ROLL NO. BL

OFFICIAL GAZETTE

UNITED STATES

PATENT OFFICE

SEPT & OCT 1932

VOLS 422 & 423

MICRO — PHOTO INC

CLEVELAND 3 OHIO

OFFICIAL GAZETTE

OF THE

UNITED STATES PATENT OFFICE

I

VOLUME 422

SEPTEMBER

1932

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

R608
13
V.422 Sept. 1932

8 Dec. '32

CONTENTS

	Page
DECISIONS OF THE COMMISSIONER OF PATENTS, September 6, 13, 20, 27	3, 307, 607, 903
TRADE-MARKS PUBLISHED AND REGISTERED, September 6, 13, 20, 27	11, 315, 615, 909
LABELS AND PRINTS REGISTERED, September 6, 13, 20, 27	39, 342, 638, 934
PLANT PATENTS	640
REISSUES, September 6, 13, 20, 27	41, 343, 639, 935
DESIGNS, September 6, 13, 20, 27	42, 345, 641, 936
PATENTS, September 6, 13, 20, 27	49, 353, 649, 943

ANNOUNCEMENTS

	Page
ADVERSE DECISIONS IN INTERFERENCE	1, 305, 901
APPLICATIONS—Condition of pending	2, 306, 606, 902
ATTORNEYS—Full post-office address	605
CHANGE IN PRICE OF OFFICIAL GAZETTE PUBLICATIONS	901
COUPONS—Suggestion for use	605
DISCLAIMERS—Blackmar, Fred W	908
Chandler, Milton E	10
Ingle, Henry W	605
Walters, Rollo F	10
DRAWINGS—Rule 38	605
FINAL FEES—Deferment of issue	305
INTERFERENCE—Defined Rule 93	605
Notices—Griffith, Graves	1, 314
NOTICE—Final rejections	305, 901
OFFICIAL GAZETTE PUBLICATIONS—Change in price	901
PATENT SUITS	9, 313, 613, 907
SUGGESTION FOR USE OF COUPONS	605
TRADE-MARKS—Canceled	1, 314

TABLE OF CASES REPORTED

	Page
* Bechman. In re	903
* Boudin. In re	610
* Cerny and Cerny. In re	307
* Clark. In re	608
* Endacott. In re	611
* Federal Cement Tile Company. In re	905
* Fischer. In re	905
* Gamble v. Church	7
* Hoffman. In re	309
* Horton. In re	607
* Jones. In re	308, 311
* Larson. Ex parte	3
* Locke v. Fuller. Fuller v. Locke	4
* Lothrop. In re	609
* Lothrop and The Timken Roller Bearing Company v. Thomas E. Robertson	312
* Martin v. Friendly	6
* Milner. In re	310
* Richardson. In re	608
* Norwine Coffee Company v. Chase & Sanborn	903
* Walgreen Company v. Godenfroy Manufacturing Company	4
* Watson and Muncz. In re	307
* Wessblad. In re	309

[Decisions of the Court of Appeals of the District of Columbia are indicated by the letter (ª); and of the United States Court of Customs and Patent Appeals by a star (*).]

ERRATA

List of Patentees, page xii, Asbury, Dorsey F., for "1,875,827" read *1,876,827*.
List of Inventions, page xiii, Radio apparatus, for "1,875,827" read *1,876,827*.

322510

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Spoons, cake turners, can openers, etc. Serial No. 303,080; Sept. 6. Class 23.

Acme Printing Ink Company, Chicago, Ill. Printing ink. Serial No. 328,806; Sept. 6. Class 11.

Ainslie, Albert, Louisville, Ky. Newspaper section. Serial No. 328,830; Sept. 6. Class 38.

Aircraft Plywood Corporation, Seattle, Wash. Plywood. Serial No. 329,036; Sept. 6. Class 12.

Alden Speare's Sons Co., The, Cambridge, Mass. Laundry bluing. Serial No. 328,509; Sept. 6. Class 6.

American-National Company, The, doing business as The Gendron Wheel Company, and The Toledo Metal Wheel Company, Toledo, Ohio. Toy vehicles. Serial No. 328,319; Sept. 6. Class 22.

American Safety Razor Corporation, Brooklyn, N. Y. Razor blades. Serial No. 328,749; Sept. 6. Class 23.

Baker & Company, Inc., Newark, N. J. Precious metal salts and electroplating preparations containing gold. Serial No. 328,474; Sept. 6. Class 6.

Beacon Manufacturing Company, New Bedford, Mass. Blankets. Serial No. 323,220; Sept. 6. Class 42.

Bennett, Earle C., doing business as Hava-Smack Co., West Springfield, Mass. Confections. Serial No. 326,998; Sept. 6. Class 46.

Bickum, Dorothy, New York, N. Y. Bandettes, brassières, corselettes, etc. Serial No. 328,974; Sept. 6. Class 39.

Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet sweepers. Serial No. 328,863; Sept. 6. Class 23.

Black Eagle Oil Company, West Allis, Wis. Gasoline and lubricating oils. Serial No. 305,692; Sept. 6. Class 15.

Bloom-Rosenblum-Klein Company, The, doing business as The Red Bell Malt Extract Company, Youngstown, Ohio. Malt syrup. Serial No. 317,703; Sept. 6. Class 46.

Boyd-Martin Boat Company, Delphi, Ind. Outboard motor boats. Serial No. 303,154; Sept. 6. Class 19.

Brook Hill Farm, Inc., Genesee Depot, Wis. Milk. Serial No. 323,528; Sept. 6. Class 46.

Bunte Brothers, Chicago, Ill. Candy. Serial No. 328,575; Sept. 6. Class 46.

Burton, W., & Co., Inc., Brooklyn, N. Y. Maltless extracts, flavors, and syrups. Serial No. 316,764; Sept. 6. Class 45.

Calavo Growers of California, Los Angeles, Calif. Fresh avocados. Serial No. 324,340; Sept. 6. Class 46.

Calavo Growers of California, Los Angeles, Calif. Fresh avocados. Serial No. 324,590; Sept. 6. Class 46.

Cannova, Antonino, Freeport, Ill. Canned tomato sauce with meat balls. Serial No. 325,629; Sept. 6. Class 46.

Carney, D. D., doing business as D. D. Carney Candy Co., Huntington, W. Va. Candy. Serial No. 319,099; Sept. 6. Class 46.

Carnrick, G. W., Co., Newark, N. J. Laxative tablet. Serial No. 326,048; Sept. 6. Class 6.

Central Scientific Company, Chicago, Ill. Vacuum pumps. Serial No. 329,041; Sept. 6. Class 23.

Chrysler Corporation, Highland Park, Mich. Cylinder blocks, cylinder heads, pistons, etc. Serial No. 315,631; Sept. 6. Class 23.

Cipolla, Vincenzo, Philadelphia, Pa. Medicinal preparation. Serial No. 328,350; Sept. 6. Class 6.

City Machine and Tool Works. (See Poock, Oscar M.)

Clasen, Edward W., doing business as Milo Laboratory, St. Louis, Mo. Medicinal preparation. Serial No. 327,340; Sept. 6. Class 6.

Classroom Teacher, Inc., The, Chicago, Ill. Rubber stamps and hectographs. Serial No. 327,005; Sept. 6. Class 37.

Classroom Teacher, Inc., The, Chicago, Ill. Rubber stamps and hectographs. Serial Nos. 327,180–1; Sept. 6. Class 37.

Columbia Pictures Corporation, New York, N. Y. Motion picture photoplays. Serial No. 328,632; Sept. 6. Class 26.

Columbus Auto Parts Company, The, Columbus, Ohio. Drag links, tie rods, radius rods, etc. Serial No. 312,903; Sept. 6. Class 19.

Conlon Corporation, Cicero, Ill. Pumps and parts thereof. Serial No. 329,138; Sept. 6. Class 23.

Continental Turpentine & Rosin Corporation, Inc., Laurel, Miss. Rosin. Serial No. 328,117; Sept. 6. Class 1.

Cooper Products Corporation, New York, N. Y. Safety razors. Serial No. 328,723; Sept. 6. Class 23.

Crown Cork & Seal Company, Inc., Baltimore, Md. Container closures. Serial No. 328,780; Sept. 6. Class 50.

Cuneo, Rose, doing business as Lily Mineral Water Works, Union City, N. J. Mineral spring water. Serial No. 327,581; Sept. 6. Class 45.

Darwin & Milner, Inc., Cleveland, Ohio. Razor blades. Serial No. 329,139; Sept. 6. Class 23.

Delta-Star Electric Company, Chicago, Ill. High voltage switching and protective equipment. Serial No. 328,086; Sept. 6. Class 21.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Adhesives. Serial No. 318,198; Sept. 6. Class 5.

Dewey Portland Cement Company, Kansas City, Mo. Portland cement. Serial No. 328,866; Sept. 6. Class 12.

Draper Corporation, Portland, Me., and Hopedale, Mass. Loom temples and parts thereof and for parts of looms. Serial No. 329,180; Sept. 6. Class 23.

Ducharne, F., Silk Co. Inc., New York, N. Y. Silk, etc., piece goods. Serial No. 328,810; Sept. 6. Class 42.

Duro Metal Products Company, Chicago, Ill. Screw drivers. Serial No. 328,732; Sept. 6. Class 23.

Electric Storage Battery Company, The, Philadelphia, Pa. Storage batteries, their parts and accessories. Serial No. 328,633; Sept. 6. Class 21.

Empire State Flour Mills, Buffalo and New York, N. Y. Wheat flour. Serial No. 327,308; Sept. 6. Class 46.

Enterprise Aluminum Company, The, Massillon, Ohio. Metal containers. Serial No. 326,138; Sept. 6. Class 2.

Evans Publishing Corporation, Dover, Del. Publication. Serial No. 329,141; Sept. 6. Class 38.

Evansville Basket and Crate Company, Evansville, Ind. Stave baskets. Serial No. 328,634; Sept. 6. Class 2.

Fleg, Bernard, Brooklyn, N. Y. Food product. Serial No. 324,508; Sept. 6. Class 46.

Flintkote Company, The, Boston, Mass. Premolded bituminous products. 305,522; Sept. 6. Class 12.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 328,935; Sept. 6. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 328,937; Sept. 6. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 328,948–50; Sept. 6. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 328,952–3; Sept. 6. Class 42.

Friedman Silver Co., Inc., Brooklyn, N. Y. Hollow ware. Serial No. 328,905; Sept. 6. Class 13.

Fritzsche Brothers, Inc., New York, N. Y. Aromatic bodies for neutralizing odor. Serial No. 328,637; Sept. 6. Class 6.

Furst-Greenman Co., Inc., New York, N. Y. Dance frocks. Serial No. 310,991; Sept. 6. Class 39.

Gemsco, Inc., New York, N. Y. Embroidered emblems. Serial No. 328,954; Sept. 6. Class 40.

Gendron Wheel Company, The. (See American-National Company, The.)

Gevaert Photo-Producten, Naamlooze Vennootschap (Société Anonyme Photo-Produits Gevaert), Oude-God, near Antwerp, Belgium. Sensitized photographic papers, plates, films, etc. Serial No. 329,115; Sept. 6. Class 26.

Golderer, Jacques G., New York, N. Y. Fly paper. Serial No. 328,604; Sept. 6. Class 50.

Gudebrod Brothers Silk Company, Philadelphia, Pa. Thread and yarn. Serial No. 321,316; Sept. 6. Class 43.

Hamilton, Mamie, doing business as Raymond-Hamilton Co., New Orleans, La. Hair restorers. Serial No. 327,848; Sept. 6. Class 6.

Harrison Wholesale Company, Chicago, Ill. Refrigerators. Serial No. 329,186; Sept. 6. Class 31.

Hava-Smack Co. (See Bennett, Earle C.)

Health Developing Apparatus Co., Inc., New York, N. Y. Table board game. Serial No. 328,690; Sept. 6. Class 22.

Heidelberg Corporation, The, New Orleans, La. Malt syrup. Serial No. 328,004; Sept. 6. Class 46.

Hiteman Leather Company, Inc., West Winfield, N. Y. Leathers. Serial No. 328,789; Sept. 6. Class 1.

Hoffman Specialty Company, Waterbury, Conn. Valves. Serial No. 316,841; Sept. 6. Class 13.

Holmes, Katherine A. MacDonald, doing business as Katherine A. MacDonald, Hollywood, Calif. Colored dressing for darkening eyelashes and eyebrows. Serial Nos. 328,171–2; Sept. 6. Class 6.

Jean, Patou, Inc., New York, N. Y. Perfumes. Serial No. 327,984; Sept. 6. Class 6.

K K Importing Corporation, The, New York, N. Y. Watch and clock springs. Serial No. 327,877; Sept. 6. Class 27.

Kaufmann Bros. & Bondy, Inc., West New York, N. J. Cigar and cigarette holders, and pipes. Serial No. 328,907; Sept. 6. Class 8.

Kroger Grocery & Baking Co., Louisville, Ky., and Cincinnati, Ohio. Flour. Serial No. 326,482; Sept. 6. Class 46.

Lederle Laboratories, Inc., New York, N. Y. Pharmaceutical preparation for removal of hookworms, etc. Serial No. 328,613; Sept. 6. Class 6.

Lege-on-Aire Beverage Company, Minneapolis, Minn. Malt beverages. Serial No. 321,349; Sept. 6. Class 48.

Lily Mineral Water Works. (See Cuneo, Rose.)

Little, Charles E., Melrose, Mass. Wrenches and sockets and parts thereof. Serial No. 327,731; Sept. 6. Class 23.

L'Onglex Limited, New York, N. Y. Nail polish, nail polish remover, cuticle remover, nail white. Serial No. 327,697; Sept. 6. Class 6.

Lundberg, Mrs. Lillian M., Hannibal, Mo. Medicinal preparation. Serial No. 328,558; Sept. 6. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Lyman, Samuel, Brooklyn, N. Y. Incandescent electric lamp bulbs and lamps. Serial No. 327,470; Sept. 6. Class 21.

MacDonald, Katherine A. (See Holmes, Katherine A. MacDonald.)

Macy, R. H., & Co., Inc., New York, N. Y. Hats. Serial No. 328,991; Sept. 6. Class 39.

Marin, Manuel, & Co., Mayaguez, P. R. Medicinal preparations. Serial No. 326,806; Sept. 6. Class 6.

Mars, Incorporated, Chicago, Ill. Candy. Serial No. 328,714; Sept. 6. Class 46.

Meriano, Philip, Philadelphia, Pa. Olive oil. Serial No. 320,655; Sept. 6. Class 46.

Merkin, M. J., Paint Co. Inc., New York, N. Y. Liquid for fireproofing various materials, and also to be incorporated in paint. Serial No. 327,802; Sept. 6. Class 6.

Meyer Both Company, Chicago, Ill., and New York, N. Y. Periodical publication. Serial No. 316,865; Sept. 6. Class 38.

Michie, Andrew Y., & Sons, Inc., Philadelphia, Pa. Hair cloth interlining in the piece. Serial No. 324,182; Sept. 6. Class 42.

Miller Brothers, New York, N. Y. Drapery and upholstery fabrics. Serial No. 327,105; Sept. 6. Class 42.

Milo Laboratory. (See Clasen, Edward W.)

Moller Brothers, Chicago, Ill. Pharmaceutical preparations. Serial No. 327,116; Sept. 6. Class 6.

National Adhesives Corporation, New York, N. Y. Adhesive products, glues, sizings, etc. Serial No. 328,758; Sept. 6. Class 5.

Naugatuck Chemical Company, The, New York, N. Y. Rubber ink. Serial No. 327,882; Sept. 6. Class 11.

Nebbia, Felice, doing business as Nebbia Pastry Co., San Francisco, Calif. Cakes. Serial No. 328,643; Sept. 6. Class 46.

New York State Society of Professional Engineers, Inc., The, New York, N. Y. Publication. Serial No. 327,521; Sept. 6. Class 38.

Nicholson File Company, Providence, R. I. Files and rasps. Serial Nos. 329,150–1; Sept. 6. Class 23.

Norge Corporation, Detroit, Mich. Freezing trays for electric refrigerators. Serial No. 329,336; Sept. 6. Class 31.

Nusbaum, Knitters, Inc., Ozone Park, N. Y. Scarfs and jackets. Serial No. 328,671; Sept. 6. Class 39.

Oat Snaps Company. (See Purity Oats Company.)

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Poultry feeds. Serial No. 319,732; Sept. 6. Class 46.

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Poultry feeds. Serial Nos. 319,734–5; Sept. 6. Class 46.

Oil-Elec-Tric Engineering Corp., Bethlehem, Pa. Oil burners. Serial No. 327,833; Sept. 6. Class 34.

Ollendorff, Julian, Brooklyn, N. Y. Motion picture films showing sketches, drawings and photographs. Serial No. 329,072; Sept. 6. Class 26.

Oneida Paper Products, Inc., Brooklyn, N. Y. Paper bags and merchandise envelopes. Serial No. 327,832; Sept. 6. Class 2.

Pepperell Manufacturing Company, Boston, Mass. Sheets. Serial No. 328,925; Sept. 6. Class 42.

Pfeiffer, S., Manufacturing Company, St. Louis, Mo. Medicinal preparation. Serial No. 328,014; Sept. 6. Class 6.

Philippe, Louis, New York, N. Y. Skin salve. Serial No. 327,564; Sept. 6. Class 6.

Phillips, Charles E., Chicago, Ill. Card games. Serial No. 327,067; Sept. 6. Class 22.

Photochrom Inc., New York, N. Y. Photographic chemicals. Serial No. 328,534; Sept. 6. Class 6.

Pineapple Refreshments Bottling Corporation, Miami, Fla. Maltless beverages and syrups for making the same. Serial No. 329,095; Sept. 6. Class 45.

Pioneer Suspender Company, Philadelphia, Pa. Buckles. Serial No. 328,015; Sept. 6. Class 40.

Pond's Extract Company, New York, N. Y. Face powder. Serial No. 328,584; Sept. 6. Class 6.

Poock, Oscar M., doing business as City Machine and Tool Works, Dayton, Ohio. Metal working machinery, chucks, jigs, etc. Serial No. 327,919; Sept. 6. Class 23.

Price Battery Corporation, Philadelphia, Pa. Storage batteries. Serial No. 328,827; Sept. 6. Class 21.

Principal Distributing Corp., New York, N. Y. Series of different motion picture films. Serial No. 328,703; Sept. 6. Class 26.

Puritan Cosmetics, Inc., St. Louis, Mo. Deodorant. Serial No. 328,226; Sept. 6. Class 6.

Purity Oats Company, doing business as Oat Snaps Company, Keokuk, Iowa. Breakfast foods in flake form. Serial No. 328,566; Sept. 6. Class 46.

Raymond-Hamilton Co. (See Hamilton, Mamie.)

Red Bell Malt Extract Company, The. (See Bloom-Rosenblum-Klein Company, The.)

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Waxed glassine wrapping and lining paper. Serial No. 329,265; Sept. 6. Class 37.

Saks & Company, New York, N. Y. Unfilled base metal compacts. Serial No. 328,875; Sept. 6. Class 2.

Schreiber Brothers, Incorporated, Baltimore, Md. Butter. Serial No. 328,761; Sept. 6. Class 46.

Scott-Borden, Anaheim, Calif. Fresh citrus fruit. Serial No. 323,753; Sept. 6. Class 46.

Scott, O. M., and Sons Company, Marysville, Ohio. Fertilizer. Serial No. 328,508; Sept. 6. Class 10.

Scram Company, The, New York, N. Y. Deodorant cream. Serial No. 325,883; Sept. 6. Class 6.

"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Toy animals, birds, dolls, etc. Serial No. 318,722; Sept. 6. Class 22.

Silverstein, Nellie, doing business as Vi-Vu Products, New York, N. Y. Liquid hair and scalp cleanser and shampoo. Serial No. 328,254; Sept. 6. Class 6.

Sloane Products, New York, N. Y. Preparation for the treatment of corns, callouses and swollen feet. Serial No. 325,270; Sept. 6. Class 6.

Smooth-On Manufacturing Company, Jersey City, N. J. Iron compound. Serial No. 329,063; Sept. 6. Class 12.

Stadium Underwear Company, Incorporated, Baltimore, Md. Pajamas. Serial No. 327,375; Sept. 6. Class 39.

Staedtler, J. S., Inc., New York, N. Y. Pencils, pencil leads, penholders, etc. Serial No. 328,191; Sept. 6. Class 37.

Standard Brands Incorporated, New York, N. Y. Mixture of an egg material and other substances. Serial No. 328,813; Sept. 6. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Thread. Serial No. 327,122; Sept. 6. Class 43.

Stearns, Frederick, & Company, Detroit, Mich. Almond cream, skin freshener, hand lotion, etc. Serial No. 328,281; Sept. 6. Class 6.

Stephens, Solomon H., Denver, Colo. Insecticide and fly exterminator. Serial No. 328,451; Sept. 6. Class 6.

Streeton, James W., New York, N. Y. Table board game. Serial No. 318,605; Sept. 6. Class 22.

Sunical Packing Company, San Francisco, Calif. Canned fruits. Serial No. 328,145; Sept. 6. Class 46.

Syladex Products Corporation, New York, N. Y. Food preparation in the nature of a medicine. Serial No. 327,991; Sept. 6. Class 6.

Texas Company, The, New York, N. Y. Compounded mineral oil. Serial No. 328,230; Sept. 6. Class 6.

Texas Quarries Inc., Austin, Tex. Quarried natural stone. Serial No. 328,650; Sept. 6. Class 12.

Thomas Asphalt Products Co., Newark, N. J. Oils and greases. Serial No. 328,377; Sept. 6. Class 6.

Toledo Metal Wheel Company, The. (See American-National Company, The.)

Triangle Underwear Corporation, New York, N. Y. Underwear. Serial No. 328,852; Sept. 6. Class 39.

Tropic-Arium, Inc., Cleveland, Ohio. Aquariums and portable conservatories. Serial No. 326,837; Sept. 6. Class 2.

Udell, Max, Sons & Co., New York, N. Y. Suits and overcoats. Serial No. 328,588; Sept. 6. Class 39.

United American Bosch Corporation, Springfield, Mass. Radio apparatus. Serial No. 328,853; Sept. 6. Class 21.

United States Rubber Company, New York, N. Y. Crib sheets made of rubber. Serial No. 327,894; Sept. 6. Class 50.

Velasco & Calzada, San Antonio, Tex. Toasted tortillas. Serial No. 328,147; Sept. 6. Class 46.

Veldown Company, Inc., New York, N. Y. Cleansing tissue. Serial No. 329,163; Sept. 6. Class 37.

Vi-Vu Products. (See Silverstein, Nellie.)

Wesco Foods Company, Cincinnati, Ohio. Malt syrup. Serial No. 327,746; Sept. 6. Class 46.

Western Lime & Cement Co., The, Milwaukee, Wis. Lime. Serial No. 329,031; Sept. 6. Class 12.

Western Lime & Cement Co., The, Milwaukee, Wis. Masonry cement. Serial No. 329,032; Sept. 6. Class 12.

Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric arc and incandescent lamps, electric controllers, electric fuses and fuse holders, etc. Serial No. 327,236; Sept. 6. Class 21.

Whitney, W. F., Company, South Ashburnham, Mass. Table tops and chair seats. Serial No. 326,066; Sept. 6. Class 32.

Wilbur, Herbert A., Southville, Mass. Honey. Serial No. 315,657; Sept. 6. Class 46.

Wood, T. W., & Sons, Richmond, Va. Seed corn. Serial No. 325,495; Sept. 6. Class 1.

Wood, T. W., & Sons, Richmond, Va. Field, garden, and lawn seed. Serial No. 325,496; Sept. 6. Class 1.

Yacht Club Bottling Works, Inc., Centredale, R. I. Maltless beverages and sirups and extracts for making the same. Serial No. 328,858; Sept. 6. Class 45.

Yardley & Co., Limited, London, England. Lavender water, powder, cold cream, etc. Serial No. 328,379; Sept. 6. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Abood, Assad, New York, N. Y. Ladies' and girls' beach pajamas, sweaters, etc. 297,303; Sept. 6. Class 39.

Allied Research Laboratories, Inc., Glendale, Calif. Solder. 297,269; Sept. 6; Serial No. 326,930; published June 21, 1932. Class 14.

Alpha Epsilon Pi Fraternity, Inc., New York, N. Y. Fraternity badges, lapel buttons, pins, etc. 297,248; Sept. 6; Serial No. 299,243; published June 21, 1932. Class 28.

American Chemical Paint Company, Lower Gwynedd Township, Montgomery County, Pa. Oil removing acid neutralizing powder. 297,161; Sept. 6; Serial No. 324,645; published June 7, 1932. Class 6.

American Chemical Paint Company, Lower Gwynedd Township, Montgomery County, Pa. Powdered rust proofing material. 297,162; Sept. 6; Serial No. 324,644; published June 7, 1932. Class 6.

American College of Life Underwriters, The, Washington, D. C., and Baltimore, Md. Watch charms. 297,156; Sept. 6; Serial No. 317,417; published June 21, 1932. Class 28.

American Flyer Mfg. Co., Chicago, Ill. Transformers. 297,214; Sept. 6; Serial No. 326,629; published June 21, 1932. Class 21.

American Well Works, The, to Paul A. Florian and Harry G. Chapman, receivers for The American Well Works, Aurora, Ill., successors. Machines. 89,323; renewed Dec. 10, 1932.

Associated Tourist Bureau of America, Baltimore, Md. Maps. 297,277; Sept. 6; Serial No. 312,122; published May 26, 1931. Class 38.

Auberger, Thomas, Paris, France. Massaging apparatus. 297,208; Sept. 6; Serial No. 326,513; published June 21, 1932. Class 44.

B. V. D. Company, Inc., The, Baltimore, Md. Trunks worn as outer garments. 297,183; Sept. 6; Serial No. 326,703; published June 14, 1932. Class 39.

Ballantine, P., & Sons, Newark, N. J. Malt syrup. 297,200; Sept. 6; Serial No. 327,039; published June 21, 1932. Class 46.

Ballowitz, Dr., & Co. Chemisch-Pharmaz. Fabrik. G. m. b. H., Berlin-Pankow, Germany. Preparation of hormones. 297,147; Sept. 6; Serial No. 322,787; published June 7, 1932. Class 6.

Bamberger, L., & Co., Newark, N. J. Children's furniture. 297,276; Sept. 6; Serial No. 309,957; published June 21, 1932. Class 32.

Bame, Harry A., New York, N. Y. Chemical composition. 297,223; Sept. 6; Serial No. 326,201; published June 14, 1932. Class 6.

Banning, Roger F., doing business as The Modern Life Publishing Co., St. Paul, Minn. Magazine. 297,272; Sept. 6; Serial No. 327,088; published June 21, 1932. Class 38.

Baron, Leon, doing business as N. C. Goodwin's Laboratory, Inc., Brooklyn, N. Y. Jelly for foot odor and perspiration. 297,169; Sept. 6; Serial No. 325,555; published June 14, 1932. Class 6.

Bear Brand Hosiery Co., Kankakee and Chicago, Ill. Hosiery. 297,185; Sept. 6; Serial No. 326,452; published June 14, 1932. Class 39.

Beeman, George W., Detroit, Mich. Face creams, powders, and lotions. 297,197; Sept. 6; Serial No. 325,703; published June 14, 1932. Class 6.

Belmont Hosiery Company, Belmont, N. H. Hosiery. 297,178; Sept. 6; Serial No. 326,973; published June 14, 1932. Class 39.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Brakes and brake systems and parts thereof. 297,176; Sept. 6; Serial No. 325,936; published June 21, 1932. Class 19.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Brakes and brake systems and parts thereof. 297,179; Sept. 6; Serial No. 325,935; published June 21, 1932. Class 19.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Brakes and brake systems and parts thereof. 297,236; Sept. 6; Serial No. 325,937; published June 21, 1932. Class 19.

Bennett, E. W., & Co., assignor to George E. Bennett, doing business as E. W. Bennett & Co., San Francisco, Calif. Cleaning powder. 89,981; renewed Jan. 28, 1933.

Biltrite Motor Equipment Co. Inc., New York, N. Y. Oils and greases. 297,253; Sept. 6; Serial No. 325,250; published June 21, 1932. Class 15.

Bloom & Jaffin, New York, N. Y. Underwear and slips, dresses, etc. 297,157; Sept. 6; Serial No. 324,982; published June 14, 1932. Class 39.

Bon Ami Company, The, New York, N. Y. Tooth paste. 297,182; Sept. 6; Serial No. 325,742; published June 7, 1932. Class 6.

Borst Engineering, Inc., Buffalo, N. Y. Coin-operated dispensing apparatus. 297,140; Sept. 6; Serial No. 326,020; published June 21, 1932. Class 23.

Brevolite Lacquer Company, North Chicago, Ill. Solutions of cellulose esters or mixtures of the same. 297,252; Sept. 6; Serial No. 298,143; published June 7, 1932. Class 6.

Brevolite Lacquer Company, North Chicago, Ill. Solutions of cellulose esters or mixtures of the same. 297,261; Sept. 6; Serial No. 298,138; published June 7, 1932. Class 6.

Byron Jackson Co., Los Angeles, Calif. Centrifugal pumps. 297,266; Sept. 6; Serial No. 326,729; published June 21, 1932. Class 23.

Campana Corporation, Batavia, Ill. Lotion for the skin. 297,174–5; Sept. 6; Serial Nos. 325,000–1; published June 7, 1932. Class 6.

Chapman, Harry G., et al., receivers. (See American Well Works, The.)

Chemische Werke Vormals H. & E. Albert, Wiesbaden-Biebrich, Germany. Anti-epileptic, sedative, and hypnotic preparation. 297,132; Sept. 6; Serial No. 318,390; published June 7, 1932. Class 6.

Chernin, Isidor, doing business as Kilnzmoth Co., New York, N. Y. Insecticide. 297,227; Sept. 6; Serial No. 325,901; published June 7, 1932. Class 6.

Clap, Harvey, & Company, Attleboro, Mass. Metal articles of jewelry. 297,218; Sept. 6; Serial No. 326,079; published June 21, 1932. Class 28.

Clayton, Joseph, doing business as Clayton Products Company, Corona, N. Y. Mechanisms for controlling the tension in the winding of material and apparatus. 297,137; Sept. 6; Serial No. 320,150; published June 21, 1932. Class 23.

Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap. 297,204; Sept. 6; Serial No. 326,842; published June 21, 1932. Class 4.

Collins, A. M., Manufacturing Company, Philadelphia, Pa. Photographic and stationery supplies. 89,817; renewed Jan. 14, 1933.

Conkey, G. E., Company, The, Cleveland, Ohio. Vermifuge (worm tablets for poultry). 297,220; Sept. 6; Serial No. 326,009; published June 14, 1932. Class 6.

Continental-Caoutchouc- und Gutta-Percha-Compagnie, by change of name to Continental Gummi-Werke Aktiengesellschaft, Hanover, Germany. Rubber-proofed fabric sheetings. 88,065; renewed Aug. 27, 1932.

Continental Gummi-Werke Aktiengesellschaft. (See Continental-Caoutchouc- und Gutta-Percha-Compagnie.)

Creco Company Inc., Long Island City, N. Y. Floor scrubbing soap. 297,154; Sept. 6; Serial No. 318,549; published June 21, 1932. Class 4.

Crystal Shoe Polish Mfg. Co., The. (See Vassilatos, William T.)

Cuthbert, P. T. & Co., Inc., New York, N. Y. Hosiery. 297,168; Sept. 6; Serial No. 325,508; published June 14, 1932. Class 39.

Davis, Fred W., New York, N. Y. Astringents, creams, rouges, etc. 297,135; Sept. 6; Serial No. 319,475; published June 7, 1932. Class 6.

Deerfoot, William, St. Louis, Mo., to William Deerfoot, Iowa City, Iowa. Blood and liver tonic. 38,751; renewed Aug. 12, 1932.

Drew Canning Company, Ltd., San Jose, Calif. Canned fruits. 297,299; Sept. 6. Class 46.

Drew Canning Company, Ltd., San Jose, Calif. Canned fruits, canned vegetables. 297,300–1; Sept. 6. Class 46.

Dunn, Struthers, Inc., Philadelphia, Pa. Selenium, thallium, etc., cells, units, and systems. 297,212; Sept. 6; Serial No. 325,860; published June 21, 1932. Class 21.

Durex Products Inc., New York, N. Y. Antiseptic jelly. 297,190–3; Sept. 6; Serial Nos. 325,837–40; published June 7, 1932. Class 6.

Dutch Products Company, Dorchester, Mass. Laxative medicine. 297,194; Sept. 6; Serial No. 325,819; published June 7, 1932. Class 6.

Egypt Canning Company, Egypt, N. Y., to Egypt Canning Company, Inc., Fairport, N. Y. Canned vegetables and fruits. 88,861; renewed Oct. 29, 1932.

Electroblacks, Incorporated, Culver City, Calif. Carbon-black. 297,229; Sept. 6; Serial No. 325,972; published June 14, 1932. Class 6.

Emporia Machine Co., Inc., Emporia, Va. Plows. 297,267; Sept. 6; Serial No. 326,744; published June 21, 1932. Class 23.

Emporia Machine Co., Inc., Emporia, Va. Plows. 297,296; Sept. 6; Serial No. 326,743; published June 21, 1932. Class 23.

Eternit, Inc., St. Louis, Mo., and New York, N. Y. Asbestos-cement siding strips. 297,247; Sept. 6; Serial No. 321,490; published June 14, 1932. Class 12.

Fabrica Nacional de Toledo, Toledo, Spain. Razor blades. 297,290; Sept. 6; Serial No. 325,005; published June 21, 1932. Class 23.

Fairbanks, Morse & Co., Chicago, Ill. Internal combustion engines, pumps, and feed-grinders. 87,988; renewed Aug. 20, 1932.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 297,181; Sept. 6; Serial No. 326,810; published June 14, 1932. Class 39.

Faulds, T. A., Co., Inc., Boston, Mass. Powdered baking flavor. 297,219; Sept. 6; Serial No. 326,050; published June 21, 1932. Class 46.

Fergusson, Alex. C., Co., Philadelphia, Pa. Cleaning compounds. 297,262; Sept. 6; Serial No. 325,255; published June 21, 1932. Class 4.

Ferry-Hanly Advertising Company, New York, N. Y.; Chicago, Ill.; and Kansas City, Mo. Cartoons. 297,275; Sept. 6; Serial No. 327,239; published June 21, 1932. Class 38.

Fischmann, Nettie, St. Louis, Mo. Dresses and suits. 297,172; Sept. 6; Serial No. 326,209; published June 21, 1932. Class 39.

Florian, Paul A., et al., receivers. (See American Well Works, The.)

Foley & Ward, Inc., Sodus, N. Y. Canned fruits, vegetables, fresh decidious fruits and vegetables. 297,297; Sept. 6. Class 46.

Ford, Barbara, Houston, Tex. Dresses, coats, underwear, etc. 297,186; Sept. 6; Serial No. 326,623; published June 21, 1932. Class 39.

Fur Protective Seal Corp., New York, N. Y. Identification tags. 297,280; Sept. 6; Serial No. 326,585; published June 21, 1932. Class 50.

Gallagher, Walter J., New York, N. Y. Printed folders. 297,268; Sept. 6; Serial No. 326,781; published June 21, 1932. Class 38.

Gane, Eustace H., doing business as R-Tex Laboratories, New York, N. Y. Medicinal preparation. 297,195; Sept. 6; Serial No. 325,400; published June 14, 1932. Class 6.

Gasser Coffee Co., The, by change of name to The Karavan Coffee Co., Toledo, Ohio. Coffee. 87,878; renewed Aug. 13, 1932.

George Washington Bicentennial Costumes Inc., New York, N. Y. Dresses. 297,131; Sept. 6; Serial No. 318,341; published Nov. 3, 1931. Class 39.

Getz Exterminators, Inc., St. Louis, Mo. Preparations for exterminating insects. 297,145; Sept. 6; Serial No. 322,635; published June 14, 1932. Class 6.

Gilmore, James A., Spokane, Wash. Hair treating compound. 297,198; Sept. 6; Serial No. 325,140; published June 14, 1932. Class 6.

Golden Valley Produce Co. Ltd., El Centro, Calif. Fresh vegetables. 297,241; Sept. 6; Serial No. 323,454; published June 21, 1932. Class 46.

Goodwin's, N. C., Laboratory, Inc. (See Baron, Leon.)

Grand Pop Bottling Co., The, Cincinnati, Ohio. Malt beverage. 297,239; Sept. 6; Serial No. 323,659; published Apr. 19, 1932. Class 48.

Gumpert, S., Co. Inc., Brooklyn, N. Y. Chocolate nut cakes, cookies, and pastries. 297,233; Sept. 6; Serial No. 326,472; published June 14, 1932. Class 46.

Gunn Furniture Company, The, Grand Rapids, Mich. Cleaner and preservative for linoleum. 297,240; Sept. 6; Serial No. 324,604; published June 21, 1932. Class 4.

Hanfling, K., & Son, Chicago, Ill. Leather. 297,265; Sept. 6; Serial No. 326,611; published June 21, 1932. Class 1.

Harris Manufacturing Company, Johnson City, Tenn. Wooden flooring. 297,216; Sept. 6; Serial No. 326,423; published June 14, 1932. Class 12.

Hart's Rejuvenating Cream Co. (See Immich, Mae J.)

Harvey, Pauline Reynolds. (See Martin, Pauline L.)

Heating Journals, Inc., New York, N. Y. Publications. 297,273; Sept. 6; Serial No. 327,096; published June 21, 1932. Class 38.

Helps to Health, Inc., New York, N. Y. Psyllium seeds. 297,225; Sept. 6; Serial No. 326,819; published June 14, 1932. Class 6.

Henry & Close Co., Boston, Mass. Fresh fish fillets. 297,201; Sept. 6; Serial No. 327,018; published June 21, 1932. Class 46.

Herbert, Beaucie J., Spokane, Wash. Dresses. 297,173; Sept. 6; Serial No. 326,051; published June 14, 1932. Class 39.

Hirschberg-Schwadron & Co. Inc., New York, N. Y. Dresses. 297,184; Sept. 6; Serial No. 325,712; published June 21, 1932. Class 39.

Hudson Manufacturing Co., The, Chicago, Ill. Food flavoring extracts. 297,244; Sept. 6; Serial No. 323,049; published June 21, 1932. Class 46.

Humble Oil & Refining Company, Houston, Tex. Lubricating oils and greases. 297,246; Sept. 6; Serial No. 322,044; published June 21, 1932. Class 15.

Hyde Park Foundry & Machine Company, Hyde Park, Pa. Rolling mill rolls, etc. 297,282; Sept. 6; Serial No. 326,369; published June 21, 1932. Class 23.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemical product. 297,199; Sept. 6; Serial No. 325,906; published June 7, 1932. Class 6.

Immich, Mae J., doing business as Hart's Rejuvenating Cream Co., Los Angeles, Calif. Beauty cream. 297,143; Sept. 6; Serial No. 322,255; published June 7, 1932. Class 6.

International Paper Company, New York, N. Y. Concentrated waste lyes of the sulfite-cellulose manufacture. 87,768; renewed Aug. 6, 1932.

Ipswich Mills, Inc., Gloucester, Mass. Hosiery. 297,232; Sept. 6; Serial No. 327,055; published June 21, 1932. Class 39.

Iron Fireman Manufacturing Company, Portland, Oreg. Automatic coal burners. 297,251; Sept. 6; Serial No. 298,331; published June 21, 1932. Class 34.

Irving Iron Works Company, Long Island City, N. Y. Metal gratings. 89,850; renewed Jan. 14, 1933.

Jackson, William C., Tulsa, Okla. Medicinal compound. 297,159; Sept. 6; Serial No. 324,745; published June 14, 1932. Class 6.

Jico Laboratories. (See Lachoff, Joseph.)

Karavan Coffee Co., The. (See Gasser Coffee Co., The.)

Karry Kart, Incorporated. (See Montgomery, Letty M., assignor.)

Kaumagraph Company, New York, N. Y. Ink solvents. 297,283; Sept. 6; Serial No. 326,289; published June 21, 1932. Class 11.

Keepaway Laboratory, London, England. Veterinary or sanitary preparation. 297,160; Sept. 6; Serial No. 324,711; published June 7, 1932. Class 6.

Keystone Steel & Wire Company, Peoria, Ill. Metallic fence posts. 297,237; Sept. 6; Serial No. 320,306; published Jan. 5, 1932. Class 13.

Kidd Products Corporation, Chicago, Ill. Chewing gum. 297,155; Sept. 6; Serial No. 317,520; published June 21, 1932. Class 46.

Kinsey, George, to Jennie Kinsey, doing business as Kinsey's Provisions, Paterson, N. J., successor. Smoked finnan haddies. 87,458; renewed July 16, 1932.

Klinzmoth Co. (See Chernin, Isidor.)

Kotex Company, Chicago, Ill. Toilet paper. 297,274; Sept. 6; Serial No. 327,097; published June 21, 1932. Class 37.

Kulla and Valente, New York, N. Y. Confection for the decorating of cakes, etc. 297,238; Sept. 6; Serial No. 324,892; published June 21, 1932. Class 46.

Lachoff, Joseph, doing business as Jico Laboratories, Chicago, Ill. Shoe polish. 297,202; Sept. 6; Serial No. 326,943; published June 21, 1932. Class 4.

Ladies Garment Manufacturing Company, Minneapolis, Minn. Dresses. 297,258; Sept. 6; Serial No. 252,157; published June 14, 1932. Class 39.

Lakeview Manufacturing Company, Chicago, Ill. Dresses. 297,231; Sept. 6; Serial No. 327,061; published June 21, 1932. Class 39.

Lamont, Corliss & Company, New York, N. Y. Chocolate. 297,153; Sept. 6; Serial No. 318,628; published June 21, 1932. Class 46.

Landers Corporation, The, Toledo, Ohio. Glove cuff material. 297,148; Sept. 6; Serial No. 323,268; published June 21, 1932. Class 50.

Law, Clare H., doing business as Signalex Service, Chicago, Ill. Signal devices for cards and sheets. 297,255; Sept. 6; Serial No. 311,614; published Apr. 21, 1931. Class 37.

Lee Hardware Company, The, Salina, Kans. General adhesive. 297,144; Sept. 6; Serial No. 322,515; published June 21, 1932. Class 5.

Lehman, Louis H., doing business as Lehman Sprayshield Company, Philadelphia, Pa. Glass shower stall doors, bath shields and enclosures. 297,130; Sept. 6; Serial No. 320,504; published June 21, 1932. Class 13.

Le Montree Manufacturing Company, The, Cincinnati, Ohio. Moth-proof bag. 297,305; Sept. 6. Class 2.

Levie, Irving, Brooklyn, N. Y. Effervescent tablets. 297,196; Sept. 6; Serial No. 325,585; published June 14, 1932. Class 6.

Levine Brothers, New York, N. Y. Insecticides. 297,189; Sept. 6; Serial No. 325,874; published June 7, 1932. Class 6.

Levy, Charles B., New Orleans, La. Bed springs, mattresses, and pillows. 297,235; Sept. 6; Serial No. 326,110; published June 21, 1932. Class 32.

Linda Mineral Sales Company, Oakland, Calif. Fertilisers and poultry litter. 297,289; Sept. 6; Serial No. 325,635; published June 21, 1932. Class 10.

Ludlow-Georgia Bagging Company, Boston, Mass., and Savannah, Ga. Jute bagging. 297,307–8; Sept. 6. Class 42.

Malleable Iron Range Company, Beaver Dam, Wis. Electric refrigerators. 297,152; Sept. 6; Serial No. 318,815; published Nov. 24, 1931. Class 21.

Manahan Chemical Co., Inc., New York, N. Y. Dyestuffs. 297,230; Sept. 6; Serial No. 325,986; published June 14, 1932. Class 6.

Manhattan Rubber Mfg. Co., The, New York, N. Y., assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Belting. 89,407; renewed Dec. 10, 1932.

Marcus & Wiesen, Inc., New York, N. Y. Sanitary belts. 297,203; Sept. 6; Serial No. 326,903; published June 21, 1932. Class 44.

Martie, R. B., Inc., New York, N. Y. Powdered soap compound. 297,206; Sept. 6; Serial No. 326,755; published June 21, 1932. Class 4.

Martin, Pauline L., to Lucile Reynolds Ralston and Pauline Reynolds Harvey, copartners doing business as Precious Ointment Co., Dixon, Ill., successor. Ointment. 87,550; renewed July 28, 1932.

Mead Johnson & Company, Evansville, Ind. Cod liver oil and viosterol. 297,187; Sept. 6; Serial No. 325,590; published June 7, 1932. Class 6.

Merck & Co., Inc., Rahway, N. J. Silver copper alloy mirroring solution. 297,228; Sept. 6; Serial No. 325,954; published June 14, 1932. Class 6.

Mercury Mills, Limited, Hamilton, Ontario, Canada. Clothing. 297,141; Sept. 6; Serial No. 321,730; published June 21, 1932. Class 39.

Merit Clothing Company, Inc., Mayfield, Ky. Coats, vests, pants, etc. 297,234; Sept. 6; Serial No. 326,163; published June 14, 1932. Class 39.

Merryweather, Thos., Co., The, Akron, Ohio. Hot air heating furnaces. 297,304; Sept. 6. Class 34.

Metex Company, Incorporated, The, Wilmington, Del.; Lock Haven, Pa.; and New York, N. Y. Papers and paper boards. 297,284; Sept. 6; Serial No. 326,225; published June 21, 1932. Class 37.

Meyer, N. S., Inc., New York, N. Y. Metal polish. 297,249; Sept. 6; Serial No. 302,469; published June 21, 1932. Class 4.

Midvale Company, The, Nicetown, Philadelphia, Pa. Tool steel. 297,259–60; Sept. 6; Serial Nos. 297,316–17; published June 21, 1932. Class 14.

Miller Company, The, Meriden, Conn. Electric lighting fixtures and lamps. 297,257; Sept. 6; Serial No. 313,381; published June 21, 1932. Class 21.

Minnesota Chemical Company, Inc., The, Minnesota Transfer, Minn. Laundry sours, chemical eradicators. 297,165; Sept. 6; Serial No. 324,319; published June 7, 1932. Class 6.

Modern Life Publishing Co., The. (See Banning, Roger F.)

Montgomery, Letty M., assignor to Karry Kart, Incorporated, New York, N. Y. Perambulator. 297,136; Sept. 6; Serial No. 319,701; published June 21, 1932. Class 19.

Morgan Construction Company, Worcester, Mass. Rolling mill apparatus. 297,285; Sept. 6; Serial No. 326,114; published June 21, 1932. Class 23.

Naamlooze Vennootschap Amsterdamsche Superfosfaatfabriek, Utrecht, Netherlands. Fertilizers. 297,281; Sept. 6; Serial No. 326,527; published June 21, 1932. Class 10.

Naamlooze Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company), The Hague, Netherlands. Disinfectant toilet preparation. 297,166; Sept. 6; Serial No. 324,228; published June 7, 1932. Class 6.

National Biscuit Company. (See Natural Food Co., The, assignor.)

National Devices Corporation, Philadelphia, Pa. Kitchen mixing device. 297,210; Sept. 6; Serial No. 326,446; published June 21, 1932. Class 21.

National Shirt Shops, Inc., New York, N. Y. Shirts, underwear, and pajamas. 297,146; Sept. 6; Serial No. 322,643; published June 21, 1932. Class 39.

National Traffic Guard Co., Atlanta, Ga. Road guards. 297,295; Sept. 6; Serial No. 325,044; published June 14, 1932. Class 12.

Natural Food Co., The, Niagara Falls, assignor to National Biscuit Company, New York, N. Y. Bread. 39,241; renewed Nov. 11, 1932.

Neumann, C. J., Coffee Co. Inc., Brooklyn, N. Y. Tea and coffee. 297,205; Sept. 6; Serial No. 326,829; published June 21, 1932. Class 46.

New York Evening Journal, Inc., New York, N. Y. Newspaper section. 297,298; Sept. 6. Class 38.

Norman, W. Howard, doing business as Walk-N-Joy Chemical Co., Raleigh, N. C. Fluid to be poured in the shoe. 297,167; Sept. 6; Serial No. 324,263; published June 7, 1932. Class 6.

Old Mission Packing Corp., Ltd., North San Diego, Calif. Canned olives, olive oil, etc. 297,292; Sept. 6; Serial No. 325,596; published June 21, 1932. Class 46.

Oppenheim, Oberndorf & Co., Inc., Baltimore, Md. Shorts, shirts, union suits, etc. 297,170; Sept. 6; Serial No. 325,405; published June 21, 1932. Class 39.

Pan-Pacific Piling & Construction Co., Wilmington, Calif. Impregnated concrete pipe and wall structures. 297,215; Sept. 6; Serial No. 326,528; published June 14, 1932. Class 12.

Penna, Edilio, Brooklyn, N. Y. Olive oil, canned tuna fish, etc. 297,243; Sept. 6; Serial No. 323,207; published June 21, 1932. Class 46.

People's Outfitting Company, Detroit, Mich. Clothing. 297,278; Sept. 6; Serial No. 312,968; published Sept. 1, 1931. Class 39.

Perfect Manufacturing Co., The, Cincinnati, Ohio. Shoe resoling and repairing compound. 297,149; Sept. 6; Serial No. 323,872; published June 14, 1932. Class 6.

Philco Trading Co., Inc., Philadelphia, Pa., and New York, N. Y. Shirts, hosiery, socks, etc. 297,171; Sept. 6; Serial No. 326,393; published June 21, 1932. Class 39.

Phillips-Jones Corporation, New York, N. Y. Shirts and pajamas. 297,177; Sept. 6; Serial No. 326,988; published June 21, 1932. Class 39.

Precious Ointment Co. (See Martin, Pauline L.)

Pyram-Seltzer Co., Los Angeles, Calif., and New York, N. Y. Preparation for nervousness and headache. 297,164; Sept. 6; Serial No. 324,444; published June 7, 1932. Class 6.

R-Tex Laboratories. (See Gane, Eustace H.)

Radio Carbon Company, Dallas, Tex. Carbon paper and typewriter ribbons. 297,134; Sept. 6; Serial No. 319,185; published June 21, 1932. Class 11.

Radio Research Laboratories, Tacoma, Wash. Radio tube testers. 297,133; Sept. 6; Serial No. 317,536; published June 21, 1932. Class 26.

Ralston, Lucile Reynolds, and Pauline Reynolds Harvey, co-partners. (See Martin, Pauline L.)

Raybestos-Manhattan, Inc. (See Manhattan Rubber Mfg. Co., The, assignor.)

Reed & Carnrick, Jersey City, N. J. Remedy for certain diseases. 87,808; renewed Aug. 6, 1932.

Reeves, B. M. Co., Inc., Brooklyn, N. Y. Bottled olives, cherries, and package dates. 297,264; Sept. 6; Serial No. 325,016; published June 21, 1932. Class 46.

Riker, Wm. B., & Son Co., New York, N. Y., assignor, by mesne assignments, to United Drug Company, Boston, Mass. Deodorants, antiseptics, and prophylactics. 89,951; renewed Jan. 21, 1933.

Russell Box Company, Medford, Mass. Paper-board. 297,291; Sept. 6; Serial No. 325,152; published June 21, 1932. Class 37.

S. M. Laboratories, Inc., Seattle, Wash. Vaginal suppositories. 297,224; Sept. 6; Serial No. 326,231; published June 14, 1932. Class 6.

Sante' Institute, Ltd., Los Angeles, Calif. Eggs and dressed poultry. 297,217; Sept. 6; Serial No. 326,193; published June 21, 1932. Class 46.

Sasco Sugar Corporation, Dover, Del. Sugar. 297,263; Sept. 6; Serial No. 325,019; published June 21, 1932. Class 46.

Schlitz, Jos., Beverage Company, Milwaukee, Wis. Canned malt syrup. 297,279; Sept. 6; Serial No. 310,305; published June 21, 1932. Class 46.

Scott Paper Company, Chester, Pa. Paper towels. 297,302; Sept. 6. Class 37.

Scott & Turner, Limited, Newcastle-upon-Tyne, England. Effervescent medicinal salt. 297,130; Sept. 6; Serial No. 317,873; published June 14, 1932. Class 6.

Seeman Brothers, assignor to Seeman Brothers, Inc., New York, N. Y. Canned fruits and vegetables. 87,935; renewed Aug. 13, 1932.

Seldon Worsted Mills, Methuen, Mass. Dress goods of cotton, woolen, etc. 297,306; Sept. 6. Class 42.

Signalex Service. (See Law, Clare H.)

Simon Ackerman Clothes, Inc., New York, N. Y. Coats, vests, trousers, etc. 297,250; Sept. 6; Serial No. 298,558; published June 14, 1932. Class 39.

Smidler, Herman L., doing business as Tricasco Laboratories, Chicago, Ill. Reconstructive tonic. 297,221; Sept. 6; Serial No. 326,117; published June 14, 1932. Class 6.

Societa Anonima Lucchese Olii E Vini, Lucca, Italy. Olive oil. 297,151; Sept. 6; Serial No. 320,010; published June 21, 1932. Class 46.

Sotiriades, George, doing business as Sotirion Remedies, Pittsburgh, Pa. Preparation for the treatment of leucorrhea, arthritis, etc. 297,226; Sept. 6; Serial No. 326,002; published June 14, 1932. Class 6.

Sotirion Remedies. (See Sotiriades, George.)

Sound Engineering Corporation, New York, N. Y. Phonographic machines and parts thereof. 297,213; Sept. 6; Serial No. 326,270; published June 21, 1932. Class 36.

Southern Chemical Cotton Company, Chattanooga, Tenn. Chemical cotton. 297,271; Sept. 6; Serial No. 327,070; published June 21, 1932. Class 1.

Southland Coffee Company, Macon, Ga. Coffee. 297,254; Sept. 6; Serial No. 312,462; published June 21, 1932. Class 46.

States Batteries, Ltd., Los Angeles, Calif. Storage batteries. 297,256; Sept. 6; Serial No. 313,021; published June 21, 1932. Class 21.

Sumergrade, N., & Sons, Inc., New York, N. Y. Pillows, mattresses, and box springs. 297,286; Sept. 6; Serial No. 326,061; published June 21, 1932. Class 32.

Sunshine Magic. (See Terry, Marion S.)

Supreme Products Company, St. Louis, Mo. Metal cleaners and polishes. 297,211; Sept. 6; Serial No. 326,399; published June 21, 1932. Class 4.

Sussberg & Feinberg, Inc., New York, N. Y. Slips. 297,180; Sept. 6; Serial No. 326,919; published June 21, 1932. Class 39.

Sussman, Wormser & Company, San Francisco, Calif. Canned fruits, vegetables, berries, etc. 297,242; Sept. 6; Serial No. 323,209; published June 7, 1932. Class 46.

Swett, Frank H., doing business as F. H. Swett & Co., Chicago, Ill. Canned fruits and vegetables. 297,207; Sept. 6; Serial No. 326,561; published June 21, 1932. Class 46.

Taylor, T. R., & Co., York, Pa. Furniture. 297,138; Sept. 6; Serial No. 320,381; published June 21, 1932. Class 32.

Terry, Marion S., doing business as Sunshine Magic, Scituate, Mass. Child's blue printing set. 297,150; Sept. 6; Serial No. 321,262; published June 21, 1932. Class 22.

Tricasco Laboratories. (See Smidler, Herman L.)

Union Oil Company of California, Los Angeles, Calif. Medicinal petroleum oil, radiator glycerine, cleanser, etc. 297,168; Sept. 6; Serial No. 324,858; published June 14, 1932. Class 6.

United Drug Company. (See Riker, Wm. B., & Son Co., assignor.)

United Drug Company, Boston, Mass. Powder puffs. 297,270; Sept. 6; Serial No. 329,033; published June 21, 1932. Class 29.

Upson, Ralph H., Ann Arbor, Mich. Horizon indicators. 297,287–8; Sept. 6; Serial Nos. 325,764–5; published June 21, 1932. Class 26.

Valligny, L. Pierre, New York, N. Y. Shampoo and hair coloring preparation. 297,163; Sept. 6; Serial No. 324,496; published June 7, 1932. Class 6.

Vassilatos, William T., doing business as The Crystal Shoe Polish Mfg. Co., Chicago, Ill. Shoe cleaning and polishing compounds. 297,209; Sept. 6; Serial No. 326,510; published June 21, 1932. Class 4.

Volunteer Stores, Inc., doing business as Volunteer Food Stores, Chattanooga, Tenn. Canned fruits, vegetables, sauer kraut, etc. 297,245; Sept. 6; Serial No. 322,344; published June 21, 1932. Class 46.

Walk-N-Joy Chemical Co. (See Norman, W. Howard.)

Ward-Love Pump Corporation, Rockford, Ill. Mechanical water softening apparatus and parts therefor. 297,142; Sept. 6; Serial No. 320,771; published June 21, 1932. Class 23.

Warner, William R., & Co., Inc., New York, N. Y. Medicinal preparations. 297,222; Sept. 6; Serial No. 326,198; published June 14, 1932. Class 6.

Waterston, George, & Sons, assignor to George Waterston & Sons, Limited, Edinburgh, Scotland. Sealing wax. 39,607; renewed Dec. 30, 1932.

Weissmann, Ludwig N., doing business as L. Weissmann & Co., Palisade, N. J. Lotions. 297,188; Sept. 6; Serial No. 325,887; published June 7, 1932. Class 6.

Wrigley, Wm., Jr., Company, Chicago, Ill. Chewing gum. 297,293; Sept. 6; Serial Nos. 325,538–9; published June 21, 1932. Class 46.

Zarnits Bros. Grocery Co., Wheeling, W. Va. Matches. 89,405; renewed Dec. 10, 1932.

Zarnits Bros. Grocery Co., Wheeling, W. Va. Foods. 89,523; renewed Dec. 17, 1932.

LIST OF REGISTRANTS OF LABELS

Alexander, George B., doing business as Etamina Sales Agency, Boston, Mass. Wataman Gland Tablets. For Gland Tablets. 41,113; Sept. 6.

Allen, Claude S., doing business as Enzer Remedy Company, Coral Gables, Fla. Enzer for Athlete's Foot. For Medicinal Preparation. 41,114; Sept. 6.

Brill, H. C., Co., Inc., Newark, N. J. Brill's E-Zee Freez. For Ice Cream Powder. 41,115; Sept. 6.

Brown & Williamson Tobacco Corporation, Louisville, Ky. Kool Cigarettes. For Cigarettes. 41,116; Sept. 6.

Burkhart, John F., Huntington Beach, Calif. J. F. B. Auto Top Dressing. For Auto Top Dressing. 41,117; Sept. 6.

California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif. C and H Sugar Bowl Pure Cane Sugar Confectioners Powdered. For Sugar. 41,118; Sept. 6.

Canoga Citrus Association, Canoga Park, Calif. Mexicana. For Fresh Oranges. 41,119; Sept. 6.

Chicago Metallic Manufacturing Company, Chicago, Ill. Up-Side-Down Cake Pan. For Cake Pans. 41,120; Sept. 6.

Clark, W. L. M., Inc., St. Louis, Mo. Grandmother Clark's Tubfast Color Quilt Patches. For Quilt Patches. 41,121; Sept. 6.

Crystal Home Filter Co. Inc., Brooklyn, N. Y. Kristal-Kleer Filter Compound. For Compound in the Form of Powder Used in the Filtration of Liquids and Beverages. 41,122; Sept. 6.

Dublin Bros., doing business as The First Tobacco Co., Boston, Mass. The First Turkish Blend Cigarettes. For Cigarettes. 41,123; Sept. 6.

Edgar, John C., Troy, Ohio. Eag-Em. For Lubricating Oil. 41,124; Sept. 6.

Enzer Remedy Company. (See Allen, Claude S.)

Eskimo Pie Corporation, Brooklyn, N. Y. Eskimo Pop. For Frozen Confections. 41,125; Sept. 6.

Eskimo Pie Corporation, Brooklyn, N. Y. Eskimo Boat. For Frozen Confections. 41,126; Sept. 6.

Eskimo Pie Corporation, Brooklyn, N. Y. Snowman Chocolate Coating. For Chocolate Coating for Frozen Confections. 41,127; Sept. 6.

Eskimo Pie Corporation, Brooklyn, N. Y. Eskimo. For Ice Cream and Cake. 41,128; Sept. 6.

Etamina Sales Agency. (See Alexander, George B.)

Fastik Products, Inc. Chicago, Ill. Fastik Improved Staples. For Staples. 41,129; Sept. 6.

First Tobacco Co., The. (See Dublin Bros.)

Fort Howard Paper Company, Green Bay, Wis. Nile Queen Crepe. For Crepe Tissue Paper. 41,130; Sept. 6.

Franco-American Baking Co., Los Angeles, Calif. Franco Hi-Jinks Bread. For Bread. 41,131; Sept. 6.

General Baking Company, New York, N. Y. Bond-Sunshine Vitamin-D Bread. For Bread. 41,132–3; Sept. 6.

General Baking Company, New York, N. Y. Sliced Bond-Sunshine Vitamin-D Bread. For Bread. 41,134; Sept. 6.

Halferty, G. P., & Co., Seattle, Wash. Smart Set Salmon Steak. For Salmon. 41,135; Sept. 6.

Kalamazoo Label Company, Kalamazoo, Mich. Spice Layer. For Cake. 41,136; Sept. 6.

King Features Syndicate, Inc., New York, N. Y. Popeye The Sailor Man. For Jointed Figure Toys. 41,137; Sept. 6.

King Features Syndicate, Inc., New York, N. Y. Popeye Shadow Boxer. For Jointed Figure Toys. 41,138; Sept. 6.

Krueger Beverage Co., Newark, N. J. Extra Lively. For Grape Beverage. 41,139; Sept. 6.

National Carbon Company, Inc., New York, N. Y. National Lubristik. For Lubricating Sticks. 41,140; Sept. 6.

Oat Snaps Company. (See Purity Oats Company.)

Orange Heights Fruit Association, Corona, Calif. Camel. For Oranges. 41,141; Sept. 6.

Penryn Fruit Company, Penryn, Calif. Penryn Fruit Co. For Fresh Pears. 41,142; Sept. 6.

Pure-A Foods, Inc., Penn Yan, N. Y. Pure-A. For Soup. 41,143; Sept. 6.

Purity Oats Company, doing business as Oat Snaps Company, Keokuk, Iowa. Oat Snaps. For Breakfast Food. 41,144; Sept. 6.

Schwartzberg, Louis, Chicago, Ill. Checker Candy Box. For Candy Boxes. 41,145; Sept. 6.

Schwartzberg, Louis, Chicago, Ill. Checker Egg Carton. For Egg Cartons. 41,146; Sept. 6.

LIST OF REGISTRANTS OF PRINTS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Luster-Mints. For Peppermints. 13,890; Sept. 6.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Beechies. For Chewing Gum. 13,897; Sept. 6.

Cream of Wheat Corporation, The, Minneapolis, Minn. To Keep Him Gaining Through the Summer. For Wheat Breakfast Food. 13,898; Sept. 6.

Cream of Wheat Corporation, The, Minneapolis, Minn. At This Age Especially Watch Their Weight. For Wheat Breakfast Food. 13,899; Sept. 6.

Frigie Corporation of America, Chicago, Ill. Frigie. For Frozen Confection Bars. 13,900; Sept. 6.

General Mills, Inc., Minneapolis, Minn. No More Coaxing a Child to Eat Cream! For Cereal Food. 13,901; Sept. 6.

Seller, Jos. & Sons Inc., Trenton, N. J. Seller's Goose Liver Sausage. For Goose Liver Sausage. 13,902; Sept. 6.

Small, Wm. F. & Fred'k R., Newburgh, N. Y. If You Can't See Big Type See Small. For Spectacles. 13,903; Sept. 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cotton, Chemical. Southern Chemical Cotton Company. 297,271; Sept. 6; Serial No. 327,070; published June 21, 1932.

Leather. K. Hanfling & Son. 297,265; Sept. 6; Serial No. 326,611; published June 21, 1932.

CLASS 2

Bag, Moth-proof. Le Montree Manufacturing Company. 297,305; Sept. 6.

CLASS 4

Cleaner and preservative for linoleum. Gunn Furniture Company. 297,240; Sept. 6; Serial No. 324,604; published June 21, 1932.

Cleaners and polishes, Metal. Supreme Products Company. 297,211; Sept. 6; Serial No. 326,399; published June 21, 1932.

Cleaning and polishing compounds, Shoe. W. T. Vassilatos. 297,209; Sept. 6; Serial No. 326,510; published June 21, 1932.

Cleaning compounds. Alex. C. Fergusson Co. 297,262; Sept. 6; Serial No. 325,255; published June 21, 1932.

Cleaning powder. E. W. Bennett & Co. 89,981; renewed Jan. 28, 1933.

Polish, Metal. N. S. Meyer, Inc. 297,249; Sept. 6; Serial No. 802,469; published June 21, 1932.

Polish, Shoe. J. Lachoff. 297,202; Sept. 6; Serial No. 326,943; published June 21, 1932.

Soap compound, Powdered. R. B. Martin, Inc. 297,206; Sept. 6; Serial No. 326,755; published June 21, 1932.

Soap, Floor scrubbing. Creco Company, Inc. 297,154; Sept. 6; Serial No. 318,549; published June 21, 1932.

Soap, Toilet. Colgate-Palmolive-Peet Company. 297,204; Sept. 6; Serial No. 326,842; published June 21, 1932.

CLASS 5

Adhesive, General. Lee Hardware Company. 297,144; Sept. 6; Serial No. 322,515; published June 21, 1932.

Lyes of the sulfite-cellulose manufacture, Concentrated waste. International Paper Company. 87,768; renewed Aug. 6, 1932.

Wax, Sealing. George Waterston & Sons. 39,607; renewed Dec. 30, 1932.

CLASS 6

Acid neutralizing powder, Oil removing. American Chemical Paint Company. 297,161; Sept. 6; Serial No. 324,645; published June 7, 1932.

Anti-epileptic, sedative, and hypnotic preparation. Chemische Werke Vormals H. & E. Albert. 297,132; Sept. 6; Serial No. 318,390; published June 7, 1932.

Antiseptic jelly. Durex Products Inc. 297,190–3; Sept. 6; Serial Nos. 325,837–40; published June 7, 1932.

Astringents, creams, rouges, etc. F. W. Davis. 297,135; Sept. 6; Serial No. 319,475; published June 7, 1932.

Carbon-black. Electroblacks, Incorporated. 297,229; Sept. 6; Serial No. 325,972; published June 14, 1932.

Chemical composition. H. A. Bame. 297,228; Sept. 6; Serial No. 326,201; published June 14, 1932.

Chemical product. I. G. Farbenindustrie Aktiengesellschaft. 297,199; Sept. 6; Serial No. 325,906; published June 7, 1932.

Cod liver oil and viosterol. Mead Johnson & Company. 297,187; Sept. 6; Serial No. 325,590; published June 7, 1932.

Compound, Shoe resoling and repairing. Perfect Manufacturing Co. 297,149; Sept. 6; Serial No. 323,872; published June 14, 1932.

Cream, Beauty. M. J. Immich. 297,143; Sept. 6; Serial No. 322,255; published June 7, 1932.

Creams, powders, and lotions, Face. G. W. Beeman. 297,197; Sept. 6; Serial No. 325,703; published June 14, 1932.

Deodorants, antiseptics, and prophylactics. Wm. B. Riker & Son Co. 89,951; renewed Jan. 21, 1933.

Disinfectant toilet preparation. Naamlooze Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company). 297,166; Sept. 6; Serial No. 324,228; published June 7, 1932.

Dyestuffs. Manahan Chemical Co. 297,230; Sept. 6; Serial No. 325,986; published June 14, 1932.

Effervescent tablets. I. Levie. 297,196; Sept. 6; Serial No. 325,585; published June 14, 1932.

Fluid to be poured in the shoe. W. H. Norman. 297,167; Sept. 6; Serial No. 324,263; published June 7, 1932.

Hair treating compound. J. A. Gilmore. 297,198; Sept. 6; Serial No. 325,140; published June 14, 1932.

Insecticide. I. Chernin. 297,227; Sept. 6; Serial No. 325,901; published June 7, 1932.

Insecticides. Levine Brothers. 297,189; Sept. 6; Serial No. 325,874; published June 7, 1932.

Jelly for foot odor and perspiration. L. Baron. 297,169; Sept. 6; Serial No. 325,555; published June 14, 1932.

Lotion for the skin. Campana Corporation. 297,174–5; Sept. 6; Serial Nos. 325,060–1; published June 7, 1932.

Lotions. L. N. Weissmann. 297,188; Sept. 6; Serial No. 325,887; published June 7, 1932.

Medicinal compound. W. C. Jackson. 297,159; Sept. 6; Serial No. 324,745; published June 14, 1932.

Medicinal petroleum oil, radiator glycerine, cleanser, etc. Union Oil Company of California. 297,158; Sept. 6; Serial No. 324,858; published June 14, 1932.

Medicinal preparation. E. H. Gane. 297,195; Sept. 6; Serial No. 325,400; published June 14, 1932.

Medicinal preparations. William R. Warner & Co. 297,222; Sept. 6; Serial No. 326,198; published June 14, 1932.

Medicinal salt, Effervescent. Scott & Turner, Limited. 297,130; Sept. 6; Serial No. 317,873; published June 14, 1932.

Medicine, Laxative. Dutch Products Company. 297,194; Sept. 6; Serial No. 325,819; published June 7, 1932.

Ointment. P. L. Martin. 87,550; renewed July 23, 1932.

Preparation for nervousness and headache. Pyram-Seltzer Co. 297,164; Sept. 6; Serial No. 324,444; published June 7, 1932.

Preparation for the treatment of leucorrhea, arthritis, etc. G. Sotiriades. 297,226; Sept. 6; Serial No. 326,002; published June 14, 1932.

Preparation of hormones. Dr. Ballowitz & Co. Chemisch-pharmaz. Fabrik, G. m. b. H. 297,147; Sept. 6; Serial No. 322,787; published June 7, 1932.

Preparations for exterminating insects. Getz Exterminators, Inc. 297,145; Sept. 6; Serial No. 322,635; published June 14, 1932.

Psyllium seeds. Helps to Health, Inc. 297,225; Sept. 6; Serial No. 326,819; published June 14, 1932.

Remedy for certain diseases. Reed & Carnrick. 87,808; renewed Aug. 6, 1932.

Rust proofing material, Powdered. American Chemical Paint Company. 297,162; Sept. 6; Serial No. 324,644; published June 7, 1932.

Shampoo and hair coloring preparation. L. P. Valligny. 297,163; Sept. 6; Serial No. 324,496; published June 7, 1932.

Silver copper alloy mirroring solution. Merck & Co. 297,223; Sept. 6; Serial No. 325,954; published June 14, 1932.

Solutions of cellulose esters or mixtures of the same. Brevolite Lacquer Company. 297,252; Sept. 6; Serial No. 298,143; published June 7, 1932.

Solutions of cellulose esters or mixtures of the same. Brevolite Lacquer Company. 297,261; Sept. 6; Serial No. 298,138; published June 7, 1932.

Sours, chemical eradicators, Laundry. Minnesota Chemical Company. 297,165; Sept. 6; Serial No. 324,310; published June 7, 1932.

Suppositories, Vaginal. S. M. Laboratories, Inc. 297,224; Sept. 6; Serial No. 326,231; published June 14, 1932.

Tonic, Blood and liver. W. Deerfoot. 38,751; renewed Aug. 12, 1932.

Tonic, Reconstructive. H. L. Smidler. 297,221; Sept. 6; Serial No. 326,117; published June 14, 1932.

Tooth paste. Bon Ami Company. 297,182; Sept. 6; Serial No. 325,742; published June 7, 1932.

Vermifuge (worm tablets for poultry). G. E. Conkey Company. 297,220; Sept. 6; Serial No. 326,009; published June 14, 1932.

Veterinary or sanitary preparation. Keepaway Laboratory. 297,160; Sept. 6; Serial No. 324,711; published June 7, 1932.

CLASS 9

Matches. Zarnits Bros. Grocery Co. 89,405; renewed Dec. 10, 1932.

CLASS 10

Fertilizers. Naamlooze Vennootschap Amsterdamsche Superfosfaatfabriek. 297,281; Sept. 6; Serial No. 326,527; published June 21, 1932.

Fertilizers and poultry litter. Linda Mineral Sales Company. 297,289; Sept. 6; Serial No. 325,635; published June 21, 1932.

CLASS 11

Carbon paper and typewriter ribbons. Radio Carbon Company. 297,134; Sept. 6; Serial No. 319,185; published June 21, 1932.

Ink solvents. Kaumagraph Company. 297,283; Sept. 6; Serial No. 326,289; published June 21, 1932.

CLASS 12

Concrete pipe and wall structures, Impregnated. Pan-Pacific Piling & Construction Co. 297,215; Sept. 6; Serial No. 326,528; published June 14, 1932.

Flooring, Wooden. Harris Manufacturing Company. 297,216; Sept. 6; Serial No. 326,423; published June 14, 1932.

Gratings, Metal. Irving Iron Works Company. 89,850; renewed Jan. 14, 1933.

Guards, Road. National Traffic Guard Co. 297,295; Sept. 6; Serial No. 325,044; published June 14, 1932.

Siding strips, Asbestos cement. Eternit, Inc. 297,247; Sept. 6; Serial No. 321,490; published June 14, 1932.

CLASS 13

Fence posts, Metallic. Keystone Steel & Wire Company. 297,237; Sept. 6; Serial No. 320,306; published Jan. 5, 1932.

Shower stall doors, bath shields and enclosures, Glass. L. H. Lehman. 297,139; Sept. 6; Serial No. 320,504; published June 21, 1932.

CLASS 14

Solder. Allied Research Laboratories, Inc. 297,269; Sept. 6; Serial No. 326,930; published June 21, 1932.

Steel, Tool. Midvale Company. 297,259–60; Sept. 6; Serial Nos. 297,310–17; published June 21, 1932.

CLASS 15

Oils and greases. Biltrite Motor Equipment Co. 297,253; Sept. 6; Serial No. 325,250; published June 21, 1932.

Oils and greases, Lubricating. Humble Oil & Refining Company. 297,246; Sept. 6; Serial No. 322,044; published June 21, 1932.

CLASS 19

Brakes and brake systems and parts thereof. Bendix Aviation Corporation. 297,176; Sept. 6; Serial No. 325,936; published June 21, 1932.

Brakes and brake systems and parts thereof. Bendix Aviation Corporation. 297,179; Sept. 6; Serial No. 325,935; published June 21, 1932.

Brakes and brake systems and parts thereof. Bendix Aviation Corporation. 297,236; Sept. 6; Serial No. 325,937; published June 21, 1932.

Perambulator. L. M. Montgomery. 297,136; Sept. 6; Serial No. 319,701; published June 21, 1932.

CLASS 21

Batteries, Storage. States Batteries, Ltd. 297,256; Sept. 6; Serial No. 313,021; published June 21, 1932.

Electric cells, units and systems. Struthers Dunn, Inc. 297,212; Sept. 6; Serial No. 325,860; published June 21, 1932.

Electric lighting fixtures and lamps. Miller Company. 297,257; Sept. 6; Serial No. 313,381; published June 21, 1932.

Kitchen mixing device. National Devices Corporation. 297,210; Sept. 6; Serial No. 326,446; published June 21, 1932.

Transformers. American Flyer Mfg. Co. 297,214; Sept. 6; Serial No. 326,629; published June 21, 1932.

CLASS 22

Printing set, Child's blue. M. S. Terry. 297,150; Sept. 6; Serial No. 321,262; published June 21, 1932.

CLASS 28

Dispensing apparatus, Coin-operated. Borst Engineering, Inc. 297,140; Sept. 6; Serial No. 320,629; published June 21, 1932.
Engines, pumps, and feed-grinders, Internal combustion. Fairbanks, Morse & Co. 87,988; renewed Aug. 20, 1932.
Machines. American Well Works. 89,323; renewed Dec. 10, 1932.
Mechanical water softening apparatus and parts therefor. Ward-Love Pump Corporation. 297,142; Sept. 6; Serial No. 320,771; published June 21, 1932.
Mechanisms for controlling the tension in the winding of material and apparatus. J. Clayton. 297,137; Sept. 6; Serial No. 320,159; published June 21, 1932.
Plows. Emporia Machine Co. Inc. 297,267; Sept. 6; Serial No. 326,744; published June 21, 1932.
Plows. Emporia Machine Co. Inc. 297,296; Sept. 6; Serial No. 326,743; published June 21, 1932.
Pumps, Centrifugal. Byron Jackson Co. 297,266; Sept. 6; Serial No. 326,729; published June 21, 1932.
Razor blades. Fabrica Nacional de Toledo. 297,290; Sept. 6; Serial No. 325,065; published June 21, 1932.
Rolling mill apparatus. Morgan Construction Company. 297,285; Sept. 6; Serial No. 326,114; published June 21, 1932.
Rolling mill rolls, etc. Hyde Park Foundry & Machine Company. 297,282; Sept. 6; Serial No. 326,369; published June 21, 1932.

CLASS 26

Indicators, Horizon. R. H. Upson. 297,287–8; Sept. 6; Serial Nos. 325,764–5; published June 21, 1932.
Testers, Radio tube. Radio Research Laboratories. 297,133; Sept. 6; Serial No. 317,536; published June 21, 1932.

CLASS 28

Badges, lapel buttons, pins, etc., Fraternity. Alpha Epsilon Pi Fraternity, Inc. 297,248; Sept. 6; Serial No. 299,243; published June 21, 1932.
Charms, Watch. American College of Life Underwriters. 297,156; Sept. 6; Serial No. 317,417; published June 21, 1932.
Jewelry, Metal articles of. Harvey Clap & Company. 297,218; Sept. 6; Serial No. 326,079; published June 21, 1932.

CLASS 29

Powder puffs. United Drug Company. 297,270; Sept. 6; Serial No. 327,033; published June 21, 1932.

CLASS 31

Refrigerators, Electric. Malleable Iron Range Company. 297,152; Sept. 6; Serial No. 318,815; published Nov. 24, 1931.

CLASS 32

Bed springs, mattresses, and pillows. C. B. Levy. 297,235; Sept. 6; Serial No. 326,110; published June 21, 1932.
Furniture. T. R. Taylor & Co. 297,138; Sept. 6; Serial No. 320,381; published June 21, 1932.
Furniture, Children's. L. Bamberger & Co. 297,276; Sept. 6; Serial No. 309,957; published June 21, 1932.
Pillows, mattresses, and box springs. N. Sumergrade & Sons, Inc. 297,286; Sept. 6; Serial No. 326,061; published June 21, 1932.

CLASS 34

Burners, Automatic coal. Iron Fireman Manufacturing Company. 297,251; Sept. 6; Serial No. 298,331; published June 21, 1932.
Furnaces, Heating. Thos. Merryweather Co. 297,304; Sept. 6.

CLASS 35

Belting. Manhattan Rubber Mfg. Co. 89,407; renewed Dec. 10, 1932.

CLASS 36

Phonographic machines and parts thereof. Sound Engineering Corporation. 297,213; Sept. 6; Serial No. 326,270; published June 21, 1932.

CLASS 37

Cards and sheets, Signal devices for. C. H. Law. 297,255; Sept. 6; Serial No. 311,614; published Apr. 21, 1931.
Paper-board. Russell Box Company. 297,291; Sept. 6; Serial No. 325,152; published June 21, 1932.
Paper, Toilet. Kotex Company. 297,274; Sept. 6; Serial No. 327,097; published June 21, 1932.
Paper towels. Scott Paper Company. 297,302; Sept. 6.
Papers and paper boards. Metex Company. 297,284; Sept. 6; Serial No. 326,225; published June 21, 1932.
Photographic and stationery supplies. A. M. Collins Manufacturing Company. 89,317; renewed Jan. 14, 1933.

CLASS 38

Cartoons. Ferry-Haniy Advertising Company. 297,275; Sept. 6; Serial No. 327,239; published June 21, 1932.
Folders, Printed. W. J. Gallagher. 297,268; Sept. 6; Serial No. 326,781; published June 21, 1932.
Magazine. R. F. Banning. 297,272; Sept. 6; Serial No. 327,088; published June 21, 1932.
Maps. Associated Tourist Bureau of America. 297,277; Sept. 6; Serial No. 312,122; published May 26, 1931.
Newspaper section. New York Evening Journal, Inc. 297,298; Sept. 6.
Publications. Heating Journals, Inc. 297,273; Sept. 6; Serial No. 327,096; published June 21, 1932.

CLASS 39

Clothing. Lakeview Manufacturing Company. 297,231; Sept. 6; Serial No. 327,061; published June 21, 1932.
Clothing. Mercury Mills, Limited. 297,141; Sept. 6; Serial No. 321,730; published June 21, 1932.
Clothing. People's Outfitting Company. 297,278; Sept. 6; Serial No. 312,958; published Sept. 1, 1931.
Coats, vests, pants, and overcoats. Fashion Park Associates, Inc. 297,181; Sept. 6; Serial No. 326,810; published June 14, 1932.
Coats, vests, pants, etc. Merit Clothing Company. 297,284; Sept. 6; Serial No. 326,155; published June 14, 1932.
Coats, vests, trousers, etc. Simon Ackerman Clothes, Inc. 297,250; Sept. 6; Serial No. 298,558; published June 14, 1932.
Dresses. George Washington Bicentennial Costumes Inc. 297,131; Sept. 6; Serial No. 318,341; published Nov. 3, 1931.
Dresses. B. J. Herbert. 297,173; Sept. 6; Serial No. 326,051; published June 14, 1932.
Dresses. Hirschberg-Schwadron & Co. Inc. 297,184; Sept. 6; Serial No. 325,712; published June 21, 1932.
Dresses. Ladies Garment Manufacturing Company. 297,258; Sept. 6; Serial No. 252,157; published June 14, 1932.
Dresses and suits. N. Fischmann. 297,172; Sept. 6; Serial No. 326,209; published June 21, 1932.
Dresses, coats, underwear, etc. B. Ford. 297,186; Sept. 6; Serial No. 326,623; published June 21, 1932.
Hosiery. Bear Brand Hosiery Co. 297,185; Sept. 6; Serial No. 326,452; published June 14, 1932.
Hosiery. Belmont Hosiery Company. 297,178; Sept. 6; Serial No. 326,973; published June 14, 1932.
Hosiery. P. T. Cuthbert & Co. 297,168; Sept. 6; Serial No. 325,568; published June 14, 1932.
Hosiery. Ipswich Mills, Inc. 297,232; Sept. 6; Serial No. 327,055; published June 21, 1932.
Pajamas, sweaters, etc., Beach. A. Abood. 297,303; Sept. 6.
Shirts and pajamas. Phillips-Jones Corporation. 297,177; Sept. 6; Serial No. 326,988; published June 21, 1932.
Shirts, hosiery, socks, etc. Philco Trading Co. 297,171; Sept. 6; Serial No. 326,393; published June 21, 1932.
Shirts, underwear, and pajamas. National Shirt Shops, Inc. 297,146; Sept. 6; Serial No. 322,643; published June 21, 1932.
Shorts, shirts, unionsuits, etc. Oppenheim, Oberndorf & Co. 297,170; Sept. 6; Serial No. 325,405; published June 21, 1932.
Slips. Sussberg & Feinberg, Inc. 297,180; Sept. 6; Serial No. 326,919; published June 21, 1932.
Trunks worn as outer garments. B. V. D. Company. 297,183; Sept. 6; Serial No. 326,703; published June 14, 1932.
Underwear and slips, dresses, etc. Bloom & Jaffin. 297,157; Sept. 6; Serial No. 324,982; published June 14, 1932.

CLASS 42

Goods of cotton, woolen, etc., Dress. Seldon Worsted Mills. 297,306; Sept. 6.
Jute bagging. Ludlow-Georgia Bagging Company. 297,307–8; Sept. 6.

CLASS 44

Massaging apparatus. T. Auberger. 297,208; Sept. 6; Serial No. 326,513; published June 21, 1932.
Sanitary belts. Marcus & Wiesen, Inc. 277,203; Sept. 6; Serial No. 326,903; published June 21, 1932.

CLASS 46

Bread. Natural Food Co. 89,241; renewed Nov. 11, 1932.
Cakes, cookies, and pastries, Chocolate nut. S. Gumpert Co. Inc. 297,233; Sept. 6; Serial No. 326,472; published June 14, 1932.
Canned fruits. Drew Canning Company. 297,299; Sept. 6.
Canned fruits and vegetables. Drew Canning Company. 297,300–1; Sept. 6.
Canned fruits and vegetables. Seeman Brothers. 87,935; renewed Aug. 13, 1932.
Canned fruits and vegetables. F. H. Swett. 297,207; Sept. 6; Serial No. 326,561; published June 21, 1932.
Canned fruits, vegetables, berries, etc. Sussman, Wormser & Company. 297,242; Sept. 6; Serial No. 323,209; published June 7, 1932.
Canned fruits, vegetables, fresh deciduous fruits and vegetables. Foley & Ward, Inc. 297,297; Sept. 6.
Canned fruits, vegetables, sauerkraut, etc. Volunteer Stores, Inc. 297,245; Sept. 6; Serial No. 322,344; published June 21, 1932.
Canned malt syrup. Jos. Schlitz Beverage Company. 297,279; Sept. 6; Serial No. 310,305; published June 21, 1932.

Canned olives, olive oil, etc. Old Mission Packing Corp. 297,292; Sept. 6; Serial No. 325,596; published June 21, 1932.
Canned vegetables and fruits. Egypt Canning Company. 88,861; renewed Oct. 20, 1932.
Chocolate. Lamont, Corliss & Company. 297,153; Sept. 6; Serial No. 318,628; published June 21, 1932.
Coffee. Gasser Coffee Co. 87,878; renewed Aug. 13, 1932.
Coffee. Southland Coffee Company. 297,254; Sept. 6; Serial No. 312,462; published June 1, 1932.
Confection for the decorating of cakes, etc. Kulla and Valente. 297,238; Sept. 6; Serial No. 324,892; published June 1, 1932.
Eggs and dressed poultry. Santé Institute, Ltd. 297,217; Sept. 6; Serial No. 326,193; published June 1, 1932.
Extracts, Food flavoring. Hudson Manufacturing Co. 297,244; Sept. 6; Serial No. 323,049; published June 1, 1932.
Finnan Haddies, Smoked. G. Kinsey. 87,458; renewed July 16, 1932.
Fish fillets, Fresh. Henry & Close Co. 297,201; Sept. 6; Serial No. 327,013; published June 1, 1932.
Flavor, Powdered baking. T. A. Faulds Co. 297,219; Sept. 6; Serial No. 326,050; published June 1, 1932.
Foods. Zarnits Bros. Grocery Co. 89,523; renewed Dec. 17, 1932.
Gum, Chewing. Kidd Products Corporation. 297,155; Sept. 6; Serial No. 317,520; published June 1, 1932.
Gum, Chewing. Wm. Wrigley Jr. Company. 297,293–4; Sept. 6; Serial Nos. 325,538–9; published June 1, 1932.
Olive oil. Societa Anonima Lucchese Olii e Vini. 297,151; Sept. 6; Serial No. 320,010; published June 1, 1932.
Olive oil, canned tuna fish, etc. E. Penna. 297,243; Sept. 6; Serial No. 323,207; published June 1, 1932.
Olives, cherries, and package dates, Bottled. B. M. Reeves Co. 297,264; Sept. 6; Serial No. 325,016; published June 1, 1932.
Sugar. Sasco Sugar Corporation. 297,263; Sept. 6; Serial No. 325,019; published June 1, 1932.
Syrup, Malt. P. Ballantine & Sons. 297,200; Sept. 6; Serial No. 327,039; published June 1, 1932.
Tea and coffee. C. J. Neumann Coffee Co. Inc. 297,205; Sept. 6; Serial No. 326,829; published June 1, 1932.
Vegetables, Fresh. Golden Valley Produce Co. Ltd. 297,241; Sept. 6; Serial No. 323,454; published June 1, 1932.

CLASS 48

Malt beverage. Grand Pop Bottling Co. 297,239; Sept. 6; 323,659; published Apr. 19, 1932.

CLASS 50

Glove cuff material. Landers Corporation. 297,148; Sept. 6; Serial No. 323,268; published June 1, 1932.
Identification tags for furs, etc. Fur Protective Seal Corp. 297,280; Sept. 6; Serial No. 326,585; published June 1, 1932.
Rubber-proofed fabric sheetings. Continental-Caoutchouc- und Gutta-Percha-Compagnie. 88,065; renewed Aug. 27, 1932.

LIST OF LABELS

Bond-Sunshine Vitamin-D Bread. For Bread. General Baking Company. 41,132–3; Sept. 6.
Brill's E-Zee Freez. For Ice Cream Powder. H. C. Brill Co. 41,115; Sept. 6.
C and H Sugar Bowl Pure Cane Sugar Confectioners Powdered. For Sugar. California and Hawaiian Sugar Refining Corporation, Limited. 41,118; Sept. 6.
Camel. For Oranges. Orange Heights Fruit Association. 41,141; Sept. 6.
Checker Candy Box. For Candy Boxes. L. Schwartzberg. 41,145; Sept. 6.
Checker Egg Carton. For Egg Cartons. L. Schwartzberg. 41,146; Sept. 6.
Eag-Em. For Lubricating Oil. J. C. Edgar. 41,124; Sept. 6.
Enzer for Athlete's Foot. For Medicinal Preparation. C. S. Allen. 41,114; Sept. 6.
Eskimo. For Ice Cream and Cake. Eskimo Pie Corporation. 41,128; Sept. 6.
Eskimo Boat. For Frozen Confections. Eskimo Pie Corporation. 41,126; Sept. 6.
Eskimo Pop. For Frozen Confections. Eskimo Pie Corporation. 41,125; Sept. 6.
Extra Lively. For Grape Beverage. Krueger Beverage Co. 41,139; Sept. 6.
Fastik Improved Staples. For Staples. Fastik Products, Inc. 41,129; Sept. 6.
Franco Hi-Jinks Bread. For Bread. Franco-American Baking Co. 41,131; Sept. 6.
Grandmother Clark's Tubfast Color Quilt Patches. For Quilt Patches. W. L. M. Clark, Inc. 41,121; Sept. 6.
J. F. B. Auto Top Dressing. For Auto Top Dressing. J. F. Burkhart. 41,117; Sept. 6.
Kool Cigarettes. For Cigarettes. Brown & Williamson Tobacco Corporation. 41,116; Sept. 6.
Kristal-Kleer Filter Compound. For Compound in the Form of Powder Used in the Filtration of Liquids and Beverages. Crystal Home Filter Co. Inc. 41,122; Sept. 6.
Mexicana. For Fresh Oranges. Canoga Citrus Association. 41,119; Sept. 6.
National Lubristik. For Lubricating Sticks. National Carbon Company. 41,140; Sept. 6.
Nile Queen Crepe. For Crepe Tissue Paper. Fort Howard Paper Company. 41,130; Sept. 6.
Oat Snaps. For Breakfast Food. Purity Oats Company. 41,144; Sept. 6.
Penryn Fruit Co. For Fresh Pears. Penryn Fruit Company. 41,142; Sept. 6.
Popeye Shadow Boxer. For Jointed Figure Toys. King Features Syndicate, Inc. 41,138; Sept. 6.
Popeye The Sailor Man. For Jointed Figure Toys. King Features Syndicate, Inc. 41,137; Sept. 6.
Pure-A. For Soup. Pure-A Foods, Inc. 41,143; Sept. 6.
Sliced Bond-Sunshine Vitamin-D Bread. For Bread. General Baking Company. 41,134; Sept. 6.
Smart Set Salmon Steak. For Salmon. G. P. Halferty & Co. 41,135; Sept. 6.
Snowman Chocolate Coating. For Chocolate Coating for Frozen Confections. Eskimo Pie Corporation. 41,127; Sept. 6.
Spice Layer. For Cake. Kalamazoo Label Company. 41,136; Sept. 6.
The First Turkish Blend Cigarettes. For Cigarettes. Dublin Bros. 41,123; Sept. 6.
Up-Side-Down Cake Pans. For Cake Pans. Chicago Metallic Manufacturing Company. 41,120; Sept. 6.
Wataman Gland Tablets. For Gland Tablets. G. B. Alexander. 41,113; Sept. 6.

LIST OF PRINTS

At this Age especially watch their Weight. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,899; Sept. 6.
Beech-Nut Beechies. For Chewing Gum. Beech-Nut Packing Company. 13,897; Sept. 6.
Beech-Nut Luster-Mints. For Peppermints. Beech-Nut Packing Company. 13,896; Sept. 6.
Frigie. For Frozen Confection Bars. Frigie Corporation of America. 13,900; Sept. 6.
If You can't See Big Type See Small. For Spectacles. Wm. F. & Fred'k R. Small. 13,903; Sept. 6.
No more coaxing a Child to eat Cream! For Cereal Food. General Mills, Inc. 13,901; Sept. 6.
Seller's Goose Liver Sausage. For Goose Liver Sausage. Jos. Seller & Sons Inc. 13,902; Sept. 6.
To keep him gaining through the Summer. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,898; Sept. 6.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 6TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abadie, Jean B. J. M., Paris, France. Maintenance of the pressure in vacuum tubes. 1,875,972; Sept. 6.
Abadie, Lucien, et al, trustees. (See Gruss, Francis K., assignor.)
Abercrombie, J. S. (See King, Walter E., assignor.)
Accounting & Tabulating Corporation of Great Britain, Limited, The. (See Brougham, Leslie E., assignor.)
Accounting & Tabulating Corporation of Great Britain Limited, The. (See Thomas, Arthur, assignor.)
Ackerly, Donald G. (See Alexander, V. S., and Ackerly.)
Adams, Clark M., assignor to Nagel Electric Company, Toledo, Ohio. Electric gauge. 1,876,483; Sept. 6.
Adams, William E., Cleveland, assignor to Diebold Safe & Lock Company, Canton, Ohio. Safety depository. 1,875,690; Sept. 6.
Advance Foundry Company, The. (See Kramer, Wilbur A., assignor.)
Aerometric Valve Corp. (See Smith Harvey E., assignor.)
Air Maze Corporation. (See Walton, George M., assignor.)
Alton & Company Limited. (See Alton, John A., assignor.)
Alton, John A., assignor to Alton & Company Limited, Derby, England. System for connecting branch tubes to pressure vessels or pipes. 1,875,404; Sept. 6.
Akerberg, Carl G., assignor to Giant Grip Mfg. Co., Oshkosh, Wis. Detachable horseshoe calk. 1,875,405; Sept. 6.
Albjerg, Edwin, Fergus Falls, Minn. Automatic storm sash adjuster. 1,875,542; Sept. 6.
Albritton, Des., assignor to J. O. Parker, Spokane, Wash. Scratch pad device. 1,875,543; Sept. 6.
Aldis, Arthur C. W., Birmingham, England. Production of maps by means of aerial photographs. 1,875,363; Sept. 6.
Alexander, Vincent S., Swissvale, and D. G. Ackerly, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,875,839; Sept. 6.
Alfaro, Osvaldo, Buenos Aires, Argentina. System of stowing wine casks, or barrels, or hogsheads, etc. 1,875406; Sept. 6.
Alfonte Robert B., Chicago, Ill., assignor to Louisville Frog, Switch and Signal Co., Louisville, Ky. Renewed switch point rail and renewing same. 1,876,482; Sept 6.
Allen, Edward R., Summit, and A. Siegel, Hillside, N. J., assignors, by mesne assignments, to Krebs Pigment & Color Corporation Wilmington, Del. Rosin soap lakes of azo compounds. 18,590; Sept. 6.
Allen, Russell G., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,875,796; Sept. 6.
Allen, Russell G., Alton, Ill., assignor to Owens-Illinois Glass Company. Cut-off mechanism for glassware forming machines. 1,875,973; Sept. 6.
Alley, Lyman E. (See Jennings, M. O., and Alley.)
Allith-Prouty Company. (See Heinen, Emil J., assignor.)
Alm, Thure W., Stewart Manor, N. Y., assignor to International Cigar Machinery Company. Automatic wrapper feed control for article-enveloping machines. 1,875,974; Sept. 6.
Alm, Thure W., Stewart Manor, N. Y., assignor to International Cigar Machinery Company. Scorch preventing device for heat-seal wrapping machines. 1,875,975; Sept. 6.
Alma Manufacturing Company of Baltimore City. (See Kerngood, Allen H., assignor.)
Almada, Albert A., Vallejo, Calif. Game device. 1,876,128; Sept. 6.
Alphonso, Peter R., Seminole, Okla., assignor to The Argent Corporation, Shreveport, La. Boiler cleaner. 1,875,407; Sept. 6.
Alphonso, Peter R., Wewoka, Okla., assignor to The Argent Corporation, Shreveport, La. Boiler skimmer. 1,875,544; Sept. 6.
Aluminum Company of America. (See Templin, Richard L., assignor.)
Aluminum Goods Manufacturing Company. (See Larsen, Alantser F., assignor.)
Amalgamated Carburetters, Limited. (See Brown, Clement, assignor.)
Amberg, Joseph O., East Orange, N. J. Belt buckle. 1,876,196; Sept. 6.
American Bank Note Company. (See Marquardt, Frank C., assignor.)
American Blower Corporation. (See Morse, Clark T., assignor.)
American Buckle Company, The. (See Salisbury, Jessup, assignor.)
American Can Company. (See Peters, John F., assignor.)
American Car and Foundry Company. (See Elder, T. W., jr., and Kassler, assignors.)
American Car and Foundry Company. (See Johnson, W. V., and Kepner, assignors.)
American Car and Foundry Company. (See Knight, John M., assignor.)
American Car and Foundry Company. (See Thompson, John B. D., assignor.)
American Car and Foundry Company. (See Willoughby, Victor, assignor.)
American Car and Foundry Motors Company. (See Hall, Elbert J., assignor.)
American Chain Company. (See Reyburn, John R., assignor.)
American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)
American Machine & Foundry Company. (See Leary, James W., assignor.)
American Machine & Foundry Company. (See Smith, Elberon D., assignor.)
American Propeller Company. (See Heath, Spencer, assignor.)
American Radiator Company. (See Schwendler, R. H., and Mehling, assignors.)
American Seating Company. (See Binkeslee, Fred J., assignor.)
American Seating Company. (See Hanson, Walter M., assignor.)
American Seating Company. (See Merrill, Ralph K., assignor.)
American Seating Company. (See Morgan, Erving B., assignor.)
American Seating Company. (See Vandervoort, Milford T., assignor.)
American Stay Company. (See Merrick, Frank W., assignor.)
American Voith Contact Co. (See Lang, Richard T., assignor.)
Amieva, Manuel M., jr., assignor to W. P. Fuller & Co., San Francisco, Calif. Producing phthalic anhydride resins. 1,875,408; Sept. 6.
Anderson Albert E., Grandview, Mo. Stove. 1,875,545; Sept. 6.
Anderson, Carl E., East Orange, assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Slide. 1,876,383; Sept. 6.
Anderson, Carl J., Chicago, Ill. Handle lock for car switches. 1,875,546; Sept. 6.
Anderson, Carl J., assignor of fifty-one and two-thirds per cent to E. Borg, and fifteen per cent to C. U. Johanson, Chicago, Ill. Grinding machine. 1,875,547; Sept. 6.
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, Edward A., assignor to The Automatic Recording Safe Company, Chicago, Ill. Savings Bank. 1,875,691; Sept. 6.
Anderson, Gustaf, Richmond Hill, N. Y. Ash sifter for furnaces. 1,875,840; Sept. 6.
Anderson, Lennox J. (See Stephens, F. G. C., Anderson, and Cash.)
Andersson, Ringhald P. A., Stockholm, Sweden. Arrangement for electric incandescent lamps. 1,875,692; Sept. 6.
Andrewes, Humfrey, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Thermionic valve system. 1,876,102; Sept. 6.
Andrews, William, Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Welding of copper. 1,875,911; Sept. 6.
Appleman, William H., Beumont, Tex. Shock absorber for vehicles. 1,875,409; Sept 6.
Arano, George, Modesto, Calif. Lens-holder for projection lamps. 1,876,364; Sept. 6.
Argent Corporation, The. (See Alphonso, Peter R., assignor.)
Armbrust Chain Company. (See Armbrust, Ferdinand, assignor.)
Armbrust, Ferdinand, North Providence, assignor to Armbrust Chain Company, Providence, R. I. Extension device. 1,876,443; Sept. 6.
Armstrong Cork Company. (See Hartman, S. H., and Powers, assignors.)
Armstrong, Louis E., Fort Dodge, Iowa, assignor to Insulex Corporation, Chicago, Ill. Heat and sound insulating board and block. 1,875,364; Sept. 6.
Arndt, Jack W., Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich. Cooling system for marine engines. 1,875,912; Sept. 6.
Arni, Hans, Falkensee, near Berlin, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Device for copying films. 1,876,442; Sept. 6.
Arnold, Fred M., Chattanooga, Tenn. Variable motion device. 1,876,129; Sept. 6.

Arnold, John. (See Wise, A. G., and Arnold.)
Aromel Corporation. (See Nazare, Francois, assignor.)
Assel, Walter J., assignor to The Timken Roller Bearing Company, Canton, Ohio. Tubular axle. 1,875,797; Sept. 6.
Atlantic Carton Corporation. (See Turner, Walter E., assignor.)
Atwater, Harry A., Kansas City, Mo. Air preheating construction for furnaces. 1,875,603; Sept. 6.
Aufiero, John M., Brooklyn, N. Y. Bracket. Des. 87,702; Sept. 6.
Automatic Recording Safe Company, The. (See Anderson, Edward A., assignor.)
Automatic Transportation Company, The. (See Gfrorer, Albert H., assignor.)
Avery, James H. (See Wentworth, P. C., and Avery.)
Avery, W. & T., Limited. (See Taylor, John W., assignor.)
Babb, Edwin, Aultman, Ohio, assignor to National Fireproofing Corporation, Pittsburgh, Pa. Making conduits or the like. 1,876,444; Sept. 6.
Babcock, George H., assignor to Rayner Decalcomania Company, Chicago, Ill. Apparatus for applying sign characters. 1,875,410; Sept. 6.
Bagley, Robert M., Haddonfield, assignor to The R. M. Hollingshead Co., Camden, N. J. Liquid sprayer construction. 1,875,841; Sept. 6.
Baily, Robert W., Philadelphia, Pa. Vibrator mechanism. 1,876,271; Sept. 6.
Baker, Charles S., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Motor connection. 1,875,798; Sept. 6.
Baker Oil Tools, Inc. (See Burt, Clarence E., assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Samuel S., Webster Groves, Mo. Heat regulator for gas stoves. 1,875,548; Sept. 6.
Baker, Thomas W. (See Magee, Frederick W., assignor.)
Baker, William J., Newport, Ky. Utility flash-light. 1,876,385; Sept. 6.
Ballard, Clifford D., et al. (See Johnson, Frederick W., assignor.)
Ballard, Milton H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Releasing device. 1,875,322; Sept. 6.
Ballard, Milton H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Press. 1,875,799; Sept. 6.
Balsamo Mariano, assignor to Fruit Supply Company, St. Louis, Mo. Basket. 1,875,694; Sept. 6.
Barelli, Henry G. (See Beard, H. G., Justus, and Barelli.)
Barker, Ward T., Kansas City, Mo. Recirculation system. 1,875,549; Sept. 6.
Barlow, H. T. (See Hannan, G. R., and Goldman, assignors.)
Barnes, George L., Los Angeles, Calif. Lighting fixture. 1,875,550; Sept. 6.
Barnett, Charles and W. Barnett, Hatfield, Herts, England. Brush-making machinery. 1,875,551; Sept. 6.
Barnett, William. (See Barnett, Charles and W.)
Barron Gray Packing Company. (See Gardner, George D., assignor.)
Barthelemy, Henri L., Rome, Ga. Hollow artificial silk of low luster and preparing the same. 1,876,130; Sept. 6.
Bartlett Hayward Company, The. (See Harper, Robert B., assignor.)
Basile, Joseph, New York, assignor to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y. Couch day bed. 1,875,976; Sept. 6.
Bassett, Gerald L., Toledo, Ohio, assignor to The Conklin Pen Company of Toledo, Ohio. Fountain pen desk set. 1,876,197; Sept. 6.
Bassick Company, The. (See Moore, Raymond G., assignor.)
Bateman, Ralph C., assignor to The Goodyear Tire and Rubber Company, Akron, Ohio. Mold cleaning solution. 1,875,552; Sept. 6.
Bayer, Joseph V., Floresville, Tex. Fog penetrating televisor. 1,876,272; Sept. 6.
Baynes, Edward C., Birmingham, Mich. Making bolt holding devices. 1,876,380; Sept. 6.
Beacham, Thomas E. (See Hele-Shaw, H. S., Beacham, and Mills.)
Beard, Henry G., D. E. Justus and A. Barelli, Kansas City, Mo. Insert for tills. 1,875,605; Sept. 6.
Beardsley, Alfred, Montevideo, Uruguay. Multicolor fountain pen. 1,875,553; Sept. 6.
Beck, Adolf, Bitterfeld, and H. Dibelka, Dusseldorf-Oberkassel, Germany, assignors, by mesne assignments, to Magnesium Development Corporation. Treatment of articles made of magnesium or high percentage magnesium alloys. 1,875,131; Sept. 6.
Becker, Joseph, Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Providing fuel gas for coking retort ovens. 1,876,037; Sept. 6.
Beckwith, Harry H. (See Jennings, Melvin O., assignor.)
Beckwith, Harry H. (See Jennings, M. O., and Alley, assignors.)
Beckwith, Louis L., Brookline, Mass. Refrigerating apparatus. 1,875,977; Sept. 6.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Goblet or similar article. Des. 87,703; Sept. 6.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Goblet or similar article. Des. 87,704; Sept. 6.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Goblet or similar article. Des. 87,705; Sept. 6.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Goblet or similar article. Des. 87,706; Sept. 6.
Bedworth, Arthur H., Everett, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Paper container. 1,876,484; Sept. 6.
Beebe, Anton, El Cerrito, Calif. Spray gun. 1,875,411; Sept. 6.
Begeman, Henry G., New York, N. Y. Muffle kiln. 1,875,865; Sept. 6.
Beghetti, Peter, San Francisco, Calif. Concrete form apparatus. 1,875,366; Sept. 6.
Behrends, Christian, Winnipeg, Manitoba, Canada. Lock. 1,875,978; Sept. 6.
Beinert, Henry, et al. (See Johnson, Frederick W., assignor.)
Bellisle, Fernand, Ottawa, Ontario, Canada. Sorter-counter machine. 1,876,038; Sept. 6.
Bell, Byron D., executor. (See Bell, Walter J.)
Bell, Walter J., deceased; B. D. Bell, executor, Los Angeles, Calif. Mirror bracket structure. 1,876,554; Sept. 6.
Belnap, Nuel D., Winnetka, Ill. Oil retainer. 1,875,842; Sept. 6.
Bemis, Albert F., Newton, assignor to Bemis Industries, Incorporated, Boston, Mass. Building construction. 1,876,198; Sept. 6.
Bemis Industries, Incorporated. (See Bemis, Albert F., assignor.)
Bendix Aviation Corporation. (See Cardoza, John B. N., assignor.)
Bendix Aviation Corporation. (See Lorenzen, Christian, assignor.)
Bendix Aviation Corporation. (See Perrot, Henri, and Calvignac, assignors.)
Bendix Brake Company. (See Cautley, John R., assignor.)
Bendix Brake Company. (See Cunningham, Marion M., assignor.)
Bendix Brake Company. (See Delahaye, Walter H., assignor.)
Bendix Brake Company. (See Frankland, Edwin, assignor.)
Bendix Brake Company. (See Gallup, David L., assignor.)
Bendix Brake Company. (See Goepfrich, Rudolph A., assignor.)
Bendix Brake Company. (See Kohr, Robert F., assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Parker, Humphrey F., assignor.)
Bendix Brake Company. (See St. James, Robert T., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bendix Brake Company. (See Seaholm, E. W., Parker, and Stahlhuth, assignors.)
Bendix Brake Company. (See Taylor, Cecil H., assignor.)
Bendix Brake Company. (See Taylor, Eugene V., assignor.)
Bendix Brake Company. (See Watts, William S., assignor.)
Bendix Research Corporation. (See Havill, Clinton H., assignor.)
Bendix Research Corporation. (See Houston, George F., assignor.)
Bennetch, Harry C., Los Angeles, Calif. Book support. 1,876,387; Sept. 6.
Benson, Arthur L., Dundee, Angus, Scotland. Bobbin drag arrangement for spinning and like textile frames. 1,876,445; Sept. 6.
Berenyi, Ludwig. (See Herzog, R. O., and Berenyi.)
Berger, Augusta M., Brooklyn, N. Y. Shoe lace fastener. 1,876,505; Sept. 6.
Beringer, Roscoe, assignor to General Motors Corporation, Detroit, Mich. Clutch. 1,875,696; Sept. 6.
Bernat, Frank, Hammond, Ind. Garment hanger. Des. 87,707; Sept. 6.
Bernau, Frederick W., Hillside, assignor to Ellis Adding Typewriter Company, Newark, N. J. Carriage control of ribbon shift mechanisms. 1,875,913; Sept. 6.
Bethune, John, Rochester, N. Y., assignor to Reo Motor Car Company, Lansing, Mich. Two speed drive axle. 1,876,388; Sept. 6.
Beutel, Robert J., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Enveloping cigar. 1,875,979; Sept. 6.
Biedermann, Paul R. G., San Francisco, Calif. Metallic sucker rod guide. 1,875,555; Sept. 6.
Bilt-Rite Manufacturing Company. (See Costa, Anthony P., assignor.)
Bingham, George C., Maldon, England. Machine for plucking birds. 1,875,980; Sept. 6.
Bird & Son, Inc. (See Graham, James E., assignor.)
Bird, Arthur L., Orwell, and H. C. Lindsley, Brandon, Vt. Windshield heater. 1,876,389; Sept. 6.
Bishop, Francis C., Calcutta, Ind. Combination lock. 1,876,132; Sept. 6.

Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Resynchronizing means for traffic signalling systems. 1,875,367; Sept. 6.
Blackburn, Jasper, Webster Groves, Mo. Cable hanger. 1,875,697; Sept. 6.
Blair, Duane A. (See Webb, J. B., and Blair.)
Blakeslee, Fred J., assignor to American Seating Company, Grand Rapids, Mich. Furniture construction. 1,875,698; Sept. 6.
Blau, Henry H., assignor to Macbeth-Evans Glass Company, Charleroi, Pa. Incandescent electric lamp bulbs. 1,875,981; Sept. 6.
Bleich, Morris. (See Longbotham, T., and Bleich.)
Block, Joseph, Brooklyn, N. Y. Illuminated device. 1,876,448; Sept. 6.
Blum, Gus, and G. Fisher, Pass Christian, Miss. Mail loading and unloading crane. 1,876,199; Sept. 6.
Blumenthal, Henry S. (See Switzer, Floyd R., assignor.)
Bodin, George, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,875,914; Sept. 6.
Bodine, Alfred V., Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph. 1,876,273; Sept. 6.
Boeckeler, Benjamin C. (See Swallen, L. C., and Boeckeler.)
Boenning, William M., Manitowoc, Wis. Folding furniture leg. 1,876,446; Sept. 6.
Boenning, William M., Manitowoc, Wis. Folding table. 1,876,447; Sept. 6.
Boernsen, John A., Ocheyedan, Iowa. Wire reel. 1,876,390; Sept. 6.
Bofino, Charles, Los Angeles, Calif. Package seal. 1,876,391; Sept. 6.
Bogopolsky, Jacques, Geneva, Switzerland. Automatic apparatus for taking cinematographic pictures. 1,876,392; Sept. 6.
Bohn, Gebhard C., St. Paul, Minn. Refrigerator frame. 1,875,843; Sept. 6.
Bolardi, Hector, Cleveland, Ohio. Receptacle. 1,875,412; Sept. 6.
Bolen, Charles C., Marion, Ohio. Railway brake. 1,875,323; Sept. 6.
Boller, Ernest R., Arden, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Prevention of corrosion. 1,875,982; Sept. 6.
Bonney-Floyd Company, The. (See Gregg, A. W., and Frank, assignors.)
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Making wheel hubs. 1,876,393; Sept. 6.
Booth, William N., assignor to Kelsey-Hayes Corporation, Detroit, Mich. Vehicle wheel. 1,876,394; Sept. 6.
Borden, Stephen W., Summit, N. J. Ground resistance meter. 1,876,324; Sept. 6.
Borg, Erik, et al. (See Anderson, Carl J., assignor.)
Bormann, Harry, Seguin, Tex. Tractor attachment. 1,876,485; Sept. 6.
Boss, Edward. (See Wood, A. A., and Boss.)
Bosshard, Arnold, Arbon, Switzerland, assignor to Sir James Farmer Norton & Company Limited, Lancashire, England. Mercerizing machine. 1,875,984; Sept. 6.
Bossini, Raoul F. (See Maiuri, G., and Bossini.)
Bourdet, Amédée L. R., Bordeaux, France. Actuating a water flushing device. 1,875,983; Sept. 6.
Bower, Ward E., Washington, D. C. Electromechanical vibrator mounting. 1,875,324; Sept. 6.
Bowman, Harold M., Summit, N. J., and R. W. Fentress, Elizabeth, N. J., assignors to Standard Oil Development Company. Container closure. 1,875,325; Sept. 6.
Bowman, James H., Honolulu, Hawaii. Bill box. 1,876,043; Sept. 6.
Bown, Lewis H., East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Plate or similar article. Des. 87,708; Sept. 6.
Boyden, Roland W., et al. (See Butterfield, Percy L.)
Boyden, Roland W., et al., receivers. (See Wakefield, Ernest A., assignor.)
Brach, Leon S., East Orange, N. J., assignor, by mesne assignments, to General Railway Signal Company. Lightning arrester. 1,876,518; Sept. 6.
Brach, Leon S., East Orange, N. J., assignor, by mesne assignments, to General Railway Signal Company. Lightning arrester. 1,876,514; Sept. 6.
Brackett, Fred M. (See Kushera, W. H., and Brackett.)
Brackett Stripping Machine Co., The. (See Kushera, W. H., and Brackett, assignors.)
Bradshaw, Robert. (See Wilkinson, M. L., and Bradshaw.)
Bradt, Merritt B. (See Schneider, E. J., and Bradt.)
Brady, George H., assignor to Improved Fire Detector Corporation, Baltimore, Md. Thermostatic circuit closer. 1,875,699; Sept. 6.
Brake Synchrometer Co. (See Langbein, Harold W., assignor.)
Braly, Homer B., Nardin, Okla. Well casing cleaning device. 1,875,413; Sept. 6.
Brandt, Edgar W., Paris, France. Projectile. 1,871,985; Sept. 6.
Brattrud, Henry, Hanlontown, Iowa. Honey box assembling device. 1,876,395; Sept. 6.
Braun, Philip N., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine with work support. 1,875,579; Sept. 6.
Braunagel, Robert, Victoria, British Columbia, Canada. Electric heating device. 1,875,844; Sept. 6.
Brennan, Edward J., Hasbrouck Heights, N. J. Container cap. Des. 87,709; Sept. 6.
Brettschneider, William F., St. Paul, Minn. Traffic signal. 1,875,556; Sept. 6.
Brewer, Harry W., St. Louis, Mo. Process and apparatus for color-striping pencils and the like. 1,875,700; Sept. 6.
British Insulated Cables Limited. (See Solttum, Worsley, assignor.)
British Radiostat Corporation, Limited. (See Andrewes, Humfrey, assignor.)
British Radiostat Corporation, Limited. (See Priechenfried, George, assignor.)
Britten, Charles E., Apollo, Pa. Metal building screen. 1,876,486; Sept. 6.
Britton, George W., Camden, N. J. Prop. 1,876,508; Sept. 6.
Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Folding mechanism for packaging machines. 1,875,986; Sept. 6.
Brougham, Leslie E., Purley, assignor to The Accounting & Tabulating Corporation of Great Britain, Limited, London, England. Record card controlled listing or tabulating or like statistical machine. 1,875,845; Sept. 6.
Brouse, William H. D., assignor to Service Station Equipment Co. Limited, Toronto, Ontario, Canada. Fluid dispensing device. 1,875,987; Sept. 6.
Brown, Bruce F., Huntington Park, and G. F. Ford, Los Angeles, assignors to Fibreboard Products Inc., San Francisco, Calif. Carton. 1,876,200; Sept. 6.
Brown, Bruce K. (See Gabriel, C. L., and Brown.)
Brown, Clement, Perry Barr, Birmingham, assignor to Amalgamated Carburetters Limited, Birmingham, England. Carburetor for internal combustion engine. 1,875,557; Sept. 6.
Brown, Glendon C. (See Stansbury, C., and Brown.)
Brown, Herman L., Greenville, Ohio. Quick detachable top lift for heels. 1,875,558; Sept. 6.
Brown, Martin F., St. Paul, Minn. Spark arrester for locomotives. 1,875,846; Sept. 6.
Brown & Sharpe Manufacturing Company. (See Sidgreaves, Henry, assignor.)
Brownell, George L., Worcester, Mass. Device for removing moisture from flexible strip material. 1,875,701; Sept. 6.
Brownell, James L., St. Petersburg, Fla., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Vehicle wheel. Re87,710; Sept. 6.
Bruce, Leo, Chicago, Ill. Pocket protector. 1,875,847; Sept. 6.
Bruesbaber, Martin W., River Forest, assignor to The Goss Printing Press Co., Chicago, Ill. Collecting and folding mechanism for printing presses. 1,876,039; Sept. 6.
Bramm, Dean H., Lansing, Mich. Hand piece for dental tools. 1,875,559; Sept. 6.
Bryant Heater & Manufacturing Company, The. (See Stark, Willet E., assignor.)
Bryant, Ozro N., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine control mechanism. 1,876,530; Sept. 6.
Bryant, Ozro N., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine control mechanism. 1,876,531; Sept. 6.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Synchronizing clock. 1,875,800; Sept. 6.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Synchronizing clock system. 1,875,801; Sept. 6.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company, Endicott, N. Y. Traffic signal. 1,876,201; Sept. 6.
Buchanan, Frank. (See Shaw, B. R., and Buchanan.)
Buckeye Steel Castings Company, The. (See Stertzbach, Harry W., assignor.)
Budnik, Cass A., Rockport, Wash. Self-supporting dam-building tower and process. 1,876,040; Sept. 6.
Buffalo Pottery. (See Bown, Lewis H., assignor.)
Building Products Limited. (See Odell, Leslie S., assignor.)
Bull, Clinton H. M., Houston, Tex. Drill. 1,876,041; Sept. 6.
Bundy Tubing Company. (See Quarnstrom, Bert L., assignor.)
Bunker, Herbert H., Jersey City, N. J. Floor unit. 1,876,042; Sept. 6.
Bunting Brass & Bronze Company. (See Heath, Oliver J., assignor.)
Burrow, Lee R. (See Dodd, R. H., and Burrow.)
Burt, Clarence E., Los Angeles, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Washing and cementing device for well casings. 1,875,414; Sept. 6.
Burt, Robert C., Pasadena, Calif. Nonvibratory mounting for reproducer arm. 1,875,848; Sept. 6.
Bussmann, Henry T., St. Louis, Mo. Electric fuse. 1,875,415; Sept. 6.
Butterfield, Percy L., Springfield, assignor to R. W. Boyden and C. A. Dana, receivers of The Fisk Rubber Company, Chicopee Falls, Mass. Continuous weighing device. 1,876,396; Sept. 6.
Butts, George W., Wynnewood, Pa. Container for transporting stacked articles. 1,875,702; Sept. 6.

Byrd, Hugh L., Stockport, assignor to Drey, Simpson & Company, Limited, South Reddish, near Stockport, England. Machine for cutting the pile of weft-pile fabrics. 1,875,703; Sept. 6.
Byrne, Clarence O. (See Forbes, A. L., jr., and Byrne.)
Cain, William E. (See Gotthardt, H. R., and Cain.)
California Packing Corporation. (See Goranson, Hjalmar and D., assignors.)
Calvignac, Germain. (See Perrot, H., and Calvignac.)
Cammen, Leon, New York, N. Y. Pipe making machinery. 1,875,560; Sept. 6.
Campbell, Clarence B., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control mechanism. 1,875,326; Sept. 6.
Campbell, Clarence B., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine control mechanism. 1,875,327; Sept. 6.
Campbell, Seth R., Brookes Mills, Pa. Surfacing machine. 1,876,202; Sept. 6.
Canary, J. D. (See Hill, Walter M., assignor.)
Cardoza, John B. N., assignor to Bendix Aviation Corporation, New York, N. Y. Brake control. 1,876,397; Sept. 6.
Carlson, Emil. (See Kahlert, E. F., and Carlson.)
Carlson, Hjalmar E., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar locator and trimmer. 1,875,988; Sept. 6.
Carlstrand, Gustav E., Baltimore, Md. Elevator. 1,876,398; Sept. 6.
Carman & Co. (See Chandler, Charles T., assignor.)
Carnarius, Edwin H. (See Hancock, C. W., and Carnarius.)
Carothers, John N., Anniston, Ala., assignor to Swann Research, Inc. Producing diphenyl. 1,875,317; Sept. 6.
Carroll, Fred M., assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,875,849; Sept. 6.
Carroll, Fred M., assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine having a universal split unit construction. 1,875,850; Sept. 6.
Carson, Robert H., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Valve. 1,875,851; Sept. 6.
Carver, Calvin B. P., Bridgewater, Mass. Cylinder for cotton gins or the like. 1,876,203; Sept. 6.
Carver, Robert R. (See Feigel, W. A., and Carver.)
Case, J. I., Company. (See Huddle, Edwin F., assignor.)
Cash, William A. (See Stephens, F. G. C., Anderson, and Cash.)
Catala, Maurice, Virginal, and A. Huart, Brussels, Belgium. Machine for the manufacture of asbestos-cement products and the like. 1,876,309; Sept. 6.
Cautley, John R., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,328; Sept. 6.
Cedar Rapids Engineering Company. (See Dunn, Allen I., assignor.)
Cederquist, Emanuel L., Alhambra, Calif. Collapsible table. 1,876,400; Sept. 6.
Celluloid Corporation. (See Schweizer, Ernest, assignor.)
Celluloid Corporation. (See Walsh, James F., assignor.)
Chace, Norman B., Cincinnati, Ohio. Electrical switch. 1,876,133; Sept. 6.
Chanaberry, Ray W., Louisville, assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Bonding locknut. 1,876,487; Sept. 6.
Chandler, Charles T., Eustis, Fla., assignor to Carman & Co., Inc., New York, N. Y. Garment protector. 1,875,416; Sept. 6.
Chapman, Arthur W., Putney, London, England. Adjustable seat mechanism. 1,875,915; Sept. 6.
Charles, Maurice, Courbevoie, France. Brake system. 1,875,989; Sept. 6.
Chatfield, Clarence E. (See Hamer, W. D., Chatfield, and Mills.)
Chatfield, Victor M., assignor to Sun Oil Company, Philadelphia, Pa. Heat exchanger. 1,876,401; Sept. 6.
Cheatham, Frank S., Savannah, Ga. Draft gear. 1,875,704; Sept. 6.
Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)
Cheney, George K., Baldwin, N. Y. Fishing line sinker. Des. 87,711; Sept. 6.
Chicago-Cleveland Car Roofing Company. (See Swanson, Earl R., assignor.)
Chireix, Henri, Paris, France. Frequency regulating system. 1,875,329; Sept. 6.
Christensen, Leo M., and W. N. McCutchan, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Producing acids by fermentation of cellulosic materials. 1,875,368; Sept. 6.
Christensen, Leo M., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Fermentation of cellulosic materials. 1,875,688; Sept. 6.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Metal working machine. 1,876,204; Sept. 6.
Christmas, Burton, Pittsburgh, Pa. Safety razor. 1,875,990; Sept. 6.
Cincinnati Grinders Incorporated. (See Peaslee, Willetts, assignor.)
Cirac Automatic Reverse Control Company. (See Cirac, Charles P., assignor.)
Cirac, Charles P., assignor to Cirac Automatic Reverse Control Company, San Francisco, Calif. Reverse stop for vehicles. 1,875,417; Sept. 6.
Cirrito, Joseph, Jersey City, N. J. Training grapevines. 1,875,561; Sept. 6.
Ciurana, Federico. (See Ciurana, Valeriano and F.)
Ciurana, Valeriano and F., Oakland, Calif. Signal arm. 1,875,418; Sept. 6.
Clark, John W., assignor to Neuberger Chemical Corporation, New York, N. Y. Making surfacing materials. 1,875,802; Sept. 6.
Clausen, Sigurd, Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar machine feeding channel. 1,875,991; Sept. 6.
Clawson, Hugh C., Rochelle, Ill. Golf bag. 1,876,134; Sept. 6.
Claypool, Wallace L., assignor to Westco-Chippewa Pump Company, Davenport, Iowa. Rotary pump. 1,875,419; Sept. 6.
Clemmensen, Erik, Newark, assignor to Mathieson Alkali Works, Inc., New York, N. Y. Making organic intermediates. 1,875,916; Sept. 6.
Cleveland Heater Company, The. (See Craver, Albert F., assignor.)
Click, Walter E. (See Good, J. L., and Click.)
Clifford, Curtis T., San Francisco, Calif. Portable fire extinguisher and sprayer. 1,875,992; Sept. 6.
Clum Manufacturing Company. (See Winning, Robert K., assignor.)
Clute, Harvey D., Rocky Ford, Colo. Vegetable grading machine. 1,875,562; Sept. 6.
Coburn, Henry J., Bode, Iowa. Tractor wheel. 1,876,488; Sept. 6.
Coil, Grover C. (See Wheelbarger, A. S., and Coil.)
Coleman, George, East Lynn, assignor to Gregory & Read Company, Lynn, Mass. Machine for cutting flexible material. 1,875,852; Sept. 6.
Coleman, John P., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,875,853; Sept. 6.
Colley, Russell S. (See Law, O. B., Colley, and Soper.)
Collins, William G., Honolulu, Hawaii. Tube holder and dispenser. 1,876,489; Sept. 6.
Colman, Howard D. (See Stewart, Duncan J., assignor.)
Colman, Howard D., Rockford, Ill. Thermostat. 1,875,369; Sept. 6.
Columbus Dental Manufacturing Company, The. (See Morris, Charles L., assignor.)
Commercial Solvents Corporation. (See Christensen, Leo M., assignor.)
Commercial Solvents Corporation. (See Christensen, L. M., and McCutchan, assignors.)
Commercial Solvents Corporation. (See Edmonds, William J., assignor.)
Commercial Solvents Corporation. (See Gabriel, C. L., and Brown, assignors.)
Commercial Solvents Corporation. (See Hancock, C. W., and Carnarius, assignors.)
Commercial Solvents Corporation. (See Langwell, Herbert, assignor.)
Commercial Solvents Corporation. (See Martin, J., and Swallen, assignors.)
Commercial Solvents Corporation. (See Swallen, Lloyd C., assignor.)
Commercial Solvents Corporation. (See Swallen, L. C., and Boeckeler, assignors.)
Commercial Solvents Corporation. (See Vaupotic, Ferdinand A., assignor.)
Commercial Solvents Corporation. (See Wheeler, M. C., and Goodale, assignors.)
Commercial Solvents Corporation. (See Woodruff, J. C., and Krchma, assignors.)
Commercial Solvents Corporation. (See Woodruff, J. C., and Wilson, assignors.)
Conklin Pen Company. (See Bassett, Gerald L., assignor.)
Conner, Benjamin F., Hartford, Conn. Jar or similar receptacle. Des. 87,712; Sept. 6.
Container Corporation of America. (See Holy, Mitchel E., assignor.)
Continental Oil Company. (See Zurcher, Paul, assignor.)
Cook, Ellsworth D., Scotia, N. Y., assignor to General Electric Company. Control circuit. 1,876,449; Sept. 6.
Cooke, Eli H., and I. B. Cooke, Spokane, Wash. Display stand. 1,875,563; Sept. 6.
Cooke, Irwin B. (See Cooke, Eli H. and I. B.)
Cooley, Volmer, Roosevelt, Wash. Dispensing device. 1,875,705; Sept. 6.
Cooper, George C., London, England. Compound eccentric mechanism. 1,875,854; Sept. 6.
Cooper, Israel W., New York, N. Y. Spring clip for ornaments and the like. 1,875,420; Sept. 6.
Costa, Anthony P., assignor to Bilt-Rite Manufacturing Company, Athens, Ga. Folding table. 1,876,274; Sept. 6.
Cote, George A., Springfield, Mass., assignor of one-half to L. A. Lively. Bedstead. 1,875,421; Sept. 6.
Coudert, Jean G. M., Issy-les-Moulineaux, and Jean Baptiste Terme, St. Etienne, France. Knitting machine. 1,875,855; Sept. 6.
Couhig, William G., Painesville, Ohio. Sealing threaded pipe joints. 1,875,708; Sept. 6.

Cowles, Irving, assignor to Union Bank of Chicago, Chicago, Ill. Force-feed lubricating system. 1,875,706; Sept. 6.
Cox, William E., New York, N. Y. Circuit controlling device. 1,875,707; Sept. 6.
Cramer, Otto P., San Francisco, Calif. Casement window hinge. 1,876,402; Sept. 6.
Craver, Albert F., Lakewood, assignor to The Cleveland Heater Company, Cleveland, Ohio. Water heater baffle. 1,875,856; Sept. 6.
Crawford, Hazel M., and W. Pollock; said Pollock assignor to Portland Feed Mills Company, Portland, Oreg. Poultry brooder. 1,876,325; Sept. 6.
Crocker, Ernest W., Duchesne, Utah. Smoking tobacco pipe. 1,875,422; Sept. 6.
Crockett, James B. (See Phillips, David J. P., assignor.)
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Croft, Hiram D., Springfield, assignor to Perkins Machine & Gear Company, West Springfield, Mass. Lubricating system. 1,875,564; Sept. 6.
Crom, John M., Tulsa, Okla., assignor to National Gunite Contracting Co., Boston, Mass. Monolithic construction. 1,876,205; Sept. 6.
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Treating hydrocarbons. 1,876,206; Sept. 6.
Crouse-Hinds Company. (See Bissell, Carl H., assignor.)
Crouse-Hinds Company. (See Hastings, Harold P., assignor.)
Crouse-Hinds Company. (See Shaw, B. R., and Buchanan, assignors.)
Cruff, Francis C., and A. A. Giuste, Dinuba, Calif. Screw valve gate. 1,875,857; Sept. 6.
Crundall, Sydney F. W. (See Llewellyn, W. B., and Crundall.)
Cummins, Delbert V., assignor to F. M. Cummins, Wilmot, S. Dak. Cripple swim bait. 1,876,275; Sept. 6.
Cummins, Frances M. (See Cummins, Delbert V., assignor.)
Cunningham, Marion M., assignor to Bendix Brake Company, South Bend, Ind. Manufacture of rivets. 1,875,709; Sept. 6.
Curie, George L., Minneapolis, Minn. Spouting system for type casting machines. 1,875,565; Sept. 6.
Currah, Launcelot E. (See Sandeman, E. K., and Currah.)
Cutler-Hammer, Inc. (See Stansbury, C., and Brown, assignors.)
Dahl, Henry. (See Lassen, H. C., and Dahl.)
Dailey, Karl F., Cleveland, Ohio. Strip steel coil-unwinder. 1,875,566; Sept. 6.
Dana, Charles A., et al. (See Butterfield, Percy L.)
Dana, Charles A., et al., receivers. (See Wakefield, Ernest A., assignor.)
Daniels, Theo, Wevelinghoven, Germany. Apparatus for feeding determined batches of tablets. 1,875,423; Sept. 6.
Daniels, Theo, Wevelinghoven, Germany. Wrapping machine. 1,875,567; Sept. 6.
Danner, John J., St. Paul, Minn. Christmas tree stand. 1,876,276; Sept. 6.
Daprato Statuary Company. (See Mariotti, Joseph J., assignor.)
Dardelet Threadlock Corporation. (See Hoke, William E., assignor.)
Dardelet Threadlock Corporation. (See Thomson, Robert, assignor.)
Darling, William V., Riverside, Calif., and R. J. Dykstra, Thompson Falls, Mont. Signal device. 1,875,424; Sept. 6.
Daudelin, Jean B., Fall River, Mass. Tension device. 1,875,568; Sept. 6.
Daudelin, Jean B., and E. E. Talbot, Fall River, Mass. Shuttle. 1,875,370; Sept. 6.
Daugherty, Samuel L., assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa. Fountain pen desk stand. 1,875,425; Sept. 6.
Davis, Elmer W., Newton Center, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y. Card index. 1,876,207; Sept. 6.
Davis, Elmer W., Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y. Record guide. 1,876,208; Sept. 6.
Davis, Ernest, Syracuse, N. Y., assignor to The Prosperity Company Inc. Supporting the overhanging ends of the bucks of pressing machines. 1,875,993; Sept. 6.
Davis, Ernest, assignor to The Prosperity Company, Syracuse, N. Y. Air circulating means for pressing machines. 1,876,277; Sept. 6.
Davis, Ervy I. (See Pearson, C. E., and Davis.)
Davis, Irvin W., South Milwaukee, Wis. Sand blasting machine. 1,875,994; Sept. 6.
Davis, James O., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind. Safety control for burner motors. 1,875,569; Sept. 6.
Davis, James O., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind. Liquid level control. 1,876,044; Sept. 6.
Davis, James O., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Flyback ratchet drive. 1,876,135; Sept. 6.
Davis-Miller Engineering Company. (See Miller, Frank L., assignor.)
Day, William H., Clinton, Conn., assignor to Remington Rand Inc., Buffalo, N. Y. Index or file. 1,876,209; Sept. 6.
Dayton, Howard B. (See Willwerscheid, T. R., and Dayton.)
Dean, George, Hall Green, England. Aircraft. 1,875,570; Sept. 6.
Deca-Disc Phonograph Company. (See Moore, William R., jr., assignor.)
De Cicco, Lewis, Chicago, Ill. Sanitary foot rest for furniture legs. 1,875,871; Sept. 6.
De Forest Crosley Radio Company. (See Lowry, Charles A., assignor.)
De Giers, Clarence A., New York, N. Y., assignor to The Liquidometer Corporation, Wilmington, Del. Content indicating mechanism for tanks and the like. 1,875,803; Sept. 6.
Delahaye, Walter H., Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,571; Sept. 6.
Delahaye, Walter H., Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,136; Sept. 6.
De Orlow, Stephen. (See Hargraves, S. S., De Orlow, and Willford.)
Detrick, M. H., Company. (See Sheahan, Frank I., assignor.)
Detroit Trust Company. (See Williams, James H., assignor.)
Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung. (See Kindermann, Erich, assignor.)
Deutsche Gold & Silber-Scheideanstadt vormals Roessler. (See Hupe, Richard, assignor.)
Devendor, John A., and W. A. Devendor, Jackson Heights, N. Y. Button. 1,876,403; Sept. 6.
Devendor, William A. (See Devendor, John A., and W. A.)
DeVries, Louis, Streator, Ill. Washing machine. 1,876,210 Sept. 6.
Dewey and Almy Chemical Company. (See Egan, C. H., and Dewey, assignors.)
Dewey, Bradley. (See Egan, C. H., and Dewey.)
Dibelka, Hugo. (See Beck, A., and Dibelka.)
Dicicco, Anthony, Providence, R. I. Combined envelope and card. 1,875,804; Sept. 6.
Dickey, Cromwell B. (See Raleigh, W. P., and Dickey.)
Dickman, Joseph J., and G. I. Lehman, assignors to Library Efficiency Corporation, New York, N. Y. Reference card. 1,875,995; Sept. 6.
Dickson, Victor E., Footscray, Victoria, assignor of one-half to C. H. Stevens, West Footscray, Australia. Metal joint for bedsteads and like purposes. 1,875,805; Sept. 6.
Dictaphone Corporation. (See Bodine, Alfred V., assignor.)
Diebold Safe & Lock Company. (See Adams, William E., assignor.)
Diescher, S., & Sons. (See Diescher, Samuel E., assignor.)
Diescher, Samuel E., assignor to S. Diescher & Sons, Pittsburgh, Pa. Plate catcher and cleaner for tinning machines. 1,876,278; Sept. 6.
Dietrich, Harold E., assignor to The Visking Corporation, Chicago, Ill. Mandrel. 1,876,279; Sept. 6.
Dillon, William A., Santa Clara, Calif. Lather brush. 1,875,426; Sept. 6.
Dmitrenko, Pierre, Paris, France. Powder box. 1,875,572; Sept. 6.
Doane, Frank I. (See Pemberton, H., and Doane.)
Dodd, Richard H., and L. R. Burrow, Stockton, Calif. Direction signal for motor vehicles. 1,875,996; Sept. 6.
Donaldson Company. (See Lowther, Wilfred W., assignor.)
Donaldson, Frank A., Minneapolis, Minn. Air cleaner. 1,875,427; Sept. 6.
Donovan, Arthur F., Hartford, Conn. Button. Des. 87,713; Sept. 6.
Donovan, Arthur F., Hartford, Conn. Dress buckle or similar article. Des. 87,714; Sept. 6.
Doring Company, Inc. (See Doring, Max B. A., assignor.)
Doring, Max B. A., assignor to Doring Company, Inc., New York, N. Y. Power transmitting mechanism. 1,875,858; Sept. 6.
Dornan, John F., assignor to Wilson & Company, Chicago, Ill. Hair spreading machine. 1,875,710; Sept. 6.
Douglass, Napoleon B., Berkeley, Calif., assignor to The Rome Company, Inc., Rome, N. Y. Wall bed. 1,876,045; Sept. 6.
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay system. 1,875,859; Sept. 6.
Draper, Charles H., Cleveland Heights, assignor to The Draper Manufacturing Company, Cleveland, Ohio. Closure construction for metallic containers. 1,875,428; Sept. 6.
Draper Manufacturing Company, The. (See Draper, Charles H., assignor.)
Drey, Simpson & Company, Limited. (See Byrd, Hugh L., assignor.)
Dudley, Frank R., Fitchburgh, Mass. Automobile headlight. 1,875,573; Sept. 6.
Dudley, William L., Seattle, Wash. Centrifugal humidifier. 1,875,711; Sept. 6.
Duncan Electric Manufacturing Company. (See Green, Stanley S., assignor.)
Duncan, Patrick, Oklahoma City, Okla. Valve. 1,875,574; Sept. 6.

Dunham, C. A., Company. (See Thinn, C. A., and Taylor, assignors.)
Dunlap, Matthew E. (See Suits, C. G., and Dunlap.)
Dunn, Allen I., assignor to Cedar Rapids Engineering Company, Cedar Rapids, Iowa. Measuring device. 1,876,280; Sept. 6.
Du Pont, E. I., de Nemours & Company. (See Boller, Ernest R., assignor.)
Du Pont, E. I., de Nemours & Company. (See Williams, I., and Neal, assignors.)
Du Puy, Richard R., assignor to Wright-De Coster, Inc., St. Paul, Minn. Loud-speaker modulating mechanism. 1,875,429; Sept. 6.
Dura Company, The. (See Miller, Dorr, assignor.)
Dusevoir, Julius, Oakland, assignor to Motive Devices, Inc., San Francisco, Calif. Carburetor. 1,875,713; Sept. 6.
Duval, Maurice, Montsecret, France. Molding apparatus. 1,875,712; Sept. 6.
Dye, Glen M., Minneapolis, Minn. Photographic print glazing machine. 1,876,046; Sept. 6.
Dyhrberg, Lauritz N., Allenton, New Zealand. Brick-handling means. 1,876,211; Sept. 6.
Dykstra, Rudolph J. (See Darling, W. V., jr., and Dykstra.)
Earnshaw, Arthur R., Wynnewood, Pa. Refrigeration. 1,876,212; Sept. 6.
Eastern Tool & Manufacturing Co. (See Anderson, Carl E., assignor.)
Eastman Manufacturing Company. (See Eisenman, Arthur A., assignor.)
Eaton Manufacturing Company, The. (See Snell, Lyle K., assignor.)
Eaton Manufacturing Company, The. (See Veale, George W., assignor.)
Eaton Manufacturing Company, The. (See Zarobsky, Charles A., assignor.)
Eckhard, John, Cincinnati, Ohio. Actuating means for shock absorbers. 1,875,575; Sept. 6.
Eckhard, John, Cincinnati, Ohio. Fluid shock absorber. 1,875,860; Sept. 6.
Eckstein, George F., Buffalo, N. Y. Winding machine. 1,875,861; Sept. 6.
Eclipse Textile Devices, Inc. (See Fassett, George R., assignor.)
Edland, Laurence A., Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y. Vulcanization of rubber. 1,875,997; Sept. 6.
Edmonds, William J., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Synthetic methanol process. 1,875,714; Sept. 6.
Edmonds, William J., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Apparatus and process for preserving liquid carbon dioxide. 1,876,047; Sept. 6.
Een, Johannes B., Oslo, Norway. Wooden plank house. 1,875,576; Sept. 6.
Eiseman, Robert J., Willoughby, assignor to The K-W. Ignition Corporation, Cleveland, Ohio. Burner control. 1,876,281; Sept. 6.
Eisenman, Arthur A., assignor to Eastman Manufacturing Company, Manitowoc, Wis. Union fitting. 1,875,830; Sept. 6.
Egan, Charles H., Boston, and B. Dewey, assignors to Dewey and Almy Chemical Company, Cambridge, Mass. Self-tightening container closure. 1,876,450; Sept. 6.
Elder, Thomas W., jr., Brooklyn, and A. Kassler, assignors to American Car and Foundry Company, New York, N. Y. Hopper car door operating mechanism. 1,876,404; Sept. 6.
Electrolux Servel Corporation. (See Maiuri, G., and Bossini, assignors.)
Ellerbeck, William L., and G. A. Steiner, Salt Lake City, Utah. Combined garment and supporter. 1,876,282; Sept. 6.
Ellis Adding Typewriter Company. (See Bernau, Frederick W., assignor.)
Ellis Adding Typewriter Company. (See Ens, Emil J., assignor.)
Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Shaft packing. 1,875,515; Sept. 6.
Emsco Derrick and Equipment Company, et al. (See Faulkner, David S., assignor.)
Emulsoids, Inc. (See Knight, Hugh, assignor.)
Endres, Herbert A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treating rubber compounds and composition obtained thereby. 1,875,372; Sept. 6.
Endsley, William H., Seguin, Tex. Device for extracting well pipes. 1,875,577; Sept. 6.
Engelen, Carl, Oedingberge Post Glandorf Bezirk Osnabruck, Germany. Harvesting machine. 1,876,137; Sept. 6.
Ennis, Elmer L., Gary, Ind. Excavating machine. 1,876,283; Sept. 6.
Ens, Emil J., assignor to Ellis Adding Typewriter Company, Newark, N. J. Operating means for front feed platens. 1,875,917; Sept. 6.
Enscott, Frank, Toronto, Ontario, Canada. Sign, name plate, or the like. 1,876,405; Sept. 6.
Esselen, Gustavus J., jr., Swampscott, assignor to The Fiberloid Corporation, Indian Orchard, Mass. Recovery of camphor. 1,875,731; Sept. 6.
Eubank, Lee H., Los Angeles, Calif., assignor to Hammond Lumber Co., Wilmington, Del. Radiocabinet. Des. 87,715; Sept. 6.
Eumuco Aktiengesellschaft fur Maschinenbau. (See Schneider, Arthur, assignor.)
Evans, Earl. (See Freimann, Raymond C., and Evans.)
Evans, Rhys D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vehicle wheel. 1,875,331; Sept. 6.
Everts Propeller Company. (See Everts, Walter W., assignor.)
Everts, Walter W., San Antonio, Tex., assignor to Everts Propeller Company. Propeller. 1,875,998; Sept. 6.
Evoritt, Guy, Princeton, Mo. Variable pitch propeller. 1,875,373; Sept. 6.
Ewald, Warren, Ardsley, assignor to John J. Nesbitt, Inc., Holmesburg, Philadelphia, Pa. Movable panel for heating and ventilating units. 1,875,918; Sept. 6.
Ewan, Thomas, Norton-on-Tees, assignor to Imperial Chemical Industries, Limited, London, England. Catalyst for production of hydrocyanic acid. 1,876,213; Sept. 6.
Exolon Company, The. (See Walton, Samuel F., assignor.)
Eynon, Harold G. and W. J. Kinderman, assignors to Industrial Developers, Inc., Philadelphia, Pa. Metal seal for paper bags. 1,875,919; Sept. 6.
Faber, Edmund J., St. Louis, Mo. Sanitary holder for collapsible tubes. 1,875,715; Sept. 6.
Fabrice, Edward H., assignor to Guardian Safety Seal Company, Chicago, Ill. Bottle sealing cap. 1,875,431; Sept. 6.
Fair, Joseph C., Fort Wayne, Ind. Tire pressure gauge. 1,875,862; Sept. 6.
Faitelowitz, Arnold, assignor to Ludwig M. Lippmann, Berlin, Germany. Extracting the nicotine from tobacco. 1,876,214; Sept. 6.
Farland, Miles L., Oakland, Calif. Pipe. 1,875,432; Sept. 6.
Farley & Loetscher Mfg. Co. (See Loetscher, Emil C., assignor.)
Farley, Preston J., Califon, N. J. Spool with reenforced head. 1,876,215; Sept. 6.
Fassett, George R., Atlanta, Ga., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Spring adjustment. 1,876,138; Sept. 6.
Faulkner, David S. (See Zerbe, L. E., and Faulkner.)
Faulkner, David S., Los Angeles, Calif., assignor of one-half to The National Supply Company, Toledo, Ohio, and one-half to Emsco Derrick and Equipment Company, Los Angeles, Calif. Rotary machine. 1,875,430; Sept. 6.
Fawick, Thomas L. (See Krenzke, William F., assignor.)
Feigel, William A., Boston, and R. R. Carver, Cambridge, Mass., assignors to Union Special Machine Company, Chicago, Ill. Pants band sewing machine. 1,875,578; Sept. 6.
Feldman, William E., assignor of one-half to A. E. Horst-Kotte, Salem, Oreg. Trousers hanger. 1,876,139; Sept. 6.
Fentress, Robert W. (See Bowman, H. M., and Fentress.)
Ferguson, Gale L., Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa. Bearing lock. 1,875,719; Sept. 6.
Fetterman, Frank W., Sacramento, assignor to Libby, McNeill & Libby, San Francisco, Calif. Exhaust box. 1,875,863; Sept. 6.
Feuillée, Henri, Gentilly, France. Apparatus for preventing the back firing in internal combustion engines. 1,876,406; Sept. 6.
Fiberloid Corporation, The. (See Esselen, Gustavus J., jr., assignor.)
Fibreboard Products Inc. (See Brown, B. F., and Ford, assignors.)
Fisher, George. (See Blum, G., and Fisher.)
Fisher, James B., to Waukesha Motor Company, Waukesha, Wis. Cooling system. 1,875,580; Sept. 6.
Fisk Rubber Company, The. (See Butterfield, Percy L., assignor.)
Fisk Rubber Company, The. (See Harvey, Robert P., assignor.)
Fisk Rubber Company, The. (See Lehman, Paul W., assignor.)
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fisk Rubber Company, The. (See Wakefield, Ernest A., assignor.)
Fisk Rubber Company, The. (See Warner, Harold E., assignor.)
Fisk Rubber Company. (See Wikle, George F., assignor.)
Fitts, Charles F., Chicago, Ill. Cleaning apparatus. 1,876,048; Sept. 6.
Fitzmaurice, William J. (See Noonan, John J., assignor.)
Fitzpatrick, James C., assignor of one-fourth to M. Fitzpatrick and one-fourth to N. Fitzpatrick, Higginsville, Mo. Sanitary hog house and pen. 1,875,433; Sept. 6.
Fitzpatrick, Mary, et al. (See Fitzpatrick, James C., assignor.)
Fitzpatrick, Naomi, et al. (See Fitzpatrick, James C., assignor.)
Fletcher, Albert L. (See Gilbert, N. S., and Fletcher.)
Fletcher, Archibald G., Springfield, Mass. Damper apparatus. 1,875,581; Sept. 6.

Fletcher Works, Incorporated. (See Schaum, Otto W., assignor.)
Foley, John R., New York, N. Y. Identifying rubber goods. 1,875,582; Sept. 6.
Food Machinery Corporation. (See Lassen, H. C., and Dahl, assignors.)
Food Machinery Corporation. (See Sharma, Jagan N., assignor.)
Forbes, Arthur L., jr., and C. O. Byrne, El Paso, Tex. Separating plant. 1,875,716; Sept. 6.
Forbes, Ferry M., Detroit, Mich. Brake. 1,875,717; Sept. 6.
Forbes, Jerry U., Cincinnati, Ohio. Winding roll. 1,876,490; Sept. 6.
Ford, George F. (See Brown, B. F., and Ford.)
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Lubrication. 1,875,718; Sept. 6.
Ford Motor Company. (See Ford, Henry.)
Ford Motor Company. (See Simpson, Howard W., assignor.)
Forde, Thomas H., and Newton W. Mellars, assignors to Formell Corporation, Ltd., San Francisco, Calif. X-ray tube. 1,876,049; Sept. 6.
Formell Corporation. (See Forde, T. H., and Mellars, assignors.)
Foster, John P., Paia, Hawaii. Treating sugar juices. 1,876,491; Sept. 6.
Foster Wheeler Corporation. (See Hardie, William H., assignor.)
Fox, Glenn, Salem, W. Va. Method of and apparatus for shooting wells. 1,875,583; Sept. 6.
Fox, Vernie A., assignor to Young Brothers Company, Detroit, Mich. Automatic dipping device. 1,876,050; Sept. 6.
Frank, Raymond H. (See Gregg, A. W., and Frank.)
Frankland, Edwin, Pontiac, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake for motor vehicles. 1,875,434; Sept. 6.
Fransen, John L., Oregon City, Oreg. Supporting device or catafalque. 1,875,435; Sept. 6.
Fraser, George H., Brooklyn, N. Y. Air separator. 1,876,516; Sept. 6.
Frazier, Irvine T., Coffeyville, Kans. Wall cabinet. 1,876,407; Sept. 6.
Frede, Charles F., St. Louis, Mo., and E. G. Hallquist, Edwardsville, assignors to General Steel Castings Corporation, Granite City, Ill. Railway car underframe. 1,875,584; Sept. 6.
Freeman, Benjamin W., Cincinnati, Ohio. Work supporting device for shoe ornamenting machinery. 1,875,720; Sept. 6.
Freimann, Raymond C., Tieton, and E. Evans, Yakima County, Wash. Fruit picker's bucket. 1,875,585; Sept. 6.
French, George F., Manchester, England. Machine gun cartridge belt. 1,876,216; Sept. 6.
French, George F., Manchester, England. Cartridge belt filling machine. 1,876,217; Sept. 6.
Frese, Joseph F., Baltimore, Md. Brake. 1,875,436; Sept. 6.
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,875,437; Sept. 6.
Fried. Krupp Aktiengesellschaft. (See Strauss, Benno, assignor.)
Fried, Richard H., Pittsburgh, Pa. Knife rack. 1,876,284; Sept. 6.
Friedman, John H., assignor to The National Machinery Co., Tiffin, Ohio. Handling stock. 1,875,586; Sept. 6.
Frost, John G. G., assignor to The Vitreous Enameling Company, Cleveland, Ohio. Superposed enamel. 1,875,721; Sept. 6.
Froussard, Albert F., St. Louis, Mo. Heel cutting machine. 1,876,285; Sept. 6.
Frova, Giovanni, Milan, Italy. Fruit pitting machine. 1,876,492; Sept. 6.
Fruit Supply Company. (See Balsamo, Mariano, assignor.)
Frutkow, Nathaniel and J. C. Wahl, Chicago, Ill. Hypodermic kit and the like. 1,876,493; Sept. 6.
Fuller Lehigh Company. (See Johnson, Charles H., assignor.)
Fuller, W. P., & Co. (See Amieva, Manuel M., jr., assignor.)
Furo, Andre C., Astoria, N. Y. Adjustable shelf. 1,876,494; Sept. 6.
Gabriel, Charles L., Terre Haute, Ind., and B. K. Brown, New York, N. Y., assignors to Commercial Solvents Corporation, Terre Haute, Ind. Catalyst for synthetic methanol production. 1,875,722; Sept. 6.
Gabriels, Henry, jr., Los Angeles, Calif. Faucet gasket. 1,875,438; Sept. 6.
Gallup, David L., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,374; Sept. 6.
Gallup, David L., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,876,140; Sept. 6.
Gardella, Albert B., Cleveland, Ohio. Brake mechanism. 1,876,286; Sept. 6.
Gardner, George D., assignor, by mesne assignments, to Barron Gray Packing Company, San Jose, Calif. Stem remover. 1,876,051; Sept. 6.
Gasoline Products Company. (See Cross, Walter M., assignor.)
Gault, Paul M., St. Louis, Mo. Signaling system. 1,875,587; Sept. 6.
Gee, Albert, Elkins Park, Pa. Cutting implement. 1,876,218; Sept. 6.
General Aniline Works, Inc. (See Herz, R., Steiger, and Hechtenberg, assignors.)
General Cable Corporation. (See Schneider, E. J., and Bradt, assignors.)
General Electric Company. (See Cook, Ellsworth D., assignor.)
General Electric Company. (See Emmet, William L. R., assignor.)
General Electric Company. (See Lennox, Thomas C., assignor.)
General Electric Company. (See Newkirk, B. L., and Grobel, assignors.)
General Electric Company. (See Stephenson, Hugh M., assignor.)
General Electric Company. (See Thearle, Ernest L., assignor.)
General Electric Company. (See Thearle, E. L., and Hubbard, assignors.)
General Electric X-Ray Corporation. (See Page, Everett W., assignor.)
General Electric X-Ray Corporation. (See Wantz, Julius B., assignor.)
General Motors Corporation. (See Beringer, Roscoe, assignor.)
General Motors Corporation. (See Thompson, Earl A., assignor.)
General Motors Corporation. (See Udale, S. M., and Truxall, assignors.)
General Railway Signal Company. (See Brach, Leon S., assignor.)
General Register Corporation. (See Zundt, John W., assignor.)
General Steel Castings Corporation. (See Frede, C. F., and Hallquist, assignors.)
General Steel Castings Corporation. (See Hahn, F. W., and Lamont, assignors.)
General Steel Castings Corporation. (See Hallquist, Einar G., assignor.)
General Steel Castings Corporation. (See Howard, Karl S., assignor.)
General Steel Castings Corporation. (See Howard, K. S., and Jackson, assignors.)
General Steel Castings Corporation. (See Roepke, Walter G., assignor.)
Gerlach, Robert M., Berlin-Halensee, Germany. Heavy metal naphthenate. 1,875,999; Sept. 6.
Gerquest, Arthur S., Hasbrouck Heights, N. J., assignor to Peabody Engineering Corporation, New York, N. Y. Pulverized coal burning device. 1,875,808; Sept. 6.
Gerstenslager, William H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for testing belts. 1,875,439; Sept. 6.
Gesell, William H., Montclair, N. J., assignor to A. S. Hinds Co., Bloomfield, N. J. Bottle. Des. 87,716; Sept. 6.
Gfrorer, Albert H., assignor to The Automatic Transportation Company, Inc., Buffalo, N. Y. Industrial truck. 1,876,219; Sept. 6.
Giant Grip Mfg. Co. (See Akerberg, Carl G., assignor.)
Gibian, Eric H., Chicago, Ill., assignor to The Vitrolite Company. Table top or the like. 1,875,864; Sept. 6.
Gibson, Louis D., assignor to The W. F. Tubbs Company, Norway, Me. Racket chair. 1,876,408; Sept. 6.
Gibson, Millard A. (See Spaeth, F. C., and Gibson.)
Giertz-Hedström, Stig. (See Stalhane, O., Werner, and Giertz-Hedström.)
Gilbert, Lloyd D., Los Angeles, Calif. Multistage pneumatic pump. 1,875,440; Sept. 6.
Gilbert, Neil S., and A. L. Fletcher, Springfield, Mass. Radio apparatus. 1,876,287; Sept. 6.
Gillette Rubber Company. (See Krause, Arnold R., assignor.)
Gillette Safety Razor Company. (See Nickerson, William E., assignor.)
Gillian, Herman A., Coshocton, Ohio. Gloves. 1,875,441; Sept. 6.
Gioe, Peter V., Brooklyn, N. Y. Safety attachment for fluid burners. 1,876,495; Sept. 6.
Giuste, Albert A. (See Cruff, F. C., and Giuste.)
Givens, Albert W., Marlborough, N. Y. Enlarged wearing surface for spike heels. 1,875,806; Sept. 6.
Gleason Works. (See White, Herbert J., assignor.)
Godfrey Conveyor Co. (See Good, J. L., and Click, assignors.)
Goepfrich, Rudolph A., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,448; Sept. 6.
Golden, John E. and O. W., Minneapolis, Minn.; said John E. Golden assignor to said Orville W. Golden. Seat adjusting device for automobile seat. 1,875,588; Sept. 6.
Golden, Orville W. (See Golden, John E. and O. W.)
Goldman, Rutherford G. (See Hannan, G. R., and Goldman.)
Goldsborough, John B., Brooklyn, N. Y. Decking for excavations. 1,876,496; Sept. 6.
Good, Jacob L., and W. E. Click, assignors to The Godfrey Conveyor Co., Elkhart, Ind. Hoisting bucket. 1,876,288; Sept. 6.
Good, John, Garden City, N. Y., assignor, by mesne assignments, to Waukesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,875,589; Sept. 6.

Goodale, Charles D. (See Wheeler, M. C., and Goodale.)
Goodman Manufacturing Company. (See Bodin, George, assignor.)
Goodman Manufacturing Company. (See Mancha R., and Stoltz, assignors.)
Goodman Manufacturing Company. (See Vodox, Frederick W., assignor.)
Goodyear Tire & Rubber Company, The. (See Bateman, Ralph C., assignor.)
Goodyear Tire & Rubber Company, The. (See Endres, Herbert A., assignor.)
Goodyear Tire & Rubber Company, The. (See Evans, Rhys D., assignor.
Goodyear Tire & Rubber Company, The. (See Gerstenslager, William H., assignor.)
Goodyear Tire & Rubber Company, The. (See Hall, Lindsay S., assignor.)
Goodyear Tire & Rubber Company. (See Kastner, Edward C., assignor.)
Goodyear Tire & Rubber Company, The. (See Lee, Adelbert E., assignor.)
Goodyear Tire & Rubber Company, The. (See Maas, Elov F., assignor.)
Goodyear Tire & Rubber Company, The. (See MacMonagle, William E., assignor.)
Goodyear Tire & Rubber Company, The. (See Musselman, Alvin J., assignor.)
Goodyear Tire & Rubber Company, The. (See Rowland, Ben W., assignor.)
Goodyear Tire & Rubber Company, The. (See State, Will C., assignor.)
Goodyear Tire & Rubber Company. (See Steere, Samuel A., assignor.)
Goodyear Tire & Rubber Company, The. (See Van Rennes, Cornelis, assignor.)
Goodyear Tire & Rubber Company, The. (See Woodward, Alva W., assignor.)
Goranson, David. (See Goranson, Hjalmar and D.)
Goranson, Hjalmar and D., San Jose, assignors to California Packing Corporation, San Francisco, Calif. Fruit peeling machine. 1,876,000; Sept. 6.
Gordon, Joseph R., assignor of one-half to C. F. Willey, Baldwin, N. Y. Seeding attachment for lawn-mowers. 1,876,409; Sept. 6.
Gordon, Kenneth, and J. Hughes, Norton-on-Tees, assignors to Imperial Chemical Industries Limited, London, England. Treatment of coal distillation gases. 1,875,920; Sept. 6.
Gorman, Patrick F., Central Falls, R. I.. Aerial safety suit device. 1,875,807; Sept. 6.
Goss Printing Press Co., The. (See Brueshaber, Martin W., assignor.)
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky. Conveyer gate section. 1,875,375; Sept. 6.
Gould & Eberhardt. (See Zimmerman, William F., assignor.)
Graham, James E., Newton, assignor to Bird & Son, Inc., East Walpole, Mass. Floor tile. 1,876,289; Sept. 6.
Grand Specialties Company. (See Saagen, Michael J., assignor.)
Grant, Francis B., and H. Harper, Norton-on-Tees, assignors to Imperial Chemical Industries Limited, London, England. Feeding finely divided solid material into high pressure vessels. 1,875,921; Sept. 6.
Gravely, Benjamin F., Dunbar, W. Va. Cutter guard. 1,876,220; Sept. 6.
Gray, Elmer J., and E. J. Hoyos, Boston, Mass., assignors to R. T. Romine, Mount Clemens, Mich. Industrial truck. 1,876,410; Sept. 6.
Great Western Fuse Company. (See La Mar, Frank C., assignor.)
Green, Stanley S., assignor to Duncan Electric Manufacturing Company, LaFayette, Ind. Current transformer. 1,875,590; Sept. 6.
Green, William B., East St. Louis, Ill. Combination gate and reversible check valve. 1,875,591; Sept. 6.
Greenpoint Metallic Bed Co. (See Basile, Joseph, assignor.)
Greg, Victor V., Dormont, Pa., assignor to The Koppers Company of Delaware. Belt scraper. 1,875,442; Sept. 6.
Gregg, Alfred W., and R. H. Frank, assignors to The Bonney-Floyd Company, Columbus, Ohio. Wear resisting ferrous alloy. 1,876,411; Sept. 6.
Gregory & Read Company. (See Coleman, George, assignor.)
Griffith, Charles A. (See Marland, J., and Griffith.)
Grimm, Joseph A., Little Neck Park, N. Y. Rack for holding clothes, shoes, jewelry or similar articles. Des. 87,717; Sept. 6.
Grobel, Lloyd P. (See Newkirk, B. L., and Grobel.)
Groove Lock Co., Inc. (See Zeindlhofer, Anton, assignor.)
Grumbacher, Walter, New York, N. Y. Artist's kit. 1,876,001; Sept. 6.
Grunder, Friedrich, Munchenstein, near Basel, Switzerland Making fibrous insulating products. 1,876,221; Sept. 6.
Gruss, Francis J., et al., trustees. (See Gruss, Francis K., assignor.)
Gruss, Francis K., Redwood City, assignor to L. Abadie, Berkeley, F. J. Gruss and F. K. Gruss, trustees, Redwood City, Calif. Vacuum brake. 1,875,723; Sept. 6.
Guardian Safety Seal Company. (See Fabrice, Edward H., assignor.)
Guerrilich, Frederick C., Guilford, Conn. Auxiliary brake-operating mechanisms for motor vehicles. 1,875,865; Sept. 6.
Gurtler, Rudolf, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Iron-cored inductance (choke coil, transformer) for direct current loads. 1,876,451; Sept. 6.
Gusdorf, Harold M., Indianapolis, Ind. Paste-like dispenser. 1,876,452; Sept. 6.
Guthrie, Robert G., assignor to Sun Oil Company, Philadelphia, Pa. Process and apparatus for combating oil and chemical fires. 1,876,222; Sept. 6.
Hadley, Edwin J., Brooklyn, N. Y. Framing means for motion picture projectors. 1,876,413; Sept. 6.
Haendel, Walter, Berlin, Germany. Dyeing and figuring woven, knitted and plaited fabrics, leather and other materials. 1,876,052; Sept. 6.
Hagey, Marvin A., Los Angeles, Calif. Flush valve. 1,876,223; Sept. 6.
Haglund, Ture R., Stockholm, Sweden. Production of aluminum oxide or products containing aluminum oxide out of material containing aluminum sulphide. 1,876,453; Sept. 6.
Hahn, Ferdinand W., Michigan City, Ind., and J. A. Lamont, Chicago, Ill., assignors, by mesne assignments, to General Steel Castings Corporation, Eddystone, Pa. Underframe. 1,875,592; Sept. 6.
Hall, Elbert J., Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Internal combustion engine. 1,875,444; Sept. 6.
Hall, Elbert J., Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y. Internal combustion engine. 1,875,724; Sept. 6.
Hall, Lindsay S., New Bedford, Mass., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cord fabric. 1,875,445; Sept. 6.
Hall, Randolph F., Rochester, N. Y. Airplane. 1,875,593; Sept. 6.
Hailer, Robert, Riehen, near Basel, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Producing fast tints on the fiber. 1,875,446; Sept. 6.
Hallquist, Einar G. (See Frede, C. F., and Hallquist.)
Hallquist, Einar G., Edwardsville, assignor to General Steel Castings Corporation, Granite City, Ill. Railway tank car underframe. 1,875,594; Sept. 6.
Hallwood, Nathan A., Columbus, Ohio. Scale. 1,875,809; Sept. 6.
Hamer, William D., C. E. Chatfield, Indianapolis, Ind., and B. Mills, Chicago, Ill., assignors to Transelectric Company, Indianapolis, Ind. Manipulating tool for high tension transmission lines. 1,875,376; Sept. 6.
Hammer, Samuel, assignor to United Metal Box Co. Inc., Brooklyn, N. Y. Adjustable shelf support. 1,875,318; Sept. 6.
Hammond Lumber Co. (See Eubank, Lee Hall, assignor.)
Hancock, Clarence W., and E. H. Carnarius, Peoria, Ill., assignors to Commercial Solvents Corporation, Terre Haute, Ind. Esterification process. 1,875,447; Sept. 6.
Hancock, Virgil H., New Orleans, La. Lens. 1,876,497; Sept. 6.
Hanna Engineering Works. (See Hanna, John C., assignor.)
Hanna, John C., assignor to Hanna Engineering Works, Chicago, Ill. Riveter construction. 1,875,448; Sept. 6.
Hanna, John C., assignor to Hanna Engineering Works, Chicago, Ill. Work handling device. 1,876,290; Sept. 6.
Hannan, George R., and R. G. Goldman, assignors, by direct and mesne assignments, to H. T. Barlow, Los Angeles, Calif. Glare shield. 1,876,225; Sept. 6.
Hannan, George R., and R. G. Goldman, assignors to H. T. Barlow, Los Angeles, Calif. Glare shield. 1,876,412; Sept. 6.
Hanson, Casper F., assignor to Olson Manufacturing Company, Albert Lea, Minn. Stanchion. 1,876,141; Sept. 6.
Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Supporting standard for desk tops. 1,875,377; Sept. 6.
Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Seat. 1,875,449; Sept. 6.
Harbert, Victor H., Chicago, Ill., assignor, by mesne assignments, to Illinois Railway Equipment Company. Floor rack connecting means. 1,875,922; Sept. 6.
Hardie, William H., assignor to Foster Wheeler Corporation, New York, N. Y. Steam generator. 1,876,291; Sept. 6.
Harding, Marston, New York, N. Y. Candy sugaring mechanism. 1,876,224; Sept. 6.
Hardinge Company, Incorporated. (See Sancton, Arthur H., assignor.)
Hargraves, Samuel S., S. De Orlow, and J. W. Wilford, assignors, by mesne assignments, to Melling Forging Company, Lansing, Mich. Air intake device. 1,875,332; Sept. 6.
Harper, Elmer E., Kansas City, Mo. Material mixing, feeding, and measuring apparatus. 1,875,450; Sept. 6.
Harper, Hugh. (See Grant, F. B., and Harper.)
Harper, Robert B., assignor to The Bartlett Hayward Company, Baltimore, Md. Centrifugal dry-dust arrester. 1,876,002; Sept. 6.
Harris, Charles L., jr., and C. H. Salstrom, St. Edward, Nebr. Valve tool. 1,875,595; Sept. 6.
Harris, Ramsay L., Claremont, and D. E. Keech, Glendale, Calif. Fountain pen filling device. 1,875,866; Sept. 6.

Harris, Robert B., Houston, Tex. Propelling means. 1,875,451; Sept. 6.
Harrison, Charles F. R., Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Production of hydrogen. 1,875,923; Sept. 6.
Hart, Harry S., Chicago, Ill. Hopper car. 1,876,003; Sept. 6.
Harter, George F., assignor to The Standard Electric Time Company, Springfield, Mass. Transmitter for fire alarm systems. 1,875,810; Sept. 6.
Hartley, Arthur J., Peoria, Ill. Grain measuring device. 1,875,725; Sept. 6.
Hartman, Samuel H., and H. L. Powers, assignors to Armstrong Cork Company, Lancaster, Pa. Greens material. 1,875,867; Sept. 6.
Hartmann, Max, Reihen, near Basel, assignor, to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Fibrous material and making same. 1,875,452; Sept. 6.
Hartness, James, Springfield, Vt. Thread gauge. 1,875,726; Sept. 6.
Harvey, Robert P., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Bead closing mechanism for tire wrapping machines. 1,876,414; Sept. 6.
Haskins, Howard B., Highland Park, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Dovetail. 1,875,453; Sept. 6.
Hastings, Harold P., assignor to Crouse-Hinds Company, Syracuse, N. Y. Fusible disconnecting plug. 1,875,378; Sept. 6.
Havill, Clinton H., South Orange, assignor to Bendix Research Corporation, East Orange, N. J. Propeller. 1,875,454; Sept. 6.
Hawkins, William P., El Paso, Tex. Brake release. 1,876,498; Sept. 6.
Hayes, Alma B. (See Hayes, Jesse W. and A. B.)
Hayes, Jesse W., and A. B. Hayes, Takoma Park, Md. Combined container and lamp-shade. 1,875,455; Sept. 6.
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Hazeltine, Harry H., Everett, Wash., assignor to The Iteco Company, Portland, Oreg. Dental flask. 1,875,596; Sept. 6.
Heald, William C., Bellows Falls, Vt. Automatic voltage controller. 1,875,868; Sept. 6.
Heard, Edmund F., Hampton, Va. Method and apparatus for sealing leaks. 1,876,415; Sept. 6.
Heath, Oliver J., assignor to The Bunting Brass & Bronze Company, Toledo, Ohio. Graphiting machine. 1,876,226; Sept. 6.
Heath, Spencer, assignor to The American Propeller Company, Baltimore, Md. Propeller. 1,875,597; Sept. 6.
Heath, Spencer, assignor to The American Propeller Company, Baltimore, Md. Propeller. 1,875,598; Sept. 6.
Hebb, John A., Hopwood, Pa. Newspaper vending machine. 1,876,292; Sept. 6.
Hechtenberg, Wilhelm. (See Herz, R., Steiger, and Hechtenberg.)
Hedegard, Clarence A., Chicago, Ill. Book-end. Des. 87,718; Sept. 6.
Heerdt, Walter, Frankfort-on-the-Main, Eschersheim, Germany. Folding bedstead. 1,875,456; Sept. 6.
Heinen, Emil J., assignor to Allith-Prouty Company, Danville, Ill. Overhead door arrangement. 1,875,599; Sept. 6.
Heintz, James C., Lakewood, Ohio. Adjustable cavity repair vulcanizer. 1,875,727; Sept. 6.
Hele-Shaw, Henry S., T. E. Beacham, Westminster, London, and E. C. Mills, Camborne, assignors to Holman Brothers Limited, Camborne, England. Hoist. 1,875,600; Sept. 6.
Helland, Martin, Seattle, Wash. Cup-cake dropping machine. 1,875,601; Sept. 6.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,227; Sept. 6.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,228; Sept. 6.
Hemmingsen, Torkild V., Copenhagen, Denmark. Cooling device for injection nozzles of internal combustion engines. 1,875,457; Sept. 6.
Henry, Frederick, assignor to The Studebaker Corporation, South Bend, Ind. Glass binding tool. 1,875,728; Sept. 6.
Hense, Heinrich, London, England. Offset printing press. 1,875,869; Sept. 6.
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Hermann, Wolfgang, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Spraying device. 1,875,729; Sept. 6.
Herz, Richard, and N. Steiger, Frankfort-on-the-Main, and W. Hechtenberg, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of fast printings on vegetable fiber. 1,875,602; Sept. 6.
Hersig, Frederick J. (See Spork, C. W., and Hersig.)
Herzog, Reginald O., and L. Berenyi, Berlin-Dahlem, Germany. Manufacturing hollow molded articles from solutions of film-forming cellulosic materials. 1,876,229; Sept. 6.
Hess, Edward B., Orlando, Fla., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,876,459; Sept. 6.
Hilgers, Wilhelm, Dusseldorf, Germany. Machine for illuminating, sorting, and stamping eggs. 1,875,811; Sept. 6.
Hill, Walter M., Hudson, assignor, by direct and mesne assignments, to J. D. Canary, Littleton, Colo. Grinding mill. 1,876,416; Sept. 6.
Hill, William H. (See Rose, Harold J., and Hill.)
Hill, William H., Arlington, N. J., assignor to The Koppers Company of Delaware. Composition of matter and process of preparing the same. 1,875,458; Sept. 6.
Hilscher, Curt, Chemnitz, Germany. Knock-over bit apparatus. 1,876,417; Sept. 6.
Hinds, A. S., Co. (See Gesell, William H., assignor.)
Hinsvark, George I., Renner, S. Dak. Brooder house for pigs. 1,876,503; Sept. 6.
Hirsch, Henry, Jersey City, N. J. Laundry list printer and counter. 1,875,870; Sept. 6.
Hively, Ossian, assignor to The Morgan Engineering Company, Alliance, Ohio. Crane trolley. 1,875,730; Sept. 6.
Hochriem, Gustav F. (See Rhodes, S. A., and Hochriem.)
Hoffmann, Emil, Cologne, Germany. Hoop-iron band or the like tensioning and fastening device. 1,876,499; Sept. 6.
Hofgaard-Remington Corporation. (See Hofgaard, Rolf, assignor.)
Hofgaard, Rolf, Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y. Electric calculating machine. 1,876,293; Sept. 6.
Hofgaard, Rolf, Ljan near Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y. Calculating machine. 1,876,294; Sept. 6.
Hofgaard, Rolf, Stabekk, near Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y. Unpolarized electromagnetic relay. 1,876,295; Sept. 6.
Hofgaard, Rolf, Stabekk, near Oslo, Norway, assignor to Hofgaard-Remington Corporation, New York, N. Y. Calculating machine. 1,876,296; Sept. 6.
Hofmann, Josef, Merion, Pa. Snubber or shock absorber. 1,876,004; Sept. 6.
Hoge, John R., and V. E. Hofmann, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,876,005; Sept. 6.
Hoke, Harry A., Altoona, Pa. Locomotive tender. 1,876,297; Sept. 6.
Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Screw thread gauge. 1,875,871; Sept. 6.
Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Screw thread gauge. 1,875,872; Sept. 6.
Holbrooks, Willie L., Houston, Tex. Dredge boat construction. 1,875,603; Sept. 6.
Holland, John A., Cincinnati, Ohio. Self filling pen. 1,876,298; Sept. 6.
Hollingshead, R. M., Co., The. (See Bagley, Robert M., assignor.)
Holm, John N., Minneapolis, Minn. Milking apparatus. 1,875,604; Sept. 6.
Holman Brothers Limited. (See Hele-Shaw, H. S., Beacham, and Mills, assignors.)
Holmes, Anna, Dallas, Tex. Container. 1,875,379; Sept. 6.
Holmes, Charles D., Santa Ana, Calif. Furnace. 1,875,459; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,333; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,334; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,335; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,336; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,337; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,338; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,339; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,340; Sept. 6.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,876,517; Sept. 6.
Holst, Ellis G., Pinehurst, Wash. Device for teaching the principles of aeroplane controls. 1,876,418; Sept. 6.
Holst, Fred D., Makoti, N. Dak. Grain harvester and stacker. 1,875,605; Sept. 6.
Holttum, Worsley, assignor to British Insulated Cables Limited, Prescot, England. Sealing device for use with electric cables and other apparatus. 1,875,732; Sept. 6.

Holy, Mitchel E., assignor to mesne assignments, to Container Corporation of America, Chicago, Ill. Display stand. 1,875,460; Sept. 6.
Honigbaum, Harry H., New York, N. Y. Holder for cigars or cigarettes. 1,876,299; Sept. 6.
Hookless Fastener Company. (See Norton, Samuel H., assignor.)
Hoover Steel Ball Company. (See Pew, Thomas C., assignor.)
Hopkins, Adelbert C., Spokane, Wash. Double ended clothespin. 1,875,461; Sept. 6.
Horne, George H., Glendale, and M. A. Lissman, Alhambra, assignors to International Precipitation Company, Los Angeles, Calif. Gas cleaning and heat transfer apparatus. 1,875,341; Sept. 6.
Horner, Birdie O., Covington, Ky. Tray mounting means far attachment to beds. 1,876,230; Sept. 6.
Horning, Harry Le Van, assignor to Waukesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,875,620; Sept. 6.
Horsley, George F., Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, Westminster, London, England. Separating and recovering olefines from gases containing same. 1,875,924; Sept. 6.
Horst-Kotte, Arthur E. (See Feldman, William E., assignor.)
Horton, Gilbert L., Litchfield, Minn. Decoy. 1,875,733; Sept. 6.
Houser, Linus D., Winchester, Calif. Curtain rod threader. 1,875,462; Sept. 6.
Houston, George F., South Bend, Ind., assignor to Bendix Research Corporation, East Orange, N. J. 1,875,606; Sept. 6.
Howard, Karl S., St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,875,343; Sept. 6.
Howard, Karl S., and E. C. Jackson, St. Louis, Mo., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,875,342; Sept. 6.
Howard, Karl S., and E. C. Jackson, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Railway truck structure. 1,875,380; Sept. 6.
Howard, Karl S., and E. C. Jackson, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Car underframe structure. 1,875,381; Sept. 6.
Howarth, Harry A. S., Frankford, assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa. Combined thrust and steady bearings. 1,876,234; Sept. 6.
Hoyos, Ernesto J. (See Gray, E. J., and Hoyos.)
Huart, Albert. (See Catala, M., and Huart.)
Hubbard, Albert B. (See Thearle, E. L., and Hubbard.)
Hubbell, Robert S., South Euclid, Ohio. Valve. 1,876,300; Sept. 6.
Huddle, Edwin F., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Mower. 1,876,006; Sept. 6.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Vehicle hood. 1,875,925; Sept. 6.
Hughes, Joseph. (See Gordon, K., and Hughes.)
Hughes, Joseph, Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, Westminster, London, England. Carrying out chemical reactions in which reaction gases are circulated. 1,875,926; Sept. 6.
Humason, Granville A. (See McEvoy, J. H., Humason, and Johnson.)
Hume, George M., Fresno, Calif. Type form tie. 1,876,231; Sept. 6.
Hummert, Robert H., assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio. Airplane inner-controlled spot lamp. 1,875,607; Sept. 6.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Producing fenchone. 1,876,454; Sept. 6.
Huntemüller, Wolf, Dusseldorf, Germany. Steam boiler. 1,875,608; Sept. 6.
Hupe, Richard, Konstanz, assignor, by mesne assignments, to Deutsche Gold- & Silber-Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Hydrogenation of naphthalene. 1,876,007; Sept. 6.
Hupe, Richard, Konstanz, assignor, by mesne assignments, to Deutsche Gold- & Silber-Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Hydrogenation of naphthalene. 1,876,008; Sept. 6.
Hupp Motor Car Corporation. (See Punke, John J., assignor.)
Hural, Alexander. (See Rodin, W. F., and Hural.)
Hurd, Edwin P., Detroit, Mich. Spare tire and rim lock. 1,875,734; Sept. 6.
Hutchens, Arthur R., Lake Wales, Fla. Double-visibility card rack. 1,875,382; Sept. 6.
Hutchings, Le Roi E., Tonawanda, assignor to Remington-Rand Inc., Buffalo, N. Y. Loose leaf binder. 1,876,232; Sept. 6.
Hutchings, Le Roi E., Tonawanda, assignor to Remington-Rand Inc., Buffalo, N. Y. Index device. 1,876,233; Sept. 6.
Hutchings, Le Roi E., Tonawanda, assignor to Remington Rand Inc., Buffalo, N. Y. Binder lock. 1,876,419; Sept. 6.
Hyde, Louis B., Detroit, Mich. Electric hot water heater. 1,876,053; Sept. 6.
I. G. Farbenindustrie Aktiengesellschaft. (See Zorn, Hermann, assignor.)
Ideal Electric & Manufacturing Co., The. (See Robinson, Cornelius P., assignor.)
Ideal Novelty & Toy Company. (See Katz, Abraham M., assignor.)
Ideal Novelty & Toy Co. (See Sanders, Maurice, assignor.)
Iio, Tatasujiro, M. Machi, E. Gun, Tokyo Fu, assignor to Tea Denki Kabushiki Kaisha, Shibuya Machi, Toyotama Gun, Tokyo Fu, Japan. Commutator shorting device for motors. 1,876,235; Sept. 6.
Illinois Railway Equipment Company. (See Harbert, Victor H., assignor.)
Imperial Chemical Industries Limited. (See Andrews, William, assignor.)
Imperial Chemical Industries, Limited. (See Ewan, Thomas, assignor.)
Imperial Chemical Industries Limited. (See Gordon, K., and Hughes, assignors.)
Imperial Chemical Industries Limited. (See Grant, F. B., and Harper, assignors.)
Imperial Chemical Industries Limited. (See Harrison, Charles F. R., assignor.)
Imperial Chemical Industries Limited. (See Horsley, George F., assignor.)
Imperial Chemical Industries Limited. (See Hughes, Joseph, assignor.)
Improved Fire Detector Corporation. (See Brady, George H., assignor.)
Indian Motorcycle Company. (See Stern, Albert J. and J., assignors.)
Industrial Developers, Inc. (See Eynon, H. G., and Kinderman, assignors.)
Industrial Patents Corporation. (See Regensburger, Richard W., assignor.)
Ingersoll-Rand Company. (See Baker, Charles S., assignor.)
Inshaw, George R., Glasgow, Scotland. Pipe joint and the like. 1,876,455; Sept. 6.
Insulex Corporation. (See Armstrong, Louis E., assignor.)
International Cigar Machinery Company. (See Alm, Thure W., assignor.)
International Cigar Machinery Company. (See Beutel, Robert J., assignor.)
International Cigar Machinery Company. (See Carlson, Hjalmar E., assignor.)
International Cigar Machinery Company. (See Clausen, Sigurd, assignor.)
International Cigar Machinery Company. (See Schussler, Walter H., assignor.)
International Precipitation Company. (See Horne, G. H., and Lissman, assignors.)
International Standard Electric Corporation. (See Sandeman, E. K., and Currah, assignors.)
International Time Recording Company. (See Bryce, James W., assignor.)
International Time Recording Company of New York. (See Bryce, James W., assignor.)
Isaacson, Fred A., Chicago, Ill. Railway tank car. 1,875,609; Sept. 6.
Isaacson, Louis H. (See Teschel, G. R., Sallager, and Isaacson.)
Iteco Company. (See Hazeltine, Harry H., assignor.)
Iversen, Lorenz, assignor to Mesta Machine Company, Pittsburgh, Pa. Roll leveler. 1,876,457; Sept. 6.
Iversen, Lorenz, Pittsburgh, and R. E. Noble, Crafton, assignors to Mesta Machine Company, Pittsburgh, Pa. Shears. 1,876,456; Sept. 6.
Ives, Clifford E. (See White, W. P., and Ives.)
Jackson, Arthur R., London, England, assignor to Remington Rand Inc., Buffalo, N. Y. Index and signal. 1,876,236; Sept. 6.
Jackson, Edwin C. (See Howard, K. S., and Jackson.)
Jackson, John G., assignor to Square D Company, Detroit, Mich. Fastening device. 1,876,237; Sept. 6.
Jackson, Ralph G., Woodbury, N. J. Floor covering and making the same. 1,875,735; Sept. 6.
Jacobs, Bessie, Pittsburgh, Pa. Drain pan. 1,876,420; Sept. 6.
Jacobsen, Arthur J., and J. C. McClure, Chicago, Ill. Extracting and inserting device. 1,876,500; Sept. 6.
Jacquard Knitting Machine Co. (See Sirmay, Julius, assignor.)
Jasgur, Samuel, Brooklyn, N. Y. Window shade adjusting device. 1,875,812; Sept. 6.
Jeannette Steel Corporation. (See Stough, Turney H., assignor.)
Jeffrey, Douglas C., Akron, and H. J. Marsham, Oakfield, N. Y., assignors to Universal Gypsum & Lime Co., Chicago, Ill. Lath bundling apparatus. 1,875,610; Sept. 6.
Jeffrey Manufacturing Company, The. (See Whitney, Paul V., assignor.)
Jenkins, Jesse M., Summit, N. J. Hairpin. 1,875,611; Sept. 6.
Jennings, Melvin O., Lexington, assignor to H. H. Beckwith, Brookline, Mass. Shoe heater. 1,876,054; Sept. 6.
Jennings, Melvin O., Lexington, and L. E. Alley, Cambridge, assignors to H. H. Beckwith, Brookline, Mass. Shoe heater. 1,876,055; Sept. 6.
Jersey, Arthur M., Lansing, Mich. Can opener. 1,876,421; Sept. 6.

Johanson, Carl U., et al. (See Anderson, Carl J., assignor.)
Johantgen, Oliver D., Kenilworth, assignor to Victor Adding Machine Company, Chicago, Ill. Paper feeding mechanism for listing machines. 1,876,056; Sept. 6.
Johantgen, Oliver D., Kenilworth, assignor to Victor Adding Machine Company, Chicago, Ill. Item counting mechanism for listing machines. 1,876,057; Sept. 6.
Johnson, Albert O., Kansas City, Mo. Double-door arresting mechanism. 1,875,873; Sept. 6.
Johnson, Charles A., Unionville, Conn. Saw set. 1,875,736; Sept. 6.
Johnson, Charles A., Unionville, Conn. Chuck. 1,875,737; Sept. 6.
Johnson, Charles H., assignor of one-half to Arthur F. Miller, Sacramento, Calif. Pressure maintaining device for pneumatic tires. 1,875,874; Sept. 6.
Johnson, Charles H., Auburndale, Mass., assignor to Fuller Lehigh Company, Fullerton, Pa. Tile for boiler tubes. 1,876,301; Sept. 6.
Johnson, Edwin A. (See McEvoy, J. H., Humason, and Johnson.)
Johnson, Erling, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Manufacturing concentrated fertilizers. 1,876,501; Sept. 6.
Johnson, Frederick W., assignor to Henry Beinert, M. E. Morse, and C. D. Ballard, Excelsior, Minn. Wrecking implement. 1,875,612; Sept. 6.
Johnson, Joseph S., Collinston, Utah. Hayfork. 1,876,422; Sept. 6.
Johnson, Samuel J., assignor to The Seinsheimer Paper Company, Cincinnati, Ohio. Garment bag. 1,876,238; Sept. 6.
Johnson, Warren V., and R. C. Kepner, Berwick, Pa., assignors to The American Car and Foundry Company, New York, N. Y. Mine car coupling. 1,876,239; Sept. 6.
Johnson, Warren V., and R. C. Kepner, Berwick, Pa., assignors to American Car and Foundry Company, New York, N. Y. Mine car. 1,876,240; Sept. 6.
Johnson's, Iver, Arms and Cycle Works. (See Van Guelpen, Louis J., assignor.)
Jones, Andrew U., Montreal, Quebec, Canada. Humidifying radiator. 1,876,142; Sept. 6.
Jones, Edward G., Vereeniging, Transvaal, Union of South Africa. Pipe molding apparatus. 1,875,735; Sept. 6.
Jones, Osgood K., San Francisco, Calif. Concrete form. 1,875,463; Sept. 6.
Jordon, Lebert E., Minneapolis, Minn. Humidifying device. 1,875,464; Sept. 6.
Josselyn, Winsor, Carmel, Calif. Camera. 1,876,143; Sept. 6.
Justus, David E. (See Beard, H. G., Justus, and Barelli.)
K-W Ignition Corporation, The. (See Eiseman, Robert J., assignor.)
Kahlert, Ernest F., and E. Carlson, Browerville, Minn. Chimney sweeper. 1,875,618; Sept. 6.
Kaplan, Louis J., Greenwich, Ohio, and L. B. Meyerson, Philadelphia, Pa., assignors, by mesne assignments, to The Kitchen Katchall Corporation, Greenwich, Ohio. Kitchen utensil. 1,875,813; Sept. 6.
Karfiol, Edward, New York, N. Y. Shelf paper. Des. 87,719; Sept. 6.
Karpen, King, Chicago, Ill., assignor to S. Karpen & Bros. Safety seat grip. 1,875,614; Sept. 6.
Karpen S., & Bros. (See Karpen, King, assignor.)
Kassler, Adolph. (See Elder, T. W., jr., and Kassler.)
Kastner, Edward C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Manufacture of rubber conduits. 1,876,241; Sept. 6.
Katz, Abraham M., assignor to Ideal Novelty & Toy Company, Brooklyn, N. Y. Doll construction. 1,876,458; Sept. 6.
Kaufman, Isaac, et al. (See Zaiden, David, assignor.)
Kaufman, Jacob, et al. (See Zaiden, David, assignor.)
Kaufman, Samuel, et al. (See Zaiden, David, assignor.)
Kaufmann, Siegfried H. (See Taplin, Harold J., assignor.)
Kayser, Daniel P. A. A., Paris, France. Electric flashlight. 1,876,058; Sept. 6.
Kearney, Edward J., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Attachment spindle clamp. 1,875,730; Sept. 6.
Kearney & Trecker Corporation. (See Kearney, Edward J., assignor.)
Keech, Dana E. (See Harris, R. L., and Keech.)
Keil, Peter. (See Wheelbarger, A. S., and Keil.)
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Hinge. 1,876,242; Sept. 6.
Kelly, William M., Philadelphia, Pa. Apparatus for reclaiming waste mixtures. 1,876,243; Sept. 6.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelsey-Hayes Wheel Corporation. (See Sinclair, Charles W., assignor.)
Kelsey-Hayes Wheel Corporation. (See Sneed, John, assignor.)
Kelsey-Hayes Wheel Corporation. (See Stoler, Edward W., assignor.)
Kemper, Ella C. (See Kemper, John C., assignor.)
Kemper, John C., assignor of one-half to E. C. Kemper, Mount Washington, Baltimore, Md. Mosquito trap. 1,876,127; Sept. 6.
Kennedy, Edward, New York, assignor to The Kennedy-Steiner Corporation, Bronx County, N. Y. Combined trap and test fitting. 1,875,615; Sept. 6.
Kennedy, Leo W., Detroit, Mich. Divider support. 1,876,423; Sept. 6.
Kennedy-Steiner Corporation, The. (See Kennedy, Edward, assignor.)
Kenyon, Harry C., Compton, Calif. Talking vending machine. 1,876,424; Sept. 6.
Kepner, Robert C. (See Johnson, W. V., and Kepner.)
Kerngood, Allen H., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md. Buckle. 1,875,319; Sept. 6.
Kesselring, Roman. (See Novák, J., and Kesselring.)
Keuffel, Adolf W., Montclair, assignor to Keuffel & Esser Co., Hoboken, N. J. Slide rule. 1,875,927; Sept. 6.
Keuffel & Esser Co. (See Keuffel, Adolf W., assignor.)
Kiesling, Le Roy H., Brooklyn, N. Y. Cable equalizing mechanism. 1,876,302; Sept. 6.
Kinderman, Walter J. (See Eynon, H. G., and Kinderman.)
Kindermann, Erich, Berlin-Reinickendorf-West, assignor to Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung, Berlin, Germany. Refrigerating method and apparatus. 1,875,875; Sept. 6.
Kindom, Olaf A., Minneapolis, Minn. Whistle. Des. 87,720; Sept. 6.
King, Horace W., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid depth indicating device. 1,876,244; Sept. 6.
King, Horace W., Berkeley, Calif., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid depth indicating device. 1,876,245; Sept. 6.
King, Orville D., San Francisco, Calif. Foam distributing apparatus. 1,876,425; Sept. 6.
King-Seeley Corporation. (See King, Horace W., assignor.)
King, Walter E., assignor to J. S. Abercrombie, Houston, Tex. Valve. 1,876,246; Sept. 6.
Kinsbury Machine Works, Inc. (See Howarth, Harry A. S., assignor.)
Kirsch, Charles W., assignor to Kirsch Company, Sturgis, Mich. Draw cord equipment for telescopically extensible curtain rods. 1,876,060; Sept. 6.
Kirsch, Charles W., assignor to Kirsch Company, Sturgis, Mich. Drapery suspension device. 1,876,061; Sept. 6.
Kirsch Company. (See Kirsch, Charles W., assignor.)
Kitchen Katch-All Corporation, The. (See Kaplan, L. J., and Meyerson, assignors.)
Kittel, John J., St. Albans, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,876,502; Sept. 6.
Klein, Emil, Stuttgart, Germany, assignor to MacGregor Instrument Company, Needham, Mass. Elastic woven bandage. 1,875,740; Sept. 6.
Klein, Hans, Ida-& Marienhutte, near Saarau, Germany. Oxidizing organic compounds. 1,876,059; Sept. 6.
Kliegl Bros. Universal Electric Stage Lighting Co. (See Kliegl, John H., assignor.)
Kliegl, John H., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y. Color screen control. 1,875,814; Sept. 6.
Klingaman, Herman, Louisville, Ohio. Aircraft and automatic control therefor. 1,875,465; Sept. 6.
Kloen, Max, Jamaica, N. Y. Hydrospeed vessel. 1,875,344; Sept. 6.
Kmetko, Philip, Wilmerding, Pa. Violin. Des. 87,721; Sept. 6.
Knaggs, Joseph, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio. Metallic box. 1,876,303; Sept. 6.
Kneler, Joseph, assignor to The Vichek Tool Company, Cleveland, Ohio. Wrench set unit. 1,875,815; Sept. 6.
Knight, Hugh, Glendora, Calif., assignor to Emulsoids, Inc., New York, N. Y. Insecticide. 1,875,466; Sept. 6.
Knight, John M., Atlantic Highlands, N. J., assignor to American Car and Foundry Company, New York, N. Y. Car seat. 1,876,247; Sept. 6.
Knipple, Hank, Bozeman, Mont. Portable crushing, screening, and loading plant. 1,876,460; Sept. 6.
Knoerzer, Arthur T. (See Knoerzer, Leonard and A. T.)
Knoerzer, Leonard and A. T., Hammond, Ind. Level winding mechanism for sewer cleaners. 1,875,467; Sept. 6.
Kohout, George A., Chicago, Ill. Damper regulator. 1,875,616; Sept. 6.
Kohr, Robert F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,468; Sept. 6.
Koppers Company of Delaware, The. (See Becker, Joseph, assignor.)
Koppers Company of Delaware, The. (See Greg, Victor V., assignor.)
Koppers Company of Delaware, The. (See Hill, William H., assignor.)
Koppers Company of Delaware, The. (See Rose, H. J., and Hill, assignors.)
Koppers Company of Delaware, The. (See Van Ackeren, Joseph, assignor.)
Kramer, Andrew A., Kansas City, Mo. Expansion dome for vehicle tanks. 1,876,304; Sept. 6.
Kramer, Wilbur A., assignor to The Advance Foundry Company, Dayton, Ohio. Combined garbage cooker and drier. 1,875,320; Sept. 6.

Krauch, Carl, and M. Pier, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Conversion of solid fuels and products derived therefrom or other carbonaceous materials into valuable products. 1,876,009; Sept. 6.

Krause, Arnold R., assignor to Gillette Rubber Company, Eau Claire, Wis. Vulcanizer with interchangeable shell. 1,875,816; Sept. 6.

Krchma, Ignace J. (See Woodruff, J. C., Martin, and Krchma.)

Krebs, Henry, assignor to Packard Motor Car Company, Detroit, Mich. Metal working machine. 1,876,248; Sept. 6.

Krebs Pigment & Color Corporation. (See Allen, E. R., and Siegel, assignors.)

Krenzke, William F., Racine, Wis., assignor of one-half to T. L. Fawick, Akron, Ohio. Front driven automobile. 1,876,249; Sept. 6.

Kroehler Mfg. Co. (See Kroehler, Peter E., assignor.)

Kroehler, Peter E., Riverside, assignor to Kroehler Mfg. Co., Naperville, Ill. Spring seat construction. 1,876,305; Sept. 6.

Kronenberger, Ferdinand, Brooklyn, N. Y. Ribbed carton. 1,876,063; Sept. 6.

Krueger, Frank, assignor to Pacific Can Co., San Francisco, Calif. Apparatus for drying can ends containing a sealing compound. 1,875,469; Sept. 6.

Kuhns, John P., Dayton, Ohio, assignor to The National Tag Manufacturing Corporation, New York, N. Y. Marking tag. 1,875,741; Sept. 6.

Kunstdünger-Patent-Verwertungs-Aktiengesellschaft. (See Larsson, Markus, assignor.)

Kushera, William H., and F. M. Brackett, assignors to The Brackett Stripping Machine Co., Topeka, Kans. Glue applicator. 1,876,062; Sept. 6.

Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Folding leg for card tables and the like. 1,876,010; Sept. 6.

Kutter, Leopold, Vienna, Austria. Fountain pen. 1,876,461; Sept. 6.

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,345; Sept. 6.

Lackenbach, Armand E. (See Mihalka, A., and Wiese, assignors.)

Laing, Clayton, Chicago, Ill. Diaphragm for sound recording and reproducing devices. 1,876,300; Sept. 6.

LaMar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Fuse indicator. 1,876,426; Sept. 6.

Lamont, John A. (See Hahn, F. W., and Lamont.)

Lang, Richard T., Weehawken, N. J., assignor to American Voith Contact Co. Inc., New York, N. Y. Apparatus for dewatering and washing pulp. 1,876,064; Sept. 6.

Langbein, Harold W., Los Angeles, Calif. Method and apparatus for handling motor vehicles. 1,876,307; Sept. 6.

Langbein, Harold W., Los Angeles, Calif., assignor to Brake Synchrometer Co., Boston, Mass. Brake testing machine. 1,875,742; Sept. 6.

Langdon, Edwin L., Chicago, Ill. Dental vulcanizer. 1,875,876; Sept. 6.

Lange, Max E. (See Trumphour, W. L., and Lange.)

Langweil, Herbert, Great Burgh, England, assignor to Commercial Solvents Corporation, Terre Haute, Ind. Fermentation of cellulosic material. 1,875,689; Sept. 6.

Lant, Richard, Vienna, Austria. Treatment of petrol and other organic liquids containing water. 1,876,326; Sept. 6.

LaPorte, Ralph, Los Angeles, Calif. Locker system. 1,875,383; Sept. 6.

Larsen, Alantser F., assignor to Aluminum Goods Manufacturing Company, Manitowoc, Wis. Electric percolator. Des. 87,722; Sept. 6.

Larson, Louis, Lynden, Wash. Divider bar attachment for mowers. 1,876,462; Sept. 6.

Larsson, Markus, Berlin, Germany, assignor, to Kunstdünger-Patent-Vertwertungs-Aktiengesellschaft, Glarus, Switzerland. Producing ammonium phosphate. 1,876,011; Sept. 6.

Lassen, Harry C., and H. Dahl, assignors, to Food Machinery Corporation, San Jose, Calif. Rotary sprayer. 1,876,250; Sept. 6.

Laukel, Arthur K., Detroit, Mich. Mold or matrix for plating. 1,875,346; Sept. 6.

Lauterstein, Harry W., Montclair, N. J. Door bed. 1,876,327; Sept. 6.

Law, Onnie B., R. S. Colley, and C. C. Soper, Kent, Ohio; said Colley and said Soper, assignors to said Law. Swivel seat. 1,876,308; Sept. 6.

Leary, James W., Bloomfield, N. J., assignor to American Machine & Foundry Company. Dust-distributor for cigarette machine tobacco feeds. 1,876,012; Sept. 6.

Lee, Adelbert E., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Measuring instrument. 1,875,617; Sept. 6.

Lee Engineering Research Corporation. (See Lee, Royal, assignor.)

Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Engine. 1,876,506; Sept. 6.

Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Internal combustion engine. 1,876,507; Sept. 6.

Lehman, George I. (See Dickman, J. J., and Lehman.)

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Dusting machine. 1,876,251; Sept. 6.

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Device for handling molds. 1,876,252; Sept. 6.

Lennox, Thomas C., Pittsfield, Mass., assignor to General Electric Company. Electrical circuit regulating means. 1,876,427; Sept. 6.

Lennox, Thomas C., Pittsfield, Mass., assignor to General Electric Company. Converting apparatus. 1,876,428; Sept. 6.

Lenon, Luther G., Portland, Oreg. Plant stalk supporter. 1,875,618; Sept. 6.

Lent, Alfred H., Capitola, Calif. Engine hood ventilator. 1,875,619; Sept. 6.

Letz Manufacturing Company, The. (See Letz, William H., assignor.)

Letz, William H., Crown Point, Ind., assignor to The Letz Manufacturing Company. Grinding mill. 1,875,743; Sept. 6.

L'Hérault, Alphonse, Three Rivers, Quebec, Canada. Speed indicator. 1,875,470; Sept. 6.

Libbey-Owens-Ford Glass Company. (See McKinley, Thomas C., assignor.)

Libby, McNeill & Libby. (See Fetterman, Frank W., assignor.)

Library Efficiency Corporation. (See Dickman, J. J., and Lehman, assignors.)

Lindquist, John, Oakland, Calif. Dispensing device. 1,875,621; Sept. 6.

Lindsley, Hiram C. (See Bird, A. L., and Lindsley.)

Lippmann, Ludwig M. (See Faitelowitz, Arnold, assignor.)

Liquid Carbonic Corporation. (See Minor, Henry R., assignor.)

Liquidometer Corporation. (See de Giers, Clarence A., assignor.)

Lissman, Marcel A. (See Horne, G. H., and Lissman.)

Lively, Leroy A. (See Cote, George A., assignor.)

Livingston, John W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,876,013; Sept. 6.

Livingston, John W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,876,014; Sept. 6.

Llewellyn, William B., and S. F. W. Crundall, assignors to Peter Spence & Sons, Limited, Manchester, England. Preparation of titanium compounds. 1,876,065; Sept. 6.

Lockett, A. M., & Company, (See Nelson, Bernard S., assignor.)

Lockwood, George I., Portland, Oreg. Concrete agitator. 1,875,622; Sept. 6.

Loetscher, Emil C., Dubuque, Iowa. Treating veneer. 1,876,328; Sept. 6.

Loetscher, Emil C., Dubuque, Iowa. Treating veneer. 1,876,329; Sept. 6.

Loetscher, Emil C., Dubuque, Iowa. Molding table tops and the like. 1,876,330; Sept. 6.

Loetscher, Emil C., assignor of one-half to Farley & Loetscher, Mfg. Co., Dubuque, Iowa. Drum sending

Loewe, Bernhard. Berlin, Germany. Arrangement for dispersing badly conductive substances in vacuum valves. 1,875,744; Sept. 6.

Logan Co. (See Gotthardt, H. R., and Cain, assignors.)

Logan Co. (See Logan, Zack S., assignor.)

Logan, Zack S., assignor to Logan Co., Inc., Louisville, Ky. Conveying system. 1,876,066; Sept. 6.

London, William J. A., Hartford, Conn., assignor to Peabody Engineering Corporation, New York, N. Y. Apparatus for pulverizing materials. 1,875,817; Sept. 6.

Long, Spencer W. (See Young, F. J., and Long.)

Longbotham, Thomas, and M. Bleich, Portland, Oreg. Automatic timing mechanism. 1,875,623; Sept. 6.

Lorenzen, Christian, Berlin-Treptow, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill. Blade structure for turbines. 1,876,067; Sept. 6.

Louisville Frog, Switch and Signal Co. (See Alfonte, Robert B., assignor.)

Louvier, Alexander and M. L., Port Arthur, Tex. Washing machine. 1,876,144; Sept. 6.

Louvier, Marius L. (See Louvier, Alexander and M. L.)

Lovekin, Luther D., Villa Nova, Pa. Electric heat shut-off for water heaters. 1,875,928; Sept. 6.

Lovekin, Luther D., Villa Nova, Pa. Valve device for connection to a hot water supply. 1,875,929; Sept. 6.

Lowe, William H., assignor to The Parsfine Companies, Inc., San Francisco, Calif. Vehicle body construction. 1,876,331; Sept. 6.

Lowry, Charles A., assignor to De Forest Crosley Radio Company, Limited, Toronto, Ontario, Canada. System of and apparatus for testing radioreceivers. 1,875,624; Sept. 6.

Lowther, Wilfred W., Minneapolis, assignor to Donaldson Company, Inc., St. Paul, Minn. Air cleaner. 1,875,471; Sept. 6.

Lucas, Herman W., Washington, D. C. Reflector. 1,875,384; Sept. 6.

Lucke, Henry H. (See Wickwire, Arthur M., jr., assignor.)

Ludwig, Louis, Brooklyn, N. Y. Electric blinker. 1,875,625; Sept. 6.

Lyon, George Albert, Allenhurst, N. J. Cover for spare tires for automobiles. 1,875,316; Sept. 6.

Maas, Elov F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Expansible pulley. 1,875,385; Sept. 6.

Mabey, Charles W., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind. Peanut dispensing device. 1,876,332; Sept. 6.

Mabey Electric and Manufacturing Company. (See Mabey, Charles W., assignor.)

Mac Ad Company. (See MacLachlan, John D., assignor.)

Macbeth-Evans Glass Company. (See Blau, Henry H., assignor.)

Macdonald, Ian, Modesto, Calif. Table and seat unit. Des. 87,723; Sept. 6.

Macgregor Instrument Company. (See Klein, Emil, assignor.)

MacKenzie, Philip, Oakland, Calif. Automotive transmission. 1,875,386; Sept. 6.

Mackintosh, William B., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Radiator valve. 1,875,387; Sept. 6.

MacLachlan, John D., assignor to Mac Ad Company, Kansas City, Mo. Advertising car display device. 1,875,321; Sept. 6.

MacMonagle, William E., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Apparatus for removing plastic material for molds. 1,876,309; Sept. 6.

Madlehner, Jacob, Erie, Pa. Underfeed fire pot. 1,876,310; Sept. 6.

Magee, Frederick W., assignor of one-half to T. W. Baker, London, Ontario, Canada. Motorist's eyeshield. 1,876,463; Sept. 6.

Magnavox Company, The. (See Pridham, Edwin S., assignor.)

Magner, Philip G., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind. Burner control. 1,875,388; Sept. 6.

Magnesium Development Corporation. (See Beck, A., and Dibelka, assignors.)

Magnesium Development Corporation. (See Pistor G., Suchy, Staib, and Moschel, assignors.)

Magnesium Development Corporation. (See Player, Edward, assignor.)

Magnesium Development Corporation. (See Staib, Karl, assignor.)

Maiuri, Guido, and R. F. Bossini, London, England, assignor, by mesne assignments, to Electrolux Servel Corporation. Refrigeration. 1,875,626; Sept. 6.

Malloy, Arthur D., et al. (See Smith, William D., assignor.)

Mancha, Raymond, St. Louis, and C. E. Stoltz, Webster Groves, Mo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill. Storage battery locomotive. 1,875,627; Sept. 6.

Manning & Co. (See Van Ranst, Cornelius W., assignor.)

Manson, Roy C., Detroit, Mich., assignor to The F. A. Neider Company, Augusta, Ky. Tufting button. 1,875,628; Sept. 6.

Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)

Marconnet, Georges, Paris, France. Propulsion of ships. 1,875,629; Sept. 6.

Marengo, August A., Stockton, Calif. Swimming belt. 1,875,630; Sept. 6.

Mariani, Alfonso, Erie, Pa. Roadbed equipment for railroads. 1,876,253; Sept. 6.

Mariotti, Joseph J., assignor to Daprato Statuary Company, Chicago, Ill. Door operating mechanism. 1,875,631; Sept. 6.

Marland, Joseph, and C. A. Grimth, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del. Grease gun. 1,875,745; Sept. 6.

Marmonier, Louis, Lyon, France. Stabilizing apparatus for aeroplanes. 1,876,254; Sept. 6.

Marquardt Company. (See Marquardt, Reinhold G., assignor.)

Marquardt, Frank C., Brooklyn, assignor to American Bank Note Company, New York, N. Y. Rotary printing machine. 1,876,255; Sept. 6.

Marquardt, Reinhold G., assignor to Marquardt Company, Milwaukee, Wis. Wire spring cushion and making the same. 1,876,429; Sept. 6.

Marr, Philip M. (See Mewmaw, Freddie B., assignor.)

Marsa, Melchor, Brooklyn, assignor to Winna Manufacturing Corporation, New York, N. Y. Window ventilator. 1,875,315; Sept. 6.

Marsh, Jas. P., Corporation. (See Carson, Robert H., assignor.)

Marsh, Jas. P., Corporation. (See Rose, Alexander D., assignor.)

Marsh, James P., Corporation. (See Thompson, Orville W., assignor.)

Marsham, Homer J. (See Jeffrey, D. C., and Marsham.)

Martin, Jerome. (See Woodruff, J. C., Martin, and Krchma.)

Martin, Jerome, and L. C. Swallen, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Production of methylamine. 1,875,746; Sept. 6.

Martin, Jerome, and L. C. Swallen, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Production of methylamine. 1,875,747; Sept. 6.

Martin, John F., Springfield, Mass. Self-locking nut and screw. 1,875,930; Sept. 6.

Massey, Alexander J., Los Angeles, Calif. Combined traffic and alarm system. 1,875,748; Sept. 6.

Mathieson Alkali Works, Inc. (See Clemmensen, Erik, assignor.)

Mathis, Eugene, assignor to New York Blower Company, Chicago, Ill. Making a fan. 1,876,518; Sept 6.

Mayer China Company. (See Wain, Harry J., assignor.)

Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tubing machine. 1,876,256; Sept. 6.

Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Apparatus for vulcanizing annular articles. 1,876,333; Sept. 6.

McAnear, Walter, Electra, Tex. Tank cleaner. 1,876,334; Sept. 6.

McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,875,877; Sept. 6.

McCaughley, Michael J., Brooklyn, N. Y. Traffic stanchion. 1,875,878; Sept. 6.

McClaren Rubber Company. (See Miller, Charles G., assignor.)

McCleary, Lorin D., Indianapolis, Ind. Internal combustion engine. 1,876,532; Sept 6.

McClellan, Thomas L. (See Requa, M., and McClellan.)

McClure, James C. (See Jacobsen, A. J., and McClure.)

McCutchan, Winfred N. (See Christensen, L. M., and McCutchan.)

McDonald, Herman M., Wilmette, Ill. Combination garment. 1,876,311; Sept. 6.

McEvoy, J. H., & Company. (See McEvoy, J. H., Humason, and Johnson, assignors.)

McEvoy, Joseph H., Houston, Tex. Universal casing head and gas saver. 1,875,632; Sept. 6.

McEvoy, Joseph H., G. A. Humason, and E. A. Johnson, assignors to J. H. McEvoy & Company, Houston, Tex. Universal casing head. 1,875,749; Sept. 6.

McGaw, Sidney A., Fresno County, Calif. Ladder construction. 1,876,335; Sept. 6.

McGregor, Alexander G., London, England. Sampling apparatus. 1,875,472; Sept. 6.

McGrew, John A., Albany, N. Y. Hydraulic draft gear. 1,876,145; Sept. 6.

McGrew, John A., Albany, N. Y. Shock absorber. 1,876,146; Sept. 6.

McKamey, William O. (See Sanford, H. W., and McKamey.)

McKee, Ralph H., Jersey City, N. J. Process of and composition for stimulating plant growth. 1,875,473; Sept. 6.

McKee, Ralph H., Jersey City, N. J., assignor to Tennessee Copper and Chemical Corporation. Acid phosphate and producing the same. 1,875,879; Sept. 6.

McKinley, Thomas C., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing molten glass. 1,875,474; Sept. 6.

McKinney, Carlos J., Detroit, Mich. Window guide channel. 1,875,519; Sept. 6.

McKuen, Edward, San Francisco, Calif. Feed for resaw machines. 1,875,633; Sept. 6.

McLaughlin, Dennis J., Ilion, assignor, by mesne assignments, to Remington Rand, Inc., New York, N. Y. Table leg attachment. 1,876,336; Sept. 6.

McLaughlin, John E. (See Soubier, L. D., and McLaughlin.)

McNally, Edwin M., assignor to The Tefra Co., Indianapolis, Ind. Toothbrush. 1,875,475; Sept. 6.

McNally, Edwin M., assignor to The Tefra Co., Indianapolis, Ind. Removable head toothbrush. 1,875,476; Sept. 6.

Mead, Leslie A., San Leandro, Calif. Plaster cast cutter. 1,876,337; Sept. 6.

Mehling, Carl W. (See Schwendler, R. H., and Mehling.)

Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Piezo-electric crystal. 1,875,347; Sept. 6.

Meldahl, Knud G., Fredriksstad, Norway. Steamship with the main boiler mounted on a deck or platform at some height above the bottom of the ship or the tank top. 1,875,634; Sept. 6.

Mellars, Newton W. (See Forde, T. H., and Mellars.)

Melling Forging Company. (See Hargraves, S. S., De Orlow and Wilford, assignors.)

Merrick, Frank W., Dorchester, assignor to American Stay Company, East Boston, Mass. Braiding machine. 1,876,147; Sept. 6.

Merrill, Ralph K., assignor to American Seating Company, Grand Rapids, Mich. Furniture construction. 1,875,635; Sept. 6.

Mersey Paper Company. (See Wood, Charles, assignor.)

Mesta Machine Company. (See Iversen, Lorenz, assignor.)

Mesta Machine Company. (See Iversen L., and Noble, assignors.)

Mesta Machine Company. (See Wood, Frank J., assignor.)

Metal Specialties Manufacturing Company. (See Hermann, Wolfgang, assignor.)

Metro-Goldwyn-Mayer Corporation. (See Wise, A. G., and Arnold, assignors.)

Mewmaw, Freddie B., assignor of one-half to P. M. Marr, Milan, Mo. Rake. 1,876,148; Sept. 6.

Meyerson, Louis B. (See Kaplan, L. J., and Meyerson.)

Michelson, Albert S., Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del. Tire. Des. 87,724; Sept. 6.
Michelson, Louis S., Los Angeles, Calif. Trunks of a bathing suit. Des. 87,725; Sept. 6.
Micromatic Hone Corporation. (See Quigley, Thomas F., assignor.)
Mihalka, Arthur and A. Wiese, New York, N. Y., assignors of one-half to Armand E. Lackenbach. Advertising change-receiving tray. 1,875,931; Sept. 6.
Miles, Thomas J., Louisville, Ky. Chair. 1,875,478; Sept. 6.
Miller, Alfred J., jr., Newark, N. J. Vehicle window shade. 1,875,430; Sept. 6.
Miller, Arthur C. (See Johnson, Charles H., assignor.)
Miller, Arthur E. (See Salisbury, H. M., and Miller.)
Miller, Carl W., Upper Darby, assignor to J. Ruskin, Philadelphia, Pa. Bottle. Des. 87,726; Sept. 6.
Miller, Charles F., jr., Pittsburgh, Pa. Animal gut defatting machine. 1,876,258; Sept. 6.
Miller, Charles G., assignor to McClaren Rubber Company, Charlotte, N. C. Tire. Des. 87,727; Sept. 6.
Miller, Dorr, Detroit, Mich., assignor, by mesne assignments, to The Dura Company, Toledo, Ohio. Handle assembly. 1,876,257; Sept. 6.
Miller, Frank L., assignor to Davis-Miller Engineering Company, Parkersburg, W. Va. Coupling device. 1,875,477; Sept. 6.
Miller, Frank L., assignor to Davis-Miller Engineering Company, Parkersburg, W. Va. Semitrailer. 1,875,636; Sept. 6.
Miller, Frank W., Chicago, Ill. Firing equipment. 1,875,750; Sept. 6.
Miller, Max C., Cumberland, R. I. Knitting needle. 1,876,259; Sept. 6.
Miller Rubber Company Inc. (See Michelson, Albert S., assignor.)
Miller, William H., Sunbury, Pa. Clamping receptacle. 1,876,464; Sept. 6.
Mills, Brent. (See Hamer, W. D., Chatfield, and Mills.)
Mills, Edward C. (See Hele-Shaw, H. S., Beacham, and Mills.)
Miner, Claude G., Berkeley, Calif. Producing anhydrous aluminum chloride and nitrogen compounds. 1,875,348; Sept. 6.
Minneapolis-Honeywell Regulator Company. (See Davis, James O., assignor.)
Minneapolis-Honeywell Regulator Company. (See Mackintosh, William B., assignor.)
Minneapolis-Honeywell Regulator Company. (See Magner, Philip G., assignor.)
Minneapolis-Honeywell Regulator Company. (See Shivers, Paul F., assignor.)
Minneapolis Linen Supply Company. (See Wallmuth, Albert A., assignor.)
Minor, Henry R., Cleveland, Ohio, assignor to Liquid Carbonic Corporation, Chicago, Ill. Method and apparatus for removing water from air bags or the like. 1,875,479; Sept. 6.
Misner, Julius C., Terre Haute, Ind. Filter. 1,876,465; Sept. 6.
Mitchell Camera Corporation. (See Mitchell, George A., assignor.)
Mitchell, Curtis P. (See Palmer, Charles R., assignor.)
Mitchell, George A., Los Angeles, Calif., assignor to Mitchell Camera Corporation. Photographic printing. 1,875,751; Sept. 6.
Mitchell, Robert, Company Limited, The. (See Taylor, Harold V., assignor.)
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Automobile heating and ventilating apparatus. 1,875,637; Sept. 6.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,875,638; Sept. 6.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,875,639; Sept. 6.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Molitor, Charles B. J., Forest Hills, assignor to Thomas Wilson & Co. Inc., New York, N. Y. Lace. Des. 87,728; Sept. 6.
Montero, Juan C., Washington, D. C. Air heat generator. 1,875,752; Sept. 6.
Moore, Francis J., Minneapolis, Minn. Roof flashing and jacket. 1,875,640; Sept. 6.
Moore, Giles S., Indianapolis, Ind. Safety razor. 1,875,480; Sept. 6.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,875,880; Sept. 6.
Moore, William R., jr., Hagerstown, Md., assignor to Deca-Disc Phonograph Company, Waynesboro, Pa. Automatic talking machine. 1,875,641; Sept. 6.
Moore, William R., jr., Hagerstown, Md., assignor to Deca-Disc Phonograph Company, Waynesboro, Pa. Loudspeaker. 1,876,466; Sept. 6.
Morante, Valeriano I., Pasadena, Calif. Grater. 1,875,481; Sept. 6.
Morch, John, Altoona, Pa. Motor suspension. 1,876,312; Sept. 6.
Morgan Engineering Company. (See Hively, Ossian, assignor.)
Morgan, Erving B., assignor to American Seating Company, Grand Rapids, Mich. Leveling device. 1,875,642; Sept. 6.
Morin, Louis H., Montreal, Quebec, Canada, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,875,818; Sept. 6.
Morris, Charles L., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio. Glazing artificial teeth. 1,876,015; Sept. 6.
Morris, Harold W., Walthem, Mass., assignor to Frederick Osann Company, New York, N. Y. Mechanism for securing bags or the like. 1,875,753; Sept. 6.
Morris, William R., Twin Falls, Idaho. Water motor. 1,876,070; Sept. 6.
Morrison, George, Poughkeepsie, N. Y. Vending machine. 1,876,510; Sept. 6.
Morse, Clark T., assignor to American Blower Corporation, Detroit, Mich. Fan housing construction. 1,875,881; Sept. 6.
Morse, Mason E., et al. (See Johnson, Frederick W., assignor.)
Morse, Ralph L., Springfield, Mass. Map. 1,875,389; Sept. 6.
Morton, Benjamin A., New York, N. Y. Illuminating apparatus. 1,876,313; Sept. 6.
Moschel, Wilhelm. (See Pistor, G., Suchy, Staib, and Moschel.)
Moseley, Tomlinson I., assignor to Pacific Hair Goods Company, San Francisco, Calif. Electrical hair waver. 1,875,882; Sept. 6.
Motive Devices, Inc. (See Dusevoir, Julius.)
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Motor Products Corporation. (See Pritchard, William S., assignor.)
Mottier, Walter F., El Campo, Tex. Hay rake. 1,875,349; Sept. 6.
Musselman, Avin J., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making pneumatic wheels. 1,875,390. Sept. 6.
Musselman, Alvin J., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making pneumatic tire wheels. 1,875,643; Sept. 6.
Musselman, Alvin J., Glen Ellyn, Ill., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Balloon tire and wheel. 1,876,068; Sept. 6.
Nagel Electric Company. (See Adams, Clark M., assignor.)
Nanna, Frank S., assignor to Thinshell Candies, Inc., Chicago, Ill. Plate for making wafers. 1,875,482; Sept. 6.
Nappanee Lumber and Manufacturing Company. (See Uline, Walter C., assignor.)
Naruse, Tomisaburo, Uchiyamashita-Cho, Kojimachi-Ku, Tokyo, Japan. Frosting the inner surface of a glass bulb. 1,875,819; Sept. 6.
Nash, Charles J. (See Schmidt, F. J., jr., and Nash.)
Nassif, Louis, Wheeling, W. Va. Shoe polishing device. 1,875,820; Sept. 6.
National Biscuit Company. (See Turnbull, Werd W., assignor.)
National City Bank of New York, The, executor. (See Tanner, Harry L.)
National Fireproofing Corporation. (See Babb, Edwin, assignor.)
National Gunite Contracting Co. (See Crom, John M., assignor.)
National Laundry Machinery Company. (See Reeps, Charles O., assignor.)
National Machinery Co., The. (See Friedman, John H., assignor.)
National Metal and Chemical Bank Limited. (See Stephens, F. G. C., Anderson, and Cash, assignors.)
National Ring Traveler Co. (See Wentworth, P. C., and Avery, assignors.)
National Supply Company, The. (See Spalding, John D., assignor.)
National Supply Company, The. (See Zerbe, L. E., and Faulkner, assignors.)
National Supply Company, The, et al. (See Faulkner, David S., assignor.)
National Supply Company of Delaware, The. (See Young, F. J., and Long, assignors.)
National Supply Company of Delaware, The. (See Youngken, Ben N., assignor.)
National Tag Manufacturing Corporation, The. (See Kuhns, John P., assignor.)
Naylor, Carl G., assignor to Naylor Pipe Company, Chicago, Ill. Apparatus for forming pipe and the like. 1,875,483; Sept. 6.
Naylor Pipe Company. (See Naylor, Carl G., assignor.)
Nazare, Francois, assignor to Aromel Corporation, New York, N. Y. Atomizer. 1,875,821; Sept. 6.
Neal, Arthur M. (See Williams, I., and Neal.)
Neider, F. A., Company, The. (See Manson, Roy C., assignor.)
Nelson, Bernard S., assignor to A. M. Lockett & Company, Ltd., New Orleans, La. Booster for exhaust steam. 1,875,754; Sept. 6.
Nelson, William K., assignor to Universal Gypsum & Lime Co., Chicago, Ill. Apparatus for making heat and sound insulating products. 1,875,644; Sept. 6.
Nelson, William K., assignor to Universal Gypsum & Lime Co., Chicago, Ill. Heat and sound insulating block. 1,876,071; Sept. 6.
Nesbitt, John J., Inc. (See Ewald, Warren, assignor.)

Nettleton, Lewis L., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Signaling apparatus. 1,875,883; Sept. 6.
Neuberger Chemical Corporation. (See Clark, John W., assignor.)
Newkirk, Burt L., and L. P. Grobel, Schenectady, N. Y., assignors to General Electric Company. Shaft packing. 1,876,520; Sept. 6.
New York Blower Company. (See Mathis, Eugene, assignor.)
Nickerson, William E., assignor to Gillette Safety Razor Company, Boston, Mass. Blade sharpening machine. 1,876,314; Sept. 6.
Nigra, Ferdinand, Los Angeles, Calif. Screw extractor. 1,875,484; Sept. 6.
Noble, Robert E. (See Iversen L., and Noble.)
Noonan, John J., assignor to W. J. Fitzmaurice, St. Louis, Mo. Egg timing device. 1,876,072; Sept. 6.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,875,645; Sept. 6.
Norton, Samuel H., Meadville, Pa., assignor to Hookless Fastener Company. Rubber sealed fastener. 1,876,338; Sept. 6.
Norton, Sir James Farmer, & Company Limited. (See Bosshard, Arnold, assignor.)
Notarianni, Pasquale, Detroit, Mich. Wrench. 1,875,646; Sept. 6.
Novak, Josef, and R. Kesselring, Novy Bohumin, Czechoslovakia. Alloy. 1,876,467; Sept. 6.
Noyes, Harry F., Chicago Heights, Ill., assignor to Victor Chemical Works. Handling phosphorous containing furnace gases. 1,875,755; Sept. 6.
O. K. Tool Company, The. (See Weddell, Ralph R., assignor.)
Oakes & Burger Co. (See Wolf, Frank F., assignor.)
Oakland Association of Credit Men. (See Strathaus, John, assignor.)
Oakley, Sterling A., Boise, Idaho. Selective card index. 1,876,149; Sept. 6.
Oberg, Anton J., and R. R. Stoefen, Los Angeles, Calif. Light projecting machine. 1,876,511; Sept. 6.
Oberle, William, Bushton, Kans. Well fishing tool. 1,876,339; Sept. 6.
O'Byrne, Nathan W., Baldwin, Kans. Ellipsograph. 1,876,069; Sept. 6.
Ochinoff, Nicholas, San Francisco, Calif. Automatic switch for left-right turns of motor vehicle devices. 1,876,321; Sept. 6.
Odda Smelteverk A/S. (See Johnson, Erling, assignor.)
Odell, Leslie S., assignor to Building Products Limited, Montreal, Quebec, Canada. Wall board. 1,876,340; Sept. 6.
O'Dwyer, Philip, Detroit, Mich. Vehicle. 1,875,647; Sept. 6.
Ohmer Fare Register Company. (See Wheelbarger, A. S., and Keil, assignors.)
Ohmer Fare Register Company. (See Wheelbarger, A. S., and Keil, assignors.)
Oil Conservation Engineering Company, The. (See Tennent, Alpheus H., assignor.)
Okada, Yoshinobu, Ikegami-Cho, Japan. Belt conveyer scale or the like. 1,875,485; Sept. 6.
Olcsvary, Louis, Republic, Pa. Automatic coupling for mine cars. 1,876,341; Sept. 6.
Olsen, Oscar, Brooklyn, N. Y. Percolator dome. 1,875,648; Sept. 6.
Olson Manufacturing Company. (See Hanson, Casper, assignor.)
Oneida Community, Limited. (See Bedford, E. B., and Parker, assignors.)
Orr, Melville L., Cincinnati, Ohio. Safety paying teller's window. 1,875,649; Sept. 6.
Osann, Frederick, Company. (See Morris, Harold W., assignor.)
Osborn, Alexander C., jr., Clarksburg, W. Va. Gas cupola furnace. 1,876,260; Sept. 6.
Osborn, Vern M., Los Angeles, Calif. Traffic signal device. 1,875,350; Sept. 6.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,875,351; Sept. 6.
Osse, Johanes A. F., Sheldon, Iowa. Device for spreading and enlarging motor pistons. 1,875,822; Sept. 6.
O'Sullivan, St. John, San Juan Capistrano, Calif. Sundial construction. 1,875,756; Sept. 6.
Otis Elevator Company. (See Werner, Herman C., assignor.)
Outboard Motor Corporation. (See Arndt, Jack W., assignor.)
Owens-Illinois Glass Company. (See Allen, Russell G., assignor.)
Owens-Illinois Glass Company. (See Hoge, J. R., and Hofmann, assignors.)
Owens-Illinois Glass Company. (See Morin, Louis H., assignor.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Owens-Illinois Glass Company. (See Soubier, L. D., and McLaughlin, assignors.)
Pacific Can Co. (See Krueger, Frank, assignor.)
Pacific Hair Goods Company. (See Moseley, Tomlinson I., assignor.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Krebs, Henry, assignor.)
Page, Everett W., River Forest, assignor to General Electric X-Ray Corporation, Chicago, Ill. Film holder. 1,876,431; Sept. 6.
Palmer, Charles R., and C. P. Mitchell, Cincinnati, Ohio, said Mitchell assignor to said Palmer. Thermometer. 1,875,757; Sept. 6.
Pan-Ross Laboratories, Inc. (See Parsons, J., and Stover, assignors.)
Paraffine Companies, Inc., The. (See Lowe, William H., assignor.)
Paraffine Companies, Inc., The. (See Rosener, Leland S., assignor.)
Park, Philip R., Buffalo, N. Y., assignor to Philip R. Park, Inc., San Pedro, Calif. Marine plant product and making the same. 1,875,352; Sept. 6.
Park, Philip R., Inc. (See Park, Philip R., assignor.)
Parker, Guy E. (See Seaholm, E. W., Parker, and Stahlhuth.)
Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,391; Sept. 6.
Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,392; Sept. 6.
Parker, James J., Absecon, N. J. Tappet valve. 1,875,758; Sept. 6.
Parker, Joseph O. (See Albritton, Dez, assignor.)
Parker, Mary G. (See Bedford, E. B., and Parker.)
Parkersburg Rig & Reel Company, The. (See Schwemlein, William, assignor.)
Parks, Dennis, St. Louis, Mo. Leather grading machine. 1,875,884; Sept. 6.
Parsons, John, Montclair, N. J., and J. H. Stover, Mt. Kisco, N. Y., assignors to Pan-Ross Laboratories, Inc., Belleville, N. J. Fuse composition. 1,875,932; Sept. 6.
Parva Products Company. (See Troendly, Harry P., assignor.)
Patten, James C. (See Thompson, M. M., and Patten.)
Patten, Margaret L., executrix. (See Thompson, M. M., and Patten.)
Peabody Engineering Corporation. (See Gerquest, Arthur S., assignor.)
Peabody Engineering Corporation. (See London, William J. A., assignor.)
Pearson, Anton, Silverhill, Ala. Potato picker. 1,876,150; Sept. 6.
Pearson, Charles E., and E. I. Davis, St. Paul, Minn. Furnace heat circulator. 1,875,393; Sept. 6.
Peaslee, Willetts, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Steady rest mechanism. 1,875,486; Sept. 6.
Peckinpaugh, Ernest H., Chattanooga, Tenn. Artificial bait. 1,876,342; Sept. 6.
Pederson, Christian H., Pittsburgh, Pa. Auto tire. 1,876,016; Sept. 6.
Pemberton, Harold, Seattle, Wash., and F. I. Doane, Berkeley, Calif. Vanity case. 1,875,650; Sept. 6.
Pemetzrieder, Georg, Berlin-Templehof, Germany. Apparatus for casting metals and metalloids. 1,876,261; Sept. 6.
Pemetzrieder, Georg, Berlin-Templehof, Germany. Alloy with copper as primary metal. 1,876,262; Sept. 6.
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, assignors to Perkins Machine & Gear Company, West Springfield, Mass. Mangle or wringer construction. 1,875,487; Sept. 6.
Perkins Machine & Gear Company. (See Croft, Hiram D., assignor.)
Perkins Machine & Gear Company. (See Perkins, J. L., and Croft, assignors.)
Perrot, Henri, Paris, France, and G. Calvignac, Mannheim, Baden, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake. 1,875,759; Sept. 6.
Peters, Frank B., Minneapolis, Minn. Bullet-resisting cabinet. 1,875,488; Sept. 6.
Peters, John F., Rochester, assignor to American Can Company, New York, N. Y. Can body maker. 1,875,353; Sept. 6.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Radiator shutter unit. 1,876,017; Sept. 6.
Peterson, William B., Hannibal, Mo. Gate. 1,875,489; Sept. 6.
Petroleum Heat and Power Company. (See Whaley, Ralph, S., assignor.)
Pew, Thomas C., assignor to Hoover Steel Ball Company, Ann Arbor, Mich. Machine for feeding tapered rollers. 1,876,315; Sept. 6.
Pfening, Fred D., Company, The. (See Pfening, Frederic D. and H., jr., assignors.)
Pfening, Frederic D. and H., jr., assignors to The Fred D. Pfening Company, Columbus, Ohio. Liquid measuring and dispensing apparatus. 1,876,512; Sept. 6.
Pfening, Henry, jr. (See Pfening, Frederic D. and H., jr.)
Phelan, William E., Kansas City, Kans. Aerofoil section. 1,875,651; Sept. 6.
Phillips, David J. P., London, England, assignor of one-half to James B. Crockett, Cambridge, Mass. Production of rubber sheets. 1,876,432; Sept. 6.
Phillips, William R., sr., Atlanta, Ga. Wrench. 1,875,490; Sept. 6.

Pier, Mathias. (See Krauch, C., and Pier.)
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)
Pinaud, John A., Atlantic Highlands, N. J. Wind motor. 1,876,018; Sept. 6.
Pines Winterfront Company. (See Petersen, Edgar G., assignor.)
Pistor, Gustav, Leipzig, R. Suchy, K. Staib, and W. Moschel, Bitterfeld, Germany, assignors, by mesne assignments, to Magnesium Development Corporation. Producing magnesium metal by electrolysis. 1,875,760; Sept. 6.
Pittman, Harry C., Richmond, Ind. Motor protector and speed accelerator. 1,875,652; Sept. 6.
Pittroff, Andreas, Dresden-Blasewitz, Germany. Lacing-shoe or boot. 1,876,263; Sept. 6.
Pittsburgh Plate Glass Company. (See Raleigh, W. P., and Dickey, assignors.)
Plant Rubber & Asbestos Works, Inc. (See Stadtfeld, Jacob A., assignor.)
Player, Edward, Astley, England, assignor, by mesne assignments, to Magnesium Development Corporation. Casting light metals in sand molds. 1,876,073; Sept. 6.
Pollak, Felix, Vienna, Austria. Manufacture of spun glass. 1,875,491; Sept. 6.
Pollock, William. (See Crawford, H. M., and Pollock.)
Pomerantz, Herman. (See Silverman, M., and Pomerantz.)
Pomosin Werke G. m. b. H. (See Ripa, Rudolf, assignor.)
Portland Feed Mills Company. (See Pollock, William, assignor.)
Post, Frank B., Los Angeles, Calif. Recorder. 1,875,653; Sept. 6.
Power, Robert W., Shubert, Neb. Work support for welding operations. 1,875,761; Sept. 6.
Powers, Henry L. (See Hartman, S. H., and Powers.)
Pridgen, John B., Charlotte, N. C. Road grading machine. 1,875,492; Sept. 6.
Pridham, Edwin S., assignor to The Magnavox Company, Oakland, Calif. Magnetic device. 1,876,164; Sept. 6.
Priebe, Herman C., deceased, Blue Island, Ill.; Thomas H. Taylor, administrator. Draft gear. 1,876,019; Sept. 6.
Priechenfried, George, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Wave signaling system. 1,876,163; Sept. 6.
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Lubricating system. 1,876,343; Sept. 6.
Prosperity Company, The. (See Braun, Phillip N., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Pucunas, John, Los Angeles, Calif. Stocking and sock form for drying, stretching, and pressing. 1,876,344; Sept. 6.
Pue, Vojtech, Prague, Czechoslovakia. Attachment for baggage and the like. 1,875,493; Sept. 6.
Punke, John J., assignor to Hupp Motor Car Corporation, Detroit, Mich. Steering wheel cap assembly. 1,876,165; Sept. 6.
Puro Sanitary Drinking Fountain Company. (See Roberge, Charles, assignor.)
Putnam, James R., assignor to Waterbury Clock Company, Waterbury, Conn. Electric clock. 1,876,020; Sept. 6.
Quarnstrom, Bert L., Grosse Pointe Park, assignor to Bundy Tubing Company, Detroit, Mich. Tube connection. 1,875,885; Sept. 6.
Quigley, Michael F., Port Richmond, N. Y. Drift pin. 1,876,021; Sept. 6.
Quigley, Thomas F., Cleveland, Ohio, assignor, by mesne assignments, to Micromatic Home Corporation. Cylinder hone or lapping tool. 1,876,468; Sept. 6.
Quinn, Stephen M., Chicago, Ill. Game apparatus. 1,876,460; Sept. 6.
Radio Corporation of America. (See Usselman, George L., assignor.)
Radio Corporation of America. (See van der Pol, Balthasar, assignor.)
Radio Corporation of America. (See Van Suchtelen, Harold, assignor.)
Radio Corporation of America. (See Vermeulen, Roelof, assignor.)
Radio Corporation of America. (See Weinberger, Julius, assignor.)
Radio Corporation of America. (See Wright, George M., assignor.)
Raleigh, Walter P., Ames, Iowa, and C. B. Dickey, Milwaukee, Wis., assignors to Pittsburgh Plate Glass Company. Disinfecting seeds. 1,875,494; Sept. 6.
Ramont, William F., Glendale, Calif. Tie and collar stay. 1,875,886; Sept. 6.
Randall Company, The. (See Randall, Howard D., assignor.)
Randall, Howard D., Cincinnati, Ohio, assignor to The Randall Company. Fabricating a runway. 1,876,166; Sept. 6.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,875,654; Sept. 6.
Rausch, Gottfried, Ammendorf, near Halle-on-Saale, Germany. Dough dividing and kneading machine. 1,876,022; Sept. 6.
Rawson, Harry H., assignor to The Washington Machinery & Supply Company, Spokane, Wash. Paper folding machine. 1,875,655; Sept. 6.
Ray, Joshua R. (See Ray, Thomas and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Method and apparatus employed in the washing and production of salt or the like. 1,875,354; Sept. 6.
Raymond Concrete Pile Company. (See Schroeder, F. A., and Smith, assignors.)
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Rayner Decalcomania Company. (See Babcock, George H., assignor.)
Read, Carlyle D., Hammond, assignor to Standard Oil Company, Whiting, Ind. Petroleum tar. 1,875,823; Sept. 6.
Redmond, John J., Toronto, Ontario, Canada. Paper creasing and cutting apparatus. 1,876,074; Sept. 6.
Redner, Allen B., assignor to Reo Motor Car Company, Lansing, Mich. Apparatus for correcting gears. 1,876,167; Sept. 6.
Reeps, Charles O., deceased; H. E. Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y. Dampening roll for presses. 1,875,824; Sept. 6.
Reeps, Harriette E., executrix. (See Reeps, Charles O.)
Reese, Frank, assignor to Reese Metal Weather Strip Co., Minneapolis, Minn. Threshold. 1,875,495; Sept. 6.
Reese, Frank, assignor to Reese Metal Weather Strip Co., Minneapolis, Minn. Weather strip. 1,875,656; Sept. 6.
Reese Metal Weather Strip Co. (See Reese, Frank, assignor.)
Regensburger, Richard W., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Egg breaking and packing table. 1,876,496; Sept. 6.
Reichert, Carl, sr. and K., jr., Cannstatt, Germany. Electric cutting machine for cutting out woven fabrics. 1,876,075; Sept. 6.
Reichert, Karl, jr. (See Reichert, C., sr. and K., jr.)
Relling, Thor. (See Stoody, W. F., and Relling.)
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,875,762; Sept. 6.
Remington Rand Inc. (See Davis, Elmer W., assignor.)
Remington Rand Inc. (See Day, William H., assignor.)
Remington Rand Inc. (See Hutchings, L. E., assignor.)
Remington Rand Inc. (See Jackson, Arthur R., assignor.)
Remington Rand Inc. (See McLaughlin, Dennis J., assignor.)
Remington Rand Inc. (See Stuart, Nicholas H., assignor.)
Remington Rand Inc. (See Wigginton, George P., assignor.)
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Reo Motor Car Company. (See Bethune, John, assignor.)
Reo Motor Car Company. (See Redner, Allen B., assignor.)
Requa, Marjorie, Beverly Hills, and T. L. McClellan, Los Angeles, Calif. Method and apparatus comprising a sanitary protective means for beds and the like. 1,875,657; Sept. 6.
Reyburn, John R., Fairfield, Conn., assignor to American Chain Company, Inc. Repair link for cross chains. 1,876,345; Sept. 6.
Rheinische Kamfer-Fabrik Gesellschaft mit beschrankter Haftung. (See Schollkopf, K., and Serini, assignors.)
Rhodes-Hochriem Manufacturing Co. (See Rhodes, S. A., and Hochriem, assignors.)
Rhodes, Seth A., Oak Park, and G. F. Hochriem, assignors to Rhodes-Hochriem Manufacturing Co., Chicago, Ill. Coin-controlled gravity-operated ticket-printing and delivery scale. 1,875,887; Sept. 6.
Rice, George J., Dorchester, Mass. Wheel fender. 1,876,470; Sept. 6.
Richardson, Bayard E., Grand Rapids, Mich. Slab construction. 1,875,888; Sept. 6.
Richardson, Dell R., and H. M. Wollum, Owen, Wis. Container. 1,875,497; Sept. 6.
Richardson, Edward A., Bethlehem, Pa. Preparing fuels for use. 1,876,168; Sept. 6.
Richford, Maurice A., Oakland, Calif. Burner tip. 1,875,394; Sept. 6.
Riddel, Walter, Yreka, Calif. Book ends. 1,876,346; Sept. 6.
Ridgill, Ernest, Sheffield, England. Jigger conveyor. 1,876,316; Sept. 6.
Ridgill, Ernest, Dronfield, Sheffield, England. Jigger conveyer. 1,876,317; Sept. 6.
Riemenschneider, Albert E., Portland, Oreg. Lawn mower. 1,876,169; Sept. 6.
Rigby, Wallis, Anerley, London, England. Toy aeroplane. Des. 87,729; Sept. 6.
Ripa, Rudolf, assignor to Pomosin Werke G. m. b. H., Frankfort-on-the-Main, Germany. Hardening of steel. 1,876,170; Sept. 6.
Robbin, Joseph F., Grand Rapids, Mich. Oar. 1,875,498; Sept. 6.
Roberge, Charles, Williamsburg, assignor to Puro Sanitary Drinking Fountain Company, Haydenville, Mass. Drinking fountain apparatus. 1,875,658; Sept. 6.
Robert Mitchell Company Limited, The. (See Taylor, Harold V., assignor.)
Robinson, Cornelius P., assignor to The Ideal Electric & Manufacturing Co., Mansfield, Ohio. Compound synchronous motor. 1,875,763; Sept. 6.
Robinson, Lula H., Dallas, Tex. Scroll and line indicator. 1,875,659; Sept. 6.
Rockland & Rockport Lime Corporation. (See Wood, George B., assignor.)

Rodin, William F., Los Angeles, Calif. Mounting for artificial teeth. 1,875,499; Sept. 6.
Rodin, William F., and A. Hural, Los Angeles, Calif. Dental flask. 1,875,660; Sept. 6.
Roeder, Clyde A., Omaha, Nebr. Vehicle seat. 1,875,500; Sept. 6.
Roepke, Walter G., Clayton, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Mold or core wash. 1,875,501; Sept. 6.
Roessner, William L., Denver, Colo. Fusible link. 1,875,661; Sept. 6.
Rome Company, The. (See Douglass, Napoleon B., assignor.)
Romme, Robert T. (See Gray, E. J., and Hoyos, assignors.)
Rose, Alexander D., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Thermometer. 1,875,889; Sept. 6.
Rose, Harold J., Penn Township, Allegheny County, Pa., and W. H. Hill, Arlington, N. J., assignors to The Koppers Company of Delaware. Composition of matter and preparing the same. 1,875,502; Sept. 6.
Rosenberry, Ray P., assignor to The Silver King Hydraulic Jack Company, Cleveland, Ohio. Hydraulic jack. 1,876,023; Sept. 6.
Rosenberry, Ray P., assignor to The Silver King Hydraulic Jack Company, Cleveland, Ohio. Hydraulic jack. 1,876,024; Sept. 6.
Rosener, Leland S., assignor to The Paraffine Companies, Inc., San Francisco, Calif. Apparatus for handling sheets. 1,876,171; Sept. 6.
Rosenthal, Leon W., New York, N. Y. Toy railway track. 1,876,347; Sept. 6.
Rosewood, Alfred, San Francisco, Calif. Waste and overflow fixture for bath tubs. 1,875,764; Sept. 6.
Rossbach, Charles D., Chicago, Ill. Window. 1,875,662; Sept. 6.
Rossiter, William J., and J. N. Wilking, Birmingham, Ala. Power driven rotary mower. 1,876,504; Sept. 6.
Rowland, Ben W., Appleton, Wis., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Protected hydrogen electrode. 1,875,503; Sept. 6.
Rowland, Ben W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Treating tire bead. 1,876,076; Sept. 6.
Rowles, E. W. A., Co. (See Thornas, P. B., and Taylor, assignors.)
Royal Typewriter Company. (See Hess, Edward B., assignor.)
Royal Typewriter Company. (See Kittel, John J., assignor.)
Rubber Service Laboratories Company, The. (See Scott, Winfield, assignor.)
Ruddy, Patrick A., Dunmore, Pa. Display rack. 1,876,172; Sept. 6.
Rudolph, Walter H., Buffalo, N. Y. Bouquet holder. 1,876,322; Sept. 6.
Ruelland, Albertine, New York, N. Y. Electric iron. Re18,592; Sept. 6.
Rukeyser, Walter A., Globe, Ariz. Treating asbestos. 1,875,890; Sept. 6.
Ruskin, Jack. (See Miller, Carl W., assignor.)
Ryff & Co. A.-G. (See Ryff, Marta, assignor.)
Ryff, Marta, assignor to Ryff & Co. A.-G., Bern, Switzerland. Garment. 1,876,348; Sept. 6.
S. M. A. Corporation. (See Ungnade, Otto, assignor.)
Saco-Lowell Shops. (See Shaw, William, assignor.)
Sager, Solomon M., Chicago, Ill. Pen-point. 1,876,151; Sept. 6.
St. James, Robert T., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,089; Sept. 6.
Salinger, Gus. (See Teschel, G. R., Salinger, and Isaacson.)
Salisbury, Hervey M., Walnut Grove, and Arthur E. Miller, Sacramento, Calif. Gyroscopic airplane. 1,875,891; Sept. 6.
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,875,933; Sept. 6.
Salisbury, William, Toledo, Ohio. Tile for soil sterilization. 1,875,395; Sept. 6.
Salisbury, William, Toledo, Ohio. Method and apparatus for soil sterilization. 1,875,504; Sept. 6.
Sallee, Webster I., Rocky River, Ohio. Drying apparatus and process. 1,876,025; Sept. 6.
Salstrom, Clarence H. (See Harris, C. L., jr., and Salstrom.)
Sancton, Arthur H., assignor to Hardinge Company, Incorporated, York, Pa. Method and apparatus for preparing and feeding pulverized fuel. 1,875,934; Sept. 6.
Sandeman, Edward K., and L. E. Currah, Aldych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Dot insertion. 1,875,935; Sept. 6.
Sander, Henry C., Asbury Park, N. J. Attachment for food choppers. 1,876,471; Sept. 6.
Sanders, Maurice, assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y. Doll. 1,876,433; Sept. 6.
Sandstrom, Charles O., Los Angeles, Calif. Heat exchanger. 1,875,663; Sept. 6.
Sanford, Hugh W., and W. O. McKamey, Knoxville, Tenn. Mine car. 1,875,505; Sept. 6.
Sanford, Hugh W., Knoxville, Tenn. Railway. 1,875,506; Sept. 6.
Sanford Investment Company. (See Marland, J., and Griffith, assignors.)
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,077; Sept. 6.
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,340; Sept. 6.
Sasgen, Michael J., assignor to Grand Specialties Company, Chicago, Ill. Adjustable doorstop. 1,876,173; Sept. 6.
Saunders, Gordon, Whittier, Calif. Oil saver packing. 1,875,936; Sept. 6.
Savage, Joseph, Runcorn, England. Apparatus for degreasing materials. 1,875,937; Sept. 6.
Savio, Victor, Los Angeles, Calif. Fountain pen. 1,875,507; Sept. 6.
Schaum, Otto W., assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Whorl latch. 1,875,938; Sept. 6.
Schehl, Oscar L., Philadelphia, Pa. Shaping machine. 1,876,078; Sept. 6.
Scherbius, Arthur, Berlin-Wannsee, Germany. Vacuum switch. 1,875,765; Sept. 6.
Schimmel, Fridolin, Faribault, Minn. Folding table like structure. 1,875,892; Sept. 6.
Schinkal, Clarence E., Los Angeles, Calif. Detachable tie-back for drapes and curtains. 1,876,026; Sept. 6.
Schlage Lock Co. (See Schlage, Walter R., assignor.)
Schlage Lock Company. (See Schlage, Walter R., assignor.)
Schlage, Walter R., assignor to Schlage Lock Co., San Francisco, Calif. Pin tumbler cylinder mounting. 1,875,396; Sept. 6.
Schlage, Walter R., assignor to Schlage Lock Co., San Francisco, Calif. Screw securing means for door latches and the like. 1,875,664; Sept. 6.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Door latch. 1,876,079; Sept. 6.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Door latch. 1,876,080; Sept. 6.
Schlage, Walter R., assignor to Schlage Lock Company, San Francisco, Calif. Door latch. 1,876,081; Sept. 6.
Schmidt, Francis J., jr., and C. J. Nash, Wauwatosa, Wis. Visor attachment for windshields of motor driven vehicles. 1,876,434; Sept. 6.
Schneider, Arthur, Dusseldorf, assignor to Eumuco Aktiengesellschaft fur Maschinenbau, Leverkusen-Schlebusch, Germany. Power hammer. 1,875,939; Sept. 6.
Schneider, Edwin J., Jamaica, and M. B. Brandt, Brooklyn, assignors, by mesne assignments, to General Cable Corporation, New York, N. Y. Electric conductor. 1,876,350; Sept. 6.
Schollkopf, Karl, Dusseldorf-Oberkassel, and A. Serini, Dusseldorf-Heerdt, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung, Dusseldorf-Oberkassel, Germany. Thymol (3-oxy-1-methyl-4-isopropyl-benzol. 1,876,435; Sept. 6.
Schroeder, Frederick A., Rochelle Park, N. J., and H. R. Smith, Douglaston, N. Y., assignors to Raymond Concrete Pile Company, New York, N. Y. Apparatus for driving hollow cylinders. 1,875,825; Sept. 6.
Schröter, Fritz, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Picture transmission. 1,875,940; Sept. 6.
Schubert, Franz H., Fort Worth, Tex. Cushioning securing attachment. 1,875,766; Sept. 6.
Schuler, Callista O'N., Saugatuck, Conn. Cloth doll. 1,875,355; Sept. 6.
Schussler, Walter H., Philadelphia, Pa., assignor to International Cigar Machinery Company. Cigar wrapping machine. 1,876,027; Sept. 6.
Schwartz, Charles, Lawrence Township, Mercer County, N. J. Teaching marksmanship. 1,875,941; Sept. 6.
Schweisthal, Fred G., Chicago, Ill. Airplane construction. 1,876,472; Sept. 6.
Schweizer, Ernest, East Orange, N. J., assignor to Celluloid Corporation. Support for optical micrometers. 1,875,665; Sept. 6.
Schwemlein, William, assignor to The Parkersburg Rig & Reel Company, Parkersburg, W. Va. Tank seam. 1,875,666; Sept. 6.
Schwendler, Richard H., Cleveland, Ohio, and C. W. Mehling, Kenmore, N. Y., assignors to American Radiator Company, New York, N. Y. Head protector. 1,876,521; Sept. 6.
Schweyer, Daniel H., Easton, Pa. Induction train control apparatus. 1,875,942; Sept. 6.
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Rubber vulcanization accelerator. 1,875,943; Sept. 6.
Seaholm, Ernest W., G. E. Parker, and A. H. Stahlhuth, Detroit, Mich., assignors to Bendix Brake Company, Chicago, Ill. Brake. 1,875,508; Sept. 6.
Seinsheimer Paper Company. (See Johnson, Samuel J., assignor.)
Senter, Andrew F. (See Senter, Daniel C. and A. F.)
Senter, Daniel C., and A. F. Senter, Grandview, Mo. Radio antenna. 1,876,318; Sept. 6.
Serini, Arthur. (See Schollkopf, K., and Serini.)
Service Station Equipment Co. Limited. (See Brouse, William H. D., assignor.)

Sharma, Jagan N., Berkeley, assignor to Food Machinery Corporation, San Jose, Calif. Treating fruit to remove spray residues. 1,875,944; Sept. 6.

Shaw, Benson R., St Louis, Mo., and F. Buchanan, assignors to Crouse-Hinds Company, Syracuse, N. Y. Boundary light for airports and the like. 1,876,082; Sept. 6.

Shaw, William, Lowell, assignor to Saco-Lowell Shops, Newton, Mass. Cotton distributing system. 1,875,356; Sept. 6.

Sheaffer, W. A., Pen Company. (See Daugherty, Samuel L., assignor.)

Sheaffer, W. A., Pen Co. (See Sheaffer, Walter A., assignor.)

Sheaffer, Walter A., assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa. Container. 1,876,152; Sept. 6.

Sheahan, Frank I., assignor to M. H. Detrick Company, Chicago, Ill. Furnace wall construction. 1,875 667; Sept. 6.

Sheldon, Daniel F., Los Angeles, Calif. Casting tetrahedrons. 1,875,668; Sept. 6.

Shell Development Company. (See Taylor, Jack F. M., assignor.)

Shell Oil Company. (See Winterburn, Read, assignor.)

Shirley, Walter L., Indianapolis, Ind. Fender mounting flag. 1,876,351; Sept. 6.

Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Pressure regulator for hot water heating systems. 1,875,509; Sept. 6.

Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Pressure affected circuit controller. 1,875,669; Sept. 6.

Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Float switch. 1,875,510; Sept. 6.

Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Snap action modulating valve. 1,875,511; Sept. 6.

Shoemaker, Alvin H., Seattle, Wash. Pneumatic tire and rim construction. 1,875,803; Sept. 6.

Shore, William E., West New Brighton, N. Y. Rotary machine. 1,875,397; Sept. 6.

Sidgreaves, Henry, Pawtucket, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Compensating mechanism for machine tools. 1,876,352; Sept. 6.

Sidgreaves, Henry, Pawtucket, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Machine tool compensating mechanism. 1,876,353; Sept. 6.

Siefke, Frederick. (See Wienholz, A. E., and Siefke.)

Siegel, Alfred. (See Allen, E. R., and Siegel.)

Siemens & Halske, Aktiengesellschaft. (See Arni, Hans, assignor.)

Siemens & Halske, Aktiengesellschaft. (See Weeber, Otto, assignor.)

Silver King Hydraulic Jack Company, The. (See Rosenberry, Ray P., assignor.)

Silverman, Max, and H. Pomerantz, New York, N. Y. Metallic insert for ornamental apparel belts. Des. 87,730; Sept. 6.

Silvermann, Max, and H. Pomerantz, New York, N. Y. Belt. Des. 87,731; Sept. 6.

Silvestri, Enrico, Milan, Italy. Ski. 1,875,512; Sept. 6.

Simmons Company. (See Kusterle, Frank, assignor.)

Simmons, Richard P., New York, N. Y. Well forming apparatus. 1,875,357; Sept. 6.

Simpson, Howard W., assignor to Ford Motor Company, Dearborn, Mich. Tractor pulley. 1,875,767; Sept. 6.

Sinclair, Charles W., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Brake drum. 1,876,354; Sept. 6.

Singmaster, James A., Bronxville, N. Y. Artificial silk filament and making same. 1,875,894; Sept. 6.

Sirmay, Julius, Philadelphia, Pa., assignor to Jacquard Knitting Machine Co., Inc. Circular rib knitting machine. 1,875,826; Sept. 6.

Sloat, Howard M., Fairfield, Conn. Milk bottle crate. 1,876,323; Sept. 6.

Smith, Elberon D., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Safety device for cigarette cut-off. 1,876,028; Sept. 6.

Smith, Elberon D., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Cigarette rod forming mechanism. 1,876,029; Sept. 6.

Smith, Franklin P. (See Smith, James D., assignor.)

Smith, Harvey E., assignor to Aerometric Valve Corp., Portland, Oreg. Inflating band piece. 1,876,355; Sept. 6.

Smith, Herman R. (See Schroeder, F. A., and Smith.)

Smith, Herman W., Louisville, Ky. Day and night rear vision mirror. 1,876,319; Sept. 6.

Smith, James D., assignor of one-half to F. P. Smith, Chicago, Ill. Sliding doorlock. 1,875,768; Sept. 6.

Smith, Leighton, et al. (See Smith, William D., assignor.)

Smith, Ray P., Penokee, Kans. Intake manifold. 1,875,670; Sept. 6.

Smith, William D., Lumber Bridge, N. C., assignors of one-fourth to A. D. Malloy and one-fourth to L. Smith, Quitman, Ga. Thermostatic control for valves. 1,875,513; Sept. 6.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Windshield wiper. 1,875,895; Sept. 6.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Windshield cleaning device. 1,875,896; Sept. 6.

Snax Automatic Stores, Inc. (See Vander Meer, Peter C. A., assignor.)

Sneed, John, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for assembling wire wheels. 1,876,356; Sept. 6.

Snell, Lyle K., Detroit, Mich., assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Brake. 1,875,945; Sept. 6.

Society of Chemical Industry in Basle. (See Haller, Robert, assignor.)

Society of Chemical Industry in Basle, the Firm of. (See Hartmann, Max, assignor.)

Solleau, Louis C., jr., Rayne, La. Feed cutter. 1,875,514; Sept. 6.

Sola Corporation. (See Sola, Joseph G., assignor.)

Sola, Joseph G., assignor to Sola Corporation, Chicago, Ill. Electric transformer. 1,875,358; Sept. 6.

Sola, Joseph, assignor to Sola Corporation, Chicago, Ill. Air purifier. 1,875,671; Sept. 6.

Soper, Cleveland C. (See Law, O. B., Colley, and Soper.)

Soubier, Leonard D., Toledo, Ohio. Machine for forming hollow glassware. 1,875,827; Sept. 6.

Soubier, Leonard D., and J. E. McLaughlin, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Glass furnace. 1,876,030; Sept. 6.

Soubier, Leonard D., Alton, Ill., assignor to Owens-Illinois Glass Company. Apparatus for drawing glass tubings. 1,876,031; Sept. 6.

Spaeth, Charles, Flushing, N. Y. Electric discharge device. 1,876,083; Sept. 6.

Spaeth, Frederick C., Williamsport, and M. A. Gibson, Lockhaven, Pa.; said Spaeth assignor to said Gibson. Plumb bob and chalk line. 1,876,473; Sept. 6.

Spalding, John D., Crafton, Pa., assignor to The National Supply Company, New York, N. Y. Rotary drawworks back brake assembly. 1,875,769; Sept. 6.

Sparkletts Bottled Water Corporation. (See Washburne, Arthur L., assignor.)

Specialty Automatic Machine Company. (See Bedworth, Arthur H., assignor.)

Spence, Peter, & Sons, Limited. (See Llewellyn, W. B., and Crundall, assignors.)

Spork, Carl W., and F. J. Herzig, San Francisco, Calif. Stop motion. 1,875,515; Sept. 6.

Sprague, Frank J., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y. Apparatus for controlling movement of vehicles on railroads. 1,876,032; Sept. 6.

Sprague Safety Control & Signal Corporation. (See Sprague, Frank J., assignor.)

Sprenkle, John and M. F., Philadelphia, Pa. Sock. Des. 87,732; Sept. 6.

Sprenkle, Marie F. (See Sprenkle, John and M. F.)

Sprrrier, Schuyler O., Carnegie, Okla. Aerial transportation apparatus. 1,876,153; Sept. 6.

Square D. Company. (See Jackson, John G., assignor.)

Stadtfeld, Jacob A., assignor to Plant Rubber & Asbestos Works, Inc., San Francisco, Calif. Gas flue or vent. 1,876,357; Sept. 6.

Stahlhuth, Arthur H. (See Seaholm, E. W., Parker, and Stahlhuth.)

Stalb, Karl. (See Pistor, G., Suchy, Stalb, and Moschel.)

Stalb, Karl, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation. Making anhydrous magnesium chloride. 1,876,084; Sept. 6.

Stalb, Karl, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation. Making anhydrous magnesium chloride. 1,876,085; Sept. 6.

Stålhane, Otto, D. R. E. Werner, and Stig Gierts-Hedström, Stockholm, Sweden. Treating materials containing arsenic acid. 1,875,897; Sept. 6.

Standard Electric Time Company. (See Harter, George F., assignor.)

Standard-I. G. Company. See Krauch, C., and Pier, assignors.)

Standard Oil Company. (See Read, Carlyle D., assignor.)

Standard Oil Development Company. (See Bowman, H. M., and Fentress, assignors.)

Stanley Works, The. (See Waters, Archibald D., assignor.)

Stansbury, Carroll, Wauwatosa, and G. C. Brown, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Phase failure and phase reversal protective system. 1,876,436; Sept. 6.

Stark, Willet, E., East Cleveland, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio. Flue construction. 1,875,946; Sept 6.

Stark, Willet E., East Cleveland, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio. Control system for boilers and the like. 1,875,947; Sept. 6.

Stark, Willet E., East Cleveland, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio. Boiler construction. 1,875,948; Sept. 6.

Stark, William E., East Cleveland, assignor to The Bryant Heater & Mfg. Co., Cleveland, Ohio. Gas burner. 1,876,086; Sept. 6.

Starkey, Shirley L., Parkersburg, W. Va. Device for making drip coffee. 1,876,474; Sept. 6.

Starr, Rose W., Chicago, Ill. Fountain comb. 1,876,033; Sept. 6.

Stary, Percy F., Detroit Lakes, Minn. Heater for mixers for concrete and the like. 1,875,516; Sept 6.

State, Will C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Apparatus for manufacturing tubular articles. 1,876,087; Sept. 6.

Stauffer, Earl C., Lancaster, Pa. Domestic boiler. 1,876,475; Sept 6.

Stebler, Fred, assignor to Stebler Parker Co., Riverside, Calif. Intersection controlling apparatus for conveyers. 1,876,154; Sept 6.

Stebler Parker Co. (See Stebler, Fred, assignor.)

Steere, Samuel A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cord fabric. 1,875,517; Sept 6.

Steiger, Harry, Baltimore, Md. Playing unit for marble games. Des. 87,733; Sept. 6.

Steiger, Norbert. (See Herz, R. Steiger, and Hechtenberg.)

Steiner, George A. (See Ellerbeck, William L., and Steiner.)

Steinmann, Albert, La Chaux-de-Fonds, Switzerland. Zero resetting mechanism for adding machines. 1,875,518; Sept. 6.

Steinmann, Albert, La Chaux-de-Fonds, Switzerland. Adding machine. 1,875,519; Sept. 6.

Steinmetz, Julius, Winthrop, Mass. Sign. 1,875,520; Sept. 6.

Stephens, Alice B., executrix. (See Stephens, F. G. C., Anderson, and Cash.)

Stephens, Francis G. C., deceased, L. J. Anderson, and W. A. Cash; A. B. Stephens, executrix, assignors to National Metal and Chemical Bank Limited, London, England. Manufacture of titanium oxide. 1,876,088; Sept. 6.

Stephenson, Hugh M., Fort Wayne, Ind., assignor to General Electric Company. Balancing machine. 1,876,523; Sept. 6.

Stern, Albert, J., and J., New York, N. Y., assignors, by mesne assignments, to Indian Motorcycle Company, Springfield, Mass. Delivery car. 1,876,155; Sept. 6.

Stern, Joseph. (See Stern, Albert, J., and J.)

Stern, Julius. (See Stern, Albert, J., and J.)

Stertzbach, Harry W., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Interlocking a journal box to a side frame. 1,875,770; Sept 6.

Stevens, Arthur L., Evanston, assignor, by mesne assignments, to Arthur L. Stevens Corporation, Chicago, Ill. Control for metallurgical furnaces. 1,876,509; Sept. 6.

Stevens, Arthur L., Corporation. (See Stevens, Arthur L., assignor.)

Stevens, Charles H. (See Dickson, Victor E., assignor.)

Stewart, Duncan J., assignor to H. D. Colman, Rockford Ill. Valve operator. 1,875,672; Sept. 6.

Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Door operator and control means therefor. 1,875,771; Sept. 6.

Stewart-Warner Corporation. (See Sussin, Victor, assignor.)

Stockstill, Ralph D., Simons, Calif. Well control and safety valve mechanism. 1,875,673; Sept. 6.

Stoefen, Robert R. (See Oberg, A. J., and Stoefen.)

Stoler, Edward W., Mansfield, Ohio, assignor to Kelsey Hayes Wheel Corporation, Detroit, Mich. Nipple swaging machine. 1,876,174; Sept. 6.

Stoltz, Charles E. (See Mancha, R., and Stoltz.)

Stoody Company. (See Stoody, W. F., and Relling, assignors.)

Stoody, Winston F., Whittier, and Thor Relling, Belvedere Gardens, assignors to Stoody Company, Whittier, Calif. Making metal carbides. 1,876,175; Sept. 6.

Stough, Turney H., assignor to Jeannette Steel Corporation, Jeannette, Pa. Hot plate attachment for griddles. 1,876,358; Sept. 6.

Stover, Jordan H. (See Parsons, J., and Stover.)

Strang, Charles B., Lindenwood, Ill. Hoe. 1,875,674; Sept. 6.

Strasburger, Le Roy V., Baltimore, Md. Food compound. 1,876,090; Sept. 6.

Strathaus, John, assignor to Oakland Association of Credit Men, Oakland, Calif. Convertible serving table and tray. 1,875,772; Sept. 6.

Straub, Francis J., New Kensington, Pa. Ceiling slab support. 1,876,359; Sept. 6.

Strauss, Benno, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Steel article insensible to the action of hot gases, vapors and liquids. 1,876,091; Sept. 6.

Ströher, Karl G., Rothenkirchen in Vogtland, Germany. Hair clamp. 1,875,949; Sept. 6.

Strout, Ralph C., Wollaston, Mass., assignor to The White Tar Company of New Jersey. Garment bag. 1,875,773; Sept. 6.

Struble, R. C., Company, Inc. (See Struble, Robert C., assignor.)

Struble, Robert C., assignor to R. C. Struble Company, Inc., Seattle, Wash. Flight control for aeroplanes. 1,875,675; Sept. 6.

Stryke, Mark H., Brooklyn, N. Y. Separable fastening device. 1,875,950; Sept. 6.

Stuart, Nicholas H., assignor to Remington Rand Inc., Buffalo, N. Y. Bookbinder. 1,876,360; Sept. 6.

Studebaker Corporation. (See Henry, Frederick, assignor.)

Suchy, Robert. (See Pistor, G., Suchy, Staib, and Moschel.)

Suekoff, Louis A., Wilmette, Ill. Spring assembly for upholstery. 1,875,521; Sept. 6.

Suits, Chauncey G., Schenectady, N. Y., and M. E. Dunlap, Madison, Wis. Moisture indicating instrument for wood. 1,875,359; Sept. 6.

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Company. (See Osgood, Charles F., assignor.)

Sullivan, Peter B., Randolph, Mass. Heel. 1,876,361; Sept. 6.

Sulzner, Charles F., Miami, Fla. Location finder for microscopes. 1,876,176; Sept. 6.

Sun Oil Company. (See Chatfield, Victor M., assignor.)

Sun Oil Company. (See Guthrie, Robert G., assignor.)

Surprenant, George, Rotterdam, N. Y. Boiler. 1,875,828; Sept. 6.

Sussin, Victor, assignor to Stewart-Warner Corporation, Chicago, Ill. Hydraulic shock absorber. 1,876,092; Sept. 6.

Suverkrop, Lew, Bakersfield, Calif. Surveying instrument. 1,875,829; Sept. 6.

Suverkrop, Lew, Bakersfield, Calif. Surveying instrument. 1,875,830; Sept. 6.

Swallen, Lloyd C. (See Martin, J., and Swallen.)

Swallen, Lloyd C., and B. C. Boeckeler, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Recovery of methyl amine. 1,875,774; Sept. 6.

Swallen, Lloyd C., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Recovery of methyl amine. 1,875,775; Sept. 6.

Swallen, Lloyd C., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Recovery of methyl amine. 1,875,776; Sept. 6.

Swann Research, Inc. (See Carothers, John N., assignor.)

Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,875,831; Sept. 6.

Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,875,832; Sept. 6.

Swartzbangh Manufacturing Company, The. (See Knaggs, Joseph, assignor.)

Sweet, Henry F., South Bend, Ind. Sanitary bed attachment. 1,875,522; Sept. 6.

Switzer, Floyd R., Birmingham, Ala., assignor, by mesne assignments, to H. S. Blumenthal, Memphis, Tenn. Typewriter ribbon rejuvenator. Re18,588; Sept. 6.

Symons Brothers Development Company. (See Symons, Loren G., assignor.)

Symons, Loren G., assignor to Symons Brothers Development Company, Hollywood, Calif. Grizzly bar. 1,876,034; Sept. 6.

Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)

Tackaberry, Robert D., Lewiston, Me. Stretcher and guider. 1,875,777; Sept. 6.

Talbot, Evariste E., (See Daudelin, J. B., and Talbot.)

Talbot, Stanley E., Merton Park, England. Antidazzle fittings for head lamps. 1,876,362; Sept. 6.

Tanner, Harry L., deceased, Brooklyn, N. Y.; The National City Bank of New York, executor. Speed-responsive controlling device. 1,876,476; Sept. 6.

Taplin, Harold J., Kew Surrey, assignor to H. J. Taplin and S. H. Kaufmann, London, England. Display device. 1,875,676; Sept. 6.

Taunton Pearl Works, Inc. (See Wakefield, Francis J., assignor.)

Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Condenser system. 1,875,360; Sept. 6.

Taylor, Albert H., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Circuits for purifying high frequency radiation. 1,875,952; Sept. 6.

Taylor, Albert H., and L. C. Young, Washington, D. C. High frequency electrical system. 1,875,951; Sept. 6.

Taylor, Albert H., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Piezo electric crystal control system. 1,875,953; Sept. 6.

Taylor, Cecil H., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,093; Sept. 6.

Taylor, Edward B. (See Thornas, P. B., and Taylor.)

Taylor, Elbert A. (See Thinn, C. A., and Taylor.)

Taylor, Elmer Z., Newark, N. J. Manufacture of tubes of paper or like material. 1,876,094; Sept. 6.

Taylor, Eugene V., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,523; Sept. 6.

Taylor, Eugene V., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,177; Sept. 6.

Taylor, Harold V., assignor to The Robert Mitchell Company Limited, Montreal, Quebec, Canada. Sash guide for window frames. 1,876,363; Sept. 6.

Taylor, Harold V., assignor to The Robert Mitchell Company Limited, Montreal, Quebec, Canada. Ventilating window. 1,876,365; Sept. 6.

Taylor, Jack F. M., Wilmington, assignor to Shell Development Company, San Francisco, Calif. Automatic end point recorder. 1,876,364; Sept. 6.
Taylor, James H., Oak Park, Ill. Forming pipe elbows. 1,875,954; Sept. 6.
Taylor, James H., Oak Park, Ill. Automatically fed furnace. 1,876,095; Sept. 6.
Taylor, John W., Soho Foundry, assignor to W. & T. Avery Limited, Birmingham, England. Weighing apparatus. 1,875,955; Sept. 6.
Taylor, Thomas H., administrator. (See Priebe, Herman C.)
Taylor, William M., Indianapolis, Ind. Road grading machine or other vehicle. 1,875,778; Sept. 6.
Tebbs, Howard, Baltimore, Md. Aircraft. 1,876,096; Sept. 6.
Teesdale, Clyde H. (See Teesdale, John B. and C. H.)
Teesdale, John B. and C. H., assignors to Teesdale Manufacturing Company, Grand Rapids, Mich. Pump. 1,875,398; Sept. 6.
Teesdale Manufacturing Company. (See Teesdale, John B. and C. H., assignors.)
Tefra Co., The. (See McNally, Edwin M., assignor.)
Telautograph Corporation. (See Van Nostrand, Arleigh N., assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Gurtler, Rudolf, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H. (See Meissner, Alexander, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H. (See Schröter, Fritz, assignor.)
Templin, Richard L. Parnassus, assignor to Aluminum Company of America, Pittsburgh, Pa. Pressure indicating mechanism for rolling mills. 1,875,524; Sept. 6.
Tennent, Alpheus H., assignor to The Oil Conservation Engineering Company, Cleveland, Ohio. Distilling apparatus for use in reclaiming oils. 1,876,035; Sept. 6.
Tennessee Copper and Chemical Corporation. (See McKee, Ralph H., assignor.)
Terme, Jean B. (See Coudert, J. G. M., and Terme.)
Ternstedt Manufacturing Company. (See Haskins, Howard B., assignor.)
Teschel, George R., G. Salinger, and L. H. Isaacson, Parkersburg, W. Va. Beveling machine. 1,876,178; Sept. 6.
Thaler, Wilhelm, Heidenheim-on-the, Brenz, Germany. Rotary feeder for pneumatic conveyers. 1,875,677; Sept. 6.
Thate, George H., Belleville, N. J. Citrus fruit juice extractor. 1,875,678; Sept. 6.
Thearle, Ernest L, Schenectady, N. Y., assignor to General Electric Company. Dynamic balancing machine. 1,876,524; Sept. 6.
Thearle, Ernest L., Schenectady, N. Y., assignor to General Electric Company. Weight calculating machine. 1,876,525; Sept. 6.
Thearle, Ernest L., and A. B. Hubbard, Schenectady, N. Y., assignors to General Electric Company. Dynamic balancing machine. 1,876,526; Sept. 6.
Thearle, Ernest L., and A. B. Hubbard, Schenectady, N. Y., assignors to General Electric Company. Balancing head. 1,876,527; Sept. 6.
Thexton, Arthur L., and M. R., assignors to Arthur L. Thexton, Cincinnati, Ohio. Sleeping cover for children. 1,875,525; Sept. 6.
Thexton, Mildred R. (See Thexton, Arthur L. and M. R.)
Thiel, Herman K., Lakeland, Minn. Multiple parallel flash light. 1,875,956; Sept. 6.
Thinn, Christian A., Chicago, and E. A. Taylor, Arlington Heights, assignors to C. A. Dunham Company, Marshalltown, Ill. Temperature control mechanism for heating systems. 1,875,957; Sept. 6.
Thinshell Candles, Inc. (See Nanna, Frank S., assignor.)
Thomas, Arthur, Thornton Heath, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Mechanism normally operated from a keyboard. 1,876,097; Sept. 6.
Thomas, Roy, Los Angeles, Calif. Torch. 1,875,361; Sept. 6.
Thompson, Earl A., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Power transmission mechanism. 1,876,098; Sept. 6.
Thompson, John B. D., Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,875,958; Sept. 6.
Thompson Manufacturing Company. (See Thompson, Walter Van E., assignor.)
Thompson, Merrill M., and J. C. Patten, deceased; said Thompson assignor to said Patten; M. L. Patten, executrix of said J. C. Patten, Indianapolis, Ind. Plating zinc-tin alloy. 1,876,156; Sept. 6.
Thompson, Orville W., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Valve device. 1,875,898; Sept. 6.
Thompson, Walter Van E., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Quick coupler valve. 1,875,679; Sept. 6.
Thompson, Walter Van E., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Sprinkler head having a removable nozzle unit. 1,875,780; Sept. 6.
Thompson, Walter Van E., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Slow motion reaction sprinkler. 1,876,099; Sept. 6.
Thomson, Robert, Newark, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y. Screw thread gauge. 1,875,899; Sept. 6.
Thomson, S. H., Manufacturing Company, The. (See Hummert, Robert H., assignor.)
Thomson, Thomas N., Huntington, N. Y. Wager gauge. 1,875,779; Sept. 6.
Thornas, Peter B., and E. B. Taylor, assignors to E. W. A. Rowles Co., Chicago, Ill. Window shade fixtures. 1,876,036; Sept. 6.
Thorsen, Karl K. A., San Francisco, Calif. Tire vulcanizing machine. 1,876,100; Sept. 6.
Thum, Martin, Rochester, N. Y. Spring structure for furniture. 1,876,101; Sept. 6.
Thum, Martin, Rochester, N. Y. Bed and a spring bottom. 1,876,102; Sept. 6.
Timken Roller Bearing Company. (See Assel, Walter J., assignor.)
Tindall, Herbert T., Dorchester, Mass. Apparatus for fractional distillation of composite liquids. 1,876,179; Sept. 6.
Toa Denki Kabushiki Kaisha. (See Ito, Tatsujiro, assignor.)
Tobin, Robert J., Hollis, N. Y. Shingle and linoleum knife. 1,876,180; Sept. 6.
Torulf, Helge G. (See Zettergren, Birger, assignor.)
Transelectric Company. (See Hamer, W. D., Chatfield, and Mills, assignors.)
Troendly, Harry P., Chicago, Ill., assignor, to Parva Products Company, Wilmington, Del. Fastener. 1,876,477; Sept. 6.
Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Water-cooled tube assembly. 1,876,103; Sept. 6.
Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Switching and relay systems. 1,876,320; Sept. 6.
Tropic-Aire, Incorporated. (See Wines, Fred B., assignor.)
Trotman, Walter G., West Springfield, Mass. Paper-making apparatus. 1,875,526; Sept. 6.
Trumphour, William L., Cleveland, and M. E. Lange, Cleveland Heights, assignors to the Warner-Swasey Company, Cleveland, Ohio. Chuck. 1,875,959; Sept. 6.
Truxell, Clyde W., jr. (See Udale, S. M., and Truxell.)
Tubbs, W. F., Company, The. (See Gibson, Louis D., assignor.)
Tucker-Gilmore Mfg. Co. (See Tucker, Jesse D., assignor, and O. A.)
Tucker, James D., Sierra Madre, Calif. Mixing bowl lock. 1,876,264; Sept. 6.
Tucker, Jesse D. and O. A. Tucker, Sacramento, said J. D. Tucker assignor to Tucker-Gilmore Mfg. Co., North Sacramento, Calif. Vehicle brake. 1,876,265; Sept. 6.
Tucker, Jesse D., assignor to Tucker-Gilmore Mfg. Company, North Sacramento, Calif. Steering mechanism. 1,876,104; Sept. 6.
Tucker, Otto A. (See Tucker, Jesse D., and O. A.)
Turnbull, Werd W., Dayton, Ohio, assignor, by mesne assignments, to National Biscuit Company. Ice cream cone. 1,875,960; Sept. 6.
Turnbull, Werd W., Dayton, Ohio, assignor, by mesne assignments, to National Biscuit Company. Ice cream cone. 1,876,105; Sept. 6.
Turner, Walter E., assignor to Atlantic Carton Corporation, Norwich, Conn. Dispensing container. 1,875,781; Sept. 6.
Tussing, Reginald M., assignor to The Victor Safe & Equipment Company, Marietta, Ohio. Package of index guides. 1,876,181; Sept. 6.
Udal, John P., Selly Park, Birmingham, England. Press guard. 1,875,527; Sept. 6.
Udale, Stanley M., and C. W. Truxell, jr., assignors, by mesne assignments, to General Motors Corporation, Detroit, Mich. Uniflow two-stroke cycle internal combustion engine. 1,875,528; Sept. 6.
Uline, Walter C., Nappanee, Ind., assignor to Nappanee Lumber and Manufacturing Company. Table frame. Re18,591; Sept. 6.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Underwood Elliott Fisher Company. (See Vickers, Harry H., assignor.)
Ungnade, Otto, Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio. Manufacture of citrates and citric acid. 1,876,366; Sept. 6.
Union Bank of Chicago. (See Cowles, Irving, assignor.)
Union Special Machine Company. (See Feigel, W. A., and Carver, assignors.)
Union Switch & Signal Company, The. (See Alexander, V. S., and Ackerly, assignors.)
Union Switch & Signal Company, The. (See Bowling, Philip H., assignor.)
Union Switch & Signal Company, The. (See Coleman, John P., assignor.)
Union Switch & Signal Company, The. (See Livingston, John W., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
Union Switch & Signal Company, The. (See Nettleton, Lewis L., assignor.)

United-Carr Fastener Corporation. (See Walters, Rollo F., assignor.)
United Metal Box Co. Inc. (See Hammer, Samuel, assignor.)
United Shoe Machinery Corporation. (See Ballard, Milton H., assignor.)
Universal Gypsum & Lime Co. (See Jeffrey, D. C., and Marsham, assignors.)
Universal Gypsum & Lime Co. (See Nelson, William K., assignor.)
Urbany, Urban, San Diego, Calif. Tamale mold and container. 1,876,182; Sept. 6.
Usselman, George L., Rocky Point, N. Y., assignor to Radio Corporation of America. Power stage arrangement. 1,876,106; Sept. 6.
Usselman, George L., Rocky Point, N. Y., assignor to Radio Corporation of America. Carrier suppression modulator. 1,876,107; Sept. 6.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Coking retort oven. 1,876,108; Sept. 6.
Van Bogdandy, Stephan and L. Wamoscher, Berlin, Germany. Metal vapor lamp. 1,875,963; Sept. 6.
Vanderbilt, R. T., Company. (See Edland, Laurence A., assignor.)
Vander Meer, Peter C. A., assignor to Snax Automatic Stores, Inc., Detroit, Mich. Control control. 1,875,900; Sept. 6.
Van der Pol, Balthasar, Eindhoven, Netherlands, assignor to Radio Corporation of America. Device for modulating the frequency of electric oscillations. 1,876,109; Sept. 6.
Vandervoort, Milford T., assignor to American Seating Company, Grand Rapids, Mich. Device for holding and operating rotary tools. 1,875,529; Sept. 6.
Van Duser, Joseph, Firthcliffe, N. Y. Fishing rod support. 1,876,478; Sept. 6.
Van Guelpen, Louis J., Cincinnati, Ohio, assignor, by mesne assignments, to Iver Johnson's Arms and Cycle Works, Fitchburg, Mass. Child's vehicle with reclining back. 1,876,111; Sept. 6.
Van Horn, Chris S., Bloomsburg, Pa. Carving instrument. 1,875,680; Sept. 6.
Van Nostrand, Arleigh N., Flushing, assignor to Telautograph Corporation, New York, N. Y. Stylus for telautographs. 1,875,833; Sept. 6.
Van Ranst, Cornelius W., Auburn, Ind., assignor to Manning & Co., Chicago, Ill. Automobile construction. 1,876,110; Sept. 6.
Van Rennes, Cornelis, Flushing, N. Y., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Valve for airbags. 1,875,782; Sept. 6.
Van Suchtelen, Harold, Eindhoven, Netherlands, assignor to Radio Corporation of America. Circuit arrangements for smoothing a direct current ripple. 1,875,961; Sept. 6.
Vaupotic, Ferdinand A., Brooklyn, N. Y., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Vanishing cream. 1,875,530; Sept. 6.
Vazcane Process, Inc. (See Vazquez, Eugenio A., assignor.)
Vazquez, Eugenio A., Habana, Cuba, assignor to Vazcane Process, Inc. Recovery of by-products of sugar extraction. 1,876,522; Sept. 6.
Veale, George W., Cleveland Heights, assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Polishing machine. 1,875,962; Sept. 6.
Veale, George W., Cleveland Heights, assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Tie bar for bumperettes. 1,876,112; Sept. 6.
Vermeulen, Roelof, Eindhoven, Netherlands, assignor to Radio Corporation of America. Magnet system for converting electric oscillations into acoustic ones or conversely. 1,876,113; Sept. 6.
Vickers, Harry H., St. Albans, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,183; Sept. 6.
Vicki, Felix J., Paris, France. Face powder feeder. 1,875,834; Sept. 6.
Victor Adding Machine Company. (See Johantgen, Oliver D., assignor.)
Victor Chemical Works. (See Noyes, Harry F., assignor.)
Victor Safe & Equipment Company, The. (See Tussing, Reginald M., assignor.)
Visking Corporation, The. (See Dietrich, Harold E., assignor.)
Vitreous Enameling Company. (See Frost, John G. G., assignor.)
Vitrolite Company, The. (See Gibian, Eric H., assignor.)
Vlchek, Tool Company, The. (See Kneier, Joseph, assignor.)
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Loading machine. 1,875,783; Sept. 6.
Vredenburgh, Martha J. H., Brooklyn, N. Y. Radio pad. Des. 87,734; Sept. 6.
Wadsworth Electric Manufacturing Company, The. (See Chanaberry, Ray W., assignor.)
Wahl, John C. (See Frutkow, N., and Wahl.)
Wahlberg, Alfred G., Duluth, Minn. Radiator. 1,875,681; Sept. 6.
Wain, Harry J., New Brighton, assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 87,735; Sept. 6.
Wakefield, Ernest A., Springfield, assignor to R. W. Boyden and C. A. Dana, receivers of The Fisk Rubber Company, Chicopee Falls, Mass. Valve pad construction. 1,876,367; Sept. 6.
Wakefield, Francis J., Attleboro, Mass., assignor to Taunton Pearl Works, Inc. Collar holder. 1,876,184; Sept. 6.
Walker, Brooks. (See Walker, Clinton L., assignor.)
Walker, Clinton L., assignor of one-half to B. Walker, Piedmont, Calif. Crankshaft mounting for internal combustion engines. 1,875,682; Sept. 6.
Walker, Horace, Portland, Oreg. Instrument for holding gauges for setting valves. 1,875,784; Sept. 6.
Wallmuth, Albert A., Chicago, Ill., assignor, by mesne assignments, to Minneapolis Linen Supply Company, Minneapolis, Minn. Bib apron. 1,876,520; Sept. 6.
Walsh, James F., South Orange, N. J., assignor to Celluloid Corporation. Laminated glass. 1,875,964; Sept. 6.
Walter, Albert U., Govans, Md. Liquid dispensing device. 1,876,157; Sept. 6.
Walters, Hugo L., Cleveland, Ohio. Interior building wall structure. 1,876,528; Sept. 6.
Walters, Rollo F., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener. Re18,589; Sept. 6.
Walton, George M., assignor to Air Maze Corporation, Cleveland, Ohio. Air cleaner. 1,876,368; Sept. 6.
Walton, Samuel F., Hamburg, assignor to The Exolon Company, Blasdell, N. Y. Production of abrasive flours. 1,875,531; Sept. 6.
Wamoscher, Lazsalo. (See Von Bogdandy, S., and Wamoscher.)
Wantz, Julius B., Oak Park, assignor to General Electric X-Ray Corporation, Chicago, Ill. X-ray apparatus. 1,876,437; Sept. 6.
Waples, Rufus, Philadelphia, Pa. Bookstand. 1,875,785; Sept. 6.
Warner, Harold E., West Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire testing machine. 1,875,786; Sept. 6.
Warner-Swasey Company. (See Trumphour, W. L., and Lange, assignors.)
Washburn, Frederick C. (See Wilkinson, Fred, assignor.)
Washburne, Arthur L., assignor to Sparkletts Bottled Water Corporation, Los Angeles, Calif. Bottle conveyer and deliverer. 1,875,532; Sept. 6.
Washington Machinery & Supply Company, The. (See Rawson, Harry H., assignor.)
Waterbury, James L., Springfield, Ohio. Register fan. 1,875,683; Sept. 6.
Waterbury, James L., Springfield, Ohio. Register grille. 1,875,684; Sept. 6.
Waterbury, James L., Springfield, Ohio. Heating and ventilating apparatus. 1,875,685; Sept. 6.
Waterbury Clock Company. (See Putnam, James R., assignor.)
Waters, Archibald D., assignor to The Stanley Works, New Britain, Conn. Door holder. 1,875,965; Sept. 6.
Waterworth, Robert J., Sidney, Ohio. Self-aligning bearing for folding machine rollers. 1,876,369; Sept. 6.
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Apparatus for forming concrete piles. 1,875,835; Sept. 6.
Watts, William S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,876,114; Sept. 6.
Waukesha Motor Company. (See Fisher, James B., assignor.)
Waukesha Motor Company. (See Good, John, assignor.)
Waukesha Motor Company. (See Le Van Horning, Harry, assignor.)
Way, Walter R., Quincy, Mass. Lock. 1,876,115; Sept. 6.
Weaver, Milo J., Berlin Heights, Ohio. Tree protector. 1,875,533; Sept. 6.
Webb, Jervis B., Royal Oak, and D. A. Blair, Detroit, Mich. Switch mechanism for conveyer systems. 1,875,966; Sept. 6.
Weber, Hermann, Spiez, Switzerland. Feeding device. 1,876,370; Sept. 6.
Weddell, Ralph R., Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y. Adjustable lock tool holder. 1,875,967; Sept. 6.
Weeber, Otto, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Static and magnetic shield. 1,875,968; Sept. 6.
Wegener, Alvin, Bear Creek, Wis. Road machine attachment. 1,875,534; Sept. 6.
Weichelt, Carl L., assignor to Wire Company, Philadelphia, Pa. Electrical resistance unit. 1,876,116; Sept. 6.
Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. Acoustic shielding. 1,876,117; Sept. 6.
Weinberger, Martin, Minneapolis, Minn. Screen apparatus for automobile windows. 1,875,901; Sept. 6.
Weiss, Dewey S., Portland, Oreg. Drawbar apparatus for trailers. 1,875,969; Sept. 6.
Weller, John, West Horsley, England. Chair. 1,876,479; Sept. 6.
Wells, Frank O., Greenfield, Mass. Forming thread cutting taps. 1,875,362; Sept. 6.

Wennerstrom, Karl G., Malmkoping, Sweden. Melting or heating material in an electrical furnace. 1,875,787; Sept. 6.
Wentworth, Philip C., Providence, R. I., and J. H. Avery, Franklin, Mass., assignors to National Ring Traveler Co., Providence, R. I. Stroboscope. 1,875,788; Sept. 6.
Werner, Donovan, R. E. (See Stålhane, O., Werner, and Giertz-Hedström.)
Werner, Herman C., North Evans, assignor to Otis Elevator Company, New York, N. Y. Opening and closing elevator cars and landing gates. 1,876,438; Sept. 6.
Wesolik, Joseph, St. Louis, Mo. Wrench. 1,875,836; Sept. 6.
Westco-Chippewa Pump Company. (See Claypool, Wallace L., assignor.)
Westco Pump Corporation. (See Ferguson, Gale L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bryant, Ozro N., assignor.)
Westinghouse Electric & Manufacturing Company. (See Campbell, Clarence B., assignor.)
Westlund, Frank A., Glendale, Calif. Poultry roost. 1,876,371; Sept. 6.
Weston, Burt H., Wood River, Ill. Apparatus for producing cakes of solid carbon dioxide. 1,876,266; Sept 6.
Whaley, Ralph S., Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y. Strainer. 1,876,439; Sept 6.
Wheelbarger, Albert S., and G. C. Coil, assignors to Ohmer Fare Register Company, Dayton, Ohio. Totalizer and printing means therefor. 1,876,118; Sept 6.
Wheelbarger, Albert S., and P. Kell, assignors to Ohmer Fare Register Company, Dayton, Ohio. Register. 1,876,119; Sept. 6.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Radio receiving apparatus. 1,875,837; Sept. 6.
Wheeler, Maynard C. and C. D. Goodale, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Continuous butyl alcohol fermentation process. 1,837,536; Sept 6.
White Cap Company. (See White, W. P., and Ives, assignors.)
White, Herbert J., assignor to Gleason Works, Rochester, N. Y. Completely automatic gear cutting machine. 1,876,372; Sept 6.
White, Morris, New York, N. Y. Hand bag. Des. 87,701; Sept. 6.
White Tar Company of New Jersey, The. (See Strout, Ralph C., assignor.)
White, Theodore R., Brooklyn, N. Y. Safety hand brake locking device for automobiles and trucks. 1,875,686; Sept. 6.
White, William P. Chicago, and C. E. Ives, Wilmette, assignors to White Cap Company, Chicago, Ill. Exhausting and sealing machine. 1,875,789; Sept. 6.
Whitney, Paul V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Combined trolley conveyer take-up and telescopic track. 1,875,535; Sept 6.
Whitney, Paul V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Extensible rail, particularly for trolley conveyer systems. 1,876,373; Sept. 6.
Wickwire, Arthur M. jr., Nutley, N. J., assignor of one-half to Henry J. Lucke, New York, N. Y. Filling and charging device. 1,875,902; Sept 6.
Wienholz, Albert E., New York, and F. Siefke, Brooklyn, N. Y. Stone saw. 1,876,480; Sept 6.
Wiese, Adalbert. (See Mihalka, A., and Wiese.)
Wigginton, George P., Kalamazoo, Mich., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Temporary binder. 1,876,374; Sept 6.
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Machine for making annular articles. 1,876,375; Sept. 6.
Wilford, James W. (See Hargraves, S. S., De Orlow, and Wilford.)
Wilking, James N. (See Rossiter, W. J., and Wilking.)
Wilkinson, Fred, assignor to F. C. Washburn, New Bedford, Mass. Textile machine. 1,876,376; Sept 6.
Wilkinson, Matthias L., and R. Bradshaw, Preston, England. Locking of stereoplates or printing surfaces to the cylinders of rotary printing machines. 1,876,378; Sept. 6.
Willey, Charlotte F. (See Gordon, Joseph R., assignor.)
Williams, Ira and A. M. Neal, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Improving aging qualities of rubber and resulting product. 1,875,903; Sept 6.
Williams, James H., Providence, R. I., assignor to Detroit Trust Company, Detroit, Mich. Motion transmitting device. 1,875,537; Sept 6.
Willis, Roy D., Bigpine, Calif. Fish screen. 1,875,790; Sept. 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,876,185; Sept 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Tank car twin tank construction. 1,876,186; Sept 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,876,187; Sept. 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Dome head arrangement for car tanks. 1,876,188; Sept. 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Multiunit tank car. 1,876,189; Sept 6.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Multiple unit tank car. 1,876,190; Sept. 6.
Willwerscheid, Theodore R., Rocky River, and H. B. Dayton, Para Heights, Ohio. Driving head for support posts. 1,875,687; Sept. 6.
Wilson & Company. (See Doran, John F., assignor.)
Wilson, Carl B., Denver, Colo. Oil burner. 1,876,377; Sept. 6.
Wilson, Frank D., Oak Park, Ill. Carton. 1,876,120; Sept. 6.
Wilson, Grace E., Wichita, Kans. Structure simulating an owl. 1,876,121; Sept 6.
Wilson, Perry W. (See Woodruff, J. C., and Wilson.)
Wilson, Thomas, & Co. Inc. (See Molitor, Charles B. J., assignor.)
Winckler, Aage E., Milwaukee, Wis. Internal combustion engine. 1,875,838; Sept. 6.
Wines, Fred B., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating apparatus for automotive vehicles. 1,876,268; Sept. 6.
Winkler, Richard G., Springfield, Mass. Razor. 1,875,538; Sept. 6.
Winna Manufacturing Corporation. (See Marsa, Melchor, assignor.)
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Friction detent for control rods. 1,875,791; Sept. 6.
Winter, Leonard W., Bluebell Hill, near Rochester, England. Landing and beaching gear for aircraft. 1,876,158; Sept. 6.
Winterburn, Read, Los Angeles, assignor to Shell Oil Company, San Francisco, Calif. Core-catching device. 1,876,379; Sept. 6.
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wired Radio, Inc. (See Young, Leo C., assignor.)
Wirt Company. (See Weichelt, Carl L., assignor.)
Wise, Anthony G., Beverly Hills, and J. Arnold, Los Angeles, assignors to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Automatic release clutch for motor drive on cameras. 1,876,267; Sept. 6.
Wittick, Ralph A., Los Angeles, Calif. Groove-cutting machine. 1,876,380; Sept. 6.
Wolf, Frank F., assignor to Oakes & Burger Co., Inc., Cattaraugus, N. Y. Can delivery mechanism. 1,876,191; Sept. 6.
Wolfe, Richard C., Beverly Hills, Calif. Refrigerator. 1,875,539; Sept. 6.
Ritz-Woller, Oliver C., Chicago, Ill. Accelerator pedal. 1,875,399; Sept. 6.
Wolters, Carl F., Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Insulated file cabinet. 1,876,192; Sept. 6.
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Lock mechanism for safes. 1,876,193; Sept. 6.
Wollum, Henry M. (See Richardson, D. R., and Wollum.)
Wood, Andrew C., Chicago, Ill. Fluid pump. 1,875,904; Sept. 6.
Wood, Austin A., and E. Boss, Columbus, Ohio. Sign. Des. 87,736; Sept. 6.
Wood, Charles, Liverpool, assignor to Mersey Paper Company, Limited, Brooklyn, Nova Scotia, Canada. Coupling device. 1,875,400; Sept. 6.
Wood, Frank J., Mount Lebanon, assignor to Mesta Machine Company, Pittsburgh, Pa. Rotary pickling machine. 1,876,440; Sept. 6.
Wood, George B., assignor to Rockland & Rockport Lime Corporation, Rockland, Me. Premixed product for plaster finishing coats. 1,876,122; Sept. 6.
Woodruff, John C., J. Martin, and I. J. Krchma, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Production of esters. 1,875,540; Sept. 6.
Woodruff, John C., and P. W. Wilson, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Propionic acid fermentation. 1,875,401; Sept. 6.
Woods, James A., Salt Lake City, Utah. Waxer and polisher. 1,875,970; Sept. 6.
Woodward, Alva W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Rim assembly. 1,875,402; Sept. 6.
Wright, Arthur, Upper Montclair, N. J. Sewage disposal apparatus. 1,876,123; Sept. 6.
Wright, Bertrand R., Syracuse, N. Y. Amusement and advertising device. 1,876,481; Sept. 6.
Wright-De Coster, Inc. (See Du Puy, Richard R., assignor.)
Wright, George M., Burford, England, assignor to Radio Corporation of America. Wireless telegraphy and telephony. 1,876,124; Sept. 6.
Wright-La Montagne Company. (See Wright, Royal J., assignor.)
Wright, Royal J., assignor to Wright-La-Montagne Company, Springfield, Mass. Christmas decorations. 1,875,971; Sept. 6.
Wuest, Adam, Inc. (See Wuest, Elmer T., assignor.)

Wuest, Elmer T., Cincinnati, Ohio, assignor to Adam Wuest, Inc. Machine for the manufacture of batts. 1,876,194; Sept. 6.
Wyckoff, Ralph, San Jose, Calif. Window construction. 1,876,125; Sept. 6.
Yagle, Theodore F., Philadelphia, Pa. Projection screen. 1,876,269; Sept. 6.
Yarrow, Harold E., Scotstoun, Scotland. Water tube boiler of the Yarrow type. 1,875,792; Sept. 6.
Yost, Edwin C., Winchester, Va. Atomizer. 1,876,441; Sept. 6.
Youmans, Thomas G., Wilmington, Del. Shoe grip. 1,876,195; Sept. 6.
Young Brothers Company. (See Fox, Vernie A., assignor.)
Young, Clarence H., Boston, Mass. Support. 1,875,403; Sept. 6.
Young, Forrest J., Torrance, and S. W. Long, Redondo, Calif., assignors to The National Supply Company of Delaware, New York, N. Y. Control head. 1,875,793; Sept. 6.
Young, Leo C. (See Taylor, Albert H., and Young.)
Young, Leo C., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Receiving system. 1,876,159; Sept. 6.
Youngken, Ben N., Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Weldless link and forming same. 1,875,905; Sept. 6.
Zahodiakin, Victor F., Cincinnati, Ohio. Internal combustion engine valve. 1,876,160; Sept. 6.
Zaiden, David, Brooklyn, assignor of one-fourth to I. Kaufman, one-fourth to Samuel Kaufman, Forest Hills, and one-fourth to Jacob Kaufman, Brooklyn, N. Y. Detachably mounted eye structure for dolls. 1,876,381; Sept. 6.
Zarobsky, Charles A., assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,875,906; Sept. 6.
Zarobsky, Charles A., assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,875,907; Sept. 6.
Zarobsky, Charles A., assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Filler neck structure. 1,875,908; Sept. 6.
Zazzara, Donata, Naples, Italy. Apparatus for automatic expulsion of worked articles from stamping power presses. 1,876,161; Sept. 6.
Zeindlhofer, Anton, Vienna, Austria, assignor to Groove Lock Co., Inc., New York, N. Y. Folding receptacle. 1,875,909; Sept. 6.
Zell, David H., Brooklyn, N. Y. Vanity case. 1,875,541; Sept. 6.
Zerbe, Lewis E., Moneta, and D. S. Faulkner, Los Angeles, Calif., assignors to The National Supply Company, Toledo, Ohio. Rotary drilling machine. 1,876,126; Sept. 6.
Zettergren, Birger, assignor to Helge Gustaf Torulf, Stockholm, Sweden. Machine for kneading, crushing, and similar operations. 1,875,794; Sept. 6.
Zimmerman, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Dual control for universal work table. 1,875,910; Sept. 6.
Zorn, Hermann, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Conversion of hydrocarbons of higher boiling point into those of lower boiling point. 1,876,270; Sept. 6.
Zundt, John W., Wollaston, Mass., assignor to General Register Corporation, Brooklyn, N. Y. Punch mechanism. 1,876,382; Sept. 6.
Zurcher, Paul, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla. Activated carbon and process of forming. 1,875,795; Sept. 6.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 6TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Accelerator, Rubber vulcanization. W. Scott. 1,875,943; Sept. 6.
Acid fermentation, Propionic. J. C. Woodruff and P. W. Wilson. 1,875,401; Sept. 6.
Acid phosphate and producing the same. R. H. McKee. 1,875,879; Sept. 6.
Acids by fermentation of cellulosic materials, Producing. L. M. Christensen and W. N. McCutchan. 1,875,368; Sept. 6.
Acoustic shielding. J. Weinberger. 1,876,117; Sept. 6.
Adding machine. A. Steinmann. 1,875,519; Sept. 6.
Adding machines, Zero resetting mechanism for. A. Steinmann. 1,875,518; Sept. 6.
Aerial transportation apparatus. S. O. Spurrier. 1,876,153; Sept. 6.
Aerofoil section. W. E. Phelan. 1,875,651; Sept. 6.
Air bags or the like, Method and apparatus for removing water from. H. R. Minor. 1,875,479; Sept. 6.
Air cleaner. F. A. Donaldson. 1,875,427; Sept. 6.
Air cleaner. W. W. Lowther. 1,875,471; Sept. 6.
Air cleaner. G. M. Walton. 1,876,368; Sept. 6.
Aircraft. G. Dean. 1,875,570; Sept. 6.
Aircraft. H. Tebbs. 1,876,096; Sept. 6.
Aircraft and automatic controls therefor. H. Klingaman. 1,875,465; Sept. 6.
Air heat generator. J. C. Montero. 1,875,752; Sept. 6.
Air intake device. S. S. Hargraves, S. De Orlow, and J. W. Wilford. 1,875,332; Sept. 6.
Air separator. G. H. Fraser. 1,876,516; Sept. 6.
Airplane. R. F. Hall. 1,875,593; Sept. 6.
Airplane construction. F. G Schweisthal. 1,876,472; Sept. 6.
Airplane, Gyroscopic. H. M. Salisbury and A. E. Miller. 1,875,891; Sept. 6.
Air preheating construction for furnaces. H. A. Atwater. 1,875,693; Sept. 6.
Air purifier. J. Sola. 1,875,671; Sept. 6.
Alcohol fermentation process, Continuous butyl. M. C. Wheeler and C. D. Goodale. 1,875,536; Sept. 6.
Alloy. J. Novak and R. Kesselring. 1,876,467; Sept. 6.
Alloy, Wear resisting ferrous. A. W. Gregg and R. H. Frank. 1,876,411; Sept. 6.
Alloy with copper as a primary metal. G. Pemetzrieder. 1,876,262; Sept. 6.
Aluminum chloride and nitrogen compounds, Producing anhydrous. C. G. Miner. 1,875,348; Sept. 6.
Aluminum oxide or products containing aluminum oxide out of material containing aluminum sulphide, Production of. T. R. Haglund. 1,876,453; Sept. 6.
Ammonium phosphate, Producing. M. Larsson. 1,876,011; Sept. 6.
Amusement and advertising device. B. R. Wright. 1,876,481; Sept. 6.
Animal gut defatting machine. C. F. Miller, jr. 1,876,258; Sept. 6.
Annular articles, Apparatus for vulcanizing. C. E. Maynard. 1,876,333; Sept. 6.
Apparatus for assembling wire wheels. J. Sneed. 1,876,356; Sept. 6.
Apron, Bib. A. A. Wallmuth. 1,876,529; Sept. 6.
Articles, Apparatus for manufacturing tubular. W. C. State. 1,876,087; Sept. 6.
Articles from solutions of film-forming cellulosic materials, Manufacturing hollow molded. R. O. Herzog and L. Berenyi. 1,876,229; Sept. 6.
Articles from stamping power presses, Apparatus for automatic expulsion of worked. D. Zazzara. 1,876,161; Sept. 6.
Articles made of magnesium or high percentage magnesium alloys, Treatment of. A. Beck and H. Dibelka. 1,876,131; Sept. 6.
Asbestos-cement products and the like, Machine for the manufacture of. M. Catala and A. Huart. 1,876,399; Sept. 6.
Asbestos, Treating. W. A. Rukeyser. 1,875,890; Sept. 6.
Atomizer. F. Nazare. 1,875,821; Sept. 6.
Atomizer. E. C. Yost. 1 876,441; Sept. 6.
Automatic end point recorder. J. F. M. Taylor. 1,876,364; Sept. 6.
Automatically fed furnace. J. H. Taylor. 1,876,095; Sept. 6.
Automobile construction. C. W. Van Ranst. 1,876,110; Sept. 6.
Automobile, Front driven. W. F. Krenzke. 1,876,249; Sept. 6.
Axle, Tubular. W. J. Assel. 1,875,797; Sept. 6.
Axle, two speed drive. J. Bethune. 1,876,388; Sept. 6.
Bag: *See*—
Garment bag.
Bags or the like, Mechanism for securing. H. W. Morris. 1,875,753; Sept. 6.

Baggage and the like, Attachment for. V. Puc. 1,875,493; Sept. 6.
Bait, Artificial. E. H. Peckinpaugh. 1,876,342; Sept. 6.
Bait, Cripple swim. D. V. Cummins. 1,876,275; Sept. 6.
Balancing head. E. L. Thearle and A. B. Hubbard. 1,876,527; Sept. 6.
Balancing machine. H. M. Stephenson. 1,876,523; Sept. 6.
Balancing machine, Dynamic. E. L. Thearle. 1,876,524; Sept. 6.
Balancing machine, Dynamic. E. L. Thearle and A. B. Hubbard. 1,876,526; Sept. 6.
Band or the like tensioning and fastening devices, Hoop-iron. E. Hoffmann. 1,876,499; Sept. 6.
Bandage, Elastic woven. E. Klein. 1,875,740; Sept. 6.
Bank, Savings. E. A. Anderson. 1,875,691; Sept. 6.
Bar: *See*—
Grizzly bar.
Basket. M. Balsamo. 1,875,694; Sept. 6.
Bearing, Combined thrust and steady. H. A. S. Howarth. 1,876,234; Sept. 6.
Bearing for folding machine rollers, Self aligning. R. J. Waterworth. 1,876,360; Sept. 6.
Bearing lock. G. L. Ferguson. 1,875,719; Sept. 6.
Bed and a spring bottom. M. Thum. 1,876,102; Sept. 6.
Bed attachment, Sanitary. H. F. Sweet. 1,875,522; Sept. 6.
Bed, Door. H. W. Lauterstein. 1,876,327; Sept. 6.
Bed, Wall. N. B. Douglass. 1,876,045; Sept. 6.
Bedstead. G. A. Cote. 1,875,421; Sept. 6.
Bedstead, Folding. W. Heerdt. 1,875,456; Sept. 6.
Belt. M. Silverman and H. Pomerantz. Des. 87,731; Sept. 6.
Belt, Machine gun cartridge. G. F. French. 1,876,216; Sept. 6.
Belt, Swimming. A. A. Marengo. 1,875,630; Sept. 6.
Beveling machine. G. R. Teschel, G. Salinger, and L. H. Isaacson 1,876,178; Sept. 6.
Bill box. J. H. Bowman. 1,876,043; Sept. 6.
Binder, Book. N. H. Stuart. 1,876,360; Sept. 6.
Binder lock. L. R. E. Hutchings. 1,876,410; Sept. 6.
Binder, Loose leaf. L. E. Hutchings. 1,876,232; Sept. 6.
Binder, Temporary. G. P. Wigginton. 1,875,374; Sept. 6.
Bit apparatus, Knock-over. C. C. Hilscher. 1,876,417; Sept. 6.
Blade sharpening machine. W. E. Nickerson. 1,876,314; Sept. 6.
Blade structure for turbines. C. Lorenzen. 1,876,067; Sept. 6.
Blinker, Electric. L. Ludwig. 1,875,625; Sept. 6.
Block: *See*—
Insulating block.
Board: *See*—
Wall board.
Boat construction, Dredge. W. L. Holbrooks. 1,875,603; Sept. 6.
Bobbin drag arrangement for spinning and like textile frames. A. L. Benson. 1,876,445; Sept. 6.
Boiler: *See*—
Domestic boiler. Steam boiler.
Boiler. G. Surprenant. 1,875,828; Sept. 6.
Boiler cleaner. P. R. Alphonso. 1,875,407; Sept. 6.
Boiler construction. W. E. Stark. 1,875,948; Sept. 6.
Boiler of the Yarrow type, Water tube. H. E. Yarrow. 1,875,792; Sept. 6.
Bolt holding devices, Making. E. C. Baynes. 1,876,386; Sept. 6.
Book-end. C. A. Hedegard. Des. 87,718; Sept. 6.
Book ends. W. Riddel. 1,876,346; Sept. 6.
Bookstand. R. Waples. 1,875,785; Sept. 6.
Booster for exhaust steam. B. S. Nelson. 1,875,754; Sept. 6.
Bottle. W. H. Gesell. Des. 87,716; Sept. 6.
Bottle. C. W. Miller. Des. 87,726; Sept. 6.
Box: *See*—
Bill box. Metallic box.
Exhaust box. Powder box.
Box assembling device, Honey. H. Brattrud. 1,876,395; Sept. 6.
Bracket. J. M. Auñero. Des. 87,702; Sept. 6.
Braiding machine. F. W. Merrick. 1,876,147; Sept. 6.
Brake: *See*—
Railway brake. Vehicle brake.
Vacuum brake.
Brake. J. R. Cautley. 1,875,328; Sept. 6.
Brake. W. H. Delahaye. 1,875,571; Sept. 6.
Brake. W. H. Delahaye. 1,876,136; Sept. 6.
Brake. F. M. Forbes. 1,875,717; Sept. 6.
Brake. J. F. Frese. 1,875,436; Sept. 6.
Brake. D. L. Gallup. 1,875,374; Sept. 6.
Brake. R. A. Goepfrich. 1,875,443; Sept. 6.

Brake. R. F. Kohr. 1,875,468; Sept. 6.
Brake. L. E. La Brie. 1,875,345; Sept. 6.
Brake. H. F. Parker. 1,875,391-2; Sept. 6.
Brake. H. Perrot and G. Calvignac. 1,875,759; Sept 6.
Brake. R. T. St. James. 1,876,089; Sept 6.
Brake. R. S. Sanford. 1,876,077; Sept. 6.
Brake. R. S. Sanford. 1,876,349; Sept 6.
Brake. E. W. Seaholm, G. E. Parker, and A. H. Stahlhuth. 1,875,508; Sept 6.
Brake. L. K. Snell. 1,875,945; Sept 6.
Brake. C. H. Taylor. 1,876,093; Sept 6.
Brake. E. V. Taylor. 1,875,523; Sept 6.
Brake. E. V. Taylor. 1,876,177; Sept 6.
Brake. W. S. Watts. 1,876,114; Sept 6.
Brake assembly, Rotary drawworks back. J. D. Spalding. 1,875,709; Sept 6.
Brake control. J. B. N. Cardoza. 1,876,397; Sept 6.
Brake drum. C. W. Sinclair. 1,876,354; Sept 6.
Brake for motor vehicles. E. Frankland. 1,875,434; Sept. 6.
Brake locking device for automobiles and trucks, Safety hand. T. R. White. 1,875,686; Sept 6.
Brake mechanism. A. B. Gardella. 1,876,286; Sept 6.
Brake mechanism. R. J. Norton. 1,875,645; Sept. 6.
Brake operating mechanisms for motor vehicles, Auxiliary. F. C. Guerrilch. 1,875,865; Sept. 6.
Brake release. W. P. Hawkins. 1,876,498; Sept 6.
Brake shoe. D. L. Gallup. 1,876,140; Sept 6.
Brake system. M. Charles. 1,875,989; Sept 6.
Brake testing machine. H. W. Langbein. 1,875,742; Sept. 6.
Braking apparatus, Railway. J. W. Livingston. 1,876,013; Sept 6.
Brick-handling means. L. N. Dyhrberg. 1,876,211; Sept. 6.
Brooder, Poultry. H. M. Crawford and W. Pollock. 1,876,325; Sept. 6.
Brush, Lather. W. A. Dillon. 1,875,426; Sept 6.
Brush making machinery. C. and W. Barnett. 1,875,551; Sept. 6.
Bucket, Fruit picker's. R. C. Freimann and E. Evans. 1,875,585; Sept. 6.
Bucket, Hoisting. J. L. Good and W. E. Click. 1,876,288; Sept 6.
Buckle. A. M. Kerngood. 1,875,319; Sept 6.
Buckle, Belt. J. O. Amberg. 1,876,196; Sept 6.
Buckle or similar article, Dress. A. F. Donovan. Des. 87,714; Sept. 6.
Building construction. A. F. Bemis. 1,876,198; Sept 6.
Bulbs, Incandescent electric lamp. H. H. Blau. 1,875,981; Sept. 6.
Burner: *See*—
Gas burner. Oil burner.
Burner control. R. J. Eiseman. 1,876,281; Sept 6.
Burner control. E. G. Magner. 1,875,388; Sept 6.
Burner tip. M. A. Richford. 1,875,394; Sept 6.
Button. J. A. and W. A. Devendorf. 1,876,403; Sept. 6.
Button. A. F. Donovan. Des. 87,713; Sept. 6.
Button loop. J. Salisbury. 1,875,933; Sept. 6.
Button, Tufting. R. C. Manson. 1,875,628; Sept. 6.
Cabinet, Bullet-resisting. F. B. Peters. 1,875,488; Sept. 6.
Cabinet, Insulated file. C. F. Wolters. 1,876,192; Sept. 6.
Cabinet, Wall. I. T. Frazier. 1,876,407; Sept. 6.
Cable equalizing mechanism. L. H. Kiesling. 1,876,302; Sept. 6.
Cable hanger. J. Blackburn. 1,875,697; Sept. 6.
Cake dropping machine, Cup. M. Helland. 1,875,601; Sept. 6.
Calculating machine. C. M. F. Friden. 1,875,437; Sept. 6.
Calculating machine. R. Hofgaard. 1,876,294; Sept. 6.
Calculating machine. R. Hofgaard. 1,876,296; Sept. 6.
Camera. W. Josselyn. 1,876,143; Sept. 6.
Camphor, Recovery of. G. J. Esselen, jr. 1,875,731; Sept. 6.
Can body maker. J. F. Peters. 1,875,353; Sept. 6.
Can delivery mechanism. F. F. Wolf. 1,876,191; Sept. 6.
Can ends containing a sealing compound, Apparatus for drying. F. Krueger. 1,875,469; Sept. 6.
Candy sugaring mechanism. M. Harding. 1,876,224; Sept. 6.
Cap, Bottle sealing. E. H. Fabrice. 1,875,431; Sept. 6.
Cap, Container. E. J. Brennan. Des. 87,709; Sept. 6.
Car, Articulated. J. B. D. Thompson. 1,875,958; Sept. 6.
Car, Articulated. V. Willoughby. 1,876,185; Sept. 6.
Car, Articulated. V. Willoughby. 1,876,187; Sept. 6.
Car coupling, Mine. W. V. Johnson and R. C. Kepner. 1,876,239; Sept. 6.
Car, Delivery. A. Stern, J. Stern, and J. Stern. 1,876,155; Sept. 6.
Car, Hopper. H. S. Hart. 1,876,003; Sept. 6.
Car, Mine. W. V. Johnson and R. C. Kepner. 1,876,240; Sept. 6.
Car, Mine. H. W. Sanford and W. O. McKamey. 1,875,505; Sept. 6.
Car, Multiple unit tank. V. Willoughby. 1,876,190; Sept. 6.
Car, Multiunit tank. V. Willoughby. 1,876,189; Sept. 6.
Car, Railway. E. R. Swanson. 1,875,831-2; Sept. 6.
Car, Railway tank. F. A. Isaacson. 1,875,609; Sept. 6.
Car retarder, Railway. J. W. Livingston. 1,876,014; Sept. 6.
Car seat. J. M. Knight. 1,876,247; Sept. 6.
Car underframe, Railway. C. F. Frede and E. G. Hallquist. 1,875,584; Sept. 6.
Car underframe, Railway tank. E. G. Hallquist. 1,875,594; Sept. 6.
Car underframe structure. K. S. Howard and E. C. Jackson. 1,875,381; Sept. 6.
Cars and landing gates, Opening and closing elevator. H. C. Werner. 1,876,438; Sept. 6.
Carbon and process of forming, Activated. P. Zurcher. 1,875,795; Sept. 6.
Carbon dioxide, Apparatus and process for preserving liquid. W. J. Edmonds. 1,876,047; Sept. 6.
Carbon dioxide, Apparatus for producing cakes of solid. B. H. Weston. 1,876,266; Sept. 6.
Carburetor. J. Dusevoir. 1,875,713; Sept. 6.
Carburetor for internal combustion engines. C. Brown. 1,875,557; Sept. 6.
Card display device, Advertising. J. D. MacLachlan. 1,875,321; Sept. 6.
Card rack, Double visibility. A. R. Hutchens. 1,875,382; Sept. 6.
Card, Reference. J. J. Dickman and G. I. Lehman. 1,875,995; Sept. 6.
Carriage control of ribbon shift mechanisms. F. W. Bernau. 1,875,913; Sept. 6.
Carrier suppression modulator. G. L. Usselman. 1,876,107; Sept. 6.
Carton. B. F. Brown and G. F. Ford. 1,876,200; Sept. 6.
Carton. F. D. Wilson. 1,876,120; Sept. 6.
Carton, Ribbed. F. Kronenberger. 1,876,063; Sept. 6.
Cartridge belt filling machine. G. F. French. 1,876,217; Sept. 6.
Carving instrument. C. S. Van Horn. 1,875,680; Sept. 6.
Case: *See*—
Vanity case.
Casing head and gas saver, Universal. J. H. McEvoy. 1,875,632; Sept. 6.
Casing head, Universal. J. H. McEvoy, G. A. Humason, and E. A. Johnson. 1,875,749; Sept. 6.
Casks, barrels, or hogsheads, etc., System of stowing wine. O. Alfaro. 1,875,406; Sept. 6.
Casting metals and metaloids, Apparatus for. G. Pemetzrieder. 1,876,261; Sept. 6.
Catalyst for production of hydrocyanic acid. T. Ewan. 1,876,213; Sept. 6.
Catalyst for synthetic menthanol production. C. L. Gabriel and B. K. Brown. 1,875,722; Sept. 6.
Catch, Hood. R. G. Moore. 1,875,880; Sept. 6.
Cellulosic material, Fermentation of. H. Langwell. 1,875,689; Sept. 6.
Cellulosic materials, Fermentation of. L. M. Christensen. 1,875,688; Sept. 6.
Chair: *See*—
Ratchet chair.
Chair. T. J. Miles. 1,875,478; Sept. 6.
Chair. J. Weller. 1,876,479; Sept. 6.
Chemical reactions in which reaction gases are circulated. Carrying out. J. Hughes. 1,875,926; Sept. 6.
Choppers, Attachment for food. H. C. Sander. 1,876,471; Sept. 6.
Christmas decoration. R. J. Wright. 1,875,971; Sept. 6.
Christmas tree stand. J. J. Danner. 1,876,276; Sept. 6.
Chuck. C. A. Johnson. 1,875,787; Sept. 6.
Chuck. W. L. Trumphour and M. E. Lange. 1,875,959; Sept. 6.
Cigar, Enveloping. R. J. Beutel. 1,875,979; Sept. 6.
Cigar locator and trimmer. H. E. Carlson. 1,875,988; Sept. 6.
Cigar machine feeding channel. S. Clausen. 1,875,991; Sept. 6.
Cigar wrapping machine. W. H. Schussler. 1,876,027; Sept. 6.
Cigarette machine tobacco feeds, Dust-distributor for. J. W. Leary. 1,876,012; Sept. 6.
Cigarette rod forming mechanism. E. D. Smith. 1,876,029; Sept. 6.
Circuit arrangements for smoothing a direct current ripple. H. Van Suchtelen. 1,875,961; Sept. 6.
Circuit closer, Thermostatic. G. H. Brady. 1,875,690; Sept. 6.
Circuit, Control. E. D. Cook. 1,876,449; Sept. 6.
Circuit controller, Pressure affected. P. F. Shivers. 1,875,669; Sept. 6.
Circuit controlling device. W. E. Cox. 1,875,707; Sept. 6.
Circuit for purifying high frequency radiation. A. H. Taylor. 1,875,952; Sept. 6.
Circuit regulating means, Electrical. T. C. Lennox. 1,876,427; Sept. 6.
Citrates and citric acid, Manufacture of. O. Ungnade. 1,876,366; Sept. 6.
Clamp: *See*—
Hair clamp. Spindle clamp.
Cleaner: *See*—
Air cleaner. Tank cleaner.
Boiler cleaner.
Cleaning apparatus. C. F. Fitts. 1,876,048; Sept. 6.
Cleaning device, Well casing. H. B. Braly. 1,875,413; Sept. 6.
Clock, Electric. J. R. Putnam. 1,876,020; Sept. 6.
Clock, Synchronizing. J. W. Bryce. 1,875,800; Sept. 6.
Clock system, Synchronizing. J. W. Bryce. 1,875,801; Sept. 6.
Closure. C. A. Zarobsky. 1,875,906-7; Sept. 6.
Closure construction for metallic containers. C. H. Draper. 1,875,428; Sept. 6.

Closure, Container. H. M. Bowman and R. W. Fentress. 1,875,325; Sept. 6.
Closure, Self tightening container. C. H. Egan and B. Dewey. 1,876,450; Sept. 6.
Clutch. R. Beringer. 1,875,696; Sept. 6.
Clutch for motor drive on cameras, Automatic release. A. G. Wise and J. Arnold. 1,876,267; Sept. 6.
Coal burning device, Pulverized. A. S. Gerquest. 1,875,808; Sept. 6.
Coffee, Device for making drip. S. L. Starkey. 1,876,474; Sept. 6.
Coil unwinder, Strip steel. K. F. Dailey. 1,875,566; Sept. 6.
Coin control. P. C. A. Vander Meer. 1,875,900; Sept. 6.
Collapsible table. E. L. Cederquist. 1,876,400; Sept. 6.
Color screen control. J. H. Kliegl. 1,875,814; Sept. 6.
Comb: *See*—
Fountain comb.
Combination lock. F. C. Bishop. 1,876,132; Sept. 6.
Commutator shorting device for motors. T. Ilo. 1,876,235; Sept. 6.
Composition for stimulating plant growth. R. H. McKee. 1,875,473; Sept. 6.
Composition of matter and preparing the same. W. H. Hill. 1,875,458; Sept. 6.
Composition of matter and preparing the same. H. J. Rose and W. H. Hill. 1,875,502; Sept. 6.
Compound eccentric mechanism. G. C. Cooper. 1,875,854; Sept. 6.
Concrete agitator. G. I. Lockwood. 1,875,622; Sept. 6.
Condenser system. A. H. Taylor. 1,875,360; Sept. 6.
Conductor, Electric. E. J. Schneider and M. B. Bradt. 1,876,350; Sept. 6.
Conduits, Manufacture of rubber. E. C. Kastner. 1,876,241; Sept. 6.
Conduits or the like, Making. E. Babb. 1,876,444; Sept. 6.
Connection, Tube. B. L. Quarnstrom. 1,875,885; Sept. 6.
Container. A. Holmes. 1,875,379; Sept. 6.
Container. D. R. Richardson and H. M. Wollum. 1,875,497; Sept. 6.
Container. W. A. Sheaffer. 1,876,152; Sept. 6.
Container and lamp shade, Combined. J. W. and A. B. Hayes. 1,875,455; Sept. 6.
Container, Dispensing. W. E. Turner. 1,875,781; Sept. 6.
Container for transporting stacked articles. G. W. Butts. 1,875,702; Sept. 6.
Container Paper. A. H. Bedworth. 1,876,484; Sept. 6.
Content indicating mechanism for tanks and the like. C. A. De Giers. 1,875,803; Sept. 6.
Control for aeroplanes, Flight. R. C. Struble. 1,875,675; Sept. 6.
Control for metallurgical furnaces. A. L. Stevens. 1,876,509; Sept. 6.
Control head. F. J. Young and S. W. Long. 1,875,793; Sept. 6.
Control mechanism. C. B. Campbell. 1,875,326; Sept. 6.
Control system for boilers and the like. W. E. Stark. 1,875,947; Sept. 6.
Controlling device, Speed responsive. H. L. Tanner. 1,876,476; Sept. 6.
Controlling movement of vehicles on railroads, Apparatus for. F. J. Sprague. 1,876,032; Sept. 6.
Converting apparatus. T. C. Lennox. 1,876,428; Sept. 6.
Conveyer and deliverer, Bottle. A. L. Washburne. 1,875,532; Sept. 6.
Conveyer, Jigger. E. Ridgill. 1,876,316; Sept. 6.
Conveyer, Jigger. E. Ridgill. 1,876,317; Sept. 6.
Conveyer scale or the like, Belt. Y. Okada. 1,875,485; Sept. 6.
Conveyer take-up and telescopic track, Combined trolley. P. V. Whitney. 1,875,535; Sept. 6.
Conveyers, Intersection controlling apparatus for. F. Stebler. 1,876,154; Sept. 6.
Conveying system. Z. S. Logan. 1,876,066; Sept. 6.
Cooker and drier, Combined garbage. W. A. Kramer. 1,875,320; Sept. 6.
Cooling device for injection nozzles of internal combustion engines. T. V. Hemmingsen. 1,875,457; Sept. 6.
Cooling system. J. B. Fisher. 1,875,580; Sept. 6.
Cooling system for marine engines. J. W. Arndt. 1,875,912; Sept. 6.
Copper, Welding of. W. Andrews. 1,875,911; Sept. 6.
Cord equipment for telescopically extensible curtain rods, Draw. C. W. Kirsch. 1,876,060; Sept. 6.
Cord fabric. L. S. Hall. 1,875,445; Sept. 6.
Cord fabric. S. A. Steere. 1,875,517; Sept. 6.
Core-catching device. R. Winterburn. 1,876,379; Sept. 6.
Corrosion, Prevention of. E. R. Boller. 1,875,982; Sept. 6.
Couch day bed. J. Basile. 1,875,976; Sept. 6.
Coupling: *See*—
Car coupling.
Coupling device. F. L. Miller. 1,875,477; Sept. 6.
Coupling device. C. Wood. 1,875,400; Sept. 6.
Coupling for mine cars, Automatic. L. Olesvary. 1,876,341; Sept. 6.
Cover for children, Sleeping. A. L. Thexton and M. R. Thexton. 1,875,525; Sept. 6.
Cover for spare tires for automobiles. G. A. Lyon. 1,875,316; Sept. 6.
Crane, Mail loading and unloading. G. Blum and G. Fisher. 1,876,199; Sept. 6.
Crate, Milk bottle. H. M. Sloat. 1,876,323; Sept. 6.
Cream, Vanishing. F. A. Vaupotic. 1,875,530; Sept. 6.
Crushing, screening and loading plant, Portable. H. Knipple. 1,876,460; Sept. 6.
Crystal, Piezo-electric. A. Meissner. 1,875,347; Sept. 6.
Current transformer. S. S. Green. 1,875,590; Sept. 6.
Curtain rod threader. L. D. Houser. 1,875,462; Sept. 6.
Cushion and making the same, Wire spring. R. G. Marquardt. 1,876,429; Sept. 6.
Cushioning securing attachment. F. H. Schubert. 1,875,766; Sept. 6.
Cut-off mechanism for glassware forming machines. R. Q. Allen. 1,875,973; Sept. 6.
Cutter: *See*—
Feed cutter. Plaster cast cutter.
Cutter guard. B. F. Gravely. 1,876,220; Sept. 6.
Cutting implement. A. Gee. 1,876,218; Sept. 6.
Cylinder for cotton gins or the like. C. B. P. Carver. 1,876,203; Sept. 6.
Cylinders, Apparatus for driving hollow. F. A. Schroeder and H. R. Smith. 1,875,825; Sept. 6.
Cylinders of rotary printing machines, Locking stereo plates or printing surfaces to the. M. L. Wilkinson and R. Bradshaw. 1,876,378; Sept. 6.
Damper apparatus. A. G. Fletcher. 1,875,581; Sept. 6.
Damper regulator. G. A. Kohout. 1,875,616; Sept. 6.
Damping roll for presses. C. O. and H. E. Reeps. 1,875,824; Sept. 6.
Decking for excavations. J. B. Goldsborough. 1,876,496; Sept. 6.
Decoy. G. L. Horton. 1,875,733; Sept. 6.
Dental flask. H. H. Hazeltine. 1,875,596; Sept. 6.
Dental flask. W. F. Rodin and A. Hural. 1,875,660; Sept. 6.
Dental vulcanizer. E. L. Langdon. 1,875,876; Sept. 6.
Device for holding and operating rotary tools. M. T. Vandervoort. 1,875,529; Sept. 6.
Device for teaching the principles of aeroplane controls. E. G. Holst. 1,876,418; Sept. 6.
Diaphragm for sound recording and reproducing devices. C. Laing. 1,876,306; Sept. 6.
Dipping device, Automatic. V. A. Fox. 1,876,050; Sept. 6.
Dispenser, Paste-like. H. M. Gusdorf. 1,876,452; Sept. 6.
Dispensing device. V. Cooley. 1,875,705; Sept. 6.
Dispensing device. J. Lindquist. 1,875,621; Sept. 6.
Display device. H. J. Taplin. 1,875,676; Sept. 6.
Display rack. P. A. Ruddy. 1,876,172; Sept. 6.
Display stand. E. H. Cooke and I. B. Cooke. 1,875,563; Sept. 6.
Display stand. M. E. Holy. 1,875,460; Sept. 6.
Distilling apparatus for use in reclaiming oils. A. H. Tennent. 1,876,035; Sept. 6.
Distributing system, Cotton. W. Shaw. 1,875,356; Sept. 6.
Doll. M. Sanders. 1,876,433; Sept. 6.
Doll, Cloth. C. O'N. Schuler. 1,875,355; Sept. 6.
Doll construction. A. M. Katz. 1,876,458; Sept. 6.
Dome for vehicle tanks, Expansion. A. A. Kramer. 1,876,304; Sept. 6.
Dome head arrangement for car tanks. V. Willoughby. 1,876,188; Sept. 6.
Domestic boiler. E. C. Stauffer. 1,876,475; Sept. 6.
Door arrangement, Overhead. E. J. Heinen. 1,875,509; Sept 6.
Door arresting mechanism, Double. A. O. Johnson. 1,875,873; Sept 6.
Door lock, Sliding. J. D. Smith. 1,875,768; Sept. 6.
Door operating mechanism. J. J. Mariotti. 1,875,631; Sept. 6.
Door operating mechanism, Hopper car. T. W. Elder, jr., and A. Kassler. 1,876,404; Sept. 6.
Door, Operator and control means therefor. D. J. Stewart. 1,875,771; Sept. 6.
Dot insertion. E. K. Sandeman and L. E. Currah. 1,875,935; Sept. 6.
Double ended clothespin. A. C. Hopkins. 1,875,461; Sept. 6.
Dough dividing and kneading machine. G. Rausch. 1,876,022; Sept. 6.
Dovetail. H. B. Haskins. 1,875,453; Sept. 6.
Draft pin. M. F. Quigley. 1,876,021; Sept. 6.
Drain pan. B. Jacobs. 1,876,420; Sept. 6.
Drapery suspension device. C. W. Kirsch. 1,876,061; Sept. 6.
Draw-bar apparatus for trailers. D. S. Weiss. 1,875,969; Sept. 6.
Drill. C. H. M. Bull. 1,876,041; Sept. 6.
Drilling machine, Rotary. L. E. Zerbe and D. S. Faulkner. 1,876,126; Sept 6.
Drive, Flyback ratchet. J. O. Davis. 1,876,135; Sept. 6.
Driving head for support posts. T. R. Willwerscheid. 1,875,687; Sept. 6.
Drum sanding machine. E. C. Loetscher. 1,876,328; Sept. 6.
Dry-dust arrester, Centrifugal. R. B. Harper. 1,876,002; Sept. 6.
Drying apparatus and process. W. I. Sallee. 1,876,025; Sept. 6.
Duphenyl, Producing. J. N. Carothers. 1,875,317; Sept. 6.
Dusting machine. P. W. Lehman. 1,876,251; Sept. 6.
Egg breaking and packing table. R. W. Regensburger. 1,875,496; Sept. 6.

Egg timing device. J. J. Noonan. 1,876,072; Sept. 6.
Electric calculating machine. R. Hofgaard. 1,876,293; Sept. 6.
Electric crystal control system, Piezo. A. H. Taylor. 1,875,953; Sept. 6.
Electric cutting machine for cutting out woven fabrics. C. Reichert, sr., and K. Reichert, jr. 1,876,075; Sept. 6.
Electric discharge device. C. Spaeth. 1,876,083; Sept. 6.
Electric gauge. C. M. Adams. 1,876,483; Sept. 6.
Electric heating device. R. Braunagel. 1,875,844; Sept. 6.
Electric iron. A. Rueliand. Re18,592; Sept. 6.
Electric oscillations, Device for regulating the frequency of. B. van der Pol. 1,876,109; Sept. 6.
Electrical hair waver. T. I. Moseley. 1,875,882; Sept. 6.
Electrical relay system. P. H. Dowling. 1,875,859; Sept. 6.
Electrical resistance unit. C. L. Weichelt. 1,876,116; Sept. 6.
Electrical switch. N. B. Chace. 1,876,133; Sept. 6.
Electrical system, High frequency. A. H. Taylor and L. C. Young. 1,875,951; Sept. 6.
Electrode, Protected hydrogen. B. W. Rowland. 1,875,503; Sept. 6.
Elevator. G. E. Carlstrand. 1,876,398; Sept. 6.
Ellipsograph. N. W. O'Bryne. 1,876,060; Sept. 6.
Enamel, Superposed. J. G. G. Frost. 1,875,721; Sept. 6.
Engine: *See*—
Internal combustion engine.
Engine. R. Lee. 1,876,506; Sept. 6.
Engine hood ventilator. A. H. Lent. 1,875,619; Sept. 6.
Engines, Apparatus for preventing the back firing in internal combustion. H. Feuillée. 1,876,406; Sept. 6.
Envelope and card, Combined. A. Dicicco. 1,875,804; Sept. 6.
Esterification process. C. W. Hancock and E. H. Carnarius. 1,875,447; Sept. 6.
Esters, Production of. J. C. Woodruff, J. Martin and I. J. Krchma. 1,875,540; Sept. 6.
Excavating machine. E. L. Ennis. 1,876,283; Sept. 6.
Exhaust box. F. W. Fetterman. 1,875,863; Sept. 6.
Exhausting and sealing machine. W. P. White and C. E. Ives. 1,875,789; Sept. 6.
Extension device. F. Armbrust. 1,876,443; Sept. 6.
Extracting and inserting device. A. J. Jacobsen and J. C. McClure. 1,876,500; Sept. 6.
Extractor: *See*—
Fruit juice extractor. Screw extractor.
Eye structure for dolls, Detachably mounted. D. Zaiden. 1,876,381; Sept. 6.
Fabric: *See*—
Cord fabric.
Fabrics, leather and other materials, Dyeing and figuring woven, knitted and plaited. W. Haendel. 1,876,052; Sept. 6.
Fan housing construction. C. T. Morse. 1,875,881; Sept. 6.
Fan, Making a. E. Mathis. 1,876,518; Sept. 6.
Fan, Register. J. L. Waterbury. 1,875,683; Sept. 6.
Fastener. H. P. Troendly. 1,876,477; Sept. 6.
Fastener, Rubber sealed. S. H. Norton. 1,876,338; Sept. 6.
Fastener, Shoe lace. A. M. Berger. 1,876,505; Sept. 6.
Fastener, Snap. R. F. Walters. Re18,589; Sept. 6.
Fastening device. J. G. Jackson. 1,876,237; Sept. 6.
Fastening device, Separable. M. H. Stryke. 1,875,950; Sept. 6.
Feed cutter. L. C. Soileau, jr. 1,875,514; Sept. 6.
Feed for resaw machines. E. McKuen. 1,875,633; Sept. 6.
Feeder for pneumatic conveyers, Rotary. W. Thaler. 1,875,677; Sept. 6.
Feeding device. H. Weber. 1,876,370; Sept. 6.
Fenchone, Producing. I. W. Humphrey. 1,876,454; Sept. 6.
Fender, Wheel. G. J. Rice. 1,876,470; Sept. 6.
Fertilizers, Manufacturing concentrated. E. Johnson. 1,876,501; Sept. 6.
Fibrous material and making same. M. Hartmann. 1,875,452; Sept. 6.
Filler neck structure. C. A. Zarobsky. 1,875,908; Sept. 6.
Filling and charging device. A. M. Wickwire, jr. 1,875,902; Sept. 6.
Films, Device for copying. H. Arni. 1,876,442; Sept. 6.
Filter. J. C. Misner. 1,876,465; Sept. 6.
Fire extinguisher and sprayer, Portable. C. T. Clifford. 1,875,992; Sept. 6.
Fire pot, Underfeed. J. Madlehner. 1,876,310; Sept. 6.
Fires, Process and apparatus for combating oil and chemical. R. G. Guthrie. 1,876,222; Sept. 6.
Firing equipment. F. W. Miller. 1,875,750; Sept. 6.
Fish screen. R. D. Willis. 1,875,790; Sept. 6.
Fitting, Union. A. A. Eisenman. 1,875,330; Sept. 6.
Fittings for head lamps, Anti-dazzle. S. E. Talbot. 1,876,362; Sept. 6.
Fixture for bath tubs, Waste and overflow. A. Rosewood. 1,875,764; Sept. 6.
Flag, Fender mounting. W. L. Shirley. 1,876,351; Sept. 6.
Flash-light, Electric. D. P. A. A. Kayser. 1,876,058; Sept. 6.
Flash light, Utility. W. J. Baker. 1,876,385; Sept. 6.
Flask: *See*—
Dental flask.
Float switch. P. F. Shivers. 1,875,510; Sept. 6.
Floor covering and making the same. R. G. Jackson. 1,875,735; Sept. 6.
Floor unit. H. H. Bunker. 1,876,042; Sept. 6.
Flours, Production of abrasive. S. F. Walton. 1,875,531; Sept. 6.
Flue construction. W. E. Stark. 1,875,946; Sept. 6.
Flue or vent, Gas. J. A. Stadtfeld. 1,876,357; Sept. 6.
Fluid dispensing device. W. H. D. Brouse. 1,875,987; Sept. 6.
Foam distributing apparatus. O. D. King. 1,876,425; Sept. 6.
Folding mechanism for packaging machines. W. B. Bronander. 1,875,986; Sept. 6.
Folding table. W. M. Boenning. 1,876,447; Sept. 6.
Folding table. A. P. Costa. 1,876,274; Sept. 6.
Food compound. L. V. Strasburger. 1,876,090; Sept. 6.
Foot rest for furniture legs, Sanitary. L. De Cicco. 1,875,371; Sept. 6.
Fork: *See*—
Hay fork.
Form apparatus, Concrete. P. Beghetti. 1,875,366; Sept. 6.
Form, Concrete. O. K. Jones. 1,875,463; Sept. 6.
Form for drying stretching and pressing, Stocking and sock. J. Pucunas. 1,876,344; Sept. 6.
Fountain apparatus, Drinking. C. Roberge. 1,875,658; Sept. 6.
Fountain comb. R. W. Starr. 1,876,033; Sept. 6.
Fountain pen desk stand. S. L. Daugherty. 1,875,425; Sept. 6.
Frame: *See*—
Refrigerator frame. Table frame.
Frequency regulating system. H. Chireix. 1,875,329; Sept. 6.
Friction detent for control rods. R. K. Winning. 1,875,791; Sept. 6.
Fruit juice extractor, Citrus. G. H. Thate. 1,875,678; Sept. 6.
Fruit peeling machine. H. Goranson and D. Goranson. 1,876,000; Sept. 6.
Fruit pitting machine. G. Frova. 1,876,492; Sept. 6.
Fruit to remove spray residues, Treating. J. N. Sharma. 1,875,944; Sept. 6.
Fuel, Method and apparatus for preparing and feeding pulverized. A. H. Sancton. 1,875,934; Sept. 6.
Fuels and products derived therefrom or other carbonaceous materials into valuable products, Conversion of solid. C. Krauch and M. Pier. 1,876,009; Sept. 6.
Fuels for use, Preparing. E. A. Richardson. 1,876,168; Sept. 6.
Furnace: *See*—
Automatically fed furnace. Glass furnace.
Gas cupola furnace.
Furnace. C. D. Holmes. 1,875,459; Sept. 6.
Furnace heat circulator. C. E. Pearson and E. I. Davis. 1,875,393; Sept. 6.
Furnace wall construction. F. I. Sheahan. 1,875,667; Sept. 6.
Furniture construction. F. J. Blakeslee. 1,875,698; Sept. 6.
Furniture construction. R. K. Merrill. 1,875,635; Sept. 6.
Fuse composition. J. Parsons and J. H. Stover. 1,875,932; Sept. 6.
Fuse, Electric. H. T. Bussmann. 1,875,415; Sept. 6.
Fuse indicator. F. C. LaMar. 1,876,426; Sept. 6.
Game apparatus. S. M. Quinn. 1,876,469; Sept. 6.
Game device. A. A. Almada. 1,876,128; Sept. 6.
Games, Playing unit for marble. H. Steiger. Des. 87,733; Sept. 6.
Garment. M. Ryff. 1,876,348; Sept. 6.
Garment and supporter, Combined. W. L. Ellerbeck and G. A. Steiner. 1,876,282; Sept. 6.
Garment bag. S. J. Johnson. 1,876,238; Sept. 6.
Garment bag. R. C. Strout. 1,875,773; Sept. 6.
Garment, Combination. H. M. McDonald. 1,876,311; Sept. 6.
Garment hanger. F. Bernat. Des. 87,707; Sept. 6.
Gas burner. W. E. Stark. 1,876,086; Sept. 6.
Gas cleaning and heat transfer apparatus. G. H. Horne and M. A. Lissman. 1,875,341; Sept. 6.
Gas cupola furnace. A. C. Osborn, jr. 1,876,200; Sept. 6.
Gas for coking retort ovens, Providing fuel. J. Becker. 1,876,037; Sept. 6.
Gases, Treatment of coal distillation. K. Gordon and J. Hughes. 1,875,920; Sept. 6.
Gasket, Faucet. H. Gabriels, jr. 1,875,438; Sept. 6.
Gate: *See*—
Screw valve gate.
Gate. W. B. Peterson. 1,875,489; Sept. 6.
Gate section, Conveyer. H. R. Gotthardt and W. E. Cain. 1,875,375; Sept. 6.
Gauge: *See*—
Electric gauge. Thread gauge.
Screw thread gauge. Tire pressure gauge.
Water gauge.
Gear cutting machine, Completely automatic. H. J. White. 1,876,372; Sept. 6.
Gear, Draft. F. S. Cheatham. 1,875,704; Sept. 6.
Gear, Draft. H. C. Priebe. 1,876,019; Sept. 6.
Gear for aircraft, Landing and beaching. L. W. Winter. 1,876,158; Sept. 6.
Gear, Hydraulic draft. J. A. McGrew. 1,876,145; Sept. 6.
Gears, Apparatus for correcting. A. B. Redner 1,876,167; Sept. 6.

Generator: *See*—
Air heat generator. Steam generator.
Glass: *See*—
Laminated glass.
Glass bulb, Frosting the inner surface of. T. Naruse. 1,875,819; Sept. 6.
Glass furnace. L. D. Soubier and J. E. McLaughlin. 1,876,030; Sept. 6.
Glass, Manufacture of spun. F. Pollak. 1,875,491; Sept. 6.
Glass, Producing molten. T. C. McKinley. 1,875,474; Sept. 6.
Glass tubings, Apparatus for drawing. L. D. Soubier. 1,876,031; Sept. 6.
Glassware forming machine. R. G. Allen. 1,875,796; Sept. 6.
Glassware forming machine. J. R. Hoge and V. E. Hofmann. 1,876,005; Sept. 6.
Glassware forming machine. L. H. Morin. 1,875,818; Sept. 6.
Gloves. H. A. Gillian. 1,875,441; Sept. 6.
Glue applicator. W. H. Kushera and F. M. Brackett. 1,876,062; Sept. 6.
Goblet. E. B. Bedford and M. G. Parker. Des. 87,703–6; Sept. 6.
Golf bag. H. C. Clawson. 1,876,134; Sept. 6.
Grading machine or other vehicle, Road. W. M. Taylor. 1,875,778; Sept. 6.
Grading machine, Vegetable. H. D. Clute. 1,875,562; Sept. 6.
Grapevines, Training. J. Cirrito. 1,875,561; Sept. 6.
Graphiting machine. O. J. Heath. 1,876,226; Sept. 6.
Grater. V. I. Morante. 1,875,481; Sept. 6.
Grille, Register. J. L. Waterbury. 1,875,684; Sept. 6.
Grinding machine. C. J. Anderson. 1,875,547; Sept. 6.
Grinding mill. W. M. Hill. 1,876,416; Sept. 6.
Grinding mill. W. H. Letz. 1,875,743; Sept. 6.
Grizzly bar. L. G. Symons. 1,876,034; Sept. 6.
Groove-cutting machine. R. A. Wittick. 1,876,380; Sept. 6.
Ground resistance meter. S. W. Borden. 1,876,324; Sept. 6.
Guide for window frames, Sash. H. V. Taylor. 1,876,363; Sept. 6.
Guide, Metallic sucker rod. P. R. G. Biedermann. 1,875,555; Sept. 6.
Gun, Grease. J. Marland and C. A. Griffith. 1,875,745; Sept. 6.
Gun, Spray. A. Beebe. 1,875,411; Sept. 6.
Hair clamp. K. G. Ströher. 1,875,949; Sept. 6.
Hairpin. J. M. Jenkins. 1,875,611; Sept. 6.
Hair spreading machine. J. F. Dornan. 1,875,710; Sept. 6.
Hammer, Power. A. Schneider. 1,875,939; Sept. 6.
Hand bag. M. White. Des. 87,701; Sept. 6.
Handle assembly. D. Miller. 1,876,257; Sept. 6.
Hanger: *See*—
Cable hanger. Trousers hanger.
Harvester and stacker, Grain. F. D. Hoist. 1,875,605; Sept. 6.
Harvesting machine. C. Engelen. 1,876,137; Sept. 6.
Hay fork. J. S. Johnson. 1,876,422; Sept. 6.
Hay rake. W. F. Mottier. 1,875,349; Sept. 6.
Headlight, Automobile. F. R. Dudley. 1,875,573; Sept. 6.
Heat and sound insulating board and block. L. E. Armstrong. 1,875,364; Sept. 6.
Heat and sound insulating products, Apparatus for making. W. K. Nelson. 1,875,644; Sept. 6.
Heat exchange device. A. B. Modine. 1,875,639; Sept. 6.
Heat exchanger. V. M. Chatfield. 1,876,401; Sept. 6.
Heat exchanger. C. O. Sandstrom. 1,875,663; Sept. 6.
Heater: *See*—
Hot water heater. Windshield heater.
Shoe heater.
Heater baffle, Water. A. F. Craver. 1,875,856; Sept. 6.
Heater for mixers for concrete and the like. P. F. Stary. 1,875,516; Sept. 6.
Heating and ventilating apparatus. J. L. Waterbury. 1,875,685; Sept. 6.
Heating and ventilating apparatus, Automobile. A. B. Modine. 1,875,637; Sept. 6.
Heating apparatus for automotive vehicles. F. B. Wines. 1,876,268; Sept. 6.
Heel. P. B. Sullivan. 1,876,361; Sept. 6.
Heel cutting machine. A. F. Froussard. 1,876,285; Sept. 6.
Heels, Enlarged wearing surface for spikes. A. W. Givens. 1,875,806; Sept. 6.
Heels, Quick detachable top lift for. H. L. Brown. 1,875,558; Sept. 6.
Hinge. H. G. Kellogg. 1,876,242; Sept. 6.
Hinge, Casement window. O. P. Cramer. 1,876,402; Sept. 6.
Hoe. C. B. Strang. 1,875,674; Sept. 6.
Hoist. H. S. Hele-Shaw, T. E. Beacham, and E. C. Mills. 1,875,600; Sept. 6.
Holder, Adjustable lock tool. R. R. Weddell. 1,875,967; Sept. 6.
Holder and dispenser, Tube. W. G. Collins. 1,876,489; Sept. 6.
Holder, Bouquet. W. H. Rudolph. 1,876,322; Sept. 6.
Holder, Collar. F. J. Wakefield. 1,876,184; Sept. 6.
Holder, Door. A. D. Waters. 1,875,965; Sept. 6.
Holder, Film. E. W. Page. 1,876,431; Sept. 6.
Holder for cigars or cigarettes. H. H. Honigbaum. 1,876,299; Sept. 6.
Holder for collapsible tubes, Sanitary. E. J. Faber. 1,875,715; Sept. 6.
Horseshoe calk, Detachable. C. G. Akerberg. 1,875,405; Sept. 6.
Hot water heater, Electric. L. B. Hyde. 1,876,053; Sept. 6.
House: *See*—
Wooden plank house.
House and pen, Sanitary hog. J. C. Fitzpatrick. 1,875,433; Sept. 6.
House for pigs, Brooder. G. I. Hinsvark. 1,876,503; Sept. 6.
Hubs, Making wheel. W. N. Booth. 1,876,393; Sept. 6.
Humidifier, Centrifugal. W. L. Dudley. 1,875,711; Sept. 6.
Humidifying device. L. E. Jordon. 1,875,464; Sept. 6.
Hydraulic jack. R. P. Rosenberry. 1,876,023; Sept. 6.
Hydrocarbons of higher boiling point into those of lower boiling point, Conversion of. H. Zorn. 1,876,270; Sept. 6.
Hydrocarbons, Treating. W. M. Cross. 1,876,206; Sept. 6.
Hydrogen, Production of. C. F. R. Harrison. 1,875,923; Sept. 6.
Ice cream cone. W. W. Turnbull. 1,875,960; Sept. 6.
Ice cream cone. W. W. Turnbull. 1,876,105; Sept. 6.
Illuminated device. J. Block. 1,876,448; Sept. 6.
Illuminating apparatus. B. A. Morton. 1,876,313; Sept. 16.
Index and signal. A. R. Jackson. 1,876,236; Sept. 6.
Index, Card. E. W. Davis. 1,876,207; Sept. 6.
Index device. Le R. E. Hutchings. 1,876,233; Sept. 6.
Index guides, Package of. R. M. Tussing. 1,876,181; Sept. 6.
Index or file. W. H. Day. 1,876,209; Sept. 6.
Index, Selective card. S. A. Oakley. 1,876,149; Sept. 6.
Indicator: *See*—
Fuse indicator. Speed indicator.
Scroll and line indicator.
Inflating hand piece. H. E. Smith. 1,876,355; Sept. 6.
Insecticide. H. Knight. 1,875,466; Sept. 6.
Insert for ornamental apparel belts, Metallic. M. Silverman and H. Pomerantz. Des. 87,730; Sept. 6.
Instrument for holding gauges for setting valves. H. Walker. 1,875,784; Sept. 6.
Insulating block, Heat and sound. W. K. Nelson. 1,876,071; Sept. 6.
Insulating products, Making fibrous. F. Grunder. 1,876,221; Sept. 6.
Internal combustion engine. J. Good. 1,875,589; Sept. 6.
Internal combustion engine. E. J. Hall. 1,875,444; Sept. 6.
Internal combustion engine. E. J. Hall. 1,875,724 Sept. 6.
Internal combustion engine. H. Le V. Horning. 1,875,620; Sept. 6.
Internal combustion engine. R. Lee. 1,876,507; Sept. 6.
Internal combustion engine. L. D. McCleary. 1,876,532; Sept. 6.
Internal combustion engine. A. E. Winckler. 1,875,838; Sept. 6.
Internal combustion engine, Uniflow two-stroke cycle. S. M. Udale and C. W. Truxell, jr. 1,875,528; Sept. 6.
Iron: *See*—
Electric iron.
Iron-cored inductance (choke, coil, transformer) for direct current loads. R. Gurtler. 1,876,451; Sept. 6.
Jack: *See*—
Hydraulic jack.
Jar or similar receptacle. B. F. Conner. Des. 87,712; Sept. 6.
Joint for bedsteads and like purposes, Metal. V. E. Dickson. 1,875,805; Sept. 6.
Journal box to a side frame, Interlocking a. H. W. Stertzbach. 1,875,770; Sept. 6.
Juices, Treating sugar. J. P. Foster. 1,876,491; Sept. 6.
Kiln, Muffle. H. G. Begeman. 1,875,365; Sept. 6.
Kit and the like, Hypodermic. N. Frutkow and J. C. Wahl. 1,876,493; Sept. 6.
Kit, Artist's. W. Grumbacher. 1,876,001; Sept. 6.
Knife rack. R. H. Fried. 1,876,284; Sept. 6.
Knife, Shingle and linoleum. R. J. Tobin. 1,876,180; Sept. 6.
Knitting machine. J. G. M. Coudert and J. B. Terme. 1,875,853; Sept. 6.
Lace. C. B. J. Mollitor. Des. 87,728; Sept. 6.
Ladder construction. S. A. McGaw. 1,876,335; Sept. 6.
Laminated glass. J. F. Walsh. 1,875,964; Sept. 6.
Lamp, Airplane inner-controlled spot. R. H. Hummert. 1,875,607; Sept. 6.
Lamp, Metal vapor. S. Van Bogdandy and L. Wamoscher. 1,875,903; Sept. 6.
Lamps, Arrangement for electric incandescent. R. P. A. Andersson. 1,875,692; Sept. 6.
Lamps, Lens holder for projection. G. Arano. 1,876,884; Sept. 6.
Latch, Door. W. R. Schlage. 1,876 079–81; Sept. 6.
Latch, Whorl. O. W. Schaum. 1,875,938; Sept. 6.
Latches and the like, Screw securing means for door. W. R. Schlage. 1,875,664; Sept. 6.
Lath bundling apparatus. D. C. Jeffrey and H. J. Marsham. 1,875,610; Sept. 6.
Laundry list printer and counter. H. Hirsch. 1,875,870; Sept. 6.

Leaks, Method and apparatus for sealing. E. F. Heard. 1,876,415; Sept. 6.
Leather grading machine. D. Parks. 1,875,884; Sept. 6.
Leg, Folding furniture. W. M. Boenning. 1,876,446; Sept. 6.
Leg for card tables and the like, Folding. F. Kusterle. 1,876,010; Sept. 6.
Lens. V. H. Hancock. 1,876,497; Sept. 6.
Leveling device. E. B. Morgan. 1,875,642; Sept. 6.
Light: *See*—
Flash-light. Multiple parallel flash light.
Light for airports and the like, Boundary. B. R. Shaw and F. Buchanan. 1,876,082; Sept. 6.
Light projecting machine. A. J. Oberg and R. R. Stoefen. 1,876,511; Sept. 6.
Lighting fixture. G. L. Barnes. 1,875,550; Sept. 6.
Lightning arrester. L. S. Brach. 1,876,513–4; Sept. 6.
Link and forming same, Weldless. B. N. Youngken. 1,875,905; Sept. 6.
Link for cross chains, Repair. J. R. Reyburn. 1,876,345; Sept. 6.
Link, Fusible. W. L. Roessner. 1,875,661; Sept. 6.
Liquid depth indicating device. H. W. King. 1,876,244–5; Sept. 6.
Liquid dispensing device. A. U. Walter. 1,876,157; Sept. 6.
Liquid level control. J. O. Davis. 1,876,044; Sept. 6.
Liquid measuring and dispensing apparatus. F. D. Pfening and H. Pfening, jr. 1,876,512; Sept. 6.
Liquids, Apparatus for fractional distillation of composite. H. T. Tindall. 1,876,179; Sept. 6.
Listing machines, Item counting mechanism for. O. D. Johantgen. 1,876,057; Sept. 6.
Listing machines, Paper feeding mechanism for. O. D. Johantgen. 1,876,056; Sept. 6.
Listing or tabulating or like statistical machine, Record card controlled. L. E. Brougham. 1,875,845; Sept. 6.
Loading machine. F. W. Vodoz. 1,875,783; Sept. 6.
Lock: *See*—
Bearing lock. Door lock.
Binder lock. Mixing bowl lock.
Combination lock. Tire and rim lock.
Lock. C. Behrends. 1,875,978; Sept. 6.
Lock. W. R. Way. 1,876,115; Sept. 6.
Lock for car switches, Handle. C. J. Anderson. 1,875,546; Sept. 6.
Lock mechanism for safes. C. F. Wolters. 1,876,193; Sept. 6.
Locker system. R. LaPorte. 1,875,383; Sept. 6.
Locknut, Bonding. R. W. Chanaberry. 1,876,487; Sept. 6.
Locomotive, Storage battery. R. Mancha and C. E. Stoltz. 1,875,627; Sept. 6.
Locomotive structure. K. S. Howard. 1,875,343; Sept. 6.
Locomotive structure. K. S. Howard and E. C. Jackson. 1,875,342; Sept. 6.
Locomotive tender. H. A. Hoke. 1,876,297; Sept. 6.
Loud speaker. W. R. Moore, jr. 1,876,466; Sept. 6.
Loud-speaker modulating mechanism. R. R. DuPuy. 1,875,429; Sept. 6.
Lubricating system. H. D. Croft. 1,875,564; Sept. 6.
Lubricating system. W. S. Pritchard. 1,876,343; Sept. 6.
Lubricating system, Force-feed. I. Cowles. 1,875,706; Sept. 6.
Lubrication. H. Ford. 1,875,718; Sept. 6.
Machine for cutting flexible material. G. Coleman. 1,875,852; Sept. 6.
Machine for cutting pile of weft-pile fabric. H. L. Byrd. 1,875,703; Sept. 6.
Machine for feeding tapered rollers. T. C. Pew. 1,876,315; Sept. 6.
Machine for forming hollow glassware. L. D. Soubier. 1,875,827; Sept. 6.
Machine for illuminating, sorting and stamping eggs. W. Hilgers. 1,875,811; Sept. 6.
Machine for kneading, crushing and similar operations. B. Zettergren. 1,875,704; Sept. 6.
Machine for making annular articles. G. F. Wikle. 1,876,375; Sept. 6.
Machine for plucking birds. G. C. Bingham. 1,875,980; Sept. 6.
Machine for testing belts. W. H. Gerstenslager. 1,875,439; Sept. 6.
Machine for the manufacture of batts. E. T. Wuest. 1,876,194; Sept. 6.
Magnesium chloride, Making anhydrous. K. Staib. 1,876,084–5; Sept. 6.
Magnesium metal by electrolysis, Producing. G. Pistor, R. Suchy, K. Staib, and W. Moschel. 1,875,760; Sept. 6.
Magnet system for converting electric oscillations into acoustic ones or conversely. R. Vermeulen. 1,876,113; Sept. 6.
Magnetic device. E. S. Pridham. 1,876,164; Sept. 6.
Mandrel. H. E. Dietrich. 1,876,279; Sept. 6.
Mangle or wringer construction. J. L. Perkins and H. D. Croft. 1,875,487; Sept. 6.
Manifold, Intake. R. P. Smith. 1,875,670; Sept. 6.
Map. R. L. Morse. 1,875,389; Sept. 6.
Maps by means of aerial photographs, Production of. A. C. W. Aldis. 1,875,363; Sept. 6.
Marksmanship, Teaching. C. Schwartz. 1,875,941; Sept. 6.
Material, Greens. S. H. Hartman and H. L. Powers. 1,875,807; Sept. 6.
Material in an electrical furnace, Process of melting or heating. K. G. Wennerstrom. 1,875,787; Sept. 6.
Material into high pressure vessels, Feeding finely divided solid. F. B. Grant and H. Harper. 1,875,921; Sept. 6.
Material from mills, Apparatus for removing plastic. W. E. MacMonagle. 1,876,309; Sept. 6.
Material mixing, feeding and measuring apparatus. E. E. Harper. 1,875,450; Sept. 6.
Materials, Apparatus for degreasing. J. Savage. 1,875,937; Sept. 6.
Materials, Apparatus for pulverizing. W. J. A. London. 1,875,817; Sept. 6.
Materials containing arsenious acid, Treating. O. Stalhane, D. R. E. Werner, and S. Giertz-Hedstrom. 1,875,897; Sept. 6.
Materials, Making surfacing. J. W. Clark. 1,875,802; Sept. 6.
Measuring device. A. I. Dunn. 1,876,280; Sept. 6.
Measuring device, Grain. A. J. Hartley. 1,875,725; Sept. 6.
Measuring instrument. A. E. Lee. 1,875,617; Sept. 6.
Mechanism normally operated from a keyboard. A. Thomas. 1,876,097; Sept. 6.
Mercerizing machine. A. A. Bosshard. 1,875,984; Sept. 6.
Metal building screen. C. E. Britten. 1,876,486; Sept. 6.
Metal carbides, Making. W. F. Stoody and T. Reiling. 1,876,175; Sept. 6.
Metal naphthenate, Heavy. R. M. Gerlach. 1,875,999; Sept. 6.
Metal working machine. J. M. Christman. 1,876,204; Sept. 6.
Metal working machine. H. Krebs. 1,876,248; Sept. 6.
Metals in sand molds, Casting light. E. Player. 1,876,073; Sept. 6.
Metallic box. J. Knaggs. 1,876,303; Sept. 6.
Meter: *See*—
Ground resistance meter.
Methanol process, Synthetic. W. J. Edmonds. 1,875,714; Sept. 6.
Methylamine, Production of. J. Martin and L. C. Swallen. 1,875,746–7; Sept. 6.
Methyl-amine, Recovery of. L. C. Swallen. 1,875,775–6; Sept. 6.
Methyl amine, Recovery of. L. C. Swallen and B. C. Boeckeler. 1,875,774; Sept. 6.
Microscopes, Location finder for. C. F. Sulzner. 1,876,176; Sept. 6.
Milking apparatus. J. N. Holm. 1,875,604; Sept. 6.
Mill: *See*—
Grinding mill.
Mining machine. G. Bodin. 1,875,914; Sept. 6.
Mining machine. M. P. Holmes. 1,875,333–40; Sept. 6.
Mining machine. M. P. Holmes. 1,876,517; Sept. 6.
Mining machine. C. F. Osgood. 1,875,351; Sept. 6.
Mirror bracket structure. W. J. Bell. 1,875,554; Sept. 6.
Mirror, Day and night rear vision. H. W. Smith. 1,876,319; Sept. 6.
Mixing bowl lock. J. D. Tucker. 1,876,264; Sept. 6.
Moisture from flexible strip material, Device for removing. G. L. Brownell. 1,875,701; Sept. 6.
Moisture indicating instrument for wood. C. G. Suits and M. E. Dunlap. 1,875,350; Sept. 6.
Mold and container, Tamale. U. Urbany. 1,876,182; Sept. 6.
Mold cleaning solution. R. C. Bateman. 1,875,552; Sept. 6.
Mold or core wash. W. G. Roepke. 1,875,501; Sept. 6.
Mold or matrix for plating. A. K. Laukel. 1,875,346; Sept. 6.
Molds, Device for handling. P. W. Lehman. 1,876,252; Sept. 6.
Molding apparatus. M. Duval. 1,875,712; Sept. 6.
Monolithic construction. J. M. Crom. 1,876,205; Sept. 6.
Mosquito trap. J. C. Kemper. 1,876,127; Sept. 6.
Motion device, Variable. F. M. Arnold. 1,876,129; Sept. 6.
Motion transmitting device. J. H. Williams. 1,875,537; Sept. 6.
Motor: *See*—
Synchronous motor. Wind motor.
Water motor.
Motor connection. C. S. Baker. 1,875,798; Sept. 6.
Motor protector and speed accelerator. H. C. Pittman. 1,875,652; Sept. 6.
Motor suspension. J. Morch. 1,876,312; Sept. 6.
Mounting, Electromechanical vibrator. W. E. Bower. 1,875,324; Sept. 6.
Mounting for artificial teeth. W. F. Rodin. 1,875,499; Sept. 6.
Mounting for internal combustion engines, Crankcase. C. L. Walker. 1,875,682; Sept. 6.
Mounting for reproducer arm, Nonvibratory. R. C. Burt. 1,875,848; Sept. 6.
Mounting, Pin tumble cylinder. W. R. Schlage. 1,875,396; Sept. 6.
Mower. E. F. Huddle. 1,876,006; Sept. 6.
Mower, Lawn. A. E. Riemenschneider. 1,876,169; Sept. 6.
Mower, Power driven rotary. W. J. Rossiter and J. N. Wilking. 1,876,504; Sept. 6.
Mowers, Divider bar attachment for. L. Larson. 1,876,462; Sept. 6.
Mowers, Seeding attachment for lawn. J. R. Gordon. 1,876,409; Sept. 6.

Multiple parallel flash-light. H. K. Thiel. 1,875,956; Sept. 6.
Naphthalene, Hydrogenation of. R. Hupe. 1,876,007–8; Sept. 6.
Needle, Knitting. M. C. Miller. 1,876,259; Sept. 6.
Newspaper vending machine. J. A. Hebb. 1,876,292; Sept. 6.
Nicotine from tobacco, Extracting the. A. Faltelowitz. 1,876,214; Sept. 6.
Nipple swaging machine. E. W. Stoler. 1,876,174; Sept. 6.
Nuts and screws, Self locking. J. F. Martin. 1,875,930; Sept. 6.
Oar. J. F. Robbin. 1,875,498; Sept. 6.
Oil burner. C. B. Wilson. 1,876,377; Sept. 6.
Oil retainer. N. D. Belnap. 1,875,842; Sept. 6.
Olefines from gases containing same, Separating and recovering. G. F. Horsley. 1,875,924; Sept. 6.
Opener, Can. A. M. Jersey. 1,876,421; Sept. 6.
Organic compounds, Oxidizing. H. Klein. 1,876,059; Sept. 6.
Organic intermediates, Making. E. Clemmensen. 1,875,916; Sept. 6.
Oven, Coking retort. J. Van Ackeren. 1,876,108; Sept. 6.
Packing, Oil saver. G. Saunders. 1,875,936; Sept. 6.
Packing, Shaft. W. Emmet. 1,876,515; Sept. 6.
Packing, Shaft. B. L. Newkirk and L. P. Grobel. 1,876,520; Sept. 6.
Pan: *See*—
Drain pan.
Panel for heating and ventilating units, Movable. W. Ewald. 1,875,918; Sept. 6.
Paper creasing and cutting apparatus. J. J. Redmond. 1,876,074; Sept. 6.
Paper folding machine. H. H. Rawson. 1,875,655; Sept. 6.
Paper making apparatus. W. G. Trotman. 1,875,526; Sept. 6.
Paper, Shelf. E. Karfiol. Des. 87,719; Sept. 6.
Peanut dispensing device. C. W. Mabey. 1,876,332; Sept. 6.
Pedal, Accelerator. O. C. Ritz Woller. 1,875,399; Sept. 6.
Pen desk set, Fountain. G. L. Bassett. 1,876,197; Sept. 6.
Pen filling device, Fountain. R. L. Harris and D. E. Keech. 1,875,866; Sept. 6.
Pen, Fountain. L. Kutter. 1,876,461; Sept. 6.
Pen, Fountain. V. Savio. 1,875,507; Sept. 6.
Pen, Multicolor fountain. A. Beardsley. 1,875,553; Sept. 6.
Pen-point. S. M. Sager. 1,876,151; Sept. 6.
Pen, Self-filling. J. A. Holland. 1,876,298; Sept. 6.
Pencils and the like, Process and apparatus for color-striping. H. W. Brewer. 1,875,700; Sept. 6.
Percolator dome. O. Olsen. 1,875,648; Sept. 6.
Percolator, Electric. A. F. Larsen. Des. 87,722; Sept. 6.
Petrol and other organic liquids containing water, Treatment of. R. Lant. 1,876,326; Sept. 6.
Petroleum tar. C. D. Read. 1,875,823; Sept. 6.
Phonograph. A. D. Bodine. 1,876,273; Sept. 6.
Phosphorous containing furnace gases, Handling. H. F. Noyes. 1,875,755; Sept. 6.
Photographic print glazing machine. G. M. Dye. 1,876,046; Sept. 6.
Photographic printing. G. A. Mitchell. 1,875,751; Sept. 6.
Picker: *See*—
Potato picker.
Pickling machine, Rotary. F. J. Wood. 1,876,440; Sept. 6.
Picture projectors, Framing means for motion. E. J. Hadley. 1,876,413; Sept. 6.
Picture transmission. F. Schroter. 1,875,940; Sept. 6.
Pictures, Automatic apparatus for taking cinematographic. J. Bogopolsky. 1,876,392; Sept. 6.
Piles, Apparatus for forming concrete. E. D. Watt. 1,875,835; Sept. 6.
Pin: *See*—
Draft pin.
Pipe: *See*—
Tobacco pipe.
Pipe. M. L. Farland. 1,875,432; Sept. 6.
Pipe elbows, Forming. J. H. Taylor. 1,875,954; Sept. 6.
Pipe joint and the like. G. R. Inshaw. 1,876,455; Sept. 6.
Pipe joints, Sealing threaded. W. G. Couhig. 1,875,708; Sept. 6.
Pipe making machinery. L. Cammen. 1,875,560; Sept. 6.
Pipe molding apparatus. E. G. Jones. 1,875,738; Sept. 6.
Pipes, Device for extracting well. W. H. Endsley. 1,875,577; Sept. 6.
Pipes or the like, Apparatus for forming. C. G. Naylor. 1,875,483; Sept. 6.
Pistons, Device for spreading and enlarging motor. J. A. F. Osse. 1,875,822; Sept. 6.
Pitch propeller, Variable. G. Evoritt. 1,875,373; Sept. 6.
Plant product and making the same, Marine. P. R. Park. 1,875,352; Sept. 6.
Plant, Separating. A. L. Forbes, jr., and C. O. Byrne. 1,875,716; Sept. 6.
Plaster cast cutter. L. A. Mead. 1,876,337; Sept. 6.
Plate attachment for griddles, Hot. T. H. Stough. 1,876,358; Sept. 6.
Plate catcher and cleaner for tinning machines. S. E. Diescher. 1,876,278; Sept. 6.
Plate for making wafers. F. S. Nanna. 1,875,482; Sept. 6.
Plate or similar article. L. H. Bown. Des. 87,708; Sept. 6.
Plate or similar article. H. J. Wain. Des. 87,735; Sept. 6.
Platens, Operating means for front feed. E. J. Ens. 1,875,917; Sept. 6.
Plug, Fusible disconnecting. H. P. Hastings. 1,875,378; Sept. 6.
Plumb bob and chalk line. F. C. Spaeth and M. A. Gibson. 1,876,473; Sept. 6.
Polishing machine. G. W. Veale. 1,875,962; Sept. 6.
Pot: *See*—
Fire pot.
Potato picker. A. Pearson. 1,876,150; Sept. 6.
Powder box. P. Dmitrenko. 1,875,572; Sept. 6.
Powder feeder, Face. F. J. Vicki. 1,875,834; Sept. 6.
Power transmission mechanism. E. A. Thompson. 1,876,098; Sept. 6.
Power transmitting mechanism. M. B. A. Doring. 1,875,858; Sept. 6.
Press: *See*—
Printing press.
Press. M. H. Ballard. 1,875,799; Sept. 6.
Press guard. J. P. Udal. 1,875,527; Sept. 6.
Pressing machine with work support. P. N. Braun. 1,875,579; Sept. 6.
Pressing machines, Air circulating means for. E. Davis. 1,876,277; Sept. 6.
Pressure in vacuum tubes, Maintenance of the. J. B. J. M. Abadie. 1,875,972; Sept. 6.
Pressure indicating mechanism for rolling mills. R. L. Templin. 1,875,524; Sept. 6.
Printing machine, Rotary. F. C. Marquardt. 1,876,255; Sept. 6.
Printing press, Offset. H. Hense. 1,875,869; Sept. 6.
Printing presses, Collecting and folding mechanism for. M. W. Brueshaber. 1,876,039; Sept. 6.
Printings on the vegetable fiber, Production of fast. R. Herz, N. Steiger, and W. Hechtenberg. 1,875,602; Sept. 6.
Product for plaster finishing coats, Pre-mixed. G. B. Wood. 1,876,122; Sept. 6.
Projectile. E. W. Brandt. 1,875,985; Sept. 6.
Projection screen. T. F. Yazle. 1,876,269; Sept. 6.
Prop. G. W. Britton. 1,876,508; Sept. 6.
Propeller. W. W. Everts. 1,875,998; Sept. 6.
Propeller. C. H. Havill. 1,875,454; Sept. 6.
Propeller. S. Heath. 1,875,597–8; Sept. 6.
Propeller. G. F. Houston. 1,875,606; Sept. 6.
Propelling means. R. B. Harris. 1,875,451; Sept. 6.
Protective means for beds and the like, Method and apparatus comprising a sanitary. M. Requa and T. L. McClellan. 1,875,657; Sept. 6.
Protective system, Phase failure and phase reversal. C. Stansbury and G. C. Brown. 1,876,436; Sept. 6.
Protector, Garment. C. T. Chandler. 1,875,416; Sept. 6.
Protector, Head. R. H. Schwendler and C. W. Mehling. 1,876,521; Sept. 6.
Protector, Pocket. L. Bruce. 1,875,847; Sept. 6.
Protector, Tree. M. J. Weaver. 1,875,533; Sept. 6.
Pulley, Expansible. E. F. Maas. 1,875,385; Sept. 6.
Pulp, Apparatus for dewatering and washing. R. T. Lang. 1,876,064; Sept. 6.
Pump. J. B. and C. H. Teesdale. 1,875,398; Sept. 6.
Pump, Fluid. A. C. Wood. 1,875,904; Sept. 6.
Pump, Multistage pneumatic. L. D. Gilbert. 1,875,440; Sept. 6.
Pump, Rotary. W. L. Claypool. 1,875,419; Sept. 6.
Punch mechanism. J. W. Zundt. 1,876,382; Sept. 6.
Rack: *See*—
Card rack. Knife rack.
Display rack.
Rack connecting means, Floor. V. H. Harbert. 1,875,922; Sept. 6.
Rack for holding clothes, shoes, jewelry, or similar articles. J. A. Grimm. Des. 87,717; Sept. 6.
Racket chair. L. D. Gibson. 1,876,408; Sept. 6.
Radiator. A. B. Modine. 1,875,638; Sept. 6.
Radiator. A. G. Wahlberg. 1,875,681; Sept. 6.
Radiator, Humidifying. A. U. Jones. 1,876,142; Sept. 6.
Radiator shutter unit. E. G. Petersen. 1,876,017; Sept. 6.
Radio antenna. D. C. and A. F. Senter. 1,876,318; Sept. 6.
Radio apparatus. N. S. Gilbert and A. L. Fletcher. 1,876,287; Sept. 6.
Radiocabinet. L. H. Eubank. Des. 87,715; Sept. 6.
Radio pad. M. J. H. Vredenburgh. Des. 87,734; Sept. 6.
Radioreceivers, System of and apparatus for testing. C. A. Lowry. 1,875,624; Sept. 6.
Radio receiving apparatus. H. A. Wheeler. 1,875,837; Sept. 6.
Rail and renewing same, Renewed switch point. R. B. Alfonte. 1,876,482; Sept. 6.
Rail, particularly for trolley conveyer systems, Extensible. P. V. Whitney. 1,876,373; Sept. 6.
Railway. H. W. Sanford. 1,875,506; Sept. 6.
Railway brake. C. C. Bolen. 1,875,323; Sept. 6.
Railway truck structure. K. S. Howard and E. C. Jackson. 1,875,380; Sept. 6.
Rake: *See*—
Hay rake.
Rake. F. B. Mewmaw. 1,876,148; Sept. 6.
Razor. R. G. Winkler. 1,875,538; Sept. 6.
Razor, Safety. B. Christmas. 1,875,990; Sept. 6.
Razor, Safety. G. S. Moore. 1,875,480; Sept. 6.
Receiving system. L. C. Young. 1,876,159; Sept. 6.
Receptacle. H. Bolardi. 1,875,412; Sept. 6.
Receptacle, Clamping. W. H. Miller. 1,876,464; Sept. 6.

Receptacle, Folding. A. Zeindlhofer. 1,875,909; Sept. 6.
Recirculation system. W. T. Barker. 1,875,549; Sept. 6.
Record guide. E. W. Davis. 1,876,208; Sept. 6.
Recorder: *See*—
Automatic end point recorder.
Reel: *See*—
Wire reel.
Recorder. F. B. Post. 1,875,653; Sept. 6.
Reflector. H. W. Lucas. 1,875,384; Sept. 6.
Refrigerating apparatus. L. I. Beckwith. 1,875,977; Sept. 6.
Refrigerating method and apparatus. E. Kindermann. 1,875,875; Sept. 6.
Refrigeration. A. R. Earnshaw. 1,876,212; Sept. 6.
Refrigeration. G. Maiuri and R. F. Bossini. 1,875,626; Sept. 6.
Refrigeration. B. Randel. 1,875,654; Sept. 6.
Refrigerator. R. C. Wolfe. 1,875,530; Sept. 6.
Refrigerator frame. G. C. Bohn. 1,875,843; Sept. 6.
Register. A. S. Wheelbarger and P. Kell. 1,876,119; Sept. 6.
Regulator: *See*—
Damper regulator.
Regulator for gas stoves, Heat. S. S. Baker. 1,875,548; Sept. 6.
Regulator for hot water heating systems, Pressure. P. F. Shivers. 1,875,509; Sept. 6.
Relay, Unpolarized electromagnetic. R. Hofgaard. 1,876,295; Sept. 6.
Releasing device. M. H. Ballard. 1,875,322; Sept. 6.
Resins, Producing phthalic anhydride. M. M. Amieva, jr. 1,875,408; Sept. 6.
Rest mechanism, Steady. W. Peaslee. 1,875,486; Sept. 6.
Rib knitting machine, Circular. J. Sirmay. 1,875,826; Sept. 6.
Rim assembly. A. W. Woodward. 1,875,402; Sept. 6.
Riveter construction. J. C. Hanna. 1,875,448; Sept. 6.
Rivets, Manufacture of. M. M. Cunningham. 1,875,709; Sept. 6.
Roadbed equipment for railroads. A. Mariani. 1,876,253; Sept. 6.
Road grading machine. J. B. Pridgen. 1,875,492; Sept. 6.
Road machine attachment. A. Wegener. 1,875,534; Sept. 6.
Roll leveler. L. Iversen. 1,876,457; Sept. 6.
Roll, Winding. J. U. Forbes. 1,876,490; Sept. 6.
Roof flashing and jacket. F. J. Moore. 1,875,640; Sept. 6.
Roost, Poultry. F. A. Westlund. 1,876,371; Sept. 6.
Rosin soap lakes of azo compounds. E. R. Allen and A. Siegel. Re18,590; Sept. 6.
Rotary machine. D. S. Faulkner. 1,875,430; Sept. 6.
Rotary machine. W. E. Shore. 1,875,397; Sept. 6.
Rubber and resulting product, Improving aging qualities of. I. Williams and A. M. Neal. 1,875,903; Sept. 6.
Rubber compounds and composition obtained thereby, Treating. H. A. Andres. 1,875,872; Sept. 6.
Rubber goods, Identifying. J. R. Foley. 1,875,582; Sept. 6.
Rubber sheets, Production of. D. J. P. Phillips. 1,876,432; Sept. 6.
Rubber vulcanization. L. A. Edlund. 1,875,997; Sept. 6.
Rule, Slide. A. W. Keuffel. 1,875,927; Sept. 6.
Runway, Fabricating a. H. D. Randall. 1,876,166; Sept. 6.
Safety attachment for fluid burners. P. V. Gioe. 1,876,495; Sept. 6.
Safety control for burner motors. J. O. Davis. 1,875,569; Sept. 6.
Safety depository. W. E. Adams. 1,875,690; Sept. 6.
Safety device for cigarette cut-offs. E. D. Smith. 1,876,028; Sept. 6.
Salt or the like, Method and apparatus employed in washing and production of. T. Ray and J. R. Ray. 1,875,354; Sept. 6.
Sampling apparatus. A. G. McGregor. 1,875,472; Sept. 6.
Sand blasting machine. I. W. Davis. 1,875,994; Sept. 6.
Sash adjuster, Automatic storm. E. Albjerg. 1,875,542; Sept. 6.
Saw set. C. A. Johnson. 1,875,736; Sept. 6.
Saw, Stone. A. E. Wienholz and F. Siefke. 1,876,480; Sept. 6.
Scale. N. A. Hallwood. 1,875,800; Sept. 6.
Scorch preventing device for heat-seal wrapping machines. T. W. Alm. 1,875,975; Sept. 6.
Scraper, Belt. V. V. Greg. 1,875,442; Sept. 6.
Scratch pad device. D. Albritton. 1,875,543; Sept. 6.
Screen: *See*—
Fish screen. Projection screen.
Metal building screen.
Screen apparatus for automobile windows. M. Weinberger. 1,875,901; Sept. 6.
Screw extractor. F. Nigra. 1,875,484; Sept. 6.
Screw thread gauge. W. E. Hoke. 1,875,871–2; Sept. 6.
Screw thread gauge. R. Thomson. 1,875,899; Sept. 6.
Screw valve gate. F. C. Cruff and A. A. Giuste. 1,875,857; Sept. 6.
Scroll and line indicator. L. H. Robinson. 1,875,659; Sept. 6.
Seal for paper bags, Metal. H. G. Eynon and W. J. Kinderman. 1,875,919; Sept. 6.
Seal, Package. C. Bofino. 1,876,391; Sept. 6.
Sealing device for use with electric cables and other apparatus. W. Holttum. 1,875,732; Sept. 6.
Seat: *See*—
Car seat. Vehicle seat.
Swivel seat.
Seat. W. M. Hanson. 1,875,449; Sept. 6.
Seat adjusting device for automobile seats. J. E. Golden and O. W. Golden. 1,875,588; Sept. 6.
Seat construction, Spring. P. E. Kroehler. 1,876,305; Sept. 6.
Seat grip, Safety. K. Karpen. 1,875,614; Sept. 6.
Seat mechanism, Adjustable. A. W. Chapman. 1,875,915; Sept. 6.
Seeds, Disinfecting. W. P. Raleigh and C. B. Dickey. 1,875,494; Sept. 6.
Semitrailer. F. L. Miller. 1,875,636; Sept. 6.
Separator: *See*—
Air separator.
Sewage disposal apparatus. A. Wright. 1,876,123; Sept. 6.
Sewer cleaners, Level winding mechanism for. L. and A. T. Knoerzer. 1,875,467; Sept. 6.
Sewing machine, Pants band. W. A. Feigel and R. R. Carver. 1,875,578; Sept. 6.
Shade adjusting device, Window. S. Jasgur. 1,875,812; Sept. 6.
Shade fixture, Window. P. B. Thomas and E. B. Taylor. 1,876,036; Sept. 6.
Shade, Vehicle window. A. J. Miller, jr. 1,876,430; Sept. 6.
Shaping machine. O. L. Schehl. 1,876,078; Sept. 6.
Shears. L. Iversen and R. E. Noble. 1,876,456; Sept. 6.
Sheets, Apparatus for handling. L. S. Rosener. 1,876,171; Sept. 6.
Shelf, Adjustable. A. C. Furo. 1,876,494; Sept. 6.
Shield, Glare. G. R. Hannan and R. G. Goldman. 1,876,225; Sept. 6.
Shield, Glare. G. R. Hannan and R. G. Goldman. 1,876,412; Sept. 6.
Shield, Motorist's eye. F. W. Magee. 1,876,463; Sept. 6.
Shield, Static and magnetic. O. Weeber. 1,875,968; Sept. 6.
Ship propulsion. G. Marconnet. 1,875,629; Sept. 6.
Shock absorber. J. A. McGrew. 1,876,146; Sept. 6.
Shock absorber, Fluid. J. Eckhard. 1,875,860; Sept. 6.
Shock absorber for vehicles. W. H. Appleman. 1,875,409; Sept. 6.
Shock absorber, Hydraulic. V. Sussin. 1,876,092; Sept. 6.
Shock absorbers, Actuating means for. J. Eckhard. 1,875,575; Sept. 6.
Shoe grip. T. G. Youmans. 1,876,195; Sept. 6.
Shoe heater. M. O. Jennings. 1,876,054; Sept. 6.
Shoe heater. M. O. Jennings and L. E. Alloy. 1,876,055; Sept. 6.
Shoe or boot, Lacing. A. Pittroff. 1,876,263; Sept. 6.
Shoe polishing device. L. Nassif. 1,875,820; Sept. 6.
Shut-off for water heaters, Electric heat. L. D. Lovekin. 1,875,928; Sept. 6.
Shuttle. J. B. Dandelin and E. E. Talbot. 1,875,370; Sept. 6.
Sifter for furnaces, Ash. G. Anderson. 1,875,840; Sept. 6.
Sign. J. Steinmetz. 1,875,520; Sept. 6.
Sign. A. A. Wood and E. Boss. Des. 87,736; Sept. 6.
Sign characters, Apparatus for applying. G. H. Babcock. 1,875,410; Sept. 6.
Sign, Nameplate or the like. E. Enscott. 1,876,405; Sept. 6.
Signal: *See*—
Traffic signal.
Signal arm. V. Ciurana and F. Ciurana. 1,875,418; Sept. 6.
Signal device. W. V. Darling, jr., and R. J. Dykstra. 1,875,424; Sept. 6.
Signal for motor vehicles, Direction. R. H. Dodd and L. R. Burrow. 1,875,996; Sept. 6.
Signaling apparatus. L. L. Nettleton. 1,875,883; Sept. 6.
Signaling system. P. M. Gault. 1,875,587; Sept. 6.
Silk filament and making same, Artificial. J. A. Singmaster. 1,875,894; Sept. 6.
Silk of low luster and preparing the same, Hollow artificial. H. L. Barthelemy. 1,876,130; Sept. 6.
Sinker, Fishing line. G. K. Cheney. Des. 87,711; Sept. 6.
Ski. E. Silvestri. 1,875,512; Sept. 6.
Skimmer, Boiler. P. R. Alphonso. 1,875,544; Sept. 6.
Slab construction. B. E. Richardson. 1,875,888; Sept. 6.
Slide. C. E. Anderson. 1,876,383; Sept. 6.
Slow motion reaction sprinkler. W. Van E. Thompson. 1,876,099; Sept. 6.
Snubber or shock absorber. J. Hofmann. 1,876,004; Sept. 6.
Sock. J. Sprenkle and M. F. Sprenkle. Des. 87,732; Sept. 6.
Soil sterilization, Method and apparatus for. W. Salisbury. 1,875,504; Sept. 6.
Sorter counter machine. F. Belisle. 1,876,038; Sept. 6.
Spark arrester for locomotives. M. F. Brown. 1,875,846; Sept. 6.
Speed indicator. A. L'Hérault. 1,875,470; Sept. 6.
Spindle clamp, Attachment. E. J. Kearney. 1,875,739; Sept. 6.
Spool with reenforced head. P. J. Farley. 1,876,215; Sept. 6.

Spouting system for type casting machines. G. L. Curle. 1,875,565; Sept. 6.
Sprayer construction, Liquid. R. M. Bagley. 1,875,841; Sept. 6.
Sprayer, Rotary. H. C. Lassen and H. Dahl. 1,876,250; Sept. 6.
Spraying device. W. Hermann. 1,875,729; Sept. 6.
Spring adjustment. G. R. Fassett. 1,876,138; Sept. 6.
Spring assembly for upholstery. L. A. Suekoff. 1,875,521; Sept. 6.
Spring clip for ornaments and the like. I. W. Cooper. 1,875,420; Sept. 6.
Spring structure for furniture. M. Thum. 1,876,101; Sept. 6.
Sprinkler: *See*—
Slow-motion reaction sprinkler.
Sprinkler head having a removable nozzle unit. W. Van E. Thompson. 1,875,780; Sept. 6.
Stabilizing apparatus for aeroplanes. L. Marmonier. 1,876,254; Sept. 6.
Stage arrangement, Power. G. L. Usselman. 1,876,106; Sept. 6.
Stanchion. C. F. Hanson. 1,876,141; Sept. 6.
Stanchion, Traffic. M. J. McCaughley. 1,875,878; Sept. 6.
Stand: *See*—
Christmas tree stand. Fountain pen desk stand.
Display stand.
Standard for desk tops, Supporting. W. M. Hanson. 1,875,377; Sept. 6.
Stay, Tie and collar. W. F. Ramont. 1,875,886; Sept. 6.
Steam boiler. W. Huntemüller. 1,875,608; Sept. 6.
Steam generator. W. H. Hardie. 1,876,291; Sept. 6.
Steamship with the main boiler mounted on a deck or platform at some height about the bottom of the ship or the tank top. K. G. Meldahl. 1,875,634; Sept. 6.
Steel article insensible to the action of hot gases, vapors and liquids. B. Strauss. 1,876,091; Sept. 6.
Steel hardening. R. Ripa. 1,876,170; Sept. 6.
Steering mechanism. J. D. Tucker. 1,876,104; Sept. 6.
Stem remover G. D. Gardner. 1,876,051; Sept. 6.
Stock, Handling J. H. Friedman. 1,875,586; Sept. 6.
Stop, Adjustable door. M. J. Sasgen. 1,876,173; Sept. 6.
Stop for vehicles, Reverse C. P. Cirac. 1,875,417; Sept. 6.
Stop motion. C. W. Spork and F. J. Herzig. 1,875,515; Sept. 6.
Stove. A. E. Anderson. 1,875,545; Sept. 6.
Strainer. R. S. Whaley. 1,876,439; Sept. 6.
Stretcher and guider. R. D. Tackaberry. 1,875,777; Sept. 6.
Stroboscope. P. C. Wentworth and J. H. Avery. 1,875,788; Sept. 6.
Structure simulating an owl. G. E. Wilson. 1,876,121; Sept. 6.
Stylus for telautographs. A. N. Van Nostrand. 1,875,833; Sept. 6.
Sugar extraction, Recovery of by products of. E. A. Vazquez. 1,876,522; Sept. 6.
Suit device, Aerial safety. P. F. Gorman. 1,875,807; Sept. 6.
Sundial construction. St. J. O'Sullivan. 1,875,756; Sept. 6.
Support. C. H. Young. 1,875,403; Sept. 6.
Support, Adjustable shelf. S. Hammer. 1,8755,318; Sept. 6.
Support, Book. H. C. Bennetch. 1,876,387; Sept. 6.
Support, Ceiling slab. F. J. Straub. 1,876,359; Sept. 6.
Support, Divider. L. W. Kennedy. 1,876,423; Sept. 6.
Support, Fishing rod. J. Van Duzer. 1,876,478; Sept. 6.
Support for optical micrometers. E. Schweizer. 1,875,665; Sept. 6.
Supporter, Plant stalk. L. G. Lenon. 1,875,618; Sept. 6.
Supporting device or catafalque. J. L. Franzen. 1,875,435; Sept. 6.
Supporting the overhanging ends of the bucks of pressing machines. E. Davis. 1,875,993; Sept. 6.
Surfacing machine. S. R. Campbell. 1,876,202; Sept. 6.
Surveying instrument. L. Suverkrop. 1,875,829–30; Sept. 6.
Sweeper, Chimney. E. F. Kahlert and E. Carlson. 1,875,613; Sept. 6.
Switch: *See*—
Electrical switch. Vacuum switch.
Float switch.
Switch for left-right turns of motor vehicle devices, Automatic. N. Ochinoff. 1,876,321; Sept. 6.
Switch mechanism for conveyer systems. J. B. Webb and D. A. Blair. 1,875,966; Sept. 6.
Switching and relay system. A. M. Trogner. 1,876,320; Sept. 6.
Swivel seat. O. B. Law, R. S. Colley, and C. C. Soper. 1,876,308; Sept. 6.
Synchronous motor, Compound. C. P. Robinson. 1,875,763; Sept. 6.
Table: *See*—
Collapsible table. Egg breaking and packing table.
Folding table.
Table and seat unit. I. Macdonald. Des. 87,723; Sept. 6.
Table and tray, Convertible serving. J. Strathaus. 1,875,772; Sept. 6.
Table frame. W. C. Uline. Des. 18,591; Sept. 6.
Table leg attachment. D. J. McLaughlin. 1,876,336; Sept. 6.
Table like structure, Folding. F. Schimmel. 1,875,892; Sept. 6.
Table top or the like. E. H. Gibian. 1,875,864; Sept. 6.
Table tops and the like, Molding. E. C. Loetscher. 1,876,830; Sept. 6.
Tables, Dual control for universal work. W. F. Zimmerman. 1,875,910; Sept. 6.
Tablets, Apparatus for feeding determined batches of. T. Daniels. 1,875,423; Sept. 6.
Tabulating machine. F. M. Carroll. 1,875,849; Sept. 6.
Tabulating machine having a universal split unit construction. F. M. Carroll. 1,875,850; Sept. 6.
Tag, Marking. J. P. Kuhns. 1,875,741; Sept. 6.
Talking machine, Automatic. W. R. Moore, jr. 1,875,641; Sept. 6.
Tank cleaner. W. McAnear. 1,876,334; Sept. 6.
Tank construction. Tank car twin. V. Willoughby. 1,876,186; Sept. 6.
Tank seam. W. Schwemlein. 1,875,666; Sept. 6.
Taps, Forming thread cutting. F. O. Wells. 1,875,362; Sept. 6.
Teeth, Glazing artificial. C. L. Morris. 1,876,015; Sept. 6.
Telegraphy and telephony, Wireless. G. M. Wright. 1,876,124; Sept. 6.
Televisor, Fog penetrating. J. V. Bayer. 1,876,272; Sept. 6.
Temperature control mechanism for heating systems. C. A. Thinn and E. A. Taylor. 1,875,957; Sept. 6.
Tension device. J. B. Daudelin. 1,875,568; Sept. 6.
Tetrahedrons, Casting. D. F. Sheldon. 1,875,668; Sept. 6.
Textile machine. F. Wilkinson. 1,876,376; Sept. 6.
Thermometer. C. R. Palmer and C. P. Mitchell. 1,875,757; Sept. 6.
Thermometer. A. D. Rose. 1,875,889; Sept. 6.
Thermostat. H. D. Colman. 1,875,369; Sept. 6.
Thread gauge. J. Hartness. 1,875,726; Sept. 6.
Threshold. F. Reese. 1,875,495; Sept. 6.
Thymol (3-oxy-1-methyl-4-isopropyl-benzol), Preparing. K. Schöllkope and A. Serini. 1,876,435; Sept. 6.
Ticket-printing-and-delivering scale, Coin-controlled gravity-operated. S. A. Rhodes and G. F. Hochriem. 1,875,887; Sept. 6.
Tie: *See*—
Type form tie.
Tie-back for drapes and curtains, Detachable. C. E. Schinkal. 1,876,026; Sept. 6.
Tie bar for bumperettes. G. W. Veale. 1,876,112; Sept. 6.
Tile, Floor. J. E. Graham. 1,876,289; Sept. 6.
Tile for boiler tubes. C. H. Johnson. 1,876,301; Sept. 6.
Tile for soil sterilization. W. Salisbury. 1,875,395; Sept. 6.
Tills, Insert for. H. G. Beard, D. E. Justus and A. Barelli. 1,875,695; Sept. 6.
Timing mechanism, Automatic. T. Longbotham and M. Bleich. 1,875,623; Sept. 6.
Tints on the fiber, Producing fast. R. Haller. 1,875,446; Sept. 6.
Tire. A. S. Michelson. Des. 87,724; Sept. 6.
Tire. C. G. Miller. Des. 87,727; Sept. 6.
Tire and rim construction, Pneumatic. A. H. Shoemaker. 1,875,893; Sept. 6.
Tire and rim lock, Spare. E. P. Hurd. 1,875,734; Sept. 6.
Tire and wheel, Balloon. A. J. Musselman. 1,876,068; Sept. 6.
Tire, Auto. C. H. Pederson. 1,876,016; Sept. 6.
Tire bead, Treating. B. W. Rowland. 1,876,076; Sept. 6.
Tire pressure gauge. J. C. Fair. 1,875,862; Sept. 6.
Tire testing machine. H. E. Warner. 1,875,786; Sept. 6.
Tire vulcanizing machine. K. K. A. Thorsen. 1,876,100; Sept. 6.
Tire wrapping machines, Bead closing mechanism. R. P. Harvey. 1,876,414; Sept. 6.
Tires, Pressure maintaining device for pneumatic. C. H. Johnson. 1,875,874; Sept. 6.
Titanium compounds, Preparation of. W. B. Llewellyn and S. F. W. Crundall. 1,876,065; Sept. 6.
Titanium oxide, Manufacture of. F. G. C. Stephens, L. J. Anderson, and W. A. Cash. 1,876,088; Sept 6.
Tobacco pipe, Smoking. E. W. Crocker. 1,875,422; Sept. 6.
Tool compensating mechanism, Machine. H. Sidgreaves. 1,876,353; Sept. 6.
Tool, Cylinder hone or lapping. T. F. Quigley. 1,876,468; Sept. 6.
Tool for high tension transmission lines, Manipulating. W. D. Hamer, C. E. Chatfield and B. Mills. 1,875,376; Sept. 6.
Tool, Glass binding. F. Henry. 1,875,728; Sept. 6.
Tool, Valve. C. L. Harris, jr., and C. H. Salstrom. 1,875,595; Sept. 6.
Tool, Well fishing. W. Oberle. 1,876,339; Sept. 6.
Tools, Compensating mechanism for machine. H. Sidgreaves. 1,876,352; Sept. 6.
Tools, Hand piece for dental. D. H. Brumm. 1,875,559; Sept. 6.
Toothbrush. E. M. McNally. 1,875,475; Sept. 6.
Toothbrush, Removable head. E. M. McNally. 1,875,476; Sept. 6.
Torch. R. Thomas. 1,875,361; Sept. 6.
Totalizer and printing means therefor. A. S. Wheelbarger and G. C. Coll. 1,876,118; Sept. 6.
Tower and process, Self-supporting dam building. C. A. Budnik. 1,876,040; Sept. 6.
Toy aeroplane. W. Rigby. Des. 87,729; Sept. 6.
Toy railway track. L. W. Rosenthal. 1,876,347; Sept. 6.

Tractor attachment. H. Bormann. 1,876,485; Sept. 6.
Tractor pulley. H. W. Simpson. 1,875,767; Sept. 6.
Tractor wheel. H. J. Coburn. 1,876,488; Sept. 6.
Traffic and alarm system, Combined. A. J. Massey. 1,875,748; Sept. 6.
Traffic controlling apparatus, Railway. V. S. Alexander and D. G. Ackerly. 1,875,839; Sept. 6.
Traffic controlling apparatus, Railway. J. P. Coleman. 1,875,853; Sept. 6.
Traffic controlling apparatus, Railway. R. A. McCann. 1,875,877; Sept. 6.
Traffic for signaling systems, Resynchronizing. C. H. Bissell. 1,875,367; Sept 6.
Traffic signal. W. F. Brettschneider. 1,875,556; Sept. 6.
Traffic signal. J. W. Bryce. 1,876,201; Sept. 6.
Traffic signal device. V. M. Osborn. 1,857,350; Sept. 6.
Train control apparatus, Induction. D. H. Schweyer. 1,875,942; Sept. 6.
Transformer, Electric. J. G. Sola. 1,875,358; Sept. 6.
Transmission, Automotive. P. MacKenzie. 1,875,386; Sept. 6.
Transmitter for fire alarm systems. G. F. Harter. 1,875,810; Sept. 6.
Trap: *See*—
Mosquito trap.
Trap and test fitting, Combined. E. Kennedy. 1,875,615; Sept. 6.
Tray, Advertising change-receiving. A. Mihalka and A. Wiese. 1,875,931; Sept. 6.
Tray mounting means for attachment to beds. B. O. Horner. 1,876,230; Sept. 6.
Trolley, Crane. O. Hively. 1,875,730; Sept. 6.
Trousers hanger. W. E. Feldman. 1,876,139; Sept. 6.
Truck, Industrial. A. H. Gfrorer. 1,876,219; Sept. 6.
Truck, Industrial. E. J. Gray and E. J. Hoyes. 1,876,410; Sept. 6.
Truck, Industrial. E. H. Remde. 1,875,762; Sept. 6.
Trunks of a bathing suit. L. S. Michelson. Des. 87,725; Sept. 6.
Tube: *See*—
X-ray tube.
Tube assembly, Water cooled. A. M. Trogner. 1,876,103; Sept. 6.
Tubes of paper or like material, Manufacture of. E. Z. Taylor. 1,876,094; Sept. 6.
Tubes to pressure vessels or pipes, System for connecting branch. J. A. Aiton. 1,875,404; Sept. 6.
Tubing machine. C. E. Maynard. 1,876,256; Sept. 6.
Turbine control mechanism. O. N. Bryant. 1,876,530–1; Sept. 6.
Turbine, Control mechanism. C. B. Campbell. 1,875,327; Sept. 6.
Type form tie. G. M. Hume. 1,876,231; Sept. 6.
Typewriter ribbon rejuvenator. F. R. Switzer. Des. 18,588; Sept. 6.
Typewriting machine. W. F. Helmond. 1,876,227–8; Sept. 6.
Typewriting machine. E. B. Hess. 1,876,459; Sept. 6.
Typewriting machine. J. J. Kittel. 1,876,502; Sept. 6.
Typewriting machine. H. H. Vickers. 1,876,183; Sept. 6.
Underframe. F. W. Hahn and J. A. Lamont. 1,875,592; Sept. 6.
Utensil, Kitchen. L. J. Kaplan and L. B. Meyerson. 1,875,818; Sept. 6.
Vacuum brake. F. K. Gruss. 1,875,723; Sept. 6.
Vacuum switch. A. Scherbius. 1,875,765; Sept. 6.
Valve. R. H. Carson. 1,875,851; Sept.
Valve. P. Duncan. 1,875,574; Sept. 6.
Valve. R. S. Hubbell. 1,876,300; Sept. 6.
Valve. W. E. King. 1,876,246; Sept. 6.
Valve, Combination gate and reversible check. W. B. Green. 1,875,591; Sept. 6.
Valve device. O. W. Thompson. 1,875,898; Sept. 6.
Valve device for connection to a hot water supply. L. D. Lovekin. 1,875,929; Sept. 6.
Valve, Flush. M. A. Hagey. 1,876,223; Sept. 6.
Valve for airbags. C. Van Rennes. 1,875,782; Sept. 6.
Valve, Internal combustion engine. V. F. Zahodiakin. 1,876,160; Sept. 6.
Valve mechanism, Well control and safety. R. D. Stockstill. 1,875,673; Sept. 6.
Valve operator. D. J. Stewart. 1,875,672; Sept. 6.
Valve pad construction. E. A. Wakefield. 1,876,367; Sept. 6.
Valve, Quick coupler. W. V. E. Thompson. 1,875,679; Sept. 6.
Valve, Radiator. W. B. Mackintosh. 1,875,387; Sept. 6.
Valve, Snap action modulating. P. F. Shivers. 1,875,511; Sept. 6.
Valve system, Thermionic. H. Andrewes. 1,876,162; Sept. 6.
Valve, Tappet. J. J. Parker. 1,875,758; Sept. 6.
Valves, Arrangement for dispersing badly conductive substances in vacuum. B. Loewe. 1,875,744; Sept. 6.
Valves, Thermostatic control for. W. D. Smith. 1,875,513; Sept. 6.
Vanity case. H. Pemberton and F. I. Doane. 1,875,650; Sept. 6.
Vanity case. D. H. Zell. 1,875,541; Sept. 6.
Vehicle. P. O'Dwyer. 1,875,647; Sept. 6.
Vehicle body construction. W. H. Lowe. 1,876,331; Sept. 6.
Vehicle brake. J. D. Tucker and O. A. Tucker. 1,876,265; Sept. 6.
Vehicle hood. J. R. Hughes. 1,875,925; Sept. 6.
Vehicle seat. C. A. Roeder. 1,875,500; Sept. 6.
Vehicle wheel. W. N. Booth. 1,876,394; Sept. 6.
Vehicle wheel. J. L. Brownell. Des. 87,710; Sept. 6.
Vehicle wheel. R. D. Evans. 1,875,331; Sept. 6.
Vehicle with reclining back, Child's. L. J. Van Guelpen. 1,876,111; Sept. 6.
Vehicles, Method and apparatus for handling motor. H. W. Laugbein. 1,876,307; Sept. 6.
Vending machine. G. Morrison. 1,876,510; Sept. 6.
Vending machine, Talking. H. C. Kenyon. 1,876,424; Sept. 6.
Veneer, Treating. E. C. Loetscher. 1,876,329; Sept. 6.
Ventilator: *See*—
Engine hood ventilator. Window ventilator.
Vessel, Hydrospeed. M. Kloen. 1,875,344; Sept. 6.
Vibrator mechanism. R. W. Baily. 1,876,271; Sept. 6.
Violin. P. Kmetko. Des. 87,721; Sept. 6.
Visor attachment for windshields of motor driven vehicles. F. J. Schmidt, jr., and C. J. Nash. 1,876,434; Sept. 6.
Voltage controller, Automatic. W. C. Heald. 1,875,868; Sept. 6.
Vulcanizer, Adjustable cavity repair. J. C. Heintz. 1,875,727; Sept. 6.
Vulcanizer with interchangeable shell. A. R. Krause. 1,875,816; Sept. 6.
Wall board. L. S. Odell. 1,876,340; Sept. 6.
Wall structure, Interior building. H. L. Walters. 1,876,528; Sept. 6.
Washing and cementing device for well casing. C. E. Burt. 1,875,414; Sept. 6.
Washing machine. L. De Vries. 1,876,210; Sept. 6.
Washing machine. A. and M. L. Louvier. 1,876,144; Sept. 6.
Waste mixtures, Apparatus for reclaiming. W. M. Kelly. 1,876,243; Sept. 6.
Water flushing device, Actuating a. A. L. R. Bourdet. 1,875,983; Sept. 6.
Water gauge. T. N. Thomson. 1,875,779; Sept. 6.
Water motor. W. R. Morris. 1,876,070; Sept. 6.
Wave signaling system. G. Priechenfried. 1,876,163; Sept. 6.
Waxer and polisher. J. A. Woods. 1,875,970; Sept. 6.
Weather strip. F. Reese. 1,875,656; Sept. 6.
Weighing apparatus. J. W. Taylor. 1,875,955; Sept. 6.
Weighing device, Continuous. P. L. Butterfield. 1,876,396; Sept. 6.
Weight calculating machine. E. L. Thearle. 1,876,525; Sept. 6.
Well forming apparatus. R. P. Simmons. 1,875,357; Sept. 6.
Wells, Method of and apparatus for shooting. G. Fox. 1,875,583; Sept. 6.
Wheel: *See*—
Tractor wheel. Vehicle wheel.
Wheel cap assembly, Steering. J. J. Punke. 1,876,165; Sept. 6.
Wheels, Making pneumatic. A. J. Musselman. 1,875,390; Sept. 6.
Wheels, Making pneumatic tire. A. J. Musselman. 1,875,643; Sept. 6.
Whistle. O. A. Kindom. Des. 87,720; Sept. 6.
Wind motor. J. A. Pinaud. 1,876,018; Sept. 6.
Winding machine. G. F. Eckstein. 1,875,861; Sept. 6.
Window. C. D. Rossbach. 1,875,662; Sept. 6.
Window construction. R. Wyckoff. 1,876,125; Sept. 6.
Window guide channel. C. J. McKinney. 1,876,519; Sept. 6.
Window, Safety paying teller. M. L. Orr. 1,875,649; Sept. 6.
Window, Ventilating. H. V. Taylor. 1,876,365; Sept. 6.
Window ventilator. M. Marsa. 1,875,315; Sept. 6.
Windshield cleaning device. T. J. Smulski. 1,875,896; Sept. 6.
Windshield heater. A. L. Bird. 1,876,389; Sept. 6.
Wiper, Windshield. T. J. Smulski. 1,875,895; Sept. 6.
Wire reel. J. A. Boernsen. 1,876,390; Sept. 6.
Wood, Moisture indicating instrument for. C. G. Suits and M. E. Dunlap. 1,875,359; Sept. 6.
Wooden plank house. J. B. Een. 1,875,576; Sept. 6.
Work handling device. J. C. Hanna. 1,876,290; Sept. 6.
Work support for welding operations. R. W. Power. 1,875,761; Sept. 6.
Work supporting device for shoe ornamenting machinery. B. W. Freeman. 1,875,720; Sept. 6.
Wrapper feed control for article enveloping machines, Automatic. T. W. Alm. 1,875,974; Sept. 6.
Wrapping machine. T. Daniels. 1,875,567; Sept. 6.
Wrecking implement. F. W. Johnson. 1,875,612; Sept. 6.
Wrench. P. Notarianni. 1,875,646; Sept. 6.
Wrench. W. R. Phillips, sr. 1,875,490; Sept. 6.
Wrench. J. Wesolik. 1,875,836; Sept. 6.
Wrench set unit. J. Kneler. 1,875,815; Sept. 6.
X-ray apparatus. J. B. Wantz. 1,876,437; Sept. 6.
X-ray tube. T. H. Forde and N. M. Mellars. 1,876,049; Sept. 6.
Zinc tin alloy, Plating. M. M. Thompson and J. C. Patten. 1,876,156; Sept. 6.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 6, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

2— 8: 1,876,521
12: 1,876,225
1,876,412
1,876,463
51: 1,876,529
67: 1,876,348
78: 1,876,311
169: 1,875,441
254: 1,875,847
265: 1,875,950
4— 194: 1,875,764
209: 1,876,127
249: 1,875,963
5— 31: 1,875,976
139: 1,875,456
140: 1,876,327
172: 1,784,045
186: 1,876,102
269: 1,876,429
294: 1,875,805
308: 1,876,230
321: 1,875,421
330: 1,875,522
1,875,657
334: 1,875,525
6— 10: 1,876,395
7— 17: 1,875,612
8— 5: 1,875,446
1,875,602
20: 1,975,452
1,875,964
9— 17: 1,875,630
25: 1,875,496
10— 11: 1,986,174
27: 1,875,709
86: 1,876,386
12— 1: 1,876,064
1,876,055
31.5: 1,985,852
47.1: 1,876,078
13— 34: 1,875,787
15— 104: 1,876,284
135: 1,865,426
163: 1,875,613
176: 1,875,475
1,875,476
266: 1,875,820
16— 86: 1,875,453
163: 1,875,922
179: 1,876,402
17— 11: 1,875,980
43: 1,876,258
44: 1,876,279
18— 2: 1,875,479
1,876,309
5: 1,786,226
14: 1,876,256
16: 1,875,712
17: 1,876,333
18: 1,875,727
1,875,876
1,876,100
33: 1,875,596
1,875,660
38: 1,875,816
45: 1,875,782
50: 1,875,903
53: 1,875,372
1,875,943
1,875,997
54: 1,876,130
58: 1,876,229
59: 1,876,166
61: 1,876,432
19— 63: 1,876,203
74: 1,875,356
80: 1,875,710
134: 1,876,376
163: 1,876,194
20— 1.01: 1,875,488
1,875,649
20: 1,875,599
45: 1,876,363
1,876,365
55: 1,875,542
69: 1,875,495
1,875,656

20— 91: 1,875,888
92: 1,875,576
22— 65: 1,876,261
189: 1,875,501
212: 1,876,073
23— 3: 1,875,920
42: 1,875,354
91: 1,876,084
1,876,085
95: 1,875,348
107: 1,876,011
143: 1,876,453
151: 1,876,213
199: 1,875,926
208: 1,876,175
212: 1,875,923
239: 1,875,932
24— 66: 1,876,464
71: 1,876,443
73: 1,876,477
75: 1,876,196
81: 1,876,184
88: 1,875,886
90: 1,876,403
120: 1,876,505
137: 1,875,461
178: 1,875,319
205: 1,876,338
213: R. 18,589
224: 1,875,933
232: 1,875,400
252: 1,875,420
265: 1,876,383
25— 30: 1,875,738
42: 1,875,644
131: 1,875,366
1,875,463
142: 1,875,365
154: 1,876,205
156: 1,876,444
157: 1,876,015
26— 10: 1,875,703
27— 26: 1,875,435
28— 1: 1,875,894
29— 33: 1,876,095
84: 1,875,728
1,876,191
56.3: 1,875,595
96: 1,875,967
105: 1,876,167
156.8: 1,876,518
159.3: 1,876,393
30— 3: 1,876,421
9: 1,876,180
12: 1,875,480
1,875,538
1,875,990
13: 1,876,218
31— 79: 1,875,604
32— 9: 1,875,499
10: 1,875,680
11: 1,875,559
36.1: 1,875,949
33— 1: 1,876,431
20: 1,875,363
23: 1,875,833
30: 1,876,069
62: 1,875,756
168: 1,875,784
172: 1,875,617
1,876,280
199: 1,875,726
1,875,871
1,875,872
1,875,899
217: 1,876,473
34— 4: 1,876,046
6: 1,876,025
32: 1,875,469
35— 6: 1,875,389
12: 1,876,418
36— 36: 1,876,361
42: 1,875,558
54: 1,876,253
72: 1,875,806
73: 1,876,195
37— 67: 1,875,603

37— 108: 1,876,283
155: 1,875,534
157: 1,875,778
172: 1,875,492
39— 75: 1,875,489
87: 1,875,631
40— 21: 1,875,493
22: 1,875,741
33: 1,875,563
55: 1,875,321
130: 1,875,424
1,875,931
1,876,448
132: 1,875,520
140: 1,876,405
145: 1,875,878
41— 4: 1,876,001
15: 1,875,971
26: 1,875,721
33: 1,875,410
38: 1,875,700
42: 1,875,819
42— 84: 1,875,941
43— 3: 1,875,733
46: 1,876,275
48: 1,876,342
45— 6: 1,875,377
7: 1,875,695
11: 1,875,772
1,876,010
1,876,274
1,876,400
1,876,446
1,876,447
31: 1,875,635
1,875,766
1,875,864
48: R. 18,591
1,876,336
51: 1,875,892
60: 1,875,785
85: 1,876,387
91: 1,875,642
97: 1,875,554
1,876,319
137: 1,875,371
46— 37: 1,876,481
40: 1,875,355
1,876,121
1,876,381
1,876,433
1,876,458
47— 23: 1,875,533
41: 1,876,322
47: 1,875,618
48: 1,875,504
58: 1,875,473
1,875,561
48— 180: 1,876,037
49— 5: 1,875,827
9: 1,876,005
14: 1,875,973
17: 1,875,491
17.1: 1,876,031
18: 1,875,818
41: 1,875,796
54: 1,876,474
56: 1,876,090
92: 1,875,964
51— 15: 1,875,994
46: 1,876,314
59: 1,875,537
80: 1,876,328
92: 1,876,178
108: 1,875,962
131: 1,876,202
176: 1,876,380
184.2: 1,876,468
215: 1,876,315
225: 1,875,547
238: 1,875,486
52— 25: 1,875,902
53— 3: 1,875,648
1,876,474
7: 1,876,358
55— 9: 1,876,150
58: 1,876,137

56— 25: 1,876,504
262: 1,876,169
288: 1,876,006
292: 1,875,349
310: 1,876,220
314: 1,876,462
346: 1,875,605
392: 1,876,148
58— 24: 1,875,800
1,875,801
26: 1,876,020
59— 35: 1,875,905
85: 1,876,345
60— 67: 1,875,326
1,875,327
1,876,530
1,876,531
61— 3: 1,875,668
10: 1,875,395
30: 1,876,040
44: 1,876,496
57: 1,875,835
77: 1,875,687
1,875,825
62— 92: 1,876,047
115: 1,876,212
119.5: 1,875,626
1,875,654
120.5: 1,875,875
121: 1,876,266
141: 1,875,539
64— 8: 1,875,385
65— 54: 1,876,264
66— 25: 1,875,826
75: 1,875,855
109: 1,876,417
117: 1,876,259
163: 1,875,515
68— 9: 1,875,579
1,875,824
1,875,993
1,876,277
12: 1,876,508
30: 1,876,420
70— 14: 1,876,115
29: 1,876,060
1,876,081
46: 1,875,396
54: 1,876,132
75: 1,875,978
90: 1,875,734
91: 1,876,257
127: 1,875,686
71— 7: 1,875,879
1,876,501
72— 68: 1,876,359
101: 1,875,667
124: 1,876,340
73— 21: 1,875,472
31: 1,875,862
51: 1,875,439
1,875,736
1,876,396
1,876,523
1,876,524
1,876,526
1,876,527
52: 1,875,889
54: 1,875,779
1,876,244
1,876,245
82: 1,875,803
110: 1,875,524
118: 1,875,757
137: 1,875,725
151: 1,876,525
74— 1: 1,875,854
1,876,129
7: 1,875,787
1,875,798
14: 1,875,896
1,876,271
1,876,316
1,876,532
34: 1,876,210
38: 1,875,682
1,875,838

74— 39: 1,875,791
53: 1,875,558
54: 1,876,135
58: 1,875,487
1,876,098
1,876,388
59: 1,875,386
81: 1,875,399
105: 1,875,527
108: 1,875,822
110: 1,875,323
75— 1: 1,876,262
1,876,411
1,876,467
76— 69: 1,875,736
101: 1,875,362
78— 29: 1,875,939
48: 1,875,448
81: 1,875,586
92: 1,875,911
96: 1,876,290
81— 3: 1,876,021
9.1: 1,876,499
9.51: 1,876,241
57: 1,875,529
71: 1,875,484
100: 1,875,646
113: 1,875,536
162: 1,875,490
83— 8: 1,875,743
11: 1,875,817
1,876,416
46: 1,875,531
53: 1,876,460
73: 1,875,516
1,875,622
86— 48: 1,876,217
87— 5: 1,875,552
6: 1,875,937
13: 1,875,320
88— 2.2: 1,875,829
1,875,830
14: 1,875,665
1,875,788
17: 1,876,392
18.6: 1,876,413
24: 1,875,751
1,876,260
1,876,384
40: 1,876,176
54: 1,876,497
89— 35: 1,876,216
90— 3: 1,876,372
15: 1,876,204
1,876,248
22: 1,876,352
1,876,353
57: 1,875,739
58: 1,875,910
91— 7: 1,876,224
12: 1,876,062
12.7: 1,876,278
32: 1,875,701
39: 1,875,970
46: 1,876,050
59: 1,876,251
62.5: R. 18,588
92— 14: 1,876,522
48: 1,875,526
52: 1,876,399
93— 1: 1,876,074
2: 1,875,975
7: 1,875,567
1,875,979
44: 1,875,986
81: 1,876,094
94— 7: 1,875,867
12: 1,876,042
95— 5: 1,876,052
32: 1,876,143
75: 1,876,442
96— 2: 1,876,147
97— 215: 1,876,488
98— 99: 1,875,315
108: 1,875,683
114: 1,875,684
99— 5: 1,875,352

90— 10: 1,875,960
1,876,105
11: 1,876,090
100— 48: 1,876,064
49: 1,875,678
101— 2: 1,875,811
78: 1,875,870
93: 1,875,845
142: 1,875,869
369: 1,875,995
378: 1,876,378
404: 1,876,231
102— 4: 1,875,583
29: 1,875,985
103— 23: 1,875,904
40: 1,875,398
87: 1,876,070
102: 1,875,419
132: 1,876,370
239: 1,875,440
104— 26: 1,875,839
91: 1,875,535
1,876,373
100: 1,875,966
105— 4: 1,875,958
1,876,185
1,876,187
44: 1,875,343
51: 1,875,627
172: 1,875,342
182: 1,875,380
220: 1,875,770
236: 1,875,894
1,876,297
244: 1,875,584
250: 1,876,003
253: 1,875,506
292: 1,876,404
358: 1,876,189
360: 1,875,609
1,876,186
1,876,190
362: 1,875,502
364: 1,876,240
369: 1,875,406
415: 1,875,381
423: 1,876,331
106— 7: 1,876,289
24: 1,875,897
1,876,122
31: 1,875,802
107— 19: 1,876,152
20: 1,876,022
28: 1,875,601
58: 1,875,482
108— 5.4: 1,875,831
1,875,832
109— 1: 1,875,690
1,876,192
3: 1,876,193
110— 45: 1,876,310
96: 1,876,301
104: 1,875,808
1,875,934
111— 52: 1,876,485
112— 11: 1,875,753
130: 1,875,578
113— 11: 1,875,353
50: 1,876,161
104: 1,875,761
114— 66.5: 1,875,344
67: 1,875,629
72: 1,875,634
115— 17: 1,875,912
24: 1,875,451
116— 37: 1,875,676
51: 1,875,556
54: 1,875,418
173: 1,876,351
118— 55: 1,876,445
65: 1,875,938
119— 16: 1,875,433
1,876,503
22: 1,876,371
34: 1,876,325
150: 1,876,141
120— 4: 1,876,167

120— 42: 1,875,553
43: 1,876,151
46: 1,875,507
1,876,298
49: 1,876,461
108: 1,875,425
121— 38: 1,875,723
41: 1,876,104
119: 1,876,506
122— 35: 1,875,606
122: 1,875,828
223: 1,876,475
224: 1,875,946
226: 1,875,948
325: 1,875,792
356: 1,875,549
383: 1,875,407
389: 1,875,544
478: 1,876,291
123— 47: 1,876,507
52: 1,875,670
1,875,724
65: 1,876,528
90: 1,875,758
119: 1,875,444
142: 1,876,406
170: 1,875,580
177: 1,876,160
191: 1,875,589
1,875,620
125— 12: 1,876,480
126— 73: 1,875,545
105: 1,875,685
110: 1,875,393
242: 1,875,840
286: 1,875,616
295: 1,875,581
127— 50: 1,876,491
128— 159: 1,876,282
317: 1,876,337
129— 8: 1,876,232
1,876,360
1,876,374
16: 1,875,382
1,876,209
1,876,233
16.1: 1,876,149
16.5: 1,876,207
16.7: 1,876,236
16.8: 1,876,208
23: 1,876,419
131— 5: 1,876,027
12: 1,875,422
37: 1,875,988
1,876,028
39: 1,876,012
43: 1,876,029
51: 1,875,432
1,876,299
55: 1,876,214
132— 13: 1,876,033
52: 1,875,611
83: 1,875,541
1,876,572
1,875,834
134— 51: 1,875,458
1,875,502
58: 1,876,065
58.5: R. 18,590
137— 13: 1,875,857
34.3: 1,875,513
71: 1,875,732
77: 1,876,615
78: 1,876,623
93: 1,876,223
111: 1,876,157
112: 1,875,856
139: 1,875,511
161: 1,875,929
138— 9: 1,876,023
1,876,024
139— 223: 1,875,370
426: 1,875,445
1,875,517
1,875,740
144— 245: 1,875,633
309: 1,876,329
1,876,330
146— 2: 1,875,496
7: 1,875,481
18: 1,876,492
37: 1,876,000
55: 1,876,051
107: 1,875,514
182: 1,876,471
219: 1,875,944
148— 6: 1,876,131
18: 1,876,170
31: 1,876,091
150— 1.5: 1,876,134
2: 1,875,585
29: 1,875,909
54: 1,875,316
151— 32: 1,875,664
1,875,930

152— 11: 1,875,874
13: 1,876,068
1,876,367
14: 1,876,016
20: 1,875,893
153— 32: 1,875,954
54: 1,876,457
154— 2: 1,875,735
1,876,357
9: 1,876,037
1,876,375
14: 1,875,390
1,875,643
1,876,076
28: 1,876,221
45: 1,876,071
45.9: 1,875,364
155— 9: 1,875,500
13: 1,875,915
16: 1,875,614
22: 1,876,111
56: 1,875,478
81: 1,876,308
85: 1,875,449
86: 1,875,698
88: 1,875,588
96: 1,876,247
117: 1,876,479
139: 1,876,403
179: 1,875,521
1,876,101
1,876,305
185: 1,875,628
156— 10: 1,876,036
20: 1,876,060
1,876,061
27: 1,875,812
28: 1,876,430
33: 1,876,026
38: 1,876,486
158— 1: 1,875,693
2: 1,876,509
7: 1,876,086
10: 1,875,750
27.4: 1,875,361
111: 1,875,394
115: 1,876,495
117.1: 1,875,388
117.5: 1,876,168
161— 16: 1,876,072
164— 23: 1,875,799
25: 1,876,285
29: 1,875,720
68: 1,876,456
76: 1,876,075
112: 1,876,097
119: 1,876,382
166— 1: 1,875,414
14: 1,875,632
1,875,749
1,876,177
1,876,793
15: 1,875,673
16: 1,875,577
18: 1,875,413
22: 1,875,466
38: 1,875,494
91: 1,875,530
168— 41: 1,875,405
169— 4: 1,876,222
1,876,425
171— 95: 1,876,483
119: 1,875,868
1,876,427
327: 1,875,324
1,875,953
172— 120: 1,875,763
126: 1,875,895
239: 1,876,476
279: 1,876,235
293: 1,875,367
173— 264: 1,876,350
175— 30: 1,876,513
1,876,514
41.5: 1,875,360
183: 1,875,359
1,876,324
1,875,358
1,876,436
320: 1,876,449
339: 1,876,113
1,876,164
356: 1,875,968
1,876,451
358: 1,875,590
363: 1,876,428
375: 1,876,281
1,876,320
176— 16: 1,875,981

176— 27: 1,875,692
48: 1,875,963
124: 1,876,058
125: 1,875,972
1,876,063
177— 327: 1,875,996
1,875,748
339: 1,875,350
1,876,201
352: 1,875,883
378: 1,875,810
178— 6: 1,876,272
7: 1,875,940
44: 1,876,961
51: 1,876,163
88: 1,875,935
179— 171: 1,876,106
1,876,107
1,876,109
180— 22: 1,876,410
27: 1,876,155
43: 1,876,249
69: 1,875,619
1,875,925
181— 27: 1,875,429
31: 1,876,466
32: 1,876,306
183— 9: 1,875,711
1,876,368
10: 1,875,471
21: 1,875,755
22: 1,876,465
48: 1,875,427
77: 1,875,332
1,876,002
85: 1,875,341
184— 1: 1,875,564
6: 1,875,718
7: 1,875,706
1,876,343
185— 1: 1,876,302
52: 1,876,438
188— 2: 1,876,397
18: 1,876,110
72: 1,875,434
77: 1,875,717
78: 1,875,328
1,875,345
1,875,391
1,875,392
1,875,443
1,875,508
1,875,523
1,875,571
1,875,945
1,876,069
1,876,093
1,876,114
1,876,136
1,876,177
79.5: 1,875,468
1,876,077
1,876,349
88: 1,876,146
89: 1,875,860
1,876,004
1,876,092
130: 1,875,409
152: 1,875,989
1,876,265
174: 1,875,436
194: 1,875,759
204: 1,876,286
218: 1,876,354
250: 1,875,374
1,875,645
1,876,140
189— 1: 1,876,198
34: 1,876,528
62: 1,876,017
69: 1,875,662
1,876,125
192— 3: 1,876,498
4: 1,875,417
1,875,865
60: 1,875,696
110: 1,876,267
125: 1,875,974
194— 103: 1,875,900
195— 20: 1,875,368
1,875,401
1,875,689
196— 51: 1,876,206
53: 1,876,009
1,876,270
55: 1,875,823
121: 1,876,035
132: 1,876,364
197— 22: 1,876,459
110: 1,876,227
127: 1,875,917
1,876,183
1,876,228
198— 1: 1,876,307
10: 1,875,783

198— 20: 1,875,532
21: 1,876,154
23: 1,876,252
33: 1,875,423
1,876,066
94: 1,875,375
118: 1,876,398
209: 1,875,863
220: 1,876,317
230: 1,875,442
199— 59: 1,875,565
200— 6: 1,875,569
8: 1,876,133
52: 1,875,707
59: 1,876,165
1,876,321
83: 1,875,669
84: 1,875,510
1,876,044
104: 1,876,295
115.5: 1,875,378
121: 1,876,426
122: 1,875,625
131: 1,875,416
139: 1,875,369
142: 1,875,928
144: 1,875,765
169: 1,875,546
201— 63: 1,876,116
202— 51: 1,875,774
143: 1,876,108
158: 1,876,179
204— 2: 1,876,156
5: 1,875,503
6: 1,875,346
9: 1,875,722
19: 1,875,760
32: 1,875,671
206— 7: 1,876,238
12: 1,876,493
16: 1,875,815
44: 1,875,781
46: 1,876,181
72: 1,876,043
208— 33: 1,875,647
184: 1,875,512
209— 2: 1,875,890
72: 1,876,038
91: 1,875,884
98: 1,875,562
139: 1,876,516
396: 1,876,034
210— 44: 1,876,243
167: 1,876,439
176: 1,875,790
199: 1,876,123
203: 1,876,326
209: 1,876,234
211— 43: 1,876,346
71: 1,876,172
153: 1,876,494
157: 1,875,460
212— 130: 1,875,730
213— 8: 1,875,704
43: 1,876,145
48: 1,876,019
188: 1,876,341
190: 1,876,239
220: 1,875,505
214— 6: 1,876,211
18: 1,875,921
65: 1,876,219
215— 46: 1,875,431
48: 1,876,152
58: 1,875,325
216— 9: 1,875,610
62: 1,875,582
217— 12: 1,875,843
69: 1,876,323
122: 1,875,694
219— 2: 1,876,356
6: 1,875,560
8: 1,875,483
24: 1,875,882
25: R. 18,592
37: 1,875,844
39: 1,875,752
1,876,053
220— 1: 1,875,699
1,876,304
39: 1,875,428
46: 1,876,450
55: 1,875,906
247— 1: 1,876,487
248— 1: 1,875,813
2: 1,875,977
11: 1,875,403
85: 1,876,188
86: 1,875,908
90: 1,875,379
221— 47.1: 1,875,745
50: 1,875,902
60: 1,875,621
250— 2: 1,876,124
9: 1,875,951
10: 1,876,159
16: 1,876,117
17: 1,875,952

221— 97: 1,875,450
101: 1,876,512
107: 1,876,332
223— 17: 1,876,344
38: 1,875,462
61: 1,875,416
68: 1,876,139
226— 63: 1,875,866
82: 1,875,789
227— 8: 1,875,807
228— 58: 1,876,335
229— 5.6: 1,876,484
7: 1,875,112
14: 1,875,497
28: 1,876,120
29: 1,876,063
32: 1,876,200
39.5: 1,875,455
57: 1,875,773
65: 1,875,919
68: 1,875,804
230— 97: 1,875,846
111: 1,875,754
133: 1,875,881
152: 1,875,397
231— 39: 1,875,991
232— 6: 1,875,691
234— 1: 1,875,653
235— 33: 1,876,118
1,876,119
58: 1,875,849
1,875,913
1,876,056
1,876,294
60: 1,876,057
1,876,293
1,876,296
69: 1,875,519
70: 1,875,927
92: 1,875,850
130: 1,875,705
144: 1,875,437
1,875,518
236— 15: 1,875,548
26: 1,875,947
42: 1,875,387
1,875,851
58: 1,875,898
91: 1,875,957
237— 12.3: 1,875,637
78: 1,875,681
240— 1.2: 1,876,062
3.1: 1,876,514
1,876,511
4: 1,876,313
6.4: 1,876,385
6.45: 1,875,650
7.7: 1,875,007
41.38: 1,875,384
48.4: 1,875,573
1,876,362
1,875,730
242— 62: 1,876,414
66: 1,875,861
72: 1,876,490
78: 1,875,566
92: 1,876,390
118: 1,876,215
147: 1,875,568
158: 1,875,467
244— 1: 1,876,153
2: 1,876,158
12: 1,876,096
1,876,472
15: 1,875,891
25: 1,875,570
29: 1,875,465
1,875,593
1,875,675
246— 3: 1,875,587
34: 1,875,877
45: 1,875,859
63: 1,875,942
1,876,032
247— 11: 1,876,199
249— 85: 1,875,794
101: 1,876,144
260— 8: 1,875,408
11: 1,876,999
16: 1,876,059
106: 1,875,447
1,875,540
118: 1,876,366
120: 1,875,688
127: 1,875,746
1,875,747
1,875,775
1,875,776
132: 1,876,454
133: 1,875,731
135: 1,875,536
142: 1,875,916
154: 1,876,435
156: 1,875,714
168: 1,875,317
1,876,007
1,876,008
170: 1,875,924
261— 2: 1,876,716
13: 1,876,464
41: 1,875,713
44: 1,875,557
262— 30: 1,876,333
1,875,334
1,875,335
1,875,336
1,875,337
1,875,338
1,875,339
1,875,340
1,875,351
1,875,914
1,876,517
263— 27: 1,876,260
264— 15: 1,875,470
265— 9: 1,875,887
25: 1,875,742
59: 1,875,955
69: 1,875,809
266— 7: 1,876,440
19: 1,875,459
267— 71: 1,876,138
268— 63: 1,875,771
128: 1,875,901
270— 61: 1,876,039
79: 1,875,655
271— 2.1: 1,876,171
2.6: 1,875,777
54: 1,876,255
273— 85: 1,876,469
144: 1,876,128
274— 10: 1,875,641
23: 1,875,848
30: 1,876,273
275— 2: 1,876,409
277— 21: 1,875,509
33: 1,875,591
45: 1,876,246
279— 6: 1,875,959
56: 1,875,737
280— 33.1: 1,875,477
1,875,636
33.74: 1,875,969
281— 6: 1,875,543
7: 1,875,659

284— 18: 1,875,679
18: 1,875,780
285— 25: 1,875,404
28: 1,875,435
31: 1,875,640
111: 1,876,415
120: 1,875,330
1,875,885
146: 1,875,708
194: 1,876,455
286— 9: 1,876,520
11: 1,876,515
16: 1,875,936
287— 90: 1,875,575
114: 1,875,555
288— 1: 1,875,842
292— 38: 1,876,173
66: 1,875,880
73: 1,875,965
169: 1,876,079
217: 1,875,768
256: 1,876,237
292— 263: 1,875,873
325: 1,876,391
293— 55: 1,876,112
58: 1,876,470
294— 67: 1,875,702
70: 1,876,288
97: 1,876,339
122: 1,876,422
296— 44.5: 1,876,519
92: 1,876,242
95: 1,876,434
299— 15: 1,875,658
67: 1,876,250
69: 1,876,099
73: 1,876,389
83: 1,875,411
84: 1,876,048
88: 1,875,841
89: 1,875,729
1,875,821
1,876,441
97: 1,875,992
299—107.1: 1,875,457
120: 1,876,377
300— 1: 1,875,551
301— 9: 1,876,394
11: 1,875,331
35: 1,875,402
124: 1,875,797
302— 49: 1,875,677
303— 20: 1,876,013
1,876,014
306— 16: 1,875,674
306— 30: 1,875,376
308— 59: 1,876,369
160: 1,876,234
236: 1,875,719
312— 35: 1,876,424
57: 1,876,292
97: 1,876,510
106: 1,875,383
140: 1,876,423
189: 1,876,407

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acme White Lead & Color Works, Detroit, Mich. Prepared paints, semi-paste paints, paint reducers, varnish removers, etc. Serial No. 328,772; Sept. 13. Class 16.

Allen Manufacturing Company, The, Hartford, Conn. Machine screws and metal plugs. Serial No. 328,971; Sept. 13. Class 13.

Allen, Mark W., & Co., Detroit, Mich. Cleansing cream, face powder, brilliantine, etc. Serial No. 312,684; Sept. 13. Class 6.

Allied Grease & Oil Co., Chicago, Ill. Lubricating greases. Serial No. 317,447; Sept. 13. Class 15.

American Advertised Products, Incorporated, Chicago, Ill. Shampoo. Serial No. 329,127; Sept. 13. Class 6.

American Crayon Company, The, Sandusky, Ohio. Paste and mucilage brushes. Serial No. 327,862; Sept. 13. Class 29.

Archer Rubber Company, Milford, Mass. Rubberized fabrics. Serial No. 329,010; Sept. 13. Class 50.

Baby-Touch Hair Remover Company. (See Davies, James O.)

Barber Asphalt Company, The, Philadelphia, Pa. Composition roofing and shingles. Serial No. 329,217; Sept. 13. Class 12.

Baxter, John A., Cambridge, Ohio. Printed cards and cardboard signs. Serial No. 295,326; Sept. 13. Class 38.

Belanger, John T., doing business as Belanger Fan & Blower Company, Detroit, Mich. Ventilating and exhaust fans and blowers. Serial No. 324,208; Sept. 13. Class 34.

Berry, James B., Sons' Co., Oil City, Pa., and Chicago, Ill. Gasoline. Serial No. 326,125; Sept. 13. Class 15.

Best Malt Products Company, Chicago, Ill. Malt syrup. Serial No. 329,012; Sept. 13. Class 46.

Be Te U Corporation, Salt Lake City, Utah. Heat generators of the gravity-feed type. Serial No. 322,305; Sept. 13. Class 34.

Bird Haven, Reseda, Calif. Live birds. Serial No. 327,999; Sept. 13. Class 1.

Black Diamond Paint and Varnish Works, Inc., Cincinnati, Ohio. Paste and ready mixed paints, paint enamels, and roof paints. Serial No. 328,750; Sept. 13. Class 16.

Bon Ami Company, The, New York, N. Y. Polishing and cleaning powder. Serial No. 326,803; Sept. 13. Class 4.

Boston Varnish Company, Everett, Mass. Varnishes, paint enamels, stains, etc. Serial No. 328,574; Sept. 13. Class 16.

Breslauer, A., Inc., New York, N. Y. Face powder, rouge, and compacts, etc. Serial No. 324,773; Sept. 13. Class 6.

Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. Serial No. 328,911; Sept. 13. Class 39.

Brown, I. Edward, Inc., New York, N. Y. Metal polishes and marble cleaning powder. Serial No. 323,768; Sept. 13. Class 4.

Budd Wheel Company, Philadelphia, Pa. Wire wheel spoke shrouds. Serial No. 320,777; Sept. 13. Class 19.

Burns, Samuel R., Newark, N. J. Automatic taping machines. Serial No. 329,220; Sept. 13. Class 23.

Calavo Growers of California, Los Angeles, Calif. Fresh avocados. Serial No. 324,589; Sept. 13. Class 46.

California Redwood Association, San Francisco, Calif. Lumber. Serial No. 329,255; Sept. 13. Class 12.

Camden Tanning Co. Limited, The, Runcorn, England, Sole leather. Serial No. 329,176; Sept. 13. Class 1.

Carthage Mills Incorporated, Cincinnati, Ohio. Printed felt base floorings in piece goods form. Serial No. 318,040; Sept. 13. Class 20.

Casterline Bros., Milwaukee, Wis. Cosmetics used for removing cuticle, polishing nails, and removing nail polish. Serial No. 328,767; Sept. 13. Class 6.

Chemical Paper Manufacturing Company, Holyoke, Mass. Writing and printing papers. 329,303; Sept. 13. Class 37.

Cincinnati Soap Company, The, Cincinnati, Ohio. Soaps. Serial No. 328,685; Sept. 13. Class 4.

Col-Tex Refining Company, Wilmington, Del., and Oklahoma City, Okla. Gasoline, furnace oils, and fuel oils. Serial No. 328,721; Sept. 13. Class 15.

Concord Silversmiths, Inc., Concord, N. H. Silver articles. Serial No. 321,459; Sept. 13. Class 28.

Conroy, Edward C., doing business as E. C. Conroy Coffee Co., Kansas City, Mo. Coffee. Serial No. 329,048; Sept. 13. Class 46.

Consolidated Mining and Smelting Company of Canada, Limited, The, Trail, Canada. Chemical fertilizer. Serial No. 328,238; Sept. 13. Class 10.

Crescent Tool Company, Jamestown, N. Y. Tool kits for hand tools. Serial No. 325,284; Sept. 13. Class 23.

Dairymen's League Co-Operative Association, Inc., Utica and New York, N. Y. Sour cream, dried skim milk, chocolate milk, etc. Serial No. 328,960; Sept. 13. Class 46.

Davies, James O., doing business as Baby-Touch Hair Remover Company, St. Louis, Mo. Article for removing superfluous or unsightly hair. Serial No. 328,914; Sept. 13. Class 44.

Davis & Scanlan Co., Boston, Mass. Color remover. Serial No. 328,326; Sept. 13. Class 6.

Diesel Filter Co., Inc., Astoria, Oreg. Oil filters. Serial No. 328,915; Sept. 13. Class 23.

Dudley Lock Corporation, Chicago, Ill. Locks. Serial No. 328,980; Sept. 13. Class 25.

Elkton Pharmaceutical Co. (See Greenwald, Jacob J., M. D.)

Exhibit Supply Company, The. (See Meyer, John F.)

Firestone Footwear Company, Hudson, Mass. Footwear. Serial No. 328,784; Sept. 13. Class 39.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. Serial No. 329,279; Sept. 13. Class 9.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. Serial No. 329,281; Sept. 13. Class 9.

Firestone Tire & Rubber Company, The, Akron, Ohio. Matches. Serial No. 329,283; Sept. 13. Class 9.

Frank and Company, Milwaukee, Wis. Frankfurters. Serial No. 325,944; Sept. 13. Class 46.

Franke, Peter, West Haven, Conn. Honey flavored popcorn. Serial No. 317,166; Sept. 13. Class 46.

Freeman Shoe Corporation, Beloit, Wis. Boots and shoes. Serial No. 326,285; Sept. 13. Class 39.

General Desserts Corporation, New York, N. Y. Chocolate malt powder preparations. Serial No. 328,289; Sept. 13. Class 46.

General Talking Pictures Corporation, New York, N. Y. Sound picture apparatus. Serial No. 316,426; Sept. 13. Class 26.

Giordano, Angelo, Westerly, R. I. Cream for scabs, sores, pimples, etc.; herb liniment and medicinal herbs. Serial No. 328,868; Sept. 13. Class 6.

Golden, Asher, New York, N. Y. Ball and roller bearings. Serial No. 329,215; Sept. 13. Class 23.

Goodrich, B. F., Company, The, New York, N. Y. Footwear. Serial No. 326,100; Sept. 13. Class 39.

Graham, William, & Company, Baltimore, Md. Turpentine and linseed oil. Serial No. 328,987; Sept. 13. Class 16.

Grand Rapids Furniture Polish Co., Grand Rapids, Mich. Furniture polish. Serial No. 328,016; Sept. 13. Class 16.

Gray-Storative. (See Sulkie, Margaret M.)

Greenwald, Jacob J., Md., doing business as Elkton Pharmaceutical Co., Elkton, Md. Preparations for the treatment of coughs and hoarseness. Serial No. 328,889; Sept. 13. Class 6.

Hillyard Chemical Company, St. Joseph, Mo. Liquid floor polish. Serial No. 324,517; Sept. 13. Class 16.

Hillyard Chemical Company, St. Joseph, Mo. Liquid floor wax. Serial No. 329,143; Sept. 13. Class 16.

Hood Rubber Company, Inc., Wilmington, Del., and Watertown, Mass. Footwear. Serial No. 326,103; Sept. 13. Class 39.

Hormats, Robert, doing business as Universal Chemical Company, Baltimore, Md. Floor polish. Serial No. 326,846; Sept. 13. Class 16.

Hough Shade Corporation, Janesville, Wis. Porch shades. Serial No. 329,447; Sept. 13. Class 32.

Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. Serial No. 329,190; Sept. 13. Class 19.

Hydrex Asphalt Products Corporation, New York, N. Y. Sound-deadening and insulating felt. Serial No. 328,293; Sept. 13. Class 12.

Johnson & Johnson, New Brunswick, N. J. Toothbrushes. Serial No. 328,732; Sept. 13. Class 29.

Karras, John, doing business as Minerva Beverage Co., Chicago, Ill. Maltless beverages. Serial No. 328,841; Sept. 13. Class 45.

Kaveny Brothers, Inc., Montclair, N. J. Oil burners. Serial No. 321,542; Sept. 13. Class 34.

Koppers-Rheolaveur Company, Pittsburgh, Pa. Coal or ore cleaning or concentrating apparatus. Serial Nos. 328,819–20; Sept. 13. Class 23.

Kops Brothers, Inc., New York, N. Y. Girdles, brassières, and combinations of girdles and brassières. Serial No. 317,810; Sept. 13. Class 39.

Kresge Department Store Corp., Newark, N. J. Alum, antiseptic preparations, aspirin, etc. Serial No. 327,514; Sept. 13. Class 6.

Laraja, Salvatore A., Brooklyn, N. Y. Canned olive oil. Serial No. 328,814; Sept. 13. Class 46.

Liggett & Myers Tobacco Company, New York, N. Y. Cigarette paper. Serial No. 324,844; Sept. 13. Class 8.

Lincoln Scale Corporation, Latrobe, Pa. Scales. Serial No. 312,484; Sept. 13. Class 26.

Lite-Watchman Corporation, New York, N. Y. Electric lighting. Serial No. 312,729; Sept. 13. Class 21.

Lowe, Joe, Corporation, Brooklyn, N. Y. Vegetable pure food ice and sherbet stabilizer standardizer. Serial No. 328,757; Sept. 13. Class 46.

Maer, Peter, doing business as Mayrose Laboratories, New York, N. Y. Insecticides, capsules, salves, etc. Serial No. 328,246; Sept. 13. Class 6.

Markell, Maurice J., Brooklyn, N. Y. Shoes. Serial No. 328,797; Sept. 13. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Marsh, M., & Son, Inc., Wheeling, W. Va. Cigars. Serial No. 328,178; Sept. 13. Class 17.

Martini & Rossi S. A., Turin, Italy. Vermouth, cocktails, liquors, bitters. Serial No. 329,425; Sept. 13. Class 49.

Master Builders Company, The, Cleveland, Ohio. Composition of matter for water-proofing concrete and cement mortar. Serial No. 329,148; Sept. 13. Class 12.

Mayer China Company, Beaver Falls, Pa. Chinaware. Serial No. 311,617; Sept. 13. Class 30.

Mayrose Laboratories. (See Maer, Peter.)

Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin controlled amusement machines. Serial No. 329,403; Sept. 13. Class 22.

Middle Atlantic Carnation Growers Association, The, Lancaster, Pa. Cut flowers. Serial No. 328,615; Sept. 13. Class 1.

Miller, A. D., Sons' Company, Pittsburgh, Pa. Gasoline. Serial No. 328,891; Sept. 13. Class 15.

Miller, A. D., Sons' Co., Pittsburgh, Pa. Dry cleaning fluid. Serial No. 328,993; Sept. 13. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Cleaning and detergent materials. Serial No. 329,197; Sept. 13. Class 4.

Minerva Beverage Co. (See Karras, John.)

Mit-Zee Products Co. (See Schmitt, Mary L.)

Montauk Paint & Wall Paper Co., Brooklyn, N. Y. Ready mixed paints, paint oils, prepared shellac, etc. Serial No. 326,626; Sept. 13. Class 16.

Motor Wheel Corporation, Lansing, Mich. Oil burners. Serial No. 327,827; Sept. 13. Class 34.

Multistamp Company, Inc., The, Norfolk, Va. Illuminated box for use as a desk in making tracings. Serial No. 328,561; Sept. 13. Class 26.

Narol Co. (See Sinaiko, A. Arlie.)

North American Dye Corporation, New York, N. Y. Cosmetics. Serial No. 327,917; Sept. 13. Class 6.

Öberg, C. O., & Co: S Aktiebolag Eskilstuna, Sweden. Files and rasps. Serial No. 317,368; Sept. 13. Class 23.

Peller-Bazelon, Chicago, Ill. Razors. Serial No. 323,094; Sept. 13. Class 23.

Pendleton Woolen Mills, Portland, Oreg. Wool blankets. Serial No. 328,799; Sept. 13. Class 42.

Photo Marketing Corporation, New York, N. Y. Cameras and parts. Serial No. 327,918; Sept. 13. Class 26.

Pilling, George P., & Son Co. doing business as Pilling, Philadelphia, Pa. Instruments for surgical, dental, etc., use, and for hospital furniture. Serial No. 329,492; Sept. 13. Class 44.

Pitman-Moore Company, Indianapolis, Ind. Medicinal product for treatment of anemia. Serial No. 329,026; Sept. 13. Class 6.

Plymouth Paper Company, Inc., The, Holyoke, Mass. Writing paper. Serial No. 328,820; Sept. 13. Class 37.

Premier Mill Corporation, Geneva, N. Y. Skin lotion, cold cream, zinc oxide, etc. Serial No. 327,805; Sept. 13. Class 6.

Princess Fabrics Co. Inc., New York, N. Y. Textile fabrics of silk only and piece goods made of silk. Serial No. 328,585; Sept. 13. Class 42.

RCA Victor Company, Inc., Camden, N. J. Sound recording apparatus. Serial No. 326,617; Sept. 13. Class 36.

Rapid Roller Company, Chicago, Ill. Printers' rollers, composition coated rollers, etc. Serial No. 327,026; Sept. 13. Class 23.

Raytheon Production Corporation, Newton, Mass. Electrical space discharge tubes. Serial No. 328,618; Sept. 13. Class 21.

Red Boy, Inc., Chicago, Ill. Base metal service trays. Serial No. 327,946; Sept. 13. Class 13.

Robins, Martha E., doing business as A. H. Robins Co., Richmond, Va. Antacid, diuretic, and alkaline laxative. Serial No. 327,234; Sept. 13. Class 6.

Rockola, David C., Chicago, Ill. Scales. Serial No. 321,258; Sept. 13. Class 26.

Royal Canadian Company, Chicago, Ill. Maltless beverages. Serial No. 328,848; Sept. 13. Class 45.

Ruth, Carol, Inc., New York, N. Y. Liquid and solid brilliantine, cleansing cream, lotion, etc. Serial No. 302,228; Sept. 13. Class 6.

Sager, Howard W., Topeka, Kans. Chamois skins. Serial No. 327,322; Sept. 13. Class 1.

Sandel Manufacturing Co., Chicago, Ill. Make-up lamp stands. Serial No. 328,997; Sept. 13. Class 32.

Sargent, Edwin, doing business as Sargent Building Specialties Co., New York, N. Y. Incinerators, parts, and hopper doors for incinerator flues. Serial No. 322,139; Sept. 13. Class 34.

Schmitt, Mary L., doing business as Mit-Zee Products Co., Lakewood, Ohio. Washing and cleaning powder. Serial No. 328,762; Sept. 13. Class 4.

Schnefel Brothers, Inc., Newark, N. J. Spring cuticle scissors, knives, nail files, etc. Serial No. 328,623; Sept. 13. Class 44.

Shore, Albert F., Jamaica, N. Y. Graph calculating devices. Serial No. 328,895; Sept. 13. Class 26.

Simmons Manufacturing Co., The, Cleveland, Ohio. Monthly publication. Serial No. 329,387; Sept. 13. Class 38.

Sinaiko, A. Arlie, doing business as Narol Co., Stevens Point, Wis. Nasal oil. Serial No. 329,035; Sept. 13. Class 6.

Smith, Goldwin, doing business as Smith Mfg. Co., Tampa, Fla. Table board game played with marbles. Serial No. 327,637; Sept. 13. Class 22.

Snider Packing Corporation, Rochester, N. Y. Canned vegetables, fruits, berries, etc. Serial No. 326,343; Sept. 13. Class 46.

Softknit Hat Co., New York, N. Y. Hats. Serial No. 328,229; Sept. 13. Class 39.

Sonnenschein, J., Hop Co. Inc., New York, N. Y. Hops. Serial No. 299,022; Sept. 13. Class 1.

Speed Boy Soap Products Co., Moline, Ill. Automobile top dressing and hand soaps. Serial No. 317,538; Sept. 13. Class 4.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Lacquer solvent. Serial No. 329,064; Sept. 13. Class 16.

Standard Scientific Supply Corporation, New York, N. Y. Collector's kits. Serial No. 325,931; Sept. 13. Class 50.

Star Bottling & Supply Co., Inc., New Haven, Conn. Maltless beverages, and extracts, syrups, and concentrates for making same. Serial No. 329,066; Sept. 13. Class 45.

Stephenson Mfg. Co., Inc., Springfield, Mass. Spray or inhalant. Serial No. 329,159; Sept. 13. Class 6.

Stockton Soap Works, Stockton, Calif. Granulated soap. Serial No. 328,896; Sept. 13. Class 4.

Sulkie, Margaret M., doing business as Gray-Storative, Niagara Falls, N. Y. Hair tonics. Serial No. 326,992; Sept. 13. Class 6.

Sun Oil Company, Philadelphia, Pa. Lubricating oil. Serial No. 328,880; Sept. 13. Class 15.

Tajmal Limited, Hamilton, Ontario, Canada. Tile, bricks, building blocks, etc. Serial No. 328,192; Sept. 13. Class 12.

Thylard Company, The, Fort Wayne, Ind. Skin ointment. Ser. No. 327,924; Sept. 13. Class 6.

Universal Chemical Company. (See Hormats, Robert.)

York and Company, Grand Rapids, Mich. Coal. Serial No. 322,035; Sept. 13. Class 1.

Zapon Company, The, Wilmington, Del. Lacquers, paint thinners, and/or lacquer thinners. Serial No. 328,861; Sept. 13. Class 16.

LIST OF REGISTRANTS OF TRADE-MARKS

Ackerman, Simon, Clothes, Inc., New York, N. Y. Coats, vests, trousers and overcoats. 297,504; Sept. 13. Class 39.

Alabama-Georgia Syrup Company, Montgomery, Ala. Corn and cane syrup. 89,971; renewed Jan. 28, 1933.

Allen Chemical Company, Toledo, Ohio. Nose and throat spray. 297,350; Sept. 13; Serial No. 326,880; published June 21, 1932. Class 6.

American District Telegraph Company, Jersey City, N. J. Automatic fire alarm devices and parts thereof. 297,475; Sept. 13; Serial No. 327,209; published July 5, 1932. Class 21.

American Hard Rubber Company, Hempstead and New York, N. Y. Plastic or moldable material. 297,374; Sept. 13; Serial No. 325,636; published June 28, 1932. Class 1.

American Proprietaries. (See Kaltz, Abraham H.)

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Wire fencing and particularly barbed wire. 297,446; Sept. 13; Serial No. 319,467; published June 28, 1932. Class 13.

Anderson, Grover C., Gateway, Mont. Fire extinguishing bombs and grenades. 297,359; Sept. 13; Serial No. 326,732; published July 5, 1932. Class 23.

Armstrong & Martin, Inc. (See Brite-Beam Lamp Corp., assignor.)

Asbury Mills, The, New York, N. Y. Bathing suits, shoes, caps, etc. 297,503; Sept. 13. Class 39.

Ash, Maurice L., jr., doing business as Wagir Chemical Company, Chicago, Ill. Chemicals. 297,368; Sept. 13; Serial No. 325,890; published June 21, 1932. Class 6.

"Automatic" Sprinkler Corporation of America, Cleveland, Ohio. Automatic sprinkler systems and parts thereof. 297,358; Sept. 13; Serial No. 326,735; published June 28, 1932. Class 13.

Barnes, Albert C., Philadelphia, Pa., assignor, by mesne assignments, to A. C. Barnes Company, New York, N. Y. Silver vitellin. 89,326; renewed Nov. 18, 1932.

Battery Hi-Ball Sales Company. (See Nelson, Herbert L.)

Bausch & Lomb Optical Company, Rochester, N. Y. Projection and photographic lenses. 297,394; Sept. 13; Serial No. 326,931; published June 28, 1932. Class 26.

Beaufont Company, Inc., The, Richmond, Va. Maltless beverages, and syrups, extracts, and concentrates used in making the same. 297,325; Sept. 13; Serial No. 327,422; published July 5, 1932. Class 45.

Beauty Appliance Corporation, Racine, Wis. Electric hair clippers. 297,349; Sept. 13; Serial No. 326,886; published July 5, 1932. Class 23.

Beauty Appliance Corporation, Racine, Wis. Electrical massage device. 297,390; Sept. 13; Serial No. 326,885; published July 5, 1932. Class 44.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk bottle covers. 297,353; Sept. 13; Serial No. 326,848; published July 5, 1932. Class 50.

Beckers, Wilhelm, assignor, by mesne assignments, to National Aniline & Chemical Company, Incorporated, New York, N. Y. Dyeing and tanning assistant. 38,764; renewed Aug. 12, 1932.

Benrose Silk Mfg. Corp., New York, N. Y. Silk and rayon crepes in the piece. 297,417; Sept. 13; Serial No. 324,423; published June 21, 1932. Class 42.

Berriman Bros. Inc., Tampa, Fla. Cigars. 297,488; Sept. 13; Serial No. 327,334; published July 5, 1932. Class 17.

Best Products Co., The. (See Terry, Walter T., jr.)

Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet sweepers. 297,348; Sept. 13; Serial No. 326,887; published June 28, 1932. Class 23.

Blakey's Boot Protectors Limited, Leeds, England. Boot protectors, studs, and nails. 297,383; Sept. 13; Serial No. 325,741; published July 5, 1932. Class 13.

Blodgett, Leo S., New York, N. Y. Medical and dental inspection lamp instruments. 297,486; Sept. 13; Serial No. 327,302; published July 5, 1932. Class 44.

Brite-Beam Lamp Corp., assignor to Armstrong & Martin, Inc., Chicago, Ill. Electric light bulbs. 297,431; Sept. 13; Serial No. 323,522; published June 28, 1932. Class 21.

Brown, Boveri & Cie., Baden, Switzerland. Circulating water pumps, and exhaust gas turbines. 297,356; Sept. 13; Serial No. 326,804; published July 5, 1932. Class 23.

Brunswig Drug Co., Los Angeles, Calif. Rochelle salt, senna leaves, cascara compound, etc. 297,333; Sept. 13; Serial No. 299,549; published Feb. 28, 1932. Class 6.

Burton, John S., Sherman, Tex., assignor, by mesne assignments, to United Drug Company, Boston Mass. Liniment. 39,739; renewed Feb. 3, 1933.

Butterfield, Fred, & Co., Inc. (See Hyde, A. G., & Sons, assignors.)

California Central Creameries, assignors to Golden State Company, Ltd., San Francisco, Calif. Eggs. 88,840; renewed Oct. 29, 1932.

Capitol Game and Novelty Company, The, St. Paul, Minn. Table board game. 297,439; Sept. 13; Serial No. 321,706; published July 5, 1932. Class 22.

Celebrity Productions, Inc., New York, N. Y. Toy books. 297,445; Sept. 13; Serial No. 320,157; published June 28, 1932. Class 22.

Central Railway Signal Company, Inc., Newton, Mass. Emergency road flares. 297,405; Sept. 13; Serial No. 326,578; published July 5, 1932. Class 9.

Chemische und pharmazeutische Fabrik, Dr. George Henning, Berlin-Tempelhof, Germany. Extract of skeletonmuscles, etc. 297,424; Sept. 13; Serial No. 323,776; published June 21, 1932. Class 6.

Chester Suspender Co., Boston, assignor to Everlastik, Incorporated, Chelsea, Mass. Suspenders. 38,001; renewed Apr. 1, 1932.

Chicago Flexible Shaft Company, Chicago, Ill. Electric animal shears and parts therefor. 297,388; Sept. 13; Serial No. 326,889; published June 28, 1932. Class 23.

Christy, Russ J., assignor to The Christy Company, Fremont, Ohio. Razors. 39,303; renewed Nov. 18, 1932.

Clapp, Otis, & Son, Inc., Boston, Mass. Sedative. 297,470–1; Sept. 13; Serial Nos. 327,184–5; published June 21, 1932. Class 6.

Clark, Elliott B., Weldon, N. C. Sanitary coverings. 297,404; Sept. 13; Serial No. 326,517; published July 5, 1932. Class 50.

Colorado Milling & Elevator Company, The. (See Husler Milling & Elevator Company, The, assignor.)

Columbian Enameling & Stamping Co., Terre Haute, Ind. Hardware, plumbing and steam-fitting supplies. 89,539; renewed Dec. 24, 1932.

Compo-Board Co., The, Minneapolis, Minn. Artificial lumber. 297,413; Sept. 13; Serial No. 324,584; published June 14, 1932. Class 12.

Conradty, C., Fabrik Elektrischer u. Galvanischer Kohlen, Nuremberg, Germany. Electrical apparatus and supplies. 88,064; renewed Aug. 27, 1932.

Continental Car-Na-Var Corporation, Brazil, Ind. Liquid polish. 297,408; Sept. 13; Serial No. 326,621; published June 28, 1932. Class 16.

Coon, Edward W., Philadelphia, Pa., assignor, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago Ill. Cheese. 87,857; renewed Aug. 13, 1932.

Corrizo Extract Company, Albany, assignors to Corrizo Extract Company, Inc., New York, N. Y. Concentrated flavoring extract. 38,621; renewed July 15, 1932.

Crown Pharmacal Company. (See Lauricella, Joseph F.)

Davis, Joanna F., doing business as Sanitas Fundoshi Company, Cleveland, Ohio. Suspensory bandages. 297,389; Sept. 13; Serial No. 326,892; published June 28, 1932. Class 44.

Defiance Spark Plugs, Inc., Toledo, Ohio. Electric light bulbs. 297,391; Sept. 13; Serial No. 326,803; published July 5, 1932. Class 21.

Diamond Mfg. Co. (See Shapleigh Hardware Company.)

Di Lorenzo, Ralph, doing business as Meadville Malt Co., Meadville, Pa. Malt syrups. 297,339; Sept. 13; Serial No. 317,426; published June 14, 1932. Class 46.

Driver-Harris Company, Harrison, N. J. Nickel-iron alloys. 297,410; Sept. 13; Serial No. 324,956; published June 28, 1932. Class 14.

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk and rayon. 297,465; Sept. 13, Serial No. 327,050; published June 21, 1932. Class 42.

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk, rayon, cotton and wool. 297,466; Sept. 13; Serial No. 327,049; published June 21, 1932. Class 42.

Eagle-Ottawa Leather Co., Grand Haven, Mich., and New York, N. Y. Leather. 297,492; Sept. 13. Class 1.

Eisemann-Werke Aktiengesellschaft, Stuttgart, Germany. Electric vibrators, permanent hair waving machines, etc. 297,331; Sept. 13; Serial No. 284,725; published June 28, 1932. Class 44.

Endo Products, Inc. (See Intravenous Products Co. of America, Inc.)

Everlastik, Incorporated. (See Chester Suspender Co., assignor.)

Exhibit Supply Company, The. (See Meyer, John F.)

Federal Cigar Company, Red Lion, Pa. Cigars. 297,487; Sept. 13; Serial No. 327,309; published June 28, 1932. Class 17.

Felder Bros., New York, N. Y. Toy pistol holsters and cartridge belts. 297,478; Sept. 13; Serial No. 327,353; published July 5, 1932. Class 22.

Feltyberger, Samuel, Pittsburgh, Pa. Portable and stationary golf games. 297,336; Sept. 13; Serial No. 309,339; published June 28, 1932. Class 22.

Fernandez, Palicio y Compañia, S. en C., Habana, Cuba. Cigars. 297,479; Sept. 13; Serial No. 327,354; published July 5, 1932. Class 17.

Finley, Nellie A., Waco, Tex. Preparation for circulating in the water cooling system of an automobile, etc. 297,425; Sept. 13; Serial No. 323,992; published June 21, 1932. Class 6.

Fisher, Norman A., doing business as Fisher Products Co., Detroit, Mich. Varnishes and paints, and paint enamels. 297,400; Sept. 13; Serial No. 326,624; published July 5, 1932. Class 16.

Fitchburg Yarn Company, Fitchburg, Mass. Yarns. 297,429; Sept. 13; Serial No. 321,273; published June 21, 1932. Class 43.

Fitchburg Yarn Company, Fitchburg, Mass. Yarns. 297,441; Sept. 13; Serial No. 321,272; published June 21, 1932. Class 43.

Fitzgerald Mfg. Company, The, Torrington, Conn. Electric food and beverage mixers. 297,472; Sept. 13; Serial No. 327,188; published July 5, 1932. Class 21.

Florida Specialty Company, Panama City, Fla. Insecticide. 297,494; Sept. 13. Class 6.

French-Wolf Paint Products Corporation, Bristol, Pa. Paints, paint enamels, varnishes, etc. 297,468; Sept. 13; Serial No. 327,008; published July 5, 1932. Class 16.

Fudo Psyllium Corp. (See Lichtenstein, William.)

Galahad Beverage Co. (See Power, John R.)

Garat & Company, Whiterock, Nev. Horses. 297,326; Sept. 13; Serial No. 327,463; published July 5, 1932. Class 1.

General Laboratories, Inc., Chicago, Ill. Ink surfacer. 297,392; Sept. 13; Serial No. 326,901; published July 5, 1932. Class 11.

Gesteira, Dr. Jeronymo, Detroit, Mich. Laxative. 297,344; Sept. 13; Serial No. 325,039; published June 21, 1932. Class 6.

Gesteira, Dr. Jeronymo, Detroit, Mich. Medicine. 297,409; Sept. 13; Serial No. 326,038; published June 21, 1932. Class 6.

Gilbert Products Co., St. Paul, Minn. Composition for softening water and for use as a soap saver and cleaner. 297,370; Sept. 13; Serial No. 325,850; published June 21, 1932. Class 6.

Gladding, B. H., Dry Goods Co., by change of name to Gladding's, Inc., Providence, R. I. Knitted, netted, and textile fabrics. 87,750; renewed Aug. 6, 1932.

Gladding, B. H., Dry Goods Co., by change of name to Gladding's, Inc., Providence, R. I. Clothing. 87,751; renewed Aug. 6, 1932.

Glade, Henry, & Co., Grand Island, to Nebraska Consolidated Mills Co., Omaha, Nebr., successor. Wheat-flour. 89,457; renewed Dec. 17, 1932.

Goedrich Chemical Company, New York, N. Y. Bactericidal and fungicidal preparations. 297,407; Sept. 13; Serial No. 326,609; published June 14, 1932. Class 6.

Golden State Company, Ltd. (See California Central Creameries, assignor.)

Great Atlantic and Pacific Tea Company, The, Jersey City, N. J., to The Great Atlantic & Pacific Tea Company, New York, N. Y. Coffee. 87,622; renewed July 30, 1932.

Great Western Cordage, Inc., Orange, Calif. Rope lines and twines. 297,454; Sept. 13; Serial No. 327,140; published July 5, 1932. Class 7.

Griswoldville Manufacturing Company, Griswoldville, Mass. Dusting, wiping, and polishing cloths. 297,449; Sept. 13; Serial No. 327,145; published June 28, 1932. Class 29.

Griswoldville Manufacturing Company, Griswoldville, Mass. Surgical gauze, bandages, hospital sponges, etc. 297,450; Sept. 13; Serial No. 327,144; published July 5, 1932. Class 44.

Griswoldville Manufacturing Company, Griswoldville, Mass. Cotton cloth. 297,451; Sept. 13; Serial No. 327,143; published June 21, 1932. Class 42.

Griswoldville Manufacturing Company, Griswoldville, Mass. Surgical gauze, bandages, hospital sponges, etc. 297,452; Sept. 13; Serial No. 327,142; published July 5, 1932. Class 44.

Griswoldville Manufacturing Company, Griswoldville, Mass. Cotton cloth. 297,453; Sept. 13; Serial No. 327,141; published June 21, 1932. Class 42.

Gudebrod Brothers Silk Company, Philadelphia, Pa. Thread. 297,324; Sept. 13; Serial No. 326,443; published June 21, 1932. Class 43.

H & W Company, The, Newark, N. J. Corsets, corset-waists, brassières, and underwaists. 90,014; renewed Jan. 28, 1933.

Haba Laboratories, Savanna, Ill. Liquid styptic. 297,375; Sept. 13; Serial No. 325,686; published June 21, 1932. Class 6.

Halliwell-Shelton Electric Corporation, New York, N. Y. Pads for use in permanent hair waving. 297,352; Sept. 13; Serial No. 326,854; published June 28, 1932. Class 44.

Harris, Louis S., doing business as Omeco Sales Products, Brooklyn, N. Y. Beverages, syrups, and concentrates. 297,357; Sept. 13; Serial No. 326,770; published June 28, 1932. Class 45.

Harvel Corporation, The, Newark, N. J. Electrical insulation. 297,508; Sept. 13. Class 21.

Henckels, J. A., Solingen, Germany. Steel, iron, lead, etc. 297,435–6; Sept. 13; Serial Nos. 323,332–3; published June 28, 1932. Class 14.

Herberts Machinery Co., Ltd., Los Angeles, Calif. Wood working machines. 297,364; Sept. 13; Serial No. 326,679; published July 5, 1932. Class 23.

Hildebrand, Walter H., Chicago, Ill. Cotton cloth in the piece. 297,376; Sept. 13; Serial No. 325,687; published June 21, 1932. Class 42.

Hillyard Chemical Company, St. Joseph, Mo. Liquid wood floor preservative. 297,414; Sept. 13; Serial No. 324,514; published July 5, 1932. Class 16.

Hitchcock Laboratories, Sebring, Ohio. Liquid preparation for coughs, colds, etc. 297,382; Sept. 13; Serial No. 325,471; published June 21, 1932. Class 6.

Holophane Glass Company, assignor, by mesne assignments, to Holophane Company, Inc., New York, N. Y. Glass reflectors and shades. 88,491; renewed Sept. 24, 1932.

Hudnut, Richard, New York, N. Y. Toilet preparations. 89,367; renewed Dec. 10, 1932.

Hudnut, Richard, New York, N. Y. Perfumes. 89,368; renewed Dec. 10, 1932.

Hudnut, Richard, New York, N. Y. Soda-water. 89,657; renewed Dec. 31, 1932.

Huntington Laboratories, Inc., Huntington, Ind. Disinfectant. 297,469; Sept. 13; Serial No. 327,153; published June 21, 1932. Class 6.

Hunt-Rankin Leather Company, Boston and Peabody, to Hunt-Rankin Leather Co., Boston, Mass. Tanned calf-leather. 90,021; renewed Jan. 28, 1933.

Husler Milling & Elevator Company, The, Salt Lake City, Utah, assignor to The Colorado Milling & Elevator Company, Denver, Colo. Wheat-flour and a breakfast cereal. 90,335; renewed Feb. 18, 1933.

Hyde, A. G., & Sons, assignors to Fred Butterfield & Co., Inc., New York, N. Y. Clothing. 87,762; renewed Aug. 6, 1932.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerized vinyl esters. 297,411; Sept. 13; Serial No. 324,738; published June 21, 1932. Class 6.

Independent Sales Company. (See Nette, Herman E.)

Innovine Company, Fairhaven, Mass. Antiseptic and mouth, throat, and dental lotion. 297,367; Sept. 13; Serial No. 326,640; published June 21, 1932. Class 6.

International Lead Refining Company, East Chicago, Ind., and New York, N. Y., to International Lead Refining Company, New York, N. Y. Lead. 89,559–61; renewed Dec. 24, 1932.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Hospital and sick room enameled ware and rubber products. 297,343; Sept. 13; Serial No. 318,365; published June 28, 1932. Class 44.

Intravenous Products Co. of America, Inc., doing business as Endo Products, Inc., New York, N. Y. Bismuth and organic arsenic preparation. 297,340; Sept. 13; Serial No. 317,559; published Oct. 6, 1931. Class 6.

Isaacs, S. Willard, doing business as Matta Grosso Turtle Oil Products Company, Los Angeles, Calif. Cosmetic. 297,416; Sept. 13; Serial No. 324,824; published June 21, 1932. Class 6.

Jaffee-Cohen & Lang, Inc., New York, N. Y. Clothing and wearing apparel. 297,496; Sept. 13. Class 39.

Janesville Clothing Co., Janesville and Baraboo, Wis. Overalls, jackets, one-piece suits and trousers. 297,345; Sept. 13; Serial No. 325,174; published Apr. 26, 1932. Class 39.

K. & S. Sales Company, Inc., Chicago, Ill. Ball projecting amusement games. 297,317; Sept. 13; Serial No. 326,371; published June 28, 1932. Class 22.

Kahlbaum, C. A. F., Berlin, Germany, assignor, by mesne assignments, to Schering Corporation, New York, N. Y. Remedy used in disorders of the stomach. 89,929; renewed Jan. 21, 1933.

Kaits, Abraham H., doing business as American Proprietaries, Philadelphia, Pa. Preparations for the scalp and hair. 297,332; Sept. 13; Serial No. 293,433; published June 21, 1932. Class 6.

Keuffel & Esser Company, Hoboken, N. J. Sensitized black print cloth. 297,489; Sept. 13; Serial No. 327,315; published June 28, 1932. Class 26.

Keyston Bros., San Francisco, Calif. Simulant toy equipment. 297,398; Sept. 13; Serial No. 326,981; published July 5, 1932. Class 22.

Killmer, Earl C., doing business as Killmer's Northern Nurseries, St. Paul, Minn. Plant packages. 297,443; Sept. 13; Serial No. 320,935; published June 28, 1932. Class 1.

King Features Syndicate, Inc., New York, N. Y. Dress patterns. 297,493; Sept. 13. Class 26.

Knipe, James L., Washington, D. C. Medical kit. 297,363; Sept. 13; Serial No. 326,686; published July 5, 1932. Class 44.

Kraft-Phenix Cheese Corporation. (See Coon, Edward W., assignor.)

Kress, S. H. & Co., New York, N. Y. Cravats, hosiery, nightgowns, etc. 297,434; Sept. 13; Serial No. 323,337; published June 21, 1932. Class 39.

Lanair Company, Chicago, Ill. Insecticides. 297,378; Sept. 13; Serial No. 325,764; published June 21, 1932. Class 6.

La Sylvia Paint and Varnish Works. (See Resnik, Samuel.)

Lauricella, Joseph F., doing business as Crown Pharmacal Company, Long Beach, Calif. Liquid preparation for the treatment of sunburn. 297,401; Sept. 13; Serial No. 326,484; published June 1, 1932. Class 6.

Ledyard Haury Company, Elyria, Ohio. Battery fillers. 297,422; Sept. 13; Serial No. 323,948; published June 21, 1932. Class 2.

Lee, Guy, Leather Company, Philadelphia, Pa. Leather. 297,310; Sept. 13; Serial No. 326,217; published July 5, 1932. Class 1.

Le Roy Laboratories. (See Wright, H. Le Roy.)

Levay Bros., Inc., New York, N. Y. Silk and rayon goods in the piece. 297,346; Sept. 13; Serial No. 326,018; published June 21, 1932. Class 42.

Lewis, A. D. (See Williams, James P.)

Lichtenstein, William, doing business as Tinklebell Products Co. and Fudo Psyllium Corp., New York, N. Y. Bird gravel. 297,490; Sept. 13; Serial No. 327,365; published June 28, 1932. Class 1.

Lowe, Joe, Corporation, Brooklyn, N. Y. Standardizers for measuring ingredients in ice cream. 297,415; Sept. 13; Serial No. 324,895; published June 28, 1932. Class 26.

Master Bridge Institute, Inc., New York, N. Y. Playing cards and playing card dealing accessories. 297,395; Sept. 13; Serial No. 326,947; published June 28, 1932. Class 22.

Matta Grosso Turtle Oil Products Company. (See Isaacs, S. Willard.)

Mattatuck Manufacturing Company, The, Waterbury, Conn. Nails, jack chain, eyelets, etc. 297,334; Sept. 13; Serial No. 308,211; published July 5, 1932. Class 18.

McCord Radiator & Mfg. Co., Detroit, Mich. Ice trays and grids for refrigerators. 297,499; Sept. 13. Class 31.

McNeil, Robert, Philadelphia, Pa. Preparation for cleansing wounds, ulcers, and the like. 297,318; Sept. 13; Serial No. 326,388; published June 14, 1932. Class 6.

McNeil, Robert, Philadelphia, Pa. Cholagogue, biliary antifermentative, and laxative. 297,319; Sept. 13; Serial No. 326,385; published June 1, 1932. Class 6.

McNeil, Robert, Philadelphia, Pa. Preparation used in the treatment of staphylococcic infections. 297,320; Sept. 13; Serial No. 326,390; published June 1, 1932. Class 6.

Meadville Malt Co. (See Di Lorenzo, Ralph.)

Meinicke & Co., New York, N. Y. Syringes or douches of rubber. 89,817; renewed Feb. 17, 1933.

Mellier Company, Perfumer. (See Pozzoni, J. A., Pharmacal Co., assignor.)

Menderth, Inc., Boston, Mass. Plant food. 297,371–2; Sept. 13; Serial Nos. 325,987–8; published June 28, 1932. Class 10.

Merck & Co. Inc., Rahway, N. J. Anæsthetic. 297,370; Sept. 13; Serial No. 325,955; published June 21, 1932. Class 6.

Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Ball projecting amusement machines. 297,460–3; Sept. 13; Serial Nos. 327,101–4; published July 5, 1932. Class 22.

Mezquita, Agustin T., Valencia, Spain. Beverage. 297,428; Sept. 13; Serial No. 322,553; published June 28, 1932. Class 45.

Mission Dry Corporation, Ltd., Los Angeles, Calif. Measuring glasses. 297,480; Sept. 13; Serial No. 327,368; published June 28, 1932. Class 26.

Morgan, Arthur W., Yonkers, N. Y. Golf balls. 297,329–30; Sept. 13; Serial Nos. 327,519–20; published July 5, 1932. Class 22.

Mosbacher, Walter Lee, Corporation, New York, N. Y. Tanned reptile skins. 297,311; Sept. 13; Serial No. 326,293; published June 28, 1932. Class 1.

Multistamp Company, Inc., The, Norfolk, Va. Stamping or stenciling inks, embossing powders and ink pads. 297,491; Sept. 11. Class 11.

Muralo Company, The, assignors to The Muralo Company, Inc., New Brighton, N. Y. Wall finishing and decorating material. 38,939; renewed Sept. 28, 1932.

Namm, A. I. & Son, doing business as The Namm Store, Brooklyn, N. Y. Liquid antiseptics and disinfectants, bath salts, talcum powder, etc. 297,312; Sept. 13; Serial No. 326,296; published June 21, 1932. Class 6.

National Aniline & Chemical Company, Incorporated. (See Beckers, Wilhelm, assignor.)

National Aniline & Chemical Company, Incorporated. (See Schoellkopf, Hartford & Hanna Co., assignor.)

National Carbide Corporation, Wytheville, Va.; New York, N. Y.; and Ivanhoe, Va. Calcium carbide. 297,315; Sept. 13; Serial No. 326,336; published June 21, 1932. Class 6.

National Remedy Company, New York, N. Y. Coloring preparation for the hair. 297,396; Sept. 13; Serial No. 326,951; published June 21, 1932. Class 6.

Naumkeag Steam Cotton Company, Salem, Mass. Bedspreads, curtains, draperies, etc. 297,360; Sept. 13; Serial No. 326,718; published June 21, 1932. Class 42.

Nebraska Consolidated Mills Co. (See Glade, Henry, & Co.)

Négyes Tobacco Shop. (See Schachter, Helen.)

Nelson, Herbert L., doing business as Battery Hi-Ball Sales Company, Boston, Mass. Secondary batteries. 297,354; Sept. 13; Serial No. 326,843; published July 5, 1932. Class 21.

Nette, Herman E., doing business as Independent Sales Company, Arlington Heights, Ill. Cigars. 297,427; Sept. 13; Serial No. 322,802; published July 5, 1932. Class 17.

New York Extract Co., Inc., Philadelphia, Pa. Syrups and extracts. 297,323; Sept. 13; Serial No. 326,491; published June 28, 1932. Class 45.

Odorono Company, Inc., The, New York, N. Y. Deodorant and perspiration corrective. 297,420; Sept. 13; Serial No. 324,296; published June 21, 1932. Class 6.

Odorono Company, Inc., The, New York, N. Y. Deodorants and preparations. 297,437; Sept. 13; Serial No. 322,265; published June 21, 1932. Class 6.

Ohio State Stove Corporation, The, Columbus, Ohio. Ranges. 297,481; Sept. 13; Serial No. 327,405; published July 5, 1932. Class 34.

Omeco Sales Products. (See Harris, Louis S.)

Outboard Motors Corporation, Milwaukee, Wis. Internal combustion motors. 297,361; Sept. 13; Serial No. 326,691; published July 5, 1932. Class 23.

Outboard Motors Corporation, Milwaukee, Wis. Lawn mowers. 297,362; Sept. 13; Serial No. 326,690; published July 5, 1932. Class 23.

Ozonair, Limited, Westminster, London, England. Electrical apparatus. 89,945; renewed Jan. 21, 1933.

P. M. C. Manufacturing Corp., Kingston, N. Y. Kitchen utensils. 297,438; Sept. 13; Serial No. 321,782; published July 5, 1932. Class 23.

Paine Drug Company, The, Rochester, N. Y. Medicinal preparation. 297,351; Sept. 13; Serial No. 326,868; published June 21, 1932. Class 6.

Par Laboratories. (See Rime, Fred.)

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. 297,467; Sept. 13; Serial No. 327,023; published June 28, 1932. Class 22.

Pearson, Chester L., doing business as Per-Plex Puzzle Co., Boston, Mass. Jig saw puzzles. 297,473; Sept. 13; Serial No. 327,197; published July 5, 1932. Class 22.

Peoples Drug Stores, Inc., Washington, D. C., doing business as Vano Company, New York, N. Y. Sanitary napkins. 297,482; Sept. 13; Serial No. 327,410; published July 5, 1932. Class 44.

Peoria Metal Specialty Co., Peoria, Ill. Metal bread boxes, canister sets, etc. 297,418–19; Sept. 13; Serial Nos. 324,362–3; published June 21, 1932. Class 2.

Per-Plex Puzzle Co. (See Pearson, Chester L.)

Philadelphia Seed Company, The, Philadelphia, Pa. Grass seed. 297,483; Sept. 13; Serial No. 327,412; published July 5, 1932. Class 1.

Philadelphia Seed Company, The, Philadelphia, Pa. Grass seed. 297,484; Sept. 13; Serial No. 327,413; published June 28, 1932. Class 1.

Phillips Lead & Supply Co., Providence, R. I. Hardware and plumbing and steam-fitting supplies. 89,498; renewed Dec. 17, 1932.

Pocahontas Oil Corporation, The., Cleveland, Ohio. Gasolines. 297,440; Sept. 13; Serial No. 321,296; published Jan. 12, 1932. Class 15.

Polar Ware Company, Sheboygan, Wis. Vitreous enamel pots, pans, etc. 297,474; Sept. 13; Serial No. 327,199; published June 28, 1932. Class 13.

Powell's, New York, N. Y. Candy, chocolate, cocoa, etc. 87,923; renewed Aug. 13, 1932.

Power, John R., doing business as Galahad Beverage Co., Allston, Mass. Soda water, syrups, and extracts. 297,365; Sept. 13; Serial No. 326,646; published June 28, 1932. Class 45.

Pozzoni, J. A., Pharmacal Co., The, Chicago, Ill., assignor to Mellier Company, Perfumer, St. Louis, Mo. Rouge. 89,697; renewed Dec. 31, 1932.

Quaker City Chocolate & Confectionery Company, Philadelphia, Pa. Candy. 89,875; renewed Jan. 14, 1933. Class 46.

Quaker State Oil Refining Co., Oil City, Pa. Mechanical device to record oil servicing. 297,313; Sept. 13; Serial No. 326,300; published June 28, 1932. Class 19.

Randall, C. Ray, & Co., North Attleboro, Mass. Necklaces, bracelets, earrings, etc. 297,373; Sept. 13; Serial No. 325,879; published July 5, 1932. Class 28.

Ray-Mac Sales Co., Wood Ridge, N. J. Preparation for increasing the efficiency of gasoline, and preventing the formation of carbon in internal combustion engines. 297,426; Sept. 13; Serial No. 322,922; published June 21, 1932. Class 6.

Reed & Bell, Inc., Berkeley, Calif. Root beer and root beer concentrate or syrup. 297,397; Sept. 13; Serial No. 326,954; published June 28, 1932. Class 45.

Resnik, Samuel, doing business as La Sylvia Paint and Varnish Works, Brooklyn, N. Y. Paints and paint enamels. 297,355; Sept. 13; Serial No. 326,831; published July 5, 1932. Class 16.

Rime, Fred, doing business as Par Laboratories, Los Angeles, Calif. Medicinal inhalant. 297,444; Sept. 13; Serial No. 320,552; published June 21, 1932. Class 6.

Rosenberg, Louis F., Providence, R. I. Golf balls. 297,366; Sept. 13; Serial No. 326,647; published July 5, 1932. Class 22.

Roth, Otto, Inc., Newark, N. J. Safety razor blades. 297,476; Sept. 13; Serial No. 327,289; published June 28, 1932. Class 28.

Roto- und Debego-Werke Aktiengesellschaft, Konigslutter, Germany. Multigraphing machines and parts thereof, stamping rollers, copying presses, etc. 297,342; Sept. 13; Serial No. 318,263; published July 5, 1932. Class 23.

Rynveld, F., & Sons, New York, N. Y. Seeds, bulbs, and flowers. 297,322; Sept. 13; Serial No. 326,433; published June 28, 1932. Class 1.

Sächsische Porzellanfabrik zu Potschappel von Carl Thieme, Potschappel-Dresden, now Freital, and Dresden, Germany. Porcelain. 297,381; Sept. 13; Serial No. 325,448; published June 21, 1932. Class 30.

St. Louis Coffee & Spice Mills, St. Louis, Mo. Blended coffee. 87,932–3; renewed Aug. 13, 1932.

Salant & Salant, to Salant & Salant, Inc., New York, N. Y., successor. Work-shirts. 87,487; renewed July 16, 1932.

Sandoz Chemical Works, Inc., New York, N. Y. Products recommended to relieve spasm and to treat affections. 297,402; Sept. 13; Serial No. 326,498; published June 21, 1932. Class 6.

Sanitas Fundoshi Company. (See Davis, Joanna F.)

Sawyer Engineering Company, The, Milford, Conn. Refrigerating units. 297,406; Sept. 13; Serial No. 326,595; published June 28, 1932. Class 31.

Sears, Roebuck and Co., Chicago, Ill. Shoes. 88,372; renewed Sept. 10, 1932.

Sears, Roebuck and Co., Chicago, Ill. Clothes washing machine. 297,497; Sept. 13. Class 24.

Service Products, Incorporated, Greenville, Pa. Chemical preparation. 297,316; Sept. 13; Serial No. 326,342; published June 1, 1932. Class 6.

Schachter, Helen, doing business as Négyes Tobacco Shop, New York, N. Y. Smoking tobacco. 297,495; Sept. 13. Class 17.

Scharpenter, John P., Aurora, Ill. Salve. 88,027; renewed Aug. 20, 1932.

Schenley Products Company, New York, N. Y. Whiskey. 297,327; Sept. 13; Serial No. 327,482; published July 5, 1932. Class 49.

Schenley Products Company, Inc., New York, N. Y. Whiskey. 297,458; Sept. 13; Serial No. 327,117; published July 5, 1932. Class 49.

Schering Corporation. (See Kahlbaum, C. A. F., assignor.)

Schoellkopf, Hartford & Hanna Co., Buffalo, N. Y., assignor to National Aniline & Chemical Company, Incorporated, New York, N. Y. Cleansing compositions. 89,573; renewed Dec. 30, 1932.

Shapleigh Hardware Company, doing business as Diamond Mfg. Co., St. Louis, Mo. Fish lines. 297,412; Sept. 13; Serial No. 324,628; published June 28, 1932. Class 22.

Sheinker, W., & Son, Inc., New York, N. Y. Maltless flavoring extracts. 297,309; Sept. 13; Serial No. 326,195; published July 5, 1932. Class 45.

Shell Oil Company, San Francisco, Calif. Turpentine substitute and paint thinner. 297,399; Sept. 13; Serial No. 326,091; published June 28, 1932. Class 16.

Shellbuilder, Inc., Houston, Tex. Crushed oyster shell. 297,403; Sept. 13; Serial No. 326,500; published June 28, 1932. Class 1.

Shortwave & Television Corporation, Boston, Mass. Radio receiving sets, kits for radio receiving sets and parts of such sets, etc. 297,448; Sept. 13; Serial No. 319,949; published July 5, 1932. Class 21.

Societe Genevoise d'Instruments De Physique, Geneva, Switzerland. Machines, lathes and tools; machinery shafting and parts thereof. 297,447; Sept. 13; Serial No. 318,998; published July 5, 1932. Class 23.

Sparks-Withington Company, The, Jackson, Mich. Radio receiving sets and parts. 297,500; Sept. 13. Class 21.

Spooner, Inc., New York, N. Y. Rouge, talcum, powder, hair tonic, etc. 297,347; Sept. 13; Serial No. 326,167; published June 1, 1932. Class 6.

Squibb, E. R., & Sons, New York, N. Y. Medicinal diamino-azo-benzols. 297,314; Sept. 13; Serial No. 326,305; published June 1, 1932. Class 6.

Standard Bottling Co., The, Denver, Colo. Maltless beverages, and syrups, extracts, and concentrates used in making the same. 297,485; Sept. 13; Serial No. 327,418; published July 5, 1932. Class 45.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. 297,455; Sept. 13; Serial No. 327,123; published June 21, 1932. Class 43.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. 297,456–7; Sept. 13; Serial Nos. 327,120–1; published June 21, 1932. Class 43.

Stearns, Frederick, & Company, Detroit, Mich. Blood-pressure-raising and hemostatic compounds. 90,142; renewed Feb. 4, 1933.

Stenover, Inc., East Orange, N. J. Insecticides. 297,423; Sept. 13; Serial No. 323,916; published June 21, 1932. Class 6.

Stevens, John A., Broadstairs, England. Electric lamps. 297,421; Sept. 13; Serial No. 324,196; published July 5, 1932. Class 21.

Stonega Coke & Coal Company, Philadelphia, Pa. Coal. 297,477; Sept. 13; Serial No. 327,324; published June 28, 1932. Class 1.

Sussberg & Feinberg Inc., New York, N. Y. Ladies' knitted or woven underwear and pajamas. 297,501–2; Sept. 13. Class 39.

Swift and Company, Chicago, Ill. Lard. 297,369; Sept. 13; Serial No. 359,932; published June 14, 1932. Class 46.

Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Wax and polish. 297,384; Sept. 13; Serial No. 325,199; published June 28, 1932. Class 16.

Thilo, Dr. Julius, doing business as Dr. Thilo & Co., Mainz, Germany. Chloride of ethyl and sterilized injections for use in the treatment of asthma, rheumatism, etc. 297,505; Sept. 13. Class 6.

Thoresen, William, doing business as Wm. Thoresen Co., Chicago, Ill. Metal decorations for caskets. 297,459; Sept. 13; Serial No. 327,113; published June 28, 1932. Class 13.

Tinklebell Products Co. (See Lichtenstein, William.)

Trumbull Electric Manufacturing Company, The, Plainville, Conn. Electrical power distribution switch boards, panel boards, safety switches, etc. 297,432–3; Sept. 13; Serial Nos. 323,372–3; published July 5, 1932. Class 21.

Tuttle & Bailey Manufacturing Company, New York, N. Y. Electro-mechanical devices for opening and closing dampers on furnaces. 297,498; Sept. 13. Class 34.

Union Wadding Company, Pawtucket, R. I. Cotton milk-strainers and the material used in the same. 297,464; Sept. 13; Serial No. 327,076; published June 28, 1932. Class 31.

United Drug Company. (See Burton, John S., assignor.)

U. S. Expansion Bolt Co., New York, N. Y. Expansion, machine and toggle bolts, and screws. 90,147; renewed Feb. 4, 1933.

Vaculette Co., Not Inc., Chicago, Ill. Vacuum massaging machines. 297,341; Sept. 13; Serial No. 318,085; published Sept. 29, 1931. Class 44.

Vano Company. (See Peoples Drug Stores, Inc.)

Van Sickle, Amanda, Ashland, Pa. Cramp and diarrhea Compound. 297,442; Sept. 13; Serial No. 320,997; published June 21, 1932. Class 6.

Vineyard Products Co., Chicago, Ill. Grape juices and compounds. 297,430; Sept. 13; Serial No. 322,529; published June 28, 1932. Class 45.

Vio-Ray Company, Kansas City, Mo. Article of manufacture. 297,506; Sept. 13, 1932. Class 50.

Vitamineral Products Company, Peoria, Ill. Compound to be mixed with feed rations of animals. 297,337; Sept. 13; Serial No. 313,722; published June 21, 1932. Class 6.

Vitamineral Products Company, Peoria, Ill. Compound to be mixed with feeding rations of animals. 297,338; Sept. 13; Serial No. 313,724; published June 21, 1932. Class 6.

Wagir Chemical Company. (See Ash, Maurice L., jr.)

Warwick Club Ginger Ale Co., Inc., The, West Warwick, R. I. Ginger ale. 297,328; Sept. 13; Serial No. 327,491; published July 5, 1932. Class 45.

Webb, James T., jr., Macon, Ga. Grease for reducing friction on surgical gloves, etc. 297,377; Sept. 13; Serial No. 325,699; published June 21, 1932. Class 6.

Wellis, William, doing business as "Bridgeco," New York, N. Y. Card game accessory. 297,321; Sept. 13; Serial No. 326,405; published June 28, 1932. Class 22.

Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric welding machines. 297,335; Sept. 13; Serial No. 308,346; published Jan. 20, 1931. Class 21.

White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Base plates. 297,393; Sept. 13; Serial No. 326,921; published June 28, 1932. Class 44.

Whitehead & Hoag Company, The, Newark, N. J. Advertising signs not made by a printer. 90,373; renewed Feb. 11, 1933.

Williams, James P., Brooklyn, N. Y., A. D. Lewis, Atlanta, Ga., successor. Soda-water drink. 88,988; renewed Oct. 29, 1932.

Willys-Overland Company, The, Toledo, Ohio. Passenger carrying automobiles. 297,385–6; Sept. 13; Serial Nos. 325,256–7; published July 5, 1932. Class 19.

Wright, H. Le Roy, doing business as Le Roy Laboratories, Orange, N. J. Salves, ointments, cream, and lotions. 297,380; Sept. 13; Serial No. 325,380; published June 21, 1932. Class 6.

Wright, H. Le Roy, doing business as Le Roy Laboratories, Orange, N. J. Salves, ointments, cream, and lotions. 297,387; Sept. 13; Serial No. 325,379; published June 21, 1932. Class 6.

Wyeth, John, & Brother, Incorporated, Philadelphia, Pa., assignor to John Wyeth & Brother, Incorporated, Wilmington, Del., and Philadelphia, Pa. Medicinal preparation. 89,727; renewed Dec. 31, 1932.

LIST OF REGISTRANTS OF LABELS

Astrasan Mfg. Company. (See Kummer, Frank.)

Bates, R. A., Bren, Calif. 4-6 Multi-Puzzle. For Puzzle Devices. 41,147; Sept. 13.

Boyd, Elizabeth, doing business as the Princess Laboratories, Los Angeles, Calif. Princess Louise. For Feminine Antiseptics. 41,149; Sept. 13.

Central Waxed Paper Company, Chicago, Ill. Enner-Jee. For Bread. 41,150; Sept. 13.

Colonial Works, Brooklyn, N. Y. Alkaloid. For a Coating Preparation for Cement, Concrete, and Composition Floors, Etc. 41,151; Sept. 13.

Coony Bayer Cigar Co., Fort Wayne, Ind. Wincroft. For Cigars. 41,148; Sept. 13.

Dickinson, Royal, Roselle, N. J. Sunice. For Skin Creams. 41,152; Sept. 13.

Eagle-Rock Springs, Inc., Eagle and Milwaukee, Wis. Eagle-Rock Water. For Spring Water. 41,153; Sept. 13.

Glazer, Max, doing business as Real Juice Company, Dallas, Tex. Wcosles. For Root Beer. 41,154; Sept. 13.

Hammer, Alice M., Hillsboro, Oreg. Hammer Spanish Dinner E. Z. Meal. For Spanish Dinners. 41,155; Sept. 13.

Hammer, Alice M., Hillsboro, Oreg. Hammer Chicken Chowder E. Z. Meal. For Chicken Chowder. 41,156; Sept. 13.

Hoague-Sprague Corporation, Lynn, Mass. Registered Nurses Shoe. For Boxes. 41,157; Sept. 13.

Hoague-Sprague Corporation, Lynn, Mass. Jack & Gill. For Boxes. 41,158; Sept. 13.

Hoague-Sprague Corporation, Lynn, Mass. Kline's Beautiful Shoes. For Boxes. 41,159; Sept. 13.

Hoague-Sprague Corporation, Lynn, Mass. Paul Revere. For Boxes. 41,160; Sept. 13.

Hoague-Sprague Corporation, Lynn, Mass. Governor Winthrop. For Boxes. 41,161; Sept. 13.

Howard, Clara M., Oakland, Calif. Lore Lee. For Face and Hand Lotion. 41,162; Sept. 13.

Johnson, Harry C., doing business as F. S. Powers Company, Crystal Lake, Ill. Devonshire's Earth Salts for Human Use. For Earth Salts. 41,163; Sept. 13.

Keith, Mrs. Merton S., Worcester, Mass. The Superscore Duplicate Pad. For contract and auction bridge pads. 41,164; Sept. 13.

Kummer, Frank, doing business as Astrasan Mfg. Company, Hackensack, N. J. Astrasan Health Cookies. For Cookies. 41,165; Sept. 13.

Loeb, H. A., & Company, Chicago, Ill. Fairy-Touch. For Hair Nets. 41,166; Sept. 13.

Loeb, H. A. & Company, Chicago, Ill. Regal. For Hair Nets. 41,167; Sept. 13.

Loeb, H. A., & Company, Chicago, Ill. Miss America. For Hair Nets. 41,168; Sept. 13.

Lyman, Samuel, Brooklyn, N. Y. Be Good to your Eyes and Lym-Lyte the Road ahead. For Electric Lamp Bulbs. 41,169; Sept. 13.

Menasha Products Company, The, Menasha, Wis. Frosty. For Frozen Custard. 41,170; Sept. 13.

Mutschler, William J., Evansville, Ind. Zep. For Aspirin Tablets. 41,171; Sept. 13.

My-T-Fine Corporation, Dover, Del., and Brooklyn, N. Y. My-T-Fine-Vanilla-Custard Flavor Dessert. For Mixture of Ingredients to be Used for Making Vanilla-Custard Flavored Desserts. 41,172; Sept. 13.

Nassour Bros., Inc., Ltd., Los Angeles, Calif. NB Antiseptic. For Antiseptic. 41,173; Sept. 13.

National Biscuit Company, New York, N. Y. Clowns. For Clown Biscuit Made with Arrowroot Flour. 41,174–5; Sept. 13.

Powers, F. S., Company. (See Johnson, Harry C.)

Princess Laboratories. (See Boyd, Elizabeth.)

Real Juice Company. (See Glazer, Max.)

Severino, Emil, Denver, Colo. Emil Severino's Famous Italian Sauces, Meat Sauce Brand. For Sauces. 41,176; Sept. 13.

United Drug Company, Boston, Mass. Safety-Heet. For Electric Heating Pad. 41,177; Sept. 13.

Warner-Jenkinson Company, St. Louis, Mo. Festival Pale Dry Ginger Ale Sparkling-Refreshing. For Ginger Ale. 41,178; Sept. 13.

Wesco Foods Company, Cincinnati, Ohio. Avalon Matches. For Matches. 41,179; Sept. 13.

LIST OF REGISTRANTS OF PRINTS

American Mine Door Company, The, Canton, Ohio. Diced Steak. For Meat-Tendering Machines. 13,904; Sept. 13.

Barrett Company, The, New York, N. Y. Nitrate of Soda. For Nitrate of Soda. 13,905; Sept. 13.

Pennsylvania Grade Crude Oil Association, Oil City, Pa. Guaranteed 100% Pure Pennsylvania Oil. For Oils. 13,906; Sept. 13.

Smith, Iowa D., Columbus, Ohio. Safety-Light. For Lanterns. 13,907; Sept. 13.

Waterman, Joseph S., & Sons, Incorporated, Boston, Mass. Funeral Price Index. For Funeral Price Indexes. 13,908; Sept. 13.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Stonega Coke & Coal Company. 297,477; Sept. 13; Serial No. 327,324; published June 28, 1932.

Gravel, Bird. W. Lichtenstein. 297,490; Sept. 13; Serial No. 327,365; published June 28, 1932.

Horses. Garat & Company. 297,326; Sept. 13; Serial No. 327,463; published July 5, 1932.

Leather. Eagle-Ottawa Leather Co. 297,492; Sept. 13.

Leather. Guy Lee Leather Company. 297,310; Sept. 13; Serial No. 326,217; published July 5, 1932.

Leather, Tanned calf. Hunt-Rankin Leather Company. 90,021; renewed Jan. 28, 1933.

Plant packages. E. C. Killmer. 297,443; Sept. 13; Serial No. 320,935; published June 28, 1932.

Plastic or moldable material. American Hard Rubber Company. 297,374; Sept. 13; Serial No. 325,636; published June 28, 1932.

Seed, Grass. Philadelphia Seed Company. 297,483; Sept. 13; Serial No. 327,412; published July 5, 1932.

Seed, Grass. Philadelphia Seed Company. 297,484; Sept. 13; Serial No. 327,413; published June 28, 1932.

Seeds, bulbs, and flowers. F. Rynveld & Sons. 297,322; Sept. 13; Serial No. 326,433; published June 28, 1932.

Shell, Crushed oyster. Shellbuilder, Inc. 297,403; Sept. 13; Serial No. 326,500; published June 28, 1932.

Skins, Tanned reptile. Walter Lee Mosbacher Corporation. 297,311; Sept. 13; Serial No. 326,293; published June 28, 1932.

CLASS 2

Battery fillers. Ledyard Haury Company. 297,422; Sept. 13; Serial No. 323,948; published June 21, 1932.

Boxes, canister sets, etc., Metal bread. Peoria Metal Specialty Co. 297,418–19; Sept. 13; Serial Nos. 324,302–3; published June 21, 1932.

CLASS 4

Cleansing compositions. Schoellkopf, Hartford & Hanna Co. 89,573; renewed Dec. 30, 1932.

CLASS 6

Anesthetic. Merck & Co. Inc. 297,370; Sept. 13; Serial No. 325,955; published June 21, 1932.

Antiseptic and mouth, throat, and dental lotion. Innovine Company. 297,367; Sept. 13; Serial No. 326,640; published June 21, 1932.

Antiseptics and disinfectants, bath salts, talcum powder, etc., Liquid. A. I. Namm & Son. 297,312; Sept. 13; Serial No. 326,296; published June 21, 1932.

Bactericidal and fungicidal preparations. Goedrich Chemical Company. 297,407; Sept. 13; Serial No. 326,609; published June 21, 1932.

Bismuth and organic arsenic preparation. Intravenous Products Co. of America, Inc. 297,340; Sept. 13; Serial No. 317,559; published Oct. 6, 1931.

Blood-pressure-raising and hemostatic compounds. Frederick Stearns & Company. 90,142; renewed Feb. 4, 1933.

Calcium Carbide. National Carbide Corporation. 297,315; Sept. 13; Serial No. 326,336; published June 21, 1932.

Chemical preparation. Service Products. 297,316; Sept. 13; Serial No. 326,342; published June 21, 1932.

Chemicals. M. L. Ash, jr. 297,368; Sept. 13; Serial No. 325,890; published June 21, 1932.

Chloride of ethyl and sterilized injections for use in the treatment of asthma, rheumatism, etc. Dr. J. Thilo. 297,505; Sept. 13.

Cholagogue, biliary antifermentative and laxative. R. McNeil. 297,319; Sept. 13; Serial No. 326,385; published June 21, 1932.

Coloring preparation for the hair. National Remedy Company. 297,306; Sept. 13; Serial No. 326,951; published June 21, 1932.

Composition for softening water, and for use as a soap saver and cleaner. Gilbert Products Co. 297,379; Sept. 13; Serial No. 325,850; published June 21, 1932.

Compound, Cramp and diarrhea. A. Van Sickle. 297,442; Sept. 13; Serial No. 320,997; published June 21, 1932.

Compound to be mixed with feed rations of animals. Vitamineral Products Company. 297,337; Sept. 13; Serial No. 313,722; published June 21, 1932.

Compound to be mixed with feeding rations of animals. Vitamineral Products Company. 297,338; Sept. 13; Serial No. 313,724; published June 21, 1932.

Cosmetic. S. W. Isaacs. 297,416; Sept. 13; Serial No. 324,824; published June 21, 1932.

Deodorant and perspiration corrective. Odorono Company. 297,420; Sept. 13; Serial No. 324,296; published June 21, 1932.

Deodorants and preparations. Odorono Company. 297,437; Sept. 13; Serial No. 322,265; published June 21, 1932.

Disinfectant. Huntington Laboratories, Inc. 297,469; Sept. 13; Serial No. 327,153; published June 21, 1932.

Dyeing and tanning assistant. W. Beckers. 38,764; renewed Aug. 12, 1932.

Esters, Polymerized vinyl. I. G. Farbenindustrie Aktiengesellschaft. 297,411; Sept. 13; Serial No. 324,738; published June 21, 1932.

Extracts of skeleton-muscles, etc. Chemische und pharmazeutische fabrik Dr. Georg Henning. 297,424; Sept. 13; Serial No. 328,776; published June 21, 1932.

Grease for reducing friction on surgical gloves and other rubber articles. J. T. Webb, jr. 297,377; Sept. 13; Serial No. 325,699; published June 21, 1932.

Insecticide. Florida Specialty Company. 297,494; Sept. 13.

Insecticides. Lanair Company. 297,378; Sept. 13; Serial No. 325,754; published June 21, 1932.

Insecticides. Stenover, Inc. 297,423; Sept. 13; Serial No. 323,916; published June 21, 1932.

Laxative. Dr. J. Gesteira. 297,344; Sept. 13; Serial No. 325,039; published June 21, 1932.

Liniment. J. S. Burton. 89,739; renewed Feb. 3, 1933.

Liquid preparation for coughs, colds, etc. Hitchcock Laboratories. 297,382; Sept. 13; Serial No. 325,471; published June 21, 1932.

Liquid preparation for the treatment of sunburn. J. F. Lauricella. 297,401; Sept. 13; Serial No. 326,484; published June 21, 1932.

Liquid styptic. Haba Laboratories. 297,375; Sept. 13; Serial No. 325,686; published June 21, 1932.

Medicinal diamino-azo-benzols. E. R. Squibb & Sons. 297,314; Sept. 13; Serial No. 326,305; published June 21, 1932.

Medicinal inhalant. F. Rime. 297,444; Sept. 13; Serial No. 320,552; published June 21, 1932.

Medicinal preparation. Paine Drug Company. 297,351; Sept. 13; Serial No. 326,868; published June 21, 1932.

Medicinal preparation. John Wyeth & Brother, Incorporated. 89,727; renewed Dec. 31, 1932.

Medicine. Dr. J. Gesteira. 297,409; Sept. 13; Serial No. 325,038; published June 21, 1932.

Perfumes. R. Hudnut. 89,368; renewed Dec. 10, 1932.

Preparation for circulating in the water cooling system of an automobile, etc. N. A. Finley. 297,425; Sept. 13; Serial No. 323,992; published June 21, 1932.

Preparation for cleansing wounds, ulcers, and the like. R. McNeil. 297,318; Sept. 13; Serial No. 326,388; published June 21, 1932.

Preparation for increasing the efficiency of gasoline, and preventing the formation of carbon in internal combustion engines. Ray-Mac Sales Co. 297,426; Sept. 13; Serial No. 322,922; published June 21, 1932.
Preparation used in the treatment of staphylococcic infections. R. McNeil. 297,320; Sept. 13; Serial No. 326,390; published June 21, 1932.
Preparations for the scalp and hair. A. H. Kaltx. 297,332; Sept. 13; Serial No. 293,433; published June 21, 1932.
Products recommended to relieve spasm and to treat affections. Sandoz Chemical Works. 297,402; Sept. 13; Serial No. 326,498; published June 21, 1932.
Remedy used in disorders of the stomach. C. A. F. Kahlbaum. 89,929; renewed Jan. 21, 1933.
Rouge. J. A. Pozzoni Pharmacal Co. 89,697; renewed Dec. 31, 1932.
Rouge, talcum powder, hair tonic, etc. Spooner, Inc. 297,347; Sept. 13; Serial No. 326,167; published June 21, 1932.
Salt, senna leaves, cascara compound, etc., Rochelle. Brunswig Drug Co. 297,333; Sept. 13; Serial No. 299,540; published Feb. 23, 1932.
Salve. J. P. Scharpenter. 88,027; renewed Aug. 20, 1932.
Salves, ointments, cream and lotions. H. L. Wright. 297,380; Sept. 13; Serial No. 325,380; published June 21, 1932.
Salves, ointments, cream and lotions. H. L. Wright. 297,387; Sept. 13; Serial No. 325,379; published June 21, 1932.
Sedative. Otis Clapp & Son, Inc. 297,470–1; Sept. 13; Serial Nos. 327,184–5; published June 21, 1932.
Silver vitellin used for medicinal purposes. A. C. Barnes. 39,326; renewed Nov. 18, 1932.
Spray, Nose and throat. Allen Chemical Company. 297,350; Sept. 13; Serial No. 326,880; published June 21, 1932.
Toilet preparations. R. Hudnut. 89,367; renewed Dec. 10, 1932.

CLASS 7

Rope lines and twines. Great Western Cordage, Inc. 297,454; Sept. 13; Serial No. 327,140; published July 5, 1932.

CLASS 9

Flares, Emergency road. Central Railway Signal Company. 297,405; Sept. 13; Serial No. 326 578; published July 5, 1932.

CLASS 10

Plant food. Menderib, Inc. 297,371–2; Sept. 13; Serial Nos. 325,987–8; published June 28, 1932.

CLASS 11

Ink surfacer. General Laboratories, Inc. 297,392; Sept. 13; Serial No. 326,901; published July 5, 1932.
Inks and ink pads. Multistamp Company. 297,491; Sept. 13.

CLASS 12

Lumber, Artificial. Compo-Board Co. 297,413; Sept. 13; Serial No. 324,584; published June 14, 1932.
Wall finishing and decorating material. Muralo Company. 38,939; renewed Sept. 23, 1932.

CLASS 13

Bolts, and screws, Expansion, machine and toggle. U. S. Expansion Bolt Co. 90,147; renewed Feb. 4, 1933.
Enamel pots, pans, etc., Vitreous. Polar Ware Company. 297,474; Sept. 13; Serial No. 327,199; published June 28, 1932.
Hardware and plumbing and steam-fitting supplies. Phillips Lead & Supply Co. 89,498; renewed Dec. 17, 1932.
Hardware, plumbing and steam-fitting supplies. Columbian Enameling & Stamping Co. 89,539; renewed Dec. 24, 1932.
Metal decorations for caskets. W. Thoresen. 297,459; Sept. 13; Serial No. 327,113; published June 28, 1932.
Nails, jack chain, eyelets, etc. Mattatuck Manufacturing Company. 297,334; Sept. 13; Serial No. 303,211; published July 5, 1932.
Protectors, studs, and nails, Boot. Blakey's Boot Protector Limited. 297,383; Sept. 13; Serial No. 325,741; published July 5, 1932.
Sprinkler systems and parts thereof, Automatic. "Automatic" Sprinkler Corporation of America. 297,358; Sept. 13; Serial No. 326,735; published June 28, 1932.
Wire fencing and particularly barbed wire. American Steel and Wire Company of New Jersey. 297,446; Sept. 13; Serial No. 319,467; published June 28, 1932.

CLASS 14

Lead. International Lead Refining Company. 89,559–61; renewed Dec. 24, 1932.
Nickel-iron alloys. Driver-Harris Company. 297,410; Sept. 13; Serial No. 324,956; published June 28, 1932.
Steel, iron, lead, etc. J. A. Henckels. 297,435–6; Sept. 13; Serial Nos. 323,332–3; published June 28, 1932.

CLASS 15

Gasoline. Pocahontas Oil Corporation. 297,440; Sept. 13; Serial No. 321,296; published Jan. 12, 1932.

CLASS 16

Paints and paint enamels. S. Resnik. 297,355; Sept. 13; Serial No. 326,831; published July 5, 1932.
Paints, paint enamels, varnishes, etc. French-Wolf Paint Products Corporation. 297,468; Sept. 13; Serial No. 327,008; published July 5, 1932.
Polish, Liquid. Continental Car-Na-Var Corporation. 297,408; Sept. 13; Serial No. 326,621; published June 28, 1932.
Preservative, Liquid wood floor. Hillyard Chemical Company. 297,414; Sept. 13; Serial No. 324,514; published July 5, 1932.
Turpentine substitute and paint thinner. Shell Oil Company. 297,390; Sept. 13; Serial No. 326,091; published June 28, 1932.
Varnishes and paints, and paint enamels. N. A. Fisher. 297,400. Sept. 13; Serial No. 326,624; published July 5, 1932.
Wax and polish. W. T. Terry, jr. 297,384; Sept. 13; Serial No. 325,199; published June 28, 1932.

CLASS 17

Cigars. Berriman Bros. Inc. 297,488; Sept. 13; Serial No. 327,334; published July 5, 1932.
Cigars. Federal Cigar Company. 297,487; Sept. 13; Serial No. 327,309; published June 28, 1932.
Cigars. Fernandez, Pallcio y Compañia, S. en C. 297,479; Sept. 13; Serial No. 327,354; published July 5, 1932.
Cigars. H. E. Nette. 297,427; Sept. 13; Serial No. 322,802; published July 5, 1932.
Tobacco, Smoking. H. Schachter. 297,495; Sept. 13.

CLASS 19

Automobiles, Passenger carrying. Willys-Overland Company. 297,385–6; Sept. 13; Serial Nos. 325,246–7; published July 5, 1932.
Mechanical device to record oil servicing. Quaker State Oil Refining Co. 297,318; Sept. 13; Serial No. 326,300; published June 28, 1932.

CLASS 21

Alarm devices and parts thereof, Automatic fire. American District Telegraph Company. 297,475; Sept. 13; Serial No. 327,209; published July 5, 1932.
Batteries, Secondary. H. L. Nelson. 297,354; Sept. 13; Serial No. 326,843; published July 5, 1932.
Electric food and beverage mixers. Fitzgerald Mfg. Company. 297,472; Sept. 13; Serial No. 327,188; published July 5, 1932.
Electric lamps. J. A. Stevens. 297,421; Sept. 13; Serial No. 324,196; published July 5, 1932.
Electric light bulbs. Brite-Beam Lamp Corp. 297,481; Sept. 13; Serial No. 323,522; published June 28, 1932.
Electric light bulbs. Defiance Spark Plugs, Inc. 297,391; Sept. 13; Serial No. 326,898; published July 5, 1932.
Electric welding machines. Westinghouse Electric & Manufacturing Company. 297,335; Sept. 13; Serial No. 308,346; published Jan. 20, 1931.
Electrical apparatus. Ozonair, Limited. 89,945; renewed Jan. 21, 1933.
Electrical apparatus and supplies. C. Conradty, Fabrik Elektrischer u. Galvanischer Kohlen. 88,604; renewed Aug. 27, 1932.
Electrical power distribution switch boards, panel boards, safety switches, etc. Trumbull Electric Manufacturing Company. 297,432–3; Sept. 13; Serial Nos. 323,372–3; published July 5, 1932.
Insulation, Electrical. Harvel Corporation. 297,508; Sept. 13.
Radio receiving sets and parts. Sparks-Withington Company. 297,500; Sept. 13.
Radio receiving sets, kits for radio receiving sets and parts of such sets, etc. Shortwave & Television Corporation. 297,448; Sept. 13; Serial No. 319,949; published July 5, 1932.

CLASS 22

Ball projecting amusement machines. J. F. Meyer. 297,460–3; Sept. 13; Serial Nos. 327,101–4; published July 5, 1932.
Card game accessory. W. Wellis. 297,321; Sept. 13; Serial No. 326,405; published June 28, 1932.
Cards and playing card dealing accessories, Playing. Master Bridge Institute, Inc. 297,395; Sept. 13; Serial No. 326,947; published June 28, 1932.
Fish lines. Shapleigh Hardware Company. 297,412; Sept. 13; Serial No. 324,628; published June 28, 1932.
Game, Board. Parker Brothers, Inc. 297,467; Sept. 13; Serial No. 327,023; published June 28, 1932.
Game, Table board. Capitol Game and Novelty Company. 297,489; Sept. 13; Serial No. 321,706; published July 5, 1932.
Games Ball projecting amusement. K. & S. Sales Company. 297 317; Sept. 13; Serial No. 326,371; published June 28, 1932.
Golf balls. A. W. Morgan. 297,329–30; Sept. 13; Serial Nos. 327,519–20; published July 5, 1932.
Golf balls. L. F. Rosenberg. 297,366; Sept. 13; Serial No. 326,647; published July 5, 1932.
Golf games, Portable and stationary. S. Feltyberger. 297,386; Sept. 13; Serial No. 309,389; published June 28, 1932.

Puzzles, Jig saw. C. L. Pearson. 297,473; Sept. 13; Serial No. 327,197; published July 5, 1932.
Toy books. Celebrity Productions, Inc. 297,445; Sept. 13; Serial No. 320,157; published June 28, 1932.
Toy equipment, Simulant. Keystone Bros. 297,398; Sept. 13; Serial No. 326,981; published July 5, 1932.
Toy pistol holsters and cartridge belts. Felder Bros. 297,478; Sept. 13; Serial No. 327,353; published July 5, 1932.

CLASS 23.

Bombs and grenades, Fire extinguishing. G. C. Anderson. 297,359; Sept. 13; Serial No. 326,732; published July 5, 1932.
Clippers, Electric hair. Beauty Appliance Corporation. 297,359; Sept. 13; Serial No. 326,732; published July 5, 1932.
Machines, lathes, and tools; machinery shafting and parts thereof. Societe Genevoise d'Instruments de Physique. 297,447; Sept. 13; Serial No. 318,998; published July 5, 1932.
Motors, Internal combustion. Outboard Motors Corporation. 297,361; Sept. 13; Serial No. 326,691; published July 5, 1932.
Mowers, Lawn. Outboard Motors Corporation. 297,362; Sept. 13; Serial No. 326,690; published July 5, 1932.
Multigraphing machines and parts thereof, stamping rollers, copying presses, etc. Roto- und Debego-Werke Aktiengesellschaft. 297,342; Sept. 13; Serial No. 318,253; published July 5, 1932.
Pumps and exhaust gas turbines, Circulating water. Brown, Boveri & Cie. 297,356; Sept. 13; Serial No. 326,804; published July 5, 1932.
Razor blades, Safety. Otto Roth, Inc. 297,476; Sept. 13; Serial No. 327,289; published June 28, 1932.
Razors. R. J. Christy. 39,303; renewed Nov. 18, 1932.
Shears and parts therefor, Electric animal. Chicago Flexible Shaft Company. 297,388; Sept. 13; Serial No. 326,889; published June 28, 1932.
Sweepers, Carpet. Bissell Carpet Sweeper Co. 297,348; Sept. 13; Serial No. 326,887; published June 28, 1932.
Utensils, Kitchen. P. M. C. Manufacturing Corp. 297,438; Sept. 13; Serial No. 321,732; published July 5, 1932.
Wood working machines. Herberts Machinery Co. 297,364; Sept. 13; Serial No. 326,679; published July 5, 1932.

CLASS 24

Washing machine, Clothes. Sears, Roebuck and Co. 297,497; Sept. 13.

CLASS 26

Lenses. Bausch & Lomb Optical Company. 297,394; Sept. 13; Serial No. 326,931; published June 28, 1932.
Measuring glasses. Mission Dry Corporation. 297,480; Sept. 13; Serial No. 327,368; published June 28, 1932.
Patterns, Dress. King Features Syndicate, Inc. 297,493; Sept. 13.
Sensitized black print cloth. Keuffel & Esser Company. 297,489; Sept. 13; Serial No. 327,315; published June 28, 1932.
Standardizers for measuring ingredients in ice cream. Joe Lowe Corporation. 297,415; Sept. 13; Serial No. 324,895; published June 28, 1932.

CLASS 28

Necklaces, bracelets, earrings, etc. C. Ray Randall & Co. 297,373; Sept. 13; Serial No. 325,879; published July 5, 1932.

CLASS 29

Cloths, Dusting, wiping and polishing. Griswoldville Manufacturing Company. 297,449; Sept. 13; Serial No. 327,145; published June 28, 1932.

CLASS 30

Porcelain. Sächsische Porzellanfabrik su Potschappel von Carl Thieme. 297,381; Sept. 13; Serial No. 325,448; published June 21, 1932.

CLASS 31

Refrigerating units. Sawyer Engineering Company. 297,406; Sept. 13; Serial No. 326,595; published June 28, 1932.
Strainers and the material used in the same, Cotton milk. Union Wadding Company. 297,464; Sept. 13; Serial No. 327,076; published June 28, 1932.
Trays and grids, Ice. McCord Radiator & Mfg. Co. 297,499; Sept. 13.

CLASS 33

Glass reflectors and shades. Holophane Glass Company. 88,491; renewed Sept. 24, 1932.

CLASS 34

Electro-mechanical devices. Tuttle & Bailey Manufacturing Company. 297,498; Sept. 13.
Ranges. Ohio State Stove Corporation. 297,481; Sept. 13; Serial No. 327,405; published July 5, 1932.

CLASS 39

Clothing. B. H. Gladding Dry Goods Co. 87,751; renewed Aug. 6, 1932.
Clothing. A. G. Hyde & Sons. 87,762; renewed Aug. 6, 1932.
Clothing and wearing apparel. Jaffee-Cohen & Lang, Inc. 297,496; Sept. 13.
Coats, vests, trousers, and overcoats. Simon Ackerman Clothes, Inc. 297,504; Sept. 13.
Corsets, corset-waists, brassieres, and underwaists. H & W Company. 90,014; renewed Jan. 28, 1933.
Cravats, hosiery, nightgowns, etc. S. H. Kress & Co. 297,434; Sept. 13; Serial No. 328,337; published June 21, 1932.
Overalls, jackets, one-piece suits and trousers. Janesville Clothing Co. 297,345; Sept. 13; Serial No. 325,174; published Apr. 26, 1932.
Shirts, Work. Salant & Salant. 87,487; renewed July 16, 1932.
Shoes. Sears, Roebuck and Co. 88,372; renewed Sept. 10, 1932.
Suits, shoes, caps, etc., Bathing. Asbury Mills. 297,503; Sept. 13.
Suspenders. Chester Suspender Co. 38,001; renewed Apr. 1, 1932.
Underwear and pajamas, Ladies'. Sussberg & Feinberg, Inc. 297,501–2; Sept. 13.

CLASS 42

Bedspreads, curtains draperies, etc. Naumkeag Steam Cotton Company. 297,360; Sept. 13; Serial No. 326,718; published June 21, 1932.
Cotton cloth. Griswoldville Manufacturing Company. 297,451; Sept. 13; Serial No. 327,143; published June 21, 1932.
Cotton cloth. Griswoldville Manufacturing Company. 297,453; Sept. 13; Serial No. 327,141; published June 21, 1932.
Cotton cloth in the piece. W. H. Hildebrand. 297,376; Sept. 13; Serial No. 325,087; published June 21, 1932.
Fabrics. B. H. Gladding Dry Goods Co. 87,750; renewed Aug. 6, 1932.
Goods of silk and rayon, Piece. F. Ducharne Silk Co. Inc. 297,465; Sept. 13; Serial No. 327,050; published June 21, 1932.
Piece goods of silk, rayon, cotton and wool. F. Ducharne Silk Co. Inc. 297,466; Sept. 13; Serial No. 327,049; published June 21, 1932.
Silk and rayon crepes in the piece. Benrose Silk Mfg. Corp. 297,417; Sept. 13; Serial No. 324,428; published June 21, 1932.
Silk and rayon goods in the piece. Levay Bros., Inc. 297,346; Sept. 13; Serial No. 326,018; published June 21, 1932.

CLASS 43

Thread. Gudebrod Brothers Silk Company. 297,324; Sept. 13; Serial No. 326,443; published June 21, 1932.
Thread, Cotton. Standard-Coosa-Thatcher Company. 297,455; Sept. 13; Serial No. 327,123; published June 21, 1932.
Thread, Cotton. Standard-Coosa-Thatcher Company. 297,456–7; Sept. 13; Serial Nos. 327,120–1; published June 21, 1932.
Yarns. Fitchburg Yarn Company. 297,429; Sept. 13; Serial No. 321,278; published June 21, 1932.
Yarns. Fitchburg Yarn Company. 297,441; Sept. 13; Serial No. 321,272; published June 21, 1932.

CLASS 44

Enameled ware and rubber products, Hospital and sick room. International Stamping & Enameling Corporation. 297,343; Sept. 13; Serial No. 318,365; published June 28, 1932.
Gauze, bandages, hospital sponges, etc., Surgical. Griswoldville Manufacturing Company. 297,450; Sept. 13; Serial No. 327,142; published July 5, 1932.
Gauze, bandages, hospital sponges, etc., Surgical. Griswoldville Manufacturing Company. 297,452; Sept. 13; Serial No. 327,144; published July 5, 1932.
Massage device, Electrical. Beauty Appliance Corporation. 297,390; Sept. 13; Serial No. 326,885; published July 5, 1932.
Medical and dental inspection lamp instruments. L. S. Blodgett. 297,486; Serial No. 327,302; published July 5, 1932.
Medical kit. J. L. Knipe. 297,363; Sept. 13; Serial No. 326,686; published July 5, 1932.
Pads for use in permanent hair waving. Halliwell-Shelton Electric Corporation. 297,352; Sept. 13; Serial No. 326,854; published June 28, 1932.
Plates, Base. S. S. White Dental Manufacturing Company. 297,393; Sept. 13; Serial No. 326,921; published June 28, 1932.
Sanitary napkins. Peoples Drug Stores, Inc. 297,482; Sept. 13; Serial No. 327,410; published July 5, 1932.
Suspensory bandages. J. F. Davis. 297,389; Sept. 13; Serial No. 326,802; published June 28, 1932.
Syringes or douches of rubber. Meinicke & Co. 39,817; renewed Feb. 17, 1933.
Vacuum massaging machines. Vaculette Co. 297,341; Sept. 13; Serial No. 318,085; published Sept. 29, 1931.
Vibrators, permanent hair waving machines, etc., Electric. Eisemann-Werke Aktiengesellschaft. 297,331; Sept. 13; Serial No. 284,725; published June 28, 1932.

CLASS 45

Beer and root beer concentrate or syrup, Root. Reed & Bell, Inc. 297,397; Sept. 13; Serial No. 326,954; published June 28, 1932.
Beverage. A. T. Mezquita. 297,428; Sept. 13; Serial No. 322,553; published June 28, 1932.
Beverages, and syrups, extracts, and concentrates used in making the same, Maltless. Beaufont Company. 297,325; Sept. 13; Serial No. 327,422; published July 5, 1932.
Beverages, and syrups, extracts, and concentrates used in making the same, Maltless. Standard Bottling Co. 297,485; Sept. 13; Serial No. 327,418; published July 5, 1932.
Beverages, syrups and concentrates. L. S. Harris. 297,357; Sept. 13; Serial No. 326,770; published June 28, 1932.
Flavoring extracts, Maltless. W. Sheinker & Son, Inc. 297,309; Sept. 13; Serial No. 326,195; published July 5, 1932.
Ginger ale. Warwick Club Ginger Ale Co. 297,328; Sept. 13; Serial No. 327,491; published July 5, 1932.
Grape juices and compounds. Vineyard Products Co. 297,430; Sept. 13; Serial No. 322,529; published June 28, 1932.
Soda-water. R. Hudnut. 89,657; renewed Dec. 31, 1932.
Soda-water drink. J. P. Williams. 88,988; renewed Oct. 29, 1932.
Soda water, syrups and extracts. J. R. Power. 297,365; Sept. 13; Serial No. 326,646; published June 28, 1932.
Syrups and extracts. New York Extract Co. 297,323; Sept. 13; Serial No. 326,491; published June 28, 1932.

CLASS 46

Candy. Quaker City Chocolate & Confectionery Company. 89,875; renewed Jan. 14, 1933.
Candy, chocolate, cocoa, etc. Powell's. 87,923; renewed Aug. 13, 1932.
Cheese. E. W. Coon. 87,857; renewed Aug. 13, 1932.
Coffee. Great Atlantic and Pacific Tea Company. 87,622; renewed July 30, 1932.
Coffee, Blended. St. Louis Coffee & Spice Mills. 87,932–3; renewed Aug. 13, 1932.
Eggs. California Central Creameries. 88,840; renewed Oct. 29, 1932.
Extract, Concentrated flavoring. Corrizo Extract Company. 38,621; renewed July 15, 1932.
Flour and a breakfast cereal, Wheat. Husler Milling & Elevator Company. 90,335; renewed Feb. 18, 1933.
Flour, Wheat. Henry Glade & Co. 89,457; renewed Dec. 17, 1932.
Lard. Swift and Company. 297,369; Sept. 13; Serial No. 325,932; published June 14, 1932.
Syrup, Corn and cane. Alabama-Georgia Syrup Company. 89,971; renewed Jan. 28, 1933.
Syrups, Malt. R. Di Lorenzo. 297,330; Sept. 13; Serial No. 317,426; published June 14, 1932.

CLASS 49

Whiskey. Schenley Products Company. 297,327; Sept. 13; Serial No. 327,482; published July 5, 1932.
Whiskey. Schenley Products Company. 297,458; Sept. 13; Serial No. 327,117; published July 5, 1932.

CLASS 50

Article of manufacture. Vio-Ray Company. 297,056–7; Sept. 13.
Coverings, Sanitary. E. B. Clark. 297,404; Sept. 13; Serial No. 326,517; published July 5, 1932.
Covers, Milk bottle. Henry Becker & Son. 297,353; Sept. 13; Serial No. 326,848; published July 5, 1932.
Signs not made by a printer, Advertising. Whitehead & Hoag Company. 90,273; renewed Feb. 11, 1933.

LIST OF LABELS

Alkaloid. For a Coating Preparation for Cement, Concrete and Composition Floors, Etc. Colonial Works. 41,151; Sept. 13.
Astrasan Health Cookies. For Cookies. F. Kummer. 41,165; Sept. 13.
Avalon Matches. For Matches. Wesco Foods Company. 41,179; Sept. 13.
Be Good to your Eyes and Lym-Lyte the Road Ahead. For Electric Lamp Bulbs. S. Lyman. 41,169; Sept. 13.
Clowns. For Clown Biscuit Made with Arrowroot Flour. National Biscuit Company. 41,174–5; Sept. 13.
Devonshire's Earth Salts for Human Use. For Earth Salts. H. C. Johnson. 41,163; Sept. 13.
Eagle-Rock Water. For Spring Water. Eagle-Rock Springs, Inc. 41,153; Sept. 13.
Emil Severino's Famous Italian Sauces Meat Sauce Brand. For Sauces. E. Severino. 41,176; Sept. 13.
Enner-Jee. For Bread. Central Waxed Paper Company. 41,150; Sept. 13.
Fairy-Touch. For Hair Nets. H. A. Loeb & Company. 41,166; Sept. 13.
Festival Pale Dry Ginger Ale Sparkling-Refreshing. For Ginger Ale. Warner-Jenkinson Company. 41,178; Sept. 13.
4-6 Multi-Puzzle. For Puzzle Devices. R. A. Bates. 41,147; Sept. 13.
Frosty. For Frozen Custard. Menasha Products Company. 41,170; Sept. 13.
Governor Winthrop. For Boxes. Hoague-Sprague Corporation. 41,161; Sept. 13.
Hammer Spanish Dinner E. Z. Meal. For Spanish Dinners. A. M. Hammer. 41,155; Sept. 13.
Hammer Chicken Chowder E. Z. Meal. For Chicken Chowder. A. M. Hammer. 41,156; Sept. 13.
Jack & Jill. For Boxes. Hoague-Sprague Corporation. 41,158; Sept. 13.
Kline's Beautiful Shoes. For Boxes. Hoague-Sprague Corporation. 41,159; Sept. 13.
Lore Lee. For Face and Hand Lotion. C. M. Howard. 41,162; Sept. 13.
Miss America. For Hair Nets. H. A. Loeb & Company. 41,168; Sept. 13.
My-T-Fine-Vanilla-Custard Flavor Dessert. For Mixture of Ingredients to be used for Making Vanilla Custard Flavored Desserts. My-T-Fine Corporation. 41,172; Sept. 13.
NB Antiseptic. For Antiseptic. Nassour Bros., Inc., Limited. 41,173; Sept. 13.
Paul Revere. For Boxes. Hoague-Sprague Corporation. 41,160; Sept. 13.
Princess Louise. For Feminine Antiseptics. E. Boyd. 41,149; Sept. 13.
Regal. For Hair Nets. H. A. Loeb & Company. 41,167; Sept. 13.
Registered Nurses Shoe. For Boxes. Hoague-Sprague Corporation. 41,157; Sept. 13.
Safety-Heet. For Electric Heating Pad. United Drug Company. 41,177; Sept. 13.
Sunice. For Skin Creams. Royal Dickinson. 41,152; Sept. 13.
The Superscore Duplicate Pad. For Contract and Auction Bridge Pads. Mrs. M. S. Keith. 41,164; Sept. 13.
Wincroft. For Cigars. Coony Bayer Cigar Co. 41,148; Sept. 13.
Woosies. For Root Beer. M. Glacer. 41,154; Sept. 13.
Zep. For Aspirin Tablets. W. J. Mutschler. 41,171; Sept. 13.

LIST OF PRINTS

Diced Steak. For Meat Tendering Machines. American Mine Door Company. 13,904; Sept. 13.
Funeral Price Index. For Funeral Price Indexes. Joseph S. Waterman & Sons, Incorporated. 13,908; Sept. 13.
Guaranteed 100% Pure Pennsylvania Oil. For Oils. Pennsylvania Grade Crude Oil Association. 13,906; Sept. 13.
Nitrate of Soda. For Nitrate of Soda. Barrett Company. 13,905; Sept. 13.
Safety-Light. For Lanterns. I. D. Smith. 13,907; Sept. 13.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 13TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. P. W. Paper Co. (See Fairchild, William, assignor.)
Abbott, Gardner, trustee. (See Glaser, Rudolph A., assignor.)
Abel, Walter T. (See Carley, L. R., and Abel.)
Abraham, Lewis C., Auderghem, Belgium. Artificial sponge and device for manufacturing same. 1,877,155; Sept. 13.
Abrahams, David J. (See Gillespie, Howard E., assignor.)
Achurch, William H., assignor to Gorham Manufacturing Company, Providence, R. I. Paten. Des. 87,737; Sept. 13.
Acuff, jr., William S., assignor to Ambler Asbestos Shingle and Sheathing Company, Ambler, Pa. Holder for plant soil. 1,876,571; Sept. 13.
Adam, Frank, Electric Co. (See Stieglitz, Henry M., assignor.)
Adam, Frederick B., St. Louis, Mo. Dimmer control apparatus. 1,876,824; Sept. 13.
Adams, Charles A., assignor to Mathews Conveyor Company, Ellwood City, Pa. Bearing adapters. 1,876,534; Sept. 13.
Adams, Ervin, assignor to H. W. Brecker, Mount Carmel, Pa. Fusible attachment plug. 1,876,823; Sept. 13.
Adatte, Albert L., North Plainfield, N. J., assignor to Pathe Exchange, Inc., New York, N. Y. Double film winding reel. 1,877,440; Sept. 13.
Adometer Corporation of America. (See Kauffman, Albert J., assignor.)
Adrianson, Alfred L., Racine, Wis. Material treating apparatus. 1,877,378; Sept. 13.
Air Reduction Company. (See Anderson, James L., assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Ajax Metal Company, The. (See Neuabuss, Heinrich, assignor.)
Akers, Charles W., and W. H. Foster, Princeton, W. Va. Journal lubricator. 1,877,633; Sept. 13.
Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)
Aktiebolaget Bergslagens Gemensamma Kraftforvaltning. (See Hultman, Gustaf, assignor.)
Albee, Hugh M., assignor to The Leavitt Machine Company, Orange, Mass. Grinding machine. 1,877,546; Sept. 13.
Albisu, José A., Saladillo, Argentina. Apparatus for the discharge of projectiles. 1,877,215; Sept. 13.
Alco Products, Incorporated. (See de Bence, Stephen B., assignor.)
Allen-Bradley Company. (See Megow, George E., assignor.)
Allen, Richard M., and A. E. Dickinson, Hartford, assignors of one-fourth to J. P. Clary, Hartford County, Conn. Paint brush. 1,876,572; Sept. 13.
Allen, William R., Holcombe, near Bury, England. Manufacture of yarns suitable for use in the production of fabrics therewith. 1,877,488; Sept. 13.
Alligator Company, The. (See George, John E., assignor.)
Alsaker, Alfred, assignor to The Delta-Star Electric Company, Chicago, Ill. Switch. 1,876,535; Sept. 13.
Alsaker, Alfred, and J. Markese, assignor to The Delta-Star Electric Company, Chicago, Ill. Fuse clip. 1,876,536; Sept. 13.
Alsaker, Alfred, and E. Nordhem, assignor to The Delta Star Electric Company, Chicago, Ill. Switch. 1,876,537; Sept. 13.
Althens, Herbert E., Auburndale, assignor to The Reese Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,876,538; Sept. 13.
Altithermo Engineering Company. (See Anderson, John H., assignor.)
Aluminum Company of America. (See Belding, George A., assignor.)
Aluminum Screw Machine Products Company. (See Malby, Seth G., assignor.)
Alvord, Charles C., assignor to Worcester Loom Works, Worcester, Mass. Spool tension spring for tuft frame. 1,876,573; Sept. 13.
Ambler Asbestos Shingle & Sheathing Company. (See Acuff, William S., jr., assignor.)
American Can Company. (See Walter, George F., assignor.)
American Car and Foundry Company. (See Bisset, W. J., and Sheffer, assignors.)
American Car & Foundry Company. (See Dietrichson, William F., assignor.)
American Car and Foundry Company. (See Walp, Charles F., assignor.)
American Chicle Company. (See Gordon, Marcus A., assignor.)
American Crayon Company, The. (See Cooney, Frank B., assignor.)
American Electric Heater Company. (See Kuhn, F., and Thomas, assignors.)
American Face Brick Research Corporation. (See Lee, Sherman Q., assignor.)
American Face Brick Research Corporation. (See Lee, S. Q., and Hathaway, assignors.)
American Face Brick Research Corporation. (See Slidell, K., and Lee, assignors.)
American Fork & Hoe Company. (See Cowdery, Robert H., assignor.)
American Ironing Machine Company. (See Peter, E. C., Schuknecht, and Schnoor, assignors.)
American Oil Company, The. (See Wakefield, Arthur T., assignor.)
American Radiator Company. (See Brabbée, Charles W., assignor.)
American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)
American Welding Company. (See Rowland, Charles L., assignor.)
Anderau, Walter. (See Straub, F., and Anderau.)
Andersen, Andrew C. (See Simpson, E. G., Cronwall, Andersen, and Field.)
Andersen Frame Corporation. (See Andersen, F. C., and Swanson, assignors.)
Andersen, Fred C., Bayport, and E. C. Swanson, Stillwater, assignors to Andersen Frame Corporation, Bayport, Minn. Window and door frame. 1,876,546; Sept. 13.
Anderson, Clarence A., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Resistance measuring apparatus. 1,877,216; Sept. 13.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Manufacture of welded pipe. 1,877,621; Sept. 13.
Anderson, John H., Detroit, Mich., assignor to Altithermo Engineering Company. Apparatus for cracking and distilling hydrocarbons. 1,877,634; Sept. 13.
Anderson, John W., Gary, Ind. Method and device for manufacturing windshield wiper blades. 1,876,574; Sept. 13.
Anderson, Louis S., assignor to Reid, Murdoch & Co., Chicago, Ill. Table for displaying food containing receptacles. 1,877,217; Sept. 13.
Andis, Matthew, Racine, Wis. Hair clipper. 1,877,749; Sept. 13.
Andres, William J., assignor to Bendix Brake Company, South Bend, Ind. Brake-operating means. 1,876,575; Sept. 13.
Andvig, Hans, Oslo, Norway. Advertising device. 1,877,441; Sept. 13.
Antoniono, Caesar, Wilmette, Ill., assignor to General Electric Company. Remote control system. 1,877,635; Sept. 13.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Electric brake operating mechanism. 1,876,539; Sept. 13.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Servo brake mechanism for vehicles. 1,876,540; Sept. 13.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,876,541; Sept. 13.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Brake applying mechanism. 1,876,545; Sept. 13.
Apple, Vincent G., and F. W. Cotterman, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind. Vehicle brake. 1,876,542; Sept. 13.
Apple, Vincent G., Dayton, Ohio, and H. D. Hukill, assignors to Bendix Brake Company, South Bend, Ind. Electric control mechanism. 1,876,543; Sept. 13.
Apple, Vincent G., and F. W. Cotterman, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind. Servo brake mechanism. 1,876,544; Sept. 13.
Appleyard, Kenelm C., Birtley, C. W. H. Holmes, Low Fell, and I. L. Bramwell, assignors of one-fourth to The Birtley Iron Company, Limited, Birtley, England. Separation of dry materials. 1,876,825; Sept. 13.
Archor, Josef. (See Eichwede, H., and Rachor.)
Armstrong, George A., Cranston, R. I., assignor to William C. Greene Company. Finger ring. 1,877,442; Sept. 13.
Armstrong, Ralph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arrangement for openings in scanning disk-multiple cardioid. 1,877,547; Sept. 13.

Armstrong, Willis O., and J. A. Mowers, Rome, N. Y. Machine for marking soap and the like. 1,876,826; Sept. 13.

Aronstam, Pauline, New York, N. Y. Dispenser. 1,877,636; Sept. 13.

Arste, Henry L., Alhambra, Calif. Doorknob lock. 1,876,576; Sept. 13.

Arvidsson, Nils, Chicago, Ill. Cigarette lighter and dispenser. 1,874,472; Sept. 13.

Asbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,875,827; Sept. 13.

Ash, Charles S., Birmingham, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,877,379; Sept. 13.

Ashfield, Herbert, Brooklyn, N. Y. Bath room accessory. 1,876,828; Sept. 13.

Ashley, Carlyle M., South Orange, assignor to Carrier Corporation, Newark, N. J. Concealed radiation heat exchanger. 1,876,547; Sept. 13.

Associated Electric Laboratories, Inc. (See Anderson, Clarence A., assignor.)

Atherton, Alfred L., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Battery-charging means. 1,876,548; Sept. 13.

Athol Manufacturing Company. See Mitchell, Rowland B., assignor.

Atkins, Harry F., Peterborough, England. Machine for dressing revolving grinding wheels. 1,877,637; Sept. 13.

Aurora X-Ray Corporation. See Humphreys, Edwin S., assignor.)

Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Wood support for conductors. 1,876,577; Sept. 13.

Austin, Arthur O., Barberton, assignor, by mesne assignments to The Ohio Brass Company, Mansfield, Ohio. Insulator. 1,876,578; Sept. 13.

Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Insulator. 1,876,579; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,876,580; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Heavy current bushing. 1,876,581; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Coating and heat treating. 1,876,582; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Insulator. 1,876,583; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Conductor clamp. 1,876,584; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Joint for cables and other devices. 1,876,585; Sept. 13.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Joint for insulators. 1,876,586; Sept. 13.

Austin, Herbert, Bromsgrove, England. Change speed gear for motor vehicles. 1,876,587; Sept. 13.

Austin, Herbert, Bromsgrove, England. Motor car body fitted with collapsible or folding top. 1,876,588; Sept. 13.

Automotive Research Corporation. (See Thompson, Fred C., assignor.)

Avakian, Nesban, Detroit, Mich. Signal operating mechanism. 1,876,829; Sept. 13.

Babel, Elmer H. (See Robers, C. R., Babel, and Brodersen.)

Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff. (See Henninger, Ludwig, assignor.)

Baker, Arthur R., assignor to I. T. Swartz, Indianapolis, Ind. Carburetor. 1,877,117; Sept. 13.

Balassa, Carl E., Los Angeles, Calif. Method of and apparatus for treating photographic baths. 1,876,830; Sept. 13.

Baldwin, Edward, North Charleston, S. C. Car journal bearing. 1,877,638; Sept. 13.

Baldwin, Edward E., New York, N. Y. Marine craft. 1,877,380; Sept. 13.

Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Chair. 1,876,549; Sept. 13.

Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Door construction. 1,876,589; Sept. 13.

Ballantine, Stuart, Mountain Lakes, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound reproducer. 1,876,831; Sept. 13.

Bancroft, Everett C., Hamilton, N. Y. Apparatus for lifting invalids. 1,876,832; Sept. 13.

Bandemer, William E., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid depth indicating device. 1,876,590; Sept. 13.

Banfield, Thomas H., Portland, Oreg. Doorcheck. 1,877,639; Sept. 13.

Banner, Frank H., assignor to General Railway Signal Company, Rochester, N. Y. Making wrist pins. 1,876,550; Sept. 13.

Barboglio, Peter. (See Gunn, Fred M., assignor.)

Barker, Eugene. (See Speck, W. C., and Barker.)

Barnes, Gladeon M., U. S. Army, Hastings, Mich. Gun. 1,877,118; Sept. 13.

Barstow, Edwin O., and G. F. Dressel, assignors to The Dow Chemical Company, Midland, Mich. Gas purification. 1,876,551; Sept. 13.

Berthold, Erich. (See Kunz, M. A., Koeberle, and Berthold.)

Bartling, Friedrich, Hugliing, Germany. Ammonia-soda process for the production of sodium hydroxide, NaOH, with simultaneous production of ammonia. 1,877,489; Sept. 13.

Bassick Company, The. (See Claude-Mantle, Arthur, assignor.)

Batchell, George W., et al. (See Bulask, Francis J., assignor.)

Bauer, Rudolf. (See Hagedorn, M., Ziese, Reyle, and Bauer.)

Baumann, Karl, Urmston, England. Steam generator. 1,877,640; Sept. 13.

Bawden, William E., Long Beach, Calif. Pillow. 1,876,591; Sept. 13.

Beard, George M., Auburn, Ind. Wind motor. 1,877,622; Sept. 13.

Beard, William H., Beaumont, Tex. Thermometer. 1,876,592; Sept. 13.

Beaton, John Lorne, Parkland, Alberta, assignor of one-fourth to G. E. A. Malchow, Stavely, Canada. Grease gun filler. 1,877,381; Sept. 13.

Beauchamp, Wilfred A., assignor to Camel Company, Chicago, Ill. Door lock. 1,877,263; Sept. 13.

Bechstein, Carl, jr. (See Moore, E., Bechstein, and Gravenstein.)

Beck, Leo L., Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Motion study. 1,877,713; Sept. 13.

Becker, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Distillation of tar. 1,876,594; Sept. 13.

Becker, Julius, Syracuse, assignor to Semet-Solvay Engineering Corporation, Solvay, N. Y. Flue system for retort coke ovens. 1,876,593; Sept. 13.

Becker, Smith & Page, Incorporated. (See Hesse, Curt O., assignor.)

Beecher, Eugene L., East Cleveland, assignor to The Gabriel Company, Cleveland, Ohio. Shock absorber. 1,876,552; Sept. 13.

Behringer, Benjamin F., West Caldwell. N. J. Washing machine for rugs, carpets, etc. 1,877,156; Sept. 13.

Beldimano, Alexander, Rotterdam, Netherlands. Generating electric power by means of wind. 1,876,595; Sept. 13.

Belding, George A., assignor to Aluminum Company of America, Pittsburgh, Pa. Roof gutter and hanger therefor. 1,876,553; Sept. 13.

Belding, Harry H., assignor to Gibson Refrigerator Company, Greenville, Mich. Refrigerator door. 1,876,596; Sept. 13.

Bemis, Kenneth E., Glendale, Calif. Liquid dispenser. 1,876,554; Sept. 13.

Bendix Brake Company. (See Andres, Wiliam J., assignor.)

Bendix Brake Company. (See Apple, Vincent G., assignor.)

Bendix Brake Company. (See Apple, V. G., and Cotterman, assignors.)

Bendix Brake Company. (See Apple, V. G., and Hukill, assignors.)

Bendix Brake Company. (See Goepfrich, Rudolph A., assignor.)

Bendix Brake Company. (See Hirvonen, Erik J., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix Brake Company. (See Whitworth, Stanley, assignor.)

Benedek, Elek, Milwaukee, Wis., assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Pump. 1,876,833; Sept. 13.

Bennett, George L., Cleveland Heights, Ohio. Sheet metal roof. 1,876,597; Sept. 13.

Berge, Joseph, Montclair, assignor to National Lock Washer Company, Newark, N. J. Spring washer. 1,876,834; Sept. 13.

Berge, Joseph, Montclair, assignor to National Lock Washer Company, Newark, N. J. Spring washer. 1,876,835; Sept. 13.

Berge, Joseph, Montclair, assignor to National Lock Washer Company, Newark, N. J. Helical lock washer for straight counterbores. 1,876,836; Sept. 13.

Bernardin Bottle Cap Company. (See Spahn, August C., assignor.)

Berry, Otto C., Indianapolis, Ind. Piston. 1,877,490; Sept. 13.

Bettschart, Anton, Neuhausen, Switzerland, and O. Nydegger, Bergheim-Erft, Germany. Reducing the attacks by alkaline liquids on straining cloths. 1,876,837; Sept. 13.

Biggert, Florence C., jr., Crafton, assignor to United Engineering and Foundry Company, Pittsburgh, Pa. Flying cutter. 1,876,838; Sept. 13.

Billig, Kurt. (See Schirmacher, Karl and W., Schaich, Wolfram, Tampka, and Billig.)

Bills, Charles E., assignor to Mead Johnson & Company, Evansville, Ind. Insolating apparatus. 1,877,382; Sept. 13.

Binford, Edwin B., Beverly Hills, assignor of one-half to Continental Building Specialties Inc., Los Angeles, Calif. Cutting and grooving machine. 1,877,443; Sept. 13.

Binns, George W. (See Harrison, R. E. W., Haas, and Binns.)

Birnbaum, Charles, Brooklyn, N. Y. Attaching means for interchangeable letters of initial rings or the like. 1,877,750; Sept. 13.

Birtley Iron Company, The. (See Appleyard, K. C., Holmes, and Bramwell, assignors.)

Birtwistle, Arthur E., and A. Roeser, Brooklyn, N. Y. Stall gate for race tracks. 1,876,839; Sept. 13.

Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Lamp changing mechanism for beacons. 1,876,840; Sept. 13.

Bisset, Wallace J., Bloomsburg, Pa., and J. W. Sheffer, Glen Ridge, N. J., assignors to American Car and Foundry Company, New York, N. Y. Electric heater. 1,876,598; Sept. 13.

Black, Knox C., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Combined rectifier and amplifier circuit. 1,876,841; Sept. 13.

Blackley, Franklin O. M., Serum Company, The. (See Wright, M. G., and Wootton, assignors.)

Blackstock, Gibbs, Toronto, Ontario, Canada. Change gear device. 1,877,383; Sept. 13.

Blank, Anna M. (née Lechner). (See Blank, Rudolph, assignor.)

Blank, Rudolph, assignor to A. M. Blank née Lechner, Emerson, N. J. Exercising apparatus. 1,877,218; Sept. 13.

Blatz, Peter A., Westover Hills, Del. Treating leather. 1,877,119; Sept. 13.

Blaw-Knox Company. (See Miscampbell, Hugh, assignor.)

Blow, George, New York, N. Y. Combustion engine. 1,876,599; Sept. 13.

Bock, Ashley, P., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Signaling system. 1,876,555; Sept. 13.

Boden, George, assignor to Scovill Manufacturing Company, Waterbury, Conn. Window locking device. 1,876,556; Sept. 13.

Bodenstein, Jacob, Herkimer, N. Y. Drawer for furniture. 1,876,557; Sept. 13.

Boe, Henry L., Minneapolis, Minn. Garment hanger. 1,877,550; Sept. 13.

Boehme, Gustav, Berlin-Zehlendorf, Germany. Toy aircraft. 1,877,120; Sept. 13.

Böger, Otto, Dessau-in-Anhelm, and O. Meissner, Uerdingen-on-the-Rhine, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. New dyestuffs of the diamino-triphenylmethane series. 1,876,842; Sept. 13.

Bohen, Edwin J., Chicago, Ill., assignor to Standard Oil Company, Whitney, Ind. Lubricating high temperature equipment for cooking food. 1,877,491; Sept. 13.

Bolling, Robert, Detroit, Mich. Bake oven. 1,876,843; Sept. 13.

Bolton, Eric N. (See Bolton, P. H., and Bolton.)

Bolton, Paul H., and E. N. Bolton, Youngstown, Ohio. Process for food products. 1,871,641; Sept. 13.

Bomhoff, Cornelius, Rockaway, N. J., assignor to Gotham Silk Hosiery Company, Inc., New York, N. Y. Knitting apparatus. 1,877,492; Sept. 13.

Bommer, Fred W., and C. E. Clarke, Winchester, assignors by mesne assignments to Stowe-Woodward, Inc., Newton, Mass. Apparatus for forming rubber threads or strips. 1,876,600; Sept. 13.

Bond Manufacturing Corporation. (See Rogers, Louis F., assignor.)

Bonewitz, Clarence, Dayton, Ohio. Stringed musical instrument. 1,876,558; Sept. 13.

Bonney-Floyd Company, The. (See Mitchell, A., and Gregg, assignors.)

Boock, Alfred C., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Engine base construction. 1,876,844; Sept. 13.

Booth, Samuel C., Montreal, Quebec, Canada. Animal trap. 1,877,264; Sept. 13.

Born, Arthur C. (See Oldberg, V., and Born.)

Borton, George W., New Lisbon, N. J., assignor to Pennsylvania Crusher Company, New York, N. Y. Hammer crusher. 1,877,121; Sept. 13.

Bosh, Robert, Aktiengesellschaft. (See Menzel, Friedrich, assignor.)

Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Tire core extractor. 1,877,751; Sept. 13.

Bothwell, Melvin, Atlantic City, N. J. Counter-sunk ash tray for card tables. 1,876,559; Sept. 13.

Bowen, John E. (See Bowen, Robert S. and J. E.)

Bowen, Robert S., and J. E., West Newton, Mass. Motion picture apparatus. 1,876,845; Sept. 13.

Bowers, Frank. (See Snow, N. L., Howse, and Bowers.)

Bowers, Frank, assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,877,719; Sept. 13.

Brabbée, Charles W., Bronxville, assignor to American Radiator Company, New York, N. Y. Radiator. 1,876,601; Sept. 13.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburgh, N. Y. Production of chemical pulp. 1,877,219; Sept. 13.

Bradley Pulverizer Company. (See Bibson, William A., assignor.)

Brady, Herbert F., Winona, Minn. Wrench. 1,877,642; Sept. 13.

Bramwell, Ivor L. (See Appleyard, K. C., Holmes, and Bramwell.)

Brandt, Leopold, Dortmund-Horde, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Welding agent. 1,876,846; Sept. 13.

Braun, Philip N., assignor to The Prosperity Company Inc., Syracuse, N. Y. Dampening means for pressing machines. 1,876,602; Sept. 13.

Brecker, Henry W. (See Adams, Ervin, assignor.)

Briggs Manufacturing Company. (See Ball, Albert P., assignor.)

Briggs and Stratton Corporation, The. (See Fitz Gerald, John W., assignor.)

Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)

Brightman, Rainald, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Dyeing viscose rayon and the dyed material thus obtained. 1,876,560; Sept. 13.

Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Manufacture of new azo dyes. 1,876,848; Sept. 13.

Brimer, Charles, Margaretville, N. Y. Plant compressing and binding device. 1,877,548; Sept. 13.

Brinker, Frederic A., Denver, Colo. Producing crude and fumed zinc oxide. 1,877,122; Sept. 13.

Brinser, Oscar D., Richmond, Va. Adjustable scythe blade fastening. 1,877,549; Sept. 13.

British Insulated Cables Limited. (See Bullock, Thomas W., assignor.)

Brockett, Bluford W., Cleveland Heights, Ohio, assignor to Railway Service and Supply Corporation, Indianapolis, Ind. Waste reclamation apparatus. 1,876,603; Sept. 13.

Brockhurst, James B., Red Bank, N. J. Constructing sea walls. 1,877,493; Sept. 13.

Brodersen, Max M. (See Rogers, C. R., Babel, and Brodersen.)

Bromley, Thomas C., Leicester, England, assignor to Jacquard Knitting Machine Company, Inc., Philadelphia, Pa. Circular knitting machine. 1,877,220; Sept. 13.

Bronson, Budd, Lakewood, assignor to The Ohio Rubber Company, Cleveland, Ohio. Steel and rubber product. 1,876,849; Sept. 13.

Brooks Engineering Corporation. (See Brooks, Stephen H., assignor.)

Brooks, Stephen H., assignor to Brooks Engineering Corporation, Los Angeles, Calif. Regulator valve. 1,877,487; Sept. 13.

Brown, George R. and G. F. Naab, assignors to The North American Manufacturing Company, Cleveland, Ohio. Automatic shut-off valve. 1,877,221; Sept. 13.

Brown, Hadyn, London, England. Device for testing sensory and mental faculties. 1,877,643; Sept. 13.

Brown & Sharpe Manufacturing Company. (See Rich, Charles A., assignor.)

Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Power take-off mechanism for tractors. 1,876,561; Sept. 13.

Brown, Theophilus and B. J. Kough, assignors to Deere & Company, Moline, Ill. Agricultural implement. 1,876,562; Sept. 13.

Browne-Morse Company. (See Soper, Raymond H., assignor.)

Brownell Company, The. (See Little, Clarence B., assignor.)

Brownlee, Dalmar T., Indianapolis, Ind. Anti-friction journal bearing. 1,877,486; Sept. 13.

Brubaker, Henry J., and J. B. Brubaker, San Dimas, assignors, by mesne assignments, to Kunkel Manufacturing Company, Ltd., Los Angeles, Calif. Feeding mechanism. 1,876,847; Sept. 13.

Brubaker, John B. (See Brubaker, Henry J. and J. B.)

Bruce, Walter E., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Radio apparatus. 1,877,551; Sept. 13.

Bruner, Cecil U., and W. S. Laughridge, Marion, Kans. Spreader and evener attachment for motor grader. 1,876,604; Sept. 13.

Brunner, Walter. (See Herz, Schubert, and Brunner.)

Brydle, Fenton R., Jamaica, N. Y., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Shingle. 1,877,222; Sept. 13.

Büchner, Carl, assignor to Papyrus A. G., Mannheim-Waldhof, Germany. Paper making machine. 1,876,563; Sept. 13.

Buck, Everett S., assignor, by mesne assignments, to The Edwards Manufacturing Company, Cincinnati, Ohio. Humidifying air. 1,877,223; Sept. 13.

Buckeye Portable Tool Company. (See Price, W. W., and Ripsch, assignors.)

Buckeye Steel Castings Company. (See Speck, W. C., and Barker, assignors.)

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing car wheel. 1,876,564; Sept. 13.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Separable drill bit. 1,876,565; Sept. 13.

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Truck side frame. 1,877,740; Sept. 13.

Buda Company, The. (See Kastler, Edward L., assignor.)

Buesch, Andrew P. (See Freeman, L. C., and Buesch.)

Bulask, Francis J., assignor of one-half to G. W. Batchell, and F. G. Schwalbe, Toledo, Ohio. Melting glass. 1,877,714; Sept. 13.

Bullock, Thomas W., Rainhill, assignor to British Insulated Cables Limited, Prescot, Lancashire, England. Machine for pushing foundry molds out of their boxes. 1,877,494; Sept. 13.

Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Producing coked agglomerates. 1,877,123; Sept. 13.

Burg, Grover F., Ann Arbor, Mich. Washer and/or drier for golf balls or similar articles. 1,876,851; Sept. 13.

Burgess, C. F., Laboratories, Inc. (See Shoemaker, Milton J., assignor.)

Burgess, John J., assignor to Rock Island Register Company, Rock Island, Ill. Register for heating plants. 1,876,850; Sept. 13.

Burgett, Marion F., Indianapolis, Ind. Metal worker's rapid spacer. 1,876,605; Sept. 13.

Burke, Alfred, New York, N. Y. Lamp shade frame. 1,877,552; Sept. 13.

Burkhalter, William T., Reidsville, Ga. Nut-lock. 1,877,384; Sept. 13.

Burkhart, Eddie, Tacoma, Wash. Flying machine. 1,877,474; Sept. 13.

Busbnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Brake applying apparatus. 1,877,554; Sept. 13.

Bushnell, Charles S., assignor to General Railway Signal Company, Rochester, N. Y. Train control system for railroads. 1,877,555; Sept. 13.

Bushnell, Charles S., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Train control. 1,877,553; Sept. 13.

Busnnell, Charles S., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Train control. 1,876,566; Sept. 13.

Bushnell, Myron B., Los Angeles, Calif. Paper feeder. 1,876,606; Sept. 13.

Butler, Joseph M., Vernon, N. Y. Fish line drying reel. 1,877,444; Sept. 13.

Butterworth, Arthur B., Brooklyn, N. Y., assignor to Butterworth System, Inc. Cleaning machine. 1,876,607; Sept. 13.

Butterworth System, Inc. (See Butterworth, Arthur B., assignor.)

C-S. Engineering Company. (See Schellens, Eugene L., assignor.)

Calcott, William S., Penns Grove, and F. B. Downing, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Making polymers of acetylene. 1,876,857; Sept. 13.

Calorizing Corporation of America. (See Rawson, Grant I., assignor.)

Camel Company. (See Beauchamp, Wilfred A., assignor.)

Cannon, Hiram B., Erie, Pa. Process of and apparatus for the combustion of solid fuel. 1,877,224; Sept. 13.

Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Tubular filter. 1,877,157; Sept. 13.

Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Device for cleaning filter tubes. 1,877,723; Sept. 13.

Cannon-Prutzman Treating Processes, Ltd. (See Cannon, Hugh H., assignor.)

Capeliuschnicoff, Matvey A., New York, N. Y. Drilling tool. 1,877,225; Sept. 13.

Capello, Esteban. (See Massobrio, P., and Capello.)

Carbonara, Victor E., Rockville Centre, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Navigation light. 1,876,852; Sept. 13.

Carborundum Company, The. (See Tone, Frank J., assignor.)

Carew, Herman, assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Paper cup. 1,877,158; Sept. 13.

Carley, Leonard R., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button. 1,876,854; Sept. 13.

Carley, Leonard R., Watertown, and W. T. Abel, Waterville, assignors to The Patent Button Company, Waterbury, Conn. Shell button. 1,876,853; Sept. 13.

Carlile, Alfred E., Meadville, Pa. Pull for a slide fastener. Des. 87,738; Sept. 13.

Carlson, Axel F., Cambridge, assignor to The Reece Button Hole Machine Company, Boston, Mass. Thread trimmer for sewing machines. 1,877,159; Sept. 13.

Carlson, Oscar F., assignor to Deere & Company, Moline, Ill. Stalk splitting attachment for corn harvesters. 1,876,567; Sept. 13.

Carlson, Oscar F., assignor to Deere & Company, Moline, Ill. Steering mechanism. 1,876,568; Sept. 13.

Carpenter, E. W., Manufacturing Company, The. (See Carpenter, Edward W., assignor.)

Carpenter, Edward W., Fairfield, assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Booster for loose leaf metals. 1,876,509; Sept. 13.

Carr, Raymond L., Boston, Mass. Vehicle body. 1,876,855; Sept. 13.

Carrier Corporation. (See Ashley, Carlyle M., assignor.)

Carter, Sidney T., Parnassus, Pa. Propeller. 1,876,608; Sept. 13.

Carter, Sidney T., Parnassus, assignor to himself and R. E. Lankford, Pittsburgh, Pa., jointly as trustees. Adjustable pitch propeller. 1,876,609; Sept. 13.

Casaletto, Joseph A., Los Gatos, Calif. Automatic take-up mechanism. 1,877,385; Sept. 13.

Case, J. I., Company. (See MacGregor, Wallace F., assignor.)

Case, Philip S., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Spray gun. 1,876,610; Sept. 13.

Case, Philip S., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Spray producing device. 1,876,611; Sept. 13.

Cater, William H., Chicago, Ill. Bearing. 1,877,495; Sept. 13.

Cesario, Aurelio, New York, N. Y. Safety razor. 1,876,570; Sept. 13.

Chadwick, Francis L., assignor to Woodall Industries Incorporated, Detroit, Mich. Vehicle body panel structure. 1,877,265; Sept. 13.

Chaffee, Edward F., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Weather or buffer strip for window sashes. 1,877,729; Sept. 13.

Chamberlain, Alfred J., Milwaukee, Wis. Dispensing container. 1,877,226; Sept. 13.

Chamberlain & Hookham Limited. (See James, Samuel, assignor.)

Chance, Thomas M., Merion, Pa. Separating materials of different specific gravities. 1,876,533; Sept. 13.

Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Switch. 1,877,445; Sept. 13.

Chanter, Arthur J., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined lamp and horn. Des. 87,739; Sept. 13.

Chapin, George M., and H. H. Goff, Hammond, Ind. Apparatus for the manufacture of feed for chickens and other animals. 1,877,266; Sept. 13.

Chase Companies, The. (See Pope, Elton A., assignor.)

Chemical Holding Corporation. (See Richter, William F., assignor.)

Chiotti, Gabriele, Aliquippa, Pa. Glass cutting apparatus. 1,876,612; Sept. 13.

Chireix, Henri, Paris, France. Acoustic device. 1,876,858; Sept. 13.

Christopher, John L., Euclid, Ohio. Door operating device. 1,877,386; Sept. 13.

Cincinnati Grinders Incorporated, The. (See Haas, F. S., and Kearns, assignor.)

Cincinnati Grinders Incorporated, The. (See Liljeberg, Carl G., assignor.)

Clamer, Guilliam H. (See Neuhauss, Heinrich, assignor.)

Clarage Fan Company. (See McMurdie, Francis J., assignor.)

Clark, Ary C., and A. L. Graves, Imperial, Calif., said Graves assignor to Imperial Irrigation District. Canal excavator. 1,877,556; Sept. 13.

Clark, Edward E., Los Angeles, assignor to George S. Irwin, Santa Monica, Calif. Holster. 1,876,613; Sept. 13.

Clark, Frank M., Pittsfield, Mass., assignor to General Electric Company. Impregnating electrical devices. 1,877,644; Sept. 13.

Clark, J. L., Manufacturing Co. (See Truesbury, Fred C., assignor.)

Clark, Olin B. (See Northrop, J. K., and Clark.)

Clarke, Charles E. (See Bommer, F. W., and Clarke.)

Clary, Jan P. (See Allen, R. M., and Dickinson, assignors.)

Claud-Mantle, Arthur, Trumbull, assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,877,186; Sept. 13.

Claude, Georges, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y. Discharge tube. 1,877,715; Sept. 13.

Claude, Georges, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y. Gas discharge light. 1,877,716; Sept. 13.

Claus, Ernst C., Chicago, Ill. Cooker for Frankfurters or the like. 1,876,614; Sept. 13.

Clavel, René, Basel, Switzerland. Loading textile material. 1,876,615; Sept. 13.

Clay Equipment Corporation. (See Clay, Joseph B., assignor.)

Clay, Joseph B., assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Gate latching device. 1,876,856; Sept. 13.

Cleveland Automatic Machine Company, The. (See Rupple, Harry W., assignor.)

Cleveland Crane & Engineering Company, The. (See Heinle, Walter C., assignor.)

Cleveland Stoker Company, The. (See Hinsch, Louis L., assignor.)

Cleveland Stoker Company, The. (See Hitchcock, Reuben, assignor.)

Cline, Allan J., Chicago, Ill. Driving mechanism for printing presses. 1,877,387; Sept. 13.

Cochrane Corporation. (See Lyon, Percy S., assignor.)

Coe, Frank S. (See Curtis, L. F., and Coe.)

Coe Manufacturing Company, The. (See Moore, Richard C., assignor.)

Coelho, Manuel T., Redwood City, Calif. Sprinkler and lawn sweeper. 1,877,388; Sept. 13.

Cohen-Venezian, Carlo, Turin, Italy. Crane. 1,877,373; Sept. 13.

Cole, Eugene R., Toledo, Ohio. Tool box or case. 1,877,490; Sept. 13.

Cole, Frank H., Chelsea, Mass. Boiler tube cleaner. 1,877,267; Sept. 13.

Cole, Fred H., and M. Skau, assignors to Delta-Star Electric Company, Chicago, Ill. Unit type multistage auxiliary switch. 1,877,557; Sept. 13.

Cole, Guerney H., and J. S. High, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Sound producing device. 1,877,558; Sept. 13.

Cole, James R., Tulsa County, Okla. Stuffing box and packing therefor. 1,877,268; Sept. 13.

Colella, Louis A., assignor of one-half to M. Shell, Detroit, Mich. Vehicle and mechanism for propelling the same. 1,876,859; Sept. 13.

Colgren, Charles A., Bloomington, Ind. Stone milling machine. 1,877,269; Sept. 13.

Collings, William R., assignor to The Dow Chemical Company, Midland, Mich. Manufacture of a composite sheet. 1,877,270; Sept. 13.

Collins, J. N., Company. (See Pearce, Sidney, assignor.)

Collins, W. C. (See Opp, Fred W., assignor.)

Columbia Phonograph Company. (See Friebus, Reginald T., assignor.)

Colvin, Nolan D., assignor to Deere & Company, Moline, Ill. Stalk lifter. 1,877,271; Sept. 13.

Combs, Edward L., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Radiocabinet. Des. 87,769; Sept. 13.

Commerce Guardian Trust & Savings Bank, The. (See Replogle, Daniel B., assignor.)

Compo, John J., Defiance, Ohio. Muffler. 1,876,861; Sept. 13.

Conklin, John H., East Hampton, Conn. Toy telephone. 1,877,160; Sept. 13.

Conklin, Roscoe D., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Mechanism for reversing motive devices for operating doors and the like. 1,877,161; Sept. 13.

Conlon, Thomas P. (See Hayes, George M., assignor.)

Connell, Edwin L., assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio. Power tool. 1,876,616; Sept. 13.

Continental Building Specialties, Inc. (See Binford, Edwin B., assignor.)

Cooling Tower Co., The. (See Phillips, Louis A., assignor.)

Cooney, Frank B., assignor to The American Crayon Company, Sandusky, Ohio. Nondrip siphon and agitator. 1,876,860; Sept. 13.

Copple, James L., Kansas City, Kans. Toy gun. 1,877,559; Sept. 13.

Cords, Otto, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Deep sea cable. 1,877,497; Sept. 13.

Cordy, Ivor, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Jar. Des. 87,770; Sept. 13.

Corell, Martin. (See Kranzlein, G., Vollmann, and Corell.)

Corson, Michael G., Jackson Heights, N. Y., assignor to National Lead Company. Refining lead. 1,786,617; Sept. 13.

Cory, Chas., Corporation. (See Feder, Joseph B., assignor.)

Coryell, William C., assignor to Republic Steel Corporation, Youngstown, Ohio. Cold rolling metal. 1,787,645; Sept. 13.

Cotterman, Frederick W. (See Apple, V. G., and Cotterman.)

Cottrell, C. J. (See Holtzman, John, assignor.)

Coultas, Wilbur J., Rock Island, assignor to Deere & Company, Moline, Ill. Mower. 1,877,272; Sept. 13.

Cowan, Andrew T., Rensselaer, N. Y. Sanding apparatus. 1,877,475; Sept. 13.

Cowdery, Robert H., Geneva, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Bow. 1,877,273; Sept. 13.

Cox, Nostrand and Gunnison, Inc. (See Gunnison, Foster, assignor.)

Coy, Harley A., Mascot, Tenn. Safety razor blade sharpener. 1,876,618; Sept. 13.

Craig, Richard M., assignor, by mesne assignments, to T. W. Menefee, San Antonio, Tex. Display apparatus. 1,877,646; Sept. 13.

Crawford, Alfred, assignor to Crawford Manufacturing Company, New Brunswick, N. J. Electric stop motion for knitting machines. 1,877,647; Sept. 13.

Crawford Manufacturing Company. (See Crawford, Alfred, assignor.)

Cress, Horatio G., Troy, Ohio. Easel blackboard. 1,876,619; Sept. 13.

Crocker-Wheeler Electric Manufacturing Company. (See Selden, Andrew K., jr., assignor.)

Croft, Hiram D. (See Perkins, J. L., and Croft.)

Cronwall, Carl G. (See Simpson, E. G., Cronwall, Andersen, and Field.)

Cross, Grosvenor M., Belvedere, Calif. Spring reaction neutralizer. 1,876,862; Sept. 13.

Cross, Grosvenor M., Boston, Mass. Shock absorber. 1,876,863; Sept. 13.

Crossland, William H., Bristol, Pa. Wing heater for areoplanes. 1,876,620; Sept. 13.

Crouse-Hinds Company. (See Bissell, Carl H., assignor.)

Crowhurst, Frank S., Los Angeles, Calif. Building construction. 1,877,274; Sept. 13.

Crute, Joseph T., assignor of one-half to M. A. Goode, Virgilina, Va. Tool for truing crank shafts. 1,876,621; Sept. 13.

Cummins, Thomas K., assignor to Northern Malleable Iron Company, St. Paul, Minn. Drop brake. 1,877,730; Sept. 13.

Cunningham, Arthur B., assignor to Republic Flow Meters Co., Chicago, Ill. Differential gas balance. 1,877,738; Sept. 13.

Cunningham, James, Portland, Oreg. Combination nailing, stapling, and riveting machine. 1,876,622; Sept. 13.

Cunningham, Lewis L., assignor to Minneapolis Honeywell Regulator Company, Minneapolis, Minn. Fuel control apparatus. 1,877,275; Sept. 13.

Cunningham, William L., Salina, Kans. Air-vent parachute. 1,877,227; Sept. 13.

Curtis, Leslie F., and F. S. Coe, Springfield, Mass., assignors to United American Bosch Corporation, Springfield, Mass. Radio tuning apparatus. 1,877,228; Sept. 13.

Curtis, Richard C., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Voltage-supply means for directional relays. 1,877,446; Sept. 13.

Cutts, Richard M., Washington, D. C. Lubricating system. 1,877,124; Sept. 13.

Dailey, William T., et al. (See Hutchings, Edward W., assignor.)

Daimler-Benz Aktiengesellschaft. (See Wagner, Max, assignor.)

Daniels, Fred H., assignor to Riley Stoker Corporation, Worcester, Mass. Furnace. 1,876,623; Sept. 13.

Daughday, Frank P., Providence, R. I. Mounting for ornaments. 1,876,624; Sept. 13.

Daugherty, Lester, Kokomo, Ind. Illuminated ornament for automobiles. 1,876,625; Sept. 13.

Daum, Herman H., Hudson, assignor, by direct and mesne assignments, to Electro-Matic Scale Eliminator, Inc., Cleveland, Ohio. Removing boiler scale and preventing the formation thereof. 1,877,389; Sept. 13.

Davidson, Clifton B., Decatur, Ill. Switch stand. 1,877,276; Sept. 13.

Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine element construction for garment and laundry pressing machines. 1,876,626; Sept. 13.

Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine. 1,877,453; Sept. 13.

Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. High pressure and low pressure pressing machine. 1,877,752; Sept. 13.

Davis, Francis H. and F. F., Monterey, Calif. Multiple pipe unit adaptable to the drilling and pumping arts. 1,876,627; Sept. 13.

Davis, Frank F. (See Davis, Francis H. and F. F.)

Davis, Frank M., Milwaukee, Wis. Vertical continuous drilling machine. 1,877,277; Sept. 13.

Davis, Frank M., Milwaukee, Wis. Beet topper and harvester. 1,877,278; Sept. 13.

Davis, Frank M., Milwaukee, Wis. Vertical continuous milling machine. 1,877,560; Sept. 13.

Davis, Merrill, Detroit, Mich. Mechanical refrigerator. 1,877,390; Sept. 13.

Davis, Robert L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmitting circuit. 1,877,561; Sept. 13.

Davis, Roy P. M., Mount Union, Pa. Brickmaking machine. 1,876,864; Sept. 13.

Dawe, Joseph, Hyde Park, London, England. Tractor wheel. 1,876,628; Sept. 13.

Dawson, John W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photo-sensitive device. 1,877,279; Sept. 13.

Day, Walter A., Washington, Pa. Portable nailing machine. 1,877,162; Sept. 13.

Deacon, Erl E. (See Disler, H. E., and Deacon.)

Dean, George E., Walker Township, Kent County, assignor to C. G. Willett, Grand Rapids, Mich. Scraper blade mounting. 1,876,865; Sept. 13.

Dean, George E., assignor to C. G. Willett, Grand Rapids, Mich. Street sweeper. 1,876,866; Sept. 13.

Dean, George E., Walker Township, Kent County, assignor to C. G. Willet, Grand Rapids, Mich. Spring grader and moldboard. 1,876,867; Sept. 13.

Deats, John S., assignor to Deats Sash and Door Company, Los Angeles, Calif. Adjustable sash. 1,877,280; Sept. 13.

Deats Sash and Door Company. (See Deats, John S., assignor.)

De Baerdemaeker, Ernest, Brussels, Belgium. Permanently waving hair. 1,876,868; Sept. 13.

De Bence, Stephen B., assignor to Alco Products, Incorporated, New York, N. Y. Tube hanger. 1,877,391; Sept. 13.

De Bernardi, Mario, Rome, Italy. Combined controlling device for steering and stabilizing aircraft. 1,877,498; Sept. 13.

De Bernardi, Mario, Rome, Italy. Combined steering and stabilizing control device for aircraft. 1,877,499; Sept. 13.

Decarie Incinerator Corporation. (See Woodman, Joseph C., assignor.)

Decker, Ellen W., South Orange, N. J. Stocking. 1,877,281; Sept. 13.

Deere & Company. (See Brown, Theophilus, assignor.)

Deere & Company. (See Brown, T., and Kough, assignors.)

Deere & Company. (See Carlson, Oscar F., assignor.)

Deere & Company. (See Colvin, Nolan D., assignor.)

Deere & Company. (See Coultas, Wilbur J., assignor.)

Deere & Company. (See Dieterich, Arthur B., assignor.)

Deere & Company. (See Erwin, Charles H., assignor.)

Deere & Company. (See Helmkamp, Walter F., assignor.)

Deere & Company. (See Hyland, William A., assignor.)

Deere & Company. (See Paul, Talbert W., assignor.)

Deere & Company. (See Paul, William L., assignor.)

DeLaney, Edward A., et al. (See Rowland, Charles L.)

De Laval Separator Company, The. (See Forsberg, Erik A., assignor.)

Delco Products Corporation. (See Kindl, Carl H., assignor.)

Deligianes, Thomas N., Chicago, Ill. Paper napkin. Des. 87,740; Sept. 13.

De Lorenzo, Thomas, West Medford, Mass. Container display board. 1,876,869; Sept. 13.

Del Papa, Louis, Pawtucket, R. I. Article holder. 1,877,229; Sept. 13.

Delta Manufacturing Company. (See Tautz, Herbert E., assignor.)

Delta-Star Electric Company, The. (See Alsaker, Alfred, assignor.)

Delta-Star Electric Company. (See Alsaker, A., and Markese, assignors.)

Delta-Star Electric Company. (See Alsaker, A., and Nordhem, assignors.)

Delta-Star Electric Company. (See Cole, F. H., and Skau, assignors.)

Delta Star Electric Company, The. (See Rah, Joseph, assignor.)

Delta-Star Electric Company. (See Sumpter, John E., assignor.)

Delta-Star Electric Company. (See Van Rosen, Hugo, assignor.)

Denning, Paul S., assignor to Frederic E. Schundler, Joliet, Ill. Coloring granular and other material. 1,876,629; Sept. 13.

Denning, Paul S., assignor to Frederic E. Schundler, Joliet, Ill. Coloring granular and other material. 1,876,630; Sept. 13.

Dennis, John W., assignor to The Philadelphia Drying Machine Company, Philadelphia, Pa. Form for drying hosiery and the like. 1,876,631; Sept. 13.

Dennis, John W., assignor to The Philadelphia Drying Machine Company, Philadelphia, Pa. Form for drying hosiery and the like. 1,876,632; Sept. 13.

Dennison, Herbert J. S. (See Posgate, James L., assignor.)

De Pasquale, Dominick, and J. L. Howard, Mount Vernon, N. Y. Sterilizer and hot liquid extractor. 1,877,392; Sept. 13.

De Pew, Chester C., Keyport, N. J., assignor to Whirlpool Incorporated. Whirlpool game device. 1,877,230; Sept. 13.

De Sana, Arthur J. (See Simpson, E. G., De Sana, and Flynn.).

Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire building apparatus. 1,876,633; Sept. 13.

Desautels, Joseph R., Sallsbury, Vt. Automatically adjustable airplane propeller. 1,876,634; Sept. 13.

Detroit Aluminum & Brass Company. (See Fobert, P. J., and Ducharme, assignors.)

Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)

Detroit Steel Products Company. (See Robinson, Claude A., assignor.)

Deutsche Gluhfadenfabrik Rich-Kurtz & Dr. Ing. Paul Schwarzkopf G. m. b. H. (See Löwit, Rudolf, assignor.)

Deutscher, William F., New York, N. Y. Aeroplane construction. 1,876,635; Sept. 13.

Diamond Chain and Manufacturing Company. (See Kottlowski, Clarence F., assignor.)

Diamond Power Specialty Corporation. (See Bowers, Frank, assignor.)

Diamond Power Specialty Corporation. (See Howse, C. L., and Lowell, assignors.)

Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)

Diamond Power Specialty Corporation. (See Snow, N. L., Howse, and Bowers, assignors.)

Dicke, Allen A., Montclair, N. J., assignor to Pioneer Heat Regulator Corporation. Temperature regulating system. 1,876,636; Sept. 13.

Dicke, Oscar H., assignor to General Railway Signal Company, Rochester, N. Y. Signaling system for railroads. 1,877,562; Sept. 13.

Dieterich, Arthur B., assignor to Deere & Company, Moline, Ill. Corn sheller. 1,877,282; Sept. 13.

Dietrichson, William F., St. Louis, Mo., assignor to American Car and Foundry Company, New York, N. Y. Door closing device for cars. 1,876,637; Sept. 13.

Dillon Company. (See Dillon, Stephen V., assignor.)

Dillon, Stephen V., assignor to The Dillon Company, Tulsa, Okla. Guiding means for pipe couplings. 1,876,638; Sept. 13.

Diskin, Harry, New York, N. Y. Chambered clothes hanger for containing an insect repelling material. 1,877,283; Sept. 13.

Disler, Harry E., Tulsa, and E. E. Deacon, Oklahoma City, Okla. Hose clamp. 1,876,639; Sept. 13.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,640; Sept. 13.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,877,663; Sept. 13.

Dodge, Adiel Y., South Bend, Ind. Light projecting apparatus. 1,877,284; Sept. 13.

Dodge Manufacturing Corporation. (See Strong, Arthur P., assignor.)

Dollhopf, Hans, Buffalo, N. Y. Bell hammer holder. 1,876,870; Sept. 13.

Doman, Carl T., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Fan construction. 1,876,871; Sept. 13.

Dorr Company, The. (See Shimmin, John T., assignor.)

Dorrer, August, W. Scheurer, and A. Ohmer, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing preparation for coloring chrome leather and making the same. 1,876,641. Sept. 13.

Dorsett, James D. (See Koontz, David R., assignor.)

Doub, Edwin A., Walnut, Kans., assignor of one-half to J. M. Harper, Kansas City, Mo. Starting gear. 1,876,642; Sept. 13.

Douglas, Harry A. (See Schmid, William, assignor.)

Douglas, Harry A. Bronson, Mich. Electric switching mechanism. 1,876,872; Sept. 13.

Douglas, Harry A., Bronson, Mich. Electric lamp. 1,876,873; Sept. 13.

Douglas, Harry A., Bronson, Mich. Electric switch. 1,876,874; Sept. 13.

Douglas, Harry A., Bronson, Mich. Automotive vehicle switching mechanism. 1,876,875; Sept. 13.

Douglas, Harry A., Bronson, Mich. Circuit continuing device. 1,876,876; Sept. 13.

Douglas, Harry A., Bronson, Mich. Reflecting electric lamp. 1,876,877; Sept. 13.

Douglas, Harry A., Bronson, Mich. Electric switch. 1,876,878; Sept. 13.

Douthitt, Frank H., Chicago, Ill., assignor of one-half to C. E. Gray, Oakland, Calif. Apparatus for the dessiccation of substances. 1,877,648; Sept. 13.

Dove, Leonard P., assignor, by mesne assignments, to R. M. Stee, trustee, Minot, N. Dak. Dye and making same. 1,877,748; Sept. 13.

Dow Chemical Company. (See Barstow, E. O., and Dressel.)

Dow Chemical Company. (See Collings, William R., assignor.)

Dow Chemical Company, The. (See Grebe, J. J., and Sanford, assignors.)

Dow Chemical Company. (See Grether, Ernest F., assignor.)

Downing, Frederick B. (See Calcott, W. S., and Downing.)

Downs, Austin H., assignor to Eclipse Air Brush Company, Inc., Newark, N. J. Device for spraying paints, lacquers, or other liquids. 1,876,643; Sept. 13.

Downs, Austin H., assignor to Eclipse Air Brush Company, Newark, N. J. Device for spraying paints, lacquers or other liquids. 1,876,654; Sept. 13.

Drabold, Walter, Detroit, Mich. Charge-forming apparatus for internal combustion engines. 1,876,879; Sept. 13.

Drapal, Othmar, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Improving the stability of diazo solutions in the presence of iron. 1,876,880; Sept. 13.

Dressel, Grayton F. (See Barstow, E. O., and Dressel.)

Dresser, S. R., Manufacturing Company. (See Welborn, Joseph E., assignor.)

Dreyfuss, Henry, New York, N. Y., assignor to The Seth Thomas Clock Company. Imitation hour glass clock. 1,877,732; Sept. 13.

Dryice Corporation of America. (See Jones, Charles L., assignor.)

Dryice Equipment Corporation. (See Killeffer, David H., assignor.)

Dryice Equipment Corporation. (See Martin, James W., jr., assignor.)

Duart Manufacturing Co. Ltd. (See Moseley, Tomlinson I., assignor.)

Dubied Machine Company. (See Werfelman, Dietrick J., assignor.)

Duey, Harold S. (See Jahn, J. R., and Duey.)

Dugan, Thomas J., assignor to M. J. O'Donnel, Lakewood, Ohio. Soldering apparatus. 1,876,821; Sept. 13.

Du-Gas Fire Extinguisher Corporation. (See Dugas, Lodias J., assignor.)

Dugas, Lodias J., Chicago, Ill., assignor to Du-Gas Fire Extinguisher Corporation, New York, N. Y. Fire extinguishing method. 1,877,649; Sept. 13.

Dujardin, Henry. (See Rensonnet, Oscar, assignor.)

Duncan, Thomas P., jr., Newport News, Va. Incendiary bomb. 1,877202; Sept. 13.

Dunford, Ernest, assignor to Landis Machine Company, St. Louis, Mo. Channeling tool. 1,877,231; Sept. 13.

Dunlop Rubber Company. (See Owen, Eric W. B., assignor.)

Dunlop Rubber Company Limited. (See Twiss, D. F., and Murphy, assignors.)

Dunn, Guy A., assignor to Eby Manufacturing Company, San Francisco, Calif. Discharge mechanism for tying machines. 1,877,564; Sept. 13.

Dunnebier, Max. (See Winkler, A., and Dunnebier.)

Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Downing, assignors.)

Dura Company, The. (See Floraday, Burton S., assignor.)

Durant, William H., Reading, Mass. Doorstop. 1,876,881; Sept. 13.

Duro Metal Products Company. (See McNaught, N. F., and Peterson, assignors.)

Dürr, Ludwig, Friedrichshafen, assignor to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Supplying fuel to internal combustion engines. 1,877,103; Sept. 13.

Dyksterhuis, Popko R., Eindhoven, Netherlands, assignor to Radio Corporation of America. Circuit arrangement for thermionic amplifying tubes coupled by transformers. 1,876,645; Sept. 13.

Dym, Emanuel, Pittsburgh, assignor to Porcelier Manufacturing Company, Greensburg, Pa. Container for cooling and dispensing water or beverages. Des. 87,741; Sept. 13.

Eakin, Volando B., Grass Valley, Oreg. Draft equalizer. 1,877,650; Sept. 13.

Eaton, Wilfred A., Cleveland, Ohio. Fluid actuated brake. 1,876,882; Sept. 13.

Ebert, Charles, Leonia, N. J., and W. B., Newkirk, Riverside, Ill., and M. Moskowitz, Spring Valley, N. Y., assignors to International Patents Development Company, Wilmington, Del. Manufacture of dextrose. 1,876,883; Sept. 13.

Eby Manufacturing Company. (See Dunn, Guy A., assignor.)

Eckels Engineering Corporation, The. (See Eckels, Parl O., assignor.)

Eckels, Parl O., assignor to The Eckels Engineering Corporation, Cleveland, Ohio. Swash plate. 1,877,285; Sept. 13.

Ecker, Will J., jr., St. Louis, Mo. Card case. 1,877,565; Sept. 13.

Eclipse Air Brush Company. (See Downs, Austin H., assignor.)

Edelmann, William J. (See Graves, L. E., and Edelmann, assignors.)

Edwards Manufacturing Company. (See Buck, Everett S., assignor.)

Edwards, O. M., Company, Inc., The. (See Chaffee, Edward F., assignor.)

Eggert, Joseph. (See Jaeger, G., and Eggert.)

Ehrmann, George B., Troy, N. Y. Keyhole guard for locks. 1,876,646; Sept. 13.

Eichwede, Heinz, and J. Rachor, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Yellow pyrazolonemono-azo dyestuffs. 1,876,884; Sept. 13.

Einstein, Howard C., Detroit, Mich., assignor to The Tabulating Machine Company, New York, N. Y. Sorting machine. 1,876,647; Sept. 13.

Einstein, Sol, Cincinnati, and H. R. Isler, Norwood, assignors, by mesne assignments, to Grinders Incorporated, Cincinnati, Ohio. Hydraulic grinder. 1,877,500; Sept. 13.

Eisenhardt, Frank J., Waukegan, Ill., assignor to Johns-Manville Corporation. Making Brake lining and the like. 1,877651; Sept. 13.

Eisler Electric Corporation. (See Swanson, Kenneth P., assignor.)

Electric Boat Company. (See Ward, William, assignor.)

Electric Steam Generators, Inc. (See Peterson, Robert E., assignor.)

Electro-Matic Scale Eliminator, Inc. (See Daum, Herman H., assignor.

Electro Metallurgical Company. (See Case, Philip S., assignor.)

Elfes, Harold L., assignor to Motor Products Corporation, Detroit, Mich. Oil cooling device. 1,876,648; Sept. 13.

Elkin, Newton, Philadelphia, Pa. Outer sole and preparing the same. 1,877,164; Sept. 13.

Ellingson, Elling, San Francisco, Calif. Locking mechanism. 1,876,885; Sept. 13.

Elliott-Fisher Company. (See Kurowski, Alfred G. F., assignor.)

Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Fusible plastic and making same. 1,876,886; Sept. 13.

Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Nitrocellulose cement. 1,877,717; Sept. 13.

Ellis-Foster Company. (See Ellis, Carleton, assignor.)

Elsey, Howard M., Oakmont, and L. R. Philpott, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Facsimile transmitter. 1,877,566; Sept. 13.

Emsco Derrick & Equipment Company. (See Goeser, Edwin W., assignor.)

Entwistle, T. C., Company. (See Sidebottom, John W., assignor.)

Erbes, William P., Los Angeles, Calif. Hot and cold water mixer for showers. 1,877,567; Sept. 13.

Erl, Joseph, and C. J. Hoffman, Buffalo, N. Y. Match saft. 1,877,568; Sept. 13.

Erwin, Charles H., Prescott, Wash., assignor to Deers & Company, Moline, Ill. Rod-weeder. 1,877,652; Sept. 13.

Esselmann, Paul. (See Fink, H., and Esselmann.)

Evans, Earl W. (See Heston, A. L., Shook, and Evans.)

Evans, Will, Hermosa Meach, Calif. Mop handle structure. 1,877,125; Sept. 13.

Excel Curtain Company. (See Holt, T. W., and Levan, assignors.)

Exton, William G., New York, N. Y. Electrooptical method and means for measuring substances for concentrations, colors, dispersions, etc. 1,877,501; Sept. 13.

Fafnir Bearing Company, The. (See Searles, Raymond R., assignor.)

Fagerl, William B., assignor to Twin Coach Company, Kent, Ohio. Motor vehicle and constructing the same. 1,877,653; Sept. 13.

Fairbanks, Morse & Co. (See Boock, Alfred C., assignor.)

Fairbanks, Morse & Co. (See Goldberg, Morris J., assignor.)

Fairbanks, Morse & Co. (See Heath, William C., assignor.)

Fairbanks, Morse & Co. (See Jahnke, Charles B., assignor.)

Fairbanks, Morse & Co. (See Lentell, John H., jr., assignor.)

Fairbanks, Morse & Co. (See Strom, Herbert, assignor.)

Fairbanks, Morse & Co. (See Whitesell, Frederick N., assignor.)

Fairchild, William, assignor to A. P. W. Paper Co., Albany, N. Y. Apparatus for dispensing. 1,876,649; Sept. 13.

Falkenthal, Erwin, Berlin-Dahlem, Germany, assignor of 50 per cent to Radio Patents Corporation, New York, N. Y. Electromagnetic apparatus. 1,877,569; Sept. 13.

Fanner Manufacturing Company, The. (See Menzi, John B., assignor.)

Farmer, Horace E., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for forming holes in articles. 1,876,650; Sept. 13.

Farnham, Sidney W., assignor to Goodman Manufacturing Company, Chicago, Ill. Loading device. 1,877,286; Sept. 13.

Fear, Harry E., Lakewood, Ohio, assignor of New Castle Refractories Company, New Castle, Pa. Crank. 1,877,424; Sept. 13.

Fedders Manufacturing Company. (See Ihde, August F., assignor.)

Feder, Joseph B., East Orange, N. J., assignor, by mesne assignments, to Chas. Cory Corporation. Firing key. 1,876,887; Sept. 13.

Federal Telegraph Company. (See Kruesi, Geoffrey G., assignor.)

Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Cords, Otto, assignor.)

Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Hunkel, Hermann, assignor.)

Ferguson, George W., Minneapolis, Minn. Device for watering plants. 1,876,888; Sept. 13.

Ferm, John Ferdinand, Midland, assignor to Pittsburgh Crucible Steel Company, Pittsburgh, Pa. Standard for street lights or other articles. Des. 87,742; Sept. 13.

Ferrante, Michael, assignor of one-half to Southern California Gas Company, Los Angeles, Calif. Gas meter construction. 1,876,889; Sept. 13.

Ferrell, Ashby D. (See Thrasher, Leroy C., assignor.)

Ferris, Malcolm, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Standard signal generator. 1,877,287; Sept. 13.

Field Herbert C. (See Simpson, E. G., Cronwall, Andersen, and Field.)

Field, Herbert C., Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Antirattling device for a window regulator clutch. 1,877,288; Sept. 13.

Field, Herbert C., Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Handle assembly. 1,877,289; Sept. 13.

Filtration Equipment Corporation. (See Laughlin, William C., assignor.)

Fink, Heinrich, and P. Esselmann, Premnitz, Westhavelland, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of artificial fibers. 1,876,890; Sept. 13.

Finley, Dozier, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Machine for wrapping pipes. 1,876,651; Sept. 13.

Finver, Abraham M., and C. Weber, New York, N. Y.; said Weber assignor to said Finver. Form roller lifting device for Kelly printing presses. 1,876,891; Sept. 13.

Fischl, Siegfried, Berlin, Baumschulenweg, and H. Steiner, Berlin-Adlershof, assignors to the Firm Schering-Kahlbaum A.-G., Berlin, Germany. Production of acid nitriles. 1,876,652; Sept. 13.

Fisk Rubber Company, The. (See Desautels, Charles H., assignor.)

Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fisk Rubber Company, The. (See Smith, Emory T., assignor.)
Fiske, Harold C., Minneapolis, Minn., assignor to James R. Kearney Corporation, St. Louis, Mo. Fuse puller. 1,876,892; Sept. 13.
Fitz Gerald, John W., assignor to Briggs and Stratton Corporation, Milwaukee, Wis. Padlock. 1,876,893; Sept. 13.
Fitz Gerald, John W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Automative vehicle hood lock. 1,876,894; Sept. 13.
Fit Gerald, John W., assignor to The Briggs and Stratton Corporation, Milwaukee, Wis. Holder for writing instruments. 1,877,570; Sept. 13.
Fitzgerald, Ralph D., New Kensington, Pa. Closure strip. 1,877,448; Sept. 13.
Fleming, James, Cleveland, Ohio. Bottle washer and rinsing machine. 1,876,895; Sept. 13.
Fleming, John R., Cleveland, and E. M. Winegar, Willoughby, assignors to The Ohio Rubber Company, Cleveland, Ohio. Press. 1,876,896; Sept. 13.
Fleming, John R., Cleveland, and E. M. Winegar, Willoughby, assignors to The Ohio Rubber Company, Cleveland, Ohio. Bead strip attaching press. 1,876,898; Sept. 13.
Flemming, Charles F., Willoughby, assignor to The Ohio Rubber Company, Cleveland, Ohio. Vulcanization. 1,876,897; Sept. 13.
Fletcher, John, New York, N. Y. Electric toaster or similar article. Des. 87,743; Sept. 13.
Fletcher, John B., Newport, Ky. Power driven washing machine. 1,876,653; Sept. 13.
Fletcher, Thomas. (See Heisler, C. A., and Fletcher.)
Flink, Charles M., and J. Olson, Ironwood, Mich. Folding table. 1,877,654; Sept. 13.
Flocco, Vincent, Newark, N. J. Remote tuning control for radioreceivers. 1,877,502; Sept. 13.
Floraday, Burton S., assignor to The Dura Company, Toledo, Ohio. Window regulator. 1,876,654; Sept. 13.
Floraday, Burton S., assignor to The Dura Company, Toledo, Ohio. Door latch. 1,876,655; Sept. 13.
Flynn, John B. (See Simpson, E. G., De Sana, and Flynn.)
Fobert, Phillip, J., and A. J. Ducharme, assignors to Detroit Aluminum & Brass Company, Detroit, Mich. Grinding or cutting machine. 1,876,899; Sept. 13.
Fobert, Phillip J., and A. J. Ducharme, assignors to Detroit Aluminum & Brass Company, Detroit, Mich. Machine for trimming bearings or the like. 1,876,900; Sept. 13.
Forbes, Henry C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Signaling system. 1,877,571; Sept. 13.
Forbes, Thomas C., assignor to Waters-Genter Company, Minneapolis, Minn. Tonster. 1,876,901; Sept. 13.
Forbes, Walter D., San Francisco, Calif. Paper trimmer. 1,876,902; Sept. 13.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Axle. 1,876,903; Sept. 13.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Hanson, John M., assignor.)
Forrest, Nell, Lakewood, Ohio. Heat insulating container. 1,877,290; Sept. 13.
Forsberg, Erik A., Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Protectively supporting rapidly rotated shafts. 1,876,656; Sept. 13.
Foster, William H. (See Akers, C. W., and Foster.)
Fox, Frederick L., Washington, D. C. Impact indicating apparatus. 1,876,657; Sept. 13.
Fox, Joseph M., Cleveland, Ohio. Friction coupling for driving nuts and the like. 1,876,658; Sept. 13.
Fox, Nelson T. (See McKenney, Emerson and H., and Fox.)
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,876,659; Sept. 13.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,876,904; Sept. 13.
Francis, Oliver T., Quantico, Va. Electric control circuit. 1,877,165; Sept. 13.
Franklin Development Corporation. (See Hastings, R. W., and Harris, assignors.)
Franklin, H. H., Manufacturing Company. (See Doman, Carl T., assignor.)
Franklin, H. H., Manufacturing Company. (See Marks, Edward S., assignor.)
Fredsell, Charles R., Brooklyn, N. Y. Cork feeding and inserting machine. 1,877,233; Sept. 13.
Freedman, Louis, Far Rockaway, N. Y., and A. E. Sherndal, Upper Montclair, N. J., assignors to H. A. Metz Laboratories, Inc., New York, N. Y. Reduction of 4-nitroso-1-phenyl-2.3-dimethyl-5-pyrazolone. 1,877,166; Sept. 13.
Freeman, Lowell C., and A. P. Buesch, Detroit, Mich., assignors to Resengin, Inc. Vehicle construction. 1,876,905; Sept. 13.
Friebus, Reginald T., Montclair, N. J., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Reproducing pictures or scenes from recorded impulses. 1,877,447; Sept. 13.
Friedman, Harry B. (See Friedman, Samuel L. and H. B.)
Friedman, Samuel L. and H. B., Los Angeles, Calif. Invisible foot cover for stockingless legs. 1,877,393; Sept. 13.
Frolich, Per K., Elizabeth, N. J., and P. L. Young, New York, N. Y., assignors to Standard Oil Development Company. Continuous method of producing esters from olefins. 1,877,291; Sept. 13.
Fruehauf Trailer Company. (See Reid, Frederick M., assignor.)
Fuel Oil Carburetor Co. Inc. (See Garibaldi, Giuseppe, assignor.)
Fulcher, Frank C., Purley, England. Filtering or fine straining apparatus for liquids. 1,877,449; Sept. 13.
Fulcher, Frank C., Purley, England. Filtering or fine straining apparatus for liquids. 1,877,450; Sept. 13.
Fulcher, Frank C., Purley, England. Filtering or fine straining apparatus for liquids. 1,877,451; Sept. 13.
Fye, William A., State College, assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa. Paddle and base for washer logs. 1,877,167; Sept. 13.
Gabriel Company, The. (See Beecher, Eugene L., assignor.)
Gagné, Augustin, Central Falls, R. I. Form-holding device for caps or like headwear. 1,877,452; Sept. 13.
Gagné, Augustin, assignor to Hemphill Company, Central Falls, R. I. Knitting machine needle assemblage. 1,877,503; Sept. 13.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,876,906; Sept. 13.
Gallagher, Samuel, New York, N. Y. Chute for waste building material. 1,877,234; Sept. 13.
Gann, Robert T. (See Huston, Samuel W., assignor.)
Gardner, Delamere B., Los Angeles, Calif. Liquid pri m. 1,877,744; Sept. 13.
Gardner Screw Corporation. (See Heglund, Theodore J., assignor.)
Gardner, Thomas P., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Combination inflow-controlling and fluid-discharge means. 1,877,292; Sept. 13.
Garfinkel, Harry, assignor to himself and G. and G. A. Ritter, as copartners, consisting of the Firm of Garfinkel & Ritter, New York, N. Y. Garment. 1,877,745; Sept. 13.
Garfinkel & Ritter. (See Garfinkel, Harry.)
Garibaldi, Giuseppe, Stamford, Conn., assignor to Fuel Oil Carburetion Co. Inc., New York, N. Y. Fuel feed for internal combustion engines. 1,877,655; Sept. 13.
Geddes, Charles I. (See Kelsea, C. H., and Geddes.)
Geibel, Andrew, Chicago, Ill. Weed extractor. 1,876,907; Sept. 13.
Geiger, Ernst, Irvington, N. J. Mechanical garage. 1,877,293; Sept. 13.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,876,908; Sept. 13.
Gelder, Royal W., Greeley, Colo. Making magnesian cement. 1,876,909; Sept. 13.
General Aniline Works, Inc. (See Böger, O., and Meissner, assignors.)
General Aniline Works, Inc. (See Dorrer, A., Scheurer, and Ohmer, assignors.)
General Aniline Works, Inc. (See Drapal, Othmar, assignor.)
General Aniline Works, Inc. (See Eichwede, H., and Rachor, assignors.)
General Aniline Works, Inc. (See Herz, R., and Schubert, assignors.)
General Aniline Works, Inc. (See Herz, R., Schubert, and Brunner, assignors.)
General Aniline Works, Inc. (See Herz, R., and Zerweck, assignors.)
General Aniline Works, Inc. (See Hoffa, E., and Seib, assignors.)
General Aniline Works, Inc. (See Honold, Ernst, assignor.)
General Aniline Works, Inc. (See Kalischer, G., Ritter, and Honold, assignors.)
General Aniline Works, Inc. (See Keller, K., and Gofferje, assignors.)
General Aniline Works, Inc. (See Kranzlein, G., Vollmann, and Corell, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., Koeberle, and Berthold, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., Koeberle, and Zerweck, assignors.)
General Aniline Works, Inc. (See Nawiasky, Paul, assignor.)
General Aniline Works, Inc. (See Scheyer, Heinz, assignor.)
General Aniline Works, Inc. (See Schirmacher, Karl, and W. Schaich, Wolfram, Tampke, and Billig, assignors.)
General Aniline Works, Inc. (See Wagner, H., and Vossen, assignors.)
General Aniline Works, Inc. (See Zerweck, Werner, assignor.)
General Aniline Works, Inc. (See Zitscher, A., and Wüterich, assignors.)
General Cable Corporation. (See Potter, Frank M., assignor.)

General Cable Corporation. (See Shondell, Howard, assignor.)
General Cable Corporation. (See Snyder, Edward, assignor.)
General Cable Corporation. (See Traxel, Charles E., assignor.)
General Electric Company. (See Antoniono, Caesar, assignor.)
General Electric Company. (See Clark, Frank M., assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Mickey, Bruce D., assignor.)
General Electric Company. (See Suits, Chauncey G., assignor.)
General Electric Company. (See Swinney, John, assignor.)
General Motors Corporation. (See Ruppert, Albert A., assignor.)
General Motors Radio Corporation. (See Ritter, Carl C., assignor.)
General Railway Signal Company. (See Banner, Frank H., assignor.)
General Railway Signal Company. (See Bushnell, Charles S., assignor.)
General Railway Signal Company. (See Dicke, Oscar H., assignor.)
General Railway Signal Company. (See Larry, Edwin C., assignor.)
General Railway Signal Company. (See Rensbaw, Alfred H., assignor.)
General Railway Signal Company. (See Taylor, Herbert B., assignor.)
General Register Corporation. (See Heisel, Reuben H., assignor.)
Geophysical Research Corporation. (See Roman, Irwin, assignor.)
George, John E., assignor to The Alligator Company, St. Louis, Mo. Fabric and making the same. 1,877,394; Sept. 13.
George, Ross F., Seattle, Wash. Loud speaking reproducer. 1,877,294; Sept. 13.
George, Ross F., Seattle, Wash. Under and overfeeder for pens. 1,877,295; Sept. 13.
Germiquet, John A. (See Merritt, Berttie O., assignor.)
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,744; Sept. 13.
Gibson, Owen H., Portland, Ind. Brake lining composition. 1,876,910; Sept. 13.
Gibson Refrigerator Company. (See Belding, Harry H., assignor.)
Gibson, William A., assignor to Bradley Pulverizer Company, Allentown, Pa. Air separator. 1,876,911; Sept. 13.
Gifford-Wood Company. (See Hallenbeck, Harold E., assignor.)
Gillespie, Howard E., Malden, assignor of one-half to D. J. Abrahams, Boston, Mass. Photograph album. 1,877,476; Sept. 13.
Gillett Rubber Company. (See Krause, A. R., and Hirsch, assignors.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gillies, Gordon I. (See Wiley, E. W., and Gillies.)
Gilmore, John L., Kansas City, Mo. Spare tire carrier. 1,876,912; Sept. 13.
Giltsch, John, M. Giltsch, H. Schorsch, and J. D. Giltsch, assignors to Standard Carriage Works, Inc., Los Angeles, Calif. Vehicle body construction. 1,876,660; Sept. 13.
Giltsch, John D. (See Giltsch, John, M., and J. D., and Schorsch.)
Giltsch, Martin. (See Giltsch, John, M., and J. D., and Schorsch.)
Giraud, André J. A., Paris, France. Amusement device. 1,877,656; Sept. 13.
Gladding, Charles B., Geneva, Ohio. Explosive engine attachment to facilitate valve grinding. 1,877,477. Sept. 13.
Glaser, Rudolph A., Cleveland, Ohio, assignor, by mesne assignments, to Gardner Abbott, as trustee. Projector lamp. 1,877,657; Sept. 13.
Gleason Works. (See Head, Ernest C., assignor.)
Gleason Works. (See Stewart, Arthur L., assignor.)
Globe American Corporation. (See Tolley, Donald B., assignor.)
Goepfrich, Rudolph A., assignor to Bendix Brake Company, South Bend, Ind. Brake slack adjuster. 1,876,661; Sept. 13.
Goeser, Edwin W., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Antifriction device for drill pipe. 1,877,395; Sept. 13.
Goff, Hugh H. (See Chapin, G. M., and Goff.)
Gofferje, Eduard. (See Keller, K., and Gofferje.)
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Cleaning and silencing means for engine exhausts. 1,877,296; Sept. 13.
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Clutch and transmission mechanism. 1,877,297; Sept. 13.
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Combustion chamber. 1,877,737; Sept. 13.
Goldsborough, Shirley L., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Protective relay system. 1,877,168; Sept. 13.
Goldsborough, Shirley L., East Orange, N. J., assignor to Westinghouse Electric & Manufactufacturing Company. High-speed directional relay element. 1,877,454; Sept. 13.
Goldsmith, Alfred N., Mount Vernon, N. Y., assignor to Radio Corporation of America. Sound reproducing machine. 1,876,913; Sept. 13.
Goldsmith, John N., assignor to Spicers Limited, London, England. Color photography. 1,877,658; Sept. 13.
Gonzales, Victor, Winnetka, Ill. Automatic time switch. 1,877,169; Sept. 13.
Goode, Marvin A. (See Crute, Joseph T., assignor.)
Goodman Manufacturing Company. (See Farnham, Sidney W., assignor.)
Goodrich, B. F., Company, The. (See Wilson, G. F., and Shook, assignors.)
Goodwin, John O., Akron, assignor to Seiberling Rubber Company, Barberton, Ohio. Heel molding method. 1,877,298; Sept. 13.
Goodyear, James W., Birkenhead, England. Hull of ships. 1,877,235; Sept. 13.
Goodyear Tire & Rubber Company. (See Musselman, Alvin J., assignor.)
Gordon, Bernard, New York, N. Y. Apparatus for treating the exhaust gases of internal combustion engines. 1,877,523; Sept. 13.
Gordon-Dunnam Manufacturing Company. (See Gordon, John W.)
Gordon, Granville J., Noxon, Mont. Level. 1,877,455; Sept. 13.
Gordon, John W., assignor to The Gordon-Dunnam Manufacturing Company, Dayton, Ohio. Tube cutting and flaring device. 1,876,914; Sept. 13.
Gordon, Marcus A., Little Neck, assignor to American Chicle Company, Long Island City, N. Y. Recovery of chicle and similar gum from filter press residue. 1,877,299; Sept. 13.
Gordon, Samuel, Far Rockaway, N. Y., assignor to International Dry Refrigeration Corporation, Wilmington, Del. Refrigerator. 1,876,915; Sept. 13.
Gorham Manufacturing Company. (See Achurch, William H., assignor.)
Gossiau, Fritz, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Fuel pump. 1,876,916; Sept. 13.
Gosslau, Fritz, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Piston for internal combustion engines. 1,876,917; Sept. 13.
Gotham Silk Hosiery Company Inc. (See Bomhoff, Cornelius, assignor.)
Gottwald, Christian, assignor to The Ric-Wil Company, Cleveland, Ohio. Improved thermo packing material. 1,877,396; Sept. 13.
Grabow, Alfred H. (See Zelma, Isaiah Z., assignor.)
Graham, John R., Linwood, Iowa. Mail box. 1,877,473; Sept. 13.
Gravely, Benjamin F., Dunbar, W. Va. Mowing machine. 1,876,662; Sept. 13.
Gravenstein, Hans J. (See Moor, E., Bechstein, and Gravenstein.)
Graves, Arthur L. (See Clark, A. C., and Graves.)
Graves, Louis E., and W. J. Edelmann, Los Angeles, Calif. Cable tap. 1,876,663; Sept. 13.
Gray, Chester E. (See Douthitt, Frank H., assignor.)
Gray, George, and C. Kingston, Jacksonville, Fla.; said Kingston assignor to said Gray. Coupling for cars and train, lines. 1,876,918; Sept. 13.
Gray, Peter, & Sons, Inc. (See Kelsea, C. H., and Geddes, assignors.)
Grebe, John J., and R. T. Sanford, assignors to The Dow Chemical Company, Midland, Mich. Treatment of deep wells. 1,877,504; Sept. 13.
Green, Allan, Sutton, near Keighley, England. Apparatus for use in the production of threads of hair and like fibers. 1,876,664; Sept. 13.
Green, William F., St. Louis, Mo. Shoe sole cementing machine. 1,877,300; Sept. 13.
Greene, John S., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic print handling apparatus. 1,877,659; Sept. 13.
Greene, William C., Company. (See Armstrong, George A., assignor.)
Greer, Edward R., Minneapolis, Minn. Tractor hitch. 1,877,126; Sept. 13.
Greer, Tony S., Sacramento, Calif. Combination gas-tank cap, fuel pipe and drain pipe lock. 1,877,418; Sept. 13.
Gregg, Alfred W. (See Mitchell, A., and Gregg.)
Greig, William R., Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Pipe covering. 1,876,665; Sept. 13.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Making derivatives of diarylethers. 1,877,301; Sept. 13.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo dyestuffs and making same. 1,877,302; Sept. 13.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo arylides of 2.3 hydroxy-naphthoic acid and azo dyestuffs derived therefrom. 1,877,303; Sept. 13.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Carbonates of salicylic esters and making same. 1,877,304; Sept. 13.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Making salicylic ester carbonates. 1,877,305; Sept. 13.
Grinders Incorporated. (See Einstein, S., and Isler, assignors.)
Griner, George S., Cleveland, Ohio. Game. 1,877,660; Sept. 13.
Groff, David A., et al. (See Hutchings, Edward W., assignor.)
Groom, Frederick P., Muskegon, Mich. Piston ring. 1,876,919; Sept. 13.
Gross, Paul, Berlin-Hermsdorf, Germany. Opening up of cereals. 1,877,170; Sept. 13.
Gruenberg, Raoul J., San Francisco, Calif. Blanking folding boxes. 1,876,666; Sept. 13.
Guilden, Ira. (See Rohland, Curt J., assignor.)
Guilden, Ira. (See Stein, Samuel H., assignor.)
Gunn, Fred M., assignor of one-half to P. Barboglio, El Paso, Tex. Stock car door. 1,877,236; Sept. 13.
Gunnison, Foster, Bronxville, assignor to Cox, Nostrand & Gunnison, Inc., Brooklyn, N. Y. Chandelier. Des. 87,745; Sept. 13.
Gunnison, Foster, Bronxville, N. Y., assignor to Cox, Nostrand, and Gunnison, Inc. Chandelier. 1,876,667; Sept. 13.
Gurwick, Irving, assignor, by mesne assignments, to Transparent Packaging & Printing Corporation, New York, N. Y. Bag making. 1,877,456; Sept. 13.
Gustin, Max, New York, N. Y. Footwear. 1,877,724; Sept. 13.
Gutberlet, Charles J., Philadelphia, Pa. Machine for treating pyraline envelope blanks. 1,877,728; Sept. 13.
Haas, Frederick S. (See Harrison, R. E. W., Haas, and Binns.)
Haas, Frederick S., and B. A. Kearns, assignors to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,877,505; Sept. 13.
Haase, Carl, Schonau, near Chemnitz, assignor to Hauboldt, A. G., Chemnitz, Germany. Machine for spinning rayon. 1,877,397; Sept. 13.
Haase, Louis. (See Van Dusen, C. A., and Haase.)
Hadley, Edwin J., Brooklyn, N. Y. Talking picture projector. 1,876,668; Sept. 13.
Hagedorn, Max, W. Ziese, and B. Reyle, Dessau-in-Anhalt, and R. Bauer, Cologne-Deutz, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of carbohydrate derivatives. 1,876,920; Sept. 13.
Hager, Arnulf. (See Kämpf, A., and Hager.
Hague, Charles K., Detroit, Mich., assignor to Sun Oil Company, Philadelphia, Pa. Cooling internal combustion engines. 1,877,398; Sept. 13.
Hale, George C., U. S. Army, Dover, N. J. Delay powder. 1,877,127; Sept. 13.
Hall, Arthur, Oak Park, assignor to Yaxley Manufacturing Company, Chicago, Ill. Resistance unit. 1,876,921; Sept. 13.
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Switch control mechanism. 1,877,171; Sept. 13.
Hamilton, Edward P., assignor to Hamilton Manufacturing Company, Two Rivers, Wis. Table. 1,876,922; Sept. 13.
Hamilton Manufacturing Company. (See Hamilton, Edward P., assignor.)
Hammond, John H., jr. (See Trenor, Albert D., assignor.)
Hammond, John J., jr. (See Purington, Ellison S., assignor.)
Hanley Company. (See Norton, Charles E., assignor.)
Hanses, William A., assignor to Rand McNally & Company, Chicago, Ill. Geographical globe structure. 1,877,306; Sept. 13.
Hanson, John M., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Surface polishing device. 1,876,923; Sept. 13.
Hargreaves, William, Timperley, assignor of one-half to R. L. Ross and Company Limited, Stockport, England. Safety valve. 1,877,457; Sept. 13.
Harlow, Earl V., Jersey City, N. J., assignor to The Koppers Company of Delaware. Liquid distributing apparatus. 1,876,669; Sept. 13.
Harper, John M. (See Doub, Edwin A., assignor.
Harris, Harry, assignor to Largman, Gray Company, Croydon, Pa. Knitted fabric for hosiery. 1,877,458; Sept. 13.
Harris, Henry K., Westminster, London, England. Advertising and signaling device. 1,877,172; Sept. 13.
Harris, Joseph, Wheaton, assignor to W. H. Miner., Inc., Chicago, Ill. Hand brake. 1,877,308; Sept. 13.
Harris, Mar. (See Hastings, R. W., and Harris.)
Harrison, Robert E. W., F. S. Haas, and G. W. Binns, Cincinnati, Ohio, assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machinery. 1,877,572; Sept. 13.
Harrison, T. F. (See Hutchings, Pryer H., assignor.)
Hart, Edwin B., assignor to Wisconsin Alumni Research Foundation, Madison, Wis. Compound for the prevention and treatment of anemia. 1,877,237; Sept. 13.
Hartinger, Hans, assignor to firm Carl Zeiss, Jena, Germany. Ophthalmic instrument. 1,877,238; Sept. 13.
Hartness, James, Springfield, Vt. Tolerance zone on gauges. 1,877,307; Sept. 13.
Haseltine, Stacy B. (See Johnson, G. A., and Haseltine.)
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Brake chain attachment. 1,877,309; Sept. 13.
Haskins, Butler J., Chicago, Ill., assignor to Joseph Weidenhoff, Incorporated. Mechanism for testing ignition of automobiles. Re18,596; Sept. 13.
Hastings, Roger W., and M. Harris, assignors to Franklin Development Corporation, Syracuse, N. Y. Joint for elliptical springs. 1,876,924; Sept. 13.
Hathaway Bakeries, Inc. (See Lemmon, John U., jr., assignor.)
Hathaway, Warner. (See Lee, S. Q., and Hathaway.)
Hauboldt, A. G. (See Haase, Carl, assignor.)
Hayes, George M., assignor of one-half to T. P. Conlon, New York, N. Y. Machine for use in determining the longitude and latitude and direction of flight of an observer. 1,877,459; Sept. 13.
Hazel-Atlas Glass Company. (See Cordy, Ivor, assignor.)
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Cutting gears. 1,877,173; Sept. 13.
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Method and apparatus for relieving hobs. 1,877,174; Sept. 13.
Heald Machine Company, The. (See Harrison, R. E. W., Haas, and Binns, assignors.)
Heath, Max L., assignor to Stanley Clothing Company, Evansville, Ind. Reenforced trousers pocket. 1,876,925; Sept. 13.
Heath, William C., Beloit, Wis., assignor to Fairbanks, Morse, & Co., Chicago, Ill. Pressure actuated switch. 1,876,926; Sept. 13.
Heertsch, Willy, Erfurt, Germany. Direction indicator. 1,877,506; Sept. 13.
Heidenhain, Johannes, Berlin, Germany. Manufacture of screens. 1,877,310; Sept. 13.
Heinicke, Ernst, New York, N. Y. Method and apparatus for treating hair. 1,877,662; Sept. 13.
Heinle, Walter C., Willoughby, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Welded end truck. 1,876,927; Sept. 13.
Heinrich, Walter A., St. Louis, Mo. Expulsion cut-out. 1,877,311; Sept. 13.
Heinrich, Walter A., St. Louis, Mo. Supporting device for electrical equipment. 1,877,312; Sept. 13.
Heintz & Kaufman, Ltd. (See Heintz, Ralph M., assignor.)
Heintz, James C., Lakewood, Ohio. Sectional tire repair vulcanizer. 1,877,175; Sept. 13.
Heintz, Ralph M., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Inductance coil. 1,876,670; Sept. 13.
Heisler, Clyde A., and T. Fletcher, assignors to The A. C. Williams Company, Ravenna, Ohio. Toy car. 1,877,661; Sept. 13.
Heller, John A., Carthage, Mo. Coin control mechanism for vending machines. 1,876,671; Sept. 13.
Helmkamp, Walter F., East Moline, assignor to Deere & Company, Moline, Ill. Harvester. 1,877,313; Sept. 13.
Helsel, Reuben H., Long Island City, assignor, by mesne assignments, to General Register Corporation, Brooklyn, N. Y. Check punching and issuing machine. 1,876,672; Sept. 13.
Heltzel, John N., Warren, Ohio. Road building apparatus. 1,876,673; Sept. 13.
Hemphill Company. (See Gagne, Augustin, assignor.)
Hendricks, Kearney J., Pittsburgh, Pa. Knockdown tank. 1,877,507; Sept. 13.
Henninger, Ludwig, assignor to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Germany. Machine for the manufacture of match boxes. 1,877,239; Sept. 13.
Hentschel, Ernest R., deceased, Washington, D. C.; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Electron discharge device circuit arrangement. 1,877,128; Sept. 13.
Hentschel, Ernest R., deceased, Springfield, Mo., by J. Olson, Springfield, Mo., administrator, assignor to Wired Radio, Inc., New York, N. Y. Electron discharge device circuit arrangement. 1,877,129; Sept. 13.
Hentschel, Paul A., assignor to Ventilector Company, Incorporated, Baltimore, Md. Deflector for gas stoves. 1,877,240; Sept. 13.
Hérault, Albert, Paris, France. Device for projecting color and monochrome films. 1,877,725; Sept. 13.
Herbert, Frank A., Cincinnati, Ohio. Cyclic limit mechanism. 1,877,314; Sept. 13.
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Hermsdorf-Schomburg-Isolatoren G. m. b. H. (See Scheid, Johann F., assignor.)
Herz, Richard, Frankfort-on-the-Main, and M. Schubert, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing aryl-ortho-carboxyamido-mercaptans. 1,876,928; Sept. 13.

Herz, Richard, Frankfort-on-the-Main and M. Schubert, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing 2-mercapto-arylene-thiazole compounds and the products. 1,876,929; Sept. 13.
Herz, Richard, Frankfort-on-the-Main, and M. Schubert, and W. Brunner, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Hydroxy-thionaphthenes containing a pyrazole ring. 1,876,930; Sept. 13.
Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Brominated vat dyestuffs of the anthanthrone series and making same. 1,877,315; Sept. 13.
Herz, Richard, Frankfort-on-the-Main, and M. Schubert and W. Brunner, Frankfort-on-the-Main, Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New indigoid dyestuffs. 1,877,316; Sept. 13.
Hesse, Curt O., Brooklyn, N. Y., assignor to Becker, Smith & Page, Incorporated, Philadelphia, Pa. Wallpaper. Des. 87,746; Sept. 13.
Hessle, Eric T., Lockport, assignor to Thiophene Products Company, Chicago, Ill. Manufacture of cyclic sulphur compounds such as thiophane and its derivatives. 1,877,478; Sept. 13.
Heston, Allen L., and F. J. Shook, Akron, and E. W. Evans, Columbiana, assignors to The National Rubber Machinery Company, Akron, Ohio. Collapsible drum. 1,877,746; Sept. 13.
Hetherington, Robert, Sharon Hill, Pa. Vibrator. 1,877,176; Sept. 13.
Hewitt, William R., New York, N. Y. Railway draft gear. 1,877,399; Sept. 13.
Heyner, Fritz. (See Kruckenberg, F., and Heyner.)
Heywood, Vincent E. and R. D. Hoaglund, Worcester, assignors to United States Envelope Company, Springfield, Mass. Machine for making paper cups. 1,876,931; Sept. 13.
Hicks, Helen C., Webster Groves, assignor to Sefton National Fibre Can Co., Maplewood, Mo. Paper bodied cans. 1,876,932; Sept. 13.
Higgins, John C., San Diego, Calif. Air relief valve for pipe lines. 1,877,400; Sept. 13.
Higgins, Mark F. (See Nyborg, T. G., and Higgins.)
High, Jurjen S. (See Cole, G. H., and High.)
Hildebrand, David A., Oakland, Calif. Built-in table. 1,877,401; Sept. 13.
Hiler, Edward E., Bloomfield, N. J. Multistage audio amplification system. 1,876,674; Sept. 13.
Hiler, Edward E., Bloomfield, N. J. Audio amplification system. 1,876,675; Sept. 13.
Hill, Frederick, Urmston, England. Washing apparatus. 1,876,676; Sept. 13.
Hill, Rowland, and E. E. Walker, Blackley, Manchester, England. Resinous composition and making same. 1,877,130; Sept. 13.
Hinckley-Myers Company. (See Thoman, C. J., and Westcott, assignors.)
Hinderer, Louis C., and W. F. Hinderer, Kankakee, Ill. Push button window lock. 1,877,177; Sept. 13.
Hinderer, Walter F. (See Hinderer, Louis C. and W. F.)
Hinrichsen, Thomas, Davenport, Iowa. Direction indicator. 1,877,402; Sept. 13.
Hinsch, Louis L., Sidney, assignor, by mesne assignments, to The Cleveland Stoker Company, Cleveland, Ohio. Forced draft means for automatic stokers. 1,876,933; Sept. 13.
Hirsch, Alfred C. (See Krause, A. R., and Hirsch.)
Hirvonen, Erik J., Worcester, Mass., assignor, by mesne assignments to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,876,934; Sept. 13.
Hitchcock, Reuben, assignor to The Cleveland Stoker Company, Cleveland, Ohio. Stoker. 1,876,935; Sept. 13.
Hitchcock, Richard C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Musical instrument. 1,877,317; Sept. 13.
Hoaglund, Ralph D. (See Heywood, V. E., and Hoaglund.)
Hocher, Andrew A., Etna, Pa., assignor to Hubbard & Company. Making rail brackets. 1,877,460; Sept. 13.
Hochriem, Gustav F., Chicago, Ill. Cabinet for coin controlled apparatus. Des. 87,747; Sept. 13.
Hodge, James G., East Orange, N. J. Piston ring structure. 1,877,461; Sept. 13.
Hofer, Paul, Basel, Switzerland. Flooring. 1,877,508; Sept. 13.
Hoffa, Erwin, and C. Seib, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing azo dyestuffs on the fiber. 1,877,318; Sept. 13.
Hoffman, Christian J. (See Erl, J., and Hoffman.)
Hoffman, Joseph D. P., Kirkwood, assignor to J. R. Kearney Corporation, St. Louis, Mo. Disconnecting switch. 1,877,319; Sept. 13.
Hoffmann, August, Leipzig, Germany. Paraffin device for treating threads. 1,877,663; Sept. 13.
Hoglund, Theodore J., assignor to Gardner Screw Corporation, Gardner, Mass. Change maker. 1,876,677; Sept. 13.
Holdsworth, Willie, Providence, R. I. Gill-drawing frame. 1,876,936; Sept. 13.
Hollars, Andrew J., Blue Eye, Mo. Can adjusting or reshaping machine. 1,876,678; Sept. 13.
Holle, Roy, Cincinnati, Ohio. Mechanical hammer. 1,877,462; Sept. 13.
Hollingsworth, William F. (See Norton, John S., assignor.)
Holmes, Colin W. H. (See Appleyard, K. C., Holmes, and Bramwell.)
Holmes, John R., Cleveland, Ohio, assignor, by mesne assignments, to Hupp Motor Car Corporation, Detroit, Mich. Hood handle and carburetor air intake. 1,876,679; Sept. 13.
Holt, Harris B., Dormont, Pa., assignor to Rosedale Foundry & Machine Company. Chain grate. 1,877,320; Sept. 13.
Holt, Thomas W., and J. F. Levan, assignors to Excel Curtain Company, Elkhart, Ind. Curtain roller construction. 1,876,939; Sept. 13.
Holtzman, John, assignor of one-half to C. James Cottrell, New York, N. Y. Cigarette case. 1,876,680; Sept. 13.
Honold, Ernst. (See Kalischer, G. Ritter, and Honold.)
Honold, Ernst, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the benzanthrone series and making same. 1,877,178; Sept. 13.
Horne, Burchard E., Andover, Mass. Pressure reducing valve. 1,876,937; Sept. 13.
Horne, Burchard E., Andover, Mass. Pressure relief valve. 1,876,938; Sept. 13.
Horton, Erwin C. (See Hueber, H., and Horton.)
Horvath, Alexander, Chicago, Ill. Apparatus for forming crystals. 1,877,403; Sept. 13.
Horwitz, Meyer, Baltimore, Md. Coin controlled game apparatus. Des. 87,748; Sept. 13.
Hosiery Machine Corporation. (See Miller, Max C., assignor.)
Hotter, Edward, Chicago, Ill. Die casting machine. 1,876,940; Sept. 13.
Houck, Joseph C., Los Angeles, Calif. Advertising device. 1,877,463; Sept. 13.
Howard, John L. (See De Pasquale, D., and Howard.)
Howes, Donald A., Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited. Production of lubricating oils. 1,877,664; Sept. 13.
Howse, Curtis L. (See Snow, N. L., Howse, and Bowers.)
Howse, Curtis L., and C. D. Lowell, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,877,721; Sept. 13.
Hubbard & Company. (See Hocher, Andrew A., assignor.)
Hubley, Fred E., Detroit, Mich. Sight gauge. 1,877,509; Sept. 13.
Hucke, Charles H., assignor to Ventrite, Inc., St. Louis, Mo. Operating means for ventilating sashes. 1,876,941; Sept. 13.
Hucke, Charles H., assignor to Ventrite, Inc., St. Louis, Mo. Operating means for ventilating sashes. 1,876,942; Sept. 13.
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Wiper arm mounting for windshield cleaners. 1,877,821; Sept. 13.
Huelhorst, Herman L. (See Wilkerson, Don D., assignor.)
Huffman, Laurnel C. (See McClarkey, Roy, assignor.)
Huffman, William C., Broken Bow, Nebr. Motor vehicle signal. Des. 87,749; Sept. 13.
Hughes, George J., Trenton, N. J. Antiscald shower head. 1,877,510; Sept. 13.
Hukill, Henry D. (See Apple, V. G., and Hukill.)
Hull, Andrew J., Laramie, Wyo., assignor to Wyoming Platinum and Gold Mining Syndicate. Recovering platinum. 1,876,043; Sept. 13.
Hulse, Stewart H., Elizabeth, N. J., assignor to Standard Oil Development Company. Method and apparatus for heat exchanges. 1,877,322; Sept. 13.
Hultman, Gustaf, Ramnas Kyrkby, assignor to Aktiebolaget Bergslagens Gemensamma Kraftforvaltning, Vasteras, Sweden. Method of and apparatus for changing-over power-line poles. 1,877,241; Sept. 13.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Power Company, Wilmington, Del. Hydrogenated resin esters and producing. 1,877,179; Sept. 13.
Humphrey, William G., Wheeling W. Va. Operating means for power presses. 1,876,944; Sept. 13.
Humphreys, Edwin S., Aurora, Ill., assignor, by mesne assignments, to Aurora X-Ray Corporation. Arc lamp. 1,877,242; Sept. 13.
Hunkel, Hermann, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Amplifier station for deep-sea signaling cables. 1,877,511; Sept. 13.
Hupp Motor Car Corporation. (See Holmes, John R., assignor.)
Hupp Motor Car Corporation. (See MacPherson, Earle S., assignor.)
Hurley, Albert B., assignor to National Paper Process Company, New York, N. Y. Producing normal light effects. 1,877,512; Sept. 13.
Husted, H. A., Company, The. (See Kraft, Herman T., assignor.)
Huston, Samuel W., assignor of one-half to R. T. Gann, Trinity, Tex. Handle grip. 1,877,464; Sept. 13.
Hutchings, Edward W., assignor of one-fourth to E. G. Swartz, one-fourth to W. T. Dailey, and one-fourth to D. A. Groff, Perry, Fla. Saw. 1,876,945; Sept. 13.

Hutchings, Pryer H., assignor of one-fourth to T. F. Harrison, Wewoka, Okla. Bolt. 1,877,665; Sept. 13.
Hydraulic Press Manufacturing Company, The. (See Benedek, Elek, assignor.)
Hyland, Lawrence A., Washington, D. C. Radio transmitter. 1,877,132; Sept. 13.
Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Thermostat. 1,877,131; Sept. 13.
Hyland, William A., East Moline, assignor to Deere & Company, Moline, Ill. Mold. 1,877,323; Sept. 13.
I. G. Farbenindustrie Aktiengesellschaft. (See Fink, H., and Esselmann, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, M., Ziese, Reyle, and Bauer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kämpf, A., and Hager, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Melms, Fritz, assignor.)
I-T-E. Circuit Breaker Company. (See Scott, William M., jr., assignor.)
Ihde, August F., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Mounting for radiator shutters. 1,877,324; Sept. 13.
Ihde, August F., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator crank box. 1,877,325; Sept. 13.
Ilford Limited. (See Whitfield, George S., assignor.)
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Imperial Chemical Industries Limited. (See Howes, Donald A., assignor.)
Imperial Chemical Industries Limited. (See Saunders, Kenneth H., assignor.)
Imperial Irrigation District. (See Clark, A. C., and Graves, assignors.)
Incorporated Paper Industries. (See Oliver, R., and Penn, assignors.)
Independent Smelting and Refining Co. (See Rosener, Leland S., assignor.)
Indian Motocycle Company. (See Stern, A., J., J., and E., assignors.)
Individual Drinking Cup Company, Inc. (See Carew, Herman, assignor.)
Ingersoll, Ward H., St. Paul, assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Temperature control apparatus. 1,877,327; Sept. 13.
International Dry Refrigeration Corporation. (See Gordon, Samuel, assignor.)
International Patents Development Company. (See Ebert, C., Newkirk, and Noskowitz, assignors.)
Irwin, John S., Jackson Heights, N. Y. Combination reading desk and bookcase. 1,876,681; Sept. 13.
Ising, Gustaf, Stocksund, Sweden. Galvanometer. 1,877,243; Sept. 13.
Isler, Herman R. (See Einstein, S., and Isler.)
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,877,404; Sept. 13.
Jacquard Knitting Machine Company. (See Bromley, Thomas C., assignor.)
Jaeger, Gebhard, and J. Eggert, assignors to The Jaeger Machine Company, Columbus, Ohio. Water tank for concrete mixers. 1,876,946; Sept. 13.
Jaeger Machine Company, The. (See Jaeger, G., and Eggert, assignors.)
Jahn, John R., Berkeley, and H. S. Duey, San Francisco, Calif. Pipe plug. 1,876,947; Sept. 13.
Jahnke, Charles B., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Lubricant conducting means. 1,876,948; Sept. 13.
James, Samuel, assignor to Chamberlain & Hookham Limited, Birmingham, England. Improvements relating to summation means. 1,876,949; Sept. 13.
Janney, Reynold, Londonderry, Ohio. Aircraft. 1,876,682; Sept. 13.
Jaques, Fernando O., Providence, R. I. Sizing tooth crowns. 1,876,950; Sept. 13.
Jaros, Edward T. (See Jaros, Frank J. and E. T.)
Jaros, Frank J. and E. T., Chicago, Ill. Attachment plug for automobile signaling devices. 1,876,951; Sept. 13.
Jeffrey Manufacturing Company, The. (See Francis, Earle V., assignor.)
Jeschke, Frank J., assignor of one-half, to J. J. Young, Detroit, Mich. Grinding mechanism. 1,877,328; Sept. 13.
Jewell Electrical Instrument Company. (See Miller, John H., assignor.)
Johns, Fred. W., Le Hall, Va. Back-up light. 1,876,952; Sept. 13.
Johns-Manville Corporation. (See Eisenhardt, Frank J., assignor.)
Johnson, Charles D., assignor to Johnson Steel & Wire Company, Inc., Worcester, Mass. Making wire tape. 1,876,953; Sept. 13.
Johnson, Frederick O., Long Bach, Calif. Automatic overflow control. 1,877,405; Sept. 13.
Johnson, George A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,877,329; Sept. 13.
Johnson, George A., and S. B. Haseltine, assignors to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,877,330; Sept. 13.
Johnson, Hiram W. and L. W., Miami, Fla. Fastener. 1,876,683; Sept. 13.
Johnson, Howard L. (See Painter, L. O., and Johnson.)
Johnson, James P., assignor to The J. P. Johnson Engineering Company, Cleveland, Ohio. Hoist. 1,876,954; Sept. 13.
Johnson, J. P., Engineering Company, The. (See Johnson, James P., assignor.)
Johnson & Johnson. (See Mathey, G. S., and Slotter, assignors.)
Johnson, Lewis W. (See Johnson, Hiram W. and L. W.)
Johnson Steel & Wire Company. (See Johnson, Charles D., assignor.)
Johnston, Allan T., Mount Lebanon, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,877,513; Sept. 13.
Johnstone, Carleton, San Mateo, Calif. Doorlock. 1,877,331; Sept. 13.
Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,877,667; Sept. 13.
Jones, Charles L., Pittsburgh, Pa., assignor to Dryice Corporation of America, New York, N. Y. Apparatus for and method of freezing carbon dioxide. 1,877,180; Sept. 13.
Jonkhoff, Henri W., Beckenham, England. Automatic steering device for swiveling bogies. 1,876,684; Sept. 13.
Jordan, Hans. (See Schoeller, W., Jordan, and Linde.)
Kalischer, Georg, and H. Ritter, Frankfort-on-the-Main, and E. Honold, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing amino-aldehyde compounds. 1,876,955; Sept. 13.
Kaltenbach, Robert W., Cleveland Heights, Ohio. Gate for material conveying chutes. 1,876,685; Sept. 13.
Kaltenbach, Robert W., Cleveland Heights, Ohio. Car dumper chute control mechanism. 1,876,686; Sept. 13.
Kämpf, Adolf Dessau-Ziebigk in Anhalt, and A. Hager, Wolfen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for preparing highly uniform solutions for the manufacture of artificial products. 1,877,337; Sept. 13.
Küppler, Paul, Dresden, Germany. Ribbon reverse for typewriters and like machines. 1,876,687; Sept. 13.
Kasser, Morris, San Francisco, Calif. Egg treatment machine. 1,876,688; Sept. 13.
Kastler, Edward L., Flossmoor, assignor to The Buda Company, Harvey, Ill. Motor. 1,876,956; Sept. 13.
Katzman, Harris, Brooklyn, N. Y. Cabinet. 1,877,514; Sept. 13.
Kauffman, Albert J., Chicago, Ill., assignor to Adometer Corporation of America, New York, N. Y. Advertising exhibitor. 1,877,406; Sept. 13.
Kearney, James R., Corporation. (See Fisks, Harold C., assignor.)
Kearney, James R., Corporation. (See Hoffman, Joseph D. P., assignor.)
Kearns, Bernard A. (See Haas, F. S., and Kearns.)
Keener, Martin M., Lancaster, Pa. Folding pin ticket. 1,877,133; Sept. 13.
Keith, James R., Bentonville, Ark. Fruit and vegetable field crate. 1,877,666; Sept. 13.
Keller, Karl, Frankfort-on-the-Main-Fechenheim, and E. Gofferje, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphonating higher paraffin hydro-carbons. 1,876,957; Sept. 13.
Kellogg, De Forest, Los Angeles, Calif. Hydraulic brake. 1,877,134; Sept. 13.
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Window construction. 1,876,689; Sept. 13.
Kelly, Thomas, North Lexington, Mass. Return water metering device. 1,876,958; Sept. 13.
Kelsea, Clarence H., Belmont, and C. I. Geddes, Arlington, assignors to Peter Gray & Sons, Inc., Cambridge, Mass. Humidifier. 1,876,959; Sept. 13.
Kelsey-Hayes Wheel Corporation. (See Ash, Charles S., assignor.)
Kelsey-Hayes Wheel Corporation. (See Farmer, Horace E., assignor.)
Kempf, Norman W. (See Ruckelshaus, J. G., and Kempf.)
Kennedy, Harry E., et al. (See Wilson, Theodore R., assignor.)
Kenworthy, Charles F., Inc. (See Kenworthy, Charles F., assignor.)
Kenworthy, Charles F., Woodbury, assignor to Charles F. Kenworthy, Inc., Waterbury, Conn. Annealing furnace. 1,876,960; Sept. 13.
Kern, Erwin, Wettingen, Switzerland. Electric current interrupting means. 1,877,753; Sept. 13.
Kidder, William V., LaCrosse, Wis. Lubricating system and product. 1,877,668; Sept. 13.
Killefer Manufacturing Corporation. (See Rogers, C. R., Babel, and Brodersen, assignors.)
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerative apparatus. 1,877,181; Sept. 13.
Kimbro, Hubert G., Bell, Calif. Sash holding device. 1,877,465; Sept. 13.
Kindl, Carl H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,876,961; Sept. 13.

King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
Kingsbury, Albert, Greenwich, Conn., assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa. Spherical bearing. 1,876,690; Sept. 13.
Kingsbury Machine Works, Inc. (See Kingsbury, Albert, assignor.)
King-Seeley Corporation. (See Bandemer, William E., assignor.)
King-Seeley Corporation. (See Muzzy, William H., assignor.)
Kingston, Carnegie. (See Gray, G., and Kingston.)
Kirk, Robert H. (See Martinez, H., and Kirk.)
Kitze, Herman, Owen, Wis. Blackboard. 1,877,669; Sept. 13.
Klahn, Arthur H., deceased, assignor to O. J. Klahn, executrix, San Francisco, Calif. Automatic opening and closing furnace door for automatic oil burners. 1,876,962; Sept. 13.
Klahn, Olga J., executrix. (See Klahn, Arthur H., assignor.)
Klass, Carl C., Ottawa, Ill. Lawn mower. 1,876,963; Sept. 13.
Kleaver, William K., Grand Rapids, Mich. Radio table or similar article. Des. 87,750; Sept. 13.
Klein, Georges, Paris, France. Window assembly. 1,877,244; Sept. 13.
Klein, Ludwig, Dusseldorf, Germany. Pilger rolling process and roll for performing same. 1,876,691; Sept. 13.
Knight, Leroy E., Northfield, Vt. Amalgamator. 1,877,670; Sept. 13.
Knoche, Joseph, Kansas City, Mo. Front for display devices. Des. 87,751; Sept. 13.
Knox, Harry A., Davenport, Iowa. Belt. 1,877,135; Sept. 13.
Koch, Louis A., jr., Louisville, Ky. Terminal connection. 1,877,671; Sept. 13.
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Koeberle, Karl. (See Kunz, M. A., Koeberle, and Bertbold.)
Koeberle, Karl. (See Kunz, M. A., Koeberle, and Zerweck.)
Koehler, Elmer E. (See Walter, E., and Koehler.)
Koehring Company. (See Pennington, Claude, assignor.)
Kolbert, Edward. (See Shapiro, David H., assignor.)
Könecke, Friedrich, Hanover, Germany. Overshoe. 1,877,182; Sept. 13.
Koontz, David R., Salisbury, assignor of one-half to J. D. Dorsett, Spencer, N. C. Automatic means for regulating fluid pressure systems. 1,876,964; Sept. 13.
Kopp, Harold M., Watertown, Conn. Producing carbureted water gas. 1,876,965; Sept. 13.
Koppers Company of Delaware, The. (See Becker, Joseph, assignor.)
Koppers Company of Delaware, The. (See Harlow, Earl V., assignor.)
Koppers Company of Delaware, The. (See Underwood, C. E., and Lehr, assignors.)
Koppers Company of Delaware, The. (See Van Ackeren, Joseph, assignor.)
Kornsweet, Samuel A., Venice, Calif. Fishing apparatus. 1,876,692; Sept. 13.
Koster, Edward C., Shaker Heights, assignor to The Vichek Tool Company, Cleveland, Ohio. Wrench set unit. 1,877,406; Sept. 13.
Kottlowski, Clarence P., assignor to Diamond Chain and Manufacturing Company, Indianapolis, Ind. Chain drive. 1,877,338; Sept. 13.
Kottlowski, Clarence P., assignor to Diamond Chain and Manufacturing Company, Indianapolis, Ind. Chain. 1,877,390; Sept. 13.
Kough, Benjamin J. (See Brown, T., and Kough.)
Kraft, Herman T., Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,876,693; Sept. 13.
Kranz, Sam, New York, N. Y. Roll screen fastener. 1,877,407; Sept. 13.
Kränzlein, Georg, H. Vollmann, and M. Corell, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Nitrogen-containing derivatives of dibenzpyrenquinones and preparing them. 1,876,966; Sept. 13.
Krause, Arnold R., and A. C. Hirsch, assignors to Gillette Rubber Company, Eau Claire, Wis. Machine for painting tires and the like. 1,876,967; Sept. 13.
Krebs, Anna, guardian. (See Krebs, LeRoy J., assignor.)
Krebs, Le Roy J.; A. Krebs, guardian, assignor of one-fourth to Anna Krebs, Clinton, Iowa. Demountable rim. 1,876,968; Sept. 13.
Krell, Joseph, Berlin-Pankow, Germany. Machine for printing addresses of other matter on forms or the like. 1,876,969; Sept. 13.
Krell, Joseph, Berlin-Zehlendorf, Germany. Address printing and calculating machine. 1,876,970; Sept. 13.
Kroger, Fred H., Ridgewood, N. J., assignor to Radio Corporation of America. Transmission system. 1,876,971; Sept. 13.
Kruckenberg, Franz, and F. Heyner, Heidelberg, Germany; said Heyner assignor to said Kruckenberg. Railway signaling system. 1,877,245; Sept. 13.
Kruesi, Geoffrey G., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio system and method. 1,876,694; Sept. 13.
Küchenmeister, Heinrich, Berlin, Germany. Sound reproducing appliance having a film record. 1,877,731; Sept. 13.
Kuhlmann, Franz, Rustringen, Germany. Drafting machine. 1,877,340; Sept. 13.
Kuhlmann, Herman H., Spokane, Wash. Supporting tray. 1,877,183; Sept. 13.
Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Electric plug. 1,876,695; Sept. 13.
Kunkel Manufacturing Company, Ltd. (See Brubaker, Henry J. and J. B., assignors.)
Kunz, Max A., Manheim, K. Koeberle, Ludwigshafen-on-the-Rhine, and W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of monoaminoanthanthrones and derivatives thereof. 1,876,972; Sept. 13.
Kunz, Max A., Manheim, K. Koeberle and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Substitution products of anthanthrones. 1,876,973; Sept. 13.
Kunz, Max A., Manheim, K. Koeberle and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogen derivatives of anthanthrones. 1,876,974; Sept. 13.
Kunz, Max A., Manheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of highly halogenated derivatives of pyranthrone. 1,876,975; Sept. 13.
Kunz, Max A., Manheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of nitrogeneous isodibenzanthrones. 1,877,741; Sept. 13.
Kurowski, Alfred G. F., Brooklyn, assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,876,696; Sept. 13.
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and card-perforating machine. 1,876,697; Sept. 13.
Kurtz, Daniel W. B., jr., Columbia, Mo. Cigarette wrapper and a cigarette made with said wrapper. 1,876,976; Sept. 13.
Kurtz, Daniel W. B., jr., Columbia, Mo. Ruler for use by draftsmen and others in drawing. 1,877,341; Sept. 13.
Kwech, Robert E., Chicago, Ill. Blue printing. 1,877,246; Sept. 13.
LaGrant, John F., et al. (See Lieske, Frank J., assignor.)
LaGuesse, Fernand, Herstal, Belgium. Two-stroke engine block. 1,876,977; Sept. 13.
Laisne, Leon, Nantes, France. Motor vehicle. 1,877,332; Sept. 13.
Lake, Francis W., Whittier, assignor to Union Oil Company of California, Los Angeles, Calif. Computing dynamometer and stroke meter with motor driven recording means. 1,877,467; Sept. 13.
Lambert, James H. (See Peck, L. C., and Lambert.)
Landsi Machine Company. (See Dunford, Ernest, assignor.)
Lang, Frederic H., and N. E. Van Stone, Chicago, Ill., assignors to The Sherwin-Williams Company, Cleveland, Ohio. Display device. 1,876,978; Sept. 13.
Lankford, Robert E. (See Carter, Sidney T., assignor.)
Largman, Gray Company. (See Harris, Harry, assignor.)
Larrabee, Bert G., Houston, Tex. Ash tray. Des. 87,752; Sept. 13.
Larry, Edwin C., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,877,333; Sept. 13.
Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Pencil. 1,876,698; Sept. 13.
Larson, Bror J., Hamden, Conn. Edge trimmer. 1,876,979; Sept. 13.
Larsson, Knut, and N. G. Palmgren, assignors to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Telephone plant. 1,877,672; Sept. 13.
Lasher, Hiram S., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,699; Sept. 13.
Lathrop, Harry D., and W. H. Paulson, Chicago, Ill.; said Paulson assignor to said Lathrop. Conveyer. 1,877,334; Sept. 13.
Laughlin, William C., Kew Gardens, assignor to Filtration Equipment Corporation, New York, N. Y. Treating domestic sewage. 1,877,623; Sept. 13.
Laughridge, William S. (See Bruner, C. U., and Laughridge.)
Launder, Ernie L., Montebello, and W. T. Launder, Anaheim, Calif. Brake operating mechanism. 1,877,408; Sept. 13.
Launder, William T. (See Launder, Ernie L., and W. T.)
Law, James A., Ascot Vale, Victoria, Australia. Method and mold for molding hollow rubber articles. 1,877,673; Sept. 13.
Leavitt Machine Company, The. (See Albee, Hugh M., assignor.)
Lee, Harry, Livingston, Mont. Mobile kitchen chair. 1,876,700; Sept. 13.

Lee, Sherman Q. (See Slidell, K., and Lee.)
Lee, Sherman Q., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Process and product of reenforcing bloated building material. 1,877,136; Sept. 13.
Lee, Sherman Q., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Progressively bloating earthly materials. 1,877,137; Sept. 13.
Lee, Sherman Q., and W. Hathaway, Madison, Wis.; said Lee, assignor, by mesne assignments, of his entire right to American Face Brick Research Corporation. Bloating and annealing cellular blocks. 1,877,138; Sept. 13.
LeFebvre, Charles W., Chicago, Ill. Window and the like. 1,877,631; Sept. 13.
Lehr, Charles E. (See Underwood, C. E., and Lehr.)
LeMare, Ernest B., St. Helens, assignor to Pilkington Brothers Limited, Liverpool, England. Glass annealing leer. 1,877,674; Sept. 13.
Lemmon, John U., jr., Newton, assignor to Hathaway Bakeries, Inc., Cambridge, Mass. Baking sausage rolls and apparatus for use therewith. 1,876,701; Sept. 13.
Lemmon, Rees H. (See Yerkes, J. A., and Lemmon.)
L'Enfant, Charles, New York, N. Y. Container. 1,877,468; Sept. 13.
Lentell, John H., jr., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Fuel injection device. 1,876,980; Sept. 13.
Levan, John F. (See Holt, T. W., and Levan.)
Leverenz, Arthur A. (See Wilkie, W., and Leverenz.)
Levy, Lucien, Paris, France. Frequency changer. 1,877,409; Sept. 13.
Lewin, George S. (See Clark, Edward E., assignor.)
Lewis, Howard W., Nutley, N. J. Manifold form aligning device. 1,876,981; Sept. 13.
Lewis, Robert I., Wilmington, assignor to Shell Development Company, San Francisco, Calif. Refining hydrocarbon oil. 1,876,702; Sept. 13.
Lewis, William A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Current transformer connection for relay operations. 1,877,139; Sept. 13.
Lichter, Malvin, New York, N. Y., assignor to The Stickless Corporation. Handle box. 1,876,982; Sept. 13.
Lidseen, Gustave, Chicago, Ill. Foldable stand. 1,876,983; Sept. 13.
Lieske, Frank J., assignor, by mesne assignments, of one-half to A. L. Marshall and J. F. LeGrant, Detroit, Mich. Self locking valve. 1,877,675; Sept. 13.
Lilienfeld, Julius E., Cedarhurst, N. Y. Amplifier for electric currents. 1,877,140; Sept. 13.
Liljeberg, Carl G., Pittsburgh, Pa., assignor to Cincinnati Grinders, Incorporated, Cincinnati, Ohio. Grinding machine. 1,877,515; Sept. 13.
Lilly, Stuart C., Dayton, Ohio. Treating hemorrhoids. 1,876,703; Sept. 13.
Lincoln Electric Company, The. (See Osborne, Samuel C., assignor.)
Linde, Walter. (See Schoeller, W., Jordan, and Linde.)
Lindeen, Charles W., Omaha, Nebr. Treating wooden stringed instruments. 1,876,984; Sept. 13.
Lindley, Curtis, jr., Empire, Calif. Fruit packing device. 1,877,479; Sept. 13.
Linn, Holman H., assignor to The Linn Manufacturing Corporation, Morris, N. Y. Head casting for radiators. 1,877,516; Sept. 13.
Linn Manufacturing Corporation, The. (See Linn, Holman H., assignor.)
Lipcot, Fred L., assignor to Rubber Shock Insulator Corporation, Bridgeport, Conn. Vibration insulator. 1,876,704; Sept. 13.
Lippard, Leslie, Salida, Colo. Battery charging system. 1,876,985; Sept. 13.
Lishness, Lysander J., Lapeer, Mich. Doorcheck. 1,876,986; Sept. 13.
Little, Clarence B., assignor to The Brownell Company, Dayton, Ohio. Automatic stoker. 1,877,410; Sept. 13.
Livingston, John W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Track rail contactor. 1,877 184; Sept. 13.
Löbbecke, Karl. (See Schulz, E. H., and Löbbecke.)
Locke, Albert R., Oak Park, Ill. Selective circuit system and remote control. Re18,593; Sept. 13.
Lockwood, John A., Fillmore, N. Y. Compound for preventing cannibalism in chickens. 1,877,676; Sept. 13.
Loeffler, William, Sheboygan, Wis. Woodworking machine. 1,876,987; Sept. 13.
Lormor, Henry W., Cleveland Heights, assignor to Willard Storage Battery Company, Cleveland, Ohio. Shut-off valve for filling nozzles. 1,876,988; Sept. 13.
Lormor, Henry W., Cleveland Heights, assignor to Willard Storage Battery Company, Cleveland, Ohio. Storage battery. 1,876,989; Sept. 13.
Lormor, Henry W., Cleveland Heights, assignor to Willard Storage Battery Company, Cleveland, Ohio. Vent plug wrench. 1,876,990; Sept. 13.
Loughridge, Matthew H., Bogota, N. J. Multiple turntable phonograph. 1,877,625; Sept. 13.
Loughridge, Matthew H., Bogota, N. J. Railway traffic controlling system. 1,877,626; Sept. 13.
Lounsbury, Harvey J., Glen Ellyn, assignor to W. H. Miner, Inc., Chicago, Ill. Radway draft rigging. 1,877,335; Sept. 13.
Lovell, George and G. D., Stratford, London, England. Panel for the walls and doors of refrigerators and cold storage rooms. 1,877,336; Sept. 13.
Lovell, George D. (See Lovell, George and G. D.)
Lovell, Henry R., Greenville, Pa. Doorcheck. Des. 87,753; Sept. 13.
Lowe, William, Plainfield, N. J. Scribing tool and T-square for mechanics. 1,877,185; Sept. 13.
Lowell, Cornelius D. (See Howse, C. L., and Lowell.)
Lower, Melvin S., assignor to The Sun Rubber Company, Barberton, Ohio. Bathing cap. 1,877,411; Sept. 13.
Löwit, Rudolf, assignor to Deutsche Glukfadenfabrik Rich Kurtz & Dr. Ing. Paul Schwarzkopf G. m. b. H., Berlin-Halensee, Germany. Electric discharge tube. 1,876,991; Sept. 13.
Lucian Tube Corporation. (See West, Walter J., assignor.)
Ludwig, Louis, Brooklyn, N. Y. Switch mechanism for attachment plugs. 1,876,705; Sept. 13.
Luftschiffbau Zeppelin G. m. b. H. (See Dürr, Ludwig, assignor.)
Lyon, Alfred J., Harshmanville, Ohio. Aluminum casting alloy. 1,877,141; Sept. 13.
Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
Lyon, Percy S., Fort Wayne, Ind., assignor to Cochrane Corporation, Philadelphia, Pa. Deaerating water heater. 1,877,412; Sept. 13.
MacCain, Lloyd W., Bronx, and E. F. Webb, New York, N. Y., assignor, by mesne assignments, to said Lloyd W. MacCain. Gas detector and signal device. 1,876,706; Sept. 13.
MacGregor, Wallace F., assignor to J. I. Case Company, Racine, Wis. Combination harvester-thrasher. 1,877,518; Sept. 13.
MacGregor, Wallace F., assignor to J. I. Case Company, Racine, Wis. Harvester. 1,877,519; Sept. 13.
MacGregor, Wallace F., assignor to J. I. Case Company, Racine, Wis. Combination harvester-thrasher. 1,877,520; Sept. 13.
MacLeod, Charles, North Easton, Mass. Pattern turning lathe. 1,876,992; Sept. 13.
MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Lubricating system. 1,876,707; Sept. 13.
MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Crank case construction for engines and the like. 1,876,708; Sept. 13.
MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Control lever. 1,876,709; Sept. 13.
MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Closure assembly for vehicle radiators. 1,876,710; Sept. 13.
Macrae, James N., and C. P. Packard, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y. Electric control system for oil burners. 1,877,248; Sept. 13.
Magazine Repeating Razor Company. (See Rodrigues, Octavius V., assignor.)
Magee Carpet Co., The. (See McCollum, A. F., and Rush, assignors.)
Magnavox Company, The. (See Trefry, Laurence D., assignor.)
Mahla, Walter T., Lorain, Ohio, assignor to National Tube Company. Pipe testing machine. 1,876,711; Sept. 13.
Malby, Seth G., Tenafly, assignor to Aluminum Screw Machine Products Company, Edgewater, N. J. Making quills. 1,877,342; Sept. 13.
Malby, Seth G., Tenafly, assignor to Aluminum Screw Machine Products Company, Edgewater, N. J. Hanger. 1,877,343; Sept. 13.
Malchou, Gustav E. A. (See Beaton, John L., assignor.)
Malley, James, Richmond, Va. Coat hanger. 1,877,247; Sept. 13.
Mallory, P. R., & Co. (See Weiger, Joseph A., assignor.)
Manaster, Ben B., Chicago, Ill. Garment connecter. 1,877,677; Sept. 13.
Manfred Weiss Stahl-und Metallwerke Aktiengesellschaft. (See Wattmann, Emil, assignor.)
Mann, Matthew D., jr., Roselle, N. J., assignor to Standard Oil Development Company. Distributor for reactive liquids and using the same. 1,876,994; Sept. 13.
Manning, Harold G., Waterbury, Conn. Steering wheel grip. 1,876,993; Sept. 13.
Mansure, Arthur J., Detroit, Mich. Automatic temperature or pressure control. 1,876,822; Sept. 13.
Manser, Arthur E., San Gabriel, Calif. Armed motorcycle. 1,876,995; Sept. 13.
Markel Electric Products, Inc. (See McFadden, Glenn E., assignor.)
Markese, James. (See Alsaker, A., and Markese.)
Markman, Fredrik, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Circuit arrangement for automatic telephone systems. 1,877,678; Sept. 13.
Marks, Edward S., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Air cooling system for aeroplane engines. 1,876,996; Sept. 13.
Marples, Stephen A., London, England. Advertising clock. 1,876,997; Sept. 13.
Marshall, Anthony L., et al. (See Lieske, Frank J., assignor.)

Marshall, Lewis C., Walpole, Mass., assignor, by mesne assignments, to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio. Piston packing for internal combustion engines. 1,877,413; Sept. 13.
Marshall, Lewis C., Walpole, Mass., assignor, by mesne assignments, to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio. Piston packing. 1,877,414; Sept. 13.
Marsteller, Lester O., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Shielded loop. 1,877,346; Sept. 13.
Martin, Alfred M., Chicago, Ill. Partition sheet for binders. 1,876,998; Sept. 13.
Martin, Glenn L., Co., The. (See Van Dusen, C. A., and Haase, assignors.)
Martin, James W., jr., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,877,187; Sept. 13.
Martin, Otto V., Sand Springs, Okla., assignor to The Texas Chemical Products Company, New York, N. Y. Anhydrous metallic chlorides and their preparation. 1,877,733; Sept. 13.
Martin & Schwartz, Inc. (See Schwartz, R. L., and Martin, assignors.)
Martin, William P. (See Schwartz, R. L., and Martin.)
Martinez, Henry, and R. H. Kirk, Newcastle-upon-Tyne, assignor, by mesne assignments, to Winget Limited, Warwick, England. Machine for crushing coal, stone, and similar materials. 1,877,188; Sept. 13.
Massobrio, Pedro, and E. Capello, Buenos Ayres, Argentina. Frame for pictures, portraits and the like. 1,877,189; Sept. 13.
Masters, Edwin L., Chicago, Ill. Plant setter. 1,877,415; Sept. 13.
Mastrangelo, Alphonso. (See Mastrangelo, Frank and A.)
Mastrangelo, Frank, and A. Mastrangelo, Fitchburg, Mass. Telephone cabinet. 1,877,470; Sept. 13.
Material Handling, Inc. (See Romine, Robert T., assignor.)
Matheus, Karl, Chicago, Ill. Belt buckle. 1,877,416; Sept. 13.
Mathews Conveyer Company. (See Adams, Charles A., assignor.)
Mathey, Gustave S., and C. F. Slotter, assignors to Johnson & Johnson, New Brunswick, N. J. Nonsoiling plaster backing and making it. 1,877,344; Sept. 13.
Matthews, George E. (See Read, Charles S., assignor.)
Mattmann, Josef, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Cooling water regulator for rotary compressors. 1,877,345; Sept. 13.
Mauldin, John L., Pettus, Tex. High pressure pump. 1,877,521; Sept. 13.
May, Joseph, Frankfort-on-the-Main, Germany. Arch support for footwear. 1,877,522; Sept. 13.
Mayer, Hans. (See Straub, F., and Mayer.)
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Temperature measuring device for rubber working machinery. 1,876,712; Sept. 13.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Fluid pressure connection. 1,876,713; Sept. 13.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Fluid pressure connection. 1,876,714; Sept. 13.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Deflator cap. 1,876,715; Sept. 13.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Apparatus for splicing tubes. 1,876,716; Sept. 13.
Maynard, Clarence J. (See Schellack, J. A., and Maynard.)
McBride, Robert P., Hampton, Va. Motor vehicle signal switch. 1,876,717; Sept. 13.
McCartney, John H., San Francisco, Calif., assignor, by mesne assignments, to Turbo-Mill Company, Ltd. Grinding. 1,877,517; Sept. 13.
McCaslin, Clifford H., Oakland, Calif. Folding table. 1,876,999; Sept. 13.
McClain, Allen F., sr., Knoxville, Tenn. Race track. 1,877,471; Sept. 13.
McClarkey, Roy, and L. C. Huffman, Valley, Nebr. Safety solder-supporting holder. 1,877,727; Sept. 13.
McCollum, Alfred F., and T. H. Rush, assignors to The Magee Carpet Co., Bloomsburg, Pa. Pile fabric. 1,877,679; Sept. 13.
McCormick, Lacy B., Greenville, N. C., assignor to Daniel E. Taylor, Norfolk, Va. Game table. 1,877,190; Sept. 13.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Hanging lamp body or similar article. Des. 87,754; Sept. 13.
McHugh, Arthur C., Norwalk, and H. F. Rasneor, Long Beach, Calif. Recording drift indicator. 1,877,249; Sept. 13.
McIlroy, Francis B., Hammond, Ind. Folder for antisqueak material. 1,877,001; Sept. 13.
McKee Glass Company. (See Smith, Maurice A., assignor.)
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McKenney Chain Co. (See McKenney, Emerson and H., and Fox, assignors.)
McKenney, Emerson and H., Wakefield, Mass., and N. T. Fox, Portland, Me., assignors to McKenney Chain Co., Portland, Me. Antiskid device. 1,877,000; Sept. 13.
McKenney, Harry. (See McKenney, Emerson and H., and Fox.)
McKibbin, Marshall, Washington, D. C. Combined razor blade sharpener and ash tray. Des. 87,755; Sept. 13.
McLanahan & Stone Corporation. (See Fye, William A., assignor.)
McMurdie, Francis J., assignor to Clarage Fan Company, Kalamazoo, Mich. Fan wheel. 1,877,347; Sept. 13.
McNaught, Norris F. and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Valve grinder. 1,877,348; Sept. 13.
McPherson, Charles A., Edgar, Mont. Toy. 1,877,680; Sept. 13.
McPherson, Duncan, San Diego, Calif. Hose nozzle handle. 1,876,718; Sept. 13.
Meachem, Harry, Teaneck, N. J., assignor to Todd Dry Dock Engineering & Repair Corporation, Brooklyn, N. Y. Atomizer. 1,877,350; Sept. 13.
Mead Johnson & Company. (See Bills, Charles E., assignor.)
Mears, Edward W., Merion, assignor to Mears-Kane-Ofeldt, Inc., Philadelphia, Pa. Automatic shut-off mechanism. 1,877,349; Sept. 13.
Mears-Kane-Ofeldt, Inc. (See Mears, Edward W., assignor.)
Meeker, Frank P. (See Whipple, H. E., and Meeker.)
Meem, James C., Brooklyn, assignor to Underpinning and Foundation Company, New York, N. Y. Trench bracing. 1,877,351; Sept. 13.
Megow, George E., South Milwaukee, assignor by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Resistor unit. 1,877,352; Sept. 13.
Mehan, Thomas O., Chicago, Ill., assignor by mesne assignments to Remington Rand, Inc. Error key mechanism for adding machines. 1,876,719; Sept. 13.
Mehren Lock Co. (See von Mehren, Oswald D., assignor.)
Meigs, Joseph V., Brooklyn, N. Y., assignor, by mesne assignments, to Plastix Corporation. Improved carbohydratephenol resin and making same. 1,877,417; Sept. 13.
Meissner, Oswald. (See Böger, O., and Meissner.)
Melms, Fritz, Premintz, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for the manufacture of artificial threads. 1,877,002; Sept. 13.
Menasha Products Company, The. (See Willauer, William R., assignor.)
Menefee, Thomas, W. (See Craig, Richard M., assignor.)
Meng, Frederick, A., Dearborn, Mich. Flying machine. 1,877,003; Sept. 13.
Menzel, Friedrich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electromagnetic switch. 1,877,353; Sept. 13.
Menzl, John B., Clayton, assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Apparatus for forming metallic retaining members. 1,877,004; Sept. 13.
Merklin, George, Bonilla, S. Dak. Wheel cleaning attachment for tractors. 1,877,005; Sept. 13.
Merrill, George H., Forest Hills, N. Y. Making protecting means for connecting devices. 1,876,720; Sept. 13.
Merritt, Berttie O., Scottsbluff, Nebr., assignor of one-half to John A. Germiquet, Edgemont, S. Dak. Terminal connecter. 1,877,142; Sept. 13.
Merryman, William E., Richmond, Ind. Clamp. 1,877,006; Sept. 13.
Metelski, Claude M., Detroit, Mich., assignor to Spaulding Fibre Company, Incorporated, North Rochester, N. H. Multiterminal electrical socket. 1,877,419; Sept. 13.
Metlox Corporation, Ltd. (See Prouty, Theodore C., assignor.)
Metz, H. A., Laboratories, Inc. (See Freedman, L., and Sherndal, assignors.)
Meyer, Charles, Milwaukee, Wis. Oiler. 1,877,007; Sept. 13.
Meyer, Ralph J., Denver, Colo. Internal combustion rotary engine. 1,877,250; Sept. 13.
Meyer & Studell S. A. (See Morf, Ernest, assignor.)
Mickey, Bruce D., Schenectady, N. Y., assignor to General Electric Company. Parallel operation of direct current motors. 1,877,681; Sept. 13.
Miller, George E., Etna, Pa. Tapping machine. 1,877,251; Sept. 13.
Miller, John H., Oak Park, Ill., assignor by mesne assignments to Jewell Electrical Instrument Company. Electric meter. 1,877,008; Sept. 13.
Miller, Max C., Cumberland, R. I. Stocking and method of knitting the same. 1,876,721; Sept. 13.
Miller, Max C., Cumberland, R. I. Knitting machine. 1,876,722; Sept. 13.
Miller, Max C., assignor to Hosiery Machine Corporation, Cumberland, R. I. Knitting machine. 1,877,573; Sept. 13.
Miller, Robert E., Bainbridge, Ga. Automatic bottle washing and brushing machine. 1,877,682; Sept. 13.
Miller, William H. (See Moore, G. S., and Miller.)
Mills, Lewis H., assignor to Neverburn Cooker Co., Seattle, Wash. Cooking utensil. 1,877,009; Sept. 13.
Milwaukee Gas Specialty Company. (See Sackett, Warren W., assignor.)
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Miner, W. H., Inc. (See Harris, Joseph, assignor.)

Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Johnson, George A., assignor.)
Miner, W. H., Inc. (See Johnson, G. A., and Haseltine, assignors.)
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Miner, W. H., Inc. (See Miner, William H., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Miner, William H., Chazy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,877,354; Sept. 13.
Minneapolis-Honeywell Regulator Company. (See Cunningham, Lewis L., assignor.)
Minneapolis-Honeywell Regulator Company. (See Ingersoll, Ward H., assignor.)
Minneapolis-Honeywell Regulator Company. (See Parker, Arthur C., assignor.)
Minneapolis-Honeywell Regulator Company. (See Shivers, Paul F., assignor.)
Minor, Charles C., Hollywood, Calif. Objective. 1,877,355; Sept. 13.
Minton, Calvin J., Gage, Okla. Tractor hitch for farm implements. 1,876,723; Sept. 13.
Miscampbell, Hugh, Duluth, Minn., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa. Lime hydrator. 1,877,010; Sept. 13.
Mitchell, H. Alton, and A. W. Gregg, assignor to The Bonney-Floyd Company, Columbus, Ohio. Wear resisting ferrous alloy. 1,876,724; Sept. 13.
Mitchell, H. Alton, and A. W. Gregg, assignors to The Bonney-Floyd Company, Columbus, Ohio. Ferrous alloy. 1,876,725; Sept. 13.
Mitchell, Rowland B., assignor to Athol Manufacturing Company, Athol, Mass. Removing diphenylamine from nitrocellulose powder. 1,876,726; Sept. 13.
Mock, James C., Detroit, Mich. Railway switch point to switch box connecting means. 1,877,524; Sept. 13.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Air heater. 1,877,011; Sept. 13.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,877,012; Sept. 13.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moldenhauer, Frieda, Watertown, Wis. Curtain stretcher. 1,877,356; Sept. 13.
Monoghan, Frank J., Perth Amboy, N. J. Arch supporter. 1,877,525; Sept. 13.
Montee, Tracy D., Pasay, Philippine Islands. Refrigerating apparatus. 1,877,143; Sept. 13.
Moor, Corenlius, Calumet City, Ill. Gas burner. 1,877,357; Sept. 13.
Moor, Emanuel, Mont Pelerin, Switerland, C. Bechstein, jr., Berlin, and H. J. Gravenstein, Charlottenburg, Germany. Keyboard instrument. 1,877,526; Sept. 13.
Moor, Herbert H. (See Stratford, R. K., and Moor.)
Moore Company, The. (See Wunderlich, William E., assignor.)
Moore, George S., Harrisburg, and W. H. Miller, Penbrook, Pa. Impelling device for cooling systems of internal combustion engine. 1,877,420; Sept. 13.
Moore, James E., Niles, Mich. Auxiliary vehicle windshield. 1,876,727; Sept. 13.
Moore, Richard C., assignor to The Coe Manufacturing Company, Painesville, Ohio. Veneer lathe. 1,877,013; Sept. 13.
Moran, Edward J., assignor to Velvetex Corporation, La-Porte, Ind. Manufacture of gassed or sponge rubber. 1,877,527; Sept. 13.
Morf, Ernest, La Chaux-de-Fonds, assignor to the firm Meyer & Studeli S. A., Soleure, Switzerland. Manufacturing process of watch glasses made of transparent elastic material. 1,877,358; Sept. 13.
Morgan, John H., Piedmont, assignor to Max L. Rosenfeld, San Francisco, Calif. Automobile no back safety stop. 1,877,014; Sept. 13.
Morin, Louis H., New York, N. Y., assignor to West Disinfecting Company. Paper folding machine. 1,877,359; Sept. 13.
Moseley, Tomlinson I., assignor to Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif. Hair waving apparatus and method. 1,877,191; Sept. 13.
Moskowitz, Meyer. (See Ebert, C., Newkirk, and Moskowitz.)
Motor Products Corporation. (See Elfes, Harold L., assignor.)
Mowers, Jay A. (See Armstrong, W. O., and Mowers.)
Mueller Co. (See Reedy, Emmett M., assignor.)
Mullen, James F., jr., Chicago, Ill. Rail cleaner. 1,876,728; Sept. 13.
Munkel, Adolph E., Columbus, Ohio. Heating apparatus. 1,877,421; Sept. 13.
Munroe, Thomas, Dayton, Ohio. Combination card and detachable pencil. 1,877,015; Sept. 13.
Munson, Lawrence J., San Francisco, Calif. Removable gunstock for pistols. 1,877,016; Sept. 13.
Murphy, David F., and S. Schneider, Oakland, Calif. Rotary doorlock. 1,877,017; Sept. 13.
Murphy, Edward A. (See Twiss, D. F., and Murphy.)
Murphy, Francis L., Harrison, N. Y. Perpetual calendar. 1,876,729; Sept. 13.
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,877,422; Sept. 13.
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,877,423; Sept. 13.
Musselman, Alvin J., Cuyahoga Falls, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic wheel. 1,877,360; Sept. 13.
Mustonen, Henry T., Little Neck, N. Y. Pneumatic lift apparatus. 1,877,683; Sept. 13.
Muzzy, William H., Evanston, Ill., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid level indicator for automobiles. 1,876,730; Sept. 13.
Naab, George F. (See Brown, G. R., and Naab.)
Nash, Robert J., Birmingham, England. Bracket for games and the manufacture thereof. 1,877,018; Sept. 13.
Nashua Sure-Hold Company. (See Wilson, Edward W., assignor.)
Nathan, George, Buffalo, N. Y. Opener for jars and bottles. 1,877,019; Sept. 13.
National Lead Company. (See Corson, Michael G., assignor.)
National Lock Washer Company. (See Berge, Joseph, assignor.)
National Malleable and Steel Castings Company. (See Wittmer, Russell J., assignor.)
National Paper Process Company. (See Hurley, Albert B., assignor.)
National Pneumatic Company. (See Conklin, Roscoe D., assignor.)
National Rubber Machinery Company, The. (See Heston, A. L., Shook, and Evens, assignors.)
National Tube Company. (See Mahla, Walter T., assignor.)
Natural-Color, Inc. (See Waide, Merrill, assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Improving halogen derivatives of N-dihydro-1.2.2'.1'-anthraquinoneazine. 1,877,020; Sept. 13.
Neate, Reginald W., Kingston-on-Thames, England. Bowden cable, flexible shaft, and the like. 1,876,731; Sept. 13.
Nelson, Virginia P., New York, N. Y. Collapsible canopy support. 1,877,192; Sept. 13.
Neon, Claude, Lights, Inc. (See Beck, Leo L., assignor.)
Neon, Claude, Lights, Inc. (See Claude, Georges, assignor.)
Neon, Claude, Lights, Inc. (See Noble, Aubrey E., assignor.)
Neon, Claude, Lights, Inc. (See Smalley, Robert C., assignor.)
Neuhauss, Heinrich, Dusseldorf, Germany, assignor of one-half to Guilliaum H. Clamer, Atlantic City, N. J. Metallurgical apparatus. 1,876,732; Sept. 13.
Neuhauss, Heinrich, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa. Sintering mechanism. 1,876,733; Sept. 13.
Neuhauss, Heinrich, Dusseldorf, Germany. Making and patching furnace walls and linings. 1,876,734; Sept. 13.
Neuteboom, Boudewyn B. (See Thomas, H. T., and Neuteboom.)
Neverburn Cooker Co. (See Mills, Lewis H., assignor.)
New Castle Refractories Company. (See Fear, Harry E., assignor.)
New Haven Sand Blast Company, The. (See Sammis, Donald S., assignor.)
New Jersey Zinc Company, The. (See Bunce, Earl H., assignor.)
Newkirk, William B. (See Evert, C., Newkirk, and Moskowitz.)
Newton, Frank E., Hartford, Conn. Screw shaving and slotting machine. 1,877,632; Sept. 13.
Nickerson, George W., Cotuit, Mass. Puller. 1,877,684; Sept. 13.
Noble, Aubrey E., Lynbrook, assignor to Claude Neon Lights, Inc., New York, N. Y. Inserting materials in envelopes. 1,877,718; Sept. 13.
Noble, Aubrey E., Lynbrook, assignor to Claude Neon Lights, Inc., New York, N. Y. Capsule. 1,877,726; Sept. 13.
Noble, Warren, Detroit, Mich. Hydraulic valve actuating mechanism. 1,876,735; Sept. 13.
Nordhem, Eric. (See Alsaker, A., and Nordhem.)
Nordhem, Eric N., Chicago, Ill. High tension cut-outs and the like. 1,877,574; Sept. 13.
Norgren, Carl A., Denver, Colo. Valve. 1,877,528; Sept. 13.
North American Manufacturing Company, The. (See Brown, G. R., and Naab, assignors.)
Northern Malleable Iron Company. (See Cummins, Thomas K., assignor.)
Northrop Aircraft Corporation. (See Northrop, John K., assignor.)
Northrop Aircraft Corporation. (See Northrop, J. K., and Clark, assignors.)
Northrop, John K., Glendale, assignor to Northrop Aircraft Corporation, Los Angeles, Calif. Airfoil. 1,877,022; Sept. 13.
Northrop, John K., Glendale, assignor to Northrop Aircraft Corporation, Los Angeles, Calif. Constructing airfoils. 1,877,023; Sept. 13.
Northrop, John K., Glendale, and O. B. Clark, Burbank, Calif., assignors to Northrop Aircraft Corporation, Los Angeles, Calif. Instrument board. 1,877,021; Sept. 13.

Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Apparatus for interrupting alternating power circuits. 1,877,575; Sept. 13.
Norton, Charles E., assignor to Hanley Company, Bradford, Pa. Car transfer device. 1,877,193; Sept. 13.
Norton, John S., assignor of one-half to W. F. Hollingsworth, San Francisco, Calif. Welder's hood. 1,877,024; Sept. 13.
Nousi, Adam J., Superior, Wyo. Pan fastener for conveyer machinery. 1,877,025; Sept. 13.
Nyborg, Tage G., and M. F. Higgins, Worcester, England. Belt drive. 1,877,194; Sept. 13.
Nydegger, Otto. (See Bettschart, Anton, and Nydegger.)
O'Connor, George K., Fairlawn, N. J., assignor to Smoot Engineering Corporation, New York, N. Y. Multiple quantity regulation. 1,877,576; Sept. 13.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,877,026; Sept. 13.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,877,027; Sept. 13.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Bulk freight container. 1,877,028; Sept. 13.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,877,029; Sept. 13.
O'Connor, Thomas, Philadelphia, Pa. Rotary pulp screen. 1,877,030; Sept. 13.
O'Donnel, Martin J. (See Dugan, Thomas J., assignor.)
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Chandler, Homer P., assignor.)
Ohio Rubber Company, The. (See Bronson, Budd, assignor.)
Ohio Rubber Company, The. (See Fleming, J. R., and Winegar, assignors.)
Ohio Rubber Company, The. (See Flemming, Charles F., assignor.)
Ohio Rubber Company, The. (See Schultz, Howard W., assignor.)
Ohmer, Artur. (See Dorrer, A., Scheurer, and Ohmer.)
Ohnstrand, Enoch. (See Rand, J. H., jr., and Ohnstrand.)
Olshei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Motor vehicle. Re18,594; Sept. 13.
Oldberg Manufacturing Company. (See Oldberg, V., and Born, assignors.)
Oldberg, Virgil, and A. C. Born, assignors to Oldberg Manufacturing Company, Detroit, Mich. Making mufflers. 1,877,195; Sept. 13.
Oliver, Ruth, and G. R. Penn, assignors, by direct and mesne assignments, to Incorporated Paper Industries, New York, N. Y. Bottle neck ring and making same. 1,877,144; Sept. 13.
Olson, Charles J., Muskegon, Mich. Floor surfacer. 1,877,031; Sept. 13.
Olson, John. (See Flink, C. M., and Olson.)
Olson, John, administrator. (See Hentschel, Ernest R.)
Omo, Frank J., Fort Worth, Tex. Air compressor. 1,876,736; Sept. 13.
Opp, Fred W., Costa Mesa, assignor of one-half to W. C. Collins, Santa Ana, Calif. Apparatus for ray treatment of vegetation. 1,876,737; Sept. 13.
Orr, Henry F. (See Walker, W. T., and Orr.)
Orth, George W., Philadelphia, Pa. Building flashing. 1,877,425; Sept. 13.
Ortt, Rowley K., Dixon, Ill. Hedge trimmer and the like. 1,877,032; Sept. 13.
Osborne, Samuel C., Cleveland Heights, assignor to The Lincoln Electric Company, Cleveland, Ohio. Electrical relay. 1,877,480; Sept. 13.
Ottenheimer, Reuben E., Baltimore, Md. Refrigerator. 1,877,685; Sept. 13.
Owen, Eric W. B., Walmley, assignor to Dunlop Rubber Company, Limited, Birmingham, England. Making rubber articles. 1,877,426; Sept. 13.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing attachment for motion picture projectors. 1,877,033; Sept. 13.
Pacific Hair Goods Company, Ltd. (See Moseley, Tomlinson I.)
Packard, Calvin P. (See Macrae, J. N., and Packard.)
Painter, Lawrence O., and H. L. Johnson, assignors to Program Service Company, St. Paul, Minn. System for transmitting sound-carrying and field currents to remotely located dynamic loud speakers. 1,877,034; Sept. 13.
Palmer, Deward B., Aurora, Ill. Insulator. 1,877,035; Sept. 13.
Palmer, Ray E., Elmira, N. Y. Road resurfacing apparatus. 1,877,577; Sept. 13.
Palmgren, Nils G. (See Larsson, K., and Palmgren.)
Papanjion, George D., Danielson, Conn. Film hanger. 1,877,036; Sept. 13.
Papyrus, A. G. (See Büchner, Carl, assignor.)
Paraffine Companies, The. (See Finley, Dozier, assignor.)
Paraffine Companies, The. (See Greig, William R., assignor.)
Paraffine Companies, The. (See Rosener, Leland S., assignor.)
Parke, Davis & Company. (See Wilkie, W., and Leverenz, assignors.)
Parker, Arthur C., Elkhart, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Burner apparatus control mechanism. 1,877,037; Sept. 13.
Parker, Cecil C., Buffalo, N. Y. Method of incinerating. 1,877,580; Sept. 13.
Parker, Charles, Company, The. (See Parker, Charles S., assignor.)
Parker, Charles S., assignor to The Charles Parker Company, Meriden, Conn. Shelf bracket. 1,877,196; Sept. 13.
Partiot, Maurice, Paterson, N. J. Hinged box and method of assembly. 1,877,038; Sept. 13.
Partiot, Maurice, Paterson, N. J. Hinged box and method of assembly. 1,877,039; Sept. 13.
Pascetti, Frank, Detroit, Mich. Riding toy. 1,877,040; Sept. 13.
Patent and Licensing Corporation, The. (See Brydle, Fenton R., assignor.)
Patent Button Company, The. (See Carley, Leonard R., assignor.)
Patent Button Company, The. (See Carley, L. R., and Abel, assignors.)
Pathe Exchange, Inc. (See Adatte, Albert L., assignor.)
Patou, Jean, Paris, France. Atomizer. 1,877,252; Sept. 13.
Patterson, William K., Lakewood, assignor to Willard Storage Battery Company, Cleveland, Ohio. Testing storage batteries. 1,877,041; Sept. 13.
Paul, Talbert W., assignor to Deere & Company, Moline, Ill. Mower. 1,877,578; Sept. 13.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Draft attachment. 1,877,579; Sept. 13.
Paulson, Walter H. (See Lathrop, H. D., and Paulson.)
Payne, Burt H., Westfield, assignor to Stulz-Sickles Company, Newark, N. J. Alloy. 1,876,738; Sept. 13.
Pearce, Edwin S., assignor to Railway Service and Supply Corporation, Indianapolis, Ind. Conditioning waste. Re18,599; Sept. 13.
Pearce, Edwin S., assignor to Railway Service and Supply Corporation, Indianapolis, Ind. Waste reclamation apparatus. 1,876,739; Sept. 13.
Pearce, Edwin S., assignor to Railway Service and Supply Corporation, Indianapolis, Ind. Renovating waste. 1,877,754; Sept. 13.
Pearce, Edwin S., assignor to Railway Service & Supply Corporation, Indianapolis, Ind. Renovating journal box packing. 1,877,755; Sept. 13.
Pearce, Sidney, Minneapolis, Minn. Box forming and gluing machine. 1,877,043; Sept. 13.
Pearce, Sidney, assignor to J. N. Collins Company, Minneapolis, Minn. Machine for and method of banding packages. 1,877,042; Sept. 13.
Pearce, William L., Houston, Tex. Drill bit. 1,876,740; Sept. 13.
Peck, Lawrence E., and J. H. Lambert, Ely, Nev. Illuminated advertising calendar. 1,877,044; Sept. 13.
Pedrick, Irneé P., assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Injector controlling means. 1,877,624; Sept. 13.
Peerless Products Company. (See Treleven, Edward V., assignor.)
Penkoski, Stanley, New York, N. Y. Two-in-one chisel. 1,877,686; Sept. 13.
Penn, George R. (See Oliver, R., and Penn.)
Pennington, Claude, San Diego, Calif., assignor to Koehring Company, Milwaukee, Wis. Accelerator for power shovels. 1,877,427; Sept. 13.
Pennsylvania Crusher Company. (See Borton, George W., assignor.)
Perkins, Edward, Rhodes, Aegean Sea. Ship's hatch. 1,877,361; Sept. 13.
Perkins, George H., Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn. Textile fabric. Des. 87,756; Sept. 13.
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, assignors to Perkins Machine & Gear Company, West Springfield, Mass. Drive for washing machines or the like. 1,877,581; Sept. 13.
Perkins Machine & Gear Company. (See Perkins, J. L., and Croft, assignors.)
Peter, Edward C., and H. C. Schuknecht, Algonquin, and R. D. Schnoor, assignors to American Ironing Machine Company, Chicago, Ill. Ironing machine. 1,877,687; Sept. 13.
Petersen, Peter C., assignor to Viking Pump Company, Cedar Falls, Iowa. Rotary pump. 1,877,688; Sept. 13.
Peterson, Edward H. (See McNaught, N. F., and Peterson.)
Peterson, Robert E., assignor, by mesne assignments, to Electric Steam Generators, Inc., New York, N. Y. Toilet seat sterilizer. 1,877,689; Sept. 13.
Petit, Louis, Paris, France. Machine for continuous printing from tracings and the like. 1,876,741; Sept. 13.
Petroleum Engineering, Inc. (See Van Acker, Frank, assignor.)
Petroleum Heat and Power Company. (See Macrae, J. N., and Packard, assignors.)
Pevear, Chase K., New York, N. Y. Crane. 1,877,582; Sept. 13.
Pfaff and Kendall. (See Pfaff, Henry C., assignor.)

Pfaff, Henry C., assignor to Pfaff and Kendall, Newark, N. J. Making columns. 1,877,583; Sept. 13.
Pfingsten, August, Rock Rapids, Iowa. Bread box. 1,876,742; Sept. 13.
Phelps, Clyde H., Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind. Device for testing wheel alignments. 1,877,045; Sept. 13.
Philadelphia Drying Machine Company, The. (See Dennis, John W., assignor.)
Philadelphia Storage Battery Company. (See Combs, Edward L., assignor.)
Phillips, Louis A., Dobbs Ferry, assignor to The Cooling Tower Co., Inc., New York, N. Y. Sprinkler distributor. 1,877,046; Sept. 13.
Philpott, La Verne R. (See Elsey, H. M., and Philpott.)
Photostat Corporation. (See Greene, John S., assignor.)
Piazza, Louis C. Western Springs, assignor to Soundex Corporation, Chicago, Ill. Method of and means for making slabs. 1,877,047; Sept. 13.
Pierce-Arrow Motor Car Company, The. (See Chanter, Arthur J., assignor.)
Pilates, Joseph H., New York, N. Y. Bed or couch. 1,876,743; Sept. 13.
Pilkington Brothers Limited. (See LeMare, Ernest B., assignor.)
Pillen, Joseph B., Cincinnati, Ohio. Automatic tuning device for radioreceivers. 1,877,691; Sept. 13.
Pioneer Heat Regulator Corporation. (See Dicke, Allen A., assignor.)
Pioneer Instrument Company. (See Carbonara, Victor E., assignor.)
Pittsburgh Crucible Steel Company. (See Ferm, John F., assignor.)
Plant Rubber & Asbestos Works. (See Stadtfield, Jacob A., assignor.)
Plastix Corporation. (See Meigs, Joseph V., assignor.)
Platt, John W., Waterville, Conn. Gas valve locking attachment. 1,877,529; Sept. 13.
Pope, Elton A., Oakville, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Bath-room fixture. Des. 87,757; Sept. 13.
Pope, Elton A., Oakville, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Bath-room fixture. Des. 87,758; Sept. 13.
Popp, Harry E., York, Pa. Adjustable vane hydraulic turbine. 1,877,048; Sept. 13.
Porcelier Manufacturing Company. (See Dym, Emanuel, assignor.)
Porete Mfg. Co. (See Walter, E., and Koehler, assignors.)
Posgate, James L., assignor to H. J. S. Dennison, as trustee, Toronto, Ontario, Canada. Device for cleaning tape lines. 1,876,744; Sept. 13.
Potter, Frank M., Rome, assignor to General Cable Corporation, New York, N. Y. Applying heat to the coverings of electrically conductive cores. 1,876,745; Sept. 13.
Powdrell & Alexander, Inc. (See Perkins, George H., assignor.)
Price, William W., and C. W. Ripsch, assignors to The Buckeye Portable Tool Company, Dayton, Ohio. Throttle. 1,877,197; Sept. 13.
Program Service Company. (See Painter, L. O., and Johnson, assignors.)
Prosperity Company Inc., The. (See Braun, Philip N., assignor.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prouty, Theodore C., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Roofing tile and process. 1,877,481; Sept. 13.
Pulliam, Ira L., Huntington Park, assignor to Richfield Oil Company of California, Los Angeles, Calif. Method and apparatus for washing and lubricating vehicles. 1,877,684; Sept. 13.
Purington, Ellison S., Gloucester, Mass., assignor to John Hays Hammond, jr. Reception of varying frequency signals. 1,876,746; Sept. 13.
Rackstraw, Albert V., Gardena, Calif. Electric incubator. 1,877,585; Sept. 13.
Radio Corporation of America. (See Ballantine, Stuart, assignor.)
Radio Corporation of America. (See Black, Knox C., assignor.)
Radio Corporation of America. (See Dyksterhuis, Popko R., assignor.)
Radio Corporation of America. (See Ferris, Malcolm, assignor.)
Radio Corporation of America. (See Goldsmith, Alfred N., assignor.)
Radio Corporation of America. (See Kroger, Fred H., assignor.)
Radio Patents Corporation. (See Falkenthal, Erwin, assignor.)
Rah, Joseph, assignor to The Delta Star Electric Company, Chicago, Ill. Top cap assembly for high voltage bushings. 1,877,586; Sept. 13.
Raible, Charles G., Shaker Heights, Ohio. Chaplet. 1,877,049; Sept. 13.
Railway Service and Supply Corporation. (See Brockett, Bluford W., assignor.)
Railway Service and Supply Corporation. (See Pearce, Edwin S., assignor.)
Rainsford, Thomas F., Detroit, assignor to Whitehead and Kales Company, River Rouge, Mich. Rim rolling machine. 1,876,747; Sept. 13.
Rand, James H., jr., Buffalo, and E. Ohnstrand, Kenmore, assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y. File cabinet. 1,876,748; Sept. 13.
Rand McNally & Company. (See Hanses, William A., assignor.)
Rasche, Rudolph A., Cincinnati, Ohio. Preparing apples for freezing. 1,877,587; Sept. 13.
Rasmussen, Edwin W., Denmark, Wis. Switch. 1,877,692; Sept. 13.
Rasmeor, Harry F. (See McHugh, A. C., and Rasmeor.)
Rawson, Grant I., assignor to Calorizing Corporation of America, Detroit, Mich. Boiler cleaner. 1,877,722; Sept. 13.
Ray, Rembert, Venice, Calif. Ice server. 1,877,050; Sept. 13.
Rea, Roy R., Beaver County, Okla. Dirtproof hub for cultivator disks. 1,876,749; Sept. 13.
Read, Balfour, Detroit, Mich. Internal combustion engine. 1,877,051; Sept. 13.
Read, Charles S. C., assignor of one-half to George E. Matthews, Toronto, Ontario, Canada. Treating pistons. 1,877,530; Sept. 13.
Readey, John M., Inc. (See Readey, John M., assignor.)
Readey, John M., assignor to John M. Readey, Inc., St. Louis, Mo. Pipe cut-off machine. 1,877,198; Sept. 13.
Ready, William A., Brookline, Mass. D-handle. 1,877,199; Sept. 13.
Ready, William A., Brookline, Mass. D-handle. 1,877,200; Sept. 13.
Redhead, Jacob H., Cleveland, Ohio. Shock absorber. 1,877,588; Sept. 13.
Reece Button Hole Machine Company, The. (See Carlson, Axel F., assignor.)
Reed, Edward G., Camas, Wash. Hollow cylindrical valve. 1,877,589; Sept. 13.
Reed, John W., Cardington, Ohio. Door. 1,876,750; Sept. 13.
Reedy, Emmett M., assignor to Mueller Co., Decatur, Ill. Adjustable elbow for meter yoke connections. 1,876,751; Sept. 13.
Reese Button Hole Machine Company, The. (See Althens, Herbert E., assignor.)
Rehrig, William J., Los Angeles, Calif. Machine for making coat hangers. 1,876,752; Sept. 13.
Reichmann, Reinhold, Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Manufacture of bodies from aluminum oxide. 1,877,531; Sept. 13.
Reid, Frederick M., assignor to Fruehauf-Trailer Company, Detroit, Mich. Vehicle running gear. 1,877,052; Sept. 13.
Reid, Murdoch & Co. (See Anderson, Louis S., assignor.)
Reitz, Herman, East Islip, N. Y. Stand for watches. 1,877,532; Sept. 13.
Remington Rand Inc. (See Mehan, Thomas O., assignor.)
Remington Rand Inc. (See Rand, J. H., and Ohnstrand, assignors.)
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Rendle, Thomas, Ottawa, Ill. Iron last and stand. 1,877,253; Sept. 13.
Renshaw, Alfred H., Noroton, Conn., assignor to General Railway Signal Company, Rochester, N. Y. Adjustable support for pipe carriers. 1,877,590; Sept. 13.
Rensonnet, Oscar, Etterbeck-Brussels, Belgium, assignor to Henry Dujardin, New York, N. Y. Motor vehicle steering sight. 1,877,428; Sept. 13.
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Apparatus for bending tubes of fiber and similar material. 1,877,627; Sept. 13.
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Method for bending tubes of paper, fiber, and similar material. 1,877,628; Sept. 13.
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Method for bending tubes of fiber and similar material. 1,877,629; Sept. 13.
Republic Flow Meters Co. (See Cunningham, Arthur B., assignor.)
Republic Flow Meters Co. (See Schneider, Elmer, assignor.)
Republic Steel Corporation. (See Coryell, William C., assignor.)
Resengin, Inc. (See Freeman, L. C., and Buesch, assignors.)
Reuge, Albert, St. Croix, Switzerland. Musical box. 1,876,753; Sept. 13.
Reyle, Berthold. (See Hagedorn, Ziese, Reyle, and Bauer.)
Rheinberger, Alphonse R., St. Paul, Minn. Globe hanger for lighting fixtures. 1,877,591; Sept. 13.
Rice, Harold N., Attleboro, Mass., and H. V. Walsh, City Island, N. Y. Statuette or analogous article. Des. 87,773; Sept. 13.
Rich, Charles A., Providence, R. I., assignor to Brown and Sharpe Manufacturing Company. Automatic screw machine. 1,877,693; Sept. 13.

Richardson Company, The. (See Yungblut, Gibson, assignor.)
Richfield Oil Company. (See Pulliam, Ira L., assignor.)
Richter, William F., assignor to Chemical Holding Corporation, Apollo, Pa. Fabrication of viscose. 1,876,754; Sept. 13.
Richter, William F., assignor to Chemical Holding Corporation, Apollo, Pa. Preparing viscose. 1,876,755; Sept. 13.
Ric-Wil Company, The. (See Gottwald, Christian, assignor.)
Riess Manufacturing Company. (See Phelps, Clyde H., assignor.)
Rightmire, John E., Yakima, Wash. Vehicle. 1,877,201; Sept. 13.
Riley Stoker Corporation. (See Daniels, Fred H., assignor.)
Rinne, Allan, Orr, Minn. Carburetor control. 1,877,533; Sept. 13.
Ripsch, Charles W. (See Prince, W. W., and Ripsch.)
Ritter, Carl C., assignor to General Motors Radio Corporation, Dayton, Ohio. Sheet material. 1,877,254; Sept. 13.
Ritter Dental Manufacturing Company Inc. (See Russell, Percy, assignor.)
Ritter, George A., et al. (See Garfinkel, Harry, assignor.)
Ritter, Gerald, et al. (See Garfinkel, Harry, assignor.)
Ritter, Heinrich. (See Kalischer, G., Ritter, and Honold.)
Robinson, Claude A., assignor to Detroit Steel Products Company, Detroit, Mich. Structural member. 1,876,756; Sept. 13.
Robinson, Frank S., Detroit, Mich. Sectional wall panel construction. 1,877,053; Sept. 13.
Rockola, David C., Chicago, Ill. Game device. Des. 87,759; Sept. 13.
Rock Island Register Company. (See Burgess, John J., signor.)
Rodrigues, Octavius V., assignor to Magazine Repeating Razor Company, New York, N. Y. Magazine razor. 1,877,429; Sept. 13.
Roeser, Anton. (See Birtwistle, A. E., and Roeser.)
Rogers, Clifford R., Los Angeles, E. H. Babel, Alhambra, and M. M. Brodersen, Monterey Park, Calif., assignors to Killefer Manufacturing Corporation. Tandem disk harrow. 1,877,592; Sept. 13.
Rogers, Louis F., assignor to Bon Manufacturing Corporation, Wilmington, Del. Collapsible tube. 1,877,534; Sept. 13.
Rohland, Curt J., Seekonk, Mass., assignor, by mesne assignments, to Ira Guilden, New York, N. Y. Crystal cutting apparatus. 1,876,757; Sept. 13.
Roman, Irwin, West Orange, N. J., assignor to Geophysical Research Corporation, New York, N. Y. Method and apparatus for surveying bore holes. 1,877,593; Sept. 13.
Rome Company, The. (See Thomas, Joseph R., assignor.)
Romine, Robert T., Mount Clemens, Mich., assignor to Material Handling, Inc., Wilmington, Del. Method and apparatus for shipping metal. 1,876,758; Sept. 13.
Romine, Robert T., Mount Clemens, Mich., assignor to Material Handling, Inc., Wilmington, Del. Apparatus for handling material. 1,876,759; Sept. 13.
Rosedale Foundry & Machine Company. (See Holt, Harris B., assignor.)
Rosener, Leland S., assignor to The Paraffine Companies, Inc., San Francisco, Calif. Pipe wrapping machine. 1,876,760; Sept. 13.
Rosener, Leland S., assignor to The Paraffine Companies, Inc., San Francisco, Calif. Festooning apparatus. 1,876,761; Sept. 13.
Rosener, Leland S., assignor to Independent Smelting and Refining Co., San Francisco, Calif. Handling ingots. 1,877,535; Sept. 13.
Rosenfeld, Max L. (See Morgan, John H., assignor.)
Ross, James G., Seattle, Wash. Mop wringer. 1,877,054; Sept. 13.
Rosse, R. L., and Company Limited. (See Hargreaves, William, assignor.)
Rowland, Charles L., deceased; K. E. Rowland and E. A. De Laney, executors, assignors to American Welding Company, Carbondale, Pa. Welding apparatus. 1,876,762; Sept. 13.
Rowland, Kathryn E. et al. (See Rowland, Charles L.)
Royal, Robert R., Paducah, Ky. Binder bolt wrench. 1,877,595; Sept. 13.
Rubber Shock Insulator Corporation. (See Lipcot, Fred L., assignor.)
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, assignor to Ruben Patents Company, New York, N. Y. Resistance device. 1,877,482; Sept. 13.
Ruben, Samuel, assignor to Ruben Patents Company, New Rochelle, N. Y. Electrical microphone. 1,877,483; Sept. 13.
Ruckelshaus, John G., and N. W. Kempf, Newark, N. J. Refrigeration. 1,877,536; Sept. 13.
Runsvold, Martin S., San Diego, Calif. Combination thermostatic switch and electric connection plug. 1,876,763; Sept. 13.
Ruppert, Albert A., Pleasant Ridge, assignor to General Motors Corporation, Detroit, Mich. Seat cushion. 1,877,055; Sept. 13.
Rupple, Harry W., Cleveland, Ohio, assignor to The Cleveland Automatic Machine Company. Automatic reverse for threading tools. 1,877,056; Sept. 13.
Rush, Theodore H. (See McCollum, A. F., and Rush.)
Russell, Percy, Swarthmore, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company Inc., Rochester, N. Y. Dental X-ray unit. 1,877,690; Sept. 13.
Ryan, Commodore D., Los Angeles, Calif., assignor, by mesne assignments, to Ralph G. Whitlock, Patents, Inc. Clutch mechanism. 1,877,694; Sept. 13.
Sackett, Warren W., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis. Protecting hood for cigar and cigarette lighters. 1,877,362; Sept. 13.
St. Clair, Milton H., assignor to The Switlik Parachute and Equipment Company, Inc., Trenton, N. J. Snap hook for parachute harness. 1,877,702; Sept. 13.
Salaberg, Morris, Scranton, Pa. Window screen. 1,877,696; Sept. 13.
Sammis, Donald S., Stratford, assignor to The New Haven Sand Blast Company, New Haven, Conn. Sand blast apparatus. 1,877,255; Sept. 13.
Sanford, Ross T. (See Grebe, J. J., and Sanford.)
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,877,597; Sept. 13.
Satow, Teikichi, Tokio, Japan. Plywood board and making the same. 1,877,202; Sept. 13.
Saunders, Kenneth Blackley, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Apparatus for carrying out reactions continuously in the liquid phase under increased pressure. 1,877,145; Sept. 13.
Sauvan, Charles H., Newark, N. J. Internal combustion engine. 1,876,764; Sept. 13.
Saville, George A., jr., Lincoln, Nebr. Adjustable waste receiver. 1,877,363; Sept. 13.
Sax, Samuel I., New York, N. Y. Method and apparatus for automatic photographic portrait cameras. 1,877,598; Sept. 13.
Schaeffer, Charles M., Emaus, Pa. Speed reducing gear. 1,877,695; Sept. 13.
Schaffer, August, Columbus, Ohio. Hernial truss. 1,877,537; Sept. 13.
Schaich, Wilhelm. (See Schirmacher, Karl and W., Schaich, Wolfram, Tampke, and Billig.)
Scharff, Willy, Frankfort-on-the-Main, Germany. Adjustable bearing bush. 1,876,765; Sept. 13.
Scheffold, Carl B., Marquis, Saskatchewan, Canada. Road grader attachment. 1,877,365; Sept. 13.
Scheid, Johann F., Hermsdorf, assignor to Hermsdorf-Schomburg-Isolatoren G. m. b. H. Sitz, Berlin, Verwaltung Hermsdorf in Thuringen, Germany. High tension insulator. 1,877,630; Sept. 13.
Scheiwer, Albert T., Erie, Pa. Hair-dresser's comb. 1,877,538; Sept. 13.
Schellack, John A., and C. J. Maynard, Bartlesville, Okla. Packing construction. 1,877,696; Sept. 13.
Schellens, Eugene L., Ridgewood, assignor to C-S Engineering Company, Englewood, N. J. Locomotive and superheater therefor. 1,876,766; Sept. 13.
Schering-Kahlbaum A-G. (See Schoeller, W., Jordan, and Linde, assignors.)
Schering-Kahlbaum A-G, the Firm of. (See Fischl S., and Steiner, assignors.)
Scheurer, Wilhelm. (See Dorrer, A., Scheurer, and Ohmer.)
Scheyer, Heins, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing monohalogenated naphthostyril compounds. 1,877,057; Sept. 13.
Schirmacher, Karl, W. Schaich, A. Wolfram, H. Tampke, K. Billig, and W. Schirmacher, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing dyestuffs of the N.N-dihydro-1.2.2'.1'-anthraquinone azine series and products obtainable thereby. 1,877,146; Sept. 13.
Schirmacher, Werner. (See Schirmacher, Karl and W., Schaich, Wolfram, Tempke, and Billig.)
Schlusselberg, Abrsham, New York, N. Y. Detachable bath robe belt. 1,877,697; Sept. 13.
Schmid, William, assignor to H. A. Douglas, Bronson, Mich. Electric switch. 1,877,058; Sept. 13.
Schneider, Elmer, assignor to Republic Flow Meters Co., Chicago, Ill. Electrical testing instrument. 1,877,739; Sept. 13.
Schneider, Simon. (See Murphy, D. F., and Schneider.)
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Smoking case. 1,877,059; Sept. 13.
Schnoor, Raymond D. (See Peter, E. C. Schuknecht, and Schnoor.)
Schoeller, Walter, Berlin-Westend, H. Jordan, Berlin-Steglitz, and W. Linde, Berlin, assignors to the Firm Schering-Kahlbaum A-G., Berlin, Germany. Simultaneous hydrogenation and dehydrogenation. 1,877,203; Sept. 13.
Schoenberg, Jacob A., Spokane, Wash. Automobile or vehicle greasing jack. 1,877,364; Sept. 13.
Schonberg, Jackson R., Westfield, N. J., assignor to Standard Oil Development Company. Method and apparatus for carrying out chemical reactions. 1,877,060; Sept. 13.
Schorsch, Henry. (See Giltsch, John, M. and J. D., and Schorsch.)
Schrader's A., Son. (See Wahl, John, assignor.)
Schroll, Ross V., North Manchester, Ind. Measuring meter. 1,877,061; Sept. 13.
Schubert, Max. (See Herz, R., and Schubert.)
Schubert, Max. (See Herz, Schubert, and Brunner.)
Schubring, Fred L., Baraboo, Wis. Powder for preventing battery post corrosion. 1,877,062; Sept. 13.

Schuknecht, Henry C. (See Peter, E, P., Schuknecht, and Schnoor.)
Schultz, Howard W., Lakewood, assignor to The Ohio Rubber Company, Cleveland, Ohio. Scale structure. 1,877,064; Sept. 13.
Schulz, Ernst H., Dortmund, and K. Löbbecke, Rheinhausen, assignors to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Producing hard alloys. 1,877,063; Sept. 13.
Schundler, Frederic E. (See Denning, Paul S., assignor.)
Schwalbe, Franz G., et al. (See Bulask, Francis J., assignor.)
Schwalbe, Franz G., Toledo, Ohio. Recuperator construction. 1,877,599; Sept. 13.
Schwartz, Rudolph L., and W. P. Martin, assignors to Martin & Schwartz, Inc., Buffalo, N. Y. Price sign. 1,877,326; Sept. 13.
Scott, William M., jr., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa. Switching mechanism. 1,877,698; Sept. 13.
Scovill Manufacturing Company. (See Boden, George, assignor.)
Searles, Raymond R., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring connection. 1,877,734; Sept. 13.
Searles, Raymond R., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring connection. 1,877,735; Sept. 13.
Sefton National Fibre Can Co. (See Hicks, Helen C., assignor.)
Segall, Oscar N., Philadelphia, Pa. Display fixture. Des. 87,760; Sept. 13.
Seib, Carl. (See Hoffa, E., and Seib.)
Seiberling, Frank A., Akron, and W. S. Wolfe, Fairlawn, assignors to Seiberling Rubber Company, Barberton, Ohio. Pneumatic tire. 1,877,600; Sept. 13.
Seiberling Rubber Company. (See Goodwin, John O., assignor.)
Seiberling Rubber Company. (See Seiberling, F. A., and Wolfe, assignors.)
Selby, John A., Providence, R. I. Automobile windshield screen. 1,877,065; Sept. 13.
Selden, Andrew K., jr., Orange, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Cooling of dynamo-electric machines. 1,876,767; Sept. 13.
Sellers, William & Company. (See Pedrick, Irael P., assignor.)
Seltzer, William, Passaic, N. J. Treating sulphonated oils, etc. 1,876,768; Sept. 13.
Semet-Solvay Engineering Corporation. (See Becker, Julius, assignor.)
Seppmann, Alfred B., Lake Crystal, Minn. Brake tester. 1,877,366; Sept. 13.
Seppmann, Alfred B., Lake Crystal, Minn. Pedal depressing means for brake testers. 1,877,367; Sept. 13.
Seyer, William F., Vancouver, British Columbia. Drying natural sodium carbonate. 1,877,368; Sept. 13.
Shadle, Lafe, Boxholm, Iowa. Dumping platform. 1,877,066; Sept. 13.
Shapiro, David H., Montreal, Quebec, Canada, assignor of one-half to Edward Kolbert, New York, N. Y. Carrying case and pattern for making the same. 1,877,601; Sept. 13.
Sharp, Leslie T., Santa Paula, Calif. Soil auger. 1,877,067; Sept. 13.
Sheffer, John W. (See Bisset, W. J., and Sheffer.)
Sheffield, Herman B., New York, N. Y. Apparatus for correcting vision. 1,876,769; Sept. 13.
Shell Development Company. (See Lewis, Robert I., assignor.)
Shell, Marie. (See Colella, Louis A., assignor.)
Sherndal, Alfred E. (See Freedman, L., and Sherndal.)
Sherwell Controls, Inc. (See Stedwell, George W., assignor.)
Sherwin-Williams Company. (See Lang, F. H., and Van Stone, assignors.)
Shimmin, John T., Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y. Apparatus for separating solids from liquids or liquors by filtration. Re18,597; Sept. 13.
Shimmin, John T., Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y. Apparatus for separatng solids from liquids or liquors by filtration. Re18,598; Sept. 13.
Shindel, Harry F., assignor to Willson Products, Inc., Reading, Pa. Adjustable band connecter. 1,876,770; Sept. 13.
Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Opposed motor control system. 1,877,605; Sept. 13.
Shoemaker, Milton J., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Bottle cap. 1,877,606; Sept. 13.
Shondell, Howard, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Winding machine. 1,876,771; Sept. 13.
Shook, Florain J. (See Heston, A. L., Shook, and Evans.)
Shook, Florain J. (See Wilson, G. F., and Shook.)
Shoop, Gertrude, Shamokin, Pa. Heat exchange article. 1,877,068; Sept. 13.
Showers, George E., Brooklyn, N. Y. Attachment for tools. 1,877,699; Sept. 13.
Sidebottom, John W., assignor to T. C. Entwistle Company, Lowell, Mass. Stop mechanism for warpers. 1,877,069; Sept. 13.
Siebert, Irwin J., Cleveland, Ohio. Amusement device. 1,877,256; Sept. 13.
Siegrist, George R., Port Huron, Mich. Lubricating system. 1,877,070; Sept. 13.
Siemens & Halske, Aktiengesellschaft. (See Gosslau, Fritz, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Reichmann, Reinhold, assignor.)
Sievers, Frederic P., Dubuque, Iowa. Composite door. 1,876,772; Sept. 13.
Silen, Erick, Stella, Wash. Power guide roller. 1,876,773; Sept. 13.
Silvene, Anthony, Victoria, British Columbia, Canada. Air brake. 1,877,600; Sept. 13.
Silverman, Joseph, Chicago, Ill. Kneeling bench. 1,877,602; Sept. 13.
Simmons, Arthur W., Nacogdoches, Tex. Bearing structure. 1,877,257; Sept. 13.
Simplex Piston Ring Company of America, Inc. (See Marshall, Lewis C., assignor.)
Simpson, Emory G., A. J. De Sana, and John B. Flynn, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Coach lock. 1,877,603; Sept. 13.
Simpson, Emory G., C. G. Cornwall, and A. C. Andersen, Detroit, Mich., and H. C. Field, Windsor, Ontario, Canada, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Adjustable seat for an automobile. 1,877,604; Sept. 13.
Siskin, Harry, Los Angeles, Calif. Chair construction. 1,876,774; Sept. 13.
Skau, Meinich. (See Cole, F. H., and Skau.)
Skellett, Albert M., St. Louis, Mo., assignor to Westinghouse Electric & Manufacturing Company. Electric discharge device. 1,877,607; Sept. 13.
Skopik, Oskar L., Berlin, Germany. Differential servomotor braking device. 1,877,430; Sept. 13.
Slidell, Kemper, and S. Q. Lee, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation. Producing columns of bloated material. 1,877,147; Sept. 13.
Slotter, Charles F. (See Mathey, G. S., and Slotter.)
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,877,369; Sept. 13.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Electrode for neon vacuum tubes. 1,877,204; Sept. 13.
Smith, Emory T., Ludlow, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cutter for skiving machines. 1,876,775; Sept. 13.
Smith, Harry G., Kings Cross, near Sydney, New South Wales, Australia. File cutting machine. 1,877,071; Sept. 13.
Smith, Henry A., Gurley, Ala. Cotton planter and fertilizer depositor. 1,876,776; Sept. 13.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,777; Sept. 13.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,876,778; Sept. 13.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriter carrying case. 1,876,779; Sept. 13.
Smith, Maurice A., assignor to McKee Glass Company, Jeannette, Pa. Goblet. Des 87,761; Sept. 13.
Smith, Oliver A., Birmingham, England. Tool extractor. 1,876,780; Sept. 13.
Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Flying cutter. 1,877,072; Sept. 13.
Smooth Engineering Corporation. (See O'Connor, George K., assignor.)
Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,877,148; Sept. 13.
Snow, Norman L., New Canaan, Conn., C. L. Howse, and F. Bowers, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,877,720; Sept. 13.
Snyder, Edward, Fort Wayne, Ind., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Tension device for winding machines. 1,876,781; Sept. 13.
Snyder, Edward, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Machinery for sealing electrical coils. 1,877,484; Sept. 13.
Society of Chemical Industry in Basle, Firm of. (See Straub, F., and Mayer, assignors.)
Society of Chemical Industry in Basle, Firm of. (See Straub, F., and Anderau, assignors.)
Solkesz, Jan H., Sourabaia, Java, Dutch East Indies. Device for cutting the cables of submarine mines. 1,877,073; Sept. 13.
Soper, Raymond H., assignor to Browne-Morse Company, Muskegon, Mich. Metal furniture. 1,877,469; Sept. 13.
Soundex Corporation. (See Piazza, Louis C., assignor.)
Southern California Gas Company. (See Ferrante, Michael, assignor.)
Spahn, August C., assignor to Bernardin Bottle Cap Company, Evansville, Ind. Jar closure. 1,877,258; Sept. 13.

Spaulding Fibre Company. (See Metelski, Claude M., assignor.)
Speck, William C., and E. Barker, assignors to The Buckeye Steel Castings Company, Columbia, Ohio. Motor. 1,877,701; Sept. 13.
Spicers Limited. (See Goldsmith, John N., assignor.)
Spyker, Ephraim K., Sacramento, Calif. Plow plane. 1,876,872; Sept. 13.
Stadtfeld, Jacob A., assignor to Plant Rubber & Asbestos Works, San Francisco, Calif. Flue or vent. 1,876,783; Sept. 13.
Standard Carriage Work, Inc. (See Giltsch, John, M., and J. D., and Scorsch.)
Standard Oil Company. (See Bohnen, Edwin J., assignor.)
Standard Oil Development Company. (See Frolich, P. K., and Young, assignors.)
Standard Oil Development Company. (See Hulse, Stewart H., assignor.)
Standard Oil Development Company. (See Mann, Matthew D., jr., assignor.)
Standard Oil Development Company. (See Schonberg, Jackson R., assignor.)
Standard Oil Development Company. (See Stratford, R. K., and Moor, assignors.)
Stanley Clothing Company. (See Heath, Max L., assignor.)
Stanziale, Anthony J., Shickshinny, Pa. Highway guard fence. 1,877,074; Sept. 13.
Stedwell, George W., Brooklyn, assignor to Sherwell Controls, Inc., New York, N. Y. Liquid dispensing. 1,876,784; Sept. 13.
Stee, R. M. (See Dove, Leonard P., assignor.)
Stein, Gustav, Salchendorf, near Neunkirchen, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Apparatus for sintering roasted materials. 1,877,608; Sept. 13.
Stein, Samuel H., Brooklyn, assignor, by mesne assignments, to Ira Guilden, New York, N. Y. Crystal cutting device. 1,876,785; Sept. 13.
Steiner, Frank G., Chicago, Ill., assignor to Steiner Sales Company, Salt Lake City, Utah. Continuous sheet appliance for examination and operating tables. 1,877,610; Sept. 13.
Steiner, Hans. (See Fischl, S., and Steiner.)
Steiner Sales Company. (See Steiner, Frank G., assignor.)
Stephenson, Frank, Piscataway, West New Brunswick, N. J. License plate holder. 1,877,075; Sept. 13.
Stern, Albert, J., J., and E., New York, N. Y., assignors, by mesne assignments, to Indian Motocycle Company, Springfield, Mass. Motor vehicle. 1,877,609; Sept. 13.
Stern, Ernest. (See Stern, Albert, J., J., and E.)
Stern, Joseph. (See Stern, Albert, J., J., and E.)
Stern, Julius. (See Stern, Albert, J., J., and E.)
Stetson, Warner D., Ferndale, Mich., assignor of one-fourth to C. E. Wisner, Detroit, Mich. Wire splicing tool. 1,877,076; Sept. 13.
Stevens, Arthur L., assignor to The Vol-U-Meter Co., Inc., Buffalo, N. Y. Inspection lamp. 1,877,077; Sept. 13.
Stewart, Arthur L., assignor to Gleason Works, Rochester, N. Y. Method of and apparatus for grinding curved tooth gears. 1,877,205; Sept. 13.
Stewart, Harry, Los Angeles, Calif. Butter mold. Des. 87,762; Sept. 13.
Stickless Corporation, The. (See Lichter, Malvin, assignor.)
Stieglitz, Henry M., assignor to Frank Adam Electric Co., St. Louis, Mo. Wire connecter. 1,877,611; Sept. 13.
Stieglitz, Henry M., assignor to Frank Adam Electric Co., St. Louis, Mo. Catch lock. 1,877,612; Sept. 13.
Stock, Walter, Los Angeles, Calif. Razor strop. 1,877,613; Sept. 13.
Stone, Mark M., Malden, assignor to S. R. Stone, Waban, Mass. Textile fabric. Des. 87,763; Sept. 13.
Stone, S. Robert. (See Stone, Mark M., assignor.)
Stoody Company. (See Stoody, Winston F., assignor.)
Stoody, Winston F., assignor to Stoody Company, Whittier, Calif. Electrode holder. 1,876,786; Sept. 13.
Stout, Edward E. (See Weydell, Jarl M., assignor.)
Stowe-Woodward, Inc. (See Bommer, F. W., and Clarke, assignor.)
Strand, Christian T., Los Angeles, Calif. Trestle assembling device. 1,876,787; Sept. 13.
Stratford, Reginald K., and H. H. Moor, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company, Purifying petroleum distillates with aqueous phenol and recovery of the same. 1,877,614; Sept. 13.
Straub, Fritz, and H. Mayer, assignors to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Metalliferous azo-dyestuffs and making same. 1,877,615; Sept. 13.
Straub, Fritz, and W. Anderau, Basel, assignors to the firm Society of Chemical Industry in Basle, of Basel, Switzerland. Azo-dyestuff and making same. 1,877,743; Sept. 13.
Streit, Albert P., Cachan, France. Making loosening stretches for cables, rods and the like. 1,877,370; Sept. 13.
Strelitz, Franz P. Berlin-Hallensee, Germany. Face-massaging apparatus. 1,877,616; Sept. 13.
Strom, Herbert, Arlington, N. J., assignor to Fairbanks, Morse & Co., Chicago, Ill. Pump. 1,877,617; Sept. 13.
Strong, Arthur P., Chicago, Ill., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind. Shaft bearing. 1,877,206; Sept. 13.
Structural Products Corporation. (See Witty, George, assignor.)
Stubenberg, Arthur F., Honolulu, Hawaii. Agricultural machine. 1,877,078; Sept. 13.
Stulz-Sickles Company. (See Payne, Burt H., assignor.)
Sturgis, Edward, jr., Boston, Mass. Phonograph record. 1,877,079; Sept. 13.
Sults, Chauncey G., Schenectady, N. Y., assignor to General Electric Company. Oscillation generator. 1,877,703; Sept. 13.
Sumpter, John E., Minneapolis, Minn., assignor to Delta-Star Electric Company, Chicago, Ill. Eternal expulsion fuse plug. 1,877,618; Sept. 13.
Sun Oil Company. (See Hague, Charles K., assignor.)
Sun Rubber Company, The. (See Lower, Melvin S., assignor.)
Swanson, Earl C. (See Andersen, F. C., and Swanson.)
Swanson, Kenneth P., Irvington, assignor to Eisler Electric Corporation, Newark, N. J. Head for beading machines. 1,877,431; Sept. 13.
Swartz, Edward G., et al. (See Hutchings, Edward W., assignor.)
Swartz, Ira T. (See Baker, Arthur R., assignor.)
Swinney, John, West Didsbury, England, assignor to General Electric Company. Interlocking mechanism. 1,877,747; Sept. 13.
Swiss Locomotive and Machine Works. (See Mattmann, Josef, assignor.)
Switlik Parachute and Equipment Company. (See St. Clair, Milton H., assignor.)
Switlik, Stanley, Trenton, N. J. Pilot's safety belt and buckle therefor. 1,877,704; Sept. 13.
Sylvan, Benjamin M., New York, N. Y. Razor blade. 1,877,149; Sept. 13.
Tabulating Machine Company, The. (See Einstein, Howard C., assignor.)
Talmadge, Frank C. (See Thompson, Thomas D., assignor.)
Tampke, Hans. (See Schirmacher, Karl and W., Schaich, Wolfram, Tampke, and Billig.)
Taple, Joseph F. (See Taylor, J. L., and Taple.)
Tarrant Manufacturing Company. (See Tarrant, William P., assignor.)
Tarrant, William P., assignor to Tarrant Manufacturing Company, Saratoga Springs, N. Y. Spraying apparatus. 1,876,788; Sept. 13.
Tautz, Herbert E., assignor to Delta Manufacturing Company, Milwaukee, Wis. Scroll saw. 1,877,705; Sept. 13.
Taylor, Daniel E. (See McCormick, Lacy B., assignor.)
Taylor, Herbert B., assignor to General Railway Signal Company, Rochester, N. Y. Electromagnetic relay. 1,877,619; Sept. 13.
Taylor, Herbert B., assignor to General Railway Signal Company, Rochester, N. Y. Adjustable trailing switch connection for railroads. 1,877,742; Sept. 13.
Taylor, John L., and J. F. Taple, Santa Barbara, Calif. Retort for mineral oils. 1,876,789; Sept. 13.
Telefonaktiebolaget L. M. Ericsson. (See Larsson, K., and Palmgren, assignors.)
Telefonaktiebolaget L. M. Ericsson. (See Markman, Fredrik, assignor.)
Ten Brook, Andrew, Detroit, Mich. Fitting. 1,877,433; Sept. 13.
Ternstedt Manufacturing Company. (See Field, Herbert C., assignor.)
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Ternstedt Manufacturing Company. (See Simpson, E. G., Cronwall, Andersen, and Field, assignors.)
Ternstedt Manufacturing Company. (See Simpson, E. G., De Sana, and Flynn, assignors.)
Terrell Machine Company, The. (See Trogdon, William H., assignor.)
Teshima, Isago, San Francisco, Calif. Wading overshoe. 1,877,080; Sept. 13.
Teves, Alfred, Frankfort-on-the-Main, Germany. Fluid pressure brake. 1,877,081; Sept. 13.
Texas Chemical Products Company, The. (See Martin, Otto V., assignor.)
Texas Company, The. (See Gardner, Thomas P., assignor.)
Thiophene Products Company. (See Hessle, Eric T., assignor.)
Thoman, Charles J., and W. Westcott, assignors to Hinckley-Myers Company, Jackson, Mich. Glass channel remover. 1,877,620; Sept. 13.
Thomas, Adolph A., New York, N. Y. Electromagnetic receiving and transmitting instrument. 1,876,790; Sept. 13.
Thomas, Horace T., and B. B. Neuteboom, assignors to Reo Motor Car Company, Lansing, Mich. Two speed axle. 1,876,791; Sept. 13.
Thomas, Joseph R., Chicago, Ill., assignor of one-half to The Rome Company, Inc. Foldable bed or other structure. 1,877,530; Sept. 13.
Thomas, Laurence H. (See Kuhn, F., and Thomas.)
Thomas, Seth, Clock Company, The. (See Dreyfuss, Henry, assignor.)
Thomas, William D., Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe and sole positioning mechanism. 1,877,434; Sept. 13.

Thompson, Basil, Tucson, Ariz. Suturing device. 1,876,792; Sept. 13.
Thompson, Fred C., Detroit, Mich., assignor, by mesne assignments, to Automotive Research Corporation. Change speed device. 1,877,540; Sept. 13.
Thompson, Marshall F., Washington, D. C. Electrical voting apparatus. 1,877,150; Sept. 13.
Thompson, Ralph E., Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,877,082; Sept. 13.
Thompson, Thomas D., Little Ferry, N. J., assignor to Frank C. Talmadge, Westbury, N. Y. Radio circuit. 1,876,793; Sept. 13.
Thrasher, Leroy C., assignor of one-half to A. D. Ferrell, Ronceverte, W. Va. Toilet closure operating device. 1,877,083; Sept. 13.
Thurber, Ezra J., Seattle, Wash. Timber shape. 1,877,087; Sept. 13.
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Todd Dry Dock, Engineering & Repair Corporation. (See Meachem, Harry, assignor.)
Tolley, Donald B., Macomb, Ill., assignor, by mesne assignments, to Globe American Corporation, Kokomo, Ind. Poultry fountain. 1,877,084; Sept. 13.
Tone, Frank J., assignor to The Carborundum Company, Niagara Falls, N. Y. Joining abrasive articles. 1,877,541; Sept. 13.
Topoozian, Haighes, New York, N. Y. Sandal. 1,877,432; Sept. 13.
Transparent Packaging & Printing Corporation. (See Gurwick, Irving, assignor.)
Traxel, Charles E., Rome, assignor to General Cable Corporation, New York, N. Y. Method of and apparatus for serving strands. 1,876,794; Sept. 13.
Trbojevich, Nikola, Detroit, Mich. Steering gear. 1,876,795; Sept. 13.
Trbojevich, Nikola, Detroit, Mich. Screw thread. 1,876,796; Sept. 13.
Trefry, Laurence D., assignor to The Magnavox Company, Chicago, Ill. Loud speaker. 1,877,085; Sept. 13.
Treleven, Edward V., Los Angeles, Calif., assignor to Peerless Products Company. Wax distributing means. 1,876,797; Sept. 13.
Trenor, Albert D., assignor to J. H. Hammond, jr., Gloucester, Mass. Course calculator. 1,877,435; Sept. 13.
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trico Products Corporation. (See Oishei, John R., assignor.)
Trillier, Benjamin J., Dubuque, Iowa. Folding garage door or the like. 1,876,798; Sept. 13.
Trogdon, William H., Worthville, N. C., assignor to The Terrell Machine Company, Charlotte, N. C. Stop mechanism for bobbin strippers. 1,877,086; Sept. 13.
Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Thermostat. 1,877,371; Sept. 13.
Truesbury, Fred C., assignor to J. L. Clark Manufacturing Co., Rockford, Ill. Container. 1,877,372; Sept. 13.
Turbo-Mill Company. (See McCartney, John H., assignor.)
Turner, William D., New York, N. Y. Absorption bulb for combustion analysis. 1,877,151; Sept. 13.
Twin Coach Company. (See Fageol, William B., assignor.)
Twiss, Douglas F., and E. A. Murphy, Birmingham, England, assignors to Dunlop Rubber Company Limited. Making tubular objects from rubber compositions. 1,877,207; Sept. 13.
Tyden, Emil, Hastings, Mich. Apparatus for protection against fire. 1,877,088; Sept. 13.
Uhlemann, William R., Evanston, Ill. Lens-mount. 1,877,089; Sept. 13.
Underpinning and Foundation Company. (See Meem, James C., assignor.)
Underwood, Charles E., and C. E. Lehr, Bethlehem, Pa., assignor, by mesne assignments, to The Koppers Company of Delaware. Gate for coke wharves. 1,876,799; Sept. 13.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Lasher, Hiram S., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Union Metal Products Company. (See Murphy, Walter P., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Oil Company of California. (See Lake, Francis W., assignor.)
Union Switch & Signal Company, The. (See Johnston, Allan T., assignor.)
Union Switch & Signal Company, The. (See Livingston, John W., assignor.)
United American Bosch Corporation. (See Curtis, L. F., and Coe., assignors.)
United Engineering and Foundry Company. (See Biggert, Florence C., jr., assignor.)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
United Shoe Machinery Corporation. (See Thomas, William D., assignor.)
United States Envelope Company. (See Heywood, V. E., and Hoaglund, assignors.)
Unterberger, Louis, Wilkes-Barre, Pa. Combination humidor and advertising device. 1,877,436; Sept. 13.
Van Acker, Frank, Tulsa, Okla., assignor to Petroleum Engineering, Inc. Improvement in fractionators. 1,876,800; Sept. 13.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Gas producer. 1,876,801; Sept. 13.
Van Briggle, Vincent O., Bridgeville, Pa. Carburetor. 1,877,090; Sept. 13.
Van Dorn Electric Tool Company. (See Connell, Edwin L., assignor.)
Van Dusen, Charles A., and L. Haase, assignors to The Glenn L. Martin Co., Baltimore, Md. Preservation of metal surfaces. 1,877,208; Sept. 13.
Van Nuys, Albert R., Pocatello, Idaho. Adjustable lecture and classroom chair. 1,876,802; Sept. 13.
Van Rosen, Hugo, Brighton, Mass., assignor to Delta-Star Electric Company. Insulator cap. 1,877,594; Sept. 13.
Van Stone, Nathan E. (See Lang, F. H., and Van Stone.)
Velvetex Corporation. (See Moran, Edward J., assignor.)
Ventilector Company. (See Hentschel, Paul A., assignor.)
Ventrite, Inc. (See Hucke, Charles H., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Plaster board. 1,877,209; Sept. 13.
Vereinigte Stahlwerke Aktiengesellschaft. (See Schulz, E. H., and Löbbecke, assignors.)
Vereinigte Stahlwerke Aktiengesellschaft, the Firm. (See Brandt, Leopold, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft, the Firm. (See Stein, Gustav, assignor.)
Vickers, Harry F., Detroit, Mich. Variable volume pump. 1,877,091; Sept. 13.
Victor X-Ray Corporation. (See Wantz, Julius B., assignor.)
Viking Pump Company. (See Petersen, Peter C., assignor.)
Vichek Tool Company, The. (See Koster, Edward C., assignor.)
Vogel, Carl H., Buffalo, N. Y. Vehicle step. 1,877,152; Sept. 13.
Vollmann, Heinrich. (See Kranslein, G., Vollmann, and Corell.)
Vol-U-Meter Co., The. (See Stevens, Arthur L., assignor.)
Von Köhler, Carl G. O. H., Stockholm, Sweden. Device for pumping out boats. 1,877,210; Sept. 13.
Von Mehren, Oswald D., New York, N. Y., assignor to Mehren Lock Co., Inc., Clifton, N. J. Bolt operating mechanism for locks. 1,876,803; Sept. 13.
Von Stumm, Herbert, Rohlstorf, near Segeberg, Germany. Vehicle auxiliary lamp. 1,876,804; Sept. 13.
Vossen, Bartholomaus. (See Wagner, H., and Vossen.)
Wagner, Fritz, Berlin-Lichterfelde, Germany. Balanced valve. 1,877,542; Sept. 13.
Wagner, Hermann, Bad Soden am Taunus, and B. Vossen, Frankfort-on-theMain-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Yellow mono-azo dyestuffs. 1,877,092; Sept. 13.
Wagner, Max, Stuttgart, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Change speed gearing. 1,877,736; Sept. 13.
Wagner, Reinhold R., Berlin-Charlottenburg, Germany. Solid sealing composition for waterless gasholders. 1,876,805; Sept. 13.
Wahl, John, Rosedale, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Air bag coupling. 1,877,706; Sept. 13.
Waide, Merrill, Newark, N. J., assignor to Natural-Color, Inc., New York, N. Y. Optical system for producing photographs and projecting the same in natural colors. 1,876,806; Sept. 13.
Wakefield, Arthur T., assignor to The American Oil Company, Baltimore, Md. Slip coupling. 1,877,093; Sept. 13.
Walborn, Joseph E., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Wrought metal repair device for pipe lines. 1,877,094; Sept. 13.
Walker, Brcoks, et al. (See Wilson, Theodore R., assignor.)
Walker, Clinton L., et al. (See Wilson, Theodore R., assignor.)
Walker, Earl R., Middletown, Ind. Truck. 1,877,095; Sept. 13.
Walker, Eric E. (See Hill, R., and Walker.)
Walker, Jack L., Dallas, Tex. Sound recording and reproducing device. 1,877,485; Sept. 13.
Walker, Richard S., Petersburg, Va. Soap dispensing device. 1,877,259; Sept. 13.
Walker, William T., and H. F. Orr, Toledo, Ohio. Combination bottle opener and beverage spoon. Des. 87,764; Sept. 13.
Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)
Waller, John A., Beverly Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Saw clamp. 1,877,096; Sept. 13.

Waller Manufacturing Corporation. (See Waller, John A., assignor.)
Wallerstein Company, Inc. (See Wallerstein, Leo, assignor.)
Wallerstein, Leo, assignor to Wallerstein Company, Inc., New York, N. Y. Degumming silk. 1,877,097; Sept. 13.
Walp, Charles F., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Skid. 1,876,807; Sept. 13.
Walsh, Harold V. (See Rice, H. N., and Walsh.)
Walter, Ernest, and E. E. Koehler, assignors to Forete Mfg. Co., Newark, N. J. Filler block. 1,876,808; Sept. 13.
Walter, George F., Brooklyn, assignor to American Can Company, New York, N. Y. Container. 1,877,153; Sept. 13.
Wantz, Julius B., Oak Park, assignor to Victor X-Ray Corporation, Chicago, Ill. X-ray apparatus. 1,877,260; Sept. 13.
Ward, William, assignor to Electric Boat Company, Groton, Conn. Air starting system for internal combustion engines. 1,876,809; Sept. 13.
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 87,765; Sept. 13.
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 87,766; Sept. 13.
Washburn, William S., Brockton, Mass. Plant stand. 1,877,098; Sept. 13.
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Waters-Genter Company. (See Forbes, Thomas C., assignor.)
Watrous, Earl G., Chicago, Ill. Faucet. 1,876,810; Sept. 13.
Watson, Edward W., Larchmont, N. Y., assignor to American Telegraph and Telephone Company. Start-stop telegraph system. 1,877,437; Sept. 13.
Wattmann, Emil, Csepel, assignor to Manfred Weiss Stahl- und Metallwerke Aktiengesellschaft, Budapest, Hungary. Refuse receptacle. 1,877,099; Sept. 13.
Wayte, Harry, Kalamazoo, Mich. Hand propelled projectile. 1,877,100; Sept. 13.
Weaver, Walter R., Montgomery, Ala. Military game. 1,877,154; Sept. 13.
Webb, Edmond F. (See MacCain, I. W., and Webb.)
Weber, Charles. (See Finver, A. M., and Weber.)
Webster, Gertrude, Los Angeles, Calif. Culinary knife. 1,877,211; Sept. 13.
Wegner, Alfred, Chicago, Ill. Emblem. Des. 87,767; Sept. 13.
Weidenhoff, Joseph, Incorporated. (See Haskins, Butler J., assignor.)
Weidner, Victor P., Port Washington, N. Y. Display cabinet for bulletin printers. Des. 87,768; Sept. 13.
Weiger, Joseph A., assignor to P. R. Mallory & Co., Incorporated, Indianapolis, Ind. Electrical make-and-break contact and composition therefor. 1,877,261; Sept. 13.
Weil, Maximilian, New York, N. Y. Transmission for phonographs. 1,877,707; Sept. 13.
Wendelstadt, Lucius F., Canaan, N. H. Shock absorber. 1,877,543; Sept. 13.
Werfelman, Dietrick J., assignor to Dubied Machinery Company, New York, N. Y. Yarn-carrier-controlling means for knitting machines. 1,877,262; Sept. 13.
West Disinfecting Company. (See Morin, Louis H., assignor.)
West, Walter J., assignor to Lucian Tube Corporation, Cleveland, Ohio. Vacuum device. 1,877,708; Sept. 13.
Westcott, William. (See Thoman, C. J., and Westcott.)
Westinghouse Electric & Manufacturing Company. (See Armstrong, Ralph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Atherton, Alfred L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bock, Ashley P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bruce, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Cole, G. H., and High.)
Westinghouse Electric & Manufacturing Company. (See Curtis, Richard C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davis, Robert L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Dawson, John W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Elsey, H. M., and Philpott, assignors.)
Westinghouse Electric & Manufacturing Company. (See Forbes, Henry C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Goldsborough, Shirley L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hitchcock, Richard C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lewis, William A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Marsteller, Lester O., assignor.)
Westinghouse Electric & Manufacturing Company. (See Skellett, Albert M., assignor.)
Weston, Louis, London, England. Non-inflammable photographic film. 1,877,212; Sept. 13.
Weydell, Jarl M., Indianapolis, Ind., assignor of one-half to E. E. Stout. Synchronizer. 1,877,101; Sept. 13.
Whipple, Henry E., and F. P. Meeker, Los Angeles, Calif. Signaling device. 1,877,438; Sept. 13.
Whirlpool Incorporated. (See DePew, Chester C., assignor.)
Whitehead and Kales Company. (See Rainsford, Thomas F., assignor.)
Whitesell, Frederick N., assignor to Fairbanks, Morse & Co., Chicago, Ill. Hydraulic control means. 1,877,102; Sept. 13.
Whitfield, George S., Ingrave, assignor to Ilford Limited, Ilford, England. Color photography. 1,877,709; Sept. 13.
Whiting, Ernest C., Brighton, Mass. Continuous contact receptacle. 1,877,103; Sept. 13.
Whitlock, Ralph G., Patents, Inc. (See Ryan, Commodore D., assignor.)
Whitworth, Stanley, assignor to Bendix Brake Company, South Bend, Ind. Manufacture of brake shoes. 1,876,811; Sept. 13.
Wichart, William F., Los Angeles, Calif. Optical instrument. 1,877,439; Sept. 13.
Wildhaber, Ernest, Brooklyn, N. Y. Rotary member for forming gears. 1,877,104; Sept. 13.
Wiley, Edward W., and G. I. Gillies, Windsor, Ontario, Canada, assignors to Herbert H. Wiley, Utica, Mich. Motor mounting. 1,876,812; Sept. 13.
Wiley, Herbert H. (See Wiley, E. W., and Gillies, assignors.)
Wilkerson, Don D., assignor of one-fifth to Herman L. Huelhorst, St. Louis, Mo. Shoe cut-out means. 1,877,105; Sept. 13.
Wilkie, Warren, and A. A. Leverenz, assignors to Parke, Davis & Company, Detroit, Mich. Capsule filling machine. 1,876,813; Sept. 13.
Willard Storage Battery Company. (See Lormor, Henry W., assignor.)
Willard Storage Battery Company. (See Patterson, William, assignor.)
Willauer, William R., Philadelphia, Pa., assignor to The Menasha Products Company, Chicago, Ill. Carton. 1,877,213; Sept. 13.
Willett, Charles G. (See Dean, George E., assignor.)
Williams, A. C., Company, The. (See Heisler, C. A., and Fletcher, assignors.)
Williams, Joseph, jr., Pittsburgh, Pa. Gas gun. 1,877,710; Sept. 13.
Williams, Judson, Philadelphia, Pa. Piston and ring assembly. 1,877,106; Sept. 13.
Williams, Victor S., London, England. Casting machine. 1,877,544; Sept. 13.
Willson Products, Inc. (See Shindel, Harry F., assignor.)
Wilson, Edward W., assignor to Nashua Sure-Hold Company, Nashua, N. H. Collar supporter. 1,876,814; Sept. 13.
Wilson, George F., and F. J. Shook, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Apparatus for wrapping tires. 1,876,815; Sept. 13.
Wilson, Theodore R., Pasbastin, Wash., assignor of one-third to B. Walker, Piedmont, one-third to H. E. Kennedy, Berkeley, and one-third to Clinton L. Walker, Piedmont, Calif. Uniform compression internal-combustion engine. Re18,595; Sept. 13.
Winegar, Edmund M. (See Fleming, J. R., and Winegar.)
Winget Limited. (See Martinez, H., and Kirk, assignors.)
Winkler, Alfred, and M. Dünnebier, Neuwied, Germany. Feeding apparatus. 1,877,107; Sept. 13.
Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wisconsin Alumni Research Foundation. (See Hart, Edwin B., assignor.)
Wise, Solomon, Cincinnati, Ohio. Nut lock. 1,877,545; Sept. 13.
Wisner, Charles E. (See Stetson, Warner D., assignor.)
Wittmer, Russell J., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler. 1,876,816; Sept. 13.
Witty, George, New York, N. Y., assignor to Structural Products Corporation. Moisture absorbing composition and making the same. 1,877,374; Sept. 13.
Wolf, Henry, Brooklyn, N. Y. Pump construction. 1,877,711; Sept. 13.
Wolfe, William S. (See Selberling, F. A., and Wolfe.)
Wolfferts, Jean, Dusseldorf, Germany. Waste and overflow for lavatories, bidets, bath tubs or the like. 1,876,817; Sept. 13.
Wolfram, Arthur. (See Schirmacher, Karl and W., Schaich, Wolfram, Tampke, and Billig.)
Wolfram, Eric A., Rock Island, Ill. Drafting tool. 1,877,375; Sept. 13.
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Combined concentric lock dial and handle for safes. Des. 87,771; Sept. 13.
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Safe. Des. 87,772; Sept. 13.
Woodall Industries Incorporated. (See Chadwick, Francis L., assignor.)
Woodman, Joseph C., Flushing, assignor to Decarie Incinerator Corporation, New York, N. Y. Screenings burner. 1,877,214; Sept. 13.
Woods, Leonard, St. Louis, Mo. Sock supporter. 1,877,108; Sept. 13.

Wootton Francis D. (See Wright M. G., and Wootton.)
Worcester Loom Works. (See Alvord, Charles C., assignor.)
Worthington, Charles C., Dunfield, N. J. Lawn mower unit. 1,876,818; Sept. 13.
Wright, Marcus G., and F. D. Wootton, assignors to The O. M. Franklin Blackley Serum Company, Denver, Colo. Cord severing implement. 1,877,876; Sept. 13.
Wuest, Elmer T., Cincinnati, Ohio. Cotton preparing machine. 1,876,819; Sept. 13.
Wullenweber, John W., Belvidere, Ill. Vehicle reflecting mirror structure. 1,877,109; Sept. 13.
Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Shaping machine. 1,877,110; Sept. 13.
Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Shaping machine. 1,877,111; Sept. 13.
Wüterich, Wilhelm. (See Zitscher, A., and Wüterich.)
Wyoming Platinum and Gold Mining Syndicate. (See Hull, Andrew J., assignor.)
Yaxley Manufacturing Company. (See Hall, Arthur, assignor.)
Yerkes, John A., and R. H. Lemmon, Long Beach, Calif. Traveling tube pump. 1,877,112; Sept. 13.
Young, James J. (See Jeschke, Frank J., assignor.)
Young, Oliver E., West Palm Beach, Fla. Pile structure and method of making and using the same. 1,877,113; Sept. 13.
Young, Philip L. (See Frolich, P. K., and Young.)
Yungblut, Gibson, Dayton, Ky., assignor to The Richardson Company, Lockland, Ohio. Producing felted sheets containing bitumen. 1,877,377; Sept. 13.
Zeiss, Carl. (See Hartinger, Hans, assignor.)
Zelma, Isaiah Z., Florence, Ala., assignor of one-half to A. H. Grabow, Franklin Square, Long Island, N. Y. Animal trap. 1,877,712; Sept. 13.
Zerweck, Werner. (See Herz, R., and Zerweck.)
Zerweck, Werner. (See Kuns, M. A., Koeberle, and Zerweck.)
Zerweck, Werner, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing monobalogen derivatives of naphthostyril and substitution products thereof. 1,877,114; Sept. 13.
Ziese, Walter. (See Hagedorn, Ziese, Reyle, and Bauer.)
Zipay, John R., Pittsburgh, Pa. Variable pitch propeller mechanism. 1,877,115; Sept. 13.
Zitscher, Arthur, and W. Wüterich, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Treating water-insoluble azo dyestuffs. 1,877,116; Sept. 13.
Zoul, Charles V., Los Angeles, Calif. Obtaining oil and other products from olives. 1,876,820; Sept. 13.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 13TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive articles, Joining. F. J. Tone. 1,877,541; Sept. 13.
Accelerator for power shovels. C. Pennington. 1,877,427; Sept. 13.
Acid nitriles. S. Fischl and H. Steiner. 1,876,652; Sept. 13.
Acoustic device. H. Chireix. 1,876,858; Sept. 13.
Address printing and calculating machine. J. Krell. 1,876,970; Sept. 13.
Advertising and signaling device. H. K. Harris. 1,877,172; Sept. 13.
Advertising device. H. Andvig. 1,877,441; Sept. 13.
Advertising device. J. C. Houck. 1,877,463; Sept. 13.
Advertising exhibitor. A. J. Kauffman. 1,877,406; Sept. 13.
Aeroplane construction. W. F. Deutscher. 1,876,635; Sept. 13.
Agglomerates, Producing coked. E. H. Bunce. 1,877,123; Sept. 13.
Agricultural implement. T. Brown and B. J. Kough. 1,876,562; Sept. 13.
Agricultural machine. A. F. Stubenberg. 1,877,078; Sept. 13.
Air bag coupling. J. Wahl. 1,877,706; Sept. 13.
Air brake. A. Silvene. 1,877,700; Sept. 13.
Air cooling system for aeroplane engines. E. S. Marks. 1,876,996; Sept. 13.
Air compressor. F. J. Omo. 1,876,736; Sept. 13.
Air, Humidifying. E. S. Buck. 1,877,223; Sept. 13.
Air separator. W. A. Gibson. 1,876,911; Sept. 13.
Aircraft. B. Janney. 1,876,682; Sept. 13.
Airfoil. J. K. Northrop. 1,877,022; Sept. 13.
Airfoils, Constructing. J. K. Northrop. 1,877,023; Sept. 13.
Air heater. A. B. Modine. 1,877,011; Sept. 13.
Airplane propeller. Automatically adjustable. J. R. Desautels. 1,876,634; Sept. 13.
Album, Photograph. H. E. Gillespie. 1,877,476; Sept. 13.
Alkaline liquids on straining cloths, Reducing the attacks by. A. Bettschart and O. Nydegger. 1,876,837; Sept. 13.
Alloy. B. H. Payne. 1,876,738; Sept. 13.
Alloy, Ferrous. H. A. Mitchell and A. W. Gregg. 1,876,725; Sept. 13.
Alloy, Wear resisting ferrous. H. A. Mitchell and A. W. Gregg. 1,876,724; Sept. 13.
Alloys, Producing hard. E. H. Schulz and K. Löbbecke. 1,877,063; Sept. 13.
Aluminum casting alloy. A. J. Lyon. 1,877,141; Sept. 13.
Amalgamator. L. E. Knight. 1,877,670; Sept. 13.
Amino-aldehyde compounds, Manufacturing. G. Kalischer and H. Ritter, and E. Honold. 1,876,955; Sept. 13.
Ammonia-soda process for the production of sodium hydroxide, NaOH, with simultaneous production of ammonia. F. Bartling. 1,877,489; Sept. 13.
Amplifier for electric currents. J. E. Lilienfeld. 1,877,140; Sept. 13.
Amusement device. A. J. A. Giraud. 1,877,656; Sept. 13.
Amusement device. I. J. Siebert. 1,877,256; Sept. 13.
Animal trap. S. C. Booth. 1,877,264; Sept. 13.
Animal trap. I. Z. Zelma. 1,877,712; Sept. 13.
Annealing furnace. C. F. Kenworthy. 1,876,960; Sept. 13.
Antifriction device for drill pipe. E. W. Goeser. 1,877,395; Sept. 13.
Antirattling device for a window regulator clutch. H. C. Field. 1,877,288; Sept. 13.
Antiskid device. E. and H. McKenney and N. T. Fox. 1,877,000; Sept. 13.
Apples for freezing, Preparing. R. A. Rasche. 1,877,587; Sept. 13.
Aryl-ortho-carboxyamido-mercaptans, Manufacturing. R. Herz and M. Schubert. 1,876,928; Sept. 13.
Atomizer. H. Meachem. 1,877,350; Sept. 13.
Atomizer. H. Patou. 1,877,252; Sept. 13.
Audio amplification system. E. E. Hiler. 1,876,675; Sept. 13.
Audio amplification system, Multistage. E. E. Hiler. 1,876,674; Sept. 13.
Auger, Soil. L. T. Sharp. 1,877,067; Sept. 13.
Automobile or vehicle greasing jack. J. A. Schoenberg. 1,877,364; Sept. 13.
Axle. H. Ford. 1,876,903; Sept. 13.
Axle, Two speed. H. T. Thomas and B. B. Neuteboom. 1,876,791; Sept. 13.
Azo arylides of 2.3 hydroxy-naphthoic acid and azo dyestuffs derived therefrom. E. F. Grether. 1,877,303; Sept. 13.
Azo-dyestuffs and making same. F. Straub and W. Anderau. 1,877,748; Sept. 13.
Azo-dyestuffs and making same, Metalliferous. F. Straub and H. Mayer. 1,877,618; Sept. 13.
Back-up light. F. W. Johns. 1,876,952; Sept. 13.
Bag making. I. Gurwick. 1,877,456; Sept. 13.
Bathroom accessory. H. Ashfield. 1,876,828; Sept. 13.
Bathroom fixture. E. A. Pope. Des. 87,757-8; Sept. 13.
Battery: *See*—
Storage battery.
Battery charging means. A. L. Atherton. 1,876,548; Sept. 13.
Battery charging system. L. Lippard. 1,876,985; Sept. 13.
Batteries, Testing storage. W. K. Patterson. 1,877,041; Sept. 13.
Bead strip attaching press. J. R. Fleming and E. M. Winegar. 1,876,898; Sept. 13.
Bearing. W. H. Cater. 1,877,495; Sept. 13.
Bearing adapter. C. A. Adams. 1,876,534; Sept. 13.
Bearing, Antifriction journal. D. T. Brownlee. 1,877,486; Sept. 13.
Bearing bush, Adjustable. W. Scharff. 1,876,765; Sept. 13.
Bearing, Car journal. E. Baldwin. 1,877,038; Sept. 13.
Bearing, Shaft. A. P. Strong. 1,877,206; Sept. 13.
Bearing, Spherical. A. Kingsbury. 1,876,690; Sept. 13.
Bearing structure. A. W. Simmons. 1,877,257; Sept. 13.
Bed or couch. J. H. Pilates. 1,876,743; Sept. 13.
Bed or other structure, Foldable. J. R. Thomas. 1,877,539; Sept. 13.
Belt. H. A. Knox. 1,877,185; Sept. 13.
Belt and buckle therefor, Pilot's safety. S. Switlik. 1,877,704; Sept. 13.
Belt, Detachable bath robe. A. Schlusselberg. 1,877,697; Sept. 13.
Bench: *See*—
Kneeling bench.
Binder bolt wrench. R. R. Royal. 1,877,595; Sept. 13.
Bit: *See*—
Drill bit.
Blackboard. H. Kritze. 1,877,669; Sept. 13.
Blades, Method and device for manufacture of windshield wiper. J. W. Anderson. 1,876,574; Sept. 13.
Block: *See*—
Engine block.
Fuller block.
Blocks, Bloating and annealing cellular. S. Q. Lee and W. Hathaway. 1,877,138; Sept. 13.
Blue printing. R. E. Kwech. 1,877,246; Sept. 13.
Board: *See*—
Display board. Plaster board.
Instrument board.
Boats, Device for pumping out. C. G. O. H. von Köhler. 1,877,210; Sept. 13.
Bodies from aluminum oxide, Manufacture of. R. Reichmann. 1,877,531; Sept. 13.
Body fitted with collapsible or folding top, Motor car. H. Austin. 1,876,588; Sept. 13.
Boiler cleaner. F. Bowers. 1,877,719; Sept. 13.
Boiler cleaner. C. L. Howse and C. D. Lowell. 1,877,721; Sept. 13.
Boiler cleaner. G. I. Rawson. 1,877,722; Sept. 13.
Boiler cleaner. N. L. Snow. 1,877,148; Sept. 13.
Boiler cleaner. N. L. Snow, C. L. Howse and F. Bowers. 1,877,720; Sept. 13.
Boiler tube cleaner. F. H. Cole. 1,877,267; Sept. 13.
Bolt. P. H. Hutchings. 1,877,665; Sept. 13.
Bolt operating mechanism for locks. O. D. von Mehren. 1,876,803; Sept. 13.
Bomb, Incendiary. T. P. Duncan, jr. 1,877,232; Sept. 13.
Booster for loose leaf metals. E. W. Carpenter. 1,876,569; Sept. 13.
Bore holes, Method and apparatus for surveying. I. Roman. 1,877,593; Sept. 13.
Bottle cap. M. J. Shoemaker. 1,877,606; Sept. 13.
Bottle neck ring and making same. R. Oliver and G. R. Penn. 1,877,144; Sept. 13.
Bottle washing and brushing machine, Automatic. R. E. Miller. 1,877,682; Sept. 13.
Bow. R. H. Cowdery. 1,877,273; Sept. 13.
Box: *See*—
Bread box. Musical box.
Handle box. Radiator crank box.
Mail box.
Box and method of assembly, Hinged. M. Partiot. 1,877,038-9; Sept. 13.
Box forming and gluing machine. S. Pearce. 1,877,043; Sept. 13.
Box or case, Tool. E. R. Cole. 1,877,496; Sept. 13.

Boxes and packing therefor, Stuffing. J. R. Cole. 1,877,268; Sept. 13.
Boxes, Blanking folding. R. J. Gruenberg. 1,876,666; Sept. 13.
Bracing, Trench. J. C. Meem. 1,877,351; Sept. 13.
Bracket: *See*—
Shelf bracket.
Brackets, Making rail. A. A. Hocher. 1,877,460; Sept. 13.
Brake: *See*—
Air brake. Hand brake.
Drop brake. Hydraulic brake.
Fluid actuated brake. Vehicle brake.
Fluid pressure brake.
Brake applying apparatus. C. S. Bushnell. 1,877,554; Sept. 13.
Brake applying mechanism. V. G. Apple. 1,876,545; Sept. 13.
Brake chain attachment. S. B. Haseltine. 1,877,309; Sept. 13.
Brake lining and the like, Making. F. J. Eisenhardt. 1,877,651; Sept. 13.
Brake lining composition. O. H. Gibson. 1,876,910; Sept. 13.
Brake mechanism. V. G. Apple. 1,876,541; Sept. 13.
Brake mechanism. E. J. Hirvonen. 1,876,934; Sept. 13.
Brake mechanism. R. S. Sanford. 1,877,597; Sept. 13.
Brake mechanism for vehicles, Servo. V. G. Apple. 1,876,540; Sept. 13.
Brake mechanism, Servo. V. G. Apple. 1,876,544; Sept. 13.
Brake operating means. W. J. Andres. 1,876,575; Sept. 13.
Brake operating mechanism. E. L. and W. T. Launder. 1,877,408; Sept. 13.
Brake operating mechanism, Electric. V. G. Apple. 1,876,539; Sept. 13.
Brake shoes, Manufacture of. S. Whitworth. 1,876,811; Sept. 13.
Brake slack adjuster. R. A. Goepfrich. 1,876,661; Sept. 13.
Brake tester. A. B. Seppmann. 1,877,366; Sept. 13.
Braking device, Differential servomotor. O. L. Skopik. 1,877,430; Sept. 13.
Bread box. A. Pfingsten. 1,876,742; Sept. 13.
Brick making machine. R. P. M. Davis. 1,876,864; Sept. 13.
Brush, Paint. R. M. Allen and A. E. Dickinson. 1,876,572; Sept. 13.
Buckle, Belt. K. Matheus. 1,877,416 Sept. 13.
Buckle, Shoe. W. L. Gibbons. Des. 87,744; Sept. 13.
Building construction. F. S. Crowhurst. 1,877,274; Sept. 13.
Building material, Process and product of reenforcing bloated. S. Q. Lee. 1,877,136; Sept. 13.
Built-in table. D. A. Hildebrand. 1,877,401; Sept. 13.
Bulb for combustion analysis, Absorption. W. D. Turner. 1,877,151; Sept. 13.
Burner: *See*—
Gas burner. Screenings burner.
Burner apparatus control mechanism. A. C. Parker. 1,877,037; Sept. 13.
Bushing, Heavy current. A. O. Austin. 1,876,581; Sept. 13.
Bushings, Top cap assembly for high voltage. J. Rah. 1,877,586; Sept. 13.
Butter mold. H. Stewart. Des. 87,762; Sept. 13.
Button. L. R. Carley. 1,876,854; Sept. 13.
Button, Shell. L. R. Carley. 1,876,853; Sept. 13.
Cabinet. H. Katzman. 1,877,514; Sept. 13.
Cabinet, File. J. H. Rand, jr., and E. Ohnstrand. 1,876,748; Sept. 13.
Cabinet for bulletin printers, Display. V. P. Weidner. Des. 87,768; Sept. 13.
Cabinet for coin controlled apparatus. G. F. Hochriem. Des. 87,747; Sept. 13.
Cabinet, Telephone. F. and A. Mastrangelo. 1,877,470; Sept. 13.
Cable, Deep sea. O. Cords. 1,877,497. Sept. 13.
Cable, flexible shaft and the like, Bowden. W. R. Neate. 1,876,731; Sept. 13.
Cable tap. L. E. Graves and W. J. Edelmann. 1,876,663; Sept. 13.
Cables of submarine mines, Device for cutting the. J. H. Solkesz. 1,877,073; Sept. 13.
Calculator, Course. A. D. Trenor. 1,877,435; Sept. 13.
Calendar, Illuminated advertising. L. E. Peck and J. H. Lambert. 1,877,044; Sept. 13.
Calendar, Perpetual. F. L. Murphy. 1,876,729; Sept. 13.
Cameras, Method and apparatus for automatic photographic portrait. S. I. Sax. 1,877,598; Sept. 13.
Can: *See*—
Paper bodied can.
Can adjusting or reshaping machine. A. J. Hollars. 1,876,678; Sept. 13.
Cap, Bathing. M. S. Lower. 1,877,411; Sept. 13.
Cap, Defiator. C. E. Maynard. 1,876,715; Sept. 13.
Capsule. A. E. Noble. 1,877,726; Sept. 13.
Capsule filling machine. W. Wilkie and A. A. Leverenz. 1,876,813; Sept. 13.
Car construction. J. F. O'Connor. 1,877,029; Sept. 13.
Car construction, Railway. W. P. Murphy. 1,877,422–3; Sept. 13.
Car construction, Railway. A. E. Small. 1,877,369; Sept. 13.
Car transfer device. C. E. Norton. 1,877,193; Sept. 13.
Car wheel, Roller bearing. T. V. Buckwalter. 1,876,564; Sept. 13.
Carbohydrate derivatives, Manufacture of. M. Hagedorn, W. Ziese, B. Reyle, and R. Bauer. 1,876,920; Sept. 13.
Carbon dioxide, Apparatus for and methods of freezing. C. L. Jones. 1,877,180; Sept. 13.
Carbonates of salicylic esters and making same. E. F. Grether. 1,877,304; Sept. 13.
Carburetor. A. R. Baker. 1,877,117; Sept. 13.
Carburetor. V. O. Van Briggle. 1,877,090; Sept. 13.
Carburetor control. A. Rinne. 1,877,533; Sept. 13.
Card and detachable pencil, Combination. T. Munroe. 1,877,015; Sept. 13.
Card case. W. J. Ecker, jr. 1,877,565; Sept. 13.
Carrier: *See*—
Tire carrier.
Carton. W. R. Willauer. 1,877,218; Sept. 13.
Case: *See*—
Card case. Smoking case.
Cigarette case. Typewriter carrying case.
Case and pattern for making the same, Carrying. D. H. Shapiro. 1,877,601; Sept. 13.
Casting for radiators, Head. H. H. Linn. 1,877,516; Sept. 13.
Casting machine. V. S. Williams. 1,877,544; Sept. 13.
Catch, Hood. A. Claud-Mantle. 1,877,186; Sept. 13.
Catch lock. H. M. Stieglitz. 1,877,612; Sept. 13.
Cement, Making magnesium. R. W. Gelder. 1,876,909; Sept. 13.
Cement, Nitrocellulose. C. Ellis. 1,877,717; Sept. 13.
Cereals, Opening up of. P. Gross. 1,877,170; Sept. 13.
Chain. C. P. Kottlowski. 1,877,339; Sept. 13.
Chair: *See*—
Kitchen chair.
Lecture and classroom chair.
Chair. J. E. Bales. 1,876,549; Sept. 13.
Chair construction. H. Siskin. 1,876,774; Sept. 13.
Chandelier. F. Gunnison. Des. 87,745; Sept. 13.
Chandelier. F. Gunnison. 1,876,667; Sept. 13.
Change maker. T. J. Hoglund. 1,876,677; Sept. 13.
Chaplet. C. G. Raible. 1,877,049; Sept. 13.
Charge-forming apparatus for internal combustion engines. W. Drabold. 1,876,879; Sept. 13.
Charge forming device. C. H. Kindl. 1,876,961; Sept. 13.
Check punching and issuing machine. R. H. Helsel. 1,876,672; Sept. 13.
Chemical pulp, Production of. L. Bradley and E. P. McKeefe. 1,877,219; Sept. 13.
Chemical reactions, Method and apparatus for carrying out. J. R. Schonberg. 1,877,060; Sept. 13.
Chicle and similar gum from filter press residue, Recovery of. M. A. Gordon. 1,877,299; Sept. 13.
Chisel, Two-in-one. S. Penkoski. 1,877,686; Sept. 13.
Chlorides and their preparation, Anhydrous metallic. O. V. Martin. 1,877,733; Sept. 13.
Chute control mechanism, Car dumper. R. W. Kaltenbach. 1,876,686; Sept. 13.
Chute for waste building material. S. Gallagher. 1,877,234; Sept. 13.
Cigarette case. J. Holtzman. 1,876,680; Sept. 13.
Cigarette wrapper and a cigarette made with said wrapper. D. W. B. Kurtz, jr. 1,876,976; Sept. 13.
Circuit arrangement, Electron discharge device. E. R. Hentschel. 1,877,128–9; Sept. 13.
Circuit arrangement for automatic telephone systems. F. Markman. 1,877,078; Sept. 13.
Circuit arrangement for thermionic amplifying tubes coupled by transformers. P. R. Dyksterhuis. 1,876,645; Sept. 13.
Circuit, Combined rectifier and amplifier. K. C. Black. 1,876,841; Sept. 13.
Circuit continuing device. H. A. Douglas. 1,876,876; Sept. 13.
Circuit, Electric control. O. T. Francis. 1,877,165; Sept. 13.
Circuit system and remote control, Selective. A. R. Locke. Re18,593; Sept. 13.
Circuit, Transmitting. R. L. Davis. 1,877,561; Sept. 13.
Circuits, Apparatus for interrupting alternating power. E. F. Northrup. 1,877,575; Sept. 13.
Clamp: *See*—
Conductor clamp. Saw clamp.
Hose clamp.
Clamp. W. E. Merryman. 1,877,006; Sept. 13.
Cleaner: *See*—
Boiler cleaner. Rail cleaner.
Boiler tube cleaner.
Cleaning and silencing means for engine exhausts. M. J. Goldberg. 1,877,296; Sept. 13.
Cleaning machine. A. B. Butterworth. 1,876,607; Sept. 13.
Clip: *See*—
Fuse clip.
Clock, Advertising. S. A. Marples. 1,876,997; Sept. 13.
Clock, Imitation hour glass. H. Dreyfuss. 1,877,732; Sept. 13.
Closure assembly for vehicle radiators. E. S. MacPherson. 1,876,710; Sept. 13.
Closure operating device, Toilet. L. C. Thrasher. 1,877,083; Sept. 13.
Closure strip. R. D. Fitzgerald. 1,877,448; Sept. 13.

Clutch and transmission mechanism. M. J. Goldberg. 1,877,297; Sept. 13.
Clutch mechanism. C. D. Ryan. 1,877,694; Sept. 13.
Coach lock. E. G. Simpson, A. J. De Sana, and J. B. Flynn. 1,877,603; Sept. 13.
Coat hanger. J. Malley. 1,877,247; Sept. 13.
Coating and heat treating. A. O. Austin. 1,876,582; Sept. 13.
Coil, Inductance. R. M. Heintz. 1,876,670; Sept. 13.
Coin control mechanism for vending machines. J. A. Heller. 1,876,671; Sept. 13.
Collapsible tube. L. F. Rogers. 1,877,534; Sept. 13.
Color photography. J. N. Goldsmith. 1,877,658; Sept. 13.
Color photography. G. S. Whitfield. 1,877,709; Sept. 13.
Coloring granular and other material. P. S. Denning. 1,876,629–30; Sept. 13.
Columns, Making. H. C. Pfaff. 1,877,583; Sept. 13.
Comb: *See*—
Hair dresser's comb.
Combustion chamber. M. J. Goldberg. 1,874,737; Sept. 13.
Combustion engine. G. Blow. 1,876,599; Sept. 13.
Compound for preventing cannibalism in chickens. J. A. Lockwood. 1,877,676; Sept. 13.
Compound for the prevention and treatment of anemia. E. B. Hart. 1,877,237; Sept. 13.
Conductor clamp. A. O. Austin. 1,876,584; Sept. 13.
Connecter, Adjustable band. H. F. Shindel. 1,876,770; Sept. 13.
Connecter, Garment. B. B. Manaster. 1,877,677; Sept. 13.
Connecter, Terminal. B. O. Merritt. 1,877,142; Sept. 13.
Connecter, Wire. H. M. Stieglitz. 1,877,611; Sept. 13.
Connection, Fluid pressure. C. E. Maynard. 1,876,713–14; Sept. 13.
Connection for railroads, Adjustable trailing switch. H. B. Taylor. 1,877,742; Sept. 13.
Connection, Spring. R. R. Searles. 1,877,734–5; Sept. 13.
Connection, Terminal. L. A. Koch, jr. 1,877,671; Sept. 13.
Container. C. L'Enfant. 1,877,768; Sept. 13.
Container. F. C. Truesbury. 1,877,372; Sept. 13.
Container. G. F. Walter. 1,877,153; Sept. 13.
Container, Bulk freight. J. F. O'Connor. 1,877,028; Sept. 13.
Container, Dispensing. A. J. Chamberlain. 1,877,226; Sept. 13.
Container for cooling and dispensing water or beverages. E. Dym. Des. 87,741; Sept. 13.
Container, Heat insulating. N. Forrest. 1,877,290; Sept. 13.
Control device for aircraft, Combined steering and stabilizing. M. de Bernardi. 1,877,499; Sept. 13.
Control means, Hydraulic. F. N. Whitesell. 1,877,102; Sept. 13.
Control system. B. W. Jones. 1,877,667; Sept. 13.
Controlling device for steering and stabilizing aircraft, Combined. M. de Bernardi. 1,877,498; Sept. 13.
Conveyer. H. D. Lathrop and W. H. Paulson. 1,877,334; Sept. 13.
Conveyer, Trolley. E. V. Francis. 1,876,659; Sept. 13.
Conveyer, Trolley. E. V. Francis. 1,876,904; Sept. 13.
Cooker for Frankfurters or the like. E. C. Claus. 1,876,614; Sept. 13.
Cooling of dynamo-electric machines. A. K. Selden, jr. 1,876,767; Sept. 13.
Cooling systems for internal combustion engines, Impelling device for. G. S. Moore and W. H. Miller. 1,877,420; Sept. 13.
Cord severing implement. M. G. Wright and F. D. Wootton. 1,877,376; Sept. 13.
Cork feeding and inserting machine. C. R. Fredsell. 1,877,233; Sept. 13.
Corn sheller. A. B. Dieterich. 1,877,282; Sept. 13.
Cotton planter and fertilizer depositor. H. A. Smith. 1,876,776; Sept. 13.
Cotton preparing machine. E. T. Wuest. 1,876,819; Sept. 13.
Coupler, Car. R. J. Wittmer. 1,876,816; Sept. 13.
Coupling: *See*—
Air bag coupling. Slip coupling.
Coupling for cars and train lines. G. Gray and C. Kingston. 1,876,918; Sept. 13.
Coupling for driving nuts and the like, Friction. J. M. Fox. 1,876,658; Sept. 13.
Cover for stockingless legs, Invisible foot. S. L. and H. B. Friedman. 1,877,393; Sept. 13.
Covering, Pipe. W. R. Greig. 1,876,665; Sept. 13.
Crane. C. Cohen-Venezian. 1,877,373; Sept. 13.
Crane. C. K. Pevear. 1,877,582; Sept. 13.
Crank. H. E. Fear. 1,877,424; Sept. 13.
Crank case construction for engines and the like. E. S. MacPherson. 1,876,708; Sept. 13.
Crate, Fruit and vegetable field. J. R. Keith. 1,877,666; Sept. 13.
Crusher: *See*—
Hammer crusher.
Crystal cutting apparatus. C. J. Rohland. 1,876,757; Sept. 13.
Crystal cutting device. S. H. Stein. 1,876,785; Sept. 13.
Crystals, Apparatus for forming. A. Horvath. 1,877,403; Sept. 13.
Cup: *See*—
Paper cup.
Current interrupting means, Electric. E. Kern. 1,877,753; Sept. 13.
Current transformer connection for relay operation. W. A. Lewis. 1,877,139; Sept. 13.
Cushion: *See*—
Seat cushion.
Cut-out, Expulsion. W. A. Heinrich. 1,877,811; Sept. 13.
Cut-outs and the like, High tension. E. N. Nordham. 1,877,574; Sept. 13.
Cutter: *See*—
Flying cutter.
Cutter for skiving machines. E. T. Smith. 1,876,775; Sept. 13.
Cutting and grooving machine. E. B. Binford. 1,877,448; Sept. 13.
Cyclic limit mechanism. F. A. Herbert. 1,877,814; Sept. 13.
Dampening means for pressing machines. P. N. Braun. 1,876,602; Sept. 13.
Deaerating water heater. P. S. Lyon. 1,877,412; Sept. 13.
Deflector for gas stoves. P. A. Hentschel. 1,877,240; Sept. 13.
Derivatives of diarylethers, Making. E. F. Grether. 1,877,301; Sept. 13.
Derivatives of pyranthrone, Production of highly halogenated. M. A. Kunz and K. Koeberle. 1,876,975; Sept. 13.
Desk and bookcase, Combination reading. J. S. Irwin. 1,876,681; Sept. 13.
Dextrose, Manufacture of. C. Ebert, W. B. Newkirk, and M. Moskowitz. 1,876,883; Sept. 13.
D-handle. W. A. Ready. 1,877,199–200; Sept. 13.
Dial and handle for safes, Combined concentric lock. C. F. Wolters. Des. 87,771; Sept. 13.
Diazo solutions in the presence of iron, Improving the stability of. O. Draphal. 1,876,880; Sept. 13.
Die casting machine. E. Hotter. 1,876,940; Sept. 13.
Dimmer control apparatus. F. B. Adam. 1,876,824; Sept. 13.
Diphenylamine from nitrocellulose powder, Removing. R. B. Mitchell. 1,876,726; Sept. 13.
Direction indicator. W. Heertsch. 1,877,506; Sept. 13.
Direction indicator. T. Hinrichsen. 1,877,402; Sept. 13.
Discharge mechanism for tying machines. G. A. Dunn. 1,877,564; Sept. 13.
Discharge tube. G. Claude. 1,877,715; Sept. 13.
Disconnecting switch. J. D. P. Hoffman. 1,877,319; Sept. 13.
Disk harrow, Tandem. C. R. Rogers, E. H. Babel, and M. M. Brodersen. 1,877,592; Sept. 13.
Dispenser. P. Aronstam. 1,877,636; Sept. 13.
Dispenser, Liquid. K. E. Bemis. 1,876,554; Sept. 13.
Dispensing apparatus. W. Fairchild. 1,876,649; Sept. 13.
Display apparatus. R. M. Craig. 1,877,646; Sept. 13.
Display board, Container. T. De Lorenzo. 1,876,869; Sept. 13.
Display device. F. H. Lang and N. E. Van Stone. 1,876,978; Sept. 13.
Display fixture. O. N. Segall. Des. 87,760; Sept. 13.
Distributor for reactive liquids and using the same. M. D. Mann, jr. 1,876,904; Sept. 13.
Door. J. W. Reed. 1,876,750; Sept. 13.
Doorcheck. T. H. Banfield. 1,877,639; Sept. 13.
Doorcheck. L. J. Lishness. 1,876,986; Sept. 13.
Doorcheck. H. R. Lovell. Des. 87,753; Sept. 13.
Door closing device for cars. W. F. Dietricheon. 1,876,637; Sept. 13.
Door, Composite. F. P. Sievers. 1,876,772; Sept. 13.
Door construction. A. P. Ball. 1,876,589; Sept. 13.
Door for automatic oil burners, Automatic opening and closing furnace. A. H. Klahn. 1,876,962; Sept. 13.
Doorknob lock. H. L. Arste. 1,876,576; Sept. 13.
Doorlock. W. A. Beauchamp. 1,877,263; Sept. 13.
Doorlock. C. Johnstone. 1,877,331; Sept. 13.
Doorlock, Rotary. D. E. Murphy and S. Schneider. 1,877,017; Sept. 13.
Door operating device. J. L. Christopher. 1,877,386; Sept. 13.
Door or the like, Folding garage. B. J. Triller. 1,876,798; Sept. 13.
Door, Refrigerator. H. H. Belding. 1,876,596; Sept. 13.
Door, Stock car. F. M. Gunn. 1,877,236; Sept. 13.
Draft attachment. W. L. Paul. 1,877,579; Sept. 13.
Draft equalizer. V. B. Eakin. 1,877,650; Sept. 13.
Draft means for automatic stokers, Forced. L. L. Hinsch. 1,876,933; Sept. 13.
Drafting machine. F. Kuhlmann. 1,877,340; Sept. 13.
Drawer for furniture. J. Bodenstein. 1,876,557; Sept. 13.
Drill bit. W. L. Pearce. 1,876,740; Sept. 13.
Drill bit, Separable. T. V. Buckwalter. 1,876,565; Sept. 13.
Drilling machine, Vertical continuous. F. M. Davis. 1,877,277; Sept. 13.
Drive, Belt. T. G. Nyborg and M. F. Higgins. 1,877,194; Sept. 13.
Drive, Chain. C. P. Kottlowski. 1,877,338; Sept. 13.
Drive for washing machines or the like. J. L. Perkins and H. D. Croft. 1,877,581; Sept. 13.

Driving mechanism for printing presses. A. J. Cline. 1,877,287; Sept. 13.
Drop brake. T. K. Cummins. 1,877,730; Sept. 13.
Drum, Collapsible. A. L. Heston, F. J. Shook, and E. W. Evans. 1,877,746; Sept. 13.
Drying reel, Fish line. J. M. Butler. 1,877,444; Sept. 13.
Dye and making same. L. P. Dove. 1,877,748; Sept. 13.
Dyeing preparation for coloring chrome leather and making the same. A. Dorrer, W. Scheurer, and A. Ohmer. 1,876,641; Sept. 13.
Dyes, Manufacture of new azo. R. Brightman. 1,876,848; Sept. 13.
Dyestuffs and making same, Azo. E. F. Grether. 1,877,302; Sept. 13.
Dyestuffs, New indigoid. R. Herz, M. Schubert, and W. Brunner. 1,877,316; Sept. 13.
Dyestuffs of the anthanthrone series and process of making same, Brominated vat. R. Herz and W. Zerweck. 1,877,315; Sept. 13.
Dyestuffs of the benzanthrone series and making same, Vat. E. Honold. 1,877,178; Sept. 13.
Dyestuffs of the diamino-triphenymethane series, New. O. Böger and O. Meissner. 1,876,842; Sept. 13.
Dyestuffs of the N. N. dihydro-1.2.2'.1'-anthraquinone azine series and products obtainable thereby, preparing. K. Schirmacher, W. Schaich, A. Wolfram, H. Tampke, K. Billig, and W. Schirmacher. 1,877,146; Sept. 13.
Dyestuffs on the fiber, Process of producing azo. E. Hoffa and C. Seib. 1,877,318; Sept. 13.
Dyestuffs, Treating water insoluble azo. A. Zitscher and W. Wüterich. 1,877,116; Sept. 13.
Dyestuffs, Yellow mono-azo. H. Wagner and B. Vossen. 1,877,092; Sept. 13.
Dyestuffs, Yellow pyrazolone mono-azo. H. Eichwede and J. Rachor. 1,876,884; Sept. 13.
Dynamometer and stroke meter with motor driven recording means, Computing. F. W. Lake. 1,877,467; Sept. 13.
Earthy materials, Progressively bloating. S. Q. Lee. 1,877,137; Sept. 13.
Easel blackboard. H. G. Cress. 1,876,619; Sept. 13.
Edge trimmer. B. J. Larson. 1,876,979; Sept. 13.
Egg treatment machine. M. Kasser. 1,876,688; Sept. 13.
Elbow for meter yoke connections, Adjustable. E. M. Reedy. 1,876,751; Sept. 13.
Electric control mechanism. V. G. Apple and H. D. Hukill. 1,876,543; Sept. 13.
Electric control system for oil burners. J. N. Macrae and C. P. Packard. 1,877,248; Sept. 13.
Electric discharge device. A. M. Skellett. 1,877,607; Sept. 13.
Electric discharge tube. R. Löwit. 1,876,991; Sept. 13.
Electric heater. W. J. Bisset and J. W. Sheffer. 1,876,598; Sept. 13.
Electric meter. J. H. Miller. 1,877,008; Sept. 13.
Electric power by means of wind, Generating. A. Beldimano. 1,876,595; Sept. 13.
Electric switch. H. A. Douglas. 1,875,874; Sept. 13.
Electric switch. H. A. Douglas. 1,876,878; Sept. 13.
Electric switch. W. Schmid. 1,877,058; Sept. 13.
Electric switching mechanism. H. A. Douglas. 1,876,872; Sept. 13.
Electrical devices, Impregnating. F. M. Clark. 1,877,644; Sept. 13.
Electrical make-and-break contact and composition therefor. J. A. Weiger. 1,877,261; Sept. 13.
Electrical testing instrument. E. Schneider. 1,877,739; Sept. 13.
Electrical voting apparatus. M. F. Thompson. 1,877,150; Sept. 13.
Electrode for neon vacuum tubes. R. C. Smalley. 1,877,204; Sept. 13.
Electromagnetic apparatus. E. Falkenthal. 1,877,569; Sept. 13.
Electromagnetic receiving and transmitting instrument. A. A. Thomas. 1,876,790; Sept. 13.
Electromagnetic switch. F. Menzel. 1,877,353; Sept. 13.
Electro-optical means and method for measuring substances for concentrations, colors, dispersions, etc. W. G. Exton. 1,877,501; Sept. 13.
Emblem. A. Wegner. Des. 87,767; Sept. 13.
Engine: *See*—
Combustion engine. Rotary engine.
Internal combustion engine.
Engine attachment to facilitate valve grinding, Explosive. C. B. Gladding. 1,877,477; Sept. 13.
Engine base construction. A. C. Boock. 1,876,844; Sept. 13.
Engine block, Two-stroke. F. LaGuesse. 1,876,977; Sept. 13.
Engines, Air starting system for internal combustion. W. Ward. 1,876,809; Sept. 13.
Engines, Cooling internal combustion. C. K. Hague. 1,877,398; Sept. 13.
Engines, Fuel feed for internal combustion. G. Garibaldi. 1,877,655; Sept. 13.
Envelopes, Inserting materials in. A. E. Noble. 1,877,718; Sept. 13.
Esters from olefins, Continuous method of producing. P. K. Frolich and P. L. Young. 1,877,291; Sept. 13.
Excavator, Canal. A. C. Clark and A. L. Graves. 1,877,556; Sept. 13.
Exercising apparatus. R. Blank. 1,877,218; Sept. 13.
Extractor: *See*—
Tire core extractor. Weed extractor.
Tool extractor.
Fabric: *See*—
Pile fabric.
Fabric and making the same. J. E. George. 1,877,394; Sept. 13.
Fabric for hosiery, Knitted. H. Harris. 1,877,458; Sept. 13.
Face massaging apparatus. F. P. Strelitz. 1,877,616; Sept. 13.
Fan construction. C. T. Doman. 1,876,871; Sept. 13.
Fan wheel. F. J. McMurdie. 1,877,347; Sept. 13.
Fastener. H. W. and L. W. Johnson. 1,876,683; Sept. 13.
Fastener for conveyer machinery, Pan. A. J. Nousi. 1,877,025; Sept. 13.
Fastener, Roll screen. S. Krans. 1,877,407; Sept. 13.
Fastening, Adjustable scythe blade. O. D. Brinser. 1,877,549; Sept. 13.
Faucet. E. G. Watrous. 1,876,810; Sept. 13.
Feed for chickens and other animals, Apparatus for the manufacture of. G. M. Chapin and H. H. Goff. 1,877,266; Sept. 13.
Feeding apparatus. A. Winkler and M. Dunnebier. 1,877,107; Sept. 13.
Feeding mechanism. H. J. and J. B. Brubaker. 1,876,847; Sept. 13.
Fence, Highway guard. A. J. Stanziale. 1,877,074; Sept. 13.
Festooning apparatus. L. S. Rosener. 1,876,761; Sept. 13.
Fibers, Manufacture of artificial. H. Fink and P. Esselmann. 1,876,890; Sept. 13.
File cutting machine. H. G. Smith. 1,877,071; Sept. 13.
Filler, Grease gun. J. L. Beaton. 1,877,381; Sept. 13.
Film hanger. G. D. Pappajion. 1,877,036; Sept. 13.
Film, Noninflammable photographic. L. Weston. 1,877,212; Sept. 13.
Films, Device for projecting color and monochrome. A Herault. 1,877,725; Sept. 13.
Filter tubes, Device for cleaning. H. H. Cannon. 1,877,723; Sept. 13.
Filter, Tubular. H. H. Cannon. 1,877,157; Sept. 13.
Filtering or fine straining apparatus for liquids. F. C. Fulcher. 1,877,449–51; Sept. 13.
Finger ring. G. A. Armstrong. 1,877,442; Sept. 13.
Fire extinguishing method. L. J. Dugas. 1,877,649; Sept. 13.
Firing key. J. B. Feder. 1,876,887; Sept. 13.
Fishing apparatus. S. A. Kornswect. 1,876,692; Sept. 13.
Fitting. A. Ten Brook. 1,877,433; Sept. 13.
Flashing, Building. G. W. Orth. 1,877,425; Sept. 13.
Floor surfacer. C. J. Olson. 1,877,031; Sept. 13.
Flooring. P. Hofer. 1,877,508; Sept. 13.
Flue or vent. J. A. Stadtfeld. 1,876,783; Sept. 13.
Flue system for retort coke ovens. J. Becker. 1,876,593; Sept. 13.
Fluid actuated brake. W. A. Eaton. 1,876,882; Sept. 13.
Fluid pressure brake. A. Teves. 1,877,081; Sept. 13.
Fluid pressure systems, Automatic means for regulating. D. R. Koonts. 1,876,964; Sept. 13.
Flying cutter. F. C. Biggert, jr. 1,876,838; Sept. 13.
Flying cutter. J. A. Smitmans. 1,877,072; Sept. 13.
Flying machine. E. Burkhart. 1,877,474; Sept. 13.
Flying machine. F. A. Meng. 1,877,003; Sept. 13.
Foldable stand. G. Lidscen. 1,876,983; Sept. 13.
Folder for antisqueak material. F. B. McIlroy. 1,877,001; Sept. 13.
Folding table. C. M. Flink. 1,877,054; Sept. 13.
Folding table. C. H. McCaslin. 1,876,999; Sept. 13.
Food products. P. H. Bolton. 1,871,641; Sept. 13.
Footwear. M. Gustin. 1,877,724; Sept. 13.
Form for drying hosiery and the like. J. W. Dennis. 1,876,631–2; Sept. 13.
Form-holding device for caps or like headwear. A. Gagne. 1,877,452; Sept. 13.
Form roller lifting device for Kelly printing presses. A. M. Finver. 1,876,891; Sept. 13.
Fountain: *See*—
Poultry fountain.
4-nitroso-1-phenyl-2.3-dimethyl-5-pyrazolone, Reduction of. L. Freedman and A. E. Sherndal. 1,877,166; Sept. 13.
Fractionators, Improvement in. F. Van Ackeren. 1,876,800; Sept. 13.
Frame: *See*—
Gill drawing frame. Truck side frame.
Lamp shade frame. Window and door frame.
Frame for pictures, portraits and the like. P. Massobrio and E. Capello. 1,877,189; Sept. 13.
Frequency changer. L. Levy. 1,877,409; Sept. 13.
Front for display devices. J. Knoche. Des. 87,751; Sept. 13.
Fruit packing device. C. Lindley, jr. 1,877,479; Sept. 13.
Fuel control apparatus. L. L. Cunningham. 1,877,275; Sept. 13.
Fuel injection device. J. H. Lentell, jr. 1,876,980; Sept. 13.
Fuel, Process of and apparatus for the combustion of solid. H. B. Cannon. 1,877,224; Sept. 13.
Fuel to internal combustion engines, Supplying. L. Durr. 1,877,163; Sept. 13.

Fuller block. E. Walter and E. E. Koehler. 1,876,808; Sept. 13.
Furnace: *See*—
Annealing furnace.
Furnace. F. H. Daniels. 1,876,623; Sept. 13.
Furnace walls and linings, Making and patching. H. Neuhauss. 1,876,734; Sept. 13.
Furniture, Metal. R. H. Soper. 1,877,469; Sept. 13.
Fuse clip. A. Alsaker and J. Markese. 1,876,536; Sept. 13.
Fuse puller. H. C. Fiske. 1,876,892; Sept. 13.
Galvanometer. G. Ising. 1,877,243; Sept. 13.
Game. G. S. Griner. 1,877,660; Sept. 13.
Game apparatus, Coin controlled. M. Horwitz. Des. 87,748; Sept. 13.
Game device. D. C. Rockola. Des. 87,759; Sept. 13.
Game device, Whirlpool. C. C. De Pew. 1,877,230; Sept. 13.
Game, Military. W. R. Weaver. 1,877,154; Sept. 13.
Game table. L. B. McCormick. 1,877,190; Sept. 13.
Garage, Mechanical. E. Geiger. 1,877,293; Sept. 13.
Garment. H. Garfinkel. 1,877,745; Sept. 13.
Garment hanger. H. L. Boe. 1,877,550; Sept. 13.
Gas balance, Differential. A. B. Cunningham. 1,877,738; Sept. 13.
Gas burner. C. Moor. 1,877,357; Sept. 13.
Gas detector and signal device. L. W. MacCain and E. F. Webb. 1,876,706; Sept. 13.
Gas discharge light. G. Claude. 1,877,716; Sept. 13.
Gas producer. J. Van Ackeren. 1, 876,801; Sept. 13.
Gas, Producing carbureted water. H. M. Kopp. 1,876 965; Sept. 13.
Gas purification. E. O. Barstow and G. F. Dressel. 1,876,551; Sept. 13.
Gases of internal combustion engines, Apparatus for treating the exhaust. B. Gordon. 1,877,523; Sept. 13.
Gate for coke wharves. C. E. Underwood and C. E. Lehr. 1,876,799; Sept. 13.
Gate for material conveying chutes. R. W. Kaltenbach. 1,876,685; Sept. 13.
Gate for race tracks, Stall. A. E. Birtwistle and A. Roeser. 1,876,839; Sept. 13.
Gate latching device. J. B. Clay. 1,876,856; Sept. 13.
Gauge: *See*—
Sight gauge.
Gear device, Change. G. Blackstock. 1,877,383; Sept. 13.
Gear for motor vehicles, Change speed. H. Austin. 1,876,587; Sept. 13.
Gear, Railway draft. W. R. Hewitt. 1,877,399; Sept. 13.
Gear, Speed reducing. C. M. Schaeffer. 1,877,695; Sept. 13.
Gear, Starting. E. A. Doub. 1,876,642; Sept. 13.
Gear, Steering. N. Trbojevich. 1,876,795; Sept. 13.
Gear, Vehicle running. F. M. Reid. 1,877,052; Sept. 13.
Gearing, Change speed. M. Wagner. 1,874,736; Sept. 13.
Gears, Cutting. E. C. Head. 1,877,173; Sept. 13.
Gears, Method of and apparatus for grinding curved tooth. A. L. Stewart. 1,877,205; Sept. 13.
Generator: *See*—
Oscillation generator. Steam generator.
Signal generator.
Gill-drawing frame. W. Holdsworth. 1,876,936; Sept. 13.
Glass channel remover. C. J. Thoman and W. Westcott. 1,877,620; Sept. 13.
Glass cutting apparatus. G. Chiotti. 1,876,612; Sept. 13.
Glass, Melting. F. J. Bulask. 1,877,714; Sept. 13.
Glasses made of transparent elastic material. Manufacturing process of watch. E. Morf. 1,877,358; Sept. 13.
Globe structure, Geographical. W. A. Hanses. 1,877,306; Sept. 13.
Goblet. M. A. Smith. Des. 87,761; Sept. 13.
Grader attachment, Road. C. B. Scheffold. 1,877,365; Sept. 13.
Grate, Chain. H. B. Holt. 1,877,320; Sept. 13.
Grinder, Hydraulic. S. Einstein and H. R. Isler. 1,877,500; Sept. 13.
Grinder, Valve. N. F. McNaugh and E. H. Peterson. 1,877,348; Sept. 13.
Grinding. J. H. McCartney. 1,877,517; Sept. 13.
Grinding machine. H. M. Albee. 1,877,546; Sept. 13.
Grinding machine. F. S. Haas and B. A. Kearns. 1,877,505; Sept. 13.
Grinding machine. C. G. Liljeberg. 1,877,515; Sept. 13.
Grinding machinery. R. E. W. Harrison, F. S. Haas, and G. W. Binns. 1,877,572; Sept. 13.
Grinding mechanism. F. J. Jeschke. 1,877,328; Sept. 13.
Grinding or cutting machine. P. J. Fobert and A. J. Ducharme. 1,876,899; Sept. 13.
Guiding means for pipe couplings. S. V. Dillon. 1,876,638; Sept. 13.
Gun. G. M. Barnes. 1,877,118; Sept. 13.
Gun, Gas. J. Williams, jr. 1,877,710; Sept. 13.
Gun, Spray. P. S. Case. 1,876,610; Sept. 13.
Gunstock for pistols, Removable. L. J. Munson. 1,877,016; Sept. 13.
Gutter and hanger therefor, Roof. G. A. Belding. 1,876,553; Sept. 13.
Hair clipper. M. Andis. 1,877,749; Sept. 13.
Hair dresser's comb. A. T. Schelwer. 1,877,538; Sept. 13.
Hair, Method and apparatus for treating. E. Heinicke. 1,877,662; Sept. 13.
Hair, Permanently waving. E. De Baerdemaeker. 1,876,868; Sept. 13.
Hair waving apparatus and method. T. I. Moseley. 1,877,191; Sept. 13.
Halogen derivatives of anthanthrones. M. A. Kunz, K. Koeberle, and E. Berthold. 1,876,974; Sept. 13.
Halogen derivatives of n-dihydro-1.2.2'.1'-anthraquinone-azine, Improving. P. Nawiasky. 1,877,020; Sept. 13.
Hammer crusher. G. W. Borton. 1,877,121; Sept. 13.
Hammer, Mechanical. R. Holle. 1,877,462; Sept. 13.
Hand brake. J. Harris. 1,877,308; Sept. 13.
Hand brake. G. A. Johnson and S. B. Haseltine. 1,877,330; Sept. 13.
Hand brake. W. H. Miner. 1,877,354; Sept. 13.
Hand brake. J. F. O'Connor. 1,877,027; Sept. 13.
Handle: *See*—
D-handle. Hose nozzle handle.
Handle assembly. H. C. Field. 1,877,289; Sept. 13.
Handle box. M. Lichter. 1,876,982; Sept. 13.
Handle grip. S. W. Huston. 1,877,464; Sept. 13.
Handle structure, Mop. W. Evans. 1,877,125; Sept. 13.
Hanger: *See*—
Coat hanger. Garment hanger.
Film hanger. Tube hanger.
Hanger. S. G. Malby. 1,877,343; Sept. 13.
Hanger for containing an insect repelling material, Chambered clothes. H. Diskin. 1,877,283; Sept. 13.
Hanger for lighting fixtures, Globe. A. R. Rheinberger. 1,877,591; Sept. 13.
Harvester. W. F. Helmkamp. 1,877,313; Sept. 13.
Harvester. W. F. MacGregor. 1,877,519; Sept. 13.
Harvester-thrasher, Combination. W. F. MacGregor. 1,877,518; Sept. 13.
Harvester-thrasher, Combination. W. F. MacGregor. 1,877,520; Sept. 13.
Harvesters, Stalk splitting attachment for corn. O. F. Carlson. 1,876,567; Sept. 13.
Hatch, Ship's. E. Perkins. 1,877,361; Sept. 13.
Head for beading machines. K. P. Swanson. 1,877,431; Sept. 13.
Heat exchange article. G. Shoop. 1,877,068; Sept. 13.
Heat exchanger, Concealed radiation. C. M. Ashley. 1,876,547; Sept. 13.
Heat exchanges, Method and apparatus for. S. H. Hulse. 1,877,322; Sept. 13.
Heat to the coverings of electrically conductive cores, Applying. F. M. Potter. 1,876,745; Sept. 13.
Heater: *See*—
Air heater. Electric heater.
Deaerating water heater.
Heater for aeroplanes, Wing. W. H. Crossland. 1,876,620; Sept. 13.
Heating apparatus. A. E. Munkel. 1,877,421; Sept. 13.
Heel molding method. J. O. Goodwin. 1,877,298; Sept. 13.
Hemorrhoids, Treating. S. C. Lilly. 1,876,703; Sept. 13.
Hobs, Method and apparatus for relieving. E. C. Head. 1,877,174; Sept. 13.
Hoist. J. P. Johnson. 1,876,954; Sept. 13.
Holder, Article. L. Del Papa. 1,877,299; Sept. 13.
Holder, Bell hammer. H. Dollhopf. 1,876,870; Sept. 13.
Holder, Electrode. W. F. Stoody. 1,876,786; Sept. 13.
Holder for plant soil. W. S. Acuff, jr. 1,876,571; Sept. 13.
Holder for writing instruments. J. W. Fitzgerald. 1,877,570; Sept. 13.
Holder, License plate. F. Stephenson. 1,877,075; Sept. 13.
Holder, Safety solder-supporting. R. McClarkey and L. C. Huffman. 1,877,727; Sept. 13.
Holster. E. E. Clark. 1,876,613; Sept. 13.
Hood for cigar and cigarette lighters, Protecting. W. W. Sackett. 1,877,362; Sept. 13.
Hood handle and carburetor air intake. J. R. Holmes. 1,876,679; Sept. 13.
Hood, Welder's. J. S. Norton. 1,877,024; Sept. 13.
Hook for parachute harness, Snap. M. H. St. Clair. 1,877,702; Sept. 13.
Hose clamp. H. E. Disler and E. E. Deacon. 1,876,639; Sept. 13.
Hose nozzle handle. D. McPherson. 1,876,718; Sept. 13.
Hub for cultivator disks, Dirtproof. R. R. Rea. 1,876,749; Sept. 13.
Hull of ships. J. W. Goodyear. 1,877,235; Sept. 13.
Humidifier. C. H. Kelsea and C. I. Geddes. 1,876,959; Sept. 13.
Humidor and advertising device, Combination. L. Unterberger. 1,877,436; Sept. 13.
Hydraulic brake. De F. Kellogg. 1,877,184; Sept. 13.
Hydrocarbons, Apparatus for cracking and distilling. J. H. Anderson. 1,877,634; Sept. 13.
Hydrocarbons, Sulphonating higher paraffin. K. Keller. 1,876,957; Sept. 13.
Hydrogenation and dehydrogenation, Simultaneous. W. Schoeller, H. Jordan, and W. Linde. 1,877,203; Sept. 13.
Hydroxy-thionaphthenes containing a pyrazole ring. R. Herz, M. Schubert, and W. Brunner. 1,876,930; Sept. 13.
Ice server. R. Ray. 1,877,050; Sept. 13.
Impact indicating apparatus. F. L. Fox. 1,876,657; Sept. 13.
Improvements relating to summation means. S. James. 1,876,949; Sept. 13.

Incinerating, Method of. C. C. Parker. 1,877,580; Sept. 13.
Incubator, Electric. A. V. Rackstraw. 1,877,585; Sept. 13.
Indicator: *See*—
Direction indicator. Vibration indicator.
Recording drift indicator.
Indicator for automobiles, Liquid level. W. H. Muzzy. 1,876,730; Sept. 13.
Inflow-controlling and fluid-discharge means, Combination. T. P. Gardner. 1,877,292; Sept. 13.
Ingots, Handling. L. S. Rosener. 1,877,535; Sept. 13.
Injector controlling means. I. P. Pedrick. 1,877,624; Sept. 13.
Instrument board. J. K. Northrop and O. B. Clark. 1,877,021; Sept. 13.
Insulating apparatus. C. E. Bills. 1,877,382; Sept. 13.
Insulator. A. O. Austin. 1,876,578–9; Sept. 13.
Insulator. A. O. Austin. 1,876,583; Sept. 13.
Insulator. D. B. Palmer. 1,877,035; Sept. 13.
Insulator cap. H. Van Rosen. 1,877,594; Sept. 13.
Insulator, High tension. J. F. Scheid. 1,877,630; Sept. 13.
Interlocking mechanism. J. Swinney. 1,877,747; Sept. 13.
Interlocking system for railroads. E. C. Larry. 1,877,333; Sept. 13.
Internal combustion engine. B. Read. 1,877,051; Sept. 13.
Internal combustion engine. C. H. Sauvan. 1,876,764; Sept. 13.
Internal combustion engine, Uniform compression. T. R. Wilson. Re18,595; Sept. 13.
Internal combustion rotary engine. R. J. Meyer. 1,877,250; Sept. 13.
Invalids, Apparatus for lifting. E. C. Bancroft. 1,876,832; Sept. 13.
Ironing machine. E. C. Peter, H. C. Schuknecht, and Raymond D. Schnoor. 1,877,687; Sept. 13.
Isodibenzanthrones, Production of nitrogenous. M. A. Kunz and K. Koeberle. 1,877,741; Sept. 13.
Jack: *See*—
Automobile or vehicle greasing jack.
Jar. I. Cordy. Des. 87,770; Sept. 13.
Jar closure. A. C. Spahn. 1,877,258; Sept. 13.
Joint for cables and other devices. A. O. Austin. 1,876,585; Sept. 13.
Joint for elliptical springs. R. W. Hastings and M. Harris. 1,876,924; Sept. 13.
Joint for insulators. A. O. Austin. 1,876,586; Sept. 13.
Journal lubricator. C. W. Akers and W. H. Foster. 1,877,683; Sept. 13.
Key: *See*—
Firing key.
Keyboard Instrument. E. Moor, C. Bechstein, jr., and H. J. Gravenstein. 1,877,526; Sept. 13.
Keyhole guard for locks. G. B. Ehrmann. 1,876,646; Sept. 13.
Key mechanism for adding machines, Error. T. O. Mehan. 1,876,719; Sept. 13.
Kitchen chair, Mobile. H. Lee. 1,876,700; Sept. 13.
Kneeling bench. J. Silverman. 1,877,602; Sept. 13.
Knife, Culinary. G. Webster. 1,877,211; Sept. 13.
Knitting apparatus. C. Bomhoff. 1,877,492; Sept. 13.
Knitting machine. M. C. Miller. 1,876,722; Sept. 13.
Knitting machine. M. C. Miller. 1,877,573; Sept. 13.
Knitting machine, Circular. T. C. Bromley. 1,877,220; Sept. 13.
Knitting machines, Yarn-carrier-controlling means for. D. J. Werfelman. 1,877,262; Sept. 13.
Knockdown tank. K. J. Hendricks. 1,877,507; Sept. 13.
Lamp and horn, Combined. A. J. Chanter. Des. 87,789; Sept. 13.
Lamp, Arc. E. S. Humphreys. 1,877,242; Sept. 13.
Lamp body or similar article, Hanging. G. E. McFadden. Des. 87,754; Sept. 13.
Lamp changing mechanism for beacons. C. H. Bissell. 1,876,840; Sept. 13.
Lamp, Electric. H. A. Douglas. 1,876,873; Sept. 13.
Lamp, Inspection. A. L. Stevens. 1,877,077; Sept. 13.
Lamp, Projector. R. A. Glaser. 1,877,657; Sept. 13.
Lamp, Reflecting electric. H. A. Douglas. 1,876,877; Sept. 13.
Lamp shade frame. A. Burke. 1,877,552; Sept. 13.
Lamp, Vehicle auxiliary. H. von Stumm. 1,876,804; Sept. 13.
Last and stand, Iron. T. Rendle. 1,877,253; Sept. 13.
Latch, Door. B. S. Floraday. 1,876,655; Sept. 13.
Lathe, Pattern turning. C. MacLeod. 1,876,992; Sept. 13.
Lathe, Veneer. R. C. Moore. 1,877,013; Sept. 13.
Lead refining. M. G. Corson. 1,876,617; Sept. 13.
Leather, Treating. P. A. Blatz. 1,877,119; Sept. 13.
Lecture and classroom chair, Adjustable. A. R. Van Nuys. 1,876,802; Sept. 13.
Leer, Glass annealing. E. B. LeMare. 1,877,674; Sept. 13.
Lens-mount. W. R. Uhlemann. 1,877,089; Sept. 13.
Letters of initial rings or the like, Attaching means for interchangeable. C. Birnbaum. 1,877,750; Sept. 13.
Level. G. J. Gordon. 1,877,455; Sept. 13.
Lever, Control. E. S. MacPherson. 1,876,709; Sept. 13.
Lift apparatus, Pneumatic. H. T. Mustonen. 1,877,683; Sept. 13.
Lifter: *See*—
Stalk lifter.
Light: *See*—
Back-up light. Navigation light.
Gas discharge light.
Light effects, Producing normal. A. B. Hurley. 1,877,512; Sept. 13.
Light projecting apparatus. A. Y. Dodge. 1,877,284; Sept. 13.
Lighter and dispenser, Cigarette. N. Arvidsson. 1,877,472; Sept. 13.
Lime hydrator. H. Miscampbell. 1,877,010; Sept. 13.
Liquid depth indicating device. W. E. Bandemer. 1,876,590; Sept. 13.
Liquid dispensing. G. W. Stedwell. 1,876,784; Sept. 13.
Liquid distributing apparatus. E. V. Harlow. 1,876,669; Sept. 13.
Liquid prism. D. B. Gardner. 1,877,744; Sept. 13.
Loading device. S. W. Farnham. 1,877,286; Sept. 13.
Lock: *See*—
Catch lock. Nut lock.
Coach lock. Vehicle hood lock.
Doorknob lock. Windowlock.
Lock. E. N. Jacobi. 1,877,404; Sept. 13.
Locking attachment, Gas valve. J. W. Platt. 1,877,529; Sept. 13.
Locking mechanism. E. Ellingson. 1,876,885; Sept. 13.
Locomotive and superheater therefor. E. L. Schellens. 1,876,766; Sept. 13.
Loop, Shielded. L. O. Marsteller. 1,877,346; Sept. 13.
Loud speaker. L. D. Trefry. 1,877,085; Sept. 13.
Loud speaking reproducer. R. F. George. 1,877,294; Sept. 13.
Lubricant conducting means. C. B. Jahnke. 1,876,948; Sept. 13.
Lubricating high temperature equipment for cooking food. E. J. Bohnen. 1,877,491; Sept. 13.
Lubricating system. R. M. Cutts. 1,877,124; Sept. 13.
Lubricating system. E. S. MacPherson. 1,876,707; Sept. 13.
Lubricating system. G. R. Siegrist. 1,877,070; Sept. 13.
Lubricating system and product. W. V. Kidder. 1,877,668; Sept. 13.
Lubricator: *See*—
Journal lubricator.
Machine for and method of banding packages. S. Pearce. 1,877,042; Sept. 13.
Machine for continuous printing from tracings and the like. L. Petit. 1,876,741; Sept. 13.
Machine for crushing coal, stone, and similar materials. H. Martinez and R. H. Kirk. 1,877,188; Sept. 13.
Machine for dressing revolving grinding wheels. H. F. Atkins. 1,877,637; Sept. 13.
Machine for forming holes in articles. H. E. Farmer. 1,876,650; Sept. 13.
Machine for making coat hangers. W. J. Rebrig. 1,876,752; Sept. 13.
Machine for making paper cups. V. E. Heywood and R. D. Hoaglund. 1,876,931; Sept. 13.
Machine for marking soap and the like. W. O. Armstrong and J. A. Mowers. 1,876,826; Sept. 13.
Machine for painting tires and the like. A. R. Krause and A. C. Hirsch. 1,876,967; Sept. 13.
Machine for printing addresses or other matter on forms or the like. J. Krell. 1,876,969; Sept. 13.
Machine for pushing foundry molds out of their boxes. T. W. Bullock. 1,877,494; Sept. 13.
Machine for spinning rayon. C. Haase. 1,877,397; Sept. 13.
Machine for the manufacture of match boxes. L. Henninger. 1,877,239; Sept. 13.
Machine for treating pyraline envelope blanks. C. J. Gutberlet. 1,877,728; Sept. 13.
Machine for trimming bearings or the like. P. J. Fobert and A. J. Ducharme. 1,876,900; Sept. 13.
Machine for use in determining the longitude and latitude and direction of flight of an observer. G. M. Hayes. 1,877,459; Sept. 13.
Machine for wrapping pipes. D. Finley. 1,876,651; Sept. 13.
Machinery for sealing electrical coils. E. Snyder. 1,877,484; Sept. 13.
Mail box. J. R. Graham. 1,877,473; Sept. 13.
Manifold form aligning device. H. W. Lewis. 1,876,981; Sept. 13.
Marine craft. E. E. Baldwin. 1,877,380; Sept. 13.
Material. Apparatus for handling. R. T. Romine. 1,876,759; Sept. 13.
Material, Producing columns of bloated. K. Slidell and S. Q. Lee. 1,877,147; Sept. 13.
Material treating apparatus. A. L. Adrianson. 1,877,378; Sept. 13.
Materials, Apparatus for sintering roasting. G. Stein. 1,877,608; Sept. 13.
Materials of different specific gravities, Separating. T. M. Chance. 1,876,538; Sept. 13.
Materials, Separation of dry. K. C. Appleyard, C. W. H. Holmes, and I. L. Bramwell. 1,876,825; Sept. 13.
Measuring meter. R. V. Schroll. 1,877,061; Sept. 13.
Mechanism for testing ignition of automobiles. B. J. Haskins. Re18,596; Sept. 13.
Metal, Cold rolling. W. C. Coryell. 1,877,645; Sept. 13.

Metal, Method and apparatus for shipping. R. T. Romine. 1,876,758; Sept. 13.
Metal repair device for pipe lines, Wrought. J. E. Walborn. 1,877,094; Sept. 13.
Metal surfaces, Preservation of. C. A. Van Dusen and L. Haase. 1,877,208; Sept. 13.
Metallic retaining members, Apparatus for forming. J. B. Menzi. 1,877,004; Sept. 13.
Metallurgical apparatus. H. Neubauss. 1,876,782; Sept. 13.
Meter: *See*—
Electric meter. Measuring meter.
Meter construction, Gas. M. Ferrante. 1,876,889; Sept. 13.
Microphone, Electrical. S. Ruben. 1,877,483; Sept. 13.
Milling machine Vertical continuous. F. M. Davis. 1,877,560; Sept. 13.
Mirror structure, Vehicle reflecting. J. W. Wullenweber. 1,877,109; Sept. 13.
Mixer for showers, Hot and cold water. W. P. Erbes. 1,877,567; Sept. 13.
Moisture absorbing composition and making the same. G. Wifty. 1,877,374; Sept. 13.
Mold. W. A. Hyland. 1,877,328; Sept 13.
Monoaminoanthanthrones and derivatives thereof, Production of. M. A. Kunz, K. Koeberle, and W. Zerweck. 1,876,972; Sept. 13.
Monohalogen derivatives of naphthostyril and substitution products thereof, Manufacturing. W. Zerweck. 1,877,114; Sept. 13.
Mop wringer. J. G. Ross. 1,877,054; Sept. 13.
Motion study. L. L. Beck. 1,877,713; Sept. 13.
Motive devices for operating doors and the like, Mechanism for reversing. R. D. Conklin. 1,877,161; Sept. 13.
Motor: *See*—
Wind motor.
Motor. E. L. Kastler. 1,876,956; Sept. 13.
Motor. W. C. Speck and E. Barker. 1,877,701; Sept. 13.
Motor control system, Opposed. P. F. Shivers. 1,877,605; Sept. 13.
Motorcycle, Armed. A. E. Monzer. 1,876,995; Sept. 13.
Motor vehicle signal. W. C. Huffman. Des. 87,749; Sept. 13.
Motors, Parallel operation of direct current. B. D. Mickey. 1,877,681; Sept. 13.
Mounting for ornaments. F. P. Daughday. 1,876,624; Sept. 13.
Mounting for radiator shutters. A. F. Ihde. 1,877,324; Sept. 13.
Mounting for windshield cleaners, Wiper arm. H. Hueber and E. C. Horton. 1,877,321; Sept. 13.
Mounting, Motor. E. W. Wiley and G. I. Gillies. 1,876,812; Sept. 13.
Mounting, Scraper blade. G. E. Dean. 1,876,865; Sept. 13.
Mower. W. J. Coultas. 1,877,272; Sept. 13.
Mower. T. W. Paul. 1,877,578; Sept. 13.
Mower, Lawn. C. C. Klass. 1,876,963; Sept. 13.
Mower unit, Lawn. C. C. Worthington. 1,876,818; Sept. 13.
Mowing machine. B. F. Gravely. 1,876,662; Sept. 13.
Muffler. J. J. Compo. 1,876,861; Sept. 13.
Mufflers, Making. V. Oldberg and A. C. Born. 1,877,195; Sept. 13.
Multistage auxiliary switch, Unit type. F. H. Cole and M. Skau. 1,877,557; Sept. 13.
Musical box. A. Reuge. 1,876,753; Sept. 13.
Musical instrument. R. C. Hitchcock. 1,877,317; Sept. 13.
Musical instrument, Stringed. C. Bonewitz. 1,876,558; Sept. 13.
Nailing machine, Portable. W. A. Day. 1,877,162; Sept. 13.
Nailing, stapling and riveting machine, Combination. J. Cunningham. 1,876,622; Sept. 13.
Naphthostyril compounds, Manufacturing monohalogenated. H. Scheyer. 1,877,057; Sept. 13.
Napkin, Paper. T. N. Deligianes. Des. 87,740; Sept. 13.
Navigation light. V. E. Carbonara. 1,876,852; Sept. 13.
Needle assemblage, Knitting machine. A. Gagné. 1,877,503; Sept. 13.
Nitrogen-containing derivatives of dibenzpyrenquinones and preparing them. G. Krünzlein, H. Vollmann, and M. Corell. 1,876,966; Sept. 13.
Nut-lock. W. T. Burkhalter. 1,877,384; Sept. 13.
Nut lock. S. Wise. 1,877,545; Sept. 13.
Objective. C. C. Minor. 1,877,355; Sept. 13.
Oil and other products from olives, Obtaining. C. V. Zoul. 1,876,820; Sept. 13.
Oil cooling device. H. L. Elfes. 1,876,648; Sept. 13.
Oil, Refining hydrocarbon. R. I. Lewis. 1,876,702; Sept. 13.
Oiler. C. Meyer. 1,877,007; Sept. 13.
Oils, etc., Treating sulphonated. W. Seltzer. 1,876,768; Sept. 13.
Oils, Production of lubricating. D. A. Howes. 1,877,664; Sept. 13.
Opener and beverage spoon, Combination bottle. W. T. Walker. Des. 87,764; Sept. 13.
Opener for jars and bottles. G. Nathan. 1,877,019; Sept. 13.
Openings in scanning disk-multiple cardioid, Arrangements for. R. W. Armstrong. 1,877,547; Sept. 13.
Ophthalmic instrument. H. Hartinger. 1,877,238; Sept. 13.
Optical instrument. W. F. Wichart. 1,877,439; Sept. 13.
Optical system for producing photographs and projecting the same in natural colors. M. Waide. 1,876,806; Sept. 13.
Ornament for automobiles, Illuminated. L. Daugherty. 1,876,625; Sept. 13.
Oscillation generator. C. G. Suits. 1,877,703; Sept. 13.
Oven, Bake. R. Bolling. 1,876,843; Sept. 13.
Overflow control, Automatic. F. O. Johnson. 1,877,405; Sept. 13.
Overshoe. F. Könecke. 1,877,182; Sept. 13.
Overshoe, Wading. I. Teshima. 1,877,080; Sept. 13.
Packing construction. J. A. Schellack and C. J. Maynard. 1,877,696; Sept. 13.
Packing for internal combustion engines, Piston. L. C. Marshall. 1,877,413; Sept. 13.
Packing material, Improved thermo. C. Gottwald. 1,877,396; Sept. 13.
Packing, Piston. L. C. Marshall. 1,877,414; Sept. 13.
Packing, Renovating journal box. E. S. Pearce. 1,877,755; Sept. 13.
Paddle and base for washer logs. W. A. Fye. 1,877,167; Sept. 13.
Padlock. J. W. Fitz Gerald. 1,876,893; Sept. 13.
Paints, lacquers or other liquids, Device for spraying. A. H. Downs. 1,876,643–4; Sept. 13.
Panel for the walls and doors of refrigerators and cold storage rooms. G. Lovell and G. D. Lovell. 1,877,336; Sept. 13.
Paper bodied can. H. C. Hicks. 1,876,932; Sept. 13.
Paper cup. H. Carew. 1,877,158; Sept. 13.
Paper feeder. M. B. Bushnell. 1,876,606; Sept. 13.
Paper folding machine. L. H. Morin. 1,877,359; Sept. 13.
Paper making machine. C. Büchner. 1,876,563; Sept. 13.
Paper trimmer. W. D. Forbes. 1,876,902; Sept. 13.
Parachute, Air-vent. W. L. Cunningham. 1,877,227; Sept. 13.
Paraffin device for treating threads. A. Hoffmann. 1,877,663; Sept. 13.
Partition sheet for binders. A. M. Martin. 1,876,998; Sept. 13.
Paten. W. H. Achurch. Des. 87,737; Sept. 13.
Pedal depressing means for brake testers. A. B. Seppmann. 1,877,367; Sept. 13.
Pencil. G. Larsen. 1,876,698; Sept. 13.
Petroleum distillates with aqueous phenol and recovery of the same, Purifying. R. K. Stratford and H. H. Moor. 1,877,614; Sept. 13.
Phonograph, Multiple turntable. M. H. Loughridge. 1,877,625; Sept. 13.
Phonograph record. E. Sturgis, jr. 1,877,079; Sept. 13.
Photo sensitive device. J. W. Dawson. 1,877,279; Sept. 13.
Photographic baths, Method of and apparatus for treating. C. E. Balassa. 1,876,830; Sept. 13.
Photographic print handling apparatus. J. S. Greene. 1,877,659; Sept. 13.
Picture apparatus, Motion. R. S. Bowen and J. E. Bowen. 1,876,845; Sept. 13.
Picture projector, Talking. E. J. Hadley. 1,876,668; Sept. 13.
Pictures or scenes from recorded impulses, Reproducing. R. T. Friebus. 1,877,447; Sept. 13.
Pile fabric. A. F. McCollum and T. H. Rush. 1,877,679; Sept. 13.
Pile structure and making and using the same. O. E. Young. 1,877,113; Sept. 13.
Pilger rolling process and roll for performing same. L. Klein. 1,876,691; Sept. 13.
Pillow. W. E. Bawden. 1,876,591; Sept. 13.
Pins, Making wrist. F. H. Banner. 1,876,550; Sept. 13.
Pipe cut-off machine. J. M. Readey. 1,877,198; Sept. 13.
Pipe, Manufacture of welded. J. L. Anderson. 1,877,621; Sept. 13.
Pipe testing machine. W. T. Mahla. 1,876,711; Sept. 13.
Pipe unit adaptable to the drilling and pumping arts, Multiple. F. H. Davis and F. F. Davis. 1,876,627; Sept. 13.
Pipe wrapping machine. L. S. Rosener. 1,876,760; Sept. 13.
Piston. O. C. Berry. 1,877,490; Sept. 13.
Piston and ring assembly. J. Williams. 1,877,106; Sept. 13.
Piston for internal combustion engines. F. Gosslau. 1,876,917; Sept. 13.
Piston ring. F. P. Groom. 1,876,919; Sept. 13.
Piston ring structure. J. G. Hodge. 1,877,461; Sept. 13.
Pistons, Treating. C. S. C. Read. 1,877,530; Sept. 13.
Pitch propeller, Adjustable. S. T. Carter. 1,876,609; Sept. 13.
Pitch propeller mechanism, Variable. J. R. Zipay. 1,877,115; Sept. 13.
Plant compressing and binding device. C. Brimer. 1,877,548; Sept. 13.
Plant setter. E. L. Masters. 1,877,415; Sept. 13.
Plant stand. W. S. Washburn. 1,877,098; Sept. 13.
Plants, Device for watering. G. W. Ferguson. 1,876,888; Sept. 13.
Plaster backing and making it, Nonsoiling. G. S. Mathey. 1,877,344; Sept. 13.
Plaster board. F. M. Venzie. 1,877,209; Sept. 13.

Plastic and making same, Fusible. C. Ellis. 1,876,886; Sept. 13.
Platform, Dumping. L. Shadle. 1,877,066; Sept. 13.
Platinum, Recovering. A. J. Hull. 1,876,948; Sept. 13;
Plow plane. E. K. Spyker. 1,876,782; Sept. 13.
Plug, Electric. F. Kuhn and L. H. Thomas. 1,876,695; Sept. 13.
Plug, External expulsion fuse. J. E. Sumpter. 1,877,618; Sept. 13.
Plug for automobile signaling devices, Attachment. F. J. Jaros and E. T. Jaros. 1,876,951; Sept. 13.
Plug, Fusible attachment. E. Adams. 1,876,823; Sept. 13.
Plug, Pipe. J. R. Jahn and H. S. Duey. 1,876,947; Sept. 13.
Plywood board and making the same. T. Satow. 1,877,202; Sept. 13.
Pneumatic wheel. A. J. Musselman. 1,877,360; Sept. 13.
Pocket, Reenforced trousers. M. L. Heath. 1,876,925; Sept. 13.
Poles, Method of and apparatus for changing over power-line. G. Hultman. 1,877,241; Sept. 13.
Polymers of acetylene, Making. W. S. Calcott and F. B. Downing. 1,876,857; Sept. 13.
Poultry fountain. D. B. Tolley. 1,877,084; Sept. 13.
Powder, Delay. G. G. Hale. 1,877,127; Sept. 13.
Powder for preventing battery post corrosion. F. L. Schubring. 1,877,062; Sept. 13.
Power guide roller. E. Silen. 1,876,773; Sept. 13.
Power presses, Operating means for. W. G. Humphrey. 1,876,944; Sept. 13.
Press: *See*—
Bead strip attaching press.
Press. J. R. Fleming and E. M. Winegar. 1,876,896; Sept. 13.
Pressing machine. E. Davis. 1,877,453; Sept. 13.
Pressing machine element construction for garment and laundry pressing machine. E. Davis. 1,876,626; Sept. 13.
Pressing machine, High pressure and low pressure. E. Davis. 1,877,752; Sept. 13.
Pressure actuated switch. W. C. Heath. 1,876,926; Sept. 13.
Projectile, Hand propelled. H. Wayte. 1,877,100; Sept. 13.
Projectiles, Apparatus for the discharge of. J. A. Albisu. 1,877,215; Sept. 13.
Propeller. S. T. Carter. 1,876,608; Sept. 13.
Protecting means for connecting devices, Making. G. H. Merrill. 1,876,720; Sept. 13.
Protection against fire, Apparatus for. E. Tyden. 1,877,088; Sept. 13.
Protective relay system. S. L. Goldsborough. 1,877,168; Sept. 13.
Pull for slide fastener. A. E. Carlile. Des. 87,738; Sept. 13.
Puller: *See*—
Fuse puller.
Puller. G. W. Nickerson. 1,877,684; Sept. 13.
Pulp screen, Rotary. T. O'Connor. 1,877,030; Sept. 13.
Pump. E. Benedek. 1,876,833; Sept. 13.
Pump. H. Strom. 1,877,617; Sept. 13.
Pump construction. H. Wolf. 1,877,711; Sept. 13.
Pump, Fuel. F. Gosslau. 1,876,916; Sept. 13.
Pump, High pressure. J. L. Mauldin. 1,877,521; Sept. 13.
Pump, Rotary. P. C. Petersen. 1,877,688; Sept. 13.
Pump, Traveling tube. J. A. Yerkes and R. H. Lemmon. 1,877,112; Sept. 13.
Pump, Variable volume. H. F. Vickers. 1,877,091; Sept. 13.
Quantity regulation, Multiple. G. K. O'Connor. 1,877 576; Sept. 13.
Quills, Making. S. G. Malby. 1,877,342; Sept. 13.
Racket for games and the manufacture thereof. R. J. Nash. 1,877,018; Sept. 13.
Radiator. C. W. Brabbée. 1,876,601; Sept. 13.
Radiator. A. B. Modine. 1,877,012; Sept. 13.
Radiator crank box. A. F. Ihde. 1,877,326; Sept. 13.
Radio apparatus. D. F. Asbury. 1,876,827; Sept. 13.
Radio apparatus. W. E. Bruce. 1,877,551; Sept. 13.
Radiocabinet. E. L. Combs. Des. 87,769; Sept. 13.
Radio circuit. T. D. Thompson. 1,876,793; Sept. 13.
Radio system and method. G. G. Kruesi. 1,876,694; Sept. 13.
Radio transmitter. L. A. Hyland. 1,877,132; Sept. 13.
Radio tuning apparatus. L. F. Curtis and F. S. Coe. 1,877,228; Sept. 13.
Rail cleaner. J. F. Mullen, jr. 1,876,728; Sept. 13.
Rail contactor, Track. J. W. Livingston. 1,877,184; Sept. 13.
Railway draft rigging. H. J. Lounsbury. 1,877,335; Sept. 13.
Railway draft rigging. J. F. O'Connor. 1,877,026; Sept. 13.
Ray treatment of vegetation, Apparatus for. F. W. Opp. 1,876,737; Sept. 13.
Rayon and the dyed material thus obtained, Dyeing viscose. R. Brightman. 1,876,560; Sept. 13.
Razor blade. B. M. Sylvan. 1,877,149; Sept. 13.
Razor, Magazine. O. V. Rodrigues. 1,877,429; Sept. 13.
Razor, Safety. A. Cesario. 1,876,570; Sept. 13.
Razor, Safety. H. J. Gaisman. 1,876,906; Sept. 13.
Razor, Safety. R. E. Thompson. 1,877,082; Sept. 13.
Reactions continuously in the liquid phase under increased pressure, Apparatus for carrying out. K. H. Saunders. 1,877,145; Sept. 13.
Receptacle, Continuous contact. E. C. Whiting. 1,877,103; Sept. 13.
Receptacle, Refuse. E. Wattmann. 1,877,099; Sept. 13.
Recording drift, Indicator. A. C. McHugh and H. F. Rasneor. 1,877,249; Sept. 13.
Recuperator construction. F. G. Schwalbe. 1,877,599; Sept. 13.
Reel: *See*—
Drying reel. Winding reel.
Refrigeration. J. G. Ruckelshaus and N. W. Kempf. 1,877,536; Sept. 13.
Refrigerative apparatus. D. H. Killeffer. 1,877,181; Sept. 13.
Refrigerating apparatus. T. D. Montee. 1,877,143; Sept. 13.
Refrigerating apparatus and method. J W. Martin, jr. 1,877,187; Sept. 13.
Refrigerator. S. Gordon. 1,876,915; Sept. 13.
Refrigerator. R. E. Ottenheimer. 1,877,685; Sept. 13.
Refrigerator, Mechanical. M. Davis. 1,877,390; Sept. 13.
Register for heating plants. J. J. Burgess. 1,876,850; Sept. 13.
Regulator: *See*—
Window regulator.
Regulator for rotary compressors, Cooling water. J. Mattmann. 1,877,345; Sept. 13.
Relay, Electrical. S. C. Osborne. 1,877,480; Sept. 13.
Relay, Electromagnetic. H. B. Taylor. 1,877,619; Sept. 13.
Relay element, High-speed directional. S. L. Goldsborough. 1,877,454; Sept. 13.
Remote control system. C. Antoniono. 1,877,635; Sept. 13.
Resin and making same, Improved carbohydrate-phenol. J. V. Meigs. 1,877,417; Sept. 13.
Resin esters and producing, Hydrogenated. I. W. Humphrey. 1,877,179; Sept. 13.
Resinous composition and making same. R. Hill and E. E. Walker. 1,877,130; Sept. 13.
Resistance device. S. Ruben. 1,877,482; Sept. 13.
Resistance measuring apparatus. C. A. Anderson. 1,877,216; Sept. 13.
Resistance unit. A. Hall. 1,876,921; Sept. 13.
Resistor unit. G. E. Megow. 1,877,352; Sept. 13.
Retort for mineral oils. J. L. Taylor and J. F. Taple. 1,876,789; Sept. 13.
Rim, Demountable. L. J. Krebs. 1,876,968; Sept. 13.
Rim rolling machine. T. F. Rainsford. 1,876,747; Sept. 13.
Ring: *See*—
Finger ring. Piston ring.
Road building apparatus. J. M. Heitzel. 1,876,673; Sept. 13.
Road resurfacing apparatus. R. E. Palmer. 1,877,577; Sept. 13.
Rod-weeder. C. H. Erwin. 1,877,652; Sept. 13.
Roller: *See*—
Power guide roller.
Roller construction, Curtain. T. W. Holt and J. F. Levan. 1,876,939; Sept. 13.
Roof, Sheet metal. G. L. Bennett. 1,876,597; Sept. 13.
Rotary member for forming gears. E. Wildhaber. 1,877,104; Sept. 13.
Rubber articles, Making. E. W. B. Owen. 1,877,426; Sept. 13.
Rubber articles, Method and mold for molding hollow. J. A. Law. 1,877,673; Sept. 13.
Rubber, Manufacture of gassed or sponge. E. J. Moran. 1,877,527; Sept. 13.
Rubber threads or strips, Apparatus for forming. F. W. Bommer and C. E. Clarke. 1,876,600; Sept. 13.
Ruler for use by draftsmen and others in drawing. D. W. B. Kurtz, jr. 1,877,341; Sept. 13.
Safe. C. F. Wolters. Des. 87,772; Sept. 13.
Safe, Match. J. Erl and C. J. Hoffman. 1,877,568; Sept. 13.
Salicylic ester carbonates, Making. E. F. Grether. 1,877,305; Sept. 13.
Sand blast apparatus. D. S. Sammis. 1,877,255; Sept. 13.
Sandal. H. Topoozian. 1,877,432; Sept. 13.
Sanding apparatus. A. T. Cowan. 1,877,475; Sept. 13.
Sash, Adjustable. J. S. Deats. 1,877,280; Sept. 13.
Sash holding device. H. G. Kimbro. 1,877,465; Sept. 13.
Sashes, Operating means for ventilating. C. H. Hucke. 1,876,941–2; Sept. 13.
Sausage rolls and apparatus for use therewith, Making. J. U. Lemmon, jr. 1,876,701; Sept. 13.
Saw. E. W. Hutchings. 1,876,945; Sept. 13.
Saw clamp. J. A. Waller. 1,877,096; Sept. 13.
Saw, Scroll. H. E. Tautz. 1,877,705; Sept. 13.
Scale and preventing the formation thereof, Removing boiler. H. H. Daum. 1,877,389; Sept. 13.
Scale structure. H. W. Schultz. 1,877,064; Sept. 13.
Screenings burner. J. C. Woodman. 1,877,214; Sept. 13.
Screen: *See*—
Pulp screen. Windshield screen.
Window screen.
Screens, Manufacture of. J. Heidenhain. 1,877,310; Sept. 13.

Screw machine, Automatic. C. A. Rich. 1,877,693; Sept. 13.
Screw shaving and slotting machine. F. E. Newton. 1,877,632; Sept. 13.
Screw thread. N. Trbojevich. 1,876,796; Sept. 13.
Sealing composition for waterless gas holder, Solid. R. R. Wagner. 1,876,805; Sept. 13.
Seat cushion. A. A. Ruppert. 1,877,055; Sept. 13.
Seat for an automobile, Adjustable. E. G. Simpson, C. G. Cronwall, A. C. Andersen, and H. C. Field. 1,877,604; Sept. 13.
Sensory and mental faculties, Device for testing. H. Brown. 1,877,643; Sept. 13.
Separator: *See*—
Air separator.
Sewage, Treating domestic. W. C. Laughlin. 1,877,623; Sept. 13.
Sewing machine, Buttonhole. H. E. Althens. 1,876,538; Sept. 13.
Sewing machines, Thread trimmer for. A. F. Carlson. 1,877,159; Sept. 13.
Shaping machine. W. E. Wunderlich. 1,877,110; Sept. 13.
Shaping machine. W. E. Wunderlich. 1,877,111; Sept. 13.
Sharpener and ash tray, Combined razor blade. M. McKibbin. Des. 87,755; Sept. 13.
Sharpener, Safety razor blade. H. A. Coy. 1,876,618; Sept. 13.
Sheet appliance for examination and operating tables, Continuous. F. G. Steiner. 1,877,610; Sept. 13.
Sheet, Manufacture of a composite. W. R. Collings. 1,877,270; Sept. 13.
Sheet material. C. C. Ritter. 1,877,254; Sept. 13.
Sheets containing bitumen, Producing felted. G. Yungblut. 1,877,377; Sept. 13.
Shelf bracket. C. S. Parker. 1,877,196; Sept. 13.
Sheller: *See*—
Corn sheller.
Shingle. F. R. Brydle. 1,877,222; Sept. 13.
Shock absorber. E. L. Beecher. 1,876,552; Sept. 13.
Shock absorber. G. M. Cross. 1,876,863; Sept. 13.
Shock absorber. J. H. Redhead. 1,877,588; Sept. 13.
Shock absorber. L. F. Wendelstadt. 1,877,543; Sept. 13.
Shock absorbing mechanism, Friction. W. A. Geiger. 1,876,908; Sept. 13.
Shock absorbing mechanism, Friction. G. A. Johnson. 1,877,329; Sept. 13.
Shoe and sole positioning mechanism. W. D. Thomas. 1,877,434; Sept. 13.
Shoe cut-out means. D. D. Wilkerson. 1,877,105; Sept. 13.
Shower head, Anti-scald. G. J. Hughes. 1,877,510; Sept. 13.
Shut-off mechanism, Automatic. E. W. Mears. 1,877,349; Sept. 13.
Sight gauge. F. E. Hubley. 1,877,509; Sept. 13.
Sight, Motor vehicle steering. O. Rensonnet. 1,877,428; Sept. 13.
Sign, Price. R. L. Schwartz and W. P. Martin. 1,877,326; Sept. 13.
Signal generator, Standard. M. Ferris. 1,877,287; Sept. 13.
Signal operating mechanism. N. Avakian. 1,876,829; Sept. 13.
Signal switch, Motor vehicle. R. P. McBride. 1,876,717; Sept. 13.
Signaling device. H. E. Whipple and F. P. Meeker. 1,877,438; Sept. 13.
Signaling system. A. P. Bock. 1,876,555; Sept. 13.
Signaling system. H. C. Forbes. 1,877,571; Sept. 13.
Signaling system for railroads. O. H. Dicke. 1,877,562; Sept. 13.
Signaling system, Railway. F. Kruckenberg, and F. Heyner. 1,877,245; Sept. 13.
Signals, Reception of varying frequency. E. S. Purington. 1,876,746; Sept. 13.
Silk, Degumming. L. Wallerstein. 1,877,007; Sept. 13.
Sintering mechanism. H. Neuhauss. 1 876,733; Sept. 13.
Siphon and agitator, Nondrip. F. B. Cooney. 1,876,860; Sept. 13.
Skid. C. F. Walp. 1,876,807; Sept. 13.
Slabs, Making. L. C. Plazza. 1,877,047; Sept. 13.
Slip coupling. A. T. Wakefield. 1,877,093; Sept. 13.
Smoking case. W. Schnell. 1,877,059; Sept. 13.
Soap dispensing device. R. S. Walker. 1,877,259; Sept. 13.
Socket, Multiterminal electrical. C. M. Metelski. 1,877,419; Sept. 13.
Sodium carbonate, Drying natural. W. F. Seyer. 1,877,368; Sept. 13.
Soldering apparatus. T. J. Dugan. 1,876,821; Sept. 13.
Sole and preparing the same, Outer. N. Elkin. 1,877,164 Sept. 13.
Sole cementing machine, Shoe. W. F. Green. 1,877,300; Sept. 13.
Solids from liquids or liquors by filtration, Apparatus for separating. J. T. Shimmin. Re18,597–8; Sept. 13.
Solutions for the manufacture of artificial products, Apparatus for preparing highly uniform. A. Klimpf and A. Hager. 1,877,337; Sept. 13.
Sorting machine. H. C. Einstein. 1,876,647; Sept. 13.
Sound-carrying and field currents to remotely located dynamic loud speakers, System for transmitting. L. O. Painter and H. L. Johnson. 1,877,034; Sept. 13.
Sound producing device. G. H. Cole and J. S. High. 1,877,558; Sept. 13.
Sound recording and reproducing device. J. L. Walker. 1,877,485; Sept. 13.
Sound reproducer. S. Ballantine. 1,876,831; Sept. 13.
Sound reproducing appliance having a film record. H. Küchenmeister. 1,877,781; Sept. 13.
Sound reproducing attachment for motion picture projectors. F. H. Owens. 1,877,033; Sept. 13.
Sound reproducing machine. A. N. Goldsmith. 1,876,913; Sept. 13.
Spacer, Metal worker's rapid. M. F. Burgett. 1,876,605; Sept. 13.
Speed device, Change. F. C. Thompson. 1,877,540; Sept. 13.
Sponge and device for manufacturing same, Artificial. L. C. Abraham. 1,877,155; Sept. 13.
Spoon or similar article. W. S. Warren. Des. 87,765–6; Sept. 13.
Spray producing device. P. S. Case. 1,876,611; Sept. 13.
Spraying apparatus. W. P. Tarrant. 1,876,788; Sept. 13.
Spreader and evener attachment for motor graders. C. U. Bruner and W. S. Laughridge. 1,876,604; Sept. 13.
Spring for tuft frames, Spool tension. C. C. Alvord. 1,876,573; Sept. 13.
Spring grader and moldboard. G. E. Dean. 1,876,867; Sept. 13.
Spring reaction neutralizer. G. M. Cross. 1,876,862; Sept. 13.
Spring washer. J. Berge. 1,876,884–5; Sept. 13.
Sprinkler and lawn sweeper. M. T. Coelho. 1,877,388; Sept. 13.
Sprinkler distributor. L. A. Phillips. 1,877,046; Sept. 13.
Stalk lifter. N. D. Colvin. 1,877,271; Sept. 13.
Stand: *See*—
Foldable stand. Switch stand.
Plant stand.
Stand for watches. H. Reitz. 1,877,532; Sept. 13.
Standard for street lights or other articles. J. F. Ferm. Des. 87,742; Sept. 13.
Station for deep-sea signaling cables, Amplifier. H. Hunkel. 1,877,511; Sept. 13.
Statuette or analogous article. H. N. Rice. Des. 87,773; Sept. 13.
Steam generator. K. Baumann. 1,877,640; Sept. 13.
Steel and rubber product. B. Bronson. 1,876,849; Sept. 13.
Steering device for swiveling bogies, Automatic. H. W. Jonkhoff. 1,876,684; Sept. 13.
Steering mechanism. O. F. Carlson. 1,876,568; Sept. 13.
Steering wheel. H. T. Kraft. 1,876,693; Sept. 13.
Sterilizer and hot liquid extractor. D. De Pasquale and J. L. Howard. 1,877,392; Sept. 13.
Sterilizer, Toilet seat. R. E. Peterson. 1,877,689; Sept. 13.
Stocking. E. W. Decker. 1,877,281; Sept. 13.
Stocking and knitting the same. M. C. Miller. 1,876,721; Sept. 13.
Stoker. R. Hitchcock. 1,876,935; Sept. 13.
Stoker, Automatic. C. B. Little. 1,877,410; Sept. 13.
Stone milling machine. C. A. Colgren. 1,877,269; Sept. 13.
Stop, Automobile no back safety. J. H. Morgan. 1,877,014; Sept. 13.
Stop, Door. W. H. Durant. 1,876,881; Sept. 13.
Stop mechanism for bobbin strippers. W. H. Trogdon. 1,877,086; Sept. 13.
Stop mechanism for warpers. J. W. Sidebottom. 1,877,069; Sept. 13.
Stop motion for knitting machines, Electric. A. Crawford. 1,877,647; Sept. 13.
Storage battery. H. W. Lormor. 1,876,989; Sept. 13.
Strands, Method of and apparatus for serving. C. E. Traxel. 1,876,794; Sept. 13.
Stretcher, Curtain. F. Moldenhauer. 1,877,356; Sept. 13.
Stretchers for cables, rods and the like, Making loosening. A. P. Streit. 1,877,370; Sept. 13.
Stringed instruments, Treating wooden. C. W. Lindeen. 1,876,984; Sept. 13.
Strip for window sashes, Weather or buffer. E. F. Chaffee. 1,877,729; Sept. 13.
Strop, Razor. W. Stock. 1,877,613; Sept. 13.
Structural member. C. A. Robinson. 1,876,756; Sept. 13.
Substances, Apparatus for the desiccation of. F. H. Douthitt. 1,877,648; Sept. 13.
Substitution products of anthanthrones. M. A. Kunz, K. Koeberle, and E. Berthold. 1,876,973; Sept. 13.
Sulphur compounds such as tiophane and its derivatives, Process for the manufacture of cyclic. E. T. Hessle. 1,877,478; Sept. 13.
Support, Collapsible canopy. V. P. Nelson. 1,877,192; Sept. 13.
Support, Conductor. A. O. Austin. 1,876,580; Sept. 13.
Support for conductors, Wood. H. O. Austin. 1,876,577; Sept. 13.
Support for footwear, Arch. J. May. 1,877,522; Sept. 13.
Support for pipe carriers, Adjustable. A. H. Renshaw. 1,877,590; Sept. 13.

Supporter, Arch. F. J. Monoghan. 1,877,525; Sept. 13.
Supporter, Collar. E. W. Wilson. 1,876,814; Sept. 13.
Supporter, Sock. L. Woods. 1,877,108; Sept. 13.
Supporting device for electrical equipment. W. A. Heinrich. 1,877,312; Sept. 13.
Supporting rapidly rotated shafts, Protectively. E. A. Forsberg. 1,876,656; Sept. 13.
Surface polishing device. J. M. Hanson. 1,876,923; Sept. 13.
Suturing device. B. Thompson. 1,876,792; Sept. 13.
Swash plate. P. O. Eckels. 1,877,285; Sept. 13.
Sweeper, Sereet. G. E. Dean. 1,876,866; Sept. 13.
Switch: *See*—
Disconnecting switch. Pressure actuated switch.
Electric switch. Signal switch.
Electromagnetic switch. Time switch.
Multiple stage auxiliary switch.
Switch. A. Alsaker. 1,876,535; Sept. 13.
Switch. A. Alsaker and E. Nordbam. 1,876,537; Sept. 13.
Switch. H. P. Chandler. 1,877,445; Sept. 13.
Switch. E. W. Rasmussen. 1,877,692; Sept. 13.
Switch and electric connection plug, Combination thermostatic. M. S. Runsvold. 1,876,763; Sept. 13.
Switch control mechanism. H. E. Hallenbeck. 1,877,171; Sept. 13.
Switch mechanism for attachment plugs. L. Ludwig. 1,876,705; Sept. 13.
Switch point to switch box connecting means, Railway. J. C. Mock. 1,877,524; Sept. 13.
Switch stand. C. B. Davidson. 1,877,276; Sept. 13.
Switching mechanism. W. M. Scott, jr. 1,877,698; Sept. 13.
Synchronizer. J. M. Weydell. 1,877,101; Sept. 13.
Table: *See*—
Built-in table. Game table.
Folding table.
Table. E. P. Hamilton. 1,876,922; Sept. 13.
Table for displaying food containing receptacles. L. S. Anderson. 1,877,217; Sept. 13.
Table or similar article, Radio. W. K. Kleaver. Des. 87,750; Sept. 13.
Take-up mechanism, Automatic. J. A. Casaletto. 1,877,385; Sept. 13.
Tank: *See*—
Knockdown tank.
Tank cap, fuel pipe and drain pipe lock, Combination gas. T. S. Greer. 1,877,418; Sept. 13.
Tank for concrete mixers, Water. G. Jaeger and J. Eggert. 1,876,946; Sept. 13.
Tape lines, Device for cleaning. J. L. Posgate. 1,876,744; Sept. 13.
Tape, Making wire. C. D. Johnson. 1,876,953; Sept. 13.
Tapping machine. G. E. Miller. 1,877,251; Sept. 13.
Tar distillation. J. Becker. 1,876,594; Sept. 13.
Telegraph system, Start-stop. E. F. Watson. 1,877,437; Sept. 13.
Telephone plant, K. Larson and N. G. Palmgren. 1,877,672; Sept. 13.
Temperature control apparatus. W. H. Ingersoll. 1,877,327; Sept. 13.
Temperature measuring device for rubber working machinery. C. E. Maynard. 1,876,712; Sept. 13.
Temperature of pressure control, Automatic. A. J. Mansure. 1,876,822; Sept. 13.
Temperature regulating system. A. A. Dicke. 1,876,636; Sept. 13.
Tension device for winding machines. E. Snyder. 1,876,781; Sept. 13.
Textile fabric. G. H. Perkins. Des. 87,756; Sept. 13.
Textile fabric. M. M. Stone. Des. 87,763; Sept. 13.
Textile material, Loading. R. Clavel. 1,876,615; Sept. 13.
Thermometer. W. H. Beard. 1,876,592; Sept. 13.
Thermostat. L. A. Hyland. 1,877,131; Sept. 13.
Thermostat. A. M. Trogner. 1,877,371; Sept. 13.
Threads, Apparatus for the manufacture of artificial. F. Melms. 1,877,002; Sept. 13.
Threads of hair and like fibers, Apparatus for use in the production of. A. Green. 1,876,664; Sept. 13.
Tool extractor. O. A. Smith. 1,876,780; Sept. 13.
Ticket, Folding pin. M. M. Keener. 1,877,133; Sept. 13.
Tile and process, Roofing. T. C. Prouty. 1,877,481; Sept. 13.
Timber shape. E. J. Thurber. 1,877,087; Sept. 13.
Throttle. W. W. Price and C. W. Ripsch. 1,877,197; Sept. 13.
Tire building apparatus. C. H. Desautels. 1,876,633; Sept. 13.
Tire carrier, Spare. J. L. Gilmore. 1,876,912; Sept. 13.
Tire core extractor. H. C. Bostwick. 1,877,751; Sept. 13.
Tire, Pneumatic. F. A. Selberling and W. S. Wolfe. 1,877,600; Sept. 13.
Tires, Apparatus for wrapping. G. F. Wilson and F. J. Shook. 1,876,815; Sept. 13.
Toaster. T. C. Forbes. 1,876,901; Sept. 13.
Toaster or similar article, Electric. J. Fletcher. Des. 87,743; Sept. 13.
Tolerance zone on gauges. J. Hartness. 1,877,307; Sept. 13.
Tool and T-square for mechanics, Scribing. W. Lowe. 1,877,185; Sept. 13.
Tool, Channeling. E. Dunford. 1,877,231; Sept. 13.
Tool, Drafting. E. A. Wolfram. 1,877,375; Sept. 13.
Tool, Drilling. M. A. Capeliuschnicoff. 1,877,225; Sept. 13.
Tool extractor. O. A. Smith. 1,876,780; Sept. 13.
Tool for truing crank shafts. J. T. Crute. 1,876,621; Sept. 13.
Tool, Power. E. L. Connell. 1,876,616; Sept. 13.
Tool, Wire splicing. W. D. Stetson. 1,877,076; Sept. 13.
Tools, Attachment for. G. E. Showers. 1,877,699; Sept. 13.
Tools, Automatic reverse for threading. H. W. Rupple. 1,877,056; Sept. 13.
Tooth crowns, Sizing. F. O. Jaques. 1,876,950; Sept. 13.
Topper and harvester, Beet. F. M. Davis. 1,877,278; Sept. 13.
Toy. C. A. McPherson. 1,877,680; Sept. 13.
Toy aircraft. G. Boehme. 1,877,120; Sept. 13.
Toy car. C. A. Heisler and T. Fletcher. 1,877,661; Sept. 13.
Toy gun. J. L. Copple. 1,877,559; Sept. 13.
Toy, Riding. F. Pascetti. 1,877,040; Sept. 13.
Toy telephone. J. H. Conklin. 1,877,160; Sept. 13.
Track, Race. A. F. McClain, sr. 1,877,471; Sept. 13.
Tractor hitch. E. R. Greer. 1,877,126; Sept. 13.
Tractor hitch for farm implements. C. J. Minton. 1,876,723; Sept. 13.
Tractor wheel. J. Dawe. 1,876,628; Sept. 13.
Tractors, Power take-off mechanism for. T. Brown. 1,876,561; Sept. 13.
Tractors, Wheel cleaning attachment for. G. Merklin. 1,877,005; Sept. 13.
Traffic controlling apparatus, Railway. A. T. Johnston. 1,877,513; Sept. 13.
Traffic controlling system, Railway. M. H. Loughridge. 1,877,626; Sept. 13.
Train control. C. S. Bushnell. 1,876,566; Sept. 13.
Train control. C. S. Bushnell. 1,877,553; Sept. 13.
Train control system for railroads. C. S. Bushnell. 1,877,555; Sept. 13.
Transmission for phonographs. M. Weil. 1,877,707; Sept. 13.
Transmission system. F. H. Kroger. 1,876,971; Sept. 13.
Transmitter, Facsimile. H. M. Elsey and L. R. Philpott. 1,877,566; Sept. 13.
Trap: *See*—
Animal trap.
Tray, Ash. B. G. Larrabee. Des. 87,752; Sept. 13.
Tray for card tables, Counter-sunk ash. M. Bothwell. 1,876,559; Sept. 13.
Tray, Supporting. H. H. Kuhlmann. 1,877,183; Sept. 13.
Trestle assembling device. C. T. Strand. 1,876,787; Sept. 13.
Trimmer: *See*—
Edge trimmer. Paper trimmer.
Trimmer and the like, Hedge. R. K. Ortt. 1,877,032; Sept. 13.
Truck. E. R. Walker. 1,877,095; Sept. 13.
Truck side frame. T. V. Buckwalter. 1,877,740; Sept. 13.
Truck, Welded end. W. C. Heinle. 1,876,927; Sept. 13.
Truss, Hernial. A. Schaffer. 1,877,537; Sept. 13.
Tube: *See*—
Collapsible tube. Electric discharge tube.
Discharge tube.
Tube cutting and flaring device. J. W. Gordon. 1,876,914; Sept. 13.
Tube hanger. S. B. De Bence. 1,877,391; Sept. 13.
Tubes, Apparatus for splicing. C. E. Maynard. 1,876,716; Sept. 13.
Tubes of fiber and similar material, Apparatus for bending. D. B. Replogle. 1,877,627; Sept. 13.
Tubes of fiber and similar material, Bending. D. B. Replogle. 1,877,629; Sept. 13.
Tubes of paper fiber and similar material, Bending. D. B. Replogle. 1,877,628; Sept. 13.
Tubular objects from rubber compositions, Making. D. F. Twiss and E. A. Murphy. 1,877,207; Sept. 13.
Turbine, Adjustable vane hydraulic. H. E. Popp. 1,877,048; Sept. 13.
Tuning control for radio receivers, Remote. V. Flocco. 1,877,502; Sept. 13.
Tuning device for radioreceivers, Automatic. J. B. Pillen. 1,877,691; Sept. 13.
2-mercapto-acylene-thiasole compounds and the products, Producing. R. Herz and M. Schubert. 1,876,929; Sept. 13.
Typewriter carrying case. J. A. B. Smith. 1,876,779; Sept. 13.
Typewriters and like machines, Ribbon reverse for. P. Kappler. 1,876,687; Sept. 13.
Typewriting and card-perforating machine, Combined. A. G. F. Kurowski. 1,876,697; Sept. 13.
Typewriting and computing machine, Combined. A. G. F. Kurowski. 1,876,696; Sept. 13.
Typewriting machine. W. A. Dobson. 1,876,640; Sept. 13.
Typewriting machine. W. A. Dobson. 1,877,563; Sept. 13.
Typewriting machine. H. S. Lasher. 1,876,699; Sept. 13.
Typewriting machine. J. A. B. Smith. 1,876,777–8; Sept. 13.
Under and overfeeder for pens. R. F. George. 1,877,295; Sept. 13.
Utensil, Cooking. L. H. Mills. 1,877,009; Sept. 13.
Vacuum device. W. J. West. 1,877,708; Sept. 13.
Valve. C. A. Norgren. 1,877,528; Sept. 13.

Valve actuating mechanism, Hydraulic. W. Noble. 1,876,735; Sept. 13.
Valve, Automatic shut-off. G. R. Brown and G. F. Naab. 1,877,221; Sept. 13.
Valve, Balanced. F. Wagner. 1,877,542; Sept. 13.
Valve for filling nozzles, Shut-off. H. W. Lormor. 1,876,988; Sept. 13.
Valve for pipe lines, Air relief. J. C. Higgins. 1,877,400; Sept. 13.
Valve, Hollow cylindrical. E. G. Reed. 1,877,589; Sept. 13.
Valve, Pressure reducing. B. E. Horne. 1,876,937; Sept. 13.
Valve, Pressure relief. B. E. Horne. 1,876,938; Sept. 13.
Valve, Regulator. S. H. Brooks. 1,877,487; Sept. 13.
Valve, Safety. W. Hargreaves. 1,877,457; Sept. 13.
Valve, Self locking. F. J. Lieske. 1,877,675; Sept. 13.
Vehicle. J. E. Rightmire. 1,877,201; Sept. 13.
Vehicle and constructing the same, Motor. W. B. Fageol. 1,877,653; Sept. 13.
Vehicle and mechanism for propelling the same. L. A. Colella. 1,876,859; Sept. 13.
Vehicle body. R. L. Carr. 1,876,855; Sept. 13.
Vehicle body construction. J. and M. Giltsch, H. Schorsch, and J. D. Giltsch. 1,876,660; Sept. 13.
Vehicle body panel structure. F. L. Chadwick. 1,877,265; Sept. 13.
Vehicle brake. V. G. Apple and F. W. Cotterman. 1,876,542; Sept. 13.
Vehicle construction. L. C. Freeman and A. P. Buesch. 1,876,905; Sept. 13.
Vehicle hood lock, Automotive. J. W. Fitz Gerald. 1,876,894; Sept. 13.
Vehicle, Motor. L. Laisne. 1,877,332; Sept. 13.
Vehicle, Motor. J. R. Oishei. Re18,594; Sept. 13.
Vehicle, Motor. A., J., J., and E. Stern. 1,877,609; Sept. 13.
Vehicle step. C. H. Vogel. 1,877,152; Sept. 13.
Vehicle switching mechanism, Automotive. H. A. Douglas. 1,876,875; Sept. 13.
Vehicle wheel. C. S. Ash. 1,877,379; Sept. 13.
Vehicles, Method and apparatus for washing and lubricating. I. L. Pulliam. 1,877,584; Sept. 13.
Vent plug wrench. H. W. Lormor. 1,876,990; Sept. 13.
Vibration indicator. F. L. Lipcot. 1,876,704; Sept. 13.
Vibrator. R. Hetherington. 1,877,176; Sept. 13.
Viscose, Fabrication of. W. F. Richter. 1,876,754; Sept. 13.
Viscose, Preparing. W. F. Richter. 1,876,755; Sept. 13.
Vision, Apparatus for correcting. H. B. Sheffield. 1,876,769; Sept. 13.
Voltage-supply means for directional relays. R. C. Curtis. 1,877,446; Sept. 13.
Vulcanization. C. F. Flemming. 1,876,897; Sept. 13.
Vulcanizer, Sectional tire repair. J. C. Heintz. 1,877,175; Sept. 13.
Wall panel construction, Sectional. F. S. Robinson. 1,877,053; Sept. 13.
Wallpaper. C. O. Hesse. Des. 87,746; Sept. 13.
Walls, Constructing sea. J. B. Brockburst. 1,877,498; Sept. 13.
Washer: *See*—
Spring washer.
Washer and/or drier for golf balls or similar articles. G. F. Burg. 1,876,851; Sept. 13.
Washer and rinsing machine, Bottle. J. Fleming. 1,876,895; Sept. 13.
Washer for straight counterbores, Helical lock. J. Berge. 1,876,836; Sept. 13.
Washing apparatus. F. Hill. 1,876,676; Sept. 13.
Washing machine for rugs, carpets, etc. B. F. Behringer. 1,877,156; Sept. 13.
Washing machine, Power driven. J. B. Fletcher. 1,876,653; Sept. 13.
Waste and overflow for laboratories, bidets, bathtubs or the like. J. Wolfferts. 1,876,817; Sept. 13.
Waste, Conditioning. E. S. Pearce. Re18,599; Sept. 13.
Waste receiver, Adjustable. G. A. Saville, jr. 1,877,363; Sept. 13.
Waste reclamation apparatus. B. W. Brockett. 1,876,603; Sept. 13.
Waste reclamation apparatus. E. S. Pearce. 1,876,739; Sept. 13.
Waste, Renovating. E. S. Pearce. 1,877,754; Sept. 13.
Water metering device, Return. T. Kelly. 1,876,958; Sept. 13.
Wax distributing means. E. V. Treleven. 1,876,797; Sept. 13.
Weed extractor. A. Geibel. 1,876,907; Sept. 13.
Welding agent. L. Brandt. 1,876,846; Sept. 13.
Welding apparatus. C. L. Rowland. 1,876,762; Sept. 13.
Wells, Treatment of deep. J. J. Grebe and R. T. Sanford. 1,877,504; Sept. 13.
Wheel: *See*—
Car wheel. Steering wheel.
Fan wheel. Tractor wheel.
Pneumatic wheel. Vehicle wheel.
Wheel alignments, Device for testing. C. H. Phelps. 1,877,045; Sept. 13.
Wheel grip, Steering. H. G. Manning. 1,876,993; Sept. 13.
Wind motor. G. M. Beard. 1,877,622; Sept. 13.
Winding machine. H. Shondell. 1,876,771; Sept. 13.
Window and door frame. F. C. Andersen and E. C Swanson. 1,876,546; Sept. 13.
Window and the like. C. W. LeFebvre. 1,877,631; Sept 13.
Window assembly. G. Klein. 1,877,244; Sept. 13.
Window construction. C. W. Kelly. 1,876,689; Sept. 13.
Window lock, Push button. L. C. and W. F. Hinderer. 1,877,177; Sept. 13.
Window locking device. G. Boden. 1,876,556; Sept. 13.
Window reel, Double film. A. L. Adatte. 1,877,440; Sept. 13.
Window regulator. B. S. Floraday. 1,876,654; Sept. 13.
Window screen. M. Salsberg. 1,877,596; Sept. 13.
Windshield, Auxiliary vehicle. J. E. Moore. 1,896,727; Sept. 13.
Windshield screen, Automobile. J. A. Selby. 1,877,065; Sept. 13.
Woodworking machine. W. Loeffler. 1,876,987; Sept. 13.
Wrench: *See*—
Binderbolt wrench. Vent plug wrench.
Wrench. H. F. Brady. 1,877,642; Sept. 13.
Wrench set unit. E. C. Koster. 1,877,466; Sept. 13.
Wringer: *See*—
Mop wringer.
X-ray apparatus. J. B. Wantz. 1,877,260; Sept. 13.
X-ray unit, Dental. P. Russell. 1,877,690; Sept. 13.
Yarns suitable for use in the production of fabrics therewith, Manufacture of. W. R. Allen. 1,877,488; Sept. 13.
Zinc oxide, Producing crude and fumed. F. A. Brinker. 1,877,122; Sept. 13.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 13, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 1: 1,876,622
46: 1,877,162
2— 8: 1,877,024
61: 1,877,393
68: 1,877,411
73: 1,877,745
93: 1,877,697
185: 1,877,452
240: 1,877,281
248: 1,876,925
4— 204: 1,876,817
205: 1,877,405
233: 1,877,689
251: 1,877,083
5— 23: 1,877,539
89: 1,876,832
131: 1,876,743
339: 1,876,891
8— 2: 1,877,097
5: 1,876,560
1,877,116
1,877,318
6: 1,877,748
13: 1,876,615
10— 3: 1,877,632
129: 1,877,251
158: 1,877,004
12— 33: 1,877,300
1,877,434
106: 1,877,231
123: 1,877,253
146: 1,877,164
13— 1: 1,876,733
35: 1,876,734
15— 21: 1,876,851
60: 1,877,682
69: 1,876,895
119: 1,877,064
120: 1,877,125
208: 1,877,155
210: 1,876,744
248: 1,876,572
253: 1,877,321
255: R. 18,594
16— 1: 1,877,639
85: 1,876,986
17— 25: 1,877,183
43: 1,876,676
18— 1: 1,877,403
2: 1,876,712
1,876,713
1,876,714
8: 1,877,002
1,877,337
1,877,397
18: 1,877,175
48: 1,876,886
1,877,212
49: 1,877,299
53: 1,876,745
1,876,897
1,877,527
54: 1,876,754
1,876,755
1,876,890
55: 1,877,673
56: 1,877,628
1,877,629
1,877,651
58: 1,877,907
1,877,426
59: 1,876,849
1,877,298
19— 100: 1,876,819
129: 1,876,936
20— 11: 1,876,546
12: 1,877,631
20: 1,876,750
1,876,798
21: 1,877,236
35: 1,876,896
1,876,772
52.1: 1,877,244
1,877,280
56.5: 1,877,336
69: 1,877,448
1,877,729

22— 1: 1,877,535
2: 1,877,544
9: 1,877,494
69: 1,876,940
120: 1,877,323
184: 1,877,049
23— 1: 1,877,368
90: 1,877,733
147: 1,877,122
184: 1,876,837
185: 1,877,489
239: 1,877,726
250: 1,876,880
287: 1,877,010
290: 1,877,145
292: 1,877,151
24— 73: 1,877,677
95: 1,876,853
1,876,854
163: 1,876,770
1,877,704
191: 1,877,416
232: 1,877,702
255: 1,877,006
25— 7: 1,876,826
42: 1,877,047
100: 1,876,864
153: 1,877,424
156: 1,877,137
1,877,138
1,877,147
1,877,531
28— 1: 1,877,488
20: 1,877,086
29— 37: 1,877,056
44: 1,877,693
84: 1,876,574
1,876,759
1,877,358
1,877,620
1,877,653
103: 1,877,104
148: 1,877,370
150: 1,877,460
155: 1,877,583
156.5: 1,876,550
1,877,530
170: 1,877,342
175: 1,876,720
30— 1: 1,877,749
9: 1,877,211
11: 1,877,082
12: 1,876,570
1,876,618
1,876,906
1,877,082
1,877,149
1,877,429
32— 10: 1,876,950
33— 28: 1,876,757
1,876,785
32: 1,876,612
42: 1,877,185
75: 1,877,375
76: 1,877,435
79: 1,877,340
107: 1,877,341
141: 1,877,061
180: 1,877,477
192: 1,876,605
199: 1,877,307
203: 1,877,045
220: 1,877,455
35— 5: 1,877,306
12: 1,877,643
15: 1,876,619
17: 1,876,978
36— 1: 1,877,182
2.5: 1,877,724
11.5: 1,877,432
11.6: 1,877,080
45: 1,877,711
71: 1,877,522
1,877,525
37— 37: 1,876,728
143: 1,876,865
1,876,867

37— 166: 1,877,365
178: 1,876,604
40— 25: 1,877,133
35: 1,877,463
52: 1,877,172
64: 1,877,326
78: 1,877,406
110: 1,877,044
113: 1,876,729
125: 1,877,075
130: 1,877,646
155: 1,877,189
41— 19: 1,877,481
42— 1: 1,877,710
71: 1,877,016
43— 61: 1,877,712
88: 1,877,264
102: 1,876,692
45— 7: 1,876,557
11: 1,876,999
1,877,654
24: 1,877,356
51: 1,877,401
60: 1,876,681
68.2: 1,876,779
1,877,610
75: 1,876,559
94: 1,876,748
97: 1,877,109
112: 1,877,314
129: 1,877,669
46— 46: 1,877,160
48: 1,877,661
1,877,690
50: 1,877,120
47— 18: 1,876,571
48: 1,876,888
48— 176: 1,876,805
205: 1,876,965
49— 2: 1,877,431
54: 1,877,714
50— 23: 1,876,937
51— 12: 1,877,255
14: 1,876,688
29: 1,877,348
37: 1,877,443
50: 1,877,572
52: 1,877,205
85: 1,877,613
95: 1,877,500
103: 1,877,515
105: 1,876,899
176: 1,877,031
184.1: 1,877,328
197: 1,876,923
207: 1,877,541
241: 1,877,546
270: 1,877,363
52— 1: 1,877,127
53— 1: 1,877,009
5: 1,876,901
55— 9: 1,877,278
68: 1,876,907
83: 1,877,592
118: 1,877,078
56— 20: 1,877,518
25: 1,876,662
60: 1,876,567
119: 1,877,271
200: 1,877,520
249: 1,876,818
1,876,953
264: 1,877,578
311: 1,877,313
313: 1,877,272
326.4: 1,877,549
364: 1,877,519
58— 127: 1,877,732
60— 16: 1,876,809
30: 1,877,523
41: 1,876,599
54.6: 1,876,882
61— 4: 1,877,493
41: 1,877,351
61: 1,877,113
62— 5: 1,877,536
91.5: 1,877,181

62— 91.5: 1,877,187
95: 1,877,143
115: 1,877,200
121: 1,876,915
1,877,180
175: 1,877,163
63— 15: 1,877,442
26: 1,876,624
29: 1,877,750
64— 5: 1,877,194
106: 1,876,658
66— 5: 1,876,722
13: 1,877,503
50: 1,877,220
82: 1,877,492
1,877,573
128: 1,877,262
161: 1,877,647
180: 1,877,488
184: 1,876,721
67— 4: 1,877,362
68— 9: 1,876,602
1,876,626
1,877,453
1,877,687
70— 8: 1,876,646
29: 1,817,331
1,877,612
46: 1,876,808
1,877,404
50: 1,877,017
91: 1,876,576
1,876,885
1,877,608
108: 1,876,893
122: 1,877,545
72— 16: 1,877,053
33: 1,877,087
46: 1,876,756
66: 1,876,808
118: 1,877,274
124: 1,877,209
127: 1,877,425
73— 1: 1,876,889
28: 1,876,958
51: 1,876,711
52: 1,876,592
54: 1,876,590
1,876,730
74— 7: 1,876,616
1,876,642
1,877,695
14: 1,877,115
1,877,581
31: 1,877,338
33: 1,876,093
1,876,993
35: 1,876,954
39: 1,876,709
1,876,731
1,877,297
1,877,533
41: 1,876,795
57: 1,876,567
1,876,791
1,877,736
58: 1,877,101
59: 1,877,383
1,877,540
108: 1,877,106
1,877,490
109: 1,876,919
1,877,413
1,877,414
1,877,461
112: 1,877,027
1,877,308
1,877,330
113: 1,877,730
6: 1,877,246
75— 1: 1,876,725
1,877,141
15: 1,876,617
65: 1,877,123
67: 1,876,943
76— 16: 1,877,071
78: 1,877,096
77— 23: 1,877,277

78— 85: 1,876,762
94: 1,877,621
80— 14: 1,876,991
60: 1,877,645
81— 3.1: 1,877,019
3.8: 1,876,892
53: 1,876,990
57: 1,877,595
86: 1,877,642
82— 4: 1,876,621
19: 1,877,174
25: 1,876,900
83— 11: 1,877,121
28: 1,877,170
53: 1,877,188
94: 1,877,517
84— 1: 1,877,317
95: 1,876,763
235: 1,877,526
275: 1,876,558
404: 1,876,870
85— 1: 1,876,796
11: 1,876,663
87— 6: 1,876,820
9: 1,877,491
12: 1,876,768
17: 1,877,717
88— 1: 1,876,806
1,877,512
2.2: 1,877,459
14: 1,877,501
1,877,713
16.2: 1,876,668
1,877,731
16.4: 1,877,725
18: 1,876,845
20: 1,877,238
1,877,439
24: 1,877,441
27: 1,876,997
47: 1,877,089
57: 1,877,355
61: 1,877,744
89— 40: 1,876,995
42: 1,877,118
90— 4: 1,877,173
20: 1,877,560
91— 12.5: 1,876,582
36: 1,877,663
39: 1,876,797
45: 1,876,610
1,876,611
1,876,643
1,876,644
1,876,967
47: 1,877,484
68: 1,877,208
1,877,344
1,877,394
70: 1,876,629
1,876,630
92— 11: 1,877,219
20: 1,876,563
21: 1,877,377
36: 1,877,030
93— 1: 1,877,144
35: 1,877,456
39: 1,876,931
40: 1,877,239
49: 1,877,043
58: 1,876,666
93: 1,877,042
94— 3: 1,877,508
31: 1,877,339
39: 1,876,673
46: 1,877,377
95— 2: 1,877,709
6: 1,877,246
42: 1,877,598
75: 1,876,741
81: 1,877,310
81.5: 1,877,658
94: 1,877,659
100: 1,877,036
97— 42: 1,877,652
47: 1,877,650
1,876,562

97— 217: 1,876,749
227: 1,876,979
98— 96: 1,876,689
110: 1,876,850
99— 2: 1,877,266
1,877,382
8: 1,877,587
11: 1,877,641
12: 1,876,984
100— 31: 1,877,548
1,877,564
101— 47: 1,876,970
298: 1,876,960
358: 1,876,891
102— 2.1: 1,877,232
103— 11: 1,877,001
41: 1,876,916
103: 1,877,617
126: 1,877,688
153: 1,877,621
161: 1,876,833
181: 1,877,112
265: 1,877,024
276: 1,876,964
104— 48: 1,877,193
1,877,584
94: 1,876,904
105— 163: 1,876,927
200: 1,877,029
205: 1,877,740
289: 1,877,423
1,877,422
366: 1,877,028
369: 1,876,758
406: 1,877,369
106— 18: 1,877,396
29: 1,876,909
107— 54: 1,876,701
60: 1,876,843
108— 7: 1,877,222
17: 1,876,597
29: 1,876,553
110— 8: 1,877,580
28: 1,876,623
40: 1,877,320
45: 1,876,933
1,876,935
85: 1,877,224
101: 1,877,410
165: 1,876,801
111— 4: 1,877,415
52: 1,876,776
112— 139: 1,877,001
252: 1,876,538
1,877,159
113— 52: 1,876,747
114— 21: 1,877,073
67: 1,877,380
79: 1,877,235
183: 1,877,210
202: 1,877,361
116— 31: 1,877,428
47: 1,877,402
51: 1,877,506
54: 1,877,438
117: 1,877,509
124.1: 1,877,228
117— 34: 1,876,664
1,876,794
119— 15.5: 1,876,839
37: 1,877,585
77: 1,877,064
120— 84: 1,876,606
97: 1,876,780
108: 1,877,570
114: 1,877,295
121— 38: 1,877,102
1,877,752
45: 1,877,701
122— 1: 1,877,640
2: 1,877,214
391: 1,877,267
392: 1,877,148
1,877,719
1,877,720
1,877,721
1,877,722

122— 460: 1,876,766
123— 17: 1,877,250
25: 1,876,764
32: 1,877,737
43: R. 18,595
51: 1,876,977
73: 1,876,956
90: 1,876,735
119: 1,876,879
122: 1,877,655
170: 1,877,398
171: 1,876,996
173: 1,877,051
175: 1,877,420
176: 1,876,917
196: 1,876,648
1,877,668
124— 14: 1,877,215
1,877,559
125— 5: 1,877,269
11: 1,877,505
1,877,637
33: 1,877,462
126— 20: 1,876,614
116: 1,877,421
299: 1,877,240
127— 39: 1,876,883
128— 54: 1,877,616
63: 1,877,176
76: 1,876,769
112: 1,877,537
271: 1,876,703
306: 1,877,376
340: 1,876,792
129— 1: 1,876,998
20: 1,877,476
24: 1,876,569
130— 30: 1,877,436
36: 1,876,976
132— 18: 1,877,538
36: 1,876,868
1,877,191
36.2: 1,877,662
133— 5: 1,876,677
134— 1: 1,877,062
11: 1,876,910
46: 1,877,374
135— 9: 1,877,192
136— 170: 1,876,989
137— 21: 1,877,418
53: 1,877,457
75: 1,876,665
1,876,783
76: 1,876,947
111: 1,876,810
1,877,567
139: 1,877,349
153: 1,877,221
1,877,487
160: 1,876,861
139— 10: 1,876,573
402: 1,877,679
140— 3: 1,876,953
119: 1,877,076
141— 1: 1,877,156
5: 1,876,603
1,876,739
142— 1: 1,876,992
143— 74: 1,877,705
133: 1,876,945
144— 3: 1,876,752
209: 1,877,013
242: 1,876,987
256: 1,877,627
309: 1,877,202
145— 20: 1,876,782
24: 1,877,686
26: 1,877,699
146— 61: 1,877,259
150: 1,876,742
148— 3: 1,877,063
23: 1,876,846
149— 5: 1,877,119
151— 27: 1,877,665
32: 1,876,534
1,876,835
1,876,836
39: 1,877,384
152— 12: 1,876,715
13: 1,877,360
14: 1,877,000
1,877,600
153— 1: 1,876,898
2: 1,877,111
25: 1,876,898
33: 1,876,709
79: 1,876,914
80: 1,876,678
154— 2: 1,877,136
9: 1,876,716
1,877,746
1,877,751
10: 1,876,633
40: 1,877,270
155— 14: 1,877,604
94: 1,876,802

155— 142: 1,876,549
166: 1,877,602
179: 1,877,055
196: 1,876,774
156— 36: 1,876,939
39: 1,877,407
1,877,506
158— 2: 1,876,962
28: 1,877,037
1,877,248
104: 1,877,357
119: 1,877,676
159— 4: 1,877,645
29: 1,877,105
36: 1,876,771
43: 1,876,902
60: 1,876,775
1,877,198
68: 1,876,838
1,877,072
89: 1,876,600
87: 1,876,659
111: 1,876,672
113: 1,876,697
166— 21: 1,877,504
167— 3: 1,877,392
53: 1,877,676
72: 1,877,237
169— 4: 1,877,640
5: 1,877,088
170— 38: 1,876,595
65: 1,877,622
162: 1,876,634
163: 1,876,606
1,876,609
171— 95: 1,877,008
1,877,243
97: R. 18,593
119: 1,876,548
223: 1,877,681
314: 1,876,985
172— 36: 1,876,767
179: 1,877,513
239: 1,877,605
281: 1,877,703
289: 1,877,667
173— 28: 1,877,035
251: 1,876,584
259: 1,877,142
1,877,611
266: 1,877,497
268: 1,876,585
273: 1,876,663
313: 1,876,578
1,876,579
318: 1,876,581
1,876,583
1,876,586
1,876,630
328: 1,876,876
1,876,951
1,877,419
1,877,671
332: 1,876,695
175— 30: 1,876,577
41: 1,877,644
41.5: 1,876,827
183: 1,877,041
1,877,216
204: 1,877,139
1,877,168
1,877,446
1,877,454
1,877,575
296: 1,877,747
312: 1,876,824
313: 1,877,594
320: 1,877,607
339: 1,876,790
356: 1,877,254
1,877,569
359: 1,876,670
363: 1,877,753
375: 1,877,275
176— 2: 1,877,718
32: 1,876,873
42: 1,877,715
51: 1,877,657
66: 1,877,242
122: 1,877,716
126: 1,877,204
177— 311: R. 18,596
1,876,706
353: 1,877,535
178— 6: 1,877,447
1,877,547
7: 1,877,566
53.1: 1,877,437
179— 1: 1,877,034
18: 1,877,672
81: 1,877,678
100.3: 1,877,033
1,877,485
140: 1,877,453

179— 171: 1,876,645
1,876,674
1,876,676
1,877,140
1,877,165
1,877,511
180— 9.1: 1,877,556
12: 1,877,126
53: 1,876,561
68: 1,877,324
69: 1,876,679
82: 1,876,543
1,876,894
181— 31: 1,876,858
1,877,065
1,877,294
32: 1,876,831
1,877,558
183— 2.5: 1,877,412
4: 1,877,685
22: 1,877,296
115: 1,876,551
184— 1: 1,877,007
6: 1,876,707
1,876,708
1,876,948
7: 1,877,070
1,877,124
188— 20: 1,877,469
78: 1,876,934
1,877,430
88: 1,877,543
89: 1,876,552
1,876,862
1,876,863
90: 1,877,134
106: 1,876,575
152: 1,877,081
156: 1,876,540
1,876,541
1,876,542
1,876,544
1,876,545
162: 1,876,539
178: 1,877,597
196: 1,876,661
1,877,385
189— 28: 1,877,074
33: 1,876,580
1,877,241
192— .01: 1,877,427
4: 1,877,014
8: 1,876,654
1,877,288
1,877,408
129: 1,876,944
142: 1,877,069
144: 1,877,694
193— 3: 1,876,686
34: 1,877,234
37: 1,876,534
194— 55: 1,876,671
55: 1,876,649
196— 10: 1,877,664
13: 1,877,614
31: 1,876,702
76: 1,876,594
112: 1,877,634
119: 1,877,060
121: 1,876,789
197— 123: 1,877,563
126: 1,876,699
1,876,777
127: 1,876,778
160: 1,876,687
198— 7: 1,877,286
30: 1,877,107
33: 1,876,847
119: 1,877,282
127: 1,877,674
177: 1,876,659
204: 1,877,334
220: 1,877,025
200— 8: 1,877,557
16: 1,876,874
38: 1,877,169
47: 1,877,171
48: 1,876,535
51: 1,876,705
59: 1,876,717
1,876,529
1,876,875
67: 1,876,887
1,877,445
83: 1,876,926
97: 1,877,619
102: 1,877,480
104: 1,877,353
107: 1,877,698
115.5: 1,876,823
120: 1,877,574
127: 1,877,319
1,877,618
129: 1,877,311
134: 1,876,536
138: 1,876,763

200— 138: 1,877,131
139: 1,877,371
159: 1,877,058
163: 1,877,692
166: 1,877,261
172: 1,876,878
201— 50: 1,877,482
55: 1,876,921
1,877,739
76: 1,877,352
202— 146: 1,876,593
204— 5: 1,876,830
25: 1,877,289
205— 48: 1,876,537
206— 16: 1,877,466
19.6: 1,877,059
20: 1,877,588
39: 1,877,585
41: 1,876,690
1,877,468
41.4: 1,877,472
44: 1,877,229
80: 1,876,869
208— 34: 1,876,700
34: 1,876,859
42: 1,877,040
150: 1,877,609
209— 110: 1,876,647
124: 1,877,479
130: 1,876,911
173: 1,876,533
245: 1,877,378
467: 1,876,825
210— 2: 1,877,623
6: 1,877,507
152: 1,877,449
1,877,450
1,877,451
182: 1,877,723
183: 1,877,157
202: R. 18,597
R. 18,598
211— 25: 1,877,532
74: 1,877,217
132: 1,876,963
212— 21: 1,877,582
49: 1,877,373
213— 7: 1,877,026
30: 1,877,399
24: 1,877,329
32: 1,876,908
50: 1,877,335
112: 1,876,816
214— 14: 1,876,685
16.1: 1,877,203
18: 1,876,799
49: 1,877,066
63: 1,876,637
65: 1,877,095
215— 4: 1,876,880
38: 1,877,600
43: 1,877,258
34: 1,877,391
41: 1,876,807
1,877,064
1,877,098
250— 2: 1,877,571
8: 1,876,746
9: 1,877,561
11: 1,876,894
1,877,346
14: 1,876,913
1,877,551
17: 1,876,555
1,876,971
20: 1,876,793
1,877,287
1,877,409
1,877,502
1,877,691
27: 1,876,841
1,877,128
1,877,129
1,877,132
27.5: 1,876,991
34: 1,876,737
1,877,708
1,877,260
1,877,690
41.5: 1,877,279
251— 5: 1,876,968
12: 1,877,200
60: 1,877,589
132: 1,877,197
135: 1,877,528
164: 1,877,675
166: 1,877,529
253— 148: 1,877,048
254— 7: 1,876,922
31: 1,877,684
93: 1,877,364
137: 1,876,773
149: 1,877,354
255— 28: 1,876,627
61: 1,876,740
67: 1,877,067

232— 28: 1,877,473
234— 1: 1,877,249
1,877,593
52: 1,877,150
59: 1,876,696
60: 1,876,719
92: 1,876,949
236— 1: 1,877,327
68: 1,876,636
79: 1,876,822
93: 1,877,510
240— 7.1: 1,876,804
1,876,952
7.7: 1,876,852
8.11: 1,876,625
10.6: 1,877,077
37.1: 1,876,840
41: 1,876,577
48.6: 1,877,294
78: 1,876,667
108: 1,877,552
128: 1,877,591
241— 6: 1,877,108
242— 6: 1,876,815
11: 1,876,651
1,876,760
55: 1,877,440
104: 1,877,444
117: 1,877,309
149: 1,876,781
244— 6: 1,877,008
12: 1,876,635
15: 1,876,682
18: 1,877,474
21: 1,877,227
29: 1,877,498
1,877,499
31: 1,876,620
1,877,021
1,877,022
1,877,023
246— 41: 1,877,562
63: 1,876,566
1,877,553
1,877,555
90: 1,877,245
135: 1,877,333
182: 1,877,626
246: 1,877,184
318: 1,877,742
413: 1,877,276
452: 1,877,524
247— 3: 1,877,103
248— 14: 1,876,844
14.2: 1,876,704
16: 1,876,812
16.5: 1,876,640
18: 1,877,196
22: 1,877,343
27: 1,877,727
30: 1,877,590
31: 1,877,312
34: 1,877,391
41: 1,876,807
1,877,064
1,876,738
1,876,796
10: 1,877,195
12: 1,876,821
13: 1,876,598
19: 1,876,631
1,877,728
220— 18: 1,877,099
24: 1,876,710
31: 1,877,038
1,877,039
38: 1,877,496
221— 2: 1,877,292
1,877,636
27: 1,877,226
47.5: 1,876,381
60: 1,877,534
62: 1,877,153
64: 1,877,372
95: 1,876,784
1,876,946
97: 1,876,554
223— 17: 1,876,632
18.6: 1,876,814
61: 1,877,247
1,877,283
65: 1,877,550
224— 2: 1,876,613
29: 1,876,912
226— 41: 1,876,813
92: 1,877,233
229— 5.7: 1,876,932
32: 1,877,213
52: 1,876,962
1,877,601
53: 1,877,188
230— 127: 1,876,871
134: 1,877,347
179: 1,876,736
186: 1,877,295
209: 1,877,345

255— 71: 1,877,225
257— 125: 1,877,325
1,877,516
136: 1,876,547
1,877,012
137: 1,877,011
153: 1,876,601
239: 1,877,322
263: 1,877,068
259— 1: 1,877,167
1,877,670
97: 1,876,994
101: 1,876,653
260— 2: 1,877,417
8: 1,877,130
11: 1,877,615
12: 1,877,743
31: 1,877,020
1,877,146
44: 1,876,929
45: 1,876,930
1,877,166
1,877,316
46: 1,877,741
53: 1,877,478
61: 1,876,966
1,876,972
1,876,973
1,876,974
1,876,975
1,877,178
1,877,315
68: 1,876,842
69: 1,876,641
72: 1,876,848
76: 1,877,303
87: 1,876,884
89: 1,877,302
97: 1,877,092
98: 1,876,957
1,877,179
101: 1,876,920
104: 1,877,304
1,877,305
106: 1,877,291
108: 1,876,652
124: 1,876,928
1,877,057
1,877,114
128: 1,876,955
134: 1,877,203
148: 1,876,726
150: 1,877,301
170: 1,876,857
261— 1: 1,877,223
12: 1,877,090
41: 1,876,961
66: 1,877,117
107: 1,876,959
114: 1,876,800
115: 1,876,669
263— 20: 1,877,599
265— 1: 1,877,366
2: 1,877,467
44: 1,877,738
47: 1,877,367
266— 5: 1,876,960
21: 1,877,608
34: 1,876,732
267— 10: 1,877,588
54: 1,877,735
55: 1,876,924
56: 1,877,734
268— 11: 1,876,942
50: 1,877,161
61: 1,877,386
111: 1,876,941
270— 5: 1,877,387
79: 1,877,359
271— 2.2: 1,876,761
29: 1,876,606
272— 4: 1,877,471
42: 1,877,656
51: 1,877,256
79: 1,877,218
273— 41: 1,877,660
73: 1,877,018
87: 1,876,657
106.5: 1,877,100
107.5: 1,877,273
124: 1,877,190
125: 1,877,220
131: 1,877,154
274— 9: 1,877,707
10: 1,877,625
42: 1,877,079
277— 37: 1,877,542
61: 1,876,938
64: 1,877,400
280— 33.10: 1,877,579
33.13: 1,876,568
33.44: 1,876,723
49: 1,876,788
91: 1,876,684
1,876,866
96: 1,877,332

280— 102: 1,877,201
124: 1,877,052
158: 1,877,006
166: 1,877,152
281— 1: 1,877,015
282— 12: 1,876,981
284— 6: 1,876,918
285— 3: 1,876,751
86: 1,876,639
111: 1,877,433
132: 1,877,094
163: 1,877,093
180: 1,877,706
285— 194: 1,876,638
286— 16: 1,877,268
1,877,696
287— 103: 1,876,872
117: 1,876,565
291— 19: 1,877,475
292— 57: 1,877,177
76: 1,877,465
114: 1,877,186
169: 1,876,655
210: 1,876,856
263: 1,877,263
288: 1,876,881
292— 339: 1,876,556
352: 1,877,289
294— 57: 1,877,199
1,877,200
1,877,464
296— 28: 1,876,905
30: 1,876,660
44: 1,876,589
1,877,265
45: 1,876,855
84: 1,876,727
94: 1,877,065
107: 1,876,883
299— 12: 1,876,718
62: 1,876,607
63: 1,877,350
88: 1,877,252
111: 1,877,388
120: 1,876,960
121: 1,877,046
301— 33: 1,876,968
53: 1,876,628
55: 1,877,379
124: 1,876,903
302— 59: 1,877,683
303— 69: 1,877,700
303— 81: 1,877,554
304— 5: 1,876,787
305— 10: 1,877,135
306— 6: 1,877,393
54: 1,877,638
71: 1,876,765
88: 1,877,633
160: 1,876,690
168: 1,876,656
174: 1,877,486
180: 1,876,564
189: 1,877,257
207: 1,877,206
308— 240: 1,877,495
243: R. 18,909
1,877,754
1,877,755
312— 25: 1,877,470
71: 1,877,050
113: 1,876,828
180: 1,877,514

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acidacure Company, Warrenton, Va. Medicine. Serial No. 328,257; Sept. 20. Class 6.

American Bemberg Corporation, New York, N. Y. Fabrics of artificial silk. Serial No. 328,204; Sept. 20. Class 42.

Anchor Sales Company, Los Angeles, Calif. Rubber bases. Serial No. 328,300; Sept. 20. Class 50.

Armstrong Cork Company, Lancaster, Pa. Linoleum and felt base wall coverings. Serial No. 329,590; Sept. 20. Class 20.

Arnold, M. N., Shoe Company, North Abington, Mass. Shoes. Serial No. 324,691; Sept. 20. Class 39.

Ballard Oil Company of Worcester, Inc., Worcester, Mass. Lubricating oils, greases, and gasoline. Serial No. 329,251; Sept. 20. Class 15.

Binney & Smith Co., New York, N. Y. Partly prepared paint product. Serial No. 328,416; Sept. 20. Class 16.

Blu-Suds Manufacturing Company. (See Vaughan, Walter C.)

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Game played on a billiard table. Serial No. 329,550; Sept. 20. Class 22.

Bullen, J. Warren, doing business as The Bullen Chemical Company, Folcroft, Pa. Insecticide and disinfectant. Serial No. 329,300; Sept. 20. Class 6.

California Products Company. (See Pagliaro, Luigi.)

Canfield, A. J., Co., Chicago, Ill. Maltless beverages. Serial No. 317,106; Sept. 20. Class 45.

Cervelli, Blanche, San Francisco, Calif. Skin lotion. Serial No. 329,278; Sept. 20. Class 6.

Chase-Williams Corporation, New York, N. Y. Tonic health food. Serial No. 328,912; Sept. 20. Class 46.

Chelucci, Giacomo, Plains, Pa. Hair lotion. Serial No. 328,116; Sept. 20. Class 6.

Chipman Chemical Company, Inc., Boundbrook, N. J. Ready-mixed paint. Serial No. 329,256; Sept. 20. Class 16.

Cirrasol Laboratories. (See Silverberg, Samuel.)

Coast Fishing Co., Wilmington, Calif. Canned tuna. Serial No. 316,150; Sept. 20. Class 46.

Cole Chemical Company, Wilmington, Del., and St. Louis, Mo. Endocrine compounds. Serial No. 327,342; Sept. 20. Class 6.

Consolidated Lobster Co., Inc., Gloucester, Mass. Live and cooked lobsters. Serial No. 325,136; Sept. 20. Class 46.

Corbin, Elbert A., jr., Gradyville, Pa. Fertilizer. Serial No. 329,222; Sept. 20. Class 10.

De Fauzon, Arturo G., Cleveland, Ohio, assignor to Pam-Pa Company of America, Inc., Wilmington, Del. Maltless beverages. Serial No. 317,164; Sept. 20. Class 45.

Delco-Remy Corporation. (See Liberty Starter Company.)

Divine Brothers Company, Utica, N. Y. Buffing, polishing and flexible grinding wheels and belts. Serial No. 329,326; Sept 20. Class 4.

Dorros, Marie, Inc., New York, N. Y. Bridal veils. Serial No. 328,410; Sept. 20. Class 42.

Du Bois Laboratories. (See Viviny Perfumers, Inc.)

El Dorado Refining Company, The, El Dorado, Kans. Gasoline. Serial No. 329,225; Sept. 20. Class 15.

Equitation Specialty Co. (See Weiskötten, William O.)

Fankhauser, Walter A., doing business as Walters Shoe Company. Shoes. Serial No. 328,982; Sept. 20. Class 39.

Federal Tea Company, Inc., Baltimore, Md. Tea. Serial No. 329,142; Sept. 20. Class 46.

Finlayson, Bousfield & Co., Ltd., Johnstone, Scotland. Fishing lines. Serial No. 325,217; Sept. 20. Class 22.

Fischer, Frank, Whiting, Ind. Envelopes. Serial No. 327,083; Sept. 20. Class 37.

Fitzgerald Mfg. Company, The, Torrington, Conn. Electric food mixer and juice extractor. Serial No. 329,229; Sept. 20. Class 21.

Foil Products Corporation, New York, N. Y. Wrapping paper. Serial No. 328,888; Sept. 20. Class 37.

Francisco, Harry, doing business as Francisco Company, Atlanta, Ga. Ice cream. Serial No. 317,761; Sept. 20. Class 46.

Garfinkel & Ritter, New York, N. Y. Silk piece goods. Serial No. 329,230; Sept. 20. Class 42.

General Tire & Rubber Company, The, Akron, Ohio. Tires and tubes. Serial No. 326,818; Sept. 20. Class 35.

Glazer, Max, doing business as Real Juice Company, Dallas, Tex. Root beer. Serial No. 329,556; Sept. 20. Class 45.

Glemby Company, Inc., The, New York, N. Y. Hair nets. Serial No. 329,183; Sept. 20. Class 42.

Gold, Arthur, Jersey City, N. J. Cold, cleansing, and vanishing cream, rouge, face powder, etc. Serial No. 328,422; Sept. 20. Class 6.

Gusman, Fannie, doing business as Mary Ann Tissue Mills Company, Brooklyn, N. Y. Paper napkins, facial towels, tissues, and toilet paper. Serial No. 327,435; Sept. 20. Class 37.

Haber, Jos. B., Inc., Philadelphia, Pa. Sweaters and sweater coats. Serial No. 329,505; Sept. 20. Class 39.

Harrison Wholesale Company, Chicago, Ill. Golf clubs and parts thereof, balls, tees, etc. Serial No. 329,185; Sept. 20. Class 22.

Hart Products Company, Toledo, Ohio. Preparation to be used for dysmenorrhea. Serial No. 328,329; Sept. 20. Class 6.

Heckel Bros., Kansas City, Mo. Medicated oil. Serial No. 321,536; Sept. 20. Class 6.

Hennings, Raymond A., New Orleans, La. Table board games. Serial No. 328,988; Sept. 20. Class 22.

Heppenstall Company, Pittsburgh, Pa. Razor blades. Serial Nos. 329,308–9; Sept. 20. Class 23.

Hilger, Adam, Limited, London, England. Spectroscopically standardized chemical substances. Serial No. 328,667; Sept. 20. Class 6.

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. Serial No. 328,812; Sept. 20. Class 39.

Holt, Bertram G., New York, N. Y. Medicinal preparations. Serial No. 324,790; Sept. 20. Class 6.

Hunt, John F., & Co., Inc., New York, N. Y. Dry yeast. Serial No. 328,219; Sept. 20. Class 46.

International Silver Company, Meriden, Conn. Flat-ware and hollow-ware made of or plated with precious metals. Serial No. 329,285; Sept. 20. Class 28.

Isbell Seed Company, Jackson, Mich. Seeds. Serial No. 328,591; Sept. 20. Class 1.

Jelke, John F., Company, Chicago, Ill. Oleomargarine, evaporated milk, mayonnaise, etc. Serial No. 328,331; Sept. 20. Class 46.

Johnson Oil Refining Company, Chicago, Ill. Lubricating oils. Serial No. 328,769; Sept. 20. Class 15.

Johnson, S. C., & Son, Racine, Wis. Paints and undercoats. Serial No. 325,659; Sept. 20. Class 16.

Jordan, Kathryn S., New York, N. Y. Headgear in the nature of a cap-veil. Serial No. 328,669; Sept. 20. Class 39.

Joubert Cie, Inc., New York, N. Y. Brilliantine, toilet water, cold cream, etc. Serial No. 328,530; Sept. 20. Class 6.

Kam Drug Manufacturing Co., Inc., doing business as Kam Remedy Company, Durham, N. C. Preparation for use in treatment of headaches, pains, etc. Serial No. 326,326; Sept. 20. Class 6.

King Features Syndicate, Inc., New York, N. Y. Newspaper section. Serial No. 329,312; Sept. 20. Class 38.

Kohan, Bertha, Los Angeles, Calif. Salve for boils, carbuncles, fistula, etc. Serial No. 328,333; Sept. 20. Class 6.

Krank, A. J., Company, St. Paul, Minn. Face creams. Serial No. 328,128; Sept. 20. Class 6.

La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme, Paris, France. Pastilles made from mineral waters. Serial No. 328,436; Sept. 20. Class 6.

La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Societe Anonyme, Paris, France. Mineral water salts. Serial No. 328,437; Sept. 20. Class 6.

Leggett, Francis H., & Company, New Yrok, N. Y. Sauce. Serial No. 328,735; Sept. 20. Class 46.

Liberty Starter Company, Detroit, Mich., assignors to Delco-Remy Corporation, Anderson, Ind. Electric coil making and assembling machinery. Serial No. 324,715; Sept. 20. Class 23.

Lily Mill and Power Company, Shelby, N. C. Sewing thread. Serial No. 329,021; Sept. 20. Class 43.

Lonji Company, Des Moines, Iowa. Liquid substance for tinting or dyeing lingerie, rayon, linen, etc. Serial No. 328,334; Sept. 20. Class 6.

Lowe, Joe, Corporation, Brooklyn, N. Y. Powdered dehydrated whole egg, albumen and yolk. Serial No. 327,317; Sept. 20. Class 46.

Luebbe, Edward J., doing business as Luebbe Products Co., Cincinnati, Ohio. Malt syrup. Serial No. 319,034; Sept. 20. Class 46.

Mairov Hat and Cap Co., Minneapolis, Minn. Caps and fur felt hats. Serial No. 328,796; Sept. 20. Class 39.

Mary Ann Tissue Mills Company. (See Gusman, Fannie.)

McComb, James B., New York, N. Y. Carpet and rug cleaning compound. Serial No. 329,351; Sept. 20. Class 4.

McCreadie, James, & Company, Limited, Glasgow, Scotland. Whiskey. Serial No. 329,585; Sept. 20. Class 49.

Meyer & Trudeau, Alexandria, Va. Soap cleaner. Serial No. 324,795; Sept. 20. Class 4.

Michelfelder, Carl F., New Rochelle, N. Y. Portable golf game apparatus. Serial No. 304,964; Sept. 20. Class 22.

Myron Bag Co., Inc., New York, N. Y. Handbags. Serial No. 327,254; Sept. 20. Class 3.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Nagy Bros. Motor Company, Bethlehem, Pa. Gasoline, motor lubricating oils, fuel oils, etc. Serial No. 329,263; Sept. 20. Class 15.

Nelson, Baker & Company, Detroit, Mich. Shaving cream. Serial No. 328,135; Sept. 20. Class 4.

Nessly, Frederick C., doing business as Rah-Na Co., Seattle, Wash. Maltless beverages. Serial No. 326,828; Sept. 20. Class 45.

Newco Co. (See Schiebel, Henry.)

Newco Manufacturing Corporation of Mount Vernon, N. Y. (See Schiebel, Henry, assignor.)

Odora Company, Inc., New York, N. Y. Storage chests. Serial No. 325,438; Sept. 20. Class 2.

Okonite Company, The, Passaic, N. J. Insulated wires and cables. Serial No. 325,721; Sept. 20. Class 21.

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics in the piece. Serial No. 329,152; Sept. 20. Class 42.

Packet Tea Corporation of America, New York, N. Y. Tea. Serial No. 328,818; Sept. 20. Class 46.

Pagliaro, Luigi, doing business as California Products Company, Pittsburgh, Pa. General tonic. Serial No. 328,819; Sept. 20. Class 6.

Pam-Pa Company of America, Inc. (See De Fauzon, Arturo G., assignor.)

Parke, Davis & Company, Detroit, Mich. Preparation used for the treatment of syphilitic and similar types of infection. Serial Nos. 328,699–200; Sept. 20. Class 6.

Pennway Manufacturing Company, Harrisburg, Pa. Children's clothing. Serial No. 328,996; Sept. 20. Class 39.

Phillips Petroleum Company, Bartlesville, Okla. Oils and greases. Serial Nos. 328,505–6; Sept. 20. Class 15.

Pittsburgh Piping and Equipment Co., Pittsburgh, Pa. Tubular metal bands. Serial No. 328,183; Sept. 20. Class 14.

Rah-Na Co. (See Nessly, Frederick G.)

Real Juice Company. (See Glazer, Max.)

Renaud Optical Company, Inc., Petersburg, Va. Ophthalmic lenses. Serial No. 329,429; Sept. 20. Class 26.

Rhodes, James H., & Company, Chicago, Ill. Steel wool and pumice stone. Serial No. 327,781; Sept. 20. Class 4.

Rhodes-Perry-Martin, Inc., St. Louis, Mo. Machinery for dry cleaning. Serial No. 329,201; Sept. 20.

Rice-Stix Dry Goods Co., St. Louis, Mo. Wearing apparel. Serial No. 327,169; Sept. 20. Class 39.

Richfield Oil Corporation of New York, New York, N. Y. Petroleum products. Serial No. 321,821; Sept. 20. Class 15.

Rockola, David C., Chicago, Ill. Table board game. Serial No. 329,203; Sept. 20. Class 22.

Ross, Fred'k N., Inc., Detroit, Mich. Ventilators. Serial No. 327,479; Sept. 20. Class 34.

Russell, Joseph M., Cleveland, Ohio. Tennis rackets. Serial No. 329,210; Sept. 20. Class 22.

San Dee Company, The, Evansville, Ind. Ointment. Serial No. 328,076; Sept. 20. Class 6.

Saul Pharmacal Co. Inc., New York, N. Y. Ointment. Serial No. 328,185; Sept. 20. Class 6.

Schenerman-Geistlinger Mfg. Co. Inc., Peekskill, N. Y. Nursing bottles. Serial No. 327,530; Sept. 20. Class 44.

Schiebel, Henry, doing business as Newco Co., assignor to Newco Manufacturing Corporation of Mount Vernon, N. Y., Mount Vernon, N. Y. Liquid wax. Serial No. 321,782; Sept. 20. Class 16.

Schmitt, Eugene, Astoria, N. Y. Finger wave preparation. Serial No. 328,706; Sept. 20. Class 6.

Schmutzer, Bernardo, Valparaiso, Chile. Medicine for the stomach. Serial No. 328,077; Sept. 20. Class 6.

Servel, Inc., New York, N. Y. Household and store refrigerators and parts thereof. Serial No. 328,965; Sept. 20. Class 31.

Severy, Charles L., Detroit, Mich. Ointment. Serial No. 328,020; Sept. 20. Class 6.

Silverberg, Samuel, doing business as Citrasol Laboratories, New York, N. Y. Liquid laxative. Serial No. 328,539; Sept. 20. Class 6.

Silverite-Gutterman Co., Boston, Mass. Leather patches. Serial No. 328,648; Sept. 20. Class 39.

Smith, George J. C., Pataskla, Ohio. Skin lotion and liquid shampoo. Serial No. 327,607; Sept. 20. Class 6.

Standard Oil Company of New Jersey, Wilmington, Del. Coal dust controlling mineral oil. Serial No. 328,673; Sept. 20. Class 15.

Steffan and Rohrer, San Francisco, Calif. Blowtorch as a dental appliance. Serial No. 328,881; Sept. 20. Class 44.

Stein, Cherrie B., Pittsburgh, Pa. Maltless beverages and syrups therefor. Serial No. 329,431; Sept. 20. Class 45.

Strathmore Paper Company, West Springfield, Mass. Writing and printing paper. Serial No. 329,433; Sept. 20. Class 37.

Tennessee Enamel Manufacturing Company, Nashville, Tenn. Porcelain tables and table tops, cabinets, etc. Serial No. 329,513; Sept. 20. Class 32.

Tennessee Enamel Manufacturing Company, Nashville, Tenn. Iced and automatic refrigerators, casings, etc. Serial No. 329,514; Sept. 20. Class 31.

Terri Cosmetics Corporation, New York, N. Y. Hair preparations. Serial No. 328,708; Sept. 20. Class 6.

Troy Blanket Mills, Troy, N. H. Piece goods and blankets. Serial No. 329,246; Sept. 20. Class 42.

United States Gauge Company, New York, N. Y. Gauges. Serial Nos. 328,454–5; Sept. 20. Class 26.

United States Gypsum Company, Chicago, Ill. Wall board, plaster board, and plaster. Serial No. 318,607; Sept. 20. Class 12.

Universal Refrigerator Company, Philadelphia, Pa. Filters and electric refrigerators. Serial No. 329,004; Sept. 20. Class 31.

Vaughan, Walter D., doing business as Blu-Suds Manufacturing Company, Detroit, Mich. Detergents. Serial No. 326,338; Sept. 20. Class 4.

Viviny Perfumers, Inc., doing business as BuBois Laboratories, West Haven, Conn. Astringents, bleaching creams, rouge, etc. Serial No. 328,456; Sept. 20. Class 6.

Walters Shoe Company. (See Fankhauser, Walter A.)

Wapler, Nicholas, Company, New York, N. Y. Feed for fish. Serial No. 329,269; Sept. 20. Class 46.

Wedler-Shuford Co., The, St. Louis, Mo. Vehicle seat covers and pads. Serial No. 325,358; Sept. 20. Class 32.

Weinberg, Alexander, New York, N. Y. Board game. Serial No. 328,458; Sept. 20. Class 22.

Weiskotten, William O., doing business as Equitation Specialty Co., San Diego, Calif. Boot trees. Serial Nos. 328,149–50; Sept. 20. Class 50.

Western Lime & Cement Co., The, Milwaukee, Wis. Lime. Serial No. 329,033; Sept. 20. Class 12.

Westinghouse Lamp Company, Bloomfield, N. J. Vacuum or gas-filled tubes and particularly for X-ray tubes. Serial No. 324,416; Sept. 20. Class 21.

Wieboldt Stores, Inc., Chicago, Ill. Skin tonic, astringent. Serial No. 322,666; Sept. 20. Class 6.

Witherbee Storage Battery Co., Inc., Belleville, N. J. Storage batteries. Serial No. 329,393; Sept. 20. Class 21.

Wooster Brush Company, The, Wooster, Ohio. Paint and varnish brushes. Serial No. 327,178; Sept. 20. Class 29.

Wurgaft, Robert B., Pomona, Calif. Fresh citrous and deciduous fruits. Serial No. 321,402; Sept. 20. Class 46.

Zinzani, Pietro, Piacenza, Italy. Magnesia. Serial No. 326,410; Sept. 20. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 297,632; Sept. 20; Serial No. 306,081; published July 5, 1932. Class 37.

Abbott Company, The, Wilton, Me. Boots, shoes, slippers, etc. 297,561; Sept. 20; Serial No. 326,073; published June 1, 1932. Class 39.

All-Steel-Equip Company, Aurora, Ill. Lockers, cabinets, tool stands, etc. 297,644; Sept. 20; Serial No. 319,682; published July 5, 1932. Class 32.

American Iron and Steel Manufacturing Company, Lebanon and Reading, Pa., to Bethlehem Steel Company, Bethlehem, Pa., successor. Structual forgings, bar-iron, and bar-steel. 89,214; renewed Dec. 3, 1932.

Anderson, Chester M., and Clarence Q. Graham (a partnership), doing business as The Distribution Systems Company, Washington, D. C. Blank books. 297,534; Sept. 20; Serial No. 327,135; published June 28, 1932. Class 37.

Asiatic Petroleum Company, Limited, The, London, England. Lamp black, chemical substances, solvents, etc. 297,633; Sept. 20; Serial No. 305,601; published June 7, 1932. Class 6.

Associated Merchandising Corporation, The, New York, N. Y. Girls' coats and dresses. 297,585; Sept. 20; Serial No. 327,087; published July 5, 1932. Class 39.

Atlantic Romper Co. Inc., Linden, N. J. Boys' wash suits, sun suits, play suits, and rompers. 297,627; Sept. 20; Serial No. 326,200; published July 5, 1932. Class 39.

Austral Window Company, Augusta, Me., and New York, N. Y. Wardrobes, coat racks, shelving, etc. 297,541; Sept. 20; Serial No. 325,132; published June 28, 1932. Class 32.

Barengo Bros., Reno, Nev. Fresh grapes. 297,540; Sept. 20; Serial No. 325,507; published June 28, 1932. Class 46.

Bass, G. H. & Co., Wilton, Me. Boots, shoes, slippers, etc. 297,595; Sept. 20; Serial No. 311,124; published July 5, 1932. Class 39.

Bay State Milling Co., Winona, Minn. Wheat flour. 297,628; Sept. 20; Serial No. 326,776; published June 28, 1932. Class 46.

Beekman Paper & Card Company. (See Greenebaum, Max.)

Berman, Benjamin, doing business as Stonhard Company, Philadelphia, Pa. Construction materials. 297,642; Sept. 20; Serial No. 319,471; published Dec. 29, 1931. Class 12.

Best Products Co., The. (See Terry, Walter T., jr.)

Bethlehem Steel Company. (See American Iron and Steel Manufacturing Company.)

Blatchford Calf Meal Company, Waukegan, Ill. Mash or meal for poultry. 297,635; Sept. 20; Serial No. 310,274; published July 5, 1932. Class 46.

Blue Seal Extract Company, Cambridge, Mass. Ginger ale and maltless beverages, and syrups and extracts for making the same. 297,589; Sept. 20; Serial No. 314,838; published June 30, 1931. Class 45.

Boosey & Hawkes, Limited. (See Hawkes & Son.)

Booth, Walter, Shoe Co., Milwaukee, Wis. Boots, shoes, and oxfords. 297,602; Sept. 20; Serial No. 322,681; published July 5, 1932. Class 39.

Bottler's Chocolate Supply Corporation, Brooklyn, N. Y. Chocolate milkfood drink. 297,593; Sept. 20; Serial No. 316,680; published Sept. 29, 1931. Class 46.

Broadway Producta Corporation, Buffalo, N. Y. Malt syrup. 297,617; Sept. 20; Serial No. 326,359; published June 28, 1932. Class 46.

Brom-O-Doro Co. (See Cockle, Edward S.)

Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Dietary material. 297,524; Sept. 20; Serial No. 324,817; published June 28, 1932. Class 46.

Byer, Inc., The House of, Cambridge, Mass. Hosiery. 297,582; Sept. 20; Serial No. 327,183; published July 5, 1932. Class 39.

Chappel Bros., Inc., Rockford, Ill. Prepared foods for dogs, cats, etc. 297,511; Sept. 20; Serial No. 321,678; published Feb. 2, 1932. Class 46.

Chappel Bros., Inc., Rockford, Ill. Prepared food for dogs, cats, etc. 297,512; Sept. 20; Serial No. 321,677; published Jan. 19, 1932. Class 46.

City Mills Company, Columbus, Ga. Wheat flour. 297,608; Sept. 20; Serial No. 322,355; published June 21, 1932. Class 46.

Clemetsen Company, The, Chicago, Ill. Desks, tables, filing cabinets. 297,601; Sept. 20; Serial No. 323,077; published July 5, 1932. Class 32.

Cleveland Provision Company, The, Cleveland, Ohio. Lard. 88,399; renewed Sept. 17, 1932.

Cockle, Edward S., doing business as Brom-O-Doro Co., New York, N. Y. Deodorant. 297,519; Sept. 20; Serial No. 320,778; published Dec. 22, 1931. Class 6.

Cohn, Morris, doing business as Chrystal Chemical Company, Belleville, N. J. Soap. 297,650; Sept. 20; Serial No. 297,297; published July 5, 1932. Class 4.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 297,597; Sept. 20; Serial No. 311,512; published Apr. 14, 1931. Class 4.

Columbia Plush & Puff Co., Inc., Brooklyn, N. Y. Woven elastics, hair pins, combs, etc. 297,546; Sept. 20; Serial No. 325,981; published June 21, 1932. Class 40.

Commercial Merchandising Corporation, Cincinnati, Ohio. Food products. 297,525–6; Sept. 20; Serial Nos. 324,459–60; published June 28, 1932. Class 46.

Cosby-Hodges Milling Co. Inc., Birmingham, Ala. Wheat flour. 297,557; Sept. 20; Serial No. 326,850; published June 28, 1932. Class 46.

Craddock-Terry Company, Lynchburg, Va. Shoes. 297,560; Sept. 20; Serial No. 326,252; published June 21, 1932. Class 39.

Cresca Company. (See Reiss & Brady.)

Crystal Chemical Company. (See Cohn, Morris.)

Darboven, Arthur, doing business as J. J. Darboven, Hamburg, Germany. Coffee. 297,523; Sept. 20; Serial No. 324,701; published June 28, 1932. Class 46.

Davies & Sullivan Company, New York, N. Y. Coffee. 297,630; Sept. 20; Serial No. 304,856; published June 28, 1932. Class 46.

DeLong Hook and Eye Company, The, Philadelphia, Pa. Safety pins. 297,559; Sept. 20; Serial No. 326,205; published July 5, 1932. Class 40.

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Food flavors, canned asparagus, canned oysters, etc. 297,622; Sept. 20; Serial No. 326,807; published June 28, 1932. Class 46.

Distribution Systems Company, The. (See Anderson, Chester M., and Clarence Q. Graham (a partnership).)

Doran, William J., doing business as Norda Manufacturing Company, St. Louis, Mo. Cleansing and polishing preparation. 297,543; Sept. 20; Serial No. 326,285; published July 5, 1932. Class 4.

Falls, J. G., doing business as J. G. Falls Co., Brooklyn, N. Y. Dietetic flour. 297,645; Sept. 20; Serial No. 313,654; published June 21, 1932. Class 46.

Fashion Brassiere Co., Inc., New York, N. Y. Corsets, brassieres, etc. 297,588; Sept. 20; Serial No. 327,052; published June 28, 1932. Class 39.

Fawcett, Harry, doing business as Grocers Co-Operative Baking Co., Minneapolis, Minn. Bread. 297,553; Sept. 20; Serial No. 327,247; published July 5, 1932. Class 46.

Felder Bros., New York, N. Y. Stationery supplies. 297,587; Sept. 20; Serial No. 327,352; published June 28, 1932. Class 37.

Fink Shoe Co. Inc., Brooklyn, N. Y. Shoes. 297,558; Sept. 20; Serial No. 326,745; published July 5, 1932. Class 39.

Fleischl, Emil, & Son, New York, N. Y. Butter. 297,550; Sept. 20; Serial No. 327,093; published July 5, 1932. Class 46.

Flick & Kupfer, Los Angeles, Calif. Fresh vegetables. 297,620; Sept. 20; Serial No. 304,131; published Aug. 25, 1931. Class 46.

Flour Mill Products Co. (See Meyers, Percy E.)

Fruit-Sno Co. (See Lahman, S. J.)

Fudo Psyllium Corp. (See Lichtenstein, William.)

Gaines, Clarence F., doing business as Gaines Food Company, Sherburne, N. Y. Puppy and cat food. 297,618; Sept. 20; Serial No. 326,468; published June 28, 1932. Class 46.

Garber Baking Company, The, Frederick, Md. Bread, rolls, cakes, and pies. 297,554; Sept. 20; Serial No. 327,249; published June 28, 1932. Class 46.

Godman, H. C., Company, The, Columbus, Ohio. Shoes. 297,510; Sept. 20; Serial No. 321,874; published July 5, 1932. Class 39.

Grainger, W. B., Packing Company, Salinas, Calif. Fresh vegetables. 297,637; Sept. 20; Serial No. 327,395; published June 28, 1932. Class 46.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Stock and dairy feed. 297,529; Sept. 20; Serial No. 327,387; published June 28, 1932. Class 46.

Greenebaum, Max, to Beekman Paper & Card Company, Inc., successor, New York, N. Y. Writing and printing paper. 89,461–2; renewed Dec. 17, 1932.

Grocers Co-Operative Baking Co. (See Fawcett, Harry.)

Hamilton, Brown Shoe Company, St. Louis, Mo. Shoes. 297,516; Sept. 20; Serial No. 320,926; published July 5, 1932. Class 39.

Hart Drug Corporation, Miami, Fla. Inhalants. 297,515; Sept. 20; Serial No. 321,645; published Mar. 1, 1932. Class 6.

Harzfeld's, Inc., Kansas City, Mo. Hosiery. 297,609; Sept. 20; Serial No. 326,857; published June 14, 1932. Class 39.

Hawkes & Son, to Boosey & Hawkes, Limited, successor, London, England. Cornets, trumpets, and drums. 88,487; renewed Sept. 24, 1932.

Hensley, Amos M., doing business as Miragio Products Co., Cleveland, Ohio. Liquid compound. 297,568; Sept. 20; Serial No. 327,397; published July 5, 1932. Class 4.

Hohnecker's Dairy, North Bergen, N. J. Milk, cream, butter, etc. 297,556; Sept. 20; Serial No. 326,969; published July 5, 1932. Class 46.

Honen, W. R., Co. (See Kodani, M.)

Hope Company, The, assignor to Lonsdale Company, Providence, R. I. Bleached muslin. 89,753; renewed Jan. 7, 1933.

Horii, Shinjiro, Tokyo, Japan. Stencil sheets. 297,598; Sept. 20; Serial No. 312,007; published July 7, 1931. Class 37.

Hormel, Geo. A., & Company, Austin, Minn. Salt pork. 297,514; Sept. 20; Serial No. 321,382; published June 28, 1932. Class 46.

Horton Manufacturing Company, Fort Wayne, Ind. Laundry washing machines. 297,583; Sept. 20; Serial No. 327,150; published June 28, 1932. Class 24.

Horton Manufacturing Company, Fort Wayne, Ind. Laundry washing machines. 297,639; Sept. 20; Serial No. 327,151; published June 28, 1932. Class 24.

Hubinger Company, The, Keokuk, Iowa. Corn starch. 297,646; Sept. 20; Serial No. 314,563; published June 28, 1932. Class 46.

Ideal Trading Co. (See Lichtenstein, William.)

Intelligencer Publishing Company, Edwardsville, Ill. Newspaper. 297,574; Sept. 20; Serial No. 326,612; published June 28, 1932. Class 38.

Jell Products Company, South Milwaukee, Wis. Preparation of gelatine. 297,625; Sept. 20; Serial No. 326,325; published June 28, 1932. Class 46.

Johns-Manville Corporation, New York, N. Y. Felt for vibration and sound deadening. 297,521; Sept. 20; Serial No. 324,440; published Apr. 12, 1932. Class 12.

Jones-Dabney Company, Inc., Louisville, Ky. Lacquers, varnishes, enamels and paints. 297,612; Sept. 20; Serial No. 326,479; published June 21, 1932. Class 16.

Kabo Corset Company, Chicago, Ill. Foundation garments, girdles, step-ins, etc. 297,562; Sept. 20; Serial No. 326,480; published July 5, 1932. Class 39.

Kasper, Marie A., Miami, Fla. Sleeping jackets. 297,578; Sept. 20; Serial No. 327,056; published July 5, 1932. Class 39.

Kent, Thomas I., Boston, Mass. Candy. 297,638; Sept. 20; Serial No. 327,314; published June 28, 1932. Class 46.

Kitchenette Cookie Company, Louisville, Ky. Cookie dough. 297,569; Sept. 20; Serial No. 326,982; published June 21, 1932. Class 46.

Kleinert, I. B., Rubber Co., to I. B. Kleinert Rubber Company, successor, New York, N. Y. Dress shields. 37,606; renewed Jan. 7, 1932.

Kodani, M., doing business as W. R. Honen Co., New York, N. Y. Aprons. 297,621; Sept. 20; Serial No. 326,822; published June 28, 1932. Class 39.

Koppers Company of Delaware, The, Pittsburgh, Pa. Coal. 297,539; Sept. 20; Serial No. 325,913; published May 17, 1932. Class 1.
Kotex Company, Chicago, Ill. Paper towels. 297,536; Sept. 20; Serial No. 327,098; published July 5, 1932. Class 37.
Kunkel, Louis B., St. Louis, Mo. Shoe polish. 297,614; Sept. 20; Serial No. 326,592; published July 5, 1932. Class 4.
Lahman, S. J., doing business as Fruit-Sno Co., Oklahoma City, Okla. Frozen confections and flavoring extracts therefor. 297,641; Sept. 20; Serial No. 318,902; published June 28, 1932. Class 46.
Levi-Ottenheimer Company, Baltimore, Md. Pajamas for girls and women; gymnasium, sports, and play suits for boys and girls. 297,587; Sept. 20; Serial No. 327,062; published July 5, 1932. Class 39.
Liberty Publishing Co., Cleveland, Ohio. Periodicals. 89,755; renewed Jan. 7, 1933.
Lichtenstein, William, doing business as Ideal Trading Co., and Fudo Psyllium Corp., New York, N. Y. Bird seed. 297,611; Sept. 20; Serial No. 326,152; published June 21, 1932. Class 46.
Lock, James, & Co. Ltd., London, England. Hats. 297,604; Sept. 20; Serial No. 322,590; published July 5, 1932. Class 39.
Lonsdale Company. (See Hope Company, assignor.)
Los Angeles Soap Company, Los Angeles, Calif. Toilet soap. 297,544; Sept. 20; Serial No. 325,875; published July 5, 1932. Class 4.
Lyle, Abram, & Sons, Limited, assignor, by mesne assignments, to Tate & Lyle, Limited, London, England. Table-syrup. 89,045; renewed Nov. 5, 1932.
Lyndell, Birger C., Somerville, Mass. Graham bread. 297,600; Sept. 20; Serial No. 323,345; published June 21, 1932. Class 46.
Maison Jeurelle, Inc., Jersey City, N. J. Toilet soap. 297,613; Sept. 20; Serial No. 326,945; published June 28, 1932. Class 4.
Malley, Edw., Co., The, New Haven, Conn. Coats, blouses, sweaters, etc. 297,590; Sept. 20; Serial No. 315,105; published Aug. 4, 1931. Class 39.
Mantell, Herman, New York, N. Y. Hosiery. 297,577; Sept. 20; Serial No. 327,319; published July 5, 1932. Class 39.
Maritime Milling Co., Inc., Buffalo, N. Y. Poultry feeds. 297,592; Sept. 20; Serial No. 316,974; published Aug. 25, 1931. Class 46.
Marney, Floyd L., doing business as Marney Animal Food Co., Huntington Park, Calif. Dog and cat food. 297,552; Sept. 20; Serial No. 327,193; published June 28, 1932. Class 46.
Melville Shoe Corporation, New York, N. Y. Shoes. 297,564; Sept. 20; Serial No. 326,292; published July 5, 1932. Class 39.
Meyers, Isadore, Philadelphia, Pa. Trousers and pants. 297,517–8; Sept. 20; Serial Nos. 320,896–7; published July 5, 1932. Class 39.
Meyers, Percy E., doing business as Flour Milk Products Co., Philadelphia, Pa. Wheat flour. 297,551; Sept. 20; Serial No. 327,162; published June 28, 1932. Class 46.
Miraglo Products Co. (See Hensley, Amos M.)
Montee Publishing Co., Inc., Baltimore, Md. Magazine. 297,575; Sept. 20; Serial No. 326,628; published June 28, 1932. Class 38.
My Own Company, Indianapolis, Ind. Canned milk. 297,651; Sept. 20; Serial No. 295,686; published Apr. 1, 1930. Class 46.
Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Mattresses and box springs. 297,610; Sept. 20; Serial No. 326,295; published June 28, 1932. Class 32.
National Bank Note Company, Cleveland, Ohio. Paper and envelopes. 297,571; Sept. 20; Serial No. 326,490; published June 28, 1932. Class 37.
National Date Company, Boston, Mass. Dates. 297,643; Sept. 20; Serial No. 319,494; published Dec. 8, 1931. Class 46.
National Washboard Company, Chicago, Ill. Ironing tables. 297,563; Sept. 20; Serial No. 326,428; published June 28, 1932. Class 24.
Naumkeag Steam Cotton Company, Salem, Mass. Shirts, pajamas, nurses' uniforms. 297,620; Sept. 20; Serial No. 326,717; published July 5, 1932. Class 39.
Nazareth Cement Company, Nazareth, Pa. Portland cement. 297,513; Sept. 20; Serial No. 321,116; published Jan. 19, 1932. Class 12.
Neighbor Products Company, Chicago, Ill. Dog food. 297,530; Sept. 20; Serial No. 327,404; published June 28, 1932. Class 46.
Neptune Meter Company, New York, N. Y. Liquid meters. 297,547–8; Sept. 20; Serial Nos. 325,853–4; published June 7, 1932. Class 26.
Norda Manufacturing Company. (See Doran, William J.)
Nutting, K. R., doing business as K. R. Nutting Co., Salinas, Calif. Lettuce. 297,603; Sept. 20; Serial No. 323,671; published June 28, 1932. Class 46.
Oat Snaps Company. (See Purity Oats Company.)
Paragon Refining Co. The, Toledo, Ohio. Illuminating oils and greases. 90,373; renewed Feb. 18, 1933.
Paramount Press, The. (See Stickler, Charles F.)
Penn Rose Hosiery Mills, Philadelphia, Pa. Hosiery. 297,576; Sept. 20; Serial No. 327,321; published July 5, 1932. Class 39.
Personeni, Joseph, New York, N. Y. Tonics and stomach bitters. 39,141; renewed Oct. 28, 1932.
Piggly Wiggly Corporation, Cincinnati, Ohio. Canned vegetables and fish. 297,647; Sept. 20; Serial No. 285,880; published June 28, 1932. Class 46.
Pitts, J. O., Atlanta, Ga. Fresh eggs. 297,599; Sept. 20; Serial No. 323,269; published June 28, 1932. Class 46.
Plotsky, Louis, Kansas City, Mo. Child's tailored overall garment. 297,542; Sept. 20; Serial No. 325,799; published July 5, 1932. Class 39.
Power Wagon Publishing Company, Chicago, Ill. Periodical. 297,533; Sept. 20; Serial No. 327,168; published July 5, 1932. Class 38.
Prescott, J. L., Company, Passaic, N. J. Polish. 297,566; Sept. 20; Serial No. 327,200; published July 5, 1932. Class 4.
Prospect Island Farming Company, San Francisco and Rio Vista, Calif. Fresh vegetables. 297,626; Sept. 20; Serial No. 326,394; published June 28, 1932. Class 46.
Purity Oats Company, doing business as Oat Snaps Company, Keokuk, Iowa. Breakfast foods. 297,555; Sept. 20; Serial No. 326,759; published June 21, 1932. Class 46.
Red & White Corporation, Buffalo, N. Y. Soap. 297,567; Sept. 20; Serial No. 327,475; published July 5, 1932. Class 4.
Reiss & Brady to Cresca Company, Incorporated, successor, New York, N. Y. Figs. 39,568; renewed Dec. 30, 1932.
Renova Co., The, St. Petersburg, Fla. Metal-less garters and hose supporters. 297,531; Sept. 20; Serial No. 327,232; published June 28, 1932. Class 39.
Rhodes, L. K., Little Rock, Ark. Metal polish. 297,615; Sept. 20; Serial No. 326,873; published July 5, 1932. Class 4.
Rippey, William, Cincinnati, Ohio. Preparations for use in making frozen desserts. 87,927; renewed Aug. 13, 1932.
Robico Biscuit Company, New York, N. Y. Biscuits and wafers. 297,549; Sept. 20; Serial No. 327,027; published June 21, 1932. Class 46.
Rogers Peet Company, New York, N. Y. Underwear. 297,579; Sept. 20; Serial No. 327,260; published July 5, 1932. Class 39.
Roundy, Peckham & Dexter Co., Milwaukee, Wis. Foods. 88,424; renewed Sept. 17, 1932.
Salant & Salant, Inc., New York, N. Y. Shirts. 297,584; Sept. 20; Serial No. 327,029; published July 5, 1932. Class 39.
Sales, G. M., Co., Fort Wayne, Ind. Hosiery. 297,580; Sept. 20; Serial No. 327,248; published July 5, 1932. Class 39.
Saxon Paper Products Inc., New York, N. Y. Paper. 297,538; Sept. 20; Serial No. 327,481; published July 5, 1932. Class 37.
Shell Eastern Petroleum Products, Inc., New York, N. Y. Maps or bulletins. 297,607; Sept. 20; Serial No. 322,233; published June 28, 1932. Class 38.
1632 Indiana Corporation. (See Wyle Hat Corporation.)
Societe Anonyme des. Caves & des Producteurs Reunis de Roquefort, Roquefort, France. Cheese. 297,591; Sept. 20; Serial No. 315,937; published July 5, 1932. Class 46.
Socony-Vacuum Corporation. (See Standard Oil Company of New York.)
Special Libraries Association, New York, N. Y. Publication. 297,528; Sept. 20; Serial No. 324,125; published June 28, 1932. Class 38.
Standard Oil Company of New York, by change of name to Socony-Vacuum Corporation, New York, N. Y. Benzin, naphtha, and gasolene. 89,301; renewed Dec. 3, 1932.
Standard Oil Company of New York, by change of name to Socony-Vacuum Corporation, New York, N. Y. Refined oil for illuminating, heating, and power purposes. 89,513; renewed Dec. 17, 1932.
Standard Table Oil Cloth Company, Jersey City, N. J., and New York, N. Y., assignors, by mesne assignments, to The Standard Textile Products Company, New York, N. Y. Oil cloths. 39,295; renewed Nov. 18, 1932.
Steel-Wedeles Company, Chicago, Ill. Canned fruits, vegetables, fish, etc. 297,631; Sept. 20; Serial No. 302,079; published June 28, 1932. Class 46.
Stewart, Donald F., New York, N. Y. Cartoons. 297,572; Sept. 20; Serial No. 326,648; published June 28, 1932. Class 38.
Stickler, Charles F., doing business as The Paramount Press, Fort Wayne, Ind. Publication. 297,532; Sept. 20; Serial No. 327,263; published July 5, 1932. Class 38.
Stobie, Frank G., doing business as Stobie Photo Copy Company, St. Louis, Mo. Photographic reproductions of imprinted matter, drawings, etc. 297,522; Sept. 20; Serial No. 324,630; published July 5, 1932. Class 38.
Stonhard Company. (See Berman, Benjamin.)
Straw Hat Corporation of America, New York, N. Y. Straw hats and hat bodies. 297,527; Sept. 20; Serial No. 324,726; published July 5, 1932. Class 39.
Superior Portland Cement, Inc., Seattle, Wash. Portland cement. 297,640; Sept. 20; Serial No. 317,090; published Dec. 29, 1931. Class 12.

Swift and Company, Chicago, Ill. Shortening made from lard and vegetable fats. 297,648; Sept. 20; Serial No. 327,291; published July 28, 1932. Class 46.
Tate & Lyle, Limited. (See Lyle, Abram, & Sons, Limited.)
Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Polishing and cleaning preparation. 297,636; Sept. 20; Serial No. 325,198; published June 7, 1932. Class 16.
Tioga Mill & Elevator Co., by change of name to Tioga-Empire Feed Mills, Inc., Waverly, N. Y. Stock feed. 88,975; renewed Oct. 29, 1932.
Tonkin Distributing Company, San Francisco, Calif. Malt syrup. 297,619; Sept. 20; Serial No. 326,402; published June 28, 1932. Class 46.
Toplitz, Louis C., New York, N. Y. Hosiery. 297,586; Sept. 20; Serial No. 327,073; published July 5, 1932. Class 39.
Truesdail, Roger W., Los Angeles, Calif. Article of food. 297,605; Sept. 20; Serial No. 322,897; published June 21, 1932. Class 46.
Turcott, David, doing business as Turcott & Company, Beloit, Wis. Candy confections. 297,623; Sept. 20; Serial No. 326,836; published June 28, 1932. Class 46.
Twentieth Century Manufacturing Co., Cedar Rapids, Iowa. Cleaner. 297,545; Sept. 20; Serial No. 325,834; published June 28, 1932. Class 4.
Veldown Company, Inc., New York, N. Y. Cleansing tissue. 297,535; Sept. 20; Serial No. 327,489; published July 5, 1932. Class 37.
Venceslao di Secondo, Vergani, Cremona, Italy. Sweet cakes. 297,649; Sept. 20; Serial No. 276,015; published July 5, 1932. Class 46.
Vuitton & Vuitton, Societe a Responsabilite Limitee, Paris, France. Trunks, valises, satchels, etc. 297,594; Sept. 20; Serial No. 313,983; published June 21, 1932. Class 3.
Wall & Ochs, Incorporated, Philadelphia, Pa. Lenses. 297,509; Sept. 20; Serial No. 321,509; published June 14, 1932. Class 26.
West Disinfecting Company, Long Island City, N. Y. Cleaning preparations, dry cleaner, floor cleaner, etc. 297,596; Sept. 20; Serial No. 311,633; published June 28, 1932. Class 4.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Laundry washing machines. 297,565; Sept. 20; Serial No. 326,726; published June 28, 1932. Class 24.
Weyenburg Shoe Mfg. Co., Milwaukee, Wis. Shoes. 297,616; Sept. 20; Serial No. 326,570; published June 28, 1932. Class 39.
White, Morris, Inc., New York, N. Y. Hand bags. 297,634; Sept. 20; Serial No. 300,698; published July 5, 1932. Class 3.
Wilder, Burley H., doing business as Wilder Photo Copy Co., Buffalo, N. Y. Printed matter, etc. 297,573; Sept. 20; Serial No. 326,566; published July 5, 1932. Class 38.
Williams, J. B., Company, The, Glastonbury, Conn. Soaps. 297,581; Sept. 20; Serial No. 327,206; published June 28, 1932. Class 4.
Wright, Wm. E., & Sons Co., Orange, N. J. Bias fold tapes. 297,570; Sept. 20; Serial No. 326,996; published July 5, 1932. Class 40.
Wrigley, Wm., jr. Company, Chicago, Ill. Chewing gum. 297,520; Sept. 20; Serial No. 320,144; published Dec. 22, 1931. Class 46.
Wyle Hat Corporation, now by change of name to 1632 Indiana Corporation, Chicago, Ill. Hats. 297,600; Sept. 20; Serial No. 322,477; published June 21, 1932. Class 39.
Zeiss Ikon Aktiengesellschaft, Dresden, Germany. Photographic apparatus. 297,624; Sept. 20; Serial No. 325,889; published July 5, 1932. Class 26.

LIST OF REGISTRANTS OF LABELS

Astrasan Mfg. Company. (See Kummer, Frank.)
Atlas Asbestos Company, North Wales, Pa. Atlas Water Pump Packing Rings. For Water Pump Packing Rings. 41,180; Sept. 20.
Balanced Pet Foods Co. (See Coyle, Robert A.)
Bunte Brothers, Chicago, Ill. Tee Up. For Candy. 41,181; Sept. 20.
Claff, M. B., & Sons, Inc., Randolph, Mass. Originators of Smart Shoes. For Shoes. 41,182; Sept. 20.
Coyle, Robert A., doing business as Balanced Pet Foods Co., Chicago, Ill. Cooked Ration. For Dog Food. 41,183; Sept. 20.
Crosse & Blackwell, Inc., Baltimore, Md. Crosse & Blackwell. For Lamb Stew. 41,184; Sept. 20.
Dickson & Donaldson Laboratorics, Glendale, Calif. Why Gray. For Preparation for Restoring Gray or Faded Hair to Its Natural Color, for Retarding Falling Hair, for Stimulating Hair Growth, for Eliminating Dandruff, Etc. 41,185; Sept. 20.
Fischer Baking Company, Newark, N. J. Fischer's Vitamin D Bread. For Bread. 41,186; Sept. 20.
Hathaway Bakeries, Inc., Cambridge, Mass. Hathaway Nickel Sliced Bread. For Bread. 41,187; Sept. 20.
King Features Syndicate, Inc., New York, N. Y. Popeye Drummer. For a Figure Toy Representing a Drummer with a Drum. 41,188; Sept. 20.
Kummer, Frank, doing business as Astrasan Mfg. Company, Hackensack, N. J. Astrasan. For Health Food. 41,189; Sept. 20.
Loose-Wiles Biscuit Company, Kansas City, Mo. Sunshine Krispy Crackers. For Crackers. 41,190; Sept. 20.
Maillard, Henry, Inc., Long Island City, N. Y. Maillard's Thin Mints. For Chocolate Covered Mint Candy. 41,191; Sept. 20.
Neumann, Martin, New York, N. Y. Coffee. For Coffee. 41,192; Sept. 20.
Neumann, Martin, New York, N. Y. Fresh Roasted Coffee. For Coffee. 41,193; Sept. 20.
Physicians & Surgeons Laboratories, The. (See Regelson, Morris.)
Regelson, Morris, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Nopaine. For Preparation for the Relief of Pain, Headaches, Neuralgia, Head Colds, Muscular Aches Etc. 41,194; Sept. 20.
Russell, Rosemarie, Atchison, Kans. Charmante Chypre Lotion. For Lotion. 41,195; Sept. 20.
Schulze Baking Company, Kansas City, Mo. Schulze's Kandy Cake. For Cake. 41,196; Sept. 20.
Shef, Irving, doing business as Shef Manufacturing Company, Union City, N. J. Shefco Sanitary Tissue Polisher. For Paper Tissue Chemically Treated to Dust, Clean and Polish Furniture, Automobiles, Windshields, Etc. 41,197; Sept. 20.
Superior Packing Corp., New York, N. Y. Superior. For Rice. 41,198; Sept. 20.
Washington Co-Operative Egg & Poultry Association, Seattle, Wash. Ovolo. For Albumen Syrup. 41,199; Sept. 20.

LIST OF REGISTRANTS OF PRINTS

Florida Power & Light Company, Miami, Coral Gables, Fort Lauderdale, Hollywood, Delray, Miami Beach, etc., Fla. Buy your Ice from the Wagon or Truck with the Orange Oval Emblem. For Ice. 13,909; Sept. 20.
Pangburn Company, Fort Worth, Tex. Lemonace. For Lemon Sherbets. 13,910; Sept. 20.
Pangburn Company, Fort Worth, Tex. Golden Nut Ice Cream. For Ice Cream. 13,911; Sept. 20.
S. S. S. Company, The, Atlanta, Ga. You too, can have a clear Skin. For Medicine. 13,912; Sept. 20.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Koppers Company of Delaware. 297,539; Sept. 20; Serial No. 325,913; published May 17, 1932.

CLASS 3

Bags, Hand. Morris White Inc. 297,634; Sept. 20; Serial No. 300,698; published July 5, 1932.
Trunks, valises, satchels, etc. Vuitton & Vuitton, Societe a Responsabilite Limitee. 297,594; Sept. 20; Serial No. 313,983; published June 21, 1932.

CLASS 4

Cleaner. Twentieth Century Manufacturing Co. 297,545; Sept. 20; Serial No. 325,834; published June 28, 1932.
Cleaning preparations, dry cleaner, floor cleaner, etc. West Disinfecting Company. 297,596; Sept. 20; Serial No. 311,633; published June 28, 1932.
Cleansing and polishing preparation. W. J. Doran. 297,543; Sept. 20; Serial No. 325,285; published July 5, 1932.

Liquid compound. A. M. Hensley. 297,568; Sept. 20; Serial No. 327,397; published July 5, 1932.
Polish. J. L. Prescott Company. 297,566; Sept. 20; Serial No. 327,200; published July 5, 1932.
Polish, Metal. L. K. Rhodes. 297,615; Sept. 20; Serial No. 326,873; published July 5, 1932.
Polish, Shoe. L. B. Kunkel. 297,614; Sept. 20; Serial No. 326,592; published July 5, 1932.
Soap. M. Cohn. 297,650; Sept. 20; Serial No. 297,297; published July 5, 1932.
Soap. Colgate-Palmolive-Peet Company. 297,597; Sept. 20; Serial No. 311,512; published Apr. 14, 1931.
Soap. Red & White Corporation. 297,567; Sept. 20; Serial No. 327,475; published July 5, 1932.
Soap, Toilet. Los Angeles Soap Company. 297,544; Sept. 20; Serial No. 325,875; published July 5, 1932.
Soap, Toilet. Maison Jeurelle, Inc. 297,613; Sept. 20; Serial No. 326,945; published June 28, 1932.
Soaps. J. B. Williams Company. 297,581; Sept. 20; Serial No. 327,206; published June 28, 1932.

CLASS 6

Deodorant. E. S. Cockle. 297,519; Sept. 20; Serial No. 320,778; published Dec. 22, 1931.
Inhalants. Hart Drug Corporation. 297,515; Sept. 20; Serial No. 321,645; published Mar. 1, 1932.
Lamp black, chemical substances, solvents, etc. Asiatic Petroleum Company. 297,633; Sept. 20; Serial No. 305,601; published June 7, 1932.
Tonics and stomach bitters. J. Personeni. 39,141; renewed Oct. 28, 1932.

CLASS 12

Cement, Portland. Nazareth Cement Company. 297,518; Sept. 20; Serial No. 321,116; published Jan. 19, 1932.
Cement, Portland. Superior Portland Cement, Inc. 297,640; Sept. 20; Serial No. 317,690; published Dec. 29, 1931.
Construction materials. B. Berman. 297,642; Sept. 20; Serial No. 319,471; published Dec. 29, 1931.
Felt for vibration and sound deadening. Johns-Manville Corporation. 297,521; Sept. 20; Serial No. 324,440; published Apr. 12, 1932.

CLASS 14

Forgings, Bar-iron, and steel, Structural. American Iron and Steel Manufacturing Company. 89,214; renewed Dec. 3, 1932.

CLASS 15

Benzin, naphtha, and gasolene. Standard Oil Company of New York. 89,301; renewed Dec. 3, 1932.
Oil for illuminating, heating, and power purposes, Refined. Standard Oil Company of New York. 89,513; renewed Dec. 17, 1932.
Oils and greases, Illuminating and lubricating. Paragon Refining Co. 90,373; renewed Feb. 18, 1933.

CLASS 16

Lacquers, varnishes, enamels, and paints. Jones-Dabney Company. 297,612; Sept. 20; Serial No. 326,479; published June 21, 1932.
Polishing and cleaning preparation. W. T. Terry, jr. 297,636; Sept. 20; Serial No. 325,198; published June 7, 1932.

CLASS 20

Cloths, Oil. Standard Table Oil Cloth Co. 39,295; renewed Nov. 18, 1932.

CLASS 24

Ironing tables. National Washboard Company. 297,563; Sept. 20; Serial No. 326,428; published June 28, 1932.
Laundry washing machines. Horton Manufacturing Company. 297,583; Sept. 20; Serial No. 327,150; published June 28, 1932.
Laundry washing machines. Horton Manufacturing Company. 297,639; Sept. 20; Serial No. 327,151; published June 28, 1932.
Laundry washing machines. Westinghouse Electric and Manufacturing Company. 297,565; Sept. 20; Serial No. 326,726; published June 28, 1932.

CLASS 26

Lenses. Wall & Ochs, Incorporated. 297,509; Sept. 20; Serial No. 321,509; published June 14, 1932.
Meters, Liquid. Neptune Meter Company. 297,547–8; Sept. 20; Serial Nos. 325,853–4; published June 7, 1932.
Photographic apparatus. Zeiss Ikon Aktiengesellschaft. 297,624; Sept. 20; Serial No. 325,889; published July 5, 1932.

CLASS 32

Desks, tables, filing cabinets. Clemetsen Company. 297,601; Sept. 20; Serial No. 323,077; published July 5, 1932.
Lockers, cabinets, tool stands, etc. All-Steel-Equip Company. 297,644; Sept. 20; Serial No. 319,682; published July 5, 1932.
Mattresses and box springs. A. I. Namm & Son. 297,610; Sept. 20; Serial No. 326,295; published June 28, 1932.
Wardrobes, coat racks, shelving, etc. Austral Window Company. 297,541; Sept. 20; Serial No. 325,132; published June 28, 1932.

CLASS 36

Cornets, trumpets, and drums. Hawkes & Son. 88,487; renewed Sept. 24, 1932.

CLASS 37

Books, Blank. Chester M. Anderson and Clarence Q. Graham. 297,534; Sept. 20; Serial No. 327,135; published June 28, 1932.
Paper. M. Greenebaum. 89,461–2; renewed Dec. 17, 1932.
Paper. Saxon Paper Products Inc. 297,538; Sept. 20; Serial No. 327,481; published July 5, 1932.
Paper and envelopes. National Bank Note Company. 297,571; Sept. 20; Serial No. 326,490; published June 28, 1932.
Paper, Toilet. A. P. W. Paper Company. 297,632; Sept. 20; Serial No. 306,081; published July 5, 1932.
Paper towels. Kotex Company. 297,536; Sept. 20; Serial No. 327,098; published July 5, 1932.
Stationery supplies. Felder Bros. 297,537; Sept. 20; Serial No. 327,352; published June 28, 1932.
Stencil sheets. S. Horil. 297,598; Sept. 20; Serial No. 312,007; published July 7, 1931.
Tissues, Cleansing. Veldown Company. 297,535; Sept. 20; Serial No. 327,489; published July 5, 1932.

CLASS 38

Cartoons. D. F. Stewart. 297,572; Sept. 20; Serial No. 326,648; published June 28, 1932.
Imprinted matter, drawings, etc., Photographic reproductions of. F. G. Stobie. 297,522; Sept. 20; Serial No. 324,630; published July 5, 1932.
Magazine. Montee Publishing Co. 297,575; Sept. 20; Serial No. 326,628; published June 28, 1932.
Maps or bulletins. Shell Eastern Petroleum Products, Inc. 297,607; Sept. 20; Serial No. 322,233; published June 28, 1932.
Newspaper. Intelligencer Publishing Company. 297,574; Sept. 20; Serial No. 326,612; published June 28, 1932.
Periodical. Power Wagon Publishing Company. 297,533; Sept. 20; Serial No. 327,168; published July 5, 1932.
Periodicals. Liberty Publishing Co. 89,755; renewed Jan. 7, 1933.
Printed matter, etc. B. H. Wilder. 297,573; Sept. 20; Serial No. 326,506; published July 5, 1932.
Publication. Special Libraries Association. 297,528; Sept. 20; Serial No. 324,125; published June 28, 1932.
Publication. C. F. Stickler. 297,532; Sept. 20; Serial No. 327,263; published July 5, 1932.

CLASS 39

Aprons. M. Kodani. 297,621; Sept. 20; Serial No. 326,822; published June 28, 1932.
Boots, shoes, and oxfords. Walter Booth Shoe Co. 297,602; Sept. 20; Serial No. 322,681; published July 5, 1932.
Boots, shoes, slippers, etc. Abbott Company. 297,561; Sept. 20; Serial No. 326,073; published June 21, 1932.
Boots, shoes, slippers, etc. G. H. Bass & Co. 297,595; Sept. 20; Serial No. 311,124; published July 5, 1932.
Coats and dresses, Girls'. Associated Merchandising Corporation. 297,585; Sept. 20; Serial No. 327,087; published July 5, 1932.
Coats, blouses, sweaters, etc. Edw. Malley Co. 297,590; Sept. 20; Serial No. 315,105; published Aug. 4, 1931.
Corsets, brassières, etc. Fashion Brassiere Co. 297,588; Sept. 20; Serial No. 327,052; published June 28, 1932.
Garments, girdles, step-ins, etc., Foundation. Kabo Corset Company. 297,562; Sept. 20; Serial No. 326,480; published July 5, 1932.
Garters and hose supporters, Metal-less. Renova Co. 297,531; Sept. 20; Serial No. 327,232; published June 28, 1932.
Hats. James Lock & Co. Ltd. 297,604; Sept. 20; Serial No. 322,590; published July 5, 1932.
Hats. Wyle Hat Corporation. 297,606; Sept. 20; Serial No. 322,477; published June 21, 1932.
Hats and hat bodies, Straw. Straw Hat Corporation of America. 297,527; Sept. 20; Serial No. 324,726; published July 5, 1932.
Hosiery. Harzfeld's, Inc. 297,609; Sept. 20; Serial No. 326,857; published June 14, 1932.
Hosiery. House of Byer, Inc. 297,582; Sept. 20; Serial No. 327,183; published July 5, 1932.
Hosiery. H. Mantell. 297,577; Sept. 20; Serial No. 327,319; published July 5, 1932.
Hosiery. Penn Rose Hosiery Mills. 297,576; Sept. 20; Serial No. 327,321; published July 5, 1932.
Hosiery. G. M. Sales Co. 297,580; Sept. 20; Serial No. 327,248; published July 5, 1932.
Hosiery. L. C. Toplitz. 297,586; Sept. 20; Serial No. 327,073; published July 5, 1932.
Jackets, Sleeping. M. A. Kasper. 297,578; Sept. 20; Serial No. 327,056; published July 5, 1932.
Overall garment, Child's tailored. L. Plotsky. 297,542; Sept. 20; Serial No. 325,799; published July 5, 1932.
Pajamas for girls and women; gymnasium, sports, and play suits for boys and girls. Levi-Ottenheimer Company. 297,587; Sept. 20; Serial No. 327,062; published July 5, 1932.

Shirts. Salant & Salant, Inc. 297,584; Sept. 20; Serial No. 327,029; published July 5, 1932.
Shirts, pajamas, nurses' uniforms. Naumkeag Steam Cotton Company. 297,620; Sept. 20; Serial No. 326,717; published July 5, 1932.
Shoes. Craddock-Terry Company. 297,560; Sept. 20; Serial No. 326,252; published June 21, 1932.
Shoes. Fink Shoe Co. Inc. 297,558; Sept. 20; Serial No. 326,745; published July 5, 1932.
Shoes. H. C. Godman Company. 297,510; Sept. 20; Serial No. 321,874; published July 5, 1932.
Shoes. Hamilton, Brown Shoe Company. 297,516; Sept. 20; Serial No. 320,926; published July 5, 1932.
Shoes. Melville Shoe Corporation. 297,564; Sept. 20; Serial No. 326,292; published July 5, 1932.
Shoes. Weyenberg Shoe Mfg. Co. 297,616; Sept. 20; Serial No. 326,570; published June 28, 1932.
Suits, sun suits, play suits, and rompers, Boys'. Atlantic Romper Co. Inc. 297,627; Sept. 20; Serial No. 326,200; published July 5, 1932.
Trousers and pants. I. Meyers. 297,517–8; Sept. 20; Serial Nos. 320,806–7; published July 5, 1932.
Underwear. Rogers Peet Company. 297,579; Sept. 20; Serial No. 327,260; published July 5, 1932.

CLASS 40

Elastics, hair pins, combs, etc., Woven. Columbia Plush & Tuff Co. 297,546; Sept. 20; Serial No. 325,981; published June 21, 1932.
Pins, Safety. DeLong Hook and Eye Company. 297,559; Sept. 20; Serial No. 326,205; published July 5, 1932.
Shields, Dress. I. B. Kleinert Co. 37,606; renewed Jan. 7, 1932.
Tapes, Bias fold. Wm. E. Wright & Sons Co. 297,570; Sept. 20; Serial No. 326,096; published July 5, 1932.

CLASS 42

Muslin, Bleached. Hope Company. 89,753; renewed Jan. 7, 1933.

CLASS 45

Ginger ale and maltless beverages, and syrups and extracts for making the same. Blue Seal Extract Company. 297,580; Sept. 20; Serial No. 314,838; published June 30, 1931.

CLASS 46

Biscuits and wafers. Robico Biscuit Company. 297,549; Sept. 20; Serial No. 327,027; published June 21, 1932.
Bread. H. Fawcett. 297,553; Sept. 20; Serial No. 327,247; published July 5, 1932.
Bread, Graham. B. C. Lyndell. 297,600; Sept. 20; Serial No. 323,345; published June 21, 1932.
Bread, rolls, cakes, and pies. Garber Baking Company. 297,554; Sept. 20; Serial No. 327,240; published June 28, 1932.
Butter. Emil Fleischl & Son. 297,550; Sept. 20; Serial No. 327,093; published July 5, 1932.
Cakes, Sweet. V. Venceslao di Secondo. 297,649; Sept. 20; Serial No. 276,015; published July 5, 1932.
Candy. T. I. Kent. 297,638; Sept. 20; Serial No. 327,314; published June 28, 1932.
Candy confections. D. Turcott. 297,623; Sept. 20; Serial No. 326,836; published June 28, 1932.
Canned fruits, vegetables, fish, etc. Steele-Wedeles Company. 297,631; Sept. 20; Serial No. 302,070; published June 28, 1932.
Canned milk. My Own Company. 297,651; Sept. 20; Serial No. 295,686; published Apr. 1, 1930.
Canned vegetables and fish. Piggly Wiggly Corporation. 297,647; Sept. 20; Serial No. 285,880; published June 28, 1932.
Cheese. Societe Anonyme des Caves & des Producteurs Reunis de Roquefort. 297,501; Sept. 20; Serial No. 315,937; published July 5, 1932.
Coffee. A. Darboven. 297,523; Sept. 20; Serial No. 324,701; published June 28, 1932.
Coffee. Davies & Sullivan Company. 297,630; Sept. 20; Serial No. 304,856; published June 28, 1932.
Confections and flavoring extracts therefor, Frozen. S. J. Lahman. 297,641; Sept. 20; Serial No. 318,902; published June 28, 1932.
Cookie dough. Kitchenette Cookie Company. 297,569; Sept. 20; Serial No. 326,982; published June 21, 1932.
Corn starch. Hubinger Company. 297,646; Sept. 20; Serial No. 314,563; published June 28, 1932.
Dates. National Date Company. 297,643; Sept. 20; Serial No. 319,494; published Dec. 8, 1931.
Dietary material. Burroughs Wellcome & Co. (U. S. A.) Inc. 27,524; Sept. 20; Serial No. 324,817; published June 28, 1932.
Eggs, Fresh. J. O. Pitts. 297,509; Sept. 20; Serial No. 323,269; published June 28, 1932.
Feed, Stock. Tioga Mill & Elevator Co. 88,975; renewed Oct. 29, 1932.
Feed, Stock and dairy. Great Atlantic & Pacific Tea Company. 297,529; Sept. 20; Serial No. 327,387; published June 28, 1932.
Feeds, Poultry. Maritime Milling Co. 297,592; Sept. 20; Serial No. 316,974; published Aug. 25, 1931.
Figs. Reiss & Brady. 39,568; renewed Dec. 30, 1932.
Flour, Dietetic. J. G. Falls. 297,645; Sept. 20; Serial No. 313,654; published June 21, 1932.
Flour, Wheat. Bay State Milling Co. 297,628; Sept. 20; Serial No. 326,776; published June 28, 1932.
Flour, Wheat. City Mills Company. 297,608; Sept. 20; Serial No. 322,355; published June 21, 1932.
Flour, Wheat. Cosby-Hodges Milling Co. Inc. 297,557; Sept. 20; Serial No. 326,850; published June 28, 1932.
Flour, Wheat. P. E. Meyers. 297,551; Sept. 20; Serial No. 327,162; published June 28, 1932.
Food, Article of. R. W. Truesdail. 297,605; Sept. 20; Serial No. 322,897; published June 21, 1932.
Food, Dog. Neighbor Products Company. 297,530; Sept. 20; Serial No. 327,404; published June 28, 1932.
Food, Dog and cat. F. L. Marney. 297,552; Sept. 20; Serial No. 327,193; published June 28, 1932.
Food drink, Chocolate milk. Bottler's Chocolate Supply Corporation. 297,593; Sept. 20; Serial No. 316,680; published Sept. 29, 1931.
Food flavors, canned asparagus, canned oysters, etc. J. Di Santo. 297,622; Sept. 20; Serial No. 326,807; published June 28, 1932.
Food for dogs, cats, etc., Prepared. Chappel Bros., Inc. 297,512; Sept. 20; Serial No. 321,677; published Jan. 19, 1932.
Food products. Commercial Merchandising Corporation. 297,525–6; Sept. 20; Serial Nos. 324,459–60; published June 28, 1932.
Food, Puppy and cat. C. F. Gaines. 297,618; Sept. 20; Serial No. 326,468; published June 28, 1932.
Foods. Roundy, Peckham & Dexter Co. 88,424; renewed Sept. 17, 1932.
Foods, Breakfast. Purity Oats Company. 297,555; Sept. 20; Serial No. 326,759; published June 21, 1932.
Foods for dogs, cats, etc., Prepared. Chappel Bros., Inc. 297,511; Sept. 20; Serial No. 321,678; published Feb. 2, 1932.
Grapes, Fresh. Barengo Bros. 297,540; Sept. 20; Serial No. 325,507; published June 28, 1932.
Gum, Chewing. Wm. Wrigley Jr. Company. 297,520; Sept. 20; Serial No. 320,144; published Dec. 22, 1931.
Lard. Cleveland Provision Company. 88,399; renewed Sept. 17, 1932.
Lettuce, K. R. Nutting. 297,603; Sept. 20; Serial No. 323,671; published June 28, 1932.
Mash or meal. Blatchford Calf Meal Company. 297,635; Sept. 20; Serial No. 310,274; published July 5, 1932.
Milk, cream, butter, etc. Hohnecker's Dairy. 297,556; Sept. 20; Serial No. 326,069; published July 5, 1932.
Pork, Salt. Geo. A. Hormel & Company. 297,514; Sept. 20; Serial No. 321,382; published June 28, 1932.
Preparation of Gelatine. Jell Products Company. 297,625; Sept. 20; Serial No. 326,325; published June 28, 1932.
Preparations for use in making frozen desserts. W. Rippey. 87,927; renewed Aug. 13, 1932.
Seed, Bird. W. Lichtenstein. 297,611; Sept. 20; Serial No. 326,152; published June 21, 1932.
Shortening made from lard and vegetable fats. Swift and Company. 297,648; Sept. 20; Serial No. 327,291; published June 28, 1932.
Syrup, Malt. Broadway Products Corporation. 297,617; Sept. 20; Serial No. 326,359; published June 28, 1932.
Syrup, Malt. Tonkin Distributing Company. 297,619; Sept. 20; Serial No. 326,402; published June 28, 1932.
Syrup, Table. Abram Lyle & Sons, Limited. 89,045; renewed Nov. 5, 1932.
Vegetables, Fresh. Flick & Kupfer. 297,629; Sept. 20; Serial No. 304,131; published Aug. 25, 1931.
Vegetables, Fresh. W. B. Grainger Packing Company. 297,637; Sept. 20; Serial No. 327,395; published June 28, 1932.
Vegetables, Fresh. Prospect Island Farming Company. 297,626; Sept. 20; Serial No. 326,394; published June 28, 1032.

LIST OF LABELS

Astrasan. For Health Food. F. Kummer. 41,189; Sept. 20.
Atlas Water Pump Packing Rings. For Water Pump Packing Rings. Atlas Asbestos Company. 41,180; Sept. 20.
Charmante Chypre Lotion. For Lotion. R. Russell. 41,195; Sept. 20.
Coffee. For Coffee. M. Neumann. 41,192; Sept. 20.
Cooked Ration. For Dog Food. R. A. Coyle. 41,183; Sept. 20.
Crosse & Blackwell. For Lamb Stew. Crosse & Blackwell, Inc. 41,184; Sept. 20.
Fischer's Vitamin D Bread. For Bread. Fischer Baking Company. 41,186; Sept. 20.
Fresh Roasted Coffee. For Coffee. M. Neumann. 41,193; Sept. 20.
Hathaway Nickel Sliced Bread. For Bread. Hathaway Bakeries, Inc. 41,187; Sept. 20.

Maillard's Thin Mints. For Chocolate Covered Mint Candy. Henry Maillard, Inc. 41,191; Sept. 20.
Nopaine. For Preparation for the Relief of Pain, Headaches, Neuralgia, Head Colds, Muscular Aches, Etc. M. Regelson. 41,194; Sept. 20.
Originators of Smart Shoes. For Shoes. M. B. Claff & Sons, Inc. 41,182; Sept. 20.
Ovolo. For Albumen Syrup. Washington Co-Operative Egg & Poultry Association. 41,199; Sept. 20.
Popeye Drummer. For a Figure Toy Representing a Drummer with a Drum. King Features Syndicate, Inc. 41,188; Sept. 20.
Schulze's Kandy Cake. For Cake. Schulze Baking Company. 41,196; Sept. 20.
Shefco Sanitary Tissue Polisher. For Paper Tissue Chemically Treated to Dust, Clean and Polish Furniture, Automobiles, Windshields, Etc. I. Shef. 41,197; Sept. 20.
Sunshine Krispy Crackers. For Crackers. Loose-Wiles Biscuit Company. 41,190; Sept. 20.
Superior. For Rice. Superior Packing Corp. 41,198; Sept. 20.
Tee Up. For Candy. Bunte Brothers. 41,181; Sept. 20.
Why Gray. For Preparation for Restoring Gray or Faded Hair to Its Natural Color, for Retarding Falling Hair, for Stimulating Hair Growth, for Eliminating Dandruff, Etc. Dickson & Donaldson Laboratories. 41,185; Sept. 20.

LIST OF PRINTS

Buy your Ice from the Wagon or Truck with the Orange Oval Emblem. For Ice. Florida Power & Light Company. 13,909; Sept. 20.
Golden Nut Ice Cream. For Ice Cream. Pangburn Company. 13,911; Sept. 20.
Lemonace. For Lemon Sherbets. Pangburn Company. 13,910; Sept. 20.
You too, can have a clear Skin. For Medicine. S. S. S. Company. 13,912; Sept. 20.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 20TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott, Alfred T., Philadelphia, Pa. Acoustic grille cloth. 1,878,570; Sept. 20.
Ab-der-Halden, Charles, Nancy, assignor to Société pour l'Exploitation des Procedes Ab-der-Halden, Paris, France. Retort with revolving hearth. 1,878,581; Sept. 20.
Abrahams, Alexander I., New York, N. Y. Acoustic horn and manufacture thereof. 1,878,360; Sept. 20.
Abramson, Alexander, Prague, Czechoslovakia. Valve. 1,878,749; Sept. 20.
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Automobile lift. 1,878,361; Sept. 20.
Ackerman, Michael H., Mansfield, assignor of one-half to Louis C. Sickel, Caledonia, Ohio. Automatic regulator. 1,877,780; Sept. 20.
Adair, Anthony G. (See McWhirter, M. H., and Adair.)
Adams, Frank H., Cleveland Heights, assignor to The Cleveland Hobbing Machine Company, Cleveland, Ohio. Hobbing machine. 1,878,656; Sept. 20.
Adams, J. D., Manufacturing Company. (See Iverson, Emil C., assignor.)
Adams, James R., Atlanta, Ga. Scaffold support. 1,878,802; Sept. 20.
Adams, William A., Brooklyn, N. Y. Display device. 1,878,750; Sept. 20.
Adlake Company, The. (See Sevison, Harry D., assignor.)
Agricola, Herman A., Atlanta, Ga. Gauge bar. 1,878,571; Sept. 20.
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Multibreak electric switch. 1,878,657; Sept. 20.
Air Way Electric Appliance Corporation. (See Suter, Theophilus A., assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Akerlund, Carl O., Chicago, Ill., assignor to Appleton Electric Company. Hanger. 1,877,781; Sept. 20.
Aktiebolaget Tonsor. (See Kylberg, Folke, assignor.)
Albee, Hugh M., assignor to The Leavitt Machine Company, Orange, Mass. Valve seat grinder. 1,877,782; Sept. 20.
Albersheim, Walter J., assignor to Radio Corporation of America, New York, N. Y. Electron emitting device. 1,878,089; Sept. 20.
Alcalá, Pablo, Los Angeles, assignor to A. Pfister and J. I. Cousins, Paso Robles, and A. C. Segarra and E. Roure, Los Angeles, Calif. Pastry machine. 1,878,256; Sept. 20.
Alcoriza, Sofronio B., Stockton, Calif. Signal for motor vehicles. 1,878,090; Sept. 20.
Allen-Bradley Company. (See Mattern, Raymond P., assignor.)
Allen-Bradley Company. (See Power, Laurence E., assignor.)
Allen-Bradley Company. (See Steenweg, William F., assignor.)
Allen, Edward B., Newton, and W. Myers, Bridgeport, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J. Stop-motion device. 1,878,091; Sept. 20.
Allied Steel Products Corporation. (See Connell, James J., assignor.)
Allith-Prouty Company. (See Scott, John E., assignor.)
All-Sol Company. (See Hey, Ernest, assignor.)
Alma Manufacturing Company of Baltimore City. (See Kerngood, Allen H., assignor.)
Altenkirch, Edmund, Alt-Landsberg-Sud, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Continuous absorption refrigerating apparatus. 1,878,092; Sept. 20.
Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Continuous absorption refrigerating system. 1,878,803; Sept. 20.
Aluminum Goods Mfg. Co. (See Larsen, Alantser F., assignor.)
Alvord, Charles C., assignor to Worcester Loom Works, Worcester, Mass. Tuft yarn setting frame. 1,877,783; Sept. 20.
Amal Limited. (See Brown, C., and Comery, assignors.)
Aman, Frank A. (See Fischer, Edward J., assignor.)
American Anode, Inc. (See Forrer, Max, assignor.)
American Anode, Inc. (See Klein, P., Szegvári, McKay, Hayes, and Trobridge, assignors.)
American Anode, Incorporated. (See Willshaw, H., Gorham, and Lee, assignors.)
American Fluid Motors Company. (See Landenberger, Henry W., assignor.)
American Fork & Hoe Company. (See Cassady, James L., assignor.)
American Sundries Co. Inc. (See Lawner, Nicholas, assignor.)
American Telephone and Telegraph Company. (See Hollmann, Hans E., assignor.)
American Telephone and Telegraph Company. (See Reynolds, Frederick W., assignor.)
American Telephone and Telegraph Company. (See Stevens, Walter A., assignor.)
American Tool Works Company, The. (See Robinson, Albert E., assignor.)
American Window Shade Machine Company. (See Colpitts, Calvin N., assignor.)
Amy, Aceves & King, Inc. (See Lyford, Elmore B., assignor.)
Andersen, Fred C. (See Rowland, J. B., and Andersen.)
Anderson, Arnold A., Peoria, Ill. Adjustable tray support. 1,877,784; Sept. 20.
Anderson-Barngrover Mfg. Co. (See Thompson, Albert R., assignor.)
Anderson, Earle S. (See Furey, E. B., and Anderson.)
Anderson, Edmund A., and G. L. Werley, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Zinc base die casting alloy. Re18,600; Sept. 20.
Anderson Frame Corporation. (See Rowland, J. B., and Anderson, assignors.)
Anderson, Lauritz W., Waterbury, Conn. Jar or vase anchor for electric lamps. 1,878,093; Sept. 20.
Anderson, Norman T. (See Sweeley, E. A., and Anderson.)
Andrews, James A., Augusta, Me. Spinning machine. 1,878,572; Sept. 20.
Andrews, Phillip R., assignor to Pacific Marine Supply Company, Seattle, Wash. Marine light. 1,877,785; Sept. 20.
Appleton Electric Company. (See Akerlund, Carl O., assignor.)
Arata, Frank, and J. E. Stiles, Sacramento, Calif. Merchandise guard. 1,877,786; Sept. 20.
Argabrite, George M., assignor to Leather Equipment Co., Inc., Chicago, Ill. Method of and apparatus for stretching leather. 1,877,878; Sept. 20.
Armour and Company. (See Will, John H., assignor.)
Arnold, Harry S., Brooklyn, and R. C. Wilson, New York, N. Y. Electrical distribution. 1,878,573; Sept. 20.
Aronoff, Samuel, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Watthour meter testing device. 1,878,658; Sept. 20.
Arrow-Hart & Hegeman Electric Company, The. (See Guett, Monroe, assignor.)
Ashley, Carlyle M. (See Stacey, A. E., jr., and Ashley.)
Associated Electric Laboratories, Inc. (See Kahn, Frederick L., assignor.)
Associated Electric Laboratories, Inc. (See Obergfell, Herbert F., assignor.)
Associated Merchandising Corporation. (See Milgrim, Salley, assignor.)
Associated Merchandising Corporation. (See Silverman, Etta, assignor.)
Atkinson, Ralph W., Perth Amboy, N. J., assignor, by mesne assignments, to General Cable Corporation. Oil-cooled terminal. 1,878,094; Sept. 20.
Atlantic Bottle Company. (See Ganter, Henry C., assignor.)
Atlas Press Company. (See Collins, James G., assignor.)
Atwood, Joel H., and Carl S. Proctor, assignors to Edith H. Priest, Ayer, Mass. Head motion for looms. 1,877,759; Sept. 20.
Austin, Miner M., Waukegan, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Pressure welding electrode. 1,878,095; Sept. 20.
Automatic Telephone Manufacturing Company Limited. (See Roseby, Philip N., assignor.)
Automotive Research Corporation. (See Swenson, Carl E., assignor.)
Axt, Joseph and Paul, Milwaukee, Wis. Spirit level. 1,878,751; Sept. 20.
Axt, Paul. (See Axt, Joseph and P.)
B. & N. Ring Manufacturing Company. (See Nichols, John M., assignor.)
Babcock Manufacturing Co. (See Reynolds, Arthur W., assignor.)
Babcock & Wilcox Company, The. (See Harter, Isaac, assignor.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Johnson, Charles H., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Noble, Ernest E., assignor.)

Babcock & Wilcox Company, The. (See Parker, J. W., and Black, assignors.)
Bader, Ferdinand, Hamburg, Germany: Sound record receptacle. 1,878,659; Sept. 20.
Badgett, Billie B., administratrix. (See Badgett, Fred L.)
Badgett, Fred L., deceased, Chickasha, Okla.; B. B. Badgett, administratrix. Steam pressure governor. 1,878,660; Sept. 20.
Bair, Richard H., Camp Hill, Pa. Pencil sharpener. 1,878,617. Sept. 20.
Baker, Benjamin P. (See McGee, J. E., and Baker.)
Baker, David B., and N. O. Panzegrau, Chicago, Ill., assignors to International Harvester Company. Oil and dirt seal for gear casings. 1,878,804; Sept. 20.
Baker, Irving C., assignor to York Ice Machinery Corporation, York, Pa. Air conditioning. 1,878,618; Sept. 20.
Baker, James E. (See Baker, Thomas R., assignor.)
Baker-Raulang Company, The. (See Hertner, John H., assignor.)
Baker, Thomas R., assignor of one-half to J. E. Baker, Chicago, Ill. Antenna system. 1,878,257; Sept. 20.
Ballard, Roscoe F. (See Warner, A. W., and Ballard.)
Bamberger, Kurt. (See Mieg, W., and Bamberger.)
Bamberger, Kurt. (See Schmidt, R. E., Stein, and Bamberger.)
Bamblett, Frederick, assignor to Packard Motor Car Company, Detroit, Mich. Treatment of metal articles. 1,878,096; Sept. 20.
Banasik, Alois E., assignor to Clowe & Cowan, Inc., Amarillo, Tex. Lock for boxes. 1,878,362; Sept. 20.
Bangs, Owen M., New York, N. Y. Hinge. 1,878,363; Sept. 20.
Banigan, Thomas F., Buffalo, assignor to Du Pont Rayon Company, New York, N. Y. Apparatus for guiding threads. 1,878,455; Sept. 20.
Bannin, Ephraim, trustee. (See Berger, Louis A., assignor.)
Barber, Benjamin R., Jacksonville, Fla. Latch for railroad switches. 1,877,788; Sept. 20.
Barclay, McClelland, Los Angeles, Calif. Automobile. Des. 87,774; Sept. 20.
Barium Reduction Corporation. (See Pierce, J. B., jr., and Curnes, assignors.)
Barker, Joseph R., Fall Brook, Calif., assignor to International Harvester Company. Tractor disk harrow. 1,878,805; Sept. 20.
Barker, William T., jr. (See Peller, K. E., and Barker.)
Barnes Drill Company. (See Johnson, Albert M., assignor.)
Barnes, Leslie W. (See Bunnell, E. C., and Barnes.)
Barrett, Charles A., Bridgeport, Conn. Automobile stop. 1,877,789; Sept. 20.
Barrett Company, The. (See Leaper, Joseph M. F., assignor.)
Barrett, Walter A., Fort Wayne, Ind. Pasteurizing apparatus. 1,878,364; Sept. 20.
Barrows, Allan S., Los Angeles, Calif., assignor to The Youngstown Steel Door Co., Cleveland, Ohio. Car door. 1,878,365; Sept. 20.
Bashloum, Jacob C., assignor to Uniflow Manufacturing Company, Erie, Pa. Switch. 1,878,456; Sept. 20.
Basil, Joseph, and C. Bongiorno, Detroit, Mich. Sound reproducing apparatus. 1,878,806; Sept. 20.
Bassick Company, The. (See Moore, Raymond G., assignor.)
Bateman, Charles S., et al. (See Wagner, James S., assignor.)
Baum, Isaac A., Chicago, Ill. Molding for metal frames. 1,878,807; Sept. 20.
Bausch & Lomb Optical Company. (See Bausch, Carl L., assignor.)
Bausch, Carl L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting and making same. 1,878,366; Sept. 20.
Bausch & Lomb Optical Company. (See Bouchard, Samuel E., assignor.)
Baxter, Burke M., Grand Rapids, Mich. Paper pulp beating machine. 1,878,661; Sept. 20.
Bayer, Otto. (See Kalischer, G., Ritter, Scheyer, and Bayer.)
Bayer, Otto, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Ketones of the anthraquinone series and making same. 1,877,790; Sept. 20.
Bayer, Otto, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthraquinone series. 1,877,791;
Beardsley & Wolcott Mfg. Co., The. (See Lucia, Louis V., assignor.)
Beatty, George W. (See Smith, Francis X., assignor.)
Beaver, Earnest, McAlester, Okla. Aeroplane. 1,878,808; Sept. 20.
Bechtel, Theodore B., Salem, Ohio. Electric furnace. 1,878,619; Sept. 20.
Beck, Leo L., Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Fixture for vacuum tube lights. 1,878,229; Sept. 20.
Beck, Leo L., Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Fixture. 1,878,247; Sept. 20.
Becker, Julius. (See Dunkle, H. E., and Becker.)
Beckman, John W., Oakland, Calif. Extracting oils. Re18,601; Sept. 20.
Beeken, Axel V. (See Brenzinger, Julius, assignor.)
Bégin, Lucien, Paris, France, assignor of one-half to W. B. Weaver, Birmingham, Ala., and H. F. Wilhelm, New York, N. Y. Electric signaling. 1,878,752; Sept. 20.
Begtrup, Edward F., Jersey City, N. J. Rail clamp. 1,878,098; Sept. 20.
Bek, Ernest G. (See Koenig, Paul, assignor.)
Bell, John P., Baltimore, Md. Fender lamp for automobiles, etc. 1,877,792; Sept. 20.
Bell, Sidney. (See Bell, S. R., and Wardwell, assignor.)
Bell, Sidney R., New York, N. Y., and G. W. Wardwell, South Norwalk, Conn.; said Wardwell assignor of his right to S. Bell, Rutherford, N. J. Cord dispensing device. 1,878,980; Sept. 20.
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Legg, Victor E., assignor.)
Belloni, Angelo, Portovenere, Italy. Life-saving hood. 1,878,434; Sept. 20.
Belluche, Frank R., Racine, Wis. Bronzing machine. 1,878,089; Sept. 20.
Bemis, Albert F., Newton, assignor to Bemis Industries Incorporated, Boston, Mass. Building construction. 1,878,367; Sept. 20.
Bemis Industries Incorporated. (See Bemis, Albert F., assignor.)
Bemis, Kenneth E., Glendale, Calif. Sandwich toaster. 1,878,258; Sept. 20.
Bendix Aviation Corporation. (See Dodge, Adiel Y., assignor.)
Benedetto, Giuseppe, Novara, Italy, assignor to The Omes Holding Company Limited, London, England. Effecting the pressing of metals and apparatus therefor. 1,878,810; Sept. 20.
Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Cotton cleaner. 1,878,662; Sept. 20.
Benjamin, Bert R., Oak Park, and W. R. Peterson, Park Ridge, Ill., assignors to International Harvester Company. Traction wheel. 1,878,811; Sept. 20.
Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric iron. 1,878,663; Sept. 20.
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Wheel alignment gauge. 1,878,664; Sept. 20.
Bennett, Claude C., assignor to A. E. Feragen, Inc., Seattle, Wash. Apparatus for bending axles. 1,878,665; Sept. 20.
Berger, Louis A., assignor to E. Banning, trustee, Chicago, Ill. Ceiling. 1,878,812; Sept. 20.
Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)
Berliner, Robert. (See Mieg, W., and Berliner.)
Berner, Leo, South Milwaukee, and P. Lohr, Milwaukee, Wis. Combustion engine. 1,877,760; Sept. 20.
Berry, George W., Santa Paula, Calif. Rind removing machine. 1,878,457; Sept. 20.
Bethlehem Steel Company. (See Froelich, Clarence H., assignor.)
Beynon, Donald E., Toronto, Ontario, Canada, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Boat fender. 1,877,793; Sept. 20.
Bielski, Joseph E., Oak Park, Ill. Advertising sign and the like. 1,878,368; Sept. 20.
Binks Manufacturing Company. (See Bramsen, S., and Wahlin, assignors.)
Bixby, Leo A., assignor to Fuller & Sons Manufacturing Co., Kalamazoo, Mich. Transmission. 1,877,794; Sept. 20.
Black-Clawson Company, The. (See Spayd, Noah P., assignor.)
Black, John E. (See Parker, J. W., and Black.)
Blackburn, T. H. (See Douthitt, Walter S., assignor.)
Blanchet, Ovila J., New Bedford, Mass. Induction electric furnace. 1,878,458; Sept. 20.
Blankenhagen, Albert, Akron, Ohio. Fire extinguisher. 1,878,369; Sept. 20.
Bletcher, Ralph E., and E. H. Bucknell, Los Angeles, Calif. Combined mixing and diverting valve. 1,878,097; Sept. 20.
Bliss, Andrew R., jr., Memphis, Tenn., and G. S. Bliss, Brooklyn, N. Y. Animal cage. 1,878,459; Sept. 20.
Bliss, George S. (See Bliss, Andrew R., jr., and G. S.)
Block, Herman W., New York, and B. H. Christenson, North White Plains, assignors to S. Stein & Co., New York, N. Y. Display container. 1,878,813; Sept. 20.
Blue, Sidney, New York, assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Undergarment. 1,878,981; Sept. 20.
Blum, August, et al. (See Manteufel, August, assignor.)
Blundell, Beatrice B., Los Angeles, Calif. Piston construction. 1,878,574; Sept. 20.
Bockmühl, Max, G. Ehrhart, and L. Stein, Frankfort-on-the-Main, Germany. Compound of the 1-phenyl-2-alkylamino-alcohol-1 series hydroxylated in the phenyl residue and preparing them. 1,877,756; Sept. 20.

Bockmühl, Max, G. Ehrhart, and L., Stein, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. 1-phenyl-2-aminoalchols (1) hydroxylated in the phenyl nucleus and preparing them. 1,877,795; Sept. 20.
Bodkin, John A., New York, N. Y. Flange and rail lubricator. 1,878,259; Sept. 20.
Böhner, George. (See Neresheimer, H., Honold, and Bohner.)
Bollweg, Bernhard, Leverkusen-on-the-Rhine, L. Zeh, Wiesdorf-on-the-Rhine, and E. Kramer, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogen substitution product of dinaphthylene-dioxide. 1,878,666; Sept. 20.
Bongiorno, Cosimo. (See Basil, J., and Bongiorno.)
Boorum & Pease Company. (See Duprée, Edmund G., assignor.)
Boorum & Pease Company. (See Finley, Charles A., assignor.)
Booz, William A. (See Huntington, H. E., and Booz.)
Borden, Moro M., assignor to Simplex Valve and Meter Company, Philadelphia, Pa. Double-indicating double-recording gauge. 1,878,460; Sept. 20.
Born, Arthur C. (See Spaulding, R. C., Oldberg, and Born.)
Bosch, Robert Aktiengesellschaft. (See Mohrle, Artur, assignor.)
Bossart, John, Los Angeles, Calif. Hydraulic torque converter. 1,877,796; Sept. 20.
Bossert, Walter F. (See Shelton, Maurice C., assignor.)
Bossert, William F., assignor to Signal Accessories Corporation, Utica, N. Y. Pipe carrier support. 1,878,100; Sept. 20.
Bost, William D., assignor to Orange-Brush Company, Chicago, Ill. Apparatus for producing citrus fruit juices. 1,878,099; Sept. 20.
Boston Woven Hose & Rubber Company. (See Bruner, Harold G., assignor.)
Bostwick Steel Lath Company, The. (See Purser, William J., assignor.)
Both, Tonjes A., Stratford, assignor to The Bryant Electric Company, Bridgeport, Conn. Mercury switch. 1,878,667; Sept. 20.
Bouchard, John J., Bradford, Pa. Combined pipe cutter and threader. 1,877,797; Sept. 20.
Bouchard, Samuel E., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting and attaching same. 1,878,870; Sept. 20.
Bouchard, Samuel E., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mounting and making same. 1,878,371; Sept. 20.
Box, John V., Los Angeles, assignor of one-half to Charles A. Dailey, Torrence, Calif. Safety deep well pump assembly. 1,878,372; Sept. 20.
Boynton, Arthur J., Winnetka, assignor to H. A. Brassert & Company, Chicago, Ill. Apparatus for cleaning gases. 1,878,668; Sept. 20.
Bradbury, Clifford C., Glencoe, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Rectifier circuit. 1,878,101; Sept. 20.
Bradley, Edgar B., Gastonia, N. C. Detachable top for rumble seats of motor vehicles. 1,878,461; Sept. 20.
Bradley, Theodore F., Westfield, assignor to Ellis-Foster Company, Montclair, N. J. Finger nail detergent. 1,878,102; Sept. 20.
Bradley, Theodore F., Westfield, assignor to Ellis-Foster Company, Montclair, N. J. Finger nail glossifier. 1,878,103; Sept. 20.
Bramsen, Svend, and F. Wahlin, assignors to Binks Manufacturing Company, Chicago, Ill. Paint spraying appliance. 1,878,435; Sept. 20.
Brandt Automatic Cashier Company. (See Schwartz, Carl, assignor.)
Brandtjen and Kluge, Inc. (See Kluge, Abel and E., assignors.)
Brass Goods M'f'g. Co. (See Craz, Albert G., assignor.)
Brassert, H. A., & Company. (See Boynton, Arthur J., assignor.)
Braselton, William. (See Mahaney, R., and Brazelton.)
Breeser, Edwin C., Philadephia, Pa. Toy building construction. 1,878,373; Sept. 20.
Breisky, John V., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Relay system. 1,878,669; Sept. 20.
Brenaman, Harry A. (See Schmidt, V. P., and Brenaman.)
Brenek, Hans. (See Rothe, F., and Brenek.)
Brenzinger, Julius, Fairfield, Conn., assignor to Axel V. Beeken, Bloomfield, N. J. Producing artificial silk or the like. 1,878,374; Sept. 20.
Bridgman, Nell E., Sunnyside, Wash. Feeder. 1,878,814; Sept. 20.
Briggs, Stephen F., and F. J. Stuckert, Milwaukee, Wis. Crank handle. 1,877,798; Sept. 20.
Brigham, Frederick L., Upper Montclair, N. J. Fabric. 1,877,799; Sept. 20.
Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Azo dyes and their production. 1,877,800; Sept. 20.
Bristol Company et al. (See Schnuck, C. F., and Kuntney, assignors.)
British Radiostat Corporation. (See Robinson, James, assignor.)
Britten, Edwin F., jr., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,877,801; Sept. 20.
Britten, Edwin F., jr., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,877,802; Sept. 20.
Brittingham, Vertner D., Cincinnati, Ohio. Spelling game board. Des. 87,775; Sept. 20.
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Making benzoic acid. 1,878,462; Sept. 20.
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Making halogenated benzoic acid derivatives. 1,878,463; Sept. 20.
Broecker, Lewis C., Bridgeport, Conn., assignor to The Firestone Steel Products Company, Akron, Ohio. Tire valve insides assembly machine. 1,878,575; Sept. 20.
Brooks, George W., Evanston, and J. J. Duginski, Chicago, Ill., assignors, by mesne assignments, to The S. O. S. Company, San Francisco, Calif. Cleansing article and making same. 1,878,104; Sept. 20.
Brosse, Paul, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Printing machine for goffered films. 1,878,670; Sept. 20.
Brown & Bigelow. (See Fischer, Howard L., assignor.)
Brown, Clement, and W. Comery, assignors to Amal Limited, Birmingham, England. Fuel injection pump for internal combustion engines. 1,877,803; Sept. 20.
Brown, E. C., Company. (See Tappen, Dewitt, assignor.)
Brown, Francis H., Ridley Park Township, Delaware County, Pa. Burning combustibles with improved calorific efficiency. 1,878,105; Sept. 20.
Brown, Franklin, assignor to General Health Corporation, Philadelphia, Pa. Apparatus for molding nipples. 1,877,761; Sept. 20.
Brown, John H., Haskell, Okla. Refuse separator. 1,878,753; Sept. 20.
Bruce, A. J., Birmingham, Ala. Buff. 1,878,815; Sept. 20.
Bruijnes, Johannes and A. T. Van Urk, Eindhoven, Netherlands, assignors to Radio Corporation of America. Diaphragm or diaphragm mount for loud speakers or other sound reproducing devices. 1,877,804; Sept. 20.
Bruner, H. G., Wakefield, assignor to Boston Woven Hose & Rubber Company, Cambridge, Mass. Solid rubber tire. 1,877,805; Sept. 20.
Brunner, Walter. (See Ritter, H., and Brunner.)
Bryant Electric Company, The. (See Both, Tonjes A., assignor.)
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Pipe bender. 1,878,754; Sept. 20.
Buchina, Joseph. (See Koch, L. B., and Buchina.)
Buckeye Jack Manufacturing Company, The. (See Wiard, George W., assignor.)
Bucklen, Herbert E., Corporation. (See Bucklen, Herbert E., assignor.)
Bucklen, Herbert E., Elkhart, Ind., assignor to Herbert E. Bucklen Corporation. Impeller. 1,878,816; Sept. 20.
Bucknell, Ernest H. (See Bletcher, R. E., and Bucknell.)
Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)
Budd Wheel Company. (See Hughes, James W., assignor.)
Buehler, Randolph J., Boston, Mass. Valve actuating mechanism. 1,878,106; Sept. 20.
Buehrer, Emil, Green Bay, Wis. Humidifying device for hot air furnaces. 1,878,817; Sept. 20.
Buermann, Albert H. (See Ruth, A. J., and Buermann.)
Bulls-Eye Electric Manufacturing Company, The. (See Trumbull, Alexander H. and G. R., assignors.)
Bulmer, Frederick R. M., Toronto, Ontario, Canada. Mask. 1,878,464; Sept. 20.
Bunker, Frank S., Compton, assignor to John Grant, Los Angeles, Calif. Underreamer. 1,878,260; Sept. 20.
Bunnell, Earl C., Stratford, and E. W. Barnes, Trumbull, Conn. Woven fabric and making same. 1,878,620; Sept. 20.
Burdett, Clarence F., Ford City, and W. Owen, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company. Glass cutting equipment. 1,878,818; Sept. 20.
Burgess, C. F., Laboratories, Inc. (See Watlon Clifford T., assignor.)
Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Switch house and switching system and apparatus. 1,878,107; Sept. 20.
Burnham, Roy. (See Minsky, J. R., and Burnham.)
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,878,621; Sept. 20.
Buron, Harry A. (See Stevenson E. P., and Buron.)
Burroughs, Robert I., Henderson, N. C. Lock cap for gasoline and other tanks. 1,878,486; Sept. 20.
Burt, Harold A., St. Albans, and J. H. Hilpman, Hollis, N. Y., assignors to Mergenthaler Linotype Company. Typographical composing and distributing machine. 1,878,231; Sept. 20.
Burton, Charles S., Oak Park, Ill. Suction fuel feeding apparatus for internal combustion engines. 1,877,806; Sept. 20.
Business Systems Limited. (See Smith, Walter H., assignor.)
Cabell, Charles A. (See Underwood, J. E., and Cabell.)

Cache, Edmond L., St.-Quentin, France. Power transmission for motor road vehicles and the like. 1,878,375; Sept. 20.
Cagliostro, Antony J., New York, N. Y. Copy holder. 1,877,807; Sept. 20.
Cagliostro, Antony J., New York, N. Y. Sugar dispenser. 1,877,808; Sept. 20.
Cahoon, Brent F., et al. (See Jones, Clarence M., assignor.)
Caise, Charles, Brooklyn, N. Y. Washing machines. 1,878,825; Sept. 20.
Caldor, Earl S., New York, N. Y. Bathing brassière. 1,878,755; Sept. 20.
Caldwell, Charles W., Johannesburg, Transvaal, Union of South Africa. Pneumatic spring suitable for vehicles. 1,878,756; Sept. 20.
California Corrugated Culvert Co. (See Norton, Albert C., assignor.)
Camel Company. (See Tobin, Kenneth J., assignor.)
Cammen, Leon, New York, N. Y. Machinery for making welded pipe. 1,878,376; Sept. 20.
Campbell, Samuel J., Green Bay, Wis. Napkin folder. 1,878,437; Sept. 20.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glassware forming apparatus. 1,878,465; Sept. 20.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Suction device for gathering molten glass. 1,878,576; Sept. 20.
Cantor, Jacob J., assignor of one-half to J. Murray, Los Angeles, Calif. Dilator. 1,878,671; Sept. 20.
Carew Manufacturing Company. (See Griffin, Courtlandt B., assignor.)
Carr, Kenneth W., assignor to Ditto, Incorporated, Chicago, Ill. Stencil sheets. 1,878,672; Sept. 20.
Carrier Engineering Corporation. (See Le Grand, Joseph M., assignor.)
Carrier Engineering Corporation. (See Stacey, A. E., jr., and Ashley, assignor.)
Carstens, Hans, Leverkusen, near Cologne-on-the-Rhine, and C. Kröner, Cologne-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Decolorizing silicic acid. 1,878,108; Sept. 20.
Carufel, Jules A., St. Paul, Minn. Marker. 1,878,673; Sept. 20.
Case, Scott L., Los Angeles, Calif. Combination box and table. 1,878,674; Sept. 20.
Caserta, Michele A., Detroit, Mich. Compressor. 1,877,809; Sept. 20.
Cassady, James L., Geneva, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Tube and rod forming machine. 1,878,261; Sept. 20.
Cawley, Aloysius J., Pittston, Pa. Sound reproducing means. 1,878,577; Sept. 20.
Cederstrom, Harold A., assignor, by mesne assignments, to The Rosco Manufacturing Company, Minneapolis, Minn. Coupling. 1,878,826; Sept. 20.
Celanese Corporation of America. (See Moss, William H., assignor.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Chadwick, Albert E. (See Cosgrove, C., and Chadwick.)
Chamberlain, Leon H., Oakland, assignor to Waterworks Supply Company, San Francisco, Calif. Indicating and controlling system. 1,877,810; Sept. 20.
Chandler, David G. (See Svendsen, R. T., and Chandler.)
Chappell, Marvin L., Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbons with a chlorinated hydrocarbon in the presence of a metallic halide. 1,878,262; Sept. 20.
Chase Companies, The. (See Gerth, Ruth, assignor.)
Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Decimal equivalent selector mechanism. 1,878,757; Sept. 20.
Chein, J., & Company. (See Hoffman, Samuel, assignor.)
Cherry, Robert M. (See Ipsen, C. L., and Cherry.)
Chicago-Cleveland Car Roofing Company. (See Swanson, Earl R., assignor.)
Chicago Governor & Manufacturing Co. (See Singer, Arthur, assignor.)
Chicago Pennant Company. (See Douglass, Carl P., assignor.)
Chiksan Oil Tool Co. (See Kubin, Van J., assignor.)
Chott, Edward L., Chicago, Ill. Mortar and pestle. 1,878,263; Sept. 20.
Christ, Wilhelm. (See Laska, L., Zitscher, Christ, and Petzold.)
Christensen, Christen, Maywood, assignor to Electrical Engineers Equipment Co., Melrose Park, Ill. Switch. 1,878,377; Sept. 20.
Christensen, Hans P., Davey, Nebr. Guard-plate fastener. 1,878,378; Sept. 20.
Christenson, Bernard H. (See Block, H. W., and Christenson.)
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Striping instrument. 1,878,466; Sept. 20.
Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Sound reproducing device. 1,878,232; Sept. 20.
Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Lubricating system for the power plant of an automobile. 1,878,379; Sept. 20.
Cincinnati Ball Crank Company, The. (See Harris, Cleo, assignor.)
Cincinnati Butchers' Supply Company, The. (See Schmidt, O. C., and Klawitter, assignors.)
Cincinnati Milling Machine Company, The. (See Einstein, S., and Nenninger, assignors.)
Clark, James D'A., Kensington, England. Determining the moisture content and quality of materials. 1,878,109; Sept. 20.
Clarke, Arthur F., deceased, Tulsa, Okla.; Nell M. Clarke, executrix. Apparatus for treating hydrocarbons. 1,878,467; Sept. 20.
Clarke, Nelle M., executrix. (See Clarke, Arthur F.)
Claus Manufacturing Co. (See Leins, O. J., and Rawlings, assignor.)
Claus Manufacturing Co. (See Leins, O. J., and Wantz, assignors.)
Clause, Frank H., Camberwell, London, assignor to Waddington Tamperproof Taximeters, Limited, London, England. Taximeter. 1,878,438; Sept. 20.
Claybourn, Leslie W., Milwaukee, Wis. Supporting means for web-rolls. 1,878,264; Sept. 20.
Clayton, Herbert D., Hill City, Kans. Merry-go-round. 1,878,758; Sept. 20.
Cleveland Hobbing Machine Company. (See Adams, Frank H., assignor.)
Clifford, Albert M., Stow, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Rubber compound and preserving it. Re18,603; Sept. 20.
Clowe & Cowan, Inc. (See Banasik, Alois E., assignor.)
Clnett, Peabody & Co. (See Blue, Sidney, assignor.)
Clum Manufacturing Company. (See Winning, Robert K., assignor.)
Cohen, Jacob. (See Goldman, I., and Cohen.)
Cole, Edward P., Chicago, Ill. Incinerator. 1,878,110; Sept. 20.
Coleman, Gerald H., and L. E. Mills, assignors to The Dow Chemical Company, Midland, Mich. Preparation of primary aromatic amine hydrohalides of the benzine series. 1,878,675; Sept. 20.
Coleman, Stewart P., Houston, Tex., assignor to Standard Oil Development Company. Treating crude oil. 1,877,811; Sept. 20.
Colgate-Palmolive-Peet Company. (See Schwantes, Julius A., assignor.)
Collins, James G., assignor to Atlas Press Company, Kalamazoo, Mich. Apparatus for locating noises in motor vehicles. 1,878,380; Sept. 20.
Collins, William D., Evansville, Ind., assignor to Servel, Inc., New York, N. Y. Refrigerator cabinet construction. 1,878,111; Sept. 20.
Collum, William B., Gainesville, Ga. Mechanism for trimming pickers. 1,877,812; Sept. 20.
Colpitts, Calvin N., Malden, assignor to American Window Shade Machine Company, Boston, Mass. Eyelet feeding mechanism for eyelet setting machines. 1,877,813; Sept. 20.
Combes Maurice B. (See Continsouza, V., and Combes.)
Combination Door Company. (See Schmidt, Louis D., assignor.)
Comery, William. (See Brown, C., and Comery.)
Conduit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Conduit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)
Connell, James J., Detroit, Mich., assignor, by mesne assignments, to Allied Steel Products Corporation. Nut lock washer. 1,878,827; Sept. 20.
Connor, Benjamin J., Chappell, Nebr. Rotary rod weeder. 1,877,814; Sept. 20.
Conrad, Frank, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio relay system. 1,877,815; Sept. 20.
Consolidated Iron-Steel Manufacturing Company. The. (See Luff, Lawrence W., assignor.)
Consortium Fuer Elektrochemische Industrie. (See Meingast, R., and Mugdan, assignors.)
Container Corporation of America. (See Walter, Harrison B., assignor.)
Continsouza, Victor, and M. B. Combes, Paris, France. Cinematograph. 1,878,381; Sept. 20.
Continuous Gramophones Limited. (See Oyston, William R., assignor.)
Cook, Charles B., Los Angeles, Calif. Liquid bath apparatus. 1,877,816; Sept. 20.
Cook, Charles B., Los Angeles, Calif. Submerger. 1,877,817; Sept. 20.
Cook, Charles B., Los Angeles, Calif. Liquid bath apparatus. 1,877,818; Sept. 20.
Cooper, Hugh S., and M. Merlub-Sobel, Cleveland, Ohio, assignors to Kemet Laboratories, Inc. Coating substances. 1,878,112; Sept. 20.
Co-Operative Embroidery Company. (See Pohl, Friedrich H. M., assignor.)
Copeland Products, Inc. (See Muffly, Glenn, assignor.)
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Method and apparatus for freezing liquids. 1,878,759; Sept. 20.
Corbett, Edward L. (See Wallace, Mardel, assignor.)
Corell, Martin. (See Kränzlein, G., Corell, and Vollman.)
Corning Glass Works. (See Fulcher, Gordon S., assignor.)

Cornuelle, George, Cincinnati, Ohio. Bricklayer's leveling and plumbing device. 1,878,448; Sept. 20.
Coryell, William C., Youngstown, Ohio. Metal lath slitting press. 1,877,819; Sept. 20.
Cosgrove, Claude, Middle Park, and A. E. Chadwick, Norford Grove, Kooyong, assignors to Hume Steel Limited, Melbourne, Australia. Method of and apparatus for use in the manufacture of metallic meshing, netting, and like fabric. 1,878,760; Sept. 20.
Costello, Henry O., Providence, R. I. Game appliance. 1,877,820; Sept. 20.
Coty, Inc. (See Tourtois, Fernand, assignor.)
Coultas, Wilbur J. (See Paradise, L. A., and Coultas.)
Cousins, James I., et al. (See Alcala, Pablo, assignor.)
Covell, Bradford S., Cambridge, Mass., assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Prevention of corrosion. 1,878,468; Sept. 20.
Covey, Felix M., Duluth, Minn. Aircraft propeller. 1,877,821; Sept. 20.
Cox, Irving J., and W. E. Kirst, Woodbury, N. J., and C. A. Woodbury, Media, Pa., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Concentrating nitric acid. 1,878,676; Sept. 20.
Cox, Oscar, Cotton Valley, La., and O. C. Willis, Norphlet, Ark. Wrist pin. Re18,604; Sept. 20.
Coyle, Paul L., Coraopolis, Pa., assignor, by mesne assignments, to Republic Steel Corporation, Jersey City, N. J. Guide box. 1,877,822; Sept. 20.
Crane Co. (See Stine, Louis B., assignor.)
Crax, Albert G., Richmond Hill, assignor to Brass Goods M'f'g. Co., Brooklyn, N. Y. Container cap. 1,878,265; Sept. 20.
Cressler, Edward P., Newton, Kans. Mount for films. 1,878,113; Sept. 20.
Crickmer, Charles S., assignor to The Guiberson Corporation, Dallas, Tex. Drill bit. 1,878,114; Sept. 20.
Crites, Joe, Evanston, assignor to The Raymond Brothers Impact Pulverizer Co., Chicago, Ill. Central lubricating system for roller mill rollers. 1,877,823; Sept. 20.
Crosier, Arthur B. et al. See Crosier, Frank B., assignor.)
Crosier, Frank B., Beloit, Wis., assignor of one-third to A. B. Crosier and one-third to M. G. Crosier. Stereoscopic motion picture camera. 1,878,382; Sept. 20.
Crosier, Minnie G., et al. See Crosier, Frank B., assignor.)
Cross, Charles F., London, England, and A. Engelstad, Vardal, Norway. Manufacture of new products comprising lignone derivatives. 1,878,828; Sept. 20.
Crouch, Logan R., Memphis, Tenn. Brazed or welded joint. 1,878,829; Sept. 20.
Crouse, Charles W., Valparaiso, Ind. Flood water control. 1,878,383; Sept. 20.
Crum, Roland R., Whittier, assignor, by mesne assignments, to J. Grant, Los Angeles, Calif. Guard for collapsible underreamers. 1,878,578; Sept. 20.
Crumb, Charles F., and A. Kowalsky, Chicago, Ill., assignors to International Harvester Company. Corn harvester. 1,878,830; Sept. 20.
Cummings, Stanley R., Canton, assignor to The Hoover Company, North Canton, Ohio. Absorption refrigerating system. 1,878,831; Sept. 20.
Cummins, Walter E., Long Beach, Calif. Pumping jack. 1,878,469; Sept. 20.
Curle, Charles W., San Francisco, Calif. Low slugging cutter mechanism. 1,878,266; Sept. 20.
Curnes, Robert L. (See Pierce, J. B., jr., and Curnes.)
Curtis, George W., New York, N. Y. Container seal. 1,878,677; Sept. 20.
Curtis Manufacturing Company. (See Ackerman, Frank, assignor.)
Cutler, Hemmer, Inc. (See Seeger, Edwin W., assignor.)
Cypress Novelty Corporation, et al. (See Preston, J. E., and Sokolow, assignors.)
Dailey, Charles A. (See Box, John V., assignor.)
Danly Machine Specialties, Inc., (See Danly, Robert C., assignor.)
Danly, Robert C., assignor to Danly Machine Specialties, Inc., Chicago, Ill. Feeding mechanism. 1,878,820; Sept. 20.
Daude, Henry A., Killeen, Tex. Portable garden hose vise. 1,878,439; Sept. 20.
Daugherty, Edwin C., Warren, Ohio. Supporting bracket for flush tanks and other plumbing fixtures. 1,878,821; Sept. 20.
Dauler, Harvey N., Pittsburgh, Pa. Cracking resins and like materials. 1,878,267; Sept. 20.
Davidson, Walter C., North Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,878,384; Sept. 20.
Davies, John, Waterloo, Liverpool, England. Process of coating metallic surfaces for prevention of corrosion. 1,878,761; Sept. 20.
Davis, Norris K. (See Mason, Alfred E., assignor.)
Davis Standard Bread Company. (See Ward, G. E., and Palmer, assignors.)
Davis, Winthrop S., Pueblo, Colo. Planting and cultivating. 1,878,819; Sept. 20.
Day, David A., Gastonia, N. C. Lease forming apparatus for warp handling machines. 1,878,268; Sept. 20.
Day, Edmund L., Westline, Pa. Treating vapor of wood or its by-products. 1,878,678; Sept. 20.
Dayton Scale Company. (See Heidinger, Willy, assignor.)
Dayton Scale Company. (See Townshend, B., and Johnston, assignors.)
Daytona Steel Foundry Company, The. (See Walther, George, assignor.)
Deacon, William T., Richmond Heights, and H. F. Perkins, Clayton, assignors to Metalfoils, Incorporated, St. Louis, Mo. Machine for lock-seaming sheets and strips. 1,878,622; Sept. 20.
De Bruijn, Emil, deceased, Roslyn, Pa., T. M. de Bruijn, executrix. Product of manufacture. 1,878,679; Sept. 20.
De Bruijn, Theresa M., executrix. (See de Bruijn, Emil.)
De Cosse, Arthur B., Miles City, Mont. Hydraulic lubricating system. 1,878,115; Sept. 20.
Dee-Hy-Products Company. (See MacLachlan, John C., assignor.)
Deere & Company. (See Metcalf, Edgar E., assignor.)
Deere & Company. (See Paradise, L. A., and Coultas, assignors.)
Deere & Company. (See Paul, William L., assignor.)
Deere & Company. (See Ralsbeck, Frank, assignor.)
Deere & Company. (See Siebenmann, Frederic J., assignor.)
Defiance Manufacturing Corporation. (See Iuland, Webster H., assignor.)
Delco-Remy Corporation. (See Hartzell, Herman L., assignor.)
Delplanque, Ferdinand, Paris, France. Machine for sewing velvet on to fabrics of any kind. 1,877,824; Sept. 20.
Delta Star Electric Company, The. (See Schneider, John, assignor.)
Desmond-Stephan Mfg. Co., The. (See Dovell, H. H., McConnell, and Henz.)
Deutche Edelstahlwerke A. G. (See Pölzguter, Franz, assignor.)
Deutsch, Fritz, Germantown, Tenn., assignor of one-third to Lehmann Machine Company, St. Louis, Mo. Ring grinding machine. 1,878,116; Sept. 20.
Deutsch, William, Detroit, Mich. Demountable safety razor. 1,878,269; Sept. 20.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Gorhan, Adolf, assignor.)
DeVilliers, Peter G. T., Pretoria, Transvaal, assignor of one-half to Messrs. Roger-Jenkins & Co. (Pty.) Ltd., Durban, Natal, Union of South Africa. Automatic telephone call box. 1,878,762; Sept. 20.
Dewald, Edward A., Massillon, Ohio, assignor to The Griscom-Russell Company, New York, N. Y. Coiling machine and method of winding coils. 1,878,233; Sept. 20.
Dewandre, Albert, Liege, Belgium. Electrical control for servo-motors. 1,878,822; Sept. 20.
Dexdale Hosiery Mills. (See Swartz, Abraham W., assignor.)
Dial, Frank E., and R. R. Rogers, Terre Haute, Ind. Safety device for presses. 1,878,470; Sept. 20.
Di Bartolomeo, Nicola, Brockton, Mass. Elevator apparatus. 1,878,823; Sept. 20.
Diescher, Samuel E., Wilkinsburg, and C. W. A. Koelkebeck, Mount Lebanon, Pa., assignors to Foster Wheeler Corporation, New York, N. Y. Method of and apparatus for metal rolling. 1,878,117; Sept. 20.
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Ditto, Incorporated. (See Carr, Kenneth W., assignor.)
Dixey, C. W., & Son Limited. (See Dixey, Walter A., assignor.)
Dixey, Fannie B., executrix. (See Dixey, Walter A.)
Dixey, Walter A., deceased, by F. B. Dixey, executrix, assignor, by mesne assignments, to C. W. Dixey & Son Limited, London, England. Optical instrument and method of treatment. 1,878,973; Sept. 20.
Doak, Robert S., assignor to Premier Electric Company, Chicago, Ill. Radio circuit. 1,877,825; Sept. 20.
Dobmaier, Karl, Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y., Azodyestuffs. 1,878,471; Sept. 20.
Dodelin, Fred A., Glen Ridge, assignor to Pyrene Manufacturing Company, Newark, N. J. Fire extinguisher. 1,878,472; Sept. 20.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Aviation Corporation. 1,878,824; Sept. 20.
Doebrich, Joseph M., Tucson, Ariz. Tool grinding machine. 1,878,385; Sept. 20.
Doerr, Harry E., assignor to Scullin Steel Company, St. Louis, Mo. Bolster end construction. 1,878,473; Sept. 20.
Dollinger, Lewis L., Rochester, N. Y. Pipe line filter. 1,878,681; Sept. 20.
Doremus, Laura, New York, N. Y. Toy. 1,877,826; Sept. 20.
Douglass, Carl P., assignor to Chicago Pennant Company, Chicago, Ill. Shipping case. 1,878,118; Sept. 20.
Douthitt, Walter S., assignor to T. H. Blackburn, Atoka, Okla. Nonskid apparatus. 1,878,386; Sept. 20.
Dovell, Hunter H., R. S. McConnell, and H. Henz, assignors to G. McConnell, doing business as The Desmond-Stephan Mfg. Co., Urbana, Ohio. Grinding wheel dresser. 1,878,763; Sept. 20.
Dow Chemical Company, The. (See Britton, Edgar C., assignor.)
Dow Chemical Company, The. (See Coleman, G. H., and Mills, assignors.)

Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company. (See Griswold, Thomas, jr., assignor.)
Dow Chemical Company, The. (See Hoy, John E., assignor.)
Dow Chemical Company, The. (See Mills, Lindley E., assignor.)
Dow Chemical Company, The. (See Putnam, M. E., and Mills, assignors.)
Dow Chemical Company, The. (See Williams, William H., assignor.)
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Multistage gas purification. 1,878,682; Sept. 20.
Dowd, Thomas, New York, N. Y. Protractor. 1,878,119; Sept. 20.
Dowell, Alvis Y. (See Kuenzli, W. A., and Dowell.)
Dowell, Jasper I., Mart, Tex. Electric fire alarm. 1,878,120; Sept. 20.
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,878,764; Sept. 20.
Drache, Hubert, New York, N. Y. Surgical instrument. 1,877,827; Sept. 20.
Drachenberg, William. (See Lundy, W. T., and Drachenberg.)
Dräger, Otto H., and H. Stelzner, Lubeck, Germany; said Stelzner assignor to said Dräger. Life saving gear. 1,878,474; Sept. 20.
Drake, Charles B., Norfolk, Va. Advertising clock. 1,878,683; Sept. 20.
Driest, Charles, Marlboro, N. J. Safety razor. 1,878,475; Sept. 20.
Duffy, James F., assignor to Duffy Manufacturing Company, Holland, Mich. Emergency brake pad. 1,878,440; Sept. 20.
Duffy Manufacturing Company. (See Duffy, James F., assignor.)
Duginski, John J. (See Brooks, G. W., and Duginski.)
Dunkle, Herbert E., Jackson Heights, and J. Becker, Flushing, assignors, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y. Oven door, frame, and fastening device. 1,878,680; Sept. 20.
Dunlop Tire and Rubber Corporation. (See Beynon, Donald E., assignor.)
Dunn, Thomas E., New York, N. Y. Rack attachment for pocket billiard tables. 1,878,449; Sept. 20.
Duplate Corporation. (See Sherts, James H., assignor.)
Du Pont, E. I., de Nemours & Company. (See Cox, I. J., Kirst, and Woodbury, assignors.)
Du Pont, E. I., de Nemours & Company. (See Lewis, Harold A., assignor.)
Du Pont Rayon Company. (See Banigan, Thomas F., assignor.)
Duprée, Edmond G., Richmond Hill., assignor to Boorum & Paase Company, New York, N. Y. Loose leaf binder. 1,878,476; Sept. 20.
Durbin, Votaw S., St. Louis, Mo. Duplex furnace for melting metals. 1,878,623; Sept. 20.
Durling, Robert S. (See Haas, E. K., and Durling.)
Eastman Kodak Company. (See Eberlin, Leon W., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Malm, Carl J., assignor.)
Eastman Kodak Company. (See Mees, Charles E. K., assignor.)
Eastman Kodak Company. (See Mihalyi, Joseph, assignor.)
Eastman Kodak Company. (See Sheppard, Samuel E., assignor.)
Eastman Kodak Company. (See Wellman, Howard C., assignor.)
Eastman Kodak Company. (See Wells, J. B., and Wynd, assignors.)
Eaton, Harrison H. (See Schneider, W. G., and Eaton, assignors.)
Eaton Manufacturing Company. (See Veale, George W., assignor.)
Eberlin, Leon W., assignor to Eastman Kodak Company, Rochester, N. Y. Ultra-violet sensitive paper. 1,878,684; Sept. 20.
Eberspacher, Otto, Angleton, Tex. Automatic control valve. 1,878,270; Sept. 20.
Eclipse Aviation Corporation. (See Nardone, Romeo M., assignor.)
Edward Valve and Manufacturing Company, The. (See Mohr, Walter W., assignor.)
Edwards, Victor E., West Boylston, assignor to Morgan Construction Company, Worcester, Mass. Shearing machine. 1,878,121; Sept. 20.
Egger-Hansen, Simon S., Vienna, Austria, assignor to Egger-Hansen's Naamlooze Vennootschap tot Exploitatie van Octrooien, Rotterdam, Netherlands. Price scale. 1,878,832; Sept. 20.
Egger-Hansen's Naamlooze Vennootschap tot Exploitatie van Octrooien. (See Egger-Hansen, Simon S., assignor.)
Ehrhart, Gustav. (See Bockmühl, M., Ehrhart, and Stein.)
Ehrich, Johann, Vienna, Austria. Stand for the display of goods. 1,878,765; Sept. 20.
Einstein, Sol, and L. F. Nenninger, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,877,828; Sept. 20.
Electric Auto-Lite Company, The. (See Schneider, W. G., and Eaton, assignors.)
Electric Cachometer Corporation, The. (See Smith, Merle L., assignor.)
Electrical Engineers Equipment Co. (See Christensen, Christen, assignor.)
Electro-Alloys Company, The. (See Whyte, William C., assignor.)
Electro Metallurgical Company. (See Udy, Marvin J., assignor.)
Electrons, Inc. (See Meyer, F., Spanner, and Germer, assignors.)
Eliggi, Bartolomeo, and L. Lorenzi, San Francisco, Calif. Signal. 1,878,122; Sept. 20.
Elkington, James E., San Francisco, Calif. Dishwashing machine. 1,878,685; Sept. 20.
Eller, Wilhelm. (See Meyer, H., and Eller.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Keratin enameling composition. 1,878,477; Sept. 20.
Ellis-Foster Company. (See Bradley, Theodore F., assignor.)
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, Hugh J., Berwyn, Ill. Microphone. 1,878,271; Sept. 20.
Ellis, Owen W., Toronto, Ontario, Canada. Alloy. 1,878,686; Sept. 20.
Ellyson, Frederich W., St. Polten, Austria. Tube receptacle with automatic closure. 1,878,833; Sept. 20.
Elwell, George H., assignor to The Greist Manufacturing Company, New Haven, Conn. Electric lamp socket. 1,878,387; Sept. 20.
Embery, Vernon L. (See Hymer, R. T., and Embery.)
Engelstad, Alf. (See Cross, C. F., and Engelstad.)
Ensign-Reynolds, Inc. (See Ensign, W. B., and Reynolds, assignors.)
Ensign, William B., and L. H. V. Reynolds, assignors to Ensign-Reynolds, Inc., New York, N. Y. Inspirator. 1,878,478; Sept. 20.
Erban, Richard, Vienna, Austria. Friction gear. 1,878,272; Sept. 20.
Erlinder, Peter E., assignor to Folding Products Corporation, Chicago, Ill. Foldable curtain. 1,877,829; Sept. 20.
Estes, Arthur P., assignor to C. M. Estes, Jackson, Tenn. Spring expander. 1,878,624; Sept. 20.
Estes, Carrie M. (See Estes, Arthur P., assignor.)
Etienne, Alfred, Montereau, assignor to la Societe l'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris, France. Separation of the constituents of gaseous mixtures by liquification. 1,878,123; Sept. 20.
Eurich, Richard H. (See Reinhardt, G. A., and Eurich.)
Evans, William A. D., Summit, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. System for starting and operating gaseous electric discharge devices. 1,878,479; Sept. 20.
Extrom, Victor E. (See Miller, P. J. N., and Extrom.)
Eyrick, Philip A., Cambridge, asignor to National Company, Inc., Malden, Mass. Electric terminal clip. 1,877,830; Sept. 20.
Faltermayer, Harry, Philadelphia, Pa. Pipe line connection for tanks. 1,878,834; Sept. 20.
Fansteel Products Company. (See Austin, Miner M., assignor.)
Fansteel Products Company. (See Bradbury, Clifford C., assignor.)
Farley, Francis J., McKees Rocks, Pa. Signaling device. Des. 87,776; Sept. 20.
Farm Specialty Company, The. (See Lamiell, Earld H., assignor.)
Farrell Burmingham Company Inc. et al. (See Schnuck, C. F., and Kuntney, assignors.)
Faughnan, Richard W. (See Freund, Philip, assignor.)
Federal Seaboard Terra Cotta Corporation. (See Olsen, Peter C., assignor.)
Fegely, John P., assignor of one-half to E. A. Wallis, Allentown, Pa. Nursing bottles. 1,877,832; Sept. 20.
Feragen, A. E., Inc. (See Bennett, Claude C., assignor.)
Ferguson, William C., St. Louis, Mo. Asphaltic cement. 1,878,625; Sept. 20.
Fergusson, Alan R., New York, N. Y. Tank cap. 1,878,687; Sept. 20.
Ferrell, Daniel D., assignor to J. E. Porter Corporation, Ottawa, Ill. Climbing structure for playgrounds. 1,877,833; Sept. 20.
Ferris, William D., assignor to Hustler Toy Corporation, Sterling, Ill. Figure toy. 1,877,834; Sept. 20.
Feykert, Peter J., San Francisco, Calif. Sheet glass mounting. 1,877,835; Sept. 20.
Fichter, Walter C. G., West Hazleton, Pa. Slip link for connecting cross chains to side chains. 1,878,388; Sept. 20.
Field, Crosby, Brooklyn, N. Y. Metal grille. 1,878,688; Sept. 20.
Fifield, Albert F., Newark, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Thread-cutting mechanism for sewing machines. 1,878,480; Sept. 20.
Finley, Charles A., Rutherford, N. J., assignor to Boorum and Pease Company, New York, N. Y. Loose leaf device. 1,878,481; Sept. 20.
Firestone Steel Products Company, The. (See Broecker, Lewis C., assignor.)

Fischer, Edward J., Covington, Ky., assignor of one-half to F. A. Aman. Hydraulic spring device for automobiles. 1,878,450; Sept. 20.
Fischer, Howard L., assignor to Brown & Bigelow, St. Paul, Minn. Pencil. 1,878,389; Sept. 20.
Fisher, Arthur W., Forest Hills Borough, and W. B. Wells, Wilkinsburg, assignors to The Union Swith & Signal Company, Swissvale, Pa. Light signal. 1,878,273; Sept. 20.
Fisk, Ernest T., Sydney, New South Wales, Australia. Screen for wall apertures. 1,878,626; Sept. 20.
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fitzgerald, Gilbert F., Milwaukee, Wis. Suppository for treating vaginal conditions. 1,878,766; Sept. 20.
Flack, Theodore J., Brooksville, Fla. Weed cutter. 1,878,689; Sept. 20.
Fleetwood, Gilbert P. (See Scott, E. A., and Fleetwood.)
Fleischmann, Frederick A., Drexel Hill, and A. L. Marsh, Philadelphia, Pa. Weighing head for dynamometer apparatus. 1,878,835; Sept. 20.
Flieg, A. C., et al. (See Nowlin, Aubrey C., assignor.)
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Door locking device. 1,877,836; Sept. 20.
Folding Products Corporation. (See Erlinder, Peder E., assignor.)
Folker, Johannes K., Charlottenlund, and F. F. Truelsen, Copenhagen, Denmark. Sack inverting machine. 1,878,627; Sept. 20.
Fordyce, Rufus G., Chicago, and H. F. Talbot, Peru, assignors to Radium Dial Company, Ottawa, Ill. Machine for printing luminous dials. 1,878,482; Sept. 20.
Forney, Rose H., Dallas, Tex. Lathe center. 1,878,690; Sept. 20.
Forrer, Max, Paris, France, assignor, by mesne assignments, to American Anode Inc. Production of deposits from aqueous dispersions of rubber and rubber-like substances. 1,878,483; Sept. 20.
Foster, Harold B., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Production of tri-substituted guanidines. 1,878,484; Sept. 20.
Foster, Julius E., Pittsburgh, Pa., assignor to Radio Corporation of America. Thermionic system. 1,878,124; Sept. 20.
Foster, Robert, New York, N. Y., assignor to Metal Traffic Marker Corporation. Traffic marker. 1,878,691; Sept. 20.
Foster Wheeler Corporation. (See Diescher, S. E., and Koelkebeck, assignors.)
Foster, William H., Elkhart, Ind. Slide mounting for lathes. 1,878,628; Sept. 20.
Fowler, Joseph E., Worcester, Mass. Oil burner. 1,878,836; Sept. 20.
Francis, Arthur F., Waterbury, Conn. Preparing metals for electroplating. 1,878,837; Sept. 20.
Franklin Railway Supply Company. (See Rosenfelt, Samuel D., assignor.)
Franklin Railway Supply Company. (See Vincent, Harry S., assignor.)
Franklin, Reginald G., Billingham, Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Production of methanol and other oxygenated organic compounds and preparation of catalysts therefor. 1,878,390; Sept. 20.
Frantz, Virgil L., assignor to Graham-White Sander Corporation, Roanoke, Va. Locomotive sanding mechanism. 1,877,837; Sept. 20.
Franz, Charles H., jr., Wauwatosa, Wis. Loose-leaf binder. 1,877,831; Sept. 20.
Frauendorf, Paul. (See Shapiro, H. A., and Frauendorf.)
Frazier, John A., South Braintree, Mass. Shaping riding boots. 1,878,391; Sept. 20.
Freeman, Hubert M., East Pittsburgh, Pa., and W. G. Wade, New York, N. Y., assignors to Westinghouse Electric and Manufacturing Company. Hot cathode electron discharge tube. 1,877,838; Sept. 20.
Freund, Phillip, Farmingdale, assignor of one-half to R. W. Faughnan, Farmingdale, Long Island, N. Y. Internal combustion engine. 1,878,767; Sept. 20.
Frigidaire Corporation. (See King, Jesse G., assignor.)
Froelich, Clarence H., Bethlehem, Pa., assignor to Bethlehem Steel Company. Reversible auxiliary locomotive. 1,878,838; Sept. 20.
Frommer, Rudolf v., Budapest, Hungary. Barrel spring for automatic firearms. 1,877,839; Sept. 20.
Frosted Foods Company. (See Souther, John G., assignor.)
Frowenfeld, James M., New York, N. Y. Display card. 1,877,840; Sept. 20.
Fruehauf Trailer Company. (See Reid, Frederick M., assignor.)
Fuchs, Henry, assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,877,841; Sept. 20.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 87,777; Sept. 20.
Fulcher, Gordon S., assignor to Corning Glass Works, Corning, N. Y. Composite refractory articles and making the same. 1,878,839; Sept. 20.
Fuller, Frederick L., Trenton, N. J., assignor to International Business Machines Corporation, New York, N. Y. Accounting machine. 1,878,125; Sept. 20.
Fuller Lehigh Company. (See Harter, Isaac, assignor.)
Fuller Lehigh Company. (See Lucke, Charles E., assignor.)
Fuller & Sons Manufacturing Co. (See Bixby, Leo A., assignor.)
Fulton, Claude C., St. Louis, Mo. Combined tire and luggage carrier for automobiles. 1,877,887; Sept. 20.
Furey, Edward R., New Rochelle, N. Y., and E. S. Anderson, Boston, Mass. Score card. 1,878,629; Sept. 20.
Furness Corporation. (See Furness, William H., assignor.)
Furness, William H., National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa. Drawing wheel. 1,878,692; Sept. 20.
Fusco, John, New Haven, Conn. Cutlery polishing machine. 1,878,840; Sept. 20.
Fyr-Fyter Company, The. (See Iddings, Roscoe C., assignor.)
Gabbert, Hugh W., Norwood, Ohio. Airplane. 1,878,768; Sept. 20.
Gallinant, Raphael C., Ridgefield Park, N. J. Steering wheel switch clip. 1,878,769; Sept. 20.
Gamble, Kent P., Schenectady, N. Y., assignor to General Electric Company. Film magazine. 1,878,693; Sept. 20.
Ganter, Henry C., Natrona, Pa., assignor to Atlantic Bottle Company. Glass making machine. 1,878,485; Sept. 20.
Gardner, Joseph H. S. (See Gardner, Joseph and J. H. S.)
Gardner, Joseph and J. H. S., assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England. Oil filter. 1,878,630; Sept. 20.
Gardner, L., & Sons Limited. (See Gardner, Joseph, and J. H. S., assignors.)
Gatchell, Frederick D., Binghamton, N. Y. Machine for washing bottles. 1,877,843; Sept. 20.
Gates, Clarence A., Westborough, Mass. Pole guard. 1,878,126; Sept. 20.
Gause, Frederick T., Wilmington, Del. Tire chain. 1,878,841; Sept. 20.
Gay, Azel. (See Gmelin, E. W., and Gay.)
Gay, Azel, assignor to Multipost Co., Rochester, N. Y. Envelope handling machine. 1,877,842; Sept. 20.
Gay, Norman H., Los Angeles, Calif. Refrigerating system with liquid and gas traps. 1,878,694; Sept. 20.
General Aniline Works, Inc. (See Bayer, Otto, assignor.)
General Aniline Works, Inc. (See Bollweg, B., Zeh and Kramer, assignors.)
General Aniline Works, Inc. (See Dobmaier, Karl, assignor.)
General Aniline Works, Inc. (See Hentrich, W., and Hardtmann, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Knoche, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Zeh, assignors.)
General Aniline Works, Inc. (See Herz, R., and Zerweck, assignors.)
General Aniline Works, Inc. (See Hoffa, E., and Heyna, assignors.)
General Aniline Works, Inc. (See Kalischer, G., Ritter, Scheyer, and Bayer, assignors.)
General Aniline Works, Inc. (See Kränzlein, G., Corell, and Vollmann, assignors.)
General Aniline Works, Inc. (See Kronholz, E. and Schlichenmaier, assignors.)
General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)
General Aniline Works, Inc. (See Laska L., Zitscher, Christ, and Petzold, assignors.)
General Aniline Works, Inc. (See Mieg, W., and Bamberger, assignors.)
General Aniline Works, Inc. (See Mieg, W., and Berliner, assignors.)
General Aniline Works, Inc. (See Mieg, W., and Heidenreich, assignors.)
General Aniline Works, Inc. (See Muth, F., and Schmelzer, assignors.)
General Aniline Works, Inc. (See Mawiasky, Paul, assignor.)
General Aniline Works, Inc. (See Neelmeier, W., and Nocken, assignors.)
General Aniline Works, Inc. (See Neresheimer, H., Honold, and Böhner, assignors.)
General Aniline Works, Inc. (See Neresheimer, H., and Schneider, assignors.)
General Aniline Works, Inc. (See Rimele, E., Glietenberg, and Neelmeier, assignors.)
General Aniline Works, Inc. (See Ritter, Heinrich, assignor.)
General Aniline Works, Inc. (See Ritter, H., and Brunner, assignors.)
General Aniline Works, Inc. (See Schmidt, M. P., and Neugebauer, assignors.)
General Aniline Works, Inc. (See Schmidt, R. E., Stein, and Bamberger, assignors.)
General Aniline Works, Inc. (See Schweitzer, Hugo, assignor.)
General Aniline Works, Inc. (See Wahl, Ottmar, assignor.)
General Aniline Works, Inc. (See Wilke, Karl, assignor.)
General Aniline Works, Inc. (See Wolff, Hugo, assignor.)
General Aniline Works, Inc. (See Zerweck, Werner, assignor.)

General Cable Corporation. (See Atkinson, Ralph W., assignor.)
General Cable Corporation. (See Myers, Alexander M., assignor.)
General Cable Corporation. (See Saltzman, Auguste L., assignor.)
General Electric Company. (See Gamble, Kent, P., assignor.)
General Electric Company. (See Ipsen, C. L., and Cherry, assignors.)
General Electric Company. (See Kienle, Roy H., assignor.)
General Electric Company. (See Thompson, Louis W., assignor.)
General Electric Vapor Lamp Company. (See Evans, William A. D., assignor.)
General Electric Vapor Lamp Company. (See Malley, Roy D., assignor.)
General Electric Vapor Lamp Company. (See Walker, Warren R., assignor.)
General Health Corporation. (See Brown, Franklin, assignor.)
General Railway Signal Company. (See Hoppe, W. H., and Swanton, assignors.)
General Railway Signal Company. (See Lindner, John C., assignor.)
General Railway Signal Company. (See Loftin, Edward H., assignor.)
General Railway Signal Company. (See Reichard, Wade H., assignor.)
General Railway Signal Company. (See Wells, R. F., and Mersereau, assignors.)
General Railway Signal Company. (See Whitehorn, Arthur R., assignor.)
General Register Corporation. (See Teague, Walter D., assignor.)
George, Henri, Paris, France. Glass working furnace. 1,878,392; Sept. 20.
Gerlach, Erwin, Berlin-Siemensstadt, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Reproducer for sound films. 1,877,844; Sept. 20.
Gerline, Otto, Kalamazoo, Mich. Fishing rod holder. 1,877,845; Sept. 20.
Germer, Edmund. (See Meyer, F., Spanner, and Germer.)
Gerth, Ruth, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Ash receptacle or similar article. Des. 87,779; Sept. 20.
Gessner, Ernest, Worcester, Mass. Variable speed transmission mechanism. 1,878,486; Sept. 20.
Gets, John B., assignor to Interlocking Fence Co., Morton, Ill. Gate hinge. 1,877,846; Sept. 20.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,778; Sept. 20.
Gibson, Thomas A., Brooklyn, N. Y. Spring toggle adjustment for wire stitching machines. 1,878,274; Sept. 20.
Gibson, Wilfrid, and J. B. Payman, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of esters. 1,877,847; Sept. 20.
Gilliam, Lusious E., Asheville, N. C. Lubricating device. 1,877,848; Sept. 20.
Gilling, Preston E., Haddon Heights, assignor to Radio Condenser Company, Camden, N. J. Electrical condensers. 1,878,631; Sept. 20.
Gilletenberg, Eguen. (See Rimele, E., Gilletenberg, and Neelmeier.)
Globe Machine & Stamping Company. (See Green, Lee B., assignor.)
Globe-Wernicke Company, The. (See Pedersen, Carl E. assignor.)
Gmelin, Edward W., and A. Gay, assignors to Multipost Co., Rochester, N. Y. Stamp affixing machine. 1,877,849; Sept. 20.
Gober, George, Alameda, Calif. Toggle bolt. 1,878,570; Sept. 20.
Golden, Alzada, La Fayette, Ind. Water waver. 1,878,842; Sept. 20.
Goldman, Isadore, and J. Cohen, Chicago, Ill. Barber's coat. 1,878,275; Sept. 20.
Goldschmidt, Rudolf, Berlin-Charlottenburg, Germany. Sound-box for sound-reproducing machines. 1,878,770; Sept. 20.
Goldsmith, Samuel J., Chicago, Ill. Garment protector. 1,878,771; Sept. 20.
Goode, Mrs. H. W. (See Hamshaw, Clarence M., assignor.)
Goodman, Glen W.; W. B. Rosenfield, Memphis, Tenn., executor. Crossing guard. 1,878,234; Sept. 20.
Goodman Manufacturing Company. (See Hatt, Angus J., assignor.)
Goodman Manufacturing Company. (See Hatt, A. J., Johnson, and Pryde, assignors.)
Goodman Manufacturing Company. (See Vodoz, Frederick W., assignor.)
Goodman Manufacturing Company. (See Walter, Raymond A.)
Goodrich, B. F., Company, The. (See Trathen, James, assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear's India Rubber Glove Manufacturing Company, The. (See Regan, William V., assignor.)
Gorhan, Adol, Liesing, near Vienna, Austria, assignor to the Firm Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Extracting concentrated volatile aliphatic acids. 1,878,695; Sept. 20.
Gorham, Water G. (See Willshaw, H., Gorham, and Lee.)
Gortner, Ross A. (See Hoffman, W. F., and Gortner.)
Gortner, Ross A., St. Paul, and W. F. Hoffman, assignors to Northwest Paper Company, Cloquet, Minn. Electrodialysis. 1,878,235; Sept. 20.
Goshorn, Harry D. (See Sigsbey, F. W., and Goshorn.)
Goss, Byron C., Cleveland, Ohio. Generation of persistent disabling gases. 1,878,488; Sept. 20.
Goss, Byron C., Cleveland, Ohio. Generation of persistent disabling gases. 1,878,489; Sept. 20.
Goss, Byron C. Cleveland, Ohio. Grenade or pressure container. 1,878,490; Sept. 20.
Goss, Byron C., Cleveland, Ohio. Explosive device. 1,878,491; Sept. 20.
Goss, Byron C., Cleveland. Ohio. Protective device, consisting of a gas gun. 1,878,492; Sept. 20.
Grabner, Rudolf, Hohenstein, Ernstthal, Germany. Knit goods. 1,877,850; Sept. 20.
Graham, Michael J., Chicago, Ill., assignor to International Harvester Company. Gauge structure. 1,878,493; Sept. 20.
Graham-White Sander Corporation. (See Frantz, Virgil L., assignor.)
Gramsa, Joseph G., assignor of one-half to S. Nieman, Buffalo, N. Y. Controlling device for motion picture projectors. 1,878,494; Sept. 20.
Grant, Dudley H., Moorestown, N. J., assignor to Standard Oil Development Company. Insecticide. 1,877,851; Sept. 20.
Grant, John. (See Bunker, Frank S., assignor.)
Grant, John. (See Crum, Roland R., assignor.)
Graser, George W., San Juan, Puerto Rico, assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa. Cane car. 1,878,451; Sept. 20.
Gray, Chester E., assignor of one-half to G. D. Turnbow, Oakland, Calif. Frozen food product and making same. 1,878,127; Sept. 20.
Gray Processes Corporation, The. (See Gray, Thomas T., assignor.)
Gray, Thomas T., Elizabeth, assignor to The Gray Processes Corporation, Newark, N. J. Treating cracked hydrocarbons. 1,878,580; Sept. 20.
Green, Ernest, London, England, assignor to Radio Corporation of America. Radio frequency circuit arrangement. 1,878,309; Sept. 20.
Green, John P., Philadelphia, Pa. Refrigeration system. 1,878,772; Sept. 20.
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Co., Cleveland, Ohio. Ornamenting ring for spoked wheels. 1,878,441; Sept. 20.
Greist Manufacturing Company, The. (See Elwell, George H., assignor.)
Grier, Kenneth M., North Hollywood, assignor to Kaymo Electric Speed Boat Corporation, Ltd., Los Angeles, Calif. Motor boat top. 1,878,393; Sept. 20.
Griffin, Courtlandt B., Longmeadow, assignor to Carew Manufacturing Company, South Hadley Falls, Mass. Paper making. 1,878,236; Sept. 20.
Griffin, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 87,780; Sept. 20.
Griffith-Hope Company. (See Hope, Samuel N., assignor.)
Griffiths, Thomas, Jersey City, N. J. Window shade bracket. 1,878,773; Sept. 20.
Griscom-Russell Company. (See Dewal, Edward A., assignor.)
Griscom, Samuel B., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission-line protective system. 1,878,774; Sept. 20.
Griswold, Thomas, jr., assignor to The Dow Chemical Company, Midland, Mich. High temperature indirect heating. 1,877,762; Sept. 20.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Valve spring. 1,878,128; Sept. 20.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Balancing machine. 1,878,129; Sept. 20.
Griswold, William A., Nashville, Tenn. Combination radiant and circulating gas heater. 1,877,852; Sept. 20.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Chucking device. 1,878,130; Sept. 20.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Crank shaft lathe. 1,878,131; Sept. 20.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Automatic lathe. 1,878,495; Sept. 20.
Gronbech, Hans P., Pacific Beach, Calif. Screen roller adjustment device. 1,877,853; Sept. 20.
Groove Lock Co. Inc. (See Leberman, Harry, assignor.)
Guett, Monroe, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Snap switch. 1,878,843; Sept. 20.
Gühring, Eugen. (See Hagedorn, M., and Gühring.)

Guiberson Corporation, The. (See Crickmer, Charles S., assignor.)
Gulyban, John F., Bedford, Ohio, assignor, by mesne assignments, to Tropic Aire, Incorporated, Minneapolis, Minn. Water circulating system for automobiles. 1,878,496; Sept. 20.
Haake, Julius W. (See Höppler, E. F., and Haake.)
Haan, Gilbert J., jr., assignor to Keeler Brass Company, Grand Rapids, Mich. Door handle. 1,878,394; Sept. 20.
Haas, Earle C., Denver, Colo. Vaginal powder applicator. 1,878,513; Sept. 20.
Haas, Edwin K., and R. S. Durling, Baltimore, Md. Apparatus for breaking in tobacco pipes. 1,878,844; Sept. 20.
Hachency, Frank C., Vancouver, Wash. Headlight. 1,878,632; Sept. 20.
Hagedorn, Max, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Elastic product. 1,877,854; Sept. 20.
Hagedorn, Max, and E. Gühring, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preserving wood. 1,877,855; Sept. 20.
Hagedorn, Max, and E. Rossbach, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of mixed cellulose ethers. 1,877,856; Sept. 20.
Hahn, Carl R., assignor. (See Margerison, A. E., and Hahn.)
Hähnel, Kurt, Falkensee, near Spandau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption machine. 1,877,857; Sept. 20.
Hahnemann, Walter, Berlin-Marienfelde, assignor to C. Lorenz Aktiengesellschaft, Berlin, Germany. System of multiple radio transmission. 1,877,858; Sept. 20.
Halizite Corporation. (See Hawerlander, Adolph, assignor.)
Hall, Everett J., assignor to Metals Disintegrating Company, Inc., Elizabeth, N. J. Baking molded pieces. 1,878,132; Sept. 20.
Haller, Oskar. (See Laska, L., and Haller.)
Hamshaw, Clarence M., Chicago, Ill., assignor of one-tenth to Mrs. H. W. Goode. Rotary garden cultivator. 1,878,442; Sept. 20.
Hamwi, Ernest, St. Louis, Mo. Pastry cup. 1,878,395; Sept. 20.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Frequency multiplier and amplifier. 1,878,308; Sept. 20.
Hansen, Charles S., South Milwaukee, Wis. Valve. 1,877,859; Sept. 20.
Hansen, Christian J., Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Treating thiocyanates. 1,878,982; Sept. 20.
Hardtmann, Max. (See Hentrich, W., and Hardtmann.)
Hardtmann, Max. (See Hentrich, W., Hardtmann, Hilger, and Zerweck.)
Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Apparatus for distilling hydrocarbon oils. 1,878,845; Sept. 20.
Harris, Charles R., and A. L. Pitman, Niagara Falls, assignors, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y. Composition of matter. 1,878,276; Sept. 20.
Harris, Cleo, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Motor base. 1,878,983; Sept. 20.
Harrison Radiator Corporation. (See Muir, Wellington, W., assignor.)
Harrison, Richard L. (See Peffer, H. C., Harrison, and Ross.)
Harrold, Edward T., assignor to Hotchkiss Steel Products Company, Binghampton, N. Y. Road rail. 1,878,846; Sept. 20.
Harter, Isaac, New York, N. Y., assignor by mesne assignments, to Fuller Lehigh Company. Steam generator. 1,878,133; Sept. 20.
Harter, Isaac, Dongan Hills, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,878,134; Sept. 20.
Hartford-Empire Company. (See Canfield, Robert W., assignor.)
Hartford-Empire Company. (See Ingle, Henry, W., assignor.)
Hartford-Empire Company. (See Lobb, Frank H., assignor.)
Hartford–Empire Company. (See Lorenz, Edward H., assignor.)
Hartford-Empire Company. (See McIntosh, Harold W., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Peiler, K. E., and Barker, assignors.)
Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung Kassel-Wilhelmshohe, Germany. Interstage steam superheating by means of high-pressure steam. 1,878,135; Sept. 20.
Hartmann, Otto H., Kassel-Wilhelmshohe, and H. Trede, Kassel, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany. Combined steam generator and feed water preheater and purifier. 1,878,514; Sept. 20.
Hartmuth, Paul. (See Schmidt, W., and Hartmuth.)
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,877,860; Sept. 20.
Hasse, Franklin C., Chicago, and S. R. Oldham, La Grange, Ill., assignors to The Oxweld Railroad Service Company. Welding machine. 1,878,136; Sept. 20.
Hassel, Lewis H., assignor to Signal Accessories Corporation, Utica, N. Y. Adjustable switch block. 1,878,696; Sept. 20.
Hatch, Lloyd A., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Process of and apparatus for separating material. 1,877,861; Sept. 20.
Hatt, Angus J., Rock Springs, Wyo., assignor, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill. Conveyer. 1,877,862; Sept. 20.
Hatt, Angus J., A. Johnson, and J. Pryde, Rock Springs, Wyo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill. Conveyer. 1,877,863; Sept. 20.
Hauck, Frederick G., Chicago, Ill., assignor to Pabst Corporation, Milwaukee, Wis. Carton or similar article. Des. 87,781; Sept. 20.
Hausser, Anthony A. (See Hausser, Carl A., and A. A.)
Hausser, Carl A., and A. A. Hausser, Philadelphia, Pa. Hemoglobinometer. 1,878,847; Sept. 20.
Hawerlander, Adolf, assignor to Halizite Corporation, New York, N. Y. Producing compressed products. 1,877,864; Sept. 20.
Hawes, Welby V., Portland, Oreg. Saw set. 1,878,896; Sept. 20.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Deconcentrator. 1,878,848; Sept. 20.
Hayes, Cecil. (See Klein, P., Szegvári, McKay, Hayes, and Trobridge.)
Hazard, George E., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Valve. 1,877,763; Sept. 20.
Hazard, George E., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Tire spreader. 1,878,515; Sept. 20.
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Heene, George W., Cleveland, Ohio. Printing means. 1,878,516; Sept. 20.
Heffelfinger, Paul E. (See Jung, O. H., and Heffelfinger.)
Heidemann, Joseph, Los Angeles, Calif. Game. 1,877,865; Sept. 20.
Heidenreich, Rudolph M. (See Mieg, Walter, and Heidenreich.)
Heidinger, Willy, Berlin, Germany, assignor to Dayton Scale Company, Dayton, Ohio. Scale chart. 1,878,697; Sept. 20.
Hekler, Charles P., and P. Horacek, Philadelphia, Pa. Ear protector. 1,878,397; Sept. 20.
Hellmer, Ralph E., assignor to Schutte & Koerting Company, Philadelphia, Pa. Barometric condenser. 1,878,582. Sept. 20.
Heltzel Steel Form and Iron Company, The. (See McBride, Robert R., assignor.)
Hem, Halvor O. (See Marshall, C. O., and Hem.)
Hemleb, Martin, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Lock-stitch sewing machine. 1,877,757; Sept. 20.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 87,782; Sept. 20.
Hemphill Company. (See Lawson, John and R. H., assignors.)
Henkel & Cie., Gesellschaft mit beschrankter Haftung. (See Höppler, E. F., and Haake, assignors.)
Henry, Paul J., Long Island City, N. Y. Airfoil. 1,878,775; Sept. 20.
Hentrich, Winfrid, and L. Zeh, Wiesdorf, near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Complex inner organo-iron compounds and preparing the same. 1,878,187; Sept. 20.
Hentrich, Winfrid, and M. Hardtmann, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Pigment dyestuffs. 1,878,698; Sept. 20.
Hentrich, Winfrid, and M. Hardtmann, Wiesdorf-on-the-Rhine, J. Hilger, Cologne-Mulheim, and W. Zerweck, Frankfort-on-the-Main, Fechenheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of 1-halogen-aryl-thiazoles. 1,878,699; Sept. 20.
Hentrich, Winfrid, Wiesdorf-on-the-Rhine, and Rudolf Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoazodyestuffs. 1,878,700; Sept. 20.
Hens, Henry. (See Dovell, H. H., McConnell, and Henz.)
Hepting, Ernst. (See Rimmelspacher, J., and Hepting.)
Herrmann, Ernst, Pforzheim, Germany. Producing a flat pictorial representation from a pattern in relief. 1,878,138; Sept. 20.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,878,849; Sept. 20.

Hertner, John H., Lakewood, assignor to The Baker-Rauling Company, Cleveland, Ohio. Vehicle. 1,878,139; Sept. 20.
Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main, Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogenating anthanthrone. 1,877,866; Sept. 20.
Herzstein, Max, and R. H. Porter, San Antonio, Tex.; said Herzstein assignor to said Porter. Bracket. 1,878,398; Sept. 20.
Hey, Ernest, assignor to All-Sol Company, Bellingham, Wash. Alloy metal flux and making the same. 1,877,867; Sept. 20.
Hicks, William W., assignor to Wesix National Company, San Francisco, Calif. Electrical heating device. 1,878,140; Sept. 20.
Hicks, William W., assignor to Wesix National Company, San Francisco, Calif. Air heater. 1,878,701; Sept. 20.
Higgin Manufacturing Company, The. (See Rudolph, Joel F., assignor.)
High, Jurjen S., Oaklyn Manor, N. J., assignor to Westinghouse Electric & Manufacturing Company. Loud speaker. 1,877,868; Sept. 20.
Hild, Frederick W., Los Angeles, Calif. Rotary drilling apparatus. 1,878,141; Sept. 20.
Hild, William J., Pekin, Ill. Sickle guard and bar. 1,877,869; Sept. 20.
Hilger, Josef. (See Hentrich, W., Hardtmann, Hilger, and Zerweck.)
Hilgers, John, Binghamton, N. Y. Protective device for tables. 1,878,850; Sept. 20.
Hill Independent Manufacturing Company. (See Smallman, Harry, assignor.)
Hill, N. N., Brass Company, The. (See Wood, William C., assignor.)
Hilpman, John H. (See Burt, H. A., and Hilpman.)
Hiltebrandt, Carl, assignor to Dr. Hiltebrandt Zahnfabrik Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Artificial teeth. 1,878,517; Sept. 20.
Hiltebrandt, Dr. Zahnfabrik Aktiengesellschaft. (See Hiltebrandt, Carl, assignor.)
Hixenbaugh, McClelland, et al. (See Wagner, James S., assignor.)
Hjermstad, John M., Red Wing, Minn. Soil pulverizer. 1,878,142; Sept. 20.
Hobart Manufacturing Company, The. (See Johnston, Herbert L., assignor.)
Hobart Manufacturing Company. (See Zademach, Erich R., assignor.)
Hobson, Stanley H., assignor to G. D. Roper Corporation, Rockford, Ill. Gas range. 1,878,143; Sept. 20.
Hodge, George O., assignor to Standard Steel and Bearings, Inc., Plainville, Conn. Machine for washing ball bearings. 1,878,277; Sept. 20.
Hodkinson, William, Alsey, Ill. Animal feeding device. 1,878,518; Sept. 20.
Hoferer, Michael J., Florissant, Mo. Device for making designs. 1,878,633; Sept. 20.
Hoffa, Erwin, and H. Heyna, Frankfort-on-the-Main, Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New dyestuff of the thioindigo series. 1,877,870; Sept. 20.
Hoffman, Samuel, South Orange, assignor to J. Chein & Company, Harrison, N. J. Toy drum. 1,877,871; Sept. 20.
Hoffman, Walter F. (See Gortner, R. A., and Hoffman.)
Hoffman, Walter F., Cloquet, and R. A. Gortner, St. Paul, assignors to The Northwest Paper Company, Cloquet, Minn. Electrical purification of water. 1,878,237; Sept. 20.
Hoffstetter, Carl H. and R. F., Erie, Pa. Range or similar article. Des. 87,783; Sept. 20.
Hoffstetter, Carl H. and R. F., Erie, Pa. Stove or range. Des. 87,784; Sept. 20.
Hoffstetter, Robert F. (See Hoffstetter, Carl H., and R. F.)
Holmann, Hans E., Darmstadt, Germany, assignor, by mesne assignments, to American Telephone and Telegraph Company. Production of short electric waves. 1,877,872; Sept. 20.
Holmes, Abram G., Pittsburgh, Pa. Fluid meter. 1,878,238; Sept. 20.
Holmes, Harleigh R., Littleton, Colo. Dump truck. 1,878,851; Sept. 20.
Holmgreen, Richard J., San Antonio, Tex. Diaphragm pump. 1,877,873; Sept. 20.
Holt, Lafayette, Burlington, N. C. Beam for supporting yarn packages. 1,878,776; Sept. 20.
Holtzman, John, New York, N. Y. Doorlock. 1,878,239; Sept. 20.
Holven, Alfred L., Crockett, Calif. Recovering sucrose from cane molasses. 1,878,144; Sept. 20.
Holven, Alfred L., Crockett, Calif. Recovery of sucrose from cane molasses. 1,878,145; Sept. 20.
Holzinger, William S. (See Reichert, E. A., and Holzinger.)
Holzwarth Gas Turbine Co. (See Schilling, Rudolph, assignor.)
Honold, Ernst. (See Neresheimer, H., Honold and Böhner.)
Hookless Fastener Company. (See Sundback, Gideon, assignor.)
Hoover Company, The. (See Cummings, Stanley R., assignor.)
Hoover Company, The. (See Davidson, Walter C., assignor.)
Hoover Company, The. (See Jones, Alfred T., assignor.)
Hoover Company, The. (See Kitto, William H., assignor.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hoover Company, The. (See Swartz, Richey L., assignor.)
Hope, Samuel N., Wauwatosa, assignor to Grimth-Hope Company, West Allis, Wis. Neck-strip dispenser. 1,878,399; Sept. 20.
Hopkins, Durward K., assignor to W. E. Kastien and J. F. Jenks, Peoria, Ill. Welding machine. 1,877,874; Sept. 20.
Hopkins, Marion B., Elizabeth, N. J., assignor to Standard Oil Development Company. Extraction of valuable ingredients from heat sensitive raw materials. 1,877,875; Sept. 20.
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic printing machine. 1,878,702; Sept. 20.
Hoppe, Friederich A., assignor to The Petersen Oven Company, Chicago, Ill. Humidifier for bake ovens. 1,878,519; Sept. 20.
Hoppe, Friedrich A., assignor to The Petersen Oven Company, Chicago, Ill. Bake oven. 1,878,703; Sept. 20.
Hoppe, Walter H., Rochester, and C. L. Swanton, Churchville, assignors to General Railway Signal Company, Rochester, N. Y. Control apparatus for power operated switch machines. 1,877,876; Sept. 20.
Höppler, Ernst F., and J. W. Haake, Dresden, assignors to the Firm Henkel & Cie. Gesellschaft mit beschrankter Haftung, Dusseldorf, Germany. Producing powderous swelling starches adapted to form an adhesive when mixed with cold water. 1,878,852; Sept. 20.
Horacek, Paul. (See Hekler, C. P., and Horacek.)
Horn, Wilbert G., Pilot Rock, Oreg. Electric operating mechanism. 1,878,777; Sept. 20.
Horsting, William F., Wilmette, assignor to Leather Equipment Company, Inc., Chicago, Ill. Tension frame. 1,877,877; Sept. 20.
Horstmann, Sidney A., assignor, by mesne assignments, to Slow Motion Suspension Limited, Bath, England. Suspension system for motor cars and vehicles of all kinds. 1,877,878; Sept. 20.
Horstmann, Wm. H., Co. (See Roberts, Wilmer L., assignor.)
Hotchkiss Steel Products Company. (See Harrold, Edward T., assignor.)
Houst, Franz, Pilsen, Czechoslovakia. Gas chamber for oil switches. 1,878,583; Sept. 20.
Howell, Ray E. (See Milnes, J., and Howell.)
Hoy, John E., assignor to The Dow Chemical Company, Midland, Mich. Fabricating magnesium. 1,878,240; Sept. 20.
Hubbard, Hugh, Orange, Tex., assignor to W. H. Stark. Fertilizer distributor. 1,878,853; Sept. 20.
Huber, Gustav, Stuttgart, Germany. Sewing machine. 1,878,146; Sept. 20.
Hudec, Anton, and T. T. Sefcik, Temple, Tex. Cultivator attachment. 1,878,443; Sept. 20.
Hudson, Donald P. (See Titherley, A. W., and Hudson.)
Hughes, James W., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Riveting machine. 1,878,520; Sept. 20.
Hulbert, William G., assignor to William Wharton, Jr., & Company, Incorporated, Easton, Pa. Track structure. 1,878,984; Sept. 20.
Hulse, Stewart H. (See Wilson, A. L., and Hulse.)
Hume Steel Limited. (See Gosgrove, C., and Chadwick, assignors.)
Humitube Mfg. Co. (See Neumiller, Harry J., assignor.)
Huntington, Harriet E., Los Angeles, and W. A. Booz, Whittier, Calif. Automatic answering and recording telephone device. 1,878,778; Sept. 20.
Hustler Toy Corporation. (See Ferris, William D., assignor.)
Hygienic Manufactures and Supplies Company, The. (See Nielsen, Heinrich V., assignor.)
Hymer, Ray T., and V. L. Embery, San Diego, Calif. Vehicle brake mechanism. 1,878,854; Sept. 20.
I. G. Farbenindustrie Aktiengesellschaft. (See Carstens, H., and Kröner, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, Max, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, M., and Gübring, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hentrich, W., Hardtmann, Hilger, and Zerweck, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Liese, Erwin, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Meidert, Friedrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Meyer, H., and Eller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Michel, Richard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pokorny, Ernst, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Staib, Karl, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Teupel, Ernst, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Voss, Arthur, assignor.)
Iddings, Roscoe C., assignor to The Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher. 1,878,704; Sept. 20.
Iddings, Roscoe C., assignor to Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher charge. 1,878,705; Sept. 20.
Iles, Gordon B., Broadstairs, England. Valve. 1,878,706; Sept. 20.
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Imperial Chemical Industries Limited. (See Franklin, Reginald G., assignor.)
Imperial Chemical Industries Limited. (See Gibson, W., and Payman, assignors.)
Individual Drinking Cup Company. (See Stone, Henry A., assignor.)
Individual Drinking Cup Company. (See Wessman, Edwin G., assignor.)
Industrial Associates, Inc. (See Riley, Champlain L., assignor.)
Industrial Patents Corporation. (See Regensburger, Richard W., assignor.)
Industries of America, Inc. (See Robinson, Harry G., assignor.)
Ingalls Steel Products Company. (See Lucy, Thomas A., assignor.)
Ingersoll Milling Machine Company, The. (See Johnson, John R., assignor.)
Ingersoll-Rand Company. (See Lear, Earl B., assignor.)
Ingersoll-Rand Company. (See Smith, William A., sr., assignor.)
Ingle, Henry W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glassware forming apparatus and method. 1,878,521; Sept. 20.
Interlocking Fence Co. (See Getz, John B., assignor.)
International Business Machines Corporation. (See Fuller, Frederick L., assignor.)
International Business Machines Corporation. (See Wood, William A., jr., assignor.)
International Communications Laboratories, Inc. (See Motto Anthony J., assignor.)
International Harvester Company. (See Baker, D. B., and Panzegrau, assignors.)
International Harvester Company. (See Barker, Joseph R., assignor.)
International Harvester Company. (See Benjamin, Bert R., assignor.)
International Harvester Company. (See Benjamin, B. R., and Peterson, assignors.)
International Harvester Company. (See Crumb, C. F., and Kowalsky, assignors.)
International Harvester Company. (See Graham, Michael J., assignor.)
International Harvester Company. (See Johnston, Edward A., assignor.)
International Harvester Company. (See Lindgren, Alexus C., assignor.)
International Harvester Company. (See Smith, Daniel W., assignor.)
International Harvester Company. (See Wessman, Arnt, W., assignor.)
International Shoe Company. (See McCarthy, Robert F., assignor.)
International Time Recording Company of New York. (See Larrabee, Clinton E., assignor.)
Ipsen, Carl L., and R. M. Cherry, Schenectady, N. Y., assignors to General Electric Company. Baking oven. 1,878,522; Sept. 20.
Irschik, Joseph, Toronto, Ontario, Canada. Tie press. 1,878,400; Sept. 20.
Iverson, Emil C., assignor to J. D. Adams Manufacturing Company, Indianapolis, Ind. Road grader. 1,877,879; Sept. 20.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical transmission. 1,878,147; Sept. 20.
Jacobson, Conrad C., Glen Ridge, N. J., and J. Schweder, assignor to John Robertson Co., Inc., Brooklyn, N. Y. Die block. 1,877,880; Sept. 20.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water tube boiler and furnace. 1,878,148; Sept. 20.
Jaeger, Gebhard, assignor to The Jaeger Machine Company, Columbus, Ohio. Road or pavement making apparatus. 1,878,278; Sept. 20.
Jaeger Machine Company, The. (See Jaeger, Gebhard, assignor.)
James, John O., Somerville, Mass. Apparatus for heating. 1,877,764; Sept. 20.
Jauslin, Oscar J. (See Swanson, Reuben D., assignor.)
Jeffreys, Charles R., McKeesport, Pa. Automatic cushion gear. 1,877,765; Sept. 20.
Jenkins Petroleum Process Company. (See Swartz, Stephen, assignor.)
Jenks, J. F., et al. (See Hopkins, Durward K., assignor.)
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Core drill. 1,878,241; Sept. 20.
Johansson, Karl A. A., Stockholm, Sweden. Card index. 1,878,634; Sept. 20.
John, Lillian, Middletown Township, Monmouth County, N. J., assignor, by mesne assignments, to E. Seifert, Chicago, Ill. Cartridge for use in apparatus for decarbonizing engines. 1,878,401; Sept. 20.
Johnson, Albert M., assignor to Barnes Drill Company, Rockford, Ill. Honing machine. 1,877,881; Sept. 20.
Johnson, Arthur E., Oak Park, assignor to Wm. Wrigley, jr. Company, Chicago, Ill. Clutch mechanism. 1,878,523; Sept. 20.
Johnson, Axel. (See Hatt, A. J., Johnson, and Pryde.)
Johnson, Charles H., Auburndale, Mass., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Furnace bridge wall and cooling means therefor. 1,878,524; Sept. 20.
Johnson, John R., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Right angle milling and boring attachment for milling machines. 1,878,707; Sept. 20.
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Tractor. 1,878,855; Sept. 20.
Johnston, Herbert L., assignor to The Hobart Manufacturing Company, Troy, Ohio. Mixing machine. 1,878,149; Sept. 20.
Johnston, John D. (See Townsend, B., and Johnston.)
Jones, Alfred E., Spokane, Wash. Visual lens. 1,878,708; Sept. 20.
Jones, Alfred T., Detroit, Mich., assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,878,856; Sept. 20.
Jones, Clarence M., assignor of three-eighths to B. F. Cahoon and three-eighths to L. Steinberg, Tulsa, Okla. Closure cap. 1,877,882; Sept. 20.
Jones, Ivan H., Great Falls, Mont. Windshield holding device. 1,878,584; Sept. 20.
Jones & Lamson Machine Company. (See Lovely, John E., assignor.)
Jones, Paul W. (See Reffer, H. C., and Jones.)
Jung, Oscar H., and P. E. Heffelfinger, Milwaukee, Wis.; said Heffelfinger assignor to said Jung. Fuse clip. 1,878,779; Sept. 20.
Kaercher, Cecil E., Ortonville, Minn. Nut shell inlay and inlaying. 1,878,402; Sept. 20.
Kürzi, Emil, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Refrigerating machine. 1,878,403; Sept. 20.
Kahn, Frederick L., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,877,883; Sept. 20.
Kahn, Leo M., New York, N. Y. Folding machine. 1,878,404; Sept. 20.
Kalischer, Georg Frankfort-on-the-Main, H. Ritter, Frankfort-on-the-Main-Fechenheim, H. Scheyer and O. Bayer, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyestuffs of pyrazolanthrone series and making same. 1,877,884; Sept. 20.
Kalman Steel Company. (See White, William E., assignor.)
Kalmeijer, Arnoldus C. A., The Hague, Netherlands. Machine for shaping figures from fat- or butter-dough or other plastic material. 1,878,585; Sept. 20.
Kaplan, Benjamin B., assignor of one-half to D. B. Reger, Morgantown, W. Va. Purifying water. 1,878,525; Sept. 20.
Karpen, S., & Bros. (See Karpen, Solomon, assignor.)
Karpen, Solomon, assignor to S. Karpen & Bros., Chicago, Ill. Sofa-bed. 1,878,405; Sept. 20.
Karper, Abraham S., New York, N. Y. Closure. 1,878,406; Sept. 20.
Kastein, W. E., et al. (See Hopkins, Durward K., assignor.)
Katich, Theodore S., St. Louis, Mo. Fishing hook. 1,878,635; Sept. 20.
Kaupke, Lee H., assignor to Rock Island Plow Company, Rock Island, Ill. Lister drive. 1,878,407; Sept. 20.
Kay & Ess Co., The. (See Phillippi, Dale M., assignor.)
Kaymo Electric Speed Boat Corporation, Ltd. (See Grier, Kenneth M., assignor.)
Keasbey & Mattison Company. (See Morris, William H., assignor.)
Keeler Brass Company. (See Haan, Gilbert J., jr., assignor.)
Keeler, Rufus B., South Gate, and R. W. Phillips, Los Angeles, Calif. Method and apparatus for producing tile. 1,878,780; Sept. 20.
Keller, Charles L., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Laminated tubular structure. 1,878,452; Sept. 20.
Keller-Dorian Colorfilm Corporation. (See Kitroser, Isaac, assignor.)
Kellogg Manufacturing Company. (See Hazard, George S., assignor.)
Kelvinator Corporation. (See Mason, George W., assignor.)
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kelvinator Corporation. (See Thomas, Charles C., assignor.)
Kemet Laboratories, Inc. (See Cooper, H. S.; and Merlub-Sobel, assignors.)
Kennedy, James W., Canton, Ohio. Dilator. 1,877,766; Sept. 20.

Kennedy-McCandless Corporation. (See McCandless, Harry E., assignor.)
Kenney, George M. (See Kenney, William C. and G. M.)
Kenney Manufacturing Company. (See Kenney, William C. and G. M., assignors.)
Kenney, William C. and G. M., assignors to Kenney Manufacturing Company, Cranston, R. I. Traverse equipment. 1,878,526; Sept. 20.
Kerngood, Allen, H., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md. Garment buckle. 1,877,885; Sept. 20.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Tube. 1,878,242; Sept. 20.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Drum for vapors under pressure. 1,878,709; Sept. 20.
Kesling, Elmer G., Bloomfield, Mo. Speed changing mechanism. 1,877,886; Sept. 20.
Kesling, Elmer G., Bloomfield, Mo. Control for speed changing mechanism. 1,877,889; Sept. 20.
Kettner, Alfred N., Inglewood, Calif. Burial vault. 1,878,781; Sept. 20.
Kielsmeier, Reuben P., Baldwin Park, Calif. Poultry-feeding device. 1,877,890; Sept. 20.
Kienle, Roy H., Schenectady, N. Y., assignor to General Electric Company. Synthetic resin and making the same. 1,878,527; Sept. 20.
King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
King, George W., et al. (See Wagener, James S., assignor.)
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,877,891; Sept. 20.
Kinzle, Philip A., and J. L. Savage, assignors to Universal Hydraulic Corporation, Denver, Colo. Fluid flow control apparatus. 1,878,150; Sept. 20.
Kipper, Herman B., New York, N. Y. Recovering sodium, potassium and magnesium chlorides from natural brines and controlling the crystal sizes. 1,878,586; Sept. 20.
Kirn, Oscar, C., assignor to The Quaker Oats Company, Chicago, Ill. Apparatus for puffing starch-containing materials. 1,878,782; Sept. 20.
Kirschbraun, Lester, Leonia, N. J. Aqueous dispersions and making same. 1,878,974; Sept. 20.
Kirst, William E. (See Cox, H. J., Kirst, and Woodbury.)
Kislyn Corporation. (See Brosse, Paul, assignor.)
Kitroser, Isaac, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y. Color filter. 1,878,857; Sept. 20.
Kitto, William H., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,878,858; Sept. 20.
Klawitter, August G. (See Schmidt, O. C., and Klawitter.)
Kleaver, William K., Grand Rapids, Mich. Radio table or similar article. Des. 87,785; Sept. 20.
Kleaver, William K., Grand Rapids, Mich. Cabinet or similar article of furniture. Des. 87,786; Sept. 20.
Kleaver, William K., Grand Rapids, Mich. Radio table or similar article. Des. 87,787; Sept. 20.
Klein, Paul, Budapest, Hungary, A. Szegvári, Akron, Ohio, R. F. McKay, C. Hayes and G. W. Trobridge Birmingham, England, assignors to American Anode, Inc., Akron, Ohio. Direct production of rubber articles from aqueous dispersion of rubber. 1,878,151; Sept. 20.
Kleinschmidt, Edward E., Park Ridge, assignor to Teletype Corporation, Chicago, Ill. Printing telegraph. 1,878,152; Sept. 20.
Kluge, Abel, and E., assignors to Brandtjen and Kluge, St. Paul, Minn. Stock magazine. 1,877,892; Sept. 20.
Kluge Eneval. (See Kluge, Abel and E.)
Knabenshue, Della, Grafton, W. Va. Electric wire stretcher. 1,878,859; Sept. 20.
Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,877,769; Sept. 20.
Knapp, Walter R., Pelham Manor, assignor to Semet-Solvay Company, New York, N. Y. Removal and recovery of phenols and pyridine from liquors. 1,878,927; Sept. 20.
Knight, Ronald F., Ramsey, N. J. Steam engine starting device. 1,877,893; Sept. 20.
Knoche, Rudolf. (See Hentrich, W., and Knoche.)
Koch, Gustav H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric welding. 1,877,767; Sept. 20.
Koch, Lydia B. (See Koch, L. B., and Buchina, assignors.)
Koch, Lydia B., and J. Buchina, New York, N. Y., assignors to said L. B. Koch. Paper container. 1,877,894; Sept. 20.
Koelkebeck, Carl W. A. (See Diescher, S. E., and Koelkebeck.)
Koenig, Paul, Maplewood, N. J., assignor to E. G. Bek, Pforzheim, Germany. Machine for making chains. 1,878,860; Sept. 20.
Koepping, Emil D., Haddon Heights, assignor to Radio Condenser Company, Camden, N. J. Shielded radio frequency transformer and condenser unit. 1,878,636; Sept. 20.
Koester, Henry A., Conroy, Iowa. Tool. 1,877,768; Sept. 20.
Kohler, Franklin W., Chicago, Ill. Chair construction. 1,877,895; Sept. 20.
Kölm, Ulrich, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Selector for group control systems. 1,878,028; Sept. 20.
Kopp, Rudolph J., Sandusky, Ohio. Tie rack. 1,878,444; Sept. 20.
Koppel Industrial Car and Equipment Company. (See Graser, George W., assignor.)
Koppers Company, The. (See Hansen, Christian J., assignor.)
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Koppers Company of Delaware, The. (See Shoeld, Mark, assignor.)
Koppers Company of Delaware, The. (See Tiddy, William, assignor.)
Korsmo, Torbjorn C., assignor to Madison-Kipp Corporation, Madison, Wis. Die casting machine. 1,877,896; Sept. 20.
Kosten, Johannes, and F. Zuidema, Grand Rapids, Mich. Device for preventing feather-pulling in fowls. 1,877,897; Sept. 20.
Kotrbaty, Guy F., New York, N. Y. Building construction. 1,877,898; Sept. 20.
Kowalsky, Andrew. (See Crumb, C. F., and Kowalsky.)
Kraeft, Herman L., assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio. Wheel construction. 1,878,528; Sept. 20.
Kramer, Erwin. (See Bollweg, B., Zeh, and Kramer.)
Kränzlein, Georg, M. Corell, and H. Vollmann, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the dibenzpyrenequinone series. 1,877,899; Sept. 20.
Krasnow, Philip, Brooklyn, N. Y. Combination book mark and clip. 1,878,861; Sept. 20.
Kröner, Gerhard. (See Carstens, H., and Kröner.)
Kronholz, Erich, Bad Soden-on-the-Taunus, and H. Schlichenmaier, Kelkehim-in-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New acid dyestuffs and a process of preparing them. 1,877,900; Sept. 20.
Kubin, Van J., Brea, assignor to Chiksan Oil Tool Co., Limited, Fullerton, Calif. Reamer. 1,877,901; Sept. 20.
Kuenzli, Walter A., Evansville, Ind., and Alvis Y. Dowell, Hastings on Hudson, N. Y., assignors to Servel Inc., New York, N. Y. Refrigeration. 1,878,029; Sept. 20.
Kuethe, Luvern L., Albert Lea, Minn. Airplane. 1,877,902; Sept. 20.
Kummer, James E., Junction City, Kans. Lubricant flow check. 1,878,408; Sept. 20.
Kuntney, Gregory W. (See Schnuck, C. F., and Kuntney.)
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Copyholder. 1,878,529; Sept. 20.
Kuykendall, Joseph E., San Antonio, Tex. Time switch. 1,878,637; Sept. 20.
Kyberg, Folke, assignor to Aktiebolaget Tonsor, Gottenborg, Sweden. Making razor blades. 1,877,758; Sept. 20.
Kyle, William D., assignor to Line Material Company, South Milwaukee, Wis. Electric insulator. 1,877,903; Sept. 20.
Kyrides, Lucas P., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Production of malachite green. 1,878,530; Sept. 20.
Lade, Archibald, Northampton, assignor to B. F. Perkins & Sons, Inc., Holyoke, Mass. Rubber cutting machine. 1,878,453; Sept. 20.
Laffoon, Carthrae M., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Rotor ventilation for turbo generators. 1,877,904; Sept. 20.
L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude. (See Picard, Charles, assignor.)
La France, Richard, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass blowing machine. 1,878,863; Sept. 20.
Lake, Clair D., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Electric key punch. 1,878,930; Sept. 20.
Lake Erie Chemical Company, The. (See Spring, Alva F., assignor.)
Lambert, Howard T., deceased, Johnstown, Pa.; Ira G. Lambert, executor. Tire deflation signal. 1,878,411; Sept. 20.
Lambert, Ira G., executor. (See Lambert, Howard T.)
Lambert, Louis F., Coatesville, Pa. Mushroom. Pl. Pt. 27; Sept. 20.
Lamiell, Earld H., assignor, by mesne assignments, to The Farm Specialty Company, Greenwich, Conn. Transplanter. 1,878,412; Sept. 20.
Lampl, Alfred, Berlin, Germany, assignor to Noma Electric Corporation, New York, N. Y. Electric resistance. 1,878,153; Sept. 20.
Lancaster Iron Works, Inc. (See Martin, James P., assignor.)
Landenberger, Henry W., assignor to American Fluid Motors Company, Philadelphia, Pa. Rotary pump. 1,878,862; Sept. 20.
Landolt, Albert, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Cellulosic materials and making same. 1,878,783; Sept. 20.

Lane, Thomas E., Detroit, and C. H. Welch, jr., Birmingham, Mich., assignors to F. Sanders. Child's portable tray. 1,878,864; Sept. 20.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,878,279; Sept. 20.
Lanpher, Henry C., et al. (See Winger, Stover C., assignor.)
Largman, Joseph, Philadelphia, Pa. Centering marker for full fashioned hosiery. 1,878,865; Sept. 20.
Larrabee, Clinton E., Binghamton, assignor to International Time Recording Company of New York, New York, N. Y. Master clock. 1,878,931; Sept. 20.
Larsen, Alantser F., assignor to Aluminum Goods Mfg. Co., Manitowoc, Wis. Electrical heating element for utensils. 1,878,784; Sept. 20.
Larson, Louis H., Santiago, Minn. Tractor propelled rake and loader. 1,877,770; Sept. 20.
Laska, Leopold, and O. Haller, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Meta-hydroxy-diarylamine-carboxylic acid. 1,877,906; Sept. 20.
Laska, Leopold, A. Zitscher, W. Christ, and A. Petzold, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing azodyestuffs. 1,878,243; Sept. 20.
Laury, N. Arthur, Rockville Center, assignor to John C. Wiarda & Company, Brooklyn, N. Y. Electrolytic treatment of manganese bearing material. 1,878,244; Sept. 20.
La Veck, Louis, Brooklyn, N. Y. Paper napkin, towel, and the like. 1,878,866; Sept. 20.
Law, Ray B., Muscatine, Iowa. Valve spring compressor. 1,878,280; Sept. 20.
Lawner, Nicholas, assignor to American Sundries Co. Inc., Brooklyn, N. Y. Electric vaporizer. 1,878,587; Sept. 20.
Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Fall, R. I. Horizontal striping attachment for circular knitting machines. 1,877,907; Sept. 20.
Lawson, Robert H. (See Lawson, John and R. H.)
Lawton, Joseph J., Syracuse, assignor to Semet-Solvay Company, New York, N. Y. Motor fuel process. 1,878,932; Sept. 20.
Lawton, Joseph J., Syracuse, assignor to Semet-Solvay Company, New York, N. Y. Treating sludge acid. 1,878,933; Sept. 20.
Layne & Bowler Corporation. (See Whann, Jesse P., assignor.)
Leaper, Joseph M. F., Buffalo, assignor to The Barrett Company, New York, N. Y. Concentrating ores by flotation. 1,878,154; Sept. 20.
Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Handle for percussive tools. 1,877,771; Sept. 20.
Leather Equipment Co. (See Argabrite, George M., assignor.)
Leather Equipment Company. (See Horsting, William F., assignor.)
Leavitt, Byron C., Duxbury, Mass. Invalid lifter. 1,878,785; Sept. 20.
Leavitt Machine Company, The. (See Albee, Hugh M., assignor.)
Leberman, Harry, assignor to Groove Lock Co. Inc., New York, N. Y. Fastening device for bags. 1,878,413; Sept. 20.
LeBlond, R. K., Machine Tool Company, The. (See Groene, William F., assignor.)
Lebo, Robert B., Elizabeth, N. J., assignor to Standard Oil Development Company. Formation of alcohols. 1,877,908; Sept. 20.
Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal vehicle body. 1,878,155; Sept. 20.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal vehicle body. 1,878,934; Sept. 20.
Lee, Fred L., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Duplicating punching machine. 1,878,935; Sept. 20.
Lee, Roger F. (See Willshaw, H., Gorham, and Lee.)
Legg, Victor E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Refining of copper. 1,878,936; Sept. 20.
Legge, Peter S., Pompton Lakes, N. J. Tool for cutting stone. 1,878,414; Sept. 20.
Legge, Peter S., Pompton Lakes, N. J. Tool for cutting stone. 1,878,415; Sept. 20.
Leggett, Herbert. (See Naiman, J. M., and Leggett.)
Le Grand, Joseph M., New York, N. Y., assignor to Carrier Engineering Corporation, Newark, N. J. Air conditioning blower. 1,877,905; Sept. 20.
Lehmann Machine Company. (See Deutsch, Fritz, assignor.)
Lehr, Erich, New York, N. Y. Clip construction. 1,878,497; Sept. 20.
Leins, Oscar J., and H. C. Rawlings, assignors to Claus Manufacturing Co., Milwaukee, Wis. Oven heat regulator. 1,878,937; Sept. 20.
Leins, Oscar J., and C. Wantz, assignors to Claus Manufacturing Co., Milwaukee, Wis. Thermally operated device. 1,878,938; Sept. 20.
Leitz, Ernst, Optische Werke. (See Schäfer, Willy, assignor.)
L'Enfant, Charles, New York, N. Y. Key holder. 1,877,909; Sept. 20.
L'Enfant, Charles, New York, N. Y. Combined cardcase and key holder. 1,877,910; Sept. 20.
L'Enfant, Charles, New York, N. Y. Article holder. 1,877,911; Sept. 20.
L'Enfant, Charles, New York, N. Y. Article holder. 1,877,912; Sept. 20.
Lennon, Patrick T., Cleveland, Ohio. Angular blade grinder. 1,877,913; Sept. 20.
Lenzner, Solomon, Buffalo, N. Y. Bottle. Des 87,788; Sept. 20.
Leone, Albert. (See Miller, C., and Leone.)
Lesage, Alfred, Schweinfurt in Bavaria, Germany. Bicycle with auxiliary motor. 1,878,975; Sept. 20.
Lesage, Alfred, Schweinfurt in Bavaria, Germany. Motorcycle. 1,878,976; Sept. 20.
Leslie, William B. (See Trejo, Stella A., assignor.)
Lester, William J., Little Rock, Ark. Production of metallic aluminum and other materials. 1,878,939; Sept. 20.
Leukhardt, John C., jr., Washington, D. C. Radiator water level indicator. 1,878,867; Sept. 20.
Lewis, Harold A., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Initiator. 1,877,772; Sept. 20.
Lewis, Harold A., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Initiator. 1,878,498; Sept. 20.
Lewis, Warren K., Newton, Mass, assignor to Standard Oil Development Company. Obtaining gasoline hydrocarbons. 1,877,914; Sept. 20.
Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Pumping vapors under high vacuum. 1,877,915; Sept. 20.
Lewis, Warren K., Newton, Mass, assignor to Standard Oil Development Company. Obtaining hydrocarbons from wells. 1,877,916; Sept. 20.
Lieberknecht, Karl, G. m. b. H. (See Lieberknecht, Karl R., assignor.)
Lieberknecht, Karl W., Oberlungwitz, Germany. Device for the taking-up shaft of flat hosiery frames. 1,878,868; Sept. 20.
Lieberknecht, Karl R., Oberlungwitz, Germany. Loop regulating mechanism. 1,878,869; Sept. 20.
Lieberknecht, Karl R., assignor to K. Lieberknecht, G. m. b. H., Oberlungwitz, Germany. Making stockings. 1,878,499; Sept. 20.
Liese, Erwin, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-main, Germany. Decomposition of waxes. 1,878,940; Sept. 20.
Lily-Tulip Cup Corporation. (See Smith, Charles F., assignor.)
Linder, Cyril S., Creighton, Pa., assignor to Pittsburgh Plate Glass Company. Making a refractory cast article. 1,878,870; Sept. 20.
Lindgren, Alexus C., Chicago, Ill., assignor to International Harvester Company. Tractor operated planter. 1,878,871; Sept. 20.
Lindgren, Alexus C., Chicago, Ill., assignor to International Harvester Company. Corn picker gathering point. 1,878,941; Sept. 20.
Lindner, John C., assignor to General Railway Signal Company, Rochester, N. Y. Protective device for interlocking systems. 1,877,917; Sept. 20.
Line Material Company. (See Kyle, William D., assignor.)
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Lingwood, Frederick D., assignor to Manufax Limited, London, England. Hand-operated shearing tool. 1,878,500; Sept. 20.
Little, Agnes G., administratrix. (See Little, Arthur E.)
Little, Arthur E., deceased, Elyria, by A. G. Little, administratrix, Akron, Ohio. Detachable coupling for jointed fishing rods. 1,878,638; Sept. 20.
Little, Donald G., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Amplifier. 1,877,918; Sept. 20.
Livingston, Ira W., Bridgeport, Ohio. Name plate. 1,877,919; Sept. 20.
Lobb, Frank H., Philadelphia, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Machine for making articles from molten material. 1,878,942; Sept. 20.
Locke, Sylvanus D., Bridgeport, and H. J. Stegeman, Fairfield, Conn. Automobile body. 1,878,043; Sept. 20.
Löfgren, Erik O., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Variable rotary electric condenser. 1,878,639; Sept. 20.
Loftin, Edward H., New York, assignor to General Railway Signal Company, Rochester, N. Y. Method of and apparatus for electrical signaling. 1,877,920; Sept. 20.
Lohr, Paul. (See Berner, L., and Lohr.)
Lombard, Nathaniel, Worcester, Mass. Power brake. 1,878,786; Sept. 20.
Lombard, Nathaniel, Worcester, Mass. Vacuum brake. 1,878,944; Sept. 20.

Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Preparing hydrocarbon products. 1,877,921; Sept. 20.
Lorenz, C., Aktiengesellschaft. (See Hahnemann, Walter, assignor.)
Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,878,156; Sept. 20.
Lorenzi, Luigi. (See Eliggi, B., and Lorenzi.)
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Lathe with center drive. 1,877,922; Sept. 20.
Lucas, William B., East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Elevator indicator. 1,878,872; Sept. 20.
Lucia, Louis V., Waterbury, Conn., assignor to The Beardsley & Wolcott Mfg. Co. Electric switch. 1,877,923; Sept. 20.
Lucke, Charles E., New York, N. Y., assignor to Fuller Lehigh Company, Fullerton, Pa. Furnace. 1,878,157; Sept. 20.
Lucy, Thomas A., assignor to Ingalls Steel Products Company, Birmingham, Ala. Bar joist. 1,878,281; Sept. 20.
Luff, Henry J., assignor to W. J. Luff, Cleveland Heights, Ohio. Joint for waste pipes and the like. 1,878,945; Sept. 20.
Luff, Henry J. and W. J., Cleveland Heights, Ohio; said H. J. Luff assignor to said W. J. Luff. Floor drain. 1,878,946; Sept. 20.
Luff, Henry J. and W. J., Cleveland Heights, Ohio; said H. J. Luff, assignor to said W. J. Huff. Float. 1,878,947; Sept. 20.
Luff, Lawrence W., Shaker Heights, assignor to The Consolidated Iron-Steel Manufacturing Company, Cleveland, Ohio. Boiler stand. 1,878,787; Sept. 20.
Luff, Lawrence W., Shaker Heights, assignor to The Consolidated Iron-Steel Manufacturing Company, Cleveland, Ohio. Boiler stand. 1,878,788; Sept. 20.
Luff, Willard J. (See Luff, Henry J., assignor.)
Luff, Willard J. (See Luff, Henry J. and W. J.)
Luff, Willard J., Cleveland Heights, Ohio. Plumbing system. 1,878,948; Sept. 20.
Luff, Willard J., Cleveland Heights, Ohio. Plumbing system. 1,878,949; Sept. 20.
Luland, Webster H., Newark, N. J., assignor to Defiance Manufacturing Corporation. Check writer. 1,878,789; Sept. 20.
Lund, Einar, Notre-Dame de Briancon, assignor to Societe des Electrodes de la Savoie, Paris, France. Electric flexible conductor. 1,878,790; Sept. 20.
Lundy, Wilson T., and W. Drachenberg, Freeport, Tex. Mining sulphur. 1,878,158; Sept. 20.
Lyford, Chauncey A., East Aurora, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Stilbene dye and producing the same. 1,878,501; Sept. 20.
Lyford, Chauncey A., East Aurora, assignor to National Aniline & Chemical Company, New York, N. Y. Reduction of organic nitro compounds. 1,878,950; Sept. 20.
Lyford, Elmore B., assignor to Amy, Aceves & King, Inc., New York, N. Y. Apparatus and method for the absorption of sound. 1,878,409; Sept. 20.
Lynch, Patrick H. (See McKay, J. A., and Lynch.)
Lyon, Harry, Brockton, Mass. Plane for leather and the like. 1,878,410; Sept. 20.
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Macaulay, Walter B., Oakland, assignor to Yuba Manufacturing Company, San Francisco, Calif. Dredge. 1,878,282; Sept. 20.
Mack, Luther L., South Pasadena, Calif., assignor to U. S. Postal Meter Corporation. Postage meter. 1,878,283; Sept. 20.
Mackin, Albert O., Johnstown, Pa. Automatic train line coupler. 1,877,924; Sept. 20.
MacLachlen, John C., assignor to Dee-Hy-Products Company, Chicago, Ill. Spray head. 1,878,588; Sept. 20.
Madison, Charles W., Centuria, Wis. Grapple. 1,878,951; Sept. 20.
Madison-Kipp Corporation. (See Korsmo, Torbjorn C., assignor.)
Magnano Corporation. (See Magnano, Sebastiano, assignor.)
Magnano, Sebastiano, assignor to Magnano Corporation, Lawrence, Mass. Abrading apparatus. 1,878,791; Sept. 20.
Mahaney, Russell, Wilkinsburg, and W. Brazelton, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Composite molding mica. 1,878,952; Sept. 20.
Malley, Roy D., East Orange, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Gas or vapor electric device and controlling the same. 1,878,159; Sept. 20.
Malley, Roy D., East Orange, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Gas or vapor discharge device. 1,878,502; Sept. 20.
Malm, Carl J., assignor to Eastman Kodak Company, Rochester, N. Y. Changing solubility of cellulose acetate. 1,878,953; Sept. 20.
Malm Carl J., assignor to Eastman Kodak Company, Rochester, N. Y. Rendering cellulose acetate free from haze. 1,878,954; Sept. 20.
Mantell, Edward P., San Francisco, Calif. Air vehicle. 1,878,955; Sept. 20.
Manteufel, August, assignor of one-third to A. Blum and one-third to R. E. Scheidler, Chicago, Ill. Can perforator. 1,878,956; Sept. 20.
Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)
Manufax Limited. (See Lingwood, Frederick D., assignor.)
Maradei, Rafael E. D., Buenos Aires, Argentina. Electric lamp. 1,878,873; Sept. 20.
Margerison, Albert E., and C. R. Hahn, assignors to Mock, Judson, Voehringer Company, Inc., Philadelphia, Pa. Hosiery and method of making same. 1,878,416; Sept. 20.
Marinsky, Davis, New York, N. Y. Buckle. 1,878,792; Sept. 20.
Marris, George C., London, G. R. Polgreen, Wembley, and S. V. Williams, Kenton, England. Manufacture of nickel iron alloys. 1,878,589; Sept. 20.
Marsh, Alpha L. (See Fleischmann, F. A., and Marsh.)
Marshall, Charles O., and H. O. Hem, assignors to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,878,160; Sept. 20.
Martin, Irvin L., Denver, Colo. Incubator. 1,878,503; Sept. 20.
Martin, James P., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. Feeder tub. 1,878,957; Sept. 20.
Martin, Louis L., Toronto, Ontario, Canada. Tobacco pipe. 1,877,925; Sept. 20.
Mason, Alfred E., assignor to N. K. Davis, San Francisco, Calif. Concrete mixer. 1,878,504; Sept. 20.
Mason, George W., assignor to Kelvinator Corporation Detroit, Mich. Evaporator for refrigerators. 1,878,284; Sept. 20.
Mason, George W., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator evaporator and temperature control therefor. 1,878,285; Sept. 20.
Mattern, Raymond P., Wauwatosa, assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Rheostat. 1,877,926; Sept. 20.
Matthews Conveyer Company. (See Milbrath, Alfred E., assignor.)
Matthis, Claude R., Corvallis, Oreg. Carbon remover. 1,878,245; Sept. 20.
Matveyeff, Michael N., Stratford, Conn. Device for attaching fabric to airplane ribs. 1,878,417; Sept. 20.
Maulde, Pierre, Vireflay, France. Air speed switch. 1,878,418; Sept. 20.
Maxmoor Corporation. (See Moore, Arlington, assignor.)
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Fluid pressure connection. 1,878,505; Sept. 20.
McBride, Robert R., assignor to The Heltzel Steel Form and Iron Company, Warren, Ohio. Batcher. 1,878,874; Sept. 20.
McBrine, L., Company, The. (See Shoemaker, Emanuel J., assignor.)
McCabe, George D., Chicago, Ill. Element supporting stem construction. 1,878,286; Sept. 20.
McCandless, Harry E., assignor to Kennedy-McCandless Corporation, Rochester, N. Y. Folding crib. 1,878,958; Sept. 20.
McCarthy Business Machines Co. (See McCarthy, Florence, assignor.)
McCarthy, Florence, assignor, by mesne assignments, to McCarthy Business Machines Co., Inc., New York, N. Y. Gathering and inserting machine. 1,878,590; Sept. 20.
McCarthy, Robert F., Webster Groves, assignor to International Shoe Company, St. Louis, Mo. Shoe. 1,878,419; Sept. 20.
McClure, Hugh M., Kearney, Nebr. Tobacco pipe. 1,878,506; Sept. 20.
McConnell, George. (See Dovell, H. H., McConnell, and Henz, assignors.)
McConnell, Robert S. (See Dovell, H. H., McConnell, and Henz.)
McEachron, Edgar J. (See Ruhoff, O. E., and McEachron.)
McGee, John E., and B. P. Baker, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Circuit interrupter. 1,878,959; Sept. 20.
McGhee, Thurman, Hayward, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filling valve for syrupers. 1,877,927; Sept. 20.
McGregor, Alexander G., London, England. Smelting of metallic ores, particularly copper sulphide ores 1,877,928; Sept. 20.
McIntosh, Harold W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Electric glass melting tank. 1,878,501; Sept. 20.
McKay Company, The. (See Covell, Bradford S., assignor.)
McKay, John A., and P. H. Lynch, Dunn, N. C. Fertilizer distributor. 1,878,960; Sept. 20.
McKay, Robert F. (See Klein, P., Szegvári, McKay, Hayes, and Trobridge.)
McKinley, James L., Appleton City, Mo. Battery switch. 1,878,977; Sept. 20.
McKinley, John W., Pawtucket, R. I., assignor to United States Finishing Company, New York, N. Y. Piling machine. 1,878,161; Sept. 20.
McLaren, Gerald J., Ballston Spa, N. Y. Coin controlled doorlock. 1,877,929; Sept. 20.

McWhirter, Mark H., and A. G. Adair, McCamey, Tex. Transparent coin wrapper. 1,878,592; Sept. 20.
Mead Corporation, The. (See Rawling, Francis G., assignor.)
Mead, Harold B., Ilford, England. Conical diaphragm for sound reproducing and recording apparatus. 1,878,162; Sept. 20.
Mead Paperboard Corporation. (See Zimmerman, Walter J., assignor.)
Mees, Charles E. K., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic element overcoated with a screening dye. 1,878,961; Sept. 20.
Mehrer, Philip, Toppenish, Wash. Tandem multiple supporting, driving, and braking mechanism. 1,877,930; Sept. 20.
Meidert, Friedrich, Frankfort-on-the-Main, Griesheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing siccatives. 1,878,962; Sept. 20.
Meingast, Rudolf, and M. Mugdan, assignors to Consortium Fuer Elektrochemische Industrie, Munich, Germany. Manufacturing acetic anhydride. 1,878,593; Sept. 20.
Meitner, Walter, Vienna, Austria. Recovery of tin compounds in the art of loading silk. 1,878,507; Sept. 20.
Menkhaus, Victor H., Norwood, Ohio. Floor scrubbing machine. 1,878,508; Sept. 20.
Mergenthaler Linotype Company. (See Burt, H. A., and Hilpman, assignors.)
Merlub-Sobel, Menahem. (See Cooper, H. S., and Merlub-Sobel.)
Merritt, Matthew M., Middleton, assignor, by mesne assignments, to The Tanning Process Company, Boston, Mass. Machine for treating hides, skins, and leathers. 1,878,420; Sept. 20.
Mersereau, Donald W. (See Wells, Robert F., and Mersereau.)
Messlein, Michael A., Chicago, Ill. Conveying apparatus. 1,878,163; Sept. 20.
Mestre, Frank, New York, N. Y. Jeweler's eyeloupe holder. 1,878,594; Sept. 20.
Metal Traffic Marker Corporation. (See Foster, Robert, assignor.)
Metalfolie, Inc. (See Deacon, W. T., and Perkins, assignors.)
Metals Distintegrating Company. (See Hall, Everett J., assignor.)
Metcalf, Edgar E., Moville, Iowa, assignor to Deere & Company, Moline, Ill. Harvester. 1,877,931; Sept. 20.
Metcalfe, James C. (See Metcalfe, Richard D. and J. C.)
Metcalfe, Richard D., and J. C., Romiley, England. Steam injector. 1,878,793; Sept. 20.
Metropolitan Device Corporation. (See Murray, Joseph B., assignor.)
Meyer, Friedrich, Berlin-Halensee, Hans-Joachim Spanner, Berlin, Germany, and Edmund Germer, Stockholm, Sweden, assignors, by mesne assignments, to Electrons, Inc. Electric lamp. 1,877,932; Sept. 20.
Meyer, Harry, Dessau, and W. Eller, Berlin-Wilmersdorf, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of artificial textiles. 1,877,933; Sept. 20.
Meyer, John F. (See Sallee, Louis H., assignor.)
Michel, Richard, Uerdingen, Niederrhein, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Insulating oil. 1,878,509; Sept. 20.
Michel, Richard, Uerdingen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of condensation products. 1,878,963; Sept. 20.
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Mieg, Walter, Opladen near Cologne, and R. M. Heidenreich, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water soluble leuco esters of vat dyestuffs. 1,878,964; Sept. 20.
Mieg, Walter, Opladen, and R. Berliner, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuff of the anthraquinone acridone series. 1,878,965; Sept. 20.
Mieg, Walter, Opladen, and K. Bamberger, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Wool dyestuff of the dianthraquinonylamine series. 1,878,966; Sept. 20.
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Optical system for projection of color pictures. 1,878,967; Sept. 20.
Milbrath, Alfred E., assignor to Mathews Conveyer Company, Ellwood City, Pa. Feeding and spacing mechanism. 1,877,934; Sept. 20.
Miles, Lester H., Los Angeles, Calif. Apparatus for refining petroleum. 1,878,875; Sept. 20.
Milgrim, Sally, Woodmere, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 87,789; Sept. 20.
Miller, Charles, and A. Leone, Long Island City, N. Y.; said Leone assignor to I. Miller & Sons, Incorporated. Making shoes. 1,878,876; Sept. 20.
Miller, Charles H., Hollidays Cove, W. Va. Christmas ornament. 1,878,794; Sept. 20.
Miller, Frederick E., Wenatchee, Wash. Scanning disk. 1,878,877; Sept. 20.
Miller, Harry, Okmulgee, Okla. Treating dry cleaning fluids. 1,878,287; Sept. 20.
Miller, I., & Sons, Incorporated. (See Miller, C., and Leone, assignors.)
Miller, John C., Racine, Wis. Hedge trimmer. 1,878,878; Sept. 20.
Miller, Peter J. N., and V. E. Extrom, Minneapolis, Minn. Toaster. 1,878,968; Sept. 20.
Millo, Ernest S., assignor to David Shlaifer, Bronx, N. Y. Ice cream dipper. 1,877,935; Sept. 20.
Mills, Lindley, E. (See Coleman, G. H., and Mills.)
Mills, Lindley, E. (See Putnam, M. E., and Mills.)
Mills, Lindley E., assignor to The Dow Chemical Company, Midland, Mich. Acylating amine. 1,878,969; Sept. 20.
Mills, Lindley E., assignor to The Dow Chemical Company, Midland, Mich. Purification of primary aromatic amine hydrohalides of the benzene series. 1,878,970; Sept. 20.
Milnes, James, Struthers, and R. E. Howell, Poland, Ohio. Roll heater. 1,878,971; Sept. 20.
Milwaukee Gas Specialty Company. (See Schirmer, Walter E., assignor.)
Mindeleff, Charles, Jackson Heights, N. Y., assignor to L. G. Robinovitch, Golden, Colo. Chlorine preparation. 1,878,164; Sept. 20.
Mindeleff, Charles, Jackson Heights, N. Y., assignor to L. G. Robinovitch, Golden, Colo. Chlorine preparation. 1,878,510; Sept. 20.
Miner, Anson, W., assignor to The Waterbury Brass Goods Corporation, Waterbury, Conn. Making vacuum tube base pins. 1,878,640; Sept. 20.
Miner, Claude G., Berkeley, Calif. Separating iron halides from aluminum halides. 1,878,246; Sept. 20.
Miner, W. H., Inc. (See Fuchs, Henry, assignor.)
Miner, William. (See Scofield, T. J., and Miner.)
Minneapolis-Honeywell Regulator Company. (See Spahr, Dion G., assignor.)
Minneapolis-Honeywell Regulator Company. (See Turner, John, assignor.)
Minnesota Mining & Manufacturing Company. (See Hatch, Lloyd A., assignor.)
Minsky, Jerome R., and R. Burnham, Lake Village, Ark. Juice extractor. 1,878,795; Sept. 20.
Minto, Wallace M., Jersey City, N. J. Cartridge for fire-arms. 1,877,778; Sept. 20.
Mitchell, Henry E., Buffalo, assignor to Semet-Solvay Company, New York, N. Y. Regenerative coke oven and operating the same. 1,878,972; Sept. 20.
Mock, Judson, Vochringer Company, Inc. (See Margerison, A. E., and Hahn, assignors.)
Mohr, Walter W., Chicago, Ill., assignor to The Edward Valve and Manufacturing Company, East Chicago, Ind. Forged steel valve. 1,878,288; Sept. 20.
Möhrle, Artur, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Starting cartridge. 1,877,936; Sept. 20.
Molins Machine Company. (See Ruau, Felix F., assignor.)
Möller, Fritz, Duisburg, Germany. Rolling mill. 1,878,595; Sept. 20.
Mon, Pete, Winnemucca, Nev. Duplex pen. 1,878,879; Sept. 20.
Monroe Calculating Machine Company. (See Britten, Edwin F., Jr., assignor.)
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Monsanto Chemical Works. (See Titherley, A. W., and Hudson, assignors.)
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Auxiliary fuel supply means for internal combustion engines of low intake depression. 1,877,937; Sept. 20.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Pressure reducing or relief valve. 1,877,938; Sept. 20.
Moore, George, New York, N. Y. Liquid purification. 1,877,939; Sept. 20.
Moore, Kenneth L. (See Moore, Willard A., and K. L.)
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Antirattle dovetail for doors. 1,878,248; Sept. 20.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Antirattle dovetail for doors. 1,878,881; Sept. 20.
Moore, Willard A. and K. L., Muncie, Ind. Pin. 1,878,880; Sept. 20.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,877,774; Sept. 20.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,878,165; Sept. 20.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,878,166; Sept. 20.
Morgan Construction Company. (See Edwards, Victor E., assignor.)
Morgan, John H. (See Rosenfeld, M. L., and Morgan.)
Morganstern, Nathan, and J. Tascher, Brooklyn, N. Y. Eye flickering means for toys and the like. 1,877,940; Sept. 20.
Morris, Melvin G., Tampa, Fla., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y. Luminescent sign. 1,878,230; Sept. 20.

Morris, William H., Philadelphia, assignor to Keasbey & Mattison Company, Ambler, Pa. Talking picture screen. 1,877,941; Sept. 20.
Morse, Albert W., Forest Hills, N. Y. Combination gas and oil burner. 1,877,942; Sept. 20.
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Link belt. 1,878,797; Sept. 20.
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,878,882; Sept. 20.
Morse, Frank L. and R. V., Ithaca, N. Y. Automatic door. 1,878,796; Sept. 20.
Morse, Robert V. (See Morse, Frank L. and R. V.)
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y. Synthetic resin and making the same. 1,878,249; Sept. 20.
Motor Devices, Inc. (See Williams, William J., assignor.)
Motto, Anthony J., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Printer concentrator system. 1,877,943; Sept. 20.
Mudd, Frank X., Oak Park, Ill. Stock car. 1,877,944; Sept. 20.
Mueller, Edward, Alma, Wis. Corn planter. 1,878,883; Sept. 20.
Mumy, Glenn, assignor to Copeland Products, Inc., Detroit, Mich. Refrigerating mechanism. 1,878,798; Sept. 20.
Mugdan, Martin. (See Meingast, R., and Mugdan.)
Muir, Wellington W., assignor to Harrison Radiator Corporation, Lockport, N. Y. Radiator core for automobile cooling systems. 1,878,511; Sept. 20.
Muller, Jacques, La Garenne Colombes, France. Lubricating pump. 1,878,167; Sept. 20.
Multipost Co. (See Gay, Azel, assignor.)
Multipost Co. (See Gmelin, E. W., and Gay, assignors.)
Murphy, Alfred J., New York, N. Y. Display cabinet for rugs and other textile fabrics. 1,878,454; Sept. 20.
Murray, John. (See Cantor, Jacob J., assignor.)
Murray, Joseph B., assignor to Metropolitan Device Corporation, Brooklyn, N. Y. Seal. 1,878,991; Sept. 20.
Murray Ohio Manufacturing Company, The. (See Kraeft, Herman L., assignor.)
Muth, Friedrich, and A. Schmelzer, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 1-amino-carbazole. 1,878,168; Sept. 20.
Myers, Alexander M., Wilkinsburg, Pa., assignor by mesne assignments, to General Cable Corporation. Terminal. 1,878,169; Sept. 20.
Myers, Walter. (See Allen, E. B., and Myers.)
N. D. Q. Specialty Corporation, et al. (See Preston, J. E., and Sokolow, assignors.)
Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines volgens Van Berkel's Patent en van andere Werktuigen. (See van Berkel, Johannes C., assignor.)
Naiman, Julius M., and H. Leggett, Blackwell, Okla.; said Leggett assignor to said Naiman. Oxygenation of saturated aliphatic hydrocarbons. 1,878,170; Sept. 20.
Nardone, Romeo M., assignor to Eclipse Aviation Corporation, East Orange, N. J. Engine starting apparatus. 1,878,421; Sept. 20.
National Aniline & Chemical Co. (See Foster, Harold B., assignor.)
National Aniline & Chemical Company. (See Kyrides, Lucas P., assignor.)
National Aniline & Chemical Company. (See Lyford, Chauncey A., assignor.)
National Aniline & Chemical Company. (See Schmittnagel, Johann P., assignor.)
National Company. (See Eyrick, Philip A., assignor.)
National Lime Association. (See Underwood, J. E., and Cabell, assignors.)
National Supply Company of Delaware, The. (See Young, Forrest J., assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyeing with vat dyestuffs sensitive to calcium compounds. 1,877,945; Sept. 20.
Neahr, Jacob E., Scarsdale, N. Y. Combined cigarette rest and ash tray. Des. 87,790; Sept. 20.
Neelmeier, Wilhelm. (See Rimele E., Glietenberg, and Neelmeier.)
Neelmeier, Wilhelm, and T. Nocken, Lever-Kusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyestuffs of the safranine series and making them. 1,878,531; Sept. 20.
Nein, William C. (See Varley, T. W., and Nein.)
Nenninger, Lester F. (See Einstein, S., and Nenninger.)
Neon, Claude, Lights, Inc. (See Beck, Leo L., assignor.)
Neon, Claude, Lights, Inc. (See Morris, Melvin G., assignor.)
Ne Page, Justus F., assignor to Ne Page McKenny Co., Seattle, Wash. Metal lamp post. 1,878,799; Sept. 20.
Ne Page McKenny Co. (See Ne Page, Justus F., assignor.)
Neptune Engineering Company. (See Svendsen, R. T., and Chandler, assignors.)
Neresheimer, Heinrich, and W. Schneider, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogen derivatives of the anthraquinoneazine series and making same. 1,877,946; Sept. 20.
Neresheimer, Heinrich, Ludwigshafen-on-the-Rhine, E. Honold, Frankfort-on-the-Main-Fechenheim, and G. Böhner, Friedrichsfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing vat dyestuffs of the anthraquinone acridine series. 1,877,947; Sept. 20.
Neresheimer, Heinrich, and W. Schneider, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the N-dihydro 1.2.2'.1'-anthraquinoneazine series and making same. 1,877,948; Sept. 20.
Neugebauer, Wilhelm. (See Schmidt, M. P., and Neugebauer.)
Neumiller, Harry J., assignor to Humitube Mfg. Co., Peoria, Ill. Device for inflating containers. 1,877,949; Sept. 20.
Newhall, Henry B., Corporation. (See Pleister, Henry W., assignor.)
New Jersey Zinc Company, The. (See Anderson, E. A., and Werley, assignors.)
Nichols, John M., assignor to B. & N. Ring Manufacturing Company, St. Louis, Mo. Two-part piston ring. 1,878,641; Sept. 20.
Nielsen, Heinrich V., Cardiff, Wales, assignor by direct and mesne assignments, to The Hygiene Manufactures and Supplies Company, Limited, London County, England. Machine for filling bottles and other vessels. 1,878,445; Sept. 20.
Nieman, Simon. (See Gramsa, Joseph G., assignor.)
Nilsson, August L., Sodertalje, Sweden. Carburetor. 1,878,171; Sept. 20.
Noble, Ernest E., Sunderland, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Baffle for steam and water drums. 1,878,172; Sept. 20.
Nocken, Theodor. (See Neelmeier, W., and Nocken.)
Noma Electric Corporation. (See Lampl, Alfred, assignor.)
Nordell, Carl H., Chicago, Ill. Foldable curtain. 1,877,950; Sept. 20.
Norris, Alfred E., Westfield, assignor to The Regina Corporation, Rahway, N. J. Floor machine. 1,877,951; Sept. 20.
Northrup, Edwin F., near Princeton, N. J. Electric condenser. 1,787,173; Sept. 20.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Trenton, N. J. Inductor type furnace. 1,878,532; Sept. 20.
Northwest Paper Company. (See Gortner, R. A., and Hoffman, assignors.)
Northwest Paper Company, The. (See Hoffman, W. F., and Gortner, assignors.)
Norton, Albert C., assignor to California Corrugated Culvert Co., Berkeley, Calif. Flume. 1,878,289; Sept. 20.
Nowlin, Aubrey C., Beggs, assignor of four-tenths to A. C. Flieg, fourteen one-hundredths to J. G. Sales, Okmulgee County, Okla., and one one-hundredth to Nathan B. Townsend. Nut opening and picking machine. 1,878,422; Sept. 20.
Nowlin, Aubrey C., Beggs, assignor of three-tenths to A. C. Flcig, Henryetta, and one-tenth to J. G. Sales, Okmulgee, Okla. Nut cracking machine. 1,878,423; Sept. 20.
Nunnally, James C., Greer, S. C. Knock-off mechanism for slubbers and roving frames. 1,878,533; Sept. 20.
Oberfell, George G., Bartlesville, Okla. Process and apparatus for storing and utilizing highly volatile liquids. 1,878,174; Sept. 20.
Obergfell, Herbert F., River Forest, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Electromagnetic device. 1,878,800; Sept. 20.
Ohnstrand, Enoch, Kenmore, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Sliding desk top. 1,877,775; Sept. 20.
Oldberg Manufacturing Company. (See Oldberg, Virgil assignor.)
Oldberg Manufacturing Company. (See Spaulding, R. C., Oldberg, and Born, assignors.)
Oldberg, Virgil. (See Spaulding, R. C., Oldberg, and Born.)
Oldberg, Virgil, assignor to Oldberg Manufacturing Company, Detroit, Mich. Muffler. 1,878,424; Sept. 20.
Oldham, Samuel R. (See Hasse, F. C., and Oldham.)
O'Leary, Lydia, Pelham, N. Y. Dermal cover preparation. 1,877,952; Sept. 20.
Olsen, Peter C., Perth Amboy, N. J., assignor to Federal Seaboard Terra Cotta Corporation, New York, N. Y. Hollow block structure. 1,877,953; Sept. 20.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,878,425; Sept. 20.
Omes Holding Company Limited, The. (See Benedetto, Giuseppe, assignor.)
Orange Brush Company. (See Bost, William D., assignor.)
Osius, Frederick J., Miami, Fla. Electric cooker. Des. 87,791; Sept. 20.
Otis Elevator Company. (See Lucas, William B., assignor.)
Ottinger, Nathan, New York, N. Y. Brief case or portfolio. 1,877,954; Sept. 20.
Ottinger, Nathan, New York, N. Y. Original package. 1,877,955; Sept. 20.

Overholtz, George D., Leetsdale, assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa. Outdoor advertising structure. 1,878,884; Sept. 20.
Overton, Alan M., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Carton and container. 1,878,290; Sept. 20.
Ovington Company. (See Ovington, Edward J., assignor.)
Ovington, Edward J., Auburndale, assignor to Ovington Company, Cambridge, Mass. Electric motor. 1,878,534; Sept. 20.
Owen, Robert V., New York, N. Y. Calendar card exhibitor for clocks. 1,878,310; Sept. 20.
Owen, William. (See Burdett, C. F., and Owen.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Owens-Illinois Glass Company. (See La France, Richard, assignor.)
Oxweld Acetylene Company. (See Voorhees, Lee G., assignor.)
Oxweld Railroad Service Company, The. (See Hasse, F. C., and Oldham, assignors.)
Oyen, Erling, Youngstown, Ohio. Boring tool for internal taper boring. 1,878,175; Sept. 20.
Oyston, William R., assignor to Continuous Gramophones Limited, London, England. Sound reproducing apparatus. 1,878,311; Sept. 20.
Pabst Corporation. (See Hauck, Frederick G., assignor.)
Pacific Marine Supply Company. (See Andrews, Phillip R., assignor.)
Packard Motor Car Company. (See Bamblett, Frederick, assignor.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Knapp, Archer L., assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Roberts, Louis L., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Pagon, William W., Baltimore, Md. Airship. 1,877,956; Sept. 20.
Pahl, Heinrich, Dusseldorf-Rath, Germany. Manufacturing rubber hose. 1,878,885; Sept. 20.
Palmer, O'Neal S. (See Ward, G. E., and Palmer.)
Palmer, Roy T. (See Sendelbach, J., and Palmer.)
Panzegrau, Norman O, (See Baker, D. B., and Panzegrau.)
Papaefthemeou, Demetrios, New York, N. Y. Taximeter flag control system. 1,878,596; Sept. 20.
Paradise, Louis A., and W. J. Coultas, assignors to Deere & Company, Moline, Ill. Corn picker. 1,877,957; Sept. 20.
Parker, James W., Ann Arbor Township, Washthenaw County, Mich. and J. E. Black, Rumson, N. J.; said Black assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,878,176; Sept. 20.
Parker, John S., Cleveland, Ohio. Chain block. 1,878,312; Sept. 20.
Parker, Russell C., Janesville, Wis. Fountain pen. Des. 87,792; Sept. 20.
Parsons, Frank B., Plainville, Conn. Antiskid chain. 1,878,291; Sept. 20.
Pasholk, Pete, Rothschild, Wis. Rotary disk valve. 1,878,535; Sept. 20.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Disk harrow. 1,877,958; Sept. 20.
Paulton, Joseph S., Chicago, Ill. Locking device. 1,878,886; Sept. 20.
Payman, Joseph B. (See Gibson, W., and Payman.)
Pedersen, Carl E., San Francisco, Calif., assignor to The Globe-Wernicke Company, Cincinnati, Ohio. Map rod. 1,878,177; Sept. 20.
Peffer, Harry C., R. L. Harrison, and D. E. Ross, assignors to Rostone, Incorporated, La Fayette, Ind. Structural material and making the same. 1,877,959; Sept. 20.
Peffer, Harry C., and P. W. Jones, assignors to Rostone, Incorporated, Lafayette, Ind. Structural material and making the same. 1,877,960; Sept. 20.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Automatic dip regulator for suction gathering receptacles and the like. 1,878,597; Sept. 20.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Supply pool level regulator. 1,878,598; Sept. 20.
Peller, Karl E., West Hartford and W. T. Barker, jr., assignor to Hartford-Empire Company, Hartford, Conn. Glass feeder apparatus. 1,878,536; Sept. 20.
Perkins, B. F., & Son, Inc. (See Lade, Archibald, assignor.)
Perkins, B. F., and Son, Inc. (See Senna, Samuel N., assignor.)
Perkins, George H., Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn. Textile fabric. Des. 87,793; Sept. 20.
Perkins, Harry F. (See Deacon, W. T., and Perkins.)
Perkins, Lee, Belmont, Mass. Liquid indicator. 1,878,801; Sept. 20.
Perkins, Rody P., Baltimore, Md. Closure. 1,878,599; Sept. 20.
Permutit Company, The. (See Stickney, Charles, assignor.)
Pescara, Raul, P., Barcelona, Spain. Safety contact device for automobiles. 1,878,313; Sept. 20.
Peters, Henry W., Boston, Mass. Making jewelry. 1,878,314; Sept. 20.
Petersen Oven Company, The. (See Hoppe, Friedrich A., assignor.)
Peterson, Walter R. (See Benjamin, B. R., and Peterson.)
Petzold, Adolf. (See Laska, L., Zitscher, Christ, and Petzold.)
Pezzella, Rocco, Washington, D. C. Hair wrapping instrument. 1,877,776; Sept. 20.
Pfaff and Kendall. (See Sutphen, Robert M., assignor.)
Pfister, Al., et al. (See Alcala, Pablo, assignor.)
Phelps, Albert W., Los Angeles, Calif. Sizing apparatus. 1,878,315; Sept. 20.
Phillippi, Dale M., assignor to The Kay & Ess Co., Dayton, Ohio. Enamel imitation leather finish. 1,878,316; Sept. 20.
Phillips, Rae W. (See Keeler, R. B., and Phillips.)
Phister, Albert B. and B. H., Fort Thomas, Ky., assignors to The Phister Manufacturing Company, Cincinnati, Ohio. Fire extinguishing apparatus. 1,878,537; Sept. 20.
Phister, Benjamin H. (See Phister, Albert B. and B. H.)
Phister Manufacutring Company, The. (See Phister, Albert B. and B. H., assignors.)
Picard, Charles, Joinville Le Point, assignor to l'Air Liquide, Societe Anonyme pour l'Etude l'Exploitation des Procedes Georges Claude, Paris, France. Apparatus for conserving and vaporizing liquefied gases. 1,878,317; Sept. 20.
Pierce, James B., jr. and R. L. Curnes, assignors to Barium Reduction Corporation, Charleston, W. Va. Preventing scum and efflorescence on brick and clay ware. 1,878,887; Sept. 20.
Pike, Robert D., Piedmont, Calif. Manufacture of monopotassium phosphate. 1,878,426; Sept. 20.
Pinder, Thomas F., Merion, Pa. Printing. 1,878,318; Sept. 20.
Pinder, Thomas F., Merion, Pa. Apparatus for preventing offsetting in printing machines. 1,878,319; Sept. 20.
Pitman, Arthur L. (See Harris, C. R., and Pitman.)
Pittsburgh Plate Glass Company. (See Burdett, C. F., and Owen, assignors.)
Pittsburgh Plate Glass Company. (See Linder, Cyril S., assignor.)
Pittsburgh Plate Glass Company. (See Spinasse, Arthur E., assignor.)
Pivoto, Felix L., Beaumont, Tex. Drill bit. 1,878,292; Sept. 20.
Pleister, Henry W., Westfield, assignor to Henry B. Newhall Corporation, Garwood, N. J. Bolt anchor having a collapsible head. 1,878,600; Sept. 20.
Pohl, Friedrich H. M., assignor to Co-Operative Embroidery Company, Woodcliff, N. J. Embroidered textile fabric or similar article. Des. 87,794; Sept. 20.
Pokorny, Ernst, Leipzig, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of tungsten metal. 1,877,961; Sept. 20.
Polgreen, Geoffrey R. (See Marris, G. C., Polgreen, and Williams.)
Polzguter, Franz, assignor to the Firm Deutche Edelstahlwerke A.-G., Bochum, Germany. Steel alloy. 1,877,962; Sept. 20.
Popper, Max, Brooklyn, N. Y. Pinking attachment for sewing machines. 1,878,293; Sept. 20.
Porter, J. E., Corporation. (See Ferrell, Daniel D., assignor.)
Porter, Robert H. (See Herzstein, M., and Porter.)
Porter, William J., Chattanooga, Tenn. Signal switch. 1,877,963; Sept. 20.
Potter, Nathan D., Enfield, Mass. Camera support. 1,878,320; Sept. 20.
Poulton, Gerald, Bromley, England. Loose leaf binder or filing cover. 1,878,321; Sept. 20.
Powdrell & Alexander, Inc. (See Perkins, George H., assignor.)
Power Gas Corporation Limited, The. (See Rambush, Niels E., assignor.)
Power, Laurence E., Milwaukee, assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Insulating composition. 1,878,178; Sept. 20.
Premier Electric Company. (See Doak, Robert S., assignor.)
Preston, John E., Newark, and S. Sokolow, Bergen, N. J., assignors of one-half to Cypress Novelty Corporation, Brooklyn, and one-half to N. D. Q. Specialty Corporation, New York, N. Y. Process and apparatus for manufacturing candle holders. 1,878,322; Sept. 20.
Priest, Edith H. (See Atwood, J. H., and Proctor, assignors.)
Primeau, Arthur L., Philadelphia, Pa. Cleaner. 1,878,250; Sept. 20.
Proctor, Carl S. (See Atwood, J. H., and Proctor.)
Pryde, James. (See Hatt, A. J., Johnson, and Pryde.)
Pure Oil Company, The. (See Harnsberger, Audley E., assignor.)

Purser, William J., Mineral Ridge, assignor to The Bostwick Steel Lath Company, Niles, Ohio. Reenforced metal lath. 1,877,964; Sept. 20.

Pursley, Alva R., Eufaula, Ala. Apparatus for cooling milk. 1,877,965; Sept. 20.

Putnam, Mark E., and L. E. Mills, assignors to The Dow Chemical Company, Midland, Mich. Preparation and purification of primary aromatic amine hydrohalides of the benzene series. 1,878,512; Sept. 20.

Pyrene Manufacturing Company. (See Dodelin, Fred A., assignor.)

Quaker Oats Company, The. (See Kirn, Oscar C., assignor.)

Quist, Frank J., Worcester Mass. Metal brush. 1,878,323; Sept. 20.

Radio Condenser Company. (See Gilling, Preston E., assignor.)

Radio Condenser Company. (See Koepping, Emil D., assignor.)

Radio Corporation of America. (See Albersheim, Walter J., assignor.)

Radio Corporation of America. (See Bruijnes, J., and Van Urk., assignors.)

Radio Corporation of America. (See Foster, Julius E., assignor.)

Radio Corporation of America. (See Green, Ernest, assignor.)

Radio Corporation of America. (See Hansell, Clarence W., assignor.)

Radio Corporation of America. (See Zwikker, Cornelis, assignor.)

Radio Patents Corporation. (See Weiller, Paul G., assignor.)

Radium Dial Company. (See Fordyce, R. G., and Talbot, assignors.)

Raisbeck, Frank, assignor to Deere & Company, Moline, Ill. Fertilizer distributor. 1,877,966; Sept. 20.

Rambush, Niels E., assignor to The Power Gas Corporation, Limited, Stockton-on-Tees, England. Apparatus for the automatic operation of machines. 1,878,888; Sept. 20.

Randall, Meredith S. (See Woodall, H. J., and Randall.)

Raney, Estel C., Columbus, Ohio. Refrigerator control. 1,877,967; Sept. 20.

Rappaport, Dario, New York, assignor to Transamerica Products Co. Inc., Brooklyn, N. Y. Telephone attachment. 1,878,601; Sept. 20.

Rasmussen, Arnold, Greenwich, Conn. Bracket as a support for scaffolds. 1,878,642; Sept. 20.

Rawling, Francis G., Chillicothe, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio. Control mechanism. 1,878,179; Sept. 20.

Rawlings, Howard C. (See Leins, O. J., and Rawlings.)

Ray, Harry P., et al. (See Wagner, James S., assignor.)

Raymond Brothers Impact Pulverizer Co. (See Crites, Joe, assignor.)

Raynor, John S., Philadelphia, Pa. Wire key for plaster and means to secure same to plaster board. 1,878,180; Sept. 20.

Raytheon Inc. (See Smith, Charles G., assignor.)

Recke, William, Philadelphia, Pa., assignor, by mesne assignments, to Sprague Signs, Inc., Wilmington, Del. Apparatus and method for marking jacquard tapes. 1,878,643; Sept. 20.

Reed, Domson H., Houston, Tex. Setting tool. 1,878,538; Sept. 20.

Regan, William V., New Haven, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn. Combined sole and heel. Des. 87,795; Sept. 20.

Regensburger, Richard W., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Egg separator. 1,878,294; Sept. 20.

Reger, David B. (See Kaplan, Benjamin B., assignor.)

Regina Corporation, The. (See Norris, Alfred E., assignor.)

Reichard, Wade H., assignor to General Railway Signal Company, Rochester, N. Y. Automatic train control system. 1,877,968; Sept. 20.

Reichert, Erwin A., and W. S. Holzinger, Highland, Ill. Air cleaner. 1,877,888; Sept. 20.

Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Tandem wheel construction. 1,877,970; Sept. 20.

Reid, Herbert W., Brooklyn, N. Y. Extractor cup for coffee filters. 1,877,971; Sept. 20.

Reinhardt, Gustav A., and R. H. Eurich, Youngstown, Ohio. Manufacture of ferrous articles. 1,878,539; Sept. 20.

Reinhardt, Gustav A., and R. H. Eurich, Youngstown, Ohio. Electrolytic method of continuous sheet manufacture and apparatus therefor. 1,878,540; Sept. 20.

Reinhold, John J., Marietta, Pa. Advertising device for ordering dairy products. 1,878,541; Sept. 20.

Reitz, Harold H., Appleton, Wis. Garment pocket construction. 1,878,324; Sept. 20.

Reliance Regulator Corporation. (See Thrall, Walter I., assignor.)

Remington Arms Company. (See Burns, James F., assignor.)

Remington Rand Inc. (See Ohnstrand, Enoch, assignor.)

Rempen, Walter, Hannover, Germany, assignor to A. M. Sloss, New York, N. Y. Stove for burning disintegrated lignite coke. 1,878,644; Sept. 20.

Replogle, John R., assignor to Kelvinator Corporation, Detroit, Mich. Lid for refrigerated cabinets. 1,878,181; Sept. 20.

Republic Steel Corporation. (See Coyle, Paul L., assignor.)

Republic Steel Corporation. (See Witherow, William P., assignor.)

Reynolds, Arthur W., assignor to The Babcock Manufacturing Co., Leonardsville, N. Y. Tractor cultivator. 1,877,777; Sept. 20.

Reynolds, Frederick W., Grantwood, N. J., assignor to American Telephone and Telegraph Company. Electro-optical transmission system. 1,878,711; Sept. 20.

Reynolds, Lloyd H. V. (See Ensign, W. B., and Reynolds.)

Rhenania-Kunhein Verein Chemischer Fabriken Aktiengesellschaft. (See Rothe, F., and Brenek, assignors.)

Ricardo, Harry R., London, England. Facilitating starting of internal combustion engines of the liquid fuel injection compression ignition type. 1,878,325; Sept. 20.

Ricardo, Harry R., London, England. Air compressor of the multicylinder reciprocating type. 1,878,326; Sept. 20.

Richardson, Allan S., Butte, Mont. Method and apparatus for cooling mine air. 1,878,542; Sept. 20.

Richardson Company, The. (See Keller, Charles L., assignor.)

Richardson Company, The. (See Overton, Alan M., assignor.)

Richardson Company, The. (See Stevenson, E. P., and Buron, assignors.)

Richardson Company, The. (See Yates, Sampson W., assignor.)

Richmond, Walter, Homestead, Fla. Reclaiming lands and maintaining lands in a condition suitable for cultivation or habitation. 1,878,295; Sept. 20.

Richter, Walther, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding head. 1,877,969; Sept. 20.

Riley, Champlain L., North Plainfield, N. J., assignor to Industrial Associates, Inc., New York, N. Y. Manufacture of casein. 1,878,182; Sept. 20.

Rimele, Eugen, E. Glietenberg, and W. Neelmeier, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoaroyldiamines of the benzene series. 1,878,543; Sept. 20.

Rimmelspacher, Joseph, and E. Hepting, Newark, N. J. Bung for containers. 1,878,327; Sept. 20.

Ringbloom, Carl A., Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker control switch. 1,878,602; Sept. 20.

Riter-Conley Manufacturing Company. (See Overholtz, George D., assignor.)

Ritter, Heinrich. (See Kalischer, G., Ritter, Scheyer, and Bayer.)

Ritter, Heinrich, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New condensation product of the anthraquinone series and making same. 1,877,972; Sept. 20.

Ritter, Heinrich, and W. Brunner, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New indigoid dyestuffs of the anthraquinone series. 1,877,973; Sept. 20.

Robb, John F., Cleveland Heights, Ohio. Pipe line depositing machine. 1,877,974; Sept. 20.

Robb, John F., Cleveland Heights, Ohio. Machine for laying pipes in trenches. 1,877,975; Sept. 20.

Roberts, Bruce B., et al. (See Winger, Stover C., assignor.)

Roberts, Louis L., assignor to Packard Motor Car Company, Detroit, Mich. Bolt heading machine. 1,878,183; Sept. 20.

Roberts, Wilmer L., Palmyra, N. J., assignor to Wm. H. Horstmann Co., Philadelphia, Pa. Tufting needle. 1,878,589; Sept. 20.

Robertson, John, Co. (See Jacobson, C. C., and Schweder, assignors.)

Robinovitch, Louise G. (See Mindeleff, Charles, assignor.)

Robinson, Albert E., assignor to The American Tool Works Company, Cincinnati, Ohio. Lapping machine. 1,878,603; Sept. 20.

Robinson, Harry G., Waterbury, Conn., assignor to Industries of America, Inc. Supply carrier for braiding machines. 1,878,890; Sept. 20.

Robinson, James, Mill Hill, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Electro-optical apparatus. 1,878,891; Sept. 20.

Robinson, Joseph, New York, N. Y. Automatic train pipe coupling. 1,878,712; Sept. 20.

Robinson, Joseph B., Rochester, N. Y. Radiator bracket. 1,878,645; Sept. 20.

Rock Island Plow Company. (See Kaupke, Lee H., assignor.)

Rodeback, Charles H., San Pedro, Calif. Necktie. 1,878,604; Sept. 20.

Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Pneumatic web severing device. 1,878,184; Sept. 20.

Roessler and Hasslacher Chemical Company, The. (See Harris, C. R., and Pitman, assignors.)

Roessler & Hasslacher Chemical Company, The. (See Whitby, George S., assignor.)

Roessler & Hasslacher Chemical Company, The. (See Zisch, Walter, assignor.)

Rogers-Jenkins & Co. (Pty.) Ltd. (See De Villiers, Peter G. T., assignor.)

Rogers, Roy R. (See Dial, F. E., and Rogers.)

Ronstrom, Thomas A., Chicago, Ill. Gas burning heater. 1,878,427; Sept. 20.

Root Spring Scraper Company. (See Weeks, Ernest A., assignor.)

Roper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)

Rosco Manufacturing Company, The. (See Cederstrom, Harold A., assignor.)

Rose, John, Atlantic City, N. J. Umbrella runner and tip cup. 1,878,428; Sept. 20.

Roseby, Philip N., assignor to Automatic Telephone Manufacturing Company Limited, Liverpool, England. Magnet core. 1,878,713; Sept. 20.

Rosenfeld, Max L., and J. H. Morgan, San Francisco, Calif.; said Morgan assignor to said Rosenfeld. Safety stop for motor vehicles. 1,877,976; Sept. 20.

Rosenfelt, Samuel D., St. Louis, Mo., assignor to Franklin Railway Supply Company, New York, N. Y. Door mechanism. 1,878,892; Sept. 20.

Rosenfield, William B., executor. (See Goodman, Glen W.)

Ross, David E. (See Peffer, H. C., Harrison, and Ross.)

Rossbach, Erich. (See Hagedorn, M., and Rossbach.)

Rostone, Incorporated. (See Peffer, H. C., and Jones, assignors.)

Rostone, Incorporated. (See Peffer, H. C., Harrison, and Ross, assignors.)

Rotberg, Samuel, Chicago, Ill. Drinking cup for birds. 1,878,893; Sept. 20.

Rothe, Fritz, and H. Brenek, assignors to the Firm Rhenania-Kunhein Verein Chemischer Fabriken Aktiengesellschaft, Berlin, Germany. Obtaining fertilizers. 1,878,185; Sept. 20.

Roure, E., et al. (See Alcala, Pablo, assignor.)

Rowland, John B., New Rochelle, N. Y., and F. C. Andersen, assignors to Andersen Frame Corporation, Bayport, Minn. Window frame. 1,877,977; Sept. 20.

Ruan, Felix, Deptford, London, assignor to Molins Machine Company, Limited, London, England. Apparatus for combing and feeding tobacco for making cigarettes and for other purposes. 1,878,328; Sept. 20.

Rudolph, Corrie F., Washington, D. C. Electron tube apparatus. 1,878,251; Sept. 20.

Rudolph, Joel F., Fort Thomas, assignor to The Higgin Manufacturing Company, Newport, Ky. Venetian blind. 1,878,186; Sept. 20.

Ruetz, Herman, Glendale, N. Y. Chair. 1,878,253; Sept. 20.

Ruff, De Witt C., 2d., St. Paul, Minn. Radiator hanger. 1,878,187; Sept. 20.

Ruhoff, Otto E., and E. J. McEachron, Wausau, Wis. Dry battery. 1,878,188; Sept. 20.

Rumpf, Herman, and I., San Francisco, Calif. Curtain carrier. 1,878,189; Sept. 20.

Rumpf, Irwin. (See Rumpf, Herman, and I.)

Rusckowski, Stanislaus, Los Angeles, Calif. Tower bridge. Des. 87,797; Sept. 20.

Ruth, Albert J., St. Louis, and A. H. Buermann, Kirkwood, Mo. Pump casing. Des. 87,796; Sept. 20.

S. O. S. Company, The. (See Brooks, G. W., and Duginski, assignors.)

Sage, Jeanne M., Detroit, Mich. Hair waving device. 1,878,978; Sept. 20.

Sales, J. G., et al. (See Nowlin, Aubrey C., assignor.)

Sallee, Louis H., Long Beach, assignor to J. F. Meyer, Hollywood, Calif. Vending machine. 1,878,894; Sept. 20.

Saltzman, Auguste L., Orange, N. J., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Chuck. 1,878,329; Sept. 20.

Sanders, Fred. (See Lane, T. E., and Welch, assignors.)

Sandling, Elmer A., Merced, Calif. Smoking device. 1,878,714; Sept. 20.

Sarver, Emmett F., Kansas City, Kans., assignor to B. W. Stunz, Kansas City, Mo. Automobile headlamp. 1,877,978; Sept. 20.

Sauer, Herman, New York, N. Y. Vehicle wheel. 1,878,330; Sept. 20.

Saul, Siegfried, Aachen, Germany. Air valve for bladders and other inflatable hollow bodies. 1,878,715; Sept. 20.

Savage, Egbert C., Santa Monica, Calif. Container. 1,877,979; Sept. 20.

Savage, John C., London, England. Optical projection apparatus. 1,878,331; Sept. 20.

Savage, John L. (See Kinzie, P. A., and Savage.)

Schafer, Lee, Los Angeles, Calif. Weight indicator. 1,877,980; Sept. 20.

Schäfer, Willy, assignor to the Firm Ernst Leitz, Optische Werke, Wetzlar, Germany. Device for determining the quantitative relation of the components of a composite substance. 1,877,981; Sept. 20.

Schakel, Walter F., and A. C. Waterman, Indianapolis, Ind.; said Schakel assignor to said Waterman. Fertilizer distributor. 1,877,982; Sept. 20.

Scheidler, Royal E., et al. (See Manteufel, August, assignor.)

Schering-Kalibaum A. G. (See Schwenk, E., and Jordan, assignors.)

Scheyer, Heinz. (See Kalischer, G., Ritter, Scheyer, and Bayer.)

Schilling, Rudolph, Woodside, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Explosion chamber. 1,877,983; Sept. 20.

Schirmer, Walter E., Chicago, Ill., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis. Multioven heat regulator. 1,878,332; Sept. 20.

Schlichenmaier, Hans. (See Kronholz, E., and Schlichenmaier.)

Schmelzer, Albert. (See Muth, F., and Schmelzer.)

Schmidt, Johann P., jr., Remscheid-Dorfmuhle, Germany. Curtain drawing device. 1,877,984; Sept. 20.

Schmidt, Louis D., assignor to Combination Door Company, Fond du Lac, Wis. Locking device. 1,878,544; Sept. 20.

Schmidt, Maximilian P., and W. Neugebauer, Biebrich-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the polynuclear aromatic imidazole series and preparing them. 1,878,986; Sept. 20.

Schmidt, Oscar C., and A. G. Klawitter, assignors to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio. Overhead track. 1,878,605; Sept. 20.

Schmidt, Robert E., Elberfeld, B. Stein, Mannheim, and K. Bamberger, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of 1.4.4'-trihydroxy-2.2'-dianthraquinonyl-3.1'-oxide. 1,878,987; Sept. 20.

Schmidt, Victor P., and H. A. Brenaman, Altoona, Pa. Centering gauge. 1,878,296; Sept. 20.

Schmidt, Werner, and P. Hartmuth, Frankfort-on-the-Main-Fechenheim, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Alkylated amino-acridinium compounds and process of making them. 1,877,985; Sept. 20.

Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung. (See Hartmann, Otto H., assignor.)

Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung. (See Hartmann, O. H., and Trede, assignors.)

Schmidt'sche Heissdampf Gesellschaft m. b. H. (See Wempe, Friedrich, assignor.)

Schmittnägel, Johann P., Basel, Switzerland, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Making substituted guanidines. 1,878,545; Sept. 20.

Schneider, Bernhard, Eichwalde, near Berlin, Germany. Light reflector. 1,878,646; Sept. 20.

Schneider, John, Roselle Park, N. J., assignor to The Delta Star Electric Company, Chicago, Ill. Switch. 1,877,986; Sept. 20.

Schneider, Wilhelm. (See Nereshelmer, H., and Schneider.)

Schneider, William G., and H. H. Eaton, assignors to The Electric Auto-Lite Company, Toledo, Ohio. Coil construction. 1,878,606; Sept. 20.

Schnuck, Carl F., New Haven, and G. W. Kuntney, Naugatuck, assignors of one-half to Farrel-Burmingham Company, Inc., Derby, and one-half to The Bristol Company, Waterbury, Conn. Repetitive-process indicator apparatus. 1,878,716; Sept. 20.

Schoepke, Robert, Juncau, Wis. Window frame. 1,878,546; Sept. 20.

Schonberg, Jackson R., Westfield, N. J., assignor to Standard Oil Development Company. Distillation under vacuum. 1,877,987; Sept. 20.

Schrank, Harry P., Akron, assignor to Selberling Rubber Company, Barberton, Ohio. Pneumatic tires. 1,877,988; Sept. 20.

Schultz, Edward, Chicago, Ill. Tobacco ash receptacle. Des. 87,798; Sept. 20.

Schutte & Koerting Company. (See Hellmer, Ralph E., assignor.)

Schutte, Wilhelm O. P., Brooklyn, N. Y. Engraving metallic surfaces for printing. 1,878,895; Sept. 20.

Schwantes, Julius A., Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Soap manufacture. 1,878,547; Sept. 20.

Schwartz, Carl, Elkhart Lake, assignor to Brandt Automatic Cashier Company, Watertown, Wis. Coin counting machine. 1,877,989; Sept. 20.

Schwartz, Evelyn, New York, N. Y. Card holder. 1,878,717; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,799; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,800; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,801; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,802; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,803; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,804; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,805; Sept. 20.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,806; Sept. 20.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,807; Sept. 20.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,808; Sept. 20.
Schweder, James. (See Jacobson, C. C., and Schweder.)
Schweitzer, Edmund O., Northbrook, Ill. Thermal protective system. 1,877,990; Sept. 20.
Schweitzer, Hugo, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Fast blue dyeings on the fiber. 1,878,548; Sept. 20.
Schwenk, Erwin, Berlin-Neu Westend, and H. Jordan, Berlin-Steglitz, assignors to Schering-Kohlbaum A. G., Berlin, Germany. Production of hydroaromatic carboxylic acids. 1,877,991; Sept. 20.
Sciarrino, Peter J., Niagara Falls, N. Y. Clear vision device. 1,878,718; Sept. 20.
Scofield, Theodore J., and W. Miner, assignors to The Sparks-Withington Company, Jackson, Mich. Radio receiving apparatus. 1,878,190; Sept. 20.
Scott, David C., assignor to H. L. Scott Company, Providence, R. I. Testing machine. 1,878,191; Sept. 20.
Scott, David C., assignor to H. L. Scott Company, Providence, R. I. Testing machine. 1,878,192; Sept. 20.
Scott, David C., Providence, and F. A. Valentine, Apponaug, assignors to H. L. Scott Company, Providence, R. I. Testing machine. 1,878,193; Sept. 20.
Scott, Eric A., Chicago, and G. P. Fleetwood, Joliet, Ill. Fireplace construction. 1,878,719; Sept. 20.
Scott, Henry L., Company. (See Scott, David C., assignor.)
Scott, Henry L. Company. (See Scott, D. C., and Valentine, assignors.)
Scott, John E., assignor to Allith-Prouty Company, Danville, Ill. Lock for door rollers. 1,878,333; Sept. 20.
Scullin Steel Company. (See Doerr, Harry E., assignor.)
Seabert, John D., Dayton, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Energy-translating device. 1,877,992; Sept. 20.
Seaver, Floyd, assignor to Swift and Company, Chicago, Ill. Apparatus for processing foodstuffs with fluid currents. 1,878,297; Sept. 20.
Seeger, Edwin W., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Motor controller. 1,878,334; Sept. 20.
Sefcik, Thomas T. (See Hudec, A., and Sefcik.)
Segarra, A. C., et al. (See Alcala, Pablo, assignor.)
Seiberling Rubber Company. (See Schrank, Harry P., assignor.)
Seifert, E. (See John, Lillian, assignor.)
Semet-Solvay Engineering Corporation. (See Dunkle, H. E., and Becker, assignors.)
Semet-Solvay Company. (See Knapp, Walter R., assignor.)
Semet-Solvay Company. (See Lawton, Joseph J., assignor.)
Semet-Solvay Company. (See Mitchell, Henry E., assignor.)
Semi-Steel Casting Co. (See Shanley, Connor B., assignor.)
Sendelbach, Joseph, and R. T. Palmer, McAlester, Okla. Apparatus for treating gasoline. 1,878,720; Sept. 20.
Senna, Samuel N., Chicopee, assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Testing apparatus. 1,878,446; Sept. 20.
Sensow, Anton C., assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing and chopping machine. 1,877,993; Sept. 20.
Servel, Inc. (See Collins, William D., assignor.)
Servel, Inc. (See Kuenzli, W. A., and Dowell, assignors.)
Sessions, Edson O., Chicago, Ill. Furnace for effecting heat treatments. 1,878,896; Sept. 20.
Sevison, Harry D., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Screw mounting. 1,878,898; Sept. 20.
Shaffer, Cleve F., San Francisco, Calif. Subaqueous tunnel. 1,877,994; Sept. 20.
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Shakeproof Lock Washer Company. (See Stenger, Victor R., assignor.)
Shanley, Connor B., St. Louis, Mo. Manhole cover. 1,877,996; Sept. 20.
Shanley, Connor B., assignor to Semi-Steel Casting Co., St. Louis, Mo. Man-hole frame and cover. 1,877,995; Sept. 20.
Shapiro, Hyman A., Los Angeles, and P. Frauendorf, Culver City, Calif. Vehicle backing mirror apparatus. 1,877,997; Sept. 20.
Shelton, Maurice C., Indianapolis, assignor to W. F. Bossert, Liberty, Ind. Reenforcement for concrete and the like. 1,878,992; Sept. 20.
Sheppard, Samuel E., assignor to Eastman Kodak Company, Rochester, N. Y. Manufacture of cellulose acetate. 1,878,988; Sept. 20.
Sherman, Clifton W., Hamilton, Ontario, Canada. Shock absorber. 1,877,998; Sept. 20.
Sherman, Clifton W., Hamilton, Ontario, Canada. Shock absorber for draft gears. 1,877,999; Sept. 20.
Sherrick, Jacob L., Scottdale, Pa. Duplicator. 1,878,897; Sept. 20.
Sherts, James H., Glen Ridge, N. J., assignor to Duplate Corporation. Apparatus for making composite glass. 1,878,899; Sept. 20.
Shlaifer, David. (See Millo, Ernest S., assignor.)
Shoeld, Mark, Mount Lebanon, Pa., assignor to The Koppers Company of Delaware. Removing one or more volatile constituents from a liquid or gas. 1,878,607; Sept. 20.
Shoemaker, Emanuel J., assignor to The L. McBrine Company, Limited, Kitchener, Ontario, Canada. Hand luggage. 1,878,989; Sept. 20.
Shull, Frank T., Washington, D. C. Panel board construction. 1,878,335; Sept. 20.
Shull, Frank T., Washington, D. C. Panel board and cabinet therefor. 1,878,336; Sept. 20.
Sickel, Louis C. (See Ackerman, Michael H., assignor.)
Siebenmann, Frederic J., assignor to Deere & Company, Moline, Ill. Cultivating implement. 1,878,000; Sept. 20.
Siemens & Halske, Aktiengesellschaft. (See Gerlach, Erwin, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Hähnel, Kurt, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Strigel, Robert, assignor.)
Signal Accessories Corporation. (See Bossert, William F., assignor.)
Signal Accessories Corporation. (See Hassel, Lewis H., assignor.)
Sigsbey, Fred W., and H. D. Goshorn, Willoughby, Ohio. Micrometer gauge. 1,878,990; Sept. 20.
Silbermann, Boris, Lausanne, Switzerland. Safety device for motor cars. 1,878,194; Sept. 20.
Silver Lake Company. (See Whittier, Roger K., assignor.)
Silverman, Etta, Brooklyn, assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 87,809; Sept. 20.
Simplex Valve and Meter Company. (See Borden, Moro M., assignor.)
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Siner, Raymond K., Philadelphia, Pa. Stocking. 1,878,337; Sept. 20.
Singer, Arthur, assignor, by mesne assignments, to Chicago Governor & Manufacturing Co., Chicago, Ill. Governor. 1,878,721; Sept. 20.
Singer, Fritz, Nuremberg, Germany. Method of extrusion. 1,878,722; Sept. 20.
Singer Manufacturing Company, The. (See Allen, E. B., and Myers, assignors.)
Singer Manufacturing Company, The. (See Fifield, Albert F., assignor.)
Singer Manufacturing Company, The. (See Hemleb, Martin, assignor.)
Sipp-Eastwood Corporation. (See Sipp, Grant, assignor.)
Sipp, Grant, assignor to Sipp-Eastwood Corporation, Paterson, N. J. Warping machine. 1,878,298; Sept. 20.
Sireci, Gesualdo C., Brooklyn, N. Y. Electric hair clipper. 1,878,549; Sept. 20.
Sisk, Martin A., Pittsburgh, Pa. Plumbing fitting. 1,878,195; Sept. 20.
Silpikas, Benjamin, Brooklyn, N. Y. Aeroplane parachute. 1,878,299; Sept. 20.
Sloan, William E., Chicago, Ill. Flush valve. 1,878,001; Sept. 20.
Sloss, Aaron M. (See Rempen, Walter, assignor.)
Slow Motion Suspension Limited. (See Hortsmann, Sidney A., assignor.)
Smallman, Harry, assignor to Hill Independent Manufacturing Company, Philadelphia, Pa. Hand stamp. 1,878,900; Sept. 20.
Smally, Emanuel C., Canton, Ohio. Connection for illuminating devices. 1,878,608; Sept. 20.
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,878,901; Sept. 20.
Smith, A. O., Corporation. (See Richter, Walther, assignor.)
Smith, Charles F., Brooklyn, assignor, by mesne assignments, to Lily-Tulip Cup Corporation, New York, N. Y. Tube cutting mechanism. 1,878,985; Sept. 20.
Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Gaseous conduction apparatus. 1,878,338; Sept. 20.
Smith, Daniel W., Oak Park, Ill., assignor to International Harvester Company. Twine tension device for grain binders. 1,878,902; Sept. 20.
Smith, Francis X., New York, assignor of one-half to G. W. Beatty, Brooklyn, N. Y. Emergency release valve. 1,878,002; Sept. 20.
Smith, Guy O., Whittier, Calif. Belt clamp. 1,878,003; Sept. 20.
Smith, Ira T., Booker, Tex. Antifreeze solution. 1,878,903; Sept. 20.
Smith, Merle L., Upper Darby, assignor to The Electric Tachometer Corporation, Philadelphia, Pa. Recording apparatus. 1,878,004; Sept. 20.
Smith, Roy H., Kent, Ohio. Blank heading machine. 1,878,196; Sept. 20.

Smith, Russell W., Union, N. J. Apparatus for making match books. 1,878,647; Sept. 20.
Smith, Walter H., assignor to Business Systems Limited, Toronto, Ontario, Canada. Printing press. 1,878,904; Sept. 20.
Smith, William A., Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. 1,878,905; Sept. 20.
Smoot, Charles H., Maplewood, N. J. Regulating system for low pressure steam generation. 1,878,005; Sept. 20.
Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake drum. 1,878,006; Sept. 20.
Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Anti rattler. 1,878,197; Sept. 20.
Snelling, Walter O., Allentown, Pa. Process of distillation. 1,878,007; Sept. 20.
Snelling, Walter O., Allentown, Pa. Psychological testing apparatus. 1,878,008; Sept. 20.
Snelling, Walter O., Allentown, Pa. Balance weight. 1,878,009; Sept. 20.
Societe des Electrodes de la Savoie. (See Lund, Einar, assignor.)
Societe l'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude. (See Etienne, Alfred, assignor.)
Societé pour l'Exploitation des Procedes Ab-der-Halden. (See Ab-der-Halden, Charles, assignor.)
Society of Chemical Industry in Basle. (See Landolt, Albert, assignor.)
Sokolow, Samuel. (See Preston, J. E., and Sokolow.)
Souther, John G., Jamaica Plain, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Apparatus for freezing food products. 1,878,198; Sept. 20.
Southern, Robert L., Palo Alto, Calif., assignor, by mesne assignments, to University Engineering Company. Two-stroke cycle engine. 1,878,339; Sept. 20.
Spahr, Dion G., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Apparatus for controlling burners. 1,878,010; Sept. 20.
Spanner, Hans-Joachim. (See Meyer, F., Spanner, and Germer.)
Sparks-Withington Company, The. (See Scofield, T. J., and Miner, assignors.)
Spaulding, Roy C., V. Oldberg, and A. C. Born, assignors to Oldberg Manufacturing Company, Detroit, Mich. Welding apparatus. 1,878,340; Sept. 20.
Spayd, Noah P., Middletown, assignor to The Black-Clawson Company, Hamilton, Ohio. Stave jointing machine. 1,878,550; Sept. 20.
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,810; Sept. 20.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spencer, Percy L., Medford, assignor to Raytheon Inc., Cambridge, Mass. Voltage regulator. 1,878,341; Sept. 20.
Sperr, Frederick W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Gas purification process. 1,878,609; Sept. 20.
Spinasse, Arthur E., Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company. Apparatus and method for drawing glass. 1,878,906; Sept. 20.
Sprague-Sells Corporation. (See McGhee, Thurman, assignor.)
Sprague Signs, Inc. (See Recke, William, assignor.)
Spring, Alva F., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Hand grenade, etc. 1,878,487; Sept. 20.
Squires, John, Detroit, Mich. Propelling means for airplanes. 1,878,011; Sept. 20.
Staats, Edward, jr., Merrill, Wis. Airplane propeller. 1,878,907; Sept. 20.
Stacey, Alfred E., jr., Essex Falls, and C. M. Ashley, South Orange, assignors to Carrier Engineering Corporation, Newark, N. J. Air conditioning and distributing unit. 1,878,012; Sept. 20.
Staib, Karl, Bitterfeld, assignor to the Firm I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of anhydrous metal chlorides. 1,878,013; Sept. 20.
Stalker, Elward A., Ann Arbor, Mich. Airplane construction. 1,878,723; Sept. 20.
Standard Oil Company of California. (See Chappell, Marvin L., assignor.)
Standard Oil Development Company. (See Coleman, Stewart P., assignor.)
Standard Oil Development Company. (See Grant, Dudley H., assignor.)
Standard Oil Development Company. (See Hopkins, Marion B., assignor.)
Standard Oil Development Company. (See Lebo, Robert B., assignor.)
Standard Oil Development Company. (See Lewis, Warren K., assignor.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Schonberg, Jackson R., assignor.)
Standard Oil Development Company. (See Stratford, Reginald K., assignor.)
Standard Oil Development Company. (See Truman, Orley H., assignor.)
Standard Oil Development Company. (See Wilson, A. L., and Hulse, assignors.)
Standard Steel and Bearings, Inc. See Hodge, George O., assignor.)
Stark, W. H. (See Hubbard, Hugh, assignor.)
Staup, John W., Terre Haute, Ind. Dredge pump. 1,878,429; Sept. 20.
Staver, Harry B. (See White, John F., assignor.)
Steenweg, William F., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Resistor. 1,878,014; Sept. 20.
Steffensen, Marius M., Seattle, Wash. Fish lure. 1,878,015; Sept. 20.
Stegeman, Henry J. (See Locke, S. D., and Stegeman.)
Stéhlik, Franz. (See Tausz, A., and Stéhlik.)
Stein, Berthold. (See Schmidt, R. E., Stein and Bamberger.)
Stein, Leonhard. (See Bockmühl, M., Ehrhart and Stein.)
Stein, S. & Co. (See Block, H. W., and Christenson, assignors.)
Steinberg, Leo, et al. (See Jones, Clarence M., assignor.)
Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Pothead. 1,878,016; Sept. 20.
Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Contact clip. 1,878,017; Sept. 20.
Steinmüller, Lebrecht, Gummersbach, Germany. Water tube boiler. 1,878,908; Sept. 20.
Stelzner, Herman. (See Drägert, O. H., and Stelzner.)
Stenger, Victor R., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock nut. 1,878,199; Sept. 20.
Stephens, Allan G., East Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Cone-horn combination. 1,878,018; Sept. 20.
Stern, Louis, Sons, Inc. (See Stern, Robert, assignor.)
Stern, Robert, Union City, assignor to Louis Stern Sons, Inc., Kearny, N. J. Testing device. 1,878,610; Sept. 20.
Stevens, Walter A., North Plainfield, N. J., assignor to American Telephone and Telegraph Company. Generating and modulating apparatus. 1,878,724; Sept. 20.
Stevenson, Earl P., Newton, and H. A. Buron, Cambridge, Mass., assignors to The Richardson Company, Lockland, Ohio, Felted fibrous composition. 1,878,300; Sept. 20.
Stevenson, Levi A., Kalispell, Mont. Edible confection. 1,878,342; Sept. 20.
Stickney, Charles A., deceased, by J. G. Tetlow, administrator, Rockford, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Water softener valve. 1,878,019; Sept. 20.
Stifel, Edward W., assignor to J. L. Stifel & Sons, Inc., Wheeling, W. Va. Tag. Des. 87,811; Sept. 20.
Stifel, J. L., & Sons, Inc. (See Stifel, Edward W., assignor.)
Stiles, Edward M., Burlington, Iowa, assignor to U. S. Slicing Machine Company. Slicing machine. 1,878,020; Sept. 20.
Stiles, Jot E. (See Arata, Frank, and Stiles.)
Stimson, Jonathan C., St. Louis, Mo. Signal lantern. 1,878,909; Sept. 20.
Stine, Louis B., Niles Center, assignor to Crane Co., Chicago, Ill. Closet bowl with spray receptor. 1,878,910; Sept. 20.
Stolz, Friedrich, Frankfort-on-the-Main-Hochst, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. α-para-hydroxyphenyl-β-methylaminopropanol and preparing it. 1,878,021; Sept. 20.
Stone, Henry A., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Capping device. 1,878,843; Sept. 20.
Stoner-Ames Brake Company. (See Stoner, George H., assignor.)
Stoner, George H., assignor to Stoner-Ames Brake Company, Inc., Boston, Mass. Brake. 1,878,911; Sept. 20.
Stoner, George H., assignor to Stoner-Ames Brake Company, Inc., Boston, Mass. Brake anchor. 1,878,912; Sept. 20.
Stovall, Fred, Monroe, La. Expansible pipe holder. 1,878,725; Sept. 20.
Stowell, Leonard B., assignor to Stowell Manufacturing Co., Ontario, Oreg. Lawn mower sharpener. 1,878,648; Sept. 20.
Stowell Manufacturing Co. (See Stowell, Leonard B., assignor.)
Stratford, Reginald K., Sarnia, Ontario, Canada, assignor to Standard Oil Development Company. Recovery of solvents used in the purification of hydrocarbons. 1,878,022; Sept. 20.
Strelow, Wilhelm, Berlin-Zehlendorf-West, Germany. Dry gas meter. 1,878,344; Sept. 20.
Streuber, Hans H., Bronx, N. Y. Producing mechanical negatives. 1,878,023; Sept. 20.
Strigel, Robert, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin, Siemensstadt, Germany. Electric gas purifying plant. 1,878,024; Sept. 20.
Stringfield, William H. Dehydrator for preservation of human bodies after decease. 1,878,649; Sept. 20.

Struve, Frederick E., Philadelphia, Pa. Stocking. Des. 87,812; Sept. 20.
Struve, Frederick E., Philadelphia, Pa. Stocking. Des. 87,813; Sept. 20.
Stuart, Frank J., St. Louis, Mo. Surgical support. 1,878,913; Sept. 20.
Stuckert, Felix J. (See Briggs, S. F., and Stuckert.)
Stuebing, William, jr., Cincinnati, Ohio. Lift truck. 1,878,726; Sept. 20.
Stunz, Bessie W. (See Sarver, Emmett F., assignor.)
Sturbelle, Lucien C., Stockel, near Brussels, Belgium. Centrifugal variable speed gear. 1,878,727; Sept. 20.
Sullivan Machinery Company. (See Johansen, Harry C.)
Sulzer Freres Societe Anonyme, the Firm of. (See Kägi, Emil, assignor.)
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Punching and forming machine. 1,878,201; Sept. 20.
Suter, Theophilus A., Brooklyn, N. Y., assignor to Air Way Electric Appliance Corporation, Toledo, Ohio. Grooming tool. 1,878,345; Sept. 20.
Sutphen, Robert M., assignor to Pfaff and Kendall, Newark, N. J. Illuminated flagpole. 1,878,447; Sept. 20.
Svendsen, Robert T., and D. G. Chandler, Minneapolis, Minn. Propeller mounting. Re18,602; Sept. 20.
Svendsen, Robert T., and D. G. Chandler, Minneapolis, Minn., assignors to Neptune Engineering Company, Dover, Del. Propeller mounting. Re18,605; Sept. 20.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,878,430; Sept. 20.
Swanson, Reuben D., assignor of one-half to O. J. Jausiin, Walla Walla, Wash. Trailer cart. 1,878,346; Sept. 20.
Swanton, Charles L. (See Hoppe, W. H., and Swanton.)
Swartz, Abraham W., Norristown, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Stocking topping machine. 1,878,728; Sept. 20.
Swartz, Richey L., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,878,914; Sept. 20.
Swartz, Stephen, Long Beach, Calif., assignor to Jenkins Petroleum Process Company, Chicago, Ill. Clarification of hydrocarbons containing suspended or colloidal complexes. 1,878,650; Sept. 20.
Sweeley, Edward A., Alexandria, Va., and N. T. Anderson, Washington, D. C. Closure fastener, seal pin type. 1,878,551; Sept. 20.
Swenson, Carl E., Rockford, Ill., assignor to Automotive Research Corporation. Transmission. 1,878,200; Sept. 20.
Swift and Company. (See Seaver, Floyd, assignor.)
Sykes, William E., Buffalo, N. Y. Change speed gearing for rolling mills and the like. 1,878,729; Sept. 20.
Sykes, William E. Buffalo, N. Y. Flexible coupling. 1,878,730; Sept. 20.
Szegvári, Andrew. (See Klein, P., Szegvári, McKay, Hoyes, and Trobridge.)
Tabulating Machine Company, The. (See Kölm, Ulrich, assignor.)
Tabulating Machine Company, The. (See Lake, Clair D., assignor.)
Tabulating Machine Company, The. (See Lee, Fred L., assignor.)
Talbot, Harrie F. (See Fordyce, R. G., and Talbot.)
Tanning Process Company, The. (See Merritt, Matthew M., assignor.)
Tappan, Dewitt, assignor to E. C. Brown Company Rochester, N. Y. Compressed air duster. 1,877,778; Sept. 20.
Tascher, Joseph. (See Morgenstern, N., and Tascher.)
Tausz, Alexander, and F. Stéhlik, Budapest, Hungary. Process and apparatus for preparing printing rollers. 1,878,347; Sept. 20.
Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. High frequency transmission system. 1,878,252; Sept. 20.
Teague, Walter D., Forest Hills, N. Y., assignor to General Register Corporation, Brooklyn, N. Y. Ticket issuing machine cabinet. Des. 87,814; Sept. 20.
Teetsow, Waldemar H., Tallinn, Esthonia. Milk evaporator. 1,878,651; Sept. 20.
Telefonaktiebolaget L. M. Ericsson. (See Löfgren, Erik O., assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Terada, Toyomatsu, San Francisco, Calif. Beet harvester. 1,878,349; Sept. 20.
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Te Selle, Polly D., Berkeley, Calif. Tiltably mounted pitcher. 1,878,348; Sept. 20.
Tetlow, James G., administrator. (See Stickney, Charles A.)
Teupel, Ernest, Dormagen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Alkyl cellulose esters. 1,877,779; Sept. 20.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Temperature controlling device for refrigerating machines. 1,878,301; Sept. 20.
Thomas, Henry, London, England, assignor to U. S. Slicing Machine Company, La Porte, Ind. Display tray for slicing machines. 1,878,202; Sept. 20.
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Combined cooker and cooler. 1,878,025; Sept. 20.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulating means. 1,878,350; Sept. 20.
Thompson, Paul W., Detroit, Mich. Sealing the shaft packings of turbines. 1,878,731; Sept. 20.
Thompson, William C., Seattle, Wash. Spin-o-plane. 1,878,732; Sept. 20.
Thorssell, Carl T., Kassel, Germany. Production of potassium nitrate. 1,878,733; Sept. 20.
Thrall, Walter L., assignor, by mesne assignments, to Reliance Regulator Corporation, Alhambra, Calif. Gas regulating apparatus. 1,878,060; Sept. 20.
Throop, Warren A., Spokane, Wash. Syringe. 1,878,026; Sept. 20.
Tiddy, William, Jeffersonville, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Removing phenols from gas liquor. 1,878,979; Sept. 20.
Timken Roller Bearing Company, The. (See Wooler, Ernest, assignor.)
Tinnerman, Albert H., Cleveland, Ohio. Gas burner control apparatus. 1,878,552; Sept. 20.
Titherley, Arthur W., Winchester, and D. P. Hudson, Llangollen, England, assignors to Monsanto Chemical Works, St. Louis, Mo. Manufacture of aromatic hydroxy compounds. 1,878,061; Sept. 20.
Tobin, Kenneth J., assignor to Camel Company, Chicago, Ill. Car construction. 1,878,062; Sept. 20.
Todd, Charles A., Owensboro, Ky. Combination garden hand tool. 1,878,553; Sept. 20.
Todd, Joseph A., Sioux City, Iowa. Protective envelope for liquid fuel containers. 1,878,063; Sept. 20.
Toledo Scale Manufacturing Company. (See Marshall, C. O., and Hem, assignors.)
Toledo Scale Manufacturing Company. (See Ulrich, Edward F., assignor.)
Tourtois, Fernand, assignor to Coty, Inc., New York, N. Y. Display stand. 1,878,302; Sept. 20.
Townsend, Nathan B., et al. (See Nowlin, Aubrey C., assignor.)
Townshend, Bailey, Jackson Heights, and J. D. Johnston, Corona, N. Y., assignors to Dayton Scale Company, Dayton, Ohio. Electrical scale. 1,878,554; Sept. 20.
Transamerica Products Co. Inc. (See Rappaport, Dario, assignor.)
Trathen, James, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Fluid conductor coupling. 1,878,303; Sept. 20.
Trede, Hans. (See Hartmann, O. H., and Trede.)
Trejo, Stella A., assignor of fifty-five per cent to W. B. Leslie, Kansas City, Mo. Needle. 1,878,915; Sept. 20.
Tremolada, Guglielmo R., Los Angeles, Calif. Fountain brush. 1,878,027; Sept. 20.
Tridex Corporation. (See Wier, Stuart A., assignor.)
Trifari, Gustavo, Brooklyn, assignor to Trifari, Krussman & Fishel, Inc., New York, N. Y. Clip brooch. 1,878,028; Sept. 20.
Trifari, Krussman & Fishel, Inc. (See Trifari, Gustavo, assignor.)
Triplett, Armstead E., Dallas, Tex. Cooking apparatus. 1,878,064; Sept. 20.
Trobridge, Geoffrey W. (See Klein, P., Szegvári, McKay, Hayes, and Trobridge.)
Tronic Aire, Incorporated. (See Gulyban, John F., assignor.)
Truelsen, Frederik F. (See Folker, J. K., and Truelsen.)
Trujillo, Deciderio, Denver, Colo. Swimmer's speed accelerating device. 1,878,916; Sept. 20.
Truman, Orley H., Houston, Tex., assignor to Standard Oil Development Company. Underground exploration method. 1,878,029; Sept. 20.
Trumbull, Alexander H., Stratford, Conn., and G. R. Trumbull, Manchester Depot, Vt., assignors to The Bulls-Eye Electric Manufacturing Company, Torrington, Conn. Electric fuse. 1,878,204; Sept. 20.
Trumbull, George R. (See Trumbull, Alexander H. and G. R.)
Tunnel and Mine Machinery Company. (See Warner, A. W., and Ballard, assignors.)
Turnbow, Grover D. (See Gray, Chester E., assignor.)
Turnbow, Grover D., Davis, Calif. Food product and making same. 1,878,203; Sept. 20.
Turner, John, Boston, Mass., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn Mechanical control. 1,878,065; Sept. 20.
Turner, William, Sheffield, England. Fluid pressure indicator for pneumatic tires and other inflated bodies. 1,878,917; Sept. 20.
Turton, Ralph E., Lexington, Ky. Illuminated pencil 1,878,431; Sept. 20.
Udy, Marvin J., Niagara Falls, N. Y., assignor to Electro Metallurgical Company. Manufacture of chromic acid. 1,878,918; Sept. 20.
Uhrik, Willie, Bellville, Tex. Poultry feeder. 1,878,555, Sept. 20.
Ulrich, Edward F., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,878,205; Sept. 20.
Ulrich, Louis, Dominion, Nova Scotia, Canada. Brake system. 1,878,734; Sept. 20.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)

Underwood, Julius E., and C. A. Cabell, Washington, D. C., assignors to National Lime Association. Lime mixture. 1,878,206; Sept. 20.
Unger, Louis, Warren, Mich. Automatic camber plate. 1,878,030; Sept. 20.
Uniflow Manufacturing Company. (See Bashloum, Jacob C., assignor.)
Union Switch & Signal Company, The. (See Dowling, Philip H., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., and Wells, assignors.)
Union Switch & Signal Company, The. (See Utne, Per, assignor.)
United States Finishing Company. (See McKinley, John W., assignor.)
U. S. Postal Meter Corporation. (See Mack, Luther L., assignor.)
U. S. Slicing Machine Company. (See Sensow, Anton C., assignor.)
U. S. Slicing Machine Company. (See Stiles, Edward M., assignor.)
U. S. Slicing Machine Company. (See Thomas, Henry, assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelis F. M., assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Wilhelmus A., assignor.)
U. S. Slicing Machine Company. (See Van Hoorn, Jetze, assignor.)
U. S. Slicing Machine Company. (See Van Weenen, Franciscus L., assignor.)
Universal Hydraulic Corporation. (See Kinzie, P. A., and Savage, assignors.)
University Engineering Company. (See Southern, Robert L., assignor.)
Upton, Albert L., St. Louis, Mo. Control system for theater lighting circuits. 1,878,304; Sept. 20.
Utne, Per, Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Speed responsive device. 1,878,305; Sept. 20.
Valentine, Frank A. (See Scott, D. C., and Valentine.)
Van Berkel, Cornelis F. M., Wassenaar, The Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Sharpener for slicing machines. 1,878,066; Sept. 20.
Van Berkel, Cornelis F. M., Wassenaar, The Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Driving mechanism for slicing machines. 1,878,067; Sept. 20.
Van Berkel, Cornelis F. M., Wassenaar, The Netherlands, assignors to U. S. Slicing Machine Company, La Porte, Ind. Slice stacker for slicing machines. 1,878,069; Sept. 20.
Van Berkel, Cornelis F. M., Wassenaar, The Netherlands, assignors to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,878,070; Sept. 20.
Van Berkel, Johannes C., Copenhagen, Denmark, assignor, by mesne assignments, to Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines volgens Van Berkel's Patent en van andere Werktuigen, Rotterdam, Holland, Rotterdam, Netherlands. Slice deflectors. 1,878,071; Sept. 20.
Van Berkel, Wilmelmus A., Clarens, Switzerland, assignor to U. S. Slicing Machine Company, La Porte, Ind. Tranmission gearing. 1,878,068; Sept. 20.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Display counter. 1,878,072; Sept. 20.
Van Dam, Dirk H. (See Van Dam, Hendrick, and D. H.)
Van Dam, Hendrik, Capelle-on-the-Ijssel, and D. H. Van Dam, Rotterdam, Netherlands. Driving system for loud speakers. 1,878,919; Sept. 20.
Van Dorn, Herbert E., Chicago, Ill., assignor to W. G. Van Dorn, Pasadena, Calif. Automatic car and air coupler. 1,878,031; Sept. 20.
Van Dorn, Herbert E., Chicago, Ill., assignor to William G. Van Dorn, Pasadena, Calif. Drawbar carrier. 1,878,032; Sept. 20.
Van Dorn, William G. (See Van Dorn, Herbert E., assignor.)
Van Hoorn, Jetze, Voorburg, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Motor driven slicing machine. 1,878,033; Sept. 20.
Vansant, Richard H., Chicago, Ill. Foldable door. 1,878,034; Sept. 20.
Vansant, Richard H., Chicago, Ill. Foldable door. 1,878,073; Sept. 20.
Van Urk, Arend T. (See Bruijnes, J., and Van Urk.)
Van Weenen, Franciscus L., Rotterdam, Netherlands, assignors to U. S. Slicing Machine Company, La Porte, Ind. Lubricating mechanism for slicing machines. 1,878,207; Sept. 20.
Varley, Thomas W., and W. C. Nein, New York, N. Y. Train control. 1,878,735; Sept. 20.
Veale, George W., Cleveland Heights, assignor to Eaton Manufacturing Company, Cleveland, Ohio. Impact bar for automobile bumpers. Des. 87,815; Sept. 20.
Venzie, Frederick M., Philadelphia, Pa. Plaster board. 1,878,611; Sept. 20.
Vickers, Harry F., Los Angeles, Calif. High speed pump. 1,878,736; Sept. 20.
Vickery, Charles H., Pittsfield, Mass. Indicating mechanism for motor cars and the like. 1,878,035; Sept. 20.
Vincent, Harry S., Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Locomotive. 1,878,208; Sept. 20.
Vincent, Harry S., Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., Locomotive auxiliary port controlling means. 1,878,209; Sept. 20.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,878,210; Sept. 20.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle transmission. 1,878,556; Sept. 20.
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Drilling mechanism. 1,878,036; Sept. 20.
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Loading machine. 1,878,037; Sept. 20.
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Drilling mechanism. 1,878,074; Sept. 20.
Vollmann, Heinrich. (See Krinzlein, G., Corell, and Vollmann.)
Von Frommer, Rudolf, Budapest, Hungary. Sliding cover for automatic firearms. 1,878,038; Sept. 20.
Von Frommer, Rudolf, Budapest, Hungary. Cartridge magazine for small arms. 1,878,039; Sept. 20.
Von Herz, Edmund, Cologne-Dellbruck, near Cologne-on-the-Rhine, Germany. Initial detonating explosive matter and for the manufacture of detonating caps in accordance therewith. 1,878,652; Sept. 20.
Voorhees, Lee G., Long Island City, N. Y., assignor to Oxweld Acetylene Company. Storage gasometer. 1,878,211; Sept. 20.
Voss, Arthur, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Water-soluble viscous condensation products of aldehydes and preparing them. 1,878,040; Sept. 20.
Voss, William J., Hammond, Ind. Kite controller. 1,878,041; Sept. 20.
Waddell, Harvey H., Cary, N. C. Automobile starting switch. 1,878,920; Sept. 20.
Waddington Tamperproof Taximeter, Limited. (See Claude, Frank H., assignor.)
Wade, Wallace G. (See Freeman, H. M., and Wade.)
Wagner, James S., Charlerol, assignor of one-fifth to G. W. King, Fayette County, one-fifth to McClelland Hixenbaugh, one-fifth to H. P. Ray, and one-fifth to C. S. Bateman, Charlerol, Pa. Refrigeration by means of carbon dioxide in solid state. 1,878,042; Sept. 20.
Wagner, Theodore C., Chemnitz, Germany. Warp stop-motion for looms. 1,878,043; Sept. 20.
Wahl, Ottmar, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works Inc., New York, N. Y. Asymmetric polymethine dyestuffs. 1,878,557; Sept. 20.
Wahlin, Fritz. (See Bramsen, S., and Wahlin.)
Walker, Robert O., Brooklyn, N. Y. Motion picture screen. 1,878,075; Sept. 20.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Motion picture of electrical lead-in devices. 1,878,212; Sept. 20.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Welding apparatus. 1,878,558; Sept. 20.
Wallace, Charles F., Westfield, assignor to Wallace & Tiernan Products, Inc., Belleville, N. J. Electrically energized motor. 1,878,076; Sept. 20.
Wallace, Marcel, St. George, assignor of one-third to E. L. Corbett, Bronx County, N. Y. Radio beacon system. 1,878,737; Sept. 20.
Wallace & Tiernan Products, Inc. (See Wallace, Charles F., assignor.)
Waller, John A., Beverly Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Device for setting circular saws. 1,878,077; Sept. 20.
Waller Manufacturing Corporation, Ltd. (See Waller, John A., assignor.)
Wallis, Ernest A. (See Fegely, John P., assignor.)
Walter, Bertha B., executrix. (See Walter, Raymond A.)
Walter, Harrison B., assignor to Container Corporation of America, Chicago, Ill. Container. 1,878,351; Sept. 20.
Walter, Raymond A., deceased, New York, N. Y.; B. B. Walter, executrix, assignor to Goodman Manufacturing Company, Chicago, Ill. Connecter link. 1,878,044; Sept. 20.
Walther, George, near Dayton, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Metal wheel. 1,878,213; Sept. 20.
Walton, Clifford T., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Device for the transmission of power. 1,878,078; Sept. 20.
Wantz, Clarence. (See Leins, O. J., and Wantz.)
Ward, George E., Los Angeles, and O. S. Palmer, Glendale, Calif., assignors to Davis Standard Bread Company. Dough rolling machine. 1,878,352; Sept. 20
Wardwell, George W. (See Bell, S. R., and Wardwell.)
Warner, Arthur W., Media, and R. F. Ballard, Chester, assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa. Jack mechanism. 1,878,738; Sept. 20.

Warren, Robert E., Los Angeles, Calif. Washing machine. 1,878,254; Sept. 20.
Waterbury Brass Goods Corporation, The. (See Miner, Anson W., assignor.)
Waterman, Adolph C. (See Schakel, W. F., and Waterman.)
Waterworks Supply Company. (See Chamberlain, Leon H., assignor.)
Watson, Richard M., Detroit, Mich. Loose-leaf binder and forming the same. 1,878,079; Sept. 20.
Watson, William W., Jamestown, N. Y. Roller window screen. 1,878,710; Sept. 20.
Watter, Max, Brooklyn, N. Y. Steam generator and sprayer for bakery ovens. 1,878,353; Sept. 20.
Wayne Company. (See Griffin, William M., assignor.)
Weaver, William B., et al. (See Bégin, Lucien, assignor.)
Weber, John, Milton, Pa. Cedar chest or similar article. Des. 87,816; Sept. 20.
Weber, John, Milton, Pa. Cedar chest or similar article. Des. 87,817; Sept. 20.
Weber, John, Milton, Pa. Cedar chest or similar article. Des. 87,818; Sept. 20.
Weber, John, Milton, Pa. Cedar chest or similar article. Des. 87,819; Sept. 20.
Weber, John, Milton, Pa. Cedar chest or similar article. Des. 87,820; Sept. 20.
Wedler, Harry G., assignor to The Wedler-Shuford Co., St. Louis, Mo. Seat cover. 1,878,045; Sept. 20.
Wedler-Shuford Co., The. (See Wedler, Harry G., assignor.)
Weeks, Ernest A., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Hydraulic road scraper. 1,878,080; Sept. 20.
Wego, Peter C., St. Paul, Minn. Bearing guard for conveyer rollers. 1,878,214; Sept. 20.
Weiller, Paul G., Bloomfield, N. J., assignor of fifty per cent to Radio Patents Corporation. Detector for modulated alternating currents. 1,878,046; Sept. 20.
Weinstein, Leon, St. Louis, Mo. Combined shoe shank stiffener and heel brace. 1,878,612; Sept. 20.
Welch, Arthur R., Hoquiam, Wash. Patching veneer. 1,878,081; Sept. 20.
Welch, Charles H., jr. (See Lane, T. E., and Welch.)
Welk, Julius R., Churchbridge, Saskatchewan, Canada. Pump. 1,878,739; Sept. 20.
Wellman, Howard C., assignor to Eastman Kodak Company, Rochester, N. Y. Self threading motion picture apparatus. 1,878,215; Sept. 20.
Wells, Fred W., Greenfield, Mass. Screw cutting die. 1,878,216; Sept. 20.
Wells, Jackson B., and C. L. A. Wynd, assignors to Eastman Kodak Company, Rochester, N. Y. Making cellulosic films. 1,878,559; Sept. 20.
Wells, Robert E., and D. W. Mersereau, assignors to General Railway Signal Company, Rochester, N. Y. Centralized traffic controlling system. 1,878,083; Sept. 20.
Wells, Wesley B. (See Fisher, A. W., and Wells.)
Wempe, Friedrich, assignor to Schmidt'sche Heissdampf Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Apparatus for regulating the operation of steam generating plants, especially for locomotives. 1,878,217; Sept. 20.
Wenger, Frederick R., Los Angeles, Calif. Making a cellular composition. 1,878,047; Sept. 20.
Werley, George L. (See Anderson, E. A., and Werley.)
Werner, Joseph, Perth Amboy, N. J. Flush box. 1,878,613; Sept. 20.
Wesix National Company. (See Hicks, William W., assignor.)
Wessman, Arnt W., Chicago, Ill., assignor to International Harvester Company. Grain measuring device. 1,878,922; Sept. 20.
Wesman, Edwin G., Easton, assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Dispensing device. 1,878,354; Sept. 20.
Westinghouse Electric & Manufacturing Company. (See Aronoff, Samuel, assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, John V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Conrad, Frank, assignor.)
Westinghouse Electric & Manufacturing Company. (See Freeman, H. M., and Wade, assignors.)
Westinghouse Electric & Manufacturing Company. (See Griscom, Samuel B., assignor.)
Westinghouse Electric & Manufacturing Company. (See High, Jurjen S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Koch, Gustav H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Laffoon, Carthrae M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Little, Donald G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mahaney, R., and Brazelton, assignors.)
Westinghouse Electric & Manufacturing Company. (See McGee, J. E., and Baker, assignors.)
Westinghouse Electric & Manufacturing Company. (See Ringbloom, Carl A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Seabert, John D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stephens, Allan G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Winkler, Frederic C., assignor.)
Whann, Jesse P., assignor to Layne & Bowler Corporation, Los Angeles, Calif. Oil well screen. 1,878,432; Sept. 20.
Wharton, William, jr., & Company. (See Hulbert, William G., assignor.)
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Operating superheterodyne receivers. 1,878,614; Sept. 20.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Electric coupling circuits. 1,878,653; Sept. 20.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Push-pull amplifier. 1,878,740; Sept. 20.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Push-pull amplifier. 1,878,741; Sept. 20.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Thermionic amplifier. 1,878,742; Sept. 20.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Push-pull amplifier. 1,878,743; Sept. 20.
Wheeler, Lawrence B., St. Louis, Mo. Belt construction. 1,878,048; Sept. 20.
Wheeler, Melville M., Nashville, Tenn. Vanity dressing table. Des. 87,821; Sept. 20.
Whitby, George S., Montreal, Quebec, Canada, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Process of and compound for treating rubber. 1,878,654; Sept. 20.
Whitby, George S., Montreal, Quebec, Canada, assignor to The Roessler & Hasslacher Chemical Company, New York, N. Y. Process of and compound for treating rubber. 1,878,655; Sept. 20.
White, Burt H., Syracuse, N. Y. Child's amusement device. 1,878,355; Sept. 20.
White, John F., assignor to H. B. Staver, Chicago, Ill. Starting cage for racing animals. 1,878,218; Sept. 20.
White Motor Company, The. (See Church, Harold D., assignor.)
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Anchor. 1,878,921; Sept. 20.
Whitehorn, Arthur R., assignor to General Railway Signal Company, Rochester, N. Y. Centralized traffic control system for railroads. 1,878,085; Sept. 20.
Whitney, Karl H., Kirksville, Mo. Vibratory apparatus. 1,878,925; Sept. 20.
Whittier, Roger K., Chattahoochee, Ga., assignor to Silver Lake Company, Newtonville, Mass. Hank of strand material. 1,878,306; Sept. 20.
Whyte, William C., assignor to The Electro-Alloys Company, Elyria, Ohio. Retort. 1,878,307; Sept. 20.
Wiard, George W., Detroit, Mich., assignor, by direct and mesne assignments, to The Buckeye Jack Manufacturing Company, Alliance, Ohio. Lifting jack. 1,878,219; Sept. 20.
Wiarda, John C. & Company. (See Laury, N. Arthur, assignor.)
Wiedeke, Gustav, assignor to Gustav Wiedeke Company, Dayton, Ohio. Tube expander. 1,878,049; Sept. 20.
Wiedeke, Gustav, Company. (See Wiedeke, Gustav, assignor.)
Wier, Stuart A., assignor to Tridex Corporation, Dallas, Tex. Apparatus for cleaning surfaces. 1,878,560; Sept. 20.
Wiesenfeld, Leo, Brooklyn, N. Y. Elastic spat. 1,878,923; Sept. 20.
Wilcox, Gertrude, Mayville, N. Y. Automatic oil stop. 1,878,356; Sept. 20.
Wilhelm, Harold F., et al. (See Bégin, Lucien, assignor.)
Wilke, Karl, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the benzanthrone-pyrazolanthrone series. 1,878,050; Sept. 20.
Will, John H., assignor to Armour and Company, Chicago, Ill. Blending device. 1,878,924; Sept. 20.
Williams, Stanley V. (See Marris, C. C., Polgreen, and Williams.)
Williams, William H., assignor to The Dow Chemical Company, Midland, Mich. Hydrated phenyl phenate product. 1,878,082; Sept. 20.
Williams, William J., assignor to Motor Devices, Inc., Chicago, Ill. Automotive electrical system. 1,878,051; Sept. 20.
Willis, Orvis C. (See Cox, O., and Willis.)
Willshaw, Harry, W. G. Gorham, and R. F. Lee, Birmingham, England, assignors to American Anode, Incorporated, New York, N. Y. Pumping of rubber latex and the like and apparatus therefor. 1,878,220; Sept. 20.
Wilson, Amyuit L., and S. H. Hulse, Elizabeth, N. J., assignors to Standard Oil Development Company. Centrifugal liquid and gas separator. 1,878,052; Sept. 20.
Wilson, Edward, St. Louis, Mo. Compressor or pump. 1,878,744; Sept. 20.
Wilson, H. E., Company, The. (See Wilson, Herbert E., assignor.)
Wilson, Herbert E., assignor to The H. E. Wilson Company, Inc., Antrim, N. H. Lug strap holder. 1,878,221; Sept. 20.
Wilson, Ray C. (See Arnold, H. S., and Wilson.)

Wilson, Wylie G., Elizabeth, N. J. Valve and the like. 1,878,222; Sept. 20.
Winger, Stover C., Los Angeles, assignor of forty per cent to H. C. Lanpher, Beverly Hills, and twenty per cent to B. B. Roberts, Los Angeles, Calif. Clutching device. 1,878,053; Sept. 20.
Winkler, Frederic C., Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Lighting apparatus. 1,878,084; Sept. 20.
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Control rod housing. 1,878,357; Sept. 20.
Winthrop Chemical Company. (See Schmidt, W., and Hartmuth, assignors.)
Winthrop Chemical Company. (See Stolz, Friedrich, assignor.)
Winthrop Chemical Company, Inc. (See Bockmühl, M., Ehrhart, and Stein, assignors.)
Wippermann, Erich, Hagen-Delstern, Germany. Piston internal combustion engine with cylinder stars arranged one behind the other in a common frame. 1,878,561; Sept. 20.
Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Witherow, William P., Pittsburgh, Pa., assignor, by mesne assignments, to Republic Steel Corporation, Jersey City, N. J. Die rolling and article produced thereby. 1,878,054; Sept. 20.
Wittliff, Theodore H., Cleveland, Ohio. Stamped metal article and making same. 1,878,055; Sept. 20.
Wolfe, Archie R., Summit, N. J. Electric socket switch. 1,878,255; Sept. 20.
Wolff, Hugo, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,878,056; Sept. 20.
Wolkow, August E., Hartford, Wis. Device for wiring honey comb frames. 1,878,746; Sept. 20.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding machine. 1,878,745; Sept. 20.
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, William A., jr., Montreal, Quebec, Canada, assignor to International Business Machines Corporation, New York, N. Y. Ruling attachment for time recorders. 1,878,562; Sept. 20.
Wood, William C., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Toy telephone. 1,878,615; Sept. 20.
Wood, William C., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Toy telephone and bank. 1,878,616; Sept. 20.
Woodall, Herbert J., and M. S. Randall, assignors to Woodall Industries Incorporated, Detroit, Mich. Laminated panel and its fabrication. 1,878,086; Sept. 20.
Woodall Industries Incorporated. (See Woodall, H. J., and Randall, assignors.)
Woodbridge, Joseph L., Philadelphia, Pa. Filling device for battery cells. 1,878,223; Sept. 20.
Woodbridge, Joseph L., Philadelphia, Pa. Train lighting and power system. 1,878,563; Sept. 20.
Woodbury, Clifford A. (See Cox, I. J., Kirst, and Woodbury.)
Woodbury, John E., Worcester, Mass. Doctor cleaning device. 1,878,564; Sept. 20.
Woodbury, John E., Worcester, Mass. Intaglio printing. 1,878,565; Sept. 20.
Wooler, Ernest, assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing and cage. 1,878,057; Sept. 20.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,878,224; Sept. 20.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,878,566; Sept. 20.
Worcester Loom Works. (See Alvord, Charles C., assignor.)
Wright, Clark W., Greenville, S. C. Vehicle light. Des. 87,822; Sept. 20.
Wright, Leonard K., Jackson Heights, Long Island, N. Y. Refrigerating apparatus. 1,878,225; Sept. 20.
Wrigley, Wm., Jr., Company. (See Johnson, Arthur E., assignor.)
Wynd, Clarence L. A. (See Wells, J. B. and Wynd.)
Yarrow, Harold E., Glasgow, Scotland. Pulverized fuel burner. 1,878,926; Sept. 20.
Yates, Emma H. (See Yates, Robert, assignor.)
Yates, Robert, assignor of one-half to Emma H. Yates, Passaic, N. J. Blade rotating mechanism. 1,878,358; Sept. 20.
Yates, Sampson W., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Process of heat treating iron sulphide material. 1,878,226; Sept. 20.
York Ice Machinery Corporation. (See Baker, Irving C., assignor.)
Young, Daniel J., assignor to Young-Whitwell Gas Process Company, Tacoma, Wash. Making carbureted water gas. 1,878,227; Sept. 20.
Young, Forrest J., Torrance, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Slip with removable liner. 1,878,433; Sept. 20.
Young, Ralph P., Marlboro, N. Y. Handle for wooden baskets. 1,878,567; Sept. 20.
Young-Whitwell Gas Process Company. (See Young, Daniel J., assignor.)
Youngblood, Henry J., Detroit, Mich. Rotary power driven tool. 1,878,747; Sept. 20.
Youngstown Steel Door Co., The. (See Barrows, Allan S., assignor.)
Yuba Manufacturing Company. (See Macaulay, Walter B., assignor.)
Zaccheo, Thomas, Windsor Locks, Conn. Apparatus for distributing material. 1,878,748; Sept. 20.
Zademach, Erich R., New Rochelle, N. Y., assignor, by mesne assignments, to Hobart Manufacturing Company, Troy, Ohio. Washing machine. 1,878,568; Sept. 20.
Zeh, Ludwig. (See Bollweg, B., Zeh and Kramer.)
Zeh, Ludwig. (See Hentrich, W. and Zeh.)
Zénon, Yvan, Rosedale, N. Y. Lubricator. 1,878,087; Sept. 20.
Zerweck, Werner. (See Hentrich, W., Hardtmann, Hilger, and Zerweck.)
Zerweck, Werner. (See Herz, R., and Zerweck, assignors.)
Zerweck, Werner, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing vat dyestuffs of the anthanthrone series. 1,878,058; Sept. 20.
Zimmerman, Samuel R., Greenville, S. C. Vehicle jack. 1,878,059; Sept. 20.
Zimmerman, Walter J., Dayton, Ohio, assignor to Mead Paperboard Corporation, Wilmington, Del. Paper manufacture. 1,878,228; Sept. 20.
Zisch, Walter, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Roessler & Hasselacher Chemical Company, New York, N. Y. Preparation of products which liberate oxygen. 1,878,359; Sept. 20.
Zitscher, Arthur. (See Laska, L., Zitscher, Christ, and Petzold.)
Zolleis, John G., Philadelphia, Pa. Handle for valves and the like. 1,878,569; Sept. 20.
Zuidema, Frank. (See Kosten, J. and Zuidema.)
Zwikker, Cornelis, Eindhoven, Netherlands, assignor to Radio Corporation of America. Acoustic apparatus. 1,878,088; Sept. 20.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 20TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

α-para-hydroxyphenyl-β-methylaminopropanol and preparing it. F. Stolz. 1,878,021; Sept. 20.
Abrading apparatus. S. Magnano. 1,878,791; Sept. 20.
Absorption machine. H. Hähnel. 1,877,857; Sept. 20.
Accounting machine. F. L. Fuller. 1,878,125; Sept. 20.
Accoustic apparatus. C. Zwikker. 1,878,088; Sept. 20.
Accoustic horn and manufacture thereof. A. I. Abrahams. 1,878,360; Sept. 20.
Acetic anhydride, Manufacturing. R. Meingast and M. Mugdan. 1,878,593; Sept. 20.
Acid, Concentrating nitric. I. J. Cox, W. E. Kirst, and C. A. Woodbury. 1,878,676; Sept. 20.
Acid, Decolorizing silicic. H. Carstens and G. Kröner. 1,878,108; Sept. 20.
Acid derivatives, Making halogenated benzoic. E. C. Britton. 1,878,463; Sept. 20.
Acid, Making benzoic. E. C. Britton. 1,878,462; Sept. 20.
Acid, Manufacture of chromic. M. J. Udy. 1,878,918; Sept. 20.
Acid, Meta-hydroxy-diarylamine-carboxylic. L. Laska and O. Haller. 1,877,906; Sept. 20.
Acid, Treating sludge. J. J. Lawton. 1,878,933; Sept. 20.
Acids, Extracting concentrated volatile aliphatic. A. Gorham. 1,878,695; Sept. 20.
Acids, Production of hydroaromatic carboxylic. E. Schwenk and H. Jordan. 1,877,991; Sept. 20.
Advertising device for ordering dairy products. J. J. Reinhold. 1,878,541; Sept. 20.
Advertising structure, Outdoor. G. D. Overholtz. 1,878,884; Sept. 20.
Aeroplane. E. Beaver. 1,878,808; Sept. 20.
Air cleaner. E. A. Reichert and W. S. Holzinger. 1,877,888; Sept. 20.
Air compressor of the multicylinder reciprocating type. H. R. Ricardo. 1,878,326; Sept. 20.
Air conditioning. I. C. Baker. 1,878,618; Sept. 20.
Air conditioning and distributing unit. A. E. Stacey, jr., and C. M. Ashley. 1,878,012; Sept. 20.
Aircraft propeller. F. M. Covey. 1,877,821; Sept. 20.
Airfoil. P. J. Henry. 1,878,775; Sept. 20.
Air heater. W. W. Hicks. 1,878,701; Sept. 20.
Air, Method and apparatus for cooling mine. A. S. Richardson. 1,878,542; Sept. 20.
Airplane. H. W. Gabbert. 1,878,768; Sept. 20.
Airplane. L. L. Kuethe. 1,877,902; Sept. 20.
Airplane construction. E. A. Stalker. 1,878,723; Sept. 20.
Airplane propeller. E. Staats, jr. 1,878,907; Sept. 20.
Airship. W. W. Pagon. 1,877,956; Sept. 20.
Air speed switch. P. Maulde. 1,878,418; Sept. 20.
Alarm: *See*—
Electric fire alarm.
Alcohols, Formation of. R. B. Lebo. 1,877,908; Sept. 20.
Aliphatic hydrocarbons, Oxygenation of saturated. J. M. Naiman and H. Leggett. 1,878,170; Sept. 20.
Alloy. O. W. Ellis. 1,878,686; Sept. 20.
Alloy metal flux and making the same. E. Hey. 1,877,867; Sept. 20.
Alloys, Manufacture of nickel iron. G. C. Marris, G. R. Polgreen, and S. V. Williams. 1,878,589; Sept. 20.
Aluminum and other materials, Production of metallic. W. J. Lester. 1,878,939; Sept. 20.
Amine, Acylating. L. E. Mills. 1,878,969; Sept. 20.
Amine hydrohalides of the benzene series, Preparation and purification of primary aromatic. M. E. Putnam and L. E. Mills. 1,878,512; Sept. 20.
Amine hydrohalides of the benzene series, Purification of primary aromatic. L. E. Mills. 1,878,970; Sept. 20.
Amino-acridinium compounds and making them, Alkylated. W. Schmidt and P. Hartmuth. 1,877,985; Sept. 20.
Ammunition. J. E. Burns. 1,878,621; Sept. 20.
Amplifier. D. G. Little. 1,877,918; Sept. 20.
Amplifier, Push-pull. H. A. Wheeler. 1,878,740–1; Sept. 20.
Amplifier, Push-pull. H. A. Wheeler. 1,878,743; Sept. 20.
Amplifier, Thermionic. H. A. Wheeler. 1,878,742; Sept. 20.
Amusement device, Child's. B. H. White. 1,878,355; Sept. 20.
Anchor. W. E. White. 1,878,921; Sept. 20.
Anchor for electric lamps, Jar or vase. L. W. Anderson. 1,878,093; Sept. 20.
Antenna system. T. R. Baker. 1,878,257; Sept. 20.
Anthanthrone, Halogenating. R. Herz and W. Zerweck. 1,877,866; Sept. 20.
Antifreeze solution. I. T. Smith. 1,878,903; Sept. 20.
Antirattle dovetail for doors. R. G. Moore. 1,878,248; Sept. 20.

Antirattler. J. Sneed. 1,878,197; Sept. 20.
Applicator, Vaginal powder. E. C. Haas. 1,878,513; Sept. 20.
Aqueous dispersions and making same. L. Kirschbraun. 1,878,974; Sept. 20.
Article and making same, Stamped metal. T. H. Wittliff. 1,878,055; Sept. 20.
Articles from aqueous dispersion of rubber, Direct production of rubber. P. Klein, A. Szegvári, R. F. McKay, C. Hayes, and G. W. Trobridge. 1,878,151; Sept. 20.
Automatic regulator. M. H. Ackerman. 1,877,780; Sept. 20.
Automobile. McC. Barclay. Des. 87,774; Sept. 20.
Automobile body. S. D. Locke and H. J. Stegeman. 1,878,943; Sept. 20.
Axles, Apparatus for bending. C. C. Bennett. 1,878,665; Sept. 20.
Azodyestuffs, Manufacturing. L. Laska, A. Zitscher, W. Christ, and A. Petzold. 1,878,243; Sept. 20.
Baffle for steam and water drums. E. E. Noble. 1,878,172; Sept. 20.
Balance weight. W. O. Snelling. 1,878,009; Sept. 20.
Balancing machine. W. R. Griswold. 1,878,129; Sept. 20.
Bar: *See*—
Gauge bar.
Batcher. R. R. McBride. 1,878,874; Sept. 20.
Battery: *See*—
Dry battery.
Battery switch. J. L. McKinley. 1,878,977; Sept. 20.
Beam for supporting yarn packages. L. Holt. 1,878,779; Sept. 20.
Bearing and cage, Roller. E. Wooler. 1,878,057; Sept. 20.
Bearing guard for conveyor rollers. P. C. Wego. 1,874,214; Sept. 20.
Bed, Sofa. S. Karpen. 1,878,405; Sept. 20.
Belt clamp. G. O. Smith. 1,878,003; Sept. 20.
Belt construction. L. B. Wheeler. 1,878,048; Sept. 20.
Belt, Link. F. L. Morse. 1,878,797; Sept. 20.
Bicycle with auxiliary motor. A. Lesage. 1,878,975; Sept. 20.
Binder and forming the same, Loose-leaf. R. M. Watson. 1,878,079; Sept. 20.
Binder, Loose leaf. E. G. Duprée. 1,878,476; Sept. 20.
Binder, Loose-leaf. C. H. Franz, jr. 1,877,831; Sept. 20.
Binder or filing cover, Loose leaf. G. Poulton, 1,878,321; Sept. 20.
Bit: *See*—
Drill bit.
Blade rotating mechanism. R. Yates. 1,878,358; Sept. 20.
Blank heading machine. R. H. Smith. 1,878,196; Sept. 20.
Blending device. J. H. Will. 1,878,924; Sept. 20.
Blind, Venetian. J. F. Rudolph. 1,878,186; Sept. 20.
Block: *See*—
Chain block. Switch block.
Die block.
Block structure, Hollow. P. C. Olsen. 1,877,953; Sept. 20.
Blower, Air conditioning. J. M. Le Grand. 1,877,905; Sept. 20.
Blue dyeings on the fiber, Fast. H. Schweitzer. 1,878,548; Sept. 20.
Board: *See*—
Plaster board.
Boat top, Motor. K. M. Grier. 1,878,393; Sept. 20.
Boiler: *See*—
Water tube boiler.
Boiler and furnace, Water tube. D. S. Jacobus. 1,878,148; Sept. 20.
Boiler stand. L. W. Luff. 1,878,787–8; Sept. 20.
Bolster end construction. H. E. Doerr. 1,878,473; Sept. 20.
Bolt: *See*—
Toggle bolt.
Bolt anchor having a collapsible head. H. W. Pleister. 1,878,600; Sept. 20.
Bolt heading machine. L. L. Roberts. 1,878,183; Sept. 20.
Book mark and clip, Combination. P. Krasnow. 1,878,861; Sept. 20.
Boots, Shaping riding. J. A. Frazier. 1,878,391; Sept. 20.
Bottle. E. W. Fuerst. Des. 87,777; Sept. 20.
Bottle. S. Lenzner. Des. 87,788; Sept. 20.
Bottle, Nursing. J. P. Fegely. 1,877,832; Sept. 20.

Bowl with spray receptor, Closet. L. B. Stine. 1,878,910; Sept. 20.
Box: *See*—
Flush box. Telephone call box.
Guide box.
Box and table, Combination. S. L. Case. 1,878,674; Sept. 20.
Bracelet chain. A. E. R. Speidel. Des. 87,810; Sept. 20.
Bracket: *See*—
Radiator bracket. Window shade bracket.
Bracket. M. Herzstein and R. H. Porter. 1,878,398; Sept. 20.
Bracket as a support for scaffolds. R. Rasmussen. 1,878,642; Sept. 20.
Bracket for flush tanks and other plumbing fixtures, Supporting. E. C. Daugherty. 1,878,821; Sept. 20.
Brake: *See*—
Hand brake. Vacuum brake.
Power brake.
Brake. G. H. Stoner. 1,878,911; Sept. 20.
Brake anchor. G. H. Stoner. 1,878,912; Sept. 20.
Brake drum. J. Sneed. 1,878,006; Sept. 20.
Brake mechanism, Vehicle. R. T. Hymer and V. L. Embery. 1,878,854; Sept. 20.
Brake pad, Emergency. J. F. Duffy. 1,878,440; Sept. 20.
Brake system. L. Ulrich. 1,878,734; Sept. 20.
Brassière, Bathing. E. S. Caldor. 1,878,755; Sept. 20.
Brazed or welded joint. L. R. Crouch. 1,878,829; Sept. 20.
Bridge, Tower. S. Rusckowski. Des. 87,797; Sept. 20.
Bronzing machine. F. R. Belluche. 1,878,098; Sept. 20.
Brooch, Clip. G. Trifari. 1,878,028; Sept. 20.
Brush, Fountain. G. R. Tremolada. 1,878,027; Sept. 20.
Brush, Metal. F. J. Quist. 1,878,323; Sept. 20.
Buckle. D. Marinsky. 1,878,792; Sept. 20.
Buckle, Garment. A. H. Kerngood. 1,877,885; Sept. 20.
Buckle, Shoe. W. L. Gibbons. Des. 87,778; Sept 20.
Buff. A. J. Bruce. 1,878,815; Sept. 20.
Building construction A. F. Bemis. 1,878,367; Sept. 20.
Building construction. G. F. Kotrbaty. 1,877,898; Sept. 20.
Bung for containers, J. Rimmelspacher and E. Hepting. 1,878,327; Sept. 20.
Burner: *See*—
Gas and oil burner. Oil burner.
Burner control mechanism, Gas. A. H. Tinnerman. 1,878,552; Sept. 20.
Burners, Apparatus for controlling. D. G. Spahr. 1,878,010; Sept. 20.
Cabinet construction, Refrigerator. W. D. Collins. 1,878,111; Sept. 20.
Cabinet for rugs and other textile fabrics, Display. A. J. Murphy. 1,878,454; Sept. 20.
Cabinet or similar article of furniture. W. K. Kleaver. Des. 87,786; Sept. 20.
Cabinet, Ticket issuing machine. W. D. Teague. Des. 87,814; Sept. 20.
Cage, Animal. A. R. Bliss, jr., and G. S. Bliss. 1,878,459; Sept. 20.
Cage for racing animals, Starting. J. F. White. 1,878,218; Sept. 20.
Calculating machine. E. F. Britten, jr. 1,877,801–2; Sept. 20.
Calendar card exhibitor for clocks. R. V. Owen. 1,878,310; Sept. 20.
Camber plates, Automatic. L. Unger. 1,878,030; Sept. 20.
Camera, Stereoscopic motion picture. F. B. Crosier. 1,878,382; Sept. 20.
Cap for gasoline and other tanks, Lock. J. I. Burroughs. 1,878,436; Sept. 20.
Capping device. H. A. Stone. 1,878,343; Sept. 20.
Car, Cane. G. W. Graser. 1,878,451; Sept. 20.
Car construction. K. J. Tobin. 1,878,062; Sept. 20.
Car, Stock. F. X. Mudd. 1,877,944; Sept. 20.
Carbon remover. C. R. Matthis. 1,878,245; Sept. 20.
Carburetor. A. L. Nilsson. 1,878,171; Sept. 20.
Card-Case and key holder, Combined. C. L'Enfant. 1,877,910; Sept. 20.
Card dispensing device. S. R. Bell and G. W. Wardwell. 1,878,980; Sept. 20.
Card, Display. J. M. Frowenfeld. 1,877,840; Sept. 20.
Card, Score. E. R. Furey and E. S. Anderson. 1,878,629; Sept. 20.
Carrier: *See*—
Curtain carrier. Drawbar carrier.
Carrier for automobiles, Combined tire and luggage. C. C. Fulton. 1,877,887; Sept. 20.
Cart, Trailer. R. D. Swanson. 1,878,346; Sept. 20.
Carton and container. A. M. Overton. 1,878,290; Sept. 20.
Carton or similar article. F. G. Hauck. Des. 87,781; Sept. 20.
Cartridge for firearms. W. M. Minto. 1,877,773; Sept. 20.
Cartridge for use in apparatus for decarbonizing engines. L. John. 1,878,401; Sept. 20.
Cartridge magazine for small arms. R. Von Frommer. 1,878,039; Sept. 20.
Cartridge, Starting. A. Möhrle. 1,877,936; Sept. 20
Case: *See*—
Shipping case.
Case or portfolio, Brief. N. Ottinger. 1,877,954; Sept. 20.
Casein, Manufacture of. C. L. Riley. 1,878,182; Sept. 20.

Casing, Pump. A. J. Ruth and A. H. Buermann. Des. 87,796; Sept. 20.
Ceiling. L. A. Berger. 1,878,812; Sept. 20.
Cellular composition, Making a. F. R. Wenger. 1,878,047; Sept. 20.
Cellulose acetate free from haze, Rendering C. J. Malm. 1,878,954; Sept. 20.
Cellulose acetate, Manufacture of. S. E. Sheppard. 1,878,988; Sept. 20.
Cellulose acetates, Changing solubility of. C. J. Malm. 1,878,953; Sept. 20.
Cellulose ether, Manufacture of mixed. M. Hagedon and E. Rossbach. 1,877,856; Sept. 20.
Cellulosic materials and making same, A. Landolt. 1,878,873; Sept. 20.
Cement, Asphaltic. W. C. Ferguson. 1,878,625; Sept. 20.
Centering gauge. V. P. Schmidt and H. A. Brenaman. 1,878,296; Sept. 20.
Chain, Antiskid. F. B. Parsons. 1,878,291; Sept. 20.
Chain block. J. S. Parker. 1,878,312; Sept. 20.
Chain, Drive. F. L. Morse. 1,878,882; Sept. 20.
Chain, Tire. F. T. Gause. 1,878,841; Sept. 20.
Chair. H. Ruetz. 1,878,253; Sept. 20.
Chair construction. F. W. Kohler. 1,877,895; Sept. 20.
Chart, Scale. W. Heidinger. 1,878,697; Sept. 20.
Check writer. W. H. Luland. 1,878,789; Sept. 20.
Chest or similar article, Cedar. J. Weber. Des. 87,816–20; Sept. 20.
Chlorine preparation. C. Mindeleff. 1,878,164; Sept. 20.
Chlorine preparation. C. Mindeleff. 1,878,510; Sept. 20.
Chuck. A. L. Saltzman. 1,878,329; Sept. 20.
Chucking device. W. F. Groene. 1,878,130; Sept. 20.
Cigarette rest and ash tray, Combined. J. E. Neahr. Des. 87,790; Sept. 20.
Cinematograph. V. Continsouza and M. B. Combes. 1,878,381; Sept. 20.
Circuit arrangement, Radio frequency. E. Green. 1,878,309; Sept. 20.
Circuit interrupter. J. E. McGee and B. P. Baker. 1,878,950; Sept. 20.
Circuit, Rectifier. C. C. Bradbury. 1,878,101; Sept. 20.
Circuits, Electric-coupling. H. A. Wheeler. 1,878,053; Sept. 20.
Clamp: *See*—
Belt clamp. Rail clamp.
Cleaner: *See*—
Air cleaner. Suction cleaner.
Cotton cleaner.
Cleaner. A. L. Primeau. 1,878,250; Sept. 20.
Cleaning surfaces, Apparatus for. S. A. Wier. 1,878,560; Sept. 20.
Cleansing article and making same. G. W. Brooks and J. J. Duginski. 1,878,104; Sept. 20.
Clear vision device. P. J. Sciarrino. 1,878,718; Sept. 20.
Climbing structure for playgrounds. D. D. Ferrell. 1,877,833; Sept. 20.
Clip: *See*—
Contact clip. Fuse clip.
Electric mineral clip. Switch clip.
Clip construction. E. Lehr. 1,878,497; Sept. 20.
Clock, Advertising. C. B. Drake. 1,878,683; Sept. 20.
Clock, Master. C. E. Larrabee. 1,878,931; Sept. 20.
Closure. A. Karper. 1,878,406; Sept. 20.
Closure. R. P. Perkins. 1,878,599; Sept. 20.
Closure cap. C. M. Jones. 1,877,882; Sept. 20.
Cloth, Acoustic grille. A. T. Abbott. 1,878,570; Sept. 20.
Clutch. A. Y. Dodge. 1,878,824; Sept. 20.
Clutch mechanism. A. E. Johnson. 1,878,523; Sept. 20.
Clutching device. S. C. Wilcox. 1,878,053; Sept. 20.
Coat, Barber's. I. Goldman and J. Cohen. 1,878,275; Sept. 20.
Coating metallic surfaces for prevention of corrosion. J. Davies. 1,878,761; Sept. 20.
Coating substances. H. S. Cooper and M. Merlub-Sobel. 1,878,112; Sept. 20.
Coil construction. W. G. Schneider and H. H. Eaton. 1,878,606; Sept. 20.
Coiling machine and winding coils. E. A. Dewald. 1,878,233; Sept. 20.
Coin counting machine. C. Schwartz. 1,877,989; Sept. 20.
Combustion engine. L. Berner and P. Lohr. 1,877,760; Sept. 20.
Combustibles with improved calorific efficiency, Burning. F. H. Brown. 1,878,105; Sept. 20.
Composition of matter. C. R. Harris and A. L. Pitman. 1,878,276; Sept. 20.
Compound of the 1-phenyl-2-alkylamino-alcohol-1 series hydroxylated in the phenyl residue and preparing them. M. Böckmühl, G. Ehrhart, and L. Stein. 1,877,756; Sept. 20.
Compressed products, Producing. A. Hawerlander. 1,877,864; Sept. 20.
Compressor. M. A. Caserta. 1,877,809; Sept. 20.
Compressor or pump. E. Wilson. 1,878,744; Sept. 20.
Concrete mixer. A. E. Mason. 1,878,504; Sept. 20.
Condensation product of the anthraquinone series and making same. H. Ritter. 1,877,972; Sept. 20.
Condensation products, Manufacture of. R. Michel. 1,878,963; Sept. 20.
Condensation products of aldehydes and preparing them, Water soluble viscous. A. Voss. 1,878,040; Sept. 20.
Condenser, Barometric. R. E. Hellmer. 1,878,582; Sept. 20.
Condenser, Electric. E. F. Northrup. 1,878,173; Sept. 20.

Condenser, Electrical. P. E. Gilling. 1,878,631; Sept. 20.
Condenser, Variable rotary electric. E. O. Löfgren. 1,878,639; Sept. 20.
Conductor, Electric flexible. E. Lund. 1,878,790; Sept. 20.
Cone-horn combination. A. G. Stephens. 1,878,018; Sept. 20.
Confection, Edible. L. A. Stevenson. 1,878,342; Sept. 20.
Connecter link. R. A. Walter. 1,878,044; Sept. 20.
Connection, Fluid pressure. C. E. Maynard. 1,878,505; Sept. 20.
Connection for illuminating device. E. C. Smally. 1,878,608; Sept. 20.
Connection for stanks, Pipe line. H. Faltermayer. 1,878,834; Sept. 20.
Contact clip. A. G. Steinmayer. 1,878,017; Sept. 20.
Container. E. C. Savage. 1,877,979; Sept. 20.
Container. H. B. Walter. 1,878,351; Sept. 20.
Container cap. A. G. Craz. 1,878,265; Sept. 20.
Container, Display. H. W. Block and B. H. Christenson. 1,878,813; Sept. 20.
Container, Grenade or pressure. B. C. Goss. 1,878,490; Sept. 20.
Container, Paper. L. B. Koch and J. Buchina. 1,877,894; Sept. 20.
Containers, Device for inflating. H. J. Neumiller. 1,877,949; Sept. 20.
Control apparatus for power operated switch machines. W. H. Hoppe and C. L. Swanton. 1,877,876; Sept. 20.
Control for speed changing mechanism. E. G. Kesling. 1,877,889; Sept. 20.
Control, Mechanical. J. Turner. 1,878,065; Sept. 20.
Control mechanism. F. G. Rawling. 1,878,179; Sept. 20.
Control switch, Circuit breaker. C. A. Ringbloom. 1,878,602; Sept. 20.
Control system for theater lighting circuits. A. L. Upton. 1,878,304; Sept. 20.
Controlling device for motion picture projectors. J. G. Gramsa. 1,878,494; Sept. 20.
Conveyer. A. J. Hatt. 1,877,862; Sept. 20.
Conveyer. A. J. Hatt, A. Johnson, and J. Pryde. 1,877,863; Sept. 20.
Conveying apparatus. M. A. Messlein. 1,878,163; Sept. 20.
Cooker and cooler, Combined. A. R. Thompson. 1,878,025; Sept. 20.
Cooker, Electric. F. J. Osius. Des. 87,791; Sept. 20.
Cooking apparatus. A. E. Triplett. 1,878,964; Sept. 20.
Copper refining. V. E. Legg. 1,878,936; Sept. 20.
Core drill. H. C. Johansen. 1,878,241; Sept. 20.
Corn picker. L. A. Paradise and W. J. Coultas. 1,877,957; Sept. 20.
Corn picket gathering point. A. C. Lindgren. 1,878,941; Sept. 20.
Corrosion, Prevention of. B. S. Covell. 1,878,468; Sept. 20.
Cotton cleaner. B. R. Benjamin. 1,878,662; Sept. 20.
Counter, Display. W. N. Vance. 1,878,072; Sept. 20.
Coupler, Automatic car and air. H. E. Van Dorn. 1,878,031; Sept. 20.
Coupler, Automatic train line. A. O. Mackin. 1,877,924; Sept. 20.
Coupling: *See*—
Flexible coupling. Pipe coupling.
Fluid conductor coupling.
Coupling. H. A. Cederstrom. 1,878,826; Sept. 20.
Coupling for jointed fishing rods, Detachable. A. E. Little. 1,878,638; Sept. 20.
Cover for automatic fire arms, Sliding. R. von Frommer. 1,878,038; Sept. 20.
Cover, Manhole. C. B. Shanley. 1,877,996; Sept. 20.
Cover, Seat. H. G. Wedler. 1,878,045; Sept. 20.
Crank handle. S. F. Briggs and F. J. Stuckert. 1,877,798; Sept. 20.
Crib, folding. H. E. McCandless. 1,878,958; Sept. 20.
Crossing guard. G. W. Goodman. 1,878,234; Sept. 20.
Cultivating implement. F. J. Siebenmann. 1,878,000; Sept. 20.
Cultivator attachment. A. Hudec and T. T. Sefcik. 1,878,443; Sept. 20.
Cultivator, Rotary garden. C. M. Hamshaw. 1,878,442; Sept. 20.
Cultivator, Tractor. A. W. Reynolds. 1,877,777; Sept. 20.
Cup: *See*—
Pastry cup.
Cup for birds, Drinking. S. Rotberg. 1,878,893; Sept. 20.
Cup for coffee filters, Extractor. H. W. Reid. 1,877,971; Sept. 20.
Curtain carrier. H. and I. Rumpf. 1,878,189; Sept. 20.
Curtain drawing device. J. P. Schmidt, jr. 1,877,984; Sept. 20.
Curtain, Foldable. P. E. Erlinder. 1,877,829; Sept. 20.
Curtain, Foldable. C. H. Nordell. 1,877,950; Sept. 20.
Cutlery polishing machine. J. Fusco. 1,878,840; Sept. 20.
Cutter: *See*—
Weed cutter.
Cutter and threader, Combined pipe. J. J. Bouchard. 1,877,797; Sept. 20.
Cutter mechanism, Low slugging. C. W. Curle. 1,878,266; Sept. 20.
Decimal equivalent selector mechanism. G. C. Chase. 1,878,757; Sept. 20.
Deconcentrator. C. G. Hawley. 1,878,848; Sept. 20.
Dehydrator for preservation of human bodies after decease. W. H. Stringfield. 1,878,649; Sept. 20.
Deposits from aqueous dispersions of rubber and rubber-like substances, Production of. M. Forrer. 1,878,483; Sept. 20.
Dermal cover preparation. L. O'Leary. 1,877,952; Sept. 20.
Designs, Device for making. M. J. Hoferer. 1,878,633; Sept. 20.
Detector for modulated alternating currents. P. G. Weiller. 1,878,046; Sept. 20.
Determining the quantitative relation of the components of a composite substance, Device for. W. Schäfer. 1,877,981; Sept. 20.
Developing apparatus. A. Langsner. 1,878,279; Sept. 20.
Device for wiring honey comb frames. A. E. Wolkow. 1,878,746; Sept. 20.
Diaphragm for sound reproducing and recording apparatus, Conical. H. B. Mead. 1,878,162; Sept. 20.
Diaphragm or diaphragm mount for loud speakers or other sound reproducing devices. Bruijnes and A. T. Van Urk. 1,877,804; Sept. 20.
Die: *See*—
Screw-cutting die.
Die block. C. C. Jacobson and J. Schweder. 1,877,880; Sept. 20.
Die casting machine. T. C. Korsmo. 1,877,896; Sept. 20.
Die rolling and article produced thereby. W. P. Witherow. 1,878,054; Sept. 20.
Dilator. J. J. Cantor. 1,878,671; Sept. 20.
Dilator. J. W. Kennedy. 1,877,766; Sept. 20.
Dip regulator for suction gathering receptacles and the like, Automatic. K. E. Peller. 1,878,597; Sept. 20.
Dipper, Ice cream. E. S. Millo. 1,877,935; Sept. 20.
Disc harrow. W. L. Paul. 1,877,959; Sept. 20.
Dish washing machine. J. E. Elkington. 1,878,685; Sept. 20.
Disk, Scanning. F. E. Miller. 1,878,877; Sept. 20.
Dispenser, Neck-strip. S. N. Hope. 1,878,399; Sept. 20.
Dispenser, Sugar. A. J. Cagliostro. 1,877,808; Sept. 20.
Dispensing device. E. G. Wessman. 1,878,354; Sept. 20.
Display device. W. A. Adams. 1,878,750; Sept. 20.
Display stand. F. Tourtois. 1,878,302; Sept. 20.
Distillation. W. O. Snelling. 1,878,007; Sept. 20.
Distillation under vacuum. J. R. Schonberg. 1,877,987; Sept. 20.
Doctor cleaning device. J. E. Woodbury. 1,878,564; Sept. 20.
Door, Automatic. F. L. Morse and R. V. Morse. 1,878,796; Sept. 20.
Door, Car. A. S. Barrows. 1,878,365; Sept. 20.
Door, Foldable. R. H. Vansant. 1,878,034; Sept. 20.
Door, Foldable. R. H. Vansant. 1,878,073; Sept. 20.
Door, frame, and fastening device, Oven. H. E. Dunkle and J. Becker. 1,878,680; Sept. 20.
Door handle. G. J. Haan, jr. 1,878,394; Sept. 20.
Door lock. J. Holtzman. 1,878,239; Sept. 20.
Doorlock, Coin controlled. G. J. McLaren. 1,877,929; Sept. 20.
Door mechanism. S. D. Rosenfelt. 1,878,892; Sept. 20.
Double-indicating double-recording gauge. M. M. Borden. 1,878,460; Sept. 20.
Dough rolling machine. G. E. Ward and O. S. Palmer. 1,878,352; Sept. 20.
Dovetail for doors, Antirattle. R. G. Moore. 1,878,881; Sept. 20.
Drain, Floor. H. J. Luff and W. J. Luff. 1,878,946; Sept. 20.
Drawbar carrier. H. E. Van Dorn. 1,878,032; Sept. 20.
Drawing wheel. W. H. Furness. 1,878,692; Sept. 20.
Dredge. W. B. Macaulay. 1,878,282; Sept. 20.
Dress. S. Milgrim. Des. 87,789; Sept. 20.
Dress. E. Silverman. Des. 87,809; Sept. 20.
Drill: *See*—
Core drill. Rock drill.
Drill bit. C. S. Crickmer. 1,878,114; Sept. 20.
Drill bit. F. L. Pivoto. 1,878,292; Sept. 20.
Drilling apparatus, Rotary. F. W. Hild. 1,878,141; Sept. 20.
Drilling mechanism. F. W. Vodoz. 1,878,030; Sept. 20.
Drilling mechanism. F. W. Vodoz. 1,878,074; Sept. 20.
Driving mechanism for slicing machines. C. F. M. Van Berkel. 1,878,067; Sept. 20.
Driving system for loud speakers. H. Van Dam and D. H. Van Dam. 1,878,919; Sept. 20.
Drum for vapors under pressure. H. J. Kerr. 1,878,709; Sept. 20.
Dry battery. O. E. Ruhoff and E. J. McEachron. 1,878,188; Sept. 20.
Duplicator. J. L. Sherrick. 1,878,807; Sept. 20.
Duster, Compressed air. D. Tappan. 1,877,778; Sept. 20.
Dye and producing the same, Stilbene. C. A. Lyford. 1,878,501; Sept. 20.
Dyeing with vat dyestuffs sensitive to calcium compounds. P. Nawiasky. 1,877,945; Sept. 20.
Dyes and their production, Azo. R. Brightman. 1,877,800; Sept. 20.
Dyestuff of the anthraquinone acridone series, Vat. W. Mieg and R. Berliner. 1,878,965; Sept. 20.
Dyestuff of the dianthraquinonylamine series, Wool. W. Mieg and K. Bamberger. 1,878,966; Sept. 20.
Dyestuff of the thioindigo series, New. E. Hoffa and H. Heyna. 1,877,870; Sept. 20.

Dyestuffs and preparing them, New acid. E. Kronholz and H. Schlichenmaier. 1,877,900; Sept. 20.
Dyestuffs, Asymmetric polymethine. O. Wahl. 1,878,557; Sept. 20.
Dyestuffs, Azo. K. Dobmaier. 1,878,471; Sept. 20.
Dyestuffs of the anthanthrone series, Manufacturing vat. W. Zerweck. 1,878,058; Sept. 20.
Dyestuffs of the anthraquinone acridine series, Producing vat. H. Neresheimer, E. Honold, and G. Böhner. 1,877,947; Sept. 20.
Dyestuffs of the anthraquinone series, New indigoid. H. Ritter and W. Brunner. 1,877,973; Sept. 20.
Dyestuffs of the anthraquinone series, Vat. O. Bayer. 1,877,791; Sept. 20.
Dyestuffs of the benzanthrone-pyrazolanthrone series, Vat. K. Wilke. 1,878,050; Sept. 20.
Dyestuffs of the dibenzpyrenequinone series, Vat. G. Kränzlein, M. Correll, and H. Vollmann. 1,877,899; Sept. 20.
Dyestuffs of the N-dihydro 1.2.2'.1'-anthraquinoneazine series and making the same, Vat. H. Neresheimer and W. Schneider. 1,877,948; Sept. 20.
Dyestuffs of the polynuclear aromatic imidazole series and preparing them, Vat. M. P. Schmidt and W. Neugebauer. 1,878,986; Sept. 20.
Dyestuffs of pyrazolanthrone series and making same, New fast. G. Kalischer, H. Ritter, H. Scheyer, and O. Bayer. 1,877,884; Sept. 20.
Dyestuffs of the safranine series and making them. W. Neelmeier and T. Nocken. 1,878,581; Sept. 20.
Dyestuffs, Pigment. W. Hentrich and M. Hardtmann. 1,878,698; Sept. 20.
Dyestuffs, Vat. H. Wolff. 1,878,056; Sept. 20.
Economizer. I. Harter. 1,878,134; Sept. 20.
Economizer. J. W. Parker and J. E. Black. 1,878,176; Sept. 20.
Egg separator. R. W. Regensburger. 1,878,294; Sept. 20.
Elastic product. M. Hagedorn. 1,877,854; Sept. 20.
Electric arc welding head. W. Richter. 1,877,969; Sept. 20.
Electric fire alarm. J. I. Dowell. 1,878,120; Sept. 20.
Electric furnace. T. B. Bechtel. 1,878,619; Sept. 20.
Electric furnace, Induction. O. J. Blanchet. 1,878,458; Sept. 20.
Electric iron. R. B. Benjamin. 1,878,663; Sept. 20.
Electric key punch. C. D. Lake. 1,878,930; Sept. 20.
Electric motor. E. J. Ovington. 1,878,534; Sept. 20.
Electric operating mechanism. W. G. Horn. 1,878,777; Sept. 20.
Electric resistance. A. Lampl. 1,878,153; Sept. 20.
Electric signaling. L. Bégin. 1,878,752; Sept. 20.
Electric socket switch. A. R. Wolfe. 1,878,255; Sept. 20.
Electric switch. L. V. Lucia. 1,877,923; Sept. 20.
Electric switch, Multibreak. C. D. Ainsworth. 1,878,657; Sept. 20.
Electric terminal clip. P. A. Eyrick. 1,877,830; Sept. 20.
Electric waves, Production of short. H. E. Hollmann. 1,877,872; Sept. 20.
Electrical control for servo-motors. A. Dewandre. 1,878,822; Sept. 20.
Electrical distribution. H. S. Arnold and R. C. Wilson. 1,878,573; Sept. 20.
Electrical heating device. W. W. Hicks. 1,878,140; Sept. 20.
Electrical lead-in devices, Production of. W. R. Walker. 1,878,212; Sept. 20.
Electrical purification of water. W. F. Hoffman and R. A. Gortner. 1,878,237; Sept. 20.
Electrical regulating means. L. W. Thompson. 1,878,350; Sept. 20.
Electrical system, Automotive. W. J. Williams. 1,878,051; Sept. 20.
Electrical translating apparatus. P. H. Dowling. 1,878,764; Sept. 20.
Electrically energized motor. C. F. Wallace. 1,878,076; Sept. 20.
Electrode, Pressure welding. M. M. Austin. 1,878,095; Sept. 20.
Electrodialysis. R. A. Gortner and W. F. Hoffman. 1,878,235; Sept. 20.
Electromagnetic device. H. F. Obergfell. 1,878,800; Sept. 20.
Electron discharge tube, Hot cathode. H. M. Freeman and W. G. Wade. 1,877,838; Sept. 20.
Electron emitting device. W. J. Albersheim. 1,878,089; Sept. 20.
Electron tube apparatus. C. F. Rudolph. 1,878,251; Sept. 20.
Electrooptical apparatus. J. Robinson. 1,878,891; Sept. 20.
Electrooptical transmission system. F. W. Reynolds. 1,878,711; Sept. 20.
Element supporting stem construction. G. D. McCabe. 1,878,286; Sept. 20.
Elevator apparatus. N. Di Bartholomes. 1,878,823; Sept. 20.
Elevator indicator. W. B. Lucas. 1,878,872; Sept. 20.
Enameling composition, Keratin. C. Ellis. 1,878,477; Sept. 20.
Energy-translating device. J. D. Seabert. 1,877,992; Sept. 20.
Engine: *See*—
Combustion engine. Two-stroke cycle engine.
Internal combustion engine.
Engine with cylinder stars arranged one behind the other in a common frame, Piston internal combustion. E. Wippermann. 1,878,561; Sept. 20.
Engines, Suction fuel feeding apparatus for internal combustion. C. S. Burton. 1,877,806; Sept. 20.
Engraving metallic surfaces for printing. W. O. P. Schutte. 1,878,895; Sept. 20.
Envelope for liquid fuel containers, Protective. J. A. Todd. 1,878,063; Sept. 20.
Envelope handling machine. A. Gay. 1,877,842; Sept. 20.
Esters, Alkyl cellulose. E. Teupel. 1,877,779; Sept. 20.
Esters, Manufacture of. W. Gibson and J. B. Payman. 1,877,847; Sept. 20.
Esters of vat dyestuffs, Water soluble leuco. W. Mieg and R. M. Heidenreich. 1,878,964; Sept. 20.
Evaporator and temperature control therefor, Refrigerator. G. W. Mason. 1,878,285; Sept. 20.
Evaporator for refrigerators. G. W. Mason. 1,878,284; Sept. 20.
Evaporator, Milk. W. H. Teetsow. 1,878,051; Sept. 20.
Explosion chamber. R. Schilling. 1,877,983; Sept. 20.
Explosion device. B. C. Goss. 1,878,491; Sept. 20.
Explosive matter for the manufacture of detonating caps in accordance therewith, Initial detonating. E. von Herz. 1,878,652; Sept. 20.
Extractor: *See*—
Juice extractor.
Extrusion. F. Singer. 1,878,722; Sept. 20.
Eye flickering means for toys and the like. N. Morgenstern and J. Tascher. 1,877,940; Sept. 20.
Eyelet setting machines, Eyelet feeding mechanism for. C. N. Colpitts. 1,877,813; Sept. 20.
Fabric. F. L. Brigham. 1,877,799; Sept. 20.
Fabric and making same, Woven. E. C. Bunnell and E. W. Barnes. 1,878,620; Sept. 20.
Fabric to airplane ribs, Device for attaching. M. N. Matveyeff. 1,878,417; Sept. 20.
Fastener, Guard plate. H. P. Christensen. 1,878,378; Sept. 20.
Fastener, seal pin type, Closure. E. A. Sweeley and N. T. Anderson. 1,878,551; Sept. 20.
Fastening device for bags. H. Leberman. 1,878,418; Sept. 20.
Feeder. N. E. Bridgman. 1,878,814; Sept. 20.
Feeder, Poultry. W. Uhrik. 1,878,555; Sept. 20.
Feeder tub. J. P. Martin. 1,878,957; Sept. 20.
Feeding and spacing mechanism. A. E. Milbrath. 1,877,934; Sept. 20.
Feeding device, Animal. W. Hodkinson. 1,878,518; Sept. 20.
Feeding device, Poultry. R. P. Kielsmeier. 1,877,890; Sept. 20.
Feeding mechanism. R. C. Danly. 1,878,820; Sept. 20.
Fender, Boat. D. E. Beynon. 1,877,793; Sept. 20.
Ferrous articles, Manufacture of. G. A. Reinhardt and R. H. Eurich. 1,878,539; Sept. 20.
Fertilizer distributor. H. Hubbard. 1,878,853; Sept. 20.
Fertilizer distributor. J. A. McKay and P. H. Lynch. 1,878,960; Sept. 20.
Fertilizer distributor. F. Raisbeck. 1,877,966; Sept. 20.
Fertilizer distributor. W. F. Schakel and A. C. Waterman. 1,877,982; Sept. 20.
Fertilizers, Obtaining. F. Rothe and H. Brenek. 1,878,185; Sept. 20.
Fibrous composition, Felted. E. P. Stevenson and H. A. Buron. 1,878,300; Sept. 20.
Filling device for battery cells. J. L. Woodbridge. 1,878,223; Sept. 20.
Films, Making cellulosic. J. B. Wells and C. L. A. Wynd. 1,878,559; Sept. 20.
Filter, Color. I. Kitroser. 1,878,857; Sept. 20.
Filter, Oil. J. and J. H. S. Gardner. 1,878,630; Sept. 20.
Filter, Pipe line. L. L. Dollinger. 1,878,681; Sept. 20.
Fire extiguisher. A. Blankenhagen. 1,878,369; Sept. 20.
Fire extinguisher. F. A. Dodelin. 1,878,472; Sept. 20.
Fire extinguisher. R. C. Iddings. 1,878,704; Sept. 20.
Fire extinguisher charge. R. C. Iddings. 1,878,705; Sept. 20.
Fire extinguishing apparatus. A. B. Phister and B. H. Phister. 1,878,537; Sept. 20.
Firearms, Barrel spring for automatic. R. V. Frommer. 1,877,839; Sept. 20.
Fireplace construction. E. A. Scott and G. P. Fleetwood. 1,878,719; Sept. 20.
Fish lure. M. M. Steffensen. 1,878,015; Sept. 20.
Fishing hook. T. S. Katich. 1,878,635; Sept. 20.
Fixture. L. L. Beck. 1,878,247; Sept. 20.
Fixture for vacuum tube lights. L. L. Beck. 1,878,229; Sept. 20.
Flange and rail lubricator. J. A. Bodkin. 1,878,259; Sept. 20.
Flexible coupling. W. E. Sykes. 1,878,730; Sept. 20.
Float. H. J. and W. J. Luff. 1,878,947; Sept. 20.
Floor machine. A. E. Norris. 1,877,951; Sept. 20.
Floor scrubbing machine. V. H. Menkhaus. 1,878,508; Sept. 20.
Fluid conductor coupling. J. Trathen. 1,878,303; Sept. 20.
Fluid dispensing apparatus. W. M. Griffin. Des. 87,780; Sept. 20.
Fluid flow control apparatus. P. A. Kinzie and J. L. Savage. 1,878,150; Sept. 20.

Fluid meter. A. G. Holmes. 1,878,238; Sept. 20.
Fluid pressure indicator for pneumatic tires and other inflated bodies. W. Turner. 1,878,917; Sept. 20.
Fluids, Treating dry cleaning. H. Miller. 1,878,287; Sept. 20.
Flume. A. C. Norton. 1,878,289; Sept. 20.
Flush box. J. Werner. 1,878,613; Sept. 20.
Folding machine. L. M. Kahn. 1,878,404; Sept. 20.
Folding machine. H. A. W. Wood. 1,878,745; Sept. 20.
Food product and making same. G. D. Turnbow. 1,878,203; Sept. 20.
Food products, Apparatus for freezing. J. G. Souther. 1,878,198; Sept. 20.
Foodstuffs with fluid currents, Apparatus for processing. F. Seaver. 1,878,297; Sept. 20.
Fowls, Device for preventing feather-pulling in. J. Kosten and F. Zuidema. 1,877,897; Sept. 20.
Frame: *See*—
Tension frame. Yarn setting frame.
Window frame.
Frame and cover, Manhole. C. B. Shanley. 1,877,995; Sept. 20.
Frames, Device for the taking up shaft of flat hosiery. K. W. Lieberknecht. 1,878,868; Sept. 20.
Frequency multiplier and amplifier. C. W. Hansell. 1,878,308; Sept. 20.
Frozen food product and making same. C. E. Gray. 1,878,127; Sept. 20.
Fruit juices, Apparatus for producing citrus. W. D. Bost. 1,878,099; Sept. 20.
Fuel burner, Pulverized. H. E. Yarrow. 1,878,926; Sept. 20.
Fuel process, Motor. J. J. Lawton. 1,878,932; Sept. 20.
Fuel supply means for internal combustion engines of low intake depression, Auxiliary. A. Moore. 1,877,937; Sept. 20.
Furnace: *See*—
Electric furnace. Inductor type furnace.
Furnace. C. E. Lucke. 1,878,157; Sept. 20.
Furnace bridge wall and cooling means therefor. C. H. Johnson. 1,878,524; Sept. 20.
Furnace for effecting heat treatments. E. O. Sessions. 1,878,896; Sept. 20.
Furnace for melting metals, Duplex. V. S. Durbin. 1,878,623; Sept. 20.
Fuse clip. O. H. Jung and P. E. Heffelfinger. 1,878,779; Sept. 20.
Fuse, Electric. A. H. and G. R. Trumbull. 1,878,204; Sept. 20.
Game. J. Heidemann. 1,877,865; Sept. 20.
Game appliance. H. O. Costello. 1,877,820; Sept. 20.
Gas and oil burner, Combination. A. W. Morse. 1,877,942; Sept. 20.
Gas burning heater. T. A. Ronstrom. 1,878,427; Sept. 20.
Gas chamber for oil switches. F. Houst. 1,878,583; Sept. 20.
Gas heater, Combination radiant and circulating. W. A. Griswold. 1,877,852; Sept. 20.
Gas, Making carbureted water. D. J. Young. 1,878,227; Sept. 20.
Gas meter, Dry. W. Strelow. 1,878,344; Sept. 20.
Gas or vapor discharge device. R. D. Malley. 1,878,502; Sept. 20.
Gas or vapor electric device and controlling the same. R. D. Malley. 1,878,159; Sept. 20.
Gas purification, Multistage. H. H. Dow. 1,878,682; Sept. 20.
Gas purification process. F. W. Sperr, jr. 1,878,609; Sept. 20.
Gas purifying plant, Electric. R. Strigel. 1,878,024; Sept. 20.
Gas regulating apparatus. W. I. Thrall. 1,878,060; Sept. 20.
Gases, Apparatus for cleaning. A. J. Boynton. 1,878,668. Sept. 20.
Gases, Apparatus for conserving and vaporizing liquefied. C. Picard. 1,878,317; Sept. 20.
Gases, Generation of persistent disabling. B. C. Goss. 1,878,488–9; Sept. 20.
Gaseous conduction apparatus. C. G. Smith. 1,878,338; Sept. 20.
Gaseous electric discharge devices, System for starting and operating. W. A. D. Evans. 1,878,479; Sept. 20.
Gaseous mixtures by liquefaction, Separation of the constituents of. A. Etienne. 1,878,123; Sept. 20.
Gasoline, Apparatus for treating. J. Sendelbach and R. T. Palmer. 1,878,720; Sept. 20.
Gasoline hydrocarbons, Obtaining. W. K. Lewis. 1,877,914; Sept. 20.
Gasometer, Storage. L. G. Voorhees. 1,878,211; Sept. 20.
Gathering and inserting machine. F. McCarthy. 1,878,590; Sept. 20.
Gauge: *See*—
Centering gauge. Micrometer gauge.
Double-indicating double-recording gauge. Wheel alignment gauge.
Gauge bar. H. A. Agricola. 1,878,571; Sept. 20.
Gauge structure. M. J. Graham. 1,878,493; Sept. 20.
Gear, Automatic cushion. C. R. Jeffreys. 1,877,765; Sept. 20.
Gear, Centrifugal variable speed. L. C. Sturbelle. 1,878,727; Sept. 20.
Gear, Friction. R. Erban. 1,878,272; Sept. 20.
Gear, Life saving. O. H. Dräger and H. Stelzner. 1,878,474; Sept. 20.
Gearing for rolling mills and the like, Change speed. W. E. Sykes. 1,878,729; Sept. 20.
Gearing, Transmission. W. A. Van Berkel. 1,878,068; Sept. 20.
Generating and modulating apparatus. W. A. Stevens. 1,878,724; Sept. 20.
Generator: *See*—
Steam generator.
Generator and feed water preheater and purifier, Combined steam. O. H. Hartmann and H. Trede. 1,878,514; Sept. 20.
Glass, Apparatus and method for drawing. A. E. Spinasse. 1,878,906; Sept. 20.
Glass, Apparatus for making composite. J. H. Sherts. 1,878,899; Sept. 20.
Glass blowing machine. R. La France. 1,878,863; Sept. 20.
Glass cutting equipment. C. F. Burdett and W. Owen. 1,878,818; Sept. 20.
Glass feeder apparatus. K. E. Peiler and W. T. Barker. 1,878,536; Sept. 20.
Glass making machine. H. C. Ganter. 1,878,485; Sept. 20.
Glass melting tank, Electric. H. W. McIntosh. 1,878,591; Sept. 20.
Glass working furnace. H. George. 1,878,392; Sept. 20.
Glassware, Apparatus for handling. E. H. Lorens. 1,878,156; Sept. 20.
Glassware forming apparatus. R. W. Canfield. 1,878,465; Sept. 20.
Glassware forming apparatus and method. H. W. Ingle. 1,878,521; Sept. 20.
Goods, Knit. R. Grabner. 1,877,850; Sept. 20.
Governor. A. Singer. 1,878,721; Sept. 20.
Governor, Steam pressure. F. L. Badgett. 1,878,660; Sept. 20.
Grader, Road. E. C. Iverson. 1,877,879; Sept. 20.
Grain measuring device. A. W. Wessman. 1,878,922; Sept. 20.
Grapple. C. W. Madison. 1,878,951; Sept. 20.
Grenade, etc., Hand. A. F. Spring. 1,878,487; Sept. 20.
Grille, Metal. C. Field. 1,878,688; Sept. 20.
Grinder, Angular blade. P. T. Lennon. 1,877,913; Sept. 20.
Grinder, Valve seat. H. M. Albee. 1,877,782; Sept. 20.
Guanidines, Making substituted. J. P. Schmittnägel. 1,878,545; Sept. 20.
Guanidines, Production of tri-substituted. H. B. Foster. 1,878,484; Sept. 20.
Guard for collapsible underreamers. R. R. Crum. 1,878,578; Sept. 20.
Guard, Merchandise. F. Arata and J. E. Stiles. 1,877,786; Sept. 20.
Guard, Pole. C. A. Gates. 1,878,126; Sept. 20.
Guide box. P. L. Coyle. 1,877,822; Sept. 20.
Hair clipper, Electric. G. C. Sireci. 1,878,549; Sept. 20.
Hair waving device. J. M. Sage. 1,878,978; Sept. 20.
Hair wrapping instrument. R. Pezzella. 1,877,776; Sept. 20.
Halogen derivatives of the anthraquinoneazine series and making same. H. Neresheimer and W. Schneider. 1,877,946; Sept. 20.
Halogen substitution product of dinaphthylene-dioxide. B. Bollweg, L. Zeh, and E. Kramer. 1,878,666; Sept. 20.
Hand brake. H. Fuchs. 1,877,841; Sept. 20.
Handle: *See*—
Crank handle. Door handle.
Handle for percussive tools. E. B. Lear. 1,877,771; Sept. 20.
Handle for valves and the like. J. G. Zolleis. 1,878,569; Sept. 20.
Handle for wooden baskets. R. P. Young. 1,878,567; Sept. 20.
Hanger: *See*—
Radiator hanger.
Hanger. C. O. Akerlund. 1,877,781; Sept. 20.
Hank of strand material. R. K. Whittier. 1,878,306; Sept. 20.
Harvester. E. E. Metcalf. 1,877,931; Sept. 20.
Harvester, Beet. T. Terada. 1,878,349; Sept. 20.
Harvester, Corn. C. F. Crumb and A. Kowalsky. 1,878,830; Sept. 20.
Headlamp, Automobile. E. F. Sarver. 1,877,978; Sept. 20.
Headlight. F. C. Hacheney. 1,878,632; Sept. 20.
Heat regulator, Multioven. W. E. Schirmer. 1,878,332; Sept. 20.
Heat treating iron sulphide material. S. W. Yates. 1,878,226; Sept. 20.
Heater: *See*—
Air heater. Gas heater.
Gas burning heater. Roll heater.
Heating, Apparatus for. J. O. James. 1,877,764; Sept. 20.
Heating element for utensils, Electrical. A. F. Larsen. 1,878,784. Sept. 20.
Heating, High temperature indirect. T. Grisfold, jr. 1,877,762; Sept. 20.
Hedge trimmer. J. C. Miller. 1,878,878; Sept. 20.
Hemoglobinometer. C. A. and A. A. Hausser. 1,878,847; Sept. 20.
Hinge. O. M. Bangs. 1,878,363; Sept. 20.

Hinge, Gate. J. B. Gets. 1,877,846; Sept. 20.
Hoboing machine. F. H. Adams. 1,878,056; Sept. 20.
Hoe vise, Portable garden. H. A. Daude. 1,878,439; Sept. 20.
Holder, Article. C. L'Enfant. 1,877,911–12; Sept. 20.
Holder, Card. E. Schwartz. 1,878,717; Sept. 20.
Holder, Copy. A. J. Cagliostro. 1,877,807; Sept. 20.
Holder, Copy. A. G. F. Kurowski. 1,878,529; Sept. 20.
Holder, Expansible pipe. F. Stovall. 1,878,725; Sept. 20.
Holder, Fishing rod. O. Gerline. 1,877,845; Sept. 20.
Holder, Jewelers' eyeloupe. F. Mestre. 1,878,594; Sept. 20.
Holder, Key. C. L'Enfant. 1,877,909; Sept. 20.
Holder, Lug strap. H. E. Wilson. 1,878,221; Sept. 20.
Holders, Process and apparatus for manufacturing candle. J. E. Preston and S. Sokolow. 1,878,322; Sept. 20.
Honing machine. A. M. Johnson. 1,877,881; Sept. 20.
Hood, Life-saving. A. Belloni. 1,878,434; Sept. 20.
Hook: *See*—
Fishing hook.
Hose, Manufacturing rubber. H. Pahl. 1,878,885; Sept. 20.
Hosiery and making same. A. E. Margerison and C. R. Hahn. 1,878,416; Sept. 20.
Housing, Control rod. R. K. Winning. 1,878,357; Sept. 20.
Humidifier for bake ovens. F. A. Hoppe. 1,878,519; Sept. 20.
Humidifying device for hot air furnaces. E. Buehrer. 1,878,817; Sept. 20.
Hydrocarbon products, Preparing. N. E. Loomis. 1,877,921; Sept. 20.
Hydrocarbons, Apparatus for treating. A. F. Clarke. 1,878,467; Sept. 20.
Hydrocarbons containing suspended or colloidal complexes, Clarification of. S. Swartz. 1,878,650; Sept. 20.
Hydrocarbons, Cracking. E. C. Herthel. 1,878,849; Sept. 20.
Hydrocarbons from wells, Obtaining. W. K. Lewis. 1,877,916; Sept. 20.
Hydrocarbons, Treating cracked. T. T. Gray. 1,878,580; Sept. 20.
Hydrocarbons with a chlorinated hydrocarbon in the presence of a metallic halide, Treating. M. L. Chappell. 1,878,262; Sept. 20.
Hydrohalides of the benzine series, Preparation of primary aromatic amine. G. H. Coleman and L. E. Mills. 1,878,675; Sept. 20.
Hydroxy compounds, Manufacture of aromatic. A. W. Titherley and D. P. Hudson. 1,878,061; Sept. 20.
Ignition device. H. L. Hartzell. 1,877,860; Sept. 20.
Illuminated flagpole. R. M. Sutphen. 1,878,447; Sept. 20.
Impact bar for automobile bumpers. G. W. Veale. Des. 57,815; Sept. 20.
Impeller. H. E. Bucklen. 1,878,816; Sept. 20.
Incinerator. E. P. Cole. 1,878,110; Sept. 20.
Incubator. I. L. Martin. 1,878,503; Sept. 20.
Index, Card. K. A. A. Johansson. 1,878,634; Sept. 20.
Indicating and controlling system. L. H. Chamberlain. 1,877,810; Sept. 20.
Indicating mechanism for motor cars and the like. C. H. Vickery. 1,878,035; Sept. 20.
Indicator: *See*—
Elevator indicator. Water level indicator.
Liquid indicator. Weight indicator.
Inductor type furnace. E. F. Northrup. 1,878,532; Sept. 20.
Initiator. H. A. Lewis. 1,877,772; Sept. 20.
Initiator. H. A. Lewis. 1,878,498; Sept. 20.
Insecticide. D. H. Grant. 1,877,851; Sept. 20.
Inspirator. W. B. Ensign and L. H. V. Reynolds. 1,878,478; Sept. 20.
Insulating composition. L. E. Power. 1,878,178; Sept. 20.
Insulator, Electric. W. D. Kyle. 1,877,003; Sept. 20.
Intaglio printing. J. E. Woodbury. 1,878,565; Sept. 20.
Internal combustion engine. P. Freund. 1,878,767; Sept. 20.
Internal combustion engine. A. Moorhouse. 1,877,774; Sept. 20.
Internal combustion engine. A. Moorhouse. 1,878,165; Sept. 20.
Internal combustion engine. J. G. Vincent. 1,878,210; Sept. 20.
Internal combustion engine. L. M. Woolson. 1,878,224; Sept. 20.
Internal combustion engine. L. M. Woolson. 1,878,566; Sept. 20.
Iron: *See*—
Electric iron.
Iron halides from aluminum halides, Separating. C. G. Miner. 1,878,246; Sept. 20.
Jack: *See*—
Lifting jack. Vehicle jack.
Pumping jack.
Jack mechanism. A. W. Warner and R. F. Ballard. 1,878,738; Sept. 20.
Jewelry, Making. H. W. Peters. 1,878,314; Sept. 20.
Joint: *See*—
Brazed or welded joint.
Joint for waste pipes and the like. H. J. Luff. 1,878,945; Sept. 20.
Joist, Bar. T. A. Lucy. 1,878,281; Sept. 20.
Juice extractor. J. R. Minsky and R. Burnham. 1,878,795; Sept. 20.
Ketones of the anthraquinone series and making same. O. Bayer. 1,877,790; Sept. 20.
Kite controller. W. J. Voss. 1,878,041; Sept. 20.
Knitted fabric. H. Hemmerich. Des. 57,782; Sept. 20.
Knitting machines, Horizontal striping attachment for circular. J. Lawson and R. H. Lawson. 1,877,907; Sept. 20.
Knock-off mechanism for slubbers and roving frames. J. C. Nunnally. 1,878,533; Sept. 20.
Lamp, Electric. R. E. D. Maradel. 1,878,873; Sept. 20.
Lamp, Electric. F. Meyer, H. J. Spanner, and E. Germer. 1,877,932; Sept. 20.
Lamp post, Metal. J. F. Ne Page. 1,878,799; Sept. 20.
Lamps for automobiles, etc., Fender. J. P. Bell. 1,877,792; Sept. 20.
Lands and maintaining lands in a condition suitable for cultivation or habitation, Reclaiming. W. Richmond. 1,878,295; Sept. 20.
Lantern, Signal. J. C. Stimson. 1,878,909; Sept. 20.
Lapping machine. A. E. Robinson. 1,878,603; Sept. 20.
Latch for railroad switches. B. R. Barber. 1,877,788; Sept. 20.
Lath, Reenforced metal. W. J. Purser. 1,877,964; Sept. 20.
Lathe, Automatic. W. F. Groene. 1,878,495; Sept. 20.
Lathe center. R. H. Forney. 1,878,690; Sept. 20.
Lathe, Crank shaft. W. F. Groene. 1,878,131; Sept. 20.
Lathe with central drive. J. E. Lovely. 1,877,922; Sept. 20.
Lease forming apparatus for warp handling machine. D. A. Day. 1,878,268; Sept. 20.
Leather finish, Enamel imitation. D. M. Phillippi. 1,878,316; Sept. 20.
Leather, Method of and apparatus for stretching. G. M. Argabrite. 1,877,787; Sept. 20.
Lens, Visual. A. E. Jones. 1,878,708; Sept. 20.
Leveling and plumbing device, Bricklayer's. G. Cornuelle. 1,878,448; Sept. 20.
Lid for refrigerated cabinets. J. R. Replogle. 1,878,181; Sept. 20.
Lift, Automobile. F. Ackerman. 1,878,361; Sept. 20.
Lifter, Invalid. B. C. Leavitt. 1,878,785; Sept. 20.
Lifting jack. G. W. Wiard. 1,878,219; Sept. 20.
Light: *See*—
Marine light.
Light signal. A. W. Fisher and W. B. Wells. 1,878,273; Sept. 20.
Lighting and power system, Train. J. L. Woodbridge. 1,878,563; Sept. 20.
Lighting apparatus. F. C. Winkler. 1,878,084; Sept. 20.
Lime mixture. J. E. Underwood and C. A. Cabell. 1,878,206; Sept. 20.
Link for connecting cross chains to side chains, Slip. W. C. G. Fichter. 1,878,388; Sept. 20.
Liquid and gas separator, Centrifugal. A. L. Wilson and S. H. Huise. 1,878,052; Sept. 20.
Liquid bath apparatus. C. B. Cook. 1,877,816; Sept. 20.
Liquid bath apparatus. C. B. Cook. 1,877,818; Sept. 20.
Liquid indicator. L. Perkins. 1,878,801; Sept. 20.
Liquid purification. G. Moore. 1,877,939; Sept. 20.
Liquids, Method and apparatus for freezing. L. G. Copeman. 1,878,759; Sept. 20.
Liquids, Process and apparatus for storing and utilizing highly volatile. G. G. Oberfell. 1,878,174; Sept. 20.
Lister drive. L. H. Kaupke. 1,878,407; Sept. 20.
Loading machine. F. W. Vodoz. 1,878,037; Sept. 20.
Lock: *See*—
Door lock.
Lock for boxes. A. E. Banasik. 1,878,362; Sept. 20.
Lock for door rollers. J. E. Scott. 1,878,333; Sept. 20.
Lock washer. C. G. Olson. 1,878,425; Sept. 20.
Locking device. J. S. Paulton. 1,878,886; Sept. 20.
Locking device. L. D. Schmidt. 1,878,544; Sept. 20.
Locking device, Door. J. B. Flynn. 1,877,836; Sept. 20.
Locomotive. H. S. Vincent. 1,878,208; Sept. 20.
Locomotive auxiliary port controlling means. H. S. Vincent. 1,878,209; Sept. 20.
Locomotive, Reversible auxiliary. C. H. Froelich. 1,878,838; Sept. 20.
Locomotive sanding mechanism. V. L. Frantz. 1,877,837; Sept. 20.
Looms, Head motion for. J. H. Atwood and C. S. Proctor. 1,877,750; Sept. 20.
Looms, Warp stop-motion for. T. C. Wagner. 1,878,043; Sept. 20.
Loop regulating mechanism. K. R. Lieberknecht. 1,878,869; Sept. 20.
Loose leaf device. C. A. Finley. 1,878,481; Sept. 20.
Loud speaker. J. S. High. 1,877,868; Sept. 20.
Lubricant flow check. J. E. Kummer. 1,878,408; Sept. 20.
Lubricating device. L. E. Gilliam. 1,877,848; Sept. 20.
Lubricating mechanism for slicing machines. F. L. Van Weenen. 1,878,207; Sept. 20.
Lubricating system for roller mill rollers, Central. J. Crites. 1,877,823; Sept. 20.
Lubricating system for the power plant of an automobile. H. D Church. 1,878,379; Sept. 20.
Lubricating system, Hydraulic. A. B. De Cosse. 1,878,115; Sept. 20.
Lubricator: *See*—
Flange and rail lubricator.
Lubricator. Y. Zénon. 1,878,087; Sept. 20.
Luggage, Hand. E. J. Shoemaker. 1,878,989; Sept. 20.

Machine for filling bottles and other vessels. H. V. Nielsem. 1,878,445; Sept. 20.
Machine for laying pipes in trenches. J. F. Robb. 1,877,975; Sept. 20.
Machine for lock-seaming sheets and strips. W. T. Deacon and H. F. Perkins. 1,878,622; Sept. 20.
Machine for making articles from molten material. F. H. Lobb. 1,878,942; Sept. 20.
Machine for making chains. P. Koenig. 1,878,860; Sept. 20.
Machine for printing luminous dials. R. G. Fordyce and H. F. Talbot. 1,878,482; Sept. 20.
Machine for sewing velvet on to fabrics of any kind. F. Delplanque. 1,877,824; Sept. 20.
Machine for shaping figures from fat- or butter-dough or other plastic material. A. C. A. Kalmeijer. 1,878,585; Sept. 20.
Machine for treating hides, skins, and leathers. M. M. Merritt. 1,878,420; Sept. 20.
Machine for washing ball bearings. G. O. Hodge. 1,878,277; Sept. 20.
Machine for washing bottles. F. D. Gatchell. 1,877,843; Sept. 20.
Machinery for making welded pipe. L. Cammen. 1,878,376; Sept. 20.
Machines, Apparatus for the automatic operation of. N. E. Rambush. 1,878,888; Sept. 20.
Magazine, Film. K. P. Gamble. 1,878,693; Sept. 20.
Magazine, Stock. A. and E. Kluge. 1,877,892; Sept. 20.
Magnesium, Fabricating. J. E. Hoy. 1,878,240; Sept. 20.
Magnet core. P. N. Roseby. 1,878,713; Sept. 20.
Malachite green, Production of. L. P. Kyrides. 1,878,530; Sept. 20.
Manganese bearing materials, Electrolytic treatment of. A. Laury. 1,878,244; Sept. 20.
Map rod. C. E. Pedersen. 1,878,177; Sept. 20.
Marine light. P. R. Andrews. 1,877,785; Sept. 20.
Marker. J. A. Carufel. 1,878,673; Sept. 20.
Marker for full fashioned hosiery, Centering. J. Largman. 1,878,865; Sept. 20.
Marker, Traffic. R. Foster. 1,878,691; Sept. 20.
Mask. F. R. M. Bulmer. 1,878,464; Sept. 20.
Match books, Apparatus for making. R. W. Smith. 1,878,647; Sept. 20.
Material, Apparatus for distributing. T. Zaccheo. 1,878,748; Sept. 20.
Materials, Apparatus for puffing starch-containing. O. C. Kirn. 1,878,782; Sept. 20.
Materials, Process of and apparatus for separating. L. A. Hatch. 1,877,861; Sept. 20.
Mercury switch. T. A. Both. 1,878,667; Sept. 20.
Merry-go-round. H. D. Clayton. 1,878,758; Sept. 20.
Metal articles, Treatment of. F. Bamblett. 1,878,096; Sept. 20.
Metal chlorides, Production of anhydrous K. Staib. 1,878,013; Sept. 20.
Metal lath slitting press. W. C. Coryell. 1,877,819; Sept. 20.
Metal rolling, Method of and apparatus for. S. E. Diescher and C. W. W. Koelkebeck. 1,878,117; Sept. 20.
Metal wheel. G. Walther. 1,878,213; Sept. 20.
Metallic meshing netting and like fabric, Method of and apparatus for use in the manufacture of. C. Cosgrove and A. E. Chadwick. 1,878,760; Sept. 20.
Metals and apparatus therefor, Effecting the pressing of. G. Benedetto. 1,878,810; Sept. 20.
Metals for electroplating, Preparing. A. F. Francis. 1,878,837; Sept. 20.
Meter: *See*—
Fluid meter. Postage meter.
Gas meter.
Methanol and other oxygenated organic compounds and preparation of catalysts therefor, Production of. R. G. Franklin. 1,878,390; Sept. 20.
Mica, Composite molding. R. Mahaney and W. Brazelton. 1,878,952; Sept. 20.
Micrometer gauge. F. W. Sigsbey and H. D. Goshorn. 1,878,990; Sept. 20.
Microphone. H. J. Ellis. 1,878,271; Sept. 20.
Milk, Apparatus for cooling. A. R. Pursley. 1,877,965; Sept. 20.
Mill: *See*—
Rolling mill.
Milling and boring attachment for milling machines, Right angle. J. R. Johnson. 1,878,707; Sept. 20.
Milling machine. S. Einstein and L. F. Nenninger. 1,877,828; Sept. 20.
Mirror apparatus, Vehicle backing. H. A. Shapiro and P. Frauendorf. 1,877,997; Sept. 20.
Mixer: *See*—
Concrete mixer.
Mixing machine. H. L. Johnston. 1,878,149; Sept. 20.
Moisture content and quality of materials, Means for determining. J. D'A. Clark. 1,878,109; Sept. 20.
Molded pieces, Baking. E. J. Hall. 1,878,132; Sept. 20.
Molding for metal frames. I. A. Baum. 1,878,807; Sept. 20.
Monoarolydiamines of the benzene series. E. Rimele, E. Glietenberg, and W. Neelmeier. 1,878,543; Sept. 20.
Monoazodyestuffs. W. Hentrich and R. Knoche. 1,878,700; Sept. 20.
Mono-potassium phosphate, Manufacture of. R. D. Pike. 1,878,426; Sept. 20.
Mortar and pestle. E. L. Chott. 1,878,263; Sept. 20.
Motion picture screen. R. O. Walker. 1,878,075; Sept. 20.
Motor: *See*—
Electric motor. Electrically energized motor.
Motor base. C. Harris. 1,278,983; Sept. 20.
Motor controller. E. W. Seeger. 1,878,334; Sept. 20.
Motorcycle. A. Lesage. 1,878,976; Sept. 20.
Mount for films. E. P. Cressler. 1,878,113; Sept. 20.
Mounting for lathes, Slide. W. H. Foster. 1,878,628; Sept. 20.
Mounting, Propeller. R. T. Svendsen and D. G. Chandler. Re18,602; Sept. 20.
Mounting, Propeller. R. T. Svendsen and D. G. Chandler. Re18,605; Sept. 20.
Mounting, Sheet glass. P. J. Feykert. 1,877,835; Sept. 20.
Mushroom. L. F. Lambert. Pl. Pt. 27; Sept. 20.
Muffler. V. Oldberg. 1,878,424; Sept. 20.
Nail detergent, Finger. T. F. Bradley. 1,878,102; Sept. 20.
Nail glossifier, Finger. T. F. Bradley. 1,878,103; Sept. 20.
Name plate. I. W. Livingston. 1,877,919; Sept. 20.
Napkin folder. S. J. Campbell. 1,878,437; Sept. 20.
Napkin, towel, and the like, Paper. L. La Veck. 1,878,866; Sept. 20.
Necktie. C. H. Rodeback. 1,878,604; Sept. 20.
Needle. S. A. Trejo. 1,878,915; Sept. 20.
Needle, Tufting. W. L. Roberts. 1,878,889; Sept. 20.
Negatives, Producing mechanical. H. H. Streuber. 1,878,023; Sept. 20.
Nipples, Apparatus for molding. F. Brown. 1,877,761; Sept. 20.
Nitro compounds, Reduction of organic. C. A. Lyford. 1,878,950; Sept. 20.
Noises in motor vehicles, Apparatus for locating. J. G. Collins. 1,878,380; Sept. 20.
Non-skid apparatus. W. Douthitt. 1,878,386; Sept. 20.
Nut cracking machine. A. C. Nowlin. 1,878,423; Sept. 20.
Nut, Lock. V. R. Stenger. 1,878,199; Sept. 20.
Nut lock washer. J. J. Connell. 1,878,827; Sept. 20.
Nut opening and picking machine. A. C. Nowlin. 1,878,422; Sept. 20.
Nut shell inlay and process of inlaying. C. E. Kaercher. 1,878,402; Sept. 20.
Oil burner. J. E. Fowler. 1,878,836; Sept. 20.
Oil, Insulating. R. Michel. 1,878,509; Sept. 20.
Oil, Treating crude. S. P. Coleman. 1,877,811; Sept. 20.
Oil well screen. J. P. Whann. 1,878,432; Sept. 20.
Oils, Apparatus for distilling hydrocarbon. A. E. Harnsberger. 1,878,845; Sept. 20.
Oils, Extracting. J. W. Beckman. Re18,601; Sept. 20.
1-amino-carbazole. F. Muth and A. Schmelzer. 1,878,168; Sept. 20.
1.4.4'-trihydroxy-2.2'-dianthraquinonyl-3.1'-oxide, Manufacture of. R. E. Schmidt, B. Stein, and K. Bamberger. 1,878,987; Sept. 20.
1-halogen-aryl-thiazoles, Manufacture of. W. Hentrich, M. Hardtmann, J. Hilger, and W. Zerweck. 1,878,699; Sept. 20.
1-Phenyl-2-aminoalcohols (1) Hydroxylated in the phenyl nucleus and preparing them. M. Bockmühl, G. Ehrhart, and L. Stein. 1,877,795; Sept. 20.
Ophthalmic mounting and attaching same. S. E. Bouchard. 1,878,370; Sept. 20.
Ophthalmic mounting and making same. C. L. Bausch. 1,878,366; Sept. 20.
Ophthalmic mounting and making same. S. E. Bouchard. 1,878,371; Sept. 20.
Optical instrument and method of treatment. W. A. Dixey. 1,878,973; Sept. 20.
Optical projection apparatus. J. C. Savage. 1,878,331; Sept. 20.
Optical system for the projection of color pictures. J. Mihalyi. 1,878,967; Sept. 20.
Ores by flotation, Concentrating. J. M. F. Leaper. 1,878,154; Sept. 20.
Ores, particularly copper sulphide ores, Smelting of metallic. A. O. McGregor. 1,877,928; Sept. 20.
Organo-iron compounds and preparing same, Complex inner. W. Hentrich and L. Zeh. 1,878,137; Sept. 20.
Ornament, Christmas. C. H. Miller. 1,878,794; Sept. 20.
Oven and operating the same, Regenerative coke. H. E. Mitchell. 1,878,972; Sept. 20.
Oven, Bake. F. A. Hoppe. 1,878,703; Sept. 20.
Oven, Baking. C. I. Ipsen and R. M. Cherry. 1,878,522; Sept. 20.
Oven heat regulator. O. J. Leins and H. C. Rawlings. 1,878,937; Sept. 20.
Package, Original. N. Ottinger. 1,877,955; Sept. 20.
Packings of turbines, Sealing the shaft. P. W. Thompson. 1,878,731; Sept. 20.
Pad: *See*—
Brake pad.
Paint spraying appliance. S. Bramsen and F. Wahlin. 1,878,435; Sept. 20.
Panel and their fabrication, Laminated. H. J. Woodall and M. S. Randall. 1,878,086; Sept. 20.
Panel board and cabinet therefor. F. T. Shull. 1,878,336; Sept. 20.
Panel board construction. F. T. Shull. 1,878,335; Sept. 20.
Paper making. C. B. Griffin. 1,878,236; Sept. 20.

Paper manufacture. W. J. Zimmerman. 1,878,228; Sept. 20.
Paper pulp beating machine. B. M. Baxter. 1,878,661; Sept. 20.
Paper, Ultra-violet sensitive. L. W. Eberlin. 1,878,684; Sept. 20.
Parachute, Aeroplane. B. Silpikas. 1,878,299; Sept. 20.
Pasteurizing apparatus. W. A. Barrett. 1,878,304; Sept. 20.
Pastry cup. E. Hamwi. 1,878,305; Sept. 20.
Pastry machine. P. Alcala. 1,878,256; Sept. 20.
Pen, Duplex. P. Mon. 1,878,879; Sept. 20.
Pen, Fountain. R. C. Parker. Des. 87,792; Sept. 20.
Pencil. H. L. Fischer. 1,878,389; Sept. 20.
Pencil, Illuminated. R. E. Turton. 1,878,431; Sept. 20.
Perforator, Can. A. Manteufel. 1,878,956; Sept. 20.
Petroleum, Apparatus for refining. L. H. Miles. 1,878,875; Sept. 20.
Phenols and pyridine from liquors, Removal and recovery of. W. R. Knapp. 1,878,927; Sept. 20.
Phenols from gas liquor, Removing. W. Tiddy. 1,878,979; Sept. 20.
Phenyl phenate product, Hydrated. W. H. Williams. 1,878,082; Sept. 20.
Photographic element overcoated with a screening die. C. E. K. Mees. 1,878,961; Sept. 20.
Photographic printing machine. R. S. Hopkins. 1,878,702; Sept. 20.
Picker: *See*—
Corn picker.
Pickers, Mechanism for trimming. W. B. Collum. 1,877,812; Sept. 20.
Pictorial representation from a pattern in relief, Producing a flat. E. Herrmann. 1,878,138; Sept. 20.
Picture apparatus, Self threading motion. H. C. Wellman. 1,878,215; Sept. 20.
Piling machine. J. W. McKinley. 1,878,161; Sept. 20.
Pin: *See*—
Wrist pin.
Pin. W. A. and K. L. Moore. 1,878,880; Sept. 20.
Pins, Making vacuum tube base. A. W. Miner. 1,878,640; Sept. 20.
Pipe: *See*—
Tobacco pipe.
Pipe bender. S. N. Buchanan. 1,878,754; Sept. 20.
Pipe coupling, Automatic train. J. Robinson. 1,878,712; Sept. 20.
Pipe line depositing machine. J. F. Robb. 1,877,974; Sept. 20.
Pipes, Apparatus for breaking in tobacco. E. K. Haas and R. S. Durling. 1,878,844; Sept. 20.
Piston construction. B. B. Blundell. 1,878,574; Sept. 20.
Pitcher, Tiltably mounted. P. D. Te Selle. 1,878,348; Sept. 20.
Plane for leather and the like. H. Lyon. 1,878,410; Sept. 20.
Planter, Corn. E. Mueller. 1,878,883; Sept. 20.
Planter, Tractor operated. A. C. Lindgren. 1,878,871; Sept. 20.
Planting and cultivating. W. S. Davis. 1,878,819; Sept. 20.
Plaster board. F. M. Venzie. 1,878,611; Sept. 20.
Plumbing fitting. M. A. Sisk. 1,878,195; Sept. 20.
Plumbing system. W. J. Luff. 1,878,948; Sept. 20.
Plumbing system. W. J. Luff. 1,878,949; Sept. 20.
Pocket construction, Garment. H. H. Reitz. 1,878,324; Sept. 20.
Pool level regulator, Supply. K. E. Peller. 1,878,598; Sept. 20.
Post: *See*—
Lamp post.
Postage meter. L. L. Mack. 1,878,283; Sept. 20.
Potassium nitrate, Production of. C. T. Thorssell. 1,878,733; Sept. 20.
Pothead. A. G. Steinmayer. 1,878,016; Sept. 20.
Power brake. N. Lombard. 1,878,786; Sept. 20.
Power, Device for the transmission of. C. T. Walton. 1,878,078; Sept. 20.
Power transmission for motor road vehicles and the like. E. L. Cache. 1,878,375; Sept. 20.
Press: *See*—
Metal lath slitting press. Tie press.
Printing press.
Price scale. S. S. Egger-Hansen. 1,878,832; Sept. 20.
Printer concentrator system. A. J. Motto. 1,877,943; Sept. 20.
Printing. T. F. Pinder. 1,878,318; Sept. 20.
Printing machine for goffered films. P. Brosse. 1,878,670; Sept. 20.
Printing machines, Apparatus for preventing offsetting in. T. F. Pinder. 1,878,319; Sept. 20.
Printing means. G. W. Heene. 1,878,516; Sept. 20.
Printing press. W. H. Smith. 1,878,904; Sept. 20.
Product of manufacture. E. de Bruijn. 1,878,679; Sept. 20.
Products comprising lignone derivatives, Manufacture of new. C. F. Cross and A. Engelstad. 1,878,828; Sept. 20.
Products which liberate oxygen, Preparation of. W. Zisch. 1,878,359; Sept. 20.
Propelling means for airplanes. J. Squires. 1,878,011; Sept. 20.
Protective device, consisting of a gas gun. B. C. Goss. 1,878,492; Sept. 20.
Protective device for interlocking systems. J. C. Lindner. 1,877,917; Sept. 20.
Protective device for tables. J. Hilgers. 1,878,850; Sept. 20.
Protector, Ear. C. P. Hekler and P. Horacek. 1,878,307; Sept. 20.
Protector, Garment. S. J. Goldsmith. 1,878,771; Sept. 20.
Protractor. T. Dowd. 1,878,119; Sept. 20.
Psychological testing apparatus. W. O. Snelling. 1,878,008; Sept. 20.
Pump. J. R. Welk. 1,878,739; Sept. 20.
Pump assembly, Safety deep well. J. V. Box. 1,878,372; Sept. 20.
Pump, Diaphragm. R. J. Holmgreen. 1,877,873; Sept. 20.
Pump, Dredge. J. W. Staup. 1,878,429 Sept. 20.
Pump for internal combustion engines, Fuel injection. C. Brown and W. Comery. 1,877,803 Sept. 20.
Pump, High speed. H. F. Vickers. 1,878,736; Sept. 20.
Pump, Lubricating. J. Muller. 1,878,167; Sept. 20.
Pump, Rotary. H. W. Landenberger. 1,878,862; Sept. 20.
Pumping jack. W. E. Cummins. 1,878,469; Sept. 20.
Punch: *See*—
Electric key punch.
Punching and forming machine. G. Sundback. 1,878,201; Sept. 20.
Punching machine, Duplicating. F. L. Lee. 1,878,035; Sept. 20.
Rack attachment for pocket billiard tables. T. E. Dunn. 1,878,449; Sept. 20.
Radiator bracket. J. B. Robinson. 1,878,645; Sept. 20.
Radiator core for automobile cooling systems. W. W. Muir. 1,878,511; Sept. 20.
Radiator hanger. De W. C. Ruff, 2d. 1,878,187; Sept. 20.
Radio beacon system. M. Wallace. 1,878,737; Sept. 20.
Radio circuit. R. S. Soak. 1,877,825; Sept. 20.
Radio frequency transformer and condenser unit, Shielded. E. D. Koeppling. 1,878,636; Sept. 20.
Radio receiving apparatus. T. J. Scofield and W. Miner. 1,878,190; Sept. 20.
Radio relay system. F. Conrad. 1,877,815; Sept. 20.
Radio transmission, System of multiple. W. Hahnemann. 1,877,858; Sept. 20.
Rack: *See*—
Tie rack.
Rail clamp. E. F. Begtrup. 1,878,809; Sept. 20.
Rail, Road. E. T. Harrold. 1,878,846; Sept. 20.
Rake and loader, Tractor propelled. L. H. Larson. 1,877,770; Sept. 20.
Range, Gas. S. H. Hobson. 1,878,143; Sept. 20.
Range or similar article. C. H. Hoffstetter and R. F. Hoffstetter. Des. 87,783; Sept. 20.
Razor blades, Making. F. Kylberg. 1,877,758; Sept. 20.
Razor, Demountable safety. W. Deutsch. 1,878,269; Sept. 20.
Razor, Safety. C. Driest. 1,878,475; Sept. 20.
Reamer. V. J. Kubin. 1,877,901; Sept. 20.
Receptacle or similar article, Ash. R. Gerth. Des. 87,779; Sept. 20.
Receptacle, Sound record. F. Bader. 1,878,659; Sept. 20.
Receptacle, Tobacco ash. E. Schultz. Des. 87,798; Sept. 20.
Receptacle with automatic closure, Tube. F. W. Ellyson. 1,878,833; Sept. 20.
Recording apparatus. M. L. Smith. 1,878,004; Sept. 20.
Reflector, Light. B. Schneider. 1,878,646; Sept. 20.
Refractory articles and making the same, Composite. G. S. Fulcher. 1,878,839; Sept. 20.
Refractory cast article, Making a. C. S. Linder. 1,878,870; Sept. 20.
Refrigerating apparatus. J. G. King. 1,877,891; Sept. 20.
Refrigerating apparatus. L. K. Wright. 1,878,225; Sept. 20.
Refrigerating apparatus, Continuous absorption. E. Altenkirch. 1,878,092; Sept. 20.
Refrigerating machine. E. Kägi. 1,878,403; Sept. 20.
Refrigerating mechanism. G. Muffly. 1,878,798; Sept. 20.
Refrigerating system, Absorption. S. R. Cummings. 1,878,831; Sept. 20.
Refrigerating system, Continuous absorption. E. N. Altenkirch. 1,878,803; Sept. 20.
Refrigerating system with liquid and gas traps. N. H. Gay. 1,878,094; Sept. 20.
Refrigeration. W. A. Kuenzli and A. Y. Dowell. 1,878,929; Sept. 20.
Refrigeration by means of carbon dioxide in solid state. J. S. Wagner. 1,878,042; Sept. 20.
Refrigeration system. J. P. Green. 1,878,772; Sept. 20.
Refrigerator control. E. C. Raney. 1,877,967; Sept. 20.
Refuse separator. J. H. Brown. 1,878,753; Sept. 20.
Registor. W. F. Steenweg. 1,878,014; Sept. 20.
Regulating system for low pressure steam generation. C. H. Smoot. 1,878,005; Sept. 20.
Regulator: *See*—
Automatic regulator. Pool level regulator.
Heat regulator. Voltage regulator.
Oven heat regulator.
Reinforcement for concrete and the like. M. C. Shelton. 1,878,992; Sept. 20.
Relay system. J. V. Breisky. 1,876,669; Sept. 20.
Repetitive-process indicator apparatus. C. F. Schnuck and G. W. Kuntney. 1,878,716; Sept. 20.
Reproducer for sound films. E. Gerlach. 1,877,844; Sept. 20.

Resin and making the same, Synthetic. R. H. Kienle. 1,878,527; Sept. 20.
Resin and making the same, Synthetic. W. H. Moss. 1,878,249; Sept. 20.
Resins and like materials, Cracking. H. N. Dauler. 1,878,267; Sept. 20.
Retort. W. C. Whyte. 1,878,307; Sept. 20.
Retort with revolving hearths. C. Ab-der-Halden. 1,878,581; Sept. 20.
Rheostat. R. P. Mattern. 1,877,926; Sept. 20.
Rind removing machine. G. W. Berry. 1,878,457; Sept. 20.
Ring: *See*—
Two-part piston ring.
Ring for spoked wheels, Ornamenting. L. B. Green. 1,878,441; Sept. 20.
Ring grinding machine. F. Deutsch. 1,878,116; Sept. 20.
Riveting machine. J. W. Hughes. 1,878,520; Sept. 20.
Road or pavement making apparatus. G. Jaeger. 1,878,278; Sept. 20.
Rock drill. W. A. Smith, sr. 1,878,905; Sept. 20.
Rod: *See*—
Map rod.
Rod weeder, Rotary. B. J. Connor. 1,877,814; Sept. 20.
Roll heater. J. Milnes and R. E. Howell. 1,878,071; Sept. 20.
Rollers, Process and apparatus for preparing printing. A. Tausz and F. Stehlik. 1,878,847; Sept. 20.
Rolling mill. F. Möller. 1,878,595; Sept. 20.
Roof, Car. E. R. Swanson. 1,878,430; Sept. 20.
Rubber compound and preserving it. A. M. Clifford. Re18,603; Sept. 20.
Rubber cutting machine. A. Lade. 1,878,453; Sept. 20.
Rubber latex and the like and apparatus therefor, Pumping of. H. Willshaw, W. G. Gorham, and R. F. Lee. 1,878,220; Sept. 20.
Rubber, Process of and compound for treating. G. S. Whitby. 1,878,654–5; Sept. 20.
Ruling attachment for time recorders. W. A. Wood, jr. 1,878,562; Sept. 20.
Sack inverting machine. J. K. Folker and F. F. Truelsen. 1,878,627; Sept. 20.
Safety contact device for automobiles. R. P. Pescara. 1,878,313; Sept. 20.
Safety device for motor cars. B. Silbermann. 1,878,194; Sept. 20.
Safety device for presses. F. E. Dial and R. R. Rogers. 1,878,470; Sept. 20.
Saw set. W. V. Hawes. 1,878,396; Sept. 20.
Saws, Device for setting circular. J. A. Weller. 1,878,077; Sept. 20.
Scale, Electrical. B. Townshend and J. D. Johnston. 1,878,554; Sept. 20.
Scale, Weighing. C. O. Marshell and H. O. Hem. 1,878,160; Sept. 20.
Scale, Weighing. E. F. Ulrich. 1,878,205; Sept. 20.
Scraper, Hydraulic road. E. A. Weeks. 1,878,080; Sept. 20.
Screen: *See*—
Motion picture screen. Talking picture screen.
Oil well screen. Window screen.
Screen for wall apertures. E. T. Fisk. 1,878,626; Sept. 20.
Screen roller adjustment device. H. P. Gronbech. 1,877,853; Sept. 20.
Screw cutting die. F. W. Wells. 1,878,216; Sept. 20.
Screw mounting. H. D. Sevison. 1,878,898; Sept. 20.
Scum and efflorescence on brick and clay wares, Preventing. J. B. Pierce, jr., and R. L. Curnes. 1,878,887; Sept. 20.
Seal. J. B. Murray. 1,878,991; Sept. 20.
Seal, Container. G. W. Curtis. 1,878,677; Sept. 20.
Seals for gear casings, Oil and dirt. D. B. Baker and N. O. Panzegrau. 1,878,804; Sept. 20.
Selector for group control systems. U. Kölm. 1,878,928; Sept. 20.
Separator: *See*—
Egg separator. Refuse separator.
Liquid and gas separator.
Sewing machine. G. Huber. 1,878,146; Sept. 20.
Sewing machine, Lock-stitch. M. Hemleb. 1,877,757; Sept. 20.
Sewing machines, Pinking attachment for. M. Popper. 1,878,293; Sept. 20.
Sewing machines, Thread-cutting mechanism for. A. F. Fifield. 1,878,480; Sept. 20.
Shade, Lamp. E. Schwarz. Des. 87,799–808; Sept. 20.
Sharpener for slicing machines. C. F. M. van Berkel. 1,878,066; Sept. 20.
Sharpener, Lawn mower. L. B. Stowell. 1,878,648; Sept. 20.
Sharpener, Pencil. R. H. Bair. 1,878,617; Sept. 20.
Shearing machine. V. E. Edwards. 1,878,121; Sept. 20.
Sheet manufacture and apparatus therefor, Electrolytic method of continuous. G. A. Reinhardt and R. H. Eurich. 1,878,540; Sept. 20.
Shipping case. C. P. Douglass. 1,878,118; Sept. 20.
Shock absorber. C. W. Sherman. 1,877,998; Sept. 20.
Shock absorber for draft gears. C. W. Sherman. 1,877,999; Sept. 20.
Shoe. R. F. McCarthy. 1,878,419; Sept. 20.
Shoes, Making. C. Miller and A. Leone. 1,878,876; Sept. 20.
Siccatives, Producing. F. Meidert. 1,878,962; Sept. 20.
Sickle guard and bar. W. J. Hild. 1,877,869; Sept. 20.
Sign, Luminescent. M. G. Morris. 1,878,230; Sept. 20.
Signal: *See*—
Light signal. Tire deflation signal.
Signal. B. Eliggi and L. Lorenzi. 1,878,122; Sept. 20.
Signal for motor vehicles. S. B. Alcoriza. 1,878,090; Sept. 20.
Signal switch. W. J. Porter. 1,877,963; Sept. 20.
Signalling device. F. J. Farley. Des. 87,776; Sept. 20.
Signalling, Method of and apparatus for electrical. E. H. Loftin. 1,877,920; Sept. 20.
Signs and the like, Advertising. J. E. Bielski. 1,878,368; Sept. 20.
Silk or the like, Producing artificial. J. Brenzinger. 1,878,374; Sept. 20.
Sizing apparatus. A. W. Phelps. 1,878,315; Sept. 20.
Slice deflector. J. C. van Berkel. 1,878,071; Sept. 20.
Slicing and chopping machine. A. C. Sensow. 1,877,993; Sept. 20.
Slicing machine. E. M. Stiles. 1,878,020; Sept. 20.
Slicing machine. C. F. M. van Berkel. 1,878,070; Sept. 20.
Slicing machine, Motor driven. J. van Hoorn. 1,878,033; Sept. 20.
Slicing machines, Slice stackers for, C. F. M. van Berkel. 1,878,069; Sept. 20.
Slip with removable liner. F. J. Young. 1,878,433; Sept. 20.
Smoking device. E. A. Sandling. 1,878,714; Sept. 20.
Snap switch. M. Guett. 1,878,843; Sept. 20.
Soap manufacture. J. A. Schwantes. 1,878,547; Sept. 20.
Socket, Electric lamp. G. H. Elwell. 1,878,387; Sept. 20.
Sodium, potassium, and magnesium chlorides from natural brines and controlling the crystal sizes, Recovering. H. B. Kipper. 1,878,586; Sept. 20.
Soil pulverizer. J. M. Hjermstad. 1,878,142; Sept. 20.
Sole and heel, Combined. W. V. Regan. Des. 87,795; Sept. 20.
Solvents used in the purification of hydrocarbons, Recovery of. R. K. Stratford. 1,878,022; Sept. 20.
Sound, Apparatus and method for the absorption of. E. B. Lyford. 1,878,409; Sept. 20.
Sound-box for sound-reproducing machines. R. Goldschmidt. 1,878,770; Sept. 20.
Sound reproducing apparatus. J. Basil and C. Bongiorno. 1,878,806; Sept. 20.
Sound reproducing apparatus. W. R. Oyston. 1,878,311; Sept. 20.
Sound reproducing device. B. J. Chromy. 1,878,232; Sept. 20.
Sound reproducing means. A. J. Cawley. 1,878,577; Sept. 20.
Spat, Elastic. L. Wiesenfeld. 1,878,923; Sept. 20.
Speed accelerating device, Swimmer's. D. Trujillo. 1,878,916; Sept. 20.
Speed changing mechanism. E. G. Kesling. 1,877,886; Sept. 20.
Speed responsive device. P. Utne. 1,878,305; Sept. 20.
Speed transmission mechanism, Variable. E. Gessner. 1,878,486; Sept. 20.
Spelling game board. V. D. Brittingham. Des. 87,775; Sept. 20.
Spinning machine. J. A. Andrews. 1,878,572; Sept. 20.
Spin-o-plane. W. C. Thompson. 1,878,732; Sept. 20.
Spirit level. J. and P. Axt. 1,878,751; Sept. 20.
Spray head, J. C. MacLachlan. 1,878,588; Sept. 20.
Spring: *See*—
Valve spring.
Spring device for automobiles, Hydraulic. E. J. Fischer. 1,878,450; Sept. 20.
Spring expander. A. P. Estes. 1,878,624; Sept. 20.
Spring suitable for vehicles, Pneumatic. C. W. Caldwell. 1,878,756; Sept. 20.
Stamp affixing machine. E. W. Gmelin and A. Gay. 1,877,849; Sept. 20.
Stamp, Hand. H. Smallman. 1,878,900; Sept. 20.
Stand: *See*—
Boiler stand. Display stand.
Stand for the display of goods. J. Ehrlich. 1,878,765; Sept. 20.
Starches adapted to form an adhesive when mixed with cold water, Producing powderous swelling. E. F. Hoppler and J. W. Haake. 1,878,852; Sept. 20.
Starting apparatus, Engine. R. M. Nardone. 1,878,421; Sept. 20.
Starting device, Steam engine. R. F. Knight. 1,877,893; Sept. 20.
Starting of internal combustion engines of the liquid fuel injection compressiong ignition type, Facilitating. H. R. Ricardo. 1,878,325; Sept. 20.
Starting switch, Automobile. H. H. Waddell. 1,878,920; Sept. 20.
Stave jointing machine. N. P. Spayd. 1,878,550; Sept. 20.
Steam generating plants especially for locomotives, Apparatus for regulating the operation of. F. Wempe. 1,878,217; Sept. 20.
Steam generator. I. Harter. 1,878,133; Sept. 20.
Steam generator and sprayer for bakery ovens. M. Watter. 1,878,353; Sept. 20.
Steam injector. R. D. and J. C. Metcalfe. 1,878,793; Sept. 20.
Steam superheating by means of high-pressure steam, Interstage. O. H. Hartmann. 1,878,135; Sept. 20.
Steel alloy. F. Pölzguter. 1,877,962; Sept. 20.

Stencil sheets. K. W. Carr. 1,878,672; Sept. 20.
Stiffener and heel brace, Combined shoe shank. L. Weinstein. 1,878,612; Sept. 20.
Stocking. R. K. Siner. 1,878,337; Sept. 20.
Stocking. F. E. Struve. Des. 87,812–13; Sept. 20.
Stockings, Making. K. R. Liberknecht. 1,878,499; Sept. 20.
Stocking topping machine. A. W. Swartz. 1,878,728; Sept. 20.
Stop, Automatic oil. G. Wilcox. 1,878,356; Sept. 20.
Stop, Automobile. C. A. Barrett. 1,877,789; Sept. 20.
Stop for motor vehicles, Safety. M. L. Rosenfeld and J. H. Morgan. 1,877,976; Sept. 20.
Stop-motion device. E. B. Allen and W. Myers. 1,878,091; Sept. 20.
Stove for burning disintegrated lignite coke. W. Rempen. 1,878,644; Sept. 20.
Stove or range. C. H. and R. F. Hoffstetter. Des. 87,784; Sept. 20.
Stretcher, Electric wire. D. Knabenshut. 1,878,859; Sept. 20.
Striping instrument. J. M. Christman. 1,878,406; Sept. 20.
Structural material and making the same. H. C. Peffer, R. L. Harrison, and D. E. Ross. 1,877,959; Sept. 20.
Structural material and making the same. H. C. Peffer and P. W. Jones. 1,877,960; Sept. 20.
Submerger. C. B. Cook. 1,877,817; Sept. 20.
Sucrose from cane molasses, Recovering. A. L. Holven. 1,878,144; Sept. 20.
Sucrose from cane molasses, Recovery of. A. L. Holven. 1,878,145; Sept. 20.
Suction cleaner. W. C. Davidson. 1,878,384; Sept. 20.
Suction cleaner. A. T. Jones. 1,878,856; Sept. 20.
Suction cleaner. W. H. Kitto. 1,878,858; Sept. 20.
Suction cleaner. D. G. Smellie. 1,878,901; Sept. 20.
Suction cleaner. R. L. Swartz. 1,878,914; Sept. 20.
Suction device for gathering molten glass. R. W. Canfield. 1,878,576; Sept. 20.
Sulphur, Mining. W. T. Lundy and W. Drachenberg. 1,878,158; Sept. 20.
Super-heterodyne receivers, Operating. H. A. Wheeler. 1,878,614; Sept. 20.
Supply carrier for braiding machines. H. G. Robinson. 1,878,890; Sept. 20.
Support, Adjustable tray. A. A. Anderson. 1,877,784; Sept. 20.
Support, Camera. N. D. Potter. 1,878,320; Sept. 20.
Support, Pipe carrier. W. F. Bossert. 1,878,100; Sept. 20.
Support, Scaffold. J. R. Adams. 1,878,802; Sept. 20.
Support, Surgical. F. J. Stuart. 1,878,913; Sept. 20.
Supporting, driving, and braking mechanism, Tandem multiple. P. Mehrer. 1,877,930; Sept. 20.
Supporting means for web rolls. L. W. Claybourn. 1,878,264; Sept. 20.
Suppository for treating vaginal conditions. G. F. Fitzgerald. 1,878,766; Sept. 20.
Surgical instrument. H. Drache. 1,877,827; Sept. 20.
Suspension system for motor cars and vehicles of all kinds. S. A. Horstmann. 1,877,878; Sept. 20.
Switch: *See*—
Air speed switch. Mercury switch.
Battery switch. Signal switch.
Control switch. Snap switch.
Electric socket switch. Starting switch.
Electric switch. Time switch.
Switch. J. C. Bashloum. 1,878,456; Sept. 20.
Switch. C. Christensen. 1,878,377; Sept. 20.
Switch. J. Schneider. 1,877,986; Sept. 20.
Switch block, Adjustable. L. H. Hassel. 1,878,696; Sept. 20.
Switch clip, Steering wheel. R. C. Gallinant. 1,878,769; Sept. 20.
Switch house and switching system and apparatus. G. A. Burnham. 1,878,107; Sept. 20.
Syringe. W. A. Throop. 1,878,026; Sept. 20.
Table or similar article, Radio. W. K. Kleaver. Des. 87,785; Sept. 20.
Table or similar article, Radio. W. K. Kleaver. Des. 87,787; Sept. 20.
Tag. E. W. Stifel. Des. 87,811; Sept. 20.
Talking picture screen. W. H. Morris. 1,877,941; Sept. 20.
Tank: *See*—
Glass melting tank.
Tank cap. A. R. Fergusson. 1,878,687; Sept. 20.
Tapes, Apparatus and method for marking jacquard. W. Recke. 1,878,643; Sept. 20.
Taximeter. F. H. Clause. 1,878,438; Sept. 20.
Taximeter flag control system. D. Papaefthemeou. 1,878,596; Sept. 20.
Telegraph, Printing. E. E. Kleinschmidt. 1,878,152; Sept. 20.
Telephone attachment. D. Rappaport. 1,878,601; Sept. 20.
Telephone, Automatic answering and recording. H. E. Huntington and W. A. Booz. 1,878,778; Sept. 20.
Telephone call box, Automatic. P. G. T. DeVilliers. 1,878,762; Sept. 20.
Telephone system, Automatic. F. L. Kahn. 1,877,883; Sept. 20.
Temperature controlling device for refrigerating machines. C. C. Thomas. 1,878,301; Sept. 20.
Tension frame. W. F. Horsting. 1,877,877; Sept. 20.
Terminal. A. M. Myers. 1,878,169; Sept. 20.
Terminal, Oil-cooled. R. W. Atkinson. 1,878,094; Sept. 20.
Testing apparatus. S. N. Senna. 1,878,446; Sept. 20.
Testing device. R. Stern. 1,878,610; Sept. 20.
Testing machine. D. C. Scott. 1,878,191–2; Sept. 20.
Testing machine. D. C. Scott and F. A. Valentine. 1,878,193; Sept. 20.
Textile fabric. G. H. Perkins. Des. 87,793; Sept. 20.
Textile fabric or similar article, Embroidered. F. H. M. Pohl. Des. 87,794; Sept. 20.
Textiles, Manufacture of artificial. H. Meyer and W. Eller. 1,877,933; Sept. 20.
Thermal protective system. E. O. Schweitzer. 1,877,990; Sept. 20.
Thermally operated device. O. J. Leins and C. Wantz. 1,878,938; Sept. 20.
Thermionic system. J. S. Foster. 1,878,124; Sept. 20.
Thiocyanates, Treating. C. J. Hansen. 1,878,982; Sept. 20.
Threads, Apparatus for guiding. T. F. Banigan. 1,878,455; Sept. 20.
Tie press. J. Irschik. 1,878,400; Sept. 20.
Tie rack. R. J. Kopp. 1,878,444; Sept. 20.
Tile, Apparatus for producing. R. B. Keeler and R. W. Phillips. 1,878,780; Sept. 20.
Time switch. J. E. Kuykendall. 1,878,637; Sept. 20.
Tin compounds in the art of leading silk, Recovery of. W. Meitner. 1,878,507; Sept. 20.
Tire deflation signal. H. T. Lambert. 1,878,411; Sept. 20.
Tire, Pneumatic. H. P. Schrank. 1,877,988; Sept. 20.
Tire, Solid rubber. H. G. Bruner. 1,877,805; Sept. 20.
Tire spreader. G. E. Hazard. 1,878,515; Sept. 20.
Toaster. P. J. N. Miller and V. E. Extrom. 1,878,968; Sept. 20.
Toaster, Sandwich. K. E. Bemis. 1,878,258; Sept. 20.
Tobacco for making cigarettes and for other purposes, Apparatus for combing and feeding. F. F. Ruau. 1,878,328; Sept. 20.
Tobacco pipe. L. L. Martin. 1,877,925; Sept. 20.
Tobacco pipe. H. M. McClure. 1,878,506; Sept. 20.
Toggle bolt. G. Gober. 1,878,579; Sept. 20.
Tool. H. A. Koester. 1,877,768; Sept. 20.
Tool, Combination garden hand. C. A. Todd. 1,878,553; Sept. 20.
Tool for cutting stone. P. S. Legge. 1,878,414–15; Sept. 20.
Tool for internal taper boring, Boring. E. Oyen. 1,878,175; Sept. 20.
Tool grinding machine. J. M. Doebrich. 1,878,385; Sept. 20.
Tool, Grooming. T. A. Suter. 1,878,345; Sept. 20.
Tool, Hand-operated shearing. F. D. Lingwood. 1,878,500; Sept. 20.
Tool, Rotary power driven. H. J. Youngblood. 1,878,747; Sept. 20.
Tool, Setting. D. H. Reed. 1,878,538; Sept. 20.
Tooth, Artificial. C. Hiltebrandt. 1,878,517; Sept. 20.
Top for rumble seats of motor vehicles, Detachable. E. B. Bradley. 1,878,461; Sept. 20.
Top, Sliding desk. E. Ohnstrand. 1,877,775; Sept. 20.
Torque converter, Hydraulic. J. Bossart. 1,877,796; Sept. 20.
Toy. L. Doremus. 1,877,826; Sept. 20.
Toy building construction. E. C. Breeser. 1,878,373; Sept. 20.
Toy drum. S. Hoffman. 1,877,871; Sept. 20.
Toy, Figure. W. D. Ferris. 1,877,834; Sept. 20.
Toy telephone. W. C. Wood. 1,878,615; Sept. 20.
Toy telephone and bank. W. C. Wood. 1,878,616; Sept. 20.
Track, Overhead. O. C. Schmidt and A. G. Klawitter. 1,878,705; Sept. 20.
Track structure. W. G. Hulbert. 1,878,984; Sept. 20.
Traction wheel. B. R. Benjamin and W. R. Peterson. 1,878,811; Sept. 20.
Tractor. E. A. Johnston. 1,878,855; Sept. 20.
Tractor disk harrow. J. R. Barker. 1,878,805; Sept. 20.
Traffic control systems for railroads, Centralized. A. R. Whitehorn. 1,878,085; Sept. 20.
Traffic controlling system, Centralized. R. F. Wells and D. W. Mersereau. 1,878,083; Sept. 20.
Train control. T. W. Varley and W. C. Nein. 1,878,735; Sept. 20.
Train control system, Automatic. W. H. Reichard. 1,877,968; Sept. 20.
Transmission. L. A. Bixby. 1,877,794; Sept. 20.
Transmission. C. E. Swenson. 1,878,200; Sept. 20.
Transmission, Electrooptical. H. E. Ives. 1,878,147; Sept. 20.
Transmission-line protective system. S. B. Griscom. 1,878,774; Sept. 20.
Transmission, Motor vehicle. J. G. Vincent. 1,878,556; Sept. 20.
Transmission system, High frequency. A. H. Taylor. 1,878,252; Sept. 20.
Transplanter. E. H. Lamiell. 1,878,412; Sept. 20.
Traverse equipment. W. C. Kenney and G. M. Kenney. 1,878,526; Sept. 20.
Tray, Child's portable. T. E. Lane and C. H. Welch, jr. 1,878,864; Sept. 20.
Tray for slicing machines, Display. H. Thomas. 1,878,202; Sept. 20.

Trimmer: *See*—
Hedge trimmer.
Truck, Dump. H. R. Holmes. 1,878,851; Sept. 20.
Truck, Lift. W. Steubing, jr. 1,878,726; Sept. 20.
Tub: *See*—
Feeder tub.
Tube: *See*—
Electron discharge tube.
Tube. H. J. Kerr. 1,878,242; Sept. 20.
Tube and rod forming machine. J. L. Cassady. 1,878,261; Sept. 20.
Tube cutting mechanism. C. F. Smith. 1,878,985; Sept. 20.
Tube expander. G. Wiedeke. 1,878,049; Sept. 20.
Tubular structure, Laminated. C. L. Keller. 1,878,452; Sept. 20.
Tungsten metal, Production of. E. Pokorny. 1,877,961; Sept. 20.
Tunnel, Subaqueous. C. F. Shaffer. 1,877,994; Sept. 20.
Twine tension device for grain binders. D. W. Smith. 1,878,902; Sept. 20.
Two-part piston ring. J. M. Nichols. 1,878,641; Sept. 20.
Two-stroke cycle engine. R. L. Southern. 1,878,339; Sept. 20.
Typographical composing and distributing machine. H. A. Burt and J. H. Hilpman. 1,878,231; Sept. 20.
Umbrella runner and tip cup. J. Rose. 1,878,428; Sept. 20.
Undergarment. S. Blue. 1,878,981; Sept. 20.
Underground exploration method. O. H. Trumann. 1,878,029; Sept. 20.
Underreamer. F. S. Bunker. 1,878,200; Sept. 20.
Vacuum brake. N. Lombard. 1,878,944; Sept. 20.
Valuable ingredients from heat sensitive raw materials, Extraction of. M. B. Hopkins. 1,877,875; Sept. 20.
Valve. A. Abramson. 1,878,749; Sept. 20.
Valve. C. S. Hansen. 1,877,859; Sept. 20.
Valve. G. E. Hazard. 1,877,763; Sept. 20.
Valve. G. B. Iles. 1,878,706; Sept. 20.
Valve actuating mechanism. R. J. Buehler. 1,878,106; Sept. 20.
Valve and the like. W. G. Wilson. 1,878,222; Sept. 20.
Valve, Automatic control. O. Eberspacher. 1,878,270; Sept. 20.
Valve, Combined mixing and diverting. R. E. Bletcher and E. H. Bucknell. 1,878,097; Sept. 20.
Valve, Emergency release. F. X. Smith. 1,878,002; Sept. 20.
Valve, Flush. W. E. Sloan. 1,878,001; Sept. 20.
Valve for bladders and other inflatable hollow bodies, Air. S. Saul. 1,878,715; Sept. 20.
Valve for syrupers, Filling. T. McGhee. 1,877,927; Sept. 20.
Valve, Forged steel. W. W. Mohr. 1,878,288; Sept. 20.
Valve insides assembly machine, Tire. L. C. Broecker. 1,878,575; Sept. 20.
Valve, Pressure reducing or relief. A. Moore. 1,877,938; Sept. 20.
Valve, Rotary disk. P. Pasholk. 1,878,535; Sept. 20.
Valve spring. W. R. Griswold. 1,878,128; Sept. 20.
Valve spring compressor. R. B. Law. 1,878,280; Sept. 20.
Valve, Water softener. C. A. Stickney. 1,878,019; Sept. 20.
Vanity dressing table. M. M. Wheeler. Des. 87,821; Sept. 20.
Vapor of wood or its by products, Treating. E. L. Day. 1,878,678; Sept. 20.
Vapors under high vacuum, Pumping. W. K. Lewis. 1,877,915; Sept. 20.
Vaporizer, Electric. N. Lawner. 1,878,587; Sept. 20.
Vault, Burial. A. N. Kettner. 1,878,781; Sept. 20.
Vehicle. J. H. Hertner. 1,878,139; Sept. 20.
Vehicle, Air. E. P. Mantell. 1,878,955; Sept. 20.
Vehicle body, Pressed metal. J. Ledwinka. 1,878,155; Sept. 20.
Vehicle body, Pressed metal. J. Ledwinka. 1,878,934; Sept. 20.
Vehicle jack. S. R. Zimmerman. 1,878,059; Sept. 20.
Vehicle light. C. W. Wright. Des. 87,822; Sept. 20.
Vehicle, Motor. A. L. Knapp. 1,877,769; Sept. 20.
Vehicle, Motor. A. Moorhouse. 1,878,166; Sept. 20.
Vehicle wheel. H. Sauer. 1,878,330; Sept. 20.
Vending machine. L. H. Sallee. 1,878,894; Sept. 20.
Veneers, Patching. A. R. Welch. 1,878,081; Sept. 20.
Ventilation for turbo generators, Rotor. C. M. Laffoon. 1,877,904; Sept. 20.
Vibratory apparatus. K. H. Whitney. 1,878,925; Sept. 20.
Volatile constituents from a liquid or gas, Removing one or more. M. Shoeld. 1,878,607; Sept. 20.
Voltage regulator. P. L. Spencer. 1,878,341; Sept. 20.
Washer: *See*—
Lock washer.
Nut lock washer.
Washing machine. C. Calse. 1,878,825; Sept. 20.
Washing machine. R. E. Warren. 1,878,254; Sept. 20.
Washing machine. E. R. Zademach. 1,878,508; Sept. 20.
Warping machine. G. Sipp. 1,878,298; Sept. 20.
Water circulating system for automobiles. J. F. Gulyban. 1,878,496; Sept. 20.
Water control, Flood. C. W. Crouse. 1,878,383; Sept. 20.
Water level indicator, Radiator. J. C. Luckhardt, jr. 1,878,867; Sept. 20.
Water, Purifying. B. B. Kaplan. 1,878,525; Sept. 20.
Water tube boiler. L. Steinmüller. 1,878,908; Sept. 20.
Water waver. A. Golden. 1,878,842; Sept. 20.
Watthour meter testing device. S. Aronoff. 1,878,658; Sept. 20.
Waxes, Decomposition of. E. Liese. 1,878,940; Sept. 20.
Web severing device, Pneumatic. O. C. Roesen. 1,878,184; Sept. 20.
Weed cutter. T. J. Flack. 1,878,689; Sept. 20.
Weighing head for dynamometer apparatus. F. A. Fleischmann and A. L. March. 1,878,835; Sept. 20.
Weight indicator. L. Schafer. 1,877,980; Sept. 20.
Welding apparatus. R. C. Spaulding, V. Oldberg, and A. C. Born. 1,878,340; Sept. 20.
Welding apparatus. W. A. Walker. 1,878,558; Sept. 20.
Welding, Electric. G. H. Koch. 1,877,767; Sept. 20.
Welding machine. F. C. Hasse and S. R. Oldham. 1,878,136; Sept. 20.
Welding machine. D. K. Hopkins. 1,877,874; Sept. 20.
Wheel: *See*—
Drawing wheel.
Metal wheel.
Traction wheel.
Vehicle wheel.
Wheel alignment gauge. C. C. Bennett. 1,878,664; Sept. 20.
Wheel construction. H. L. Kraeft. 1,878,528; Sept. 20.
Wheel construction, Tandem. F. M. Reid. 1,877,970; Sept. 20.
Wheel dresser, Grinding. H. H. Dovell. 1,878,763; Sept. 20.
Window frame. J. B. Rowland and F. C. Andersen. 1,877,977; Sept. 20.
Window frame. R. Schoepke. 1,878,546; Sept. 20.
Window screen, Roller. W. W. Watson. 1,878,710; Sept. 20.
Window shade bracket. T. Griffiths. 1,878,773; Sept. 20.
Windshield holding device. I. H. Jones. 1,878,584; Sept. 20.
Wire key for plaster and means to secure same to plaster board. J. S. Raynor. 1,878,180; Sept. 20.
Wire stitching machines, Spring toggle adjustment for. T. A. Gibson. 1,878,274; Sept. 20.
Wood, Preserving. M. Hagedorn and E. Gübring. 1,877,855; Sept. 20.
Wrapper, Transparent coin. M. H. McWhirter and A. G. Adair. 1,878,592; Sept. 20.
Wrist pin. O. Cox and O. C. Willis. Re18,604; Sept. 20.
Yarn setting frame, Tuft. C. C. Alvord. 1,877,783; Sept. 20.
Zinc base die casting alloy. E. A. Anderson and G. L. Werley. Re18,600; Sept. 20.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 20, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

1— 7: 1,878,274
49: 1,878,417
2— 42: 1,878,755
150: 1,878,604
237: 1,878,981
243: 1,877,799
247: 1,878,275
254: 1,878,324
4— 7: 1,878,910
57: 1,878,613
212: 1,878,948
1,878,949
5— 58: 1,878,405
86: 1,878,785
97: 1,878,958
8— 5: 1,878,548
6: 1,877,945
19: 1,878,161
1,878,776
20: 1,878,783
9— 1: 1,878,393
20: 1,878,434
21: 1,878,916
10— 12: 1,878,196
110: 1,877,797
118: 1,878,216
12— 117: 1,878,391
142: 1,878,876
13— 6: 1,878,392
1,878,591
8: 1,878,532
25: 1,878,619
15— 13: 1,878,914
16: 1,878,858
1,878,901
50: 1,878,508
138: 1,878,027
179: 1,878,856
197: 1,878,323
16— 85: 1,878,248
1,878,881
100: 1,878,333
163: 1,877,846
171: 1,878,363
18— 1: 1,878,322
2: 1,878,505
8: 1,878,455
1,878,692
17: 1,878,899
37: 1,878,559
42: 1,877,761
47.5: 1,877,959
1,877,960
50: R.18,603
53: 1,878,654
1,878,655
54: 1,877,933
1,878,374
55: 1,877,864
58: 1,878,483
19— 76: 1,878,753
130: 1,878,572
20— 11: 1,877,977
12: 1,878,546
19: 1,878,034
20: 1,877,529
1,878,073
40.5: 1,878,718
56.4: 1,877,835
22— 69: 1,877,896
110: 1,878,880
23— 3: 1,878,609
6: 1,878,359
7: 1,878,682
10: 1,878,705
38: 1,878,586
87: 1,878,013
96: 1,878,246
102: 1,878,733
107: 1,878,426
119: 1,878,982
136: 1,878,507
160: 1,878,676
182: 1,878,108
193: 1,878,979
237: 1,878,390
23— 246: 1,878,164
1,878,510
24— 31: 1,878,003
137: 1,878,497
198: 1,877,885
236: 1,878,291
263: 1,878,372
1,878,433
25— 9: 1,878,547
103: 1,878,957
105: 1,878,780
118: 1,878,846
27— 17: 1,878,781
28— 30: 1,878,298
40: 1,878,268
55.5: 1,877,783
29— 27: 1,878,628
33: 1,878,575
34: 1,878,201
67: 1,878,571
86.3: 1,878,290
87.1: 1,878,624
156.8: 1,878,240
160.5: 1,878,530
160.6: 1,878,314
30— 1: 1,878,540
9: 1,877,827
1,878,689
11: 1,878,878
12: 1,878,269
1,878,475
32— 9: 1,878,517
33— 27: 1,878,633
32: 1,878,562
1,878,818
85: 1,878,448
105: 1,878,119
147: 1,878,493
1,878,990
174: 1,877,981
180: 1,878,296
199: 1,878,673
203: 1,878,664
213: 1,878,751
34— 39: 1,878,297
48: 1,878,236
35— 12: 1,878,008
36— 2: 1,878,923
58.5: 1,878,419
76: 1,878,612
37— 155: 1,878,080
159: 1,877,979
39— 6: 1,878,234
40— 4: 1,878,541
28: 1,878,434
34: 1,878,663
40: 1,878,750
52: 1,878,310
130: 1,878,331
132: 1,878,368
140: 1,877,919
150: 1,878,113
41— 10: 1,878,441
1,878,794
25: 1,878,138
35: 1,878,402
38.6: 1,878,672
43: 1,878,895
46: 1,878,023
42— 1: 1,878,492
4: 1,877,839
16: 1,878,098
50: 1,878,039
43— 5: 1,878,951
46: 1,878,015
89: 1,878,635
131: 1,877,979
147: 1,877,778
45— 6: 1,877,775
51: 1,877,784
75: 1,878,850
82: 1,878,601
97: 1,877,997
106: 1,877,950
141: 1,878,864
46— 35: 1,878,373
46— 36: 1,878,615
1,878,616
37: 1,877,826
1,878,355
40: 1,877,940
45: 1,877,834
46: 1,877,871
47— 1: Pl. Pt. 27
48— 176: 1,878,211
208: 1,878,227
49— 5: 1,878,465
1,878,485
1,878,597
9: 1,878,521
1,878,863
1,878,942
17: 1,878,906
55: 1,878,536
1,878,598
62: 1,878,576
77: 1,878,870
79: 1,878,839
50— 16: 1,878,060
51— 26: 1,878,603
34: 1,877,881
48: 1,878,116
84: 1,878,840
95: 1,878,385
98: 1,878,048
101: 1,877,913
100: 1,878,791
193: 1,878,815
215: 1,878,820
241: 1,877,782
248: 1,878,006
52— 4: 1,878,621
1,878,652
53— 3: 1,877,971
55— 83: 1,878,805
107: 1,878,349
152: 1,878,142
56— 14: 1,878,662
27: 1,877,770
102: 1,878,830
104: 1,877,957
119: 1,878,941
298: 1,877,869
307: 1,878,378
58— 33: 1,878,931
59— 16: 1,878,860
85: 1,878,388
60— 39: 1,878,217
41: 1,877,983
73: 1,878,135
95: 1,878,005
61— 10: 1,878,295
14: 1,878,280
17: 1,878,383
42: 1,877,994
85: 1,878,738
62— 1: 1,878,317
1,878,681
4: 1,877,967
8: 1,878,284
1,878,285
1,878,301
1,878,798
91.5: 1,878,042
101: 1,878,198
115: 1,878,403
1,878,994
118: 1,878,225
119: 1,878,092
119.5: 1,877,857
1,878,803
1,878,831
126: 1,877,891
141: 1,878,772
172: 1,878,750
176: 1,878,542
63— 20: 1,878,028
64— 96: 1,877,765
1,878,730
65— 31: 1,878,348
66— 82: 1,878,869
66— 140: 1,877,907
148: 1,878,728
149: 1,878,868
172: 1,878,337
1,878,865
173: 1,878,416
187: 1,878,499
196: 1,877,850
68— 18: 1,878,254
69— 1: 1,877,812
70— 14: 1,878,239
20: 1,878,886
74: 1,878,362
90: 1,878,436
128: 1,877,788
71— 7: 1,878,185
72— 41: 1,877,953
48: 1,877,898
94: 1,878,719
98: 1,878,807
101: 1,878,921
116: 1,877,964
118: 1,878,812
124: 1,878,180
73— 1: 1,878,344
51: 1,878,129
1,878,380
76: 1,878,098
32: 1,878,882
34: 1,878,272
1,878,456
38: Rl8,604
39: 1,877,886
1,877,889
57: 1,878,700
61: 1,878,797
79: 1,878,166
109: 1,877,774
1,878,574
109: 1,878,641
112: 1,877,841
75— 1: R.18,600
1,877,962
1,878,686
17: 1,877,961
58: 1,878,939
62: 1,877,928
76— 59: 1,878,396
63: 1,878,077
82: 1,878,439
104: 1,877,758
77— 3: 1,878,175
80— 12: 1,878,261
13: 1,878,117
36: 1,878,595
41: 1,878,971
51: 1,877,822
60: 1,878,054
81— 16: 1,878,754
23: 1,877,768
82— 2: 1,877,922
29: 1,878,495
33: 1,878,690
40: 1,878,130
1,878,131
83— 10: 1,878,263
73: 1,878,504
94: 1,878,267
84— 60: 1,878,706
85— 2.4: 1,878,600
8: 1,878,579
87— 5: 1,878,102
1,878,245
6: R.18,601
16: 1,878,940
23: 1,878,104
1,878,250
28: 1,877,875
88— 14: 1,878,847
16.4: 1,878,967
17: 1,878,215
88— 17: 1,878,494
1,878,693
20: 1,878,973
24: 1,877,941
1,878,075
1,878,670
47: 1,878,366
1,878,370
1,878,371
51: 1,878,594
54: 1,878,708
166: 1,878,382
90— 4: 1,878,656
16: 1,878,707
19: 1,878,266
21: 1,877,828
91— 25: 1,877,951
45: 1,878,435
46: 1,877,817
62.6: 1,878,466
68: 1,878,761
92— 20: 1,878,228
21: 1,878,047
1,878,300
24: 1,878,661
41: 1,878,452
93— 6: 1,878,590
7: 1,878,647
94— 1.5: 1,878,691
8: 1,878,992
34: 1,877,905
1,877,906
1,878,727
44: 1,878,278
95— 2: 1,878,961
7: 1,878,684
73: 1,878,347
1,878,702
81.5: 1,878,857
94: 1,878,279
95— 16: 1,878,890
97— 40: 1,878,442
42: 1,877,814
47: 1,877,777
62: 1,878,553
193: 1,878,443
233: 1,878,000
98— 88: 1,878,626
99— 2: 1,878,064
1,878,099
1,878,782
10: 1,878,342
11: 1,878,182
1,878,395
12: 1,877,855
16: 1,878,127
1,878,203
101— 20: 1,878,516
91: 1,878,283
95: 1,878,789
111: 1,878,900
131: 1,878,897
163: 1,878,564
1,878,565
181: 1,878,904
251: 1,878,482
416: 1,878,318
1,878,319
102— 1: 1,878,489
9: 1,877,772
1,878,498
12: 1,877,773
29: 1,878,487
1,878,490
1,878,491
103— 5: 1,878,736
37: 1,877,803
44: 1,877,873
114: 1,878,429
150: 1,878,220
161: 1,878,862
178: 1,878,739
236: 1,877,806
265: 1,878,793
104— 99: 1,878,605
105— 48: 1,878,838
175: 1,878,208
105— 230: 1,878,473
308: 1,878,451
410: 1,878,062
106— 11: 1,878,887
14: 1,878,178
24: 1,878,206
31: 1,878,625
107— 8: 1,878,585
12: 1,878,352
15: 1,878,256
48: 1,877,935
57: 1,878,519
1,878,703
64: 1,878,353
108— 5: 1,878,430
110— 17: 1,878,110
28: 1,878,157
104: 1,878,926
178: 1,878,892
111— 1: 1,878,819
7: 1,878,412
38: 1,878,883
52: 1,878,871
68: 1,878,407
74: 1,878,853
77: 1,878,960
112— 67: 1,878,091
79: 1,877,824
80: 1,878,889
122: 1,878,298
162: 1,878,146
192: 1,877,757
224: 1,878,915
252: 1,878,480
113— 51: 1,878,640
55: 1,878,022
59: 1,878,136
103: 1,878,725
114— 219: 1,877,793
115— 41: R.18,602
R.18,605
116— 34: 1,878,411
114: 1,878,867
119: 1,878,861
120: 1,878,629
129: 1,878,035
118— 3: 1,878,533
119— 9: 1,877,944
15.5: 1,878,218
18: 1,878,459
1,878,893
37: 1,878,503
52: 1,877,890
1,878,555
53: 1,878,518
61: 1,878,814
84: 1,878,345
97: 1,877,897
120— 18: 1,878,389
32: 1,877,807
33: 1,878,529
91: 1,878,617
112: 1,878,879
121— 31: 1,878,905
36: 1,877,771
41: 1,878,822
142: 1,877,893
1,878,209
122— 4: 1,788,524
5: 1,878,133
235: 1,878,148
1,878,908
379: 1,878,848
417: 1,878,514
421: 1,878,176
491: 1,878,172
123— 43: 1,878,767
44: 1,878,561
46.5: 1,878,313
65: 1,878,339
81: 1,877,760
1,878,325
119: 1,878,210
127: 1,877,937
173: 1,878,165
174: 1,878,496

123— 176: 1, 873, 566
184: 1, 877, 936
190: 1, 878, 535
196: 1, 878, 356
125— 5: 1, 878, 414
1, 878, 415
37: 1, 878, 763
126— 39: 1, 878, 143
73: 1, 878, 644
90: 1, 877, 852
113: 1, 878, 817
272: 1, 878, 025
127— 36: 1, 878, 852
47: 1, 878, 144
1, 878, 145
128— 63: 1, 878, 925
116: 1, 878, 913
191: 1, 878, 474
146: 1, 878, 464
232: 1, 878, 026
266: 1, 878, 513
341: 1, 877, 766
343: 1, 878, 671
129— 17: 1, 878, 481
1, 878, 634
24: 1, 878, 079
25: 1, 878, 321
38: 1, 877, 831
41: 1, 878, 476
131— 12: 1, 877, 925
1, 878, 506
1, 878, 714
1, 878, 844
39: 1, 878, 328
132— 32: 1, 878, 842
33: 1, 877, 776
1, 878, 978
45: 1, 878, 397
133— 8: 1, 877, 989
10: 1, 878, 592
134— 1: 1, 878, 828
1, 878, 974
26: 1, 878, 316
57: 1, 878, 962
135— 44: 1, 878, 428
136— 162: 1, 878, 223
175: 1, 878, 188
137— 18: 1, 878, 610
34. 3: 1, 878, 002
68: 1, 878, 929
93: 1, 878, 001
104: 1, 878, 947
139: 1, 878, 150
145: 1, 878, 106
152: 1, 878, 721
153: 1, 877, 780
160: 1, 878, 424
139— 76: 1, 877, 759
154: 1, 878, 221
355: 1, 878, 043
419: 1, 878, 620
420: 1, 878, 570
140— 92. 2: 1, 878, 329
93: 1, 878, 746
141— 1: 1, 878, 277
7: 1, 877, 843
9: 1, 878, 685
144— 2: 1, 878, 081
146— 2: 1, 878, 294
3: 1, 878, 795
10: 1, 878, 422
1, 878, 423
94: 1, 878, 069
101: 1, 877, 993
102: 1, 878, 020
1, 878, 033
1, 878, 067
1, 878, 070
1, 878, 071
130: 1, 878, 457
194: 1, 877, 816
217: 1, 878, 202
147— 27: 1, 878, 550
148— 3: 1, 878, 226
11. 5: 1, 878, 936
23: 1, 877, 867
149— 9: 1, 878, 420
13: 1, 878, 410
21: 1, 877, 787
1, 877, 877
150— 40: 1, 877, 909
1, 877, 910
1, 877, 911
1, 877, 912
52: 1, 877, 954
1, 878, 118
151— 35: 1, 878, 199
1, 878, 425
1, 878, 827
152— 1: 1, 877, 805
14: 1, 877, 988
1, 878, 386
1, 878, 841
28: 1, 878, 330
153— 32: 1, 878, 665
64. 5: 1, 878, 233

153— 82: 1, 878, 049
154— 2: 1, 878, 086
2. 5: 1, 878, 952
8: 1, 878, 885
9: 1, 878, 515
45. 9: 1, 878, 290
1, 878, 611
53: 1, 878, 679
155— 6: 1, 877, 895
14: 1, 877, 769
179: 1, 878, 253
182: 1, 878, 045
156— 17: 1, 878, 186
20: 1, 877, 984
1, 878, 189
1, 878, 526
24: 1, 878, 773
30: 1, 877, 853
1, 878, 710
158— 11: 1, 877, 942
28: 1, 878, 010
77: 1, 878, 105
89: 1, 878, 836
99: 1, 878, 427
115: 1, 878, 552
118: 1, 878, 478
159— 24: 1, 878, 651
161— 1: 1, 878, 888
164— 34: 1, 878, 985
49: 1, 878, 121
68: 1, 878, 453
81: 1, 878, 500
90: 1, 878, 520
113: 1, 878, 930
1, 878, 935
115: 1, 878, 643
166— 5: 1, 878, 432
10: 1, 878, 538
21: 1, 877, 915
1, 877, 916
167— 3: 1, 877, 818
43: 1, 877, 851
47: 1, 878, 488
64: 1, 878, 766
85: 1, 878, 103
1, 878, 477
90: 1, 877, 952
169— 26: 1, 878, 398
32: 1, 878, 369
1, 878, 704
170— 163: 1, 877, 821
1, 878, 011
1, 878, 358
165: 1, 878, 907
173: 1, 878, 816
171— 119: 1, 878, 350
1, 878, 764
209: 1, 878, 724
252: 1, 877, 904
313: 1, 878, 563
325: 1, 878, 132
172— 36: 1, 878, 534
179: 1, 878, 334
173— 13: 1, 878, 790
28: 1, 877, 903
269: 1, 877, 830
318: 1, 878, 094
328: 1, 878, 229
353: 1, 878, 016
1, 878, 169
355: 1, 878, 255
356: 1, 878, 387
175— 21: 1, 878, 589
1, 878, 713
1, 878, 800
41: 1, 878, 173
41. 5: 1, 877, 918
1, 878, 190
1, 878, 631
1, 878, 639
183: 1, 878, 109
294: 1, 877, 990
1, 878, 669
1, 878, 774
298: 1, 878, 107
312: 1, 878, 304
339: 1, 878, 919
361: 1, 878, 606
363: 1, 878, 101
376: 1, 878, 859
176— 16: 1, 878, 873
43: 1, 878, 159
122: 1, 878, 247
1, 878, 502
124: 1, 877, 932
1, 878, 479
126: 1, 878, 230
1, 878, 608
177— 329: 1, 878, 122
1, 878, 273
1, 878, 909
336: 1, 878, 872
351: 1, 877, 810
352: 1, 878, 752
178— 6: 1, 878, 147

178— 7: 1, 878, 711
33: 1, 878, 152
44: 1, 878, 653
69. 5: 1, 878, 877
69. 6: 1, 877, 943
179— 6: 1, 878, 778
6. 3: 1, 878, 762
18: 1, 877, 883
100. 3: 1, 877, 844
100. 11: 1, 877, 825
111: 1, 877, 868
115. 5: 1, 878, 232
135: 1, 878, 271
171: 1, 878, 309
1, 878, 740
1, 878, 741
1, 878, 742
1, 878, 743
180— 9. 2: 1, 878, 855
22: 1, 877, 930
33: 1, 878, 976
1, 878, 976
75: 1, 878, 375
83: 1, 878, 194
90. 6: 1, 878, 440
181— 0. 5: 1, 878, 029
27: 1, 878, 088
1, 878, 360
30: 1, 878, 409
31: 1, 877, 804
1, 877, 992
1, 878, 018
1, 878, 162
182— 15: 1, 878, 946
183— 4: 1, 878, 649
7: 1, 878, 024
10: 1, 877, 888
34: 1, 878, 098
51: 1, 878, 384
109: 1, 878, 052
115: 1, 878, 123
184— 3: 1, 877, 848
1, 878, 259
5: 1, 877, 823
1, 878, 207
1, 878, 224
1, 878, 379
1, 878, 408
1, 878, 729
21: 1, 878, 087
28: 1, 188, 167
39: 1, 878, 115
185— 40: 1, 878, 076
188— 72: 1, 878, 854
78: 1, 878, 197
1, 878, 911
1, 878, 912
127: 1, 878, 734
152: 1, 878, 786
1, 878, 944
218: 1, 878, 006
189— 1: 1, 878, 367
23: 1, 878, 799
32: 1, 878, 126
37: 1, 878, 281
46: 1, 878, 365
82: 1, 878, 688
84: 1, 878, 884
190— 11: 1, 878, 674
41: 1, 878, 989
192— 4: 1, 877, 789
1, 877, 794
1, 877, 976
10: 1, 878, 823
18: 1, 878, 149
25: 1, 878, 523
44: 1, 878, 053
48: 1, 878, 556
58: 1, 877, 796
60: 1, 878, 078
105: 1, 878, 824
134: 1, 878, 470
194— 54: 1, 877, 929
196— 7: 1, 878, 174
8: 1, 877, 914
9: 1, 878, 575
13: 1, 878, 022
16: 1, 878, 287
48: 1, 878, 849
54: 1, 878, 262
73: 1, 877, 811
76: 1, 878, 932
77: 1, 877, 967
87: 1, 877, 921
96: 1, 878, 580
110: 1, 878, 845
145: 1, 878, 650
148: 1, 878, 933
198— 7: 1, 878, 037
26: 1, 877, 934
170: 1, 877, 931
220: 1, 877, 862
1, 877, 863
1, 878, 044
199— 46: 1, 878, 231

200— 4: 1, 878, 602
16: 1, 878, 090
21: 1, 877, 860
37: 1, 878, 716
38: 1, 878, 637
48: 1, 877, 986
52: 1, 878, 977
59: 1, 877, 953
1, 878, 769
68: 1, 877, 923
70: 1, 878, 843
81: 1, 878, 418
83: 1, 878, 456
87: 1, 878, 657
99: 1, 878, 777
118: 1, 878, 153
130: 1, 878, 204
134: 1, 878, 017
1, 878, 779
138: 1, 878, 663
139: 1, 878, 065
142: 1, 878, 120
1, 878, 784
144: 1, 878, 959
150: 1, 878, 583
154: 1, 878, 667
169: 1, 878, 377
201— 48: 1, 878, 920
63: 1, 877, 926
76: 1, 878, 014
202— 30: 1, 878, 678
39: 1, 878, 007
40: 1, 878, 607
104: 1, 878, 581
146: 1, 878, 972
248: 1, 878, 680
204— 1: 1, 878, 096
1, 878, 161
1, 878, 235
1, 878, 837
6: 1, 878, 540
9: 1, 878, 244
1, 878, 918
25: 1, 878, 237
206— 44: 1, 878, 813
46: 1, 878, 306
56: 1, 878, 401
57: 1, 878, 866
60: 1, 877, 786
80: 1, 877, 840
207— 2: 1, 877, 880
10: 1, 878, 722
209— 91: 1, 878, 315
139: 1, 877, 861
166: 1, 878, 154
210— 1: 1, 877, 939
9: 1, 878, 525
43: 1, 878, 720
165: 1, 878, 630
211— 45: 1, 878, 177
77: 1, 878, 302
154: 1, 878, 444
1, 878, 765
213— 36: 1, 877, 998
1, 877, 999
61: 1, 878, 032
76: 1, 878, 031
214— 1: 1, 877, 974
1, 877, 975
1, 878, 156
17: 1, 878, 163
215— 11: 1, 877, 832
44: 1, 878, 265
216— 34: 1, 877, 849
217— 125: 1, 878, 567
218— 15. 1: 1, 877, 813
219— 3: 1, 878, 183
1, 878, 810
4: 1, 877, 874
1, 878, 095
1, 878, 558
1, 878, 760
6: 1, 877, 767
1, 878, 376
8: 1, 877, 909
1, 878, 340
10: 1, 878, 212
11: 1, 878, 458
19: 1, 878, 258
1, 878, 968
34: 1, 878, 140
1, 878, 701
35: 1, 878, 522
40: 1, 878, 587
220— 3: 1, 878, 709
9: 1, 878, 063
1, 878, 111
24: 1, 878, 181
37: 1, 878, 327
1, 878, 406
43: 1, 878, 687
46: 1, 878, 677
85: 1, 878, 834
221— 23: 1, 878, 956
60: 1, 877, 882

221— 60: 1, 878, 599
1, 878, 833
61: 1, 878, 924
98: 1, 877, 808
110: 1, 878, 874
119: 1, 877, 982
146: 1, 878, 894
223— 19: 1, 878, 400
20: 1, 878, 627
61: 1, 878, 771
224— 26: 1, 878, 792
29: 1, 877, 887
225— 43: 1, 878, 351
226— 92: 1, 878, 343
108: 1, 878, 445
124: 1, 877, 927
129: 1, 877, 949
229— 1. 5: 1, 877, 894
87: 1, 877, 955
230— 174: 1, 878, 326
182: 1, 877, 809
207: 1, 878, 744
234— 6: 1, 878, 460
36: 1, 878, 004
235— 30: 1, 878, 438
1, 878, 596
60: 1, 878, 125
62: 1, 877, 802
82: 1, 877, 801
1, 878, 757
86: 1, 878, 697
1, 878, 832
92: 1, 878, 928
236— 15: 1, 878, 332
1, 878, 937
1, 878, 938
25: 1, 878, 270
26: 1, 878, 660
240— 2: 1, 878, 447
6. 46: 1, 878, 431
8. 1: 1, 877, 792
10. 6: 1, 877, 785
48. 4: 1, 878, 632
48. 6: 1, 877, 978
52. 5: 1, 878, 003
85: 1, 878, 084
93: 1, 878, 646
241— 8: 1, 878, 048
242— 58: 1, 878, 184
72: 1, 878, 264
75: 1, 878, 381
86: 1, 878, 537
96: 1, 878, 041
142: 1, 878, 980
155: 1, 878, 902
244— 2: 1, 878, 768
3: 1, 877, 956
12: 1, 878, 030
1, 878, 723
1, 878, 775
14: 1, 878, 808
15: 1, 877, 902
1, 878, 955
19: 1, 878, 732
21: 1, 878, 299
245— 464: 1, 878, 984
246— 3: 1, 878, 063
1, 878, 065
63: 1, 877, 920
1, 877, 968
1, 878, 735
135: 1, 877, 917
240: 1, 877, 876
247— 3: 1, 878, 573
10: 1, 878, 335
1, 878, 336
248— 17: 1, 878, 187
1, 878, 645
20: 1, 878, 821
30: 1, 878, 100
32: 1, 877, 781
37: 1, 877, 845
41: 1, 878, 787
1, 878, 788
46: 1, 878, 320
250— 2: 1, 877, 858
11: 1, 878, 737
15: 1, 877, 815
16: 1, 878, 636
17: 1, 878, 308
20: 1, 878, 614
27: 1, 878, 046
1, 878, 124
1, 878, 251
27. 5: 1, 877, 838
1, 878, 089
1, 878, 112
1, 878, 286
1, 878, 338
1, 878, 341
33: 1, 878, 257
36: 1, 877, 872
1, 878, 252
41. 5: 1, 878, 891
251— 27: 1, 878, 222

251— 76: 1, 878, 019
121: 1, 877, 938
132: 1, 877, 859
155: 1, 878, 288
252— 1: 1, 878, 509
5: 1, 878, 276
1, 878, 468
1, 878, 903
253— 3: 1, 878, 747
254— 10: 1, 878, 726
43: 1, 878, 809
93: 1, 878, 361
94: 1, 878, 059
98: 1, 878, 219
100: 1, 878, 696
169: 1, 878, 312
187: 1, 878, 282
255— 1: 1, 878, 141
51: 1, 878, 036
1, 878, 074
61: 1, 878, 292
71: 1, 878, 114
72: 1, 878, 241
73: 1, 877, 901
75: 1, 878, 260
1, 878, 578
257— 46: 1, 877, 764
108: 1, 878, 364
130: 1, 878, 511
137: 1, 878, 012
178: 1, 877, 965
215: 1, 877, 762
230: 1, 878, 134
244: 1, 877, 905
262: 1, 878, 242
259— 95: 1, 878, 825
260— 2: 1, 878, 040
1, 878, 249
11: 1, 878, 137
17: 1, 877, 854
29: 1, 878, 531
31: 1, 877, 946
1, 877, 948
1, 878, 964
36: 1, 877, 947
1, 877, 985
37: 1, 878, 965
44: 1, 878, 699
1, 878, 986
45: 1, 877, 884
1, 878, 050
46: 1, 878, 168
47: 1, 878, 557
48: 1, 877, 973
53: 1, 877, 870
54: 1, 878, 666
1, 878, 967
60: 1, 877, 791
1, 877, 900
1, 878, 056
1, 878, 058
1, 878, 966
61: 1, 877, 866
1, 877, 899
1, 877, 972
64: 1, 877, 790
68: 1, 878, 530
69: 1, 878, 501
72: 1, 877, 800
76: 1, 878, 698
81: 1, 878, 471
92: 1, 878, 700
95: 1, 878, 243
101: 1, 877, 779
1, 878, 988
102: 1, 878, 953
1, 878, 954
106: 1, 877, 847
108: 1, 877, 991
1, 878, 462
1, 878, 463
109: 1, 877, 906
122: 1, 878, 695
123: 1, 878, 593
124: 1, 878, 543
1, 878, 969
125: 1, 878, 484
1, 878, 545
128. 5: 1, 877, 756
1, 877, 795
1, 878, 021
130: 1, 878, 527
130. 5: 1, 878, 512
1, 878, 675
1, 878, 950
1, 878, 970
137: 1, 878, 061
152: 1, 877, 856
154: 1, 878, 082
1, 878, 927
156: 1, 877, 908
1, 878, 170
168: 1, 878, 963
261— 41: 1, 878, 171
89: 1, 878, 588

261— 90: 1, 878, 668
113: 1, 878, 467
115: 1, 878, 618
116: 1, 878, 562
262— 3: 1, 878, 158
263— 8: 1, 878, 896
34: 1, 878, 307
264— 20: 1, 878, 306
265— 14: 1, 878, 446
17: 1, 878, 191
1, 878, 192
1, 878, 193
27: 1, 878, 160
44: 1, 878, 179
1, 878, 801
47: 1, 877, 980
1, 878, 835

265— 49: 1, 878, 009
62: 1, 878, 205
70: 1, 878, 554
266— 11: 1, 878, 622
267— 2: 1, 878, 450
20: 1, 877, 878
61: 1, 878, 128
65: 1, 878, 756
268— 63: 1, 878, 796
270— 66: 1, 878, 437
83: 1, 878, 404
86: 1, 878, 745
271— 2: 1, 877, 842
2. 4: 1, 877, 819
62: 1, 877, 802
272— 33: 1, 878, 758
60: 1, 877, 833

273— 11: 1, 878, 449
65: 1, 878, 715
77: 1, 877, 820
138: 1, 877, 865
150: 1, 878, 717
274— 1: 1, 878, 906
10: 1, 878, 311
11: 1, 878, 577
35: 1, 878, 770
275— 2: 1, 878, 748
6: 1, 877, 966
277— 20: 1, 877, 763
51: 1, 878, 097
280— 33. 5: 1, 877, 958
33. 44: 1, 878, 346
124: 1, 877, 970
284— 5: 1, 877, 924

284— 18: 1, 878, 303
285— 34: 1, 878, 195
66: 1, 878, 357
68: 1, 878, 712
111: 1, 878, 829
115: 1, 878, 945
171: 1, 878, 826
286— 9: 1, 878, 731
11: 1, 878, 904
84: 1, 878, 584
287— 53: 1, 878, 569
60: 1, 878, 055
110: 1, 878, 638
290— 37: 1, 878, 051
38: 1, 878, 421
291— 16: 1, 877, 837
292— 145: 1, 878, 413
169: 1, 877, 836

292— 211: 1, 878, 551
218: 1, 878, 544
320: 1, 878, 991
337: 1, 878, 808
347: 1, 878, 304
348: 1, 877, 798
296— 28: 1, 878, 155
1, 878, 934
84: 1, 878, 584
98: 1, 878, 943
138: 1, 878, 461
298— 17: 1, 878, 851
299— 69: 1, 878, 568
84: 1, 878, 560
96: 1, 878, 472
107. 6: 1, 878, 749
301— 5: 1, 878, 139

301— 13: 1, 878, 213
40: 1, 878, 811
60: 1, 878, 528
304— 18: 1, 878, 802
27: 1, 878, 642
308— 11: 1, 878, 983
30: 1, 878, 214
218: 1, 878, 057
312— 14: 1, 878, 659
43: 1, 878, 354
61: 1, 878, 399
118: 1, 878, 072

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ackermann, G. A., Paper Mills, Inc., Chicago, Ill. Paper used for printing, binding, and wrapping. Serial No. 310,507; Sept. 27. Class 37.

Adams, Harry E., doing business as Northlake Products Company, Peoria, Ill. Metallic liquid cement. Serial No. 328,515; Sept. 27. Class 5.

Alpine Electric Corporation, Schenectady, N. Y. Fuse plugs. Serial No. 329,418; Sept. 27. Class 21.

American Bemberg Corporation. (See I. P. Bemberg Aktiengesellschaft.)

American Manufacturing Company, Boston, Mass., and Brooklyn, N. Y. Manila, sisal, hemp, and other vegetable fibre rope. Serial Nos. 328,171–2; Sept. 27. Class 7.

Anthracite Equipment Corporation, New York, N. Y. Filtering media. Serial No. 328,931; Sept. 27. Class 31.

Ascher, Simon, & Co., Inc., New York, N. Y. Sweaters. Serial No. 329,438; Sept. 27. Class 39.

Associated London Flour Millers Limited, London, England. Chemical substances used for veterinary purposes. Serial No. 325,674; Sept. 27. Class 6.

Atlas Canning Company, Inc., Brooklyn, N. Y. Prepared food for dogs, cats, and carnivorous animals. Serial No. 329,298; Sept. 27. Class 46.

Autocar Company, The, Ardmore, Pa. Automobile business cars, and motor trucks and parts thereof. Serial No. 323,118; Sept. 27. Class 19.

B. E. F. News Company. (See McCafferty, Scott B.)

Baird & McGuire, Inc., Holbrook, Mass. Insecticides. Serial No. 329,009; Sept. 27. Class 6.

Baked Products Company. (See Schaefer, George E.)

Barlow-Moore Tobacco Company, Inc., Bowling Green, Ky. Tobacco. Serial No. 329,439; Sept. 27. Class 17.

Bates, Edward L., doing business as Novo Mfg. Co., Modesto, Calif. Liquid preparation for cleaning paint or varnished surfaces, mirrors and glass, etc. Serial No. 323,982; Sept. 27. Class 4.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. Serial No. 329,518; Sept. 27. Class 26.

Bloomingdale Bros., Inc., New York, N. Y. Ginger ale. Serial No. 329,762; Sept. 27. Class 45.

Bonat, Samuel, & Bro., New York, N. Y. Face powder, lipstick, rouge, eye shadow, etc. Serial No. 329,109; Sept. 27. Class 6.

Bourjois, Inc., New York, N. Y. Face powder. Serial No. 328,336; Sept. 27. Class 6.

Bradley, Smith Co., The, New Haven, Conn. Candy. Serial No. 328,909; Sept. 27. Class 46.

Burns Bros., New York, N. Y. Solid fuel consisting of a mixture of petroleum coke and anthracite coal. Serial No. 329,301; Sept. 27. Class 1.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. Serial No. 329,465; Sept. 27. Class 16.

Calavo Growers of California, Los Angeles, Calif. Food oils. Serial No. 329,253; Sept. 27. Class 46.

Campbell, S., & Son Limited, Glasgow, Scotland. Scotch whiskey and gin. Serial No. 329,622; Sept. 27. Class 49.

Campbell Soup Company, Camden, N. J. Canned tomato juice. Serial No. 318,437; Sept. 27. Class 46.

Castelló, Alejandro G., Barcelona, Spain. Preparation for use in the treatment of stomach complaints. Serial No. 327,179; Sept. 27. Class 6.

Cellulose Products Corporation, Shamokin, Pa., and New York, N. Y. Handkerchiefs, cleansing and polishing tissues, napkins, etc. Serial No. 329,527; Sept. 27. Class 37.

Certex Corporation, Kansas City, Mo. Prophylactic rubber articles. Serial No. 329,250; Sept. 27. Class 44.

Chanel, Inc., New York, N. Y. Perfume. Serial No. 328,865; Sept. 27. Class 6.

Chase & Co., Sanford, Fla. Fertilizers. Serial No. 329,133; Sept. 27. Class 10.

Chase & Co., Sanford, Fla. Insecticides. Serial No. 329,134; Sept. 27. Class 6.

Claron Products Incorporated, Philadelphia, Pa. Candy laxative. Serial No. 328,808; Sept. 27. Class 6.

Classroom Teacher, Inc., The, Chicago, Ill. Hectograph ink, rubber stamp ink, and inking pads. Serial No. 329,442; Sept. 27. Class 11.

Clawson Machine Co., Flagtown, N. J. Ice chipping machines. Serial No. 329,466; Sept. 27. Class 23.

Cosgrove, Thos. C., doing business as The Cosgrove Bakers, Vineyard Haven, Mass. Whole wheat wafers. Serial No. 329,257; Sept. 27. Class 46.

CO_2 Appliance Company, Tulsa, Okla. Generators for vaporizing solid carbon dioxide. Serial No. 327,680; Sept. 27. Class 23.

Darsky, N. H., doing business as Golden Age Ginger Ale Co. of America, Youngstown, Ohio. Mineral and carbonated water, maltless beverages, and extracts for making the same. Serial No. 328,263; Sept. 27. Class 45.

Davis, John H., Company, doing business as Sunset Line & Twine Company, San Francisco, Calif. Fishing lines. Serial No. 327,935; Sept. 27. Class 22.

Davis Presto-Pak Company, Los Angeles, Calif. Cigarette cases. Serial No. 326,935; Sept. 27. Class 8.

Denaten Felt & Hair Company, Inc., Philadelphia, Pa. Carpet and rug cushions. Serial No. 328,057; Sept. 27. Class 50.

Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Scotch whiskey. Serial No. 329,628; Sept. 27. Class 49.

Douglass, Horton M., Seattle, Wash. Stomachic home treatment for stomach disorders, bowel, liver, disorders, etc. Serial No. 317,427; Sept. 27. Class 6.

Drugkraft, Inc., doing business as Sabrol Laboratories, New York, N. Y. Tooth paste. Serial No. 328,481; Sept. 27. Class 6.

Duenmer, Maxon H., Kansas City, Mo. Catamenial belts or sanitary napkin holders. Serial No. 329,552; Sept. 27. Class 44.

Du Fold Brush Manufacturing Co. Inc., New York, N. Y. Combined coat hanger and brush. Serial No. 319,203; Sept. 27. Class 50.

E. P. Remedy Co., Inc., The. (See Jones, Joseph W.)

Electro Anti-Corrosion Corporation, New York, N. Y. Anodes. Serial No. 329,140; Sept. 27. Class 21.

Evening Herald Publishing Company, Los Angeles, Calif. Caption or title for newspaper article. Serial Nos. 329,553–4; Sept. 27. Class 38.

Exhibit Supply Company, The. (See Meyer, John F.)

Fear, Ernest D., Kansas City, Mo. Frozen confections. Serial No. 328,754; Sept. 27. Class 46.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. Serial No. 317,925; Sept. 27. Class 42.

Fort Howard Paper Company, Green Bay, Wis. Paper napkins, toilet paper, and paper towels. Serial No. 329,745; Sept. 27. Class 37.

Frozen Confections, Inc., New York, N. Y. Frozen confections. Serial No. 329,016; Sept. 27. Class 46.

Geyser Manufacturing Company, New Orleans, La. Water heaters. Serial No. 317,666; Sept. 27. Class 34.

Golden Age Ginger Ale Co. of America. (See Darsky, N. H.)

Gonzalez, Rosalino, San Juan de La Arena, Spain. Preserved fish. Serial No. 329,233; Sept. 27. Class 46.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Storage batteries. Serial No. 329,580; Sept. 27. Class 21.

Gorton, Thomas S., jr., doing business as Slade Gorton Co., Chicago, Ill. Smoked herring. Serial No. 324,377; Sept. 27. Class 46.

Hall, Constance A., doing business as The Keratin Company, Forest Hills, N. Y. Hair tonic. Serial No. 328,608; Sept. 27. Class 6.

Harzfeld's, Inc., Kansas City, Mo. Astringent, skin tonic, tissue cream, etc. Serial No. 324,511; Sept. 27. Class 6.

Herrlinger Paper Company, The, Cincinnati, Ohio. Paper sealing tape. Serial No. 329,581; Sept. 27. Class 37.

Hil-Vin Oil Company, Buffalo, N. Y. Lubricating oils. Serial No. 329,600; Sept. 27. Class 15.

Holmstrom-Pilcher Co., Lockport, Ill. Rolled oats and macaroni. Serial No. 329,048; Sept. 27. Class 46.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hypnotic. Serial No. 329,085; Sept. 27. Class 6.

I. P. Bemberg Aktiengesellschaft Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Piece goods comprising or containing artificial silk. Serial No. 326,777; Sept. 27. Class 42.

Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. Serial No. 329,715; Sept. 27. Class 22.

Ilon Aktiengesellschaft, Basel, Switzerland. Chemical and pharmaceutical products. Serial No. 317,669; Sept. 27. Class 6.

Inecto, Inc., New York, N. Y. Hair dye. Serial Nos. 328,425–6; Sept. 27. Class 6.

Inecto, Inc., New York, N. Y. Hair tonic. Serial No. 328,427; Sept. 27. Class 6.

Inecto, Inc., New York, N. Y. Hair dye. Serial No. 328,428; Sept. 27. Class 6.

Isabella Sugar Company, Mount Pleasant, Mich. Granulated sugar. Serial No. 328,716; Sept. 27. Class 46.

Johns-Manville Corporation, New York, N. Y. Flax packing for glands, stuffing boxes, valve stems, etc. Serial No. 328,641; Sept. 27. Class 35.

Jones, Joseph W., doing business as The E. P. Remedy Co., Inc., Bristol, Tenn. Preparation for the relief of headaches, neuralgia, etc. Serial No. 328,387; Sept. 27. Class 6.

Kayser, Julius, & Co., New York, N. Y. Hosiery. Serial No. 329,530; Sept. 27. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kellogg Company, Battle Creek, Mich. Printed chart. Serial No. 329,311; Sept. 27. Class 38.
Keppy Island Lime and Transport Company, The, Cleveland, Ohio. Finishing hydrated lime. Serial No. 329,051; Sept. 27. Class 12.
Keratin Company, The. (See Hall, Constance A.)
Kerr, James, Jenners, Pa. Radio interference and noise eliminator. Serial No. 318,314; Sept. 27. Class 21.
Kidd, Mrs. E. G., Incorporated, Richmond, Va. Vegetable pickles. Serial No. 328,400; Sept. 27. Class 46.
Killian Manufacturing Co., The, Akron, Ohio. Prophylactic rubber articles. Serial Nos. 329,531–2; Sept. 27. Class 44.
King, Dobbs & Company, Chattanooga, Tenn. Coffee. Serial No. 328,957; Sept. 27. Class 46.
Knight, Victor W., Chicago, Ill. Handkerchiefs. Serial No. 329,052; Sept. 27. Class 42.
Kyffhäuser-Laboratorium Fabrikation Chem.-Pharm. Präparate Hermann Quincke Bad Frankenhausen A. K., Frankenhausen, Germany. Medicines. Serial No. 327,443; Sept. 27. Class 6.
Latex Laboratories, New York, N. Y. Prophylactic rubber articles. Serial No. 325,175; Sept. 27. Class 44.
Lincoln Bag Company, Chicago, Ill. Moth proof storage bags. Serial Nos. 327,615–16; Sept. 27. Class 2.
Lockwood Bracket Co., Waltham and Boston, Mass. Powdered soap. Serial No. 305,714; Sept. 27. Class 4.
Marenus, Samuel, doing business as Union County Pickle Works, Elizabeth, N. J. Preserved pickles, chow chow, pickled relishes, etc. Serial No. 307,501; Sept. 27. Class 46.
McCafferty, Scott B., assignor to B. E. F. News Company, Washington, D. C. Publication. Serial No. 328,444; Sept. 27. Class 38.
Meinhardt, Henry B., Chicago, Ill. Canvas dividing and doorway curtains for refrigerator cars, etc. Serial No. 329,558; Sept. 27. Class 50.
Mente & Co., Inc., New Orleans, La. Twine of cotton or jute. Serial No. 322,780; Sept. 27. Class 7.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin-controlled amusement devices. Serial No. 329,381; Sept. 27. Class 22.
Miller, J. H., Chicago, Ill. Liniments. Serial No. 328,717; Sept. 27. Class 6.
Minerva Wax Paper Company, Minerva, Ohio. Packages of wax paper. Serial No. 327,560; Sept. 27. Class 37.
Mintzer, Edward D., doing business as The Standard Peroxide Co., Chicago, Ill. Hair bleach. Serial No. 328,221; Sept. 27. Class 6.
Molnar, Nicholas M., doing business as Vita-Gloss Products Co., New York, N. Y. Liquid compound for hair wash and treatment. Serial No. 329,056; Sept. 27. Class 6.
Moran, Victor, Bradford, Pa. Picture puzzle. Serial No. 329,644; Sept. 27. Class 22.
Morgan, Walter, Company Inc., Washington, D. C. Showcard paints. Serial No. 328,962; Sept. 27. Class 16.
Morrell, John, & Co., Ottumwa, Iowa. Coffee. Serial No. 328,276; Sept. 27. Class 46.
Mueller Electric Company, Cleveland, Ohio. Battery carriers. Serial No. 329,451; Sept. 27. Class 19.
National Society of Puritan Descendants, Boston, Mass. Loose leaf publication. Serial No. 327,828; Sept. 27. Class 38.
National Sulphur Co., Inc., New York, N. Y. Sulphur for dusting purposes. Serial No. 329,023; Sept. 27. Class 6.
Northbilt Manufacturing Co., Minneapolis, Minn. Children's playsuits and snow suits. Serial No. 329,561; Sept. 27. Class 39.
Northlake Products Company. (See Adams, Harry E.)
Novo Mfg. Co. (See Bates, Edward L.)
Oxo, Limited, London, England. Maltless beverages, syrups, and extracts and concentrates. Serial No. 329,455; Sept. 27. Class 45.
Panariello, Vincenzo, Coney Island, N. Y. Canned olive oil. Serial No. 323,018; Sept. 27. Class 46.
Penick, S. B., & Company, Inc., New York, N. Y. Extract of cube root or derris root. Serial No. 329,024; Sept. 27. Class 6.
Penick, S. B., & Company, Inc., New York, N. Y. Concentrated moth proofing solution. Serial No. 329,025; Sept. 27. Class 6.
Pentz, William E., doing business as Wep Chemical Co., St. Joseph, Mo. Vaginal ointment, perspiration powder, dental cream, etc. Serial No. 328,404; Sept. 27. Class 6.
Permutit Company, The, New York, N. Y. Base exchange silicates used as purifying and treating materials for water. Serial No. 329,121; Sept. 27. Class 6.
Pfaffman Egg Noodle Company, The, Cleveland, Ohio. Macaroni. Serial No. 323,306; Sept. 27. Class 46.
Podhorsky, Valeria Ing., Bucharest, Roumania. Medicine. Serial No. 325,897; Sept. 27. Class 6.
Post Printing and Publishing Company, The, Denver, Colo. Section or column appearing in a newspaper. Serial No. 329,240; Sept. 27. Class 38.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, beauty creams, etc. Serial No. 325,725; Sept. 27. Class 6.
Riegel, G. Frederic, New York, N. Y. Cigars. Serial No. 329,586; Sept. 27. Class 17.
Roland, W. H., Bloomington, Ill. Wearing apparel. Serial No. 327,452; Sept. 27. Class 39.
Royal Baking Powder Company, New York, N. Y. Baking powder. Serial No. 327,890; Sept. 27. Class 6.
Sabrol Laboratories. (See Drugkraft, Inc.)
Safeway Stores, Incorporated, Oakland, Calif. Bread. Serial No. 328,894; Sept. 27. Class 46.
Scannell, F. A., & Company, Boston, Mass. Medicinal preparation for the treatment of skin diseases. Serial No. 329,459; Sept. 27. Class 6.
Schaefer, George E., doing business as Baked Products Company, Newark, N. J. Laxative. Serial No. 328,743; Sept. 27. Class 6.
Schreitmüller, Gottfried, doing business as Shavol Corp. of America, New York, N. Y. Hair remover. Serial No. 317,780; Sept. 27. Class 6.
"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Cleaners for school slates, pen wipers, and stamp moisteners. Serial No. 318,723; Sept. 27. Class 37.
Shavol Corp. of America. (See Schreitmüller, Gottfried.)
Sherwin-Williams Company, The, Cleveland, Ohio. Paints. Serial No. 329,027; Sept. 27. Class 16.
Silten, Dr. Ernst, Berlin, Germany. Inhalant for asthma and bronchial catarrh. Serial No. 326,763; Sept. 27. Class 6.
Snider Packing Corporation, Rochester, assignor, by mesne assignments, to Snider Packing Corporation, New York, N. Y. Canned vegetables, canned fruits, canned berries, etc. Serial No. 326,344; Sept. 27. Class 46.
Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Tonic. Serial No. 326,397; Sept. 27. Class 6.
Staedtler, J. S., Inc., New York, N. Y. Eyebrow and eyelash coloring pencils, eye shadows pencils, and make-up pencils. Serial No. 327,923; Sept. 27. Class 6.
Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 329,430; Sept. 27. Class 15.
Standard Peroxide Co., The. (See Mintzer, Edward D.)
Stephenson Mfg. Co., Inc., Springfield, Mass. Antiseptic or germicide. Serial No. 329,160; Sept. 27. Class 6.
Storms, H. M., Company, Brooklyn, N. Y. Carbon paper. Serial No. 328,406; Sept. 27. Class 11.
Sunset Line & Twine Company. (See Davis, John H., Company.)
Swift and Company, Chicago, Ill. Ice cream. Serial No. 329,204; Sept. 27. Class 46.
Union County Pickle Works. (See Marenus, Samuel.)
Van Rooy Coffee Co., Inc., Cleveland, Ohio. Coffee. Serial No. 307,341; Sept. 27. Class 46.
Velsicol Corporation, Chicago, Ill. Lacquer, varnish, stain, and paint. Serial Nos. 325,668–9; Sept. 27. Class 16.
Virginia Dare Extract Company, Inc., Brooklyn, N. Y. Maltless beverages, syrups and extracts for making the same. Serial No. 329,758; Sept. 27. Class 45.
Vita-Gloss Products Co. (See Molnar, Nicholas M.)
Wanamaker, John, Philadelphia, Philadelphia, Pa. Hat boxes, over-night cases, week-end cases, etc. Serial No. 329,364; Sept. 27. Class 3.
Wapler, Nicholas, Company, New York, N. Y. Feed for fish. Serial No. 329,268; Sept. 27. Class 46.
Webster, F. S., Company, Cambridge, Mass. Carbon paper. Serial No. 322,411; Sept. 27. Class 11.
Wep Chemical Co. (See Pentz, William E.)
Whisk-Brush Vacuum Machine Co., Inc., New York, N. Y. Vacuum cleaners and attachments therefor. Serial No. 329,248; Sept. 27. Class 21.
Wieboldt Stores, Inc., Chicago, Ill. Cold cream. Serial No. 322,664; Sept. 27. Class 6.
Wienner, Jacob M., doing business as J. M. Wienner & Co., Baltimore, Md. Laxatives. Serial No. 328,342; Sept. 27. Class 6.
Wilson, E. A., Co., Lowell, Mass. Coal. Serial No. 313,618; Sept. 27. Class 1.
Wilson-Jones Company, Chicago, Ill. Filing, mailing envelopes, filing folders, etc. Serial No. 329,759; Sept. 27. Class 37.
Wojtasinski, Wladyslaw, doing business as W. Wojtasinski Drug Co., Dorchester, Mass. Cathartic medicine. Serial No. 328,857; Sept. 27. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Acme Staple Company, Camden, N. J. Stapling, tagging, binding, etc., machines. 297,683; Sept. 27; Serial No. 325,548; published July 19, 1932. Class 13.
Air-Way Electric Appliance Corporation, Toledo, Ohio. Floor wax applicators and dust bags and collectors. 297,675; Sept. 27; Serial No. 325,206; published June 7, 1932. Class 23.
American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)
American Crayon Company, The, Sandusky, Ohio. Birthday candles. 297,741; Sept. 27; Serial No. 322,815; published July 19, 1932. Class 15.
American Flyer Mfg. Co., Chicago, Ill. Miniature trains. 297,687; Sept. 27; Serial No. 327,643; published July 12, 1932. Class 22.
Balog, Jacques, doing business as Olla Spezialitäten Jacques Balog, Vienna, Austria. Prophylactic rubber articles. 297,724; Sept. 27; Serial No. 320,270; published July 19, 1932. Class 44.
Barned Products Company, New Brunswick, N. J. Vanilla extract. 297,728; Sept. 27; Serial No. 322,678; published July 5, 1932. Class 46.
Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 297,708; Sept. 27; Serial No. 325,055; published May 17, 1932. Class 43.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Rugs. 297,797; Sept. 27. Class 42.
Bragg-Kliesrath Corporation, Long Island City, N. Y. Brakes and brake systems and parts thereof. 297,718; Sept. 27; Serial No. 304,908; published July 12, 1932. Class 19.
Brague, Inc., Hinsdale, Mass. Soil. 297,666; Sept. 27; Serial No. 327,295; published July 19, 1932. Class 1.
Brocker, Ben, doing business as Geté Cie, New York, N. Y. Nail pencils. 297,791; Sept. 27. Class 6.
Brooks, T. E., doing business as T. E. Brooks & Co., Red Lion, Pa. Cigars. 297,685; Sept. 27; Serial No. 327,844; published July 19, 1932. Class 17.
Bucklen, Herbert E., Corporation, Elkhart, Ind. Propeller type, wind-driven electric light and power plants. 297,704; Sept. 27; Serial No. 297,890; published July 12, 1932. Class 21.
Bulk Razor Blade Company. (See Mitchell, Glenn C.)
Carboloy Company, Inc., Detroit, Mich. Metal composition or alloy. 297,659–60; Sept. 27; Serial Nos. 327,675–6; published July 12, 1932. Class 14.
Central Foundry Company, The, New York, N. Y. Oil and gasoline separator traps. 297,710; Sept. 27; Serial No. 315,229; published July 19, 1932. Class 13.
Central Iron & Metal Company, Ltd., The, London, England, and Westphalia, Germany. Non-ferrous wire, rods, and strip. 297,744; Sept. 27; Serial No. 323,525; published July 12, 1932. Class 14.
Childs Company, New York, N. Y. Pepper relish, mince meat, plum pudding, etc. 297,722; Sept. 27; Serial No. 312,173; published July 5, 1932. Class 46.
Columbus Show Case Company, The, Columbus, Ohio. Merchandise display cases. 297,772; Sept. 27; Serial No. 327,045; published July 12, 1932. Class 32.
Dayton Rubber Manufacturing Company, The, Dayton, Ohio. Pulleys. 297,677; Sept. 27; Serial No. 326,129; published July 19, 1932. Class 23.
De Mars, Arthur J., Washington, D. C. Publication. 297,779; Sept. 27; Serial No. 327,582; published July 12, 1932. Class 38.
Dennis, William V., San Francisco, Calif. Ice cream freezers. 297,698; Sept. 27; Serial No. 327,047; published July 12, 1932. Class 31.
Derman, Harry, Inc., Long Island City, N. Y. Transparent hoods. 297,664; Sept. 27; Serial No. 327,345; published July 19, 1932. Class 19.
Eagle Straw Corporation, New York and Brooklyn, N. Y. Drinking straws. 297,695; Sept. 27; Serial No. 327,273; published July 12, 1932. Class 50.
Eisemann-Werke Aktiengeeellschaft, Stuttgart, Germany. Electric hair cutting machines and thinning-out clippers, etc. 297,770; Sept. 27; Serial No. 327,092; published July 12, 1932. Class 21.
Endsley Lamp Company, Frankfort, Ind. Electric casket lamps and their holding brackets. 297,784; Sept. 27. Class 21.
Erlanger, N., Blumgart & Co., Inc., New York, N. Y. Linen, cotton, silk, and mixed piece goods. 297,795–6; Sept. 27. Class 42.
Excelsior Varsity Underwear Corporation, Baltimore, Md. Pajamas. 297,761; Sept. 27; Serial No. 327,682; published July 12, 1932. Class 39.
Exhibit Supply Company, The. (See Meyer, John F.)
Finn, J. A., & Company, New York, N. Y. Cotton piece goods. 297,788; Sept. 27. Class 42.
Fischman Soda Fountain Supply Co., Philadelphia, Pa. Crushed fruit and concentrated fruit syrups. 297,654; Sept. 27; Serial No. 326,139; published July 5, 1932. Class 46.
Fletcher, Abraham, doing business as Fletcher Chemical Company, Cincinnati, Ohio. Membranous and rubber prophylactic articles. 297,714; Sept. 27; Serial No. 325,575; published July 19, 1932. Class 44.
Flip Beverage Corporation, Chicago, Ill. Compound for soft drinks. 297,738; Sept. 27; Serial No. 317,846; published Nov. 10, 1931. Class 45.
Fredrikstad Traemelfabrik Aktieselskab, Fredrikstad, Norway. Wood flour. 297,676; Sept. 27; Serial No. 325,849; published July 12, 1932. Class 1.
Frigid Products Corp., Brooklyn, N. Y. Ice cream. 297,674; Sept. 27; Serial No. 327,393; published July 5, 1932. Class 46.
Gambee, Martin H., Pawling, N. Y. Household furniture. 297,759; Sept. 27; Serial No. 327,553; published July 19, 1932. Class 32.
General Cable Corporation, New York, N. Y. Electrical wires and cables. 297,680; Sept. 27; Serial No. 326,816; published July 19, 1932. Class 21.
Geté Cie. (See Brocker, Ben.)
Gilby Wire Company, Newark, N. J. Wire, ribbon and strip for electrical purposes. 297,735; Sept. 27; Serial No. 324,679; published July 12, 1932. Class 21.
Gladding, McBean & Co., Seattle, Wash. Sewer and drainage tile. 297,785; Sept. 27. Class 12.
Golden Bear Coffee Company, Ltd., Los Angeles, Calif. Coffee. 297,717; Sept. 27; Serial No. 326,801; published July 5, 1932. Class 46.
Goldsmith's, P., Company, The, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio. Sporting goods. 38,587; renewed July 8, 1932.
Goris & Arnstein, Inc., Chicago, Ill. Dental molding preparation for making up casts and models. 297,776; Sept. 27; Serial No. 327,010; published July 19, 1932. Class 44.
Gould Storage Battery Corporation, Depew, N. Y. Storage batteries. 297,723; Sept. 27; Serial No. 313,165; published July 12, 1932. Class 21.
Grant, W. T. Company, New York, N. Y. Kitchen cutlery. 297,699; Sept. 27; Serial No. 327,011; published July 12, 1932. Class 23.
Gulberson Diesel Engine Company, Dallas, Tex. Internal combustion engines and parts thereof. 297,769; Sept. 27; Serial No. 327,146; published July 12, 1932. Class 23.
Hahn, Irvin H., Co., The, Baltimore, Md. Metal military insignias, metal belt buckles, metal badges, etc. 297,748; Sept. 27; Serial No. 326,257; published July 12, 1932. Class 28.
Hall, Horace W., Newton, Mass. Tennis rackets. 297,792; Sept. 27. Class 22.
Hardwick, Hindle, Inc., Newark, N. J. Resistance units, rheostats, and potentiometers. 297,719; Sept. 27; Serial No. 308,780; published July 19, 1932. Class 21.
Harris, D. P. Hardware & Manufacturing Co., Inc., New York, N. Y. Roller skates. 297,691; Sept. 27; Serial No. 327,466; published July 12, 1932. Class 22.
Harrow-Taylor Butter Company, Kansas City, Mo. Mayonnaise dressing. 297,652; Sept. 27; Serial No. 327,357; published July 5, 1932. Class 46.
Harvel Corporation, The, Newark, N. J. Paints, varnishes, primers, etc. 297,782; Sept. 27. Class 16.
Hi-Power Fluid Co., Chicago, Ill. Chemical solution for addition in small quantities to gasoline. 297,793; Sept. 27. Class 6.
Hirsch & Sons, Inc., Chicago, Ill. Coats. 297,756; Sept. 27; Serial No. 327,467; published July 12, 1932. Class 39.
Hollander, A., & Son, Inc., Newark, N. J. Fur skins. 297,657; Sept. 27; Serial No. 327,694; published July 12, 1932. Class 1.
Holtite Manufacturing Company, Baltimore, Md. Rubber heels. 297,740; Sept. 27; Serial No. 324,166; published Apr. 19, 1932. Class 39.
Humble Oil and Refining Company, Houston, Tex. Lubricating oils and greases. 297,742; Sept. 27; Serial No. 322,934; published July 12, 1932. Class 15.
Huntsville-Sinclair Mining Company, Kansas City, Mo. Coal. 297,658; Sept. 27; Serial No. 327,659; published July 19, 1932. Class 1.
International Silver Spring, Meriden, Conn. Silver-plated flat-ware and hollow-ware. 297,733; Sept. 27; Serial No. 324,609; published July 12, 1932. Class 28.
Jacobs, Arthur E., Cleveland, Ohio. Toy cash registers. 297,690; Sept. 27; Serial No. 327,510; published July 12, 1932. Class 22.
Johnson, Matthey & Company, Incorporated, New York, N. Y. Finger rings. 297,732; Sept. 27; Serial No. 323,761; published July 12, 1932. Class 28.
K & L Manufacturing Company, Salt Lake City, Utah. Nut candy bars. 297,712; Sept. 27; Serial No. 326,219; published July 5, 1932. Class 46.

Kayser, Julius, & Co., New York, N. Y. Hosiery. 297,760; Sept. 27; Serial No. 327,696; published July 19, 1932. Class 39.
Keystone Oil Refining Co., Detroit, Mich. Oils and greases. 297,694; Sept. 27; Serial No. 327,361; published July 19, 1932. Class 15.
Kirchhofer, Paul P., assignor to Louise J. Kirchhofer, Massillon, Ohio. Pharmaceutical preparations. 87,345; renewed July 9, 1932.
Kleenti Co., The, New York, N. Y. Liquid strainers. 297,665; Sept. 27; Serial No. 327,316; published July 12, 1932. Class 13.
Klein, L., Inc., Chicago, Ill. Refrigerators. 297,607; Sept. 27; Serial No. 327,157; published July 12, 1932. Class 31.
Klüssendorf, Heinrich H. D., doing business as Heinrich H. Klüssendorf, Berlin, Germany. Automatic motion picture machines and films. 297,736; Sept. 27; Serial No. 324,825; published July 19, 1932. Class 26.
Knit Products Corporation, Belmont, N. C. Hosiery. 297,753; Sept. 27; Serial No. 327,363; published July 12, 1932. Class 39.
Kofeale Corporation, Pittsburgh, Pa. Beverage. 297,688; Sept. 27; Serial No. 327,541; published July 12, 1932. Class 45.
Lamm, Jacob C., doing business as Lamm Bros., Baltimore, Md. Suitings of linen and cotton mixtures, etc. 297,781; Sept. 27; Serial No. 322,759; published July 12, 1932. Class 42.
La Mode Permanent Wave Corp., Buffalo, N. Y. Permanent wave sachets. 297,777; Sept. 27; Serial No. 327,224; published July 12, 1932. Class 44.
Lebow Brotners, Baltimore, Md. Suits, overcoats, and top coats. 297,734; Sept. 27; Serial No. 324,613; published July 5, 1932. Class 39.
Levin & Harris Shirt Co. Inc., assignor to Lubin-Weeker Co. Inc., New York, N. Y. Pajamas, night shirts, robes, etc. 297,727; Sept. 27; Serial No. 321,883; published July 12, 1932. Class 39.
Lincoln Oil Refining Company, Robinson, Ill. Gasoline, kerosene, and lubricating oils and greases. 297,720; Sept. 27; Serial No. 310,722; published Apr. 21, 1931. Class 15.
Louisiana State Rice Milling Company, Inc., Abbeville, La. Rice. 297,713; Sept. 27; Serial No. 325,661; published June 28, 1932. Class 46.
Lowe, Joe, Corporation, Brooklyn, N. Y. Knives and handles. 297,737; Sept. 27; Serial No. 324,896; published July 12, 1932. Class 23.
Lowry, Julius C., doing business as Lowry Electric Company, Detroit, Mich. Electric fire alarm signaling systems. 297,766; Sept. 27; Serial No. 327,282; published July 12, 1932. Class 21.
Lubin-Weeker Co. Inc. (See Levin & Harris Shirt Co. Inc., assignor.)
Magnum Products, Inc., New York, N. Y. Powder puffs and for fabric pads. 297,693; Sept. 27; Serial No. 327,366; published July 19, 1932. Class 29.
Mallars & Company, doing business as Mandco, Chicago, Ill. Olive oil. 297,716; Sept. 27; Serial No. 325,232; published July 5, 1932. Class 46.
Mandco. (See Mallars & Company.)
Mayer-Nock Co., The, Philadelpuia, Pa. Suits, frocks, and dresses. 297,757; Sept. 27; Serial No. 327,543; published July 12, 1932. Class 39.
McEvoy, J. H., & Company, Houston, Tex. Well tubing heads and parts therefor. 297,786; Sept. 27. Class 13.
Mead Johnson & Company, Evansville, Ind. Food product. 297,653; Sept. 27; Serial No. 326,867; published July 5, 1932. Class 46.
Menasha Products Co., Menasha, Wis. Toilet paper. 297,799; Sept. 27. Class 37.
Mendoc Mending Company. (See Roozendaal, Siegfried J.)
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin controlled amusement device. 297,794; Sept. 27. Class 22.
Michigan Tanning & Extract Co., Petoskey, Mich. Leather. 297,669; Sept. 27; Serial No. 326,614; published July 12, 1932. Class 1.
Mitchell, Glenn C., doing business as Bulk Razor Blade Company, Aurora, Ill. Razor blades. 297,787; Sept. 27. Class 23.
More, R. L., & Son, Vernon, Tex. Oils and greases. 297,696; Sept. 27; Serial No. 327,230; published July 12, 1932. Class 15.
Myndall Cain. (See Powder Puff Shop.)
Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Mattresses and box springs. 297,749; Sept. 27; Serial No. 326,294; published July 12, 1932. Class 32.
National Mineral Company, The, Chicago, Ill. Hair waving pads. 297,774; Sept. 27; Serial No. 327,701; published July 19, 1932. Class 44.
National Mineral Company, The, Chicago, Ill. Hair waving pads. 297,780; Sept. 27; Serial No. 327,700; published July 19, 1932. Class 44.
Nekoosa-Edwards Paper Company. (See Rhinelander Paper Company, assignor.)
Nims Cafe, Incorporated, Spokane, Wash. Coffee, tea, bread, etc. 297,788; Sept. 27. Class 46.
No Cil-Pad Corporation, New York, N. Y. Hair waving pads. 297,725; Sept. 27; Serial No. 321,252; published July 19, 1932. Class 44.
O. K. Nut Company. (See Roumel, Constantine.)
O. K. Peanut Company. (See Roumel, Constantine.)
Oak Hill Citrus Growers Association, Oak Hill, Fla. Fresh citrus fruit. 297,802; Sept. 27. Class 46.
Olla Spezialitäten Jacques Balog. (See Balog, Jacques.)
P. M. C. Manufacturing Corp., Kingston, N. Y. Kitchen utensils. 297,739; Sept. 27; Serial No. 321,733; published July 12, 1932. Class 13.
Parodi Cigar Company of New York, Inc., Scranton, Pa. Cigars. 297,689; Sept. 27; Serial No. 327,525; published July 19, 1932. Class 17.
Parodi Cigar Company of New York, Inc., Scranton, Pa. Cigars. 297,671–2; Sept. 27; Serial Nos. 327,526–7; published July 19, 1932. Class 17.
Parodi Cigar Company of New York, Inc., Scranton, Pa. Cigars. 297,673; Sept. 27; Serial No. 327,524; published July 19, 1932. Class 17.
Payne-Cowan Company, Dallas, Tex. Underwear. 297,747; Sept. 27; Serial No. 325,598; published July 5, 1932. Class 39.
Porter Chemical Company, The, Hagerstown, Md. Outfits or sets containing drawing materials, etc. 297,686; Sept. 27; Serial No. 327,704; published July 19, 1932. Class 50.
Porter, William B., Philadelphia, Pa. Maltless beverages. 297,789; Sept. 27. Class 45.
Powder Puff Shop, doing business as Myndall Cain, Minneapolis, Minn. Sachets for permanent waving. 297,775; Sept. 27; Serial No. 326,871; published July 19, 1932. Class 44.
Quincy Show Case Works, The, Quincy, Ill. Wall cases, show cases, counters, etc. 297,773; Sept. 27; Serial No. 326,953; published July 12, 1932. Class 32.
Quincy Stove Manufacturing Company, The, Quincy, Ill. Portable stoves, ranges, furnaces, etc. 297,684; Sept. 27; Serial No. 325,015; published July 19, 1932. Class 34.
Ray Fuel Company, Detroit, Mich. Charcoal. 297,668; Sept. 27; Serial No. 327,002; published July 12, 1932. Class 1.
Reische, Albert, doing business as Springfield Auto Supply Company, Springfield, Ill. Vehicle batteries, battery cables, wire, etc. 297,702; Sept. 27; Serial No. 314,864; published July 19, 1932. Class 21.
Reynolds, Eleanor S., doing business as James E. Reynolds and Company, New York, N. Y. Braided cotton sash cord. 297,726; Sept. 27; Serial No. 321,314; published July 12, 1932. Class 7.
Reynolds Wire Co., Dixon, Ill. Wire cloth. 297,655; Sept. 27; Serial No. 325,241; published July 12, 1932. Class 13.
Rhea Manufacturing Company, The, Milwaukee, Wis. Wash dresses, smocks, and pajamas. 297,762; Sept. 27; Serial No. 327,772; published July 19, 1932. Class 39.
Rhinelander Paper Company, Rhinelander, Wis., assignor to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Wrapping paper. 88,026; renewed Aug. 20, 1932.
Roberts Manufacturing Company, Inc., Maple Shade, N. J. Electric skin stimulators or vibrator massagers. 297,778; Sept. 27; Serial No. 327,477; published July 12, 1932. Class 44.
Roozendaal, Siegfried J., doing business as Mendoc Mending Company, Brooklyn, N. Y. Package containing materials and instructions for repairing garments. 297,743; Sept. 27; Serial No. 323,147; published July 12, 1932. Class 50.
Roth, Otto, Inc., Newark, N. J. Safety razor blades. 297,755; Sept. 27; Serial No. 327,455; published July 12, 1932. Class 23.
Roumel, Constantine, doing business as O. K. Peanut Company and O. K. Nut Company, Washington, D. C. Candies and nuts. 297,707; Sept. 27; Serial No. 315,930; published Aug. 18, 1931. Class 46.
Ruzicka, Francis W., Chatham, N. J. Cut flowers. 297,670; Sept. 27; Serial No. 327,529; published July 12, 1932. Class 1.
Rybak, Felix, doing business as Rybak Sales Co., Brooklyn, N. Y. Fruit syrups. 297,692; Sept. 27; Serial No. 327,372; published July 12, 1932. Class 45.
Sanitex Mfg. Co. Ltd., Los Angeles, Calif. Sanitary napkin holders. 297,706; Sept. 27; Serial No. 315,764; published July 12, 1932. Class 44.
Santa Clara Valley Fruit Exchange, San Jose, Calif. Fresh cherries. 297,703; Sept. 27; Serial No. 326,844; published July 5, 1932. Class 46.
Sargent & Company, New Haven, Conn. Metal shelves. 297,767; Sept. 27; Serial No. 327,201; published July 12, 1932. Class 32.
Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 297,765; Sept. 27; Serial No. 327,290; published July 19, 1932. Class 39.
Scott-Mebane Manufacturing Company, Graham, N. C. Overalls. 297,763; Sept. 27; Serial No. 327,855; published July 19, 1932. Class 39.
Shell Oil Company, San Francisco, Calif. Gasoline. 297,700; Sept. 27; Serial No. 326,990; published July 19, 1932. Class 15.
Société Anonyme Des Bas "Occulta", Lyon, France. Orthopedical girdles, corsets, belts, and stockings. 297,721; Sept. 27; Serial No. 310,779; published July 12, 1932. Class 44.
Springfield Auto Supply Company. (See Reisch, Albert.)
Stanard-Tilton Milling Company, St. Louis, Mo. Flour. 297,705; Sept. 27; Serial No. 319,188; published Jan. 5, 1932. Class 46.

Sterling Automotive Products Corporation, Buffalo, N. Y. Tire valves. 297,661; Sept. 27; Serial No. 327,666; published July 12, 1932. Class 13.
Stieff Company, The, Baltimore, Md. Flat and hollow tableware. 297,768; Sept. 27; Serial No. 327,180; published July 19, 1932. Class 28.
Sun-Glo Lamp Works, Inc., Brooklyn, N. Y. Incandescent lamps or bnibs. 297,752; Sept. 27; Serial No. 326,834; published July 12, 1932. Class 21.
Superior Machine Tool Company, Kokomo, Ind. Metal working drilling machines. 297,801; Sept. 27. Class 23.
Supplee-Biddle Hardware Company, Philadelphia, Pa. Storage batteries. 297,764; Sept. 27; Serial No. 327,325; published July 19, 1932. Class 21.
Supreme Products Company, Columbus, Ohio. Malt syrup. 297,715; Sept. 27; Serial No. 325,487; published July 5, 1932. Class 46.
Swift and Company, Chicago, Ill. Sausage. 297,709; Sept. 27; Serial No. 315,224; published July 7, 1931. Class 46.
Tanning Process Company, The, Boston, Mass. Leather. 297,662; Sept. 27; Serial No. 327,640; published July 12, 1932. Class 1.
Teich & Makower, New York, N. Y. Sweaters and bathing suits. 297,754; Sept. 27; Serial No. 327,380; published July 12, 1932. Class 39.
Televator Corporation, The, New York, N. Y. Electric audible annunciators. 297,745; Sept. 27; Serial No. 323,796; published July 19, 1932. Class 21.
Theta Alpha Fraternity, Kenmore, N. Y. Jewelry. 297,758; Sept. 27; Serial No. 327,609; published July 19, 1932. Class 28.
Thurberator Corporation, The, New York, N. Y. Liquid fuel carburetors. 297,679; Sept. 27; Serial No. 326,562; published July 19, 1932. Class 23.
Turner & Seymour Manufacturing Co., The, Torrington, Conn. Knife sharpeners, egg beaters, and mashers. 297,771; Sept. 27; Serial No. 327,080; published July 12, 1932. Class 23.
Union Oil Company of California, Los Angeles, Calif. Cutting oil, thread cutting compound, gasoline, etc. 297,746; Sept. 27; Serial No. 324,914; published July 12, 1932. Class 15.
United Health Equipment Company, Chicago, Ill. Exercising machines. 297,682; Sept. 27; Serial No. 326,967; published July 12, 1932. Class 22.
United Health Equipment Company, Chicago, Ill. Exercising machines. 297,701; Sept. 27; Serial No. 326,968; published July 12, 1932. Class 22.
United Packing Company, Fresno, Calif. Fresh grapes, deciduous and citrus fruits, etc. 297,711; Sept. 27; Serial No. 326,724; published July 5, 1932. Class 46.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Slide fasteners. 297,667; Sept. 27; Serial No. 327,115; published July 12, 1932. Class 13.
Walton, Perry, Boston, Mass. Kitchen utensils. 297,681; Sept. 27; Serial No. 326,922; published July 12, 1932. Class 23.
Waugh Equipment Company, Depew, N. Y. India-rubber buffing and draft springs and bearing springs, etc. 297,663; Sept. 27; Serial No. 327,571; published July 12, 1932. Class 19.
Wil-Mor Company, Watertown, Wis. Root beer. 297,678; Sept. 27; Serial No. 326,311; published July 12, 1932. Class 45.
Wilson's, C., Plumbing Shop on Wheels, Inc., Buffalo, N. Y. Brass plumbing and steam fitting valves, brass faucets, etc. 297,790; Sept. 27. Class 13.
Windsor Coal Company, Kansas City, Mo. Coal. 297,656; Sept. 27; Serial No. 327,840; published July 19, 1932. Class 1.
Witherbee Storage Battery Co., Inc., Belleville, N. J. Storage batteries. 297,803; Sept. 27. Class 21.
Wood, T. W., & Sons, Richmond, Va. Grass seed. 297,798; Sept. 27. Class 1.
Wortendyke Manufacturing Co., Richmond, Va. Toilet paper, paper towels, paper napkins. 297,800; Sept. 27. Class 37.
Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills and hammers, sinkers, etc. 297,730–1; Sept. 27; Serial Nos. 323,642–3; published July 19, 1932. Class 23.
X-Otic, Inc., New York, N. Y. Diaper holding garments and fillers therefor. 297,751; Sept. 27; Serial No. 326,597; published July 19, 1932. Class 39.
York, Joseph W., New York, N. Y. Prophylactic rubber articles. 297,729; Sept. 27; Serial No. 323,431; published July 19, 1932. Class 44.
Zildjian, Avedis, Company, Norfolk Downs, Mass. Cymbals. 297,750; Sept. 27; Serial No. 326,316; published July 12, 1932. Class 36.

LIST OF REGISTRANTS OF LABELS

Adohr Creamery Company, Los Angeles, Calif. Adohr Big Breakfast Eggs. For Eggs. 41,200; Sept. 27.
All Nations Bakers, Inc., New York, N. Y. Valencia Biscuits. For Biscuits. 41,201; Sept. 27.
Armstrong, Charles W., New York, N. Y. Armstrong's Original Dutch Sauce. For Sauce. 41,202; Sept. 27.
Bridgeman-Russell Company, Duluth, Minn. Honey-Milk. For Frozen Confections. 41,203; Sept. 27.
Caplan, M. J., Co., Inc., Lawrence, Mass. Radio. For Canned Tomatoes. 41,204; Sept. 27.
Chamin Optical Co., Inc., Boston, Mass. Soft-site Ophthalmic Lens. For Lenses. 41,205; Sept. 27.
Eskimo Pie Corporation, Brooklyn, N. Y. Snow-Man. For Frozen Confections. 41,206; Sept. 27.
Fruit-Sno Company. (See Labman, S. J.)
General Plating Company. (See Saba, Joseph G.)
Golden West Products Co., Los Angeles, Calif. Certified No. 1 Peanuts. For Peanuts. 41,207; Sept. 27.
Held, John, Salt Lake City, Utah. Tizink. For Ink. 41,208; Sept. 27.
Hills Bros., San Francisco, Calif. Ground Right to Taste Right. For Coffee. 41,209; Sept. 27.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Imitation Vanilla Extract. For Imitation Vanilla Extract. 41,210; Sept. 27.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Pure Lemon Extract. For Lemon Extract. 41,211; Sept. 27.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Pure Vanilla Extract. For Vanilla Extract. 41,212; Sept. 27.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T Bread 'N Butter Blend Coffee. For Coffee. 41,213–14; Sept. 27.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T Rice. For Rice. 41,215; Sept. 27.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel Talcum Powder. For Talcum Powder. 41,216; Sept. 27.
Lahman, S. J., doing business as Fruit-Sno Company, Oklahoma City, Okla. Fruit-Sno Sherbert Flavoring Compound. For Sherbert Flavoring Compound. 41,217; Sept. 27.
Long, W. E., Company, The, Chicago, Ill. Wheat Tone the Ideal Bread. For Bread. 41,218; Sept. 27.
Lyons, Benjamin, doing business as Benjamin Lyons Export Co., Philadelphia, Pa. Lyon's Northern Woods Brand. For Maple Syrup. 41,219; Sept. 27.
Marquise Chocolate Co. (See Page & Shaw, Inc.)
Page & Shaw, Inc., doing business as Marquise Chocolate Co., Cambridge, Mass. Alice Blue. For Chocolates. 41,200; Sept. 27.
Saba, Joseph G., doing business as General Plating Company, New York, N. Y. La-Chrom Metal-Plating. For Paste for Plating and Polishing Brass, Copper, Zinc, Bronze, etc. 41,221; Sept. 27.
Strauss, Louis B., New York, N. Y. Rhine Castle Water Springs. For Sparkling Alkaline Muriated Table Water. 41,222; Sept. 27.
Strickler, Ellis B., Yorkana, Pa. London Court. For Cigars. 41,223; Sept. 27.
Vestal Chemical Co., St. Louis, Mo. Wax-Rite Liquid Wax. For Liquid Wax. 41,224; Sept. 27.
Wrigley, Wm., Jr., Company, Chicago, Ill. Wrigley's Spearmint The Perfect Gum. For Chewing Gum. 41,225; Sept. 27.
Wrigley, Wm., Jr., Company, Chicago, Ill. Wrigley's Spearmint Chewing Gum. For Chewing Gum. 41,226; Sept. 27.
Wrigley, Wm., Jr., Company, Chicago, Ill. Wrigley's Double Mint Chewing Gum. For Chewing Gum. 41,227; Sept. 27.
Zimmer, Karl R., doing business as Zimmer Paper Products, Indianapolis, Ind. Bread. For Bread. 41,228; Sept. 27.

LIST OF REGISTRANTS OF PRINTS

Aromint Corporation, Chicago, Ill. Peppermint Aromints. For Peppermint Candy. 13,913; Sept. 27.

Hoffmann, William E., Niles, Mich. Big-Frosty. For Ice Cream and Frozen Confections and Preparations. 13,914; Sept. 27.

Iver Johnson's Arms & Cycle Works, Fitchburg, Mass. America's Quality Bicycle. For Bicycles, Junior-Cycles, Scooters, and Velocipedes. 13,915; Sept. 27.

Northwest Paper Company, The, Cloquet, Minn. Klo-Kay English Finish Book Paper. For Book Paper. 13,916; Sept. 27.

Pennewell, Jack, doing business as Jack Penewell's, Wilkes-Barre, Pa. Jack Penewell's Original Twin Six Talking Steel Guitar. For Hawaiian Steel Guitars. 13,917; Sept. 27.
Postograph Co., The, Baltimore, Md. Jandho's Postograph. For Printed Blanks. 13,918; Sept. 27.
Simpson Bros., Inc., doing business as Wakefield Dairy, Washington, D. C. Wakefield Dairy. For Milk. 13,919; Sept. 27.
Wakefield Dairy. (See Simpson Bros., Inc.)
Welch Grape Juice Company, The, Westfield, N. Y. Olympic Athletes Train on Welch's Grape Juice. For Grape Juice. 13,920; Sept. 27.
World's Products Co., Spencer, Ind. Aspirin. For Aspirin. 13,921–2; Sept. 27.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Spearmint Chewing Gum. For Chewing Gum. 13,923; Sept. 27.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Charcoal. Ray Fuel Company. 297,668; Sept. 27; Serial No. 327,002; published July 12, 1932.
Coal. Huntsville-Sinclair Mining Company. 297,658; Sept. 27; Serial No. 327,659; published July 19, 1932.
Coal. Windsor Coal Company. 297,656; Sept. 27; Serial No. 327,840; published July 19, 1932.
Flowers, Cut. F. W. Ruzicka. 297,670; Sept. 27; Serial No. 327,529; published July 12, 1932.
Leather. Michigan Tanning & Extract Co. 297,669; Sept. 27; Serial No. 326,614; published July 12, 1932.
Leather. Tanning Process Company. 297,662; Sept. 27; Serial No. 327,640; published July 12, 1932.
Seed, Grass. T. W. Wood & Sons. 297,798; Sept. 27.
Skins, Fur. A. Hollander & Son, Inc. 297,657; Sept. 27; Serial No. 327,694; published July 12, 1932.
Soil. Brague, Inc. 297,666; Sept. 27; Serial No. 327,295; published July 19, 1932.
Wood-flour. Fredriksstad Traemelfabrik Aktieselskab. 297,676; Sept. 27; Serial No. 325,849; published July 12, 1932.

CLASS 6

Chemical solution for addition in small quantities to gasoline. Hi-Power Fluid Co. 297,793; Sept. 27.
Nail pencils. B. Brocker. 297,791; Sept. 27.
Pharmaceutical preparation. P. P. Kirchhofer. 87,345; renewed July 9, 1932.

CLASS 7

Cord, Braided cotton sash. E. S. Reynolds. 297,726; Sept. 27; Serial No. 321,314; published July 12, 1932.

CLASS 12

Tile, Sewer and drainage. Gladding, McBean & Co. 297,785; Sept. 27.

CLASS 13

Fasteners, Slide. Waldes Koh-I-Noor, Inc. 297,667; Sept. 27; Serial No. 327,115; published July 12, 1932.
Plumbing and steam fitting valves, brass faucets, etc., Brass. C. Wilson's Plumbing Shop on Wheels, Inc. 297,790; Sept. 27.
Separator traps, Oil and gasoline. Central Foundry Company. 297,710; Sept. 27; Serial No. 315,229; published July 19, 1932.
Stapling, tagging, binding, etc., machines. Acme Staple Company. 297,683; Sept. 27; Serial No. 325,548; published July 19, 1932.
Strainers, Liquid. Kleenti Co. 297,665; Sept. 27; Serial No. 327,316; published July 12, 1932.
Utensils, Kitchen. P. M. C. Manufacturing Corp. 297,739; Sept. 27; Serial No. 321,733; published July 12, 1932.
Valves, Tire. Sterling Automotive Products Corporation. 297,661; Sept. 27; Serial No. 327,666; published July 12, 1932.
Well tubing heads and parts therefor. J. H. McEvoy & Company. 297,786; Sept. 27.
Wire cloth. Reynolds Wire Co. 297,655; Sept. 27; Serial No. 325,241; published July 12, 1932.

CLASS 14

Metal composition or alloy, Hard. Carboloy Company. 297,659–60; Sept. 27; Serial Nos. 327,675–6; published July 12, 1932.
Wire, rods, and strip, Non-ferrous. Central Iron & Metal Company. 297,744; Sept. 27; Serial No. 323,525; published July 12, 1932.

CLASS 15

Candles, Birthday. American Crayon Company. 297,741; Sept. 27; Serial No. 322,815; published July 19, 1932.
Gasoline. Shell Oil Company. 297,700; Sept. 27; Serial No. 326,990; published July 19, 1932.
Gasoline, kerosene, and lubricating oils and greases. Lincoln Oil Refining Company. 297,720; Sept. 27; Serial No. 310,722; published Apr. 21, 1931.
Oil, thread cutting compound, gasoline, etc., Cutting. Union Oil Company of California. 297,746; Sept. 27; Serial No. 324,614; published July 12, 1932.
Oils and greases. Keystone Oil Refining Co. 297,694; Sept. 27; Serial No. 327,361; published July 19, 1932.
Oils and greases. R. L. More & Son. 297,696; Sept. 27; Serial No. 327,230; published July 12, 1932.
Oils and greases, Lubricating. Humble Oil and Refining Company. 297,742; Sept. 27; Serial No. 322,934; published July 12, 1932.

CLASS 16

Paints, varnishes, primers, etc. Harvel Corporation. 297,782; Sept. 27.

CLASS 17

Cigars. T. E. Brooks. 297,685; Sept. 27; Serial No. 327,844; published July 19, 1932.
Cigars. Parodi Cigar Company of New York, Inc. 297,671–2; Sept. 27; Serial Nos. 327,526–7; published July 19, 1932.
Cigars. Parodi Cigar Company of New York, Inc. 297,673; Sept. 27; Serial No. 327,524; published July 19, 1932.
Cigars. Parodi Cigar Company of New York, Inc. 297,689; Sept. 27; Serial No. 327,525; published July 19, 1932.

CLASS 19

Brakes and brake systems and parts thereof. Bragg-Kliesrath Corporation. 297,718; Sept. 27; Serial No. 304,908; published July 12, 1932.
Buffing and draft springs and bearing springs, etc., India-rubber. Waugh Equipment Company. 297,663; Sept. 27; Serial No. 327,571; published July 12, 1932.
Hoods, Transparent. Harry Derman, Inc. 297,664; Sept. 27; Serial No. 327,345; published July 19, 1932.

CLASS 21

Batteries, battery cables, wire, etc., Vehicle. A. Reisch. 297,702; Sept. 27; Serial No. 314,864; published July 19, 1932.
Batteries, Storage. Gould Storage Battery Corporation. 297,723; Sept. 27; Serial No. 313,185; published July 12, 1932.
Batteries, Storage. Supplee-Biddle Hardware Company. 297,764; Sept. 27; Serial No. 327,325; published July 19, 1932.
Batteries, Storage. Witherbee Storage Battery Co. 297,803; Sept. 27.
Electric audible annunciators. Televator Corporation. 297,745; Sept. 27; Serial No. 323,796; published July 19, 1932.
Electric casket lamps and their holding brackets. Endsley Lamp Company. 297,784; Sept. 27.
Electric fire alarm signaling systems. J. C. Lowry. 297,766; Sept. 27; Serial No. 327,282; published July 12, 1932.
Electric hair cutting machines and thinning-out clippers, etc. Elsemann-Werke Aktiengesellschaft. 297,770; Sept. 27; Serial No. 327,092; published July 12, 1932.
Electric light and power plants, Propeller type, wind-driven. Herbert E. Bucklen Corporation. 297,704; Sept. 27; Serial No. 297,890; published July 12, 1932.
Electrical wires and cables. General Cable Corporation. 297,680; Sept. 27; Serial No. 326,816; published July 19, 1932.
Lamps or bulbs, Incandescent. Sun-Glo Lamp Works, Inc. 297,752; Sept. 27; Serial No. 326,834; published July 12, 1932.
Resistance units, rheostats, and potentiometers. Hardwick, Hindle, Inc. 297,719; Sept. 27; Serial No. 308,780; published July 19, 1932.
Wire, ribbon and strip for electrical purposes. Gilby Wire Company. 297,735; Sept. 27; Serial No. 324,679; published July 12, 1932.

CLASS 22

Amusement device, Coin controlled. J. F. Meyer. 297,794; Sept. 27.
Exercising machines. United Health Equipment Company. 297,701; Sept. 27; Serial No. 326,908; published July 12, 1932.
Roller skates. D. P. Harris Hardware & Manufacturing Co. 297,691; Sept. 27; Serial No. 327,466; published July 12, 1932.
Sporting goods. P. Goldsmith's Sons. 38,587; renewed July 8, 1932.
Tennis rackets. H. W. Hall. 297,792; Sept. 27.
Toy cash registers. A. E. Jacobs. 297,690; Sept. 27; Serial No. 327,510; published July 12, 1932.
Trains, Miniature. American Flyer Mfg. Co. 297,687; Sept. 27; Serial No. 327,643; published July 12, 1932.

CLASS 23

Applicators and dust bags and collectors, Floor wax. Air-Way Electric Appliance Corporation. 297,675; Sept. 27; Serial No. 325,206; published June 7, 1932.
Carburetors, Liquid fuel. Thurberator Corporation. 297,679; Sept. 27; Serial No. 326,562; published July 19, 1932.
Cutlery, Kitchen. W. T. Grant Company. 297,699; Sept. 27; Serial No. 327,011; published July 12, 1932.
Drilling machines, Metal working. Superior Machine Tool Company. 297,801; Sept. 27.
Drills and hammers, sinkers, etc., Rock. Worthington Pump and Machinery Corporation. 297,730–1; Sept. 27; Serial Nos. 323,642–3; published July 19, 1932.
Engines, and parts thereof, Internal combustion. Guiberson Diesel Engine Company. 297,709; Sept. 27; Serial No. 327,146; published July 12, 1932.
Knives and handles. Joe Lowe Corporation. 297,737; Sept. 27; Serial No. 324,896; published July 12, 1932.
Pulleys. Dayton Rubber Manufacturing Company. 297,677; Sept. 27; Serial No. 326,129; published July 19, 1932.
Razor blades. G. C. Mitchell. 297,787; Sept. 27.
Razor blades, Safety. Otto Roth, Inc. 297,755; Sept. 27; Serial No. 327,455; published July 12, 1932.
Sharpeners, Egg beaters, and mashers, Knife. Turner & Seymour Manufacturing Co. 297,771; Sept. 27; Serial No. 327,080; published July 12, 1932.
Utensils, Kitchen. P. Walton. 297,681; Sept. 27; Serial No. 326,922; published July 12, 1932.

CLASS 26

Motion picture machines and films, Automatic. H. H. D. Klüssendorf. 297,736; Sept. 27; Serial No. 324,825; published July 19, 1932.

CLASS 28

Flat-ware and hollow-ware, Silver-plated. International Silver Company. 297,733; Sept. 27; Serial No. 324,609; published July 12, 1932.
Insignias, metal belt buckles and badges, etc. Irvin H. Hahn Co. 297,748; Sept. 27; Serial No. 326,257; published July 12, 1932.
Jewelry. Theta Alpha Fraternity. 297,758; Sept. 27; Serial No. 327,609; published July 19, 1932.
Rings, Finger. Johnson, Matthey & Company. 297,782; Sept. 27; Serial No. 323,761; published July 12, 1932.
Tableware, Flat and hollow. Stieff Company. 297,768; Sept. 27; Serial No. 327,180; published July 19, 1932.

CLASS 29

Powder puffs and for fabric pads. Magnum Products, Inc. 297,693; Sept. 27; Serial No. 327,366; published July 19, 1932.

CLASS 31

Freezers, Ice cream. W. V. Dennis. 297,698; Sept. 27; Serial No. 327,047; published July 12, 1932.
Refrigerators. L. Klein, Inc. 297,697; Sept. 27; Serial No. 327,157; published July 12, 1932.

CLASS 32

Cases, Merchandise display. Columbus Show Case Company. 297,772; Sept. 27; Serial No. 327,045; published July 12, 1932.
Cases, show cases, counters, etc., Wall. Quincy Show Case Works. 297,773; Sept. 27; Serial No. 326,953; published July 12, 1932.
Exercising machines. United Health Equipment Company. 297,682; Sept. 27; Serial No. 326,907; published July 12, 1932
Furniture, Household. M. H. Gambee. 297,759; Sept. 27; Serial No. 327,553; published July 19, 1932.
Mattresses and box springs. A. I. Namm & Son. 297,749; Sept. 27; Serial No. 326,294; published July 12, 1932.
Shelves, Metal. Sargent & Company. 297,767; Sept. 27; Serial No. 327,201; published July 12, 1932.

CLASS 34

Stoves, ranges, furnaces, etc., Portable. Quincy Stove Manufacturing Company. 297,684; Sept. 27; Serial No. 325,015; published July 19, 1932.

CLASS 36

Cymbals. Avedis Zildjian Company. 297,750; Sept. 27; Serial No. 326,316; published July 12, 1932.

CLASS 37

Paper, paper towels, paper napkins, Toilet. Wortendyke Manufacturing Co. 297,800; Sept. 27.
Paper, Toilet. Menasha Products Co. 297,799; Sept. 27.
Paper, Wrapping. Rhinelander Paper Company. 88,026; renewed Aug. 20, 1932.

CLASS 38

Publication. A. J. De Mars. 297,779; Sept. 27; Serial No. 327,582; published July 12, 1932.

CLASS 39

Coats. Hirsh & Sons, Inc. 297,756; Sept. 27; Serial No. 327,407; published July 12, 1932.
Coats, vests, trousers, etc. J. Schoeneman, Incorporated. 297,765; Sept. 27; Serial No. 327,290; published July 19, 1932.
Diaper holding garments and fillers therefor, X-Otic, Inc. 297,751; Sept. 27; Serial No. 326,597; published July 19, 1932.
Dresses, smocks, and pajamas, Wash. Rhea Manufacturing Company. 297,762; Sept. 27; Serial No. 327,772; published July 19, 1932.
Heels, Rubber. Holtite Manufacturing Company. 297,740; Sept. 27; Serial No. 324,166; published Apr. 19, 1932.
Hosiery, Julius Kayser & Co. 297,760; Sept. 27; Serial No. 327,696; published July 19, 1932.
Hosiery, Knit Products Corporation. 297,753; Sept. 27; Serial No. 327,368; published July 12, 1932.
Overalls. Scott-Mebane Manufacturing Company. 297,763; Sept. 27; Serial No. 327,855; published July 19, 1932.
Pajamas. Excelsior Varsity Underwear Corporation. 297,761; Sept. 27; Serial No. 327,682; published July 12, 1932.
Pajamas, night shirts, robes, etc. Levin & Harris Shirt Co. Inc. 297,727; Sept. 27; Serial No. 321,883; published July 12, 1932.
Suits, frocks, and dresses. Mayer-Nock Co. 297,757; Sept. 27; Serial No. 327,543; published July 12, 1932.
Suits, overcoats, and top coats. Lebow Brothers. 297,734; Sept. 27; Serial No. 324,613; published July 5, 1932.
Sweaters and bathing suits. Teich & Makower. 297,754; Sept. 27; Serial No. 327,380; published July 12, 1932.
Underwear, Ladies'. Payne-Cowan Company. 297,747; Sept. 27; Serial No. 325,598; published July 5, 1932.

CLASS 42

Cotton piece goods. J. A. Finn & Company. 297,783; Sept. 27.
Linen, cotton, silk, and mixed piece goods. N. Erlanger, Blumgart & Co. 297,795–6; Sept. 27.
Rugs. Sidney Blumenthal & Co. Inc. 297,797; Sept. 27.
Suitings of linen and cotton mixtures, etc. J. C. Lamm. 297,781; Sept. 27; Serial No. 322,759; published July 12, 1932.

CLASS 43

Thread and yarn. I. P. Bemberg Aktiengesellschaft. 297,708; Sept. 27; Serial No. 325,055; published May 17, 1932.

CLASS 44

Dental molding preparation for making up casts and models. Goris & Arnstein, Inc. 297,776; Sept. 27; Serial No. 327,010; published July 19, 1932.
Hair waving pads. National Mineral Company. 297,774; Sept. 27; Serial No. 327,701; published July 19, 1932.
Hair waving pads. National Mineral Company. 297,780; Sept. 27; Serial No. 327,700; published July 19, 1932.
Hair waving pads. No Cli-Pad Corporation. 297,725; Sept. 27; Serial No. 321,252; published July 19, 1932.
Orthoepedical girdles, corsets, belts, and stockings. Société Anonyme Des Bas "Occulta". 297,721; Sept. 27; Serial No. 310,779; published July 12, 1932.
Permanent wave sachets. La Mode Permanent Wave Corp. 297,777; Sept. 27; Serial No. 327,224; published July 12, 1932.
Prophylactic rubber articles. J. Balog. 297,724; Sept. 27; Serial No. 320,270; published July 19, 1932.
Prophylactic rubber articles. J. W. York. 297,729; Sept. 27; Serial No. 323,431; published July 19, 1932.
Rubber prophylactic articles, Membranous and. A. Fletcher. 297,714; Sept. 27; Serial No. 325,575; published July 19, 1932.
Sachets for permanent waving. Powder Puff Shop. 297,775; Sept. 27; Serial No. 326,871; published July 19, 1932.
Sanitary napkin holders. Sanitex Mfg. Co. Ltd. 297,706; Sept. 27; Serial No. 315,764; published July 12, 1932.
Stimulators or vibrator massagers, Electric skin. Roberts Manufacturing Company. 297,778; Sept. 27; Serial No. 327,477; published July 12, 1932.

CLASS 45

Beverage. Kofcale Corporation. 297,688; Sept. 27; Serial No. 327,541; published July 12, 1932.
Beverages, Maltless. W. B. Porter. 297,789; Sept. 27.
Compound for soft drinks. Flip Beverage Corporation. 297,738; Sept. 27; Serial No. 317,846; published Nov. 10, 1931.
Fruit syrups. F. Rybak. 297,692; Sept. 27; Serial No. 292,372; published July 12, 1932.
Root beer. Wil-Mor Company. 297,678; Sept. 27; Serial No. 326,311; published July 12, 1932.

CLASS 46

Candies and nuts. C. Roumel. 297,707; Sept. 27; Serial No. 315,930; published Aug. 18, 1931.
Cherries, Fresh. Santa Clara Valley Fruit Exchange. 297,703; Sept. 27; Serial No. 326,844; published July 5, 1932.
Coffee. Golden Bear Coffee Company. 297,717; Sept. 27; Serial No. 326,801; published July 5, 1932.
Coffee, tea, bread, etc. Nims Cafe, Incorporated. 297,788; Sept. 27.
Extract, Vanilla. Barned Products Company. 297,728; Sept. 27; Serial No. 322,678; published July 5, 1932.

Flour. Stanard-Tilton Milling Company. 297,705; Sept. 27; Serial No. 319,188; published Jan. 5, 1932.
Food product. Mead Johnson & Company. 297,653; Sept. 27; Serial No. 326,867; published July 5, 1932.
Fruit and concentrated fruit syrups, Crushed. Fischman Soda Fountain Supply Co. 297,654; Sept. 27; Serial No. 326,139; published July 5, 1932.
Fruit, Fresh citrus. Oak Hill Citrus Growers Association. 297,802; Sept. 27.
Grapes, deciduous and citrus fruits, etc., Fresh. United Packing Company. 297,711; Sept. 27; Serial No. 326,724; published July 5, 1932.
Ice cream. Frigid Products Corp. 297,674; Sept. 27; Serial No. 327,393; published July 5, 1932.
Mayonnaise dressing. Harrow-Taylor Butter Company. 297,652; Sept. 27; Serial No. 327,357; published July 5, 1932.
Nut candy bars. K & L Manufacturing Company. 297,712; Sept. 27; Serial No. 326,219; published July 5, 1932.
Olive oil. Mallars & Company. 297,716; Sept. 27; Serial No. 325,232; published July 5, 1932.
Pepper relish, mince meat, plum pudding, etc. Childs Company. 297,722; Sept. 27; Serial No. 312,173; published July 5, 1932.
Rice. Louisiana State Rice Milling Company. 297,713; Sept. 27; Serial No. 325,661; published June 28, 1932.
Sausage. Swift and Company. 297,709; Sept. 27; Serial No. 315,224; published July 7, 1931.
Syrup, Malt. Supreme Products Company. 297,715; Sept. 27; Serial No. 326,487; published July 5, 1932.

CLASS 50

Outfits or sets containing drawing materials, etc. Porter Chemical Company. 297,686; Sept. 27; Serial No. 327,704; published July 19, 1932.
Package containing materials and instructions for repairing garments. S. J. Roozendaal. 297,743; Sept. 27; Serial No. 323,147; published July 12, 1932.
Straws, Drinking. Eagle Straw Corporation. 297,695; Sept. 27; Serial No. 327,273; published July 12, 1932.

LIST OF LABELS

Adohr Big Breakfast Eggs. For Eggs. Adohr Creamery Company. 41,200; Sept. 27.
Alice Blue. For Chocolates. Page & Shaw, Inc. 41,220; Sept. 27.
Armstrong's Original Dutch Sauce. For Sauce. C. W. Armstrong. 41,202; Sept. 27.
Blue Jewel Imitation Vanilla Extract. For Imitation Vanilla Extract. Jewel Food Stores, Inc. 41,210; Sept. 27.
Blue Jewel Pure Lemon Extract. For Lemon Extract. Jewel Food Stores, Inc. 41,211; Sept. 27.
Blue Jewel Pure Vanilla Extract. For Vanilla Extract. Jewel Food Stores, Inc. 41,212; Sept. 27.
Bread. For Bread. K. R. Zimmer. 41,228; Sept. 27.
Certified No. 1 Peanuts. For Peanuts. Golden West Products Co. 41,207; Sept. 27.
Fruit-Sno Sherbert Flavoring Compound. For Sherbert Flavoring Compound. S. J. Lahman. 41,217; Sept. 27.
Ground Right to Taste Right. For Coffee. Hills Bros. 41,209; Sept. 27.
Honey-Milk. For Frozen Confections. Bridgeman-Russell Company. 41,203; Sept. 27.
Jewel T Bread 'N Butter Blend Coffee. For Coffee. Jewel Tea Co., Inc. 41,213–4; Sept. 27.
Jewel T Rice. For Rice. Jewel Tea Co., Inc. 41,215; Sept. 27.
Jewel Talcum Powder. For Talcum Powder. Jewel Tea Co., Inc. 41,216; Sept. 27.
La-Chrom Metal-Plating. For Paste for Plating and Polishing Brass, Copper, Zinc, Bronze, Etc. J. G. Saba. 41,221; Sept. 27.
London Court. For Cigars. E. B. Strickler. 41,223; Sept. 27.
Lyon's Northern Woods Brand. For Maple Syrup. B. Lyons. 41,219; Sept. 27.
Permanent wave sachets. La Mode Permanent Wave Corp. 297,777; Sept. 27; Serial No. 327,224; published July 12, 1932.
Radio. For Canned Tomatoes. M. J. Caplan Co. 41,204; Sept. 27.
Rhine Castle Water Springs. For Sparkling Alkaline Muriated Table Water. L. B. Strauss. 41,222; Sept. 27.
Snow-Man. For Frozen Confections. Eskimo Pie Corporation. 41,206; Sept. 27.
Soft-site Ophthalmic Lens. For Lenses. Chaffin Optical Co. 41,205; Sept. 27.
Tizink. For Ink. J. Held. 41,208; Sept. 27.
Valencia Biscuits. For Biscuits. All Nations Bakers, Inc. 41,201; Sept. 27.
Wax-Rite Liquid Wax. For Liquid Wax. Vestal Chemical Co. 41,224; Sept. 27.
Wheat Tone the Ideal Bread. For Bread. W. E. Long Company. 41,218; Sept. 27.
Wrigley's Double Mint Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 41,227; Sept. 27.
Wrigley's Spearmint Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 41,226; Sept. 27.
Wrigley's Spearmint The Perfect Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 41,225; Sept. 27.

LIST OF PRINTS

America's Quality Bicycle. For Bicycles, Junior-Cycles, Scooters, and Velocipedes. Iver Johnson's Arms & Cycle Works. 13,915; Sept. 27.
Aspirin. For Aspirin. World's Products Co. 13,921–2; Sept. 27.
Big-Frosty. For Ice-Cream and Frozen Confections and Preparations. W. E. Hoffmann. 13,914; Sept. 27.
Jack Penewell's Original Twin Six Talking Steel Guitar. For Hawaiian Steel Guitars. J. Pennewell. 13,917; Sept. 27.
Jandho's Postograph. For Printed Blanks. Postograph Co. 13,918; Sept. 27.
Klo-Kay English Finish Book Paper. For Book Paper. Northwest Paper Company. 13,916; Sept. 27.
Olympic Athletes Train on Welch's Grape Juice. For Grape Juice. Welch Grape Juice Company. 13,920; Sept. 27.
Peppermint Aromints. For Peppermint Candy. Aromint Corporation. 13,913; Sept. 27.
Wakefield Dairy. For Milk. Simpson Bros., Inc. 13,919; Sept. 27.
Wrigley's Spearmint Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 13,923; Sept. 27.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 27TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. B. See Elevator Company. (See Lindstrom, Nils O., assignor.)
Abbe, Edward J., assignor to The Elwell-Parker Electric Co., Cleveland, Ohio. Industrial truck. 1,878,994; Sept. 27.
Abbe, Edward J., assignor to The Elwell Parker Electric Company, Cleveland, Ohio. Industrial truck 1,878,995; Sept. 27.
Achtziger, Christoph, assignor to the Firm Porzellanfabrik Weiden Gebr. Bauscher, Weiden, Germany. Dripless spout for pouring vessels of ceramic material. 1,878,996; Sept. 27.
Addington, W. H. (See Ferguson, James R., assignor.)
Addressograph Company. (See McCain, Cecil C., assignor.)
Ade, Richard A. (See Fiore, A., and Ade.)
Adelantado, Luis, Barcelona, Spain. Manufacture of phosphates and phosphoric acid. 1,878,997; Sept. 27.
Adt, Albert W., et al. (See Zeun, Louis H., assignor.)
Advance Machine Company. (See Richardson, M. H., and Gegert, assignors.)
Agfa Ansco Corporation. (See Gehrke, Friedrich W., assignor.)
Agfa Ansco Corporation. (See Goldhammer, Leo, assignor.)
Agfa Ansco Corporation. (See Heymer, Gerd, assignor.)
Agfa Ansco Corporation. (See Opfermann, E., and Fischer, assignors.)
Agfa Ansco Corporation. (See Schneider, Wilhelm, assignor.)
Ahlm, Charles E. F., East Cleveland, assignor, by mesne assignments, to Automotive Research Corporation, Warren, Ohio. Transmission gearing. 1,880,064; Sept. 27.
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Inclosed electric conductor and switch gear. 1,878,999; Sept. 27.
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Metal clad switch gear and inclosed conductor system therefor. 1,879,000; Sept. 27.
Air Reduction Company. (See Deming, George M., assignor.)
Air Reduction Company. (See Lawrence, Frank S., assignor.)
Air Reduction Company. (See Ost, W. R., and Lawrence, assignors.)
Alton, Mary H., Summer Hill, Ill. Fence post. 1,879,725; Sept. 27.
Ajax Electrothermic Corporation. (See Linnhoff, Franz, assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin Fitch, assignor.)
Ajax Electrothermic Corporation. (See Tama Cyrano, assignor.)
Akins, Randall P., Denver, Colo. Continuous filter. 1,878,998; Sept. 27.
Aktiebolaget Formator. (See Bauschlicher, August, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Piechl, O., and Latzko, assignors.)
Allen, Charles I., Wadesboro, N. C. Leg splint. 1,879,001; Sept. 27.
Allen, Russell G. (See Kadow, A., and Allen.)
Alles, Clifton Co., Los Angeles, Calif. Movable magnetic marker. 1,879,002; Sept. 27.
Alles, Gordon A., Monterey Park, Calif. Salts of 1-phenyl-2-aminopropane. 1,879,003; Sept. 27.
Allyn, Robert S., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., and one-half to N. D. Q. Specialty Corporation. Candle holder machine and process. 1,880,118; Sept. 27.
Altorfer, Alpheus W., Peoria, Ill. Service table. 1,879,004; Sept. 27.
Aluminum Company of America. (See Horsfield, B. T., Kempf, and Fink, assignors.)
American Arch Company. (See Willett, Alfred A., assignor.)
American Bemberg Corporation. (See Bauriedel, G., and Hartmann, assignors.)
American Bicherony Company, The. (See von Reis, Lambert, assignor.)
American Car and Foundry Company. (See Clarke, Allen W., assignor.)
American Car and Foundry Company. (See Mayer, William J., assignor.)
American Doucil Company. (See Hilditch, T. P., and Wheaton, assignors.)
American Floor Surfacing Machine Company, The. (See Myers, Harry L., assignor.)
American Fork & Hoe Company, The. (See Dennis, Charles, assignor.)
American Hammered Piston Ring Company. (See Morton, Allen W., assignor.)
American Hammered Piston Ring Company, The. (See Morton, A. W., and Stead, assignors.)
American Manganese Bronze Company. (See Samms, Horace, assignor.)
American Mills Company, The. (See Vacher, John, assignor.)
American Moistening Company. (See Armstrong, Joseph, assignor.)
American Moistening Company. (See Loepsinger, Albert J., assignor.)
American Optical Company. (See Baker, Nelson M., assignor.)
American Optical Company. (See Glancy, Anna E., assignor.)
American Optical Company. (See Schumacher, Elmer L., assignor.)
American Optical Company. (See Simonds, Royal H., assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Optical Company. (See Tillyer, E. D., and Baker, assignors.)
American Optical Company. (See Tillyer, E. D., and Pond, assignors.)
American Pulley Company, The. (See Munoz, Gonzalo C., assignor.)
American Rolling Mill Company, The. (See Smith, R. R., Songer, and Salender, assignors.)
American Telephone and Telegraph Company. (See Haines, William T. assignor.)
American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)
American Telephone and Telegraph Company. (See Swart, Leland K, assignor.)
American Tile Fixture Company. (See Doven, Joseph F., assignor.)
Anderberg, Anders and E. A., assignors to Carl Holmbergs Mekaniska Verkstads Aktiebolag, Lund, Sweden. Compressed air brake for obtaining a variable braking effect. 1,878,993; Sept. 27.
Anderberg, Erik A. (See Anderberg, Anders and E. A.)
Andersen, Fred C., assignor to Andersen Lumber Company, Bayport, Minn. Window and door frame. 1,879,005; Sept. 27.
Andersen Lumber Company. (See Andersen, Fred C., assignor.)
Anderson, Thomas F. (See Carpenter, R. F., and Anderson.)
Anderson, William D., San Francisco, Calif. Swivel ferrule strap socket. 1,879,006; Sept. 27.
Anderson, William O., Detroit, Mich. Sanitary razor strop holder. 1,880,007; Sept. 27.
Anderton, George, New Bedford, Mass. Card novelty. 1,879,007; Sept. 27.
Angus, Donald J., Indianapolis, Ind. Graphic meter. 1,880,008; Sept. 27.
Animal Trap Company of America. (See Lehn, J. U., and Huebener, assignors.)
Animal Trap Company of America. (See Zahm, J. D., and Lehn, assignors.)
Anstice, Josiah, & Co. (See Anstice, Mortimer R., assignor.)
Anstice, Mortimer R., assignor to J. Anstice & Co., Inc., Rochester, N. Y. Vegetable slicing machine. 1,879,008; Sept. 27.
Anthony, Benjamin F., Youngstown, Ohio. Apparatus for finishing and testing tubular products. 1,879,009; Sept. 27.
Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Waffle cooking stove. 1,879,010; Sept. 27.
Appel, Oscar, assignor to Uni-Lec-Tric Burner Corporation, Paterson, N. J. Oil burning apparatus. 1,879,011; Sept. 27.
Armitage, Joseph B. (See Kearney, E. J., and Armitage.)
Armstrong, Joseph, Conimicut, assignor to American Moistening Company, Providence, R. I. Atomizing nozzle. 1,879,012; Sept. 27.
Arndt, Paul. (See Scognamillo, S., and Arndt.)
Arnold, Carl, Nuremberg, Germany. Winding device for spinning toys. 1,879,013; Sept. 27.
Arpin, Edmund P., jr., Port Edwards, Wis. Coating apparatus. 1,880,065; Sept. 27.
Art Metal Works, Inc. (See Burchett, Walter J., assignor.)

Aschenbrenner, Claus, assignor to the Firm Photogrammetrie G. m. b. H., Munich, Germany. Mechanism of film propulsion. 1,879,866; Sept. 27.
Ashman, David B., Baltimore, Md. Portable fabric punching machine. 1,880,031; Sept. 27.
Associated Electric Laboratories, Inc. (See Hudd, Alfred E., assignor.)
Atlas Powder Company. (See Stratton, Richard H., assignor.)
Atmospheric Nitrogen Corporation. (See Kniskern, Walter H., assignor.)
Audio Cinema. (See Lane, George, assignor.)
Aurora Sign Company. (See Gross, Joseph E., assignor.)
Austin, Gilbert, and J. C. and W. A. MacFarlane, Glasgow, Scotland. Constant current electric generator. 1,879,014; Sept. 27.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Tracker mechanism for musical instruments. 1,879,015; Sept. 27.
Austin, Joseph H., Louisville, Ky., assignor to P. Lorillard Company, New York, N. Y. Threshing machine for tobacco. 1,879,016; Sept. 27.
Austin Organ Company, The. (See Austin, John T., assignor.)
Auto Mop Manufacturing Company. (See Larberg, George O., assignor.)
Automatic Musical Instrument Company. (See Kenyon, B. C., Boa, and Green, assignors.)
Automotive Research Corporation. (See Ahlm, Charles E. F., assignor.)
Babcock & Wilcox Company, The. (See Harter, Isaac, assignor.)
Babitt, Joseph F., Wellington, Ohio. Safety appliance for ladders. 1,879,017; Sept. 27.
Baerulfsen, Karl M., Oslo, Norway. Folding baby carriage. 1,880,167; Sept. 27.
Bagley, Walter G., Pueblo, Colo. Gas burner. 1,879,916; Sept. 27.
Baird, Dudley. (See Hartley, H. J., and Baird.)
Baird-Warner, Incorporated. (See Warner, Charles L., assignor.)
Baker, Nelson M. (See Tillyer, E. D., and Baker.)
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,879,780; Sept. 27.
Ball, Charles W., Bellingham, Wash. Clothes washing device. 1,879,018; Sept. 27.
Ballentine, Earle W., Chicago, Ill., assignor to Solar Industries, Inc. Electric air heater. 1,879,019; Sept. 27.
Ballentine, Earle W., Chicago, Ill., assignor to Solar Industries, Inc. Electric air heater. 1,879,889; Sept. 27.
Balsiger, Harold E., assignor to Landis Tool Company, Waynesboro, Pa. Automatic by-pass valve. 1,879,020; Sept. 27.
Bamberger, Kurt. (See Schmidt, R. E., Stein, and Bamberger.)
Banker, Oscar H., Philadelphia, Pa. Multicolor printing press. 1,879,597; Sept. 27.
Banning, Ephraim, trustee. (See Coyle, Joseph L., assignor.)
Barber, Martin A., Cleveland, Ohio, assignor to Consolidated Connector Patent Corporation, Wilmington, Del. Automatic train pipe connecter. 1,879,021; Sept. 27.
Barcalo, Edward J., Buffalo, N. Y. End frame for swings or similar article. Des. 87,823; Sept. 27.
Barce, John O., Chicago, Ill. Shower bath cabinet. 1,879,782; Sept. 27.
Barclay, Earle H., assignor to The Silica Gel Corporation, Baltimore, Md. Catalytic gel and making same. 1,879,022; Sept. 27.
Barker, Wayne M. (See Smith, F., and Barker.)
Barlow, H. T. (See Hannan, G. R., and Goldman, assignors.)
Barnes, Alvin P., assignor to Serv-Rite Corporation, Minneapolis, Minn. Fruit holder. Des. 87,824; Sept. 27.
Barnes, William B., Auburn, Ind., assignor to Universal Gear Shift Corporation. Gear shifting mechanism. 1,880,066; Sept. 27.
Barnett, Louis, Brooklyn, N. Y. Convertible cap ping. 1,879,783; Sept. 27.
Barrett, Joseph R., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric generating and distributing system. 1,879,969; Sept. 27.
Barron, William L., Laurence Harbor, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Bobbin-thread tension-device for sewing machines. 1,879,023; Sept. 27.
Barthélemy, Henri L., Milan, Italy. Manufacture of cellulose acetate. 1,880,067; Sept. 27.
Barto, Edward J., jr., assignor to K-D Manufacturing Company, Lancaster, Pa. Valve jack or prop. 1,879,024; Sept. 27.
Bascle, Joseph A., Ponchatoula, La. Internal combustion engine. 1,879,025; Sept. 27.
Basham, James E., assignor of one-half to E. G. Matson, Denver, Colo. Weatherstrip. 1,879,026; Sept. 27.
Bassler, Kurt, Berlin-Westend, Germany, assignor to General Electric Company. Internal combustion engine and the like. 1,879,027; Sept. 27.
Bauer, Wilhelm, J. Haller, and L. Zeh, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New water soluble sulfuric acid esters of leuco derivatives of indigoid vat dyestuffs. 1,879,028; Sept. 27.
Baumgard, George, Carlstadt, N. J., assignor to Eagle Pencil Company, New York, N. Y. Pencil display carton. 1,879,029; Sept. 27.
Bauriedel, Gotthard, and A. Hartmann, Barmen, Germany, assignors to the Firm American Bemberg Corporation, New York, N. Y. Machine for spinning artificial silk. 1,880,068; Sept. 27.
Bausch & Lomb Optical Company. (See Bouchard, Samuel E., assignor.)
Bauschlicher, August, Pankow, near Berlin, Germany, assignor to Aktiebolaget Formator, Stockholm, Sweden. Cigar machine. 1,880,009; Sept. 27.
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill column. 1,879,030; Sept. 27.
Bayley, William D., Springfield, Ohio. Farrowing house. 1,879,781; Sept. 27.
Becker, Bernard C., Canton, Ohio, assignor to The Hoover Company. Cord protector. 1,880,069; Sept. 27.
Becker, Ernst, Hamburg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing vulcanized fibers. 1,879,031; Sept. 27.
Becker, Heins, Hamburg, Germany. Smoking process. 1,879,032; Sept. 27.
Becker, William E., Chicago, Ill., assignor to Goss Printing Press Company. Printing. 1,880,070; Sept. 27.
Beede, Herbert G., assignor to Pantex Pressing Machine, Inc., Pawtucket, R. I. Steaming board. 1,879,033; Sept. 27.
Behnke, Guy E., Houston, Tex., and R. Glesey, Oklahoma City, Okla., assignors to Reed Roller Bit Company, Houston, Tex. Drill cutter mounting. 1,879,034; Sept. 27.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Collapsible arm rest for seats. 1,879,035; Sept. 27.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Reclining chair. 1,879,036; Sept. 27.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Car chair. 1,879,037; Sept. 27.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Locking device for car seats. 1,879,038; Sept. 27.
Bell, Charles W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,880,032; Sept. 27.
Bellanca, Giuseppe M., New Castle, Del. Airplane construction. 1,879,039; Sept. 27.
Belluche, Elmer W., assignor to Christensen Machine Company, Racine, Wis. Signature stitching machine. 1,879,040; Sept. 27.
Bemies, James F. (See Smith, S. N., and Bemies.)
Bender, Sydney E., Brooklyn, N. Y. Sample color card. 1,879,041; Sept. 27.
Bendix Aviation Corporation. (See Norton, Raymond J., assignor.)
Bendix Aviation Corporation. (See Semmes, Harry H., assignor.)
Bendix Brake Company. (See Stinson, Edward A., assignor.)
Benecke, Heinrich, Berlin-Pankow, Germany, assignor to General Electric Company. Acoustic device. 1,879,042; Sept. 27.
Bennett, Charles E., Hawthorne, assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J. Lead pressing. 1,879,867; Sept. 27.
Bennett, Frank. (See Hallowell, H. T., and Bennett.)
Bennett, Nicholas, Appleton, Widnes, H. Dodd, Glazebrook, near Manchester, and W. C. Sprent, Cressington, Liverpool, assignors to Imperial Chemical Industries Limited, Nobel House, Buckingham Gate, London, England. Manufacture and production of aromatic acid chlorides. 1,880,169; Sept. 27.
Bennhold, Walter, Furstenwalde, Germany. Water gas generator. 1,880,010; Sept. 27.
Benz, Henry J., Racine, Wis. Flowerpot support and irrigating device. 1,879,784; Sept. 27.
Ber, George J., Rayne, La. Soft collar holder. 1,880,168; Sept. 27.
Berger, Emil, Salzburg, Austria. Swimming device with automatic gas filling. 1,879,726; Sept. 27.
Bergman, Jerome E., Buffalo, and F. P. Ego, Kenmore, assignors to Bergman Tool Mfg. Co., Buffalo, N. Y. Battery tool. 1,880,172; Sept. 27.
Bergman Tool Mfg. Co. (See Bergman, J. E., and Ego, assignors.)
Bergsten, Frank R., Anoka, Minn. Cow-tail holder. 1,879,043; Sept. 27.
Berliet, Marius, assignor to Societe Anonyme des Automobiles, M. Berliet, Lyon, France. Operation of motor vehicles. 1,879,044; Sept. 27.
Berlin, Ludwig W. (See Kränzlein, G., Müller, and Berlin.)
Bernard, Hanns, Uerdingen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Paint. 1,879,045; Sept. 27.
Bettle, Griscom, Gladwyn, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Aircraft construction. 1,879,046; Sept. 27.

Betts, William B., Binghamton, N. Y. Vending machine. 1,879,047; Sept. 27.
Beurdeley, André, Paris, France. Vehicle suspension spring. 1,879,048; Sept. 27.
Bieler, Oscar, Pittsburgh, Pa. Suspension apparatus for well drilling operations. 1,880,071; Sept. 27.
Bierlich, John Harald, Bennington, Vt., assignor of one-half to C. E. Dooley, Philmont, N. Y., and one-fourth to K. G. Bierlich, Bennington, Vt. Collapsible stove and cooking utensil. 1,879,837; Sept. 27.
Bierlich, K. G., et al. (See Bierlich, John H., assignor.)
Biery, Walter L. (See Greis, Alphonse M., assignor.)
Biffar, Charles F., Long Eddy, N. Y. Antiskid chain. 1,880,170; Sept. 27.
Billig, Fred W. (See Johnson, L. E., Winchell, Hardick, and Billig.)
Bjorkman, George E., Djursholm, Sweden, and J. Geloso, New York, N. Y. Permanent waving apparatus. 1,879,053; Sept. 27.
Black, Lee J., Beaumont, Tex. Water cooled winding drum. 1,879,049; Sept. 27.
Black, Wayne N. (See Parrish, B. E., and Black.)
Blakeslee, Henry J., Marlboro, Conn. Teapot. 1,879,654; Sept. 27.
Blandford, Francis W., Prince Albert, Saskatchewan, Canada. Shock absorber. 1,879,050; Sept. 27.
Blizard, John, Garden City, assignor to Foster Wheel Corporation, New York, N. Y. Fuel burner. 1,879,652; Sept. 27.
Blood, George E., assignor to The Foote Company, Inc., Nunda, N. Y. Water measuring tank for concrete pavers. 1,879,051; Sept. 27.
Boa, Wilmur W. (See Kenyon, B. C., Boa, and Green.)
Boda, Joseph E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Disk harrow. 1,879,785; Sept. 27.
Boeckermann, Bernard J., assignor, by mesne assignments, to The Cappel Upholstering Company, Dayton, Ohio. Resilient furniture slat support. 1,879,786; Sept. 27.
Bohmker, John C., Kankakee, Ill. Corn planter. 1,879,787; Sept. 27.
Bommer, Max, R. Haller, Riehen, near Basel, and E. Pool, Basel, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Obtaining fast tints on the fiber. 1,879,727; Sept. 27.
Bornkessel, Bruno, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Printing mechanism for cash registers. 1,879,838; Sept. 27.
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Circuit controlling apparatus. 1,880,033; Sept. 27.
Bossert, William F. (See Burke, William R., assignor.)
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Bouchard, Samuel E., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Bar material for ophthalmic mountings. Des. 87,825; Sept. 27.
Bounds, Benjamin F., Rosston, Okla., assignor of one-half to O. Wear, Englewood, Kans. Hitch. 1,879,052; Sept. 27.
Bown, Gilbert C., and E. J. McCarthy, Long Beach, N. Y. Lubricating bearings. 1,879,839; Sept. 27.
Boyce, Leonard D., Maplewood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,879,053; Sept. 27.
Boyd, Harold A., Glasgow, Scotland. Preventing ballooning of the yarn in flyer spinning and like frames. 1,879,054; Sept. 27.
Boykin, Christopher C., Norfolk, Va. Seed planting machine. 1,879,055; Sept. 27.
Boynton, Arthur J., assignor to H. A. Brassert & Company, Chicago, Ill. Checkerbrick and checkerwork construction. 1,880,011; Sept. 27.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,879,598; Sept. 27.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brand, James C. (See Chase, L. W., Zybach, and Brand.)
Brandfon, Samuel, and J. F. Katz, New York, N. Y. Fountainette. Des. 87,826; Sept. 27.
Brandt, Edgar W., Paris, France. Bladed projectile. 1,879,840; Sept. 27.
Brassert, H. A., & Company. (See Boynton, Arthur J., assignor.)
Brassert, H. A., & Company. (See Brassert, Herman A., assignor.)
Brassert, Herman A., Kenilworth, assignor to H. A. Brassert & Company, Chicago, Ill. Checker construction. 1,879,056; Sept. 27.
Brassert, Herman A., assignor to H. A. Brassert & Company, Chicago, Ill. Melting furnace. 1,880,012; Sept. 27.
Braun, Frank C. (See Pullets, George, assignor.)
Bray, Freeman M., Columbus, Kans. Automobile direction signal. 1,879,057; Sept. 27.
Bray, Geo., & Company Limited. (See Bray, George, assignor.)
Bray, George, assignor to Geo. Bray & Company Limited, Leeds, England. Electrical heating element. 1,879,728; Sept. 27.
Breer, Carl, Detroit, Mich. Bending tool. 1,879,868; Sept. 27.
Breer, Carl, Detroit, Mich. Bending tool. 1,879,869; Sept. 27.
Bremer, William S., Chicago, Ill. Heat reflecting and conducting bowl for heaters. 1,879,970; Sept. 27.
Bright Star Battery Company. (See Corigliano, Peter, assignor.)
Briody, Bernard, assignor to Truscon Steel Company, Youngstown, Ohio. Roadway joint. 1,880,013; Sept. 27.
British Steel Piling Company, Limited, The. (See Salmon, Reginald, G., assignor.)
Brockman, Robert H., St. Petersburg, Fla. Hand vise. 1,879,058; Sept. 27.
Brogden, Joah, Melrose Park, assignor to David Lupton's Sons Company, Philadelphia, Pa. Metallic frame construction. 1,879,655; Sept. 27.
Brooks, Benjamin T., Greenwich, Conn., assignor to Petroleum Chemical Corporation. Liquid phase sulphation of normal butene. 1,879,599; Sept. 27.
Brookshire, Roy L., and F. John, Weaubleau, Mo. Poultry cooper's helper. 1,879,059; Sept. 27.
Broomhead, George, New York, N. Y. Tension device for automobile tops. 1,879,060; Sept. 27.
Brosse, Paul, Neuilly-sur-Seine, France, assignor to Kislyn Corporation. Device for the cutting of threads on cylindrical surfaces. 1,879,061; Sept. 27.
Brown, Charles B. (See Brown, Charles H. and C. B.)
Brown, Charles H., and P. Frazier, Breckenridge, Tex. Blade for road scrapers. 1,879,062; Sept. 27.
Brown, Charles H. and C. B., Flushing, N. Y. Shoe. 1,879,729; Sept. 27.
Brown Company. (See Lovering, Everett W., assignor.)
Brown Company. (See Moore, Hugh K., assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Richter, G. A., and Scherer, assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Schur, M. O., and Gosselink, assignors.)
Brown Company. (See Schur, M. O., and Hoos, assignors.)
Brown Company. (See Schur, M. O., Rasch, and Hoos, assignors.)
Brown Company. (See Sherman, John C., assignor.)
Brown Company. (See Vannah, Harold P., assignor.)
Brown, Robert H., Ottawa, Ontario, Canada. Watering bowl and supporting the same. 1,879,788; Sept. 27.
Brown, Robert S., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn. Chuck. 1,879,656; Sept. 27.
Browne, Richard B., Brooklyn, N. Y. Balanced window sash. 1,879,730; Sept. 27.
Browning, James H., Great Neck, N. Y., assignor to Safety Liquid Fuel Torch Corporation. Welding and cutting torch. 1,879,789; Sept. 27.
Bruck, Robert L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire building form or core. 1,879,063; Sept. 27.
Brunder, George G., et al. (See Clohecy, Leon G., assignor.)
Brunswick-Balke-Collender Company, The. (See Kennedy, Robert E., assignor.)
Bryan, Leon O., assignor to E. I. du Pont de Nemours & Company Wilmington, Del. Gelatinous explosive composition. 1,879,064; Sept. 27.
Bryant, Edward C., Atlanta, Ga. Razor blade sharpener. 1,879,065; Sept. 27.
Bryant, Martha M., Chicago, Ill., assignor to Juvenile Wood Products, Inc., Fort Wayne, Ind. Shield for boys' toilet seats. 1,879,066; Sept. 27.
Buchert, Harry, et al. (See Drake, Ernest B., assignor.)
Buckeye Blower Company, The. (See Harnett, Lewis D., assignor.)
Bucklein, Frank P., Los Angeles, Calif. Oils cleaning machine. 1,879,067; Sept. 27.
Buckley, Jerry J., Bridgewater, N. Y. Condiment holder. 1,879,731; Sept. 27.
Budd, Edward G., Manufacturing Co. (See Bettle, Griscom, assignor.)
Budd, Edward G., Manufacturing Co. (See Hanson, Arthur F., assignor.)
Budd, Edward G., Manufacturing Company. (See Kelley, George L., assignor.)
Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)
Budd Wheel Company. (See Reed, George B., assignor.)
Buehler, Walter A., Cucamonga, Calif. Check valve. 1,879,890; Sept. 27.
Bunbury, Hugh M., W. J. S. Naunton, Prestwich, Manchester, and W. A. Sexton, Huddersfield, England, assignors to Imperial Chemical Industries Ltd. Vulcanization of rubber. 1,879,068; Sept. 27.
Burchett, Walter J., East Orange, assignor to Art Metal Works, Inc., Newark, N. J. Projecting device. 1,879,600; Sept. 27.
Burgess, Pearl M., Reading, Pa. Chute. 1,879,069; Sept. 27.
Burke, William R., assignor of one-half to W. F. Bossert, Utica, N. Y. Railway signal control. 1,879,070; Sept. 27.
Burnett, Richard W., Chicago, Ill. Hand brake mounting for railway cars. 1,879,971; Sept. 27.
Burnett, Richard W., Chicago, Ill. Railway hand brake. 1,879,972; Sept. 27.

Burnett, Richard W., Chicago, Ill. Railway hand brake. 1,879,973; Sept. 27.
Burnett, Richard W., Chicago, Ill. Railway hand brake. 1,879,974; Sept. 27.
Burnett, Richard W., Chicago, Ill. Hand brake for drop end gondolas. 1,879,975; Sept. 27.
Burnett, Richard W., Chicago, Ill. Attaching bracket for railway car hand brakes. 1,879,976; Sept. 27.
Burnett, Richard W., Chicago, Ill. Hand brake holding and releasing means. 1,879,977; Sept. 27.
Burt, Harold A., St. Albans, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing and distributing machine. 1,880,110; Sept. 27.
Burt Manufacturing Company, The. (See Palmer, Clarence A., assignor.)
Burt Manufacturing Company, The. (See Palmer, C. A., and Lenke, assignors.)
Busch, Werner, Cologne-Deutz assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Precipitation of heavy metal hydroxides. 1,879,071; Sept. 27.
Bush, Vannevar, West Medford, assignor to Raytheon, Inc., Cambridge, Mass. Gaseous conduction device. 1,880,014; Sept. 27.
Butterfield, Vernon J., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating apparatus for automotive vehicles. 1,879,072; Sept. 27.
Butterworth, Arthur, and N. J. Viken, Johannesburg, Transvaal, South Africa. Electrical means for operating or raising and lowering railway booms and the like. 1,879,919; Sept. 27.
Caesar, John and S. Eggleston, St. Paul, assignors to Standard Conveyor Company, North St. Paul, Minn. Automatic transfer apparatus for conveyers. 1,879,073; Sept. 27.
Caillet, Robert. (See Mutrux, M., and Caillet.)
Caldwell, Edwd., F., & Co. (See Tucker, Spencer J., assignor.)
Camel Company. (See Lute, C., and Tobin, assignors.)
Cammack, Robert W., Mount Vernon, N. Y. Dental floss holder. 1,879,074; Sept. 27.
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Slack adjuster. 1,879,075; Sept. 27.
Campbell, Donald J., Muskegon Heights, Mich. Tire. 1,879,790; Sept. 27.
Canpel Upholstery Company, The. (See Boeckermann, Bernard J., assignor.)
Carbide & Carbon Chemicals Corporation. (See Davidson, Joseph G., assignor.)
Carbide and Carbon Chemicals Corporation. (See Reid, George H., assignor.)
Carbondale Machine Co., The. (See Torrance, Henry, assignor.)
Card, William C., jr., Waverly, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y. Upperroughing machine. 1,879,657; Sept. 27.
Carle, John, Garwood, N. J. Metal casting machine. 1,879,076; Sept. 27.
Carlin, Samuel. (See Stern, L. A., and Carlin.)
Carlsen, Carl, Youngstown, Ohio. Forming pipe blanks. 1,879,077; Sept. 27.
Carlsen, Carl, Youngstown, Ohio. Forming tubular articles. 1,879,078; Sept. 27.
Carpenter Hiatt Sales Company. (See Read, Frederick A., jr., assignor.)
Carpenter, Robert F., and T. F. Anderson, assignors to The Sanymetal Products Co., Cleveland, Ohio. Hinge structure. 1,879,079; Sept. 27.
Carpenter, Robert F., and T. F. Anderson, assignors to The Sanymetal Products Company, Cleveland, Ohio. Hinge structure. 1,879,080; Sept. 27.
Carpentier, Melbourne L., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Propeller driving unit. 1,879,081; Sept. 27.
Carroll, Janie I. (See Smott, Daisy E., assignor.)
Carson, Lee L. Whittier, assignor of one-fourth to George T. Dunn, San Diego, Calif. Pump valve. 1,880,120; Sept. 27.
Carson, Robert H., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Trap. 1,879,791; Sept. 27.
Carter Carburetor Corporation. (See Boyce, Leonard D., assignor.)
Carter, Edward A., Buffalo, N. Y. Antirattler for windows. 1,880,173; Sept. 27.
Carvalho, Leslie R. N., assignor to The Closure Service Company, Toledo, Ohio. Closure. 1,879,082; Sept. 27.
Case, J. I., Company. (See Boda, Joseph E., assignor.)
Case, J. I., Company. (See Geraldson, Gerald, assignor.)
Casper, Benjamin A., Minneapolis, Minn. Buffing and abrasive device. 1,879,083; Sept. 27.
Caswell, Thomas W., Flint, Mich., and G. A. Kelly, New York, N. Y.; said Caswell assignor to said Kelly. Manufacturing concrete header blocks. 1,879,841; Sept. 27.
Caterpillar Tractor Co. (See Thoen, Lowell H., assignor.)
Central Scientific Company. (See Dubrovin, John, assignor.)
Ceramic Development Corporation. (See Lotz, Alfred E. C., assignor.)
Chadbourne, Glenn A., Chadbourn, Mont. Mowing machine. 1,880,121; Sept. 27.
Chadwick, Verner R., London, England. Chain grate stoker. 1,879,732; Sept. 27.
Chandler, Wallace L., East Lansing, Mich., assignor, by mesne assignments, to Merck & Co. Inc., Rahway, N. J. Iodine composition. 1,879,601; Sept. 27.
Chaney, Harvey P., Los Angeles, Calif. Cotton fiber rolling device. 1,879,084; Sept. 27.
Chapman, Frank D., Berlin, Wis. Treating granular edible commodities. 1,879,085; Sept. 27.
Charen, Myer, assignor to Universal Dental Company, Philadelphia, Pa. Display holder. 1,879,658; Sept. 27.
Chase, Leon W., F. L. Zybach, and J. C. Brand, assignors to Chase Plow Company, Lincoln, Nebr. Cultivator. 1,879,733; Sept. 27.
Chase Plow Company. (See Chase, L. W., Zybach, and Brand, assignors.)
Cheney, Wallace E., Milwaukee, Wis. Latch. 1,879,792; Sept. 27.
Chisholm, Henry, Cleveland, Ohio. Lubricating system. 1,879,086; Sept. 27.
Chomik, Charles, Linnton, Oreg. Bathing girl table or stand. 1,879,087; Sept. 27.
Christensen Machine Company. (See Belluche, Elmer W., assignor.)
Christensen, Marinus, assignor of fifty per cent to B. F. Cowan, Refugio County, Tex. Setting tool. 1,879,088; Sept. 27.
Christian, David A., assignor to Siemens Brothers & Company, Limited, London, England. Mounting arrangement for electrical apparatus. 1,880,072; Sept. 27.
Christiansen, Walter G., Bloomfield, N. J., and E. Moness, assignors to E. R. Squibb & Sons, New York, N. Y. Obtainment of vitamin concentrates from fats. 1,879,734; Sept. 27.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Lapping gear sets. 1,879,089; Sept. 27.
Chrysler Corporation. (See Carpentier, Melbourne L., assignor.)
Chubb, Lewis W., Edgewood Park, Pa., assignor to Radio Corporation of America, New York, N. Y. Motion picture apparatus. 1,879,793; Sept. 27.
Church, Lewis H., Westfield, assignor to The Thomas & Betts Co., Elizabeth, N. J. Box connector. 1,879,920; Sept. 27.
Cislak, Francis E., assignor to P. C. Reilly, Indianapolis, Ind. Purifying anthracene and other substances. 1,879,090; Sept. 27.
Clancy, Frank, assignor to S. Michaels, New York, N. Y. Automatic air valve for hot water radiators. 1,879,091; Sept. 27.
Clark, Harry A., Detroit, Mich. Necktie and attaching same to a collar. 1,879,092; Sept. 27.
Clark, James A., El Paso, Tex. Radioantenna device. 1,879,978; Sept. 27.
Clarke, Allen W., Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,879,093; Sept. 27.
Clatterbuck, Nathaniel P., Dobbs Ferry, N. Y. Diaphragm for locomotives. 1,879,094; Sept. 27.
Claybourn, Leslie W., assignor to Claybourn Process Corporation, Milwaukee, Wis. Sheet delivery control. 1,879,095; Sept. 27.
Claybourn Process Corporation. (See Claybourn, Leslie W., assignor.)
Clayton & Lambert Manufacturing Company. (See Lambert, Charles F., assignor.)
Cleveland Graphite Bronze Company, The. (See Johnson, Carl W., assignor.)
Clifford, Albert M., Stow, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Deterioration inhibitor for rubber. Re18,607; Sept. 27.
Clifford, Harry. (See Salmon, R. D., and Clifford.)
Clifford Manufacturing Co. (See Clifford, Walter B.)
Clifford, Walter B., assignor to Clifford Manufacturing Co., Boston, Mass. Apparatus for production of bellows tubing. 1,880,184; Sept. 27.
Clobecy, Leon G., Wauwatosa, assignor of one-third to G. G. Brumder and one-third to W. C. Mayer, Milwaukee, Wis. Variable speed transmission. 1,879,921; Sept 27.
Closure Service Company, The. (See Carvalho, Leslie R. N., assignor.)
Cochran, Clyde E., assignor to The Elwell Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,879,096; Sept. 27.
Cochrane Corporation. (See Gibson, George H., assignor.)
Coffey, Irven E., Santa Ana, Calif. Storage battery inspection lamp. 1,879,097; Sept. 27.
Coffey, Irven E., Santa Ana, Calif. Luminous indicator for electrical apparatus. 1,879,098; Sept. 27.
Coffey, Irven E., Playa Del Rey, Calif. Battery terminal puller. 1,879,099; Sept. 27.
Cohn, Max M. (See Johnston, C. L., and Cohn.)
Colby, Allan B., Providence, R. I. Fastener. 1,879,100; Sept. 27.
Cole, Elmer K., Winterset, Iowa. Cable end take-up fitting. 1,879,636; Sept. 27.
Coleman, James A., Cleveland, Ohio. Vehicle washing apparatus. 1,879,101; Sept. 27.
Collins, John J., New York, N. Y. Folding trunk. 1,879,102; Sept. 27.
Colton, Charles H., assignor to Great Lakes Dredge & Dock Company, Chicago, Ill. Dredge discharge conduit. 1,880,073; Sept. 27.

Columbia Phonograph Company. (See Massey, Augustine H., assignor.)
Columbia Phonograph Company. (See Roycroft, Walter R., assignor.)
Compo Shoe Machinery Corporation. (See Card, William C., jr., assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Condit Electrical Manufacturing Corporation. (See Barrett, Joseph R., assignor.)
Condit Electrical Manufacturing Corporation. (See Tasker, Maurice B., assignor.)
Connett, Leonard, Cincinnati, Ohio. Mold and removing the same from the cast material. 1,879,891; Sept. 27.
Connor, James F., Cleveland, Ohio. Brush and holding bristles in same. 1,879,103; Sept. 27.
Connadty, Ottmar, Nuremberg, Germany. Electrolytic cells and in anodes used in such cells. 1,879,842; Sept. 27.
Consolidated Connector Patent Corporation. (See Barber, Martin A., assignor.)
Cook, Earle S., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,879,662; Sept. 27.
Cooke, Geoffrey H., London, assignor to Handley Page Limited, Cricklewood, England. Fuse-setting device for aircraft bombs. 1,880,122; Sept. 27.
Coolidge, Leigh H., assignor to Coolidge Propeller Company, Seattle, Wash. Regulator for adjusting the pitch to propeller blades while in motion. 1,879,659; Sept. 27.
Coolidge Propeller Company. (See Coolidge, Leigh H., assignor.)
Cooper, Stewart S. (See Levi, Jack W., assignor.)
Cooper, Stewart S., Cincinnati, Ohio. Aviator's helmet. 1,879,104; Sept. 27.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Flexible sharp freezing container. 1,879,602; Sept. 27.
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerating unit. 1,879,922; Sept. 27.
Corigliano, Peter, Brooklyn, N. Y., assignor to Bright Star Battery Company, Hoboken, N. J. Shipping and display box for dry cells. 1,879,105; Sept. 27.
Corning Glass Works. (See Fulcher, Gordon S., assignor.)
Coronet Phosphate Company. (See Gooch, S. D., and Waggaman, assignors.)
Corr, John T. (See Crandall, Henry F., assignor.)
Corrall, Herbert, Helensburgh, and J. Heggie, Clydebank, Scotland, assignors to the Singer Manufacturing Company, Elizabeth, N. J. Differential feeding mechanism for sewing machines. 1,879,106; Sept. 27.
Couch, David H., Darien, Conn. Air or gas washer. 1,879,107; Sept. 27.
Countryman, Guy A., Ashland, Ohio. Frame straightening tool. 1,879,979; Sept. 27.
Coupland, Richard C., U. S. Army, Norfolk, Va. Cooling jacket for machine gun barrels. 1,879,603; Sept. 27.
Cousins, Walter G., Brockton, Mass. Shoe last buffing or polishing machine. 1,879,108; Sept. 27.
Cowan, B. F. (See Christensen, Marinus, assignor.)
Coy, John, Hartford, Conn. Solution dispensing attachment. 1,879,109; Sept. 27.
Coyle, Joseph L., London, Ontario, Canada, assignor to E. Banning, trustee, Chicago, Ill. Egg carton. 1,880,074; Sept. 27.
Cramer, Raymond H., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Grinding. 1,879,110; Sept. 27.
Crandall, Henry F., Silver Cliff, assignor of one-half to J. T. Corr, Racine, Wis. Seed planter. 1,879,111; Sept. 27.
Creed and Company, Limited. (See Salmon, Reginald D., assignor.)
Creed and Company, Limited. (See Salmon, R. D., and Clifford, assignors.)
Creed and Company, Limited. (See Salmon, R. D., and Thomas, assignors.)
Cress, Hurve L., jr., Hygiene, Colo. Self cleaning rake. 1,879,112; Sept. 27.
Crossby, William E. J., Harrow, assignor to Mono Containers Limited, London, England. Liquid-proof carton. 1,879,113; Sept. 27.
Crumb, Charles F., Chicago, and J. A. Latowski, Harvey, Ill., assignors to International Harvester Company. Manure spreader. 1,879,114; Sept. 27.
Cundall, Robert N., Blasdell, assignor to The Hoepner Automatic Machinery Corporation, Buffalo, N. Y. Container filling machine. 1,879,794; Sept. 27.
Cundiff, Charles W., and W. A. Steele, assignors to Owensboro Ditcher & Grader Co., Inc., Owensboro, Ky. Terracing-ditching and grading machine. 1,879,115; Sept. 27.
Curtis, Henry E., San Jose, Calif. Power transmission. 1,879,843; Sept. 27.
Cushman, James S. (See Spengler, Henry, assignor.)
Cypress Novelty Corporation. (See Allyn, Robert S., assignor.)
Cypress Novelty Corporation et al. (See Krieg, Anthony W., assignor.)
D'Albay, Jacques T., Paris, France. Apparatus for submarine explorations at great depths. 1,879,735; Sept. 27.
Dalton, Philip, Schenectady, N. Y. Calculating goniometer. 1,879,116; Sept. 27.
Daniels, Lloyd C. (See Jaeger, A. O., Daniels, West, and Stevenson.)
Dash, Ira F. (See Shalomith, Israel H., assignor.)
Dauble, Erik W., Detroit, Mich. Doorstop. 1,879,119; Sept. 27.
Davey, Paul H., Kent, Ohio. Tree removing apparatus. 1,879,120; Sept. 27.
Davidson, Earl J., Detroit, Mich. Adjustable golf club. 1,879,117; Sept. 27.
Davidson, Joseph G., Yonkers, N. Y., assignor to Carbide & Carbon Chemicals Corporation. Motor fuel. 1,879,118; Sept. 27.
Davis, Charles C., Philadelphia, Pa. Clamp for use in welding. 1,879,122; Sept. 27.
Davis, Daniel S., Wheeling, W. Va. Portable repair stand. 1,879,123; Sept. 27.
Davis, Durrel H., assignor to Highway Trailer Company, Edgerton, Wis. Tubular drawbar for trailers. 1,880,075; Sept. 27.
Davis, Durrel H., and E. F. Hathorn, assignors to Highway Trailer Company, Edgerton, Wis. Articulated semitrailer construction. 1,880,123; Sept. 27.
Davis, Harold S., Belmont, Mass., assignor, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y. Tertiary derivative of hydrocarbons and preparation thereof. 1,879,660; Sept. 27.
Davis, Robert B. (See Dugan, Thomas, assignor.)
Davy, Arthur E., assignor to Hamilton-Wade Company, Brockton, Mass. Finishing welt and making the same. 1,879,121; Sept. 27.
Dayton Scale Company. (See Gilbert, William N., assignor.)
Dayton Scale Company. (See Reussenzehn, Ernest Albert, assignor.)
Dayton Scale Company. (See Strachan, T. H., and Fryer, assignors.)
Debrie, André L. V. C., Paris, France. Cinematographic view taking apparatus. 1,879,844; Sept. 27.
De Dominicis, Gaetano, Turin, Italy. Taping machine. 1,879,124; Sept. 27.
Deering, William, assignor to Union Hardware Company, Torrington, Conn. Fish reel mounting. 1,879,795; Sept. 27.
Defiance Manufacturing Company. (See Phinney, Edgar E., assignor.)
Degener, Gustave O., Brooklyn, N. Y., and J. C. Hochman, Bradley Beach, N. J., assignors of one-half to J. C. Hochman and one-half to M. Samburg, New York, N. Y. Computing machine. 1,879,125; Sept. 27.
Deister, Emil E., assignor to Deister Machine Co., Fort Wayne, Ind. Drive mechanism. 1,879,923; Sept. 27.
Deister Machine Co. (See Deister, Emil E., assignor.)
De Laval Separator Company, The. (See Scott, Walter A., assignor.)
Dell, Frank C., Chicago, Ill. Pencil. 1,879,736; Sept. 27.
Delich, Peter, assignor of thirty per cent to R. Z. Vokovan, Duluth, Minn. Conveyer toy. 1,879,845; Sept. 27.
Dellert, Louis, New York, N. Y. Chair. 1,879,126; Sept. 27.
Dellinger, Martin C. (See Kulp, Harry W., assignor.)
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
Del Riccio, Lorenzo, Los Angeles, Calif., assignor to Paramount Famous Lasky Corporation, and Warner Bros. Pictures, Inc., New York, N. Y. Projection apparatus. 1,879,737; Sept. 27.
DeLuxe Metal Furniture Company. (See Onions, Herbert J., assignor.)
Demag Aktiengesellschaft. (See Heetkamp, Heinrich, assignor.)
Deming, George M., East Orange, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Welding apparatus. 1,880,076; Sept. 27.
Dennis, Charles, Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio. Rake. 1,879,924; Sept. 27.
Dennis, Charles, Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio. Rake. 1,879,925 · Sept. 27.
Desper, Ernest W., Worcester, Mass. Cigarette. 1,879,128; Sept. 27.
Detrick, M. H., Company. (See Moreau, Pierre L. A., assignor.)
De Vinney, Floyd W., assignor to The Foote Company, Inc., Nunda, N. Y. Water measuring tank for concrete pavers. 1,879,129; Sept. 27.
Dewandre, Albert, Liege, Belgium. Fluid braking mechanism. 1,879,892; Sept. 27.
Dewhurst, Wallace W. (See Jones, N. R., and Dewhurst.)
De Wit, Leonard, Chicago, Ill. Statuette or analogous article. Des. 87,827; Sept. 27.
Diago, Federico G., Habana, Cuba. Engine starter. 1,879,130; Sept. 27.
Dickerson, John A., Chicago, Ill. Construction form. 1,879,738; Sept. 27.
Dill, John. (See Shmyroff, A., Dill, and Van Hoofstadt.)
Dill, John, Woodside, and A. Shmyroff, Kew Gardens, assignors to Lion Match Co., Inc., New York, N. Y. Match stacking mechanism. 1,880,077; Sept. 27.
Dillman, Edward E., Dallas, Tex. Means and method for welding tanks. 1,879,604; Sept. 27.

Dobke, Günther, Reinickendorf, Germany, assignor to General Electric Company. Degassing vacuum apparatus. 1,879,131; Sept. 27.
Dobmaier, Carl, Leverkusen near Cologne-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Arylsulphamino-alpha-naphthol sulphonic acids. 1,879,132; Sept. 27.
Dobrovolny, Frank J., Niagara Falls, assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y. Refrigerating composition. 1,879,893; Sept. 27.
Dodd, Herbert. (See Bennett, N. Dodd, and Sprent.)
Dodson, James Le R., Chicago, Ill. Ignition switch. Re18,608; Sept. 27.
Dolph, Warner L., and N. H. Lewis, Rochester, N. Y. Cylindrical grinding attachment for surface grinders. 1,879,134; Sept. 27.
Donovan, Norman L., and C. E. Lake, Jersey City, N. J., assignors to The Union Switch & Signal Company, Swissvale, Pa. Electric interlocking machine. 1,880,034; Sept. 27.
Dooley, C. E., et al. (See Bierlich, John H., assignor.)
Dorland, Clement L., Bakersfield, Calif. Air conditioner. 1,879,133; Sept. 27.
Doven, Joseph F., Zanesville, Ohio, assignor to American Tile Fixture Company, Inc. Tile surfaced structural element. 1,880,015; Sept. 27.
Dow, Alexander, New York, N. Y., assignor to Dow Patents Holding Corporation. Starter mechanism for internal combustion engines. 1,879,926; Sept. 27.
Dow Patents Holding Corporation. (See Dow, Alexander, assignor.)
Dowdall, James T., Ozone Park, assignor of one-half to John T. Keveney, Brooklyn, N. Y. Auxiliary feed devices for sewing machines. 1,880,016; Sept. 27.
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake controlling valve. 1,879,661; Sept. 27.
Downes, John R., Middlesex, and S. F. Miller, Bay Head, N. J., assignors to Pacific Flush-Tank Company, New York, N. Y. Sedimentation tank. 1,879,135; Sept. 27.
Downingtown Manufacturing Company. (See Ellis, Charles L., assignor.)
Drake, Warren C., Inwood, assignor to E. B. Priebe and H. Buchert, New York, N. Y. Water wall. 1,880,187; Sept. 27.
Draper Corporation. (See Lindsjo, Verner, assignor.)
Dreyer, Albert, Lucerne, Switzerland. Process and apparatus for manufacturing flexible tubes. 1,879,663; Sept. 27.
Dreyfus, Henry, London, England. Manufacture of aliphatic acids and their esters. 1,879,605; Sept. 27.
Dreyfus, Henry, London, England. Manufacture of aliphatic acids and their esters. 1,879,606; Sept. 27.
Drill, John J., Ranshaw, Pa. Miter gauge for sliding T-bevels. 1,879,980; Sept. 27.
Drums Limited et al. (See Jessop, William.)
Dubrovin, John, assignor to Central Scientific Company, Chicago, Ill. Blower and vacuum pump. 1,879,136; Sept. 27.
Dugan, Joseph, Los Angeles, Calif. Continuous aim gunfire control system. 1,880,174; Sept. 27.
Dugan, Thomas, assignor of one-half to R. B. Davis, Wichita, Kans. Beet harvesting machine. 1,879,137; Sept. 27.
Duncan, Walter H., et al. (See Smith, Orville O., assignor.)
Dunn, George T. (See Carson, Lee L., assignor.)
Du Pont, E. I., de Nemours & Co. (See Bryan, Leon O., assignor.)
Eagle Pencil Company. (See Baumgard, George, assignor.)
Eagle Pencil Company. (See Felser, Leonard C., assignor.)
Eakins, Herbert W., Springfield, Ohio. Machine and method for making pop corn confections. 1,879,928; Sept. 27.
Eakins, Herbert W., Springfield, Ohio. Machine for making popcorn confections. 1,879,927; Sept. 27.
Eastman Kodak Company. (See Othmer, Donald F., assignor.)
Eaton, George, assignor to M. C. Eaton, Cleveland, Ohio. Door check. 1,879,664; Sept. 27.
Eaton, May C. (See Eaton, George, assignor.)
Eccles, William H., London, and A. Whitaker, West Drayton, England, assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y. Controlling light. 1,879,138; Sept. 27.
Eddy, Charles F. A., New London, Conn. Signal system. 1,879,139; Sept. 27.
Edmonds, Courtenay H. W., London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Interlocking frame for railway points and signals and the like. 1,880,035; Sept. 27.
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,879,140; Sept. 27.
Edwards, Valentine W., assignor to The Houghton Butcher Manufacturing Company Limited, London, England. Combined shutter and film winding mechanism for photographic cameras. 1,879,141; Sept. 27.
Egan, Mathew M., Fort Worth, Tex. Propeller. 1,879,142; Sept. 27.
Egbert, Warren. (See Kerns, F. W., and Egbert.)
Eggleston, Smith. (See Caesar, J., and Eggleston.)
Ego, Frederick P. (See Bergman, J. E., and Ego.)
Ehrlich, Francis J., Indianapolis, Ind. Bun splitter. 1,879,796; Sept. 27.
Eisner, William J., assignor to Newark Paraffine & Parchment Paper Co., Newark, N. J. Apparatus for coating. 1,880,078; Sept. 27.
Ekvall, Edward E., Elgin, assignor to The W. H. Howell, Company, Geneva, Ill. Folding table. 1,879,665; Sept. 27.
Electrolux Servel Corporation. (See Lenning, Alvar, assignor.)
Ellis, Charles L., Bradford Hills, assignor to Downingtown Manufacturing Company, Downingtown, Pa. Board machine. 1,879,143; Sept. 27.
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Machine and process for making laminated products. 1,879,797; Sept. 27.
Elwell, Guy R. (See Sieber, J. R., and Elwell.)
Elwell-Parker Electric Co., The. (See Abbe, Edward J., assignor.)
Elwert, George, Barren Hill, Pa. Nut lock. 1,880,124; Sept. 27.
Emery, Le Roy F., assignor to Hamilton-Wade Company, Brockton, Mass. Woven fabric. 1,879,144; Sept. 27.
Endurable Products Co. (See Smith, James J., assignor.)
Entwisle & Kenyon Limited. (See Kenyon, William H., assignor.)
Erickson, Bernard, Dunedin, assignor of one-half to O. A. Erickson, Clearwater, Fla. Band saw. 1,879,145; Sept. 27.
Erickson, Fred, Waterville, Kans. Rotary harrow. 1,879,666; Sept. 27.
Erickson, K. E. (See Huffschmidt, Robert E., assignor.)
Erickson, Oscar A. (See Erickson, Bernard, assignor.)
Ericson, Richard, assignor to United States Gypsum Co., Chicago, Ill. Light-weight ceramic material and making the same. Re18,606; Sept. 27.
Ernst, Otto. (See Schmidt, A., Ernst, and Lange.)
Ernst, Victor C. (See Wollensak, A., and Ernst.)
Eshbaugh, Jesse E., Flint, Mich. Propaganda distributor. 1,879,894; Sept. 27.
Estrin, David A., Brooklyn, N. Y. Frankfurter roll sandwich machine. 1,879,146; Sept. 27.
Evans, Edward S., assignor to Evans Products Company, Detroit, Mich. Chock block. 1,879,917; Sept. 27.
Evans Lead Company. (See Rowley, Willson H., assignor.)
Evans Products Company. (See Evans, Edward S., assignor.)
Evans, William A. D., Summit, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Illuminated sign. 1,879,147; Sept. 27.
Ewest, Hans. (See Pifani, M., Ewest and Rüttenauer.)
Ewing, Wylie B., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Elevator tower and the like. 1,880,125; Sept. 27.
Fageol, Frank R., Oakland, Calif., assignor to Twin Coach Company, Kent, Ohio. Railway rolling stock and road vehicle construction. 1,880,126; Sept. 27.
Fairbank, Murry N., Cold Spring Harbor, N. Y. Aeroplane wheel. 1,880,079; Sept. 27.
Falck, Joseph E., Pittsburgh, Pa. Burial casket. Des. 87,828; Sept. 27.
Farmer, Clyde C., Pittsburgh, and J. C. McCune, Edgewood, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake cylinder. 1,879,667; Sept. 27.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Slack adjuster. 1,879,668; Sept. 27.
Farmer, Clyde C., Pittsburgh, and E. E. Hewitt, Edgewood, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,879,669; Sept. 27.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Retarded release stop. 1,879,670; Sept. 27.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,879,671; Sept. 27.
Fassett, Truman E., Sarasota, Fla. Apparatus for transmitting and receiving vocal sounds. 1,879,148; Sept. 27.
Faultless Caster Company. (See Noelting, W. H., and Van Dusen, assignors.)
Felser, Leonard C., Montclair, N. J., assignor to Eagle Pencil Company, New York, N. Y. Penholder. 1,880,080; Sept. 27.
Fenton, Paul E., Thomaston, and E. H. Tompkins, assignors to Scovill Manufacturing Company, Waterbury, Conn. Attaching machine. 1,879,895; Sept. 27.
Ferguson, Gale L., Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa. Pumping apparatus. 1,879,149; Sept. 27.
Ferguson, James R., assignor of one-half to W. H. Addington, Dallas, Tex. Rotating device for fans. 1,879,150; Sept. 27.
Ferguson, William P., Middlebury, assignor to Scovill Manufacturing Company, Waterbury, Conn. Lavatory spout. Des. 87,829; Sept. 27.

Ferguson, William P., Middlebury, Conn. Combined valve control handle and indexing dial. Des. 87,830; Sept. 27.
Ferrara, Frank, Medford, assignor to Shawmut Engineering Company, Dorchester, Mass. Carrier or means for preparing tuft yarns for a loom. 1,879,672; Sept. 27.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Latch for doors or other closures. Des. 87,831; Sept. 27.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Overhead garage door. 1,879,798; Sept. 27.
Finholm, William S., Forest Hills West, N. Y. Recording mechanism. 1,879,151; Sept. 27.
Fink, Henry W., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Deflector for heaters. 1,879,152; Sept. 27.
Fink, William L. (See Horsfield, B. T., Kempf, and Fink.)
Fiore, Antonio, and R. A. Ade, Philadelphia, Pa. Thread waxing device. 1,879,153; Sept. 27.
Fischer, Charles W., assignor to Theo. A. Kochs Company, Chicago, Ill. Chaise longue. 1,879,673; Sept. 27.
Fischer, Walter. (See Opfermann, E., and Fischer.)
Fisher, George H., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Limit for opposed motor control systems. 1,879,154; Sept. 27.
Fisher, Harry C., Norwood, assignor to The Richardson Company, Lockland, Ohio. Coloring slabs of mineral substances. 1,879,155; Sept. 27.
Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,879,607; Sept. 27.
Fitch, Ellery R., Westwood, N. J., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,879,674; Sept. 27.
Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)
Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Motor assembly including speed control. 1,879,675; Sept. 27.
Fleischer I., & Sons. (See Fleischer, Nathan I., assignor.)
Fleischer, Nathan I., assignor to I. Fleischer & Sons, Cincinnati, Ohio. Protective cover. 1,879,739; Sept. 27.
Fletcher Works, Incorporated. (See Schaum, Carl, assignor.)
Foley, Frank W., Dollar Bay, and A. T. Sweet, Houghton, Mich. Apparatus for forming metal strips. 1,879,836; Sept. 27.
Foote-Burt Company, The. (See Schiltz, Bernard P., assignor.)
Foote Company, The. (See Blood, George E., assignor.)
Foote Company, The. (See De Vinney, Floyd W., assignor.)
Fornaire, Raphaël, Murois, France. Self-propelling vehicle. 1,880,127; Sept. 27.
Förster, Bernhard, Pforzheim, Germany. Device for the automatic single feeding of ring shaped blanks to working points. 1,879,156; Sept. 27.
Forte, Mary, New York, N. Y. Souvenir toy or similar article. Des. 87,832; Sept. 27.
Fortune, James C., Monterey, Calif. Hydraulic feed for rotary drilling. 1,879,929; Sept. 27.
Foshee, Mason, Jacksonville, Fla. Collapsible shipping crate. 1,879,157; Sept. 27.
Foster, Alfred E., Wilkes-Barre, Pa. Lipstick case. 1,879,846; Sept. 27.
Foster, Tony E., assignor to Herff-Jones Co., Indianapolis, Ind. Jewel mounting. 1,879,896; Sept. 27.
Foster Wheel Corporation. (See Blizard, John, assignor.)
Foulke, Ted E., Nutley, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Glow discharge lamp. 1,879,158; Sept. 27.
Foulke, Ted E., Nutley, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Electric discharge device. 1,879,159; Sept. 27.
Foundry Materials, Inc. (See Inkley, Edwin A., assignor.)
Fountain, John N., Westfield, Mass. Decorating machine. 1,879,608; Sept. 27.
Fowzer, Frank B., Kilgore, Tex. Method and apparatus for extinguishing the flow of fluid in wells out of control. 1,879,160; Sept. 27.
Fox Case Corporation. (See Sponable, Earl I., assignor.)
Frambach, Mathew J., and C. P. Hills, Hartley, Iowa. Fish mouth spreader. 1,879,161; Sept. 27.
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Fraser, John, Leckmelm by Garve, Scotland. Pump for delivering measured quantities of liquid. 1,879,870; Sept. 27.
Frazier, Patrick. (See Brown, C. H., and Frazier.)
Frederiksen, Felix M., assignor to Pabst Corporation, Milwaukee, Wis. Manufacture of soft cheese. 1,879,162; Sept. 27.
Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Ground clamp for outlet and switch boxes. 1,880,081; Sept. 27.
French, Charles A., Riverside, Ill. Steam pressure regulating device. 1,879,163; Sept. 27.
French, Joseph P., Brooklyn, N. Y. Mica splitting machine. 1,879,164; Sept. 27.
French, Louis O., Milwaukee, Wis. Electromagnetically-operated valve. 1,879,165; Sept. 27.
French, William E., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. Portable repress machine. 1,879,166; Sept. 27.
Freysinger, John B., assignor to North & Judd Manufacturing Company, New Britain, Conn. Buckle. Des. 87,833; Sept. 27.
Freysinger, John B., assignor to North & Judd Manufacturing Company, New Britain, Conn. Safety snap hook. 1,879,167; Sept. 27.
Freysinger, John B., assignor to North & Judd Manufacturing Company, New Britain, Conn. Safety snap hook. 1,879,168; Sept. 27.
Fridholm, Bjarne, Brooklyn, N. Y. Clothesline support. 1,880,082; Sept. 27.
Fried. Krupp Aktiengesellschaft. (See Bornkessel, Bruno, assignor.)
Friedinger, Albert, Furstenfeldbruck, near Munich, Germany. Electric time switch. 1,879,169; Sept. 27.
Friedrich, Charles F. (See Savage, E. S., and Friedrich.)
Frigidaire Corporation. (See Getchell, Robert M., assignor.)
Fryer, William H. (See Strachan, T. H., and Fryer.)
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle or similar article. Des. 87,834; Sept. 27.
Fulcher, Gordon S., assignor to Corning Glass Works, Corning, N. Y. Refractory article. 1,879,676; Sept. 27.
Full Tone Reproduction Co. (See Wollensak, A., and Ernst, assignors.)
Furedy, Frank, New York, N. Y. Self inking fountain pen. 1,880,128; Sept. 27.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Mattress anchor for sleeping car berths. 1,879,170; Sept. 27.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Mattress making process and machine. 1,879,171; Sept. 27.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Bedspring. 1,879,172; Sept. 27.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Sewing machine. 1,879,173; Sept. 27.
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Mattress filler making process and machine. 1,879,174; Sept. 27.
Gardner, Prince A., jr., St. Louis, Mo. Bill fold. Des. 87,837; Sept. 27.
Gardner, Prince A., jr., St. Louis, Mo. Bill fold. Des. 87,838; Sept. 27.
Garl, Lennie, executrix. (See Garl, Manious.)
Garl, Manious, deceased, Akron, Ohio; L. Garl, executrix. Punch register for recording electrically transmitted signals, etc. 1,879,175; Sept. 27.
Gas Research Company. (See Smith, Harry F., assignor.)
Gasoline Products Company. (See Snelling, Walter O., assignor.)
Gast, Herbert, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company. Remote control of three-phase motors. 1,879,176; Sept. 27.
Gattie, Charles, New York, N. Y. Automatic safety wheel lock for vehicles. 1,880,129; Sept. 27.
Gaudin, Antoine M., Salt Lake City, Utah. Method of flotation. 1,879,871; Sept. 27.
Gault, John J., assignor to W. J. Newman Company, Chicago, Ill. Drilling apparatus for large wells. 1,879,177; Sept. 27.
Gebert, Albert E. (See Richardson, M. H., and Gebert.)
Geddes, Alfred, Buffalo, N. Y. Oil well pump. 1,879,178; Sept. 27.
Gehrke, Friedrich W., Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Mechanically grinding concave lenses. 1,879,179; Sept. 27.
Gelbel, John F., assignor to Master Metal Products, Inc., Buffalo, N. Y. Game board. 1,880,175; Sept. 27.
Geloso, J. (See Bjorkman, George E., assignor.)
Gem Crib & Cradle Company. (See Johnson, A. S., and Neunherz, assignors.)
Gem Hammock & Fly Net Company, The. (See Kootz, Arthur C., assignor.)
Gendreau, Joseph A., and E. Messier, Hartford, Conn. Hydrovehicle. 1,879,180; Sept. 27.
General Aniline Works, Inc. (See Bauer, W., Haller, and Zeh, assignors.)
General Aniline Works, Inc. (See Dobmaier, Carl, assignor.)
General Aniline Works, Inc. (See Hagenest H., and Stauf, assignors.)
General Aniline Works, Inc. (See Hardtmann, Max, assignor.)
General Aniline Works, Inc. (See Hilger J., and Wiedemann, assignors.)
General Aniline Works, Inc. (See Hoyer, H., and Gleitenberg, assignors.)
General Aniline Works, Inc. (See Mildner, Hans, assignor.)
General Aniline Works, Inc. (See Neelmeier, W., and Gleitenberg, assignors.)
General Aniline Works, Inc. (See Neelmeier, W., and Goll, assignors.)
General Aniline Works, Inc. (See Schmidt, R. E., Steik, and Bamberger, assignors.)
General Electric Company. (See Bassler, Kurt, assignor.)
General Electric Company. (See Benecke, Heinrich, assignor.)

General Electric Company. (See Dobke, Günther, assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Heinrich, Arthur F., assignor.)
General Electric Company. (See Horstkotte, Edward H., assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Isaac, Archibald C .T., assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Jones, N. R., and Dewhurst, assignors.)
General Electric Company. (See Kempton, Leslie A., assignor.)
General Electric Company. (See Merchon, Alfred V., assignor.)
General Electric Company. (See O'Neil, James A., assignor.)
General Electric Company. (See Pirani, Marcello, assignor.)
General Electric Company. (See Pirani, M., Ewest, and Rüttenauer, assignors.)
General Electric Company. (See Robinson, Lewis T., assignor.)
General Electric Company. (See Ross, Aubrey A., assignor.)
General Electric Company. (See Sass, Friedrich, assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Smith, Chester W., assignor.)
General Electric Company. (See Standerwick, Reginald G., assignor.)
General Electric Vapor Lamp Company. (See Evans, William A. D., assignor.)
General Electric Vapor Lamp Company. (See Foulke, Ted E., assignor.)
General Foods Corporation. (See Loesch, Hugo G., assignor.)
General Motors Corporation. (See Cramer, Raymond H., assignor.)
Geraldson, Gerald, assignor to J. I. Case Company, Racine, Wis. Tractor cultivator. 1,879,181; Sept. 27.
Gerisch, Richard W., Los Angeles, assignor to Los Angeles Knitting Company, Hollydale, Calif. Garment. 1,879,898; Sept. 27.
Gernelle-Danloy, Joseph E., Rouen, France. Grinding and mixing apparatus. 1,879,897; Sept. 27.
Getchell, Robert M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,880,083; Sept. 27.
Gibbons, Frank J., Worcester, Mass. Shock absorber. 1,879,182; Sept. 27.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,835; Sept. 27.
Gibson, George H., Montclair, N. J., assignor to Cochrane Corporation, Philadelphia, Pa. Water deaeration. 1,879,930; Sept. 27.
Gibson, William. (See Taylor, H., and Gibson.)
Giesey, Russell. (See Behnke, G. E., and Giesey.)
Gilbert, William N., Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale indicator control. 1,879,183; Sept. 27.
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gilligan, George H., Providence, R. I., assignor to U. S. Ring Traveler Company. Spinning or twisting device. 1,880,084; Sept. 27.
Gilmore, William, Meridian, Miss. De-clutching mechanism. 1,879,184; Sept. 27.
Gilpin, Garth G., Riverside, Ill., assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,880,085; Sept. 27.
Glaesel, Max, New York, N. Y. Ornament. 1,879,799; Sept. 27.
Glancy, Anna E., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,879,800; Sept. 27.
Gleim, Harry F., Portsmouth, Ohio. Bench. 1,879,185; Sept. 27.
Glietenberg, Eugen. (See Hoyer, H., and Glietenberg.)
Glietenberg, Eugen. (See Neelmeier, W., and Glietenberg.)
Gockel, Dora C., St. Louis, Mo. Artificial flower and making same. 1,879,677; Sept. 27.
Goddard, Robert H., Worcester, Mass. Apparatus for igniting liquid fuel. 1,879,186; Sept. 27.
Goddard, Robert H., Worcester, Mass. Mechanism for directing flight. 1,879,187; Sept. 27.
Goerz, C. P., American Optical Company. (See Mueller, Emil M., assignor.)
Goldbach, Fritz, Marysburg, Saskatchewan, Canada. Puzzle. 1,880,130; Sept. 27.
Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Film door for motion picture apparatus. 1,879,188; Sept. 27.
Goldman, Rutherford G. (See Hannan, G. R., and Goldman.)
Goll, Otto. (See Neelmeier, W., and Goll.)
Gooch, Stapleton D., Lake Wales, and W. H. Waggaman, Lakeland, Fla., assignors to Coronet Phosphate Company, New York, N. Y. Oxidizing phosphorous. 1,879,189; Sept. 27.
Good, John N., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,879,678; Sept. 27.
Goodrich, B. F., Company, The. (See Bruck, Robert L., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goosman, Herbert J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Throw-out feed-lift mechanism for sewing machines. 1,879,190; Sept. 27.
Goosman, Herbert J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Throw-out feed-lift mechanism for sewing machines. 1,879,191; Sept. 27.
Gorhan, Adolf, Liesing near Vienna, Austria. Production of waterfree ethyl alcohol. 1,879,847; Sept. 27.
Gosch, William H., assignor to The Nolde and Horst Company, Reading, Pa. Stocking. 1,880,086; Sept. 27.
Goss Printing Press Company. (See Becker, William E., assignor.)
Gosselink, John G. (See Schur, M. O., and Gosselink.)
Gottschall, Joseph E., Madison, Wis. Clothes clamp. 1,879,192; Sept. 27.
Gover, Miles L., Somerset, Ky. Garment display rack. 1,879,879; Sept. 27.
Grace, Claude B. (See Johnson, A. J., and Grace.)
Graham, James M., and C. Norton, New York, N. Y., assignors, by mesne assignments, to Otis Elevator Company. Position indicator for elevatora. 1,879,801; Sept. 27.
Graham, William S., Canton, Ill., assignor to International Harvester Company. Tillage disk. 1,879,193; Sept. 27.
Grange, Leo O., assignor to W. J. Jarratt, Chicago, Ill. Vulcanizing apparatus. 1,879,194; Sept. 27.
Graubner, Herman G. (See Jones, H. W., and Graubner.)
Gray, David A., Chattanooga, Tenn. Rotary engine. 1,880,131; Sept. 27.
Gray, Thomas, assignor of one-half to J. Gutsmithl and G. H. Hoerman, Lyndon, Kans. Cutter bar. 1,879,195; Sept. 27.
Graybar Electric Company. (See Redding, Charles E., assignor.)
Great Lakes Dredge & Dock Company. (See Colton, Charles H.)
Green, Clifford H. (See Kenyon, B. C., Boa, and Green.)
Greene, Linus E., Fitchburg, Mass., assignor to Manning, Maxwell & Moore, Inc., New York, N. Y. Gear cutting apparatus. 1,879,196; Sept. 27.
Greenstein, Alexander S., New York, N. Y. Fur stretching device. 1,879,931; Sept. 27.
Greenwald, Harold A., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Resistor unit for refrigerating apparatus. 1,879,197; Sept. 27.
Greiner, Heinz. (See Koenigs, E., and Greiner.)
Greis, Alphonse M., Hartsdale, assignor of one-half to W. L. Biery, New York. N. Y. Electrical wall molding. 1,879,198; Sept. 27.
Greist Manufacturing Company. (See La Vigne, George J., assignor.)
Gresham, Floyd. (See Robertson, Ivy B., assignor.)
Grimes, Lee, Tillamook, Oreg. Pipe bending tool. 1,879,199; Sept. 27.
Grimm, Franklin, Mora, Minn. Rural mail box. 1,879,200; Sept. 27.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Cam shaft lathe. 1,879,201; Sept. 27.
Grondahl, Jens K., Red Wing, Minn. Alarm. 1,879,202; Sept. 27.
Gross, Joseph E., Swissvale, Pa., assignor to Aurora Sign Company. Luminous tube. 1,879,740; Sept. 27.
Grunwaldt, Frank E., Seattle, Wash. Combination furnace. 1,879,932; Sept. 27.
Guerin, Paul J., assignor, by mesne assignments, to Mack Sennett Color Film Co., Ltd., Los Angeles, Calif. Printing machine for cinematograph films. 1,880,087; Sept. 27.
Guiberson Corporation, The. (See Hubbard, William E., assignor.)
Guilbert, Paul, Rouen, and J. Legrand, St. Mande, France. Plant for loading and unloading wagons. 1,879,203; Sept. 27.
Guillissen, Joseph, assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Production of ammonium phosphates. 1,879,204; Sept. 27.
Guinzburg, Victor, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Show card. 1,880,088; Sept. 27.
Gulf Pipe Line Company of Oklahoma. (See Hunter, James N., assignor.)
Gunn, Damon M., Fort Williams, Me. Valve closure. 1,879,205; Sept. 27.
Günzler, Heinrich, and A. Moré, Elberfeld, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Preparing phenyl mercuric acetate. 1,879,206; Sept. 27.
Gupwell, Alfred P., Birmingham, England. Steel or metal mesh for reenforcing concrete asphalt and like material. 1,879,207; Sept. 27.
Gurley, W. & L. E. (See Smart, Charles E., assignor.)

Gusdorf, Harold M., Indianapolis, Ind. Dispenser. 1,879,208; Sept. 27.
Gutsmithl, John, et al. (See Gray, Thomas, assignor.)
Gypsum Lime and Alabastine, Canada, Limited. (See Robinson, L. V., and Thomson, assignors.)
Hagenest, Hermann. (See Stauf, F. W., and Hagenest.)
Hagenest, Hermann, Leverkusen-Wiesdorf-on-the-Rhine, and F. W. Stauf, Cologne-Deutz-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing nitriles. 1,879,209; Sept. 27.
Hahl, Hans, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Pyrazole derivatives. 1,879,210; Sept. 27.
Hall, James L., assignor of one-half to S. L. Murchison, Crockett, Tex. Machine. 1,879,211; Sept. 27.
Haines, William T., Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company. Telephone system. 1,879,741; Sept. 27.
Hainlen, Adolf, Geislingen-Steige, Germany. Apparatus for cooking or frying. 1,879,212; Sept. 27.
Hale & Kilburn Co. (See Bell, Alfred B., assignor.)
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Automatic time switch. 1,879,213; Sept. 27.
Hall, W. F., Printing Company. (See Kusch, Roy P., assignor.)
Haller, Josef. (See Bauer, W., Haller, and Zeh.)
Haller, Robert. (See Bommer, M., Haller, and Pool.)
Haller, Robert, Riehen, near Basel, and A. Heckendorn, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Textile containing allyl ethers of cellulose and making same. 1,879,742; Sept. 27.
Hallett, Joseph L. (See McCauley, G. C., and Hallett.)
Hallowell, Howard T., and F. Bennett, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Truck. 1,879,214; Sept. 27.
Hamilton, Van A., Palastine, Tex. Drawbar for trailers. 1,879,981; Sept. 27.
Hamilton-Wade Company. (See Davy, Arthur E., assignor.)
Hamilton-Wade Company. (See Emery, LeRoy F., assignor.)
Hamilton-Wade Company. (See Howard, Albert L., assignor.)
Hammerl, Jacob, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,879,215; Sept. 27.
Handlan-Buck Manufacturing Company. (See Kuehner, Louis C., assignor.)
Handley Page Limited. (See Cooke, Geoffrey H., assignor.)
Handley Page Limited. (See Lachmann, Gustav, assignor.)
Hanley, Michael, Chicago, Ill. Signaling system. 1,879,933; Sept. 27.
Hanley, Michael, Chicago, Ill. Signaling transmitter. 1,879,934; Sept. 27.
Hanlon-Waters, Inc. (See Putnam, James K., assignor.)
Hannan, George R., and R. G. Goldman, assignors to H. T. Barlow, Los Angeles, Calif. Glare shield. 1,879,216; Sept. 27.
Hannon, Mildred, San Gabriel, Calif. Finger-shaping device. 1,879,609; Sept. 27.
Hanson, Arthur F., assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Welding machine. 1,879,217; Sept. 27.
Hanson Clifford O., assignor to The Hanson Clutch & Machinery Co., Tiffin, Ohio. Steering mechanism. 1,879,218; Sept. 27.
Hanson Clutch & Machinery Co., The. (See Hanson, Clifford O., assignor.)
Harbison, William C., assignor to Packard Motor Car Company, Detroit, Mich. Pump. 1,879,219; Sept. 27.
Hardick, Floyd W. (See Johnson, L. E., Winchell, Hardick, and Billig.)
Hardtmann, Max, Naunhof, near Leipzig, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New azodyestuffs. 1,879,223; Sept. 27.
Hardy, Donovan H., Manila, Philippine Islands, assignor of one-third to E. V. Skar, Omaha, Nebr. Marking stamp. 1,879,982; Sept. 27.
Hargroves, Willis W., jr., assignor to Planters Manufacturing Co., Inc., Portsmouth, Va. Shipping basket cover fastener. 1,880,132; Sept. 27.
Harmon, Robert R., Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y. Apparatus for removing suspended articles from gases and vapors. 1,880,017; Sept. 27.
Harmon, Robert R., Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y. Apparatus for cleaning gases. 1,880,018; Sept. 27.
Harmony, Florence M. (See Harmony, Harry H., assignor.)
Harmony, Harry H., assignor to F. M. Harmony, Chambersburg, Pa. Flower receptacle. 1,879,220; Sept. 27.
Harnett, Lewis D., assignor to The Buckeye Blower Company, Columbus, Ohio. Double radiator with means of expansion on radiators. 1,879,802; Sept. 27.
Harper, Carl B., Washington, D. C. Airplane. 1,880,019; Sept. 27.
Harrigan, William, Jersey City, N. J., assignor to The Texas Company, New York, N. Y. Lubricating apparatus. 1,879,221; Sept. 27.
Harrington, George G., assignor to Reed Roller Bit Company, Houston, Tex. Drill. 1,879,222; Sept. 27.
Harris, Max, Buffalo, N. Y. Wax spatula. 1,880,176; Sept. 27.
Hart-Carter Company. (See Mayhew, Joseph H., assignor.)
Hart, Charles, Media, Pa., assignor of one-half to P. Shields, Washington, D. C. Treating ores in the manufacture of rustless steel. Re18,609; Sept. 27.
Harter, Isaac, Dongan Hills, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler casing. 1,879,610; Sept. 27.
Hartford-Empire Company. (See Nagle, C., and Hoopes, assignors.)
Hartley, Henry J., Hastings-on-Hudson, N. Y., and D. Baird, Berkeley, Calif., assignors, by mesne assignments, to Nichols Engineering and Research Corporation, New York, N. Y. Rabbling means. 1,879,680; Sept. 27.
Hartmann, August. (See Bauriedel, Gotthard, and Hartmann.)
Harvey, James W., Winthrop, Me. Boat construction. 1,879,681; Sept. 27.
Hassell, Cecil S., Miami, Fla. Egg testing machine. Des. 87,836; Sept. 27.
Hassensall, Louis W., Toledo, Ohio. Carrier. 1,880,133; Sept. 27.
Hatborn, Elmer F. (See Davis, D. H., and Hathorn.)
Hatborn, Elmer F., Edgerton, Wis., assignor to Highway Trailer Company. Adjustable shaft lift. 1,880,134; Sept. 27.
Hauk, Joseph, assignor to Hauk Manufacturing Company, Milwaukee, Wis. Container washing machine. 1,879,224; Sept. 27.
Hauk Manufacturing Company. (See Hauk, Joseph, assignor.)
Haulik, Joseph, Durant City, Pa. Furnace. 1,879,899; Sept. 27.
Haw, Jakob, Berlin-Staaken, Germany, assignor to the Firm of Propeller Aktiengesellschaft, Schaffhausen-on-the-Rhine, Switzerland. Propeller blade. 1,879,225; Sept. 27.
Hawaiian Pineapple Company, Ltd. (See Morse, Harry S., assignor.)
Haxeltine Corporation. (See Wheeler, Harold A., assignor.)
Heath, Charles W., Sioux City, Iowa. Automatic locking gas tank cover. 1,880,135; Sept. 27.
Heckendorn, Alphonse. (See Haller, R., and Heckendorn.)
Heddy, Edward H., Fillmore, Calif. Magazine type of drilling tool. 1,879,226; Sept. 27.
Heenan & Froude Limited. (See Walker, George H., assignor.)
Heetkamp, Heinrich, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Guide for the mandrel shafts in tube drawing benches. 1,879,743; Sept. 27.
Heggie, James. (See Corrall, H., and Heggie.)
Hehre, Frederick W., Arlington, N. J., assignor to L. W. Rosenthal, New York, N. Y. Apparatus for toy electric railways. 1,879,227; Sept. 27.
Heidecorn, Max, Mount Vernon, and C. J. Miller, Bronx, N. Y. Indicating device. 1,880,089; Sept. 27.
Helgis, Henry E., West Orange, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y. Fire extinguisher support. 1,879,228; Sept. 27.
Heiney, John W., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Brake disk. 1,879,744; Sept. 27.
Heinrich, Arthur F., Rugby, England, assignor to General Electric Company. Power factor regulation of alternating current machines. 1,879,229; Sept. 27.
Heinze, William A., and M. L. Liston, assignors to Victor Manufacturing & Gasket Company, Chicago, Ill. Protector for folded materials. 1,879,682; Sept. 27.
Heist, Charles H., Youngstown, and B. M. Stubblefield, Poland Ohio. Blast furnace back drafting. 1,879,230; Sept. 27.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,879,231; Sept. 27.
Henderson, George and W. M., Catrine, Scotland. Apparatus for laying tile drains. 1,879,683; Sept. 27.
Henderson, Wallace M. (See Henderson, George and W. M.)
Henker, Max A., Lugau, Germany. Floating support. 1,879,745; Sept. 27.
Henry, Ferdinand G., Moline, Ill. Conveyer belt support. 1,879,232; Sept. 27.
Henry, George W., jr., assignor to Soabar Company, Philadelphia, Pa. Machine for applying tickets to merchandise. 1,879,233; Sept. 27.
Herff-Jones Co. (See Foster, Tony E., assignor.)
Hermann, V. O., Corporation, The. (See Hermann, Volquardt O., assignor.)
Hermann, Volquardt O., assignor to The V. O. Hermann Corporation, New York, N. Y. Machine for making lollipops. 1,879,234; Sept. 27.
Hermanns, Alfred, and K. Klug, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany. High pressure locomotive with interstage superheating. 1,879,235; Sept. 27.

Hesla, Louis E., et al. (See Smith, Orville O., assignor.)
Hewitt, Ellis E. (See Farmer, C. C., and Hewitt.)
Heymer, Gerd, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Printing color pictures. 1,879,236; Sept. 27.
Heymer, Gerd, Dessau-Ziebigk, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Production of lenticular elements on films. 1,879,237; Sept. 27.
Hickok, Eugene H., LeRoy, Minn. Seed holder. 1,880,136; Sept. 27.
Hickok Manufacturing Co. (See Whitehouse, John R., assignor.)
Hidlebaugh, William H., Electra, Tex. Train line coupler. 1,879,238; Sept. 27.
Higgin Manufacturing Company, The. (See Lamping, Harry, assignor.)
Highway Trailer Company. (See Davis, Durrel H., assignor.)
Highway Trailer Company. (See Davis, D. H., and Hathorn, assignors.)
Highway Trailer Company. (See Hathorn, Elmer F., assignor.)
Hilditch, Thomas P., Birkenhead, and H. J. Wheaton, Hale, England, assignors to American Doucil Company, Philadelphia, Pa. Manufacture and production of base-exchanging compounds. 1,879,239; Sept. 27.
Hilger, Josef, and K. Wiedemann, Cologne-Mulheim-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs. 1,879,240; Sept. 27.
Hill, John W., assignor of one-half to F. A. Parsons, Milwaukee, Wis. Refrigerated container. 1,879,241; Sept. 27.
Hill, Rowland M., Milwaukee, Wis. Variable pitch propeller. 1,879,935; Sept. 27.
Hills, Charles P. (See Frambach, M. J., and Hills.)
Hilton, John, Dublin County, Ireland. Spring cushioned upholstery. 1,880,137; Sept. 27.
Hochman, Julius C. (See Degener, G. O., and Hochman.)
Hochman, Julius C., et al. (See Degener, G. O., and Hochman, assignors.)
Hoerman, G. H., et al. (See Gray, Thomas, assignor.)
Hoff, Martin, New York, N. Y. Expansion shoe tree. 1,879,242; Sept. 27.
Hoffacker, Ira C., assignor to Mount Vernon-Woodbury Mills, Inc., Baltimore, Md. Fabric. 1,879,243; Sept. 27.
Hoffman, Fred, Wabash, Ind. Scaffold support. 1,879,244; Sept. 27.
Hofmann, George, Boston, Mass. Safety razor. 1,879,900; Sept. 27.
Hofmann, Victor E., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Mold for glassware forming machines. 1,879,872; Sept. 27.
Hogfors, Hans F. B., Stockholm, Sweden. Tens carrying means. 1,879,245; Sept. 27.
Hogue, Jesse S., Hammond, Ind. Refractory body. 1,879,246; Sept. 27.
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Submarine concentric conductor system. 1,879,746; Sept. 27.
Holliday, John D., Orchard, Nebr. Animal feeder. 1,879,247; Sept. 27.
Holloway, John H., assignor to Northwest Engineering Corporation, Green Bay, Wis. Apparatus for removing fuel dilution from engine's lubricating oil. 1,879,248; Sept. 27.
Holman, William W. (See Neller, R., and Holman.)
Holmbergs, Carl, MeKaniska Verkstads Aktiebolag. (See Anderberg, Anders, and E. A.)
Holmes, J. H., & Company Limited. (See Taylor, H., and Gibson, assignors.)
Holpner Automatic Machinery Corporation, The. (See Cundall, Robert N., assignor.)
Honsaker, Charles C., Philadelphia, Pa. Colonic tube. 1,879,249; Sept. 27.
Hoopes, Chester B. (See Nagle, C., and Hoopes.)
Hoos, Benjamin G. (See Schur, M. O., and Hoos.)
Hoos, Benjamin G. (See Schur, M. O., Rasch, and Hoos.)
Hoover Company, The. (See Becker, Bernard C., assignor.)
Hopkins, Arthur G., Maspeth, assignor to Metal Package Corporation, New York, N. Y. Sheet metal can. 1,879,873; Sept. 27.
Hopkins, Charles, Pottstown, Pa. Die. 1,879,250; Sept. 27.
Hopkins, Loren L., Woodcliff, N. J. Sanding device for vehicles. 1,879,747; Sept. 27.
Horbatuck, Wesley, New York, N. Y. Easel. 1,879,251; Sept. 27.
Horne, Christopher M., Arlington, Mass. Portable transformer and hoist. 1,879,848; Sept. 27.
Horochowsky, Anthony, assignor of one-third to C. Lefehick, Elizabeth, N. J. Electric signal and switch therefor. 1,879,252; Sept. 27.
Horsfield, Basil T., Badin, N. C., and L. W. Kempf and W. L. Fink, Cleveland, Ohio, assignors to Aluminum Company of America, Pittsburgh, Pa. Aluminum-silicon alloy. 1,879,748; Sept. 27.
Horstkotte, Edward H., Schenectady, N. Y., assignor to General Electric Company. Tellurium resistor for refrigerators. 1,879,253; Sept. 27.
Houdry Process Corporation. (See Joseph, Alfred, assignor.)
Houdry Process Corporation. (See Ostrander, Arthur J., assignor.)
Houghton, Arthur E., East Twickenham, England. Supporting articles on wearing apparel. 1,879,254; Sept. 27.
Houghton Butcher Manufacturing Company Limited. (See Edwards, Valentine W., assignor.)
Hougland, Albert C., St. Paul, Minn. Driving mechanism for churns. 1,879,255; Sept. 27.
Hougland, Albert C., St. Paul, Minn. Vat construction. 1,879,256; Sept. 27.
Howard, Albert L., assignor to Hamilton-Wade Company, Brockton, Mass. Upholstery moulding strip. 1,879,257; Sept. 27.
Howard, Albert L., assignor to Hamilton-Wade Company, Brockton, Mass. Finishing welt and making the same. 1,879,258; Sept. 27.
Howard, Albert L., assignor to Hamilton-Wade Company, Brockton, Mass. Ornamental product and producing the same. 1,879,259; Sept. 27.
Howard, Neal D., Merrick, N. Y. Savings bank. 1,879,260; Sept. 27.
Howe, David, et al. (See Linfert, W., and Walters, assignors.)
Howell, Charles. (See Tarrence, H. P., and Howell.)
Howell, W. H., Company, The. (See Ekvall, Edward E., assignor.)
Hoyer, Heinrich, and E. Gleitenberg, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoazo dyestuffs. 1,879,261; Sept. 27.
Hubbard, William E., Los Angeles, Calif., assignor to The Guiberson Corporation, Dallas, Tex. Hydraulic pumping systems. 1,879,262; Sept. 27.
Hübl, Franz, Warnsdorf, Czechoslovakia. Arrangement for performing mechanical works. 1,880,138; Sept. 27.
Hudd, Alfred E., Long Park, Chesham Bois, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Train stop system. 1,879,611; Sept. 27.
Hudd, Alfred E., Long Park, Chesham Bois, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic train control system. 1,879,613; Sept. 27.
Hudd, Alfred E., Evanston, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Train stop and cab signal system. 1,879,612; Sept. 27.
Hudd, Alfred E., Evanston, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Train stop system. 1,879,614; Sept. 27.
Hudd, Alfred E., Evanston, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Railway traffic controlling apparatus. 1,879,615; Sept. 27.
Hudd, Alfred E., Evanston, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Railway traffic controlling apparatus. 1,879,616; Sept. 27.
Hudd, Alfred E., Sussex, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Train stop system. 1,879,617; Sept. 27.
Huebener, Mary A. (See Lehn, J. U., and Huebener.)
Huffschmidt, Robert E., assignor to K. E. Erickson, Portland, Oreg. Street traffic signal. 1,879,263; Sept. 27.
Hughes, Charles R., Altoona, Pa. Mining machine. 1,880,090; Sept. 27.
Hughes, Charles R., Altoona, Pa. Mining machine. 1,880,091; Sept. 27.
Hughes, Kenneth, and J. Williams, Elwood, Ind. Stand for poultry fountains. 1,879,264; Sept. 27.
Hughes Tool Company. (See Schlumpf, Robert W., assignor.)
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Electron discharge device. 1,880,092; Sept. 27.
Hume, Everett R., Wetherford, Okla. Amusement device. 1,880,139; Sept. 27.
Hunter Illuminated Car Sign Company. (See Hunter, L. G., and Reisiger, assignors.)
Hunter, James N., assignor to Gulf Pipe Line Company of Oklahoma, Tulsa, Okla. Process and apparatus for dehydration of crude oil emulsions. 1,879,849; Sept. 27.
Hunter, Lytle G. and H. B. Reisiger, assignors to The Hunter Illuminated Car Sign Company, Flushing, N. Y. Indicator. 1,879,265; Sept. 27.
Hunter, William N., Blanchester, Ohio. Device for making and carrying cigarettes. 1,879,266; Sept. 27.
Hurni, Ford M., St. Joe, Ind. Wind indicator for aviators. 1,879,267; Sept. 27.
Hurst, Elizabeth T., Olympia, Wash. Pie pan. 1,879,268; Sept. 27.
Hussey, Charles. (See Nicholas, M., Koller, Ledel, and Hussey.)
Huston, Charles H., Allerton, Iowa. Liquid and air circulating refrigerator. 1,880,093; Sept. 27.
Hutchinson, Oliver C. K., Alton, Ill., J. E. McLaughlin, and L. D. Soubier, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,879,684; Sept. 27.
Hutchison, George R., Beckley, W. Va. Dispensing apparatus. 1,879,269; Sept. 27.
Huvck, F. C., & Sons. (See Wilson, Ezekiel J., assignor.)

Hygienic Tube and Container Co. (See Lermer, Herman B., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Becker, Ernst, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Bernard, Hanns, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Busch, Werner, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kränzlein, G., Müller, and Berlin, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Laage, Emil, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lehmann, R., and Michel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, A., Ernst, and Lange, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schwerdtel, Fritz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Stauf, F. W., and Hagenest, assignors.)
I-T-E Circuit Breaker Company. (See Scott, William M., jr., assignor.)
Icre, Jean B., New York, N. Y. Wing for aircraft. 1,879,618; Sept. 27.
Ideal Novelty & Toy Co. (See Sanders, Maurice, assignor.)
Ideal Tooth, Incorporated, The. (See Myerson, S., and Jones, assignors.)
Imperial Chemical Industries Limited. (See Bennett, N., Dodd, and Sprent, assignors.)
Imperial Chemical Industries Ltd. (See Bunbury, H. M., Naunton, and Sexton, assignors.)
Ingalsbe, William A., Fithian, Ill. Hog ringer. 1,879,270; Sept. 27.
Ingersoll Milling Machine Company, The. (See Oberhoffken, Alexander, assignor.)
Ingersoll Milling Machine Company. (See Sproul, William C., assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See McAllister, Raymond C., assignor.)
Ingerson, Harry T., Patten, Me. Lawn mower. 1,879,271; Sept. 27.
Inkley, Edwin A., assignor to Foundry Materials, Inc., Lyndhurst, Ohio. Sand preparation. 1,879,272; Sept. 27.
Insulite Company, The. (See Ellis, George H., assignor.)
International Harvester Company. (See Crumb, C. F., and Latowski, assignors.)
International Harvester Company. (See Graham, William S., assignor.)
International Motor Company. (See Heiney, John W., assignor.)
International Paint and Compositions Company et al. (See Jessop, William, assignor.)
Inventors' Patent Holding Company. (See Mahr, Julius A., assignor.)
Irminger, Carolina A., Hoboken, N. J. Theater chair light. 1,879,273; Sept. 27.
Isaac, Archibald C. T., Rugby, England, assignor to General Electric Company. Indicating device for electrical apparatus. 1,879,276; Sept. 27.
Isley, Gilbert W., Cleveland, Ohio. Door holder. 1,879,274; Sept. 27.
Ison, Harry, New York, N. Y. Motor vehicle. 1,879,275; Sept. 27.
Ivandick, Mathew G., Waukegan, Wis. Steering wheel mounting. 1,879,936; Sept. 27.
Izzo, Frank, Huntington, W. Va. Brake beam safety iron. 1,879,277; Sept. 27.
Jackson, Hartley H., Kansas City, Mo. Advertising clock. 1,879,619; Sept. 27.
Jacobs, George H., assignor to The Peters Cartridge Company, Kings Mills, Ohio. Cartridge. 1,879,278; Sept. 27.
Jacobson, Herbert O., Everett, Mass. Shaft coupling. 1,880,094; Sept. 27.
Jacsko, Joseph, Youngstown, Ohio. Cooling and heating system. 1,879,685; Sept. 27.
Jaeger, Alphons O., L. C. Daniels, H. J. West, and C. E. Stevenson, Crafton, assignors, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Purification process using solvents. 1,879,686; Sept. 27.
Jahn, August, Hamburg, Germany. Meat chopper. 1,879,279; Sept. 27.
Jahr, Gustave I., et al. (See Stolfa, H., and Zwerina, assignors.)
James, Arthur E., Auburn, R. I. Division for bowling alleys and guard therefor. 1,879,749; Sept. 27.
James, George V., Youngstown, Ohio. Guard for circular saws. 1,879,280; Sept. 27.
James, Henry V., Cintra, England. Paper web tensioning means for reel-fed printing presses. 1,879,901; Sept. 27.
James, Henry V., Radlett, England. Paper web tensioning means for reel-fed printing presses. 1,879,902; Sept. 27.
Jarchow, Warren L., Stillwater, Minn. Trim for turf borders. 1,879,281; Sept. 27.
Jarratt, Walter J. (See Grange, Leo O., assignor.)
Jenkins, Alexander F., Baltimore, Md. Apparatus for mixing gases. 1,880,140; Sept. 27.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Resistance cell-circuit. 1,879,687; Sept. 27.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Multiple spot lamp. 1,879,688; Sept. 27.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jenner, Ralph L., East Orange, N. J., assignor to Lapp Insulator Company, Inc. Suspension clamp. 1,879,282; Sept. 27.
Jessop, William, Grays, assignor of one-third to Drums Limited and one-third to The International Paint and Compositions Company, Limited, London, England. Guards. 1,879,283; Sept. 27.
John, Franklin. (See Brookshire, Roy L., assignor.)
Johne-Werk Grafische Maschinen-Aktiengesellschaft. (See Stegmann, Karl, asignor.)
Johnson, Albert J., and C. B. Grace, Omaha, Nebr. Advertising rack for typewriters. 1,879,284; Sept. 27.
Johnson, Andrew G., Lincoln, Nebr. Rotary pump. 1,879,803; Sept. 27.
Johnson, Arvid S., Auburn, and H. W. Neunherz, Gardner, assignors to Gem Crib & Cradle Company, Gardner, Mass. Machine for making sheet metal articles. 1,879,285; Sept. 27.
Johnson, Arvid S., Auburn, and H. W., Neunherz, assignors to Gem Crib & Cradle Company, Gardner, Mass. Buffing machine. 1,879,286; Sept. 27.
Johnson, Carl W., Shaker Heights, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Steering column bushings. 1,879,287; Sept. 27.
Johnson, Eads, Morristown, N. J. Marine tractor. Re18,610; Sept. 27.
Johnson, Ingman J., Los Angeles, Calif. Combined mold and clamp for stringed musical instruments. 1,879,288; Sept. 27.
Johnson, John A., assignor to National Supply and Service Corporation, Crawfordsville, Ind. Flue spark screen. 1,879,289; Sept. 27.
Johnson, Laurence B., Spruce Lake, Saskatchewan, Canada. Lock nut and bolt. 1,879,290; Sept. 27.
Johnson, Lloyd E., A. B. Winchell, F. W. Hardick, and F. W. Billig, assignors, by mesne assignments, to The Sparks-Withington Company, Jackson, Mich. Phonograph. 1,879,291; Sept. 27.
Johnson, Robert W., Minneapolis, Minn. Journal box packing retainer. 1,879,804; Sept. 27.
Johnston, Clarence L., Hillsborough, and M. M. Cohn, Los Gatos, Calif. Rotary visible index apparatus and card. 1,879,620; Sept. 27.
Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Controlling a power switch. 1,879,292; Sept. 27.
Jones, Edmund A. (See Myerson, S., and Jones.)
Jones, Emory E., assignor to Winding Gulf Collieries, Bluefield, W. Va. Briquette press. 1,879,293; Sept. 27.
Jones, Henry A., Lynwood, assignor to F. V. Long, trustee, Compton, Calif. Compensating gauge device for liquid storage tanks. 1,879,805; Sept. 27.
Jones, Homer W., Williamsville, N. Y., assignor to National Carbon Company, Inc. Battery hand lamp. 1,879,622; Sept. 27.
Jones, Homer W., Williamsville, N. Y., assignor to National Carbon Company, Inc. Battery box. 1,879,623; Sept. 27.
Jones, Homer W., Newark, N. J., and H. G. Graubner, New York, N. Y., assignors to National Carbon Company, Inc. Battery hand lamp. 1,879,621; Sept. 27.
Jones, Nevell R., Haddonfield, and W. W. Dewhurst, Haddon Heights, N. J., assignors to General Electric Company. Tuning indicator. 1,879,294; Sept. 27.
Jordan, Hans. (See Schoeller, W., Jordan, and Schöllkopf.)
Joseph, Alfred, Enghein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del. Conversion of solid combustibles into liquid fuel. 1,879,750; Sept. 27.
Juhasz, Steven. (See Ottrosinka, Louis, assignor.)
Juvenile Wood Products, Inc. (See Bryant, Martha M., assignor.)
K-D Manufacturing Company. (See Barto, Edward J., jr., assignor.)
Kadow, August, and R. G. Allen, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Machine for forming hollow glass articles. 1,879,689; Sept. 27.
Kadow, August, and C. W. Schwenzfeier, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Glass cutting mechanism. 1,879,690; Sept. 27.
Kahn, Benjamin. (See Sunkenberg, E. W., and Kahn.)
Kahn, Julius, assignor to Truscon Steel Company, Youngstown, Ohio. Joist. 1,879,295; Sept. 27.
Kalbach, Raymond B., Philadelphia, Pa. Chenille fabric. 1,876,691; Sept. 27.
Kane, Thomas E., Mansfield, Mass., assignor to The Textile-Finishing Machinery Company. Calendering machine. 1,879,926; Sept. 27.
Karfiol, Edward, New York, N. Y. Shelf paper. Des. 87,839; Sept. 27.
Katz, Jack F. (See Brandfon, S., and Katz.)
Katzman, Max, Utica, N. Y. Electric vaporizer. 1,879,297; Sept. 27.
Kautz, Arthur C. (See Kohler, A. F. H., and Kautz.)

Kayser, Frank, Toledo, Ohio. Dispensing apparatus. 1,879,298; Sept. 27.
Kayser, Julius, & Co. (See Mack, Sterling C., assignor.)
Kearney, Edward J., and J. B. Armitage, Wauwatosa, assignors to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,879,692; Sept. 27.
Kearney & Trecker Corporation. (See Kearney, E. J., and Armitage, assignors.)
Kehl, Oscar J., Elizabeth, Ill. Hayrack. 1,879,299; Sept. 27.
Keiser, Charles R., assignor to The Serton Rubber Company, Dayton, Ohio. Support for collapsible tubes. 1,879,751; Sept. 27.
Keller, Jeremiah, Canton, Ohio. Timer for traffic signals. 1,879,300; Sept. 27.
Kelley, Don G., Rochester, N. Y. Multiple unit mounting for gas burners. 1,879,301; Sept. 27.
Kelley, George L., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Sheet metal window panel and forming the same. 1,879,302; Sept. 27.
Kelley, William V. D., Hollywood, Calif. Photographic film. 1,879,806; Sept. 27.
Kelly, George A. (See Caswell, T. W., and Kelly.)
Kelvinator Corporation. (See Greenwald, Harold A., assignor.)
Kemp, C. M., Manufacturing Company, The. (See Kemp, W. W., and Van Horn, assignors.)
Kemp, William W., and W. H. Van Horn, assignors to The C. M. Kemp Manufacturing Company, Baltimore, Md. Air and gas mixing device. 1,880,141; Sept. 27.
Kempe, Irwin T. (See Kennedy, D. S., and Kempe.)
Kempf, Louis W. (See Horsfield, B. T., Kempf, and Fink.)
Kempton, Leslie A., Bridgeport, Conn., assignor to General Electric Company. Switch blade. 1,879,303; Sept. 27.
Kennedy, Donald S., and I. T. Kempe, Longparish, England. Spare tire carrier for road vehicles. 1,879,304; Sept. 27.
Kennedy, James W., Canton, Ohio. Dilator. 1,879,305; Sept. 27.
Kennedy, James W., Canton, Ohio. Dilator. 1,879,307; Sept. 27.
Kennedy, Robert E., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Adjustable pin spot for bowling alleys. 1,879,306; Sept. 27.
Kent, Earl W., Muskegon, Mich., assignor to Service Station Equipment Company, Conshohocken, Pa. Liquid dispensing apparatus. 1,879,308; Sept. 27.
Kent, Earl W., Muskegon, Mich., assignor to Service Station Equipment Company, Conshohocken, Pa. Liquid dispensing apparatus. 1,879,309; Sept. 27.
Kenyon, Bertram C., W. W. Bon, and C. H. Green, Grand Rapids, assignors to Automatic Musical Instrument Company, Grand Rapids, Mich. Automatic sound reproducing instrument. 1,879,693; Sept. 27.
Kenyon, William H., Accrington, assignor to Entwisle & Kenyon Limited, Ewbank Works, Accrington, England. Carpet sweeper. 1,879,752; Sept. 27.
Kerns, Frank W., and W. Egbert, Oakland, Calif. Removing sand and the like from fluids. 1,880,185; Sept. 27.
Keuls, Henry P. C., New York, N. Y., assignor to Sealed Joint Construction Corporation. Wall structure. 1,879,311; Sept. 27.
Keune, Adolph L., Carlinville, Ill. Combined track and coupling attachment. 1,879,310; Sept. 27.
Keveney, John T. (See Dowdall, James T., assignor.)
Kewley, James, Nelson, England. Shoe sole press. 1,879,753; Sept. 27.
Kidde, Walter, & Company. (See Hiegis, Henry E., assignor.)
Kidde, Walter, & Company. (See Marr, George M. and A. P., assignors.)
Kidde, Walter, & Company. (See Minor, Henry R., assignor.)
Kidder, William V., La Crosse, Wis. Lubricating system and products. 1,879,874; Sept. 27.
Killius, Eduard O., Hanau-on-the-Main, Germany. Current supply regulating apparatus. 1,879,312; Sept. 27.
King, Andrew. (See Koronski, Andre.)
King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
King, Peter I., Stanton, Minn. Barrel lifter and conveyer. 1,879,313; Sept. 27.
Kirk, Claude R., Chicago, Ill. Amusement machine cabinet. Des. 87,840; Sept. 27.
Kislyn Corporation. (See Brosse, Paul, assignor.)
Kiss, Aaron, Meriden, Conn. Ornamented silk lampshade. 1,879,314; Sept. 27.
Klauer Manufacturing Company. (See Klauer, W. E., and Ostrander, assignors.)
Klauer, Walter E., and C. L. Ostrander, assignors to Klauer Manufacturing Company, Dubuque, Iowa. Loading hood for snow removing mechanism. 1,879,315; Sept. 27.
Kleb, George A., St. Louis, Mo. Baseball strike zone target. 1,879,316; Sept. 27.
Kleiber, Kurt, Sandberg, Germany. Closing device for collar buttons. 1,879,903; Sept. 27.
Klein, Benjamin F., Detroit, Mich. Beverage dispenser. 1,879,317; Sept. 27.
Klein, Thomas J., Chicago, Ill. Bird perch. 1,879,318; Sept. 27.
Kleinert, I. B., Rubber Company. (See Guinzburg, Victor, assignor.)
Kleitz, William, Albany, N. Y. Concrete structure. 1,879,319; Sept. 27

Klett, Henry G., New York, N. Y. Valve. 1,879,320; Sept. 27.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Kline, Elmer V., University City, assignor to Victor Pharmacal Company, Inc., St. Louis, Mo. Safety razor blade sharpener. 1,879,807; Sept. 27.
Klingbeil, Edward, Chicago, Ill. Incinerator. 1,880,142; Sept. 27.
Klopp, Friedrich, Wald, Rhineland, Germany. Device for hardening the surfaces of cylindrical bodies. 1,879,850; Sept. 27.
Klug, Kurt. (See Hermanuz, A., and Klug.)
Klumpp, Carl S., Brooklyn, N. Y., and R. R. Potter, Jersey City, N. J. Bearing surface. 1,879,754; Sept. 27.
Knabner, Albert, and J. Richter, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Thermionic tube. 1,879,321; Sept. 27.
Knauf, Paul W., Cynwyd, assignor to Schutte & Koerting Company, Philadelphia, Pa. Quick opening steam valve actuated by a cylinder. 1,880,186; Sept. 27.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Rack for gas drums. 1,879,937; Sept. 27.
Kneen, Everett H., Ansonia, Conn. Container for adhesive plaster and the like. 1,879,755; Sept. 27.
Knepper, Charles E., assignor to Newspaper Boys of America, Incorporated, Indianapolis, Ind. Medal. Des. 87,841; Sept. 27.
Knistern, Walter H., Prince George County, Va., assignor to Atmospheric Nitrogen Corporation, New York, N. Y. Valve. 1,879,322; Sept. 27.
Knowles, Alexander S., assignor to Tar & Petroleum Process Company, Chicago, Ill. Coking liquid hydrocarbons. 1,879,983; Sept. 27.
Koch, Emery, Maracaibo, Venezuela. Aircraft. 1,879,323; Sept. 27.
Kochs, Theo. A., Company. (See Fischer, Charles W., assignor.)
Koenigs, Ernst, and H. Greiner, Breslau, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Pyridine derivatives and producing them. 1879,324; Sept. 27.
Kohler, August F. H., and A. C. Kautz, Lockport, N. Y.; said Kautz assignor to said Kohler. Adapter for valves. 1,880,177; Sept. 27.
Kohnle, Frederick, assignor to The Monarch Marking System Company, Dayton, Ohio. Marking machine. 1,879,875; Sept. 27.
Koller, Andrew. (See Nicholas, M., Koller, Ledel, and Hussey.)
Kootz, Arthur C., assignor to The Gem Hammock & Fly Net Company, Milwaukee, Wis. Mop. 1,879,325; Sept. 27.
Kopp, Reinhold A., et al. (See Peter, Joseph, assignor.)
Koronski, Andre, now by judicial change of name Andrew King, Narberth, Pa. Liquid level indicator. 1,880,171; Sept. 27.
Krahmer, Antony. (See Silva, J. R., and Krahmer.)
Kränzlein, Georg, Frankfort-on-the-Main-Hochst, R. C. Müller, Bad Soden-on-the-Taunus, and L. W. Berlin, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Positive electrode and preparing the same. 1,879,904; Sept. 27.
Krause, Albert F., Buffalo, N. Y. Heating apparatus. 1,880,178; Sept. 27.
Krause, Paul, assignor, by direct and mesne assignments, of one-third to W. E. Sprague, deceased, Lucy A. Sprague, administratrix, and one-third to H. Taylor, Babylon, N. Y. Liquid pump. 1,879,876; Sept. 27.
Kravitz, Vane, Ojai, Calif. Fruit cutting implement. 1,879,851; Sept. 27.
Krell, George, Sapulpa, and G. M. Martinet, Tulsa, Okla.; said Martinet assignor to said Krell. Speed transformer. 1,879,326; Sept. 27.
Kremmling, Aribert. (See Kremmling, Otto, assignor.)
Kremmling, Otto, Hamersleben, Germany. Process and apparatus for expressing bakers' material. 1,879,327; Sept. 27.
Kremmling, Otto, Hamersleben, assignor to A. Kremmling, Hamersleben near Oschersleben, Germany. Apparatus for manufacturing pastries and confectionery. 1,879,328; Sept. 27.
Krieg, Anthony W., assignor of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., and one-half to N. D. Q. Specialty Corporation. Manufacture of candle holders. 1,879,816; Sept. 27.
Kuchta, Daniel M., Brooklyn, N. Y. Brick crate. 1,879,756; Sept. 27.
Kuehner, Louis C., assignor to Handlan-Buck Manufacturing Company, St. Louis, Mo. Burner. 1,879,329; Sept. 27.
Kulp, Harry W., assignor of one-half to M. C. Dellinger, Lancaster, Pa. Animal feeding device. 1,879,332; Sept. 27.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Valve spring lifter. 1,879,330; Sept. 27.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Wheel, gear and the like pulling devices. 1,879,331; Sept. 27.

Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Bushing remover. 1,879,333; Sept. 27.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Perch bolt remover. 1,879,334; Sept. 27.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Sleeve puller. 1,879,335; Sept. 27.
Kusch, Roy P., assignor to W. F. Hall Printing Company, Chicago, Ill. Bookbinding machine. 1,879,757; Sept. 27.
Kwartin, Bernard, Philadelphia, Pa. Regenerative photoelectric cell circuit. 1,880,020; Sept. 27.
Lnage, Emil, Uerdingen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, Manufacture of a-naphthol. 1,879,337; Sept. 27.
Lachmann, Gustav, Akasaka-Ku, Tokyo, Japan, assignor to Handley Page Limited, Cricklewood, Middlesex, England. Aeroplane wing with guide blades. 1,879,338; Sept. 27.
Ladd, Lesier L., Lockport, Ill. Kiln furniture. 1,879,808; Sept. 27.
La Force, Burdett D., Altadena, Calif. Surgical instrument. 1,879,339; Sept. 27.
Lake, Clarence E. (See Donovan, N. L., and Lake.)
Lambert, Charles F., assignor, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich. Method and apparatus for preheating liquid fuels and maintaining a combustible mixture after initial vaporization. 1,879,938; Sept. 27.
Lamblin-Parent, Gustave A. M., Lille, France. Cover glass lens for headlights. Des. 87,842; Sept. 27.
Lamblin-Parent, Gustave A. M., Lille, France. Cover glass lens for headlights. Des. 87,843; Sept. 27.
Lamping, Harry, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky. Weather stripping for metal sashes. 1,879,340; Sept. 27.
Lancaster Iron Works, Inc. (See French, William E., assignor.)
Landis Tool Company. (See Balsiger, Harold E., assignor.)
Lane, George, New Haven, Conn., assignor to Audio Cinema, Bronx, N. Y. Apparatus for the visual recordation of sound beats. 1,879,694; Sept. 27.
Lange, Heinrich. (See Schmidt, A., Ernst, and Lange.)
Lapham, Ralph M., Glens Falls, N. Y. Vest. 1,879,341; Sept. 27.
Lapp Insulator Company, Inc. (See Jenner, Ralph L., assignor.)
Larberg, George O., assignor to Auto Mop Manufacturing Company, Kansas City, Mo. Mop. 1,879,809; Sept. 27.
Larum, Lars, McCabe, Mont. Wind wheel. 1,880,143; Sept. 27.
Latowski, John A. (See Crumb, C. F., and Latowski.)
Latzko, Johann. (See Piechl, O., and Latzko.)
Lauter, Samuel, Chicago, Ill. Blower for heating plants. 1,879,342; Sept. 27.
La Vigne, George J., assignor to The Greist Manufacturing Company, New Haven, Conn. Portable lamp. 1,879,343; Sept. 27.
Lawler, James J., Mt. Vernon, N. Y. Automatic mixing valve. 1,879,344; Sept. 27.
Lawrence, Alvah H., Hamlet, Ind. Dirigible air sailing craft. 1,879,345; Sept. 27.
Lawrence, Frank S. (See Ost, William R., and Lawrence.)
Lawrence, Frank S., Dunellin, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Circumferential pipe cutting or welding machine. 1,879,346; Sept. 27.
Lawson, Albert R., Hamilton, Ontario, Canada. Manifolding check book. 1,879,347; Sept. 27.
Lawson, Caster E., Utica, Ohio. Pneumatic tire core. 1,879,348; Sept. 27.
Le Blond, R. K., Machine Tool Company, The. (See Groene, William F., assignor.)
Ledel, Carl. (See Nicholas, M., Koller, Ledel, and Hussey.)
Lederer, Karl M., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Relay contact. 1,879,349; Sept. 27.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Making tubular articles. 1,880,095; Sept. 27.
Leeb, Frank, Culver City, Calif. Lock. 1,879,350; Sept. 27.
Lefchick, Charles. (See Horochowsky, Anthony, assignor.)
Lefebure, Victor, London, England. Manufacture of plasters from anhydrite. 1,879,877; Sept. 27.
Legrand, Jules. (See Guilbert, P., and Legrand.)
Lehman, Emanuel, Richmond, Va. Chin support. 1,879,852; Sept. 27.
Lehmann, Rudolf, Uerdingen, and R. Michel, Krefeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Process for suppressing the growth of micro-organisms. 1,879,351; Sept. 27.
Lehn, John U. (See Zahm, J. D., and Lehn.)
Lehn, John U., and M. A. Huebener, assignors to Animal Trap Company of America, Lititz, Pa. Animal trap. 1,879,930; Sept. 27.
Leigh Banana Case Co. (See Leigh, Carl G., assignor.)
Leigh, Carl G., assignor to Leigh Banana Case Co., Chicago, Ill. Attaching a cover fastener. 1,879,984; Sept. 27.
Leissner, Reinhard, Garfield, N. J. Artistic curtain. 1,879,695; Sept. 27.
Lenke, Edward. (See Palmer, C. A., and Lenke.)

Lenning, Alvar, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Absorber for refrigerators. 1,879,352; Sept. 27.
Lermer, Herman B., assignor to Hygienic Tube and Container Co., Newark, N. J. Medicinal container or similar article. Des. 87,844; Sept. 27.
Levi, Jack W., assignor, by mesne assignments, to Stewart S. Cooper, Cincinnati, Ohio. Aviator's helmet. 1,879,353; Sept. 27.
Levi, Leayle J., St. Thomas, Virgin Islands. Portable check protector. 1,879,354; Sept. 27.
Lewis, Norman H. (See Dolph, W. L., and Lewis.)
Leyvastre, Ferdinand, assignor to Société de Paris et du Rhone, Lyon, France. Starting mechanism for motor vehicles. 1,879,878; Sept. 27.
Liddell, Robert P. F., Morris Township, Morris County, assignor to Motor Improvements, Inc., Newark, N. J. Filter making machine. 1,879,355; Sept. 27.
Liebfried, Jacob, Santa Cruz, Calif. Prune picker. 1,879,905; Sept. 27.
Light, Ralph A., Cynwyd, and J. W. Price, jr., assignors to The United States Metallic Packing Company, Philadelphia, Pa. Sand trap. 1,879,810; Sept. 27.
Lilly, William, New York, N. Y. Gasoline vaporizer. 1,879,358; Sept. 27.
Lindemann, Waldemar, Dusseldorf, Germany. Briquetting press. 1,879,356; Sept. 27.
Lindsey, Anna K., Morrisonville, Ill. Sick-room or commode chair. 1,879,879; Sept. 27.
Lindsey, Anna K., Morrisonville, Ill. Combination portable stove. 1,879,880; Sept. 27.
Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Picker stick check. 1,880,096; Sept. 27.
Lindstrom, Nils O., Nutley, N. J., assignor to A. B. See Elevator Company, Inc. Bearing. 1,879,357; Sept. 27.
Linfert, William, et al. (See Linfert, W., and Walters, assignors.)
Linfert, William, and W. T. Walters, assignors of two-thirds to said Linfert and one-third to David Howe, Cincinnati, Ohio. Locking cap for automobile gasoline tanks. 1,879,359; Sept. 27.
Linnhoff, Franz, Eberswalde, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. Y. Electric induction furnace. 1,879,360; Sept. 27.
Linnhoff, Franz, Eberswalde, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Electric induction furnace. 1,879,361; Sept. 27.
Linstrom, Peter J., Medford, Mass. License plate holder. 1,879,906; Sept. 27.
Lion Match Co. (See Dill, J., and Shmyroff, assignors.)
Lion Match Co., Inc. (See Shmyroff, A., Dill, and Van Hoofstadt, assignors.)
Lipper, Clarence, Philadelphia, assignor to The Lipper Manufacturing Co., Inc. Bandeau. 1,879,362; Sept. 27.
Lipper Manufacturing Co. (See Lipper, Clarence, assignor.)
Liston, Marc L. (See Heinze, W. A., and Liston.)
Livingston, Fremont P., Denver, Colo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Pressure retaining valve. 1,879,696; Sept. 27.
Lockwood, Ray L., West Springfield, assignor to Old Colony Envelope Company, Westfield, Mass. Apparatus for making envelopes. 1,879,624; Sept. 27.
Loepsinger, Albert J., assignor to American Moistening Company, Providence, R. I. Self-cleaning atomizer. 1,879,363; Sept. 27.
Loesch, Hugo G., Rochester, assignor, by mesne assignments, to General Foods Corporation, New York, N. Y. Pectin preparation. 1,879,697; Sept. 27.
Lomar, Louis L., Houston, Tex. Coupling. 1,879,364; Sept. 27.
Lombard, Nathaniel, Worcester, Mass. Vacuum brake. 1,879,365; Sept. 27.
Long, Bernard, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Process and apparatus for tempering glass. 1,879,698; Sept. 27.
Long, Bernard, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Tempering glass. 1,879,699; Sept. 27.
Long, Charles E., assignor of one-half to Puffer-Hubbard Mfg. Co., Minneapolis, Minn. Refrigerating device. 1,880,097; Sept. 27.
Long, Frank V., trustee. (See Jones, Henry A., assignor.)
Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.)
Lorillard, P., Company, The. (See Austin, Joseph H., assignor.)
Lorraine, David G., Los Angeles, Calif. Ejector. 1,879,366; Sept. 27.
Los Angeles Knitting Company. (See Gerisch, Richard W., assignor.)
Lotz, Alfred F. C., assignor to Ceramic Development Corporation, Chicago, Ill. Clay tempering means and method. 1,879,367; Sept. 27.
Lovell Manufacturing Company. (See Schuda, Ernest J., assignor.)
Lovell, McDonald, and V. Sussin, Chicago, Ill. Freezing tray for refrigerators. 1,879,368; Sept. 27.
Lovering, Everett W., assignor to Brown Company, Berlin, N. H. Composition of matter and making the same. 1,880,036; Sept. 27.

Lullau, Ernst, Buffalo, N. Y. Hoist or transfer mechanism. 1,879,315; Sept. 27.

Lümmen, Hans, assignor to Motorenfabrik Deutz Aktiengesellschaft, Cologne-Deutz-on-the-Rhine, Germany. Cooled nozzle for fuel valves in internal combustion engines. 1,879,985; Sept. 27.

Lupton's, David, Sons Company. (See Brogden, Joah, assignor.)

Lute, Carl, and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Door mechanism. 1,879,369; Sept. 27.

Lyon Metal Products, Incorporated. (See O'Connor, John B., assignor.)

MacBeth, Colin, Four Oaks, England. Vulcanizer. 1,879,379; Sept. 27.

MacFarlane, James C. (See Austin, G., J. C., and W. A. MacFarlane.)

MacFarlane, William A. (See Austin, G., James C. and W. A. MacFarlane.)

Mack, Sterling C., Bangor, Pa., assignor to Julius Kayser & Co., New York, N. Y. Knitting machine. 1,879,758; Sept. 27.

Macklin, Frederick T., Covington, Ky. Toy glider and runway. 1,879,986; Sept. 27.

Mahr, Julius A., assignor to Inventors' Patent Holding Company, Minneapolis, Minn. Brake for baby carriages and the like. 1,879,759; Sept. 27.

Mair, John E., Mars, Pa., assignor to National Electric Products Corporation, New York, N. Y. Swivel connecter fitting for conduits and the like. 1,880,098; Sept. 27.

Malinowski, Enoch. (See Marshall, Enoch, assignor.)

Maloz, Walter C., New Orleans, La. Perpetual calendar. 1,879,380; Sept. 27.

Mangiameli, Francesco, Dusseldorf, Germany. Supplying gases to welding torches and the like. 1,879,940; Sept. 27.

Manning, Maxwell & Moore, Inc. (See Greene, Linus E., assignor.)

Mantor, Otis E., Monterey, Calif. Duo-hydroaircraft. 1,879,700; Sept. 27.

Margiloff, Elise B. (See Margiloff, Henry, assignor.)

Margiloff, Henry, assignor to E. B. Margiloff, Brooklyn, N. Y. Automatic gas cock control. 1,879,381; Sept. 27.

Marino, Anthony J., Union City, N. J. Protective coating and applying same to nickel, nickel alloys, and chromium-iron alloys. 1,879,701; Sept. 27.

Marr, Arthur P. (See Marr, George M. and A. P.)

Marr, George M., Woodhaven, and A. P. Marr, assignors to Walter Kidde & Company, Inc., New York, N. Y. Valve. 1,879,382; Sept. 27.

Marsh, Harry V., Chicago, Ill. Advertising display. 1,880,099; Sept. 27.

Marsh, Jas. P., Corporation. (See Carson, Robert H., assignor.)

Marshall, Enoch, assignor of one-half to Enoch Malinowski, Manville, N. J. Automatic fire alarm switch. 1,879,383; Sept. 27.

Martinet, Guy M. (See Krell, G., and Martinet.)

Massey, Augustine H., Stratford, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Cube tap. Des. 87,845; Sept. 27.

Massicotte, William E. N., Detroit, Mich. Conveyer system. 1,879,384; Sept. 27.

Master Metal Products, Inc. (See Geibel, John F., assignor.)

Matson, Ephraim G. (See Basham, James E., assignor.)

Mayer, Walter C., et al. (See Clobecy, Leon G., assignor.)

Mayer, William J., Philadelphia, Pa., assignor, by mesne assignments, to American Car and Foundry Company, New York, N. Y. Car seat. 1,879,853; Sept. 27.

Mayhew, Joseph H., Minneapolis, Minn., assignor to Hart-Carter Company, Peoria, Ill. Separating disk. 1,879,385; Sept. 27.

Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Stapling machine or tacker. 1,879,987; Sept. 27.

McAllister, Raymond C., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor cylinder. 1,879,370; Sept. 27.

McCabe, James V., Boston, Mass. Indicator attachment for calipers or the like. 1,879,941; Sept. 27.

McCain, Cecil C., Glen Ellyn, Ill., assignor to Addressograph Company, Wilmington, Del. Platen for printing and addressing machines. 1,879,811; Sept. 27.

McCarthy, Edward J. (See Bown, G. C., and McCarthy.)

McCarthy, Timothy B., Syracuse, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc. Pressing machine. 1,880,100; Sept. 27.

McCartney, Will C., Cambridge, Ohio. Decanter or similar article. Des. 87,846; Sept. 27.

McCauley, Gordon C., Boston, and Joseph L. Hallett, Braintree, Mass. Accessory unit for domestic freezing apparatus. 1,880,021; Sept. 27.

McCloskey, Ernest D., Altoona, Pa. Water level indicating device. 1,879,371; Sept. 27.

McComb, Henry G., Chicago, Ill., assignor to Servel, Inc., New York, N. Y. Adjustable shelf. 1,879,372; Sept. 27.

McComb, Herbert, Gary, Ind. Utilizing certain by-products of iron and steel plants. 1,879,373; Sept. 27.

McCombs, William A., New York, and H. C. Parke, Brooklyn, N. Y. Electrical discharge illuminated sign. 1,879,374; Sept. 27.

McCune, Joseph C. (See Farmer, C. C., and McCune.)

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Magnet supporting device. 1,879,702; Sept. 27.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,879,703; Sept. 27.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Traction increasing device. 1,879,704; Sept. 27.

McElroy, Bessie, Chicago, Ill. Grave form. 1,879,375; Sept. 27.

McGill Manufacturing Company. (See Popp, Rudolf, assignor.)

McGrew, John A., Albany, N. Y. Auxiliary propulsion unit. 1,880,144; Sept. 27.

McLaughlin, John E. (See Hutchinson, O. C. K., McLaughlin, and Soubler.)

McLaughlin, John E. (See Schwenzfeier, C. W., and McLaughlin.)

McMinn, Julian H., Norene, Tenn. Scaffold. 1,879,376; Sept. 27.

McNeely, James W., Long Beach, Calif. Screen and making the same. 1,879,377; Sept. 27.

McWilliams, William C., Newton, Mass. Shingle roofing and laying the same. 1,879,378; Sept. 27.

Meachem, Harry, Teaneck, N. J., assignor to Todd Dry Dock Engineering & Repair Corporation, Brooklyn, N. Y. Blower. 1,880,101; Sept. 27.

Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)

Mead Paperboard Corporation. (See Smith, Charles E., assignor.)

Mechanical Development Company. (See Wilson, Samuel A., assignor.)

Medakovic, Mirko, Zagreb, Jugoslavia. Shoulder rest for violins. 1,879,386; Sept. 27.

Meissner, Alexander, assignor to Telefunken Gesellschaft fue Drahtlose Telegraphie m. b. H., Berlin, Germany. Light control arrangement. 1,880,102; Sept. 27.

Melind, Louis, Chicago, Ill. Stamp. 1,879,387; Sept. 27.

Melyan, Paul, Chicago, Ill. Top-spinning handle. 1,880,145; Sept. 27.

Mendenhall, Earl, and J. B. Van Horn, Los Angeles, Calif. Submersible electric motor. 1,879,625; Sept. 27.

Mendenhall, Earl, and J. B. Van Horn, Los Angeles, Calif. Emulsion preventing seal. 1,879,626; Sept. 27.

Mendenhall, Earl, and J. B. Van Horn, Los Angeles, Calif. Bearing structure having unbalanced lubrication. 1,879,627; Sept. 27.

Mendenhall, Earl, and J. B. Van Horn, Los Angeles, Calif. Submersible motor without oil-supply means. 1,879,628; Sept. 27.

Mercil Plating Equipment Company. (See O'Neill, William J., assignor.)

Merck & Co., Inc. (See Chandler, Wallace L., assignor.)

Mergenthaler Linotype Company. (See Burt, Harold A., assignor.)

Mergenthaler Linotype Company. (See Stouges, Anthony J., assignor.)

Merahon, Alfred V., Schenectady, N. Y., assignor to General Electric Company. Automatic control of feeding mechanism in tool machines. 1,879,388; Sept. 27.

Messler, Elle. (See Gendreau, J. A., and Messler.)

Metal Package Corporation. (See Hopkins, Arthur G., assignor.)

Methlin, Nicholas E., assignor to Schneider & Cie., Paris, France. Antiaircraft gun. 1,879,705; Sept. 27.

Meyer, Joseph A., Newark, N. J. Centrifugal setting out machine. 1,879,942; Sept. 27.

Meyer, Ralph J., Denver, Colo. Apparatus for mining. 1,879,907; Sept. 27.

Michaels, Sidney. (See Clancy, Frank, assignor.)

Michel, Richard. (See Lehmann, R., and Michel.)

Mietzsch, Fritz. (See Schulemann, W., Mietzsch, and Wingler.)

Mietzsch, Fritz, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Addition compound of quinolines and barbituric acids and producing same. 1,879,389; Sept. 27.

Mildner, Hans, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Preparing quinizarine sulphonic acids. 1,879,390; Sept. 27.

Miller, Arthur S., Des Moines, Iowa. Impeller reaction envelope. 1,879,812; Sept. 27.

Miller, Charles, New York, N. Y. Shoe. Des. 87,847; Sept. 27.

Miller, Charles, New York, N. Y. Shoe. Des. 87,848; Sept. 27.

Miller, Charles, New York, N. Y. Shoe. Des. 87,849; Sept. 27.

Miller, Charles J. (See Heidecorn, M., and Miller.)

Miller, Edward, St. Paul, Minn. Adjustable horse-collar. 1,879,391; Sept. 27.

Miller, George C., Brighton, Mass. Display device. 1,879,943; Sept. 27.

Miller, H. H., Industries Company, The. (See Miller, Harvey H., assignor.)

Miller, Harvey H., assignor to The H. H. Miller Industries Company, Canton, Ohio. Pasteurizers. 1,879,392; Sept. 27.

Miller, Herman B., San Francisco, Calif. Tray unloader. 1,879,393; Sept. 27.

Miller, James S., Trenton, N. J. Clamp. 1,879,394; Sept. 27.

Miller, James S., Clinton, Nebr. Automobile tire protector. 1,879,395; Sept. 27.

Miller, Philip L., Florissant, Mo. Combined plumb and level saw handle. 1,879,396; Sept. 27.

Miller, Robert M., Montgomery, Pa. Desk. 1,879,854; Sept. 27.

Miller, Samuel F. (See Downes, J. R., and Miller.)

Milwaukee Gas Specialty Co. (See Toelle, Herbert E., assignor.)

Minneapolis-Honeywell Regulator Company. (See Fisher, George H., assignor.)

Minor, Henry R., Ossining, N. Y., assignor to Walter Kidde & Company, Inc. Valve. 1,879,397; Sept. 27.

Mirfield, George E., Youngstown, Ohio. Gauge for sizing internal threads. 1,879,398; Sept. 27.

Mirfield, George E., Youngstown, Ohio. Indexing means for grinding milling cutters. 1,879,399; Sept. 27.

Mirick, Carlos B., Washington, D. C. Remote control apparatus. 1,879,629; Sept. 27.

Miskelly, Samuel, Downers Grove, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,880,037; Sept. 27.

Mitchell, Jack J., St. Petersburg, Fla. Ice tray. 1,819,400; Sept. 27.

Molitor, Eugene N., St. Paul, Minn. Tree protector. 1,879,813; Sept. 27.

Monaco, Louis P., San Mateo, Calif. Exercising device. 1,879,401; Sept. 27.

Monahan, Earl, Hyannis, Nebr. Hand tool. 1,879,402; Sept. 27.

Monarch, Arthur M., Brooklyn, N. Y. Closure for containers. 1,880,022; Sept. 27.

Monarch Marking System Company, The. (See Kohnle, Frederick, assignor.)

Moness, Eugene. (See Christiansen, W. G., and Moness.)

Mono Containers Limited. (See Crossby, William E. J., assignor.)

Monroe, Leland C., Marceline, Mo. Changeable sign holder. 1,879,403; Sept. 27.

Moody, Axel W., Elgin, Ill. Safety brake. 1,879,630; Sept. 27.

Moody, Frederick K., Chicago, Ill. Tire inflater. 1,879,404; Sept. 27.

Moon, Charles R., assignor to Ontario Manufacturing Company, Muncie, Ind. Apparatus for manufacture of hollow silverware. 1,879,908; Sept. 27.

Moore, Hugh K., assignor to Brown Company, Berlin, N. H. Cement composition and producing same. 1,880,038; Sept. 27.

Moore, Judson L., New Orleans, La. Rotary pump. 1,879,405; Sept. 27.

Moore, Thomas F., New York, N. Y. Display device. 1,879,760; Sept. 27.

Moré, Arnold. (See Günzler, H., and Moré.)

Moreau, Pierre L. A., Paris, France, assignor to M. H. Detrick Company, Chicago, Ill. Furnace arch construction. 1,879,406; Sept. 27.

Morenus, Robert F., Portland, Oreg. Compact. 1,879,407; Sept. 27.

Morgan, Edward R., and C. Zuefle, Flint, Mich. Connecting rod. 1,879,814; Sept. 27.

Morgan, John O., High Point, N. C. Coin or check control device. 1,879,408; Sept. 27.

Morison, David N., Carrington, Newcastle, New South Wales, Australia. Ore sintering machine. 1,880,146; Sept. 27.

Morris, Howard I., assignor to C. M. Yoder and H. O. Yoder, Lakewood, Ohio. Process of and apparatus for making pipes or cylinders. 1,879,409; Sept. 27.

Morris, Warren A., Wyoming, and C. L. Spangler, Cincinnati, assignors to The Paper Service Company, Lockland, Ohio. Art of inserting liners into containers. 1,879,410; Sept. 27.

Morrison, Walter D., Detroit, Mich. Forming device. 1,879,411; Sept. 27.

Morse, Harry S., assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii. Combined fruit cutting and can filling machine. 1,879,989; Sept. 27.

Morton, Allen W., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Piston rod packing. 1,879,855; Sept. 27.

Morton, Allen W., and E. Stead, assignors to The American Hammered Piston Ring Company, Baltimore, Md. Rod packing. 1,879,088; Sept. 27.

Motorenfabrik Deutz Aktiengesellschaft. (See Lummen, Hans, assignor.)

Motor Improvements, Inc. (See Liddell, Robert P. F., assignor.)

Motor Terminals Company. (See Fitch, Benjamin F., assignor.)

Mott, Chester, Huntington Park, Calif., and G. G. Spencer, Denver, Colo., assignors to Union Carbide and Carbon Research Laboratories, Inc. Torch. 1,879,631; Sept. 27.

Mount Vernon-Woodberry Mills, Inc. (See Hoffacker, Ira C., assignor.)

Mueller, Emil M., assignor to C. P. Goerz American Optical Company, New York, N. Y. Sighting device. 1,879,412; Sept. 27.

Mueller, Theodore E., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Sink. Des. 87,850; Sept. 27.

Muller, Hans-Paul. (See Schranz, K., and Muller.)

Müller, Joseph, Deans, N. J. Valve. 1,879,413; Sept. 27.

Müller, Richard K. (See Kränzlein, G., Müller, and Berlin.)

Mullins, William H., South Boston, Va. Show window. 1,880,147; Sept. 27.

Mundorf Heating Systems Company. (See Mundorf, James J., assignor.)

Mundorf, James J., assignor to Mundorf Heating Systems Company, Sharon, Pa. Automatic controlling means for heating systems. 1,879,706; Sept. 27.

Munoz, Gonzalo C., assignor to The American Pulley Company, Philadelphia, Pa. Pile shoe. 1,879,414; Sept. 27.

Murchison, Sidnor L. (See Hall, James L., assignor.)

Murdoch, Charles P., Lansdale, Pa. Closure or cap for collapsible tubes. 1,880,103; Sept. 27.

Murphy, P. H., Company. (See Gilpin, Garth G., assignor.)

Mussawir, Alfred G. (See Saliba, G. J., and Mussawir.)

Muth, Emil, Saarbrucken, Germany. Apparatus for conveying goods in bales, sacks or the like. 1,879,944; Sept. 27.

Mutrux, Marcel, and R. Caillet, Vevey, Switzerland. Valve operating means. 1,879,415; Sept. 27.

Mutschler, Henry G., Rochester, N. Y., and H. Whittaker, Montreal, Quebec, Canada. Movable poster display apparatus. 1,879,416; Sept. 27.

Muzzioli, Gaetano, Milan, Italy. Process for printing inscriptions and drawings intended to be placed upon wood, fabric and other absorbent materials. 1,879,417; Sept. 27.

Myatt, Samuel L., St. Louis, Mo. Adjustable floor board and foot rest. 1,879,418; Sept. 27.

Myers, Harry L., assignor to The American Floor Surfacing Machine Company, Toledo, Ohio. Combined floor scrubbing, brushing, polishing, and abrading machine. Des. 87,851; Sept. 27.

Myerson, Simon, Brookline, and E. A. Jones, Medford, assignors to The Ideal-Tooth Incorporated, Cambridge, Mass. Artificial teeth. 1,879,419; Sept. 27.

N. D. Q. Specialty Corporation et al. (See Krieg, Anthony W., assignor.)

Nagle, Clyde, Elmira, N. Y., and C. B. Hoopes, Three Rivers, Tex. Apparatus for feeding glass charges. 1,879,420; Sept. 27.

Nalle, Charles E., Philadelphia, Pa. Adjustable caster. 1,879,421; Sept. 27.

Narahara, Teruo, Setagaya, Japan. Calculator. 1,880,148; Sept. 27.

Nash, Simeon, Columbus, Ohio. Rotary engine. 1,879,422; Sept. 27.

National Aniline & Chemical Company. (See Punnett, Ellis L., assignor.)

National Automatic Doughnut Machine Company. (See Roehl, Frank M., assignor.)

National Carbon Company. (See Jones, Homer W., assignor.)

National Carbon Company. (See Jones, H. W., and Graubner, assignors.)

National Carbon Company. (See Voorhees, Lee J., assignor.)

National Electric Products Corporation. (See Frederickson, Otto A., assignor.)

National Electric Products Corporation. (See Mair, John E., assignor.)

National Electric Products Corporation. (See Roseman, Oscar E., assignor.)

National Electric Products Corporation. (See Wanamaker, George L., assignor.)

National Rubber Machinery Company, The. (See Sethman, Retus W., assignor.)

National-Standard Company. (See Pierce, Robert C., assignor.)

National Supply and Service Corporation. (See Johnson, John A., assignor.)

Naunton, William J. S. (See Bunbury, H. M., Naunton, and Sexton.)

Neale, John, London, England. System of sound recording and reproduction. 1,879,423; Sept. 27.

Neale, John, St. John's Wood, London, England. System of railway control and signaling. 1,880,149; Sept. 27.

Neelmeier, Wilhelm, and E. Glietenberg, Leverkusen, near Cologne, Germany, assignors to General Aniline Works Inc., New York, N. Y. Water soluble diazo compounds. 1,879,424; Sept. 27.

Neelmeier, Wilhelm, and O. Goll, Leverkusen, I. G. Werk., Germany, assignors to General Aniline Works, Inc., New York, N. Y. Hydroxycarbazole sulphonic acid. 1,879,425; Sept. 27.

Neller, Richard, and W. W. Holman, Chicago, Ill. Display device. 1,879,761; Sept. 27.

Nelson, Christian, Oceanside, Calif. Suspender hook. 1,879,817; Sept. 27.

Neunherz, Herbert W. (See Johnson, A. S., and Neunherz.)

Newark Paraffine & Parchment Paper Co. (See Eisner, William J., assignor.)

New Britain-Gridley Machine Company, The. (See Brown, Robert S., assignor.)

New Idea Spreader Company, The. (See Synck, Henry, assignor.)

Newman, W. J., Company. (See Gault, John J., assignor.)

Newspaper Boys of America, Incorporated. (See Knepper, Charles E., assignor.)
Newton, Albert E., assignor to Premier Electric Heaters Limited, Birmingham, England. Electrically heated utensil. 1,879,426; Sept. 27.
Nicholas, Matthew, A. Koller, C. Ledel, and C. Hussey, Pasadena, Calif. Protective device for banks. 1,879,427; Sept. 27.
Nichols Engineering and Research Corporation. (See Hartley, H. J., and Baird, assignors.)
Nielsen, Niels P., Custer Township, Whatcom County, Wash. Hen-house dropping-board cleaner. 1,879,818; Sept. 27.
Nilson, Leonard D., Wayzata, Minn. Lifting jack. 1,880,150; Sept. 27.
Nilson, Leonard D., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Temperature indicator. 1,879,428; Sept. 27.
Nitardy, Ferdinand W., Brooklyn, assignor to E. R. Squibb & Sons, New York, N. Y. Protection of autoxidizable materials. 1,879,762; Sept. 27.
Nobbs, George H., Watertown, Mass. Power tractor unit. 1,880,023; Sept. 27.
Noelting, William H., and W. M. Van Dusen, assignors to Faultless Caster Company, Evansville, Ind. Adjustable adapter for casters. 1,879,429; Sept. 27.
Noetzli, Fred A., Los Angeles County, Calif. Dam and method of constructing the same. 1,879,430; Sept. 27.
Nolde and Horst Company, The. (See Gosch, William H., assignor.)
Nollesche Werke Kommandit Gesellschaft. (See Wollny, Karl, assignor.)
North & Judd Manufacturing Company. (See Freysinger, John B., assignor.)
Northrup, Edwin Fitch, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, Ewing Township, N. J. Induction electric furnace. 1,879,431; Sept. 27.
Northwest Engineering Corporation. (See Holloway, John H., assignor.)
Norton, Clifford. (See Graham, J. M., and Norton.)
Norton, Raymond J., Washington, D. C., assignor to Bendix Aviation Corporation, South Bend, Ind. Hydroservo brake. 1,879,432; Sept. 27.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Friction facing. 1,879,433; Sept. 27.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake structure. 1,879,434; Sept. 27.
Nusser, Eugene L., et al. (See Peter, Joseph, assignor.)
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Manufacturing phosphatic fertilizers. 1,879,435; Sept. 27.
Oberhoffken, Alexander, assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Machine tool. 1,879,436; Sept. 27.
Oberphos Company. (See Ober, B., and Wight.)
O'Brien, John J., Lakehurst, N. J. Engine release mechanism. 1,879,632; Sept. 27.
O'Brien, John O. (See Thornton, John E., assignor.)
O'Brien, Richard J., assignor to Waugh Equipment Company, Depew, N. Y. Truck center bolster cushion. 1,879,437; Sept. 27.
O'Connor, John B., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Folding table. 1,879,945; Sept. 27.
Ogilvie, Francis E., University, Va., assignor of one-half to William H. Sawyers, Hinton, W. Va. Parking device. 1,879,438; Sept. 27.
Ohio Art Company. (See Winzeler, Henry S., assignor.)
Okonite-Callender Cable Company. (See Bennett, Charles E., assignor.)
Old Colony Envelope Company. (See Lockwood, Ray L., assignor.)
Oles, Burdette S., assignor to Oles Envelope Corporation, Baltimore, Md. Envelope making machine. 1,879,990; Sept. 27.
Oles Envelope Corporation. (See Oles, Burdette S., assignor.)
Olney, George J., Westernville, N. Y. Vegetable cleaner and separator. 1,879,439; Sept. 27.
Olsen, Reuben A., and R. H. Shadrick, Minneapolis, Minn. Hydraulically controlled variable speed pulley. 1,879,633; Sept. 27.
Olson, Oscar, St. Joseph, Mich. Production of noiseless stops for doors or windows. 1,879,440; Sept. 27.
Olson, Raymond R., Long Beach, Calif. Watch cleaning machine. 1,879,441; Sept. 27.
O'Neil, James A., Lynn, Mass., assignor to General Electric Company. Refractor. 1,879,442; Sept. 27.
O'Neil, James R., San Francisco, Calif. Smoking set. 1,879,634; Sept. 27.
O'Neill, William J., River Forest, assignor to Mercil Plating Equipment Company, Chicago, Ill. Conveying mechanism. 1,879,819; Sept. 27.
Onions, Herbert J., assignor to De Luxe Metal Furniture Company, Warren, Pa. Adjustable shelving. 1,880,179; Sept. 27.
Ontario Manufacturing Company. (See Moon, Charles R., assignor.)
Opfermann, Erich, Berlin-Charlottenburg, and W. Fischer, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Protective paper strips for daylight loading film rolls. 1,879,443; Sept. 27.
Osann, Frederick, Company. (See Plumley, Raymond L., assignor.)
Ost, William R., Verona, and F. S. Lawrence, Dunellen, N. J., assignors to Air Reduction Company, Incorporated, New York, N. Y. Circumferential pipe cutting or welding apparatus. 1,879,444; Sept. 27.
Ostrander, Arthur J., Woodbury, N. J., assignor to Houdry Process Corporation, New York, N. Y. Liquid-feeding means. 1,879,635; Sept. 27.
Ostrander, Charles L. (See Klauer, W. E., and Ostrander.)
Othmer, Donald F., assignor to Eastman Kodak Company, Rochester, N. Y. Crystallizing salts from solutions containing them. 1,879,445; Sept. 27.
Otis Elevator Company. (See Graham, J. M., and Norton, assignors.)
Ottrosinka, Louis, assignor of one-half to Steven Juhasz, Tonawanda, N. Y. Rail fastener. 1,880,180; Sept. 27.
Overton, Glen, Allegan Township, Allegan County, Mich. Valve. 1,879,763; Sept. 27.
Owensboro Ditcher & Grader Co. (See Cundiff, C. W., and Steele, assignors.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Owens-Illinois Glass Company. (See Hofmann, Victor E., assignor.)
Owens-Illinois Glass Company. (See Hutchinson, O. C. K., McLaughlin, and Soubier, assignors.)
Owens-Illinois Glass Company. (See Kadow, A., and Allen, assignors.)
Owens-Illinois Glass Company. (See Kadow, A., and Schwenzfeier, assignors.)
Owens-Illinois Glass Co. (See Rule, John F., assignor.)
Owens-Illinois Glass Company. (See Schwenzfeier, C. W., and McLaughlin, assignors.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Pabst Corporation. (See Frederiksen, Felix M., assignor.)
Pabst, William R., Berkeley, Calif. Garment hanger. 1,879,946; Sept. 27.
Pacific Flush-Tank Company. (See Downes, J. R., and Miller, assignors.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Edwards, Herbert C., assignor.)
Packard Motor Car Company. (See Hammerl, Jacob, assignor.)
Packard Motor Car Company. (See Harbison, William C., assignor.)
Packard Motor Car Company. (See Roberts, Louis L., assignor.)
Packard Motor Car Company. (See Stougaard, Roy A., assignor.)
Page, John W., Chicago, Ill. Self-propelled apparatus. 1,879,446; Sept. 27.
Page, John W., Chicago, Ill. Bucket lip. 1,879,447; Sept. 27.
Page, John W., Chicago, Ill. Spreader. 1,879,448; Sept. 27.
Painter, Maud W., Cleveland, Ohio. Chair. Des. 87,852; Sept. 27.
Palm, Robert, Fairfield, Ala. Operating mechanism for removing pit covers and the like. 1,879,881; Sept. 27.
Palme, Josef F., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine. 1,879,449; Sept. 27.
Palmer, Clarence A., assignor to The Burt Manufacturing Company, Akron, Ohio. Ventilator. 1,879,450; Sept. 27.
Palmer, Clarence A., and E. Lenke, assignors to The Burt Manufacturing Company, Akron, Ohio. Method of and apparatus for filtering oil. 1,879,451; Sept. 27.
Paloice, John J., Youngstown, Ohio. Pliers, etc. 1,879,452; Sept. 27.
Pantex Pressing Machine, Inc. (See Beede, Herbert G., assignor.)
Paper Service Company, The. (See Morris, W. A., and Spangler, assignors.)
Paramount Famous Lasky Corporation et al. (See del Riccio, Lorenzo, assignor.)
Parent, Emile J., Hartford, assignor to The Whitlock Coil Pipe Company, West Hartford, Conn. Heat exchanger. 1,879,453; Sept. 27.
Parke, Henry C. (See McCombs, W. A., and Parke.)
Parker, Elwell, Electric Company, The. (See Cochran, Clyde E., assignor.)
Parker, Harry T., assignor to The Stanley Works, New Britain, Conn. Mortising tool. 1,879,454; Sept. 27.
Parrish, Benjamin E., Cody, Wyo., and W. N. Black, Turpan, Mexico, assignors of one-half to J. H. Reynolds, Houston, Tex. Grief stem. 1,879,455; Sept. 27.
Parsons, Fred A. (See Hill, John W., assignor.)
Parsons, Lillian B., assignor of one-half to J. L. Valley, Pickens, S. C. Writing instrument. 1,879,456; Sept. 27.
Paulsen, Carley H., Hingham, Mass. Fastening means for wall and ceiling boards. 1,879,457; Sept. 27.
Peabody Engineering Corporation. (See Harmon, Robert R., assignor.)

Pearce, Walter A. (See Peter, L. H., and Pearce.)
Peitler, Frank D., Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y. Support for power driven units. 1,879,458; Sept. 27.
Pelton, Ernest W., assignor to The Stanley Works, New Britain, Conn. Anchor plate. 1,879,459; Sept. 27.
Perry, James E., Carrollton, Tex. Drinking vessel. 1,879,820; Sept. 27.
Peter, Joseph, Lyons, assignor of thirty per cent to E. L. Nusser and thirty per cent to R. A. Kopp, Chicago, Ill. Vacuum pump. 1,879,947; Sept. 27.
Peter, Leslie H., and W. A. Pearce, King's Cross, London, England, assignors, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Interlocking signaling. 1,880,039; Sept. 27.
Peters Cartridge Company, The. (See Jacobs, George H., assignor.)
Peters, Frank B., Minneapolis, Minn. Automatic storm sash operator. 1,879,460; Sept. 27.
Petersen Oven Company, The. (See Rancke, Albert H., assignor.)
Petersen, Peter F., Carbondale, Okla. Slide trombone. 1,879,461; Sept. 27.
Petersen, Peter F., Carbondale, Okla. Musical instrument valve. 1,879,462; Sept. 27.
Peterson, Adolphe C., Minneapolis, Minn. Aeroplane wing device. 1,879,821; Sept. 27.
Peterson, Bert L., Wooster, Ohio. Drill tool joint. 1,879,856; Sept. 27.
Peterson, Johann G., West Hartford, Conn. Electrical connecting device. 1,880,151; Sept. 27.
Petrequin, Frederic J., St. Genevieve, Mo. Apparatus for treating gases. 1,879,463; Sept. 27.
Petroleum Chemical Corporation. (See Brooks, Benjamin T., assignor.)
Petroleum Chemical Corporation. (See Davis, Harold S., assignor.)
Pew, Arthur E., jr., Bryn Mawr, assignor to Sun Oil Company, Philadelphia, Pa. Distilling oil. 1,879,948; Sept. 27.
Pfriemer Wilhelm J., Belvidere, N. J. Piano hammer forming machine. 1,879,464; Sept. 27.
Phinney, Edgar E., West Orange, assignor to Defiance Manufacturing Company, Orange, N. J. Paper feeding device. 1,879,465; Sept. 27.
Photogrammetrie G. m. b. H. (See Aschenbrenner, Claus, assignor.)
Picken, William J. (See Round, H. J., and Picken.)
Pickford, James, Oldham, England. Guard for carding engines. 1,879,764; Sept. 27.
Pierce, Robert C., assignor to National Standard Company, Niles, Mich. Article made of wire and making the same. 1,879,466; Sept. 27.
Pierrès, René E. M., Paris, France. Building structure. 1,879,467; Sept. 27.
Pijakowski, Wladyslaw, Chicago, Ill. Swimming device. 1,879,468; Sept. 27.
Pinaud, Inc. (See Quinn, John J., assignor.)
Pinaud, John A., Atlantic Highlands, N. J. Propeller. 1,880,104; Sept. 27.
Pinkosh, Michael, Minneapolis, Minn. Camera with convex mirror. 1,879,940; Sept. 27.
Piovarchy, John, Uniontown, Pa. Battery holder for mine lamps. 1,879,469; Sept. 27.
Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Electric discharge lamp. 1,879,470; Sept. 27.
Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,879,472; Sept. 27.
Pirani, Marcello, Berlin-Wilmersdorf, H. Ewest, Berlin, and A. Rüttenauer, Berlin-Charlottenberg, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,879,471; Sept. 27.
Pitts, Elvas A., Columbus, Ohio. Shelter for domestic animals. 1,879,473; Sept. 27.
Pittsburg Utilities. (See Sperling, Eva, assignor.)
Planter Manufacturing Co. (See Hargroves, Willis W., jr., assignor.)
Plechi, Otto, Pfaffstatten, near Vienna, and J. Latzko, Vienna, Austria, assignors to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Supervisory control panel. 1,879,707; Sept. 27.
Plumley, Raymond L., Brooklyn, assignor to Frederick Osann Company, New York, N. Y. Sewing machine light arrangement. 1,879,708; Sept. 27.
Pohl, Karl, et al. (See Stolfa, H., and Zwerina.)
Pond, Charles H. (See Tillyer, E. D., and Pond.)
Pontoppidan, Carl. Holte, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Filtration of suspended sediments. 1,879,474; Sept. 27.
Pool, Enrico. (See Bommer, M., Haller, and Pool.)
Poon, Tom K., San Francisco, Calif. Shoe fastening device. 1,879,475; Sept. 27.
Popp, Rudolf, assignor to McGill Manufacturing Company, Valparaiso, Ind. Switching device. 1,879,822; Sept. 27.
Popp, William J., Loudonville, N. Y. Bottle. Des. 87,853; Sept. 27.
Porzzellanfabrik Weiden Gebr. Bauscher. (See Achtziger, Christoph, assignor.)
Potter, Robert R. (See Klumpp, C. S., and Potter.)
Poulson, Vernon S., Ogden City, Utah. Clothing bag. 1,879,476; Sept. 27.
Powell, Marian F., Palatka, Fla. Candle holder. 1,879,477; Sept. 27.
Powers Regulator Company, The. (See Snediker, Morton O., assignor.)
Pratt, William E., Chicago, assignor to William E. Pratt Manufacturing Company, Joliet, Ill. Live decoy halter. 1,879,991; Sept. 27.
Pratt, William E., Manufacturing Company. (See Pratt, William E., assignor.)
Pratt, William E., Mfg. Co., The. (See Tyler, William C., assignor.)
Premier Electric Heater Limited. (See Newton, Albert E., assignor.)
Price, Joseph W., jr. (See Light, R. A., and Price.)
Priebe, Ernest B., et al. (See Drake, Warren C., assignor.)
Propeller Aktiengesellschaft. (See Haw, Jakob, assignor.)
Prosperity Company, The. (See McCarthy, Timothy B., assignor.)
Prosperity Company, The. (See Zimarik, John, assignor.)
Pruiett, Charles L., Ventura, Calif. Stuffing box. 1,879,478; Sept. 27.
Psi A.-G. (See Schwaller, Emil, assignor.)
Puffer-Hubbard Mfg. Co. (See Long, Charles E., assignor.)
Pulleta, George, assignor of one-half to F. C. Braun, New York, N. Y. Wreath making method and means. 1,879,882; Sept. 27.
Punnett, Ellis L., Buffalo, assignor to National Aniline & Chemical Company, New York, N. Y. Ball mill. 1,879,479; Sept. 27.
Purea, John A., Kearney, N. J. Body harness. 1,879,480; Sept. 27.
Putnam, James K., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Valve. 1,879,481; Sept. 27.
Quinn, John J., Scarsdale, N. Y., assignor to Pinaud, Inc., New York, N. Y. Bottle. Des. 87,854; Sept. 27.
Quintenz, Harry L., Chicago, Ill. Valve lock. 1,879,482; Sept. 27.
Radio Corporation of America. (See Chubb, Lewis W., assignor.)
Radio Corporation of America. (See Eccles, W. H., and Whitaker, assignors.)
Radio Corporation of America. (See Round, H. J., and Picken, assignors.)
Radio Corporation of America. (See Thompsett, Harry A., assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Production of improved alkaline filler. 1,879,483; Sept. 27.
Ramage, James, Hartford, Conn. Book support. 1,879,484; Sept. 27.
Ramage, William H., Trumbull County, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio. Closed bottom ingot mold. 1,879,485; Sept. 27.
Rancke, Albert H., Hinsdale, assignor to The Petersen Oven Company, Chicago, Ill. Release device for drive mechanism for bake ovens. 1,879,486; Sept. 27.
Ransomes & Rapier Limited. (See Richards, Arthur, assignor.)
Rasch, Royal H. (See Schur, M. O., Rasch, and Hoos.)
Rastetter, William C., Fort Wayne, Ind. Folding armchair. 1,879,487; Sept. 27.
Rauh, Frederic H., South Orange, assignor to J. Wiss & Sons Co., Newark, N. J. Grass shears. 1,879,488; Sept. 27.
Ray, Grover C., Bisbee, Ariz. Writer's ring. 1,879,489; Sept. 27.
Ray, William C., San Diego, Calif. Cotton boll harvester. 1,879,823; Sept. 27.
Raytheon, Inc. (See Bush, Vannevar, assignor.)
Read, Frederick A., jr., Albion, N. Y., assignor to The Carpenter-Hiatt Sales Company, Denver, Colo. Basket liner. 1,879,950; Sept. 27.
Reamy, Daniel H., and A. Swanson, Los Angeles, Calif. Underreamer. 1,879,490; Sept. 27.
Reddig, Charles E., Kew Gardens, assignor to Graybar Electric Company, Inc., New York, N. Y. Vacuum cleaner. 1,879,710; Sept. 27.
Rednour, William H., Edwardsport, Ind. Reraller. 1,879,491; Sept. 27.
Reed, George B., assignor to Budd Wheel Company, Philadelphia, Pa. Demountable wheel. 1,879,492; Sept. 27.
Reed Manufacturing Company. (See Stoeltzlen, Leo V., assignor.)
Reed Roller Bit Company. (See Behnke, G. E., and Giesey, assignors.)
Reed Roller Bit Company. (See Harrington, George G., assignor.)
Reid, George H., South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation. Manufacture of 1,4-dioxane. 1,879,637; Sept. 27.
Reifel, Harry, Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Oscillation generation apparatus. 1,880,105; Sept. 27.
Reilly, Peter C. (See Cislak, Francis E., assignor.)
Reinhold, Charles, Geneva, Switzerland. Device for removing wheels from their axles. 1,879,883; Sept. 27.
Reinhold, John J., Marietta, Pa. Kneading device. 1,879,493; Sept. 27.

Reisinger, Harry B. (See Hunter, L. G., and Reisinger, assignors.)
Remmey, George Bickley, Philadelphia, Pa. High temperature furnace. 1,879,494; Sept. 27.
Renwick, Ross L., Niles, Mich. Insect electrocutor. 1,879,495; Sept. 27.
Reussenzehn, Ernest Albert, assignor to Dayton Scale Company, Dayton, Ohio. Platform for scales. 1,879,496; Sept. 27.
Reynolds, J. H. (See Parris, B. E., and Black, assignors.)
Rice, Francis Owen, Baltimore, Md., assignor to Rohm & Haas Company, Philadelphia, Pa. Preparation of ketene. 1,879,497; Sept. 27.
Rich, Louis, New York, N. Y. Sewing machine. 1,879,709; Sept. 27.
Richards, Arthur, London, assignor to Ransomes & Rapier Limited, Ipswich, Suffolk, England. Apparatus for launching aircraft. 1,879,765; Sept. 27.
Richards, Thomas K., Lexington, and H. M. Weber, Newton, Mass. Cassette for X-ray work. 1,879,498; Sept. 27.
Richardson Company, The. (See Fisher, Harry C., assignor.)
Richardson, Myron H., Chicago, and A. E. Gebert, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill. Coin controlled switch and timing mechanism. 1,879,499; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Pulp refining and bleaching process. 1,880,040; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Acid process of fiber liberation. 1,880,042; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Production of high grade chemical pulps. 1,880,043; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Alkaline fiber liberation. 1,880,044; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Paper manufacture. 1,880,045; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Processing of cellulose fiber. 1,880,046; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Pulp refining process. 1,880,047; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Multistage pulping raw cellulosic material. 1,880,048; Sept. 27.
Richter, George A., assignor to Brown Company, Berlin, N. H. Producting white wood pulp for high grade paper manufacture. 1,880,049; Sept. 27.
Richter, George A., and P. C. Scherer, jr., assignors to Brown Company, Berlin, N. H. Stabilization of cellulose xanthate. 1,880,041; Sept. 27.
Richter, Johann. (See Knaber, A., and Richter.)
Rieke, Irvin H., Auburn, Ind., assignor to Rieke Metal Products Corporation. Seal for bung fixtures. 1,879,500; Sept. 27.
Rieke Metal Products Corporation. (See Rieke, Irvin H., assignor.)
Ries, Henry J., Iowa City, Iowa. Foot control for motor cars. 1,880,152; Sept. 27.
Rigler, Richard W., Philadelphia, Pa. Apparatus for testing the eyesight. 1,879,501; Sept. 27.
Rinker, Joseph A., South Bend, Ind. Glare dimmer. 1,880,024; Sept. 27.
Rinman, Erik Ludvig, Djursholm, Sweden. Producing valuable products from vegetable substances. 1,879,502; Sept. 27.
Rinman, Erik Ludvig, Djursholm, Sweden. Relieving alkaline solutions, particularly waste liquors from the soda or sulphate pulp manufacture, of silica. 1,879,503; Sept. 27.
Rinne, Richard, Tacoma, Wash. Smoking pipe. 1,879,504; Sept. 27.
Ripke, Otto, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company Inc., New York,, N. Y. Organic gold complex compound and process of making same. 1,879,505; Sept. 27.
Roberts & Mander Stove Company. (See Antrim, William D., assignor.)
Roberts, John H., Newport, Ark. Hoe. 1,879,909; Sept. 27.
Roberts, Louis L., assignor to Packard Motor Car Company, Detroit, Mich. Grinding machine. 1,879,506; Sept. 27.
Robertson, Ivy B., assignor of one-third to F. Gresham, Charlotte, N. C. Door operating mechanism. 1,879,507; Sept. 27.
Robertson, John H., London, England. Variable friction gearing. 1,879,508; Sept. 27.
Robertson, William H., Dayton, Ohio. Internal combustion engine. 1,879,910; Sept. 27.
Robertson, William H., Dayton, Ohio. Internal combustion engine. 1,879,911; Sept. 27.
Robertson, William H., Dayton, Ohio. Internal combustion engine. 1,880,025; Sept. 27.
Robinson, Leo V., and G. M. Thomson, Caledonia, assignors to Gypsum Lime and Alabastine, Canada, Limited, Paris, Ontario, Canada. Method of and apparatus for making wall board. 1,880,188; Sept. 27.
Robinson, Lewis T., Schenectady, N. Y., assignor to General Electric company. Film drive. 1,880,106; Sept. 27.
Rockwood, George I., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Fusible link. 1,879,509; Sept. 27.
Rockwood Sprinkler Company. (See Rockwood, George I., assignor.)
Rode, Fredrich J., Chicago, Ill. Metal working press. 1,879,510; Sept. 27.
Rodgers, Clyde C., San Francisco, Calif. Mechanically operated game table. 1,879,511; Sept. 27.
Roehl, Frank M., assignor to National Automatic Doughnut Machine Company, Minneapolis, Minn. Doughnut former. 1,879,951; Sept. 27.
Roessler and Hasslacher Chemical Company, The. (See Dobrovolny, Frank J., assignor.)
Rogers, Walter F., Cicero, Ill. Automatic lighter for gas stoves. 1,879,992; Sept. 27.
Rohm & Haas Company. (See Rice, Francis O., assignor.)
Roseman, Oscar E., Pittsburgh, Pa., assignor to National Electric Products Corporation, New York, N. Y. Fitting and reducer adapter therefor. 1,880,107; Sept. 27.
Rosen, Samuel, Providence, R. I. Display package for edibles and the like. 1,879,952; Sept. 27.
Rosenthal, Leon W. (See Hehre, Frederick W., assignor.)
Rosenzweig, Siegfried, New York, N. Y. Sound insulating and vibration dampening structural unit. 1,880,153; Sept. 27.
Ross, Aubrey A., Marblehead, Mass., assignor to General Electric Company. Gear pump and the like. 1,880,108; Sept. 27.
Rotea, Ireneo, Los Angeles, Calif. Spectacle type of lamp holder. 1,879,512; Sept. 27.
Rothholz, Louis, New York, N. Y. Plate glass transporting truck. 1,879,518; Sept. 27.
Rotondo, Anthony. (See Rotondo, Sabastiano and A.)
Rotondo, Sebastiano and A., Brooklyn, N. Y. Lawn mower. 1,880,154; Sept. 27.
Round, Henry J., Muswell Hill, London, and W. J. Picken, Southend-on-Sea, England, assignors to Radio Corporation of America. Supporting the electrodes of thermionic devices. 1,879,514; Sept. 27.
Routt, Robert A., Hutchinson, Kans. Mortar board. 1,879,515; Sept. 27.
Rowan, John, New York, N. Y. Eyeglass mirror. 1,879,516; Sept. 27.
Rowbotham, Hubert G., Westcliff-on-Sea, England. Tin, jar, or like container. 1,879,517; Sept. 27.
Rowe, William H., Los Angeles, Calif. Vending machine cabinet. 1,879,884; Sept. 27.
Rowley, Willson H., Charleston, assignor to Evans Lead Company, Charleston, W. Va. Producing composition of matter. 1,879,638; Sept. 27.
Rowley, Willson H., assignor to Evans Lead Company, Charleston, W. Va. Composition of matter. 1,879,639; Sept. 27.
Roycroft, Walter R., Ozone Park, N. Y., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Record centering means for multiplying machines. 1,879,766; Sept. 27.
Rudd, Anton A., Sidney, Nebr. Device for dismantling freight car trucks. 1,879,518; Sept. 27.
Ruff, De Witt C. 2d, St. Paul, Minn. Radiator hanger. 1,879,519; Sept. 27.
Rule, John F., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Mechanism for skimming and stirring glass. 1,879,711; Sept. 27.
Rusden, Ethelbert A., Nayatt, assignor to The Textile-Finishing Machinery Compay, Providence, R. I. Fabric impregnating machine. 1,879,520; Sept. 27.
Ruth, William G., Gap, Pa. Cinder spreader. 1,880,155; Sept. 27.
Rüttenauer, Alfred. (See Pirani, M. Ewest, and Rüttenauer.)
Safety Liquid Fuel Torch Corporation. (See Browning, James H., assignor.)
Safety Mining Company. (See Kneeland, Frank E., assignor.)
Sailer, Rudolph J., Townley, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Work-guide for sewing machines. 1,879,521; Sept. 27.
St. Pierre, Henry, Worcester, Mass. Antiskid device. 1,879,584; Sept. 27.
Salender, Lambert A. (See Smith, R. R., Songer, and Salender.)
Saliba, George J., and A. G. Mussawir, Brooklyn, N. Y. Sound record slot machine. 1,879,522; Sept. 27.
Salmon, Reginald D., assignor to Creed and Company, Limited, Croydon, England. Start-stop mechanism. 1,879,525; Sept. 27.
Salmon, Reginald D., and H. Clifford, assignor to Creed and Company, Limited, Croydon, England. Mechanically actuated vibrating relay. 1,879,523; Sept. 27.
Salmon, Reginald D., and F. R. Thomas, assignors to Creed and Company, Limited, Croydon, England. Telegraph system and apparatus. 1,879,524; Sept. 27.
Salmon, Reginald G., Barkingside, assignor of one-half to The British Steel Piling Company, Limited, London, England. Pile driver. 1,879,993; Sept. 27.
Samburg, Maurice, et al. (See Degener, G. O., and Hochman, assignors.)
Samms, Horace, assignor to American Manganese Bronze Company, Holmesburg, Philadelphia, Pa. Plug cock. 1,879,526; Sept. 27.
Sandel, Albert L., Chicago, Ill. Lamp. Des. 87,855; Sept. 27.
Sanders, Maurice, assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y. Doll. 1,880,109; Sept. 27.
Sansone, Joseph, Jersey City, N. J. Permanently attached collar button. 1,879,527; Sept. 27.

Sanymetal Products Co., The. (See Carpenter, R. F., and Anderson, assignors.)
Sass, Friedrich, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Internal combustion engine. 1,879,528; Sept. 27.
Savage, Edward S., and C. F. Friedrich, Rochester, N. Y. Figure toy. Des. 87,856; Sept. 27.
Sawyers, William H. (See Oglivie, Francis E., assignor.)
Schaaff, John T., Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y. Perforated card controlled machine. 1,879,529; Sept. 27.
Schaf, Joseph C., jr., Indianapolis, Ind. Battery and generator testing apparatus for motor vehicles. 1,879,530; Sept. 27.
Schaffert, Adolf H., assignor to Truscon Steel Company, Youngstown, Ohio. Closure operator and lock. 1,879,994; Sept. 27.
Schafran, Isaac, assignor of one-half to Isidor Thornschein, New York, N. Y. Aircraft. 1,879,857; Sept. 27.
Schaum, Carl, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Reel mechanism. 1,879,885; Sept. 27.
Schemmel, Robert C., Union City, Ind. Electric wire conduit. 1,880,156; Sept. 27.
Scherer, Philip C., jr. (See Richter, G. A., and Scherer, assignors.)
Schering-Kahlbaum A. G. (See Schöeller, W., Jordan, and Schöllkopf, assignors.)
Schifferle, Charles J., Oakland, assignor to H. R. Struthers, Berkeley, Calif. Burning gas. 1,879,886; Sept. 27.
Schiltz, Bernard P., assignor to The Foote-Burt Company, Cleveland, Ohio. Machine tool. 1,879,531; Sept. 27.
Schlebecker, Oscar H., assignor of one-half to G. W. Settles, Fort Wayne, Ind. Can hook for barrels. 1,879,532; Sept. 27.
Schleicher, Manfred, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemmenstadt, near Berlin, Germany. Apparatus for the supervision of electric power distributing systems. 1,879,887; Sept. 27.
Schlumpf, Robert W., assignor to Hughes Tool Company, Houston, Tex. Combination rolling and scraping cutter bit. 1,879,127; Sept. 27.
Schmidt, Albrecht, O. Ernst, and H. Lange, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Alkyl naphthalenes and preparing same. 1,879,912; Sept. 27.
Schmidt, Hans, Wuppertal-Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Calcium complex salts. 1,879,533; Sept. 27.
Schmidt, John, assignor to Schmidt Sheet Metal Works, Inc., Buffalo, N. Y. Window screen. 1,879,534; Sept. 27.
Schmidt, Karl, Berlin-Lichtenrade, assignor to C. Lorenz. Aktiengesellschaft, Berlin-Tempelhof, Germany. Speed regulator. 1,879,824; Sept. 27.
Schmidt, Robert E., B. Stein, and K. Bamberger, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs of the anthraquinone series. 1,879,535; Sept. 27.
Schmidt Sheet Metal Works, Inc. (See Schmidt, John, assignor.)
Schmidtsche Heissdampf-Gesellschaft mit beschrankter Haftung. (See Hermannz, A., and Klug, assignors.)
Schneebell, Hugo, Courbevoie, France. Carburetor. 1,879,536; Sept. 27.
Schneider & Cie. (See Methlin, Nicolas E., assignor.)
Schneider, Ferdinand, Fulda, Germany. Electrical advertisement clock. 1,879,913; Sept. 27.
Schneider, Hermann. (See Straub, F., and Schneider.)
Schneider, Wilhelm, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Antihalation layers for photographic material. 1,879,537; Sept. 27.
Schoeller, Walter, Berlin-Westend, H. Jordan, Berlin-Steglitz, and K. Schöllkopf, Dusseldorf-Oberkassel, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Production of menthenes. 1,879,767; Sept. 27.
Schöllkopf, Karl. (See Schoeller, W., Jordan, and Schöllkopf.)
Schönhöfer, Fritz, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Quinoline derivative and producing the same. 1,879,538; Sept. 27.
Schranz, Karl, and H.-P. Muller, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Double compounds of the acridine series. 1,879,539; Sept. 27.
Schroedter, Edmund, Brooklyn, N. Y. Ash receiver. 1,879,558; Sept. 27.
Schuda, Ernest J., assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. 1,879,995; Sept. 27.
Schulemann, Werner, Vohwinkel, near Elberfeld, F. Mietzsch, Elberfeld, Germany, and A. Wingler, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y. Compounds of the diazine series. 1,879,540; Sept. 27.
Schulemann, Werner, Vohwinkel, near Elberfeld, F. Mietzsch, Elberfeld, Germany, and A. Wingler, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y. Compounds of the oxazine series. 1,879,541; Sept. 27.
Schulte, John C., Norway, Iowa. Farm gate. 1,879,542; Sept. 27.
Schulz, Walter F. (See White, H. E., and Schulz.)
Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,879,825; Sept. 27.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Impregnating fibrous articles and material therefor. 1,880,050; Sept. 27.
Schur, Milton O., and J. G. Gosselink, assignors to Brown Company, Berlin, N. H. Manufacture of bends from straight fiber tubes. 1,880,053; Sept. 27.
Schur, Milton O., and B. G. Hoos, assignors to Brown Company, Berlin, N. H. Shredded cellulose pulp adapted for nitration and making it. 1,880,052; Sept. 27.
Schur, Milton O., and B. G. Hoos, assignors to Brown Company, Berlin, N. H. Nitrocellulose manufacture and cellulose therefor. 1,880,054; Sept. 27.
Schur, Milton O., and B. G. Hoos, assignors to Brown Company, Berlin, N. H. Preparation of nitrocellulose. 1,880,055; Sept. 27.
Schur, Milton O., R. H. Rasch, and B. G. Hoos, assignors to Brown Company, Berlin, N. H. Conditioning cellulose fiber and the product thereof. 1,880,051; Sept. 27.
Schutte & Koerting Company. (See Knauf, Paul W., assignor.)
Schwaller, Emil, assignor to Psi A.-G., Bern, Switzerland. Closure for rigid or non-collapsible metal containers. 1,879,914; Sept. 27.
Schwenzfeier, Carl W. (See Kadow, A., and Schwenzfeier.)
Schwenzfeier, Carl W., and J. E. McLaughlin, assignors to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,879,712; Sept. 27.
Schwerdtel, Fritz, Cologne-Mulheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Coagulation of latex-like emulsions. 1,879,543; Sept. 27.
Scognamillo, Salvatore and P. Arndt, assignors of one-third to David Shlaifer, New York, N. Y. Electron discharge device. 1,879,544; Sept. 27.
Scott, Henearie L., San Antonio, Tex. Self loading and unloading elevator. 1,879,713; Sept. 27.
Scott, Walter A., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Cleansing composition. 1,879,953; Sept. 27.
Scott, William M., jr., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa. Switching mechanism. 1,879,714; Sept. 27.
Scovill Manufacturing Company. (See Fenton, P. E., and Tompkins, assignors.)
Scovill Manufacturing Company. (See Ferguson, William P., assignor.)
Sealed Joint Construction Corporation. (See Keuls, Henry P. C., assignor.)
Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Electrical control system. 1,879,545; Sept. 27.
Seibert, Carl F., Hamilton, and E. J. Seibert, Cincinnati, Ohio. Driving means for applicators. 1,879,546; Sept. 27.
Seibert, Elmer J. (See Seibert, Carl F. and E. J.)
Seiden Research & Engineering Corporation, The. (See Jaeger, A. O., Daniels, West, and Stevenson, assignors.)
Semmes, Harry H., Chevy Chase, Md., assignor to Bendix Aviation Corporation, South Bend, Ind. Seaplane. 1,879,547; Sept. 27.
Sennett, Mack, Color Film Co. (See Guerin, Paul J., assignor.)
Serton Rubber Company, The. (See Keiser, Charles R., assignor.)
Servel, Inc. (See McComb, Henry G., assignor.)
Servel, Inc. (See Peltier, Frank D., assignor.)
Service Station Equipment Company. (See Kent, Earl W., assignor.)
Serv-Rite Corporation. (See Barnes, Alvin P., assignor.)
Sethman, Retus W., Cuyahoga Falls, assignor to The National Rubber Machinery Company, Akron, Ohio. Automatic venting machine. 1,879,548; Sept. 27.
Setterberg, Ivar, Stockholm, Sweden. Manufacturing porous refractory articles. 1,880,157; Sept. 27.
Settles, George W. (See Schlebecker, Oscar H., assignor.)
Sexton, Wilfrid A. (See Bunbury, H. M., Naunton, and Sexton.)
Shadrick, Richard H. (See Olsen, R. A., and Shadrick.)
Shaffer, Nellie M., Des Moines, Iowa. Wall paper remover. 1,879,826; Sept. 27.
Shakespeare Company. (See Workman, Peter, jr., assignor.)
Shalomith, Israel H., Brooklyn, assignor of one-half to I. F. Dash, New York, N. Y. Terminal connection for electric lamp sockets. 1,879,768; Sept. 27.
Shapiro, David H., New York, N. Y. Machine and method for manufacturing articles from viscous substances. 1,880,110; Sept. 27.
Shawmut Engineering Company. (See Ferrara, Frank, assignor.)
Sherman, Clifton W., Hamilton, Ontario, Canada. Car truck. 1,879,549; Sept. 27.

Sherman, John C., Gorham, Me., assignor to Brown Company, Berlin, N. H. Manufacture of rovings, yarns, twines and the like. 1,880,056; Sept. 27.
Sherman, John C., Gorham, Me., assignor to Brown Company, Berlin, N. H. Method of and machine for making paper. 1,880,057; Sept. 27.
Sherwood, Walter, Bolivar, N. Y. Sectional portable step. 1,879,996: Sept. 27.
Shields, Alexander F., Mount Sterling, Ky. Tobacco press. 1,879,550; Sept. 27.
Shields, Peter. (See Hart, Charles, assignor.)
Shlaifer, David. (See Scognamillo, S., and Arndt.)
Shmyroff, Andrew. (See Dill, J., and Shmyroff.)
Shmyroff, Andrew, Kew Gardens, J. Dill, Woodside, and E. Van Hoofstadt, Brooklyn, assignors to Lion Match Co., Inc., New York, N. Y. Match making machine. 1,880,111; Sept. 27.
Shmyroff, Andrew, Kew Gardens, J. Dill, Woodside, and E. Van Hoofstadt, Brooklyn, assignors to Lion Match Co., Inc., New York, N. Y. Transporting mechanism for book match making machines. 1,880,112; Sept. 27.
Shoemaker, James M., Washington, D. C. Internal combustion engine. 1,879,551; Sept. 27.
Sieber, John R., and G. R. Elwell, Pittsburgh, Pa., assignors to Standard Sanitary Manufacturing Company. Drawer for kitchen sinks. 1,879,888; Sept. 27.
Siegel, David, Weehawken, N. J. Nonrun knitted fabric. 1,880,158; Sept. 27.
Siemens Brothers & Company Limited. (See Christian, David A., assignor.)
Siemens & Halske, Aktiengesellschaft. (See Schleicher, Manfred, assignor.)
Sikorsky Aviation Corporation. (See Sikorsky, Igor, assignor.)
Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Amphibian aircraft. 1,879,716; Sept. 27.
Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Pneumatically operated and controlled aircraft. 1,879,717; Sept. 27.
Silica Gel Corporation, The. (See Barclay, Earle H., assignor.)
Silva, Jesus R., and A. Krahmer, El Paso, Tex. Brush construction. 1,879,552; Sept. 27.
Silva, Jesus R., and A. Krahmer, El Paso, Tex. Shaving brush. 1,879,553; Sept. 27.
Silverman, Jack R., Dayton, Ohio, assignor, by mesne assignments, of one-half to The Univis Corporation, Wilmington, Del., and one-half to United Kingdom Optical Company, Limited, London, England. Lens. 1,879,769; Sept. 27.
Simkins, Adelbert C., Pleasantville, N. J. Combination sign. 1,879,554; Sept. 27.
Simmons Company. (See Gail, John F., assignor.)
Simmons, Eckley M., Ridgewood, N. Y. Method and machine for cutting and forming plates and other articles. 1,879,555; Sept. 27.
Simonds, Royal H., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,879,827; Sept. 27.
Simonsson, Wilhelm, Halsingborg, Sweden. Bottle washing machine. 1,879,770; Sept. 27.
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Singer Manufacturing Company, The. (See Barron, William L., assignor.)
Singer Manufacturing Company, The. (See Corrall, H., and Heggie, assignors.)
Singer Manufacturing Company, The. (See Goosman, Herbert J., assignor.)
Singer Manufacturing Company, The. (See Palme, Josef F., assignor.)
Singer Manufacturing Company, The. (See Saller, Rudolph J., assignor.)
Singerman, Joseph, New York, N. Y. Color box. 1,880,026; Sept. 27.
Skar, Eilif V. (See Hardy, Donovan H., assignor.)
Skitt, James H., assignor to Smith, Drum & Company, Philadelphia, Pa. Support for ironing machine rolls. 1,879,556; Sept. 27.
Skreen, Orlando O., Minneapolis, Minn. Vapor supply device for engines. 1,879,557; Sept. 27.
Slaughter, Graham, Greenville, S. C. Lug member for looms. 1,879,558; Sept. 27.
Small, Jacob, Baltimore, Md. Shirt form. 1,880,027; Sept. 27.
Smart, Charles E., assignor to W. & L. E. Gurley, Troy, N. Y. Running sheet micrometer. 1,879,559; Sept. 27.
Smidth, F. L. & Co. (See Pontoppidan, Carl, assignor.)
Smith, Alfred B. (See Smith, Clifford R., and A. B.)
Smith, Arthur, Port Chester, assignor to S. Sternau & Co., Inc., New York, N. Y. Stove. 1,879,954; Sept. 27.
Smith, Arthur, Port Chester, assignor to S. Sternau & Co., Inc., New York, N. Y. Stove. 1,879,955; Sept. 27.
Smith, Charles E., Sylva, N. C., assignor to Mead Paperboard Corporation, Wilmington, Del. Paper manufacture. 1,879,560; Sept. 27.
Smith, Chester W., Lynn, Mass., assignor to General Electric Company. Diffuser for centrifugal compressors. 1,879,561; Sept. 27.
Smith, Clifford R., and A. B. Smith, Wolverhampton, England. Mixing apparatus. 1,879,828; Sept. 27.
Smith, Clinton D., Russell, Iowa. Field conditioning machine. 1,880,113; Sept. 27.
Smith, Drum & Company. (See Skitt, James H., assignor.)
Smith, Edward W., Philadelphia, Pa. Manufacturing storage battery separators. 1,879,562; Sept. 27.
Smith, Frank, Oak Lane, and W. M. Barker, Philadelphia, Pa. Timing mechanism for driers, scorchers, and formers. 1,880,114; Sept. 27.
Smith, Harry F., assignor to The Gas Research Company, Dayton, Ohio. Heat engine. 1,879,563; Sept. 27.
Smith, James J., Philadelphia, Pa. Pressure coupling. 1,879,565; Sept. 27.
Smith, James J., assignor, by mesne assignments, to Endurable Products Co., Inc., Philadelphia, Pa. Grease fitting. 1,879,564; Sept. 27.
Smith, John W., Philadelphia, Pa. Means for milling surfaces requiring a uniform screw pitch. 1,879,566; Sept. 27.
Smith, Orville O., assignor of one-half to L. E. Hesla and W. H. Duncan, Prescott, Ariz. Pump. 1,879,567; Sept. 27.
Smith, Russell R., W. F. Songer, and L. A. Salender, Ashland, Ky., assignors to The American Rolling Mill Company, Middletown, Ohio. Sheet metal rolling. 1,879,829; Sept. 27.
Smith, Samuel N., and J. F. Bemies, New York, N. Y., assignors to United States Union Corporation. Making pipe couplings. 1,880,115; Sept. 27.
Smith's, John E., Sons Company. (See Van Hooydonk, Adrian C., assignor.)
Smoot, Daisy E., Apopka, assignor of one-fourth to J. I. Carroll, Orlando, Fla. Portable animal bath. 1,879,915; Sept. 27.
Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Mixing valve. 1,879,771; Sept. 27.
Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Time controlled heat regulator. 1,879,772; Sept. 27.
Sneed, John, Royal Oak, Mich. Rolling machine. 1,879,568; Sept. 27.
Snelling, Walter O., Allentown, Pa., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Manufacturing hydrocarbon products. 1,880,189; Sept. 27.
Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Clutch. 1,879,569; Sept. 27.
Soaber Company. (See Henry, George W., jr., assignor.)
Société Anonyme des Automobiles M. Berliet. (See Berliet, Marius, assignor.)
Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chaumy & Cirey. (See Long, Bernard, assignor.)
Société de Paris et du Rhone. (See Leyvastre, Ferdinand, assignor.)
Society of Chemical Industry in Basle. (See Bommer, M., Haller, and Pool, assignors.)
Society of Chemical Industry in Basle. (See Haller, R., and Heckendorn, assignors.)
Society of Chemical Industry in Basle. (See Straub, F., and Schneider, assignors.)
Sokorsky, Igor, College Point, L. I., N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Amphibian boat structure. 1,879,715; Sept. 27.
Solar Industries, Inc. (See Ballentine, Earle W., assignor.)
Songer, William F. (See Smith, R. R., Songer, and Salender.)
Sopsko, Michael, Cleveland, Ohio. Vanity case. 1,879,570; Sept. 27.
Soubier, Leonard D. (See Hutchinson, O. C. K., McLaughlin, and Soubier.)
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass furnace. 1,879,718; Sept. 27.
Spangler, Carroll L. (See Morris, W. A., and Spangler.)
Sparks-Withington Company, The. (See Johnson, L. E., Winchell, Hardick, and Billig, assignors.)
Spaulding, Harris W., Haverhill, Mass. Movable block puzzle. 1,879,571; Sept. 27.
Speegle, Andrew G., Iola, Kans. Floating deck. 1,879,572; Sept. 27.
Spencer, Gerald G. (See Mott, C., and Spencer.)
Spengler, Henry, assignor to J. S. Cushman, New York, N. Y. Bottle cap. 1,879,640; Sept. 27.
Sperling, Eva, assignor to Pittsburg Utilities, New York, N. Y. Instantaneous water heater. 1,879,956; Sept. 27.
Sponable, Earl I., assignor to Fox Case Corporation, New York, N. Y. Combined moving picture and sound camera. 1,879,573; Sept. 27.
Sprague, Lucy A., administratrix. (See Krause, Paul.)
Sprague, William E., et al. (See Krause, Paul, assignor.)
Sprent, William C. (See Bennett, N., Dodd, and Sprent.)
Sproul, William C., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Metal working tool. 1,879,574; Sept. 27.
Squibb, E. R., & Sons. (See Christiansen, W. G., and Moness, assignors.)
Squibb, E. R., & Sons. (See Nitardy, Ferdinand W., assignor.)
Standard Conveyor Company. (See Caesar, J., and Eggleston, assignors.)
Standard Neckwear Company. (See Weinstein, Otto, assignor.)

Standard Pressed Steel Co. (See Hallowell, H. T., and Bennett, assignors.)
Standard Sanitary Manufacturing Company. (See Mueller, Theodore E., assignor.)
Standard Sanitary Manufacturing Company. (See Sieber, J. R., and Elwell, assignors.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Barometer and temperature correcting means and constant volume governor. 1,879,575; Sept. 27.
Stanley Works, The. (See Parker, Harry T., assignor.)
Stanley Works, The. (See Pelton, Ernest W., assignor.)
Stanley Works, The. (See Stowell, Austin L., assignor.)
Star, Richard, Brooklyn, N. Y. Ship speed indicator and distance register. 1,879,576; Sept. 27.
Stauf, Friedrich W. (See Hagenest, H., and Stauf.)
Stauf, Friedrich W., Cologne-Deutz-on-the-Rhine, and H. Hagenest, Wiesdorf-Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Precipitating iron from the solutions freed from copper obtained by burning pyrites with chlorine. 1,879,577; Sept. 27.
Stead, Edward. (See Morton, A. W., and Stead.)
Steele, James W., Dallas, Tex. Collar stiffener and reenforcing means. 1,879,918; Sept. 27.
Steele, William A. (See Cundiff, C. W., and Steele.)
Stegmann, Karl, assignor to Johne-Werk Grafische Maschinen-Aktiengesellschaft, Bautzen, Germany. Pile compressing means for paper cutting machines and the like. 1,880,159; Sept. 27.
Stein, Berthold. (See Schmidt, R. E., Stein, and Bamberger.)
Stern, Louis A., and S. Carlin, New York, N. Y. Neckwear. 1,879,957; Sept. 27.
Sternau, S., & Co. (See Smith, Arthur, assignor.)
Stevenson, Charles E. (See Jaeger, A. O., Daniels, West, and Stevenson.)
Stewart, Carlton D., Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Motor vehicle device. 1,879,719; Sept. 27.
Stinson, Edward A., Northville, Mich., assignor, by mesne assignments, to Bendix Brake Company, South Bend, Ind. Airplane control mechanism. 1,879,859; Sept. 27.
Stoeltzlen, Leo V., assignor to Reed Manufacturing Company, Erie Pa. Die stock. 1,879,578; Sept. 27.
Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Forming boxes and the like. 1,879,830; Sept. 27.
Stokes and Smith Company. (See Stokes, John S., assignor.)
Stolfa, Hermann, and R. Zwerina, Vienna, Austria, assignors of one-sixth to K. Pohl, and one-sixth to G. I. Jahr, New York, N. Y. Rocket. 1,879,579; Sept. 27.
Stoner, Abraham D., New Windsor, Md. Rabbit hutch. 1,879,580; Sept. 27.
Stougaard, Roy A., assignor to Packard Motor Car Company, Detroit, Mich. Exhaust gas conveyer. 1,879,581; Sept. 27.
Stouges, Anthony J., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Slug casting machine. 1,880,160; Sept. 27.
Stout, Minor W., Kansas City, Mo. Fluid mixing device. 1,879,582; Sept. 27.
Stowell, Austin L., assignor to The Stanley Works, New Britain, Conn. Three way bending iron. 1,879,583; Sept. 27.
Strachan, Thomas H., and W. H. Fryer, assignors to Dayton Scale Company, Dayton, Ohio. Weight rack for scales. 1,879,585; Sept. 27.
Stratton, Richard H., Berkeley, Calif., assignor to Atlas Powder Company, Wilmington, Del. Explosive composition. 1,880,116; Sept. 27.
Straub, Fritz, Basel, and H. Schneider, Riehen, near Basel, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Chromium compounds of ortho-hydroxy-azo-dyestuffs and making same. 1,879,997; Sept. 27.
Struckmeyer, Frank P. J., San Francisco, Calif. Window construction. 1,879,586; Sept. 27.
Struthers, Harry R. (See Schiefferle, Charles J., assignor.)
Stubblefield, Buford M. (See Heist, C. H., and Stubblefield.)
Sun Oil Company. (See Pew, Arthur E., jr., assignor.)
Sunkenberg, Edward W., Checlcroft-Hohokus, N. J., and B. Kahn, New York, N. Y.; said Kahn assignor to said Sunkenberg. Time register and recording device. 1,879,641; Sept. 27.
Sussin, Victor. (See Lovell, McD., and Sussin.)
Swain, Harry P., Concord, N. H. Level and plumb indicator. 1,879,587; Sept. 27.
Swanson, Albert. (See Reamy, D. H., and Swanson.)
Swanson, Ernest, Springfield, Mass. Hedge trimming shears. 1,879,860; Sept. 27.
Swart, Leland K., Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company. Electrical protective system. 1,879,773; Sept. 27.
Sweet, Andrew T. (See Foley, F. W., and Sweet.)
Sylvester, Julius, assignor to Simplex Engineering Company, Washington, Pa. Sheet glass forming and annealing method and apparatus. 1,879,998; Sept. 27.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Corn picking machine. 1,879,588; Sept. 27.
Tabulating Machine Company, The. (See Schaaff, John T., assignor.)
Tama, Cyrano, Berlin-Schoneberg, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Composition for smelting hearths. 1,879,589; Sept. 27.
Tar & Petroleum Process Company. (See Knowles, Alexander S., assignor.)
Tarrence, Harold P., and Charles Howell, Bloomfield, Iowa. Vending machine for bottle pop, beer, and the like. 1,879,590; Sept. 27.
Tasker, Maurice B., Danvers, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Circuit interrupter. 1,879,958; Sept. 27.
Taylor, Harry, et al. (See Krause, Paul, assignor.)
Taylor, Henry, and W. Gibson, Newcastle-on-Tyne, assignors to J. H. Holmes & Company Limited, Hebburn-on-Tyne, England. Web tensioning and controlling mechanism for printing machines and the like. 1,879,591; Sept. 27.
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Knabner, A., and Richter, assignors.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Temple, Robert M., Philadelphia, Pa. Supporting means for agitator mechanism. 1,879,774; Sept. 27.
Texas Company, The. (See Harrigan, William, assignor.)
Textile-Finishing Machinery Company, The. (See Kane, Thomas E., assignor.)
Textile-Finishing Machinery Company, The. (See Rusden, Ethelbert A., assignor.)
Thayer, James H. (See Wilson, H., and Thayer.)
Thoen, Lowell H., Stockton, assignor to Caterpillar Tractor Co., San Leandro, Calif. Harvester pick-up. 1,879,959; Sept. 27.
Thoen, Lowell H., assignor to Caterpillar Tractor Co., San Leandro, Calif. Combined harvester-thresher 1,879,960; Sept. 27.
Thomas & Betts Co., The. (See Church, Lewis H., assignor.)
Thomas, Frank B., Forest Hills, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,879,642; Sept. 27.
Thomas, Frank R. (See Salmon, R. D., and Thomas.)
Thomas, Guyer D., Yakima, Wash. Distance-indicator for vehicles. 1,879,592; Sept. 27.
Thomas, Mable M., executrix. (See Thomas, Thomas H.)
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Quick release device. 1,879,643; Sept. 27.
Thomas, Thomas H., deceased, by M. M. Thomas, executrix, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Signal and brake system. 1,879,644; Sept. 27.
Thomas, Thomas H., deceased, by M. M. Thomas, executrix, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,879,645; Sept. 27.
Thomas, Thomas H., deceased, by M. M. Thomas, executrix, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,879,646; Sept. 27.
Thompsett, Harry A., Ealing, London, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Talking machine. 1,879,593; Sept. 27.
Thompson, Alfred H., Los Angeles, Calif. Burner. 1,879,832; Sept. 27.
Thompson, Benjamin H., Ardara, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Reversing valve for fluid compressors. 1,879,647; Sept. 27.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,879,901; Sept. 27.
Thomson, George M. (See Robinson, L. V., and Thomson.)
Thornschein, Isidor. (See Schafran, Isaac, assignor.)
Thornton, John E., St. Brelade, Jersey, Channel Islands, assignor to J. O. O'Brien, Manchester, England. Production of cinematograph film positives. 1,879,775; Sept. 27.
Threlkeld, Clarence D., Bellingham, Wash. Steam compress heater. 1,879,831; Sept. 27.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,880,029; Sept. 27.
Tillyer, Edgar D., and C. H. Pond, assignors to American Optical Company, Southbridge, Mass. Eye testing device. 1,879,833; Sept. 27.
Tillyer, Edgar D., and N. M. Baker, assignors to American Optical Company, Southbridge, Mass. Eye testing device. 1,880,028; Sept. 27.
Tobin, Kenneth J. (See Lute, C., and Tobin.)
Todd Dry Dock Engineering & Repair Corporation. (See Meachem, Harry, assignor.)
Toelle, Herbert E., assignor to Milwaukee Gas Specialty Co., Milwaukee, Wis. Gas range. 1,879,776; Sept. 27.
Tompkins, Emerson H. (See Fenton, P. E., and Tompkins.)
Torrance, Henry, New York, N. Y., assignor to The Carbondale Machine Co., Carbondale, Pa. Apparatus for freezing comestibles. 1,880,117; Sept. 27.
Trempe, William J., North Billerica, Mass. Automatic wire screen guide for paper making machines. 1,879,962; Sept. 27.

Trey, Serge, College Point, N. Y. Aeroplane wing. 1,879,594; Sept. 27.
Tropic-Aire, Incorporated. (See Butterfield, Vernon J., assignor.)
Tropic-Aire, Incorporated. (See Fink, Henry W., assignor.)
Tropic-Aire, Incorporated. (See Nilson, Leonard D., assignor.)
Truscon Steel Company. (See Briody, Bernard, assignor.)
Truscon Steel Company. (See Kahn, Julius, assignor.)
Truscon Steel Company. (See Schaffert, Adolf H., assignor.)
Truscon Steel Company. (See Wallen, Arthur C., assignor.)
Truscon Steel Company. (See White, H. E., and Schulz, assignors.)
Tucker, Spencer J., Jamaica, assignor to Edwd. F. Caldwell & Co. Inc., New York, N. Y. Lighting fixture. Des. 87,857; Sept. 27.
Tully, Albert V., Newark-on-Trent, England. Apparatus for the manufacture of enriched water gas and coal gas. 1,880,161; Sept. 27.
Tully, Sydney J. B., and O. E. Yeo, Newark-on-Trent, England. Apparatus for making mixed water gas and coal gas. 1,880,162; Sept. 27.
Turner, John Y., Los Angeles, Calif. Shock absorbing seat support. 1,880,181; Sept. 27.
Twin Coach Company. (See Fageol, Frank R., assignor.)
Tyler, William C., assignor to W. E. Pratt Mfg. Co., Joliet, Ill. Screw jack. 1,879,999; Sept. 27.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Uni-Lec-Tric Burner Corporation. (See Appel, Oscar, assignor.)
Union Carbide and Carbon Research Laboratories, Inc. (See Mott, C., and Spencer, assignors.)
Union Chimique Belge, Societe Anonyme. (See Guillissen, Joseph, assignor.)
Union Hardware Company. (See Deering, William, assignor.)
Union Switch & Signal Company, The. (See Bell, Charles W., assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Donovan, N. L., and Lake, assignors.)
Union Switch & Signal Company, The. (See Edmonds, Courtenay H. W., assignor.)
Union Switch & Signal Company, The. (See Miskelly, Samuel, assignor.)
Union Switch & Signal Company, The. (See Peter, L. H., and Pearce, assignors.)
United Kingdom Optical Company, et al. (See Silverman, Jack R., assignor.)
United States Gypsum Co. (See Ericson, Richard, assignor.)
United States Metallic Packing Company, The. (See Light, R. A., and Price, assignors.)
U. S. Ring Traveler Company. (See Gilligan, George H., assignor.)
United States Union Corporation. (See Smith, S. N., and Bemies, assignors.)
Universal Dental Company. (See Charen, Myer, assignor.)
Universal Draft Gear Attachment Co. (See Camp, Percy B., assignor.)
Universal Gear Shift Corporation. (See Barnes, William B., assignor.)
Univis Corporation, The, et al. (See Silverman, Jack R., assignor.)
V. D. Limited. (See Vigneron, Jean B. J. A., assignor.)
Vacher, John, assignor to The American Mills Company, Waterbury, Conn. Covering device for elastic strands, wire, and the like. 1,879,963; Sept. 27.
Valle, Albert J., Los Angeles, Calif. Composition for treating trees and other vegetation. 1,879,777; Sept. 27.
Valley, John L. (See Parsons, Lillian B., assignor.)
Valley Mould & Iron Corporation. (See Ramage, William H., assignor.)
Vallone, Charles, Buffalo, N. Y. End frame for swings or similar article. Des. 87,859; Sept. 27.
Vallone, Joseph M., Buffalo, N. Y. End frame for swings or similar article. Des. 87,858; Sept. 27.
Van Dusen, Walter M. (See Noelting, W. H., and Van Dusen.)
Van Hoofstadt, Edward. (See Shmyroff, A., Dill, and Van Hoofstadt.)
Van Hooydonk, Adrian C., assignor to John E. Smith's Sons Company, Buffalo, N. Y. Sausage stuffer. 1,880,182; Sept. 27.
Van Horn, Junius B. (See Mendenhall, E., and Van Horn.)
Van Horn, William H. (See Kemp, W. W., and Van Horn.)
Vannah, Harold P., West Palm Beach, Fla., assignor to Brown Company, Berlin, N. H. Treating soils. 1,880,058; Sept. 27.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,879,778; Sept. 27.
Victor Manufacturing & Gasket Company. (See Heinze, W. A., and Liston, assignors.)
Victor Pharmacal Company. (See Kline, Elmer V., assignor.)
Vigneron, Jean B. J. A., La Rochelle, France, assignor to V. D. Limited, London, England. Towing device for trawl nets. 1,880,059; Sept. 27.
Viken, Nils J. (See Butterworth, A., and Viken.)
Villochi, John A., Easton, Pa. Dispensing container. 1,880,163; Sept. 27.
Vokovan, Rudolph Z. (See Delich, Peter, assignor.)
Von Reis, Lambert, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicherony Company. Method and device for conveying glass plates and other articles. 1,879,720; Sept. 27.
Voorhees, Lee J., Long Island City, N. Y., assignor to National Carbon Company, Inc. Battery box. 1,879,595; Sept. 27.
Waggaman, William H. (See Gooch, S. D., and Waggaman.)
Walker, George H., assignor to Heenan & Froude Limited, Worcester, England. Apparatus for testing the brakes of vehicles. 1,879,721; Sept. 27.
Wallen, Arthur C., Bronxville, N. Y., assignor to Truscon Steel Company, Youngstown, Ohio. Making poles. 1,880,000; Sept. 27.
Walten, Alfred L., Blackpool, England. Needle for sound reproducing instruments. 1,879,722; Sept. 27.
Walters, William T. (See Linfert, W., and Walters.)
Wanamaker, George L., Ambridge, Pa., assignor to National Electric Products Corporation, New York, N. Y. Deep sea telephone, life line, and diving cable. 1,880,060; Sept. 27.
Waring, Guy H. (See Waring, William G., and G. H.)
Waring, William G., Webb City, and G. H. Waring, Oronogo, Mo. Refining zinciferous material. 1,879,834; Sept. 27.
Warner, Arthur P., Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Electromagnetic friction device. 1,880,061; Sept. 27.
Warner Bros. Pictures, Inc., et al. (See del Riccio, Lorenzo, assignor.)
Warner, Charles L., Milford, assignor to Baird-Warner, Incorporated, Bridgeport, Conn. Oil burner. 1,879,596; Sept. 27.
Warner Electric Brake Corporation. (See Warner, Arthur P., assignor.)
Waugh Equipment Company. (See O'Brien, Richard J., assignor.)
Wear, Orville F. (See Bounds, Benjamin F., assignor.)
Weber, Harry M. (See Richards, T. K., and Weber.)
Weinstein, Otto, assignor to Standard Neckwear Company, Boston, Mass. Double faced necktie and preparing the same. 1,880,001; Sept. 27.
West, Herbert J. (See Jaeger, A. O., Daniels, West, and Stevenson.)
Westco Paump Corporation. (See Ferguson, Gale L., assignor.)
Westinghouse Air Brake Company, The. (See Cook, Earle S., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, C. C., and Hewitt, assignors.)
Westinghouse Air Brake Company, The. (See Farmer, C. C., and McCune, assignors.)
Westinghouse Air Brake Company, The. (See Fitch, Ellery R., assignor.)
Westinghouse Air Brake Company, The. (See Good, John N., assignor.)
Westinghouse Air Brake Company, The. (See Livingston, Fremont P., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Stewart, Carlton D., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Frank B., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Thompson, Benjamin H., assignor.)
Westinghouse Air Brake Company, The. (See Whitaker, Uncas A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Gast, Herbert, assignor.)
Weston Electrical Instrument Corporation. (See Lederer, Karl M., assignor.)
Wheaton, Harold J. (See Hilditch, T. P., and Wheaton.)
Wheeler, Harold A., Jackson Heights, N. Y., assignor to Hazeltine Corporation. Volume control. 1,879,861; Sept. 27.
Wheeler, Harold A., Jackson Heights, N. Y., assignor to Hazeltine Corporation. Volume control. 1,879,862; Sept. 27.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Volume control. 1,879,863; Sept. 27.
Wheeling Steel Corporation. (See Ewing, Wylie B., assignor.)
Whitaker, Alfred. (See Eccles, W. H., and Whitaker.)
Whitaker, Uncas A., Canton, Ohio, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Graduated release valve. 1,879,648; Sept. 27.
White, Herbert E., Cleveland, and W. F. Schulz, assignors to Truscon Steel Company, Youngstown, Ohio. Drawing roll mechanism. 1,880,002; Sept. 27.
White, Herbert E., and W. F. Schulz, Cleveland, assignors to Truscon Steel Company, Youngstown, Ohio. Making metal structures 1,880,003; Sept. 27.

Whitehouse, John R., assignor to Hickok Manufacturing Co., Inc., Rochester, N. Y. Machine for sewing belts, suspenders, garters, and the like. 1,880,164; Sept. 27.
Whitlock Coil Pipe Company, The. (See Parent, Emile J., assignor.)
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Postal machine. 1,879,964; Sept. 27.
Whitlock, Ralph G., Los Angeles, Calif. Handling metered permit mail. 1,879,965; Sept. 27.
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Postal machine. 1,879,966; Sept. 27.
Whitlock, Ralph G., Patents Inc. (See Whitlock, Ralph G., assignor.)
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Hand operated postal machine. 1,879,967; Sept. 27.
Whittaker, Harry. (See Mutschler, H. G., and Whittaker.)
Wiedemann, Karl. (See Hilger, J., and Wiedemann.)
Wight, Edward Hyatt. (See Ober, B., and Wight.)
Wilkinson, Charles G., New York, N. Y. Flagpole and the like. 1,879,779; Sept. 27.
Wilkinson, Michael A., Owego, N. Y. Folding table. 1,879,649; Sept. 27.
Willett, Alfred H., West Englewood, N. J., assignor to American Arch Company, New York, N. Y. Siphon arch brick. 1,880,062; Sept. 27.
Williams, Joseph. (See Hughes, Kenneth, assignor.)
Wilson, Ezekiel J., East Greenbush, assignor to F. C. Huyck & Sons, Albany, N. Y. Loom. 1,880,183; Sept. 27.
Wilson, Hugh, Grand Junction, Colo., and J. H. Thayer, Salt Lake City, Utah. Lubricating device for friction bearings. 1,879,723; Sept. 27.
Wilson, Samuel A., assignor to Mechanical Development Company, Detroit, Mich. Shock absorber. 1,880,030; Sept. 27.
Winchell, Arthur B. (See Johnson, L. E., Winchell, Hardick, and Billig.)
Winding Gulf Collieries. (See Jones, Emory E., assignor.)
Wingler, August. (See Schulemann, Mietzsch, and Wingler.)
Winthrop Chemical Company. (See Günzler, H., and Moré, assignors.)
Winthrop Chemical Company. (See Hahl, Hans, assignor.)
Winthrop Chemical Company. (See Koenigs, E., and Greiner, assignors.)
Winthrop Chemical Company. (See Mietzsch, Fritz, assignor.)
Winthrop Chemical Company. (See Ripke, Otto, assignor.)
Winthrop Chemical Company. (See Schmidt, Hans, assignor.)
Winthrop Chemical Company. (See Schönhöfer, Fritz, assignor.)
Winthrop Chemical Company. (See Schranz, K., and Muller, assignors.)
Winthrop Chemical Company. (See Schulemann, W., Mietzsch, and Wingler, assignors.)
Winzeler, Henry S., assignor to Ohio Art Company, Bryan, Ohio. Memorandum calendar. 1,880,165; Sept. 27.
Winzenburg, Wilhelm, Dresden-Laubegast, assignor to Zeiss Ikon, Aktiengesellschaft Dresden, Dresden, Germany. Portable sound film box. 1,879,864; Sept. 27.
Wired Radio, Inc. (See Reifel, Harry, assignor.)
Wiss, J. & Sons Co. (See Rauh, Frederic H., assignor.)
Wollensak, Andrew, and V. C. Ernst, assignors to Full Tone Reproduction Co., Rochester, N. Y. Apparatus for reproducing sound from photographic records. 1,879,650; Sept. 27.
Wolny, Karl, assignor to the Firm Nollesche Werke Kommandit Gesellschaft, Weissenfels, On-the-Saale, Germany. Machine for the manufacture of templates. 1,879,835; Sept. 27.
Wolpert, Emil, Stuttgart, Germany. Seat. 1,879,724; Sept. 27.
Woodruff, Ben H., Meridian, Miss. Radio lead and lightning arrester. 1,880,166; Sept. 27.
Workman, Peter, jr., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel frame. Des. 87,860; Sept. 27.
Worswick, Ray C., Roswell, N. Mex. Cylinder protector. 1,880,004; Sept. 27.
Wright, Arthur, Upper Montclair, and F. W. Young, Verona, N. J. Filter cake treating device. 1,880,005; Sept. 27.
Wright, Dexter M., New York, N. Y. Collapsible music stand. 1,879,865; Sept. 27.
Yale, Rodney H., San Diego, Calif. Dam. 1,879,836; Sept. 27.
Yeo, Oliver E. (See Tully, Sydney J. B., and Yeo.)
Yoder, Carl M., et al. (See Morris, Howard I., assignor.)
Yoder, Harvey O., et al. (See Morris, Howard I., assignor.)
Young, Frank W. (See Wright, A., and Young.)
Young, Frank W., Upper Montclair, N. J. Filter cake treating device. 1,880,006; Sept. 27.
Zahm, Joseph D., and J. U. Lehn, assignors to Animal Trap Company of America, Lititz, Pa. Animal trap. 1,879,968; Sept. 27.
Zeh, Ludwig. (See Bauer, W., Haller, and Zeh.)
Zeiss, Ikon, Aktiengesellschaft Dresden. (See Winzenburg, Wilhelm, assignor.)
Zeun, Louis H., Catonsville, assignor of one-third to A. W. Adt and one-third to J. B. Adt, Baltimore, Md. Tobacco stemming and stripping machine. 1,879,651; Sept. 27.
Zimarik, John, Akron, Ohio, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Two-hand control for presses or the like. 1,880,063; Sept. 27.
Zuefle, Christian. (See Morgan, E. R., and Zuefle.)
Zwerina, Rudolf. (See Stolfa, H., and Zwerina.)
Zybach, Frank L. (See Chase, L. W., Zybach, and Brand.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 27TH DAY OF SEPTEMBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorber for refrigerators. A. Lenning. 1,879,352; Sept. 27.
Acetate, Preparing phenyl mercuric. H. Günzler and A. Moré. 1,879,206; Sept. 27.
Acid chlorides, Manufacture and production of aromatic. N. Bennett, H. Dood, and W. C. Sprent. 1,880 169; Sept. 27.
Acid esters of leuco derivatives of indigoid vat dyestuffs, New water soluble sulphuric. W. Bauer, J. Haller, and L. Zeh. 1,879,028; Sept. 27.
Acid, Hydroxycarbazole-sulphonic. W. Neelmeier and O. Goll. 1,879,425; Sept. 27.
Acids and their esters, Manufacture of aliphatic. H. Dreyfus. 1,879,605–6; Sept. 27.
Acids, Arylsulphamino-alpha-napthol sulphonic. C. Dobmaier. 1,879,132; Sept. 27.
Acids, Preparing quinizaring sulphonic. H. Mildner. 1,879,390; Sept. 27.
Acoustic device. H. Benecke. 1,879,042; Sept. 27.
Adapter for valves. A. F. H. Kohler and A. C. Kautz. 1,880,177; Sept. 27.
Advertising display. H. V. Marsh. 1,880,099; Sept. 27.
Aeroplane wheel. M. N. Fairbank. 1,880,079; Sept. 27.
Aeroplane wing. S. Trey. 1,879,594; Sept. 27.
Aeroplane wing device. A. C. Peterson. 1,879,821; Sept. 27.
Aeroplane wing with guide blades. G. Lachmann. 1,879,338; Sept. 27.
Air and gas mixing device. W. W. Kemp and W. H. Van Horn. 1,880,141; Sept. 27.
Air conditioner. C. L. Dorland. 1,879,133; Sept. 27.
Aircraft. E. Koch. 1,879,323; Sept. 27.
Aircraft. I. Schafran. 1,879,857; Sept. 27.
Aircraft, Amphibian. I. Sikorsky. 1,879,716; Sept. 27.
Aircraft, Apparatus for launching. A. Richards. 1,879,765; Sept. 27.
Aircraft construction. G. Bettle. 1,879,046; Sept. 27.
Aircraft, Pneumatically operated and controlled. I. Sikorsky. 1,879,717; Sept. 27.
Air heater, Electric. E. W. Ballentine. 1,879,889; Sept. 27.
Air or gas washer. D. H. Couch. 1,879,107; Sept. 27.
Airplane. C. B. Harper. 1,880,019; Sept. 27.
Airplane construction. G. M. Bellanca. 1,879,039; Sept. 27.
Airplane control mechanism. E. A. Stinson. 1,879,859; Sept. 27.
Alarm. J. K. Grondahl. 1,879,202; Sept. 27.
Alcohol, Production of water free ethyl. A. Gorhan. 1,879,847; Sept. 27.
Alkaline filler, Production of improved. H. R. Rafton. 1,879,483; Sept. 27.
Alkaline solutions, particularly waste liquors from the soda or sulphate pulp manufacture, of silica, Relieving. E. L. Rinman. 1,879,503; Sept. 27.
Alkyl naphthalenes and preparing same. A. Schmidt, O. Ernst, and H. Lange. 1,879,912; Sept. 27.
a-naphthol, Manufacture of. E. Lange. 1,879,337; Sept. 27.
Aluminum-silicon alloy. B. T. Horsfield, L. W. Kempf, and W. L. Fink. 1,879,748; Sept. 27.
Amusement device. E. R. Hume. 1,880,139; Sept. 27.
Amusement machine cabinet. C. R. Kirk. Des. 87,840; Sept. 27.
Anchor for sleeping car berths, Mattress. J. F. Gall. 1,879,170; Sept. 27.
Anchor plate. E. W. Pelton. 1,879,459; Sept. 27.
Animal bath, Portable. D. E. Smoot. 1,879,915; Sept. 27.
Animal feeding device. H. W. Kulp. 1,879,332; Sept. 27.
Animal trap. J. U. Lehn and M. A. Huebener. 1,879,930; Sept. 27.
Animal trap. J. D. Zahm and J. U. Lehn. 1,879,968; Sept. 27.
Anthracene and other substances, Purifying. F. E. Cislak. 1,879,090; Sept. 27.
Anti-halation layers for photographic material. W. Schneider. 1,879,537; Sept. 27.
Anti-rattler for windows. E. A. Carter. 1,880,173; Sept. 27.
Antiskid device. H. St. Pierre. 1,879,584; Sept. 27.
Article made of wire and making the same. R. C. Pierce. 1,879,466; Sept. 27.
Articles and material therefor, Impregnating fibrous. M. O. Schur. 1,880,050; Sept. 27.
Articles, Forming tubular. C. Carlsen. 1,879,078; Sept. 27.
Articles from gases and vapors, Apparatus for removing suspended. R. R. Harmon. 1,880,017; Sept. 27.
Articles, Making tubular. J. Ledwinka. 1,880,095; Sept. 27.

Articles, Manufacturing porous refractory. I. Setterberg. 1,880,157; Sept. 27.
Ash receiver. E. Schroedter. 1,879,858; Sept. 27.
Atomizer, Self-cleaning. A. J. Loepsinger. 1,879,363; Sept. 27.
Attaching machine. P. E. Fenton and E. H. Tompkins. 1,879,895; Sept. 27.
Automobile direction signal. F. M. Bray. 1,879,057; Sept. 27.
Azodyestuffs, New. M. Hardtmann. 1,879,223; Sept. 27.
Bag: *See*—
Clothing bag.
Bakers' material, Process and apparatus for expressing. O. Kremmling. 1,879,327; Sept. 27.
Ball mill. E. L. Punnett. 1,879,479; Sept. 27.
Ballooning of the yarn in flyer spinning and like frames, Means for preventing. H. A. Boyd. 1,879,054; Sept. 27.
Bandeau. C. Lipper. 1,879,362; Sept. 27.
Bank, Savings. N. D. Howard. 1,879,260; Sept. 27.
Bar: *See*—
Cutter bar.
Bar material for ophthalmic mountings. S. E. Bouchard. Des. 87,825; Sept. 27.
Barometer and temperature correcting means and constant volume governor. R. G. Standerwick. 1,879,575; Sept. 27.
Base-exchanging compounds, Manufacture and production of. T. P. Hilditch and H. J. Wheaton. 1,879,239; Sept. 27.
Basket liner. F. A. Read, jr. 1,879,950; Sept. 27.
Bath: *See*—
Animal bath.
Battery and generator testing apparatus for motor vehicles. J. C. Schaf, jr. 1,879,530; Sept. 27.
Battery box. H. W. Jones. 1,879,623; Sept. 27.
Battery box. L. J. Voorhees. 1,879,595; Sept. 27.
Battery holder for mine lamps. J. Piovarchy. 1,879,469; Sept. 27.
Battery separators, Manufacturing storage. E. W. Smith. 1,879,562; Sept. 27.
Battery terminal puller. I. E. Coffey. 1,879,099; Sept. 27.
Bearing. N. O. Lindstrom. 1,879,357; Sept. 27.
Bearing structure having unbalanced lubrication. E. Mendenhall and J. B. Van Horn. 1,879,627; Sept. 27.
Bearing surface. C. S. Klumpp and R. R. Potter. 1,879,754; Sept. 27.
Bearings, Lubricating. G. C. Bown and Edward J. McCarthy. 1,879,839; Sept. 27.
Bedspring. J. F. Gall. 1,879,172; Sept. 27.
Beet harvesting machine. T. Dugan. 1,879,137; Sept. 27.
Bellows tubing, Apparatus for production of. W. B. Clifford. 1,880,184; Sept. 27.
Bench. H. F. Gleim. 1,879,185; Sept. 27.
Bends from straight fiber tubes, Manufacture of. M. O. Schur and J. G. Gosselink. 1,880,053; Sept. 27.
Bill fold. P. A. Gardner. Des. 87,837–8; Sept. 27.
Bit: *See*—
Cutter bit.
Blade for road scrapers. C. H. Brown and P. Frazier. 1,879,062; Sept. 27.
Block: *See*—
Chock block.
Blower. H. Meachem. 1,880,101; Sept. 27.
Blower for heating plants. S. Lauter. 1,879,342; Sept. 27.
Board: *See*—
Game board. Steaming board.
Mortar board.
Board and foot rest, Adjustable floor. S. L. Myatt. 1,879,418; Sept. 27.
Board machine. C. L. Ellis. 1,879,143; Sept. 27.
Board, Method of and apparatus for making wall. L. V. Robinson and G. M. Thomson. 1,880,188; Sept. 27.
Boat construction. J. W. Harvey. 1,879,681; Sept. 27.
Boat structure, Amphibian. I. Sikorsky. 1,879,715; Sept. 27.
Boiler casing. I. Harter. 1,879,610; Sept. 27.
Bolster cushion, Truck center. R. J. O'Brien. 1,879,437; Sept. 27.
Bolt remover, Perch. H. W. Kulp and M. C. Dellinger. 1,879,334; Sept. 27.
Bookbinding machine. R. P. Kusch. 1,879,757; Sept. 27.
Book, Manifolding check. A. R. Lawson. 1,879,347; Sept. 27.
Bottle. W. J. Popp. Des. 87,853; Sept. 27.
Bottle. J. J. Quinn. Des. 87,854; Sept. 27.
Bottle cap. H. Spengler. 1,879,640; Sept. 27.

Bottle or similar article. E. W. Fuerst. Des. 87,834; Sept. 27.
Bottle washing machine. W. Simonsson. 1,879,770; Sept. 27.
Bowl and supporting the same, Watering. R. H. Brown. 1,879,788; Sept. 27.
Bowl for heaters, Heat reflecting and conducting. W. S. Bremer. 1,879,970; Sept. 27.
Box: *See*—
Battery box. Sound film box.
Color box. Stuffing box.
Rural mail box.
Box connecter. L. H. Church. 1,879,920; Sept. 27.
Box for dry cells, Shipping and display. P. Corigliano. 1,879,105; Sept. 27.
Boxes and the like, Forming. J. S. Stokes. 1,879,830; Sept. 27.
Bracket for railway car hand brakes, Attaching. R. W. Burnett. 1,879,976; Sept. 27.
Brake: *See*—
Electropneumatic brake. Hydroservo brake.
Fluid pressure brake. Safety brake.
Hand brake. Vacuum brake.
Brake beam safety iron. F. Izzo. 1,879,277; Sept. 27.
Brake cylinder. C. C. Farmer and J. C. McCune. 1,879,607; Sept. 27.
Brake disk. J. W. Heiney. 1,879,744; Sept. 27.
Brake for baby carriages and the like. J. A. Mahr. 1,879,759; Sept. 27.
Brake for drop end gondolas, Hand. R. W. Burnett. 1,879,975; Sept. 27.
Brake for obtaining a variable braking effect, Compressed air. A. and E. A. Anderberg. 1,879,993; Sept. 27.
Brake holding and releasing means, Hand. R. W. Burnett. 1 879,977; Sept. 27.
Brake structure. R. J. Norton. 1,879,434; Sept. 27.
Brakes of vehicles, Apparatus for testing the. G. H. Walker. 1,879,721; Sept. 27.
Brick, Siphon arch. A. H. Willett. 1,880,062; Sept. 27.
Briquette press. E. E. Jones. 1,879,293; Sept. 27.
Briquetting press. W. Lindemann. 1,879,350; Sept. 27.
Brush and holding bristles in same. J. F. Connor. 1,879,103; Sept. 27.
Brush construction. J. R. Silva and A. Krahmer. 1,879,552; Sept. 27.
Brush, Shaving. J. R. Silva and A. Krahmer. 1,879,553; Sept. 27.
Bucket lip. J. W. Page. 1,879,447; Sept. 27.
Buckle. J. B. Freysinger. Des. 87,833; Sept. 27.
Buffing and abrasive device. B. A. Casper. 1,879,083; Sept. 27.
Buffing machine. A. S. Johnson and H. W. Neunherz. 1,879,286; Sept. 27.
Buffing or polishing machine, Shoe last. W. G. Cousins. 1,879,108; Sept. 27.
Building structure. R. E. M. Pierrès. 1,879,467; Sept. 27.
Building structure. F. M. Venzie. 1,879,778; Sept. 27.
Bun splitter. F. J. Ehrlich. 1,879,796; Sept. 27.
Burial casket. J. E. Falck. Des. 87,828; Sept. 27.
Burner: *See*—
Fuel burner. Oil burner.
Gas burner.
Burner. L. C. Kuehner. 1,879,329; Sept. 27.
Burner. A. H. Thompson. 1,879,832; Sept. 27.
Bushing remover. H. W. Kulp and M. C. Dellinger. 1,879,333; Sept. 27.
Bushing, Steering column. C. W. Johnson. 1,879,287; Sept. 27.
Button, Permanently attached collar. J. Sansone. 1,879,527; Sept. 27.
By-products of iron and steel plants, Utilizing certain. H. McComb. 1,879,373; Sept. 27.
Cabinet, Shower bath. J. O. Barce. 1,879,782; Sept. 27.
Cabinet, Vending machine. W. H. Rowe. 1,879,884; Sept. 27.
Cable and take-up fitting. E. H. Cole. 1,879,636; Sept. 27.
Calcium complex salts. H. Schmidt. 1,879,533; Sept. 27.
Calculator. T. Narahara. 1,880,148; Sept. 27.
Calendar, Memorandum. H. S. Winzeler. 1,880,165; Sept. 27.
Calendar, Perpetual. W. C. Maloz. 1,879,380; Sept. 27.
Calendering machine. T. E. Kane. 1,879,296; Sept. 27.
Camera, Combined moving picture and sound. E. I. Sponable. 1,879,573; Sept. 27.
Camera with convex mirror. M. Pinkosh. 1,879,940; Sept. 27.
Can: *See*—
Sheet metal can.
Candle holder machine and process. R. S. Allyn. 1,880,118; Sept. 27.
Cant hook for barrels. O. H. Schlebecker. 1,879,532; Sept. 27.
Cap for automobile gasoline tanks, Locking. W. Linfert and W. T. Walters. 1,879,359; Sept. 27.
Car, Articulated. A. W. Clarke. 1,879,093; Sept. 27.
Car chair. A. B. Bell. 1,879,037; Sept. 27.
Car equipment, Safety. E. R. Fitch. 1,879,674; Sept. 27.
Car equipment, Safety. T. H. Thomas. 1,879,645; Sept. 27.
Car seat. W. J. Mayer. 1,879,853; Sept. 27.
Carburetor. L. D. Boyce. 1,879,053; Sept. 27.
Carburetor. H. Schneebeli. 1,879,536; Sept. 27.

Card controlled machine, Perforated. J. T. Schaaff. 1,879,529; Sept. 27.
Card novelty. G. Anderton. 1,879,007; Sept. 27.
Card, Sample color. S. E. Bender. 1,879,041; Sept. 27.
Card, Show. V. Guinzburg. 1,880,088; Sept. 27.
Carriage, Folding baby. K. M. Baerulfsen. 1,880,167; Sept. 27.
Carrier. L. W. Hassensall. 1,880,133; Sept. 27.
Carrier for road vehicles, Spare tire. D. S. Kennedy and I. T. Kempe. 1,879,304; Sept. 27.
Carrier or means for preparing tuft yarns for a loom. F. Ferrara. 1,879,672; Sept. 27.
Carton, Egg. J. L. Coyle. 1,880,074; Sept. 27.
Carton, Liquid proof. W. E. J. Crossby. 1,879,113; Sept. 27.
Carton, Pencil display. G. Baumgard. 1,879,029; Sept. 27.
Cartridge. G. H. Jacobs. 1,879,278; Sept. 27.
Case: *See*—
Lipstick case. Vanity case.
Cassette for X-ray work. T. K. Richards and H. M. Weber. 1,879,498; Sept. 27.
Caster, Adjustable. C. R. Nalle. 1,879,421; Sept. 27.
Casters, Adjustable adapter for. W. H. Noelting and W. M. Van Dusen. 1,879,429; Sept. 27.
Catalytic gel and making same. E. H. Barclay. 1,879,022; Sept. 27.
Cellulose acetate, Manufacture of. H. L. Barthélemy. 1,880,007; Sept. 27.
Cellulose fiber and product thereof, Conditioning. M. O. Schur, R. H. Rasch, and B. G. Hoos. 1,880,051; Sept. 27.
Cellulose fiber, Processing of. G. A. Richter. 1,880,046; Sept. 27.
Cellulose pulp adapted for nitration and making it, Shredded. M. O. Schur and B. G. Hoos. 1,880,052; Sept. 27.
Cellulosic material, Multistage process of pulping raw. G. A. Richter. 1,880,048; Sept. 27.
Cement composition and producing same. H. K. Moore. 1,880,038; Sept. 27.
Ceramic material and making same, Light-weight. R. Ericson. Re18,606; Sept. 27.
Chain, Antiskid. C. F. Biffar. 1,880,170; Sept. 27.
Chair: *See*—
Car chair. Sick-room or commode chair.
Folding arm chair.
Reclining chair.
Chair. L. Dellert. 1,879,126; Sept. 27.
Chair. M. W. Painter. Des. 87,852; Sept. 27.
Chaise longue. C. W. Fischer. 1,879,673; Sept. 27.
Checkerbrick and checkerwork construction. A. J. Boynton. 1,880,011; Sept. 27.
Checker construction. H. A. Brassert. 1,879,056; Sept. 27.
Cheese, Manufacture of soft. F. M. Frederiksen. 1,879,162; Sept. 27.
Chenille fabric. R. B. Kalbach. 1,879,691; Sept. 27.
Chock block. E. S. Evans. 1,879,917; Sept. 27.
Chopper: *See*—
Meat chopper.
Chromium compounds of ortho-hydroxy-azo-dyestuffs and making same. F. Straub and H. Schneider. 1,879,997; Sept. 27.
Chuck. R. S. Brown. 1,879,656; Sept. 27.
Chute. P. M. Burgess. 1,879,069; Sept. 27.
Cigar machine. A. Rauschlicher. 1,880,009; Sept. 27.
Cigarette. E. W. Desper. 1,879,128; Sept. 27.
Cigarettes, Device for making and carrying. W. N. Hunter. 1,879,266; Sept. 27.
Cinder spreader. W. C. Ruth. 1,880,155; Sept. 27.
Cinematographic view taking apparatus. A. L. Debrie. 1,879,844; Sept. 27.
Circuit controlling apparatus. P. N. Bossart. 1,880,033; Sept. 27.
Circuit interrupter. M. B. Tasker. 1,879,958; Sept. 27.
Circuit, Regenerative photo-electric cell. B. Kwartin. 1,880,020; Sept. 27.
Circuit, Resistance cell. C. F. Jenkins. 1,879,687; Sept. 27.
Clamp: *See*—
Clothes clamp. Suspension clamp.
Clamp. J. S. Miller. 1,879,394; Sept. 27.
Clamp for outlet and switch boxes, Ground. O. A. Frederickson. 1,880,081; Sept. 27.
Clamp for use in welding. C. C. Davis. 1,879,122; Sept. 27.
Clay tempering. A. F. C. Lotz. 1,879,367; Sept. 27.
Cleaner: *See*—
Henhouse dropping-board cleaner. Vacuum cleaner.
Cleansing composition. W. A. Scott. 1,879,953; Sept. 27.
Clock, Advertising. H. H. Jackson. 1,879,610; Sept. 27.
Clock, Electrical advertisement. F. Schneider. 1,879,913; Sept. 27.
Closing device for collar buttons. K. Kleiber. 1,879,903; Sept. 27.
Closure. L. R. N. Carvalho. 1,879,082; Sept. 27.
Closure for rigid or non-collapsible metal containers. E. Schwaller. 1,879,914; Sept. 27.
Closure operator and lock. A. H. Schaffert. 1,879,994; Sept. 27.
Closure or cap for collapsible tubes. C. P. Murdoch. 1,880,103; Sept. 27.

Closure, Valve. D. M. Gunn. 1,879,205; Sept. 27.
Clothes clamp. J. E. Gottschall. 1,879,192; Sept. 27.
Clothes washing device. C. W. Ball. 1,879,018; Sept. 27.
Clothing bag. V. S. Poulson. 1,879,476; Sept. 27.
Clutch. F. O. Snow, jr. 1,879,569; Sept. 27.
Coating and applying same to nickel, nickel alloys, and chromium-iron alloys, Protective. A. J. Marino. 1,879,701; Sept. 27.
Coating apparatus. E. P. Arpin, jr. 1,880,065; Sept. 27.
Coating, Apparatus for. W. J. Eisner. 1,880,078; Sept. 27.
Cock, Plug. H. Samms. 1,879,526; Sept. 27.
Coin or check control device. J. O. Morgan. 1,879,408; Sept. 27.
Collar stiffener and reenforcing means. J. W. Steele. 1,879,918; Sept. 27.
Colonic tube. C. C. Honsaker. 1,879,249; Sept. 27.
Color box. J. Singerman. 1,880,026; Sept. 27.
Combination furnace. F. E. Grunwaldt. 1,879,032; Sept. 27.
Combined floor scrubbing, brushing, polishing, and abrading machine. H. L. Myers. Des. 87,851; Sept. 27.
Combined valve control handle and indexing dial. W. P. Ferguson. Des. 87,830; Sept. 27.
Combustibles into liquid fuel, Conversion of solid. A. Joseph. 1,879,750; Sept. 27.
Comestibles, Apparatus for freezing. H. Torrance. 1,880,117; Sept. 27.
Compact. R. F. Morenus. 1,879,407; Sept. 27.
Composition for smelting hearths. C. Tama. 1,879,589; Sept. 27.
Composition for treating trees and other vegetation. A. J. Valle. 1,879,777; Sept. 27.
Composition of matter. W. H. Rowley. 1,879,639; Sept. 27.
Composition of matter, Producing. W. H. Rowley. 1,879,638; Sept. 27.
Compound of quinolines and barbituric acids and producing same, Addition. F. Mietzsch. 1,879,389; Sept. 27.
Compounds of the acridine series, Double. K. Schranz and H.-P. Muller. 1,879,539; Sept. 27.
Compounds of the diazine series. W. Schulemann, F. Mietzsch and A. Wingler. 1,879,540; Sept. 27.
Compounds of the oxazine series. W. Schulemann, F. Mietzsch, and A. Wingler. 1,879,541; Sept. 27.
Compressor cylinder. R. C. McAllister. 1,879,370; Sept. 27.
Computing machine. G. O. Degener and J. C. Hochman. 1,879,125; Sept. 27.
Concrete header blocks, Manufacturing. T. W. Caswell and G. A. Kelly. 1,879,841; Sept. 27.
Concrete structure. W. Kleitz. 1,879,819; Sept. 27.
Conductor and switch gear, Inclosed electric. C. D. Ainsworth. 1,878,999; Sept. 27.
Conduit, Dredge discharge. C. H. Colton. 1,880,073; Sept. 27.
Conduit, Electric wire. R. C. Schemmel. 1,880,156; Sept. 27.
Connecter, Automatic train pipe. M. A. Barber. 1,879,021; Sept. 27.
Connecter fitting for conduits and the like, Swivel. J. E. Mair. 1,880,098; Sept. 27.
Connecting rod. E. R. Morgan and C. Znefle. 1,879,814; Sept. 27.
Connection for electric lamp sockets, Terminal. I. H. Shalomith. 1,879,768; Sept. 27.
Container, Dispensing. J. A. Villechi. 1,880,163; Sept. 27.
Container filling machine. R. N. Cundall. 1,879,794; Sept. 27.
Container, Flexible sharp freezing. L. G. Copeman. 1,879,602; Sept. 27.
Container for adhesive plaster and the like. E. H. Kneen. 1,879,755; Sept. 27.
Container, Refrigerated. J. W. Hill. 1,879,241; Sept. 27.
Container washing machine. J. Hauk. 1,879,224; Sept. 27.
Containers, Closure for. A. M. Monarch. 1,880,022; Sept. 27.
Control for motor cars, Foot. H. J. Reis. 1,880,152; Sept. 27.
Control for presses or the like, Two-hand. J. Zimarik. 1,880,063; Sept. 27.
Control of feeding mechanism in tool machines, Automatic. A. V. Mershon. 1,879,388; Sept. 27.
Control panel, Supervisory. O. Plechl and J. Latzko. 1,879,707; Sept. 27.
Controlling light. W. H. Eccles and A. Whitaker. 1,879,138; Sept. 27.
Controlling means for heating systems, Automatic. J. J. Mundorf. 1,879,706; Sept. 27.
Conveyer. Exhaust gas. R. A. Stougaard. 1,879,581; Sept. 27.
Conveyer system. W. E. Massicotte. 1,879,384; Sept. 27.
Conveying mechanism. W. J. O'Neill. 1,879,819; Sept. 27.
Cooking or frying, Apparatus for. A. Hainlen. 1,879,212; Sept. 27.
Cooling and heating system. J. Jaczko. 1,879,685; Sept. 27.
Cooling jacket for machine gun barrels. R. C. Coupland. 1,879,603; Sept. 27.
Corn picking machine. H. Synck. 1,879,588; Sept. 27.
Cotton fiber rolling device. H. P. Chaney. 1,879,084; Sept. 27.
Coupler, Train line. W. H. Hidlebaugh. 1,879,238; Sept. 27.
Coupling: *See*—
Pressure coupling. Shaft coupling.
Coupling. L. L. Lomer. 1,879,364; Sept. 27.
Couplings, Making pipe. S. N. Smith and J. F. Bemies. 1,880,115; Sept. 27.
Cover. Automatic locking. C. W. Heath. 1,880,135; Sept. 27.
Cover glass lens for headlights. G. A. M. Lamblin-Parent. Des. 87,842–3; Sept. 27.
Cover, Protective. N. I. Fleischer. 1,879,739; Sept. 27.
Covering device for elastic strands, wire, and the like. J. Vacher. 1,879,963; Sept. 27.
Craft, Dirigible air sailing. A. H. Lawrence. 1,879,345; Sept. 27.
Crate, Brick. D. M. Kuchta. 1,879,756; Sept. 27.
Crate, Collapsible shipping. M. Foshee. 1,879,157; Sept. 27.
Cube tap. A. H. Massey. Des. 87,845; Sept. 27.
Cultivator. L. W. Chase, F. L. Zybach, and J. C. Brand. 1,879,733; Sept. 27.
Cultivator, Tractor. G. Geraldson. 1,879,181; Sept. 27.
Current supply regulating apparatus. E. O. Killius. 1,879,312; Sept. 27.
Curtain, Artistic. R. Leissner. 1,879,695; Sept. 27.
Cushion: *See*—
Bolster cushion.
Cutter bar. T. Gray. 1,879,105; Sept. 27.
Cutter bit. Combination rolling and scraping. R. W. Schlumpf. 1,879,127; Sept. 27.
Dam. R. H. Yale. 1,879,836; Sept. 27.
Dam and constructing the same. F. A. Noetzli. 1,879,430; Sept. 27.
Decanter or similar article. W. C. McCartney. Des. 87,846; Sept. 27.
Deck, Floating. A. G. Speegle. 1,879,572; Sept. 27.
De-clutching mechanism. W. Gilmore. 1,879,184; Sept. 27.
Decorating machine. J. N. Fountain. 1,879,608; Sept. 27.
Deflector for heaters. H. W. Fink. 1,879,152; Sept. 27.
Demountable wheel. G. B. Reed. 1,879,492; Sept. 27.
Derivative of hydrocarbons and preparation thereof, Tertiary. H. S. Davis. 1,879,660; Sept. 27.
Desk. R. M. Miller. 1,879,854; Sept. 27.
Deterioration inhibitor for rubber. A. M. Clifford. Re18,607; Sept. 27.
Device for hardening the surfaces of cylindrical bodies. F. Klopp. 1,879,850; Sept. 27.
Device for the automatic single feeding of ring shaped blanks to working points. B. Forster. 1,879,156; Sept. 27.
Device for the cutting of threads on cylindrical surfaces. P. Brosse. 1,879,061; Sept. 27.
Diazo compound. Water soluble. W. Neelmeier and E. Giletenberg. 1,879,424; Sept. 27.
Die. C. Hopkins. 1,879,250; Sept. 27.
Diestock. L. V. Stoeltzlen. 1,879,578; Sept. 27.
Diffuser for centrifugal compressors. C. W. Smith. 1,879,561; Sept. 27.
Dilator. J. W. Kennedy. 1,879,305; Sept. 27.
Dilator. J. W. Kennedy. 1,879,307; Sept. 27.
Dimmer, Glare. J. A. Rinker. 1,880,024; Sept. 27.
Disk harrow. J. E. Boda. 1,879,785; Sept. 27.
Disk, Separating. J. H. Mayhew. 1,879,385; Sept. 27.
Disk, Tillage. W. S. Graham. 1,879,193; Sept. 27.
Dispenser. H. M. Gusdorf. 1,879,208; Sept. 27.
Dispenser, Beverage. B. F. Klein. 1,879,317; Sept. 27.
Dispensing apparatus. G. R. Hutchinson. 1,879,269; Sept. 27.
Dispensing apparatus. F. Kayser. 1,879,298; Sept. 27.
Display device. G. C. Miller. 1,879,043; Sept. 27.
Display device. T. F. Moore. 1,879,760; Sept. 27.
Display device. R. Neller and W. W. Holman. 1,879,761; Sept. 27.
Display package for edibles and the like. S. Rosen. 1,879,952; Sept. 27.
Distance indicator for vehicles. G. D. Thomas. 1,879,592; Sept. 27.
Division for bowling alleys and guard therefor. A. E. James. 1,879,749; Sept. 27.
Doll. M. Sanders. 1,880,109; Sept. 27.
Doorcheck. G. Eaton. 1,879,664; Sept. 27.
Door for motion picture apparatus, Film. L. Goldhammer. 1,879,188; Sept. 27.
Door mechanism. C. Lute and K. J. Tobin. 1,879,369; Sept. 27.
Door operating mechanism. I. B. Robertson. 1,879,507; Sept. 27.
Door, Overhead garage. W. D. Ferris. 1,879,798; Sept. 27.
Doughnut former. F. M. Roehl. 1,879,951; Sept. 27.
Drawer for kitchen sinks. J. R. Sieber and G. R. Elwell. 1,879,888; Sept. 27.
Drill. G. G. Harrington. 1,879,222; Sept. 27.
Drill column. L. C. Bayles. 1,879,030; Sept. 27.
Drill tool joint. B. L. Peterson. 1,879,856; Sept 27.
Drilling apparatus for large wells. J. J. Gault. 1,879,177; Sept. 27.
Drive mechanism. E. E. Deister. 1,879,923; Sept. 27.
Driver, Pile. R. G. Salmon. 1,879,993; Sept. 27.

CARNEGIE LIBRARY OF ATLANTA

Driving means for applicators. C. F. and E. J. Seibert. 1,879,546; Sept. 27.
Driving mechanism for churns. A. C. Hougland. 1,879,255; Sept. 27.
Drum, Water cooled winding. L. J. Black. 1,879,049; Sept. 27.
Dyestuffs, Azo. J. Hilger and K. Wiedemann. 1,879,240; Sept. 27.
Dyestuffs, Monoazo. H. Hoyer and E. Gleitenberg. 1,879,261; Sept. 27.
Dyestuffs of the anthraquinone series, New vat. R. E. Schmidt, B. Stein, and K. Bamberger. 1,879,535; Sept. 27.
Easel. W. Horbatuck. 1,879,251; Sept. 27.
Edible commodities, Treating granular. F. D. Chapman. 1,879,085; Sept. 27.
Egg testing machine. C. S. Hassell. Des. 87,836; Sept. 27.
Elector. D. G. Lorraine. 1,879,366; Sept. 27.
Electric air heater. E. W. Ballentine. 1,879,019; Sept. 27.
Electric discharge device. T. E. Foulke. 1,879,159; Sept. 27.
Electric discharge device, Gaseous. M. Pirani, H. Ewest, and A. Ruttenauer. 1,879,471; Sept. 27.
Electric generating and distributing system. J. R. Barrett. 1,879,969; Sept. 27.
Electric generator, Constant current. G. Austin and J. C. and W. A. MacFarlane. 1,879,014; Sept. 27.
Electric induction furnace. F. Linhoff. 1,879,360–1; Sept. 27.
Electric motor, Submergible. E. Mendenhall and J. B. Van Horn. 1,879,625; Sept. 27.
Electric power distributing systems, Apparatus for the supervision of. M. Schleicher. 1,879,887; Sept. 27.
Electric time switch. A. Friedinger. 1,879,169; Sept. 27.
Electrical connecting device. J. G. Peterson. 1,880,151; Sept. 27.
Electrical control system. H. T. Seeley. 1,879,545; Sept. 27.
Electrical heating element. G. Bray. 1,879,728; Sept. 27.
Electrical means for operating or raising and lowering railway booms and the like. A. Butterworth and N. J. Viken. 1,879,919; Sept. 27.
Electrical protective system. L. K. Swart. 1,879,773; Sept. 27.
Electrode and preparing the same, Positive. G. Kränzlein, R. C. Müller, and L. W. Berlin. 1,879,904; Sept. 27.
Electrodes of thermionic devices, Supporting the. H. J. Round and W. J. Picken. 1,879,514; Sept. 27.
Electrolytic cells and in anodes used in such cells. O. Conradty. 1,879,842; Sept. 27.
Electromagnetic friction device. A. P. Warner. 1,880,061; Sept. 27.
Electron discharge device. A. W. Hull. 1,880,092; Sept. 27.
Electron discharge device. S. Scognamillo and P. Arndt. 1,879,544; Sept. 27.
Electropneumatic brake. J. N. Good. 1,879,678; Sept. 27.
Electropneumatic brake. T. H. Thomas. 1,879,646; Sept. 27.
Elevator tower and the like. W. B. Ewing. 1,880,125; Sept. 27.
Elevators, Position indicator for. J. M. Graham and C. Norton. 1,879,801; Sept. 27.
Emulsions, Coagulation of latex like. F. Schwerdtel. 1,879,543; Sept. 27.
End frame for swings or similar article. E. J. Barcalo. Des. 87,823; Sept. 27.
End frame for swings or similar article. J. M. Vallone. Des. 87,858; Sept. 27.
End frame for swings or similar article. C. Vallone. Des. 87,859; Sept. 27.
Engine: *See*—
Heat engine. Rotary engine.
Internal combustion engine.
Engine and the like, Internal combustion. K. Bassler. 1,879,027; Sept. 27.
Engine release mechanism. J. J. O'Brien. 1,879,632; Sept. 27.
Envelope, Impeller reaction. A. S. Miller. 1,879,812; Sept. 27.
Envelope making machine. B. S. Oles. 1,879,900; Sept. 27.
Envelopes, Apparatus for making. R. L. Lockwood. 1,879,624; Sept. 27.
Exercising device. L. P. Monaco. 1,879,401; Sept. 27.
Explosive composition. R. H. Stratton. 1,880,116; Sept. 27.
Explosive composition, Gelatinous. L. O. Bryan. 1,879,064; Sept. 27.
Eye testing device. E. D. Tillyer and C. H. Pond. 1,879,833; Sept. 27.
Eye testing device. E. D. Tillyer and N. M. Baker. 1,880,028; Sept. 27.
Eyesight, Apparatus for testing the. R. W. Rigler. 1,879,501; Sept. 27.
Fabric: *See*—
Chenille fabric. Woven fabric.
Knitted fabric.
Fabric. I. C. Hoffacker. 1,879,243; Sept. 27.
Fabric impregnating machine. E. A. Rusden. 1,879,520; Sept. 27.
Fans, Rotating device for. J. R. Ferguson. 1,879,150; Sept. 27.
Farm gate. J. C. Schulte. 1,879,542; Sept. 27.
Farrowing house. W. D. Bayley. 1,879,781; Sept. 27.
Fastener. A. B. Colby. 1,879,100; Sept. 27.
Fastener, Attaching a cover. C. G. Leigh. 1,879,984; Sept. 27.
Fastener, Rail. L. Ottrosinka. 1,880,180; Sept. 27.
Fastener, Shipping basket cover. W. W. Hargroves. 1,880,132; Sept. 27.
Fastening means for wall and ceiling boards. C. H. Paulsen. 1,879,457; Sept. 27.
Feeder, Animal. J. D. Holliday. 1,879,247; Sept. 27.
Fence post. M. H. Alton. 1,879,725; Sept. 27.
Fertilizers, Manufacturing phosphatic. B. Ober and E. H. Wight. 1,879,485; Sept. 27.
Fiber liberation, Acid process of. G. A. Richter. 1,880,042; Sept. 27.
Fiber liberation, Alkaline. G. A. Richter. 1,880,044; Sept. 27.
Fibers, Preparing vulcanized. E. Becker. 1,879,031; Sept. 27.
Field conditioning machine. C. D. Smith. 1,880,113; Sept. 27.
Figure toy. E. S. Savage and C. F. Friedrich. Des. 87,856; Sept. 27.
Film, Drive. L. T. Robinson. 1,880,106; Sept. 27.
Film, Photographic. W. V. D. Kelley. 1,879,806; Sept. 27.
Film positives, Production of cinematographic. J. E. Thornton. 1,879,775; Sept. 27.
Film propulsion, Mechanism of. C. Aschenbrenner. 1,879,866; Sept. 27.
Films, Production of lenticular elements on. G. Heymer. 1,879,237; Sept. 27.
Filter cake treating device. A. Wright and F. W. Young. 1,880,005; Sept. 27.
Filter cake treating device. F. W. Young. 1,880,006; Sept. 27.
Filter, Continuous. R. P. Akins. 1,878,998; Sept. 27.
Filter making machine. R. P. F. Liddell. 1,879,355; Sept. 27.
Finger-shaping device. M. Hannon. 1,879,609; Sept. 27.
Fire alarm switch, Automatic. E. Marshall. 1,879,383; Sept. 27.
Fish mouth spreader. M. J. Frambach and C. P. Hills. 1,879,161; Sept. 27.
Fishing reel frame. P. Workman, jr. Des. 87,860; Sept. 27.
Fitting and reducer adapter therefor. O. E. Roseman. 1,880,107; Sept. 27.
Flagpole and the like. C. G. Wilkinson. 1,879,779; Sept. 27.
Flight, Mechanism for directing. R. H. W. Goddard. 1,879,187; Sept. 27.
Flotation, Method of. A. M. Gaudin. 1,879,871; Sept. 27.
Flower and making same, Artificial. D. C. Gockel. 1,879,677; Sept. 27.
Flue spark screen. J. A. Johnson. 1,879,289; Sept. 27.
Fluid breaking mechanism. A. Dewandre. 1,879,892; Sept. 27.
Fluid mixing device. M. W. Stout. 1,879,582; Sept. 27.
Fluid pressure brake. E. S. Cook. 1,879,662; Sept. 27.
Fluid pressure brake. C. C. Farmer. 1,879,671; Sept. 27.
Fluid pressure brake. C. C. Farmer and E. E. Hewitt. 1,879,669; Sept. 27.
Fluid pressure brake. J. C. McCune. 1,879,703; Sept. 27.
Fluid pressure brake. F. B. Thomas. 1,879,642; Sept. 27.
Folding armchair. W. C. Rastetter. 1,879,487; Sept. 27.
Folding table. E. E. Ekvall. 1,879,665; Sept. 27.
Folding table. J. B. O'Connor. 1,879,945; Sept. 27.
Folding table. M. A. Wilkinson. 1,879,649; Sept. 27.
Form, Construction. J. A. Dickerson. 1,879,738; Sept. 27.
Form, Grave. B. McElroy. 1,879,375; Sept. 27.
Form or core, Tire building. R. L. Bruck. 1,879,063; Sept. 27.
Form, Shirt. J. Small. 1,880,027; Sept. 27.
Forming device. W. D. Morrison. 1,879,411; Sept. 27.
Fountainette. S. Brandfon and J. F. Katz. Des. 87,826; Sept. 27.
Frame: *See*—
Window and door frame.
Frame construction, Metallic. J. Brogden. 1,879,655; Sept. 27.
Freezing apparatus, Accessory unit for domestic. G. C. McCauley and J. L. Hallett. 1,880,021; Sept. 27.
Freight, Apparatus for transferring. B. F. Fitch. 1,879,607; Sept. 27.
Friction facing. R. J. Norton. 1,879,433; Sept. 27.
Fruit cutting and can filling machine, Combined. H. S. Morse. 1,879,989; Sept. 27.
Fruit cutting implement. V. Kravitz. 1,879,851; Sept. 27.
Fruit holder. A. P. Barnes. Des. 87,824; Sept. 27.
Fuel, Apparatus for igniting liquid. R. H. Goddard. 1,879,186; Sept. 27.
Fuel burner. J. Blizard. 1,879,652; Sept. 27.
Fuel dilution from engine's lubricating oil, Apparatus for removing. J. H. Holloway. 1,879,248; Sept. 27.
Fuel, Motor. J. G. Davidson. 1,879,118; Sept. 27.

Fuels and maintaining a combustible mixture after initial vaporization, Method and apparatus for preheating liquid. C. F. Lambert. 1,879,938; Sept. 27.
Fur stretching device. A. S. Greenstein. 1,879,931; Sept. 27.
Furnace: *See*—
Combination furnace. High temperature furnace.
Electric induction furnace. Induction electric furnace.
Glass furnace. Melting furnace.
Furnace. J. Haulik. 1,879,899; Sept. 27.
Furnace arch construction. P. L. A. Moreau. 1,879,406; Sept. 27.
Furnace back drafting, Blast. C. H. Heist and B. M. Stubblefield. 1,879,230; Sept. 27.
Furniture, Kiln. L. L. Ladd. 1,879,808; Sept. 27.
Fuse-setting device for aircraft bombs. G. H. Cooke. 1,880,122; Sept. 27.
Game board. J. F. Geibel. 1,880,175; Sept. 27.
Game table, Mechanically operated. C. Rodgers. 1,879,511; Sept. 27.
Garment. R. W. Gerisch. 1,879,898; Sept. 27.
Garment display rack. M. L. Gover. 1,879,679; Sept. 27.
Garment hanger. W. R. Pabst. 1,879,946; Sept. 27.
Gas and coal gas, Apparatus for making mixed water. S. J. B. Tully and O. E. Yeo. 1,880,162; Sept. 27.
Gas and coal gas, Apparatus for the manufacture of enriched water. A. V. Tully. 1,880,161; Sept. 27.
Gas burner. W. G. Bagley. 1,879,916; Sept. 27.
Gas, Burning. C. J. Schifferle. 1,879,886; Sept. 27.
Gas cock control, Automatic. H. Margiloff. 1,879,381; Sept. 27.
Gases, Apparatus for cleaning. R. R. Harmon. 1,880,018; Sept. 27.
Gases, Apparatus for mixing. A. F. Jenkins. 1,880,140; Sept. 27.
Gases, Apparatus for treating. F. J. Petrequin. 1,879,403; Sept. 27.
Gases to welding torches and the like, Supplying. F. Mangiamell. 1,879,940; Sept. 27.
Gaseous conduction device. V. Bush. 1,880,014; Sept. 27.
Gaseous electric discharge device. M. Pirani. 1,879,472; Sept. 27.
Gasoline vaporizer. W. Lilly. 1,879,358; Sept. 27.
Gate: *See*—
Farm gate.
Gauge device for liquid storage tanks, Compensating. H. A. Jones. 1,879,805; Sept. 27.
Gauge for sizing internal threads. G. E. Mirfield. 1,879,398; Sept. 27.
Gauge for sliding T-levels, Miter. J. J. Drill. 1,879,980; Sept. 27.
Gear and enclosed conductor system therefor, Metal clad switch. C. D. Ainsworth. 1,879,000; Sept. 27.
Gear cutting apparatus. L. E. Greene. 1,879,190; Sept. 27.
Gear sets, Lapping. J. M. Christman. 1,879,089; Sept. 27.
Gear shifting mechanism. W. B. Barnes. 1,880,066; Sept. 27.
Gearing, Transmission. C. E. F. Ahlm. 1,880,064; Sept. 27.
Gearing, Variable friction. J. H. Robertson. 1,879,508; Sept. 27.
Generator: *See*—
Electric generator. Water gas generator.
Glass charges, Apparatus for feeding. C. Nagle and C. B. Hoopes. 1,879,420; Sept. 27.
Glass cutting mechanism. A. Kadow and C. W. Schwenzfeier. 1,879,690; Sept. 27.
Glass forming and annealing method and apparatus, Sheet. J. Sylvester. 1,879,998; Sept. 27.
Glass furnace. L. D. Soubier. 1,879,718; Sept. 27.
Glass, Mechanism for skimming and stirring. J. F. Rule. 1,879,711; Sept. 27.
Glass plates and other articles, Method and device for conveying. L. Von Reis. 1,879,720; Sept. 27.
Glass, Process and apparatus for tempering. B. Long. 1,879,698; Sept. 27.
Glass, Tempering. B. Long. 1,879,699; Sept. 27.
Glassware forming machine. O. C. K. Hutchinson, J. E. McLaughlin and L. D. Soubier. 1,879,684; Sept. 27.
Glassware forming machine. C. W. Schwenzfeier and J. E. McLaughlin. 1,879,712; Sept. 27.
Gold complex compound and making same, Organic. O. Ripke. 1,879,505; Sept. 27.
Golf club, Adjustable. E. J. Davidson. 1,879,117; Sept. 27.
Goniometer, Calculating. P. Dalton. 1,879,116; Sept. 27.
Goods in bales, sacks, or the like, Apparatus for conveying. E. Muth. 1,879,044; Sept. 27.
Graphic meter. D. J. Angus. 1,880,008; Sept. 27.
Grass shears. F. H. Rauh. 1,879,488; Sept. 27.
Grease fitting. J. J. Smith. 1,879,564; Sept. 27.
Grief stem. B. E. Parrish and W. N. Black. 1,879,455; Sept. 27.
Grinding. R. H. Cramer. 1,879,110; Sept. 27.
Grinding and mixing apparatus. J. E. Gernelle-Danloy. 1,879,897; Sept. 27.
Grinding attachment, Cylindrical. W. Dolph and N. H. Lewis. 1,879,134; Sept. 27.
Grinding machine. L. L. Roberts. 1,879,506; Sept. 27.
Guard. W. Jessop. 1,879,283; Sept. 27.
Guard for carding engines. J. Pickford. 1,879,764; Sept. 27.
Guard for circular saws. G. V. James. 1,879,280; Sept. 27.
Guide for paper making machines, Automatic wire screen. W. J. Trempe. 1,879,962; Sept. 27.
Guide for the mandrel shafts in tube drawing benches. H. Heetkamp. 1,879,743; Sept. 27.
Gun, antiaircraft. N. E. Methlin. 1,879,705; Sept. 27.
Gunfire control system, Continuous aim. J. Dugan. 1,880,174; Sept. 27.
Halter, Live decoy. W. E. Pratt. 1,879,991; Sept. 27.
Hand brake, Railway. R. W. Burnett. 1,879,972–4; Sept. 27.
Handle: *See*—
Saw handle. Top-spinning handle.
Hanger: *See*—
Garment hanger. Radiator hanger.
Harness, Body. J. A. Pures. 1,879,480; Sept. 27.
Harrow, Rotary. F. Erickson. 1,879,666; Sept. 27.
Harvester, Cotton boll. W. C. Ray. 1,879,823; Sept. 27.
Harvester pick-up. L. H. Thoen. 1,879,959; Sept. 27.
Harvester-thresher, Combined. L. H. Thoen. 1,879,960; Sept. 27.
Hayrack. O. J. Kehl. 1,879,299; Sept. 27.
Heat engine. H. F. Smith. 1,879,563; Sept. 27.
Heat exchanger. E. J. Parent. 1,879,453; Sept. 27.
Heat regulator, Time controlled. M. O. Snediker. 1,879,772; Sept. 27.
Heater: *See*—
Electric air heater. Water heater.
Steam compress heater.
Heating apparatus. A. F. Krause. 1,880,178; Sept. 27.
Heating apparatus for automotive vehicles. V. J. Butterfield. 1,879,072; Sept. 27.
Hedge trimming shears. E. Swanson. 1,879,860; Sept. 27.
Helmet, Aviator's. S. S. Cooper. 1,879,104; Sept. 27.
Helmet, Aviator's. J. W. Levi. 1,879,353; Sept. 27.
Henhouse dropping-board cleaner. N. P. Nielsen. 1,879,818; Sept. 27.
High temperature furnace. G. B. Remmey. 1,879,494; Sept. 27.
Hinge structure. R. F. Carpenter and T. F. Anderson. 1,879,079–80; Sept. 27.
Hitch. B. F. Bounds. 1,879,052; Sept. 27.
Hoe. J. H. Roberts. 1,879,909; Sept. 27.
Hog ringer. W. A. Ingalsbe. 1,879,270; Sept. 27.
Hoist or transfer mechanism. E. Lullau. 1,879,815; Sept. 27.
Holder, Candle. M. F. Powell. 1,879,477; Sept. 27.
Holder, Changeable sign. L. C. Monroe. 1,879,403; Sept. 27.
Holder, Condiment. J. J. Buckley. 1,879,731; Sept. 27.
Holder, Cow tail. F. R. Bergsten. 1,879,043; Sept. 27.
Holder, Dental floss. R. W. Cammack. 1,879,074; Sept. 27.
Holder, Display. M. Charen. 1,879,658; Sept. 27.
Holder, Door. G. W. Isley. 1,879,274; Sept. 27.
Holder, License plate. P. J. Linstrom. 1,879,906; Sept. 27.
Holder, Sanitary razor strop. W. O. Anderson. 1,880,007; Sept. 27.
Holder, Seed. E. H. Hickok. 1,880,136; Sept. 27.
Holder, Soft collar. G. J. Ber. 1,880,168; Sept. 27.
Holders, Manufacture of candle. A. W. Krieg. 1,879,816; Sept. 27.
Hook: *See*—
Safety snap hook. Suspender hook.
Horse-collar, Adjustable. E. Miller. 1,879,391; Sept. 27.
House: *See*—
Farrowing house.
Hutch, Rabbit. A. D. Stoner. 1,879,580; Sept. 27.
Hydraulic feed for rotary drilling. J. C. Fortune. 1,879,929; Sept. 27.
Hydroaircraft, Duo. O. E. Mantor. 1,879,700; Sept. 27.
Hydrocarbon products, Manufacturing. W. O. Snelling. 1,880,189; Sept. 27.
Hydrocarbons, Coking liquid. A. S. Knowles. 1,879,983; Sept. 27.
Hydroservo brake. R. J. Norton. 1,879,432; Sept. 27.
Hydrovehicle. J. A. Gendreau and E. Messier. 1,879,180; Sept. 27.
Hydroxides, Precipitation of heavy metal. W. Busch. 1,879,071; Sept. 27.
Ignition switch. J. Le R. Dodson. Re18,608; Sept. 27.
Incinerator. E. Klingbeil. 1,880,142; Sept. 27.
Index apparatus and card, Rotary visible. C. L. Johnston and M. M. Cohn. 1,879,620; Sept. 27.
Indexing means for grinding milling cutters. G. E. Mirfield. 1,879,399; Sept. 27.
Indicating device. M. Heidecorn and C. J. Miller. 1,880,089; Sept. 27.
Indicating device for electrical apparatus. A. C. T. Isaac. 1,879,276; Sept. 27.
Indicator: *See*—
Level and plumb indicator Temperature indicator.
Liquid level indicator. Tuning indicator.
Indicator. L. G. Hunter and H. B. Reisiger. 1,879,285; Sept. 27.
Indicator attachment for calipers or the like. J. V. McCabe. 1,879,941; Sept. 27.
Indicator for electrical apparatus, Luminous. I. E. Coffey. 1,879,098; Sept. 27.
Induction electric furnace. E. F. Northrup. 1,879,431; Sept. 27.
Ingot mold, Closed bottom. W. H. Ramage. 1,879,485; Sept. 27.

Inscriptions and drawings intended to be placed upon wood, fabric, and other absorbent materials, Printing. G. Muzzioli. 1,879,417; Sept. 27.
Insect electrocutor. R. L. Renwick. 1,879,495; Sept. 27.
Interlocking frame for railway points and signals and the like. C. H. W. Edmonds. 1,880,035; Sept. 27.
Interlocking machine, Electric. N. L. Donovan and C. E. Lake. 1,880,034; Sept. 27.
Internal combustion engine. J. A. Bascle. 1,879,025; Sept. 27.
Internal combustion engine. H. C. Edwards. 1,879,140; Sept. 27.
Internal combustion engine. W. H. Robertson. 1,879,910; Sept. 27.
Internal combustion engine. W. H. Robertson. 1,879,911; Sept. 27.
Internal combustion engine. W. H. Robertson. 1,880,025; Sept. 27.
Internal combustion engine. F. Sass. 1,879,528; Sept. 27.
Internal combustion engine. J. M. Shoemaker. 1,879,551; Sept. 27.
Iodine composition. W. L. Chandler. 1,879,601; Sept. 27.
Iron: *See*—
Brake beam safety iron. Three-way bending iron.
Iron from the solutions freed from copper obtained by burning pyrites with chlorine, Precipitating. F. W. Staaf and H. Hagenest. 1,879,577; Sept. 27.
Jack: *See*—
Lifting jack. Screw jack.
Jack or prop, Valve. E. J. Barto, jr. 1,879,024; Sept. 27.
Jewel mounting. T. E. Foster. 1,879,896; Sept. 27.
Joint: *See*—
Drill tool joint. Roadway joint.
Joist. J. Kahn. 1,879,295; Sept. 27.
Journal box packing retainer. R. W. Johnson. 1,879,804; Sept. 27.
Ketene, Preparation of. F. O. Rice. 1,879,497; Sept. 27.
Kneading device. J. J. Reinhold. 1,879,493; Sept. 27.
Knitted fabric, Nonrun. D. Siegel. 1,880,158; Sept. 27.
Knitting machine. S. C. Mack. 1,879,758; Sept. 27.
Lamp. A. L. Sandel. Des. 87,855; Sept. 27.
Lamp, Battery hand. H. W. Jones. 1,879,622; Sept. 27.
Lamp, Battery hand. H. W. Jones and H. G. Graubner. 1,879,621; Sept. 27.
Lamp, Electric discharge. M. Pirani. 1,879,470; Sept. 27.
Lamp, Glow discharge. T. E. Foulke. 1,879,158; Sept. 27.
Lamp, Multiple spot. C. F. Jenkins. 1,879,088; Sept. 27.
Lamp, Portable. G. J. La Vigne. 1,879,343; Sept. 27.
Lamp, Storage battery inspection. I. E. Coffey. 1,879,097; Sept. 27.
Lampshade, Ornamented silk. A. Kiss. 1,879,314; Sept. 27.
Latch. W. E. Cheney. 1,879,792; Sept. 27.
Latch for doors or other closures. W. D. Ferris. Des. 87,831; Sept. 27.
Lathe, Cam shaft. W. F. Groene. 1,879,201; Sept. 27.
Lavatory spout. W. P. Ferguson. Des. 87,829; Sept. 27.
Lead pressing. C. E. Bennett. 1,879,807; Sept. 27.
Lens. J. R. Silverman. 1,879,769; Sept. 27.
Lens, Ophthalmic. A. E. Glancy. 1,879,800; Sept. 27.
Lens, Ophthalmic. E. D. Tillyer. 1,880,029; Sept. 27.
Lenses, Mechanically grinding concave. F. W. Gehrke. 1,879,179; Sept. 27.
Level and plumb indicator. H. P. Swain. 1,879,587; Sept. 27.
Lift, Adjustable shaft. E. F. Hathorn. 1,880,134; Sept. 27.
Lifter: *See*—
Valve spring lifter.
Lifter and conveyer, Barrel. P. I. King. 1,879,313; Sept. 27.
Lifting jack. L. D. Nilson. 1,880,150; Sept. 27.
Light: *See*—
Theater chair light.
Light arrangement, Sewing machine. R. L. Plumley. 1,879,708; Sept. 27.
Light control arrangement. A. Meissner. 1,880,102; Sept. 27.
Lighter for gas stoves, Automatic. W. F. Rogers. 1,879,992; Sept. 27.
Lighting fixture. S. J. Tucker. Des. 87,857; Sept. 27.
Liners into containers, Inserting. W. A. Morris and C. L. Spangler. 1,879,410; Sept. 27.
Link, Fusible. G. I. Rockwood. 1,879,509; Sept. 27.
Lipstick case. A. E. Foster. 1,879,846; Sept. 27.
Liquid dispensing apparatus. E. W. Kent. 1,879,308–9; Sept. 27.
Liquid-feeding means. A. J. Ostrander. 1,879,035; Sept. 27.
Liquid level indicator. A. King. 1,880,171; Sept. 27.
Liquid phase sulphation of normal butene. B. T. Brooks. 1,879,599; Sept. 27.
Loading hood for snow removing mechanism. W. E. Klauer and C. L. Ostrander. 1,879,315; Sept. 27.
Lock: *See*—
Nut lock. Valve lock.
Lock. F. Leeb. 1,879,350; Sept. 27.
Lock for vehicles, Automatic safety wheel. C. Gattie. 1,880,129; Sept. 27.
Locking device for car seats. A. B. Bell. 1,879,038; Sept. 27.
Locomotive with interstage superheating, High pressure. A. Hermanuz and K. Klug. 1,879,235; Sept. 27.
Locomotives, Diaphragm for. N. P. Clatterbuck. 1,879,094; Sept. 27.
Loom. E. J. Wilson. 1,880,183; Sept. 27.
Looms, Lug member for. G. Slaughter. 1,879,558; Sept. 27.
Lubricating apparatus. W. Harrigan. 1,879,221; Sept. 27.
Lubricating device for friction bearings. H. Wilson and J. H. Thayer. 1,879,723; Sept. 27.
Lubricating system. H. Chisholm. 1,879,086; Sept. 27.
Lubricating system and products. W. V. Kidder. 1,879,874; Sept. 27.
Luminous tube. J. E. Gross. 1,879,740; Sept. 27.
Machine. J. L. Hall. 1,879,211; Sept. 27.
Machine and method for making popcorn confections. H. W. Eakins. 1,879,928; Sept. 27.
Machine and method for manufacturing articles from viscous substances. D. H. Shapiro. 1,880,110; Sept. 27.
Machine and process for making laminated products. G. H. Ellis. 1,879,797; Sept. 27.
Machine for applying tickets to merchandise. G. W. Henry, jr. 1,879,233; Sept. 27.
Machine for forming hollow glass articles. A. Kadow and R. G. Allen. 1,879,689; Sept. 27.
Machine for making lollipops. V. O. Hermann. 1,879,234; Sept. 27.
Machine for making popcorn confections. H. W. Eakins. 1,879,927; Sept. 27.
Machine for making sheet metal articles. A. S. Johnson and H. W. Neunherz. 1,879,285; Sept. 27.
Machine for sewing belts, suspenders, garters, and the like. J. R. Whitehouse. 1,880,164; Sept. 27.
Machine for spinning artificial silk. G. Baurledel and A. Hartmann. 1,880,068; Sept. 27.
Machine for the manufacture of templates. K. Wolny. 1,879,835; Sept. 27.
Magazine type of drilling tool. E. H. Heddy. 1,879,226; Sept. 27.
Magnet supporting device. J. C. McCune. 1,879,702; Sept. 27.
Mail, Handling metered permit. R. G. Whitlock. 1,879,965; Sept. 27.
Manure spreader. C. F. Crumb and J. A. Latowski. 1,879,114; Sept. 27.
Marker, Movable magnetic. C. C. Alles. 1,879,002; Sept. 27.
Marking machine. F. Kohnle. 1,879,875; Sept. 27.
Match making machine. A. Shmyroff, J. Dill, and E. Van Hoofstadt. 1,880,111; Sept. 27.
Match stacking mechanism. J. Dill and A. Shmyroff. 1,880,077; Sept. 27.
Matter and making the same, Composition of. E. W. Lovering. 1,880,036; Sept. 27.
Mattress filler making process and machine. J. F. Gail. 1,879,174; Sept. 27.
Mattress making process and machine. J. F. Gail. 1,879,171; Sept. 27.
Measuring tank for concrete pavers, Water. G. E. Blood. 1,879,051; Sept. 27.
Measuring tank for concrete pavers, Water. F. W. De Vinney. 1,879,129; Sept. 27.
Meat chopper. A. Jahn. 1,879,279; Sept. 27.
Mechanical arrangement for performing works. F. Hübl. 1,880,138; Sept. 27.
Medal. C. E. Knepper. Des. 87,841; Sept. 27.
Medicinal container or similar article. H. B. Lermer. Des. 87,844; Sept. 27.
Melting furnace. H. A. Brassert. 1,880,012; Sept. 27.
Menthenes, Production of. W. Schoeller, H. Jordan, and K. Schollköpf. 1,879,767; Sept. 27.
Mesh for reenforcing concrete asphalt and like material, Steel or metal. A. P. Gupwell. 1,879,207; Sept. 27.
Metal casting machine. J. Carle. 1,879,076; Sept. 27.
Metal rolling, Sheet. R. R. Smith, W. F. Songer, and L. A. Salender. 1,879,829; Sept. 27.
Metal strips, Apparatus for forming. F. W. Foley and A. T. Sweet. 1,879,336; Sept. 27.
Metal structures, Making. H. E. White and W. F. Schulz. 1,880,003; Sept. 27.
Metal working press. F. J. Rode. 1,879,510; Sept. 27.
Meter: *See*—
Graphic meter.
Mica splitting machine. J. P. French. 1,879,164; Sept. 27.
Micrometer, Running sheet. C. E. Smart. 1,879,559; Sept. 27.
Micro-organisms, Suppressing the growth of. R. Lehmann and R. Michel. 1,879,351; Sept. 27.
Mill: *See*—
Ball mill.
Mining, Apparatus for. R. J. Meyer. 1,879,907; Sept. 27.
Mining machine. C. R. Hughes. 1,880,090–1; Sept. 27.
Mirror, Eyeglass. J. Rowan. 1,879,516; Sept. 27.
Mixing apparatus. C. R. and A. B. Smith. 1,879,828; Sept. 27.
Mold: *See*—
Ingot mold.
Mold and clamp for stringed musical instruments, Combined. I. J. Johnson. 1,879,288; Sept. 27.
Mold and method of removing the same from the cast material. L. Connett. 1,879,891; Sept. 27.

Mold for glassware forming machines. V. E. Hofmann. 1,879,872; Sept. 27.
Molding, Electric wall. A. M. Greis. 1,879,198; Sept. 27.
Molding strip, Upholstery. A. L. Howard. 1,879,257; Sept. 27.
Mop. A. C. Kootz. 1,879,325; Sept. 27.
Mop. G. O. Larberg. 1,879,809; Sept. 27.
Mortar board. R. A. Routt. 1,879,515; Sept. 27.
Motor: *See*—
Electric motor.
Motor assembly including speed control. P. J. Fitzgerald. 1,879,675; Sept. 27.
Motor control system, Limit for opposed. G. H. Fisher. 1,879,154; Sept. 27.
Motor without oil-supply means, Submersible. E. Mendenhall and J. B. Van Horn. 1,879,628; Sept. 27.
Mounting arrangement for electrical apparatus. D. A. Christian. 1,880,072; Sept. 27.
Mounting, Drill cutter. G. E. Behnke and R. Giesey. 1,879,034; Sept. 27.
Mounting, Fish reel. W. Deering. 1,879,795; Sept. 27.
Mounting for gas burners, Multiple unit. D. G. Kelley. 1,879,301; Sept. 27.
Mounting for railway cars, Hand brake. R. W. Burnett. 1,879,971; Sept. 27.
Mounting, Steering wheel. M. G. Ivandick. 1,879,936; Sept. 27.
Mower, Lawn. H. T. Ingerson. 1,879,271; Sept. 27.
Mower, Lawn. S. and A. Rotondo. 1,880,154; Sept. 27.
Mowing machine. G. A. Chadbourne. 1,880,121; Sept. 27.
Multicolor printing press. O. H. Banker. 1,879,597; Sept. 27.
Music stand, Collapsible. D. M. Wright. 1,879,865; Sept. 27.
Musical instruments, Tracker mechanism for. J. T. Austin. 1,879,015; Sept. 27.
Necktie and attaching same to a collar. H. A. Clark. 1,879,092; Sept. 27.
Necktie and preparing the same, Double faced. O. Weinstein. 1,880,001; Sept. 27.
Neckwear. L. A. Stern and S. Carlin. 1,879,957; Sept. 27.
Needle for sound reproducing instruments. A. L. Walten. 1,879,722; Sept. 27.
Nitriles, Preparing. H. Hagenest and F. W. Stauf. 1,879,209; Sept. 27.
Nitrocellulose manufacture and cellulose therefor. M. O. Schur and B. G. Hoos. 1,880,054; Sept. 27.
Nitrocelluloses, Preparation of. M. O. Schur and B. G. Hoos. 1,880,055; Sept. 27.
Nozzle, Atomizing. J. Armstrong. 1,879,012; Sept. 27.
Nozzle for fuel valves in internal combustion engines, Cooled. H. Lummen. 1,879,985; Sept. 27.
Nut and bolt, Lock. L. B. Johnson. 1,879,290; Sept. 27.
Nut lock. G. Elwert. 1,880,124; Sept. 27.
Oil burner. C. L. Warner. 1,879,596; Sept. 27.
Oil burning apparatus. O. Appel. 1,879,011; Sept. 27.
Oil, Distilling. A. E. Pew, jr. 1,879,948; Sept. 27.
Oil emulsions, Process and apparatus for dehydration of crude. J. N. Hunter. 1,879,849; Sept. 27.
Oil, Method of and apparatus for filtering. C. A. Palmer and E. Lenke. 1,879,451; Sept. 27.
Oils cleaning machine. F. P. Bucklein. 1,879,067; Sept. 27.
1, 4 dioxane, Manufacture of. G. H. Reid. 1,879,637; Sept. 27.
Operating mechanism for removing pit covers and the like. R. Palm. 1,879,881; Sept. 27.
Ophthalmic mounting. N. M. Baker. 1,879,780; Sept. 27.
Ophthalmic mounting. E. L. Schumacher. 1,879,825; Sept. 27.
Ophthalmic mounting. R. H. Simonds. 1,879,827; Sept. 27.
Ore sintering machine. D. N. Morison. 1,880,146; Sept. 27.
Ores in the manufacture of rustless steel, Treating. C. Hart. Re18,609; Sept. 27.
Ornament. M. Giaesel. 1,879,799; Sept. 27.
Ornamental product and producing the same. A. L. Howard. 1,879,259; Sept. 27.
Oscillation generation apparatus. H. Reifel. 1,880,105; Sept. 27.
Packing, Piston rod. A. W. Morton. 1,879,855; Sept. 27.
Packing, Rod. A. W. Morton and E. Stead. 1,879,988; Sept. 27.
Paint. H. Bernard. 1,879,045; Sept. 27.
Pan: *See*—
Pie pan.
Paper feeding device. E. E. Phinney. 1,879,465; Sept. 27.
Paper manufacture. G. A. Richter. 1,880,045; Sept. 27.
Paper manufacture. C. E. Smith. 1,879,560; Sept. 27.
Paper, Method of and machine for making. J. C. Sherman. 1,880,057; Sept. 27.
Paper remover, Wall. N. M. Shaffer. 1,879,826; Sept. 27.
Paper strips for daylight loading film rolls, Protective. E. Opfermann and W. Fischer. 1,879,443; Sept. 27.
Paper web tensioning means for reel-fed printing presses. H. V. James. 1,879,901–2; Sept. 27.
Parking device. F. E. Ogilvie. 1,879,438; Sept. 27.
Pasteurizer. H. H. Miller. 1,879,392; Sept. 27.
Pastries and confectionery, Apparatus for manufacturing. O. Kremmling. 1,879,328; Sept. 27.
Pectin preparation. H. G. Loesch. 1,879,697; Sept. 27.
Pen, Self inking fountain. F. Furedy. 1,880,128; Sept. 27.
Pencil. F. C. Dell. 1,879,736; Sept. 27.
Penholder. L. C. Felser. 1,880,080; Sept. 27.
Perch, Bird. T. J. Klein. 1,879,318; Sept. 27.
Phonograph. L. E. Johnson, A. B. Winchell, F. W. Hardick, and F. W. Billig. 1,879,291; Sept. 27.
Phosphates and phosphoric acid, Manufacture of. L. Adelantano. 1,878,997; Sept. 27.
Phosphates, Production of ammonium. J. Guillissen. 1,879,204; Sept. 27.
Phosphorus, Oxidizing. S. D. Gooch and W. H. Waggaman. 1,879,189; Sept. 27.
Piano hammer forming machine. W. J. Pfriemer. 1,879,464; Sept. 27.
Picker: *See*—
Prune picker.
Picker stick check. V. Lindsjo. 1,880,096; Sept. 27.
Picture apparatus, Motion. L. W. Chubb. 1,879,793; Sept. 27.
Pictures, Printing color. G. Heymer. 1,879,236; Sept. 27.
Pie pan. E. T. Hurst. 1,879,268; Sept. 27.
Pile compressing means for paper cutting machines and the like. K. Stegmann. 1,880,159; Sept. 27.
Pin spot for bowling alleys, Adjustable. R. E. Kennedy. 1,879,306; Sept. 27.
Pipe: *See*—
Smoking pipe.
Pipe blanks, Forming. C. Carlsen. 1,879,077; Sept. 27.
Pipe cutting or welding apparatus, Circumferential. W. R. Ost and F. S. Lawrence. 1,879,444; Sept. 27.
Pipe cutting or welding machine, Circumferential. F. S. Lawrence. 1,879,346; Sept. 27.
Pipes or cylinders, Process of and apparatus for making. H. I. Morris. 1,879,409; Sept. 27.
Pitch propeller, Variable. R. M. Hill. 1,879,935; Sept. 27.
Plant for loading and unloading wagons. P. Guilbert and J. Legrand. 1,879,203; Sept. 27.
Planter, Corn. J. C. Bohmker. 1,879,787; Sept. 27.
Plasters from anhydrite, Manufacture of. V. Lefebure. 1,879,877; Sept. 27.
Platen for printing and addressing machines. C. C. McCain. 1,879,811; Sept. 27.
Plates and other articles, Method and machine for cutting and forming. E. M. Simmons. 1,879,555; Sept. 27.
Platform for scales. E. A. Reussenzehn. 1,879,496; Sept. 27.
Pliers, etc. J. J. Palotce. 1,879,452; Sept. 27.
Plug, Convertible cap. L. Barnett. 1,879,783; Sept. 27.
Poles, Making. A. C. Wallen. 1,880,000; Sept. 27.
Portable repair stand. D. S. Davis. 1,879,123; Sept. 27.
Post: *See*—
Fence post.
Postal machine. R. G. Whitlock. 1,879,964; Sept. 27.
Postal machine. R. G. Whitlock. 1,879,966; Sept. 27.
Postal machine, Hand operated. R. G. Whitlock. 1,879,967; Sept. 27.
Poster display apparatus, Movable. H. G. Mutschler and H. Whittaker. 1,879,416; Sept. 27.
Poultry cooper's helper. R. L. Brookshire and F. John. 1,879,059; Sept. 27.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,879,598; Sept. 27.
Power factor regulation of alternating current machines. A. F. Heinrich. 1,879,229; Sept. 27.
Power transmission. H. E. Curtis. 1,879,843; Sept. 27.
Press: *See*—
Briquet press.
Briquetting press.
Metal working press.
Multicolor printing press.
Shoe sole press.
Tobacco press.
Pressing machine. T. B. McCarthy. 1,880,100; Sept. 27.
Pressure coupling. J. J. Smith. 1,879,565; Sept. 27.
Printing. W. E. Becker. 1,880,070; Sept. 27.
Printing machine for cinematograph films. P. J. Guerin. 1,880,087; Sept. 27.
Printing mechanism for cash registers. B. Bornkessel. 1,879,838; Sept. 27.
Products from vegetable substances, Producing valuable. E. L. Rinman. 1,879,502; Sept. 27.
Projectile, Bladed. E. W. Brandt. 1,879,840; Sept. 27.
Projecting apparatus. L. Del Riccio. 1,879,737; Sept. 27.
Projecting device. W. J. Burchett. 1,879,600; Sept. 27.
Propaganda distributor. J. E. Eshbaugh. 1,879,894; Sept. 27.
Propeller. M. M. Egan. 1,879,142; Sept. 27.
Propeller. J. A. Pinaud. 1,880,104; Sept. 27.
Propeller blade. J. Haw. 1,879,225; Sept. 27.
Propeller driving unit. M. L. Carpentier. 1,879,081; Sept. 27.
Propulsion unit, Auxiliary. J. A. McGrew. 1,880,895; Sept. 27.
Protection of autoxidizable materials. F. W. Nitardy. 1,879,762; Sept. 27.
Protective device for banks. M. Nicholas, A. Keller, C. Ledel, and C. Hussey. 1,879,427; Sept. 27.
Protector, Automobile tire. J. S. Miller. 1,879,395; Sept. 27.
Protector, Cord. B. C. Becker. 1,880,069; Sept. 27.
Protector, Cylinder. R. C. Worswick. 1,880,004; Sept. 27.
Protector for folded materials. W. A. Heinze and M. L. Liston. 1,879,682; Sept. 27.

Protector, Portable check. L. J. Levi. 1,879,954; Sept. 27.
Prune picker. J. Liebfried. 1,879,905; Sept. 27.
Puller: *See*—
Battery terminal puller.
Sleeve puller.
Pulley, Hydraulically controlled variable speed. R. A. Olsen and R. H. Shadrick. 1,879,633; Sept. 27.
Pulp for high grade paper manufacture, Producing white wood. G. A. Richter. 1,880,049; Sept. 27.
Pulp refining and bleaching process. G. A. Richter. 1,880,040; Sept. 27.
Pulp refining process. G. A. Richter. 1,880,047; Sept. 27.
Pulps, Production of high grade chemical. G. A. Richter. 1,880,043; Sept. 27.
Pump. W. C. Harbison. 1,879,219; Sept. 27.
Pump. O. O. Smith. 1,879,507; Sept. 27.
Pump and the like, Gear. A. A. Ross. 1,880,108; Sept. 27.
Pump, Blower and vacuum. J. Dubrovin. 1,879,136; Sept. 27.
Pump for delivering measured quantities of liquid. J. Fraser. 1,879,870; Sept. 27.
Pump, Liquid. P. Krause. 1,879,876; Sept. 27.
Pump, Oil well. A. Geddes. 1,879,178; Sept. 27.
Pump, Rotary. A. G. Johnson. 1,879,803; Sept. 27.
Pump, Rotary. J. L. Moore. 1,879,405; Sept. 27.
Pump, Vacuum. J. Peter. 1,879,947; Sept. 27.
Pumping apparatus. G. L. Ferguson. 1,879,149; Sept. 27.
Pumping system, Hydraulic. W. E. Hubbard. 1,879,262; Sept. 27.
Punch register for recording electrically transmitted signals, etc. M. Garl. 1,879,175; Sept. 27.
Punching machine, Portable fabric. D. B. Ashman. 1,880,031; Sept. 27.
Purification process using solvents. A. O. Jaeger, L. C. Daniels, H. J. West, and C. E. Stevenson. 1,879,686; Sept. 27.
Puzzle. F. Goldbach. 1,880,130; Sept. 27.
Puzzle, Movable block. H. W. Spaulding. 1,879,571; Sept. 27.
Pyrazole derivatives. H. Hahl. 1,879,219; Sept. 27.
Pyridine derivatives and producing them. E. Koeniga and H. Greiner. 1,879,324; Sept. 27.
Quinoline derivatives and producing the same. F. Schönhöfer. 1,879,538; Sept. 27.
Rabbling means. H. J. Hartley. 1,879,080; Sept. 27.
Rack: *See*—
Garment display rack.
Rack for gas drums. F. H. Kneeland. 1,879,037; Sept. 27.
Rack for scales, Weight. T. H. Strachan and W. H. Fryer. 1,879,585; Sept. 27.
Rack for typewriters, Advertising. A. J. Johnson and C. B. Grace. 1,879,284; Sept. 27.
Radiator hanger. D. C. Rug. 1,879,519; Sept. 27.
Radiator with means of expansion on radiators, Double means of. L. D. Hartnett. 1,879,802; Sept. 27.
Radio antenna device. J. A. Clark. 1,879,978; Sept. 27.
Radio lead and lightning arrester. B. H. Woodruff. 1,880,166; Sept. 27.
Railway control and signaling, System of. J. Neale. 1,880,149; Sept. 27.
Railway rolling stock and road vehicle construction. F. R. Fageol. 1,880,126; Sept. 27.
Railway signal control. W. R. Burke. 1,879,070; Sept. 27.
Railway signaling. C. W. Bell. 1,880,032; Sept. 27.
Rake: *See*—
Self cleaning rake.
Rake. C. Dennis. 1,879,924–5; Sept. 27.
Range, Gas. H. E. Toelle. 1,879,776; Sept. 27.
Razor blade sharpener. E. C. Bryant. 1,879,065; Sept. 27.
Razor, Safety. G. Hofman. 1,879,900; Sept. 27.
Razor, Safety. R. E. Thompson. 1,879,961; Sept. 27.
Receptacle, Flower. H. H. Harmony. 1,879,220; Sept. 27.
Reclining chair. A. B. Bell. 1,879,036; Sept. 27.
Record centering means for multiplying machines. W. R. Roycroft. 1,879,766; Sept. 27.
Recording mechanism. W. S. Finholm. 1,879,151; Sept. 27.
Reel mechanism. C. Schaum. 1,879,885; Sept. 27.
Refractor. J. A. O'Neil. 1,879,442; Sept. 27.
Refractory article. G. S. Fulcher. 1,879,676; Sept. 27.
Refractory body. J. S. Hogue. 1,879,246; Sept. 27.
Refrigerating apparatus. R. M. Getchell. 1,880,083; Sept. 27.
Refrigerating apparatus, Resistor unit for. H. R. Greenwald. 1,879,197; Sept. 27.
Refrigerating composition. F. J. Dobrovolyn. 1,879,898; Sept. 27.
Refrigerating device. C. E. Long. 1,880,097; Sept. 27.
Refrigerating unit. L. G. Copeman. 1,879,922; Sept. 27.
Refrigerator, Liquid and air circulating. C. H. Huston. 1,880,093; Sept. 27.
Regulator: *See*—
Heat regulator.
Speed regulator.
Regulator for adjusting the pitch to propeller blades while in motion. L. H. Coolidge. 1,879,659; Sept. 27.
Relay contact. K. M. Lederer. 1,879,349; Sept. 27.
Relay, Mechanically actuated vibrating. R. D. Salmon and H. Clifford. 1,879,523; Sept. 27.
Release device for drive mechanism for bake ovens. A. H. Rancke. 1,879,486; Sept. 27.
Release device, Quick. T. H. Thomas. 1,879,648; Sept. 27.
Remote control apparatus. C. B. Mirick. 1,879,629; Sept. 27.
Remote control of three-phase motors. H. Gust. 1,879,176; Sept. 27.
Repress machine, Portable. W. E. French. 1,879,166; Sept. 27.
Rerailer. W. H. Rednour. 1,879,491; Sept. 27.
Rest for seats, Collapsible arm. A. B. Bell. 1,879,035; Sept. 27.
Ring: *See*—
Writer's ring.
Roadway joint. B. Briody. 1,880,013; Sept. 27.
Rocket. H. Stoifa and R. Zwerina. 1,879,579; Sept. 27.
Rod: *See*—
Connecting rod.
Roll mechanism, Drawing. H. E. White and W. F. Schulz. 1,880,002; Sept. 27.
Rolling machine. J. Sneed. 1,879,568; Sept. 27.
Roof, Car. G. G. Gilpin. 1,880,085; Sept. 27.
Rotary engine. D. A. Gray. 1,880,131; Sept. 27.
Rotary engine. S. Nash. 1,879,422; Sept. 27.
Rovings, yarns, twines and the like, Manufacture of. J. C. Sherman. 1,880,056; Sept. 27.
Rubber, Vulcanization of. H. M. Bunbury, W. J. S. Naunton, and W. A. Sexton. 1,879,008; Sept. 27.
Rural mail box. F. Grimm. 1,879,200; Sept. 27.
Safety appliance for ladders. J. F. Babitt. 1,879,017; Sept. 27.
Safety brake. A. W. Moody. 1,879,630; Sept. 27.
Safety snap hook. J. B. Freysinger. 1,879,167–8; Sept. 27.
Salts from solutions containing them, Crystallizing. D. F. Othmer. 1,879,445; Sept. 27.
Salts of 1-phenyl-2-aminopropane. G. A. Alles. 1,879,003; Sept. 27.
Sand and the like from fluids, Removing. F. W. Kerns and W. Egbert. 1,880,185; Sept. 27.
Sand preparation. E. A. Inkley. 1,879,272; Sept. 27.
Sand trap. R. A. Light and J. W. Price, jr. 1,879,810; Sept. 27.
Sanding device for vehicles. L. L. Hopkins. 1,879,747; Sept. 27.
Sandwich machine, Frankfurter roll. D. A. Estrin. 1,879,146; Sept. 27.
Sash, Balanced window. R. B. Browne. 1,879,730; Sept. 27.
Sash operator, Automatic storm. F. B. Peters. 1,879,460; Sept. 27.
Sausage stuffer. A. C. Van Hooydonk. 1,880,182; Sept. 27.
Saw, Band. B. Erickson. 1,879,145; Sept. 27.
Saw handle, Combined plumb and level. P. L. Miller. 1,879,396; Sept. 27.
Scaffold. J. H. McMinn. 1,879,376; Sept. 27.
Scale indicator control, Weighing. W. N. Gilbert. 1,879,183; Sept. 27.
Screen: *See*—
Fine spark screen.
Window screen.
Screen and making the same. J. W. McNeely. 1,879,377; Sept. 27.
Screw jack. W. C. Tyler. 1,879,999; Sept. 27.
Seal, Emulsion preventing. E. Mendenhall and J. B. Van Horn. 1,879,626; Sept. 27.
Seal for bung fixtures. I. H. Rieke. 1,879,500; Sept. 27.
Seaplane. H. H. Semmes. 1,879,547; Sept. 27.
Sent: *See*—
Car sent.
Seat. E. Wolpert. 1,879,724; Sept. 27.
Sedimentation tank. J. R. Downes and S. F. Miller. 1,879,135; Sept. 27.
Sediments Filtration of suspended. C. Pontoppidan. 1,879,474; Sept. 27.
Seed planter. H. F. Crandall. 1,879,111; Sept. 27.
Seed planting machine. C. C. Boykin. 1,879,055; Sept. 27.
Self cleaning rake. H. L. Cress, jr. 1,879,112; Sept. 27.
Self loading and unloading elevator. H. L. Scott. 1,879,713; Sept. 27.
Self-propelled apparatus. J. W. Page. 1,879,446; Sept. 27.
Semi-trailer construction, Articulated. D. H. Davis and E. F. Hathorn. 1,880,123; Sept. 27.
Service table. A. W. Altorfer. 1,879,004; Sept. 27.
Setting out machine, Centrifugal. J. A. Meyer. 1,879,942; Sept. 27.
Sewing machine. J. F. Gail. 1,879,173; Sept. 27.
Sewing machine. J. F. Palme. 1,879,449; Sept. 27.
Sewing machine. L. Rich. 1,879,709; Sept. 27.
Sewing machines, Auxiliary feed device for. J. T. Dowdall. 1,880,016; Sept. 27.
Sewing machines, Bobbin-thread tension-device for. W. L. Barron. 1,879,023; Sept. 27.
Sewing machines, Differential feeding mechanism for. H. Corrall and J. Heggie. 1,879,106; Sept. 27.
Sewing machines, Throw-out feed-lift mechanism for. H. J. Goosman. 1,879,190–1; Sept. 27.
Sewing machines, Work-guide for. R. J. Sailer. 1,879,521; Sept. 27.
Shaft coupling. H. O. Jacobson. 1,880,094; Sept. 27.

Sharpener, Safety razor blade. E. V. Kline. 1,879,807; Sept. 27.
Shears: *See*—
Grass shears. Hedge trimming shears.
Sheet delivery control. L. W. Claybourn. 1,879,095; Sept. 27.
Sheet metal can. A. G. Hopkins. 1,879,873; Sept. 27.
Shelf, Adjustable. H. G. McComb. 1,879,372; Sept. 27.
Shelf paper. E. Karfoil. Des. 87,839; Sept. 27.
Shelter for domestic animals. E. A. Pitts. 1,879,473; Sept. 27.
Shelving, Adjustable. H. J. Onions. 1,880,179; Sept. 27.
Shield, Glare. G. R. Hannan and R. G. Goldman. 1,879,216; Sept. 27.
Shield for boys' toilet seats. M. M. Bryant. 1,879,066; Sept. 27.
Shingle roofing and laying the same. W. C. McWilliams. 1,879,378; Sept. 27.
Ship speed indicator and distance register. R. Star. 1,879,576; Sept. 27.
Shock absorber. F. W. Blanford. 1,879,050; Sept. 27.
Shock absorber. F. J. Gibbons. 1,879,182; Sept. 27.
Shock absorber. S. A. Wilson. 1,880,030; Sept. 27.
Shoe. C. H. and C. B. Brown. 1,879,729; Sept. 27.
Shoe. C. Miller. Des. 87,847–9; Sept. 27.
Shoe buckle. W. L. Gibbons. Des. 87,835; Sept. 27.
Shoe fastening device. T. K. Poon. 1,879,475; Sept. 27.
Shoe, Pile. G. C. Munoz. 1,879,414; Sept. 27.
Shoe sole press. J. Kewley. 1,879,753; Sept. 27.
Shoe tree, Expansion. M. Hoff. 1,879,242; Sept. 27.
Shoulder rest for violins. M. Medakovic. 1,879,386; Sept. 27.
Sick-room or commode chair. A. K. Lindsey. 1,879,879; Sept. 27.
Sighting device. E. M. Mueller. 1,879,412; Sept. 27.
Sign, Combination. A. C. Simkins. 1,879,554; Sept. 27.
Sign, Electrical discharge illuminated. W. A. McCombs and H. C. Parke. 1,879,374; Sept. 27.
Sign, Illuminated. W. A. D. Evans. 1,879,147; Sept. 27.
Signal: *See*—
Automobile direction signal. Traffic signal.
Signal and brake system. T. H. Thomas. 1,879,644; Sept. 27.
Signal and switch therefor, Electric. A. Horochowsky. 1,879,252; Sept. 27.
Signal system. C. F. A. Eddy. 1,879,139; Sept. 27.
Signaling, Interlocking. L. H. Peter and W. A. Pearce. 1,880,039; Sept. 27.
Signaling system. M. Hanley. 1,879,933; Sept. 27.
Signature stitching machine. E. W. Belluche. 1,879,040; Sept. 27.
Silverware, Apparatus for manufacture of hollow. C. R. Moon. 1,879,908; Sept. 27.
Sink. T. E. Mueller. Des. 87,850; Sept. 27.
Slab of mineral substances, Coloring. H. C. Fisher. 1,879,155; Sept. 27.
Slack adjuster. P. B. Camp. 1,879,075; Sept. 27.
Slack adjuster. C. C. Farmer. 1,879,068; Sept. 27.
Sleeve puller. H. W. Kulp and M. C. Dellinger. 1,879,335; Sept. 27.
Slug casting machine. A. J. Stouges. 1,880,160; Sept. 27.
Smoking pipe. R. Rinne. 1,879,504; Sept. 27.
Smoking process. H. Becker. 1,879,032; Sept. 27.
Smoking set. J. R. O'Neil. 1,879,634; Sept. 27.
Socket, Swivel ferrule strap. W. D. Anderson. 1,879,006; Sept. 27.
Soils, Treating. H. P. Vannah. 1,880,058; Sept. 27.
Solution dispensing attachment. J. Coy. 1,879,109; Sept. 27.
Sound beats, Apparatus for the visual recordation of. G. Lane. 1,879,694; Sept. 27.
Sound film box, Portable. W. Winzenburg. 1,879,864; Sept. 27.
Sound from photographic records, Apparatus for reproducing. A. Wollensak and V. C. Ernst. 1,879,650; Sept. 27.
Sound insulating and vibration dampening structural unit. S. Rosenzweig. 1,880,153; Sept. 27.
Sound record slot machine. G. J. Saliba and A. G. Mussawir. 1,879,522; Sept. 27.
Sound recording and reproduction, System of. J. Neale. 1,879,423; Sept. 27.
Sound reproducing instrument, Automatic. B. C. Kenyon, W. W. Boa, and C. H. Green. 1,879,693; Sept. 27.
Souvenir toy or similar article. M. Forte. Des. 87,832; Sept. 27.
Spatula, Wax. M. Harris. 1,880,176; Sept. 27.
Spectacle type of lamp holder. I. Rotea. 1,879,512; Sept. 27.
Speed regulator. K. Schmidt. 1,879,824; Sept. 27.
Speed transformer. G. Krell and G. M. Martinet. 1,879,326; Sept. 27.
Speed transmission, Variable. L. G. Globecy. 1,879,921; Sept. 27.
Spinning or twisting device. G. H. Gilligan. 1,880,084; Sept. 27.
Splint, Leg. C. I. Allen. 1,879,001; Sept. 27.
Spout for pouring vessels of ceramic material, Dripless. C. Achtziger. 1,878,996; Sept. 27.
Spreader. J. W. Page. 1,879,448; Sept. 27.
Spring: *See*—
Vehicle suspension spring.
Stamp. L. Meiind. 1,879,387; Sept. 27.
Stamp, Marking. D. H. Hardy. 1,879,982; Sept. 27.
Stand: *See*—
Music stand. Portable repair stand.
Stand for poultry fountains. K. Hughes and J. Williams. 1,879,264; Sept. 27.
Stapling machine or tacker. A. H. Maynard. 1,879,987; Sept. 27.
Start-stop mechanism. R. D. Salmon. 1,879,525; Sept. 27.
Starter, Engine. F. G. Diago. 1,879,130; Sept. 27.
Starter mechanism for internal combustion engines. A. Dow. 1,879,926; Sept. 27.
Starting mechanism for motor vehicles. F. Leyvastre. 1,879,878; Sept. 27.
Statuette or analogous article. L. de Wit. Des. 87,827; Sept. 27.
Steam compress heater. C. D. Threlkeld. 1,879,831; Sept. 27.
Steam pressure regulating device. C. A. French. 1,879,163; Sept. 27.
Steaming board. H. G. Reede. 1,879,033; Sept. 27.
Steering mechanism. C. O. Hanson. 1,879,218; Sept. 27.
Step, Sectional portable. W. Sherwood. 1,879,996; Sept. 27.
Stocking. W. H. Gosch. 1,880,086; Sept. 27.
Stoker, Chain grate. V. R. Chadwick. 1,879,732; Sept. 27.
Stop and cab signal system, Train. A. E. Hudd. 1,879,612; Sept. 27.
Stop, Door. E. W. Dauble. 1,879,119; Sept. 27.
Stop, Retarded release. C. Farmer. 1,879,670; Sept. 27.
Stop system, Train. A. E. Hudd. 1,879,611; Sept. 27.
Stop system, Train. A. E. Hudd. 1,879,614; Sept. 27.
Stop system, Train. A. E. Hudd. 1,879,617; Sept. 27.
Stops for doors or windows, Production of noiseless. O. Olson. 1,879,440; Sept. 27.
Stove. A. Smith. 1,879,954–5; Sept. 27.
Stove and cooking utensil, Collapsible. J. H. Bierlich. 1,879,837; Sept. 27.
Stove, Combination portable. A. K. Lindsey. 1,879,880; Sept. 27.
Stove, Waffle cooking. W. D. Antrim. 1,879,010; Sept. 27.
Stuffing box. C. L. Pruiett. 1,879,478; Sept. 27.
Submarine concentric conductor system. W. H. T. Holden. 1,879,746; Sept. 27.
Submarine explorations at great depth, Apparatus for. J. T. D'Albay. 1,879,735; Sept. 27.
Support and irrigating device, Flower pot. H. J. Benz. 1,879,784; Sept. 27.
Support, Book. J. Ramage. 1,879,484; Sept. 27.
Support, Chin. E. Lehman. 1,879,852; Sept. 27.
Support, Clothesline. B. Fridholm. 1,880,082; Sept. 27.
Support, Conveyer belt. F. G. Henry. 1,879,232; Sept. 27.
Support, Fire extinguisher. H. E. Heigis. 1,879,228; Sept. 27.
Support, Floating. M. A. Henker. 1,879,745; Sept. 27.
Support for collapsible tubes. C. R. Kelser. 1,879,751; Sept. 27.
Support for ironing machine rolls. J. H. Skitt. 1,879,556; Sept. 27.
Support for power driven units. F. D. Peltier. 1,879,458; Sept. 27.
Support, Resilient furniture slat. B. J. Boeckermann. 1,879,786; Sept. 27.
Support, Scaffold. F. Hoffman. 1,879,244; Sept. 27.
Support, Shock absorbing seat. J. Y. Turner. 1,880,181; Sept. 27.
Supporting articles on wearing apparel. A. E. Houghton. 1,879,254; Sept. 27.
Supporting means for agitator mechanism. R. M. Temple. 1,879,774; Sept. 27.
Surfaces requiring a uniform screw pitch, Milling. J. W. Smith. 1,879,566; Sept. 27.
Surgical instrument. B. D. La Force. 1,879,339; Sept. 27.
Suspender hook. C. Nelson. 1,879,817; Sept. 27.
Suspension apparatus for well drilling operations. O. Bieler. 1,880,071; Sept. 27.
Suspension clamp. R. L. Jenner. 1,879,282; Sept. 27.
Sweeper, Carpet. W. H. Kenyon. 1,879,752; Sept. 27.
Swimming device. W. Pijakowski. 1,879,468; Sept. 27.
Swimming device with automatic gas filling. E. Berger. 1,879,726; Sept. 27.
Switch: *See*—
Electric time switch. Ignition switch.
Fire alarm switch. Time switch.
Switch and timing mechanism, Coin controlled. M. H. Richardson and A. E. Gebert. 1,879,499; Sept. 27.
Switch blade. L. A. Kempton. 1,879,303; Sept. 27.
Switch, Controlling a power. B. W. Jones. 1,879,292; Sept. 27.
Switching device. R. Popp. 1,879,822; Sept. 27.
Switching mechanism. W. M. Scott, jr. 1,879,714; Sept. 27.
Table: *See*—
Folding table. Service table.
Game table.
Table or stand, Bathing girl. C. Chomik. 1,879,087; Sept. 27.
Talking machine. H. A. Thompsett. 1,879,593; Sept. 27.
Tank: *See*—
Sedimentation tank.

Tanks, Welding. E. E. Dillman. 1,879,604; Sept. 27.
Taping machine. G. De Dominicis. 1,879,124; Sept. 27.
Target, Base ball strike zone. G. A. Kleb. 1,879,316; Sept. 27.
Teapot. H. J. Blakeslee. 1,879,654; Sept. 27.
Teeth, Artificial. S. Myerson and E. A. Jones. 1,879,419; Sept. 27.
Telegraph system and apparatus. R. D. Salmon and F. R. Thomas. 1,879,524; Sept. 27.
Telephone, life line and diving cable, Deep sea. G. L. Wanamaker. 1,880,060; Sept. 27.
Telephone system. W. T. Haines. 1,879,741; Sept. 27.
Tellurium resistor for refrigerators. E. H. Horstkotte. 1,879,253; Sept. 27.
Temperature indicator. L. D. Nilson. 1,879,428; Sept. 27.
Tens carrying means. H. F. B. Hogfors. 1,879,245; Sept. 27.
Tension device for automobile tops. G. Broomhead. 1,879,060; Sept. 27.
Terracing-ditching and grading machine. C. W. Cundiff and W. A. Steele. 1,879,115; Sept. 27.
Textile containing alkyl ethers of cellulose and making same. R. Haller and A. Heckendorn. 1,879,742; Sept. 27.
Theater chair light. C. A. Irminger. 1,879,273; Sept. 27.
Thermionic tube. A. Knabner and J. Richter. 1,879,321; Sept. 27.
Thread waxing device. A. Fiore and R. A. Ade. 1,879,153; Sept. 27.
Three-way bending iron. A. L. Stowell. 1,879,583; Sept. 27.
Threshing machine for tobacco. J. H. Austin. 1,879,016; Sept. 27.
Tile drains, Apparatus for laying. G. and W. M. Henderson. 1,879,683; Sept. 27.
Tile-surfaced structural element. J. F. Doven. 1,880,015; Sept. 27.
Time register and recording device. E. W. Sunkenberg and B. Kahn. 1,879,641; Sept. 27.
Time switch, Automatic. C. I. Hall. 1,879,213; Sept. 27.
Timer for traffic signals. J. Keller. 1,879,300; Sept. 27.
Timing mechanism for driers, scorchers, and formers. F. Smith and W. M. Barker. 1,880,114; Sept. 27.
Tin, jar, or like container. H. G. Rowbotham. 1,879,517; Sept. 27.
Tints on the fiber, Obtaining fast. M. Bommer, R. Haller, and E. Pool. 1,879,727; Sept. 27.
Tire. D. J. Campbell. 1,879,790; Sept. 27.
Tire core, Pneumatic. C. E. Lawson. 1,879,348; Sept. 27.
Tire inflator. F. K. Moody. 1,879,404; Sept. 27.
Tobacco press. A. F. Shields. 1,879,550; Sept. 27.
Tobacco stemming and stripping machine. L. H. Seun. 1,879,651; Sept. 27.
Tool, Battery. J. E. Bergman and F. P. Ego. 1,880,172; Sept. 27.
Tool, Bending. C. Breer. 1,879,868–9; Sept. 27.
Tool, Frame straightening. G. A. Countryman. 1,879,979; Sept. 27.
Tool, Hand. E. Monahan. 1,879,402; Sept. 27.
Tool, Machine. E. J. Kearney and J. B. Armitage. 1,879,692; Sept. 27.
Tool, Machine. A. Oberhoffken. 1,879,436; Sept. 27.
Tool, Metal working. W. C. Sproul. 1,879,574; Sept. 27.
Tool, Mortising. H. T. Parker. 1,879,454; Sept. 27.
Tool, Pipe bending. L. Grimes. 1,879,199; Sept. 27.
Tool, Setting. M. Christensen. 1,879,088; Sept. 27.
Tools, Machine. B. P. Schlitz. 1,879,531; Sept. 27.
Top-spinning handle. P. Melyan. 1,880,145; Sept. 27.
Torch. C. Mott and G. G. Spencer. 1,879,631; Sept. 27.
Torch, Welding and cutting. J. H. Browning. 1,879,789; Sept. 27.
Towing device for trawl nets. J. B. J. A. Vigneron. 1,880,059; Sept. 27.
Toy, Conveyer. P. Delich. 1,879,845; Sept. 27.
Toy electric railways, Apparatus for. F. W. Hehre. 1,879,227; Sept. 27.
Toy glider and runway. F. T. Macklin. 1,879,986; Sept. 27.
Track and coupling attachment, Combined. A. L. Keune. 1,879,310; Sept. 27.
Traction increasing device. J. C. McCune. 1,879,704; Sept. 27.
Tractor, Marine. E. Johnson. Re18,610; Sept. 27.
Tractor unit, Power. G. H. Nobbs. 1,880,023; Sept. 27.
Traffic controlling apparatus, Railway. A. E. Hudd. 1,879,615–16; Sept. 27.
Traffic controlling apparatus, Railway. S. Miskelly. 1,880,037; Sept. 27.
Traffic signal, Street. R. E. Huffschmidt. 1,879,263; Sept. 27.
Trailers, Drawbar for. V. A. Hamilton. 1,879,981; Sept. 27.
Trailers, Tubular drawbar for. D. H. Davis. 1,880,075; Sept. 27.
Train control system, Automatic. A. E. Hudd. 1,879,613; Sept. 27.
Transfer apparatus for conveyers, Automatic. J. Cæsar and S. Eggleston. 1,879,073; Sept. 27.
Transformer and hoist, Portable. C. M. Horne. 1,879,848; Sept. 27.
Transmitter, Signaling. M. Hanley. 1,879,934; Sept. 27.
Transporting mechanism for book match making machines. A. Shyroff, J. Dill, and E. Van Hoofstadt. 1,880,112; Sept. 27.
Trap: *See*—
Animal trap. Sand trap.
Trap. R. H. Carson. 1,879,791; Sept. 27.
Tray for refrigerators, Freezing. M. Lovell and V. Sussin. 1,879,308; Sept. 27.
Tray, Ice. J. J. Mitchell. 1,879,400; Sept. 27.
Tray unloader. H. B. Miller. 1,879,393; Sept. 27.
Tree protector. E. N. Molitor. 1,879,813; Sept. 27.
Tree removing apparatus. P. H. Davey. 1,879,120; Sept. 27.
Trim for turf borders. W. L. Jarchow. 1,879,281; Sept. 27.
Trombone, Slide. P. F. Petersen. 1,879,461; Sept. 27.
Truck. H. T. Hallowell and F. Bennett. 1,879,214; Sept. 27.
Truck, Car. C. W. Sherman. 1,879,549; Sept. 27.
Truck, Industrial. E. J. Abbe. 1,878,994–5; Sept. 27.
Truck, Industrial. C. E. Cochran. 1,879,096; Sept. 27.
Truck, Plate glass transporting. L. Rothholz. 1,879,513; Sept. 27.
Trucks, Device for dismantling freight car. A. A. Rudd. 1,879,518; Sept. 27.
Trunk, Folding. J. J. Collins. 1,879,102; Sept. 27.
Tube: *See*—
Colonic tube. Thermionic tube.
Luminous tube.
Tubes, Process and apparatus for manufacturing flexible. A. Dreyer. 1,879,663; Sept. 27.
Tubular products, Apparatus for finishing and testing. B. F. Anthony. 1,879,009; Sept. 27.
Tuning indicator. N. R. Jones and W. W. Dewhurst. 1,879,294; Sept. 27.
Typewriting machine. W. F. Helmond. 1,879,231; Sept. 27.
Typographical composing and distributing machine. H. A. Burt. 1,880,119; Sept. 27.
Underreamer. D. H. Reamy and A. Swanson. 1,879,490; Sept. 27.
Upholstery, Spring cushioned. J. Hilton. 1,880,137; Sept. 27.
Upper-roughing machine. W. C. Card, jr. 1,879,657; Sept. 27.
Utensil, Electrically heated. A. E. Newton. 1,879,426; Sept. 27.
Vacuum apparatus, Degassing. G. Dobke. 1,879,131; Sept. 27.
Vacuum brake. N. Lombard. 1,879,365; Sept. 27.
Vacuum cleaner. C. E. Reddig. 1,879,710; Sept. 27.
Valve. H. G. Klett. 1,879,320; Sept. 27.
Valve. W. H. Knistern. 1,879,322; Sept. 27.
Valve. G. M. and A. P. Marr. 1,879,382; Sept. 27.
Valve. H. R. Minor. 1,879,397; Sept. 27.
Valve. J. Müller. 1,879,413; Sept. 27.
Valve. G. Overton. 1,879,703; Sept. 27.
Valve. J. K. Putnam. 1,879,481; Sept. 27.
Valve actuated by a cylinder, Quick opening steam. P. W. Knauf. 1,880,186; Sept. 27.
Valve, Automatic by-pass. H. E. Balsiger. 1,879,020; Sept. 27.
Valve, Automatic mixing. J. J. Lawler. 1,879,344; Sept. 27.
Valve, Brake controlling. S. G. Down. 1,879,661; Sept. 27.
Valve, Check. W. A. Buehler. 1,879,890; Sept. 27.
Valve, Electromagnetically-operated. L. O. French. 1,879,105; Sept. 27.
Valve for fluid compressors, Reversing. B. H. Thompson. 1,879,647; Sept. 27.
Valve for hot water radiators, Automatic air. F. Clancy. 1,879,091; Sept. 27.
Valve, Graduated release. U. A. Whitaker. 1,879,648; Sept. 27.
Valve lock. H. L. Quintenz. 1,879,482; Sept. 27.
Valve mixing. M. O. Snediker. 1,879,771; Sept. 27.
Valve, Musical instrument. P. F. Petersen. 1,879,462; Sept. 27.
Valve operating means. M. Mutrux and R. Calliet. 1,879,415; Sept. 27.
Valve, Pressure retaining. F. P. Livingston. 1,879,696; Sept. 27.
Valve, Pump. L. L. Carson. 1,880,120; Sept. 27.
Valve spring lifter. H. W. Kulp and M. C. Dellinger. 1,879,330; Sept. 27.
Vanity case. M. Sopsko. 1,879,570; Sept. 27.
Vapor supply device for engines. O. O. Skreen. 1,879,557; Sept. 27.
Vaporizer, Electric. M. Katzman. 1,879,297; Sept. 27.
Vat construction. A. C. Hougland. 1,879,256; Sept. 27.
Vegetable cleaner and separator. G. J. Olney. 1,879,439; Sept. 27.
Vegetable slicing machine. M. R. Anstice. 1,879,008; Sept. 27.
Vehicle device, Motor. C. D. Stewart. 1,879,719; Sept. 27.
Vehicle, Self-propelling. R. Fornaire. 1,880,127; Sept. 27.
Vehicle, Motor. J. Hammerl. 1,879,215; Sept. 27.
Vehicle, Motor. H. Ison. 1,879,275; Sept. 27.
Vehicle suspension spring. A. Beurdeley. 1,879,048; Sept. 27.
Vehicle washing apparatus. J. A. Coleman. 1,879,101; Sept. 27.
Vehicles, Means for operation of motor. M. Berliet. 1,879,044; Sept. 27.

Vending machine. W. B. Betts. 1,879,047; Sept. 27.
Vending machine for bottle pop, beer, and the like. H. P. Tarrence and C. Howell. 1,879,590; Sept. 27.
Ventilator. C. A. Palmer. 1,879,450; Sept. 27.
Venting machine, Automatic. R. W. Sethman. 1,879,548; Sept. 27.
Vessel, Drinking. J. E. Perry. 1,879,820; Sept. 27.
Vest. R. M. Lapham. 1,879,341; Sept. 27.
Vise, Hand. R. H. Brockman. 1,879,058; Sept. 27.
Vitamin concentrates from fats, Obtainment of. W. G. Christiansen and E. Moness. 1,879,734; Sept. 27.
Vocal sounds, Apparatus for transmitting and receiving. T. E. Fassett. 1,879,148; Sept. 27.
Volume control. H. A. Wheeler. 1,879,861–3; Sept. 27.
Vulcanizer. C. MacBeth. 1,879,379; Sept. 27.
Vulcanizing apparatus. L. O. Grange. 1,879,194; Sept. 27.
Wall structure. H. P. C. Keuls. 1,879,311; Sept. 27.
Wall, Water. W. C. Drake. 1,880,187; Sept. 27.
Washer: *See*—
  Air or gun washer.
Watch cleaning machine. R. R. Olson. 1,879,441; Sept. 27.
Water deaeration. G. H. Gibson. 1,879,930; Sept. 27.
Water gas generator. W. Bennbold. 1,880,010; Sept. 27.
Water heater, Instantaneous. E. Sperling. 1,879,956; Sept. 27.
Water level indicating device. E. D. McCloskey. 1,879,371; Sept. 27.
Waving apparatus, Permanent. G. E. Bjorkman and J. Geloso. 1,879,653; Sept. 27.
Weatherstrip. J. E. Basham. 1,879,026; Sept. 27.
Weather stripping for metal sashes. H. Lamping. 1,879,340; Sept. 27.
Web tensioning and controlling mechanism for printing machines and the like. H. Taylor and W. Gibson. 1,879,591; Sept. 27.
Welding apparatus. G. M. Deming. 1,880,076; Sept. 27.
Welding machine. A. F. Hanson. 1,879,217; Sept. 27.
Wells out of control, Method and apparatus for extinguishing the flow of fluid in. F. B. Fowzer. 1,879,160; Sept. 27.
Welt and making same, Finishing. A. E. Davy. 1,879,121; Sept. 27.
Welt and making the same, Finishing. A. L. Howard. 1,879,258; Sept. 27.
Wheel: *See*—
  Aeroplane wheel. Wind wheel.
  Demountable wheel.
Wheel, Gear and the like pulling device. H. W. Kulp and M. C. Dellinger. 1,879,331; Sept. 27.
Wheels from their axles, Device for removing. C. Reinhold. 1,879,883; Sept. 27.
Wind indicator for aviators. F. M. Hurni. 1,879,267; Sept. 27.
Wind wheel. L. Larum. 1,880,143; Sept. 27.
Winding device for spinning toys. C. Arnold. 1,879,013; Sept. 27.
Winding mechanism for photographic cameras, Combined shutter and film. V. W. Edwards. 1,879,141; Sept. 27.
Window and door frame. F. C. Andersen. 1,879,005; Sept. 27.
Window construction. F. P. J. Struckmeyer. 1,879,586; Sept. 27.
Window panel and forming the same, Sheet metal. G. L. Kelley. 1,879,302; Sept. 27.
Window screen. J. Schmidt. 1,879,534; Sept. 27.
Window, Show. W. H. Mullins. 1,880,147; Sept. 27.
Wing for aircraft. J. B. Icre. 1,879,618; Sept. 27.
Woven fabric. L. F. Emery. 1,879,144; Sept. 27.
Wreath making. G. Pullets. 1,879,882; Sept. 27.
Wringer. E. J. Schuda. 1,879,995; Sept. 27.
Writer's ring. G. C. Ray. 1,879,489; Sept. 27.
Writing instrument. L. B. Parsons. 1,879,456; Sept. 27.
Xanthate, Stabilization of cellulose. G. A. Richter and P. C. Scherer, jr. 1,880,041; Sept. 27.
Zinciferous material, Refining. W. G. Waring and G. H. Waring. 1,879,834; Sept. 27.

CLASSIFICATION OF PATENTS

ISSUED SEPTEMBER 27, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

	Des. R. 18, 610	23—	165: 1, 879, 189	43—	22: 1, 879, 795	62—	89. 5: 1, 880, 097	88—	18: 1, 879, 844	103—	137: 1, 879, 567
1—	4: 1, 879, 835		286: 1, 879, 479		29: 1, 879, 161		95: 1, 879, 922		20: 1, 879, 833		144: 1, 879, 405
	49: 1, 879, 987	24—	10: 1, 879, 254		88: 1, 879, 968		104: 1, 880, 117		1, 880, 028		184: 1, 879, 178
2—	6: 1, 879, 104		40: 1, 879, 903		93: 1, 879, 939		108. 5: 1, 879, 368		24: 1, 879, 236		202: 1, 880, 004
	1, 879, 353		73: 1, 879, 817		112: 1, 879, 495		1, 879, 400		1, 879, 600	104—	52: 1, 879, 581
	102: 1, 879, 341		88: 1, 880, 168	44—	9: 1, 879, 118		1, 879, 602		1, 879, 737		164: 1, 879, 815
	127: 1, 879, 527		115: 1, 879, 991	45—	11: 1, 879, 649		115: 1, 880, 083		41: 1, 879, 516		265: 1, 879, 491
	141: 1, 879, 092		123: 1, 879, 006		1, 879, 665		126: 1, 879, 241		42: 1, 879, 825	105—	4: 1, 879, 093.
	146: 1, 879, 957		137: 1, 879, 192		1, 879, 945		127: 1, 879, 197		1, 879, 827		48: 1, 880, 144
	1, 880, 001		140: 1, 879, 475		48: 1, 879, 087		129: 1, 879, 133		47: 1, 879, 780		159: 1, 880, 126
	211: 1, 879, 808		183: 1, 879, 682		80: 1, 879, 484	63—	26: 1, 879, 896		54: 1, 879, 769		197: 1, 879, 549
4—	145: 1, 879, 782		218: 1, 879, 100		95: 1, 879, 888	64—	96: 1, 880, 094		1, 879, 800		200: 1, 879, 437
	237: 1, 879, 066		241: 1, 879, 167	46—	32: 1, 880, 145	65—	13: 1, 879, 820		61: 1, 879, 138		236: 1, 879, 371
5—	1: 1, 879, 185		1, 879, 168		37: 1, 879, 007		31: 1, 878, 996	89—	1: 1, 879, 603	106—	25: 1, 880, 038
	12: 1, 879, 216		253: 1, 879, 394		1, 879, 845		57: 1, 879, 731		40: 1, 879, 705		34: 1, 879, 877
	269: 1, 879, 172	25—	11: 1, 879, 367		40: 1, 880, 109	66—	130: 1, 879, 758		41: 1, 880, 174	107—	1: 1, 879, 146
	322: 1, 879, 170		42: 1, 880, 006		50: 1, 879, 986		169: 1, 880, 158	90—	4: 1, 879, 196		8: 1, 879, 234
7—	3: 1, 879, 402		77: 1, 879, 293		51: 1, 879, 013		173: 1, 880, 086		15: 1, 879, 436		14: 1, 879, 327
	13: 1, 879, 396		87: 1, 879, 166	47—	23: 1, 879, 813	67—	25: 1, 879, 477		1, 879, 548		15: 1, 879, 951
8—	5: 1, 879, 727		128: 1, 879, 738		33: 1, 879, 375		72: 1, 879, 329		16: 1, 879, 692		16: 1, 879, 927
	19: 1, 879, 520		142: 1, 879, 246		34: 1, 879, 220	68—	8: 1, 880, 082		20: 1, 879, 566		27: 1, 879, 328
	20: 1, 879, 031		153: 1, 879, 808		37: 1, 880, 136		9: 1, 879, 033	91—	12. 7: 1, 880, 002	108—	5. 4: 1, 880, 065
	1, 879, 742		155: 1, 879, 841		38: 1, 879, 784		1, 879, 556		16: 1, 880, 070		7: 1, 879, 378
9—	18: 1, 879, 180		156: 1, 880, 157	48—	71: 1, 880, 161		32: 1, 879, 995		33: 1, 879, 757	110—	40: 1, 879, 732
	19: 1, 879, 726	27—	25: 1, 879, 852		73: 1, 880, 162		37: 1, 879, 018		1, 880, 078		69: 1, 879, 342
	21: 1, 879, 468	29—	18: 1, 879, 529		78: 1, 880, 010	70—	29: 1, 879, 350		45: 1, 880, 065		87: 1, 880, 062
10—	85: 1, 879, 250		33: 1, 879, 355		180: 1, 880, 140		90: 1, 880, 135		46: 1, 879, 153		95: 1, 879, 406
	101: 1, 879, 061		84: 1, 879, 440		184: 1, 880, 141		124: 1, 879, 482		68: 1, 879, 314		104: 1, 879, 652
	127: 1, 879, 578		85: 1, 879, 099	49—	3: 1, 879, 998	71—	7: 1, 878, 997		1, 880, 050		122: 1, 879, 094
	134: 1, 879, 531		1, 879, 331		5: 1, 879, 684		1, 879, 435		70: 1, 879, 155	111—	5: 1, 879, 683
12—	33: 1, 879, 753		1, 879, 334		1, 879, 689		9: 1, 880, 058	92—	9: 1, 880, 043		52: 1, 879, 787
	51: 1, 879, 657		86: 1, 879, 883		1, 879, 690	72—	16: 1, 879, 319		1, 880, 046		74: 1, 879, 111
	128. 2: 1, 879, 242		86. 3: 1, 879, 024		1, 879, 711		18: 1, 879, 778		1, 880, 049	112—	1: 1, 879, 691
	1, 879, 330		1, 879, 330		1, 879, 712		26: 1, 880, 015		11: 1, 880, 042		108: 1, 879, 709
13—	26: 1, 879, 361		87: 1, 880, 079		22: 1, 879, 411		39: 1, 879, 467		1, 880, 048		138: 1, 879, 521
	1, 879, 431		88. 2: 1, 879, 333		45: 1, 879, 698		96: 1, 879, 996		13: 1, 879, 503		159: 1, 879, 449
	27: 1, 879, 360		1, 879, 335		1, 879, 699		115: 1, 879, 457		1, 880, 044		203: 1, 879, 190
15—	8: 1, 879, 710		105: 1, 879, 574		55: 1, 879, 420		127: 1, 879, 311		1, 880, 047		1, 879, 191
	41: 1, 879, 752		148: 1, 880, 115		1, 879, 718	73—	51: 1, 879, 529		20: 1, 879, 560		209: 1, 879, 106
	56: 1, 879, 067		155: 1, 880, 000		59: 1, 879, 899		52: 1, 879, 276		21: 1, 879, 463		215: 1, 880, 016
	98: 1, 879, 083		1, 880, 003		65: 1, 879, 872		55: 1, 879, 267		1, 880, 045		219: 1, 880, 164
	176: 1, 879, 553	30—	11: 1, 879, 860		82. 1: 1, 880, 029		82: 1, 879, 805		39: 1, 880, 056		233: 1, 879, 023
	190: 1, 879, 103		12: 1, 879, 900		92: 1, 879, 676		1, 880, 171		1, 880, 057		252: 1, 879, 173
	194: 1, 879, 552		1, 879, 961	51—	74: 1, 879, 286	74—	7: 1, 879, 004		42: 1, 879, 143	113—	46: 1, 879, 510
	228: 1, 879, 809		24: 1, 879, 851		84: 1, 879, 108		1, 879, 130		1, 879, 797		59: 1, 879, 908
16—	19: 1, 879, 421	32—	9: 1, 879, 419		101: 1, 879, 506		1, 879, 926		75: 1, 879, 296		1, 880, 076
	21: 1, 879, 420		10: 1, 880, 176		103: 1, 879, 110		17: 1, 879, 814	93—	1: 1, 879, 410		100: 1, 879, 604
	91: 1, 879, 310	33—	1: 1, 879, 624		105: 1, 879, 134		26: 1, 879, 508		43: 1, 879, 830		102: 1, 879, 122
	96: 1, 879, 754		67: 1, 879, 116		165: 1, 879, 388		33: 1, 879, 936		73: 1, 879, 990		112: 1, 879, 302
	99: 1, 879, 369		91: 1, 879, 980		200: 1, 880, 007		34: 1, 879, 326		88: 1, 879, 233	114—	0. 5: 1, 879, 745
	154: 1, 879, 079		147: 1, 879, 559		211: 1, 879, 065		1, 879, 921	94—	8: 1, 879, 207		71: 1, 879, 681
	1, 879, 080		148: 1, 879, 941		1, 879, 807		1, 880, 127		17: 1, 880, 013	115—	34: 1, 879, 081
	199: 1, 879, 730		199: 1, 879, 398		225: 1, 879, 399		51: 1, 879, 962		31: 1, 879, 281	116—	46: 1, 879, 139
17—	35: 1, 880, 182		218: 1, 879, 587		278: 1, 879, 089		57: 1, 880, 064	95—	2: 1, 879, 806		114: 1, 879, 228
18—	1: 1, 879, 816	34—	16: 1, 880, 114		1, 879, 179		81: 1, 880, 152		8: 1, 879, 537		117: 1, 879, 707
	1, 880, 118	35—	12: 1, 880, 026	52—	5: 1, 880, 116		105: 1, 879, 283		9: 1, 879, 443		124. 1: 1, 879, 294
	8: 1, 880, 068	36—	3: 1, 879, 144		13: 1, 879, 064		112: 1, 879, 972		31: 1, 879, 141		132: 1, 879, 438
	15: 1, 879, 237		71: 1, 879, 729	53—	3: 1, 879, 654		1, 879, 975		75: 1, 880, 067		1, 879, 694
	1, 880, 110	37—	43: 1, 879, 315		6: 1, 879, 268		121: 1, 879, 976	97—	40: 1, 880, 113		135: 1, 880, 089
	17: 1, 879, 379		135: 1, 879, 447		10: 1, 879, 010	75—	1: 1, 879, 749		47: 1, 879, 181	117—	41: 1, 879, 124
	18: 1, 879, 194		143: 1, 879, 062	54—	19: 1, 879, 391		17: R. 18, 609		65: 1, 879, 909		42: 1, 879, 963
	19: 1, 879, 555		174: 1, 879, 115	55—	9: 1, 879, 137		18: 1, 879, 577		156: 1, 879, 733	118—	57: 1, 879, 054
	40: 1, 879, 891	39—	14: 1, 879, 542		10: 1, 879, 924		73: 1, 879, 373		217: 1, 879, 193		61: 1, 880, 064
	45: 1, 879, 348	40—	32: 1, 879, 913		1, 879, 925	78—	42: 1, 879, 356	98—	99: 1, 879, 534	119—	1: 1, 879, 915
	50: R. 18, 607		36: 1, 879, 416		13: 1, 879, 666	80—	5: 1, 879, 568	99—	2: 1, 880, 040		16: 1, 879, 580
	53: 1, 879, 068		53: 1, 879, 501		83: 1, 879, 785	81—	15: 1, 879, 583		9: 1, 879, 032		1, 879, 781
	56: 1, 880, 053		63: 1, 879, 554		146: 1, 879, 112		1, 879, 568		11: 1, 879, 162		17: 1, 879, 059
19—	149: 1, 879, 084		95: 1, 879, 265	56—	11: 1, 879, 823		1, 879, 969		1, 879, 697		19: 1, 879, 473
	163: 1, 879, 174		107: 1, 879, 260		20: 1, 879, 960		18: 1, 879, 058	100—	2: 1, 879, 550		22: 1, 879, 818
20—	4: 1, 880, 153		1, 879, 380		25: 1, 880, 154		49: 1, 879, 452	101—	19: 1, 879, 354		26: 1, 879, 318
	11: 1, 879, 005		119: 1, 880, 165		106: 1, 879, 588		51: 1, 880, 172		149: 1, 879, 775		54: 1, 879, 247
	12: 1, 879, 586		125: 1, 879, 251		240: 1, 879, 488	82—	19: 1, 879, 201		184: 1, 879, 608		61: 1, 879, 332
	19: 1, 879, 798		1, 879, 760		261: 1, 879, 271	83—	45: 1, 879, 897		186: 1, 879, 597		75: 1, 879, 788
	40. 4: 1, 880, 147		1, 879, 906		262: 1, 880, 121	84—	159: 1, 879, 015		287: 1, 879, 964		77: 1, 879, 264
	55: 1, 879, 460		129: 1, 879, 761		298: 1, 879, 195		280: 1, 879, 386		1, 879, 967		105: 1, 879, 043
	68: 1, 879, 026		130: 1, 879, 284		328: 1, 879, 905		392: 1, 879, 462		291: 1, 879, 875	120—	18: 1, 879, 736
	69: 1, 879, 340		1, 879, 374		364: 1, 879, 959		395: 1, 879, 461		368: 1, 879, 387		42: 1, 880, 128
	92: 1, 879, 459		132: 1, 879, 619	60—	13: 1, 879, 911		471: 1, 879, 002		1, 879, 982		98: 1, 880, 080
22—	73: 1, 879, 076		133: 1, 879, 147		24: 1, 879, 563	87—	5: 1, 879, 953		407: 1, 879, 811		103: 1, 879, 456
	148: 1, 879, 485		146: 1, 879, 403		52: 1, 879, 262		9: 1, 879, 874	102—	12: 1, 879, 278		107: 1, 879, 489
	188: 1, 879, 272		156: 1, 880, 099		54. 6: 1, 879, 633	88—	1: 1, 879, 263		23: 1, 879, 579	121—	41: 1, 879, 598
	203: 1, 879, 409	41—	10: 1, 879, 259	61—	30: 1, 879, 430		1, 879, 949		29: 1, 879, 840		1, 879, 892
23—	61: 1, 879, 834		13: 1, 879, 677		32: 1, 879, 836		1. 5: 1, 879, 412	103—	22: 1, 879, 870		69: 1, 880, 131
	107: 1, 879, 204		21: 1, 879, 695		53: 1, 879, 414		2. 2: 1, 879, 592		103: 1, 879, 803		108: 1, 879, 647
	113: 1, 879, 239		33: 1, 879, 417		69: 1, 879, 735		16. 2: 1, 880, 106		113: 1, 879, 149	122—	6: 1, 880, 187
	144: 1, 879, 022		36: 1, 879, 799		76: 1, 879, 993		16. 6: 1, 879, 793		126: 1, 879, 219		37: 1, 879, 235
	147: 1, 879, 071	43—	9: 1, 880, 059	62—	31: 1, 880, 093		17: 1, 879, 188		1, 880, 108		44. 8: 1, 879, 163

122— 494: 1,879,610
123— 11: 1,879,422
25: 1,879,557
32: 1,879,528
1,879,910
1,880,025
59: 1,879,025
97: 1,879,719
122: 1,879,551
173: 1,879,027
196: 1,879,248
125— 24: 1,879,164
126— 38: 1,879,880
40: 1,879,515
43: 1,879,837
1,879,954
1,879,955
109: 1,879,932
224: 1,880,142
271. 1: 1,879,826
128— 57: 1,879,493
77: 1,879,609
85: 1,879,001
239: 1,879,249
309: 1,879,339
332: 1,879,270
341: 1,879,307
344: 1,879,305
129— 2: 1,879,620
20: 1,879,041
131— 5: 1,879,266
12: 1,879,504
45: 1,880,009
51: 1,879,634
1,879,858
52: 1,879,128
57: 1,879,651
60: 1,879,016
132— 49: 1,879,362
79: 1,879,846
83: 1,879,407
1,879,570
92: 1,879,074
134— 17: 1,880,036
39: 1,879,045
136— 26: 1,879,639
27: 1,879,638
28: 1,879,904
148: 1,879,562
173: 1,879,595
1,879,623
137— 21: 1,879,890
53: 1,879,020
78: 1,879,940
122: 1,879,091
139: 1,879,165
1,879,415
1,879,545
1,880,186
153: 1,879,413
139— 10: 1,879,672
144: 1,880,183
153: 1,879,558
165: 1,880,096
415: 1,879,243
140— 3: 1,879,156
93: 1,879,984
141— 1: 1,879,441
7: 1,879,224
1,879,770
143— 21: 1,879,145
157: 1,879,211
159: 1,879,280
144— 27: 1,879,454
29: 1,879,464
259: 1,879,288
146— 73: 1,879,796
169: 1,879,008
187: 1,879,279
193: 1,879,439
148— 7: 1,879,701
149— 20: 1,879,942
151— 2: 1,880,124
8: 1,879,290
152— 11. 5: 1,879,404
14: 1,879,584
1,880,170
16: 1,879,395
17: 1,879,790
153— 38: 1,879,979
46: 1,879,199
49: 1,879,077
1,879,078
1,879,285
73: 1,879,663
1,880,184
79: 1,879,009
154— 1: 1,880,188
9: 1,879,063
155— 2: 1,879,126
45: 1,879,673
50: 1,879,724
52: 1,880,181
95: 1,879,038
96: 1,879,037

155— 96: 1,879,853
112: 1,879,035
139: 1,879,487
163: 1,879,036
179: 1,879,786
1,880,137
184: 1,879,121
1,879,257
1,879,258
188: 1,879,879
158— 4: 1,879,011
1,879,596
7: 1,880,178
27. 4: 1,879,631
1,879,789
28: 1,879,186
1,879,832
61: 1,879,301
83: 1,879,938
99: 1,879,916
115: 1,879,776
1,879,992
117. 1: 1,879,381
117. 5: 1,879,886
159— 50: 1,879,445
161— 1: 1,879,641
164— 79: 1,880,159
89: 1,879,175
123: 1,880,031
166— 1: 1,879,160
10: 1,879,068
167— 3: 1,879,831
14: 1,879,777
22: 1,879,351
53: 1,879,601
81: 1,879,734
1,879,762
169— 42: 1,879,509
170— 79: 1,880,143
159: 1,879,225
162: 1,879,935
163: 1,879,659
1,880,104
165: 1,879,142
168: 1,879,812
171— 97: 1,879,292
223: 1,879,014
172— 36: 1,879,625
1,879,628
1,879,675
126: 1,880,033
179: 1,879,176
239: 1,879,154
280: 1,879,229
293: 1,879,824
173— 264: 1,879,746
1,880,060
322: 1,880,069
1,880,151
334: 1,879,783
358: 1,879,768
175— 30: 1,880,166
183: 1,879,098
294: 1,879,969
298: 1,878,999
1,879,000
336: 1,879,612
176— 122: 1,879,158
1,879,470
1,879,471
1,879,472
1,879,688
126: 1,879,740
177— 311: 1,879,530
1,879,887
329: 1,879,057
336: 1,879,801
339: 1,879,213
367: 1,879,933
378: 1,879,934
178— 4: 1,879,524
53. 1: 1,879,525
90: 1,879,523
179— 5: 1,879,202
18: 1,879,741
78: 1,879,773
91: 1,880,072
100. 3: 1,879,423
1,879,650
1,879,964
171: 1,879,687
180— 8: 1,879,446
9. 2: 1,879,218
19: 1,880,023
27: 1,879,275
49: 1,879,044
77: 1,879,096
82: R. 18,608
181— 20: 1,879,148
31: 1,879,042
183— 2. 5: 1,879,930
21: 1,879,107
23: 1,880,017
1,880,018
97: 1,879,289

184— 7: 1,879,086
105: 1,879,564
187— 9: 1,878,995
188— 20: 1,879,750
30: 1,879,630
62: 1,879,917
78: 1,879,434
81. 1: 1,879,973
1,879,974
1,879,977
88: 1,879,050
89: 1,879,182
1,880,030
107: 1,879,971
109: 1,880,129
140: 1,880,061
152: 1,879,365
200: 1,879,075
1,879,668
206: 1,879,702
210: 1,879,277
264: 1,879,049
1,879,433
1,879,744
189— 19: 1,880,125
26: 1,879,779
37: 1,879,295
75: 1,879,655
190— 35: 1,879,102
192— . 01: 1,879,184
4: 1,880,066
13: 1,879,569
18: 1,879,546
56: 1,879,486
59: 1,879,843
131: 1,880,063
133: 1,880,100
135: 1,879,764
193— 32: 1,879,944
34: 1,879,069
194— 9: 1,879,499
55: 1,879,408
196— 5: 1,879,849
10: 1,880,189
53: 1,879,750
77: 1,879,948
197— 109: 1,879,231
198— 26: 1,879,073
127: 1,879,720
189: 1,879,384
192: 1,879,232
218: 1,880,112
199— 20: 1,880,119
52: 1,880,160
200— 5: 1,879,714
27: 1,879,300
34: 1,879,169
64: 1,879,822
138: 1,879,426
1,879,428
142: 1,879,383
144: 1,879,131
1,879,958
146: 1,879,303
166: 1,879,349
201— 63: 1,879,253
67: 1,879,728
202— 15: 1,879,983
34: 1,879,502
68: 1,879,847
204— 58: 1,879,842
205— 4: 1,879,743
206— 7: 1,879,476
44: 1,879,105
52: 1,879,755
67: 1,879,029
78: 1,880,088
79: 1,879,751
1,879,952
83: 1,879,658
207— 10: 1,879,867
13: 1,879,336
209— 96: 1,879,385
166: 1,879,871
211: 1,880,185
367: 1,879,923
403: 1,879,977
210— 3: 1,879,135
43: 1,879,451
182: 1,879,474
199: 1,880,005
202: 1,878,998
211— 96: 1,879,679
128: 1,879,943
153: 1,879,372
212— 38: 1,880,138
134: 1,879,819
214— 1. 1: 1,879,393
3: 1,879,120
38: 1,879,203
1,879,607
66: 1,878,994
86: 1,879,518
95: 1,879,713
145: 1,879,448

215— 38: 1,879,640
43: 1,879,082
217— 3: 1,879,950
12: 1,879,157
218— 6: 1,879,895
219— 4: 1,879,217
10: 1,880,095
24: 1,879,653
34: 1,879,970
37: 1,879,212
38: 1,879,019
1,879,889
39: 1,879,956
40: 1,879,297
220— 9: 1,879,256
1,879,392
19: 1,879,466
23: 1,879,517
26: 1,879,572
30: 1,879,500
54: 1,879,573
55: 1,879,359
221— 60: 1,879,205
1,879,208
1,879,914
1,880,022
1,880,103
73. 5: 1,879,382
80: 1,879,221
95: 1,879,051
1,879,129
1,879,308
1,879,309
103: 1,879,763
1,879,876
116: 1,879,109
135: 1,879,055
146: 1,879,269
223— 18. 4: 1,880,027
18. 6: 1,879,918
19: 1,879,931
61: 1,879,739
64: 1,879,946
224— 5: 1,879,469
1,879,480
29: 1,879,304
225— 21: 1,879,317
226— 4: 1,880,077
45: 1,879,171
69: 1,879,989
116: 1,879,794
228— 61: 1,879,017
229— 5. 5: 1,879,113
29: 1,880,074
72: 1,879,965
230— 5: 1,879,575
104: 1,879,366
117: 1,879,450
132: 1,879,561
1,880,101
152: 1,879,136
203: 1,879,947
212: 1,879,370
256: 1,879,150
232— 33: 1,879,200
234— 1: 1,879,151
235— 3: 1,879,838
61: 1,879,576
80: 1,880,148
133: 1,879,245
139: 1,879,125
236— 12: 1,879,344
1,879,771
46: 1,879,772
58: 1,879,791
69: 1,879,312
78: 1,879,706
238— 157: 1,880,180
240— 2: 1,879,097
2. 14: 1,879,708
4: 1,879,273
10. 67: 1,879,622
10. 69: 1,879,621
59: 1,879,512
81: 1,879,343
106: 1,879,442
242— 4: 1,879,852
49: 1,879,885
71: 1,879,866
74: 1,880,008
75: 1,879,591
1,879,901
1,879,902
244— 1: 1,879,894
1,880,122
2: 1,879,432
1,879,547
1,879,716
1,879,765
10: 1,879,346
12: 1,879,338
1,879,518
1,879,821
1,880,019

244— 14: 1,879,594
1,879,700
15: 1,879,857
18: 1,879,187
19: 1,879,323
29: 1,879,717
1,879,859
30: 1,879,039
1,879,046
1,879,632
1,879,715
246— 29: 1,880,149
33: 1,879,615
41: 1,880,037
63: 1,879,611
1,879,613
1,879,614
1,879,616
1,879,617
127: 1,879,919
130: 1,879,070
1,880,032
133: 1,880,034
134: 1,880,035
1,880,039
232: 1,879,227
251: 1,879,252
247— 1: 1,880,081
3: 1,879,198
25: 1,879,920
1,880,107
31: 1,880,098
40: 1,880,156
248— 2: 1,879,865
12: 1,879,937
16: 1,879,458
17: 1,879,519
19: 1,880,179
20: 1,879,585
30: 1,879,848
31: 1,879,282
41: 1,879,214
250— 1: 1,880,102
20: 1,879,861
1,879,862
1,879,863
27. 5: 1,879,159
1,879,321
1,879,514
1,879,544
1,880,014
1,880,092
33: 1,879,978
34: 1,879,498
40: 1,879,629
41. 5: 1,880,020
1,880,105
251— 28: 1,879,322
40: 1,879,320
48: 1,880,177
97: 1,879,526
113: 1,879,481
128: 1,880,120
163: 1,879,397
252— 5: 1,879,893
254— 6: 1,880,150
88: 1,879,123
102: 1,879,999
131: 1,879,313
139: 1,880,071
255— 22: 1,879,929
23: 1,879,455
53: 1,879,080
61: 1,879,127
1,879,222
1,879,226
71: 1,879,034
1,879,177
74: 1,879,490
256— 52: 1,879,725
257— 9: 1,879,685
137: 1,879,072
1,879,152
1,879,902
239: 1,879,453
261: 1,879,140
259— 43: 1,879,328
84: 1,879,255
108: 1,879,928
109: 1,880,021
260— 6: 1,879,543
9: 1,879,505
12: 1,879,240
1,879,997
13: 1,879,206
28: 1,879,841
29: 1,879,540
33: 1,879,389
36: 1,879,539
38: 1,879,538
42: 1,879,324
45: 1,879,210
46: 1,879,000

260— 46: 1,879,425
49: 1,879,028
54: 1,879,637
57: 1,879,666
58: 1,879,390
60: 1,879,535
69: 1,879,424
76: 1,879,228
92: 1,879,261
98: 1,879,599
1,879,660
100: 1,880,041
101: 1,880,067
106: 1,879,605
1,879,606
108: 1,879,209
123: 1,880,169
127: 1,879,003
128: 1,879,132
134: 1,879,497
146: 1,880,051
1,880,052
1,880,054
148: 1,880,055
154: 1,879,337
155: 1,879,533
167: 1,879,767
168: 1,879,912
261— 19: 1,879,463
45: 1,879,053
49: 1,879,536
79: 1,879,382
104: 1,879,358
114: 1,879,352
262— 5: 1,880,091
12: 1,879,907
30: 1,880,000
263— 9: 1,879,494
19: 1,879,220
23: 1,879,444
26: 1,879,680
27: 1,880,012
51: 1,879,056
1,880,011
265— 25: 1,879,721
27: 1,879,496
62: 1,879,183
266— 4: 1,879,850
21: 1,880,146
23: 1,879,346
43: 1,879,589
267— 29: 1,879,048
268— 2: 1,879,427
10: 1,879,881
35: 1,879,507
117: 1,879,994
271— 2. 3: 1,879,573
2. 4: 1,879,465
2. 6: 1,880,111
39: 1,879,966
79: 1,879,095
87: 1,879,040
272— 33: 1,880,139
67: 1,879,401
273— 26: 1,879,316
52: 1,879,306
54: 1,879,749
79: 1,879,117
132: 1,879,571
136: 1,880,175
138: 1,879,511
156: 1,880,130
274— 10: 1,879,291
1,879,522
1,879,593
1,879,693
1,879,766
38: 1,879,722
275— 6: 1,879,114
8: 1,880,155
279— 60: 1,879,656
280— 33. 1: 1,880,123
1,880,134
33. 15: 1,879,052
33. 44: 1,879,981
1,880,075
42: 1,880,167
282— 22: 1,879,347
285— 58: 1,879,238
1,879,021
84: 1,879,565
168: 1,879,364
286— 9: 1,879,626
24: 1,879,855
1,879,988
31: 1,879,478
287— 76: 1,879,636
125: 1,879,856
290— 31: 1,879,878
291— 11: 1,879,810
28: 1,879,747
292— 74: 1,880,173
113: 1,879,792
253: 1,880,132

292— 275: 1,879,274
338: 1,879,119
343: 1,879,664
294— 15: 1,879,532
67: 1,879,756
296— 3: 1,879,513
7: 1,879,299
75: 1,879,418
97: 1,880,024
296— 120: 1,879,060
143: 1,879,215
297—107. 1: 1,879,985
299— 58: 1,879,635
59: 1,879,012
84: 1,879,101
301— 9: 1,879,492
302— 14: 1,879,085
302— 16: 1,880,073
303— 1: 1,879,670
3: 1,879,704
6. 1: 1,879,674
7: 1,879,646
1,879,648
20: 1,879,644
1,879,645
1,879,678
303— 23: 1,878,993
25: 1,879,642
26: 1,879,703
35: 1,879,662
1,879,669
1,879,671
54: 1,879,661
69: 1,879,643
79: 1,879,690
303— 88: 1,879,667
304— 23: 1,879,244
29: 1,879,376
306— 1: 1,879,325
308— 72: 1,879,357
83: 1,879,723
89: 1,879,804
115: 1,879,839
134: 1,879,627
308— 134: 1,879,774
238: 1,879,287
312— 30: 1,879,854
36: 1,879,590
1,880,133
77: 1,880,163
80: 1,879,208
83: 1,879,047
189: 1,879,884

U. S. GOVERNMENT PRINTING OFFICE: 1932

Patents Nos. 1,875,315 to 1,876,532

CARNEGIE LIBRARY OF ATLANTA

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 422—No. 1 TUESDAY, SEPTEMBER 6, 1932 Price—$10 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $10.00 per annum; including annual index, $11.50; single numbers, 25 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of September 6, 1932	1
Trade-Marks Canceled	1
Adverse Decisions in Interference	1
Interference Notice	1
Applications Under Examination	2
Commissioner's Decision—	
Ex parte Larson	3
Decisions of the U. S. Court—	
Walgreen Company v. Godenfroy Manufacturing Company	4
Locke v. Fuller. Fuller v. Locke	4
Martin v. Friendly	6
Gamble v. Church	7
Patent Suits	9
Disclaimers	10
Trade-Marks Published (158 Applications)	11
Trade-Mark Registrations Granted	32
Trade-Mark Registrations Renewed	38
Labels	39
Prints	40
Reissues	41
Designs	42
Patents Granted	49

Issue of September 6, 1932

Trade-Marks	170	No. 297,130 to No.	297,308, inclusive.
T. M. Renewals	20		
Labels	34	No. 41,113 to No.	41,146, inclusive.
Prints	8	No. 13,896 to No.	13,903, inclusive.
Reissues	6	No. 18,588 to No.	18,592, inclusive.
Designs	36	No. 87,701 to No.	87,736, inclusive.
Patents	1,218	No. 1,875,315 to No.	1,876,532, inclusive.
Total	1,500		

Trade-Marks Canceled

140,368. Skin-lotion. The Drysol Chemical Co., Buffalo, N. Y. Registered March 15, 1921. Canceled August 6, 1932.

184,095. Magnesium oxide. Gigante & Company, Incorporated, New York, N. Y. Registered May 20, 1924. Canceled August 20, 1932.

230,747. Thread. The Gardiner Hall Jr. Company, South Willington, Conn., and New York, N. Y. Registered August 2, 1927. Canceled August 6, 1932.

284,520. Sanitary napkins. The Deane Plaster Co., Yonkers, N. Y. Registered June 30, 1931. Canceled August 6, 1932.

285,201. Plastic composition. Arthur F. Rowe, Lansing, Mich. Registered July 14, 1931. Canceled August 20, 1932.

287,635. Manicure files. The Schaaf & Good Company, Fremont, Ohio. Registered September 29, 1931. Canceled August 20, 1932.

293,175. Folders issued from time to time. First National Bank of Arizona at Phoenix, Phoenix, Ariz. Registered April 12, 1932. Canceled August 6, 1932.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,680,675, A. S. Gale, Magnetic system to control the stop and leveling of elevators, decided July 25, 1932, claims 5, 10, 13, 14, 16, 38, 47, 50, 51, and 52.

Pat. 1,698,159, C. F. Goddard, Grease pump, decided July 1, 1932, claims 1, 2, 3, 4, and 5.

Pat. 1,700,043, F. W. Gunn, Hose clamp, decided July 30, 1932, claims 1, 2, 3, and 4.

Pat. 1,709,035, Caleb Payne, Manufacture of veneered blocks, decided July 1, 1932, claims 1 and 2.

Pat. 1,758,605, J. R. Jackson, jr., Elevator, decided August 16, 1932, claims 20, 22, and 28.

Pat. 1,795,084, O. H. Dicke, Train dispatching system for railroads, decided July 26, 1932, claim 11.

Pat. 1,798,790, W. C. Gould, Speed control for electrical typewriters, decided August 12, 1932, claim 1.

Pat. 1,824,638, A. R. Towers, Ice melting device, decided August 15, 1932, claims 18 and 19.

Pat. 1,842,096, F. A. Howard and N. E. Loomis, Method of control of pyrolysis of hydrocarbon oils, decided August 18, 1932, claim 1.

Reissue Pat. 17,796, H. S. Nelson, Phonograph reproducer, decided August 18, 1932, claim 4.

Interference Notice

U. S. Patent Office, *Washington, Aug. 11, 1932.*

The assigns or legal representatives of Graves Griffith, deceased, take notice:

Interferences have been declared by this Office between an application for patent filed by Graves Griffith, 235 Moncada Way, Ingleside Terrace, San Francisco, Calif., and applications for patent filed by Henry A. Wayringer, 10 Frank Street, Schenectady, N. Y., Arthur Stephen Ford, 412 West 110th St., New York, N. Y., and Clifton G. Found, 148 Plymouth Avenue, Schenectady, N. Y. The death of the party Griffith has been noted in the record and the notice of interference sent to his legal representatives has been returned by the post office as undeliverable. Notice is hereby given that unless the assigns or legal representatives of said Griffith, deceased, shall enter an appearance therein within 30 days from the first publication of this order the interferences will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

Wm. A. Kinnan,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business August 20, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 73,251; Trade-Mark Division, 926. Oldest new case, Feb. 18, 1932; oldest amended, Feb. 18, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	May 24	May 24	487
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Apr. 20	Apr. 20	912
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 2	May 10	733
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 25	May 31	441
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 3	May 10	409
4806 C	6. LEWERS, A. M., Carbon Chemistry	Feb. 20	Feb. 29	2,070
5725	7. JARBOE, C. G., Optics; Photography	Mar. 24	Mar. 24	1,477
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 25	Apr. 6	1,109
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	May 23	May 23	782
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 21	Mar. 24	872
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 5	Apr. 13	660
7701	12. HENRY, C. C., Machine Elements	May 7	May 7	595
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding, Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 7	Apr. 7	1,113
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	May 2	May 10	761
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 18	Mar. 20	1,922
5612	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 27	Apr. 27	962
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 25	Feb. 25	1,417
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Apr. 21	Apr. 20	651
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Feb. 24	Feb. 27	1,769
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 6	May 7	630
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 4	Apr. 8	884
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	May 2	May 25	636
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 23	Feb. 23	870
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	May 2	May 4	684
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 4	Mar. 4	1,453
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 19	Feb. 25	1,087
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Apr. 23	Apr. 25	969
4628	28. BENSON, A. R., Internal-Combustion Engines	Mar. 10	Mar. 11	1,373
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Feb. 25	Feb. 29	913
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 20	Apr. 12	871
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Feb. 25	Feb. 25	1,536
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 23	Apr. 23	822
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 23	Feb. 20	2,393
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 21	Mar. 21	874
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 20	June 16	423
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 27	Mar. 9	1,630
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 11	Mar. 18	1,202
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 13	June 16	217
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 24	Feb. 26	1,469
7880	40. OBERLIN, J. J., Receptacles	Mar. 29	Mar. 30	2,166
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	May 24	June 9	592
5882	42. CUTTING, H. O., Electric Signaling	Feb. 24	Mar. 1	1,330
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 4	Apr. 4	1,437
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 20	Feb. 20	1,841
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Apr. 20	Apr. 25	1,023
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Apr. 23	Apr. 22	632
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 30	Mar. 30	1,991
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Mar. 18	Mar. 18	810
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Feb. 26	Feb. 26	1,591
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Feb. 23	Feb. 26	2,157
5628	51. BACKUS, C. D., Radiant Energy	Apr. 2	Apr. 2	1,211
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	May 23	May 25	811
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	June 7	June 8	502
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Feb. 26	Feb. 26	1,121
6883	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	June 10	June 10	337
	{Designs	July 28	Aug. 8	126
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 8	Mar. 8	1,500
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 20	Apr. 21	680
5605	58. DOWELL, E. F., Abrading; Typewriting	Feb. 24	Feb. 24	1,267
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Feb. 18	Feb. 18	1,764
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Feb. 24	Feb. 24	1,436
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 27	Mar. 2	1,381
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Mar. 3	Mar. 3	1,797
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 24	Feb. 24	1,460
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Apr. 22	Apr. 26	587
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Feb. 26	Feb. 26	1,623
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	July 20	Aug. 8	793
	{Labels and Prints	July 22	Aug. 5	133

DECISIONS IN PATENT AND TRADE-MARK CASES

Decisions of the Board of Appeals

Ex parte Larson

Serial No. 183,905. Decided June 1, 1931

1. Claims — Coined Expressions — Ex Parte Markush Construed.

Certain claims for a process of manufacturing oxygenated hydrocarbons in which a specified gaseous mixture is passed over a catalyst which includes "an oxide of one of the elements of the group manganese, tungsten, zinc, cadmium and molybdenum" *Held* patentable since applicant by stating what metallic oxides will work in his process has made them equivalents and a related group in said process. *Ex parte Markush*, 304 O. G. 839, construed.

2. Patentability—Claims of Undue Breadth.

Certain claims for a process of effecting reactions in the gaseous phase *Held* unpatentable as being broader than applicant's invention since there is nothing in his disclosure to show that his specific catalyst when employed in accordance with his described process would affect all gaseous phase reactions.

[This application has resulted in Patent No. 1,844,129, issued February 9, 1932.]

Application for patent filed April 14, 1927, Serial No. 183,905. Production of methanol and other carbon compounds and catalytic agents for use therein.

Messrs Pennie, Davis, Marvin and Edmonds for applicant.

Before Moore, Assistant Commissioner, and Landers and Pierce, Examiners in Chief.

Moore, *Assistant Commissioner:*

The applicant appeals from the decision of the Examiner finally rejecting claims 1, 2, 3, 5, 7 and 9. Claims 1 and 3 may be quoted as illustrative of the subject matter on appeal:

1. The process of effecting reactions in the gaseous phase, which comprises subjecting the gases to react to the action of a heated catalyst consisting of the reduction product of a fused mixture of copper oxide and an oxide of one of the elements of the group manganese, tungsten, zinc, cadmium and molybdenum.

3. The process of manufacturing oxygenated hydrocarbons, which comprises passing a gaseous mixture containing carbon monoxide and a hydrogen over a heated catalyst consisting of the reduction product of a fused mixture of copper oxide and an oxide of one of the elements of the group manganese, tungsten, zinc, cadmium and molybdenum.

Claims 1, 3, 5, 7 and 9 stand rejected as being alternative in the inclusion of a group of unrelated elements, the alternative form of the claims being expressed in the following or equivalent language:

a heated catalyst consisting of the reduction product of a fused mixture of copper oxide and an oxide of one of the elements of the group manganese, tungsten, zinc, cadmium and molybdenum.

Claims 1 and 2 are rejected on the additional ground that they are too broad in that the disclosure is limited to the production of oxygenated hydrocarbons from carbon oxides and hydrogen.

As to the first ground of rejection, the Examiner contends that the inclusion of the group of unrelated elements is purely alternative and opposed to law, as set forth in *Caldwell and Barr*, 120 O. G. 2125, and *Ex parte Fretwell*, 20 Gour. 85:12. The Examiner also points out that the elements enumerated in the claims are selected from groups 2, 6 and 7 of the periodic system, the physical and chemical properties thereof being diverse and unrelated, and states that if patents were issued, each to a process such as defined by claim 1 but limited to a different one of the elements of said group, there would be no question as to the validity of each of such patents over the others.

The applicant contends, in effect, that the several elements enumerated in the group are equivalents in the applicant's catalyst when used in the relation claimed; that there is no known generic term under which they may be included; that the catalyst in such relation is admittedly new; and that said elements may be properly included in each of the claims under the practice outlined in *Ex parte Markush*, 340 O. G. 839, 1925 C. D. 126.

The Examiner contends that the facts in this case are not governed by the Markush decision, but by the decision in *Ex parte Palmer and Fulton*, 398 O. G. 707, in which it was held as follows:

It was not intended to rule in the Markush case that any substances which would accomplish applicant's purpose might be included in the claim in the form stated, irrespective of whether those substances could properly be regarded as species of a known genus or subgenus or whether they were so related that the discovery of the desired property in one would suggest its existence in the other, so that the granting of a patent specific to one might justify the refusal of a patent on an application specific to another.

It was held in the Markush decision that under certain conditions a claim which included as one of its elements, one of a group consisting of certain specified substances was a proper form of claim. The decision, however, was limited to cases where there were species belonging to the same known genus and subgenus but there was no known subgenus term which would include only such species of a genus which had been found would accomplish the applicant's purpose and where, if patents were taken out on each of the specific substances, it might well be that such patents would not all be valid.

[1] While the exact situation presented herein was not present in the Markush case, yet it is believed that the principle applied in said case is applicable herein. Metallic oxides may or may not, in a given instance, form a recognized group of related substances. The applicant, however, has stated what metallic oxides will work in his process, and has thus made them equivalents and a related group in said process.

With respect to claims 1 and 2 being broader than the applicant's invention, we are of the opinion that the Examiner's rejection is without reversible error.

[2] So far as appears from the record, the applicant's disclosures are confined to the manufacture of oxygenated hydrocarbons from carbon oxides and hydrogen by passing a gaseous mixture containing carbon monoxide and hydrocarbon over his specific catalyst while in a heated state. There is nothing of record to show that the applicant's specific catalyst, when employed in accordance with his described process, would effect all gaseous phase reactions, as pointed out by the Examiner, and yet claims 1 and 2 are broad enough to include not only the specific gaseous phase reactions disclosed, but all others.

The public should not be required to invent or to resort to experimentation in order to apply the applicant's catalyst in effecting gaseous phase reactions other than those disclosed. The claims should be no broader than the disclosures.

The action of the Examiner rejecting claims 1 and 2 is affirmed, but is reversed as to claims 3, 5, 7 and 9.

U. S. Court of Customs and Patent Appeals

WALGREEN COMPANY *v.* GODENFROY MANUFACTURING COMPANY

No. 2,905. Decided May 23, 1932

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—SKIN CREAM AND SHAVING CREAM.
   Shaving cream *Held* to constitute goods of the same descriptive properties as skin cream.
2. SAME—SIMILARITY—"PEAU-DOUX" AND "PEAUDOUCE".
   A mark for shaving cream consisting of the profile of the head and shoulders of a man with the compound word "Peau-Doux" and underneath the same "(Po-Do)" *Held* confusingly similar to the term "Peaudouce" previously used by another as a trade-mark for skin cream.

APPEAL from the Patent Office. Affirmed.

Mr. Harry C. Alberts and *Mr. Theo. K. Bryant* for Walgreen Company.

Messrs. Carr & Carr & Gravely, Mr. Samuel Herrick, Mr. Joseph J. Gravely, and *Mr. James A. Carr* for Godenfroy Manufacturing Company.

GRAHAM, *P. J.:*

The appellant filed its application for registration of its trade-mark in the United States Patent Office on May 25, 1928. The mark is used on shaving cream and consists of the profile of the head and shoulders of a man, with the compound word "Peau-Doux", and underneath the same the following: "(Po-Do)." The mark is said to have been used since March 1, 1926.

The appellee opposes the registration, relying upon its registration of the trade-mark "Peaudouce" for skin cream, and the continuous use of the same in interstate commerce since October, 1895. This registration is No. 250,012, dated November 27, 1928.

The opposer alone took testimony, and it satisfactorily appears that the opposer used its mark, as provided by law, long prior to appellant's entrance into the field. The applicant filed, as a part of its application, a disclaimer of the word "Peau-Doux", except as used in its mark.

We agree with the Commissioner in his decision that the goods of opposer and applicant are of the same descriptive properties, and that confusion would result if applicant's mark were registered. Hence registration should be denied. It would be a work of supererogation for us to repeat here what we have said so many times. *California Packing Co. v. Tillman & Bendell,* 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *Sun-Maid R. G. of California v. American Grocer Company,* 17 C. C. P. A. (Patents) 1034, 40 F.(2d) 116, 395 O. G. 3; *Harris v. Plough Chem. Co.* 19 C. C. P. A. (Patents) ——, 54 F.(2d) 967, 418 O. G. 3.

It is argued that the word "Peau-Doux" has been disclaimed, except in conjunction with this mark. This is of no importance. The confusion will continue, as Justice Robb, of the Court of Appeals of the District of Columbia, said in *Fishbeck Soap Co. v. Kleeno Mfg. Co.,* 44 App. D. C. 6, 216 O. G. 663, while "the disclaimer would slumber in the archives of the Patent Office."

It is vigorously argued by appellant's counsel that opposer can not be heard to oppose the registration of appellant's mark, for the reason that opposer's mark is descriptive, not the subject of exclusive ownership, and was not entitled to registration. This raises the question of the validity of opposer's registered mark. It is the holding of this court that the validity of the opposer's mark will not be inquired into in opposition proceedings. *Celotex Co. v. Millington,* 18 C. C. P. A. (Patents) 1484, 49 F.(2d) 1053, 413 O. G. 279; *Daltroff & Cie v. Vivaudou,* 19 C. C. P. A. (Patents) ——, 53 F.(2d) 536, 414 O. G. 7.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

LOCKE *v.* FULLER

FULLER *v.* LOCKE

No. 2,958 and 2,959. Decided May 23, 1932

1. INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.
   Claims for a theater lighting system including "a common control means for the switch means of each group" *Held* not readable upon the application of L. and that priority with respect thereto was properly awarded to F.
2. SAME—SAME—SAME.
   Claims for a theater lighting system including "means including a group of individually adjustable switches for each load circuit" *Held* not readable upon the disclosure of L. which shows merely switches which are movable to make or break a connection between two controls since merely opening or closing a switch does not constitute individually adjusting the same, and priority with respect thereto awarded to F.

APPEAL from the Patent Office. Modified.

The firm of Charles W. Hills and *Mr. Myron G. Clear, Mr. Charles W. Hills, jr., Mr. Charles F. Meroni,* and *Mr. M. R. Chambers* for Locke.

Mr. O. H. Eschholz and *Mr. Wesley G. Carr* for Fuller.

BLAND, *J.:*

These are appeals from the decision of the Board of Appeals of the United States Patent Office in an interference proceeding in which Locke was awarded priority of invention as to the subject matter of counts 1, 2, 3, 8, 9, 10, 11 and 13, and priority of invention was awarded to Fuller as to the subject matter of counts 4, 5, 6, 7, 12 and 14.

The counts were taken from the Fuller patent which had been assigned to the Westinghouse Electric and Manufacturing Co., and were copied in an application for reissue of a patent to Locke under which the Hub Electric Company is the exclusive licensee.

Locke appeals from the decision of the Board awarding priority to Fuller as to counts 4, 5, 6, 7, 12 and 14, and Fuller has appealed from the same decision which awarded priority to Locke in counts 2, 3, 8, 9, 10, 11 and 13.

Priority in the subject matter of count 1 was, by the Board of Appeals, awarded to Locke. No appeal is taken from the Board's decision as to count 1 and consideration of this count is not required by us.

The sole question in the case, which we need to consider, is: Do the counts of the interference read upon the Locke disclosure—can Locke make the counts?

The Examiner of Interferences and the Law Examiner held that Locke could make all the counts and awarded priority to Locke in the subject matter thereof. Upon appeal to the Board of Appeals, the Board held with the Examiner of Interferences and the Law Examiner that Locke could make counts 1, 2, 3, 8, 9, 10, 11 and 13, but that he could not make counts 4, 5, 6, 7, 12 and 14, and, therefore, reversed the decision appealed from in this respect, and awarded priority as to counts 4, 5, 6, 7, 12 and 14 to Fuller.

There is a single record for both appealed cases, and both are briefed and argued together, and will be included in one decision by this court.

The invention relates to a theater lighting system in which a plurality of lighting circuits are positioned in various portions of the stage with separate circuits, at any one position, having different colored lamps. The different circuits and colors for the different scenes may be preselected, that is, while one scene is being produced, another set of switches is arranged to throw on certain lights for the next scene without interfering with the lights being used in the first or any other scene. The whole arrangement is also designed to prevent the flow of so-called "sneak" currents through lamp circuits other than those which pertain to the active scenes.

We think claims 2 and 4 are illustrative and they are as follows:

2. In a theatre-lighting system, the combination with a supply circuit having a plurality of separately operable switches and a plurality of load circuits, of controlling devices for each of said circuits, *and means including a group of individually adjustable switches for each load circuit,* each of which is associated with a different separately operable switch for selectively controlling the connection of said source to said controlling devices whereby desired combinations of said lighting circuits may be preselected for a series of scenes and whereby the circuits of each selected combination may be energized without disturbing the adjustment for preceding or subsequent scenes. [Italics ours.]

4. In combination in a theatre-lighting system, a plurality of groups of switch means, a source of electric energy, *a common control means for the switch means of each group,* a plurality of lighting currents controlled by said switch means, a common connection from each lighting circuit to one switch means of each group, and a means individual to each switch means adapted to determine whether actuation of its said control means shall cause current flow through said switch means. [Italics ours.]

Count 2 is illustrative of the counts in which priority of invention was awarded to Locke, and count 4 is illustrative of the character of the counts awarded Fuller.

We have italicized the controverted portions of the counts.

The Board concluded that the Law Examiner properly held that the term in count 2—

and means including a group of individually adjustable switches for each load circuit

read upon Locke's structure as shown in Figure 1*a*. Counts 3, 8, 9, 10, 11 and 13 contain substantially the same language as the italicized phrase in count 2. Having held that such language read upon Locke's disclosure, and it being conceded that if he could make the counts he was prior to Fuller in invention, the Board awarded priority in this group of counts to Locke.

The Board held that the term "a common control means for the switch means of each group" which is found in count 4 (similar language being found in counts 5, 6, 7, 12 and 14), did not read upon the Locke structure, and that Locke could not make such counts, and, therefore, awarded priority in this group of counts to Fuller.

The construction of the theater lighting system involved in both applications is somewhat difficult to understand and more difficult to explain, and we do not regard it as necessary to set out in detail the various elements of the different structures.

In discussing the counts in which priority of invention was awarded to Fuller, the Board said:

Count 4 recites a "common control means for the switch means of each group" as well as a common connection from each lighting circuit to one switch means of each group "and means individual to each switch means adapted to determine whether actuation of its said control means shall cause current flow." The Law Examiner holds switch 82 a common control means for group 1 of switches. We do not consider this language can be so broadly construed. To control a switch, we consider means to effect a movement of said switch. To control the current passing through the switch we do not consider as controlling the switch which is either closed or open independent of the current in the line to the switch. The common connection from each lighting circuit to one switch means of each group does read, as the Law Examiner holds, on the + and — lines between load and the switches S. Not finding any control means in Locke, we do not find the "means *axax* adapted to determine whether actuation of its said control means shall cause current flow."

Count 5 reads "means insuring common actuation of the switch means of a group." Count 6 reads "a common control means for the switch means of each group." Count 7 reads "means insuring common actuation of the switch means of a group." Count 5 also has a clause "adapted to determine whether actuation of its said first said means shall cause current flow." In counts 6 and 7 this clause reads "adapted to determine whether actuation of its said control means shall cause current flow." These expressions mean to us, as held in connection with count 4, mechanism for actually changing the position of the switch or effecting an opening or closing of same and not merely controlling the flow or current through the switches when closed. We consider that claims 4, 5, 6 and 7 are not readable on the Locke construction. Count 12 recites a common control means for the switch means of each group as well as the expression "adapted to determine whether actuation of its control means shall cause current to flow." Count 14 uses the language "means insuring the common actuation of the switch means" and a similar closing expression to that in count 12. For reasons above stated, we do not consider that these counts read on Locke.

[1] We agree that Locke does not show the common control means referred to, and we affirm the action of the Board in awarding priority of invention of the counts of this group to Fuller.

As to counts 2, 3, 8, 9, 10, 11 and 13, we find ourselves in disagreement with the finding of the Board.

Counts 2, 3, 8, 9 and 11 are characterized by a common element which is expressed in count 2 in the phrase—

and means including a group of individually adjustable switches for each load circuit.

In counts 10 and 13 is found language directed to the same subject matter as is above referred to in

counts 2, 3, 8, 9, and 11. In count 10 is found the phrase—

a plurality of means adapted to be preset to interrupt the circuit between said source and each load circuit.

In count 13 is found the phrase—

means individual to each switch means of each group to determine whether current from said source shall flow through the said switch means

etc.

The allowance of priority to Locke of this group of counts depends upon whether or not the phrase in each count above referred to reads upon the Locke disclosure. We do not think it does.

[2] The Board in affirming the decision appealed from as to the right of Locke to make this group of counts, construed the term "adjustable" as applicable to the movement of a switch from closed position to open position, and conversely from open position to closed position, holding that switches *a*, *b*, *c*, and *d* in Figure 1*a* were individually adjustable, and said:

* * * For instance a series of switches may be said to be adjusted or set in open or closed position before the current to be supplied to the various circuits controlled by said switches is turned on.

In determining what "individually adjustable" means, and what the quoted phrases in counts 10 and 13 mean, we think it proper to examine the Fuller drawings and disclosure, since the count originated in his application. The individually adjustable switches 58 in Fuller are adjusted preliminary to the circuit opening and circuit closing movements. Each switch 58 is adjustable by a presetting action involving the use of a screw or other adjusting device which throws the circuit out of contact with certain particular connections, irrespective of any further circuit closing movement.

The same features in Locke, claimed to respond to this language, are switches *a*, *b*, *c*, and *d*, shown in Figure 1*a*. These are merely switches (no particular kind indicated) and are movable to make or break a connection between two controls. It is not thought that merely opening or closing a switch constitutes individually adjusting the same for each load circuit as is contended for by Locke.

We therefore, conclude that Locke cannot make counts 2, 3, 8, 9 and 11. For substantially the same reasons as apply to counts 2, 3, 8, 9 and 11, we think that the above quoted phrases found in counts 10 and 13 do not read on Locke's disclosure. The Board erred in affirming the action of the Examiner of Interferences in awarding priority to Locke in this group of counts.

We have examined all the errors assigned by the parties on both sides and find no reversible error therein except as is herein indicated, and a further discussion of the various questions raised is deemed unnecessary.

The decision of the Board of Appeals is, therefore, modified. It is affirmed as to the award of priority of invention to Fuller in counts 4, 5, 6, 7, 12 and 14, and it is reversed as to its award to Locke of priority in counts 2, 3, 8, 9, 10, 11 and 13.

Modified.

U. S. Court of Customs and Patent Appeals

MARTIN *v.* FRIENDLY

No. 2,960. Decided May 23, 1932

1. INTERFERENCE—ISSUE—CONSTRUCTION.

"The counts are broadly drawn and, not being ambiguous, must be given the broadest construction which they will reasonably permit. Limitations, not expressly defined, can not be read into them for the purpose of avoiding the issue of priority."

2. SAME—SAME—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that F. can make the claims in issue and that priority with respect thereto was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Chas. M. Candy and *Mr. R. B. Richardson* for Martin.

Mr. George E. Mueller for Friendly.

HATFIELD, *J.*:

This is an appeal in an interference proceeding from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner of Interferences awarding priority of invention as to all of the counts, Nos. 1 to 13, inclusive, to appellee, Herbert M. Friendly.

The counts in issue were taken from appellant's Patent No. 1,640,551, issued August 30, 1927.

Counts 2 and 4 are illustrative. They read:

2. In a telephone system, a subscriber's line, a first selector, means including said first selector, a second selector, and a connector directively controllable by the subscriber on said line for connecting with a second line, means including said first selector, another second selector, a third selector, and another connector similarly controlled for connecting with a third line, telephone numbers for said second and third lines having the same number of digits, and means for automatically releasing said first selector whenever the said second line is called in order to cancel one of the digits in the number.

4. In a telephone system, a selector switch and means for operating the same, said switch having a primary movement and an automatic secondary selecting movement, a slow acting relay energized during the primary movement and deenergized on the completion thereof to start the secondary movement, a release magnet, and a circuit for said magnet closed by said relay upon deenergizing in case the primary movement has stopped at a certain predetermined point.

As stated in the counts, the invention relates to improvements in automatic telephone systems.

Counsel for appellant moved to dissolve the interference on the ground that appellee had no right to make the counts in issue. The motion was denied by the Law Examiner. Thereafter, a petition for a rehearing was filed and denied.

In describing the invention generally, the Law Examiner said:

When an office includes so few lines that it is unnecessary to extend the lines through a first, second and third selector but only two selectors are required in a series, it is desirable to assign numbers to the lines so that as many dialling strokes will be required as if the number of lines required three selectors. In the abbreviated system, therefore, it is necessary that the first selctor or some part of the system "absorb" or nullify one of the dialled digits and the patentee accomplishes this by so arranging the first selector that it will restore to normal after being set off normal in response to the first digit dialled. Upon the dialling of the second digit the first selector functions normally. The modified first selector may easily be changed to a normal selector when the system expands so that a third selector is necessary but the line numbers may remain unchanged. The result may be accomplished by means of a selector switch constructed as outlined in count 4, for example.

Thereupon, the Law Examiner discussed the counts and held that they read upon appellee's disclosure.

Due to the fact that the date alleged in appellant's preliminary statement for conception of the involved invention was subsequent to the filing date of appellee, and it having been held by the Law Examiner that appellee's disclosure supported the counts in issue, the Examiner of Interferences awarded priority of invention to appellee.

In its decision affirming the decision of the Examiner of Interferences, the Board of Appeals held that the involved counts were—

broadly drawn to a general arrangement whereby with the same number of calling digits a connection may be set up between either of two groups or exchanges, using a less number of automatic switches to obtain connection to one group than to obtain connection to the other group or exchange;

and that—

In both cases circuits are controlled and relays operated by these critical initial digits and we find ourselves unable to discover any basis for the view that the terms of the counts define anything in Martin's system not disclosed by Friendly.

Counsel for appellant, in an elaborate brief, contends, among other things, that, due to the fact that the subject matter was highly technical, neither the Law Examiner nor the Board of Appeals thoroughly understood the issues, and that, if they had, they would have reached a different conclusion.

It is true that the subject matter of the involved counts is highly technical. In such cases, the rule is well established that, in the absence of evidence of those expert in the art, concurring decisions of the Patent Office tribunals will not be disturbed, unless it appears that they are manifestly wrong. Authorities need not be cited in support of this proposition.

However, in the case at bar, the issues have been so clearly presented by counsel for the parties, that we have not experienced great difficulty in understanding them. The counts in issue have been fully analyzed and applied by each of the tribunals below to appellee's disclosure, and each has held, and correctly so we think, adversely to the contentions of counsel for appellant.

[1] The counts are broadly drawn and, not being ambiguous, must be given the broadest construction which they will reasonably permit. Limitations, not expressly defined, can not be read into them for the purpose of avoiding the issue of priority. *Deibel* v. *Heise & Schumacher*, 18 C. C. P. A. (Patents) 907, 46 F.(2d) 570, 405 O. G. 845; *Moore* v. *Greene*, 18 C. C. P. A. (Patents) 1317, 48 F.(2d) 960, 411 O. G. 820.

[2] Considering the facts of record and the law applicable thereto, we are of opinion that the tribunals of the Patent Office reached the right conclusion. Accordingly, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

GAMBLE *v.* CHURCH

No. 2,957. Decided May 2, 1932

INTERFERENCE—PRIORITY.

Evidence reviewed and *Held* insufficient to establish that G., who was the first to conceive the invention, reduced it to practice prior to C's. filing date and *Held* further that G. was not diligent in reducing the invention to practice from and after C's. date of conception and that priority was properly awarded to C.

APPEAL from the Patent Office. Affirmed.

Mr. Wm. O. Belt for Gamble.

Mr. Ralph N. Flint and *Mr. Arthur W. Davidson* for Church.

LENROOT, *J.*:

This is an interference proceeding in which appellant appeals from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner of Interferences awarding priority of invention to appellee.

The invention relates to a clutch construction wherein a flat driven plate is located between the two driving members of the clutch and a gradual, progressive engagement of the plate by the said two members is secured through a distortion or "kinking" of the plate.

The issue consists of a single count, which reads as follows:

In a friction clutch, the combination of a relatively fixed clutch member, a relatively movable clutch member, and a driven plate member located therebetween, and friction rings upon opposite faces of said plate member, the contact area between the clutch members and rings constructed to progressively increase till full contact and engagement of the clutch is effected by the kinking of said plate under pressure between said clutch members.

The application of appellant was filed May 15, 1926. Appellee's application was filed October 14, 1925. Appellant therefore is the junior party and the burden was upon him to establish priority of invention by a preponderance of evidence.

Both tribunals of the Patent Office gave to appellee March 5, 1925, as his date of conception, and his filing date of October 14, 1925, for constructive reduction to practice.

The Examiner of Interferences found that appellant had established conception of the invention in the summer or fall of 1923. The Board of Appeals held that appellant conceived the invention either in 1923 or 1924, and that it was immaterial which of said years was given him, since either is prior to the date awarded appellee for conception.

Both tribunals held that a claimed reduction to practice by appellant in May, 1924, constituted merely an abandoned experiment, and that appellant had failed to establish diligence in reducing his invention to practice.

The burden of proof being upon appellant, and there being concurring findings of the Patent Office tribunals upon the questions of fact involved, the rule is applicable that such findings will be accepted by us unless manifestly wrong. *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 40 F.(2d) 995, 399 O. G. 3.

It appears from the testimony that appellant is a mechanical engineer and was, during the years from 1923 to the time the testimony herein was taken, in the employ of the Borg & Beck Company, large clutch manufacturers, to whom he assigned his patent application; that said Borg & Beck Company had formerly supplied the Paige Motor Company of Detroit with clutches, but had lost its business; that in 1923 and the early part of 1924 said Borg & Beck Company, through appellant, was trying to obtain an order from said Paige Motor Company for clutches for use in the new Jewett car being put out by said company. Tests of Borg &

Beck clutches, not embodying the invention here involved, had been going on for several months, but said clutches were not considered satisfactory by the Paige company. Appellant was in Detroit looking after the tests for his employer. Appellant disclosed to one Mather, the chief engineer for the Paige company, a form of clutch embodying the invention set forth in said count, and said Mather expressed a desire to try it. Appellant then had the Borg & Beck Company grind a pair of their standard friction rings to a form responding to said count and had them substituted in the Jewett car being tested by the Paige company. The first pair were unsatisfactory, due, it is claimed, to grease having been smeared on them by a workman. A second pair were made and substituted, and tested in said car in the latter part of May, 1924. Appellant testified that he drove the car on two occasions and that "the results indicated that the more gradual engagement and smoother action which we had hoped for had been obtained." Appellant made a report to the Borg & Beck Company which states that one Porth, foreman of the experimental department of the Paige company, who made the test, reported to appellant that the "clutch is now operating nicely." Appellee objected to this report as being hearsay and as not identifying the invention here in issue. We think the objection was well taken and that the report should not be considered. Both tribunals of the Patent Office held that appellant's testimony as to the result of said test was not sufficient to establish that the test was successful and constituted a reduction to practice of the invention.

The only corroboration of appellant's testimony as to the result of the tests was the testimony of said Porth. When asked if the test was successful, he answered:

> Well, as I remember it, it was quite an improvement over what we had been using at that time. It is hard to remember all those things now.

The clutch tested was left in the automobile and there is no evidence as to what became of it.

Although the test was made at the suggestion of said Mather, chief engineer for the Paige company, he testified that he knew nothing of the test having been made, or the results thereof. Appellant does not testify that he discussed his invention further with Mather, and it would seem that, if appellant thought that the test was successful, he would have brought it to the attention of Mather, as he (Mather) was the one who suggested the test. This is particularly significant when the testimony shows clearly that appellant was doing everything possible to secure an order from the Paige company for clutches made by the Borg & Beck Company.

The Board of Appeals, after holding that appellant's testimony as to said tests had not been sufficiently corroborated to establish reduction to practice, in its decision said:

> Possibly this testimony might be sufficient upon which to base a holding of successful reduction to practice if the subsequent events did not indicate that it was an abandoned experiment. The following facts are believed to justify this holding of abandoned experiment by the Examiner of Interferences. Except for Gamble's uncorroborated testimony to some laboratory tests in October, 1924, (X Qs. 83 and 90) no other rings embodying the invention were made and tested until 1926 when the molded facings Exhibits 10 and 11, were made and tested in May and July, 1926, (Gamble Q. 76) at about the time Gamble filed his application. The Paige Company did not adopt his invention. That Gamble and his assignee have never done anything in the way of commercializing the invention and that except for the filing of his application it was abandoned in favor of other forms of driven plates providing a yielding effect is indicated by the following testimony of Gamble:
>
> X Q. 92. Do I understand from your answer that you have not up to the present time made and used clutches having plates of the kind about which we are talking, that is the tapering faces. I mean made and used them in automobiles? A. That is right, to the best of my knowledge.
>
> * * * * * * *
>
> R. D. Q. 136. Referring to your answer to X Q. 92 why did you not go into commercial production of clutch plates of this invention when you were able to obtain satisfactory molded facings? A. About this time we experimented with other forms of driven plates providing this same yielding effect with the flat type of facing and these other forms were preferred by our customers.
>
> Reed testified that tapered facings made of woven fabric were not commercially practical "because the woven facings being soft would wear rapidly because of the narrow contacts presented on first engagement (Q. 81)."

The Board of Appeals further stated that it concurred with a statement of the Examiner of Interferences that appellant's application was not filed until the appearance of closely related devices were placed upon the market by appellee's assignee. Appellant complains of this finding and contends that the devices of appellee's assignee referred to did not embody the invention in question. This is true, but we think the statement that the devices were closely related to the device here involved was warranted by the evidence.

Appellant correctly contends that commercial production of an invention is not necessary to constitute reduction to practice, but the testimony in this case indicates that neither appellant nor his assignee endeavored to make any commercial use of the invention, or filed an application for patent therefor, until long after appellee's filing date. Had there been a successful reduction to practice in May, 1924, as claimed by appellant, it is reasonable to suppose that appellant would afterwards have brought the device to the notice of Mather with information concerning the test, and that drawings or samples of the device would have been produced and preserved by appellant or his assignee prior to appellee's filing date; none of these things was done, and the invention, so far as appellant and his assignee were concerned, lay dormant, without even a record of any kind being made of the invention from at least October, 1924, until the early part of 1926, after appellee's filing date.

Appellant attempts to explain this delay by testimony that he and his assignee knew that the friction rings in the device tested were too soft to be used commercially and that, to render the device commercially practicable, molded rings were necessary, and that serviceable molded rings which could be successfully utilized in appellant's invention were not produced until the early part of 1926.

However, the testimony shows that from 1919 to 1925 appellant's assignee manufactured and sold, to at least one large customer, molded rings, but from May, 1924, to 1926, no attempt was made to utilize molded rings in appellant's invention, experimentally or otherwise.

We find nothing in the record from which we can say that the Patent Office tribunals were manifestly wrong in finding that the test of May, 1924, was not a reduction to practice of the invention but was an abandoned experiment. Long and unexplained delay following a test of invention is inconsistent with a subsequent claim that the invention was successful. *Sundberg* v. *Schmitt*, 58 App. D. C. 292, 29 F.(2d) 880, 379 O. G. 441; *Vanore* v. *Improta*, 25 F.(2d) 918, 372 O. G. 763.

Appellant, being the first to conceive the invention, was chargeable with reasonable diligence in reducing his invention to practice from immediately prior to March 5, 1925, when appellee entered the field.

Both tribunals of the Patent Office found that appellant had not established such diligence, and in our opinion no other finding was possible upon the evidence in the case. Appellant's excuse for the delay was the inability of appellant and his assignee to secure satisfactory molded rings prior to 1926, and it is claimed that appellant's assignee was active from March, 1925, to May, 1926, in perfecting the desired molded rings. The testimony does not sustain such contention; it shows that in a few hours appellant could have produced the device as it was produced in May, 1924, and could have thoroughly tested it, with competent witnesses observing the tests; or, if proper material was not available for making the device, he could have filed an application for a patent. He did neither.

We find no error in the decision of the Board of Appeals and it is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,011,141, 1,019,403, 1,019,404, N. S. Amstutz, Illustrative telegraphy, D. C., S. D. N. Y., Doc. E 45/48, *N. S. Amstutz* v. *American Telephone & Telegraph Co.* Dismissed on merits July 2 1932. Doc. E 47/205, *N. S. Amstutz* v. *Radio Corp. of America*. Dismissed for lack of prosecution (notice June 29, 1932).

1,019,403. (See 1,011,141.) 1,019,404. (See 1,011,141.)

1,104,316. (See 1,211,543.)

1,168,820, W. H. Miles, Vulcanizing apparatus for repairing rubber tires, etc.; 1,252,909, A. B. Low, Prepared fuel, filed July 6, 1932, D. C., W. D. Wis. (Madison), Doc. E 2108, *A. B. Low et al.* v. *C. H. Halperin Co.*

1,175,909. (See 1,239,099.)

1,211,543, F. Chatfield, Label feeding machine; 1,104,316, A. Rosenthal, Label cutting and folding machine, filed July 16, 1932, D. C. Conn. (New Haven), Doc. E 2226, *The Rose Patch & Label Co.* v. *American Fabrics Co.*

1,215,178, Meier & Swift, Automatic operating means for ticket vending and registering machines; 1,266,021, E. H. Kelley, Vending machine; 1,308,966, W. L. Sullivan, Ticket issuing machine; 1,398,994, G. H. Armitage, Delivery mechanism for vending machines; 1,435,231, R. H. Heisel, Ticket issuing machine, filed June 27, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4326, *General Register Corp.* v. *The TICKet Issuing Machine Co.*

1,224,152, 1,625,640, J. J. Dillon, Pulley, D. C., N. D. Ohio, E. Div., Doc. 3831, *Dillon Pulley Co.* v. *National Lock Co. et al.* Dismissed July 22, 1932.

1,239,099, W. A. Hall, Hydrocarbon product; 1,239,100, same, Liquid fuel; 1,175,909, same, Process for the conversion of heavy hydrocarbons into lighter hydrocarbons; 1,242,795, same, Process for the production of motor spirit from heavy hydrocarbons, D. C., E. D. Ill. (East St. Louis), Doc. E 4511, *The Texas Co.* v. *Lubrite Refining Corp. et al.* Dismissed July 11, 1932.

1,239,100. (See 1,239,099.) 1,242,795. (See 1,239,099.)

1,245,157, Jacobs & Jacobs, Hair waving and drying apparatus; 1,477,873, H. Jacobs, Hair waving device, filed July 11, 1932, D. C., S. D. N. Y., Doc. E 70/14, *H. Jacobs* v. *P. E. Gair's, Inc.*

1,252,909 (See 1,168,820.) 1,266,021. (See 1,215,178.)

1,308,966. (See 1,215,178.)

1,313,828, A. G. Leigh, Aeroplane; 1,404,129, same, Aeroplane with inherent stability, filed July 1, 1932, D. C., S. D. N. Y., Doc. E 69/332, *L. P. R. Co.* v. *Handley Page, Ltd., et al.*

1,364,851, L. Mastrangel, Starting device; 1,364,852, Hartford & Mastrangel, System for generating, storing, distributing, and utilizing electrical energy; 1,364,853, same, Engine starter; 1,364,854, E. V. Hartford, Electrical starter, filed July 20, 1932, D. C., E. D. N. Y., Doc. E 6494, *P. A. Rose* v. *Curtiss-Wright Air Terminals, Inc.*

1,364,852. (See 1,364,851.) 1,364,853. (See 1,364,851.)

1,364,854. (See 1,364,851.) 1,398,994. (See 1,215,178.)

1,404,129. (See 1,313,828.) 1,435,231. (See 1,215,178.)

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, filed July 18, 1932, D. C., S. D. N. Y., Doc. E 70/89, *Good Humor Corp. of America* v. *Zero Ice Cream Co. et al.* Same, filed Aug. 1, 1932, D. C., N. D. Ga. (Atlanta), Doc. E 688, *Good Humor Corp. of America* v. *Geo. Moore Ice Cream Co., Inc.*

1,477,873. (See 1,245,157.)

1,506,945, W. Saklad, Shoe and arch supporter; 1,586,120, same, Last; 1,685,827, same, Method of making boots and shoes, D. C. Mass., Doc. E 3143, *W. Saklad* v. *The Florsheim Shoe Co.* Dismissed without prejudice Jan. 29, 1932.

1,586,120. (See 1,506,945.)

1,619,798, Lewis & Murray, Container for hair in permanent waving process; 1,856,692, G. Comerford, Wrapper for use in hair waving process, filed June 24, 1932, D. C. Md., Doc. E 2068, *The Nestle Le Mur Co. v. Duradene Co., Inc.*

1,625,640. (See 1,224,152.)

1,630,195, M. Margolith, Vending machine; 1,770,805, C. Fleischer, same; 1,801,100, J. F. Meyer, Delivery chute for vending machines, filed June 28, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3307–S, *J. F. Meyer* v. *Mills Sales Co., Ltd. et al.*

1,634,789. (See 1,820,445.) 1,655,695. (See 1,609,281.)

1,655,696. (See 1,609,281.)

1,670,656, W. L. Fleisher, Ventilating system; Re. 16,611, L. L. Lewis, Method of and apparatus for cooling and ventilating, filed July 9, 1932, D. C., E. D. Mich. (Detroit) Doc. 5465, *Auditorium Conditioning Corp.* v. *New Union Building Co.*

1,685,827. (See 1,506,945.)

1,689,732, 1,691,661, Laucks & Davidson, Vegetable glue and method of making same, D. C., W. D. Wash., N. Div., Doc. 650, *I. F. Laucks, Inc.* v. *Kaseno Products Co. et al.* Claims 2, 4, 6, and 8 of 1,689,732 and claims 13 and 14 of 1,691,661 held valid and infringed July 11, 1932.

1,691,661. (See 1,689,732.)

1,697,567, W. J. King, Folding table; 1,697,594, E. E. Gowell, same, D. C., E. D. Wis. (Milwaukee), Doc. E 3364, *The E. T. Burrowes Co., Inc., et al.* v. *Badger Lumber & Mfg. Co. et al.* Dismissed as to Badger Lumber & Mfg. Co.; consent decree for plaintiff July 13, 1932.

1,697,594. (See 1,697,567.)

1,706,218, H. G. Cordley, Apparatus for dispensing liquids; Des. 77,220, same, Water cooler, D. C., S. D. N. Y., Doc. E 52/888, *Cordley & Hayes* v. *Rotax Co., Inc.* Dismissed for lack of prosecution (notice June 29, 1932.)

1,715,000 (a), A. Cheney, Interlocking metal flashing; Re. 18,492, E. H. Friedrich, Metal flashing, filed July 6, 1932, D. C., M. D. Pa., Doc. 928, *The Cheney Co.* v. *H. B. Kottcamp et al.* (*C. C. Kottcamp & Son*).

1,715,000 (b), 1,728,955, A. Cheney, Interlocking metal flashing, D. C., S. D. N. Y., Doc. E 64/369, *The Cheney Co.* v. *The Interlock Flashing Corp.* Consent decree for plaintiff (notice July 15, 1932).

1,718,997. (See 1,470,524.) 1,728,955. (See 1,715,000 (b).)

1,764,412. (See 1,820,445.) 1,770,305. (See 1,630,195.)

1,776,235, L. U. Larkin, Refrigeration method and apparatus; 1,823,003, J. R. Replogle, Refrigerating unit, filed July 8, 1932, D. C., E. D. N. Y., Doc. E 6462, *The Guardian Trust Co.* v. *A. Cottone* (*Blythebourne Market*).

1,797,063, J. H. Meister, Apparatus for and method of moving material; 1,797,064, Wickes & Neils, Log transporting vehicle, filed June 22, 1932, D. C. Oreg. (Portland), Doc. E 9299, *Williamette Ersted Co.* v. *Pacific Car & Foundry Co. et al.*

1,797,064. (See 1,797,063.) 1,801,100. (See 1,630,195.)

1,820,445, K. D. Craft, Shingle shake machine; 1,634,789, C. J. Melby, same; 1,764,412, same, Shingle, filed July 21, 1932, D. C., W. D. Wash. (Seattle), Doc. 943, *Fittte Cedar Shake Co. et al.* v. *C. D. Shingle Co. et al.*

1,823,003. (See 1,776,235.)

1,853,560, 1,853,561, P. S. Hauton, Mechanical pencil, filed July 5, 1932, D. C., S. D. N. Y., Doc. E 69/355, *Scripto Mfg. Co.* v. *Eagle Pencil Co.*

1,853,561. (See 1,853,560.) 1,856,692. (See 1,619,798.)

Re. 16,611. (See 1,670,656.)

Re. 17,605, H. F. Schecker, Electrical condenser and method of making same, D. C., S. D. N. Y., Doc. E 55/92, *Aerovox Wireless Corp.* v. *Polyment Mfg. Corp.* Dismissed (notice July 19, 1932).

Re. 18,492. (See 1,715,000 (a).)

Des. 77,220. (See 1,706,218.)

Disclaimers

1,656,369—*Milton E. Chandler*, Chicago, Ill. CARBURETING APPARATUS. Patent dated January 17, 1928. Disclaimer filed August 10, 1932, by the assignee, *Bendix Stromberg Carburetor Company.*

Hereby enters this disclaimer to claim 9 of said patent, which claim is in the following words, to wit:

"9. In combination, an intake manifold, a fuel reservoir, a conduit connecting said fuel reservoir with said intake manifold, and suction responsive means for increasing the effectiveness of the manifold suction for drawing fuel through said conduit when said manifold suction is low, and for decreasing the effectiveness of the manifold suction for drawing fuel through said conduit when said manifold suction is high."

1,845,991.—*Rollo F. Walters*, Detroit, Mich. SNAP FASTENER SECURED TRIM STRIP INSTALLATION. Patent dated February 16, 1932. Disclaimer filed August 20, 1932, by the assignee, *United-Carr Fastener Corporation.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"1. A snap fastener secured installation comprising, in combination, a supporting structure having an aperture, a hollow trimming strip, snap fastener members assembled with said strip and each having a base located within said trimming strip and arranged to slide longitudinally within said strip for relative adjustment, said fastener members each having a head extending beyond one face of the trimming strip and passing through the aperture in the supporting structure, thereby to secure the trimming strip to said supporting structure, and spring means interposed between the base of each fastener member and said trimming strip to prevent rattle of the parts of the installation.

"2. A trim strip structure comprising, in combination, a hollow metal strip, a snap fastener member carried by said strip and having a smooth base located within said strip, said strip presenting a smooth inner surface to permit sliding of the fastener member, a spring member interposed between said base and said strip to prevent rattle and hold the fastener member against accidental movement relative to the strip, said snap fastener member having a head extending from said base through an aperture at the inner face of said strip for securing said strip to a support and means providing a lost motion connection between the fastener, spring and the strip whereby the fastener may be shifted by a lateral movement only relative to the strip for alignment with cooperating fastening means carried by a supporting structure.

"3. A trim strip structure comprising, in combination a hollow metal strip, a snap fastener member carried by said strip and having a base located within said strip, a spring member interposed between said base and said strip to prevent rattle and hold the fastener member against accidental movement relative to the strip and said snap fastener member having shank means passing through the spring member and the inner face of said strip and having a head and a neck for engagement with a socket on a supporting structure.

"4. A trim strip structure comprising, in combination, a hollow metal strip, a snap fastener member carried by said strip and having a base located within said strip, a thin apertured sheet metal spring member interposed between said base and said strip to prevent rattle and hold the fastener member against accidental movement relative to the strip and said snap fastener member having shank means passing through the spring member and the inner face of said strip and having a head and a neck for engagement with a socket on a supporting structure.

"6. A trim strip structure comprising, in combination, a hollow metal strip, a snap fastening member carried by said strip and having a base located within said strip, a thin apertured sheet metal spring member interposed between said base and said strip to prevent rattle and hold the fastener member against accidental movement relative to the strip, said snap fastener member being formed from sheet metal and having a pair of thin flat socket-engaging portions extending from said base through the spring member and the inner face of said strip, said socket-engaging portions being offset laterally relative to each other and being movable toward and away from each other for engagement with a socket provided on a supporting structure to which the strip is to be attached."

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 6, 1932

[VOL. 422. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 325,495. T. W. WOOD & SONS, Richmond, Va. Filed Mar. 25, 1932.



Applicant hereby disclaims the words "Brand", "Maize", and "Registered U. S. A." apart from the mark as shown on the drawing.

For Seed Corn.

Claims use since March, 1922.

Ser. No. 325,496. T. W. WOOD & SONS, Richmond, Va. Filed Mar. 25, 1932. Under section 5b of the act of 1905 as amended, in 1920.



The drawing is lined for red.

For Field, Garden, and Lawn Seed.

Claims use since January, 1907.

Ser. No. 328,117. CONTINENTAL TURPENTINE & ROSIN CORPORATION, INC., Laurel, Miss. Filed June 20, 1932.

AJAX

For Rosin.

Claims use since November, 1930.

Ser. No. 328,789. HITEMAN LEATHER COMPANY, INC., West Winfield, N. Y. Filed July 14, 1932.

PROMENADE

For Leathers.

Claims use since May 21, 1932.

CLASS 2

Receptacles

Ser. No. 326,138. THE ENTERPRISE ALUMINUM COMPANY, Massillon, Ohio. Filed Apr. 15, 1932.

Fresh-O-Dor

For Metal Containers.

Claims use since Apr. 5, 1932.

Ser. No. 326,837. TROPIC-ARIUM, INC., Cleveland, Ohio. Filed May 6, 1932.

TROPIC-ARIUM

For Aquariums and Portable Conservatories.

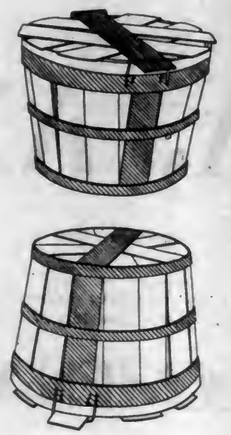
Claims use since Mar. 24, 1932.

Ser. No. 327,832. ONEIDA PAPER PRODUCTS, INC., Brooklyn, N. Y. Filed June 8, 1932.

VISOPHANE

For Paper Bags and Merchandise Envelopes.
Claims use since May 6, 1932.

Ser. No. 328,634. EVANSVILLE BASKET AND CRATE COMPANY, Evansville, Ind. Filed July 8, 1932.



The trade-mark comprises a single diametrical green band about the basket with three circumferential green bands around the basket. The drawing is lined for green. No claim is made to the representation of the basket per se.
For Stave Baskets.
Claims use since Jan. 1, 1932.

Ser. No. 328,875. SAKS & COMPANY, New York, N. Y. Filed July 18, 1932.

On the Square

For Unfilled Base Metal Compacts.
Claims use since June 1, 1932.

CLASS 5

Adhesives

Ser. No. 318,198. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Adhesives—Namely, Gums, Glues, Pastes, Binders, Mucilages, Sizings, and/or Cements for Application to Surfaces of Paper, Glass, Wood, Metal, Cork, Linoleum, Natural or Artificial Fibres, Fabrics, Concrete, Plaster, Artificial Board, Paint, Enamel, Varnish, Lacquer, Stone, Cement, Abrasives, Briquettes, Leather, Dyes, Dry Colors, Earthenware, Porcelain, Synthetic Resins, and/or Hard Plastic Compositions (Such as Celluloid, Bakelite, Casein Plastics, Hard Molded Rubber).
Claims use since Sept. 24, 1930.

Ser. No. 328,758. NATIONAL ADHESIVES CORPORATION, New York, N. Y. Filed July 13, 1932.

CHLORDEX

For Adhesive Products, and Particularly Adhesive Pastes, Glues, Mucilages, Dextrines, Sizings, and Padding Compositions in Dry, Liquid, or Paste Form.
Claims use since June 23, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 325,270. SLOANE PRODUCTS, New York, N. Y. Filed Mar. 18, 1932.

SLOANES NU-FOOT

No claim being made to the word "Sloanes" except in the form and association shown.
For Preparation for the Treatment of Corns, Callouses, Tired, Aching, Sweaty, Burning, Itching, and Swollen Feet.
Claims use since 1924.

Ser. No. 325,883. THE SCRAM COMPANY, New York, N. Y. Filed Apr. 7, 1932.

SCRAM

For Deodorant Cream.
Claims use since Jan. 10, 1931.

Ser. No. 326,048. G. W. CARNRICK CO., Newark, N. J. Filed Apr. 13, 1932.

AGOFEC

For Laxative Tablet.
Claims use since Apr. 4, 1932.

Ser. No. 326,866. MANUEL MARIN & CO., Mayaguez, Puerto Rico. Filed May 7, 1932.



The drawing is lined for green and red.
For Medicinal Preparations Used for Treatment of Neuralgia, Rheumatism, Sore Throat, La Grippe, Colds, Coughs, Bronchitis, Inflammatory Conditions, Insect-Bites, Sprains, Indigestion and Stomach Disorders, Catarrhal Conditions of the Mucous Membranes, Nervous Disorders, and as a Tonic and Blood Purifier.
Claims use since Jan. 19, 1930.

Ser. No. 327,116. MOLLER BROTHERS, Chicago, Ill. Filed May 13, 1932.

MIN-ER-LIN

For Pharmaceutical Preparations—Namely, Liniments, Ointments, or Salves for Cuts, Burns, Sprains, Aches, Pains, Boils, Cold Sores, Sore Throat, Colds, and Sunburn.
Claims use since Nov. 1, 1931.

Ser. No. 327,340. EDWARD W. CLASEN, doing business as Milo Laboratory, St. Louis, Mo. Filed May 23, 1932.

MILO Rx 2222

No claim is made to the symbol "℞" apart from the mark shown.
For Medicinal Preparation for the Treatment of Athlete's Foot and Ringworm.
Claims use since May 16, 1932.

Ser. No. 327,564. LOUIS PHILIPPE, New York, N. Y. Filed May 28, 1932.

SULPHIODINE

The term "Iodine" is disclaimed apart from the mark as shown.
For Skin Salve.
Claims use since January, 1932.

Ser. No. 327,697. L'ONGLEX LIMITED, New York, N. Y. Filed June 3, 1932.

L'Onglex

For Liquid Nail Polish, Liquid Nail Polish Remover, Cuticle Remover, Nail White.
Claims use since 1928.

Ser. No. 327,802. M. J. MERKIN PAINT CO. INC., New York, N. Y. Filed June 7, 1932.

STOP-PHYR

For Liquid for Fireproofing Various Materials, Such as Textiles, Wood, Etc., and is Also to be Used as a Liquid Which is Incorporated in Paint and is Used in the Fire Retardance of Lumber, Containing Monobasic, Diabasic, and Tribasic Salts of Ammonium Plus the Sodium Salts of Phosphoric Acid.
Claims use since Mar. 1, 1932.

Ser. No. 327,848. MAMIE HAMILTON, doing business as Raymond-Hamilton Co., New Orleans, La. Filed June 9, 1932.



The portrait of a man appearing on the drawing is fanciful.
For Hair Restorers.
Claims use since Jan. 4, 1932.

Ser. No. 327,984. JEAN PATOU, INC., New York, N. Y. Filed June 14, 1932.

Invitation

For Perfumes.
Claims use since June 4, 1932.

Ser. No. 327,991. SYLADEX PRODUCTS CORPORATION, New York, N. Y. Filed June 14, 1932.

SYLADEX

For A Food Preparation in the Nature of a Medicine Adapted to be Mixed with Other Foods for Helping to Naturally Correct Constipation and Change the Intestinal Flora and to Regulate the Bowels.
Claims use since November, 1931.

Ser. No. 328,014. S. PFEIFFER MANUFACTURING COMPANY, St. Louis. Mo. Filed June 15, 1932.

RED E AID

The drawing is lined for red. No exclusive claim is made to the word "Aid" apart from the mark shown.
For Medicinal Preparation for the Treatment of Disorders Due to Amenorrhea, Dysmenorrhea, and Menorrhagia.
Claims use since May 15, 1932.

Ser. No. 328,171. KATHERINE A. MACDONALD HOLMES, doing business as Katherine A. MacDonald, Hollywood, Calif. Filed June 21, 1932.



The name "Katherine A. MacDonald" appearing on the drawing is a facsimile of the signature of applicant. The words "Lash Cosmetic" and "Waterproof" appearing on the drawing are disclaimed apart from the other features of the mark.
For Colored Liquid Dressing for Use in Darkening Eyelashes and Eyebrows.
Claims use since May 4, 1928.

Ser. No. 328,172. KATHERINE A. MACDONALD HOLMES, doing business as Katherine A. MacDonald, Hollywood, Calif. Filed June 21, 1932.

LASHMETIQUE

For Colored Dressing for Eyelashes and Eyebrows.
Claims use since Oct. 10, 1931.

Ser. No. 328,226. PURITAN COSMETICS, INC., St. Louis, Mo. Filed June 22, 1932.



The word "Sweet" is disclaimed apart from the mark shown in the drawing. The portrait appearing in the drawing is fanciful.
For Deodorant.
Claims use since May 10, 1919.

Ser. No. 328,230. THE TEXAS COMPANY, New York, N. Y. Filed June 22, 1932.

TEXSPRAY

For Compounded Mineral Oil for Use in the Treatment of Textile Fibers.
Claims use since June 1, 1932.

Ser. No. 328,254. NELLIE SILVERSTEIN, doing business as Vi-Vu Products, New York, N. Y. Filed June 23, 1932.

ORJENE PURE

Applicant disclaims the word "Pure" apart from the mark as shown.
For Liquid Hair and Scalp Cleanser and Shampoo.
Claims use since July, 1928.

Ser. No. 328,281. FREDERICK STEARNS & COMPANY, Detroit, Mich. Filed June 24, 1932.

Ruth Lane

The name appearing in the drawing is a facsimile signature of Ruth Lane, an employee of the applicant company.
For Almond Cream, Skin Freshener, Hand Lotion, Facial Astringent, Vanishing Cream, Shampoo, Cold Cream, Cleansing Cream, Brilliantine, Tissue Cream, and Face Powder.
Claims use since June 3, 1932.

Ser. No. 328,350. VINCENZO CIPOLLA, Philadelphia. Pa. Filed June 28, 1932.



Applicant disclaims exclusive rights to all wording other than "Manus Dei" and "V. Cipolla" except when used in association with the balance of the mark shown.
For Medicinal Preparation for Gangrene, Tumors, Ulcers, Wounds, Sores, Panarices, Piles, Rheumatism, and Glandular Alterations.
Claims use since July 2, 1912.

Ser. No. 328,377. THOMAS ASPHALT PRODUCTS CO., Newark, N. J. Filed June 28, 1932.

FATTY
RBT
ACIDS

The words "Fatty Acids" are disclaimed apart from the mark.
For Oils and Greases Used in the Manufacture of Rubber, Soap, and of Use in Textile Trades.
Claims use since October, 1931.

Ser. No. 328,379. YARDLEY & CO., LIMITED, London, England. Filed June 28, 1932.



For Lavender Water, Face Powder, Sachets, Cold Cream, Bath Salts, Shampoo Powder, Talcum Powder, Bath Dusting Powder, Toilet Lotion, Brilliantine, Face Cream, Skin Cream, and Perfume.
Claims use since February, 1912.

Ser. No. 328,451. SOLOMON H. STEPHENS, Denver, Colo. Filed June 30, 1932.

SWAT THE FLY



For Insecticide and Fly Exterminator.
Claims use since June 21, 1932.

Ser. No. 328,474. BAKER & COMPANY, INC., Newark, N. J. Filed July 1, 1932.

AUROSAL

For Precious Metal Salts and Precious Metal Electroplating Preparations Containing Gold.
Claims use since June 1, 1932.

Ser. No. 328,509. THE ALDEN SPEARE'S SONS CO., Cambridge, Mass. Filed July 1, 1932.

SOLBLUE

For Laundry Bluing.
Claims use since January, 1931.

Ser. No. 328,534. PHOTOCHROM INC., New York, N. Y. Filed July 2, 1932.

PHOTOCHROM

For Photographic Chemicals.
Claims use since June 27, 1932.

Ser. No. 328,558. MRS. LILLIAN M. LUNDBERG, Hannibal, Mo. Filed July 5, 1932.

"CRONICTONE"

For Medicinal Preparation for the Alleviation of Rheumatism, Arthritis, and Other Muscular and Joint Arthritis.
Claims use since June 1, 1932.

Ser. No. 328,584. POND'S EXTRACT COMPANY, New York, N. Y. Filed July 6, 1932.

POND'S

For Face Powder.
Claims use since June 15, 1932.

Ser. No. 328,613. LEDERLE LABORATORIES, INC., New York, N. Y. Filed July 7, 1932.

VERCAPS

For Pharmaceutical Preparation for the Removal of Roundworms and Hookworms in Dogs, Cats, and Foxes; Roundworms in Poultry and Swine; and Stomach Worms in Sheep and Goats.
Claims use since June 4, 1932.

Ser. No. 328,637. FRITZSCHE BROTHERS, INC., New York, N. Y. Filed July 8, 1932.

NEUTROLEUM

For Aromatic Bodies Designed for the Dual Purpose of Neutralizing the Odor of Petroleum Distillates and Other Solvents of Similar Application for Use in Insecticide Sprays, Floor Waxes, Cleaners, Naphtha, and All Manner of Technical Products and of Odorizing or Aromatizing the Products Whose Inherent Odor Has Been Thus Neutralized.
Claims use since Apr. 26, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 328,907. KAUFMANN BROS. & BONDY, INC., West New York, N. J. Filed July 20, 1932.

Rocky Briar

No rights are asserted to the exclusive use of the word "Briar" apart from the mark as shown in the drawing.
For Cigar Holders, Cigarette Holders, and Pipes.
Claims use since July 15, 1932.

CLASS 10

Fertilizers

Ser. No. 328,508. O. M. SCOTT AND SONS COMPANY, Marysville, Ohio. Filed July 1, 1932.



The drawing is lined for green. The representation of a bag per se is disclaimed.
For Fertilizer.
Claims use since 1928.

CLASS 11

Inks and Inking Materials

Ser. No. 327,882. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Rubber Ink.
Claims use since Mar. 28, 1932.

Ser. No. 328,806. ACME PRINTING INK COMPANY, Chicago, Ill. Filed July 15, 1932.

Acme Printing Ink Co.

For Printing Ink.
Claims use since May 20, 1932.

CLASS 12

Construction Materials

Ser. No. 305,522. THE FLINTKOTE COMPANY, Boston, Mass. Filed Sept. 10, 1930.

SAFE-T-JOINT

No claim is made to the use of the words "Construction with", "For Concrete Roads and Structures", nor to the words "Safety" and "Joint" apart from the mark as shown.
For Premolded Bituminous Products, Especially Preformed Expansion Joints.
Claims use since Aug. 14, 1930.

Ser. No. 328,650. TEXAS QUARRIES INC., Austin, Tex. Filed July 8, 1932.



The representation of the goods, and all wording except "Texas Quarries Inc." appearing upon the drawing are disclaimed apart from the mark shown.
For Quarried Natural Stone.
Claims use since January, 1930.

Ser. No. 328,866. DEWEY PORTLAND CEMENT COMPANY, Kansas City, Mo. Filed July 18, 1932.



The words "24 Hour Concrete" are disclaimed apart from the other features of the mark shown in the drawing.
For Portland Cement.
Claims use since June 30, 1932.

Ser. No. 329,031. THE WESTERN LIME & CEMENT CO., Milwaukee, Wis. Filed July 23, 1932.

GRIMMS

For Lime.
Claims use since Dec. 23, 1930.

Ser. No. 329,032. THE WESTERN LIME & CEMENT CO., Milwaukee, Wis. Filed July 23, 1932.

MORTARITE

For Masonry Cement.
Claims use since Jan. 24, 1929.

Ser. No. 329,036. AIRCRAFT PLYWOOD CORPORATION, Seattle, Wash. Filed July 25, 1932.

PlyCRAFT

For Plywood.
Claims use since June 11, 1932.

Ser. No. 329,063. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J. Filed July 25, 1932.

No. 1

For an Iron Compound in the Form of a Dry Powder Used to Repair Defects and Breaks in and Make Patches on Iron and Other Metallic Substances, to Make Metallic Joints, and to Cover Metallic Surfaces.
Claims use since 1901.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 316,841. HOFFMAN SPECIALTY COMPANY, Waterbury, Conn. Filed July 11, 1931.

The AIRPORT

For Valves—Namely, Air Valves for Steam Radiators.
Claims use since May 11, 1931.

Ser. No. 328,905. FRIEDMAN SILVER CO., INC., Brooklyn, N. Y. Filed July 19, 1932.

F S Co

For Hollow Ware of Base Metal—Namely, Pewter Hollow Ware Unplated with Precious Metal, Not Including Knives, Forks, and Spoons.
Claims use since June 1, 1932.

CLASS 15

Oils and Greases

Ser. No. 305,692. BLACK EAGLE OIL COMPANY, West Allis, Wis. Filed Sept. 15, 1930.

QUALITY
BLACK EAGLE OIL CO., Inc.

The word "Quality" appearing on the drawing is disclaimed apart from the other features of the mark therein shown.
For Gasoline and Lubricating Oils.
Claims use since Dec. 25, 1927.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 303,154. BOYD-MARTIN BOAT COMPANY, Delphi, Ind. Filed July 7, 1930.

BOYD MARTIN BOAT CO.

The shading shown in the drawing indicates the color blue.
For Outboard Motor Boats.
Claims use since Apr. 29, 1926.

Ser. No. 312,903. THE COLUMBUS AUTO PARTS COMPANY, Columbus, Ohio. Filed Apr. 3, 1931.

AUTOCENTRIC

For Drag Links, Tie Rods, Radius Rods, Torque Rods, and Thrust Rods for Vehicles.
Claims use since Oct. 21, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 327,236. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed May 18, 1932. Under section 5b of the Act of 1905 as amended in 1920.

Westinghouse

For Electric Arc and Incandescent Lamps, Electric Controllers, Electric Fuses and Fuse Holders, Electric Generators and Generator Parts, Lightning-Arresters, Electric Motors and Motor Parts, Electric Regulators, Electric Rheostats and Resistors, Electric Switchboards and Parts, Electric Switches and Circuit Breakers, Systems of Electrical Distribution, Electric Transformers and Choke-Coils, Electric Trolleys and Contact-Shoes.
Claims use since 1888.

Ser. No. 327,470. SAMUEL LYMAN, Brooklyn, N. Y. Filed May 26, 1932.

"Constructed for Continued Good Vision" — LYM-LYTE TRADE MARK

No claim is made to the exclusive use of all wording on the drawing excepting the word "Lym-Lyte" apart from the mark as shown in the drawing.
For Incandescent Electric Lamp Bulbs and Electric Floor, Table, Ceiling, and Automobile Lamps.
Claims use since Apr. 7, 1932.

Ser. No. 328,086. DELTA-STAR ELECTRIC COMPANY, Chicago, Ill. Filed June 18, 1932.

HIGH TENSION
CHAMPION
DEPENDABLE
EQUIPMENT
TRADE MARK

Applicant disclaims the words "High Tension Equipment," "Dependable" and "Trade Mark" appearing on the drawing. The drawing is lined for shading only.
For High Voltage Switching and Protective Equipment Consisting of Indoor and Outdoor Apparatus for High-Tension Electrical Installations; Outdoor and Indoor Substations and Parts Thereof, Switches; Rural Power Distribution Apparatus Comprising Bus-Bar Supports and Parts Thereof, Switches, Pole-Top Switches, Gang Operated Switches, Fuses, Fuse Mountings, Wiring Supports, Insulators, Choke Coils, Entrance Tubes, Arresters, Fuse Tongs, Plugs, Terminal Lugs, and Wire Connectors.
Claims use since Feb. 1, 1924.

Ser. No. 328,633. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa. Filed July 8, 1932.

IDEX

For Storage Batteries, Their Parts and Accessories Referring to Plates or Electrodes, Jars or Containers, Separators or Spaces, and Connectors.
Claims use since June 18, 1932.

Ser. No. 328,827. PRICE BATTERY CORPORATION, Philadelphia, Pa. Filed July 12, 1932.

HANDLER

For Storage Batteries.
Claims use since Jan. 1, 1929.

Ser. No. 328,853. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Filed July 16, 1932.

VIBRO-POWER

No claim is made to the use of the word "Power" apart from the mark shown in the drawing.
For Radio Apparatus, Comprising Radio Receiving Sets and Loud Speakers.
Claims use since June 7, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 318,605. JAMES W. STREETON, New York, N. Y. Filed Aug. 31, 1931.

nu-meri-co

For Table Board Game Played with Pieces.
Claims use since June 19, 1931.

Ser. No. 318,722. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed Sept. 3, 1931.

BELINDE

For Toy Animals, Birds, Human Figures, Dolls, Toy Fruits, and Toy Clocks Made of India Rubber Having Sponge Like or Moss-Like Appearance.
Claims use since May 5, 1931.

Ser. No. 327,067. CHARLES E. PHILLIPS, Chicago, Ill. Filed May 13, 1932.



No claim is made to the exclusive use of the words "The Game of" apart from the mark as shown in the drawing.
For Card Games.
Claims use since May 6, 1932.

Ser. No. 328,319. THE AMERICAN-NATIONAL COMPANY, doing business as The Gendron Wheel Company and The Toledo Metal Wheel Company, Toledo, Ohio. Filed June 27, 1932.

Skippy

For Toy Vehicles—Namely, Aeroplanes, Automobiles, Bicycles, Pedal Cars, Hand Cars, Locomotives, Motor and Sail Boats, Scooters, Sulkies, Velocipedes, Trucks, Wagons, Walkabout Baby Bikes and Wheelbarrows; also Juvenile Sleds and Juvenile Playground Equipment Including Combination Gymnasium, Wading Pool, Slides, Sand Boxes, Teeter Totters, Roller Coasters, Lawn Swings, Ladders, and Golf Set.
Claims use since May 1, 1932.

Ser. No. 328,690. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed July 11, 1932.

RABBIT GOLF

No claim is made to the word "Golf" apart from the other feature of the mark.
For Table-Board Game Played with Balls Over an Obstructed Course.
Claims use since June 2, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 303,080. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930.



The trade-mark consists of a narrow green colored band around the handle of the goods and near the free end thereof as indicated by the lining shown in the drawing and is applied to the handle by dipping, painting or otherwise placing the band thereon. The representation of the handle is disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 315,631. CHRYSLER CORPORATION, Highland Park, Mich. Filed June 10, 1931.



For Cylinder Blocks, Cylinder Heads, Pistons, Connecting Rods, Crank Shafts, Cam Shafts, Tappets, Poppet Valves, Water Pump Shaft, Water Pump Housing, Fans, Propeller Shafts, Universal Joints, Differential Gear Housing, Differential Gears, Ring Gears and Pinions, Clutch Flywheel, Clutch Disc, Transmission Housing, Transmission Shaft, and Transmission Gears.
Claims use since May 1, 1931.

Ser. No. 327,731. CHARLES E. LITTLE, Melrose, Mass. Filed June 4, 1932.

HEX-O

For Wrenches, Hexagonal Wrenches, Tap Wrenches, Socket Wrenches, Ratchet Wrenches and Parts Thereof, Sockets and Parts Thereof.
Claims use since Feb. 1, 1932.

Ser. No. 327,919. OSCAR M. POOCK, doing business as City Machine and Tool Works, Dayton, Ohio. Filed June 11, 1932.

Cimatool

For Metal Working Machinery—Namely, Chamfering, Burnishing, Boring, Drilling, Burring, Milling, and Rounding Machines; Chucks, Jigs, Fixtures, Dies, and Special Machinery.
Claims use since May 15, 1931.

Ser. No. 328,723. COOPER PRODUCTS CORPORATION, New York, N. Y. Filed July 12, 1932.



The lining in the drawing indicates brown color and the stippling gold color. No claim is made to the words "Razor by" apart from the mark shown in the drawing.
For Safety Razors.
Claims use since June, 1932.

Ser. No. 328,749. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed July 13, 1932.

Dual Alignment

For Razor Blades.
Claims use since June 30, 1932.

Ser. No. 328,782. DURO METAL PRODUCTS COMPANY, Chicago, Ill. Filed July 14, 1932.

DuroLite

For Screw Drivers.
Claims use since June 15, 1932.

Ser. No. 328,863. BISSELL CARPET SWEEPER CO., Grand Rapids, Mich. Filed July 18, 1932.

RELIANCE

For Carpet Sweepers.
Claims use since June 16, 1932.

Ser. No. 329,041. CENTRAL SCIENTIFIC COMPANY, Chicago, Ill. Filed July 25, 1932.

ARISTOVAC

For Vacuum Pumps.
Claims use since Jan. 16, 1932.

Ser. No. 329,138. CONLON CORPORATION, Cicero, Ill. Filed July 28, 1932.

DRAINATOR

For Pumps and Parts Thereof.
Claims use since May 28, 1932.

Ser. No. 329,139. DARWIN & MILNER, INC., Cleveland, Ohio. Filed July 28, 1932.

MIRACOL

For Razor Blades.
Claims use since June 15, 1932.

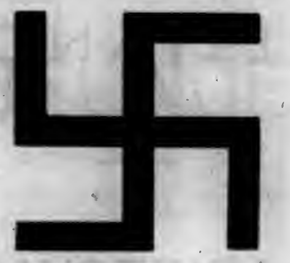
Ser. No. 329,150. NICHOLSON FILE COMPANY, Providence, R. I. Filed July 28, 1932.

SWASTIKA



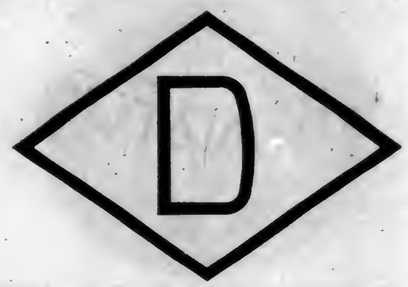
For Files and Rasps.
Claims use since July 14, 1932.

Ser. No. 329,151. NICHOLSON FILE COMPANY, Providence, R. I. Filed July 28, 1932.



For Files and Rasps.
Claims use since July 14, 1932.

Ser. No. 329,180. DRAPER CORPORATION, Portland, Me., and Hopedale, Mass. Filed July 29, 1932.



Applicant claims ownership of registered Trade-Mark No. 90,797 issued Mar. 25, 1913.
For Loom-Temples and Parts Thereof and for Parts of Looms.
Claims use since 1871.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 328,632. COLUMBIA PICTURES CORPORATION, New York, N. Y. Filed July 8, 1932.



No claim is made to the words "Columbia Pictures Presents" except as used in conjunction with the other features of the mark.
For Motion Picture Photoplays.
Claims use since October, 1928.

Ser. No. 328,703. PRINCIPAL DISTRIBUTING CORP., New York, N. Y. Filed July 11, 1932.

SEEING IS BELIEVING

For Series of Different Motion Picture Films.
Claims use since Apr. 18, 1932.

Ser. No. 329,072. JULIAN OLLENDORFF, Brooklyn, N. Y. Filed July 23, 1932.



For Motion Picture Films Showing Sketches, Drawings and Photographs.
Claims use since June 1, 1932.

Ser. No. 329,115. GEVAERT PHOTO-PRODUCTEN, NAAMLOOZE VENNOOTSCHAP (SOCIÉTÉ ANONYME PHOTO-PRODUITS GEVAERT), Oude-God, near Antwerp, Belgium. Filed July 27, 1932.

SUPERCHROME

For Sensitized Photographic Papers, Plates, Films, Roll Films, Portrait Films, Studio Films, Plan Films, Pack Films, Radiofilms, Cinematographic Films, Cameras and Parts Therefor, Developing Apparatus, Cinematographic Cameras, and Projectors.
Claims use since Jan. 1, 1932.

CLASS 27

Horological Instruments

Ser. No. 327,877. THE K K IMPORTING CORPORATION, New York, N. Y. Filed June 10, 1932.



For Watch and Clock Springs.
Claims use since March, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 329,186. HARRISON WHOLESALE COMPANY, Chicago, Ill. Filed July 29, 1932.

DUCHESS

For Refrigerators.
Claims use since Jan. 1, 1932.

Ser. No. 329,336. NORGE CORPORATION, Detroit, Mich. Filed Aug. 4, 1932.

ICEVOIR

For Freezing Trays for Electric Refrigerators.
Claims use since Jan. 1, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 326,066. W. F. WHITNEY COMPANY, South Ashburnham, Mass. Filed Apr. 13, 1932.



For Table Tops and Chair Seats of a Composition Material.
Claims use since Aug. 18, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,838. OIL-ELEC-TRIC ENGINEERING CORP., Bethlehem, Pa. Filed June 8, 1932.

DOE

For Heating Equipment—Namely, Oil Burners.
Claims use since Mar. 1, 1932.

CLASS 37

Paper and Stationery

Ser. No. 327,005. THE CLASSROOM TEACHER, INC., Chicago, Ill. Filed May 12, 1932.

THE CLASSROOM PRINTER

No claim is made to the word "Printer" apart from the mark shown.
For Rubber Stamps and Hectographs.
Claims use since Oct. 8, 1931.

Ser. No. 327,180. THE CLASSROOM TEACHER, INC., Chicago, Ill. Filed May 16, 1932.

THE COOPERATIVE PRINTER

No claim is made to the word "Printer" apart from the mark shown.
For Rubber Stamps and Hectographs.
Claims use since May 13, 1932.

Ser. No. 327,131. THE CLASSROOM TEACHER, INC., Chicago, Ill. Filed May 16, 1932.

THE CREATIVE PRINTER

No claim is made to the word "Printer" apart from the mark shown.
For Rubber Stamps and Hectographs.
Claims use since May 14, 1932.

Ser. No. 328,191. J. S. STAEDTLER, INC., New York, N. Y. Filed June 21, 1932.

"LUMOGRAPH"

For Lead Pencils, Colored Pencils, Indelible Pencils, Copying Pencils, Pencil Leads, and Copying Leads and Sticks; Slate Pencils, Blackboard, Drawing, Sign, and Marking Pencils, Combination Pens and Pencils, Rubber Pencils, Penholders, Fountain Pens, Mechanical Pencils, and Fillers for Same.
Claims use since Oct. 1, 1931.

Ser. No. 329,163. VELDOWN COMPANY, INC., New York, N. Y. Filed July 28, 1932.

HANDIES

For Cleansing Tissue.
Claims use since June 24, 1932.

Ser. No. 329,265. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed Aug. 1, 1932.

SNO-SHEEN

For Waxed Glassine Wrapping and Lining Paper.
Claims use since July 22, 1932.

CLASS 38

Prints and Publications

Ser. No. 316,865. MEYER BOTH COMPANY, Chicago, Ill., and New York, N. Y. Filed July 11, 1931.

THE RETAIL ADVERTISING WEEK

No claim is made to the words "Published by Meyer Both Company, 960 Sixth Avenue, New York, 20th and Michigan, Chicago" apart from the mark shown on the drawing.
For Periodical Publication.
Claims use since Mar. 16, 1931.

Ser. No. 327,521. THE NEW YORK STATE SOCIETY OF PROFESSIONAL ENGINEERS, INC., New York, N. Y. Filed May 27, 1932.

The AMERICAN ENGINEER

For Periodical Publication.
Claims use since January, 1931.

Ser. No. 328,830. ALBERT AINSLIE, Louisville, Ky. Filed July 14, 1932.

STRANGE, BUT TRUE

For Newspaper Section.
Claims use since June 30, 1932.

Ser. No. 329,141. EVANS PUBLISHING CORPORATION, Dover, Del. Filed July 28, 1932.

THE FAMILY CIRCLE

For Weekly Publication.
Claims use since June 3, 1932.

CLASS 39

Clothing

Ser. No. 310,991. FURST-GREENMAN CO., INC., New York, N. Y. Filed Feb. 12, 1931.

Miss America DANCE FROCKS

The descriptive words "Dance Frocks" are disclaimed apart from the mark shown in the drawing.
For Women's, Ladies', Misses', and Children's Dance Frocks.
Claims use since Jan. 2, 1930.

Ser. No. 327,375. STADIUM UNDERWEAR COMPANY, INCORPORATED, Baltimore, Md. Filed May 23, 1932.

RAINBEAU

For Pajamas.
Claims use since May 7, 1932.

Ser. No. 328,588. MAX UDELL SONS & CO., New York, N. Y. Filed July 6, 1932.

YEARCRAFT

For Men's and Young Men's Suits and Overcoats.
Claims use since Apr. 21, 1932.

Ser. No. 328,671. NUSBAUM, KNITTERS, INC., Ozone Park, L. I., N. Y. Filed July 9, 1932.

Topperall

For Women's Scarfs and Jackets.
Claims use since Apr. 30, 1932.

Ser. No. 328,852. TRIANGLE UNDERWEAR CORPORATION, New York, N. Y. Filed July 16, 1932.

Crepe DeLillian

No claim is made to the word "Crepe" apart from the mark shown in the drawing.
For Ladies' Underwear.
Claims use since Mar. 21, 1932.

Ser. No. 328,974. DOROTHY BICKUM, New York, N. Y. Filed July 22, 1932.

"Business Girl"

For Bandettes, Bandeaux, Brassières, Girdles, Corselettes, and Garter Belts.
Claims use since June, 1932.

Ser. No. 328,991. R. H. MACY & CO., INC., New York, N. Y. Filed July 22, 1932.

Top down

For Women's Hats.
Claims use since June 18, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 328,015. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed June 15, 1932.

Expando

For Buckles Made of Non-Precious Metal.
Claims use since May 15, 1932.

Ser. No. 328,954. GEMACO, INC., New York, N. Y. Filed July 21, 1932.

SEMBLER

For Embroidered Emblems for Special Wearing Apparel Such as Bathing Suits, Gym Shorts, Athletic Suits, Uniforms, Sweat Shirts, Work Clothing Such as Uniforms for Oil Companies and Automobile Manufacturers.
Claims use since March, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,220. BEACON MANUFACTURING COMPANY, New Bedford, Mass. Filed Jan. 21, 1932.

CAMEO

For Blankets Made of Cotton or Cotton and Wool.
Claims use since Jan. 8, 1932.

Ser. No. 324,182. ANDREW Y. MICHIE & SONS, INC., Philadelphia, Pa. Filed Feb. 15, 1932.

HYMO

For Hair Cloth Interlining in the Piece.
Claims use since Jan. 22, 1932.

Ser. No. 327,105. MILLER BROTHERS, New York, N. Y. Filed May 14, 1932.

ROCKFAST

For Drapery and Upholstery Fabrics Made of Cotton, Silk, Linen, and Wool.
Claims use since July, 1920.

Ser. No. 328,810. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed July 15, 1932.

VELOURS TARAVAI

No rights are asserted to the exclusive use of the word "Velours" apart from the mark as shown in the drawing.
For Piece Goods of Silk, Rayon, Cotton, and Wool and Mixtures of These Materials.
Claims use since July 11, 1932.

Ser. No. 328,925. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed July 20, 1932.

PEPPERELL FABRICS

PEPPERELL

Applicant hereby disclaims exclusive use of the word "Fabrics" apart from the mark as shown in the drawing.
For Textile Sheets.
Claims use since July 11, 1932.

Ser. No. 328,935. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Chantra

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,937. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Duvelga

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,948. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Marsha

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,949. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Tarza

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,950. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Valdai

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,952. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Valkeen

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,953. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Volna

For Woolen Piece Goods.
Claims use since May 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 321,316. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa. Filed Nov. 19, 1931.

GUDEGRADE YDS

The word "Yds" is disclaimed.
For Thread and Yarn.
Claims use since Mar. 1, 1931.

Ser. No. 327,122. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed May 14, 1932.

THATCO LOOPER

No claim is made to the word "Looper" apart from the mark as shown in the drawing.
For Cotton Thread.
Claims use since Apr. 14, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 316,764. W. BURTON & CO., INC., Brooklyn, N. Y. Filed July 9, 1931.

"Deliciously Yours"

For Non-Alcoholic Maltless Extracts, Flavors, and Syrups for Making Soft Drinks.
Claims use since May, 1928.

Ser. No. 327,581. ROSE CUNEO, doing business as Lily Mineral Water Works, Union City, N. J. Filed May 31, 1932.

AQUASAN

For Mineral Spring Water.
Claims use since Apr. 29, 1930.

Ser. No. 328,858. YACHT CLUB BOTTLING WORKS, INC., Centredale, R. I. Filed July 16, 1932.

COMMODORE



The portrait shown on the drawing is fanciful.
For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Jan. 1, 1930.

Ser. No. 329,095. PINEAPPLE REFRESHMENTS BOTTLING CORPORATION, Miami, Fla. Filed July 26, 1932.

Pineapple Sport

No claim is made to the word "Pineapple" apart from the mark as shown.
For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks and Syrups for Making the Same.
Claims use since June 20, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 315,657. HERBERT A. WILBUR, Southville, Mass. Filed June 9, 1931.

Golden Bee

For Honey.
Claims use since July 13, 1929.

Ser. No. 317,703. THE BLOOM-ROSENBLUM-KLEIN COMPANY, doing business as The Red Bell Malt Extract Company, Youngstown, Ohio. Filed Aug. 6, 1931.

RED BELL

For Malt Syrup for Beverage-Making and Food Purposes.
Claims use since June 8, 1931.

Ser. No. 319,099. D. D. CARNEY, doing business as D. D. Carney Candy Co., Huntington, W. Va. Filed Sept. 16, 1931.



Carney's Billy Boy

The picture is that of Billy Vess Carney the son of the applicant.
For Candy.
Claims use since July 15, 1931.

Ser. No. 319,782. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Oct. 5, 1931.

MER-MASH

No claim is made to the word "Mash" except when associated with the word "Mer."
For Poultry Feeds.
Claims use since Jan. 1, 1923.

Ser. No. 319,734. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Oct. 5, 1931.

Chicalmash

No claim is made to the word "Mash" except when associated with the word "Chical."
For Poultry Feeds.
Claims use since Dec. 23, 1927.

Ser. No. 319,735. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Oct. 5, 1931.

Eggalmash

No claim is made to the word "Mash" except when associated with the word "Eggal."
For Poultry Feeds.
Claims use since Dec. 23, 1927.

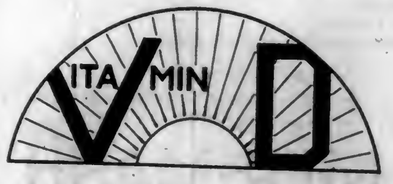
Ser. No. 320,655. PHILIP MERIANO, Philadelphia, Pa. Filed Oct. 27, 1931.

VIA NOVA



For Olive Oil.
Claims use since Sept. 25, 1930.

Ser. No. 323,523. BROOK HILL FARM, INC., Genesee Depot, Wis. Filed Jan. 28, 1932.



No claim is made to the exclusive use of the word "Vitamin D" or the letters "V D" apart from the mark as shown on the drawing.
For Milk.
Claims use since Jan. 10, 1932.

Ser. No. 323,753. SCOTT-BORDEN, Anaheim, Calif. Filed Feb. 2, 1932.



The portrait of the woman shown on the drawing is merely fanciful.
For Fresh Citrus Fruit.
Claims use since Jan. 15, 1932.

Ser. No. 324,340. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Feb. 20, 1932.

EL DORADO

For Fresh Avocados.
Claims use since Oct. 1, 1930.

Ser. No. 324,508. BERNARD FIEG, Brooklyn, N. Y. Filed Feb. 26, 1932.

EASTOLINE

For Food Product Consisting of Chocolate, Yeast, Cane Sugar, Malt, and Other Ingredients for Use in Producing Food Beverages.
Claims use since Apr. 8, 1930.

Ser. No. 324,590. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Feb. 29, 1932.

ORO NEGRO

For Fresh Avocados.
Claims use since Oct. 1, 1930.

Ser. No. 325,629. ANTONINO CANNOVA, Freeport, Ill. Filed Mar. 28, 1932.



The drawing is lined conventionally for red and black.
For Canned Tomato Sauce with Meat Balls.
Claims use since Feb. 1, 1931.

Ser. No. 326,482. KROGER GROCERY & BAKING CO., Louisville, Ky., and Cincinnati, Ohio. Filed Apr. 25, 1932.



For Wheat Flour and Self Rising Flour.
Claims use since August, 1931.

Ser. No. 326,998. EARLE C. BENNETT, doing business as Hava-Smack Co., West Springfield, Mass. Filed May 10, 1932.

HAVA-SMACK

For Confections Composed of Nuts, Cereals, and Syrups.
Claims use since Mar. 1, 1932.

Ser. No. 327,308. EMPIRE STATE FLOUR MILLS, Buffalo and New York, N. Y. Filed May 21, 1932.

MOTHER'S PET



The representation of the child is purely fanciful.
For Wheat Flour.
Claims use since Feb. 29, 1932.

Ser. No. 327,746. WESCO FOODS COMPANY, Cincinnati, Ohio. Filed June 4, 1932.

GUEST



The picture forming a part of the trade-mark is fanciful.
For Malt Syrup.
Claims use since Apr. 12, 1932.

Ser. No. 328,004. THE HEIDELBERG CORPORATION, New Orleans, La. Filed June 15, 1932.



No claim is made to the words "Heidelberg" and "Brumalt" apart from the other features of the mark.
For Malt Syrup.
Claims use since May 31, 1932.

Ser. No. 328,145. SUNICAL PACKING COMPANY, San Francisco, Calif. Filed June 20, 1932.

RURAL GOLD

For Canned Fruits.
Claims use since June 5, 1932.

Ser. No. 328,147. VELASCO & CALZADA, San Antonio, Tex. Filed June 20, 1932.



No claim is made to the word "Sabrosa" apart from the mark as shown in the drawing.
For Toasted Tortillas.
Claims use since Feb. 1, 1932.

Ser. No. 328,813. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed June 25, 1932.

VOL-TEX

For Mixture of an Egg Material and Other Substances Suitable for Use as an Ingredient in Making Cakes and Other Food Products.
Claims use since Apr. 20, 1932.

Ser. No. 328,566. PURITY OATS COMPANY, doing business as Oat Snaps Company, Keokuk, Iowa. Filed July 5, 1932.



The word "Oat" is hereby disclaimed apart from the mark shown.
For Breakfast Foods in Flake Form Made Principally from Oats.
Claims use since Mar. 21, 1932.

Ser. No. 328,575. BUNTE BROTHERS, Chicago, Ill. Filed July 6, 1932.

TEE UP

For Candy.
Claims use since Apr. 10, 1932.

Ser. No. 328,643. FELICE NEBBIA, doing business as Nebbia Pastry Co., San Francisco, Calif. Filed July 8, 1932.



The word "Cake" is disclaimed apart from the mark as shown on the drawing except in the association shown.
For Cakes.
Claims use since 1921.

Ser. No. 328,714. MARS, INCORPORATED, Chicago, Ill. Filed July 8, 1932.



For Candy.
Claims use since May 1, 1932.

Ser. No. 328,761. SCHREIBER BROTHERS, INCORPORATED, Baltimore, Md. Filed July 13, 1932.

GWYNNDALE

For Butter.
Claims use since May 9, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 321,349. LEGE-ON-AIRE BEVERAGE COMPANY, Minneapolis, Minn. Filed Nov. 20, 1931.

Lege-on-aire

For Malt Beverages Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since Oct. 20, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 327,894. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed June 10, 1932.

SLEEPY HEAD

For Crib Sheets Made of Rubber and Rubber and Fabric.
Claims use since May 6, 1932.

Ser. No. 328,604. JACQUES G. GOLDBERG, New York, N. Y. Filed July 7, 1932.

SOLO



For Fly Paper.
Claims use since May 1, 1932.

Ser. No. 328,780. CROWN CORK & SEAL COMPANY, INC., Baltimore, Md. Filed July 14, 1932.

SERAX

For Container Closures.
Claims use since Sept. 18, 1898.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 6, 1932

297,130. EFFERVESCENT MEDICINAL SALT. SCOTT & TURNER, LIMITED, Newcastle-upon-Tyne, England.
Filed August 11, 1931. Serial No. 317,873. PUBLISHED JUNE 14, 1932. Class 6.

297,131. WOMEN'S AND MISSES' DRESSES. GEORGE WASHINGTON BICENTENNIAL COSTUMES INC., New York, N. Y.
Filed August 22, 1931. Serial No. 318,341. PUBLISHED NOVEMBER 3, 1931. Class 39.

297,132. ANTI-EPILEPTIC, SEDATIVE, AND HYPNOTIC PREPARATION. CHEMISCHE WERKE VORMALS H. & E. ALBERT, Wiesbaden-Biebrich, Germany.
Filed August 25, 1931. Serial No. 318,390. PUBLISHED JUNE 7, 1932. Class 6.

297,133. RADIO TUBE TESTERS. RADIO RESEARCH LABORATORIES, Tacoma, Wash.
Filed July 31, 1931. Serial No. 317,536. PUBLISHED JUNE 21, 1932. Class 26.

297,134. CARBON PAPER AND TYPEWRITER RIBBONS. RADIO CARBON COMPANY, Dallas, Tex.
Filed September 18, 1931. Serial No. 319,185. PUBLISHED JUNE 21, 1932. Class 11.

297,135. ASTRINGENTS, CREAMS, ROUGES, ETC. FRED W. DAVIS, New York, N. Y.
Filed September 28, 1931. Serial No. 319,475. PUBLISHED JUNE 7, 1932. Class 6.

297,136. PERAMBULATOR. LETTY M. MONTGOMERY, New York, N. Y., assignor to Karry Kart, Incorporated, New York, N. Y., a Corporation of New York.
Filed October 3, 1931. Serial No. 319,701. PUBLISHED JUNE 21, 1932. Class 19.

297,137. MECHANISMS FOR CONTROLLING THE TENSION IN THE WINDING OF MATERIAL AND APPARATUS IN WHICH MATERIAL IS TRANSFERRED FROM ONE HOLDER TO ANOTHER BY A WINDING OPERATION EMBODYING SUCH MECHANISMS AND PARTS AND ELEMENTS THEREOF. JOSEPH CLAYTON, doing business as Clayton Products Company, Corona, N. Y.
Filed October 17, 1931. Serial No. 320,159. PUBLISHED JUNE 21, 1932. Class 28.

297,138. UPHOLSTERED LIVING ROOM FURNITURE — NAMELY, DAVENPORTS, CHAIRS, COUCHES, STOOLS, AND BENCHES. T. R. TAYLOR & Co., York, Pa.
Filed October 23, 1931. Serial No. 320,381. PUBLISHED JUNE 21, 1932. Class 32.

297,139. GLASS SHOWER STALL DOORS, GLASS SHOWER BATH SHIELDS, AND GLASS BATH ENCLOSURES. LOUIS H. LEHMAN, doing business as Lehman Sprayshield Company, Philadelphia, Pa.
Filed October 27, 1931. Serial No. 320,504. PUBLISHED JUNE 21, 1932. Class 13.

297,140. COIN-OPERATED DISPENSING APPARATUS. BORST ENGINEERING, INC., Buffalo, N. Y.
Filed October 30, 1931. Serial No. 320,629. PUBLISHED JUNE 21, 1932. Class 23.

297,141. CLOTHING—NAMELY, KNITTED AND WOVEN SWEATER COATS, PULLOVERS, SUITS, DRESSES, BLOUSES, BATHING SUITS, AND HOSIERY FOR MEN, WOMEN, AND CHILDREN. MERCURY MILLS, LIMITED, Hamilton, Ontario, Canada.
Filed December 3, 1931. Serial No. 321,730. PUBLISHED JUNE 21, 1932. Class 39.

297,142. MECHANICAL WATER SOFTENING APPARATUS AND PARTS THEREFOR. WARD-LOVE PUMP CORPORATION, Rockford, Ill.
Filed November 3, 1931. Serial No. 320,771. PUBLISHED JUNE 21, 1932. Class 23.

297,143. BEAUTY CREAM. MAE J. IMMICH, doing business as Hart's Rejuvenating Cream Co., Los Angeles, Calif.
Filed December 18, 1931. Serial No. 322,255. PUBLISHED JUNE 7, 1932. Class 6.

297,144. GENERAL ADHESIVE ESPECIALLY ADAPTED FOR BOOK BINDING, CEMENTING, CELLOPHANE, FABRICS, LEATHER, AND RUBBER, AND FOR OTHER PURPOSES. THE LEE HARDWARE COMPANY, Salina, Kans.
Filed December 29, 1931. Serial No. 322,515. PUBLISHED JUNE 21, 1932. Class 5.

297,145. PREPARATIONS FOR EXTERMINATING INSECTS. GETZ EXTERMINATORS, INC., St. Louis, Mo.
Filed January 2, 1932. Serial No. 322,635. PUBLISHED JUNE 14, 1932. Class 6.

297,146. MEN'S DRESS, NEGLIGEE, AND WORK SHIRTS, UNDERWEAR, AND PAJAMAS. NATIONAL SHIRT SHOPS, INC., New York, N. Y.
Filed January 2, 1932. Serial No. 322,643. PUBLISHED JUNE 21, 1932. Class 39.

297,147. A PREPARATION CONSISTING OF HORMONES FOR SMOOTHING, RENEWING, AND REJUVENATING THE SKIN AND PURIFYING SAME FROM BEAUTY DEFECTS THROUGH INTERNAL ACTION. DR. BALLOWITZ & CO. CHEMISCH-PHARMAZ. FABRIK G. M. B. H., Berlin-Pankow, Germany.
Filed January 7, 1932. Serial No. 322,787. PUBLISHED JUNE 7, 1932. Class 6.

297,148. GLOVE CUFF MATERIAL COMPOSED OF TWO PIECES HIGH GRADE FIRST QUALITY COTTON GOODS, DUCK, DRILL, OR SHEETING CONSTRUCTION, OR ANY COMBINATION OF THESE WHICH SERVES THE PURPOSE BEST, COMBINED WITH A HEAVY RUBBER COMPOUND. THE LANDERS CORPORATION, Toledo, Ohio.
Filed January 19, 1932. Serial No. 323,268. PUBLISHED JUNE 21, 1932. Class 50.

297,149. SHOE RESOLING AND REPAIRING COMPOUND. THE PERFECT MANUFACTURING CO., Cincinnati, Ohio.
Filed February 5, 1932. Serial No. 323,872. PUBLISHED JUNE 14, 1932. Class 6.

297,150. CHILD'S BLUE PRINTING SET. MARION S. TERRY, doing business as Sunshine Magic, Scituate, Mass.
Filed November 18, 1931. Serial No. 321,262. PUBLISHED JUNE 21, 1932. Class 22.

297,151. OLIVE OIL. SOCIETA ANONIMA LUCCHESE OLII E VINI, Lucca, Italy.
Filed October 12, 1931. Serial No. 320,010. PUBLISHED JUNE 21, 1932. Class 46.

297,152. ELECTRIC REFRIGERATORS. MALLEABLE IRON RANGE COMPANY, Beaver Dam, Wis.
Filed September 5, 1931. Serial No. 318,815. PUBLISHED NOVEMBER 24, 1931. Class 31.

297,153. PREPARED EDIBLE CHOCOLATE. LAMONT, CORLISS & COMPANY, New York, N. Y.
Filed September 1, 1931. Serial No. 318,628. PUBLISHED JUNE 21, 1932. Class 46.

297,154. FLOOR SCRUBBING SOAP. CRECO COMPANY INC., Long Island City, N. Y.
Filed August 29, 1931. Serial No. 318,549. PUBLISHED JUNE 21, 1932. Class 4.

297,155. CHEWING GUM. KIDD PRODUCTS CORPORATION, Chicago, Ill.
Filed July 31, 1931. Serial No. 317,520. PUBLISHED JUNE 21, 1932. Class 46.

297,156. WATCH CHARMS. THE AMERICAN COLLEGE OF LIFE UNDERWRITERS, Washington, D. C., and Baltimore, Md.
Filed July 29, 1931. Serial No. 317,417. PUBLISHED JUNE 21, 1932. Class 28.

297,157. LADIES', MISSES', AND JUNIOR UNDERWEAR AND SLIPS, DRESSES, FROCKS, AND GOWNS. BLOOM & JAFFIN, New York, N. Y.
Filed March 10, 1932. Serial No. 324,982. PUBLISHED JUNE 14, 1932. Class 39.

297,158. MEDICINAL PETROLEUM OIL, RADIATOR GLYCERINE, RADIATOR CLEANER AND ANTI-CORROSION MATERIAL, INSECTICIDAL OILS, OILS FOR OILING PAPER, AND COSMETIC OILS—NAMELY, OILS USED AS AN OIL BASE FOR MAKING COLD CREAMS, NOURISHING CREAMS, SHAVING CREAMS, AND HAIR OILS, ETC. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed March 7, 1932. Serial No. 324,858. PUBLISHED JUNE 14, 1932. Class 6.

297,159. MEDICINAL COMPOUND FOR USE IN THE RELIEF OF PAINS AND CRAMPS AND THE FEELING OF GENERAL DEBILITY JUST PRIOR TO AND DURING THE PERIOD OF MENSTRUATION. WILLIAM C. JACKSON, Tulsa, Okla.
Filed March 8, 1932. Serial No. 324,745. PUBLISHED JUNE 14, 1932. Class 6.

297,160. VETERINARY OR SANITARY PREPARATION FOR THE EXTERNAL TREATMENT OF ANIMALS WHILE IN SEASON. KEEPAWAY LABORATORY, London, England.
Filed March 2, 1932. Serial No. 324,711. PUBLISHED JUNE 7, 1932. Class 6.

297,161. OIL REMOVING ACID NEUTRALIZING POWDER. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Montgomery County, Pa.
Filed March 1, 1932. Serial No. 324,645. PUBLISHED JUNE 7, 1932. Class 6.

297,162. POWDERED RUST PROOFING MATERIAL. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Montgomery County, Pa.
Filed March 1, 1932. Serial No. 324,644. PUBLISHED JUNE 7, 1932. Class 6.

297,163. SHAMPOO AND HAIR COLORING PREPARATION. L. PIERRE VALLIONY, New York, N. Y.
Filed February 25, 1932. Serial No. 324,496. PUBLISHED JUNE 7, 1932. Class 6.

297,164. PREPARATION FOR THE TREATMENT OF NERVOUSNESS AND HEADACHE. PYRAM-SELTZER CO., Los Angeles, Calif., and New York, N. Y.
Filed February 24, 1932. Serial No. 324,444. PUBLISHED JUNE 7, 1932. Class 6.

297,165. LAUNDRY SOURS, CHEMICAL ERADICATORS. THE MINNESOTA CHEMICAL COMPANY, INC., Minnesota Transfer, Minn.
Filed February 19, 1932. Serial No. 324,319. PUBLISHED JUNE 7, 1932. Class 6.

297,166. DISINFECTANT TOILET PREPARATION. NAAMLOOZE VENOOTSCHAP CHEMISCH-PHARMACEUTISCHE FABRIEK "MENOLINE" (MENOLINE DRUG COMPANY), The Hague, Netherlands.
Filed February 16, 1932. Serial No. 324,228. PUBLISHED JUNE 7, 1932. Class 6.

297,167. FLUID TO BE POURED IN THE SHOE, WHICH IS RECOMMENDED FOR ATHLETE'S FOOT, SOFT CORNS, PERSPIRING, BURNING, ODOROUS, AND GALLED FEET. W. HOWARD NORMAN, doing business as Walk-N-Joy Chemical Co., Raleigh, N. C.
Filed February 17, 1932. Serial No. 324,263. PUBLISHED JUNE 7, 1932. Class 6.

297,168. HOSIERY. P. T. CUTHBERT & CO., INC., New York, N. Y.
Filed March 28, 1932. Serial No. 325,568. PUBLISHED JUNE 14, 1932. Class 39.

297,169. GREASELESS AND STAINLESS JELLY FOR THE RELIEF OF FOOT ODOR AND PERSPIRATION. LEON BARON, doing business as N. C. Goodwin's Laboratory, Inc., Brooklyn, N. Y.
Filed March 28, 1932. Serial No. 325,555. PUBLISHED JUNE 14, 1932. Class 6.

297,170. MEN'S AND BOYS' SHORTS, DRESS, NEGLIGEE, AND WORK SHIRTS, UNIONSUITS, PAJAMAS, AND NIGHT SHIRTS. OPPENHEIM, OSBENDORF & CO., INC., Baltimore, Md.
Filed March 28, 1932. Serial No. 325,405. PUBLISHED JUNE 21, 1932. Class 39.

297,171. DRESS AND WORK SHIRTS, HOSIERY, SOCKS, AND WORK TROUSERS. PHILCO TRADING CO., INC., Philadelphia, Pa., and New York, N. Y.
Filed April 22, 1932. Serial No. 326,393. PUBLISHED JUNE 21, 1932. Class 39.

297,172. MISSES' AND MATRONS' DRESSES AND SUITS. NETTIE FISCHMANN, St. Louis, Mo.
Filed April 18, 1932. Serial No. 326,209. PUBLISHED JUNE 21, 1932. Class 39.

297,173. DRESSES USED FOR WOMEN, MISSES, AND CHILDREN. BEAUCIE J. HEBERT, Spokane, Wash.
Filed April 13, 1932. Serial No. 326,051. PUBLISHED JUNE 14, 1932. Class 39.

297,174. LOTION FOR THE SKIN. CAMPANA CORPORATION, Batavia, Ill.
Filed March 12, 1932. Serial No. 325,061. PUBLISHED JUNE 7, 1932. Class 6.

297,175. LOTION FOR THE SKIN. CAMPANA CORPORATION, Batavia, Ill.
Filed March 12, 1932. Serial No. 325,060. PUBLISHED JUNE 7, 1932. Class 6.

297,176. BRAKES AND BRAKE SYSTEMS AND PARTS THEREOF. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind.
Filed April 9, 1932. Serial No. 325,936. PUBLISHED JUNE 21, 1932. Class 19.

297,177. MEN'S AND BOYS' NEGLIGEE SHIRTS AND PAJAMAS. PHILLIPS-JONES CORPORATION, New York, N. Y.
Filed May 11, 1932. Serial No. 326,988. PUBLISHED JUNE 21, 1932. Class 39.

297,178. HOSIERY. BELMONT HOSIERY COMPANY, Belmont, N. H.
Filed May 11, 1932. Serial No. 326,973. PUBLISHED JUNE 14, 1932. Class 39.

297,179. BRAKES AND BRAKE SYSTEMS AND PARTS THEREOF. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind.
Filed April 9, 1932. Serial No. 325,935. PUBLISHED JUNE 21, 1932. Class 19.

297,180. WOMEN'S, MISSES', AND CHILDREN'S SLIPS. SUSSBERG & FEINBERG, INC., New York, N. Y.
Filed May 9, 1932. Serial No. 326,919. PUBLISHED JUNE 21, 1932. Class 39.

297,181. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed May 6, 1932. Serial No. 326,810. PUBLISHED JUNE 14, 1932. Class 39.

297,182. TOOTH PASTE. THE BON AMI COMPANY, New York, N. Y.
Filed April 2, 1932. Serial No. 325,742. PUBLISHED JUNE 7, 1932. Class 6.

297,183. TRUNKS WORN AS OUTER GARMENTS BY MALES AND FEMALES FOR BATHING, CAMPING, AND OTHER SPORT AND ATHLETIC USES GENERALLY. THE B. V. D. COMPANY, INC., Baltimore, Md.
Filed May 3, 1932. Serial No. 326,703. PUBLISHED JUNE 14, 1932. Class 39.

297,184. WOMEN'S, MISSES', AND CHILDREN'S DRESSES. HIRSCHBERG-SCHWADRON & CO. INC., New York, N. Y.
Filed April 1, 1932. Serial No. 325,712. PUBLISHED JUNE 21, 1932. Class 39.

297,185. HOSIERY. BEAR BRAND HOSIERY CO., Kankakee and Chicago, Ill.
Filed April 25, 1932. Serial No. 326,452. PUBLISHED JUNE 14, 1932. Class 39.

297,186. WOMEN'S DRESSES, COATS, COAT-SUITS, UNDER-WEAR, HATS, PAJAMAS, KIMONOS, ROBES, AND NEGLIGEES. BARBARA FORD, Houston, Tex.
Filed April 28, 1932. Serial No. 326,623. PUBLISHED JUNE 21, 1932. Class 39.

297,187. COD LIVER OIL AND VISOSTEROL—NAMELY, ACTIVATED ERGOSTEROL IN OIL. MEAD JOHNSON & COMPANY, Evansville, Ind.
Filed March 28, 1932. Serial No. 325,590. PUBLISHED JUNE 7, 1932. Class 6.

297,188. LOTIONS FOR TREATING HAIR. LUDWIG N. WEISSMANN, doing business as L. Weissmann & Co., Palisade, N. J.
Filed April 7, 1932. Serial No. 325,887. PUBLISHED JUNE 7, 1932. Class 6.

297,189. INSECTICIDES. LEVINE BROTHERS, New York, N. Y.
Filed April 7, 1932. Serial No. 325,874. PUBLISHED JUNE 7, 1932. Class 6.

297,190. ANTISEPTIC JELLY. DUREX PRODUCTS INC., New York, N. Y.
Filed April 6, 1932. Serial No. 325,840. PUBLISHED JUNE 7, 1932. Class 6.

297,191. ANTISEPTIC JELLY. DUREX PRODUCTS INC., New York, N. Y.
Filed April 6, 1932. Serial No. 325,839. PUBLISHED JUNE 7, 1932. Class 6.

297,192. ANTISEPTIC JELLY. DUREX PRODUCTS INC., New York, N. Y.
Filed April 6, 1932. Serial No. 325,838. PUBLISHED JUNE 7, 1932. Class 6.

297,193. ANTISEPTIC JELLY. DUREX PRODUCTS INC., New York, N. Y.
Filed April 6, 1932. Serial No. 325,837. PUBLISHED JUNE 7, 1932. Class 6.

297,194. LAXATIVE MEDICINE COMPOSED OF A PALATABLE EMULSION OF MINERAL OIL AND CASCARA. DUTCH PRODUCTS COMPANY, Dorchester, Mass.
Filed April 5, 1932. Serial No. 325,819. PUBLISHED JUNE 7, 1932. Class 6.

297,195. MEDICINAL PREPARATION FOR THE TREATMENT OF ECZEMA, FACIAL ERUPTIONS, POISON IVY, INSECT BITES AND STINGS, AND SKIN DISEASES ACCOMPANIED BY ITCHING. EUSTACE H. GANE, doing business as R-Tex Laboratories, New York, N. Y.
Filed March 23, 1932. Serial No. 325,400. PUBLISHED JUNE 14, 1932. Class 6.

297,196. EFFERVESCENT TABLETS FOR USE IN FEMININE HYGIENE. IRVING LEVIE, Brooklyn, N. Y.
Filed March 28, 1932. Serial No. 325,585. PUBLISHED JUNE 14, 1932. Class 6.

297,197. FACE CREAMS, FACE POWDERS, AND HAND, FACE, AND SKIN LOTIONS. GEORGE W. BEEMAN, Detroit, Mich.
Filed April 1, 1932. Serial No. 325,703. PUBLISHED JUNE 14, 1932. Class 6.

297,198. HAIR TREATING COMPOUND IN THE FORM OF A SOLUTION, LOTION, PASTE, OR CREAM FOR USE AS A HAIR WASH OR SHAMPOO FOR USE IN THE TREATMENT OF THE HAIR. JAMES A. GILMORE, Spokane, Wash.
Filed March 15, 1932. Serial No. 325,140. PUBLISHED JUNE 14, 1932. Class 6.

297,199. CHEMICAL PRODUCT FOR KEEPING CUT FLOWERS FRESH AND PROMOTING EARLY BUDDING IN PLANTS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed April 8, 1932. Serial No. 325,906. PUBLISHED JUNE 7, 1932. Class 6.

297,200. MALT SYRUP. P. BALLANTINE & SONS, Newark, N. J.
Filed May 13, 1932. Serial No. 327,039. PUBLISHED JUNE 21, 1932. Class 46.

297,201. FRESH FISH FILLETS. HENRY & CLOSE CO., Boston, Mass.
Filed May 12, 1932. Serial No. 327,013. PUBLISHED JUNE 21, 1932. Class 46.

297,202. SHOE POLISH. JOSEPH LACHOFF, doing business as Jico Laboratories, Chicago, Ill.
Filed May 10, 1932. Serial No. 326,943. PUBLISHED JUNE 21, 1932. Class 4.

297,203. SANITARY BELTS. MARCUS & WIESEN, INC., New York, N. Y.
Filed May 9, 1932. Serial No. 326,903. PUBLISHED JUNE 21, 1932. Class 44.

297,204. TOILET SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed May 6, 1932. Serial No. 326,842. PUBLISHED JUNE 21, 1932. Class 4.

297,205. TEA AND COFFEE. C. J. NEUMANN COFFEE CO. INC., Brooklyn, N. Y.
Filed May 6, 1932. Serial No. 326,829. PUBLISHED JUNE 21, 1932. Class 46.

297,206. POWDERED SOAP COMPOUND. R. B. MARTIE, INC., New York, N. Y.
Filed May 4, 1932. Serial No. 326,755. PUBLISHED JUNE 21, 1932. Class 4.

297,207. CANNED FRUITS AND CANNED VEGETABLES. FRANK H. SWETT, doing business as F. H. Swett & Co., Chicago, Ill.
Filed April 27, 1932. Serial No. 326,561. PUBLISHED JUNE 21, 1932. Class 46.

297,208. MASSAGING APPARATUS. THOMAS AUBERGER, Paris, France.
Filed April 26, 1932. Serial No. 326,513. PUBLISHED JUNE 21, 1932. Class 44.

297,209. SHOE CLEANING AND POLISHING COMPOUNDS. WILLIAM T. VASSILATOS, doing business as The Crystal Shoe Polish Mfg. Co., Chicago, Ill.
Filed Apr. 23, 1932. Serial No. 326,510. PUBLISHED JUNE 21, 1932. Class 4.

297,210. KITCHEN MIXING DEVICE. NATIONAL DEVICES CORPORATION, Philadelphia, Pa.
Filed April 23, 1932. Serial No. 326,446. PUBLISHED JUNE 21, 1932. Class 21.

297,211. METAL CLEANERS AND POLISHES. SUPREME PRODUCTS COMPANY, St. Louis, Mo.
Filed April 22, 1932. Serial No. 326,399. PUBLISHED JUNE 21, 1932. Class 4.

297,212. SELENIUM, THALIUM, PHOTOELECTRIC AND LIGHT SENSITIVE CELLS CHANGING IN ELECTRICAL RESISTANCE IN RESPONSE TO CHANGES IN INTENSITY OF LIGHT, ETC. STRUTHERS DUNN INC., Philadelphia, Pa.
Filed April 6, 1932. Serial No. 325,860. PUBLISHED JUNE 21, 1932. Class 21.

297,213. PHONOGRAPHIC MACHINES AND PARTS THEREOF FOR RECORDING AND REPRODUCING SOUND, AND RECORDS AND NEEDLES FOR USE THEREWITH. SOUND ENGINEERING CORPORATION, New York, N. Y.
Filed April 19, 1932. Serial No. 326,270. PUBLISHED JUNE 21, 1932. Class 36.

297,214. TRANSFORMERS. AMERICAN FLYER MFG. CO., Chicago, Ill.
Filed April 30, 1932. Serial No. 326,629. PUBLISHED JUNE 21, 1932. Class 21.

297,215. IMPREGNATED CONCRETE PIPE AND WALL STRUCTURES. PAN-PACIFIC PILING & CONSTRUCTION CO., Wilmington, Calif.
Filed April 26, 1932. Serial No. 326,528. PUBLISHED JUNE 14, 1932. Class 12.

297,216. WOODEN FLOORING. HARRIS MANUFACTURING COMPANY, Johnson City, Tenn.
Filed April 23, 1932. Serial No. 326,423. PUBLISHED JUNE 14, 1932. Class 12.

297,217. EGGS AND DRESSED POULTRY. SANTE' INSTITUTE, LTD., Los Angeles, Calif.
Filed April 16, 1932. Serial No. 326,193. PUBLISHED JUNE 21, 1932. Class 46.

297,218. METAL ARTICLES OF JEWELRY FOR PERSONAL WEAR OR ADORNMENT, NOT INCLUDING WATCHES. HARVEY CLAP & COMPANY, Attleboro, Mass.
Filed April 14, 1932. Serial No. 326,079. PUBLISHED JUNE 21, 1932. Class 28.

297,219. POWDERED BAKING FLAVOR. T. A. FAULDS CO., INC., Boston, Mass.
Filed April 13, 1932. Serial No. 326,050. PUBLISHED JUNE 21, 1932. Class 46.

297,220. VERMIFUGE (WORM TABLETS FOR POULTRY). THE G. E. CONKEY COMPANY, Cleveland, Ohio.
Filed April 12, 1932. Serial No. 326,009. PUBLISHED JUNE 14, 1930. Class 6.

297,221. RECONSTRUCTIVE TONIC. HERMAN L. SMIDLER, doing business as Tricasco Laboratories, Chicago, Ill.
Filed April 14, 1932. Serial No. 326,117. PUBLISHED JUNE 14, 1932. Class 6.

297,222. MEDICINAL PREPARATIONS INDICATED IN THE TREATMENT OF HYPER-ACIDITY, RHEUMATISM, GOUT, LUMBAGO, AND CORYZA, AND FOR A TONIC, STIMULANT, AND EXPECTORANT. WILLIAM R. WARNER & CO., INC., New York, N. Y.
Filed April 16, 1932. Serial No. 326,198. PUBLISHED JUNE 14, 1932. Class 6.

297,223. CHEMICAL COMPOSITION FOR PRODUCING COLORED FLAMES. HARRY A. BAME, New York, N. Y.
Filed April 18, 1932. Serial No. 326,201. PUBLISHED JUNE 14, 1932. Class 6.

297,224. VAGINAL SUPPOSITORIES. S. M. LABORATORIES, INC., Seattle, Wash.
Filed April 18, 1932. Serial No. 326,231. PUBLISHED JUNE 14, 1932. Class 6.

297,225. PSYLLIUM SEEDS. HELPS TO HEALTH, INC., New York, N. Y.
Filed May 6, 1932. Serial No. 326,819. PUBLISHED JUNE 14, 1932. Class 6.

297,226. PREPARATION FOR THE TREATMENT OF LEUCORRHEA, PROSTATIS, ARTHRITIS, GONORRHEA, EPILEPSY, ANEMIA, CANCER SERUM, AND HERNIA. GEORGE SOTIRIADES, doing business as Sotirion Remedies, Pittsburgh, Pa.
Filed April 11, 1932. Serial No. 326,002. PUBLISHED JUNE 14, 1932. Class 6.

297,227. INSECTICIDE. ISIDOR CHERNIN, doing business as Klinzmoth Co., New York, N. Y.
Filed April 8, 1932. Serial No. 325,901. PUBLISHED JUNE 7, 1932. Class 6.

297,228. SILVER COPPER ALLOY MIRRORING SOLUTION. MERCK & CO., INC., Rahway, N. J.
Filed April 9, 1932. Serial No. 325,954. PUBLISHED JUNE 14, 1932. Class 6.

297,229. CARBON-BLACK FOR USE IN RUBBER COMPOUNDING, MANUFACTURE OF PAINTS AND INKS, AND OTHER USES. ELECTROBLACKS, INCORPORATED, Culver City, Calif.
Filed April 9, 1932. Serial No. 325,972. PUBLISHED JUNE 14, 1932. Class 6.

297,230. DYESTUFFS. MANAHAN CHEMICAL CO., INC., New York, N. Y.
Filed April 11, 1932. Serial No. 325,986. PUBLISHED JUNE 14, 1932. Class 6.

297,231. LADIES' DRESSES. LAKEVIEW MANUFACTURING COMPANY, Chicago, Ill.
Filed May 13, 1932. Serial No. 327,061. PUBLISHED JUNE 21, 1932. Class 39.

297,232. HOSIERY. IPSWICH MILLS, INC., Gloucester, Mass.
Filed May 13, 1932. Serial No. 327,055. PUBLISHED JUNE 21, 1932. Class 39.

297,233. CHOCOLATE NUT CAKES, COOKIES, AND PASTRIES. S. GUMPERT CO. INC., Brooklyn, N. Y.
Filed April 25, 1932. Serial No. 326,472. PUBLISHED JUNE 14, 1932. Class 46.

297,234. MEN'S, YOUNG MEN'S, YOUTHS', AND BOYS' COATS, VESTS, PANTS, OVERCOATS, AND TOP COATS. MERIT CLOTHING COMPANY, INC., Mayfield, Ky.
Filed April 15, 1932. Serial No. 326,155. PUBLISHED JUNE 14, 1932. Class 39.

297,235. BED SPRINGS, MATTRESSES, AND PILLOWS. CHARLES B. LEVY, New Orleans, La.
Filed April 14, 1932. Serial No. 326,110. PUBLISHED JUNE 21, 1932. Class 32.

297,236. BRAKES AND BRAKE SYSTEMS AND PARTS THEREOF. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind.
Filed April 9, 1932. Serial No. 325,937. PUBLISHED JUNE 21, 1932. Class 19.

297,237. METALLIC FENCE POSTS. KEYSTONE STEEL & WIRE COMPANY, Peoria, Ill.
Filed October 22, 1931. Serial No. 320,306. PUBLISHED JANUARY 5, 1932. Class 13.

297,238. CONFECTION FOR THE DECORATING OF CAKES, PIES, PUDDINGS, SHERBETS, ICE CREAMS, SALADS, COOKIES, CANDIES, AND ROASTS. KULLA AND VALENTE, New York, N. Y.
Filed March 8, 1932. Serial No, 324,892. PUBLISHED JUNE 21, 1932. Class 46.

297,239. MALT BEVERAGE CONTAINING NOT MORE THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. THE GRAND POP BOTTLING CO., Cincinnati, Ohio.
Filed February 1, 1932. Serial No. 323,659. PUBLISHED APRIL 19, 1932. Class 48.

297,240. CLEANER AND PRESERVATIVE FOR LINOLEUM. THE GUNN FURNITURE COMPANY, Grand Rapids, Mich.
Filed February 29, 1932. Serial No. 324,604. PUBLISHED JUNE 21, 1932. Class 4.

297,241. FRESH VEGETABLES. GOLDEN VALLEY PRODUCE CO. LTD., El Centro, Calif.
Filed January 26, 1932. Serial No. 323,454. PUBLISHED JUNE 21, 1932. Class 46.

297,242. CANNED FRUITS, CANNED VEGETABLES, CANNED BERRIES, DRIED FRUITS, FRUIT PRESERVES. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif.
Filed January 20, 1932. Serial No. 323,209. PUBLISHED JUNE 7, 1932. Class 46.

297,243. OLIVE OIL, CANNED TUNA FISH, TOMATO PASTE, AND MALT SYRUP. EDILIO PENNA, Brooklyn, N. Y.
Filed January 20, 1932. Serial No. 323,207. PUBLISHED JUNE 21, 1932. Class 46.

297,244. FOOD FLAVORING EXTRACTS, PARTICULARLY CONCENTRATED MEXICAN AND BOURBON VANILLA. THE HUDSON MANUFACTURING CO., Chicago, Ill.
Filed January 15, 1932. Serial No. 323,049. PUBLISHED JUNE 21, 1932. Class 46.

297,245. CANNED FRUITS, CANNED VEGETABLES, CANNED FRUITS FOR SALAD, CANNED SAUER KRAUT, ROLLED OATS, HOMINY GRITS, MACARONI, EGG NOODLES, WHEAT FLOUR, PICKLES, OLIVES, AND CATSUP. VOLUNTEER STORES, INC., doing business as Volunteer Food Stores, Chattanooga, Tenn.
Filed December 21, 1931. Serial No. 322,344. PUBLISHED JUNE 21, 1932. Class 46.

297,246. LUBRICATING OILS AND GREASES. HUMBLE OIL & REFINING COMPANY, Houston, Tex.
Filed December 12, 1931. Serial No. 322,044. PUBLISHED JUNE 21, 1932. Class 15.

297,247. ASBESTOS-CEMENT-SIDING STRIPS. ETERNIT, INC., St. Louis, Mo., and New York, N. Y.
Filed November 25, 1931. Serial No. 321,490. PUBLISHED JUNE 14, 1932. Class 12.

297,248. FRATERNITY BADGES, LAPEL BUTTONS, SCARF, LAPEL, AND BREAST PINS, CUFF LINKS, TIE CLASPS, CHARMS, FINGER RINGS, BELT BUCKLES, AND ORNAMENTAL SHIELDS, ALL OF PRECIOUS METAL. ALPHA EPSILON PI FRATERNITY, INC., New York N. Y.
Filed April 22, 1930. Serial No. 299,243. PUBLISHED JUNE 21, 1932. Class 28.

297,249. METAL POLISH. N. S. MEYER, INC., New York, N. Y.
Filed June 16, 1930. Serial No. 302,469. PUBLISHED JUNE 21, 1932. Class 4.

297,250. MEN'S AND YOUNG MEN'S COATS, VESTS, TROUSERS, AND OVERCOATS. SIMON ACKERMAN CLOTHES, INC., New York, N. Y.
Filed April 9, 1930. Serial No. 298,558. PUBLISHED JUNE 14, 1932. Class 39.

297,251. AUTOMATIC COAL BURNERS. IRON FIREMAN MANUFACTURING COMPANY, Portland, Oreg.
Filed April 3, 1930. Serial No. 298,331. PUBLISHED JUNE 21, 1932. Class 34.

297,252. SOLUTIONS OF CELLULOSE ESTERS OR MIXTURES OF THE SAME. BREVOLITE LACQUER COMPANY, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,143. PUBLISHED JUNE 7, 1932. Class 6.

297,253. OILS AND GREASES. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y.
Filed March 18, 1932. Serial No. 325,250. PUBLISHED JUNE 21, 1932. Class 15.

297,254. COFFEE. SOUTHLAND COFFEE COMPANY, Macon, Ga.
Filed March 23, 1931. Serial No. 312,462. PUBLISHED JUNE 21, 1932. Class 46.

297,255. SIGNAL DEVICES FOR CARDS AND SHEETS. CLARE H. LAW, doing business as Signalex Service, Chicago, Ill.
Filed March 2, 1931. Serial No. 311,614. PUBLISHED APRIL 21, 1931. Class 37.

297,256. STORAGE BATTERIES. STATES BATTERIES, LTD., Los Angeles, Calif.
Filed April 4, 1931. Serial No. 313,021. PUBLISHED JUNE 21, 1931. Class 21.

297,257. ELECTRIC LIGHTING FIXTURES AND LAMPS. THE MILLER COMPANY, Meriden, Conn.
Filed April 15, 1931. Serial No. 313,381. PUBLISHED JUNE 21, 1932. Class 21.

297,258. LADIES', MISSES', AND JUNIORS' DRESSES. LADIES GARMENT MANUFACTURING COMPANY, Minneapolis, Minn.
Filed July 16, 1927. Serial No. 252,157. PUBLISHED JUNE 14, 1932. Class 39.

297,259. TOOL STEEL. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa.
Filed March 14, 1930. Under section 5b of the act of 1905, as amended in 1920. Serial No. 297,317. PUBLISHED JUNE 21, 1932. Class 14.

297,260. TOOL STEEL. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa.
Filed March 14, 1930. Under section 5b of the act of 1905, as amended in 1920. Serial No. 297,316. PUBLISHED JUNE 21, 1932. Class 14.

297,261. SOLUTIONS OF CELLULOSE ESTERS OR MIXTURES OF THE SAME. BREVOLITE LACQUER COMPANY, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,138. PUBLISHED JUNE 7, 1932. Class 6.

297,262. CLEANING COMPOUNDS FOR GENERAL HOUSEHOLD USE. ALEX C. FERGUSSON CO., Philadelphia, Pa.
Filed March 18, 1932. Serial No. 325,255. PUBLISHED JUNE 21, 1932. Class 4.

297,263. SUGAR. SASCO SUGAR CORPORATION, Dover, Del.
Filed March 10, 1932. Serial No. 325,019. PUBLISHED JUNE 21, 1932. Class 46.

297,264. BOTTLED OLIVES, BOTTLED CHERRIES, AND PACKAGE DATES. B. M. REEVES CO., INC., Brooklyn, N. Y.
Filed March 10, 1932. Serial No. 325,016. PUBLISHED JUNE 21, 1932. Class 46.

297,265. LEATHER. K. HANFLING & SON, Chicago, Ill.
Filed April 29, 1932. Serial No. 326,611. PUBLISHED JUNE 21, 1932. Class 1.

297,266. CENTRIFUGAL PUMPS. BYRON JACKSON CO., Los Angeles, Calif.
Filed May 2, 1932. Serial No. 326,729. PUBLISHED JUNE 21, 1932. Class 23.

297,267. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed May 4, 1932. Serial No. 326,744. PUBLISHED JUNE 21, 1932. Class 23.

297,268. PRINTED FOLDERS. WALTER J. GALLAGHER, New York, N. Y.
Filed May 5, 1932. Serial No. 326,781. PUBLISHED JUNE 21, 1932. Class 38.

297,269. SOLDER. ALLIED RESEARCH LABORATORIES, INC., Glendale, Calif.
Filed May 10, 1932. Serial No. 326,930. PUBLISHED JUNE 21, 1932. Class 14.

297,270. POWDER PUFFS. UNITED DRUG COMPANY, Boston, Mass.
Filed May 12, 1932. Serial No. 327,033. PUBLISHED JUNE 21, 1932. Class 29.

297,271. CHEMICAL COTTON, OTHERWISE KNOWN AS COTTON LINTER PULP AND AS BLEACHED LINTERS AND AS PURIFIED LINTERS. SOUTHERN CHEMICAL COTTON COMPANY, Chattanooga, Tenn.
Filed May 13, 1932. Serial No. 327,070. PUBLISHED JUNE 21, 1932. Class 1.

297,272. PERIODICAL MAGAZINE. ROGER F. BANNING, doing business as The Modern Life Publishing Co., St. Paul, Minn.
Filed May 14, 1932. Serial No. 327,088. PUBLISHED JUNE 21, 1932. Class 38.

297,273. PERIODICAL PUBLICATIONS. HEATING JOURNALS, INC., New York, N. Y.
Filed May 14, 1932. Serial No. 327,096. PUBLISHED JUNE 21, 1932. Class 38.

297,274. TOILET PAPER. KOTEX COMPANY, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,097. PUBLISHED JUNE 21, 1932. Class 37.

297,275. CARTOONS. FERRY-HANLY ADVERTISING COMPANY, New York, N. Y.; Chicago, Ill.; and Kansas City, Mo.
Filed May 19, 1932. Serial No. 327,239. PUBLISHED JUNE 21, 1932. Class 38.

297,276. CHILDREN'S FURNITURE—E. G., MINIATURE ARTICLES IN IMITATION OF CHAIRS, STOOLS, TABLES, DESKS, CRIBS, BEDS, CABINETS, AND CUPBOARDS. L. BAMBERGER & CO., Newark, N. J.
Filed January 15, 1931. Serial No. 309,957. PUBLISHED JUNE 21, 1932. Class 32.

297,277. MAPS. ASSOCIATED TOURIST BUREAU OF AMERICA, Baltimore, Md.
Filed March 13, 1931. Serial No. 312,122. PUBLISHED MAY 26, 1931. Class 38.

297,278. MEN'S AND BOYS' CLOTHING—NAMELY, OVERCOATS, TOP COATS, SUITS, COATS, VESTS, AND TROUSERS. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich.
Filed April 4, 1931. Serial No. 312,958. PUBLISHED SEPTEMBER 1, 1931. Class 39.

297,279. CANNED MALT SYRUP. JOS. SCHLITZ BEVERAGE COMPANY, Milwaukee, Wis.
Filed January 23, 1931. Serial No. 310,805. PUBLISHED JUNE 21, 1932. Class 46.

297,280. IDENTIFICATION TAGS USED FOR FURS, RAW SKINS, OR THE LIKE. FUR PROTECTIVE SEAL CORP., New York, N. Y.
Filed April 28, 1932. Serial No. 326,585. PUBLISHED JUNE 21, 1932. Class 50.

297,281. FERTILIZERS. NAAMLOOZE VENNOOTSCHAP AMSTERDAMSCHE SUPERFOSFAATFABRIEK, Utrecht, Netherlands.
Filed April 26, 1932. Serial No. 326,527. PUBLISHED JUNE 21, 1932. Class 10.

297,282. ROLLING MILL ROLLS, INCLUDING WORKING, BACKING, AND EDGING ROLLS, ROLLER LEVELLER ROLLS, PINCH ROLLS, CONVEYOR ROLLS, AND PACK OPENER ROLLS. HYDE PARK FOUNDRY & MACHINE COMPANY, Hyde Park, Pa.
Filed April 22, 1932. Serial No. 326,369. PUBLISHED JUNE 21, 1932. Class 23.

297,283. INK SOLVENTS OTHER THAN INK ERADICATORS. KAUMAGRAPH COMPANY, New York, N. Y.
Filed April 20, 1932. Serial No. 326,280. PUBLISHED JUNE 21, 1932. Class 11.

297,284. ABSORBENT, COVER, NEWS, PRINTING (COATED AND UNCOATED), TISSUE, WRAPPING, AND WRITING PAPERS, AND PAPER BOARDS, SUCH AS CARDBOARDS AND THE LIKE. THE METEX COMPANY, INCORPORATED, Wilmington, Del.; and Lock Haven, Pa.; and New York, N. Y.
Filed April 18, 1932. Serial No. 326,225. PUBLISHED JUNE 21, 1932. Class 37.

297,285. ROLLING MILL APPARATUS—NAMELY, BEARINGS FOR ROLL NECKS AND THE LIKE. MORGAN CONSTRUCTION COMPANY, Worcester, Mass.
Filed April 14, 1932. Serial No. 326,114. PUBLISHED JUNE 21, 1932. Class 23.

297,286. PILLOWS, MATTRESSES, AND BOX SPRINGS. N. SUMBERADE & SONS, INC., New York, N. Y.
Filed April 13, 1932. Serial No. 326,061. PUBLISHED JUNE 21, 1932. Class 32.

297,287. NAVIGATION AND CONTROL INSTRUMENTS — NAMELY, HORIZON INDICATORS. RALPH H. UPSON, Ann Arbor, Mich.
Filed April 2, 1932. Serial No. 325,765. PUBLISHED JUNE 21, 1932. Class 26.

297,288. NAVIGATION AND CONTROL INSTRUMENTS — NAMELY, HORIZON INDICATORS. RALPH H. UPSON, Ann Arbor, Mich.
Filed April 2, 1932. Serial No. 325,764. PUBLISHED JUNE 21, 1932. Class 26.

297,289. MINERAL FERTILIZERS AND POULTRY LITTER. LINDA MINERAL SALES COMPANY, Oakland, Calif.
Filed March 29, 1932. Serial No. 325,635. PUBLISHED JUNE 21, 1932. Class 10.

297,290. RAZOR BLADES. FABRICA NACIONAL DE TOLEDO, Toledo, Spain.
Filed March 12, 1932. Serial No. 325,065. PUBLISHED JUNE 21, 1932. Class 23.

297,291. PAPER-BOARD FOR USE IN THE MANUFACTURE OF RECEPTACLES. RUSSELL BOX COMPANY, Medford, Mass.
Filed March 15, 1932. Serial No. 325,152. PUBLISHED JUNE 21, 1932. Class 37.

297,292. CANNED OLIVES, OLIVE OIL, ORANGE MARMALADE. OLD MISSION PACKING CORP., LTD., North San Diego, Calif.
Filed March 28, 1932. Serial No. 325,596. PUBLISHED JUNE 21, 1932. Class 46.

297,293. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed March 26, 1932. Serial No. 325,539. PUBLISHED JUNE 21, 1932. Class 46.

297,294. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed March 26, 1932. Serial No. 325,538. PUBLISHED JUNE 21, 1932. Class 46.

297,295. ROAD GUARDS FORMED OF RESILIENT METAL IMPACT MEMBERS SECURED UNDER TENSION TO SPACED POSTS. NATIONAL TRAFFIC GUARD CO., Atlanta, Ga.
Filed March 11, 1932. Serial No. 325,044. PUBLISHED JUNE 14, 1932. Class 12.

297,296. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed May 4, 1932. Serial No. 326,743. PUBLISHED JUNE 21, 1932. Class 23.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

297,297. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FOLEY & WARD, INC., Sodus, N. Y. Filed July 8, 1931. Serial No. 316,723.

SODUS BAY

For Canned Fruits, Canned Vegetables, Fresh Deciduous Fruits, Fresh Vegetables.
Claims use since June 22, 1931.

297,298. (CLASS 38. PRINTS AND PUBLICATIONS.) NEW YORK EVENING JOURNAL, INC., New York, N. Y. Filed June 20, 1931. Serial No. 316,098.

KAY DANIELS

For Newspaper Section.
Claims use since May 25, 1931.

297,299. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DREW CANNING COMPANY, LTD., San Jose, Calif. Filed June 29, 1931. Serial No. 316,423.

DREW

For Canned Fruits.
Claims use since June 5, 1931.

297,300. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DREW CANNING COMPANY, LTD., San Jose, Calif. Filed July 20, 1931. Serial No. 317,110.

BELVOIR

For Canned Fruits, Canned Vegetables.
Claims use since June 23, 1931.

297,301. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DREW CANNING COMPANY, LTD., San Jose, Calif. Filed July 20, 1931. Serial No. 317,111.

BENBOW

For Canned Fruits, Canned Vegetables.
Claims use since June 23, 1931.

297,302. (CLASS 37. PAPER AND STATIONERY.) SCOTT PAPER COMPANY, Chester, Pa. Filed Oct. 15, 1931. Serial No. 320,107.

ScotTowels

For Paper Towels.
Claims use since July 28, 1931.

297,303. (CLASS 39. CLOTHING.) ASSAD ABOOD, New York, N. Y. Filed Jan. 9, 1932. Serial No. 322,841.

Twine Knit

For Ladies' and Girls' Beach Pajamas, Sweaters, Sport Suits, Dresses, Blouses, Jackets, and Skirts.
Claims use since Oct. 1, 1930.

297,304. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE THOS. MERRYWEATHER CO., Akron, Ohio. Filed Jan. 30, 1932. Serial No. 323,735.

WASHDAIR

For Hot Air Heating Furnaces in Which Coal, Oil, Gas, or Wood are Used for Fuel; Air Inlet Boxes, Humidifying and Air Washing Devices for Such Hot Air Furnaces.
Claims use since Jan. 22, 1927.

297,305. (CLASS 2. RECEPTACLES.) THE LE MONTREE MANUFACTURING COMPANY, Cincinnati, Ohio. Filed July 16, 1931. Serial No. 317,000.

"VERIBEST"

For Moth-Proof Bag.
Claims use since Jan. 1, 1931.

297,306. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SELDEN WORSTED MILLS, Methuen, Mass. Filed June 30, 1932. Serial No. 328,450.

TRIPLE-TWIST WEVE

For Certain-Named Dress Goods.
Claims use since May, 1928.

297,307. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LUDLOW-GEORGIA BAGGING COMPANY, Boston, Mass., and Savannah, Ga. Filed July 21, 1932. Serial No. 328,959.

GEORGIA

For Jute Bagging.
Claims use since July 10, 1930.

297,308. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LUDLOW-GEORGIA BAGGING COMPANY, Boston, Mass., and Savannah, Ga. Filed July 21, 1932. Serial No. 328,960.

SAVANNAH

For Jute Bagging.
Claims use since July 20, 1929.

TRADE-MARK REGISTRATIONS RENEWED

38,751. A BLOOD AND LIVER TONIC. Registered August 12, 1902. WILLIAM DEERFOOT, St. Louis, Mo. Renewed August 12, 1932, to William Deerfoot, Iowa City, Iowa.

39,241. BREAD. Registered November 11, 1902. THE NATURAL FOOD CO., Niagara Falls, N. Y. Renewed November 11, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

CARNEGIE LIBRARY OF ATLANTA

39,607. SEALING WAX. Registered December 30, 1902. GEORGE WATERSTON & SONS. Renewed December 30, 1932, to George Waterston & Sons, Limited, Edinburgh, Scotland, a Corporation of Great Britain, assignee.

87,458. SMOKED FINNAN HADDIES. Registered July 16, 1912. GEORGE W. KINSEY. Renewed July 16, 1932, to Jennie Kinsey, doing business as Kinsey's Provisions, Paterson, N. J., successor.

87,550. AN OINTMENT FOR SKIN DISEASES. Registered July 23, 1912. PAULINE LYON MARTIN. Renewed July 23, 1932, to Lucile Reynolds Ralston and Pauline Reynolds Harvey, co-partners doing business as Precious Ointment Co., Dixon, Ill., successor.

87,768. CONCENTRATED WASTE LYES OF THE SULFITE-CELLULOSE MANUFACTURE. Registered August 6, 1912. INTERNATIONAL PAPER COMPANY, New York, N. Y., a Corporation of New York. Renewed August 6, 1932.

87,808. A REMEDY FOR CERTAIN DISEASES. Registered August 6, 1912. REED & CARNRICK, Jersey City, N. J., a Corporation of New Jersey. Renewed August 6, 1932.

87,878. COFFEE. Registered August 13, 1912. THE GASSER COFFEE CO. Renewed August 13, 1932, to The Karavan Coffee Co., Toledo, Ohio, a Corporation of Ohio, by change of name.

87,935. CANNED FRUITS AND VEGETABLES. Registered August 13, 1912. SEEMAN BROTHERS. Renewed August 13, 1932, to Seeman Brothers, Inc., New York, N. Y., a Corporation of New York, assignee.

87,988. INTERNAL-COMBUSTION ENGINES, PUMPS, AND FEED-GRINDERS. Registered August 20, 1912. FAIRBANKS, MORSE & CO., Chicago, Ill., a Corporation of Illinois. Renewed August 20, 1932.

88,065. RUBBER-PROOFED FABRIC SHEETINGS USED IN VESSELS NAVIGATING THE AIR. Registered August 27, 1912. CONTINENTAL-CAOUTCHOUC-UND GUTTA-PERCHA-COMPAGNIE. Renewed August 27, 1932, to Continental Gummi-Werke Aktiengesellschaft, Hanover, Germany, a Corporation of Germany, by change of name.

88,861. CANNED VEGETABLES AND FRUITS. Registered October 29, 1912. EGYPT CANNING COMPANY, Egypt, N. Y. Renewed October 29, 1932, to Egypt Canning Company, Inc., Fairport, N. Y., a Corporation of New York, successor.

89,323. CERTAIN NAMED MACHINES. Registered December 10, 1912. THE AMERICAN WELL WORKS. Renewed December 10, 1932, to Paul A. Florian and Harry G. Chapman, receivers for The American Well Works, Aurora, Ill., successors.

89,405. MATCHES. Registered December 10, 1912. ZANITS BROS. GROCERY CO., Wheeling, W. Va., a Corporation of West Virginia. Renewed December 10, 1932.

89,407. BELTING MADE PARTLY OF FABRIC AND PARTLY OF RUBBER. Registered December 10, 1912. THE MANHATTAN RUBBER MFG. CO., New York, N. Y. Renewed December 10, 1932, to Raybestos-Manhattan, Inc., Passaic, N. J., a Corporation of New Jersey, assignee.

89,523. CERTAIN NAMED FOODS. Registered December 17, 1912. ZARNITS BROS. GROCERY CO., Wheeling, W. Va., a Corporation of West Virginia. Renewed December 17, 1932.

89,817. CERTAIN NAMED PHOTOGRAPHIC AND STATIONERY SUPPLIES. Registered January 14, 1913. A. M. COLLINS MANUFACTURING COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed January 14, 1933.

89,850. METAL GRATINGS. Registered January 14, 1913. IRVING IRON WORKS COMPANY, Long Island City, N. Y., a Corporation of New York. Renewed January 14, 1933.

89,951. DEODORANTS, ANTISEPTICS, AND PROPHYLACTICS. Registered January 21, 1913. WM. B. RIKER & SON CO., New York, N. Y. Renewed January 21, 1933, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

89,981. CLEANING-POWDER. Registered January 28, 1913. E. W. BENNETT & CO. Renewed January 28, 1933, to George E. Bennett, doing business as E. W. Bennett & Co., San Francisco, Calif., assignee.

LABELS

REGISTERED SEPTEMBER 6, 1932

41,113.—*Title:* WATAMAN GLAND TABLETS. For Gland Tablets. GEORGE B. ALEXANDER, doing business as Etamina Sales Agency, Boston, Mass. Published July 7, 1932.

41,114.—*Title:* ENZER FOR ATHLETE'S FOOT. For Medicinal Preparation. CLAUDE S. ALLEN, doing business as Enzer Remedy Company, Coral Gables, Fla. Published May 20, 1932.

41,115.—*Title:* BRILL'S E-ZEE FREEZ. For Ice Cream Powder. H. C. BRILL CO., INC., Newark, N. J. Published July 6, 1932.

41,116.—*Title:* KOOL CIGARETTES. For Cigarettes. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Published July 13, 1932.

41,117.—*Title:* J. F. B. AUTO TOP DRESSING. For Auto Top Dressing. JOHN F. BURKHARDT, Huntington Beach, Calif. Published April 27, 1932.

41,118.—*Title:* C AND H SUGAR BOWL PURE CANE SUGAR CONFECTIONERS POWDERED. For Sugar. CALIFORNIA AND HAWAIIAN SUGAR REFINING CORPORATION, LIMITED, San Francisco, Calif. Published August 2, 1932.

41,119.—*Title:* MEXICANA. For Fresh Oranges. CANOGA CITRUS ASSOCIATION, Canoga Park, Calif. Published March 30, 1932.

41,120.—*Title:* UP-SIDE-DOWN CAKE PAN. For Cake Pans. CHICAGO METALLIC MANUFACTURING COMPANY, Chicago, Ill. Published January 21, 1932.

41,121.—*Title:* GRANDMOTHER CLARK'S TUBFAST COLOR QUILT PATCHES. For Quilt Patches. W. L. M. CLARK, INC., St. Louis, Mo. Published June 15, 1932.

41,122.—*Title:* KRISTAL-KLEER FILTER COMPOUND. For Compound in the Form of Powder Used in the Filtration of Liquids. CRYSTAL HOME FILTER CO. INC., Brooklyn, N. Y. Published February 8, 1932.

41,123.—*Title:* THE FIRST TURKISH BLEND CIGARETTES. For Cigarettes. DUBLIN BROS., doing business as The First Tobacco Co., Boston, Mass. Published June 20, 1932.

41,124.—*Title:* EAZ-EM. For Lubricating Oil. JOHN C. EDGAR, Troy, Ohio. Published June 3, 1932.

41,125.—*Title:* ESKIMO POP. For Frozen Confections. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published February 1, 1932.

41,126.—*Title:* ESKIMO BOAT. For Frozen Confections. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published March 1, 1932.

41,127.—*Title:* SNOWMAN CHOCOLATE COATING. For Chocolate Coating for Frozen Confections. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published May 15, 1932.

41,128.—*Title:* ESKIMO. For Ice Cream and Cake. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published May 1, 1932.

41,129.—*Title:* FASTIK IMPROVED STAPLES. For Staples. FASTIK PRODUCTS, INC., Chicago, Ill. Published June 11, 1932.

41,130.—*Title:* NILE QUEEN CREPE. For Crepe Tissue Paper. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Published June 28, 1932.

41,131.—*Title:* FRANCO HI-JINKS BREAD. For Bread. FRANCO-AMERICAN BAKING CO., Los Angeles, Calif. Published July 1, 1932.

41,132.—*Title:* BOND-SUNSHINE VITAMIN-D BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published August 1, 1932.

41,133.—*Title:* BOND-SUNSHINE VITAMIN-D BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published August 1, 1932.

41,134.—*Title:* SLICED BOND-SUNSHINE VITAMIN-D BREAD. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published August 1, 1932.

41,135.—*Title:* SMART SET SALMON STEAK. For Salmon. G. P. HALFERTY & CO., Seattle, Wash. Published May 27, 1932.

41,136.—*Title:* SPICE LAYER. For Cake. KALAMAZOO LABEL COMPANY, Kalamazoo, Mich. Published November 16, 1931.

41,137.—*Title:* POPEYE THE SAILOR MAN. For Jointed Figure Toys. KING FEATURES SYNDICATE, INC., New York, N. Y. Published February 1, 1932.

41,138.—*Title:* POPEYE SHADOW BOXER. For Jointed Figure Toys. KING FEATURES SYNDICATE, INC., New York, N. Y. Published February 1, 1932.

41,139.—*Title:* EXTRA LIVELY. For Grape Beverage. KRUEGER BEVERAGE CO., Newark, N. J. Published June 26, 1931.

41,140.—*Title:* NATIONAL LUBRISTIK. For Lubricating Sticks. NATIONAL CARBON COMPANY, INC., New York, N. Y. Published March 10, 1932.

41,141.—*Title:* CAMEL. For Oranges. ORANGE HEIGHTS FRUIT ASSOCIATION, Corona, Calif. Published March 12, 1932.

41,142.—*Title:* PENRYN FRUIT CO. For Fresh Pears. PENRYN FRUIT COMPANY, Penryn, Calif. Published July 1, 1932.

41,143.—*Title:* PURE-A. For Soup. PURE-A FOODS, INC., Penn Yan, N. Y. Published June 16, 1932.

41,144.—*Title:* OAT SNAPS. For Breakfast Food. PURITY OATS COMPANY, doing business as Oat Snaps Company, Keokuk, Iowa. Published May 10, 1932.

41,145.—*Title:* CHECKER CANDY BOX. For Candy Boxes. LOUIS SCHWARTZBERG, Chicago, Ill. Published April 1, 1932.

41,146.—*Title:* CHECKER EGG CARTON. For Egg Cartons. LOUIS SCHWARTZBERG, Chicago, Ill. Published April 1, 1932.

PRINTS

REGISTERED SEPTEMBER 6, 1932

13,896.—*Title:* BEECH-NUT LUSTER-MINTS. For Peppermints. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

13,897.—*Title:* BEECH-NUT BEECHIES. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

13,898.—*Title:* TO KEEP HIM GAINING THROUGH THE SUMMER. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published July 9, 1932.

13,899.—*Title:* AT THIS AGE EXPECIALLY WATCH THEIR WEIGHT. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published August 5, 1932.

13,900.—*Title:* FRIGIE. For Frozen Confection Bars. FRIGIE CORPORATION OF AMERICA, Chicago, Ill. Published July 11, 1932.

13,901.—*Title:* NO MORE COAXING A CHILD TO EAT CEREAL! For Cereal Food. GENERAL MILLS, INC., Minneapolis, Minn. Published July 5, 1932.

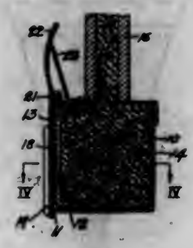
13,902.—*Title:* SEILER'S GOOSE LIVER SAUSAGE. For Goose Liver Sausage. JOS. SEILER & SONS INC., Trenton, N. J. Published June 2, 1932.

13,903.—*Title:* IF YOU CAN'T SEE BIG TYPE SEE SMALL. For Spectacles. WM. F. & FRED'S R. SMALL, Newburgh, N. Y. Published May 20, 1932.

REISSUES

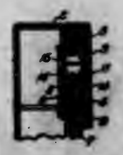
SEPTEMBER 6, 1932

18,588. TYPEWRITER RIBBON REJUVENATOR. FLOYD R. SWITZER, Birmingham, Ala., assignor, by mesne assignments, to Henry S. Blumenthal, Memphis, Tenn. Original No. 1,820,583, dated Aug. 25, 1931, Serial No. 359,983, filed May 2, 1929. Reissue No. 18,441, dated Apr. 26, 1932, Serial No. 572,149, filed Oct. 30, 1931. This application for reissue filed June 13, 1932. Serial No. 617,065. 19 Claims. (Cl. 91—62.5.)



1. A typewriter ribbon moistener comprising a reservoir having an opening in one side thereof and being packed with loose fibrous material saturated with a moistening fluid, a covering of close fibrous material disposed across the opening, and a spring pressed plate hinged across the opening and adapted to press the typewriter ribbon against the covering.

18,589. SNAP FASTENER. ROLLO F. WALTERS, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Original application filed July 24, 1924, Serial No. 727,958, and in Canada Nov. 9, 1926. Divided and application filed Jan. 21, 1929. Serial No. 333,908. Patent No. 1,769,727, dated July 1, 1930. Application for reissue filed Apr. 27, 1932. Serial No. 607,877. 4 Claims. (Cl. 24—213.)

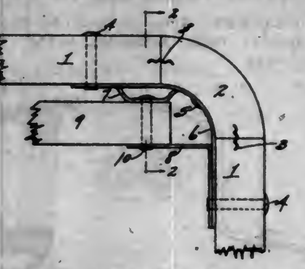


3. A snap fastener member formed entirely from a single piece of metal bent to provide a U-shaped attaching portion with the side portions of the U normally substantially parallel and adapted to yield away from each other, a stud means formed integral with and extending outwardly from one of the side portions of the U-shaped attaching portion for cooperative engagement with a socket means, and a detent element extending from one of the side portions of the U-shaped attaching portion toward the other side portion and normally intersecting substantially the entire space between the side portions of the attaching portion whereby it will automatically snap into a hole in a support when the support is forced between the side portions of the attaching portion thereby to prevent accidental displacement of the fastener member from the support.

18,590. ROSIN SOAP LAKES OF AZO COMPOUNDS. EDWARD R. ALLEN, Summit, and ALFRED SIEGEL, Hillside, N. J., assignors, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Original No. 1,772,300, dated Aug. 5, 1930, Serial No. 262,332, filed Mar. 16, 1928. Application for reissue filed Mar. 3, 1932. Serial No. 596,668. 13 Claims. (Cl. 134—58.5.)

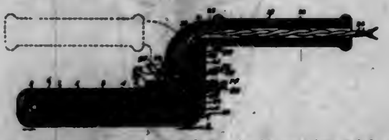
1. A substantially oil and water insoluble lake which comprises an insoluble metallic salt of an azo dyestuff and from 15% to 50% of a non-diluting substratum comprising a substantially insoluble metallic rosinate, said lake having the characteristic of producing a clear, bright, non-bronzy tone.

18,591. TABLE FRAME. WALTER C. ULINE, Nappanee, Ind., assignor to Nappanee Lumber and Manufacturing Company, a Corporation of Indiana. Original No. 1,832,673, dated Nov. 17, 1931, Serial No. 300,281, filed Aug. 17, 1928. Application for reissue filed May 13, 1932. Serial No. 611,192. 10 Claims. (Cl. 45—48.)



1. The combination with a table frame corner comprised of adjacent frame rails and a quadrant shaped corner member secured to said rails, of a table leg, a corner brace secured to the inner side of said table frame and having bearing contact therewith throughout its length, an offset member integrally formed with said brace, an arm carried by one of said rails, and means for pivotally supporting said leg between said off-set member and said arm.

18,592. ELECTRIC IRON. ALBERTINE RUELLAND, New York, N. Y. Original No. 1,563,591, dated Dec. 1, 1925, Serial No. 461,598, filed Apr. 15, 1921. Application for reissue filed Apr. 1, 1932. Serial No. 602,610. 4 Claims. (Cl. 219—25.)



4. An electric iron comprising a body portion with a boss on its rear upper surface only, a handle having a substantially straight grip portion, a rotary connection between one end of the handle and said boss, spacing the handle in a plane apart from the plane of the body portion and enabling the handle to be turned in its plane to different working positions, the handle in one position extending rearwardly of the body portion so that it can be gripped at a substantial distance from the body portion, and in another position extending directly over the body portion, and a device for fixing the handle to the boss for use in said positions, the handle being supported only by its connection at one end with said boss.

DESIGNS

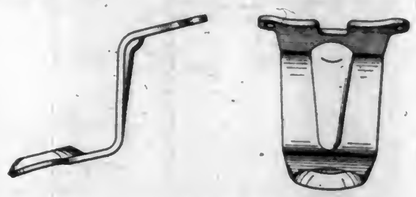
SEPTEMBER 6, 1932

87,701. HAND BAG. MORRIS WHITE, New York, N. Y. Filed Sept. 29, 1931. Serial No. 41,256. Term of patent 7 years.



The ornamental design for a hand bag substantially as shown and described.

87,702. BRACKET. JOHN M. AUFIERO, Brooklyn, N. Y. Filed June 21, 1932. Serial No. 44,156. Term of patent 3½ years.



The ornamental design for a bracket as shown.

87,703. GOBLET OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,281. Term of patent 7 years.



The ornamental design for a goblet or similar article as shown and described.

87,704. GOBLET OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,282. Term of patent 7 years.



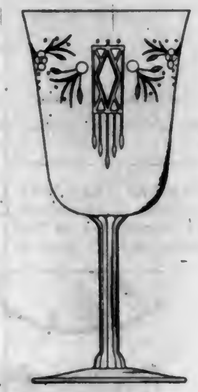
The ornamental design for a goblet or similar article as shown and described.

87,705. GOBLET OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,283. Term of patent 7 years.



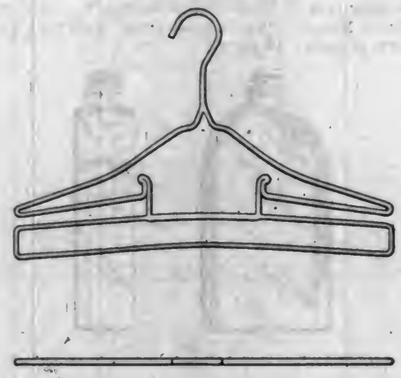
The ornamental design for a goblet or similar article as shown and described.

87,706. GOBLET OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,284. Term of patent 7 years.



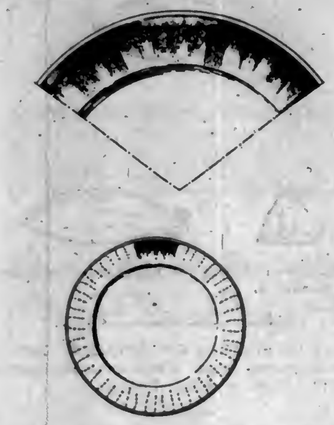
The ornamental design for a goblet or similar article as shown and described.

87,707. GARMENT HANGER. FRANK BERNAT, Hammond, Ind. Filed July 16, 1932. Serial No. 44,358. Term of patent 7 years.



The ornamental design for a garment hanger as shown.

87,708. PLATE OR SIMILAR ARTICLE. LEWIS H. BOWN, East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Filed July 14, 1932. Serial No. 44,324. Term of patent 3½ years.



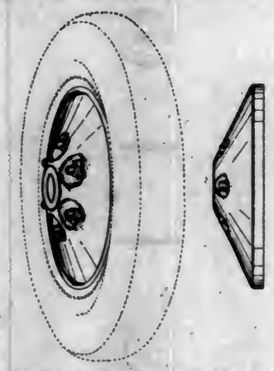
The ornamental design for a plate or similar article as shown and described.

87,709. CONTAINER CAP. EDWARD J. BRENNAN, Hasbrouck Heights, N. J. Filed July 14, 1932. Serial No. 44,325. Term of patent 14 years.



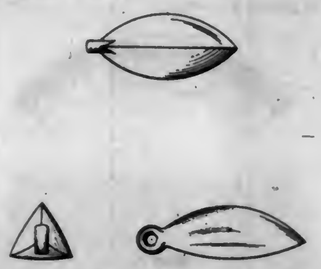
The ornamental design for a container cap, as shown.

87,710. VEHICLE WHEEL. JAMES L. BROWNELL, St. Petersburg, Fla., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Dec. 30, 1931. Serial No. 42,306. Term of patent 14 years.



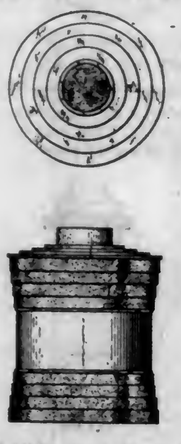
The ornamental design for a vehicle wheel, as shown and described.

87,711. FISHING LINE SINKER. GEORGE K. CHENEY, Baldwin, N. Y. Filed May 13, 1932. Serial No. 43,796. Term of patent 7 years.



The ornamental design for a fishing line sinker, substantially as shown.

87,712. JAR OR SIMILAR RECEPTACLE. BENJAMIN F. CONNER, Hartford, Conn. Filed June 24, 1932. Serial No. 44,179. Term of patent 7 years.



The ornamental design for a jar or similar receptacle as shown and described.

87,713. BUTTON. ARTHUR F. DONOVAN, Hartford, Conn. Filed June 24, 1932. Serial No. 44,176. Term of patent 7 years.



The ornamental design for a button as shown.

87,714. DRESS BUCKLE OR SIMILAR ARTICLE. ARTHUR F. DONOVAN, Hartford, Conn. Filed June 24, 1932. Serial No. 44,177. Term of patent 7 years.



The ornamental design for a dress buckle or similar article as shown.

87,715. RADIOCABINET. LEE HALL EUBANK, Los Angeles, Calif., assignor to Hammond Lumber Co., Wilmington, Del., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 38,182. Term of patent 3½ years.



An ornamental design for a radio cabinet as shown.

87,716. BOTTLE. WILLIAM H. GESELL, Montclair, N. J., assignor to A. S. Hinds Co., Bloomfield, N. J., a Corporation of Maine. Filed July 14, 1932. Serial No. 44,328. Term of patent 14 years.



The ornamental design for a bottle as shown.

87,717. RACK FOR HOLDING CLOTHES, SHOES, JEWELRY, OR SIMILAR ARTICLES. JOSEPH A. GRIMM, Little Neck Park, N. Y. Filed June 14, 1932. Serial No. 44,075. Term of patent 3½ years.



The ornamental design for a rack for holding clothes, shoes, jewelry, or similar articles as shown.

87,718. BOOK-END. CLARENCE A. HEDEGARD, Chicago, Ill. Filed June 22, 1932. Serial No. 44,161. Term of patent 7 years.



The ornamental design for a book-end, as shown.

87,719. SHELF PAPER. EDWARD KARFIOL, New York, N. Y. Filed June 25, 1932. Serial No. 44,192. Term of patent 14 years.



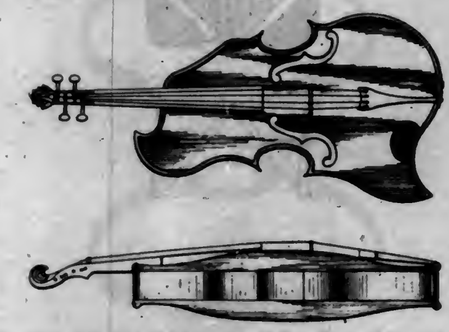
The ornamental design for shelf-paper as shown.

87,720. WHISTLE. OLAF A. KINDOM, Minneapolis, Minn. Filed July 13, 1932. Serial No. 44,316. Term of patent 14 years.



The ornamental design for a whistle substantially as shown.

87,721. VIOLIN. PHILIP KMETKO, Wilmerding Pa. Filed July 16, 1932. Serial No. 44,357. Term of patent 7 years.



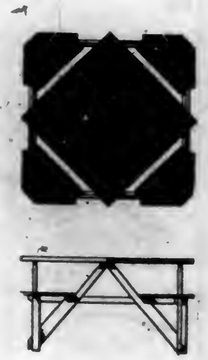
The ornamental design for a violin, as shown.

87,722. ELECTRIC PERCOLATOR. ALANTSER F. LARSEN, Manitowoc, Wis., assignor to Aluminum Goods Manufacturing Company, Manitowoc, Wis. Filed Jan. 13, 1932. Serial No. 42,466. Term of patent 3½ years.



The ornamental design for an electric percolator, as shown.

87,723. TABLE AND SEAT UNIT. IAN MACDONALD, Modesto, Calif. Filed July 5, 1932. Serial No. 44,264. Term of patent 14 years.



The ornamental design for a table and seat unit, as shown.

87,724. TIRE. ALBERT S. MICHELSON, Akron, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 8, 1928. Serial No. 29,161. Term of patent 14 years.



The ornamental design for a tire, as shown.

87,725. TRUNKS OF A BATHING SUIT. LOUIS S. MICHELSON, Los Angeles, Calif. Filed Feb. 10, 1932. Serial No. 42,808. Term of patent 14 years.



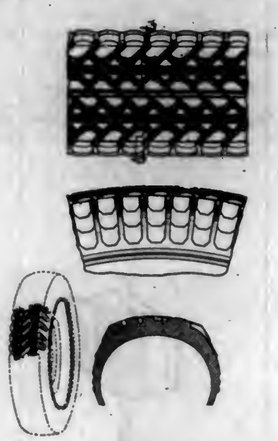
The ornamental design for the trunks of a bathing suit as shown.

87,726. BOTTLE. CARL W. MILLER, Upper Darby, Pa., assignor to Jack Ruskin, Philadelphia, Pa. Filed June 13, 1932. Serial No. 44,067. Term of patent 3½ years.



The ornamental design for a bottle as shown and described.

87,727. TIRE. CHARLES G. MILLER, Charlotte, N. C., assignor to McClaren Rubber Company, Charlotte, N. C., a Corporation of Delaware. Filed Apr. 20, 1932. Serial No. 43,553. Term of patent 7 years.



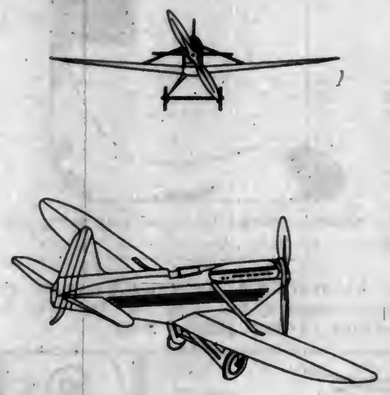
The ornamental design for a tire as shown.

87,728. LACE. CHARLES B. J. MOLITOR, Forest Hills, N. Y., assignor to Thomas Wilson & Co. Inc., New York, N. Y. Filed June 2, 1932. Serial No. 43,958. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

87,729. TOY AEROPLANE. WALLIS RIGBY, Anerley, London, England. Filed May 19, 1932. Serial No. 43,850. Term of patent 3½ years.



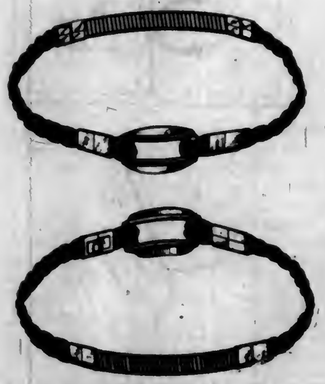
The ornamental design for a toy aeroplane as shown and described.

87,730. METALLIC INSERT FOR ORNAMENTAL APPAREL BELTS. MAX SILVERMAN and HERMAN POMERANTZ, New York, N. Y. Filed June 20, 1932. Serial No. 44,151. Term of patent 7 years.



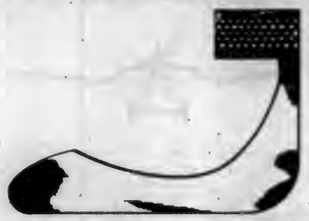
The ornamental design for a metallic insert for ornamental apparel belts, as shown and described.

87,731. BELT. MAX SILVERMAN and HERMAN POMERANTZ, New York, N. Y. Filed July 21, 1932. Serial No. 44,407. Term of patent 7 years.



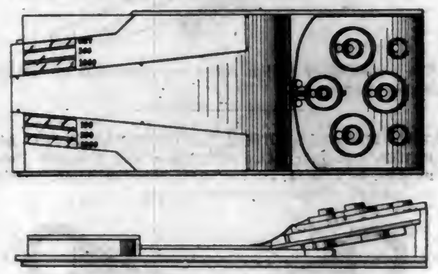
The ornamental design for a belt, as shown.

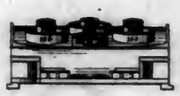
87,732. SOCK. JOHN SPRENKLE and MARIE F. SPRENKLE, Philadelphia, Pa. Filed June 2, 1932. Serial No. 43,964. Term of patent 14 years.



The ornamental design for a sock, as shown and described.

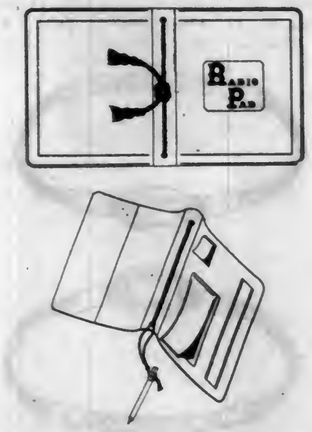
87,733. PLAYING UNIT FOR MARBLE GAMES. HARRY STEIGER, Baltimore, Md. Filed July 28, 1932. Serial No. 44,464. Term of patent 7 years.





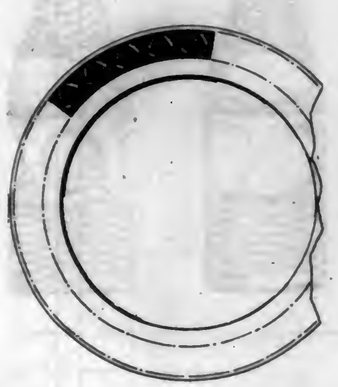
The ornamental design for a playing unit for marble games, as shown.

87,734. RADIO PAD. MARTHA JEAN HARVEY VREDENBURGH, Brooklyn, N. Y. Filed May 6, 1932. Serial No. 43,726. Term of patent 3½ years.



The ornamental design for a radio pad as shown.

87,735. PLATE OR SIMILAR ARTICLE. HARRY J. WAIN, New Brighton, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed July 12, 1932. Serial No. 44,315. Term of patent 14 years.



The ornamental design for a plate or similar article, as shown and described.

87,736. SIGN. AUSTIN A. WOOD and EDWARD BOSS, Columbus, Ohio. Filed Dec. 12, 1931. Serial No. 42,065. Term of patent 7 years.

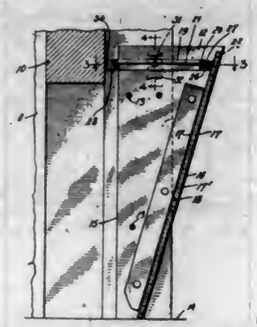


The ornamental design for a sign, as shown.

PATENTS

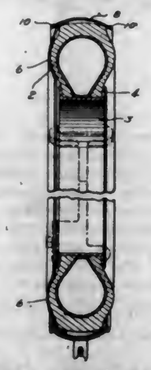
GRANTED SEPTEMBER 6, 1932

1,875,315. WINDOW VENTILATOR. MELCHOR MARRA, Brooklyn, N. Y., assignor to Winna Manufacturing Corporation, New York, N. Y. Filed Mar. 3, 1931. Serial No. 519,720. 6 Claims. (Cl. 98—99.)



1. The combination with a window casing and a vertically slidable sash therein, of a pair of ventilator end-frames secured to the vertical members of said window casing immediately above the sill portion thereof so as to project into the room, said end-frames having formed thereon a pair of channels in alignment with one another, an air-deflecting plate member slidable in said channels and resting upon said sill portion, the top edge of said deflecting member being spaced from said sash, a screen frame pivotally mounted on said end-frames adapted to close the space between the top edge of said deflecting member and said window sash, and co-acting means on said screen frame and said end-frames for maintaining said screen frame in closing position, said co-acting means including spring pressed members thereby permitting said screen frame to be shifted around its pivots in either direction by pressure exerted thereon in the act of moving said sash either up or down in said window casing.

1,875,316. COVER FOR SPARE TIRES FOR AUTOMOBILES. GEORGE ALBERT LYON, Allenhurst, N. J. Filed Oct. 27, 1928. Serial No. 315,455. 7 Claims. (Cl. 150—54.)

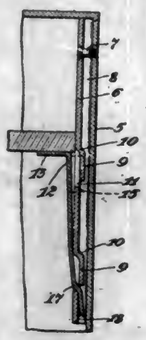


1. A multi-portion tire cover including a side plate portion of circular form for covering a side of the tire, a split rim portion associated therewith formed to extend about the outer periphery of the tire and extending from said side plate portion over substantially the entire width of the tread leaving the other and rear side of the tire exposed when the complete tire cover is thereon, said rim portion having a convex curvature of relatively shorter radius than that of the curvature of the tire tread so as to provide clearance between that portion and the tread when the rim portion is in position and prior to the tightening of the rim portion into secured engagement with the tire and means connecting the adjacent ends of said rim portion to draw them toward each other for securing the cover on the tire.

1,875,317. PROCESS FOR PRODUCING DIPHENYL. JOHN N. CAROTHERS, Anniston, Ala., assignor to Swann Research, Inc., a Corporation of Alabama. Filed Apr. 7, 1928. Serial No. 268,096. 15 Claims. (Cl. 260—168.)

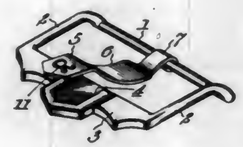
1. The herein described continuous process for the production and separation of diphenyl which comprises vaporizing benzol, preheating said vapors to at least 600° C., passing said preheated benzol vapor over a surface which is heated to a temperature which will decompose benzene and form substantial quantities of diphenyl, condensing said diphenyl and other compounds and unreacted benzol, separating said condensate from hydrogen and uncondensed gases, and then separating said diphenyl from such accompanying compounds as may occur.

1,875,318. ADJUSTABLE SHELF SUPPORT. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 26, 1930. Serial No. 447,525. 5 Claims. (Cl. 248—19.)



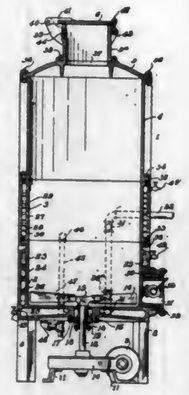
1. Shelf supporting means comprising a guide adapted to be rigidly fixed in a vertical position to the side wall of a cabinet, said guide having vertically spaced transverse slots therein and a yieldable tongue above each of said slots, a shelf supporting member, said member and the guide having cooperating parts inseparably retaining the same in connected relation and permitting of vertical sliding movement of said member along the guide, and said shelf supporting member also including a part extending in vertical parallel relation to the guide for downward insertion through a selected slot in the latter, said part having a lateral offset and the yieldable tongue cooperating therewith to hold the same in bearing engagement upon the lower edge of the slot in the guide to thereby releasably retain the supporting member in its adjusted position on the guide.

1,875,319. BUCKLE. ALLEN H. KERNGOOD, Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed July 19, 1930. Serial No. 469,119. 8 Claims. (Cl. 24—178.)



1. A buckle, having a frame provided with a flat cross bar at its front, and a cross bar at its rear and located in a plane lower than the front cross bar, and a tongue of rectangular cross section pivoted to said rear cross bar and having an elevated broad flat leading end of a size to be passed through an opening in a belt and lie on top of said front cross bar and provided with an identification mark exposed to view when the buckle is in use.

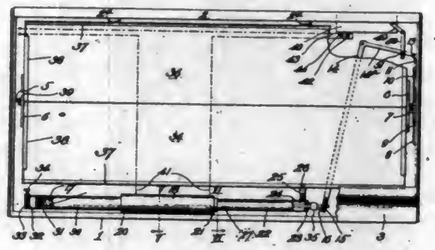
1,875,320. COMBINED GARBAGE COOKER AND DRIER. WILBUR A. KRAMER, Dayton, Ohio, assignor to The Advance Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed June 16, 1930. Serial No. 461,295. 1 Claim. (Cl. 87—13.)



A garbage cooker and drier comprising a sectional cylindrical casting having double walls to provide steam compartments, ties between said walls, ribs also between said walls, said ribs being formed with holes to pass the steam from one compartment to the other, a steam line for introducing steam to said compartments, and an outlet line for the condensed steam in said compartments.

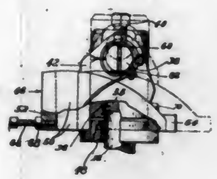
1,875,321. ADVERTISING CARD DISPLAY DEVICE. JOHN D. MACLACHLAN, Kansas City, Mo., assignor to Mac Ad Company, Kansas City, Mo., a Corporation of Missouri. Filed Dec. 15, 1930. Serial No. 502,419. 1 Claim. (Cl. 40—55.)

In an advertising device, a casing having an open front side, a horizontal transverse rotary carrier journaled in the casing, cards movable with and pivotally mounted at their inner corners on the carrier and adapted for independent pivotal movement from an upwardly-projecting position visible at the same side of the casing, a ratchet wheel rotatable with the carrier, a pawl to turn and a dog to prevent reverse turning movement of the ratchet wheel, a lever carrying the pawl, a bell-crank lever for operating the pawl-carrying lever, electrically-operated means for operating the bell-crank lever in one direction, an elec-



tric snap switch for making and breaking a circuit through said electrically operated means, a link establishing a pivotal pin-and-slot connection between the bell-crank lever and the switch, and means for reversing the movement of the bell-crank lever when the circuit through the electrically operated means is broken through operation of the snap-switch.

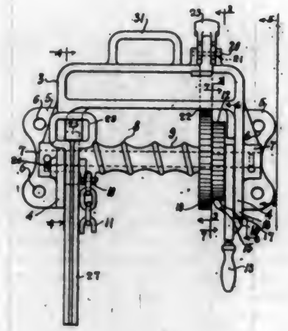
1,875,322. RELEASING DEVICE. MILTON HENRY BALLARD, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 6, 1927. Serial No. 159,433. 6 Claims. (Cl. 254—104.)



1. A releasing device comprising a movable wedge having two bearing surfaces, and pressure members constructed and arranged to engage different portions of the bearing surfaces upon relative movement between the wedge and the pressure members, one of the bearing surfaces having portions extending relatively to the other bearing surface at angles greater than the maximum angle between portions of the surfaces engageable by the pressure members at which the wedge will remain in position under pressure exerted by the pressure members.

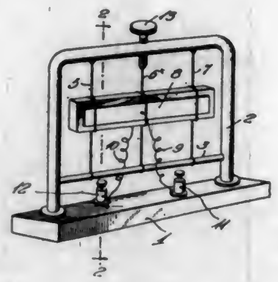
1,875,323. RAILWAY BRAKE. CHARLES C. BOLEN, Marion, Ohio. Filed May 18, 1931. Serial No. 538,047. 3 Claims. (Cl. 74—110.)

1. In a brake operating attachment, a frame having thereon a hand hold, a drum on the frame adapted on rotation to take up the brake, said hand hold being located above the drum and a pawl on the frame adjacent the hand hold to hold the drum against rotation and releasing the



brake, said pawl having an extension thereon so located relative to the hand hold whereby the extension may be engaged by the thumb of the hand on the hand hold to release the pawl from the drum.

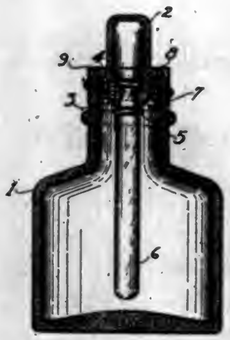
1,875,324. ELECTROMECHANICAL VIBRATOR MOUNTING. WARD E. BOWER, Washington, D. C. Filed Jan. 30, 1929. Serial No. 336,222. 5 Claims. (Cl. 171—327.)



1. In a piezo electric crystal unit, a piezo electric crystal, electrodes in contact with said crystal, a frame member, a taut flexible member attached to said frame member and to said crystal substantially at its fundamental nodal point, and other flexible members attached to said frame member and embracing said crystal and its electrodes on opposite sides of its nodal point and maintained under substantially less tension than said taut flexible member.

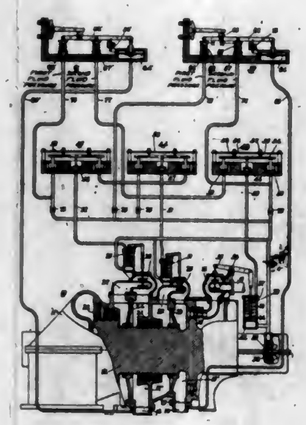
1,875,325. CONTAINER CLOSURE. HAROLD M. BOWMAN, Summit, and ROBERT W. FENTRESS, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,074. 1 Claim. (Cl. 215—58.)

A device of the class described, comprising a container having an opening, a bulb, a flange intermediate the ends of the bulb projecting radially outwardly from the bulb into alignment with the wall of the container, the flange adapted to rest upon the end of the wall with the lower portion of the bulb depending into the container in spaced



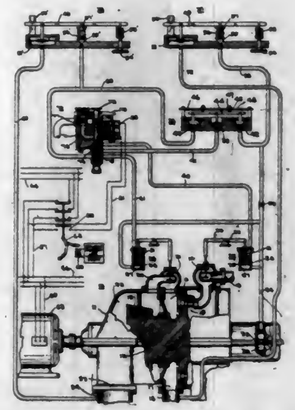
relation to the wall, a coupling member for pressing the flange against the wall, and a tube in the depending portion only of the bulb extending into the container.

1,875,326. CONTROL MECHANISM. CLARENCE B. CAMPBELL, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 9, 1930. Serial No. 466,797. 5 Claims. (Cl. 60—67.)



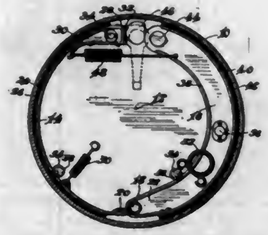
1. The combination wtih a multi-stage prime mover having openings communicating with a plurality of pressure stages therein, and admission valve for controlling the admission of motive fluid to the prime mover and a valve controlling the flow at each opening, of a control mechanism comprising a device associated with each opening and providing a fluid pressure varying in one direction and another fluid pressure varying in the opposite direction in response to change in pressure at the associated opening, and a means for controlling each valve in response to one of the fluid pressures of each of said devices.

1,875,327. TURBINE CONTROL MECHANISM. CLARENCE B. CAMPBELL, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1930. Serial No. 478,962. 4 Claims. (Cl. 60—67.)



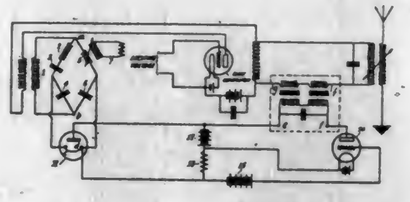
1. The combination with a multi-stage elastic fluid prime mover exhausting at a back pressure and having an opening providing communication between an intermediate-pressure stage therein and a region external to the working passages of the prime mover, an admission valve for the prime mover, and a second valve controlling the flow of fluid at said opening, of a control mechanism therefor comprising means providing a first fluid pressure varying in response to changes in pressure at said opening, means providing a second fluid pressure varying in response to changes in pressure of the exhaust fluid, means responsive to said first and second fluid pressures for providing a third fluid pressure, means responsive to the third fluid pressure for controlling said admission valve, and means responsive to the second fluid pressure for controlling said second valve.

1,875,328. BRAKE. JOHN R. CAUTLEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 22, 1928. Serial No. 307,062. 7 Claims. (Cl. 188—78.)



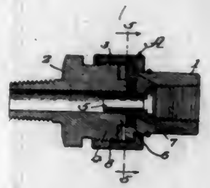
1. A brake comprising a brake support, a rigid shoe having an opening adjacent one end thereof, an anchor fixed to said support extending into said opening to provide a pivotal mounting for said shoe, a flexible shoe having one end pivoted to the rigid shoe, and a device for actuating the other end of the flexible shoe only.

1,875,329. FREQUENCY REGULATING SYSTEM. HENRI CHIREIX, Paris, France. Filed July 9, 1927, Serial No. 204,437, and in France July 23, 1926. 7 Claims. (Cl. 250—36.)



1. A frequency control system, comprising an oscillation generator, current control means responsive to changes in frequency associated with the generator output, tuning means connected to the oscillation circuit of the generator actuated by the current control means for maintaining the frequency substantially constant, said tuning means comprising a saturated self-inductance coil coupled to said generator output and a variable condenser inserted in said generator output circuit and control means for said condenser including a magnet having a winding in series with said saturated coil and an armature connected to an armature of said condenser.

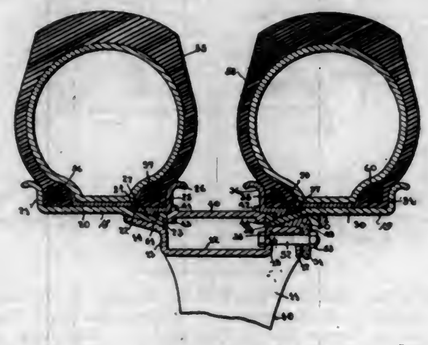
1,875,330. UNION FITTING. ARTHUR A. EISENMAN, Manitowoc, Wis., assignor to Eastman Manufacturing Company, Manitowoc, Wis., a Corporation of Wisconsin. Filed Aug. 29, 1928. Serial No. 302,790. 4 Claims. (Cl. 285—120.)



1. In a union fitting, the combination of tubular members adapted, respectively, for attachment to parts to be connected thereby, one of said members comprising an insert adapted to enter the bore of the other member. means for detachably connecting said members, adapted to advance them towards each other, and sealing means for preventing leakage at the joint between said members, comprising a gasket seated in a recess formed in the face of the member which carries said insert, said gasket being provided with a hole to receive said insert, and an axial projection on the other member adapted to enter said recess and subject said gasket to pressure, said insert forming a separate, detachable part and being proportioned so that its outer end will project through the gasket, the relation being such that when said fitting members are disconnected, the outer end of said insert will be accessible for engagement by a tool for detaching the same.

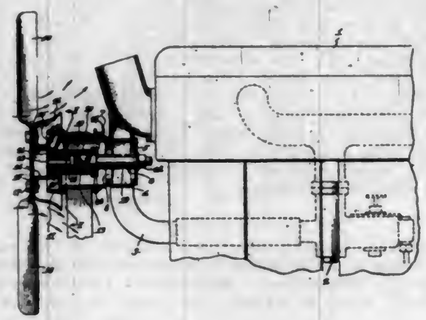
1,875,331. VEHICLE WHEEL. RHYS D. EVANS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 19, 1928. Serial No. 306,925. 4 Claims. (Cl. 301—11.)

1. The combination of a wheel having a tapered peripheral surface, a rim embodying a pair of annular members movable laterally relatively, each embodying a tire retaining flange, one of such members having a tapered surface on its inner periphery, complementary to the surface on the wheel and adapted to rest thereon, the latter member also having a shoulder on its inner periphery and adjacent the other rim member, and adjustable clamping means engaging the wheel and such other rim member



initially to force the rim members toward each other against the pressure in a tire on the rim, and finally to engage such shoulder on the other rim, whereby any looseness subsequently occurring between the parts will be taken up by the air pressure in the tire forcing the rim members away from each other.

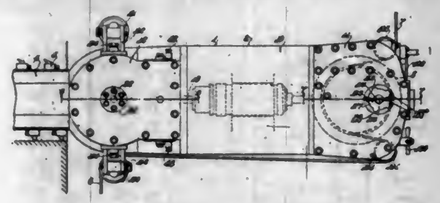
1,875,332. AIR INTAKE DEVICE. SAMUEL S. HARGRAVES, STEPHEN DE ORLOW, and JAMES W. WILFORD, Lansing, Mich., assignors, by mesne assignments, to Melling Forging Company, Lansing, Mich., a Corporation of Michigan. Filed Feb. 20, 1928. Serial No. 255,626. 1 Claim. (Cl. 183—77.)



In combination with the fan and air intake pipe of a gas engine, said pipe having an open end in the air stream of said fan, a cup-shaped deflector having one end secured to said fan and its other end spaced around the open end of said intake pipe.

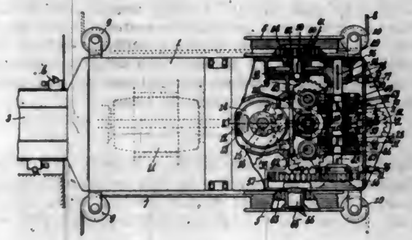
1,875,333. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 15, 1928. Serial No. 312,722. 69 Claims. (Cl. 262—30.)

1. In a mining machine, a horizontal motor having its power shaft extending longitudinally of the machine, cutting mechanism driven from one end of said motor, and feeding mechanism driven from the opposite end of said motor including coaxially arranged relatively rotatable feed operating and controlling members each adapted to cooperate with flexible feeding means, and plural speed driving gearing for driving said members at one speed



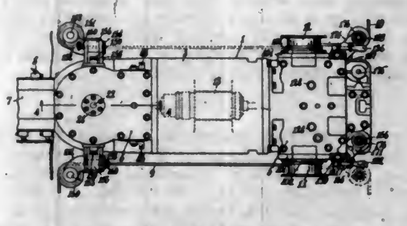
in one direction and at a different speed in the opposite direction while said motor operates continuously in the same direction.

1,875,334. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 7, 1929. Serial No. 338,287. 63 Claims. (Cl. 262—30.)



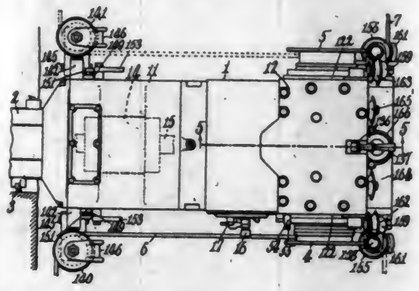
1. In a mining machine, a machine frame slidable on its bottom on the mine floor, a motor carried by said frame, kerf cutting mechanism driven by said motor including a cutter bar projecting from said frame, and feeding means for the machine including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means, and driving connections between said motor and feed operating members including means for effective drive of said feed operating members at fast and slow speeds and in opposite directions at either speed without reversing said motor.

1,875,335. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 8, 1929. Serial No. 367,894. 101 Claims. (Cl. 262—30.)



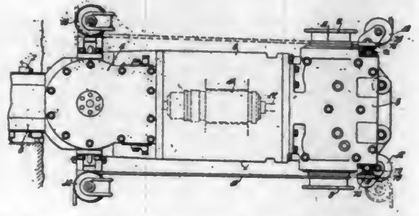
55. A mining machine feeding mechanism including relatively rotatable feeding members disposed with their axes parallel to a transverse vertical plane and each adapted to cooperate directly with flexible feeding means, and motor operated driving means for said members including a fast speed gear train and a slow speed gear train individual to each member, each gear train having a friction controlling clutch, two friction clutches controlling each member.

1,875,336. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 3, 1929. Serial No. 367,895. 64 Claims. (Cl. 262—30.)



1. In a mining machine, a motor and feeding means driven by said motor including relatively rotatable feed operating and controlling members disposed on axes parallel to a transverse vertical plane and each adapted to cooperate with flexible feeding means, and separate fast and slow speed driving connections between said motor and each of said members entirely distinct from the drive for the other member, the driving connections for each member including parallel worms and coaxial worm wheels meshing therewith.

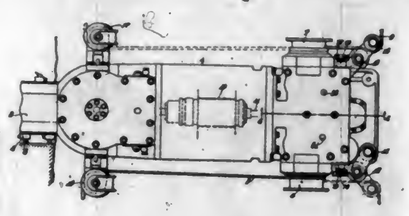
1,875,337. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 30, 1929. Serial No. 417,328. 24 Claims. (Cl. 262—30.)



1. A mining machine feeding mechanism comprising relatively rotatable feed operating and controlling members each adapted to cooperate directly with flexible feeding means, and a plural speed driving mechanism for said members including alined shafts one connected to each member, a slow speed gear train for each shaft including a terminal gear coaxial with each shaft, a clutch for connecting each terminal gear to its respective shaft, a fast speed gear train including a terminal gear coaxial with said shafts, and clutches for connecting said shafts to said fast speed terminal gear.

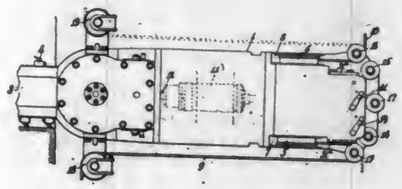
1,875,338. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 30, 1929. Serial No. 417,329. 87 Claims. (Cl. 262—30.)

1. A mining machine feeding mechanism including relatively rotatable feed operating and controlling members each adapted to cooperate directly with flexible feeding means, and a plural speed driving means for said members for rotating the latter either separately or simultaneously in a direction to draw in their respective flexible feeding means at relatively high speed or at relatively low speed, said means being operative to effect drive of one member at a low speed while the other member is simultaneously driven at a high speed and having embodied therein a slow speed driving mechanism including a final slow speed driving element, a fast speed driving mechanism including a final fast speed driving element, and friction con-



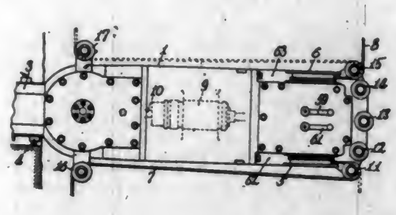
trolling clutches for said mechanisms respectively, the final driving elements of said mechanisms being common to the drive of both members.

1,875,339. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 18, 1930. Serial No. 436,860. 24 Claims. (Cl. 262—30.)



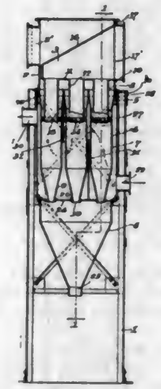
1, A mining machine feeding mechanism including relatively rotatable feeding members each adapted to cooperate directly with flexible feeding means, and motor operated driving means therefor including a fast speed mechanism and a slow speed mechanism having final fast and slow speed driving elements through which either member may be driven, and clutch mechanism within said driving elements for connecting either member in driving relation with the final driving element of either mechanism or for connecting one member to one driving element while the other member is simultaneously connected to the other driving element.

1,875,340. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 20, 1930. Serial No. 437,368. 56 Claims. (Cl. 262—30.)



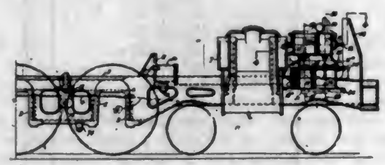
1. A mining machine feeding mechanism including a rotatable feed member adapted to cooperate directly with flexible feeding means, and motor operated driving means therefor including a fast speed gear train and a slow speed gear train, each train having a final rotatable driving element and said elements rotating about fixed axes offset from the feed member axis and having driving engagement with said feed member at spaced points.

1,875,341. GAS CLEANING AND HEAT TRANSFER APPARATUS. GEORGE H. HORNE, Glendale, and MARCEL A. LISSMAN, Alhambra, Calif., assignors to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed July 28, 1931. Serial No. 553,540. 5 Claims. (Cl. 183—85.)



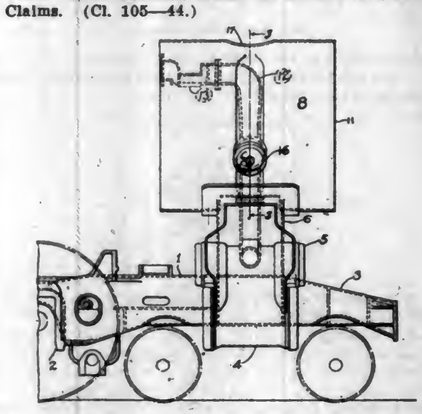
1. A gas cleaning and heat transfer apparatus comprising a plurality of tubular separating elements disposed in spaced parallel relation and provided at their upper ends with inlet means adapted to impart whirling motion to gas entering therethrough, and with centrally disposed gas outlet means and provided at their lower ends with restricted outlet openings, housing means surrounding all of said separating elements and provided with means for passing a fluid medium therethrough at a temperature different than the temperature of the gas within said separating elements, means connected to said inlet means of all of said separating elements for delivering thereto a gas carrying suspended material, and means connected to said restricted outlet openings of all of said separating elements for removing material collected in said separating elements.

1,875,342. LOCOMOTIVE STRUCTURE. KARL S. HOWARD and EDWIN C. JACKSON, St. Louis, Mo., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,509. 30 Claims. (Cl. 105—172.)



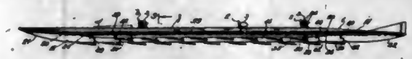
1. In a locomotive, spaced side frame members forming opposite sides of a brake cylinder body.

1,875,343. LOCOMOTIVE STRUCTURE. KARL S. HOWARD, St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Apr. 27, 1931. Serial No. 538,326. 16 Claims. (Cl. 105—44.)



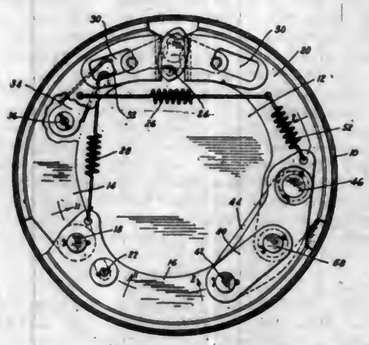
1. In a locomotive, a smoke box support, a smoke box including an outer wall mounted on said support, a live steam pipe extending into the top of said smoke box, and a single steam pipe integral with said outer wall and extending from said first mentioned steam pipe through said smoke box and into said support.

1,875,344. HYDROSPEED VESSEL. MAX KLOEN, Jamaica, N. Y. Filed July 22, 1930. Serial No. 469,713. 11 Claims. (Cl. 114—66.5.)



1. A hydro speed vessel having a hull of greater width than depth to be maintained at the level of the water during transit, parallel fins extending longitudinally at the bottom of said hull the full length of the hull, wings pivotally mounted on the edges of said fins, and extending to both sides of said fin, the wings on each fin being independent in operation and mounting of the wings on another fin, controlling means mounted on said hull, and means for connecting said controlling means to said wings.

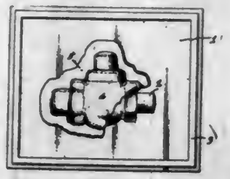
1,875,345. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 12, 1928. Serial No. 312,114. 17 Claims. (Cl. 188—78.)



1. A brake comprising, in combination, a fixed anchor, a shoe, angularly-movable means linking the shoe to said

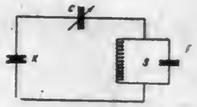
anchor, and an auxiliary shoe on the opposite side of the anchor from the first shoe and pivotally connected to said first shoe in such a manner that the torque of both shoes is transmitted to the anchor by said means.

1,875,346. MOLD OR MATRIX FOR PLATING. ARTHUR K. LAUKEL, Detroit, Mich. Filed May 13, 1926. Serial No. 108,715. 12 Claims. (Cl. 204—6.)



1. The method of preparing a molded counterpart of a model for electroplating which consists in applying to the model a coating of plastic material having incorporated therein a substance which when treated with the salt of a metal reducible by it will result in a conductive coating of such metal being formed on the surface treated, subsequently backing said coating with a body of plastic material adapted to adhere to said coating, removing the resulting mold after setting from the model, and treating the exposed surface of the coating with such metallic salt.

1,875,347. PIEZO-ELECTRIC CRYSTAL. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed May 7, 1927, Serial No. 189,500, and in Germany June 24, 1926. 2 Claims. (Cl. 250—36.)



1. In combination, a piezo electric crystal having a pair of electrodes, a tuned circuit, connections between the circuit and said electrodes, and solely a variable condenser in one of the connections from the tuned circuit to one of the electrodes.

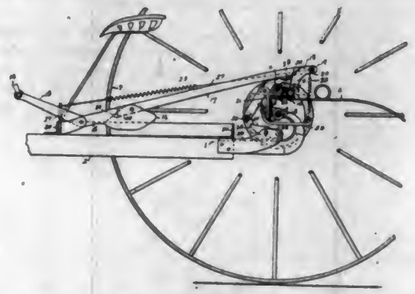
1,875,348. PROCESS OF PRODUCING ANHYDROUS ALUMINUM CHLORIDE AND NITROGEN COMPOUNDS. CLAUDE G. MINER, Berkeley, Calif. Filed Jan. 2, 1929. Serial No. 329,952. 18 Claims. (Cl. 23—95.)

1. The process of manufacturing an aluminum halide which comprises subjecting a mixture containing an oxygen containing aluminous material and a carbonaceous material to an atmosphere containing a hydrogen halide gas and nitrogen at an elevated temperature.

18. The process of producing aluminum chloride and a nitrogen containing organic compound which comprises reacting at an elevated temperature upon an oxygen containing aluminum compound with hydrochloric acid in the presence of nitrogen and carbon, the said carbon being present in sufficient proportion as to liberate aluminum in the said aluminous compound for the formation of aluminum chloride and also to provide sufficient carbon for the formation of the nitrogen containing organic compound.

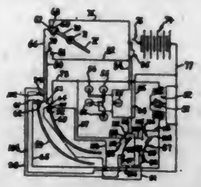
1,875,349. HAY RAKE. WALTER F. MOTTIER, El Campo, Tex. Filed Jan. 8, 1931. Serial No. 507,451. 10 Claims. (Cl. 56—292.)

1. The combination with a hay rake having a frame, ground wheels, a rake head, and means for locking the rake head to rotate with the wheels, of means for controlling the action of the locking means comprising a member having connection therewith and movably mounted on the rake head, means under the control of the operator for manually effecting an initial movement of said member



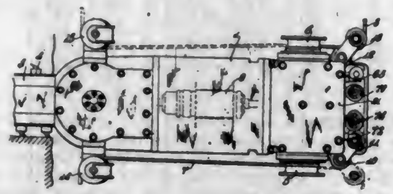
and for automatically completing said movement whereby a locking connection between the rake head and wheels is established, means acting as a guide to control the completion of the movement of said member until said rake head has turned with the wheels through a predetermined distance.

1,875,350. TRAFFIC SIGNAL DEVICE. VERN M. OSBORN, Los Angeles, Calif. Filed Nov. 24, 1928. Serial No. 321,576. 1 Claim. (Cl. 177—339.)



In a traffic signal device, a signal member including means to indicate traffic "go" when in one position and traffic "stop" when rotated substantially 90° from the first named position, means to rotatably mount said signal, a pair of electrical conductive tracks mounted on said signal member, a reversible motor arranged to drive said signal member, a control switch, said control switch including two sets of contacts and a movably mounted contact bar adapted to bridge said sets of contacts alternately, a source of electrical energy and means whereby when said contact bar bridges one set of contacts current will be conducted from said source to said motor to rotate said signal member and upon rotation of said member and said tracks to a predetermined point the circuit to said motor will be broken and when said contact bar bridges the other of said sets of contacts current will be conducted from said source to said motor through the other of said tracks and operate said motor in the opposite direction until said other track has rotated a predetermined distance whereupon the circuit to said motor will be broken, and means whereby when the circuit through one of said tracks is broken the other of said tracks will be in a position to complete a circuit to said motor when said contact bar bridges the correct set of contacts, automatic means for actuating said signal member when said control switch is in a neutral position, said automatic means including a pair of automatic switches, said switches each including a pair of contacts and a contact bar adapted to bridge said contacts, said contact bars each being mounted on a thermal responsive arm, an electrical resistance coil associated with each of said arms and adapted to heat said arms, means connecting one of said coils to said battery through one of said tracks when said track is in a predetermined position and means connecting the other of said coils to said battery through the other of said tracks when said other track is in a predetermined position, and said tracks when in another predetermined posoition being adapted to break the circuit to said coils, said tracks when in one predetermined position being adapted to make a circuit to conduct current to said coils to heat said coils and said thermal arms, said arms when heated being adapted to move said contact bars into engagement with their associated contacts and make a circuit to said motor to operate said motor and actuate said signal member, said automatic switches being operable consecutively.

1,875,351. MINING MACHINE. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 31, 1930. Serial No. 440,309. 34 Claims. (Cl. 262—30.)

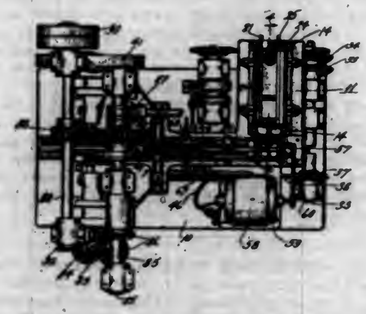


1. A mining machine feeding mechanism comprising relatively rotatable feed members each adapted to cooperate directly with flexible feeding means, and separate and distinct motor driven driving connections for said feed members including a plural predetermined speed planetary transmission mechanism for each member, said planetary transmission mechanisms being arranged on alined axes.

1,875,352. MARINE PLANT PRODUCT AND METHOD OF MAKING THE SAME. PHILIP R. PARK, Buffalo, N. Y., assignor to Philip R. Park, Inc., San Pedro, Calif., a Corporation of California. Filed Sept. 5, 1928. Serial No. 304,178. 5 Claims. (Cl. 99—5.)

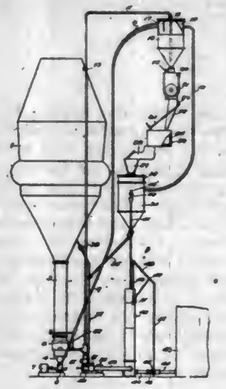
1. The process of treating marine plants such as kelp which consists in rapidly heating the same initially to a temperature sufficiently high to disrupt the plant cells and to seal the plant juices within the plants, and in then drying out the plants at lower temperatures.

1,875,353. CAN BODY MAKER. JOHN F. PETERS, Rochester, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 3, 1927. Serial No. 196,207. 9 Claims. (Cl. 113—11.)



1. A machine for making can bodies, comprising a forming horn, a magazine arranged at the side of the horn and near the bottom thereof, roller means for wrapping the blanks around said horn, and means for feeding the blanks from the bottom of said magazine directly to the said roller means, and means for binding the edges of the blanks and means for interlocking said bent edges.

1,875,354. METHOD AND APPARATUS EMPLOYED IN THE WASHING AND PRODUCTION OF SALT OR THE LIKE. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Nov. 19, 1924. Serial No. 750,888. 9 Claims. (Cl. 23—42.)



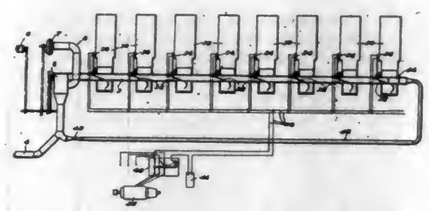
1. The process of refining salt consisting in withdrawing salt from an evaporating apparatus, adding salt brine thereto for washing and thinning said salt, and pumping the same to a centrifugal drier, a portion of the added brine being removed prior to discharge into the drier, and the salt and the remaining brine being agitated and co-mixed after the removal of said portion of the brine and before discharge into the drier, and removing the dried salt and discharging the brine into the evaporating apparatus.

1,875,355. CLOTH DOLL. CALLISTA O'NEILL SCHULER, Saugatuck, Conn. Filed Dec. 12, 1929. Serial No. 413,436. 3 Claims. (Cl. 46—40.)



1. A stuffed cloth doll made of a casing having a front and a back of the body, the back of the body being of substantially greater length than the front, connected at the top with the top of the front and brought down and forward to form a back and a seat, the back having its side edges near its lower end extended outwardly and thence inwardly to provide an extra width of material and being folded to bring the outward and inward extending edges into alignment with each other and with the edge immediately thereabove, and being secured on these edges to each other and to the lower portion of the side edges of the front.

1,875,356. COTTON DISTRIBUTING SYSTEM. WILLIAM SHAW, Lowell, Mass., assignor to Saco-Lowell Shops, Newton, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1929. Serial No. 343,493. 8 Claims. (Cl. 19—74.)



1. In a cottom distributing system, the combination of a series of cotton working machines, machinery for preparing the cotton for delivery to said cotton working machines, conveying apparatus for carrying the cotton from said preparing machinery to said cotton working machines and including a belt for conveying the cottom past the entire series of the latter machines, devices for atuomatically controlling the delivery of cotton by said belt to the different cotton working machines in accordance with their individual requirements, and an additional suction conveyor operative continuously to receive any cotton discharged at the delivery end of said belt and to carry the cotton so discharged back to said conveying apparatus and deliver it thereto at a point in advance of the cotton working machines.

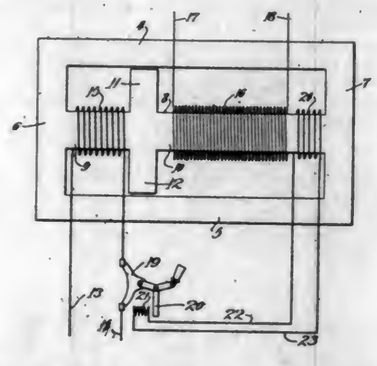
1,875,357. WELL FORMING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Apr. 25, 1928. Serial No. 272,799. 5 Claims. (Cl. 255—4.)



2. An oil well having a gas expanding chamber located above the intake thereof through which the natural gas may expand during the initial flow stage of the well and a reduction head for concentrating the gas pressure upon a reduced mass of oil when the natural gas pressure declines.

1,875,358. ELECTRIC TRANSFORMER. JOSEPH G. SOLA, Chicago, Ill., assignor to Sola Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1930, Serial No. 432,329. Renewed Dec. 21, 1931. 8 Claims. (Cl. 175—294.)

1. In an arrangement of the type described, the combination of core means, a primary coil and a secondary coil in transformer relationship to each other on said core means, an auxiliary coil on said core means, shunt core means including an air-gap located between said primary and said secondary coils adapted when the secondary coil circuit is opened to cause a variation in the strength of



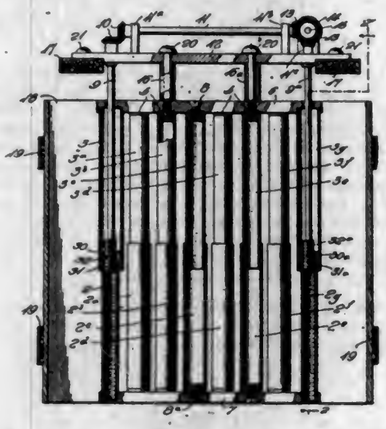
the flux threading said auxiliary coil, and means in operative relation with said auxiliary coil adapted automatically to open said primary coil circuit by reason of the change in the strength of the current through said auxiliary coil when said secondary coil circuit is opened.

1,875,359. MOISTURE INDICATING INSTRUMENT FOR WOOD. CHAUNCEY GUY SUITS, Schenectady, N. Y., and MATTHEW ELBRIDGE DUNLAP, Madison, Wis., dedicated to the free use of the Government and the Public. Filed May 16, 1930. Serial No. 453,086. 6 Claims. (Cl. 175—183.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A moisture indicating instrument for wood comprising two dependent electrical circuits having a common battery; one circuit, known as the standard, includes a fixed resistance and a fixed condenser connected electrically in series and with a neon glow lamp shunted around the condenser in such a way that the neon glow lamp will flash at a fixed or standard rate per minute; and the other, a secondary or test circuit contains a fixed condenser, the capacity of which is definitely related to a certain moisture content of wood and with a neon glow lamp shunted around it and connected electrically in series with electrodes capable of being driven into the wood and thereby forming the resistance to be measured by observing the rate of flash of the test neon glow lamp as compared to that of the neon glow lamp in the standard circuit, whereby it may be determined whether the wood under test contains more or less moisture than that established by the capacity of the condenser in the test circuit depending on whether the test lamp flashes at a rate of speed faster or slower than the standard lamp.

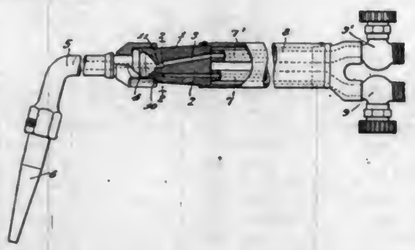
1,875,360. CONDENSER SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,138. 11 Claims. (Cl. 175—41.5.)

3. In a condenser system, a pair of conductive tubular members adapted to slide over each other, means for controlling the motion of said tubular members over each other in balanced relationship, and a conductive plate adjacent to and electrically insulated from said tubular members,



said plate member constituting one element of said condenser system and said tubular members constituting the other element of said condenser system.

1,875,361. TORCH. ROY THOMAS, Los Angeles, Calif. Filed Apr. 2, 1929. Serial No. 351,911. 19 Claims. (Cl. 158—27.4.)



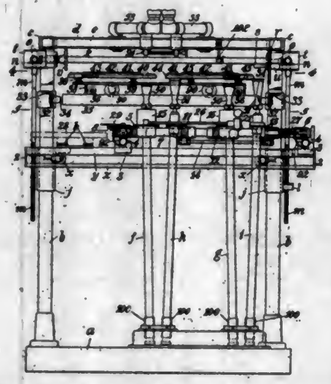
1. In a torch of the character described, a mixer, a head having a supply bore communicating with the mixer, the said bore having an abrupt lateral offset adapted to arrest flash-back rearwardly beyond the mixer and into said bore.

1,875,362. THE METHOD OF FORMING THREAD CUTTING TAPS. FRANK O. WELLS, Greenfield, Mass. Filed Oct. 25, 1929. Serial No. 402,338. 4 Claims. (Cl. 76—101.)



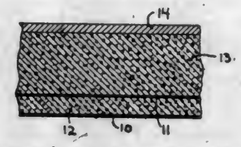
1. The method of forming taps which consists in first forging from a rod or bar a tap blank having at one end grooves running parallel to the axis of the blank and at the other end a cylindrical shank provided with a squared extremity, twisting the grooved part of the blank to arrange the grooves at an angle to the axis of the blank, annealing the blank, centering the blank, turning the fluted blank down to the required size and relieving the lands and flutes, cutting threads on the relieved lands, grinding the blank to the correct size, and hardening and polishing the blank.

1,875,363. PRODUCTION OF MAPS BY MEANS OF AERIAL PHOTOGRAPHS. ARTHUR CYRIL WEBB ALDIS, Birmingham, England. Filed Mar. 20, 1930, Serial No. 437,543, and in Great Britain Apr. 10, 1929. 2 Claims. (Cl. 33—20.)



1. In apparatus for use in the production of maps from pairs of aerial photographs, the combination comprising a stereoscope, a photograph support with means whereby a pair of photographs can be relatively adjusted, the said support being capable of receiving sliding movements in any direction in a horizontal plane, there being stationary reference marks in the stereoscope situated over the photograph support and viewable through the stereoscope, contour plotting mechanism situated beneath the photograph support and capable of receiving sliding movements in any direction in a horizontal plane, and rigid members in pivotal connection with the photograph support, the contour plotting mechanism and a fixed base, the said members determining a pair of relatively inclined and conjointly movable axes which pass through fixed points in said base situated equidistantly from the photographs on vertical axes containing the reference marks, and which also pass through the plumb points on the photographs, substantially as described.

1,875,364. HEAT AND SOUND INSULATING BOARD AND BLOCK. LOUIS E. ARMSTRONG, Fort Dodge, Iowa, assignor to Insulex Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 9, 1930. Serial No. 487,431. 7 Claims. (Cl. 154—45.9.)

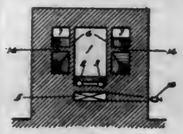


1. In a product of the type described, the combination of two liners of fibrous material, a layer of plastic material comprising gypsum as the principal ingredient interposed between said two liners in bonded relationship thereto a comparatively much thicker layer of comparatively much lighter cellular plastic material also comprising gypsum as its principal ingredient bonded to the outer face of one of said liners, and a third sheet of fibrous material bonded to the outer face of said second named layer of plastic material.

1,875,365. MUFFLE KILN. HENRY G. BEGEMAN, New York, N. Y. Filed Aug. 23, 1930. Serial No. 477,420. 9 Claims. (Cl. 25—142.)

8. A continuous tunnel muffle kiln with side heating flues separated by spaced tiles into lower and upper compartments, having one or more dampers in the upper com-

partment adapted to be regulated, whereby either all gases pass through the lower compartment, heating the upper compartment by radiation only, or else part of the



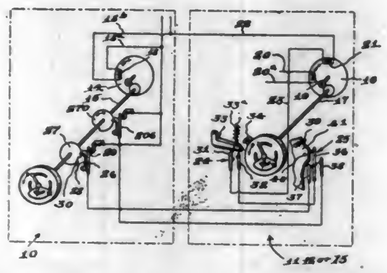
gases also flow through the upper compartment simultaneously with the gases in the lower compartment and in the same direction.

1,875,366. CONCRETE FORM APPARATUS. PETER BEGHETTI, San Francisco, Calif. Filed Apr. 21, 1930. Serial No. 445,990. 3 Claims. (Cl. 25—131.)



1. In concrete form apparatus, a stay rod provided with stops for spacing adjacent sides of the wall forms, said rod being in two sections and said stops including a yoke fitting in notches in one section and an enlargement on the end of the other section, the sections being hooked together through said enlargement, means on the rod outward of the wall forms for holding the walls against the stops respectively, said means adapted to engage the rod for locking thereto at any point along the rod outward of the forms.

1,875,367. RESYNCHRONIZING MEANS FOR TRAFFIC SIGNALING SYSTEMS. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 27, 1930. Serial No. 491,349. 1 Claim. (Cl. 172—293.)

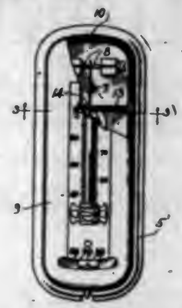


In a stop and go traffic signaling system for street intersections in which the signals pass through repeated traffic cycle periods, a master controller including an electric motor, a secondary controller for the segnals at each intersection including an electric motor, each motor having a driving coil, circuits for the driving coils which are constantly closed during the operation of the system, each secondary motor having a bucking coil, the electric motor or master controller being unprovided with a bucking coil, the bucking coil circuit having a normally closed and a normally open switch therein, means operated by the master controller for holding the normally closed switch closed and having means for opening the bucking coil circuit during each traffic cycle, each secondary timer having means for closing the companion normally open switch during each traffic cycle.

1,875,368. PROCESS OF PRODUCING ACIDS BY FERMENTATION OF CELLULOSIC MATERIALS. LEO M. CHRISTENSEN and WINFRED N. MCCUTCHAN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed June 14, 1930. Serial No. 461,259. 11 Claims. (Cl. 195—20.)

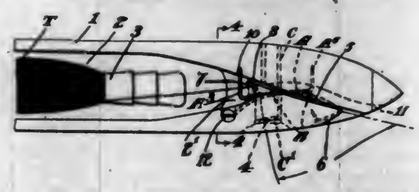
4. In a process for the fermentation of cellulosic materials by means of thermophilic bacteria, the steps which comprise neutralizing the fermenting medium with a neutralizing agent selected from one of the groups consisting of (a) ammonia, ammonium carbonate and ammonium bicarbonate, and (b) oxides, hydroxides, carbonates and bicarbonates of alkali metals and alkaline earth metals, allowing the fermentation to proceed and subsequently neutralizing the fermenting medium with a neutralizing agent selected from the group not used in the previous neutralization.

1,875,369. THERMOSTAT. HOWARD D. COLMAN, Rockford, Ill. Filed May 12, 1930. Serial No. 451,579. 7 Claims. (Cl. 200—139.)



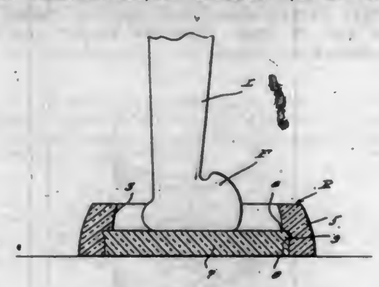
1. A thermostat comprising, in combination, an elongated substantially flat base, a removable cover composed of molded insulating material and having a substantially flat front wall and a peripheral side wall, said cover being adapted to fit onto said base and cooperating therewith to form an elongated compartment, a coiled bimetallic strip supported on said base at one end of said compartment, an elongated substantially flat tongue supported by said strip and projecting longitudinally of said compartment, a contact mounted on said base at the end thereof opposite said strip and cooperating with the free end of said tongue to form a control switch, and a partition molded integral with the cover walls and extending transversely across the cover to divide said compartment into a perforated portion containing said thermostatic strip and an unperforated portion substantially closed by said partition and containing said switch, said partition having a slot therein open at its inner edge so as to receive said tongue when said cover is fitted onto said base.

1,875,370. SHUTTLE. JEAN B. DAUDELIN and EVARISTE E. TALBOT, Fall River, Mass. Filed July 28, 1930. Serial No. 471,190. 23 Claims. (Cl. 139—223.)



1. In a shuttle, a bobbin, a throat forwardly thereof, a thread delivery eye and threading slots communicating therewith, a lateral shoulder in said throat, means forwardly of said threading slots disposed in the same horizontal plane as said shoulder to permit the thread during the threading action to be drawn straight forward in said throat in an approximate alinement with said bobbin and prior to its passage to the threading eye.

1,875,371. SANITARY FOOT REST FOR FURNITURE LEGS. LEWIS DE CICCO, Chicago, Ill. Filed May 29, 1930. Serial No. 457,201. 2 Claims. (Cl. 45—137.)

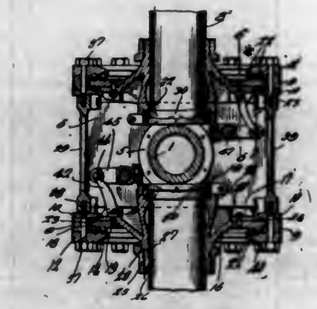


1. As a new article of manufacture, a foot rest for furniture legs comprising a disk having threads on the periphery thereof, and an annular member provided with an internal annular shoulder, and threads on the inner periphery of the annular member on one side of the shoulder for cooperation with the threads on said disk, said shoulder being engageable with said disk when the latter has been screwed into final position within the confines of said annular member.

1,875,372. METHOD OF TREATING RUBBER COMPOUNDS AND COMPOSITION OBTAINED THEREBY. HERBERT A. ENDRES, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 27, 1930. Serial No. 484,941. 6 Claims. (Cl. 18—53.)

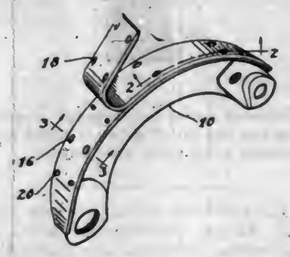
1. A method of preventing sulfur bloom in unvulcanized rubber compounds which comprises incorporating therein a mixture of sulfurs, said mixture comprising insoluble sulfur and no more soluble sulfur than the rubber will dissolve.

1,875,373. VARIABLE PITCH PROPELLER. GUY EVORITT, Princeton, Mo. Filed Aug. 5, 1930. Serial No. 473,247. 6 Claims. (Cl. 170—163.)



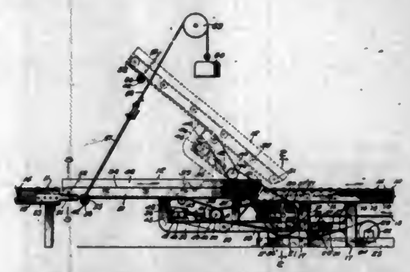
1. A variable pitch propeller comprising in combination a pair of opposed combined propeller blade supports and bearing structures, each of said combined supports and bearing structures including a pair of opposed bearing rings, an annular member disposed between the opposed bearing rings, spacer bars extending between said combined supports and bearing structures, and bolts passing through the rings, said annular members, and engageable with said spacer bars for retaining said parts in assembled relation.

1,875,374. BRAKE. DAVID L. GALLUP, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 9, 1930. Serial No. 466,664. 5 Claims. (Cl. 188—250.)



1. A brake shoe comprising a web, a rim secured thereto, bosses arranged on the rim in parallel rows, a liner for the rim having depressions receiving the bosses and means arranged alternately with the bosses for securing the liner on the rim.

1,875,375. CONVEYER GATE SECTION. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Aug. 9, 1930. Serial No. 474,228. 8 Claims. (Cl. 198—94.)



1. Apparatus of the character described comprising a pair of main conveyer sections having their adjacent ends spaced from each other, a conveyer gate section normally horizontally arranged between said main conveyer sections and forming a continuation thereof, a shaft pivotally supporting one end of said gate section, stop means for limiting the downward movement of the free end of said gate section to normal position, power conveying means for one of said main conveying sections and including an endless member, a rotatable member concentric with said shaft and over which said endless member passes, power conveying means for said gate section, and driving connections between said rotatable member and said last named conveying means.

1,875,376. MANIPULATING TOOL FOR HIGH TENSION TRANSMISSION LINES. WILLIAM D. HAMER and CLARENCE E. CHATFIELD, Indianapolis, Ind., and BRENT MILLS, Chicago, Ill., assignors to Transelectric Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 14, 1927. Serial No. 168,182. 3 Claims. (Cl. 306—30.)

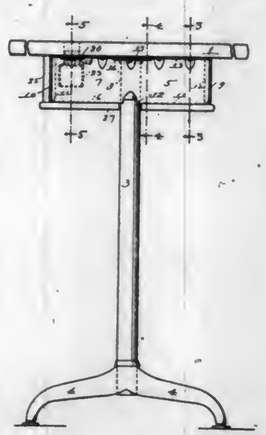
1. In an implement for manipulating high tension conductors, in combination, an insulating handle, a fitting for said handle having a socket in one end for the recep-

tion of the handle and a polygonal socket in its exposed end, said exposed end being externally threaded, and a gripping element for attachment to said fitting having an



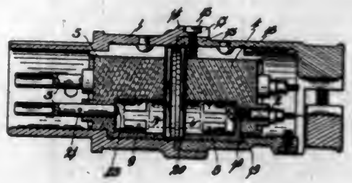
internally threaded socket for threaded engagement with said threaded end and carrying two laterally separated oppositely presented overlapping hook fingers.

1,875,377. SUPPORTING STANDARD FOR DESK TOPS. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Aug. 2, 1930. Serial No. 472,568. 9 Claims. (Cl. 45—6.)



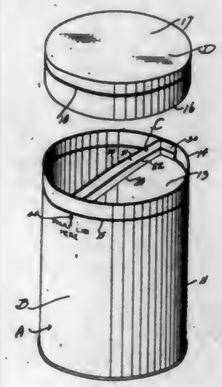
1. In a supporting standard for a desk top and the like: a vertical post; a box having a bottom portion with an opening through which the upper end of the post fittingly extends, and upwardly-diverging side walls with horizontal flanges to which the desk top is fastened.

1,875,378. FUSIBLE DISCONNECTING PLUG. HAROLD P. HASTINGS, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 27, 1930. Serial No. 491,406. 2 Claims. (Cl. 200—115.5.)



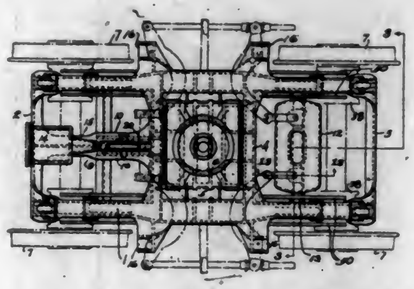
1. In an electrical fused disconnecting plug, the combination of a hollow body consisting of two abutting sections, each section having a terminal block detachably mounted therein, wire terminals carried by one block and plug terminals carried by the other block, the terminal blocks having complemental recesses for receiving fuses formed in their ends toward the abutting ends of the body sections, fuse clips located in the bottom of the recesses and being connected to the wire and plug terminals respectively, and means for detachably holding the body sections together.

1,875,379. CONTAINER. ANNA HOLMES, Dallas, Tex. Filed Sept. 11, 1930. Serial No. 481,307. 4 Claims. (Cl. 220—9.)



1. In a device of the class described the combination of a container having a detachable closure therefor, said closure including a flange adapted to telescope upon the exterior of the container, and a diametrically disposed leveling and reinforcing member fixedly secured at its ends within the open end of the container, the container externally thereof having indicia designating an end of the member pertinent to the location at which the cover should be started when placing upon the container.

1,875,380. RAILWAY TRUCK STRUCTURE. KARL S. HOWARD and EDWIN C. JACKSON, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 446,124. 19 Claims. (Cl. 105—182.)



1. A railway truck frame including a fluid brake cylinder body and a fluid reservoir integral therewith, portions of said body and said reservoir constituting structural elements of the frame.

1,875,381. CAR UNDERFRAME STRUCTURE. KARL S. HOWARD and EDWIN C. JACKSON, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 16, 1930. Serial No. 461,477. 26 Claims. (Cl. 105—415.)



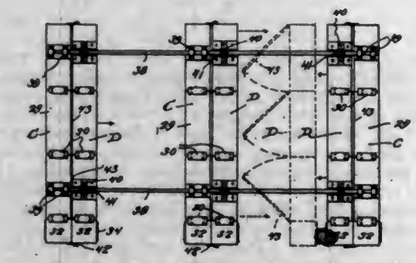
1. In a railway vehicle underframe, a center sill, a side sill, spaced transoms between said sills, and a fluid brake reservoir body extending between and merging with said transoms and integral therewith.

1,875,382. DOUBLE-VISIBILITY CARD RACK. ARTHUR R. HUTCHENS, Lake Wales, Fla. Filed July 8, 1930. Serial No. 465,726. 6 Claims. (Cl. 129—16.)



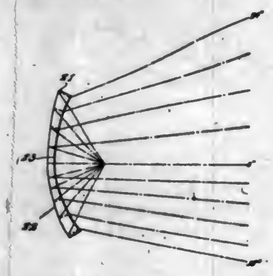
5. A double-visibility card rack comprising a card frame, a plurality of cards slidably carried therein, said cards being provided with projections by which said cards are supported by each other and in spaced relation, and an inclined pair of follower blocks, the upper follower block being disposed on the outside of said cards and the lower follower block being disposed on the inside of said cards.

1,875,383. LOCKER SYSTEM. RALPH LA PORTE, Los Angeles, Calif. Filed May 27, 1930. Serial No. 456,098. 4 Claims. (Cl. 312—106.)



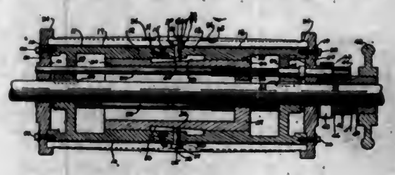
1. In a locker system, a plurality of units each including a plurality of compartments, individual locker receptacles removably arranged in said compartments, means for locking each locker receptacle in its respective compartment, each locker receptacle having an opening in the rear thereof, means for normally holding said units together in pairs and in back to back relation with the openings in the rear of the locker receptacles of the respective units arranged in juxtaposition, said units being adapted to be separated to permit access to the locker receptacles of either unit through the openings therein, and means positioned between said units when normally associated to prevent access to any of said openings from the front of either unit, and subsequent to the removal of any of said locker receptacles therefrom.

1,875,384. REFLECTOR. HERMAN W. LUCAS, Washington, D. C. Filed June 10, 1930. Serial No. 460,197. 2 Claims. (Cl. 240—41.38.)



1. In a search light beacon for airways, a bifocal mirror lens reflector comprising a glass lens having front and rear toric surfaces, the rear surface being silvered, the focal length of the top half of the lens being greater than the focal length of the bottom half of the lens whereby the lens exhibits predetermined astigmatic spread of uniform intensity from the axis of light projection upward and a less astigmatic spread of uniform intensity from the axis of light projection downward.

1,875,385. EXPANSIBLE PULLEY. ELOV F. MAAS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 20, 1926. Serial No. 136,419. 11 Claims. (Cl. 64—8.)

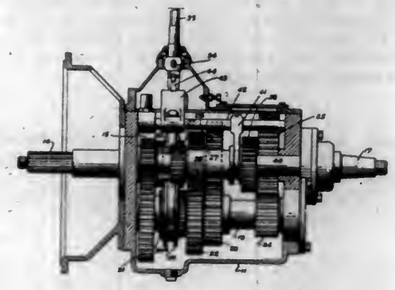


1. An expansible pulley comprising a plurality of pairs of slats, the members of each pair being arranged in substantially end to end relation about a common axis, means pivotally securing the remote ends of the slats, means engaging the inner adjacent ends of the slats to move them radially outwardly with respect to the axis, and resilient means exerting a continuous yielding force to urge the adjacent ends of the slats radially inwardly.

1,875,386. AUTOMOTIVE TRANSMISSION. PHILIP MACKENZIE, Oakland, Calif. Filed Oct. 6, 1930. Serial No. 480,641. 8 Claims. (Cl. 74—59.)

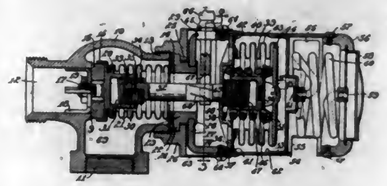
1. A transmission including a casing, a drive shaft projecting into the casing, a driven shaft journalled in the casing in alignment with the drive shaft, a countershaft in the casing disposed parallel to the drive and driven shafts, a drive gear fixed to the drive shaft, a first countershaft gear fixed on the countershaft in constant

mesh with the drive gear, a first speed gear and a second speed gear both rotatably mounted on the driven shaft, a third speed gear fixed on the driven shaft, gears fixed on the countershaft in constant mesh with the first and second speed gears, a rotatable gear on the countershaft



in constant mesh with the third speed gear, clutch means operative to clutch the first or second speed gears to the driven shaft, clutch means to clutch the first countershaft gear to the rotatable countershaft gear, and clutch means to clutch the third speed gear to the drive shaft.

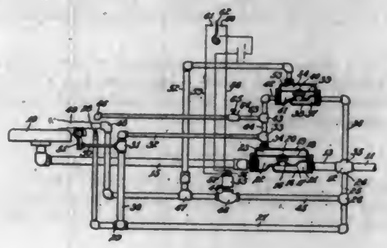
1,875,387. RADIATOR VALVE. WILLIAM B. MACKINTOSH, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed May 12, 1930, Serial No. 451,583. 10 Claims. (Cl. 236—42.)



1. In a valve, a casing having an inlet and an outlet and a valve seat therebetween, a valve mounted in said casing for movement toward and away from said seat, a valve stem threadedly engaged, at its one end, with said valve, a spring seat threadedly engaged on the opposite end of said stem, an abutment stationarily mounted in said casing, a spring confined between said abutment and said spring seat, means preventing rotation of said valve, and means for rotating said stem.

1,875,388. BURNER CONTROL. PHILIP G. MAGNER, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,579. 4 Claims. (Cl. 158—117.1.)

1. The combination with a main fluid-fuel burner and a main supply line for supplying fuel thereto, of means for controlling said burner comprising a valve casing connected in said line, a flexible diaphragm in said casing, and movable by differential pressures in said casing to control flow through said casing, a pilot conduit by-passing said valve and terminating adjacent said main burner but operatively disassociated therefrom, an ignition conduit by-passing said main valve and terminating in a burner positioned in operative relation to the terminus of said pilot conduit and to said main burner, a valve in said ignition conduit, means for operating said last-mentioned valve, a branch connected to said main supply line in advance of said main valve and connected to said main valve casing to supply valve-closing pressure fluid to said main valve diaphragm, an auxiliary valve casing in said last-mentioned conduit, a flexible diaphragm in said auxiliary valve casing and movable by differential pressures in said casing to control flow through said casing, a bleed



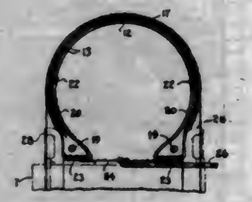
pipe connected to said branch between said auxiliary valve casing and said main valve casing, a pipe by-passing said main valve and connected to supply valve-closing pressure fluid to said auxiliary valve casing, flow through said last-mentioned pipe being controlled by said ignition conduit valve, a pipe connected to said pilot conduit and connected to said branch between said bleed-pipe connection and said main valve casing, a valve in said last-mentioned pipe, and thermo-responsive means positioned to be affected by flame issuing from said ignition burner for controlling said last-mentioned valve.

1,875,389. MAP. RALPH L. MORSE, Springfield, Mass. Filed July 31, 1930. Serial No. 471,979. 1 Claim. (Cl. 35—6.)



The method of producing an educational map which consists in, printing on a flat sheet of relatively inelastic material a map with geographical designations located thereon in inaccurate geographical relationship, shaping said sheet by offsetting the same to provide relief portions thereon and bring said geographical designations into permanent, correct geographical relationship, and finally in securing said shaped sheet to a relatively smooth surface of a rigid sheet of material which is curved to represent the curvature of the earth's surface, all cooperating to provide a final relief map with geographical designations thereon in permanent and proper relief relative to one another and which is curved to represent the curvature of that portion of the earth's surface represented by the map.

1,875,390. METHOD OF MAKING PNEUMATIC WHEELS. ALVIN J. MUSSELMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,710. 4 Claims. (Cl. 154—14.)



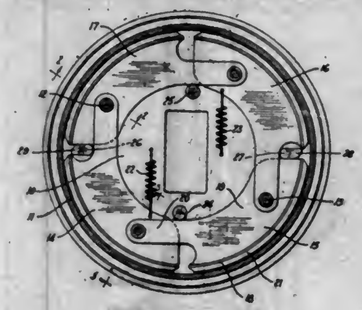
1. A method of making pneumatic wheels which comprises shaping rubberized fabric material into tire form, inserting a sleeve of vulcanizable material axially of the wheel through the bead portions thereof, securing the end portions of the sleeve in air-tight relation to the inner circumferential portions of the tire.

1,875,391. BRAKE. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,391. 2 Claims. (Cl. 188—78.)

1. A brake comprising a fixed support, friction members having separable ends arranged for movement on the support, an actuating member positioned for movement between said ends, an operating lever for moving said actuating member, an adjustable member on the fixed support, means eccentrically connecting one end of said lever to said adjustable member, a ball and socket connection between said actuating member and said lever, said connection being disposed between the ends of said lever, and operating means for said lever connected to the free end of said lever.

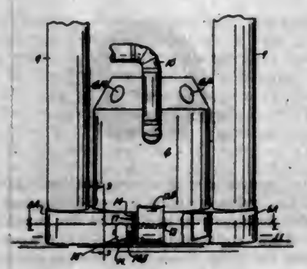
1,875,392. BRAKE. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,389. 4 Claims. (Cl. 188—78.)

1. A brake comprising two sets of shoes, each set including a primary and secondary shoe, the sets arranged end to end with overlaying portions, the primary shoes being pivotally connected to the secondary shoes and the



secondary shoes anchored through the opposite primary shoes, and means for imparting force to the primary shoes concomitantly.

1,875,393. FURNACE HEAT CIRCULATOR. CHARLES E. PEARSON and ERVY I. DAVIS, St. Paul, Minn. Filed Apr. 17, 1930. Serial No. 445,064. 3 Claims. (Cl. 126—110.)

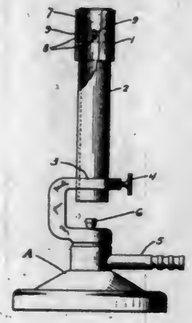


1. In a warm air circulating device for furnaces having a central heating drum, a shell surrounding said drum concentrically, hot air outlet means in the upper part of said furnace, return-air intake means comprising pipes communicating with the lower interior of said shell; said circulating device comprising a fan housing mounted exteriorly of and fixed to the lower part of said shell and communicating with the interior thereof through an aperture provided therein, a radial winged fan mounted in the ontermost part of said housing on a horizontal shaft journaled therein, said fan arranged to be rotated in a direction to draw air thru its housing from the lower part of said shell and to expel air from said housing into the space between the heated drum and said shell at an elevation above the said air intake action of the fan; a horizontal partition fixed in said fan housing between the fan and the furnace shell comprising a plate dividing that part of the fan housing into a lower and an upper air duct, inwardly and upwardly directed plate extensions of said upper duct formed integral thereof and located within the furnace shell for the purpose described.

1,875,394. BURNER TIP. MAURICE A. RICHFORD, Oakland, Calif. Filed Apr. 14, 1930. Serial No. 444,102. 2 Claims. (Cl. 158—111.)

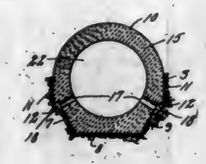
1. In a burner of the character described, an elongated main burner tube, means adjacent one end of the tube for

supplying a mixture of gas and air, a sleeve secured to the opposite end of the tube and forming an annular chamber exterior to the main tube, said main tube having perforations formed therein in communication with the



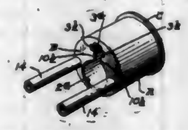
annular chamber, and a plurality of baffle members interior of the main tube whereby a small portion of the gas and air mixture discharging therethrough is diverted through the perforations into the annular chamber.

1,875,395. TILE FOR SOIL STERILIZATION. WILLIAM SALISBURY, Toledo, Ohio. Filed July 17, 1930. Serial No. 468,612. 5 Claims. (Cl. 61—10.)



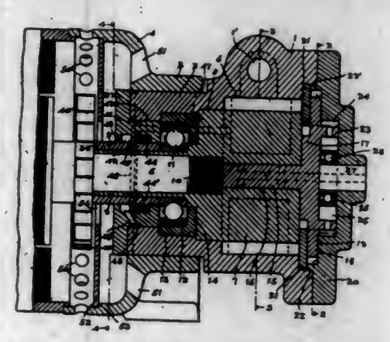
1. A tile element having a cross sectional form comprising three flat sides forming a semi-hexagonal portion, a circular side terminating in parallel flat faced extensions, and flat sides connecting the semi-hexagonal portion termini and the extensions, said semi-hexagonal portions having downwardly directed openings therethrough adjacent the connecting sides.

1,875,396. PIN TUMBLER CYLINDER MOUNTING. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Co., San Francisco, Calif., a Corporation of California. Filed May 14, 1930. Serial No. 452,297. 8 Claims. (Cl. 70—46.)



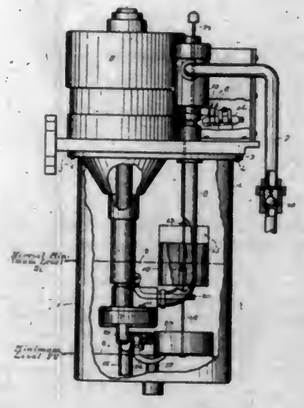
1. A pin tumbler cylinder lock mounting comprising a cylindrical shaped elongated housing, an integral bottom member on the housing, said bottom member having an opening formed therein conforming to the cross sectional shape of the pin tumbler cylinder lock, a face plate secured to the opposite end of the housing and having an opening formed therein to receive the key end of the pin tumbler cylinder lock, said bottom and face plate openings permitting endwise insertion of a pin tumbler cylinder lock, a U-shaped clip adapted to straddle the inner end of a pin tumbler cylinder when inserted in the housing, and lugs on the clip engageable with the bottom member of the housing to secure the pin tumbler cylinder lock against endwise removal from the housing.

1,875,397. ROTARY MACHINE. WILLIAM E. SHORE, West New Brighton, N. Y. Filed Mar. 20, 1930, Serial No. 437,583, and in Canada Apr. 5, 1929. 23 Claims. (Cl. 230—152.)



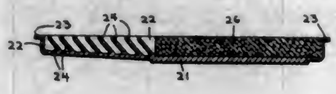
1. A rotary machine, comprising in combination a casing formed with a cylinder, a transversely slotted rotor eccentrically arranged in said cylinder, a single vane member reciprocably mounted in the slot in said rotor, said vane member having a transverse slotted portion extending beyond the cylinder, said vane member having axially spaced plane guide surfaces extending therefrom in right angular relation to the impeller axis, means engaging the opposite walls of said slot beyond said cylinder to determine the reciprocal movement of the vane member in the rotor and guide means co-operating with each of said axially spaced plane guide surfaces to definitely maintain said impeller with its outer ends in true parallel relation to the cylinder wall.

1,875,398. PUMP. JOHN B. TEESDALE and CLYDE H. TEESDALE, Grand Rapids, Mich., assignors to Teesdale Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 29, 1930. Serial No. 457,227. 5 Claims. (Cl. 103—40.)



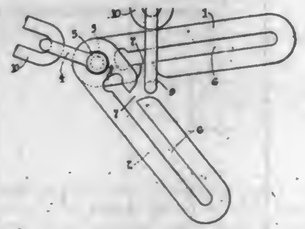
1. In an organization of the class described, a container adapted to hold a liquid and having an outlet at the lower portion and provided thereat with means for maintaining a minimum liquid level within the container, a pump, a liquid intake supply conduit for said container connected to said pump, a minimum liquid level conduit connected to said pump and extending below the minimum liquid level, and a liquid level operated valve for selectively opening the minimum level conduit when the pump in its normal operation fails to draw liquid through the other conduit and the liquid within the container falls to the minimum level.

1,875,399. ACCELERATOR PEDAL. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Oct. 9, 1930. Serial No. 487,415. 5 Claims. (Cl. 74—81.)



1. In an accelerator pedal, the combination of a plate, means for pivotally mounting said plate in position on a car, a covering member formed of rubber extending along said plate having a recess in its inner face at one end portion and having flexible rib portions formed integrally therewith at the other end portion serving to space said member yieldingly from said plate, a pad of sponge rubber removably mounted in said recess for supporting said covering member yieldingly from said plate, and means for securing said covering member on said plate.

1,875,400. COUPLING DEVICE. CHARLES WOOD, Liverpool, Nova Scotia, Canada, assignor to Mersey Paper Company, Limited, Brooklyn, Nova Scotia, Canada, a Corporation of Nova Scotia. Filed Dec. 3, 1931. Serial No. 578,753. 1 Claim. (Cl. 24—232.)

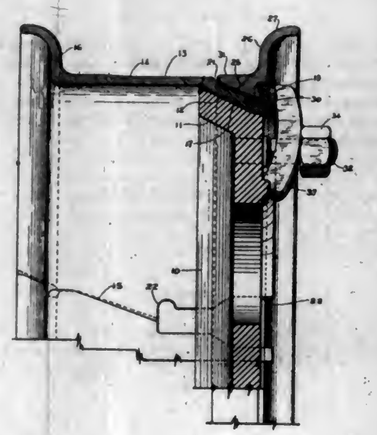


A coupling device comprising a plurality of flat, elongated members arranged face to face, a connecting loop, and means for pivotally connecting said members and loop together adjacent one end of said members, a slot of substantially uniform width extending longitudinally of said members and gaps in said members near the pivoted ends thereof and arranged equidistant from the pivot and facing in opposite directions, said slots being provided at the end adjacent the pivot with coacting locking recesses which are wider than the remaining part of the slot.

1,875,401. PROPIONIC ACID FERMENTATION. JOHN C. WOODRUFF and PERRY W. WILSON, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Aug. 2, 1928. Serial No. 297,094. 3 Claims. (Cl. 195—20.)

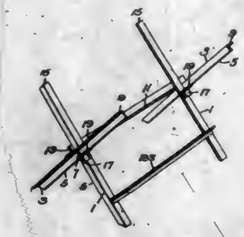
1. A process for producing propionic acid and ethyl alcohol by fermentation of carbohydrate material which comprises inoculating a carbohydrate-containing mash with propionic acid bacteria, allowing the propionic acid fermentation to proceed until the peak of the fermentation has passed, and then inoculating with yeast and allowing fermentation to proceed to completion.

1,875,402. RIM ASSEMBLY. ALVA W. WOODWARD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 23, 1931. Serial No. 546,262. 3 Claims. (Cl. 87—35.)



1. In combination, a transversely split rim section having a tire-engaging flange at one edge, a base portion, a supporting portion at its other edge inclined toward the axis of the section and terminating in a flange directed away from the axis of the rim, thereby providing a gutter in the section, an endless side ring interlocked with the split section, said ring having a portion disposed in the gutter of the split section and engaging the latter only in the region of the junction of the inclined portion and flange defining the gutter, a tire retaining flange on the endless side ring in substantial alignment with the flange defining the gutter in the split section.

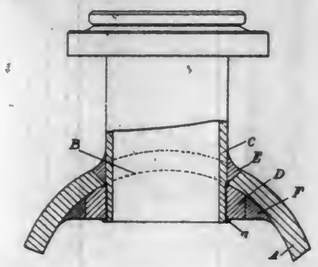
1,875,403. SUPPORT. CLARENCE H. YOUNG, Boston, Mass. Filed June 19, 1931. Serial No. 545,894. 1 Claim. (Cl. 248—11.)



A collapsible support for tanks and the like having, in combination, pairs of spaced angle irons having flanges in vertical planes, pivotally connected in substantially abutting relation and having their other flanges uppermost, a bar extending from one of said uppermost flanges of one angle iron of said pairs of angle irons to the uppermost flange of the corresponding angle iron of the other pair, said bar being secured to said uppermost flanges adjacent the pivotal connection of said angle irons and arranged to contact with the edges of the vertical flanges of the other angle irons of said pairs and to serve as stop

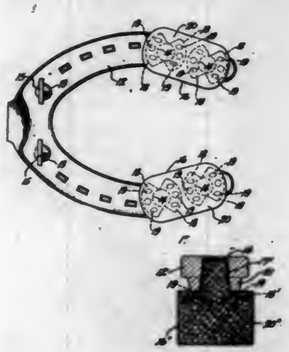
members therefor, and additional stop means carried by the last mentioned angle irons adjacent the pivotal connection of said angle irons arranged to contact with the edges of the vertical flanges of the angle irons which carry said bar when the latter contacts with the edges of the vertical flanges which carry said additional stop means.

1,875,404. SYSTEM FOR CONNECTING BRANCH TUBES TO PRESSURE VESSELS OR PIPES. JOHN ARTHUR AITON, Derby, England, assignor to Aiton & Company Limited, Derby, England. Filed Aug. 6, 1931, Serial No. 555,608, and in Great Britain Jan. 16, 1931. 2 Claims. (Cl. 285—25.)



1. In combination a vessel adapted to withstand pressure, a branch pipe therefrom, the said branch pipe being screwed into a nut within the said vessel, a weld at the junction of the branch pipe with the exterior of the vessel and a weld at the junction of the nut with the interior of the vessel.

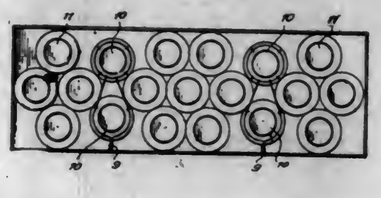
1,875,405. DETACHABLE HORSESHOE CALK. CARL G. AKERBERG, Oshkosh, Wis., assignor to Giant Grip Mfg. Co., Oshkosh, Wis., a Corporation of Wisconsin. Filed July 22, 1931. Serial No. 552,441. 4 Claims. (Cl. 168—41.)



1. A padded horseshoe calk, comprising a resilient pad, and a metallic member having a lower anchoring flange embedded in said pad and also having a hollow shank portion extending outwardly of the pad and having some of the material of the pad extending thereinto, said shank portion being removably engageable with a horseshoe.

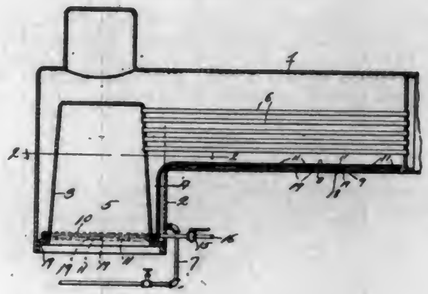
1,875,406. SYSTEM OF STOWING WINE CASKS, OR BARRELS, OR HOGSHEADS, ETC. OSVALDO ALFARO, Buenos Aires, Argentina. Filed Feb. 6, 1931. Serial No. 514,048. 4 Claims. (Cl. 105—369.)

1. A method for stowing hogsheads and the like in vehicles of various kinds, consisting in arranging a plurality of hogsheads each in a vertical position substantially throughout the entire floor surface of a vehicle, and fastening together two hogsheads which are situated near opposite walls of the vehicle and forcibly moving said two



hogsheads toward each other and simultaneously displacing the remaining hogsheads resulting in a general wedging of the hogsheads against each other and against the walls of the vehicle.

1,875,407. BOILER CLEANER. PETER R. ALPHONSO, Seminole, Okla., assignor to The Argent Corporation, Shreveport, La., a Corporation of Louisiana. Filed Mar. 25, 1929. Serial No. 349,821. 2 Claims. (Cl. 122—383.)



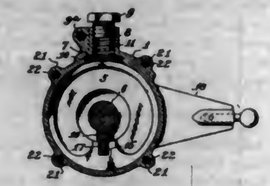
1. A boiler cleaner conduit comprising a metallic flexible conduit, said conduit being formed with a plurality of convolutions, a rigid plate secured to the under side of some of the convolutions and rigidly holding the same, said conduit being flexible with the exception of that portion to which the plates are secured, said plate being provided with a discharge port registering with a discharge port in the secured convolutions of the conduit.

1,875,408. METHOD OF PRODUCING PHTHALIC ANHYDRIDE RESINS. MANUEL M. AMIEVA, Jr., San Francisco, Calif., assignor to W. P. Fuller & Co., San Francisco, Calif., a Corporation of California. Filed Mar. 7, 1931. Serial No. 521,006. 6 Claims. (Cl. 260—8.)

1. The method of combining predetermined quantities of phthalic anhydride, glycerine and fatty acids which consists in first causing the glycerin and the fatty acid to react with a portion of the phthalic anhydride and in causing the resulting product to react with the remaining portion of phthalic anhydride, each of the portions representing a substantial part of the original amount.

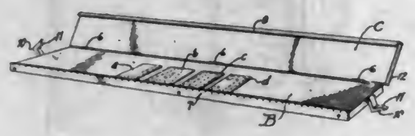
1,875,409. SHOCK ABSORBER FOR VEHICLES. WILLIAM H. APPLEMAN, Beaumont, Tex. Filed May 7, 1931. Serial No. 535,740. 9 Claims. (Cl. 188—130.)

4. A housing containing an annular bearing, a gearless disc peripherally journaled upon the walls of said annular bearing, a shaft entering and journaled upon bearings in said housing, a flexible connection formed between said



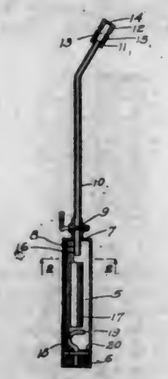
shaft and said disc that precludes a sliding movement between said shaft and said disc at their points of contact.

1,875,410. APPARATUS FOR APPLYING SIGN CHARACTERS. GEORGE H. BABCOCK, Chicago, Ill., assignor to Rayner Decalcomania Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1930. Serial No. 502,826. 2 Claims. (Cl. 41—33.)



1. An apparatus for handling transfer characters comprising a base having a gauge whereon sign characters may be aligned, a clamp connected for movement with the base, and a cushion on the clamp so disposed as to engage with portions of the sign characters remote from the gauge, permitting the application to other portions of the characters of a common connecting means to unite them together.

1,875,411. SPRAY GUN. ANTON BEEBE, El Cerrito, Calif. Filed Sept. 12, 1930. Serial No. 481,474. 4 Claims. (Cl. 299—83.)



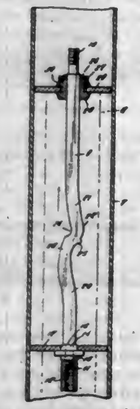
1. A spray gun comprising a cylindrical handle having a chamber formed therein, a rigid tube extending into one end of said chamber and having a transverse groove formed in the end thereof, a removable cartridge retaining disc at the other end of said chamber provided with a coiled inlet tube extending into said chamber and adapted to direct the flow of water tangentially to the walls of the chamber and means for attaching said other end of said handle to a flexible hose or tube.

1,875,412. RECEPTACLE. HECTOR BOIARDI, Cleveland, Ohio. Filed Mar. 27, 1931. Serial No. 525,806. 1 Claim. (Cl. 229—7.)



A receptacle of the character described having a tapered body portion and a straight portion of uniform dimensions at its open end, and an internal groove at the point of juncture between said portions, a perforated closure element fitted in said groove and held fixed relatively to the receptacle, and a removable imperforate closure element adapted to repose upon the first-mentioned element and frictionally held by the straight portion of the receptacle, immediately above said groove.

1,875,413. WELL CASING CLEANING DEVICE. HOMER BENJAMIN BRALY, Nardin, Okla. Filed Feb. 27, 1931. Serial No. 518,843. 2 Claims. (Cl. 166—18.)

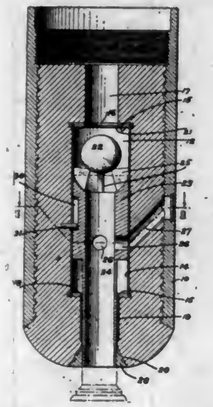


1. A device for removing paraffine from a well casing comprising a shaft adapted to be inserted in the casing, a plate having an opening therein through which the shaft passes, the intermediate portion of said shaft being provided with oppositely and laterally offset portions defining a seat on one side, a lug on the opposite side, said lug engaging the plate on the downward movement of the shaft, after movement of the plate has been stopped by its engagement with the paraffine in the casing, whereby said lug will move the plate into a position more nearly vertical than horizontal to cause an edge wall of the opening in the plate to engage the seat so that as the plate moves downwardly with the shaft it will cut its way through the paraffine, and a stop on the lower end of the shaft adapted to engage the plate upon upward movement of the shaft to cause said plate to assume a horizontal position to remove the paraffine as the shaft and plate are moved upwardly.

1,875,414. WASHING AND CEMENTING DEVICE FOR WELL CASINGS. CLARENCE E. BURT, Los Angeles, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Sept. 8, 1930. Serial No. 479,501. 9 Claims. (Cl. 166—1.)

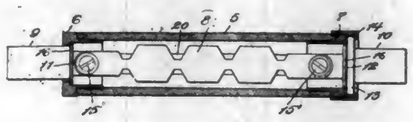
1. A device of the character described adapted to be connected with a string of well casing, said device com-

prising a cementitious plug having upper and lower aligned passageways and provided with an intermediate valve chamber and having radial ports in its sides, valve means fitted to said device and extending into and ex-



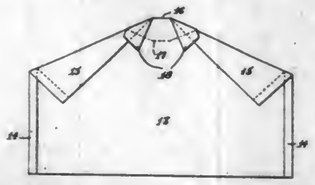
teriorly of said chamber and preventing the discharge of fluid through said side ports from within the casing until the lower end of the string comes in close proximity to an obstruction in the well bore and the valve means contacts with such obstruction.

1,875,415. ELECTRIC FUSE. HENRY T. BUSSMANN, St. Louis, Mo. Filed Nov. 9, 1923. Serial No. 673,756. 10 Claims. (Cl. 200—131.)



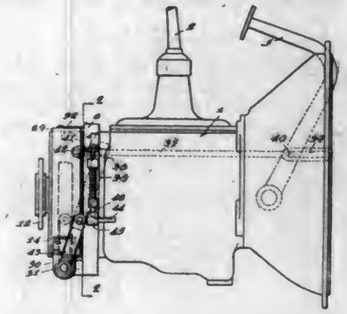
1. In a fuse, a casing, a terminal, a closure disc attached to the terminal, means for holding the closure disc to the casing, a fuse link, means for connecting the link to the terminal, the closure disc having the aperture within which the terminal is fitted so arranged that part of the periphery of the aperture is fitted tightly on the terminal and the balance of its periphery is held in a fixed position away from the terminal so as to allow a predetermined space between the terminal and the closured disc for the exit of a limited determined amount of the vapor generated on blowing of the fuse link.

1,875,416. GARMENT PROTECTOR. CHARLES T. CHANDLER, Eustis, Fla., assignor to Carman & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 22, 1931. Serial No. 552,507. 1 Claim. (Cl. 223—61.)



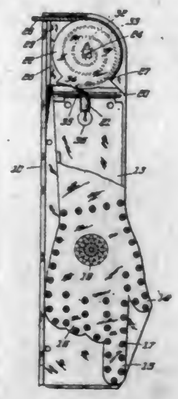
A garment protector comprising two marginally connected sections of paper one of which is thinner than the other, and a complete reinforcement for the thinner member, the upper corners of said sections of paper and portions of the reinforcement being triangularly folded, the central portion of the reinforcement extending across and secured to the thinner member with laterally spreading wing portions thereof folded over and secured to the other section of paper, the complete article having an opening between said folded portions, said opening being of a size to permit the passage of the hook of a garment hanger.

1,875,417. REVERSE STOP FOR VEHICLES. CHARLES P. CIRAC, San Francisco, Calif., assignor to Cirac Automatic Reverse Control Company, San Francisco, Calif. Filed Feb. 1, 1930. Serial No. 425,218. 6 Claims. (Cl. 192—4.)



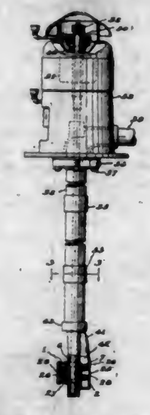
1. In a reverse stop for vehicles, a rotatable member having a ratchet, a brake drum rotatable on the member and formed with a pair of spaced stops, pawls carried by said drum and operatively engaging with the ratchet, a brake band for locking the drum against movement, a cam having an extended portion arranged between said stops and having a limited throw with respect to the drum, means for yieldingly holding the cam against the ratchet, said ratchet when rotating in one direction moving said cam for releasing the pawls from the ratchet.

1,875,418. SIGNAL ARM. VALERIANO CIURANA and FEDERICO CIURANA, Oakland, Calif. Filed Mar. 14, 1932. Serial No. 598,584. 2 Claims. (Cl. 116—54.)



1. A signal arm comprising a housing adapted to be secured to the side of an automotive vehicle, a hollow arm pivotally mounted and resiliently retained in said housing and terminating in a hollow hand outlined with a multiplicity of spaced brilliants and a large double brilliant intermediately disposed relative to the outlining brilliants for providing the effect of continuity of illumination over the entire surface of the hand, and, indirect lighting means disposed in said arm for said brilliants.

1,875,419. ROTARY PUMP. WALLACE L. CLAYPOOL, Davenport, Iowa, assignor to Westco-Chippewa Pump Company, Davenport, Iowa, a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,583. 22 Claims. (Cl. 103—102.)



1. In a multiple-stage rotary pump, a casing having a plurality of annular fluid passages, rotors for said passages each having a series of marginal buckets at its opposite sides facing toward the sides of said pasage, mean to resist inwardly radial movement of fluid between said rotors and adjacent portions of said casing, an inlet communicating with one of said passages, an outlet communicating with another of said passages, and stop means in each passage for deflecting fluid from both sides of the rotor therein to both sides of the rotor in an adjacent passage.

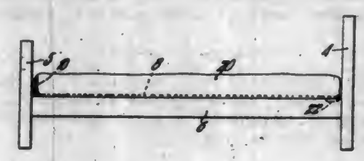
1,875,420. SPRING CLIP FOR ORNAMENTS AND THE LIKE. ISRAEL W. COOPER, New York, N. Y. Filed Dec. 29, 1931. Serial No. 583,722. 3 Claims. (Cl. 24—252.)



1. Means for detachably affixing an ornament to a garment comprising an ornament having an integral lug provided with a bridge, a gripping member hingedly engaged with the bridge, spring members integrally formed at one end of the gripping member, prongs formed at the other, said spring members and prongs arranged to impinge upon the rear face of the ornament on opposite sides of the lug and an operating tab integral with the gripping member.

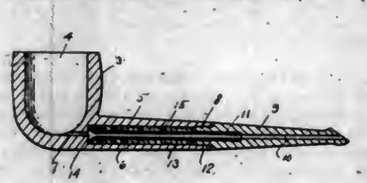
1,875,421. BEDSTEAD. GEORGE A. COTE, Springfield, Mass., assignor of one-half to Leroy A. Lively. Filed Dec. 17, 1931. Serial No. 581,595. 3 Claims. (Cl. 5—321.)

1. A bedstead having foot and head members connected by side rails in combination with an apparatus of the class described comprising, a frame having parallel side bars for resting on said side rails connected to a cross bar adjacent said head member, means by which the cross-bar is pivoted to said bedstead, whereby the frame may swing



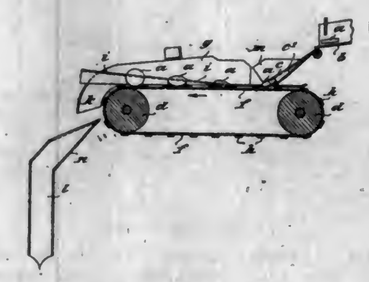
from a position on said bed to an upright position, and vertical pieces on the outer ends of said side bars connected to an end bar, a second end bar adjustable up and down between said end pieces and clasps on said second bar.

1,875,422. SMOKING TOBACCO PIPE. ERNEST W. CROCKER, Duchesne, Utah. Filed Dec. 15, 1931. Serial No. 581,221. 3 Claims. (Cl. 131—12.)



1. A tobacco smoking pipe comprising a substantially conventional bowl having a laterally directed stem section, said stem section being longitudinally bored to provide an elongated socket screw threaded at its outer end and further bored to provide a restricted smoke passage affording communication between the cavity of the bowl and said socket, a mouth piece having a screw threaded nipple threaded into the screw threaded end of said socket, said mouth piece having a smoke passage, a tube connected to the mouth piece and in alinement with said smoke passage, said tube being fitted in said socket and the end adjacent said bowl being provided with a flared bell like enlargement of a diameter slightly less than the diameter of the socket, said tube being formed with longitudinal slots, and a removable sleeve of absorbent material mounted on said tube.

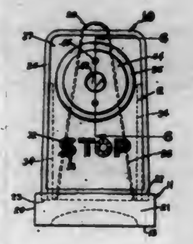
1,875,423. APPARATUS FOR FEEDING DETERMINED BATCHES OF TABLETS. THEO DANIELS, Weveling-hoven, Germany. Filed Mar. 25, 1931, Serial No. 525,313, and in Germany Apr. 19, 1930. 3 Claims. (Cl. 198—33.)



1. Apparatus for feeding determined batches of tablets to wrapping apparatus, comprising in combination a plurality of stationary walls forming a plurality of longi-

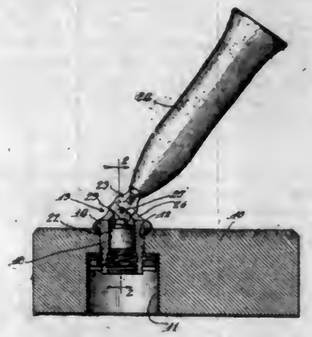
tudinal tracks, a conveyor belt having transverse transporter ledges for conveying tablets along said tracks and stationary slide rails to cause tablets conveyed along said tracks to assume an upright position, together with a member having channels leading to the wrapping apparatus, down which the tablets pass in an upright position.

1,875,424. SIGNAL DEVICE. WILLIAM V. DARLING, Jr., Riverside, Calif., and RUDOLPH J. DYKSTRA, Thompson Falls, Mont. Filed July 13, 1931. Serial No. 550,468. 9 Claims. (Cl. 40—130.)



5. In a pavement signal, a base made of vulcanized rubber and having a slot therein, a flexible signal member made of vulcanized rubber and having one end extending into said slot, a reenforcing member secured to said signal members and means engaging said reenforcing member and said base to hold said signal member on said base, said reenforcing member being flexible and extending along said signal member.

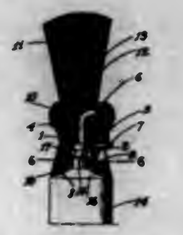
1,875,425. FOUNTAIN PEN DESK STAND. SAMUEL L. DAUGHERTY, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa, a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,221. 7 Claims. (Cl. 120—108.)



1. A supporting means for the pivotally mounted fountain pen receptacle of a desk stand comprising a recessed member having a spring pressed plunger in the recess thereof, said plunger having movable means thereon for engagement with said receptacle for holding the same in adjusted positions.

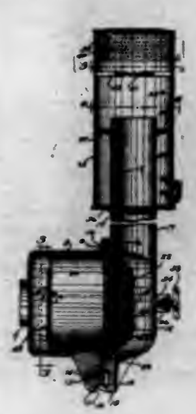
1,875,426. LATHER BRUSH. WILLIAM A. DILLON, Santa Clara, Calif. Filed June 13, 1931. Serial No. 544,068. 5 Claims. (Cl. 15—135.)

1. A lather brush comprising a body member, bristles projecting upwardly from one end thereof, means on the other end of the body for connection to a cream holding tube, a cream dispensing conduit leading through the body to provide communication between the tube and the exterior of the body at the same end as and to the outside of the bristles, and a substantially flat non-porous element



mounted in connection with but separate from the bristles and body between the bristles and outer end of the conduit and on which cream exuding from the conduit is initially received.

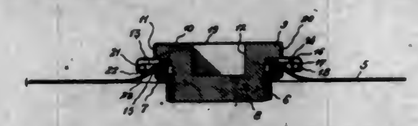
1,875,427. AIR CLEANER. FRANK A. DONALDSON, Minneapolis, Minn. Filed Sept. 13, 1930. Serial No. 481,632. 4 Claims. (Cl. 183—48.)



1. An air cleaner comprising a casing that is open at one end and provided at the other end with means for attachment to a carburetor, a hood hinged to the open end of said casing for opening and closing movements and provided with an air intake, an air filter in said casing between said carburetor connection and air intake and arranged to be held in position by said hood when the same is closed and being removable when said hood is open, a primary air cleaner carried by said hood for movements therewith and arranged to discharge into the intake thereof, and having a dust-receiving chamber that is thrown into a dust-dumping position when said hood is moved hingedly to an open position to permit removal of said air filter.

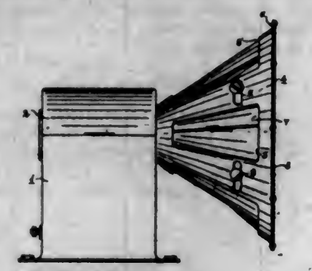
1,875,428. CLOSURE CONSTRUCTION FOR METALLIC CONTAINERS. CHARLES H. DRAPER, Cleveland Heights, Ohio, assignor to The Draper Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 26, 1930. Serial No. 498,398. 7 Claims. (Cl. 220—89.)

1. In combination with a container having a wall provided with a threaded opening, a threaded plug screwed into the opening having a tool engaging formation at its outer end, a cap enclosing the plug sealing the plug against removal without destruction of the cap provided with a formation telescoping the plug tool engaging formation, cap retaining means projecting from the container wall, and the cap being provided with means rotatably connect-



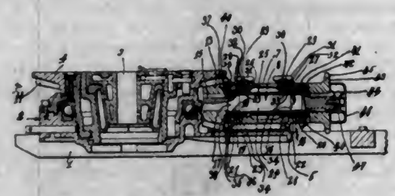
ed to said retaining means whereby the plug may be tightened in the threaded opening without destruction of the cap.

1,875,429. LOUD-SPEAKER MODULATING MECHANISM. RICHARD R. DU PUY, St. Paul, Minn., assignor to Wright-De Coster, Inc., St. Paul, Minn., a Corporation of Minnesota. Filed Aug. 10, 1931. Serial No. 556,044. 3 Claims. (Cl. 181—27.)



1. In an electrical sound reproducing mechanism, a vibratory diaphragm, means operatively connected to said diaphragm to cause a vibration thereof to produce sound tones of varying frequencies, and an enclosure being positioned in slightly spaced position from over one side of said diaphragm, said enclosure having variable openings therein to modulate tones of lower frequencies produced by vibration of said diaphragm.

1,875,430. ROTARY MACHINE. DAVID S. FAULKNER, Los Angeles, Calif., assignor, by direct and mesne assignments, of one-half to The National Supply Company, Toledo, Ohio, a Corporation of Ohio, and one-half to Emsco Derrick and Equipment Company, Los Angeles, Calif., a Corporation of California. Filed May 2, 1927. Serial No. 188,806. 18 Claims. (Cl. 255—23.)



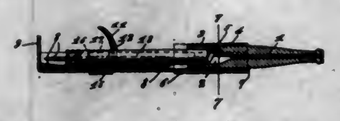
1. In a rotary machine, the combination of a base, a table rotatably supported by the base, a housing removably secured to the base in ways formed therein, bearings mounted in the housing in spaced relation, a bearing sleeve mounted between the bearings, a pinion shaft journaled in the housing on the bearings, a pinion gear secured to the pinion shaft and adapted to mesh with gear teeth formed on the rotary table, and an overhanging sprocket secured to the opposite end of the shaft beyond the end of the housing.

1,875,431. BOTTLE SEALING CAP. EDWARD H. FABRICE, Chicago, Ill., assignor to Guardian Safety Seal Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1931. Serial No. 511,011. 6 Claims. (Cl. 215—46.)



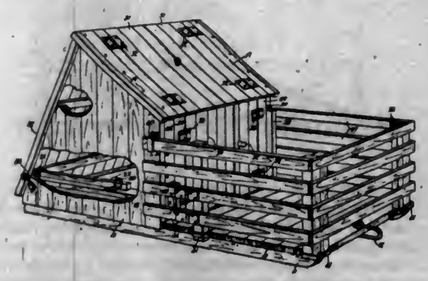
1. A bottle sealing cap including a substantially cylindrical skirt portion equipped with an annular rip-strip integral with said skirt portion and terminating at one end in a free tongue, and an outwardly projecting guard formation in said cap contiguous to said tongue for preventing accidental engagement and distortion of the latter in ordinary handling of a bottle equipped with said cap.

1,875,432. PIPE. MILES L. FARLAND, Oakland, Calif. Filed Dec. 8, 1931. Serial No. 579,803. 3 Claims. (Cl. 131—51.)



1. In an article for the purpose set forth, in combination with a cigar or cigarette holder having a slot communicating with the cigar or cigarette receiving socket therein, of a sleeve arranged for slidable movement over the holder and having a depending finger that passes through the opening and enters the socket, a trough having an open end received through the sleeve, fixed on the holder and having a flange to be contacted by the inner end of the sleeve when the sleeve is in one position, the upper end of the trough being closed and an arched smoke deflector mounted for slidable movement on the trough.

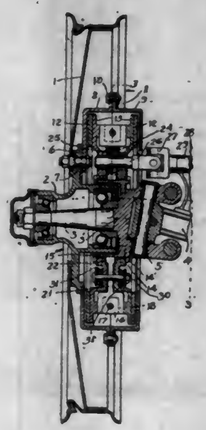
1,875,433. SANITARY HOG HOUSE AND PEN. JAMES C. FITZPATRICK, Higginsville, Mo., assignor of one-fourth to Mary Fitzpatrick and one-fourth to Naomi Fitzpatrick, Higginsville, Mo. Filed Dec. 15, 1930. Serial No. 502,458. 1 Claim. (Cl. 119—16.)



A combination house, shelter and pen of knock-down construction comprising a unitary flooring member and framework providing a combination hog shelter house and

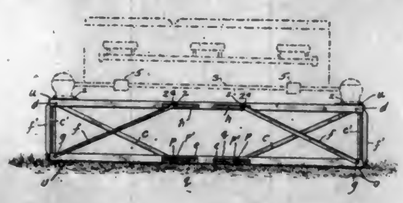
pen in communication with each other and utilizing the top of said flooring member as a common floor surface for the shelter house and pen, the house portion of said framework having a removable ridge pole, and a swinging combination wall and roof member having hook elements removably engaging said pole and pivotal prop members for supporting said swinging member in raised position to serve as an open shelter member.

1,875,434. BRAKE FOR MOTOR VEHICLES. EDWIN FRANKLAND, Pontiac, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 19, 1923. Serial No. 681,501. 8 Claims. (Cl. 188—72.)



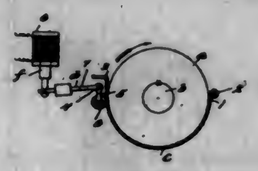
1. In a vehicle brake, the combination with a vehicle wheel, and a brake drum carried thereby having a disk wall, of a spindle forming a journal for said wheel, a member rigidly connected with said spindle and having a series of teeth elongated parallel to the wheel axis, a brake shoe mounted within the drum, slidable into and out of engagement with said disk wall of the drum, and having teeth meshed with those of said toothed member, to restrain said brake shoe from rotation, and means for actuating said brake shoe laterally.

1,875,435. SUPPORTING DEVICE OR CATAFALQUE. JOHN L. FRANZEN, Oregon City, Oreg. Filed June 27, 1931. Serial No. 547,281. 2 Claims. (Cl. 27—26.)



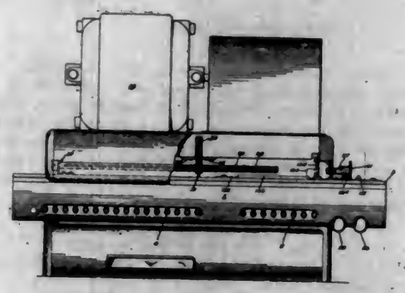
1. A coffin stage comprising, upper and lower elongate rectangular companion frames, diagonal arms connecting the ends of said frames, said arms pivoted at one end to one frame and movably secured at the other end to the companion frame, said arms adapted to support the upper frame of the stage parallel or obliquely with the base, whereby to arrange the upper frame in a horizontal plane irrespective of the slope of the ground on which the stage is placed.

1,875,436. BRAKE. JOSEPH F. FREESE, Baltimore, Md. Filed Jan. 26, 1931. Serial No. 511,380. 2 Claims. (Cl. 188—174.)



1. The combination with a member having a cylindrical braking surface and adapted to rotate in a vertical plane in one direction, of a flexible substantially semi-circular brake band anchored at one end and extending around the lower half of said member, a bell crank lever having a weighted arm and a downwardly extending arm, the latter having a roller adapted to normally bear against the free end of the band and hold it against the braking surface and a magnet adapted when energized, to lift the weighted arm and thereby move the roller away from the band, to release the brake.

1,875,437. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Oct. 17, 1928, Serial No. 313,026. Renewed Jan. 26, 1931. 10 Claims. (Cl. 235—144.)



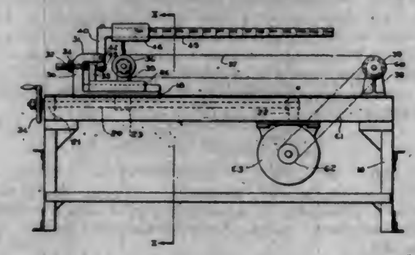
1. In a calculating machine, a frame, a displaceable carriage mounted on the frame, a register mounted on said carriage, zero resetting means associated with the register, a motor mounted on the frame and control means on the carriage arranged to connect the motor to the zero resetting device.

1,875,438. FAUCET GASKET. HENRY GABRIELS, Jr., Los Angeles, Calif. Filed Jan. 3, 1931. Serial No. 506,371. 1 Claim. (Cl. 251—160.)



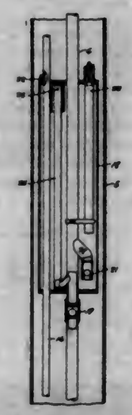
A deformable, rubber gasket, adapted to be seated in a faucet, stem-end cup which has a smooth imperforate gasket seat, said gasket having a deep annular groove in its face which seats in the cup part; whereby when the gasket is compressed it contracts the groove and forms therein an air compression chamber acting to resist gasket deformation.

1,875,439. MACHINE FOR TESTING BELTS. WILLIAM H. GERSTENSLAGER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,413. 7 Claims. (Cl. 73—51.)



2. A machine for testing endless belts comprising a frame, a pair of pulleys rotatably mounted in the frame for supporting an endless belt, means for driving one of the pulleys, means for indicating the sidewise movement of the belt as it is driven, and means for applying a variable tension to the belt.

1,875,440. MULTISTAGE PNEUMATIC PUMP. LLOYD D. GILBERT, Los Angeles, Calif. Filed Feb. 13, 1931. Serial No. 515,483. 4 Claims. (Cl. 103—239.)



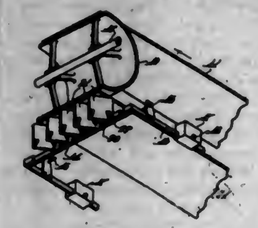
1. Means for lifting liquid from a well which comprises a flow pipe extending into the well, displacement chambers disposed along said flow pipe, check valves in said flow pipe adjacent and below each of said chambers for preventing retrograde flow of fluid in said flow line, exit ports placing said flow pipe and chambers in communication for passage of fluid from said chambers to said flow pipe and check valves therein preventing retrograde flow, riser pipes in said chambers connected to the flow pipe at the lower parts of the chambers and opening to the upper parts thereof, said riser pipes having passages connected to said flow pipe to control flow of fluid therethrough to a rate less than that in said flow pipe, an actuating fluid pipe having openings in continuous and free communication with said chambers, and actuating fluid exhaust openings in said chambers, and liquid level controlled means for enabling opening of said exhaust openings when a predetermined low level has been reached in said chambers, and closing said exhaust openings when the level of liquid in said chambers has reached a predetermined high level, said actuating fluid pipe having its opening passages to said chambers restricting flow of actuating fluid to a rate less than that through said exhaust openings.

1,875,441. GLOVES. HERMAN A. GILLIAN, Coshocton, Ohio. Filed Mar. 28, 1931. Serial No. 526,017. 1 Claim. (Cl. 2—169.)



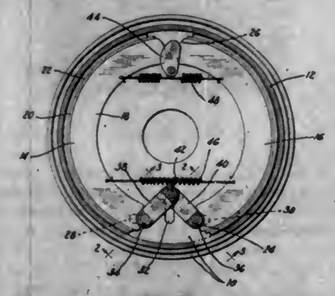
A glove having a hand back extending from adjacent the wrist to the base of the fingers in the vicinity of the finger crotches and knuckles, said glove including a palm with thumb, index and little fingers, a separate second and third finger palm piece and a second and third finger rear finger section having an integral extension from the base of the fingers and extending toward the wrist, said extension being of a width to cover the knuckles and overlapping the back piece in the region of the knuckles, said extension and back piece being stitched together from the base of the second and third finger along each side respectively toward the wrist.

1,875,442. BELT SCRAPER. VICTOR V. GREG, Dormont, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 502,135. 12 Claims. (Cl. 198—230.)



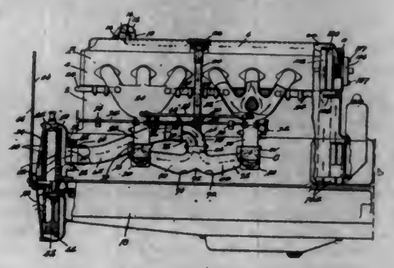
8. In a belt scraper, a plurality of scraper elements spaced along a line perpendicular to the direction of travel of the belt and each disposed at an oblique angle thereto.

1,875,443. BRAKE. RUDOLPH A. GOEPFRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 8, 1931. Serial No. 507,340. 1 Claim. (Cl. 188—78.)



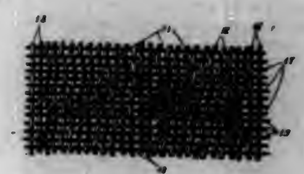
A brake comprising a backing plate having slots arranged in a plane common to both slots and a slot positioned centrally between the spaced slots and vertically with respect to the plane common to the spaced slots, anchors movable in the spaced slots, corresponding links pivotally connected to each other and to the anchors and a binding post slidable in the vertically positioned slot providing the pivotal connection between the links.

1,875,444. INTERNAL COMBUSTION ENGINE. ELBERT J. HALL, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,517. 12 Claims. (Cl. 123—119.)



1. In an internal combustion engine, a plurality of carburetors, and means for introducing air under pressure above atmospheric to the carburetors whereby to deliver fuel mixture to the engine at a pressure above atmospheric comprising a distributor connecting said carburetors and provided with a common inlet substantially midway of the ends thereof, a conduit, a blower mounted on and actuated by the crank shaft for delivering air under pressure to the conduit, a separator connecting the conduit and distributor, means in said separator for dividing the air injected therein from the conduit to provide a uniform discharge thereof into the common inlet of the distributor, the latter having oppositely extending deflecting surfaces arranged substantially opposite the areas defined by said dividing means whereby substantially equal amounts of air are delivered to each carburetor, and means for balancing the pressure of the fuel mixtures delivered from the carburetors.

1,875,445. CORD FABRIC. LINDSAY S. HALL, New Bedford, Mass., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 25, 1930. Serial No. 484,289. 2 Claims. (Cl. 139—426.)



1. In or for a pneumatic tire carcass, a breaker strip comprising a warp composed of groups of sinuous cords separated by substantially straight cords of the same size as the sinuous cords.

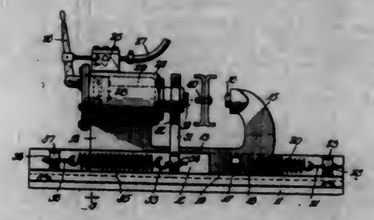
1,875,446. PROCESS FOR PRODUCING FAST TINTS ON THE FIBER. ROBERT HALLER, Riehen, near Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 29, 1929, Serial No. 389,324, and in Switzerland Sept. 7, 1928. 2 Claims. (Cl. 8—5.)

1. Process for producing fast tints on the fiber, consisting in coupling reduced vat-dyestuffs, with which the fiber has been impregnated, with diazo-compounds.

1,875,447. ESTERIFICATION PROCESS. CLARENCE W. HANCOCK and EDWIN H. CARNARIUS, Peoria, Ill., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Jan. 2, 1930. Serial No. 418,153. 17 Claims. (Cl. 260—106.)

1. In a process for the manufacture of esters by the direct esterification of a free aliphatic carboxylic acid, the step which comprises neutralizing the reaction mixture with a non-aqueous suspension of lime on the completion of the esterification, said neutralization being carried out in the esterification kettle while the reaction mixture is still hot.

1,875,448. RIVETER CONSTRUCTION. JOHN C. HANNA, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1928. Serial No. 260,068. 2 Claims. (Cl. 78—48.)



1. In a riveter construction, a supporting frame, a riveter mounted upon the supporting frame, a dead die and a live die, both said dies being independently movable relative to the supporting frame, and yieldable means connecting each die and the frame and positioning the dies relative to the supporting frame, the yieldable means connected to the dead die having less resistance than that connected to the live die whereby in actuation of the dies the dead die will position itself relative to the work prior to the live die,

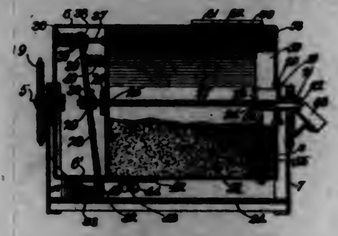
1,875,449. SEAT. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Nov. 10, 1930. Serial No. 494,472. 4 Claims. (Cl. 155—85.)



1. In a device of the class described, a pair of spaced strut supporting members, a strut tiltably secured at its respective ends to said strut supporting members, said strut having a widened medial portion provided with an annular recess, a seat supporting member having a dished portion fitting within said recess, and means for rotatably securing said seat supporting member to said strut.

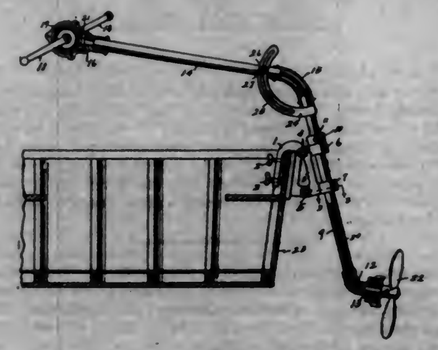
1,875,450. MATERIAL MIXING, FEEDING, AND MEASURING APPARATUS. ELMER E. HARPER, Kansas City, Mo. Filed Dec. 8, 1930. Serial No. 500,965. 20 Claims. (Cl. 221—97.)

1. Material handling apparatus comprising, in combination with means providing a discharge orifice, a cup adjacent to said orifice, means for effecting the discharge of a measured quantity of material from said cup through



said orifice, and means operating to empty and refill said cup between successive operations of said discharging means.

1,875,451. PROPELLING MEANS. ROBERT B. HARRIS, Houston, Tex. Filed Mar. 7, 1932. Serial No. 597,262. 4 Claims. (Cl. 115—24.)



1. A boat propelling device comprising a bracket adapted to be attached to a boat, upper and lower clamp means on said bracket, bearings in said clamp means, a tubular shaft housing in said bearings, means for adjusting said housing in said bearings, the lower end of said housing having a rearwardly turned portion provided with a shaft bearing, a flexible tubular coupling attached to the upper end of said housing, a forwardly extended tubular housing attached to said flexible coupling, a flexible shaft extending through said housings and coupling, manually operable means operatively connected with, and adapted to drive, said shaft the rear end of said shaft working through said shaft bearing and a propeller fixed to the rear end of said shaft.

1,875,452. FIBROUS MATERIAL AND PROCESS OF MAKING SAME. MAX HARTMANN, Riehen, near Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 27, 1929, Serial No. 381,688, and in Switzerland Aug. 8, 1928. 10 Claims. (Cl. 8—20.)

1. Process of altering the chemical properties of natural fibrous materials, comprising treating fibrous materials with organic isocyanates in the absence of solvents.

1,875,453. DOVETAIL. HOWARD B. HASKINS, Highland Park, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 21, 1931. Serial No. 582,237. 7 Claims. (Cl. 16—86.)

1. In a dovetail for an automotive vehicle of the type having interengaging male and female members adapted to be mounted on fixed and movable parts of the vehicle body, a casing adapted to receive the female member the side faces of the female member having a small clearance



with the casing, and anti-rattling means positioned between one of the side faces of the female member and the casing.

1,875,454. PROPELLER. CLINTON H. HAVILL, South Orange, N. J., assignor to Bendix Research Corporation, East Orange, N. J., a Corporation of Indiana. Filed May 20, 1931. Serial No. 538,801. 11 Claims. (Cl. 170—159.)



1. A built-up metal propeller blade having a separately formed root member, said member having a substantially cylindrical hub portion, a pair of oppositely disposed divergent arms integrally formed with respect to said hub portion, a ledge disposed on either side of said arms, and a pair of laminated blade members secured together at their outer extremities and secured at their inner extremities in said ledges.

1,875,455. COMBINED CONTAINER AND LAMP SHADE. JESSE WARRINGTON HAYES and ALMA B. HAYES, Takoma Park, Md. Filed Nov. 22, 1929. Serial No. 408,992. 5 Claims. (Cl. 229—39.5.)
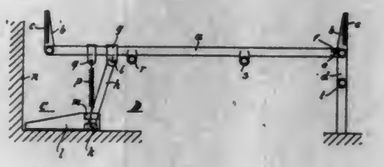


1. A device comprising a single sheet having a hole in the center for the purpose of admitting the neck of an electric light bulb, each of the four corners of said sheet being scored with a series of four lines and designed to fold inward, bringing the four side panels to inclined angles to form a lamp shade.

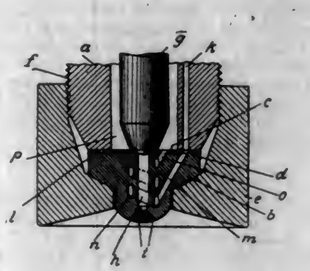
1,875,456. FOLDING BEDSTEAD. WALTER HERRDT, Frankfort-on-the-Main-Eschersheim, Germany. Filed Jan. 6, 1930, Serial No. 418,923, and in France Jan. 5, 1929. 1 Claim. (Cl. 5—139.)

An independent foldable bedstead adapted to be maintained in a horizontal or vertical position comprising in

combination, an oblong frame, freely movable foot supports connected to one end of the frame, other foot supports pivotally connected to the sides of the frame and spaced from the opposite end of the frame, angular foot members each including a horizontal attaching portion, and a vertical supporting portion, a pair of stops in the form of a loop carried on the vertical supporting portion of each of the foot members, the last mentioned foot supports being pivoted to the foot members and arranged within the loop between the stops, said stops acting to limit the pivotal movement of the adjacent foot supports within an angular amplitude of about 20° on each side relative to the vertical position, and tension springs arranged adjacent the inner sides of the last mentioned foot supports and having the respective ends connected to the lower pivotal connections of the last mentioned foot supports and to the sides of the oblong frame.



1,875,457. COOLING DEVICE FOR INJECTION NOZZLES OF INTERNAL COMBUSTION ENGINES. TORKILD VALDEMAR HEMMINGSEN, Copenhagen, Denmark. Filed Nov. 21, 1929, Serial No. 408,912, and in Denmark Dec. 29, 1928. 6 Claims. (Cl. 299—107.1.)

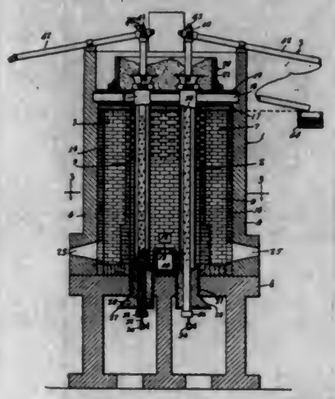


3. As a new article of manufacture, a fuel injection nozzle having a central fuel passage and atomizing passages communicating with its lower end, said nozzle having a helical passage surrounding the central passage for conducting fuel oil to the upper end of the central passage.

1,875,458. COMPOSITION OF MATTER AND PROCESS OF PREPARING THE SAME. WILLIAM H. HILL, Arlington, N. J., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 393,115. 5 Claims. (Cl. 134—51.)

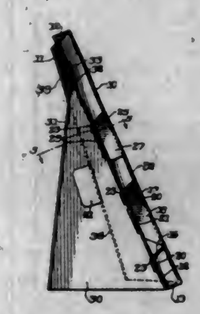
1. A process of preparing bituminous products, which process comprises heating coal and oil together to non-decomposing temperatures of the coal, namely about 200° C. to 400° C., to form a homogeneous fluid mass of coal and oil, maintaining the said mass in a fluid state, and mixing with the said mass a volatile solvent containing at least one of a group consisting of benzene, toluene, solvent naphtha, gasoline and turpentine, in sufficient amount only to thicken the said fluid mass.

1,875,459. FURNACE. CHARLES D. HOLMES, Santa Ana, Calif. Filed Apr. 11, 1931. Serial No. 529,332. 3 Claims. (Cl. 266—19.)



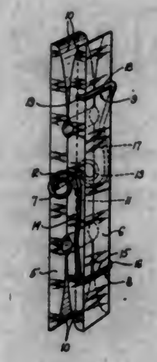
2. In an ore roasting furnace, a vertically disposed ore roasting retort, a vapor collector pipe extending through said retort and perforated a portion of its length in said retort, a downwardly inclined condenser tube connected at its upper end with the upper end of said vapor collector pipe, and means mounted upon the lower end of said vapor collector pipe for admitting a predetermined amount of air therein.

1,875,460. DISPLAY STAND. MITCHEL E. HOLT, Chicago, Ill., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,707. 11 Claims. (Cl. 211—157.)



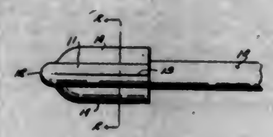
1. A collapsible display stand having in combination, a front panel, a rear panel arranged in spaced parallel relation to said front panel, openings in said front panel, flaps foldable from the edges of said openings, said rear panel having tab receiving slots adapted to receive tabs of said flaps whereby to provide pockets adapted to receive and display merchandise, supporting flanges foldable from the side edges of said rear panel to support said stand in an inclined position and additional flanges foldable from the side edges of said front panel and adapted to be detachably connected to the first-mentioned supporting flanges in order to strengthen the stand and to conceal the side openings between the front and rear panels.

1,875,461. DOUBLE ENDED CLOTHESPIN. ADELBERT C. HOPKINS, Spokane, Wash. Filed Mar. 26, 1932. Serial No. 601,335. 1 Claim. (Cl. 24—137.)



A double ended clothes pin comprising a pair of jaws disposed in juxtaposition and having opposed inner convex end face portions, one of said jaws having a groove centrally disposed across its outer face, the other jaw having a groove disposed across its outer face at each of its end portions, a spring wire clamping member comprising a cross bar portion fitting into the central groove of the one jaw, said bar having a spiral portion formed at each end thereof and fitting snugly against both of the opposite sides of the juxtaposed jaws, arm portions extending respectively from each of said spiral portions in opposite directions and snugly against the opposite sides of the other jaw, each of said arms deflected at right angles to form fingers repectively fitting into the grooves at the end portions of said other jaw, and the ends of said fingers bent at right angles to fit around the corner edges of said jaw.

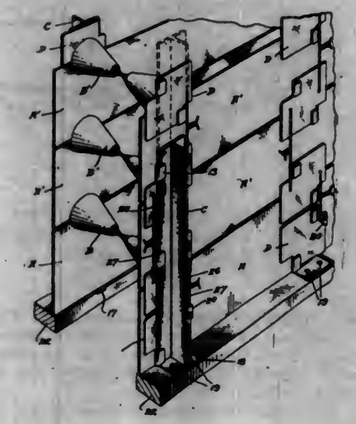
1,875,462. CURTAIN ROD THREADER. LINUS D. HOUSER, Winchester, Calif. Filed Oct. 17, 1931. Serial No. 569,487. 1 Claim. (Cl. 223—38.)



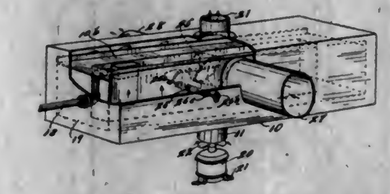
A curtain rod threader for round or flat rods, comprising a cylindrical body open at one end, a blunt member formed with the opposite end, said body being split longitudinally at diametrically opposed points, and a pair of opposed longitudinally extending offset portions formed with the body, said offset portions being arcuate in transverse section and having a radius less than the radius of the body.

1,875,463. CONCRETE FORM. OSGOOD K. JONES, San Francisco, Calif. Filed June 30, 1931. Serial No. 547,889. 7 Claims. (Cl. 28—131.)

3. In a form structure of the character described, a plurality of brace bars, a plurality of elongated side plates forming the side walls of the form, a plurality of guide platea interposed between the side plates and the brace bars, means frictionally securing the brace bars to the guide plates, a plurality of spacing units interposed between the side plates, and tie wires extending through the spacing units, said wires also extending between the side plates and through the guide plates and tied thereto.



1,875,464. HUMIDIFYING DEVICE. LEBERT E. JORDAN, Minneapolis, Minn. Filed Nov. 28, 1930. Serial No. 498,629. 10 Claims. (Cl. 261—13.)

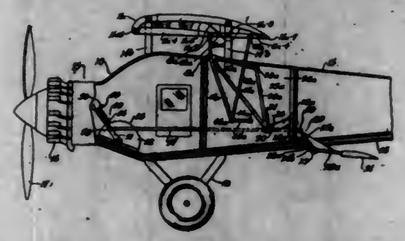


1. A heating and humidifying device adapted to be used in connection with a furnace having in combination, a closed casing, a water pan at the upper end of said casing, said closed casing having a chamber therein within said casing, an inlet conduit connected to one side of said chamber adapted to be connected to the smoke pipe of the furnace, an outlet conduit at the opposite side of said chamber adapted to be connected to a chimney, said pan having an extension disposed in said chamber, the gases passing through said inlet and outlet conduits passing around said extension and inlet and outlet conduits for air in said casing respectively below and above said pan.

1,875,465. AIRCRAFT AND AUTOMATIC CONTROL THEREFOR. HERMAN KLINGAMAN, Louisville, Ohio. Filed Aug. 17, 1931. Serial No. 557,456. 8 Claims. (Cl. 244—29.)

1. An airplane including a fuselage, a set of lifting airfoils mounted on the fuselage and operatively associated

with each other and constituting a composite airfoil having variable aerodynamic characteristics, aerodynamically actuated control means operatively mounted on the fuse-

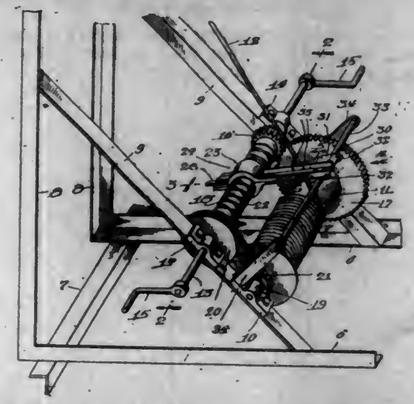


lage, the control means including a control airfoil located below the fuselage, and means operatively connecting the control means with the set of lifting airfoils.

1,875,466. INSECTICIDE. HUGH KNIGHT, Glendora, Calif., assignor, by direct and mesne assignments, to Emulsoids, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1929. Serial No. 406,534. 15 Claims. (Cl. 167—22.)

1. An insecticide comprising butyl-ricinoleate and an emulsifier.

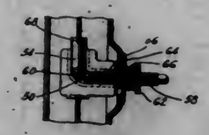
1,875,467. LEVEL WINDING MECHANISM FOR SEWER CLEANERS. LEONARD KNOERZER and ARTHUR T. KNOERZER, Hammond, Ind. Filed Dec. 19, 1929. Serial No. 415,159. 2 Claims. (Cl. 242—158.)



1. Winding mechanism for sewer cleaners comprising in combination a drum upon which a cable is wound, a drive shaft extending parallel with the drum, power transmitting gearing between said power shaft and drum, a sleeve rotatably mounted on said drive shaft and having a continuous helical trackway formed in its face, drive mechanism for said sleeve operated by said drum, a cable guiding arm having a collar surrounding said sleeve and provided with a shoe traveling in the groove of said sleeve, and guiding means for said arm arranged to impart right line movement to said arm.

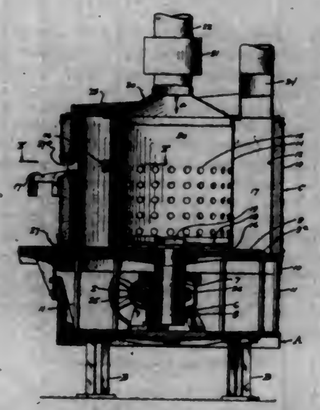
1,875,468. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1931. Serial No. 512,320. 14 Claims. (Cl. 188—79.5.)

2. A brake comprising articulated friction elements, means connecting the articulated ends of the friction elements and shiftable with said elements and including a member having a conduit, a movable plunger in one end of the conduit engaging one of the friction elements, a flange on the member having a notch for the reception of the



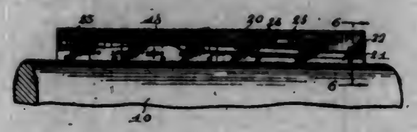
other friction element, a thrust screw in the other end of the conduit, a flexible connection between the plunger and the thrust screw and means for locking the thrust screw in adjusted position.

1,875,469. APPARATUS FOR DRYING CAN ENDS CONTAINING A SEALING COMPOUND. FRANK KRUEGER, San Francisco, Calif., assignor to Pacific Can Co., San Francisco, Calif., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,688. 9 Claims. (Cl. 34—32.)



9. In a machine of the character described a circular rotatable table adapted to receive and support a plurality of can ends, and means for stacking the can ends upon said table into an irregular pile, said means comprising an annular inclined surface provided along the outer edge of said table, and a feeding member adapted to deliver can ends to the table at a level next below the pile of ends previously delivered and force them against the said inclined surface underneath the pile.

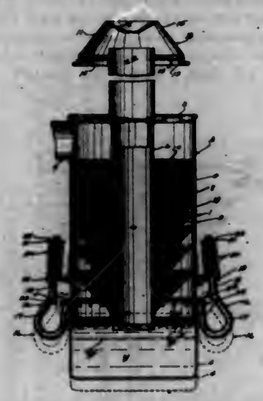
1,875,470. SPEED INDICATOR. ALPHONSE L'HÉRAULT, Three Rivers, Quebec, Canada. Filed June 16, 1931. Serial No. 544,914. 5 Claims. (Cl. 264—15.)



1. A device for indicating the rotary speed of a rotating member comprising an elongated scale attached to the exterior surface of the rotating member and extending lengthwise of the axis of the rotating member, and a resilient member fastened at one end to the rotating member

disposed to swing outwardly by the centrifugal force exerted by the rotating member during the rotary operation thereof co-operating with the scale to indicate the rotary speed of the rotating member.

1,875,471. AIR CLEANER. WILFRED W. LOWTHER, Minneapolis, Minn., assignor to Donaldson Company, Inc., St. Paul, Minn., a Corporation of Minnesota. Filed July 20, 1931. Serial No. 551,884. 5 Claims. (Cl. 183—10.)



1. In an air cleaner, the combination with a casing comprising a shell-like section having an opening in its lower end and inlet and outlet passages, a fluid reservoir normally frictionally engaging the open end portion of the casing and affording a closure therefor, of means for yieldingly pressing said fluid reservoir toward said open end section but permitting outward movements thereof under excessive internal pressure.

1,875,472. SAMPLING APPARATUS. ALEXANDER GRANT MCGREGOR, London, England. Filed Apr. 2, 1928. Serial No. 266,715. 7 Claims. (Cl. 73—21.)

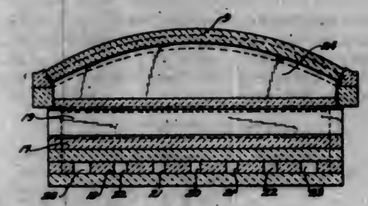


7. Apparatus for sampling crushed ore and like material consisting of a series of riffle splitters mounted in a series one below another, chutes between each adjacent pair of splitters in the series for directing samples divided off by the splitters above the chutes to the splitters below, by gravity, said chutes being provided with means to store sample material, and automatic means to discharge sample material, said means consisting of a counterweighted hinged bottom to the storage receptacle.

1,875,473. PROCESS OF AND COMPOSITION FOR STIMULATING PLANT GROWTH. RALPH H. MCKEE, Jersey City, N. J. Filed Dec. 11, 1929. Serial No. 413,432. 8 Claims. (Cl. 47—58.)

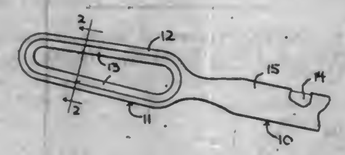
1. The process of stimulating plant growth comprising exposing the plant under treatment to an atmosphere containing vapors from shale oil, the concentration of said vapors being materially in excess of that which would result from the evaporation of shale oil under ordinary conditions at atmospheric temperatures.

1,875,474. APPARATUS FOR PRODUCING MOLTEN GLASS. THOMAS C. MCKINLEY, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 23, 1927. Serial No. 242,088. 6 Claims. (Cl. 49—54.)



1. In glass apparatus, a tank furnace adapted to contain a mass of molten glass and including a melting chamber and a refining chamber, a bridge wall arranged within the furnace at substantially the juncture of the melting chamber and refining chamber for causing sub-surface glass to flow from the former into the latter, and means providing a plurality of spaced openings beneath said bridge wall through which the glass is caused to flow as it passes from said melting chamber into said refining chamber, said openings increasing respectively in size from the center of the furnace toward the opposite sides thereof.

1,875,475. TOOTHBRUSH. EDWIN M. MCNALLY, Indianapolis, Ind., assignor to The Tefra Co., Indianapolis, Ind., a Corporation of Delaware. Filed Feb. 10, 1931. Serial No. 514,802. 4 Claims (Cl. 15—176.)

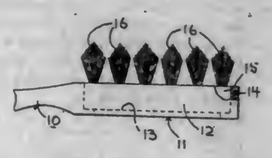


1. A toothbrush comprising a handle formed of metal, a loop on one end of said handle, a layer of comparatively much softer protecting material firmly bonded to the metal of said loop about the surface thereof, and a brush head removably held in tight gripping relationship in said layer-covered loop.

1,875,476. REMOVABLE HEAD TOOTHBRUSH. EDWIN M. MCNALLY, Indianapolis, Ind., assignor to The Tefra Co., Indianapolis, Ind., a Corporation of Delaware. Filed Feb. 10, 1931. Serial No. 514,803. 5 Claims. (Cl. 15—176.)

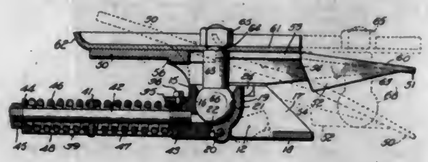
1. In a toothbrush, the combination of a handle, a loop at one end of the handle formed integrally with the handle, and a brush head mounted in said loop, said loop and handle being in the form of a molding of non-metallic material and said loop being provided with a reenforcing

metallic bow substantially completely surrounded on both its inner and its outer faces by said material and extending across one end of the loop and along the adjacent portions



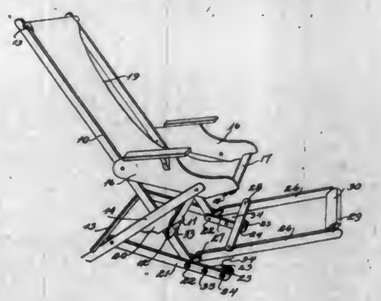
of the sides of the loop serving to press the side portions of the loop into firm gripping relationship to the side portions of the brush head.

1,875,477. COUPLING DEVICE. FRANK L. MILLER, Parkersburg, W. Va., assignor to Davis-Miller Engineering Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed Mar. 30, 1931. Serial No. 526,511. 13 Claims. (Cl. 280—33.)



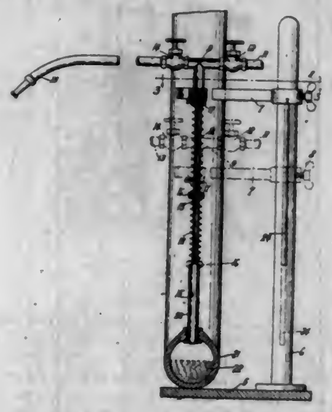
1. A device of the character described comprising a body adapted to be mounted over a portion of a motor vehicle adjacent the rear end thereof and having a portion forming a socket member, a coacting socket member pivotally connected to said body to swing vertically between operative and inoperative positions, means for locking said last named member in operative position, said members forming a spherical socket, a coupling element adapted for connection with a vehicle to be towed by said motor vehicle, and a guide plate pivotally connected to said body and operative for engaging said coupling element to position the latter laterally and vertically for movement into said socket members.

1,875,478. CHAIR. THOMAS J. MILES, Louisville, Ky. Filed Sept. 5, 1930. Serial No. 479,995. 5 Claims. (Cl. 155—36.)



1. In a folding chair, a back frame including spaced side members, a rest frame including side members spaced equally with the back frame side members and positioned directly in front of the same, pivotal connections between the lower ends of the back frame side members and the lower ends of the rest frame side members, said rest frame being pivotally movable between a position adjacent and substantially parallel to the back frame to constitute a back rest and a position extending forwardly from the back frame to constitute a foot rest, and a seat frame including side members pivoted at their rear ends to the outside of the back frame side members to lie out of the paths of the rest frame side members.

1,875,479. METHOD AND APPARATUS FOR REMOVING WATER FROM AIR BAGS OR THE LIKE. HENRY R. MINOR, Cleveland, Ohio, assignor to Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 11, 1930. Serial No. 501,507. 10 Claims. (Cl. 18—2.)



1. That the method of removing liquid from air bags, which comprises standing the air bag in an upright position with the stem at the bottom, applying air pressure to the interior of the bag, while maintaining air pressure above atmospheric pressure within the bag, inserting a tube thru the stem of the bag down into the liquid and opening said tube to the atmosphere so that the air pressure in the bag forces the liquid out the tube.

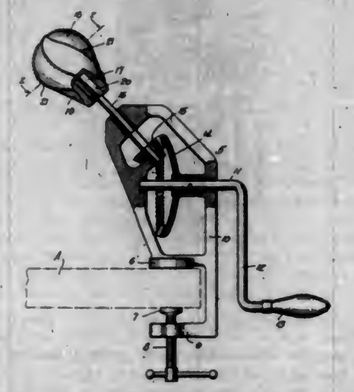
1,875,480. SAFETY RAZOR. GILES S. MOORE, Indianapolis, Ind. Filed Dec. 19, 1931. Serial No. 582,148. 2 Claims. (Cl. 30—12.)



1. A safety razor of the kind described comprising a head portion having a screw threaded stud thereon, a plate, a handle portion adapted to be secured on the screw threaded stud and to hold the plate between it and the head, a blade secured between the head and the plate, one edge of the plate being hinged to permit it to swing away from the cutting edge of the blade, a finger on the said hinged portion engageable by the handle to hold the hinged edge out of engagement with the cutting edge of the blade, substantially as set forth.

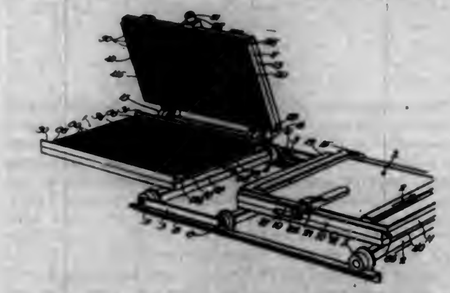
CARNEGIE LIBRARY OF ATLANTA

1,875,481. GRATER. VALERIANO I. MORANTE, Pasadena, Calif. Filed Dec. 17, 1930. Serial No. 503,078. 1 Claim. (Cl. 146—7.)



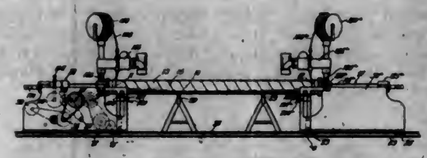
In a cocoanut grater, a bracket including an upwardly and inwardly extending super-structure, a shaft journaled for rotation in the super-structure and having a portion extending upwardly beyond and inwardly from the upper end thereof, means carried by the bracket for transmitting power to said shaft, and a grating member carried by the aforementioned portion of the shaft and consisting of a body of a shape having a gradually reduced neck portion at its inner extremity and a substantially spherical outer portion, the walls of the latter merging into the walls of the neck portion, said grating member having spaced apart rows of grating teeth extending from a point at the axis of said spherical portion to a point at the inner extremity of said neck portion.

1,875,482. PLATE FOR MAKING WAFERS. FRANK S. NANNA, Chicago, Ill., assignor to Thinshell Candies, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1931. Serial No. 573,630. 4 Claims. (Cl. 107—58.)



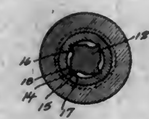
4. A pair of mold plates for making wafers or the like comprising a lower plate having upwardly extending ridges along the ends thereof, an upper plate having flanges formed along the ends thereof and adapted when the upper plate is closed against said lower plate to overhang the ends of the latter, vent means formed in said ridges and in said flanges to provide restricted passageways for the escape of vapors and the like from the mold space between said plates, and cooperating gauging notches formed near the ends of said flanges and said ridges.

1,875,483. APPARATUS FOR FORMING PIPES AND THE LIKE. CARL G. NAYLOR, Chicago, Ill., assignor to Naylor Pipe Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1929. Serial No. 389,712. 9 Claims. (Cl. 219—8.)



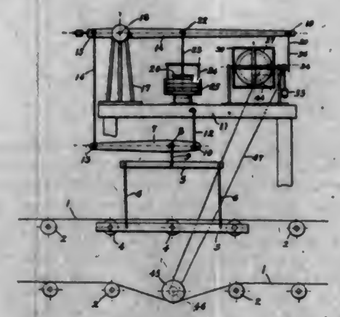
1. Apparatus for handling pipe while work is being done thereon, said apparatus comprising a pair of spaced mechanisms, one of said mechanisms being movable toward and away from the other, each of said mechanisms comprising a rotatable member adapted to hold one end of the pipe, and means including clutch means carried by said movable mechanism for displacing it away from and toward the other.

1,875,484. SCREW EXTRACTOR. FERDINAND NIGRA, Los Angeles, Calif. Filed Nov. 25, 1930. Serial No. 498,013. 8 Claims. (Cl. 81—71.)



1. An extractor of the character described, comprising: a body having a head adapted to be driven and an engagement portion extending therefrom there being substantially straight ribs on the exterior of said engagement portion for engaging an opening in a screw, said ribs having leading and following faces so disposed that outwardly faced engagement edges are formed on said ribs which converge relative to the axis of the extractor, said leading faces approaching closely to radial position adjacent said engagement edges so that the rotational forces transmitted by said leading faces to the screw will be substantially tangential to the circle of engagement of said ribs with the screw.

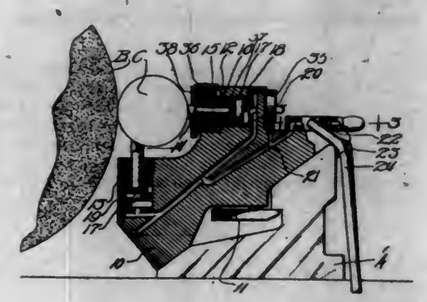
1,875,485. BELT CONVEYER SCALE OR THE LIKE. YOSHINOBU OKADA, Ikegami-Cho, Japan. Filed Dec. 29, 1931, Serial No. 583,775, and in Japan Oct. 3, 1931. 3 Claims. (Cl. 285—28.)



1. An automatic apparatus for integrating the weight being transported, comprising a scale beam in neutral equilibrium, an integrating mechanism in stable equili-

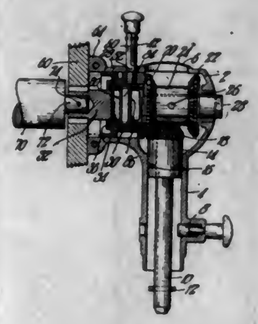
brium including a disc and a rotatable frame rotatably supporting the said disc, a circular cam provided on the said frame, and a flexible means connecting the said cam and the said scale beam.

1,875,486. STEADY REST MECHANISM. WILLETTS PEASLEE, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 30, 1927. Serial No. 179,632. 12 Claims. (Cl. 51—238.)



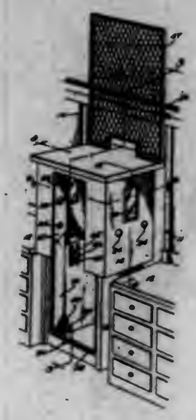
1. A steady rest mechanism of the character described, including a supporting block, pressure cylinders within the block, pistons movable in the cylinders and having projecting work engaging shoes, means for jointly introducing pressure into the cylinders, and automatic means preventing reverse flow of introduced pressure.

1,875,487. MANGLE OR WRINGER CONSTRUCTION. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 6, 1932. Serial No. 584,920. 5 Claims. (Cl. 74—58.)



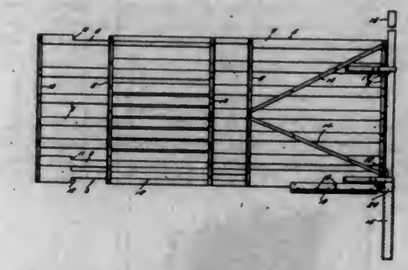
1. An apparatus of the class described comprising in combination, a housing, a drive shaft rotatable therein carrying a driving element, a driven shaft having a rear end rotatable and reciprocable in the rear end of said housing, a cam oscillatable and reciprocable in said housing at the forward end thereof rotatably receiving the forward end of said driven shaft, a driven element fixed to said driven shaft between said cam member and the rear end of said housing, means associated with said driven shaft and cam to hold them against relative reciprocation and means associated with said cam as it is oscillated in said housing to move said driven shaft and bring said driven element into and out of engagement with the driving element.

1,875,488. BULLET-RESISTING CABINET. FRANK B. PETERS, Minneapolis, Minn. Filed June 6, 1931. Serial No. 542,569. 13 Claims. (Cl. 20—1.01.)



1. A bullet-resisting extensible cabinet comprising a base section and a vertically movable top section telescoped onto the base section, said cabinet having a door opening formed in part in each of the two sections thereof, a door section for the door opening in each section of the cabinet and mounted on the respective section thereof, power means for raising the top section, and manually-controlled means for setting the power means into action.

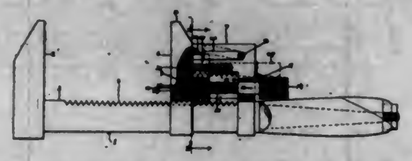
1,875,489. GATE. WILLIAM B. PETERSON, Hannibal, Mo. Filed Sept. 21, 1931. Serial No. 564,204. 1 Claim. (Cl. 39—75.)



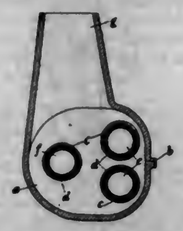
The combination with a gate post, a gate, and means connecting the gate with the post for swinging movement horizontally and sliding movement vertically; of means for securing the gate at a desired elevation comprising a collar on said gate post and having laterally extending ears, a rod pivotally connected at one end with said ears, a bar fixedly secured to the gate adjacent the lower edge thereof and elongated longitudinally of the gate, and also being provided with an elongated longitudinal slot, and a longitudinal series of relatively spaced notches adjacent said slots, and said rod having a free end thereof formed to operate in said slot and to engage a selected one of said notches.

1,875,490. WRENCH. WILLIAM R. PHILLIPS, Sr., Atlanta, Ga. Filed Nov. 4, 1931. Serial No. 572,968. 2 Claims. (Cl. 81—162.)

2. A wrench of the class set forth a stationary jaw on an angular shank provided with annular threads or teeth on its upper side facing a movable jaw, arranged upon the shank, said movable jaw including a head and carriage having a transverse opening, a headed and threaded screw pin member arranged in the carriage and positioned centrally, transversely and just slightly above the toothed shank in the opening of the carriage longitudinally in a suitable position for threadedly engaging in a threaded nut, said nut also having an annularly shaped toothed top and bottom for engaging in like teeth on the shank below and a longitudinally slidable prism above containing also like teeth to secure the said jaw in an absolute immovable position on the shank, said prism having a longitudinally extending bore in its inner end housing a spiral spring, one end of which is fixed in said housing and its other end extending beyond said prism and fixedly seated in a cavity in the front wall of said transverse opening, and a latch pivotally mounted on said carriage to engage one end of a leaf lever on said nut to securely lock the same in inoperative position.

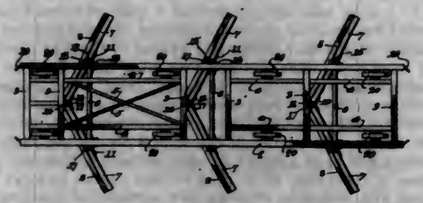


1,875,491. MANUFACTURE OF SPUN GLASS. FELIX POLLAK, Vienna, Austria. Filed May 21, 1931, Serial No. 539,074, and in Great Britain Feb. 28, 1931. 2 Claims. (Cl. 49—17.)



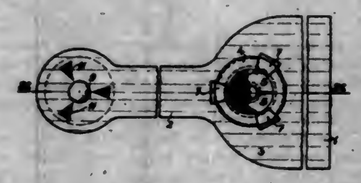
2. In means for heating raw glass in the manufacture of glass threads, the combination of a heating chamber having outlet means through which glass can be withdrawn from the chamber in filament form, a pair of heating elements spaced apart in parallel relation within the chamber adjacent to the outlet means, the relative disposition of the outlet means and heating elements being such that the said means are opposite to the space between said elements, and an additional heating element situated adjacent to the first mentioned heating elements at the side remote from the said outlet means, substantially as described.

1,875,492. ROAD GRADING MACHINE. JOHN BAILEY PRIDGEN, Charlotte, N. C. Filed June 24, 1931. Serial No. 546,631. 4 Claims. (Cl. 37—172.)



1. In a road grading machine, the combination of heavy longitudinal beams, a plurality of cross-beams attached to the longitudinal beams and together constituting the main frame, a series of blade units comprising blade carrying beams arranged in V-form and disposed beneath the main frame of the machine, cutting blades attached to said blade supporting members, said blades and supporting members projecting laterally considerably beyond the main frame of the machine to operate to the desired width on the road to reduce the weight of the machine without reducing its range of operation, and means for independently adjusting the blade units for operating at successively deeper levels on the road-bed.

1,875,493. ATTACHMENT FOR BAGGAGE AND THE LIKE. VOJTĚCH PUC, Prague, Czechoslovakia. Filed Sept. 24, 1931. Serial No. 564,914. 1 Claim. (Cl. 40—21.)



An attachment for baggage and the like consisting in the combination of a card with a narrow band running from one end of the card and a bachelor's button, the spring part of the button which is arranged in the part of the card which runs into the band and consists of a perforated disc lying on one side of the card with slits running from the edge of the hole, and a cap on the other side of the card, the marginal tongues of which are pushed through the card and bent back over the disc.

1,875,494. ART OF DISINFECTING SEEDS. WALTER P. RALEIGH, Ames, Iowa, and CROMWELL B. DICKEY, Milwaukee, Wis., assignors to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 6, 1928. Serial No. 252,425. 4 Claims. (Cl. 167—38.)

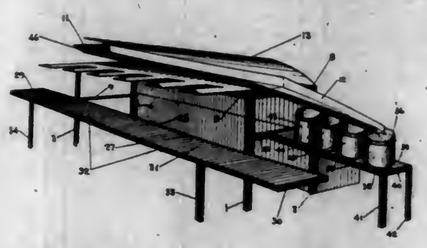
4. The herein described finely pulverized disinfectant for corn and like seeds consisting of an inert carrier comprising graphite and basic mercury carbonate.

1,875,495. THRESHOLD. FRANK REESE, Minneapolis, Minn., assignor to Reese Metal Weather Strip Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 10, 1930. Serial No. 427,355. 3 Claims. (Cl. 20—69.)



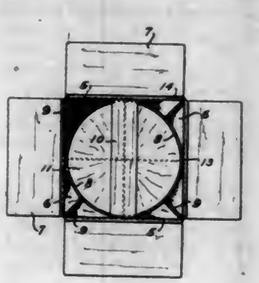
1. A threshold having inner and outer supporting flanges the former of which at its junction with the threshold is laterally spaced from the inner edge of the threshold, the outer face of the inner flange at the bottom edge thereof is substantially directly under the inner edge of the threshold, and a flashing under the threshold and extending outward of its two flanges, said flashing having at its inner edge a perpendicular flange with which the inner flange of the threshold engages to position the threshold on the flashing.

1,875,496. EGG BREAKING AND PACKING TABLE. RICHARD W. REGENSBURGER, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,658. 3 Claims. (Cl. 146—2.)



1. A work bench of the class described comprising a longitudinally extending frame work, a plurality of spaced longitudinally arranged egg breaking stations, each such station being provided with an egg breaking device mounted on a shelf carried by and projecting forwardly from the upper front portion of the frame work, a longitudinally extending conveyor located below said shelves and accessible to said egg breaking stations for the cartage of containers of whole eggs, a longitudinally extending trough located at the top of the frame work to receive the contents of the eggs, a forwardly and upwardly projecting hood that extends longitudinally over a portion of the trough, and a support or conveyor adapted to hold receptacles to be individually filled by receiving such egg contents from the discharge end of said trough.

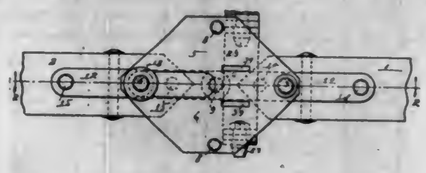
1,875,497. CONTAINER. DELL R. RICHARDSON and HENRY M. WOLLUM, Owen, Wis. Filed Dec. 15, 1930. Serial No. 502,337. 2 Claims. (Cl. 229—14.)



1. In a container, an endless series of end connected side walls foldable at their adjoining ends to either form a box structure when distended or lie flat in close proximity to each other when collapsed, and a secondary flexible wall permanently attached intermediate its ends to the inside medial portion of each of said side walls, each of said secondary walls having its opposite ends remote from the place of attachment thereof to the adjacent side wall foldable to position said ends either diagonally of the distended box structure to distort the series of secondary walls into continuous circular formation due to the permanent medial attachments thereof or between the adjacent side and secondary walls so as to cause the composite wall structure to fold flat when collapsed.

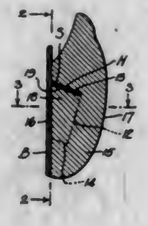
1,875,498. OAR. JOSEPH FRED ROBBIN, Grand Rapids, Mich. Filed Mar. 23, 1931. Serial No. 524,565. 12 Claims. (Cl. 9—25.)

1. In an oar of the character described: a middle member having a slide bearing in fixed relation therewith extending in the oar's longitudinal direction; a blade portion and a handle portion having their adjacent ends directly connected pivotally, one of said portions being



mounted on the middle member swingably, and the other one of said portions being mounted on the middle member swingably and slidably in said bearing.

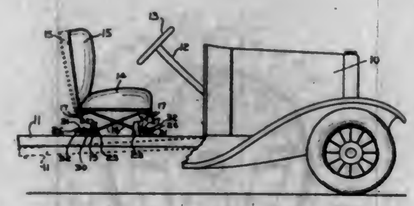
1,875,499. MOUNTING FOR ARTIFICIAL TEETH. WILLIAM F. RODIN, Los Angeles, Calif. Filed Dec. 1, 1930. Serial No. 499,392. 1 Claim. (Cl. 32—9.)



A mounting comprising a backing having a head of U form projecting at an acute angle from one side thereof and providing spaced apart parallel walls and a curved connecting wall co-acting therewith and with the backing to form a pocket, and a tooth having a socket complementary to the head to provide a tongue in the socket entering the pocket of the head when the latter is received in the socket, the socket extending from the lingual side of the tooth and inclining labio-occlusally from the lingual side and disposing the spaced apart parallel walls of the head vertically with their free ends in the incisal portion of incisors and in the buccal portion of molars and bicuspids.

1,875,500. VEHICLE SEAT. CLYDE A. ROEDER, Omaha, Nebr. Filed Feb. 12, 1931. Serial No. 515,149. 5 Claims. (Cl. 155—9.)

1. A seat support, comprising a pair of crossed arms, means for securing the upper ends of the arms to the underside of the seat, said arms having cylindrical portions on their lower ends and provided with shaft portions extending substantially horizontally from the cylindrical portions, posts for said crossed arms adapted for attachment to a supporting frame, links pivotally mounted on the upper ends of the posts, said links having forks at their lower ends adapted to embrace said cylindrical portions of the arms, pivot pins carried by the forks of the links and engaging through said cylindrical portions of the arms for hingedly connecting the arms to the lower ends of the links, bracket plates adapted to be mounted on the support in spaced relation to the post, and having vertical slots therein adapted to receive said shaft portions of the arms therethrough, and springs mounted on said shaft portions at opposite sides of the bracket plates and adapt-



ed to bear thereagainst for yieldably checking the movements of said arms and the swinging movements of said links.

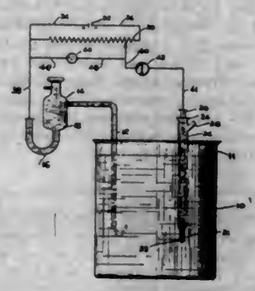
1,875,501. MOLD OR CORE WASH. WALTER G. ROEPKE, Clayton, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,437. 5 Claims. (Cl. 22—189.)

3. A mold or core wash comprising ammonium nitrate and a liquid solvent.

1,875,502. COMPOSITION OF MATTER AND PROCESSES OF PREPARING THE SAME. HAROLD J. ROSE, Penn Township, Allegheny County, Pa., and WILLIAM H. HILL, Arlington, N. J., assignors to The Koppers Company of Delaware, a Corporation of Delaware. Filed Sept. 16, 1920. Serial No. 393,124. 5 Claims. (Cl. 134—51.)

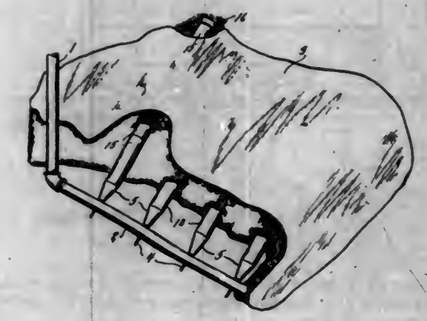
1. A process of preparing bituminous products, which process comprises heating coal and oil solvent for coal together to non-decomposing temperatures of the coal, namely about 200° C. to 400° C., to form a homogeneous fluid mass, maintaining the said mass in a fluid state, and mixing with the said mass a composition of aliphatic nature selected from a group consisting of vegetable oil, paraffin oil, paraffin wax, lubricating oil, petroleum still residue, and asphalt in sufficient amount to form a thickened mass upon addition thereof.

1,875,503. PROTECTED HYDROGEN ELECTRODE. BEN W. ROWLAND, Appleton, Wis., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 6, 1931. Serial No. 506,903. 5 Claims. (Cl. 204—5.)



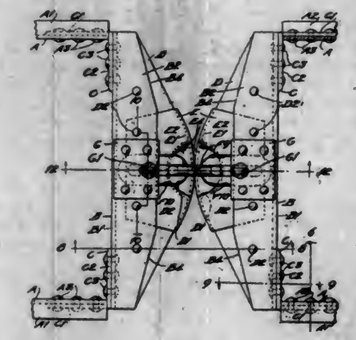
2. A hydrogen ion electrode which is coated with a continuous film comprising a semipermeable cellulose derivative.

1,875,504. METHOD AND APPARATUS FOR SOIL STERILIZATION. WILLIAM SALISBURY, Toledo, Ohio. Original application filed July 17, 1930, Serial No. 468,612. Divided and this application filed Apr. 25, 1931. Serial No. 532,804. 8 Claims. (Cl. 47—48.)



1. The method of sterilizing soil comprising discharging steam directly thereinto from a sub-surface source, confining the steam to a downwardly directed discharge.

1,875,505. MINE CAR. HUGH W. SANFORD and WILLIAM O. MCKAMEY, Knoxville, Tenn. Filed Jan. 26, 1931. Serial No. 511,412. 3 Claims. (Cl. 213—220.)

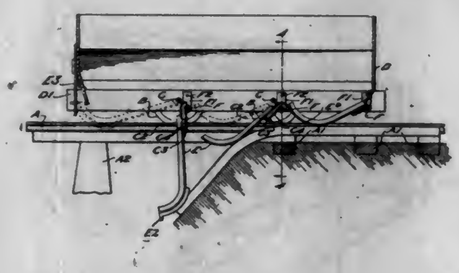


1. A horizontal metal bumper for a mine or similar rail car, said bumper comprising an upright wall and said bumper also comprising an upper flange directed toward the car body and the bumper having at the middle upright longitudinal plane of the car an indentation formed by indenting the upper part of said wall and the adjacent part of said flange, the depth of the indentation being only as much as is needed to receive the lower part of one end of a horizontal coupling link resting in an upright plane, whereby the lower portion of said wall is uninterrupted.

1,875,506. RAILWAY. HUGH W. SANFORD, Knoxville, Tenn. Original application filed Oct. 1, 1927, Serial No. 223,356, now Patent No. 1,802,445, dated Apr. 28, 1931. Divided and this application filed Mar. 5, 1931. Serial No. 520,420. 17 Claims. (Cl. 105—253.)

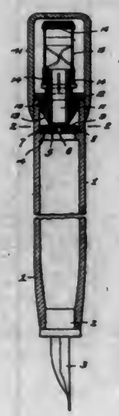
1. In a dumping car, the combination of a protecting frame structure, wheels and axles for supporting said

structure, a plurality of transversely hinged drop-bottom dumping doors for said car, hangers carried by the frame structure and means carried by the hangers for hingedly



supporting at least one of said doors, said means having the hinging axis disposed above the bottom of the protecting frame structure.

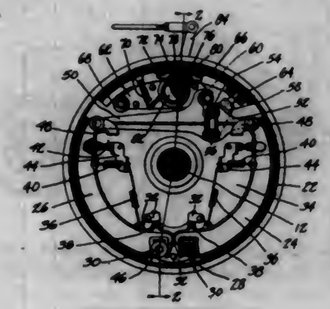
1,875,507. FOUNTAIN PEN. VICTOR SAVIO, Los Angeles, Calif. Filed Dec. 11, 1931. Serial No. 580,392. 14 Claims. (Cl. 120—46.)



1. A fountain pen filler comprising a compressible sack in one end of the barrel operable to withdraw the air contained in the barrel and expel the same exteriorly of the sack to thereby create a suction at the opposite end of the barrel, and a valve for partly closing the greater length of the barrel against the sack in the compressive action of the latter, said valve closing the sack against the fluid admitted to the barrel under the suction created in the operation of the sack.

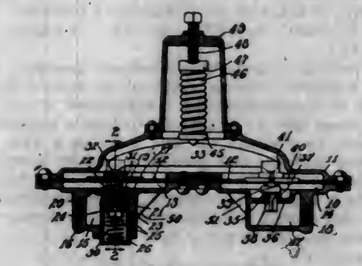
1,875,508. BRAKE. ERNEST W. SEAHOLM, GUY E. PARKER and ARTHUR H. STAHLHUTH, Detroit, Mich., assignors to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1924, Serial No. 692,526. Renewed May 22, 1931. 24 Claims. (Cl. 188—78.)

1. A brake comprising, in combination, a drum, a pair of pivoted shoes within the drum, a push member engaging the free end of each shoe, the inner end of each push member being formed with two recesses, the recesses in the two members being alined to form a pair of bearings,



a floating lever having a pair of pins in the bearings, and a servo shoe connected to the lever to rock it when moved circumferentially by the drum.

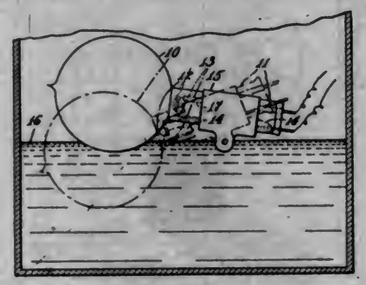
1,875,509. PRESSURE REGULATOR FOR HOT WATER HEATING SYSTEMS. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,189. 6 Claims. (Cl. 277—21.)



1. A pressure regulator comprising an inlet, a delivery passage and a drainage outlet, a variable-volume inlet chamber, flow-controlling member interposed between said inlet and said variable-volume inlet chamber and connected to the variable element of said variable-volume inlet chamber, means for normally urging said flow-controlling member to flow-obstructing position, a variable-volume drainage chamber, a flow-controlling member interposed between the variable-volume drainage chamber and the drainage outlet and positioned by the variable element of the variable-volume drainage chamber, a single yielding means acting simultaneously upon the variable elements of the two variable-volume chambers, and communicating connections between the delivery passage and the two variable-volume chambers.

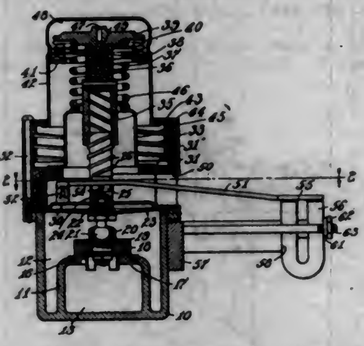
1,875,510. FLOAT SWITCH. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,191. 6 Claims. (Cl. 200—84.)

1. A glass body comprising a sealed chambered portion, electrical terminals sealed through the wall of said chambered portion and a mobile electrical conductor sealed in said chambered portion, and a second chambered portion isolated from the first-chambered portion as to the said mobile conductor and having a buoyant value such as to be capable, when associated with a variable level



body of liquid, to shift the terminal-carrying portion to vary the relation between the terminals and mobile electric conductor.

1,875,511. SNAP-ACTION MODULATING VALVE. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 22, 1931. Serial No. 510,400. 15 Claims. (Cl. 137—139.)



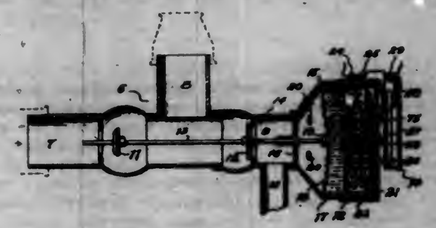
1. A modulating valve comprising a hollow main body having communicating inlet and outlet chambers, a movable valve shiftable to vary the communication between said chambers, an expansible and contractible bellows, an axially adjustable abutment for one end of said bellows, a variable length connection between the other end of said bellows and the valve adjustably dependent upon the adjustable bellows abutment, and a spring arranged to have a one-way action upon the valve.

1,875,512. SKI. ENRICO SILVESTRI, Milan, Italy. Filed May 7, 1931, Serial No. 535,752, and in Italy May 12, 1930. 9 Claims. (Cl. 208—184.)



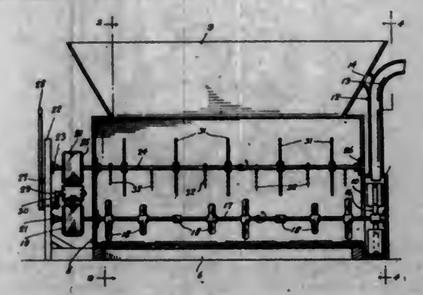
1. A folding ski comprising a ski section, a metal box fastened on one end of said ski section, a second ski section, a metal head fastened on one end of said second ski section and fitting in said box, a transverse member in said box having a curve surface, a nose on said head having a curve surface to mate with and engage said curve surface of said transverse member, cooperating tapering surfaces on said box and head, and screw means interconnecting said box and head to force said tapering surfaces and said nose and transverse member on each other.

1,875,513. THERMOSTATIC CONTROL FOR VALVES. WILLIAM DOUGLAS SMITH, Lumber Bridge, N. C., assignor of one-fourth to Arthur D. Malloy and one-fourth to Leighton Smith, Quitman, Ga. Filed Aug. 14, 1931. Serial No. 557,189. 3 Claims. (Cl. 137—34.3.)



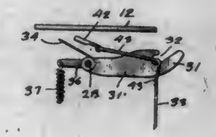
2. In a thermostatic control for valves, the combination of a pipe-coupling having extensions to form respectively connections for supply, service and drain pipes, a valve controlling the communication between the supply and service connections and a second valve controlling the communication between the service and drain pipe connections, a stem common to both valves with the latter arranged so that when one is opened the other is closed, a closed container for a volatile liquid, an expansible diaphragm constituting one of the walls of the container and attached to the valve stem, an electric heater adjacent to the container to vaporize the liquid therein to bulge the diaphragm to actuate the valve stem to close one of the valves and to open the other, the diaphragm responding to atmospheric pressure to return to its initial position on condensation of the vaporized liquid in the container, the return movement of the diaphragm actuating the valve stem to reverse the positions of the valves, and an element responsive to temperature changes for controlling the electric circuit of the heater.

1,875,514. FEED CUTTER. LOUIS C. SOILEAU, Jr., Rayne, La. Filed May 10, 1931. Serial No. 538,510. 2 Claims. (Cl. 146—107.)



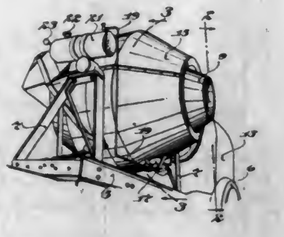
1. In a feed cutter and mixer of the class described, a casing including a hopper, a horizontal lower shaft in the lower portion of the casing provided with longitudinally spaced spirally arranged blades functioning as conveyor elements as well as beaters, and a rotary cutter in the upper portion of the casing including a shaft mounted directly above said first-named shaft and provided with longitudinally spaced rotary disc saws, and combined beater and saw cleaning elements on said second shaft.

1,875,515. STOP MOTION. CARL W. SPORK and FREDERICK J. HERZIG, San Francisco, Calif. Filed Sept. 25, 1931. Serial No. 565,068. 2 Claims. (Cl. 66—163.)



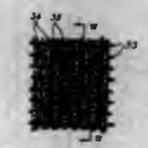
1. The combination with a knitting machine provided with a power clutch controlled by electromagnetic means having one side thereof electrically grounded to one side of said machine, of a stop-motion comprising a plate insulated from said machine and electrically connected to the opposite side of said electromagnetic means; a contact pivotally mounted adjacent the insulated member and normally held from contact therewith; a pair of parallel fingers connected to said contact and arranged to support a thread being knitted and extending across said fingers; a second contact pivotally mounted adjacent the first contact and the insulated plate and normally held in contact with said insulated plate; a lever connected to said second contact and resting parallel with and between the parallel fingers of the first contact, said lever being supported upon said thread to prevent contact of said second contact with said insulated plate, an increased tension of said thread operating to depress said fingers and move the first mentioned contact into contact with the insulated member, and a decreased tension or break in said thread operating to release said second mentioned contact into contact with said insulated member, whereby a contact of either contact with said insulated member may actuate the electromagnetic means and stop said machine.

1,875,516. HEATER FOR MIXERS FOR CONCRETE AND THE LIKE. PERCY F. STARY, Detroit Lakes, Minn. Filed Mar. 6, 1930. Serial No. 433,753. 4 Claims. (Cl. 83—73.)



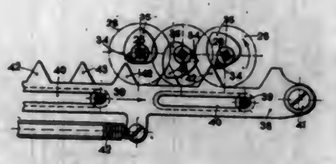
1. In a mixer of the class described, the combination with a drum mounted for rotary and tilting movements, of a jacket for the drum spaced therefrom to leave a hot air chamber therebetween, said jacket being mounted for common tilting movement with the drum and in which the drum is free to rotate in the jacket, a liquid fuel burner mounted to move with the jacket for heating the drum, and a fuel supply tank for the burner mounted on the jacket and having a supply conduit leading to said burner.

1,875,517. CORD FABRIC. SAMUEL A. STEERE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 25, 1930. Serial No. 484,290. 5 Claims. (Cl. 139—426.)



1. A breaker strip fabric composed of alternately heavy and light cords, the light cords being initially under tension and the heavy cords being initially free from tension.

1,875,518. ZERO RESETTING MECHANISM FOR ADDING MACHINES. ALBERT STEINMANN, La Chaux-De-Fonds, Switzerland. Filed Oct. 29, 1930, Serial No. 492,013, and in Switzerland Apr. 24, 1930. 2 Claims. (Cl. 235—144.)

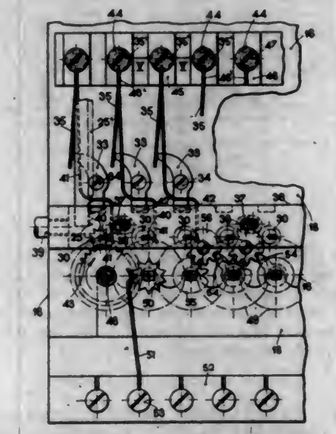


1. An adding machine comprising a totalizing mechanism having rotary numeral discs or wheels, and means for simultaneously re-setting the numeral discs to zero, the said means comprising a linearly movable rack having teeth arranged in two parallel rows, the teeth of one row being staggered relative to those of the other row, a biasing spring tending to re-set the rack after movement thereof, cams arranged one in advance of the other on each spindle of the numbered discs, so that cooperating teeth of the said rack are adapted to cooperate with the cams of the corresponding spindle for imparting to the spindle one or more successive angular impulses for re-setting the discs to zero, the number of impulses being determined by the angular position of the disc being re-set, the cams of each of the discs being reversed on their spindle with respect to the arrangement of the cams of the adjacent spindles.

1,875,519. ADDING MACHINE. ALBERT STEINMANN, La Chaux-De-Fonds, Switzerland. Filed Oct. 29, 1930, Serial No. 492,012, and in Switzerland Mar. 27, 1930. 12 Claims. (Cl. 235—60.)

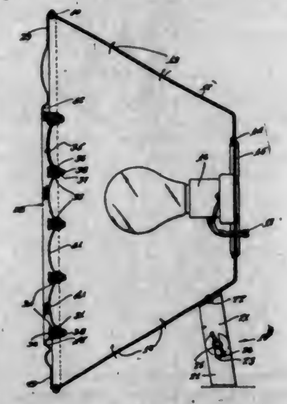
1. In an adding machine, comprising a frame, and a totalizing machine consisting of a plurality of counting disks, and a plurality of pinions for actuating them; means for setting said pinions, comprising a plurality of rectilinearly movable rack bars, means normally urging

said rack bars into their zero position, means for normally locking the rack bars in any position thereof other than zero, and in which position the rack bars engage



with and actuate said pinions, and means for disengaging said rack bars and pinions, and said locking means whereby the rack bars can be restored to their zero position.

1,875,520. SIGN. JULIUS STEINMETZ, Winthrop, Mass. Filed Dec. 24, 1931. Serial No. 583,009. 5 Claims. (Cl. 40—132.)



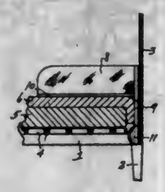
5. A sign comprising a supporting member, lighting means, a front formed of open mesh material attached to said member and forward of said means, said front having portions projected and depressed from the plane surface and having the openings covered by a light transmitting material, said projected portions forming surfaces for symbolic members, and means in said depressed portions to hold said members on said surfaces.

1,875,521. SPRING ASSEMBLY FOR UPHOLSTERY. LOUIS A. SUEKOFF, Wilmette, Ill. Filed Nov. 2, 1931. Serial No. 572,494. 3 Claims. (Cl. 155—179.)

1. A spring assembly comprising an articulate series of spring-filled fabric casings, a flat strip of sheet metal provided with a series of perforations spaced from each other a distance equal to the diameters of the springs in said casings, the latter having loose fabric portions at the ends of the meeting points of the several casings and at the extremities of the series thereof projecting through said perforations in said strip, and substantially non-elastic retaining means extending through said loose fabric portions and spanning said perforations on the face of the said strip opposite that upon which said casings are supported.

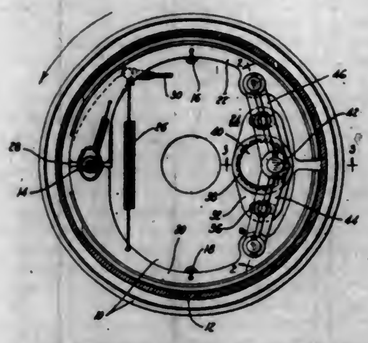


1,875,522. SANITARY BED ATTACHMENT. HENRY F. SWEET, South Bend, Ind. Filed Feb. 2, 1931. Serial No. 512,833. 2 Claims. (Cl. 5—330.)



2. A breath shield comprising a substantially vertically disposed plate supported on the bedding of a bed adjacent one end thereof, a downwardly extending member carried by said plate and terminating below the bedding and a counterweight carried by said downwardly extending member and entirely supported thereby, said counterweight forming means whereby said vertically disposed plate is normally maintained in a vertical position on the bedding.

1,875,523. BRAKE. EUGENE V. TAYLOR, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 24, 1931. Serial No. 558,973. 7 Claims. (Cl. 188—78.)

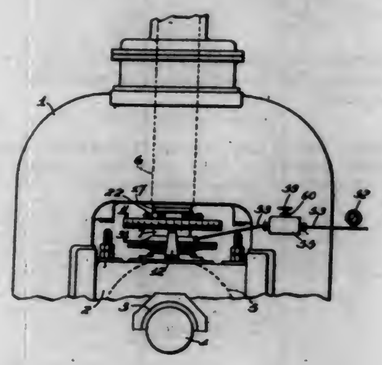


1. A brake comprising friction elements, an adjustable bracket, an eccentric supported by the bracket and links pivotally connecting the eccentric to the friction elements.

1,875,524. PRESSURE INDICATING MECHANISM FOR ROLLING MILLS. RICHARD L. TEMPLIN, Parnassus, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1930. Serial No. 478,500. 2 Claims. (Cl. 73—110.)

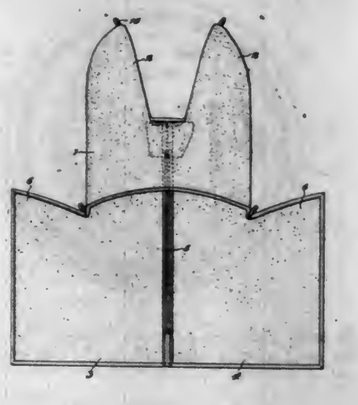
2. A pressure-measuring device, comprising a pair of flexible disc members having concave faces disposed in

superimposed relation to constitute a closed chamber, a gasket disposed between the engaging edges of the discs, a clamping ring having an internal bore disposed to engage the peripheries of the discs for retaining said gasket and having a shoulder for engaging the external face of one disc near the edge, a second clamping ring for engaging



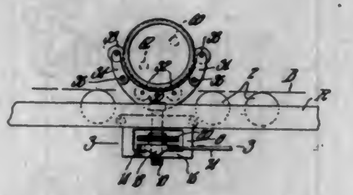
the edge of the other disc, means for holding the clamping rings to compress the edges of the discs into close engagement with the gasket, and pressure indicating means connected to the closed chamber for measuring the pressure to which the external surfaces of the discs may be subjected.

1,875,525. SLEEPING COVER FOR CHILDREN. ARTHUR L. THEXTON and MILDRED R. THEXTON, Cincinnati, Ohio, assignors to Arthur L. Thexton. Filed June 17, 1931. Serial No. 545,030. 6 Claims. (Cl. 5—334.)



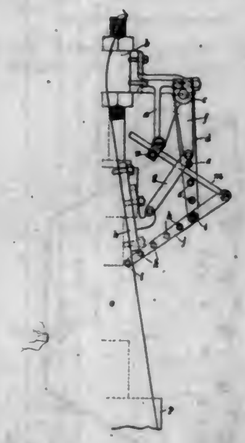
1. A sleeping cover for children, comprising, an envelope for the upper portion of the child's body, said envelope characterized by a neck opening at its upper end, and two arm enclosing pockets, one on each side of the neck opening, said pockets extending above the neck opening to permit the child to sleep with its arms and hands in an elevated position.

1,875,526. PAPER-MAKING APPARATUS. WALTER G. TROTMAN, West Springfield, Mass. Filed Jan. 14, 1932. Serial No. 586,579. 5 Claims. (Cl. 92—48.)



1. In a paper-making apparatus, means for rotatably supporting opposite ends of a dandy roll including means associated therewith for independently moving opposite ends of said dandy roll up and down and means for simultaneously moving the supports at opposite ends of the dandy roll up and down.

1,875,527. PRESS GUARD. JOHN POUNTNEY UDAL, Selly Park, Birmingham, England. Filed Apr. 1, 1931, Serial No. 526,942, and in Great Britain May 29, 1930. 1 Claim. (Cl. 74—105.)

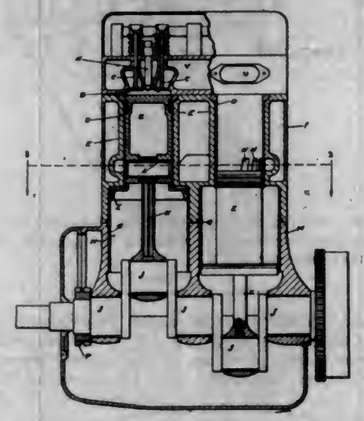


A press guard for a power press having a reciprocating plunger comprising brackets on said plunger, a cross-shaft mounted on said brackets, a primary guard member mounted on said cross-shaft, a lever attached to said cross-shaft, a link pivotally attached to said lever and a stationary part of the press, a second guard member pivoted on the primary guard and provided at its lower end with a hand striking member, an extension on said secondary guard member and a link having one end pivoted to said extension and the other end pivotally mounted on one of said brackets.

1,875,528. UNIFLOW TWO-STROKE CYCLE INTERNAL COMBUSTION ENGINE. STANLEY M. UDALE and CLYDE W. TRUXELL, Jr., Detroit, Mich., assignors, by mesne assignments, to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 14, 1929, Serial No. 385,899. Renewed Dec. 4, 1931. 8 Claims. (Cl. 123—65.)

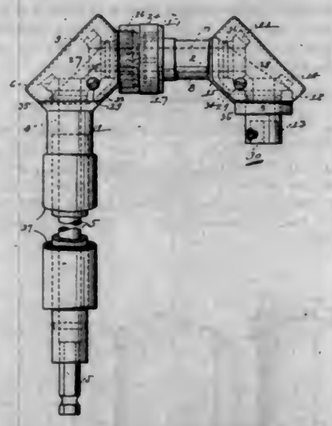
2. A two-stroke oil engine comprising a crank shaft having throws at 180°, a plurality of cylinders, pistons

therein connected to said crank shaft, a two-diameter cylinder, a piston therein connected to said crank shaft, said pistons fitting both diameters of said cylinder forming an upper combustion chamber and a lower, annular air pump, inlet ports located in the lower portions of said combustion chamber so as to be uncovered by said piston, said ports being so formed as to give to the entering air a rotary motion within said combustion cylinder, pas-



sages connecting the adjacent annular air pump cylinders with the combustion cylinders whereby air is forced by the air pump cylinders into and through the combustion cylinders, cylinder head, a plurality of exhaust valves in said head, a fuel nozzle in said head located in the center of said head and discharging radially across said exhaust valves, means for admitting liquid fuel under pressure to said fuel nozzle.

1,875,529. DEVICE FOR HOLDING AND OPERATING ROTARY TOOLS. MILFORD T. VANDERVOORT, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed June 15, 1931. Serial No. 544,494. 2 Claims. (Cl. 81—57.)

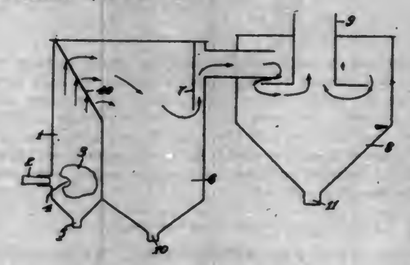


1. In a device of the character described: bearing members having respectively rotary bearings angularly disposed axially; a driving shaft and a driven shaft rotatable in said bearings and having meshing gears; tool-carrying member rotatable on the bearing member which contains the driven shaft, the bearing members being connected turnably about the axis of the driven shaft; means for releasably holding the bearing members against interrelative turning movement comprising teeth on one of the bearing members circularly disposed about its axis, a sleeve part of the other bearing member having circularly disposed teeth adapted to engage the first-mentioned teeth, and a collar on one of the bearing members engaging said sleeve part and threaded on the other bearing member, and turnable around said members to move said sleeve part and cause its teeth to engage the first-mentioned teeth.

1,875,530. VANISHING CREAM. FERDINAND A. VAUPOTIC, Brooklyn, N. Y., assignor to Commercial Solvents Corporation, Terra Haute, Ind., a Corporation of Maryland. Filed Dec. 4, 1929. Serial No. 411,680. 10 Claims. (Cl. 167—91.)

1. A vanishing cream containing alkyl ester of a higher fatty acid.

1,875,531. PRODUCTION OF ABRASIVE FLOURS. SAMUEL F. WALTON, Hamburg, N. Y., assignor to The Exolon Company, Blasdell, N. Y., a Corporation of Massachusetts. Filed Mar. 1, 1930. Serial No. 432,326. 2 Claims. (Cl. 83—46.)

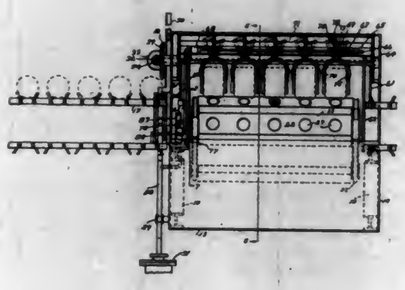


1. In apparatus for producing abrasive flours, in combination, an air blast for projecting a grain steam, a reduction chamber into which said stream is delivered, an impingement surface within said chamber and so located with reference to said air blast that a recess is worn in said surface by attritive action of the grains projected thereagainst whereby the grains have a colliding action with each other and a caroming action off the walls of the recess effective both to reduce them to the desired size and simultaneously impart to them a permanent capillarity, and a collection chamber communicating with said reduction chamber, said chambers having a common outlet for the lighter products of reduction and said reduction chamber having a baffled outlet into said collection chamber, and draft means connecting with said common outlet for carrying the lighter products of reduction from said reduction chamber through said collection chamber and out of the apparatus, said reduction chamber having also a gravity discharge for the heavier products of reduction dropping out of the air stream in said reduction chamber whereby such products may be collected for reintroduction into said reduction chamber and reimpaction against said impingement surface thereof, and said collection chamber having an independent gravity discharge for the lighter products of reduction passing thereinto through said baffled outlet of the reduction chamber and dropping out of the air stream into said collection chamber whereby said lighter products may be collected.

1,875,532. BOTTLE CONVEYER AND DELIVERER. ARTHUR L. WASHBURNE, Los Angeles, Calif., assignor to Sparkletts Bottled Water Corporation, Los Angeles, Calif., a Corporation of California. Filed Dec. 26, 1930. Serial No. 504,770. 5 Claims. (Cl. 198—20.)

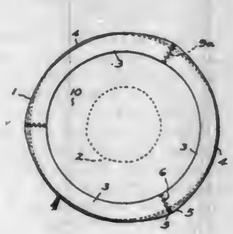
1. In a bottle handling machine, an endless conveyer to transport bottles to a discharge end: mechanism to intermittently advance said conveyer step by step including

a reciprocable operating member and intermittent advancing means for said conveyer operated by one way movement of said member, and a bottle grasping device at the discharge end including oscillatable lever arms mounted to be swung over said conveyer and geared to said member to be oscillated simultaneously with said member through a cycle, tongs supported by said arms for grasping bottles, motor means connectioned to said tongs for swinging the



jaws thereof to bottle release position, control means for said motor having a tappet rod actuated by said lever arms at the outer end of their oscillation to cause said motor to move the tong jaws to bottle release position and at the inner end of their oscillation operating said valve control means to enable said tong jaws to be closed to bottle clasping position, and means urging said tong jaws to clasping position.

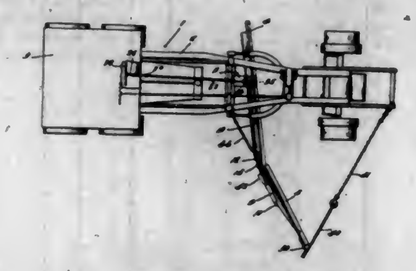
1,875,533. TREE PROTECTOR. MILO J. WEAVER, Berlin Heights, Ohio. Filed July 9, 1931. Serial No. 549,649. 4 Claims. (Cl. 47—23.)



1. A fruit protector comprising, in combination, a concrete collar arranged to rest upon the ground and to surround the base of a tree in spaced relation thereto, said collar extending from the ground upwardly to a height to prevent scaling thereof by rodents, said collar comprising a plurality of longitudinal sections, said sections being of greater thickness along their longitudinal edges to strengthen said sections, and means holding said sections in assembled relation.

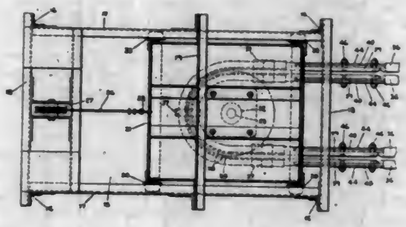
1,875,534. ROAD MACHINE ATTACHMENT. ALVIN WEGENER, Bear Creek, Wis. Filed June 20, 1931. Serial No. 547,751. 4 Claims. (Cl. 37—155.)

3. An attachment for a road machine of the type including a scraper blade, comprising a ground working blade pivotally connected to the scraper blade, a bracket rigidly secured to the ground working blade, an internally threaded sleeve, a shank projecting laterally from an intermediate portion of the sleeve and journalled in the bracket for mounting the sleeve for swinging movement on said bracket, a screw shaft threaded through the sleeve, and



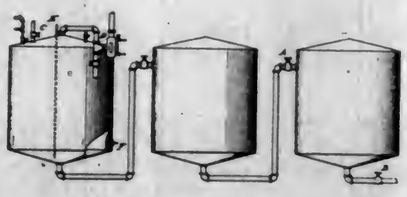
means for rotating the screw shaft for threading the sleeve longitudinally thereon for swinging the ground working blade on the scraper blade.

1,875,535. COMBINED TROLLEY CONVEYER TAKE-UP AND TELESCOPIC TRACK. PAUL V. WHITNEY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 22, 1930. Serial No. 490,524. 19 Claims. (Cl. 104—91.)



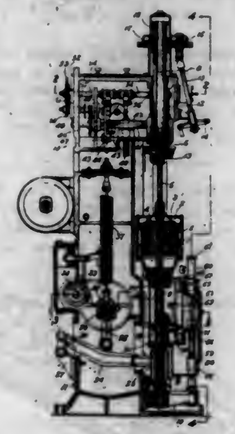
1. A telescopic track comprising a pair of track sections, one of said sections having an element longitudinally slotted, and the other having longitudinally spaced transverse elements slidably mounted in said slot.

1,875,536. CONTINUOUS BUTYL ALCOHOL FERMENTATION PROCESS. MAYNARD C. WHEELER and CHARLES D. GOODALE, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Apr. 9, 1932, Serial No. 604,473, and in Canada Jan. 22, 1929. 12 Claims. (Cl. 260—135.)



1. A continuous process for the fermentation of carbohydrate-containing mashes by means of butyl alcohol producing bacteria, which comprises conducting said process in a plurality of fermenters connected in series while adding fresh mash to the first of said fermenters and removing fermented mash from the last fermenter of the series and maintaining the flow of mash at a rate such that there will be a complete displacement of the mash in the first fermenter in a period included in the normal logarithmic growth period of the bacteria.

1,875,537. MOTION TRANSMITTING DEVICE. JAMES HOWARD WILLIAMS, Providence, R. I., assignor to Detroit Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 21, 1931. Serial No. 531,692. 10 Claims. (Cl. 51—59.)



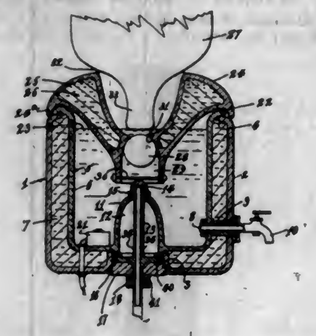
1. A motion transmitting device comprising a frame having a pair of supports mounted thereon which are provided with opposed guideways, said supports being mounted for relative reciprocation, one of said supports being mounted for adjustment angularly about an axis perpendicular to the plane of its guideway, a floating head interposed between said supports and having portions slidable in said guideways, a member rotatably mounted in one of said supports, and means interposed between said floating head and rotatably mounted mebmer for oscillating the latter.

1,875,538. RAZOR. RICHARD G. WINKLER, Springfield, Mass. Filed Apr. 6, 1931, Serial No. 528,002. Renewed Sept. 30, 1931. 2 Claims. (Cl. 30—12.)



2. A razor of the class described comprising in combination, a blade supporting plate having a central opening therethrough, a sleeve depending from said plate around the opening and having a restricted opening at its lower end, a cap hinged to said plate and having openings adjacent the marginal edges thereof to provide relatively narrow rims along its side edges for overlying the side edges of a blade positioned between the plate and the cap, said cap and plate being provided with interfitting raised portions and grooves, a handle having its upper part reciprocable and rotatable in said sleeve, a flange on the upper end of the handle, cooperating with the lower end portion of the sleeve to prevent disengagement of the handle from the sleeve, a threaded stud depending from the cap for disposition through the opening in the plate and extending into the sleeve, a threaded socket in the upper end of the handle for receiving the threaded stud and an expansible spring arranged in the sleeve between the plate and the flange on the handle.

1,875,539. REFRIGERATOR. RICHARD C. WOLFE, Beverly Hills, Calif. Filed Aug. 4, 1930. Serial No. 472,855. 12 Claims. (Cl. 62—141.)



1. In a refrigerator including a chamber to receive the substance to be cooled, a pervious membrane, a refrigerant at atmospheric pressure on one side of the membrane, and means for reducing the pressure on the opposite side of said membrane so that the refrigerant is forced through the pervious membrane.

1,875,540. PRODUCTION OF ESTERS. JOHN C. WOODRUFF, JEROME MARTIN, and IGNACE J. KRCHMA, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 15, 1928. Serial No. 319,724. 12 Claims. (Cl. 260—106.)

1. In a process for converting primary alcohols containing more than one carbon atom into their corresponding esters, the step which comprises subjecting said alcohols in the liquid phase at temperatures ranging from about 230° C. to about the critical temperature of the alcohol employed, to contact with catalysts of the type containing silver compounds or metallic silver and uranyl compounds of metals selected from the group consisting of calcium, barium, strontium, magnesium, zinc, silver and lead.

1,875,541. VANITY CASE. DAVID H. ZELL, Brooklyn, N. Y. Filed Dec. 10, 1929. Serial No. 412,968. 7 Claims. (Cl. 132—83.)



1. An article of the character described comprising a case body having an opening in an end wall thereof, a tray movable into and out of the case body through said opening, and means for retaining said tray in assembled

relation to the case body for supporting the tray in an extended position relative thereto, said means consisting of spaced pairs of relatively extensible members, one member in each pair being rigidly fixed within the case body and having means cooperating with means on the other member to slidably guide the latter and limit its extension through the opening in the body wall of the case, and said latter members and the tray having coacting means permitting of the limited sliding movement of the tray relative to said members and supporting the tray in an extended position relative to said members and wholly beyond said end of the case body.

1,875,542. AUTOMATIC STORM SASH ADJUSTER. EDWIN ALBJERG, Fergus Falls, Minn. Filed Sept. 21, 1931. Serial No. 564,179. 2 Claims. (Cl. 20—55.)



1. In a device for use in connection with a frame, a sash slidable in the frame, and a closure hinged to the top of the frame: a vertical bearing, means for securing the vertical bearing to the closure, a horizontal bearing, means for securing the horizontal bearing to the closure, a rod extended lengthwise of the closure, the rod comprising an inclined part disposed at an acute angle to the closure in a plane at right angles to the closure, an arm on one end of the inclined part and extended toward the closure, and a rectangular finger on the arm, at one end of the rod, the finger being received in the horizontal bearing, the opposite end of the rod being received in the vertical bearing, a keeper having an opening receiving the inclined part of the rod slidably, to open the closure when the sash is slid in the frame, means for securing the keeper to the sash, and mechanism for holding the finger in the horizontal bearing, to keep the inclined part of the rod in said plane, at right angles to the closure, said mechanism being movable to permit the finger to be withdrawn from the horizontal bearing, the rod having play enough in the vertical bearing to permit the finger to be withdrawn from the horizontal bearing, and to permit the rod to be swung of the opening in the keeper, and the rod being rotatable in the vertical bearing, to enable the inclined portion and the arm to lie flat against the closure when the closure is detached from the frame, and stacked.

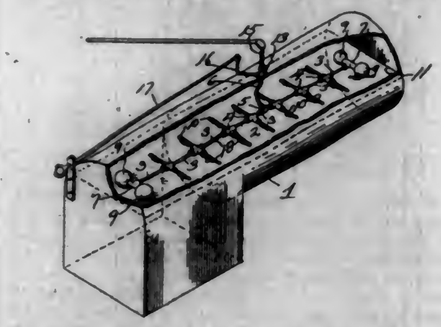
1,875,543. SCRATCH PAD DEVICE. DEZ ALBRITTON, Spokane, Wash., assignor to Joseph O. Parker, Spokane, Wash. Filed May 8, 1931. Serial No. 535,924. 1 Claim. (Cl. 281—6.)

A scratch pad device having in combination a casing comprising a slanting top and V-shape sides joined thereto, a curved end portion for said top where same joins the sides at their acute angles, a spindle having a roll of paper mounted thereon, the ends of said spindle mounted in slots in the sides of the casing having lower reduced portions adapted to receive annular grooves in said spindle ends, a transverse bar punched upwardly from either end portion of the top whereby the paper may pass thereunder,



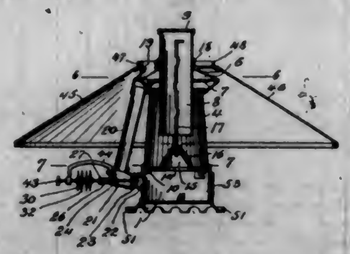
lugs punched inwardly from the casing sides and bent upwardly whereby they are adapted to cooperate with the transverse bars in engaging the paper and providing tension therefor, and central lugs for the top adapted to serve as guides for the edges of the paper.

1,875,544. BOILER SKIMMER. PETER R. ALPHONSO, Wewoka, Okla., assignor to The Argent Corporation, Shreveport, La., a Corporation of Louisiana. Filed Feb. 7, 1931. Serial No. 514,298. 2 Claims. (Cl. 122—389.)



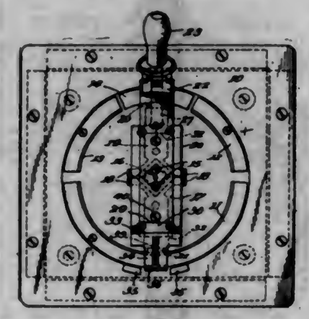
1. The combination with a boiler, a skimmer disposed within said boiler, said skimmer being float supported, a slack flexible discharge pipe connected to the boiler above the skimmer, said skimmer being formed from a plurality of apertured pipes, said flexible pipe connection between the skimmer and the boiler forming means whereby said skimmer may move laterally in all directions.

1,875,545. STOVE. ALBERT E. ANDERSON, Grandview, Mo. Filed Jan. 28, 1929. Serial No. 335,503. 8 Claims. (Cl. 126—73.)



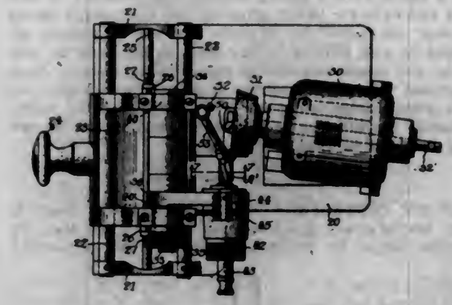
1. In a stove, a grate, a magazine above and spaced from the grate, and an imperforate upwardly converging deflector adapted to rest on and close the central portion of said grate and movable upwardly to a position in which it will close the lower end of said magazine.

1,875,546. HANDLE LOCK FOR CAR SWITCHES. CARL J. ANDERSON, Chicago, Ill. Filed Apr. 15, 1929. Serial No. 355,161. 6 Claims. (Cl. 200—169.)



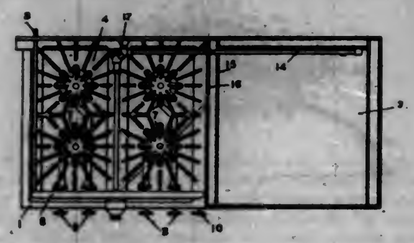
1. In a switching device for elevator cars, contact members for starting and stopping the car, a locking device holding the contact members in neutral position when the car is stopped, a handle for releasing the locking devices and for moving the contact members, and automatically operating means for locking the locking devices and folding the handle back when the contact members are in neutral position.

1,875,547. GRINDING MACHINE. CARL J. ANDERSON, Chicago, Ill., assignor of fifty-one and two-thirds per cent to Erik Borg and fifteen per cent to Carl U. Johanson, Chicago, Ill. Filed Nov. 20, 1929. Serial No. 408,435. 6 Claims. (Cl. 51—225.)



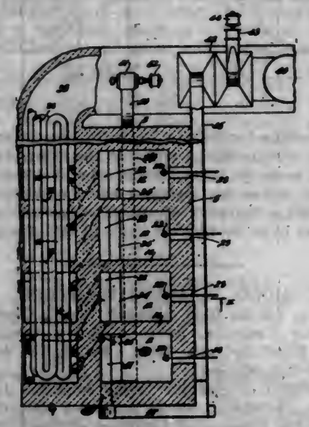
1. A machine for grinding milling cutters or the like comprising, in combination, a frame having a pair of uprights on the sides thereof, a pair of spaced horizontal guide bars mounted on said uprights, a carriage embracing both of said bars and slidable thereon, a horizontal rod mounted in said uprights between said bars, adjustable stops secured on said rod for limiting the sliding movement of said carriage to cause the cuts on all teeth to be equal, a cutter carrying device adjustably mounted on said carriage, means for locking said device in its adjusted position, means for grinding the cutter, and guide means adapted to hold the cutter in an indexed position relative to the grinding means.

1,875,548. HEAT REGULATOR FOR GAS STOVES. SAMUEL S. BAKER, Webster Groves, Mo. Filed Aug. 21, 1931. Serial No. 558,432. 11 Claims. (Cl. 236—15.)



1. In a stove having an oven and open burners located laterally of the oven, a thermostat positioned at the rear of the oven, a valve casing positioned laterally of the front of the oven and provided with a valve controlling the fuel supply to the oven, and means connecting the thermostat to the valve, said means comprising a tube rigidly connected to the valve casing and a rod within the tube to transmit movement of the thermostat to the valve.

1,875,549. RECIRCULATION SYSTEM. WARD T. BARKER, Kansas City, Mo. Filed Mar. 27, 1929. Serial No. 350,239. 1 Claim. (Cl. 122—356.)

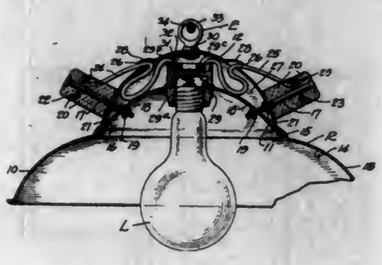


A recirculating apparatus comprising, in combination with a plurality of separate furnace units each having a combustion chamber communicating with a vaporizing chamber, means providing a conduit passage for conducting the heating gases from the vaporizing chamber of one of said units to the combustion chamber of the next succeeding unit, and a vaporizing assembly comprising a plurality of tubes each extending continuously through the vaporizing chambers of all said furnace units.

1,875,550. LIGHTING FIXTURE. GEORGE L. BARNES, Los Angeles, Calif. Filed Aug. 19, 1930. Serial No. 476,388. 8 Claims. (Cl. 240—78.)

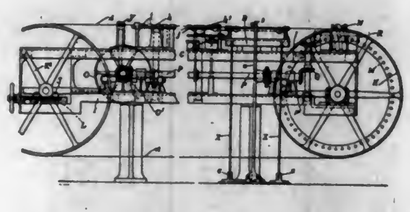
7. A lighting fixture having two reflector sections coacting to form a compartment provided with an opening

for a conductor; an insulator to which a conductor is adapted to be secured for connection to a terminal in



the compartment; and means co-acting with the insulator and reflector sections, to support the insulator on the reflector and secure the reflector sections together.

1,875,551. BRUSH-MAKING MACHINERY. CHARLES BARNETT and WILLIAM BARNETT, Hatfield, Herts, England. Filed Apr. 19, 1930, Serial No. 445,694, and in Great Britain Apr. 26, 1929. 11 Claims. (Cl. 300—1.)



1. A machine for making knots for brooms and brushes having in combination a series of operating stations and a flexible band conveyor having equally spaced notches in its side, means for inserting knots of bristles in said notches, and a plurality of spaced members moving parallel to said band holding the knots in said spaced notches.

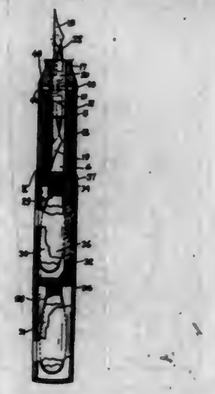
1,875,552. MOLD CLEANING SOLUTION. RALPH C. BATEMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 28, 1929. Serial No. 403,123. 6 Claims. (Cl. 87—5.)

1. A method of cleaning molds employed in the vulcanization of rubber which comprises subjecting them to heat in the presence of a mixture of cresol and a penetrant selected from a group embracing pine oil, turpentine and the fraction obtained between 180 and 200 degrees C. in the fractionation of the steam distillate of pine wood.

4. A method of cleaning molds employed in the vulcanization of rubber which comprises subjecting them to the action of heat in the presence of a mixture of approximately equal proportions of cresol and a penetrant selected from a group embracing pine oil, turpentine and the fraction obtained between 180 and 200 degrees C. in the fractionation of the steam distillate of pine wood.

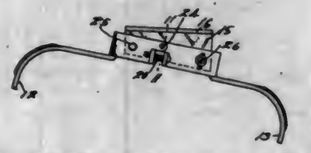
1,875,553. MULTICOLOR FOUNTAIN PEN. ALFRED S. BEARDSLEY, Montevideo, Uruguay. Filed Apr. 10, 1931. Serial No. 529,099. 5 Claims. (Cl. 120—42.)

1. In a writing implement, a body member having a plurality of ink channels, a holder mounted in said body member and having passages therein, a pen in each passage, a multi-color ink supply for the said body channels



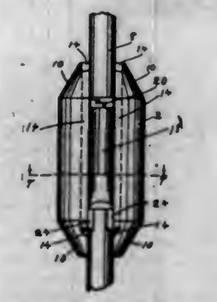
and means for revolvably mounting the holder in the body whereby one of the passages and one of the channels coincide.

1,875,554. MIRROR BRACKET STRUCTURE. WALTER JOEL BELL, deceased, Los Angeles, Calif., by Byron D. Bell, executor, Los Angeles, Calif. Original application filed Jan. 2, 1929, Serial No. 329,792. Divided and this application filed Oct. 18, 1929. Serial No. 400,604. 1 Claim. (Cl. 45—97.)



In a rear view mirror device, a stationary hanger, having a flange part, a spring bracket arm attached to said part and having a bowed gripping end, an opposite spring bracket arm bowed at its outer end and adjustably attached to said part, a mirror hung at its ends by said arms, and means connecting the arms to regulate their frictional grip on the mirror ends; the attachment for said arms comprising a pivot on said part for bodily swinging the arms as to the hanger, and means for setting the arms in angular adjustment.

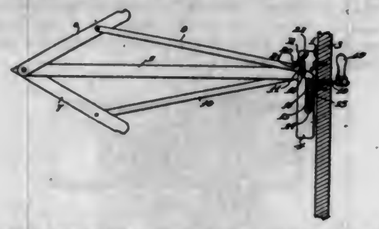
1,875,555. METALLIC SUCKER ROD GUIDE. PAUL R. G. BIEDERMANN, San Francisco, Calif. Filed Mar. 25, 1929. Serial No. 349,608. 4 Claims. (Cl. 287—114.)



3. A device of the class described comprising an open-sided body portion provided with grooves, each having

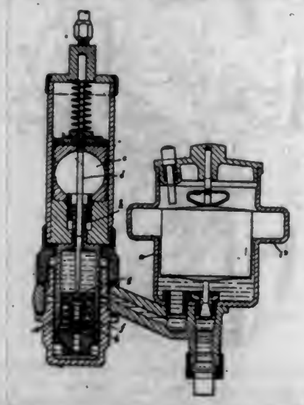
an off-set portion for receiving a locking key, said locking being accomplished by the bending of the lower portion of said key as it is forced within said grooves and held by said off-set portion.

1,875,556. TRAFFIC SIGNAL. WILLIAM F. BRETTSCHNEIDER, St. Paul, Minn. Filed Aug. 10, 1931. Serial No. 556,042. 2 Claims. (Cl. 116—51.)



1. An automobile turn signal, comprising in combination a supporting bracket, a signal member pivotally supported thereon, a pair of vanes pivotally connected to the outer end of said signal member, link means connected to said vanes and pivotally connected to said bracket, and an operating member slidably mounted on said bracket and pivotally connected to said link means to operate said signal.

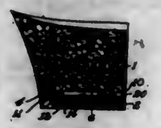
1,875,557. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. CLEMENT BROWN, Perry Barr Birmingham, England, assignor to Amalgamated Carburetters Limited, Birmingham, England, a British Company. Filed Dec. 26, 1929, Serial No. 416,577, and in Great Britain Jan. 10, 1929. 2 Claims. (Cl. 261—44.)



1. In a carburetor, a liquid fuel well, means to supply fuel thereto, a piston fitted in the well and having a restricted duct for the passage of fuel from the well, a needle valve bearing on the piston and arranged for movement together with the piston, a spring active to cause the piston to follow the needle valve when the latter is withdrawn and thus cause the piston to force fuel thereabove into the mixing element of the carburetor and a valve to close against return movement of fuel through the piston.

1,875,558. QUICK DETACHABLE TOP LIFT FOR HEELS. HERMAN L. BROWN, Greenville, Ohio. Filed Aug. 14, 1931. Serial No. 557,017. 3 Claims. (Cl. 36—42.)

1. The combination with a shoe heel, of a plate secured to, and covering the bottom face area of, said heel, locking fingers projecting downwardly from said plate approximately on the longitudinal center line thereof, said plate formed with clamp receiving holes adjacent said locking fingers, a top lift, a plate secured to the upper face of said top lift, hook clamps formed on said top lift plate to enter the clamp receiving holes in the heel plate, a pair



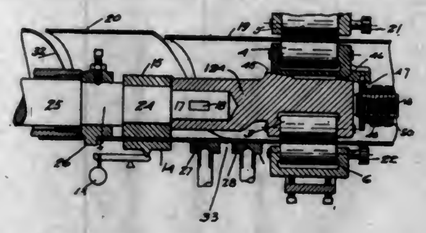
of tunnel lugs on the longitudinal center line of the top lift plate, and a locking pin inserted through the tunnel lugs for engagement by the locking fingers when the hook clamps engage in the clamp receiving holes of the heel plate, said pin being removable to permit a quick detachment of the top lift from the heel.

1,875,559. HAND PIECE FOR DENTAL TOOLS. DEAN H. BRUMM, Lansing, Mich. Filed Feb. 24, 1930. Serial No. 431,019. 19 Claims. (Cl. 32—11.)



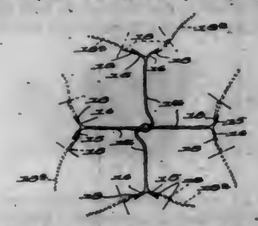
1. A hand piece for dental tools comprising a casing, a drive shaft extending into one end of said casing, transmission means arranged in the other end of said casing and connected to said drive shaft, a tool holding shaft journalled in the last named end of said casing, a gear carried by said last named shaft, a gear carried by said transmission means and meshing with said first named gear, and a thrust take-up element connected to said casing and engaging an annular portion of said transmission means, said casing being provided in one side with an opening through which said thrust take-up element projects, said element being releasable for outward substantially radial movement from said transmission means to permit withdrawal thereof from the casing through the first named end thereof.

1,875,560. PIPE MAKING MACHINERY. LEON CAMMEN, New York, N. Y. Filed Nov. 17, 1930. Serial No. 496,212. 7 Claims. (Cl. 219—6.)



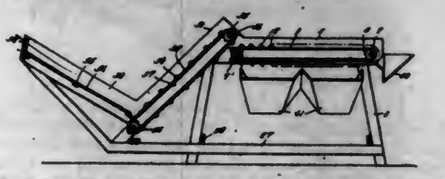
1. A tube welding device comprising means for forming a spiral tubular member and imparting a longitudinal movement thereto, a mandrel adjacent to said forming means in the direction of travel, guiding means upon said mandrel for maintaining the edges of the spirally wound material in spaced relation, roller means positioned in the direction of travel of the spiral tube for effecting rotation of the tube and closing under pressure and in abutting relation the edges to be welded, and electrode means at the closure of said edges, for heating the abutting edges and effecting welding.

1,875,561. METHOD OF TRAINING GRAPEVINES. JOSEPH CIRRITO, Jersey City, N. J. Filed Jan. 23, 1931. Serial No. 510,810. 8 Claims. (Cl. 47—58.)



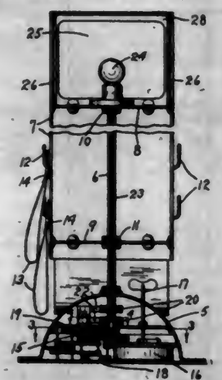
1. A method for training a vine which has had the trunk stem thereof trained to a substantially vertical position and provided with a series of spaced horizontal stories each consisting of a number of branches or arms radiating from the trunk, said method including pruning the arms and trunks to remove all canes and buds except one cane at the extremities of said branches, and cutting back said retained cane to the first eye nearest the branch.

1,875,562. VEGETABLE GRADING MACHINE. HARVEY D. CLUTE, Rocky Ford, Colo. Filed Oct. 29, 1930. Serial No. 492,019. 2 Claims. (Cl. 209—98.)



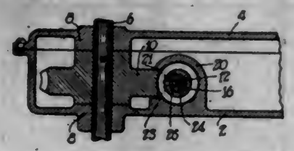
1. A grading conveyor comprising a pair of endless members, roller supporting means for the same, a plurality of cross members pivotally connected with the endless members and each cross member being of V-shape in cross section, with the ends of its forward edge pivotally connected to the endless members, said V-shaped members being spaced apart a sufficient distance to form spaces between them and their rear edges resting on the endless members as the cross members are travelling along with the upper runs of the endless members, and said cross members then depending from the endless members when travelling along with the bottom runs of the endless members.

1,875,563. DISPLAY STAND. ELI H. COOKE and IRWIN B. COOKE, Spokane, Wash. Filed Feb. 15, 1930. Serial No. 428,775. 1 Claim. (Cl. 40—33.)



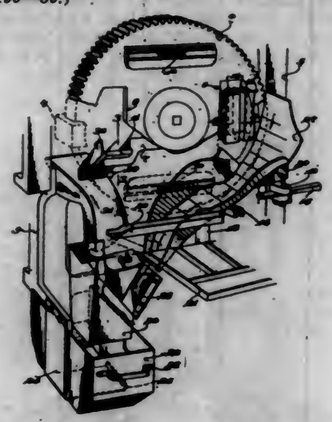
As a sign exhibitor a display stand comprising in combination a hollow base, a rack body supported on the base, a display compartment for the upper portion of the rack body having windows whereby transparent signs are displayed, a supporting frame having legs and adapted to be slidably installed within the upper display compartment to retain display signs in place, and means for intermittent illumination of the upper display compartment.

1,875,564. LUBRICATING SYSTEM. HIRAM D. CROFT, Springfield, Mass., assignor to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1930. Serial No. 420,537. 3 Claims. (Cl. 184—1.)



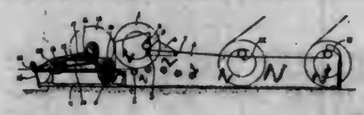
1. Lubricating system comprising in combination, a support, a worm and worm-gear in meshing engagement journalled in said support and a shroud carried by said support embracing said worm and the intermeshing parts of said worm and gear, the said shroud having an open end to permit the passage of lubricant into and out of said shroud.

1,875,565. SPOUTING SYSTEM FOR TYPE CASTING MACHINES. GEORGE L. CURLE, Minneapolis, Minn. Filed Nov. 7, 1930. Serial No. 494,062. 13 Claims. (Cl. 199—59.)



1. In a type casting machine, the combination with a mold disk and front trimming knives, of a waste receptacle, and a trough constructed and arranged to extend under the mold disk to receive shavings precipitated from the mold disk and front trimming knives and discharge the same into the waste receptacle.

1,875,566. STRIP STEEL COIL-UNWINDER. KARL F. DAILEY, Cleveland, Ohio. Filed June 23, 1930. Serial No. 463,279. 6 Claims. (Cl. 242—78.)



1. The combination of means for supporting a roll of metal strip, a pair of readily disengageable rotatable rollers for unwinding the end portion of said roll of strip, means for operating said rollers, means for disengaging said rollers whereby the strip may be released from engagement by said rollers, and means whereby said roll of strip may be moved away from said rollers and the unwound end portion thereby withdrawn therefrom.

1,875,567. WRAPPING MACHINE. THEO DANIELS, Wevelinghoven, Germany. Filed Mar. 25, 1931, Serial No. 525,312, and in Germany Apr. 19, 1930. 2 Claims. (Cl. 93—7.)



1. A machine for wrapping tablets comprising in combination a recessed rotary drum, a plurality of rollers situated in a recess in said drum, co-operating recessed feed rollers for feeding a column of tablets to said recess in said drum, together with a rolling up surface partly encircling said drum to cause the column of tablets, brought into contact therewith by rotation of the drum, to rotate and so become encased in a wrapper delivered to said recess in said drum.

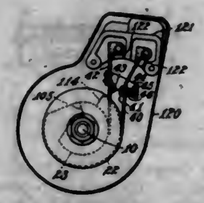
1,875,568. TENSION DEVICE. JEAN B. DAUDELIN, Fall River, Mass. Filed Mar. 25, 1930. Serial No. 438,678. 3 Claims. (Cl. 242—147.)



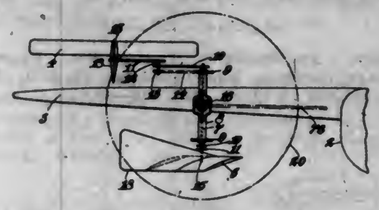
1. A thread tensioning device for use with a winder frame having a bobbin comprising a helix mounted on said frame and through which the thread from the bobbin is adapted to be drawn, a tension bar fixed within the helix centrally thereof and a guide having a radial slot extending therethrough from top to bottom and disposed substantially opposite the innermost turn of the helix through which slot the thread is guided from said helix onto the bar in a plurality of turns, and means for regulating the tightness of said turns and hence the degree of tension of the thread.

1,875,569. SAFETY CONTROL FOR BURNER MOTORS. JAMES O. DAVIS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind., a Corporation of Delaware. Filed Sept. 12, 1930. Serial No. 481,579. 4 Claims. (Cl. 200—6.)

1. Switch mechanism comprising a finger, a second finger mounted for cooperation with said first finger and adapted to contact one face thereof, resilient means biasing said fingers against movement in one direction, a contact member movable with, but insulated from, said second finger and adapted to contact the opposite face of said first finger, and means for flexing said resilient means and permitting said first finger to drop, under the influence of said resilient means, into contact with said second finger, and permitting said second finger to drop, under the influence of said resilient means, to break the contact between said first finger and said second finger and to make contact between said contact member and said first finger.

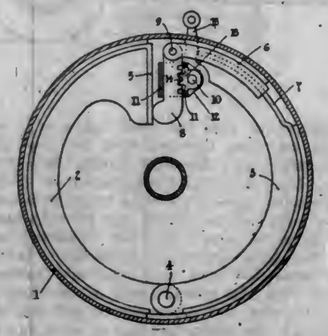


1,875,570. AIRCRAFT. GEORGE DEAN, Hall Green, England. Filed July 26, 1930, Serial No. 471,000, and in Great Britain Aug. 2, 1929. 9 Claims. (Cl. 244—26.)



2. An aircraft having an aerofoil movably secured on it and means for harmonically reciprocating the aerofoil as a whole in a straight line path.

1,875,571. BRAKE. WALTER H. DELAHAYE, Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Filed Dec. 2, 1929. Serial No. 410,939. 18 Claims. (Cl. 188—78.)



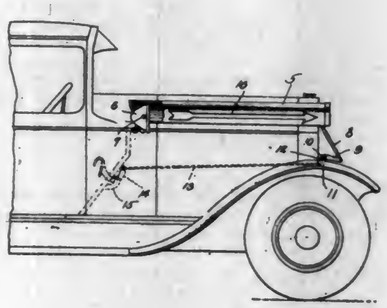
1. In a brake of the class described and in combination with a fixed support therefor, a pair of shoes anchored thereon, a servo shoe, a lever mounted for sliding movement and for pivotal movement about a fixed pivot, means for causing the sliding movement and means for using the rocking movement caused by travel of the servo shoe with the drum of the element to be braked to further apply the shoes.

1,875,572. POWDER BOX. PIERRE DMITRENKO, Paris, France. Filed June 13, 1930, Serial No. 461,025, and in France June 22, 1929. 7 Claims. (Cl. 132—83.)



1. Powder box comprising a box body, a lid hinged on this body, a crown on this body, a powder sifting surface at the centre portion of this crown, a resilient and deformable plate at the base of the box and on which the powder rests, a stiff resilient lever connected at one end to the underside of the crown and at the other end projecting upwardly through an opening in this crown the middle portion of this lever bearing on the said domed plate, an inwardly projecting lip on the box lid and a part on the free end of the lever adapted to engage over this lip when the box is closed whereby a downward movement of the lid to close the box first depresses the said lever so as to deform the said base plate, and then causes the said lever to snap over the said lip and relax the said base plate suddenly.

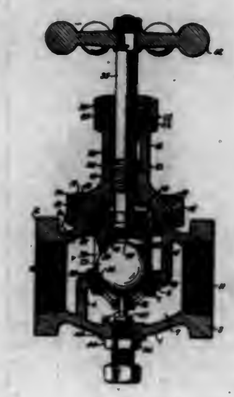
1,875,573. AUTOMOBILE HEADLIGHT. FRANK R. DUDLEY, Fitchburg, Mass. Filed Jan. 21, 1931. Serial No. 510,257. 1 Claim. (Cl. 240—48.4.)



In combination with the cowl lights of a motor vehicle, pins extending laterally from the cowl light housings, elongated lamp housings having their lower sides open, said lamp housings having openings to receive the pins to pivotally support the lamp housings at one of their respective ends, lenses closing the forward ends of the lamp housings, a supporting rod extending across the front of the motor vehicle and connected to the rod, links pivotally connected with the arms and having pivotal connection with the forward ends of the lamp housings, and an operating rod connected to the first mentioned rod to operate the supporting rod to raise and lower the front end of the lamp housing.

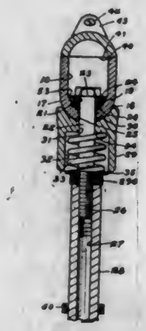
1,875,574. VALVE. PATRICK DUNCAN, Oklahoma City, Okla. Filed Apr. 27, 1931. Serial No. 538,075. 6 Claims. (Cl. 251—140.)

3. In a valve of the character described including a valve body, a partition in the body having an opening, a valve seat member having sealing engagement in the opening, a check member on the valve seat, a screw member threaded into the valve body and adapted to engage



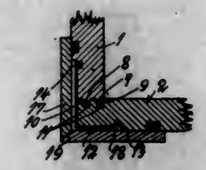
said seat member for removing the seat member from the valve body, and a pilot member on the screw for raising the check member from the seat member.

1,875,575. ACTUATING MEANS FOR SHOCK ABSORBERS. JOHN ECKHARD, Cincinnati, Ohio. Filed Aug. 30, 1930. Serial No. 478,951. 2 Claims. (Cl. 287—90.)



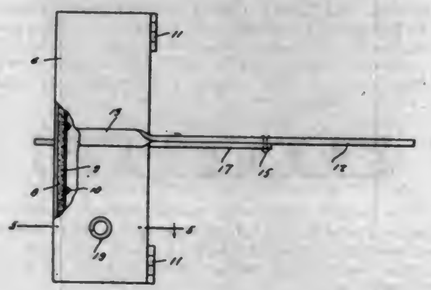
1. In combination an arm having a socket on an end thereof the socket having an opening therein the axis of which opening lies in the plane of the arm, a spherical portion on the said end of the arm substantially concentric with the socket interior, a bored sleeve having a socket depression therein substantially concentric with the bore, the bore being enlarged at one end for reception of a spring, a spring in the enlarged portion of the bore, a dividing wall in the sleeve between the spring and socket portion, a part-sphere element received in the socket of the arm, a screw threaded element associated with the part-sphere element and extending through the socket opening and the bore of the sleeve, and a tubular connector having a threaded bore for receiving an end of the screw threaded element.

1,875,576. WOODEN PLNK HOUSE. JOHANNES BENJAMIN EEN, Oslo, Norway. Filed Apr. 30, 1930, Serial No. 448,728, and in Canada May 6, 1929. 1 Claim. (Cl. 20—92.)



In corner constructions for wooden plank houses built with the planks lying horizontal on each other, the combination of at least two vertical, wedge-shaped ribs in the plank ends of one wall fitting into corresponding wedge-shaped grooves in the plank ends of the adjoining wall, said grooves having greater depth than the height of said ribs and having spaces for packing on the bottom of said grooves, with angle plates having inturned ribs fitting into grooves at a slight angle with each other so as to press, when driven home, said vertical wedge-shaped ribs into said wedge-shaped grooves, said angle plates being protected by corner boards fastened to underlying laths fitting into vertical grooves in the outer sides of the plank walls.

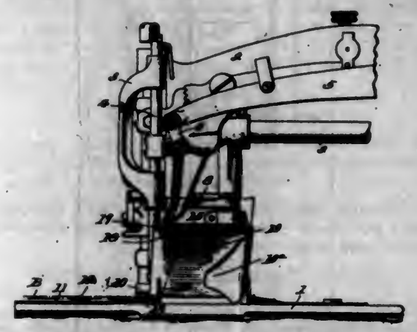
1,875,577. DEVICE FOR EXTRACTING WELL PIPES. WILLIAM H. ENDSLEY, Seguin, Tex. Filed May 26, 1931. Serial No. 540,191. 2 Claims. (Cl. 166—16.)



1. A device for extracting oil well tubing, comprising a substantially cylindrical member separated longitudinally to provide complemental sections, hinges connecting the sections at one longitudinal edge thereof, packing means internally of the sections and extending along the end and longitudinal edges of the sections, a handle member having a curved end secured to the convex side of one of the sections intermediate the ends of said one section, a pair of complemental opposed members having at one end lateral curved extensions secured to the convex side of the other of said sections, a link pivotally connected at one end to corresponding ends of the opposed members, and a lever pivotally connected at one end thereof to said handle, said lever intermediate its ends being also connected to said link.

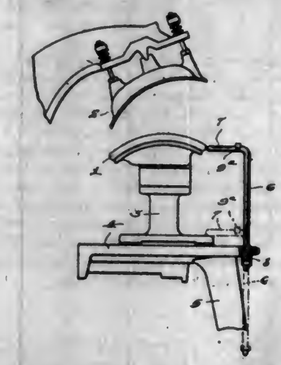
1,875,578. PANTS BAND SEWING MACHINE. WILLIAM A. FEIGEL, Boston, and ROBERT R. CARVER, Cambridge, Mass., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1928. Serial No. 314,700. 3 Claims. (Cl. 112—186.)

1. In a sewing machine a stitch forming mechanism for forming zigzag stitches, a guide for guiding a body fabric to the stitching mechanism so that the needle at each stitch enters the body fabric, a guide for guiding a formed pant band having means for positioning said stiffening is laid on top of of the body fabric with the edge thereof within the limits of the zigzag stitching and so that the stiffening strip is laid beneath the body fabric, whereby the needle at each puncture passes through the stiffening



strip, said guide for the pant band being provided with means for underfolding the edge of the facing strip as it is led to the stitching mechanism, said guide for the pant band having means for positioning said stiffening strip so that the stitches will penetrate the same at a predetermined distance from the edge thereof.

1,875,579. PRESSING MACHINE WITH WORK SUPPORT. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,614. 5 Claims. (Cl. 68—9.)

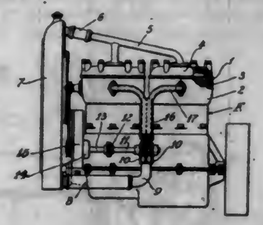


1. In a pressing machine, an elevated platen pressing element and a work support located in front of the pressing element to support that portion of the work which is unsupported by the pressing element, said work support including a plurality of supporting rods having horizontally disposed upper portions to form a head; guide means in which said supporting rods are slidably mounted for shifting the work support into and out of juxtaposition to the pressing element.

1,875,580. COOLING SYSTEM. JAMES B. FISHER, Waukesha, Wis., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1928. Serial No. 313,409. 9 Claims. (Cl. 123—170.)

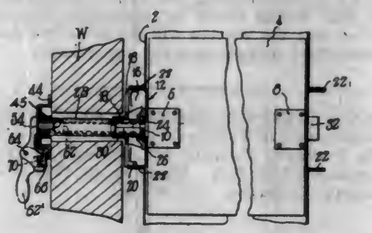
1. In combination, an internal combustion engine having a plurality of cylinders, a common water jacket surround-

ing the cylinders, a source of supply of cooling water, and means for delivering water from said source of supply



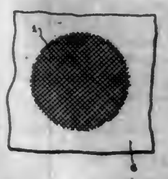
to the water space about the cylinders at a plurality of points and under pressure, the water being delivered at each of said points independently.

1,875,581. DAMPER APPARATUS. ARCHIBALD G. FLETCHER, Springfield, Mass. Filed Feb. 6, 1930, Serial No. 426,357. Renewed Mar. 7, 1932. 4 Claims. (Cl. 126—295.)



1. The combination of a flue and damper oscillatable therein, between open and closed positions with operating mechanism therefor comprising in combination, a housing having a part rotatable therein which is spring pressed in one direction, a trunnion on said damper, a wall plate, an operating member having a hub provided with a circumferential recess and a longitudinal groove, a retaining plate having an opening in which said hub is rotatable and an inwardly extending lip in said recess to hold said operating member and retaining plate against separation except when said groove and lip are in alignment, connections between said member, the rotatable part in said housing and a trunnion on said damper.

1,875,582. METHOD AND MEANS FOR IDENTIFYING RUBBER GOODS. JOHN RUSSELL FOLEY, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,333. 8 Claims. (Cl. 216—62.)



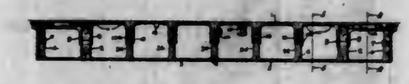
1. A method of identifying rubber goods, comprising puncturing a rubber label to provide indications therein, and then applying the label to a rubber article by cold vulcanization.

1,875,583. METHOD OF AND APPARATUS FOR SHOOTING WELLS. GLENN FOX, Salem, W. Va. Filed Mar. 4, 1930. Serial No. 433,054. 17 Claims. (Cl. 102—4.)



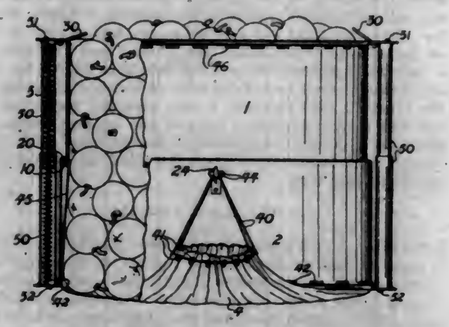
3. The herein described method of shooting oil or gas wells which extend through a plurality of productive strata which consists in independently anchoring a separate charge of explosive in the well adjacent each stratum, and exploding said charges, firing the uppermost charge first and the lower charges in succession.

1,875,584. RAILWAY CAR UNDERFRAME. CHARLES F. FREDE, St. Louis, Mo., and EINAR G. HALLQUIST, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Jan. 24, 1931. Serial No. 511,062. 28 Claims. (Cl. 105—244.)



1. In a car underframe, spaced bolster members, a single center sill member between said bolster members, and support members arranged to carry the inner ends of drop doors, all of said members forming an integral structure.

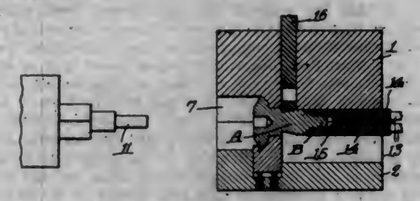
1,875,585. FRUIT PICKER'S BUCKET. RAYMOND C. FREIMANN, Tieton, and EARL EVANS, Yakima County, Wash. Filed Nov. 12, 1930. Serial No. 495,171. 4 Claims. (Cl. 150—2.)



1. A fruit pickers bucket comprising two or more telescoping sleeves, suspending means secured to the upper sleeve, a releasable bottom secured to the lower sleeve, and spring means normally holding the sleeves telescoped,

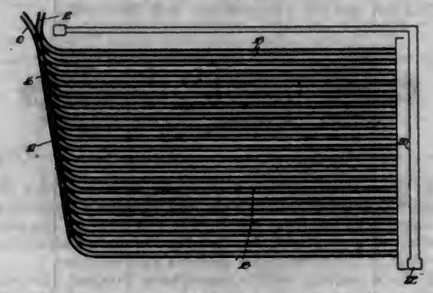
but yieldable under the weight of fruit supported from the bottom to permit extension of the lower section below the upper.

1,875,586. METHOD OF AND MEANS FOR HANDLING STOCK. JOHN HENRY FRIEDMAN, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Nov. 14, 1929. Serial No. 407,193. 5 Claims. (Cl. 78—81.)



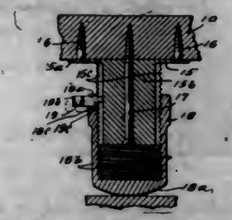
4. The method of forging a short blank which includes the steps of reducing the back end of the blank, housing said end in a separate extension of the blank, then gripping the extension to hold it against movement, and finally shaping the front end of the blank within the gripping means.

1,875,587. SIGNALING SYSTEM. PAUL M. GAULT, St. Louis, Mo. Filed Jan. 18, 1930, Serial No. 421,630. Renewed Mar. 12, 1932. 4 Claims. (Cl. 246—3.)



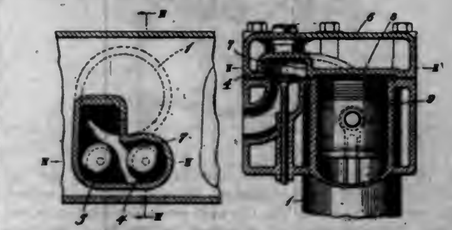
1. In a signal system, in combination with a main railroad track and a plurality of sidings branching therefrom, an indicator adapted to be located adjacent said main track and at a point in advance of said sidings, said indicator being provided with a plurality of signal means and each corresponding to a given siding, and manually controlled means for causing optionally any of said signals to become operative independent of track conditions or switch position, said means being controllable from a single point remote from said signal.

1,875,588. SEAT ADJUSTING DEVICE FOR AUTOMOBILE SEATS. JOHN E. GOLDEN and ORVILLE WILLIAM GOLDEN, Minneapolis, Minn., said John E. Golden assignor to said Orville W. Golden. Filed Oct. 14, 1929. Serial No. 399,519. 2 Claims. (Cl. 155—88.)



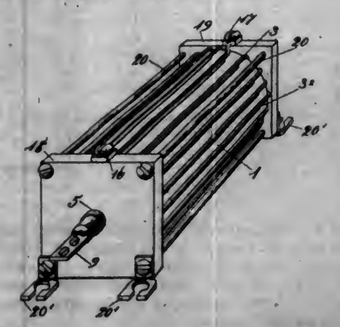
2. A seat elevating device for an automobile seat comprising a member having means for attachment to the seat and an exteriorly threaded stem projecting downwardly therefrom, an interiorly threaded shell threaded on said stem and having a closed end, said stem having a longitudinal groove cut in its exterior surface and a spring comprising a thin plate secured at one end to said shell and extending in semi-circular form about said shell, said spring having an offset bight portion adjacent its free end and extending into said slot of said shell and adapted to extend into the groove in said stem, said spring at its free end also having a finger grip portion exterior to said shell for engagement to move said bight portion out of the groove of said stem.

1,875,589. INTERNAL COMBUSTION ENGINE. JOHN GOOD, Garden City, N. Y., assignor, by mesne assignments, to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Nov. 21, 1924. Serial No. 751,214. 3 Claims. (Cl. 123—191.)



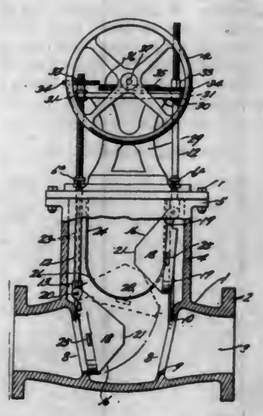
1. In an engine of the character described, a cylinder, a piston, a cylinder head provided with a primary valve controlled combustion chamber to one side of the cylinder and also provided with a secondary combustion chamber communicating with the primary chambers and sloping downwardly therefrom and extending above the piston face at least to the plane extending through the adjacent piston axes and remote from the piston face center, said cylinder head having a wall providing a minimum clearance above the remainder of the piston face when the piston is at the upper limit of its stroke, intake and exhaust valves for said primary chamber arranged to provide cooling of the exhaust valve by the intake gases passing from the primary chamber to the cylinder.

1,875,590. CURRENT TRANSFORMER. STANLEY S. GREEN, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed June 30, 1930. Serial No. 464,951. 5 Claims. (Cl. 175—358.)



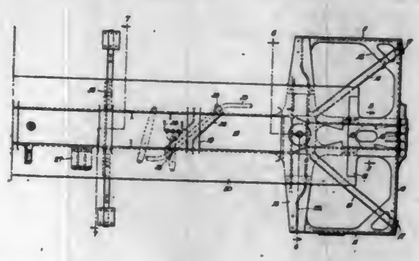
1. A current transformer including a closed continuous and unbroken magnetic core having a winding space, a primary conductor and a secondary winding, wherein the portions of the secondary winding on the outside of such space have a greater effective cross section normal to the current flow than the portions within such space.

1,875,591. COMBINATION GATE AND REVERSIBLE CHECK VALVE. WILLIAM B. GREEN, East St. Louis, Ill. Filed Jan. 16, 1931. Serial No. 509,168. 4 Claims. (Cl. 277—33.)



1. In a device of the kind described, a housing, an upwardly extended head chamber thereon, opposed spaced valve seats in the housing, the said seats converging downwardly, hangers slidably mounted in the head chamber above the valve seats, valves hinged at their upper margins to the said hangers and adapted to be raised and lowered between the valve seats thereby, the said valves comprising flat outer faces adapted to engage the said valve seats, and cone-shaped backs terminating in flat wedging faces adapted for engagement to hold the said valves apart and to the valve seats, the said wedging faces being arranged to lie in a vertical plane when the valves are lowered.

1,875,592. UNDERFRAME. FERDINAND W. HAHN, Michigan City, Ind., and JOHN A. LAMONT, Chicago, Ill., assignors, by mesne assignments, to General Steel Castings Corporation, Eddystone, Pa., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,510. 27 Claims. (Cl. 105—362.)



1. In a tank car, in combination with end frames, bolsters secured thereto, a longitudinally disposed member joining said bolsters and integral therewith, a well portion formed in said longitudinal member, said member forming the bottom portion of a tank with remaining tank structure secured thereto.

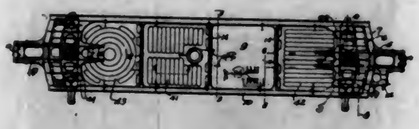
2. In a tank car, in combination with end frames, bolsters secured thereto, a longitudinally disposed member joining said bolsters and integral therewith, a well portion formed in said longitudinal member and extending the length between said bolsters, and tank structure secured thereto.

1,875,593. AIRPLANE. RANDOLPH F. HALL, Rochester, N. Y. Filed July 31, 1930. Serial No. 472,100. 40 Claims. (Cl. 244—29.)



1. A high lift wing of the type formed with a longitudinally disposed air displacement passage extending rearwardly therethrough, comprising a front longitudinal beam, a rear longitudinal beam of the open truss type, a series of spaced open truss type ribs secured transversely across and between said beams, an upper surface formed by a relatively thin substantially single thickness covering secured over said beams and ribs, a rear flap member pivotally mounted at the under side or the wing and forming a portion of the under surface of the wing, and the under wing surface forward of said flap formed by a relatively thin substantially single thickness covering, the air displacement passage formed and defined by the space within the wing between such upper and lower relatively thin covering which provide a maximum passage depth within the wing.

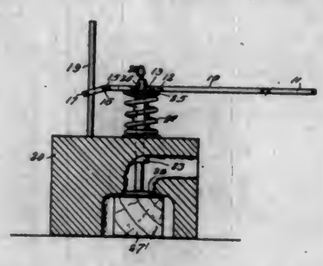
1,875,594. RAILWAY TANK CAR UNDERFRAME. EINAR G. HALLQUIST, Edwardsville, Ill., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,526. 27 Claims. (Cl. 105—236.)



1. In a railway vehicle underframe, bolsters, and a web extending between said bolsters and forming a substantially continuous arc from side to side and forming the lower portion of a tank and also forming the main longitudinal element of the underframe between said bolsters.

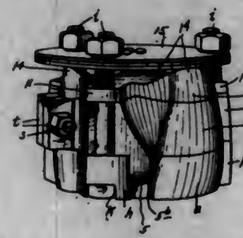
2. In a railway vehicle underframe integral structure, bolsters of box section, and an arcuate web extending between said bolsters with its sides substantially at the level of the tops of said bolsters and with its downwardly curved intermediate portion extending substantially to the level of the bottoms of said bolsters, said web forming the main member of the underframe between the bolsters for carrying loads and transmitting longitudinal forces.

1,875,595. VALVE TOOL. CHARLES L. HARRIS, Jr., and CLARENCE H. SALSTROM, St. Edward, Nebr. Filed Dec. 31, 1930. Serial No. 505,915. 4 Claims. (Cl. 29—86.3.)



1. A valve handling tool, comprising an elongated flat lever having a head at one end adapted to fit over a valve steam and having a slot through the head for the reception of the stem, a lug pivotally mounted on the outer end of the head and provided with an opening therethrough adapted to loosely engage over a rocker arm post and to bind thereon upon the swinging of the lever about the valve stem.

1,875,596. DENTAL FLASK. HARRY H. HAZELTINE, Everett, Wash., assignor to The Iteco Company, Portland, Oreg., a Corporation of Oregon. Filed May 26, 1930. Serial No. 455,826. 4 Claims. (Cl. 18—33.)



1. A dental flask comprising separate sections, the upper face of the upper section provided at its perimeter with three equi-distantly spaced supporting projections all coming substantially to a point in a common horizontal plane, a resilient clamping plate supported upon said projections, compression means located at the perimeter of the flask between and equi-distant from said supporting projections, said compression means extending through said flask sections and said clamping plate, whereby the force of said compression means is uniformly applied in line with the walls of the flask, in drawing the sections of the flask together.

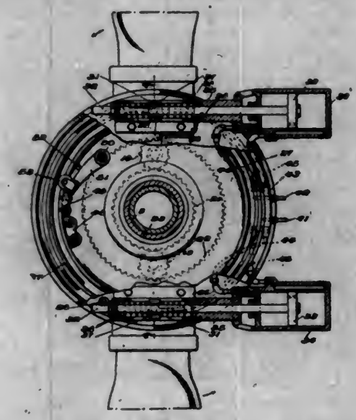
1,875,597. PROPELLER. SPENCER HEATH, Baltimore, Md., assignor to The American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Jan. 10, 1929. Serial No. 331,688. 20 Claims. (Cl. 170—159.)



1. In a propeller, in combination, a core of compressed fibrous material, the density of which differs in various portions so that the ratio of initial to final size is least at the hub.

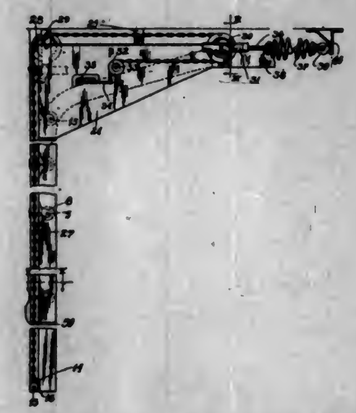
1,875,598. PROPELLER. SPENCER HEATH, Baltimore, Md., assignor to The American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 17, 1929. Serial No. 393,247. 12 Claims. (Cl. 170—163.)

1. In combination with a propeller adapted to be actuated by a power shaft and embodying a variable pitch blade, means for varying the pitch of said blade including a pair of concentrically mounted gears, a pair of brake



drums arranged in co-planar relation and operatively connected to said gears and fluid pressure means for selectively holding said drums against rotation.

1,875,599. OVERHEAD DOOR ARRANGEMENT. EMIL J. HEINEN, Danville, Ill., assignor to Allith-Prouty Company, Danville, Ill., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 402,874. 11 Claims. (Cl. 20—20.)

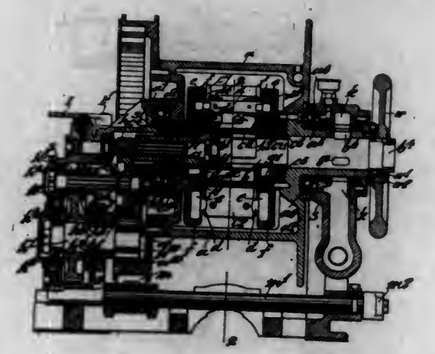


1. An overhead roller door construction including an articulated door, rollers adjacent the hinged portions of said door, rollers near the upper margin of said door, other rollers adjacent the lower margin of said door, a trackway having a channel track therein and a flat trackway therealong, the upper rollers and the rollers at the hinges engaging the channel trackway and the lower rollers engaging the flat trackway.

1,875,600. HOIST. HENRY SELBY HELE-SHAW and THOMAS EDWARD BEACHAM, Westminster, London, and EDWARD CECIL MILLS, Camborne, England, assignors to Holman Brothers Limited, Camborne, England. Filed Mar. 13, 1930, Serial No. 435,567, and in Great Britain Mar. 22, 1929. 6 Claims. (Cl. 254—186.)

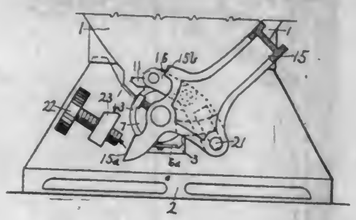
1. A hoist comprising a drum, gearing for driving the drum, a rotary cylinder carrier driving the gearing,

cylinders on the carrier containing reciprocating pistons, means for reciprocating the pistons during the rotation of the carrier, a normally fixed power supply valve supplying power to the cylinders and on which the cylinder carrier rotates, bearings on which the drum rotates and stand-



ards carrying the bearings, the drum having coaxial extensions at both ends supported by the bearings in the standards, while the cylinder carrier has an axial extension extending through one end of the drum and forming the first member of the gearing driving the drum.

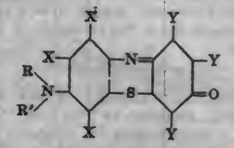
1,875,601. CUP-CAKE DROPPING MACHINE. MARTIN HELLAND, Seattle, Wash. Filed Aug. 8, 1931. Serial No. 555,967. 3 Claims. (Cl. 107—28.)



1. A cup-cake dropping machine including a dough container having an outlet, a valve container covering said outlet and having an outlet, a removable plate on the valve container beneath the outlet thereof having openings therein, a chambered oscillatory valve and dough cutting member in the valve container for opening and closing said outlet openings, a hinged double valve-gate operated to fill the chamber of said valve and provide the pressure to discharge the dough therefrom, a crank handle on an end of the cutting member, a link on said valve gate, a slotted link pivotally carried by the first link, and operating connections between the slotted link and the crank handle.

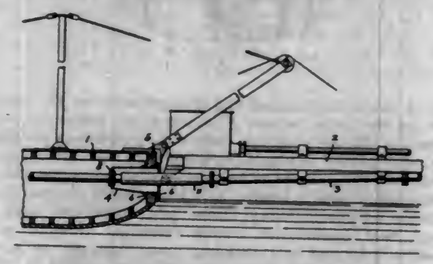
1,875,602. PRODUCTION OF FAST PRINTINGS ON THE VEGETABLE FIBER. RICHARD HERZ and NORBERT STEIGER, Frankfort-on-the-Main, and WILHELM HECHTENBERG, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 10, 1930, Serial No. 460,286, and in Germany July 10, 1929. 2 Claims. (Cl. 8—5.)

1. Process which comprises printing vegetable fibers according to the direct printing methods usual for vat dyestuffs, with the quinone vat dyestuffs of the probable general formula:



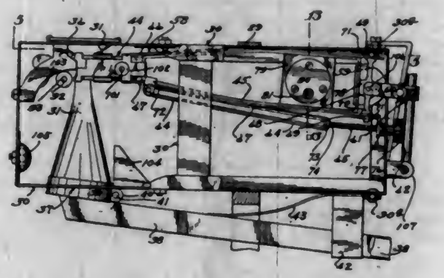
(wherein R' means an aryl group which may or may not otherwise contain substituents, R indicates hydrogen which may be substituted by alkyl or aralkyl, X hydrogen or a monovalent substituent and Y hydrogen or halogen).

1,875,603. DREDGE BOAT CONSTRUCTION. WILLIE L. HOLBROOKS, Houston, Tex. Filed May 2, 1932. Serial No. 608,833. 6 Claims. (Cl. 37—67.)



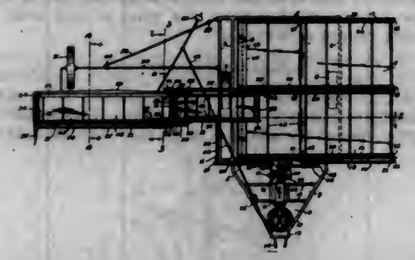
1. The combination with a dredge boat having a ladder pivoted thereto and a suction pipe which is supported by said ladder; an inwardly extending box through, and attached to, a wall of the boat through which said pipe extends and to the inner end of which said pipe is attached.

1,875,604. MILKING APPARATUS. JOHN N. HOLM, Minneapolis, Minn. Filed Oct. 11, 1928. Serial No. 311,749. 11 Claims. (Cl. 31—79.)



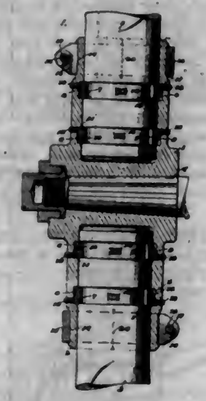
6. In a milking apparatus, a resilient teat receptacle, a pivoted arm-like member movable pivotally up and down, cooperating teat-squeezing elements operative on opposite sides of the receptacle and movable with the free end of said pivoted arm between the ends of the receptacle, means for moving one of the elements toward the other for squeezing action on a teat in the receptacle at the top of the upward stroke, means for keeping said moved element in an operative position during its downward movement, means for causing said moved element to return to an inoperative position at the bottom thereof and remain inoperative during its upward movement, means whereby the other of said elements is normally resiliently held in an operative position for exerting a yielding pressure on a teat in the receptacle, and means for rendering said elements inoperative on the teat irrespective of their up and down positions in respect thereto.

1,875,605. GRAIN HARVESTER AND STACKER. FRED D. HOLST, Makoti, N. Dak. Filed May 26, 1930. Serial No. 455,704. 5 Claims. (Cl. 56—346.)



1. A combined grain harvesting and stacking machine comprising a wheeled frame, a box body carried by said frame, a grain cutting mechanism mounted at one side of said frame, an endless carrier adapted to receive the grain as cut by said cutting mechanism and to elevate the same to be discharged into said box body, said box body having an upwardly and outwardly inclined deck at a side thereof other than the side adjacent said cutting mechanism, an endless conveyor working over said deck, means for driving said cutting mechanism and said carrier and means for driving said conveyor.

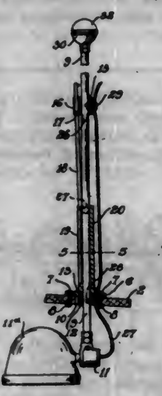
1,875,606. PROPELLER. GEORGE F. HOUSTON, South Bend, Ind., assignor to Bendix Research Corporation, East Orange, N. J., a Corporation of Indiana. Filed Nov. 7, 1930. Serial No. 494,109. 13 Claims. (Cl. 170—173.)



1. A propeller blade, a hub therefor comprising a cylindrical member having a plurality of spaced, annular grooves internally thereof, an external groove at the free end of said hub adapted to receive a clamping ring, external annular grooves on said propeller blade adapted to register with the said internal grooves of said hub to form a recess therewith, and spring-actuated expansion rings adapted to be received in said recess to releasably prevent relative movement of said propeller blade and hub.

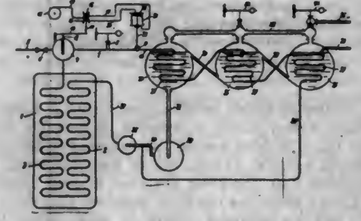
1,875,607. AIRPLANE INNER-CONTROLLED SPOT LAMP. ROBERT H. HUMMERT, Dayton, Ohio, assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 25, 1930. Serial No. 470,628. 5 Claims. (Cl. 240—7.7.)

4. In an airplane having a fuselage, a floor in the latter, a streamlined bottom below said floor, a bracket sleeve secured to said floor, said floor and the fuselage bottom formed with registering holes, a lamp supporting



tube movably secured to said bracket for a straight down movement through said holes, and a spot lamp carried by the lower end of said tube.

1,875,608. STEAM BOILER. WOLF HUNTEMÜLLER, Dusseldorf, Germany. Filed June 19, 1930, Serial No. 462,313, and in Germany July 2, 1929. 4 Claims. (Cl. 122—35.)



1. A steam boiler plant, comprising the combination with a steam boiler comprising steam generating tubes, means for forcing liquid into said boiler at about critical pressure, means for heating the liquid in the tubes to raise the pressure thereof and a pipe connected to said boiler for supplying steam to a steam consumer, of a second pipe connected to the boiler, a valve in said second pipe for controlling the admission of steam thereto from the boiler, actuating means for said valev controlled by the temperature of the steam in the boiler and operating to open the valve on the temperature of the steam rising and to close the valve on the temperature falling, means for cooling the steam in said second pipe and means connected to the second pipe and to the boiler for returning the cooled fluid to the boiler.

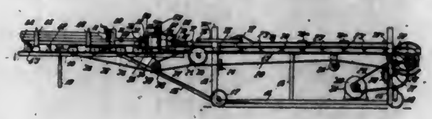
1,875,609. RAILWAY TANK CAR. FRED A. ISAACSON, Chicago, Ill. Filed Feb. 9, 1931. Serial No. 514,351. 17 Claims. (Cl. 105—360.)



1. In a railway vehicle underframe, a bolster, a tank end member integral with said bolster, and a hand brake support bracket integral with said bolster and member.

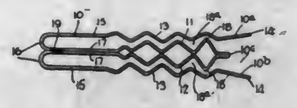
2. In a railway vehicle underframe, spaced bolsters and an arcuate web of constant radius extending between said bolsters and adapted to form a tank bottom, the intermediate portion of said web sloping downwardly towards an outlet opening.

1,875,610. LATH BUNDLING APPARATUS. DOUGLAS C. JEFFREY, Akron, and HOMER J. MARSHAM, Oakfield, N. Y., assignors to Universal Gypsum & Lime Co., Chicago, Ill., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 353,570. 20 Claims. (Cl. 216—9.)



1. A machine of the type described, comprising in combination conveyor means for carrying along in superposed piled relation a plurality of pieces of board, and means adapted as the pieces pass forward to apply adhesive tape binders about edge portions of the pile for holding the pieces of board together in unit bundle form.

1,875,611. HAIRPIN. JESSE M. JENKINS, Summit, N. J. Filed June 20, 1931. Serial No. 545,713. 3 Claims. (Cl. 132—52.)



3. A double chamber hairpin comprising a single piece of resilient wire forming a plurality of separate legs and a center leg, a welded portion on said center leg forming an integral hairpin having plural hair receiving chambers, crimped hair receiving portions in said hairpin, an enlarged hair receiving chamber adjacent the end of said hairpin, and an enlarged crimp in said center leg adjacent said enlarged chamber acting as a barrier for the removal of hair from said enlarged chamber.

1,875,612. WRECKING IMPLEMENT. FREDERICK W. JOHNSON, Excelsior, Minn., assignor to Henry Beinert, Mason E. Morse, and Clifford D. Ballard, Excelsior, Minn. Filed June 9, 1930. Serial No. 459,901. 5 Claims. (Cl. 7—17.)



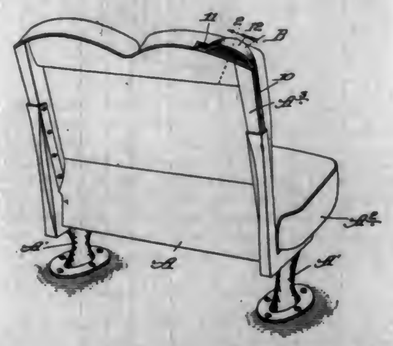
1. A wrecking implement comprising, a straight elongated handle, a thrust head secured to one end of said handle and extending longitudinally thereof, said head terminating in a chisel portion disposed longitudinally thereof, a wedging rib extending longitudinally of said head at the medial portion thereof and a hook extending laterally of said head and lying substantially in the same plane as said chisel portion, the point of said hook extending toward said handle.

1,875,613. CHIMNEY SWEEPER. ERNEST F. KAHLERT and EMIL CARLSON, Browerville, Minn. Filed Mar. 18, 1930. Serial No. 436,804. 2 Claims. (Cl. 15—163.)



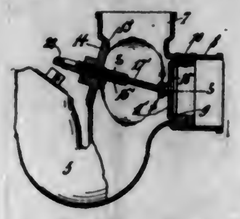
1. A device of the character described comprising a body adapted to be reciprocated in a chimney, a cleaning element formed of two sections associated with said body and connected therewith whereby the element may be urged outwardly thereby, said connection comprising a T-shaped member rigidly secured to said body and being longitudinally slotted in its shank and in each arm, a hinge foldably connecting the sections of said cleaning element, the pivot pin of said hinge being extended whereby one end thereof is slidably secured in said slot in the shank of said T-shaped member, a nut threaded on the opposite end of said pin to secure said pin in selected positions in its slot, and guide pins carried by said leaning elements and slidable in the slots in the arms of said T-shaped member.

1,875,614. SAFETY SEAT GRIP. KING KARPEN, Chicago, Ill., assignor to S. Karpen & Bros., a Corporation of Virginia. Filed Jan. 7, 1931. Serial No. 507,266. 1 Claim. (Cl. 155—16.)



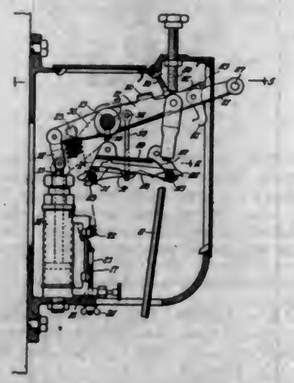
In combination: a seat equipped with a back, a grip-handle equipped with attachment flange extensions, said grip-handle comprising a top web having a central portion of relatively wide cross-section and end-portions of relatively narrow cross-section, said end-portions tapering toward and merging with said attachment flanges, and a depending flange partition joining said top web along a longitudinal median line.

1,875,615. COMBINED TRAP AND TEST FITTING. EDWARD KENNEDY, New York, N. Y., assignor to The Kennedy-Steiner Corporation, Bronx County, N. Y. Filed Feb. 21, 1929. Serial No. 341,710. 2 Claims. (Cl. 137—77.)



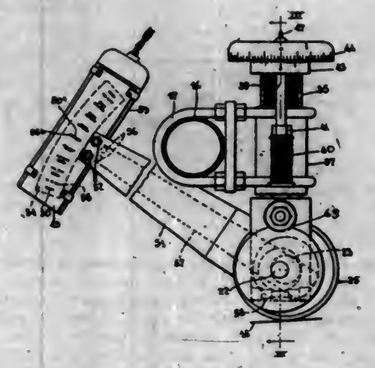
1. A combination trap and test fitting for plumbing systems including a trap body having a hub extension for connection with the house piping, a valve seat at the inner end of said hub extension, a valve disc to engage said seat and close the connection between the house piping and the trap, said valve disc having a central opening therethrough, the wall of the trap body opposed to said valve seat being obliquely inclined and provided with a threaded opening, a closure plate for said opening, a rigid conduit section detachably threaded in said closure plate, and said conduit section at one of its ends being in open communication with said opening in said valve disc and having a universal ball and socket connection with said disc whereby water may be supplied to the plumbing system through said conduit section, said section being adjustable to tightly seal the valve against its seat, and said closure plate for the opening in the body wall of the trap, the valve disc and said adjustable conduit section being removable as a unit through said opening with respect to the trap body.

1,875,616. DAMPER REGULATOR. GEORGE A. KOHOUT, Chicago, Ill. Filed May 26, 1930. Serial No. 455,715. 9 Claims. (Cl. 126—286.)



1. In a damper control mechanism, a damper, means for maintaining the damper in open position while a drive element is operating and moving it into closed position when the drive element stops comprising a shaft, a pair of lever arms thereon one having connection with the damper and the other with the drive element, means for causing said arms to move in unison to open the damper, latch means for latching the damper connected arm in position on completion of the opening movement, and means operated by the other lever arm upon stopping of the drive means to release said latch means, said damper having means tending to move it to closed position.

1,875,617. MEASURING INSTRUMENT. ADELBERT E. LEE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,192. 2 Claims. (Cl. 33—172.)



1. A device for gauging the thickness of sheet material during its movement over a support, comprising a frame, a rotatable shaft mounted in the frame and having a pair of eccentric portions, a roller mounted on the eccentric portions of the shaft, an elongate plate secured to the frame, having substantially equally spaced slots therein, an arm mounted on one end of the shaft, an arcuate plate secured to the arm, having slots therein coacting with the slots in the first mentioned plate for indicating variations in the thickness of the material, illuminating means at one side of the plates, and means for adjusting the position of the frame with respect to the support.

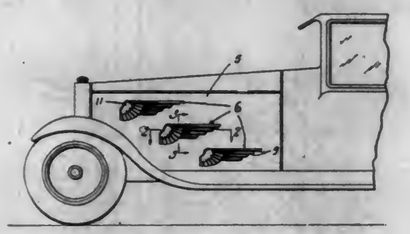
1,875,618. PLANT STALK SUPPORTER. LUTHER G. LENON, Portland, Oreg. Filed May 2, 1931. Serial No. 534,540. 2 Claims. (Cl. 47—47.)



1. A stalk holder comprising a stake member, the upper end of said stake bent to form an open loop lying in a transverse plane normal to the stake and thereby adapted to engage the stalk of a plant, an arm, one end

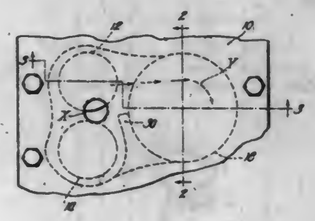
of which is coiled about the portion of the loop adjacent the stake and the other end projecting outwardly so as to rest upon the free end of the loop to form a closure therefor.

1,875,619. ENGINE HOOD VENTILATOR. ALFRED H. LENT, Capitola, Calif. Filed Oct. 4, 1929, Serial No. 397,432. Renewed Jan. 18, 1932. 6 Claims. (Cl. 180—69.)



1. In a ventilator for the engine hood of a motor vehicle, said hood having a vent opening therein, a deflector strip disposed in outwardly spaced relation to said opening, and a deflector plate adjustably supported on the hood and being adjustable from a position lying over portions of the strip and opening to a position extending outward and rearward from said portions of the strip and opening.

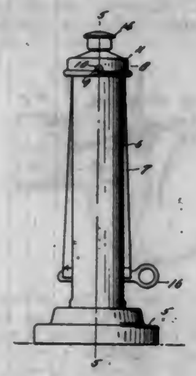
1,875,620. INTERNAL COMBUSTION ENGINE. HARRY LE VAN HOANING, Waukesha, Wis., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Original application filed Apr. 18, 1921, Serial No. 462,187. Patent No. 1,729,972, dated Oct. 1, 1929. Divided and this application filed Sept. 28, 1929. Serial No. 395,784. 6 Claims. (Cl. 123—191.)



1. In an L-head internal combustion engine, a cylinder block having a cylinder bore therein, a piston reciprocating in said cylinder, combustible gas inlet and burned gas outlet passages formed in said block and terminating similarly adjacent the end of said bore, a head lying over said bore and said inlet and outlet passages, said head having a recess formed therein and lying over said inlet and outlet passages and said bore, a baffle in said recess lying between said bore and said outlet passage, valves for said inlet and outlet passages, and spark ignition means in said recess.

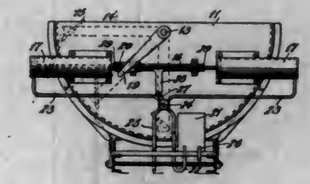
1,875,621. DISPENSING DEVICE. JOHN LINDQUIST, Oakland, Calif. Filed Apr. 21, 1930. Serial No. 446,148. 1 Claim. (Cl. 221—60.)

A collapsible tube holder comprising a base, a cylinder formed of resilient material and having its lower end integrally formed with the base, said cylinder having a pair of diametrically disposed longitudinally extending slots therein extending from a point adjacent the bottom of the cylinder through the upper end thereof, a cap fitting over the upper end of the cylinder and means for detachably connecting the cap to the cylinder, said cap



having an opening therein, the cylinder being adapted to receive a collapsible tube with the corners of said tube projecting through the slots, which slots act as guiding means for the ends of a winding key attached to the flattened end of the tube, with the upper end of the tube projecting through the opening in the cap.

1,875,622. CONCRETE AGITATOR. GEORGE I. LOCKWOOD, Portland, Oreg. Filed Jan. 7, 1930. Serial No. 419,079. 6 Claims. (Cl. 88—78.)

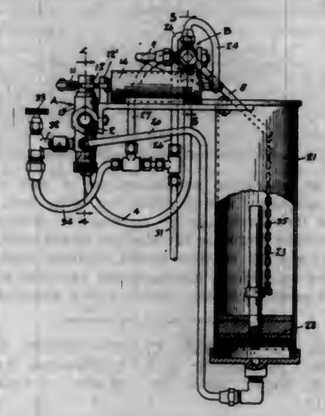


1. In a vehicle for transporting concrete and the like, a substantially semi-cylindrical tank mounted on the vehicle chassis; a stirrer shaft journaled in the opposite ends of the tank; stirrer arms secured to the shaft; reversible paddles journaled between the stirrer arms; and hydraulic means for oscillating said stirrer shaft.

1,875,623. AUTOMATIC TIMING MECHANISM. THOMAS LONGBOTHAM and MORRIS BLEICH, Portland, Oreg. Filed Oct. 1, 1929. Serial No. 396,523. 6 Claims. (Cl. 137—78.)

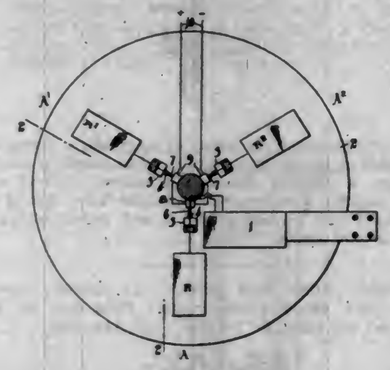
6. In an automatic timing mechanism, a main fluid passageway, a main valve therefor, a pair of cylinders having pistons mounted therein, a lever having its arms connected to the pistons and the main valve, fluid conduits leading to said cylinders from the main passageway and having the main valve arranged therein, a second valve for causing the fluid to enter one cylinder and to empty from the other or vice versa through the conduits

communicating with the cylinders, a storage cylinder, a piston in the storage cylinder connected to the second valve, and a conduit for conveying part of the fluid from



the main passageway to or from the storage cylinder and controlled by the main valve, and means for adjusting the movements of said levers.

1,875,624. SYSTEM OF AND APPARATUS FOR TESTING RADIORECEIVERS. CHARLES A. LOWRY, Toronto, Ontario, Canada, assignor to De Forest Crosley Radio Company, Limited, Toronto, Ontario, Canada. Filed Sept. 29, 1930. Serial No. 485,083. 2 Claims. (Cl. 250—20.)



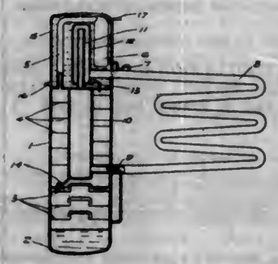
1. Apparatus for testing radio-receivers comprising a movable carrier adapted to support a plurality of radio-receivers in different positions for successive delivery to a testing position; a set of tube-heating terminals supported by the carrier at each of the said positions and adapted for connection to the filament circuit of a receiver; a set of testing terminals supported by the carrier at each of the said positions and adapted for connection to the other circuits of a receiver to be tested; a stationary part; contacts carried by said part positioned in a circuit for a tube-heating current and engageable with the tube-heating terminals simultaneously; and a set of testing contacts carried by said stationary part at the testing position connectable with a testing instrument, and making contact with one set of testing terminals while all the sets of tube-heating terminals are engaged with their tube-heating contacts.

1,875,625. ELECTRIC BLINKER. LOUIS LUDWIG, Brooklyn, N. Y. Filed May 13, 1929. Serial No. 362,583. 4 Claims. (Cl. 200—122.)



1. An electric blinker connectable to a single wire of an electric circuit consisting of, a casing formed of two halves, a thermostatic switch contained in said casing and insulated therefrom, the terminals of said switch supported between the ends of the half-casings and electrically connected with the means by which these are assembled, and said assembling means consisting of eyelets which form the terminals by which the device is connected in an electric circuit.

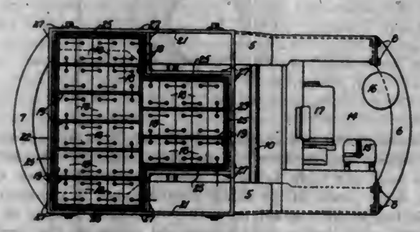
1,875,626. REFRIGERATION. GUIDO MAIURI and RAOUL FELICE BOSSINI, London, England, assignor, by mesne assignments, to Electrolux Servel Corporation, a Corporation of Delaware. Filed May 26, 1930, Serial No. 455,770, and in France May 31, 1929. 32 Claims. (Cl. 62—119.5.)



1. That improvement in the art of refrigeration which consists in forming a ternary mixture of refrigerant vapor, inert gas and vapor of absorption liquid and lowering the temperature of the ternary mixture in stages.

10. In refrigerating apparatus, the combination of a refrigerant vaporizer, an absorption fluid vaporizer, and means providing restricted communication therebetween.

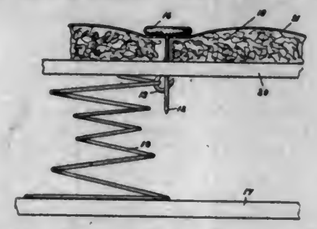
1,875,627. STORAGE BATTERY LOCOMOTIVE. RAYMOND MANCHA, St. Louis, and CHARLES E. STOLTZ, Webster Groves, Mo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930, Serial No. 465,498. Renewed Nov. 19, 1931. 12 Claims. (Cl. 105—51.)



1. A telescopic storage battery locomotive provided with a chassis including side frame members, a battery from which energy is transmitted to drive the locomotive, and

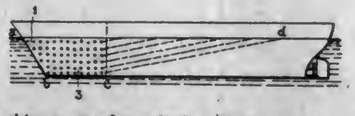
a holder for said battery, said holder being telescoped with said chassis and the lower portion of said holder being removably seated on said side frame members to permit removal of said battery.

1,875,628. TUFTING BUTTON. ROY C. MANSON, Detroit, Mich., assignor to The F. A. Nelder Company, Augusta, Ky., a Corporation of Kentucky. Filed Nov. 15, 1928. Serial No. 319,642. 6 Claims. (Cl. 155—185.)



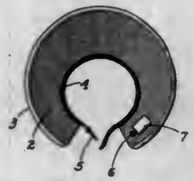
1. In a device of the class described the combination of a cap having an annular flange, a wire ring disposed within the cap, covering material disposed over the cap and clamped between the flange and the ring and a pair of co-operating arms comprising an insertable point and a hook both formed integral with the ring.

1,875,629. PROPULSION OF SHIPS. GEORGES MARCONNET, Paris, France. Filed Dec. 2, 1930, Serial No. 499,585, and in France Dec. 6, 1929. 1 Claim. (Cl. 114—67.)



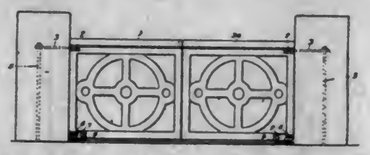
In a ship, means for reducing the resistance offered to its advance by the friction of the water comprising double walls disposed at the front part of the ship so as to form a chamber for the reception of compressed gaseous fluid, means for introducing such fluid into said chamber, and a plurality of apertures formed in the outer wall of said chamber for permitting the escape of the compressed fluid, the cross-sectional area of which apertures increases with their depth of immersion in the water as and for the purpose described.

1,875,630. SWIMMING BELT. AUGUST A. MARENGO, Stockton, Calif. Filed Apr. 24, 1931. Serial No. 532,459. 1 Claim. (Cl. 9—17.)



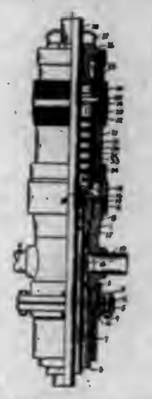
A swimming belt comprising initially separate flat strips of rubber cut to have the desired horizontal contour of the belt, one strip being of somewhat greater area than the other; said strips being superimposed in symmetrical relation to each other, and the extending portion of the larger strip being folded over the edges of the smaller strip and being secured thereto and a non-elastic strip of flexible material secured along the inner periphery of the belt and overlapping and secured to the larger strip above and below the adjacent line of fold thereof.

1,875,631. DOOR OPERATING MECHANISM. JOSEPH J. MARIOTTI, Chicago, Ill., assignor to Daprato Statuary Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1930. Serial No. 435,075. 11 Claims. (Cl. 39—87.)



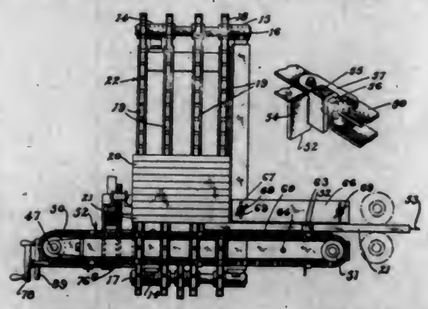
1. In an operating mechanism for a pair of pivoted closure members, means connected with both members when the latter are open for causing the closing rotation of one member to rotate the other to closed position before the first member reaches closed position together with means for operatively disconnecting the first said means after the second member reaches closed position.

1,875,632. UNIVERSAL CASING HEAD AND GAS SAVER. JOSEPH H. MCEVOY, Houston, Tex. Filed Feb. 23, 1929. Serial No. 341,922. 2 Claims. (Cl. 166—14.)



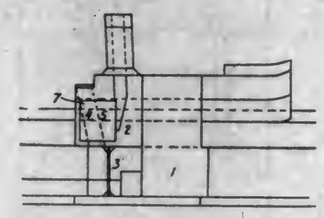
1. In a device of the character described, a casing head threaded externally at its upper end to receive a coupling member, a coupling thereon, a slip bowl disposed above said coupling, a sleeve secured on the inner face of said slip bowl and to said coupling, and tubing wiping devices in said sleeve.

1,875,633. FEED FOR RESAW MACHINES. EDWARD MCKUEN, San Francisco, Calif. Filed Oct. 29, 1929. Serial No. 403,217. 1 Claim. (Cl. 144—245.)



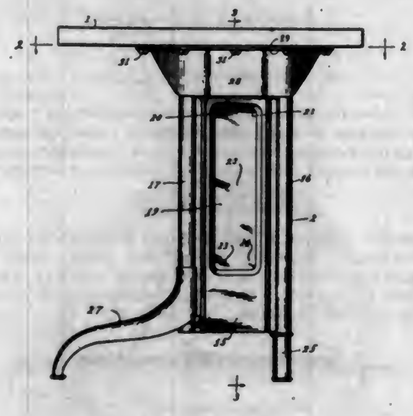
In a lumber feeding device, the combination of a means for supporting lumber edgewise in a stack, a conveyor means extending at right angles to said stack and adapted to strip off the lumber one piece at a time from the end of said stack, said conveyor means consisting of an endless chain travelling in a horizontal plane and having vertically disposed slots in the links thereof, and flights having hooked ends thereon for removable engagement with said slots.

1,875,634. STEAMSHIP WITH THE MAIN BOILER MOUNTED ON A DECK OR PLATFORM AT SOME HEIGHT ABOVE THE BOTTOM OF THE SHIP OR THE TANK TOP. KNUD GEORG MELDAHL, Fredrikstad, Norway. Filed Oct. 16, 1931, Serial No. 569,328, and in Norway Sept. 2, 1931. 2 Claims. (Cl. 114—72.)



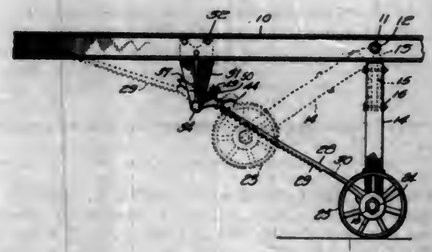
1. In a steamship, the combination with a plurality of main boilers mounted on a deck or platform at some height above the bottom of the ship, said boilers being arranged in spaced relation of a bunker below the boilers, and at least one filling trunk for the bunker carried down between the boilers.

1,875,635. FURNITURE CONSTRUCTION. RALPH K. MERRILL, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Apr. 17, 1929. Serial No. 355,708. 2 Claims. (Cl. 45—31.)



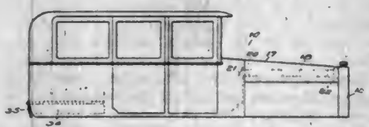
1. In metal structure of the character specified, a standard comprising a pair of sheet metal strips disposed in parallel relation with their marginal edge portions spaced apart and the intermediate portions pressed inwardly and connected to provide a panel, post members connected to opposite marginal edges of the strips and closing the space therebetween, a foot attached to the lower end of each post member, a bracket at the top and outer side of the standard and attached to the post members and outer strip, and a U-shaped clip at the top and inner side of the standard and attached to the inner strip.

1,875,636. SEMITRAILER. FRANK LOUIS MILLER, Parkersburg, W. Va., assignor to Davis-Miller Engineering Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed Feb. 3, 1931. Serial No. 513,218. 9 Claims. (Cl. 280—33.1.)



1. In a semi-trailer, depending strut means pivotally connected to the body of the trailer to swing between operative and inoperative positions and provided with supporting wheels, a rack bar pivotally connected at one end to said strut means, a pinion meshing with the teeth of said rack bar at a point spaced from said strut means, and means for locking said strut means in either of said positions.

1,875,637. AUTOMOBILE HEATING AND VENTILATING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1929. Serial No. 342,283. 2 Claims. (Cl. 237—12.3.)

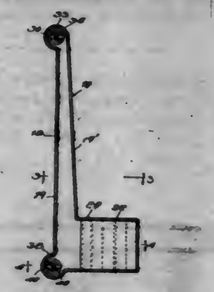


1. The combination with an automobile having a radiator forming an element of the cooling system for the engine of the automobile, a closed body and a hood extending from the body to the radiator, of means for heating the body, said means including an elongated member providing a chamber having an open side and openings respectively located adjacent the opposite ends of said member in a wall opposite said open side, said member being supported by and located adjacent the upper portion and extended transversely and communicating with air passages of the radiator, said automobile body having a wall with openings which communicate with the interior of said body, and conduits secured to the hood adapted to be moved into and out of communicating relation with said openings adjacent the opposite ends of said chambered member and said openings in said wall.

1,875,638. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 14, 1929. Serial No. 399,506. 8 Claims. (Cl. 257—136.)

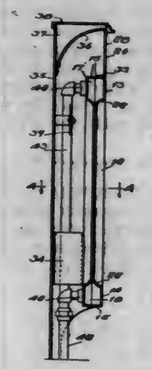
3. In a device of the class described, a substantially vertical tank-like member, a base member communicating

with said tank-like member, said base member comprising a plurality of laterally extending spaced hollow members,



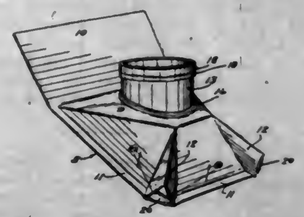
and heat conducting vanes arranged on said hollow members.

1,875,638. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 21, 1929. Serial No. 401,204. 4 Claims. (Cl. 257—136.)



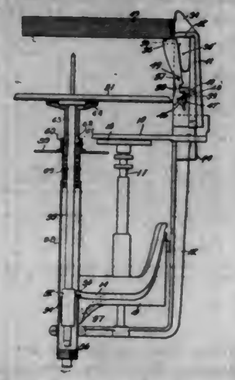
3. A heat exchange device formed of a sheet of material, the marginal edges of which are formed to provide a flange at said edges, said sheet being depressed in the direction of said flanges to provide a plurality of longitudinally extending recesses, which face in a direction opposite to the direction of said flanges, the ends of said recesses being arranged in spaced relation to the marginal edges of said sheet, the depressed portions of an adjacent pair of said recesses providing walls of a passage arranged between said depressed portions.

1,875,640. ROOF FLASHING AND JACKET. FRANCIS J. MOORE, Minneapolis, Minn. Filed May 11, 1931. Serial No. 536,438. 8 Claims. (Cl. 285—31.)



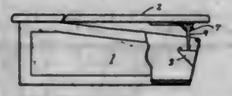
1. An inclined flashing and a vent pipe jacket secured thereto, said flashing having a vertical gusset that is outwardly and transversely bulged to permit the gusset to be spread or contracted to change the inclination of the jacket, said gusset being folded to close the lower open end thereof with freedom to permit the gusset to be spread or contracted.

1,875,641. AUTOMATIC TALKING MACHINE. WILLIAM R. MOORE, Jr., Hagerstown, Md., assignor to Deca-Disc Phonograph Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1929. Serial No. 353,784. 6 Claims. (Cl. 274—10.)



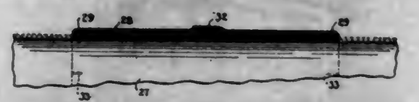
1. In a phonograph for playing a plurality of records in succession, means for changing the records comprising a record table, a spindle supporting said table, means for raising and lowering the said spindle, the said means having frictional engagement only with the spindle, substantially as set forth.

1,875,642. LEVELING DEVICE. ERVING B. MORGAN, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Feb. 12, 1931. Serial No. 515,387. 2 Claims. (Cl. 45—91.)



2. The combination with a school desk having a swingably mounted normally inclined top, of a pivotally mounted spring tensioned arm secured to the underside of said desk top adapted to be swung to a position for leveling the top.

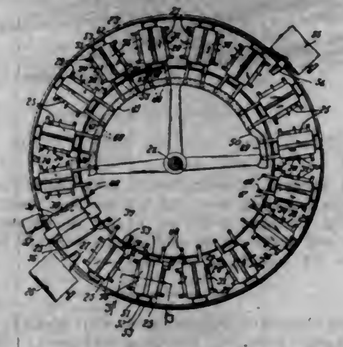
1,875,643. METHOD OF MAKING PNEUMATIC TIRE WHEELS. ALVIN J. MUSSELMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 4, 1929. Serial No. 397,892. 8 Claims. (Cl. 154—14.)



2. A method of making a tire casing which comprises forming a casing fabric upon a spherical airbag, applying inextensible beads to the lateral edge portions of the fabric, incorporating a suitable rubber compound with the fabric, and vulcanizing the structure in an annular tire mold.

4. A method of building pneumatic tires which comprises forming an endless band of tire building material, folding the band to form looped edge portions, shirring the looped edge portions about annular retaining members of relatively small diameter while the maximum diameter of the band remains unchanged, inflating the band to substantially spherical form, applying inextensible beads to the shirred edge portions, applying discs of rubber compound to the sides of the band and in joint forming relation at the central tread portion of the band, and vulcanizing the assembly of elements in a mold.

1,875,644. APPARATUS FOR MAKING HEAT AND SOUND INSULATING PRODUCTS. WILLIAM K. NELSON, Chicago, Ill., assignor to Universal Gypsum & Lime Co., Chicago, Ill., a Corporation of Delaware. Original application filed July 2, 1927, Serial No. 203,199. Divided and this application filed Aug. 18, 1930. Serial No. 475,892. 20 Claims. (Cl. 25—42.)



1. An apparatus for making a heat and sound insulating product, comprising in combination a bottom member, end wall members pivotally mounted on said bottom member on axes at a fixed distance apart, side wall members between said end wall members and abutting at their ends against said end wall members and adjustable between the end wall members toward and from each other for the production of products of different thicknesses, and means for holding said wall members releasably in cooperative relation for the formation of a block.

1,875,645. BRAKE MECHANISM. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 9, 1929. Serial No. 331,296. 10 Claims. (Cl. 188—250.)



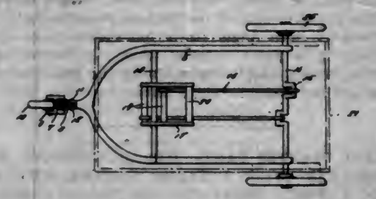
1. A wheel brake member comprising a metallic shoe and a friction facing bonded to the shoe throughout the contacting area and means to protect the bonded area from frictional heats.

1,875,646. WRENCH. PASQUALE NOTARIANNI, Detroit, Mich. Filed Jan. 17, 1931. Serial No. 509,439. 2 Claims. (Cl. 81—100.)



1. A wrench comprising, in combination, a handle having a fixed jaw, a yoke pivotally secured to said handle adjacent said jaw, a movable jaw having a shank insertable through said yoke, teeth on said shank, said handle having a slot therein, a trigger in said slot, a head on said trigger, teeth on said head, a socket in one wall of said slot providing a bearing surface for said trigger, a finger piece on said trigger extending out of said slot through a cover plate thereover, a spring between said trigger, adjacent the head, and the cover plate, adapted to urge the teeth on said head into engagement with the teeth on said shank, and a pin in said handle passing through a slot in said trigger to guide said trigger in its movement.

1,875,647. VEHICLE. PHILIP O'DWYER, Detroit, Mich. Filed May 18, 1931. Serial No. 538,349. 1 Claim. (Cl. 208—38.)



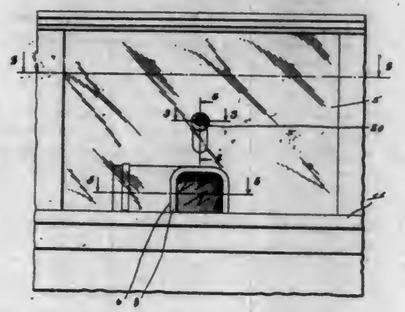
In a vehicle of the class described, a frame, an axle carried by the frame and having a pair of longitudinally spaced oppositely directed cranks, wheels mounted on the axle, links extending forwardly from said cranks, an actuating lever having a pair of laterally spaced guide members and cross bars connecting the guide members, the forward portions of said links being connected to said cross bars, and a cross rod carried by said frame and extending through the guide members of said lever, at a point between and in spaced parallel relation to said cross bars, said lever being provided at the upper portion thereof with a cross member constituting a handle and driving said guide members.

1,875,648. PERCOLATOR DOME. OSCAR OLSEN, Brooklyn, N. Y. Filed Jan. 15, 1931. Serial No. 508,852. 4 Claims. (Cl. 53—3.)



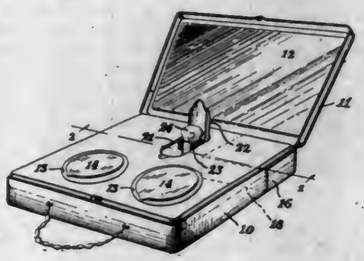
1. A percolator top comprising a metal cover having a central flanged opening and a dome insertible into said cover from the under side only, a flange on said dome adapted to encompass the opening in said cover, means above said flange for holding the latter against the metal cover adjacent said opening, and means for preventing accidental displacement of said dome.

1,875,649. SAFETY PAYING TELLER'S WINDOW. MELVILLE L. ORR, Cincinnati, Ohio. Filed Feb. 26, 1930. Serial No. 431,507. 1 Claim. (Cl. 20—1.01.)



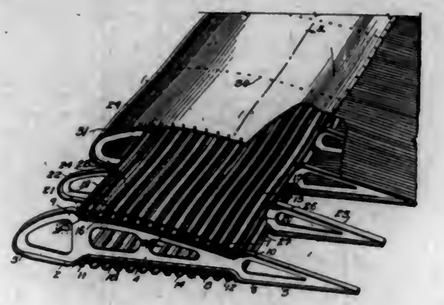
In a structure for the protection of tellers, a counter, a partition extending vertically from said counter provided with a recess in its lower edge, a tunnel disposed on said counter having one end closely fitted in said recess, the opposite end of the tunnel being laterally curved to extend at right angles on a horizontal plane and terminating at a point remote from the recess in said partition, and a band disposed over the free end of said tunnel and secured to said counter.

1,875,650. VANITY CASE. HAROLD PEMBERTON, Seattle, Wash., and FRANK I. DOANE, Berkeley, Calif. Filed May 5, 1930. Serial No. 449,752. 1 Claim. (Cl. 240—6.45.)



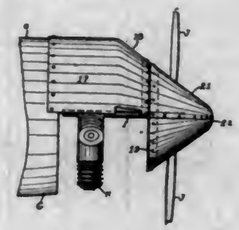
In a vanity case, the combination of casing having a cosmetic containing compartment and having a medially and transversely disposed slot formed within the rear portion thereof, a cover hinged to said casing, a mirror on said cover, a resilient conductor of electrical energy mounted within and insulated from said casing, a dry cell battery removably seated within the casing and normally in contact with said conductor and casing, a reflector hingedly mounted within said casing for folding movement within said slot, a lamp socket on said reflector, and an incandescent bulb in said socket adapted to contact said conductor when the reflector is elevated.

1,875,651. AEROFOIL SECTION. WILLIAM E. PHELAN, Kansas City, Kans. Filed May 29, 1930. Serial No. 456,918. 17 Claims. (Cl. 244—31.)



1. In airplane construction, a wing comprising transverse ribs including head and tail portions longitudinally extending corrugated plates having longitudinal edge flanges, and fasteners in said flanges engaged with said portions for connecting the ribs.

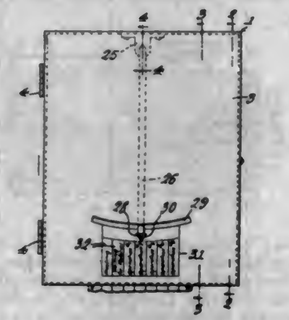
1,875,652. MOTOR PROTECTOR AND SPEED ACCELERATOR. HARRY C. PITTMAN, Richmond, Ind. Filed Jan. 12, 1931. Serial No. 508,150. 1 Claim. (Cl. 244—31.)



In combination with a motor having a shaft extending forwardly therefrom and adapted to be rotated thereby and propeller blades carried by the projecting portion of said shaft; a relatively stationary jacket member extending partly around the motor with its forward end forming a disc at right-angles to and concentric with said shaft, a conical jacket member concentric with said shaft and secured thereto with its rear end located near to and corresponding with said disc and with said blades projecting outwardly through said conical jacket member.

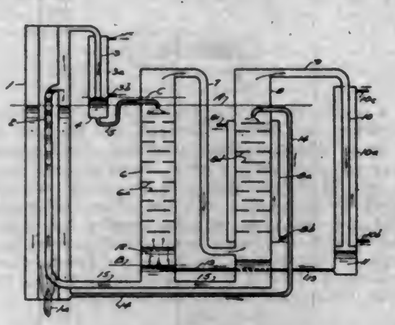
1,875,653. RECORDER. FRANK BURDETTE POST, Los Angeles, Calif. Filed Mar. 14, 1930. Serial No. 435,850. 6 Claims. (Cl. 234—1.)

3. A recording means comprising a support, a pendulum marker, means for mounting the marker for swinging movement on the support, transversely of an axis, and for sliding movement longitudinally of said axis, and



mechanism for automatically moving the marker longitudinally of said axis to cause the marker to cooperate with the material on which a mark is to be made.

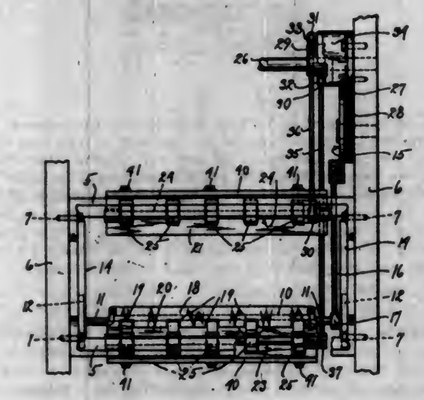
1,875,654. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Dec. 10, 1930. Serial No. 501,173. 7 Claims. (Cl. 62—119.5.)



1. The method of refrigeration comprising introducing a solution of a gas in a liquid into a space filled with a supplementary gaseous medium inert towards the solution, separating the gas in solution from the liquid forming a mixture of said gas and said inert gaseous medium, then separating said separated gas from said supplementary gas by reabsorbing one in the liquid and condensing the other to liquid state.

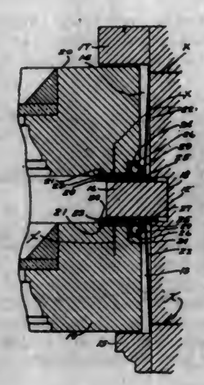
1,875,655. PAPER FOLDING MACHINE. HARRY H. RAWSON, Spokane, Wash., assignor to The Washington Machinery & Supply Company, Spokane, Wash. Filed Aug. 17, 1931. Serial No. 557,448. 4 Claims. (Cl. 270—79.)

1. The combination with a printing press frame of a paper folding machine arranged to be driven by the mechanism of the printing press, said folding machine comprising a frame secured to the printing press frame, a rectangular folding member having an opening therethrough, gears fixed to the ends of the folding member, the projecting ends of said folding member slidably disposed in guide slots formed in the folding machine frame, rack bars secured to said frame and meshing with said gears, drive wheels mounted on the press frame, an arm eccentrically connected to each of said drive wheels and to the ends of the folding member whereby said member is caused to reciprocatively move the length of the guide slots and to make a half turn in alternatively opposite directions at each reciprocative movement thereof, a flange plate secured to the upper and lower faces of the folding member and having spaced part notches in their outer edge portions, a bar secured transversely of the folding machine frame adjacent the ends of the guide slots, finger supporting shafts mounted adjacent said bars and parallel therewith, adjusting means for said shafts, a plurality of fingers fixed to said shafts in spaced re-



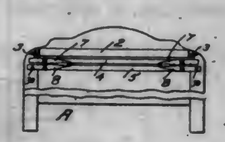
lation to register with the notches in the folding member flange plates, frictional inserts for said fingers, and means whereby said finger supporting shafts are caused to alternatively turn and whereby the fingers at each end of the machine are caused to move into engagement with the particular transverse bar that is adjacent the folding member in its reciprocative movements.

1,875,656. WEATHER STRIP. FRANK REESE, Minneapolis, Minn., assignor to Reese Metal Weather Strip Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 22, 1930. Serial No. 503,894. 7 Claims. (Cl. 20—69.)



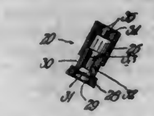
1. A weather strip device comprising a pair of members, applicable the one to a sash and the other to a frame in which the sash is slidably mounted, said two members having interlocked elements that hold said members for common movement except relative longitudinal sliding movement, one of said members having a part that is substantially parallel to the sash and arranged to yield and permit a limited lateral movement of the sash in respect to the frame.

1,875,657. METHOD AND APPARATUS COMPRISING A SANITARY PROTECTIVE MEANS FOR BEDS AND THE LIKE. MARJORIE REQUA, Beverly Hills, and THOMAS LEE MCCLELLAN, Los Angeles, Calif. Filed July 15, 1930. Serial No. 468,100. 8 Claims. (Cl. 5—330.)



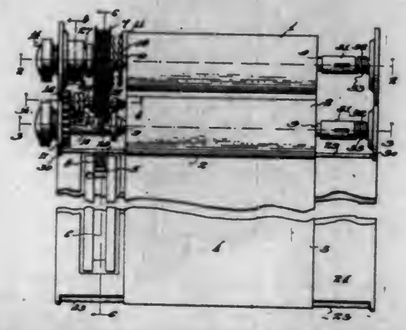
1. In combination with a bedstead, a bar, means by which the bar is secured to the bed end at the rear and below the top thereof, a second bar, means connecting the two bars so that the second mentioned bar may be retracted below the top of the bed end or extended above the top, a roller, means by which the roller is rotatably carried by the second mentioned bar and a flexible shield carried by the roller and adapted to be drawn off the roller and extended over the front of the bed end.

1,875,658. DRINKING FOUNTAIN APPARATUS. CHARLES ROBERGE, Williamsburg, Mass., assignor to Puro Sanitary Drinking Fountain Company, a copartnership of Massachusetts, consisting of Christian J. Hills and Reuben B. Hills, Haydenville, Mass. Filed Jan. 14, 1931. Serial No. 508,710. 4 Claims. (Cl. 299—15.)



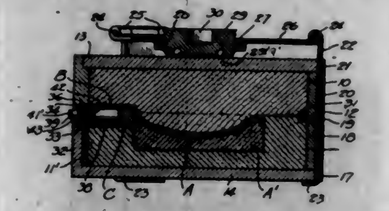
1. A drinking fountain apparatus comprising in combination, a hollow nozzle having an outlet in a side thereof, a cap in the upper side of said nozzle and a plug movable therein, the said plug and cap being provided with bores therethrough.

1,875,659. SCROLL AND LINE INDICATOR. LULA H. ROBINSON, Dallas, Tex. Filed Mar. 23, 1929. Serial No. 349,460. 5 Claims. (Cl. 281—7.)



1. A scroll mounting including a pair of hinged plates each having roller receiving means on its free end, said rollers being arranged to receive a strip of writing material interwound thereon to travel over the upper surface of each of said plates when one of said rollers is rotated, means to successively rotate said rollers a predetermined distance in one direction and means to reverse said plates to expose the opposite side of said writing material.

1,875,660. DENTAL FLASK. WILLIAM F. RODIN and ALEXANDER HUHAL, Los Angeles, Calif. Filed Dec. 17, 1929. Serial No. 414,802. 6 Claims. (Cl. 18—33.)



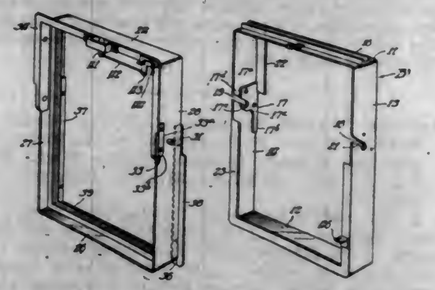
2. A flask including a plurality of mating flask sections superposed with respect to each other, a gasket removably interposed between said sections and having an annular rib occupying a position within the flask and in spaced relation to the inner surface of one of said sections so that plaster contained in the flask will flow over the rib and onto the gasket at a point between said mating sections, closing means for the flask, and means for clamping the closing means and the flask sections together.

1,875,661. FUSIBLE LINK. WILLIAM L. ROESSNER, Denver, Colo. Filed Sept. 8, 1931. Serial No. 561,667. 6 Claims. (Cl. 169—42.)



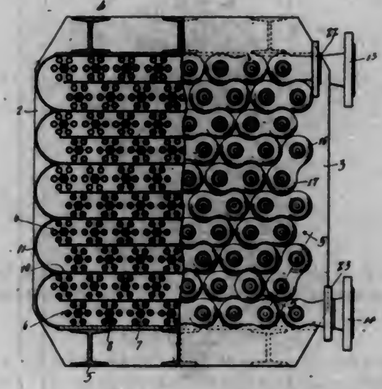
3. A fusible link of the type described, comprising, in combination, two relatively movable and separable members, one of which comprises a member provided with an opening and the other of which comprises two substantially parallel flexible arms, one end of the arms being attached to each other and the other end extending through the opening in the other member, the ends that extend through the opening being spread apart so that the distance between their outer surfaces is greater than the corresponding width of the opening, and a plug of fusible material interposed between the spread ends.

1,875,662. WINDOW. CHARLES D. ROSSBACH, Chicago, Ill. Filed Apr. 18, 1931. Serial No. 531,097. 8 Claims. (Cl. 189—69.)



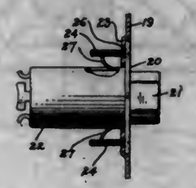
1. In a window, a frame having top, bottom and side members and pivot slots in the side members, a sash having pivot members extending into said slots and cooperating therewith to form pivots for the sash, combination weather and stop strips on the frame and sash extending to points short of the pivots, whereby the sash can be swung open, and a weather block disposed between the sash and frame adjacent the pivot, and overlapping said weather strips, whereby a weather tight joint is provided at the pivot.

1,875,663. HEAT EXCHANGER. CHARLES O. SANDSTROM, Los Angeles, Calif. Filed Jan. 21, 1931. Serial No. 510,203. 10 Claims. (Cl. 257—240.)



1. A heat exchanger comprising tube sheets, tubes connecting the tube sheets, baffle members having their edges engaging the tube sheets, said baffle members having curved ends which form return passages for the baffle passages formed by the baffle members, and means providing return passages for the tubes.

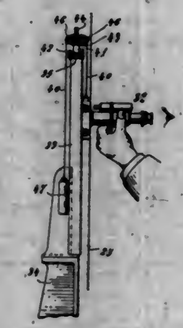
1,875,664. SCREW SECURING MEANS FOR DOOR LATCHES AND THE LIKE. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Co., San Francisco, Calif., a Corporation of California. Filed Mar. 4, 1930. Serial No. 433,041. 1 Claim. (Cl. 151—82.)



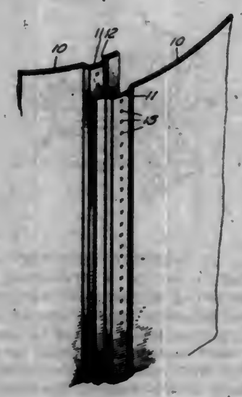
In combination with a housing member having a threaded opening formed therein, a perforated face plate member, a machine screw extending through the perforated face plate member and through the threaded opening in the housing member to clamp the members with relation to each other, and a lug struck out of the housing member and bent into the path of the screw to frictionally secure the screw against rotation.

1,875,665. SUPPORT FOR OPTICAL MICROMETERS. ERNEST SCHWEIZER, East Orange, N. J., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed June 25, 1928. Serial No. 287,948. 2 Claims. (Cl. 88—14.)

1. In means for measuring the thickness of a moving sheet of transparent film, the combination of a movably mounted transparent film, a movably mounted backing element on one side of said moving sheet and mounted so that it may move in the direction of travel of said moving sheet, and a device for optically measuring the thickness of said sheet having a member adapted to be pressed against the other side of said moving sheet, whereby when the measuring device is pressed against the moving sheet the backing element moves with said sheet.



1,875,666. TANK SEAM. WILLIAM SCHWEMLEIN, Parkersburg, W. Va., assignor to the Parkersburg Rig & Reel Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed Aug. 3, 1931. Serial No. 554,891. 8 Claims. (Cl. 220—75.)

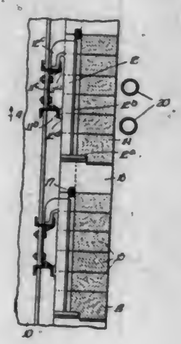


1. A tank construction comprising a plurality of side plates each adjacent pair of which has its vertical edges overlapping and provided with openings, one vertical edge portion of each plate being ribbed to reinforce the plate and to provide a vertical channel, and bolts arranged in the openings of the plates and provided with heads corresponding in size to and arranged in said channels whereby the latter prevent turning movement of the bolts.

1,875,667. FURNACE WALL CONSTRUCTION. FRANK I. SHEAHAN, Chicago, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1930. Serial No. 423,718. 5 Claims. (Cl. 72—101.)

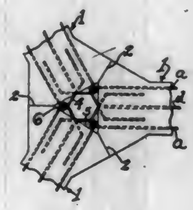
3. In furnace wall structure, the combination of parallel upright frame members, a horizontal stretcher member connected to the upright members and having portions at its upper and lower sides disposed partly between

and extending partly beyond the upright members, hangers supported on said extending portions of the stretcher members and depending at the side of the latter,



and wall refractories supported on and anchored to the hangers with their outer faces in proximity to but spaced from the stretcher members.

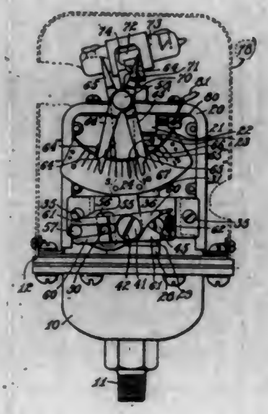
1,875,668. METHOD OF CASTING TETRAHEDRONS. DANIEL F. SHELDON, Los Angeles, Calif. Filed June 8, 1931. Serial No. 542,826. 1 Claim. (Cl. 61—3.)



The method of producing reinforced concrete tetrahedrons adapted for service in establishing and maintaining river banks in and with alluvial soil deposits, wherein the tetrahedron sides are angular and of skeleton formation with the skeleton legs arranged to complete the side configuration, said method consisting in precasting the legs individually with enlarged ends and with reinforcing elements exposed at the ends of the leg, producing the embryo tetrahedron by assembling the respective legs into the tetrahedron form with the exposed reinforcing elements at an end of a leg positioned relative to those of an adjacent leg to permit the elements to be secured together to anchor the legs relatively with the anchor elements exposed, and then completing the tetrahedron by the addition of concrete to fill the spaces formed at the corner angles during the assembly and encase the exposed anchor elements, whereby the angular corners will be continuous and of reinforced concrete formation of which the leg reinforcing elements are an integral part to anchor the sides relative to each other.

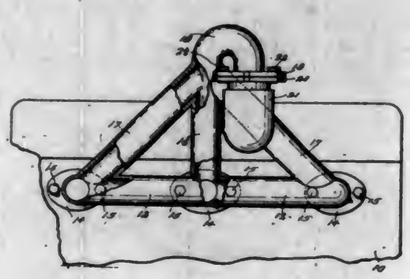
1,875,669. PRESSURE AFFECTED CIRCUIT CONTROLLER. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,463. 7 Claims. (Cl. 200—83.)

1. A circuit-controller comprising a shiftable terminal element and a projection associated therewith, a shiftable arm, a pair of fingers independently medially pivoted on said arm with one pair of ends of said fingers straddling



said projection, and means carried by the arm for engaging and retaining the opposite ends of said fingers in adjusted position.

1,875,670. INTAKE MANIFOLD. RAY PERCY SMITH, Penokee, Kans. Filed July 16, 1930. Serial No. 468,398. 1 Claim. (Cl. 128—52.)

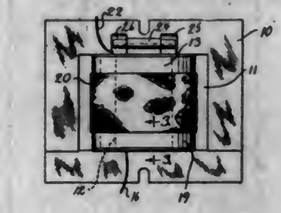


A down draft intake manifold for internal combustion engines, comprising a horizontal pipe section having end and intermediate coupling branches adapted for attachment along the side of an internal combustion engine for communication with the intake passages thereof, a plurality of pipe branches of substantially the same diameter as said horizontal pipe connected thereto in registry with said coupling branches and converging upwardly to a point above the horizontal pipe and merging together in intercommunicating relation, and means at the point of mergence of said pipe branches for connecting a carburetor thereto.

1,875,671. AIR PURIFIER. JOSEPH SOLA, Chicago, Ill., assignor to Sola Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 27, 1929. Serial No. 416,905. 3 Claims. (Cl. 204—32.)

1. In an air purifier, the combination of a transformer, the electrical connections between the ends of the secondary coil of said transformer comprising a metal plate

in condenser relationship to a portion of said secondary coil arranged so that when an undulatory current is passed through the primary coil of the transformer a high



potential undulatory current is caused to pass by a capacitance effect through the condenser and the secondary coil.

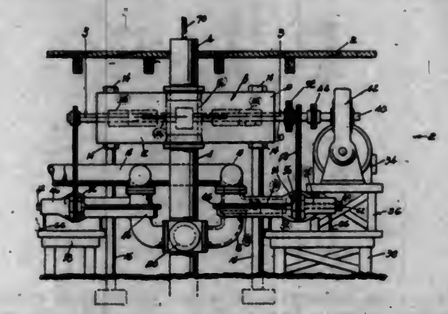
1,875,672. VALVE OPERATOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Apr. 23, 1930. Serial No. 446,461. 8 Claims. (Cl. 251—49.)



2. The combination of a valve casing having an opening therein, a valve member controlling a passageway through said casing by movement toward and from a seat therein, a stem connected at one end to said member with its other end projecting through said opening, means supporting said member for reciprocation toward and from its seat and sealing said opening including a cap screw-threaded onto said casing around the opening, an inverted U-shaped frame member having its opposite ends detachably secured to said cap, said frame member providing a housing in which the upper end of said stem is disposed, a screw alined with said stem and threading through said frame member, means within said housing detachably connecting said stem and screw, and an operating handle on the other end of said screw by which the screw may be turned to effect reciprocation of said valve member.

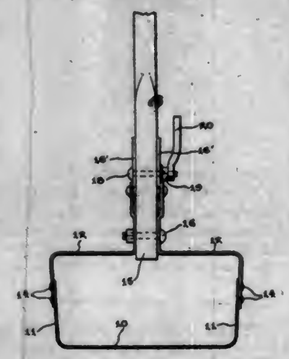
1,875,673. WELL CONTROL AND SAFETY VALVE MECHANISM. RALPH D. STOCKSTILL, Simons, Calif. Filed Oct. 28, 1929. Serial No. 402,960. 8 Claims. (Cl. 166—15.)

1. In an oil well fire and gusher extinguisher, in combination, a sectional tubing, a coupling connecting two of the sections of said tubing, said coupling being of softer material than said tubing, by-pass means connected to said tubing below said coupling, means for controlling



said by-pass means, and combined cutter and closure means associated with said coupling for cutting the latter, whereby said tubing may be closed at said coupling.

1,875,674. HOE. CHARLES B. STRANG, Lindenwood, Ill. Filed Oct. 11, 1929. Serial No. 398,998. 1 Claim. (Cl. 306—16.)

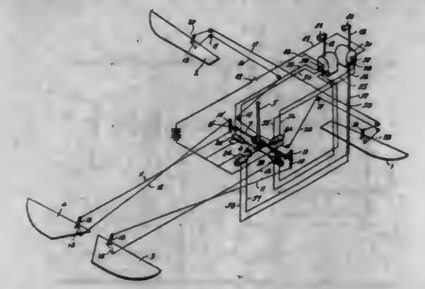


An implement comprising a reversible member, arms of generally Z-shaped form having certain terminals secured to said member, a handle on opposite sides of which the remaining terminals of the arms are positioned, a pivot bolt passing through the handle and through said remaining arm terminals to pivotally connect the latter with the handle for swinging movement of said member to opposite sides of the handle, links formed with longitudinal slots, said links having terminal pivotal connections with the handle engaging portions of the arms, a bolt passing through the handle back of said pivot bolt and also passing through the slots in the links and a clamping nut provided with an actuating handle, said nut being threadingly engaged with the last said bolt.

1,875,675. FLIGHT CONTROL FOR AEROPLANES. ROBERT C. STRUBLE, Seattle, Wash., assignor to R. C. Struble Company, Inc., Seattle, Wash., a Corporation of Washington. Filed May 24, 1930. Serial No. 455,169. 1 Claim. (Cl. 244—29.)

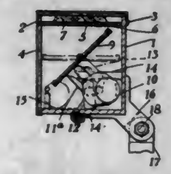
In an airplane or the like, the combination with a control member that is movable in one direction to vary the elevation of the airplane and movable in another direction to effect lateral turning thereof, of gyroscopic devices operable respectively to actuate the control member for changing the elevation and lateral direction of the

airplane; each of the gyroscopic devices including a rotatable driving member and separate means for the gyroscopic devices whereby slip stream air currents oper-



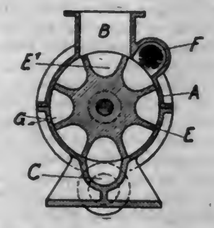
ate to cause delivery of air against the rotatable driving members to rotate them to functionally actuate the said gyroscopic devices.

1,875,676. DISPLAY DEVICE. HAROLD JOHN TAPLIN, Kew, Surrey, England, assignor to Harold John Taplin and Siegfried Henry Kaufmann, London, England. Filed May 5, 1930, Serial No. 449,900, and in Great Britain May 7, 1929. 9 Claims. (Cl. 116—37.)



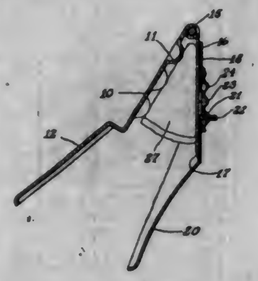
1. In an inertia-operated display device intended to be carried by a vehicle, a display, a pivoted reflector in reflective cooperation with the display, a pivoted inertia weight, and connections between said weight and said reflector such that in one position of the weight the display can be viewed and in another is concealed.

1,875,677. ROTARY FEEDER FOR PNEUMATIC CONVEYERS. WILHELM THALER, Heidenheim-on-the-Brenz, Germany. Filed Oct. 29, 1930, Serial No. 491,997, and in Germany Nov. 14, 1929. 2 Claims. (Cl. 302—49.)



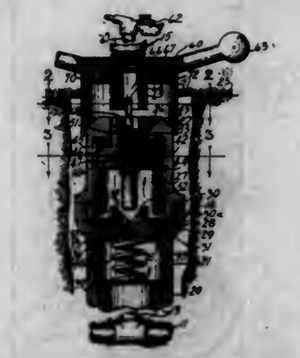
1. In a rotary feeder for pneumatic conveyers for pulp and the like, a casing having a vertically disposed feeder, a rotary wheel mounted in the casing having a plurality of curvate cells set inwardly of its periphery, and an oppositely disposed inlet and outlet pipe connection in communication and integral with the casing and having an up-bent portion, the bottom edge of which is in coincidence with the periphery of the wheel and is diametrically opposed to said feeder, said cells by their curvature forming a complemental section of the pipe connection and a continuous passage entering and leaving the cell heel, whereby pulp and the like fed into the wheel cells are in the path of conveyance in the pipe.

1,875,678. CITROUS FRUIT JUICE EXTRACTOR. GEORGE H. THATE, Belleville, N. J. Filed Sept. 8, 1931. Serial No. 561,673. 7 Claims. (Cl. 100—49.)



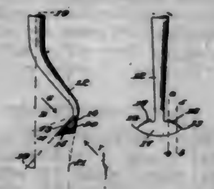
7. In a juice extractor, a pair of jaws mutually hinged, and means for increasing the area of one of said jaws.

1,875,679. QUICK COUPLER VALVE. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 6, 1928. Serial No. 310,705. 11 Claims. (Cl. 284—18.)



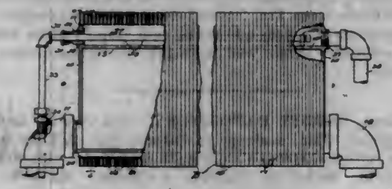
1. In a device of the class described, the combination of: a shell forming a passage, a valve adapted to close said passage; a closure adapted to close one end of said passage; a seat in said shell; an engaging means on said closure adapted to engage said seat and seal said end of said passage; means for removing said closure from closing position; and valve-opening means for unseating said valve when said closure is removed from closing position.

1,875,680. CARVING INSTRUMENT. CHRIS S. VAN HORN, Bloomsburg, Pa. Filed Jan. 9, 1930. Serial No. 419,674. 12 Claims. (Cl. 32—10.)



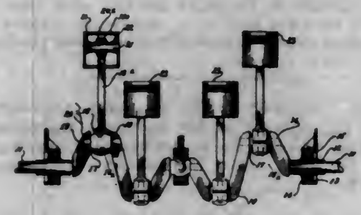
1. A carving tool comprising a stem and a head extending transversely at the end of said stem, said head having a continuous anterior cutting edge for employment by pushing said stem and cutting edge adjacent said stem for employment by pulling said stem.

1,875,681. RADIATOR. ALFRED G. WAHLBERG, Duluth, Minn. Filed Dec. 18, 1929. Serial No. 414,837. 2 Claims. (Cl. 237—78.)



1. In a combined heating and humidifying apparatus of the character described, the combination of a relatively elongated member having vertical end walls, side walls and a top wall disposed a relatively short distance below the upper edges of the side walls, said end, side and top walls being all formed integrally to thereby provide an enclosed heat-medium retaining chamber below said top wall and an open top humidifying chamber above said top wall; longitudinally spaced fins extending laterally from each of said side walls and extending also vertically upwardly above said top wall whereby to provide a plurality of vertical passages between the fins along each side of said member for the heated currents of air to pass upwardly beyond the open mouth of the humidifying chamber; and means for supplying a heating medium to said heat-medium retaining chamber.

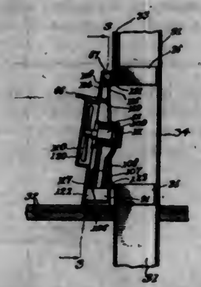
1,875,682. CRANKSHAFT MOUNTING FOR INTERNAL COMBUSTION ENGINES. CLINTON L. WALKER, Piedmont, Calif., assignor of one-half to Brooks Walker, Piedmont, Calif. Original application filed Aug. 26, 1929, Serial No. 388,574. Divided and this application filed May 31, 1930. Serial No. 458,367. 3 Claims. (Cl. 74—38.)



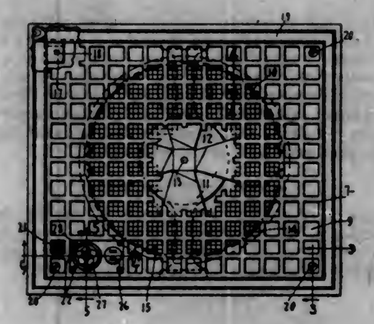
3. In an engine, a crankcase having end bearings and a spherical intermediate bearing, a crankshaft having a spherical bearing portion journalled in said intermediate bearing, and bushings mounted for universal movement in said end bearings, the ends of said crankshaft being journalled in said bushings.

1,875,683. REGISTER FAN. JAMES L. WATERBURY, Springfield, Ohio. Original application filed Mar. 30, 1927, Serial No. 179,704. Divided and this application filed Sept. 19, 1929. Serial No. 393,773. 5 Claims. (Cl. 98—108.)

1. In combination with a hot air stack and a register box, a border frame for the register box having a cold air channel therein,, a grill plate fitted in said border frame, a fan and motor unit in said frame, hollow means for supporting said unit and being interiorly in communication with the air chamber in said border frame, and a damper associated with said grill plate.

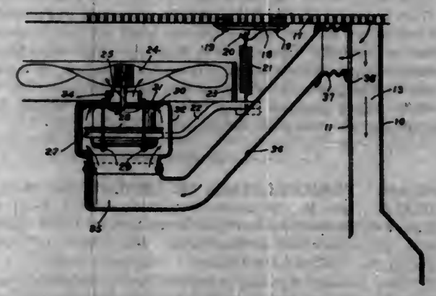


1,875,684. REGISTER GRILLE. JAMES L. WATERBURY, Springfield, Ohio. Filed Nov. 23, 1929. Serial No. 409,376. 6 Claims. (Cl. 98—114.)



1. In a structure of the character described, the combination of two grilles placed together, and an intermediate supporting plate between said grilles to which said grilles are secured and having a central opening for the circulation of air through said grilles but being otherwise imperforate, said opening being of smaller dimensions than said grilles.

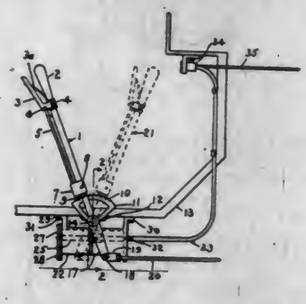
1,875,685. HEATING AND VENTILATING APPARATUS. JAMES L. WATERBURY, Springfield, Ohio. Filed Jan. 23, 1931. Serial No. 510,656. 4 Claims. (Cl. 126—105.)



1. In combination with an air heating device having a heated air outlet passage and a return cool air passage, a motor, a fan mounted on the motor, said motor and fan

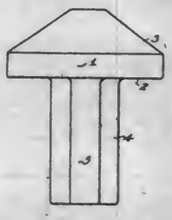
being located in said heated air outlet passage, and means for by-passing a quantity of the air from the return cool air passage directly to the motor and fan for protecting the motor against injury by the hot air and for commingling the hot air with a small proportion of the returned cool air.

1,875,686. SAFETY HAND BRAKE LOCKING DEVICE FOR AUTOMOBILES AND TRUCKS. THEODORE R. WHITE, Brooklyn, N. Y. Filed Oct. 21, 1930. Serial No. 490,149. 3 Claims. (Cl. 70—127.)



1. In a motor vehicle, the combination with an emergency brake lever having an extension, said lever pivoted under the floor board of the vehicle, and a notched segment engageable with a hand lever rod mounted upon said brake lever, of a support fixed to said floor board pivotally carrying a shaft, said shaft having fixed thereto a lever adapted to be moved to engage with said extension and prevent further movement of the brake lever.

1,875,687. DRIVING HEAD FOR SUPPORT POSTS. THEODOR R. WILLWERSCHEID, Rocky River, and HOWARD B. DAYTON, Parma Heights, Oh'o. Filed May 20, 1931. Serial No. 538,730. 2 Claims. (Cl. 61—77.)



1. A driving cap for channeled metal posts, comprising a solid head portion, a finger member extending downwardly from one side of said head portion, a second finger member extending downwardly from the head portion a spaced distance inwardly from the first finger member, said finger members being spaced apart a distance sufficient to admit a side of the post, the width of the inner downwardly extending finger portion being of a size to fit within the channel of the post to be driven.

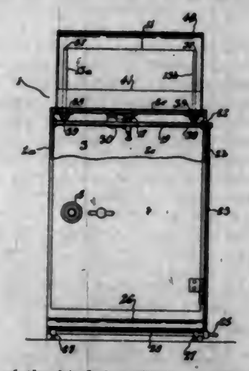
1,875,688. FERMENTATION OF CELLULOSIC MATERIALS. LEO M. CHRISTENSEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 14, 1929. Serial No. 407,293. 8 Claims. (Cl. 260—120.)

1. In a process for the fermentation of cellulosic materials, the improvement which comprises successively utilizing as the inoculum in succeeding fermentations the unfermented cellulosic material from previous similar fermentations.

1,875,689. FERMENTATION OF CELLULOSIC MATERIAL. HERBERT LANGWELL, Great Burgh, England, assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 14, 1929. Serial No. 407,295. 2 Claims. (Cl. 195—20.)

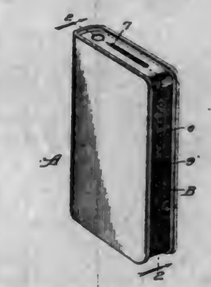
1. In the process of producing acetic and butyric acids and other useful products by the fermentation of cellulosic materials by the aid of thermophilic bacteria, the steps which comprise inoculating a cellulosic mash with bacteria of the said type, allowing fermentation to go substantially to completion, allowing the mash to settle, withdrawing from the fermentation vessel a portion of the supernatant mash, adding to said fermentation vessel fresh cellulosic mash, and allowing the fermentation to continue.

1,875,690. SAFETY DEPOSITORY. WILLIAM E. ADAMS, Cleveland, Ohio, assignor to Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed May 18, 1929. Serial No. 364,299. 3 Claims. (Cl. 109—1.)



1. A device of the kind described comprising a housing having a door opening and a door therefor, said housing having an apertured top wall, a pivoted closure member for the aperture in said top wall, a shelf constrained to move with said closure member and adapted to close said aperture when said closure member is in its open position, spring-actuated fluid-check means for displacing said closure member into its closed position, and a spring-pressed latch accessible solely through said door for locking said closure member in its closed position, said latch being held in a retracted position by said closure member while said closure member is moving into its closed position.

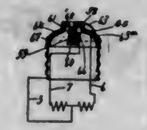
1,875,691. SAVINGS BANK. EDWARD A. ANDERSON, Chicago, Ill., assignor to The Automatic Recording Safe Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 16, 1930. Serial No. 421,168. 2 Claims. (Cl. 232—6.)



1. A savings bank having a casing section of U-form cross-section with edge portions of sheet metal which are turned outwardly and then backwardly upon adjacent

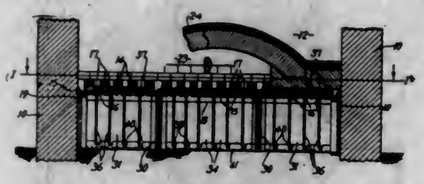
portions of the metal to form flanges; padding sheets applied to the side walls of said casing section between said flanges; and a fabric covering for said casing section, folded inwardly about the edge portions and joined to the inner surfaces of said side walls.

1,875,692. ARRANGEMENT FOR ELECTRIC INCANDESCENT LAMPS. RINGHALD PER ALFRED ANDERSSON, Stockholm, Sweden. Filed Apr. 11, 1928, Serial No. 269,172, and in Sweden Jan. 28, 1928. 1 Claim. (Cl. 176—27.)



A lamp having a metal sleeve, a base, a bottom contact on the base, a pin rotatably journaled in the bottom contact and provided at its free end with a collar forming an abutment, a helical spring on the pin bearing at one end against said abutment and at the other end against the under side of the bottom contact, a rotatable disc fast to the outer end of the pin and having a contact spring, a pair of contacts extending through the base and each engageable by said contact spring, a contact ring arranged on the outer side of the base and electrically connected to one of said contacts and a plurality of filaments each having one end connected to the sleeve and the other end connected to one of the first named contacts.

1,875,693. AIR PREHEATING CONSTRUCTION FOR FURNACES. HARRY A. ATWATER, Kansas City, Mo. Filed July 10, 1929. Serial No. 377,263. 7 Claims. (Cl. 158—1.)



1. A furnace construction comprising a combustion chamber having a floor, and an air-feed passage beneath said floor for conducting air from the exterior of the furnace to said chamber, and one or more metallic air preheating sheets suspended from said floor in position to subdivide the flow of air through said passage and subject the same to the pre-heating effects of the lateral faces of said sheets.

1,875,694. BASKET. MARIANO BALSAMO, St. Louis, Mo., assignor to Fruit Supply Company, St. Louis, Mo., a Corporation of Missouri. Filed June 14, 1929. Serial No. 370,778. 2 Claims. (Cl. 217—122.)



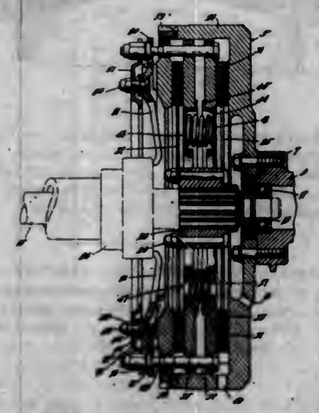
1. A basket of the class described having a top edge, a hoop surrounding the basket and substantially flush with the top edge, a hoop inside the top edge and extending above the same, said inside hoop being tapered downwardly and outwardly so as to eliminate a bottom edge corner against which the produce in the basket might otherwise rest and become injured, means binding said hoops together with the basket wall therebetween, and a lid member so juxtaposed adjacent the top of the inside hoop as to prevent substantial exposure of the top edge corners of said inside hoop to said produce, said lid member having a flange extending downwardly outside of the inside hoop.

1,875,695. INSERT FOR TILLS. HENRY G. BEARD, DAVID E. JUSTUS and ANTONIO BARELLI, Kansas City, Mo. Filed July 12, 1929. Serial No. 377,764. 12 Claims. (Cl. 45—7.)



1. An insert for reducing the size of a tray compartment, including a chamber portion adapted to be attached to one of the vertical walls of the compartment for reducing the length of the compartment, and a side plate extending rearwardly from said chamber portion in spaced relation with an adjacent vertical wall of the compartment for reducing the lateral dimensions of the compartment.

1,875,696. CLUTCH. ROSCOE BERINGER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,536. 9 Claims. (Cl. 192—69.)

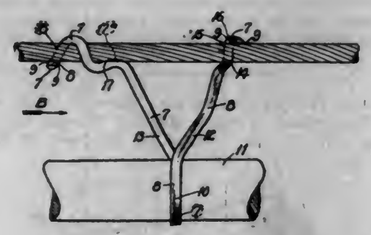


1. In a disc clutch, parallel spaced driven plates, a plurality of pairs of driving plates, the plates of each pair being one on either side of a driven plate, the inner and adjacent driving plates being axially slidable, yielding means to separate said inner driving plates, a plurality of radially disposed operating pivoted fingers, means connecting each of said fingers on the opposite sides of its fulcrum to the movable driving plates.

1,875,697. CABLE HANGER. JASPER BLACKBURN, Webster Groves, Mo. Filed Mar. 29, 1929. Serial No. 350,881. 1 Claim. (Cl. 248—33.)

A cable hanger formed of a single strand of spring wire having a convex and a flat face, a cable seat formed intermediate the ends of said wire and having the convex face thereof uppermost, diverging arms formed at the ends of said cable seat, a tilted hook formed at one end of said

wire and integral with one of said arms and adapted to have the flat face of the wire opposed to a messenger wire, a resilient arm integral with and at an angle to the remaining arm and presenting one edge of the wire to the



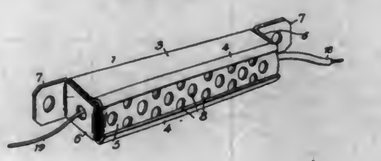
under face of the messenger wire, and a spiral gripping hook internal with said resilient arm, said gripping hooks having the flat face of the wire opposed to the messenger wire.

1,875,698. FURNITURE CONSTRUCTION. FRED J. BLAKESLEE, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Nov. 9, 1929. Serial No. 405,896. 9 Claims. (Cl. 155—86.)



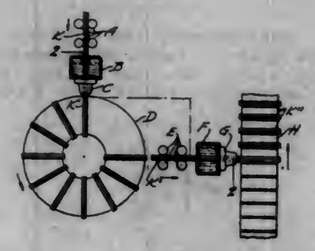
1. A construction comprising: a member having an opening therethrough; a pair of separate members on the opposite sides respectively of the first-mentioned member and having offset portions respectively extending into said opening and united directly within the same.

1,875,699. THERMOSTATIC CIRCUIT CLOSER. GEORGE H. BRADY, Baltimore, Md., assignor to Improved Fire Detector Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 7, 1928. Serial No. 283,675. 8 Claims. (Cl. 220—1.)



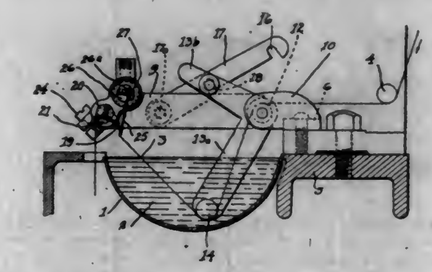
1. In a casing for a thermostatic circuit closer, a channeled casing body having a back wall and side walls and normally open at its ends and front, said side walls being provided with inturned flanges, and a cover plate closing the opening at the front of the body and underlying said flanges, said cover plate having end portions closing the said normally open ends of the body and terminating in fastening members parallel with the back wall of the casing whereby the closer may be attached to a support.

1,875,700. PROCESS AND APPARATUS FOR COLOR-STRIPING PENCILS AND THE LIKE. HARRY W. BREWER, St. Louis, Mo. Filed June 28, 1930. Serial No. 464,668. 7 Claims. (Cl. 41—38.)



4. That process of pencil-finishing which consists in providing a pencil-body with a liquid paint-coating of one color, passing the coated pencil endwise through the bore of a wiping-member for removing surplus paint from the pencil-body and then drying said coating, providing said coated pencil-body with a liquid paint-coating of another color and then passing the so freshly coated pencil-body endwise through a second wiping-member bore complementary only in part to the contour of the pencil-body for removing corresponding parts only of the second coating for exposing both colors on the pencil-body.

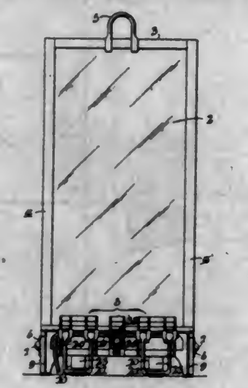
1,875,701. DEVICE FOR REMOVING MOISTURE FROM FLEXIBLE STRIP MATERIAL. GEORGE L. BROWNELL, Worcester, Mass. Filed Nov. 14, 1929. Serial No. 407,266. 2 Claims. (Cl. 91—32.)



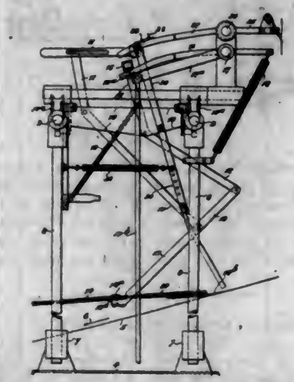
3. In a device of the class described, the combination with a fluid receptacle, a fixed scraper blade mounted above the receptacle, a rotatably mounted scraper blade and a roll mounted on a fixed axis above said receptacle and opposite to said blades, of a rod pivotally mounted on the same axis as said roll, said rod being turnable to immerse a strip of flexible material in said receptacle, means for locking said rod to maintain said strip at a predetermined depth in said receptacle intermediate the points of engagement of its under surface with said roll and with the edge of said stationary blade, and means for maintaining said rotatably mounted blade in position to engage the upper surface of said strip adjacent to said fixed blade.

1,875,702. CONTAINER FOR TRANSPORTING STACKED ARTICLES. GEORGE W. BUTTS, Wynnewood, Pa. Filed July 30, 1931. Serial No. 553,961. 6 Claims. (Cl. 294—67.)

1. A bottomless container of the character descibed having a box-shaped frame, links pivotally mounted on opposite sides of said frame, said links normally engaging load-carrying members disposed across the bottom of the frame, and being adapted to be swung outwardly to release said load-carrying members, and means whereby said links are yieldingly held in either engaged or released position against the pressure of a spring.



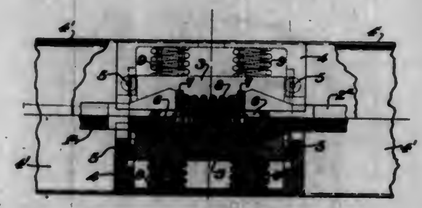
1,875,703. MACHINE FOR CUTTING THE PILE OF WEFT-PILE FABRICS. HUGH LINLEY BYRD, Stockport, England, assignor to Drey, Simpson & Company, Limited, South Reddish, near Stockport, England. Filed Aug. 7, 1929, Serial No. 384,121, and in Great Britain Dec. 24, 1928. 5 Claims. (Cl. 26—10.)



1. In a machine for cutting the pile of weft-pile fabrics, including a knife, means for mechanically supporting the knife during the cutting operation comprising a holder adapted to be moved to and fro across the machine, an operating lever for controlling the operation of the machine, a system of levers connected to said knife and adapted under normal operation to engage said operating lever, said system of levers being adapted upon movement of the knife in either direction to release said operating lever, and means for actuating said operating lever to stop the machine when released by said system of levers.

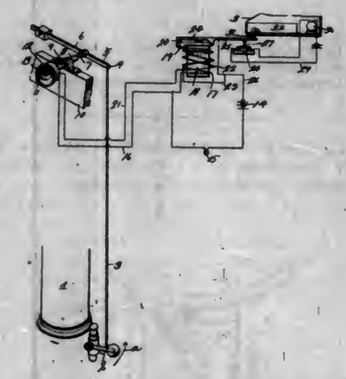
1,875,704. DRAFT GEAR. FRANK S. CHEATHAM, Savannah, Ga. Filed June 19, 1929. Serial No. 372,133. 2 Claims. (Cl. 213—8.)

1. In a draft gear, the combination of a casing affixed to the car-structure, a pair of oppositely-movable double wedges, one being bifurcated to receive the other to thus cause them to overlap each other and to have their inclined edges coincident with each other, each of said double wedges being connected to a draw-bar of the car, and spring-pressed double-wedge friction blocks normally pressing against all the adjacent inclined faces of both



said wedge members and having their ends in abutting relation with said casing, key means extending through elongated slots in both wedge members, said key means being extended laterally beyond the wedge members and having compressible springs arranged between their respective ends.

1,875,705. DISPENSING DEVICE. VOLMER COOLEY, Roosevelt, Wash. Filed Oct. 19, 1927. Serial No. 227,204. 2 Claims. (Cl. 235—130.)

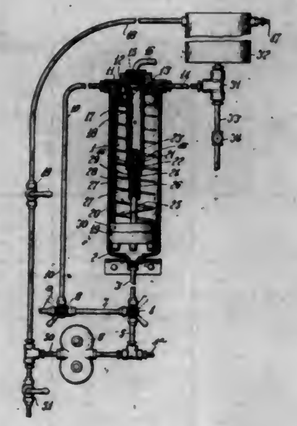


1. A controlling device for a cash register drawer, said controlling device being remotely actuated by a lever of a dispensing machine, said device comprising an electric circuit for controlling said cash register drawer, means for breaking said cash register drawer circuit and rendering the same inoperative, said means comprising a pivoted lever, a switch in the cash register circuit and opened upon rocking of the lever, a relay for rocking said lever, a circuit maker and breaker remote to the gasoline dispensing device, a rod connection between said circuit maker and breaker and the operating lever of the dispensing device whereby upon movement of the operating lever said circuit maker and breaker will be closed, said circuit maker and breaker being in circuit with the relay, a contact carried by the relay and with which the pivoted rocker arm cooperates, said rocker arm closing a circuit upon energizing of the relay through a battery and a signalling light.

1,875,706. FORCE-FEED LUBRICATING SYSTEM. IRVING COWLES, Chicago, Ill., assignor to Union Bank of Chicago, Chicago, Ill., a Corporation of Illinois, trustee. Filed Apr. 30, 1927. Serial No. 187,741. 11 Claims. (Cl. 184—7.)

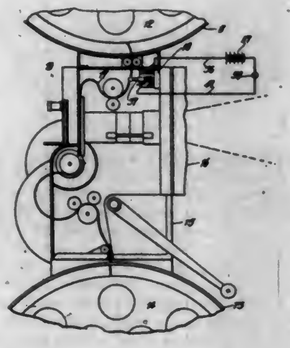
1. In a lubricating system, a cylinder adapted to be maintained full of oil, a piston therein, a second pump cyl-

inder communicating at its intake end with the first cylinder, a hollow piston rod for said second pump connected with said piston for actuation by the latter, intake ports



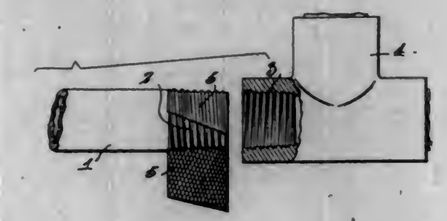
between the ends of said piston rod, a piston having limited slidable movement on said rod for controlling said ports, and means for actuating said first-named piston.

1,875,707. CIRCUIT CONTROLLING DEVICE. WILLIAM E. COX, New York, N. Y. Filed Oct. 28, 1929. Serial No. 403,052. 5 Claims. (Cl. 200—52.)



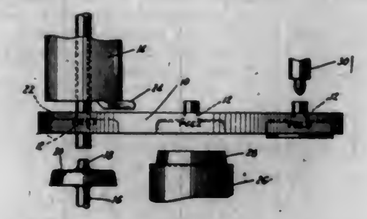
1. An electric switch for motion picture projecting machines comprising a base, a bracket slidably mounted on said base, manipulative screw means for imparting sliding movement to said bracket and for securing the same in an adjusted position, a stationary contact mounted on said bracket, a switch arm pivoted on said bracket, a contact on one end of said switch arm, a kerfed head on the other end of said switch arm adapted for bearing engagement with the edge of a film strip, and spring means tending to urge said switch arm in a direction to cause the contact thereon to engage the stationary contact, both of said contacts adapted to be arranged in an electric circuit, substantially as and for the purpose specified.

1,875,708. METHOD AND MEANS FOR SEALING THREADED PIPE JOINTS. WILLIAM G. COUHIG, Painesville, Ohio. Filed Jan. 28, 1930. Serial No. 424,036. 7 Claims. (Cl. 285—146.)



1. As a new article of manufacture, a pipe joint sealing ribbon comprising a base of thin flexible fabric impregnated with a sealing substance that is not destroyed by heat and moisture when in use.

1,875,709. MANUFACTURE OF RIVETS. MARION M. CUNNINGHAM, South Bend, Ind. assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 397,795. 4 Claims. (Cl. 10—27.)



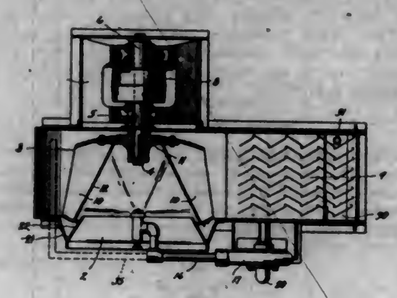
1. That method of forming rivets which comprises feeding and rotating tubular stock against an axially moving shaping tool rotating in opposite direction to the direction of rotation of the stock to provide a cup at one end of the stock to form a rivet head, severing the headed portion of the stock, and filling said cup with a plug.

1,875,710. HAIR SPREADING MACHINE. JOHN F. DORNAN, Chicago, Ill., assignor to Wilson & Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,400. 1 Claim. (Cl. 19—80.)



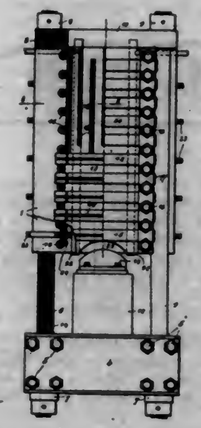
A picking machine of the character described, including; a hopper with tapered sides and elongated mouth; a pair of oppositely rotating picking rollers in the hopper; a picking roller in the hopper near the mouth thereof; a conveyor with its receiving end near the mouth of the hopper; a picking roller above the conveyor near the discharge end thereof; and a rotating brush above the conveyor and adjacent the discharge end thereof.

1,875,711. CENTRIFUGAL HUMIDIFIER. WILLIAM LYLE DUDLEY, Seattle, Wash. Filed Sept. 22, 1926. Serial No. 137,025. 2 Claims. (Cl. 183—9.)



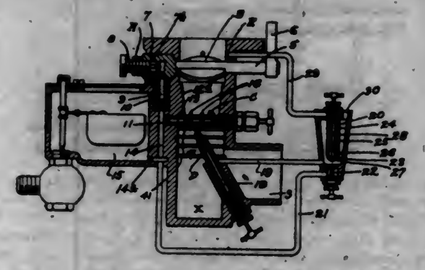
1. In combination, a volute fan casing having an air inlet at one side and an outlet at the end, a fan wheel, having blades in circular arrangement, mounted within the casing and alined with said air inlet and revoluble to draw air into the casing through the inlet and to forcibly discharge it through said outlet, a screen fitted to the inner edges of said fan blades and through which all air must pass in entering the casing, a spray device mounted adjacent the air inlet to deliver water in a fine spray or film against the fan and through which all air entering the casing must pass, and eliminator plates mounted in the outlet for collecting free moisture from the air in passing.

1,875,712. MOLDING APPARATUS. MAURICE DUVAL, Montsecret, France. Filed June 22, 1928, Serial No. 287,560, and in France Aug. 25, 1927. 3 Claims. (Cl. 18—16.)



3. An apparatus for molding objects, including a mold made up of plates spaced apart in correspondence with the width of the element and end walls spaced apart a distance less than the length of the element, means for creating an initial pressure on the element at the entrance end of the mold whereby an element introduced into the mold is frictionally retarded at its ends while subjected to pressure to thereby compress the element, and means for adjusting the end walls of the mold to vary the frictional resistance between said walls and the ends of the element.

1,875,713. CARBURETOR. JULIUS DUSEVOIR, Oakland, Calif., assignor to Motive Devices, Inc., San Francisco, Calif., a Corporation of California. Filed June 24, 1929. Serial No. 373,088. 12 Claims. (Cl. 261—41.)

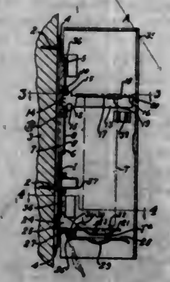


1. In a carburetor a main fuel supplying jet, a combination starting and idling jet, a well in the carburetor to supply fuel to the starting and idling jet, the latter having fuel controlled communication with the well at different levels and said well having an air inlet at the top a common connection for supplying fuel to the main jet and the well, an accelerating jet having its discharge end located at the main jet, a connection between the accelerating jet and the bottom of the well whereby fuel is supplied, and a throttle valve interposed between the main jet and the starting and idling jet.

1,875,714. SYNTHETIC METHANOL PROCESS. WILLIAM J. EDMONDS, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Dec. 13, 1926. Serial No. 154,634. 4 Claims. (Cl. 260—156.)

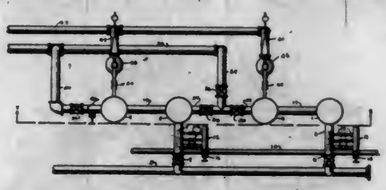
1. In the process of manufacturing methanol by the interaction of hydrogen and carbon dioxide in the presence of a catalyst and under the influence of elevated pressure and temperature, the steps which comprise passing a gas consisting of 1–5% carbon dioxide and 99–95% hydrogen over said catalyst, circulating said gas mixture to make methanol, adding hydrogen and carbon dioxide to the system to replenish that consumed, the amount of carbon dioxide in said system being always maintained below approximately 5%.

1,875,715. SANITARY HOLDER FOR COLLAPSIBLE TUBES. EDMUND J. FABER, St. Louis, Mo. Filed Apr. 16, 1930. Serial No. 444,647. 7 Claims. (Cl. 221—60.)



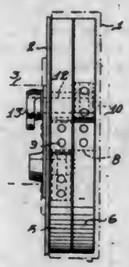
1. A collapsible tube holder comprising a base, means for clamping a collapsible tube in place comprising a pair of movable clamping elements, and means for drawing said clamping elements toward each other to perform the clamping operation, the last-mentioned means comprising a member slidably supported by said clamping elements, and faces on said clamping elements which lie at an angle with respect to the line of movement of said member and with which said member slidingly contacts.

1,875,716. SEPARATING PLANT. ARTHUR L. FORBES, Jr., and CLARENCE O. BYRNE, El Paso, Tex. Filed Mar. 17, 1930. Serial No. 436,464. 8 Claims. (Cl. 261—2.)



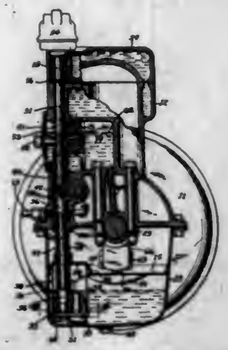
1. In treating apparatus a scrubbing tower having an inlet and an outlet to permit the passage of a fluid therethrough, successive nests of tubes forming passageways for the fluid from said inlet to the outlet, mixing chambers, between adjacent nests into which the tubes of such nests are connected, and bubble caps on the discharge ends of the tubes of the ultimate nest of tubes.

1,875,717. BRAKE. FERRY M. FORBES, Detroit, Mich. Filed July 9, 1930. Serial No. 466,682. 2 Claims. (Cl. 188—77.)



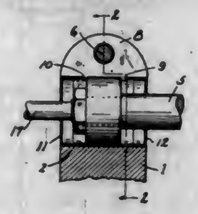
2. A brake band comprising a plurality of sections forming convolutions around a brake drum, a bracket mounted on one end of one of said sections to anchor it relative to said drum, a bracket mounted on one of said sections to accommodate means for forcing said section into contact with said drum, and plates interconnecting said sections whereby said pressure of said section against said drum is equally distributed to all of said section.

1,875,718. LUBRICATION. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Aug. 18, 1927. Serial No. 213,778. 6 Claims. (Cl. 184—6.)



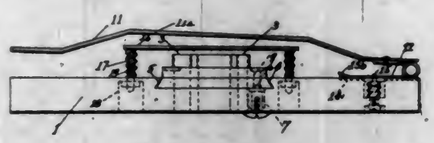
1. In a device of the character described, a cylinder block having a vertical distributor drive shaft therein and a bearing and a valve inspection chamber into which the distributor drive shaft extends, an oil pan secured below the cylinder block, an oil pump disposed in the oil pan and operatively connected with the distributor drive shaft, means for carrying the oil from the oil pump through and around the distributor and pump drive shaft up to the valve inspection chamber, and means for conveying oil from the valve inspection chamber to said bearings, whereby the valve inspection chamber becomes an oil reservoir and the oil therein may lubricate said bearings and silence said valves.

1,875,719. BEARING LOCK. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa, a Corporation of Delaware. Filed May 15, 1930. Serial No. 452,778. 6 Claims. (Cl. 308—236.)



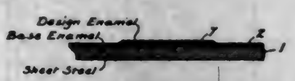
1. In a ball bearing journal, the combination of a receiving member with a ball bearing assembly, and means associated with said receiving member to prevent movement of said ball bearing assembly, said means comprising a semi-circular disk having tabs.

1,875,720. WORK SUPPORTING DEVICE FOR SHOE ORNAMENTING MACHINERY. BENJAMIN WILLIAM FREEMAN, Cincinnati, Ohio. Filed July 19, 1927. Serial No. 206,966. 21 Claims. (Cl. 164—29.)



1. A device of the character specified, comprising a support, a cutting device and a clamping device, said support comprising a plate having grooves at its side and end, said cutting device slidably engaging said grooves at a side of said plate and the clamping device slidably engaging a groove at an end of said plate.

1,875,721. SUPERPOSED ENAMEL. JOHN G. G. FROST, Cleveland, Ohio, assignor to The Vitreous Enameling Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 21, 1928. Serial No. 287,355. 8 Claims. (Cl. 41—26.)

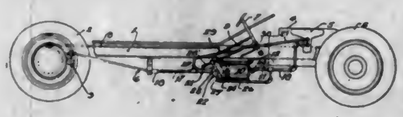


1. The method of vitreous enameling, which comprises spraying a suspension of vitreous enamel in a binder dissolved in a highly volatile solvent upon a dry, unburned enamel-coated surface in desired configuration and permitting said solvent to evaporate without the application of heat to the object to be enameled, whereby said enameled coatings may be burned in one operation.

1,875,722. CATALYST FOR SYNTHETIC METHANOL PRODUCTION. CHARLES L. GABRIEL, Terre Haute, Ind., and BRUCE K. BROWN, New York, N. Y., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Original application filed Aug. 27, 1925, Serial No. 52,956. Divided and this application filed Sept. 15, 1928. Serial No. 306,287. 4 Claims. (Cl. 204—9.)

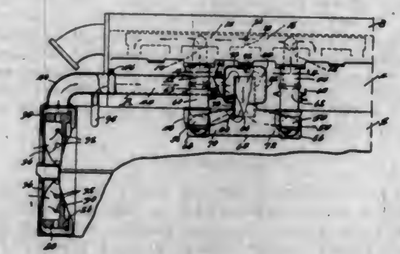
1. A methanol catalyst which comprises a copper-zinc alloy in which the copper predominates, the surface of which comprises the partially reduced oxides of the alloy surface.

1,875,723. VACUUM BRAKE. FRANCIS K. GRUSS, Redwood City, Calif., assignor to Lucien Abadie, Berkeley, Calif., Francis J. Gruss and Francis K. Gruss, Redwood City, Calif., trustees. Filed Mar. 26, 1928. Serial No. 264,736. 7 Claims. (Cl. 121—38.)



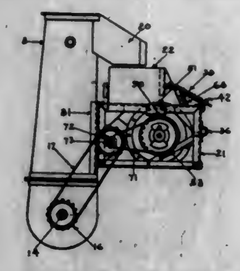
7. In combination with a motor vehicle including an internal combustion engine and brake mechanism, a cylinder, a piston reciprocally mounted in the cylinder, a connection between the piston and the brake mechanism whereby reciprocation of the cylinder will apply and release the brakes, a valve having ports in communication with the atmosphere, means forming fluid communication between said manifold, said valve and opposite ends of said cylinder, a by-pass between said valve and fluid communicating means between the manifold and cylinder, a check valve in said last named means between the by-pass and cylinder, said valve being operable to gradually change the flow conditions in said fluid communicating means and adapted to permit a constant flow of atmospheric air to said manifold at all times.

1,875,724. INTERNAL COMBUSTION ENGINE. ELBERT J. HALL, Detroit, Mich., assignor to American Car and Foundry Motors Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,518. 17 Claims. (Cl. 123—52M.)



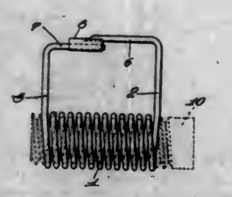
1. In an internal combustion engine, a plurality of carburetors, an intake manifold to which the carburetors are connected and means for directing air at a pressure above atmospheric to the carburetors, comprising a blower actuated by the crank shaft, a conduit receiving air from the blower, a distributor connected to the carburetors, an accumulator interposed between the conduit and distributor, and a conduit of smaller capacity than said accumulator leading from said accumulator to said distributor, said last-named conduit being at least partially surrounded by said accumulator.

1,875,725. GRAIN MEASURING DEVICE. ARTHUR J. HARTLEY, Peoria, Ill. Filed June 30, 1927. Serial No. 202,509. 11 Claims. (Cl. 73—137.)



7. A grain measuring device comprising a frame casing, a pivoted hopper oscillatably mounted therein, mechanism for resiliently holding said hopper in raised position, a plural vaned grain meter rotatably mounted in the bottom of the hopper, said hopper being adapted to be moved downwardly by a predetermined weight of grain therein and means controlled by the downward movement of said hopper to rotate said grain meter and means controlled by said hopper for stopping the rotation of said meter when said hopper is returned to raised position, and an adjustable plate member disposed adjacent the outer edges of the vanes of the grain meter, said plate being capable of adjustment in direct relation with the size and condition of the grain measured.

1,875,726. THREAD GAUGE. JAMES HARTNESS, Springfield, Vt. Filed Apr. 7, 1927. Serial No. 181,708. 8 Claims. (Cl. 33—199.)



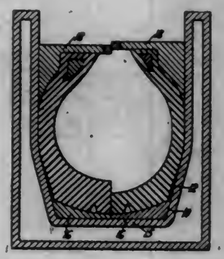
2. A thread gauge comprising a coil of resilient material which may be sprung between adjacent threads of a threaded member, and magnifying means connected to spaced portions of said coil for indicating the angular extent of engagement thereon of the length of said coil between said spaced portions when applied to the threaded member.

3. The method of testing the pitch diameter of a threaded member which comprises engaging a wrapping element of definite length circumferentially between adjacent threads of a standard threaded member and then between adjacent threads of the member to be tested, and noting the differences in angular extent of said element when engaged with the standard member and when engaged with the member to be tested.

1,875,727. ADJUSTABLE CAVITY REPAIR VULCANIZER. JAMES C. HEINTZ, Lakewood, Ohio. Filed May 31, 1930. Serial No. 457,976. 10 Claims. (Cl. 18—18.)

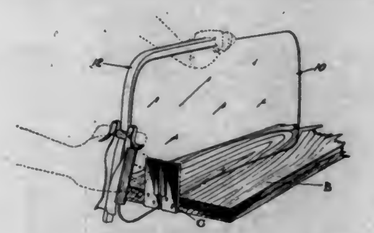
1. In an adjustable cavity vulcanizer, a mold of maximum size having side and base walls, the side walls converging from the median line to the base wall in lines substantially symmetrical to the shoulders of the tire, the base wall being formed upon a straight line, in com-

bination with a removable and replaceable tread filler having a flat base resting upon the base wall of the mold, and having a curved upper surface to conform to the tread of the tire, and a removable and replaceable side



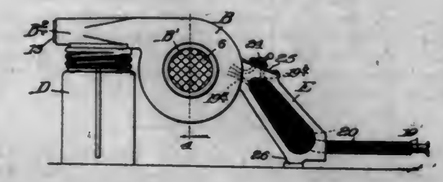
reducing plate of even thickness throughout, having side walls corresponding to the contour of a side wall of the mold, and extending to and resting upon the straight line base wall of the mold.

1,875,728. GLASS BINDING TOOL. FREDERICK HENRY, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Sept. 18, 1931. Serial No. 563,543. 10 Claims. (Cl. 29—84.)



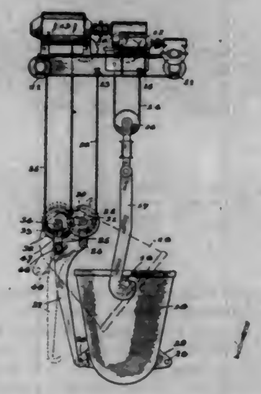
1. A tool for applying a rubber binding to a glass panel comprising, a handle portion, a roller for pressing the binding upon the panel, and a spreader secured to the handle and disposed between the handle and the roller for spreading the binding as it is applied to the panel.

1,875,729. SPRAYING DEVICE. WOLFGANG HERMANN, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1927. Serial No. 237,735. 7 Claims. (Cl. 299—89.)



1. A spraying device comprising an electric motor provided with a casing having a fan-casing attached to one end thereof and equipped with an air-nozzle having a Venturi terminal, the armature-shaft of the motor extending into said fan-casing, a fan mounted on said armature-shaft, a liquid-container cap attached to the lower side of said air-nozzle, a liquid-tube depending through said cap, and a liquid-nozzle within said air-nozzle communicating with said liquid-tube and cooperating with said Venturi terminal.

1,875,730. CRANE TROLLEY. OSSIAN HIVELY, Alliance, Ohio, assignor to The Morgan Engineering Company, Alliance, Ohio. Filed Aug. 26, 1930. Serial No. 477,914. 16 Claims. (Cl. 212—130.)



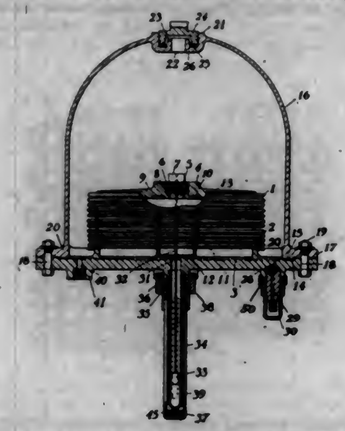
1. A mechanism of the character described, including a trolley carriage, a main hoisting drum on the carriage provided with a hoisting cable, a member tilting drum on the carriage provided with hoisting cables, connected pulleys engaging the last mentioned cables, a tilting member operatively connected to the pulleys to be swung or elevated by the latter, and means coacting with one of the last mentioned cables for raising or lowering one of the pulleys so as to swing the tilting member.

1,875,731. PROCESS FOR RECOVERY OF CAMPHOR. GUSTAVUS J. ESSELEN, Jr., Swampscott, Mass., assignor to The Fiberloid Corporation, Indiana Orchard, Mass., a Corporation of Massachusetts. Filed July 12, 1929. Serial No. 377,853. 5 Claims. (Cl. 260—133.)

1. The method of separating the camphor and pyroxylin of pieces of pyroxylin plastic composition which consists in, circulating a liquid over and through the composition and maintaining the liquid within a temperature range from 15 to 40 degrees centigrade, the said liquid consisting of a mixture of textile spirits and a relatively small amount of a pyroxylin solvent.

1,875,732. SEALING DEVICE FOR USE WITH ELECTRIC CABLES AND OTHER APPARATUS. WORSLEY HOLTTUM, Prescot, England, assignor to British Insulated Cables Limited, Prescot, England, a British Company. Filed Aug. 2, 1930, Serial No. 472,735, and in Great Britain Sept. 3, 1929. 1 Claim. (Cl. 137—71.)

A device for applying a load to the external surface of a flexible reservoir of the bellows type, and of relatively thin metal, to maintain a fluid material in an apparatus under pressure whilst allowing the material to expand and contract under varying temperature conditions, comprising a casing for the flexible reservoir having a base portion and an upper portion secured thereto, a liquid seal and packing members disposed between the parts, a gas within the casing to exert the required degree of pressure above that of the atmosphere upon the external surface of the reservoir, a device for indicating the degree of expansion of the reservoir adapted to be connected to the latter and passing through an aperture in the base portion, a



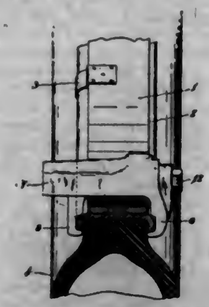
tubular member sealed from the atmosphere and supported by the base portion, the indicating device passing into the said tubular member.

1,875,733. DECOY. GILBERT L. HORTON, Litchfield, Minn. Filed Aug. 25, 1930. Serial No. 477,527. 1 Claim. (Cl. 43—3.)



A decoy head having a solid rear portion of penetrable material, the forward side thereof being curved, and a hollow sheet metal bill having the rearward end thereof open and curved to fittingly engage the curved forward portion of said penetrable portion, the upper and lower rear edges of said bill portion being extended to overlie the penetrable head portion, and pointed metallic means secured to each of said extensions and driven into the penetrable head portion to secure the bill in adjusted position thereon.

1,875,734. SPARE TIRE AND RIM LOCK. EDWIN P. HURD, Detroit, Mich. Filed Apr. 2, 1928. Serial No. 266,478. 15 Claims. (Cl. 70—90.)



1. In an expanding and contracting device, a rotatable adjusting element, an operating element spaced therefrom, a coupling member adapted to connect said elements, and a lock-controlled device adapted to actuate said member for connecting or disconnecting said elements.

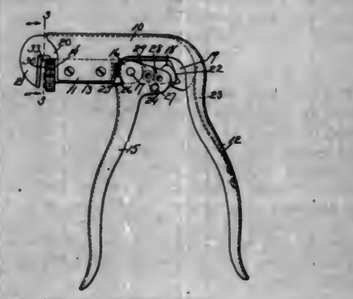
1,875,735. FLOOR COVERING AND METHOD OF MAKING THE SAME. RALPH G. JACKSON, Woodbury, N. J. Filed July 13, 1929. Serial No. 378,165. 11 Claims. (Cl. 154—2.)



3. In a floor covering, a first layer, a second layer, and between said first and second layers an intermediate fabric layer of woven material with open mesh, said first and said second layer being united together through the mesh openings of said fabric.

9. The process of making floor coverings, which process consists in assembling a layer of paper like material and a layer of linoleum composition with a sheet of fabric therebetween, and causing some of the material of said linoleum composition to penetrate through the fabric and to unite with the layer of paper like material.

1,875,736. SAW SET. CHARLES A. JOHNSON, Unionville, Conn. Filed Nov. 30, 1927. Serial No. 236,840. 14 Claims. (Cl. 76—69.)



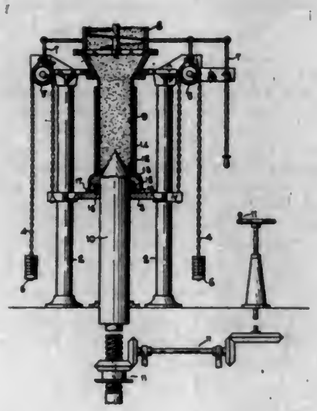
1. A saw set comprising a movable and a stationary jaw, the latter comprising an anvil, two handle members, one of which is pivotally mounted on a pivot passing through the axis of said anvil, and connections between said pivoted handle member and the movable jaw for forcing said jaws one toward the other, said connections including a fulcrum pivoted on the pivoted handle between stops carried by said handle.

1,875,737. CHUCK. CHARLES A. JOHNSON, Unionville, Conn. Filed May 5, 1928. Serial No. 275,319. 10 Claims. (Cl. 279—56.)



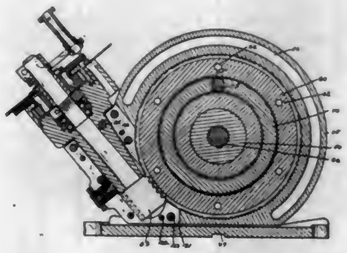
1. A chuck including a support, a body journaled in said support, chuck jaws movably mounted in said body, a clamping sleeve threadedly engaging said body, means for connecting and disconnecting said support with respect to said body for rotation of the support independently of or with the body, a supplemental tightening member movably mounted in said body, and means for detachably connecting said supplemental tightening member to said support for rotation therewith.

1,875,738. PIPE MOLDING APPARATUS. EDWARD GEORGE JONES, Vereeniging, Transvaal, Union of South Africa. Filed Aug. 15, 1930, Serial No. 475,522, and in the Union of South Africa Sept. 16, 1929. 2 Claims. (Cl. 25—30.)



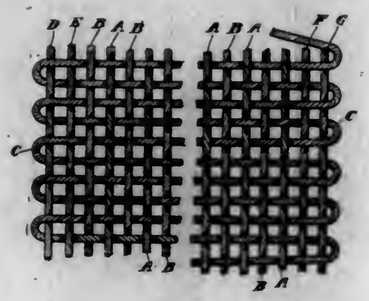
2. In a pipe molding machine the combination of a press, an elongated nozzle through which the plastic material is forced by the press, a mold casing surrounding said nozzle and movable axially relatively thereto, yielding means supporting said casing against sliding movement over said nozzle and a central core member extending through said means and arranged to be stationary while the mold is being filled so as to occupy the whole length of the mold casing at the completion of the molding operation and removable to withdraw it from the molded pipe.

1,875,739. ATTACHMENT SPINDLE CLAMP. EDWARD J. KEARNEY, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Original application filed Apr. 24, 1923, Serial No. 634,292. Divided and this application filed May 23, 1927. Serial No. 193,475. 6 Claims. (Cl. 90—57.)



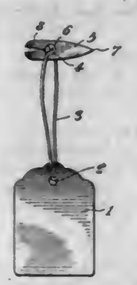
1. In a machine tool attachment, the combination of a spindle rotatable in a tapered bearing, a spindle clamp comprising an expansible ring and ring expanding means including a pin axially movable parallel with the spindle axis in the direction of the small end of the spindle bearing to expand the ring.

1,875,740. ELASTIC WOVEN BANDAGE. EMIL KLEIN, Stuttgart, Germany, assignor to MacGregor Instrument Company, Needham, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1931, Serial No. 555,664, and in Germany Jan. 26, 1931. 4 Claims. (Cl. 139—426.)



1. An elastic dressing bandage comprising central warp threads alternately overtwisted right and left, and two or more warp threads adjacent each edge over-twisted in the same direction but of opposite twist at the opposite edges of the bandage and included together in the weft forming selvage edges of the bandage of greater elasticity than the center warp.

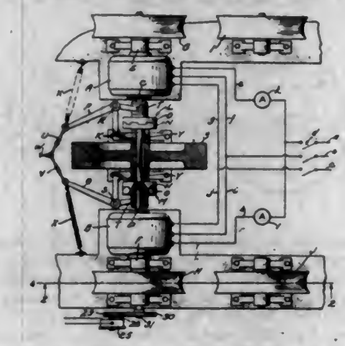
1,875,741. MARKING TAG. JOHN P. KUHNS, Dayton, Ohio, assignor to The National Tag Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,898. 8 Claims. (Cl. 40—22.)



1. A marking tag having a string loop attached thereto and an anchor barb carried on said loop, said barb being provided with a pointed end for penetrating material and a slit through the body of said barb carrying one end of the loop, said slit terminating inwardly intermediate the ends of the barb to permit the barb when turned parallel to the surface of the material after passing through the same to constitute an anchor for said loop, said slit permitting removal of the barb from the loop for removing the tag from the material.

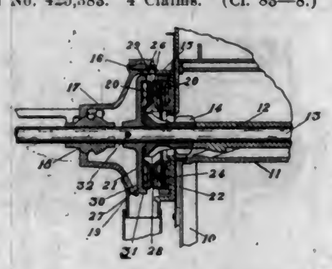
1,875,742. BRAKE TESTING MACHINE. HAROLD W. LANGREIN, Los Angeles, Calif., assignor to Brake Synchrometer Co., Boston, Mass., a Corporation of Massachusetts. Original application filed Oct. 29, 1925, Serial No. 65,604. Divided and this application filed June 1, 1929. Serial No. 367,732. 7 Claims. (Cl. 265—25.)

2. In a machine for testing the brakes of a motor vehicle: a plurality of roller supports for the wheels of a vehicle; a motor for rotating each roller support; a common source of energy for said motors; and a meter between said source and each of said motors whereby to



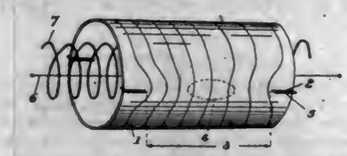
separately indicate the load on said source as effected by resistance on each of the several roller supports upon an application of the brakes carried by the wheels of the vehicle.

1,875,743. GRINDING MILL. WILLIAM H. LETZ, Crown Point, Ind., assignor to The Letz Manufacturing Company, a Corporation of Indiana. Filed Feb. 3, 1930. Serial No. 425,383. 4 Claims. (Cl. 83—8.)



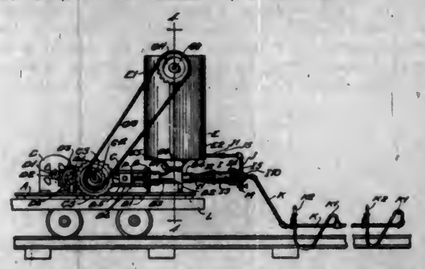
1. The combination with a grinding mill, of a frame therefor, a rotary shaft mounted on said frame, a plate holder secured to said shaft, a grinding plate secured to said plate holder, a relatively stationary grinding plate secured to said frame and cooperating with said first-mentioned plate, and disks secured adjacent said plates having a peripheral flange formed thereon forming a recess for the reception of each of said grinding plates for substantially encasing both of said plates whereby the broken parts of said grinding plates resulting from the accidental breaking of said plates are prevented from being discharged from between said disks.

1,875,744. ARRANGEMENT FOR DISPENSING BADLY CONDUCTIVE SUBSTANCES IN VACUUM VALVES. BERNHARD LOEWE, Berlin, Germany. Filed May 23, 1929, Serial No. 365,340, and in Germany May 12, 1928. 5 Claims. (Cl. 250—275.)



1. A vacuum tube comprising an electrode system consisting of a cathode, a grid and a cylindrical anode, lead-in wires for the system, an eddy current arrangement outside the tube consisting of a high frequency current coil for heating the anode at a destined place to a higher temperature than at neighbouring places the anode being slit along a line across said place.

1,875,745. GREASE GUN. JOSEPH MARLAND and CHARLES A. GRIFFITH, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 21, 1928. Serial No. 320,974. 14 Claims. (Cl. 221—47.1.)



1. In a grease gun, the combination of a tank having in its bottom wall a passage, a horizontal pump extending across and communicating with said passage, a fixed upright tubular valve member seated in said passage, and a movable upright valve member supported in said tubular valve member.

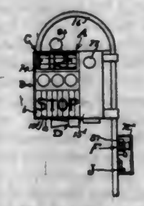
1,875,746. PRODUCTION OF METHYLAMINE. JEROME MARTIN and LLOYD C. SWALLEN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 18, 1930. Serial No. 468,992. 12 Claims. (Cl. 260—127.)

1. Process for the production of methylamine which comprises passing a gaseous mixture comprising one part methanol and one to six parts ammonia at temperatures ranging from 300° to 500° C. over metallic oxide dehydrating catalysts.

1,875,747. PRODUCTION OF METHYLAMINE. JEROME MARTIN and LLOYD C. SWALLEN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 18, 1930. Serial No. 468,993. 13 Claims. (Cl. 260—127.)

1. Process for the production of methyl amine which comprises passing a mixture of methanol and ammonia at temperatures ranging from 300° to 500° C. over catalysts comprising aluminium silicate, and recovering and separating the products thereby formed.

1,875,748. COMBINED TRAFFIC AND ALARM SYSTEM. ALEXANDER J. MASSEY, Los Angeles, Calif. Filed Oct. 2, 1924. Serial No. 741,257. 11 Claims. (Cl. 177—327.)



3. A combined traffic signaling and alarm system comprising: composite signaling devices located at street intersections and like places and each including: means

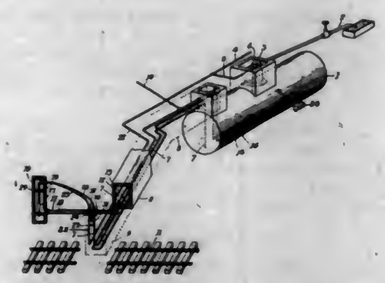
to indicate when traffic streams are to proceed and when traffic streams are to stop in the ordinary regulation of traffic; means to indicate when fire apparatus is to be avoided; means to indicate a special vehicle is to be avoided; and means to so vary the operation of said means as to indicate when both fire apparatus and such vehicles are to be simultaneously avoided,—at least one of the means concerned being operated intermittently when said means are concurrently energized.

1,875,749. UNIVERSAL CASING HEAD. JOSEPH H. MCEVOY, GRANVILLE A. HUMASON, and EDWIN A. JOHNSON, Houston, Tex., assignors to J. H. McEvoy & Company, Houston, Tex., a Corporation of Texas. Filed Oct. 29, 1927. Serial No. 229,653. 3 Claims. (Cl. 166—14.)



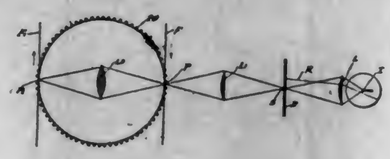
1. A casing head comprising in combination a tapered seat, a set of pipe engaging slips therein, a nipple having a neck reduced to a diameter less than that of said slips and arranged to be screwed onto said head, a packing chamber in said reduced neck, a pair of gland members in said chamber the lower end of said members having a flange thereon whereby its downward movement is limited and having its lower end arranged to contact the upper end of said slips, packing between said glands, and a cap on said neck whereby said glands, packing and slips may be compressed into pipe engaging position.

1,875,750. FIRING EQUIPMENT. FRANK W. MILLER, Chicago, Ill. Filed May 31, 1930. Serial No. 458,332. 5 Claims. (Cl. 158—10.)



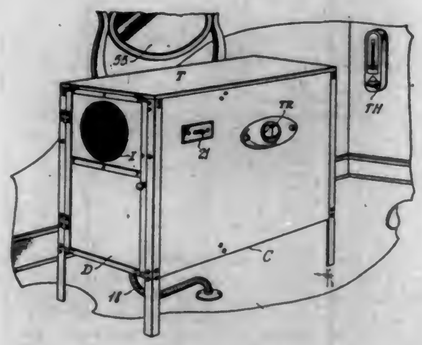
1. Locomotive fire lighting apparatus comprising a liquid fuel reservoir buried underground, a pipe connected with said reservoir and with a firing position at a railway track for delivering fuel thereto, a housing for inclosing said pipe underground between the reservoir and said position, a steam pipe positioned in said housing alongside the fuel pipe and connected with a source of steam for heating said pipe, a steam coil in the reservoir, means including a pipe for delivering air under pressure to said position and to the reservoir interior, a mixing nozzle suitable for insertion into a locomotive fire box and flexible conduits connecting said nozzle respectively with the air pipe and said fuel pipe, and valves for regulating the flow of air and of fuel to said nozzle.

1,875,751. PHOTOGRAPHIC PRINTING. GEORGE A. MITCHELL, Los Angeles, Calif., assignor to Mitchell Camera Corporation, a Corporation of Delaware. Filed Mar. 13, 1929. Serial No. 346,647. 2 Claims. (Cl. 88—24.)



1. Apparatus for printing photographic film, embodying means for moving two films in photographic printing relation one to the other, a linear light slit extending in a direction transverse to the direction of movement of the film from which the print is being taken, means for illuminating the light slit, and a cylindric lens disposed with the axis of its cylindric surface parallel to said linear light slit and arranged to cast transversely across the film from which the print is being taken a laterally compressed image of said linear light slit.

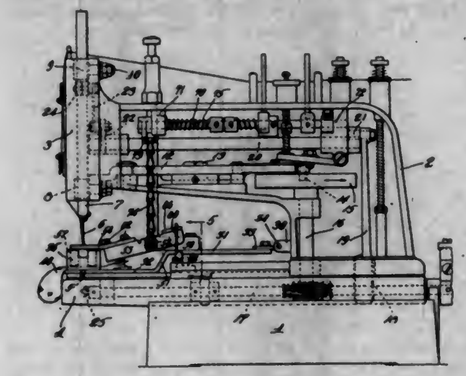
1,875,752. AIR HEAT GENERATOR. JUAN C. MONTERO. Washington, D. C. Filed Oct. 14, 1926. Serial No. 141,453. 11 Claims. (Cl. 219—39.)



1. In a device of the character described, the combination of a cabinet including a heat insulated compartment and a second compartment separated from one another by a heat insulating partition, the said partition having an opening therethrough, said heat insulating compartment having an outlet opening, an air conduit extending through the opening of said partition and to the said outlet opening, a means for affecting the temperature within said heat insulated compartment and thereby affecting the temperature within said conduit, a fan-casing within said second compartment, a fan in the fan-casing and operable to force air through said conduit, and means automatically operable for increasing and decreasing the speed of said fan in accordance with the temperature of the atmosphere contiguous to such means.

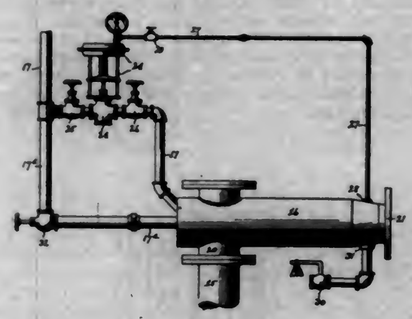
1,875,753. MECHANISM FOR SECURING BAGS OR THE LIKE. HAROLD W. MORRIS, Waltham, Mass., assignor to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed July 18, 1929. Serial No. 379,107. 6 Claims. (Cl. 112—11.)

1. In a sewing machine, sewing instrumentalities, means, including pairs of spaced elements, the spacing of the elements of one pair being transverse to the spacing of the elements of the other pair, for holding material gathered together to form a bundle, and means for moving said instrumentalities and holding means relatively during



the sewing operation to cause stitches to pass alternately over and about opposite sides of the material and to be secured together therebeneath.

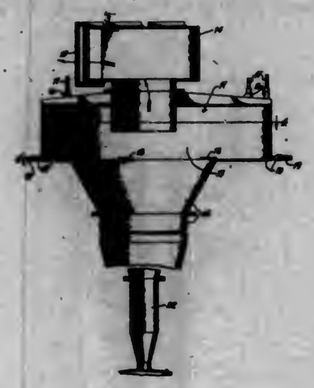
1,875,754. BOOSTER FOR EXHAUST STEAM. BERNARD STANLEY NELSON, New Orleans, La., assignor to A. M. Lockett & Company, Ltd., New Orleans, La., a Corporation of Louisiana. Filed Aug. 11, 1930. Serial No. 474,630. 2 Claims. (Cl. 230—111.)



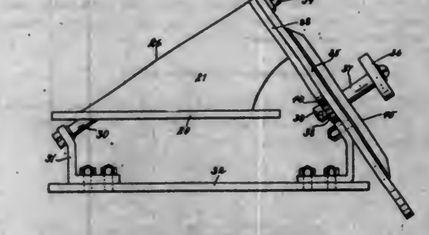
1. The combination, in a booster for exhaust steam, of a casing enclosing a mixing chamber having an inlet end and an outlet end, means for admitting exhaust steam to the inlet end of said chamber, a manifold, means controlled by the resultant pressure of the mixed live and exhaust steams at the outlet end of said mixing chamber for exclusively admitting live steam to said manifold, a series of live steam discharge nozzles projecting from said manifold into the inlet end of said mixing chamber, and supplementary means, independent of said manifold, for admitting live steam to the inlet end of said mixing chamber in proximity with the live steam discharged from said nozzles.

1,875,755. HANDLING PHOSPHORUS CONTAINING FURNACE GASES. HARRY F. NOYES, Chicago Heights, Ill., assignor to Victor Chemical Works, a Corporation of Illinois. Filed May 25, 1929. Serial No. 365,901. 3 Claims. (Cl. 183—21.)

1. A dust collector for gases from volatilization furnaces, said collector having a curvilinear head and tangential inlet thereinto, nozzles for the supply of cleaning liquid, said nozzles opening in proximity to a wall surface of said collector and being adapted to distribute a film of said fluid over the walls of the inlet head of said collector without substantial admixture with the gases whereby, on supply of the cleaning fluid, the motion of the fluid and the agitation of the gas entering the collector are effective to remove deposits from the wall thereof.



1,875,756. SUNDIAL CONSTRUCTION. ST. JOHN O'SULLIVAN, San Juan Capistrano, Calif. Filed Feb. 14, 1928. Serial No. 254,254. 4 Claims. (Cl. 33—62.)

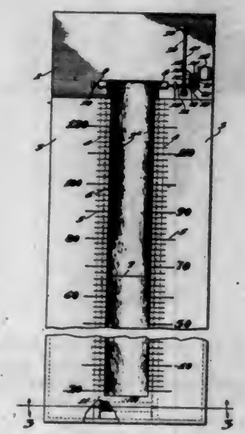


1. Means for revolubly adjusting the dial of a sundial construction wherein the dial is flat and the gnomon is rigidly secured and in a plane perpendicular thereto, including a frame in which the dial and the gnomon unit is revolubly mounted on an axis substantially at and parallel with the shadow-casting edge of the gnomon, a toothed segment secured to the gnomon and extending at right angles from the axis thereof, means for engaging the toothed end of said segment and causing it to revolve and give the desired movement to the dial and gnomon, and a date indicating plate secured on said last mentioned means for determining a desired position of said dial and gnomon, whereby they would indicate time other than solar time.

1,875,757. THERMOMETER. CHARLES R. PALMER and CURTIS P. MITCHELL, Cincinnati, Ohio; said Mitchell assignor to said Palmer. Filed Apr. 20, 1928. Serial No. 271,585. 11 Claims. (Cl. 73—118.)

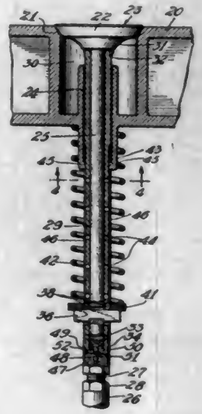
9. A large temperature registering device, comprising, a thermally sensitive member adapted to move over a given path responsively to changes in temperature and to occupy a definite position in said path for a definite temperature, a member bearing a temperature scale, a flexible belt marked to indicate temperature in relation to said scale, a roller pendently supporting said belt, means for holding said belt taut, a motor, a screw threaded shaft rotatively connected with said motor, reduced motion mechanism con-

necting said screw threaded shaft and motor, and a control member provided with contacts, one on each side of said thermally sensitive member, said control member translatably connecting with the screw portion of said screw threaded shaft so as to be moved by the rotation of



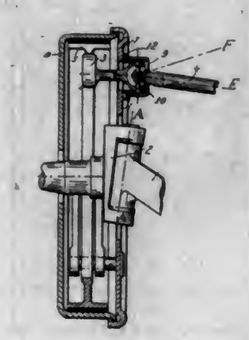
the motor in the path of travel of the thermally sensitive member, said contacts on said member so connected to said motor that the contact of either with the thermally sensitive member revolves the motor in the direction tending to disestablish said contact.

1,875,758. TAPPET VALVE. JAMES J. PARKER, Absecon, N. J. Filed Apr. 19, 1930. Serial No. 445,633. 7 Claims. (Cl. 123—90.)



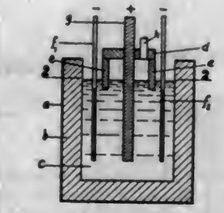
1. A tappet valve comprising a valve disc, a valve stem, and a sleeve carried by said stem and slidably mounted thereon, a stop member carried by said stem and engaging said sleeve to limit the clearance between said sleeve and valve, and a spring tensioned between said stem and sleeve to maintain said clearance.

1,875,759. BRAKE. HENRI PERROT, Paris, France, and GERMAIN CALVIGNAC, Mannheim, Baden, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1928, Serial No. 254,943, and in France Dec. 5, 1927. 11 Claims. (Cl. 188—194.)



1. A floating cam assembly including a rotatable support carrying a pivot member forming part of a universal joint, in combination with a cam turned by said pivot and shiftable about said pivot and supported by said support.

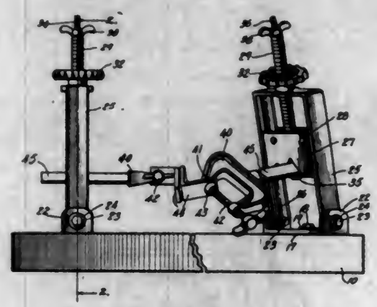
1,875,760. PROCESS FOR PRODUCING MAGNESIUM METAL BY ELECTROLYSIS. GUSTAV PISTOR, Leipzig, and ROBERT SUCHY, KARL STAIB, and WILHELM MOSCHEL, Bitterfeld, Germany, assignors, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Nov. 1, 1929, Serial No. 403,982, and in Germany Feb. 6, 1929. 11 Claims. (Cl. 204—19.)



1. An electrolytic cell for producing magnesium from a fused bath containing magnesium chloride, comprising a container of non-conductive material and arranged in said container a solid non-conductive substantially vertical partition and vertically disposed electrodes arranged bilaterally to said partition, said partition and electrodes extending downwards into said cell, the distance between the lower edge of said partition and the bottom of the cell being more than twice the distance between either of said electrodes and said bottom.

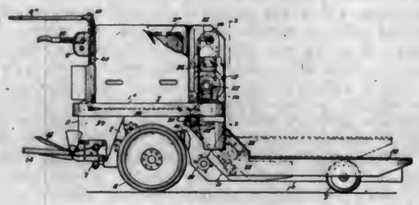
1,875,761. WORK SUPPORT FOR WELDING OPERATIONS. ROBERT W. POWER, Shubert, Nebr. Filed May 29, 1930. Serial No. 456,917. 3 Claims. (Cl. 113—104.)

1. In a work support, a frame member, a work-clamping element mounted for adjusting movement within the frame, a threaded sleeve attached to said clamping element and provided with an adjusting wheel supported by



said frame, and a second clamping element carried by a screw rod extending through said sleeve and provided with an operating nut engaged by one end of said sleeve.

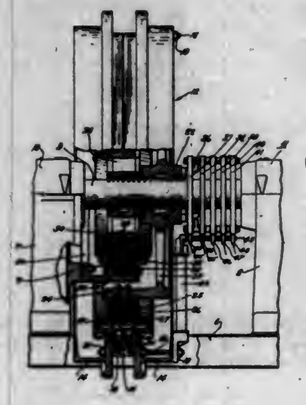
1,875,762. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 6, 1929. Serial No. 383,802. 6 Claims. (Cl. 254—5.)



1. In apparatus of the class described, the combination of a wheel mounted frame, a load carrying member mounted to move thereon from one position to another, electrically driven power means, including batteries for supplying current thereto, for operating said member, a controller for completing the circuit to the electric motor of said means to drive it in either direction, and means movable with said member in either direction and connected to said controller and arranged to move it from one "On" position to its other "On" position when said member moves beyond a predetermined position in either direction to drive said power means in the opposite direction.

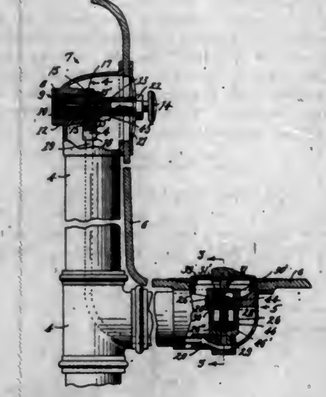
1,875,763. COMPOUND SYNCHRONOUS MOTOR. CORNELIUS P. ROBINSON, Mansfield, Ohio, assignor to The Ideal Electric & Manufacturing Co., Mansfield, Ohio, a Corporation of Ohio. Filed June 30, 1930. Serial No. 464,733. 8 Claims. (Cl. 172—120.)

1. A compound electrical machine comprising means forming a stator, means carried in the stator and forming a main motor winding, additional means carried by the stator and forming an auxiliary motor winding concentrically disposed with respect to the main motor winding, a shaft rotatable with respect to the stator, a fly wheel carried by the shaft and revoluble therewith, said fly wheel having a portion extending between the auxiliary motor winding and the main motor winding, means carried by the flywheel and comprising a main motor winding adapted to cooperate with the main motor winding on the stator to provide a dynamo electric relationship therebetween and additional means revoluble with the shaft and comprising an auxiliary motor winding and



adapted to co-operate with the auxiliary motor winding mounted on the stator to provide a dynamo electric relation ship therebetween.

1,875,764. WASTE AND OVERFLOW FIXTURE FOR BATH TUBS. ALFRED ROSEWOOD, San Francisco, Calif. Filed Aug. 10, 1928. Serial No. 298,824. 5 Claims. (Cl. 4—194.)

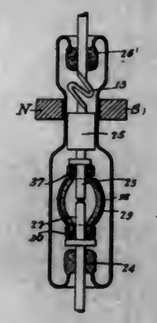


1. In a fixture of the character described having a discharge port, a stopper for closing the same and an overflow port, pressure-operated means for removing the stopper from its seat and a manual control mounted in the overflow port for the pressure means.

1,875,765. VACUUM SWITCH. ARTHUR SCHERBIUS, Berlin-Wannsee, Germany. Filed May 28, 1928, Serial No. 281,231, and in Germany July 1, 1927. 4 Claims. (Cl. 200—144.)

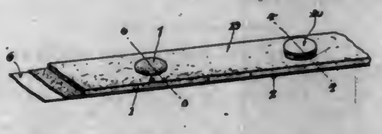
1. Electric switch comprising in combination, a vacuum-tight vessel, separable contacts therein movable away from each other during the switching, carriers for the contacts, an enveloping body of insulating material dim-

cult to fuse and substantially spaced in its middle portion from the contacts and surrounding both contacts, said enveloping body closely surrounding the contacts at its



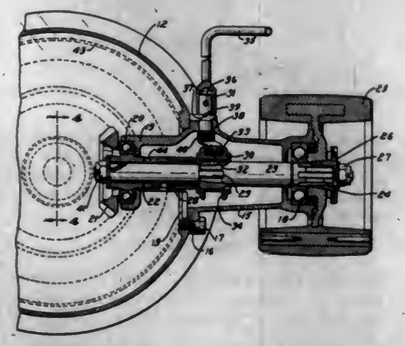
outer ends, thereby protecting the carriers of the contacts against an arc which is formed on the contacts and tends to travel to the carriers.

1,875,766. CUSHIONING SECURING ATTACHMENT. FRANZ H. SCHUBERT, Fort Worth, Tex. Filed Dec. 20, 1930. Serial No. 503,854. 13 Claims. (Cl. 45—31.)



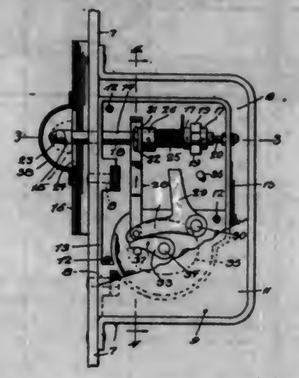
1. An attachment for the purpose set forth comprising a combined supporting, cushioning and coupling means of strip like form for the marginal portions of the glass protecting covers for surfaces, and combined cushioning and coupling means of disk like form for the body of the cover adjacent the marginal portions of the latter, each of said means provided with adhesive material of disc like form for securing the means to the surface to be protected and for securing the means to the cover.

1,875,767. TRACTOR PULLEY. HOWARD W. SIMPSON, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,864. 4 Claims. (Cl. 74—7.)



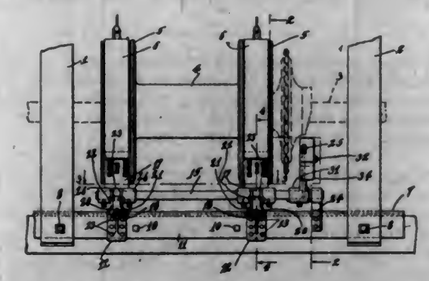
1. In a quick detachable tractor pulley, a housing adapted to be secured over an opening in said tractor, the outer end of said housing extending to position adjacent to one of the tractor wheels and the inner end thereof extending into said tractor, and a pulley rotatably mounted in the outer end of said housing, the inner end of said housing being of an inverted U shaped cross section so that the housing may be rotated slightly and then moved to position where the pulley will clear said tractor wheel when the unit is being removed from the tractor.

1,875,768. SLIDING DOORLOCK. JAMES D. SMITH, Chicago, Ill., assignor of one-half to Franklin P. Smith, Chicago, Ill. Filed Mar. 9, 1931. Serial No. 521,050. 3 Claims. (Cl. 292—217.)



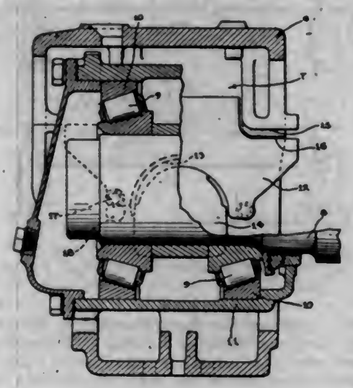
1. A sliding door lock comprising in combination a lock casing, a lock bolt having a shank rotatably mounted and held against endwise movement in said casing, and having a head on one end of tapered formation, the side edges of which are eccentric with respect to the axis of the bolt, a keeper having an elongated slot extending at right angles to the normal plane of the bolt head, the side edges of which slot are adapted to engage the side edges of the bolt head and thereby rotate the bolt head into parallelism with the slot during the final closing movement of the door, a stop member on the bolt coacting with the casing to position the bolt head in locking position at right angles to the slot, a spring engaging the lock bolt, co-operating with said stop member to yieldably hold the bolt head in locking position, a radially extending pin on the bolt, a slotted bolt actuating link through which said pin extends, and manually operable means for actuating the link.

1,875,769. ROTARY DRAWWORKS BACK BRAKE ASSEMBLY. JOHN D. SPALDING, Crafton, Pa., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,981. 11 Claims. (Cl. 254—187.)



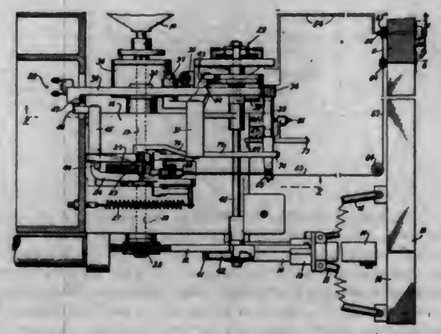
1. In a rotary drawworks, the combination of a frame including spaced posts, an angle iron secured to the lower ends of said posts, a drum shaft supported by the posts, a drum mounted on the drum shaft, the drum providing spaced brake rims, brake band mounted on the brake rims, brackets secured to the angle iron in alignment with the brake rims, means for securing the dead ends of the brake bands to said brackets, and a brake band actuating shaft rotatably supported by the said brackets and secured to the live ends of said brake bands.

1,875,770. MEANS FOR INTERLOCKING A JOURNAL BOX TO A SIDE FRAME. HARRY W. STERTZBACH, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed May 2, 1930. Serial No. 449,259. 15 Claims. (Cl. 105—220.)



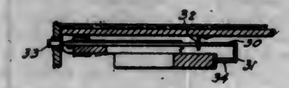
1. In combination, a side frame member having an opening therein, supporting elements on which the side frame member rests, a journal box carrying said supporting elements, and means for preventing the supporting elements from rocking out of their vertical plane, said means comprising side extensions to said supporting elements.

1,875,771. DOOR OPERATOR AND CONTROL MEANS THEREFOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Nov. 7, 1927. Serial No. 231,619. 14 Claims. (Cl. 268—63.)



1. The combination with a door, of an electric motor, of means including an overload release device normally providing a driving connection between said motor and said door and adapted when a condition of overload is encountered in the operation of said motor to free the door, locking means for said door including means for holding said driving connection against effective movement and means to prevent releasing of said device when said door is in closed position, and means including a mechanism operable from a point outside of the door to successively release said holding means and said device whereby to permit the door to be opened independently of said motor.

1,875,772. CONVERTIBLE SERVING TABLE AND TRAY. JOHN STRATHAUS, Oakland, Calif., assignor to Oakland Association of Credit Men, Oakland, Calif., a Corporation. Filed Mar. 9, 1931. Serial No. 521,809. 1 Claim. (Cl. 45—11.)



In combination with a table, provided with folding legs consisting of two pair of standards, each pair being connected by an upper and lower cross member; push button releasable means cooperating between said table and one of said lower cross members for locking said legs in folded position, and releasable struts for said legs.

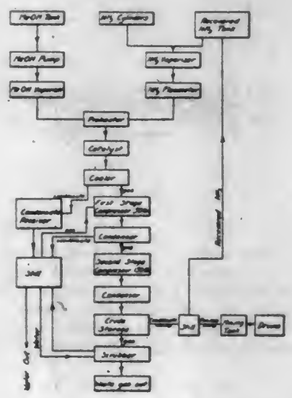
1,875,773. GARMENT BAG. RALPH C. STROUT, Wollaston, Mass., assignor to The White Tar Company of New Jersey, a Corporation of New Jersey. Filed Mar. 7, 1930. Serial No. 433,917. 5 Claims. (Cl. 229—57.)



1. A garment bag having two side wall members, folds on a side edge and an end edge of said members, one of said folds including an end portion of the other, and a

fold comprising a corner of both the including and the included folds, the corner fold being itself folded within said including fold.

1,875,774. RECOVERY OF METHYL AMINE. LLOYD C. SWALLEN and BENJAMIN C. BOECKELER, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Aug. 21, 1930. Serial No. 476,794. 12 Claims. (Cl. 202—51.)



1. A process for recovering methyl amine from mixtures containing ammonia, which comprises liquefying the methyl amine and ammonia and fractionally distilling under pressure to separate the ammonia from the methyl amine.

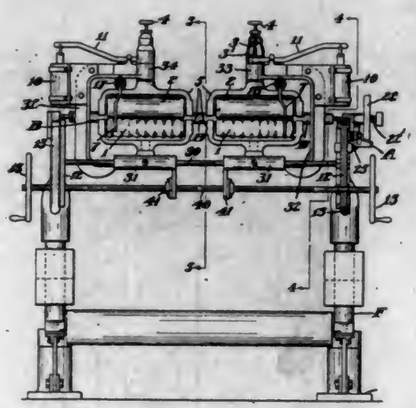
1,875,775. RECOVERY OF METHYL AMINE. LLOYD C. SWALLEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Oct. 2, 1930. Serial No. 486,059. 17 Claims. (Cl. 260—127.)

1. A method for the recovery of methyl amine from mixtures containing ammonia which comprises converting the bases into their salts the ammonium salt being less soluble than the amines salt, concentrating the solution of the salts until almost saturated with respect to the methyl amine salt, removing the ammonium salt which crystallizes out, and stripping out the remainder of the ammonia by passing gaseous methyl amine in contact with the solution.

1,875,776. RECOVERY OF METHYL AMINE. LLOYD C. SWALLEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Oct. 2, 1930. Serial No. 486,060. 12 Claims. (Cl. 260—127.)

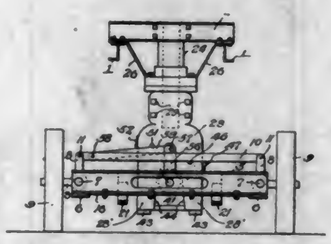
1. The process for the recovery of methyl amine from mixtures containing ammonia which comprises absorbing the methyl amine and at least a part of the ammonia in a liquid lower aliphatic alcohol, and displacing the ammonia from the resulting alcoholic solution by contacting said solution with gaseous methyl amine.

1,875,777. STRETCHER AND GUIDER. ROBERT DANIEL TACKABERRY, Lewiston, Me. Filed Aug. 13, 1929. Serial No. 385,559. 3 Claims. (Cl. 271—26.)



1. In a device of the class described, a frame, a pair of rolls rotatably mounted therein on horizontal axes, and each roll being independently swivelled on a vertical axis therein, and means for adjustably holding the rolls in contact with each other.

1,875,778. ROAD GRADING MACHINE OR OTHER VEHICLE. WILLIAM M. TAYLOR, Indianapolis, Ind. Filed Aug. 15, 1929. Serial No. 386,002. 12 Claims. (Cl. 37—157.)



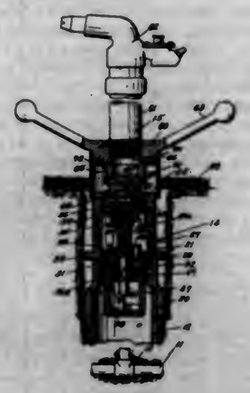
1. In a road grading machine in the operation of which the bed can be maintained approximately level transversely regardless of the transverse grade of the ground, the combination with the bed, of an axle movable freely about a horizontal axis and also rotatable freely about a vertical axis, and wheels on the axle, of means for tilting the wheels sidewise of the machine, means for supporting the bed from the axle and means for moving the supports of the bed of the machine lengthwise of the axle, said wheel tilting means and lengthwise moving means being capable of operating separately or simultaneously.

1,875,779. WATER GAUGE. THOMAS N. THOMSON, Huntington, N. Y. Filed Oct. 20, 1928. Serial No. 313,804. 11 Claims. (Cl. 73—54.)



1. A boiler water gauge including two superposed supporting hollow members, a colored liquid in the lower member, a sight glass supported between and in communication with the two members and into which the colored liquid rises for observation, a trap in the lower supporting member in line with the sight glass adapted to retain the colored liquid in the lower member and means on the lower member operable to drain the gauge.

1,875,780. SPRINKLER HEAD HAVING A REMOVABLE NOZZLE UNIT. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed June 25, 1928. Serial No. 287,919. 17 Claims. (Cl. 284—18.)



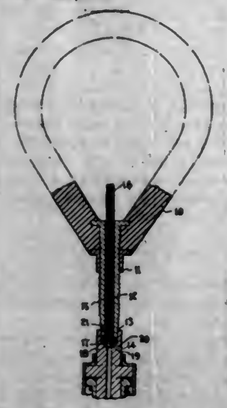
1. In a device of the class described, the combination of: a shell forming a passage; a valve adapted to close said passage; a closure adapted to close one end of said passage; means detachably connected to said shell for removing said closure from closing position, said means moving into the end of said passage as said closure is removed therefrom; and valve-opening means for unseating said valve as said closure is removed from closing position.

1,875,781. DISPENSING CONTAINER. WALTER E. TURNER, Norwich, Conn., assignor to Atlantic Carton Corporation, Norwich, Conn., a Corporation of New York. Filed July 7, 1930. Serial No. 466,135. 1 Claim. (Cl. 206—44.)



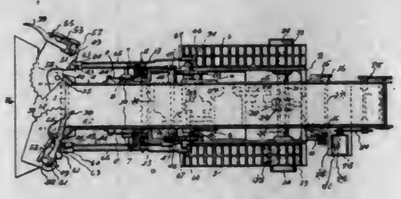
A carton blank comprising in combination front, rear and side walls joined together to form a receptacle when set up, the front wall having a transverse window the lower edge of which is spaced above the lower edge of said wall, the lower edge of said front wall extending beyond the lower edge of the rear wall and the lower edges of the side walls extending in an angular relation therebetween so the receptacle when resting with the lower edges on a horizontal surface will tilt rearwardly, an easel on the rear face of said rear wall for supporting the receptacle in said tilted position, a section extending from the said lower edge of the front wall to the lower edge of the rear wall to close the lower end of the receptacle, a second section extending from said first-named section to overlie the inner face of said rear wall, a third section extending from said second section to extend across between said front and rear walls adjacent the lower edge of said window and a fourth section extending from said third section to overlie the inner face of said front wall below said window and rest on the inner face of said first named section, the said sections being arranged so that the first-named section may rest on a horizontal surface when the carton is set up in tilted position and whereby the third section will be supported in parallelism with said first-named section.

1,875,782. VALVE FOR AIRBAGS. CORNELIS VAN RENNES, Flushing, N. Y., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 4, 1930. Serial No. 441,483. 7 Claims. (Cl. 18—45.)



1. The combination with an inflatable container having a tubular valve stem communicating with the interior of the container, of a flexible device disposed in the valve stem opening and projecting a substantial distance into the interior of the container.

1,875,783. LOADING MACHINE. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 14, 1929, Serial No. 399,410. Renewed May 9, 1932. 15 Claims. (Cl. 198—10.)



1. In a loading machine of the class described, a conveyor, and gathering mechanism for gathering and depositing material on to said conveyor comprising a pair of reciprocably movable agitating members extending forwardly of said conveyor and across the forward end thereof having gathering arms pivoted thereon and reciprocably movable with respect thereto in a plane parallel to the plane of movement of said agitating members.

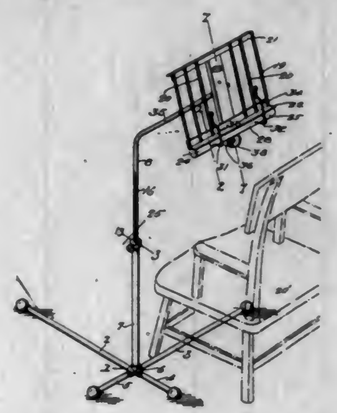
1,875,784. INSTRUMENT FOR HOLDING GAUGES FOR SETTING VALVES. HORACE WALKER, Portland, Oreg. Filed June 28, 1929. Serial No. 374,604. 1 Claim. (Cl. 33—168.)



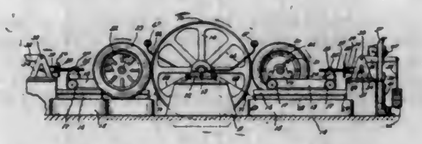
A gauge comprising a holder, U-shaped in cross section, thickness gauges pivoted near the end of the holder, said holder having an integral U-shaped stop extending beyond the end and being of less width than the body of the holder, said stop extending at a slight angle to the holder for permitting the desired gauge to be swung slightly beyond a half circle.

1,875,785. BOOKSTAND. RUFUS WAPLES, Philadelphia, Pa. Filed Apr. 10, 1929. Serial No. 353,987. 7 Claims. (Cl. 45—60.)

4. In a support, a platform, a supporting standard therefor, and a base member from which the standard arises, said base member including feet radiating from the lower end of the standard, said feet being arranged in groups, the feet of each group being of equal length, the feet of different groups being of different lengths, there being two feet in the group having the greater length, said feet being spaced through approximately 90 degrees, said standard being formed in two sections of which the upper section has an angular extension supporting the platform, the sections of the standard being capable of relative rotation and means operatively connecting said standard sections and limiting relative rotation of the sections to an angle, throughout which said angular arm and the platform are maintained within the angle defined by the longer feet.



1,875,786. TIRE TESTING MACHINE. HAROLD E. WARNER, West Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1928. Serial No. 253,225. 1 Claim. (Cl. 73—51.)



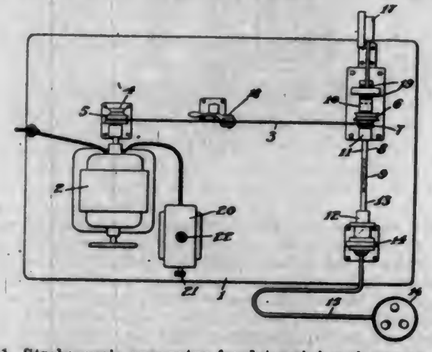
A tire testing machine which comprises a rotatable wheel, a tire support mounted for movement toward and from the wheel, weight means connected to said support to advance the support toward the wheel, a fluid pressure cylinder operably connected to the weight, means to raise the weight and retract the support, a valve for admitting fluid under pressure to the cylinder, an electric circuit including a solenoid and a switch for operating said valve, said switch being positioned to be actuated by the weight, means upon excessive advance of the tire support toward the wheel to close said circuit and thereby open said valve to raise the weight and retract the support and means to retain the weight in raised position when the support is retracted.

1,875,787. PROCESS OF MELTING OR HEATING MATERIAL IN AN ELECTRICAL FURNACE. KARL GUSTAF WENNERSTROM, Malmkoping, Sweden. Filed Aug. 19, 1929, Serial No. 386,921, and in Sweden May 21 1928. 4 Claims. (Cl. 13—34.)



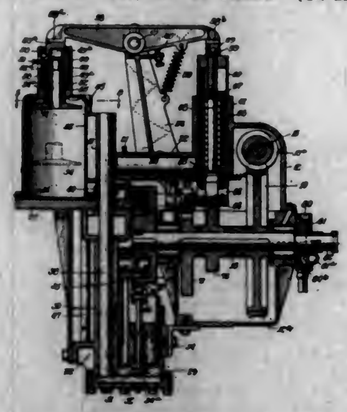
1. A process of melting or heating material in an electric furnace with a layer of slag consisting in heating the layer of slag solely by electric resistance and thereby heating the material to be treated, and maintaining said material during the entire treatment above the layer of slag.

1,875,788. STROBOSCOPE. PHILIP C. WENTWORTH, Providence, R. I., and JAMES H. AVERY, Franklin, Mass., assignors to National Ring Traveler Co., Providence, R. I., a Corporation of Rhode Island. Filed June 10, 1931. Serial No. 543,314. 4 Claims. (Cl. 88—14.)



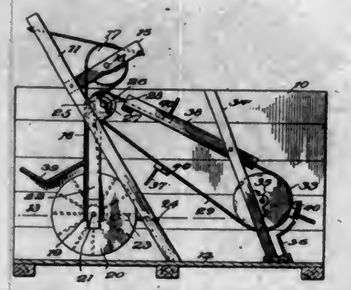
1. Stroboscopic apparatus for determining the necessary factors to establish the proper relationship between the spindle, ring and traveler used in ring spinning and twisting yarn, comprising a variable speed motor, and interrupter shaft driven from said motor at speeds regulatable to the varying speed of the spindle and traveler relative to each other, a variable resistance for controlling the input of current to said motor, an interrupter driven from said driven shaft, a flash light manipulatable with reference to the part or parts to be observed and adapted to be periodically flashed by said interrupter in synchronism therewith for determining stroboscopically the speed of the spindle and traveler relative to each other so that the relation of the traveler to the ring may be observed with the stroboscope at the speed obtained, and a tachometer driven from said driven shaft for visually indicating the speed of said driven shaft.

1,875,789. EXHAUSTING AND SEALING MACHINE. WILLIAM P. WHITE, Chicago, and CLIFFORD E. IVES, Wilmette, Ill., assignors to White Cap Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 1, 1928. Serial No. 309,540. 11 Claims. (Cl. 226—82.)



1. A sealing machine comprising, in combination, a bell movable vertically at the sealing station, a sealing device carried on the bell, a presser device operable to actuate the sealing device to seat a closure on a package in the bell, and means for moving the presser device into and out of the zone of movement of the bell.

1,875,790. FISH SCREEN. ROY D. WILLIS, Bigpine, Calif. Filed Jan. 22, 1930. Serial No. 422,597. 4 Claims. (Cl. 210—176.)



1. In a fish guard for flumes, the combination with a conveyor for lifting débris from the water, of a débris receiving trough positioned to receive the débris lifted from the said conveyor, and means carried by the said conveyor for lifting water and discharging the same into the trough to flush the débris from the receiving trough.

1,875,791. FRICTION DETENT FOR CONTROL RODS. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 31, 1930. Serial No. 424,834. 4 Claims. (Cl. 74—39.)

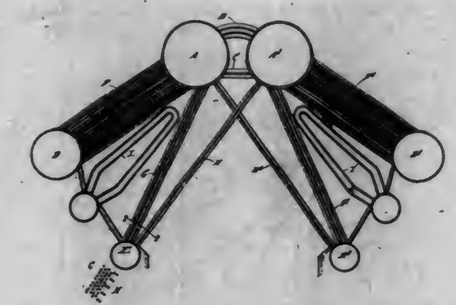


1. In a control device, the combination with a tubular casing and a rod reciprocable therein, said casing being apertured, of a sleeve frictionally embracing the casing and provided with a spring finger having an integral spherically embossed portion projecting through the aperture into engagement with said rod, said embossed portion being urged into said engagement by said spring, said rod having a depression registerable with said aperture in which the embossed portion of said finger is yieldably and impositively engageable.

1,875,792. WATER TUBE BOILER OF THE YARROW TYPE. HAROLD EDGAR YARROW, Scotstoun, Scotland. Filed Mar. 28, 1929, Serial No. 350,647, and in Great Britain Apr. 4, 1928. 1 Claim. (Cl. 122—325.)

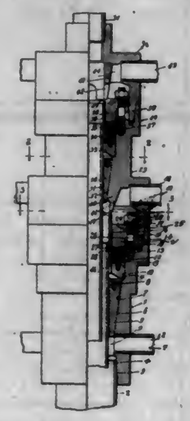
A water tube boiler of the Yarrow type, comprising two parallel steam drums and a plurality of water drums on each side of the furnace and parallel with the said steam drums, inclined banks of steam generating tubes connecting the water drums at each side of the furnace with the steam drum on that side and a plurality of rows of steam generating tubes on both sides of and immediately adjacent to the combustion space and directly connecting the innermost water drum on each side of the furnace with the steam drum on the opposite side of the furnace, the tubes of each row of said plurality of rows of steam generating tubes registering, respectively, with tubes of the adjacent row transversely of

said steam and water drums and being spaced apart longitudinally of said steam and water drums approximately twice the distance between adjacent tubes of said banks of steam generating tubes to preclude "bird-nesting", while



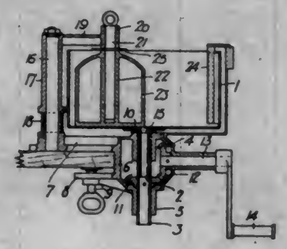
still effectively screening the parts of the steam drums which would otherwise be exposed to direct radiation from the furnace as well as balancing the pressure in the said steam drums.

1,875,793. CONTROL HEAD. FORREST JOSEPH YOUNG, Torrance, and SPENCER WILLIAM LONG, Redondo, Calif., assignors to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1930. Serial No. 419,314. 5 Claims. (Cl. 166—14.)



1. A control head including a pair of similar casing head members secured together and one of said casing head members being secured to the upper end of a casing, the casing head members each including sectional slips mounted on tapered seats formed within said casing head members to support concentrically disposed casings, packing glands mounted within said casing head members above said sectional slips on shoulders formed within said casing head members, packing gland follower rings mounted on the packing glands, means mounted within the casing head members for adjusting the position of said packing gland followers to pack the said concentric casings against the casing head members and vents formed in the casing head members communicating with angular spaces formed between the concentric casings.

1,875,794. MACHINE FOR KNEADING, CRUSHING, AND SIMILAR OPERATIONS. BIRGER ZETTERGREN, Stckholm, Sweden, assignor to Helge Gustaf Torulf, Stockholm, Sweden. Filed Feb. 8, 1928, Serial No. 252,857, and in Sweden Oct. 15, 1927. 16 Claims. (Cl. 259—85.)

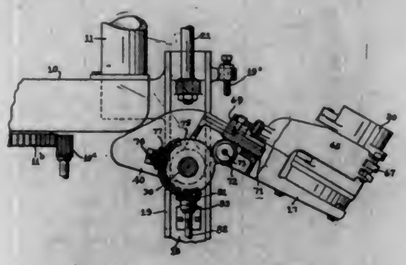


1. A machine for effecting kneading, crushing, mixing, and similar operations, comprising a rotary receptacle to receive the material to be treated, a roller in said receptacle rotatable around an independent axis substantially parallel to the axis of rotation of said receptacle, cooperating teeth on the inside of said receptacle and on said roller, and means to yieldingly hold said roller with its teeth in positive engagement with the teeth of said receptacle.

1,875,795. ACTIVATED CARBON AND PROCESS OF FORMING. PAUL ZURCHER, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,441. 15 Claims. (Cl. 252—3.)

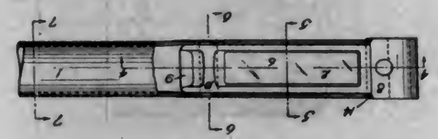
1. The method of activating carbon which comprises subjecting heated carbon to the action of a phosphorus compound as an activating chemical capable of forming volatile reaction products, and subjecting the resulting carbon to the action of steam at a temperature between 850° C. to 1100° C.

1,875,796. GLASSWARE FORMING MACHINE. RUSSELL G. ALLEN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 18, 1929. Serial No. 340,686. 7 Claims. (Cl. 49—41.)



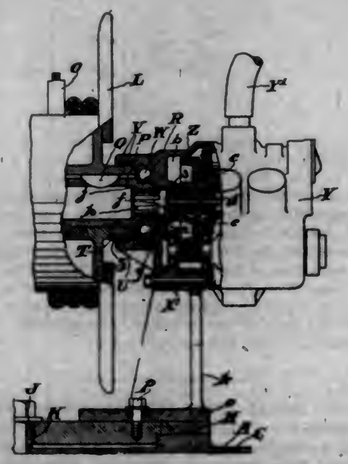
1. In a glass forming machine, the combination of a mold carrier mounted to swing up and down about a horizontal axis, a partible mold on said carrier, means for swinging said carrier about said axis for raising and lowering the mold, mechanism for opening and closing the mold including a gear train, said train comprising a gear rotatable about said horizontal axis, and means cooperating with said carrier swinging means for causing said gear to rotate about said axis with the mold carrier and at the same angular velocity during said raising and lowering of the mold, whereby the swinging of the mold carrier about said axis will not cause opening or closing movements of the mold.

1,875,797. TUBULAR AXLE. WALTER J. ASSEL, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 2, 1931. Serial No. 513,008. 4 Claims. (Cl. 301—124.)



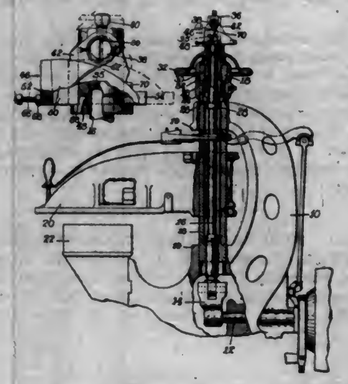
1. An axle comprising a hollow tubular body of circular section throughout its middle portion, and inserts welded in the ends of said tubular body, each insert comprising an inner end portion inside of said tubular body, an outer end portion partly inside and partly beyond the end of said tubular body and an intermediate portion, said inner end portion being at its tip of less depth and width than the diameter of the circular bore of the tubular body but increasing gradually in depth beyond such diameter, and said inner end portion also having convex vertical ribs on its sides in position for the side walls of the tubular body to press against when said insert is forced into said tubular body.

1,875,798. MOTOR CONNECTION. CHARLES S. BAKER, Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 12, 1929. Serial No. 392,151. 1 Claim. (Cl. 74—7.)



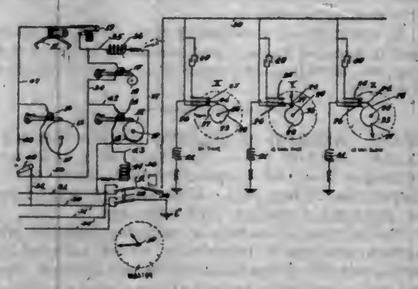
In a motor connection, the combination of a member and a standard for supporting the member, recesses in the ends of the member, a wall between the recesses and having a bore, a driven member journaled in one recess and having a shoulder seating against the wall, a motor secured to the member and having a gear train extending into the other recess, a shaft driven by the gear train journalled in the bore and slidably interlocking with the driven member, and a shoulder on the shaft acting against the wall to limit movement of the shaft in the direction of the driven member.

1,875,799. PRESS. MILTON H. BALLARD, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Jan. 6, 1927, Serial No. 159,433. Divided and this application filed Nov. 17, 1931. Serial No. 575,674. 10 Claims. (Cl. 164—23.)



5. In a machine for performing pressure-applying operations, a work-supporting bed, a post having a presser member mounted thereon in spaced relation to the bed, a spindle for operating the post, a member mounted on the spindle for supporting the post, a clamping member carried by the spindle, and a wedge positioned between the post-supporting member and the clamping member, the wedge having a curved bearing surface for engaging a correspondingly curved surface of the clamping member releasably to secure the post to the spindle, the construction and arrangement being such that the effective angle of the wedge is variable so that a slight movement of the wedge in a direction to release the pressure upon the wedge will result in the forcing out of the wedge.

1,875,800. SYNCHRONIZING CLOCK. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Apr. 20, 1925. Serial No. 24,322. 39 Claims. (Cl. 58—24.)



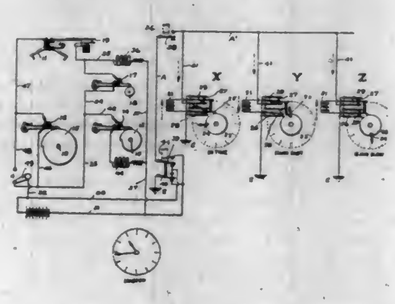
1. In a synchronizing system including in combination, a master clock having means for controlling the distribution of electrical energy of different frequency characteristics over a common circuit, a plurality of secondary clocks connected across said common circuit each having a translating device for actuating the same, and means

controlled solely by said translating device for determining whether the electrical energy from said common circuit will be utilized for advancing the secondary clock.

10. In a secondary clock, the combination of a shaft, a ratchet wheel on said shaft, an electromagnet for actuating said ratchet wheel, two branch circuits one of which contains a condenser, a switch, and means controlled by the rotative position of said shaft for connecting either one of said branch circuits in series with the electromagnet.

36. The method of operating a secondary clock from a master clock which comprises transmitting current through a circuit from the master clock to the secondary clock, suspending operation of the secondary clock by the said current by changing at the secondary clock the opposition to the flow of the current in the circuit, and resuming operation of the secondary clock by supplying to the circuit from the master clock current of a different characteristic.

1,875,801. SYNCHRONIZING CLOCK SYSTEM. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Oct. 16, 1925. Serial No. 62,745. 22 Claims. (Cl. 58—24.)



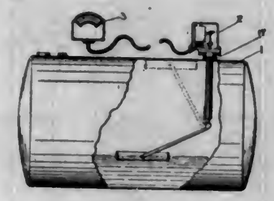
1. In a synchronizing clock system, in combination with a master clock and a secondary clock, a single secondary clock circuit, means for controlling the distribution of electrical energy over said single circuit so as to cause intermittent flow of current in the form of impulses, electro-magnetic means in said single circuit for causing the actuation of said secondary clock, and means controlled by said secondary clock for reversing the direction of flow of current through said electro-magnetic means whereby said impulses are ineffectual to actuate said electro-magnetic means.

8. In combination, a secondary clock having a polarized actuating impulse magnet, and secondary clock-controlled means for controlling the polarity of current supplied to said magnet.

1,875,802. METHOD OF MAKING SURFACING MATERIALS. JOHN W. CLARK, New York, N. Y., assignor to Neuberger Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,818. 2 Claims. (Cl. 106—31.)

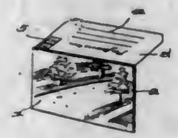
2. The process of making a surfacing material which comprises, treating a bituminous binder material comprising a mixture of crude petroleum and bitumen, wherein the crude petroleum content of the mixture constitutes from 8% to 25% of the bitumen content thereof by weight, by heating the said mixture to a temperature of approximately 150–200 degrees F. and under a vacuum in excess of 21 inches to remove substantially entirely all of the volatile hydrocarbons contained therein, separately heating a mineral aggregate to drive off the moisture therefrom, and then mixing the bituminous binder material and moisture free mineral aggregate together.

1,875,803. CONTENT INDICATING MECHANISM FOR TANKS AND THE LIKE. CLARENCE A. DE GIERS, New York, N. Y., assignor, by mesne assignments, to The Liquidometer Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 26, 1926. Serial No. 150,676. 5 Claims. (Cl. 73—82.)



1. The combination of a tank, a float in the tank, a float arm, a housing, a base supporting the housing, a collar secured to the base, a threaded coupling threaded to the collar and screwed into the tank, a pipe extending through the coupling and extending into the tank, a rod in the pipe pivotally secured to the float arm, an operating arm, resilient adjustable means connecting the rod and operating arm, and a pair of compressible and expansible chambers pivotally connected to and operated by the operating arm.

1,875,804. COMBINED ENVELOPE AND CARD. ANTHONY DICICCO. Providence, R. I. Filed Apr. 16, 1931. Serial No. 530,705. 2 Claims. (Cl. 229—68.)

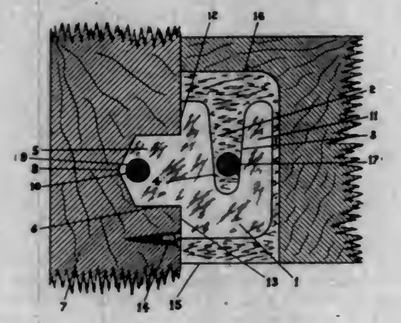


1. A combined envelope and postal card comprising a relatively stiff cardboard front having a pictorial front face, a complete envelope having a front face extending approximately co-extensive with and adhesively secured to the back face of the card approximately throughout the entire area thereof, and a closure flap carried by the top edge of the envelope and extending approximately over the area of the back of the envelope, and said flap providing conventional stamp and address spaces.

1,875,805. METAL JOINT FOR BEDSTEADS AND LIKE PURPOSES. VICTOR EDWIN DICKSON, Footscray, Victoria, Australia, assignor of one-half to Charles Henry Stevens, West Footscray, Australia. Filed Jan. 2, 1930, Serial No. 417,962, and in Australia Jan. 25, 1929. Renewed July 11, 1932. 1 Claim. (Cl. 5—294.)

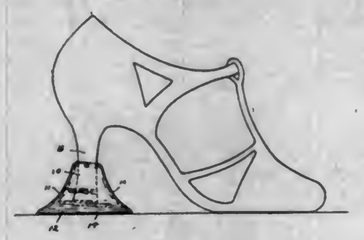
The combination, in a metal joint for connecting two members together, of a metal plate provided with a tongue adapted to fit into a recess in the first of said members, said tongue being perforated to form an aperture, anchoring means adapted to be fitted into a hole in the said first member and through said tongue aperture, a finger formed by a vertical recess in said plate, said finger having an inner inclined face, a recess in the second of said members to be connected together, anchoring means

secured to said second member and adapted to engage said inclined face of the finger of said plate, a metal screw driven into the first of said members to be connected



together, and a shoulder formed in the lower portion of the metal plate, said shoulder being adapted to bear against said metal screw.

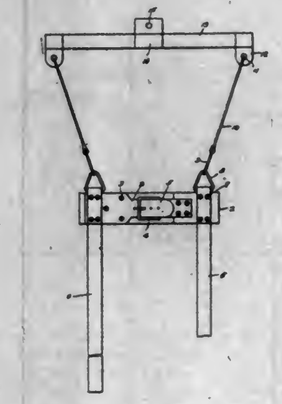
1,875,806. ENLARGED WEARING SURFACE FOR SPIKE HEELS. ALBERT W. GIVENS, Marlborough, N. Y. Filed June 30, 1931. Serial No. 547,857. 1 Claim. (Cl. 36—72.)



A detachable enlarged wearing surface for spike heels, comprising a circular tread member integral with a conical heel embracing member having tapered concave sides and a central opening conforming in shape to a cross section of the spike heel, and a metallic disk of greater area that the spike heel secured within said tread between the shoe heel and the wearing surface at an angle thereto.

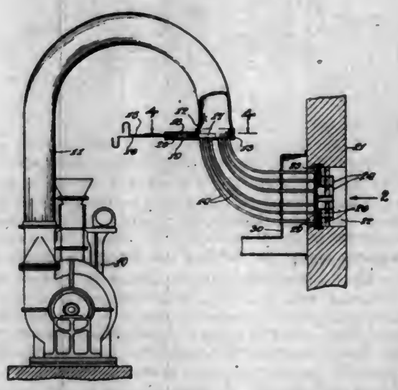
1,875,807. AERIAL SAFETY SUIT DEVICE. PATRICK F. GORMAN, Central Falls, R. I. Filed May 7, 1931. Serial No. 535,742. 1 Claim. (Cl. 227—8.)

A device of the class described comprising a belt, adjustable means for fastening the belt about the waist of the user, a pair of vertically arranged looped straps forming slings and having their upper ends secured to the belt, each strap having one end connected to the belt forwardly of a side of the belt and its other end connected with the belt at the rear thereof and rearwardly of the said side of the belt, each strap having its ends bent to form loops with the looped parts extending above the belt and the fastening means for connecting the ends of the straps to the belt passing through the upper ends of the straps, the bent over portions and the belt, triangular shaped members placed in, he loops formed by the bent over portions of the ends of the straps, a beam, brackets connected to the ends thereof having openings therein, a flexible member passing through the opening of each bracket, snap fasteners connected with the ends of the flexible members and engaging the triangular shaped members, the snap fasteners of one flexible member engaging the triangular shaped members of one sling forming strap



and the snap fasteners of the other flexible member engaging the triangular shaped members of the other sling forming member.

1,875,808. PULVERIZED COAL BURNING DEVICE. ARTHUR S. GERQUEST, Hasbrouck Heights, N. J., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1928. Serial No. 301,239. 3 Claims. (Cl. 110—104.)

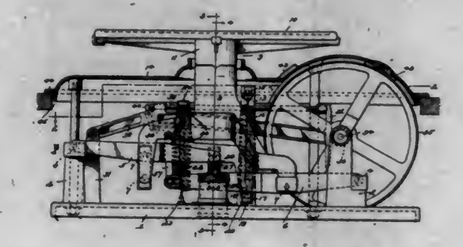


1. In combination, a fuel supply pipe having a housing at its outlet, a plurality of distributing tubes, each connected at one end to said housing, a burner to which said tubes are connected at their other ends, a shutter supported in said housing, and means for moving said shutter to close some of said distributing tubes from the supply pipe.

1,875,809. SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed Sept. 27, 1926, Serial No. 137,906. Renewed June 4, 1931. 32 Claims. (Cl. 265—69.)

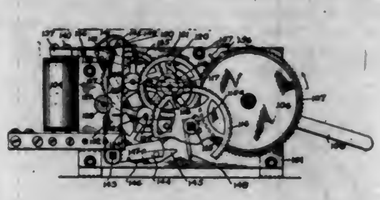
1. In a scale, a base, a weighing beam pivotally mounted in connection with the base, a weight receiver pivotally

supported in connection with said beam, a pair of springs having certain of the ends thereof connected with said base and their other ends connected with said beam, the points of connection of said springs with said beam being disposed at unequal distances from the point of pivotal con-



nection of said beam with said base, an auxiliary arm pivotally mounted in connection with said base, means for oscillating said arm in unison with said beam, and an indicating mechanism operated by the movements of said arm.

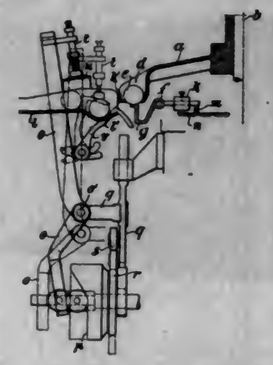
1,875,810. TRANSMITTER FOR FIRE ALARM SYSTEMS. GEORGE F. HARTER, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed Oct. 19, 1927. Serial No. 227,095. 6 Claims. (Cl. 177—378.)



1. In a transmitter mechanism, in combination, a set of circuit-controlling contacts, mechanism associated with said contacts to operate the same and having a driving spring, means for putting the spring under driving tension, a detent normally locking the contact-operating mechanism and shiftable automatically to release the same, electromagnetic means for holding the detent in locking position, a lever associated with the detent to prevent movement thereof into locking position before the spring has been fully tensioned, means actuated by the spring-tensioning means for rocking said lever to permit movement of the detent into locking position; and means operating when the spring tensioning means is actuated, to shift the detent into locking position.

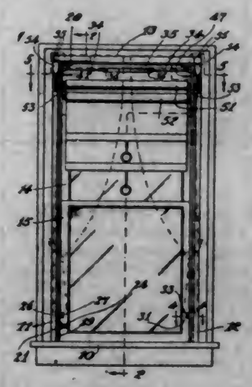
1,875,811. MACHINE FOR ILLUMINATING, SORTING, AND STAMPING EGGS. WILHELM HILGERS, Dusseldorf, Germany. Filed July 16, 1930, Serial No. 468,438, and in Germany Aug. 24, 1929. 3 Claims. (Cl. 101—2.)

1. In a machine for illuminating, sorting and stamping eggs, a rotatable sorting table adapted to classify eggs into different weight groups, a plurality of discharge channels each adapted to receive from the sorting table eggs of a particular weight, each discharge channel being formed with a recess in which each egg that passes along the channel comes to rest for a short time, a plurality of weight stamps bearing different designations for the different groups of eggs, stamp pads for inking the weight stamps, means comprising cam discs for moving the weight stamps from the stamp pads to the eggs and back, so as to stamp each egg with an indication of its weight



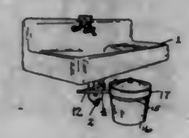
during its stoppage in the recess, and mechanically controlled means for shifting each egg out of the recess after it has been stamped.

1,875,812. WINDOW SHADE ADJUSTING DEVICE. SAMUEL JASGUR, Brooklyn, N. Y. Filed Apr. 1, 1929. Serial No. 351,671. 7 Claims. (Cl. 156—27.)



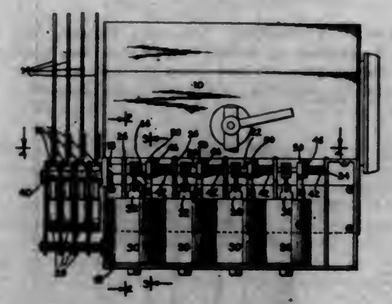
1. In a device of the character described, in combination, two vertical channel-shaped members the base of each having a longitudinal slot therein for attachment to inner opposing sides of a window frame, the base of each channel-shaped member being spaced from said window-frame and the two arms of said channel-shaped member being directed inwardly toward said window-frame, a revoluble sprocket in each channel-shaped member, means exterior of said channel-shaped member adapted to revolve one of said sprockets, a revoluble shaft connecting the two said channel-shaped members, a sprocket attached to each end of said shaft and within one of said runways, chain belts within said run-ways and connecting the shaft sprockets with the other two said sprockets, a curtain-carrier fixedly attached to opposite points of the two said belts and means for maintaining said carrier at any desired vertical position.

1,875,813. KITCHEN UTENSIL. LOUIS J. KAPLAN, Greenwich, Ohio, and LOUIS B. METZGASON, Philadelphia, Pa., assignors, by mesne assignments, to The Kitchen Katch-All Corporation, Greenwich, Ohio, a Corporation of Ohio. Filed Oct. 21, 1927. Serial No. 227,678. 1 Claim. (Cl. 248—1.)



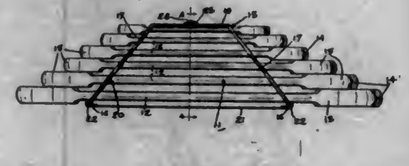
A device for supporting a pail of substantial size for movement in and out beneath a kitchen sink, comprising a clamp adapted to engage a sink drain pipe within a range of sizes, said clamp including a vertical eye member, a unitary vertical pivot member engageable in said eye, and including a horizontal supporting arm of substantial length with a horizontally flattened outer end, a second arm of substantial length having a horizontally flattened inner end vertically pivoted to the outer end of the first-named arm and having a vertically flattened outer end, a ring of size to receive said pail, said ring having adjacent ends horizontally pivoted to opposite sides of said outer end of said second-named arm, and lugs on said outer end to prevent descent of said ring below a horizontal plane, said eye and all of said pivots preventing sagging of any part of said holding device below a horizontal plane, and permitting the ring to be folded back upon the outer arm, the outer arm to be folded upon the inner arm, and the entire assembly to be swung into a compact space below a sink, thereby producing an economy of space.

1,875,814. COLOR SCREEN CONTROL. JOHN H. KLIEGL, New York, N. Y., assignor to Kliegl Bros. Universal Electric Stage Lighting Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,540. 4 Claims. (Cl. 240—3.1.)



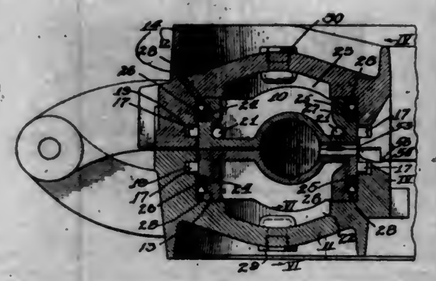
1. A color control apparatus for a spot light, comprising in combination, a color screen having normal and operative positions, a solenoid operatively connected to said screen, means for supplying current to said solenoid whereby said solenoid rotates said screen from normal to operative position, and means effective immediately after said rotation begins, for producing and maintaining a constant reduction in strength of said solenoid, whereby said screen is moved softly positively to operative position.

1,875,815. WRENCH SET UNIT. JOSEPH KNEIER, Cleveland, Ohio, assignor to The Vichek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 17, 1927. Serial No. 240,701. 10 Claims. (Cl. 206—16.)



1. A wrench set unit, comprising: a plurality of wrenches assembled side by side; a pair of straps extending about said wrenches, but interrupted; a pair of connecting strips securing the two ends of one of said straps respectively to the corresponding ends of the other of said straps; said straps and said strips being a single piece of wire, and resilient; and means holding said straps spaced remote from said strips; said straps and said wrenches interabutting to prevent any substantial relative longitudinal movement between said straps and said wrenches; whereby said wrenches are held both against separation and against shifting, but said straps are readily openable to permit removal and replacement of said wrenches.

1,875,816. VULCANIZER WITH INTERCHANGEABLE SHELL. ARNOLD R. KRAUSE, Eau Claire, Wis., assignor to Gillette Rubber Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed Oct. 28, 1929. Serial No. 402,846. 1 Claim. (Cl. 18—38.)

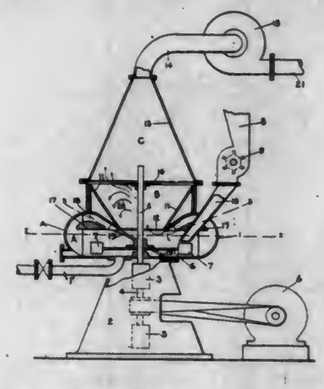


In a vulcanizer, a mold, a shell in said mold, a flexible ring in said shell said ring being substantially rectangular in cross-section and having a V groove in one surface, substantially the width of the face, one face of the ring adjacent the V groove being in engagement with said mold, means for interlocking said shell to said mold, and fluid pressure means for holding said shell and said mold in a locked position, said shell having ducts leading to the V groove in said ring through which fluid under pressure may pass to enter the groove and compress said flexible ring to seal said shell to said mold.

1,875,817. APPARATUS FOR PULVERIZING MATERIALS. WILLIAM J. A. LONDON, Hartford, Conn., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1929. Serial No. 339,338. 8 Claims. (Cl. 83—11.)

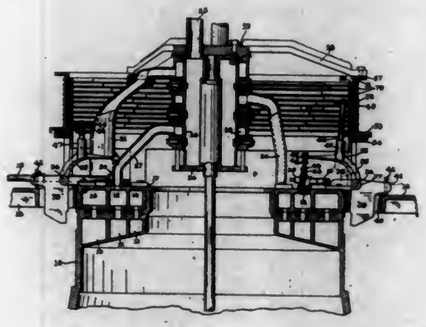
1. A pulverizer comprising a casing having an outlet in the upper part thereof, hammers supported within the

casing, means for rotating said hammers, means for delivering the material to be pulverized into the casing, and deflecting blades between the outer ends of the hammers



and the wall of the casing and inclined from the bottom of the casing toward the outlet for directing the material away from said hammers, to the outlet.

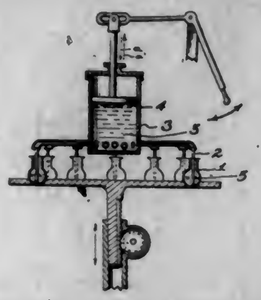
1,875,818. GLASSWARE FORMING MACHINE. LOUIS HORACE MORIN, Montreal, Quebec, Canada, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 22, 1928. Serial No. 263,651. 10 Claims. (Cl. 49—18.)



1. In a glassware forming machine, the combination of a stationary central pillar, a mold carriage rotatably supported thereon, an annular series of molds on said carriage, means to periodically supply air pressure to the molds, air pressure control valves individual to the molds, valve actuating levers individual to the valves, means normally yieldingly holding the levers out of operative engagement with the valves, and cams individual to the molds to rock the levers at regular intervals and thereby open the valves to apply air pressure to the mold.

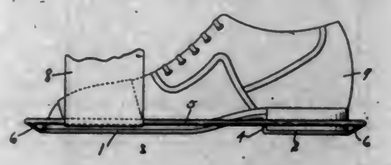
1,875,819. METHOD OF FROSTING THE INNER SURFACE OF A GLASS BULB. TOMISABURO NABUSE, Uchiyamashita-Cho, Kojimachi-Ku, Tokyo, Japan. Filed Sept. 6, 1930, Serial No. 480,278, and in Japan Sept. 20, 1929. 2 Claims. (Cl. 41—42.)

1. A method of frosting a portion of the inner surface of a glass bulb of an electric lamp; consisting in first injecting in the bulb a special etching liquid through a narrow tube and thereupon extracting said liquid therefrom; said liquid containing a powdered material selected from a group consisting of starch and cornflour, which acts to give cohesiveness to the liquid, whereby a sharp, clear, dividing line, between the frosted and transparent parts



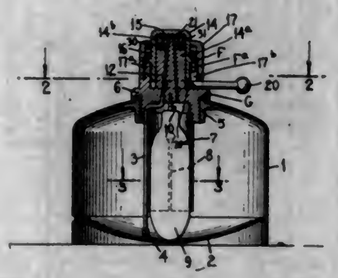
of the bulb is obtained said powdered material settling in the etching liquid to alter the etching action in the parts where the material has settled.

1,875,820. SHOE POLISHING DEVICE. LOUIS NASSIF, Wheeling, W. Va. Filed Apr. 9, 1932. Serial No. 604,137. 1 Claim. (Cl. 15—266.)



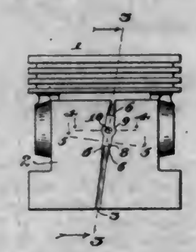
In a shoe polishing device comprising a foot plate, guide means for a polishing cloth attached to said plate and spaced away from the sides of the latter, said guide means occupying a position wherein it is elevated above the level of the plane of said plate and completely surrounds the latter, and means located at the opposite ends of said plate for supporting said guide means.

1,875,821. ATOMIZER. FRANCOIS NAZARE, New York, N. Y., assignor to Aromel Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,397. 4 Claims. (Cl. 299—89.)



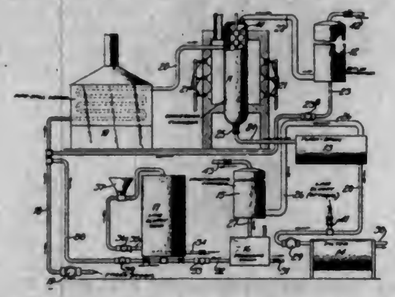
1. An atomizer comprising a container portion having an opening therein, a plug removably inserted in said opening, a retainer connected with the inside portion of said plug and adapted to hold a sealed vessel which contains a gas under pressure, a pin connected to said plug and adapted to rupture the seal of said vessel before the plug is fully inserted, an outlet tube connected to said plug, said outlet tube having its outlet end connected to a channel in said plug, and its inlet end at the bottom part of the container, another channel located in said plug and communicating with the interior of said container, a common discharge orifice for both said channels and a valve adapted to control said channels.

1,875,822. DEVICE FOR SPREADING AND ENLARGING MOTOR PISTONS. JOHANES A. F. OSSE, Sheldon, Iowa. Filed Aug. 21, 1931. Serial No. 558,604. 4 Claims. (Cl. 74—108.)



1. A device of the class described, comprising an elongated substantially rectangular body provided at its center with a substantially cylinder-like portion hollow at its center, and said body provided with outwardly extending flanges its full length and at the same side edges, substantially as shown and described.

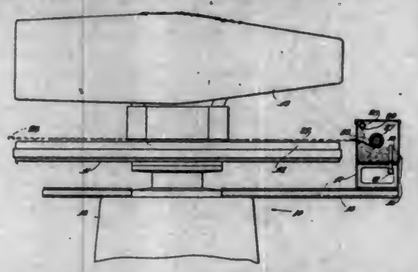
1,875,823. PETROLEUM TAR. CARLYLE D. READ, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed June 23, 1927. Serial No. 201,004. 3 Claims. (Cl. 196—55.)



1. The method of producing pressure tar free from coke and other objectionable solid materials which comprises adding lime to a hydrocarbon oil and subjecting such oil to cracking to produce vaporous products and unvaporized pressure tar containing lime and carbonaceous matter in readily filterable agglomerates, separately withdrawing the said pressure tar and forcing the same through a filter medium, thereby removing the agglomerated lime and carbonaceous matter.

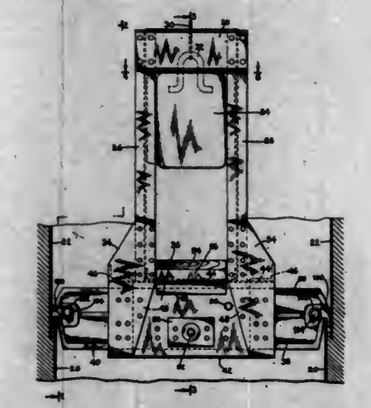
1,875,824. DAMPENING ROLL FOR PRESSES. CHARLES O. REEPS, deceased, Waukegan, Ill., by Harriette Estelle Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,116. 1 Claim. (Cl. 68—9.)

The combination with an ironing buck, of a dampening attachment therefor comprising a trough supported at one end of the buck, a spring roller mounted within said trough with its axis at right angles to the longitudinal axis of the buck, a sheet of absorbent material wound on said roller to be unrolled therefrom and extended across the top of the buck longitudinally thereof, a spray pipe



within the trough for moistening the sheet as it is withdrawn from the roller, and a drain pipe for said trough for maintaining a constant level of water therein.

1,875,825. APPARATUS FOR DRIVING HOLLOW CYLINDERS. FREDERICK A. SCHROEDER, Rochelle Park, N. J., and HERMAN R. SMITH, Douglaston, N. Y., assignors to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 17, 1930. Serial No. 421,372. 4 Claims. (Cl. 61—77.)

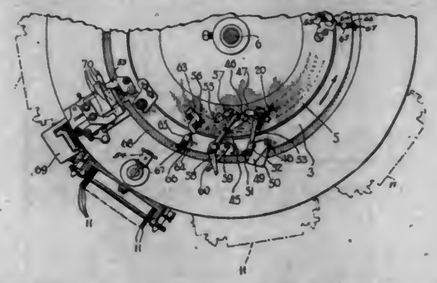


1. In apparatus for driving hollow cylinders, in combination, a pair of driving beams, a horizontal guideway for supporting said beams in alignment with each other, the opposite ends of said beams projecting beyond said guideway to engage a cylinder, manually operable means for simultaneously and equally adjusting said beams into and out of said guideway whereby the apparatus may be adapted for driving cylinders of different diameters, members carried by the horizontal guideway, and a force applying means operating within said members for applying a driving force to said guideway and for bodily raising said apparatus.

1,875,826. CIRCULAR RIB KNITTING MACHINE. JULIUS SIRMAY, Philadelphia, Pa., assignor to Jacquard Knitting Machine Co., Inc., a Corporation of New York. Filed May 23, 1930. Serial No. 454,856. 15 Claims. (Cl. 66—25.)

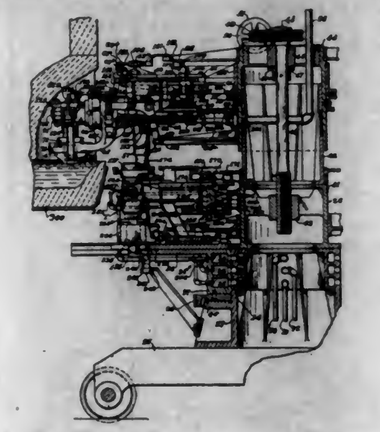
1. In a circular rib knitting machine, the combination of a plurality of banks of needles, means for feeding a plurality of yarns thereto, means to cause the needles of one of said banks to knit from said yarns in a selective manner, needles of another of said banks being provided with projecting butts, and a slotted wheel, slotted to permit certain of said butts to pass through it but engaging other

of said butts to actuate the corresponding needles of said another needle bank, and continuously rotating, when in operation, as the wheel and said another needle bank are



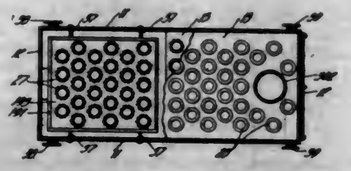
passed on over the other, controlling the knitting of one of said yarns on the needles of said another of said needle banks.

1,875,827. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Toledo, Ohio. Filed June 13, 1928. Serial No. 284,908. 36 Claims. (Cl. 49—5.)



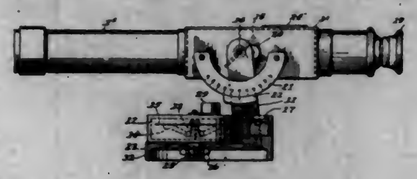
1. In combination, a suction gathering mold mounted in permanently inverted position and open at its lower end to receive a charge of glass, means for drawing a charge of glass upward by suction from a supply body into said mold through the lower end thereof, a finishing mold therebelow, a turnover unit interposed between said molds, a neck mold on the turnover unit, means to form a parison in the gathering and neck molds, means to invert the turnover unit to transfer a parison to the finishing mold, and means to expand the parison to its final form in said finishing mold.

1,875,828. BOILER. GEORGE SURPRENANT, Rotterdam, N. Y. Filed Sept. 12, 1930. Serial No. 481,432. 2 Claims. (Cl. 122—122.)



1. In combination, a furnace, a steam boiler comprising an up-pass for gases from said furnace and a down-pass communicating with said up-pass, the gases through said passes engaging boiler heating surface, and a stack for the gases communicating with the lower end of said down-pass, a portion of said stack being surrounded by boiler water and another portion thereof exposed to gases between the up-pass and the down-pass.

1,875,829. SURVEYING INSTRUMENT. LEW SUVERKROP, Bakersfield, Calif. Filed Nov. 18, 1929. Serial No. 407,999. 15 Claims. (Cl. 88—2.2.)

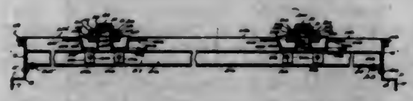


1. In an instrument of the class described, a sighting tube, a compass and a level associated therewith, and means within the tube for producing and transmitting images of the compass and level to the field of view of the observer while viewing an object through said sighting device, and a casing surrounding the compass and level and supporting them directly from the sighting tube.

1,875,830. SURVEYING INSTRUMENT. LEW SUVERKROP, Bakersfield, Calif. Filed Dec. 5, 1929. Serial No. 411,726. 16 Claims. (Cl. 88—2.2.)

1. In an instrument of the class described, a sight tube, a casing containing a compass and level, means for connecting said sight tube and casing comprising a straight vertical hollow tube, fastened to said casing at one end and an optical system located at the other end of said hollow tube for producing and transmitting images of said compass and level to said sight tube.

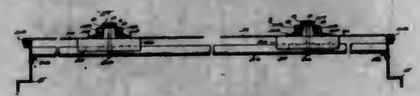
1,875,831. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,399. 15 Claims. (Cl. 108—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam

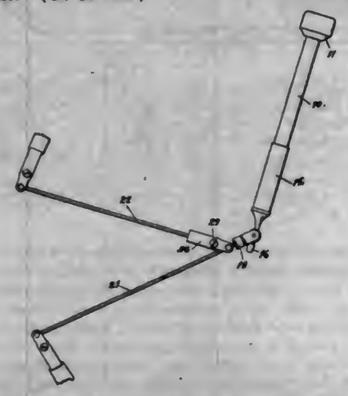
member extending longitudinally of the car in spaced relation to the roof sheets, and brackets for connecting said beam member to the carlines, each of said brackets having off-set portions respectively secured to the beam and to the associated carline, the portion of each bracket secured to the beam being rigidly provided with means for supportingly cooperating with an adjacent portion of a neighboring roof sheet.

1,875,832. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,405. 2 Claims. (Cl. 108—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines, each of said carlines having a web and downwardly extending legs terminating in oppositely projecting flanges, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam member extending longitudinally of the car, filler blocks respectively interposed between the beam member and carlines and projecting beyond the flanges of the latter for supporting the roof sheets, and U-shaped members depending from the carlines for supporting the beam in spaced relation to the roof sheets, said beam being disposed within the legs of each U-shaped member and resting upon the portion of the latter connecting the legs, said filler blocks being respectively clamped between the beam and the lateral flanges of the carlines by said U-shaped members.

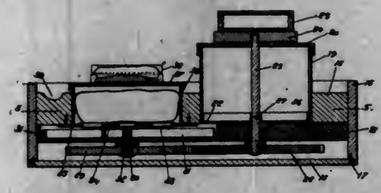
1,875,833. STYLUS FOR TELAUTOGRAPHS. ARLEIGH N. VAN NOSTRAND, Flushing, N. Y., assignor to Telautograph Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 5, 1929. Serial No. 352,619. 2 Claims. (Cl. 33—23.)



2. A stylus for telautograph apparatus comprising a rod, a flange at one end, a tapering portion extending from the flange, a ball on the end of the tapering portion, a stylus point extending from the ball, and a sleeve on the rod seating against the flange.

1,875,834. FACE POWDER FEEDER. FELIX JOSEPH VICKI, Paris, France. Filed Mar. 10, 1930, Serial No. 434,698, and in France Mar. 11, 1929. Renewed July 2, 1931. 21 Claims. (Cl. 132—88.)

11. A face powder feeder comprising, in combination, a casing internally fitted with an intermediate horizontal diaphragm and a partition located parallel to said diaphragm and in contact therewith, a shallow powder container recessed in the diaphragm and having a rough bottom surface, a plate screwed to the partition to close the container and formed with offset perpendicular slots shaped as spouts all opening in the same angular direction with respect to the centre of the container, a serpentine rake mounted for rotation upon itself on a central spindle passing through the diaphragm axially of the container, said serpentine rake being formed of a double helical strip engaging edgewise the rough bottom surface of the container and delineating two symmetrical channels both opening in the same angular direction as the spout-like slots and each having an outer flaring entrance, an intermediate throt-



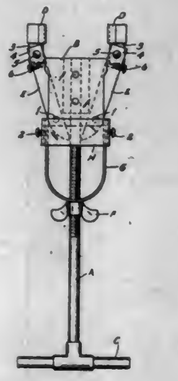
tled portion and an inner bulging portion, a gear associated with the spindle and housed in the space between the diaphragm and tthe bottom of the casing, a powder tank supported by the diaphragm in a hollowed portion of the partition and communicating by an opening in the diaphragm with the powder container, a second spindle associated with the gear and carrying an operating knob, said second spindle axially traversing the powder tank, a rake fixed upon the last-named spindle adjacent the bottom of the tank, said second rake slightly overhanging the first rake to sweep the powder from the tank into the container through said opening, and a puff-receiving housing located above the slotted plate in a hollowed portion of the partition.

1,875,835. APPARATUS FOR FORMING CONCRETE PILES. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 12, 1930. Serial No. 474,745. 5 Claims. (Cl. 61—57.)



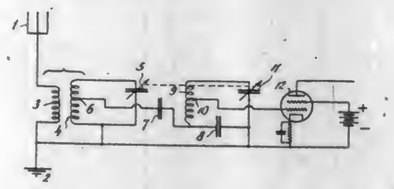
1. In combination, a metallic shell, a tubular concrete lining therein, driving projections extending inwardly of the bore of said lining and of a material different from that of the lining to reinforce said lining, and a driving core having corrugations engageable with said projections, together with means to expand and contract said core.

1,875,836. WRENCH. JOSEPH WESOLIK, St. Louis, Mo. Filed Oct. 16, 1931. Serial No. 569,203. 3 Claims. (Cl. 81—113.)



1. A wrench, comprising an operating shank adapted to be arranged substantially lengthwise of the longitudinal axis of the part to be turned, a cross piece or handle on said shank at the lower end of same, a bifurcated head piece rigidly attached to the upper end of said shank, oppositely-disposed levers pivotally mounted on said head piece and provided with laterally-projecting jaws, a nut mounted on said shank and adapted to be adjusted longitudinally of same, a yoke-shaped member actuated by said nut and combined with a sleeve that is adapted to embrace said levers and swing them on their axes to vary the size of the space between the jaws, the side arms of said yoke-shaped member being arranged inside of said sleeve and disposed so as to engage said levers, means for adjusting said side arms relatively to said sleeve so as to compensate for wear, and means for enabling the angular relationship between said jaws and levers to be changed.

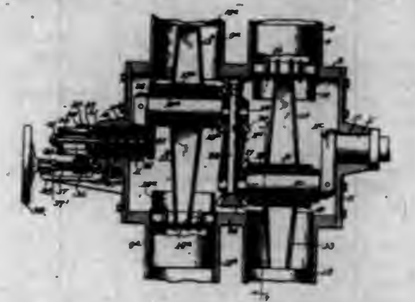
1,875,837. RADIO RECEIVING APPARATUS. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation. Filed July 7, 1931. Serial No. 549,149. 12 Claims. (Cl. 250—20.)



1. In a superheterodyne radio receiver, means for rejecting the "image" frequency, which comprise an input transformer, a tuned radio-frequency circuit including the secondary of said transformer, a second tuned radio-frequency circuit, and means connecting said tuned radio-frequency circuits, said last mentioned means including a connection to a portion of the first tuned circuit which is at node potential relative to currents of the "image" frequency.

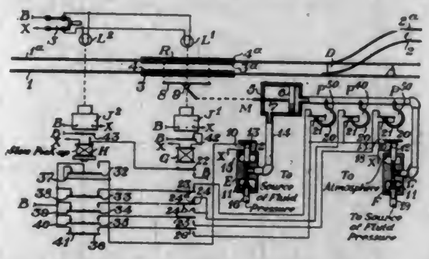
1,875,838. INTERNAL COMBUSTION ENGINE. AAGE E. WINCKLER, Milwaukee, Wis. Filed June 24, 1929. Serial No. 373,160. 2 Claims. (Cl. 74—38.)

2. In an internal combustion engine, the combination of a pair of engine units arranged one in front of the other, each of said units comprising a plurality of radially extending cylinders with pistons mounted slidably therein, a crank-shaft for the engine provided with a pair of cranks, a set of connecting rods for one of the engine units extending between and connected operatively to one of the cranks and the pistons of said one unit, a set of connecting rods for the other unit extending between and connected operatively to the other crank and the pistons of said other unit, a pair of sleeve-like eccentrics mounted rotatably on the cranks and operative in re-



sponse to rotation thereof relatively to the cranks, to vary the length of the piston strokes, and means on the crankshaft forming a driving connection between the eccentrics and operatively to rotate one eccentric in a direction opposite from the other eccentric so that the stresses applied to said one eccentric are transmitted so as to counterbalance the piston stresses applied to the other eccentric.

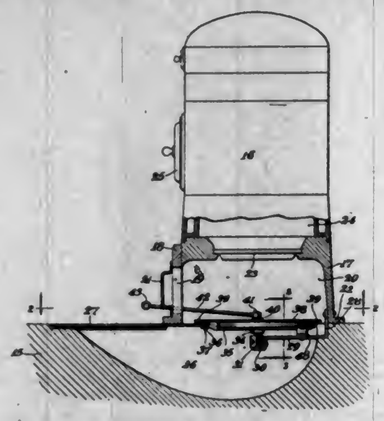
1,875,839. RAILWAY TRAFFIC CONTROLLING APPARATUS. VINCENT S. ALEXANDER, Swissvale, and DONALD G. ACKERLY, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 29, 1930. Serial No. 484,992. 15 Claims. (Cl. 104—26.)



1. In combination, a stretch of railway track, a first relay provided with a plurality of normally open and normally closed contacts arranged to be operated in a predetermined order upon energization of the relay, means for energizing said first relay when a predetermined point on a car passes a predetermined point along the trackway, a second relay, means for operating said second relay when a predetermined point on the car passes a second point along the trackway located in advance of said first point, traffic governing means, and means selectively controlled by the contacts of said two relays for controlling said traffic governing means in accordance with the speed of said car.

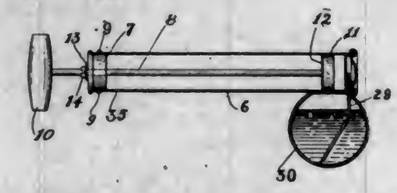
1,875,840. ASH SIFTER FOR FURNACES. GUSTAF ANDERSON, Richmond Hill, N. Y. Filed Jan. 15, 1931. Serial No. 508,908. 4 Claims. (Cl. 26—242.)

1. In combination with a furnace ash pit, a chamber therebelow, a circular screen disposed in a horizontal plane in the opening between said pit and chamber, a series of in-reaching brackets fixed to the wall of said pit carrying a pivot mounting for said screen, a plate ring covering the space between the ash pit wall and peripheral edge of said screen, a manually reciprocative bar extend-



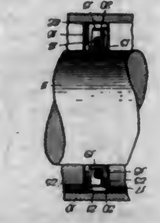
ing into the ash pit pivoted to the edge of said screen to produce semirotational movement, a spring bumper carried by said screen, and means on one of said brackets to limit the movement of said bumper in either direction.

1,875,841. LIQUID SPRAYER CONSTRUCTION. ROBERT M. BAGLEY, Haddonfield, N. J., assignor to The R. M. Hollingshead Co., Camden, N. J., a Corporation of New Jersey. Filed Apr. 29, 1930. Serial No. 448,214. 5 Claims. (Cl. 299—88.)



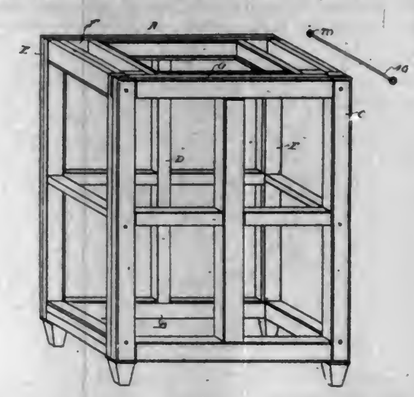
1. A liquid sprayer including a pump cylinder having a terminal wall and a baffle plate secured to the end thereof, in spaced relation to each other, by a single crimped seam; said baffle plate having a horizontally disposed elliptical opening, and spraying means operatively disposed between said terminal wall and said baffle plate and in operative relation to said elliptical opening.

1,875,842. OIL RETAINER. NUEL D. BELNAP, Winnetka, Ill. Filed Feb. 19, 1930. Serial No. 429,749. 9 Claims. (Cl. 288—1.)



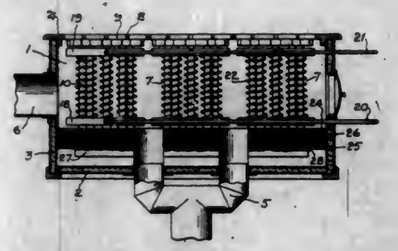
1. In a fluid retainer which is adapted to be positioned within a tubular housing about a centrally arranged shaft, a cage, a shaft packing shiftably positioned therein, and cam means for automatically causing the packing to be pressed into tightly sealed association with the cage when the shaft rotates.

1,875,843. REFRIGERATOR FRAME. GERHARD C. BOHN, St. Paul, Minn. Filed May 5, 1930. Serial No. 449,892. 6 Claims. (Cl. 217—12.)



1. A knock-down refrigerator assembled from interlocking units, comprising a base, end members engaging said base and supported thereby, said end members having forwardly and rearwardly projecting elements to support front and rear members, a front and a rear member having recesses to receive the projections on the end members, a removable top portion insertable in the upper end of the enclosure formed by the front, rear, and end members, means carried by the top portion to removably support a mechanical refrigerating unit by horizontal insertion of the latter through the front of the frame and a removable rail mounted transversely across the forward portion of said top member.

1,875,844. ELECTRIC HEATING DEVICE. ROBERT BRAUNAGEL, Victoria, British Columbia, Canada. Filed Aug. 12, 1930. Serial No. 474,831. 5 Claims. (Cl. 219—37.)

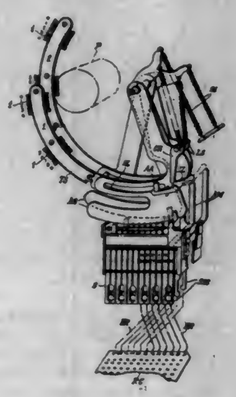


1. An electric heating device comprising a chamber having a top wall, a hot plate mounted in said top wall for heating utensils, a vertical tubular member integral with the hot plate, a resistance element in the hot plate, a further resistance element in the tubular member and a hot water heating tube within the zone of heat of the tubular member.

1,875,845. RECORD CARD CONTROLLED LISTING OR TABULATING OR LIKE STATISTICAL MACHINE. LESLIE ERNEST BROUGHAM, Purley, England, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Filed Oct. 27, 1931, Serial No. 571,446, and in Great Britain Nov. 7, 1930. 6 Claims. (Cl. 101—93.)

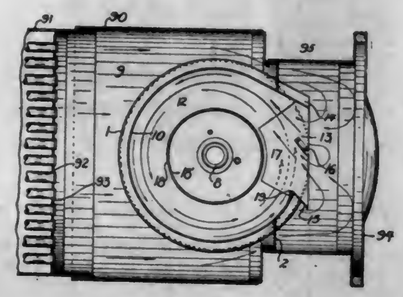
1. The combination with an analyser of a listing, tabulating or like statistical machine, having a plurality of type bearing members each associated with a settable controlling singing member, of groups of settable stops

for determining the movement of the swinging members at each operation of the machine, said groups of stops each corresponding to a predetermined section of a card column, ancillary stops to said groups for controlling the position of the type bearing members with respect



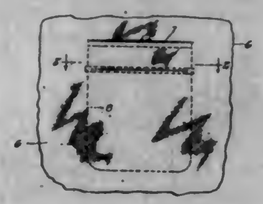
to the swinging controlling members, special sensing members in the analyser for actuating said ancillary stops and means for actuating stops in a plurality of groups from a single column of sensing members corresponding to a card column in the analyser.

1,875,846. SPARK ARRESTER FOR LOCOMOTIVES. MARTIN F. BROWN, St. Paul, Minn. Filed May 21, 1930. Serial No. 454,339. 15 Claims. (Cl. 230—97.)



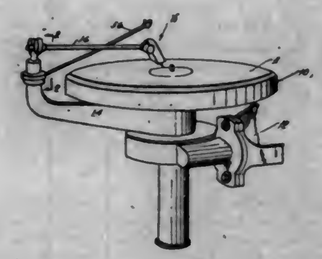
1. In combination with a stack extension and an associated nozzle aligned therewith but spaced below the same for discharging a draft inducing column up said stack extension, a separator casing surrounding the associated ends of said stack extension and nozzle, and means providing an inlet opening for said casing with its bottom end extending into a plane below that of said stack extension for directing the incoming products of combustion tangentially toward one side of the casing in a path outside the draft inducing column discharged by the nozzle.

1,875,847. POCKET PROTECTOR. LEO BRUCE, Chicago, Ill. Filed June 18, 1930. Serial No. 461,980. 2 Claims. (Cl. 2—254.)



1. A pocket protector comprising a flat strip with grippers at its ends adapted to engage over the opposite edges of a pocket to which it is applied and a spring attached to the ends of the strip and adapted to form a bow in the strip to indicate that the pocket is open.

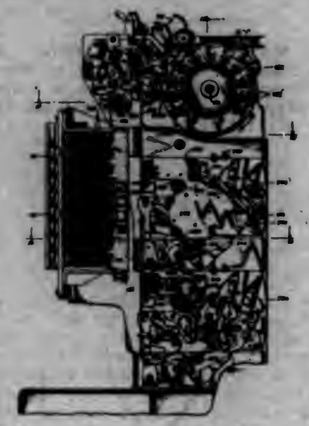
1,875,848. NONVIBRATORY MOUNTING FOR REPRODUCER ARMS. ROBERT C. BURT, Pasadena, Calif. Filed May 19, 1930. Serial No. 453,575. 6 Claims. (Cl. 274—23.)



1. In sound reproducing apparatus, the combination of a frame adapted for support of a rotatable record table, a reproducer arm, a mounting for said reproducer arm on said frame, and a vibration absorbing unit included in the mounting of said reproducer arm; said mounting including a member pivoted to said frame, a pair of coil springs each supported at one end of its coil by said member, said coils being relatively disposed with their axes parallel and in spaced relation, a reproducer arm extending parallel to said coil axes, and a supporting connection between the opposite end of each of said coil springs and said reproducer arm, said connection including a cushion adapted resiliently to limit extension of said spring.

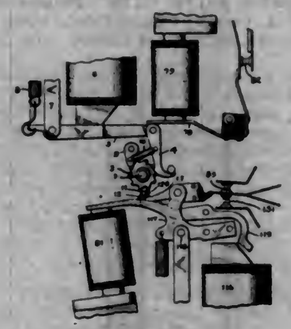
1,875,849. TABULATING MACHINE. FRED M. CARROLL, Endicott, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 19, 1922. Serial No. 607,847. 117 Claims. (Cl. 235—58.)

2. In a tabulating machine, an accumulator, printing mechanism, means for actuating said mechanism toward a starting point and means for restoring said accumulator to zero position and for causing said mechanism to print



the amount standing upon said accumulator during the period that said mechanism is in motion and moving to said starting position.

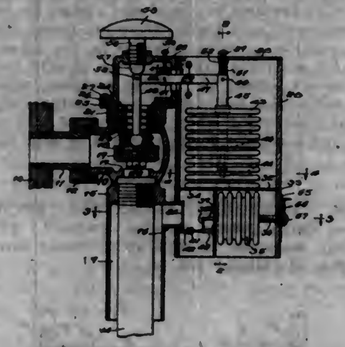
1,875,850. TABULATING MACHINE HAVING A UNIVERSAL SPLIT UNIT CONSTRUCTION. FRED M. CARROLL, Endicott, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 12, 1925. Serial No. 36,574. 37 Claims. (Cl. 235—92.)



2. In an accounting device, an accumulator unit, an electro-magnet for actuating said unit, and means controlled by the energization of said magnet for causing repeat reenergizations thereof.

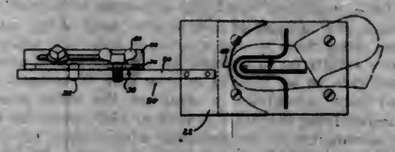
1,875,851. VALVE. ROBERT H. CARSON, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1929. Serial No. 357,796. 3 Claims. (Cl. 236—42.)

2. In a device of the kind described, the combination of a valve body having a valve therein, temperature responsive means carried by the valve body for actuating said valve, a tubular element extending from said body adapted to surround an end of a pipe which communicates with the valve body, said tubular element having a passage providing means for directing air to said temperature



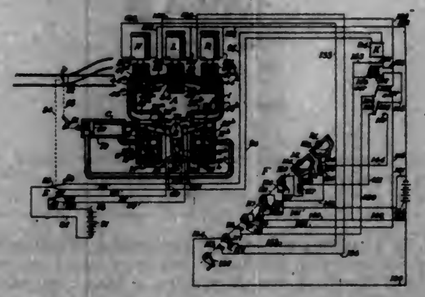
responsive means, a valve controlling said passage, and temperature responsive means for controlling said last mentioned valve.

1,875,852. MACHINE FOR CUTTING FLEXIBLE MATERIAL. GEORGE COLEMAN, East Lynn, Mass., assignor to Gregory & Read Company, Lynn, Mass., a Corporation of Massachusetts. Filed Jan. 24, 1930. Serial No. 423,077. 1 Claim. (Cl. 12—31.5.)



A machine for cutting a tab on a leather sole comprising a flat bed, a cutter having side portions and wing portions extended sidewise from the side portions, means for relatively moving the cutter and bed, and a rounded support for the tab between the side portions only of the cutter and of smaller area than the tab to leave the edges of the tab unsupported, and to cause the side portions of the cutter to make a bevel cut.

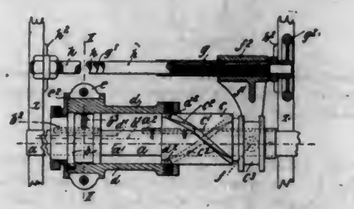
1,875,853. RAILWAY TRAFFIC CONTROLLING APPARATUS. JOHN P. COLEMAN, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1930, Serial No. 447,155. Renewed Feb. 16, 1932. 8 Claims. (Cl. 246—141.)



1. In combination, railway traffic governing means, fluid pressure means for operating said traffic governing means between normal and reverse positions, valve mech-

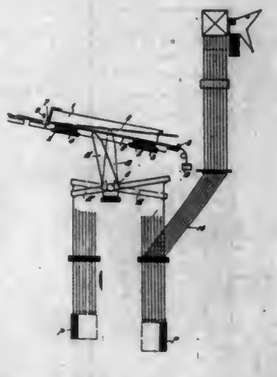
anism for controlling the operation of said fluid pressure means and comprising a pair of fluid pressure cylinders, a piston in each of said cylinders, means for selectively controlling the admission of fluid pressure to said cylinders, a valve operable by one of said pistons for ontrolling the operation of said traffic governing means toward its normal position, a valve operable by the other of said pistons for controlling the operation of said traffic governing means toward its reverse position, means operatively connecting said valves for insuring that one of said valves is closed when the other of said valves is opened, and a contact device operated by said connecting means.

1,875,854. COMPOUND ECCENTRIC MECHANISM. GEORGE CECIL COOPER, London, England. Filed Dec. 21, 1931, Serial No. 582,409, and in Great Britain Jan. 20, 1931. 3 Claims. (Cl. 74—1.)



1. Compound eccentric mechanism comprising a driving shaft, a pair of co-axially arranged eccentrics, both of which are splined to rotate with said shaft, one eccentric being fixed to and the other eccentric being free to move axially on said shaft, an outer eccentric mounted on and free to be rotated on the pair of co-axially arranged inner eccentrics, a strap on the outer eccentric for transmitting the desired motion, and means for angularly moving the outer eccentric with respect to the inner pair of eccentrics.

1,875,855. KNITTING MACHINE. JEAN GEDEON MARIE COUDERT, Issy-les-Moulineaux, and JEAN BAPTISTE TERME, St. Etienne, France. Filed Mar. 11, 1931, Serial No. 521,857, and in France Mar. 11, 1930. 5 Claims. (Cl. 66—75.)



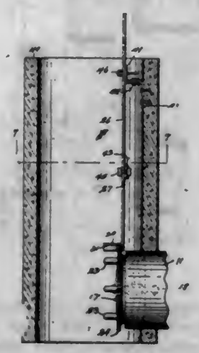
1. In a knitting machine the combination of a standard jacquard selecting mechanism employing paper or card patterns exactly as used in weaving, a tappet for moving each needle into position for actuation by the lock, a beam pivoted beneath each said tappet, a finger on said beam positioned to raise the corresponding tappet when said beam is rocked, means for rocking said beams controlled by said jacquard mechanism, and a reciprocating carriage positioned to engage such of said tappets as have not been raised by the corresponding fingers and to clear such as have been raised by the corresponding fingers.

1,875,856. WATER HEATER BAFFLE. ALBERT F. CRAVER, Lakewood, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 5, 1931. Serial No. 506,554. 4 Claims. (Cl. 137—112.)



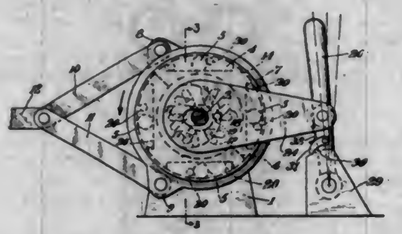
3. A vertically arranged baffle for a heating appliance comprising a plurality of similarly formed detachably interlocked members, said members being provided with end hooks for suspending one member from the other and having laterally extending fins adapted to contact with the corresponding fins of the adjacent element.

1,875,857. SCREW VALVE GATE. FRANCIS C. CRUFF and ALBERT A. GIUSTI, Dinuba, Calif. Filed May 16, 1931. Serial No. 537,923. 4 Claims. (Cl. 137—13.)



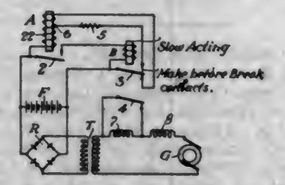
1. A water gate including a pipe having a seat and having a spider formed with an interiorly screw-threaded hub, a valve coacting with the seat and having peripheral teeth, a screw-threaded stem engaging the hub, and means for operating the valve including a lever pivoted intermediate its ends and at its end adjacent the valve being provided with an outwardly projecting lip engaging the teeth of the valve and projecting outward a distance equal to the range of movement of the valve, the lever being oscillatable and vertically movable to bring it into engagement with different teeth after each oscillation.

1,875,858. POWER TRANSMITTING MECHANISM. MAX B. A. DORING, Brooklyn, N. Y., assignor to Doring Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1930. Serial No. 432,734. 9 Claims. (Cl. 74—53.)



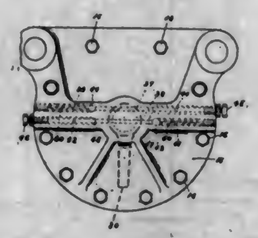
1. In a device of the character described, a rotor having radial openings near its center, rings mounted on said rotor, bearings members positioned between the rings and the rotor, apertured plates for holding the rings on said rotor, a rod passing through the apertures in said plates and the openings in the rotor, and a control member provided with an eccentric groove for receiving the end of said rod.

1,875,859. ELECTRICAL RELAY SYSTEM. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1931. Serial No. 506,054. 10 Claims. (Cl. 246—45.



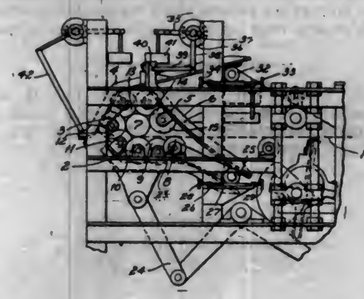
1. In combination, a source of current, a load connected with said source, two relays A and B, means for connecting the entire winding of relay A across the terminals of said load through a back contact of relay B, means for connecting only a portion of the winding of relay A across the terminals of said load through a front contact of relay B, means for energizing relay B when and only when the armature of relay A is closed, and means controlled by relay B for varying the current supplied to said load by said source.

1,875,860. FLUID SHOCK ABSORBER. JOHN ECKHARD, Cincinnati, Ohio. Filed Aug. 29, 1930. Serial No. 478,647. 9 Claims. (Cl. 188—89.)



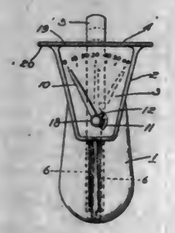
1. In a device of the class described the combination of a movable piston and a divided housing therefor providing a reservoir and a piston chamber in which the piston may move, the piston serving to divide the piston chamber, a pair of fluid replenishing valves each normally yieldingly seated and adapted for communicating with the reservoir, one of the valves being in communication with the piston chamber at one side of the piston and the other being in communication with the piston chamber at the other side of the piston, said valves being arranged to preclude passage of fluid from the piston chamber to the reservoir but to yield and open by suction of the piston to permit passage of small amounts of fluid from the reservoir to the piston chamber to compensate for fluid leakage from the piston chamber, and independent passage means each normally serving to convey fluid from one side of the piston to the other upon movement of the piston the passages each including a check valve and a second valve for fixed adjustment.

1,875,861. WINDING MACHINE. GEORGE F. ECKSTEIN, Buffalo, N. Y. Filed Sept. 9, 1927. Serial No. 218,486. 1 Claim. (Cl. 242—66.



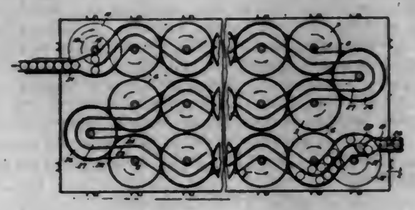
A winding mechanism of the class described, comprising a number of rotatable rollers mounted upon pivoted levers and grouped about a common center, means for orienting said rollers about a plurality of common centers, means for shifting said common center in a vertical plane, gravitational means for regulating the pressure of said rollers upon a cylindrical roll of material being wound in said winding machine.

1,875,862. TIRE PRESSURE GAUGE. JOSEPH C. FAIR, Fort Wayne, Ind. Filed July 7, 1930. Serial No. 465,865. 1 Claim. (Cl. 73—31.)



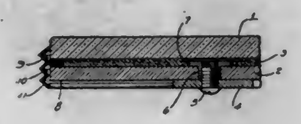
A gauge comprising a body having an external stop shoulder, a plunger movably carried in the body and projecting normally past said shoulder with spring means pocketed in the body yieldingly holding said plunger in projecting position, but adapted to permit its depression toward said shoulder, said spring means including a pair of coil springs disposed side by side, an equalizer block pivotally associated with the plunger and engaging said springs respectively at opposite sides of its pivot, whereby it is adapted to rock on the pivot for accommodating differences in said springs; and pressure-indicating means movably engaged with said plunger.

1,875,863. EXHAUST BOX. FRANK W. FETTERMAN, Sacramento, Calif., assignor to Libby, McNeill & Libby, San Francisco, Calif., a Corporation of Maine. Filed Jan. 16, 1931. Serial No. 509,228. 2 Claims. (Cl. 198—209.



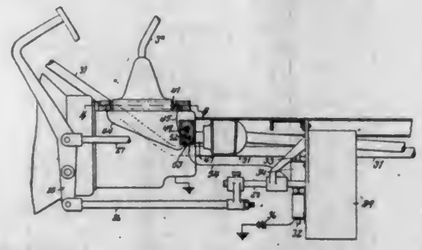
1. In an exhaust box having a plurality of rotatable discs connected in series and multiple runways in which objects may progress in the same direction simultaneously over said disc, an initial disc and a discharge disc rotatable at speeds greater than the speeds of the remaining discs.

1,875,864. TABLE TOP OR THE LIKE. ERIC H. GIBIAN, Chicago, Ill., assignor to The Vitrolite Company, a Corporation of West Virginia. Filed Apr. 25, 1931. Serial No. 532,736. 9 Claims. (Cl. 45—31.)



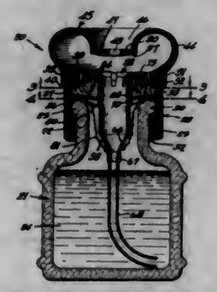
1. A table top or the like comprising a panel of frangible material and an underlying reenforcing panel cemented thereto, a protective band extending along and overlying the edge of said panels and completely concealing the edge of the reenforcing panel, and holding means for the band extending therefrom into the joint between the panels.

1,875,865. AUXILIARY BRAKE-OPERATING MECHANISM FOR MOTOR VEHICLES. FREDERICK C. GUERRLICH, Guilford, Conn. Filed Feb. 19, 1931. Serial No. 516,877. 7 Claims. (Cl. 192—4.)



1. In a motor vehicle, the combination with the transmission-mechanism and brake-mechanism, of automatic means for applying the brakes when the vehicle moves in a direction opposite to that for which the transmission-mechanism is set, the said automatic means including a cylinder and a piston, the said piston connected with the brake-mechanism, and means for supplying fluid-pressure to move said piston when the vehicle moves in a direction opposite to that for which the transmission-mechanism is set.

1,875,866. FOUNTAIN PEN FILLING DEVICE. RAMSAY L. HARRIS, Claremont, and DANA E. KEECH, Glendale, Calif. Filed May 17, 1932. Serial No. 611,798. 24 Claims. (Cl. 226—63.)

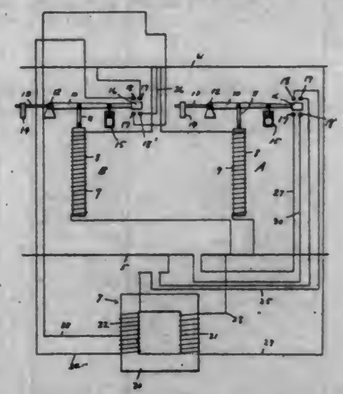


1. In a fountain pen filling device the combination of: a wall provided with a vertical opening adapted to admit the nib of a fountain pen and a resilient seat means disposed about said opening and engaging the mouth of the barrel of said pen to exclude said barrel from passing through said opening, and to make a fluid-tight seal with said mouth, vent means being provided leading from the space immediately surrounding said nib a relatively short distance below the level of said seal; said wall providing means to lift a body of ink from a source of supply upwardly in said space so as to immerse said nib in ink up to the level of said vent means, said ink entering said vent means and forming a liquid trap preventing access of air to the aforesaid space during the filling of said pen from said ink.

1,875,867. GREENS MATERIAL. SAMUEL H. HARTMAN and HENRY L. POWERS, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1930. Serial No. 483,130. 5 Claims. (Cl. 94—7.)

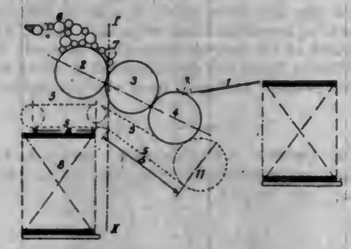
1. A surfacing material for golf greens comprising comminuted saturated fibrous material which is inherently coherent but not permanently united, said surfacing material being relatively loose, porous, waterproof, resilient and resistant to scuffing.

1,875,868. AUTOMATIC VOLTAGE CONTROLLER. WILLIAM C. HEALD, Bellows Falls, Vt. Filed Sept. 25, 1929. Serial No. 395,099. 2 Claims. (Cl. 171—119.)



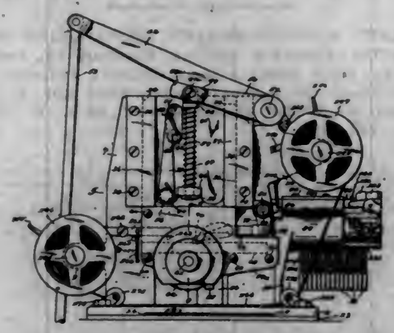
1. An automatic voltage regulator for distribution lines comprising a transformer having a primary and a secondary winding, an opening in one of the distribution lines, the primary winding of said transformer being connected across the distribution lines on the supply side of the opening, electromagnetic means for closing said lines at a predetermined voltage and upon a decrease in voltage to open said line and connect one side of the secondary winding to one of the distribution lines, and a second electro-magnetic means adapted upon the decrease in line voltage to connect a tap of the secondary winding to the other distribution line and upon a further decrease in voltage to connect the other terminal of the secondary winding to the other distribution line.

1,875,869. OFFSET PRINTING-PRESS. HEINRICH HENSE, London, England. Filed Sept. 15, 1930, Serial No. 481,891, and in Germany Nov. 22, 1929. 6 Claims. (Cl. 101—142.)



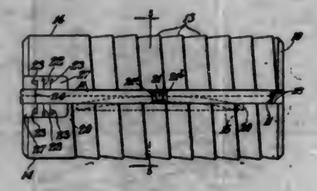
1. In an offset printing-press the combination of a printing-cylinder, offset-cylinder, impression-cylinder, sheet-delivery, pile-delivery, and a frame for supporting the said cylinders, the said cylinders and pile-delivery being so disposed that the rotating-axis of the offset-cylinder lies on that side of a plane containing the rotating axes of the plate-cylinder and impression-cylinder that is remote from the pile-delivery, whereby the pile-delivery thus is situated immediately below said plate-cylinder, one side of the space in which said pile-delivery is located being defined by a vertical plane that is tangent to the plate-cylinder at the side where it contacts with the offset-cylinder, so that the space housing the pile-delivery is free from all working parts except the sheet-delivery.

1,875,870. LAUNDRY LIST PRINTER AND COUNTER. HENRY HIRSCH, Jersey City, N. J. Filed Nov. 19, 1931. Serial No. 576,197. 11 Claims. (Cl. 101—78.)



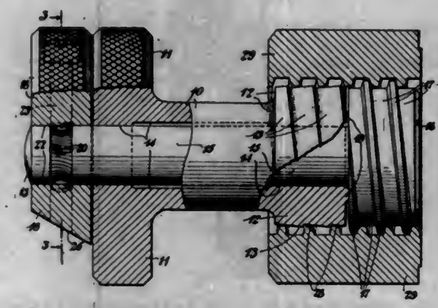
1. In a device of the character described, the combination with a pin holder adapted to contain identifying pins, of a type roll having quantity-indicating characters thereon, a receptacle for operatively attaching said pin holder to said device, means operated by a removal of a pin from the holder to rotate said type roll and means for lowering said type roll to printing position.

1,875,871. SCREW THREAD GAUGE. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,280. 10 Claims. (Cl. 33—199.)



1. A gauge for testing internal screw threads of the Dardelet type as to minor diameter, comprising a plug having an external screw thread of the buttress type of the same pitch as the thread to be tested, and minor diameter variation indicating means engageable with one side face of an internal thread screwed upon the plug and mounted in the plug to move longitudinally of the plug.

1,875,872. SCREW THREAD GAUGE. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,281. 11 Claims. (Cl. 33—199.)

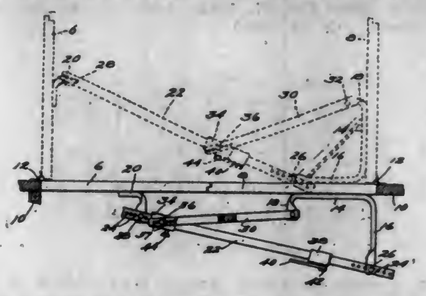


1. A screw thread gauge for testing the diametrical crest dimensions of internal screw threads, comprising two members connected for relative rotation about a common axis and held against axial travel, said members having external screw threads of different profiles but of equal pitch adapted to receive respectively axially spaced portions of the internal thread to be tested, one of said threads being a non-gauging thread with side faces having the same angular relation to the thread axis as the side faces of the internal thread the gauge is designed to test, and the other thread being a guaging thread having a master side face making a substantially smaller angle with the axial line of the thread than the side faces of the non-gauging thread, the axial line of each of said external threads being coincident with the axis of rotation of said members.

1,875,873. DOUBLE-DOOR ARRESTING MECHANISM. ALBERT O. JOHNSON, Kansas City, Mo. Filed Sept. 4, 1931. Serial No. 561,102. 7 Claims. (Cl. 292—268.)

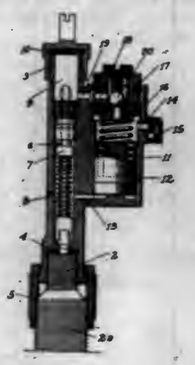
3. Arresting mechanism for oppositely swinging double-doors comprising a bracket carried by one door adjacent its hingedly supported edge; a fixture mounted on the other door at a point spaced from the hingedly supported edge thereof; a bar extending between said bracket and

fixture; a slide on said bar; a link interconnecting said slide and bracket; a dog pivotally associated with said bar in the path of travel of said slide, said dog being



moved into latching engagement with said slide by the slide and gravity; and means for moving the dog to the inoperative position.

1,875,874. PRESSURE MAINTAINING DEVICE FOR PNEUMATIC TIRES. CHARLES H. JOHNSON, Sacramento, Calif., assignor of one-half to Arthur E. Miller, Sacramento, Calif. Filed Nov. 8, 1929. Serial No. 405,639. 1 Claim. (Cl. 152—11.)

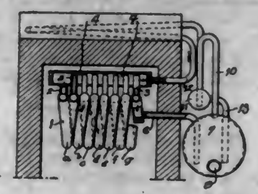


The combination with a tire valve casing and valve, of a pump cylinder having a communicating passage into the valve casing on each side of the valve, a piston in the cylinder operable by pressure impulses imparted thereto by air discharged from the tire on one side of the valve to pump air from the atmosphere into the casing on the other side of the valve, a spring tending to hold the piston against movement by such impulses, and means operable from the exterior of the pump cylinder for adjusting the tension of said spring.

1,875,875. REFRIGERATING METHOD AND APPARATUS. ERICH KINDERMANN, Berlin-Reinickendorf-West, Germany, assignor to Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung, Berlin, Germany, a Corporation of Germany. Filed Mar. 21, 1929, Serial No. 348,743, and in Germany Mar. 26, 1928. 18 Claims. (Cl. 62—120.5.)

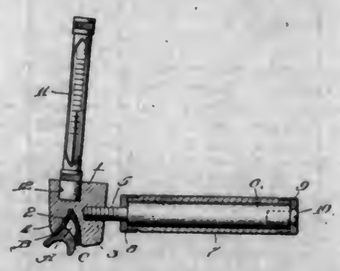
1. In the method of refrigeration which involves the heating of a liquid solvent for the refrigerant, in a generator-absorber, and the condensation of the liberated refrigerant, alternating with evaporation of such condensed refrigerant, the step which consists in returning said solvent from the condenser through the evaporator to the generator-absorber during the period of heating the generator-absorber and of condensing the refrigerant.

8. An absorption refrigerating apparatus comprising a generator-absorber having an inlet and an outlet a condenser whose inlet is connected with the outlet of the generator-absorber, and evaporating means having an inlet connected with the outlet of the condenser and an outlet connected with the inlet of the generator-absorber, said means consisting of a plurality of separate evapora-



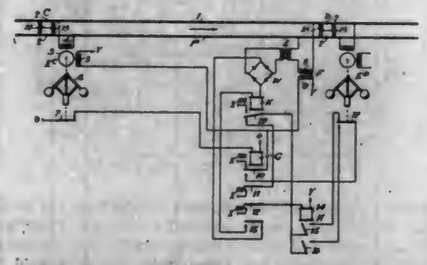
tors each having an upper space for gas and a lower space for liquid, the gas space of all of said evaporators being in permanent communication with each other, while the liquid spaces of the several evaporators normally hold separate bodies of liquid but are connected in series to permit successive passage of liquid from one evaporator to the next.

1,875,876. DENTAL VULCANIZER. EDWIN L. LANGDON, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 442,054. 8 Claims. (Cl. 18—18.)



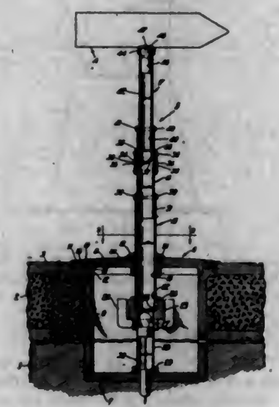
7. A vulcanizing device comprising a metal block having in one face a V-shaped groove extending entirely across the same, a heavy metal heating element, a member of comparatively small cross-sectional area connecting said heating element and said block, a sleeve of refractory material over said heating element, and a thermometer detachably connected to said block.

1,875,877. RAILWAY TRAFFIC CONTROLLING APPARATUS. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1931, Serial No. 519,980. Renewed Dec. 2, 1931. 12 Claims. (Cl. 246—34.)



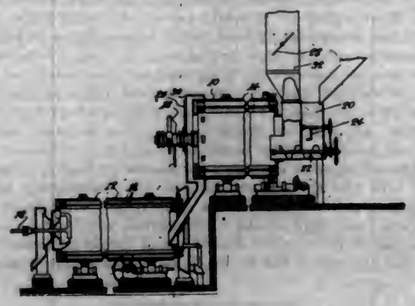
4. In combination, a section of railway track, a track relay having a winding connected with the rails at the entrance end of said section, means operating when said relay is energized to supply current of one voltage to the rails of the section, means responsive to the deenergization of said relay to reduce the voltage of the current supplied to the rails of said section, and means operating when a train approaches the exit end of said section to again increase the voltage applied to the track rails.

1,875,878. TRAFFIC STANCHION. MICHAEL J. MCCAUGHLEY, Brooklyn, N. Y. Filed Jan. 26, 1931. Serial No. 511,121. 1 Claim. (Cl. 40—145.)



In a traffic stanchion, in combination, a standard and a base, the standard being composed of separable sections adapted to be stored in the base, and the base comprising a box and fixed and hinged cover sections therefor, said fixed cover section being constructed to receive and operatively support the standard.

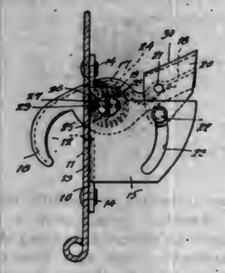
1,875,879. ACID PHOSPHATE AND METHOD OF PRODUCING THE SAME. RALPH H. MCKEE, Jersey City, N. J., assignor to Tennessee Copper and Chemical Corporation, a Corporation of New York. Filed Oct. 27, 1927. Serial No. 229,283. 6 Claims. (Cl. 71—7.)



1. The herein described process of treating acid phosphate, comprising intermittently contacting such phosphate in finely divided form with positively heated elements to remove moisture and impart a granular structure thereto, continuing such treatment until the moisture content of the phosphate has been reduced to below about 4%, and thereafter promptly cooling the phosphate.

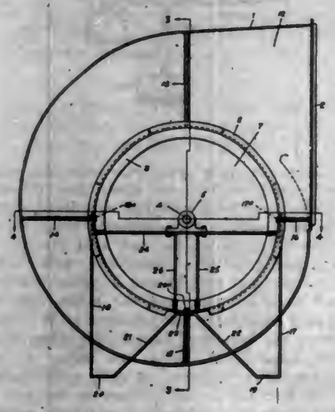
CARNEGIE LIBRARY OF ATLANTA

1,875,880. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 16, 1931. Serial No. 530,519. 5 Claims. (Cl. 292—66.)



1. In a hood catch, a catch element and a keeper element, one of said elements having an engaging surface adapted to move in a direction non-parallel to a given line to engage the other element to hold the hood closed, actuating means for moving said last mentioned element into and out of engagement with the other element, and means adapted to maintain a constant angle of said engaging surface with respect to said given line in any position of said actuating means.

1,875,881. FAN HOUSING CONSTRUCTION. CLARK T. MORSE, Detroit, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 27, 1931. Serial No. 511,569. 3 Claims. (Cl. 230—133.)



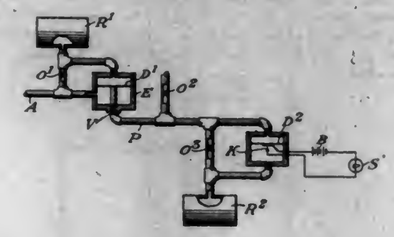
1. In a blower casing, the combination of end walls and side walls, a plurality of reinforcing strips attached on their inner edges to the side walls and projecting laterally therefrom, a ring connecting the inner extremities of said strips, said ring being attached to the side wall in which it is located, and means for supporting a fan shaft bearing in said ring, said ring, strips and side walls being integrally welded to one another, and a separate supporting means for supporting said casing, fan shaft and fan in spaced relation from a base surface, consisting of a member selectively positioned and attached to the opposite sides and bottom of the ring.

1,875,882. ELECTRICAL HAIR WAVER. TOMLINSON I. MOSELEY, San Francisco, Calif., assignor to Pacific Hair Goods Company, San Francisco, Calif., a Corporation of California. Filed Mar. 5, 1929. Serial No. 344,845. 6 Claims. (Cl. 219—24.)



1. In a hair waver heater, a metallic member adapted to be placed in thermal contact with a mandrel upon which hair is wound, an electrical heating element in heat transferring relationship with said member, a metallic extension secured to said member, a hollow handle portion secured to said extension, heat insulating material interposed between said extension and said one member, and electrical conductors extended through said handle portion and connected to said element.

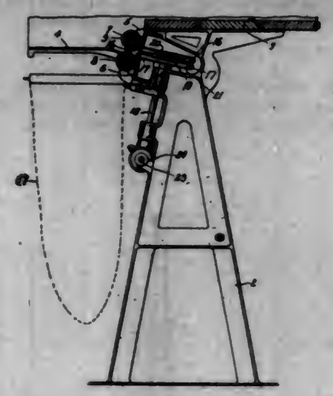
1,875,883. SIGNALING APPARATUS. LEWIS L. NETTLETON, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 30, 1928. Serial No. 273,883. 4 Claims. (Cl. 177—352.)



1. A receiver for train brake pipe signaling, comprising a reservoir connected with the brake pipe through a restricted orifice, a pressure change amplifier containing a diaphragm and connected on opposite sides of said diaphragm with said brake pipe and said reservoir respectively, an auxiliary pipe connected with atmosphere through a restricted orifice, and a valve interposed between said auxiliary pipe and the brake pipe and controlled by said diaphragm and arranged to be open a slight amount when the pressures on opposite sides of said first orifice are equal, said parts also being so arranged that the amount of opening of said valve increases or decreases in response to an increase or decrease of pressure in the brake pipe, whereby a relatively small change in brake pipe pressure results in a relatively large change of pressure in said auxiliary pipe.

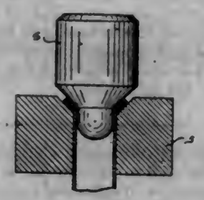
1,875,884. LEATHER GRADING MACHINE. DENNIS PARKS, St. Louis, Mo. Filed July 3, 1929. Serial No. 375,642. 4 Claims. (Cl. 209—91.)

1. A leather grading machine, comprising a pair of cylindrical grading rollers located one above the other and arranged in converging relation to each other to provide a space between them gradually narrowing in width from one end of the rollers to the other, and means located at the rear of said rollers for successively conveying pieces of leather lengthwise of the rollers with a portion of each piece projecting into the space between the rollers, comprising a pair of endless carriers formed



of coiled wire and extending parallel with the rollers in contact with each other substantially throughout the length of the rollers.

1,875,885. TUBE CONNECTION. BERT L. QUARNSTROM, Grosse Pointe Park, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 9, 1929. Serial No. 391,121. 3 Claims. (Cl. 285—120.)

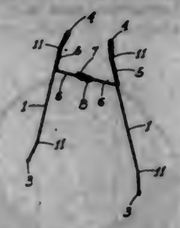


1. For connection between two fittings or the like which are adapted to be drawn together axially and which have cooperating surfaces similarly inclined as regards the axial center of the fittings, a tube having the wall portions of an end thereof flared outwardly, a ferrule U shaped in cross section fitting over the end of the tube, one leg of the ferrule lying against the inside of the flared wall portion, and the other leg lying against the outside of the flared wall portion with said legs relatively tightly gripping the flared portion, the extreme end of the tube substantially abutting the bight portion of the U shaped ferrule, the angle of the flared wall portion of the tube and the legs of the ferrule substantially corresponding to the angle of the cooperating surfaces of the fittings, and said flared wall portion and ferrule being adapted to be engaged between said cooperating surfaces of the fittings as the fittings are drawn together axially for coupling.

1,875,886. TIE AND COLLAR STAY. WILLIAM F. RAMONT, Glendale, Calif. Filed Aug. 1, 1931. Serial No. 554,424. 4 Claims. (Cl. 24—88.)

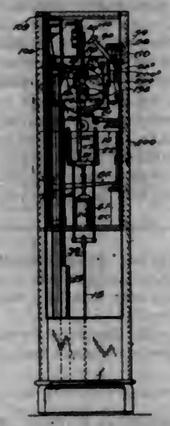
2. A stay for soft collars comprising separate substantially straight stay elements adapted to be inserted in the flap of a collar from the back, bars extending toward each other from said elements intermediate their ends and having disengageable and cooperating fastenings on

their adjacent ends, and means integral with the bars and elements and formed in part with the latter for connecting the bars to the elements; said elements being



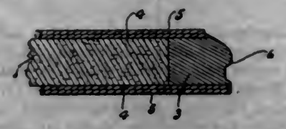
bent out slightly for a short distance at their lower ends and being similarly bent at their upper ends but in the opposite direction.

1,875,887. COIN-CONTROLLED GRAVITY-OPERATED TICKET-PRINTING AND DELIVERING SCALE. SETH A. RHODES, Oak Park, and GUSTAV F. HOCHRIEM, Chicago, Ill., assignors to Rhodes-Hochriem Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 2, 1925, Serial No. 200. Divided and this application filed Jan. 8, 1926. Serial No. 79,929. 9 Claims. (Cl. 265—9.)



1. In a ticket-printing-and-delivering weighing scale of the character described, the combination with ticket printing and delivering mechanisms, of a vertically disposed ticket magazine extending below the plane of said printing mechanism and adapted to hold tickets face to face in a vertical pile, said ticket delivering mechanism including means for feeding the topmost ticket from the pile to the printing mechanism, a support for the tickets freely movable up and down in the magazine and a coiled spring mechanism, the lower end of which is connected to said support and the upper end of which is anchored adjacent the upper end of the ticket magazine.

1,875,888. SLAB CONSTRUCTION. BAYARD E. RICHARDSON, Grand Rapids, Mich. Filed Sept. 23, 1929. Serial No. 394,482. 1 Claim. (Cl. 20—91.)



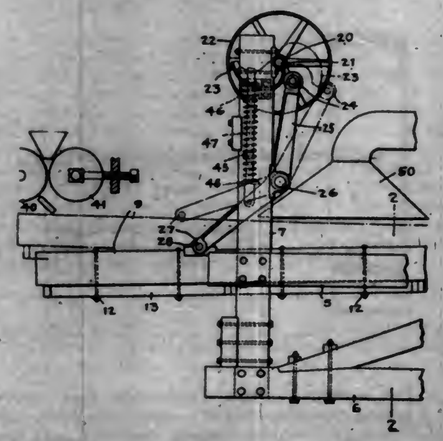
A top of the class described comprising, a flat core of uniform thickness of homogeneous bagasse, a wood frame having sides and ends of the same thickness as the core located around said core at its edges and secured thereto, and veneers glued to the opposite sides of the core and frame, said bagasse being capable of receiving and absorbing moisture.

1,875,889. THERMOMETER. ALEXANDER D. ROSE, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1928. Serial No. 309,099. 5 Claims. (Cl. 73—52.)



2. In a device of the kind described, the combination of a member providing a frame for a liquid carrying tube, said member having an apertured extension in which said tube is located, a tubular member providing an extension, an element mounted in said tubular member, said element being apertured to receive said tube and hold said tube relatively to said frame, a member adapted to be passed over an end of said tubular member and providing an element of a support for said device, said element which is mounted in said tubular member being engageable with the member which is adapted to be passed over said tubular member to prevent passage of fluid between said last mentioned members.

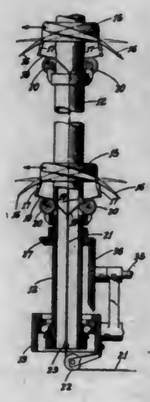
1,875,890. METHOD FOR TREATING ASBESTOS. WALTER ARNOLD RUKEYSER, Globe, Ariz. Filed July 3, 1930. Serial No. 465,485. 4 Claims. (Cl. 209—2.)



1. The process of cleaning asbestos fiber from the gangue and grading the same comprising placing a mass of crushed asbestos-bearing rock and/or asbestos upon

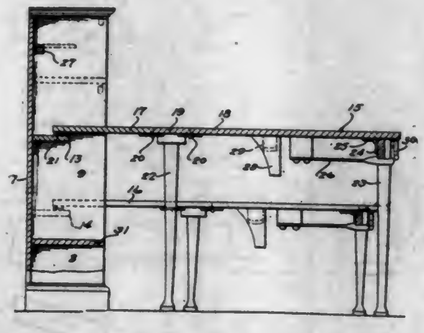
a flat support having cleaning and grading passages and imparting to the support and the said asbestos thereon a differential shake having horizontal and vertical components regulated to transport the said asbestos along the surface and to retain the fibers in position parallel to the support.

1,875,891. GYROSCOPIC AIRPLANE. HERVEY M. SALISBURY, Walnut Grove, and ARTHUR E. MILLER, Sacramento, Calif. Filed July 28, 1930. Serial No. 471,306. 8 Claims. (Cl. 244—15.)



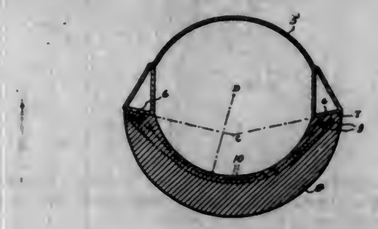
5. In an airplane, a vertical shaft, a propeller thereon, vanes extending along and hinged to the following edges of the blades of each propeller, and means for setting the vanes at different angles relative to a horizontal plane and for holding the same against return movement to such plane without interfering with the movement of the vanes to a depending vertical position.

1,875,892. FOLDING TABLE LIKE STRUCTURE. FRIDOLIN SCHIMMEL, Faribault, Minn. Filed Jan. 28, 1929, Serial No. 335,418. Renewed Jan. 16, 1932. 9 Claims. (Cl. 45—51.)



1. The combination with a relatively fixed support, of a folding table-like structure comprising inner, outer and intermediate sections hingedly connected, said inner section being hingedly attached to the support, a center leg for the intermediate section, and an outer leg for the outer section.

1,875,893. PNEUMATIC TIRE AND RIM CONSTRUCTION. ALVIN H. SHOEMAKER, Seattle, Wash. Original application filed Nov. 19, 1925, Serial No. 69,995. Divided and this application filed Mar. 19, 1930. Serial No. 436,920. 3 Claims. (Cl. 152—20.)

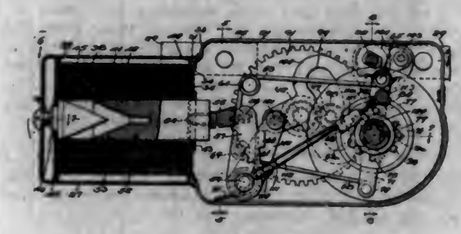


1. In a tire and rim construction of the class described, a rim having an annular circumferential air cavity forming an air chamber, conical bead receiving portions formed on the edges of said rim at an incline to a plane tangential to said rim, the inner edges of said bead receiving portions being slightly higher than the outer edges of the same, and a half tire of elastic material having non-elastic bead portions arranged to be drawn inwardly onto said bead receiving portions by air pressure within said tire and to bind circumferentially on said inclined bead receiving portions, said bead portions each having two non-elastic bead rings therein, said bead rings being spaced apart and arranged to rest squarely on said inclined bead receiving rim portions whereby rocking movement of said tire bead portions on said inclined rim portions is prevented and an efficient air seal insured, said half tire having reinforing means extending between said two bead portions and forming a substantially non-elastic transverse binder but leaving said tire free to expand longitudinally except for said bead portions.

1,875,894. ARTIFICIAL SILK FILAMENT AND METHOD OF MAKING SAME. JAMES A. SINOMASTER, Bronxville, N. Y. Filed May 8, 1929. Serial No. 361,543. 2 Claims. (Cl. 28—1.)

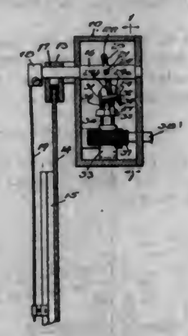
1. An artificial silk filament having immersed in and distributed throughout its mass material fine particles of titanium dioxide.

1,875,895. WINDSHIELD WIPER. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Apr. 24, 1925, Serial No. 25,532. Renewed Dec. 12, 1931. 19 Claims. (Cl. 172—126.)



15. In a device of the class described, a rotary member having driving means mounted thereon and positioned eccentrically to the axis thereof, a rocking member having a cam slot therein adapted to receive said driving means, and a pivoted member operatively related to said rocking member in a manner to receive an oscillatory motion therefrom when said rotary member and driving means are actuated.

1,875,896. WINDSHIELD CLEANING DEVICE. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Oct. 21, 1929. Serial No. 401,151. 17 Claims. (Cl. 74—14.)

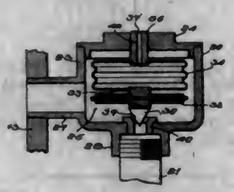


1. In a device of the class described, the combination of a support adapted for attachment to the windshield frame of a motor vehicle, a drive shaft rotatably mounted therein, a second shaft mounted in said support and extending transversely to the axial line of rotation of said drive shaft, and means pivotally mounted on said second shaft in a manner to oscillate in a plane extending longitudinally thereof and operatively related to said drive shaft for oscillating said second shaft when said drive shaft is rotated.

1,875,897. METHOD FOR TREATING MATERIALS CONTAINING ARSENIOUS ACID. OTTO STÄLHANE, DONOVAN RAGNAR EFRAIM WERNER, and STIG GIERTZ-HEDSTRÖM, Stockholm, Sweden. Filed Apr. 24, 1930, Serial No. 447,102, and in Sweden Dec. 21, 1929. 13 Claims. (Cl. 106—24.)

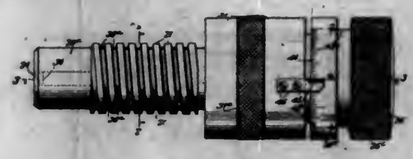
1. A mixture substantially containing about 60 to 70% Portland cement and about 40 to 30% arsenious acid is heated to 200 to 250° C. in a closed rotating container either heated from outside or by introduction of hot gases or by internal combustion of solid, fluent or gaseous fuel. The heating may be carried out by means of electric energy. The mixture is thereafter cooled or left to cool either while still in the furnace or after having been taken out therefrom. By said treatment the reaction may be retarded by adding water or aqueous substances.

1,875,898. VALVE DEVICE. ORVILLE W. THOMPSON, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1928. Serial No. 286,446. 14 Claims. (Cl. 236—58.)



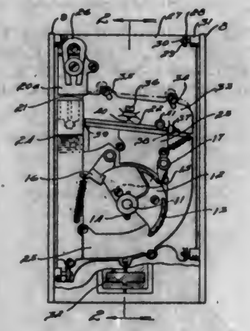
1. In a trap adapted to control the flow of heating medium through a closed heating system, the combination of a valve, and separate devices respectively providing thermostatic means for controlling the operation of the valve and pressure responsive means operable by pressure above and below atmospheric pressure for controlling the operation of the valve.

1,875,899. SCREW THREAD GAUGE. ROBERT THOMSON, Newark, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,671. 9 Claims. (Cl. 33—199.)



1. A gauge for internal screw threads, comprising a longitudinally slotted plug having an external thread interrupted by the plug slot for testing an internal thread for pitch, thickness and major diameter, a member slidable in the plug slot and having an interrupted thread one side face of which extends across the groove of the plug thread and is inclined to the perpendicular to the plug thread axis, and means for slidably adjusting said member in the plug slot for displacing said side face into engagement with the crest of an internal thread screwed on the plug to test the internal thread as to minor diameter.

1,875,900. COIN CONTROL. PETER C. A. VANDER MEER, Detroit, Mich., assignor to Snax Automatic Stores, Inc., Detroit, Mich., a Corporation of Michigan. Filed Oct. 8, 1930. Serial No. 487,125. 19 Claims. (Cl. 194—103.)

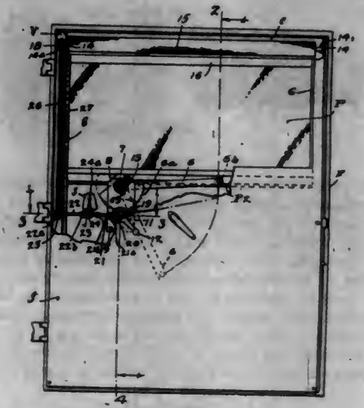


1. The combination with a coin controlled vending machine of a coin control device having a coin receiving chute and a slug expelling chute, and a coin detector comprising a tilting platform intersecting the path of said coin receiving chute and means pivotally mounting the said platform whereby said platform will tilt on the contact at one end thereof of a coin of a predetermined weight and will tilt also on contact at the other end thereof of a coin of a different weight whereby a coin of a predetermined weight will be separated from coins of other weights, and means whereby said tilting platform will be maintained on a constant axis relative to a predetermined position of said coin controlled vending machine.

1,875,901. SCREEN APPARATUS FOR AUTOMOBILE WINDOWS. MARTIN WEINBERGER, Minneapolis, Minn. Filed Aug. 7, 1929. Serial No. 384,197. 2 Claims. (Cl. 268—128.)

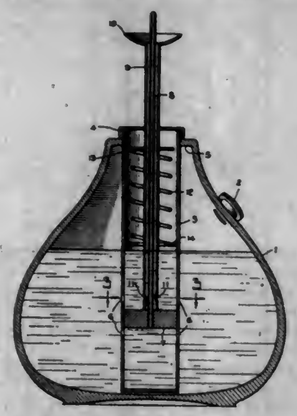
1. In combination with a window frame having opposed parallel guides and a window slidable longitudinally in said guides, a window raising element mounted for swinging movement in such manner that the ratio of the angular movement thereof to the lineal movement of the window increases as the window approaches closed position,

a flexible screen also slidably mounted in said guides, a screen roller mounted transversely at the ends of said guides for spirally winding said screen, a rotary operating member and driving connections between said operating member and said roller and between said operating



member and said window raising element or arm so constructed and arranged that said ratio increases directly and equally to the ratio of the same angular movement of said raising element to the lineal movement of the lower edge of the flexible screen.

1,875,902. FILLING AND CHARGING DEVICE. ARTHUR M. WICKWIRE, Jr., Nutley, N. J., assignor of one-half to Henry J. Lucke, New York, N. Y. Filed Feb. 6, 1930. Serial No. 426,204. 4 Claims. (Cl. 221—50.)

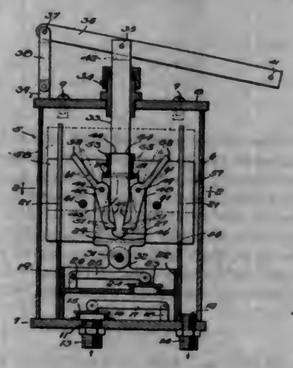


1. A filling device comprising a reservoir, a cylinder within the reservoir projecting from the top thereof and being closed at its bottom, said cylinder having openings spaced at different distances from said bottom, a piston in the cylinder and normally between said openings, a hollow stem connected to the piston and having openings therethrough adjacent to the piston, said stem projecting to the outside of the reservoir, a hollow stem within the first stem passing through the piston and projecting from the reservoir beyond the end of the first stem, the outer end of the first stem being expanded to form a bowl surrounding the inner stem, so that pressure on the outer stem causes a portion of the contents of the reservoir to be expelled through the inner stem, any excess being caught by the bowl and returned through the outer stem to the inside of the reservoir.

1,875,903. METHOD OF IMPROVING AGING QUALITIES OF RUBBER AND RESULTING PRODUCT. IRA WILLIAMS and ARTHUR M. NEAL, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 24, 1930. Serial No. 470,539. 16 Claims. (Cl. 18—50.)

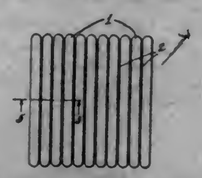
1. The process of increasing the resistance of rubber to deterioration which comprises incorporating with the rubber a salt obtained by reacting a carboxylic acid and a primary aromatic diamine.

1,875,904. FLUID PUMP. ANDREW C. WOOD, Chicago Ill. Filed Sept. 13, 1930. Serial No. 481,664. 11 Claims. (Cl. 103—23.)



1. In a device of the class described, the combination of a casing having inlet and outlet ports, a pump cylinder positioned in said casing and spaced therefrom in a manner to form a reservoir, a reciprocating piston mounted in said cylinder, an actuating member slidably mounted in the casing and automatically connectible to said piston, a float, and float actuated means for positively disconnecting said member from the piston.

1,875,905. WELDLESS LINK AND METHOD OF FORMING SAME. BEN N. YOUNGKEN, Los Angeles, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,921. 2 Claims. (Cl. 59—35.)



1. A method of forming weldless elevator links which includes forging a cylindrical body of steel having spaced rings connected by relatively thin webs, cutting the webs to form separate rings, and heating and bending the rings to form elevator links.

1,875,906. CLOSURE. CHARLES A. ZAROBSKY, Cleveland, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 21, 1929. Serial No. 372,585. 1 Claim. (Cl. 220—55.)

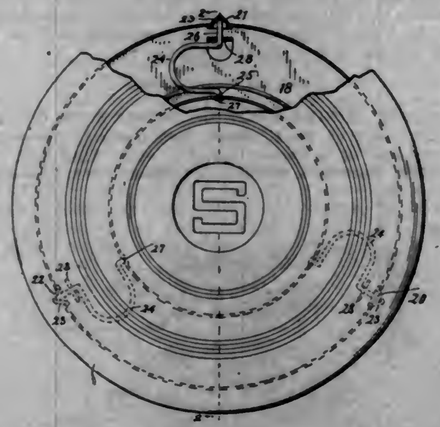
In a closure device the combination of a member having an opening to be closed and a lip surrounding said opening, a cap having a sheet metal body provided with a tubular portion removably engaging in said opening, and

means carried by said cap for removably retaining said tubular portion in said opening, the last mentioned means comprising a locking member on said tubular portion adapted to engage under said lip, a second locking movably disposed in an opening provided in the side wall of said tu-



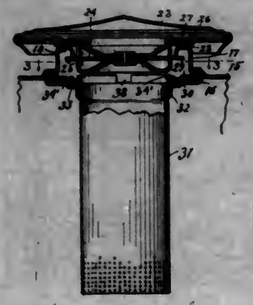
bular portion and adapted to engage under said lip, and means housed in said tubular portions for normally urging said second locking member outwardly whereby the latter rides over said lip when said tubular portion is moved into or out of said opening.

1,875,907. CLOSURE. CHARLES A. ZAROBSKY, Cleveland, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 26, 1929. Serial No. 381,148. 7 Claims. (Cl. 220—55.)



1. A closure comprising a body having a portion adapted to extend into an opening to be closed, said body portion having inner and outer walls with a recess therebetween, a locking member carried by the outer wall and normally extending laterally therethrough for retaining said portion in said opening, and a substantially U-shaped spring disposed in said recess and having a relatively stationary end portion in engagement with the inner wall of said body portion and a relatively movable end portion in engagement with said locking member.

1,875,908. FILLER NECK STRUCTURE. CHARLES A. ZAROBSKY, Cleveland, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 11, 1929. Serial No. 399,067. 5 Claims. (Cl. 220—86.)



1. A filler neck structure comprising, a tubular member, a screen member, and means for releasably locking said members together, said means comprising lugs on said screen member, and an annular part carried by said tubular member and having circumferentially extending resilient locking portions adapted to be engaged by said lugs, said locking portions being integral with said annular part.

1,875,909. FOLDING RECEPTACLE. ANTON ZEINDLHOFER, Vienna, Austria, assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 21, 1928. Serial No. 255,866. 7 Claims. (Cl. 150—29.)

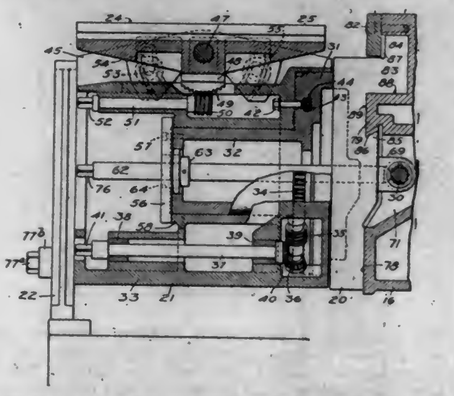


1. Securing means for a receptacle comprising a body containing a plurality of pockets, said means including frame members hinged together to which the mouths of said pockets are to be secured, and sliding means engaging the frame members to secure and release same and permit access to said pockets.

1,875,910. DUAL CONTROL FOR UNIVERSAL WORK-TABLES. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed Oct. 8, 1927. Serial No. 224,990. 2 Claims. (Cl. 90—58.)

1. A shaper combining a frame; a cross-rail mounted thereon; a saddle translatably mounted on said cross-rail; a trunnion extending outwardly from said saddle; a table rotatably mounted on said trunnion; means, including an actuating shaft extending lengthwise of said table and having its operating end accessible from the end of the table, for rotating the table on said trunnion; a tiltable supporting member pivotally mounted on said table; means carried by and rotatable with said table and including an actuating shaft having its operating end accessible from the end of the table for tilting said supporting member in the various angular positions of said table; means for translating said saddle along said cross-rail including a

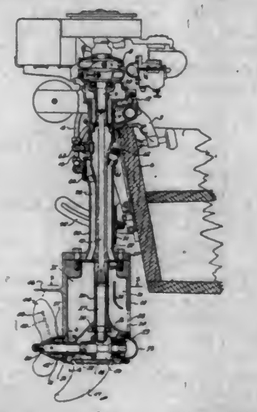
non-rotatable nut carried by said saddle, a rotary feed screw journaled lengthwise of said cross-rail and having a threaded engagement with said nut, said feed screw being provided with a projecting end adapted to receive an actuating crank to effect rotation of said screw and thereby translation of said table; and auxiliary means for rotating said feed screw to effect translation of said table, said auxiliary means including a shaft journaled coaxial with said trunnion and having an end adjacent the end of said table adapted to receive an actuating crank, and a splined gear connection between the other end of said shaft and said feed screw.



1,875,911. WELDING OF COPPER. WILLIAM ANDREWS, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Jan. 24, 1930, Serial No. 423,272, and in Great Britain Jan. 29, 1929. 5 Claims. (Cl. 78—92.)

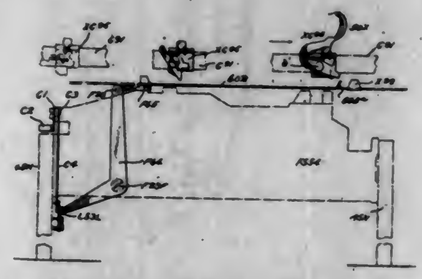
5. Process of welding copper bodies in which those portions of the said bodies adjacent to the points which are to be joined, consist of copper alloyed with a small quantity of a de-oxidant sufficient to prevent oxidation in the region of the weld without rendering the weld brittle.

1,875,912. COOLING SYSTEM FOR MARINE ENGINES. JACK W. ARNDT, Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 30, 1928. Serial No. 250,611. 16 Claims. (Cl. 115—17.)



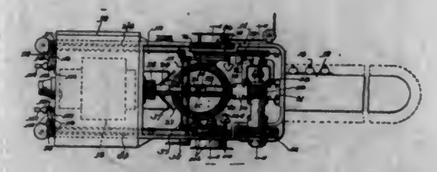
1. In a marine power plant having a cooling system, the combination with a propeller shaft, of a member providing a bearing therefor and a port adjacent said bearing communicating with said system, a propeller on said shaft abutting the ported portion of said member and provided with an apertured hub adapted in rotation to receive a liquid directly from said port, said propeller having a radial passage from said port for the discharge of such liquid.

1,875,913. CARRIAGE CONTROL OF RIBBON SHIFT MECHANISMS. FREDERICK W. BERNAU, Hillside, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Original application filed Oct. 31, 1922, Serial No. 598,153. Divided and this application filed Sept. 16, 1929. Serial No. 393,105. 10 Claims. (Cl. 235—58.)



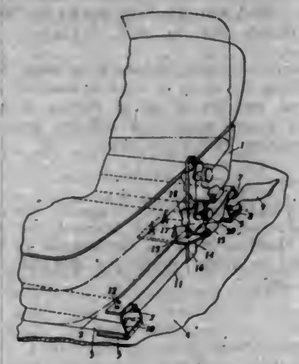
1. In a calculating machine, the combination with an accumulator, of actuators therefor, a keyboard controlling the actuators on which any desired number may be set up for accumulation on the subsequent operation of the machine, printing means, operating means for putting the machine through its cycle of operations, a travelling carriage, a stop mounted on said carriage and which is adapted to be set either for utilization, or, in inoperative position, means which is settable for printing an item in a distinctive manner, and means operable by the said stop only when the carriage is in a pre-determined position, provided said stop has been set for co-operation therewith, for causing said printing means to be thereupon automatically set for distinctive printing on the subsequent operation of the machine by said operating means.

1,875,914. MINING MACHINE. GEORGE BODIN, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1926. Serial No. 135,006. 26 Claims. (Cl. 262—30.)



1. In a mining machine, a frame, a motor rearwardly of said frame, a cutter bar having a cutter chain thereon, a sprocket operably connected with said motor for driving said cutter chain, a transversely disposed feed driving member at one end of said frame, a pair of feed drums disposed on opposite sides of said frame on a transverse axis in front of the axis of said cutter chain sprocket, and means concentric with said feed drums for selectively engaging either of said drums with said feed driving member, and means disposed on the opposite side of the axis of said cutter chain sprocket for operating said engaging means.

1,875,915. ADJUSTABLE SEAT MECHANISM. ARTHUR WILLIAM CHAPMAN, Putney, London, England. Filed Oct. 9, 1930, Serial No. 487,383, and in Great Britain Aug. 16, 1930. 3 Claims. (Cl. 155—13.)

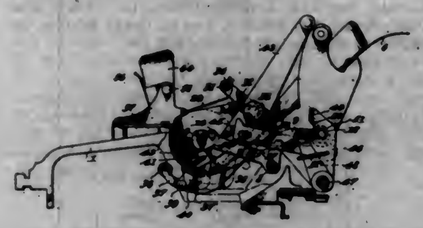


1. In an adjustable seat mechanism, a seat base pivoted at its rear, a horizontally slotted plate projecting from the seat, an upright bar standing up from a fixture and loosely surrounded by the slot in said plate so that the latter can slide freely up and down upon said bar, an L-shaped cam member also slidable upon said bar and connected by a loosely fitting hook to said plate so that downward pressure upon the plate causes the cam member to swing through an angle sufficient to cause it to grip upon the bar and create a downward resisting lock thereon, and means for releasably locking said cam member against upward movement thus preventing undesired further raking or tilting of the seat.

1,875,916. PROCESS OF MAKING ORGANIC INTERMEDIATES. ERIK CLEMMENSEN, Newark, N. Y., assignor to Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Aug. 13, 1926. Serial No. 129,089. 9 Claims. (Cl. 260—142.)

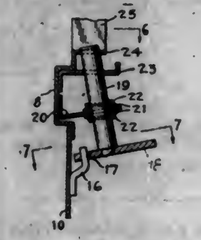
1. A process of making an alkoxy-nitrobenzene which includes slowly adding a metallic alcoholate to a halogen-nitrobenzene while maintaining the mixture at substantially atmospheric pressure and at an elevated temperature.

1,875,917. OPERATING MEANS FOR FRONT FEED PLATENS. EMIL J. ENS, Newark, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 27, 1929. Serial No. 388,783. 27 Claims. (Cl. 197—127.)



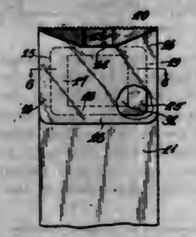
1. In an operating means for front feed platens, the combination with a platen, and a paper table, of end plates carrying the platen and paper table, rockers on which the end plates, the platen and paper table are bodily mounted so that they may be raised and lowered when the rockers are turned, paper compression rolls for the platen, and means operated when the platen is raised which releases the rolls from the platen and retains them in released position so long as the platen remains in raised position and restores them when the platen is lowered.

1,875,918. MOVABLE PANEL FOR HEATING AND VENTILATING UNITS. WARREN EWALD, Ardsley, Pa., assignor to John J. Nesbitt, Inc., Holmesburg-Philadelphia, Pa., a Corporation of New Jersey. Filed Feb. 16, 1931. Serial No. 515,924. 7 Claims. (Cl. 257—136.)



1. A heating and ventilating unit having its enclosing casing provided with a removable panel, and cam mechanism between the panel and casing for locking the panel to the casing and for acting upon the panel to press the same outwardly from the casing.

1,875,919. METAL SEAL FOR PAPER BAGS. HAROLD G. EYNON and WALTER J. KINDERMAN, Philadelphia, Pa., assignors to Industrial Developers, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,098. 11 Claims. (Cl. 229—65.)



1. A bag, a closure tie secured permanently to the outside of the bag and comprising a metal tie having side portions parallel to and near the bag edges and a transverse connection between the side portions.

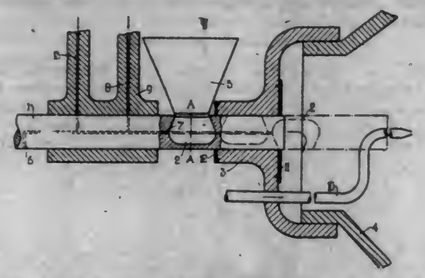
1,875,920. TREATMENT OF COAL DISTILLATION GASES. KENNETH GORDON and JOSEPH HUGHES, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Sept. 13, 1928, Serial No. 305,865, and in Great Britain Oct. 17, 1927. 6 Claims. (Cl. 23—3.)

1. Process of treating coke oven and like gases which comprises removing the low pressure constituents, compressing the gas, washing it successively with ammonia liquor and ammoniacal cuprous solution, further compressing it and washing it with kerosene.

1,875,921. FEEDING FINELY DIVIDED SOLID MATERIAL INTO HIGH PRESSURE VESSELS. FRANCIS BRIAN GRANT and HUGH HARPER, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Mar. 13, 1930, Serial No. 435,671, and in Great Britain Mar. 22, 1929. 4 Claims. (Cl. 214—18.)

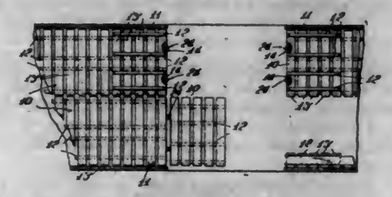
1. An apparatus for feeding finely divided solid material into a high pressure vessel, comprising a gland in

said vessel, a slidable ram passing through said gland, said ram being adapted to rotate through 180° at the in-



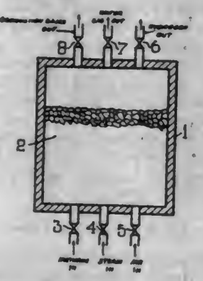
ner end of its stroke, a cavity in said ram, and a hopper adapted to register with said cavity in the outermost positions of said ram.

1,875,922. FLOOR RACK CONNECTING MEANS. VICTOR H. HARBERT, Chicago, Ill., assignor, by mesne assignments, to Illinois Railway Equipment Company, a Corporation of Illinois. Filed Jan. 6, 1930. Serial No. 418,732. 12 Claims. (Cl. 16—168.)



1. Floor rack connecting means comprising a pair of socketed plates adapted to be secured to the lower faces of the end slats of two aligned floor rack sections, two opposite sides of the sockets in the plates being provided with arcuate ribs; and a connecting member whose opposite ends are provided with laterally disposed portions adapted to rotatably seat on said arcuate ribs so as to permit vertical swinging movement of the member relative to said plates.

1,875,923. PRODUCTION OF HYDROGEN. CHARLES FREDERICK REED HARRISON, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Apr. 11, 1930, Serial No. 443,487, and in Great Britain Apr. 19, 1929. 6 Claims. (Cl. 23—212.)

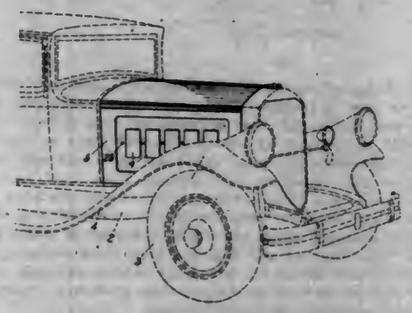


2. The process for the production of hydrogen which comprises heating up coke to about 1500° C. by means of a current of air cutting off said air, passing in methane until the temperature falls to about 1100° C. cutting off said methane, passing in steam until the temperature falls to about 900° C. cutting off said steam, and then repeating the cycle.

1,875,924. PROCESS FOR SEPARATING AND RECOVERING OLEFINES FROM GASES CONTAINING SAME. GEORGE FREDERICK HORSLEY, Stockton-on-Tees, England, assignor to Imperial Chemical Industries Limited, Westminster, London, England, a British Company. Filed Mar. 21, 1928, Serial No. 263,597, and in Great Britain Mar. 30, 1927. 5 Claims. (Cl. 260—170.)

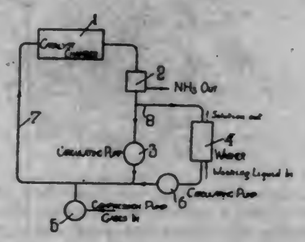
1. Process of removing olefines from gases which comprises scrubbing the gases in a tower made of alloy steel, with an acid solution of silver nitrate to absorb the olefines, and regenerating said solution and recovering olefines therefrom by heating same.

1,875,925. VEHICLE HOOD. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,530. 3 Claims. (Cl. 180—69.)



1. In a vehicle, the combination with a hood having an opening therein and an offset flange parallel to the plane of the hood surrounding said opening, of a shutter for said opening adapted to cover said opening and said flange and having its outer face substantially flush with the outer face of said hood, a hinge for said shutter supported on the inner face of said hood and passing around said flange, spring means cooperating with said hinge for urging said shutter to open position, and a sliding latch bolt having an operating handle on the outside of said hood, supported on the inner face of said hood for securing said shutter against the action of said spring in closed position.
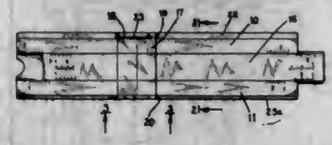
1,875,926. CARRYING OUT CHEMICAL REACTIONS IN WHICH REACTION GASES ARE CIRCULATED. JOSEPH HUGHES, Stockton-on-Tees, England, assignor to Imperial Chemical Industries Limited, Westminster, London, England, a British Company. Filed Mar. 21, 1928, Serial No. 263,598, and in Great Britain Apr. 6, 1927. 6 Claims. (Cl. 23—199.)



1. Process of treating gases comprising reactive gases and a small proportion of inerts which includes the steps of causing said gases to react with one another while

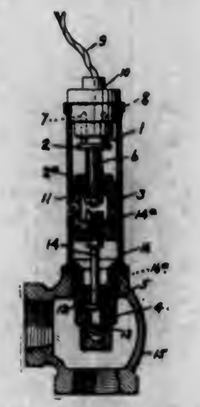
circulating under pressure purging away part of the said gases, scrubbing the purge separately under pressure with a paraffin oil and returning the purge to said process.

1,875,927. SLIDE RULE. ADOLF W. KEUFFEL, Montclair, N. J., assignor to Keuffel & Esser Co., Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 29, 1930. Serial No. 491,856. 3 Claims. (Cl. 235—70.)



1. In a slide rule, in combination, a pair of spaced side bars, a slide movable therebetween, said side bars being formed, in their outer sides, respectively, with longitudinally extending grooves, substantially rectangular in cross-section, a runner comprising guide portions disposed one on each side of the rule, each guide being formed with a tongue to be received in and slidable in the grooves, the bottom surface of the flange lying in the plane of the bottom surface of the guide portions and the bottom wall of the groove extending outwardly in one plane to a point at least in the plane of the outer marginal surface of the guide portions.

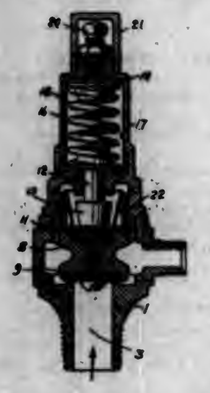
1,875,928. ELECTRIC HEAT SHUT-OFF FOR WATER HEATERS. LUTHER D. LOVEKIN, Villa Nova, Pa. Filed Dec. 12, 1930. Serial No. 501,930. 4 Claims. (Cl. 200—142.)



1. An electric heat shut-off for water heaters comprising, in combination, a circuit controller, a weight slidably mounted to operate the circuit controller, a thermally conductive water-tight casing adapted for immersion in the water of the heater, and a fusible metal plug arranged in the casing and supporting the weight which it permits to descend and operate the controller, when the plug softens by heat.

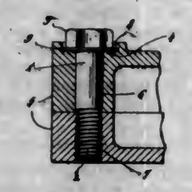
1,875,929. VALVE DEVICE FOR CONNECTION TO A HOT WATER SUPPLY. LUTHER D. LOVEKIN, Villa Nova, Pa. Filed May 1, 1931. Serial No. 534,167. 4 Claims. (Cl. 137—161.)

3. A valve device adapted for connection with a hot water supply comprising a two part valve casing of which one part is provided with a stem guide and with a cylindrical chamber and of which the other part is provided with inlet and outlet openings and with a valve seat between said openings, a piston movable in said cylindrical chamber and provided at one end with a head having a face adapted for cooperation with the valve seat, a fusible metal body arranged at the end of the



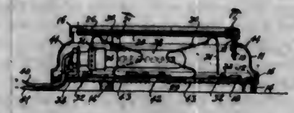
piston opposite said face, a stem movable through the stem guide opening, a bonnet detachably connected with the first mentioned part of the casing, a spring housed in the bonnet and last mentioned part of the casing and arranged for operation on the stem, and a set screw for adjusting the tension of the spring.

1,875,930. SELF-LOCKING NUT AND SCREW. JOHN F. MARTIN, Springfield, Mass. Filed Feb. 26, 1931. Serial No. 518,483. 7 Claims. (Cl. 151—32.)



5. The combination of a fastening bolt having a head, a pair of members having holes to receive the bolt, threads on the bolt, and a rotatable nut to engage the end of the bolt, the nut having a peripheral flange adjacent one end, said flange being initially bent towards the axis of the nut to restrict its initial diameter, one of said members having a recess around one end of the hole therethrough, said recess being large enough to receive the nut with the flange thereon, the nut when screwed tight causing the flange to abut against a surface of the recess and to expand and bind the nut in position.

1,875,931. ADVERTISING CHANGE-RECEIVING TRAY. ARTHUR MIHALKA and ADALBERT WIESE, New York, N. Y., assignors of one-half to Armand E. Lackenbach. Filed Nov. 14, 1930. Serial No. 495,556. 8 Claims. (Cl. 40—130.)



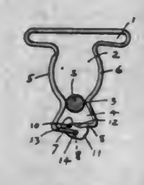
1. In a device of the character described, the combination of a base, a casing, a change receiving plate, an advertising legend bearing element associated therewith, a lighting unit secured to said base, a plurality of spring

members mounted on said base at different points under the casing so that they are in a position to support all parts of it and resiliently supporting said change receiving plate, and forming the sole support therefor and an electric circuit including said spring members and said lighting unit.

1,875,932. FUSE COMPOSITION. JOHN PARSONS, Montclair, N. J., and JORDAN HOMER STOVER, Mount Kisco, N. Y., assignors to Pan-Ross Laboratories, Inc., Belleville, N. J., a Corporation of New York. Filed May 6, 1930. Serial No. 450,306. 18 Claims. (Cl. 52—25.)

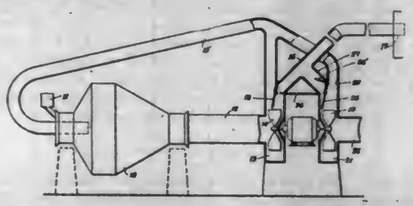
1. A fuse composition of the character described, said composition having as its constituents a coal-forming combustible and an oxidizer distributed through a nitro cellulose binder, said binder being in excess of either the combustible or the oxidizer.

1,875,933. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed June 6, 1930. Serial No. 459,473. 5 Claims. (Cl. 24—224.)



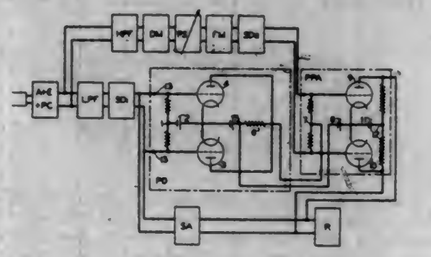
4. A button loop comprising a suspension loop having spring arms depending therefrom and providing axially associated loops in a common plane and having an intermediate restricted portion, the arms having terminals, and a sheet-metal connecting member so mounted upon the terminals as to have a tipping movement only in said plane to permit the lateral expansion of the restricted portion only upon a slight axial distortion of the button loop structure.

1,875,934. METHOD AND APPARATUS FOR PREPARING AND FEEDING PULVERIZED FUEL. ARTHUR H. SANCTON, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1927. Serial No. 233,767. 5 Claims. (Cl. 110—104.)



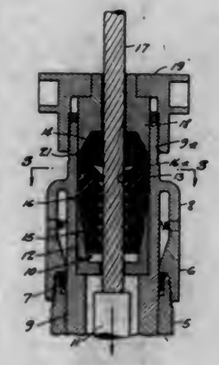
1. The method of preparing pulverized fuel and of feeding the same to burners comprising, pulverizing the fuel, carrying pulverized fuel from a pulverizer by means of fluid currents, diverting one portion of the fuel-laden fluid to the burners and diverting another portion of the fuel-laden fluid back to the pulverizer, co-mingling with the first named diverted portion of fuel-laden fluid a portion of fuel-free fluid substantially equal to the second named portion of the diverted fuel-laden fluid, co-mingling with the second named diverted portion of the fuel-laden fluid, a portion of fuel-free fluid substantially equal to the portion of the first named diverted portion of fuel laden fluid, and passing the last named co-mingled medium through the pulverizer.

1,875,935. DOT INSERTION. EDWARD K. SANDEMAN and LANCELOT EDGAR CURRAH, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1931, Serial No. 518,370, and in Great Britain Apr. 25, 1930. 5 Claims. (Cl. 178—88.)



5. A telegraph system comprising a mechanically static apparatus adapted to supply continuously to the receiver dot impulses derived from a synchronizing current, means operated by an incoming signal to paralyze said mechanically static apparatus to suppress the supply of dots and a signal shaping device adapted to shape said dot impulses and said signals before they are impressed on said receiver.

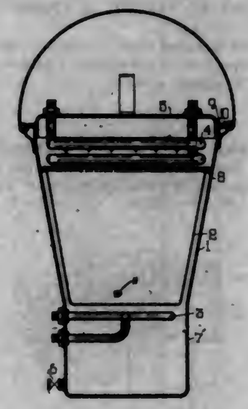
1,875,936. OIL SAVER PACKING. GORDON SAUNDERS, Whittier, Calif. Filed May 4, 1931. Serial No. 534,873. 10 Claims. (Cl. 286—16.)



1. A packing for oil savers and the like comprising a stuffing box, a bushing having a bore with flexible annular barbs all slanting in one direction for engagement with a line, said barbs having substantially square cut ends whereby the barbs will be compressed against the line on passage of the latter in one direction and will be released on passage of the line in the other direction.

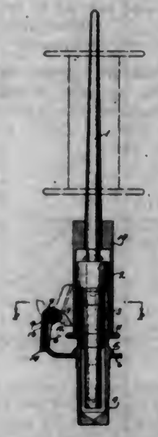
1,875,937. APPARATUS FOR DEGREASING MATERIALS. JOSEPH SAVAGE, Runcorn, England. Filed Dec. 16, 1926, Serial No. 155,324, and in Great Britain June 23, 1926. 5 Claims. (Cl. 87—6.)

2. A unitary apparatus for degreasing metal castings and similar non-absorbent bodies with volatile solvents, comprising a single container, the lower portion of which is heated and serves as a still for initially volatilizing the solvent, a removable lid for said container having a cooling coil supported by and depending therefrom into the upper portion of the container, a second cooling coil located



within the lower portion of the container, and means for supporting the material to be degreased intermediate the upper and lower cooling coils.

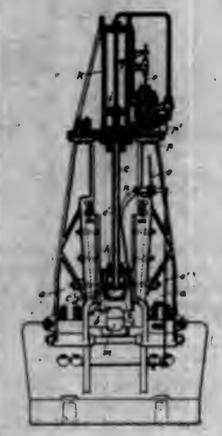
1,875,938. WHORL LATCH. OTTO W. SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,092. 6 Claims. (Cl. 118—65.)



1. In combination, a whorl, a latch therefor, a support for the latch, said latch being pivoted intermediate its ends on said support whereby the latch may be rotated to bring its center of gravity between its pivot and the whorl, said pivot being so located that the latch will be held by gravity in both latching and unlatched positions.

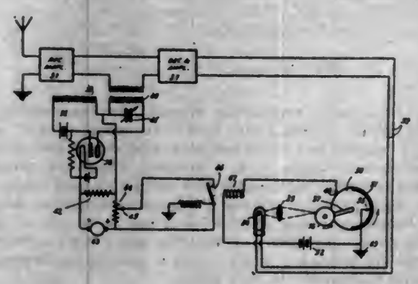
1,875,939. POWER HAMMER. ARTHUR SCHNEIDER, Duesseldorf, Germany, assignor to Eumuco Aktiengesellschaft fur Maschinenbau, Leverkusen-Schlebusch, Germany, a German Company. Filed Feb. 25, 1931, Serial No. 518,220, and in Germany Feb. 27, 1930. 2 Claims. (Cl. 78—29.)

1. A hammer adapted to be raised and accelerated downwardly by an elastic fluid, comprising in combination, a tup, a tup rod with a piston movable within a bore of the tup, an air cushion disposed between the piston of the tup rod and the tup and adapted to become upwardly and downwardly effective during the motion of the piston of the tup rod, and a plurality of ducts through the walls of



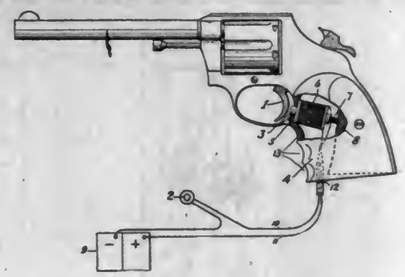
the tup between the bore of the tup and the outer atmosphere certain of said ducts being effective above and the others below said piston and adapted to be shut and opened by the piston of the tup rod during its motion within the bore of the tup.

1,875,940. PICTURE TRANSMISSION. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Original application filed Feb. 23, 1929, Serial No. 342,059. Patent No. 1,784,850, dated Dec. 16, 1930, and in Germany Mar. 3, 1928. Divided and this application filed Nov. 18, 1930. Serial No. 496,380. 7 Claims. (Cl. 178—7.)



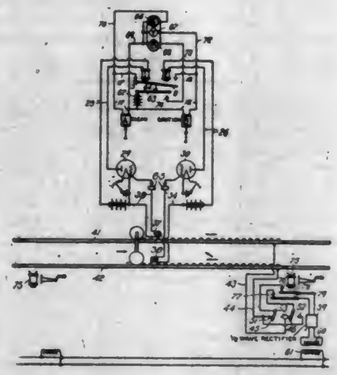
1. In a picture receiving apparatus, a supporting drum for a recording surface, a source for producing recordings upon the recording surface carried by said record drum, means for receiving transmitted signals periodically varying in frequency by predetermined amounts, a local oscillator for generating a frequency suitable for producing a constant beat frequency from the varying frequency received signals, and means operable at predetermined time periods for varying the frequency of the local oscillator for maintaining a constant beat frequency irrespective of the change in the frequency of the received signals.

1,875,941. MEANS FOR TEACHING MARKSMANSHIP. CHARLES SCHWARTZ, Lawrence Township, Mercer County, N. J. Filed Jan. 5, 1932. Serial No. 584,763. 4 Claims. (Cl. 42—84.)



1. For teaching marksmanship, a detached fire arm free to be held in the hand for manual aiming and having a trigger free for manual operation by a pupil and provided with means carried by the fire arm and operable by an instructor and adapted to actuate the trigger.

1,875,942. INDUCTION TRAIN CONTROL APPARATUS. DANIEL HERBERT SCHWEYER, Easton, Pa. Original application filed Aug. 21, 1928, Serial No. 301,021, now Patent 1,801,882, Apr. 21, 1931. Divided and this application filed Oct. 24, 1930. Serial No. 490,992. 4 Claims. (Cl. 246—63.)



1. In a train controlling system, the combination, a track circuit including both rails of the track, an A. C. supply, a transformer connected with said supply and having a secondary circuit with a rectifier connected therein, means including said rectifier for energizing said track circuit with pulsating current from said secondary circuit, an independent inductive receiver for each rail of said track circuit, a rectifier, an amplifier and a relay connected in circuit with each receiver and a translating device selectively controlled by said relays.

1,875,943. RUBBER VULCANIZATION ACCELERATOR. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 14, 1928. Serial No. 246,919. 8 Claims. (Cl. 18—53.)

1. The process of preparing vulcanized rubber which comprises heating rubber and a vulcanizing agent in the presence of a compound possessing the formula

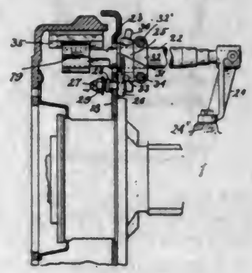
$C_2H_5O.CSSH.R$,

where R is a completely hydrogenated cyclic amine.

1,875,944. PROCESS OF TREATING FRUIT TO REMOVE SPRAY RESIDUES. JAGAN N. SHARMA, Berkeley, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,133. 5 Claims. (Cl. 146—219.)

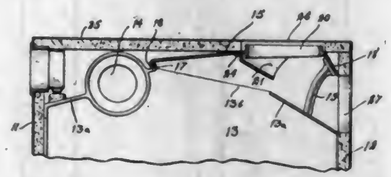
1. A process of treating fruit to remove spray residues, including arsenates, which comprises contacting the fruit with a solution of alkali silicate.

1,875,945. BRAKE. LYLE K. SNELL, Detroit, Mich., assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1930. Serial No. 435,188. 8 Claims. (Cl. 188—78.)



1. In a brake the combination of a drum, a backing plate adjacent said drum, a friction device, and friction device actuating means including a bearing movably mounted on said backing plate, an operating shaft rotatable in said bearing, and means for preventing the transfer of lubricant from said bearing to said friction device.

1,875,946. FLUE CONSTRUCTION. WILLET E. STARK, East Cleveland, Ohio, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 24, 1928. Serial No. 309,200. 4 Claims. (Cl. 122—224.)

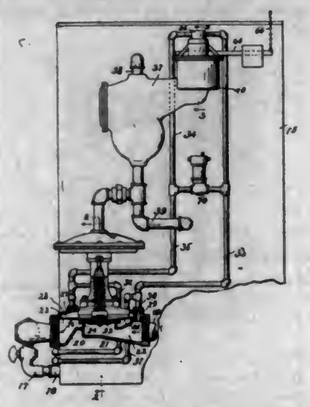


1. A flue for sectional boilers and the like comprising a member adapted to be supported above the boiler sections and extending substantially entirely over the flue gas exit area between said sections, an opening in said member adapted to communicate with a chimney, a baffle disposed below a portion only of said opening whereby the back drafts from the chimney are diverted away from the combustion chamber of the boiler, and an enclosing member having an opening in one wall through which back drafts are adapted to pass to atmosphere.

1,875,947. CONTROL SYSTEM FOR BOILERS AND THE LIKE. WILLET E. STARK, East Cleveland, Ohio, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,279. 5 Claims. (Cl. 236—26.)

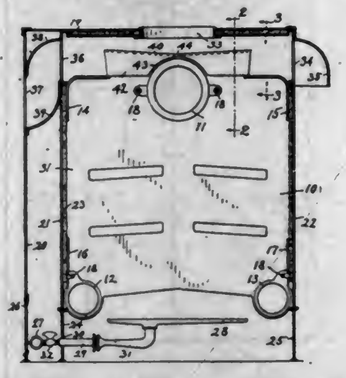
1. In a fuel control system for gas-fired heating apparatus, the combination of a valve for controlling the flow of gas to the burners, means for controlling the actuation

of said valve whereby the flow of gas to the burners is adapted to be cut off when a predetermined limit of boiler pressure, water level or room temperature is reached,



and other control means associated with said valve whereby said flow of gas is gradually reduced before one of said predetermined limits is reached.

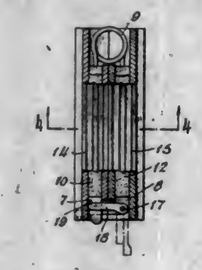
1,875,948. BOILER CONSTRUCTION. WILLET E. STARK, East Cleveland, Ohio, assignor to The Bryant Heater & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 24, 1930. Serial No. 470,275. 6 Claims. (Cl. 122—226.)



6. In a boiler having water sections, the combination of a casing enclosing the sections, said casing having an opening adapted to communicate with a chimney, different walls of said casing having air openings, and a baffle in said casing forming a passage having its ends in substantial alignment with said air openings.

1,875,949. HAIR CLAMP. KARL GEORG STRÖHER, Rothenkirchen in Vogtland, Germany. Filed Oct. 30, 1931. Serial No. 572,008. 1 Claim. (Cl. 132—36.1.)

A hair clamp for use in permanent waving processes, comprising cooperating clamping bars having straight opposed faces between which a strand of hair is adapted to be held, there being an unobstructed space between the ends of said bars whereby said strands may be evenly distributed along the same and securely held by said faces, a spring at one end of said clamp forming a connection between adjacent ends of said bars and operating to spread the latter apart, said spring also providing a yielding connection between the ends which it connects so as to permit of a slight spreading movement of the latter relative to the opposite ends of the bars when a strand of



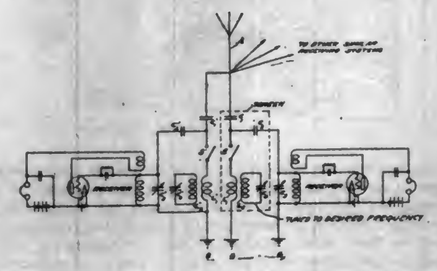
hair is clamped therebetween, and a latching device at the latter ends of said bars pivoted to one of them and engageable with the other for holding the same together against the spreading action of said spring.

1,875,950. SEPARABLE FASTENING DEVICE. MARK H. STRYKE, Brooklyn, N. Y. Filed Mar. 26, 1932. Serial No. 601,361. 7 Claims. (Cl. 2—265.)



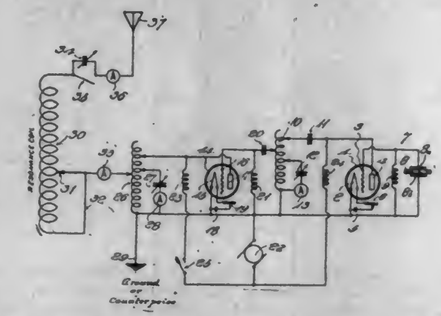
1. In a separable fastening device, a tape having therein a plurality of pockets extending transversely thereof, both of the opposite walls of each pocket being provided with aligned apertures, a fastener element of a separable fastener arranged within each of said pockets, each of said fastener elements having a socket and opposite that a projection, the entrance of each of said sockets being in registration with the aperture in one wall of the respective pocket and each of said projections extending through the aperture in the other wall of the respective pocket.

1,875,951. HIGH FREQUENCY ELECTRICAL SYSTEM. ALBERT HOYT TAYLOR and LEO C. YOUNG, Washington, D. C. Filed May 15, 1924. Serial No. 713,545. 12 Claims. (Cl. 250—9.)



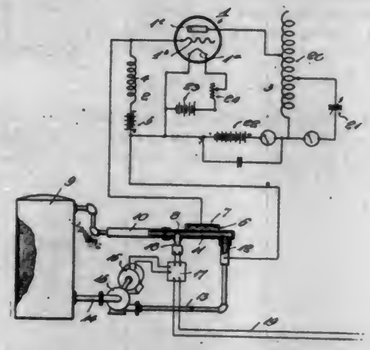
8. A high frequency electrical system including a collector of high frequency electrical currents and a plurality of receivers connected thereto each through the following arrangement: a condenser of small capacity and a divided path, one division including a single wire connection containing a condenser of small capacity and a receiver in series, and the other division containing a coupled rejector.

1,875,952. CIRCUIT FOR PURIFYING HIGH FREQUENCY RADIATION. ALBERT H. TAYLOR, Washington, D. C., assignor. by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 20, 1926. Serial No. 136,702. 6 Claims. (Cl. 250—17.)



1. In a high frequency transmission system, a source of waves capable of supplying waves of different frequencies including waves of a desired frequency, a radiating conductor having a length equal to one half the wave length of the desired waves, and means for coupling said source to said conductor for the radiation of waves of the desired frequency to the substantial exclusion of waves of other frequencies comprising a connecting link having an electrical length of an odd multiple of the quarter wave length of the desired waves.

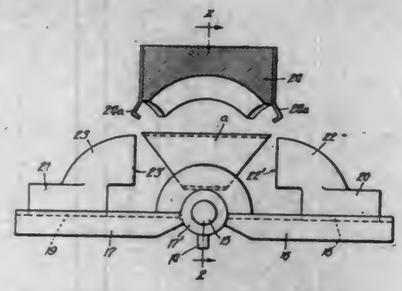
1,875,953. PIEZO ELECTRIC CRYSTAL CONTROL SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1926. Serial No. 83,407. 9 Claims. (Cl. 171—327.)



1. A piezo electric crystal control system comprising a pair of contact plates, a piezo electric crystal mounted between said contact plates, and means for circulating a cooling fluid over at least one of said contact plates, said cooling fluid being maintained at a temperature below that temperature at which the operating characteristics of said piezo electric crystal are impaired.

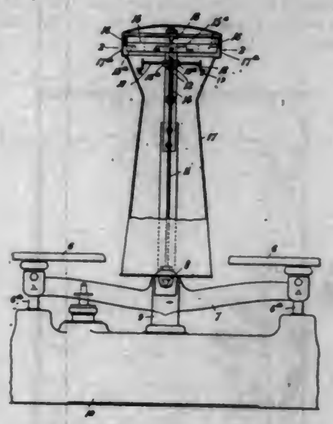
1,875,954. METHOD OF AND MEANS FOR FORMING PIPE ELBOWS. JAMES HALL TAYLOR, Oak Park, Ill. Filed June 20, 1930. Serial No. 462,513. 21 Claims. (Cl. 153—32.)

1. The method of curving a piece of tubing which comprises subjecting the same to straight line opposing action of external curved dies with a curved internal die disposed therein, and removing said internal die from said piece of tubing by arcuate movement while said external dies are in contact with said piece of tubing and thereby shaping a portion of the tubing about one of the external dies.



12. In combination, a curve anvil, supporting members swinging upon the axis of said anvil, horn dies slidably mounted on said supporting members, and an external die movable toward and away from said anvil.

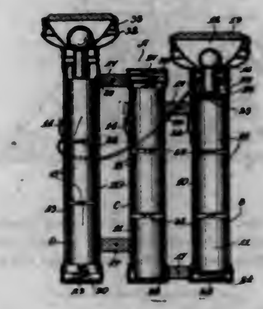
1,875,955. WEIGHING APPARATUS. JOHN WILLIAM TAYLOR, Soho Foundry, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England. Filed May 18, 1929. Serial No. 364,261. 4 Claims. (Cl. 265—59.)



1. In a weighing apparatus, a rotatable indicating mechanism provided with more than two similar sets of indicating means, fixed indicating means adapted to cooperate with the indicating means provided on the rotatable indicating mechanism, a weighing lever, means for transmitting the movement of the said lever to the rotatable indicating mechanism for effecting a rotation thereof in correspondence with the movement imparted to the lever and a housing for the indicating mechanism which admits of the simultaneous observation of the position of equipose of the weighing lever as denoted by the said indicating means from more than two points.

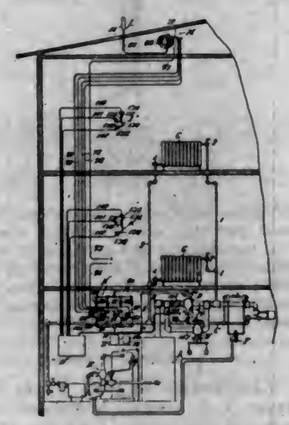
1,875,956. MULTIPLE PARALLEL FLASH LIGHT. HERMAN K. THIEL, Lakeland, Minn. Filed Apr. 28, 1930. Serial No. 447,833. 5 Claims. (Cl. 240—10.6.)

1. A multiple parallel electric flashlight comprising, battery enclosing casings, adjustable bracket conductor means for holding said casings adjustably connected together and conducting current from one casing to another, electric light globes and reflectors carried by said casings, and switch means for connecting said electric light bulbs selectively in a manner to direct the energy from the batteries



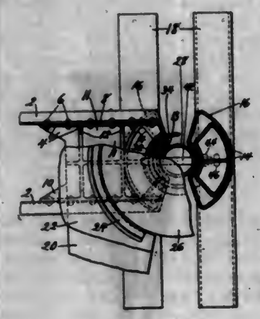
contained in said casings to a particular light, switch means for increasing the energy to the light, and switch means for directing all of the energy from all of the batteries in said casings to a single light.

1,875,957. TEMPERATURE CONTROL MECHANISM FOR HEATING SYSTEMS. CHRISTIAN A. THINN, Chicago, and ELBERT A. TAYLOR, Arlington Heights, Ill., assignors to C. A. Dunham Company, Marshalltown, Ill., a Corporation of Iowa. Filed Dec. 9, 1929. Serial No. 412,850. 7 Claims. (Cl. 236—91.)



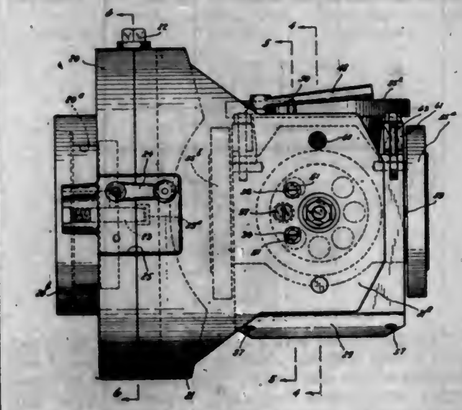
1. In combination with a heating system comprising a source of steam and a radiating system, a reducing valve for controlling the flow of steam to the radiating system, said valve comprising operating means including a diaphragm for varying the setting of the valve, said diaphragm being subject at one side to the steam pressure existing at the low pressure side of the valve, thermostatically controlled means for varying the fluid pressure applied to the other side of the diaphragm in accordance with the temperature prevailing outside of the building to be heated, and thermostatic means for closing the valve when a predetermined maximum temperature is attained inside the building.

1,875,958. ARTICULATED CAR. JOHN B. D. THOMPSON, Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,691. 15 Claims. (Cl. 105—4.)



1. In an articulated car comprising a plurality of car bodies, a truck beneath the adjacent end portions of said bodies, connected body and truck bearings, and a buffing element interposed between the adjacent end portions of said bodies supported thereby for retaining said bodies in spaced relation and for transmitting pulling stresses from the bodies to the truck.

1,875,959. CHUCK. WILLIAM L. TRUMPHOUR, Cleveland, and MAX E. LANGE, Cleveland Heights, Ohio, assignors to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,700. 17 Claims. (Cl. 279—5.)



1. A chuck comprising a chuck body, a work holder in the form of the unit rotatably supported by the chuck body, locating means for positioning the work holder in predetermined positions, and tapered means for clamping the work holder in such positions.

1,875,960. ICE CREAM CONE. WERD W. TURNBULL, Dayton, Ohio, assignor, by mesne assignments, to National Biscuit Company, a Corporation of New Jersey. Filed Apr. 17, 1930. Serial No. 444,891. 2 Claims. (Cl. 99—10.)

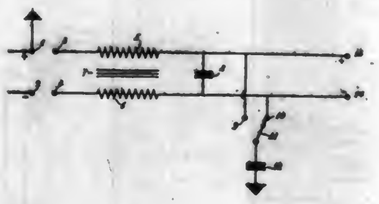
1. An ice cream cone comprising inner and outer spaced conical pastry shells, a confection filling within the space

between the shells, the shells having convexly-curved outwardly flaring shallow mouths open at their upper ends, a bead on the outer shell adapted to rest on the curved throat of the inner shell of another cone into which it may be



inserted to prevent wedging and sticking, the mouth of the outer shell being of greater diameter than the mouth of the inner shell, and the edges of the two mouths lying substantially in the same plane.

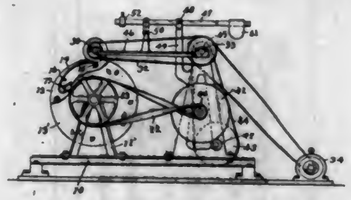
1,875,961. CIRCUIT ARRANGEMENTS FOR SMOOTHING A DIRECT CURRENT RIPPLE. HAROLD VAN SUCHTELEN, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 23, 1930, Serial No. 477,284, and in the Netherlands Aug. 24, 1929. 3 Claims. (Cl. 178—44.)



1. In combination with a source of pulsating direct current a circuit including a positive lead and a negative lead connected to said source one of said leads being grounded, a filter arrangement comprising a pair of choke coils wound about the same core connected respectively to said two leads, a condenser shunted across said two leads, an auxiliary condenser having one side thereof grounded and means including a switching arrangement for connecting the other side of said auxiliary condenser to either one of said leads.

1,875,962. POLISHING MACHINE. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 22, 1927. Serial No. 214,536. 4 Claims. (Cl. 51—108.)

1. In a machine for polishing bumper bars, a rotatable rack, means for supporting the bars upon the periphery of said rack end to end in a plane at right angles to the axis of the rack, means for rotating said rack continuously, a polishing wheel movable radially of said rack and mounted in substantially the same plane and arranged to engage the bars and pass over their surfaces



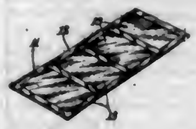
longitudinally as the rack rotates, and means for imparting a plurality of reciprocations to said rack parallel to its axis during each revolution of the rack.

1,875,963. METAL VAPOR LAMP. STEPHAN VON BOGDANDY and LASZLO WAMOSCHER, Berlin, Germany. Filed Sept. 17, 1928, Serial No. 306,557, and in Germany Oct. 15, 1927. 8 Claims. (Cl. 176—48.)



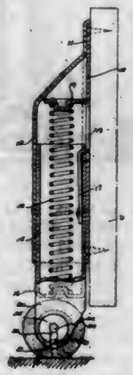
1. A metal vapor lamp comprising a closed bulb or tube, a longitudinal partition extending from the lower end practically to the opposite end of the said bulb or tube, the said partition being flat and protected at its free end with a highly refractory metal, anode and cathode chambers, electrode fillings in the said chambers, and points of attachment for the electrode leads.

1,875,964. LAMINATED GLASS. JAMES F. WALSH, South Orange, N. J., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed Jan. 11, 1930. Serial No. 420,154. 9 Claims. (Cl. 49—92.)



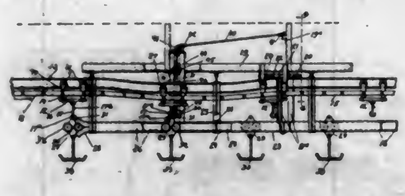
5. A laminated product comprising a layer of liquid material sealed between transparent sheets, said liquid material comprising a condensation product of paratoluolsulphonamid and formaldehyde.

1,875,965. DOOR HOLDER. ARCHIBALD D. WATERS, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 27, 1929. Serial No. 350,224. 10 Claims. (Cl. 293—73.)



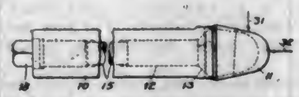
1. A door holder of the character described having a roller adapted to engage the floor, means for rotatably supporting said roller, elements respectively fixed and rotatable with said roller and having frictional engaging surfaces, and resilient means for urging said elements into frictional engagement.

1,875,966. SWITCH MECHANISM FOR CONVEYER SYSTEMS. JERVIS B. WEBB, Royal Oak, and DUANE A. BLAIR, Detroit, Mich. Filed Mar. 18, 1930, Serial No. 436,867. Renewed Apr. 21, 1932. 14 Claims. (Cl. 104—100.)



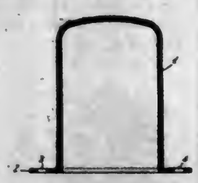
1. In a conveyer system, a main continuously operating conveyer, an auxiliary track adjacent to said main conveyer, switch means for placing said auxiliary track selectively into or out of communicating relationship with said main conveyer and means for automatically releasing article carrying devices from the main conveyer when said switch means is in communication with said auxiliary track.

1,875,967. ADJUSTABLE LOCK TOOL HOLDER. RALPH R. WEDDELL, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 13, 1928. Serial No. 261,205. 5 Claims. (Cl. 29—96.)



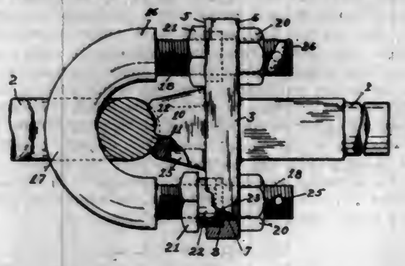
1. A cutter for machine tools combining a supporting shank having a cutaway portion at the outer end presenting a supporting platform surface for a cutter bit and a tapered recess back of and adjacent said platform surface; an adjusting member forming substantially the rear wall of said recess opposite to the side adjacent said platform; means for adjusting said member forwardly to vary the width of said recess; a cutter bit adapted to rest on said platform and having a projection engaging in and closely conforming to the shape of said recess, said projection and the opening formed by said member and said side adjacent the platform diverging outwardly toward the cutting edge of said bit in a direction parallel to said platform surface whereby said cutter bit may be inserted from said side and be wedged in place, and said opening and projection also being shaped to form a dove-tail acting transversely to said platform surface to lock the cutter bit thereon.

1,875,968. STATIC AND MAGNETIC SHIELD. OTTO WEBER, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed June 18, 1930, Serial No. 461,927, and in Germany June 19, 1929. 4 Claims. (Cl. 175—356.)



1. Static shield, particularly for self-induction coils, and of special advantage in radio receiving arrangements, characterized in that it consists of copper coated aluminum sheeting.

1,875,969. DRAWBAR APPARATUS FOR TRAILERS. DEWEY S. WEISS, Portland, Oreg. Filed Mar. 20, 1931. Serial No. 524,031. 5 Claims. (Cl. 280—33.14.)

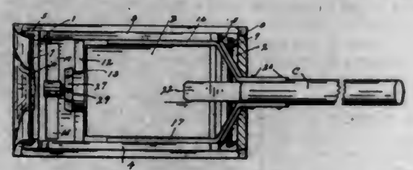


1. A trailer connection to trucks, consisting in combination with a draft-hook of a truck, said hook being circular in cross-section, of a draw-bar secured at one end to a trailer and having a T-head at its opposite end formed with a pair of spaced apertures therethrough, a U-shaped member having a pair of parallel, spaced threaded bolts adapted to extend through said apertures, and nuts threaded on each said bolt upon opposite sides of said T-head to provide a closely adjustable connection with said draft-hook between said U-bolt and the T-head.

1,875,970. WAXER AND POLISHER. JAMES A. WOODS, Salt Lake City, Utah. Filed July 24, 1930. Serial No. 470,377. 5 Claims. (Cl. 91—39.)

1. In a device of the class described the combination of a base; means to hold a wax containing can therein; a closure plug for said can having a port therethrough; a cap to control the flow of the fluid through said port; openings through said base to allow fluids to pass therethrough; a semi-partition across the bottom of said base

to hold the neck of said can; a pad for said base covering the ends and the bottom thereof having openings therethrough in alignment with the openings in said base; spring wires to hold said pad to said base; and a handle



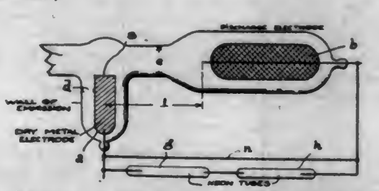
for said base made up of two legs secured to a single handle with a central lever between said legs to contact the top side of the wax can when the handle is lowered by the operator to force the fluid thereform.

1,875,971. CHRISTMAS DECORATION. ROYAL J. WRIGHT, Springfield, Mass., assignor to Wright-La Montagne Company, Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1931. Serial No. 511,526. 7 Claims. (Cl. 41—15.)



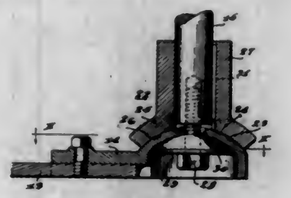
2. The method of forming a metal Christmas tree comprising, first, the cutting of a blank of the desired shape from a sheet of thin metal which indicates the outlines of a tree, second, folding said blank about its vertical or central axial line to form the trunk portion with the two oppositely located leaves shaped approximately like one-half of a tree extending from the trunk portion and in superimposed relation to each other, third, shearing said leaves into narrow spiral strips of varying widths which are formed as the metal is sheared, fourth, pulling out and bending into the desired position the spirals caused by said shearing, and fifth, curling the ends of the heavier of said strips to form sockets for the support of electric light bulbs, candles, or other articles.

1,875,972. MAINTENANCE OF THE PRESSURE IN VACUUM TUBES. JEAN BAPTISTE JOSEPH MARCEL ABADIE, Paris, France. Filed Aug. 15, 1927, Serial No. 213,170, and in France Aug. 26, 1926. 2 Claims. (Cl. 176—125.)



1. A gaseous conduction device comprising a tube, an electrode at one end thereof, a gas replenishing means at the other end of said tube including a metallic container for decomposing salt, and an electrode touching the projected contour of the tube intermediate said electrode and gas replenishing means.

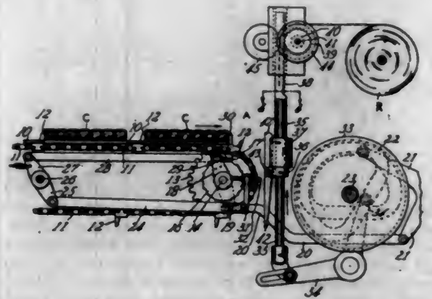
1,875,973. CUT-OFF MECHANISM FOR GLASSWARE FORMING MACHINES. RUSSELL G. ALLEN, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Sept. 10, 1930. Serial No. 480,872. 9 Claims. (Cl. 49—14.)



1. In combination, a blank mold having a charge receiving opening in one end, a cut-off knife adapted to sever gathered charges in the mold from a supply body, a rock shaft supporting the knife, means for operating the rock shaft to thereby actuate the knife, means providing a ball and socket joint connecting the knife and rock shaft and permitting universal adjustment of the angular position of the knife with respect to the shaft and mold, and means for securing the knife in adjusted position.

4. Cut-off mechanism comprising a knife, a holder therefor, a rock shaft adapted to support a knife and holder, means providing a swivel connection between the rock shaft and knife holder comprising a crown portion on the holder, a cup carried by the shaft and adapted to be seated on said crown, and clamping means for securing the cup and crown portion in any adjusted position including a locking bolt extending through said crown and screw threaded into said shaft.

1,875,974. AUTOMATIC WRAPPER FEED CONTROL FOR ARTICLE-ENVELOPING MACHINES. THURE W. ALM, Stewart Manor, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Jan. 29, 1931. Serial No. 512,135. 7 Claims. (Cl. 192—125.)

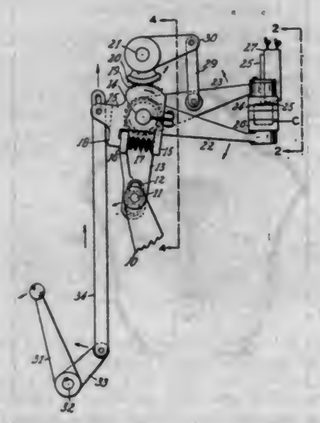


1. In a wrapper feed control for article-enveloping machines, the combination with means for forwarding articles, of mechanism controlled by the forwarding movement of the articles for feeding a web of wrapping material for said articles.

1,875,975. SCORCH PREVENTING DEVICE FOR HEAT-SEAL WRAPPING MACHINES. THURE W. ALM, Stewart Manor, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Feb. 6, 1931. Serial No. 514,045. 5 Claims. (Cl. 93—2.)

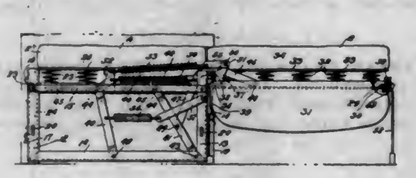
1. In a scorch preventing device for heat-seal wrapping machines, the combination with a pair of heat sealing units, of means for normally moving said units in and out of operative position, and mechanism for relatively separating said units when the machine is stopped, to prevent

scorching of the wrapping material, said heat sealing units including a female heat sealing die and a male heat



sealing die cooperating therewith to seal the end of a wrapper overhanging the end of the article which it encloses.

1,875,976. COUCH DAY BED. JOSEPH BASILE, New York, N. Y., assignor to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 3, 1931. Serial No. 506,341. 21 Claims. (Cl. 5—31.)



17. In a bed structure, the combination of a main frame, two bed sections, one of which is movable up or down on the main frame and the other is pivoted to the main frame, and operating mechanism connecting the bed sections for moving them to collapsed position or to a side by side position, the operating mechanism including a series of links having a pivotal connection with a front portion of the main frame, a shiftable connection with the front portion of the vertically movable bed section and a pivotal connection with the pivoted bed section, and a relatively long series of links behind the other series, and connecting the bed sections with the main frame for relative movement of such sections.

1,875,977. REFRIGERATING APPARATUS. LOUIS I. BECKWITH, Brookline, Mass. Filed Oct. 29, 1931. Serial No. 571,733. 8 Claims. (Cl. 248—2.)

8. A column for use in supporting refrigerating apparatus, said column comprising upper and lower relatively rotatable sections, means for supporting a load substantially entirely from the lower of said relatively rotatable sections, the upper of said relatively rotatable sections having its upper end portion screw-threaded, a collar threaded on this upper end portion, a cap element adapted



to contact with the ceiling of a room, and a spring interposed between said cap element and said collar to compensate for changes in temperature.

1,875,978. LOCK. CHRISTIAN BEHRENDS, Winnipeg, Manitoba, Canada. Filed Sept. 8, 1930, Serial No. 480,550, and in Canada Sept. 9, 1929. 2 Claims. (Cl. 70—75.)

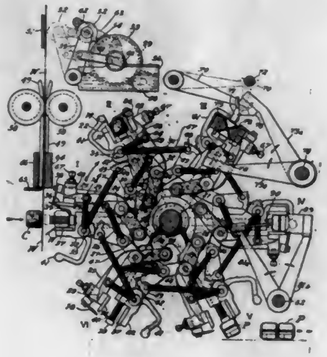


1. A key operated lock comprising a casing, a plurality of similar latches arranged side by side within the casing, said latches being exposed at one end beyond the casing and being provided at such ends with differently positioned slots, a pivot pin pivotally supporting the other ends of the latches, springs engaging the latches and normally pressing the same inwardly to place the slots out of registration, a stop pin carried by the casing and passing through suitable slots provided in the bodies of the latches and limiting the in swung position of the latches under the influence of the springs, and a locking lever carried by the casing and engageable with the latches to lock the same with the end slots out of or in registration as desired.

1,875,979. ENVELOPING CIGAR. ROBERT J. BEUTEL, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Mar. 1, 1930. Serial No. 432,508. 18 Claims. (Cl. 93—7.)

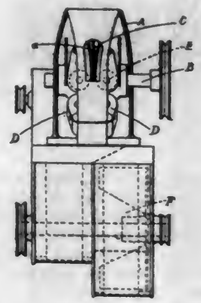
1. The combination with devices for supporting an elongated article encircled by a wrapper which overhangs

one of its ends, of means having tucker elements movable into interfitting relationship about the axis of the article for tucking in and creasing the overhanging material to



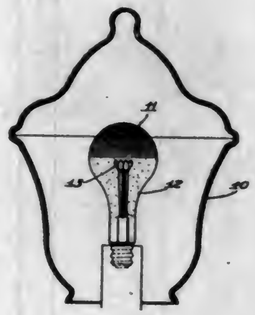
form it into an X cross-section, and mechanism for flattening and folding transversely the end portion of the tucked material.

1,875,980. MACHINE FOR PLUCKING BIRDS. GEORGE COWLEY BINGHAM, Maldon, England. Filed Dec. 15, 1928, Serial No. 326,216, and in Great Britain Nov. 23, 1927. 4 Claims. (Cl. 17—11.)



1. In a machine for plucking birds, a plurality of spaced co-axial discs, means for rotating said discs, means for tilting adjacent discs during the rotation thereof relatively to each other so as to cause the margins of those discs to approach each other in the direction of rotation of the discs to grip between them the feathers on the carcasses of birds and then, after a predetermined arcuate movement in such gripping position, to recede to release said feathers, a casing within which the discs are arranged, and suction means for extracting from said casing the feathers released by the discs.

1,875,981. INCANDESCENT ELECTRIC LAMP BULB. HENRY H. BLAU, Charleroi, Pa., assignor to Macbeth-Evans Glass Company, Charleroi, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,618. 5 Claims. (Cl. 176—16.)

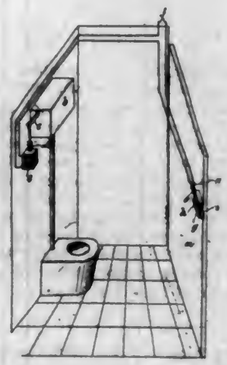


1. An incandescent electric lamp bulb integrally formed throughout of a chemically-homogeneous thermally-opacifiable glass, one portion of the bulb being thermally opacified to transmit diffused light and to reflect light through another portion of the bulb.

1,875,982. PREVENTION OF CORROSION. ERNEST R. BOLLER, Arden, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,381. 13 Claims. (Cl. 23—239.)

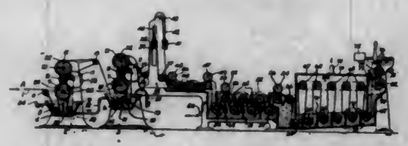
1. The process of preventing corrosion of ferrous materials subject to attack by urea synthesis melts which comprises adding to said melt a substance which, in solution therewith, produces negatively charged colloidal particles.

1,875,983. MEANS FOR ACTUATING A WATER FLUSHING DEVICE. AMÉDÉE LUCIEN ROGER BOURDET, Bordeaux, France. Filed Apr. 24, 1930, Serial No. 446,950, and in France Apr. 26, 1929. 4 Claims. (Cl. 4—249.)



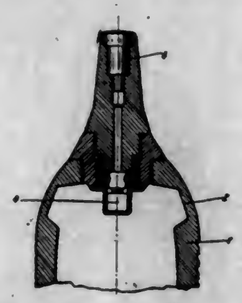
1. Means for automatically flushing the water in latrines when opening doors of same, comprising in combination a flushing device, an electromagnet, whose movable armature is positively connected with said flushing device, a switch electrically connected with said electromagnet, means for opening a latrine door and means for connecting said switch with said first-mentioned means.

1,875,984. MERCERIZING MACHINE. ARNOLD BOSSHARD, Arbon, Switzerland, assignor to Sir James Farmer Norton & Company Limited, Lancashire, England, a British Company. Original application filed June 28, 1926, Serial No. 119,137, and in Germany July 3, 1925. Divided and this application filed Jan. 24, 1928. Serial No. 249,052. 3 Claims. (Cl. 8—20.)



2. In a chainless mercerizing machine, in combination, a steeping tank, means for moving a web of fabric through said tank, a washing tank, means for moving the steeped fabric through the washing tank, means for passing washing fluid through the washing tank counter to the movement of the fabric, a plurality of breadth stretching rollers of the curved type in the washing tank for stretching the fabric in width, and means for maintaining the level of the washing fluid in the tank above said stretching rollers, so that the fabric will remain immersed while being stretched and washed.

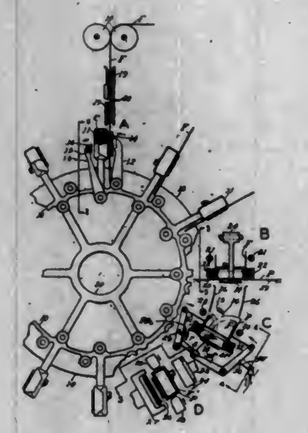
1,875,985. PROJECTILE. EDGAR WILLIAM BRANDT, Paris, France. Filed June 17, 1930, Serial No. 461,793, and in France June 20, 1929. 6 Claims. (Cl. 102—29.)



1. A harmless practice projectile comprising a heavy externally cylindrical body portion and an ogival nose at the front end thereof, a fuse carried by said nose having a detonator of limited charge insufficient to disrupt or bring said body to a standstill, the nose portion of the body being cut away opposite the detonator so that upon the detonation only parts of the ogival nose and fuse may be detached from said body portion and projected forwardly in a cone of small apex angle upon removal and said body portion continues forward after the detonation so that no parts of the projectile are thrown backward or laterally in event of a detonation adjacent the projecting weapon.

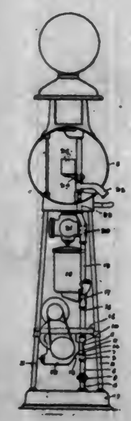
1,875,986. FOLDING MECHANISM FOR PACKAGING MACHINES. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 5, 1930. Serial No. 426,106. 16 Claims. (Cl. 93—44.)

1. The method of forming a container which consists in providing a mandrel of the shape of the container to be made, partially wrapping a first sheet in trough formation about the front and sides and overhanging an end of said mandrel, then wrapping a second sheet in trough formation about the front and sides of said mandrel with one side flap thereof projecting beyond the adjacent flap of



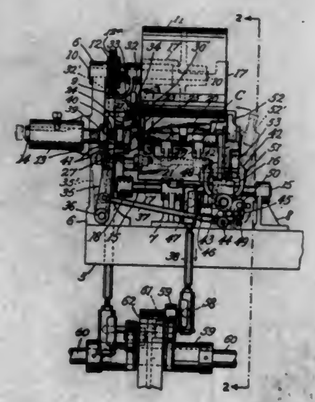
the first sheet, folding as a unit the other side flaps of the first and second sheets, thereafter folding as a unit the projecting side flap and the adjacent first sheet flap so as to hide the seam of the first sheet, and folding the overhanging end flaps to close the container end.

1,875,987. FLUID DISPENSING DEVICE. WILLIAM H. D. BROUSE, Toronto, Ontario, Canada, assignor to Service Station Equipment Co. Limited, Toronto, Canada. Filed July 17, 1931. Serial No. 551,415. 4 Claims. (Cl. 221—95.)



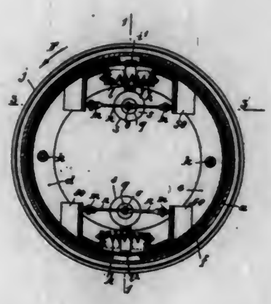
1. In a fluid dispensing device, a rigid tubular upright having a plurality of mounting surfaces adapted to support mechanisms through which the fluid travels, said tubular upright having bye-passing passages opening through said mounting surfaces, and fluid controlling mechanisms supported from said surfaces and having inlet and discharge openings communicating with said bye-passing passages.

1,875,988. CIGAR LOCATOR AND TRIMMER. HJALMAR E. CARLSON, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Sept. 26, 1931. Serial No. 565,376. 7 Claims. (Cl. 131—37.)



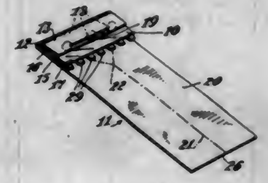
1. In a cigar machine, the combination with cigar supporting devices permitting axial movement of the cigar, of a locator having an aperture therein and forming a ledger plate, means for giving said locator an axial movement toward the cigar to a predetermined position to cause said aperture to engage and locate the cigar and mechanism coacting with said ledger plate for trimming the end of the located cigar whereby corresponding ends of the cigars are trimmed to a predetermined size.

1,875,989. BRAKE SYSTEM. MAURICE CHARLES, Courbevoie, France. Filed Mar. 2, 1929, Serial No. 344,004, and in France Nov. 16, 1928. 9 Claims. (Cl. 188—152.)



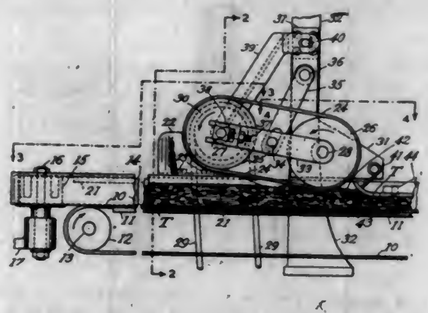
1. A brake assembly comprising a brake drum having cylindrical and annular internal braking surfaces, a pair of brake shoes mounted inside said brake drum and having cylindrical and annular surfaces adapted to coact with those of the brake drum, said shoes being displaceable toward and away from one another and lying in substantially the same plane, deformable means connected to and extending between said brake shoes, said deformable means having a greater length than the maximum possible distance between said shoes when mounted inside the drum, and means for exerting pressure on said deformable means intermediate the extremities thereof in a direction forming an angle with the plane in which the brake shoes lie, whereby said shoes are successively forced outwardly in contact with the cylindrical frictional surfaces of the drum and then laterally into contact with the annular frictional surfaces of the latter.

1,875,990. SAFETY RAZOR. BURTON CHRISTMAS, Pittsburgh, Pa. Filed Sept. 15, 1931. Serial No. 562,850. 10 Claims. (Cl. 30—12.)



1. A safety razor including a blade having a cutting edge, a sheet of flexible material folded at one end to pass around the blade and terminate near the cutting edge and extended at the other end to form a handle, a further extension of the material forming a flap folding at will down over the blade to cover the cutting edge, and a crease in the extension so that the extension will fold along the crease to form a reasonably stiff handle.

1,875,991. CIGAR MACHINE FEEDING CHANNEL. SIGURD CLAUSEN, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Aug. 21, 1931. Serial No. 558,552. 5 Claims. (Cl. 131—39.)

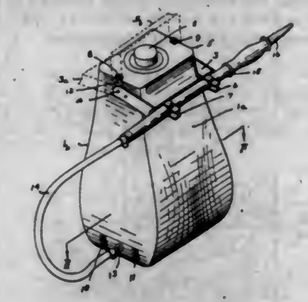


1. The combination with a plurality of travelling belts arranged to form a tobacco feeding channel, of stationary ledges projecting into said channel along the sides thereof for holding down the edges of tobacco leaves in said channel, a compactor adapted to compress the tobacco in said channel, an inclined travelling belt adapted to lay down any tobacco leaves upstanding from the tobacco between said ledges and compactor, plates overlying said ledges and adapted to guide the tobacco leaves which may overhang said ledges under said inclined belt, and a stripper having one end engaging said inclined belt.

1,875,992. PORTABLE FIRE EXTINGUISHER AND SPRAYER. CURTIS T. CLIFFORD, San Francisco, Calif. Filed Mar. 18, 1932. Serial No. 599,707. 3 Claims. (Cl. 299—97.)

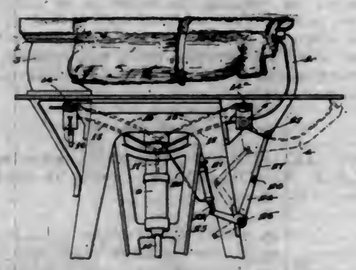
1. A portable fire extinguisher and sprayer comprising a tank having opposite sides each shaped to fit the back

of an operator; a flexible hose attached to said tank; force pump means having one end connected to said hose; a



bail pivoted to the upper portion of and adapted to swing to either side of said tank; spring clip means fixed to said bail and adapted to frictionally grip said pump means.

1,875,993. MEANS FOR SUPPORTING THE OVERHANGING ENDS OF THE BUCKS OF PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 3, 1928. Serial No. 274,928. 7 Claims. (Cl. 68—9.)

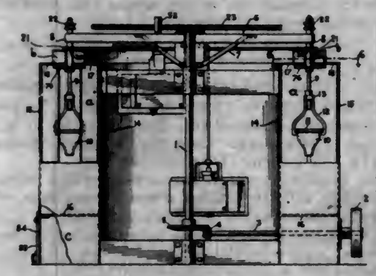


1. A garment pressing machine including in combination, a frame, a buck, a head movable toward and from the buck, means for supporting one end of the buck on the frame, a brace member movable into and out of position to support the other end of the buck, means for actuating the head, and additional means for actuating said brace member in synchronism with the head.

7. A garment or ironing press, comprising in combination, a frame, a table carried on the frame, a pressing buck mounted on the frame above the table and having an unsupported work-receiving portion, a pressing head coacting with the buck, actuating mechanism carried by the frame and operatively connected with the press head to open and close the press, a retractable buck supporting brace movably carried on the frame under the table and adapted to move up and down in relation to the table; and an operating connection between the actuating mechanism and the supporting brace to simultaneously move said brace into engagement with the unsupported work-receiving portion of the buck, simultaneously with the closing of the press, and lower said brace below the table out of the way as the press opens.

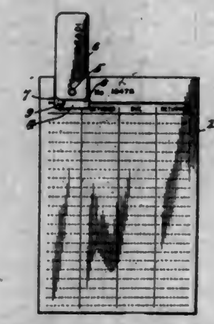
1,875,994. SAND BLASTING MACHINE. IRVIN W. DAVIS, South Milwaukee, Wis. Filed Oct. 30, 1925. Serial No. 65,718. 17 Claims. (Cl. 51—15.)

10. In a sand blast machine, the combination of a work holder, a movable sand blast nozzle, said work holder being bodily movable past said nozzle, means for the simultaneous movement of said work holder and nozzle, and



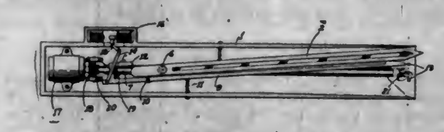
means restraining said nozzle for movement such that the blast therefrom follows the movement of said work holder over a portion of its path.

1,875,995. REFERENCE CARD. JOSEPH J. DICKMAN and GEORGE I. LEHMAN, New York, N. Y., assignors to Library Efficiency Corporation, New York, N. Y. Filed Aug. 5, 1927. Serial No. 210,840. 4 Claims. (Cl. 101—369.)



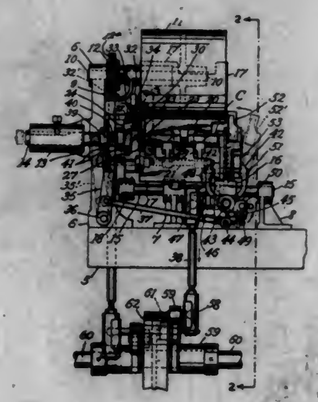
1. In combination with a card having upon its obverse surface an identification number, a plate applied to the card and having a pivot stud and a stop stud spaced from the pivot stud, a second plate pivotally mounted upon the pivot stud of the first-mentioned plate and having upon its one surface an identification number corresponding with that of the identification number of the card, the second-mentioned plate being adapted to swing over the identification number of the card, one edge of said second-mentioned plate being adapted to abut said stop stud to limit the pivotal movement of said second plate in both directions, as and for the purposes described.

1,875,996. DIRECTION SIGNAL FOR MOTOR VEHICLES. RICHARD H. DODD and LEE R. BURROW, Stockton, Calif. Filed July 13, 1931. Serial No. 550,473. 7 Claims. (Cl. 177—327.)



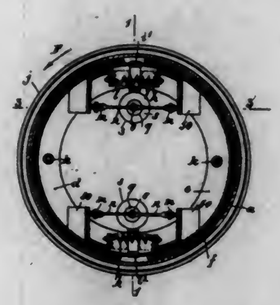
1. A direction signal comprising a horizontal casing, a signal arm extending lengthwise of and normally disposed within the casing, means to extend the arm from the

1,875,988. CIGAR LOCATOR AND TRIMMER. HJALMAR E. CARLSON, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Sept. 26, 1931. Serial No. 565,376. 7 Claims. (Cl. 131—37.)



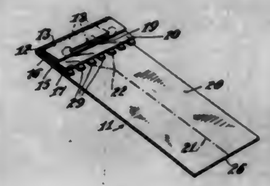
1. In a cigar machine, the combination with cigar supporting devices permitting axial movement of the cigar, of a locator having an aperture therein and forming a ledger plate, means for giving said locator an axial movement toward the cigar to a predetermined position to cause said aperture to engage and locate the cigar and mechanism coacting with said ledger plate for trimming the end of the located cigar whereby corresponding ends of the cigars are trimmed to a predetermined size.

1,875,989. BRAKE SYSTEM. MAURICE CHARLES, Courbevoie, France. Filed Mar. 2, 1929, Serial No. 344,004, and in France Nov. 16, 1928. 9 Claims. (Cl. 188—152.)



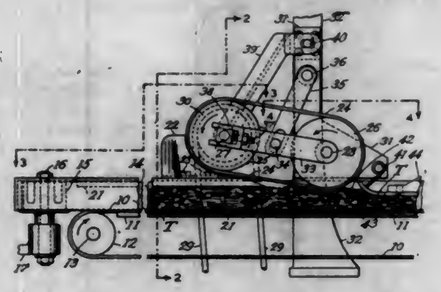
1. A brake assembly comprising a brake drum having cylindrical and annular internal braking surfaces, a pair of brake shoes mounted inside said brake drum and having cylindrical and annular surfaces adapted to coact with those of the brake drum, said shoes being displaceable toward and away from one another and lying in substantially the same plane, deformable means connected to and extending between said brake shoes, said deformable means having a greater length than the maximum possible distance between said shoes when mounted inside the drum, and means for exerting pressure on said deformable means intermediate the extremities thereof in a direction forming an angle with the plane in which the brake shoes lie, whereby said shoes are successively forced outwardly in contact with the cylindrical frictional surfaces of the drum and then laterally into contact with the annular frictional surfaces of the latter.

1,875,990. SAFETY RAZOR. BURTON CHRISTMAS, Pittsburgh, Pa. Filed Sept. 15, 1931. Serial No. 562,850. 10 Claims. (Cl. 30—12.)



1. A safety razor including a blade having a cutting edge, a sheet of flexible material folded at one end to pass around the blade and terminate near the cutting edge and extended at the other end to form a handle, a further extension of the material forming a flap folding at will down over the blade to cover the cutting edge, and a crease in the extension so that the extension will fold along the crease to form a reasonably stiff handle.

1,875,991. CIGAR MACHINE FEEDING CHANNEL. SIGURD CLAUSEN, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Aug. 21, 1931. Serial No. 558,552. 5 Claims. (Cl. 131—39.)

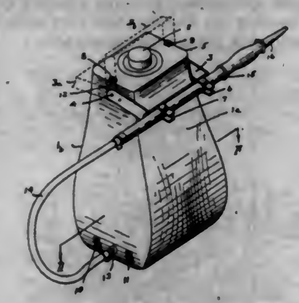


1. The combination with a plurality of travelling belts arranged to form a tobacco feeding channel, of stationary ledges projecting into said channel along the sides thereof for holding down the edges of tobacco leaves in said channel, a compactor adapted to compress the tobacco in said channel, an inclined travelling belt adapted to lay down any tobacco leaves upstanding from the tobacco between said ledges and compactor, plates overlying said ledges and adapted to guide the tobacco leaves which may overhang said ledges under said inclined belt, and a stripper having one end engaging said inclined belt.

1,875,992. PORTABLE FIRE EXTINGUISHER AND SPRAYER. CURTIS T. CLIFFORD, San Francisco, Calif. Filed Mar. 18, 1932. Serial No. 599,707. 3 Claims. (Cl. 299—97.)

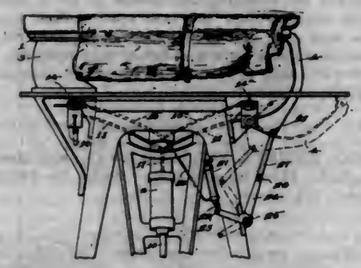
1. A portable fire extinguisher and sprayer comprising a tank having opposite sides each shaped to fit the back

of an operator; a flexible hose attached to said tank; force pump means having one end connected to said hose; a



bail pivoted to the upper portion of and adapted to swing to either side of said tank; spring clip means fixed to said bail and adapted to frictionally grip said pump means.

1,875,993. MEANS FOR SUPPORTING THE OVERHANGING ENDS OF THE BUCKS OF PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 3, 1928. Serial No. 274,928. 7 Claims. (Cl. 68—9.)

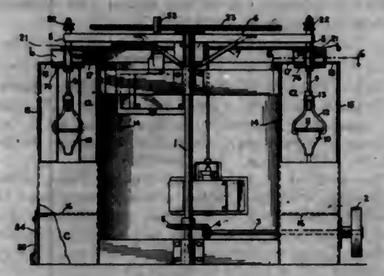


1. A garment pressing machine including in combination, a frame, a buck, a head movable toward and from the buck, means for supporting one end of the buck on the frame, a brace member movable into and out of position to support the other end of the buck, means for actuating the head, and additional means for actuating said brace member in synchronism with the head.

7. A garment or ironing press, comprising in combination, a frame, a table carried on the frame, a pressing buck mounted on the frame above the table and having an unsupported work-receiving portion, a pressing head coacting with the buck, actuating mechanism carried by the frame and operatively connected with the press head to open and close the press, a retractable buck supporting brace movably carried on the frame under the table and adapted to move up and down in relation to the table; and an operating connection between the actuating mechanism and the supporting brace to simultaneously move said brace into engagement with the unsupported work-receiving portion of the buck, simultaneously with the closing of the press, and lower said brace below the table out of the way as the press opens.

1,875,994. SAND BLASTING MACHINE. IRVIN W. DAVIS, South Milwaukee, Wis. Filed Oct. 30, 1925. Serial No. 65,718. 17 Claims. (Cl. 51—15.)

10. In a sand blast machine, the combination of a work holder, a movable sand blast nozzle, said work holder being bodily movable past said nozzle, means for the simultaneous movement of said work holder and nozzle, and



means restraining said nozzle for movement such that the blast therefrom follows the movement of said work holder over a portion of its path.

1,875,995. REFERENCE CARD. JOSEPH J. DICKMAN and GEORGE I. LEHMAN, New York, N. Y., assignors to Library Efficiency Corporation, New York, N. Y. Filed Aug. 5, 1927. Serial No. 210,840. 4 Claims. (Cl. 101—369.)



1. In combination with a card having upon its obverse surface an identification number, a plate applied to the card and having a pivot stud and a stop stud spaced from the pivot stud, a second plate pivotally mounted upon the pivot stud of the first-mentioned plate and having upon its one surface an identification number corresponding with that of the identification number of the card, the second-mentioned plate being adapted to swing over the identification number of the card, one edge of said second-mentioned plate being adapted to abut said stop stud to limit the pivotal movement of said second plate in both directions, as and for the purposes described.

1,875,996. DIRECTION SIGNAL FOR MOTOR VEHICLES. RICHARD H. DODD and LEE R. BURROW, Stockton, Calif. Filed July 13, 1931. Serial No. 550,473. 7 Claims. (Cl. 177—327.)



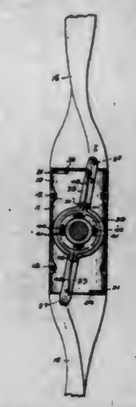
1. A direction signal comprising a horizontal casing, a signal arm extending lengthwise of and normally disposed within the casing, means to extend the arm from the

casing, means to initially shift the arm to horizontal, upwardly or downwardly angled positions relative to the casing, and selective means for each position to successively place the position controlling means and subsequently the extending means in operation.

1,875,997. VULCANIZATION OF RUBBER. LAURENCE A. EDLAND, Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 440,174. 11 Claims. (Cl. 18—53.)

1. The method of vulcanizing rubber which comprises incorporating with the rubber a small percentage of sulfur, a small percentage of tellurium not in excess of about 2% of the rubber, and a small percentage of an organic accelerator, and vulcanizing the resulting mixture at a temperature not in excess of about 160° C.

1,875,998. PROPELLER. WALTER W. EVERTS, San Antonio, Tex., assignor to Everts Propeller Company, a Corporation of Texas. Filed May 22, 1931. Serial No. 539,337. 8 Claims. (Cl. 170—162.)



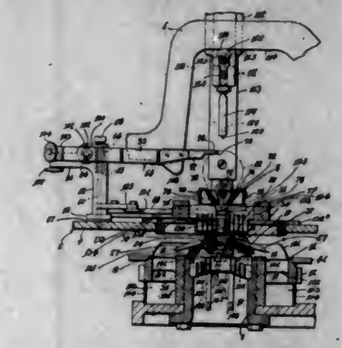
1. A propeller comprising a hub member, blades pivotally mounted upon the hub member and having axes upon which they turn with relation to the hub member, each blade having unbalanced areas upon opposite sides of its turning axis so that it is automatically turned upon such axis by fluid pressure acting upon such blade, a lever pivotally mounted exteriorly upon the hub member and connected with the blades so that they turn in unison, and resilient means to oppose the swinging movement of the lever upon its pivot in one direction.

1,875,999. HEAVY METAL NAPTHENATE. ROBERT MARIA GERLACH, Berlin-Halensee, Germany. Filed June 21, 1926, Serial No. 117,596, and in Germany Oct. 13, 1924. 3 Claims. (Cl. 260—11.)

3. A process of manufacturing water-insoluble complex metal compounds, consisting in mixing naphthenic acid at ordinary temperature with salts of metals of the second analytical group with weak acids and digesting the mixture until complete solution is obtained.

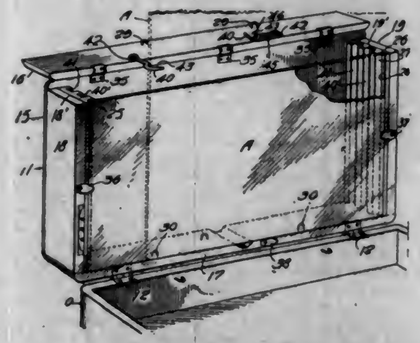
1,876,000. FRUIT PEELING MACHINE. HJALMAR GORANSON and DAVID GORANSON, San Jose, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of California. Filed Feb. 23, 1927. Serial No. 170,126. 39 Claims. (Cl. 146—37.)

1. In a fruit peeling machine, the combination of peeling mechanism, cutting means located to one side of the peeling mechanism for cutting off the end of the fruit, a holding device for holding the fruit to present the same to the cutting means, a rotary table supporting the peeling mechanism, and automatic means actuated as the table rotates for moving the holding device to bring the fruit into alinement with the peeling mechanism.



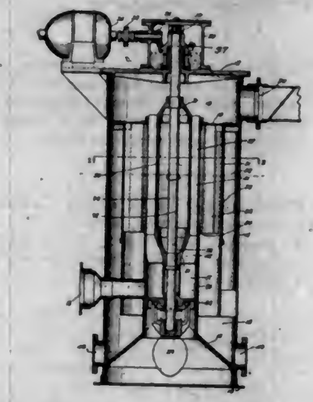
38. In a fruit peeling machine, the combination of a frame, peeling mechanism mounted in the frame to rotate around a vertical axis, a cover on the frame having a central opening in line with the said axis, a swinging fruit holder supported on the frame, having means for engaging the fruit to hold the same and capable of assuming a position at one side of the cover to receive the fruit, means for swinging the holder so as to bring the fruit into position over the said opening and into line with the said axis, and means for holding the fruit in a depressed position within and below said opening, and a pusher with means for controlling same to advance the fruit past the cutters.

1,876,001. ARTIST'S KIT. WALTER GRUMBACHER, New York, N. Y. Filed June 16, 1931. Serial No. 544,737. 8 Claims. (Cl. 41—4.)



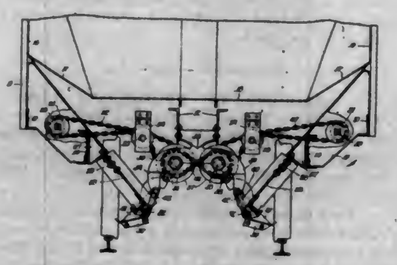
5. An artist kit comprising two sections forming a compartment therebetween and hinged to each other so as to bring one of the sections at an angle to the other, one of said sections comprising a bottom, a lower end wall, an upper end wall pivoted to said bottom, and two side walls, the outer surfaces of said side walls being of substantially in a common plane, and means for holding a paint board flush with the outer surfaces of said side walls, and in said common plane, said means comprising channels in said side walls extending for the full length of said side walls and open outwardly and closed at their upper ends when the pivoted upper end wall is in normal position and open when said upper end wall is swung out of its normal, and abutment means carried by said pivoted top wall, so arranged that when the upper end wall is moved about its pivot to its normal position, said abutment means will position themselves beneath a board received in said channels, and means on said lower end wall for buttressing the lower end of the paint board.

1,876,002. CENTRIFUGAL DRY-DUST ARRESTER. ROBERT B. HARPER, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed June 6, 1930. Serial No. 459,531. 10 Claims. (Cl. 183—77.)



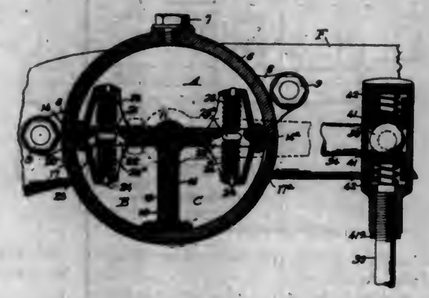
1. A centrifugal dry-dust arrester comprising, a casing having a gas inlet and outlet therefor; a rotor mounted in spaced relation to said casing for rotation therein and adapted for centrifuging a current of gas passing through said casing from the inlet to the outlet thereof; an apron mounted in spaced relation to and interposed between said rotor and casing, said apron being adapted to form a quiescent dust-collecting gas-space between said casing and said rotor and having openings therein for passage of centrifuged dust from said rotor to said dust-collecting gas-space; a series of stationary louvers arranged between said rotor and said apron and adapted for arresting dust from the centrifuged gas current and for passage of such dust to the openings in said apron; and means for rotating said rotor.

1,876,003. HOPPER CAR. HARRY S. HART, Chicago, Ill. Filed Jan. 13, 1930. Serial No. 420,324. 6 Claims. (Cl. 105—250.)



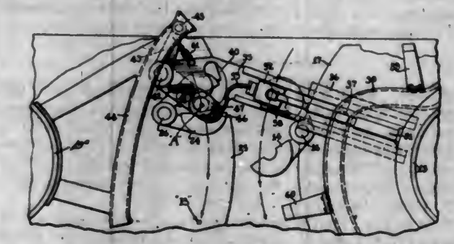
1. A railway car comprising a body construction and trucks and wheels therefor supporting said body at a predetermined distance above the wheel tracks, having doors for closing the hopper thereof pivotally mounted at the lower end of said hopper and of a length greater than the distance between the location of its pivot and the wheel tracks, a portion of said door being adapted to be moved relative to and simultaneously with the opening of the door proper to provide clearance for the complete opening of said door.

1,876,004. SNUBBER OR SHOCK ABSORBER. JOSEF HOFMANN, Merion, Pa. Filed Feb. 14, 1929. Serial No. 339,845. 3 Claims. (Cl. 188—89.)



1. In a snubber, a casing, a by-pass for the casing, an abutment in the casing, a piston member, said abutment and member dividing the casing into chambers and said member controlling the by-pass and provided with a port therethrough, a valve arranged to pass entirely through the port and means to mount said valve to cause different throttling pressures in one direction of movement of the member than in the other direction.

1,876,005. GLASSWARE FORMING MACHINE. JOHN RALPH HOOE and VICTOR E. HOFMANN, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,555. 12 Claims. (Cl. 49—9.)

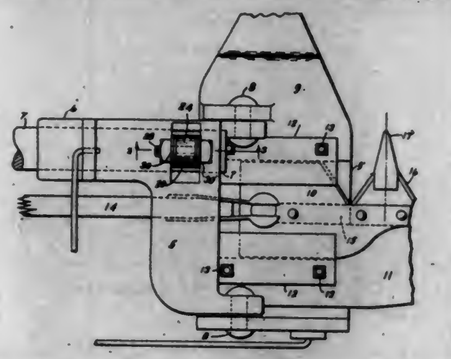


1. In a machine for forming glassware, the combination of two continuously rotating tables, a blank mold on one table, a finishing mold on the other table, means individual to the blank mold for transferring blanks from the blank mold to the finishing mold, said means comprising a pair of tongs adapted to support a blank, means on the blank mold table for projecting the tongs radially of said table to a position over and in register with a finishing mold, means for causing the tongs to travel in a horizontal plane relative to the projecting means and thereby follow the path of the finishing mold, means to close the finishing mold about the blank, and means operating to release the blank from the tongs after the finishing mold has closed.

1,876,006. MOWER. EDWIN F. HUDDLE, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,847. 5 Claims. (Cl. 56—288.)

1. In a mower having a shoe support, a shaft upon which said support is mounted, a shoe connected to the

support, reciprocating cutting devices mounted upon the shoe, means for actuating the devices, means for adjusting the support in relation to the cutting devices comprising a



stop insertable through the support and into the shaft said stop having shims at its sides, and means for detachably securing the stop and shims together.

1,876,007. PROCESS FOR THE HYDROGENATION OF NAPHTHALENE. RICHARD HUPE, Konstanz, Germany, assignor, by mesne assignments, to Deutsche Gold- & Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 6, 1931, Serial No. 567,314, and in Germany Oct. 7, 1930. 11 Claims. (Cl. 260—168.)

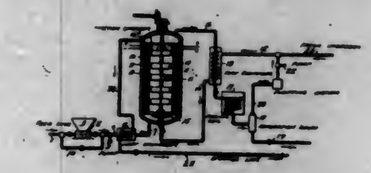
1. A process for the hydrogenation of naphthalene which consists in heating the naphthalene until a definite fall in temperature takes place in the presence of an excess of hydrogen and a catalyst containing a metal selected from the group consisting of iron, nickel and cobalt and an amount of hydrogen sulphide such as to increase the activity of said metal-containing catalyst, maintaining the pressure in the reaction space at a value above 50 atmospheres, and then further heating the reaction mixture at a temperature above the point of fall in temperature.

1,876,008. PROCESS FOR THE HYDROGENATION OF NAPHTHALENE. RICHARD HUPE, Konstanz, Germany, assignor, by mesne assignments, to Deutsche Gold- & Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 6, 1931, Serial No. 567,315, and in Germany Oct. 7, 1930. 10 Claims. (Cl. 260—168.)

1. A process for the hydrogenation of naphthalene which consists in heating the naphthalene at a temperature above 380 degrees centigrade and below the point at which a sudden fall in temperature takes place in the presence of an excess of hydrogen and a catalyst containing a metal selected from the group consisting of iron, nickel and cobalt and an amount of hydrogen sulphide such as to increase the activity of said metal-containing catalyst, and maintaining the pressure in the reaction space at a value above 50 atmospheres.

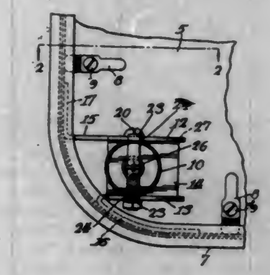
1,876,009. CONVERSION OF SOLID FUELS AND PRODUCTS DERIVED THEREFROM OR OTHER CARBONACEOUS MATERIALS INTO VALUABLE PRODUCTS. CARL KRAUCH and MATHIAS PIER, Ludwigshafen-on-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Original application filed Feb. 6, 1926, Serial No. 86,646, and in Germany Sept. 10, 1925. Divided and this application filed Feb. 29, 1928. Serial No. 258,144. 19 Claims. (Cl. 196—53.)

1. The process of converting high boiling carbonaceous substances, such as solid and liquid fuels, distillation and extraction products thereof into valuable low boiling liquids, by destructive hydrogenation, which comprises treating them with added hydrogen at a pressure of at least 20 atmospheres and at a temperature of between 300° and



700° C. at which they will undergo conversion to a substantial extent into low boiling hydrocarbons of gasoline character in the presence of a catalyst comprising at least one of the substances in the solid state selected from the group consisting of compounds of silver and copper.

1,876,010. FOLDING LEG FOR CARD TABLES AND THE LIKE. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,290. 11 Claims. (Cl. 45—11.)

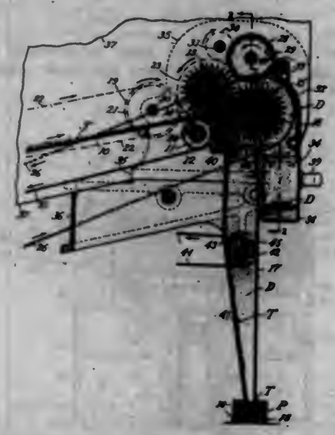


1. In a folding table of the class described, the combination of a table top including a depending side frame, a leg for supporting said top, means connecting said leg and top, said leg being movable about said supporting means from extended position to folded position adjacent the under side of the top, said means including a one piece, substantially U-shaped bracket fixed to said top and having the web of said U-substantially parallel with the table top and wing portions extending laterally from the depending legs of said U and secured to said depending side frame, said leg being pivotally mounted between the sides of said U-shaped bracket, and means for locking said leg in extended position.

1,876,011. PROCESS OF PRODUCING AMMONIUM PHOSPHATE. MARKUS LARSSON, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Filed Oct. 1, 1930, Serial No. 485,826, and in Sweden Oct. 5, 1929. 1 Claim. (Cl. 23—107.)

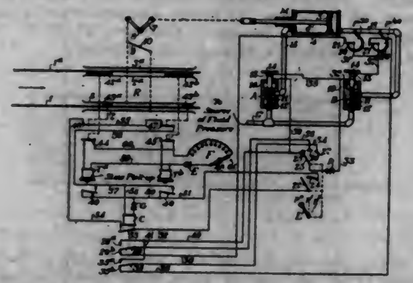
In a method of producing ammonium phosphate in which phosphate rock is leached with sulphuric acid containing some ammonium sulphate and the phosphoric acid solution produced is neutralized with ammonia to form ammonium phosphate, the steps which comprises crystallizing out substantially pure ammonium phosphate from the neutralized solution by evaporation and cooling and adding the remaining mother liquor consisting chiefly of the saturated solution of ammonium sulphate to the leaching acid in continued performance of the leaching process.

1,876,012. DUST-DISTRIBUTOR FOR CIGARETTE MACHINE TOBACCO FEEDS. JAMES W. LEARY, Bloomfield, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Sept. 18, 1931. Serial No. 563,631. 5 Claims. (Cl. 131—30.)



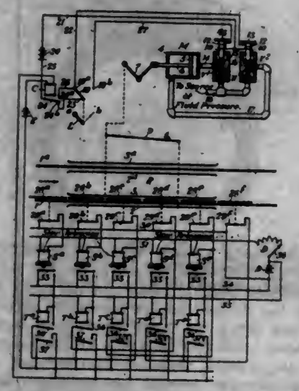
1. The combination with the hopper of a cigarette machine feed, of a rotating feed drum mounted in said hopper, a delivery chute arranged to deliver tobacco to the cigarette wrapper strip, a rotating picker roller for removing the tobacco from said feed drum and throwing it into said chute, a rotating distributing roller disposed adjacent said picker roller to carry away the dust thrown on it by said picker roller, means on the front wall of said hopper for scraping the dust from said distributing roller, and a removable dust receptacle arranged to catch the dust scraped from said distributing roller.

1,876,013. RAILWAY BRAKING APPARATUS. JOHN W. LIVINGSTON, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 2, 1931. Serial No. 560,717. 7 Claims. (Cl. 303—20.)



1. Railway braking apparatus comprising a braking bar located in the trackway adjacent a track rail, a first relay, means controlled by said first relay for controlling said braking bar, a plurality of other relays, means controlled by each of said other relays for controlling said first relay; a plurality of devices disposed in pairs along the trackway, the devices of each pair being so arranged that the first device will become operated each time a car wheel passes a first fixed point and will be restored to its normal condition when the car wheel passes a second fixed point located a measured distance in advance of said first fixed point and that the second device will become operated each time a car wheel passes a third point intermediate said first and second points and will be restored to its normal condition when the car wheel passes said second point, means controlled by said first device of each pair for controlling a different one of said other relays, and means controlled by all of said second devices for controlling said first relay.

1,876,014. RAILWAY CAR RETARDER. JOHN W. LIVINGSTON, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 2, 1931. Serial No. 560,718. 10 Claims. (Cl. 303—20.)



1. In combination, a stretch of railway track, a braking bar located adjacent one of the rails of said stretch and movable into engagement with a part of a car traversing said stretch for retarding the speed of the car, a series of contacts arranged to be successively operated by a car traversing said stretch, a series of timing relays one controlled by each contact of the series but the last, a series of locking relays one controlled by each of said timing relays and by a contact of the series located in advance of the contact which controls the associated timing relay, and means controlled by said locking relays for controlling said braking bar.

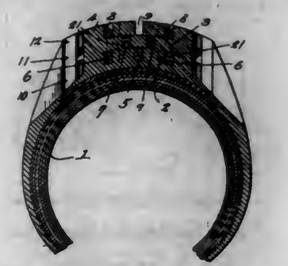
1,876,015. PROCESS OF GLAZING ARTIFICIAL TEETH. CHARLES LEON MORRIS, Columbus, Ohio, assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation. Filed Feb. 28, 1929. Serial No. 343,504. 1 Claim. (Cl. 25—157.)



The method of glazing artificial teeth in an electrical resistance furnace employing a resistor exposed in the furnace chamber so as to protect the tooth against spalling from the resistor and from injury by atmospheric impurities or too sudden cooling after glazing, which method consists in enclosing the tooth in a covered dust-proof receptacle of refractory material sufficiently thin to allow ready passage of heat therethrough and sufficiently refractory to withstand the operating temperature of the furnace; disposing the receptacle in the furnace chamber and subjecting it therein while the tooth is excluded thereby from direct exposure to the atmosphere of said

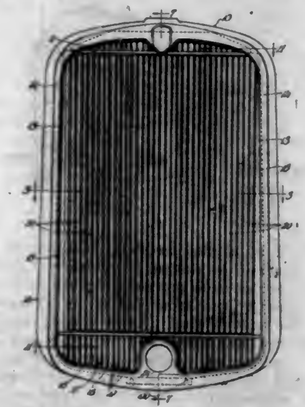
chamber to the action of heat of sufficient temperature and for a sufficient period of time to glaze the tooth, and removing the receptacle from the furnace and allowing it to freely cool to the temperature of the air while the cover is applied so as to protect the tooth from exposure to the air while cooling.

1,876,016. AUTO TIRE. CHRISTIAN H. PEDERSON, Pittsburgh, Pa. Filed Apr. 21, 1932. Serial No. 606,730. 1 Claim. (Cl. 152—14.)



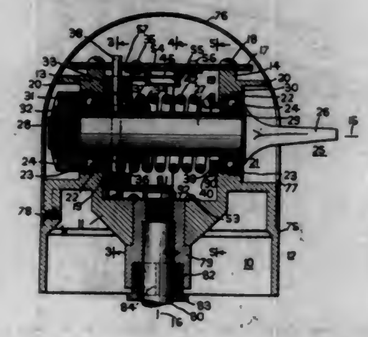
A tire comprising a body, an inner tread, an intermediate tread and an outer tread, the treads being secured together, the intermediate tread and the inner tread being disclosed as the treads that are outwardly thereof are successively worn down, the inner tread being secured to the body, the inner tread having a first circumferential groove located in the median plane of the tire and second circumferential grooves located on opposite sides of the first-circumferential groove, the intermediate tread having transversely spaced circumferential grooves located on opposite sides of the median plane of the tire and between the first and second circumferential grooves of the inner tread, the outer tread having circumferential grooves duplicating the circumferential grooves of the inner tread, all of the treads being provided in their outer edges with grooves comprising parts which are alined in all of the treads, the last-specified grooves of the inner and outer treads having heads including transverse parts, circumferentially extended parts which are alined in all of the treads, the transverse parts of the grooves of the intermediate tread crossing the corresponding parts of the grooves of the inner and outer treads.

1,876,017. RADIATOR SHUTTER UNIT. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 436,940. 4 Claims. (Cl. 189—62.)



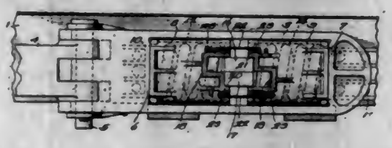
4. A radiator shutter assembly, comprising a radiator shell, a radiator core carried by said shell, a shutter unit carried by said core, said shutter unit having a plurality of outwardly extending resilient false shutter plates engaging the inner edge of said shell, a plurality of shutters carried by said shutter unit, and means for adjustably securing said shutter plates to the lower part of said shell and the upper part of said radiator.

1,876,018. WIND MOTOR. JOHN A. PINAUD, Atlantic Highlands, N. J. Filed Dec. 23, 1929. Serial No. 416,006. 9 Claims. (Cl. 170—68.)



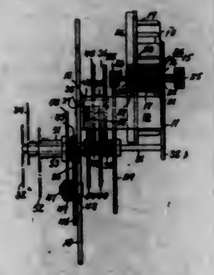
1. An adjustable device comprising a hub member having a main axis, a transverse member having a transverse axis, means for pivotally mounting said transverse member on said hub member so that the transverse member is pivotable about its own axis, actuating means responsive to the speed of rotation about said main axis for changing the angular position of said transverse member about its own axis, restoring means opposing said actuating means, said actuating means comprising a concentric cylindrical drum on said transverse member, a thin flat strap freely pivoted to said drum and wrapping around said drum, and a governing weight at the end of said strap, whereby said weight is free to seek a true radial position with respect to said main axis.

1,876,019. DRAFT GEAR. HERMAN C. PRIEBE, Blue Island, Ill.; Thomas H. Taylor administrator of said Herman C. Priebe, deceased. Filed Oct. 23, 1928. Serial No. 314,359. 1 Claim. (Cl. 213—48.)



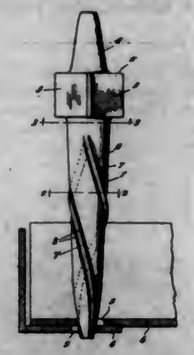
A draft gear comprising two aligned spring barrels movable along the line of draft, each barrel having a closed end and an open end, said open end having lateral enlargements thereof providing recesses communicating with the barrel bore, there being one each of two pair of recesses in each lateral enlargement, one pair of said recesses extending deeper longitudinally of the gear than the other pair of relatively shallow recesses, said barrels having their open ends adjacent with the pair of shallow recesses of one barrel opposing the deeper recesses of the other barrel; a relatively thick rectangular bar seated in the shallow recesses of each barrel and movable in the deeper recesses of the other barrel, said bars extending in the same direction across the line of draft and being in sliding lapping relation longitudinally of the gear axis; and a coil spring housed in each barrel and arranged along the line of draft, each said spring pressing at one end upon the closed end of the barrel which houses it and at the other end pressing upon the other barrel through the intermediation of one of said bars.

1,876,020. ELECTRIC CLOCK. JAMES R. PUTNAM, Waterbury, Conn., assignor to Waterbury Clock Company, Waterbury, Conn., a Corporation. Filed Sept. 26, 1930. Serial No. 484,477. 5 Claims. (Cl. 58—26.)



1. An electric clock-movement having a front movement-plate, a one-piece motor-support removably secured directly thereto, a motor irremovably attached to the said motor-support, forming a unit therewith and having its bearings located within the core of its stator; and a movement-train geared into the rotor of the motor.

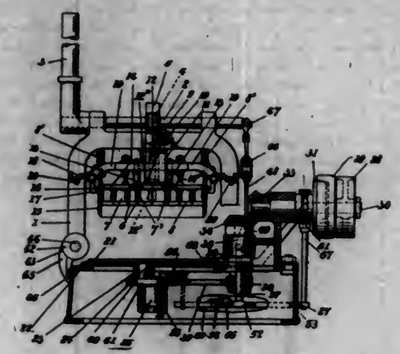
1,876,021. DRIFT PIN. MICHAEL F. QUIGLEY, Port Richmond, N. Y. Filed Aug. 28, 1929. Serial No. 389,025. 8 Claims. (Cl. 81—3.)



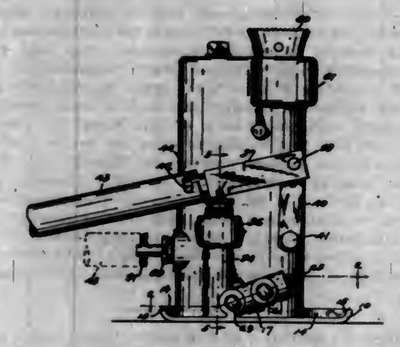
1. A tool for alining holes in metal units comprising a tapered shank having spiral ribs thereon adapted to bite into the metal at the walls of the holes when the tool is driven therein and prevent said tool from being forcibly ejected therefrom.

1,876,022. DOUGH DIVIDING AND KNEADING MACHINE. GOTTFRIED RAUSCH, Ammendorf, near Halle-on-Saale, Germany. Filed Sept. 21, 1929. Serial No. 394,238. 12 Claims. (Cl. 107—20.)

7. In a dough dividing and kneading machine, the combination with means for dividing the dough, of means for pressing the dough, a rotatable dough depositing plate for supporting and kneading the dough, a manually operable single lever connected only to said dividing means to move it to and from dough dividing position, normally operative means supported by said dividing means for moving said dough pressing means into operative position, a stationary wedge member for actuating said normally operative means to cause it to stop moving said dough pressing means, and means connected to and controlled from said lever for rotating said dough depositing plate, said dough dividing means including a transverse bar, a rack fixed to said bar and geared to said lever and dough dividing cutters fixed to said bar.



1,876,023. HYDRAULIC JACK. RAY P. ROSENBERRY, Cleveland, Ohio, assignor to The Silver King Hydraulic Jack Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 7, 1930. Serial No. 442,116. 2 Claims. (Cl. 188—9.)

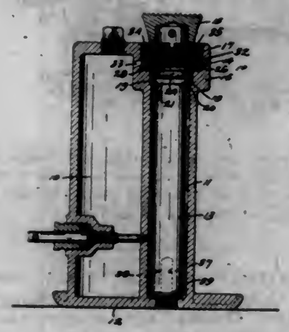


1. A hydraulic jack having a ram cylinder and a reservoir disposed in line and having a flat dividing wall common to both cylinder and reservoir, said cylinder having an unfinished inner surface; a closure for the upper portion of said ram cylinder; a cylindrical ram mounted in said ram cylinder and extending through said closure, said ram being disposed throughout its length in spaced relation with the walls of said cylinder; and means for withdrawing fluid from said reservoir and forcing the same into said ram cylinder entirely around said ram, for elevating said ram by displacement.

1,876,024. HYDRAULIC JACK. RAY P. ROSENBERRY, Cleveland, Ohio, assignor to The Silver King Hydraulic Jack Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 7, 1930. Serial No. 442,117. 2 Claims. (Cl. 188—9.)

1. A hydraulic jack, comprising: a reservoir; a ram cylinder having an internally screw threaded recess in the upper portion thereof forming a first shoulder, said

ram cylinder also having an outlet passage for establishing communication between said reservoir and said recess, and having a second shoulder disposed therein below said first shoulder; a ram disposed within said ram cylinder an having a radially extending passage formed in the lower portion thereof ommunicating with the ram cylinder beneath said ram; an annular member surrounding said ram in spaced relation therewith in seating engagement with said second shoulder and having an inwardly and downwardly inclined upper surface; a first packing member surrounding said ram and having an annular flange disposed in seating engagement with said first shoulder and with an inwardly and downwardly inclined lower surface for operative engagement with the correspondingly inclined upper surface of said annular member; a



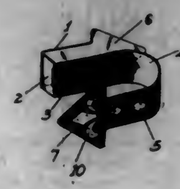
first washer surrounding said ram in threaded engagement with the threads of said recess for maintaining said packing member in sealing engagement with said ram, said washer having a beveled inner circumference and radially extending grooves in the upper face thereof; and a second washer surrounding said ram in screw threaded engagement with the threads of said recess for engagement with said first washer to close the beveled portion thereof and said grooves, and forming therewith an inner annular passage intersected by radially extending passages, the passage in the lower portion of said ram being adapted to communicate with said annular passage and with said radial passages when said ram reaches its upper limit of travel to permit the escape of fluid from said ram cylinder to said reservoir through said outlet passage.

1,876,025. DRYING APPARATUS AND PROCESS. WEBSTER I. SALLEE, Rocky River, Ohio. Filed Dec. 3, 1929. Serial No. 411,279. 5 Claims. (Cl. 34—6.)



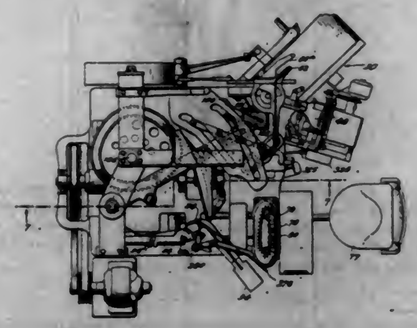
1. A drier comprising an elongated drum, a flue within and spaced from the walls of said drum, means to tumble materials to be dried progressively through said drum and onto said flue, a combustion chamber arranged to discharge into said flue at one end thereof, said chamber being coaxial with said flue, a nozzle at the discharge end of said chamber for directing products of combustion from said chamber into said flue, said nozzle projecting into said flue, the end of said flue being flared around said nozzle and forming an annular passage between said nozzle and said flue, and said combustion chamber being movable toward and away from said flue whereby the size of said annular passage and the amount of air introduced therethrough is controlled, baffle means at the discharge end of the flue to return the products of combustion back between the flue and drum, and means to conduct material to be dried against the flue within said drum at the end adjacent to said combustion chamber.

1,876,026. DETACHABLE TIE-BACK FOR DRAPES AND CURTAINS. CLARENCE E. SCHINKAL, Los Angeles, Calif. Filed Aug. 25, 1930. Serial No. 477,640. 2 Claims. (Cl. 156—83.)



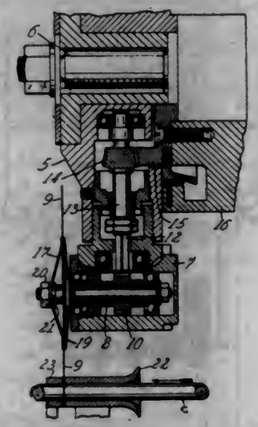
1. A curtain holder comprising a relatively narrow flat strip having its ends bent into reverse hook portions one end being adapted to be inserted between a window casing and wall and such end terminating in an arrow head having relatively wide barbs, whereby the point of the arrow head will permit ready insertion of the same back of the casing and the projecting barbs of the arrow will maintain the holder against lateral canting action.

1,876,027. CIGAR WRAPPING MACHINE. WALTER H. SCHUSSLER, Philadelphia, Pa., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed July 7, 1930. Serial No. 466,192. 25 Claims. (Cl. 131—5.)
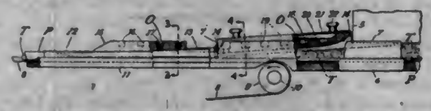


1. In combination with a wrapping machine having a plurality of stations, of a cigar transfer mechanism comprising two cigar engaging fingers, mechanism for moving said fingers over said stations in predetermined sequence, a relatively fixed finger cooperating with said first mentioned fingers and located therebetween, and means for separating each of said first mentioned fingers from said third finger at predetermined instants.

1,876,028. SAFETY DEVICE FOR CIGARETTE CUTOFFS. ELBERON D. SMITH, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Aug. 21, 1931. Serial No. 558,546. 5 Claims. (Cl. 131—37.)



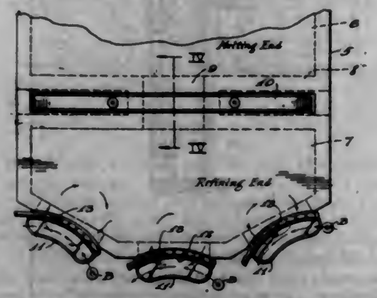
1. A cigarette cutoff having in combination a disk blade, a rotatable mount for supporting and driving said blade, a gear drive for positively rotating said mount, and means on said mount for frictionally gripping said disk to permit slipping of the blade without injuring the gear drive when the blade meets an abnormal obstrution.

1,876,029. CIGARETTE ROD FORMING MECHANISM. ELBERON D. SMITH, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New York. Filed Nov. 11, 1931. Serial No. 574,415. 13 Claims. (Cl. 131—43.)



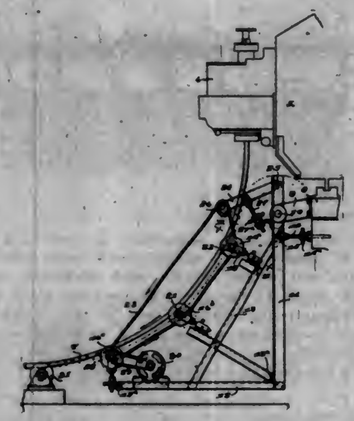
1. In a continuous rod cigarette machine, the combination with rod forming mechanism having a stationary forming surface acting on a moving stream of tobacco, of means for feeding a liquid in small amounts to the surface while the same is in operating position to facilitate passage of the tobacco.

1,876,030. GLASS FURNACE. LEONARD D. SOUBIER and JOHN E. MCLAUGHLIN, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 4, 1929. Serial No. 397,174. 4 Claims. (Cl. 49—56.)



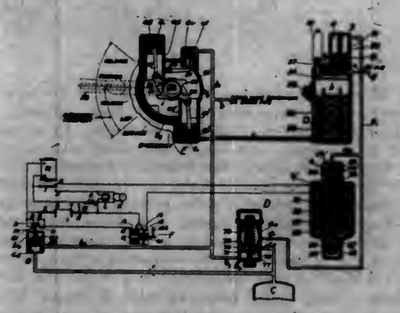
1. In combination, a tank to contain molten glass, one wall of said tank having a lateral opening therethrough, a lateral extension on said wall arranged to receive glass from the supply body and provide an exposed gathering area, a jack-arch arranged above the extension and protruding forward beyond said wall and having a battery of mixing chambers therein arranged at short intervals along the jack-arch, said chambers opening through the top surface of said protruding portion of the jack-arch and extending downward therethrough to the lower side of the jack-arch, and fuel injectors arranged over the jack-arch to direct fuel into said chambers.

1,876,031. APPARATUS FOR DRAWING GLASS TUBINGS. LEONARD D. SOUBIER, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Mar. 28, 1931. Serial No. 525,907. 10 Claims. (Cl. 49—17.1.)



1. The combination of a glass tube former, a drawing apparatus arranged to apply a drawing tension to tubing produced by the former, a frame pivotally supported beneath said tube former and in close proximity thereto, means for adjustably positioning said frame, a plurality of adjustable rollers mounted on the frame and adapted to in part control the direction of travel of the tube, and means carried by said frame for positively rotating said rollers.

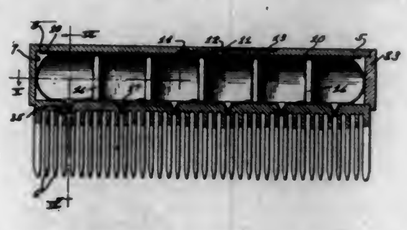
1,876,032. APPARATUS FOR CONTROLLING MOVEMENT OF VEHICLES ON RAILROADS. FRANK J. SPRAGUE, New York, N. Y., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 12, 1927. Serial No. 183,193. 31 Claims. (Cl. 246—63.)



1. In a train control system of the intermittent inductive type, the combination of vehicle-carried means and trackway devices, the vehicle-carried means comprising

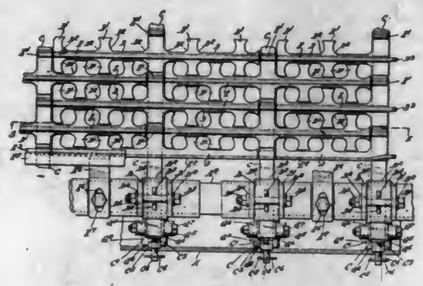
normally inactive brake-setting means which, when active, cause an automatic application of the brakes, actuation of the brake-setting means being initiated by an inductive impulse received from the track; an acknowledging device on the vehicle to prevent actuation of the brake-setting means on reception of the track impulse provided the device is operated prior to the actuation of the brake-setting means, the acknowledging device permitting restoration of the brake-setting means, after their actuation, only if a predetermined amount of braking has taken place.

1,876,033. FOUNTAIN COMB. ROSE W. STARR, Chicago, Ill. Filed May 18, 1932. Serial No. 611,954. 17 Claims. (Cl. 132—13.)



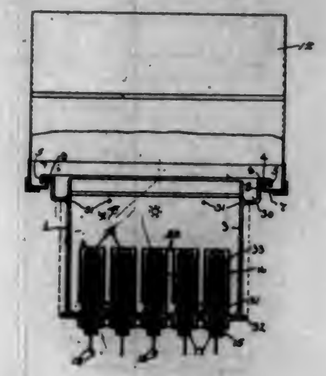
1. A fountain comb comprising a body and a plurality of longitudinally spaced teeth, said body having a longitudinal cavity therein, and apertures extending from the cavity to the spaces between the teeth, a multicell self-sustaining resilient sack in the cavity of the body and adapted to contain liquid to be fed to the hair being combed, and means on said sack for delivering liquid to the apertures between the teeth.

1,876,034. GRIZZLY BAR. LOREN G. SYMONS, Hollywood, Calif., assignor to Symons Brothers Development Company, Hollywood, Calif., a Corporation of Delaware. Filed Dec. 17, 1930. Serial No. 502,914. 8 Claims. (Cl. 209—396.)



1. In a separating bar, a longitudinally extending bar member, arms extending laterally from opposite sides of said bar, fingers laterally extending from opposite sides of the arms, and ridges upwardly extending along the tops of the arms, the tops of the ridges, and the upper faces of the arms, defining generally parallel planes, the arms along opposite sides of the bars being in line, the fingers of adjacent arms and of opposite sides of the same arm being aligned, and a terminal extension at each end of each said bar, extending outwardly beyond the junction of the outermost arm with the bar, the outermost arm being provided with a flange upwardly extending to a height somewhat greater than the height of the ridges upon the remaining arms, the terminal extensions extending upwardly above the normal plane of the tops of the fingers.

1,876,035. DISTILLING APPARATUS FOR USE IN RECLAIMING OILS. ALPHEUS H. TENNENT, Cleveland, Ohio, assignor to The Oil Conservation Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 8, 1928. Serial No. 311,045. 2 Claims. (Cl. 196—121.)



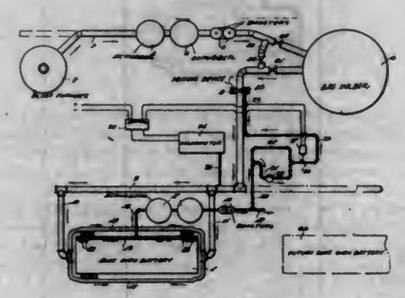
2. An evaporator for oils consisting of an open chamber having a horizontal top flange with a down-turned lip, a series of spaced cylindrical bosses formed integrally with said chamber and extending upwardly from the bottom, said bosses being provided near the bottom with a series of spaced radially extending lugs and having spacing lugs thereabove, heating elements mounted in said bosses, cylindrical tubes mounted around said bosses and spaced therefrom, said tubes resting on said bottom lugs and being held in spaced relation from said bosses by said other lugs, a condensate collecting member secured to the under side of said horizontal flange, and a condenser hood secured to said collecting member.

1,876,036. WINDOW SHADE FIXTURES. PETER B. THORNAS and EDWARD B. TAYLOR, Chicago, Ill., assignors to E. W. A. Rowles Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1931. Serial No. 526,870. 20 Claims. (Cl. 156—10.)



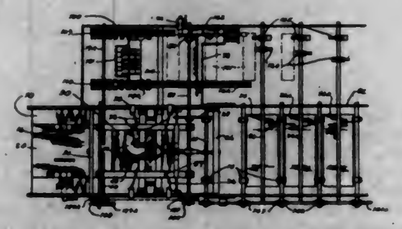
1. A window shade supporting means comprising a supporting panel adapted to extend transversely of a window, means for rotatably supporting a pair of window shades on the panel, brackets adapted to be mounted on the window frame at opposite sides of the window, means for detachably supporting the ends of the panel from the brackets, and means mounted on the panel and adapted to engage a fixed member for temporarily supporting the panel and parts carried thereby at one side of the window.

1,876,037. METHOD OF PROVIDING FUEL GAS FOR COKING RETORT OVENS. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Feb. 19, 1929. Serial No. 341,240. 8 Claims. (Cl. 48—180.)



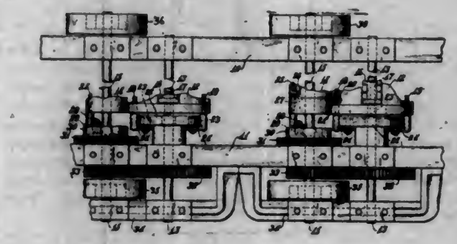
1. The method of providing fuel gas for coking retort ovens which comprises supplying blast-furnace gas of variable thermal value, mixing a relatively small amount of coke-oven gas with said blast-furnace gas to correct the thermal value of the latter when it falls below a predetermined value, measuring the thermal value of the gases so mixed, and then regulating the amount of coke-oven gas added to said blast-furnace gas in accordance with the measurement thus obtained to maintain the thermal value of the mixed gas substantially constant at approximately the maximum thermal value of the blast-furnace gas.

1,876,038. SORTER-COUNTER MACHINE. FERNAND RELISLE, Ottawa, Ontario, Canada. Filed Nov. 8, 1929. Serial No. 405,740. 15 Claims. (Cl. 209—72.)



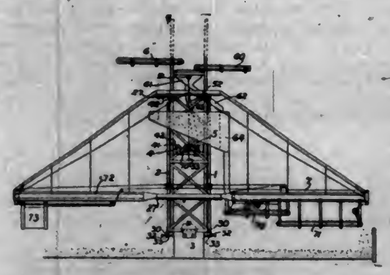
1. In a sorter-counter machine and the like, a card box for the punched cards, means forming a path for the cards from said box and operating to move the cards forwardly in said path, means operating to discharge the cards successively from said box into said path, means operating to momentarily stop a card in said path, a block formed with a cavity operatively connected to a source of a fluid under pressure and adapted to engage a card thereunder, a valve interposed between the source and said cavity, means associated with said valve operable to close and open the source to said cavity, locking means co-operating with said valve operating means operable to releasably lock said valve operating means when said valve is closed and card-operated means co-operating with said locking means operable to release the same as said block engages with the card.

1,876,039. COLLECTING AND FOLDING MECHANISM FOR PRINTING PRESSES. MARTIN W. BRUESHABER, River Forest, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1929. Serial No. 386,096. 7 Claims. (Cl. 270—61.)



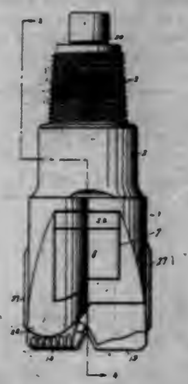
1. A collecting and folding mechanism for a printing press, comprising in combination oppositely disposed frame members, a folding cylinder journaled between said frame members, a cutting cylinder journaled between said frame members in operative relationship to said folding cylinder, and means serving to brace said cylinders against bowing outwardly away from each other between said frame members.

1,876,040. SELF-SUPPORTING DAM-BUILDING TOWER AND PROCESS. CASS A. BUDNIK, Rockport, Wash. Filed Sept. 4, 1929. Serial No. 390,232. 16 Claims. (Cl. 61—30.)



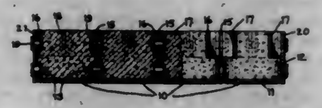
1. The process of placing concrete in dams or the like through the employment of two tower sections of such base area and height as to be self-supporting, said sections being telescoped and vertically movable relative to each other, which consists in casing a foundation block upon the substructure, raising one of said tower sections and supporting it in elevated position from said block, raising the other section and supporting it likewise in elevated position upon the same block, and supplying concrete to the elevated tower for local distribution, repeating the casting, raising and distributing operations until the dam has reached the required height.

1,876,041. DRILL. CLINTON H. M. BULL, Houston, Tex. Filed Dec. 11, 1928. Serial No. 325,299. 15 Claims. (Cl. 255—61.)
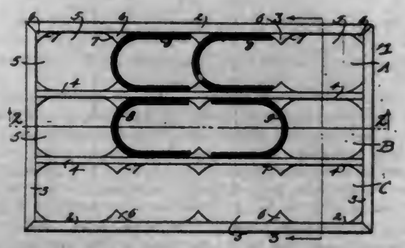


1. A drill including a head having a blade slot extending transversely therethrough, a blade fitted into said slot, a block in the head interlocked with the blade, an axial locking shaft having a threaded connection with the drill and whose inner end bears against said block.

1,876,042. FLOOR UNIT. HERBERT H. BUNKER, Jersey City, N. J. Filed May 24, 1929. Serial No. 365,620. 2 Claims. (Cl. 94—12.)



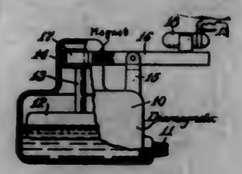
1. A flooring unit comprising a base portion built-up of channel members having their flanges secured to each other and their webs forming the bottom wall of the flooring unit, longitudinal strips of metal secured to and bordering the full lengths of the outside flanges of the exterior channel members, said strips of metal extending above the height of the flanges, a metallic floor surface structure comprising reticulated bars, said floor surface structure being disposed above the flanges of said channel members, strips of metal connecting the flanges and surface structure at intervals spaced throughout the surface area of the flooring unit, said floor surface structure being within the area of said longitudinal metallic strips, and filling material imbedding the flanges of the channel members and the floor surface structure.

1,876,043. BILL BOX. JAMES H. BOWMAN, Honolulu, Territory of Hawaii. Filed May 13, 1929. Serial No. 362,687. 3 Claims. (Cl. 206—72.)



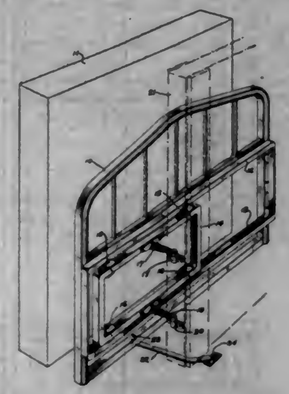
1. A bill box comprising vertically extending walls arranged in spaced relation with each other, projections carried by the walls and extending toward each other and forming bill compartments, dimensioned and shaped to allow bills to be looped and nested therein on edge in vertical position with the projections embracing the bills.

1,876,044. LIQUID LEVEL CONTROL. JAMES O. DAVIS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Wabash, Ind., a Corporation of Delaware. Filed June 4, 1928. Serial No. 282,821. 7 Claims. (Cl. 200—84.)



1. A liquid-level-affected controller comprising a hollow body provided with a tubular portion for attachment to and communication with the interior of a liquid container, a float arranged within said hollow body and provided with a magnetic portion also within said body, and a controller element movably supported upon said hollow body and provided with a magnetic portion extended into magnetic relation with the magnetic head of the float, and a mercury contact tube mounted directly on said controller.

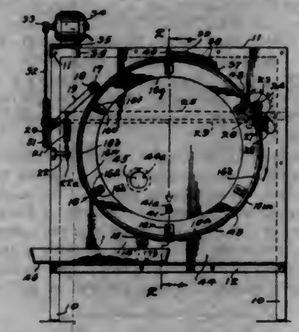
1,876,045. WALL BED. NAPOLEON B. DOUGLASS, Berkeley, Calif., assignor to The Rome Company, Inc., Rome, N. Y., a Corporation of New York. Filed Apr. 15, 1929. Serial No. 355,017. 8 Claims. (Cl. 5—172.)



1. For combination with a wall having an opening, a wall bed of greater width than said opening, a bed supporting carriage pivotally mounted at one jamb of said opening and adapted to swing in a horizontal plane, means carried by said bed adapted to engage said carriage and permit the bed to ride sideways thereupon as the carriage is pivoted about its support, and means automatically to cause the bed to ride sideways on said carriage as the carriage is pivoted about its support.

1,876,046. PHOTOGRAPHIC PRINT GLAZING MACHINE. GLEN M. DYE, Minneapolis, Minn. Filed Jan. 16, 1929. Serial No. 332,871. 11 Claims. (Cl. 34—4.)

1. A print glazing apparatus having in combination, a frame, a drum having a smooth polished peripheral surface, means at the bottom of said drum carried on said frame for supporting the drum causing it to gravitate toward one side, a driven yielding roller engaging the drum at said side thereof against which the drum gravitates, said roller acting to rotate said drum by contact therewith and to press a photographic print against said



drum with its emulsion side engaging said drum, a shaft carrying said roller and bearings for said shaft supported on said frame in fixed relation thereto.

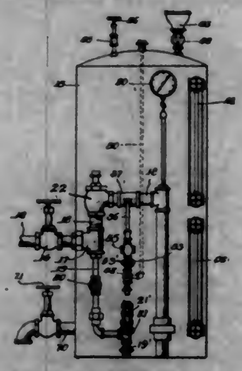
1,876,047. APPARATUS AND PROCESS FOR PRESERVING LIQUID CARBON DIOXIDE. WILLIAM J. EDMONDS, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed July 18, 1928. Serial No. 293,737. 16 Claims. (Cl. 62—92.)



1. A container for liquefied gases which comprises a pressure-resistant, liquid-containing vessel serving as an inner vessel, an outer vessel surrounding the said inner vessel, the said vessels defining a space between them, a heating coil within the space for heating gases evolved in the said liquid-containing vessel, the said coil at least partially enveloping the liquid-containing vessel, and means for passing the said gases into the coil

---

1,876,048. CLEANING APPARATUS. CHARLES F. FITTS, Chicago, Ill. Filed Aug. 31, 1931. Serial No. 560,391. 7 Claims. (Cl. 279—84.)

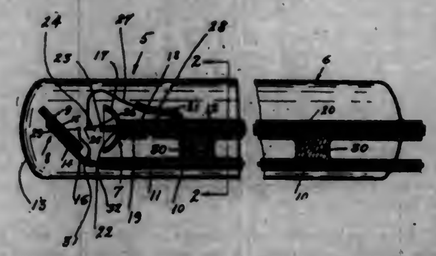


1. A cleaning apparatus of the character described comprising in combination a water pipe adapted for connection at one end to a source of hot water under pressure and at its other end to a supply nozzle; a tank containing oil; a water feed pipe extending from said water pipe to the lower portion of said oil tank; means for feeding oil from said tank to said water pipe including a vertical oil feed pipe connected to said water pipe from below and having an oil feeding valve therein, said last named pipe being connected to the top portion of said oil tank; and a valve in said water pipe located between the connections of said water feed pipe and said oil feed pipe and constructed to permit the flow of liquid in said water pipe in the direction of from said source of hot water under pressure to said spray nozzle, while preventing flow in the reverse direction.

3. A cleaning apparatus of the character described comprising in combination, a water pipe adapted for connection at one end to a source of hot water under pressure and at its other end to a spray nozzle; a tank containing oil; a water feed pipe extending from said water pipe to the lower portion of said oil tank; means for feeding oil from said tank to said water pipe including a vertical oil feed pipe connected to said water pipe from below and having an oil feeding valve therein, said last named pipe being connected to the top portion of said oil tank; and means in said water pipe located between the connections of said water feed pipe and said oil feed pipe, for decreasing the water pressure in said water pipe whereby the pressure at the point of connection of said oil feed pipe with said water pipe is less than the pressure in said tank.

6. A cleaning apparatus of the character described comprising a water pipe adapted to be connected at one end to a source of hot water under pressure and at its other end to a spray nozzle, a tank of oil, said water pipe being connected to said oil tank from a point above the bottom of said oil tank, and means for feeding oil from the top of said tank to said water pipe, said last named means comprising a pipe and a trapped air pocket at the top of said tank, the end of said last named pipe being open and positioned in said trapped air pocket.

1,876,049. X-RAY TUBE. THOMAS H. FORDE and NEWTON W. MELLARS, San Francisco, Calif., assignors to Formell Corporation, Ltd., San Francisco, Calif., a Corporation of California. Filed July 8, 1929. Serial No. 376,694. 6 Claims. (Cl. 250—35.)

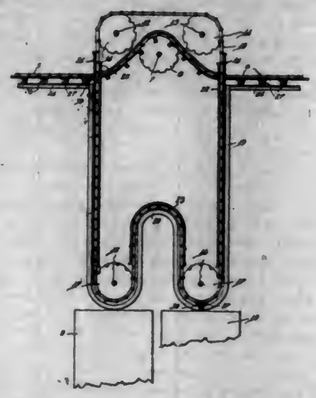


1. In an X-ray tube, an envelope, a cathode, an anti-cathode, a coil electrically connected to the cathode and extending in the general direction of said anti-cathode, and a thermionic emission member comprisig a relatively small target interposed between said coil and the anti-cathode to serve as a source of anti-cathode-bombarding electrons, the free end of said coil being adjacent said target and having approximately the same outline as the target.

1,876,050. AUTOMATIC DIPPING DEVICE. VERNIE A. FOX, Detroit, Mich., assignor to Young Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed May 27, 1929. Serial No. 366,359. 3 Claims. (Cl. 91—46.)

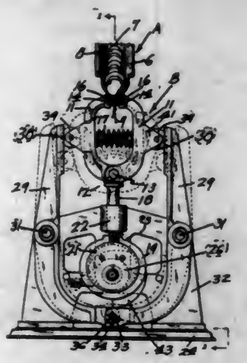
1. In an automatic dipping device, an oven, a conveyor travelling through the same, a dip tank below said

conveyor, a dipping conveyor chain adapted to approach and recede from said tank and intersecting said conveyor, means on said chain for receiving material from said conveyor while moving towards said tank and for discharging



the material to said conveyor when receding from said tank, and gearing operating intermittently on said chain and adapted to rest when said means is in receiving, dipping and discharging positions.

1,876,051. STEM REMOVER. GEORGE D. GARDNER, San Jose, Calif., assignor, by mesne assignments, to Barron Gray Packing Company, San Jose, Calif., a Corporation of California. Filed Sept. 21, 1929. Serial No. 394,248. 3 Claims. (Cl. 146—55.)

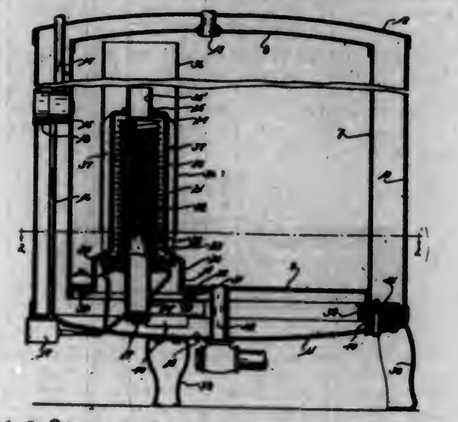


1. The combination with means to hold fruit with the stems thereof projecting in the same direction therefrom, of a stem remover comprising a frame disposed in operative relation to said holding means; opposed gripping elements, means on said frame to support and reciprocate said elements, the latter being pivotally mounted on the reciprocating means to permit the movement of said elements toward and away from each other; means to normally urge the said elements away from each other; means on the frame to force said elements against each other, said last mentioned means being operated in synchronism with the said reciprocating means to close said elements into gripping position at an end of their stroke, and to maintain the elements in gripping position during a part of their return stroke, said element closing means comprising an actuating lever pivoted intermediate its ends on the frame, adjacent each element; an end of each lever being adapted to engage one of the elements to force the same toward the other element; and an actuating member related to said reciprocating means and acting upon the other end of each lever to urge the first mentioned end thereof against the respective element at the end of a stroke of said elements and during a part of their return stroke.

1,876,052. PROCESS FOR DYEING AND FIGURING WOVEN, KNITTED AND PLAITED FABRICS, LEATHER, AND OTHER MATERIALS. WALTER HAENDEL, Berlin, Germany. Filed Mar. 28, 1929, Serial No. 350,820, and in Germany Apr. 7, 1928. 2 Claims. (Cl. 95—5.)

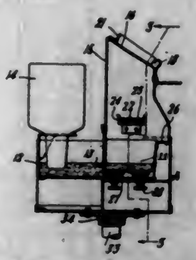
1. A process for producing a coloured pattern on a dark ground on woven, knitted and plaited fabrics, leather and other materials, consisting in treating the material with two compounds, one of which is capable of forming a dyestuff only under the action of light and the other of which is capable of retaining its capacity to form a dyestuff only in the dark, and thereupon exposing the material to the action of light, modulated by a pattern as set forth.

1,876,053. ELECTRIC HOT WATER HEATER. LOUIS B. HYDE, Detroit, Mich. Filed Mar. 17, 1930. Serial No. 436,395. 3 Claims. (Cl. 219—39.)



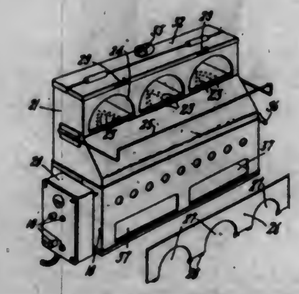
1. In a hot water heater of the class described: a water container having a bottom provided with an opening; a housing secured in said opening and projecting inwardly of said container; a tube projecting through the inner end of said housing in communication with the interior of said container and terminating at one end outwardly of said container; a removable plug for closing the outer end of said tube; an insulating core mounted on said tube; a heating element wound on said core; and means for retaining said core in position in said housing.

1,876,054. SHOE HEATER. MELVIN O. JENNINGS, Lexington, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed Aug. 30, 1929. Serial No. 389,378. 1 Claim. (Cl. 12—1.)



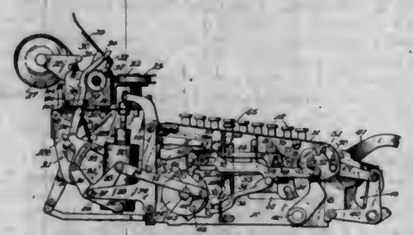
A device of the class described comprising a housing having a perforated top, means for supporting a shoe last with its toe portion over said perforations, a guide rail mounted on said perforated top to receive toe portions of lasts, means for heating the air within said housing, means for supplying moisture for the heated air, and means for admitting to the housing a controlled flow of fresh air.

1,876,055. SHOE HEATER. MELVIN O. JENNINGS, Lexington, and LYMAN E. ALLEY, Cambridge, Mass., assignors to Harry H. Beckwith, Brookline, Mass. Filed Aug. 30, 1929. Serial No. 389,379. 3 Claims. (Cl. 12—1.)



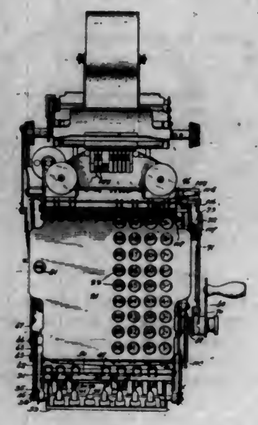
1. Apparatus of the class described, comprising an open-top casing member, an open steam-supply receptacle occupying a portion of the space in said casing and forming with a portion of said casing an air chamber, a hood fitted over said casing member and provided with a series of lateral openings to receive shoe toes, a damper adjacent to said receptacle adjustable to admit air from said chamber into the lower portion of the hood, a damper at the top of said hood to regulate the flow of steam and air through said hood, a transverse perforated partition below said openings, and arched members for said openings forming with said partition a series of chambers for the reception of shoe toes.

1,876,056. PAPER FEEDING MECHANISM FOR LISTING MACHINES. OLIVER D. JOHANTGEN, Kenilworth, Ill., assignor to Victor Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 23, 1929. Serial No. 394,491. 8 Claims. (Cl. 235—58.)



2. In a machine of the class described, in combination with item accumulating and total taking devices and a platen normally adapted to be actuated by predetermined steps in line spacing, a handle and power connections for imparting movements to the various mechanisms comprised within the machine, a total key adapted when actuated to condition the machine for the taking of totals, and means for imparting increased feeding movements in the same direction to the platen, said means comprising a movable rack bar and a pinion on the platen the pinion being adapted to rotate freely under the rack during item accumulating, means operable by actuation of the total key in total taking, for bringing said rack into operative connecting relation with parts movable during the total taking operation, the rack being freely movable over the pinion during the forward stroke of the handle and in effective meshing relation during the return stroke of the handle.

1,876,057. ITEM COUNTING MECHANISM FOR LISTING MACHINES. OLIVER D. JOHANTGEN, Kenilworth, Ill., assignor to Victor Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 23, 1929. Serial No. 394,492. 5 Claims. (Cl. 235—60.)

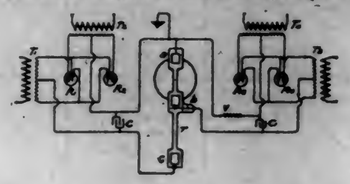


1. In a machine of the class described, the combination of a plurality of rows of item keys arranged in ascending orders, a rack bar associated with each row of item keys and adapted to be stopped in appropriate position by the depression of any key in the associated order, accumulating mechanisms associated with each of the rack bars, a swinging rack lock plate for each order, positioned to be swung laterally by the depression of any key in said order and adapted when so swung to unlock the associated rack bar, a universal releasing bar extending transversely and mounted for lifting movement and provided with means adapted when actuated to restore the swinging rack lock plates to locking position and to restore the depressed item keys to elevated position, an item counting rack bar and associated accumulating mechanisms, a slide plate carried by the releasing bar and having a locking member normally in locking engagement with the item counting rack bar, and members on said slide plate adapted to engage with the respective swinging rack locks to effect a sliding unlocking movement of the slide plate by the swinging movement of any one of the rack lock plates, a swinging stop a single space in advance of the locking member for the item counting rack bar, said stop having engagement with the releasing bar and adapted to be displaced by a lifting movement thereof, a total setting member adapted when actuated to elevate the universal releasing bar to unlock the rack locks for the item accumulating mechanism and displace the stop for the item counting rack bar, and to effect displacement of the slide plate to unlock the item count rack bar through a movement imparted to the slide plate by the swinging of the rack lock plates, and power mechanisms for actuating the several mechanisms in timed relation to one another.

1,876,058. ELECTRIC FLASH-LIGHT. DANIEL PAUL ALBERT ANDRÉ KAYSER, Paris, France. Filed May 13, 1929, Serial No. 362,655, and in France May 6, 1928. 5 Claims. (Cl. 176—124.)

1. A flash producing device comprising a luminescent discharge tube, a closed circuit therefor, a condenser in

said circuit connected in shunt with said tube, an impedance in series between the condenser and the tube and a source of current in said circuit, the capacity of the con-

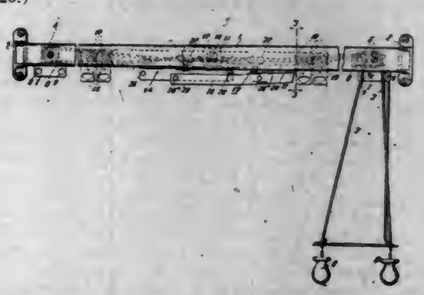


denser being such with reference to the intensity of said current that the flashes take place at predetermined intervals of time.

1876,059. PROCESS FOR OXIDIZING ORGANIC COMPOUNDS. HANS KLEIN, Ida-& Marienhutte, near Saarau, Germany. Filed Sept. 27, 1926, Serial No. 138,125, and in Germany Oct. 19, 1925. 2 Claims. (Cl. 260—16.)

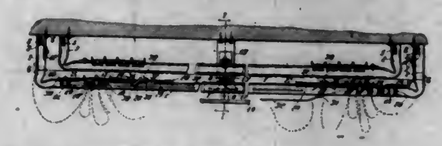
1. A method of producing N-substituted thiuramdisulphides consisting in oxidizing N-substituted dithiocarbamates with a solution of a polythionate.

1,876,060. DRAW CORD EQUIPMENT FOR TELESCOPICALLY EXTENSIBLE CURTAIN RODS. CHARLES W. KIRSCH, Sturgis, Mich., assignor to Kirsch Company, Sturgis, Mich., a Corporation of Michigan. Filed June 22, 1931. Serial No. 546,133. 11 Claims. (Cl. 156—20.)



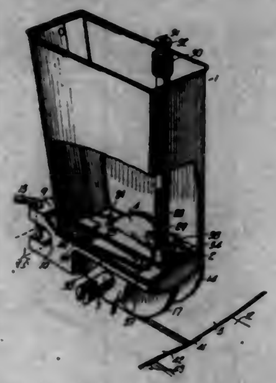
5. A drapery carrier for a curtain rod equipped with a draw-cord, including means loosely engaging said carrier with said draw-cord, said means permitting slippage of said cord relatively to said carrier, while maintaining said cord engaged therewith, and including means on said carrier adapted to be digitally engaged with said cord to prevent said slippage.

1,876,061. DRAPERY SUSPENSION DEVICE. CHARLES W. KIRSCH, Sturgis, Mich., assignor to Kirsch Company, Sturgis, Mich., a Corporation of Michigan. Filed June 22, 1931. Serial No. 546,134. 14 Claims. (Cl. 156—20.)



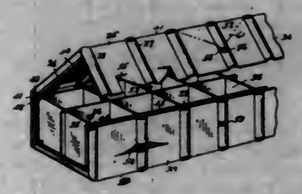
14. The combination with a curtain rod and a center support therefor disposed between the same and the window casing, of a member secured to the wall of the rod opposed to said support for engaging the rod therewith, said member leaving the top, bottom, and front walls of the rod unobstructed.

1,876,062. GLUE APPLICATOR. WILLIAM H. KUSHERA and FRED M. BRACKETT, Topeka, Kans., assignors to The Brackett Stripping Machine Co., Topeka, Kans., a Co-partnership consisting of Edward M. Brackett and Fred M. Brackett. Filed Aug. 23, 1929. Serial No. 387,949. 12 Claims. (Cl. 91—12.)



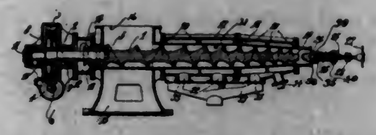
1. In a glue applicator including a pot having a slotted bottom, and a glue roller operable in the slot, means including a post in the pot, and a tubular shaft rotatable on the post having an operating handle exterior to the pot for varying the effective area of the slot.

1,876,063. RIBBED CARTON. FERDINAND KSONENBERGER, Brooklyn, N. Y. Filed May 11, 1928. Serial No. 276,871. 4 Claims. (Cl. 229—29.)



3. In an egg carton made up of a cell-forming filler enclosed in a wrapper, a wrapper having longitudinal outwardly embossed corrugations, and transverse outwardly embossed corrugations intersecting said longitudinal corrugations, the wrapper at the intersections of transverse and longitudinal corrugations being concaved whereby such points will not break when the blank is bent at such points.

1,876,064. APPARATUS FOR DEWATERING AND WASHING PULP. RICHARD T. LANG, Weehawken, N. J., assignor to American Voith Contact Co. Inc., New York, N. Y., a Corporation of New York. Filed May 8, 1926. Serial No. 107,569. 9 Claims. (Cl. 100—48.)

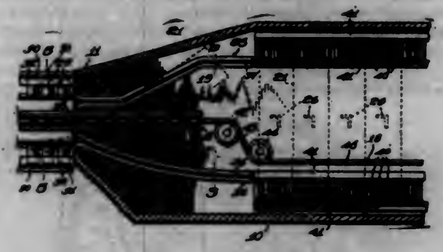


1. The combination with a casing containing a screw and having inlet and outlet ends, of means for operating the screw to advance the pulp toward the outlet end, means for operating the screw in a reverse direction, and means for supplying a cleaning fluid to the interior of the casing so as to flush the pulp material toward the inlet end while the screw is operated in a reverse direction.

1,876,065. PREPARATION OF TITANIUM COMPOUNDS. WILLIAM BASIL LLEWELLYN and SYDNEY FRANCIS WILLIAM CRUNDALL, Manchester, England, assignors to Peter Spence & Sons, Limited, Manchester, England. Filed Apr. 26, 1926, Serial No. 104,838, and in Great Britain May 8, 1925. 6 Claims. (Cl. 134—58.)

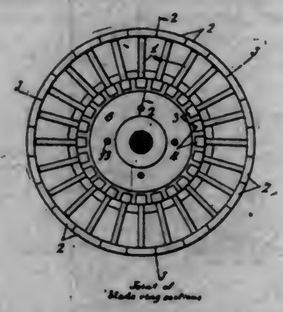
1. A process for the preparation of precipitated hydrated basic titanic phosphate in a readily filterable and washable form, which consists in gradually mixing a suitable phosphate solution with a solution of a titanic salt having a concentration less than 10% of TiO_2 by volume, and maintaining the solutions at a temperature of not less than about 50° C. during the mixing.

1,876,066. CONVEYING SYSTEM. ZACK S. LOGAN, Louisville, Ky., assignor to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Jan. 17, 1929. Serial No. 333,043. 5 Claims. (Cl. 198—33.)



1. In a system of the character described, a conveyor chain provided with a pusher element carried by one link thereof, an elongated carrier provided with an engaging member with which said element is adapted to contact whereby movement of said chain will be transmitted to said carrier to move the latter from one point to another, said carrier being provided with projecting pins, means for supporting and guiding said carrier during such movement to cause it to travel longitudinally with respect to said chain, channels adapted to engage said pins when said carrier reaches the second mentioned point to cause it to turn to an angular position with respect to said chain, and means operative after said carrier assumes such angular position for disengaging said pusher element from said engaging member.

1,876,067. BLADE STRUCTURE FOR TURBINES. CHRISTIAN LORENZEN, Berlin-Treptow, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 15, 1927, Serial No. 219,600, and in Germany Sept. 20, 1926. 6 Claims. (Cl. 253—77.)



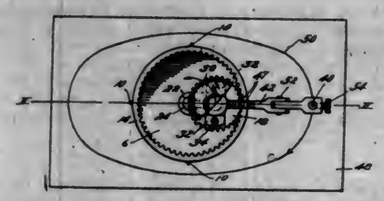
1. A turbine rotor comprising an annular set of blades each provided with a working portion and with an inner portion or foot having edges projecting laterally beyond said working portion, said edges forming annular series, and a body or carrier having edge portions overlapping and holding said edges of the blade feet.

1,876,068. BALLOON TIRE AND WHEEL. ALVIN J. MUSSELMAN, Glen Ellyn, Ill., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 23, 1928. Serial No. 279,985. 4 Claims. (Cl. 152—18.)



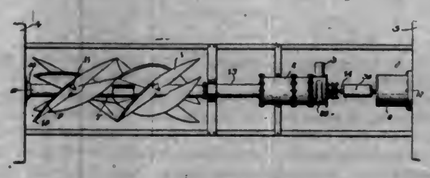
1. A low pressure pneumatic wheel structure comprising a rubberized fabric band, normally of cylindrical shape, means in the band for contracting edge portions thereof so that the normally cylindrical band assumes a toroidal shape and means independent of the contracting means for securing the contracted edge portions upon a rotatable hub.

1,876,069. ELLIPSOGRAPH. NATHAN W. O'BYRNE, Baldwin, Kans. Filed Jan. 4, 1932. Serial No. 584,657. 8 Claims. (Cl. 33—30.)



1. In an ellipsograph, an internal gear; a pinion in mesh with said gear; a crank lever interconnecting said internal gear and pinion; and a marker carried by said pinion.

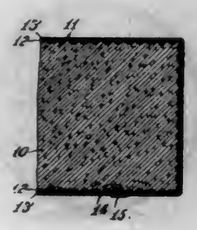
1,876,070. WATER MOTOR. WILLIAM ROY MORRIS, Twin Falls, Idaho. Filed Mar. 9, 1928. Serial No. 260,563. 7 Claims. (Cl. 103—87.



1. A combined hydraulic motor and pump comprising an impeller and a pump, a hollow shaft for transmitting power from said impeller to said pump, and supplying water to said pump, said impeller and pump being so correlatively positioned that the end thrust of the pump

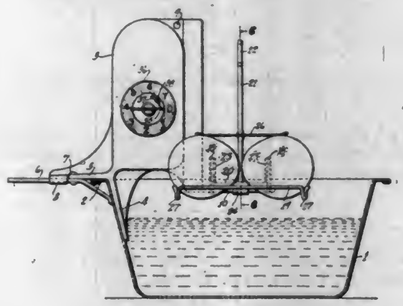
opposes the end thrust of the said impeller or said shaft, said impeller including blades, and scoops associated with said blades and communicating with said hollow shaft for forcibly introducing water into said shaft.

1,876,071. HEAT AND SOUND INSULATING BLOCK. WILLIAM K. NELSON, Chicago, Ill., assignor to Universal Gypsum & Lime Co., Chicago, Ill., a Corporation of Delaware. Filed Mar. 14, 1928. Serial No. 261,667. 4 Claims. (Cl. 154—45.)



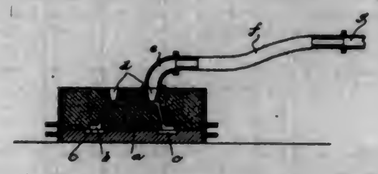
1. In a heat and sound insulating block, the combination of a tubular wrapper comprising oppositely disposed wall panels hingedly connected together so as to form a rectangular mold, and a body of light weight, fragile material resulting from a mixture of calcined gypsum, water, and gas forming and gas retaining ingredients, said body being set and hardened in highly cellular condition in said wrapper in bonded relationship to its inner faces so as to be locked firmly in position in the wrapper.

1,876,072. EGG TIMING DEVICE. JOHN J. NOONAN, St. Louis, Mo., assignor to William J. Fitzmaurice, St. Louis, Mo. Filed Mar. 14, 1929. Serial No. 346,866. 7 Claims. (Cl. 161—16.)



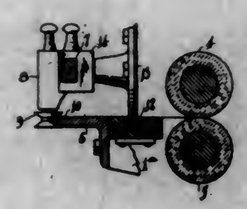
7. In an egg timing device having an egg lifter, a timer controlling said lifter, said timer including a stop to restrain said lifter, an adjustable timing member whereby said stop is actuated to release said lifter, clock mechanism whereby said adjustable timing member is driven, a restraining member to prevent operation of said clock mechanism, said adjustable timing member being movable independently of said stop and restraining member to predetermine the time of the operation, and means for releasing said restraining member and moving said stop into the path of said lifter in response to a downward movement of said lifter, said means including a spring associated with said restraining member and stop.

1,876,073. PROCESS OF CASTING LIGHT METALS IN SAND MOLDS. EDWARD PLAYER, Astley, England, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Sept. 19, 1929, Serial No. 393,844, and in Germany Sept. 19, 1928. 1 Claim. (Cl. 22—212.)



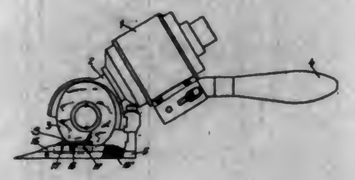
In a process of casting light metals in green sand molds provided with a plurality of local chill plates the preliminary step of simultaneously and uniformly heating said chills to a temperature within the range between about 50 and 100° C., by passing a current of heated air through the mold for some time prior to casting.

1,876,074. PAPER CREASING AND CUTTING APPARATUS. JOHN J. REDMOND, Toronto, Ontario, Canada. Filed Oct. 5, 1931. Serial No. 566,966. 6 Claims. (Cl. 93—1.)



1. Paper cutting apparatus comprising a frame having bearings for supporting a roll of paper; a bar supported on the frame parallel to the axis of the bearings, the bar being provided with a straight-edge on which the paper may be creased; a guide supported in spaced relationship to the bar; and means carried by the guide for co-operation with the straight-edge to crease the paper.

1,876,075. ELECTRIC CUTTING MACHINE FOR CUTTING OUT WOVEN FABRICS. CARL REICHERT, Sr., and KARL REICHERT, Jr., Cannstatt, Germany. Filed May 6, 1929, Serial No. 360,952, and in Germany May 16, 1928. 11 Claims. (Cl. 164—76.)



1. In an electric cutting machine for cutting out woven fabrics, a non-circular rotary cutter having an uninterrupted cutting edge extending completely round its periphery and a counter cutting blade arranged on the machine in contact with the rotary cutter, as and for the purposes set forth.

1,876,076. METHOD OF TREATING TIRE BEAD. BEN W ROWLAND, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 27, 1929. Serial No. 381,672. 5 Claims. (Cl. 154—14.)

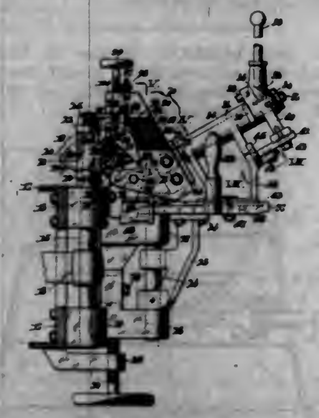
1. A method of treating the beads of pneumatic tires prior to their incorporation into the tires which comprises coating them with a mixture of latex, oxidized pine oil and pine tar having such viscosity as to permit approximately three revolutions per minute of the revolving cylinder of a Stormer viscosimeter when the latter is actuated by a weight of 200 grams.

1,876,077. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 4, 1928. Serial No. 303,716. 6 Claims. (Cl. 188—79.5.)



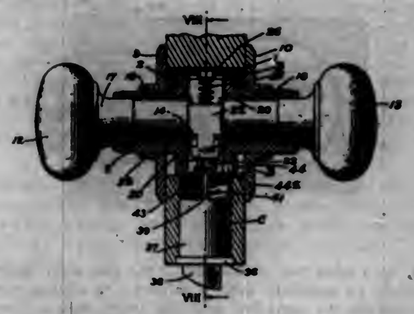
4. A brake comprising shoes connected by a floating pivot having a grooved end, in combination with a positioning lever having one end embracing and interlocking with said grooved end, and an adjustable eccentric engaging the other end.

1,876,078. SHAPING MACHINE. OSCAR L. SCHEHL, Philadelphia, Pa. Filed Oct. 24, 1927. Serial No. 228,203. 14 Claims. (Cl. 12—47.1.)



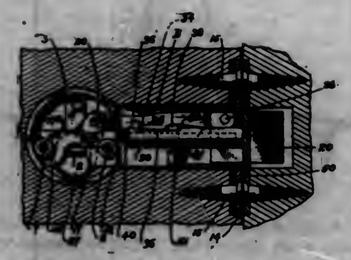
1. In a shaping machine for breasting shoe heel blanks, a rotary cutter with cutting edges at an angle to each other and both inclined to the horizontal; holding means for the blanks to be shaped; and means to swing the holding means crosswise of the cutter about an oblique axis substantially parallel to one of the cutter edges to effect fashioning of continuing curvatures of varying sweep in the frontal face of the blanks with said face rounded concentrically to the swinging axis.

1,876,079. DOOR LATCH. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Company, San Francisco, Calif., a Corporation of California. Filed Dec. 12, 1927. Serial No. 239,380. 12 Claims. (Cl. 292—169.)



1. The combination with a door having a transverse opening formed therein of a housing insertable in the opening, a hub member on each end of the housing and projecting beyond opposite faces of the door, an escutcheon plate supported by one hub member and having a threaded engagement therewith to permit it to be adjusted inwardly or outwardly of the hub member, said escutcheon plate engaging one face of the door and having teeth formed on its inner face which are adapted to be embedded in the face of the door to secure the escutcheon plate against rotation on its threaded connection, an escutcheon plate slidably mounted on the other hub member and engageable with the opposite face of the door, and clamping screws extending through the last-named escutcheon plate and having a threaded engagement with the housing.

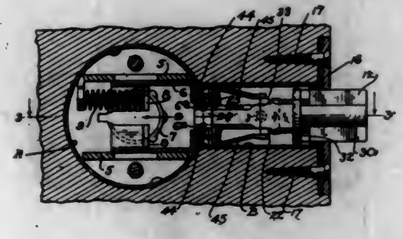
1,876,080. DOOR LATCH. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Company, San Francisco, Calif., a Corporation of California. Filed June 18, 1928. Serial No. 286,077. 6 Claims. (Cl. 70—29.)



1. In a door latch of the character described, an elongated tubular housing, a main latch bolt and an auxiliary latch bolt mounted in said housing and normally projecting through one end thereof, said latches aligning and being operable on a common plane, an elongated dogging link mounted within the housing, a pivotal connection between one end of the link and the main latch bolt, a stop member which the opposite end of the dogging link

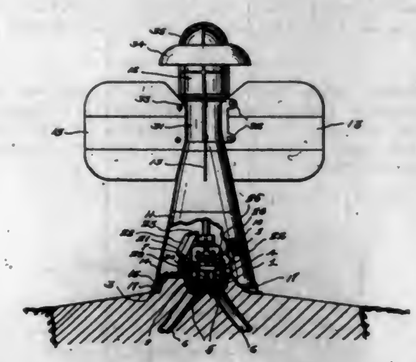
is adapted to engage, means whereby the dogging link is maintained out of engagement with the stop member when the auxiliary latch bolt is extended, and means whereby engagement is made with the stop member when the auxiliary latch bolt is depressed.

1,876,081. DOOR LATCH. WALTER R. SCHLAGE, San Francisco, Calif., assignor to Schlage Lock Company, San Francisco, Calif., a Corporation of California. Filed Mar. 5, 1929. Serial No. 344,260. 6 Claims. (Cl. 70—29.)



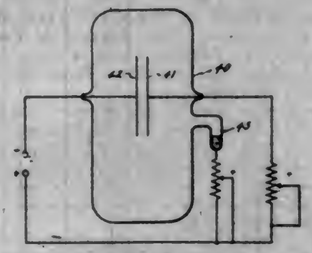
1. In a latch bolt mechanism of the character described a latch, an auxiliary bolt, a retractor, a sliding member connecting the retractor and the latch, means whereby depression of the auxiliary bolt will dog the latch, and means whereby movement of the retractor and the sliding member will first release the dogging means and secondly retract the latch bolt.

1,876,082. BOUNDARY LIGHT FOR AIRPORTS AND THE LIKE. BENSON R. SHAW, St. Louis, Mo., and FRANK BUCHANAN, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,886. 2 Claims. (Cl. 240—1.2.)



1. A lamp of the class described comprising a base mountable upon the ground, a hollow demountable post mounted on the base, the base having a central box portion having a wall projecting into the post, contacts in the box portion for connection to service wires, the post having a depending cable therein for connection to the lamp, contacts at the lower end of the cable for detachably engaging the former contacts, a housing carried at the lower end of the cable and coacting with the inwardly projecting portion of the box to cover the same and enclose the contacts.

1,876,083. ELECTRIC DISCHARGE DEVICE. CHARLES SPARTH, Flushing, N. Y. Original application filed Mar. 2, 1929, Serial No. 343,873. Divided and this application filed Dec. 3, 1929. Serial No. 411,277. Renewed Jan. 27, 1932. 4 Claims. (Cl. 176—125.)



1. In a television lamp, an envelope, a pair of flat electrodes spaced apart a distance less than the mean free path, a filling of rare gas within said envelope, a reservoir containing mercury connected to said envelope, means for passing a discharge between said electrodes, and means for vaporizing said mercury.

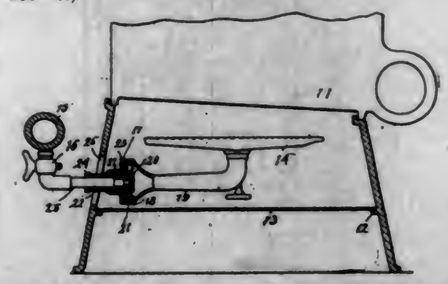
1,876,084. METHOD OF MAKING ANHYDROUS MAGNESIUM CHLORIDE. KARL STAIB, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Mar. 2, 1927, Serial No. 172,216, and in Germany Mar. 6, 1926. 3 Claims. (Cl. 23—91.)

1. The process which comprises introducing finely subdivided magnesium oxide suspended in a current consisting of chlorine and carbon monoxide, into a reaction chamber sufficiently preheated to start the reaction, and withdrawing molten chloride from said chamber, the heat of reaction sufficing to maintain the reaction.

1,876,085. METHOD OF MAKING ANHYDROUS MAGNESIUM CHLORIDE. KARL STAIB, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Mar. 6, 1928, Serial No. 259,595, and in Germany Mar. 6, 1926. 4 Claims. (Cl. 23—91.)

2. The process of converting magnesium oxide into anhydrous molten magnesium chloride comprising introducing a mixture of finely ground magnesium oxide and finely ground carbonaceous material, suspended in a current of chlorine gas, into a reaction chamber sufficiently preheated to start the reaction, and withdrawing molten chloride from said chamber, the heat of reaction sufficing to maintain the reaction.

1,876,086. GAS BURNER. WILLET E. STARK, East Cleveland, Ohio, assignor to The Bryant Heater & Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1927. Serial No. 241,012. 1 Claim. (Cl. 158—7.)



In a gas burning apparatus, the combination of a combustion chamber, a burner therein, an air and fuel mixing device communicating with the burner, means for delivering fuel to said device, and adjustable means disposed partially within and partially without the combustion chamber and adjustable from outside the chamber for regulating the primary air supplied to said device and for causing said air to be supplied from inside the combustion chamber at a reduced pressure.

1,876,087. APPARATUS FOR MANUFACTURING TUBULAR ARTICLES. WILL C. STATE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 27, 1928. Serial No. 328,678. 6 Claims. (Cl. 154—9.)

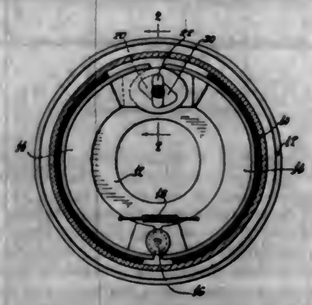


1. An apparatus for manufacturing tubular articles comprising an endless flexible form having an opening intermediate its edges, and spaced pairs of rollers for rotatably supporting opposite ends of the form, the opening in the form being disposed oppositely to the space between the pairs of rollers.

1,876,088. MANUFACTURE OF TITANIUM OXIDE. FRANCIS GEORGE COAD STEPHENS, LENNOX JAMES ANDERSON, and WILLIAM ALAN CASH, London, England; Alice Burt Stephens, executrix of said Francis George Coad Stephens, deceased, assignors to National Metal and Chemical Bank Limited, London, England, a British Company. Filed July 27, 1928, Serial No. 295,838, and in Great Britain Aug. 2, 1927. 11 Claims. (Cl. 134—58.)

2. As a preliminary to the manufacture of titanium containing pigments, the steps of obtaining barium sulphate and titanium hydroxide consisting in adding gradually a solution containing titanium sulphate and some iron sulphate as impurity to a solution of barium chloride and then heating the mass.

1,876,089. BRAKE. ROBERT T. ST. JAMES, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 30, 1930. Serial No. 492,277. 3 Claims. (Cl. 188—78.)



1. A brake comprising friction means having adjacent relatively movable ends arranged side by side and an operating cam acting on said ends, said ends being formed with openings embracing said cam so that the cam moves the ends positively in both directions.

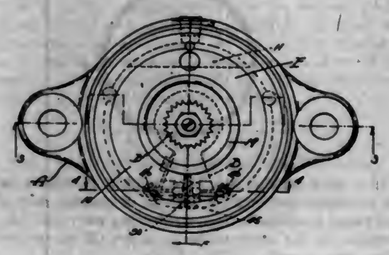
1,876,090. FOOD COMPOUND. LE ROY V. STRASBURGER, Baltimore, Md. Filed May 28, 1930. Serial No. 456,823. 7 Claims. (Cl. 99—11.)

1. A sterilized oyster stew preparation comprising milk and a substantially pure starch.

1,876,091. STEEL ARTICLE INSENSIBLE TO THE ACTION OF HOT GASES, VAPORS, AND LIQUIDS. BENNO STRAUSS, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Jan. 7, 1930, Serial No. 419,213, and in Germany Apr. 23, 1929. 2 Claims. (Cl. 148—31.)

1. Articles which in their normal use are subjected to the attack of hydrogen or of hydrogen containing gases taking place under high pressure and at high temperatures, said articles consisting of a steel alloy that has been heated above the point of recalescence Ac3 and quickly cooled, followed by reheating to 600° to 650° C., said steel alloy containing 0.05 to 0.2% of carbon, about 5 to 12% of chromium and about 0.2 to 1% of molybdenum.

1,876,092. HYDRAULIC SHOCK ABSORBER. VICTOR SUSSIN, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 15, 1929. Serial No. 378,302. 13 Claims. (Cl. 188—89.)

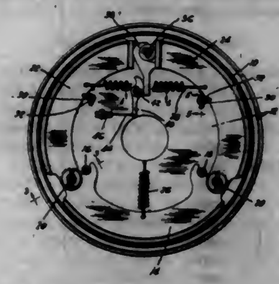


1. A construction for the purpose indicated comprising a casing having a piston chamber and a piston member arranged and connected for back and forth movement therein, the chamber being arranged to be occupied by liquid, the piston member having a passage for the liquid from one side to the other of the piston in the movement of the latter in the chamber, the piston being recessed from one side transversely of the direction of its back and forth movement and having the liquid passage traversing said recess and constituting ports communicating with the recess at its opposite sides; a valve carried in said recess and arranged for oscillating therein from side to side thereof to seat at said ports respectively in the back and forth movements of the piston, the valve being constructed to permit liquid entering through one of said ports to pass the valve to the other side thereof, and having at said other side a face opening positioned for registering with the port at that side of the piston recess and accessible to the liquid passing the valve from the first mentioned port.

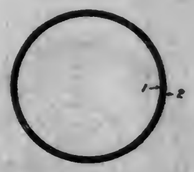
1,876,093. BRAKE. CECIL H. TAYLOR, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 28, 1929. Serial No. 350,528. 9 Claims. (Cl. 188—78.)

1. A brake comprising, in combination, a drum, a rigid shoe engageable with the drum and anchoring at one end when the drum is turning in one direction and at

the other end when the drum is turning in the other direction, a rigid servo shoe operatively connected to each end of the first shoe, a stop between the unconnected ends of the servo shoes, and a floating cam lever pivotally supported by the stop and engaging both servo shoes.



1,876,094. MANUFACTURE OF TUBES OF PAPER OR LIKE MATERIAL. ELMER ZEBLEY TAYLOR, Newark, N. J. Filed Mar. 27, 1929, Serial No. 350,395. Renewed July 15, 1932. 2 Claims. (Cl. 93—81.)



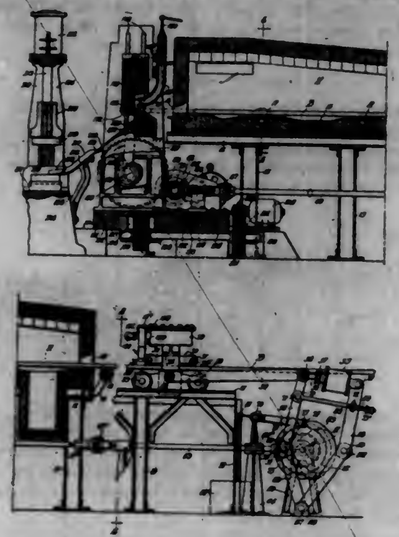
1. In a tube-making machine, a pair of rollers between which material for making a tube is passed, one of such rollers being provided with a projecting part co-acting with the surface of the other roller to taper off the material by crushing the same.

1,876,095. AUTOMATICALLY FED FURNACE. JAMES HALL TAYLOR, Oak Park, Ill. Filed July 22, 1929. Serial No. 379,915. 33 Claims. (Cl. 29—33.)

1. The combination of a furnace and bar feeding mechanism, said mechanism comprising reciprocating means for gripping and releasing the bar, and means for moving said gripping means a definite distance in one direction while gripping the bar and for moving said gripping means a lesser distance in the opposite direction while gripping the bar and the remainder of the distance while not gripping it.

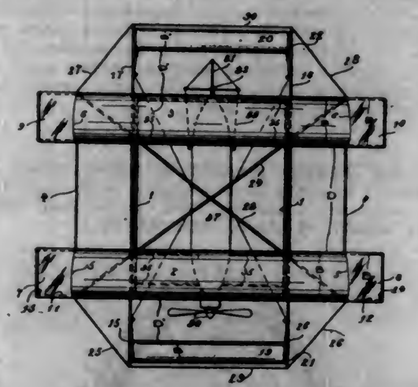
15. In combination, a furnace, a reciprocating carriage mounted adjacent one end of the furnace, a structure mounted to rock on an axis, an extension member connected to the rockable structure for independent rocking movement, operating connections between said member and the carriage, an expansible and contractible link connection between the extension member and the rockable structure, means for oscillating said structure, means on the carriage for gripping a bar to be fed through the furnace when the structure is moved in bar feeding direction and for releasing the bar after said structure has been moved a predetermined distance in the other direction, and means for extending the link after the bar has been gripped and for contracting the link after the bar has been released, and means for varying the extent of expansion and contraction of said link connection.

25. In combination, a furnace, bar feeding means for periodically projecting a bar from the furnace a predetermined distance and then returning the bar to the furnace by reciprocation of the bar, shears disposed to cut a blank from the projected end of the bar, the return movement of the bar being less than the projecting movement thereof by the length of the blank cut off, said



feeding means advancing the bar step by step through the furnace, and being adjustable to vary the length of the projected portion of the bar, and means for driving the feeding means and the shears in synchronism.

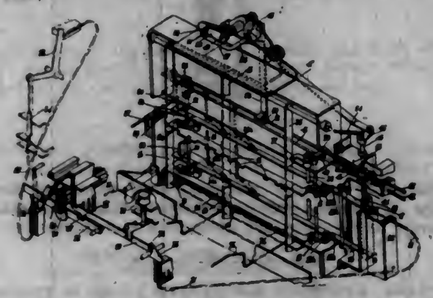
1,876,096. AIRCRAFT. HOWARD TEBBS, Baltimore, Md. Filed Oct. 11, 1929, Serial No. 398,906. Renewed July 2, 1932. 10 Claims. (Cl. 244—12.)



1. In an aircraft, a structural formula, comprising a plurality of horizontal supporting members, or planes, and dihedral surfaces, or planes, so spaced to facilitate such aircraft in its functions and supported by a square strut and braced frame to support said horizontal supporting surfaces which extend laterally from the fore and aft ends thereof and divided by a space to exceed twice the breadth of said supporting surfaces, and in a ratio of five to seven in width to one in breadth, which surfaces deviate slightly from a straight line by a slight elevation in the center thus forming an arch in the lateral direction of roughly 1 to 40, supported by extended struts, elevating and depressing members with means for controlling or changing their inclination, said members being normally

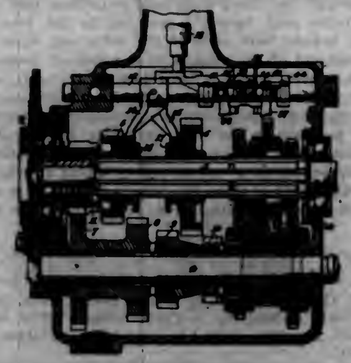
supporting planes, and are in breadth less than one-half of the main supporting planes and separated sufficiently to permit a space of two times their breadth between them and the supporting planes, the length and width of the structure is equal and practically form a square. All the supporting and elevating and depressing surfaces being of parabolical form in the longitudinal direction, and having in the central rear a vertical plane for lateral control.

1,876,097. MECHANISM NORMALLY OPERATED FROM A KEYBOARD. ARTHUR THOMAS, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Filed Jan. 28, 1931, Serial No. 510,712, and in Great Britain Mar. 14, 1930. 20 Claims. (Cl. 164—112.)



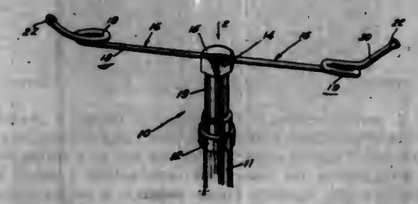
1. In apparatus normally operated from a keyboard the combination of a master machine, a servant machine, a group of key members on one of said machines, a smaller group of key members on the other of said machines, and a translating device, said translating device comprising in combination a plurality of displaceable members each adapted to co-operate with a key member of the larger group, a plurality of bar members disposed in a plane lying across the displaceable members and in juxtaposed position relative thereto, bell cranks connected to the ends of each bar, actuator rods connecting said bell cranks whereby a parallel link mechanism is formed, and operative connections between said actuator rods and the operative parts of the servant machine, whereby said parts are moved on depression of a key in the master machine.

1,876,098. POWER TRANSMISSION MECHANISM. EARL A. THOMPSON, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 15, 1925, Serial No. 23,222. Renewed June 18, 1932. 25 Claims. (Cl. 74—58.)



1. A transmission mechanism including a shiftable power transmitting element and a shifter rod for operating the same, said shifter rod having elongated recesses formed therein, one of said recesses being spaced longitudinally of the rod relative to the other, and a member engageable in each of said recesses for normally holding the shifter rod in its neutral position but allowing movement of the rod in either direction with one of the members remaining in its recess.

1,876,099. SLOW MOTION REACTION SPRINKLER. WALTER VAN B. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 20, 1928. Serial No. 255,649. 14 Claims. (Cl. 299—69.)



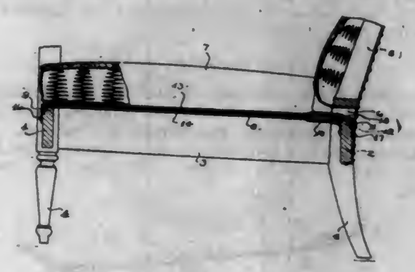
4. In a reaction sprinkler, the combination of: a supply means; a head rotatable thereon; an arm extending outward from said head through which the liquid passes; a nozzle on said arm from which said water issues in a direction to produce a reactionary force tending to rotate said head slowly, but normally incapable of doing so due to the sticking of said head on the supply means; and means included in said arm whereby the flow of water is caused to change its direction of flow to produce such a vibration that said head will not stick.

1,876,100. TIRE VULCANIZING MACHINE. KARL K. A. THORSEN, San Francisco, Calif. Filed Aug. 12, 1929. Serial No. 385,248. 21 Claims. (Cl. 18—18.)



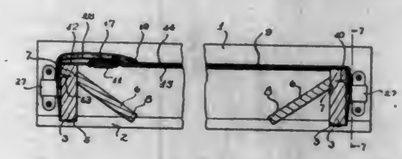
7. A tire vulcanizing machine comprising a body member having a tire receiving recess therein, and having a heating chamber in the wall of said recess; a movable mold section arranged to extend into said tire receiving recess; means for bodily movably supporting said mold section on the body member; adjustable means for fastening the mold section in operative position; said fastening means comprising fastening blocks radially movable on said section; fixed retainer elements on the said body member to receive said blocks; withdrawable pins in each retaining member against which the blocks bear in certain operative positions of the mold sections; and means to move said blocks simultaneously into and out of said retainer elements; and means to move said mold section bodily towards and away from said tire receiving recess.

1,876,101. SPRING STRUCTURE FOR FURNITURE. MARTIN THUM, Rochester, N. Y. Filed Oct. 6, 1930. Serial No. 486,551. 5 Claims. (Cl. 155—179.)



1. A spring structure comprising a frame, a plurality of inelastic members extending across the frame in parallel relation and rigidly connected at one end to a frame member and having its other end terminating a short distance from the opposite frame member, a spring connection between the last mentioned frame member and the adjacent end of the respective inelastic members, and a pliable covering attached to the same frame members to which the inelastic members and their spring connections are attached, and having the portion over the inelastic members approximately taut and the portion over the spring connections crimped, said covering including portions which embrace the inelastic members and are connected midway the spaces formed therebetween.

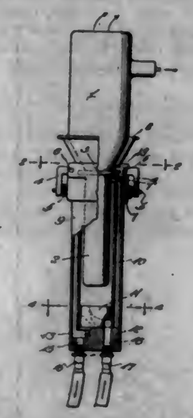
1,876,102. BED AND A SPRING BOTTOM. MARTIN THUM, Rochester, N. Y. Filed Feb. 26, 1931. Serial No. 518,454. 1 Claim. (Cl. 5—186.)



A spring bed bottom member comprising a frame, including end pieces, inelastic straps rigidly secured to the foot end piece of the frame, and elastic connections between the head end piece and the straps situated adjacent the head end piece, and a cover having an upper layer secured to both end pieces and also having a lower layer extending from the foot end piece to a point on the inner side of the elastic connections exposing the under side of the elastic connections, the two layers being stitched together between the straps.

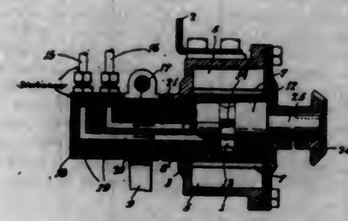
1,876,103. WATER COOLED TUBE ASSEMBLY. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 325,106. 3 Claims. (Cl. 250—27.5.)

2. An electron tube apparatus including a thermionic tube having an external anode and a source of electrons therefor and comprising a socket structure arranged to receive said anode, a laterally extending flange on said anode, a head carried by said socket structure, a pair of rod members carried by said head, extending parallel to each other on opposite sides of and in a plane perpendicular to the axis of said socket structure, rockable levers mounted on said rod members and adjustable laterally on said rod members with respect to said head from



diametrically opposite positions with respect to said flange on said anode to positions beyond said flange for securing or releasing said anode from said socket.

1,876,104. STEERING MECHANISM. JESSE D. TUCKER, North Sacramento, Calif., assignor to Tucker-Gilmore Mfg. Company, North Sacramento, Calif., a Corporation of California. Filed Nov. 29, 1930. Serial No. 499,119. 3 Claims. (Cl. 121—141.)



1. A steering mechanism for a motor comprising a cylindrical housing adapted to be mounted on a side frame of the vehicle so as to extend transversely thereof, a tubular rotor turnably mounted in the housing and projecting beyond one end of the same, a steering arm secured to and depending from said projecting end of the rotor, a valve plug turnably mounted in the rotor and projecting beyond both ends of the rotor and housing, a gear on one end of the plug, a hand actuated mechanism connected to said gear, a collar relatively turnable on the other end of the plug, separated liquid conduits connected to the collar and communicating with the periphery of the plug, passages in the plug extending from said conduits to the rotor, and means formed with the rotor and housing to permit of a circulation of liquid through the passages and housing when the plug is turned from a predetermined neutral position and cause the rotor to be turned.

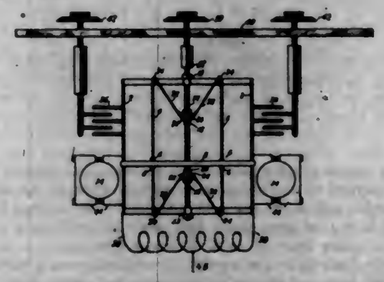
1,876,105. ICE CREAM CONE. WEBB W. TURNBULL, Dayton, Ohio, assignor, by mesne assignments, to National Biscuit Company, a Corporation of New Jersey. Filed Oct. 24, 1928. Serial No. 314,687. 6 Claims. (Cl. 99—10.)

1. An ice cream cone having a conical body portion terminating at its upper end in a convexly flared throat merging into a wide flaring shallow mouth, the outer surface of which merges substantially into a plane at



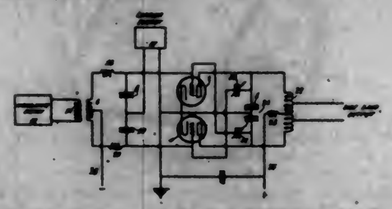
right angles to the body portion, whereby the flared shallow mouth portion is adapted to hold widely different sized servings of ice cream at the top of the cone.

1,876,106. POWER STAGE ARRANGEMENT. GEORGE L. USSELMAN, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corpo ation of Delaware. Filed Mar. 19, 1927. Serial No. 176,605. 15 Claims. (Cl. 179—171.)



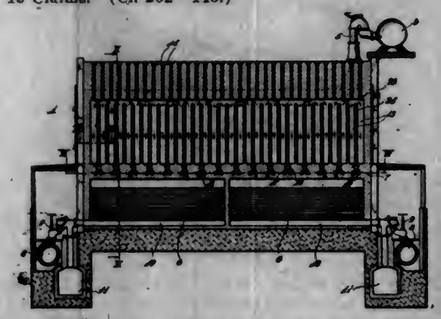
5. In a push-pull power stage, in combination, two electron emission tubes having anode terminals, and an output circuit including inductive means and a variable condenser, said condenser comprising two fixed plates and two movable plates situated between the fixed plates and arranged to be adjusted simultaneously nearer to or further from the fixed plates, said electron emission tubes having their anode terminals substantially directly attached to said fixed condenser plates, said inductive means being positioned adjacent to and between the planes of said plates, and having its ends substantially directly connected to said plates and said anode terminals.

1,876,107. CARRIER SUPPRESSION MODULATOR. GEORGE L. USSELMAN, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,457. 11 Claims. (Cl. 179—171.)



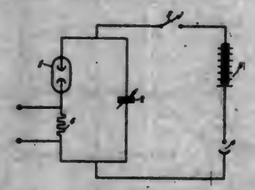
3. In carrier suppression modulation, the method of augmenting the output of energy of beat frequencies and diminishing the output of energy of input frequency which includes over-neutralizing the carrier suppression modulator, in order to provide positive regeneration of the beat frequencies, and positive degeneration of an input frequency.

1,876,108. COKING RETORT OVEN. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Dec. 15, 1927. Serial No. 240,130. 19 Claims. (Cl. 202—143.)



1. In a coking retort oven battery, the combination with a series of alternate oven chambers and heating walls therefor arranged side-by-side in a row, each of said heating walls comprising a plurality of flame flues, and a plurality of regenerators below said oven chambers and extending transversely of the battery, of a plurality of horizontal flues each extending throughout the length of said battery and transversely of said oven chambers, communicably connecting each of said regenerators to said horizontal flues at least one flame flue in each of said walls.

1,876,109. DEVICE FOR MODULATING THE FREQUENCY OF ELECTRIC OSCILLATIONS. BALTHASAR VAN DER POL, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 20, 1929, Serial No. 408,462, and in the Netherlands Nov. 30, 1928. 3 Claims. (Cl. 179—171.)

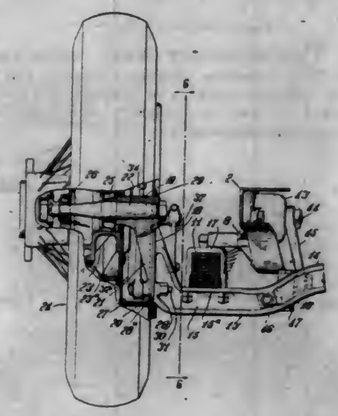


1. In a system for transmitting intelligence by undulatory electrical currents operated upon in accordance with intelligence to be transmitted, a glow discharge device and a resistance in series, a condenser connected across the glow discharge device and the resistance, a source of potential, and a radiant responsive device connected in series with said glow discharge device and said resistance whereby variations in radiant energy falling upon said radiant responsive device causes variations in frequency of oscillations set up between the glow device and said resistance and condenser.

1,876,110. AUTOMOBILE CONSTRUCTION. CORNELIUS W. VAN RANST, Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed June 8, 1929. Serial No. 369,283. 10 Claims. (Cl. 188—18.)

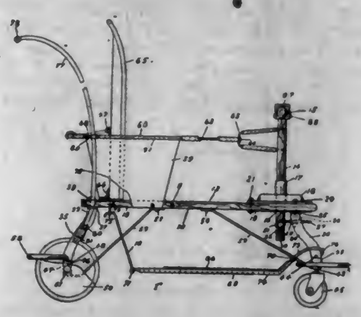
1. In an automobile, a wheel having a brake drum, a non-tubular axle including a rigid spindle upon which the

wheel is mounted and having an upright end portion adjacent the brake drum, and braking mechanism arranged



for cooperation with the brake drum, and including brake shoes pivotally supported upon said upright end portion of said axle.

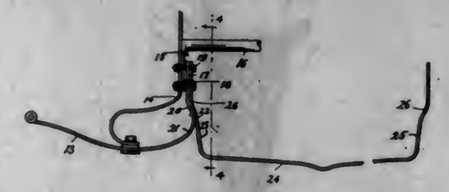
1,876,111. CHILD'S VEHICLE WITH RECLINING BACK. LOUIS J. VAN GUELPEN, Cincinnati, Ohio, assignor, by mesne assignments, to Iver Johnson's Arms and Cycle Works, Fitchburg, Mass., a Corporation of Massachusetts. Filed Aug. 23, 1928. Serial No. 301,585. 5 Claims. (Cl. 155—22.)



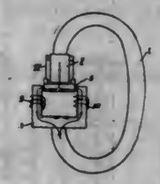
1. In a child's vehicle comprising a seat tractionally supported and having vertical side sections supporting a continuous wire frame, a back rest pivotally secured to the seat between the side sections and within the wire frame and having pivotal hook means on its rear face, said hook means being adapted to co-operate with the wire frame to maintain the back rest in an upright position and to be disengaged from such co-operation to allow the back rest to be supported by the wire frame.

1,876,112. TIE BAR FOR BUMPERETTES. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 1, 1930. Serial No. 449,061. 1 Claim. (Cl. 293—55.)

A bumperette connecting member comprising a bar provided with forwardly extending arms, said arms having substantially straight end portions adapted to be clamped to the bumperette supporting means and also having curved portions adjacent said straight portions adapted to engage the forward side of curved portions of the bumperettes which extend inwardly of said supporting means.

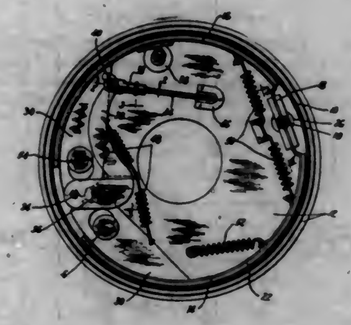


1,876,113. MAGNET SYSTEM FOR CONVERTING ELECTRIC OSCILLATIONS INTO ACOUSTIC ONES OR CONVERSELY. ROELOF VERMEULEN, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 10, 1928, Serial No. 298,827, and in the Netherlands Sept. 24, 1927. 7 Claims. (Cl. 175—339.)



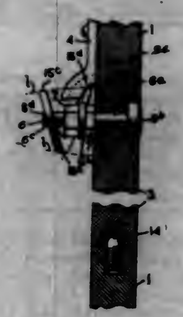
1. In combination a permanent magnet, a U-shaped pole piece fastened to one of the poles of said magnet, an armature positioned with one end adjacent one of the limbs of said U-shaped pole piece and with its other end adjacent the other limb of said U-shapel pole piece, a single limb pole piece fastened to the other pole of said magnet, said pole piece being positioned with its single limb adjacent the intermediate part of said armature, an operating member connected to said armature, a pair of coils mounted on the limbs of said pole piece, and means supporting said armature for movement along its longitudinal axis.

1,876,114. BRAKE. WILLIAM S. WATTS, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 9, 1930. Serial No. 419,521. 5 Claims. (Cl. 188—78.)



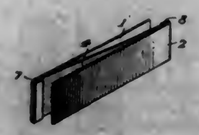
1. A brake including, in combination with an annular friction device having separable ends, a floating lever member having parallel body sections straddling a reinforcing means secured to one of said ends, said lever member also having parallel body portions interposed between and straddling said separable ends.

1,876,115. LOCK. WALTER R. WAY, Quincy, Mass. Filed Dec. 30, 1927. Serial No. 243,639. 4 Claims. (Cl. 70—14.)



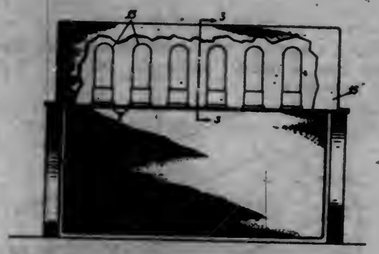
1. Means for securing a closure movably in a wall opening, comprising an operating shaft adapted to be mounted in and to extend rotatably through one of the wall elements and be held against axial movement therein; an engaged member adapted to be secured on the other wall element; and an engaging member projecting from the inner part of said shaft, comprising a stiff plate of stamped sheet metal having a marginal portion set oblique to the plane of the closure and positioned with respect to the engaged member so that upon rotation of the shaft it constitutes a cam for moving the closure; there being a shaft-engaging portion of the sheet metal integral with the said marginal portion and constituting a support on the shaft for said marginal portion in its said oblique position.

1,876,116. ELECTRICAL RESISTANCE UNIT. CARL L. WEICHELT, Philadelphia, Pa., assignor to Wirt Company, Philadelphia, Pa., a Corporation of Maine. Original application filed Aug. 7, 1929, Serial No. 384,105. Divided and this application filed Aug. 8, 1930. Serial No. 473,789. 2 Claims. (Cl. 201—63.)



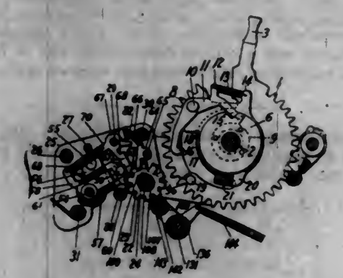
1. A resistance unit comprising a support consisting of two conducting strips, each strip having a folded end, the inner edges of said folded ends being spaced from the extremities of the non-folded ends, insulation between the two strips and clamped in their folded ends, other insulating material covering the support between the folded ends of the strips, and a resistance element wound on said last mentioned insulation.

1,876,117. ACOUSTIC SHIELDING. JULIUS WEINBERGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 9, 1926. Serial No. 121,331. 7 Claims. (Cl. 250—16.)



1. In radio apparatus employing electron discharge devices, means for shielding said devices from acoustic disturbances comprising a casing of a heavy metal.

1,876,118. TOTALIZER AND PRINTING MEANS THEREFOR. ALBERT S. WHEELBARGER and GROVER C. COIL, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio. Filed Dec. 8, 1927. Serial No. 238,662. 17 Claims. (Cl. 235—33.)



1. In a machine of the type described, a resetting shaft, a plurality of totalizer wheels mounted thereon, carrying arms for said totalizer wheels, locking means to hold said shaft against rotation, locking means whereby said carrying arms lock said wheels against rotation, and means whereby both of said locking means are rendered inoperative.

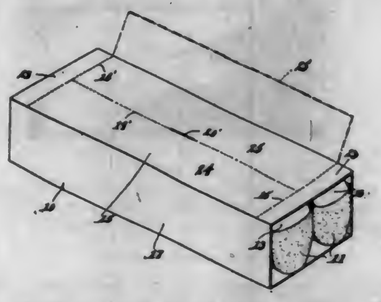
1,876,119. REGISTER. ALBERT S. WHEELBARGER and PETER KEIL, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio. Filed July 26, 1929. Serial No. 381,137. 3 Claims. (Cl. 235—33.)



1. In a machine of the type described, a setting member, a disk secured thereto and provided with a notch, a gear, a lever carried by said gear, an arm forming a

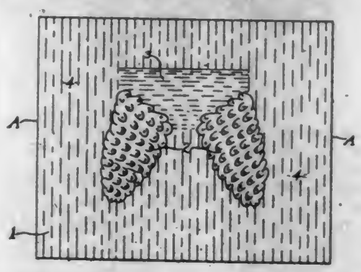
part of said lever and seated in said notch when the parts are in normal position, a spring secured to said lever so as to urge said arm into said notch when said notch is adjacent said arm, and means to prevent said arm being moved out of said notch when the machine is idle.

1,876,120. CARTON. FRANK D. WILSON, Oak Park, Ill. Filed May 8, 1929. Serial No. 361,298. 2 Claims. (Cl. 229—28.)



1. A carton of the character described, comprising a substantially rectangular, open-ended tubular case and a compartmental filler inserted endwise and retentively secured in said case, one side wall of said case having opening panel portions and fixed transverse bracing panels, said panels being defined by transverse lines of closely arranged perforations adjacent the opposite ends of the carton, and a central longitudinal line of like perforations connecting said transverse lines of perforations.

1,876,121. STRUCTURE SIMULATING AN OWL. GRACE E. WILSON, Wichita, Kans. Filed Apr. 20, 1931. Serial No. 531,317. 6 Claims. (Cl. 46—40.)

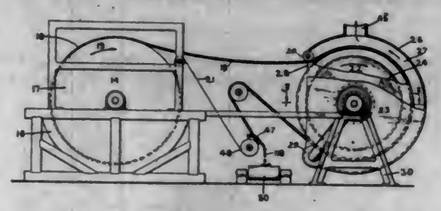


1. In a structure simulating an owl, a sheet like body portion having two of its oppositely disposed edges attached together, and the two transversely positioned edges with respect to the first said edges being gathered and secured together, one being cut to form a tail, the other being cut to form a crest and ears as a head, eyes secured to the head, and a beak extending from between the eyes, and means to attach the tail portion to a perch, the said means simulating the feed of the owl.

1,876,122. PREMIXED PRODUCT FOR PLASTER FINISHING COATS. GEORGE B. WOOD, Rockland, Me., assignor to Rockland & Rockport Lime Corporation, Rockland, Me., a Corporation of Maine. Filed May 2, 1930. Serial No. 449,358. 3 Claims. (Cl. 106—24.)

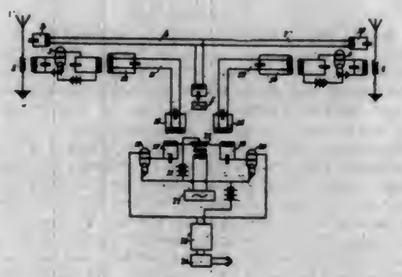
1. A pre-mixed plaster finish product consisting of comminuted quick lime, and a granular aggregate of above 100 mesh size, said lime comprising particles of size substantially to equal the weight of the grains of the aggregate.

1,876,123. SEWAGE DISPOSAL APPARATUS. ARTHUR WRIGHT, Upper Montclair, N. J. Filed Feb. 28, 1928. Serial No. 257,771. 10 Claims. (Cl. 210—199.)



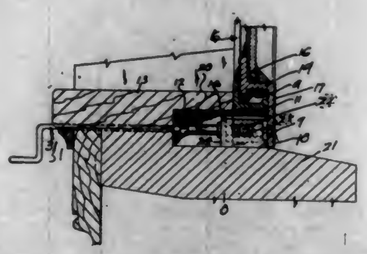
7. The combination with a continuous drum drier and filter cake reenforcement comprising spaced continuous strands, of cake discharging means comprising a roller about which the strands are directed and a comb-like device between the teeth of which the strands pass and whereof said teeth are curved about a portion of the roller.

1,876,124. WIRELESS TELEGRAPHY AND TELEPHONY. GEORGE MAURICE WRIGHT, Burford, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 17, 1928, Serial No. 247,350, and in Great Britain Jan. 17, 1927. 5 Claims. (Cl. 250—2.)



1. Radio signalling apparatus comprising means for collecting electromagnetic energy of like frequency at a plurality of separated points, means for beating the energy so collected with locally generated electrical energy and means for successively translating the resulting beat frequency energies.

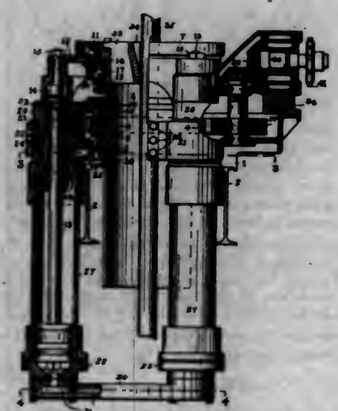
1,876,125. WINDOW CONSTRUCTION. RALPH WYCKOFF, San Jose, Calif. Filed Mar. 19, 1930. Serial No. 437,031. 3 Claims. (Cl. 189—69.)



1. Operating means for a casement sash comprising a fixed sill member having a recess formed below an outside portion thereof, an extension on the sash extended to below the level of the sill member and over said recess

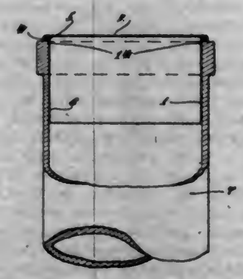
to cover the latter, an operating element on the inside face of the said extension facing said recess, means in the recess to swingably support said element, and actuating means extended under the sill member and through the wall and connected to said element to turn the said element to open and close the window.

1,876,126. ROTARY DRILLING MACHINE. LEWIS E. ZERBE, Moneta, and DAVID S. FAULKNER, Los Angeles, Calif., assignors to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,395. 4 Claims. (Cl. 255—22.)



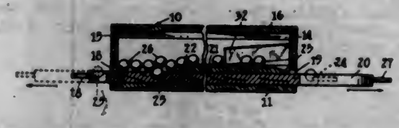
1. In a rotary drilling machine, a base having a vertical opening with an annular recess therein opening inwardly, a gear supported by the lower wall of the recess, means carried by the upper wall of the recess for resisting the upper movement of the gear, a sleeve splined to the gear and positioned in the opening, means for elevating the sleeve, controlling its descent and maintaining it at any selected elevation, a well drilling table secured to the top of the sleeve, and means for rotating the gear.

1,876,127. MOSQUITO TRAP. JOHN CHARLES KEMPER, Mount Washington, Md., assignor of one-half to Ella C. Kemper, Mount Washington, Baltimore, Md. Filed Apr. 10, 1931. Serial No. 529,007. 2 Claims. (Cl. 4—209.)



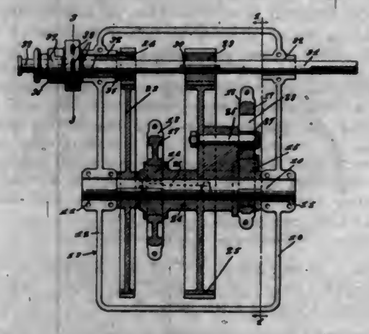
2. A mosquito trap having a substantially flat piece of interwoven wire mesh on the top thereof, a cylindrical body portion depending therefrom, and fixed thereto, a positioning shoulder formed on said body portion in the form of an outwardly rolled edge at a point where the wire mesh is engaged to the cylindrical body portion, the rolled edge being adapted to secure the wire mesh to the body portion, the wire mesh being substantially flush with said positioning shoulder whereby a maximum mosquito trap cover is obtained with a minimum portion thereof projecting beyond the positioning shoulder.

1,876,128. GAME DEVICE. ALBERT A. ALMADA, Vallejo, Calif. Filed Oct. 20, 1931. Serial No. 569,872. 2 Claims. (Cl. 273—144.)



1. In a game device of the class described, a housing, an ejector slide operating thru said housing, an agitator cooperating with said ejector, orifices in opposite ends of said ejector, a plurality of rollable objects within the housing, means for guiding said objects to the ejector, and means for feeding said objects singly to said orifices when the ejector is moved in either direction.

1,876,129. VARIABLE MOTION DEVICE. FRED M. ARNOLD, Chattanooga, Tenn. Filed Aug. 21, 1931. Serial No. 558,574. 4 Claims. (Cl. 74—1.)



1. In mechanism of the class described comprising a plurality of shafts, inner eccentrics fixed to one of the shafts, outer eccentrics loosely mounted on the inner eccentrics, gears on the shaft carrying the inner eccentrics, one gear being fixed and the other loose thereon, a pinion fixed on the other shaft and meshing with the loose gear, wrist pins carried by the loose gear and adjustably connected with the outer eccentrics, a pinion relatively movable about said other shaft and meshing with the fixed gear, and means connected with said last named pinion for turning the same to alter the position of the shaft carrying the inner eccentrics.

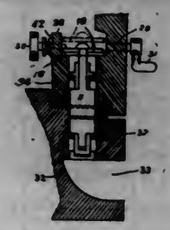
1,876,130. HOLLOW ARTIFICIAL SILK OF LOW LUSTER AND PROCESS OF PREPARING THE SAME. HENRI LOUIS BARTHELEMY, Rome, Ga. Filed Sept. 15, 1930. Serial No. 482,161. 12 Claims. (Cl. 18—54.)

1. The process of making hollow filaments of artificial silk which comprises spinning a solution of a cellulosic compound selected from the ester and ether groups, and containing an ether selected from the group consisting of isopropyl ether and its halogenated derivatives.

1,876,131. PROCESS FOR THE TREATMENT OF ARTICLES MADE OF MAGNESIUM OR HIGH PERCENTAGE MAGNESIUM ALLOYS. ADOLF BECK, Bitterfeld, and HUGO DIBELKA, Dusseldorf-Oberkassel, Germany, assignors, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed July 20, 1929, Serial No. 379,871, and in Germany July 25, 1928. 2 Claims. (Cl. 148—6.)

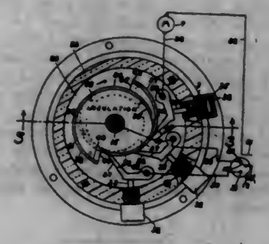
1. The process for preventing the corrosive action of water on magnesium or magnesium alloys which comprises adding to the water a small amount, approximating 1%, of a water soluble dichromate.

1,876,132. COMBINATION LOCK. FRANCIS CARTERET BISHOP, Calcutta, India. Filed Oct. 18, 1927, Serial No. 226,941, and in British India Sept. 1, 1927. 1 Claim. (Cl. 70—54.)



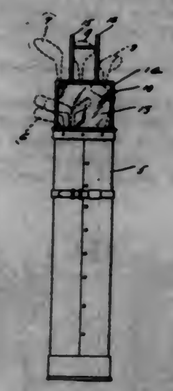
In a combination lock, a plurality of locking members, some of which are normally in locking position while the others are normally in open position, all said locking members having spring devices to return them when disengaged to their normal positions, a plurality of operating devices for said locking members, a releasing means to engage said locking members, said releasing means projecting from both sides of the combination lock and means connecting the releasing means to the locking members normally in closing position for releasing said locking members without actuation of said operating devices, and means to return the said locking members automatically to locking position when disengaged by the releasing means.

1,876,133. ELECTRICAL SWITCH. NORMAN B. CHACE, Cincinnati, Ohio. Filed Apr. 22, 1931. Serial No. 531,906. 7 Claims. (Cl. 200—8.)



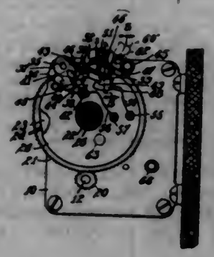
1. A rotary electrical contact member for an electrical control switch comprising a plurality of insulated similar electricity conducting segments at least two of which are greater than a half circle in peripheral extent, the segments being eccentric to the axis of rotation of the rotary contact member and having separated toe and heel portions overlapping but at different distances from the axis of rotation of the rotary contact member.

1,876,134. GOLF BAG. HUGH C. CLAWSON, Rochelle, Ill. Filed Apr. 17, 1931. Serial No. 530,962. 2 Claims. (Cl. 150—1.5.)



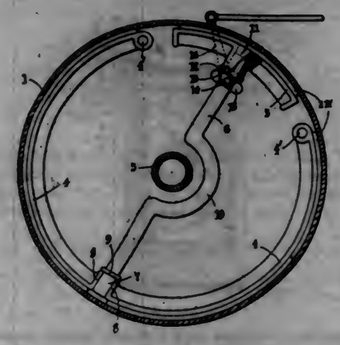
2. In a structure of the class described, a golf bag having an opening in one end thereof for the passage of wooden and iron clubs, a sheath attached to the open end of said bag and having a cross-sectional area less than the opening in the bag, leaving a portion of the opening in the bag for the reception of the shanks of iron clubs, said sheath being provided with a plurality of laterally spaced extensions, constituting separators to hold the heads of wooden clubs separate and apart.

1,876,135. FLYBACK RATCHET DRIVE. JAMES O. DAVIS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 25, 1931. Serial No. 532,859. 10 Claims. (Cl. 74—54.)



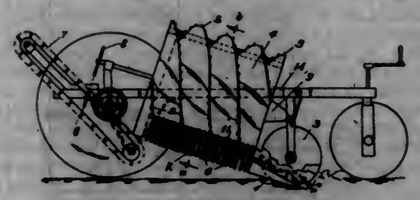
1. A snap-back driving train comprising, a rotary driver, an oscillatory driven element, a pawl carried by the driven element and adapted to engage the driver, a retracting lever carried by the driven element, a one-way connection between the pawl and retracting lever in pawl-retracting direction, a latch carried by the driven element and arranged to hold the retracting lever in pawl-activating position, means for driving the retracting lever in pawl-retracting direction, means for shifting said latch to release position, a latch arranged to hold the pawl in retracted position, a one-way connection between the two latches to retract the second latch from pawl-retaining position when the first latch is in position to retain the retracting lever in inactive position, means arranged in the path of movement of the second latch to retract it upon completion of a forward stroke of the driven element, means for restoring the retracting lever to inactive position at the end of each return stroke of the driven element, and a spring yieldingly urging the driven element in reverse direction.

1,876,136. BRAKE. WALTER HAMILTON DELAHAYE, Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Filed May 1, 1929. Serial No. 359,446. 9 Claims. (Cl. 188—78.)



1. In a Servo brake, a fixed support, a main shoe, a lever operating said main shoe, a Servo brake shoe slidable on said lever and means supported on said lever to cause outward movement of said shoe to engage a brake drum.

1,876,137. HARVESTING MACHINE. CARL ENGELEN, Oedingberge Post Glandorf Bezirk Osnabruck, Germany. Filed Nov. 25, 1929, Serial No. 409,679, and in Germany Nov. 24, 1928. 8 Claims. (Cl. 55—58.)



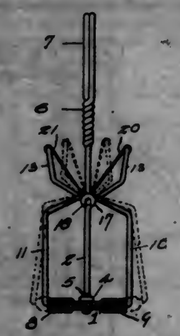
1. In a machine for harvesting agricultural products, a plurality of resilient and relatively movable transverse rods forming a basket, a revoluble worm partially enclosed by said basket co-operating with said rods, for separating the weeds and other undesirable material from the products being gathered, and means for actuating the worm and rods by the forward travel of the machine.

1,876,138. SPRING ADJUSTMENT. GEORGE R. FASSETT, Atlanta, Ga., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Dec. 5, 1929. Serial No. 411,804. 5 Claims. (Cl. 267—71.)



1. A spring adjustment, comprising the combination of a spring and a movable abutment therefor, of an adjustment element pivoted on an axis transverse to the direction of movement of the abutment, and provided with a plurality of surfaces located at different distances from its axis and each adapted to engage said abutment.

1,876,139. TROUSERS HANGER. WILLIAM E. FELDMAN, Salem, Oreg., assignor of one-half to Arthur E. Horst-Kotte, Salem, Oreg. Filed Feb. 20, 1931. Serial No. 517,364. 1 Claim. (Cl. 223—68.)



The combination in a duplex trousers-hanger with a central bar forming a fixed jaw, a suspending frame rigid with the bar, and a pivot bar in the frame, of a pair of holder-frames having pivotal supports on the pivot bar, said holder-frames having upper portions forming handles, a movable jaw carried at the lower end of each holder-frame for co-action with the fixed jaw, a spring on the pivot bar, and a pair of arms on the spring, each of said arms being connected to a handle.

1,876,140. BRAKE SHOE. DAVID L. GALLUP, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 30, 1928. Serial No. 322,677. 8 Claims. (Cl. 188—250.)

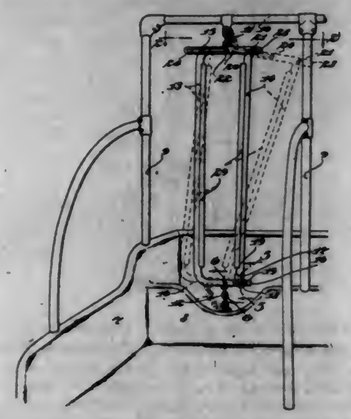


1. A brake shoe comprising at least two principal parts, viz: (1) an outer arcuate band formed with a comparatively small number of embossments lying in or immediately adjacent a longitudinally extending line dividing the band in equal parts and further provided with a plurality of spaced slots also lying in or immediately adjacent said line, and (2) a separate stiffening web having tongues at its outer edge projecting into the aforementioned slots and having its outer edge engaging the inner face of said band between the openings, said band being secured to the web at least in part by spot welds at the aforementioned embossments, the welds and tongues being symmetrically spaced from the center of the shoe to provide a shoe, one half of which is the mirror image of the remaining half.

1,876,141. STANCHION. CASPER F. HANSON, Albert Lea, Minn., assignor to Olson Manufacturing Company, Albert Lea, Minn., a Corporation of Minnesota. Filed Mar. 29, 1930. Serial No. 439,967. 5 Claims. (Cl. 119—150.)

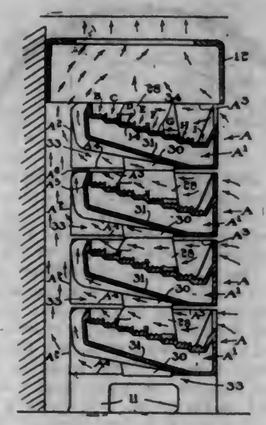
5. A stanchion including a relatively stationary member having a channeled top extension and a cooperating upright bar hinged at its lower end to the member for opening and closing movements in the plane of the stanchion, a horizontally disposed latch-acting hook in the channeled top extension, the rear end of said hook being bifurcated, a horizontal pin extending through the prongs of the bifurcated end of the hook and pivotally connecting the same

to the top extension for vertical swinging movement, and means for suspending the stanchion from an overhead support including a loose link between the prongs of the bifurcated end of the hook and through which link the pivot pin extends, said hook being constructed and ar-



ranged to engage the link and hold the same in a rearwardly and upwardly inclined position, whereby the weight of the suspended stanchion acting on the link tends to move the link into an upright position and thereby hold the hook in an operative position.

1,876,142. HUMIDIFYING RADIATOR. ANDREW U. JONES, Montreal, Quebec, Canada. Filed Feb. 15, 1932. Serial No. 593,123. 8 Claims. (Cl. 257—182.)



7. A radiator including a series of vertically spaced radiator sections, each having its top and bottom walls sloping downwardly toward the front of the radiator, the top wall of each section being recessed to provide a water evaporating area and the end walls being formed to project above the top wall and below the bottom wall so that the upper and lower edges of said end walls closely approach the opposing end wall edges of adjacent sections.

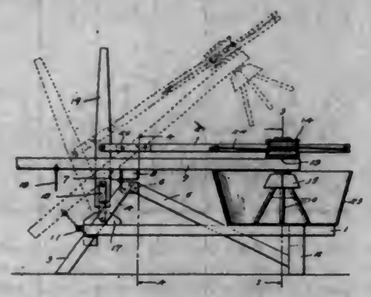
1,876,143. CAMERA. WINSOR JOSSELYN, Carmel, Calif. Filed Apr. 17, 1929, Serial No. 355,879. Renewed Apr. 5, 1932. 5 Claims. (Cl. 95—32.)

1. In a camera, a film winding reel, a shutter, a lever operable to control actuation of said shutter, resilient means for engaging and locking said lever against movement after each actuation of said shutter, releasing means actuated by turning movement of said film, winding



reel operative to release said resilient means from locking engagement with said lever, and a ridge on said lever for guiding the operation of said resilient means.

1,876,144. WASHING MACHINE. ALEXANDER LOUVIER and MARIUS LEWIS LOUVIER, Port Arthur, Tex. Filed Feb. 16, 1932. Serial No. 593,338. 3 Claims. (Cl. 259—101.)



1. A hand operated washing machine comprising a base structure in the form of a platform, supporting legs for the platform at the front and rear ends thereof, the legs at the rear end of the platform being extended to a point above the same, a sill supported between the extended ends of the rear legs and above the platform, an arm extending transversely of the sill and having pivotal connection intermediate its ends to the sill, one end of the arm being disposed over the forward end of the platform, an oscillating hand lever mounted on the platform adjacent the arm, a rod pivotally connected at one end of the lever and extending forwardly therefrom, an agitator element carried by the said forward end of the arm and including a plurality of downwardly diverging agitator fingers and a pulley element, and a flexible cable connected at its ends to remote points on the rod and having its intermediate portion wrapped about said pulley.

1,876,145. HYDRAULIC DRAFT GEAR. JOHN A. MCGREW, Albany, N. Y. Filed Aug. 14, 1929. Serial No. 385,817. 6 Claims. (Cl. 213—43.)

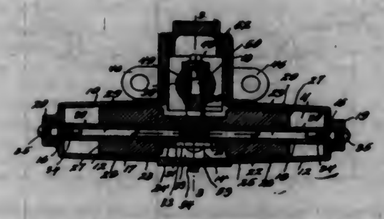
5. A self-contained hydraulic compression element for draft gears or the like, comprising, in combination, a pair of telescoping casing members, the outer one of said members being provided with an annular wall projecting inwardly from one end thereof, said wall being considerably shorter than said casing member and adapted to divide said member into an outer annular fluid reservoir portion

and a central pressure chamber, a plunger formed on said inner telescoping casing member and adapted to enter said pressure chamber with a slight clearance and displace the fluid therein upon compression of said element under a



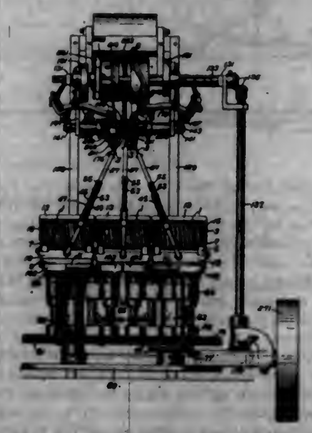
draft or buffing force, said plunger being of such length as to normally be disposed exteriorly of said pressure chamber, and means for restoring said element to normal extended position upon the cessation of said force.

1,876,146. SHOCK ABSORBER. JOHN A. MCGREW, Albany, N. Y. Filed Jan. 2, 1930. Serial No. 418,054. 18 Claims. (Cl. 188—88.)



1. In a shock absorber, in combination, a casing enclosing a fluid chamber, a plunger adapted to reciprocate within said chamber but remain at all times out of contact with the walls of said chamber, said casing and plunger being, respectively, adapted to be connected to relatively movable elements, and a member rigid with said casing and extending from end to end of said chamber, said member being slidably received within a longitudinal opening through said plunger, whereby said plunger may be guided in its movements within said chamber.

1,876,147. BRAIDING MACHINE. FRANK W. MERRICK, Dorchester, Mass., assignor to American Stay Company, East Boston, Mass., a Corporation of Massachusetts. Filed Nov. 25, 1929. Serial No. 409,563. 21 Claims. (Cl. 96—2.)



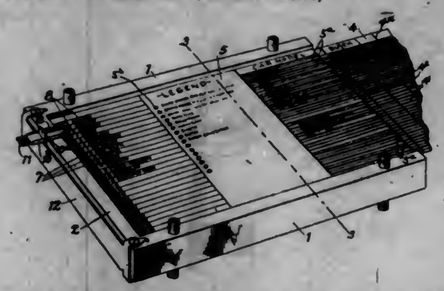
1. A braiding machine having, in combination, means for moving reservoirs of strand to lay a flat plaited braid in which the same side of each strand is continuously at the same side of the braid, means acting to pull the portions of the successive middle strands coming out of the end of the braid alternately to opposite sides of the braid, beating-up mechanism operating upon said portions of said strands when so pulled, and means for operating said means for pulling said middle strands and said beating-up mechanism coordinately with each other and with the movements of said reservoirs.

1,876,148. RAKE. FREDDIE B. MEWMAW, Milan, Mo., assignor of one-half to Phillip M. Marr, Milan, Mo. Filed May 15, 1931. Serial No. 537,712. 2 Claims. (Cl. 56—396.)



1. In a rake of the class described, a frame, a plurality of tines extending forwardly from the frame, a follower movable over said tines and having a plurality of rearwardly extending rods, frusto-conical-shaped sleeve on said rods and tapered toward the rear ends thereof, expansion springs confined between said sleeves and the rear ends of said rods, and brackets attached to said frame and having seats narrowed toward the rear ends thereof to support said sleeves.

1,876,149. SELECTIVE CARD INDEX. STERLING A. OAKLEY, Boise, Idaho. Filed Dec. 22, 1931. Serial No. 582,615. 21 Claims. (Cl. 129—16.1.)



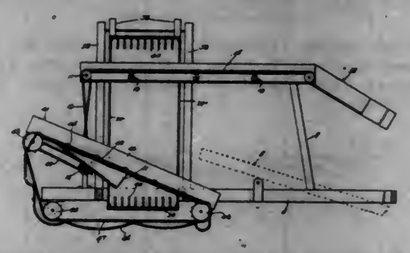
1. In a selective card index, a casing comprising top and bottom members, with registering slots extending through said members; superimposed cards separably movably mounted in the casing; each card having a notch adapted to register with one slot so as to expose the inner end of said notch; and each card having slots adapted to register with the remaining slots in the members; the notches in the various cards registering with different slots in the members; and means adapted to enter the slots and engage the notches and shift the related card.

21. In a selective card index, a casing having one end open, a series of cards in the casing adapted to be individually projected out of the open end, registering horizontal linings on the cards and on the top and bottom faces of the casing for co-relating information, and vertical lining on the cards dividing each card into a plurality of vertical fields for the purpose specified.

1,876,150. POTATO PICKER. ANTON PEARSON, Silverhill, Ala. Filed July 22, 1930. Serial No. 469,880. 2 Claims. (Cl. 55—9.)

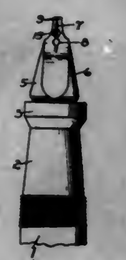
1. A potato picker attachment for potato diggers comprising a frame, a vertically arranged slotted drum rotatably supported in said frame, and transversely arranged in said frame, a plurality of rows of curved fingers carried

by the inner circumference of the drum and forming means for elevating the potatoes, a longitudinally arranged conveyor frame supported on the frame and having an intermediate part located within the drum, said conveyor frame sloping downwardly and forwardly with its lower end receiving the potatoes and vines from the diggers, endless chains supported for travelling movement through the conveyor, some of the chains being arranged in loops



for forming pockets for holding the potatoes and vines, with the vines discharged from the top of the conveyor after the potatoes have been separated therefrom, a chute for delivering the potatoes from the conveyor into the low part of the drum, and a second conveyor, including an endless travelling member, passing through the upper part of the drum for receiving the potatoes dropped from the fingers and means for actuating the two conveyors and rotating the drum.

1,876,151. PEN-POINT. SOLOMON M. SAGER, Chicago, Ill. Filed Nov. 1, 1929. Serial No. 403,947. 12 Claims. (Cl. 120—43.)



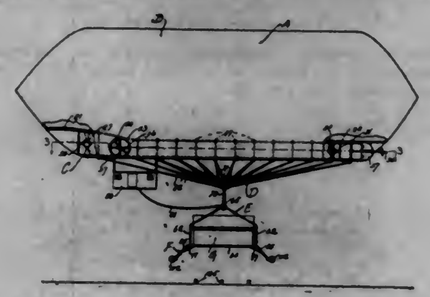
1. The combination with a pen-holder, of a unitary multi-point pen supported thereby having the pen point arranged for independent use, and a unitary multiple type feed bar engaged in said holder and projecting into the multi-point pen for feeding ink independently to each of the pen points.

1,876,152. CONTAINER. WALTER A. SHEAFFER, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa, a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,183. 3 Claims. (Cl. 215—48.)



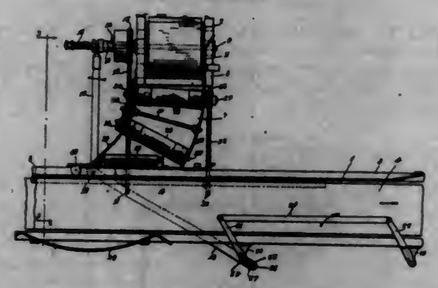
1. A receptacle for liquids having a main chamber and an open-ended auxiliary chamber, an apertured seat between said chambers providing communication therebetween, said aperture being of a substantially smaller diameter than the diameters of said chambers, removable rigid closure means for engaging said open end of said auxiliary chamber, and sealing means comprising a resilient member of a diameter throughout the length thereof greater than that of said aperture and smaller than that of said auxiliary chamber secured to said closure means for effecting a seal of said main chamber to prevent soiling of the upper end of said auxiliary chamber, said sealing means being of a greater height than the depth of said auxiliary chamber.

1,876,153. AERIAL TRANSPORTATION APPARATUS. SCHUYLER O. SPURRIER, Carnegie, Okla. Filed Sept. 2, 1930. Serial No. 479,305. 16 Claims. (Cl. 244—1.)



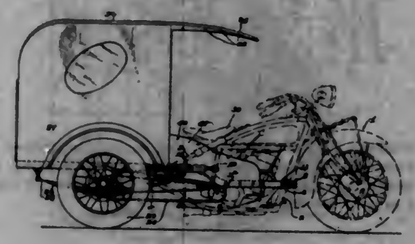
1. In aerial transportation apparatus the combination of a dirigible aircraft, load attaching means, means to releasably connect the load attaching means to the dirigible aircraft, and means for rotatably shifting the load attaching means with respect to the dirigible aircraft.

1,876,154. INTERSECTION CONTROLLING APPARATUS FOR CONVEYERS. FRED STEBLER, Riverside, Calif., assignor to Stebler Parker Co., Riverside, Calif., a Corporation of California. Filed July 22, 1929. Serial No. 380,040. 3 Claims. (Cl. 198—21.)



2. In apparatus of the kind described, the combination of a continuously driven main conveyer, a lateral conveyer having its discharge end adjacent to the main conveyer, automatic means controlled by an article advancing on the main conveyer for stopping the lateral conveyer to delay articles advancing on the same into the intersection with the main conveyer, and feeding means located between the discharge end of the lateral conveyer and the main conveyer, said feeding means including a pair of driven rollers mounted with their axes converging toward each other and cooperating to deliver a box from the lateral conveyer on to the main conveyer in the general direction in which the main conveyer is moving, one of said rollers being located adjacent to the delivery end of the lateral conveyer so as to advance any article left standing on the lateral conveyer and projecting beyond its end, onto the main conveyer.

1,876,155. DELIVERY CAR. ALBERT STERN, JULIUS STERN, and JOSEPH STERN, New York, N. Y., assignors, by mesne assignments, to Indian Motocycle Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1930. Serial No. 432,144. 11 Claims. (Cl. 180—27.)

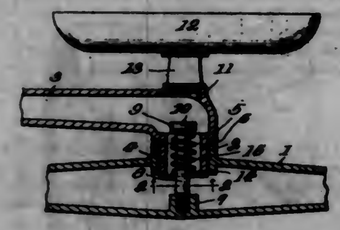


2. In a device of the class described, the combination of a motorcycle and a delivery car chassis, said motorcycle including a front frame and a rear fork, said chassis including two side members, a front cross member and a central cross member, means for tieing the said front cross member of the chassis to the front frame of the motorcycle, means including a longitudinal rod for tieing the front frame of the motorcycle to the said central member of the said chassis and means for tieing the said motorcycle rear fork to the said central member of the chassis.

1,876,156. PLATING ZINC-TIN ALLOY. MERRILL M. THOMPSON and JAMES C. PATTEN, Indianapolis, Ind.; said Thompson assignor to said Patten; Margaret Lucile Patten executrix of said James C. Patten, deceased. Filed Sept. 2, 1930. Serial No. 479,414. 9 Claims. (Cl. 204—2.)

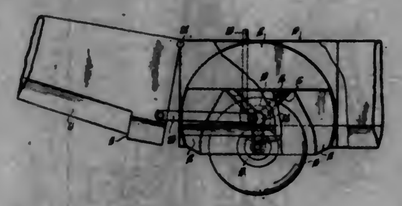
6. In the electroplating of iron and steel articles with zinc-tin alloys at predetermined metallic ratios, the process which comprises passing current through a bath between anodes and the said articles serving as cathodes, the said bath containing zinc and tin in approximately said predetermined ratio, and the said anode being a zinc-tin alloy amalgamated with mercury, the zinc and tin of said alloy being in a ratio of 90:10 and the amount of mercury being about 2 per cent of the alloy.

1,876,157. LIQUID DISPENSING DEVICE. ALBERT U. WALTER, Govans, Md. Filed Dec. 15, 1931. Serial No. 581,205. 6 Claims. (Cl. 137—111.)



2. A liquid dispensing device including a supply pipe, a swinging spout mounted thereon, one of said parts having a bearing sleeve and the other having a trunnion sleeve extending into the bearing sleeve, said pipe and spout having cooperating sealing surfaces, and means located within the pipe and spout and extending centrally through the trunnion sleeve for holding said parts in assembled position.

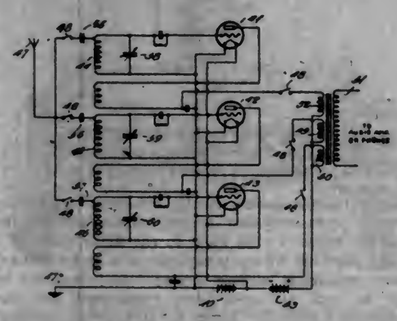
1,876,158. LANDING AND BEACHING GEAR FOR AIRCRAFT. LEONARD WILLOUGHBY WINTER, Bluebell Hill, near Rochester, England. Filed Dec. 15, 1931, Serial No. 581,203, and in Great Britain Dec. 8, 1930. 12 Claims. (Cl. 244—2.)



3. Aircraft alighting gear comprising a buoyant body having an opening, a ground wheel, means for moving said wheel about a pivot positioned within said body into the buoyant body from its operative position by way of said opening and vice versa, said means including a drive shaft, and a cover for said opening operable from said shaft to swing about the pivotal axis for the wheel and close the opening when the wheel is retracted.

9. Aircraft alighting gear comprising a buoyant body having an opening, an open-ended box-like frame slidable endwise within said opening, a wheel, journals in said frame for said wheel, a cover for the end of said frame, and means for simultaneously moving said wheel and cover.

1,876,159. RECEIVING SYSTEM. LEO C. YOUNG, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1928. Serial No. 294,287. 20 Claims. (Cl. 250—10.)

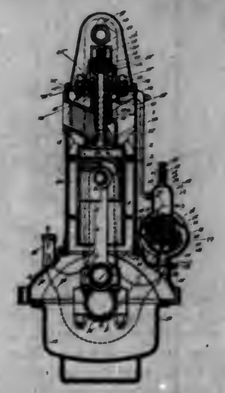


1. In a radio receiving system the combination of a plurality of thermionic tubes having a plurality of input circuits, said input circuits having different harmonically related frequency characteristics corresponding to a plurality of transmitted signals, said thermionic tubes having a common output circuit, and means associated with said output circuit for reproducing the received signalling energy.

1,876,160. INTERNAL COMBUSTION ENGINE VALVE. VICTOR F. ZAHODIAKIN, Cincinnati, Ohio. Filed Nov. 16, 1931. Serial No. 575,259. 17 Claims. (Cl. 123—177.)

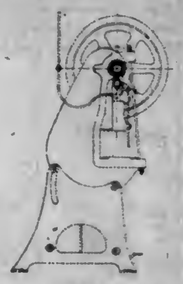
1. In an internal combustion engine, the combination with an engine block having a cylinder having a reciprocating piston therein adapted to make compression, explosion, exhaust and intake strokes, a crank case fixed to the bottom of said block, an engine head having a valve guide having a spiral groove therein and being fixed to the top

of said block and having an exhaust passage, an operative exhaust valve in said head and slidable in said guide and having a stem, head and seat, of means to create cur-



rents of air around and in contact with said stem and in contact with said valve head and thence through said exhaust passage.

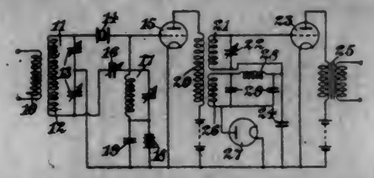
1,876,161. APPARATUS FOR AUTOMATIC EXPULSION OF WORKED ARTICLES FROM STAMPING POWER PRESSES. DONATO ZAZZARA, Naples, Italy. Filed July 7, 1931, Serial No. 549,263, and in Italy June 5, 1931. 4 Claims. (Cl. 113—50.)



1. Apparatus for pneumatically expelling stamped articles from a press including in combination with the drive shaft of the press, a ring fixed to the drive shaft of the press and provided with a peripheral cam and also having a smooth cylindrical surface arranged in juxtaposed relation to the cam, an independent compressed air supply pipe associated with the press, a valve casing interposed within the pipe, a valve including a head operating in the casing for controlling the passage of compressed air thereto, a stem projecting from the casing, and means for adjusting the position of the ring on the shaft so that either the cam or the smooth surface will actuate the valve stem, substantially as and for the purposes set forth.

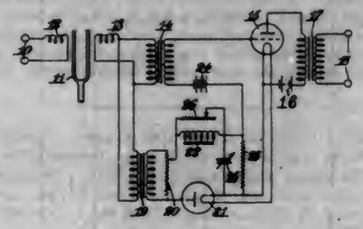
1,876,162. THERMIONIC VALVE SYSTEM. HUMPREY ANDREWES, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed Apr. 18, 1931, Serial No. 531,210, and in Great Britain May 7, 1930. 5 Claims. (Cl. 250—20.)

1. In wave signalling apparatus, the combination with a highly selective resonator for applied modulated wave energy, a detector valve to which the energy output of said resonator is supplied, the degree of selectivity of said resonator being such that the percentage modulation of the energy supplied to the valve is materially reduced, whereby an abnormally high bias potential is required for the valve, means operable to reduce the degree of selectivity of said resonator whereby the percentage of modulation of the energy supplied to the valve is increased by reduction of



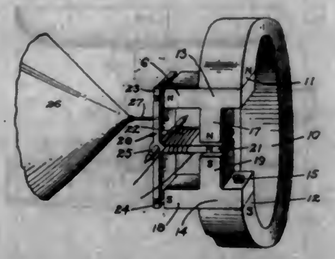
the absolute signal amplitude, and means controlled by operation of said last named means for decreasing the bias potential supplied to the valve as the degree of selectivity of said resonator is reduced.

1,876,163. WAVE SIGNALING SYSTEM. GEORGE PRIECHENFRIED, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed Mar. 30, 1931, Serial No. 526,528, and in Great Britain May 7, 1930. 9 Claims. (Cl. 178—51.)



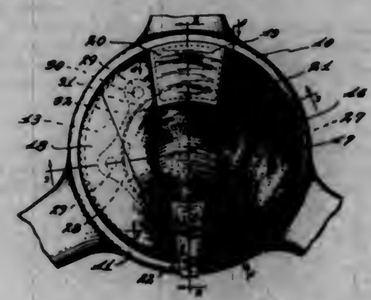
1. Receiving apparatus for telegraphic signals comprising signal receiving means of low damping, the degree of damping of said means being insufficient to prevent persistence of the signals so that the longer of the individual signal impulses fail to fall to their initial value following the passage of the signal, and means associated with said receiving means and responsive to the individual signal impulses for reducing the amplitude of the impulses to an extent proportionate to such amplitude.

1,876,164. MAGNETIC DEVICE. EDWIN S. PRIDHAM, Oakland, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed July 1, 1929. Serial No. 375,145. 11 Claims. (Cl. 175—339.)



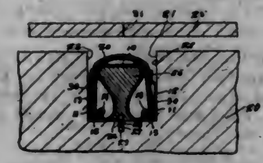
1. A magnetic actuating mechanism for sound transmission devices and the like comprising a magnetic field producing element having a pair of polar projections formed upon each pole thereof and disposed to provide two magnetic flux paths from each pole, a pivoted three pole balanced armature adapted to magnetically co-operate with said polar projections, and a winding on said armature.

1,876,165. STEERING WHEEL CAP ASSEMBLY. JOHN J. PUNKE, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed July 22, 1929. Serial No. 380,221. 7 Claims. (Cl. 200—59.)



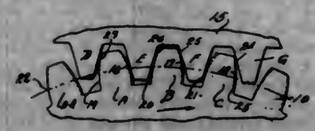
1. In a device of the class described, the combination with a steering wheel having a hub portion and a plurality of circuit controlling switches, of a cap formed of a plurality of sections rotatable as a unit upon the hub portion to actuate one of the switches, one of said sections operable independent of the other sections for actuating another of said switches.

1,876,166. METHOD OF FABRICATING A RUNWAY. HOWARD D. RANDALL, Cincinnati, Ohio, assignor to The Randall Company, a Corporation of Ohio. Filed Aug. 12, 1930. Serial No. 474,686. 3 Claims. (Cl. 18—59.)



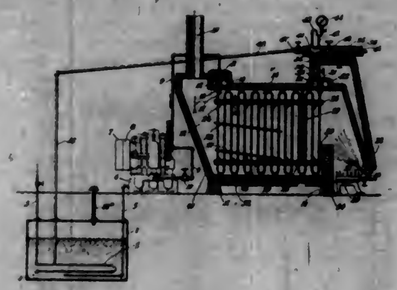
1. The method of fabricating a runway comprising placing in a mold a core having a contour corresponding to a desired form of runway channel, the mold having a base and side walls, placing in the mold against each side wall an anchor member having a clinch portion in abutment upon the base of the mold, covering the core, the base of the mold and each clinch portion with a covering strip for the runway body, placing in the mold upon the covering strip a quantity of material that will expand and retain its expanded condition upon subjection to heat confining the contents of the mold and subjecting the filled mold to a heat treatment for expanding the expansible material whereby to anchor the anchor member and cause the covering material to be pressure held upon the clinch portion of the anchor member, then removing the formed runway from the mold.

1,876,167. APPARATUS FOR CORRECTING GEARS. ALLEN B. REDNER, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Aug. 28, 1929. Serial No. 389,023. 4 Claims. (Cl. 29—105.)



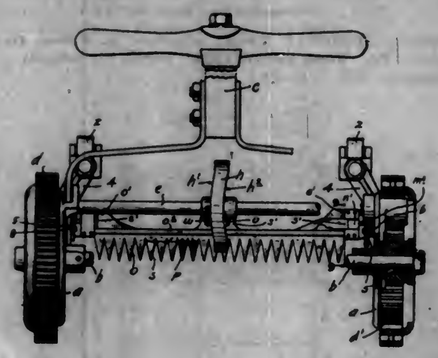
1. A Gleason finish cutter modified from Gleason's standard practice of between 13° and 16° cutting angle by altering the cutting edge approximately two degrees.

1,876,168. PROCESS OF PREPARING FUELS FOR USE. EDWARD ADAMS RICHARDSON, Bethlehem, Pa. Filed Aug. 18, 1928. Serial No. 300,569. 8 Claims. (Cl. 158—117.5.)



1. The method of utilizing normally liquid fuels which comprises the steps of heating a liquid adapted to be used as a fuel to a temperature substantially at least as high as the critical temperature thereof while maintaining it at a pressure of the order of the critical pressure thereof, conveying directly while in this condition to the apparatus controlling the consumption of the same and oxidizing the fuel while in the form of a gas-like vapor.

1,876,169. LAWN MOWER. ALBERT E. RIEMENSCHNEIDER, Portland, Oreg. Filed May 22, 1929. Serial No. 365,029. 4 Claims. (Cl. 56—262.)

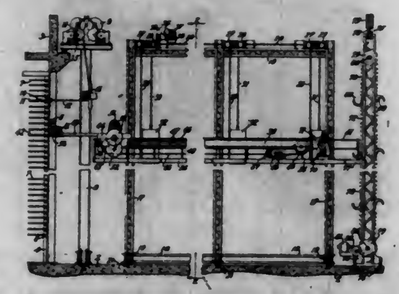


1. In a lawn mower the combination of a frame, ground wheels journaled at the sides of the frame, a stationary serrated blade and a complementary longitudinally reciprocable blade, said blades arranged parallel with and to the rear of the axis of rotation of said ground wheels and supported at each end on tiltable brackets carried by said frame, means carried by said frame adapted to hold said brackets in adjusted position relatively to the ground, and a driving connection between said ground wheels and said complementary blade for reciprocating the latter.

1,876,170. HARDENING OF STEEL. RUDOLF RIPA, Frankfort-on-the-Main, Germany, assignor to Pomosin Werke G. m. b. H., Frankfort-on-the-Main, Germany, a Company of Germany. Filed Apr. 23, 1931, Serial No. 532,277, and in Germany Apr. 30, 1930. 1 Claim. (Cl. 148—18.)

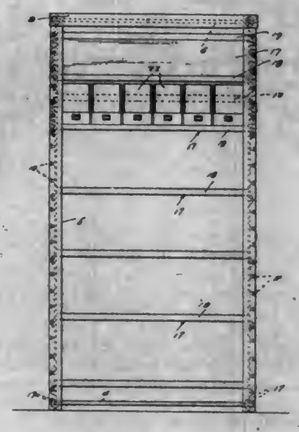
The process of treating steels and like metal alloys, which consists in plunging them while hot into a hardening pectin solution.

1,876,171. APPARATUS FOR HANDLING SHEETS. LELAND S. ROSENER, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 6, 1931. Serial No. 528,222. 14 Claims. (Cl. 271—2.1.)



1. An apparatus for handling sheets comprising a rack for holding the sheet, a conveyor opposite the rack, means for driving said conveyor, and means for pulling a portion of the sheet out of the rack and depositing it on the conveyor, the amount of the sheet pulled out by said pulling-out means being such that the frictional engagement of the sheet with the conveyor operates to continue pulling out the sheet.

1,876,172. DISPLAY RACK. PATRICK A. RUDDY, Dunmore, Pa. Filed July 7, 1930. Serial No. 466,281. 5 Claims. (Cl. 211—71.)



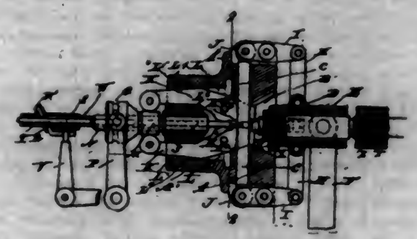
2. A rack comprising a pair of end frames, formed of angle iron and having a plurality of lugs attached to one of the legs forming the angle portion, said frames being spaced apart, with the angle portion facing outwardly, slidably adjustable shelf rests engaging with the lugs formed on the frames and shelves associated with the adjustable rests, adapted to support a plurality of pans thereon.

1,876,173. ADJUSTABLE DOORSTOP. MICHAEL J. SASGEN, Chicago, Ill., assignor to Grand Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed July 22, 1930. Serial No. 469,819. 4 Claims. (Cl. 292—338.)



1. In a door stop of the kind described, a pivoted lever, the lever made of a plurality of relatively longitudinally movable parts for adjusting the lever, means for retaining the parts rigidly in their adjusted positions and means for permanently securing the parts against complete separation.

1,876,174. NIPPLE SWAGING MACHINE. EDWARD W. STOLER, Mansfield, Ohio, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 24, 1928. Serial No. 328,299. 11 Claims. (Cl. 10—11.)

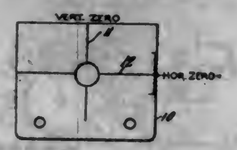


1. In a head for automatically forming blank nipples from wire stock, in combination, a stationary outer head, having a central opening therethrough, forming dies radially movable in said head, an axially movable heading die, and means operatively connected with the movements of said heading die for simultaneously moving said forming dies to and from said wire stock, means for gripping said wire stock adjacent to said forming dies while said heading and forming dies are operated upon said stock, a support in which said gripping means are mounted said support being rotatable in said head to shear the wire stock from the formed and headed nipple blank while said forming and heading dies are exerting their greatest amount of pressure and have completed their greatest amount of pressure and have completed their work thereon.

1,876,175. METHOD OF MAKING METAL CARBIDES. WINSTON F. STOODY, Whittier, and THOR RELLING, Belvedere Gardens, Calif., assignors to Stoody Company, Whittier, Calif., a Corporation of California. Filed May 28, 1930. Serial No. 456,806. 3 Claims. (Cl. 23—208.)

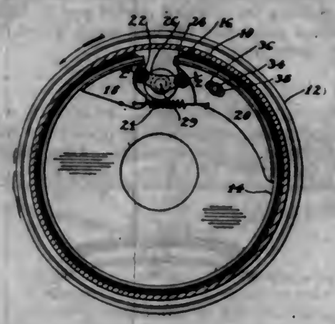
1. A method of making carbides of metals, comprising making a paste of carbon with distilled petroleum oil, intimately mixing the paste with a finely divided metal, and sintering the mixture.

1,876,176. LOCATION FINDER FOR MICROSCOPES. CHARLES F. SULZNER, Miami, Fla. Filed Dec. 16, 1930. Serial No. 502,874. 10 Claims. (Cl. 88—40.)



1. Means for locating an object on a microscope slide including a microscope stage having longitudinal and transverse zero-lines disposed at right angles to each other and disposed so as to intersect each other, at the optical axis of the microscope and means associated with the slide and coacting with said zero lines for determining the position of a predetermined point on said slide with reference to said longitudinal and transverse zero lines of the stage.

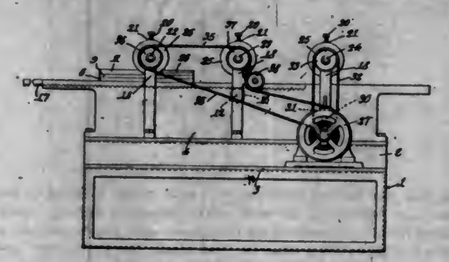
1,876,177. BRAKE. EUGENE V. TAYLOR, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 26, 1930. Serial No. 470,798. 9 Claims. (Cl. 188—78.)



1. A brake comprising a drum, friction means therefor having relatively movable ends, a rotatable brake applying member, one of said ends having thrust surfaces, one of which is a cam surface adapted to coact with the member to apply the brake, and the other of which is a surface in contact with the member having the same contour as the path defined by the contacting portion of the member.

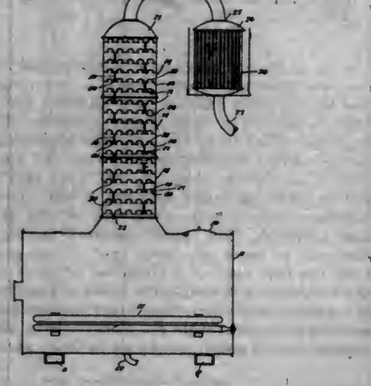
1,876,178. BEVELING MACHINE. GEORGE R. TESCHEL, GUS SALINGER and LOUIS H. ISAACSON, Parkersburg, W. Va. Filed Dec. 17, 1928. Serial No. 326,668. 1 Claim. (Cl. 51—92.)

In a glass-grinding machine, a bed provided in its upper surface with a longitudinal recess, a work carriage movable longitudinally of the bed, a vertically movable table above the carriage, and movable with the carriage along the bed, a plurality of means mounted in the carriage and engaging the table to raise, lower and level the table, said means extending under the carriage and into the recess, and being accessible for manipulation by way of the recess, mechanism extended into the recess for imparting right-line reciprocation to the carriage, the means for raising, leveling and lowering the table being spaced to clear said means, as the carriage is reciprocated, terminal grinders and an intermediate grinder supported for rotation in operative relation to the carriage, the terminal grinders being spaced from the intermediate



grinder by a distance less than the length of the work on the carriage, and the distance between the terminal grinders being greater than the length of the work on the carriage, a shaft journaled in the bed, belt connection between the shaft and one of the terminal grinders, another single, belt connection between the shaft and the intermediate grinder and the other terminal grinder, a motor and means for connecting the motor operatively with the shaft.

1,876,179. APPARATUS FOR FRACTIONAL DISTILLATION OF COMPOSITE LIQUIDS. HERBERT T. TINDALL, Dorchester, Mass. Filed May 23, 1930. Serial No. 455,077. 2 Claims. (Cl. 202—158.)

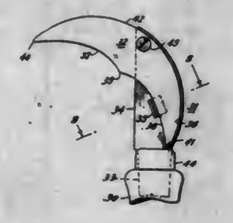


1. Apparatus for distilling a composite liquid comprising a still, a vapor column communicatingly connected with said still, a series of plates within said vapor column dividing the same into chambers, a multiplicity of bell caps on each such plate, and pipe means flush with the top of each such plate extending downward to a point adjacent the plate immediately below, whereby condensate is returned to the still without contacting to an unnecessary extent with vapors ascending from the still.

1,876,180. SHINGLE AND LINOLEUM KNIFE. ROBERT J. TOBIN, Hollis, N. Y. Filed July 12, 1930. Serial No. 467,451. 3 Claims. (Cl. 30—9.)

2. In a cutting knife, the combination of a crescent-shaped reversible blade with the inner edge of the crescent forming the cutting edge, a plate member for receiving

and holding said blade, means for attaching said blade to said plate member, an upstanding curved wall member formed on the back edge of said plate member for engaging the curved back edge of said plate member for en-



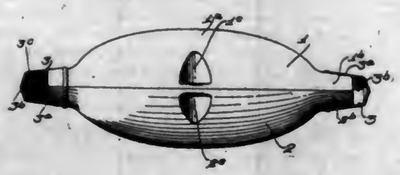
gaging the curved back edge of said blade to hold it from moving relatively to said plate member during cutting operations, an upstanding tongue on said plate member adjacent the cutting edge of said blade to protect the user, and a handle secured to said plate member.

1,876,181. PACKAGE OF INDEX GUIDES. REGINALD MILLER TUSSING, Marietta, Ohio, assignor to The Victor Safe & Equipment Company, Marietta, Ohio. Filed Nov. 19, 1930. Serial No. 496,760. 2 Claims. (Cl. 206—46.)



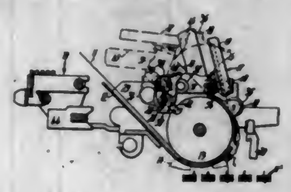
1. In a display package of index guides, the combination of a plurality of index guide cards arranged in groups and having index tabs on each adjacent card in a group offset laterally, an open topped container of less height than said guide cards receiving and supporting said cards in upstanding relation therein with the upper end portions of said guide cards and the index tabs thereon projecting above the upper open end of said container, spacer members between adjacent groups of said guide cards in said container, said spacer members having a thickness sufficient to space the front card of one group of cards from the rear card of a preceding group of cards so that the tab thereon is visible for display, whereby each group of cards is separated from other groups and all of the tabs thereon are visible for display when the package is viewed from a point above and in front thereof.

1,876,182. TAMALE MOLD AND CONTAINER. URBAN URBANY, San Diego, Calif. Filed Feb. 10, 1931. Serial No. 514,893. 8 Claims. (Cl. 107—19.)



1. In a tamale mold and container, a pair of complementary shell members together simulating a tapering ended tamale, there being provided reduced open end portions, and closed ended cap means fitted over said end portions for closing said open end portions and holding said shell members in their complementary relation.

1,876,183. TYPEWRITING MACHINE. HARRY H. VICKERS, St. Albans, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed June 9, 1925, Serial No. 35,858, now Patent No. 1,743,040, dated Jan. 14, 1930. Divided and this application filed Sept. 13, 1929. Serial No. 392,295. 7 Claims. (Cl. 197—127.)



1. In a typewriting and computing machine, the combination with a carriage, a cross-rod fastened in the ends of said carriage, and a collating table mounted on said cross-rod for lateral adjustment with respect to said carriage, of means for readily latching said table in a plurality of positions on said rod, said means including a finger-piece pivoted above said cross-rod, and having a substantially flat tab-portion extending forwardly from said cross-rod, and a portion having an open slot extending downwardly from the pivot to straddle said cross-rod, and a spring normally pressing said slotted portion against said cross-rod for engaging in notches cut in the back of said cross-rod, the construction of said finger-piece and said spring being such that, when said table is moved from one notch along the rod, said slotted portion slides on the crossrod and snaps into the next notch without attention from the operative.

1,876,184. COLLAR HOLDER. FRANCIS J. WAKEFIELD, Attleboro, Mass., assignor to Taunton Pearl Works, Inc., a Corporation of Massachusetts. Filed June 3, 1931. Serial No. 541,842. 6 Claims. (Cl. 24—81.)

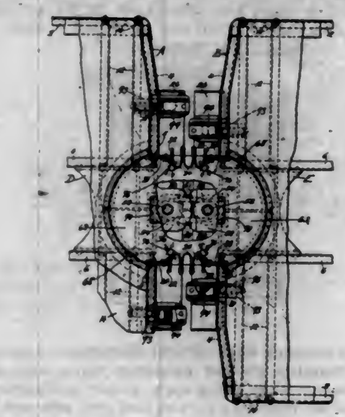


6. In a collar holder, a bar of resilient sheet stock disposed in a plane parallel to the extent of the stock which it is intended to grip, a bar of sheet stock of a width greater than its thickness and disposed in a plane at right angles to the plane of the first said bar and located substantially centrally thereof whereby the same is relatively rigid, a sheet metal neck offset and extending from the edge of the resilient bar to the second said bar to connect said bars together, and a tongue extending from the opposite edge of said resilient bar to the junction of said neck and second said bar to close the space therebetween.

1,876,185. ARTICULATED CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,689. 12 Claims. (Cl. 105—4.)

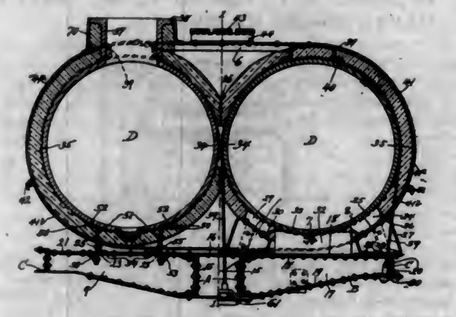
1. In an articulated car, a truck comprising a plurality of bolsters, a plurality of car bodies having adja-

cent end portions arranged over the truck, interengaging body connection castings secured to the said adjacent



end portions to prevent excessive relative vertical shifting of the car bodies, and body and truck center bearings connecting the bodies and truck.

1,876,186. TANK CAR TWIN TANK CONSTRUCTION. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,771. 18 Claims. (Cl. 105—360.)

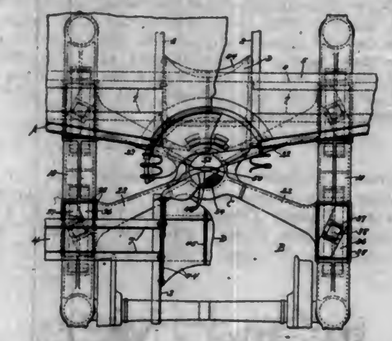


1. In a tank car construction, the combination with a car frame of a pair of insulated tanks carried by the frame and extending lengthwise of the car frame, means for anchoring the tanks to the car frame centrally of the car, additional means adjacent each end of the car for holding the tanks in position on the frame and a casing surrounding the pair of tanks and supported thereby.

2. In a tank car construction, the combination with a car frame of a pair of insulated tanks disposed thereon and extending longitudinally of the car, permanent fastening members carried by each of the tanks intermediate their extremities and connected to the car frame centrally of the car, and a casing surrounding the pair of tanks and supported thereby.

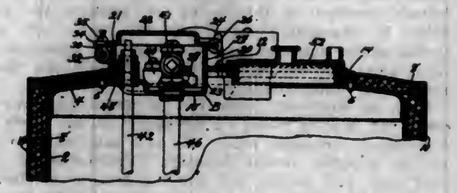
1,876,187. ARTICULATED CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 3, 1931. Serial No. 506,343. 15 Claims. (Cl. 105—4.)

1. In an articulated car, a truck, a pair of car bodies having their adjacent end portions supported wholly by the truck side frames and means for transmitting pulling stresses from the bodies to the truck comprising a tubular bearing portion supported by the truck and ar-



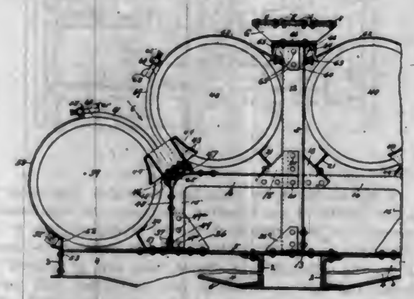
ranged substantially midway between the side frames and end sills and with which the adjacent end portions of the bodies are engaged.

1,876,188. DOME HEAD ARRANGEMENT FOR CAR TANKS. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 11, 1931. Serial No. 529,896. 9 Claims. (Cl. 220—85.)



1. In a tank dome having a head provided with an opening, means closing said opening comprising a dome head casting including a ring member and web formed as an integral structure, said web having an open box-like portion formed in a part thereof, a removable closure element for the box-like portion, said web further having a man-hole opening spaced from the box-like portion and a man-hole cover normally closing said opening.

1,876,189. MULTIUNIT TANK CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 11, 1931. Serial No. 543,590. 22 Claims. (Cl. 105—358.)

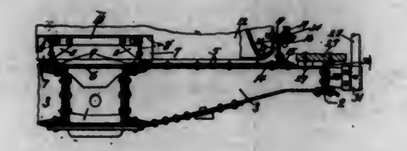


1. A multiple unit tank car having a plurality of lower tanks, an upper tank, means for supporting said

upper tank above and between said lower tanks, and means whereby each tank is longitudinally anchored independently of the other.

2. A multiple unit tank car comprising a pair of lower tanks disposed with their longitudinal axes lengthwise of the car and transversely spaced from each other, an upper tank having its longitudinal axis also disposed lengthwise of the car, and means for supporting said upper tank above and between said lower tanks and independently thereof.

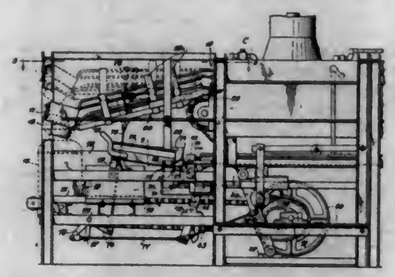
1,876,190. MULTIPLE UNIT TANK CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 14, 1931. Serial No. 575,013. 8 Claims. (Cl. 105—360.)



1. In a multi-unit tank car, a frame including a center sill, side sills outwardly spaced therefrom, bolsters and cross-bearers, means for cradling a plurality of tanks transversely on said frame, said means comprising cradle frames mounted on the center sill whereby the load strain is transmitted directly to the center sill, and anchor means supported by the bolsters and cross-bearers engageable with the tank ends for forcing the tanks against the cradle frames.

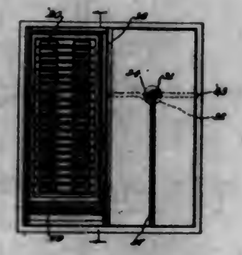
2. In a multi-unit tank car, a frame including a center sill, seating means on the center sill for a row of transversely arranged tanks, the last said means comprising movable anchor members introducible to the tank ends, and moving and securing devices therefor.

1,876,191. CAN DELIVERY MECHANISM. FRANK F. WOLF, Cattaraugus, N. Y., assignor to Oakes & Burger Co., Inc., Cattaraugus, N. Y., a Corporation of New York. Filed Nov. 4, 1930. Serial No. 493,300. 33 Claims. (Cl. 29—84.)



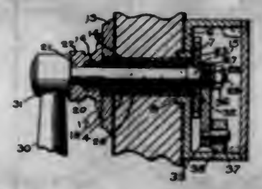
1. In a can washing machine in which the cans are advanced while in an inverted position, the combination of mechanism for upending the cans comprising means for tipping a can forward, means supported against movement in the direction in which the can is tipped for receiving the can and means for operating said means last mentioned whereby the can is righted by gravity from the position in which it is received to a full upended position.

1,876,192. INSULATED FILE CABINET. CARL F. WOLTERS, Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 18, 1927. Serial No. 176,517. 3 Claims. (Cl. 109—1.)



1. A fire resisting filing cabinet comprising a container having a plurality of heat insulating walls, one of the sides of the container being open, a heat insulating door mounted on the container to close said open side and being movable to open said open side, co-operating means on said container and on said door engageable when the door is closed to seal the container, and counter-balancing means mounted within the container and connected to the door for both resiliently retaining the door in sealing relation with the container and counter-balancing the weight of the door when opened.

1,876,193. LOCK MECHANISM FOR SAFES. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 17, 1931. Serial No. 516,402. 3 Claims. (Cl. 109—3.)

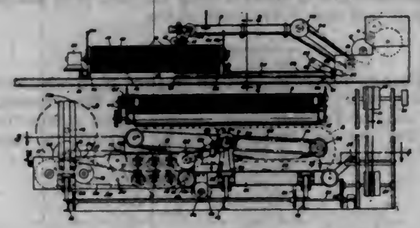


1. In a lock for a safe door, a combination mechanism mounted on said door and provided with gear means, a throw bolt formed with a transverse notch and slidably mounted on the door adjacent said mechanism, a pair of independently rotatable concentric shafts mounted through the door, one of said shafts having gear means meshing with the gear means of said combination mechanism and the remaining shaft having a crank arm engaging said throw bolt, a locking bolt mounted for lateral movement relative said throw bolt and engageable in the transverse notch thereof, and means connecting said locking bolt to the combination mechanism for operation thereby.

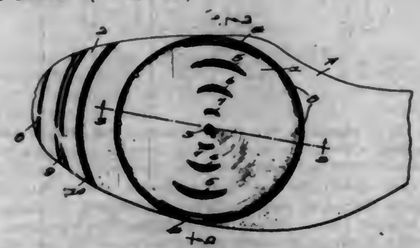
1,876,194. MACHINE FOR THE MANUFACTURE OF BATS. ELMER T. WUEST, Cincinnati, Ohio, assignor to Adam Wuest, Inc., a Corporation of Ohio. Filed Nov. 14, 1930. Serial No. 495,605. 7 Claims. (Cl. 19—163.)

1. In a device for the manufacture of bats, the combination of an elevated traveling apron for advancing a continuous length of sheet material, a second traveling apron movable in opposite directions transversely of the direction of movement of the first apron, a carriage providing a tilting mounting for the second apron, means for reciprocating the carriage longitudinally of the first apron whereby to provide a sheet folding means, a discharging conveyer, and power actuated means mounted

for movement with the carriage and adapted to operate on the folded material carried thereto by the discharging conveyer, tilting of the second traveling apron and reversal of movement thereof serving to discharge the folded material prior to subjection thereof to the power actuated means.



1,876,195. SHOE GRIP. THOMAS GRANT YOUMANS, Wilmington, Del. Filed Apr. 9, 1932. Serial No. 604,295. 6 Claims. (Cl. 36—73.)



1. A shoe grip comprising a tread portion having a downwardly presented convex face and being formed with a plurality of pairs of downwardly depending arcuate gripping ribs and a centrally disposed anchoring pivot point depending downward beyond all of said ribs, said ribs being arranged in pairs equidistantly disposed on opposite sides of said anchoring pivot point, the respective sets of ribs being disposed in diametrically opposite segments of said plate and having their lowest points disposed on an imaginary line parallel to the face of said tread portion and intersecting the radial centers of said segments and the axis of said anchoring pivot point, each said rib having its radially inner face disposed concentric to the axis of said anchoring pivot point and being tapered upward from its lowest central point toward its respective end portions to merge with the surface of the tread portion, and the radially inner face of each arcuate rib being substantially vertical for most of its length and merging by an abrupt concave curve with the lower face of the tread portion, and the radially outer face of each said rib being of a downwardly sloping convex contour merging with the lower face of said tread portion.

1,876,196. BELT BUCKLE. JOSEPH O. AMBERG, East Orange, N. J. Filed Sept. 30, 1930. Serial No. 485,358. 3 Claims. (Cl. 24—75.)



1. A belt buckle structure comprising, a buckle frame, a buckle stem pivotally connected to said buckle frame, a buckle prong, said buckle prong having a forward exposed portion extending substantially parallel with the front face of the buckle frame and a rearwardly directed portion, said rearwardly directed portion being secured to said buckle stem intermediate the ends of the latter, said buckle prong cooperating with said buckle frame in holding a belt end portion threaded through said buckle, and a hook member adapted to be secured to the other belt end portion and having a hook for engaging said buckle stem to thereby provide an additional means for fastening and unfastening the belt, said hook having the forward leg portion thereof extending substantially parallel to the front face of said buckle frame and being pressed against the rear surface of that portion of the belt lying within the confines of said buckle frame, the forward exposed portion of said buckle prong cooperating with the forward leg portion of said hook whereby such belt portion is held forwardly so that its front surface is substantially flush with the front face of said buckle frame.

1,876,197. FOUNTAIN PEN DESK SET. GERALD L. BASSETT, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,835. 22 Claims. (Cl. 120—4.)



1. In a fountain pen desk set, a base formed with a well, a pen supporting receptacle, means for supporting said receptacle on said base for angular movement, and a valve controlled passageway connecting said receptacle to said well.

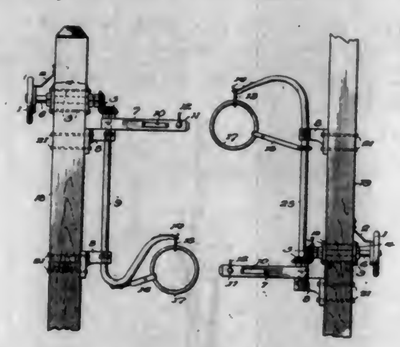
1,876,198. BUILDING CONSTRUCTION. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Mar. 12, 1930. Serial No. 435,120. 10 Claims. (Cl. 189—1.)



1. A building construction comprising frame members having web plates and marginal reinforcements provid-

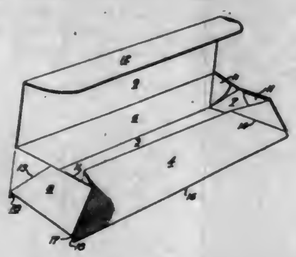
ing flanges at right angles to the plates, intermediate panels including web plates substantially in the plane of the first-named plates, marginal reinforcements for said panels providing flanges in juxtaposition to the flanges upon the frame members and connected thereto, and filler members disposed between the edges of adjoining panels, said filler members having grooves receiving the edges of web plates.

1,876,199. MAIL LOADING AND UNLOADING CRANE. GUS BLUM and GEORGE FISHER, Pass Christian, Miss. Filed June 17, 1929. Serial No. 371,653. 2 Claims. (Cl. 258—11.)



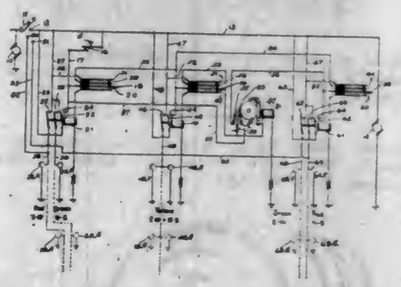
1. Mail transfer mechanism comprising in combination, a track-side crane, a car carried crane, said cranes being reversed with respect to one another, means for suspending a mail bag by one end from each of said cranes, means on each of said cranes for engaging the suspended mail bag carried by the other crane in a simultaneous transfer, and manually operable means for moving said cranes into mail bag transfer position.

1,876,200. CARTON. BRUCE F. BROWN, Huntington Park, and GEORGE F. FOAD, Los Angeles, Calif., assignors to Fibreboard Products Inc., San Francisco, Calif., a Corporation of Delaware. Filed July 6, 1929. Serial No. 376,370. 2 Claims. (Cl. 229—32.)



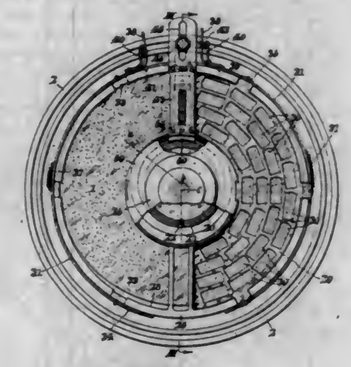
2. A foldable collapsible carton formed of a single blank and having bottom, end and side walls, the portions between said bottom and side walls only being provided with double crease lines, said bottom and side walls being reversely folded on said crease lines when the carton is set up to provide depending flanges of double thickness of material formed by longitudinal legs integral with the side and bottom walls extending only along the sides of the carton, so as to elevate the bottom and provide an unobstructed passageway under the bottom between said flanges, the legs of said flanges being secured together to form rigid extensions of said sides, and said ends and sides being collapsible upon the bottom when in folded condition whereby both of the sides and ends fold inwardly to flat collapsed position and outwardly to set up position without bending the flanges which form rigid extensions of the sides, the sides and their respective rigid extensions turning about a hinge line formed by the junction of said flanges with said bottom.

1,876,201. TRAFFIC SIGNAL. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company, Endicott, N. Y., a Corporation of New York. Filed Dec. 18, 1924. Serial No. 756,667. 9 Claims. (Cl. 177—339.)



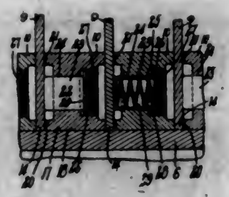
3. In a signaling system in combination with a series of signal circuits, a plurality of devices operating independently and automatically for successively maintaining each circuit for a given time period, means controlled by each device at substantially the time of breaking of its related signal circuit for initiating the operation of another device, and means operative after the last signal device of the series has been operated for automatically periodically reversing the order of operation of the remaining signal devices of the series.

1,876,202. SURFACING MACHINE. SETH R. CAMPBELL, Brookes Mills, Pa. Filed Feb. 13, 1930. Serial No. 428,112. 8 Claims. (Cl. 51—131.)



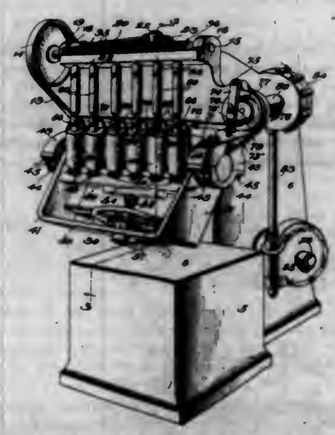
1. A surface grinding machine including a rotary grinding plate, a surrounding annulus eccentric to said grinding plate and adapted to be rotated in the opposite direction therefrom, a work-holder supported on a bearing frictionally engaging said grinding plate, an arm connecting said work-holder and the annulus aforesaid whereby the work-holder is adapted to rotate with said annulus, and means whereby said bearing is at times subjected to the rotary movement of the grinding plate and at times subjected to the rotary movement of said annulus.

1,876,203. CYLINDER FOR COTTON GINS OR THE LIKE. CALVIN B. P. CARVER, Bridgewater, Mass. Filed Jan. 26, 1931. Serial No. 511,222. 17 Claims. (Cl. 19—63.)



1. A cylinder for a cotton gin or the like having, in combination, an arbor, a plurality of yieldable spacing members mounted upon said arbor, and a saw yieldingly mounted upon the arbor and positioned between each of the spacing members.

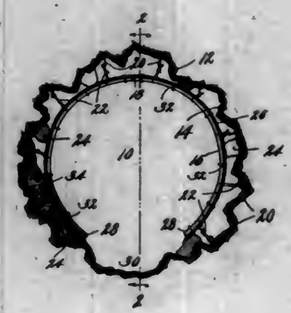
1,876,204. METAL WORKING MACHINE. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 21, 1927. Serial No. 185,626. 39 Claims. (Cl. 90—15.)



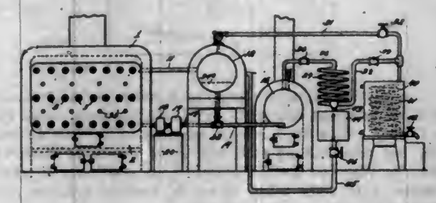
1. In a machine of the character described, a work holder arranged for oscillating movement and adapted to support work therein, means for oscillating the work holder and the work, a driven cutting tool extending in the work holder for engagement with the work and arranged to oscillate in the work holder about an axis extending transversely of the axis of oscillation of said work holder, and means for oscillating the driven cutting tool within the work holder during oscillating movement of the latter and the work, whereby said tool cuts into and machines said work.

1,876,205. MONOLITHIC CONSTRUCTION. JOHN MAURICE CROM, Tulsa, Okla., assignor to National Gunite Contracting Co., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1930. Serial No. 505,743. 2 Claims. (Cl. 25—154.)

1. A method of forming a relatively thick lining in a substantially imperforate tunnel bore which comprises making a retaining form wall of foraminous material spaced from the imperforate tunnel bore a distance substantially equal to the thickness of the lining desired, and then shooting a cementitious mixture into the space between the tunnel bore and foraminous material to fill the space therebetween and maintaining the shot face of the cementitious mixture at a relatively steep angle to permit the rebound to pass outwardly through the foraminous material.



1,876,206. PROCESS FOR TREATING HYDROCARBONS. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 8, 1923. Serial No. 667,380. 6 Claims. (Cl. 196—51.)

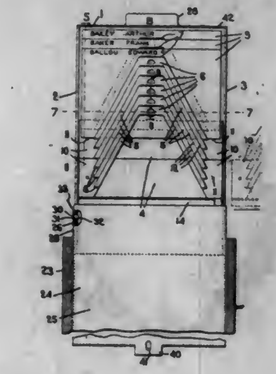


5. An improvement in the art of oil conversion for the purpose of producing lighter from the heavier hydrocarbon products which comprises maintaining a considerable body of oil under such cracking conditions of temperature and pressure as to prevent substantial distillation of the lighter oil fractions, continuously withdrawing oil from the body and passing the oil withdrawn to a stage into which it is released at reduced pressure whereby the lighter fractions will distill off, condensing such lighter fractions and separately taking off incondensible gases from the cracking stage to prevent excess rise in pressure.

1,876,207. CARD INDEX. ELMER W. DAVIS, Newton Center, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Jan. 11, 1927. Serial No. 160,490. 23 Claims. (Cl. 129—16.5.)

1. In a card index, the combination with a panel, of a series of connected card-holding members, each having

non-pivoted card-supporting means and each member except one of the end members of the series being supported entirely by one of the members connected thereto, and means for connecting said end member to the panel.

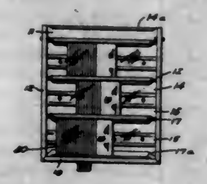


1,876,208. RECORD GUIDE. ELMER W. DAVIS, Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Dec. 5, 1928. Serial No. 324,034. 12 Claims. (Cl. 129—16.8.)



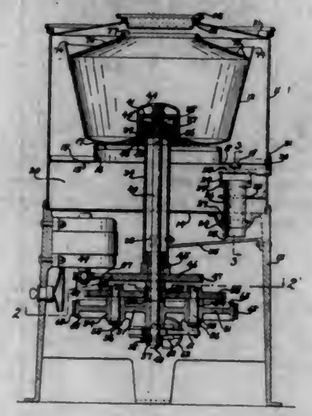
1. A record guide comprising a body portion provided with an integral marginal extension doubled upon itself to form a tab with a pocket adapted to receive an index slip, the free end of said tab being extended downward over the adjacent margin of said body portion and secured thereto, said body being offset to form a shallow recess adapted to receive said free end.

1,876,209. INDEX OR FILE. WILLIAM H. DAY, Clinton, Conn., assignor to Remington Rand Inc., Buffalo, N. Y. Original application filed Nov. 11, 1924, Serial No. 749,196. Divided and this application filed July 20, 1929. Serial No. 379,759. 19 Claims. (Cl. 129—16.)



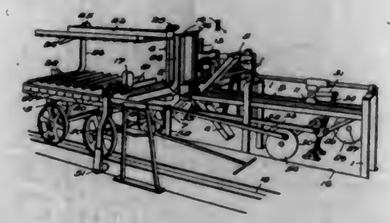
7. In an index or file, a drawer, having series of index cards mounted therein, and a card edge retaining member, said member presenting a flange extending over the edges of one series of said cards, and an abutment for the edges of the cards of said series and another series, and a flange portion for receiving an edge of a sheath member.

1,876,210. WASHING MACHINE. LOUIS DE VRIES, Streator, Ill. Filed Jan. 2, 1930. Serial No. 417,912. 8 Claims. (Cl. 74—34.)



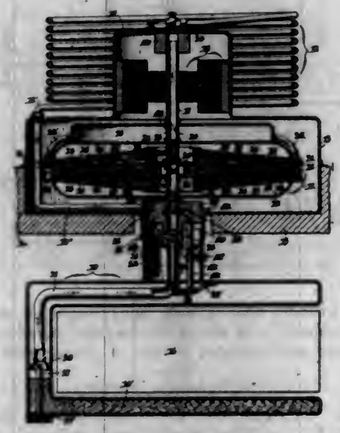
1. Driving mechanism comprising a shaft, a supporting member on the shaft and rotary elements supported thereon, means on the shaft for driving said rotary elements, equalizing mechanism including members driven by said rotary elements and connected with the shaft for oscillating it, and means on said members for resiliently absorbing momentum at the end of each oscillatory stroke.

1,876,211. BRICK-HANDLING MEANS. LAURITZ NEILSEN DYHRBERG, Allenton, New Zealand. Filed June 4, 1929, Serial No. 368,421, and in New Zealand June 19, 1928. 15 Claims. (Cl. 214—6.)



1. Improvements in brick-handling means comprising a member rotatable upon a horizontal axis and presenting one or more substantially radial arms each adapted when rising through its substantially horizontal position to receive bricks in side-by-side relation and place the same in stacked formation as such arm reaches its upper vertical position, a loading surface whereon said bricks are received and along which such bricks are forwarded to a position from whence they are lifted as aforesaid by said rising arm, said loading surface comprising a stationary table formed with a longitudinal slot and a push-block adapted to reciprocate over said table, said push-block having a depending tongue-piece operating in the table slot to serve as a guide for the push-block.

1,876,212. REFRIGERATION. ARTHUR R. EARNSHAW, Wynnewood, Pa. Filed Mar. 25, 1931. Serial No. 525,145. 27 Claims. (Cl. 62—115.)



1. The method of refrigeration which consists in evaporating refrigerant fluid in an inert gas under pressure, separating the two gases in the mixture by progessive-diffusion, and condensing the refrigerant gas for re-evaporation in the recovered inert gas.

1,876,213. CATALYST FOR PRODUCTION OF HYDROCYANIC ACID. THOMAS EWAN, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England. Filed Jan. 2, 1929, Serial No. 329 949, and in Great Britain Feb. 10, 1928. 9 Claims. (Cl. 23—151.)

1. Process of obtaining hydrocyanic acid from formamide which comprises vaporizing formamide and passing the foramide vapor over a dehydrating catalyst which has been previously heated to a temperature exceeding 1000° C. for at least ten hours.

5. Process of obtaining hydrocyanic acid from formamide which comprises vaporizing formamide and passing the formamide vapor over alumina which has been previously heated to a temperature exceeding 1000° C. for at least ten hours.

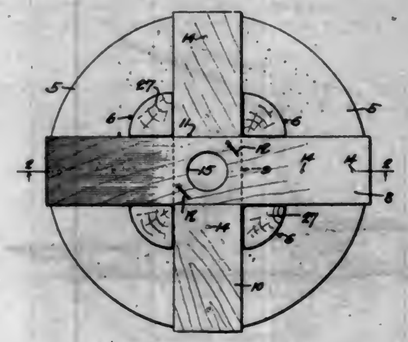
6. Process of obtaining hydrocyanic acid from formamide which comprises vaporizing formamide and passing the formamide vapar over thoria which has been previously heated to a temperature exceeding 1000° C. for at least ten hours.

7. Process of obtaining hydrocyanic acid from formamide which comprises vaporizing formamide and passing the formamide vapor over zirconia which has been previously heated to a temperature exceeding 1000° C. for at least ten hours.

1,876,214. METHOD FOR EXTRACTING THE NICOTINE FROM TOBACCO. ARNOLD FAITELOWITZ, Berlin, Germany, assignor to Ludwig Max Lippmann. Filed Oct. 23, 1930, Serial No. 490,827, and in Germany Feb. 25, 1930. 5 Claims. (Cl. 131—55.)

5. The method for extracting nicotine from tobacco which comprises lixiviating tobacco, squeezing out the extract from the tobacco, treating the extract with air to subject the extract to fermentation, neutralizing the aminobases generating during the fermentation of the extract, and bringing the extract in contact again with the tobacco leaves.

1,876,215. SPOOL WITH REENFORCED HEAD. PRESTON J. FARLEY, Califon, N. J. Filed Aug. 23, 1929. Serial No. 388,007. 6 Claims. (Cl. 242—118.)



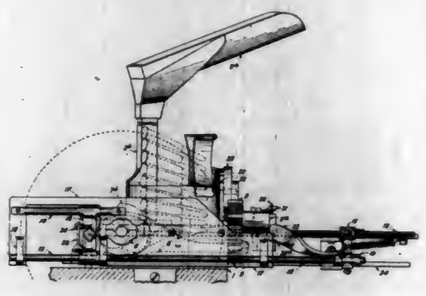
1. In a spool for carrying heavy material, the combination of a pair of discs forming the heads of the spool, said discs having central apertures and having additional apertures for the insertion of reinforcing slats, one or more wooden bars mounted on the outer surface of the discs and reinforcing same, said wood bars having apertures corresponding with the central aperture of the disc, blocks mounted on the inner surface of the discs, said blocks having apertures corresponding with the central aperture of the disc, slats extending from one disc to the other disc, said slats being affixed to the wooden reinforcing bars.

1,876,216. MACHINE GUN CARTRIDGE BELT. GEORGE FREDERICK FRENCH, Manchester, England. Filed Apr. 30, 1931, Serial No. 534,082, and in Great Britain May 6, 1930. 3 Claims. (Cl. 89—35.)



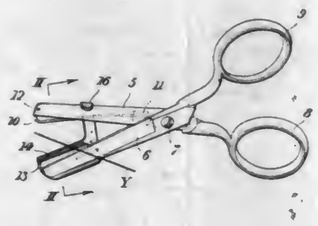
1. A cartridge belt having two free thicknesses at intervals producing open-ended pockets for cartridges, the pockets being narrower at one end than the other, and said belt being of curved formation longitudinally and along the edge in which the narrower ends of the pockets lie having free selvedges producing a continuous channel or gutter, as set forth.

1,876,217. CARTRIDGE BELT FILLING MACHINE. GEORGE FREDERICK FRENCH, Manchester, England, Filed Apr. 30, 1931, Serial No. 534,083, and in Great Britain May 6, 1930. 14 Claims. (Cl. 86—48.)



1. A cartridge belt filling machine comprising a pusher for feeding the cartridges to the belt pockets and means for opening each pocket at the narrow end prior to the insertion of the cartridge in the opposite end, said means comprising pivoted tongues and a reciprocatory pilot rod for actuating and cooperating with said tongues.

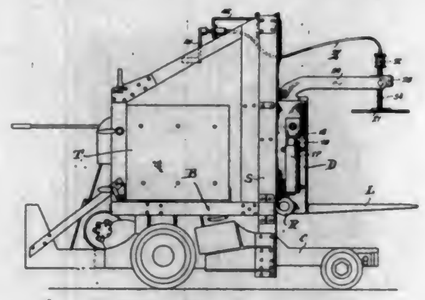
1,876,218. CUTTING IMPLEMENT. ALBERT GEE, Elkins Park, Pa. Filed Oct. 27, 1930. Serial No. 491,478. 4 Claims. (Cl. 30—13.)



3. The combination of a cutting implement for severing yarn and the like comprising a pair of coacting shearing blades; a spring finger anchored at its rear end to one of the blades, with its forward portion free alongside said blade and normally lying in advance of the blade edge; and a holding member in advance of the edge of the other blade having a groove therein located to engage said spring finger before the blade edges pass one another, said groove being spaced from the blade edge to which the member is attached to permit the first mentioned blade edge to shear past the same after the spring finger engages said groove.
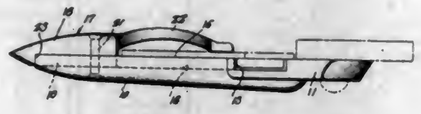
1,876,219. INDUSTRIAL TRUCK. ALBERT H. GROBER, Buffalo, N. Y., assignor to The Automatic Transportation Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 472,060. 10 Claims. (Cl. 214—65.)

1. The combination with a conveyor of a load supporting frame carried thereby, a cross rod mounted in said frame and having a range of movement relative thereto, a load supporting element carried by said cross rod, means at opposite ends of said cross rod for normally holding said cross rod away from the lower limit of said range of movement, a load engaging member and means connecting said member and said load supporting



element whereby upon a load being rested on said supporting element it is moved downwardly to effect movement of the load engaging member to engage said load.

1,876,220. CUTTER GUARD. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed May 30, 1930, Serial No. 457,550. Renewed June 21, 1932. 1 Claim. (Cl. 56—310.)



A cutter guard unit for mowing machines and the like comprising a body having a guard finger projecting therefrom, said finger having its longitudinal marginal edges formed for cutting action with a cutting knife reciprocated thereacross, the upper face of said finger having a longitudinal central groove, and a removable lip disposed on said upper face having on the outer end portion of its lower face a longitudinal rib arranged to be received in the corresponding portion of the said groove, said lip having a rearwardly extending upwardly arched arm the rear extremity of which bears on the upper face of said cutting knife.

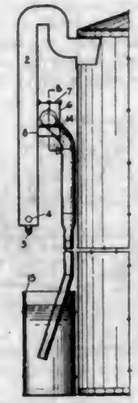
1,876,221. PROCESS FOR MAKING FIBROUS INSULATING PRODUCTS. FRIEDRICH GRUNDER, Munchenstein, near Basel, Switzerland. Filed Nov. 9, 1929, Serial No. 406,168, and in Switzerland Dec. 4, 1928. 3 Claims. (Cl. 154—28.)

1. That process of producing heat and sound insulating articles which consists of taking a mass of wood waste and other vegetable fibres both of which have been treated in an alkaline bath and have had excess bath removed, comminuting the mass, conveying the comminuted mass to a mold by a compressed air current whereby the mass as aerated, lightly pressing the molded mass to expel at least a portion of the moisture, and drying the lightly pressed mass.

1,876,222. PROCESS AND APPARATUS FOR COMBATING OIL AND CHEMICAL FIRES. ROBERT G. GUTHRIE, Philadelphia, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 29, 1932. Serial No. 589,557. 10 Claims. (Cl. 169—4.)

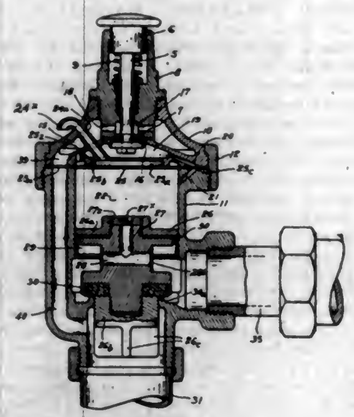
1. Apparatus for feeding a fire smothering foam to an oil tank comprising a foam chamber, an outlet from the foam chamber to an oil tank, an auxiliary outlet

from the foam chamber to a point outside the oil tank and means associated with said auxiliary outlet whereby foam of too high a specific gravity is passed out through the auxiliary outlet.



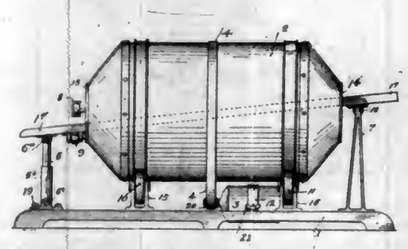
7. The process of combating oil and chemical fires comprising feeding foam generating materials to a generating chamber, withdrawing foam from the chamber to the locus where it is desired for use, and preventing foam of too high a specific gravity from reaching the point of withdrawal from the chamber.

1,876,223. FLUSH VALVE. MARVIN A. HAGEY, Los Angeles, Calif. Filed May 8, 1931. Serial No. 535,914. 4 Claims. (Cl. 137—93.)
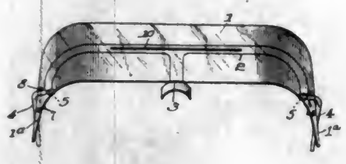


2. In a flushing valve, a casing construction, a diaphragm therewithin which separates the casing construction into two chambers one a main chamber and the other a diaphragm chamber, a pressure operable plunger having a working fit within said main chamber, a supply pipe and outlet pipe communicating with said main chamber, communication between said pipes being controlled by said plunger, there being a restricted passage through said plunger affording communication between said supply pipe and said main chamber, and there being a vent passage from said diaphragm chamber to the external atmosphere, there being passages to afford communication between said main chamber and the outlet pipe, and an externally operable relief valve to open such communication to cause the flushing operation, the opening of said relief valve causing the diaphragm to recede from said diaphragm chamber, there being passages which afford communication between said diaphragm chamber and the outlet pipe when the diaphragm is so relaxed.

1,876,224. CANDY SUGARING MECHANISM. MARSTON HARDING, New York, N. Y. Filed July 22, 1930. Serial No. 469,830. 5 Claims. (Cl. 91—7.)



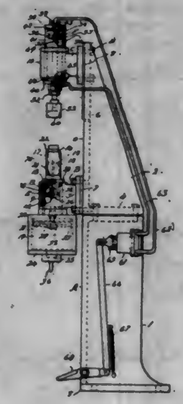
1. In a candy sugaring machine, the combination of a tray and a rotatably mounted drum having open ends through which said tray extends, means to rotate said drum, cam members carried by said drum for agitating said tray, and spirally disposed ribs on the inside walls of said drum for distributing coating sugar.

1,876,225. GLARE SHIELD. GEORGE R. HANNAN and RUTHERFORD G. GOLDMAN, Los Angeles, Calif., assignors, by direct and mesne assignments, to H. T. Barlow, Los Angeles, Calif. Filed May 22, 1931. Serial No. 539,250. 4 Claims. (Cl. 2—12.)



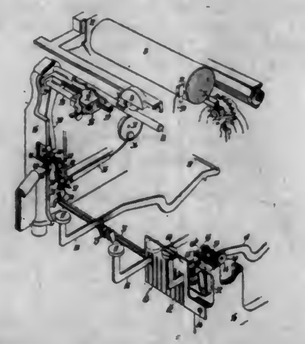
1. In combination, a supporting frame adapted to extend across the face adjacent the eyes, a shield having its medial portion extending across the front of the frame, a wire extending along the outer surface of the medial portion of the shield with the ends of said wire bent rearwardly and of some appreciable length and projecting through the shield and frame and secured to the frame whereby the medial portion of the shield is held against disengagement from the frame with the wire ends forming a pivotal mounting for the medial portion of the shield and permitting play at the pivotal mounting whereby the shield may be tilted to operative or inoperative position without binding on the frame, the ends of the shield being adapted to lie in the plane of said medial portion of the shield so that the shield may lie flat against the front of the frame when in inoperative position, and said shield ends being adapted to be curved rearwardly around the ends of the frame and tilted downwardly whereby the medial portion of the shield is tilted downwardly and outwardly in front of the frame for operatively positioning the shield, and means for securing the rearwardly curved shield ends to the frame.

1,876,226. GRAPHITING MACHINE. OLIVER J. HEATH, Toledo, Ohio, assignor to The Bunting Brass & Bronze Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,656. 14 Claims. (Cl. 18—5.)



2. In a graphite machine, a pair of substantially aligned brackets, a bushing arbor carried by one of said brackets, a cap for the arbor, and means carried by the other of said brackets for actuating said cap.

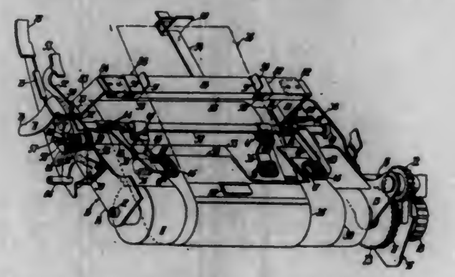
1,876,227. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 444,005. 6 Claims. (Cl. 197—110.)



1. In a typewriting machine having a main frame and depressible key-levers, the combination of pendent lugs on said levers, a transverse locking bail beneath the key-levers, gudgeons on which said locking bail may be moved lengthwise, means for operating said locking bail, key-operated means including a cam on said locking bail, for moving it lengthwise to free the same from said operating means, and a returning spring for moving said locking bail both about its hinge and lengthwise, whereby said locking bail may be restored to normal position.

1,876,228. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,469. 4 Claims. (Cl. 197—127.)

1. In a continuous billing carbon-stripping typewriting machine having a platen-displacing frame, a platen in said frame around which may be fed from the rear a multiple-ply work-web and an underlying record-web extending out from both side edges of said work-web, the combination with a paper-table on said frame at the introductory side of said platen and a paper-table at the delivery side of said platen, of instrumentalities mounted for displacement with said platen for clamping said record-web on said paper-tables at the introductory side and the delivery side of said platen, said instrumentalities including a crosswise rock-shaft supported on said platen-frame for displacement therewith, a set of flexible clamping arms

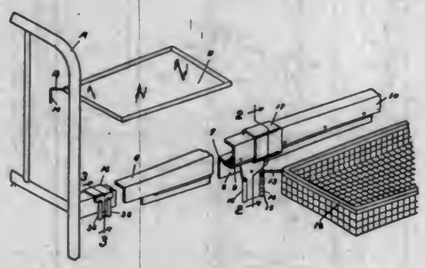


adjustable angularly and also lengthwise of the rock-shaft and fastened on said rock-shaft for gripping said record-web on said table at the introductory side of said platen, and a second set of angularly and axially adjustable clamping arms mounted on said rock-shaft and rigidly fastened thereto and each carrying a yielding pad for gripping said record-web against said table at the delivery side of said platen, the flexibility of said first-named set of arms and the yielding pads of said second-named set of arms permitting all of said arms to effectively clamp said record-web irrespective of small inaccuracies of angular adjustment of said arms on said rock-shaft.

1,876,229. PROCESS OF MANUFACTURING HOLLOW MOLDED ARTICLES FROM SOLUTIONS OF FILM-FORMING CELLULOSIC MATERIALS. REGINALD OLIVER HERZOG and LUDWIG BERENYI, Berlin-Dahlem, Germany. Filed Mar. 28, 1927, Serial No. 179,181, and in Germany Nov. 5, 1926. 6 Claims. (Cl. 18—58.)

1. The process of manufacturing hollow articles consisting of a cellulosic colloid and having an orifice through which core material used in the process is withdrawn, which comprises preparing a core having an exterior configuration corresponding to the interior configuration of the desired product, said core being constituted at least at the exterior portions thereof of a substance capable at room temperature of resisting deformation by the compressive action of a colloid contracting itself on said core, said core substance further having a lower conversion point than that of the colloid to be molded thereon, bringing said core into contact with a cellulosic colloid solution whereby a relatively thin layer of colloid material attaches itself to the outer surface of the core, causing the solvent of said colloid layer to evaporate and the layer to contract within its own body upon and into compressive contact with the core material, whereby said layer assumes a permanent set and condition about the core exterior, then, via a non-aqueous medium, applying heat, shape-modifying with respect to the core but not with respect to the colloid material, said temperature being intermediate between the conversion point of the core material and the temperature which deleteriously affects the colloid material and by the application of such heat causing the surface of the core to pass into a non-rigid condition to a depth of the solid core material at least such as to loosen the core material from the molded article and to permit the withdrawal of the core material through the withdrawal orifice of the molded article and then in such condition of the core material withdrawing it unresistingly from the hollow molded article through its said orifice.

1,876,230. TRAY MOUNTING MEANS FOR ATTACHMENT TO BEDS. BIRDIE O. HORNER, Covington, Ky. Filed Aug. 28, 1930. Serial No. 478,346. 3 Claims. (Cl. 5—308.)



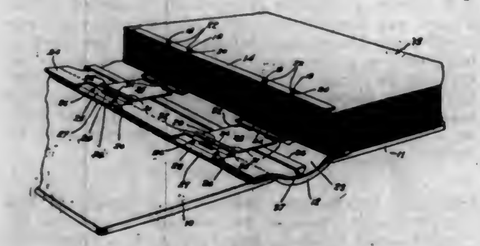
1. A clamp and support of the class described comprising a pair of connected parallel spaced legs, a turned edge on one of the legs for engagement with a bed rail, a supporting plate depending downwardly from the other leg at substantially right angles thereto, a tray supporting socket mounted on the supporting plate and disposed wholly below the level of the bed rail, and a quick action means for latching the device in position relative to the bed rail.

1,876,231. TYPE FORM TIE. GEORGE M. HUME, Fresno, Calif. Filed May 1, 1931. Serial No. 534,238. 12 Claims. (Cl. 101—404.)



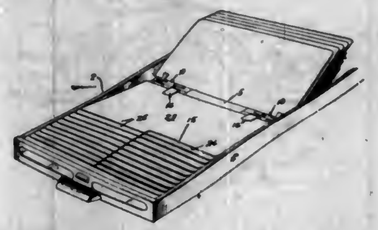
10. A type tying device comprising a block adapted to lie alongside the form, a tape extending through the block and around the form, a flat spring mounted longitudinally on the block with its opposite ends arranged to impinge opposite ends respectively of the tape to prevent retraction thereof after tensioning around the type, a releasing cam under opposite ends of the spring for releasing the hold of either end upon the tape.

1,876,232. LOOSE LEAF BINDER. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 8, 1930. Serial No. 426,871. 8 Claims. (Cl. 129—8.)



1. A loose leaf binder having a pair of transfer members, locking means associated therewith, and single means for selectively releasing either of said transfer members.

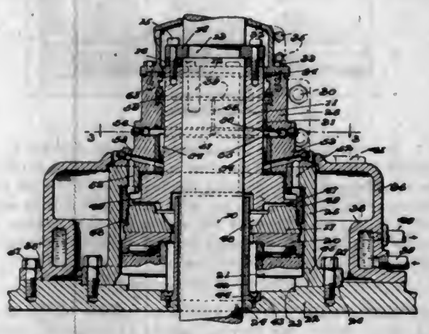
1,876,233. INDEX DEVICE. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Mar. 27, 1930. Serial No. 439,508. 10 Claims. (Cl. 129—16.)



6. The combination with a filing tray having a plurality of retainers mounted therein, of holder members removably mounted in said retainers in transverse aligned relation with each other relative to said tray, each holder member having a pintle portion, and a card rotatably mounted on the pintles of each aligned group of holder members.

8. An index device comprising, a card having a slot adjacent one margin; a bearing member having a journal portion, a flat portion extending therefrom and a turned-back end thereof engaging said journal portion; said end extending through the slot in said card and retaining the marginal portion of said card on said flat portion.

1,876,234. COMBINED THRUST AND STEADY BEARING. HARRY A. S. HOWARTH, Frankford, Pa., assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 3, 1928. Serial No. 317,002. 39 Claims. (Cl. 308—160.)

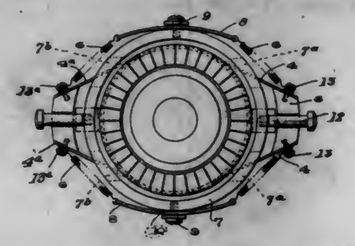


1. In a combined thrust and steady bearing, the combination of a rotatable thrust bearing member, means providing a body of oil in which said thrust bearing member is immersed, means associated with said rotatable thrust bearing member for developing centrifugal pressure in the oil for delivery to the bearing surfaces of the steady bearing, and means cooperating with said thrust bearing member whereby oil is forced to the bearing surfaces of the steady bearing by reason of the viscosity action developed by the rotation of said rotatable thrust bearing member.

1,876,235. COMMUTATOR SHORTING DEVICE FOR MOTORS. TATSUJIRO IIO, Meguro Machi, Ebara Gun, Tokyo Fu, Japan, assignor to Toa Denki Kabushiki Kaisha, Shibuya Machi, Toyotama Gun, Tokyo Fu, Japan, a Corporation of Japan. Filed Sept. 17, 1930. Serial No. 482,525. 4 Claims. (Cl. 172—279.)

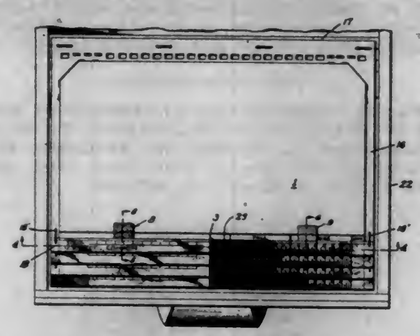
1. The combination with a rotatable commutator, of flexible straps disposed in encircling relation to said com-

mutator and normally out of contact therewith, radially movable weights mounted for rotation with the commutator and secured to said straps thereby under centrifugal



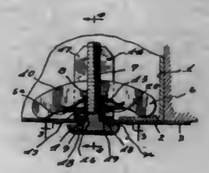
force to carry the straps into contact with said commutator, and tension means for opposing the centrifugal movement of said weights.

1,876,236. INDEX AND SIGNAL. ARTHUR REX JACKSON, London, England, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Mar. 9, 1931, Serial No. 521,845, and in Germany May 9, 1930. 10 Claims. (Cl. 129—16.7.)



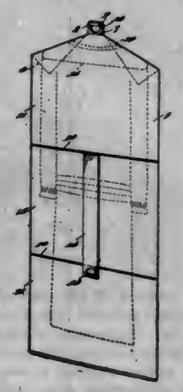
1. An index device comprising a card having a slot formed in one marginal portion, a pair of signal strips extending through said slot and independently movable along the marginal portion of the card, portions of said signal strips being superimposed for signalling cooperation, and means enclosing the marginal portion of said card and said signal strips.

1,876,237. FASTENING DEVICE. JOHN G. JACKSON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1930. Serial No. 486,855. 12 Claims. (Cl. 292—256.)



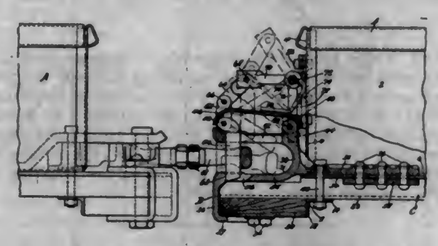
1. A fastening device comprising a clamping member, a rotatable actuating element adjustably connected to said clamping member for moving the same toward and away from the parts to be clamped, and a plate-like member carried by said actuating element and operatively connected thereto when said clamping member is substantially free of clamping pressure for shifting said clamping member, into and out of clamping position.

1,876,238. GARMENT BAG. SAMUEL J. JOHNSON, Cincinnati, Ohio, assignor to The Seinsheimer Paper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 24, 1930. Serial No. 438,409. 6 Claims. (Cl. 206—7.)



1. A delivery bag for garments, comprising, a longitudinally foldable flattened tube, a reenforcing strip disposed longitudinally of a central panel, and a hanger disposed with one end of the bag for supporting the garments therein, said hanger and reenforcing strip cooperating to form a double handle for the folded bag.

1,876,239. MINE CAR COUPLING. WARREN V. JOHNSON and ROBERT C. KEPNER, Berwick, Pa., assignors to The American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 20, 1931. Serial No. 531,392. 2 Claims. (Cl. 213—190.)

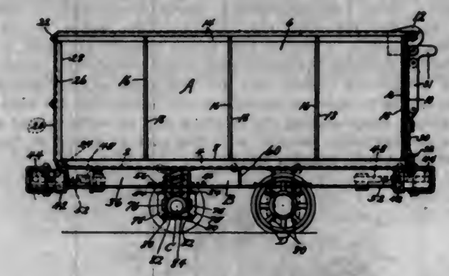


2. A coupling device for rotary dump mine cars comprising a draw head having alined openings in the upper and lower walls thereof, a coupling pin support pivoted to the draw head adjacent the opening in the upper wall thereof, a coupling pin pivotally connected to said support and normally extending into said openings, said coupling pin being capable of movement in one direction independently of the support, link and lever means for swinging the support to lift the coupling pin from the openings, and a keeper pivotally mounted adjacent the draw head adapted to engage the support when the car is rotated to restrain the support against movement on its pivot.

1,876,240. MINE CAR. WARREN V. JOHNSON and ROBERT C. KEPNER, Berwick, Pa., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 11, 1931. Serial No. 543,605. 11 Claims. (Cl. 105—364.)

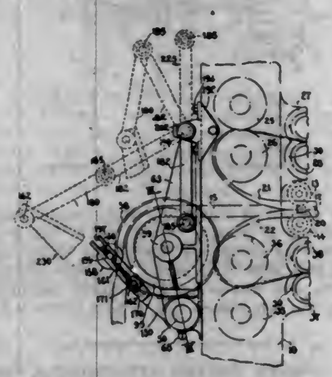
1. In a mine car, a body, an underframe to which the body is secured, said underframe including longitudinally

extending sills and spaced cross-bearers, axles beneath the underframe, and journal boxes for the axles, said



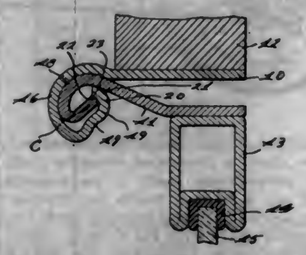
journal boxes having spring receiving means extending into and guided by the cross-bearers.

1,876,241. MANUFACTURE OF RUBBER CONDUITS. EDWARD C. KASTNER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 18, 1929. Serial No. 379,153. 14 Claims. (Cl. 81—9.51.)



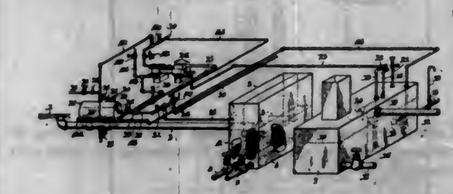
1. In a machine for stripping a covering from a conduit, means for splitting the covering, means for pulling the split covering divergently from the course of the conduit and rotary means for constantly exerting a pull on the conduit as the covering is stripped therefrom, said rotary means being driven at a greater peripheral speed than the linear speed at which the covering is stripped from the conduit.

1,876,242. HINGE. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Oct. 13, 1930. Serial No. 488,487. 4 Claims. (Cl. 296—92.)



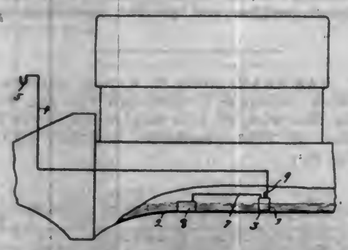
3. A hinge comprising a pair of hinge parts each having a bead formed therein for interfitting pivotal engagement said beads each terminating in an inturned edge, the extremity of the outer inturned edge having a bearing engagement respectively with the inturned edge and bead of the inner hinge part.

1,876,243. APPARATUS FOR RECLAIMING WASTE MIXTURES. WILLIAM M. KELLY, Philadelphia, Pa. Filed Mar. 11, 1931. Serial No. 521,638. 5 Claims. (Cl. 210—44.)



1. Apparatus for reclaiming a used mixture of oil and water and preparing it for further use comprising means for straining the used mixture, a separating tank wherein the oil and water of said mixture are separated after straining, means controlled by the liquid level in said separating tank for admitting a replenishing supply of fresh water to said tank, a pressure tank, a pump for carrying oil and water from said separating tank to said pressure tank, and means for discharging the oil and water from said pressure tank mixed in predetermined proportions.

1,876,244. LIQUID DEPTH INDICATING DEVICE. HORACE W. KING, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Oct. 30, 1922. Serial No. 598,043. 8 Claims. (Cl. 73—54.)

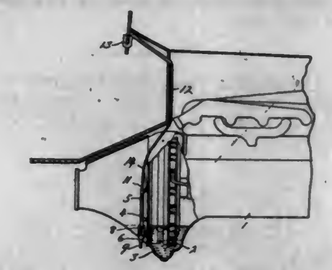


1. In a liquid depth indicating device, the combination with an air chamber having a closed lower end, said air chamber having a closed upper end above the normal level of the liquid, and a pressure gage communicating with said air chamber above the normal level of the liquid, of a second chamber communicating with the liquid at the full depth to be measured and with said first-mentioned chamber above the normal level of the liquid, and means for feeding the liquid into said first-mentioned chamber, the volume of air displaced by the entering liquid being sufficient to displace the liquid in said second chamber to a predetermined level.

1,876,245. LIQUID DEPTH INDICATING DEVICE. HORACE W. KING, Berkeley, Calif., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Jan. 3, 1927. Serial No. 158,686. 8 Claims. (Cl. 73—54.)

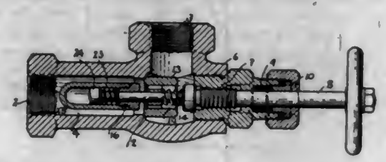
1. In a device for indicating the depth of oil in an engine crank case, the combination with an air chamber com-

municating with the crank case, a pressure gage, means whereby said gage communicates with the air space of



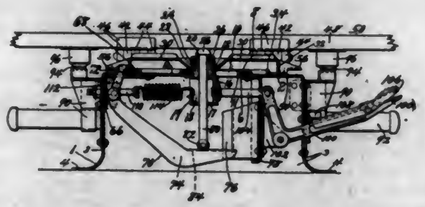
said chamber, and means dependent upon the lowering of the oil level in the crank case for introducing air into said air chamber.

1,876,246. VALVE. WALTER E. KING, Houston, Tex., assignor to J. S. Abercrombie, Houston, Tex. Filed Jan. 15, 1929. Serial No. 332,657. 3 Claims. (Cl. 277—45.)



1. In a valve structure having a fluid passage, a valve closing said passage in one direction, said valve having an opening therethrough, a closure for said opening normally seated, but adapted to automatically open in a direction opposite to that of the valve, common means to support said valves adapted also to move said closure and valve into a closed position and prevent automatic opening thereof.

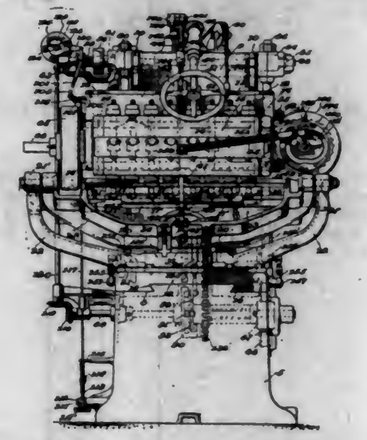
1,876,247. CAR SEAT. JOHN M. KNIGHT, Atlantic Highlands, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 21, 1930. Serial No. 437,750. 23 Claims. (Cl. 155—96.)



23. In a seat, a base, a seat plate mounted on the base for rotation about a fixed axis, a seat body hinged to said seat plate, and lever means operated by the seat plate upon rotation thereof to tilt the seat body.

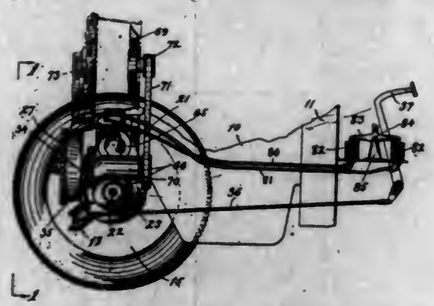
1,876,248. METAL WORKING MACHINE. HENRY KRBS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 16, 1926. Serial No. 155,262. 68 Claims. (Cl. 90—15.1

1. In a machine of the character described, a rotatable mill or cutter adapted to machine the wall of a cylinder head compression recess, a cradle mounted opposite the mill or cutter and arranged to swing on an axis extending transversely of the axis of rotation of the mill or cutter, said cradle being adapted to support a cylinder head thereon with the compression recess faced toward, and its wall engaged with, the mill or cutter, means for rotating the mill or cutter, and means causing said mill or cutter to machine the entire wall of the compression recess and comprising mechanism for automatically swinging said cradle in opposite directions and mechanism for automatically reciprocating the rotating mill or cutter along a line substantially parallel with the axis of swing of the cradle and said cylinder head.



52. The method of machining metal work, which consists in making a straight initial cut in the work, machining the work along one side of the initial cut, then machining said work from said side of the initial cut to the opposite side thereof, and thereafter machining the work along the last named side of said initial cut.

1,876,249. FRONT DRIVEN AUTOMOBILE. WILLIAM F. KRENZKE, Racine, Wis., assignor of one-half to Thomas L. Fawick, Akron, Ohio. Filed Apr. 14, 1930. Serial No. 444,091. 15 Claims. (Cl. 180—43.

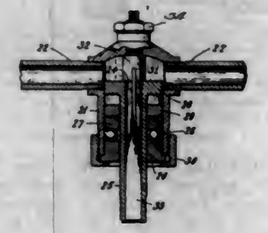


1. Automobile driving means comprising a longitudinal prime-mover shaft, a transverse live-axle shaft extending under said prime-mover shaft, a transversely-positioned change-gear set, a friction clutch for driving the latter, and gearing located over said live-axle shaft for connecting the prime-mover shaft with the friction clutch.

15. In a front-drive automobile, the combination of a front ground wheel, an internal-combustion engine, driving connections including a change-gear mechanism between

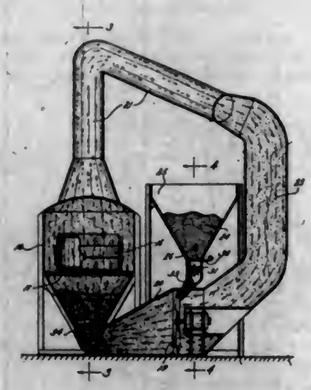
said engine and wheel, a plurality of pairs of expansible metal receiving bellows devices associated with said change-gear mechanism for reciprocating the parts thereof to effect the gear changes, a gear-shifting hand-lever, and a plurality of pairs of expansible metal sending bellows devices adapted to be selectively associated with said hand-lever and having their members respectively piped to the receiving members.

1,876,250. ROTARY SPRAYER. HARRY C. LASSEN and HENRY DAHL, San Jose, Calif., assignors to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed July 8, 1930. Serial No. 466,602. 4 Claims. (Cl. 299—67.)



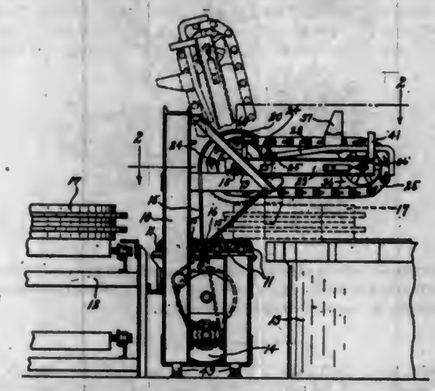
4. In a spraying apparatus, a substantially cylindrical hollow hub, a plunger mounted in peripheral contact with the inner wall of the hub, a stem supporting the plunger and having a supply passage communicating with the interior of the hub, a spiral strip attached to the hub and extending into the supply passage, a closure member for one end of the hub, a packing gland disposed between the plunger and said closure member, and an anti-friction bearing disposed between said packing gland and closure member, said hub being capable of reciproeation and rotation with respect to said plunger.

1,876,251. DUSTING MACHINE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1930. Serial No. 443,126. 3 Claims. (Cl. 91—59.)



1. A device of the character described which comprises an elongated chamber, a conveyor passing longitudinally through the chamber, a pair of spaced ducts opening from the top of the center portion of the chamber, said spaced ducts leading to a common return duct opening into the bottom of the chamber at a point below the conveyor and between the openings of the spaced ducts, a blower in said return duct and means to feed powdered lubricant to the blower.

1,876,252. DEVICE FOR HANDLING MOLDS. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1930. Serial No. 490,963. 3 Claims. (Cl. 198—23.)



1. A device for handling molds which comprises a carriage adapted to be positioned intermediate a mold conveyor and a heater to substantially bridge the gap between the heater and the conveyor, means mounted on the carriage to selectively advance the molds toward or from the heater, means pivoted to said carriage, for movement to and from operative position, to move the molds from the heater onto the mold advancing means, and means to automatically stop said mold moving means after each cycle of operation.

1,876,253. ROADBED EQUIPMENT FOR RAILROADS. ALFONSO MARIANI, Erie, Pa. Filed May 25, 1931. Serial No. 539,883. 6 Claims. (Cl. 246—317.)

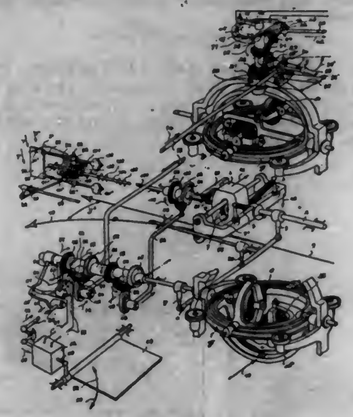


1. A railroad road bed including main and switch rails and a frog and means to secure the frog in place that permit removal and replacement of the frog without disturbance of any members except those immediately concerned in holding the frog, and comprising tie mounted clamps at the two extremities of the frog each clamp comprising a base plate long enough to reach across at least two adjacent ties, two upwardly extending flanges spaced away from the outer sides of the rail end opposite which they are placed and blocks between such flanges and the rails and bolts passing horizontally through flanges, blocks, rails and a portion of the frog lying between the rails.

1,876,254. STABILIZING APPARATUS FOR AEROPLANES. LOUIS MARMONIER, Lyon, France. Filed Sept. 22, 1931, Serial No. 564,885, and in France Sept. 16, 1930. 13 Claims. (Cl. 244—29.)

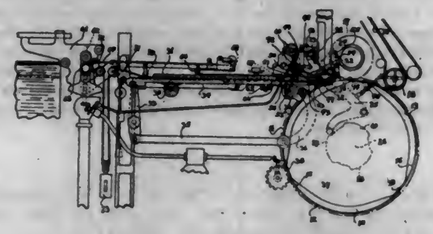
1. In an aircraft, means for automatically operating the lateral control surfaces comprising a gyrostat and

compensating means for acting in opposition to said gyrostat under the action of centrifugal force during turning



movement of the aircraft for tilting the said lateral control surfaces to bank the aircraft at the necessary angle to perform a correct turning movement.

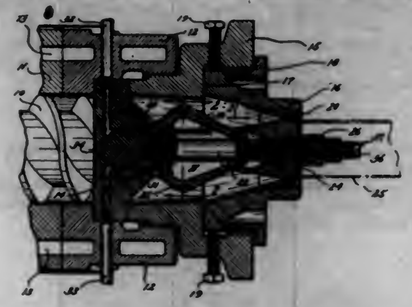
1,876,255. ROTARY PRINTING MACHINE. FRANK C. MARQUARDT, Brooklyn, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed May 16, 1930. Serial No. 452,955. 14 Claims. (Cl. 271—54.)



1. A rotary printing machine, embodying therein the combination with a printing couple including a plate cylinder adapted to receive an intaglio, engraved or undersurface printing plate, and an impression cylinder or D-roll cooperating therewith, of a sheet feeding mechanism embodying therein a fixed support for the forward edge of a sheet adjacent said printing couple front gauge stops co-operating with said fixed support to accurately position said sheet in relation to said couple a reciprocatory support for the sheet, pusher members carried by and movable with said reciprocatory support, means adapted to intermittently actuate said front gauge stops, said pusher members and said reciprcatory support to advance a sheet into frictional engagement with the members of said printing conple, and mechanisms adapted to remove one sheet at a time from a stack and deposit it upon and in operative relation to said fixed support. said reciprocatory support. said front gauge stops and said pusher members.

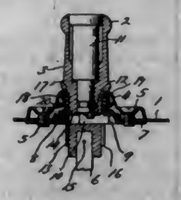
1,876,256. TUBING MACHINE. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1930. Serial No. 424,622. 3 Claims. (Cl. 18—14.)

1. A tubing machine which comprises means for advancing plastic material, an outer die member, a spider, a stem carried by the spider, a core member supported by the stem and forming with the outer die member, an annular extruding die, a shell positioned on the stem



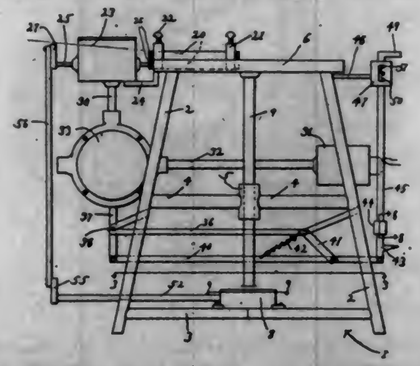
intermediate the spider and core and adapted to compress the material just prior to its extrusion through the die and means to cool the shell.

1,876,257. HANDLE ASSEMBLY. DORR MILLER, Detroit, Mich., assignor, by mesne assignments, to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 16, 1928. Serial No. 247,196. 14 Claims. (Cl. 70—91.)



8. In a handle assembly, the combination with a support, of a sheet metal lock plate secured to the inner side of said support and having a boss extending outwardly through said support and provided with a locking recess, a handle carried by said support and having a shank extending through said boss, and a locking bolt mounted in said shank and movable transversely thereof into engagement with the locking recess, said bolt being substantially within the confines of said lock plate.

1,876,258. ANIMAL GUT DEFATTING MACHINE. CHARLES F. MILLER, Jr., Pittsburgh, Pa. Filed Nov. 22, 1930. Serial No. 497,493. 4 Claims. (Cl. 17—43.)



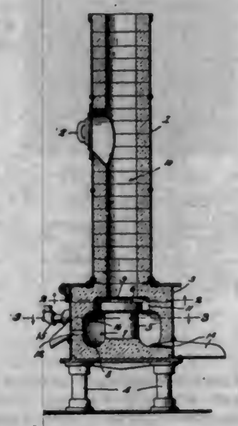
1. A gut defatting machine comprising a supporting stand, a stationary ring mounted on the supporting stand, a turntable mounted for rotation in the ring for receiving the gut, the ring extending above the turntable, coacting rolls operatively mounted adjacent the turntable for drawing the gut therefrom, a knife mounted on the ring adjacent the turntable for engagement with the gut for removing fat therefrom as said gut is drawn from the turntable, means on the turntable engageable with the gut for removing fat from said gut and for engaging the gut with the knife as the gut is drawn from the turntable, and a prime mover mounted on the stand and operatively connected with the rolls and with the turntable.

1,876,259. KNITTING NEEDLE. MAX C. MILLER, Cumberland, R. I. Filed Feb. 26, 1929, Serial No. 342,858. Renewed Feb. 4, 1932. 29 Claims. (Cl. 66—117.)



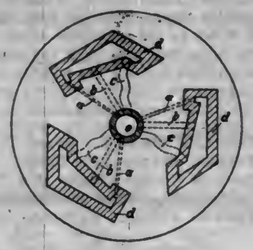
1. A mending needle having, in combination, a hooked needle, a hook closing member adapted to engage with and cast off a loop over the needle hook on the retracting stroke of the needle, and a yarn guiding member for guiding a new strand of yarn into the needle hook adapted to engage with and carry the said strand of yarn between the guide member and the needle hook beyond the hook closing portion of the hook closing member on the fabric-piercing stroke of the needle.

1,876,260. GAS CUPOLA FURNACE. ALEXANDER C. OSBORN, Jr., Clarksburg, W. Va. Filed May 11, 1931. Serial No. 536,543. 1 Claim. (Cl. 263—27.)



A smelting furnace which has a vertical bore, and an enlarged space of greater diameter than the bore at the lower end of the bore, there being an enlarged chamber at the lower end of the enlarged space, and of greater diameter than the enlarged space, the furnace having a slag outlet and an outlet for molten metal, both of which communicate with the chamber, the furnace being provided with an approximately cylindrical post which projects upwardly from the bottom of the chamber, the bottom of the chamber, about the post, forming a lower hearth, the post being provided at its upper end with a disk-like portion, the top of which is substantially flat, and substantially horizontal, to form an upper hearth spaced vertically from the lower end of the bore, the disk-like portion being housed in the enlarged space, leaving a restricted annular space about the periphery of the disk-like portion, through which the metal, initially smelted, flows to the lower hearth for final smelting, said restricted annular space being upwardly closed and so shaped and constructed that the metal is held on the upper hearth, the post proper being of less diameter than its disk-like portion, to increase the capacity of the chamber, and means for supplying heat to both hearths, by way of the chamber.

1,876,261. APPARATUS FOR CASTING METALS AND METALLOIDS. GEORG PEMETZRIEDER, Berlin-Tempelhof, Germany. Filed Aug. 29, 1930, Serial No. 478,766, and in Germany Dec. 3, 1929. 6 Claims. (Cl. 22—65.)



5. Apparatus for centrifugal casting comprising a table rotatable about a vertical axis; a central runner concentric with the axis of said table and having such a small diameter that the centrifugal force exerted upon the metal in said runner when said table is in rotation is smaller than the weight of said metal; a plurality of closed molds mounted symmetrically on said table, each in upright position, said molds being spaced outward from said runner a substantial distance; and covered channels connecting the feet of said molds with the foot of said runner, whereby said molds are filled in rising direction.

1,876,262. ALLOY WITH COPPER AS PRIMARY METAL. GEORG PEMETZRIEDER, Berlin-Tempelhof, Germany. Filed May 1, 1931, Serial No. 534,449, and in Germany May 2, 1930. 7 Claims. (Cl. 75—1.)

1. An alloy composed of the following ingredients in approximately the proportions given: copper 62.3% to 46.2%, tin 4 to 8%, zinc 3 to 10%, lead 30 to 35%, alkaline earth metal 0.2 to 0.5%, and sodium 0.1 to 0.3%.

1,876,263. LACING SHOE OR BOOT. ANDREAS PITTROFF, Dresden-Blasewitz, Germany. Filed Aug. 20, 1930, Serial No. 476,591, and in Germany Feb. 3, 1930. 2 Claims. (Cl. 36—54.)



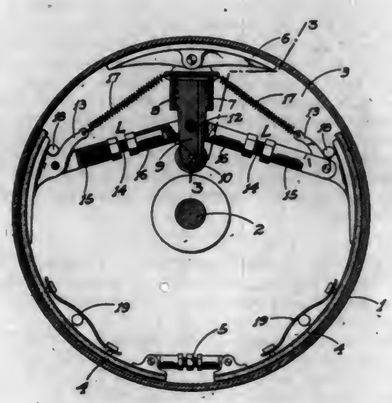
1. In a lacing-shoe or boot, a tongue and flaps projecting therefrom, said flaps being adapted to fold over the upper edge of the shoe at each side of the line of lacing, and means laterally removed from the line of lacing for securing the flaps in their folded position.

1,876,264. MIXING BOWL LOCK. JAMES D. TUCKER, Sierra Madre, Calif. Filed Oct. 9, 1930. Serial No. 487,497. 2 Claims. (Cl. 65—54.)



1. A mixing bowl construction comprising a base, upstanding expansible means mounted upon said base, and a bowl having a recess on the underside of its bottom removably positioned upon the base with the expansible means expanded in the recess to hold the bowl in position on the base.

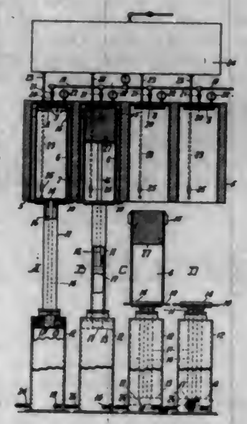
1,876,265. VEHICLE BRAKE. JESSE D. TUCKER and OTTO A. TUCKER, Sacramento, Calif.; said Jesse D. Tucker assignor to Tucker-Gilmore Mfg. Co., North Sacramento, Calif., a Corporation of California. Filed Oct. 3, 1930. Serial No. 486,092. 8 Claims. (Cl. 188—152.)



1. A brake structure comprising an internal drum, a brake shoe mounted for engagement with the drum, an actuating member adapted to be frictionally engaged with the drum, a cylinder associated with the member, a piston slidable in the cylinder, an arm rigid with and depending from the piston and swivelly mounted in a fixed position relative to the drum on an axis parallel to the drum axis, means for supplying a fluid to the cylinder, and a link between the arm and the shoe adjacent one end of the same.

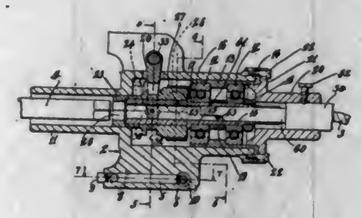
1,876,266. APPARATUS FOR PRODUCING CAKES OF SOLID CARBON DIOXIDE. BURT H. WESTON, Wood River, Ill. Filed Mar. 20, 1929. Serial No. 348,635. 14 Claims. (Cl. 62—121.)

1. In an apparatus for producing solid carbon dioxide, a casing having one end open, a mold adapted to be inserted in said casing, means for supporting said mold in said casing and closing the open end of said casing, said mold being of less diameter than said casing to provide a space between said parts, said mold having an opening to connect the interior thereof with said space, means for introducing liquid carbon dioxide under pressure into said



mold and causing the same to expand and form carbon dioxide snow, and means for compressing said snow in said mold while said mold is supported within said casing.

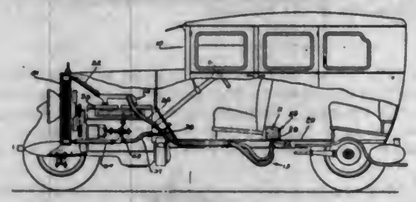
1,876,267. AUTOMATIC RELEASE CLUTCH FOR MOTOR DRIVE ON CAMERAS. ANTHONY G. WISE, Beverly Hills, and JOHN ARNOLD, Los Angeles, Calif., assignors to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,577. 4 Claims. (Cl. 192—110.)



1. A clutch member comprising in combination a housing, a rotatable quill within said casing, means for forming a driving connection with said quill, a longitudinally movable sleeve upon said quill within said housing, diametrically opposed longitudinal flats in said quill, rotatable rollers carried by said sleeve, said rollers cooperating with said flats and means for moving said sleeve and rollers longitudinally upon said quill.

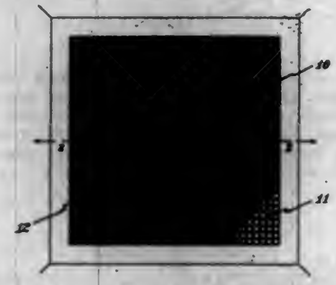
1,876,268. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. FRED B. WINES, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 394,697. 14 Claims. (Cl. 257—137.)

1. In combination, a heating element adapted to be positioned in a closed body and including a plurality of sets of air-circulating passages, the air-circulating passages of each set having their outer ends open to said closed body and the inner ends of the air-circulating passages of the different sets being arranged in spaced apart relation, means for supplying heat to said air-circulating passages, air propelling means adjacent the inner ends of said air-circulating passages at one side of said heating element for withdrawing air from said closed body and for returning said withdrawn air back into said closed body, the said



air propelling means being adapted to cause the said withdrawn and returned air to travel through said air-circulating passages to thus be heated and kept in continuous circulation within the closed body, and a motor adapted to be supported upon the floor of said body between said air-circulating passages and having a shaft extending transversely of said heating element and supporting said air propelling means.

1,876,269. PROJECTION SCREEN. THEODORE F. YAGLE, Philadelphia, Pa. Filed Oct. 16, 1929. Serial No. 400,109. 6 Claims. (Cl. 88—24.)



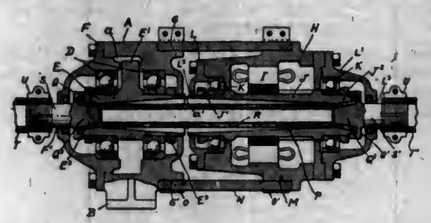
8. A projection screen for motion pictures comprising a foraminated backing, a facing of irregularly disposed matted fibres on said backing, and means for reflecting light coated on said fibres.

1,876,270. CONVERSION OF HYDROCARBONS OF HIGHER BOILING POINT INTO THOSE OF LOWER BOILING POINT. HERMANN ZORN, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 14, 1930, Serial No. 444,354, and in Germany Apr. 18, 1929. 15 Claims. (Cl. 196—53.)

1. In the thermal decomposition of hydrocarbons of high boiling point into those of lower boiling point, the step which comprises employing a metal compound of a 1.3-diketone soluble in the hydrocarbons to be converted, as a catalyst.

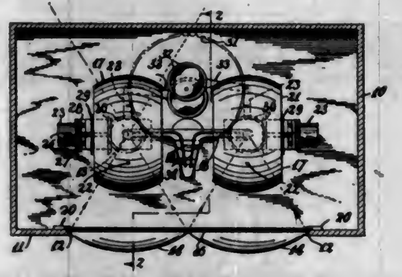
1,876,271. VIBRATOR MECHANISM. ROBERT W. BAILY, Philadelphia, Pa. Filed Jan. 27, 1932. Serial No. 589,239. 6 Claims. (Cl. 74—14.)

1. Vibrator mechanism comprising in combination a vibrator housing adapted to be secured to the object to be vibrated supporting a driven shaft and an eccentric weight rotating with said shaft, a laterally resilient motor support secured to the vibrator housing and supporting a motor housing, a motor housing supported on said laterally resilient support and supporting a motor and a driving shaft in such manner that the driving shaft will be in



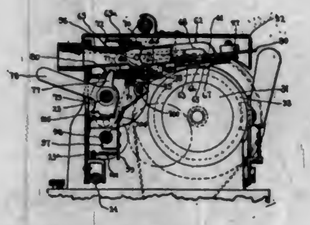
approximate alignment with the driven shaft of the vibrator and a flexible coupling between the driving and driven shafts.

1,876,272. FOG PENETRATING TELEVISOR. JOSEPH VERNE BAYER, Floresville, Tex. Filed Dec. 16, 1930. Serial No. 502,648. 15 Claims. (Cl. 178—6.)



1. A fog penetrating televisor, comprising a light proof casing having in its front side a pair of adjacent openings, a light sensitive cell behind each opening, a lens in each opening focused upon said cells, a shield dividing said casing in two and separating the light from said lenses, an infra-red ray screen behind each lens for allowing the passage of infra-red rays only, barrels scanners interposed between said cells and screen for enclosing said cells, means for operating said scanners, electric circuits including said light sensitive cells, and means for receiving the electric impulses in said circuits and converting them into a picture.

1,876,273. PHONOGRAPH. ALFRED V. BODINE, Fairfield, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Original application filed May 1, 1926, Serial No. 105,989. Divided and this application filed Apr. 27, 1927. Serial No. 186,955. 9 Claims. (Cl. 274—30.)



1. In a phonograph, in combination, a frame, a record-support rotatably mounted on said frame, a sound-box, a

carriage for the sound-box mounted on said frame and comprising a sheet metal member having only side walls and a connecting front wall, and means between the walls of said member for slidably mounting the sound-box.

1,876,274. FOLDING TABLE. ANTHONY P. COSTA, Athens, Ga., assignor to Bilt-Rite Manufacturing Company, Athens, Ga., a Corporation of Georgia. Filed Apr. 1, 1930. Serial No. 440,767. 7 Claims. (Cl. 45—11.)



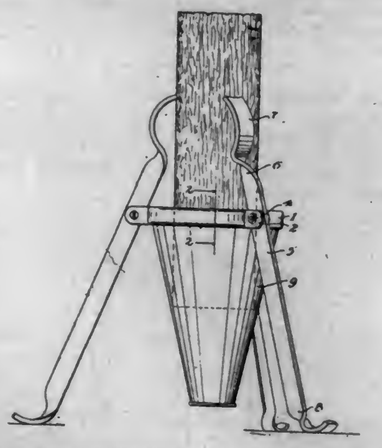
2. A folding table including a top, a leg pivotally connected to said top, a resilient guide rod connected to said top, a rigid link having one of its ends slidably connected to the guide rod, and its other end pivotally connected to said leg, a projection carried by the top, and a notch in the link to engage said projection.

1,876,275. CRIPPLE SWIM BAIT. DELBERT V. CUMMINS, Wilmot, S. Dak., assignor to Frances M. Cummins, Wilmot, S. Dak. Filed Oct. 8, 1931. Serial No. 567,734. 3 Claims. (Cl. 43—46.)



1. A fish lure comprising a body, hooks carried thereby, said body having a depression in its forward end, and a plug projecting forwardly from the center of said depression, said body being cut away at its forward end at one side and at an angle intersecting said depression.

1,876,276. CHRISTMAS TREE STAND. JOHN J. DANNER, St. Paul, Minn. Filed Oct. 11, 1929. Serial No. 398,895. 1 Claim. (Cl. 248—38.)



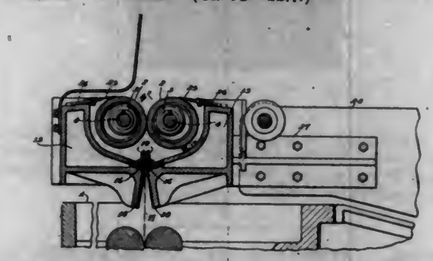
A Christmas tree support stand, comprising an annular frame composed of a plurality of segmental arcuate shaped sections each having a channel formed in its inner face, and each of said sections having their ends bent radially outwardly therefrom, a leg adapted to be positioned between the bent ends of adjacent sections, means extending through said ends and leg to pivot the latter therebetween, a container having an annular rim formed to be positioned in the channel on the inner face of each segmental section, and means associated with the pivot means for drawing the segments into gripping engagement with said rim of the container.

1,876,277. AIR CIRCULATING MEANS FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 17, 1928, Serial No. 320,146. Renewed Aug. 6, 1931. 5 Claims. (Cl. 68—9.)



1. A pressing machine comprising cooperating pressing elements having relative movement one toward and from the other, one of said elements being heated and formed with chambers arranged in juxtaposition thereto to receive heat therefrom, one chamber being formed with discharge openings at one margin of the pressing element and arranged to discharge across the pressing face thereof and a second chamber being formed with inlet openings along the opposite margin, and a circulating device having an outlet connected to one chamber and an inlet connected to the second chamber.

1,876,278. PLATE CATCHER AND CLEANER FOR TINNING MACHINES. SAMUEL E. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Partnership consisting of Samuel E. Diescher and August P. Diescher. Filed Oct. 26, 1927. Serial No. 228,812. 6 Claims. (Cl. 91—12.7.)

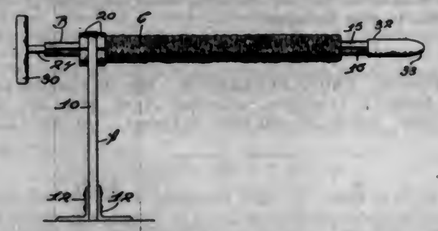


1. In a tinning machine, the combination with a tin pot, of a pair of continuous catcher rolls comprising floating cylinders of greater length than the width of tin plate passing between them, means for maintaining said rolls at a temperature materially below that of the plate passing between them whereby grease on the surfaces of the plate adheres to the faces of the rolls, and means for continuously removing grease from the faces of the rolls.

1,876,279. MANDREL. HAROLD E. DIETRICH, Chicago, Ill., assignor to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Aug. 23, 1930. Serial No. 477,357. 1 Claim. (Cl. 17—44.)

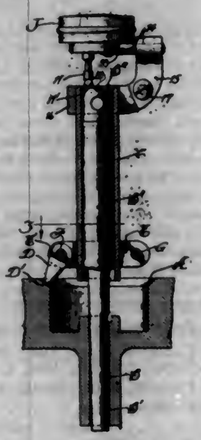
In a device for shirring sausage casings, a standard having an aperture therein, and a collapsible mandrel having one end mounted in said standard, said mandrel comprising members extending longitudinally thereof and adapted to receive said sausage casings, said members projecting through said aperture and one of said members

being movable transversely in said aperture when said mandrel is collapsed or expanded, a cam extending between said members substantially the entire length thereof and rotatable to displace said transversely movable member in



a direction away from the other of said members whereby the diameter of the mandrel is increased, and means at the other end of said mandrel and extending between said members for holding them in alignment with each other.

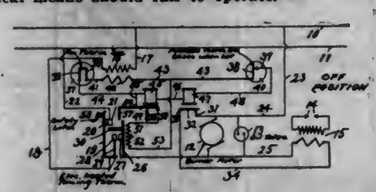
1,876,280. MEASURING DEVICE. ALLEN I. DUNN, Cedar Rapids, Iowa, assignor to Cedar Rapids Engineering Company, Cedar Rapids, Iowa, a Corporation of Iowa. Filed June 13, 1929. Serial No. 370,706. 4 Claims. (Cl. 33—172.)



1. A device for indicating the deformity of a valve seat arranged above a co-operating valve stem guide, said device comprising; an elongated pilot adapted to be rigidly mounted in the guide with its upper end projecting above the guide; a finger carrier rotatably and slidably mounted on the upper end portion of the pilot; a finger mounted on the finger carrier and adapted to be placed in contact with the valve seat; and means controlled by the finger carrier for indicating the vertical movements of the latter on the pilot as said finger carrier is rotated with the finger in contact with the valve seat.

1,876,281. BURNER CONTROL. ROBERT J. EISEMAN, Willoughby, Ohio, assignor to The K-W. Ignition Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 17, 1930. Serial No. 496,158. 10 Claims. (Cl. 175—375.)

2. In an electrical control system, an operating circuit, an operating switch for controlling said circuit, said switch having a thermostatic element adapted by the application of heat to move toward switch actuating position, a heating coil for said thermostatic element, a first control thermostat in circuit with said heating coil, a second control thermostat, electrical means controlled jointly by said first and second control thermostats for disabling said coil circuit and holding said switch in the actuated position, a safety switch adapted to disable said operating circuit, and means adapted to be set in motion by the continued movement of said thermostatic element for actuating said safety switch in the event that said electrical means should fail to operate.



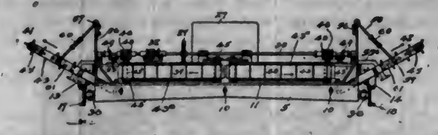
5. In an electrical control system, an operating switch, thermostatic means for actuating said switch, an electric heating coil for actuating said thermostatic means, an electric circuit in which said coil is located, a second switch for controlling said circuit and a relay having an armature adapted when the relay is energized to actuate said second switch and hold said operating switch in actuated position.

1,876,282. COMBINED GARMENT AND SUPPORTER. WILLIAM L. ELLERBECK and GEORGE A. STEINER, Salt Lake City, Utah. Filed Feb. 6, 1932. Serial No. 591,382. 2 Claims. (Cl. 128—159.)



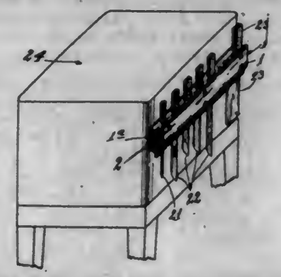
1. A combined garment and supporter including, a body portion, a waist band attached to the body portion and adapted to be tensioned about the waist, and a caudal portion formed with transverse tucks or ridges depending from the body portion, said caudal portion being adapted to be passed between the wearer's legs and looped over said waist band at the transverse tucks or ridges thereby making frictional contact therewith, to form a supporter.

1,876,283. EXCAVATING MACHINE. ELMER L. ENNIS, Gary, Ind. Filed June 8, 1931. Serial No. 542,930. 7 Claims. (Cl. 37—108.)



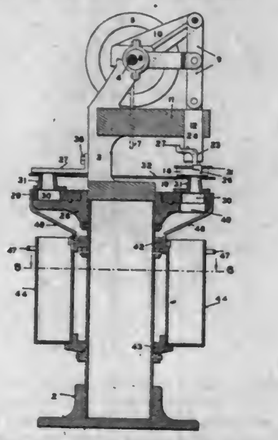
3. In a wheeled excavating machine, the combination with a main frame, a scraper blade, and an apron rigidly joining said blade and frame, of means for conveying material from the blade laterally across the apron and means for vertically adjusting the scraper end of the main frame with relation to a roadbed.

1,876,284. KNIFE RACK. RICHARD H. FRIED, Pittsburgh, Pa. Filed Oct. 15, 1930. Serial No. 489,000. 6 Claims. (Cl. 15—104.)



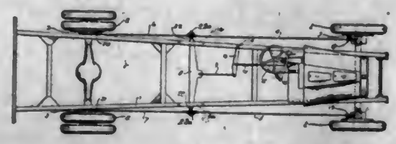
1. In a rack for knives, a housing comprising two housing-halves in spaced parallel relation; brushes positioned in the housing-halves and having their bristles in juxtaposed relation and adapted to simultaneously engage the sides of the blades of said knives; resilient means to removably secure the brushes to their respective housing-halves; the backs of said brushes having recesses adapted for snap engagement by said securing means.

1,876,285. HEEL CUTTING MACHINE. ALBERT F. FROUSSARD, St. Louis, Mo. Filed Oct. 15, 1930. Serial No. 488,744. 4 Claims. (Cl. 164—25.)



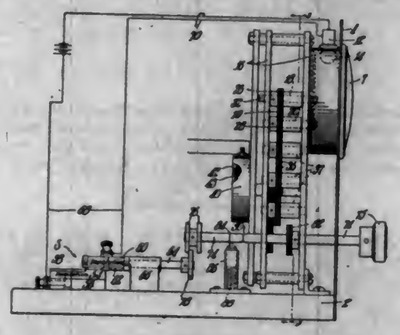
1. In a device of the class described, the combination with a rotary carrier, of a plurality of dies mounted thereon, a plunger cooperating with any selected die, means for independently adjusting each of said dies vertically, and a die gauge for securing alignment of the cutting edges of the dies.

1,876,286. BRAKE MECHANISM. ALBERT B. GARDELLA, Cleveland, Ohio. Filed Dec. 9, 1929. Serial No. 412,793. 2 Claims. (Cl. 188—204.)



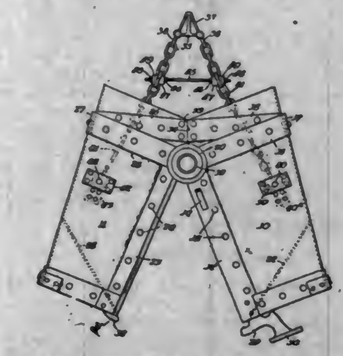
1. The combination with the frame of a vehicle having front and rear wheel brakes, and also having guide slots at opposite sides of the frame, of an equalizing beam extending across the frame and having flattened portions extending through and slidable and non-rotatable in said slots, lever arms loosely pivoted on the ends of the beam outside of the frame, front and rear brake rods connected to said arms, and an operating lever connected to said beam to shift the same.

1,876,287. RADIO APPARATUS. NEIL S. GILBERT and ALBERT L. FLETCHER, Springfield, Mass. Filed Apr. 28, 1930. Serial No. 447,968. 3 Claims. (Cl. 250—20.)



1. An apparatus of the class described comprising in combination, shafts for a tuning unit and a resistance unit each connected to a drive gear, a frame, a rotatable shaft in said frame slidable between rear, neutral and forward positions, a switch including contacts and a slidable member for opening and closing said contacts, an operating gear on said shaft arranged for engaging the drive gear of said resistanct unit when said shaft is in a rear position and to disengage the same when in neutral and forward positions, connections associated with said shaft and slidable member arranged whereby the latter is operated by the former and the drive gear of said tuning unit shaft disposed to be engaged by said operating gear when the shaft is in neutral position.

1,876,288. HOISTING BUCKET. JACOB LEWIS GOOD and WALTER E. CLICK, Elkhart, Ind., assignors to The Godfrey Conveyor Co., Elkhart, Ind., a Corporation of Indiana. Filed June 26, 1930. Serial No. 463,872. 14 Claims. (Cl. 294—70.)

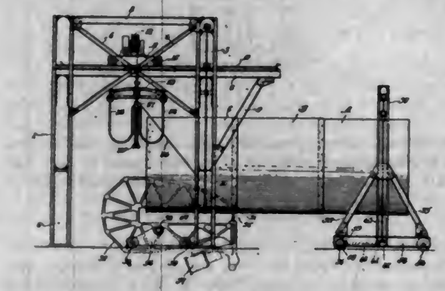


1. A bucket comprising two open-sided sections, hinges connecting the said sections below their tops, bottoms in each of said sections inclined towards the open sides of said sections at an angle of approximately 45 degrees, a latch, and bails for each of said sections, the said bails being connected to the side portions of each of said sections whereby the said bucket is closed by the pulling force of the said bail.

1,876,289. FLOOR TILE. JAMES E. GRAHAM, Newton, Mass., assignor to Bird & Son, Inc., East Walpole, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1931. Serial No. 560,999. 7 Claims. (Cl. 106—7.)

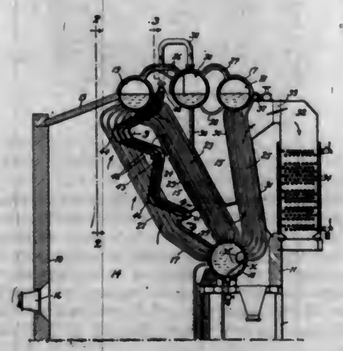
8. A floor tile of homogeneous composition, said composition including a nitrocellulose bonding agent having a nitrogen content of from 11% to 13% and a viscosity of more than 20 seconds, a plasticizer in an amount equal to at least 80% by weight of said nitrocellulose bonding agent, a resin, a graded cork filler substantially all passing a 40 mesh screen and substantially half passing a 100 mesh screen, amorphous and fibrous finely divided mineral fillers, and pigment.

1,876,290. WORK HANDLING DEVICE. JOHN C. HANNA, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Dec. 24, 1928. Serial No. 328,174. 3 Claims. (Cl. 78—96.)



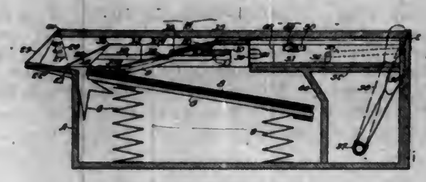
1. In apparatus for handling sectional cylindrical work adapted to be progressively riveted section by section, a fixed framework extending above and over the longitudinal path of movement of the work, horizontal trackways on said framework above said work, hoisting mechanism supported on said trackways for travel in a path above the work, and adapted to lift and longitudinally move the work, an endless sling having a loop for receiving and suspending the work and means on said framework for supporting said sling to extend around and above the path of travel of said hoisting mechanism.

1,876,291. STEAM GENERATOR. WILLIAM HUGHS HARDIE, New York, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1931. Serial No. 518,361. 7 Claims. (Cl. 122—478.)



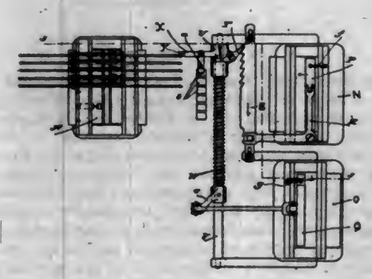
1. A steam generator comprising walls enclosing a furnace chamber and a boiler space, a boiler in the boiler space comprising an upper drum, a lower drum, a bank of vertically inclined tubes connecting the lower and upper drums and arranged to receive radiant heat, and a superheater comprising headers behind the bank and tubes connecting the headers, an intermediate support for the tubes behind the bank and said tubes having bends between the support and the headers extending forwardly toward the furnace chamber in lanes in said bank.

1,876,292. NEWSPAPER VENDING MACHINE. JOHN A. HEBB, Hopwood, Pa. Filed Nov. 9, 1929. Serial No. 405,877. 9 Claims. (Cl. 312—57.)



8. A newspaper vending machine provided with a case having a storage cavity and a delivedy opening, an inclined supporting platform resiliently mounted in the storage cavity, a movable cross head having a finger pivoted thereto, an incision device on said finger, and a lifting guide rod pivotally mounted over and engaging the finger and above the cross head for elevation by forward movement of the cross head.

1,876,293. ELECTRIC CALCULATING MACHINE. ROLF HOFGAARD, Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,330. 127 Claims. (Cl. 235—60.)

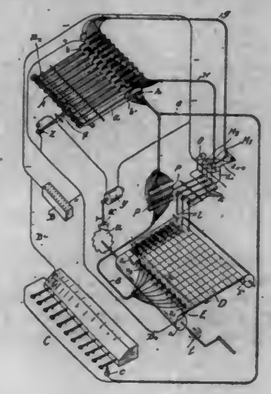


19. In an electric calculating machine two sets of each ten digit lines corresponding to the digits of the numerical system, key controlled means for interconnecting said two sets of digit lines in ten combinations, a registering device comprising ten multiple contact relays each of which is adapted to be energized by current in one of the sets of digit lines, said relays each having corresponding stationary and movable armature contacts representing denominational orders, a number of locking bars each adapted to actuate locking pawls for alternately locking and releasing in the same denominational order the respective contact armatures of said multiple contact relays when a current is caused to pass through a digit line of the same set corresponding to a digit of the same denominational order, actuating mechanism common to all said locking bars of said registering device and comprising a sliding sleeve having a cam thereon for engaging cam surfaces on the locking bars to reciprocate the same suc-

cessively and means for causing said sleeve to move one step in one direction each time a current impulse is transmitted to the said actuating mechanism.

92. The combination of two registers, a computing mechanism, means for entering numbers in the computing mechanism corresponding to the numbers in the registers under control of the registers, means for transmitting the computed result to one register and clearing it of the number entering the computation incidentally to the entry of the computed result, and means for conditioning the other register to receive a new number without clearing it of the number entering the computation.

1,876,294. CALCULATING MACHINE. ROLF HOFGAARD, Ljan, near Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1924, Serial No. 688,564, and in Norway Feb. 6, 1923. 47 Claims. (Cl. 235—58.)

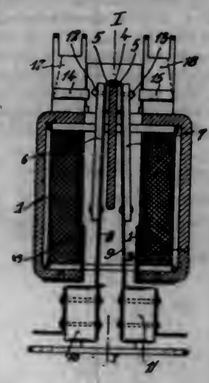


4. An electrically operated calculating machine comprising a series of digit keys, a plurality of registering elements, a plurality of corresponding registering element leads, a plurality of contact members, a plurality of corresponding leads connected thereto, a movable strip adjacent the contact members, actuation of the registering elements operating to perforate the strip, the contact members cooperating with the perforations produced in the strip to permit connection of the contact member leads to a source of potential, connection means for the digit keys whereby operation of any digit key connects each contact member lead with a corresponding registering element lead, said connection means being arranged so that each contact member lead is connected with a registering element lead representing a digit higher in value than the contact lead, by the amount represented by the particular digit key operated.

27. In a calculating machine, a series of punches 1 to 0, a series of digit keys, means for operating the punches under control of said keys, and a tabulating key for causing an operation of the zero punch.

1,876,295. UNPOLARIZED ELECTROMAGNETIC RELAY. ROLF HOFGAARD, Stabekk, near Oslo, Norway, assignor, by mesne assignments, to Hofgaard-Remington Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1927, Serial No. 181,223, and in Germany Feb. 4, 1927. 23 Claims. (Cl. 200—104.)

1. In an electromagnetic relay, a solenoid, two rows of independent movable armatures mounted inside said solenoid to be operated by the energization thereof, a stationary core between said two rows of armatures, and a



body of iron covering said solenoid externally and providing in combination with the armatures inside of said solenoid a path of small resistance for the magnetic flux.

1,876,296. CALCULATING MACHINE. ROLF HOFGAARD, Stabekk, near Oslo, Norway, assignor to Hofgaard-Remington Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1929, Serial No. 346,292, and in Great Britain Mar. 13, 1928. 105 Claims. (Cl. 235—60.)

28. In an electric multiplication machine a plurality of registers adapted to cooperate with sets of calculating relays for interconnecting sets of digit lines in accordance with the multiplication and addition tables respectively, means for setting up multiplicand and multiplier in different registers and automatic means for multiplying each digit of the multiplier with the multiplicant and adding the successive products thereof in a third register.

33. In an electric division machine a plurality of registers and sets of calculating relays cooperating therewith, means for transmitting current impulses to said registers in order to set up the dividend and a divisor in separate registers, selection means for automatically selecting the digits of the quotient by a series of multiplications of the divisor with the highest and successively the next lower digits of the numerical system until the proper digit is obtained and subtracting the consecutive products from the dividend.

35. The combination with an electric calculating machine comprising a ten key keyboard, a plurality of registers, means for entering the digits of a number in denominational sequence in one register, means for transmitting said number to another register in reverse order, of a recording device adapted to type the digits of the number in the order from right to left during transmission and in order from left to right during entry of the number in the first register under control of the keyboard.

55. The combination of a register adapted to receive numbers, means for entering new numbers and simultaneously as an incident to such entry erasing the previous number or the part thereof involving the same number of denominational orders, and means for erasing the portion of the previous number in higher denominational orders and registering zero in such orders.

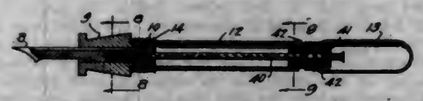
75. The combination of a register, means for directly electrically transmitting digits of a higher denominational order in the register back to the register as a lower denominational order and coincidentally erasing the digits not transmitted, a transfer mechanism in the transmitting line, and means under control of the highest denominational order to be discarded to energize the transfer mechanism in case the digit in said order is larger than the value of the digit it is desired to discard.

1,876,297. LOCOMOTIVE TENDER. HARRY A. HOKE, Altoona, Pa. Filed Feb. 5, 1932. Serial No. 591,049. 10 Claims. (Cl. 105—236.)



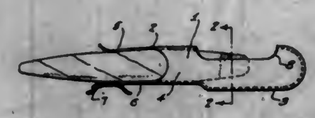
1. In a locomotive tender, a frame including a water bottom sloping downward toward the front of the tender throughout substantially the length thereof.

1,876,298. SELF-FILLING PEN. JOHN A. HOLLAND, Cincinnati, Ohio. Filed Jan. 8, 1931. Serial No. 507,455. 1 Claim. (Cl. 120—46.)



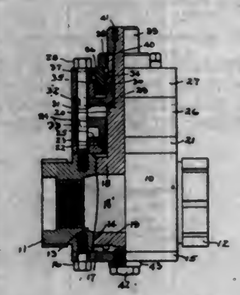
In a fountain pen, the combination of a pen point mounting member including means for feeding ink through said mounting member to the pen point, a refillable translucent rigid non-frangible cylindrical reservoir member fixed to the mounting member and having its hollow center in communication with the ink feeding means, a pump means comprising a tube having comunication with the ink feeding means and valve controlled communication with the interior of the reservoir, and a flexible bulb having its interior in communication with the tube and attached to and sealing the free end of the cylinder for introducing ink into the interior of the reservoir by way of the ink feeding means, and a hollow barrel having detachable connection to the mounting member at the junction of the mounting member and the reservoir member and completely enclosing the reservoir member and the pump means.

1,876,299. HOLDER FOR CIGARS OR CIGARETTES. HARRY H. HONIGBAUM, New York, N. Y. Filed Feb. 5, 1930. Serial No. 425,984. 2 Claims. (Cl. 131—51.)



2 As a new article of manufacture, a cigar or cigarette holder comprising a substantially cylindrical part through which a cigar or cigarette is adapted to extend, one end of the cylindrical part being projected in the direction of its length to form an open top tray adapted to underlie the burning end of the cigar or cigarette to receive ashes that may fall therefrom, the base of said tray being depressed below the base of the cylindrical member, so that the burning end of the cigar or cigarette will be spaced from the base of the tray.

1,876,300. VALVE. ROBERT S. HUBBELL, South Euclid, Ohio. Filed Aug. 27, 1929. Serial No. 388,750. 9 Claims. (Cl. 251—97.)



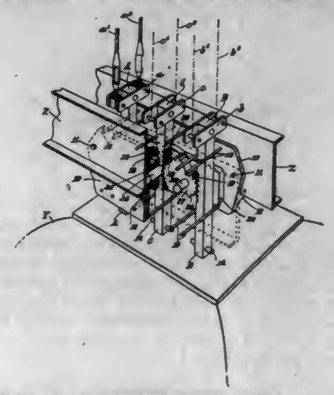
9. In a valve, a casing having a passage therethrough, a seat in said casing, a member adapted to close on said seat, a valve stem connected to said member, a bonnet projecting from said casing and having an internally threaded through passage, a bushing externally and internally threaded and screwed into said bonnet passage, external threads on said valve stem engaging internal threads of said bushing, operative engaging means on the outer ends of said bushing and of said stem respectively, the threads connecting said valve stem and bushing being of steeper pitch than those connecting said bushing and bonnet.

1,876,301. TILE FOR BOILER TUBES. CHARLES H. JOHNSON, Auburndale, Mass., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,596. 1 Claim. (Cl. 110—98.)



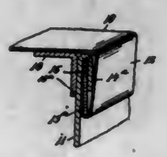
In combination, a row of tubes and tile applied to said tubes, said tile being wider than the distance between center lines of adjacent tubes, and lying entirely on one side of a plane that is tangent to said tubes, said tile having extensions projecting between said tubes beyond the plane of the center lines of said tubes.

1,876,302. CABLE EQUALIZING MECHANISM. LE ROY H. KIESLING, Brooklyn, N. Y. Filed July 28, 1931. Serial No. 553,511. 14 Claims. (Cl. 187—1.)



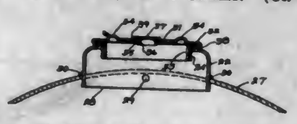
1. Cable equalizing mechanism comprising a rocker centrally pivoted on the load with arms extending laterally at both sides, a floating oscillator or gear member pivoted at each end of the rocker, and a system of vertical tension members supported by the cables and operatively engaging both ends of each floating oscillator.

1,876,303. METALLIC BOX. JOSEPH KNAGGS, Toledo, Ohio, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a Corporation. Filed Mar. 20, 1931. Serial No. 524,110. 9 Claims. (Cl. 220—55.)



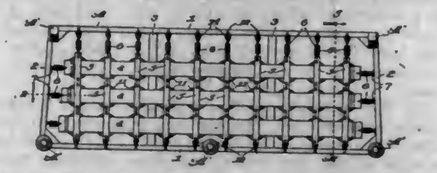
1. In a box of the character described, side and end members having their adjacent vertical edges bent outwardly and downwardly, and a top member adapted to interlock with the side and end members, the said top member being bent to form a depending flange the edge of which is bent inwardly and upwardly to correspond with the bends of the side and end members, and forming cooperating channels therewith, and a member in the said channels and interlocking therewith to rigidly hold the top member to the side and end members.

1,876,304. EXPANSION DOME FOR VEHICLE TANKS. ANDREW A. KRAMER, Kansas City, Mo. Filed Feb. 15, 1929. Serial No. 340,109. 7 Claims. (Cl. 220—1.)



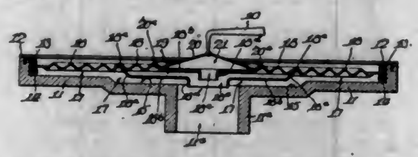
2. The combination with a tank having a curved shell portion, of a one-piece sheet metal dome welded in an opening in said shell portion, said dome comprising a body portion having a cylindrical portion of substantially uniform external diameter extending from the lower edge of said dome to a point located a substantial distance above said shell portion to provide a welding surface, said dome having an integral depending substantially cylindrical internally threaded flange portion at its outer end surrounding an opening in said dome, and said dome having a stiffening portion adjacent said flange connecting said flange portion and said body portion and extending substantially perpendicular thereto for stiffening the said flange to hold the same in a true circular form.

1,876,305. SPRING SEAT CONSTRUCTION. PETER E. KROEHLER, Riverside, Ill., assignor to Kroehler Mfg. Co., Naperville, Ill., a Corporation of Illinois. Filed July 20, 1931. Serial No. 552,013. 3 Claims. (Cl. 155—179.)



2. In combination, a frame comprising front, rear and side rails, metal hanger strips connected to said front and rear rails, said strips affording hinge loops, a plurality of metal straps, each of said straps being provided at one end with a plurality of perforations, a loop connecting member engaging each of the hinge loops of the connector on said rear rail, spring helicals connecting said metal loops to the rear ends of said straps, and hook connectors connecting the forward ends of said straps to the hangers on the front rail, said hook members being provided with a hinge portion adapted to be received within the hinge loop of said hangers and having also spaced hook ends adapted to engage perforations in the forward ends of said straps.

1,876,306. DIAPHRAGM FOR SOUND RECORDING AND REPRODUCING DEVICES. CLAYTON LAING, Chicago, Ill. Filed May 9, 1928. Serial No. 276,259. 18 Claims. (Cl. 181—32.)



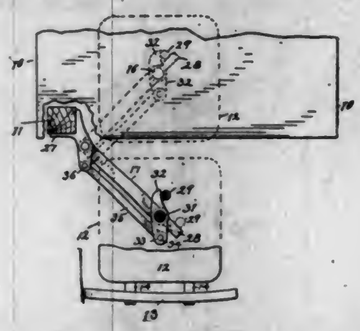
1. A diaphragm for sound-wave recording or reproduction comprising a series of thin sheet-material vibratory diaphragm members in superposed relation to each other in a series, each of said members being to a large extent in spaced relation to the adjacent one thereof in the series, each member of the series except the last being connected to the adjacent member of the series, in the order from first to last thereof, within the area of the next adjacent member of the series in the order from first to last whereby each member of the series except the first thereof is dependent upon the next adjacent preceding member of the series for its vibration, each member of the series except the first thereof having an opening forming a passageway for air vibrations, with means for vibrating the first member of the series.

1,876,307. METHOD AND APPARATUS FOR HANDLING MOTOR VEHICLES. HAROLD W. LANGBEIN, Los Angeles, Calif. Filed May 8, 1929. Serial No. 361,489. 7 Claims. (Cl. 198—1.)



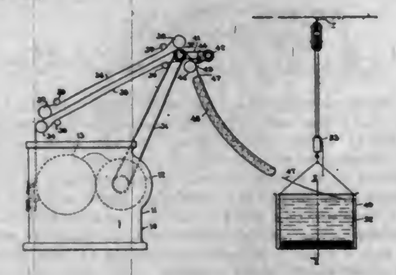
1. Apparatus of the character described including means for elevating a vehicle a substantial distance from the normal level, and a chain conveyor receiving the vehicle from said means and carrying it horizontally in an elevated position with its wheels free, said means including an incline along which the vehicle is adapted to operate onto the conveyor.

1,876,308. SWIVEL SEAT. ONNIE B. LAW, RUSSELL SIDNEY COLLEY, and CLEVELAND CONNER SOPER, Kent, Ohio; said Colley and said Soper assignors to said Law. Filed Aug. 19, 1927, Serial No. 214,080. Renewed Apr. 4, 1931. 14 Claims. (Cl. 155—81.)



3. The combination with a desk or the like, of a pivoted seat, a support for said seat, means for pivotally connecting said support to said desk to thereby permit said seat to be moved beneath or away from said desk, and means carried by said first named means for preventing oscillation of said seat about its axis as it is moved to a position beneath said desk.

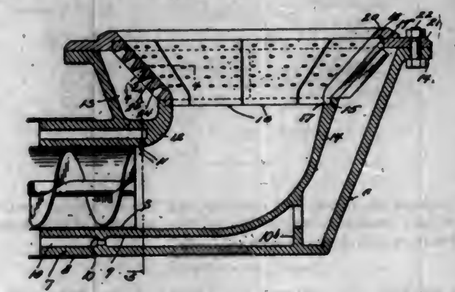
1,876,309. APPARATUS FOR REMOVING PLASTIC MATERIAL FROM MILLS. WILLIAM E. MACMONAGLE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,761. 6 Claims. (Cl. 18—2.)



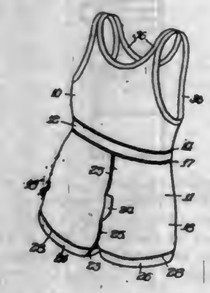
3. The combination with a mill for kneading plastic material, of a blade for severing a strip of plastic material from a mill roll and a rotatable disc having indicia projecting from the surface thereof for marking a series of figures upon the strip progressively, a tank for containing liquid, means for moving the material directly from the mill to the tank, and movable means within the tank for supporting the material therein.

1,876,310. UNDERFEED FIRE POT. JACOB MADLEHNER, Erie, Pa. Filed Apr. 13, 1929. Serial No. 354,956. 3 Claims. (Cl. 110—45.)

1. An apparatus of the character described, comprising a casing having its upper end open and surrounded by a flange, said casing having a tubular extension projecting rearwardly from its lower portion, a fire pot mounted in said casing and spaced therefrom, said fire pot having its upper end open and disposed below the upper end of said casing, said fire pot also having a cylindrical extension projecting rearwardly from its lower portion into and spaced from the extension of said casing, a grate of substantially inverted truncated cone shape mounted in the upper open end of said casing and having its lower end supported by the open upper end of said fire pot, and an annulus mounted on the flanged upper end of said casing and having a recess in its under side in which the upper end of said grate is seated.



1,876,311. COMBINATION GARMENT. HERMAN M. MCDONALD, Wilmette, Ill. Filed May 27, 1932. Serial No. 613,884. 6 Claims. (Cl. 2—78.)

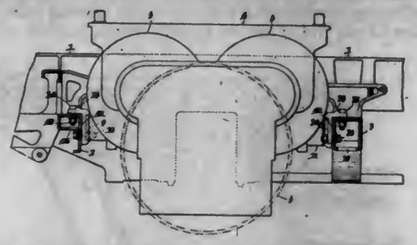


3. A union garment of the class described, devoid of crotch openings and formed of knitted material free from fastenings for maintaining the same on the body of a wearer, comprising a shirt and pants, and a waist band interposed between the shirt and pants and formed of inner and outer walls, the lower end of the shirt being turned inwardly upon the body thereof to constitute said inner wall of the waist band, a line of stitching between the free edge of the turned-in portion of the shirt and the body of the wearer for fastening the turned-in portion to the body of the shirt, the pants including complemental members each of which comprises individual cut blanks of knitted fabric having an upper area of relatively open knit stitches and a lower area of elastic close knit stitches, said complemental members being joined together along inner meeting edges and the lower inner edges of said individual blanks being seamed together to define individual leg portions to form a closed crotch garment capable of wide distension and stretching to be passed from one leg to the other about the torso of the wearer.

1,876,312. MOTOR SUSPENSION. JOHN MORCH, Altoona, Pa. Filed Nov. 6, 1930. Serial No. 493,736. 10 Claims. (Cl. 248—14.1.)

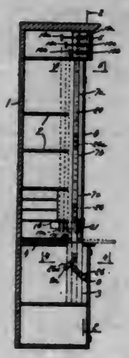
9. In combination, a vehicle frame including cross ties, a motor frame supported between said cross ties, and a bracket adapted to fit snugly between a cross tie side wall

and the motor frame, said bracket having a portion extending horizontally across the top of a cross tie and a portion extending beneath the motor frame, and shims interposed



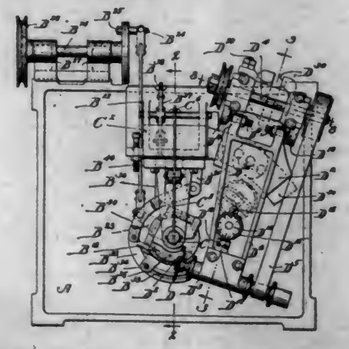
between the top of said cross tie and the horizontal portion of said bracket to adjust the vertical relation of said motor frame and vehicle frame.

1,876,313. ILLUMINATING APPARATUS. BENJAMIN A. MORTON, New York, N. Y. Filed Sept. 7, 1929. Serial No. 390,916. 10 Claims. (Cl. 240—4.)



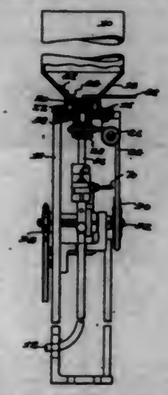
5. The combination of panels, lights carried thereby, supports for said panels having means for partly concealing them, means for adjusting said panels from their position of concealment to their position of exposure, and a common operating mechanism for translating all said panels into a common vertical plane.

1,876,314. BLADE SHARPENING MACHINE. WILLIAM EMERY NICKERSON, Boston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Aug. 24, 1927. Serial No. 215,238. 12 Claims. (Cl. 51—46.)



11. In a machine for sharpening curved edge blades, a rotary abrading disk, a two-part oscillatory blade holder cooperating therewith, power operated mechanism for oscillating the holder as a unit about its axis to grind a blade in the holder while leaving one part of the holder free for independent oscillation about the same axis, and means for independently oscillating said part to carry the sharpened blade beyond the range of the abrading disk.

1,876,315. MACHINE FOR FEEDING TAPERED ROLLERS. THOMAS C. PEW, Ann Arbor, Mich., assignor to Hoover Steel Ball Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Feb. 2, 1931. Serial No. 512,796. 31 Claims. (Cl. 51—215.)



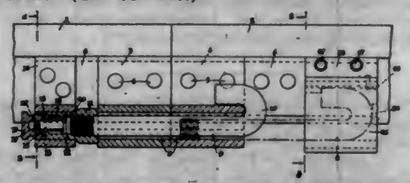
1. In a machine for feeding rollers or the like, feeding means including a rotating conical shell having an internal thread and having an opening at its apex the axis of the shell being substantially vertical, the latter being at the bottom of the cone, and a stationary element in said shell overlying the thread and disposed in parallel relation to the adjacent element of revolution of the cone.

1,876,316. JIGGER CONVEYER. ERNEST RIDGILL, Sheffield, England. Filed Mar. 28, 1931, Serial No. 526,064, and in Great Britain June 24, 1930. 13 Claims. (Cl. 74—14.)



1. Mechanism for imparting reciprocatory motion to the troughs of jigger conveyers which comprises a drying crank coupled by a connecting rod to one arm of a pivotally mounted double-armed lever, the other arm of which is connected to a second connecting rod arranged to be operatively connected to the trough of a jigger conveyer, both said connecting rods being disposed at acute angles to the respective arms of said double-armed lever when the mechanism is in a position corresponding to the extreme forward limit of movement of the trough.

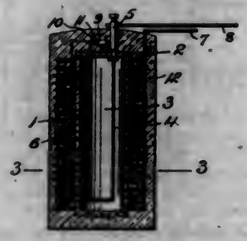
1,876,317. JIGGER CONVEYER. ERNEST RIDGILL, Dronfield, Sheffield, England. Filed Sept. 9, 1931, Serial No. 561,934, and in Great Britain Mar. 4, 1931. 15 Claims. (Cl. 198—220.)



3. In a trough for a jigger conveyer of the kind referred to, a connection for the adjacent ends of two successive

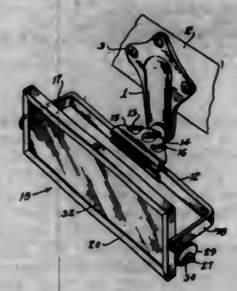
troughs sections which comprises a bolt secured to one section and a nut permanently and rotatably mounted upon the other section in such a manner that when the said adjacent ends of the said sections are disposed adjacent to and in alignment with one another, the said bolt and nut are automatically arranged in substantial parallelism with one another, for the purpose described.

1,876,318. RADIO ANTENNA. DANIEL C. SENTER and ANDREW F. SENTER, Grandview, Mo. Filed Aug. 1, 1930. Serial No. 472,241. 2 Claims. (Cl. 250—33.)



1. In a radio antenna, a casing composed of non-magnetic insulating material impervious to water and air, a conductor the end of which extend outside said casing, said conductor having an inductance winding embedded in and insulated by the material of said casing, said conductor having a loop extending into and spaced from and in series with said winding, and a connection including a condenser between the arms of said loop.

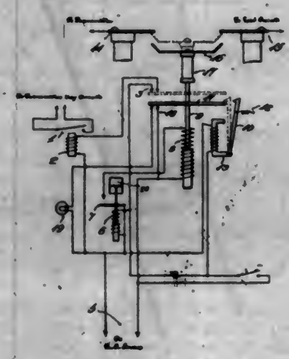
1,876,319. DAY AND NIGHT REAR VISION MIRROR. HERMAN W. SMITH, Louisville, Ky. Filed Oct. 11, 1930. Serial No. 488,091. 4 Claims. (Cl. 45—97.)



3. In a rear vision mirror, the combination with a bracket, of a support connected to pivot universally with respect to said bracket and to laterally slide thereon for its full length, and a rear vision mirror journaled in said support.

1,876,320. SWITCHING AND RELAY SYSTEM. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 13, 1928. Serial No. 325,770. 4 Claims. (Cl. 175—375.)

3. A switching and relay system comprising in combination a main electromagnetic relay, a plurality of electromagnetic relays associated with a source of electrical energy, an armature and contact system controlled by each of said relays, a common control circuit for connecting certain of said relays with said source, an electromagnetic locking device for preventing the mechanical movement of the armature associated with one of said relays, said electromagnetic locking device being controlled by the



closing of said common control circuit, and a slow motion mechanism connected to one of said relays for prolonging the energization of the relay which has its armature controlled by said electromagnetic locking device for a predetermined time after the opening of said control circuit.

1,876,321. AUTOMATIC SWITCH FOR LEFT-RIGHT TURNS OF MOTOR VEHICLE DEVICES. NICOLAS OCHINOFF, San Francisco, Calif. Filed Mar. 19, 1929. Serial No. 348,192. 6 Claims. (Cl. 200—59.)

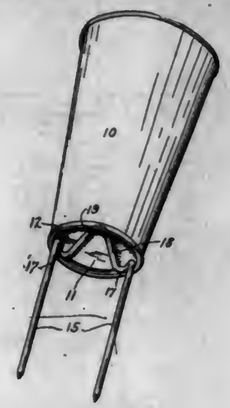


1. In a device of the character described a switch-casing fixedly mounted in operative relation to the steering wheel of a vehicle, a plurality of resiliently mounted switch plungers in the casing being adapted to close various signal circuits on the vehicle, each plunger being normally in circuit breaking position and having an end thereof extended through a wall of the casing; a manually actuated lever pivoted on the casing and adapted to be selectively swung over the ends of said plungers to depress the same into circuit closing position; a release arm fixed on the lever and being extended into the casing and being adapted to move with the lever; reciprocable releasing elements resiliently mounted on the casing and being normally held in inoperative relation relatively to said arm; and means connected to the steering wheel to rotate therewith and being adapted to move the respective releasing elements into contact with the said arm so as to force said arm into neutral position thereby to cause the automatic release of the respective plungers into circuit breaking positions.

1,876,322. BOUQUET HOLDER. WALTER H. RUDOLPH, Buffalo, N. Y. Filed Sept. 1, 1931. Serial No. 560,571. 7 Claims. (Cl. 47—41.)

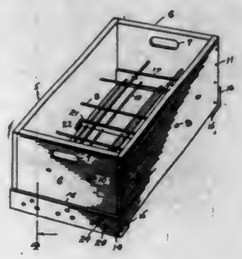
1. A bouquet holder comprising a container having a flanged bottom, and a spike-forming element detachably se-

cured to said bottom, said element comprising a plurality of spikes located at spaced points closely adjacent to the said flanged bottom, a container-engaging portion of



sinuous contour having a plurality of sections contacting with the flange of said bottom at a plurality of substantially equally spaced points.

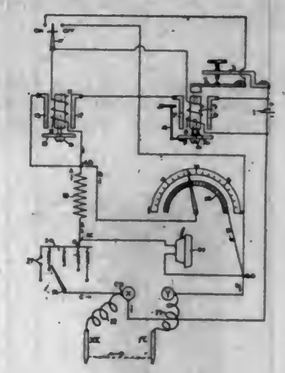
1,876,323. MILK BOTTLE CRATE. HOWARD M. SLOAT, Fairfield, Conn. Filed July 10, 1928, Serial No. 291,506. Renewed July 28, 1932. 4 Claims. (Cl. 217—69.)



1. The combination with a milk bottle crate comprising wood sides and end members, two opposite ones of which are provided with slots that extend in from their edge across the width of said members, of an attachable bottom comprising a pair of elongated channel irons each adapted to cover the entire bottom edge portion of the end of a crate including said slots, each of the side flanges of said channel irons having a longitudinal series of holes therethrough that align with those of the other flange, a series of rods having their opposite end portions secured in said aligned holes of the two side flanges of each of the said channel irons in a way to form a rigid support for the said end and in position to enter the slots, a supporting iron mounted upon said rods between the two said channel irons and adapted to be secured to the crate, and means for securing the said channel irons to bottom edge portions of the ends of the crate.

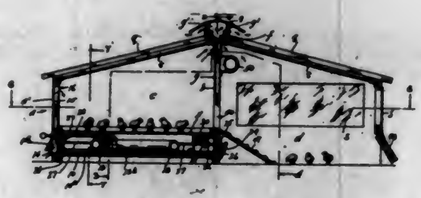
1,876,324. GROUND RESISTANCE METER. STEPHEN W. BORDEN, Summit, N. J. Filed Aug. 1, 1929. Serial No. 382,753. 1 Claim. (Cl. 175—183.)

A bridge for measuring the ohmage of a resistance, which includes four bridge arms, C, A, B, and D, the last being the resistance to be measured, the four arms being connected in closed series, in the order mentioned; a battery having one terminal, connected to the junction of arms C and D, and its other terminal connected to the junction of arms A and B; a current detector connected between the junction of arms A and C and the junction of arms B and D; and an electromagnetic circuit-closing device, having its operating winding connected between the



first mentioned battery terminal and the junction of arms A and B, said device functioning to close a circuit between the said battery terminal and the junction of arms B and D.

1,876,325. POULTRY BROODER. HAZEL M. CRAWFORD and WILLIAM POLLOCK, Portland, Oreg.; said Pollock assignor to Portland Feed Mills Company, Portland, Oreg., a Corporation of Oregon. Filed Oct. 15, 1929. Serial No. 399,788. 12 Claims. (Cl. 119—34.)

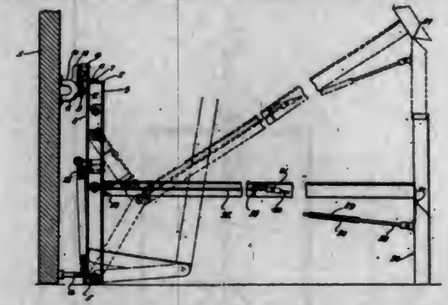


1. A poultry brooder and the like comprising, a brooder chamber, a vent in the roof of said chamber, a thermostatically controlled cover controlling said vent, a vent in the lower wall portion of said chamber, a passageway in said wall connecting the said vent with said chamber at the top, a ventilating opening in the roof of the chamber, a false floor in said brooder chamber forming a coil chamber between said false floor and the real floor of said brooder chamber, hot water coils located in said coil chamber, vents in the wall at each side of said coil chamber, thermostatically controlled covers controlling said vents and a heater chamber at one end of said brooder chamber, a heating element in said heating chamber, by which said hot water coils are heated.

1,876,326. TREATMENT OF PETROL AND OTHER ORGANIC LIQUIDS CONTAINING WATER. RICHARD LANT, Vienna, Austria. Filed Oct. 26, 1929, Serial No. 402,808, and in Great Britain Sept. 10, 1929. 9 Claims. (Cl. 210—203.)

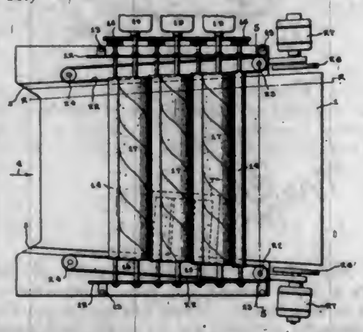
3. A method of treating petrol and other organic liquids containing water in suspension for the purpose of effecting the removal of the water which comprises filtering the same through cellulose esters of the higher fatty acids which are present as glycerides in non-drying oils or fats.

1,876,327. DOOR BED. HARRY W. LAUTERSTEIN, Montclair, N. J. Filed Oct. 11, 1929. Serial No. 398,961. 1 Claim. (Cl. 5—140.)



In a bed, the combination of a supporting frame adapted to be mounted in upright position and comprising a rectangular frame, the upright side bars of which are formed with guideways, a toggle embodying vertically straight link elements adapted to be in vertical alinement when the toggle is on dead centers, the lower terminal of the lower link element being mounted near the lower ends of said side bars for pivotal movement on a fixed axis guiding members carried by the upper end of the upper link element and extending into the guideways of said side bars, a bed rectangular frame rigidly secured at its head end to the upper link element of the toggle and extending at right angles therefrom to partake of a horizontal position when the toggle is on dead centers, and springs, one end of each of which is secured to the upper portion of the toggle and the other end of each of which is secured to the cross bar at the base of the supporting frame.

1,876,328. DRUM SANDING MACHINE. EMIL C. LOETSCHER, Dubuque, Iowa, assignor of one-half to Farley & Loetscher Mfg. Co., Dubuque, Iowa. Filed May 21, 1928. Serial No. 279,342. 9 Claims. (Cl. 51—80.)

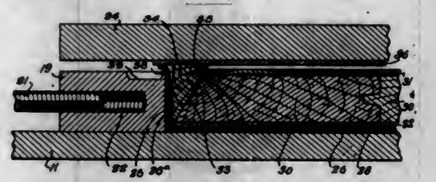


1. In a sanding machine, upper and lower rotatable feed rolls, upper and lower rotatable sanding drums, the upper drums being spaced from the lower drums, and the upper feed rolls being spaced from the lower feed rolls to permit a sash to be fed between the same, and a belt having one of its runs arranged at an oblique angle relatively to the axes of the drums and engageable with one edge of the sash for assisting in feeding the same between said upper and lower drums.

1,876,329. METHOD OF TREATING VENEER. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Aug. 22, 1931. Serial No. 558,836. 5 Claims. (Cl. 144—309.)

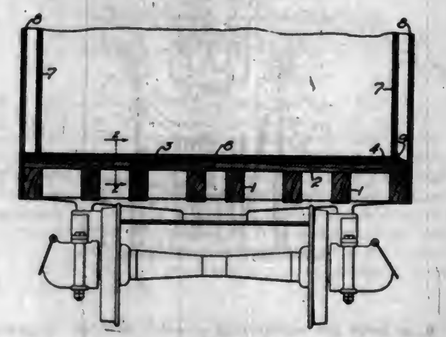
1. The method of coating an article containing cellulosic material with condensation product, consisting in removing natural resin from the cellulosic material then treating the cellulosic material with condensation product in a manner to produce a film of the latter on the surface of the finished article, and subjecting the treated cellulosic material to platen pressure and heat to react the condensation product.

1,876,330. METHOD OF MOLDING TABLE TOPS AND THE LIKE. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Jan. 29, 1932. Serial No. 589,756. 9 Claims. (Cl. 144—309.)



1. The method of veneering a core, consisting in applying synthetic resin adhesive to certain of the component parts, lining the end and side walls of a mold cavity with veneering, placing within the lined mold cavity a core that will expand against the lined side walls thereof when pressure is applied to one face of said core, applying pressure to press the core against the lined end wall of the mold cavity and to cause the core to expand against the lined sides of the mold cavity, and applying heat to react the synthetic resin to cause it to bind the component parts of the product in their final relation.

1,876,331. VEHICLE BODY CONSTRUCTION. WILLIAM H. LOWE, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,497. 3 Claims. (Cl. 105—423.)

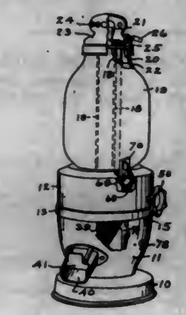


1. A freight car comprising a plurality of stringers, floor boards overlying said stringers, an outer sheathing extending upwardly adjacent the ends of said floor boards, a sheathing spaced inwardly of said outer sheathing, and a waterproof wearing sheet secured over the floor boards and extending under the inner sheathing to abut against the outer sheathing, the edges of said sheet being tapered off between said sheathings.

1,876,332. PEANUT DISPENSING DEVICE. CHARLES W. MABEY, Indianapolis, Ind., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind. Filed Aug. 3, 1931. Serial No. 554,730. 7 Claims. (Cl. 221—107.)

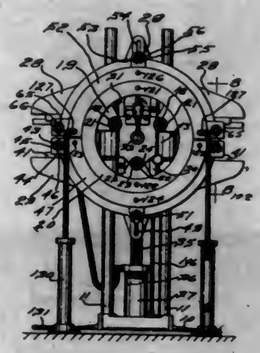
3. In a vending device, a container, a measuring cup below the container rockably mounted on trunnions, a plate dividing the cup into two compartments, a second plate having an S-shaped bend cut away for a part of the

length of the bend to form a slot by which half of the second plate is assembled above the half below the first plate, a screw passed threadedly through one of the trun-



nions of the cup and engaging the second plate, a wing nut on the outer end of the screw and a lock-nut on the screw against the trunnion.

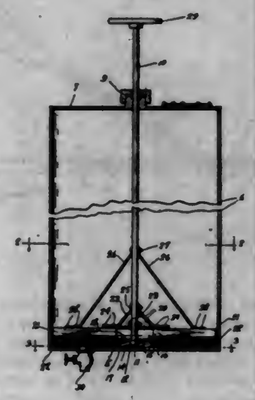
1,876,333. APPARATUS FOR VULCANIZING ANNULAR ARTICLES. CHARLES E. MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 3, 1927. Serial No. 210,295. 15 Claims. (Cl. 18—17.)



9. A mold for vulcanizing annular articles comprising a circular central section and a pair of semi-circular outer sections, a locking member having a substantially semi-circular groove located at each end of one of the outer sections, a rotatable eccentric secured at each end of the other outer section, formed to pass by the corresponding locking member when in one position and to force the outer mold sections together when rotated, and means actuated by the closing of the molds for rotating the eccentrics into locking position.

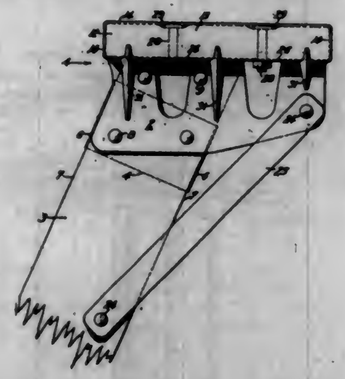
1,876,334. TANK CLEANER. WALTER MCANEAR, Electra, Tex. Filed May 9, 1931. Serial No. 536,239. 3 Claims. (Cl. 210—209.)

1. In combination with a tank, of a block fixed to the bottom of the tank and having a concave recess in the upper surface thereof, a shaft journalled through the top of the tank and terminating at its bottom end in a knob bearing in the recess, means on the block for holding the knob in the recess, and brushing means on the shaft to engage the bottom of the tank, said means for holding the knob in the recess comprising a plate hingedly mounted



on the block at one end and means for holding the other end locked in place, said plate having a slot through which the shaft extends.

1,876,335. LADDER CONSTRUCTION. SIDNEY A. MCGAW, Fresno County, Calif. Filed Mar. 30, 1931. Serial No. 526,180. 12 Claims. (Cl. 228—58.)

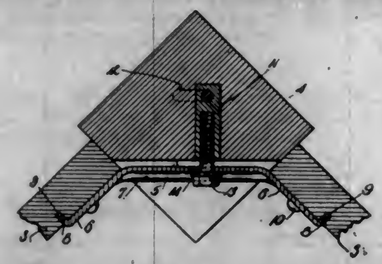


1. A device for preventing the splitting of the head board in a ladder having side rails, comprising a plate adapted to be secured to a side rail, and a cap arranged on the plate for enclosing an end of the head board, said cap having a substantially horizontal flange portion upon which the bottom surface of the head board may rest.

1,876,336. TABLE LEG ATTACHMENT. DENNIS J. MCLAUGHLIN, Ilion, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1925. Serial No. 75,758. 3 Claims. (Cl. 45—48.)

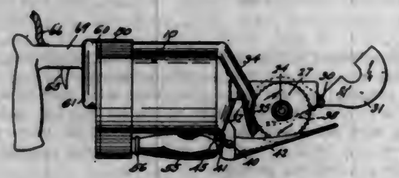
1. A fastening for table legs comprising, in combination with the side rails and leg of a table, a corner plate having side portions abutting and fastened to said rails, a series of internally threaded bushings fixed transversely in the leg with their axes disposed in parallel relation in different spaced vertical planes, and having transverse openings through their inner ends in aligned relation, a

single pin passing through said leg and through all of said openings to secure the bushings within the leg and to prevent rotation thereof, and bolts passing through the



central portion of the corner plate and threading into said bushings for securing the corner plate and side rails against the leg.

1,876,337. PLASTER CAST CUTTER. LESLIE A. MEAD, San Leandro, Calif. Filed Nov. 23, 1931. Serial No. 576,687. 1 Claim. (Cl. 128—317.)



A plaster cast cutter comprising an electric motor, a bracket secured to the front of said motor and having an integral gear box a saw rotatably mounted on one side of said bracket, and driven by said motor through spiral gears, an adjustable depth gauge for said saw, an under-surface gauge for said saw, an exhauster mounted on the rear of said motor and driven thereby, an intake pipe extending from said exhauster to the rear of said saw, and a dust collecting bag removably secured to the discharge outlet of said exhauster.

1,876,338. RUBBER SEALED FASTENER. SAMUEL H. NORTON, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Nov. 22, 1929. Serial No. 409,014. 9 Claims. (Cl. 24—205.)



1. The combination with a fastening device of the type having a pair of flexible stringers and cooperating fastening means on the adjacent edges of said stringers, of covering strips wholly carried by said stringers and permanently connected thereto at points spaced from the outer edges of said stringers, said covering strips having portions overlying said fastening means, said fastening device and attached covering strips constituting a separate and distinct unit adapted to be connected to the separable edges of an article to be fastened.

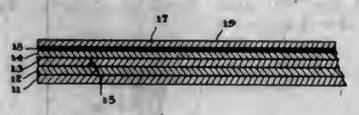
1,876,339. WELL FISHING TOOL. WILLIAM OBERLE, Bushton, Kans. Filed Dec. 29, 1931. Serial No. 583,740. 2 Claims. (Cl. 294—97.)

1. A well fishing tool of the class described comprising a tubular body provided near its lower end with a substantially square aperture, a catch comprising a substantially rectangular plate having its free end formed with a curvate notch having its opposite end curved to conform to the interior of the body and further formed at said last-named end with a thickened block-like exten-



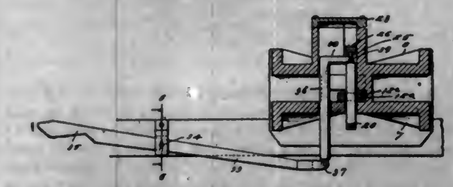
sion projecting through and beyond the aperture, said extension being formed with an opening, a key in said opening constituting a pivotal retaining connection for the plate, and a release rod pivotally attached at its lower end to the intermediate portion of said plate.

1,876,340. WALL BOARD. LESLIE S. ODELL, Montreal, Quebec, Canada, assignor to Building Products Limited, Montreal, Quebec, Canada. Filed Apr. 15, 1929. Serial No. 355,220. 1 Claim. (Cl. 72—124.)



A wall board construction comprising a plurality of separate layers of fibrous material adhesively united in face to face relation to form a comparatively thick insulating board, each layer comprising a mass of fibrous material which is continuous throughout the length and width of the layer and a plaster receiving surface for said board comprising an additional layer of fibrous material joined to an outer layer of said board by a comparatively thin layer of asphaltic waterproof material adapted to serve as a barrier against the penetration of moisture from said additional layer.

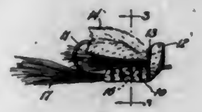
1,876,341. AUTOMATIC COUPLING FOR MINE CARS. LOUIS OLCSVARY, Republic, Pa. Filed Mar. 22, 1928. Serial No. 263,696. 1 Claim. (Cl. 213—188.)



A car coupling comprising a body having a head and steam, the head being formed with a longitudinally extending recess and a chamber rising from the recess, a removable cap for the top of said chamber, a pin slidable vertically in said head and extending through the recess

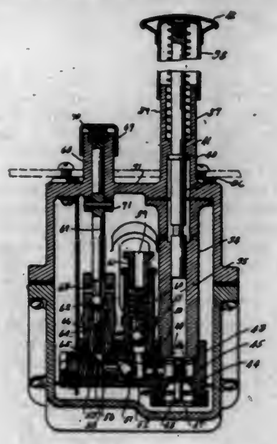
and movable upwardly into said chamber, a latch in said chamber to engage said pin and releasably hold the same in an elevated position, and means to move the pin upwardly into position for engagement by said latch consisting of a lever pivotally mounted with one end extending beneath the head, a bar slidably received in a passage formed vertically in said head with its lower end extending below the head and pivoted to said lever and its upper end portion extending into said chamber, and a side arm extending from the upper end of said bar and pivoted to said pin.

1,876,342. ARTIFICIAL BAIT. ERNEST HILORY PECKINPAUGH, Chattanooga, Tenn. Filed Oct. 30, 1928. Serial No. 316,013. 2 Claims. (Cl. 43—48.)



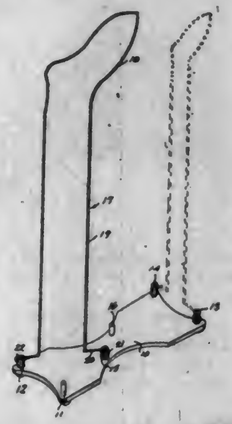
1. In combination with a fish hook, an artificial floating insect having an elongated and rearwardly tapered body portion presenting a shallow, longitudinal slot in its lower side within which the shank of the hook is nonrotatably secured with the bill pointing upwardly; a head on the body having a flat vertical face portion above the eye of the hook, a rearwardly inclined face portion below the eye of the hook and a reduced neck portion.

1,876,343. LUBRICATING SYSTEM. WILLIAM S. PRITCHARD, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Sept. 15, 1926. Serial No. 135,611. 7 Claims. (Cl. 184—7.)



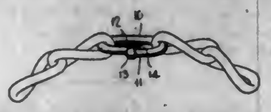
1. In a pressure lubricating system for vehicles, the combination with a lubricant source, a system of conduits, and valves at the points of distribution operable by pressure to deliver lubricant at said points and further operable upon the relief of said pressure to return to normal closed position, of means for forcing and maintaining lubricant under pressure in said conduits, a pressure controlled by-pass valve associated with said pump for controlling the pressure built up by said pump and a manually controlled pressure relief valve, means for releasing said lubricant and returning it to said reservoir.

1,876,344. STOCKING AND SOCK FORM FOR DRYING, STRETCHING, AND PRESSING. JOHN PUCUNAS, Los Angeles, Calif. Filed Apr. 29, 1931. Serial No. 533,704. 3 Claims. (Cl. 223—17.)



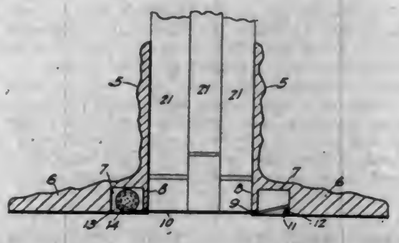
1. A stocking and sock form for drying, stretching and pressing, comprising a base, a tubular member having open ends mounted on the base, a resilient wire bent into the form of an outline of an article of hosiery, the leg portions of the wire being bent inwardly for reception in the open ends of the tubular member, and means for locking the wire in the tubular member.

1,876,345. REPAIR LINK FOR CROSS CHAINS. JOHN R. REYBURN, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed June 23, 1928. Serial No. 287,663. 1 Claim. (Cl. 59—85.)



A repair link consisting of a rod formed with knob like ends, the rod being of uniform cross section between said ends, the rod also being bent to form an open loop with the free ends of the rod lying in different planes, and adapted in service to be bent transversely into a common plane.

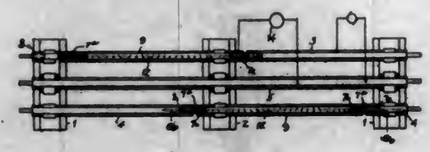
1,876,346. BOOK ENDS. WALTER RIDDEL, Yreka, Calif. Filed Dec. 5, 1930. Serial No. 500,215. 1 Claim. (Cl. 211—43.)



A clamping device comprising a web, two blocks having bases and resiliently connected by said web, one end of said web being anchored to one of said blocks, a spring

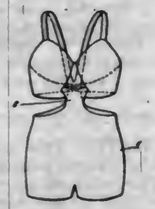
drum axially disposed in a recess in the other block parallel to the base and having journals removably secured in slots at each end of the recess by means of set screws, the other end of said web being attached to said spring drum, said spring drum operating against the web at all times tending to draw the blocks together.

1,876,347. TOY RAILWAY TRACK. LEON W. ROSENTHAL, New York, N. Y. Filed Mar. 18, 1931. Serial No. 523,484. 17 Claims. (Cl. 246—81.)



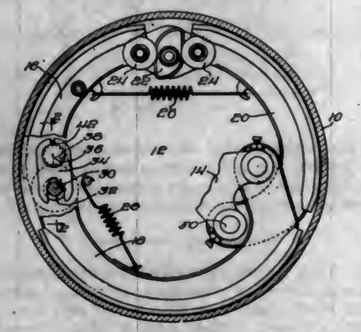
1. A toy railway track section having a subdivided track rail and an insulated electrical conductor encircled by part of said rail.

1,876,348. GARMENT. MARTA RYFF, Bern, Switzerland, assignor to Ryff & Co. A.-G., Bern, Switzerland, a Corporation of Switzerland. Filed Aug. 29, 1931, Serial No. 560,093, and in Switzerland July 23, 1931. 3 Claims. (Cl. 2—67.)



1. A garment, comprising in combination a lower part constituting a pair of drawers, and an upper part constituting a brassière connected with said lower part only by two vertical narrow bands, said upper part comprising two flaps each fixedly connected with one of said bands and adapted to be attached to the other band.

1,876,349. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 6, 1928. Serial No. 267,859. 9 Claims. (Cl. 188—79.5.)



4. A brake comprising, in combination, a drum, friction means, a stationary support, said means and said support having cooperating guide members, one of which is provided with a slot extending generally circumferentially of the drum and which slot embraces a part of the other member, the slotted member being shiftable by the said part of the other member to adjusted position by the operation of applying the brake.

1,876,350. ELECTRIC CONDUCTOR. EDWIN J. SCHNEIDER, Jamaica, and MERRITT B. BRANDT, Brooklyn, N. Y., assignors, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1926. Serial No. 88,228. 5 Claims. (Cl. 173—264.)



3. An article of manufacture comprising in combination, an electric conductor, a sheath of insulating compound surrounding said conductor, and a protector casing for the insulated conductor comprising a spirally wound fibrous strip, said strip being thicker along one edge than along the other edge and being wound with the edges of adjacent turns overlapping.

1,876,351. FENDER MOUNTING FLAG. WALTER L. SHIRLEY, Indianapolis, Ind. Filed Mar. 28, 1932. Serial No. 601,492. 11 Claims. (Cl. 116—173.)

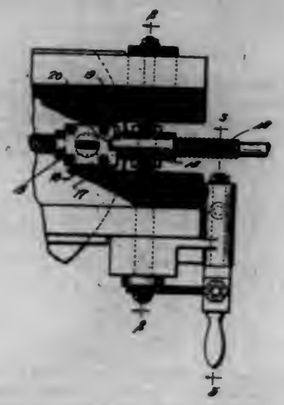


1. In a flag holder, a clamping device having front and rear clamping members, a flag staff, a staff engaging hook fixed relative to one of said clamping members, a loop fixed relative to an opposing clamp member, a leg extending from said one clamp member adjacent said loop, a foot on said staff inserted in said loop having a greater width than height whereby the staff may be rocked to shift said loop by rotation of the foot and may be engaged by said hook, and means for retaining a flag on said staff.

1,876,352. COMPENSATING MECHANISM FOR MACHINE TOOLS. HENRY SIDGREAVES, Pawtucket, R. I., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 29, 1930. Serial No. 448,247. 18 Claims. (Cl. 90—22.)

1. In a machine tool, a base, a movable support, a rotatably screw connected to said movable support for reciprocation thereof, a movable nut mounted on said base and

threadedly engaging said screw, means for positively locking said movable nut against rotation, a rotatable shaft,



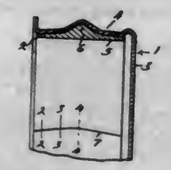
means for axially moving said movable nut on rotation of said shaft, and yielding means tending to rotate said shaft.

1,876,353. MACHINE TOOL COMPENSATING MECHANISM. HENRY SIDGREAVES, Pawtucket, R. I., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 29, 1930. Serial No. 448,248. 10 Claims. (Cl. 90—22.)



1. In a machine tool, a base, a movable support, a rotatable screw member connected to said movable support for reciprocation thereof, a nut member mounted in said base and threadedly engaging said screw member, means for holding said movable nut against rotation and yieldable means engaging one of said members and axially movable to axially shift said engaged member in either direction, and means for adjusting the yieldable means for varying the engaging pressure thereof in either direction.

1,876,354. BRAKE DRUM. CHARLES W. SINCLAIR, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 8, 1932. Serial No. 585,567. 9 Claims. (Cl. 188—218.)



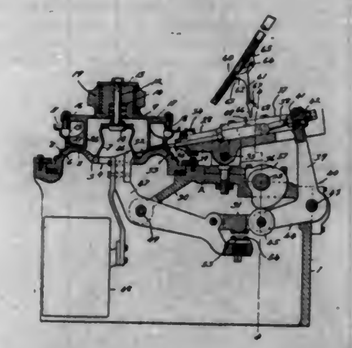
1. In a brake drum, a transversely split annular lining having radially interlocking ends.

1,876,355. INFLATING HAND PIECE. HARVEY E. SMITH, Portland, Oreg., assignor to Aerometric Valve Corp., Portland, Oreg., a Corporation of Oregon. Original application filed Aug. 27, 1927, Serial No. 215,987. Divided and this application filed July 22, 1929. Serial No. 379,930. 5 Claims. (Cl. 251—121.)



1. In an inflating hand piece, a body, a nipple secured to one end of the body and having a portion extending into the body and provided with radial openings, said body having an outlet at its other end, an inwardly opening valve normally closing the inner end of the nipple, a piston operating in the extension of the nipple and bearing against said valve, and yielding means urging the piston toward the valve, the piston normally closing said openings and having a snug fit with the nipple extension.

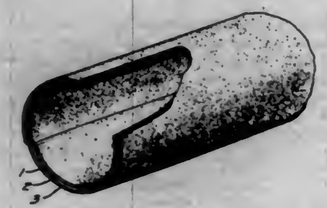
1,876,356. APPARATUS FOR ASSEMBLING WIRE WHEELS. JOHN SNEED, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Nov. 9, 1931. Serial No. 573,937. 12 Claims. (Cl. 219—2.)



1. In an apparatus for assembling wire wheels, the combination with means for holding hub and rim members, of means for assembling a spoke blank with said members, and means for connecting said spoke blanks to said members.

1,876,357. GAS FLUE OR VENT. JACOB A. STADTFELD, San Francisco, Calif., assignor to Plant Rubber & Asbestos Works, Inc., San Francisco, Calif., a Corporation of California. Filed Aug. 8, 1928. Serial No. 298,224. 2 Claims. (Cl. 154—2.)

1. The process of making a heat insulating acid resistant pipe consisting in impregnating a strip of asbestos with a mixture of sodium silicate, zinc oxide, lead carbonate and silica; in winding the material so impregnated about a mandrel to form a cylinder; in air drying



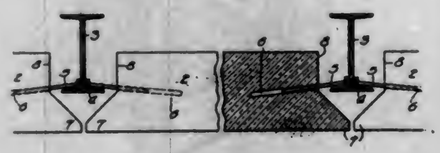
and baking the cylinder so formed; in passing this cylinder thru a bath of calcium chloride and in then baking the cylinder so treated.

1,876,358. HOT PLATE ATTACHMENT FOR GRIDDLES. TURNEY H. STOUGH, Jeannette, Pa., assignor to Jeannette Steel Corporation, Jeannette, Pa. Filed Apr. 14, 1931. Serial No. 530,072. 6 Claims. (Cl. 53—7.)



1. A hot plate attachment for griddles and the like comprising a griddle having a flaring side wall and a depending annular flange forming a pocket between the wall and flange, a hot plate detachably engaged with the griddle, an upwardly directed peripheral edge on the hot plate extending into the pocket, said hot plate having a marginal recess therein, and lugs associated with the flange and engaged with the hot plate by passage through the recess for retaining the hot plate in position on the griddle.

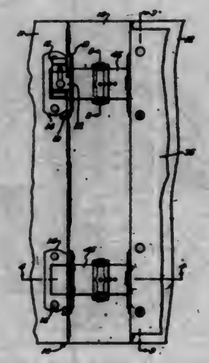
1,876,359. CEILING SLAB SUPPORT. FRANCIS J. STRAUB, New Kensington, Pa. Filed Apr. 27, 1929. Serial No. 358,543. 6 Claims. (Cl. 72—68.)



1. A ceiling slab having at opposite ends inwardly extending closed bottom sockets provided with a tubular bearing and a supporting bolt movably mounted in each socket provided with a projecting supporting terminal.

1,876,360. BOOKBINDER. NICHOLAS H. STUART, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 8, 1930. Serial No. 426,935. 4 Claims. (Cl. 129—8.)

1. A binder comprising a book cover having front and rear portions and a connecting web portion, hinge members secured within the front and rear portions adjacent the web, pins mounted in the hinge members, fasteners mounted on the pins for rotation with respect to the hinge members, plates provided with impaling means for



collectively holding a plurality of leaves, and means on the plates engageable with the fasteners for locking cooperation therewith.

1,876,361. HEEL. PETER B. SULLIVAN, Randolph, Mass. Filed Sept. 9, 1931. Serial No. 561,862. 3 Claims. (Cl. 36—36.)

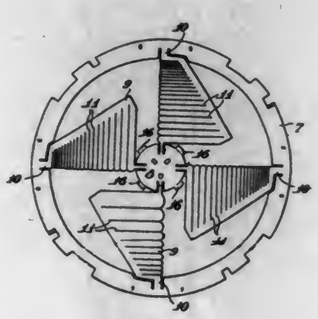


1. A shoe heel having a cavity in its lower face, said cavity extending rearwardly into said heel from the breast surface thereof, a plate secured on said lower face, a rubber top lift having an integral lug extending upwardly therefrom into said cavity, said plate having a slot therein provided with an open end adjacent to said breast surface, whereby said top lift may be moved into its operative position on the heel by sliding said lug into said slot and cavity in a rearward direction, and teeth carried by said plate and gripping the base of said lug at opposite sides thereof to lock said top lift in its operative position on said heel, a substantial portion of said lug being positioned above the level of said teeth.

1,876,362. ANTIDAZZLE FITTING FOR HEAD LAMPS. STANLEY EDWARD TALBOT, Merton Park, England. Filed May 29, 1931, Serial No. 541,009, and in Great Britain June 6, 1930. 6 Claims. (Cl. 240—48.4.)

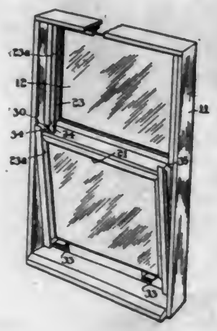
1. A blank of sheet material to be formed into a support for light beam constricting elements comprising a ring, a center element, a plurality of vanes extending be-

tween said ring and said center element to be bent to operative positions at substantially right angles to the plane of the ring, and relatively narrow neck formations at



the ends of the vanes connecting the same with said ring and said center element, respectively, to facilitate bending of the vanes.

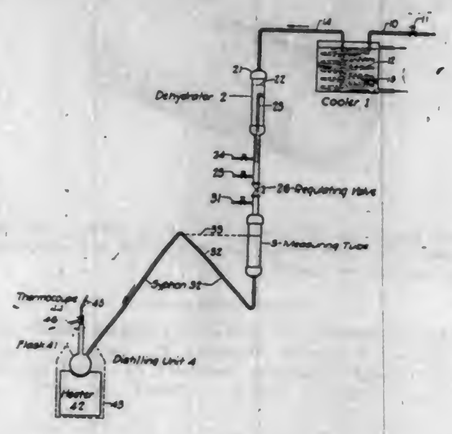
1,876,363. SASH GUIDE FOR WINDOW FRAMES. HAROLD V. TAYLOR, Montreal, Quebec, Canada, assignor to The Robert Mitchell Company Limited, Montreal, Quebec, Canada. Filed May 26, 1930. Serial No. 455,851. 9 Claims. (Cl. 20—45.)



1. A sash guide assembly comprising a base strip adapted to be detachably secured to the ordinary jamb of a window frame and complementary sash guiding and retaining sections secured to said strip to form a unit therewith, one of said sections being movable into and out of alignment with the complementary section.

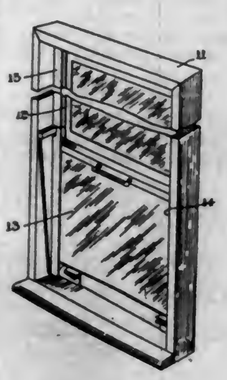
1,876,364. AUTOMATIC END POINT RECORDER. JACK FRANCIS MAHON TAYLOR, Wilmington, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 30, 1928. Serial No. 316,089. 6 Claims. (Cl. 196—132.)

6. In a distillation system, a distillation apparatus, means for continuously withdrawing a small sample of distillate from the distillation apparatus, a small distillation flask, means for introducing said sample into the distillation flask, means for heating said flask and vaporizing said sample, means for regulating a condition of operation of the distillation apparatus, means effected by the final boiling point of the sample of distillate to automatical-



ly control the said regulating means to obtain a substantially constant final boiling point distillate from the distillation apparatus.

1,876,365. VENTILATING WINDOW. HAROLD V. TAYLOR, Montreal, Quebec, Canada, assignor to The Robert Mitchell Company Limited, Montreal, Quebec, Canada. Filed Jan. 9, 1931. Serial No. 507,635. 5 Claims. (Cl. 20—45.)

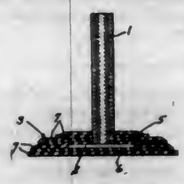


1. A ventilating window comprising a frame equipped with upper and lower sashes, channel guides secured to the side portions of the frame and receiving the side edges of the lower sash, said guides comprising stationary upper sections and pivotally mounted lower sections, said lower sections being swingable into and out of alignment with said upper sections, wing plates arranged at opposite sides of the lower sections and adapted to engage with said sections when the latter are swung to an inclined position out of alignment with the upper sections, said wing plates serving as weatherproofing elements between the side portions of the window frame and said lower sections when the latter are in said inclined position.

1,876,366. MANUFACTURE OF CITRATES AND CITRIC ACID. OTTO UNGNADE, Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 8, 1930. Serial No. 500,878. 4 Claims. (Cl. 260—118.)

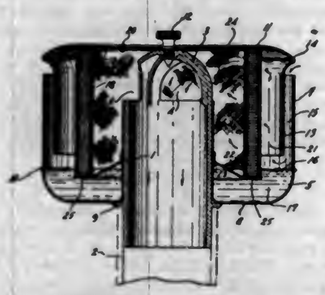
1. The method of producing magnesium-free citrate from a citrate-containing raw material when magnesium is present, consisting in dissolving the material in an acid which yields a water soluble salt with alkaline earth metals, neutralizing the resulting solution with an earth alkali whose citrate is less soluble than magnesium citrate, and separating the citrate of such earth alkali from the solution.

1,876,367. VALVE PAD CONSTRUCTION. ERNEST A. WAKEFIELD, Springfield, Mass., assignor to Roland W. Boyden and Charles A. Dana, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 16, 1931. Serial No. 537,773. 4 Claims. (Cl. 152—13.)



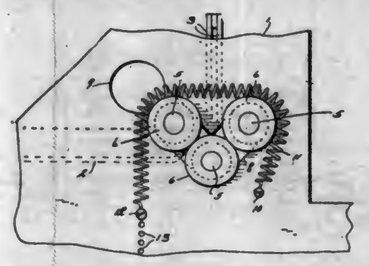
1. In combination an annular rubber tube, a valve stem having an anchor plate imbedded in the wall of the tube, a layer of hard rubber bonded to the inner face of the anchor plate and extending substantially beyond the edges of said plate, a layer of hard rubber position on the opposite side of the anchor plate and bonded to the base of the stem, said last named layer of hard rubber extending beyond the edges of the anchor plate, the free edges of both said layers of hard rubber being imbedded in, bonded to, and separated from each other by the rubber of the tube.

1,876,368. AIR CLEANER. GEORGE M. WALTON, Cleveland, Ohio, assignor to Air Maze Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,718. 6 Claims. (Cl. 183—9.)



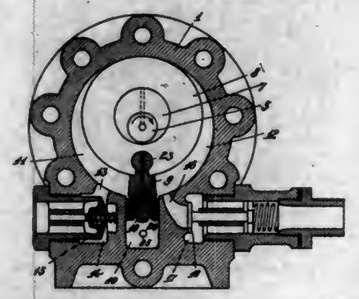
1. In an air cleaner of the class described, a tubular frame member having a downwardly opening mouth portion adapted for connection with the air inlet of a carburetion device, a lower casing member having a central well portion fitting about said frame member, and providing a liquid container thereabout opening upwardly, an upper casing member carried by said frame member and opening downwardly within the lower casing member, and air maize filter means arranged within the upper casing member about said frame member and extending below the liquid level of the lower casing member, said well portion of said lower casing member having a flange arranged to close the bottom of said air maze filter.

1,876,369. SELF-ALIGNING BEARING FOR FOLDING MACHINE ROLLERS. ROBERT J. WATERWORTH, Sidney, Ohio. Filed Sept. 26, 1929. Serial No. 395,880. 10 Claims. (Cl. 308—59.)



1. In a paper folding machine, a frame including a pair of opposed walls each having a slot formed therein, each of said slots being enlarged at one end to provide a circular aperture, said slots and apertures being in alignment transversely between said walls, transverse paper folding rollers each having a trunnion at each end, bearings for said trunnions each comprising a spool adapted to extend into a slot aperture and having a circumferential groove adapted to receive the opposed edges of the slot, and a tensioning spring extending transversely of each slot and connected to the adjacent wall and bearing against the bearing spool nearest the slot aperture.

1,876,370. FEEDING DEVICE. HERMANN WEBER, Spiez, Switzerland. Filed Mar. 26, 1930, Serial No. 439,257, and in Germany June 18, 1929. 3 Claims. (Cl. 103—132.)

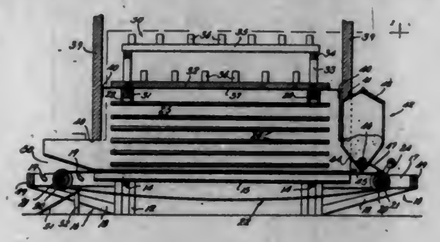


1. A feeding device for liquid or gaseous fluids, comprising, in combination, a casing having a cylindrical space; an annular piston arranged eccentrically in said space; an eccentric located in said piston; means for rotating said eccentric; a blade extending from said piston into a chamber provided for it in said casing, the blade-portion most remote from the piston being designed as a pivot for it; and two independent shoes enclosing this pivot-portion of the blade between them and guiding it between the walls of said chamber, said blade portion having a passage therein for lubricant, said passage running lengthwise of the blade, and a plurality of other lubricant passages communicating therewith and terminating adjacent the shoes, to feed lubricant to said shoes and thus also assist in maintaining fluid-tight joints substantially as and for the purposes set forth.

1,876,371. POULTRY ROOST. FRANK A. WESTLUND, Glendale, Calif. Filed Apr. 22, 1931. Serial No. 531,927. 13 Claims. (Cl. 119—22.)

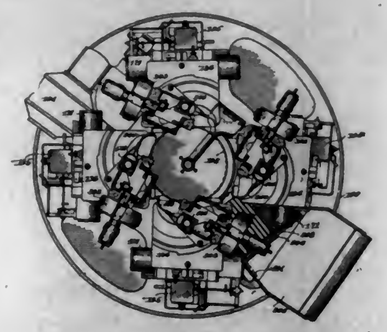
1. A poultry roost construction having an elongated bin, a plurality of roost bars positioned above the bin, a

screening between the bars and the top of the bin, the bin having an opening at the bottom, a conveyor extending longitudinally through said opening from end to end of the bin, means to operate the conveyor, and means to de-



posite sand on the conveyor when in operation, said roost bars being positioned in a plurality of tiers one above the other, and separating means positioned in staggered relation one to the other on the upper and lower roost bars to space the poultry in a staggered relation.

1,876,372. COMPLETELY AUTOMATIC GEAR CUTTING MACHINE. HERBERT J. WHITE, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Sept. 28, 1929. Serial No. 395,942. 45 Claims. (Cl. 90—8.)

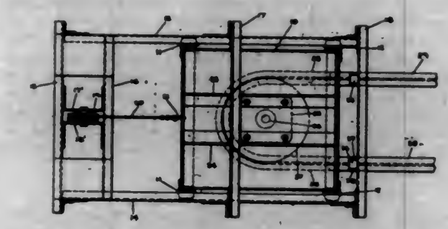


1. In a machine for producing gears, a blank holder, a work spindle, and means for transferring a blank from said blank holder to the work spindle comprising a reciprocable and rotatable bar provided with a toothed rack section and with a toothed spur gear section, an arm secured to said bar having blank engaging means secured thereto, a piston provided with a series of rack teeth adapted to engage the spur toothed section of said bar, a second piston provided with a series of rack teeth, an idler gear meshing with said second piston and with the rack teeth of said bar, and means for actuating said piston to effect the transfer movement.

36. In a machine of the class described, a pair of supports, one of which is a work support, fluid-pressure operated means for moving one of said supports toward the other to effect a working operation and for withdrawing said support away from the other when the working operation has been completed to permit removal of the completed work-piece and chucking of a new blank, a blank holder, fluid-pressure operated transfer mechanism for transferring a blank from the blank holder to the work support, a rotary drum having a series of valves cut into its periphery controlling the sequence of operations of the loading mechanism, fluid-pressure operated means for rotating said drum, a movable valve controlling the speed of operation of the movable support during movement to and from working position and operable on movement of said support to loading position to permit supply of pressure fluid to the parts of the transfer mechanism controlled by said rotary drum and to the fluid-pressure operated means for rotating said drum.

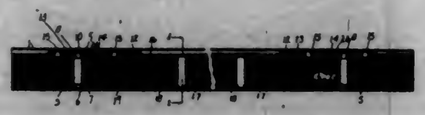
44. In a machine for producing gears, a work spindle, a magazine adapted to carry a plurality of gear blanks in stacked relation, a transfer member adapted to be operated to transfer blanks to the work spindle, a blank-holder communicating with the magazine and adapted to hold blanks in position for engagement by the transfer member, an oscillatory member adapted to separate the blanks in the magazine from the blanks in the blank-holder, means whereby movement of the transfer member in successive transfer movements operates said oscillatory member to allow the endmost blanks in the magazine to be moved successively from the magazine to the work-holder and be positioned therein, means operated by the transfer member in its transfer movement for separating the remainder of blanks in the magazine from the endmost blank in the magazine at the time of the last described movement so as to allow the endmost blank to move into the blank-holder and means for operating the transfer mechanism to effect transfer of blanks from the blank-holder to the work spindle.

1,876,373. EXTENSIBLE RAIL, PARTICULARLY FOR TROLLEY CONVEYER SYSTEMS. PAUL V. WHITNEY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 19, 1931. Serial No. 563,831. 10 Claims. (Cl. 104—91.)



1. An extensible rail for trolley conveyers, said rail comprising I-beam sections in end to end relation with their webs substantially vertically disposed, means for supporting said sections for relative displacement, and means for bridging a gap between the lower flanges of the sections comprising parallel guide members fixed to one of said sections to project longitudinally thereof and between which the lower flanges of the other section are received with a sliding fit, the tops of the guide members being substantially flush with the top surfaces of said flanges.

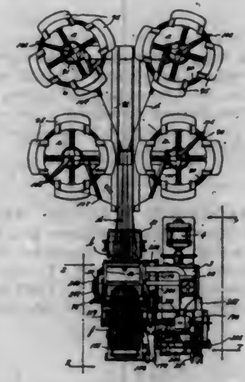
1,876,374. TEMPORARY BINDER. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 29, 1927. Serial No. 187,498. 3 Claims. (Cl. 129—8.)



1. A temporary binder comprising a pair of cover members and a back formed of a single piece of flexible material folded upon itself to form a pair of binding members, a plurality of posts carried by one of said binding members and having a connection thereto for maintaining said

member in folded relation and adapted to project through openings provided in a group of sheets and in the other of said binding members, said posts having reduced ends forming shoulders and with annular grooves adjacent to the extremities thereof, a transfer bar detachably associated with the other of said binding members and having openings therein adapted to receive the reduced ends of said posts and to abut the shoulders formed thereon, and locking members movably mounted on said last-mentioned binding member and having a connection thereto for maintaining said member in folded relation, said locking members having slots formed therein having enlarged portions through which the reduced ends of said posts are adapted to project, and reduced portions the edges of which are adapted to enter the annular grooves provided on said posts when the locking members are moved into locking position relative to said posts.

1,876,375. MACHINE FOR MAKING ANNULAR ARTICLES. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Sept. 13, 1929. Serial No. 392,846. 12 Claims. (Cl. 154—9.)

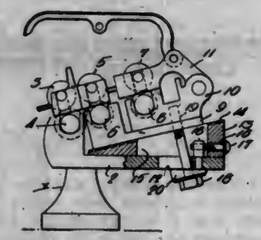


2. A device of the character described which comprises a grooved rotatable drum, means to secure the ends of a wrapper strip and a core strand in superposed relation in the groove of the drum in position to be wound into the groove upon rotation of the drum, folding means adapted to be moved into engagement with the wrapper and core to longitudinally fold the wrapper about the core to enclose the latter.

6. A device of the character described which comprises a rotatable drum provided with a plurality of peripheral grooves, means to secure the ends of a plurality of wrapper strips to the drum in position to be wound into the grooves upon rotation of the drum, means to secure the ends of a plurality of strands of core material to the drum in position to be wound into the grooves in superposed relation with respect to the wrapper, means to rotate the drum, means to automatically sever the wrapper strips after a complete convolution of the wrapper has been applied in the grooves and means, automatically operative after a predetermined number of convolutions of core material have been wound on the wrappers, to stop the machine.

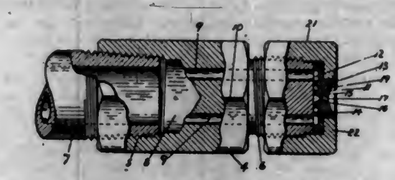
1,876,376. TEXTILE MACHINE. FRED WILKINSON, New Bedford, Mass., assignor to Frederick C. Washburn, New Bedford, Mass. Filed Mar. 17, 1931. Serial No. 523,263. 7 Claims. (Cl. 19—134.)

1. Apparatus of the class described wherein front, rear, and intermediate rolls are used for drafting a textile strand, said apparatus comprising a stand having fixed bearings for the front bottom roll and a horizontal table portion adapted to support movable bearings for the other rolls, and a wedge member interposable between said table portion and the movable bearings for holding the latter in such position that the line of draft is inclined, said table portion having an elongate slot therein, a wedge member



resting on the table and having an inclined upper surface for supporting the movable bearings, means for adjusting the wedge member longitudinally of the table whereby to vary the inclination of the line of draft, and means for securing the wedge member and the movable bearings in adjusted position.

1,876,377. OIL BURNER. CARL B. WILSON, Denver, Colo. Filed Apr. 20, 1931. Serial No. 531,443. 9 Claims. (Cl. 299—120.)



1. In an oil burner, a nozzle for the discharge of oil, having outer and inner annular spaces in a face interiorly of the nozzle, the nozzle having a passage for supplying oil to the outer space, said face having strainer grooves connecting the spaces, the nozle having a discharge aperture and grooves tangent to the aperture in said face and communicating with the inner space to conduct oil entered into the outer space and thru the strainer grooves, to the discharge aperture.

1,876,378. LOCKING OF STEREOPLATES OR PRINTING SURFACES TO THE CYLINDERS OF ROTARY PRINTING MACHINES. MATTHIAS LEWIS WILKINSON and ROBERT BRADSHAW, Preston, England. Filed Mar. 25, 1931, Serial No. 525,280, and in Great Britain Apr. 1, 1930. 6 Claims. (Cl. 101—378.)

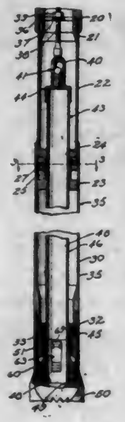
5. Means for locking printing plates on a printing cylinder, comprising a cylinder having a central margin ring and a groove extending lengthwise from the end of the cylinder, inner and outer locking dogs slidably mounted in said groove of the cylinder and adapted to hold inner and outer printing plates between the dogs and the inner dog and the margin ring, an internally threaded sleeve carried by the outer dog, a second internal sleeve carried by the inner dog, a rod extending from the end of the cylinder and having threads upon its inner end engaging in the sleeve of the inner dog for moving the dog when the rod is turned, a threaded hollow rod around said first rod and freely movable thereon and engaged in threaded relation with the sleeve of the outer dog for moving the latter when the outer rod is turned, means for turning said outer rod to move the outer dog and release the outer plate,

and means for simultaneously moving the inner and outer rods for simultaneously moving said inner and outer dogs to hold the outer plate in interlocked engagement on the cylinder and for freeing the inner plate therefrom.



6. Means for locking printing plates on a printing cylinder, comprising a cylinder body having a longitudinal groove therein and a central margin ring, a pair of locking dogs slidably mounted in the groove of the cylinder and adapted to engage inner and outer plates between the ring and the inner dog and between the inner and outer dogs, a threaded shaft in said groove extending from the end of the cylinder and threaded through the outer dog and slidably engaging through the inner dog, an abutment carried upon the inner end of the threaded shaft to engage the inner dog, means for turning the shaft to adjust the outer dog, and means for moving the shaft longitudinally in the groove for moving both the inner and outer dogs.

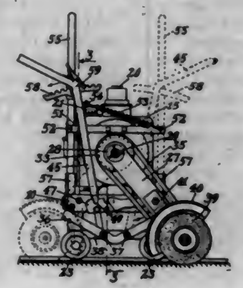
1,876,379. CORE-CATCHING DEVICE. READ WINTERBURN, Los Angeles, Calif., assignor to Shell Oil Company, San Francisco, Calif., a Corporation of California. Filed June 5, 1929. Serial No. 368,595. 13 Claims. (Cl. 255—72.)



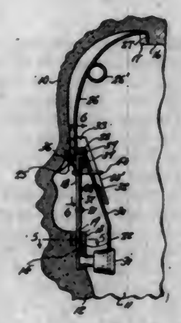
6. In combination in a core taking device, inner and outer barrels, said inner barrel providing a core chamber open at its lower end, jaws hanging from hinges attached to the inner barrel and movable into said core chamber by means of the weight of the outer barrel.

1,876,380. GROOVE-CUTTING MACHINE. RALPH A. WITTICK, Los Angeles, Calif. Filed May 20, 1930. Serial No. 453,963. 5 Claims. (Cl. 51—176.)

5. In a groove cutting machine of the character described, a pivoted arm swingable from one end to the other of the machine, a cutting disc mounted in the free end of said arm to operate in either of two positions, means to maintain said arm in a substantially vertical plane at right angles to the axis of its pivot in either of its two positions, a connecting bar pivotally attached to said arm at a distance from the pivot thereof, and a reversible lever having a detachable connection with said connecting bar thereby adapting said lever to fix the angular operative position of said arm when the latter is directed toward either end of the machine, said connecting bar having notches cut into opposite edges thereof to afford a detachable operating connection of said reversible lever therewith in either of the reverse positions thereof.

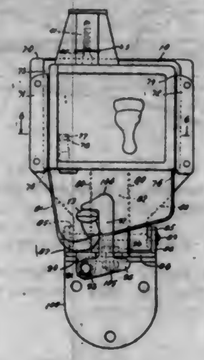


1,876,381. DETACHABLY MOUNTED EYE STRUCTURE FOR DOLLS. DAVID ZAIDEN, Brooklyn, N. Y., assignor of one-fourth to Isaac Kaufman, one-fourth to Samuel Kaufman, Forest Hills, N. Y., and one-fourth to Jacob Kaufman, Brooklyn, N. Y. Filed Apr. 8, 1932. Serial No. 603,948. 10 Claims. (Cl. 46—40.)



1. The combination with a hollow doll-head having within its interior an upper boss and a lower boss, said lower boss having a countersunk seat provided in its side walls with latch slots, of a carrier plate having a resilient arm upwardly extending therefrom into engagement with said upper boss, a turn-button latch rotatably connected with the lower end portion of said carrier plate, said turn-button latch being movable to engage in said latch slots when said lower end portion of said carrier plate is seated in the seat of said lower boss, whereby said carrier plate and its resilient arm are secured in affixed operative relation to said doll-head, and pendulum actuated eye-devices supported by said carrier plate.

1,876,382. PUNCH MECHANISM. JOHN WILLIAM ZUNDT, Wollaston, Mass., assignor to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Filed Apr. 11, 1931. Serial No. 529,424. 5 Claims. (Cl. 164—119.)

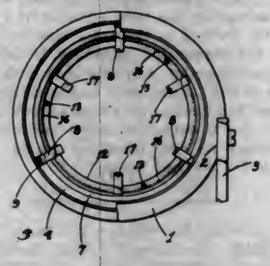


1. In combination, a bracket, a punch movably mounted thereon, a handle movable manually to operate said punch, and means on the bracket for holding the handle against movement as the punch is moved relative to the bracket.

1,876,383. SLIDE. CARL E. ANDERSON, East Orange, N. J., assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Filed May 6, 1931. Serial No. 535,311. 3 Claims. (Cl. 24—265.)

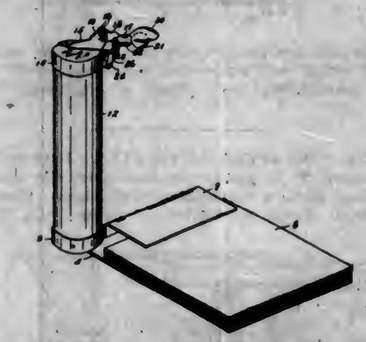
1. A slide comprising a frame having three substantially parallel strands between which a strap is adapted to be threaded and a clip of sheet metal secured by a looped part to the central strand and having its end projecting beyond an outer strand and provided at said end with means for securing it to the end of the strap previously threaded through the frame.

1,876,384. LENS-HOLDER FOR PROJECTION LAMPS. GEORGE ARANO, Modesto, Calif. Filed Dec. 27, 1930. Serial No. 505,088. 5 Claims. (Cl. 88—24.)



1. A lens holder including a ring of a bore larger than the diameter of a lens, circumferentially spaced and relatively small members mounted in the ring and against which the back of the lens bears, and relatively thin elements mounted on the ring to engage the edge of the lens at circumferentially spaced points and hold the same in spaced relation to the rings.

1,876,385. UTILITY FLASH-LIGHT. WILLIAM J. BAKER, Newport, Ky. Filed June 9, 1931. Serial No. 543,054. 2 Claims. (Cl. 240—6.4.)



1. A combined writing pad and flash-light comprising a flat base having an extension at the top thereof and an integral flap for clamping a writing pad to the base, a cup member rotatably mounted upon said extension by means of a battery contact stud, a battery casing removably mounted in snug relationship within said cup member, a cap closing the upper end of the casing, a battery terminal extension projecting outwardly of the cap, an upstanding lug secured upon the cap, and a light directing holder pivotally mounted upon said lug and adapted to hold a light bulb with the stem thereof extending outwardly of the holder whereby pivotal upward and downward movement of the holder respectively breaks and effects contact of the light bulb stem with said outwardly-projecting battery terminal extension.

1,876,386. METHOD OF MAKING BOLT HOLDING DEVICES. EDWARD C. BAYNES, Birmingham, Mich. Filed May 27, 1931. Serial No. 540,489. 1 Claim. (Cl. 10—86.)

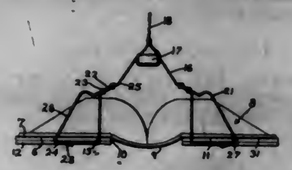


That process of making one piece sheet metal bolt holding devices which includes the steps of (*a*) providing an elongated sheet metal strip blank, (*b*) stamping threads on and transversely across the central portion of said strip blank and forming the centrally threaded portion to a trough-like, elongated substantially semi-cylindrical form with the axis of the threads extending longitudinally, coincidental with the axis of the trough, (*c*) folding the strip across the axis of the threads into a U to bring the ends of the semi-cylindrical threaded portion together and (*d*) bending the ends of the strip away from the axis of the threads.

1,876,387. BOOK SUPPORT. HARRY C. BENNETCH, Los Angeles, Calif. Filed Mar. 27, 1929. Serial No. 350,308. 13 Claims. (Cl. 45—85.)

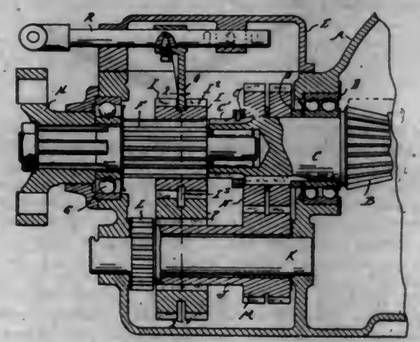
1. A book supporting device comprising a pair of plates spaced to receive a book therebetween, means joining the

lower edges of said plates and hingedly connected thereto, a pair of suspending straps, each connected to both plates adjacent their respective axes of hinging movement to per-



mit swinging said plates about said axes while supported by said straps, and supporting means connected to said straps intermediate their points of attachment to the plates.

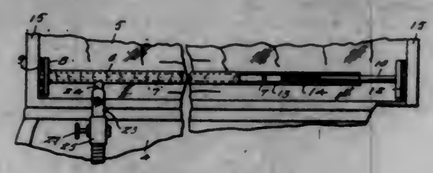
1,876,388. TWO SPEED DRIVE AXLE. JOHN BETHUNE, Rochester, N. Y., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Sept. 16, 1929. Serial No. 392,968. 1 Claim. (Cl. 74—58.)



A motor vehicle drive axle comprising the axle housing and a lateral extension thereof, a differential gear driving pinion, a shaft therefor, a driving shaft in alignment and in stepped engagement with the pinion shaft and within the extension of said housing, said driving shaft and pinion shaft being provided with corresponding and adjacent spline portions, a herringbone gear having a groove and being slidable on the spline portions of said drive shaft and engageable with the spline portion of the pinion shaft for directly coupling said shafts, a counter shaft parallel to said aligned shafts, a herringbone gear slidable on said counter shaft and intermeshing with said first mentioned gear, a splined head on said counter shaft engageable with the gear on said shaft when said gears are shifted to disengage said first mentioned gear from said pinion shaft, a constant mesh gear train between said counter shaft and the pinion shaft and in connection with said first mentioned intermeshing gears constituting a step down or reduction gear train, a shifter slidable in the extension of said housing and a shifter fork engaging the groove in said first mentioned herringbone gear intermediate the two oppositely inclined tooth portions thereof whereby said gear may be shifted to alternatively drive said pinion shaft directly from the drive shaft or through the medium of said gearing.

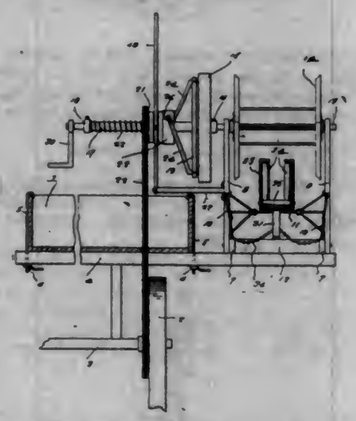
1,876,389. WINDSHIELD HEATER. ARTHUR L. BIRD, Orwell, and HIRAM C. LINDSLEY, Brandon, Vt. Filed Jan. 15, 1931. Serial No. 508,982. 4 Claims. (Cl. 299—78.)

1. A nozzle as set forth comprising an elongated hollow member having one end thereof open and the other end closed, a laterally extending member secured to the closed end of the member, said hollow member having longitudinally spaced apertures therein, an intake nipple secured to the hollow member and telescoping supporting means engaging the open end of the hollow member and



cooperating with said laterally extending member to support the hollow member in suspended relation between a pair of vertical supports.

1,876,390. WIRE REEL. JOHN A. BORRENSEN, Ocheyedan, Iowa. Filed May 19, 1931. Serial No. 538,523. 3 Claims. (Cl. 242—92.)



1. A wire reel comprising a supporting structure for detachable mounting on the box or body of a vehicle, said supporting structure including a pair of spaced, parallel beams extending transversely beneath the box and projecting laterally beyond one side of said box, elongated hooks anchored in the beams and engageable over the top of the box for clamping the beams therebeneath, spaced parallel, longitudinal bars on the projecting portions of the beams, standards hingedly mounted on intermediate portions of the bars, a brace extending between the lower portions of the standards and secured to said standards, and a cross member extending between the bars below the brace member, a spool mounted for rotation on the standards, means for actuating the spool, and wire guide means mounted on the supporting structure forwardly of the spool, said guide means including a tongue comprising an elongated bar bent upon itself and having its ends pivotally secured to the brace member and the cross member of the supporting structure, a substantially U-shaped frame disposed vertially and rotatably on the free portion of the tongue, said tongue adapted for swinging movement in a horizontal plane, spaced vertical rollers journaled in the U-shaped frame, a horizontally disposed roller journaled on the U-shaped frame, adjacent the lower ends of the vertical rollers.

1,876,391. PACKAGE SEAL. CHARLES BOFFINO, Los Angeles, Calif. Filed Jan. 25, 1932. Serial No. 588,706. 1 Claim. (Cl. 292—325.)

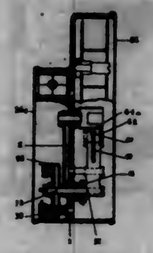
In a package seal, a dished wall and a dished disk supported above the wall, mating annular beads adjacent

the edges of the wall and disk and said disk having a radial slit therein inwardly of and adjacent the beads,



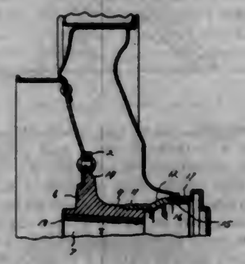
a dished bottom wall in opposed relation to the aforesaid wall and a flange on the first named wall for retaining the bottom all in assembled relation thereto.

1,876,392. AUTOMATIC APPARATUS FOR TAKING CINEMATOGRAPHIC PICTURES. JACQUES BOGOPOLSKY, Geneva, Switzerland. Filed Mar. 24, 1927, Serial No. 178,033, and in Switzerland Oct. 9, 1926. 1 Claim. (Cl. 88—17.)



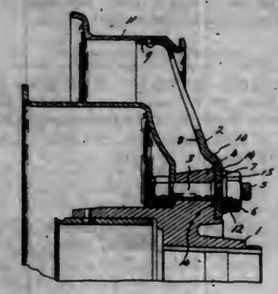
In an apparatus for taking moving pictures, a casing having an X-cross section and forming two adjacent but separate chambers, driving mechanism, including a spring motor, gears, a governor, a counter, and a brake in one of the chambers, all of the rotatable shafts in said chamber having their axes perpendicular to the partition between the compartments, and some of said shafts extending through the partition into the other chamber, a cylindrical shutter mounted on one of said extending shafts, an eccentric mounted on another of the extending shafts, feeding means for the film driven by said eccentric, a sprocket mounted on another of the extending shafts for supplying film to the feeding means and discharging the film therefrom and film spools and means for rotating one of said film spools from the shaft carrying the sprocket.

1,876,393. METHOD OF MAKING WHEEL HUBS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 27, 1925, Serial No. 26,250. Renewed Oct. 28, 1930. 8 Claims. (Cl. 29—159.3.)



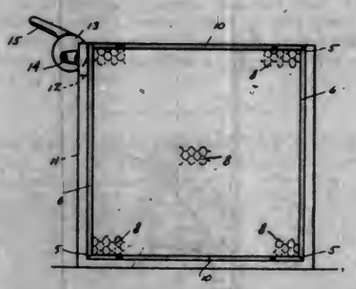
2. The forming of a wheel hub which comprises the forging of a body having a barrel and a radially extending annular flange, the axial boring of the barrel to form an opening therethrough for engagement by a shaft, the machining of a portion of the barrel to reduce its external diameter and form an annular shoulder, the drawing of a sleeve having a portion adapted to engage the reduced portion of the barrel and a portion of greater diameter, the shrinking of the first mentioned portion of the sleeve upon the reduced portion of the barrel and against the annular shoulder, and the machining of the portion of greater diameter of the sleeve to form an annular flared seat intermediate its ends and external threads between the seat and one end.

1,876,394. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 27, 1931. Serial No. 533,828. 5 Claims. (Cl. 301—9.)



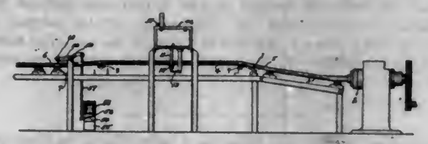
1. A vehicle wheel, comprising a hub member, a series of threaded members upon and extending substantially parallel to the axis of said hub member, a nut for each of said threaded members having a serrated contact face, and a wheel body having a sheet metal member adapted to be secured to said hub member by said threaded members and nuts, said sheet metal member having holes therethrough for receiving said threaded members and having serrated contact faces in its opposite sides and encircling said holes for engaging said contact faces of said nuts.

1,876,395. HONEY BOX ASSEMBLING DEVICE. HENRY BRATTRUD, Hanlontown, Iowa. Filed Sept. 2, 1930. Serial No. 479,331. 1 Claim. (Cl. 6—10.)



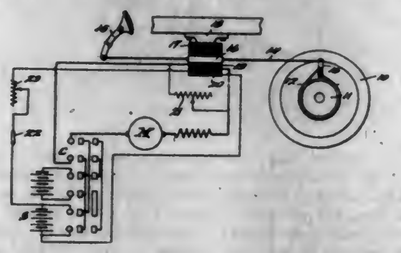
An assembling device of the character described comprising a U-shaped structure, one upper end portion of the U-shaped structure being provided with a downwardly extending slot, a pair of brackets on the outside of the said end portion, one at each side of the said slot, a disk eccentrically mounted between the brackets to operate through the slot, and a tangentially disposed lever on the said disk.

1,876,396. CONTINUOUS WEIGHING DEVICE. PERCY L. BUTTERFIELD, Springfield, Mass., assignor to Roland W. Boyden and Charles A. Dana, as receivers of The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 24, 1931. Serial No. 577,003. 7 Claims. (Cl. 73—51.)



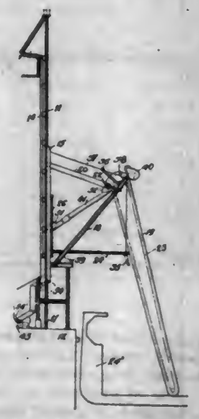
1. In combination means for forming stock in continuous lengths, means for determining the weight of said stock per unit of length, stock marring means and means associated with the weighing means for balanced movement therewith to automatically actuate said stock marring means to indicate such portions of the stock as are outside predetermined weight limits.

1,876,397. BRAKE CONTROL. JOHN BYRD NORRIS CARDOZA, New York, N. Y., assignor to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1928, Serial No. 258,857. Renewed Sept. 18, 1931. 18 Claims. (Cl. 188—2.)



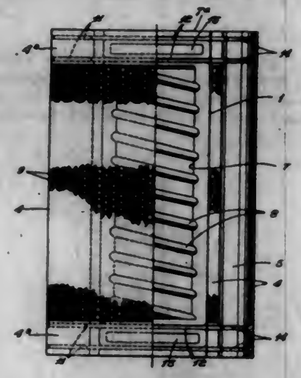
1. In an electrically propelled vehicle, the combination with brake mechanism and manual means for controlling the same, of electrically controlled means for preventing brake applications while current is flowing thru the motor circuit.

1,876,398. ELEVATOR. GUSTAV E. CARLSTRAND, Baltimore, Md. Filed June 24, 1931. Serial No. 546,567. 12 Claims. (Cl. 198—118.)



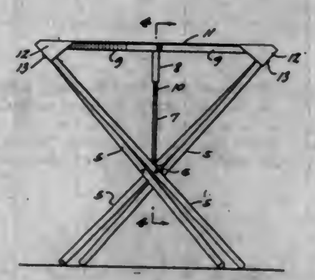
3. In a device of the character described, a frame structure, a crosshead mounted thereon, a boom pivoted to said crosshead, an elevator leg pivoted to said boom, a pusher arm pivoted to the crosshead and engaging the elevator leg, and means whereby movement of the boom will cause a movement of the pusher arm in the opposite direction.

1,876,399. MACHINE FOR THE MANUFACTURE OF ASBESTOS-CEMENT PRODUCTS AND THE LIKE. MAURICE CATALA, Virginal, and ALBERT HUART, Brussels, Belgium. Filed Mar. 12, 1931, Serial No. 522,114, and in Belgium Mar. 22, 1930. 5 Claims. (Cl. 92—52.)



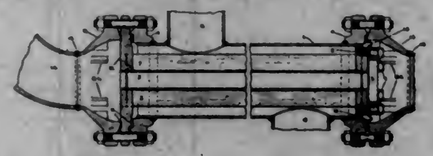
1. In a machine for the manufacture of asbestos-cement products, the combination with a suction box, of an endless felt band adapted to move across the mouth of said box, an endless apron of pervious material interposed between said band and the mouth of said box, said apron having solid edge portions, and longitudinal ribs on said edge portions having a sealing engagement with the side edges of the mouth of said box.

1,876,400. COLLAPSIBLE TABLE. EMANUEL L. CEDERQUIST, Alhambra, Calif. Filed Sept. 5, 1931. Serial No. 561,316. 7 Claims. (Cl. 45—11.)



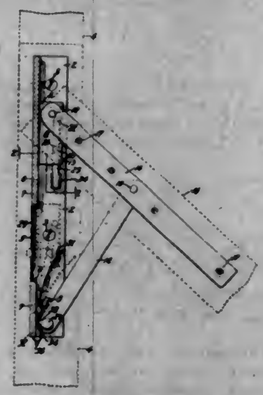
1. In a collapsible table, the combination of a pedestal structure and a detachable top; said pedestal structure comprising a runner guide, a vertical runner slidably mounted on said guide, ribs pivoted to said runner and resiliently flexible in a horizontal direction, whereby said ribs may be disposed to lie in a horiontal plane and on center with respect to one another, stretcher struts for said ribs secured to said guide, a retainer for said runner to hold the ribs in expanded position; said top comprising a flexible sheet with means at the edges to attach the ends of said ribs and so spaced that when said top is stretched the ribs are flexed.

1,876,401. HEAT EXCHANGER. VICTOR M. CHATFIELD, Philadelphia, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 28, 1931. Serial No. 553,538. 2 Claims. (Cl. 257—247.)



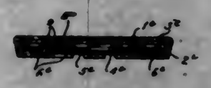
1. A heat exchanger comprising a flanged tube of fairly large diameter having inlet and outlet ports in the walls thereof, a plurality of smaller tubes longitudinally disposed within said tubes, tube sheets into which the ends of the smaller tubes are rolled, a flexible gasket detachably secured to, and of larger diameter than, one of the tube sheets, flanged pipe fittings, means for securing the periphery of said gasket between the flange of one of the fittings and one of the flanges of the larger tube to seal the end of the larger tube, said gasket permitting relative expansion and contraction between the larger tube and the smaller tubes, said last named pipe fitting having abutments therein to limit the movement of the smaller tubes.

1,876,402. CASEMENT WINDOW HINGE. OTTO P. CRAMER, San Francisco, Calif. Filed Mar. 6, 1931. Serial No. 520,641. 6 Claims. (Cl. 16—179.)



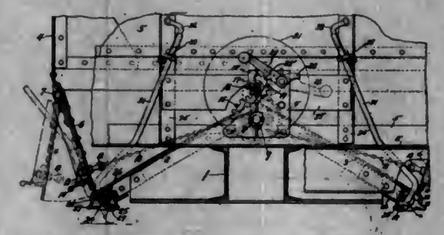
1. A casement window hinge comprising a base plate, a shoe slidably arranged on the base plate, a swing plate pivotally connected to the shoe, a link pivotally connecting the base plate and the swing plate, a latch for locking the shoe to the base plate at selected intervals, and means for automatically rendering the latch operative at a predetermined position.

1,876,403. BUTTON. JOHN A. DEVENDOR and WILLIAM A. DEVENDOR, Jackson Heights, N. Y. Filed Mar. 20, 1930. Serial No. 437,582. 11 Claims. (Cl. 24—90.)



1. In a button, in combination, a flanged shell, a fabric cover therefor, a collet comprising a body portion and a piece of attaching fabric whereby the button may be sewed to a piece of material, said collet being provided with integral means adapted to be upset and clinched against the body portion of the collet to secure the attaching fabric firmly in place, said collet co-acting with the shell flange to grip the margin of the covering fabric and secure it in place.

1,876,404. HOPPER CAR DOOR OPERATING MECHANISM. THOMAS W. ELDER, Jr., Brooklyn, and ADOLPH KASSLER, New York, N. Y., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 30, 1931. Serial No. 547,912. 7 Claims. (Cl. 105—292.)



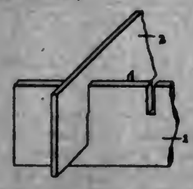
1. The combination in a dumping car comprising a body having a discharge door, operating means for effecting opening and closing of said door including a rotatable member having a ratchet associated therewith, and pawl mechanism engageable with said ratchet during both opening and closing of said door and adapted to hold said door in any given position automatically upon ceasing actuation of the door operating means.

1,876,405. SIGN, NAME PLATE, OR THE LIKE. FRANK ENSCOTT, Toronto, Ontario, Canada. Filed Feb. 15, 1932. Serial No. 592,908. 2 Claims. (Cl. 40—140.)



1. In a sign, the combination of a plurality of separate symbols each having a single threaded post extending from its rear face, a nut on each of said posts, and a slotted alining bar through which said posts extend, said posts having flattened portions at opposite sides engaging the sides of the slot.

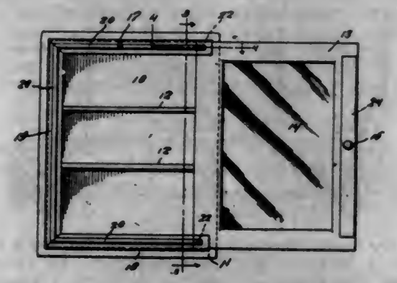
1,876,406. APPARATUS FOR PREVENTING THE BACK FIRING IN INTERNAL COMBUSTION ENGINES. HENRI FEUILLÉE, Gentilly, France. Filed Apr. 1, 1930, Serial No. 440,710, and in France Dec. 18, 1929. 5 Claims. (Cl. 123—142.)



1. A device to be arranged in the fuel supply conduit of an internal combustion engine to diminish the fire hazard due to back firing of the engine, comprising a plu-

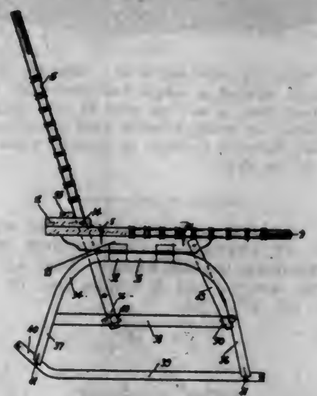
rality of plates arranged in crossed relation to form a cellular structure, some of said plates being of approximately V-shape in cross section and said device being adapted to be arranged in said conduit with the apexes of said approximately V-shaped plates facing away from the engine, whereby the device offers comparatively little resistance to the flow of fuel to the engine but offers comparatively great resistance to flow of ignited gases in the opposite direction.

1,876,407. WALL CABINET. IRVINE T. FRAZIER, Coffeyville, Kans. Filed Feb. 5, 1932. Serial No. 591,171. 2 Claims. (Cl. 312—189.)



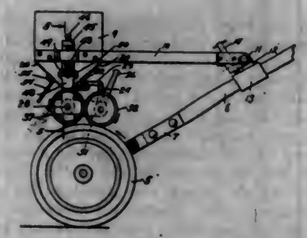
1. In a wall cabinet, the combination of a casing having a front opening, U-shaped guides secured to the front of the casing adjacent said opening, a longitudinally extending centrally located channel formed in the outer wall of each guide, a door mounted for horizontal sliding movement in said guides, a mirror arranged on the door, retaining flanges extending from the marginal edges of the door for holding the mirror in place thereon, and cooperating means carried by said flanges and the walls of said channels for limiting the movement of the door to its opened position.

1,876,408. RACKET CHAIR. LOUIS D. GIBSON, Norway, Me., assignor to The W. F. Tubbs Company, Norway, Me., a Corporation of Maine. Filed Oct. 11, 1928. Serial No. 311,826. 8 Claims. (Cl. 155—139.)



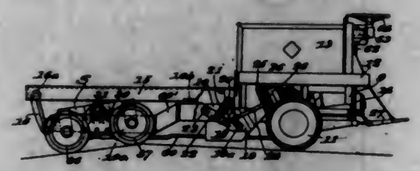
6. In a folding chair, in combination a back and a seat, of a pair of longitudinally extending lateral supports for the seat hinged to the sides thereof and adapted to be folded inwardly thereunder, said back comprising upper and lower portions hinge connectors disposed intermediate said back portions for hingedly supporting the back on the seat near its rear end, said back adapted to fold with its upper portion superposed over said seat and alternately with its upper portion in an upright position of use with its lower portion extending pendantly below said seat, connecting means adapted to detachably secure the pendant portion of said back to said pair of hinged seat supports to simultaneously maintain the seat supports in seat supporting position, and said back in its said upright position of use.

1,876,409. SEEDING ATTACHMENT FOR LAWN-MOWERS. JOSEPH R. GORDON, Baldwin, N. Y., assignor of one-half to Charlotte F. Willey, Baldwin, Long Island, N. Y. Filed June 30, 1931. Serial No. 547,956. 9 Claims. (Cl. 275—2.)



1. In combination with a lawn-mower including wheels, a seed or fertilizer distributor comprising a receptacle, means for supporting the receptacle above the wheels of the mower, a distributing member rotatably mounted beneath the receptacle, projections for said distributing member to scatter seed or fertilizer directly from the receptacle and means between said distributing member and the mower wheels for rotating the distributor in the same direction as the mower wheels.

1,876,410. INDUSTRIAL TRUCK. ELMER J. GRAY and ERNESTO J. HOYOS, Boston, Mass., assignors to Robert T. Romine, Mount Clemens, Mich. Filed Mar. 16, 1929. Serial No. 347,585. 8 Claims. (Cl. 180—22.)



2. In an industrial power driven truck, a frame comprising a main portion at the rear end and a forward load supporting extension disposed relatively close to the ground, a platform surmounting said frame extension, a rocking sub-frame, said sub-frame comprising a longitudinally extending central portion pivoted on a transverse axis to said frame extension and transverse axle members pivoted to said central portion to rock on a longitudinal axis between said platform and frame extension, and longitudinally spaced dirigible load supporting wheels of relatively small diameter mounted at the ends of said axle members.

1,876,411. WEAR RESISTING FERROUS ALLOY. ALFRED W. GREGG and RAYMOND H. FRANK, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 24, 1931. Serial No. 525,032. 2 Claims. (Cl. 75—1.)

1. As a new composition of matter, an alloy of analysis having substantially the following range: nickel 15.00% to 35.00%, chromium 10.00% to 25.00%, tungsten 10.00% to 25.00%, vanadium 1.00% to 5.00%, copper 1.00% to 5.00%, aluminum 1.00% to 10.00%, molybdenum .50% to 5.00%, carbon .50% to 4.00%, and the principal portion of the remainder iron.

1,876,412. GLARE SHIELD. GEORGE R. HANNAN and RUTHERFORD G. GOLDMAN, Los Angeles, Calif., assignors to H. T. Barlow, Los Angeles, Calif. Filed Feb. 25, 1932. Serial No. 594,996. 8 Claims. (Cl. 2—12.)



1. In combination, a supporting frame adapted to extend across the face adjacent the eyes and having hinged earpieces at its ends adapted to engage the ears, a shield having its medial portion extending across the front of the frame with its ends projecting beyond the ends of the frame, levers having engagement with the ends of the shield and pivotally supported with relation to the frame, and connections between the levers and hinged ear-pieces for swinging the levers by folding and unfolding the earpieces so as to respectively swing the ends of the shield to inoperative position lying in the plane of its medial portion and curve said shield ends to operative position extending rearwardly around the ends of the frame.

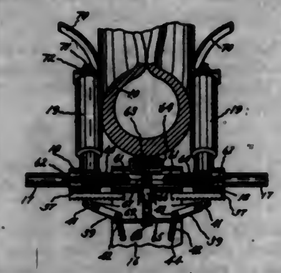
1,876,413. FRAMING MEANS FOR MOTION PICTURE PROJECTORS. EDWIN J. HADLEY, Brooklyn, N. Y. Filed Sept. 29, 1931. Serial No. 565,725. 4 Claims. (Cl. 88—18.6.)



1. In a motion picture projector, a gate having a projection aperture across which a motion picture film is moved, a drive shaft, a film driving sprocket on said drive shaft, a counter-shaft, a film retarding cam on said counter-shaft, a drive gear on said drive shaft, a pinion on said counter shaft to mesh with said drive gear, said pinion being shiftable, while remaining in mesh with said drive gear, longitudinally in either direction on said counter-shaft, manipulatable means for so shifting said pinion, and means for translating longitudinal shifting movements of said pinion into rotatable adjusting movements of said counter-shaft and retarding cam for framing the picture sections of running film in registration with said projection aperture.

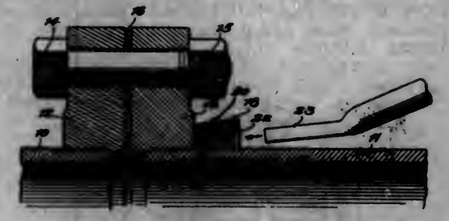
1,876,414. BEAD CLOSING MECHANISM FOR TIRE WRAPPING MACHINES. ROBERT P. HARVEY, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1927. Serial No. 213,850. 3 Claims. (Cl. 242—6.)

1. In a tire wrapping machine, bead closing mechanism comprising a pair of tire engaging members spring-pressed together, ratchet means for holding the members against outward movement from a position determined by their contact with the sides of the tire, means for separating



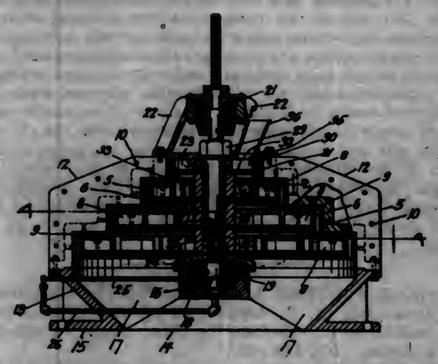
the members to remove them from contact with the tire, and connections between said separating means and the ratchet means for disengaging the latter.

1,876,415. METHOD AND APPARATUS FOR SEALING LEAKS. EDMUND F. HEARD, Hampton, Va. Filed May 19, 1927. Serial No. 192,673. 14 Claims. (Cl. 285—111.)



1. The method of sealing leaks in joints between annular surfaces which includes wrapping a flexible strip around and retaining the same in position to form a ring surrounding but spaced from the joint between said surfaces, caulking sealing material between said ring and said joint into retaining and joint sealing engagement therewith, and uniting the coils of said strip to render the same into an integral ring.

1,876,416. GRINDING MILL. WALTER M. HILL, Hudson, Colo., assignor, by direct and mesne assignments, to J. D. Canary, Littleton, Colo. Filed Aug. 28, 1928. Serial No. 302,528. 11 Claims. (Cl. 83—11.)



1. In a pulverizing mill, a pulverizing unit comprising a circular impact wall, a rotary disk spaced from the wall,

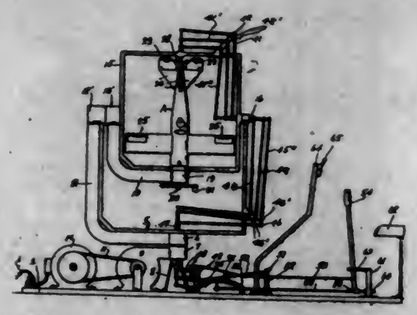
blades reversibly mounted on the disk and having impact-ends one of which is at the periphery of the same, and means for locking said blades against lateral displacement.

1,876,417. KNOCK-OVER BIT APPARATUS. CURT HILSCHER, Chemnitz, Germany. Filed Apr. 25, 1930, Serial No. 447,227, and in Germany Mar. 10, 1930. 2 Claims. (Cl. 66—109.)



1. A knock-over bit apparatus for taking the meshes off the needles in cotton machines comprising, a movable comb, a group of longer knock-over bits extending along a portion of the comb and projecting at all times into the path of the fabric edge, and a group of shorter knock-over bits extending along another portion of the comb and adapted to be moved out of the path of the fabric edge, whereby portions of the fabric edge may be brought beneath the shorter bits and retained out of knitting position while knitting continues along the fabric edge above the longer bits.

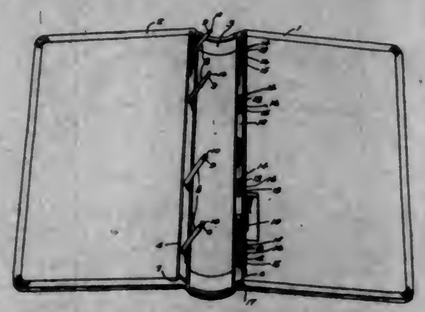
1,876,418. DEVICE FOR TEACHING THE PRINCIPLES OF AEROPLANE CONTROLS. ELLIS G. HOLST, Pinehurst, Wash. Filed Jan. 31, 1931. Serial No. 512,698. 5 Claims. (Cl. 35—12.)



1. An apparatus of the class described comprising a base, a frame supported for movement about a vertical axis on the base, a second frame supported in the first frame for movement about a horizontal axis, a miniature aeroplane supported in the second frame and for movement about its longitudinal axis, means for introducing an air current into the fuselage and wing of the plane, said wing and the tail end of the fuselage having openings therein, ailerons adjustably supported adjacent the openings in the wing, rudders and elevators adjustably supported adjacent the openings in the tail end of the fuselage, manually operated means for adjusting the ailerons, manually operated means for adjusting the elevators, manually operated means for adjusting the rudders, whereby the air current will act on said control elements, the action of the air on the ailerons causing the plane to move about its axis, the action of the air on the elevators causing the second frame to move on its axis and the action of the air on the rudders causing the first frame to move on its axis.

1,876,419. BINDER LOCK. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed May 14, 1930. Serial No. 452,476. 4 Claims. (Cl. 129—23.)

1. A loose leaf binder comprising two binding members, one of which is provided with leaf impaling posts and the other of which carries means for interlocking with said posts and key controlled mechanism comprising a latch pin, a resilient mounting therefor which normally disposes said latch pin in locking engagement with said interlocking means when said interlocking

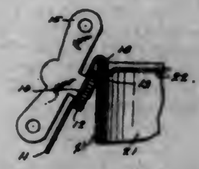


means is in operative engagement with said posts, and a key for releasing said latch pin when it is desired to disrupt the operative engagement of said interlocking means and said posts.

1,876,420. DRAIN PAN. BESSIE JACOBS, Pittsburgh, Pa. Filed Aug. 1, 1930. Serial No. 472,344. 5 Claims. (Cl. 68—30.)

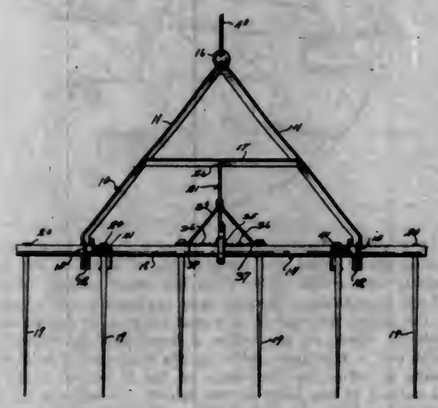
1. A drain pan comprising a bottom ledge and an upwardly extending wall, said ledge being contoured to overlie a portion of a wall of an underlying vessel and embracing an interior opening, a reticulated structure supported in said interior opening, and an abbreviated front wall forming a continuation of said bottom ledge and said interior reticulated structure.

1,876,421. CAN OPENER. ARTHUR M. JERSEY, Lansing, Mich. Filed May 29, 1931. Serial No. 540,978. 1 Claim. (Cl. 30—3.)



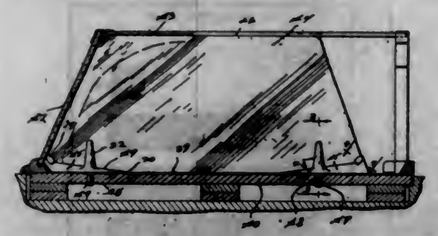
A can opener comprising a pair of pivoted handles, a toothed wheel carried by one of said handles, an operating member for said wheel, and a U-shaped cutting and crimping member formed with the other handle and having the keen edge swingable partially across one face of said wheel, movement of the handles toward each other forcing the cutting member downwardly through the top of the can and coactively clamping the crimped edge of the can between the periphery of the wheel and the closed portion of the cutting member whereby to prevent slipping of the wheel relative to the can and simultaneously moving the crimping portion of the U-shaped member toward the wheel to regulate the crimping of the severed edge remaining on the cam.

1,876,422. HAYFORK. JOSEPH S. JOHNSON, Collinston, Utah. Filed July 22, 1931. Serial No. 552,519. 8 Claims. (Cl. 294—122.)



1. A loading fork of the character described comprising a frame structure, a fork structure swingably carried by the frame, means for releasably locking the fork structure in adjusted position in the frame, and yieldable means engaging the fork structure and the frame for constantly urging the fork structure in released position.

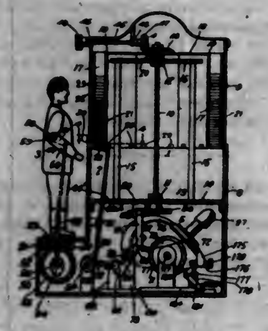
1,876,423. DIVIDER SUPPORT. LEO W. KENNEDY, Detroit, Mich. Filed June 29, 1931. Serial No. 547,719. 3 Claims. (Cl. 312—140.)



1. In a show case, the combination with a glass partition having an unnotched lower edge provided with an upwardly inclined portion, said partition resting upon the floor of the show case with the inclined edge portion spaced therefrom, of a support resting on said floor and having longitudinally spaced partition receiving and supporting portions adapted to embrace the inclined edge of the partition, the edge engaging face of the support being shaped to correspond to the inclined edge of the partition.

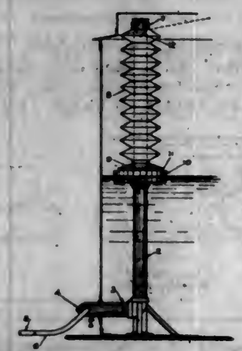
1,876,424. TALKING VENDING MACHINE. HARRY C. KENYON, Compton, Calif. Filed Mar. 19, 1930. Serial No. 436,994. 2 Claims. (Cl. 312—35.)

1. In a machine as disclosed, a magazine comprising a plurality of compartments for articles to be vended, means for operating said magazine to bring any of said compartments into vending position, means for ejecting articles from the compartments respectively while in vending position, an automaton, means for actuating



the automaton for receiving and for delivering the ejected articles respectively to the purchaser, and means synchronized with said magazine operating means for audibly advertising the articles when vended from said compartments respectively while in vending position.

1,876,425. FOAM DISTRIBUTING APPARATUS. ORVILLE DOERING KING, San Francisco, Calif. Filed Feb. 9, 1931. Serial No. 514,525. 5 Claims. (Cl. 169—4.)



1. In an apparatus for extinguishing fires in tanks containing inflammable liquid, substantially as described, the combination of a mixing chamber, a standpipe connected thereto, flexible tubular means concentric with the standpipe and connected to its upper end, and means for discharging foam near the surface of the inflammable liquid.

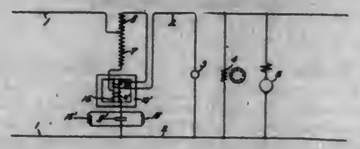
1,876,426. FUSE INDICATOR. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,985. 2 Claims. (Cl. 200—121.)



1. In a cartridge fuse, in combination: a hollow elongated insulating body; metallic ferrules, one attached to each end of the body; a fusible link extending within the body between the ferrules and making electrical

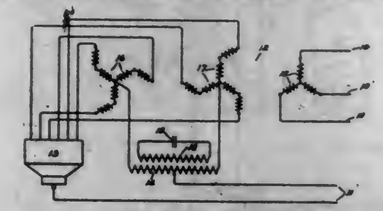
contact therewith; a hollow transparent tube; a fuse wire of relatively small current carrying capacity compared with the fusible link extending through the tube; metallic brackets, one surrounding each end of the tube and each connected with an end of the fusible wire, each bracket formed with a relatively large orifice and a connecting relatively small orifice; buttons, one on each ferrule, of a size to pass through the larger orifices in the brackets and be retained in the smaller orifices of the brackets whereby the fuse wire of relatively small current carrying capacity may be mounted with its ends in electrical contact with the ferrules.

1,876,427. ELECTRICAL CIRCUIT REGULATING MEANS. THOMAS C. LENNOX, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,634. 17 Claims. (Cl. 171—119.)



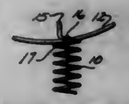
16. In combination, an alternating current circuit, a booster transformer having a series winding connected in said circuit and a shunt winding connected across said circuit, and means having a negative impedance-current characteristic connected in series with said shunt winding.

1,876,428. CONVERTING APPARATUS. THOMAS C. LENNOX, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,441. 9 Claims. (Cl. 175—363.)



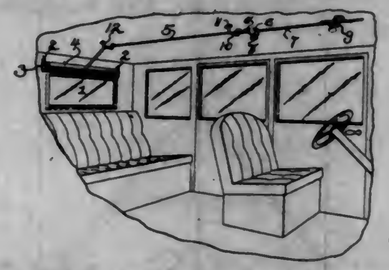
1. The combination of a transformer provided with a plurality of groups of secondary windings, an interphase transformer connected between the neutral terminals of said groups, a rectifier connected to the end terminals of said groups, and a condenser connected in shunt relation to said interphase transformer, said condenser being designed to carry a current of the order of the full load current of said transformer.

1,876,429. WIRE SPRING CUSHION AND METHOD OF MAKING THE SAME. REINHOLD G. MARQUARDT, Milwaukee, Wis., assignor to Marquardt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 24, 1930. Serial No. 470,323. 3 Claims. (Cl. 5—269.)



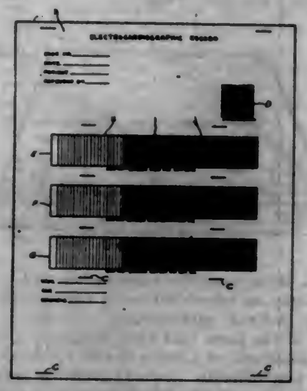
1. A bed bottom structure including a helical coupling coil of resilient material having a single looped end portion extending in a plane substantially parallel to the longitudinal axis of the coil and terminating in a substantially bow-shaped laterally extending snap arm in loop closing relation to the end of the coil whereby to provide a snap action between said arm and the adjacent terminal coil of the spring when connecting a strand of wire to said loop.

1,876,430. VEHICLE WINDOW SHADE. ALFRED J. MILLER, Jr., Newark, N. J. Filed Nov. 6, 1931. Serial No. 573,360. 1 Claim. (Cl. 156—28.)



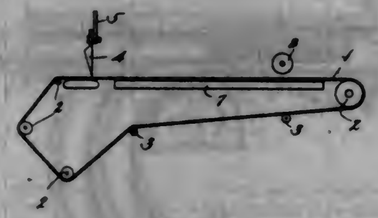
In a vehicle having a rear window and a spring controlled shade roller, the combination of a device for controlling said shade roller from the front portion of the vehicle comprising a flexible tape having one end secured to the roller, whereby it is wound thereon in conjunction with the shade on the roller, a longitudinally extending guide rod, a U-shaped guide on the rear end of said rod, means securing the terminals of the U-shaped guide to the ceiling of the body of the vehicle for supporting the rear end of the rod, means supporting the front end of the rod from the ceiling, a slide block adjustably mounted on the guide rod, said tape being received in the U-shaped guide and supported thereby, and means securing the forward end of the tape to the slide block.

1,876,431. FILM HOLDER. EVERETT W. PAGE, River Forest, Ill., assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,094. 5 Claims. (Cl. 33—1.)



1. A film holder comprising a front and a back, and fastening members therebetween, the front of said holder having a window of slightly less width than the width of the film to be held therein, that portion of the back exposed through said window bearing a series of spaced, transverse lines, and said fastening members being located on opposite sides of and spaced transversely of said window a distance slightly greater than the width of a film to be inserted into said holder and viewed through said window.

1,876,432. PRODUCTION OF RUBBER SHEETS. DAVID JOHN PRITCHARD PHILLIPS, London, England, assignor of one-half to James Barret Crockett, Cambridge, Mass. Filed Mar. 16, 1929, Serial No. 347,693, and in Great Britain Oct. 7, 1927. 4 Claims. (Cl. 18—61.)



2. A method of making a multi-colored sheet of rubber, which comprises depositing and drying latex of one color as a layer, superposing and drying on said first-mentioned layer a second layer of latex of another color, and impressing in one of said layers on at least one face thereof a design in intaglio and of sufficient depth to permit the color of the superposed layer to show through said design.

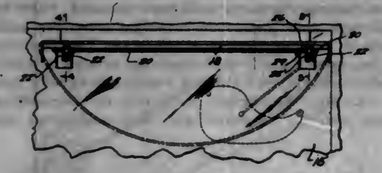
1,876,433. DOLL. MAURICE SANDERS, Brooklyn, N. Y., assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 13, 1931. Serial No. 529,589. 2 Claims. (Cl. 46—40.)



1. A doll comprising a hollow neck portion made of flesh-colored resilient rubber having a predetermined normal shape, and a rigid head provided with a socket in which the upper end of said neck portion enters and closely fits, and means including an elastic member for yieldably connecting said neck portion and said head portion, so that the head portion can be adjusted with respect to the neck portion.

1,876,434. VISOR ATTACHMENT FOR WINDSHIELDS OF MOTOR DRIVEN VEHICLES. FRANCIS J. SCHMIDT, Jr., and CHARLES J. NASH, Wauwatosa, Wis. Filed Oct. 1, 1928. Serial No. 309,450. 12 Claims. (Cl. 296—95.)

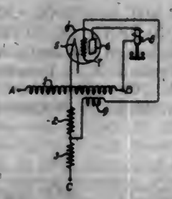
1. The combination with a vehicle windshield provided with suitable spaced apertures, of a set of clamping bolts extending through said apertures, clamping brackets supported by said bolts against the outer face of the windshield, a supporting rod connecting said clamping brackets, a visor pivoted to said supporting rod in the bracket supported portions thereof, means for interlocking the visor with one of the brackets by lateral movement of the visor, and means for moving the visor laterally from the inner side of the windshield.



1,876,435. PREPARING THYMOL (3-OXY-1-METHYL-4-ISOPROPYL-BENZOL). KARL SCHÖLLKOPF, Dusseldorf-Oberkassel, and ARTHUR SERINI, Dusseldorf-Heerdt, Germany, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung, Dusseldorf-Oberkassel, Germany. Filed Sept. 20, 1928, Serial No. 307,836, and in Germany Oct. 12, 1927. 3 Claims. (Cl. 260—154.)

1. A process for preparing thymol (3-hydroxy-1-methyl-3-isopropyl-benzene) consisting in isomerizing the propyl derivatives of meta-cresol isomeric with thymol by heating the said isometric derivatives to above 330–400° C. and in subjecting the isomerization product to fractional distillation.

1,876,436. PHASE FAILURE AND PHASE REVERSAL PROTECTIVE SYSTEM. CARROLL STANSBURY, Wauwatosa, and GLENDON C. BROWN, Milwaukee, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,278. 4 Claims. (Cl. 175—294.)

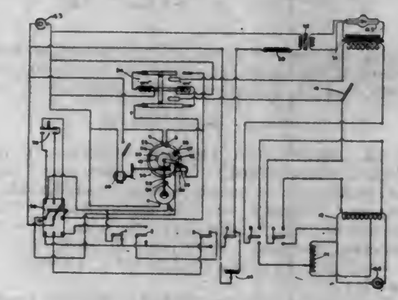


1. In combination, a polyphase circuit, a translating device, a continuously excited vapor electric device provided with a cathode and anode connected in series with said translating device to said circuit so as to receive space current therefrom, said vapor device being provided with an electrode arranged to control the current transmitted therethrough, said electrode being connected to the circuit so as to be normally subjected to a potential which lags a given angle behind the cathode potential, such lag being reduced by abnormal current and voltage conditions in the circuit.

1,876,437. X-RAY APPARATUS. JULIUS B. WANTZ, Oak Park, Ill., assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed Jan. 5, 1928. Serial No. 244,592. 1 Claim. (Cl. 250—34.)

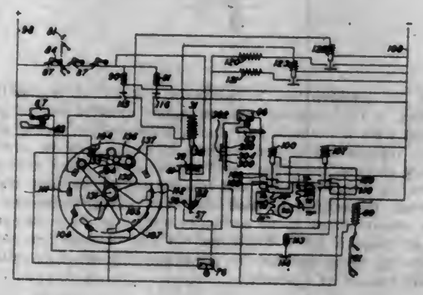
An X-ray apparatus comprising an X-ray tube, a filamentary cathode and anode in said tube, a high tension transformer connected thereto, a main auto-transformer for regulating the voltage impressed upon the high tension transformer, a circuit intermediate said high tension transformer and said auto-transformer and adapted to be closed

by a circuit breaker, an additional auto-transformer for regulating the voltage impressed upon said high tension transformer and adapted to displace said main auto-transformer, switch means for connecting and disconnecting said additional auto-transformer to said high tension transformer, a filament current transformer for said tube, a filament current regulator governing the electromotive force impressed upon said filament current transformer, an additional filament current control means for said filament current transformer, a circuit for connecting said filament current regulator and said additional filament



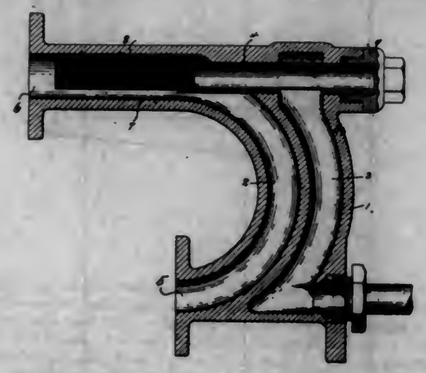
current control means, switch means being unitary with said first named switch means for controlling said filamentary circuit, a timer adapted to determine the time during which high tension current may be impressed upon said X-ray tube, a circuit breaker in combination with said timer and adapted to close said first named circuit, switch means for said timer whereby the timing element thereof is rendered operable or inoperable relatively to said circuit breaker, and means for selectively actuating said first named switch means to produce a relatively powerful or weaker X-light for a predetermined period of time.

1,876,438. MEANS FOR OPENING AND CLOSING ELEVATOR CARS AND LANDING GATES. HERMAN CARL WERNER, North Evans, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1929, Serial No. 395,285, and in Australia Sept. 28, 1928. 9 Claims. (Cl. 187—52.)



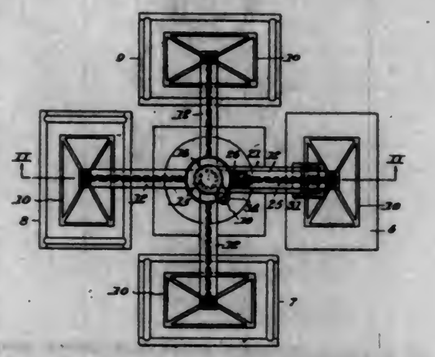
1. An elevator control arrangement comprising means installed on the car for moving the car gate, means for releasing the latch of the landing gate and simultaneously opening the car driving circuit, a laterally movable clutch member fitted within the car gate structure, a counterpart fixed clutch member on each landing gate, and means for moving the car gate clutch member so as to project it from the car gate laterally to effect its engagement with counterpart clutch members on a landing gate, said clutch moving means being interlocked with a car gate latch and with an interrupting device in the car driving circuit.

1,876,439. STRAINER. RALPH S. WHALEY, Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,648. 1 Claim. (Cl. 210—167.)



In combination a unitary coupling constructed to provide two intercommunicating conduits within the coupling, a tube removably mounted in said coupling and providing a communicating connection for the flow of fluid from the first conduit intermediate its ends to the second conduit, and a strainer within the coupling and carried by said tube and removable therewith, said strainer extending into and terminating within the first conduit.

1,876,440. ROTARY PICKLING MACHINE. FRANK J. WOOD, Mount Lebanon, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1931. Serial No. 578,876. 15 Claims. (Cl. 266—7.)



15. In a pickling and washing machine of the rotary type, a spider rotatable about a vertical axis and comprising both a plunger and arms whose loads are subject to a diminution at a station, means for vertically reciprocating said spider, an arm rotatably carried by the plunger, a vertical rod cooperating with the last mentioned arm to retain the same stationary during rotation of the spider and permitting vertical reciprocations of the last mentioned arm with the spider, a counterweight mounted on the last mentioned arm for movement along the same, and means for so moving said counterweight.

1,876,441. ATOMIZER. EDWIN C. YOST, Winchester, Va. Filed Sept. 13, 1929. Serial No. 392,460. 2 Claims. (Cl. 299—89.)

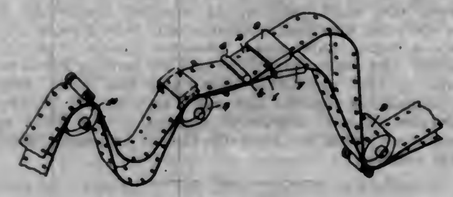
1. Atomizer comprising a container and an atomizing nozzle including a tube mounted on said container having

a bulb at one end and discharge apertures at the other, a partition extending longitudinally within said tube defining an inner conduit terminating at both ends short of the ends of said tube, having an opening at the end adjacent said discharge aperture and having an angularly disposed portion adjacent its other end extending into said container, said tube having a lateral branch, opening in the



bottom wall thereof adjacent the angularly disposed portion of said inner conduit, and extending into said container, the said partition extending beyond said angularly disposed portion and over the point of communication of said lateral branch with said tube, forming a baffle directed toward said bulb for deflecting a part of the air jet created by said bulb through said lateral branch into said container.

1,876,442. DEVICE FOR COPYING FILMS. HANS ARNI, Falkensee, near Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 17, 1932, Serial No. 593,515, and in Germany Dec. 6, 1930. 8 Claims. (Cl. 95—75.)



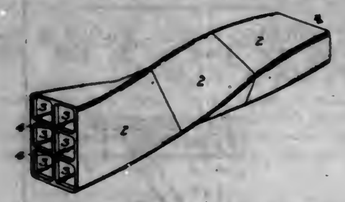
1. In a device for copying one lenticulated film from another, means for feeding said films past an exposure aperture, and means for kinking at least one of the films with respect to the other and at least in part out of its normal plane sufficiently to displace one film laterally with respect to the other and thereby to introduce a slight angle between the longitudinal axes of the films at the exposure aperture.

1,876,443. EXTENSION DEVICE. FERDINAND ARMBRUST, North Providence, R. I., assignor to Armbrust Chain Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 13, 1932. Serial No. 604,902. 7 Claims. (Cl. 24—71.)



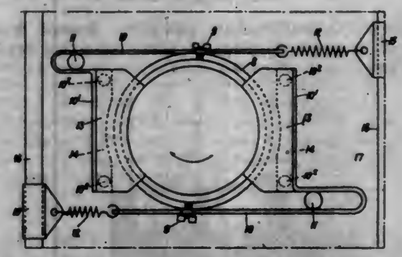
1. In a device of the type specified, a plurality of hingedly connected foldable sections including a keeper comprising a front wall, side walls, and inwardly directed flanges upon the side walls, a locking plate slidably mounted in the keeper between the front wall and flanges, an extension member engaging the plate, a strap attached to the extension member, and means for locking the plate in adjusted engagement with the flanges.

1,876,444. METHOD OF MAKING CONDUITS OR THE LIKE. EDWIN BABB, Aultman, Ohio, assignor to National Fireproofing Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed May 2, 1928, Serial No. 274,533, and in Canada May 28, 1928. Divided and this application filed Oct. 1, 1930. Serial No. 485,692. 8 Claims. (Cl. 25—156.)



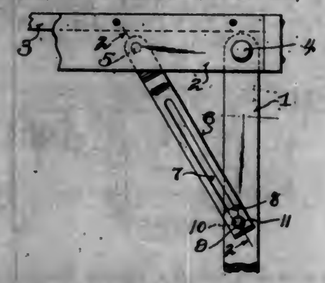
1. A method of making conduit or the like, comprising extruding a hollow length of ceramic material other than a hollow right cylinder whose wall is of uniform thickness and twisting the extruded length.

1,876,445. BOBBIN DRAG ARRANGEMENT FOR SPINNING AND LIKE TEXTILE FRAMES. ARTHUR LANGSTAFF BENSON, Dundee, Angus, Scotland. Original application filed Nov. 19, 1930, Serial No. 496,583, and in Great Britain Nov. 28, 1929. Divided and this application filed Sept. 17, 1931. Serial No. 563,380. 1 Claim. (Cl. 118—55.)



In a spinning or like textile frame, a bobbin drag device comprising, in combination with a lifter, a bobbin-receiving socket member rotatably mounted on the lifter, parallel bars operatively connected to diametrally opposed points of said socket member, a pair of diametrally opposed brake shoes engageable with the lower flange of the bobbin and connected to said bars, and springs influencing said bars, whereby partial rotation of said socket member when frictionally entrained by the bobbin effects the spring controlled movement of said brake shoes towards the bobbin flange.

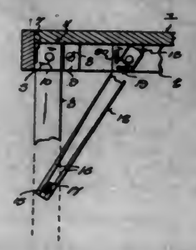
1,876,446. FOLDING FURNITURE LEG. WILLIAM M. BOENNING, Manitowoc, Wis. Filed Nov. 18, 1931. Serial No. 575,772. 2 Claims. (Cl. 45—11.)



1. The combination of a table including side rails and a top, and a foldable leg in pivotal union therewith, a brace-

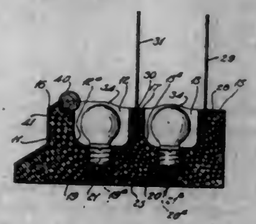
strap for the leg in pivotal union with the table having a slot therein, the outer end of the strap being folded over to form an apertured tongue spaced from the opposite face of the strap, and a pin projecting from the leg engaging the slot and for locking engagement with the tongue aperture when the leg is in its functioning position.

1,876,447. FOLDING TABLE. WILLIAM M. BOENNING, Manitowoc, Wis. Filed Jan. 13, 1932. Serial No. 586,367. 5 Claims. (Cl. 45—11.)



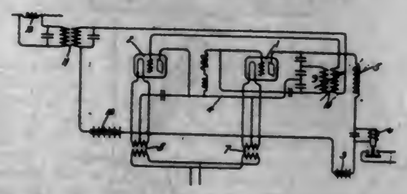
1. In a folding table including a top, a leg pivotally carried by said top, a headed stud carried by the leg, and a channelled brace pivotally carried by the top and embracing the head of said stud to latch the leg in extended position.

1,876,448. ILLUMINATED DEVICE. JOSEPH BLOCK, Brooklyn, N. Y. Filed June 8, 1931. Serial No. 542,795. 8 Claims. (Cl. 40—130.)



2. An illuminated display device comprising a member, display elements mounted thereon, a row of lamp sockets mounted within said base member adjacent said display elements, said sockets being connected in series circuit, and miniature low voltage lamps attached to said sockets for illuminating said display elements, each lamp being provided with a shunt across the filament thereof, said shunts being non-conductive at the voltage of the lamp and conductive at the voltage of the series.

1,876,449. CONTROL CIRCUIT. ELLSWORTH D. COOK, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,321. 6 Claims. (Cl. 175—320.)



1. In a system in which a control device is operated in response to a voltage variation, and which includes a plurality of discharge paths connected in series, the method of operating said discharge paths which includes the steps of subjecting one of said paths to said voltage variation, producing oscillations by current in another path, subjecting said first path to the oscillations produced, and controlling said device by current flowing through said discharge paths in series.

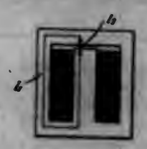
4. In combination, an electrical circuit including a pair of series connected discharge paths, means for controlling one of said discharge paths, means for causing electrical oscillations to be produced responsively to current in the other discharge path, means for controlling the impedance of said first discharge path responsively to said oscillations and means connected to respond to current in said circuit.

1,876,450. SELF-TIGHTENING CONTAINER CLOSURE. CHARLES H. EGAN, Boston, and BRADLEY DEWEY, Cambridge, Mass., assignors to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1927. Serial No. 240,756. 3 Claims. (Cl. 220—46.)



1. A sealed container comprising a sealed joint including spaced walls and a sealing material confined between said walls, said sealing material comprising, in its operative condition, a substantially homogeneous mixture including rubber and a substance capable of gel formation with water, the rubber and gel forming substance being in such substantial proportions that each, while in confinement between said walls, shall furnish effective restraint against substantial removal of the other by substances which are normally capable of accomplishing such removal.

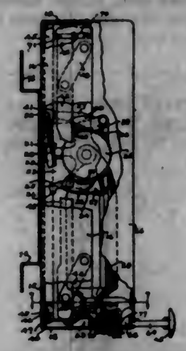
1,876,451. IRON-CORED INDUCTANCE (CHOKE COIL, TRANSFORMER) FOR DIRECT CURRENT LOADS. RUDOLF GURTLER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 11, 1931, Serial No. 550,118, and in Germany Aug. 14, 1930. 4 Claims. (Cl. 175—356.)



1. In the manufacture of electrical induction apparatus comprising a magnetic core and at least one winding on said core, said core being constructed of laminations of core material, the method of fixing the magnetic reluctance of the apparatus which comprises forming air gaps in enough of said laminations to increase the magnetic reluctance of the apparatus to a value slightly less than the desired value and then further increasing the value of the magnetic reluctance to the desired value by inserting a layer of insulation material between at least two adjacent laminations.

1,876,452. PASTE-LIKE DISPENSER. HAROLD M. GUSDORF, Indianapolis, Ind. Filed Apr. 8, 1931. Serial No. 528,620. 31 Claims. (Cl. 221—60.)

1. In a dispenser of paste-like substances, a box, a vertically disposed toggle bar movably supported by the box, a carriage vertically slidable in the box, a spindle rotatably carried by the carriage, a toothed wheel on the spindle, pawl means between the toggle bar and the wheel,



and means for pushing said bar to cause said pawl means to revolve said wheel a predetermined distance upon each operation of the bar.

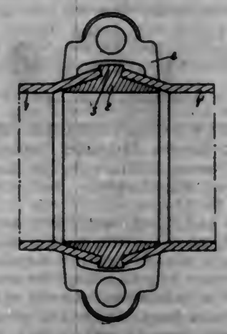
1,876,453. PROCESS FOR PRODUCTION OF ALUMINUM OXIDE OR PRODUCTS CONTAINING ALUMINUM OXIDE OUT OF MATERIAL CONTAINING ALUMINUM SULPHIDE. TURE ROBERT HAGLUND, Stockholm, Sweden. Original application filed Nov. 6, 1926, Serial No. 146,854, now Patent No. 1,797,655, and in Sweden Nov. 18, 1925. Divided and this application filed Nov. 12, 1927. Serial No. 232,940. 6 Claims. (Cl. 23—143.)

4. Process for producing aluminum oxide products from a solidified melt containing aluminum sulphide, consisting in treating the melt under oxidizing conditions with liquid water, so as to decompose the sulphuretted hydrogen, which is formed during the treatment.

1,876,454. METHOD OF PRODUCING FENCHONE. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1928. Serial No. 246,905. 16 Claims. (Cl. 260—182.)

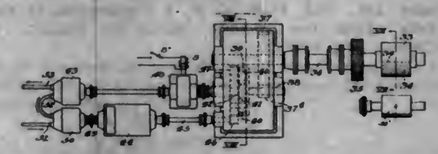
2. The method of producing fenchone which includes subjecting a pine oil cut containing fenchyl alcohol to heat in the presence of dilute nitric acid to effect oxidation thereof and separating fenchone produced from other oxidation products.

1,876,455. PIPE JOINT AND THE LIKE. GEORGE RICHARD INSHAW, Glasgow, Scotland. Filed Jan. 14, 1931, Serial No. 508,626, and in Great Britain Jan. 28, 1930. 8 Claims. (Cl. 285—194.)



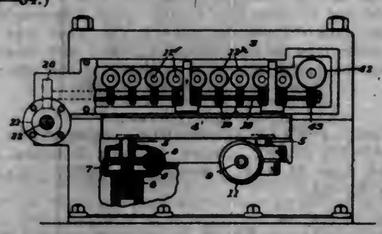
1. A flexible pipe joint sealed by fluid pressure, comprising two registering pipe pieces coned at their adjacent ends to constitute a double-conical recess; a one-piece flexible packing ring having externally coned ends received in said recess, the inner face of said ring being exposed to the fluid pressure in said pipe pieces, the inner circumferential surface of said packing ring when in unflexed condition being arched convexly inwardly, the ends of said ring when in unflexed condition being of less conicity than said recess, said ring when in flexed condition mating with said recess and being provided with an external circumferential ridge abutting against the adjacent ends of the pipe-pieces; and internally coned arcuate housings connected together to form a hollow annulus embracing the coned outer faces of said pipe pieces and compressing the coned ends of said pipe pieces on said packing ring preventing endwise relative displacement of said pipe pieces while permitting flexure of the joint.

1,876,456. SHEARS. LORENZ IVERSEN, Pittsburgh, and ROBERT E. NOBLE, Crafton, Pa., assignors to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1928. Serial No. 245,704. 9 Claims. (Cl. 164—68.)



3. In a shearing mechanism, a main driving member, a shear, means for delivering material to the shear, operative driving connections between said driving member and said shear comprising gearing for driving the shear at a plurality of speeds, said driving gearing including a control element stationary during driving of the shear in synchronism with the delivery means and rotating during driving of the shear at a different speed, and means for rotating said control element.

1,876,457. ROLL LEVELER. LORENZ IVERSEN, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 28, 1929. Serial No. 374,374. 27 Claims. (Cl. 153—54.)



1. In a roll leveling machine, a pair of stationary frame members, a plurality of rolls mounted thereon, a pair of adjustable frame members, a plurality of rollers mounted thereon, a line shaft for driving the rolls on the stationary frame members, and a second line shaft for driving the rolls supported by the adjustable frame members.

1,876,458. DOLL CONSTRUCTION. ABRAHAM M. KATZ, Brooklyn, N. Y., assignor to Ideal Novelty & Toy Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 26, 1932. Serial No. 595,408. 2 Claims. (Cl. 46—40.)

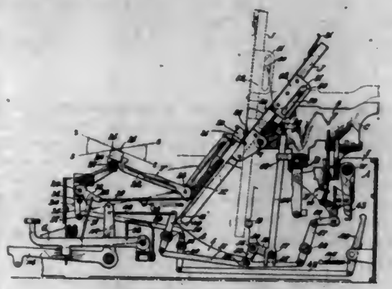
1. In a doll, a member having an inner end provided with an opening, said inner end being made of resilient material, and a button located in said opening, said button having a base and a tapered head, the base being

of greater diameter than the inner end of said head, the base being also of greater diameter than said opening, said head filling said opening, said base being located be-



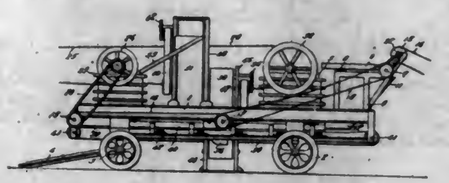
hind the inner end of said opening, said resilient material being shaped so as to interlock with said head and said base and to press against said tapered head.

1,876,459. TYPEWRITING MACHINE. EDWARD B. HESS, Orlando, Fla., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 5, 1931. Serial No. 506,807. 17 Claims. (Cl. 197—22.)



1. In a typewriting machine, the combination with a type carrier, of flat types mounted on said carrier and having printing faces disposed at an angle to each other, a flat platen normally disposed in a plane parallel to the printing face of one type when said type is in printing position and movable into another plane disposed in parallelism with the printing face of the other type when said other type is in printing position, and means for moving the platen from one position to the other.

1,876,460. PORTABLE CRUSHING, SCREENING, AND LOADING PLANT. HANK KNIPPLE, Bozeman, Mont. Filed June 25, 1930. Serial No. 463,722. 2 Claims. (Cl. 83—53.)



1. A crushing and screening apparatus comprising a supporting frame, a main crusher and reduction crusher mounted on said frame one adjacent each end thereof, a vibratory screen located under each crusher, a single longitudinally extending conveyor extending under both screens for receiving the material passing through the screens and delivering said material at one end of the apparatus, means for actuating the screens in a manner to cause the material failing to pass through the perforations therein to drop from the adjacent or inner ends of the screens, a chute for receiving this material dropping from the inner ends of the screens, and conveyor means for conveying the material from said chute to the reduction crusher.

1,876,461. FOUNTAIN PEN. LEOPOLD KOTTER, Vienna, Austria. Filed Jan. 25, 1932, Serial No. 588,762, and in Germany Feb. 6, 1931. 6 Claims. (Cl. 120—49.)



1. Fountain-pen holder consisting of two telescopically slidable tubes of which the inner tube carries the nib (pen) and the outer tube has a closing flap and receives a slightly S-like curved leaf-spring which is guided in a longitudinal groove of the outer tube, eccentrically engages the closing flap and has a nose-like end which cooperates with stops of the inner tube in such a manner that the closing flap is automatically opened when the inner tube is pushed out and automatically closed when said tube is pushed back.

1,876,462. DIVIDER BAR ATTACHMENT FOR MOWERS. LOUIS LARSON, Lynden, Wash. Filed Sept. 5, 1931. Serial No. 561,439. 4 Claims. (Cl. 56—314.)

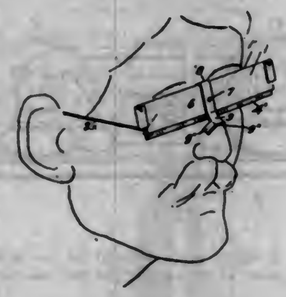


1. In combination, a sickle bar shoe having a lug and an opening located below and rearwardly of the lug, a bolt passing through the opening, a block connected to and extending rearwardly from the bolt and having a lug contacting with said first lug, a divider bar connected to the bolt and supported by the block, and means for adjusting the divider bar relative to the block.

1,876,463. MOTORIST'S EYESHIELD. FREDERICK WILLIAM MAGER, London, Ontario, Canada, assignor of one-half to Thomas William Baker, London, Ontario, Canada. Filed July 1, 1930. Serial No. 465,174. 1 Claim. (Cl. 2—12.)

A motorist's eye shield comprising an opaque shield body formed of sheet material having aligned orifices in the opposite walls thereof located centrally of the shield body near its outer edge, a strip of transparent fragile sheet material fitting between the walls of the shield body to form protection from injury and projecting slightly beyond the lower edges of said walls to form a narrow transparent unprotected edging, and having an orifice

so positioned as to be in alignment with the orifices of the shield body when either longitudinal edge of the strip is located within said shield body end, means passing



through the aligned orifices of the wall and transparent strip to permit of the inversion of said fragile strip so that either longitudinal edge may be utilized as desired.

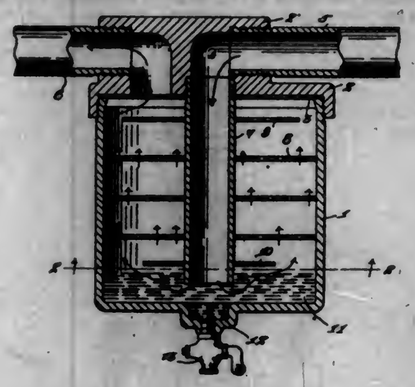
1,876,464. CLAMPING RECEPTACLE. WILLIAM H. MILLER, Sunbury, Pa. Filed May 12, 1931. Serial No. 536,882. 1 Claim. (Cl. 24—66.)



A device of the class described comprising a single piece of sheet material, preferably metal, cut and bent to provide a flat wide base, a spring clamping jaw of corresponding width to the base and a sleeve-like bight, the bight being located between the clamping jaw and base and constituting a hinged area for said jaw, an extension on the base remote from the bight and having an aperture for a fastener accessible beyond the jaw, and anchoring spurs struck from the base and spaced from said aperture and adapted to bite into a support about a fastener when passed through the aperture to rigidly secure the base upon the support, the jaw at its free edge being outwardly curled.

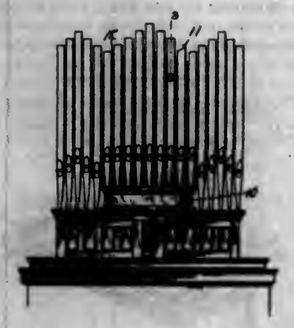
1,876,465. FILTER. JULIUS C. MISNER, Terre Haute, Ind. Filed July 17, 1930. Serial No. 468,660. 1 Claim. (Cl. 183—22.)

A gas filter adapted to be connected in and supported by alined flow pipe sections comprising a cap having a depending peripheral flange, a casing screwed within the flange and closed by the cap, the cap being provided upon the top side thereof with an enlargement disposed diametrically of the cap, said enlargement provided with internal passages spaced from each other at their inner ends, said passages having outer ends at the ends of the enlargement and adapted to be connected with sections of the flow pipe, and the inner ends of the passages being at the under side of the cap, a pipe depending from the inner end of one passage and housed within the casing and having the lower end thereof open and spaced above the bottom wall of the casing, a series of spaced perforated plates mounted upon said pipe and disposed across the interior of the casing and imperforate plates mounted upon said pipe, one beyond each side of the series of perforated plates and the upper imperforate plate being



of greater diameter than the lower imperforate plate and having the periphery thereof spaced from the inner side wall surface of the casing.

1,876,466. LOUD-SPEAKER. WILLIAM R. MOORE, Jr., Hagerstown, Md., assignor to Deca-Disc Phonograph Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Dec. 2, 1929. Serial No. 411,157. 4 Claims. (Cl. 181—31.)

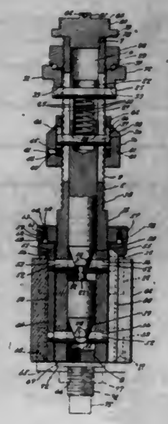


1. The combination with a loud speaker of a plurality of vertical pipes arranged in arcuate formation in front of the loud speaker and secured thereto, a base having a group of said plurality of pipes mounted at each end and a pedestal positioned on and set back from the edge of said base, said pedestal supporting a group of said pipes between the said end groups, substantially as set forth.

1,876,467. ALLOY. JOSEF NOVÁK and ROMAN KESSELRING, Novy Bohumin, Czechoslovakia. Filed Apr. 17, 1930, Serial No. 445,198, and in Germany Mar. 30, 1929. 1 Claim. (Cl. 75—1.)

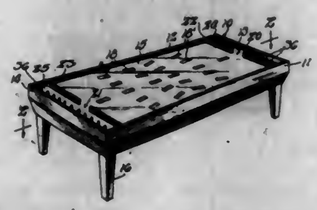
A rust-proof, silicon-free, non-corrodible steel alloy containing from 0.1 to 1 percent chromium, from 0.25 to 0.5 percent copper, from 0.04 to 0.25 percent nickel, from 0.01 to 0.05 percent tungsten and carbon from 0.03 to 0.10 percent, and the balance substantially all iron with the exception of impurities as phosphorus up to 0.005 percent and sulphur up to 0.04 percent.

1,876,468. CYLINDER HONE OR LAPPING TOOL. THOMAS F. QUIGLEY, Cleveland, Ohio, assignor, by mesne assignments, to Micromatic Hone Corporation, a Corporation of Michigan. Filed Nov. 19, 1926, Serial No. 149,382. Renewed Dec. 6, 1928. 18 Claims. (Cl. 51—184.4.)



1. In a lapping tool, the combination of a tubular body, a conical plunger working therein, shoes guided radially on the body and actuated by the plunger to expand the shoes, a cam collar loosely mounted on the body and having an operating connection to the plunger including a compressible spring, a nut threaded on the body and bearing against the collar to advance the same, and a settable stop collar threaded on the body, the plunger being provided with a projection engageable with said stop collar to limit the advancing movement of the plunger.

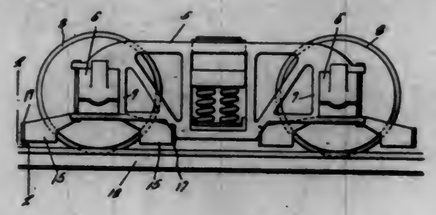
1,876,469. GAME APPARATUS. STEPHEN M. QUINN, Chicago, Ill. Filed May 15, 1931. Serial No. 537,661. 1 Claim. (Cl. 273—85.)



Game apparatus comprising means providing a playing surface and opposing goals, a plurality of strikers arranged in opposing groups on the playing surface, normally flush therewith, and pivotally mounted for movement in a vertical arc, and operating means for raising the strikers up from the playing surface to meet an oncoming ball with which the game is played, to drive the ball toward one of the goals, said operating means including, for each striker, a solenoid including a movable element pivotally connected to the striker, and a control switch for the solenoid.

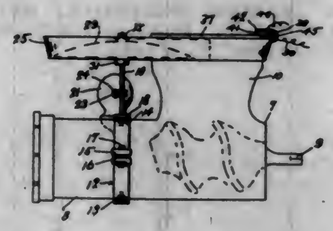
1,876,470. WHEEL FENDER. GEORGE J. RICE, Dorchester, Mass. Filed Feb. 10, 1932. Serial No. 592,167. 1 Claim. (Cl. 293—58.)

A vehicle wheel guard comprising an elongated frame piece provided with inwardly disposed end portions, a laterally disposed frame piece at each end of the first-mentioned frame piece, a plate secured to the first-mentioned frame piece and to the inwardly disposed end portions



thereof, and a buffer plate secured to the laterally disposed frame pieces at the ends of the first-mentioned frame piece.

1,876,471. ATTACHMENT FOR FOOD CHOPPERS. HENRY C. SANDER, Asbury Park, N. J. Filed Jan. 8, 1930. Serial No. 418,288. 4 Claims. (Cl. 146—182.)



1. An attachment of the class described for a conventional food chopper, comprising in combination, a food chopper, a split ring mounted on the horizontal cylinder of the chopper, a radial projection on the ring, a motor supported on the projection, a bearing on the ring, a vertical shaft rotatably supported in said bearing, a connection between the motor and the shaft for rotating the same, a shallow trough of circular formation and having a semi-circular extension at one side, said trough adapted to be mounted on the feeding bowl of the chopper and project outwardly therefrom to receive journalled through its center portion the upper end of the shaft, said semi-circular extension being disposed immediately upon said bowl and apertured to empty thereinto, a convex rotatable disk in said trough on the upper end of the shaft therein, a stationary scraper blade projected radially from the center of said disk and secured upon the upper end of the shaft and the wall of the extension of the trough for directing the material deposited on said disk into the bowl.

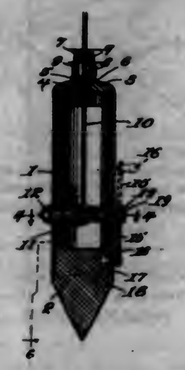
1,876,472. AIRPLANE CONSTRUCTION. FRED G. SCHWEISTHAL, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 407,865. 10 Claims. (Cl. 244—12.)



1. An airplane, basic wings on said airplane having curved upper surfaces, and auxiliary wings above said basic wings having curved lower surfaces, and forming with said basic wings horizontally extending passages

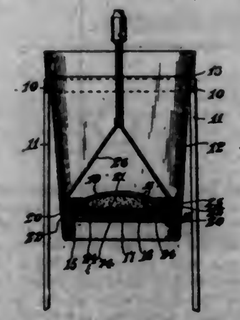
having a comparatively narrow throat, the degree of divergence of surfaces of said basic wings and said auxiliary wings being abrupt at their forward portions and gradually diverging from the throat to their trailing edges.

1,876,473. PLUMB BOB AND CHALK LINE. FREDERICK C. SPAETH, Williamsport, and MILLARD A. GIBSON, Lock Haven, Pa.; said Spaeth assignor to said Gibson. Filed Mar. 12, 1930. Serial No. 435,238. 2 Claims. (Cl. 33—217.)



1. A plumb bob comprising a cylindrical body shell, a point having a reduced end screwed in one end of the shell, a head having a central threaded opening and a threaded extension screwed in the second end of the shell, a headed guide sleeve screwed through the opening in the head, a nut screwed on the sleeve and contacting with the inner face of the head, said sleeve having divided clutch fingers extending from the outer end thereof, the outer faces of the fingers being tapered and inward of such tapered portions being threaded, a nut having one end of its bore tapered and non-threaded and said nut being screwed on the threaded portions of the fingers, for compressing a plumb line between the fingers when the same is passed through the sleeve guide, a transversely arranged shaft to which the inner end of the plumb line is connected the shell having openings in which the shaft is journaled, a swingable handle on the shaft, having an outstanding operating knob and said shell having an opening therethrough, and the threaded end of the point having a notch in a line with said opening and said opening and notch designed to receive therein the knob end of the handle for holding the shaft from turning and for preventing the accidental disassociation of the shell and point.

1,876,474. DEVICE FOR MAKING DRIP COFFEE. SHIRLEY L. STARKEY, Parkersburg, W. Va. Filed Nov. 24, 1930. Serial No. 497,874. 3 Claims. (Cl. 53—3.)



1. A device of the kind described, comprising a liquid receiver open at its top and bottom, a substance charged cartridge removably seated in the open bottom of the receiver and sealed marginally therein at its seat, and means for suspending the receiver directly over a receptacle, said cartridge having a non-porous perforated bottom with superposed upper and lower pervious fabric and filter materials, and means for permanently joining such materials removed from their marginal edges to provide centrally thereof a pocket for a substance charge.

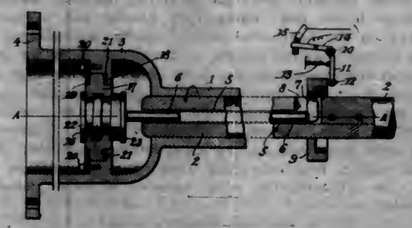
1,876,475. DOMESTIC BOILER. EARL C. STAUFFER, Lancaster, Pa. Filed Mar. 30, 1931. Serial No. 526,473. 13 Claims. (Cl. 122—228.)



9. A section for a top-fired down-draft boiler comprising a unitary casting constructed of decreasing cross-section downwardly said section adapted to be contained in a closely fitting casing whereby to cause crowding of heating gases as they move downwardly and insure their rubbing against the water surface of the boiler where the water is coldest, and said casting having an opening adjacent the top thereof to receive a fuel burner, as and for the purpose set forth.

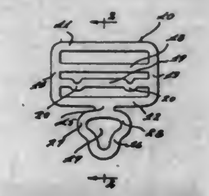
12. A section for a top-fired down-draft boiler having an opening adjacent the top thereof to receive a fuel burner, a projecting flange along the bottom and side edges of said opening adapted to cause the products of combustion to pass upwardly from the burner chamber when the sections are assembled as and for the purpose set forth.

1,876,476. SPEED-RESPONSIVE CONTROLLING DEVICE. HARRY L. TANNER, Brooklyn, N. Y.; The National City Bank of New York executor of the Estate of said Harry L. Tanner, deceased. Filed May 14, 1920. Serial No. 381,354. 21 Claims. (Cl. 172—239.)



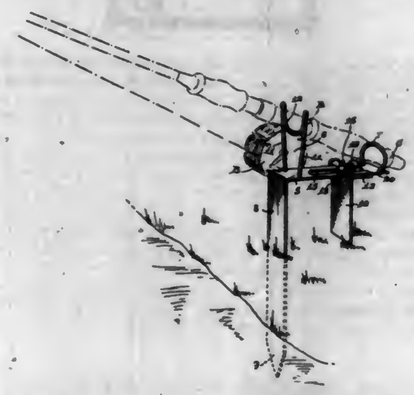
1. In combination, a rotatable driving element, a rotatable driven element, a device for operatively coupling said elements, and means controlled by relative rotation of said elements for causing said device to become operative when the driven element attains an angular velocity substantially equal to that of the driving element, said last mentioned means comprising a pair of relatively rotatable members, one driven by said driving element and the other by said driven element, and means controlled by the relative speeds of said driving and driven elements for causing relative axial movement of said members.

1,876,477. FASTENER. HARRY P. TROENDLY, Chicago, Ill., assignor to Parva Products Company, Wilmington, Del., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,316. 7 Claims. (Cl. 24—73.)



1. A new article of manufacture comprising a sheet metal stamping shaped to define a frame, spaced bars connecting opposite sides of said frame, a clover leaf shaped loop, and a connection between said loop and said frame, one of said bars being provided with rounded offset portions arranged in the plane of said frame.

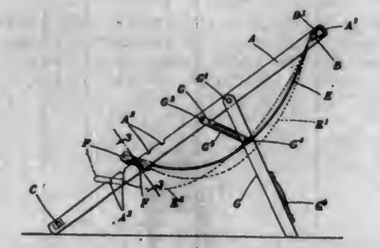
1,876,478. FISHING ROD SUPPORT. JOSEPH VAN DUZER, Firthcliffe, N. Y. Filed Dec. 3, 1930. Serial No. 499,818. 3 Claims. (Cl. 248—37.)



1. A device of the character set forth including a horizontal member and a vertical depending member at one end thereof, said members being fashioned from a length of strap material and the depending member having a pointed lower end, upstanding fishing rod supporting means on the horizontal member and a depending strap-like element carried by the horizontal member for longitudinal adjustment thereon with respect to the first mentioned depending member, said latter member having an angularly bent upper end underlying the horizontal member, said horizontal member having a longitudinal slot, said upper end having an aperture registering therewith and a bolt extending through said aperture and slot, for retaining the latter member in its adjusted positions.

1,876,479. CHAIR. JOHN WELLER, West Horsley, England. Filed Mar. 2, 1932, Serial No. 596,357, and in Great Britain Jan. 16, 1931. 11 Claims. (Cl. 155—117.)

1. A chair including in combination a main frame comprising side members, one end of each of which rests on the ground, and upper and lower transverse members extending between the side members, a supporting frame, means for connecting one end of the supporting frame to an intermediate point in the side members of the main frame while its other end rests on the ground, an intermediate transverse member extending between the side members of the main frame, means connecting the intermediate transverse member to the side members of the main frame and providing adjustment of the intermediate transverse member in the direction of the length of the side members, and a length of flexible material extending between and supported by the upper and intermediate transverse members.

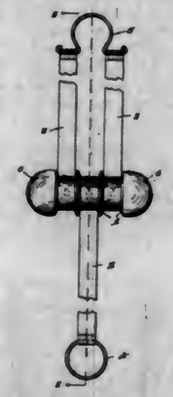


1,876,480. STONE SAW. ALBERT E. WIENHOLZ, New York, and FREDERICK SIEFKE, Brooklyn, N. Y. Filed Jan. 7, 1931. Serial No. 507,264. 1 Claim. (Cl. 125—12.)



A saw for cutting stone consisting of a strand of metal presenting a plurality of spiral cutting edges extending parallel to each other in spaced relation, each of said edges having indentations therein, and there being grooves in said strand which extend transversely between said edges.

1,876,481. AMUSEMENT AND ADVERTISING DEVICE. BERTRAND R. WRIGHT, Syracuse, N. Y. Filed Dec. 4, 1931. Serial No. 579,007. 1 Claim. (Cl. 46—87.)



In a device of the class described, the combination of a roller, a tape winding on the roller centrally thereof, a pair of tapes winding on the end portions of the roller on opposite sides of the first tape and in the opposite direction from the first tape, the pair of tapes extending from the roller in the opposite direction from that of the first tape, handles at the outer ends of the tapes, the handle for the pair of tapes being located in a plane extending between the pair of tapes and thereby serving as an equalizer.

1,876,482. RENEWED SWITCH POINT RAIL AND PROCESS FOR RENEWING SAME. ROBERT B. ALFONTE, Chicago, Ill., assignor to Louisville Frog, Switch and Signal Co., Louisville, Ky. Filed Nov. 4, 1929. Serial No. 404,749. 15 Claims. (Cl. 246—435.)



1. In combination, a switch point rail having its tapered portion cut out for a part of its length to provide a recess having a bottom wall and a curved end wall, the latter merging into the former and a beveled surface bordering said cutout, a switch point part positioned in said cutout and having a beveled surface arranged over said other surface and coacting with the latter to provide a single V-groove, and a welding filler position in said groove and being welded to the walls of the latter.

1,876,483. ELECTRIC GAUGE. CLARK M. ADAMS, Toledo, Ohio, assignor to Nagel Electric Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 16, 1929. Serial No. 414,391. 8 Claims. (Cl. 171—95.)



1. In an electrical indicating instrument, an armature mounted to swing about a fixed axis, and a pair of electromagnets having poles positioned laterally of said axis and angularly spaced with respect to the axis, the poles of said magnets being on opposite sides of the plane of the armature.

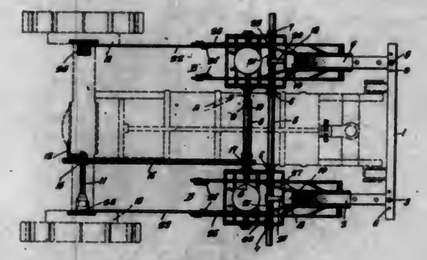
1,876,484. PAPER CONTAINER. ARTHUR H. BEDWORTH, Everett, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed June 23, 1931. Serial No. 546,252. 3 Claims. (Cl. 229—5.6.)



1. A paper container having an end closure comprising inner and outer disks, the inner disk having a marginal flange enclosed by a portion of the body of the container and providing a triple-thick rim, and the outer disk having a marginal portion enclosed by the said triple-thick rim.

1,876,485. TRACTOR ATTACHMENT. HARRY BORMANN, Seguin, Tex. Filed Sept. 5, 1930. Serial No. 480,011. 2 Claims. (Cl. 111—52.)

1. In a tractor attachment of the kind described, a pair of planters adapted to be arranged at opposite sides of a tractor and each having a forwardly extending tongue, a channeled cross bar suitably mounted forwardly upon the tractor and receiving in its channel the tongues, coupling pins engaged with the cross bar and tongues for adjustably connecting the same, feeding means in each planter, a coupling common to the feeding means and connected therewith of both planters for operation in unison, driven connections between the coupling and a power wheel



of the tractor, and manually operable means for the respective planters to independently adjust the same relative to a ground surface.

1,876,486. METAL BUILDING SCREEN. CHARLES E. BRITTEN, Apollo, Pa. Filed Mar. 15, 1932. Serial No. 599,026. 12 Claims. (Cl. 156—38.)



1. A device of the character described comprising a substantially rigid frame, a sheet of material secured at its edges to said frame, a hollow frame in which said rigid frame is arranged and including a plurality of separate sections, and means connected between said sections and said rigid frame for moving the former toward and away from said rigid frame.

1,876,487. BONDING LOCKNUT. RAY W. CHANABERRY, Louisville, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Sept. 11, 1930. Serial No. 481,136. 8 Claims. (Cl. 247—1.)

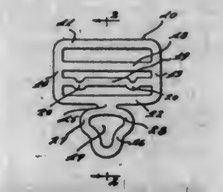


8. As a new article of manufacture a bonding locknut comprising an annulus having internal screw threads, and a tapped hole through the annular portion, the axis of the tapped hole being in a direction neither parallel to, nor intersecting the major axis of the annulus, and a set screw positioned in the tapped hole.

1,876,488. TRACTOR WHEEL. HENRY J. COBURN, Bode, Iowa. Filed Oct. 6, 1930. Serial No. 486,849. 1 Claim. (Cl. 97—215.)

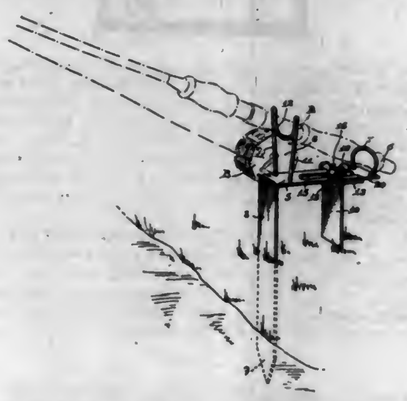
A wheel comprising discs having openings at their centers, rings applied to the discs and surrounding said openings, said discs having converging peripheral portions, blocks transposed between the peripheral edges of

1,876,477. FASTENER. HARRY P. TROENDLY, Chicago, Ill., assignor to Parva Products Company, Wilmington, Del., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,316. 7 Claims. (Cl. 24—73.)



1. A new article of manufacture comprising a sheet metal stamping shaped to define a frame, spaced bars connecting opposite sides of said frame, a clover leaf shaped loop, and a connection between said loop and said frame, one of said bars being provided with rounded offset portions arranged in the plane of said frame.

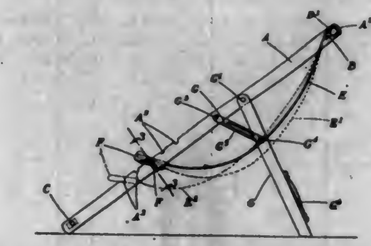
1,876,478. FISHING ROD SUPPORT. JOSEPH VAN DUZER, Firthcliffe, N. Y. Filed Dec. 3, 1930. Serial No. 499,818. 3 Claims. (Cl. 248—37.)



1. A device of the character set forth including a horizontal member and a vertical depending member at one end thereof, said members being fashioned from a length of strap material and the depending member having a pointed lower end, upstanding fishing rod supporting means on the horizontal member and a depending strap-like element carried by the horizontal member for longitudinal adjustment thereon with respect to the first mentioned depending member, said latter member having an angularly bent upper end underlying the horizontal member, said horizontal member having a longitudinal slot, said upper end having an aperture registering therewith and a bolt extending through said aperture and slot, for retaining the latter member in its adjusted positions.

1,876,479. CHAIR. JOHN WELLER, West Horsley, England. Filed Mar. 2, 1932, Serial No. 596,357, and in Great Britain Jan. 16, 1931. 11 Claims. (Cl. 155—117.)

1. A chair including in combination a main frame comprising side members, one end of each of which rests on the ground, and upper and lower transverse members extending between the side members, a supporting frame, means for connecting one end of the supporting frame to an intermediate point in the side members of the main frame while its other end rests on the ground, an intermediate transverse member extending between the side members of the main frame, means connecting the intermediate transverse member to the side members of the main frame and providing adjustment of the intermediate transverse member in the direction of the length of the side members, and a length of flexible material extending between and supported by the upper and intermediate transverse members.



1,876,480. STONE SAW. ALBERT E. WIENHOLZ, New York, and FREDERICK SIEFKE, Brooklyn, N. Y. Filed Jan. 7, 1931. Serial No. 507,264. 1 Claim. (Cl. 125—12.)



A saw for cutting stone consisting of a strand of metal presenting a plurality of spiral cutting edges extending parallel to each other in spaced relation, each of said edges having indentations therein, and there being grooves in said strand which extend transversely between said edges.

1,876,481. AMUSEMENT AND ADVERTISING DEVICE. BERTRAND R. WRIGHT, Syracuse, N. Y. Filed Dec. 4, 1931. Serial No. 579,007. 1 Claim. (Cl. 46—37.)



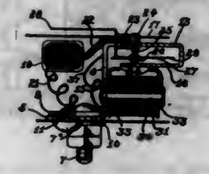
In a device of the class described, the combination of a roller, a tape winding on the roller centrally thereof, a pair of tapes winding on the end portions of the roller on opposite sides of the first tape and in the opposite direction from the first tape, the pair of tapes extending from the roller in the opposite direction from that of the first tape, handles at the outer ends of the tapes, the handle for the pair of tapes being located in a plane extending between the pair of tapes and thereby serving as an equalizer.

1,876,482. RENEWED SWITCH POINT RAIL AND PROCESS FOR RENEWING SAME. ROBERT B. ALFONTE, Chicago, Ill., assignor to Louisville Frog, Switch and Signal Co., Louisville, Ky. Filed Nov. 4, 1929. Serial No. 404,749. 15 Claims. (Cl. 246—435.)



1. In combination, a switch point rail having its tapered portion cut out for a part of its length to provide a recess having a bottom wall and a curved end wall, the latter merging into the former and a beveled surface bordering said cutout, a switch point part positioned in said cutout and having a beveled surface arranged over said other surface and coacting with the latter to provide a single V-groove, and a welding filler position in said groove and being welded to the walls of the latter.

1,876,483. ELECTRIC GAUGE. CLARK M. ADAMS, Toledo, Ohio, assignor to Nagel Electric Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 16, 1929. Serial No. 414,391. 8 Claims. (Cl. 171—95.)



1. In an electrical indicating instrument, an armature mounted to swing about a fixed axis, and a pair of electromagnets having poles positioned laterally of said axis and angularly spaced with respect to the axis, the poles of said magnets being on opposite sides of the plane of the armature.

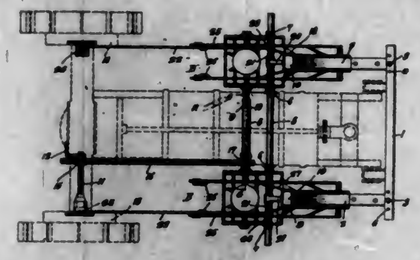
1,876,484. PAPER CONTAINER. ARTHUR H. BEDWORTH, Everett, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed June 23, 1931. Serial No. 546,252. 3 Claims. (Cl. 229—5.6.)



1. A paper container having an end closure comprising inner and outer disks, the inner disk having a marginal flange enclosed by a portion of the body of the container and providing a triple-thick rim, and the outer disk having a marginal portion enclosed by the said triple-thick rim.

1,876,485. TRACTOR ATTACHMENT. HARRY BORMANN, Seguin, Tex. Filed Sept. 5, 1930. Serial No. 480,011. 2 Claims. (Cl. 111—52.)

1. In a tractor attachment of the kind described, a pair of planters adapted to be arranged at opposite sides of a tractor and each having a forwardly extending tongue, a channeled cross bar suitably mounted forwardly upon the tractor and receiving in its channel the tongues, coupling pins engaged with the cross bar and tongues for adjustably connecting the same, feeding means in each planter, a coupling common to the feeding means and connected therewith of both planters for operation in unison, driven connections between the coupling and a power wheel of the tractor, and manually operable means for the respective planters to independently adjust the same relative to a ground surface.

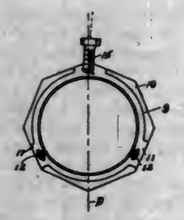


1,876,486. METAL BUILDING SCREEN. CHARLES E. BRITTEN, Apollo, Pa. Filed Mar. 15, 1932. Serial No. 599,026. 12 Claims. (Cl. 156—38.)



1. A device of the character described comprising a substantially rigid frame, a sheet of material secured at its edges to said frame, a hollow frame in which said rigid frame is arranged and including a plurality of separate sections, and means connected between said sections and said rigid frame for moving the former toward and away from said rigid frame.

1,876,487. BONDING LOCKNUT. RAY W. CHANABERRY, Louisville, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Sept. 11, 1930. Serial No. 481,136. 8 Claims. (Cl. 247—1.)

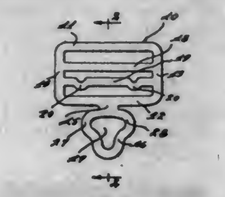


8. As a new article of manufacture a bonding locknut comprising an annulus having internal screw threads, and a tapped hole through the annular portion, the axis of the tapped hole being in a direction neither parallel to, nor intersecting the major axis of the annulus, and a set screw positioned in the tapped hole.

1,876,488. TRACTOR WHEEL. HENRY J. COBURN, Bode, Iowa. Filed Oct. 6, 1930. Serial No. 486,849. 1 Claim. (Cl. 97—215.)

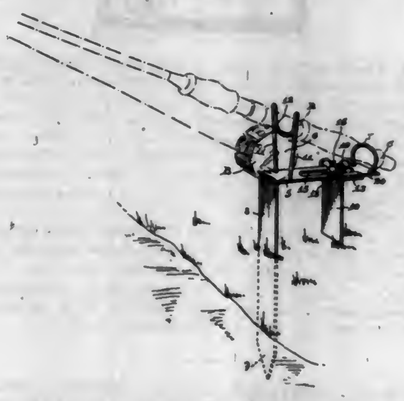
A wheel comprising discs having openings at their centers, rings applied to the discs and surrounding said openings, said discs having converging peripheral portions, blocks transposed between the peripheral edges of

1,876,477. FASTENER. HARRY P. TROENDLY, Chicago, Ill., assignor to Parva Products Company, Wilmington, Del., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,316. 7 Claims. (Cl. 24—73.)



1. A new article of manufacture comprising a sheet metal stamping shaped to define a frame, spaced bars connecting opposite sides of said frame, a clover leaf shaped loop, and a connection between said loop and said frame, one of said bars being provided with rounded offset portions arranged in the plane of said frame.

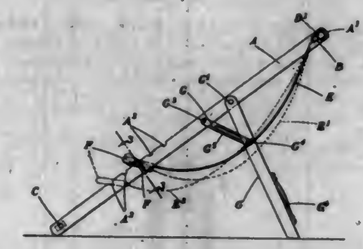
1,876,478. FISHING ROD SUPPORT. JOSEPH VAN DUZER, Firthcliffe, N. Y. Filed Dec. 3, 1930. Serial No. 499,818. 3 Claims. (Cl. 248—37.)



1. A device of the character set forth including a horizontal member and a vertical depending member at one end thereof, said members being fashioned from a length of strap material and the depending member having a pointed lower end, upstanding fishing rod supporting means on the horizontal member and a depending strap-like element carried by the horizontal member for longitudinal adjustment thereon with respect to the first mentioned depending member, said latter member having an angularly bent upper end underlying the horizontal member, said horizontal member having a longitudinal slot, said upper end having an aperture registering therewith and a bolt extending through said aperture and slot, for retaining the latter member in its adjusted positions.

1,876,479. CHAIR. JOHN WELLER, West Horsley, England. Filed Mar. 2, 1932, Serial No. 596,357, and in Great Britain Jan. 16, 1931. 11 Claims. (Cl. 155—117.)

1. A chair including in combination a main frame comprising side members, one end of each of which rests on the ground, and upper and lower transverse members extending between the side members, a supporting frame, means for connecting one end of the supporting frame to an intermediate point in the side members of the main frame while its other end rests on the ground, an intermediate transverse member extending between the side members of the main frame, means connecting the intermediate transverse member to the side members of the main frame and providing adjustment of the intermediate transverse member in the direction of the length of the side members, and a length of flexible material extending between and supported by the upper and intermediate transverse members.



1,876,480. STONE SAW. ALBERT E. WIENHOLZ, New York, and FREDERICK SIEFKE, Brooklyn, N. Y. Filed Jan. 7, 1931. Serial No. 507,264. 1 Claim. (Cl. 125—12.)



A saw for cutting stone consisting of a strand of metal presenting a plurality of spiral cutting edges extending parallel to each other in spaced relation, each of said edges having indentations therein, and there being grooves in said strand which extend transversely between said edges.

1,876,481. AMUSEMENT AND ADVERTISING DEVICE. BERTRAND R. WRIGHT, Syracuse, N. Y. Filed Dec. 4, 1931. Serial No. 579,007. 1 Claim. (Cl. 46—87.)



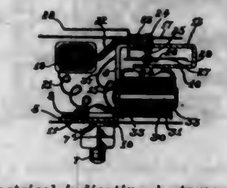
In a device of the class described, the combination of a roller, a tape winding on the roller centrally thereof, a pair of tapes winding on the end portions of the roller on opposite sides of the first tape and in the opposite direction from the first tape, the pair of tapes extending from the roller in the opposite direction from that of the first tape, handles at the outer ends of the tapes, the handle for the pair of tapes being located in a plane extending between the pair of tapes and thereby serving as an equalizer.

1,876,482. RENEWED SWITCH POINT RAIL AND PROCESS FOR RENEWING SAME. ROBERT B. ALVONTE, Chicago, Ill., assignor to Louisville Frog, Switch and Signal Co., Louisville, Ky. Filed Nov. 4, 1929. Serial No. 404,749. 15 Claims. (Cl. 246—435.)



1. In combination, a switch point rail having its tapered portion cut out for a part of its length to provide a recess having a bottom wall and a curved end wall, the latter merging into the former and a beveled surface bordering said cutout, a switch point part positioned in said cutout and having a beveled surface arranged over said other surface and coacting with the latter to provide a single V-groove, and a welding filler position in said groove and being welded to the walls of the latter.

1,876,483. ELECTRIC GAUGE. CLARK M. ADAMS, Toledo, Ohio, assignor to Nagel Electric Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 16, 1929. Serial No. 414,391. 8 Claims. (Cl. 171—95.)



1. In an electrical indicating instrument, an armature mounted to swing about a fixed axis, and a pair of electromagnets having poles positioned laterally of said axis and angularly spaced with respect to the axis, the poles of said magnets being on opposite sides of the plane of the armature.

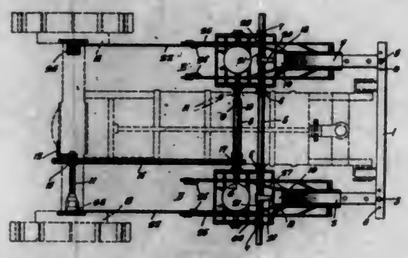
1,876,484. PAPER CONTAINER. ARTHUR H. BEDWORTH, Everett, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed June 23, 1931. Serial No. 546,252. 3 Claims. (Cl. 229—5.6.)



1. A paper container having an end closure comprising inner and outer disks, the inner disk having a marginal flange enclosed by a portion of the body of the container and providing a triple-thick rim, and the outer disk having a marginal portion enclosed by the said triple-thick rim.

1,876,485. TRACTOR ATTACHMENT. HARRY BORMANN, Seguin, Tex. Filed Sept. 5, 1930. Serial No. 480,011. 2 Claims. (Cl. 111—52.)

1. In a tractor attachment of the kind described, a pair of planters adapted to be arranged at opposite sides of a tractor and each having a forwardly extending tongue, a channeled cross bar suitably mounted forwardly upon the tractor and receiving in its channel the tongues, coupling pins engaged with the cross bar and tongues for adjustably connecting the same, feeding means in each planter, a coupling common to the feeding means and connected therewith of both planters for operation in unison, driven connections between the coupling and a power wheel



of the tractor, and manually operable means for the respective planters to independently adjust the same relative to a ground surface.

1,876,486. METAL BUILDING SCREEN. CHARLES E. BRITTEN, Apollo, Pa. Filed Mar. 15, 1932. Serial No. 599,026. 12 Claims. (Cl. 156—38.)



1. A device of the character described comprising a substantially rigid frame, a sheet of material secured at its edges to said frame, a hollow frame in which said rigid frame is arranged and including a plurality of separate sections, and means connected between said sections and said rigid frame for moving the former toward and away from said rigid frame.

1,876,487. BONDING LOCKNUT. RAY W. CHANABERRY, Louisville, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Sept. 11, 1930. Serial No. 481,136. 8 Claims. (Cl. 247—1.)

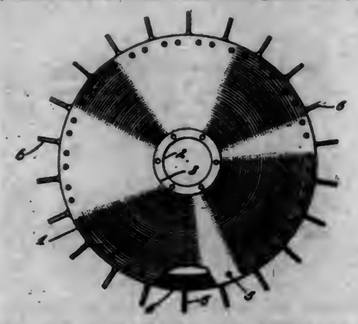


8. As a new article of manufacture a bonding locknut comprising an annulus having internal screw threads, and a tapped hole through the annular portion, the axis of the tapped hole being in a direction neither parallel to, nor intersecting the major axis of the annulus, and a set screw positioned in the tapped hole.

1,876,488. TRACTOR WHEEL. HENRY J. COBURN, Bode, Iowa. Filed Oct. 6, 1930. Serial No. 486,849. 1 Claim. (Cl. 97—215.)

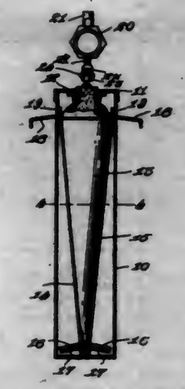
A wheel comprising discs having openings at their centers, rings applied to the discs and surrounding said openings, said discs having converging peripheral portions, blocks transposed between the peripheral edges of

the discs and having converging side surfaces fitting snugly against the inner surfaces of the discs, said blocks contacting each other at their ends throughout the periphery



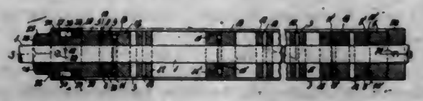
of the wheel, each block having a blade disposed radially with relation to the wheel and extending transversely across the periphery of the disc.

1,876,489. TUBE HOLDER AND DISPENSER. WILLIAM G. COLLINS, Honolulu, Territory of Hawaii. Filed Mar. 30, 1931. Serial No. 526,363. 1 Claim. (Cl. 221—60.)



A dispensing apparatus for collapsible tubes comprising a housing having an open end and a pair of oppositely disposed openings formed in the housing at a point adjacent the open end thereof, complemental wall members arranged within the housing in a downwardly, inwardly, and obliquely inclined position, an offset attaching flange formed on the lower end of each of said complemental wall members, a hinge within the container and mounted upon the bottom thereof and connected with the offset attaching flanges of the complemental walls, and inverted U-shaped finger engaging portions secured to the outer face of each of the complemental wall members and projecting outwardly through the oppositely disposed openings of the housing and extending therebeyond for compressing the said complemental wall members.

1,876,490. WINDING ROLL. JERRY U. FORBES, Cincinnati, Ohio. Filed Dec. 17, 1929. Serial No. 414,791. 14 Claims. (Cl. 242—72.)

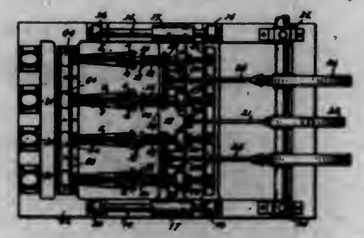


1. In a winding roll, a shaft, shell sections of arc-shaped cross section around said shaft, means directly attached to one section in which said shaft is directly journaled, and means attached to said shaft to turn therewith, for repeatedly moving another one of said sections various distances from the one section by turning said shaft continuously in one direction relatively to said sections.

1,876,491. METHOD OF TREATING SUGAR JUICES. JOHN P. FOSTER, Pala, Territory of Hawaii. Filed June 2, 1930. Serial No. 459,023. 8 Claims. (Cl. 127—50.)

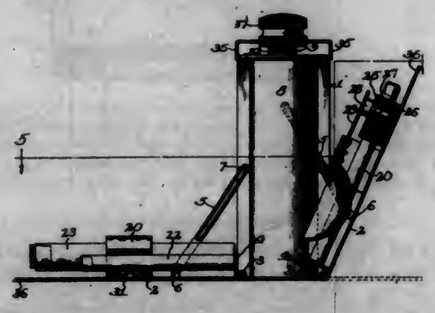
1. In the purification of sugar juices, the steps which comprise acidulating an alkaline sugar juice containing alkali-forming metal compounds of sugars and non-sugars, to a degree sufficient to substantially completely dissociate said sugar compounds and return sugar to the solution, but insufficient to dissociate said non-sugar compounds, and then separating said non-sugar compounds from the sugar solution.

1,876,492. FRUIT PITTING MACHINE. GIOVANNI FROVA, Milan, Italy. Filed Jan. 31, 1930, Serial No. 424,964, and in Italy Feb. 11, 1929. 7 Claims. (Cl. 146—18.)



1. A fruit pitting machine comprising a pit extracting tool, means to operate said tool, means to predispose the fruit to be pitted in the path of said pit extracting tool, means also arranged in the path of said tool and ahead of said second named means, said third named means being traversed by said tool and forming a stop for unpitted fruits carried by said tool, means to detach, from said tool, pits carried thereby and means carried by said tool to clean said tool.

1,876,493. HYPODERMIC KIT AND THE LIKE. NATHANIEL FRUTKOW and JOHN C. WAHL, Chicago, Ill. Filed Jan. 9, 1930. Serial No. 419,512. 8 Claims. (Cl. 206—12.)



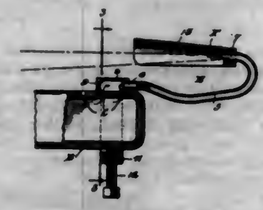
1. A case for a medicament kit comprising a body portion, heat exchange means associated with said body portion, sides for said body portion, holders connected to said sides, medicament holding means carried by said holders, and resilient means for holding said holding means in a substantially firm position.

1,876,494. ADJUSTABLE SHELF. ANDRE CHRISTIAN FURO, Astoria, N. Y. Filed June 23, 1931. Serial No. 546,323. 1 Claim. (Cl. 211—153.)



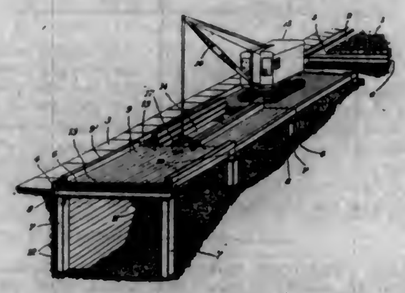
An adjustable shelf comprising a pair of flat plate portions provided at their longitudinal edges with pendant flanges, said plate portions being arranged in overlapping relation, pivot members extending through the flanges at the points of overlap to effect pivotal connection between said members, said members at their free ends being cut away for the greater part of their widths to leave extending spur portions at opposite edges, the ends of said flanges being beveled but said flanges extending onto said spur portions.

1,876,495. SAFETY ATTACHMENT FOR FLUID BURNERS. PETER V. GIOE, Brooklyn, N. Y. Filed Apr. 21, 1930. Serial No. 446,053. 4 Claims. (Cl. 158—115.)



1. A re-igniting device adapted for attachment to a fluid burner head having a plurality of burner apertures comprising an inverted cup shaped element defining a chamber open on the under side and adapted to be secured on contact with the burner head over one of the burner apertures to establish communication between said burner aperture and the chamber, a conduit extending from said member and communicating with said chamber and a shield carried by the opposite outer end of the conduit for protecting the same against extinguishment by drafts or liquid which may descend upon the burner head.

1,876,496. DECKING FOR EXCAVATIONS. JOHN B. GOLDSBOROUGH, Brooklyn, N. Y. Filed Jan. 30, 1930. Serial No. 424,606. 8 Claims. (Cl. 61—44.)



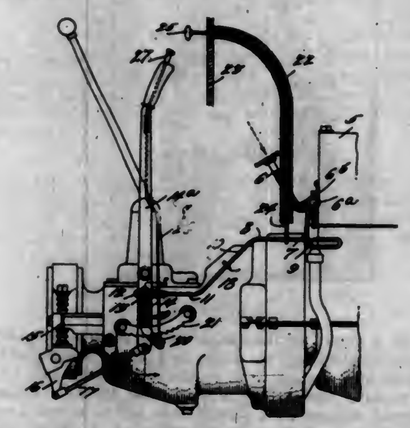
1. A cut and cover method of constructing a subway under a roadway which consists of providing supporting members at spaced intervals along the edges of the roadway, placing girders transversely of said roadway and supporting them by said spaced supporting members, placing a plurality of removable members directly upon said girders to form a temporary roadway which may be opened by the removal of several of said removable members to allow direct access below the temporary roadway at a point where subway construction is to be performed.

1,876,497. LENS. VIRGIL H. HANCOCK, New Orleans, La. Filed Nov. 15, 1929. Serial No. 407,487. 5 Claims. (Cl. 88—54.)



1. In a trifocal lens, a major lens and a circular insert set in the major lens and consisting of two segments of which one is less than a full circle with a flat top and has its vertical dimension greater than the radius of the circle but less than the diameter of the circle, the other segment being less than a semi-circle with a flat bottom and having its vertical dimension less than the radius of the circle, the major lens and the two segments each having a different index of refraction from the other two.

1,876,498. BRAKE RELEASE. WILLIAM P. HAWKINS, El Paso, Tex. Filed Jan. 8, 1932. Serial No. 585,573. 6 Claims. (Cl. 192—3.)

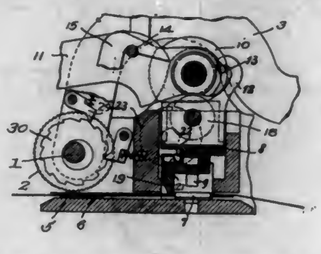


1. In a brake release, an emergency brake operating lever, a lever pivoted thereto near its lower end, a tooth engaging element carried by the last mentioned lever for engaging a rack and operative to hold the brake lever in different positions of adjustment, an element connected to the second mentioned lever, an accelerator operating means, and means for communicating the motion of the accelerator operating means to the second mentioned lever for releasing the emergency brake.

1,876,499. HOOP-IRON BAND OR THE LIKE TENSIONING AND FASTENING DEVICE. EMIL HOFFMANN, Cologne, Germany. Filed Dec. 11, 1931, Serial No. 580,426, and in Germany Mar. 28, 1930. 6 Claims. (Cl. 81—9.1.)

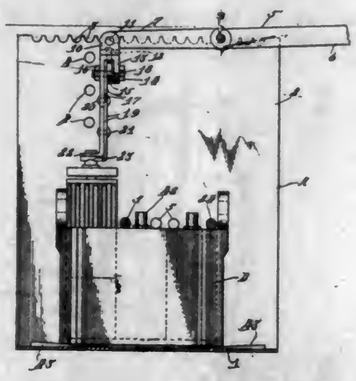
1. A device for tensioning and fastening a hoop-iron band around bales, packages and the like comprising a sup-

port for the overlapping ends of the band and of a locking sleeve, a roughened tensioning roller, a lever for pressing said tensioning roller onto the band, a lever for rotating said tensioning roller, means including a stamping member for effecting the fastening of the band, a lever for



operating said means, and means responsive to the initial movement of the lever which presses down the tensioning roller to automatically lower said stamping member to engage said sleeve and overlapping ends of the band and to maintain them in position during the tensioning operation and until the fastening has been effected.

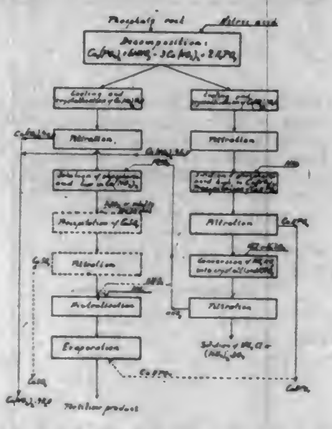
1,876,500. EXTRACTING AND INSERTING DEVICE. ARTHUR J. JACOBSEN and JAMES C. MCCLURE, Chicago, Ill. Filed Aug. 23, 1929. Serial No. 387,958. 5 Claims. (Cl. 254—133.)



1. In a device of the character set forth a supporting member comprising two walls, said walls being provided at their upper edges with pivot rod bearings and at an intermediate point with perforations, tie rods adapted to extend through said perforations and to secure a storage battery against vertical movement, a lifting lever supported upon a pivot rod journalled in said pivot bearings and means depending from said lever adapted to engage portions of a battery cell.

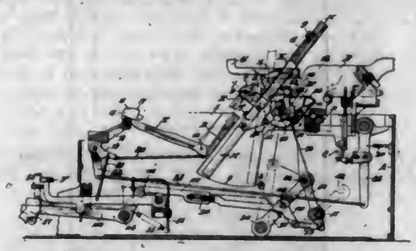
1,876,501. PROCESS OF MANUFACTURING CONCENTRATED FERTILIZERS. ERLING JOHNSON, Odda, Norway, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Filed Oct. 4, 1930, Serial No. 486,507, and in Norway Oct. 11, 1929. 4 Claims. (Cl. 71—7.)

1. A process of manufacturing concentrated universal fertilizers, comprising dissolving phosphate rock in nitric acid to form a solution containing calcium nitrate and free phosphoric acid, dividing the solution so obtained into two portions, crystallizing from the first of said portions as much as possible of the calcium nitrate present, and separating the crystals from the remaining mother liquor, subjecting also the second portion of the initial solution to crystallization of calcium nitrate but only to such extent that sufficient lime in the shape of nitrate is retained in solution to form di-calcium phosphate with all the phosphoric acid present, separating the crystals of calcium nitrate from the solution, adding ammonia to the latter to precipitate di-calcium phosphate and to give a solution of ammonium nitrate, separating di-cal-



cium phosphate from the solution, converting the ammonium nitrate of the solution by means of potassium salts into potassium nitrate, which is crystallized out and a solution of ammonium salt, separating the potassium nitrate crystals from said solution, adding said potassium nitrate to the first portion of mother liquor poor in calcium nitrate, neutralizing the mixture with ammonia and bringing the product to dryness.

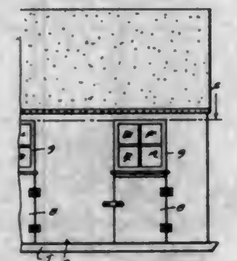
1,876,502. TYPEWRITING MACHINE. JOHN J. KITTEL, St. Albans, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 13, 1931. Serial No. 550,547. 31 Claims. (Cl. 197—22.)



1. In a typewriting machine, the combination with a type carrier having flat upper and lower types thereon and disposed at an angle to each other, of a flat platen normally disposed in a plane parallel to the face of one type when said type is in printing position and supported to swing about a fixed axis to position the platen in a plane parallel to the face of the other type when said other type is in printing position, and means for swinging the platen from one printing position to the other.

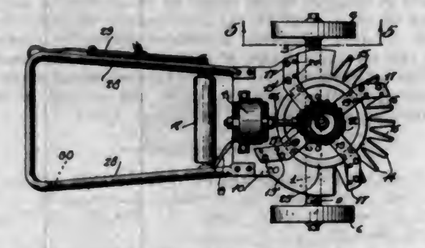
1,876,503. BROODER HOUSE FOR PIGS. GEORGE I. HINSVARK, Renner, S. Dak. Filed Apr. 1, 1930. Serial No. 440,793. 1 Claim. (Cl. 119—16.)

A brooder house comprising a series of stalls arranged at opposite sides of the center thereof, an alleyway located between the series of stalls and having sides closing the inner ends of the stalls and located above the floors of the stalls, beams extending longitudinally of the sides near the lower portions of the latter, boards mounted on the beams and constituting a portion of the floor of the alleyway, right angularly related partitions dividing the spaces between the stall and the alleyway floors into rest and play compartments communicating



with the stalls, a perforated casing located between the adjacent ends of the partitions and having portions thereof extending into the compartments, a heater in the casing, and an imperforate cover for the upper side of the casing consisting of alternate layers of corrugated sheet metal and asbestos and removably mounted on the beams and constituting the remaining portion of the floor of the alleyway.

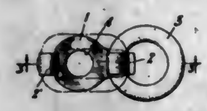
1,876,504. POWER DRIVEN ROTARY MOWER. WILLIAM J. ROSSITER and JAMES N. WILKINS, Birmingham, Ala. Filed Feb. 1, 1930, Serial No. 425,241. Renewed July 9, 1932. 2 Claims. (Cl. 56—25.)



1. A lawn mower comprising a pair of spaced ground wheels, a stub shaft for each wheel, U-shaped bar suspended between said ground wheels and adjustably connected to said stub shafts, a horizontally disposed and substantially circular base plate secured to said bar, radially extending fingers each having a cutting edge formed with said base plate and extending beyond said ground wheels, a vertically positioned spindle formed with said base plate, a rotary frame mounted upon said spindle, radially extending arms formed with said rotary frame, angular extensions formed with the outer end of each arm, a cutting blade carried by each angular extension and adapted to cooperate with the cutting edges of said fingers, a bearing ring mounted upon said base plate, a second bearing ring carried by said arm of the rotary frame and adapted to ride upon the first mentioned bearing ring, a motor mounted upon said base plate and operatively connected to said rotary frame, a castor wheel for supporting the rear end of said base plate, and a handle secured to the rear portion of said base plate whereby the machine may be manually propelled over the ground.

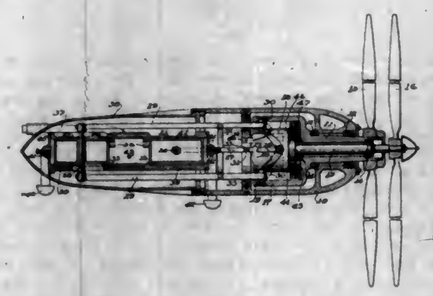
1,876,505. SHOE LACE FASTENER. AUGUSTA M. BRAGER, Brooklyn, N. Y. Filed Sept. 11, 1931. Serial No. 562,363. 2 Claims. (Cl. 24—120.)

2. A shoe lace fastener comprising a resilient metallic body portion having two curved members integral therewith and forming hooks, a yielding member adapted to be engaged by said hooks to retain the loose ends of a shoe lace between the yielding member and the body por-



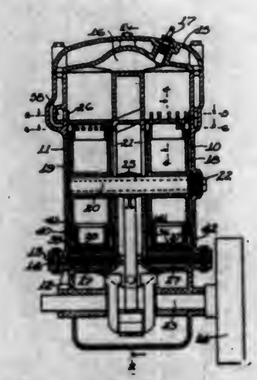
tion when said yielding member is in engagement with said hooks, the opening of said hooks being slightly less than the diameter of the yielding member to prevent accidental removal of the yielding member from the hooks.

1,876,506. ENGINE. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 25, 1929. Serial No. 409,583. 12 Claims. (Cl. 121—119.)
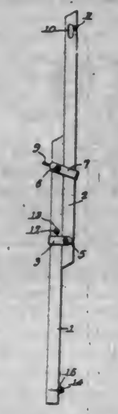


1. In an engine, the combination of a pair of co-axial shafts rotatable in opposite directions, power means including a cylinder and a piston relatively reciprocatory therein, and cam means operatively connected with said power means for rotating said co-axial shafts in opposite directions.

1,876,507. INTERNAL COMBUSTION ENGINE. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 24, 1930. Serial No. 430,822. 13 Claims. (Cl. 123—47.)



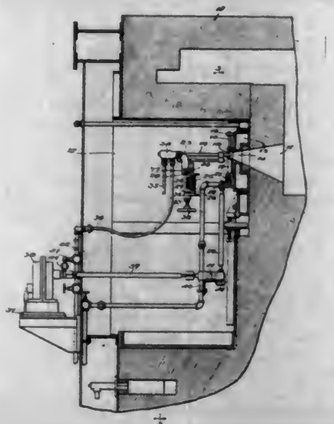
7. In an internal combustion engine, the combination of a pair of cylinders having a common combustion chamber, pistons movable in said cylinders, charge pre-compression means including said pistons, and means including valve means for each piston for conducting the pre-compressed charge from both of said pistons into one of said cylinders.

1,876,508. PROP. GEORGE W. BRITTON, Camden, N. J. Filed Jan. 30, 1931. Serial No. 512,409. 1 Claim. (Cl. 68—12.)



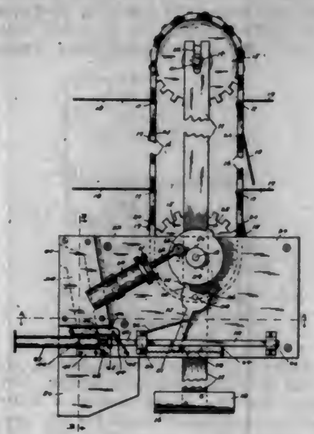
A prop including upper and lower parallel members, a yoke pivotally connected at one end to the upper end portion of the lower member, an inturned lip on the lower edge of the yoke normally held by gravity in gripping engagement with the upper member to hold said upper member against downward sliding movement, a finger piece integral with that end of the yoke remote from the lip and overbalanced by the lip end of the yoke, said finger piece being depressible toward the bottom of the prop to disengage the lip from the prop, a yoke straddling the lower portion of the upper member, prongs integral therewith and seated in said member for holding the yoke stationary to said member, a transverse rivet in the upper member for holding the prongs in engagement therewith, stop pins on the lower member above and below the pronged yoke for limiting the sliding movement of the upper member in both directions relative to the lower member, and wear devices on the pins.

1,876,509. CONTROL FOR METALLURGICAL FURNACES. ARTHUR L. STEVENS, Evanston, Ill., assignor, by mesne assignments, to Arthur L. Stevens Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 347,863. 32 Claims. (Cl. 158—2.)



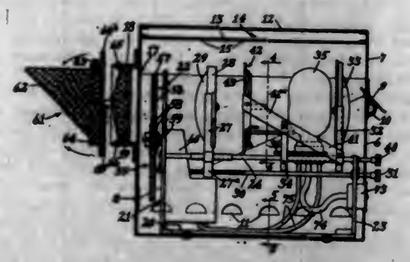
15. The combination with a movable closure, a series of valves, and controlling means for said closures and valves whereby they are operated in a predetermined sequence.

1,876,510. VENDING MACHINE. GEORGE MORRISON, Poughkeepsie, N. Y. Filed Aug. 14, 1930. Serial No. 475,169. 1 Claim. (Cl. 312—97.)



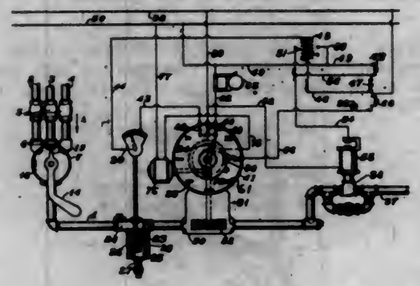
A vending machine comprising a pair of uprights spaced apart in parallel relation, a lower transverse shaft journaled in said uprights near their lower ends, an upper transverse shaft adjustably mounted in said uprights near their upper ends, sprocket wheels mounted upon said shafts, endless conveyors carried by said sprocket wheels, article supports pivoted to said conveyors and adapted to support articles upon them during their downward travel as actuated by the weight of the article, an escapement wheel secured on the lower shaft, an escapement lever coacting therewith, a cushion device for preventing the too rapid travel of said conveyor, comprising a cylinder pivoted adjacent said escapement wheel, a piston mounted therein and a connecting rod secured to said piston and pivoted to said escapement wheel.

1,876,511. LIGHT PROJECTING MACHINE. ANTON J. OBERG and ROBERT R. STOEFEN, Los Angeles, Calif. Filed Dec. 23, 1930. Serial No. 504,268. 3 Claims. (Cl. 240—3.1.)



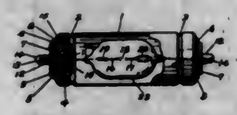
1. In a device of the kind described, a casing, a reflector, a lamp, a frame construction within said casing to support said reflector and lamp, said lamp being thereby supported adjacent to one side of said reflector in a position to direct light thereagainst, a diffusing plate, means mounted upon said frame construction to support said diffusing plate for pivotal adjustment at different angles with relation to the rays of light received from said reflector, a converging lens positioned to receive rays of light passing from said reflector through said diffusing plate, and means to adjust the position of said frame construction together with said diffusing plate toward and from said converging lens.

1,876,512. LIQUID MEASURING AND DISPENSING APPARATUS. FREDERIC D. PFENING and HENRY PFENING, Jr., Columbus, Ohio, assignors to The Fred D. Pfening Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 9, 1930. Serial No. 480,680. 17 Claims. (Cl. 221—101.)



1. In liquid measuring and dispensing apparatus, a liquid flow line, a magnetic valve arranged in said flow line for controlling the passage of liquid therethrough, a flow registering meter connected with said flow line, switch mechanism actuated by said flow meter for controlling the operation of said valve, and means including a motor remotely controlled for resetting said switch mechanism subsequent to a given flow of liquid through said flow line.

1,876,513. LIGHTNING ARRESTER. LEON S. BRACH, East Orange, N. J., assignor, by mesne assignments, to General Railway Signal Company. Filed May 11, 1928. Serial No. 277,007. 14 Claims. (Cl. 175—30.)



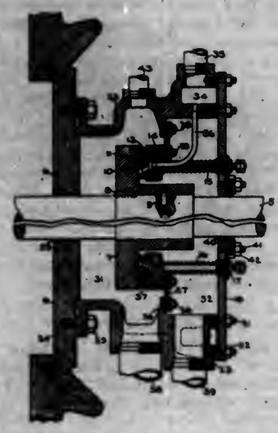
7. A lightning arrester having plural spark gaps, one gap being within a sealed chamber, a protecting shell for the chamber and a spark gap positioned at each end of the shell, said shell connecting the corresponding conducting elements of the last mentioned gaps while the co-operating elements of the last mentioned gaps are connected one each to the electrodes forming the sealed in gap.

1,876,514. LIGHTNING ARRESTER. LEON S. BRACH, East Orange, N. J., assignor, by mesne assignments, to General Railway Signal Company. Filed May 11, 1928. Serial No. 277,008. 10 Claims. (Cl. 175—30.)



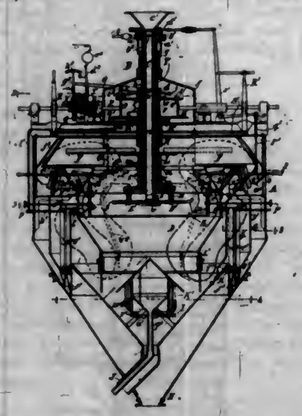
1. A lightning arrester comprising; a base of insulating material having a recess, a choke coil located in said recess, a plurality of terminals mounted in a single row on said base, said choke coil being connected between the end terminals, plates carried in edgewise position by the base on opposite sides of a majority of the terminals and having bent-over portions extending toward said terminals forming spark gaps therewith, said plate being connected one to each of said end terminals.

1,876,515. SHAFT PACKING. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1931. Serial No. 532,029. 3 Claims. (Cl. 286—11.)



1. The combination with a rotating shaft and a wall through which said shaft projects, of a packing for preventing leakage along said shaft, said packing comprising a casing surrounding the shaft and secured to the wall, an annular member rigidly secured to the shaft and provided with an annular groove and radial grooves which extend outwardly from said annular groove and are provided with beveled edges, a sealing ring, a holder for the sealing ring, a flexible annular member having its inner edge secured to the holder and its outer edge secured to the casing, means for yieldingly pressing said sealing ring against said runner and means for supplying water to said annular and radial grooves whereby said water forms a sealing film between said runner and ring.

1,876,516. AIR SEPARATOR. GEORGE HOLT FRASER, Brooklyn, N. Y. Filed Sept. 12, 1924, Serial No. 737,411. Renewed May 5, 1930. 54 Claims. (Cl. 209—139.)

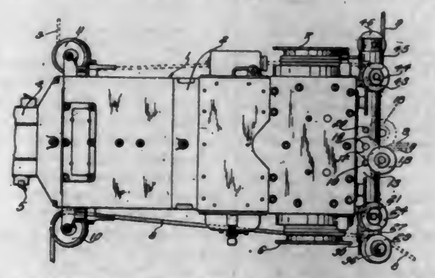


7. In combination, in a separator, a casing enclosing a circular separating chamber having a lower current inlet and an upward current passage and an upper current outlet, material supply means within and concentric of said chamber for supplying material to be separated in said passage, blower means for causing a fluid current to enter said chamber through said inlet and flow up through said passage and through said outlet to separate and float

fine material from said chamber, and expansible material distributor means within and spaced from the wall of said chamber and concentric of said supplying means for distributing such material in the path of such current and expansible to vary radially of such chamber such distribution to vary the fineness of such separation.

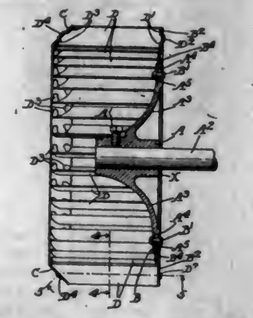
47. In combination, a casing enclosing a dust chamber and affording a current passage communicating with said chamber, blower means for causing a dust laden fluid current to flow through said passage to float dust into said dust chamber, and dust filter means for intercepting and discharging into said dust chamber fine material floating in such current comprising spaced vertically extended hollow faced baffle members disposed across said passage with their hollow faces opposed to the direct path of approach of such current and in communication with said dust chamber, said baffles having valve seat faces at their lower ends, and counter-balanced valve means opposite and co-operating with said seating faces for closing such communication through said hollow faces.

1,876,517. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 16, 1930. Serial No. 489,019. 28 Claims. (Cl. 262—30.)



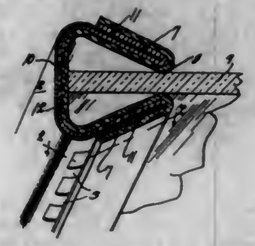
1. In a mining machine having a forwardly projecting cutter bar, the combination with a feed member and a cooperating flexible feeding element, of guiding means for said flexible element including a swing arm pivotally mounted at the rear of said feed member at the rear end of the machine remote from said cutter bar and carrying a guide sheave, said arm being swingable to locate said sheave in different elevated positions whereby it may be engaged by said flexible element when the latter is extended in a plurality of directions from said feed member.

1,876,518. METHOD OF MAKING A FAN. EUGENE MATHIS, Chicago, Ill., assignor to New York Blower Company, Chicago, Ill., a Corporation of Indiana. Filed Dec. 31, 1931. Serial No. 584,102. 11 Claims. (Cl. 29—156.8.)



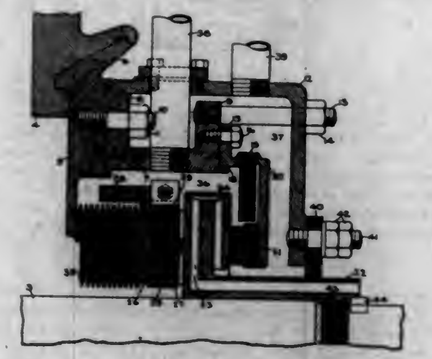
1. The method of forming a fan which includes the following steps: forming a plurality of blade receiving members, forming a plurality of fan blades having at the end of each of said blades a plurality of lugs in the plane of the blade, bending one of said lugs at each end of the blade out of said plane to project outwardly from the face of the blade, positioning the blades in the blade receiving members with said bent lugs in contact with one surface of each blade receiving member, subsequently bending the remaining lugs at each end of the blades to engage an opposite surface of said members.

1,876,519. WINDOW GUIDE CHANNEL. CARLOS J. MCKINNEY, Detroit, Mich. Filed Mar. 15, 1930, Serial No. 435,987. Renewed Feb. 29, 1932. 11 Claims. (Cl. 296—44.5.)



2. A guide channel, including a generally channel-shaped sheet metal member having a base and a pair of side flanges, each of said side flanges being provided with transversely disposed tongues, a rubber strip secured to the inner surface of said base and to both the inner and outer surfaces of the tongues of each of said side flanges, and a fabric strip secured to and overlying said rubber strip throughout its width.

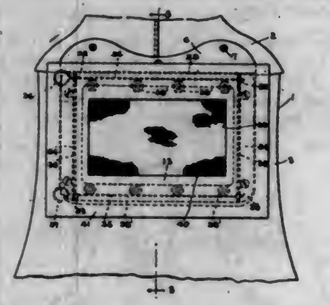
1,876,520. SHAFT PACKING. BURT L. NEWKIRK and LLOYD P. GROBEL, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Apr. 22, 1931. Serial No. 532,008. 9 Claims. (Cl. 286—9.)



1. The combination with a shaft and a wall through which the shaft projects, of a packing for preventing leakage along said shaft, comprising a runner rigidly secured to said shaft to form a fluid-tight joint therewith, a sealing ring having two annular grooves defining a sealing strip therebetween and an inner and outer bearing surface, one of which is provided with radial grooves, and means for yieldingly pressing said ring against said runner.

1,876,521. HEAD PROTECTOR. RICHARD H. SCHWENDLER, Cleveland, Ohio, and CARL W. MEHLING, Kenmore, N. Y., assignors to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 23, 1929. Serial No. 415,943. 4 Claims. (Cl. 2—8.)

1. A head protecting device comprising a head enclosing member having a sight opening, a transparent medium sealing said opening, said member having supporting means at the sides of and above and below said opening, a frame member having supporting means above and below said opening and cooperable with said first-named means to space said frame member from said enclosing member, said first-named and said second-named means

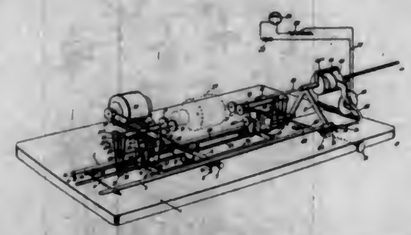


having slined apertures above and below said opening, horizontally positioned pins extending between and through said apertures to secure said members together, said frame member having an opening registering with said sight opening, and a screen member closing said second-named opening.

1,876,522. RECOVERY OF BY-PRODUCTS OF SUGAR EXTRACTION. EUGENIO ANTONIO VAZQUEZ, Habana, Cuba, assignor to Vazcane Process, Inc., a Corporation of Delaware. Filed Oct. 31, 1930. Serial No. 492,547. 16 Claims. (Cl. 92—14.)

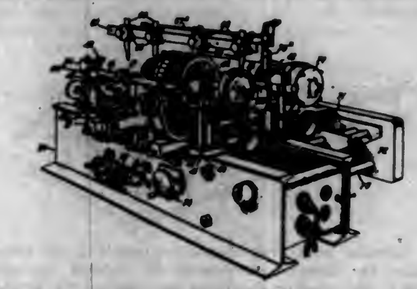
1. The process of extracting sugar from sugar cane and recovering byproducts therefrom which consists in extracting sugar from cane in the usual manner, storing the bagasse derived from this extraction in a solution of lime until the normal period of operation of the sugar mill is completed and returning the bagasse and treating liquor to the sugar mill and subjecting it to treatment therein analogous to that of the sugar extraction process to obtain fiber, pulp and other byproducts therefrom.

1,876,523. BALANCING MACHINE. HUGH M. STEPHENSON, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,590. 16 Claims. (Cl. 73—51.)



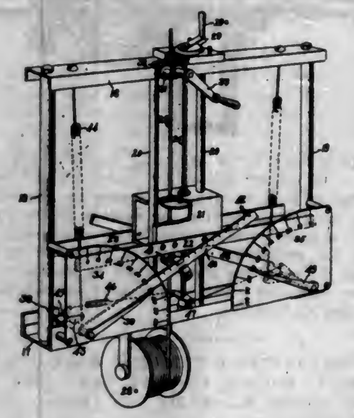
1. In a balancing machine, the combination of a base, a frame pivotally mounted on the base and free to vibrate in one plane, means carried by the frame for supporting a body to be balanced, means for rotating a body on said supporting means, said supporting means being slidable as a unit along said frame whereby either end of said body may be positioned above said pivot, means for locking said supporting means to said frame, means for applying vibratory impulses to the frame in said plane, and means for varying the strength of said impulses and the plane through the rotating body in which the impulses are applied.

1,876,524. DYNAMIC BALANCING MACHINE. ERNEST L. THEARLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 5, 1929. Serial No. 375,934. 37 Claims. (Cl. 73—51.)



1. In a balancing machine, the combination of a base, a cradle adapted to carry the body to be balanced, an elastic support for the cradle, which is carried by the base, a means for rotating the body at balancing speed, and a means connected with the body for rotation therewith which includes a weight that is free to adjust itself angularly with respect to said means to indicate the angular position where the mass of the body is to be changed to dynamically balance the same.

1,876,525. WEIGHT CALCULATING MACHINE. ERNEST L. THEARLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 26, 1930. Serial No. 477,941. 13 Claims. (Cl. 73—151.)

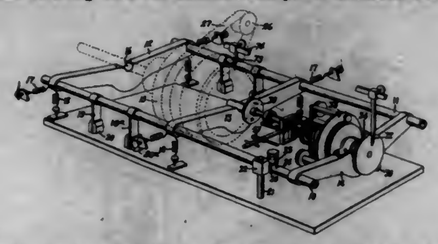


1. In a machine of the character described, the combination of a supporting frame, means carried by the frame for positively pulling a length of weight material through the machine from a source of supply, which means is in constant clamping engagement with the material, a means carried by the frame whereby a measure of the length of weight material so moved may be ascertained, a knife carried by the frame for cutting off said length of material, and means for restoring the measuring means to its initial position.

1,876,526. DYNAMIC BALANCING MACHINE. ERNEST L. THEARLE and ALBERT B. HUBBARD, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed July 23, 1931. Serial No. 552,776. 18 Claims. (Cl. 73—51.)

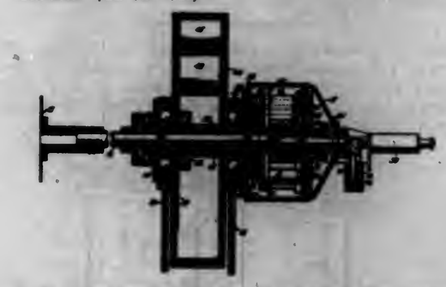
1. In a balancing machine, the combination of a base, a support for the body being balanced, an elastic sus-

pension for the support carried by the base, a means for rotating the body at any desired speed, a member carried by the support and rotating in synchronism with the body, a pair of weights in spaced relation carried by and rotating with the member, and power actuated mecha-



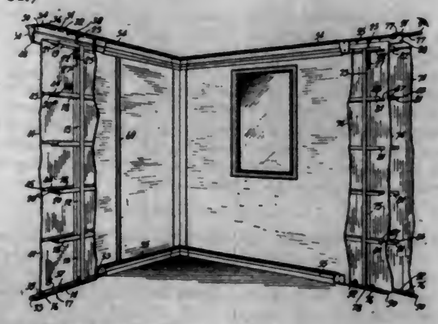
nism operable while the member is rotating for either changing the angular relation of the weights one with respect to the other or simultaneously moving the weights as a unit to change their phase relation with respect to the unbalanced mass of said body.

1,876,527. BALANCING HEAD. ERNEST L. THEARLE and ALBERT B. HUBBARD, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 14, 1931. Serial No. 557,150. 11 Claims. (Cl. 73—51.)



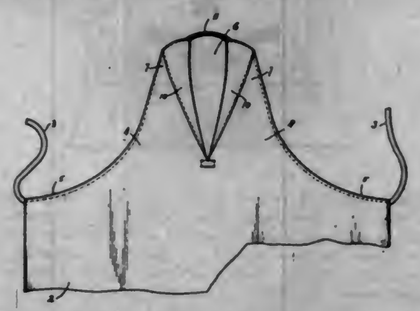
1. In a head for a balancing machine, the combination of a rotary supporting means, a driving shaft therefor, a pair of weights carried by the supporting means, devices for moving the weights on the supporting means independently of the rotary movement thereof, means for actuating the devices, magnetic means controlling the operation of the actuating means, and a lock for the magnetic means which must be released before the latter can operate.

1,876,528. INTERIOR BUILDING WALL STRUCTURE. HUGO L. WALTERS, Cleveland, Ohio. Filed July 27, 1931. Serial No. 553,386. 19 Claims. (Cl. 189—34.)



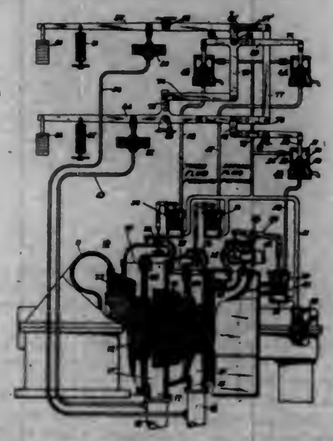
17. A building wall comprising a rigid framework, metal panels for the opposite sides of said framework, means for suspending said metal panels from said framework in non-contacting spaced relation, insulating means disposed between said framework and suspending means whereby no metal-to-metal contact is obtained between said metal panels and framework, and insulating means disposed between the panels and extending substantially throughout the area of the wall.

1,876,529. BIB APRON. ALBERT A. WALLMUTH, Chicago, Ill., assignor, by mesne assignments, to Minneapolis Linen Supply Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 11, 1932. Serial No. 604,498. 1 Claim. (Cl. 2—51.)



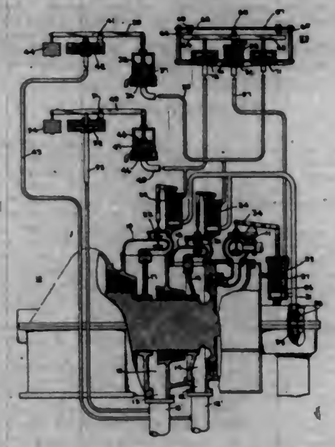
An apron having a high-cut bib portion provided with an upper curved edge and a centrally arranged slit extending downwardly in said bib portion through said edge, the flaps formed in the fabric by said slit being turned outwardly along diverging lines to form a V-shaped opening and reinforcing lapels for the bib straps upon each side of said opening, the upper ends of said lapels being flush substantially with the corresponding ends of said straps and stitched thereto, and a bib supporting band having its ends connected to said straps at the inner ends thereof and curved to merge into the curvature of the edges of said strap ends, said upper ends of said lapels serving to reinforce the upper ends of said straps which constitute continuations of the bib supporting band.

1,876,530. TURBINE CONTROL MECHANISM. OZRO N. BRYANT, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,988. 9 Claims. (Cl. 60—67.)



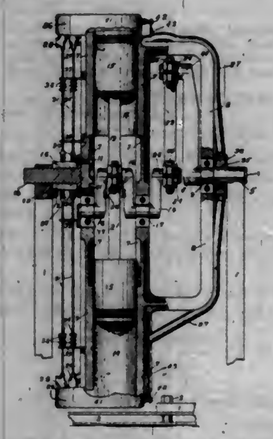
1. The combination with a multi-stage prime mover having admission valve means, means providing communication between the exterior of the prime mover and a plurality of intermediate pressure stages and a valve means controlling the flow of motive fluid at each of said intermediate pressure stages, of a regulating mechanism for each of said last-mentioned valve means comprising means providing a fluid pressure varying in consequence of variations in demand for flow through either of the communicating means and means responsive to said fluid pressure for controlling the valve means.

1,876,531. TURBINE CONTROL MECHANISM. OZRO N. BRYANT, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1930. Serial No. 478,929. 3 Claims. (Cl. 60—67.)



1. The combination with an elastic fluid prime mover having an admission valve and extraction or admission openings communicating with two intermediate-pressure stages therein, of a governing system therefor comprising means associated with each of said pressure stages for providing a fluid pressure varying in response to the pressure at said stage and for regulating the flow of fluid at the pressure stage in response to said variable fluid pressure, means responsive to both of said variable fluid pressures for providing a third variable fluid pressure, and means responsive to said third variable fluid pressure for regulating said admission valve.

1,876,532. INTERNAL COMBUSTION ENGINE. LORIN D. MCCLEARY, Indianapolis, Ind. Filed Sept. 6, 1929. Serial No. 390,741. 5 Claims. (Cl. 74—14.)



1. The combination of a frame rotatable on an axis, a crank-shaft journaled in said frame in parallel alignment with the axis of said frame, a pivot fixed in relation to said axis and in the plane of rotation of said frame, a member having one end pivotally attached to a crank-pin of said crank-shaft and the other end pivotally attached to said fixed pivot.

Patents Nos. 1,876,533 to 1,877,755

THE OFFICIAL GAZETTE
OF THE
United States Patent Office

Vol. 422—No. 2 TUESDAY, SEPTEMBER 13, 1932 Price—$10 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $10.00 per annum; including annual index, $11.50; single numbers, 25 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of September 13, 1932	305
Adverse Decisions in Interference	305
Notice Concerning Final Rejections	305
Notice—Final Fees	305
Applications Under Examination	306
Decisions of the U. S. Courts—	
In re Watson and Munes	307
In re Cerny and Cerny	307
In re Jones	308
In re Wesslblad	309
In re Hoffman	309
In re Milner	310
In re Jones	311
Lothrop and The Timken Roller Bearing Company v. Thomas E. Robertson	312
Patent Suits	313
Trade-Marks Canceled	314
Interference Notice	314
Trade-Marks Published (129 Applications)	315
Trade-Mark Registrations Granted	332
Trade-Mark Registrations Renewed	340
Labels	342
Prints	342
Reissues	343
Designs	345
Patents Granted	353

Issue of September 13, 1932

Trade-Marks	200	No.	297,309 to No.	297,508, inclusive.
T. M. Renewals	45			
Labels	83	No.	41,147 to No.	41,179, inclusive.
Prints	5	No.	13,904 to No.	13,908, inclusive.
Reissues	7	No.	18,593 to No.	18,599, inclusive.
Designs	37	No.	87,737 to No.	87,773, inclusive.
Patents	1,223	No.	1,876,533 to No.	1,877,755, inclusive.
Total	1,550			

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,735,844, E. L. White, Duplex radio communication system, decided August 4, 1932, claims 1, 2 and 3.

Pat. 1,751,722, F. S. Bitgood, Burner, decided July 25, 1932, claims 1 and 4.

Pat. 1769,117, R. W. Davenport, Refrigerating and ice making apparatus, decided August 4, 1932, claims 1, 2 and 4.

Pat. 1,850,853, W. P. Murphy, Grab iron for railway cars, decided August 23, 1932, claims 1, 2, 3 and 4.

Notice
Concerning Final Rejections

August 13, 1932.

The attention of the Examiners is again called to the fact that Principal Examiners are expected to personally consider every application which is up for the *third* official action, with a view of finally concluding its prosecution either by allowance or final rejection, whenever this can reasonably and justly be done; see notice of October 11, 1930, Glascock's Manual, page 218. As stated in said notice, the Principal Examiners should impress their assistants with the fact that the *shortest path* to the final disposition of an application is by *finding the best references on the first search* and carefully applying them. For fear this may be misunderstood, let it be stated that the Commissioner looks with disfavor upon final rejection upon the second action where the applicant has changed his claims either by substitution or amendment in such a manner as to show that he is making a bona fide effort to convince the Examiner that the application should be allowed.

Attorneys are urged to cooperate with the Office by doing their utmost to carry out the spirit of the foregoing notice to the end that the Office may bring all of its work up to date.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Notice—Final Fees

OWING TO THE RECEIPT OF 12,549 FINAL FEES (INSTEAD OF THE USUAL 4,000) DURING THE FOUR WEEKS PRECEDING JULY 31, THE DAY THE FINAL FEE WAS INCREASED TO $30, INCLUDING THE RECEIPT OF 6,510 FINAL FEES THE LAST WEEK, IT BECOMES NECESSARY TO DEFER THE ISSUANCE OF PATENTS ON WHICH THE FINAL FEES ARE PAID FROM SEPTEMBER 15 UNTIL OCTOBER 31.

NOTICE IS THEREFORE GIVEN THAT THE PATENT OFFICE RESERVES THE RIGHT TO DEFER THE ISSUANCE OF ANY PATENT, ON WHICH THE FINAL FEE IS RECEIVED FROM SEPTEMBER 15 TO OCTOBER 31, UNLESS AT THE TIME OF PAYMENT OF THE FINAL FEE A WRITTEN SHOWING IS MADE THAT IT IS NECESSARY TO HAVE THE PATENT ISSUE ON A SPECIFIED DATE.

Condition of Applications Under Examination at Close of Business August 27, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 72,271; Trade-Mark Division, 888. Oldest new case, Feb. 20, 1932; oldest amended, Feb. 20, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	May 28	May 31	449
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Apr. 28	Apr. 30	912
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 10	May 17	713
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 26	June 4	446
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 9	May 10	397
4898 C	6. LEWERS, A. M., Carbon Chemistry	Mar. 3	Mar. 4	2,043
5725	7. JARBOE, C. G., Optics; Photography	Mar. 29	Mar. 29	1,444
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Apr. 2	Apr. 20	1,062
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	June. 1	June 2	762
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 29	Mar. 30	891
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 14	Apr. 25	662
7701	12. HENRY, C. C., Machine Elements	May 14	May 11	594
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 14	Apr. 14	1,068
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	May 7	May 14	762
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 27	Mar. 27	1,891
5612	16. SPENCER, C. J., Telegraphy; Telephony	May 5	May 5	934
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 5	Mar. 5	1,411
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Apr. 28	Apr. 29	655
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Feb. 29	Mar. 7	1,780
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 10	May 10	629
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 12	Apr. 14	872
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	May 12	May 25	608
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Mar. 4	Mar. 1	862
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	May 6	May 13	649
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 12	Mar. 15	1,429
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 2	Feb. 25	1,067
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	May 1	May 2	962
4628	28. BENSON, A. R., Internal-Combustion Engines	Mar. 7	Mar. 9	1,372
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Feb. 27	Feb. 29	906
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 20	Apr. 25	842
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Mar. 4	Mar. 7	1,515
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	May 5	May 3	804
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 27	Feb. 27	2,337
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 28	Mar. 30	852
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 27	June 29	424
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Mar. 1	Mar. 10	1,620
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 21	Mar. 28	1,168
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 15	June 16	196
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 2	Mar. 2	1,473
7880	40. OBERLIN, J. J., Receptacles	Apr. 5	Apr. 7	2,169
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel? ..l-tutes; Railway Draft Appliances; Spring Devices.	May 31	June 20	570
5882	42. CUTTING, H. O., Electric Signaling	Mar. 3	Mar. 10	1,317
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 11	Apr. 11	1,420
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 27	Feb. 29	1,808
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Apr. 30	Apr. 30	989
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	May 7	May 2	634
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 2	Mar. 31	1,986
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Mar. 25	Mar. 25	779
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 2	Mar. 2	1,557
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Mar. 1	Mar. 2	2,184
5628	51. BACKUS, C. D., Radiant Energy	Apr. 11	Apr. 11	1,186
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	June 3	June 3	790
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	June 14	June 17	483
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Mar. 6	Mar. 6	1,110
6883	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	June 18	June 18	345
	{Designs	Aug. 8	Aug. 18	117
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 10	Mar. 16	1,473
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 22	Apr. 20	674
5605	58. DOWELL, E. F., Abrading; Typewriting	Feb. 29	Mar. 1	1,266
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Feb. 20	Feb. 20	1,777
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Mar. 4	Mar. 5	1,412
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Mar. 4	Mar. 9	1,353
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Mar. 12	Mar. 12	1,773
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Mar. 3	Mar. 3	1,456
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Apr. 30	May 9	545
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Mar. 3	Mar. 3	1,595
2099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—{Trade-Marks	July 30	Aug. 13	800
	{Labels and Prints	Aug. 1	Aug. 12	88

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE WATSON AND MUNCZ

No. 2,907. Decided May 23, 1932

PATENTABILITY—TRUCK HAVING CHANNELED SIDE MEMBERS.

Claims for a truck having channeled side members *Held* patentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Frank B. Fox, Messrs. Fraley & Paul, and *Mr. Charles L. Sturtevant* for Watson and Muncz.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

We are asked in this appeal to reverse the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner in his rejection of claims 2 and 5 in an application for a patent relating to a warehouse or hand truck.

Claims 2 and 5 follow:

2. A truck comprising channeled side members and channeled cross members with the channel sides turned and flattened inward under the webs at the side members, the thus flattened portions of said cross members externally overlapping the channel webs of the side members and being secured to said webs.

5. A truck comprising channeled side members, a channeled cross member with flattened portions externally overlapping and secured to the channel webs of said side members, V-bent legs with their upper ends secured to said side members, and a strap bar brace with midportion secured to that of said cross member and ends twisted into the planes of portions of said legs and secured thereto.

The references relied upon are: Mercer, 869,922, November 5, 1907; Hambay, 1,196,776, September 5, 1916.

The construction of appellants' device is sufficiently shown by the claims. Claim 2 is specifically drawn to flattening the portions of the cross members at the point where they are fastened to the side members. The board rejected this claim on Mercer, the structure of which differed from appellants' structure only in that in Mercer the sides of the channel at the ends where they are fastened to the side members are cut away, while in appellants' disclosure they are turned inward and flattened. It is argued that this feature of appellants' structure makes the truck stronger. The Board concluded that the Examiner was right in his holding that this was not a patentable distinction but was merely an obvious mechanical one.

Claim 5 was rejected by the Examiner on Mercer in view of Hambay. The two features to which the claim is directed are first, that feature which is described in claim 2 as the turning inward of the sides of the cross member; second, the V-bent legs with their upper ends secured to the side members, and a strap bar brace with midportion secured to the cross member and the ends of the same being twisted so as to be easily attached to the cross member and side member.

The first portion of the claim is anticipated by Mercer. With reference to the second portion of the claim, the Board called attention to the fact that Mercer shows two separate leg braces and that Hambay shows a single strap bar secured at its midportion to the cross member and having its ends secured respectively to the two legs, and called attention to the fact that in Hambay the ends of the leg braces are not twisted. The Board saw no invention in twisting the ends of the members in appellants' device to bring them into the plane of the sides of the legs to which they are attached.

We agree with the decision of the Board and the reasons assigned therefor, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE CERNY AND CERNY

No. 2,988. Decided May 23, 1932

INTERFERENCE—PATENTABILITY—CORN SHELLERS.

Claims for a corn sheller *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. M. E. Jones for Cerny and Cerny.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

All of appellants' claims (4 to 8 inclusive) for a patent for a corn sheller were rejected by the Examiner, which rejection was affirmed by the Board of Appeals. Appeal to this court is taken from the decision of the board.

Claim 5 is regarded as illustrative and reads:

5. A machine of the character set forth, comprising a wheel supported chassis, an engine carried by the chassis, a propeller shaft including a section connected to the engine and a section connected to certain of the wheels, a clutch connecting the shaft sections, clutch operating means, a pulley carried by said first shaft section, a corn sheller mounted on the chassis and including a main shaft provided with a pulley, a belt passing about the pulleys, and a belt tightener.

The references relied on are: Cook, 827,851, August 7, 1906; Tschantz, 1,155,173, September 28, 1915.

The application relates to a corn sheller having a wheel-supported chassis carrying an engine and cross members which support a propeller shaft connected with the engine and with a section connected to certain of the wheels of the vehicle. The combination contains a clutch member connected with the shaft sections which is operated by a lever to connect or disconnect the shaft sections. On the chassis is a corn sheller containing a main shaft and an impeller shaft, and provided with pulleys, a belt and a belt tightener.

The Board of Appeals rejected the claims on the ground that it was old to combine a motor truck with a corn husker or a thresher as was shown in the two above references, and that it was not inventive to substitute a corn sheller for a corn husker or thresher and that the use of a belt, pulley and belt

tightener was without invention over the prior use of a sprocket chain drive. The Board further concluded that it was not inventive to provide universal joints in the drive shaft.

The applicants urge here that their alleged invention rests in their particular combination, parts of which they claim are new, that is to say, no one machine has even been constructed making use of the same units or installations, and that their particular combination has resulted in a corn sheller which can be operated by one man, is speedy on the road, and easy to move backwards and forwards.

The Solicitor for the Patent Office cites *Tom Huston Mfg. Co. et al. v. Clyde Iron Works Sales Co.*, 32 F.(2d) 558, 387 O. G. 5, where the Circuit Court of Appeals, Sixth Circuit, discussed the validity of combination claims in a patent and said:

> • • • Their validity is urged upon us upon the ground that there is invention in combining the motor power of a tractor with a log and stump pulling mechanism. We do not think so.

We agree with the conclusion reached by the Board of Appeals that there is no invention shown in appellants' application over the prior art.

Appellants urge here at considerable length that each of the claims calls for a propeller shaft and cite the definition of a propeller shaft in Dykes' Automobile and Gasoline Engine Encyclopedia, page 1077, of the 16th edition, published in 1931 by Goodheart-Willcox Co., Chicago, Ill., which definition is as follows: "the drive shaft from the transmission to the rear axle." They contend that the prior art cited has no such drive shaft nor its equivalent and that, therefore, their claims are not anticipated by the prior art.

The shafts which carry the power from the engine and act to propel the vehicles in the prior art, we think, under the ordinary acceptance of the meaning of the term, may be properly regarded as propeller shafts. The mere fact that appellants' propeller shaft is somewhat differently constructed than those of the references makes no difference, under the circumstances of this case.

We agree with the conclusion reached by the Board of Appeals and the reasons assigned therefor, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE JONES

No. 2,969. Decided May 23, 1932

PATENTABILITY—DETERGENT ARTICLE.

Claims for a detergent article into which soap is placed *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Ivan P. Tashof for Jones.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner in rejecting all of appellant's claims in his application for a patent for what is referred to as a detergent article, into which soap is placed, for use in the bath and elsewhere.

Appellant's device forms a solid chamberless sponge when it is empty. It is made by cementing the edges of two pieces of rubber, the flat sides of which fit together. A part of one end and the center of the two pieces are not cemented together, resulting in an opening for the soap to pass through and into the center. A receptacle for the soap in the interior of the sponge is thereby formed. As the soap becomes smaller, the elastic walls come nearer together, and when the soap is entirely removed, the sponge article as a whole is still usable and does not collapse. With this article, very small pieces of soap can be used.

The rejected claims are as follows:

16. A detergent article comprising in combination, an envelope consisting of two layers of sponge material secured together at flat surfaces to form a pocket, and detergent material in said pocket.

17. A refillable detergent article comprising in combination two layers of material secured together at coincident surfaces to form a pocket between them and an opening for said pocket, one of said layers comprising a porous spongy soft and resilient substance.

19. A refillable detergent article comprising in combination two separate flat slabs of sponge rubber secured together at the periphery of the slabs to form a pocket between the slabs, the securing of the two slabs being incomplete about the edges to leave an opening into the pocket of less width than the pocket.

21. A refillable detergent article comprising a sponge envelope having when empty a detergent receiving pocket the sides of which are normally in contact to form a solid sponge, said pocket having a constricted opening to the exterior of the sponge.

24. A refillable detergent article comprising an envelope of sponge material having at the periphery a thickness of material not greater than the total thickness over the pocket area.

The references relied upon are: Weston, 837,759, December 4, 1906; Hobbs, 1,326,265, December 30, 1919; Dessau, 1,469,917, October 9, 1923; Henry, 1,577,861, March 23, 1926.

Henry and Weston each contains a chamber for the soap which chamber is rectangular and has perpendicular walls. This chamber is collapsible when empty or when containing a piece of soap smaller than is required to fit the chamber. In Weston, Henry and Hobbs, the opening is secured by metal attachments.

Dessau shows a flat envelope consisting of a sheet of raw crepe rubber secured together along the edges to form a pocket for the soap. The material used is not the ordinary sponge rubber. Holes are made in the crepe rubber layers to permit the water to pass through.

Hobbs' article is composed of an upper and a lower part, with a cavity in each, which are joined together by a metal ring.

It is conceded that no reference nor combination of the references completely anticipates appellant's invention. The Board held that it would not require invention to so modify the structures in the references as to produce applicant's article.

We are of the opinion that the improvements made by appellant are useful and were not obvious, and that it required more than mechanical skill of one skilled in the art to make such improvements. At least there is considerable doubt as to whether or not the improvements were obvious and we, under the well known rule, resolve such doubt in favor of the applicant.

We think the appealed claims are allowable, and the decision of the Board of Appeals is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE WESSBLAD

No. 2,930. Decided May 23, 1932

PATENTABILITY—REFRIGERATING APPARATUS.

Claims for a refrigerating apparatus *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

BLAND, *J.*, specially concurring.

Mr. William G. McKnight, Mr. Loyd H. Sutton, and *Mr. Wm. T. Hedlund* for Wessblad.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting all of the claims in appellant's application, 23 to 26, inclusive, for a patent for an alleged invention relating to an air-cooled absorption refrigerating apparatus.

Appellant's apparatus is fully described in the appealed claims, of which 23 may be taken as illustrative:

23. Refrigerating apparatus comprising a generator, an absorber, a refrigerant condenser, an evaporator, all connected by conduits to form a closed system and a second system consisting of a closed hermetically sealed vaporization-condensation cycle comprising a chamber and an air-cooled condenser situated above said chamber and connected thereto, said second system containing a volatile liquid and said refrigerant condenser of the first-mentioned system being contained within said chamber of the second system.

The references are: Darlington, 854,276, May 21, 1907; Doherty, 1,518,053, December 2, 1924; von Platen-Munters (Br.), 202,602, March 27, 1924; von Platen-Munters (Br.), 1,609,334, December 7, 1926.

The sole issue before the court relates to the particular form of cooling means in combination with an absorption refrigerating apparatus.

In its decision, the Board of Appeals described appellant's apparatus and described and applied the references as follows:

> The cooling means comprises a closed system having a chamber in which the condenser and the absorber of the refrigerating system are located. This circuit also includes a coil so located as to be cooled by air. The closed circuit contains a liquid which is so chosen that its boiling point is sufficiently low to permit volatilizaton by the heat received from the condenser and absorber. The gases so produced condense in the cooling coil and return as liquid to the chamber surrounding the condenser and absorber. In the patent to von Platen et al. the condenser and absorber are located in chambers through which cooling water is circulated. This water does not travel in a closed cycle and is not evaporated.
>
> The Examiner has cited the patent to Doherty as disclosing a refrigerating system in which the cooling water for the condenser and absorber circulates through a closed path. Appellant, however, denies that this is the operation in Doherty.
>
> The patent to Darlington discloses a cooling system of the same type as employed by the appellant. This system is illustrated in the patent as used for cooling a transformer.
>
> It is the Examiner's position that there would be no invention in substituting the Darlington cooling system for the water cooling system shown in von Platen since Doherty discloses a closed circuit cooling system for the condenser and absorber of a refrigerating system. It is not seen that the disclosure in Doherty is especially helpful since this reference fails to disclose the type of cooling system defined in the claims.
>
> Appellant urges that the Darlington patent is from a non-analogous art and therefore not available as a reference. It is noted that the Darlington patent is directed particularly to the cooling system employed whether used for cooling electrical or other apparatus. The patent states that the invention relates to methods of conveying heat away from or cooling electrical and other heat-producing devices. It further states that it should be understood that the method may be applied to the cooling of any heat-producing or heat-radiating devices whether the heat is produced electrically or otherwise. The claims in the patent are broadly drawn to a temperature-regulator for heat producing devices; see especially claims 4 and 5. In view of this disclosure in Darlington it seems to us clear that appellant has not exercised invention in the substitution of this old type of cooling device, which is of general application, for the cooling device for the condenser and absorber of the refrigerating system disclosed in the patent to von Platen et al. and also in the British patent relied upon as a reference.

None of the references anticipate appellant's apparatus. The sole question, therefore, is whether invention was involved in modifying the von Platen disclosure, in view of the other references, by substituting for its cooling system the cooling apparatus disclosed in the patent to Darlington.

That appellant's apparatus is novel and useful, is not denied. It likewise is not denied that appellant has made a distinct advancement in the absorption refrigerating art. It is true that the patent to Darlington, as stated by the Board of Appeals, and argued by the Solicitor for the Patent Office, relates to temperature-regulators, and is not limited to electrical transformers, described in the patent. Nevertheless, considering the references in connection with appellant's combination, its admitted novelty, usefulness, and the distinct advancement it made in the absorption refrigerating art, we are out of accord with the conclusion reached by the Patent Office tribunals. We think the claims are patentable.

The decision of the Board of Appeals is, accordingly, reversed.

Reversed.

BLAND, *J.*, (specially concurring):

I concur in the result for the reason that there is at least a very grave doubt as to the patentability of the claims, and it has been made clear to me that the board did not resolve such doubt in favor of the applicant.

U. S. Court of Customs and Patent Appeals

IN RE HOFFMAN

No. 2,968. Decided May 23, 1932

DESIGNS—PATENTABILITY.

A design for a cabinet stove *Held* not inventively different from the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John D. Rippey and *Mr. Lawrence C. Kingsland* for Hoffman.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying appellant's application for a patent for an alleged invention relating to a design for a "cabinet stove."

The claim is: "The ornamental design for a cabinet stove, showing my new design."

The references are: Lanzkroner, 1,440,304, December 26, 1922; Hoffman, 1,453,710, May 1, 1923; Fiske, 1,632,283, June 14, 1927.

The patent to Lanzkroner, as held by the tribunals of the Patent Office, discloses a refrigerator quite similar to appellant's design.

The patent to Hoffman was cited by the Primary Examiner to show that the use "of rectangular shaped compartments" is "old in the stove art."

The Board of Appeals referred to that patent as showing a "cabinet construction applied to a part of a stove."

The patent to Fiske discloses a refrigerator cabinet provided with three doors. The doors are not shown, but, as stated by the Board of Appeals, from the position of the hinges disclosed, it is apparent that they are of the conventional type.

Appellant discloses a structure designed to serve as a cabinet for a stove.

The issue in the case was stated by counsel for appellant in his brief as follows:

The issue in this case is whether it involved invention to take a cabinet form known for centuries and modify it to make a cloak for a cooking stove, known at least for an hundred years, under all of the circumstances including the tireless efforts of the stove manufacturers to arrive at designs for stoves more acceptable than the existing forms, with the component elements before their eyes but without perceiving the solution of the problem, together with an immediate and substantially universal acceptance of the fruits of the inventor's efforts by the industry.

Counsel for appellant concedes that the adaptation of an old cabinet to a new use, no matter how convenient, useful, or beautiful it may be in its new use, is not invention. It is contended, however, that the following language of the Supreme Court in the case of *Smith* v. *Whitman Saddle Company*, 148 U. S. 674, 679, 63 O. G. 912, has particular application to the issues here:

If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty and the result is in effect a new creation, the design may be patentable.

In order to be understood, the quoted excerpt should be read in connection with other pronouncements in the court's opinion. In discussing the law pertaining to mechanical, as well as design, patents, the court quoted with approval the following from the case of *Northrup* v. *Adams*, Fed. Cor. No. 10,328, 12 O. G. 430:

To entitle a party to the benefit of the act, in either case, there must be originality, and the exercise of the inventive faculty. In the one, there must be novelty and utility; in the other, originality and beauty. Mere mechanical skill is insufficient. There must be something akin to genius—an effort of the brain as well as the hand. The adaptation of old devices or forms to new purposes, however convenient, useful or beautiful they may be in their new role, is not invention.

It may be, as argued by counsel for appellant, that the involved design differs somewhat from the designs disclosed in the references. However, we are of opinion that those differences are not substantial; that appellant's design does not produce a substantially different æsthetic effect; and that it required nothing more than the skill of the artisan, or the designer, to so modify the references as to obtain appellant's design.

We think the tribunals of the Patent Office reached the right conclusion, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MILNER

No. 2,990. Decided May 23, 1932

PATENTABILITY—APPARATUS FOR POWER REGULATION.

Claims for an apparatus for power regulation *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Paul Carpenter, *Mr. Brendan J. McCann*, and *Mr. Ira J. Wilson* for Milner.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting 48 claims in appellant's application for a patent for an alleged invention relating to improvements "in method of and apparatus for power regulation," particularly for regulating the operation of locomotive steam engines, which, in operation, are subjected to constantly changing conditions of load, speed, etc.

On the day of the oral arguments, counsel for appellant filed in this court a written election to prosecute the following claims only: apparatus claims 15, 18, 19, 20, 50, 105, and 107, and withdraw all of the other claims involved in this appeal. Accordingly, we will consider only the claims above enumerated. Claims 20, 50, and 107 are sufficiently illustrative. They read:

20. In an engine, the combination of a speed sensitive member, a valve gear, and means for regulating a supply of fuel, and said valve gear, by the action of said speed sensitive member, and means for varying the effective action of said speed sensitive member on said valve gear and fuel supply.

50. In a steam engine having a valve motion cut-off a water supply for the boiler thereof, and means for operatively automatically controlling the said valve motion cut-off and water supply in accordance with the rate of speed of the engine.

107. In a device of the character described, in combination, a source of fluid under pressure, an engine operated thereby, a valve gear mechanism, means for controlling the supply of fuel, a speed sensitive device and interconnecting means adapted to actuate said valve gear mechanism and said supply of fuel accordingly, independently of the pressure of such fluid, and means for setting said interconnecting means for varying the action by said speed sensitive device upon said valve gear mechanism.

The references are: Prall, 426,060, April 22, 1890; Christensen, 542,702, July 16, 1895; Hoadley, 586,384, July 13, 1897; Thomson, 733,093, July 7, 1903; Drompp, 782,902, February 21, 1905; Clark, 807,419, December 12, 1905; Lovegrove, 807,478, December 19, 1905; Shepherd, 1,016,857, February 6, 1912; MacFarren, 1,116,346, November 3, 1914; Le Blanc, 1,141,968, June 8, 1915; Kasley, 1,231,261, June 26, 1917; Brownback, 1,277,541, September 3, 1918; Milner, 1,372,445, March 22, 1921; Muchka, 1,559,730, November 3, 1925.

Claim 50 was rejected by the Patent Office tribunals on the ground that appellant's specification did not adequately disclose, as stated by the Primary Examiner,

means for coordinating control features other than the fuel feed and cut-off mechanism with the speed of the locomotive,

and all of the claims, including claim 50, were rejected on the ground that they lacked invention in view of the prior art.

Appellant contends that he has combined in one apparatus—

speed control means for actuating the valve gear mechanism, means for varying the operation of this means, and to simultaneously, by the speed responsive means, control the supply of fuel, air, water and the like to the locomotive boiler.

Although conceding that appellant's combination was novel and useful, the tribunals of the Patent Office held that each of its elements was old; that the combination was plainly suggested by the references; and that, therefore, nothing more than ordinary mechanical skill was required to produce it.

In its decision, affirming the decision of the Primary Examiner, the Board of Appeals, in an exhaustive opinion, among other things, said:

Appellant's patent 1,372,445 discloses cut-off linkage controlled by the speed of the locomotive and while maximum draw-bar pull is stated to be the object of the invention, it appears that the structure operates in substantially the same way as the speed controlled cut-off mechanism of this application and would necessarily tend to effect economies in steam consumption. As we see it the extension of the idea of speed control to embrace other mechanism, normally manually controlled, as to the broad conception at least, is obvious, though it might require invention to work out a practical solution of this broad idea.

The Le Blanc patent shows a steam engine in which the water, fuel and air supply is controlled by speed responsive means. In discussing this patent appellant asserts that when running light a large quantity of fuel, water and air will be supplied the boiler and that under load the reverse will be true. As we read the patent the reverse is true as to both assertions. See lines 44 to 48, page 2. This patent clearly shows an embodiment of the idea of controlling the fuel, air and water automatically from the speed of the engine and we see nothing broadly patentable in incorporating this form of control in an engine of a particular type such as a locomotive engine nor in one which already has a speed controlled link motion such as in appellant's prior patent.

The Lovegrove patent shows it old to control a damper in accordance with engine speed.

MacFarren controls a throttle by speed responsive mechanism and regulates the cut-off mechanism indirectly through steam pressure.

The Muchka patent shows it old to interconnect the feed water control and valve gear. We see nothing inventive in controlling the valve gear of this patent by speed responsive mechanism such as used in appellant's patent.

The remaining references show it old to interconnect various controls and are in the main merely cumulative. We see no reason for discussing them individually.

It is vigorously contended by counsel for appellant that the Patent Office tribunals were wrong in holding that it was obvious to combine the various references; that the involved combination is new and useful; and that, therefore, appellant is entitled to a patent.

The question to be determined is whether appellant's combination, new and useful though it may be, involves invention. If it does, appellant is entitled to a patent.

We have given careful consideration to the various contentions made by counsel for appellant. However, we are of opinion that the involved combination was plainly suggested by the references, and that nothing more than ordinary mechanical skill was required to produce it. Holding these views, we deem it unnecessary to discuss other issues presented by the parties.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE JONES

No. 2,979. Decided May 23, 1932

PATENTABILITY—BATTERY LAMP.

Claims for a battery lamp *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Byrnes, Townsend & Potter, *Mr. C. H. Potter*, *Mr. R. E. Parker*, *Mr. E. L. Greenwald*, and *Mr. F. D. Brooker* for Jones.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting claims 4 to 7, inclusive, 16, 17, 18, 20 to 24, inclusive, 26 and 27 of appellant's application for want of invention in view of the prior art.

Appellant, upon oral argument, waived the appeal with reference to claims 4, 16, 17, and 22, and therefore the decision of the Board of Appeals as to such claims will be affirmed without further consideration.

Of those remaining, claim 18 is illustrative and reads as follows:

18. In a battery hand lamp, the combination with a lamp bulb, and a battery in circuit with said bulb, of a casing enclosing the battery and having a supporting base at one end, vertically extending bearings carried by the casing, and a handle slidably mounted in said bearings for movement in a plane intersecting the axis of said bulb and between an open carrying position and a closed position in which it conforms to the top end of the casing, said handle terminating short of the bottom end of said casing whereby said lamp may stand on said supporting base both when said handle is in open position and when it is in closed position.

The references relied upon are: Rhind, 520,659, May 29, 1894; Schmuck, 613,888, November 8, 1898; Theurer, 918,222, April 13, 1909; Langer et al. (Austrian), 66,324, August 25, 1914; Kahn, 1,315,556, September 9, 1919; Fertman et al., 1,316,568, September 23, 1919; Rogge (German), 361,054, February 2, 1922; Graff, 1,373,611, April 5, 1921; Lyhne, 1,432,348, October 17, 1922; Kahn et al., 1,544,236, June 30, 1925.

The alleged invention is described by the Board of Appeals in its decision as follows:

This application discloses a battery lantern wherein a casing of rectangular form of sufficient dimensions to hold three small cylindrical dry cells, two of which stand in vertical position and the remaining one lies in horizontal position across the tops, together with a lamp casing, is employed. The casing is divided at the top and sides and hinged at the bottom. Small lugs are struck up from the bottom of sufficient depth to serve as feet to keep the hinge member from contact with a supporting surface when the lantern is placed thereon. Suitable elements are provided within the casings so that the batteries may be supported in proper position, which elements also serve as terminal contacts to complete the electrical circuit of the batteries. These are so arranged that the batteries may be inserted only in proper directional relation in respect to their poles. A latch and a guard therefor serve to lock the casing in closed position, and a slidable *bale* serves as a handle. The several features are set forth in different association as may be observed by the above representative claims.

While we believe that appellant's battery lamp is an improvement over any lamp shown in any single reference, we are of the opinion that the features of appellant's claims, which he contends lend patentability thereto, are all within the range of mechanical skill rather than of invention; that is to say, an

inspection of the references would enable one skilled in the art so to modify and combine the various features shown therein as to produce appellant's structure covered by the claims in issue, without the exercise of the inventive faculty.

No useful purpose would be served in discussing in detail the applicability of the references to said claims.

With respect to appellant's contention that the references Schmuck and Theurer relate to bails for cans, and that this is a nonanalogous art with respect to flashlight casings, this Court, in the case of *In re Voorhees*, 17 C. C. P. A. (Patents) 1162, 40 F. (2d) 773, 399 O. G. 7, held that a bail for a container of a battery used in a flashlight is not remote from the art wherein bails are provided for cans.

For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

Court of Appeals of the District of Columbia

LOTHROP AND THE TIMKEN ROLLER BEARING COMPANY *v.* THOMAS E. ROBERTSON

No. 5,300. Decided June 6, 1932

1. PATENTABILITY—RES ADJUDICATA.

The doctrine of *res adjudicata* or estoppel by former judgment applies to adjudications of the Patent Office tribunals.

2. SAME — SAME — FAILURE TO APPEAL IN THE PATENT OFFICE.

Where certain claims were proposed in an interference but were held unpatentable over the prior art and no appeal was taken from the decision but subsequently substantially the same claims were presented ex parte, *Held* that the non-patentability of such claims is res adjudicata.

3. SAME—PROCESS CLAIMS UNPATENTABLE—ARTICLE CLAIMS DEFINED BY THE PROCESS.

Where claims for a process of making an article are unpatentable, *Held* that claims for the article which define the article by that process are also unpatentable.

APPEAL affirmed.

Mr. Samuel Herrick and *Mr. James A. Carr* for Lothrop et al.

Mr. T. A. Hostetler for the Commissioner of Patents.

Before MARTIN, Chief Justice, and ROBB, VAN ORSDEL, HITZ, and GRONER, Associate Justices.

ROBB, *Associate Justice:*

Appeal from a decree in the supreme court of the District dismissing appellants' bill filed under the provisions of sec. 4915, R. S. (tit. 35, U. S. C., sec. 63).

Two patent applications are involved: No. 488,260 (filed July 28, 1921) for a process for making conical rollers used in roller bearings, and No. 530,643 (filed January 20, 1922) for the roller produced by that process.

It is conceded that conical or taper roller bearings were not originated by appellant Lothrop. The claim is that he has devised a method by which rollers for such bearings may be made much more economically than by any previously known method.

The process consists in coining or forging a substantially cylindrical slug in a tapered die or dies to produce an unfinished roller of the size and taper desired, with depressions in the ends suitable for centering it in a grinding machine. The volume of the slug is approximately equal to the volume of the finished roller, a slight allowance being made for grinding. The slug is placed in the cylindrical bore of a lower die and is swaged in the partly cylindrical and partly tapered bore of the vertically movable upper die by pressure exerted by the plunger of the lower die, whereby the slug is shortened endwise and spread laterally to conform to the surface of the upper die. It is thus converted into a blank, and at the same time a central depression is formed in the lower end of the blank by an accurately centered projection on the face of the plunger. The blank is then subjected to pressure in another die by means of a plunger die and a knockout piece, having a projection adapted to form a centering depression on the upper end of the roller. The taper of the bores of the die is the same as desired for the finished product, so that the roller is forged to the desired shape. It is then carburized and hardened.

In the thirteen claims of the process application the operation is variously characterized as "coining," "forging," "upsetting," and "shortening and thickening" the slug. We reproduce counts 1, 2, 3, and 7 as illustrative of the group:

"1. The improvement in the art of making conical rollers, which consists in progressively coining a slug in a series of dies of which the last is of the size and taper desired for the roller.

"2. The process of making conical rollers which consists in coining a slug of substantially the same volume as the finished roller in a conical die or dies to form a green roller of approximately the size and shape desired for the finished roller and carburizing and hardening said green roller.

"3. The process of making conical rollers which consists in coining a slug in a conical die or dies to form a green roller of approximately the size and shape desired for the finished roller and with centering depressions in its opposite ends concentric with the axis thereof, carburizing and hardening said roller, mounting it on centering spindles entered into the end depressions thereof and grinding the surface thereof while thus centered."

"7. The process of making conical rollers for roller bearings which comprises shortening and thickening a cylindrical slug of substantially the same volume as the finished roller by pressure against the ends thereof while in a conical die of the size and taper of such roller."

From the decisions of the Patent Office tribunals, it appears that claims 1 and 2 of the application were formerly allowed and involved in Interference No. 47,230, *Lothrop* v. *Bock*. The operation characterized as "coining" in these two claims was then called "upsetting" and constituted counts 2 and 3 of the interference. Lothrop moved to dissolve the interference on the ground that Bock's operation was not "upsetting"; hence, that he could not make the claims of the issue. The Law Examiner held that "upsetting" did not correctly describe the operation of either party, but that the actual operations of both parties were essentially the same. The Law Examiner then allowed a motion to amend by adding new counts, differing from the former counts in the use of the word "forging" instead of "upsetting." Thereupon the French patent to Renault, No. 491,251, was brought to the attention of the Examiner, and he held it to be a statutory bar to Lothrop's right to a patent for the subject matter of the proposed counts. The Law Examiner ruled that proposed count 3 (substantially present claim 2) differed from proposed count 1 in the act of carburizing and hardening the green roller, which, in view of the prior art, did not involve invention. Thereupon the interference was dissolved, and neither party appealed.

Lothrop then attempted to prosecute his application ex parte. The Examiner held that claims 1 and 2 of the application are substantially the same as proposed claims 2 and 3 of the interference, differing only in the use of the word "coining" instead of "forging." The Examiner said:

Coining is understood to be that form of forging in which the article forged is entirely enclosed in, and completely fills the die cavity. * * * The applicant can not now obtain in an ex parte proceeding what he has been denied inter partes.

The Board of Appeals ruled that the rejected claims of this application are substantially the same as counts 2 and 3 of the Lothrop-Bock interference; that claim 7 is substantially the same as claim 1 of that interference. The Board said:

It is clear that the non-patentability of these claims has been passed upon and is res adjudicata.

The Board ruled that the other claims of the application, involving the formation of the centering depressions in the roller while being shaped in the die and the steps of carburizing and hardening the roller after it is formed, were not patentable in view of the prior art.

[1, 2] The doctrine of res judicata, or estoppel by former judgment, applies to adjudications of the Patent Office tribunals. *Blackford* v. *Wilder*, 28 App. D. C. 535; *In Re Marconi*, 38 App. D. C. 286. In *United States ex rel. Newcomb Motor Co.* v. *Moore*, 30 App. D. C. 464, 476, we expressly ruled that the remedy of a defeated party in an interference proceeding is by way of appeal; that—

he has no right whatever thereafter to prosecute the claims of the issue in an ex parte case.

See also *In re Capen*, 43 App. D. C. 342; *In re Doble*, 57 App. D. C. 10, 16 F. (2d) 350. The Patent Office correctly ruled, therefore, that the decision in the interference case as to the nonpatentability of these processes claims is res judicata.

[3] Coming now to consider the twenty article claims, we reproduce, as illustrative, claims 1, 4, and 12.

"1. A roller consisting of a slug upset endwise throughout its length and axially recessed in its ends inside a forming die."

"4. A die-formed roller for a roller bearing made by the upsetting of a slug against the side of a die of circular section, said roller being case-hardened and having its main bearing surface free from marks of finishing tools whereby the entire case resulting from the hardening operation is preserved in the finished roller."

"12. A roller having axial recesses in its ends, the rim portions of said recesses or one of them having conical bands concentric with the axis of the roller and said ends having marks as and for the purpose set forth."

These claims, as held by the Patent Office, define the article by the steps of the process set forth in the prior claims hereinabove held to be unpatentable. In other words, these claims, if allowed, would result in a patent for substantially the same invention as that covered by the disallowed process claims. In considering the grounds of rejection, the Board of Appeals said:

The first ground is that the claims define the article by reciting the method of making it and therefore are not divisible from the claims in appellants' copending application Serial No. 488,260 for the method of making the roller. * * * As to the shape of the roller the claims of the instant case do not patentably distinguish from the prior art. The patents to Griffin and Huther show that it is old to provide tapered rollers of this character with axially located conical recesses in their ends. The patent to Miller shows a recessed end of a roller having a frustoconical band surrounding the recess. There would be no invention in duplicating this shape at both ends of the roller, in view of either Griffin or Huther. Nor would it be invention to use the shape disclosed by Miller, at the opposite ends of the roller shown in Fig. 12 of Griffin.

The decree is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,128,292. (See 1,231,764.)

1,150,298, F. C. Overbury, Shingle strip; 1,340,402, same, Method of making shingle strip, filed July 27, 1932, D. C., W. D. N. Y., Doc. 1465, *The Patent & Licensing Corp.* v. *National Mfg. Corp.*

1,187,228, A. J. Asch, Rheostat, filed Aug. 10, 1932, D. C., S. D. N. Y., Doc. E 70/244, *A. J. Asch* v. *Ward Leonard Electric Co.*

1,195,232, H. W. Kimes, Automatic cut-out for electric motors, C. C. A., 8th Cir. (St. Louis), Doc. 9329, *The McKays Co.* v. *Penn Electric Switch Co.* Decree affirmed Aug. 8, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuits for electron discharge devices; 1,128,292, E. H. Colpitts, Electric wave amplifier; 1,504,537, H. D. Arnold, Power limiting amplifying device, C. C. A., 2d Cir., Doc.—, *Western Electric Co., Inc.*, v. *S. Wellerstein.* Decree modified (notice Aug. 2, 1932).

1,807,733 (*a*), A. V. Gullborg, Lubricating apparatus; 1,807,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed July 26, 1932, D. C. Mass., Doc. E 3701, *Alemite Corp.* v. *L. Palder.* Same, D. C., S. D. N. Y., Doc. E 67/355, *Alemite Corp.* v. *Eastern Machine Co., Inc., et al.* Consent decree for plaintiff (notice July 22, 1932). Same, filed Aug. 3, 1932, D. C., S. D. N. Y., Doc. E 70/193, *Alemite Corp.* v. *L. Nath.*

1,807,733 (*b*), A. V. Gullborg, Lubricating apparatus; 1,807,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus; Re. 18,278, Re. 18,123, W. L. Morris, Grease feeder, filed July 25, 1932, D. C., S. D. Tex. (Houston), Doc. E 522, *Alemite Corp. et al* v. *G. W. Heiman.*

1,807,734, A. V. Gullborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, D. C. Minn. (Minneapolis), Doc. E 812, *The Bassick Mfg. Co.* v. *Gray Co., Inc.* Consent decree July 28, 1932.

1,807,734. (See 1,807,733 (*a*) and (*b*).)

1,328,107, S. B. Waring, Expansion joint strips; 1,339,094, F. C. Bowman, Preformed expansion joint strip, filed July 27, 1932, D. C., E. D. Mich. (Detroit), Doc. 5491, *Construction Materials Patents, Inc.* v. *S. Bottenfield* (*Asphalt Specialty Co.*).

1,339,094. (See 1,328,107.) 1,340,402. (See 1,150,298.)

1,426,754. (See 1,231,764.)

1,475,980. (See 1,807,733 (*a*) and (*b*) and 1,807,734.)

1,492,977, Gore & Lawson, Fibre rope, C. C. A., 3d Cir., Doc. 4792, *R. S. Lawson* v. *Whitlock Cordage Co.* Decree affirmed Aug. 9, 1932.

1,504,537. (See 1,231,764.)

1,535,849, M. Noda, Clinical thermometer tubing, filed Aug. 12, 1932, D. C., E. D. N. Y., Doc. E 6522, *Alaskan Ken-Onki Kabushiki Kaisha, et al.* v. *Nurnberg Thermometer Co., Inc.*

1,564,378, H. Stein et al., Bleached and dyed furs; 1,573,200, same, Process of bleaching and dyeing furs, filed Aug. 2, 1932, D. C., E. D. N. Y., Doc. E 6512, *Steinfur Patents Corp.* v. *Michael Miller Fur Dyeing Corp. et al.*

1,573,200. (See 1,564,378.)

1,601,465, 1,770,830, J. G. Barbour, Trickling filter floor construction, filed July 30, 1932, D. C., N. D. Ohio, E. Div., Doc. 4881, *The Metropolitan Paving Brick Co.* v. *American Vitrified Products Co. et al.*

1,605,411. (See 1,650,353.)

1,609,281, A. C. Andersen, Clutch; 1,655,695, 1,655,696, Heintz & Archer, Window regulator, D. C., N. D. Ohio, W. Div., Doc. E 908, *Ternstedt Mfg. Co.* v. *Myers Regulator Co. et al.* Patents 1,609,281 and 1,655,696 withdrawn; claims 2, 3, 4, 5, and 16 of 1,655,695 and claims 2 and 4 of Re. 16,565, held invalid July 25, 1932.

1,629,870, P. J. Horgan, Press, D. C., W. D. N. Y., Doc. 1266–G, *United Shoe Machinery Corp.* v. *E. H. Ferree Co. et al.* Dismissed Aug. 9, 1932.

1,639,294, H. D. Hudson, Sprayer, C. C. A., 8th Cir. (St. Louis), Doc. 9455, *H. D. Hudson Mfg. Co. et al.* v. *Standard Oil Co.* Decree affirmed Aug. 4, 1932.

1,650,353, L. A. Hazeltine, Wave signaling system; 1,605,411, C. O. Weber, Non-oscillating radio frequency selective amplifier, D. C., S. D. N. Y., Doc. E 44/186, *Hazeltine Corp.* v. *Electric Service Engineering Corp.* Consent decree for plaintiff Aug. 1, 1932.

1,655,695. (See 1,609,281.) 1,655,696. (See 1,609,281.)

1,681,033, B. W. Freeman, Cut out machine for shoe uppers, D. C. Mass., Doc. E 3655, *B. W. Freeman* v. *W. H. Hawkes.* Injunction granted Aug. 10, 1932.

1,682,874, F. K. Vreeland, Radio frequency amplifier; 1,725,433, same, Band receiving system; 1,730,987, same, Variable band amplifier; 1,749,930, same, Variable circuit element for radio receiving sets; 1,850,973, same, Band receiving system, filed Aug. 8, 1932, D. C., S. D. N. Y., Doc. E 70/228, *Vreeland Corp.* v. *The Aeolian Co. et al.*

1,702,929, J. L. Breese, jr., Process of combustion; 1,743,081, same, Oil burning apparatus; 1,781,453, A. J. Frame, Automatic controlling mechanism; 1,782,668, W. W. Stuart, Oil burner, D. C., E. D. Ill. (East St. Louis), Doc. E 4392, *Oil Devices Corp. et al.* v. *Vulcan Oil Burner Co. Inc.* Injunction granted (notice July 30, 1932).

1,705,479, S. W. Hayes, Bumper post, D. C., S. D. N. Y., Doc. E 61/90, *Hayes Track Appliance Co.* v. *Fox Bros. & Co., Inc.* Consent decree for plaintiff (notice Aug. 8, 1932).

1,709,477, W. D. Kyle, Insulator, D. C., N. D. Ohio, W. Div., Doc. E 1055, *Line Material Co.* v. *Porcelain Products, Inc.* Patent held valid and infringed (notice Aug. 8, 1932).

1,725,433. (See 1,682,874.) 1,730,987. (See 1,682,874.)

1,743,081. (See 1,702,929.)

1,749,930. (See 1,682,874.) 1,770,830. (See 1,601,465.)

1,781,453. (See 1,702,929.) 1,782,668. (See 1,702,929.)

1,792,642, Jones & Shomaker, Dating and numbering mechanism; 1,855,132, same, Feeding mechanism, filed June 11, 1932, D. C., E. D. Va., Doc. 276, *The Duplex Envelope Co., Inc.*, v. *Denominational Envelope Co. et al.*

1,846,615, H. W. Russ, Wood heel grooving machine; 1,860,789, W. N. Sawyer, same, filed Aug. 1, 1932, D. C., E. D. N. Y., Doc. E 6511, *United Shoe Machinery Corp.* v. *Brooklyn Wood Heel Corp.*

1,850,973. (See 1,682,874.) 1,855,132. (See 1,792,642.)

1,860,789. (See 1,846,615.) Re. 16,565. (See 1,609,281.)

Re. 16,946, B. Rosenthal, Key case, D. C. Mass., Doc. E 3019, *B. Rosenthal* v. *Corliss Mfg. Co.* Dismissed without prejudice Jan. 2, 1932.

Re. 18,123. (See 1,307,733 (b).)

Re. 18,232, R. S. Fowler, Fastening means for belts, D. C., N. D. Calif. (San Francisco), Doc. E 3190–S, *R. S. Fowler* v. *E. V. Pasquale.* Patent held valid and infringed Aug. 1, 1932.

Re. 18,278. (See 1,307,733 (b).)

T. M. 180,558, Reid, Murdock & Co., Canned fruits and preserves; T. M. 224,367, same, Cranberries, canned salmon, etc., filed July 25, 1932, D. C. Kans. (Wichita), Doc. 707–N, *Reid, Murdock & Co.* v. *The Ranney-Davis Mercantile Co.*

T. M. 224,367. (See T. M. 180,558.)

Trade-Marks Canceled

112,635. Certain named electrical apparatus, machines, and supplies. Bosch Magneto Company, New York, N. Y. Registered September 19, 1916. Canceled August 30, 1932.

119,512. Certain named cutlery, machinery, and tools, and parts thereof. The Crescent Co., Meriden, Conn. Registered November 27, 1917. Canceled August 30, 1932.

141,911. Certain tools. The Crescent Company, Meriden, Conn. Registered May 3, 1921. Canceled August 30, 1932.

183,932. Bread. Paul G. Lewis, doing business under the firm name and style of Oliver Twist Bakeries Co., Los Angeles, Calif. Registered May 13, 1924. Canceled August 20, 1932.

184,571. Perfume, toilet water, and face powder. Frederick Stearns & Company, Detroit, Mich. Registered May 27, 1924. Canceled August 20, 1932.

209,488. Rubber heels. J. F. McElwain Company. Nashua, N. H. Registered February 23, 1926. Canceled August 20 1932.

251,497. Pumpernickel. Geo. F. Stuhmer & Co., Inc., Brooklyn, N. Y. Registered January 8, 1929. Canceled August 30, 1932.

279,528. Pumpernickel. Geo. F. Stuhmer & Co., Inc., Brooklyn, N. Y. Registered January 20, 1931. Canceled August 30, 1932.

287,636. Manicure files. The Schaaf & Good Company, Fremont, Ohio. Registered September 29, 1931. Canceled August 20, 1932.

288,182. Woolen cloth in the piece. A. G. Dewey Company, Quechee, Vt. Registered October 20, 1931. Canceled August 30, 1932.

292,880. Insecticides, germicides, and fungicides. California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Registered March 29, 1932. Canceled August 30, 1932.

Interference Notice

U. S. PATENT OFFICE, *Washington, Aug. 11, 1932.*

The assigns or legal representatives of Graves Griffith, deceased, take notice:

Interferences have been declared by this Office between an application for patent filed by Graves Griffith, 235 Moncada Way, Ingleside Terrace, San Francisco, Calif., and applications for patent filed by Henry A. Wayringer, 10 Frank Street, Schenectady, N. Y., Arthur Stephen Ford, 412 West 110th St., New York, N. Y., and Clifton G. Found, 148 Plymouth Avenue, Schenectady, N. Y. The death of the party Griffith has been noted in the record and the notice of interference sent to his legal representatives has been returned by the post office as undeliverable. Notice is hereby given that unless the assigns or legal representatives of said Griffith, deceased, shall enter an appearance therein within 30 days from the first publication of this order the interferences will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 13, 1932

[VOL. 422, No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

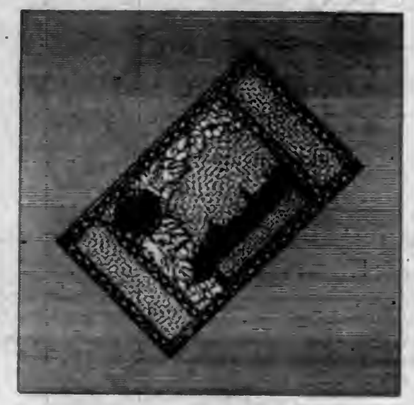
Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 299,022. J. SONNENSCHEIN HOP CO. INC., New York, N. Y. Filed Apr. 17, 1930.



The cross-hatching in the drawing indicates the color yellow and the horizontal lining indicates the color purple. No registration rights are claimed for the representation of the wrapper per se which appears on the drawing.

For Hops.

Claims use since Mar. 31, 1922.

Ser. No. 322,035. YORK AND COMPANY, Grand Rapids, Mich. Filed Dec. 11, 1931.



For Coal.

Claims use since Sept. 25, 1930.

Ser. No. 327,322. HOWARD W. SAGER, Topeka, Kans. Filed May 21, 1932.



For Chamois Skins.

Claims use since June 1, 1932.

Ser. No. 327,999. BIRD HAVEN, Reseda, Calif. Filed June 15, 1932.

BIRD HAVEN

For Live Birds.

Claims use since Dec. 8, 1929.

Ser. No. 328,615. THE MIDDLE ATLANTIC CARNATION GROWERS ASSOCIATION, Lancaster, Pa. Filed July 7, 1932.



The word "Carnations" is disclaimed apart from the mark as shown on the drawing.

For Cut Flowers.

Claims use since Sept. 1, 1931.

Ser. No. 329,176. THE CAMDEN TANNING CO. LIMITED, Runcorn, England. Filed July 29, 1932.

SPORTIDE

For Sole Leather.
Claims use since July, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 317,538. SPEED BOY SOAP PRODUCTS CO., Moline, Ill. Filed July 31, 1931.



For Automobile Top Dressing and Hand Soaps.
Claims use since Jan. 1, 1931.

Ser. No. 323,768. I. EDWARD BROWN, INC., New York, N. Y. Filed Feb. 2, 1932.

I. EDWARD BROWN INC.

For Metal Polishes and Marble Cleaning Powder.
Claims use since Apr. 20, 1929.

Ser. No. 326,803. THE BON AMI COMPANY, New York, N. Y. Filed May 6, 1932.



The drawing is lined for red and yellow. No claim is made to the words "El Limpiador Moderno" and "Trade-Mark". No claim is made to the outline of the label.
For Polishing and Cleaning Powder for General Use.
Claims use since 1914.

Ser. No. 328,685. THE CINCINNATI SOAP COMPANY, Cincinnati, Ohio. Filed July 11, 1932.

SAFE-GARD

For Toilet Soaps.
Claims use since January, 1932.

Ser. No. 328,762. MARY L. SCHMITT, doing business as Mit-Zee Products Co., Lakewood, Ohio. Filed July 13, 1932.

MIT-ZEE

For Washing and Cleaning Powder, Particularly a Hand Soap.
Claims use since June 22, 1932.

Ser. No. 328,896. STOCKTON SOAP WORKS, Stockton, Calif. Filed July 19, 1932.

SOAP-PERBA

The use of the word "Soap" is disclaimed apart from the mark as shown on the drawing.
For Granulated Soap.
Claims use since June 1, 1932.

Ser. No. 328,993. A. D. MILLER SONS' CO., Pittsburgh, Pa. Filed July 22, 1932.

Paree

For Dry Cleaning Fluid.
Claims use since Apr. 1, 1932.

Ser. No. 329,197. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed July 29, 1932.

TERMALAC

For Cleaning, Cleansing, and Detergent Materials—Namely, Dairy Cleaning Powders for Cleaning, Cleansing, Scrubbing, Scouring, Washing, and Polishing for Household, Dairy, Factory, and Other Uses.
Claims use since July 7, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 302,228. CAROL RUTH, INC., New York, N. Y. Filed June 6, 1930.

Carol Ruth

For Liquid Brilliantine, Solid Brilliantine, Hair Wash in the Nature of a Shampoo, Cleansing Cream, Cleansing Lotion, Skin Tonic, Tissue Cream, Muscle Oil, Astringent Lotion, Deodorant Lotion, Hygienic Powder, Dusting Powder, Foundation Cream, Astringent Foundation Cream, Hand Lotion, Face Powder, Liquid Face Powder, Rouge Compact, Lip Stick, Eyelash Cosmetic and Eye Shadow in the Nature of Cosmetic for Application to the Skin between the Eyebrows and Eyelashes.
Claims use since May 16, 1930.

Ser. No. 312,684. MARK W. ALLEN & CO., Detroit, Mich. Filed Mar. 30, 1931.

Vogue House

For Cleansing Cream, Face Powder, Brilliantine, Vanishing Cream, Cold Cream, Tissue Cream, Foundation Cream, Deodorant Cream, Hair Oil, Rose and Almond Facial Cream, Hot Oil Preparation for Scalp Treatment, Permanent Wave Oil, Depilatory Powder, Skin Lotion, Astringent Lotion, and Soapless Shampoo.
Claims use since Nov. 1, 1929.

Ser. No. 324,773. A. BRESLAUER, INC., New York, N. Y. Filed Mar. 4, 1932.

Contouré

For Face Powder, Rouge and Powder Compacts, Eyelash Liquid, and Circulation Cream, Being a Massage Cream for Inducing an Increased Circulation.
Claims use since Sept. 1, 1931.

Ser. No. 326,992. MARGARET M. SULKIE, doing business as Gray-Storative, Niagara Falls, N. Y. Filed May 11, 1932.

GRA-STORATIVE

For Hair Tonics.
Claims use since May 2, 1932.

Ser. No. 327,234. MARTHA ELIZABETH ROBINS, doing business as A. H. Robins Co., Richmond, Va. Filed May 18, 1932.

URALIPHIC

For Antacid, Diuretic, and Alkaline Laxative.
Claims use since Mar. 1, 1932.

Ser. No. 327,514. KRESGE DEPARTMENT STORE CORP., Newark, N. J. Filed May 27, 1932.



For Alum, Antiseptic Preparations, Aspirin, Bath Salts, Hair Tonic, Bleaching Fluids, Camphor, Toilet Water, Face Powder, Disinfectants, Skin Creams, Dental Paste, Hair Dye, Insecticides, Laxative Tablets, Lye, Skin Ointments, Mineral Oil for Medicinal Purposes, Perfumes, Finger Nail Polish, Talcum Powder, Rouge, and Salt.
Claims use since February, 1927.

Ser. No. 327,805. PREMIER MILL CORPORATION, Geneva, N. Y. Filed June 7, 1932.

PREMEK

For Skin Lotion, Cold Cream, Zinc Oxide, Insecticide Soluble Oil, Rubber Accelerator for Hastening the Cure and Vulcanization of Rubber Products, Rubber Latex Stabilizer Used in Making Up Rubber Latex Compounds.
Claims use since May 24, 1930.

Ser. No. 327,917. NORTH AMERICAN DYE CORPORATION, New York, N. Y. Filed June 11, 1932.

Barrington

For Cosmetics, Particularly Hand Cream.
Claims use since Jan. 1, 1931.

Ser. No. 327,924. THE THYLARD COMPANY, Fort Wayne, Ind. Filed June 11, 1932.

THYLARD

For Skin Ointment for Athlete Foot, Ringworm, Barber's Itch, and Eczema.
Claims use since May 7, 1932.

Ser. No. 328,246. PETER MAER, doing business as Mayrose Laboratories, New York, N. Y. Filed June 23, 1932.

MAYROSE

For Insecticides, Capsules for the Treatment of Pain and Discomfort of Simple Headache, Neuralgia, and Toothache; Indigestion Corrector, a Medicinal Preparation for the Treatment of Sour and Acid Stomach, Hyperacidity, Gastric Fermentation, and Heartburn; Rubbing Salve for Relieving Local Congestion Caused by Colds; Medicinal Preparation for the Treatment of Earache and Toothache; Milk of Magnesia; and Corn and Callous Salve.
Claims use since Jan. 15, 1932.

Ser. No. 328,326. DAVIS & SCANLAN CO., Boston, Mass. Filed June 27, 1932.

KO-RE-KO

For Liquid Color Remover for Bleaching Colored Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since June 11, 1932.

Ser. No. 328,767. CASTERLINE BROS., Milwaukee, Wis. Filed July 13, 1932.



The representation of the female head or bust forming a feature of the mark is fanciful.
For Cosmetics Used for Removing Cuticle, Polishing Nails, and Removing Nail Polish.
Claims use since Sept. 1, 1931.

Ser. No. 328,868. ANGELO GIORDANO, Westerly, R. I. Filed July 18, 1932.

J. V. D.
Angelo Giordano

The signature on the drawing is the autograph of the applicant.
For Cream for Scabs, Sores, Pimples, Itch, or Any Other Skin Disease; and an Herb Liniment for Rheumatism, and All Kinds of Pains; and Medicinal Herbs for Chronic Bronchitis, Intestinal Gases, Asthma, Liver and Kidney Trouble, Fevers, and Headaches.
Claims use since Apr. 1, 1932.

Ser. No. 328,880. JACOB J. GREENWALD, M. D., doing business as Elkton Pharmaceutical Co., Elkton, Md. Filed July 19, 1932.



The trade-mark as used on the labels is in red and this color is an essential feature of the mark.
For Preparations for the Treatment of Coughs or Hoarseness Due to Colds, and for Minor Throat or Bronchial Irritations.
Claims use since Jan. 5, 1932.

Ser. No. 329,026. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed July 23, 1932.

VENTRI-ZYME

Registration rights in the word "Zyme" are disclaimed apart from the mark as shown on the drawing.
For Medicinal Product for Treatment of Anemia.
Claims use since May 31, 1932.

Ser. No. 329,035. A. ARLIE SINAIKO, doing business as Narol Co., Stevens Point, Wis. Filed July 25, 1932.

Narol

For Nasal Oil.
Claims use since Oct. 1, 1931.

Ser. No. 329,127. AMERICAN ADVERTISED PRODUCTS, INCORPORATED, Chicago, Ill. Filed July 28, 1932.



For Shampoo.
Claims use since July 1, 1932.

Ser. No. 329,159. STEPHENSON MFG. CO., INC., Springfield, Mass. Filed July 28, 1932.

NA-ZONE

For Spray or Inhalant for Throat and Nose, for Colds and Other Affections.
Claims use since June 1, 1931.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 324,844. LIGGETT & MYERS TOBACCO COMPANY, New York, N. Y. Filed Mar. 7, 1932.

Tip Top

For Cigarette Paper, Cut, Uncut, and in Books or Packages.
Claims use since Nov. 9, 1869.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 329,279. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Aug. 2, 1932.

Firestone

Applicant is the owner of registration No. 140,804.
For Matches.
Claims use since Dec. 29, 1927.

Ser. No. 329,281. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Aug. 2, 1932.



For Matches.
Claims use since Dec. 29, 1927.

Ser. No. 329,283. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Aug. 2, 1932.



For Matches.
Claims use since Jan. 4, 1930.

CLASS 10

Fertilizers

Ser. No. 328,238. THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA, LIMITED, Trail, Canada. Filed June 23, 1932.

TADANAC

For Chemical Fertilizer Used for Agricultural and Horticultural Purposes.
Claims use since January, 1916.

CLASS 12

Construction Materials

Ser. No. 328,192. TAJMAL LIMITED, Hamilton, Ontario, Canada. Filed June 21, 1932.

TAJMAL

For Tile, Bricks, Building Blocks, Columns, Steps, Wall Boards, Wall Panels, Molded Cementitious Blocks or Panels for Use as Flooring or Walling, Molded Cementitious Blocks or Panels Simulating Marble, Travertin, Granite and the Like, Cementitious Compositions for Use in Making Any or All of the Above Mentioned Articles, and Plaster and Cementitious Coatings for Protecting and Preserving Wood, Steel, Iron and Other Construction Materials.
Claims use since Apr. 23, 1932.

Ser. No. 328,293. HYDREX ASPHALT PRODUCTS CORPORATION, New York, N. Y. Filed June 22, 1932.

SANIFLOR

For Sound-Deadening and Insulating Felt.
Claims use since Aug. 23, 1910.

Ser. No. 329,148. THE MASTER BUILDERS COMPANY, Cleveland, Ohio. Filed July 28, 1932.

STEAROX 30

For Composition of Matter for Waterproofing Concrete and Cement Mortar, and for a Composition of Matter for Coloring Concrete and Cement Mortar, and for a Composition of Matter for Waterproofing and Coloring Concrete and Cement Mortar.
Claims use since June 1, 1932.

Ser. No. 329,217. THE BARBER ASPHALT COMPANY, Philadelphia, Pa. Filed July 30, 1932.

MAS-TAB

For Composition Roofing and Shingles.
Claims use since June 14, 1932.

Ser. No. 329,255. CALIFORNIA REDWOOD ASSOCIATION, San Francisco, Calif. Filed Aug. 1, 1932.



For Lumber.
Claims use since January, 1928.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 327,946. RED BOY, INC., Chicago, Ill. Filed June 13, 1932.



For Base Metal Service Trays and Merchandise Holding and Displaying Attachments for Such Trays.
Claims use since Apr. 21, 1932.

Ser. No. 328,971. THE ALLEN MANUFACTURING COMPANY, Hartford, Conn. Filed July 22, 1932.



The lining on the drawing is for shading. No claim is hereby made to the exclusive use of the words "Process" and "Sockets" and the representation of the screw head.
For Machine Screws and Threaded Metal Plugs Having Socketed Head Ends.
Claims use since 1926.

CLASS 15

Oils and Greases

Ser. No. 317,447. ALLIED GREASE & OIL CO., Chicago, Ill. Filed July 30, 1931.

FriXion-Foe GREASES

The word "Greases" is disclaimed apart from the mark as shown.
For Lubricating Greases.
Claims use since Nov. 15, 1928.

Ser. No. 326,125. JAMES B. BERRY SONS' CO., Oil City, Pa., and Chicago, Ill. Filed Apr. 15, 1932.



Applicant does not claim exclusive right to use "Hi Octane Gasoline" apart from the mark shown in the drawing.
For Gasoline.
Claims use since Apr. 18, 1932.

Ser. No. 328,721. COL-TEX REFINING COMPANY, Wilmington, Del., and Oklahoma City, Okla. Filed July 12, 1932.

COL-TEX

For Gasoline, Furnace Oils, and Fuel Oils.
Claims use since Oct. 1, 1928.

Ser. No. 328,880. SUN OIL COMPANY, Philadelphia, Pa. Filed July 18, 1932.



The word "Made" is disclaimed apart from the mark shown in the drawing.
For Lubricating Oil.
Claims use since July 8, 1931.

Ser. No. 328,891. A. D. MILLER SONS' COMPANY, Pittsburgh, Pa. Filed July 19, 1932.



For Gasoline.
Claims use since January, 1885.

CLASS 16

Paints and Painters' Materials

Ser. No. 324,517. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo. Filed Feb. 26, 1932.

HIL-TONE

For Liquid Floor Polish.
Claims use since Jan. 4, 1932.

Ser. No. 326,346. ROBERT HORMATS, doing business as Universal Chemical Company, Baltimore, Md. Filed Apr. 21, 1932.

FILM-O-WAX

No claim is made to the descriptive words "Wax" and "Film" apart from the mark as shown.
For Floor Polish.
Claims use since Jan. 1, 1932.

Ser. No. 326,626. MONTAUK PAINT & WALL PAPER CO., Brooklyn, N. Y. Filed Apr. 28, 1932.

MONTAUK



For Ready Mixed Paints, Paint Oils, Prepared Shellac, Turpentine, Varnishes, and White Lead and Red Lead for Use as Pigments.
Claims use since Apr. 13, 1914.

Ser. No. 328,574. BOSTON VARNISH COMPANY, Everett, Mass. Filed July 6, 1932.

KWIXET

For Varnishes, Paint Enamels, Stains, and Ready-Mixed Paints.
Claims use since June 15, 1932.

Ser. No. 328,750. THE BLACK DIAMOND PAINT AND VARNISH WORKS, INC., Cincinnati, Ohio. Filed July 13, 1932.

Black Diamond
Products
The Black Diamond
Paint & Varnish Works Inc.
CINCINNATI, OHIO

Applicant disclaims the word "Products" together with the name "Cincinnati, Ohio" apart from the mark shown.
For Paste and Ready Mixed Paints, Paint Enamels, and Roof Paints.
Claims use since Jan. 5, 1932.

Ser. No. 328,772. ACME WHITE LEAD & COLOR WORKS, Detroit, Mich. Filed July 11, 1932.

BIG 6 LINE

For Prepared Paints, Semi-Paste Paints, Paint and Enamel Finishes, Paste Paints, Paint Dryers, Varnishes, Undercoaters, Flat Paints, Gloss Paints, Varnish Oils, Paint Enamels, Paint Reducers, Paint Thinners, Stains, Colors in Oil, Paint and Varnish Removers, and Primers.
Claims use since Feb. 1, 1929.

Ser. No. 328,861. THE ZAPON COMPANY, Wilmington, Del. Filed July 15, 1932.

MOVIETONE

For Lacquers, Paint Thinners and/or Lacquer Thinners.
Claims use since Oct. 19, 1928.

Ser. No. 328,916. GRAND RAPIDS FURNITURE POLISH CO., Grand Rapids, Mich. Filed July 20, 1932.

CREAMAX

For Furniture Polish.
Claims use since June 24, 1932.

Ser. No. 328,987. WILLIAM GRAHAM & COMPANY, Baltimore, Md. Filed July 22, 1932.

ORIOLE

For Turpentine and Linseed Oil.
Claims use since Jan. 1, 1880.

Ser. No. 329,064. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed July 25, 1932.

BUTONE

For Lacquer Solvent.
Claims use since May 27, 1932.

Ser. No. 329,143. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo. Filed July 28, 1932.

Hil-Glo

For Liquid Floor Wax.
Claims use since Jan. 10, 1932.

CLASS 17

Tobacco Products

Ser. No. 328,178. M. MARSH & SON, INC., Wheeling, W. Va. Filed June 21, 1932.

RONDAX

For Cigars.
Claims use since Apr. 15, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 320,777. BUDD WHEEL COMPANY, Philadelphia, Pa. Filed Nov. 4, 1931.

SNAPSPOKES

For Wire Wheel Spoke Shrouds.
Claims use since Jan. 21, 1931.

Ser. No. 329,190. HUDSON MOTOR CAR COMPANY, Detroit, Mich. Filed July 29, 1932.

TERRAPLANE

For Gasoline Passenger Automobiles.
Claims use since July 21, 1932.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 318,040. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio. Filed Aug. 17, 1931.

CARTHAGE
SARRANA RUGS

No claim is made to the words "Carthage" and "Rugs" except in the association shown.
For Printed Felt Base Floorings in Piece Goods Form.
Claims use since Aug. 1, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 312,729. LITE-WATCHMAN CORPORATION, New York, N. Y. Filed Mar. 28, 1931.

LITE-WATCHMAN

For Electric Lighting, Particularly Used with Self-Propelling Vehicles, and Visual Indicating Systems Using Light Producing Means, Particularly Headlights and Rear-End Signal Lights and Parts Thereof.
Claims use since Mar. 16, 1931.

Ser. No. 328,618. RAYTHEON PRODUCTION CORPORATION, Newton, Mass. Filed July 7, 1932.

PLATO

For Electrical Space Discharge Tubes.
Claims use since July 6, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 327,637. GOLDWIN SMITH, doing business as Smith Mfg. Co., Tampa, Fla. Filed June 1, 1932.

FLIPPER

For Table Board Game Played with Marbles.
Claims use since May 24, 1932.

Ser. No. 329,403. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Aug. 8, 1932.

CUCKOO-CLOCK

For Coin Controlled Amusement Machines.
Claims use since May 14, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 317,368. C. O. ÖBERG & CO:S AKTIEBOLAG, Eskilstuna, Sweden. Filed July 27, 1931.



The representation of the file and the words "Eskilstuna, Sweden" are disclaimed apart from the mark shown on the drawing. Applicant claims ownership of U. S. trade-mark registrations: #169,287 issued June 12, 1923; #257,200 issued June 4, 1929; #281,585 issued Mar. 24, 1931.

For Files and Rasps.
Claims use since 1929.

Ser. No. 323,094. PELLAR-BAZELON, Chicago, Ill. Filed Jan. 16, 1932.

BIAS STROKE

A part of the drawing is lined to indicate a "red" color. The words "Bias Stroke" are disclaimed apart from the mark as shown.

For Razors and Particularly the So-Called Safety-Razor.
Claims use since Jan. 12, 1932.

Ser. No. 323,819. KOPPERS-RHEOLAVEUR COMPANY, Pittsburgh, Pa. Filed Feb. 4, 1932.

Rhéo laveur

Applicant disclaims "Laveur" apart from the mark "Rhéo laveur" as a whole.

For Coal or Ore Cleaning or Concentrating Apparatus.
Claims use since Jan. 30, 1930.

Ser. No. 323,820. KOPPERS-RHEOLAVEUR COMPANY, Pittsburgh, Pa. Filed Feb. 4, 1932.

The Rhéo laveur
COAL ORES

Applicant disclaims the words "Current Washer" and "Coal-Ores" and "Laveur" apart from "Rhéo laveur" as a whole bounded by lines substantially as shown on the drawing.

For Coal or Ore Cleaning or Concentrating Apparatus.
Claims use since Jan. 30, 1930.

Ser. No. 325,284. CRESCENT TOOL COMPANY, Jamestown, N. Y. Filed Mar. 19, 1932.

CRESCENT

Applicant claims ownership of trade-mark registration No. 67,460 issued Feb. 4, 1908.

For Tool Kits for Hand Tools Such, for example, as a Wrench, Pliers, Screw Driver, and the Like.
Claims use since 1907.

Ser. No. 327,026. RAPID ROLLER COMPANY, Chicago, Ill. Filed May 12, 1932.



No claim is made to the representation of the printer's roller separate and apart from the combination as shown.

For Printer's Rollers, Composition Coated Rollers, Offset and Lithograph Rollers, Rotogravure Rollers, and Rubber Rollers.
Claims use since July, 1918.

Ser. No. 328,915. DIESEL FILTER CO., INC., Astoria, Oreg. Filed July 20, 1932.

SENTINEL

For Oil Filters of the Type Used as an Accessory to Internal Combustion Engines and the Like.
Claims use since May 1, 1931.

Ser. No. 329,215. ASHER GOLDEN, New York, N. Y. Filed July 29, 1932.

RBF

For Ball and Roller Bearings.
Claims use since April, 1923.

Ser. No. 329,220. SAMUEL R. BURNS, Newark, N. J. Filed July 30, 1932.

TAPE-O-MATIC

For Automatic Taping Machines.
Claims use since Nov. 24, 1930.

CLASS 25

Locks and Safes

Ser. No. 328,980. DUDLEY LOCK CORPORATION, Chicago, Ill. Filed July 22, 1932.

AUTODIAL

For Locks.
Claims use since May 1, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 312,484. LINCOLN SCALE CORPORATION, Latrobe, Pa. Filed Mar. 24, 1931.



For Weighing Scales.
Claims use since April, 1928.

Ser. No. 316,426. GENERAL TALKING PICTURES CORPORATION, New York, N. Y. Filed June 29, 1931.



For Sound Picture Apparatus—Namely, Apparatus and Parts Thereof for Recording and Reproducing in Combination with Sound and Light Effects.
Claims use since May 15, 1931.

Ser. No. 321,258. DAVID C. ROCKOLA, Chicago, Ill. Filed Nov. 18, 1931.

PERSONAL WEIGHT

The use of the word "Weight" except in the combination of words herein set out is disclaimed.

For Weighing Scales.
Claims use since June 15, 1931.

Ser. No. 327,918. PHOTO MARKETING CORPORATION, New York, N. Y. Filed June 11, 1932.

Micky

For Cameras and Camera Parts.
Claims use since Jan. 22, 1932.

Ser. No. 328,561. THE MULTISTAMP COMPANY, INC., Norfolk, Va. Filed July 5, 1932.

MULTISCOPE

For an Illuminated Box with Glass Top for Use as a Desk in Making Tracings of Drawings, Cartoons, and Other Similar Designs.
Claims use since May 28, 1932.

Ser. No. 328,895. ALBERT F. SHORE, Jamaica, N. Y. Filed July 19, 1932.

MATH-EMAT

For Graph Calculating Devices.
Claims use since May, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 321,459. CONCORD SILVERSMITHS, INC., Concord, N. H. Filed Nov. 24, 1931.



For Articles Made of Silver—Namely, Knives, Forks, and Spoons, Nut and Candy Dishes, Ash Trays, Baskets, Beverage Mixers, Cups, Saucers, Bowls, Table Dishes, Pitchers, Bread Trays, Plates, Candlesticks, Centre Pieces, Tea and Coffee Sets, and Waiters, Compotiers, Goblets, Loving Cups, Platters, Salt and Pepper Shakers, Sugar Bowls, and Vases.
Claims use since Sept. 15, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,862. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed June 10, 1932.

FLEXALL

For Paste and Mucilage Applying Brushes.
Claims use since May 31, 1932.

Ser. No. 328,732. JOHNSON & JOHNSON, New Brunswick, N. J. Filed July 12, 1932.

VAL-U

For Toothbrushes.
Claims use since July 1, 1932.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 311,617. MAYER CHINA COMPANY, Beaver Falls, Pa. Filed Mar. 2, 1931.



The words "True Ivory" for the purpose of this registration are disclaimed except in connection with the other features of the mark.
For Chinaware.
Claims use since Jan. 2, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 328,997. SANDEL MANUFACTURING CO., Chicago, Ill. Filed July 22, 1932.

DOLLY VARDEN

For Make-Up Lamp Stands.
Claims use since Apr. 15, 1932.

Ser. No. 329,447. HOUGH SHADE CORPORATION, Janesville, Wis. Filed Aug. 10, 1932.

Vudorette

For Porch Shades.
Claims use since July 19, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 321,542. KAVENY BROTHERS, INC., Montclair, N. J. Filed Nov. 27, 1931.



The words "Silent Rotary Automatic Oil Burner" are disclaimed apart from the mark as shown.
For Oil Burners.
Claims use since March, 1930.

Ser. No. 322,139. EDWIN SARGENT, doing business as Sargent Building Specialties Co., New York, N. Y. Filed Dec. 15, 1931.

SARGENT
INCINERATOR
EQUAL
AIRE

The words "Sargent" and "Incinerator" are disclaimed apart and aside from the mark as shown.
For Incinerators, Incinerator Parts, and Hopper Doors for Incinerator Flues.
Claims use since Nov. 9, 1931.

Ser. No. 322,305. BE TE U CORPORATION, Salt Lake City, Utah. Filed Dec. 21, 1931.



For Heat Generators of the Gravity-Feed Type for Burning Solid Fuel for Domestic Furnaces, Heating Boilers, and Industrial Furnaces and Parts Thereof.
Claims use since Dec. 10, 1931.

Ser. No. 324,208. JOHN T. BELANGER, doing business as Belanger Fan & Blower Company, Detroit, Mich. Filed Feb. 15, 1932.

WOLVERINE

For Ventilating and Exhaust Fans and Blowers.
Claims use since Oct. 23, 1931.

Ser. No. 327,827. MOTOR WHEEL CORPORATION, Lansing, Mich. Filed June 8, 1932.

GYRO-FLAME

Applicant disclaims the word "Flame" apart from the mark shown in the drawing.
For Oil Burners for Domestic and Commercial Heating and Cooking Purposes.
Claims use since May 18, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 326,617. RCA VICTOR COMPANY, INC., Camden, N. J. Filed Apr. 29, 1932.



For Sound Recording Apparatus of Non-Photographic Types, Sound Originating Machinery Consisting of Tuning-Fork Pianos, Vibratory-Reed Pianos, Electric Carillons and Carillon-Control Keyboards, Fluid-Actuated Loudspeakers, Talking Machines Adapted for Combination with Motion Picture Apparatus, Talking Machines Adapted for Combination with Television Receiving Apparatus, Talking Machines Adapted for Combination with Radio Receiving Apparatus, Talking Machine Cabinet Resonance Compensating Devices, Loudspeakers Adapted for Use in Connection with Talking Machines, Talking Machines and Gramophones, Talking Machine Horns, Mechanical and Fluid-Actuated Talking Machine Amplifiers, Talking Machine Styli or Needles, Sound Boxes for Talking Machines, Record Supporting and Rotating Platens for Talking Machines, Sound-Records for Talking Machines, Talking Machine Record Blanks, and Talking Machine Record Albums.
Claims use since June 2, 1931.

CLASS 37

Paper and Stationery

Ser. No. 328,820. THE PLYMOUTH PAPER COMPANY, INC., Holyoke, Mass. Filed July 15, 1932.

COUNTY BOND

No claim is made to the word "Bond" appearing on the drawing apart from the mark shown.
For Writing Paper.
Claims use since July, 1900.

Ser. No. 329,303. CHEMICAL PAPER MANUFACTURING COMPANY, Holyoke, Mass. Filed Aug. 3, 1932.

DAILY SALES

For Writing and Printing Papers.
Claims use since November, 1930.

CLASS 38

Prints and Publications

Ser. No. 295,326. JOHN A. BAXTER, Cambridge, Ohio. Filed Jan. 29, 1930.

Glo-Brite

For Printed Cards and Cardboard Signs.
Claims use since March, 1929.

Ser. No. 329,387. THE SIMMONS MANUFACTURING CO., Cleveland, Ohio. Filed Aug. 6, 1932.

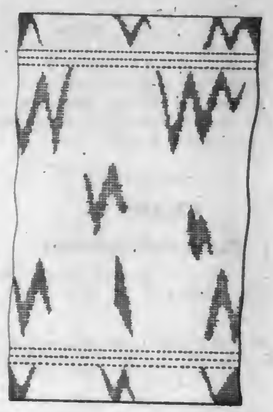
SIMMONS
GUIDE TO PROFITS $

For Monthly Publication.
Claims use since Jan. 1, 1930.

CLASS 39

Clothing

Ser. No. 317,810. KOPS BROTHERS, INC., New York, N. Y. Filed Aug. 8, 1931.



No claim is made to the exclusive right to the pictorial representation of a piece of goods per se. The trade-mark consists of three purple stripes adjacent each edge of the elastic material employed in these garments.

For Girdles, Brassières, and Combinations of Girdles and Brassières.

Claims use since July 7, 1931.

Ser. No. 326,100. THE B. F. GOODRICH COMPANY, New York, N. Y. Filed Apr. 14, 1932.

SUN-AIR

For Footwear—Namely, Boots and Shoes Made Wholly or Partly of Rubber.

Claims use since Jan. 13, 1932.

Ser. No. 326,103. HOOD RUBBER COMPANY, INC., Wilmington, Del., and Watertown, Mass. Filed Apr. 14, 1932.

XTRULOCK

For Footwear—Namely, Boots and Shoes Made Wholly or Partly of Rubber.

Claims use since Sept. 2, 1931.

Ser. No. 326,285. FREEMAN SHOE CORPORATION, Beloit, Wis. Filed Apr. 20, 1932.

NU-MATIC

For Boots and Shoes of Leather, Fabric, or Combinations Thereof.

Claims use since Dec. 1, 1929.

Ser. No. 328,229. SOFTKNIT HAT CO., New York, N. Y. Filed June 22, 1932.

Softknit

Softknit Hat Co.

The initials in the upper left hand corner of the trade-mark are W RMR. The words "Softknit" and "Softknit Hat Co." are disclaimed apart from the mark shown in the drawing.

For Men's and Women's Hats of Knitted and Woven Material.

Claims use since Feb. 1, 1932.

Ser. No. 328,784. FIRESTONE FOOTWEAR COMPANY, Hudson, Mass. Filed July 14, 1932.

Sanisole

For Footwear—Namely, Boots and Shoes of Rubber or Canvas and Rubber and Inner and Outer Soles Therefor.

Claims use since May 3, 1932.

Ser. No. 328,797. MAURICE J. MARKELL, Brooklyn, N. Y. Filed July 14, 1932.

TARSO SUPINATOR

For Men's, Women's, and Children's Shoes, Made of Leather, Rubber, or Fabric and Combinations of These Materials.

Claims use since December, 1931.

Ser. No. 328,911. BRIGHTON LADIES HAT CO. INC., New York, N. Y. Filed July 20, 1932.

KARICOON

For Women's, Misses', and Children's Hats.

Claims use since June 1, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,585. PRINCESS FABRICS CO. INC., New York, N. Y. Filed July 6, 1932.

MAGERA

For Textile Fabrics of Silk Only and Piece Goods Made of Silk.

Claims use since Feb. 1, 1931.

Ser. No. 328,799. PENDLETON WOOLEN MILLS, Portland, Oreg. Filed July 14, 1932.

FOR THE REST OF YOUR LIFE

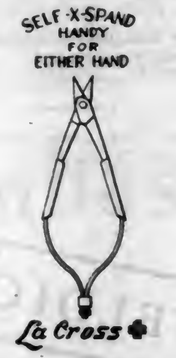
For Wool Blankets.

Claims use since Apr. 1, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 328,623. SCHNEFEL BROTHERS, INC., Newark, N. J. Filed July 7, 1932.



No claim is made to the words "Handy for Either Hand" apart from the mark shown in the drawing. No claim is made to the expression "Self-X-Spand" nor to the representation of the goods apart from the mark shown in the drawing.

For Spring Cuticle Scissors, Cuticle Knives, Nail Files, Manicure Scissors, and Nail Clippers.

Claims use since Mar. 1, 1932.

Ser. No. 328,914. JAMES O. DAVIES, doing business as Baby-Touch Hair Remover Company, St. Louis, Mo. Filed July 20, 1932.

BABY TOUCH

For An Article for Removing Superfluous or Unsightly Hair.

Claims use since Feb. 5, 1931.

Ser. No. 329,492. GEORGE P. PILLING & SON CO., doing business as Pilling, Philadelphia, Pa. Filed Aug. 12, 1932. Under 10-year proviso.

PILLING

For Instruments for Surgical, Dental, and Veterinary Use, and for Hospital Furniture.

Claims use since 1882.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 328,841. JOHN KARRAS, doing business as Minerva Beverage Co., Chicago, Ill. Filed July 16, 1932.



For Non-Alcoholic Maltless Beverages Sold as Soft Drinks.

Claims use since July 1, 1932.

Ser. No. 328,848. ROYAL CANADIAN COMPANY, Chicago, Ill. Filed July 16, 1932.



No claim is made to the name "Canadian" apart from the mark as shown.

For Non-Alcoholic Maltless Beverages.

Claims use since Nov. 19, 1931.

Ser. No. 329,066. STAR BOTTLING & SUPPLY CO., INC., New Haven, Conn. Filed July 25, 1932.

LYNBROOK

For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Used in Making the Same.

Claims use since Apr. 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 317,166. PETER FRANKE, West Haven, Conn. Filed July 21, 1931.



The words "Honey Pop-Corn", "Here's Your Honey Pop Corn", and "Oh! You're My Honey" are not claimed apart from the other features of the mark.
For Honey Flavored Popcorn.
Claims use since 1920.

Ser. No. 324,589. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Feb. 29, 1932.

ORO VERDE

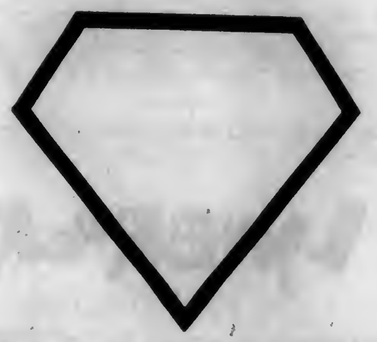
For Fresh Avocados.
Claims use since Oct. 1, 1930.

Ser. No. 325,944. FRANK AND COMPANY, Milwaukee, Wis. Filed Apr. 9, 1932.

Frankettes

For Frankfurters.
Claims use since Feb. 2, 1932.

Ser. No. 326,343. SNIDER PACKING CORPORATION, Rochester, N. Y., assignor, by mesne assignments, to Snider Packing Corporation, a Corporation of New York. Filed Apr. 21, 1932.



For Canned Vegetables, Canned Fruits, Canned Berries, Canned Pork and Beans, Canned Cranberries, Canned Applesauce, Canned Sauerkraut, Canned Succotash, Cocktail Sauce, Catsup, Chili Sauce, Tomato Juice, Kraut Cocktail, Tomato Juice Cocktail, and Vinegar, Canned Soups, Spaghetti, Salad Dressing and Fruit Preserves.
Claims use since 1884.

Ser. No. 328,289. GENERAL DESSERTS CORPORATION, New York, N. Y. Filed June 20, 1932.

HA-CHA

For Chocolate Malt Powder Preparations for Making or Flavoring Food Beverages.
Claims use since Jan. 2, 1932.

Ser. No. 328,757. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed July 13, 1932.

WELDICE

For Vegetable Pure Food Ice and Sherbet Stabilizer Standardized.
Claims use since May 6, 1932.

Ser. No. 328,814. SALVATORE A. LARAJA, Brooklyn, N. Y. Filed July 15, 1932.



For Canned Olive Oil.
Claims use since Apr. 1, 1932.

Ser. No. 328,969. DAIRYMEN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica and New York, N. Y. Filed July 21, 1932.

DAIRYLEA

For Sour Cream, Dried Skim Milk, Chocolate Milk, Buttermilk and Cottage Cheese.
Claims use since June 18, 1929, on sour cream and dried skim milk; since Jan. 2, 1931, on cottage cheese; and since Feb. 15, 1931, on buttermilk and chocolate milk.

Ser. No. 329,012. BEST MALT PRODUCTS COMPANY, Chicago, Ill. Filed July 23, 1932.

Embassy

For Malt Syrup.
Claims use since Nov. 17, 1931.

Ser. No. 329,043. EDWARD CLARENCE CONROY, doing business as E. C. Conroy Coffee Co., Kansas City, Mo. Filed July 25, 1932.



For Coffee.
Claims use since Mar. 28, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,425. MARTINI & ROSSI S. A., Turin, Italy. Filed Aug. 9, 1932.



For Vermouth, Cocktails, Liquors, and Bitters.
Claims use since July 25, 1925.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 325,931. STANDARD SCIENTIFIC SUPPLY CORPORATION, New York, N. Y. Filed Apr. 7, 1932.

NATURE CRAFT
COLLECTING KIT

The words "Collecting Kit" which appear on the drawing are disclaimed apart from the mark "Nature Craft".
For Collector's Kits Which Contain All Implements Necessary in the Collection and Mounting of Butterflies, Insects, and Similar Objects.
Claims use since Jan. 1, 1932.

Ser. No. 329,010. ARCHER RUBBER COMPANY, Milford, Mass. Filed July 23, 1932.

CHERVEL

The lining in the drawing is for the purpose of shading only.
For Rubberized Fabrics.
Claims use since July 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 13, 1932

297,309. NON-ALCOHOLIC MALTLESS FLAVORING EXTRACTS USED IN THE PREPARATION OF SOFT DRINKS. W. SHEINKER & SON, INC., New York, N. Y.
Filed April 16, 1932. Serial No. 326,195. PUBLISHED JULY 5, 1932. Class 45.

297,310. WHOLE AND SOLE LEATHER, INCLUDING SIDES, BACKS, CROPS, BENDS, SHOULDERS, BELLIES, AND HEADS; ALSO STRIPS, BLOCKS, SQUARES, AND SLABS CUT THEREFROM. GUY LEE LEATHER COMPANY, Philadelphia, Pa.
Filed April 18, 1932. Serial No. 326,217. PUBLISHED JULY 5, 1932. Class 1.

297,311. TANNED REPTILE SKINS. WALTER LEE MOSSACHER CORPORATION, New York, N. Y.
Filed April 20, 1932. Serial No. 326,293. PUBLISHED JUNE 28, 1932. Class 1.

297,312. LIQUID ANTISEPTICS AND DISINFECTANTS, BATH SALTS, TALCUM POWDER, ETC. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y.
Filed April 20, 1932. Serial No. 326,296. PUBLISHED JUNE 21, 1932. Class 6.

297,313. MECHANICAL DEVICE UPON WHICH TO RECORD OIL SERVICING FOR VEHICLES. QUAKER STATE OIL REFINING CO., Oil City, Pa.
Filed April 20, 1932. Serial No. 326,300. PUBLISHED JUNE 28, 1932. Class 19.

297,314. MEDICINAL DIAMINO-AZO-BENZOLS. E. R. SQUIBB & SONS, New York, N. Y.
Filed April 20, 1932. Serial No. 326,305. PUBLISHED JUNE 21, 1932. Class 6.

297,315. CALCIUM CARBIDE. NATIONAL CARBIDE CORPORATION, Wytheville, Va., and New York, N. Y., and Ivanhoe, Va.
Filed April 21, 1932. Serial No. 326,336. PUBLISHED JUNE 21, 1932. Class 6.

297,316. CHEMICAL PREPARATION FOR USE IN CLEANING COFFEE URNS. SERVICE PRODUCTS, INCORPORATED, Greenville, Pa.
Filed April 21, 1932. Serial No. 326,342. PUBLISHED JUNE 21, 1932. Class 6.

297,317. COIN CONTROL BALL PROJECTING AMUSEMENT GAMES. K. & S. SALES COMPANY, INC., Chicago, Ill.
Filed April 22, 1932. Serial No. 326,371. PUBLISHED JUNE 28, 1932. Class 22.

297,318. PREPARATION FOR CLEANSING WOUNDS, ULCERS, AND THE LIKE. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,388. PUBLISHED JUNE 21, 1932. Class 6.

297,319. CHOLAGOGUE, BILIARY ANTIFERMENTATIVE, AND LAXATIVE. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,385. PUBLISHED JUNE 21, 1932. Class 6.

297,320. PREPARATION USED IN THE TREATMENT OF STAPHYLOCOCCIC INFECTIONS. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,390. PUBLISHED JUNE 21, 1932. Class 6.

297,321. CARD GAME ACCESSORY CONSISTING OF A GAME BOARD FOR USE WITH A DECK OF CARDS IN THE WORKING OUT AND SOLVING OF PROBLEMS IN VARIOUS CARD GAMES. WILLIAM WELLIS, doing business as "Bridgeco," New York, N. Y.
Filed April 22, 1932. Serial No. 326,405. PUBLISHED JUNE 28, 1932. Class 22.

297,322. VEGETABLE AND FLOWER SEEDS, BULBS, AND FLOWERS. F. RYNVELD & SONS, New York, N. Y.
Filed April 23, 1932. Serial No. 326,433. PUBLISHED JUNE 28, 1932. Class 1.

297,323. NONALCOHOLIC, MALTLESS SYRUPS AND EXTRACTS USED IN THE PREPARATION OF SOFT DRINKS. NEW YORK EXTRACT CO., INC., Philadelphia, Pa.
Filed April 25, 1932. Serial No. 326,491. PUBLISHED JUNE 28, 1932. Class 45.

297,324. THREAD. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa.
Filed April 21, 1932. Serial No. 326,443. PUBLISHED JUNE 21, 1932. Class 43.

297,325. CARBONATED NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS, EXTRACTS, AND CONCENTRATES USED IN MAKING THE SAME. THE BEAUFONT COMPANY, INC., Richmond, Va.
Filed May 25, 1932. Serial No. 327,422. PUBLISHED JULY 5, 1932. Class 45.

297,326. LIVE STOCK—NAMELY, HORSES. GARAT & COMPANY, Whiterock, Nev.
Filed May 26, 1932. Serial No. 327,463. PUBLISHED JULY 5, 1932. Class 1.

297,327. WHISKEY. SCHENLEY PRODUCTS COMPANY, New York, N. Y.
Filed May 26, 1932. Serial No. 327,482. PUBLISHED JULY 5, 1932. Class 49.

297,328. GINGER ALE. THE WARWICK CLUB GINGER ALE CO., INC., West Warwick, R. I.
Filed May 26, 1932. Serial No. 327,491. PUBLISHED JULY 5, 1932. Class 45.

297,329. GOLF BALLS. ARTHUR W. MORGAN, Yonkers, N. Y.
Filed May 27, 1932. Serial No. 327,519. PUBLISHED JULY 5, 1932. Class 22.

297,330. GOLF BALLS. ARTHUR W. MORGAN, Yonkers, N. Y.
Filed May 27, 1932. Serial No. 327,520. PUBLISHED JULY 5, 1932. Class 22.

297,331. VIBRATORS, THERAPEUTIC LAMPS, ETC. EISEMANN-WERKE AKTIENGESELLSCHAFT, Stuttgart, Germany.
Filed May 28, 1929. Serial No. 284,725. PUBLISHED JUNE 28, 1932. Class 44.

297,332. PREPARATIONS FOR THE TREATMENT OF THE SCALP AND HAIR. ABRAHAM H. KAITZ, doing business as American Proprietaries, Philadelphia, Pa.
Filed December 9, 1929. Serial No. 293,433. PUBLISHED JUNE 21, 1932. Class 6.

297,333. ROCHELLE SALT, SENNA LEAVES, CASCARA COMPOUND, ETC. BRUNSWIG DRUG CO., Los Angeles, Calif.
Filed April 28, 1930. Serial No. 299,549. PUBLISHED FEBRUARY 23, 1932. Class 6.

297,334. UPHOLSTERY NAILS, JACK CHAIN, BRASS PLUMBER'S AND SAFETY CHAIN, EYELETS, COIL AND FLAT SPRINGS FOR GENERAL USE, WIRE MATTRESS FABRIC, AND SCREW MACHINE PRODUCTS—NAMELY, SCREWS, BOLTS, NUTS AND SMALL METAL PARTS OF ARTICLES OF HARDWARE—AND PLUMBING AND STEAM-FITTING SUPPLIES. THE MATTATUCK MANUFACTURING COMPANY, Waterbury, Conn.
Filed November 22, 1930. Serial No. 308,211. PUBLISHED JULY 5, 1932. Class 13.

297,335. ELECTRIC WELDING MACHINES. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed November 26, 1930. Serial No. 308,346. PUBLISHED JANUARY 20, 1931. Class 21.

297,336. PORTABLE AND STATIONARY GOLF GAMES SOLD AS A UNIT. SAMUEL FELTYBERGER, Pittsburgh, Pa.
Filed December 26, 1930. Serial No. 309,339. PUBLISHED JUNE 28, 1932. Class 22.

297,337. COMPOUND CONTAINING VARIOUS MINERALS TO BE MIXED WITH FEED RATIONS OF ANIMALS FOR CORRECTIVE PURPOSES. VITAMINERAL PRODUCTS COMPANY, Peoria, Ill.
Filed April 28, 1931. Serial No. 313,722. PUBLISHED JUNE 21, 1932. Class 6.

297,338. COMPOUND CONTAINING VARIOUS MINERALS TO BE MIXED WITH THE FEEDING RATIONS OF ANIMALS FOR CORRECTIVE PURPOSES. VITAMINERAL PRODUCTS COMPANY, Peoria, Ill.
Filed April 28, 1931. Serial No. 313,724. PUBLISHED JUNE 21, 1932. Class 6.

297,339. MALT SYRUPS. RALPH DI LORENZO, doing business as Meadville Malt Co., Meadville, Pa.
Filed July 29, 1931. Serial No. 317,426. PUBLISHED JUNE 14, 1932. Class 46.

297,340. BISMUTH AND ORGANIC ARSENIC PREPARATION USED IN THE TREATMENT OF SYPHILIS USED INTRAMUSCULARLY. INTRAVENOUS PRODUCTS CO. OF AMERICA, INC., doing business as Endo Products, Inc., New York, N. Y.
Filed August 1, 1931. Serial No. 317,559. PUBLISHED OCTOBER 6, 1931. Class 6.

297,341. VACUUM MASSAGING MACHINES. VACULETTE CO., NOT INC., Chicago, Ill.
Filed August 17, 1931. Serial No. 318,085. PUBLISHED SEPTEMBER 29, 1931. Class 44.

297,342. MULTIGRAPHING MACHINES AND PARTS THEREOF, STAMPING ROLLERS, COPYING PRESSES, COPYING ROLLERS, ADDRESSING MACHINES AND PARTS THEREOF, FOLDING MACHINES AND PARTS THEREOF. ROTO-UND DEBEGO-WERKE AKTIENGESELLSCHAFT, Konigslutter, Germany.
Filed August 20, 1931. Serial No. 318,253. PUBLISHED JULY 5, 1932. Class 28.

297,343. IRRIGATORS, NASAL DOUCHES, ETC. INTERNATIONAL STAMPING & ENAMELING CORPORATION, Brooklyn, N. Y., now by change of name International Enamelware Corporation.
Filed August 24, 1931. Serial No. 318,365. PUBLISHED JUNE 28, 1932. Class 44.

297,344. LAXATIVE. DR. JERONYMO GESTEIRA, Detroit, Mich.
Filed March 11, 1932. Serial No. 325,039. PUBLISHED JUNE 21, 1932. Class 6.

297,345. OVERALLS, WORK JACKETS, ONE-PIECE WORK SUITS AND WORK TROUSERS FOR MEN AND BOYS. JANESVILLE CLOTHING CO., Janesville, and Baraboo, Wis.
Filed March 16, 1932. Serial No. 325,714. PUBLISHED APRIL 26, 1932. Class 39.

297,346. SILK AND RAYON GOODS IN THE PIECE. LEVAT BROS., INC., New York, N. Y.
Filed April 12, 1932. Serial No. 326,018. PUBLISHED JUNE 21, 1932. Class 42.

297,347. ROUGE, TALCUM, POWDER, HAIR TONIC, ETC. SPOONER, INC., New York, N. Y.
Filed April 15, 1932. Serial No. 326,167. PUBLISHED JUNE 21, 1932. Class 6.

297,348. CARPET SWEEPERS. BISSELL CARPET SWEEPER CO., Grand Rapids, Mich.
Filed May 9, 1932. Serial No. 326,887. PUBLISHED JUNE 28, 1932. Class 23.

297,349. ELECTRIC HAIR CLIPPERS. BEAUTY APPLIANCE CORPORATION, Racine, Wis.
Filed May 9, 1932. Serial No. 326,886. PUBLISHED JULY 5, 1932. Class 23.

297,350. NOSE AND THROAT SPRAY. ALLEN CHEMICAL COMPANY, Toledo, Ohio.
Filed May 9, 1932. Serial No. 326,880. PUBLISHED JUNE 21, 1932. Class 6.

297,351. MEDICINAL PREPARATION USED IN THE TREATMENT OF CERTAIN TYPES OF NUTRITIONAL ANEMIA IN INFANTS AND CHILDREN. THE PAINE DRUG COMPANY, Rochester, N. Y.
Filed May 7, 1932. Serial No. 326,868. PUBLISHED JUNE 21, 1932. Class 6.

297,352. PADS FOR USE IN PERMANENT HAIR WAVING. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y.
Filed May 7, 1932. Serial No. 326,854. PUBLISHED JUNE 28, 1932. Class 44.

297,353. MILK BOTTLE COVERS DESIGNED TO BE INSERTED OVER THE MOUTH AND NECK PORTION OF MILK BOTTLES TO PROTECT THE SAME AND KEEP THEM SANITARY. HENRY BECKER & SON, INC., Roseland, N. J.
Filed May 7, 1932. Serial No. 326,848. PUBLISHED JULY 5, 1932. Class 50.

297,354. SECONDARY BATTERIES. HERBERT L. NELSON, doing business as Battery Hi-Ball Sales Company, Boston, Mass.
Filed May 6, 1932. Serial No. 326,848. PUBLISHED JULY 5, 1932. Class 21.

297,355. PAINTS AND ENAMELS. SAMUEL RESNIK, doing business as La Sylvia Paint and Varnish Works, Brooklyn, N. Y.
Filed May 6, 1932. Serial No. 326,881. PUBLISHED JULY 5, 1932. Class 16.

297,356. CIRCULATING WATER PUMPS, AND EXHAUST GAS TURBINES. BROWN, BOVERI & CIE., Baden, Switzerland.
Filed May 6, 1932. Serial No. 326,804. PUBLISHED JULY 5, 1932. Class 23.

297,357. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND CONCENTRATES USED THEREFOR. LOUIS SAUL HARRIS, doing business as Omeco Sales Products, Brooklyn, N. Y.
Filed May 4, 1932. Serial No. 326,770. PUBLISHED JUNE 28, 1932. Class 45.

297,358. AUTOMATIC SPRINKLER SYSTEMS AND PARTS THEREOF. "AUTOMATIC" SPRINKLER CORPORATION OF AMERICA, Cleveland, Ohio.
Filed May 4, 1932. Serial No. 326,735. PUBLISHED JUNE 28, 1932. Class 13.

297,359. FIRE EXTINGUISHING BOMBS AND GRENADES. GROVER C. ANDERSON, Gateway, Mont.
Filed May 4, 1932. Serial No. 326,732. PUBLISHED JULY 5, 1932. Class 23.

297,360. BEDSPREADS, CURTAINS AND DRAPERIES OF FABRIC; FABRIC MATTRESS COVERS, FABRIC MATTRESS PROTECTORS; BLANKETS, WHETHER OF WOOL, COTTON, OR BOTH; AND TOWELS. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass.
Filed May 3, 1932. Serial No. 326,718. PUBLISHED JUNE 21, 1932. Class 42.

297,361. INTERNAL COMBUSTION MOTORS FOR BICYCLES. OUTBOARD MOTORS CORPORATION, Milwaukee, Wis.
Filed May 2, 1932. Serial No. 326,691. PUBLISHED JULY 5, 1932. Class 23.

297,362. LAWN MOWERS. OUTBOARD MOTORS CORPORATION, Milwaukee, Wis.
Filed May 2, 1932. Serial No. 326,690. PUBLISHED JULY 5, 1932. Class 23.

297,363. FIRST AID MEDICAL KIT. JAMES L. KNIPE, Washington, D. C.
Filed May 2, 1932. Serial No. 326,686. PUBLISHED JULY 5, 1932. Class 44.

297,364. POWER OPERATED WOOD WORKING MACHINES — NAMELY, BAND SAWS, JOINTERS, SAW TABLES, LATHES, AND VERTICAL SPINDLE SHAPERS. HERBERTS MACHINERY CO., LTD., Los Angeles, Calif.
Filed May 2, 1932. Serial No. 326,679. PUBLISHED JULY 5, 1932. Class 23.

297,365. SODA WATER; AND NONALCOHOLIC, MALTLESS SYRUPS AND EXTRACTS FOR MAKING SOFT DRINKS. JOHN R. POWER, doing business as Galahad Beverage Co., Allston, Mass.
Filed April 30, 1932. Serial No. 326,646. PUBLISHED JUNE 28, 1932. Class 45.

297,366. GOLF BALLS. LOUIS FRANK ROSENBERG, Providence, R. I.
Filed April 30, 1932. Serial No. 326,647. PUBLISHED JULY 5, 1932. Class 22.

297,367. ANTISEPTIC AND MOUTH, THROAT, AND DENTAL LOTION. INNOVINE COMPANY, Fairhaven, Mass.
Filed April 30, 1932. Serial No. 326,640. PUBLISHED JUNE 21, 1932. Class 6.

297,368. CHEMICALS USED IN THE CORRECTION OF WATER FOR SCALE, CORROSIVE ACTION, AND METAL EMBRITTLEMENT. MAURICE L. ASH, Jr., doing business as Wagir Chemical Company, Chicago, Ill.
Filed April 6, 1932. Serial No. 325,890. PUBLISHED JUNE 21, 1932. Class 6.

297,369. LARD. SWIFT AND COMPANY, Chicago, Ill.
Filed April 7, 1932. Serial No. 325,932. PUBLISHED JUNE 14, 1932. Class 46.

297,370. ANÆSTHETIC. MERCK & CO. INC., Rahway, N. J.
Filed April 9, 1932. Serial No. 325,955. PUBLISHED JUNE 21, 1932. Class 6.

297,371. PLANT FOOD MADE FROM FINELY PULVERIZED, BLAND, PRIMAL EARTH-MINERALS. MENDERTH, INC., Boston, Mass.
Filed April 11, 1932. Serial No. 325,987. PUBLISHED JUNE 28, 1932. Class 10.

297,372. PLANT FOOD MADE FROM FINELY PULVERIZED, BLAND, PRIMAL EARTH-MINERALS. MENDERTH, INC., Boston, Mass.
Filed April 11, 1932. Serial No. 325,988. PUBLISHED JUNE 28, 1932. Class 10.

297,373. NECKLACES, BRACELETS, EARRINGS, HAT ORNAMENTS MADE OF OR PLATED WITH PRECIOUS METAL AND OTHER RTICLES OF JEWELRY FOR PERSONAL WEAR NOT INCLUDING WATCHES. C. RAY RANDALL & Co., North Attleboro, Mass.
Filed April 7, 1932. Serial No. 325,879. PUBLISHED JULY 5, 1932. Class 28.

297,374. PLASTIC OR MOLDABLE MATERIAL SOLD AS SUCH AND ADAPTED FOR THE MANUFACTURE OF VARIOUS INDUSTRIAL PRODUCTS. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y.
Filed March 30, 1932. Serial No. 325,636. PUBLISHED JUNE 28, 1932. Class 1.

297,375. LIQUID STYPTIC TO BE USED TO STOP THE FLOW OF BLOOD FROM SHAVING CUTS. HABA LABORATORIES, Savanna, Ill.
Filed March 31, 1932. Serial No. 325,686. PUBLISHED JUNE 21, 1932. Class 6.

297,376. COTTON CLOTH IN THE PIECE, TO BE USED FOR FILTERING PURPOSES. WALTER HERBERT HILDEBRAND, Chicago, Ill.
Filed March 31, 1932. Serial No. 325,687. PUBLISHED JUNE 21, 1932. Class 42.

297,377. GREASE FOR REDUCING FRICTION ON SURGICAL GLOVES AND OTHER RUBBER ARTICLES. JAMES T. WEBB, Jr., Macon, Ga.
Filed March 31, 1932. Serial No. 325,699. PUBLISHED JUNE 21, 1932. Class 6.

297,378. INSECTICIDES. LANAIR COMPANY, Chicago, Ill.
Filed April 2, 1932. Serial No. 325,754. PUBLISHED JUNE 21, 1932. Class 6.

297,379. COMPOSITION FOR SOFTENING WATER AND FOR USE AS A SOAP SAVER AND CLEANER. GILBERT PRODUCTS CO., St. Paul, Minn.
Filed April 6, 1932. Serial No. 325,850. PUBLISHED JUNE 21, 1932. Class 6.

297,380. SALVES, OINTMENTS, CREAM AND LOTIONS, ALL FOR THE EXTERNAL USE AND TREATMENT OF THE SKIN AND SKIN DISORDERS. H. LE ROY WRIGHT, doing business as Le Roy Laboratories, Orange, N. J.
Filed March 22, 1932. Serial No. 325,380. PUBLISHED JUNE 21, 1932. Class 6.

297,381. PORCELAIN. SÄCHSISCHE PORZELLANFABRIK ZU POTSCHAPPEL VON CARL THIEME, Potschappel-Dresden, now Freital, and Dresden, Germany.
Filed March 23, 1932. Serial No. 325,448. PUBLISHED JUNE 21, 1932. Class 30.

297,382. LIQUID PREPARATION FOR COUGHS, COLDS, CROUP, SORENESS IN LUNGS, INFLAMMATION IN AIR PASSAGES, ASTHMA, BRONCHITIS, SORE THROAT, AND LA GRIPPE. HITCHCOCK LABORATORIES, Sebring, Ohio.
Filed March 25, 1932. Serial No. 325,471. PUBLISHED JUNE 21, 1932. Class 6.

297,383. BOOT PROTECTORS, BOOT STUDS, AND BOOT NAILS. BLAKEY'S BOOT PROTECTORS LIMITED, Leeds, England.
Filed April 2, 1932. Serial No. 325,741. PUBLISHED JULY 5, 1932. Class 13.

297,384. FLOOR AND FURNITURE WAX AND POLISH. WALTER T. TERRY, Jr., doing business as The Best Products Co., Kansas City, Mo.
Filed March 14, 1932. Serial No. 325,199. PUBLISHED JUNE 28, 1932. Class 16.

297,385. PASSENGER CARRYING AUTOMOBILES. THE WILLYS-OVERLAND COMPANY, Toledo, Ohio.
Filed March 17, 1932. Serial No. 325,246. PUBLISHED JULY 5, 1932. Class 19.

297,386. PASSENGER CARRYING AUTOMOBILES. THE WILLYS-OVERLAND COMPANY, Toledo, Ohio.
Filed March 17, 1932. Serial No. 325,247. PUBLISHED JULY 5, 1932. Class 19.

297,387. SALVES, OINTMENTS, CREAM AND LOTIONS, ALL FOR THE EXTERNAL USE AND TREATMENT OF THE SKIN AND SKIN DISORDERS. H. LE ROY WRIGHT, doing business as Le Roy Laboratories, Orange, N. J.
Filed March 22, 1932. Serial No. 325,379. PUBLISHED JUNE 21, 1932. Class 6.

297,388. ELECTRIC ANIMAL SHEARS AND PARTS THEREFOR. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill.
Filed May 9, 1932. Serial No. 326,889. PUBLISHED JUNE 28, 1932. Class 23.

297,389. SUSPENSORY BANDAGES. JOANNA FOUTS DAVIS, doing business as Sanitas Fundoshi Company, Cleveland, Ohio.
Filed May 9, 1932. Serial No. 326,892. PUBLISHED JUNE 28, 1932. Class 44.

297,390. ELECTRICAL MASSAGE DEVICE. BEAUTY APPLIANCE CORPORATION, Racine, Wis.
Filed May 9, 1932. Serial No. 326,885. PUBLISHED JULY 5, 1932. Class 44.

297,391. ELECTRIC LIGHT BULBS. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio.
Filed May 9, 1932. Serial No. 326,893. PUBLISHED JULY 5, 1932. Class 21.

297,392. INK SURFACER A PREPARATION. GENERAL LABORATORIES, INC., Chicago, Ill.
Filed May 9, 1932. Serial No. 326,901. PUBLISHED JULY 5, 1932. Class 11.

297,393. BASE PLATES. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed May 9, 1932. Serial No. 326,921. PUBLISHED JUNE 28, 1932. Class 44.

297,394. PROJECTION AND PHOTOGRAPHIC LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed May 10, 1932. Serial No. 326,931. PUBLISHED JUNE 28, 1932. Class 26.

297,395. PLAYING CARDS AND PLAYING CARD DEALING ACCESSORIES—NAMELY, DEAL BOXES AND DEAL CARDS. MASTER BRIDGE INSTITUTE, INC., New York, N. Y.
Filed May 10, 1932. Serial No. 326,947. PUBLISHED JUNE 28, 1932. Class 22.

297,396. COLORING PREPARATION FOR THE HAIR. NATIONAL REMEDY COMPANY, New York, N. Y.
Filed May 10, 1932. Serial No. 326,951. PUBLISHED JUNE 21, 1932. Class 6.

297,397. ROOT BEER AND ROOT BEER CONCENTRATE OR SYRUP. REED & BELL, INC., Berkeley, Calif.
Filed May 10, 1932. Serial No. 326,954. PUBLISHED JUNE 28, 1932. Class 45.

297,398. SIMULANT TOY EQUIPMENT. KEYSTON BROS., San Francisco, Calif.
Filed May 11, 1932. Serial No. 326,981. PUBLISHED JULY 5, 1932. Class 22.

297,399. TURPENTINE SUBSTITUTE AND PAINT THINNER. SHELL OIL COMPANY, San Francisco, Calif.
Filed May 11, 1932. Serial No. 326,991. PUBLISHED JUNE 28, 1932. Class 16.

297,400. VARNISHES, PAINTS AND ENAMELS. NORMAN ANTHONY FISHER, doing business as Fisher Products Co., Detroit, Mich.
Filed April 29, 1932. Serial No. 326,624. PUBLISHED JULY 5, 1932. Class 16.

297,401. LIQUID PREPARATION FOR THE TREATMENT OF SUNBURN. JOSEPH F. LAURICELLA, doing business as Crown Pharmacal Company, Long Beach, Calif.
Filed April 25, 1932. Serial No. 326,484. PUBLISHED JUNE 21, 1932. Class 6.

297,402. PRODUCTS RECOMMENDED TO RELIEVE SPASM AND TO TREAT AFFECTIONS IN WHICH IMBALANCE OF THE AUTONOMIC NERVOUS SYSTEM PLAYS AN IMPORTANT PART. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed April 25, 1932. Serial No. 326,498. PUBLISHED JUNE 21, 1932. Class 6.

297,403. CRUSHED OYSTER SHELL FOR POULTRY FEED. SHELLBUILDER, INC., Houston, Tex.
Filed April 25, 1932. Serial No. 326,500. PUBLISHED JUNE 28, 1932. Class 1.

297,404. SANITARY COVERINGS TO BE USED ON THE NECK OF BOTTLES. ELLIOTT B. CLARK, Weldon, N. C.
Filed April 26, 1932. Serial No. 326,517. PUBLISHED JULY 5, 1932. Class 50.

297,405. EMERGENCY ROAD FLARES. CENTRAL RAILWAY SIGNAL COMPANY, INC., Newton, Mass.
Filed April 28, 1932. Serial No. 326,578. PUBLISHED JULY 5, 1932. Class 9.

297,406. REFRIGERATING UNITS. THE SAWYER ENGINEERING COMPANY, Milford, Conn.
Filed April 28, 1932. Serial No. 326,595. PUBLISHED JUNE 28, 1932. Class 31.

297,407. BACTERICIDAL AND FUNGICIDAL PREPARATIONS. GOODRICH CHEMICAL COMPANY, New York, N. Y.
Filed April 29, 1932. Serial No. 326,609. PUBLISHED JUNE 21, 1932. Class 6.

297,408. LIQUID FLOOR POLISH. CONTINENTAL CAR-NA-VAR CORPORATION, Brazil, Ind.
Filed April 27, 1932. Serial No. 326,621. PUBLISHED JUNE 28, 1932. Class 16.

297,409. MEDICINE USED AS A SEDATIVE AND ANTISPASMODIC IN GENERAL MEDICINE AND GYNECOLOGICAL AND OBSTETRICAL PRACTICE. DR. JERONYMO GESTEIRA, Detroit, Mich.
Filed March 11, 1932. Serial No. 325,088. PUBLISHED JUNE 21, 1932. Class 6.

297,410. NICKEL-IRON ALLOYS IN VARIOUS FORMS. DRIVER-HARRIS COMPANY, Harrison, N. J.
Filed March 9, 1932. Serial No. 324,956. PUBLISHED JUNE 28, 1932. Class 14.

297,411. POLYMERIZED VINYL ESTERS OF THE GENERAL NATURE OF SYNTHETIC RESINS IN LIQUID OR SOLID FORM. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed March 3, 1932. Serial No. 324,738. PUBLISHED JUNE 21, 1932. Class 6.

297,412. FISH LINES. SHAPLEIGH HARDWARE COMPANY, doing business as Diamond Mfg. Co., St. Louis, Mo.
Filed February 29, 1932. Serial No. 324,628. PUBLISHED JUNE 28, 1932. Class 22.

297,413. ARTIFICIAL LUMBER IN STRIPS, SHEETS, AND BOARDS. THE COMPO-BOARD CO., Minneapolis, Minn.
Filed February 27, 1932. Serial No. 324,584. PUBLISHED JUNE 14, 1932. Class 12.

297,414. WOOD FLOOR PRESERVATIVE IN THE NATURE OF A WAX COATING. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 26, 1932. Serial No. 324,514. PUBLISHED JULY 5, 1932. Class 16.

297,415. STANDARDIZERS FOR MEASURING INGREDIENTS IN ICE CREAM. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,895. PUBLISHED JUNE 28, 1932. Class 26.

297,416. COSMETIC CONSISTING OF TURTLE OIL USED FOR FACE MASSAGING. S. WILLARD ISAACS, doing business as Matta Grosso Turtle Oil Products Company, Los Angeles, Calif.
Filed March 5, 1932. Serial No. 324,824. PUBLISHED JUNE 21, 1932. Class 6.

297,417. SILK AND RAYON CREPES IN THE PIECE. BENROSE SILK MFG. CORP., New York, N. Y.
Filed February 24, 1932. Serial No. 324,423. PUBLISHED JUNE 21, 1932. Class 42.

297,418. METAL BREAD BOXES, CANISTER SETS, FLOUR BINS, WASTE BASKETS, UTILITY AND MEDICINE CHESTS. PEORIA METAL SPECIALTY CO., Peoria, Ill.
Filed February 20, 1932. Serial No. 324,363. PUBLISHED JUNE 21, 1932. Class 2.

297,419. METAL BREAD BOXES, CANISTER SETS, FLOUR BINS, WASTE BASKETS, UTILITY AND MEDICINE CHESTS. PEORIA METAL SPECIALTY CO., Peoria, Ill.
Filed February 20, 1932. Serial No. 324,362. PUBLISHED JUNE 21, 1932. Class 2.

297,420. DEODORANT AND PERSPIRATION CORRECTIVE. THE ODORONO COMPANY, INC., New York, N. Y.
Filed February 18, 1932. Serial No. 324,296. PUBLISHED JUNE 21, 1932. Class 6.

297,421. ELECTRIC LAMPS. JOHN ALFRED STEVENS, Broadstairs, England.
Filed February 15, 1932. Serial No. 324,196. PUBLISHED JULY 5, 1932. Class 21.

297,422. BATTERY FILLERS. LEDYARD HAURY COMPANY, Elyria, Ohio.
Filed February 8, 1932. Serial No. 323,948. PUBLISHED JUNE 21, 1932. Class 2.

297,423. INSECTICIDES. STENOVER, INC., East Orange, N. J.
Filed February 6, 1932. Serial No. 323,916. PUBLISHED JUNE 21, 1932. Class 6.

297,424. EXTRACT OF SKELETON-MUSCLES, A PREPARATION USED IN THE TREATMENT OF ANGINA PECTORIS AND OTHER HEART VESSEL DISEASES, HYPERTONY, CIRCULATION TROUBLES, AND SIMILAR DISEASES. CHEMISCHE UND PHARMAZEUTISCHE FABRIK DR. GEORG HENNING, Berlin-Tempelhof, Germany.
Filed February 3, 1932. Serial No. 323,776. PUBLISHED JUNE 21, 1932. Class 6.

297,425. PREPARATION FOR CIRCULATING IN THE WATER COOLING SYSTEM OF AN AUTOMOBILE TO PREVENT LEAKING OF THE RADIATOR AND TO FILL CRACKS IN THE CYLINDER HEAD AND MOTOR BLOCK. NELLIE A. FINLEY, Waco, Tex.
Filed February 9, 1932. Serial No. 323,992. PUBLISHED JUNE 21, 1932. Class 6.

297,426. PREPARATION FOR USE IN INCREASING THE EFFICIENCY OF GASOLINE AND PREVENTING THE FORMATION OF CARBON IN INTERNAL COMBUSTION ENGINES. RAY-MAC SALES CO., Wood-Ridge, N. J.
Filed January 11, 1932. Serial No. 322,922. PUBLISHED JUNE 21, 1932. Class 6.

297,427. CIGARS. HERMAN E. NETTE, doing business as Independent Sales Company, Arlington Heights, Ill.
Filed January 7, 1932. Serial No. 322,802. PUBLISHED JULY 5, 1932. Class 17.

297,428. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. AGUSTIN TRIGO MEZQUITA, Valencia, Spain.
Filed December 30, 1931. Serial No. 322,553. PUBLISHED JUNE 28, 1932. Class 45.

297,429. YARNS. FITCHBURG YARN COMPANY, Fitchburg, Mass.
Filed November 19, 1931. Serial No. 321,278. PUBLISHED JUNE 21, 1932. Class 43.

297,430. GRAPE JUICES, AND CONCENTRATED POWDERED GRAPE COMPOUNDS FOR PREPARING NON-ALCOHOLIC BEVERAGES. VINEYARD PRODUCTS CO., Chicago, Ill.
Filed December 29, 1931. Serial No. 322,529. PUBLISHED JUNE 28, 1932. Class 45.

297,431. ELECTRIC LIGHT BULBS. BRITE-BEAM LAMP CORP., Chicago, Ill., assignor to Armstrong & Martin, Inc., Chicago, Ill., a Corporation of Illinois.
Filed January 28, 1932. Serial No. 323,522. PUBLISHED JUNE 28, 1932. Class 21.

297,432. ELECTRICAL POWER DISTRIBUTION SWITCH BOARDS, PANEL BOARDS, SAFETY SWITCHES, SWITCHBOARD CABINETS, FUSE HOLDERS, PANEL BOARD SECTIONS, AND PARTS THEREOF. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn.
Filed January 23, 1932. Serial No. 323,373. PUBLISHED JULY 5, 1932. Class 21.

297,433. ELECTRICAL POWER DISTRIBUTION SWITCH BOARDS, PANEL BOARDS, SAFETY SWITCHES, SWITCHBOARD CABINETS, FUSE HOLDERS, PANEL BOARD SECTIONS, AND PARTS THEREOF. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn.
Filed January 23, 1932. Serial No. 323,372. PUBLISHED JULY 5, 1932. Class 21.

297,434. CRAVATS, HOSIERY, NIGHTGOWNS, ETC. S. H. KRESS & Co., New York, N. Y.
Filed January 23, 1932. Serial No. 323,337. PUBLISHED JUNE 21, 1932. Class 39.

297,435. STEEL, IRON, LEAD, ZINC, AND COPPER. J. A. HENCKELS, Solingen, Germany.
Filed January 23, 1932. Serial No. 323,333. PUBLISHED JUNE 28, 1932. Class 14.

297,436. STEEL, IRON, LEAD, ZINC, AND COPPER. J. A. HENCKELS, Solingen, Germany.
Filed January 23, 1932. Serial No. 323,332. PUBLISHED JUNE 28, 1932. Class 14.

297,437. DEODORANTS AND PREPARATIONS FOR PREVENTING EXCESSIVE PERSPIRATION. THE ODORONO COMPANY, INC., New York, N. Y.
Filed December 18, 1931. Serial No. 322,265. PUBLISHED JUNE 21, 1932. Class 6.

297,438. KITCHEN UTENSILS, NAMELY, KITCHEN LADLES, MIXING SPOONS, ETC. P. M. C. MANUFACTURING CORP., Kingston, N. Y.
Filed December 3, 1931. Serial No. 321,732. PUBLISHED JULY 5, 1932. Class 23.

297,439. TABLE BOARD GAME PLAYED WITH PIECES. THE CAPITOL GAME AND NOVELTY COMPANY, St. Paul, Minn.
Filed December 2, 1931. Serial No. 321,706. PUBLISHED JULY 5, 1932. Class 22.

297,440. GASOLINES. THE POCAHONTAS OIL CORPORATION, Cleveland, Ohio.
Filed November 19, 1931. Serial No. 321,296. PUBLISHED JANUARY 12, 1932. Class 15.

297,441. YARNS. FITCHBURG YARN COMPANY, Fitchburg, Mass.
Filed November 19, 1931. Serial No. 321,272. PUBLISHED JUNE 21, 1932. Class 43.

297,442. CRAMP AND DIARRHEA COMPOUND. AMANDA VAN SICKLE, Ashland, Pa.
Filed November 10, 1931. Serial No. 320,997. PUBLISHED JUNE 21, 1932. Class 6.

297,443. PLANT PACKAGES COMPRISING GROWING PLANTS AND CARTONS WITHIN WHICH THE GROWING PLANTS ARE CONTAINED. EARL C. KILLMER, doing business as Killmer's Northern Nurseries, St. Paul, Minn.
Filed November 9, 1931. Serial No. 320,935. PUBLISHED JUNE 28, 1932. Class 1.

297,444. MEDICINAL INHALANT. FRED RIME, doing business as Par Laboratories, Los Angeles, Calif.
Filed October 28, 1931. Serial No. 320,552. PUBLISHED JUNE 21, 1932. Class 6.

297,445. TOY BOOKS. CELEBRITY PRODUCTIONS, INC., New York, N. Y.
Filed October 17, 1931. Serial No. 320,157. PUBLISHED JUNE 28, 1932. Class 22.

297,446. WIRE FENCING, AND PARTICULARLY BARBED WIRE. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass; and Hoboken, N. J.
Filed September 28, 1931. Serial No. 319,467. PUBLISHED JUNE 28, 1932. Class 18.

297,447. MACHINES, LATHES, AND TOOLS FOR CUTTING, BORING, DIVIDING, GRINDING, AND MACHINING METALS AND OTHER MATERIALS; MACHINERY SHAFTING AND PARTS THEREOF. SOCIETE GENEVOISE D'INSTRUMENTS DE PHYSIQUE, Geneva, Switzerland.
Filed September 12, 1931. Serial No. 318,998. PUBLISHED JULY 5, 1932. Class 23.

297,448. RADIO RECEIVING SETS, KITS FOR RADIO RECEIVING SETS AND PARTS OF SUCH SETS, ETC. SHORTWAVE & TELEVISION CORPORATION, Boston, Mass.
Filed October 10, 1931. Serial No. 319,949. PUBLISHED JULY 5, 1932. Class 21.

297,449. DUSTING, WIPING, AND POLISHING CLOTHS. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed May 16, 1932. Serial No. 327,145. PUBLISHED JUNE 28, 1932. Class 29.

297,450. SURGICAL GAUZE, BANDAGES, ETC. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed May 16, 1932. Serial No. 327,144. PUBLISHED JULY 5, 1932. Class 44.

297,451. COTTON CLOTH BOTH IN THE PIECE AND IN CUT LENGTHS. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed May 16, 1932. Serial No. 327,143. PUBLISHED JUNE 21, 1932. Class 42.

297,452. SURGICAL GAUZE, BANDAGES, ETC. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed May 16, 1932. Serial No. 327,142. PUBLISHED JULY 5, 1932. Class 44.

297,453. COTTON CLOTH BOTH IN THE PIECE AND IN CUT LENGTHS. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed May 16, 1932. Serial No. 327,141. PUBLISHED JUNE 21, 1932. Class 42.

297,454. MANILA AND/OR FIBER ROPE LINES AND TWINES. GREAT WESTERN CORDAGE, INC., Orange, Calif.
Filed May 16, 1932. Serial No. 327,140. PUBLISHED JULY 5, 1932. Class 7.

297,455. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed May 14, 1932. Serial No. 327,123. PUBLISHED JUNE 21, 1932. Class 43.

297,456. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed May 14, 1932. Serial No. 327,121. PUBLISHED JUNE 21, 1932. Class 43.

297,457. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed May 14, 1932. Serial No. 327,120. PUBLISHED JUNE 21, 1932. Class 43.

297,458. WHISKEY. SCHENLEY PRODUCTS COMPANY, INC., New York, N. Y.
Filed May 13, 1932. Serial No. 327,117. PUBLISHED JULY 5, 1932. Class 49.

297,459. METAL DECORATIONS FOR CASKETS. WILLIAM THORESEN, doing business as Wm. Thoresen Co., Chicago, Ill.
Filed May 14, 1932. Serial No. 327,113. PUBLISHED JUNE 28, 1932. Class 13.

297,460. COIN-CONTROLLED, BALL-PROJECTING AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,104. PUBLISHED JULY 5, 1932. Class 22.

297,461. COIN-CONTROLLED, BALL PROJECTING AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,103. PUBLISHED JULY 5, 1932. Class 22.

297,462. COIN-CONTROLLED, BALL PROJECTING AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,102. PUBLISHED JULY 5, 1932. Class 22.

297,463. COIN-CONTROLLED, BALL PROJECTING AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,101. PUBLISHED JULY 5, 1932. Class 22.

297,464. COTTON MILK-STRAINERS AND THE MATERIAL USED IN THE SAME. UNION WADDING COMPANY, Pawtucket, R. I.
Filed May 13, 1932. Serial No. 327,076. PUBLISHED JUNE 28, 1932. Class 31.

297,465. PIECE GOODS OF SILK AND RAYON AND MIXTURES THEREOF. F. DUCHARME SILK CO. INC., New York, N. Y.
Filed May 13, 1932. Serial No. 327,050. PUBLISHED JUNE 21, 1932. Class 42.

297,466. PIECE GOODS OF SILK, RAYON, COTTON, AND WOOL, AND MIXTURES OF THESE MATERIALS. F. DUCHARME SILK CO. INC., New York, N. Y.
Filed May 13, 1932. Serial No. 327,049. PUBLISHED JUNE 21, 1932. Class 42.

297,467. BOARD GAME, PLAYED WITH MOVABLE PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed May 12, 1932. Serial No. 327,023. PUBLISHED JUNE 28, 1932. Class 22.

297,468. CERTAIN PAINT PRODUCTS. FRENCH-WOLF PAINT PRODUCTS CORPORATION, Bristol, Pa.
Filed May 12, 1932. Serial No. 327,008. PUBLISHED JULY 5, 1932. Class 16.

297,469. DISINFECTANT. HUNTINGTON LABORATORIES, INC., Huntington, Ind.
Filed May 16, 1932. Serial No. 327,153. PUBLISHED JUNE 21, 1932. Class 6.

297,470. SEDATIVE. OTIS CLAPP & SON, INC., Boston, Mass.
Filed May 17, 1932. Serial No. 327,184. PUBLISHED JUNE 21, 1932. Class 6.

297,471. SEDATIVE. OTIS CLAPP & SON, INC., Boston, Mass.
Filed May 17, 1932. Serial No. 327,185. PUBLISHED JUNE 21, 1932. Class 6.

297,472. ELECTRIC FOOD AND BEVERAGE MIXERS. THE FITZGERALD MFG. COMPANY, Torrington, Conn.
Filed May 17, 1932. Serial No. 327,188. PUBLISHED JULY 5, 1932. Class 21.

297,473. JIG SAW PUZZLES. CHESTER L. PEARSON, doing business as Per-Plex Puzzle Co., Boston, Mass.
Filed May 17, 1932. Serial No. 327,197. PUBLISHED JULY 5, 1932. Class 22.

297,474. VITREOUS ENAMEL POTS, PANS, AND KETTLES FOR COOKING, SANITARY, AND STORAGE PURPOSES FOR USE IN THE HOME, RESTAURANT, AND HOSPITAL. POLAR WARE COMPANY, Sheboygan, Wis.
Filed May 17, 1932. Serial No. 327,199. PUBLISHED JUNE 28, 1932. Class 13.

297,475. AUTOMATIC FIRE ALARM DEVICES AND PARTS THEREOF. AMERICAN DISTRICT TELEGRAPH COMPANY, Jersey City, N. J.
Filed May 14, 1932. Serial No. 327,209. PUBLISHED JULY 5, 1932. Class 21.

297,476. SAFETY RAZOR BLADES. OTTO ROTH, INC., Newark, N. J.
Filed May 20, 1932. Serial No. 327,289. PUBLISHED JUNE 28, 1932. Class 23.

297,477. COAL. STONEGA COKE & COAL COMPANY, Philadelphia, Pa.
Filed May 21, 1932. Serial No. 327,324. PUBLISHED JUNE 28, 1932. Class 1.

297,478. TOY PISTOL HOLSTERS AND CARTRIDGE BELTS. FELDER BROS., New York, N. Y.
Filed May 23, 1932. Serial No. 327,353. PUBLISHED JULY 5, 1932. Class 22.

297,479. CIGARS. FERNANDEZ, PALICIO Y COMPAÑIA, S. EN C., Habana, Cuba.
Filed May 23, 1932. Serial No. 327,354. PUBLISHED JULY 5, 1932. Class 17.

297,480. MEASURING GLASSES. MISSION DRY CORPORATION, LTD., Los Angeles, Calif.
Filed May 23, 1932. Serial No. 327,368. PUBLISHED JUNE 28, 1932. Class 26.

297,481. KITCHEN RANGES OPERATED EITHER BY GAS OR ELECTRICITY. THE OHIO STATE STOVE CORPORATION, Columbus, Ohio.
Filed May 24, 1932. Serial No. 327,405. PUBLISHED JULY 5, 1932. Class 34.

297,482. SANITARY NAPKINS. PEOPLES DRUG STORES, INC., Washington, D. C., also doing business as Vano Company, New York, N. Y.
Filed May 24, 1932. Serial No. 327,410. PUBLISHED JULY 5, 1932. Class 44.

297,483. GRASS SEED. THE PHILADELPHIA SEED COMPANY, Philadelphia, Pa.
Filed May 24, 1932. Serial No. 327,412. PUBLISHED JULY 5, 1932. Class 1.

297,484. GRASS SEED. THE PHILADELPHIA SEED COMPANY, Philadelphia, Pa.
Filed May 24, 1932. Serial No. 327,413. PUBLISHED JUNE 28, 1932. Class 1.

297,485. CARBONATED NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND FOR SYRUPS, EXTRACTS, AND CONCENTRATES USED IN MAKING THE SAME. THE STANDARD BOTTLING CO., Denver, Colo.
Filed May 24, 1932. Serial No. 327,418. PUBLISHED JULY 5, 1932. Class 45.

297,486. MEDICAL AND DENTAL INSPECTION LAMP INSTRUMENTS. LEO S. BLODGETT, New York, N. Y.
Filed May 21, 1932. Serial No. 327,302. PUBLISHED JULY 5, 1932. Class 44.

297,487. CIGARS. FEDERAL CIGAR COMPANY, Red Lion, Pa.
Filed May 21, 1932. Serial No. 327,309. PUBLISHED JUNE 28, 1932. Class 17.

297,488. CIGARS. BERRIMAN BROS. INC., Tampa, Fla.
Filed May 23, 1932. Serial No. 327,334. PUBLISHED JULY 5, 1932. Class 17.

297,489. SENSITIZED BLACK PRINT CLOTH. KEUFFEL & ESSER COMPANY, Hoboken, N. J.
Filed May 21, 1932. Serial No. 327,315. PUBLISHED JUNE 28, 1932. Class 26.

297,490. BIRD GRAVEL. WILLIAM LICHTENSTEIN, doing business as Tinkiebell Products Co. and Fudo Psyllium Corp., New York, N. Y.
Filed May 23, 1932. Serial No. 327,365. PUBLISHED JUNE 28, 1932. Class 1.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

297,491. (CLASS 11. INKS AND INKING MATERIALS.) THE MULTISTAMP COMPANY, INC., Norfolk, Va. Filed July 5, 1932. Serial No. 328,677.

MULTISTAMP

For Stamping or Stenciling Inks, Embossing Powders and Ink Pads.
Claims use since May 13, 1928.

297,492. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) EAGLE-OTTAWA LEATHER CO., Grand Haven, Mich., and New York, N. Y. Filed June 8, 1932. Serial No. 327,819.

MOORISH GRAIN

For Leather.
Claims use since July 15, 1930.

297,493. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) KING FEATURES SYNDICATE, INC., New York, N. Y. Filed May 27, 1932. Serial No. 327,513.

Marian Martin

For Dress Patterns.
Claims use since Aug. 18, 1930.

297,494. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORIDA SPECIALTY COMPANY, Panama City, Fla. Filed May 16, 1932. Serial No. 327,288.

SKEETER-DOPE

For An Insecticide.
Claims use since May 1, 1931.

297,495. (CLASS 17. TOBACCO PRODUCTS.) HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y. Filed Mar. 8, 1932. Serial No. 324,906.

KASSAI

For Smoking Tobacco.
Claims use since 1907.

297,496. (CLASS 39. CLOTHING.) JAFFEE-COHEN & LANG, INC., New York, N. Y. Filed Nov. 5, 1931. Serial No. 320,826.

HARRIS-SPUN

For Clothing and Wearing Apparel—Namely, Coats, Suits, Knickers; Caps and Hats for Men, Women, and Children; Dresses for Women and Children; Pajamas, Nightshirts, Night-Dresses and Night-Drawers for Men, Women, and Children; Union Suits, Uniforms, Drawers, Chemises, Undershirts, Bloomers, Step-Ins, i. e., Underdrawers Type; Brassières, Hosiery, Collars, Bathing Suits, Shirt Waists, Blouses, Negligees, Work and Under Shirts, Neckties, Lumber-Jacks, Sweaters, Trousers, Scarfs; Shoes of Leather, Rubber, and Fabrics or Combinations of the Same; Slippers, and Gloves of Leather, Rubber, Fabric, Felt, or Combinations of the Same.
Claims use since July 1, 1931.

297,497. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Oct. 2, 1931. Serial No. 319,669.

Washerette

For Clothes Washing Machine Operated by Suction Created by a Vacuum Cleaner.
Claims use since July 24, 1931.

297,498. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) TUTTLE & BAILEY MANUFACTURING COMPANY, New York, N. Y. Filed Aug. 5, 1931. Serial No. 317,684.

QUICKSET

For Electro-Mechanical Devices for Opening and Closing Dampers on Furnaces.
Claims use since July 24, 1931.

297,499. (CLASS 31. FILTERS AND REFRIGERATORS.) MCCORD RADIATOR & MFG. CO., Detroit, Mich. Filed July 17, 1931. Serial No. 317,046.

EASY-OUT

For Ice Trays and Grids for Refrigerators.
Claims use since May 7, 1931.

297,500. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE SPARKS-WITHINGTON COMPANY, Jackson, Mich. Filed July 13, 1931. Serial No. 316,903.

Lafoy

For Radio Receiving Sets and Parts Thereof.
Claims use since June 22, 1931.

297,501. (CLASS 39. CLOTHING.) SUSSBERG & FEINBERG INC., New York, N. Y. Filed July 11, 1931. Serial No. 316,857.

"Biasilk"

For Ladies' Knitted or Woven Underwear and Pajamas Made from Silk.
Claims use since July 3, 1931.

297,502. (CLASS 39. CLOTHING.) SUSSBERG & FEINBERG INC., New York, N. Y. Filed July 11, 1931. Serial No. 316,856.

"Biaslip"

For Ladies' Knitted or Woven Underwear and Pajamas Made from Silk, Cotton and Rayon or Mixtures Thereof.
Claims use since July 3, 1931.

297,503. (CLASS 39. CLOTHING.) THE ASBURY MILLS, New York, N. Y. Filed June 1, 1931. Serial No. 315,239.

Kellermann

For Bathing Suits for Children, Misses, and Women; Bathing Shoes, Bathing Caps, Bathing Tights and Bathing Scarfs and Capes.
Claims use since 1922.

297,504. (CLASS 39. CLOTHING.) SIMON ACKERMAN CLOTHES, INC., New York, N. Y. Filed Apr. 28, 1931. Serial No. 313,899.

NEEDLECRAFT

For Men's and Young Men's Coats, Vests, Trousers, and Overcoats.
Claims use since Mar. 27, 1931.

297,505. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DR. JULIUS THILO, doing business as Dr. Thilo & Co., Mainz, Germany. Filed Dec. 23, 1930. Serial No. 309,291.

Doktor Thilo

For Chloride of Ethyl and Sterilized Injections in Ampoule Form for Use in the Treatment of Asthma, Addison's Disease, Febrile Affections, Rheumatism, Neuralgia, Coughs, Malaria, Tuberculosis, Skin-Troubles, Heart-Disorders, Chlorosis, Leucemia, Hemophilia, Arteriosclerosis, Psoriasis, Lupus, Influenza, Syphilis, Basedow's Disease, Phthisis, Pneumonia, Bronchitis, Tabes, Varices, and Tetanus.

Claims use since 1920.

297,506. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) VIO-RAY COMPANY, Kansas City, Mo. Filed Jan. 24, 1928. Serial No. 260,604.

VIO-RAY SCREEN GLASS

For Article of Manufacture Comprising a Reticular Metallic Base Covered with a Thin Transparent or Translucent Elastic Body or Film Firmly Adhering to the Strands of Said Base, Said Article Being Used as a Substitute for or in the Place of Ordinary Window Glass.

Claims use since Aug. 1, 1926.

297,507. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) VIO-RAY COMPANY, Kansas City, Mo. Filed Jan. 24, 1928. Serial No. 260,602.

VIO-RAY

For Article of Manufacture Comprising a Fabric Base of Either Wire or Cloth Impregnated with or to Which Has Been Applied a Waterproof and Transparent Material, Said Article Being Used as a Substitute for or in the Place of Ordinary Window Glass.

Claims use since Aug. 1, 1925.

297,508. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE HARVEL CORPORATION, Newark, N. J. Filed Oct. 4, 1927. Serial No. 255,600.

HARVELL

For Electrical Insulation in Liquid, Semi-Liquid, Paste Form, in Sheets Plain and Laminated, and in the Form of Molding Compounds.

Claims use since Aug. 1, 1927.

TRADE-MARK REGISTRATIONS RENEWED

38,001. SUSPENDERS. Registered April 1, 1902. CHESTER SUSPENDER CO., Boston, Mass. Renewed April 1, 1932, to Everlastik, Incorporated, Chelsea, Mass., a Corporation of Massachusetts, assignee.

38,621. A CONCENTRATED FLAVORING EXTRACT. Registered July 15, 1902. CORRIZO EXTRACT COMPANY, Albany, N. Y. Renewed July 15, 1932, to Corrizo Extract Company, Inc., New York, N. Y., a Corporation of New York, assignee.

38,764. A DYEING AND TANNING ASSISTANT. Registered August 12, 1902. WILHELM BECKERS. Renewed August 12, 1932, to National Aniline & Chemical Company, Incorporated, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

38,939. WALL FINISHING AND DECORATING MATERIAL. Registered September 23, 1902. THE MURALO COMPANY. Renewed September 23, 1932, to The Muralo Company, Inc., New Brighton, N. Y., a Corporation of New York, assignee.

39,303. RAZORS. Registered November 18, 1902. RUSS J. CHRISTY. Renewed November 18, 1932, to The Christy Company, Fremont, Ohio, a Corporation of Ohio, assignee.

39,326. SILVER VITELLIN USED FOR MEDICINAL PURPOSES. Registered November 18, 1902. ALBERT C. BARNES, Philadelphia, Pa. Renewed November 18, 1932, to A. C. Barnes Company, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,573. CERTAIN NAMED CLEANSING COMPOSITIONS. Registered December 30, 1902. SCHOELLKOPF, HARTFORD & HANNA CO., Buffalo, N. Y. Renewed December 30, 1932, to National Aniline & Chemical Company, Incorporated, New York, N. Y., a Corporation of New York, assignee.

39,739. LINIMENT. Registered February 3, 1903. JOHN S. BURTON, Sherman, Tex. Renewed February 3, 1933, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

39,817. SYRINGES OR DOUCHES OF RUBBER. Registered February 17, 1903. MEINECKE & CO., New York, N. Y., a Corporation of New Jersey. Renewed February 17, 1933.

87,487. MEN'S AND BOYS' WORK-SHIRTS. Registered July 16, 1912. SALANT & SALANT. Renewed July 16, 1932, to Salant & Salant, Inc., New York, N. Y., a Corporation of New York, successor.

87,622. COFFEE. Registered July 30, 1912. THE GREAT ATLANTIC AND PACIFIC TEA COMPANY, Jersey City, N. J. Renewed July 30, 1932, to The Great Atlantic & Pacific Tea Company, New York, N. Y., a Corporation of New Jersey.

87,750. CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. Registered August 6, 1912. B. H. GLADDING DRY GOODS CO. Renewed August 6, 1932, to Gladding's, Inc., Providence, R. I., a Corporation of Rhode Island, by change of name.

87,751. CERTAIN CLOTHING. Registered August 6, 1912. B. H. GLADDING DRY GOODS CO. Renewed August 6, 1932, to Gladding's, Inc., Providence, R. I., a Corporation of Rhode Island, by change of name.

87,762. CERTAIN CLOTHING. Registered August 6, 1912. A. G. HYDE & SONS. Renewed August 6, 1932, to Fred Butterfield & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

87,857. CHEESE. Registered August 13, 1912. EDWARD W. COON, Philadelphia, Pa. Renewed August 13, 1932, to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware, assignee by mesne assignments.

87,923. CANDY, CHOCOLATE, COCOA, PRESERVED FRUIT, AND NUTS. Registered August 13, 1912. POWELL'S, New York, N. Y., a Corporation of New York. Renewed August 13, 1932.

87,932. BLENDED COFFEE. Registered August 13, 1912. ST. LOUIS COFFEE & SPICE MILLS, St. Louis, Mo., a Corporation of Missouri. Renewed August 13, 1932.

87,933. BLENDED COFFEE. Registered August 13, 1912. ST. LOUIS COFFEE & SPICE MILLS, St. Louis, Mo., a Corporation of Missouri. Renewed August 13, 1932.

88,027. A SALVE FOR THE RELIEF OF CERTAIN DISABILITIES. Registered August 20, 1912. JOHN P. SCHARPENTER, Aurora, Ill. Renewed August 20, 1932.

88,064. CERTAIN ELECTRICAL APPARATUS AND SUPPLIES. Registered August 27, 1912. C. CONRADTY, FABRIK ELEKTRISCHER U. GALVANISCHER KOHLEN, Nuremberg, Germany, a Firm. Renewed August 27, 1932.

88,372. CHILDREN'S LEATHER, CANVAS AND RUBBER SHOES. Registered September 10, 1912. SEARS, ROEBUCK AND CO., Chicago, Ill., a Corporation of New York. Renewed September 10, 1932.

88,491. GLASS REFLECTORS AND SHADES. Registered September 24, 1912. HOLOPHANE GLASS COMPANY. Renewed September 24, 1932, to Holophane Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,840. EGGS. Registered October 29, 1912. CALIFORNIA CENTRAL CREAMERIES. Renewed October 29, 1932, to Golden State Company, Ltd., San Francisco, Calif., a Corporation of Delaware, assignee.

88,988. A SODA-WATER DRINK. Registered October 29, 1912. JAMES P. WILLIAMS, Brooklyn, N. Y. Renewed October 29, 1932, to A. D. Lewis, Atlanta, Ga., successor.

89,367. CERTAIN NAMED TOILET PREPARATIONS. Registered December 10, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed December 10, 1932.

89,368. PERFUMES. Registered December 10, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed December 10, 1932.

89,457. WHEAT-FLOUR. Registered December 17, 1912. HENRY GLADE & CO., Grand Island, Nebr. Renewed December 17, 1932, to Nebraska Consolidated Mills Co., Omaha, Nebr., a Corporation of Nebraska, successor.

89,498. CERTAIN NAMED HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES. Registered December 17, 1912. PHILLIPS LEAD & SUPPLY CO., Providence, R. I., a Corporation of Rhode Island. Renewed December 17, 1932.

89,539. CERTAIN NAMED HARDWARE, PLUMBING, AND STEAM-FITTING SUPPLIES. Registered December 24, 1912. COLUMBIAN ENAMELING & STAMPING CO., Terre Haute, Ind., a Corporation of Indiana. Renewed December 24, 1932.

89,559. LEAD. Registered December 24, 1912. INTERNATIONAL LEAD REFINING COMPANY, East Chicago, Ind., and New York, N. Y. Renewed December 24, 1932, to International Lead Refining Company, New York, N. Y., a Corporation of Indiana.

89,560. LEAD. Registered December 24, 1912. INTERNATIONAL LEAD REFINING COMPANY, East Chicago, Ind., and New York, N. Y. Renewed December 24, 1932, to International Lead Refining Company, New York, N. Y., a Corporation of Indiana.

89,561. LEAD. Registered December 24, 1912. INTERNATIONAL LEAD REFINING COMPANY, East Chicago, Ind., and New York, N. Y. Renewed December 24, 1932, to International Lead Refining Company, New York, N. Y., a Corporation of Indiana.

89,657. SODA-WATER. Registered December 31, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed December 31, 1932.

89,697. ROUGE. Registered December 31, 1912. THE J. A. POZZONI PHARMACAL CO., Chicago, Ill. Renewed December 31, 1932, to Mellier Company, Perfumer, St. Louis, Mo., a Corporation of Missouri, assignee.

89,727. A MEDICINAL PREPARATION. Registered December 31, 1912. JOHN WYETH & BROTHER, INCORPORATED, Philadelphia, Pa. Renewed December 31, 1932, to John Wyeth & Brother, Incorporated, Wilmington, Del., and Philadelphia, Pa., a Corporation of Delaware, assignee.

89,875. CANDY. Registered January 14, 1913. QUAKER CITY CHOCOLATE & CONFECTIONERY COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed January 14, 1933.

89,929. A REMEDY USED INTERNALLY IN DISORDERS OF THE STOMACH. Registered January 21, 1913. C. A. F. KAHLBAUM, Berlin, Germany. Renewed January 21, 1932, to Schering Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

89,945. ELECTRICAL APPARATUS FOR CERTAIN NAMED PURPOSES. Registered January 21, 1913. OZONAIR, LIMITED, Westminster, London, England, a Corporation of Great Britain. Renewed January 21, 1933.

89,971. A CORN AND CANE SYRUP. Registered January 28, 1913. ALABAMA-GEORGIA SYRUP COMPANY, Montgomery, Ala., a Corporation of Alabama. Renewed January 28, 1933.

90,014. CORSETS, CORSET-WAISTS, BRASSIERES, AND UNDERWAISTS. Registered January 28, 1913. THE H & W COMPANY, Newark, N. J., a Corporation of New Jersey. Renewed January 28, 1933.

90,021. TANNED CALF-LEATHER. Registered January 28, 1913. HUNT-RANKIN LEATHER COMPANY, Boston and Peabody, Mass. Renewed January 28, 1933, to Hunt-Rankin Leather Co., Boston, Mass., a Corporation of Massachusetts.

90,142. BLOOD-PRESSURE-RAISING AND HEMOSTATIC COMPOUNDS. Registered February 4, 1913. FREDERICK STEARNS & COMPANY, Detroit, Mich., a Corporation of Michigan. Renewed February 4, 1933.

90,147. EXPANSION-BOLTS, MACHINE-BOLTS, TOGGLE-BOLTS, AND SCREWS. Registered February 4, 1913. U. S. EXPANSION BOLT CO., New York, N. Y., a Corporation of New York. Renewed February 4, 1933.

90,273. CERTAIN ADVERTISING SIGNS NOT SUSCEPTIBLE OF BEING MADE BY A PRINTER. Registered February 11, 1913. THE WHITEHEAD & HOAG COMPANY, Newark, N. J., a Corporation of New Jersey. Renewed February 11, 1933.

90,335. WHEAT-FLOUR AND A BREAKFAST CEREAL. Registered February 18, 1913. THE HUBLER MILLING & ELEVATOR COMPANY, Salt Lake City, Utah. Renewed February 18, 1933, to The Colorado Milling & Elevator Company, Denver, Colo., a Corporation of Colorado, assignee.

LABELS

REGISTERED SEPTEMBER 13, 1932

41,147.—*Title:* 4-6 MULTI-PUZZLE. For Puzzle Devices. R. A. BATES, Brea, Calif. Published June 9, 1932.

41,148.—*Title:* WINCROFT. For Cigars. COONY BAYER CIGAR CO., Fort Wayne, Ind. Published August 8, 1932.

41,149.—*Title:* PRINCESS LOUISE. For Feminine Antiseptics. ELIZABETH BOYD, doing business as the Princess Laboratories, Los Angeles, Calif. Published October 15, 1931.

41,150.—*Title:* ENNER-JEE. For Bread. CENTRAL WAXED PAPER CO., Chicago, Ill. Published July 15, 1932.

41,151.—*Title:* ALKALOID. For a Coating Preparation for Cement Concrete, and Composition Floors, Plaster and Stucco Walls Etc. COLONIAL WORKS, Brooklyn, N. Y. Published July 18, 1932.

41,152.—*Title:* SUNICE. For Skin Creams, ROYAL DICKINSON, Roselle, N. J. Published May 15, 1932.

41,153.—*Title:* EAGLE-ROCK WATER. For Spring Water. EAGLE-ROCK SPRINGS, INC., Eagle and Milwaukee, Wis. Published July 12, 1932.

41,154.—*Title:* WOOSIES. For Root Beer. MAX GLAZER, doing business as Real Juice Co., Dallas, Tex. Published July 29, 1932.

41,155.—*Title:* HAMMER SPANISH DINNER E. Z. MEAL. For Spanish Dinners. ALICE M. HAMMER, Hillsboro, Oreg. Published April 15, 1932.

41,156.—*Title:* HAMMER CHICKEN CHOWDER E. Z. MEAL. For Chicken Chowder. ALICE M. HAMMER, Hillsboro, Oreg. Published April 15, 1932.

41,157.—*Title:* REGISTERED NURSES SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 5, 1932.

41,158.—*Title:* JACK & JILL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 18, 1932.

41,159.—*Title:* KLINE'S BEAUTIFUL SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 2, 1932.

41,160.—*Title:* PAUL REVERE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 18, 1932.

41,161.—*Title:* GOVERNOR WINTHROP. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 2, 1932.

41,162.—*Title:* LORE LEE. For Face and Hand Lotion. CLARA M. HOWARD, Oakland, Calif. Published June 25, 1932.

41,163.—*Title:* DEVONSHIRE'S EARTH SALTS FOR HUMAN USE. For Earth Salts. HARRY C. JOHNSON, doing business as F. S. Powers Co., Crystal Lake, Ill. Published May 25, 1932.

41,164.—*Title:* THE SUPERSCORE DUPLICATE PAD. For Contract and Auction Bridge Pads. MRS. MERTON S. KEITH, Worcester, Mass. Published August 2, 1932.

41,165.—*Title:* ASTRASAN HEALTH COOKIES. For Cookies. FRANK KUMMER, doing business as Astrasan Mfg. Co., Hackensack, N. J. Published May 16, 1932.

41,166.—*Title:* FAIRY-TOUCH. For Hair Nets. H. A. LOEB & CO., Chicago, Ill. Published January 25, 1932.

41,167.—*Title:* REGAL. For Hair Nets. H. A. LOEB & CO., Chicago, Ill. Published January 25, 1932.

41,168.—*Title:* MISS AMERICA. For Hair Nets. H. A. LOEB & CO., Chicago, Ill. Published January 25, 1932.

41,169.—*Title:* BE GOOD TO YOUR EYES AND LYM-LYTE THE ROAD AHEAD. For Electric Lamp Bulbs. SAMUEL LYMAN, Brooklyn, N. Y. Published June 10, 1932.

41,170.—*Title:* FROSTY. For Frozen Custard. THE MENASHA PRODUCTS CO., Menasha, Wis. Published July 11, 1932.

41,171.—*Title:* ZEP. For Aspirin Tablets. WILLIAM J. MUTSCHLER, Evansville, Ind. Published February 17, 1931.

41,172.—*Title:* MY-T-FINE-VANILLA-CUSTARD FLAVOR DESSERT. For Mixture of Ingredients to be Used For Making Vanilla-Custard Flavored Desserts. MY-T-FINE CORPORATION, Dover, Del., and Brooklyn, N. Y. Published August 5, 1932.

41,173.—*Title:* NB ANTISEPTIC. For Antiseptic. NASSOUR BROS., INC., LTD., Los Angeles, Calif. Published June 29, 1932.

41,174.—*Title:* CLOWNS. For Clown Biscuit Made with Arrowroot Flour. NATIONAL BISCUIT CO., New York, N. Y. Published May 20, 1932.

41,175.—*Title:* CLOWNS. For Clown Biscuit Made with Arrowroot Flour. NATIONAL BISCUIT CO., New York, N. Y. Published May 20, 1932.

41,176.—*Title:* EMIL SEVERINO'S FAMOUS ITALIAN SAUCES, MEAT SAUCE BRAND. For Sauces. EMIL SEVERINO, Denver, Colo. Published January 15, 1932.

41,177.—*Title:* SAFETY-HEET. For Electric Heating Pad. UNITED DRUG CO., Boston, Mass. Published June 11, 1932.

41,178.—*Title:* FESTIVAL PALE DRY GINGER ALE SPARKLING-REFRESHING. For Ginger Ale. WARNER-JENKINSON CO., St. Louis, Mo. Published May 15, 1932.

41,179.—*Title:* AVALON MATCHES. For Matches. WESCO FOODS CO., Cincinnati, Ohio. Published June 19, 1932.

PRINTS

REGISTERED SEPTEMBER 13, 1932

13,904.—*Title:* DICED STEAK. For Meat Tendering Machines. THE AMERICAN MINE DOOR CO., Canton, Ohio. Published March 1, 1932.

13,905.—*Title:* NITRATE OF SODA. For Nitrate of Soda. THE BARRETT CO., New York, N. Y. Published May 10, 1932.

13,906.—*Title:* GUARANTEED 100% PURE PENNSYLVANIA OIL. For Oils. PENNSYLVANIA GRADE CRUDE OIL ASSOCIATION, Oil City, Pa. Published August 16, 1932.

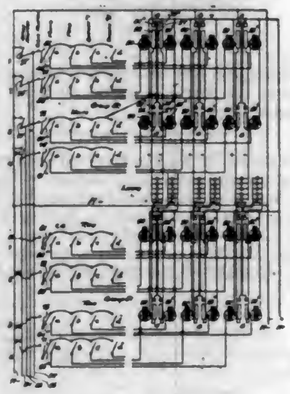
13,907.—*Title:* SAFETY-LIGHT. For Lanterns. IOWA D. SMITH, Columbus, Ohio. Published June 30, 1932.

13,908.—*Title:* FUNERAL PRICE INDEX. For Funeral Price Indexes. JOSEPH S. WATERMAN & SONS, INCORPORATED, Boston, Mass. Published July 23, 1932.

REISSUES

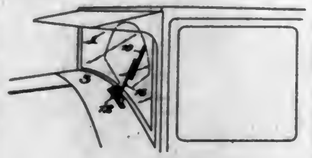
SEPTEMBER 13, 1932

18,593. SELECTIVE CIRCUIT SYSTEM AND REMOTE CONTROL. ALBERT R. LOCKE, Oak Park, Ill. Original No. 1,638,774, dated Aug. 9, 1927, Serial No. 407,386, filed Sept. 1, 1920. Application for reissue filed June 25, 1928. Serial No. 288,214. 43 Claims. (Cl. 171—97.)



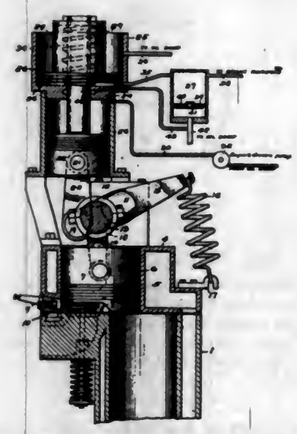
22. The method of illuminating with electric lamps energized by a plurality of separate load circuits, in a system having a plurality of separately operable control switches in commonly connected groups, which consists in closing selected switches of each group for connecting them to selected load circuits and in separately energizing the common connection of each group of control switches whereby selected load circuits are energized.

18,594. MOTOR VEHICLE. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Original No. 1,719,444, dated July 2, 1929, Serial No. 131,195, filed Aug. 24, 1926. Application for reissue filed June 21, 1932. Serial No. 618,510. 12 Claims. (Cl. 15—255.)



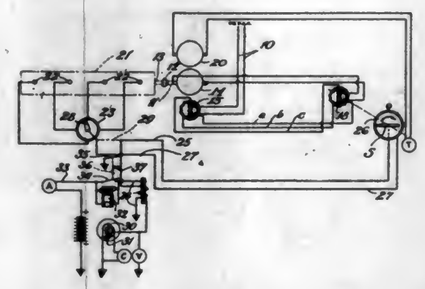
1. In combination with the cowl and windshield of an automotive vehicle, of a windshield cleaner motor mounted beneath the cowl and housed thereby, said cowl having a slot therein substantially parallel to the vehicle windshield, a wiper arm operably connected to the cleaner motor and extending upwardly through the cowl slot, a wiper element operably connected to the upwardly projecting arm and movable thereby in wiping contact with the windshield, and a weather guard for the cowl slot.

18,595. UNIFORM COMPRESSION INTERNAL-COMBUSTION ENGINE. THEODORE R. WILSON, Peshastin, Wash., assignor, by direct and mesne assignments, of one-third to Brooks Walker, Piedmont, Calif., one-third to Harry E. Kennedy, Berkeley, Calif., and one-third to Clinton L. Walker, Piedmont, Calif. Original No. 1,639,477, dated Aug. 16, 1927, Serial No. 106,638, filed May 4, 1926. Application for reissue filed July 31, 1929. Serial No. 382,413. 16 Claims. (Cl. 124—48.)



1. The combination with an internal combustion engine and its cylinders of a movable compression abutment and means under control of the intake manifold pressure of said engine for varying the position of said abutment in accordance with variations in said intake manifold pressure.

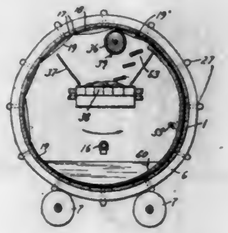
18,596. MECHANISM FOR TESTING IGNITION OF AUTOMOBILES. BUTLER J. HASKINS, Chicago, Ill., assignor to Joseph Weidenhoff, Incorporated, a Corporation of Illinois. Original No. 1,748,417, dated Feb. 25, 1930, Serial No. 255,887, filed Feb. 18, 1928. Application for reissue filed Apr. 13, 1931. Serial No. 529,862. 8 Claims. (Cl. 177—311.)



1. Ignition testing apparatus for automobile engines, comprising a spark protractor operatively connected to the engine to rotate in synchronism therewith at any given

speed thereof, and means electrically connected to the distributor for indicating visually on said protractor all of the sparks as they pass the distributor, each indication at said protractor being simultaneous with the passage of the spark through the distributor and of the same duration.

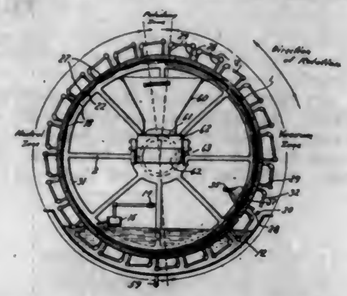
18,597. APPARATUS FOR SEPARATING SOLIDS FROM LIQUIDS OR LIQUORS BY FILTRATION. JOHN T. SHIMMIN, Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,752,758, dated Apr. 1, 1930, Serial No. 27,804, filed May 4, 1925. Application for reissue filed Apr. 17, 1931. Serial No. 530,959. 9 Claims. (Cl. 210—202.)



8. In a filtering apparatus, a flexible filtering medium, a supporting frame therefor engaging the margin of said medium, and means for flexing said medium on opposite sides of a plane connecting the lines of engagement between the medium and said frame to dislodge solids from the medium.

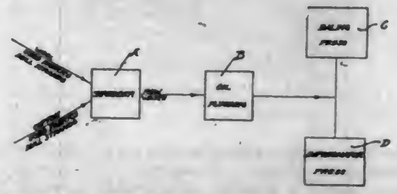
18,598. APPARATUS FOR SEPARATING SOLIDS FROM LIQUIDS OR LIQUORS BY FILTRATION. JOHN T. SHIMMIN, Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,791,251, dated Feb. 3, 1931, Serial No. 56,156, filed Sept. 14, 1925. Renewed Oct. 20, 1930. Application for reissue filed Apr. 17, 1931. Serial No. 530,960. 15 Claims. (Cl. 210—202.)

1. Filtering apparatus comprising a rotatable drum, a filtering medium mounted on the inner longitudinal face of the drum arranged to pass beneath a liquid in a zone at the lower part of the drum, and means for applying filtering pressure to the medium when in contact



with such liquid but only in a portion of said zone spaced from the point of entrance of the filtering medium beneath the liquid.

18,599. METHOD OF CONDITIONING WASTE. EDWIN S. PEARCE, Indianapolis, Ind., assignor to Railway Service and Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Original No. 1,779,011, dated Oct. 21, 1930, Serial No. 283,725, filed June 7, 1928. Renewed Aug. 25, 1930. Application for reissue filed Feb. 26, 1932. Serial No. 595,609. 8 Claims. (Cl. 308—243.)

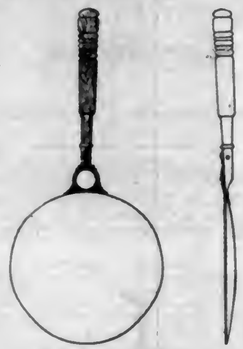


7. The herein described steps of a method of treating waste for use in journal boxes, which consist of the step of passing hot oil through said waste while rotating the waste in the basket of a centrifugal machine; the succeeding step of extracting from said waste the major portion of the oil thereof; and the succeeding step of immersing said waste in hot oil to remove moisture therefrom.

DESIGNS

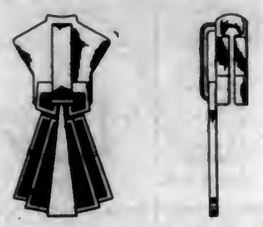
SEPTEMBER 13, 1932

87,737. PATEN. WILLIAM H. ACHURCH, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I. Filed July 16, 1932. Serial No. 44,354. Term of patent 14 years.



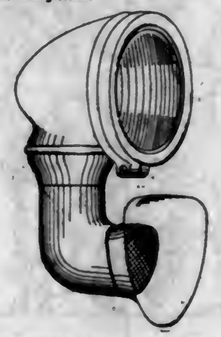
The ornamental design for a paten, as shown.

87,738. PULL FOR A SLIDE FASTENER. ALFRED E. CARLILE, Meadville, Pa. Filed Feb. 1, 1932. Serial No. 42,687. Term of patent 7 years.



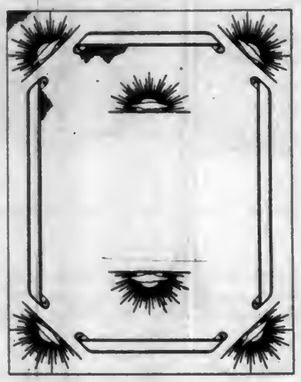
The ornamental design for a pull for a slide fastener substantially as shown.

87,739. COMBINED LAMP AND HORN. ARTHUR J. CHANTER, Buffalo, N. Y., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed July 11, 1932. Serial No. 44,800. Term of patent 14 years.



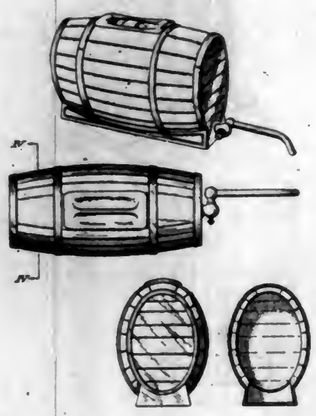
The ornamental design for a combined lamp and horn substantially as shown.

87,740. PAPER NAPKIN. THOMAS N. DELIGIANES, Chicago, Ill. Filed June 29, 1932. Serial No. 44,214. Term of patent 14 years.



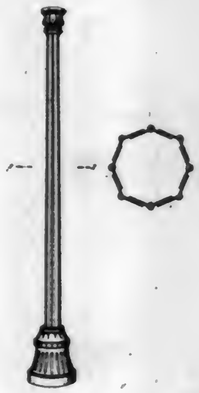
The ornamental design for a paper napkin as shown.

87,741. CONTAINER FOR COOLING AND DISPENSING WATER OR BEVERAGES. EMANUEL DYM, Pittsburgh, Pa., assignor to Porcelier Manufacturing Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed June 27, 1932. Serial No. 44,200. Term of patent 7 years.



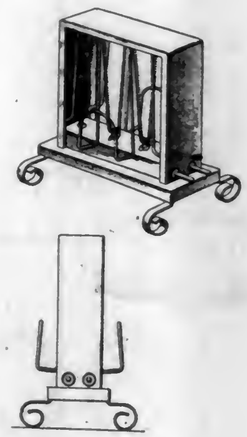
The ornamental design for a container for cooling and dispensing water or beverages, as shown.

87,742. STANDARD FOR STREET LIGHTS OR OTHER ARTICLES. JOHN FERDINAND FERM, Midland, Pa., assignor to Pittsburgh Crucible Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1932. Serial No. 44,378. Term of patent 14 years.



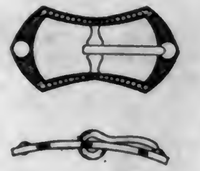
The ornamental design for a standard for street lights or other articles, as shown.

87,743. ELECTRIC TOASTER OR SIMILAR ARTICLE. JOHN FLETCHER, New York, N. Y. Filed July 12, 1932. Serial No. 44,312. Term of patent 7 years.



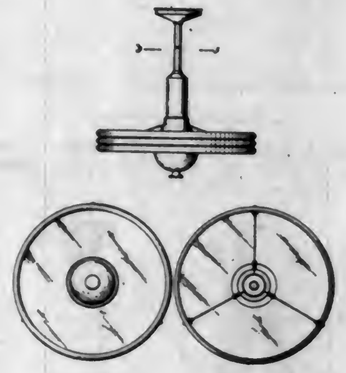
The ornamental design for an electric toaster or similar article, as shown.

87,744. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed June 6, 1932. Serial No. 43,994. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

87,745. CHANDELIER. FOSTER GUNNISON, Bronxville, N. Y., assignor to Cox, Nostrand & Gunnison, Inc., Brooklyn, N. Y., a Corporation of New York. Filed July 15, 1932. Serial No. 44,348. Term of patent 14 years.



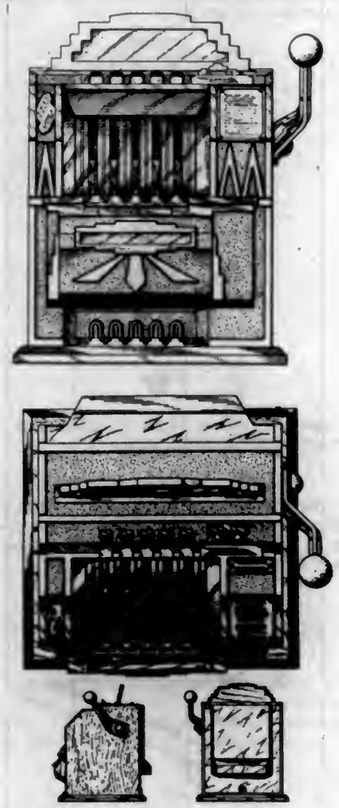
The ornamental design for a chandelier, as shown.

87,746. WALL PAPER. CURT OSCAR HESSE, Brooklyn, N. Y., assignor to Becker, Smith & Page, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 29, 1929. Serial No. 31,884. Term of patent 3½ years.



The ornamental design for wall paper as shown.

87,747. CABINET FOR COIN CONTROLLED APPARATUS. GUSTAV F. HOCHREIM, Chicago, Ill. Filed June 27, 1932. Serial No. 44,205. Term of patent 14 years.



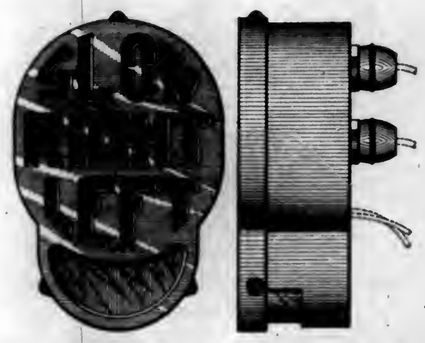
The ornamental design for a cabinet for coin controlled apparatus as shown.

87,748. COIN CONTROLLED GAME APPARATUS. MEYER HORWITZ, Baltimore, Md. Filed Feb. 10, 1932. Serial No. 42,798. Term of patent 7 years.



The ornamental design for a coin controlled game apparatus, as shown.

87,749. MOTOR VEHICLE SIGNAL. WILLIAM C. HUFFMAN, Broken Bow, Nebr. Filed July 9, 1932. Serial No. 44,289. Term of patent 14 years.



The ornamental design for a motor vehicle signal, as shown.

87,750. RADIO TABLE OR SIMILAR ARTICLE. WILLIAM K. KLEAVER, Grand Rapids, Mich. Filed Mar. 12, 1932. Serial No. 43,167. Term of patent 3½ years.



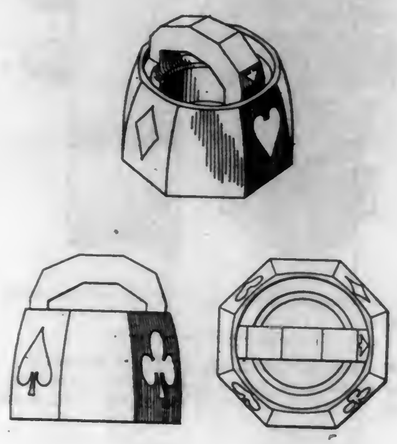
The ornamental design for a radio table or similar article, as shown and described.

87,751. FRONT FOR DISPLAY DEVICES. JOSEPH KNOCHE, Kansas City, Mo. Filed Jan. 19, 1931. Serial No. 38,382. Term of patent 7 years.



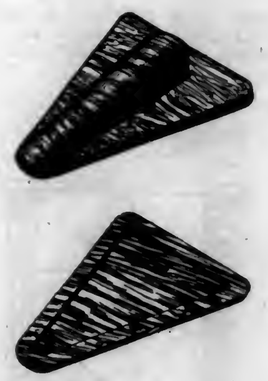
The ornamental design for a front for a display device substantially as shown and described.

87,752. ASH TRAY. BERT G. LARRABEE, Houston, Tex. Filed July 23, 1931. Serial No. 40,645. Term of patent 3½ years.



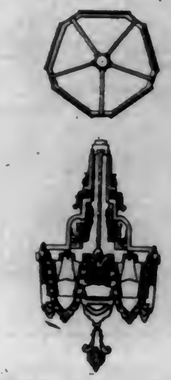
The ornamental design for an ash tray, as shown.

87,753. DOORCHECK. HENRY R. LOVELL, Greenville, Pa. Filed May 25, 1932. Serial No. 43,898. Term of patent 14 years.



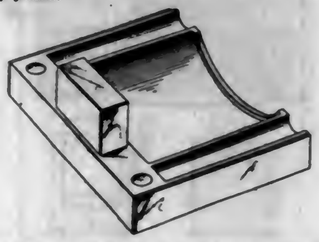
The ornamental design for a door check as shown.

87,754. HANGING LAMP BODY OR SIMILAR ARTICLE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 6, 1932. Serial No. 44,269. Term of patent 3½ years.



The ornamental design for a hanging lamp body or similar article, substantially as shown.

87,755. COMBINED RAZOR BLADE SHARPENER AND ASH TRAY. MARSHALL MCKIBBIN, Washington, D. C. Filed Mar. 7, 1932. Serial No. 43,105. Term of patent 3½ years.



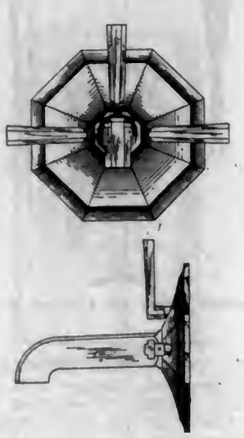
The ornamental design for a combined razor blade sharpener and ash tray as shown.

87,756. TEXTILE FABRIC. GEORGE H. PERKINS, Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn., a Corporation of Massachusetts. Filed June 10, 1932. Serial No. 44,050. Term of patent 3½ years.



The ornamental design for textile fabric, as shown.

87,757. BATH-ROOM FIXTURE. ELTON A. POPE, Oakville, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed May 6, 1932. Serial No. 43,731. Term of patent 7 years.



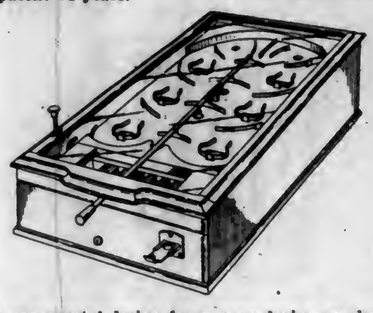
The ornamental design for a bath-room fixture as shown.

87,758. BATH-ROOM FIXTURE. ELTON A. POPE, Oakville, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed May 6, 1932. Serial No. 43,732. Term of patent 7 years.



The ornamental design for a bath-room fixture as shown.

87,759. GAME DEVICE. DAVID C. ROCKOLA, Chicago, Ill. Filed July 21, 1932. Serial No. 44,389. Term of patent 14 years.



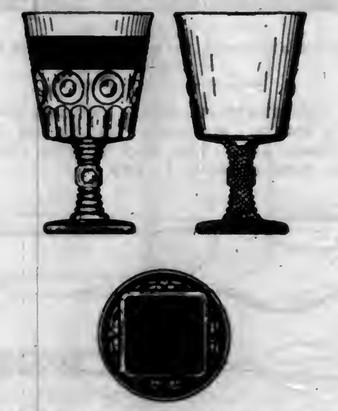
The ornamental design for a game device, as shown.

87,760. DISPLAY FIXTURE. OSCAR N. SEGALL, Philadelphia, Pa. Filed May 7, 1932. Serial No. 43,744. Term of patent 7 years.



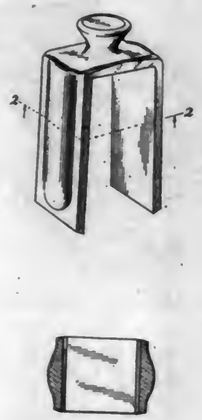
The ornamental design for a display fixture, as shown.

87,761. GOBLET. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed July 21, 1932. Serial No. 44,397. Term of patent 7 years.



The ornamental design for a goblet, as shown.

87,762. BUTTER MOLD. HARRY STEWART, Los Angeles, Calif. Filed July 11, 1932. Serial No. 44,804. Term of patent 3½ years.



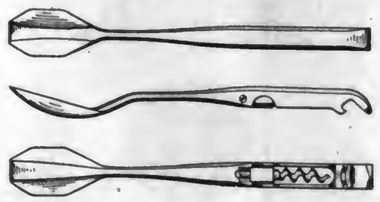
The ornamental design for a butter mold as shown.

87,763. TEXTILE FABRIC. MARK M. STONE, Malden, Mass., assignor to S. Robert Stone, Waban, Mass. Filed July 29, 1932. Serial No. 44,483. Term of patent 3½ years.



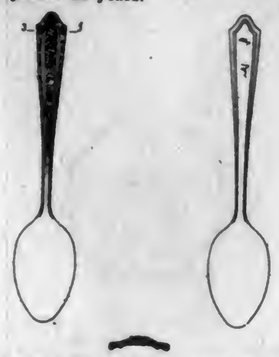
The ornamental design for a textile fabric as shown.

87,764. COMBINATION BOTTLE OPENER AND BEVERAGE SPOON. WILLIAM T. WALKER and HENRY F. ORR, Toledo, Ohio. Filed July 25, 1932. Serial No. 44,444. Term of patent 7 years.



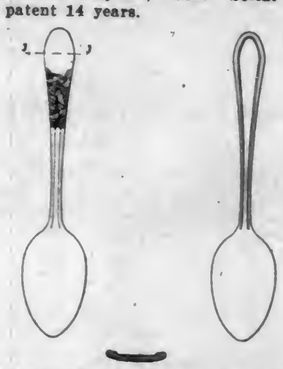
The ornamental design for a combination bottle opener and beverage spoon, as shown.

87,765. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed July 15, 1932. Serial No. 44,346. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown.

87,766. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed July 27, 1932. Serial No. 44,450. Term of patent 14 years.



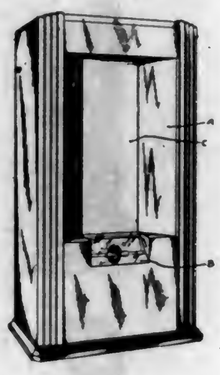
The ornamental design for a spoon or similar article as shown.

87,767. EMBLEM. ALFRED WEGNER, Chicago, Ill. Filed May 28, 1932. Serial No. 43,926. Term of patent 8½ years.



The ornamental design for an emblem, substantially as shown and described.

87,768. DISPLAY CABINET FOR BULLETIN PRINTERS. VICTOR P. WEIDNER, Port Washington, N. Y. Filed Jan. 14, 1932. Serial No. 42,472. Term of patent 7 years.



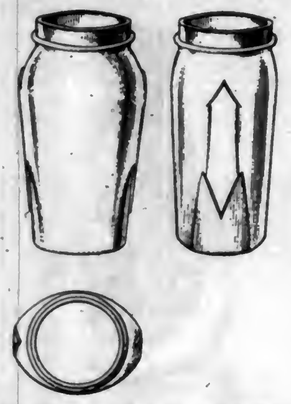
The ornamental design for a display cabinet for bulletin printers as shown and described.

87,769. RADIOCABINET. EDWARD L. COMBS, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 2, 1932. Serial No. 44,242. Term of patent 7 years.



The ornamental design for a radio cabinet, as shown.

87,770. JAR. IVOR CORDY, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed July 25, 1932. Serial No. 44,436. Term of patent 14 years.



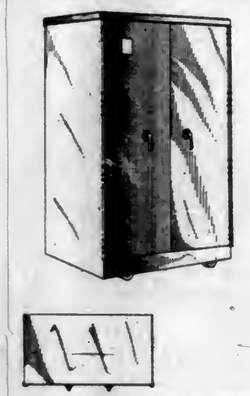
The ornamental design for a jar, as shown.

87,771. COMBINED CONCENTRIC LOCK DIAL AND HANDLE FOR SAFES. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 17, 1931. Serial No. 38,697. Term of patent 7 years.



The ornamental design for a combined concentric lock dial and handle for safes, as shown.

87,772. SAFE. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 17, 1931. Serial No. 38,696. Term of patent 14 years.



The ornamental design for a safe as shown.

87,773. STATUETTE OR ANALOGOUS ARTICLE. HAROLD N. RICE, Attleboro, Mass., and HAROLD V. WALSH, City Island, N. Y. Filed June 20, 1932. Serial No. 44,152. Term of patent 3½ years.





87,773—Continued



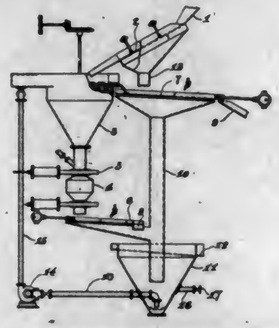


The ornamental design for a statuette or analogous article, substantially as shown and described.

PATENTS

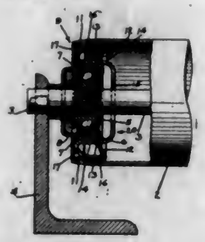
GRANTED SEPTEMBER 13, 1932

1,876,533. METHOD FOR SEPARATING MATERIALS OF DIFFERENT SPECIFIC GRAVITIES. THOMAS M. CHANCE, Merion, Pa. Filed Sept. 24, 1927. Serial No. 221,816. 4 Claims. (Cl. 209—173.)



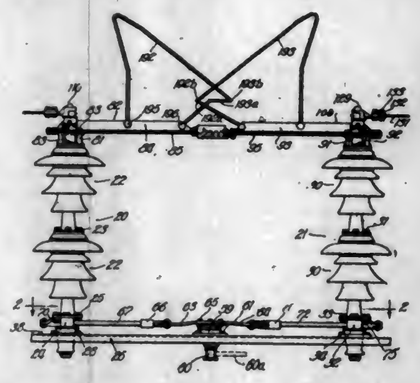
1. A method of removing fine light materials from the constituents of a separatory fluid mass which consists in causing a volume of a gravity separating mixture of liquid and comminuted solids admixed with light materials and with liquid to fall as a stream of relatively small cross-sectional area from a higher to a lower level, thereby developing relatively high velocity therein; in causing said stream to impinge into, to agitate and to prevent sedimentation of said solids and to maintain a portion of said fallen volume as a highly fluid agitated mixture; in causing a portion of the liquid constituent of said stream to flow upwardly through said agitated mixture to discharge the finer of said light materials therefrom and to maintain said agitated mixture diluted to a specific gravity below that of the coarser of said light materials, thereby maintaining said coarser light materials admixed through said mixture; in returning the remainder of said volume to said separatory fluid mass for reuse therein; in arresting said fall, said upward flow and said return, thereby causing said solids in said agitated mixture to settle into the lower portion of said mixture and come to rest, displacing the diluting liquid from said lower portion to the upper portion thereof; in causing said displaced liquid to eject said coarser admixed light materials from admixture with said solids to a locus above and apart from said settled solids; and in discharging said ejected materials, substantially free of said solids, from said locus.

1,876,534. BEARING ADAPTER. CHARLES ATWOOD ADAMS, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed May 29, 1931. Serial No. 540,983. 6 Claims. (Cl. 193—37.)



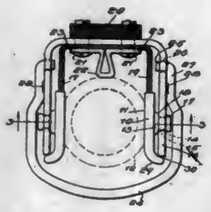
1. A bearing adapter comprising a head adapted to be fitted into one end of a tubular roller, said head having means adapted to engage the end of said roller and also having an inwardly turned flange provided with an axial bore, and a member having a cup-shaped portion fitting in said bore and adapted to receive a bearing cage.

1,876,535. SWITCH. ALFRED ALSAKER, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 27, 1926, Serial No. 137,927. Divided and this application filed Jan. 6, 1930. Serial No. 418,677. 3 Claims. (Cl. 200—48.)



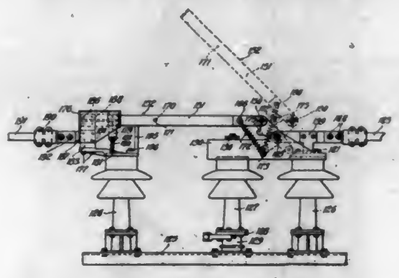
1. A switch having a rotary insulator, a T shaped switch blade mounted on the insulator and actuated thereby, the flange of the T being disposed towards the insulator and the stem of the T being directed away from the insulator, a bearing member mounted on the stem of the blade with its central axis in line with the axis of rotation of the insulator, and in a line wire anchored to the switch through said bearing member.

1,876,536. FUSE CLIP. ALFRED ALSAKER and JAMES MARKESE, Chicago, Ill., assignors to Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1928. Serial No. 270,210. 17 Claims. (Cl. 200—134.)



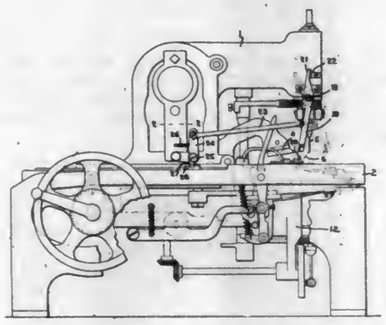
2. A fuse clip comprising in combination, non-resilient, self-aligning contact members, a U-shaped resilient supporting element secured thereto, means for limiting the insertion of a fuse terminal between said contact members, and locking means for the fuse terminal comprising a resilient ball pivoted to said supporting element, and lugs on said element relatively close to said pivot, between which said ball engages.

1,876,537. SWITCH. ALFRED ALSAKER and ERIC NORDHEM, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 27, 1927, Serial No. 194,608, now Patent No. 1,842,707, dated Jan. 26, 1932. Divided and this application filed July 12, 1928. Serial No. 292,190. 10 Claims. (Cl. 200—48.)



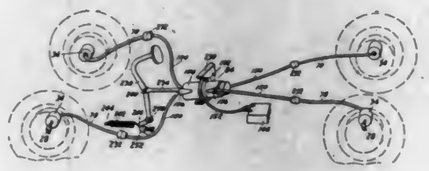
1. In a switch of the character described, a supporting plate, an insulated support for the same, blade supporting means pivotally mounted on the plate, a blade pivoted on said supporting means, means yieldingly urging the blade in the closing direction, stop means carried by said supporting means and limiting movement of the blade by said yielding means, operating means connected to said supporting means, contact jaws cooperating with said blade, and means stopping the movement of the blade in the closing direction at a point to align the blade with the jaws, said blade being thereafter moved into contact with the jaws by rectilinear movement.

1,876,538. BUTTONHOLE SEWING MACHINE. HERBERT E. ALTHENS, Auburndale, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Sept. 27, 1928. Serial No. 308,626. 10 Claims. (Cl. 112—252.)



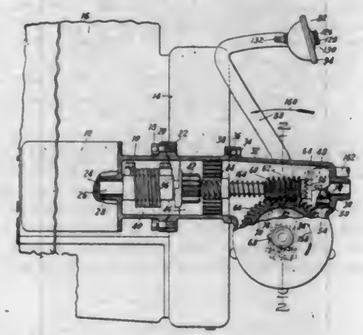
1. In a two-thread buttonhole sewing machine of the type having a bed to which the work is clamped and a frame movable on the bed and carrying stitch-forming mechanism including a needle for the upper thread, which frame has a movement after the buttonhole is completed to carry the parts from stitching to buttonhole-cutting position, the combination with said bed and frame, of an upper thread pull-off device pivoted to the frame and swingable relative thereto in the direction of movement thereof and adapted during such swinging movement to act on the upper thread between the needle and the work, and means actuated by the movement of the frame which carries the parts into buttonhole-cutting position to actuate said pull-off.

1,876,539. ELECTRIC BRAKE OPERATING MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 22, 1928. Serial No. 301,267. 16 Claims. (Cl. 188—162.)



1. In an automotive braking system, the combination of brakes, electric power driven means to operate said brakes, windings divided into a plurality of separate circuits for energizing said means, and a series parallel controller for said circuits.

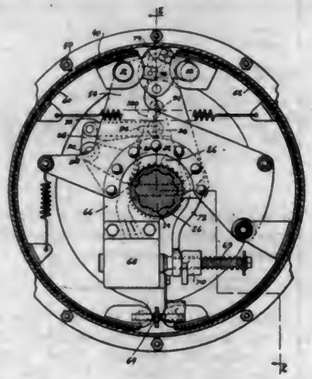
1,876,540. SERVO BRAKE MECHANISM FOR VEHICLES. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,298. 33 Claims. (Cl. 188—156.)



1. Automotive mechanism comprising, in combination, an internal combustion engine, a motor, brakes, means operable to couple the motor with the engine to start the engine, a brake operating shaft, gearing adapted to operatively connect the motor to said brake operating shaft, a brake operating pedal, and a clutch responsive to brake applying movement of said pedal to operatively couple the motor with said shaft through said gearing.

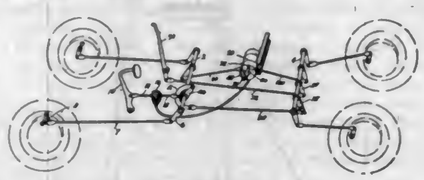
1,876,541. BRAKE MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 14, 1929. Serial No. 407,080. 10 Claims. (Cl. 188—156.)

1. Brake mechanism comprising a wheel spindle held against rotation by one end, an integral hollow drum closed at both ends rotatably supported thereon, internal expanding brake mechanism secured against rotation within the drum, electric motor means supported within the



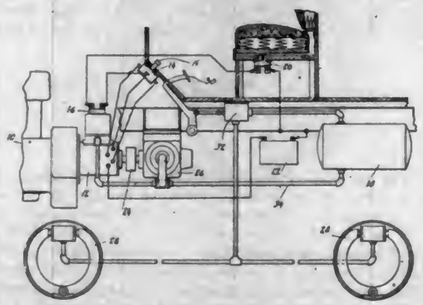
drum for expanding said brake mechanism, and mechanical means manually operable independently of the electric motor means for expanding the same.

1,876,542. VEHICLE BRAKE. VINCENT G. APPLE and FREDERICK W. COTTERMAN, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 16, 1929. Serial No. 407,764. 14 Claims. (Cl. 188—156.)



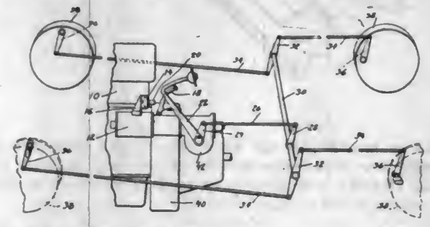
1. Brake mechanism comprising, in combination, at least two brakes, a brake operating member, mechanical linkage connecting said member and brakes for applying the latter, power means controlled by the tension in the mechanical linkage for applying the brakes, and means constituting a part of the power means whereby the pressure applied thereby to each of the brakes is automatically equalized.

1,876,543. ELECTRIC CONTROL MECHANISM. VINCENT G. APPLE, Dayton, Ohio, and HENRY D. HUKILL, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,686. 6 Claims. (Cl. 180—82.)



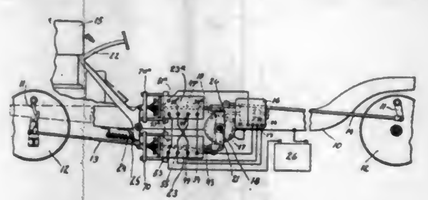
1. Automotive vehicle control mechanism comprising, in combination, an electric circuit including a switch adapted to close upon occupancy of the driver's seat, brakes, a fluid compressor, an engine, an electric motor operable on rotation in one direction to drive said engine and on rotation in the other direction to drive said compressor, a pressure controlled switch in said circuit operable to close a circuit through the motor in a compressor drive direction only when the driver's seat is occupied, and a reversing switch operable at any time to close a circuit through the motor in an engine drive direction.

1,876,544. SERVO BRAKE MECHANISM. VINCENT G. APPLE and FREDERICK W. COTTERMAN, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 1, 1930. Serial No. 432,294. 8 Claims. (Cl. 188—156.)



1. Automotive mechanism comprising, in combination, a starting motor including a rotatable armature shaft held against axial movement, an internal combustion engine, brakes, and means for selectively forming operative connections between the motor and either the engine or the brakes, said motor and brake connection forming means including adjustable means for limiting the power transmitted thereby to a predetermined maximum.

1,876,545. BRAKE APPLYING MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 21, 1930. Serial No. 462,752. 7 Claims. (Cl. 188—156.)

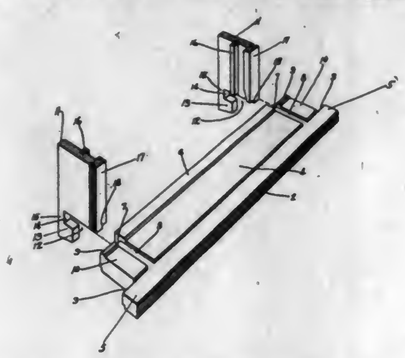


1. In combination with a power brake, booster mechanism controllable by a normally operated member in accordance with the manual effort exerted therein, means automatically operable on release of pressure from said member to reverse the operation of said booster mechanism, said means including means for decelerating the power of said booster during its reverse operation in direct proportion to the resistance offered by the brakes to effect a smooth positive release of the brakes.

1,876,546. WINDOW AND DOOR FRAME. FRED C. ANDERSEN, Bayport, and EARL C. SWANSON, Stillwater, Minn., assignors to Andersen Frame Corporation, Bayport, Minn., a Corporation of Wisconsin. Filed Dec. 30, 1929. Serial No. 417,421. 2 Claims. (Cl. 20—11.)

1. A sill having a transverse dado in its upper surface and a notch intersecting the inner end of the said dado, a jamb having a lower end corresponding substantially in thickness to the width of said dado and fitting therein, said jamb having a depending part to enter the notch

in said sill and said depending part being provided with a recess, the lower end of the jamb forming the upper wall of the recess and adapted to enter said dado and the lower wall of said recess being seated against the



under surface of the sill when the sill and jamb are assembled, the rear lower portion of the jamb back of the recess forming a neck adapted to receive a nail to hold the jamb and sill together.

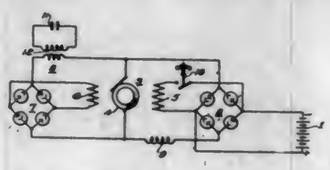
1,876,547. CONCEALED RADIATION HEAT EXCHANGER. CARLYLE MARTIN ASHLEY, South Orange, N. J., assignor to Carrier Corporation, Newark, N. J., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,567. 12 Claims. (Cl. 257—136.)



5. A heat exchanger assembly comprising a plurality of walls forming a duct having an inlet at one end portion and an outlet at the other end portion, a heat exchanger consisting of a conduit of conducting material and a plurality of fins bonded to said conduit to form a series of air passages transverse of said conduit, means to mount said exchanger with the fins spaced from the bottom of said duct to form a by-pass passage and with the vertically disposed inlets to the respective fin passages horizontally opposite said duct inlet, and a damper for controlling said by-pass passage.

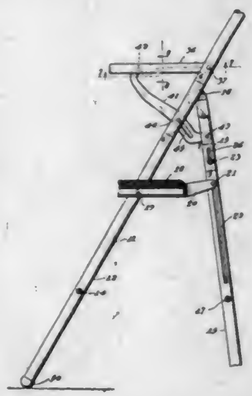
1,876,548. BATTERY-CHARGING MEANS. ALFRED L. ATHERTON, Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 6, 1929. Serial No. 344,752. 2 Claims. (Cl. 171—119.)

1. In combination with a source of electromotive force which comprises an armature and two field windings, said windings being connected in opposition, means for supplying a substantially constant direct current to one of said windings, and means including a capacitance and



a rectifier for supplying direct current to the other winding which varies in value in response to variations in the speed of rotation of said armature.

1,876,549. CHAIR. JAMES E. BALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Aug. 9, 1929. Serial No. 384,583. 9 Claims. (Cl. 155—142.)



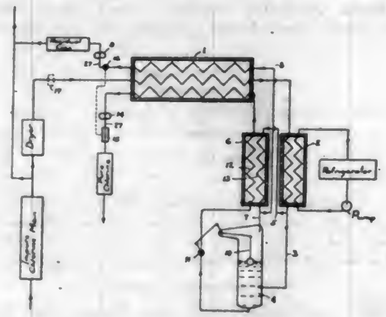
1. A folding chair comprising a frame member, legs pivoted to said frame member at their upper ends, an arm pivoted to said frame member, means pivoted to one of said legs and having sliding engagement with said arm, and a sliding pivotal connection between said frame member and said means for permitting swinging movement of said arm during folding or unfolding movement of said chair.

1,876,550. METHOD OF MAKING WRIST PINS. FRANK H. BANNER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed May 3, 1928. Serial No. 274,932. 3 Claims. (Cl. 29—156.5.)



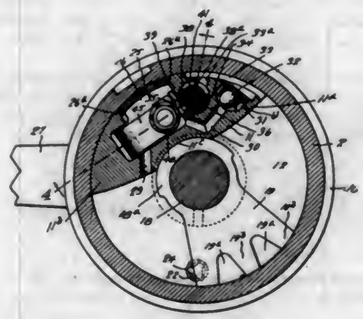
1. The method of making wrist pins, comprising, cutting a piece of cylindrical stock to length to form a body, forming a continuous peripheral groove near one end of said body, cutting a length of straight stock of a cross section complementary to the peripheral groove and of a length equal to the circumference of the groove, forming said piece of stock into a U, and then pressing the ends of the U together around the body and in the groove to form a head of uniform cross section on the body to completely encircle the body.

1,876,551. GAS PURIFICATION. EDWIN O. BARSTOW and GRAYTON F. DRESSEL, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 11, 1929. Serial No. 391,732. 2 Claims. (Cl. 183—115.)



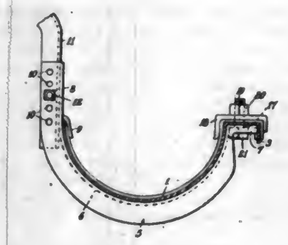
1. The method of preparing substantially pure chlorine gas from an approximately 80 to 90 per cent mixture thereof with air and other permanent gases which comprises introducing such mixture at a pressure not greatly in excess of atmospheric pressure, cooling to a temperature of approximately —25° C. by exchange of heat with residual products of the process, further cooling to a temperature between about —30° C. and —34° C. by exchange of latent heat with previously liquefied chlorine revaporizing at a lower pressure, whereby a portion of the chlorine content of the mixed gases is liquefied, separating the liquid from the uncondensed gases, reducing the pressure on such liquid, revaporizing the same in indirect heat transfer relation with the cooled gases in said liquefying step, conducting such revaporized chlorine and uncondensed gases separately to the initial cooling step and passing the same in countercurrent heat exchange relation with the incoming gases.

1,876,552. SHOCK ABSORBER. EUGENE L. BEECHER, East Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1931. Serial No. 523,290. 17 Claims. (Cl. 188—89.)



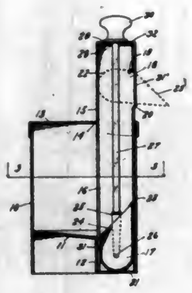
1. A shock absorber comprising, in combination, a casing having a working chamber, a piston in said working chamber and movable toward and from walls defining the impact and rebound ends, respectively, of said chamber, there being a by-pass passageway communicating through one of said walls with the impact end of said working chamber and through the other wall of said chamber with the rebound end of such working chamber, a slide valve for controlling the effective area of such passageway, a guideway for said valve, a thermostat subjected to the temperature of the liquid in said shock absorber, and a self-aligning connection between the said thermostat and the said valve whereby the valve may be moved freely in its guideway by said thermostat.

1,876,553. ROOF GUTTER AND HANGER THEREFOR. GEORGE A. BELDING, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 383,111. 2 Claims. (Cl. 108—29.)



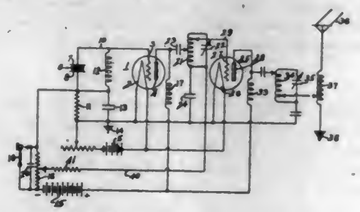
1. A hanger to receive the end portions of two gutter sections arranged in overlapping relation comprising a semi-cylindrical body having a flange on one edge thereof, each of said gutter sections having a semi-cylindrical body and a flange on one edge thereof similar to and cooperating with said hanger, and means to secure the flanges of said gutter sections to the flange of said hanger, said securing means including a bolt locked against retrograde movement.

1,876,554. LIQUID DISPENSER. KENNETH E. BEMIS, Glendale, Calif. Filed July 14, 1931. Serial No. 550,722. 3 Claims. (Cl. 221—97.)



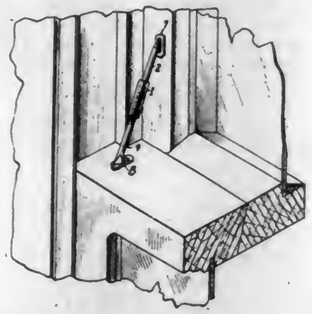
1. A dispensing device for liquids comprising a container having a skip well, a skipway of rectangular cross-section removably fitting in said well and extending upwardly above said container, a skip slidable in said skipway and provided with an upwardly extending lip and arcuate bottom, a lifter rod pivotally secured to said skip, a cover secured to said lifter rod, an aperture formed through the front of said skipway above said container and normally closed by said cover and an inwardly projecting lip at the upper end of said aperture adapted to cooperate with the lip on said skip for dumping said skip, said lip forming a spout when projected through said aperture.

1,876,555. SIGNALING SYSTEM. ASHLEY P. BOCK, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1928. Serial No. 274,697. 3 Claims. (Cl. 250—17.)



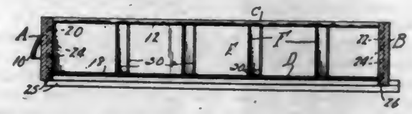
3. In a signaling system, an oscillation generator, an amplifier energized therefrom, means for supplying plate potential to said generator and said amplifier, means for deriving grid-biasing potentials from said plate-potential source, means for varying said plate potential to control the amplitude of oscillations generated, and means whereby the biasing potential applied to said amplifier is rendered less negative when the amplitude of the generated oscillations is caused to increase, the same means serving to render the biasing potential applied to said amplifier more negative when the amplitude of said oscillations is decreased.

1,876,556. WINDOW LOCKING DEVICE. GEORGE BODEN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 18, 1931. Serial No. 563,472. 2 Claims. (Cl. 292—339.)



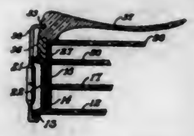
1. A window locking device comprising a pair of staples adapted to be secured to opposite sashes, said staples each having a slot therein, and an extensible member consisting of two threaded parts, one of said parts having a notched end adapted to engage the slot in one of said staples and held against rotation therein, and the other of said parts having a substantially pointed end adapted to engage the slot in the other of said staples and permitted to rotate therein.

1,876,557. DRAWER FOR FURNITURE. JACOB BODENSTEIN, Herkimer, N. Y. Filed Dec. 20, 1928. Serial No. 327,286. 10 Claims. (Cl. 45—7.)



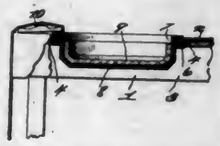
1. A drawer having a front and a back made of wood, and metal sides having upright portions terminating at their upper edges in beads and at their lower edges in bent portions forming at their bottoms shoes on which the drawer may slide and with channel shaped portions into which the edges of a drawer bottom enter.

1,876,558. STRINGED MUSICAL INSTRUMENT. CLARENCE BONEWITZ, Dayton, Ohio. Filed July 1, 1931. Serial No. 548,061. 10 Claims. (Cl. 84—275.)



1. In a stringed musical instrument, a resonance box having a belly and a back, separate spaces substantially perpendicular to said back at the ends of the box, and spaced baffles projecting between the spacers within the box.

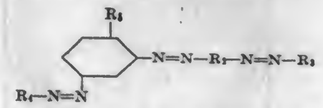
1,876,559. COUNTERSUNK ASH TRAY FOR CARD TABLES. MELVIN BOTHWELL, Atlantic City, N. J. Filed June 13, 1930. Serial No. 461,021. 1 Claim. (Cl. 45—75.)



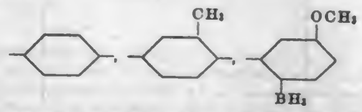
In combination, a card table having the top formed with an ash tray receiving opening, a cloth spread over the top with a portion thereof depressed into said opening, an ash tray seated in said opening on top of the cloth and having a bounding flange resting on the table top on top of the cloth, and a butterfly fastener pivotally mounted on the table top adjacent said opening and movable into and out of overlapping relation to the flange of said ash tray, the fastener being disposed beneath the cloth but overlapping and pressing a portion of the latter into contact with the ash tray flange when moved to overlap the same.

1,876,560. PROCESS OF DYEING VISCOSE RAYON AND THE DYED MATERIAL THUS OBTAINED. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Feb. 10, 1932, Serial No. 592,188, and in Great Britain Mar. 13, 1929. 10 Claims. (Cl. 8—5.)

1. In the dyeing of regenerated cellulose materials in even level shades, the process which comprises applying to said regenerated cellulose material from a dye bath, trisazo dyes having the probable formula:

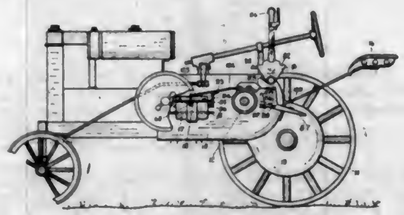


wherein R_2 represents a coupled residue of the class consisting of



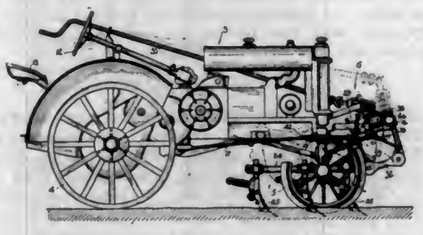
R_3 represents a coupled residue of a coupling component of the class consisting of salicylic acid, orthocresotinic acid, 1-naphthol-5-sulphonic acid, 2-naphthol-6-sulphonic acid, 1:4-naphthol-sulphonic acid, 1-amino-5-naphthol-7-sulphonic acid, 2-amino-8-naphthol-3:6-disulphonic acid, and 2-methylamino-naphthalene-7-sulphonic acid, and R_4 represents a coupled residue of a coupling component of the class consisting of 2-amino-8-naphthol-6-sulphonic acid, 2-phenylamino-8-naphthol-6-sulphonic acid, 2-benzoylamino-8-naphthol-6-sulphonic acid, 2-phenylamino-5-naphthol-7-sulphonic acid, and 1:8-amino-naphthol-2:4-disulphonic acid, R_5 represents H, CH_3 or OCH_3, thereby dyeing said materials in even level shades.

1,876,561. POWER TAKE-OFF MECHANISM FOR TRACTORS. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 9, 1928. Serial No. 245,335. 27 Claims. (Cl. 180—53.)



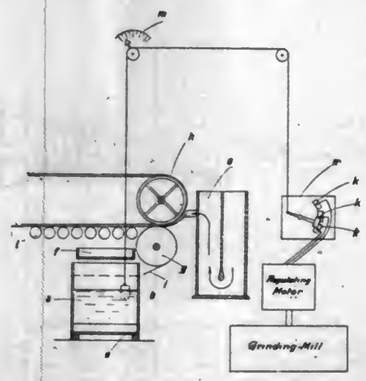
1. The combination with a tractor comprising a driving member, of power take-off mechanism on said tractor adapted to be driven by said driving member, said power take-off mechanism comprising two take-off shafts adapted for selective coupling to the mechanism to be driven, one of said shafts extending longitudinally of the tractor for transmitting take-off power to implement parts at one end of the tractor, and gear mechanism operable selectively to transmit a relatively high speed to either of said shafts or a relatively low speed to either of said shafts.

1,876,562. AGRICULTURAL IMPLEMENT. THEOPHILUS BROWN and BENJAMIN J. KOUGH, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 17, 1930. Serial No. 436,336. 25 Claims. (Cl. 97—47.)



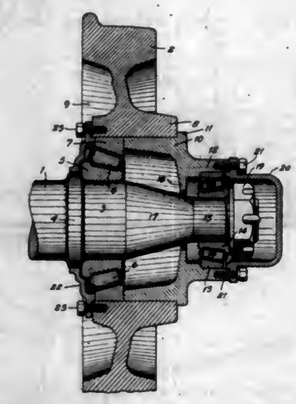
1. In an agricultural implement, the combination with a tractor including a steering mechanism, of cultivating devices associated with the tractor and movable into and out of ground contacting position, said devices tending, when in contact with the ground, to steer the tractor to one side, and means connected with said mechanism and responsive to movement thereof for exerting a steering bias on said steering mechanism for counteracting said steering deflection caused by said cultivating devices contacting with the ground.

1,876,563. PAPER MAKING MACHINE. CARL BÜCHNER, Mannheim-Waldhof, Germany, assignor to Papyrus A. G., Mannheim-Waldhof, Germany. Filed Jan. 17, 1929, Serial No. 333,091, and in Germany Feb. 14, 1928. 5 Claims. (Cl. 92—20.)



1. A method of checking and regulating the degree of grinding of the pulp supplied to paper making machines having a sieve, consisting in measuring the quantity of flow of at least a portion of the water flowing down through the sieve of the paper making machine, observing fluctuations in the said quantity of flow and adjusting the grinding of the pulp to restore the quantity of flow to the normal value, as and for the purpose set forth.

1,876,564. ROLLER BEARING CAR WHEEL. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 25, 1930. Serial No. 470,568. 6 Claims. (Cl. 305—180.)



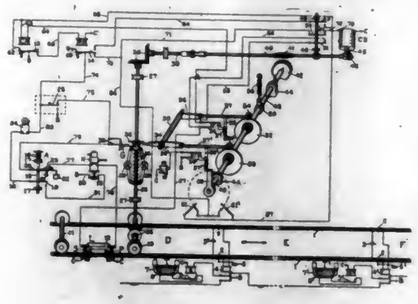
1. A roller bearing car wheel construction comprising a car wheel having a bore therethrough, an axle extending into said bore, a conical roller bearing interposed directly between the axle and the bore of said wheel, a bearing mounting sleeve mounted in the outer end of said bore and engaging the outer bearing member of said bearing and a conical roller bearing interposed between the outer end portion of said axle and the end portion of said bearing mounting sleeve.

1,876,565. SEPARABLE DRILL BIT. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,851. 3 Claims. (Cl. 287—117.)



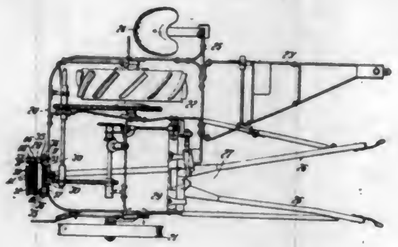
1. A detachable bit construction comprising a drill rod having a tapering threaded end portion, a bit having a tapering threaded shank portion and an interiorly threaded coupling member receiving said drill rod and said bit shank, the crest of each thread being shaped to leave a space between it and the bottom of the groove in which it fits, both faces of each thread engaging adjacent threads.

1,876,566. TRAIN CONTROL. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Oct. 21, 1922. Serial No. 596,101. 16 Claims. (Cl. 246—63.)



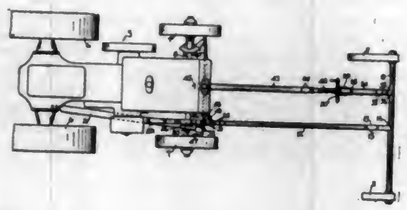
1. In a train control system for railroads equipped with a block signal system, the combination with trackway means effective near the entrance to each block to communicate a stopping influence if the corresponding signal indicates caution, of car-carried apparatus responding to said stopping influence and acting to apply the brakes of the car, said apparatus including means permitting release of the brakes after the speed of the car has been reduced to a predetermined control speed provided the engineer has taken appropriate action just prior to and only just prior to the reception of said stopping influence.

1,876,567. STALK SPLITTING ATTACHMENT FOR CORN HARVESTERS. OSCAR F. CARLSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 287,924. 22 Claims. (Cl. 56—60.)



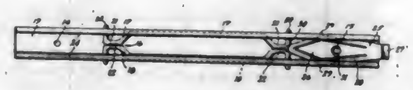
1. A harvesting implement adapted to cut the stalks of the plants and comprising means for splitting or shredding the stubble after the stalks have been cut.

1,876,568. STEERING MECHANISM. OSCAR F. CARLSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,538. 23 Claims. (Cl. 280—33.13.)



23. The combination of a tractor and an implement disposed forwardly of the tractor, a push bar connecting the implement with the tractor so as to be pushed by the tractor, means connecting the steering wheels of the tractor with an intermediate portion of said push bar, and means for causing angular displacement between the implement and the tractor for steering said tractor through said first mentioned means.

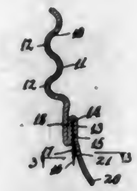
1,876,569. BOOSTER FOR LOOSE LEAF METALS. EDWARD W. CARPENTER, Fairfield, Conn., assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 21, 1931. Serial No. 538,938. 5 Claims. (Cl. 129—24.)



1. In a loose leaf binder, a metal including a pair of wires having their ends bent to form portions of loops and movable toward and from each other to close and

open the loops, said wires having portions forming a toggle, a piece of resilient sheet metal substantially inclosing the portions of the wires forming the toggle and tensioning the same, said sheet-metal having a pair of openings, a booster for engaging the toggle to open the loops, and said booster having a pair of ears disposed in said openings in the sheet-metal whereby the booster is pivotally mounted.

1,876,570. SAFETY RAZOR. AURELIO CESARIO, New York, N. Y. Filed June 16, 1930. Serial No. 461,283. 1 Claim. (Cl. 30—12.)



A shaving blade holder formed of a single rectangular strip of resilient sheet metal comprising a handle portion transversely corrugated, a blade holder portion at one end of the handle consisting of a transverse flat portion adjacent the handle a transverse fold in contact with the flat portion and a second transverse fold spaced from the first fold to form a blade gripping pocket, and a longitudinally corrugated blade guard portion at the end of said second fold curved away from the blade pocket and provided with soap passing apertures.

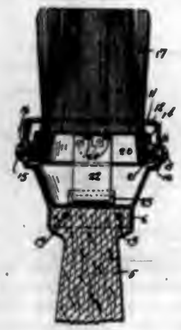
1,876,571. HOLDER FOR PLANT SOIL. WILLIAM SCHEETZ ACUFF, Jr., Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa., a Corporation of Pennsylvania. Filed Nov. 22, 1929. Serial No. 408,944. 3 Claims. (Cl. 47—18.)



1. A greenhouse bench comprising a unitary open-topped box-like body portion of asbestos material and a pair of independent upright metallic end frames on which the body portion is removably mounted, said unitary body portion being constituted by a bottom and sides and in itself constituting the sole connection between the end frames and maintaining them in properly spaced relationship.

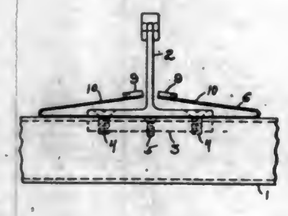
1,876,572. PAINTBRUSH. RICHARD M. ALLEN and ALBERT E. DICKINSON, Hartford, Conn., assignors of one-fourth to Jan P. Clary, Hartford County, Conn. Filed Feb. 28, 1931. Serial No. 519,199. 5 Claims. (Cl. 15—248.)

1. A brush structure comprising a flared casing having an opening and an opposite reduced portion, a handle secured to the reduced portion of the casing, a bristle support movably mounted within the confines of the casing, spring means for normally holding the bristle support in axial



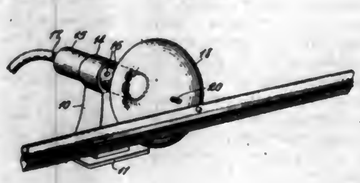
alinement with the opening and bristles secured to the bristle support and having their free ends projecting in spaced relation through the opening in the casing.

1,876,573. SPOOL TENSION SPRING FOR TUFT FRAMES. CHARLES CLINTON ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed May 21, 1930. Serial No. 454,364. 8 Claims. (Cl. 139—10.)



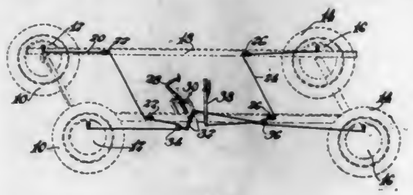
1. As a new article of manufacture a tension spring for a tuft frame adapted to receive at least two yarn spools, said spring being shaped to afford independent braking contacts on the adjacent heads of two contiguous spools.

1,876,574. METHOD AND DEVICE FOR MANUFACTURING WINDSHIELD WIPER BLADES. JOHN W. ANDERSON, Gary, Ind. Filed Apr. 6, 1931. Serial No. 527,936. 3 Claims. (Cl. 29—84.)



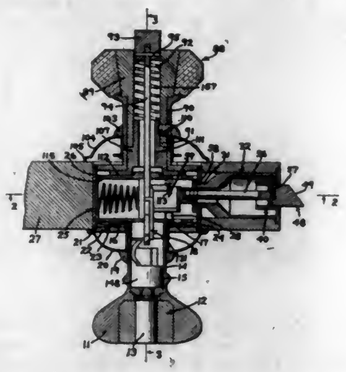
1. The method of manufacturing windshield wiper blades, which comprises the steps of assembling a rubber wiping strip in the channel of a metal holder having registering perforations in its side walls; and passing a heated punch through the perforations in one of the side walls of the holder and into contact with the wiper strip so as to melt the same and push a slug therefrom out through the hole in the opposite side wall of the holder.

1,876,575. BRAKE-OPERATING MEANS. WILLIAM J. ANDRES, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 28, 1929. Serial No. 350,473. 2 Claims. (Cl. 188—106.)



1. A vehicle having a pair of front brakes operatively connected by a cable, a pair of rear brakes operatively connected by a second cable, a pedal having rigid therewith a pair of oppositely-extending arms one of which has fixed thereto a connection extending respectively to the first cable to operate the front brakes, an emergency lever, and a cable fixedly connected at its opposite ends to the emergency lever and the other of said arms and intermediately connected to the second cable.

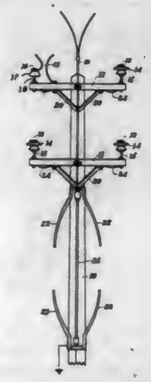
1,876,576. DOORKNOB LOCK. HENRY L. ARSTE, Alhambra, Calif. Filed Jan. 8, 1930. Serial No. 419,389. 16 Claims. (Cl. 70—91.)



1. A door knob lock having an outer and an inner knob on opposite sides of a door with a latch bolt extending beyond the edge of the door, a lock in the outer knob having means including a trigger device cooperating therewith to lock the latch bolt in a locking position, and means cooperating with the said outer knob to restrict said knob from rotation when the latch bolt is in the locked position, the inner knob having said slidable trigger device extending longitudinally therethrough, means operable by the partial rotation of the inner knob to unlock the said latch bolt, the unlocking of said latch bolt releasing the trigger for movement in one direction, the unlocking of the latch bolt permitting rotation of the outer knob and means actuated by the movement of the trigger in the opposite direction to lock the said latching bolt and thereby prevent rotation of the outer knob.

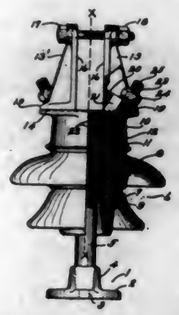
1,876,577. WOOD SUPPORT FOR CONDUCTORS. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of Ohio. Filed June 1, 1926. Serial No. 112,744. 12 Claims. (Cl. 175—30.)

2. A conductor support comprising a wood pole, an insulator mounted on said wood pole, a transmission line carried by said insulator, a lightning rod projecting above said pole, a conductor connected with said lightning rod and shunting a portion upon the top of said pole and a high resistance leakage conductor connecting said lightning rod with ground the resistance of said leakage conductor being sufficiently great to provide a leakage path to ground from said conductor having a conductivity commensurate with that of the leakage path from said transmission line to ground.



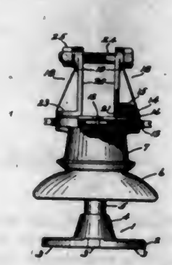
6. A wood pole having an insulator mounted thereon, a transmission line carried by said insulator, a charge receiving element mounted on said pole adjacent said transmission line but insulated therefrom, a charging conductor mounted on said pole and insulated from said charge receiving element and means forming a discharge gap between said charging conductor and charge receiving element.

1,876,578. INSULATOR. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 22, 1927. Serial No. 234,966. 1 Claim. (Cl. 173—313.)



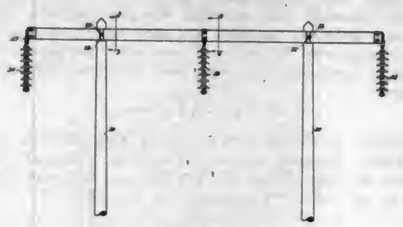
An insulator support for bus bars comprising a base, a dielectric member mounted on said base, a cap having an upper bearing surface carried by said dielectric member, a guide way formed on the upper surface of said cap, a pair of clamping members mounted to slide toward and away from each other on said guide way, said clamping members having upright clamping surfaces facing each other for engaging opposite sides of a bus bar and having outwardly extending lugs at the bases thereof provided with elongated slots and with upper inclined faces, bolts extending through said slots and having heads thereon engaging said upper inclined faces and acting to exert force on said clamping members tending to move said clamping members toward each other and to press said clamping members on the bearing face of said cap, said cap having a plurality of spaced inclined sockets therein for receiving each of said bolts to permit said bolts to be secured to said cap in adjusted positions, and a bolt connecting the upper ends of said clamping members to press the upper ends of said clamping members against a bus bar held between said members.

1,876,579. INSULATOR. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 9, 1927. Serial No. 238,917. 5 Claims. (Cl. 173—313.)



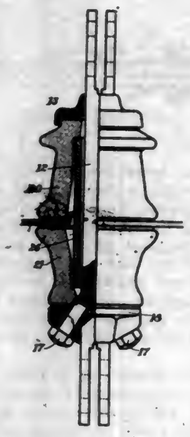
2. A conductor support comprising a base and conductor support secured together in insulated relation by an interposed insulating member, a pair of spaced clamping members mounted on the support to receive and clamp a conductor, lugs adapted to engage the clamping members to hold the members in contact with the conductor and to the support and interlocked with the members to prevent the members moving in the longitudinal direction of the conductor, means on the lugs to interlock with the support to prevent movement in the aforesaid direction and means to move the lugs toward each other.

1,876,580. CONDUCTOR SUPPORT. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 27, 1928. Serial No. 288,728. 13 Claims. (Cl. 189—33.)



1. A support for electrical conductors, comprising a pair of spaced wood poles, wood beams disposed at opposite sides of said poles in registration with each other, brackets mounted on said poles and having supporting shelves engaging the lower edges of said wood beams for supporting said beams, a fitting for holding said beams in fixed spaced relation to each other between said wood poles, said fitting having flanges engaging the top edges of said wood beams to support said fitting from said top edges, an insulator string suspended from said fitting, said beams having the ends thereof projecting beyond said poles and sprung inwardly toward each other, clamps for holding said inwardly sprung ends together, said clamps having flanges for engaging the upper edges of said beams to support said clamps from said edges, and suspension insulators suspended from said clamps.

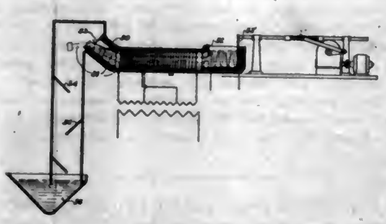
1,876,581. HEAVY CURRENT BUSHING. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 8, 1928. Serial No. 304,763. 16 Claims. (Cl. 173—318.)



5. In combination, a tubular insulator, a conductor of non-circular cross section extending through said insulator and having a flange thereon engaging one end of said insulator to close said end, a bearing member having bearing connection with said insulator, and a threaded member connecting said bearing member and the non-circular portion of said conductor and of such form and so positioned that it exerts tension on said conductor to hold said flange in contact with the end of said insulator.

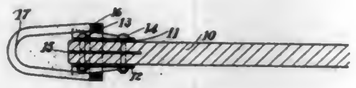
15. The combination with a tubular insulator, of a conductor extending therethrough and having a stop for engaging one end of said insulator, said conductor having a transverse opening therethrough, a key extending through said opening, a bearing member engaging said insulator, and threaded means connecting said key and bearing member for holding said conductor in place in said tubular insulator.

1,876,582. COATING AND HEAT TREATING. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original application filed May 25, 1925, Serial No. 32,709. Divided and this application filed Sept. 14, 1928. Serial No. 305,976. 7 Claims. (Cl. 91—12.5.)



2. Apparatus for coating metal articles, comprising a container of refractory material having a portion thereof closed at the top, means for feeding articles progressively through said container and electrical means for heating a bath of molten coating metal to different temperatures at different portions of said container.

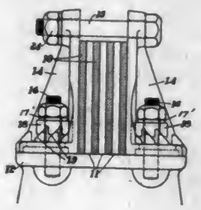
1,876,583. INSULATOR. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 17, 1928. Serial No. 306,442. 7 Claims. (Cl. 173—318.)



1. An insulator comprising a stress member, gripping plates engaging opposite faces of said stress member and having outer projecting flanges at the opposite edges thereof provided with inclined outer bearing edges, a fitting having a yoke mounted to engage said inclined bearing edges to transmit the load on said insulator and to force said gripping plates against the surfaces of said stress member, and means for supplementing the frictional contact between said gripping plates and stress member to prevent slipping of said gripping plates on said stress member.

6. An insulator comprising a stress member, gripping plates disposed at opposite sides of said stress member and having inclined bearing surfaces on their outer faces, a fitting comprising a pair of holding members disposed at opposite edges of said stress member and having projections thereon engaging the bearing faces on said gripping plates, and a cross tie connecting said holding members.

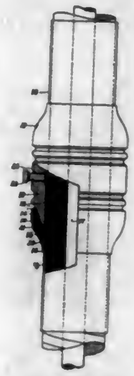
1,876,584. CONDUCTOR CLAMP. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 8, 1929. Serial No. 338,431. 5 Claims. (Cl. 172—251.)



1. A holding device for a conductor comprising a base having a bearing surface, a clamping jaw mounted on said base, said jaw having abutments determining a plurality of positions of adjustment of said jaw on said base for accommodating conductors of various sizes, said jaw being movable along said surface in a direction parallel to said surface, and means for securing said jaw to said base, said securing means exerting pressure on said jaw toward said conductor through a limited range of movement of said jaw for each position of adjustment of said jaw.

1,876,585. JOINT FOR CABLES AND OTHER DEVICES. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 7, 1929. Serial No. 361,204. 3 Claims. (Cl. 173—268.)

1. The combination with a cable having a conductor, an insulating covering and an outer metal sheath, the end of said sheath being flared outwardly, of a dielectric sleeve surrounding said insulating covering and having a tapered portion extending between said sheath and said insulating covering, the outer surface of said tapered portion being roughened and coated with metal, attaching metal



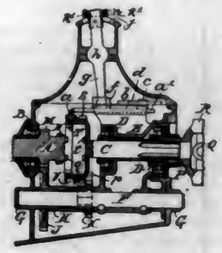
for securing said coated surface and sheath together, and a reinforcing member for preventing mechanical separation of the joint between said sheath and dielectric sleeve

1,876,586. JOINT FOR INSULATORS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,376. 5 Claims. (Cl. 173—318.)



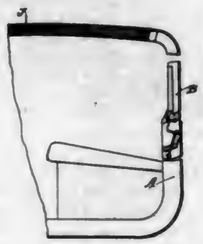
1. A bushing insulator comprising a pair of dielectric members, metallic fittings secured to each of said dielectric members, sheet metal baffles soldered to each of said dielectric members and spanning the joint between the respective dielectric members and their fittings and extending between said fittings, and means for clamping said fittings to each other to hold said dielectric members together.

1,876,587. CHANGE SPEED GEAR FOR MOTOR VEHICLES. HERBERT AUSTIN, Bromsgrove, England. Filed July 20, 1929, Serial No. 379,764, and in Great Britain Aug. 16, 1928. 11 Claims. (Cl. 74—57.)



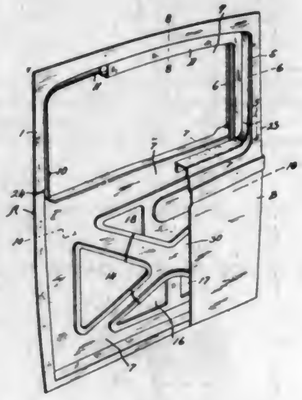
1. A change speed gear comprising a main driving shaft, a main driven shaft, an externally toothed wheel rigid with one of said shafts, an internally toothed wheel rigid with the other of said shafts, means whereby the one shaft is maintained parallel to the other, a lay shaft parallel to the other shafts and driven from one of said shafts, an externally toothed wheel rigid with said lay shaft, an externally toothed wheel on the other said main shaft and means whereby the one main shaft can be rocked in one direction to allow said internally toothed wheel of the one shaft to be brought into engagement with the externally toothed wheel of the other shaft, and means whereby said shaft which is adapted to be rocked may also be moved endwise to bring said externally toothed wheel thereof into engagement with said externally toothed wheel of said lay shaft.

1,876,588. MOTOR CAR BODY FITTED WITH COLLAPSIBLE OR FOLDING TOP. HERBERT AUSTIN, Bromsgrove, England. Filed Nov. 18, 1929, Serial No. 407,981, and in Great Britain Dec. 11, 1928. 7 Claims. (Cl. 296—107.)



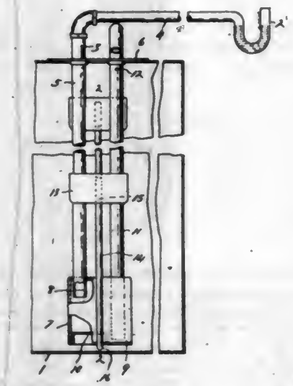
1. A motor vehicle body, a lower part of the back thereof, an upper part of the back which when closed is in the same plane as the lower part and is hinged in relation to the said lower part and adapted to be turned back at right angles to open it, a hinge member in respect of said upper part a notch in said hinge member, and a detent adapted to be brought into engagement with said notch to lock said upper part in its open position.

1,876,589. DOOR CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 8, 1930. Serial No. 500,951. 6 Claims. (Cl. 296—44.)



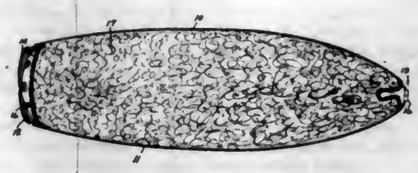
1. In a door, an inner panel having a portion comprising the frame of the door and having a one-piece intermediate web portion provided with a window opening, said frame being offset at substantially its upper half, and an outer panel extending from the lower edge of the inner panel to the lower edge of the window opening therein and secured to said frame portion flush with the upper offset portion.

1,876,590. LIQUID DEPTH INDICATING DEVICE. WILLIAM E. BANDEMER, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Aug. 1, 1927. Serial No. 209,928. 2 Claims. (Cl. 73—54.)



1. In combination with a pressure gauge for measuring the depth of liquid in a tank, a pressure transmitting conduit extending from the gauge into the liquid in the tank and in communication with the tank at a pressure transmitting level in the tank, the pressure transmitting conduit having an opening in its lower end, a cup within the tank at an elevation above the pressure transmitting level for receiving liquid, and a liquid conduit extending from the cup to an elevation below the pressure transmitting level, the liquid conduit having a restricted opening near the bottom of the cup for the passage of liquid from the cup into the liquid conduit upon emptying of the cup, the liquid conduit also having an open upper end above the bottom of the cup for the passage of air into the liquid conduit upon emptying of the cup, the open upper end and the cup being above the liquid in the zone thereof at times during the disturbance of the liquid, whereby air may enter through the open upper end of the conduit and be carried through the liquid conduit by the liquid entering the liquid conduit from the cup, the liquid conduit further having an opening at its lower end for the passage of air passing through the liquid conduit and positioned beneath the pressure transmitting conduit whereby air may enter the latter.

1,876,591. PILLOW. WILLIAM E. BAWDEN, Long Beach, Calif. Filed Mar. 26, 1930. Serial No. 439,086. 2 Claims. (Cl. 5—339.)



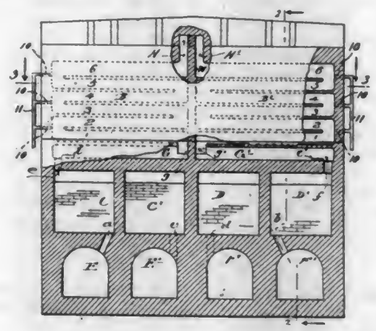
1. A pillow having a cover formed of relatively non-porous material, there being openings in the ends of the cover, sections of relatively porous material secured to the interior of the cover over said openings, and means for closing the openings over the porous material.

1,876,592. THERMOMETER. WILLIAM H. BEARD, Beaumont, Tex. Filed Nov. 14, 1930. Serial No. 495,764. 4 Claims. (Cl. 73—52.)



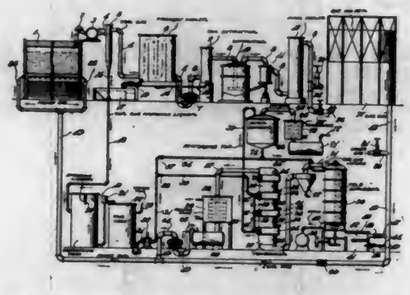
4. In a thermometer device, the combination of a protecting casing having an elongated opening therein and a lower liquid receiving chamber to which liquid enters thru said opening, said chamber having an inverted cup-shaped socket opening outwardly at the lowermost end of said chamber, said socket being provided with a transverse opening in a side wall thereof communicating with said chamber, a detachable drain plug in the socket preventing liquid in said chamber from flowing out of said transverse opening, and a thermometer carried in said casing.

1,876,593. FLUE SYSTEM FOR RETORT COKE OVENS. JULIUS BECKER, Syracuse, N. Y., assignor to Semet-Solvay Engineering Corporation, Solvay, N. Y., a Corporation of New York. Filed Sept. 19, 1921. Serial No. 501,577. 4 Claims. (Cl. 202—146.)



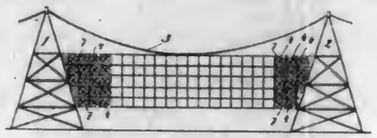
1. A coke oven comprising in combination a horizontally elongated coking chamber, two independent heating systems for said coking chamber, one of said heating systems extending a portion of the length of said chamber, and the second of said heating systems extending for another portion of said coking chamber, each of said heating systems comprising the hereinafter recited flues, passages, conduits, and regenerators, to wit, a combustion flue on each of opposite sides of said coking chamber, each of the combustion flues comprising zig-zag series-connected superimposed horizontal passages, a cross-over flue extending over the top of said coking chamber and communicating with each of the uppermost of said horizontal passages on opposite sides of said coking chamber, conduits respectively individual to and communicating with each of the lower-most of said horizontal passages on opposite sides of said coking chamber, and four reversible regenerators arranged in a row beneath the coking chamber longitudinally thereof and communicating with the flues.

1,876,594. DISTILLATION OF TAR. JOSEPH BECKER, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Apr. 17, 1928. Serial No. 270,646. 5 Claims. (Cl. 196—76.)



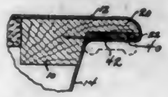
1. The method of carbonizing coal and obtaining pitch therefrom which comprises distilling the coal in a battery of coking retorts, removing coal gases and separating tar therefrom, burning a portion of the coal gas, adding to the products of combustion an additional quantity of the coal gas, subjecting the tar to contact with the mixture of coal gas and products of combustion whereby the tar is distilled to pitch, cooling the gases to remove tar distillates therefrom, mixing the gases used for distillation of the tar with a portion of the coal gas not so used, and employing the mixture of gases thereby obtained to heat said coking retorts.

1,876,595. GENERATING ELECTRIC POWER BY MEANS OF WIND. ALEXANDER BELDIMANO, Rotterdam, Netherlands. Filed June 18, 1929, Serial No. 371,949, and in Germany June 27, 1928. 1 Claim. (Cl. 170—38.)



An installation for deriving power from the wind, comprising a vertically disposed flexible net, the meshes of said net constituting a plurality of juxtaposed apertures extending through said net, and wind wheels arranged in said apertures.

1,876,596. REFRIGERATOR DOOR. HARRY H. BELDING, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a Corporation of Michigan. Filed Aug. 12, 1930. Serial No. 474,696. 7 Claims. (Cl. 20—35.)



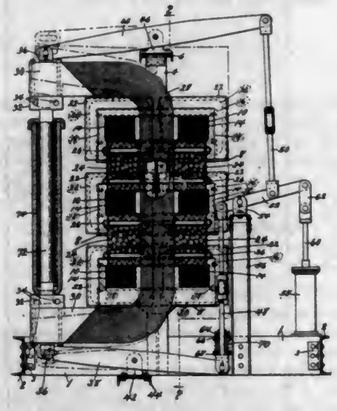
1. Refrigerator door construction including a wood frame, a front cover plate, and a back cover plate, the front plate having an edge flange bent around the rear side of the frame to lie in a plane parallel to that of the door, the back plate also having an edge flange in a plane parallel to that of the door, and means forced into the wood frame through spaced bent up portions of the edge flange of said back plate near an edge thereof for securing the latter to the frame the direction of drive of said means being in a plane parallel to that of the door.

1,876,597. SHEET METAL ROOF. GEORGE L. BENNETT, Cleveland Heights, Ohio. Filed June 7, 1928. Serial No. 283,471. 14 Claims. (Cl. 108—17.)



1. A sheet metal roof embodying therein metallic shingles or tiles having a vitreous coating comprising a weather face portion having nail openings adjacent the upper edge thereof, a butt flange, side edge flanges, and means adjoining one of said side edge flanges forming a trough of a width to receive and permit lateral adjustment of the side edge flange of an adjacent shingle or tile the bottom of said trough being on substantially the same plane as said side edge flanges, and an auxiliary trough along one edge of said other trough positioned in its entirety above the bottom of the trough, and means co-operating with said trough for securing the shingle or tile to the decking adjacent said butt.

1,876,598. ELECTRIC HEATER. WALLACE J. BISSET, Bloomsburg, Pa., and JOHN W. SHEFFER, Glen Ridge, N. J., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 31, 1930. Serial No. 440,328. 9 Claims. (Cl. 219—13.)



1. In an electric heater, a plurality of magnetic cores arranged in a column, primary coils for said cores, a flexible secondary coil extending through all of said cores, and work holding contacts carried by the secondary coil and releasable from the work upon flexing of said secondary coil.

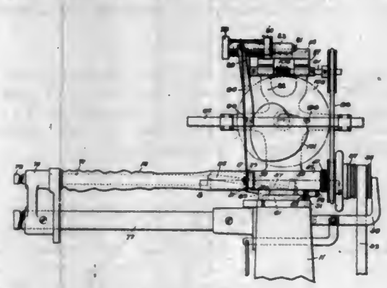
1,876,599. COMBUSTION ENGINE. GEORGE BLOW, New York, N. Y. Filed Oct. 25, 1928. Serial No. 315,032. 28 Claims. (Cl. 60—41.)

7. In an engine, the combination of a pair of alined cylinders, a combustion chamber in each cylinder next to the end adjacent the other cylinder, a high pressure turbine rotor in each cylinder adjacent the respective combustion chambers, a low pressure turbine rotor in the end of each cylinder opposite the said high pressure rotor, a revoluble



shaft keyed to said rotors to revolve therewith but slidable through said rotors and cylinders, and a piston in each cylinder fixed on said shaft between the respective high and low pressure rotors.

1,876,600. APPARATUS FOR FORMING RUBBER THREADS OR STRIPS. FRED WILLIAM BOMMER and CHARLES E. CLARKE, Winchester, Mass., assignors, by mesne assignments, to Stowe-Woodward, Inc., Newton, Mass. Filed Nov. 2, 1929. Serial No. 404,446. 14 Claims. (Cl. 164—69.)

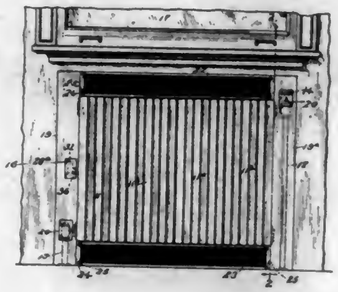


1. In a machine for cutting a continuous thread or strip from a tubular body of rubber or like elastic material, the combination of a mandrel adapted to have frictional engagement with the inner walls of said body at the leading end thereof which is to be cut, said mandrel carrying a shearing edge adapted to underlie said body, a rotary cutting knife having a shearing edge in contact with the shearing edge of the mandrel, resilient means for enforcing frictional engagement between the knife and the shearing edge of the mandrel, means for rotating the mandrel to carry the tubular body beneath the cutting knife, means for rotating the knife, a freely rotatable support on which the opposite end of the body is adapted to be carried and to turn when the mandrel is rotated and means for feeding the tubular body progressively lengthwise on said mandrel toward the knife, the same comprising a roller with which the inner walls of the leading end of said tubular member have frictional engagement, said roller being positioned at an angle with relation to the mandrel to provide a tube-advancing relation to said tubular body, and means for adjusting said roller with relation to said mandrel.

1,876,601. RADIATOR. CHARLES W. BRABBÉE, Bronxville, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 2, 1928. Serial No. 266,492. 1 Claim. (Cl. 257—153.)

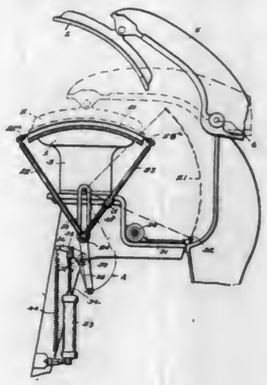
A radiator section formed as an integral cast unit comprising a substantially flat panel, a plurality of parallel conduit portions extending rearwardly therefrom, and transverse headers adjacent to opposite ends of said panel communicating with said conduit portions, and a receptacle portion at one edge of said panel communicating with one end of one of said conduit portions and with the header adjacent to said end; the portions of said panel interme-

diate said conduit portions constituting fin members extending therefrom in prolongation of the front wall portions of said conduit portions, and the combined outer sur-



face of the front wall portions of said conduit portions and the surfaces of its respective fin members aggregating substantially double the surface of the rearwardly extending portions of said conduit portions, substantially as specified.

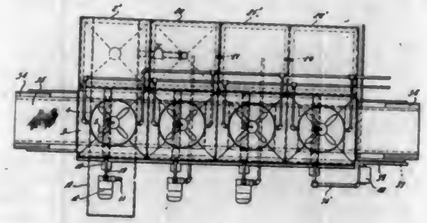
1,876,602. DAMPENING MEANS FOR PRESSING MACHINES. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Feb. 15, 1929. Serial No. 340,252. 14 Claims. (Cl. 68—9.)



1. A pressing machine including upper and lower cooperating pressing elements one of which is movable toward and from the other, the lower element having means associated therewith for projecting steam through the article thereon, a chilling plate movable into and out of position overlying the article on the lower pressing element in position to condense the steam in the garment and hence dampen the garment, means for moving the chilling plate independently of the movable pressing element and for moving the movable pressing element independently of the chilling plate.

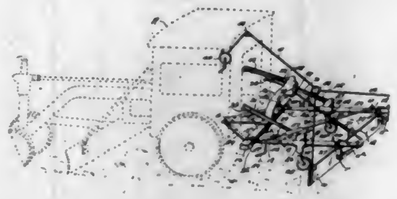
1,876,603. WASTE RECLAMATION APPARATUS. BLUFORD W. BROCKETT, Cleveland Heights, Ohio, assignor to Railway Service and Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 13, 1929. Serial No. 346,724. 6 Claims. (Cl. 141—5.)

1. Apparatus for reclaiming journal box packing, comprising a casing structure having an inlet end and an outlet end, conveyor means for supporting therein in mat form journal box packing and for conveying the same through said casing structure from its inlet end to its outlet end, a plurality of oil discharging devices arranged in said casing structure along the path of said conveyor means, an oil storage compartment for each of said oil discharging devices and adapted to receive therefrom at least some of the oil discharged thereby, means for supplying each of said oil discharging devices with oil from its oil storage compartment, whereby said devices may be supplied with



oil for discharge upon the mat of packing while it is being conveyed through said casing structure, said storage compartments from the inlet end of said casing structure toward the outlet end thereof containing oil in increasing states or conditions of cleanliness, and means for providing oil flow communication between said compartments, the communication being such that each compartment discharges directly into the preceding compartment and the discharge from at least some of said compartments being automatically effected when the oil in said compartments reaches a predetermined height.

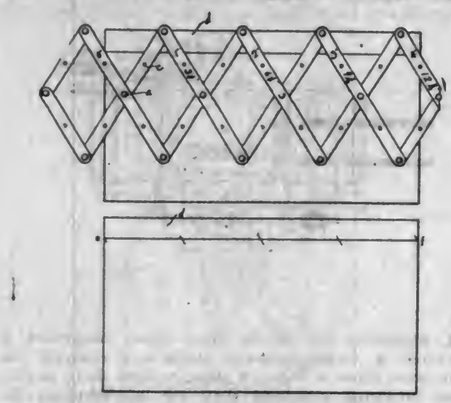
1,876,604. SPREADER AND EVENER ATTACHMENT FOR MOTOR GRADERS. CECIL U. BRUNER and WILLIAM S. LAUGHRIDGE, Marion, Kans. Filed Aug. 18, 1931. Serial No. 557,877. 7 Claims. (Cl. 37—178.)



1. An evener attachment for motor graders comprising a draft beam having means whereby it may be attached to the rear end of the motor grader behind the grading blade thereof, draw bars extending rearward from the draft beam, a blade supported at the rear end of the draw bars, wheels mounted upon the draw bars for relative vertical movement, means for vertically adjusting said draw bars relative to the wheels and including levers mounted on the draw bars and operatively engaging said wheels, and means attached to the grader whereby the draw bars and the blade may be bodily raised from engagement with the road.

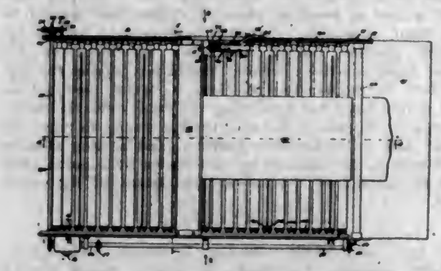
1,876,605. METAL WORKER'S RAPID SPACER. MARION F. BURDETT, Indianapolis, Ind. Filed Nov. 26, 1930. Serial No. 498,273. 2 Claims. (Cl. 33—192.)

1. In a device for laying off equal spaces, a plurality of upper and lower bars, the upper bars crossing the lower bars at their ends and middles, pivotal connections between the bars at their crossing places in the manner of a lazy tongs structure, each of said top bars being formed with numbers increasing consecutively in value



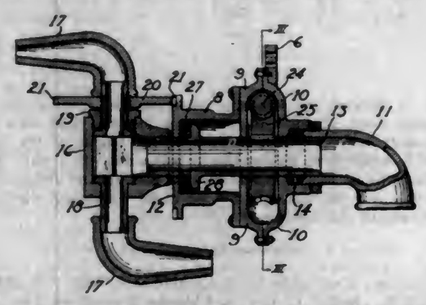
from bar to bar designating pipe diameters and all of said bars being formed with sight holes through their midwidths midway between their end and middle pivots.

1,876,606. PAPER FEEDER. MYRON B. BUSHNELL, Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,493. 23 Claims. (Cl. 271—29.)



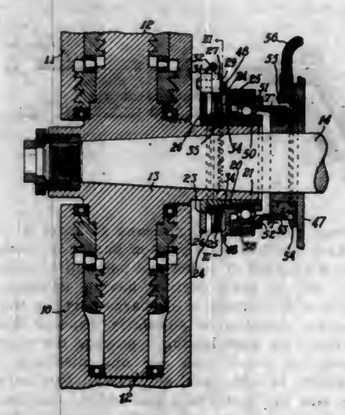
1. A paper feeder comprising in combination means to support a stack of sheet paper, means to remove a series of sheets simultaneously from the bottom of the stack, and means to withdraw sheets one at a time from the said series.

1,876,607. CLEANING MACHINE. ARTHUR B. BUTTERWORTH, Brooklyn, N. Y., assignor to Butterworth System, Inc., a Corporation of Delaware. Filed Jan. 5, 1931. Serial No. 506,514. 1 Claim. (Cl. 299—62.)



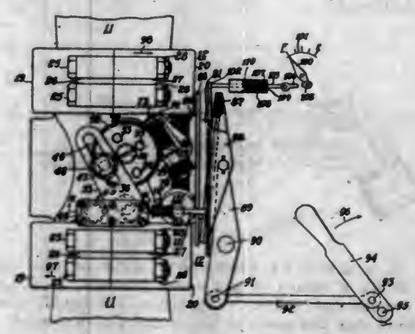
A cleaning device, comprising a tubular housing having an annularly toothed end, an inlet pipe secured to the opposite end of the housing, a headed tube having a shank extending rotatably through the toothed end and along the longitudinal axis of the housing into the inlet pipe, a packing ring sealing the shank with respect to the pipe and housing, nozzles projecting rotatably laterally from the head of the tube, a gear rigidly affixed to the nozzles and engaging the toothed end, a gear encircling and non-rotatably secured to the shank within the housing, and driving means for the gear extending into the housing.

1,876,608. PROPELLER. SIDNEY T. CARTER, Parnassus, Pa. Filed Mar. 15, 1929. Serial No. 347,431. 18 Claims. (Cl. 170—163.)



1. The combination with a propeller blade of mechanism for shifting the blade so as to change the pitch thereof, means for positioning said mechanism on a propeller shaft so as to vary said pitch, and means for operating a portion of said mechanism so as to cause a reversal of said pitch.

1,876,609. ADJUSTABLE PITCH PROPELLER. SIDNEY T. CARTER, Parnassus, Pa., assignor to himself and Robert E. Lankford, Pittsburgh, Pa., jointly as trustees. Filed Apr. 9, 1930. Serial No. 442,801. 18 Claims. (Cl. 170—163.)



1. In combination with a propeller hub having a crank shaft bore therein and a propeller blade mounted on the hub and turnable about its longitudinal axis, of a lever pivotally connected to the hub and propeller, said lever having a longitudinal slot, a gear turnably mounted on the hub, a pin on said gear extending into the slot of said lever, a jack shaft on said hub, a worm on said shaft meshing with said gear, a gear on said shaft, a worm on said hub mounted concentrically with the crank

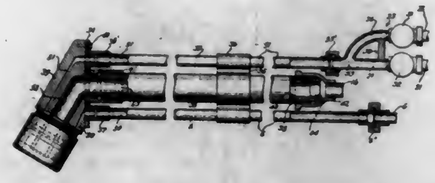
shaft bore thereof, said concentrically mounted worm meshing with the jack shaft gear, a brake drum on said concentrically mounted worm, a brake, and means for operating said brake into braking engagement with said drum, whereby when the hub is rotating, relative movement between the concentrically mounted worm and the hub is effected.

1,876,610. SPRAY GUN. PHILIP S. CASE, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Feb. 8, 1929. Serial No. 338,586. 18 Claims. (Cl. 91—45.)



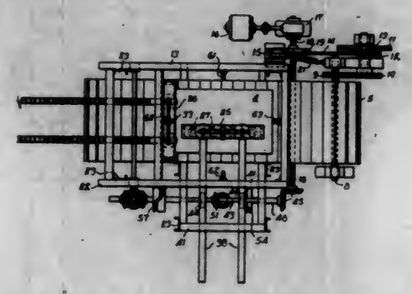
1. A spray gun comprising means to form a mixture of liquid and gas, a handle portion having a conduit for conducting a mixture of solids and gas and a conduit for conducting gas, a head portion having passages coextensive with said conduits, a discharge port for the solids and gas and a plurality of annularly disposed discharge ports for gas, said head having a passage for conducting said mixture of liquid and gas and discharge means therefor, means in said liquid and gas mixture passage to intimately mix the liquid and gas and to distribute the mixture equally to the annularly disposed discharge means and means in said gas passage to distribute gas equally to the plurality of annularly disposed discharge ports, said passage for solids and gas being disposed axially in said head and said discharge for the gas and the mixture of liquid and gas being arranged to discharge the same in the vicinity of the discharged mixture of solids and gas so as to form a mixture externally of the head.

1,876,611. SPRAY PRODUCING DEVICE. PHILIP S. CASE, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Feb. 8, 1929. Serial No. 338,587. 17 Claims. (Cl. 91—45.)



1. In a device for producing a spray of gas, liquid and solids, a source of gas under pressure, a container for comminuted solids, a container for liquid, mixers for solid and gas and for liquid and gas, a conduit for the solid and gas mixture having a discharge orifice, a conduit adapted to discharge the mixture of liquid and gases in an envelope around the discharged solid and gas mixture and a conduit for gas having orifices to project the gas into the discharged mixture of solid and gas, a communication for conducting gas from said source to said solids container, a by-pass around said solids container connecting said communication and the solids mixer and a valve in the solids container to relieve the air pressure therein and stop the flow of solids.

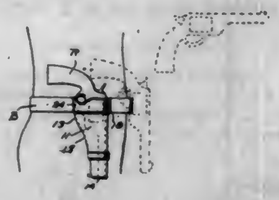
1,876,612. GLASS CUTTING APPARATUS. GABRIELE CHIOTTI, Aliquippa, Pa. Filed Sept. 24, 1929. Serial No. 304,819. 4 Claims. (Cl. 33—32.)



1. Apparatus for cutting sheet glass, comprising a conveyer, a cutter arranged above said conveyer for movement across a sheet of glass, a drive shaft, mechanism connected with said shaft for intermittently advancing said conveyer, means operatively connected with said shaft for moving said cutter while said conveyer is at rest, a second cutter, and means operatively connected with said shaft for moving the second-named cutter across the glass in a direction transversely of the direction of movement of the first-named cutter and in timed relation to the operation thereof.

3. Apparatus for cutting sheet glass, comprising a cutter head, means for advancing and retracting said head across a sheet of glass, a cutter tool carried by said head, means for yieldably holding said tool in operative position during advancing movement of the cutter head, relatively weaker means for moving the cutter tool to inoperative position, a device mounted on said cutter head for rendering the said yieldable means inoperative to permit the said weaker means to move the cutter tool to inoperative position, and a stop member positioned to be engaged by said device at a point adjacent to the end of the forward movement of the cutter head.

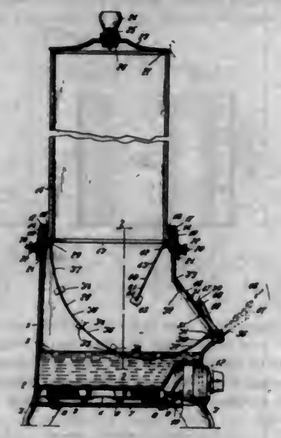
1,876,613. HOLSTER. EDWARD E. CLARK, Los Angeles, Calif., assignor to George S. Lewin, Santa Monica, Calif. Filed Oct. 14, 1931. Serial No. 568,773. 7 Claims. (Cl. 224—2.)



1. A holster for firearms and the like comprising a holster body adapted to receive a firearm, that side of the body against which the top of the barrel of the firearm is adapted to be positioned being open to permit the firearm to be moved therethrough, and means forming a barrier over the opening for normally retaining the firearm within the holster.

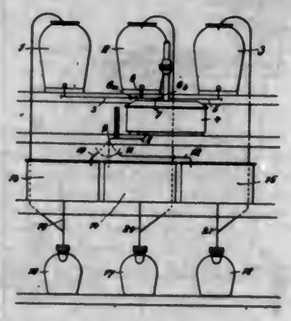
1,876,614. COOKER FOR FRANKFURTERS OR THE LIKE. ERNST C. CLAUS, Chicago, Ill. Filed Oct. 16, 1930. Serial No. 489,027. 4 Claims. (Cl. 126—20.)

1. In a cooker, the combination with a receptacle adapted to contain a liquid, a heating element for heating the liquid in said receptacle and generating vapor, an inclined support arranged above the liquid in the receptacle to support foodstuff, means to introduce vapor into direct contact with the foodstuff whereby the food-



stuff will be cooked by the vapor while on the support above the liquid, an opening adjacent the bottom of the receptacle at the end of the support, and a normally closed door for closing said opening.

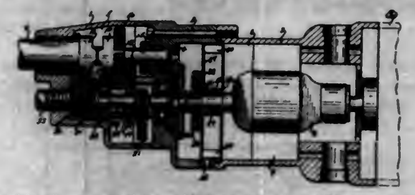
1,876,615. METHOD OF LOADING TEXTILE MATERIAL. RENÉ CLAVEL, Basel, Switzerland. Filed June 19, 1928, Serial No. 286,574, and in Switzerland Aug. 23, 1927. 2 Claims. (Cl. 8—13.)



1. A method of loading textile material consisting in treating the textile material successively with an acid, a metal loading solution and a fixing solution consecutively in a single centrifuge without removal of the material from said centrifuge during the consecutive steps of the process and without washing the material treated with the metal loading solution.

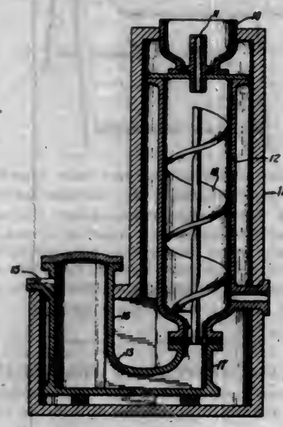
1,876,616. POWER TOOL. EDWIN L. CONNELL, Cleveland, Ohio, assignor to The Van Dorn Electric Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 3, 1929. Serial No. 411,340. 6 Claims. (Cl. 74—7.)

1. In a tool of the class described, a spindle, an electric motor, driving connections therebetween and including a pair of cooperating friction clutch members, one of said clutch members being fixedly mounted upon the armature of said motor and one end of said armature being journalled in said other clutch member, spring means effective upon the clutch member in which said armature end is journalled for producing frictional driving engagement of said clutch members, a housing carrying the aforementioned elements, and a single means



operable from outside said housing for effecting adjustment of said spring means to thereby control the degree of frictional driving engagement of said clutch members.

1,876,617. REFINING LEAD. MICHAEL GEORGE CORSON, Jackson Heights, N. Y., assignor to National Lead Company, a Corporation of New Jersey. Filed May 30, 1930. Serial No. 457,654. 1 Claim. (Cl. 75—15.)



In the refining of lead, the process which comprises establishing and maintaining a column of molten aluminum of substantial height resting on a supporting bath of molten lead, continuously introducing molten lead to be refined beneath the surface of the molten aluminum with exclusion of air, passing the so introduced lead in a circuitous path through the said column of molten aluminum and continuously withdrawing the refined lead from beneath the column of molten aluminum.

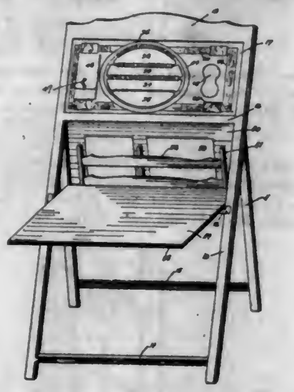
1,876,618. SAFETY RAZOR BLADE SHARPENER. HARLEY A. COY, Mascot, Tenn. Filed Feb. 3, 1932. Serial No. 590,744. 9 Claims. (Cl. 30—12.)



1. In a razor, a guard, a clamping member, a blade between said guard and clamping member, means for

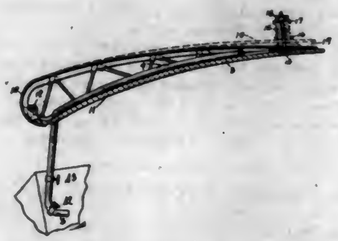
holding said member, blade and guard in assembled relation, and a sharpening device mounted between the blade and clamping member for transverse movement relative to the blade and clamping member.

1,876,619. EASEL BLACKBOARD. HORATIO G. CRENS, Troy, Ohio. Filed Apr. 8, 1930. Serial No. 442,523. 3 Claims. (Cl. 35—15.)



1. In an easel blackboard of the class described, members forming guide channels for buttons between themselves and an outer channeled member, the outer ends of the inner of said members turned or curved, the turn or curve leading from the guide channels between said inner and the outer members meeting the outer oval channel at approximately a right angle allowing the buttons to pass in or out of the curve without locking.

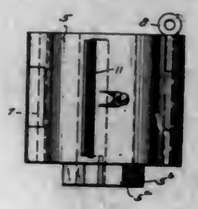
1,876,620. WING HEATER FOR AEROPLANES. WILLIAM H. CROSSLAND, Bristol, Pa. Filed Aug. 13, 1930. Serial No. 475,028. 11 Claims. (Cl. 244—31.)



1. Means for heating a surface of a flying machine and preventing the formation of ice thereon consisting of the combination of a cell formed by the surface to be heated as one of the bounding members, means for supplying waste gases from the flying machine power plant directly to the said cell and means actuated by fluid actuated expansion plates for permitting the escape of the said waste gases from the said cell after the temperature within the cell reaches a predetermined point.

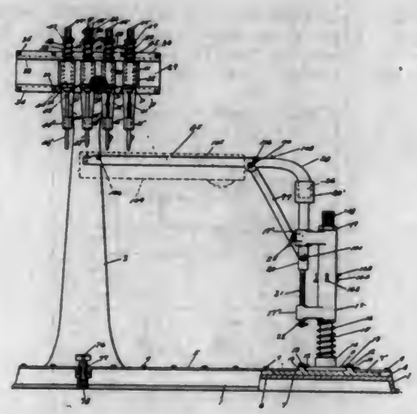
1,876,621. TOOL FOR TRUING CRANK SHAFTS. JOSEPH THOMAS CRUTE, Virgilina, Va., assignor of one-half to Marvin A. Goode, Virgilina, Va. Filed Nov. 4, 1930. Serial No. 493,410. 1 Claim. (Cl. 82—4.)

A crank pin truing tool of the character described comprising a body portion made of two separable halves adapted to complementally embrace a crank pin, means for holding the free edges of said halves together, an elongated cutting or scraping tool carried by one of said halves and extending in parallelism with the axes of the crank pin to be trued, and an angular extension upon the end of each of said halves, said extensions complementally forming a wrench-receiving surface having a mean diam-



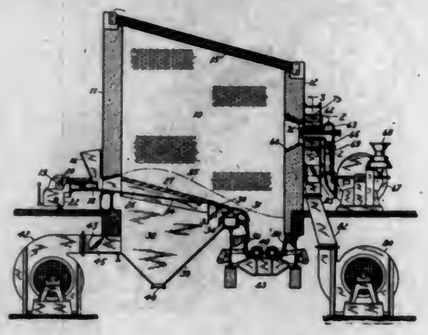
eter that is materially less than the diameter of the body portion, said tool extending substantially throughout the combined length of the body portion and angular extensions and being cut away at the point where it passes through said extensions so as not to extend beyond the surface thereof.

1,876,622. COMBINATION NAILING, STAPLING, AND RIVETING MACHINE. JAMES CUNNINGHAM, Portland, Oreg. Filed Mar. 4, 1931. Serial No. 520,033. 7 Claims. (Cl. 1—1.)



1. A machine of the class described, comprising a base, a standard projecting upwardly from said base, a guideway at the upper end of said standard, a head slidable in said guideway, said head having mounted thereto a mechanism for driving nails, a mechanism for driving staples, a mechanism for clinching rivets and a mechanism for peening rivets; there being an operable position wherein each mechanism may be operated and in which each may be positioned by moving said head back and forth, means for operating each mechanism when it is in operable position, a guideway in said base, a base plate slidable in said guideway, a guideway in said base plate arranged transversely to the last mentioned guideway, a pedestal plate slidable therein, a column vertically mounted on said pedestal plate, a sleeve on said column including a yieldable mounting embodying a seat therefor, a vertically adjustable horn support member carried by said sleeve, said horn support member being supplied with a socket for receiving a work support member, and a work support member designed for seating in said socket.

1,876,623. FURNACE. FRED H. DANIELS, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1927. Serial No. 222,792. 5 Claims. (Cl. 110—28.)



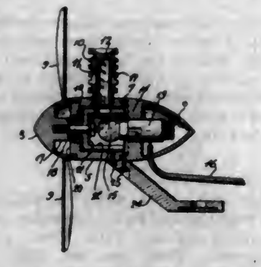
5. A furnace comprising walls defining a combustion chamber, an underfeed stoker therein having a plurality of parallel retorts extending rearwardly from the front wall of the chamber, an ash dump in the rear of the retorts, means for feeding a bed of fuel through said retorts to the ash dump, means for supplying air to the fuel in said retorts, one wall of the chamber being provided with an opening, a pulverized fuel burner mounted on said wall and arranged to discharge through said opening, said burner and opening being so located that the flame is over the ash dump, and means to supply air and pulverized fuel to said burner for combustion.

1,876,624. MOUNTING FOR ORNAMENTS. FRANK P. DAUGHADAY, Providence, R. I. Filed May 22, 1930. Serial No. 454,642. 2 Claims. (Cl. 63—26.)



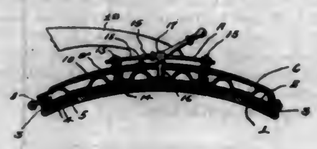
1. In combination, a base plate having an opening therethrough, a mother-of-pearl ornament having a recess in the back thereof, said recess having a convex base and an undercut peripheral wall, and a cup-shaped holding member of ductile metal having an integral bottom wall closing one end and an open end, said open end flared into locking engagement with said recess and its shank end extending through said opening and enlarged over said base plate.

1,876,625. ILLUMINATED ORNAMENT FOR AUTOMOBILES. LESTER DAUGHERTY, Kokomo, Ind. Filed Apr. 29, 1931. Serial No. 533,827. 3 Claims. (Cl. 240—8.11.)



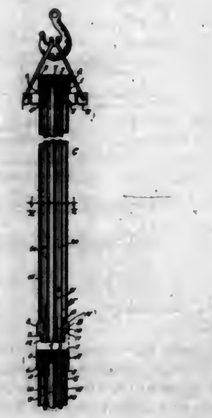
1. In an illuminated ornament of the character described, a body portion, radial cylinders carried by the body, a rotatable propeller blade at the forward end of the body, illuminating means within the body, rotatable means operated by the propeller to effect successive illumination of the cylinders, each cylinder having side windows therein, and a colored screen in the cylinder spanning the windows.

1,876,626. PRESSING MACHINE ELEMENT CONSTRUCTION FOR GARMENT AND LAUNDRY PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Dec. 28, 1928. Serial No. 329,038. 13 Claims. (Cl. 68—9.)



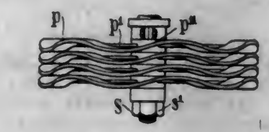
1. In a garment or laundry pressing machine in combination a press plate; a second plate overlying the press plate and secured thereto; a third plate formed of sheet metal, and formed so that its marginal edges and other portions of its area contact with said second plate, while other portions of the area of said third plate are spaced apart from the second plate to form a chamber for a fluid medium; means securing the third plate to the second plate; means for admitting fluid to the chamber; a carrier; and securing means operatively connected with the first plate and the carrier and extending through the second and third plates.

1,876,627. MULTIPLE PIPE UNIT ADAPTABLE TO THE DRILLING AND PUMPING ARTS. FRANCIS H. DAVIS and FRANK F. DAVIS, Monterey, Calif. Filed Jan. 27, 1931. Serial No. 511,616. 3 Claims. (Cl. 255—28.)



1. As a new unitary article of manufacture, a multitubular pipe comprising an outer casing, a plurality of longitudinal internal tubes traversing the casing and rigidly mounted therein, a coupling element at each end of the casing having an outwardly disposed contact table and external shoulders on the coupling elements outwardly of the contact tables normally spaced when the tables are contacting to permit further adjustment of the elements to compensate for wear.

1,876,628. TRACTOR WHEEL. JOSEPH DAWE, Hyde Park, London, England. Filed Oct. 12, 1926, Serial No. 141,053, and in Great Britain Oct. 16, 1925. 2 Claims. (Cl. 201—52.)

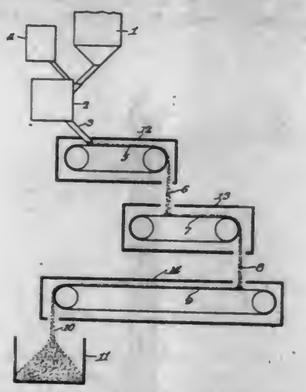


2. A driving wheel for tractors and similar agricultural implements, comprising a series of annular plates of sinuous formation in relation to the plane of rotation, spokes uniting each of said plates to a central boss whereby each plate with its spokes and boss forms an independent unit, and means for securing said units in predetermined angular relation to each other, the edges of said plates forming the entire tread of the wheel, said edges being adapted to cut through the surface soil.

1,876,629. PROCESS OF COLORING GRANULAR AND OTHER MATERIAL. PAUL S. DENNING, Joliet, Ill., assignor to Frederic E. Schundler, Joliet, Ill. Filed June 21, 1929. Serial No. 372,803. 4 Claims. (Cl. 91—70.)

1. A method of coloring granules which consists in mixing in a dry state granular material and a substance that will react on a soluble silicate to form an insoluble silicate, then applying a mixture of coloring matter and a soluble silicate solution and finally drying the mixture by artificial heat.

1,876,630. PROCESS OF COLORING GRANULAR AND OTHER MATERIAL. PAUL S. DENNING, Joliet, Ill., assignor to Frederic E. Schundler, Joliet, Ill. Filed Mar. 3, 1930. Serial No. 432,634. 4 Claims. (Cl. 91—70.)



4. A process for coloring granules which consists in mixing a cement comprising calcined material and water with color pigment, mixing the colored cement with granules, drying and simultaneously agitating the mixed mass to prevent agglomeration.

1,876,631. FORM FOR DRYING HOSIERY AND THE LIKE. JOHN W. DENNIS, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1929. Serial No. 347,662. 3 Claims. (Cl. 219—19.)

1. A self-contained electric heater element for hollow hosiery drying forms and the like comprising leg and foot sections with an inter-pivoted ankle section embodying spaced arcuate-components all jointly fitting the hollow of the form with capacity for relative lateral movement during insertion into or withdrawal from the form, and said



heater element including a continuous resistance coil wound about insulation core pieces in the leg and foot sections with straight bridging segments threaded between the ankle arcuate components.

1,876,632. FORM FOR DRYING HOSIERY AND THE LIKE. JOHN W. DENNIS, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 19, 1929. Serial No. 356,414. 2 Claims. (Cl. 223—17.)

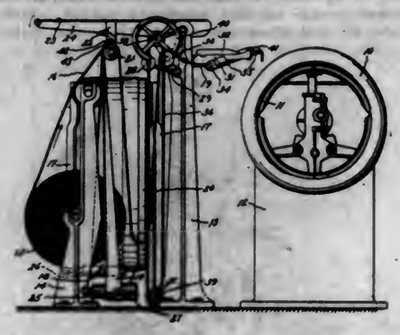


1. A hosiery drying form comprising a profile body, and a pivoted spring influenced heel piece projecting outward through an edge slot of the body, said heel piece being restrained as regards outward movement by an abutment in the slot but having capacity for yielding as a stocking is drawn over the form thereby to automatically adapt the latter to the stocking.

1,876,633. TIRE BUILDING APPARATUS. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1928. Serial No. 265,836. 5 Claims. (Cl. 154—10.)

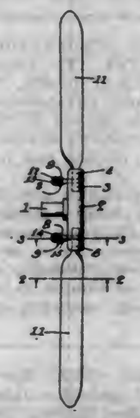
4. A device for supplying strip material which comprises a pair of spaced supports over which the strip is passed,

means to engage the material and means to move said material engaging means to draw the material under tension



into a loop between the supports and to return the material engaging means to its initial position to free the looped material from tension.

1,876,634. AUTOMATICALLY ADJUSTABLE AIRPLANE PROPELLER. JOSEPH ROMEO DESAUTELS, Salisbury, Vt. Filed Dec. 8, 1930. Serial No. 500,913. 8 Claims. (Cl. 170—162.)



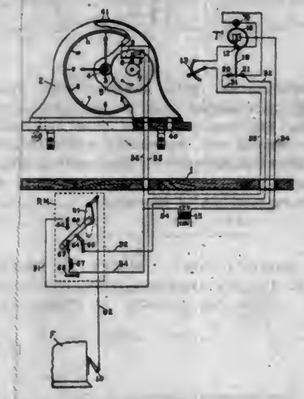
1. In an automatically controlled propeller, the combination of a hub, reversely pitched propeller blades rotatably mounted in the ends of the hub, said blades having their shafts alined and offset from the center of the blades, the hub having offset elongated slots extending to the shafts of the propeller blade, independently controlled movable arms affixed to the shafts of the propeller blades and projecting through said elongated slots in the hub, spaced arms fixedly mounted in the hub, arcuate compression springs engaged to the ends of the fixed arms and to the ends of the movable arms, and guide pins for said springs.

1,876,635. AEROPLANE CONSTRUCTION. WILLIAM F. DEUTSCHER, New York, N. Y. Filed July 14, 1930. Serial No. 467,069. 14 Claims. (Cl. 244—12.)



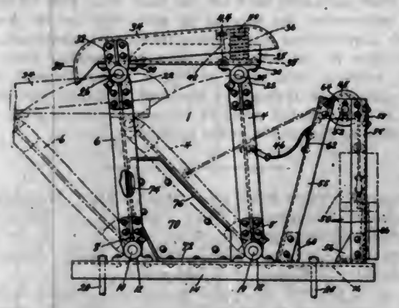
1. In aeroplane construction, a wing having a plurality of longitudinally extending and rearwardly inclined passageways extending through the lower surface of said wing and through the upper surface thereof, said passageways being defined by vanes passing through the wing, said vanes being so disposed with respect to each other at their upper ends as to form constricted slits extending longitudinally of the wing, and said vanes at their lower ends extending downwardly and forwardly.

1,876,636. TEMPERATURE REGULATING SYSTEM. ALLEN A. DICKE, Montclair, N. J., assignor to Pioneer Heat Regulator Corporation, a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,368. 2 Claims. (Cl. 236—68.)



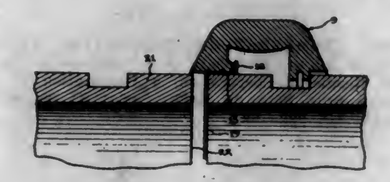
1. In a temperature controlling system, the combination with a dwelling room, of a furnace for heating said room, temperature responsive means for controlling the flow of heat from said furnace to said room to maintain the temperature of said room at a predetermined value, an auxiliary heat source adjacent said temperature responsive means rendered active when said temperature responsive means has been operated to its increased heat-flow position, time controlled means, circuit controlling means controlled by said time controlled means, and means for causing said temperature responsive means to regulate the temperature of said room to a lower value including a circuit including a second auxiliary heat source and effective when said circuit controlling means is closed.

1,876,637. DOOR CLOSING DEVICE FOR CARS. WILLIAM F. DIETRICHSON, St. Louis, Mo., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 27, 1930. Serial No. 431,868. 33 Claims. (Cl. 214—63.)



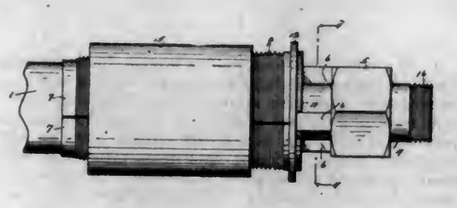
1. In a door closing device, a support, a frame mounted thereon and capable of limited shifting in two directions, and a door engaging member supported by and pivotally connected at one end to said frame.

1,876,638. GUIDING MEANS FOR PIPE COUPLINGS. STEPHEN V. DILLON, Tulsa, Okla., assignor to The Dillon Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Jan. 31, 1931. Serial No. 512,702. 11 Claims. (Cl. 285—194.)



1. The combination with adjacent pipe ends having spaced apart extremities and a channel-shaped packing ring bridging the space between said extremities, of a guide ring having an outwardly extending abutment projecting into the channel of the packing ring, and an inwardly extending abutment projecting into the space between the extremities of the pipes.

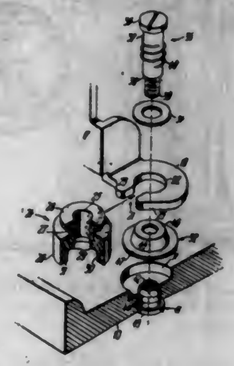
1,876,639. HOSE CLAMP. HARRY E. DISLER, Tulsa, and EARL E. DEACON, Oklahoma City, Okla. Filed Sept. 12, 1930. Serial No. 481,572. 1 Claim. (Cl. 285—86.)



A hose clamp, comprising a tubular body designed to have one end extended into an end of a hose, a shoulder formed integral with and about said body inwardly of the other end for engagement with the hose end, a plurality of slips comprising elongated bodies of arcuate cross section, disposed longitudinally of the hose and surrounding the same, a flange formed integral with each slip at one end and projecting inwardly, each flange of each slip terminating at each end short of the adjacent longitudinal edge of the slip, said flanges being designed to overlie and engage said shoulder, longitudinally extending ribs formed integral with said tubular body and each engaging between the ends of a pair of flanges and preventing the turning of said slips on the hose, a sleeve surrounding and having threaded engagement with said slips for securing the same in position about the hose, each of said slips having a groove formed about the outer face thereof at the end adjacent the flange, and a ring member adapted to engage in the grooves of the slips to couple the same together.

1,876,640. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1929. Serial No. 339,337. 5 Claims. (Cl. 248—16.5.)

1. In a portable typewriting machine having a frame and a baseboard for supporting the same, the combination with a lug secured to the frame, the lug having a foot-retaining opening therein, of a shoulder-screw, a resilient foot having a longitudinal orifice through which said screw is mounted on the baseboard, a spring on said screw above the foot, effective to press against the top of the foot to urge the foot to bear against the baseboard, means on said baseboard against which the shoulder on said screw bears to limit its movement and

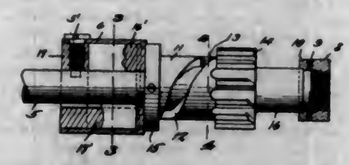


control the pressure of said spring, and means carried by said baseboard with which the screw engages to secure the machine to the baseboard, whereby the machine can be carried by the baseboard.

1,876,641. DYEING PREPARATION FOR COLORING CHROME LEATHER AND PROCESS OF MAKING THE SAME. AUGUST DORRER, WILHELM SCHEURER, and ARTUR OHMER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1930, Serial No. 445,520, and in Germany Apr. 27, 1929. 6 Claims. (Cl. 260—69.)

1. A process of producing new dyestuffs, which comprises warming a N-nitroso compound of a monoazo dyestuff selected from the group consisting of the benzene and naphthalene series with an aromatic compound selected from the group consisting of the benzene and naphthalene series substituted by at least one radicle selected from the group consisting of amino and hydroxy radicles.

1,876,642. STARTING GEAR. EDWIN A. DOUB, Walnut, Kans., assignor of one-half to John M. Harper, Kansas City, Mo. Filed Mar. 18, 1931. Serial No. 523,587. 1 Claim. (Cl. 74—7.)



A motor starter embodying a shaft, cushioning means at the outer end of the shaft, a sleeve mounted on the shaft, a blade at one end of the sleeve and disposed in parallel relation to the shaft, a pin extending from the sleeve, an outer sleeve mounted on the first mentioned sleeve, the outer sleeve having a cam slot in which the pin moves, to move the outer sleeve longitudinally of the shaft when the shaft is rotated, a pinion on one end of the outer sleeve and adapted to move into engagement with the teeth of a fly wheel of a motor to start the motor, a blade secured to the shaft, a sleeve surrounding the blades, rubber cushioning members positioned between the blades to restrict rotary movement of the outer sleeve, and a collar fitted in one end of the sleeve surrounding the blades.

1,876,643. DEVICE FOR SPRAYING PAINTS, LACQUERS OR OTHER LIQUIDS. AUSTIN H. DOWNS, Newark, N. J., assignor to Eclipse Air Brush Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 14, 1927. Serial No. 161,066. 17 Claims. (Cl. 91—45.)



1. In combination in a device of the character described, a body portion having a barrel portion with a nozzle construction at one end, liquid supply conduits leading to said nozzle, a liquid controlling valve assembly provided in said barrel portion including a valve having a plunger, bearing means for said plunger, a packing gland construction for said plunger and means extending from the rear end of the barrel portion for adjusting the position of the valve and plunger, said means including a polygonal shaped shaft and an adjusting nut having a polygonal bore fitting said shaft.

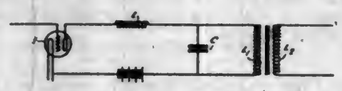
1,876,644. DEVICE FOR SPRAYING PAINTS, LACQUERS OR OTHER LIQUIDS. AUSTIN H. DOWNS, Newark, N. J., assignor to Eclipse Air Brush Company, Inc., Newark, N. J., a Corporation of New Jersey. Original application filed Aug. 2, 1926, Serial No. 126,507. Divided and this application filed June 28, 1928. Serial No. 288,986. 16 Claims. (Cl. 91—45.)



1. In combination in a spray gun for atomizing and spraying liquids by means of air pressure having an air passage and a branch passage leading from said air passage, a valve in said branch passage, means for normally holding the valve on its seat to close said branch passage, said means being overcome by an excess of pressure to permit the discharge of air through said branch passage to give a signal.

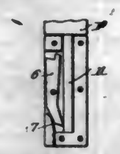
16. A spray gun for atomizing and spraying liquids, including a body member, a nozzle construction on the front end of said body member, said body member being provided with a liquid passage communicating with said nozzle construction, said body member also having a liquid inlet connection communicating with said liquid passage and which projects from said body member, said body member having connected air passages leading therethrough to said nozzle construction, a valve for controlling said air passages, said passages passing around said liquid inlet connection, a by-pass pipe extending from said body member and in communication with said air passages extending around said liquid inlet connection, whereby when a pressure cup is utilized in connection with said liquid inlet connection, air may be admitted into the pressure cup through said by-pass pipe to exert pressure on the liquid in the pressure cup and force the liquid through said liquid inlet connection to said nozzle construction.

1,876,645. CIRCUIT ARRANGEMENT FOR THERMIONIC AMPLIFYING TUBES COUPLED BY TRANSFORMERS. POPKO REINDER DIJKSTRAHUIS, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 24, 1930, Serial No. 484,003, and in the Netherlands Sept. 28, 1929. 8 Claims. (Cl. 179—171.)



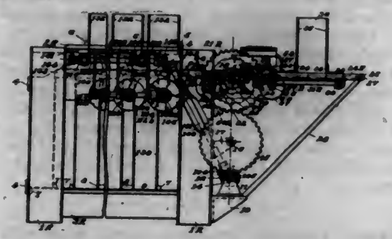
1. Means for amplifying a wide range of frequencies substantially evenly throughout the range, comprising an electron discharge device having an input circuit and an output circuit, said output circuit including the primary winding of a transformer having a high ratio of transformation, a utilizing circuit including the secondary winding of said transformer, an inductance in said output circuit in series with said primary winding and a capacity shunted across said primary winding, said condenser and said inductance having values such that the resonance frequency determined by them exceeds the leakage resonance frequency of the transformer, and the ratio between the ohmic resistance and the inductance occurring in the circuit constituted by the said inductance, said capacity and the internal resistance of said electron discharge device is less than unity for the resonance frequency.

1,876,646. KEYHOLE GUARD FOR LOCKS. GEORGE B. EHRMANN, Troy, N. Y. Filed May 28, 1928. Serial No. 281,340. 1 Claim. (Cl. 70—8.)



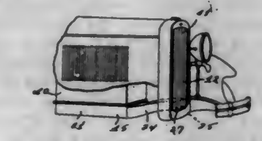
A means for the purpose described, comprising a pin-like member, a magnet at one end of the pin, and a filling block which is freely movable lengthwise of the pin, whereby it may be positioned in the key way of a lock by the pin, and provided with a pivotally mounted dog adapted to be automatically projected therefrom to constitute an abutment preventing withdrawal of the block from the key way when the pin is withdrawn and which dog is moved into non-projecting relation to the block, as the pin is positioned in the block, prior to the magnet coming into operative relation to the block.

1,876,647. SORTING MACHINE. HOWARD C. EINSTEIN, Detroit, Mich., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Original application filed July 17, 1922, Serial No. 575,468. Divided and this application filed Jan. 28, 1929. Serial No. 335,411. 8 Claims. (Cl. 209—110.)



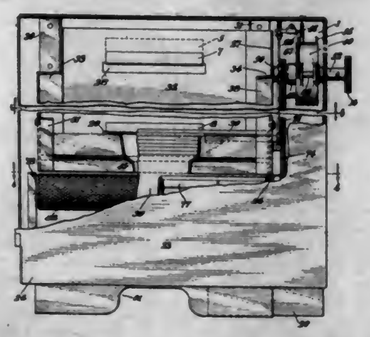
1. In mechanism of the character described, the combination of means for conveying cards, a sorting device including a series of movable pins arranged in groups and adapted to analyze cards having holes therein to effect sorting said cards, and the engagement of other pins in other cancelling holes in the cards bearing a certain positional relation to said first named holes rendering the sorting action produced by said first named pins ineffective, means adapted to render inoperative any desired group of pins.

1,876,648. OIL COOLING DEVICE. HAROLD L. ELFES, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Sept. 22, 1930. Serial No. 483,720. 15 Claims. (Cl. 123—196.)



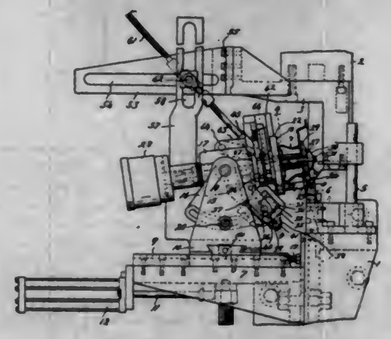
1. An oil cooling attachment for engines comprising means constituting a closure for the lower side of the engine crank case, said means including a receptacle for the engine lubricant and means providing an air circulatory passage surrounding said receptacle.

1,876,649. APPARATUS FOR DISPENSING. WILLIAM FAIRCHILD, Albany, N. Y., assignor to A. P. W. Paper Co., Albany, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,848. 4 Claims. (Cl. 194—85.)



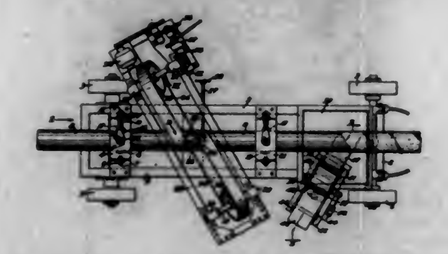
1. A coin-actuated mechanism comprising a feeding device for dispensing, a manually operable member for moving said feeding device when coupled thereto by a coin, and a stop for positioning the feeding device for the receipt of a coin after the coin has been discharged therefrom, said stop having a tongue projecting into the path of the coin for the release of said stop, said feeding device and manually operable member being provided with overlapping pins for the support of the coin during the operating of the feeding device and spiral means for changing the position of the coin during the feeding operation so that one of said pins is cleared and the coin is discharged.

1,876,650. MACHINE FOR FORMING HOLES IN ARTICLES. HORACE EDWARD FARMER, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed June 3, 1929. Serial No. 367,933. 11 Claims. (Cl. 104—87.)



1. A machine having a tool for fashioning an article and a support for the work article having upper and lower base members movable transversely of each other in a horizontal direction, a pivotal member adjustably mounted upon said upper base member, a second pivotal member connected to said first mentioned pivotal member and adapted to be adjustable therewith, and a carrier for the work article mounted upon said second pivotal member to rotate transversely to the axis thereof.

1,876,651. MACHINE FOR WRAPPING PIPES. DOZIER FINLEY, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 25, 1930. Serial No. 447,185. 8 Claims. (Cl. 242—11.)



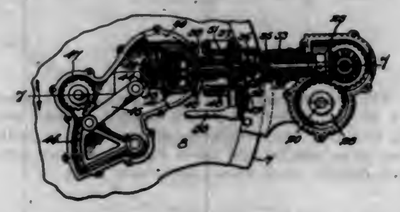
1. A pipe wrapping machine comprising means for moving the pipe, elements slidably engageable with the pipe and angularly disposed with respect to the pipe axis for effecting a combined rotary and longitudinal movement of the pipe.

3. A pipe wrapping machine comprising a plurality of pipe supporting blocks set at a selected angle with respect to the axis of the pipe, and means for moving the pipe.

1,876,652. PRODUCTION OF ACID NITRILES. SIEGFRIED FISCHL, Berlin-Baumschulenweg, and HANS STEINER, Berlin-Adlershof, Germany, assignors to the Firm Schering-Kahlbaum A.-G., Berlin, Germany. Filed Nov. 19, 1929, Serial No. 408,408, and in Germany Nov. 29, 1928. 16 Claims. (Cl. 260—108.)

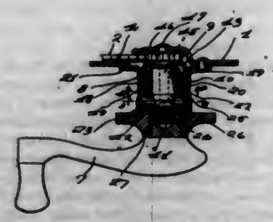
1. The method of producing acid nitriles comprising acting on the neutral ammonium salt of the saturated carboxylic acid corresponding to the nitrile and having a like number of C-atoms with an acid chloride of the group constituted by phosphorous oxychloride, phosphorus trichloride and arylsulfochloride in the presence of a weak organic base which is not capable of saponifying at the temperature of the reaction the nitrile formed in the reaction.

1,876,653. POWER DRIVEN WASHING MACHINE. JOHN B. FLETCHER, Newport, Ky. Filed Mar. 8, 1930. Serial No. 434,403. 1 Claim. (Cl. 259—101.)



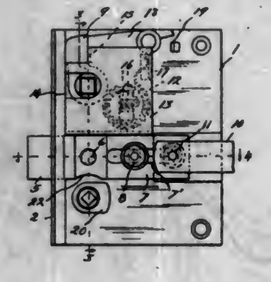
In a washing machine, a tub, a stationary cover ring fixed to the upper edge of the tub, a cover hingedly mounted upon said ring cooperating therewith to provide a closure for the tub, an oscillating dolly carried by said cover depending into the tub when the cover is closed, transmission means for oscillating said dolly including a gear fixed upon the axle of said dolly, a rack segment fulcrumed upon said cover having its rack teeth in mesh with said gear, a rotative crank member, a link connecting said crank member and segment, a pair of axially aligned shafts, one supported and journalled upon said cover to be movable therewith and in gear connection with said crank member, and the second stationary relative thereto, and coupling means for rotatably connecting said shafts when the cover is in closed position and thereby lock the cover against being opened.

1,876,654. WINDOW REGULATOR. BURTON S. FLORADAY, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 13, 1928. Serial No. 305,767. 4 Claims. (Cl. 192—8.)



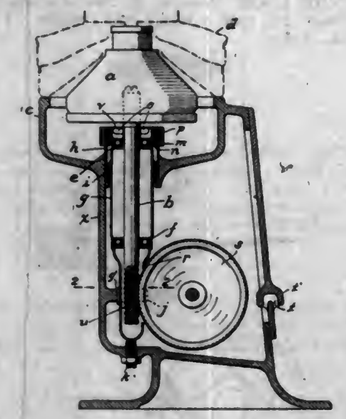
1. In a window regulator, the combination with irreversible drive mechanism including a coil spring, a handle for actuating said mechanism and a bearing member for said handle, of a tubular sheet metal member common to both said mechanism and bearing member for housing said coil spring and frictionally engaging the same when in locking position and for detachably receiving said bearing member to support the same, said tubular member having struck-out tongues for positioning said mechanism.

1,876,655. DOOR LATCH. BURTON S. FLORADAY, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed May 26, 1930. Serial No. 455,810. 7 Claims. (Cl. 292—169.)



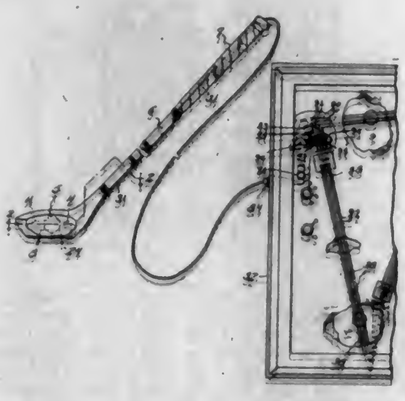
1. In a latch, a case plate, a latch bolt movable on said case plate, retracting means on said case plate for said bolt, means engaging said case plate for normally holding said bolt in extended position, and a plate-like extension rigid with said bolt and projecting from one side thereof, said extension being laterally offset from the bolt in a direction to form a space between the same and case plate for receiving said bolt holding means.

1,876,656. MEANS FOR PROTECTIVELY SUPPORTING RAPIDLY ROTATED SHAFTS. ERIK AUGUST FORSBERG, Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 19, 1927, Serial No. 241,043, and in Sweden Jan. 3, 1927. 8 Claims. (Cl. 308—168.)



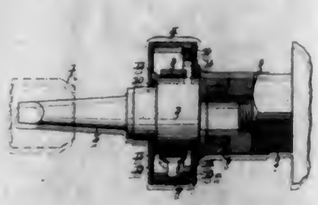
1. The combination of a centrifugal separator bowl and a driving shaft therefor, a frame comprising a casing surrounding the space adjacent the shaft-engaging end of the bowl and provided with an opening through which said shaft extends, a casing surrounding the shaft and extending through and spaced from the wall of said opening, spaced-apart anti-friction bearings between the shaft and the casing, an elastic support for the shaft casing, means to induce a flow of air upwardly along the shaft casing into the bowl casing, and a protective cover adapted to exclude the entrance of foreign matter from the bowl casing to the shaft casing and antifriction bearings but allowing the specified flow of air.

1,876,657. IMPACT INDICATING APPARATUS. FREDERICK L. FOX, Washington, D. C. Filed Aug. 12, 1929. Serial No. 385,410. 11 Claims. (Cl. 273—87.)



1. In an impact indicating apparatus, a club provided with a movable impact element, means for indicating the power of a blow dealt said element, and time-controlled means for controlling the operation of said indicating means.

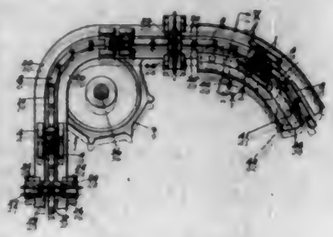
1,876,658. FRICTION COUPLING FOR DRIVING NUTS AND THE LIKE. JOSEPH M. FOX, Cleveland, Ohio. Filed Mar. 22, 1930. Serial No. 438,020. 4 Claims. (Cl. 64—106.)





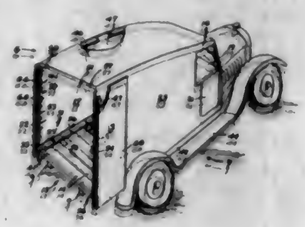
1. A friction coupling comprising a driving element, a driven element, one of said elements having a drum thereon, a friction band attached to the other element, said band surrounding said drum and having its ends tangential thereto at a common point on its face, and means for varying the tension between said band and drum.

1,876,659. TROLLEY CONVEYER. EARLE VERNON FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 15, 1928. Serial No. 326,381. 6 Claims. (Cl. 198—177.)



2. The combination with an overhead track having a curve in a horizontal plane, a trolley member movable along said track, and vertically disposed rollers positioned at the inner side of said curve for engagement with said trolley member as it moves about said curve.

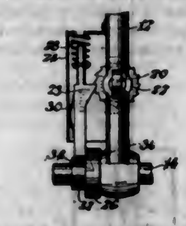
1,876,660. VEHICLE BODY CONSTRUCTION. JOHN GILTSCH, MARTIN GILTSCH, HENRY SCHORSCH, and JOHN D. GILTSCH, Los Angeles, Calif., assignors to Standard Carriage Works, Inc., Los Angeles, Calif., a Corporation of California. Filed Apr. 16, 1930. Serial No. 444,738. 1 Claim. (Cl. 296—30.)



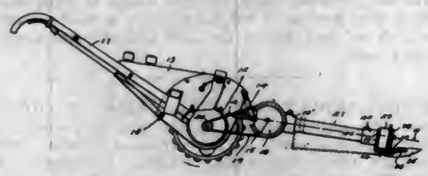
In a vehicle body construction a floor, means for securing said floor to a chassis, a one-piece side panel secured at each side edge of said floor and extending upwards therefrom, a roof extending between the upper edges of said side panels, and an integral angle iron rigidly secured to the after edges of said floor, said roof and said side panels, one leg of said angle iron being secured against the inner surfaces of said roof, said side panels and said floor adjacent the after edges thereof, and the other leg of said angle iron extending across said after edges.

1,876,661. BRAKE SLACK ADJUSTER. RUDOLPH A. GOEFFRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 341,891. 13 Claims. (Cl. 188—196.)

4. Operating mechanism comprising, in combination, a lever, a cam adjacent the fulcrum of the lever and held from movement with the lever, operated means including a threaded part, a nut connected to the lever and threaded on said part and having a ratchet, and a pawl engaging the ratchet and said cam and which is operated by the cam to turn the nut to take up on said operated means.

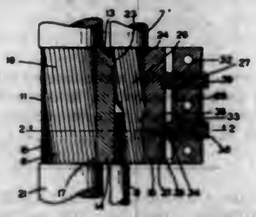


1,876,662. MOWING MACHINE. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed Apr. 22, 1929. Serial No. 357,140. 7 Claims. (Cl. 56—25.)



1. A mowing device including a housing, a shaft in the housing, a fly-wheel on one end of the shaft, a sleeve on the housing, a bracket on the sleeve, a cutter mechanism on the bracket including a cutter bar, a slotted arm extending vertically from the cutter bar, and means on the fly-wheel engaged in the slot of said arm for reciprocating said cutter bar.

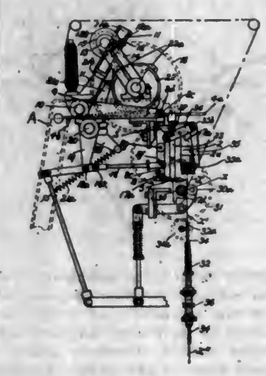
1,876,663. CABLE TAP. LOUIS E. GRAVES and WILLIAM J. EDELMANN, Los Angeles, Calif. Filed Aug. 28, 1929. Serial No. 388,977. 6 Claims. (Cl. 173—273.)



1. A cable tap comprising in combination: a substantially U-shaped strap adapted to partially encircle a cable, a primary presser block slidably disposed between the extended ends of said strap and having a recess in its outer face adapted to receive a tap cable, a secondary presser block slidably disposed within said recess and engageable with said tap cable, thrust means adjacent the ends of said strap, means restraining said thrust means against displacement from the strap laterally in respect to said cables, and a screw threaded through said thrust means and engaging said secondary presser block to press both blocks into tight engagement with their respective cables.

1,876,664. APPARATUS FOR USE IN THE PRODUCTION OF THREADS OF HAIR AND LIKE FIBERS. ALLAN GREEN, Sutton, near Keighley, England. Filed Apr. 22, 1929, Serial No. 357,025, and in Great Britain Apr. 23, 1928. Renewed Jan. 26, 1932. 11 Claims. (Cl. 117—34.)

1. In apparatus for producing continuous threads by surrounding or wrapping hairs with threads formed of other fibers, jaws for selecting and removing single hairs or a plurality of hairs from a bundle of hairs, adjustable devices for enabling said jaws to select single hairs or a plurality of same, lever devices for actuating said jaws, a cam formed adjustable so that it may be made to actuate the jaws once or a plurality of times during each of its revolutions to meet the requirements of shorter or



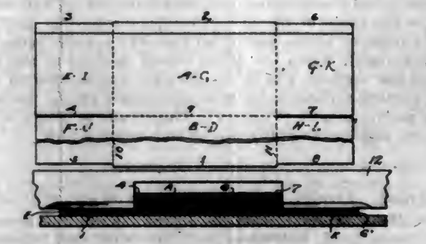
longer hairs, rotary rollers arranged to receive and convey the hairs delivered to them by the jaws, said rotary rollers also adapted to receive the yarn, a wrapping device associated with said rollers, a wrapping thread carried for said wrapping device, and means for encircling said wrapping thread around the hair and thread as it issues from said rollers.

1,876,665. PIPE COVERING. WILLIAM R. GREIG, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,710. 3 Claims. (Cl. 137—75.)



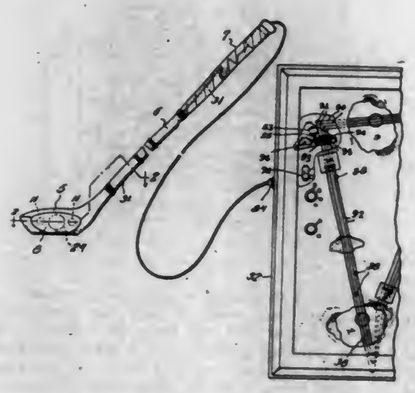
3. A protected pipe comprising a tubular member, and a wrapping on said pipe comprising a sheet of fabric saturated with a waterproof material and a sheet of abrasion resistant material cemented thereto so as to leave an edge of said fabric exposed, said wrapping being lapped to cover the exposed edge of the fabric.

1,876,666. METHOD OF BLANKING FOLDING BOXES. RAOUL J. GRUENBERG, San Francisco, Calif. Filed Sept. 10, 1929. Serial No. 391,552. 4 Claims. (Cl. 93—58.)



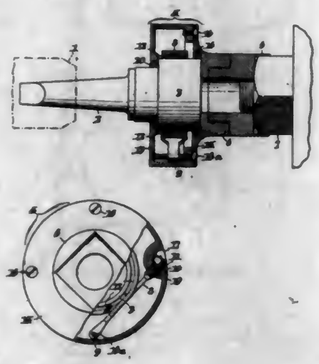
1. The method of blanking folding boxes consisting of cutting and scoring a plurality of superimposed folded blanks simultaneously.

1,876,657. IMPACT INDICATING APPARATUS. FREDERICK L. FOX, Washington, D. C. Filed Aug. 12, 1929. Serial No. 385,440. 11 Claims. (Cl. 273—87.)



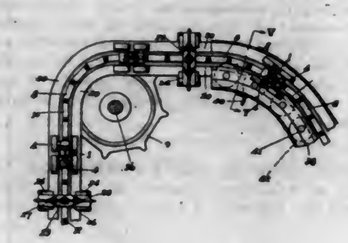
1. In an impact indicating apparatus, a club provided with a movable impact element, means for indicating the power of a blow dealt said element, and time-controlled means for controlling the operation of said indicating means.

1,876,658. FRICTION COUPLING FOR DRIVING NUTS AND THE LIKE. JOSEPH M. FOX, Cleveland, Ohio. Filed Mar. 22, 1930. Serial No. 438,020. 4 Claims. (Cl. 64—106.)



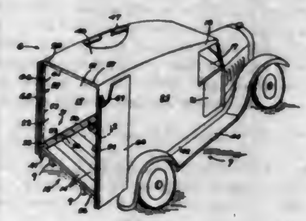
1. A friction coupling comprising a driving element, a driven element, one of said elements having a drum thereon, a friction band attached to the other element, said band surrounding said drum and having its ends tangential thereto at a common point on its face, and means for varying the tension between said band and drum.

1,876,659. TROLLEY CONVEYER. EARLE VERNON FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 15, 1928. Serial No. 326,381. 6 Claims. (Cl. 198—177.)



2. The combination with an overhead track having a curve in a horizontal plane, a trolley member movable along said track, and vertically disposed rollers positioned at the inner side of said curve for engagement with said trolley member as it moves about said curve.

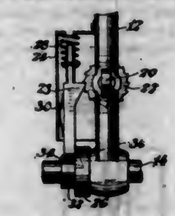
1,876,660. VEHICLE BODY CONSTRUCTION. JOHN GILTSCH, MARTIN GILTSCH, HENRY SCHORSCH, and JOHN D. GILTSCH, Los Angeles, Calif., assignors to Standard Carriage Works, Inc., Los Angeles, Calif., a Corporation of California. Filed Apr. 16, 1930. Serial No. 444,738. 1 Claim. (Cl. 296—30.)



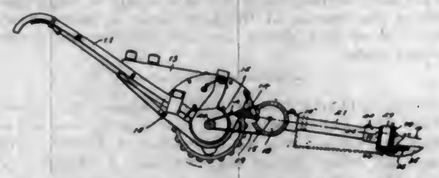
In a vehicle body construction a floor, means for securing said floor to a chassis, a one-piece side panel secured at each side edge of said floor and extending upwards therefrom, a roof extending between the upper edges of said side panels, and an integral angle iron rigidly secured to the after edges of said floor, said roof and said side panels, one leg of said angle iron being secured against the inner surfaces of said roof, said side panels and said floor adjacent the after edges thereof, and the other leg of said angle iron extending across said after edges.

1,876,661. BRAKE SLACK ADJUSTER. RUDOLPH A. GOEPPRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 341,891. 13 Claims. (Cl. 188—196.)

4. Operating mechanism comprising, in combination, a lever, a cam adjacent the fulcrum of the lever and held from movement with the lever, operated means including a threaded part, a nut connected to the lever and threaded on said part and having a ratchet, and a pawl engaging the ratchet and said cam and which is operated by the cam to turn the nut to take up on said operated means.

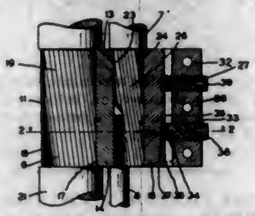


1,876,662. MOWING MACHINE. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed Apr. 22, 1929. Serial No. 357,140. 7 Claims. (Cl. 56—25.)



1. A mowing device including a housing, a shaft in the housing, a fly-wheel on one end of the shaft, a sleeve on the housing, a bracket on the sleeve, a cutter mechanism on the bracket including a cutter bar, a slotted arm extending vertically from the cutter bar, and means on the fly-wheel engaged in the slot of said arm for reciprocating said cutter bar.

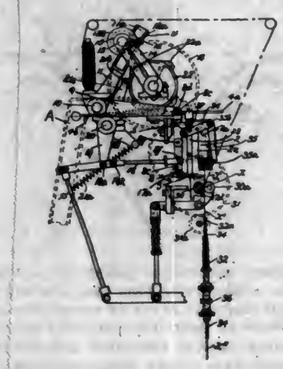
1,876,663. CABLE TAP. LOUIS E. GRAVES and WILLIAM J. EDELMANN, Los Angeles, Calif. Filed Aug. 28, 1929. Serial No. 388,977. 6 Claims. (Cl. 173—273.)



1. A cable tap comprising in combination: a substantially U-shaped strap adapted to partially encircle a cable, a primary presser block slidably disposed between the extended ends of said strap and having a recess in its outer face adapted to receive a tap cable, a secondary presser block slidably disposed within said recess and engageable with said tap cable, thrust means adjacent the ends of said strap, means restraining said thrust means against displacement from the strap laterally in respect to said cables, and a screw threaded through said thrust means and engaging said secondary presser block to press both blocks into tight engagement with their respective cables.

1,876,664. APPARATUS FOR USE IN THE PRODUCTION OF THREADS OF HAIR AND LIKE FIBERS. ALLAN GREEN, Sutton, near Keighley, England. Filed Apr. 22, 1929, Serial No. 357,025, and in Great Britain Apr. 23, 1928. Renewed Jan. 26, 1932. 11 Claims. (Cl. 117—34.)

1. In apparatus for producing continuous threads by surrounding or wrapping hairs with threads formed of other fibers, jaws for selecting and removing single hairs or a plurality of hairs from a bundle of hairs, adjustable devices for enabling said jaws to select single hairs or a plurality of same, lever devices for actuating said jaws, a cam formed adjustable so that it may be made to actuate the jaws once or a plurality of times during each of its revolutions to meet the requirements of shorter or longer hairs, rotary rollers arranged to receive and convey the hairs delivered to them by the jaws, said rotary rollers also adapted to receive the yarn, a wrapping device associated with said rollers, a wrapping thread carried for said wrapping device, and means for encircling said wrapping thread around the hair and thread as it issues from said rollers.

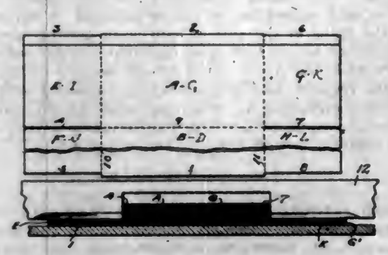


1,876,665. PIPE COVERING. WILLIAM R. GREIG, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,710. 3 Claims. (Cl. 137—75.)



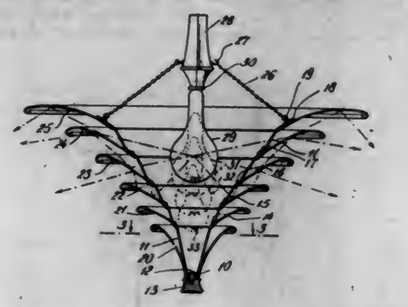
3. A protected pipe comprising a tubular member, and a wrapping on said pipe comprising a sheet of fabric saturated with a waterproof material and a sheet of abrasion resistant material cemented thereto so as to leave an edge of said fabric exposed, said wrapping being lapped to cover the exposed edge of the fabric.

1,876,666. METHOD OF BLANKING FOLDING BOXES. RAOUL J. GRUENBERG, San Francisco, Calif. Filed Sept. 10, 1929. Serial No. 391,552. 4 Claims. (Cl. 93—58.)



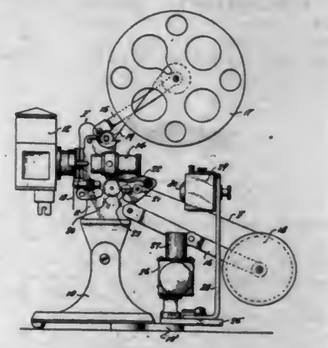
1. The method of blanking folding boxes consisting of cutting and scoring a plurality of superimposed folded blanks simultaneously.

1,876,667. CHANDELIER. FOSTER GUNNISON, Bronxville, N. Y., assignor to Cox, Nostrand and Gunnison, Inc., a Corporation of New York. Filed Jan. 15, 1930. Serial No. 420,837. 6 Claims. (Cl. 240—78.)



1. In a lighting fixture, the combination of a plurality of like annular reflectors of sizes progressively increasing from bottom to top, a plurality of straps connecting said reflectors together at their inner edges in spaced relation to form a hollow conical structure, means securing the converging lower ends of the straps together, a member on said means supporting an additional reflector independently of the straps, a hanger, a plurality of members connecting this structure to said hanger, and a source of light mounted within the central portion of this structure.

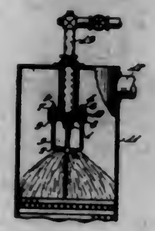
1,876,668. TALKING PICTURE PROJECTOR. EDWIN J. HADLEY, Brooklyn, N. Y. Filed June 11, 1930. Serial No. 460,343. 5 Claims. (Cl. 88—16.2.)



1. In a talking picture projector, a supporting structure having a film running mechanism including a main driving sprocket mounted thereon, a reflector means to be traversed by the running film, said reflector means being fixed to said supporting structure adjacent to but off-set from the plane of the axis of said main driving sprocket, said reflector means having an undercut angular reflecting surface with which the sound record sections of the running film register, and means movably connected with said supporting structure for mounting sound record translating means subject to selective disposition in active or inactive relation to said reflector and running film.

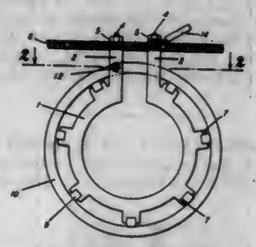
1,876,669. LIQUID DISTRIBUTING APPARATUS. EARL V. HARLOW, Jersey City, N. J., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,544. 1 Claim. (Cl. 261—115.)

In apparatus for treating gases with finely divided liquid, in combination, a shell, a liquid supply pipe passing through the upper portion of the said shell, the said pipe terminating in a downwardly directed nozzle within the said shell and adapted to project a descending stream of liquid, a baffle having convex surfaces, and means rigid with the said shell for supporting the said baffle in the



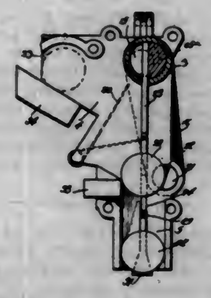
path of the said stream of liquid, the said baffle having an upper convex surface toward the said nozzle and a lower convex surface away from the said nozzle to bring about uniform distribution of the said liquid in finely divided form over an area within the said shell directly beneath the said baffle.

1,876,670. INDUCTANCE COIL. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Apr. 25, 1932. Serial No. 607,295. 5 Claims. (Cl. (Cl. 175—359.)



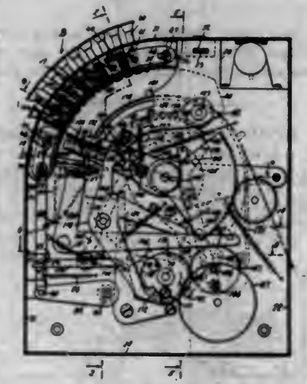
1. An inductor comprising a conductive supporting turn, an insulating frame mounted on said turn, a conductive helix wound on said frame, said supporting turn forming a continuation of said helix.

1,876,671. COIN CONTROL MECHANISM FOR VENDING MACHINES. JOHN A. HELLER, Carthage, Mo. Filed Mar. 23, 1931. Serial No. 524,726. 10 Claims. 175—359.)



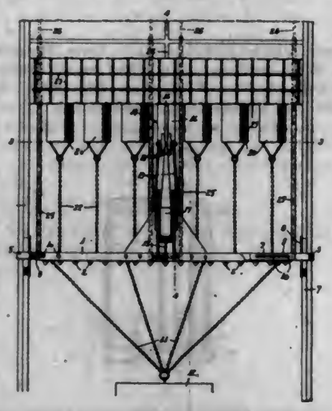
1. In coin control mechanism of the character described, a manually reciprocable rod for operating vending mechanism, said rod having a reduced portion defining a shoulder on the rod, a pivoted lock arm having an opening therein received on the reduced portion of the shaft and normally positioned to place the rod shoulder out of alinement with the arm opening, the arm providing a temporary support for a coin inserted in the mechanism, and means operated by the rod for moving the coin through the mechanism, and shifting the lock arm to aline the arm opening with the rod shoulder to permit reciprocating movement of the rod.

1,876,672. CHECK PUNCHING AND ISSUING MACHINE. REUBEN H. HELSEL, Long Island City, N. Y., assignor, by mesne assignments, to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Original application filed May 4, 1926, Serial No. 106,632. Divided and this application filed June 17, 1930. Serial No. 461,711. 12 Claims. (Cl. 164—111.)



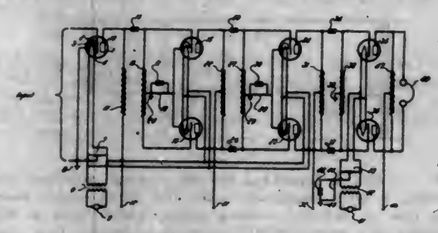
1. In a machine of the character described, check strip supporting means, power operated mechanism operative on the strip supported thereby, a plurality of selector keys for controlling the operation of said mechanism, and means for locking said keys against operation when no check is disposed in position to be operated upon by said mechanism.

1,876,673. ROAD BUILDING APPARATUS. JOHN N. HELTZEL, Warren, Ohio. Filed Aug. 14, 1929. Serial No. 385,800. 15 Claims. (Cl. 94—39.)



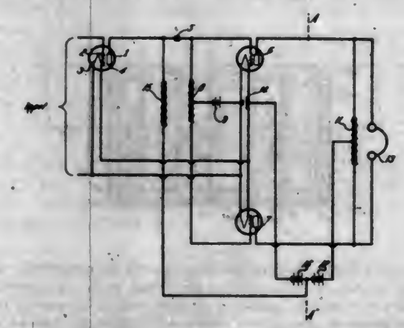
1. A road building apparatus comprising a runner, and means for supplying a folded strip over said runner.

1,876,674. MULTISTAGE AUDIO AMPLIFICATION SYSTEM. EDWARD E. HILER, Bloomfield, N. J. Filed Aug. 21, 1929. Serial No. 387,818. 4 Claims. (Cl. 179—171.)



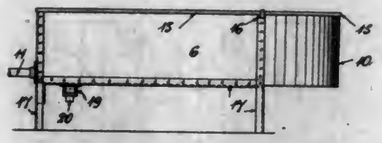
1. In an audio frequency amplifier circuit, the combination with a pair of electron discharge devices, each of said devices having a grid element together with a cathode and anode, of external circuits extending between the cathode and grid elements of said devices, transformer means having two magnetically coupled windings solidly connected in series, said transformer means having the first of its windings connected in the external circuit of one of said devices and the second of its windings connected in the external circuit of the other of said devices, and a pair of coupling circuits, the first of said coupling circuits being connected to the first winding of said transformer means, and the second of said coupling circuits being connected to the second winding of said transformer means, whereby current flowing in said first coupling circuit through said first winding acts to supplement the voltage in said second winding, and current flowing in said second coupling circuit through said second winding acts to supplement the voltage in said first winding, said first and second windings serving, respectively, as grid chokes for the respective electron discharge devices.

1,876,675. AUDIO AMPLIFICATION SYSTEM. EDWARD E. HILER, Bloomfield, N. J. Filed July 13, 1929. Serial No. 378,058. 4 Claims. (Cl. 179—171.)



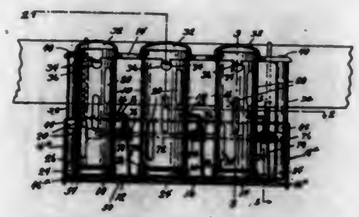
1. An electrical amplification system comprising in combination, an electron discharge device adapted to have its grid and cathode elements connected to an input circuit, an anode choke coil, said discharge device having its anode supplied with positive potential through said anode choke coil, a condenser, and transformer means, said transformer means having a primary winding and a secondary winding, said condenser and said primary winding being arranged in parallel with said anode choke coil, a pair of oppositely arranged electron discharge devices having cathode-grid circuits, one of said discharge devices having its cathode-grid circuit connected across the primary winding of said transformer means and the other of said discharge devices having its cathode-grid circuit connected across the secondary winding of said transformer means.

1,876,676. WASHING APPARATUS. FREDERICK HILL, Urmston, England. Filed May 14, 1929, Serial No. 363,064, and in Great Britain May 16, 1928. 4 Claims. (Cl. 17—43.)



1. A washing apparatus for the purpose indicated comprising, a tank completely open and unobstructed above and free of internal moving parts, which tank is surrounded by a wall curved in part approximately in a semicircle to form one end of the tank and is divided for the greater part of its length by a partition extending upwards from the bottom and from the other end towards the curved part of the wall into two limbs each closed at one end and communicating only by their other ends in the part of the tank bounded by the curved part of the wall, thereby constituting a channel completely open and unobstructed throughout its length above, internally unobstructed throughout its length from the closed end of one limb to the closed end of the other, relatively long in proportion to its width, and of adequate length to present a series of working places continuous one with another and freely accessible in which material may be washed progressively in successive stages in passage from the end of one limb to the end of the other limb; means for the supply of running water at the end of the limb from which material washed is removed, and an overflow outlet passage at the end of the other limb where material to be washed is introduced, which overflow outlet passage has its entrance near the bottom of said tank.

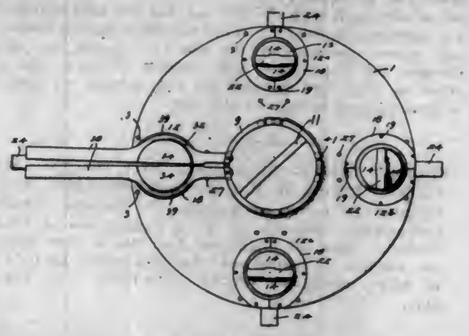
1,876,677. CHANGE MAKER. THEODORE JOHN HOGLUND, Gardner, Mass., assignor to Gardner Screw Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1928. Serial No. 269,212. 10 Claims. (Cl. 133—5.)



10. In a coin-changer having spaced intermediate and bottom plates, a coin-tube registering with an aperture in said intermediate plate, a pivoted coin-discharging ring located between said plates under said coin-tube, and an operating lever for said ring having an operative connection therewith, said ring having an ear provided with an opening, and said intermediate plate having an integral struck-out depending cylindrical projection which extends loosely through said opening in the ear of said ring and which comprises a pivotal support for said ring, said bottom plate underlying said projection and serving to maintain said ring in pivotal engagement with said projection.

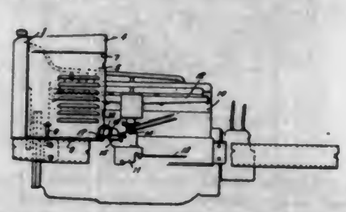
1,876,678. CAN ADJUSTING OR RESHAPING MACHINE. ANDREW J. HOLLARS, Blue Eye, Mo. Filed Mar. 22, 1930. Serial No. 438,185. 7 Claims. (Cl. 153—80.)

1. A can adjusting or reshaping machine, comprising an expansible core upon which the can is to be positioned, means by which the core may be expanded, a matrix consisting of hollow sections having corresponding ends



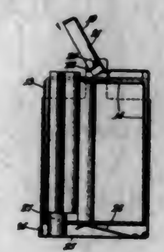
closed and their other ends open, and means carrying the matrix sections for movement into and out of contact with the side and bottom walls of the can on the core.

1,876,679. HOOD HANDLE AND CARBURETOR AIR INTAKE. JOHN RALPH HOLMES, Cleveland, Ohio, assignor, by mesne assignments, to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 10, 1928. Serial No. 268,841. 2 Claims. (Cl. 180—69.)



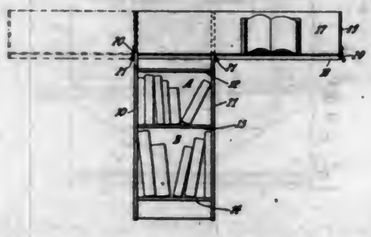
1. A vehicle having in combination, an internal combustion engine provided with fuel feeding mechanism including an air intake member, means for inclosing said engine and intake member including a hood having a movable section provided with an opening therein, means for collecting air flowing through said opening and conducting the same to said intake member, and a member carried by the hood for concealing said opening and forming a handle for manipulating said movable section.

1,876,680. CIGARETTE CASE. JOHN HOLTZMAN, New York, N. Y., assignor of one-half to C. James Cottrell, New York, N. Y. Filed Dec. 16, 1929. Serial No. 414,274. 10 Claims. (Cl. 206—41.)



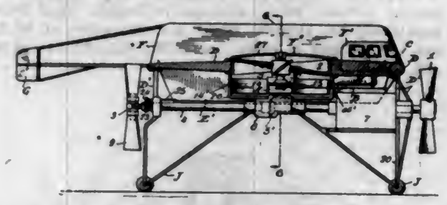
1. A covering device for cigarette cartons, comprising a wire frame member having legs insertable between the inner and outer paper layers of the carton, a plate attached to the frame member, a casing adapted to receive the carton and the member, a cover pivotally connected to the casing, resilient means normally urging the cover to an open position, a tongue on the plate engaging the cover to hold the latter closed, a spring attached to the bottom of the casing and adapted to engage the bottom of a carton contained therein, and a lug projecting upwardly from the bottom of the casing to eject a cigarette from the carton as the latter is moved downwardly.

1,876,681. COMBINATION READING DESK AND BOOKCASE. JOHN STAMM IRWIN, Jackson Heights, N. Y. Filed Feb. 17, 1931. Serial No. 516,347. 5 Claims. (Cl. 45—60.)



1. A combination reading desk and bookcase which comprises a bookcase unit, a shelf detachably disposed thereon, bevelled cleats on the back of the shelf and the unit to engage and support the shelf vertically in back of and from the unit when not in use.

1,876,682. AIRCRAFT. REYNOLD JANNEY, Londonderry, Ohio. Filed Dec. 20, 1930. Serial No. 503,728. 6 Claims. (Cl. 244—15.)



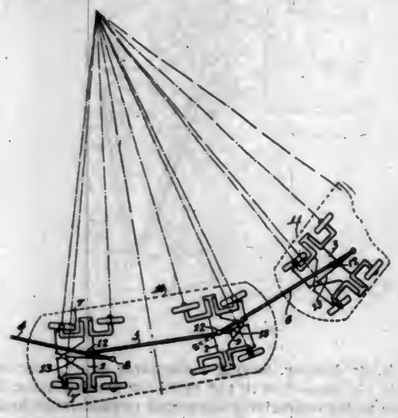
1. A craft having propellers located one in advance of the other, and constructed to permit of rotating them with opposite effects on the medium in which the craft is to travel, a structural member having an approximately horizontal surface under which said medium is crowded by said propellers when rotating with opposite effects, a lifting propeller arranged to drive the medium in which the craft is to travel, downwardly into the space between the first-named propellers, and depending bilge fins located at each side of said space, to impede the lateral escape of said medium, and a dorsal fin on the upper surface of the member having the approximately horizontal surface.

1,876,683. FASTENER. HIRAM W. JOHNSON and LEWIS W. JOHNSON, Miami, Fla. Filed Oct. 7, 1930. Serial No. 487,081. 1 Claim. (Cl. 85—11.)



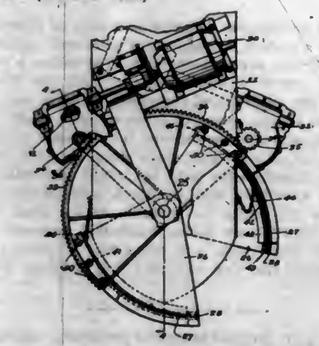
A fastener of the class described including spaced, substantially round, nail-like penetrating devices, and flat, alined chisel-like webs integral with and connecting said devices at one end, each of said devices being extended beyond opposite faces of the adjacent webs, each web and the adjoining devices cooperating to provide opposed channels between said devices and along opposite flat faces of the web.

1,876,684. AUTOMATIC STEERING DEVICE FOR SWIVELING BOGIES. HENRI WOUTER JONKHOFF, Beckenham, England. Filed June 27, 1929, Serial No. 374,168, and in the Netherlands July 4, 1928. 3 Claims. (Cl. 280—91.)



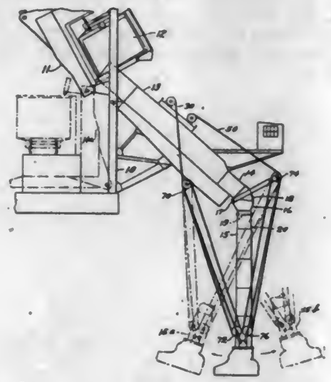
1. Automatic steering mechanism of the character described comprising a vehicle body element, a bogie pivoted to the front end of said body element for pivotal movement relative thereto, front and rear pairs of wheels carried by said bogie, the front pair of said wheels being mounted for angular steering movements relative to the bogie, a lever pivoted coaxially with the pivotal connection of the bogie with the vehicle body element, and a connection between said lever and the angularly movable steering wheels of the bogie whereby pivotal movements of the lever relative to the bogie effect angular steering movements of the steering wheels, the said lever extending from the vehicle for connection with another vehicle whereby pivotal movements are adapted to be imparted to the lever relative to the vehicles by the movements of the vehicles in rounding curves.

1,876,685. GATE FOR MATERIAL CONVEYING CHUTES. ROBERT W. KALTENBACH, Cleveland Heights, Ohio. Filed Mar. 9, 1931. Serial No. 521,063. 14 Claims. (Cl. 214—14.)



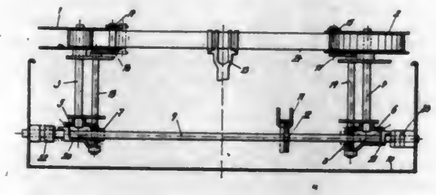
1. In combination, a material conveying chute, a pair of closure members mounted on the chute, adjacent the bottom portions thereof, each closure member comprising telescopic sections.

1,876,686. CAR DUMPER CHUTE CONTROL MECHANISM. ROBERT W. KALTENBACH, Cleveland Heights, Ohio. Filed Dec. 5, 1930. Serial No. 500,300. 14 Claims. (Cl. 193—3.)



1. A car dumper, having a discharge chute, four cables operatively connected to the chute for manipulating it, an electric motor operatively connected to each cable, and single means for operating said motors in groups.

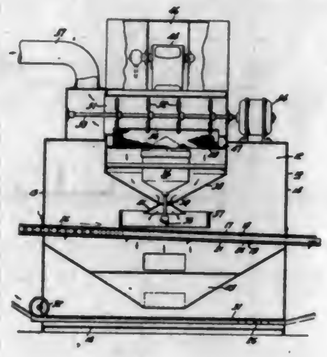
1,876,687. RIBBON REVERSE FOR TYPEWRITERS AND LIKE MACHINES. PAUL KÄPPLER, Dresden, Germany. Filed Nov. 19, 1927, Serial No. 234,306, and in Germany Nov. 27, 1926. 6 Claims. (Cl. 197—160.)



1. Ribbon mechanism comprising a pair of ribbon spools upon which a ribbon is wound and unwound, spindles carrying said spools, gear wheels on said spindles, a rotatable and axially movable feed shaft, gearing on said shaft adapted in one position of the shaft to drive one of said spindles and in the other position of said shaft to drive the other of said spindles, means for intermittently rotating said shaft, a pair of collars fixed on said shaft, an element movable into the path of each of said collars so as to form an abutment and having a cam surface for engagement by the collar on rotation of the shaft to shift said shaft axially, and spring-controlled members held in contact with the ribbon and operative by tension on the ribbon to move the cam elements into position to engage the collars.

1,876,688. EGG TREATMENT MACHINE. MORRIS KASSER, San Francisco, Calif. Filed Sept. 19, 1930. Serial No. 483,038. 3 Claims. (Cl. 51—14.)

1. In an egg treatment machine, a plurality of parallel tracks arranged whereby eggs supported thereby may roll along each track while supported thereon at opposite points along the length of each egg, egg engaging means arranged adjacent said tracks and adapted to move along a predetermined path parallel to the tracks, said engaging



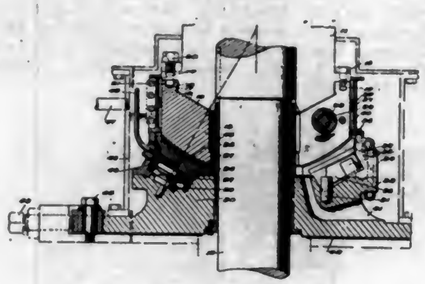
means serving to segregate each egg of each row of eggs on a particular track, whereby as said means is moved the eggs continuously roll along the tracks, and means for cleaning the surfaces of the eggs as the eggs are rolled along and supported by said tracks.

1,876,689. WINDOW CONSTRUCTION. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 3, 1930. Serial No. 432,853. 1 Claim. (Cl. 98—96.)



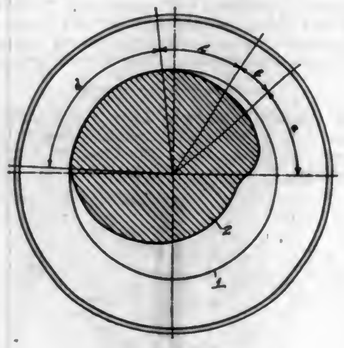
A ventilator comprising spaced inner and outer walls cooperating to form an air pocket and having communicating openings therein, a screen interposed between the said openings, a slide for controlling the quantity of air passing through the opening in the inner wall, a cover plate for said last-mentioned opening carrying said slide and screen, and means detachably securing said cover plate to the inner wall whereby said cover plate, slide and screen may be removed from the inner wall as a unit.

1,876,690. SPHERICAL BEARING. ALBERT KINGSBURY, Greenwich, Conn., assignor to Kingsbury Machine Works, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,554. 51 Claims. (Cl. 308—160.)



1. In a thrust bearing, in combination with a shaft, a separate thrust block attached thereto, a runner carried by said thrust block, said thrust block and runner having conical surfaces of engagement, and a stationary bearing member cooperating with said runner, said runner having a convex bearing surface and said stationary bearing member having a mating concave bearing surface.

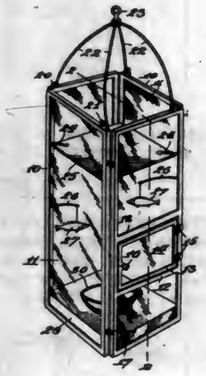
1,876,691. PILGER ROLLING PROCESS AND ROLL FOR PERFORMING SAME. LUDWIG KLEIN, Dusseldorf, Germany. Filed Mar. 24, 1930, Serial No. 438,600, and in Germany Apr. 2, 1929. 4 Claims. (Cl. 80—14.)



4. A pilger roll comprising two eccentric stretching passes and a centric surfacing pass between said eccentric passes, the eccentricity of the first stretching pass being greater than that of the second stretching pass.

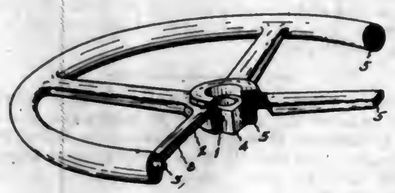
1,876,692. FISHING APPARATUS. SAMUEL A. KORNSWEET, Venice, Calif. Filed Jan. 3, 1930. Serial No. 418,193. 8 Claims. (Cl. 43—102.)

6. In a fishing apparatus, a container having transparent walls, a water tight housing removably positioned in the lower portion of said container, storage batteries located in said housing, a lamp carried by said housing and connected to the storage batteries therein, a reflector arranged beneath said lamp and a buoyant panel loosely ar-



ranged in the upper portion of said container and serving as a downwardly opening closure for the open upper end of said container.

1,876,693. STEERING WHEEL. HERMAN T. KRAFT, Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 26, 1929. Serial No. 342,734. 5 Claims. (Cl. 74—33.)

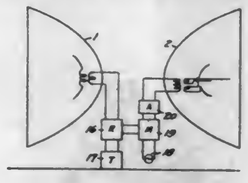


1. A steering wheel spider comprising a central hub having a plurality of sides, lugs projecting from said sides, and a plurality of spoke portions having an integral interconnecting flange at their inner ends conforming in shape and secured to said hub with said lugs extending into openings in the walls of said flange.

1,876,694. RADIO SYSTEM AND METHOD. GEOFFREY GOTTLIEB KRUESI, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 21, 1928. Serial No. 279,293. 2 Claims. (Cl. 250—11.)

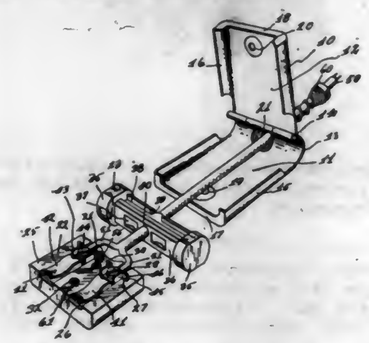
2. A radio communication system comprising a transmitting and a receiving station, a paraboloidal reflector having its axis substantially tangent to the earth's surface with radiating means mounted therein having both a hori-

zontal and vertical component at the transmitter, and a paraboloidal reflector at the receiver having its axis substantially tangent to the earth's surface and having there-



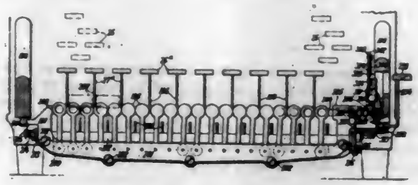
in as the sole essential absorbing element, a conductor lying in a vertical plane intersecting the transmitter and receiving stations.

1,876,695. ELECTRIC PLUG. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1928. Serial No. 252,317. 12 Claims. (Cl. 173—332.)



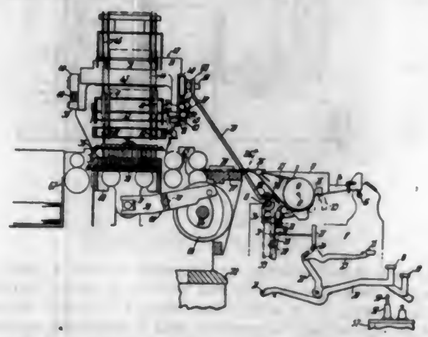
1. In an electric plug, an insulator block, a sectional metallic casing for said block, one section of said casing including one side and the base of the casing and the other section of the casing forming the remaining side of the casing, and a hinge joining the two sections of the casing to each other.

1,876,696. COMBINED TYPEWRITING AND COMPUTING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1926. Serial No. 94,181. 9 Claims. (Cl. 235—59.)



1. In a computing machine, the combination of a master gear, a master dog and a totalizer, the totalizer being movable relatively to the master gear and the master dog, and the totalizer including a series of digit wheels, a series of carrying gears, and carrying-over units for the carrying gears, spring-pressed carrying unit supporting arms operated seriatim by the master dog, a safety-bar operable to lock the series of supporting arms when one arm is actuated by the master dog, a toothed-centering arm for the carrying gear of lowest denominational order operated by the master dog, and a pair of toothed-centering arms operated by the safety-bar, one arm to correct the toothed alignment of the carrying gear of the highest denominational order, and the other arm to correct the alignment of an intermediate carrying gear.

1,876,697. COMBINED TYPEWRITING AND CARD-PERFORATING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 14, 1926. Serial No. 154,667. 7 Claims. (Cl. 164—113.)



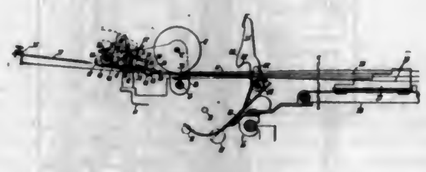
1. The combination with a set of keys, of a typewriting mechanism controlled thereby and including types, a carriage for feeding a card past the printing point of said types, a card-perforator mechanism also controlled by said keys and including a bank of punches and a carriage provided with means for setting up punches in locations in said bank of punches corresponding to the locations of the characters typed, said perforator-mechanism being disposed behind the typewriting mechanism so that a card may be removed from the typewriter-carriage and directly presented to the perforator-mechanism, and means including a link connection joining said carriages for simultaneous movements in the same direction, said link connection being designed and disposed at the end of the carriages so that in the movement of said carriages said link connection does not cross the line of card-delivery from the typewriter-carriage to the perforator-mechanism.

1,876,698. PENCIL. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Dec. 13, 1929. Serial No. 413,738. 9 Claims. (Cl. 120—84.)



4. In a pencil, a barrel adapted to carry a writing lead at its lower end, a member disposed at the upper end of the barrel and having threaded engagement therewith, a magazine for spare leads normally disposed within said barrel below said member and threaded thereto, and means on said member adapted to hold an eraser thereon so that it will extend beyond the upper end of the barrel.

1,876,699. TYPEWRITING MACHINE. HIRAM S. LASHER, New York, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,457. 11 Claims. (Cl. 197—126.)



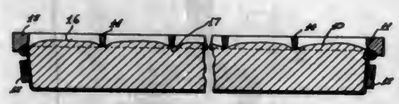
1. In a continuous-billing typewriting machine having a platen around which may be fed a work-web including a plurality of separate superposed form-printed web-plies, each form having a plurality of holes adjacent its bottom edge which normally register with the holes of the superposed forms, the combination with a platen-displacing frame, of a paper-table at the delivery side of said platen mounted on said frame for adjustment toward and from said platen, and provided with a laterally-disposed slot, pin-members supported by said table below the same and disposed opposite said slot, said pin-members being mounted for lateral adjustment, normally inaccessible means for manually moving said pin-members against spring-action through said slot, said means being rendered accessible when said platen-frame is displaced and said work-web is in a straightened condition, to engage the pins in the holes in a typed set of said forms, for bringing the forms into accurate registration with each other, said forms having been slightly displaced by their feeding movement through said machine, devices for locking said pin-members in their effective positions, whereby said pin-members retain said plies while said platen-frame is returned to typing position, and means for automatically releasing said locking devices upon return of said platen-frame to typing position, whereby said pin-members are withdrawn from said forms by spring-action.

1,876,700. MOBILE KITCHEN CHAIR. HARRY LEE, Livingston, Mont. Filed Apr. 10, 1930. Serial No. 443,135. 2 Claims. (Cl. 208—34.)



1. A device of the class described comprising a body, a crank shaft journaled on the under side thereof, wheels on said crank shaft, pinions carried by the crank shaft, gear wheels in mesh with said pinions, a shaft on which the gear wheels are carried, means journaling the latter shaft from the body, pitmen on the outer side of and connected to the gear wheels, manually operable levers pivoted to the body and to the pitmen, pitmen inwardly of the gear wheels connected to the cranks, and pedals pivoted to the body and to the latter pitmen forwardly of said levers.

1,876,701. METHOD OF BAKING SAUSAGE ROLLS AND APPARATUS FOR USE THEREWITH. JOHN U. LEMMON, Jr., Newton, Mass., assignor to Hathaway Bakeries, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 21, 1931. Serial No. 570,068. 4 Claims. (Cl. 107—54.)



1. The method of forming a pan of sandwich rolls which consists in placing a sheet of dough in a pan with the depth of the sheet substantially uniform throughout its area, supporting an open-work dough marking frame on the pan above the dough, proofing the dough over a suitable period of time to cause the dough to rise and to be indented by the overlying marking frame, and then baking the pan of proofed and marked dough while the marking frame remains in position indenting the dough.

1,876,702. REFINING HYDROCARBON OIL. ROBERT I. LEWIS, Wilmington, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 26, 1928. Serial No. 308,583. 3 Claims. (Cl. 196—31.)

1. The process of preparing a gasoline of reduced sulfur content comprising: treating pressure distillate with concentrated sulfuric acid at about 20° F., and subsequently before redistilling further treating the distillate at atmospheric temperature with sulfuric acid of the same concentration and of an amount equal to about one-fourth of that used in the cold acid treatment, and redistilling the treated pressure distillate.

1,876,703. MEANS FOR TREATING HEMORRHOIDS. STUART C. LILLY, Dayton, Ohio. Filed Mar. 6, 1931. Serial No. 520,635. 3 Claims. (Cl. 128—271.)

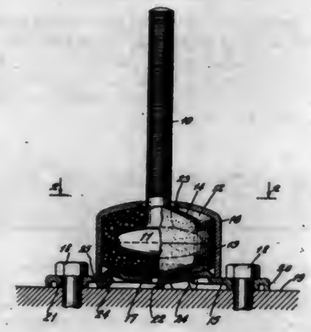


1. A device of the type described, comprising a member for applying a hollow medicinal cone to a diseased part, a conical top on said member to receive the cone, said applicator member formed with an axial hole extending through its conical top, and a plunger in said hole to raise the cone above the conical top of the applicator member for the purpose specified.

1,876,704. VIBRATION INSULATOR. FRED L. LIPCOT, Bridgeport, Conn., assignor to Rubber Shock Insulator Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed Jan. 22, 1931. Serial No. 510,843. 8 Claims. (Cl. 248—14.2.)

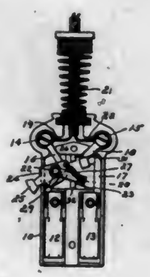
1. A sheet metal casing for a damping element of a vibration insulator, comprising a cap formed with tongues,

and a base plate adapted to be secured to a support, said plate being formed with slots to receive the tongues and with a marginal bearing rim adapted to space the body



of the plate from the support, the plate being also provided with a central lug adapted to bear against the support.

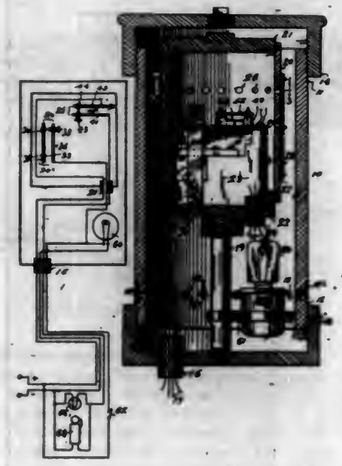
1,876,705. SWITCH MECHANISM FOR ATTACHMENT PLUGS. LOUIS LUDWIG, Brooklyn, N. Y. Filed Feb. 9, 1931. Serial No. 514,402. 6 Claims. (Cl. 200—51.)



1. In a switch mechanism for attachment plugs of the class described, a stud having one end secured in one of the half-casings and the other end supported in the other half-casing of which the attachment plug is formed, a single U-shaped switch arm mounted on said stud, an operating lever mounted on said stud and engaged between the legs of the switch arm, and a spring connected between the operating lever and the switch arm for actuating the switch arm when the operating lever is moved, the free end of the switch arm engaging between the switch blades formed by the flexible ends of the lead which connects one of the wire conductors with one of the contact members contained in the casing.

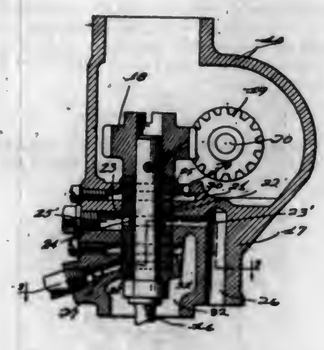
1,876,706. GAS DETECTOR AND SIGNAL DEVICE. LLOYD W. MACCAIN, Bronx, and EDMOND F. WEBB, New York, N. Y., assignors, by mesne assignments, to said Lloyd W. MacCain. Filed July 30, 1927. Serial No. 209,589. 9 Claims. (Cl. 177—311.)

1. A gas detector and signal device comprising a casing having perforations, a metallic screen and a fibrous cover over said perforations, an insulation base within said casing, thermostat arms mounted on said base, a receptacle mounted on one of said arms and catalytic agencies in said receptacle whereby said thermostat arm is operated in response to the presence of a predetermined percentage of hydrogen, and heating means con-



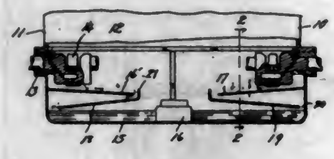
trolled by the other thermostat arm for maintaining the atmosphere about said base and arms at a substantially constant temperature.

1,876,707. LUBRICATING SYSTEM. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Aug. 20, 1928. Serial No. 300,849. 7 Claims. (Cl. 184—6.)



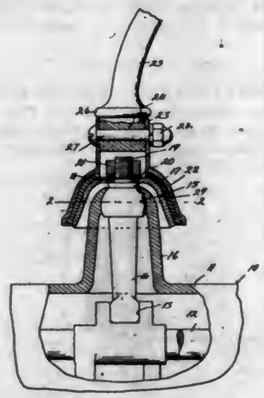
1. In a lubricating system for internal combustion engines and the like, the combination with a pressure pump for delivering lubricant under pressure, of a shaft driven by the engine and connected to said pump for actuating the same, a bushing for said shaft having circumferentially spaced passages therein, a conduit connected to the pressure side of said pump and communicating with one of the said passages, a second conduit extending from the other of said passages to the part to be lubricated, and means for transferring lubricant from said first mentioned conduit to said second conduit including a longitudinally extending groove in the pump operating shaft aforesaid.

1,876,708. CRANK CASE CONSTRUCTION FOR ENGINES AND THE LIKE. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 25, 1929. Srial No. 342,594. 9 Claims. (Cl. 184—6.)



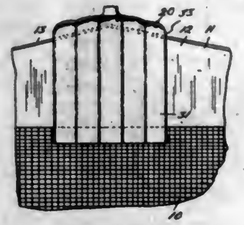
1. In an internal combustion engine, a crank case adapted to contain a supply of lubricant, a lubricant pump positioned within the crank case intermediate the ends thereof and operable to distribute lubricant upon certain parts of the engine, a baffle secured within the crank case above the lubricant supply and extending inwardly from one wall thereof to a point adjacent the pump, said baffle being inclined downwardly from the wall aforesaid toward the pump and operable to prevent the lubricant within the crank case from splashing out of the same and to collect the lubricant draining from the parts aforesaid of the engine, and a second baffle in the crank case disposed below the baffle aforesaid and inclined downwardly toward the said wall and spaced therefrom, said second baffle adapted to receive the lubricant collected by the first mentioned baffle and discharge the same into the crank case through the space between the outer end thereof and the wall aforesaid.

1,876,709. CONTROL LEVER. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed July 7, 1930. Serial No. 466,205. 1 Claim. (Cl. 74—39.)



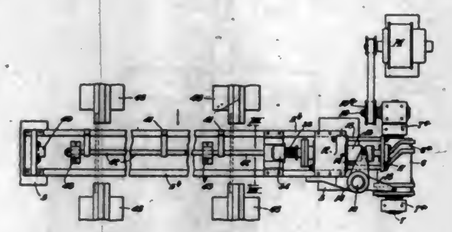
A transmission control lever formed of a plurality of axially spaced parts, a bell-shaped member secured to one of said parts adjacent one end thereof, a second substantially bell-shaped member secured to the adjacent end of another of said parts and encircling the bell-shaped member aforesaid in spaced relation thereto, and a correspondingly shaped element formed of resilient non-metallic material interposed between the bell-shaped members aforesaid and secured thereto for fastening the two parts together and for insulating the same from metallic contact with each other.

1,876,710. CLOSURE ASSEMBLY FOR VEHICLE RADIATORS. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 6, 1931. Serial No. 528,168. 12 Claims. (Cl. 220—24.)



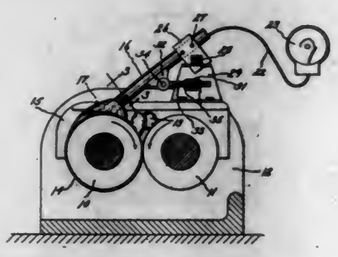
1. A closure assembly for vehicle radiators having a shell and a core portion located within the shell and provided with a filler opening, said assembly including a rotatable cap member insertable into an opening in the shell and engageable with the core portion for sealing the filler opening, a second cap non-rotatably mounted upon the shell exteriorly of the same for concealing the opening therein, and means connecting the caps together accessible from a point exteriorly of the shell and permitting rotation and axial displacement of said first-mentioned cap relative to the second-mentioned cap.

1,876,711. PIPE TESTING MACHINE. WALTER T. MAHLA, Lorain, Ohio, assignor to National Tube Company, a Corporation of New Jersey. Filed June 19, 1930. Serial No. 462,278. 3 Claims. (Cl. 73—51.)



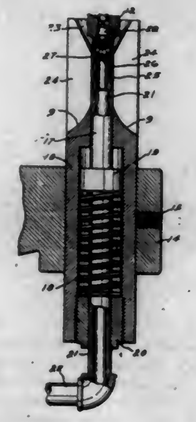
1. In a hydrostatic testing mechanism of the class specified, a plunger, means for reciprocating said plunger, a head member and valve slidably mounted for limited movement in said plunger, said plunger and said head being reciprocated as a unit to engage the said head with the pipe to be tested, said head having a passage therethrough terminating in a socket adapted to fit over and communicate with one end of the pipe to be tested, said head having a stop, a spring mounted on said plunger and engaged between said head and said stop on said plunger so as to normally hold said head and valve in extended position, said plunger having a plurality of passages, one of said passages extending to said valve and another of said passages extending from said valve to said passage in said head, means for supplying water under pressure to said one of said passages in said plunger, and said valve being adapted to establish communication between said passages in said plunger and said head to admit water under pressure to the pipe being tested when said plunger is moved forwardly relative to said valve, and said head and said valve being adapted to automatically move to closed position when said head and valve are moved to their forwardmost position relative to said plunger by said spring.

1,876,712. TEMPERATURE MEASURING DEVICE FOR RUBBER WORKING MACHINERY. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1927. Serial No. 232,078. 4 Claims. (Cl. 18—2.)



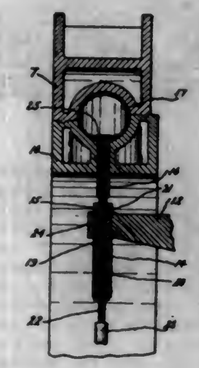
3. The combination of a rubber working roll, a plow acting to raise from the surface of the roll a portion of the rubber being worked, and a temperature responsive device mounted in the surface of the plow and heat insulated therefrom.

1,876,713. FLUID PRESSURE CONNECTION. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed July 5, 1928. Serial No. 290,500. 5 Claims. (Cl. 18—2.)



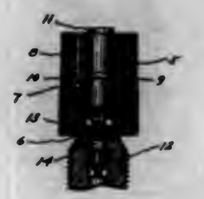
2. A fluid pressure connection comprising a casing adapted to be held in adjustable predetermined telescoping relation with the end of the valve stem of an article to be inflated, a portion of the casing surrounding the valve stem being flared outwardly and provided with a plurality of slots forming openings to the interior of the casing, a bored plunger positioned within the casing and having its end adjacent the slots tapered to seat inside the valve stem, the base of said slots being inclined in the general direction of the taper of the plunger, a pin secured transversely of the bore of the plunger and positioned to engage the valve spindle of the valve mechanism located within the valve stem when the tapered end of the plunger is introduced into the valve stem, and a spring tending to force the tapered portion of the plunger into sealing engagement with the valve stem against the pressure within the article acting against the valve stem.

1,876,714. FLUID PRESSURE CONNECTION. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Original application filed Feb. 23, 1928. Serial No. 256,078. Divided and this application filed Sept. 24, 1928. Serial No. 307,853. 3 Claims. (Cl. 18—2.)



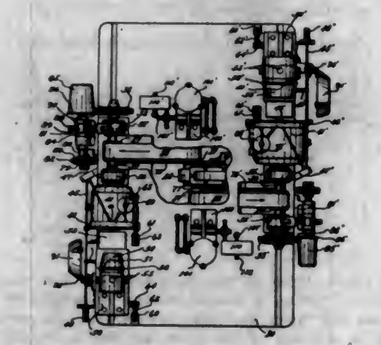
3. A fluid pressure connection for vulcanising molds which comprises a cylindrical housing flared at one end to receive the end of the valve stem of an article within the mold, a plunger, having an unobstructed passage therethrough for the conduction of fluid pressure, slidably mounted within the housing, said plunger being adapted to be connected at one end to a source of fluid pressure and tapered at the other end to seat within the end of the valve stem, a spring surrounding the plunger within the housing and tending to force the plunger outwardly of the housing and into engagement with the valve stem, the resiliency of the spring being such as to permit outward movement of the valve stem with respect to the mold under the fluid pressure within the article, and means to hold the housing in a predetermined fixed relation with the mold to limit the outward movement of the stem with respect to the mold.

1,876,715. DEFLATER CAP. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1929. Serial No. 386,075. 1 Claim. (Cl. 152—12.)



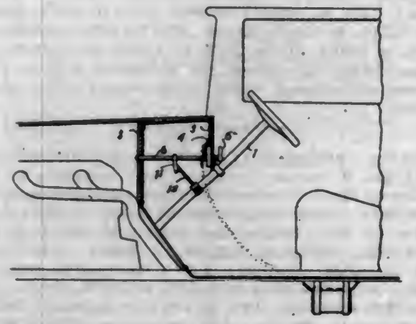
A device for use in the deflation of inner tubes for pneumatic tires and the like which comprises a generally cylindrical member formed of resilient rubber, a chamber formed in one end thereof and in which the end of a valve stem is adapted to be engaged to hold the device on the valve stem by the stretching of the walls of the chamber, a pin, formed of non-resilient material, positioned axially in said member and supported directly by the rubber of which said member is formed, one end of said pin projecting into the chamber to yieldingly engage and hold open the valve in the stem by the resiliency of the rubber supporting the pin, and a plurality of longitudinally positioned ducts formed in said rubber member to provide air passages from the chamber to the opposite end face of the rubber member, said ducts being arranged substantially symmetrically around said pin to increase the flexibility of the rubber surrounding the pin.

1,876,716. APPARATUS FOR SPLICING TUBES. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,955. 2 Claims. (Cl. 154—9.)



2. A tube splicing device comprising a pair of spaced parallel shafts, a skiving cutter mounted on a diagonally opposite end of each shaft, a buffing wheel mounted on the other diagonally opposite end of each shaft, means to continuously rotate said shafts and means to support the ends of tubes to be spliced in operative relation with the cutters and buffers.

1,876,717. MOTOR VEHICLE SIGNAL SWITCH. ROBERT P. MCBRIDE, Hampton, Va. Filed Oct. 24, 1927. Serial No. 228,444. 1 Claim. (Cl. 200—59.)



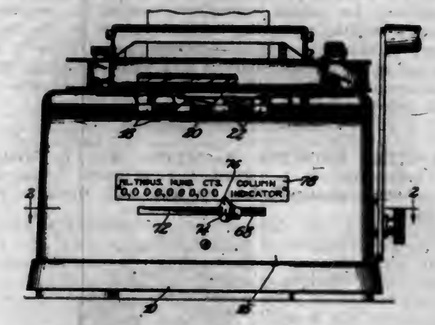
In a direction signal for motor vehicles, a shaft of a length to extend between a dash board and an instrument board and be rotatably and slidably engaged through the same with its rear end projecting rearwardly from the instrument board, an actuating handle upon the rear end of said shaft, a spring to resist rotary and sliding motion of the shaft, an arm carried by said shaft and extending radially therefrom to serve as a movable contact, stationary contacts, a plate to mount the stationary contacts at opposite sides of the movable contact in insulated relation to the shaft and each other, the plate being formed between the stationary contacts with a seat to receive the free end of the movable contact and the spring serving to yieldably retain the shaft in a normal position with the free end of the movable contact in the seat, an abutment carried by said shaft and having arms extending transversely from opposite sides of the shaft in diverging relation to each other, and an arm having means to connect the same to a steering post and mount the same in position to extend radially from the post between arms of the abutment and engage the same to return the shaft and movable contact to a normal position.

1,876,718. HOSE NOZZLE HANDLE. DUNCAN MCPHERSON, San Diego, Calif. Filed Apr. 11, 1929. Serial No. 354,379. 7 Claims. (Cl. 299—112.)



3. In a hose handling construction, a hose, a nozzle connected therewith, combined with a manually operated handle secured to said nozzle, a portion of said handle at the rearward extremity thereof being in hand grip form and so positioned as to equilibrate the moments of the several reactions of the stream passing through said nozzle and the weight of said construction.

1,876,719. ERROR KEY MECHANISM FOR ADDING MACHINES. THOMAS O. MEHAN, Chicago, Ill., assignor, by mesne assignments, to Remington Rand, Inc., a Corporation of Delaware. Filed Feb. 20, 1930. Serial No. 429,920. 2 Claims. (Cl. 235—60.)

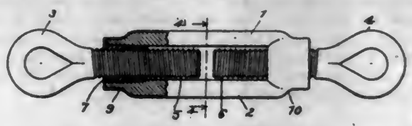


1. In an adding machine having a reciprocable stop carriage, the combination of a casing having an elongated slot formed therein, an indicator scale on said casing adjacent said slot, an error key stem pivotally secured to the stop carriage and projecting through said slot, and a key button removably secured to said stem and having a pointer cooperating with said indicator scale, said error key stem being manually pivotable through said slot upon removal of said key button thereby to permit removal of said casing.

1,876,720. METHOD OF MAKING PROTECTING MEANS FOR CONNECTING DEVICES. GEORGE H. MERRILL, Forest Hills, N. Y. Filed Sept. 11, 1930. Serial No. 481,330. 4 Claims. (Cl. 29—175.)

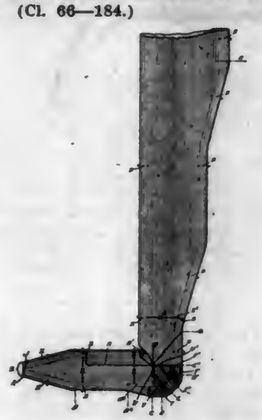
2. The method of making a structural connecting device subject to corrosion which comprises, inserting a

bushing of non-corrodible metal within one portion thereof, deforming said bushing under pressure, applying external coatings of integral non-corrodible metal to all



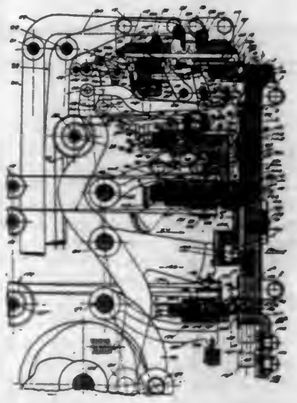
portions thereof, and machining the internal surface of said bushing in accordance with the complementary portion of said device.

1,876,721. STOCKING AND METHOD OF KNITTING THE SAME. MAX C. MILLER, Cumberland, R. I. Filed Jan. 7, 1925, Serial No. 992. Renewed Feb. 17, 1932. 29 Claims. (Cl. 66—184.)



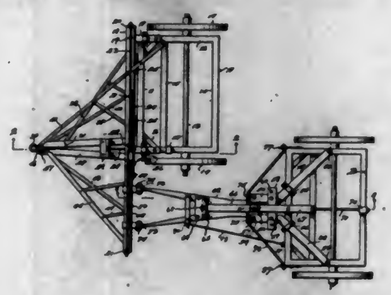
1. The method of knitting a stocking having a closed fashioned toe which comprises forming a setting-up course, knitting along the top and bottom of the toe, a series of continuous wales corresponding to loops in the setting-up course, and during such knitting adding fashioning wales at both sides of both series along both top and bottom.

1,876,722. KNITTING MACHINE. MAX C. MILLER, Cumberland, R. I. Filed Aug. 9, 1926, Serial No. 128,059. Renewed Feb. 8, 1932. 55 Claims. (Cl. 66—5.)



1. In a flat knitting machine for knitting a wrought stocking blank, a central group of needles, stepping needles on either sides thereof, means for stepping these needles outwardly from the central group, means for adding to the central group of needles as the stepping needles step outwardly with means at the same time for adding needles to the stepping groups.

1,876,723. TRACTOR HITCH FOR FARM IMPLEMENTS. CALVIN J. MINTON, Gage, Okla. Filed July 31, 1930. Serial No. 472,061. 8 Claims. (Cl. 280—33.44.)



1. A trailer hitch of the character described, including a cross bar having a tongue, means to detachably hold the cross bar upon an implement frame, an extension pivoted to one end of the cross bar for movement in a vertical plane transversely of the hitch, means on the extension exetnding forward and inward and adapted to be detachably engaged with the tongue, means detachably engaging the extension and cross bar and holding the extension in a horizontal laterally extended position, and means for supporting the extension in a vertical position.

1,876,724. WEAR RESISTING FERROUS ALLOY. H. ALTON MITCHELL and ALFRED W. GREGG, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 16, 1930. Serial No. 421,306. 6 Claims. (Cl. 219—8.)

4. An alloy welding rod containing 1.00% to 12.00% tungsten, 1.00% to 10.00% chromium, .10% to 5.00% nickel, .10% to 8.00% aluminum, .10% to 2.00% vanadium, 1.75% to 4.00% carbon, .50% to 5.00% manganese, .20% to 3.00% silicon, .10% to 6.00% molybdenum, the balance being iron except for impurities such as phosphorus and sulphur, which are incidental to the manufacture.

1,876,725. FERROUS ALLOY. H. ALTON MITCHELL and ALFRED W. GREGG, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Jan. 16, 1930, Serial No. 421,306. Divided and this application filed Apr. 24, 1931. Serial No. 532,704. 6 Claims. (Cl. 75—1.)

1. An alloy containing 2.00% to 12.00% tungsten, 1.00% to 10.00% chromium, .10% to 5.00% nickel, .10% to 8.00% aluminum, .10% to 2.00% vanadium, 1.75% to 4.00% carbon, .50% to 5.00% manganese, .20% to 3.00% silicon, the balance being predominantly iron, said alloy having a high degree of hardness and a comparatively low fusing temperature.

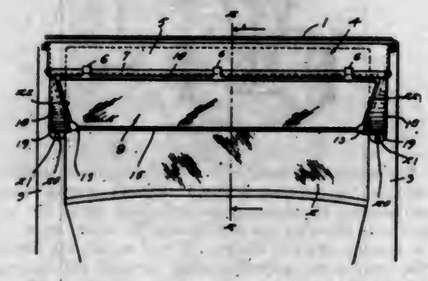
1,876,726. METHOD OF REMOVING DIPHENYLAMINE FROM NITROCELLULOSE POWDER. ROWLAND B. MITCHELL, Athol, Mass., assignor to Athol Manufacturing Company, Athol, Mass., a Corporation of Massachusetts. Filed Sept. 19, 1930. Serial No. 483,138. 18 Claims. (Cl. 260—148.)

5. The method of removing diphenylamine from smokeless powder which includes treating the powder with an

CARNEGIE LIBRARY OF ATLANTA

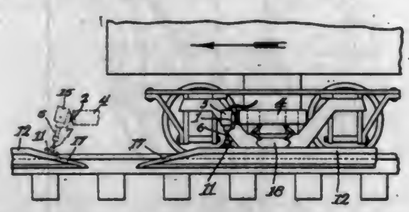
aliphatic alcohol which is a solvent for the nitrocellulose and diphenylamine in admixture with a liquid aromatic hydrocarbon in such amount that the mixture will swell the powder at least 100% without dissolving any substantial amount thereof and the mixture being chemically nonreactive with the powder.

1,876,727. AUXILIARY VEHICLE WINDSHIELD. JAMES E. MOORE, Niles, Mich. Filed May 6, 1930. Serial No. 450,250. 4 Claims. (Cl. 296—84.)



1. The combination with a vehicle windshield having a forwardly and downwardly projecting visor across the upper portion thereof, of an auxiliary windshield, comprising a glass panel of a width substantially equal to the width of the vehicle windshield, elements carried by the panel along one longitudinal edge for detachably securing the panel to the forward edge of said visor, a substantially triangular plate at each end of the glass panel closing the area between the panel and the vehicle windshield, and a supporting flange carried by each triangular plate and underlying the adjacent edge of the glass panel to maintain the same in downwardly and inwardly inclined position with respect to the vehicle windshield.

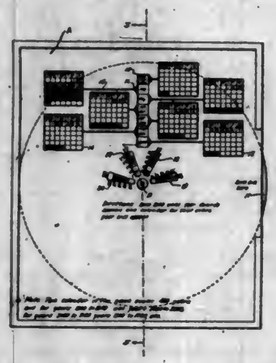
1,876,728. RAIL CLEANER. JAMES F. MULLEN, Jr., Chicago, Ill. Filed May 21, 1930. Serial No. 454,224. 5 Claims. (Cl. 37—37.)



1. An electrical motive power system wherein the current for driving a motor vehicle is derived by trolley shoe contact with a third rail, characterized by an ice cutter in the form of a wheel having a flat lower side adapted to slide on said rail, having its periphery provided with cutting teeth to cut the ice off the rail, mounted on the vehicle to rotate about a vertically disposed axis in front of the trolley shoe, with an electric motor in axial alinement with said ice cutter for the operation thereof.

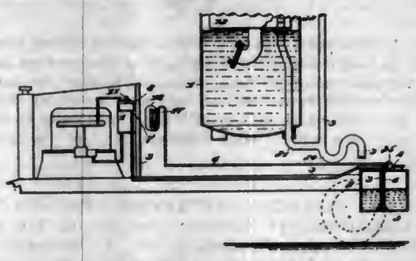
1,876,729. PERPETUAL CALENDAR. FRANCIS L. MURPHY, Harrison, N. Y. Filed Aug. 28, 1930. Serial No. 478,389. 10 Claims. (Cl. 40—113.)

1. In a calendar of the nature described, in combination, a member having seven monthly calendar formations suitably arranged thereon, each calendar beginning on a different day of the week; a second member mounted for relative movement with respect to said first member and having thereon the numerals of all the years of a century arranged in twenty-eight groups with the successive numerals of each group forming an arithmetical progression, said second member also having thereon the twelve month-symbols of the year arranged in varying combinations in twenty-eight groups of twelve months each, the century-year groups and the month-symbol groups occupying predetermined relative positions upon said member; indica-



tion means on said first member for positioning said second member so that any one of said century-year groups and every year of that group will be visible and occupy a predetermined position relatively to said first member, and simultaneously the appropriate twelve-month group for all of the years shown will appear in appropriate relation to the said seven calendar formations.

1,876,730. LIQUID LEVEL INDICATOR FOR AUTOMOBILES. WILLIAM H. MUZZY, Evanston, Ill., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Oct. 23, 1926. Serial No. 143,636. 2 Claims. (Cl. 73—54.)

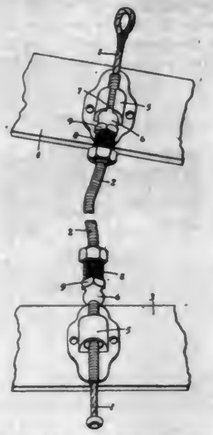


1. In an automobile, the combination with a fuel supply tank, of a vacuum tank having an inner chamber adapted to communicate with the air, a pipe having its lower end portion opening within the supply tank and its upper end portion extending upwardly within the inner chamber and provided with an opening in its side near the bottom of the inner chamber, means for placing said pipe in communication with the inner chamber above the first mentioned opening, a pressure gauge, and a connection extending from the gauge and communicating with the interior of the supply tank at the full depth to be measured, the lower end of the pipe and the connection being so related that the air entrained with the fuel upon the return of the fuel from the inner chamber to the supply tank and discharged from the pipe will be received in the connection.

1,876,731. BOWDEN CABLE, FLEXIBLE SHAFT AND THE LIKE. REGINALD WILLIAM NEATE, Kingston-on-the-Thames, England. Filed June 14, 1929, Serial No. 370,970, and in Great Britain Aug. 8, 1928. 3 Claims. (Cl. 74—39.)

1. A support for a flexible cable comprising an attachment bracket, a tubular sleeve thereon, one end of which terminates in an enlarged substantially hemispherical

socket, an internally threaded tubular sleeve adapted to screw onto the wire wrapping of a cable casing, means on



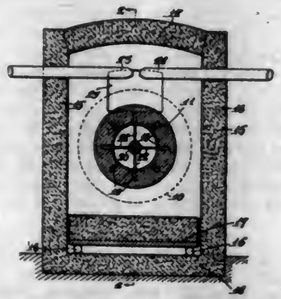
said sleeve for securing it to said casing, and a head on said sleeve substantially hemispherical in contour adapted to seat within said socket.

1,876,732. METALLURGICAL APPARATUS. HEINRICH NEUHAUSS, Dusseldorf, Germany, assignor of one-half to Guilliam H. Clamer, Atlantic City, N. J. Filed Oct. 17, 1928. Serial No. 313,005. 6 Claims. (Cl. 266—34.)



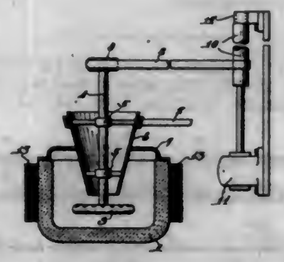
1. A container adapted to hold a pool of molten iron or steel, a desulfurizing unit melting at a temperature below the temperature of the bath, means for holding the unit so that it extends down into the bath and means for moving the unit bodily and bath relatively, eccentrically to bring the unit into contact with different parts of the molten bath.

1,876,733. SINTERING MECHANISM. HEINRICH NEUHAUSS, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Aug. 1, 1928, Serial No. 296,803. Divided and this application filed Sept. 3, 1929. Serial No. 390,082. 7 Claims. (Cl. 13—1.)



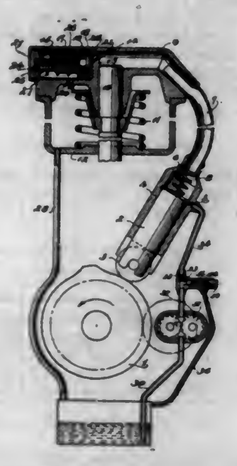
1. In a furnace for sintering refractories, furnace walls, a source of heat for the sintering, a pattern and a support for the pattern adapted to move the pattern through a predetermined path suitable for exposing the entire surface of the pattern to be used to the sintering heat.

1,876,734. METHOD OF MAKING AND PATCHING FURNACE WALLS AND LININGS. HEINRICH NEUHAUSS, Dusseldorf, Germany. Filed Sept. 3, 1929. Serial No. 390,083. 6 Claims. (Cl. 13—35.)



1. The method of forming a refractory for an inductor-coil-surrounded furnace adapted to hold molten metal, which consists in forming the refractory layer by layer of sinterable material and in sintering the layers separately by the heating effect of current induced within the interior of the furnace by current passing through the inductor.

1,876,735. HYDRAULIC VALVE ACTUATING MECHANISM. WARREN NOBLE, Detroit, Mich. Filed June 26, 1928. Serial No. 288,482. 16 Claims. (Cl. 123—90.)



16. In a hydraulic valve gear operable under pulsating pressures, a fluid chamber adapted for communication with a source of fluid pressure supply whereby a scavenging flow of fluid thru said chamber is initiated, an actuating and an actuated plunger exposed to the fluid in said chamber for inducing and receiving pulsations of said fluid, an outlet passage from a region of air accumulation in said chamber and an outlet valve controlling bleeding of air thru said passage, said valve being normally open under scavenging pressure and being closed by the fluid upon a rise in pressure of said fluid within said casing beyond the predetermined amount employed for scavenging.

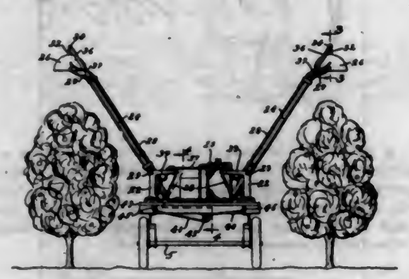
1,876,736. AIR COMPRESSOR. FRANK J. OMO, Fort Worth, Tex. Filed Oct. 12, 1929. Serial No. 399,114. 13 Claims. (Cl. 230—179.)

1. In an air compressor of the class described, a cylinder, opposed pistons adapted to reciprocate in said cylinder, a driving shaft, a cam secured to said shaft, anti-friction rollers carried by each of the pistons and bear-



ing upon the cam at substantially diametrically opposite points and linkage between the rollers to positively hold all of said rollers in contact with said cam.

1,876,737. APPARATUS FOR RAY TREATMENT OF VEGETATION. FRED W. OPP, Costa Mesa, Calif., assignor of one-half to W. C. Collins, Santa Ana, Calif. Filed Feb. 25, 1929. Serial No. 342,530. 1 Claim. (Cl. 250—84.)



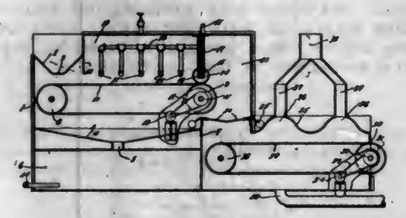
An apparatus for ray treating vegetation comprising a wheeled support, standards mounted on said support, an arm pivoted to each of said standards and extending upwardly and outwardly whereby arms on opposite sides of said support present their upper ends adjacent growing plants in rows located on opposite sides of the wheeled support, a ray producing element carried by each of said arms, a means on the support to adjust the arms to different inclinations and a means to supply a high tension electric current to the ray producing elements.

1,876,738. ALLOY. BURT HOWELL PAYNE, Westfield, N. J., assignor to Stulz-Sickles Company, Newark, N. J. Filed Sept. 2, 1931. Serial No. 560,877. 12 Claims. (Cl. 219—8.)

1. A welding rod consisting of

	Per cent
Carbon	.60 to .85
Manganese	11.00 to 13.50
Nickel	2.50 to 3.50
Silicon	more than .60
Ferrous metal	balance.

1,876,739. WASTE RECLAMATION APPARATUS. EDWIN S. PEARCE, Indianapolis, Ind., assignor to Railway Service and Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 13, 1929. Serial No. 346,709. 5 Claims. (Cl. 141—5.)



1. Apparatus for treating journal box packing, comprising a front treating chamber and a rear treating chamber, the rear end portion of said front chamber overlying the front end portion of said rear chamber and communication between said chamber portions being provided by an opening therebetween, automatically closing door means for said opening, a journal box packing inlet at the front end of said front chamber and a journal box packing outlet at the rear end of said rear chamber, a horizontally disposed foraminous conveyor in said front chamber having its front receiving end adjacent said inlet and its rear discharging end adjacent said communication opening, a horizontally disposed foraminous conveyor in said rear chamber having its front receiving end adjacent said communication opening and its rear discharging end adjacent said outlet, whereby journal box packing passed through said inlet onto the conveyor in said front chamber will be carried through said chamber on said conveyor and thereafter passed, upon the opening of said communication opening door means, through said opening onto the conveyor in said rear chamber and will be carried on said conveyor through said rear chamber to the outlet thereof, means for subjecting the packing as it travels through the front chamber on the conveyor therein to a steaming effect, and means for subjecting the packing as it passes through the rear chamber on the conveyor therein to a drying effect.

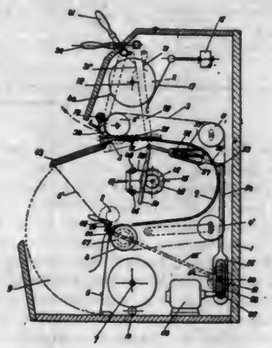
1,876,740. DRILL BIT. WILLIAM L. PEARCE, Houston, Tex. Filed Mar. 2, 1929. Serial No. 343,978. 3 Claims. (Cl. 255—61.)



1. A drill bit having a body whose upper end is formed into a shank and whose lower end is flattened having opposite flat faces, the lower end of said body terminating in oppositely curved cutting edges, a groove in each face having a greater depth than its width and being outwardly flared and whose upper end continues on up through the

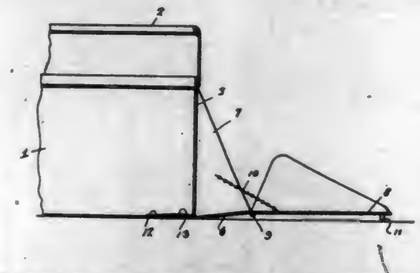
shank, forming a bore, and whose lower end terminates near the corresponding cutting edge, each groove being located approximately midway between the axis of the bit and the corresponding edge of said bit.

1,876,741. MACHINE FOR CONTINUOUS PRINTING FROM TRACINGS AND THE LIKE. LOUIS PETIT, Paris, France. Filed Apr. 5, 1928, Serial No. 267,571, and in France May 20, 1927. 13 Claims. (Cl. 95—75.)



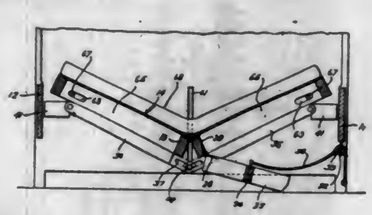
1. A machine for continuous photographic printing which comprises a supporting frame, a supply roll mounted within said frame for rotatably holding a roll of photographic printing paper, means for braking said supply roll when a roll of sensitized paper is carried thereon, printing means having a glass surface, an endless driving band running in contact with said glass surface and having an inlet adjacent to said roll for printing paper, and automatic feeding mechanism located in the proximity of said inlet for feeding the sensitized paper across the entire width thereof from said supply roll to said endless driving belt.

1,876,742. BREAD BOX. AUGUST PFINGSTEN, Rock Rapids, Iowa. Filed Jan. 15, 1931. Serial No. 509,005. 1 Claim. (Cl. 146—150.)



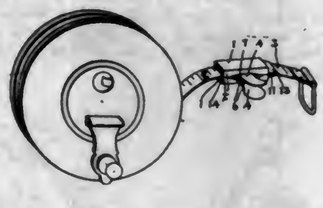
A bread box comprising a container and a cover therefor, an opening in one end of the container and one side wall of the container having a vertically arranged slit therein located adjacent the open end of the box whereby a knife can be passed through the slit and drawn through a loaf of bread to cut a slice therefrom, and an outwardly extending flange surrounding the slit and forming guiding means for the knife, an extension at the open end of the container comprising a bottom part and a pair of side parts, the outer edges of said side parts sloping upwardly and inwardly to the top of the box and a cover part hinged to the outer part of the bottom part of the extension for covering the same and the open end of the box when said cover part is in raised position.

1,876,743. BED OR COUCH. JOSEPH H. PILATES, New York, N. Y. Filed June 20, 1930. Serial No. 462,461. 4 Claims. (Cl. 5—131.)



1. A bed comprising a pair of side rails and a member disposed between said side rails and forming a surface for the support of a person's body, said member being shaped so that the central longitudinal portion thereof is disposed substantially below the level of said side rails and the longitudinal edges thereof remain at substantially the level of said side rails so that the surface forms a dihedral angle having sides sloping downwardly toward the longitudinal center line from the side rails.

1,876,744. DEVICE FOR CLEANING TAPE LINES. JAMES L. POSGATE, Toronto, Ontario, Canada, assignor to Herbert J. S. Dennison, as trustee, Toronto, Canada. Filed Aug. 24, 1929. Serial No. 388,126. 5 Claims. (Cl. 15—210.)



1. A device for cleaning tape lines, comprising a clip member formed of a pair of relatively movable sections adapted to be separated to permit the insertion therebetween and removal of the tape line, and means carried by said sections for engaging the surfaces and edges of the tape line to scrape and oil the same.

1,876,745. METHOD OF APPLYING HEAT TO THE COVERINGS OF ELECTRICALLY CONDUCTIVE CORES. FRANK M. POTTER, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Aug. 26, 1927. Serial No. 215,627. 13 Claims. (Cl. 18—53.)



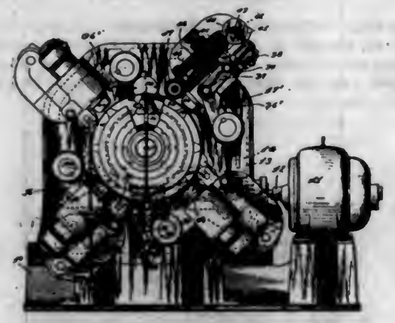
1. The method of manufacturing electrical cables of indefinite length which comprises, covering a copper conductor with a complete thin surface coating of tin, covering the tin coating with a complete thin surface coating of zinc, covering the coating of zinc with a relatively thick complete surface coating of rubber, and vulcanizing the rubber by passing the completed cable continuously through a closely overlying coil of definite length carrying high frequency electrical currents, whereby the conductor is inductively heated by the current passing through said coil and produces heating of the rubber coating from its interior surface outward.

1,876,746. RECEPTION OF VARYING FREQUENCY SIGNALS. ELLISON S. PURINGTON, Gloucester, Mass., assignor to John Hays Hammond, jr. Filed May 18, 1929. Serial No. 364,221. 6 Claims. (Cl. 250—8.)



1. Means for the reception of variable frequency signals which comprises an input circuit, a first detector, an input circuit for said first detector, a local oscillator producing a high frequency differing from the received frequency, a second local oscillator for producing a low frequency differing from the incoming frequency by an amount which is different than the difference of the first local oscillator therefrom, an output circuit for said first detector, a filter circuit inductively related to said output circuit, and adapted to filter from the output of said first detector all frequencies except the difference frequency between the high heterodyning frequency and the received frequency, and the difference frequency between the received frequency and the low heterodyning frequency, and to amplify the frequencies passed, a second detector associated with the output of said filter circuit for combining the two difference frequencies existing in the output of said first filter, a second filter for removing from the output of said second detector all frequencies except the frequency produced by said last combining, corresponding to the difference of the two local oscillators, a third detector associated with the output of said last mentioned filter, a third heterodyning frequency source for producing a frequency which, when combined with said last produced frequency, will cause a constant audio frequency, and a utilization circuit for said audio frequency.

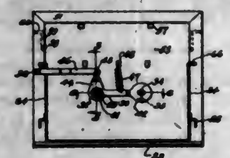
1,876,747. RIM ROLLING MACHINE. THOMAS F. RAINSFORD, Detroit, Mich., assignor to Whitehead and Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Aug. 1, 1927. Serial No. 209,840. 23 Claims. (Cl. 113—52.)



1. In a rim rolling machine, means for supporting and rotating a cylindrical blank, pressure and spinning rolls, means for causing said rolls to engage said blank and means operated by said last means for stopping the rotation of said blank upon completion of the rolling operation.

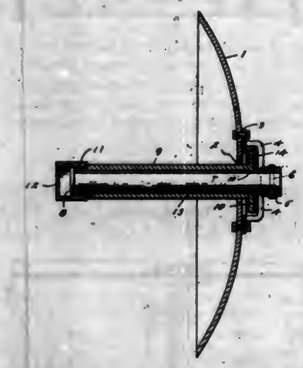
1,876,748. FILE CABINET. JAMES H. RAND, Jr., Buffalo, and ENOCH OHNSTRAND, Kenmore, N. Y., assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1927. Serial No. 186,794. 8 Claims. (Cl. 45—94)

6. In a file cabinet, a housing, a drawer slidable in said housing, latching means carried by the drawer for locking engagement with the housing to hold said drawer in closed position, and a handle having one end pivotally mounted on the drawer and the opposite end conected to



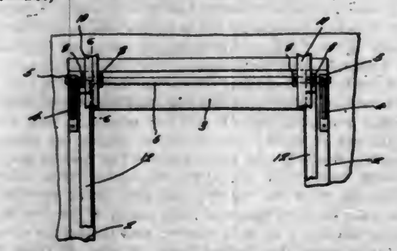
said latching means for operating said latching means in the pivotal movement of the handle to release the drawer for opening movement when the handle is pulled.

1,876,749. DIRTPROOF HUB FOR CULTIVATOR DISKS. ROY R. REA, Beaver County, Okla. Filed Oct. 17, 1931. Serial No. 569,478. 7 Claims. (Cl. 97—217.)



1. The combination with a cultivator disk having an opening axially therethrough, of a hub, means connecting the hub with a disk to support the hub concentric with said opening and at a point removed from the adjacent face of the disk, a supporting spindle secured at one end in the hub and extending through the disk opening, a boxing for said spindle, and means carried by the boxing at the end adjacent the hub for deflecting downwardly earth passing through the disk aperture.

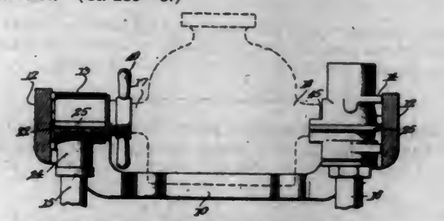
1,876,750. DOOR. JOHN W. REED, Cardington, Ohio. Filed May 21, 1930. Serial No. 454,321. 1 Claim. (Cl. 20—20.)



A door of the class described comprising a plurality of panel door sections hingedly connected together, a fixed shaft, a number of hollow pulleys rotatably mounted in spaced relation to each other on the shaft, a coiled spring disposed in said pulleys each having one end connected to a pulley and the other end connected to the shaft, a polygonal winding frame fixed on the periphery of each pulley, each frame being composed of a number of members having concaved outer faces to form a groove in the outer face or

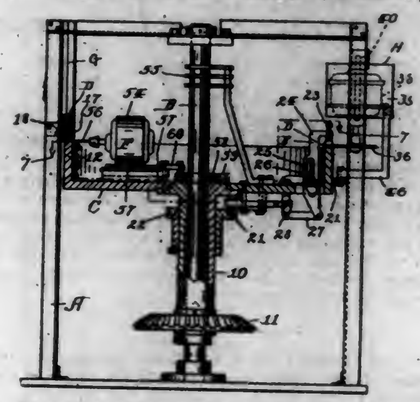
edge of the frame and flexible members connected with the upper section of the door and with the winding frame, whereby the flexible members will be wound in the groove at the beginning of the lifting operation and then the door section will be wound around the frames.

1,876,751. ADJUSTABLE ELBOW FOR METER YOKE CONNECTIONS. EMMETT M. REEDY, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Feb. 4, 1929. Serial No. 337,370. 16 Claims. (Cl. 285—3.)



1. An elbow connection for fluid meters having inlet and outlet openings, and adjustable means located in said elbow and adjustable at all times to open and close communication through the elbow and adapted to engage a meter spud, said means having threaded engagement with the elbow.

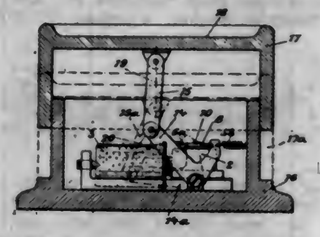
1,876,752. MACHINE FOR MAKING COAT HANGERS. WILLIAM J. REHRIG, Los Angeles, Calif. Filed July 30, 1930. Serial No. 471,743. 7 Claims. (Cl. 144—3.)



1. A machine for trimming the convex rims of garment hanger blanks, comprising, in combination, a continuously revoluble carrier, means for feeding a series of said blanks to be trimmed lengthwise in a circular path upon said carrier with their convex rims coincident with the axis of said carrier, means for holding said blanks on said carrier when received thereon and for releasing said blanks near the end of their cycle of travel, means for trimming the convex rims of said blanks while the blanks are held upon said carrier, a plurality of power drills movable continuously with the carrier, one drill being provided to drill a hole in each blank of said series while the blanks are being advanced by said carrier, and means for ejecting said blanks from the carrier near the end of their cycle of travel.

1,876,753. MUSICAL BOX. ALBERT REUGE, St. Croix, Switzerland. Filed July 26, 1930, Serial No. 470,958, and in Switzerland July 9, 1930. 9 Claims. (Cl. 84—95.)

2. A musical box comprising a casing, a motor in the casing, a musical apparatus mounted in the casing and driven by the motor, and a plurality of levers for winding the motor which have pivot points so that the levers are



capable of being moved without changing the direction of the movement in the same plane curves which never cross each other.

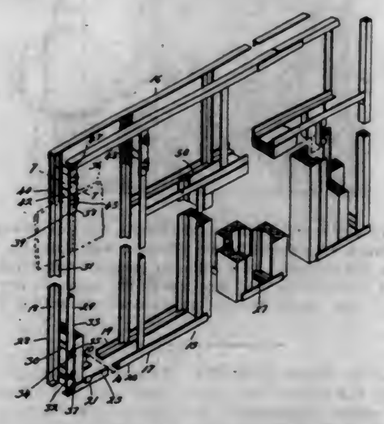
1,876,754. FABRICATION OF VISCOSE. WILLIAM F. RICHTER, Apollo, Pa., assignor to Chemical Holding Corporation, Apollo, Pa., a Corporation of Delaware. Filed Oct. 7, 1930. Serial No. 487,026. 8 Claims. (Cl. 18—54.)

8. In a process of preparing artificial fibers from viscose the step comprising precipitating the viscose in a bath containing sulfuric acid in an amount sufficient to coagulate the viscose but not exceeding about 8 per cent, and also containing bismuth sulfate and zinc sulfate.

1,876,755. PROCESS OF PREPARING VISCOSE. WILLIAM F. RICHTER, Apollo, Pa., assignor to Chemical Holding Corporation, Apollo, Pa., a Corporation of Delaware. Filed May 1, 1931. Serial No. 534,447. 6 Claims. (Cl. 18—54.)

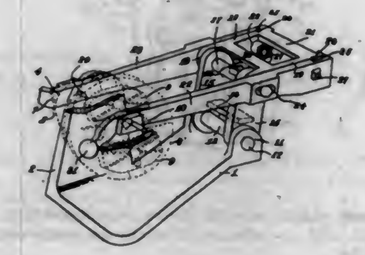
1. In a process of making viscose products the steps comprising xanthating unaged alkali cellulose, dissolving the xanthate in dilute caustic soda solution at about 8° C., maintaining the viscose solution at said temperature and without substantial aging, spinning it in an 18 per cent soluton of sulfuric acid at said temperature and for a time to cause coagulation.

1,876,756. STRUCTURAL MEMBER. CLAUDE A. ROBINSON, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,575. 14 Claims. (Cl. 72—46.)



1. In a structural stud member, the combination with angle bars with aligned flanges and transverse flanges at their outer edges, and means for securing said angle bars in fixed relative position, of an extension member comprising bars embracing each of said angle bars and slidably engageable therewith, and a tie member extending between said extension bars and rigidly secured thereto and provided with tongues extending laterally therebeyond intermediate their side edges.

1,876,757. CRYSTAL CUTTING APPARATUS. CURT J. ROHLAND, Seekonk, Mass., assignor, by mesne assignments, to Ira Guilden, New York, N. Y. Filed Dec. 24, 1928. Serial No. 328,182. 12 Claims. (Cl. 33—28.)



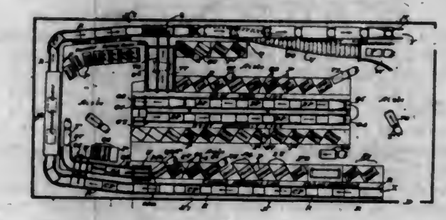
1. Watch crystal cutting apparatus embodying means to support the watch bezel to be fitted and a crystal blank in centered axial alinement and against relative movement with respect to one another, in combination with a crystal cutter, and a follower mounted in coaxial relation for identical simultaneous movements in all directions in planes which are respectively parallel to the plane of the bezel seat, said follower embodying a guide finger adapted for direct contact with the bezel seat and resiliently mounted for radial lost motion to an extent sufficient to position the periphery of the finger in tangential relation to the common axis of the follower and cutter, and means for limiting said lost motion of the guide finger to the extent stated.

1,876,758. METHOD AND APPARATUS FOR SHIPPING METAL. ROBERT T. ROMINE, Mount Clemens, Mich., assignor to Material Handling, Inc., Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 20, 1928, Serial No. 313,846, now Patent No. 1,745,057, dated Jan. 28, 1930. Divided and this application filed Jan. 23, 1930. Serial No. 422,845. 10 Claims. (Cl. 105—369.)



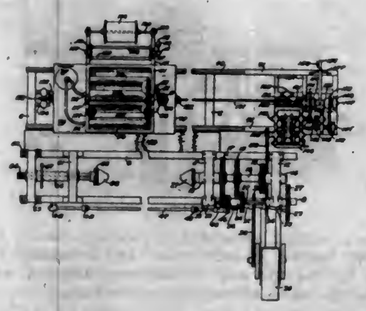
1. The hereindescribed method of shipping sheet, strip or bar metal in relatively heavy unit packs on a freight car floor, which consists in forming a stack having its parts superimposed one upon another, disposing between the surfaces of said superimposed adjacent parts relatively softer material, such as wood, binding the rack as a unit and then positioning the pack with the parts arranged flatwise upon the car floor whereby said sheets are held against substantial shifting movement due to their frictional engagement with said material.

1,876,759. APPARATUS FOR HANDLING MATERIAL. ROBERT T. ROMINE, Mount Clemens, Mich., assignor to Material Handling, Inc., Wilmington, Del., a Corporation of Delaware. Original application filed May 5, 1927, Serial No. 189,136. Patent No. 1,772,735, dated Aug. 12, 1930. Divided and this application filed Jan. 23, 1930. Serial No. 422,844. 2 Claims. (Cl. 29—84.)



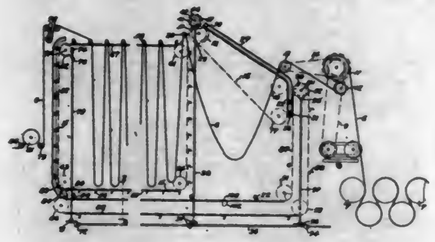
1. In an assembly plant for automobiles or the like including a plant building, the combination of a chassis assembly line extending around three sides of the building, a body assembly line located intermediate opposite sides of the chassis assembly line, a sub-assembly line parallel to said chassis assembly line, each of said assembly lines comprising spaced parallel ways having portable platforms with legs traveling on said ways, means at a point in the chassis assembly line for mounting the assembled parts of the body on the chassis, said chassis assembly line adjacent its outlet end having a downwardly inclined portion arranged to withdraw the platform from the chassis when the wheels are attached thereto, a pair of spaced bracket members adjacent the outlet of the assembly line positioned above said inclined portion, said bracket members having horizontally inwardly disposed surfaces constituting a guideway for removing the assembled car from the chassis assembly line.

1,876,760. PIPE WRAPPING MACHINE. LELAND S. ROSENER, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,426. 2 Claims. (Cl. 242—11.)



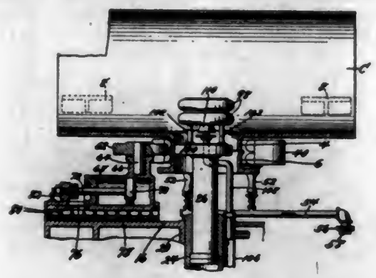
1. A pipe wrapping machine comprising means for supporting and rotating a pipe, a track parallel to the rotational axis of said pipe, a carriage movable along said track, a tank adapted to hold a fluid and movable about a vertical axis on said carriage, a gear sector fixed to said tank, a pinion meshing with said sector, means for rotating said pinion to adjust the angular position of the tank about said axis, means for moving the carriage along the track, and means for feeding wrapping material through said fluid and to said pipe.

1,876,761. FESTOONING APPARATUS. LELAND S. ROSENER, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,451. 15 Claims. (Cl. 271—2.2.)



1. In an apparatus for handling a looped web, a plurality of bars adapted to hold the web, a conveyor for transporting a succession of said bars while holding the web in loops, means adjacent one end of the conveyor for feeding the web thereto, means adjacent the other end of the conveyor for unlooping the web to unload the bars, a conveyor adjacent the feeding means for conveying a succession of said unloaded bars from below the web into contact therewith to hold it in loops, and a transfer conveyor for transporting said loop-holding bars from the second mentioned conveyor and depositing them on the first mentioned conveyor.

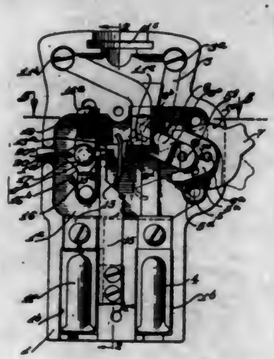
1,876,762. WELDING APPARATUS. CHARLES L. ROWLAND, deceased, Carbondale, Pa.; by Kathryn E. Rowland, executrix, Carbondale, Pa., and Edward A. De Laney, executor, Carbondale, Pa., assignors to American Welding Company, Carbondale, Pa., a Corporation of Delaware. Original application filed Jan. 27, 1926, Serial No. 84,134. Divided and this application filed Apr. 29, 1930. Serial No. 448,252. 5 Claims. (Cl. 78—85.)



1. In a welding apparatus, a rotatable turret, a pneumatic lift carried by said turret, and a welding member carried by the lift and eccentrically disposed with respect to the center of rotation of the turret.

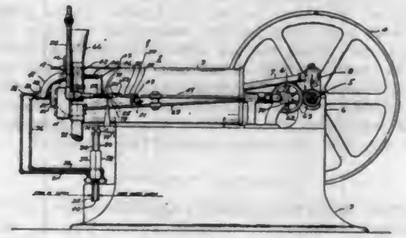
1,876,763. COMBINATION THERMOSTATIC SWITCH AND ELECTRIC CONNECTION PLUG. MARTIN S. RUNSVOLD, San Diego, Calif. Filed Sept. 25, 1930. Serial No. 484,324. 8 Claims. (Cl. 200—138.)

1. A combination thermostatic switch and electric connection plug consisting of a casing, terminals therein arranged to connect to an electric element, a pair of contacts within said casing, the one of said contacts connected to one lead of an electric circuit, the other of said contacts connected with one of said terminals, yieldable means tending at all times to separate the said contacts, and a thermostat element adapted to receive heat transmitted to said terminals, said thermostat element arranged



to engage and restrain the action of said yieldable means, whereby said contacts are normally in engagement with each other.

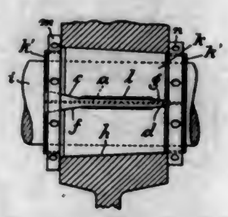
1,876,764. INTERNAL COMBUSTION ENGINE. CHARLES H. SAUVAN, Newark, N. J. Filed Nov. 4, 1930. Serial No. 493,334. 8 Claims. (Cl. 123—25.)



1. In an internal combustion engine, in combination; a cylinder having a head thereon, an intake manifold in communication with the interior of said head for supplying combustible mixture to said cylinder, a vaporizer projecting into the interior of said head, said vaporizer comprising a hollow casing provided with a plurality of heat absorbing projections extending outwardly from the exterior surface thereof and a plurality of heat dissipating projections extending inwardly from the interior surface thereof, said exterior and interior projections cooperating to absorb heat from the hot products of combustion within said cylinder and conveying such heat to the interior of said vaporizer, fuel oil and water piping projecting into said vaporizer for spraying fuel oil and water respectively into the interior of said vaporizer to be evaporated therein, and conduit means connecting said vaporizer to said intake manifold, whereby vaporized fuel oil and steam are conveyed to said intake manifold for use in said engine.

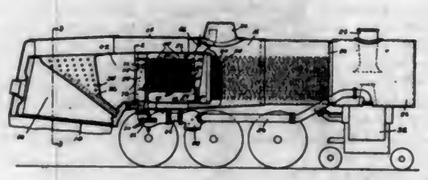
1,876,765. ADJUSTABLE BEARING BUSH. WILLY SCHARFF, Frankfort-on-the-Main, Germany. Filed July 16, 1928, Serial No. 293,020, and in Germany Feb. 2, 1928. 2 Claims. (Cl. 308—71.)

1. An adjustable tapering bearing bushing having a longitudinal slot, a tapering recess in connection with said slot, and a wedge in said recess of a length equal to the thickness of the member in which said bushing is used, the taper of the mating faces of said wedge and said recess



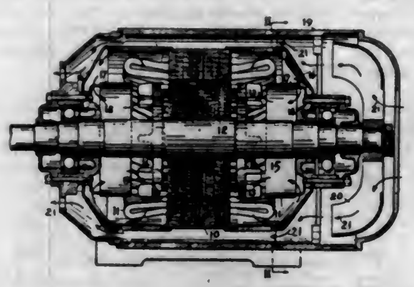
being so determined with respect to the taper of said bushing as to maintain the faces in fitting relation for any position of said bushing in its bearing.

1,876,766. LOCOMOTIVE AND SUPERHEATER THEREFOR. EUGENE L. SCHELLENS, Ridgewood, N. J., assignor to C-S Engineering Company, Englewood, N. J., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 440,950. 14 Claims. (Cl. 122—460.)



1. A locomotive boiler having a combustion chamber, a rear tube sheet forming the front wall of said chamber, fire tubes terminated at said tube sheet, and a superheater for the steam delivered from said boiler located in said combustion chamber in the rear of said tube sheet and free and independent of said fire tubes having independent saturated and superheated steam headers one of which is carrid by the top wall and the other by the bottom wall of said combustion chamber.

1,876,767. COOLING OF DYNAMO-ELECTRIC MACHINES. ANDREW K. SELDEN, Jr., Orange, N. J., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed Mar. 7, 1931. Serial No. 520,765. 2 Claims. (Cl. 172—36.)



1. An enclosed dynamo-electric machine having a stator core with windings which project beyond the ends of the stator core, a rotor with a core and a squirrel-cage winding consisting of bars projecting beyond the ends of the rotor core and so located that they will act as a fan by which air will be driven radially directly against the stator windings, a thin-walled end shield, and an annular air-guide between the squirrel-cage and the end shield and spaced from the end shield whereby the air which is driven past the squirrel-cage and the stator windings is caused to return along a path adjacent to the end shield.

1,876,768. METHOD OF TREATING SULPHONATED OILS, ETC. WILLIAM SELTZER, Passaic, N. J. Filed Oct. 4, 1929. Serial No. 397,441. 3 Claims. (Cl. 87—12.)

1. The hereindescribed method of purging a sulphonated oil, fat or fatty acid of the undesirable fraction which consists in mixing such oil, fat or fatty acid in the presence of water with an untreated oil substance ordinarily substantially non-volatile and allowing the water-soluble and water-insoluble portions of the entire content to separate into two distinct bodies.

1,876,769. APPARATUS FOR CORRECTING VISION. HERMAN B. SHEFFIELD, New York, N. Y. Filed Jan. 23, 1931. Serial No. 510,622. 2 Claims. (Cl. 128—76.)



1. A vision correcting device comprising an eye shield having a small aperture therein, means to support said shield on the head of the wearer adjacent the eye whose vision is to be corrected and with said aperture substantially on the axis of said eye, and a diaphragm mounted on a pivot on said shield with said pivot spaced from said aperture, said diaphragm having therein a slit spaced from the pivot a distance substantially equal to the distance between said pivot and said aperture, whereby upon moving the diaphragm on its pivot and slit may be brought into registry with said aperture and its angle with respect to the axis of the eye may be varied.

1,876,770. ADJUSTABLE BAND CONNECTER. HARRY F. SHINDEL, Reading, Pa., assignor to Wilson Products, Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1931. Serial No. 582,771. 7 Claims. (Cl. 24—163.)

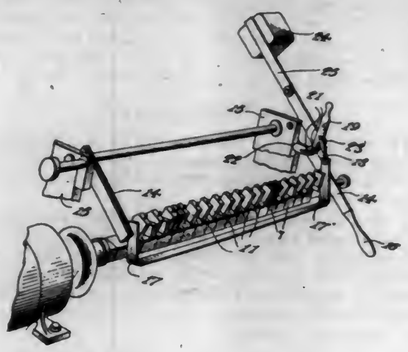


1. In combination with the ends of a band; a connecter therefor comprising a plate having an aperture for receiving said ends; and a stud extending through said aperture and having enlarged end parts engaging said band at opposite sides of said plate to retain said stud positioned on said plate for securing said ends thereto.

1,876,771. WINDING MACHINE. HOWARD SHONDELL, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Apr. 25, 1931. Serial No. 532,760. 6 Claims. (Cl. 164—36.)

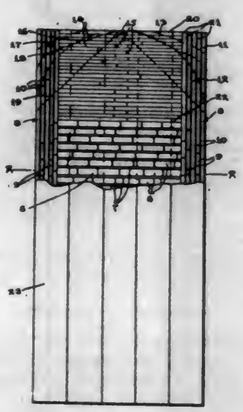
1. The combination in a winding machine of a winding spindle, means for winding sheet material thereon, cut-

ters movable toward and away from said spindle for severing said material, a guard for shielding said cutters and



means for moving said guard to uncover said cutters when said cutters are moved toward said spindle.

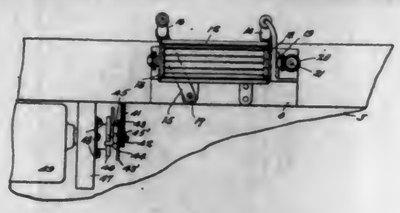
1,876,772. COMPOSITE DOOR. FREDERIC P. SIEVERS, Dubuque, Iowa. Filed Aug. 18, 1930. Serial No. 476,113. 1 Claim. (Cl. 20—35.)



A door comprising a core including a panel and side stiles, the main portion of the panel and side stiles being formed of composite lumber, the head portion of the panel being made up of a multiplicity of horizontally disposed rows of wood strips secured together, and the head portions of the side stiles being made up of a multiplicity of vertically composed wood strips secured together, face veneers covering the opposite sides of the core and secured to the latter, said strips and the face veneer being of the same class or kind of wood, some of said horizontal strips being of less length than the width of the panel, and having their ends connected together and breaking joints at the intermediate portion of the panel, and the majority of the vertical strips of each side stile being of a length only slightly greater than the head portion of the door.

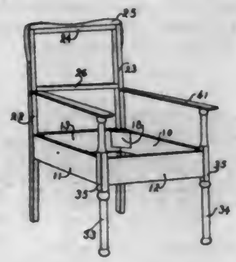
1,876,773. POWER GUIDE ROLLER. ERICK SILEN, Stella, Wash. Filed Sept. 3, 1930. Serial No. 479,543. 2 Claims. (Cl. 254—137.)

1. In a power guide roller, a base, a roller member mounted on the base, vertical rollers disposed laterally of the roller member, a pivoted arm for supporting one of the vertical rollers to move the vertical roller supported there-



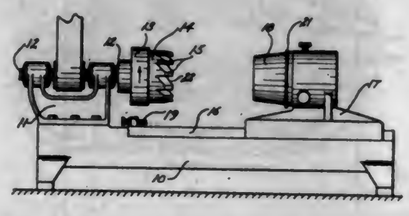
by towards the vertical roller at the opposite end of the roller member, and means for throwing the roller member into and out of operation.

1,876,774. CHAIR CONSTRUCTION. HARRY SISKIN, Los Angeles, Calif. Filed May 14, 1930. Serial No. 452,268. 1 Claim. (Cl. 155—196.)



An assemblable chair construction comprising a seat frame having connected sides, front and back, the ends of the sides, front and back being spaced to provide recesses in the corners of the seat frame, a pair of back legs receivable in the recesses in the rear corners of the seat frame, upwardly directed wedges on the forward sides of the back legs, the rear ends of the sides having complementary sockets adapted to receive the wedges, a cross member connecting the back legs and arranged to assist in supporting the back of the seat frame when the wedges and sockets are in engagement, a pair of front legs receivable in the recesses at the front corners of the seat frame, means for fastening the front legs to the seat frame, arms carried by the front legs, and means for detachably connecting the rear ends of the arms to the back legs.

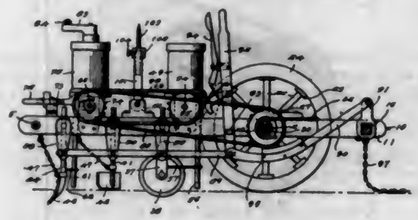
1,876,775. CUTTER FOR SKIVING MACHINES. EMORY T. SMITH, Ludlow, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 21, 1930. Serial No. 454,284. 3 Claims. (Cl. 164—60.)



1. In a device of the character described, a rotating cylindrical cutter the cutting edge of which comprises a

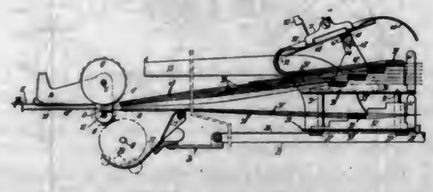
plurality of tooth-shaped portions formed with knife-like leading cutting edges and rearward extending knife-like cutting edges, the latter being of substantially greater length than the former.

1,876,776. COTTON PLANTER AND FERTILIZER DEPOSITOR. HENRY A. SMITH, Gurley, Ala. Filed Nov. 2, 1929. Serial No. 404,359. 6 Claims. (Cl. 111—52.)



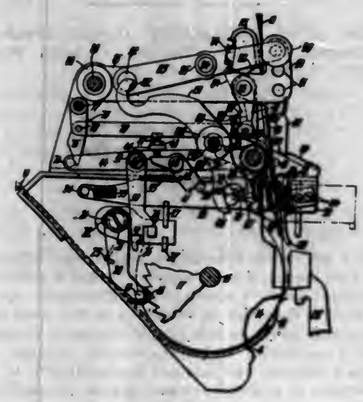
2. In a planting and fertilizer depositing machine of the character described, a pair of frame structures disposed in spaced parallel relation longitudinally of the machine, an axle extending transversely of the structures, earth working elements carried by said structures, material depositing elements carried by the structures and including mechanism operable for discharging predetermined amounts of material therefrom, supporting wheels for the machine mounted on said axle, one of said wheels having a hub formed at one end to provide a clutch jaw, a clutch jaw shiftable on said axle for connection with the first mentioned clutch jaw and rotatable with the axle, means connecting said shiftable clutch jaw with said discharging mechanism for driving the latter, and a cam element reciprocable longitudinally of the machine for effecting the disengagement of said shiftable jaw from the fixed jaw.

1,876,777. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,710. 4 Claims. (Cl. 197—126.)



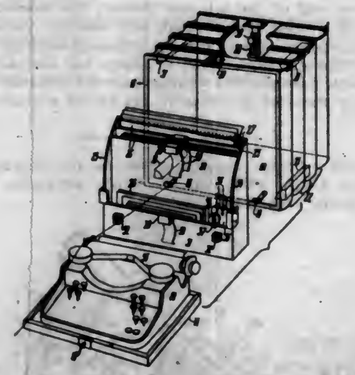
1. A multiple web and carbon carrying mechanism for a typewriting machine comprising a truck having carbon carriers for a fan fold web, a second truck carried by said first truck but readily detachable therefrom and having a base, upwardly extending stepped supports on said base, and carbon carrier blades mounted on said supports for carrying carbons between individual loose leaf webs threaded loosely between said blades, said second carbon carrier for the loose leaf webs having brackets extending from said base above the topmost blade, a bar supported on said brackets, a shelf longitudinally adjustable on said bar above the blades and a clamp for holding any predetermined number of the loose leaves with their individual carbons against said shelf.

1,876,778. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1929. Serial No. 333,711. 22 Claims. (Cl. 197—127.)



1. In a typewriting machine having a stationary platen, the combination of releasable clamps normally detaining the web, a reciprocatory line-space lever, a reciprocatory paper-feeding frame whose reciprocations are controlled by said lever, means controlled by said line-space lever through said frame to release the web-detaining clamps and close the web-feeding clamps, means controlled by the lever to impart a feeding stroke to said frame and the web-detaining clamps after the release of the web-detaining clamps, and means controlled by said frame for restoring the web-detaining clamps and opening the web-feeding clamps preparatory to return of the frame to normal position.

1,876,779. TYPEWRITER CARRYING CASE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 15, 1930. Serial No. 481,874. 2 Claims. (Cl. 45—68.2.)



2. A typewriter cabinet comprising a casing permanently closed on all its sides except one, a typewriter baseboard fitting the open side of the casing and detachably held in position and when removed leaving an opening constituting the only means of access to the interior of the casing, a rack for stationery with means to detachably hold the rack at its bottom against a closed side of the casing, the

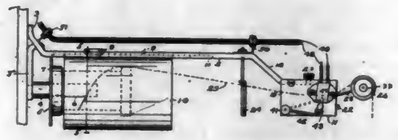
rack being less in height than the casing whereby when the typewriter baseboard carrying the machine is turned to horizontal position the rack may be lifted to release it from said holding means and moved through the opening that is normally closed by the typewriter baseboard.

1,876,780. TOOL EXTRACTOR. OLIVER ALFRED SMITH, Birmingham, England. Filed Jan. 11, 1932. Serial No. 585,837. 5 Claims. (Cl. 120—97.)



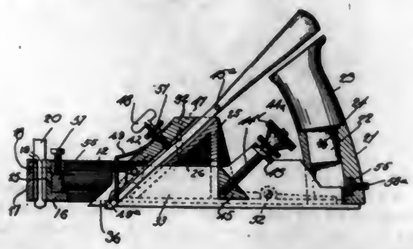
1. In a device for inserting a tool in and extracting it from a tool holder, a hand member having a partially cut-out portion bent at a substantial angle thereto and forming a resilient guard for an extension of said hand member, bent portions on either side of said extension forming side guards, a projection on said extension inclined toward said hand member and adapted antomatically to engage a perforation in said tool for the purpose of inserting it in and extracting it from the tool holder.

1,876,781. TENSION DEVICE FOR WINDING MACHINES. EDWARD SNYDER, Fort Wayne, Ind., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 26, 1926. Serial No. 124,838. 9 Claims. (Cl. 242—149.)



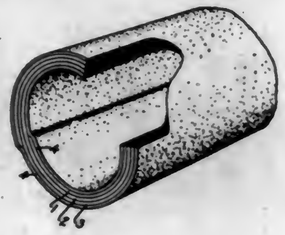
1. The combination with a spindle adapted to support a coil of wire, of an annular guard surrounding the spindle, adjustably mounted members opposing each other and adapted to frictionally engage the wire when withdrawn from one end of the coil and through the annular guard, the path of the wire through and between the opposing members being substantially in alignment with the spindle, a revoluble member adapted to engage the wire beyond the adjustable members and a support for the revoluble member pivotally mounted to swing in the arc of a circle.

1,876,782. PLOW PLANE. EPHRAIM K. SPYKER, Sacramento, Calif. Filed Aug. 27, 1929. Serial No. 388,790. 4 Claims. (Cl. 145—20.)



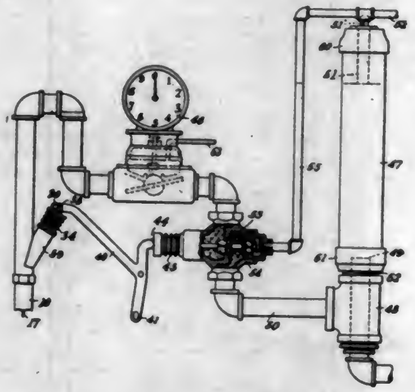
1. In a plane of the character described, a frame, a tool rest of inverted substantially V-form mounted on the frame and having slots in the spaced side walls thereof and said frame being longitudinally slotted in alinement with the rest slots, and a depth gage comprising a blade extending through the rest slots and depending through the frame slot.

1,876,783. FLUE OR VENT. JACOB A. STADTFELD, San Francisco, Calif., assignor to Plant Rubber & Asbestos Works, San Francisco, Calif., a Corporation of California. Filed Sept. 28, 1929. Serial No. 395,986. 2 Claims. (Cl. 137—75.)



2. As a new article of manufacture, a pipe for carrying off products of combustion comprising a tube of asbestos hardened and compacted by a vitrified binder permeating its fibres to provide a unitary rigid flue structure capable of self-support, said binder comprising the products resulting from the combination of an alkali metal silicate and a metal compound.

1,876,784. LIQUID DISPENSING. GEORGE W. STEDWELL, Brooklyn, N. Y., assignor to Sherwell Controls, Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 362,949. 28 Claims. (Cl. 221—95.)

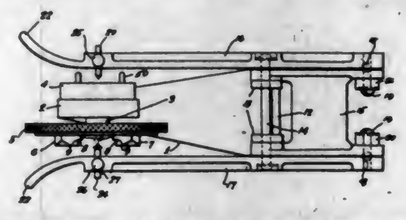


1. Liquid delivery apparatus, comprising in combination, a flexible liquid delivery hose, a Y fitting at the entry end of said hose, a liquid delivery line connected with one branch of said fitting, a flexible syphon closing the other branch of the fitting, liquid flow governing means operable by said syphon and a flexible mechanical operating connection extending from the discharge end portion of the hose, back through the hose to said syphon.

1,876,785. CRYSTAL CUTTING DEVICE. SAMUEL H. STEIN, Brooklyn, N. Y., assignor, by mesne assignments, to Ira Guilden, New York, N. Y. Filed June 12, 1930. Serial No. 460,653. 1 Claim. (Cl. 33—28.)

A watch crystal cutting device embodying means to support a watch bezel to be fitted and a crystal blank in centered axial alinement and against relative movement

with respect to one another, in combination with a crystal cutter, and a follower positioned in axial alinement with the crystal cutter, said follower comprising a head



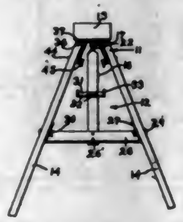
adapted to bear on the face of the bezel adjacent the crystal seat and having a follower point projecting from said head and adapted to engage with the seat of the bezel.

1,876,786. ELECTRODE HOLDER. WINSTON F. STOODY, Whittier, Calif., assignor to Stoody Company, Whittier, Calif., a Corporation of California. Filed July 8, 1930. Serial No. 466,461. 14 Claims. (Cl. 219—8.)



1. An electrode holder having a longitudinally divided shank, the sections of which present opposed surfaces between which a conductor may be positioned, means carried by the shank adapted to grip and hold an electrode, and threaded means for tightening the sections together.

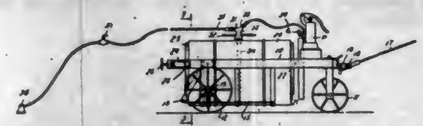
1,876,787. TRESTLE ASSEMBLING DEVICE. CHRISTIAN T. STRAND, Los Angeles, Calif. Filed June 19, 1929. Serial No. 372,179. 6 Claims. (Cl. 304—5.)



1. In an assembling device for a trestle including a body bar and a pair of legs, means for pivoting said legs to said body bar adjacent an end thereof to be optionally extended therefrom or folded thereagainst extending toward the other end thereof, and a brace member comprising a brace, means for pivotally securing the upper end of the brace to said body bar, a crossbar secured to the lower end of said brace, and disengageable means at each end of said crossbar for attaching said cross-bar to one of said legs, said brace being foldable toward the under side of said body bar to lie between said legs when the legs are folded against the body bar with said crossbar extending across the exposed upper ends of said legs.

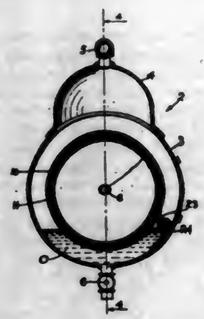
1,876,788. SPRAYING APPARATUS. WILLIAM P. TARRANT, Saratoga Springs, N. Y., assignor to Tarrant Manufacturing Company, Saratoga Springs, N. Y., a Corporation of New York. Filed Mar. 11, 1930. Serial No. 434,884. 6 Claims. (Cl. 280—49.)

1. Apparatus of the character described comprising a truck having a frame comprising side frame members and a cross frame member at one end thereof, a cradle between said side frame members adapted to support a barrel, bracing means for one end of the barrel carried by the cross



frame member, a removable cross frame member carried by the other end of the side frame members, and bracing means for the other end of the barrel carried by said removable cross frame member.

1,876,789. RETORT FOR MINERAL OILS. JOHN LEWIS TAYLOR and JOSEPH F. TAPIE, Santa Barbara, Calif. Filed Mar. 6, 1929. Serial No. 344,707. 2 Claims. (Cl. 196—121.)



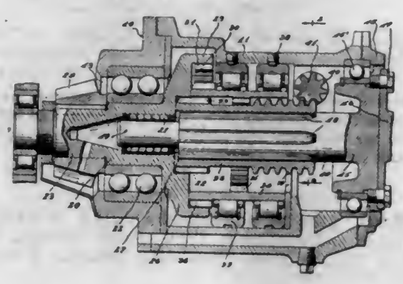
2. A retort for the treatment of mineral oils comprising a stationary casing provided with a vapor outlet, means for supplying oil to partially fill said casing, a rotatable, horizontal cylinder within said casing and adapted to have its lower portion submerged in said oil, means for rotating said cylinder, means for heating said cylinder, and means for removing carbon formed on said cylinder from said casing without said carbon coming in contact with the oil in the lower portion of said casing.

1,876,790. ELECTROMAGNETIC RECEIVING AND TRANSMITTING INSTRUMENT. ADOLPH A. THOMAS, New York, N. Y. Filed Oct. 11, 1927. Serial No. 225,586. 35 Claims. (Cl. 175—339.)



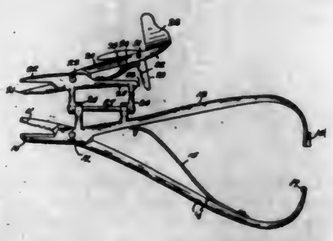
1. In an electromagnetic device, a magnet having two pole pieces, a pair of resilient armatures secured at one end to opposite sides of one of said pole pieces, the free ends of said armatures extending on opposite sides of the other pole piece but out of contact therewith, whereby said armatures provide two parallel magnetic paths between said pole pieces with an airgap in each path, a coil surrounding at least one of said armatures, and means for connecting the free ends of said armatures to a vibratory member.

1,876,791. TWO SPEED AXLE. HORACE T. THOMAS and BOUDEWYN B. NEUTEBOOM, Lansing, Mich., assignors to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Sept. 16, 1929. Serial No. 392,906. 1 Claim. (Cl. 74—57.)



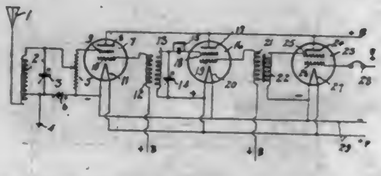
A two speed drive axle comprising a casing, a driving element, a driven element axially aligned with said driving element and having a beveled drive pinion and a longitudinal bore, a bearing in said bore rotatably receiving one end of said driving element, a bearing surrounding and rotatably mounting said driving element within said casing, said driven element having an internal tooth clutch element and an internal gear of larger diameter than said clutch element, a sleeve eccentrically mounted within said casing and having at one end thereof an external gear meshing with said internal gear, said sleeve having an internal gear closely spaced in a longitudinal direction to said external gear and having a portion projecting from said internal gear in the opposite direction from said external gear, a bearing surrounding said projecting portion of said sleeve, a second sleeve non-rotatably and slidably mounted on said driving element within said first mentioned sleeve, the second mentioned sleeve having a spur gear at one end thereof arranged intermediate the tooth clutch element on said driven shaft and said internal gear on said first mentioned sleeve and adapted to alternately engage the same, said second mentioned sleeve having annular teeth thereon arranged beneath said projecting portion of said sleeve and extending laterally beyond the same and a pinion laterally spaced with respect to said bearing engaging the portion of said annular teeth projecting beyond said first mentioned sleeve and adapted to longitudinally shift said second mentioned sleeve during the rotation thereof with said drive element.

1,876,792. SUTURING DEVICE. BASIL THOMPSON, Tucson, Ariz. Filed June 30, 1930. Serial No. 464,874. 9 Claims. (Cl. 128—340.)



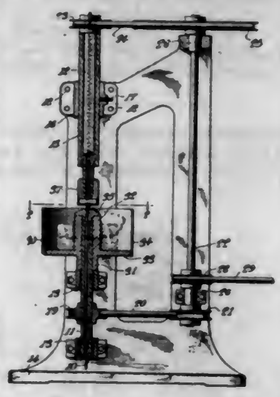
5. A suturing device comprising a main pair of forceps, an auxiliary pair of forceps, one jaw of the main pair being hingedly connected to one jaw of the auxiliary pair so that the jaws may assume spaced parallel positions equidistant from the axis of rotation.

1,876,793. RADIO CIRCUIT. THOMAS D. THOMPSON, Little Ferry, N. J., assignor to Frank C. Talmadge, Westbury, N. Y. Filed Oct. 22, 1929. Serial No. 401,428. 7 Claims. (Cl. 250—20.)



1. In a multi-stage radio circuit the combination comprising a plurality of vacuum tubes each having an anode and a cathode and two grids arranged at relatively different distances from the cathode, input circuits connected between the grids furthest from the cathodes and the cathodes, output circuits connected to the other grids of said vacuum tubes, the input circuits and the output circuits of intermediate tubes being coupled together in a multi-stage circuit and an electro-responsive device connected directly in circuit with the grid nearest the cathode of the last vacuum.

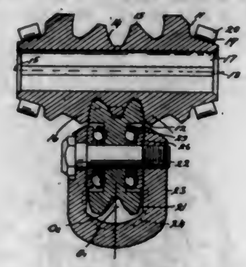
1,876,794. METHOD OF AND APPARATUS FOR SERVING STRANDS. CHARLES E. TRAXEL, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Mar. 23, 1929. Serial No. 349,327. 25 Claims. (Cl. 117—34.)



1. In a machine for serving a strand of low tensile strength upon an axially advancing core, in combination, a flyer rotatable about said core, a package of said stranded material on said flyer, a retaining wall concentrically surrounding said package, means for rotating said flyer to cause a loop of said strand to balloon off said package against said retaining wall, said loop feeding off the package against the drag of the portion of the loop in contact with the wall, rotation of said flyer also winding the strand against the action of centrifugal force upon said advancing core to form a helix thereon, and a distributor concentric with said advancing core for smoothing the material of the strand evenly about the core, said distributor rotating faster than said flyer and in the same direction so as to cross said helix and prevent loosening of the helix on the core.

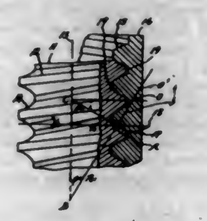
1,876,795. STEERING GEAR. NIKOLA TREBOJEVICH, Detroit, Mich. Filed Apr. 28, 1930. Serial No. 448,066. 4 Claims. (Cl. 74—41.)

1. In a steering gear of the worm and roller type, a roller comprising a plurality of rotary contact surfaces drawn about an axis in which the intersection of the said surfaces with an oblique plane passing through the



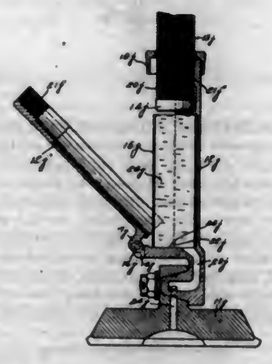
center of the roller are a series of convex curves all lying in a circle and all conjugate to a basic rack from which the worm thread contours were developed.

1,876,796. SCREW THREAD. NIKOLA TREBOJEVICH, Detroit, Mich. Filed Mar. 2, 1931. Serial No. 519,578. 7 Claims. (Cl. 85—1.)



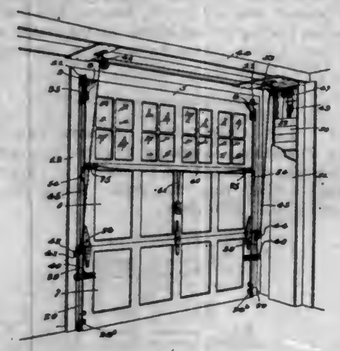
1. A screw having a helical thread of a constant pitch wound about an axis in which the thread contours are curved and concave in the axial plane and so inclined as to produce a gradually diminishing pressure angle as measured from the roots toward the tips of the thread.

1,876,797. WAX DISTRIBUTING MEANS. EDWARD V. TRELEVEN, Los Angeles, Calif., assignor to Peerless Products Company, a Corporation of California. Filed Feb. 1, 1926, Serial No. 85,251. Renewed July 23, 1929. 5 Claims. (Cl. 91—39.)



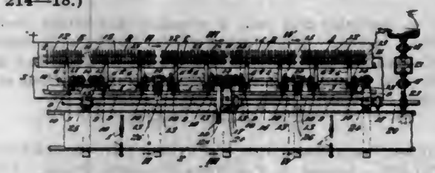
3. In a wax distributing means; a waxer head having a wax delivery passage; a wax container pivoted to the head; and a handle for manipulating the head and axially movable of the container for expressing wax therefrom into the head; said container including a pair of longitudinal sections pivotally joined together adjacent that part of the container that is nearest the head.

1,876,798. FOLDING GARAGE DOOR OR THE LIKE. BENJAMIN J. TRILLER, Dubuque, Iowa. Filed July 29, 1930. Serial No. 471,486. 18 Claims. (Cl. 20—20.)



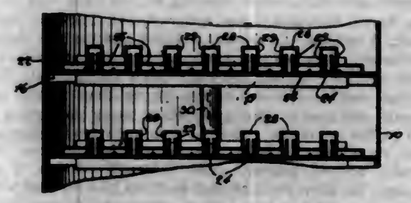
1. A garage door structure or the like, including a frame having a door opening therein, a door closing said opening and formed of hingedly connected superposed sections, a hanger bracket at each side of the frame provided with an angular slot, pintles on the door extending into and adapted to move along said slots, and an adjustable member mounted on each bracket and engageable with the pintle for adjusting the latter along the slot.

1,876,799. GATE FOR COKE WHARVES. CHARLES E. UNDERWOOD and CHARLES E. LEHR, Bethlehem, Pa., assignors, by mesne assignments, to The Koppers Company of Delaware, a Corporation of Delaware. Filed Mar. 8, 1928. Serial No. 259,961. 23 Claims. (Cl. 214—18.)



1. A gate operating mechanism for coke wharves including in combination, a plurality of gates to be opened and closed in timed relation, a motor, one or more cams for each gate, a cam shaft, a driving shaft operatively connected to said cam shaft and said motor, and means adapted to be operated by said cams for opening and closing the gates in timed relation.

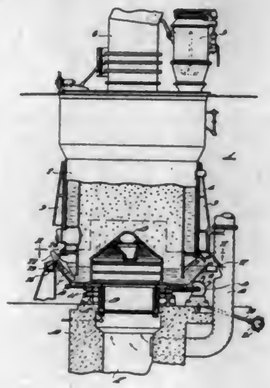
1,876,800. IMPROVEMENT IN FRACTIONATORS. FRANK VAN ACKER, Tulsa, Okla., assignor to Petroleum Engineering, Inc., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,410. 4 Claims. (Cl. 261—114.)



1. In apparatus of the class described, a contact tray having elongated spaced base members running from side to side of the tray, said members having upturned flanges

forming flow nozzles, channel shaped caps having downturned flanges and covering said nozzles from end to end thereof, and channel shaped perforated bubble plates each having downturned flanges resting on the respective base plate in spaced relation to its flanges, said caps having their flanges resting on the bubble plates at the side edges thereof, said bubble plates having flow openings at the ends of their webs.

1,876,801. GAS PRODUCER. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,244. 3 Claims. (Cl. 110—165.)



1. A rotatable ash pan, a rotatable ash-lifting device carried thereby, means operable to rotate said device when said ash pan is rotated, a trough for receiving ash from said device and means for removing ash from said trough.

1,876,802. ADJUSTABLE LECTURE AND CLASSROOM CHAIR. ALBERT R. VAN NUYS, Pocatello, Idaho. Filed Oct. 20, 1931. Serial No. 569,982. 2 Claims. (Cl. 155—94.)



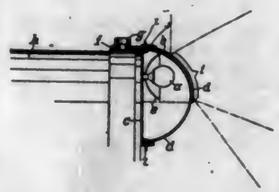
1. A chair of the character set forth comprising a base, a lower pedestal section secured to the base and of hollow, fluted formation, an upper fluted pedestal section arranged within the lower pedestal section for vertical adjustment with respect thereto, the corrugations of the upper pedestal section fitting within those of the lower pedestal section and one of the corrugations of the upper pedestal sections having a flattened upper portion, a vertical series of rivets carried by said flattened portion, a rivet extending through the corrugation of the lower pedestal section opposite said flattened portion, a pawl arranged between the pedestal sections and secured at one end to the rivet and provided with a hook engaging between a pair of said first rivets to maintain the upper pedestal section in adjusted position, and a seat secured to the upper pedestal section.

1,876,803. BOLT OPERATING MECHANISM FOR LOCKS. OSWALD D. VON MEHREN, New York, N. Y., assignor to Mehren Lock Co., Inc., Clifton, N. J., a Corporation of New Jersey. Filed Dec. 30, 1929, Serial No. 417,270. Renewed Apr. 13, 1932. 5 Claims. (Cl. 70—46.)



1. The combination of a key operated rotary part, a bolt operating member mounted to rotate about an axis eccentric of the barrel and through such rotation to engage with and operate suitable bolt mechanism, and an element having a pivotal connection with said member, and also connected to the barrel for rotation with the latter, said element being slotted to permit the pivoral connection between the said member and element to assume variable radial distances from the axis of rotation of the barrel during rotation of the barrel about its axis and the concurrent rotation of the member about its axis.

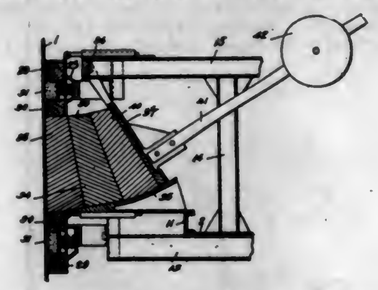
1,876,804. VEHICLE AUXILIARY LAMP. HERBERT VON STUMM, Rohlstorf near Segeberg, Germany. Filed Apr. 16, 1929, Serial No. 355,591, and in Germany Apr. 21, 1928. 1 Claim. (Cl. 240—7.1.)



In a vehicle headlight in combination, a source of light, a reflector disposed behind said source of light, a casing for said source of light and said reflector including a domed translucent cover disposed in front of said source of light, an opaque screen disposed adjacent the portion of said cover above the horizontal medial plane of said cover and having a reflecting interior surface, a substantially triangular aperture being provided in the portion of the screen disposed on that side of the vertical medial plane on which side of the roadway the vehicle travels to avoid vehicles proceeding in the opposite direction.

1,876,805. SOLID SEALING COMPOSITION FOR WATERLESS GASHOLDERS. REINHOLD RICHARD WAGNER, Berlin-Charlottenburg, Germany. Filed Apr. 9, 1928, Serial No. 268,586, and in Germany Apr. 13, 1927. 1 Claim. (Cl. 48—176.)

In a gasholder of the waterless type comprising a shell, a piston-like closure movable axially in said shell, and means interposed between said piston-like closure and the inner wall of said shell for the purpose of exerting

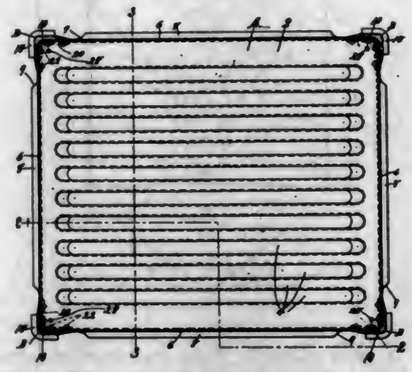


a pressure on a solid sealing composition, the process of providing said piston-like closure with a solid sealing composition composed of an emulsion of soap and mineral oil.

1,876,806. OPTICAL SYSTEM FOR PRODUCING PHOTOGRAPHS AND PROJECTING THE SAME IN NATURAL COLORS. MERRILL WAIDE, Newark, N. J., assignor to Natural-Color, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1929. Serial No. 358,178. 2 Claims. (Cl. 88—1.)

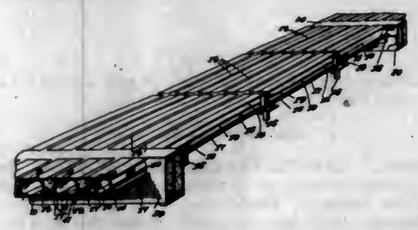
1. An optical system for photographically recording form and color of an object, comprising an objective to receive all the light from said object, means to disperse the light traversing said objective, a series of collecting lenses, and means to direct dispersed light from said dispersing means upon said collecting lenses without appreciable deviation, said collecting lenses being spaced at varying distances from said light directing means so that each of said lenses lies in the approximate focus of rays of the particular colors which fall upon the same whereby images are formed on a color sensitive emulsion corresponding to colors of the dispersed light.

1,876,807. SKID. CHARLES F. WALP, Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1929. Serial No. 395,864. 2 Claims. (Cl. 248—41.)



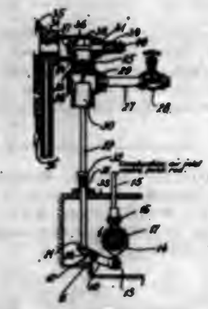
1. A skid comprising a corrugated top plate having an angle along each edge thereof one leg of said angle being merged with the other leg thereof to provide attaching portions at each corner of the plate, and supporting legs secured to said attaching portions and extending obliquely downward therefrom whereby to permit a second skid to be nested with the first skid with the legs of the respective skids in wedging relation.

1,876,808. FILLER BLOCK. ERNEST WALTER and ELMER E. KOEHLER, Newark, N. J., assignors to Porete Mfg. Co., Newark, N. J., a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,534. 3 Claims. (Cl. 72—66.)



1. In a filler block, in combination, an extended concrete member having a curved web extended longitudinally thereof and flanges along the top and bottom portions of said web, the top flange on the convex side of said web being narrower than the bottom flange upon that side and the top and bottom flanges on the concave side of said web being of equal width.

1,876,809. AIR STARTING SYSTEM FOR INTERNAL COMBUSTION ENGINES. WILLIAM WARD, Groton, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Mar. 11, 1926. Serial No. 93,889. 2 Claims. (Cl. 60—16.)

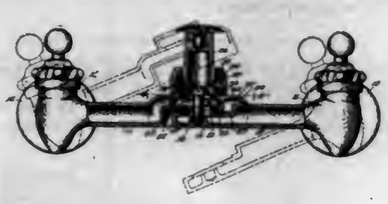


1. In an internal combustion engine having an inlet valve, the combination of a cam shaft, a cam thereon for operating the inlet valve of the engine, a chamber, a normally closed starting air valve between the chamber and the cylinder, an air-line leading to the chamber for supplying starting air, a second starting air valve controlling the flow of air from the air-line to the chamber, a piston rigidly connected with said second starting air valve, the movement of said piston and said second starting air valve being controlled by air pressure in the line, and connections between the piston and the cam, effective upon air pressure being admitted to the air-line, to cause said cam to open the second starting air valve, said first starting air valve being opened by air pressure in the chamber.

1,876,810. FAUCET. EARL G. WATROUS, Chicago, Ill. Filed June 15, 1931. Serial No. 544,560. 10 Claims. (Cl. 137—111.)

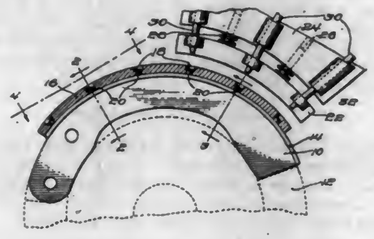
8. A faucet comprising a valve body adapted to be secured directly to a supply pipe and having an outlet exten-

sion, a second valve body also adapted to be secured directly to a supply pipe and having an outlet extension, an



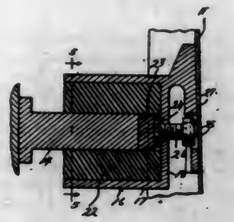
adjustable joint between the ends of said extensions and an outlet spout connected with said joint.

1,876,811. MANUFACTURE OF BRAKE SHOES. STANLEY WHITWORTH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 14, 1928. Serial No. 261,579. 8 Claims. (Cl. 219—2.)



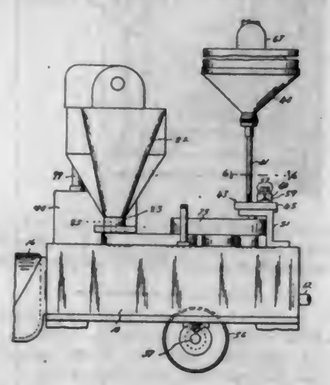
1. In the manufacture of brake shoes, the method of attaching brake lining to brake shoes which comprises permanently securing rivets to the rim of the shoe by welding, said rivets being disposed in countersunk holes in the lining, whereby said lining is permanently attached to said shoe.

1,876,812. MOTOR MOUNTING. EDWARD W. WILEY and GORDON I. GILLIES, Windsor, Ontario, Canada, assignors to Herbert H. Wiley, Utica, Mich. Filed Oct. 5, 1931, Serial No. 567,068, and in Canada Sept. 3, 1931. 6 Claims. (Cl. 248—14.2.)



4. A mounting for attaching a power unit to a vehicle chassis having a side sill, comprising a housing rigidly secured to the side sill and extending inwardly therefrom, a supporting arm projecting laterally outwardly from the power unit and extending into the housing in spaced relation to the sides and end walls thereof, resilient material arranged under compression within the housing between the side and end walls of the latter and the adjacent walls of the arm, and means for varying the pressure exerted by said resilient means on the end wall of said arm.

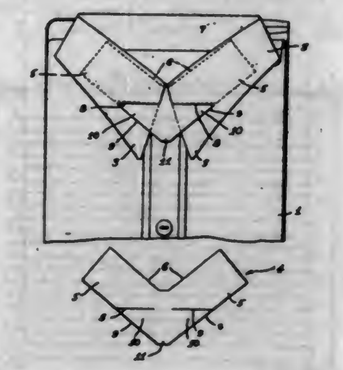
1,876,813. CAPSULE FILLING MACHINE. WARREN WILKIN and ARTHUR A. LEVERENZ, Detroit, Mich., assignors to Parke, Davis & Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 13, 1928. Serial No. 254,127. 17 Claims. (Cl. 226—41.)



7. In a capsule filling machine, capsule righting mechanism and actuating mechanism therefor including a lever, means for oscillating said lever, a second lever connected to said righting mechanism and means effecting a yieldable driving connection between said levers.

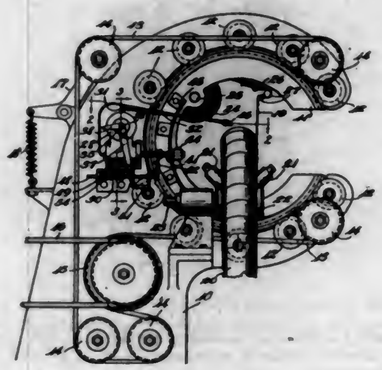
10. In a capsule filling machine, capsule unjoining and joining mechanism including a pair of relatively movable plates, each plate being provided with a series of apertures, the apertures in one plate being adapted to retain the caps of the capsules and the apertures in the other plate being adapted to retain the bodies of the capsules, and means for relatively moving said plates to successively bring each aperture in one plate in successive registration with two apertures in the other plate.

1,876,814. COLLAR SUPPORTER. EDWARD W. WILSON, Nashua, N. H., assignor to Nashua Surehold Company, Nashua, N. H., a Corporation of New Hampshire. Filed Jan. 4, 1932. Serial No. 584,636. 5 Claims. (Cl. 223—18.6.)



1. A collar supporter of the kind described, comprising a blank of sheet material of substantially V-shape to fit under the front portion of a collar and against the neck-band of a shirt, said blank having slits forming wings to overlie the flaps of said collar to hold the same in normal position.

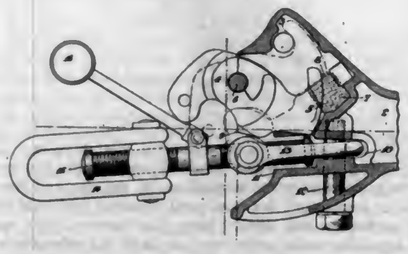
1,876,815. APPARATUS FOR WRAPPING TIRES. GEORGE F. WILSON and FLORAIN J. SHOOK, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 26, 1929. Serial No. 373,884. 14 Claims. (Cl. 242—6.)



1. In apparatus for wrapping annular articles the combination of means for enclosing the article in a succession of overlapped convolutions of wrapping material, and means for successively applying adhesive to the respective convolutions after they are on the article.

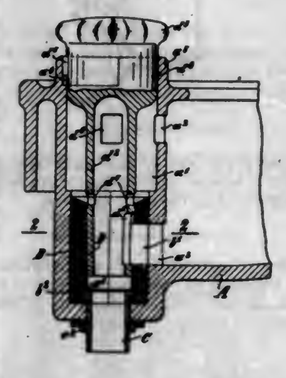
8. In tire-wrapping apparatus, the combination of means for supporting a tire and rotating it on its own axis, a rotary shuttle for applying a wrapper to said tire, an adhesive-dispensing device spaced from the wrapper and adapted to project adhesive thereunto, and means on said shuttle for actuating the adhesive-dispensing device.

1,876,816. CAR COUPLER. RUSSELL J. WITTMER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 5, 1926. Serial No. 127,259. 3 Claims. (Cl. 213—112.)



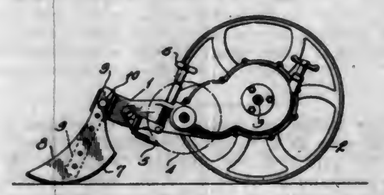
1. An automatic coupler comprising a head, a pivoted knuckle and a lock capable of effecting normal coupling operations with a like coupler and having a transitional coupling member mounted therein adjacent the central horizontal plane of the coupler and adapted without interference with the normal coupler parts to be rotated into and out of operative position by movement about a horizontal axis and being adapted when in operative position to extend forwardly beyond the buffing face of the coupler and be held between the guard arm and knuckle so as to permit a pull substantially along the longitudinal axis of the coupler, the said coupler being operable either as an automatic coupler or as a transitional coupler without the automatic coupler parts interfering with the transitional parts or vice versa.

1,876,817. WASTE AND OVERFLOW FOR LAVATORIES, BIDETS, BATHTUBS, OR THE LIKE. JEAN WOLFFERTS, Dusseldorf, Germany. Filed May 6, 1931, Serial No. 535,384, and in Germany May 14, 1930. 3 Claims. (Cl. 4—204.)



1. In a device of the type described a bowl casing, a discharge duct therein, a slide valve casing consisting of rubber and removably inserted in the said discharge duct, an inner groove in the lower part of the valve casing, and a connecting member for the discharge piping of the bowl casing made of metal and having an annular flange engaging the said groove and adapted to secure the slide valve casing to the bowl casing.

1,876,818. LAWN MOWER UNIT. CHARLES C. WORTHINGTON, Dunfield, N. J. Filed Aug. 3, 1929. Serial No. 383,303. 6 Claims. (Cl. 56—249.)

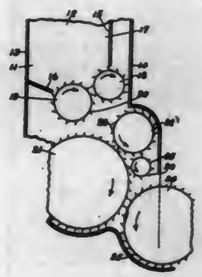


1. A lawn mower adapted for use on sandy lawns and the like comprising a frame containing a ledger knife and fly knife, a pair of ground wheels supporting one end of said frame and one or both serving to drive the fly knife, in combination with supporting means for the other end of said frame presenting an extended ground-contacting surface shaped to slide on the ground with a smoothing, as distinguished from a rut-marking effect thereon; and for this purpose being substantially co-extensive laterally with the width of the mower.

1,876,819. COTTON PREPARING MACHINE. ELMER T. WUEST, Cincinnati, Ohio. Filed Feb. 21, 1930. Serial No. 430,220. 5 Claims. (Cl. 19—100.)

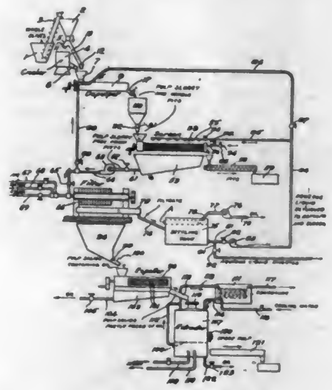
1. The combination with a carding machine comprising one main cylinder only, one worker only and one

stripper only, cooperating for carding fibers, of means for continuously sprinkling fibers in loose condition on-



to substantially the top of the main cylinder, and in advance of the worker and stripper, and means for removing the fibers from the main cylinder.

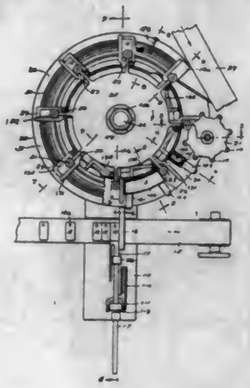
1,876,820. METHOD OF OBTAINING OIL AND OTHER PRODUCTS FROM OLIVES. CHARLES V. ZOUL, Los Angeles, Calif. Filed Feb. 27, 1928. Serial No. 257,211. 3 Claims. (Cl. 87—6.)



1. The method of treating olives comprising subjecting the same to a continued crushing operation to remove the pulp from the pits and disintegrate the pulp while maintaining all parts of the olives including the pits, together with all solid and liquid products of such disintegration, in admixture with one another throughout such crushing operation, the intensity of such crushing operation being sufficient to disintegrate the pulp and liberate the aqueous liquid content thereof and a portion of the oil content, but insufficient to crush the pits, resulting in formation of a suspension of uncrushed pits in a slurry containing substantially all portions of the pulp solids and liquids, subsequently separating the pits from said slurry, and then treating the slurry to recover oil therefrom.

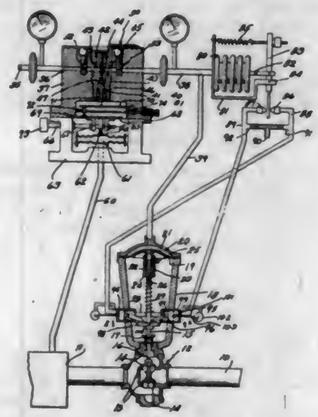
1,876,821. SOLDERING APPARATUS. THOMAS J. DUGAN, Lakewood, Ohio, assignor to Martin J. O'Donnel, Lakewood, Ohio. Filed May 3, 1929. Serial No. 360,086. 23 Claims. (Cl. 219—12.)

1. In a mechanism of the class described, the combination of a rotary head, means to rotate said head continuously, means for feeding containers to the head, feeding means to feed a metallic member to the head, and



a soldering apparatus including a soldering iron carried by the head to solder a metallic member to a metal part of the container.

1,876,822. AUTOMATIC TEMPERATURE OR PRESSURE CONTROL. ARTHUR J. MANSURE, Detroit, Mich. Filed Nov. 23, 1929. Serial No. 409,348. 11 Claims. (Cl. 236—79.)

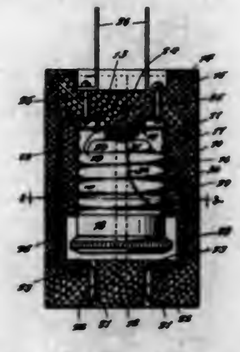


1. In combination, a fluid supply conduit, a valve for controlling the flow of fluid through said conduit, a member movable upon variations in the demand for the fluid, a connection between said member and said valve for actuating the latter from the former, and means for adjusting said connection to vary the effective actuation of the valve by said member upon a predetermined change in the demand for said fluid.

1,876,823. FUSIBLE ATTACHMENT PLUG. ERVIN ADAMS, Mount Carmel, Pa., assignor to Henry W. Brecker, Mount Carmel, Pa. Filed May 9, 1931. Serial No. 536,253. 5 Claims. (Cl. 200—116.5.)

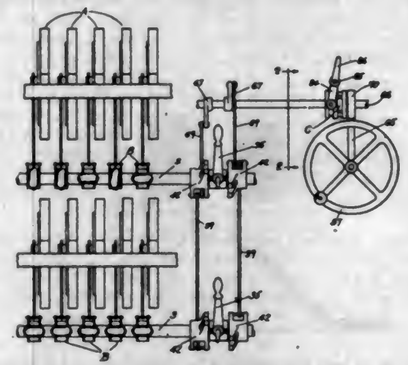
1. A fusible attachment plug comprising telescoped shells detachably secured together, a metal screw socket carried by one of the shells for receiving a standard fuse plug, prongs carried by one of the shells, spring tongues carried by the other shell in slots formed in the shell,

overlapping leaves carried by the shells having wiping contact with each other for electrically connecting the prongs and tongues in series with said socket, and a spring



tongue carried by one of the shells and projecting into said socket for connecting the center terminal of the fuse plug with one of said prongs.

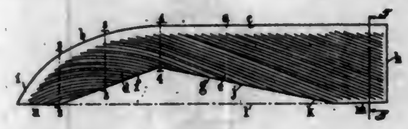
1,876,824. DIMMER CONTROL APPARATUS. FREDERICK B. ADAM, St. Louis, Mo. Filed May 18, 1929. Serial No. 364,231. 5 Claims. (Cl. 175—312.)



1. In a lighting control system including a dead-front control board, a bank of dimmers arranged in rows, interconnecting means for the individual dimmers, clutching means for interconnecting a plurality of rows, and a shaft adapted to be operatively connected to any number of said dimmers, the combination of an actuating gear for said shaft, a manual shaft-actuating element connected to said gear, a clutch associated with the actuating gear and shaft members operatively related to the parts of the clutch, adapted to indicate their engaging positions and a clutch actuating element, said actuating elements and indicating members being disposed on the face of said control board, and said shaft, actuating gear and clutch, at the rear thereof.

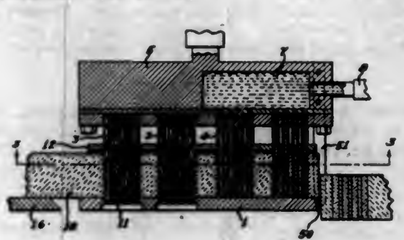
1,876,825. SEPARATION OF DRY MATERIALS. KENELM CHARLES APPLEYARD, Birtley, COLIN WILLIAM HIGHAM HOLMES, Low Fell, and IVOR LLOYD BRAMWELL, Birtley, England, assignors of one-fourth to The Birtley Iron Company, Limited, Birtley, England. Filed Jan. 4, 1929, Serial No. 330,865, and in Great Britain Jan. 24, 1928. 1 Claim. (Cl. 209—467.)

In a device of the class described comprising an elongated table having a preliminary feed section and a concentrating section, a banking bar and a tailing riffle extending along the longitudinal edges of the table, the feed section having groups of straight riffles thereon extending diagonally across the table and disposed in acute angular relation with respect to the tailing riffle, and a group of



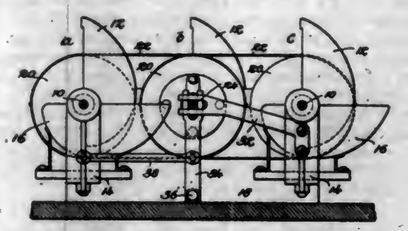
curved riffles upon the concentrating section and extending in a substantially longitudinal direction of the table and disposed in acute angular relation with respect to the tailing riffle, the riffles of the concentrating section varying in angularity.

1,876,826. MACHINE FOR MARKING SOAP AND THE LIKE. WILLIS O. ARMSTRONG and JAY A. MOWERS, Rome, N. Y. Filed Apr. 4, 1931. Serial No. 527,842. 10 Claims. (Cl. 25—7.)



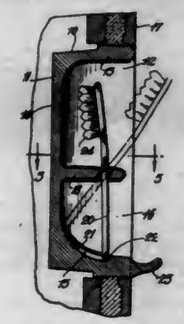
1. In a machine of the class described, the combination of a support for an article to be provided with ineffaceable markings running therethrough, means for punching passages through the article, and additional means for filling the passages with material, actuating means for effecting relative movement of the support, and the passage forming and filling means to effect the punching and filling operations, and means for effecting the relative feeding movement of the articles and the punching and filling means to bring the articles with the passages punched therethrough into juxtaposition to the filling means, and to bring the articles and the punching means into juxtaposition to perform the punching of another set of passages while the former set is being filled.

1,876,827. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Nov. 9, 1927. Serial No. 232,039. 8 Claims. (Cl. 175—41.5.)



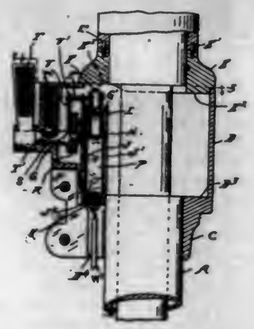
1. In radio apparatus, a condenser embodying two sets of blades only, each set being individually adjustable, a single operator, and connections between the operator and each set of blades responsive respectively to different movements of the operator to individually adjust said sets.

1,876,828. BATHROOM ACCESSORY. HERBERT ASHFIELD, Brooklyn, N. Y. Filed June 19, 1931. Serial No. 545,609. 3 Claims. (Cl. 312—113.)



3. A built-in tooth brush holder comprising a body provided with a horizontal supporting wall, a horizontal ledge extending from said body above and in spaced relation to said supporting wall and having an angularly disposed slot therein, a curved wall joining said supporting wall and said ledge, and a stop shoulder on said supporting wall.

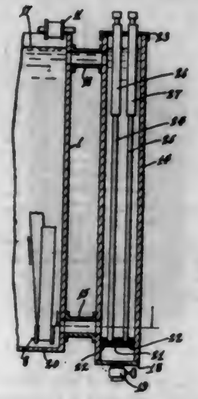
1,876,829. SIGNAL OPERATING MECHANISM. NESHAN AVAKIAN, Detroit, Mich. Filed Mar. 26, 1928. Serial No. 264,927. 3 Claims. (Cl. 200—59.)



1. A signal-control switch for mounting upon the steering post of a motor vehicle, comprising a substantially cylindrical shell for housing the switch and encircling the steering post, a pair of upstanding resilient contact arms supported by and within said shell and normally spaced and insulated from each other, a manually operable handle having a connecting portion extending through and from said shell, a sector plate within the shell and connected to the handle causing movement of one of said resilient contact arms to force it into contact with the other, a combined tripping and cam member having a portion engageable with the sector plate for moving the same in the opposite direction, thereby releasing its holding engagement with the contact arm and having another portion engageable with the same contact arm to retain it in the position in which it was previously held by the sector plate.

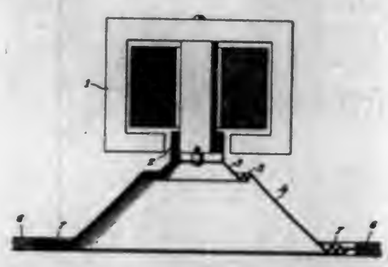
1,876,830. METHOD OF AND APPARATUS FOR TREATING PHOTOGRAPHIC BATHS. CARL E. BALASSA, Los Angeles, Calif. Filed May 5, 1930, Serial No. 449,965. Renewed Feb. 2, 1932. 5 Claims. (Cl. 204—5.)

2. In a method of maintaining photographic fixing baths free from sodium silver thiosulphate while in use, the steps of maintaining top and bottom portions of a fixing bath in communication with an electrolytic cell, continuously removing silver from such fixing solution in said cell by electro-plating, and maintaining circulation through



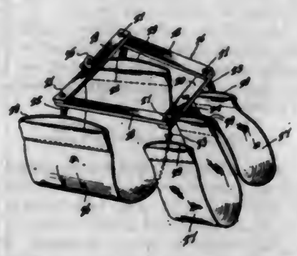
such cell by permitting the desilvered fixing solution to be displaced upwardly in such cell by fixing solution from the bottom of the fixing bath.

1,876,831. SOUND REPRODUCER. STUART BALLANTINE, Mountain Lakes, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 20, 1930. Serial No. 462,641. 3 Claims. (Cl. 181—32.)



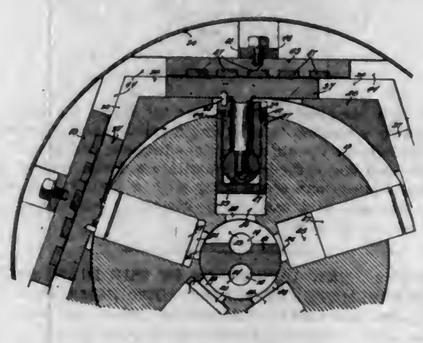
1. In a sound radiator, a plurality of sound radiating elements and compliant couplings connecting said elements, said couplings comprising a plurality of annular corrugations.

1,876,832. APPARATUS FOR LIFTING INVALIDS. EVERETT C. BANCROFT, Hamilton, N. Y. Filed Apr. 7, 1931. Serial No. 528,427. 1 Claim. (Cl. 5—89.)



A sling comprising a rigid frame having side bars and front and rear end bars, depending hooks at the corners of the frame and at the center of the front end bar, an upstanding hook at the center of the rear end bar to be engaged with a hoist, and a plurality of bands each provided at each end with a handle extending the full width of the band and having a central eye engageable with one of the depending hooks.

1,876,833. PUMP. ELEK BENEDEK, Milwaukee, Wis., assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Jan. 28, 1931. Serial No. 511,684. 15 Claims. (Cl. 103—161.)



1. In a pump or motor the combination of a pintle, a radial series of reciprocable piston and cylinder assemblies rotatable about said pintle, a rotary member surrounding said assemblies and rotatable therewith, a cross-head connected with each of said assemblies and freely reciprocable with respect to said rotary member in a direction normal to the axis of reciprocation of the connected assembly, and a lubricated bearing block interposed between each of said crossheads and said rotary member for sustaining the thrusts of said assemblies, each of said blocks having a pair of substantially plane faced bearing surfaces oppositely inclined in the direction of reciprocation of its associated cross-head.

1,876,834. SPRING WASHER. JOSEPH BERGE, Montclair, N. J., assignor to National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 12, 1931. Serial No. 556,676. 1 Claim. (Cl. 151—32.)



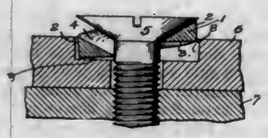
A spring washer open at its ends and of a helical shape, said washer having its inner face inclined inwardly to provide a countersunk portion adapted to cooperate with a bevel head screw passed within said washer and driven against the latter whereby said washer will be compressed and expanded and caused to exert a force both laterally and outwardly against the bevel head of the screw.

1,876,835. SPRING WASHER. JOSEPH BERGE, Montclair, N. J., assignor to National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 12, 1931. Serial No. 556,677. 1 Claim. (Cl. 151—32.)

A spring washer adapted for an inclined countersunk opening in a part to be secured to another structure, said washer being split and of helical or spiral form and having its outer and inner edges inclined in parallelism, said washer adapted to be used in connection with a bolt or screw having an inclined head, said bolt or screw adapted to be passed through said washer and part and tightened to said structure whereby the inclined head of said bolt or screw will be forced against the inclined edges of the washer and will thereby compress the latter and expand the outer inclined edges of the washer against the wall of said opening.



1,876,836. HELICAL LOCK WASHER FOR STRAIGHT COUNTERBORES. JOSEPH BERGE, Montclair, N. J., assignor to National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 12, 1931. Serial No. 556,678. 3 Claims. (Cl. 151—32.)

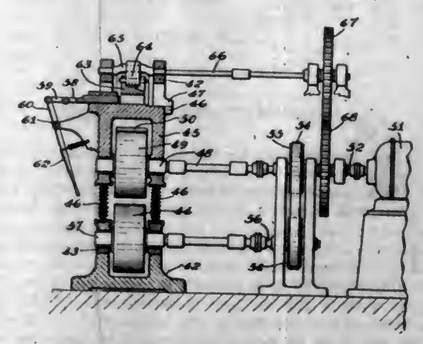


1. In combination, a body provided with a straight counterbore, a screw with a beveled head, and a spring washer in the form of a helical segment triangular in cross section disposed in said counterbore, said washer having an inclined face adapted to contact with said beveled head.

1,876,837. PROCESS FOR REDUCING THE ATTACKS BY ALKALINE LIQUIDS ON STRAINING CLOTHS. ANTON BETTSCHART, Neuhausen, Switzerland, and OTTO NYDEGGER, Bergheim-Erft, Germany. Filed Jan. 10, 1930, Serial No. 420,004, and in Germany Jan. 17, 1929. 4 Claims. (Cl. 23—184.)

1. A process for reducing the attacks of alkaline liquids on straining cloths, which comprises filtering said liquids in the presence of manganese-oxygen compounds.

1,876,838. FLYING CUTTER. FLORENCE C. BIGGERT, Jr., Crafton, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1929. Serial No. 402,381. 2 Claims. (Cl. 164—68.)



1. A flying cutter for severing moving material comprising a rotatable blade, a rotatable anvil roll, means for supporting said blade and roll so as to permit relative move-

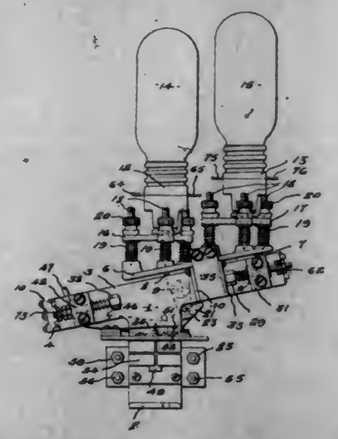
ment of one towards and away from the other, means for rotating said blade and roll at peripheral speeds which are substantially the same as the linear speed of the material to be severed, said means being constituted to produce a relative peripheral movement between said blade and roll to cause said blade to cooperate with varying parts of said roll, and means effecting a relative movement between said blade and said roll when it is desired to sever the material.

1,876,839. STALL GATE FOR RACE TRACKS. ARTHUR E. BIRTWISTLE and ANTON ROESER, Brooklyn, N. Y. Filed Dec. 21, 1929. Serial No. 415,700. 13 Claims. (Cl. 119—15.5.)



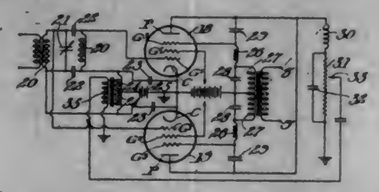
1. In a stall gate for jockey-ridden race horses, stalls, partitions laterally separating said stalls, and substantially horizontally disposed dash boards protruding from said partitions into said stalls at a level below that of the feet of a jockey mounted on a race horse, the surfaces of said dash boards extending at a downward incline from said partitions and being directed down at their point of furthest protrusion from said partitions.

1,876,840. LAMP CHANGING MECHANISM FOR BEACONS. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed July 24, 1929. Serial No. 380,646. 4 Claims. (Cl. 240—37.1.)



1. In a lamp changing mechanism for beacons and the like, the combination of a support provided with an inclined track extending transversely of the axis of the beacon, a carriage mounted on the track, a pair of electric lamps mounted on the carriage, the carriage being normally arranged at the upper portion of the track with one of the lamps in a predetermined position and an electric circuit in which the lamp in such position is connected, means for normally holding the carriage from movement down the track and means controlled by the breaking of the circuit through the lamp in said predetermined position for releasing the holding means, and means for giving a starting impulse to the carriage when the holding means is released.

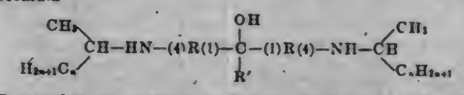
1,876,841. COMBINED RECTIFIER AND AMPLIFIER CIRCUIT. KNOX CHARLTON BLACK, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1930. Serial No. 447,303. 16 Claims. (Cl. 250—27.)



1. In a combined amplifier-detector stage, the combination with a vacuum tube having a cathode and a plurality of elements, of circuit connections between one of said elements and said cathode to constitute a diode rectifier, and circuit connections cooperating with a plurality of other elements and said cathode to constitute amplifier input and output circuits.

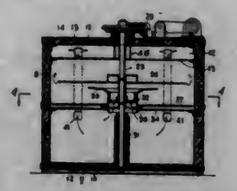
1,876,842. NEW DYESTUFFS OF THE DIAMINO-TRIPHENYLMETHANE SERIES. OTTO BÖGER, Dessau in Anhalm, and OSWALD MEISSNER, Uerdingen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1928, Serial No. 267,130, and in Germany Apr. 23, 1927. 5 Claims. (Cl. 260—68.)

1. The new dyestuffs of the diamino-triphenylmethane series being salts of an acid represented by the general formula



R meaning an aromatic radicle of the benzene series, R' meaning the radicle of a benzene disulphonic acid and n standing for a whole number; these dyestuffs in the shape of their dry sodium salts being dark powders soluble in water with a blue color and dyeing wool blue tints.

1,876,843. BAKE OVEN. ROBERT BOLLING, Detroit, Mich. Filed Dec. 19, 1930. Serial No. 503,455. 11 Claims. (Cl. 107—60.)

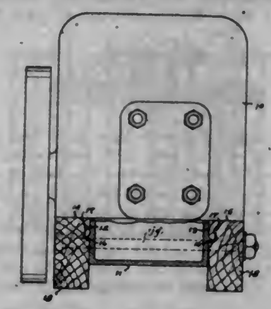


1. In a bake oven, walls defining an enclosure, a plurality of vertically spaced shelves for supporting bake goods, a heat unit in the lower part of the enclosure, the lower shelf being provided with a substantially centrally disposed opening, the upper shelf being substantially closed centrally but spaced from the walls at its edges, and a deflector associated with the lower shelf for directing heated currents which pass through the opening in the lower shelf into close proximity with the upper shelf.

1,876,844. ENGINE BASE CONSTRUCTION. ALFRED C. BOOCK, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,626. 7 Claims. (Cl. 248—14.)

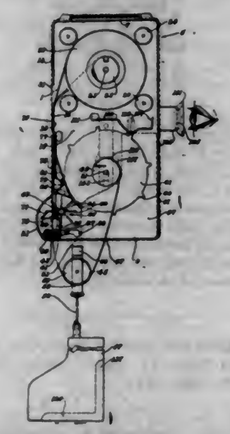
1. In an internal combustion engine having a casing portion depending from the frame of the engine, paired sub-

base members extending longitudinally of the engine, and laterally engaging said casing portion holding bolts extending transversely of the engine and of said sub-base mem-



bers, and means formed integrally with, and extending from the engine base, coacting with said bolts for securing said engine and sub-base against relative displacement.

1,876,845. MOTION PICTURE APPARATUS. ROBERT S. BOWEN and JOHN ELLIS BOWEN, West Newton, Mass. Filed Apr. 3, 1931. Serial No. 527,440. 3 Claims. (Cl. 88—18.)



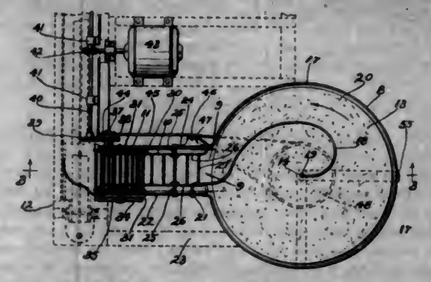
1. Film-exhibiting apparatus comprising a supply-spool, a take-up spool, intermittent film-escapement mechanism, a pulley adapted to run in a film-loop intermediate the spools, a weight, and elastic inertia- and vibration-absorbing means suspending the weight from the pulley.

1,876,846. WELDING AGENT. LEOPOLD BRANDT, Dortmund-Horde, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Aug. 4, 1930, Serial No. 473,132, and in Germany Aug. 19, 1929. 7 Claims. (Cl. 148—23.)

1. Agent for welding metals containing carbonyl compounds of metal of the iron group.

1,876,847. FEEDING MECHANISM. HENRY J. BRUBAKER and JOHN B. BRUBAKER, San Dimas, Calif., assignors, by mesne assignments, to Kunkel Manufacturing Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed Nov. 13, 1929. Serial No. 406,812. 14 Claims. (Cl. 198—33.)

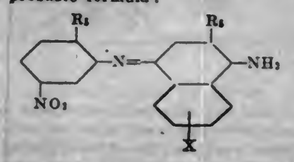
1. A feeding mechanism comprising a movably mounted object supporting member, object-turning units rotatably mounted adjacent to one another above said member and extending transversely of the path of movement of said member and one of said units constructed and adapted to



successively frictionally engage the rear side of objects on said member and move said objects into engagement with another of said units, and a means to operate said member.

1,876,848. MANUFACTURE OF NEW AZO DYES. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Apr. 7, 1930, Serial No. 442,452, and in Great Britain Apr. 11, 1929. 29 Claims. (Cl. 260—72.)

1. In the manufacture of new trisazo dyes capable of dyeing regenerated cellulose in even level shades, the process which comprises diazotizing a nitro-azo-compound having the probable formula:



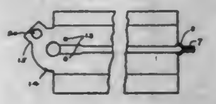
wherein R_5 represents hydrogen, an alkyl or alkoxy group, R_6 represents hydrogen or an alkoxy group, X represents hydrogen or sulphonic group, coupling the diazo compound thus produced with an azo coupling component of the class consisting of a carboxylic acid of a phenol, a naphthol, and a naphthol-sulfonic acid, to form a nitro-disazo compound, reducing the said nitro disazo compound to form the corresponding amino compound, diazotizing said amino compound and coupling with an amino-naphthol-sulphonic acid and then isolating the trisazo dye thus produced.

1,876,849. STEEL AND RUBBER PRODUCT. BUDD BRONSON, Lakewood, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 5, 1927. Serial No. 237,801. 1 Claim. (Cl. 18—59.)



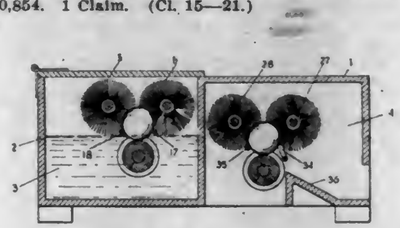
A rubber steel article such as described, comprising a sheet metal body with locking projections struck up from its margin and with perforations inside its margin, and a rubber covering molded and vulcanized to one side thereof, the rubber having a thickened margin and in the molding operation being positively interlocked with the body by the projections which extend up into the thickened margin and by the rubber being squeezed through the perforations inside the margin.

1,876,850. REGISTER FOR HEATING PLANTS. JOHN J. BURGESS, Rock Island, Ill., assignor to Rock Island Register Company, Rock Island, Ill., a Corporation of Illinois. Filed July 17, 1930. Serial No. 468,670. 8 Claims. (Cl. 98—110.)



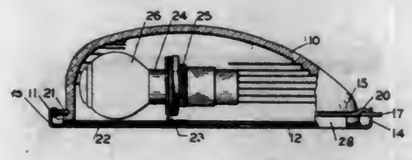
3. In a register, a sheet metal louvre having an extension at one end, the extension being integral along its entire width with the louvre, and the sides of said extension at the inner or base end being rolled up towards each other to form a stop substantially in the shape of a dome with one side open, and to form a cylindrical pin outward of said stop.

1,876,851. WASHER AND/OR DRIER FOR GOLF BALLS OR SIMILAR ARTICLES. GROVER F. BURG, Ann Arbor, Mich. Filed Dec. 8, 1930. Serial No. 500,854. 1 Claim. (Cl. 15—21.)



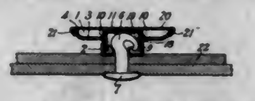
A device for cleaning spherical articles such as golf balls, comprising in combination a pair of rotary brushes, a rigid helically grooved worm, a pair of rigid guides positioned parallel to, and between, the worm and the brushes for carrying the spherical article along a straight line path between the worm and the brushes, and a plurality of projections positioned along the said worm for shifting the axis of rotation of the ball as it travels along the said worm, the said brushes being adapted to rotate in opposite directions to urge the said ball downwardly upon the said worm and projections.

1,876,852. NAVIGATION LIGHT. VICTOR E. CARBONARA, Rockville Center, N. Y., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,057. 6 Claims. (Cl. 240—7.7.)



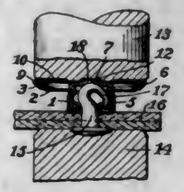
1. The combination with a base-plate, a lamp mounting carried thereby and a lens enclosing the lamp mounting, of means for detachably securing the lens to the base-plate, said means consisting of a lens-engaging loop having two ends which may be sprung laterally of the lens to release the same and which are locked together to hold the lens in position when engaging the same, and means for pivotally mounting said lens-engaging loop on said base-plate.

1,876,853. SHELL BUTTON. LEONARD R. CARLEY, Watertown, and WALTER T. ABEL, Waterville, Conn., assignors to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 18, 1931. Serial No. 545,322. 4 Claims. (Cl. 24—95.)



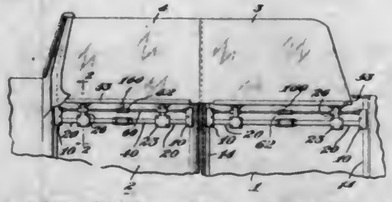
4. A button comprising a hollow shell and an integral hub, a die fitting within said hub, the bottom of the die being radially split and perforate, the bottom of the hub of the button shell also being perforate, a shoulder on said die and overhanging the peripheral edge of the hub of the button shell, a cap on said shell and contacting with the upper surface of the die, and pointed indentations formed in the hub of the button shell and extending into the walls of the die to rigidly secure the die in the button shell.

1,876,854. BUTTON. LEONARD R. CARLEY, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 17, 1932. Serial No. 599,518. 5 Claims. (Cl. 24—95.)



1. The combination of a tack button and tack fastener, the button consisting of a shell and an ornamented stamped cap fitting tightly thereon, an anchor fitting within the shell, the upper surface of the anchor having a central protrusion therein, the tack deformed and clenched within said anchor and extending within the said protrusion, a central ornamentation in the cap, and the protrusion of the anchor backing up the under surface of said central ornamentation.

1,876,855. VEHICLE BODY. RAYMOND L. CARR, Boston, Mass. Filed Sept. 11, 1931. Serial No. 562,284. 17 Claims. (Cl. 296—45.)

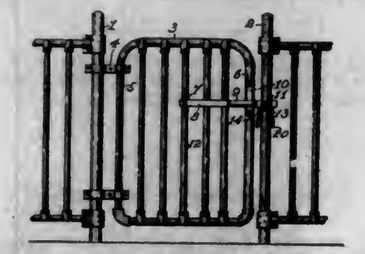


1. A vehicle body comprising a hollow body wall, a pair of panels movable from a lowered position thereabove, a guide in the body wall, torsion spring means slidably associated with said guide, and an arm extending upwardly from said spring to the lower portion of the panel, said spring yieldably pressing one of the panel edges against that of the other panel.

1,876,856. GATE LATCHING DEVICE. JOSEPH B. CLAY, Cedar Falls, Iowa, assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Filed Apr. 16, 1931. Serial No. 530,615. 4 Claims. (Cl. 292—210.)

1. The combination with a swinging gate and a head post, of a latch bar pivoted at one end on the gate to project therebeyond across the head post, a medially

dentated yoke embracing said post with end weights substantially below its detent and pivotally mounted on the head post to engage said latch bar, to have the detent



normally yieldingly keep said detent engaged with the latch bar, and means on said head post at opposite sides of said detent and extending therebeyond to serve as side guards therefor.

1,876,857. PROCESS OF MAKING POLYMERS OF ACETYLENE. WILLIAM S. CALCOTT, Penns Grove, and FREDERICK B. DOWNING, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 1, 1928. Serial No. 303,494. 17 Claims. (Cl. 260—170.)

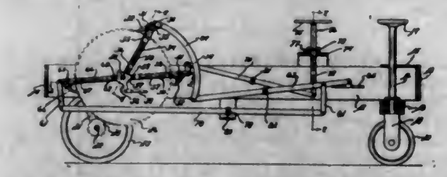
2. In a process for the continuous production of acetylene polymers, the steps which comprise continuously passing acetylene into contacts with a heated acid reacting cuprous chloride catalyst adapted to promote the polymerization, continuously removing the unreacted acetylene together with the volatile products of the reaction, condensing said products, separating the unreacted acetylene from the acetylene polymers and, returning said unreacted acetylene to the reaction.

1,876,858. ACOUSTIC DEVICE. HENRI CHIREIX, Paris, France. Filed May 2, 1929, Serial No. 359,823, and in France May 3, 1928. 2 Claims. (Cl. 181—31.)



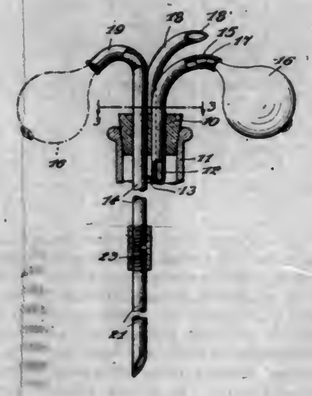
1. Acoustic apparatus comprising at least one support, a supporting element lodged in said support and comprising a band made from elastic material curved back around a circular spring so as to form a concave surface, and at least one conical diaphragm whose rim bears upon said concave surface.

1,876,859. VEHICLE AND MECHANISM FOR PROPELLING THE SAME. LOUIS A. COLELLA, Detroit, Mich., assignor of one-half to Marie Shell, Detroit, Mich. Filed Apr. 16, 1931. Serial No. 530,575. 5 Claims. (Cl. 208—34.)



1. A vehicle construction of the class described, comprising: a frame; traction wheels for supporting said frame; a rotatable gear adapted upon rotation for rotating said traction wheels; a bar rockably mounted intermediate its ends on the axis of said gear; a pair of dogs each rockably mounted on opposite ends of said bar and adapted when in operative position for engaging the periphery of said gear and rotating the same upon rocking of said bar; means for selectively moving either of said dogs to inoperative position; and rockable means for rocking said bar.

1,876,860. NONDRIP SIPHON AND AGITATOR. FRANK B. COONEY, Sandusky, Ohio, assignor to The American Crayon Company, Sandusky, Ohio, a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 414,074. 1 Claim. (Cl. 215—4.)



A liquid delivering device for bottles comprising a stopper adapted to be fitted into the bottle neck, a delivery tube for the liquid extending through said stopper having a laterally and downwardly curved outer discharge end, a pair of additional tubes extending through said stopper and having their outer ends laterally curved, a hand operated air compresser having means for interchangeable connection with said curved end of one of the latter tubes and the outer end of the delivery tube to force air under pressure into the bottle, and the other of said last named tubes constituting an air vent having an unobstructed bore, and the outer open end thereof being positioned above and substantially in the same vertical plane with the air inlet tube for the convenient application of the thumb to said open end of the vent tube while the liquid is being delivered by the operation of the air compresser through said delivery tube.

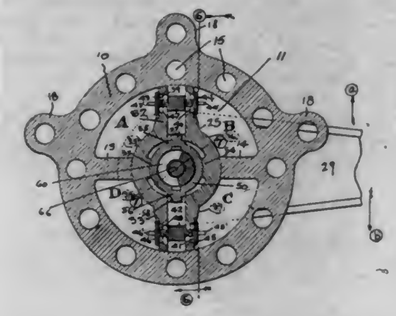
1,876,861. MUFFLER. JOHN J. COMPO, Defiance, Ohio. Filed Dec. 21, 1929. Seiral No. 415,655. 2 Claims. (Cl. 137—160.)



1. In a muffler, a cylindrical drum, a core comprising a pair of cones and three discs, two of the discs surrounding the smaller ends of the cones and the third disc located at the larger ends of the cones, the said discs fitting the interior of the drum, a cylindrical tubular member located within one of the cones and extending to the central disc of the muffler and having openings in the vicinity of the central disc, the last named cone having openings near the inlet of the muffler, the central

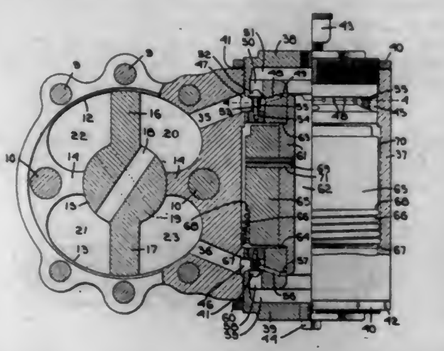
disc having openings exterior to the said cones, the other of the cones having openings near the central disc, the smaller end of the last named cone forming the outlet of the muffler.

1,876,862. SPRING REACTION NEUTRALIZER. GROSVENOR M. CROSS, Belvedere, Calif. Filed July 30, 1927. Serial No. 209,595. 7 Claims. (Cl. 188—89.)



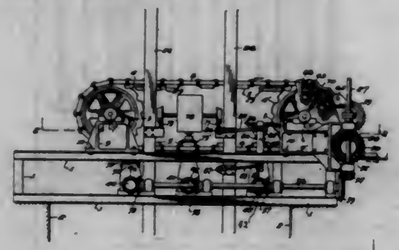
1. A shock absorber for two spring-connected bodies which have a limited spring distorting movement toward and from each other comprising a piston chamber member and a rotary piston member therein in which all the wall surfaces with which the piston member is in slidable engagement are in fixed relation to each other and to the piston chamber member, the said piston member and piston chamber member being connected respectively to said bodies and acting to permit limited movement of the bodies away from a normal position either toward or from each other and to retard equally for equal extents of movement the return movement in either direction to said normal position, and means for adjusting the forces exerted between the two members to conform to changes in the normal position of said bodies with respect to each other.

1,876,863. SHOCK ABSORBER. GROSVENOR M. CROSS, Boston, Mass. Filed June 6, 1928. Serial No. 283,354. 19 Claims. (Cl. 188—89.)



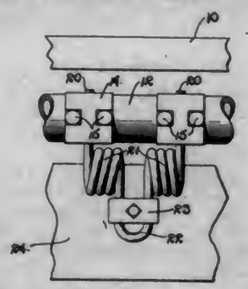
1. In a fluid-operated shock absorber connecting the axle and body of a vehicle, a valve balanced to move with the body whenever the body moves vertically at a constant velocity and to move with respect to the body in either direction only as a result of inertia due to a change in such velocity and means controlled by the valve acting to prevent separation and permit convergence of the axle and body when the valve is in one extreme position and to prevent convergence and permit separation of the axle and body when the valve is in its other extreme position and to check said separating or converging movements when the valve is between said positions.

1,876,864. BRICKMAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed Oct. 11, 1930. Serial No. 488,109. 3 Claims. (Cl. 25—100.)



1. In a brick making machine having an endless chain conveyor, molds fixed to said conveyor in substantially spaced relation to each other, overhead material discharge means positioned above the conveyor for dropping brick making material into the molds, means for driving the chains to cause the molds to be moved successively through the machine, beneath the material discharge means, the molds of the upper flight of the conveyor being staggered with respect to the molds of the lower flight, and the space between the molds being unobstructed whereby flow of brick making material from the hopper into a lower flight mold will be unobstructed.

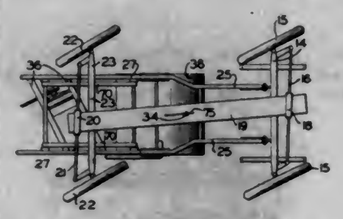
1,876,865. SCRAPER BLADE MOUNTING. GEORGE E. DEAN, Walker Township, Kent County, Mich., assignor to Charles G. Willett, Grand Rapids, Mich. Original application filed Mar. 10, 1930, Serial No. 434,492. Divided and this application filed Oct. 7, 1931. Serial No. 567,350. 4 Claims. (Cl. 37—143.)



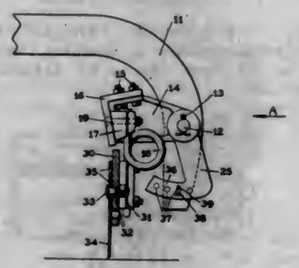
2. In a device adapted to scrape roads or the like, a supporting means, a blade spaced a short distance from said supporting means and connecting means between the said supporting means and the said blade, said connecting means including a cylindrically shaped coil spring, said spring being located in spaced relationship to the said supporting means and abutting against said blade for the purpose described.

1,876,866. STREET SWEEPER. GEORGE E. DEAN, Grand Rapids, Mich., assignor to Charles G. Willett, Grand Rapids, Mich. Filed Dec. 22, 1930. Serial No. 503,960. 9 Claims. (Cl. 280—91.)

1. An automotive vehicle comprising a front axle, pivoted wheels thereon, a tie rod connecting the wheels so that movement of one wheel about its pivot is transmitted to the other wheel, a guideway rigid with the tie rod, a frame, means to pivot the frame to the front axle, wheels for the frame, means to pivot the wheels on the frame, guiding means for the wheels, a lever pivoted on the frame and having one end received in the aforesaid guideway and means connecting the other end of the lever and the guiding means for the last mentioned wheels whereby movement of the tie rod will cause movement of the guiding means.

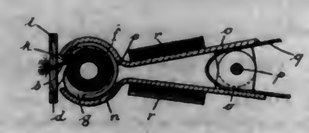


1,876,867. SPRING GRADER AND MOLDBOARD. GEORGE E. DEAN, Walker Township, Kent County, Mich., assignor to Charles G. Willett, Grand Rapids, Mich. Filed Oct. 7, 1931. Serial No. 567,349. 4 Claims. (Cl. 37—143.)



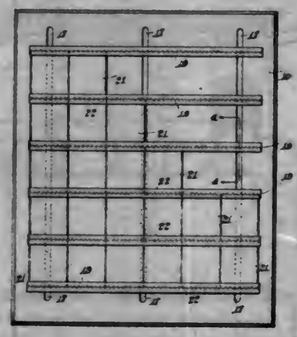
3. In a device of the character described, an upper moldboard, a support, means connecting the upper moldboard to the support, a lower moldboard and spring means interconnecting the lower moldboard to the upper moldboard, said moldboards lying in substantially the same plane.

1,876,868. METHOD AND MEANS FOR PERMANENTLY WAVING HAIR. ERNEST DE BAERDEMAEKER, Brussels, Belgium. Filed May 5, 1930, Serial No. 450,037, and in Belgium June 5, 1929. 7 Claims. (Cl. 132—36.)



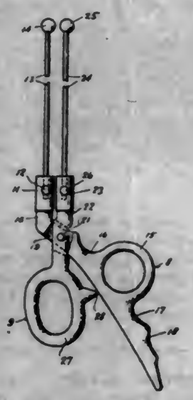
1. Apparatus for permanently waving hair comprising a cylindrical core about which a lock of hair is adapted to be wound, and a casing enclosing the hair on the core including gripping means and two leaves of flexible material the edges of which are clamped about the hair on the core by the gripping means and the leaves being wrapped in opposite directions about the hair on the core and the gripping means and having the side edges thereof folded within the edges of the core.

1,876,869. CONTAINER DISPLAY BOARD. THOMAS DE LORENZO, West Medford, Mass. Filed May 12, 1930. Serial No. 451,633. 7 Claims. (Cl. 206—80.)



1. In a device of the class described, a board provided with a plurality of open vertical and parallel slots extending substantially the entire length of same board; a plurality of T-shaped members extending transversely of said slots the flanges of which are considerably removed from the front face of said board; a plurality of threaded projections secured to each of said members and extending through said slots; and clamping nuts on said threaded members.

1,876,870. BELL HAMMER HOLDER. HANS DOLLHOFF, Buffalo, N. Y. Filed Feb. 9, 1932. Serial No. 591,905. 4 Claims. (Cl. 81—404.)

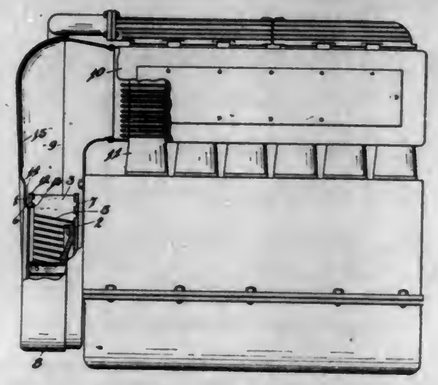


1. As a new article of manufacture, a hand grasped and manipulated hammer accessory comprising a device including a pair of intersecting pivotally connected members constructed at their inner ends to form a hand-grip and at their outer ends to accommodate two or more conventional hammers, whereby to permit the hammers to be held in an even plane with each other and moved toward and from each other in predetermined spaced interval distances for playing the tone of musical chords in unison.

1,876,871. FAN CONSTRUCTION. CARL T. DOMAN, Syracuse, N. Y., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 29, 1930. Serial No. 485,049. 4 Claims. (Cl. 230—127.)

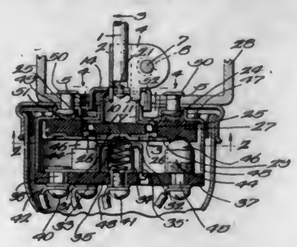
1. A centrifugal fan including an annular front wall, enclosing an air inlet, and a closed rear wall, said front and rear walls having substantially parallel opposing faces;

vanes between said parallel faces and confined between the planes of the faces, said vanes having portions extending inwardly beyond the inner edge of the annular front



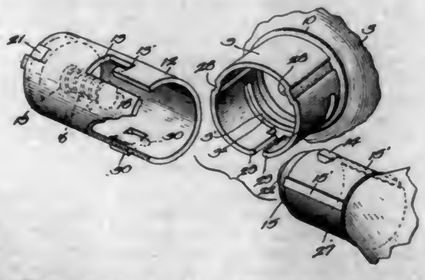
wall, and having their inner portions inclined rearwardly and the edges of said inner portions inclined inwardly toward the axis of the fan.

1,876,872. ELECTRIC SWITCHING MECHANISM. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 6, 1928. Serial No. 252,282. 5 Claims. (Cl. 287—103.)



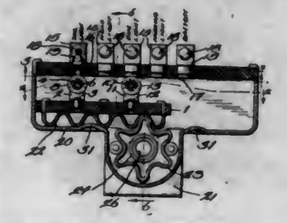
1. A coupling member formed of spring sheet metal folded into a U and having a socket portion at its bight and flat sides extending from said socket portion and having a prong at the bight and another prong upon one of the flat sides; and a clamping device for drawing one of said flat sides toward the other.

1,876,873. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Oct. 23, 1929. Serial No. 401,722. 7 Claims. (Cl. 176—32.)



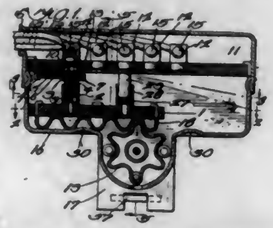
1. The combination with a lamp socket; of an incandescent lamp having its base received in said socket and which base is smaller in cross section than the bore of the socket, said socket and lamp base having interengaging laterally extending formations one of which hooks upon the other, said formations having camming engagement forcing lateral movement of the lamp base against a side of the socket.

1,876,874. ELECTRIC SWITCH. HARRY A. DOUGLAS, Bronson, Mich. Filed Dec. 16, 1929. Serial No. 414,490. 14 Claims. (Cl. 200—16.)



1. A switch including two switch contact bearing members relatively movable to bring the contacts thereon into and out of engagement, one of said members carrying spring pressed rotatable annular portions contacting with the other member, three of said portions forming a triangle extending in the direction of movement of the members.

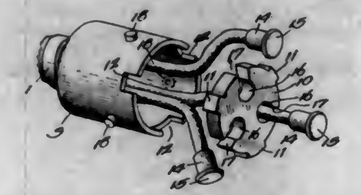
1,876,875. AUTOMOTIVE VEHICLE SWITCHING MECHANISM. HARRY A. DOUGLAS, Bronson, Mich. Filed Dec. 16, 1929. Serial No. 414,492. 7 Claims. (Cl. 200—59.)



1. The combination with a hollow rotatable shaft for operating switching mechanism of an automotive vehicle; of a casing for the switching mechanism, said shaft extending through the casing; a contacting element located in the region of the lower end of the hollow switch operating shaft; an insulated contact assembled with this shaft in a position to be engaged upon the exterior of the casing and engaged by the aforesaid contacting element; and a conductor connected with and extending from the contact that is assembled with the switch operating shaft and extending through this shaft to the upper end thereof.

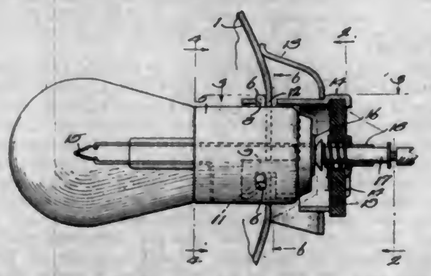
1,876,876. CIRCUIT CONTINUING DEVICE. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 3, 1930. Serial No. 425,544. 1 Claim. (Cl. 173—328.)

The combination with a conductor fixed at one end and at its other end having a tubular metallic contact carrying member thereon, said member being formed with a shank of larger diameter than the conductor and terminating in a flanged contact portion; of a contact carrying disc having a recess which is inclusive of a substantially circular portion spaced from the periphery of the disc and within which the aforesaid shank may be snugly received and said recess having a portion substantially narrower than the diameter of said shank extending from the circular portion to the periphery of the disc and through which the conductor where adjacent the shank may be passed laterally, the shank being snugly receivable into the circular portion of said recess when it is in register with this recess portion and the conductor is pulled upon in a suitable direction, the extent to which the shank is drawn into the circular



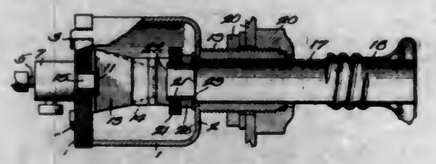
portion being limited by the flanged contact which is engageable with the disc where it margins the circular portion of the recess, whereby said contact may be positioned on said disc relatively near to the center thereof without disconnecting it from the conductor.

1,876,877. REFLECTING ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 3, 1930. Serial No. 425,547. 4 Claims. (Cl. 240—41.)



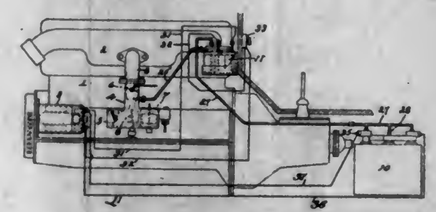
1. The combination with an incandescent lamp whose base is laterally enlarged; of a mounting therefor; a socket receiving the base of said lamp, the lateral enlargement of the lamp base being between a portion of the socket and said mounting; and a spring pressing the socket upon the lateral enlargement of the lamp base and, through the intermediation of the socket, pressing the lateral enlargement of the lamp base against said mounting.

1,876,878. ELECTRIC SWITCH. HARRY A. DOUGLAS, Bronson, Mich. Filed Aug. 8, 1930. Serial No. 473,800. 3 Claims. (Cl. 200—172.)



1. In a structure of the class described, a mounting having an opening therethrough; an exteriorly threaded sleeve passing through said opening; a clamping nut on said sleeve and clamping the sleeve to the mounting; a hollow shank carrying a contact actuator at one end and reciprocable in said sleeve and the other end of the shank being threaded by a distortion of the metal of the shank; and a hollow knob having a skirt portion provided with threads interengaging with the threads of the shank, said skirt portion surrounding the shank and interengageable with the nut to limit the movement of the shank in the direction of the actuator.

1,876,879. CHARGE-FORMING APPARATUS FOR INTERNAL COMBUSTION ENGINES. WALTER DRABOLD, Detroit, Mich. Filed Aug. 7, 1929. Serial No. 384,200. 3 Claims. (Cl. 123—119.)

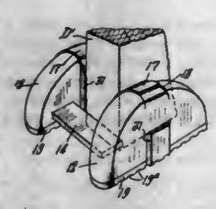


1. An apparatus for forming gaseous fuel charges for internal combustion engines, including means for producing an initial flow of carburetted air, a water decomposing gas generator having an outlet into said flow, and a storage battery connected for delivery to said flow, of gas given off by said battery.

1,876,880. IMPROVING THE STABILITY OF DIAZO SOLUTIONS IN THE PRESENCE OF IRON. OTHMAR DRAPAL, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928, Serial No. 328,049, and in Germany Dec. 24, 1927. 2 Claims. (Cl. 23—250.)

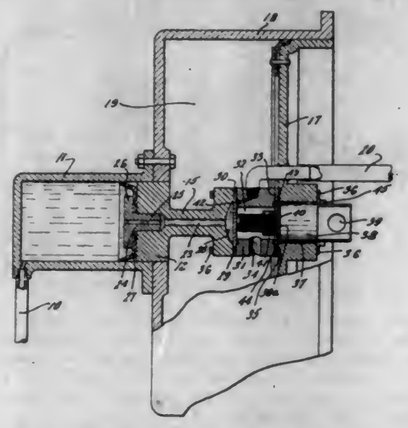
1. A method of improving the stability of a diazo solution in the presence of iron which comprises adding nitrous acid to said diazo-solution in an amount at least equivalent to the amount of alkali metal nitrite originally used to form the diazo solution.

1,876,881. DOORSTOP. WILLIAM H. DURANT, Reading, Mass. Filed Nov. 4, 1931. Serial No. 572,955. 7 Claims. (Cl. 292—288.)



1. A door stop comprising a pair of blocks formed to rest on a floor, and having opposed inner sides arranged to face opposite sides of a door, and a neck rigidly attached to the blocks and spacing them apart with their inner sides substantially parallel with each other, the neck being formed to enter the space between the lower end of a high hung door and a floor, and permit the location of the blocks at various distances from the swinging edge of the door, the neck being located at one side of the longitudinal centers of the blocks so that it constitutes an end of a door receiving recess between the major portions of the blocks, and is adapted to abut the swinging edge of a low hung door in said recess, said blocks being provided with anti-rattling buffers extending vertically across the mid length portions of their sides and projecting outwardly therefrom to prevent contact of any portions of the blocks with the door.

1,876,882. FLUID ACTUATED BRAKE. WILFRED A. EATON, Cleveland, Ohio. Filed Mar. 16, 1929. Serial No. 347,678. 2 Claims. (Cl. 60—54.6.)



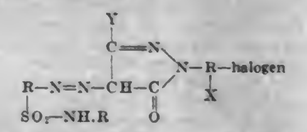
1. In a braking system employing liquid for transmitting the brake-applying force, with a master cylinder having a piston movable therein for the purpose, a vacuum cylinder, a power piston movable in said vacuum cylinder, piston rod means connecting said pistons, valve means arranged for connecting a source of negative fluid pressure with the vacuum cylinder, operator-operated means for controlling said valve means, said master cylinder piston having an opening, and means associated with said opening for causing said valve means actuation to be opposed in amounts varying with the pressure of the liquid against said master cylinder piston.

1,876,883. MANUFACTURE OF DEXTROSE. CHARLES EGERT, Leonia, N. J., WILLIAM B. NEWKIRK, Riverside, Ill., and MEYER MOSKOWITZ, Spring Valley, N. Y., assignors to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 1, 1927. Serial No. 180,332. 6 Claims. (Cl. 127—39.)

1. Method of manufacturing dextrose which comprises making a partial conversion of the starch, partially neutralizing the solution, filtering the same mechanically and over bone black, treating the solution with a neutralizing agent to increase the pH value, concentrating it, filtering at the higher density over bone black and then completing the conversion.

1,876,884. YELLOW PYRAZOLONE MONO AZO DYESTUFFS. HEINZ EICHWEDE and JOSEF RACHOR, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929, Serial No. 392,250, and in Germany Sept. 21, 1928. 8 Claims. (Cl. 260—87.)

1. As new products, the azo dyestuffs of the following probable general formula:



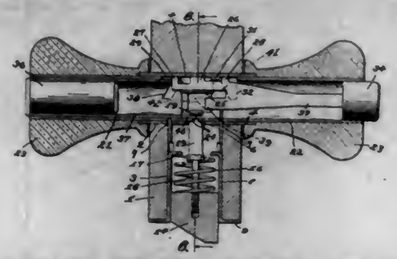
wherein R stands for a benzene residue which may be substituted by alkyl or halogen,

Y for a CH_3-, COO-alkyl- or a carboxyl group and

X for a sulfo group,

the said dyestuffs having a yellow color and being distinguished by their fastness to light.

1,876,885. LOCKING MECHANISM. ELLING ELLINGSON, San Francisco, Calif. Filed Apr. 8, 1930. Serial No. 442,588. 26 Claims. (Cl. 70—91.)



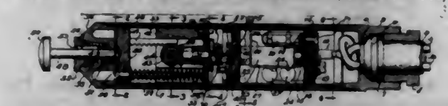
1. A locking mechanism comprising a lock casing mounted transversely through a door; a bolt casing mounted within the edge of the door and engaging the lock casing; a bolt slidably mounted within the bolt casing and provided with a stem extending into the lock casing; a pair of knobs rotatably mounted upon the ends of the lock casing and provided with sleeves extending into the casing into actuating engagement with the bolt stem; means engaging the knob sleeves within the casing to prevent axial movement of said sleeves relative to the casing and to permit rotation of said sleeves for actuating the bolt; and a locking member mounted within the lock casing and movable to engage and disengage the sleeves as desired.

16. In a locking mechanism, a tubular lock casing mounted transversely thru a door and provided with a pair of spaced slots; a pair of tubular knob sleeves rotatably mounted within the lock casing extending from the approximate center to opposite ends thereof and provided with slots registering longitudinally with the slots in the lock casing; and a bolt casing mounted within the edge of the door and provided with lugs extending thru the registered slots of the lock casing and the knob sleeves to secure the same in assembled relation within the door, said slots in said knob sleeves being longer than the lots in the lock casing whereby partial rotation of said sleeves within said lock casing may be permitted.

1,876,886. FUSIBLE PLASTIC AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Jan. 9, 1925, Serial No. 1,497. Renewed June 20, 1931. 19 Claims. (Cl. 18—48.)

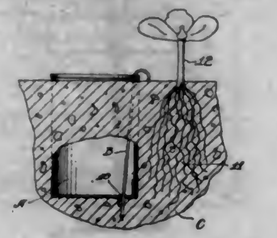
2. The process which comprises incorporating a glycerol-organic acid resin of a substantially permanently fusible character with nitrocellulose and a filler, warming the mixture to render plastic, placing in a mold and pressing while chilling.

1,876,887. FIRING KEY. JOSEPH B. FEDER, East Orange, N. J., assignor, by mesne assignments, to Chas. Cory Corporation, a Corporation of New York. Filed Oct. 16, 1928. Serial No. 312,786. 3 Claims. (Cl. 200—67.)



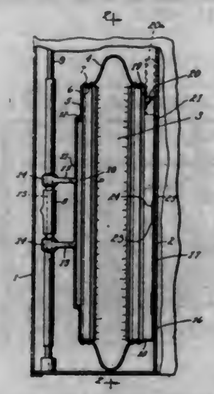
3. In a firing key construction, oppositely arranged fixed contacts, a shaft journaled between the contacts and provided with oppositely arranged wings carrying electrically connected contacts to simultaneously engage the fixed contacts, thereby to connect the same when the shaft is rotated, a second shaft, means to rotate said second shaft, and a resilient connection between the shafts put under tension by the rotation of the second shaft during the first part of its movement, whereby to impart a snap movement to the first shaft, the means for rotating the second shaft including a plunger movable axially of the shaft and means interposed between the plunger and the second shaft for rotating said shaft when the plunger is moved axially.

1,876,888. DEVICE FOR WATERING PLANTS. GEORGE W. FERGUSON, Minneapolis, Minn. Filed Mar. 23, 1931. Serial No. 524,432. 6 Claims. (Cl. 47—48.)



1. A device for watering plants and the like including, a container for water adapted to be set down into the ground, a hole formed in said container, and an obstruction fitting loosely in said hole limiting the drainage from said container to a drop at a time.

1,876,889. GAS METER CONSTRUCTION. MICHAEL FERRANTE, Los Angeles, Calif., assignor of one-half to Southern California Gas Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 8, 1930. Serial No. 480,326. 5 Claims. (Cl. 73—1.)

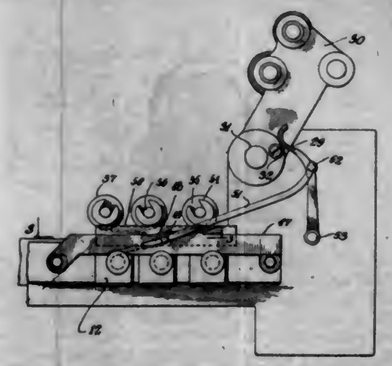


1. In a meter construction, the combination of a casing, a measuring chamber within the casing having a bellows including a flexible apron and a movable head connected to said apron, a fixed wall within the casing opposite the said movable head, and said bellows also including a relatively fixed head in the form of a disc with a flange projecting toward the movable head for attaching the flexible apron of the bellows, said disc having spaced openings therethrough for the application of solder on the side of the fixed head remote from said fixed wall.

1,876,890. MANUFACTURE OF ARTIFICIAL FIBERS. HEINRICH FINK and PAUL ESSELMANN, Premnitz, Westhavelland, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 6, 1929, Serial No. 344,910, and in Germany Mar. 14, 1928. 35 Claims. (18—54.)

1. The process for manufacturing artificial fibers from viscose, which comprises pressing a viscose solution through a spinning nozzle into a precipitating bath containing at least 30% of an acid ester of a poly-basic mineral acid with an aliphatic alcohol.

1,876,891. FORM ROLLER LIFTING DEVICE FOR KELLY PRINTING PRESSES. ABRAHAM M. FINVER and CHARLES WEBER, New York, N. Y.; said Weber assignor to said Finver. Filed Dec. 30, 1929. Serial No. 417,871. 2 Claims. (Cl. 101—358.)



1. In a printing press a stationary slotted bar secured to the frame of the press, a movable bar parallel to said stationary bar, and in close proximity thereto, a pin on said movable bar adapted to travel in the slot of said stationary bar, a pivoted operating lever, an operating rod attached at one end to said pin and at its opposite end to said operating lever, and a means for lifting and lowering said movable bar supporting the end spindles of the printing rollers.

1,876,892. FUSE PULLER. HAROLD C. FISKE, Minneapolis, Minn., assignor to James R. Kearney Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 27, 1929. Serial No. 343,204. 8 Claims. (Cl. 81—3.8.)

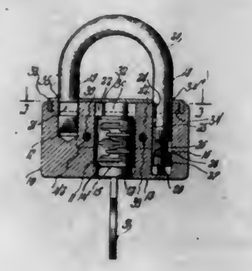


1. In a distantly operable clamp for electrical apparatus, a pair of clamping jaws, a handle associated with said jaws for rotation relative thereto, a body member having a threaded bore coaxial with the handle, a pivot stud projecting laterally from the body, one of said jaws having an aperture adapted to receive said stud, and adapted to be clamped thereby in adjustable offset, normally stationary relation to the body member, a pivot carried by the stationary jaw, the opposite jaw being arranged for clamping movement about said last named pivot, and having a curved actuating seat disposed in line with said threaded bore, and a threaded clamp actuating member coacting with the threaded bore, said member being operatively associated with the handle and operatively, engaging said curved seat.

1,876,893. PADLOCK. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs and Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 19, 1928. Serial No. 326,913. 11 Claims. (Cl. 70—108.)

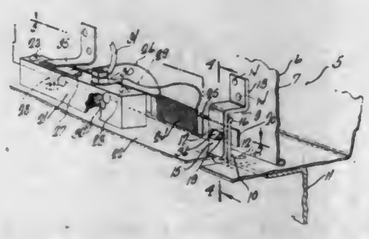
1. A padlock, comprising a retainer having three parallel bores therein arranged with their axes in approximately transverse alignment, the central bore extending through the retainer, a key controller lock cylinder mounted in the central bore adapted to be inserted therein from the top of the retainer, means preventing axial alignment

of the lock cylinder in its bore beyond the bottom face of said retainer, an approximately U-shaped shackle member having its shanks engageable in the other bores of the retainer, a locking member disposed in the top face of the retainer, means carried by said locking member and engage-



able with one shank of the shackle to prevent movement of the shackle in the retainer, means whereby rotation of the cylinder disengages the locking member from said shackle shank to permit its movement from the retainer, and means whereby said locking member likewise prevents detachment of the shackle from the retainer.

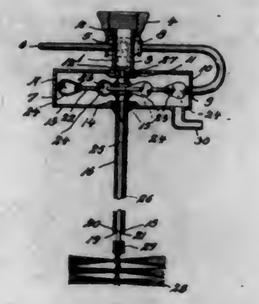
1,876,894. AUTOMOTIVE VEHICLE HOOD LOCK. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 9, 1929. Serial No. 398,435. 12 Claims. (Cl. 180—82.)



1. The combination with an automotive vehicle hood, of means for securing the same against opening including a member carried by the hood, a latch member engageable with said member upon closing of the hood, thermally responsive means directly carrying the latch member and thermal means for operating the thermally responsive means to move the latch member out of engagement with said hood carried member to release the hood for opening.

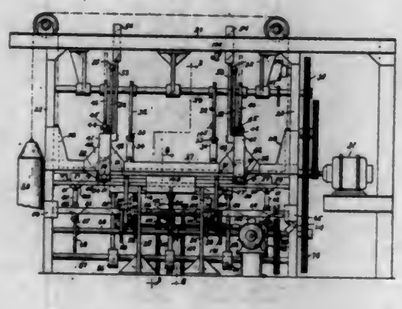
1,876,895. BOTTLE WASHER AND RINSING MACHINE. JAMES FLEMING, Cleveland, Ohio. Filed June 12, 1930. Serial No. 460,687. 2 Claims. (Cl. 15—69.)

1. In a bottle cleaner and rinser of the class described, comprising a body having a working chamber, a connecting member rotatably mounted thereon for connecting the working chamber to a suitable source of liquid supply, the connecting member having an egress opening therein, the working chamber having an ingress opening in the wall thereof, means interconnecting the egress opening in the connecting member to the ingress opening in the working chamber, an egress opening in the working chamber, a tubular portion projecting from the lower wall of the working chamber and communicating with the egress opening, a shafted turbine mounted in the working chamber and journalled in the tubular member and extending beyond the



end thereof, a bottle cleaning instrumentality mounted on the shaft, and means for leading clean water from the working chamber.

1,876,896. PRESS. JOHN R. FLEMING, Cleveland, and EDMUND M. WINEGAR, Willoughby, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 19, 1931. Serial No. 545,456. 9 Claims. (Cl. 153—25.)

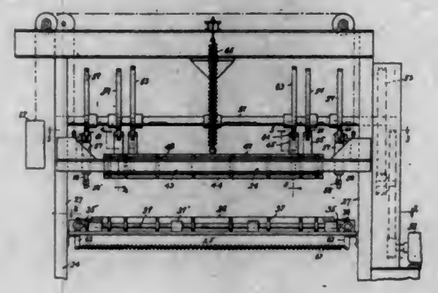


1. In apparatus of the character described the combination of a frame, a die adapted to receive a flanged metal body, a slide cooperating with said die for pressing said body therebetween, a shaft mounted in said frame, means associated with said shaft for actuating said slide, and means for bending a flange of said body comprising a yoke having spaced arms, a roll carried by said arms, means associated with said shaft for reciprocating said yoke relative to said slide, and guiding means on said slide engaging said arms whereby said roll is constrained to be translated along a path into which a flange of said body projects.

1,876,897. PROCESS OF VULCANIZATION. CHARLES F. FLEMMING. Willoughby, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 18, 1929. Serial No. 379,332. 6 Claims. (Cl. 18—53.)

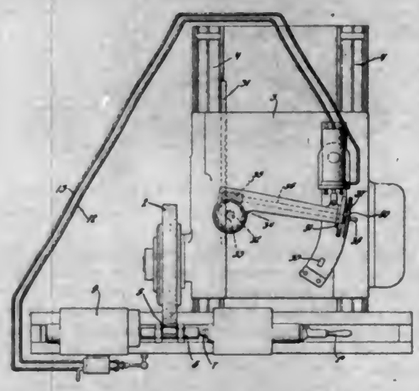
1. The method of reducing the period of vulcanization of a rubber compound which comprises mixing therein substances which are exothermic in their reactions, including a substance containing water of crystallization.

1,876,898. BEAD STRIP ATTACHING PRESS. JOHN R. FLEMING, Cleveland, and EDMUND M. WINEGAR, Willoughby, Ohio, assignors to The Ohio Rubber Company Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 514,025. 12 Claims. (Cl. 153—1.)



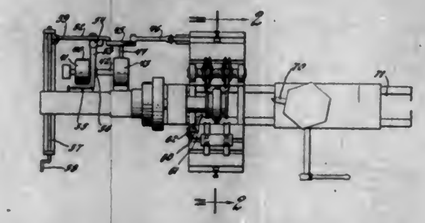
1. In apparatus of the character described, the combination of supporting means adapted to receive a body having a portion to which a metallic strip is to be applied, pressure pad means for holding said body against said supporting means, means for moving said pressure pad means into engagement with said body, a plurality of punches for pressing portions of said strip into strip-securing engagement with said body, and automatically operable means movable in timed relation with respect to the movement of said pressure pad means for actuating said punches.

1,876,899. GRINDING OR CUTTING MACHINE. PHILLIP J. FOBERT and ADRIEN J. DUCHARME, Detroit, Mich., assignors to Detroit Aluminum & Brass Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 15, 1930. Serial No. 475,490. 5 Claims. (Cl. 51—105.)



5. In a machine substantially for the purpose described, a tool for actuating upon a piece of work, a shiftable table supporting the same, a fixed rack, a pintle carried by the table, a gear thereon meshing with the rack, an arm swingable around the pintle, a shaft in the arm, a worm gear connection between the shaft and the pinion, means for rotating the shaft manually, power means for rocking the arm, a positive stop for limiting arm movement, means cushioning the power means when the arm is limited by the stop, said shaft being rotatable to determine the working position of the tool relative to the position determined by said stop.

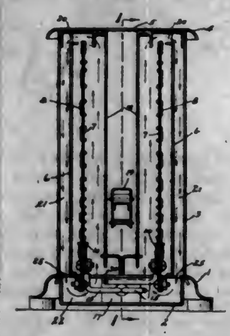
1,876,900. MACHINE FOR TRIMMING BEARINGS OR THE LIKE. PHILLIP J. FOBERT and ADRIEN J. DUCHARME, Detroit, Mich., assignors to Detroit Aluminum & Brass Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 16, 1930. Serial No. 475,672. 7 Claims. (Cl. 82—25.)



1. A device for trimming the inner edge of a bearing, comprising in combination an arbor for holding the bearing, said arbor having a portion the diameter of which is less than the inner diameter of the bearing, a cutting tool, means mounting the cutting tool to move the same in toward the arbor, said cutting tool having a surface for engaging the arbor for camming the same into cutting relation as regards an inner edge of the bearing.

6. A machine for trimming bearings or the like comprising a rotatable arbor for supporting a bearing with one end of the bearing projecting beyond the end of the arbor, an axially movable cutting instrument for cutting the inner peripheral edge of the bearing projecting beyond the arbor, a tool support on each side of the arbor, cutting tools carried thereby, means for moving the support toward and away from the arbor so that the cutting tools act upon the bearing, another cutting tool pivotally mounted on one of the supports having a cutting edge axially removed from the end of the bearing inwardly of the end of the arbor, said last named cutting tool being swung on its pivotal mounting as the support upon which it is mounted moves toward the arbor whereby its cutting edge moves axially toward the bearing and into cutting relation with the inner peripheral edge of the bearing located inwardly of the end of the arbor.

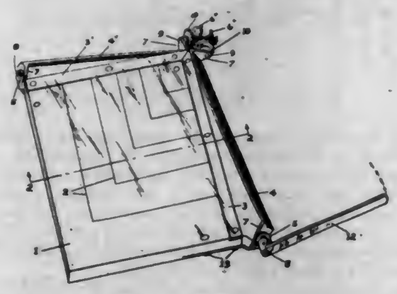
1,876,901. TOASTER. THOMAS C. FORBES, Minneapolis, Minn., assignor to Waters-Genter Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 7, 1930. Serial No. 442,388. 3 Claims. (Cl. 53—5.)



1. A device of the class described including a casing as a cooking chamber, a casing surrounding the cooking chamber and spaced therefrom, each of two opposed walls of said casings having slots, a support for the article to be cooked arranged within said cooking chamber and including links and pivots therefor, said links having portions snugly fitting, but capable of pivotal motion in certain of said slots, and a lever having a portion also snugly fitting within at least one of the slots in which

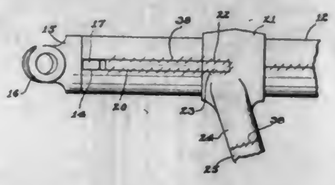
the links are pivoted, and attached to one of the pivots, and passing through a slot of the outer casing, and having an extension also passing through one of the slots of the wall of the cooking chamber and engageable with one of the links in a manner to raise the same.

1,876,902. PAPER TRIMMER. WALTER D. FORBES, San Francisco, Calif. Filed June 1, 1929. Serial No. 367,677. 8 Claims. (Cl. 164—43.)



4. A trimmer for sheet material comprising a base plate upon which the sheet is laid including fixed cutting edges and a plurality of trimming knives operatively arranged respectively along the edges of said base plate for trimming the margins of the sheet thereagainst, said knives being formed with cutting edges extending at an angle along a cylindrical surface of revolution, and supported on axes for revolving against said base plate, means on one knife for revolving the same, and transmission means connecting the knives together for simultaneous revolution.

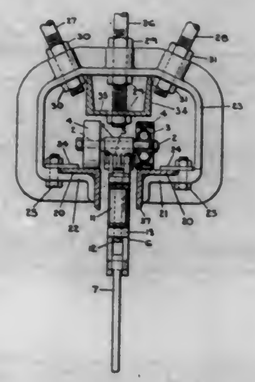
1,876,903. AXLE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,447. 3 Claims. (Cl. 301—124.)



2. A front axle comprising, an open ended tube having a longitudinal slot in each end thereof, knuckle joints having portions adapted to extend into the ends of said tube having keys thereon projecting into said slots, and sleeves adapted to be secured over said tube in positions spaced from said knuckle joints, said sleeves having slots therein receiving said knuckle joint keys to thereby absorb the torsional loads from the knuckle joints independently of said tube.

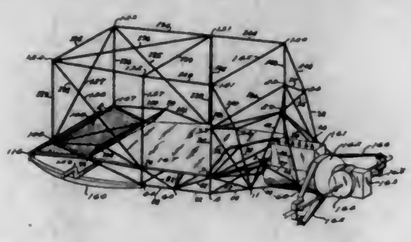
1,876,904. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 11, 1931. Serial No. 536,614. 20 Claims. (Cl. 104—94.)

1. The combination with an overhead track including parallel spaced apart track rails, of means for supporting the same including a C-shaped yoke casting, the inwardly projecting arms of which support said rails, clamping members to secure said track rails to said yoke casting, suspension and bracing rods projecting through apertures



of said yoke casting, and nuts screw-threaded to said rods by the adjustment of which vertical adjustment of said track rails can be effected.

1,876,905. VEHICLE CONSTRUCTION. LOWELL C. FREEMAN and ANDREW P. BUESCH, Detroit, Mich., assignors to Resengin, Inc., a Corporation of Michigan. Filed Apr. 5, 1930. Serial No. 441,771. 28 Claims. (Cl. 296—28.)

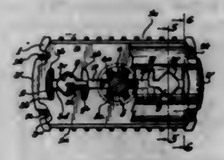


11. In a vehicle body frame construction, a statically determinate front structure having an upstanding end and extending downwardly at the front end and rearwardly along the floor, a statically determinate rear structure having an upstanding end and extending downwardly at the back and forwardly along the floor, the rearwardly extending end of said front structure being connected to the forwardly extending end of said rear structure, and a compression member extending along the roof of said body for connecting the upstanding ends of said front and rear structures.

1,876,906. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 413,108. 6 Claims. (Cl. 30—12.)

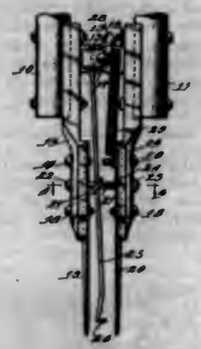
1. A safety razor blade of substantially oblong contour provided with cutting edges along its longer sides, said blade having an elongated slot intermediate the

cutting edges thereof terminating in transverse enlargements adjacent the ends of the blade, the end margins of the slot forming with the ends of the blade elongated



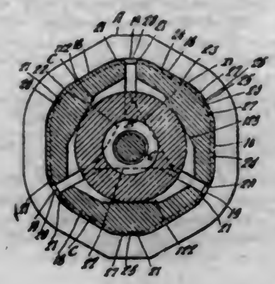
flexing portions or hinges having at least the major portions thereof beyond the ends of the cutting edges of said blade.

1,876,907. WEED EXTRACTOR. ANDREW GEIBEL, Chicago, Ill. Filed May 31, 1930. Serial No. 458,178. 5 Claims. (Cl. 55—68.)



2. A device of the character described, comprising a pair of pivotally mounted cooperating blades, handles attached to said blades for actuating the same, repelling means disposed between said blades adapted for reciprocal movement relative thereto for cleaning the same, said means having a coil spring adapted to be placed under tension upon the insertion of the blades into the ground and to be automatically released upon the withdrawal and opening of the same for forcing the weed from the said blades.

1,876,908. FRICTION SHOCK ABSORBING MECHANISM. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,913. 2 Claims. (Cl. 213—32.)



1. In a friction shock absorbing mechanism, the combination with a friction shell of substantially hexagonal interior cross section, said shell having six interior flat friction surfaces converging inwardly of the shell and symmetrically arranged about the longitudinal axis thereof, each adjacent pair of flat surfaces being separated by an intermediate, inwardly protruding, rounded surface merging with said flat surface, said merging portion being rounded; three friction shoes, each having a pair of angularly disposed flat friction surfaces having flat surface contact with one of said pairs of shell friction surfaces, said angularly disposed friction surfaces of each shoe being separated by an intermediate curved surface merging with said flat surfaces, said merging portions being rounded and clearance being provided between said protruding rounded surface of the shell and curved surface of the shoe; wedge means cooperating with said shoes; and spring means opposing relative movement of the shoes and shell.

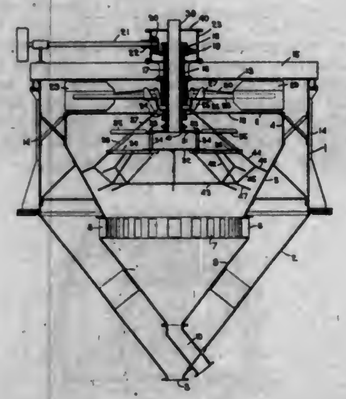
1,876,909. METHOD OF MAKING MAGNESIAN CEMENT. ROYAL W. GELDER, Greeley, Colo. Filed July 26, 1927. Serial No. 208,660. 6 Claims. (Cl. 106—29.)

1. The step in a process of preparing a calcined dolomite for use in a magnesian cement which consists in subjecting the same to the action of sulphur dioxide and carbon dioxide gases at a temperature greater than 800° C.

1,876,910. BRAKE LINING COMPOSITION. OWEN H. GIBSON, Portland, Ind. Filed Oct. 14, 1929. Serial No. 399,701. 1 Claim. (Cl. 134—11.)

A brake lining composition comprising, in approximately the following proportions, corn oil 85%, kerosene 10%, and neats-foot oil 5%, the same being mixed together without heat.

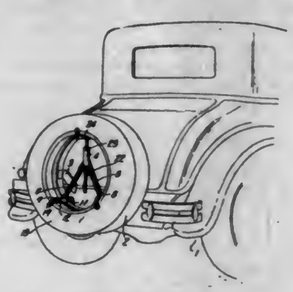
1,876,911. AIR SEPARATOR. WILLIAM A. GIBSON, Allentown, Pa., assignor to Bradley Pulverizer Company, Allentown, Pa., a Corporation of Massachusetts. Filed Oct. 23, 1930. Serial No. 490,619. 7 Claims. (Cl. 209—139.)



1. An air separator comprising a closed outer casing having means for delivering the finished material, an inner casing spaced apart from said outer casing and having means for delivering the tailings, means for causing a continuous circulation of air upwardly through the chamber of the inner casing and downwardly through the space between the inner and outer casings, means for feeding the material axially into said inner casing, rotatable means for distributing said material centrifugally into the ascending air current, members flexibly suspended from said rotatable distributing means, and movable outwardly by cen-

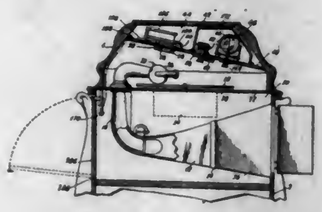
trifugal force operable to cause a whirling movement of the ascending current of air in the inner casing and to prolong the suspension of the descending material and to disintegrate coarser particles of material by impact.

1,876,912. SPARE TIRE CARRIER. JOHN L. GILMORE, Kansas City, Mo. Filed Oct. 17, 1929. Serial No. 400,294. 2 Claims. (Cl. 224—29.)



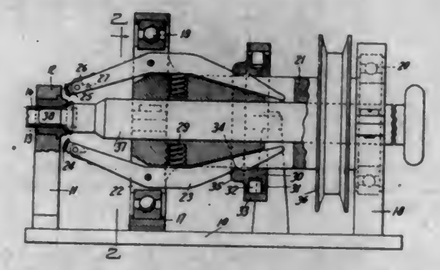
1. A spare tire carrier including a tubular body, outwardly diverging legs integral with said body having reduced portions on the lower ends forming stop shoulders thereon, a threaded shaft freely and slidably mounted in the tubular body, an arm fixed to said shaft having rim seats for engaging respectively the rim of a spare tire and the rim of an auxiliary tire, a nut on said shaft for adjustably supporting the shaft from the tubular body, complementary arms having seats similar to said first named seats and having openings between the seats thereof to loosely receive the reduced portions of said legs whereby the complementary arms may be pivoted relatively to the legs to admit the rim of the auxiliary tire when the carrier has been applied to the spare tire and to permit the seats in said complementary arms to fit squarely against the rims of the tires when the carrier is applied to tires of different diameters, and means on the lower ends of said reduced portions to retain said complementary arms.

1,876,913. SOUND REPRODUCING MACHINE. ALFRED N. GOLDSMITH, Mount Vernon, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Sept. 9, 1922, Serial No. 587,067, now Patent No. 1,721,151, dated July 16, 1929. Divided and this application filed July 24, 1928. Serial No. 295,029. 9 Claims. (Cl. 250—14.)



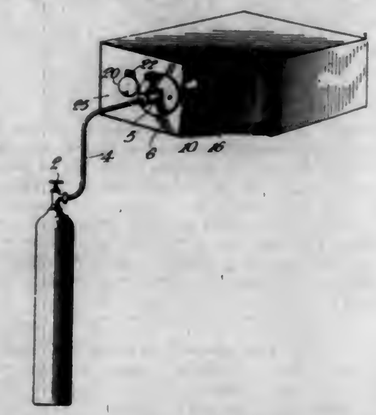
1. In a sound reproducing machine, a casing comprising a main body portion and a member mounted on the body portion for movement relatively thereto, a horn mounted in said body portion, and radio receiving apparatus mounted on said movable member and comprising controlling elements normally contained within the casing so as to be invisible, said member and said controlling elements being so constructed and arranged as to render the controlling elements visible and readily accessible to the operator upon movement of the member relatively to the body portion of the casing.

1,876,914. TUBE CUTTING AND FLARING DEVICE. JOHN W. GORDON, Dayton, Ohio, assignor to The Gordon-Dunnam Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 2, 1929. Serial No. 410,955. 12 Claims. (Cl. 153—79.)



2. In a tube cutter, a tube-holding device, a rotatable blade-supporting device, blades carried by said blade-supporting device and movable into positions to engage a tube in said tube-holding device, and a mandrel mounted for longitudinal movement and having a part adapted to enter the tube and to support the same during the cutting operation, said mandrel also having a tapered portion to engage the end of said tube and flare the same.

1,876,915. REFRIGERATOR. SAMUEL GORDON, Far Rockaway, N. Y., assignor to International Dry Refrigeration Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 14, 1929. Serial No. 362,898. 1 Claim. (Cl. 62—121.)



In a refrigerator for utilizing a compressed, gaseous refrigerant, a refrigerating unit comprising an expansion chamber, a cold chamber surrounding said expansion chamber, means permitting the escape of gases from said first-named chamber to the second, a displaceable closure for normally preventing the escape of gases from said second chamber and a brine tank surrounding and forming a portion of the walls of said second-named chamber.

1,876,916. FUEL PUMP. FRITZ GOSSLAU, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Sept. 22, 1930, Serial No. 483,556, and in Germany Oct. 1, 1929. 1 Claim. (Cl. 103—41.)

A fuel pump having a casing, a stationary piston barrel and a reciprocating piston disposed therein, and having means for varying the amount of fuel delivered by varying its angular position in the barrel, a regulating sleeve

rotatably adjustable in the casing and containing said barrel and piston, said sleeve being contracted at its lower end to substantially the diameter of said barrel, and having diametrically opposite longitudinal slots in the contracted portion and a transverse bar fixed in said piston and engaging said slots with its free ends, for coupling said



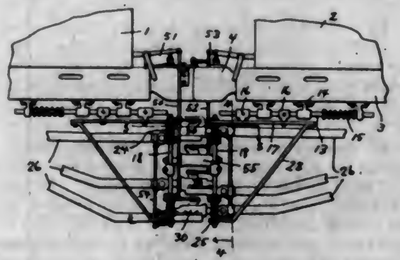
piston with said sleeve to partake in the rotary adjustments of the latter for adjusting the amount of fuel delivered by said piston, said bar having a length not greater than the inner diameter of said sleeve to permit the removal of said barrel and piston through the upper end of said sleeve and the outer end of said casing.

1,876,917. PISTON FOR INTERNAL COMBUSTION ENGINES. FRITZ GOSSLAU, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Jan. 6, 1931, Serial No. 506,921, and in Germany Aug. 10, 1929. 4 Claims. (Cl. 123—176.)



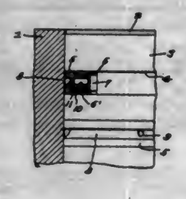
1. In a piston for internal combustion engines having at least its head made of a heat treated beryllium alloy, a normally solid substance disposed adjacent to said piston head and adapted to liquefy at the normal operating temperatures of the piston and being non-vaporizable at said temperatures, for transferring heat from the piston head of its sides.

1,876,918. COUPLING FOR CARS AND TRAIN LINES. GEORGE GRAY and CARNEGIE KINGSTON, Jacksonville, Fla.; said Kingston assignor to said Gray. Filed July 2, 1931. Serial No. 548,450. 8 Claims. (Cl. 284—6.)



1. In a coupling for cars, and in combination with the ordinary car couplers, of male and female members located below the car couplers, valve means for coupling said male and female members with the cars carrying said car couplers, means for locking said male and female members in engagement with one another, and common actuating means for said locking means, said valves and the locking pins of the car couplers, supporting plates for said male and female coupling members, and means for suspending said plates from adjacent cars for movement longitudinally and laterally relative to said cars.

1,876,919. PISTON RING. FREDERICK P. GROOM, Muskegon, Mich. Filed Sept. 23, 1931. Serial No. 564,679. 2 Claims. (Cl. 74—109.)



1. A piston ring having a circumferentially extending groove in its inner periphery and further having a circumferentially extending groove in its outer periphery, said ring still further having a series of circumferentially spaced apertures extending transversely therethrough, at right angles to the axis thereof from the second named groove to the first named groove, said ring still further having ports extending from the first-named groove to the lower side of the ring.

1,876,920. MANUFACTURE OF CARBOHYDRATE DERIVATIVES. MAX HAGEDORN, WALTER ZIESE, and BERTHOLD REYLE, Dessau in Anhalt, and RUDOLF BAUER, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 25, 1930, Serial No. 447,422, and in Germany May 1, 1929. 11 Claims. (Cl. 260—101.)

1. The process which comprises acting with an unsubstituted alkylene oxide and a caustic alkali simultaneously on a carbohydrate at ordinary pressure.

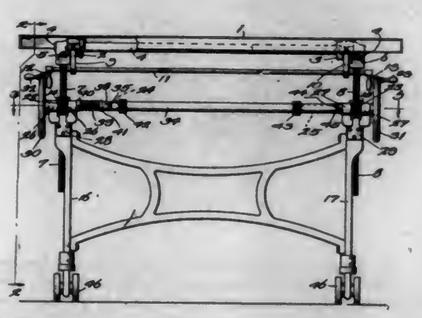
1,876,921. RESISTANCE UNIT. ARTHUR HALL, Oak Park, Ill., assignor to Yaxley Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,105. 3 Claims. (Cl. 201—55.)



1. The combination with an enclosing cup having a circular wall; of a generally circular resistance unit surrounded by the circular wall of the cup and having adjacent end portions; and a spreading device engaging said end portions and exerting expanding action upon the resistance unit in a circular direction to press the resistance unit against the circular cup wall to hold this resistance unit in assembly with the cup, wherein a spring tongue is formed on the circular wall of the cup

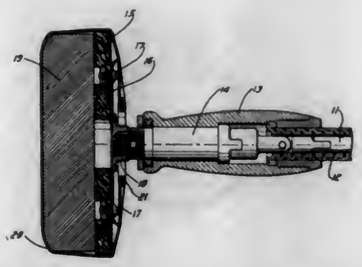
and the spreading device is formed with an ear, said ear and tongue being constructed to permit the ear to lie between the tongue and the end wall of the cup to hold the spreading device in position.

1,876,922. TABLE. EDWARD P. HAMILTON, Two Rivers, Wis., assignor to Hamilton Manufacturing Company, Two Rivers, Wis., a Corporation of Wisconsin. Filed Feb. 8, 1930. Serial No. 426,851. 8 Claims. (Cl. 254—7.)



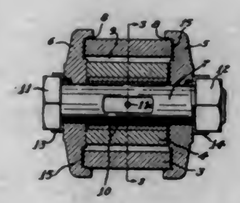
1. The combination with a table inclusive of a table top and supporting legs for such top; of upright gear elements carried by said legs and carrying the table top; gear elements complemental to the aforesaid gear elements and in operating relation thereto; a lever at one side of the table and in actuating relation with one of said complemental gear elements; and spring pressed means for separably coupling said complemental gear elements whereby both of said complemental gear elements may be operated together to effect upright movement of the gear elements pertaining thereto and the bodily upright movement of the table top, this coupling member being adjustable to an uncoupling position to permit upright movement of one of the upright gear elements alone and the corresponding swinging adjustment of the table top.

1,876,923. SURFACE POLISHING DEVICE. JOHN M. HANSON, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed July 10, 1930. Serial No. 467,048. 1 Claim. (Cl. 51—197.)



In a device for polishing painted or lacquered surfaces, a sleeve like handle, a rigid driving shaft rotatably mounted in said handle having one end screw threaded and projecting out through one end of said sleeve with the other end of the shaft within said sleeve, a flexible shaft in driving connection with said enclosed end, a flexible casing for said flexible shaft detachably secured in said handle whereby a direct drive through said handle is obtained, a flanged fitting threaded on said screw threads having a metal disc permanently secured thereto, said threads being of such direction that normal rotation of the flexible shaft tends to tighten the fitting and said threads, a felt ring of materially larger diameter than said metal disc rigidly secured thereto said ring having an axial opening therein substantially equal to the diameter of said flange fitting, a flat disc of sponge rubber several times the thickness of the felt disc and of substantially the same diameter cemented to the outer face of said felt disc, and a polishing cloth drawn around the sponge rubber and felt disc and metal plate, said cloth being securely fastened thereto by means of a draw string whereby the edges of said rubber disc will be relieved.

1,876,924. JOINT FOR ELLIPTICAL SPRINGS. ROGER W. HASTINGS and MARK HARRIS, Syracuse, N. Y., assignors to Franklin Development Corporation, Syracuse, N. Y., a Corporation of New York. Filed Nov. 11, 1930. Serial No. 494,961. 6 Claims. (Cl. 267—55.)



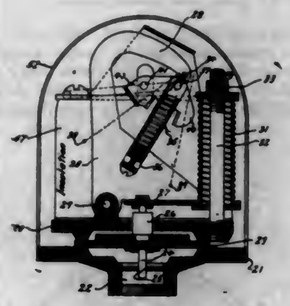
1. In an elliptical leaf spring, the combination of upper and lower leaf springs, the main leaves of the springs having eyes at their ends, said eyes being arranged concentric, a pivot extending through the inner eye and the inner eye having a bearing on said pivot and means mounted on the pivot and coacting with the outer eye and spaced apart from the inner eye to hold the outer eye off the periphery of the inner eye.

1,876,925. REENFORCED TROUSERS POCKET. MAX L. HEATH, Evansville, Ind., assignor to Stanley Clothing Company, Evansville, Ind., a Corporation of Indiana. Filed Apr. 16, 1931. Serial No. 530,639. 5 Claims. (Cl. 2—248.)



1. An apparel pocket having a depending double wall extension of less width than the pocket, the lower ends of the walls of the extension being united, said extension being folded upon itself and interposed between the side walls of said pocket at the corner thereof to form a reenforcement, and stitching securing the reenforcement to the pocket whereby when said stitching is ripped the extension will unfold and drop beneath the pocket and form an auxiliary pocket to prevent loss of the contents of the main pocket.

1,876,926. PRESSURE ACTUATED SWITCH. WILLIAM C. HEATH, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed May 27, 1927. Serial No. 194,682. 8 Claims. (Cl. 200—83.)



1. In a pressure controlled apparatus, a flexible element having a surface disposed in a fluid pressure passage and positionable according to the fluid pressure therein, a cleaning member operable in said passage responsively to movements of said flexible element, a lever movable by the flexible element, an oscillating member operatively associated with the lever a control element movable by the oscillating member, and means providing a limited movement of the oscillating member free of operative engagement with the control element.

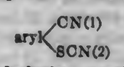
1,876,927. WELDED END TRUCK. WALTER C. HEINLE, Willoughby, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed June 6, 1929. Serial No. 368,972. 1 Claim. (Cl. 105—163.)



In a traveling crane, a fabricated end truck, comprising rolled side members having raised end portions, top members and bottom members joining said side members said top member extending over said end portions, the lower corners of said side members being notched out, bearing supporting members engaging said side plates at said notches, said bearing supporting members extending transversely of the side plates and spaced to receive a wheel between them, bracing plates joining said side members and said bearing supporting plates, said bracing plates being arranged in planes at right angles to said side members, said members and plates being integrally united at their joints by welding.

1,876,928. PROCESS FOR MANUFACTURING ARYL-ORTHO-CARBOXYAMIDO-MERCAPTANS. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 336,005, and in Germany Jan. 31, 1928. 4 Claims. (Cl. 120—124.)

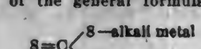
3. A process for manufacturing aryl-ortho-carboxymido-mercaptans which comprises treating an ortho-cyanogen-aryl-sulfo-cyanogen-compound of the general formula:



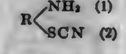
first with an acidic hydrolyzing agent, thereafter with an alkaline saponifying agent in the presence of a reducing agent.

1,876,929. PROCESS FOR PRODUCING 2-MERCAPTO-ARYLENE-THIAZOLE COMPOUNDS AND THE PRODUCTS. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929, Serial No. 340,327, and in Germany Feb. 24, 1928. 7 Claims. (Cl. 260—44.)

1. A process which comprises acting with a thiocarbonic acid compound of the general formula:



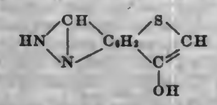
wherein X means -O-alkali metal, -S-alkali metal- or -O-alkyl, in presence of an alkali on an otho-aminoaryl-sulfocyanogen compound of the general formula:



wherein R means naphthalene or a radical of the benzene series which may contain chlorine, methyl or methoxy.

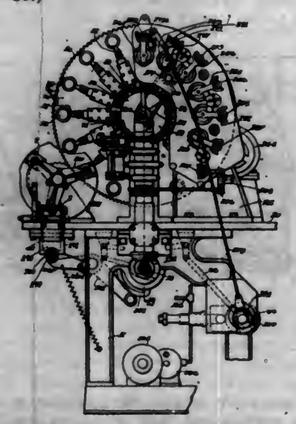
1,876,930. HYDROXY-THIONAPHTHENES CONTAINING A PYRAZOLE RING. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT and WALTER BAUNNER, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1929, Serial No. 415,351, and in Germany Dec. 22, 1928. 4 Claims. (Cl. 260—45.)

1. As new products, the hydroxy-pyrazole-thionapthenes probably corresponding to the general formula:



wherein the CH-group stands in the para-position to the -C-OH-group and the 5-position of the benzene as well as the 2-position of the pyrazole nucleus may contain a methyl group, which compounds are colorless to light-colored crystalline substances having a definite melting point, are insoluble in water, easily soluble in dilute caustic alkali solutions even without an addition of organic solvents, and yield when oxidized grey to olive thioindigo dyestuffs.

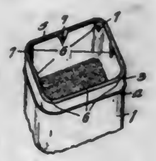
1,876,931. MACHINE FOR MAKING PAPER CUPS. VINCENT E. HEYWOOD and RALPH D. HOAGLUND, Worcester, Mass., assignors to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed Mar. 28, 1928. Serial No. 265,368. 65 Claims. (Cl. 93—39.)



1. The improvement in the art of making cups which consists in simultaneously delivering a flat blank and a

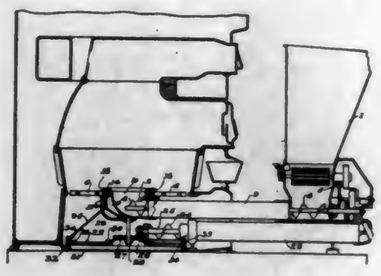
circular disk to a rigid non-rotatable cup form and then wrapping said blank into a sleeve around said form while maintaining said disk at one end of said cup form to provide a bottom for the cup sleeve.

1,876,932. PAPER BODIED CAN. HELEN C. HICKS, Webster Groves, Mo., assignor to Sefton National Fibre Can Co., Maplewood, Mo., a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,348. 3 Claims. (Cl. 229—5.7.)



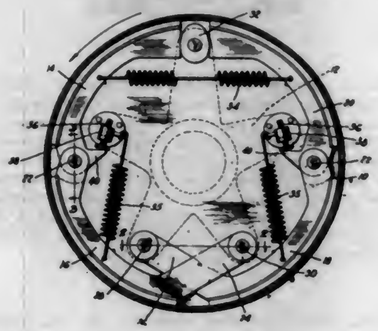
1. A construction of the kind described comprising a receptacle having a straight wall of paper or fibrous material closed at one end and open at the other end, a metallic mouth band for the open end of the receptacle, an endless inturned flange therefor engaging the open end face of the receptacle and a plurality of prongs shaped members integral with and directed from the free edge of the flange which members are adapted to be forced into the receptacle for engagement with the inner face thereof opposite the band and indentations on the prong shaped members embedded in the wall of the paper material to permanently hold the mouth band and flange in position on the paper material.

1,876,933. FORCED DRAFT MEANS FOR AUTOMATIC STOKERS. LOUIS L. HINSCH, Sidney, Ohio, assignor, by mesne assignments, to The Cleveland Stoker Company, Cleveland, Ohio. Filed Sept. 24, 1929. Serial No. 394,815. 5 Claims. (Cl. 110—45.)



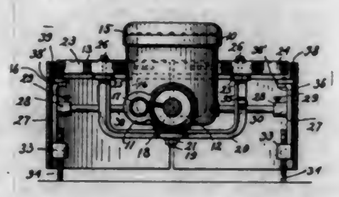
1. In an automatic stoker, the combination with a retort, grates surrounding said retort, mechanical means for forcing coal through said retort onto said grates, an air ring mounted on the retort, said ring being fluted to direct air outwardly upon the grates, and means for forcing air outwardly through the fluted portions of the air ring upon the grates for the purpose specified.

1,876,934. BRAKE MECHANISM. ERIK J. HIRVONEN, Worcester, Mass., assignor, by mesne assignments, to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Jan. 27, 1925, Serial No. 5,129. Divided and this application filed Apr. 15, 1929. Serial No. 355,116. 5 Claims. (Cl. 188—78.)



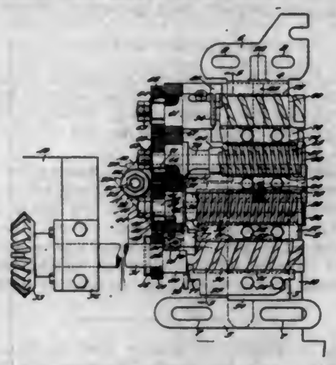
1. A brake comprising a support, two pairs of articulated brake shoes having overlapping extensions pivotally anchored to the support, and stops adjacent the articulations limiting the idle positions of the pairs of shoes.

1,876,935. STOKER. REUBEN HITCHCOCK, Cleveland, Ohio, assignor to The Cleveland Stoker Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 25, 1931. Serial No. 525,144. 10 Claims. (Cl. 110—45.)



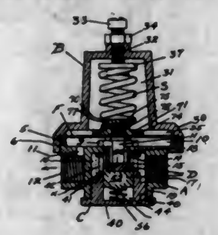
1. In a stoker mechanism for furnaces, a retort, means for supporting said retort, a grate surrounding said retort, a ring surrounding said grate supported by said means, and an apron secured to said ring and extending downwardly therefrom to a plane adjacent the floor of the furnace.

1,876,936. GILL-DRAWING FRAME. WILLIE HOLDSWORTH, Providence, R. I. Filed May 29, 1930. Serial No. 457,062. 6 Claims. (Cl. 19—129.)



5. An improved construction of gill-screw having a threaded portion of predetermined diameter and a shank portion of less diameter with the thread-groove of its larger portion continued into its reduced shank portion to form relatively shallow threads therein.

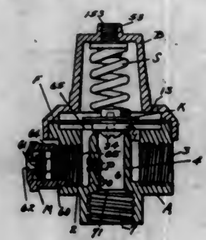
1,876,937. PRESSURE REDUCING VALVE. BURCHARD E. HORNE, Andover, Mass. Filed Jan. 22, 1929. Serial No. 334,259. 2 Claims. (Cl. 50—23.)



1. The combination in a pressure reducing valve having a body on top of which is a diaphragm chamber with an outlet therefrom and a centrally disposed inlet passage thereto which extends down through a hub the end of which forms a valve seat, said body having a valve chamber which extends above said valve seat and into the side of which enters the main fluid inlet; a plug which extends up into the valve chamber thereby closing its end opposite the inlet passage, said plug having a centrally disposed dead ended tubular valve disc guide which is larger than the hub and has fluid inlets thereto from the valve chamber; a valve disc slidable in said valve disc guide and a disc seating spring between it and the end of the plug whereby the disc is normally held in contact with the hub valve seat; a cage attached to the valve body and having a spring housing and an adjusting screw hole; a diaphragm held at its rim between the cage and the body; an imperforate pressure plate positioned centrally on the top of the diaphragm and a stem positioned at the bottom and threaded through the diaphragm into said pressure plate, such stem extending loosely down through the inlet passage and engaging the valve disc; together with pressure means including an adjusting screw which passes through said hole in the top of the cage; and a pressure spring between this screw and the pressure plate.

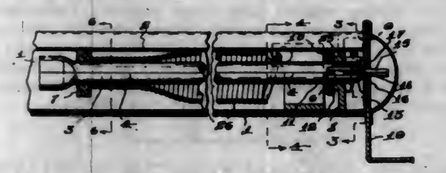
1,876,938. PRESSURE RELIEF VALVE. BURCHARD E. HORNE, Andover, Mass. Filed Jan. 23, 1929. Serial No. 334,478. 7 Claims. (Cl. 277—61.)

7. A diaphragm relief valve comprising a casing having a water space which is open at the top, and having inlet, plug and outlet passages from said water space together with a tubular outlet which has a fusible plug hole opposite the plug passage and extends up into such water space and has at the top a valve seat and connects at the bottom with a waste opening; a dome attached to said casing and extending upwardly of said valve seat; a diaphragm



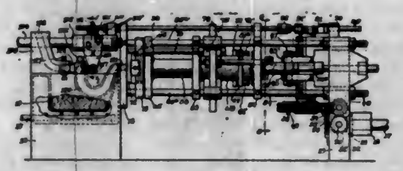
positioned between the dome and the casing; a valve disc attached centrally to the lower side of the diaphragm proximate to the valve seat; a fusible plug in the plug hole; a vacuum relief valve in the plug passage; and means to exert pressure on the upper side of the diaphragm.

1,876,939. CURTAIN ROLLER CONSTRUCTION. THOMAS W. HOLT and JOHN F. LEVAN, Elkhart, Ind., assignors to Excel Curtain Company, Elkhart, Ind., a Corporation of Delaware. Filed Aug. 12, 1930. Serial No. 474,759. 16 Claims. (Cl. 156—36.)



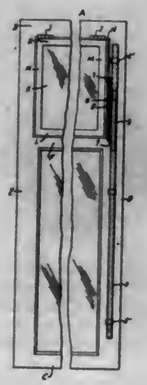
1. A curtain roller construction comprising a barrel, a tubular mandrel having a bearing at its inner end in the barrel, a spring anchored at one end to the mandrel and at its other end to the barrel, a head mounted in one end of the barrel in which the outer end of the mandrel is journalled, the outer end of the mandrel projecting beyond the head, and being flattened forming a tongue, and means for holding the mandrel from axial movement including said flattened portion.

1,876,940. DIE CASTING MACHINE. EDWARD HOTTER, Chicago, Ill. Filed May 22, 1930. Serial No. 454,531. 14 Claims. (Cl. 22—69.)



1. In a die casting machine, in combination, a stationary die, a movable die, a core movable into and out of said dies, a channel-shaped member having a cam slot in the web portion thereof, a cam plate slidably mounted in said channel-shaped member and also having a cam slot therein, means connecting one of said cam members to said movable die, means connecting the other of said cam members to said core, and means for actuating said cam members comprising a rotary device and a pin positioned eccentrically on said rotary device and extending through and engaging both of said cam slots.

1,876,941. OPERATING MEANS FOR VENTILATING SASHES. CHARLES H. HUCKE, St. Louis, Mo., assignor to Ventrite, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Oct. 17, 1928. Serial No. 312,947. 6 Claims. (Cl. 268—111.)



1. An operating device for a closure element mounted for movement at and with respect to the outer face of a window sash by which same is supported, comprising an operating member arranged at the outer face of said window sash, said operating member being connected to said closure member and being extended transversely through an elongated opening formed through said window sash to the face of said window sash opposite to the face thereof at which said closure element is located, said operating member at the latter face of the window sash being provided with an operating portion.

1,876,942. OPERATING MEANS FOR VENTILATING SASHES. CHARLES H. HUCKE, St. Louis, Mo., assignor to Ventrite, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 23, 1929. Serial No. 349,339. 10 Claims. (Cl. 268—111.)

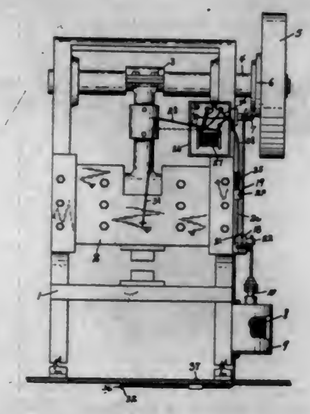


1. An operating device for a closure element mounted for movement with respect to a window sash by which same is supported, comprising a member pivoted to said sash, means for connecting said pivoted member to said closure element, and a manually operated member arranged in cooperative engagement with said pivoted member, said pivoted member having a portion cooperative with said manually operated member to provide locking means for the closure element and a portion cooperative with said manually operated member to impart movement to said closure element to open or close same, substantially the entire operating device being located within the depth of said window sash when the closure element is in its closed position.

1,876,943. METHOD OF RECOVERING PLATINUM. ANDREW J. HULL, Laramie, Wyo., assignor to Wyoming Platinum and Gold Mining Syndicate, a Trust. Filed Apr. 17, 1931. Serial No. 531,015. 8 Claims. (Cl. 75—67.)

1. A method of treating platinum-bearing ores to produce sponge platinum, which comprises roasting platinum-bearing concentrate for about six hours more or less under a temperature of about 600° C., subjecting the roasted warm product to chlorine gas to convert the mass into chloride salts of platinum, passing said salts into solution, and precipitating the solution with zinc.

1,876,944. OPERATING MEANS FOR POWER PRESSES. WILLIAM G. HUMPHREY, Wheeling, W. Va. Filed Feb. 7, 1930. Serial No. 426,550. 6 Claims. (Cl. 192—129.)



1. Operating means for power presses having a reciprocal head and means for operating the head including a clutch dog, comprising a solenoid having a core, a pivoted lever connected to the core, a pivoted arm above the lever, a rod connecting the lever and arm, a spring device connected to the arm to normally hold same and thereby the lever in inoperative position, means to connect the arm to said clutch dog to operate the latter, a magnet coil, a pivoted spring-held contact arm associated with said coil, a contact normally engaged by said contact arm, a switch, a circuit including said solenoid, the coil, the switch, the contact and the contact arm, and a flexible connection between the reciprocal head and the contact arm for operating the latter upon the working stroke of the head.

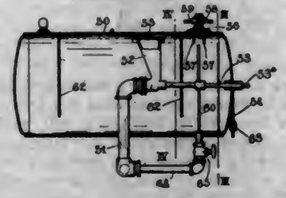
1,876,945. SAW. EDWARD W. HUTCHINGS, Perry, Fla., assignor of one-fourth to Edward G. Swartz, one-fourth to William T. Dailey and one-fourth to David A. Groff, Perry, Fla. Filed Oct. 15, 1931. Serial No. 569,019. 1 Claim. (Cl. 143—133.)

A sash gang saw comprising a blade having means at its opposite ends for attachment to a saw-carrying frame and provided along one edge between said attaching means with a series of downwardly projecting cutting teeth of hook form terminating short of the lower end of the blade and all extending in the same direction, and a pointed clearing tooth disposed at the lower end of the blade and spaced from and reversed relative to the cutting teeth, the walls of the blade at the opposite ends of the space between the cutting teeth and clearing tooth being undercut and the distance between the point of the clearing tooth and the point of the adjacent cutting tooth being greater than the distance between the points of any two of the cutting teeth, said clearing tooth being substantially twice the length of the cutting teeth and the pointed end thereof overhanging the adjacent under-



cut wall at the space between the clearing tooth and cutting teeth and projecting laterally in a straight line beyond the end of said cutting teeth, the lower edge of the clearing tooth extending from the point thereof towards the adjacent frame attaching means and having a greater inclination towards the horizontal axis of the blade than the upper edge thereof whereby to prevent the clearing tooth from detaching slivers of wood from the work on the downward stroke of the saw therethrough.

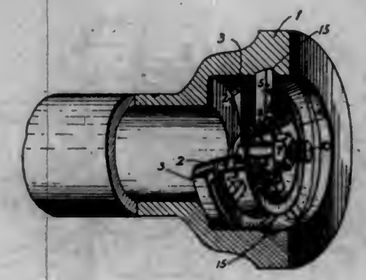
1,876,946. WATER TANK FOR CONCRETE MIXERS. GEBHARD JAEGER and JOSEPH EGGERT, Columbus, Ohio, assignors to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 18, 1931. Serial No. 531,022. 9 Claims. (Cl. 221—95.)



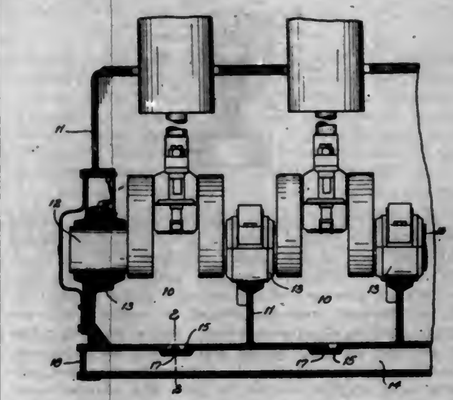
1. Means for supplying water to a concrete mixing or conveying vessel, said means including a water tank, a conductor leading therefrom, a siphoning device operable externally of the tank for leading water to said conductor, said tank having a water charging opening and a closure therefor, and means controlled by the position of the siphon for engaging said closure to prevent the removal of the latter.

1,876,947. PIPE-PLUG. JOHN R. JAHN, Berkeley, and HAROLD STEWART DUEY, San Francisco, Calif. Filed Aug. 11, 1930. Serial No. 474,460. 7 Claims. (Cl. 137—76.)

7. The pressure stop described in claim 6 wherein the said means for extending said stops and for forcing said face member upon said gasket member comprises a threaded pipe nipple anchored in said face member having a running nut thereon and an annular member adapted to be acted upon by said nut to force said annular member toward said face member.



1,876,948. LUBRICANT CONDUCTING MEANS. CHARLES B. JAHNKE, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1927. Serial No. 180,253. 3 Claims. (Cl. 184—6.)

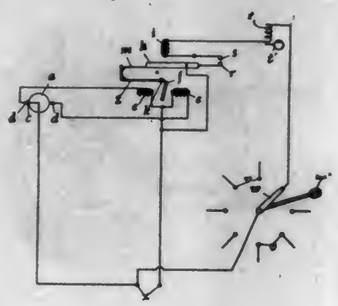


1. In an engine, a crank case, adapted for a substantial pressure, means for keeping a normally dry crank case, including an oil conduit cast integrally therewith near a lower portion thereof, and adapted to serve as an oil drain from said crank case, means forming a crank case outlet to said conduit, in substantially the lower part of the crank case, and including removable oil conducting elements for continuous communication from the case to the conduit, and tending to confine the crank case pressure from said conduit.

1,876,949. IMPROVEMENTS RELATING TO SUMMATION MEANS. SAMUEL JAMES, Birmingham, England, assignor to Chamberlain & Hockham Limited, Birmingham, England. Filed Apr. 14, 1930, Serial No. 444,193, and in Great Britain May 2, 1929. 4 Claims. (Cl. 235—92.)

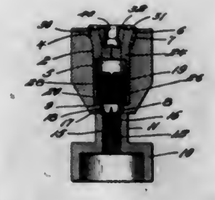
1. In summation means, the combination comprising a rotary contact device, a double acting magnet con-

trolled by the said contact device, a movable member actuated by the magnet, a trip lever actuated by the movable member a circuit controlling device consisting



in part of an element engageable by the trip lever, and an electromagnet for resetting the circuit controlling device, substantially as described.

1,876,950. METHOD AND MEANS FOR SIZING TOOTH CROWNS. FERNANDO O. JAQUES, Providence, R. I. Filed Dec. 6, 1930. Serial No. 500,556. 8 Claims. (Cl. 32—10.)



1. In a device of the character described, a casing provided with a conical bore, an adapter member fitting within the bore of said casing provided with an internally threaded cylindrical portion and comprising contractile arms provided with a common recess located entirely within said arms and shaped to conform with the exterior surface of a tooth crown, and a member rotatably mounted in said casing and having an externally threaded portion engaging the internally threaded portion of said adapter member to move the adapter member within said casing a sufficient distance to reduce the cross-sectional area of a tooth crown positioned within said recess to any desired extent within the limits of movement determined by the contractile arms.

5. The method of reducing the size of formed tooth crowns without materially changing their external configuration which comprises, exerting substantially uniform pressure upon the outer longitudinal surface of the crown wall throughout substantially its entire extent to contract the wall uniformly while supporting the end wall of the crown externally.

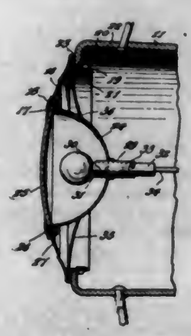
1,876,951. ATTACHMENT PLUG FOR AUTOMOBILE SIGNALING DEVICES. FRANK J. JAROS and EDWARD T. JAROS, Chicago, Ill. Filed Sept. 14, 1928. Serial No. 306,088. 2 Claims. (Cl. 173—328.)

1. In an attachment plug of the character described, a housing one wall of which constitutes a support, an insulating plate within said housing adjacent to the inner face of said supporting wall thereof, a pair of resilient strips mounted on said insulating plate, a pair of pins slidable through said insulating plate and being normally yieldably pressed in projected position through openings provided therefor in the wall of said housing, a cap member attachable to said wall of the housing on the outside thereof, a dielectric plate within said cap member,



a pair of metal plates mounted on said dielectric plate and being engageable respectively with said pair of pins on said housing when said cap member is attached to the housing, and resilient means for releasably holding said cap member in position on said housing.

1,876,952. BACK-UP LIGHT. FRED W. JOHNS, Lee Hall, Va. Filed Dec. 4, 1931. Serial No. 579,049. 1 Claim. (Cl. 240—7.1.)

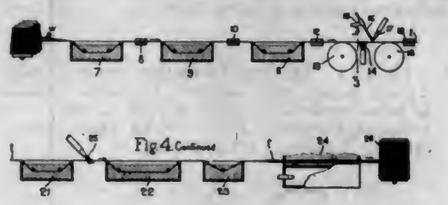


A back-up light comprising a hub cap dished outwardly and having a central opening, said cap having a flange at the edge of the opening forming a seat, said cap having an annular rim of substantially U-shape in cross section forming a seat, a back-up light having a casing engaged at the rim against the first named seat and having its lens exposed through said central opening in the hub cap, and a spring split clamp ring of substantially frusto-conical cross section engaged at the edge in said U-shaped seat and flaring downwardly and inwardly opposite to the dished contour of the hub cap, the inner circular edge of said ring bearing against the light casing and exerting pressure against the casing axially of the casing to firmly press the rim of the casing into the seat formed by the first named flange.

1,876,953. METHOD OF MAKING WIRE TAPE. CHARLES D. JOHNSON, Worcester, Mass., assignor to Johnson Steel & Wire Company, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1930. Serial No. 441,364. 4 Claims. (Cl. 140—3.)

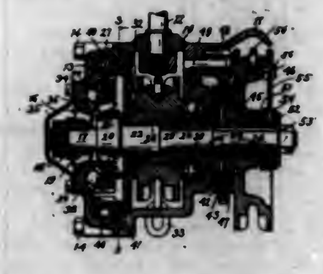
1. The method of making wire tape which consists in arranging a plurality of wires in parallel spaced relation,

moving the spaced wires forwardly in the direction of their length at a uniform speed and at the same time maintain-



ing the spacing and then soldering the wires together at spaced intervals along their length during their forward movement.

1,876,954. HOIST. JAMES P. JOHNSON, Cleveland, Ohio, assignor to The J. P. Johnson Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1929. Serial No. 357,937. 2 Claims. (Cl. 24—35.)



1. In a hoist, a housing, a power shaft supported adjacent one of its ends in said housing upon a tapered roller bearing and having an eccentric portion adjacent such end, a gear associated with said eccentric portion and mounted upon a roller bearing oppositely tapered with respect to said first named bearing, a second gear concentrically associated with said shaft and meshing with said first named gear, said housing and said first named gear having their adjacent faces provided with a plurality of depressions, the depressions in one cooperating with the depressions in the other to form chambers, and balls arranged in said chambers for restricting rotation of said first named gear while permitting eccentric movement thereof and for receiving the end thrust incident to the meshing of said gears.

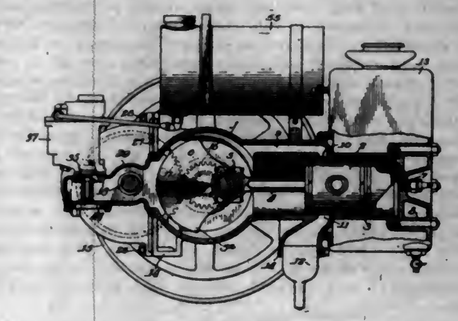
1,876,955. PROCESS FOR MANUFACTURING AMINOALDEHYDE COMPOUNDS. GEORG KALISCHER and HEINRICH RITTER, Frankfort-on-the-Main, and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1930, Serial No. 430,126, and in Germany Feb. 25, 1929. 14 Claims. (Cl. 260—128.)

11. As new compounds aromatic aryl-sulfaminoaldehyde compounds corresponding probably to the general formula:

$$\text{aryl}\begin{cases}(NX{-}SO_2{-}R)_n\\ CHO\end{cases},$$

wherein n is the number 1 or 2, X means hydrogen or an aryl group, R means a radical of the benzene series and aryl means an armomatic radical of the benzene-, naphthalene- or anthracene series the group —NH—SO_2—R standing in an adjacent position to the —CHO group, which compounds are solid substances generally of a crystalline structure acid, soluble in caustic alkali solutions.

1,876,956. MOTOR. EDWARD L. KASTLER, Flossmoor, Ill., assignor to The Buda Company, Harvey, Ill., a Corporation of Illinois. Filed Jan. 15, 1930. Serial No. 420,832. 12 Claims. (Cl. 123—73.)

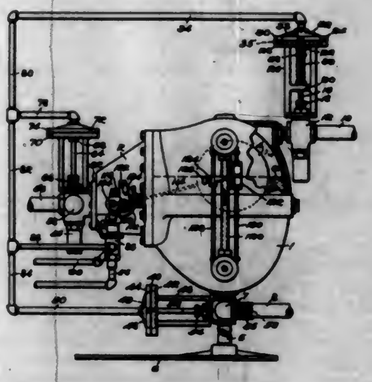


5. A motor comprising a horizontally disposed two-cycle internal combustion engine having a crank shaft and a closed crank case through which the gaseous fuel mixture is introduced to the engine, and having within the crank case a secondary power shaft geared to the crank shaft, the bearings of both of said shafts being exposed to the compression space of the crank case, and the crank case being transversely divided between the crank shaft and secondary power shaft to provide an end housing carrying said secondary power shaft, which housing is separably connected to the main body of the crank case, the main body of the crank case constituting the supported motor frame and the end housing being removable therefrom for access to the interior of the main body from the rear.

1,876,957. PROCESS OF SULPHONATING HIGHER PARAFFIN HYDROCARBONS. KARL KELLER, Frankfort-on-the-Main-Fechenheim, and EDUARD GOFFERJÉ, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 9, 1930, Serial No. 466,884, and in Germany Aug. 3, 1929. 3 Claims. (Cl. 260—98.)

1. A process for manufacturing new conversion products of higher paraffin hydrocarbons, which comprises treating with a sulphonating agent the product obtainable by reacting with an alkali of the alkali metals or alkaline earth metals on a poly-halogenated derivative of technical mixtures of higher paraffin hydrocarbons.

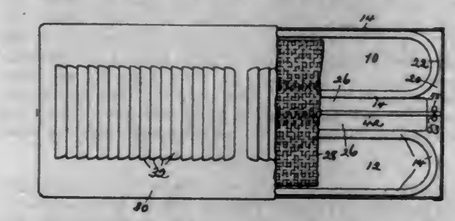
1,876,958. RETURN WATER METERING DEVICE. THOMAS KELLY, North Lexington, Mass. Filed Apr. 15, 1929. Serial No. 355,027. 3 Claims. (Cl. 73—28.)



1. A liquid measuring device of the class described comprising, in combination, a casing providing a measuring

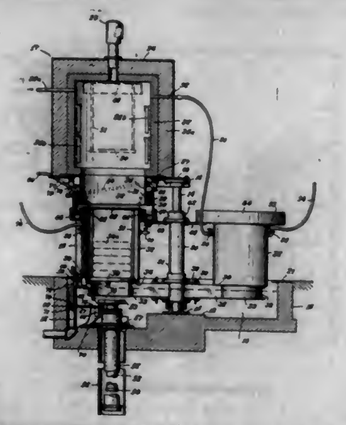
chamber, a supply pipe leading into said chamber, an inlet valve normally open in said supply pipe, an outlet pipe leading from said chamber, an outlet valve normally closed in said outlet pipe, pressure responsive means for operation of said inlet and outlet valves, a pressure supply pipe connected to said casing whereby pressure may be admitted from a source of supply to discharge the liquid from said chamber, a pressure responsive mechanism for controlling the flow of pressure through said pressure supply pipe to said chamber, conduits connecting an energy supply to said valve actuating means, means for controlling the energy supply through said conduits to said pressure responsive mechanism and to the actuating means for the inlet and outlet valves, and means responsive to the liquid level in said chamber for controlling said energy supply controlling means whereby when a predetermined level is reached by the liquid in said chamber said inlet valve will be closed, said outlet valve will be opened and the liquid will be discharged by the pressure admitted to said chamber through said pressure supply pipe.

1,876,959. HUMIDIFIER. CLARENCE H. KELSEA, Belmont, and CHARLES I. GEDDES, Arlington, Mass., assignors to Peter Gray & Sons, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1930. Serial No. 431,253. 11 Claims. (Cl. 261—107.)



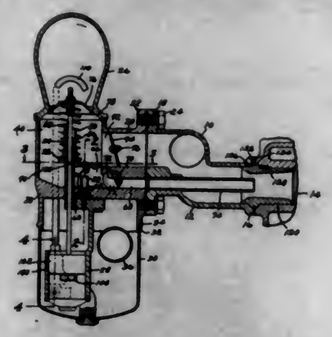
1. A humidifier comprising a box-like structure having sheet metal side walls and a sheet metal trough-support formed integrally with and extending between the side walls, said support being provided with openings, water-holding troughs removably inserted into said openings in the trough-supporting member, and end pieces welded to the ends of the side walls.

1,876,960. ANNEALING FURNACE. CHARLES F. KENWORTHY, Woodbury, Conn., assignor to Charles F. Kenworthy, Inc., Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 14, 1929. Serial No. 332,307. 6 Claims. (Cl. 266—5.)



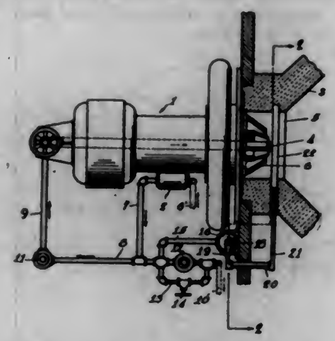
1. In an annealing apparatus, an annealing furnace, a magazine for holding the metal before and after annealing, means for supplying a non-oxidizing gas to said furnace, a breather connection between said magazine and said furnace whereby no vacuum will be produced in said magazine during the succeeding cooling operation.

1,876,961. CHARGE FORMING DEVICE. CARL H. KINDL, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 14, 1928. Serial No. 319,362. 7 Claims. (Cl. 261—41.)



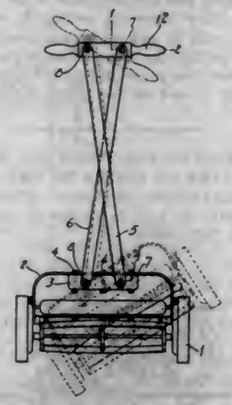
1. A charge forming device for internal combustion engines comprising a main air supply chamber, a plurality of primary mixture passages communicating with said air supply chamber, partition plates in the air supply chamber separating said chamber into a plurality of individual spaces, each of which communicates with one of said mixture passages, a secondary air passage also communicating with said air chamber and supplying additional air for admixture with the primary mixture, and a plurality of fuel jets one of which communicates directly with each of said spaces, whereby the static suction of the air chamber is effective to cause a flow of fuel from each of said jets.

1,876,962. AUTOMATIC OPENING AND CLOSING FURNACE DOOR FOR AUTOMATIC OIL BURNERS. ARTHUR H. KLAHN, San Francisco, Calif.; Olga J. Klahn, executrix of said Arthur H. Klahn, deceased, assignor to Olga J. Klahn, San Francisco, Calif. Filed Apr. 6, 1929. Serial No. 353,137. 7 Claims. (Cl. 158—2.)



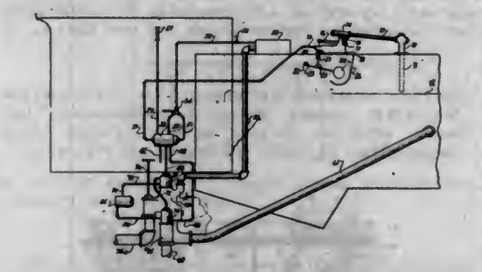
1. The combination with an oil burner and a source of fluid pressure therefor, of a protective shield movable into a position in front of the burner, and means controlled by the fluid pressure for moving the shield away from the burner when the burner starts operating, and in front of the burner when it stops for preventing carbonization of oil on the discharge nozzle of the burner.

1,876,963. LAWN MOWER. CARL C. KLASS, Ottawa, Ill. Filed May 7, 1930. Serial No. 450,471. 5 Claims. (Cl. 56—249.)



1. In a lawn mower, steering means comprising a handle attaching member associated with said mower, a handle grip, a plurality of crossed links extending rearwardly of the mower, the forward end of each link being pivotally connected to said handle attaching member, and the other ends of said links being pivotally connected to said handle grip.

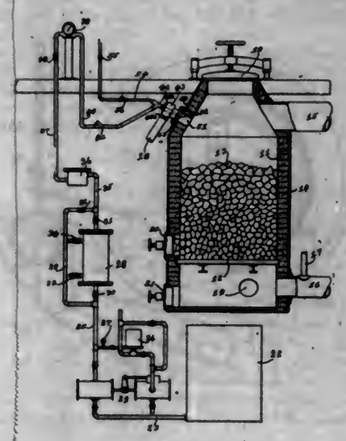
1,876,964. AUTOMATIC MEANS FOR REGULATING FLUID PRESSURE SYSTEMS. DAVID RAY KOONTZ, Salisbury, N. C., assignor of one-half to James D. Dorsett, Spencer, N. C. Filed Sept. 20, 1930. Serial No. 483,307. 9 Claims. (Cl. 103—276.)



1. In a steam generating system having an injector for forcing water into said system by steam pressure from said system, said injector having an overflow valve and a valve for controlling the passage of steam into said injector, means adapted to be operated by the steam pressure for opening the overflow valve, retarding means through which the steam opening the overflow valve is adapted to be passed after raising the overflow valve, a pipe leading from the other side of said retarding means to means associated with said steam valve for opening the same, said retarding means being adapted to delay the passage of steam from the overflow valve to the steam valve for a sufficient time to allow water to pass through the injector and through the overflow valve before the steam valve is opened.

1,876,965. PROCESS OF PRODUCING CARBURETED WATER GAS. HAROLD M. KOPP, Watertown, Conn. Filed Feb. 21, 1930. Serial No. 430,236. 3 Claims. (Cl. 48—205.)

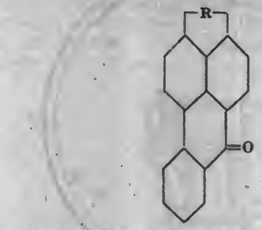
1. The process of generating combustible gas by alternate air and steam blasting in a gas generator having an open mixing space above a fuel bed, means for injecting atomized tar into a whirling jet of steam and delivering the mixture into said space, a gas offtake beneath said fuel bed, and a second gas offtake above said fuel bed,



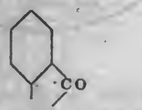
which comprises upwardly air blasting said fuel bed to incandescence and subsequently passing said steam and atomized tar downwardly through said fuel bed to crack said tar into fixed gaseous hydrocarbons without excessive formation of lampblack.

1,876,966. NITROGEN-CONTAINING DERIVATIVES OF DIBENZPYRENQUINONES AND PROCESS OF PREPARING THEM. GEORG KRÄNZLEIN, HEINRICH VOLLMANN, and MARTIN CORELL, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1929, Serial No. 342,660, and in Germany Mar. 16, 1928. 12 Claims. (Cl. 260—61.)

1. The process which comprises causing a nitrating agent to react with a compound of the general structure:



wherein R stands for the bivalent residue

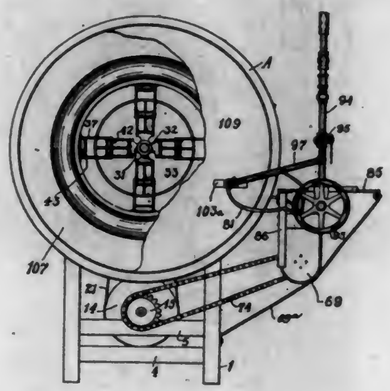


and at least one nuclear hydrogen atom is unsubstituted.

1,876,967. MACHINE FOR PAINTING TIRES AND THE LIKE. ARNOLD R. KRAUSE and ALFRED C. HIRSCH, Eau Claire, Wis., assignors to Gillette Rubber Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed May 8, 1929. Serial No. 361,280. 12 Claims. (Cl. 91—45.)

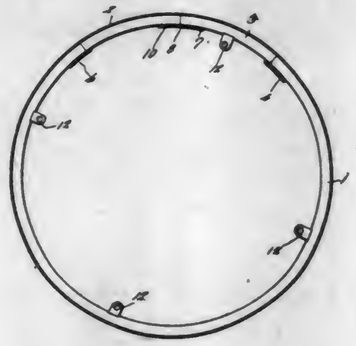
1. In a machine for spraying a rotatable ring-like member with a fluid, means for rotating said member, clamping means for engaging the inner periphery of said member to connect it with said rotating means, a plurality of nozzles

spaced about the outer periphery of said member for spraying the same with a fluid as said member is rotated past said nozzles, a common mounting for said nozzles, and means for adjusting said mounting towards and away



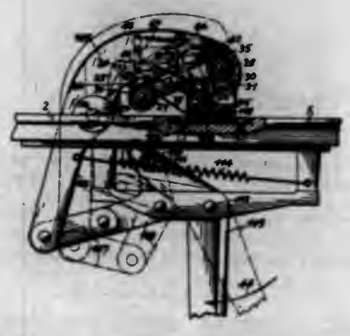
from said rotating member in accordance with the diameter of the same, said last mentioned means including a stationary rack and a saddle plate supporting a pinion engaging said rack whereby said saddle plate may be moved as said pinion is rotated along said rack.

1,876,968. DEMOUNTABLE RIM. LE ROY J. KREBS, Clinton, Iowa; Anna Krebs, guardian of said Le Roy J. Krebs, assignor of one fourth to Anna Krebs, Clinton, Iowa. Filed Feb. 3, 1931. Serial No. 513,204. 1 Claim. (Cl. 301—32.)



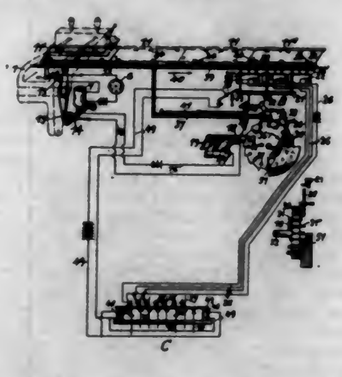
A collapsible rim of the type which embodies a main rim section whose ends are spaced from each other, and a swingable section hinged on each end of the main section, the free ends of the swingable sections being provided meas for connecting them in end to end engagement, hinge means for connecting said swingable sections to the main section comprising a transverse slot in the swingable section; a rigid latch member secured to the radially inward side of the end of the main rim section and projecting therebeyond, the latch member comprising a wide flat plate having the free end thereof turned so as to project radially outwardly and engage in said transverse slot of the companion swingable section when they are assembled, and a spring plate on the radially outward side of the main rim section extended beyond the free end thereof, and means passing through said main rim section, the latch member and the spring plate for securing them in place, said spring plate being placed and proportioned so as to cause a snap action to take place when the swingable section is moved into and out of end to end engagement with the main rim section, and to bridge the joint between the last-mentioned sections and cover the projection of the latch member when the sections are in end to end engagement.

1,876,969. MACHINE FOR PRINTING ADDRESSES OR OTHER MATTER ON FORMS OR THE LIKE. JOSEPH KRELL, Berlin-Pankow, Germany. Filed Apr. 5, 1928, Serial No. 267,736, and in Germany Apr. 16, 1927. 2 Claims. (Cl. 101—298.)



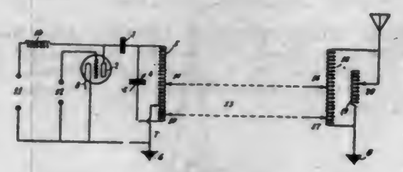
1. In a machine for printing from printing plates, a table, a printing arm adapted to receive a printing plate and mounted to rock on said table, a ribbon-feed mechanism and a plate ejector on said arm, and means on said arm which are adapted to be operated by its rocking movement for actuating said mechanism and said ejector.

1,876,970. ADDRESS PRINTING AND CALCULATING MACHINE. JOSEPH KRELL, Berlin-Zehlendorf, Germany. Filed Dec. 21, 1929, Serial No. 415,703, and in Germany Dec. 22, 1928. 6 Claims. (Cl. 101—47.)



1. A combined address-printing and calculating machine comprising a printing and a calculating unit, the latter unit with operating mechanism of any usual type, a selector adapted to be controlled by the printing plates of said printing unit, contacts in said selector, a circuit connected with each contact, an electromagnet in each circuit, and means connected with said electromagnet for operating said calculating machine.

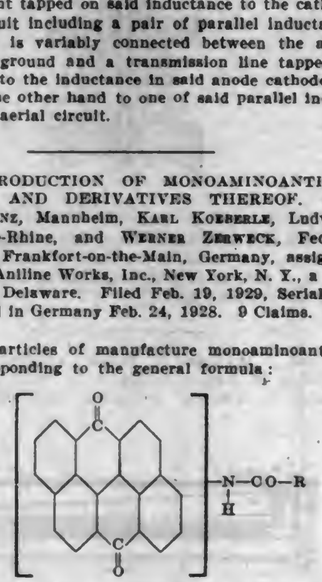
1,876,971. TRANSMISSION SYSTEM. FRED H. KROGER, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 437,005. 6 Claims. (Cl. 250—17.)



1. A thermionic transmitter including a thermionic amplifier having a tank circuit including a tuned inductance connected through a condenser to the anode and through a point tapped on said inductance to the cathode, an aerial circuit including a pair of parallel inductances one of which is variably connected between the aerial capacity and ground and a transmission line tapped on the one hand to the inductance in said anode cathode circuit and on the other hand to one of said parallel inductances in said aerial circuit.

1,876,972. PRODUCTION OF MONOAMINOANTHANTHRONES AND DERIVATIVES THEREOF. MAX ALBERT KUNZ, Mannheim, KARL KOEBERLE, Ludwigshafen-on-the-Rhine, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 19, 1929, Serial No. 341,274, and in Germany Feb. 24, 1928. 9 Claims. (Cl. 260—61.)

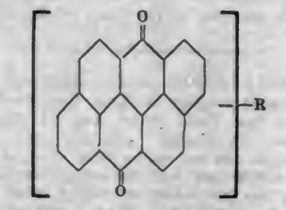
1. As new articles of manufacture monoaminoanthanthrones corresponding to the general formula:



in which R stands for a benzene radical which is substituted by a methoxy group.

1,876,973. SUBSTITUTION PRODUCTS OF ANTHANTHRONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1929, Serial No. 342,297, and in Germany July 28, 1928. 4 Claims. (Cl. 260—61.)

1. As new articles of manufacture uniform derivatives of the anthanthrone series corresponding to the general formula:



in which R stands for a hydroxy (which may be etherified or esterified), carboxylic, cyano, thio-cyano or mercapto group.

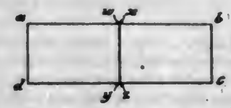
1,876,974. HALOGEN DERIVATIVES OF ANTHANTHRONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1929, Serial No. 342,948, and in Germany July 28, 1928. 2 Claims. (Cl. 260—61.)

1. A process of producing halogen derivatives of anthanthrones which comprises heating a nitroanthanthrone in an organic diluting medium of high boiling point and of the aromatic series with a halogenating agent, at least until all nitro groups are eliminated.

1,876,975. PRODUCTION OF HIGHLY HALOGENATED DERIVATIVES OF PYRANTHRONE. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,586, and in Germany Mar. 10, 1928. 2 Claims. (Cl. 260—61.)

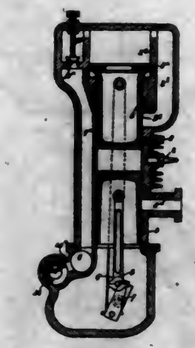
2. As new articles of manufacture pyranthrones containing from 5 to 8 atomic proportions of halogen forming orange to red needles difficultly soluble in sulphuric acid but readily soluble in oleum and chlorosulphonic acid to give greenish blue to blue solutions and dyeing cotton orange to orange red shades from blue-violet to violet vats.

1,876,976. CIGARETTE WRAPPER AND A CIGARETTE MADE WITH SAID WRAPPER. DANIEL W. B. KURTZ, Jr., Columbia, Mo. Filed May 7, 1928. Serial No. 275,767. 3 Claims. (Cl. 131—36.)



1. A cigarette wrapper having a narrow weakened smoke and air impervious area extending transversely and the entire width thereof intermediate its ends.

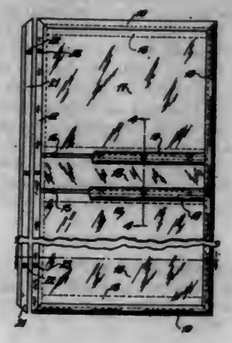
1,876,977. TWO-STROKE ENGINE BLOCK. FERNAND LAGUESSE, Herstal, Belgium. Filed June 24, 1930, Serial No. 463,509, and in Belgium June 29, 1929. 3 Claims. (Cl. 123—51.)



2. A two-stroke combustion engine comprising a casing, a motive cylinder having admission and exhaust ports, two opposed pistons arranged in said cylinder so as to respectively control said admission and exhaust ports, a crankshaft operatively connected with both pistons, a pump piston formed by an enlargement of the piston controlling said admission ports, a cylinder for said pump piston formed by an enlargement of said motive cylinder, which pump piston and cylinder form a charge introducing pump,

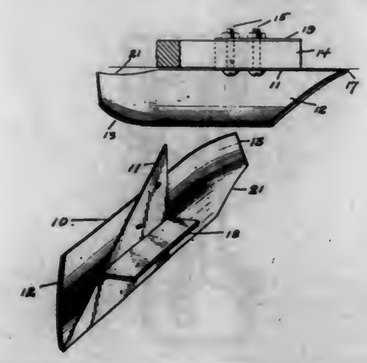
an auxiliary chamber forming the principal part of the total compression space of the pump, which chamber is situated in the engine casing before the pump, and a relatively long duct connecting said auxiliary chamber with the pump cylinder.

1,876,978. DISPLAY DEVICE. FREDERIC H. LANG and NATHAN E. VAN STONE, Chicago, Ill., assignors to The Sherwin-Williams Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 1, 1929, Serial No. 382,757. Divided and this application filed Nov. 3, 1931. Serial No. 572,824. 5 Claims. (Cl. 35—17.)



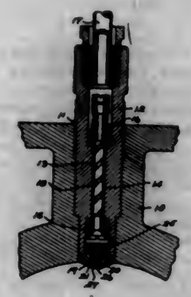
1. A display device of the character described comprising, in combination, a frame having opposed inner grooves therein, a pair of cross members, retaining members mounted on each cross member, upper and lower colored panels slidably supported between the retaining members and grooves, and an intermediate panel slidable upon said retaining members and serving to conceal the same.

1,876,979. EDGE TRIMMER. BROR JULIUS LARSON, Hamden, Conn. Filed Sept. 22, 1931. Serial No. 564,339. 2 Claims. (Cl. 97—227.)
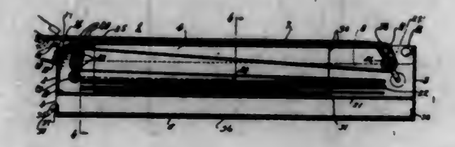


1. An edge trimmer including a cutter composed of an elongated plate-like member having its rear end curved inwardly to form a deflector for the material cut, a cheek plate of less length than that of the cutter secured at its bottom to the latter and having its rear spaced a distance forwardly of the said curved rear end of the cutter, the front edges of the cutter and cheek plate being substantially in register and having downwardly and forwardly inclined cutting edges, a handle, and means to rigidly secure the handle to the cheek plate at points spaced from the cutter.

1,876,980. FUEL INJECTION DEVICE. JOHN HOWARD LENTELL, Jr., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1929. Serial No. 405,118. 9 Claims. (Cl. 299—120.)



1. In a fuel injection device, a member for directing fuel discharge, and having a plurality of fuel guide passages therein, a pair of such passages being of different angularity and sectional area.

1,876,981. MANIFOLD FORM ALIGNING DEVICE. HOWARD W. LEWIS, Nutley, N. J. Filed July 16, 1930. Serial No. 468,249. 9 Claims. (Cl. 282—12.)



1. A form aligning device comprising, a casing having a writing top and a body portion supporting said top, said body portion serving as a reservoir for writing sheets arranged in continuous strip form and having a slot in each side wall thereof, said continuous strip extending out of said body portion and being adapted to be pulled across said top, and opposed snubbing rollers mounted within said body portion and engaging opposite sides of said continuous strip to tension the same as it is pulled across said top in use, said snubbing rollers having extensions at their ends, the extensions at one end of said rollers being turnably mounted in one of said slots and the extensions at the other end of said rollers being turnably mounted in the other of said slots.

1,876,982. HANDLE BOX. MALVIN LICHTER, New York, N. Y., assignor to The Stickless Corporation, a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,940. 11 Claims. (Cl. 225—52.)

1. In a handle box the combination of a bottom panel, a front leaf and a back leaf extending from said bottom panel, a pair of side leaves extending from said front leaf, a pair of side leaves connected with said back leaf, a top leaf extending from said back leaf, and a pair of additional front leaves, said back leaf, said top leaf and all of said front leaves being each provided with an opening and with a narrow portion partially bounding said opening, all of said leaves being so positioned that one



overlaps another, said openings being in registry with each other and said narrow portions together forming a handle.

1,876,983. FOLDABLE STAND. GUSTAVE LIDSEEN, Chicago, Ill. Filed Feb. 13, 1930. Serial No. 428,029. 13 Claims. (Cl. 211—132.)



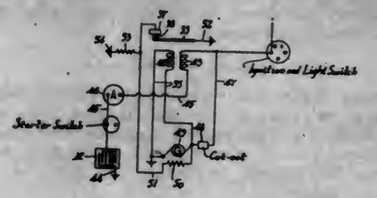
1. In a foldable stand, a plurality of legs, bracing means for said legs, a plurality of load carrying members supported by said legs, means for bracing said members, and tongues struck from said last mentioned means for interlocking said bracing means.

1,876,984. METHOD OF TREATING WOODEN STRINGED INSTRUMENTS. CHARLES W. LINDEEN, Omaha, Nebr. Filed July 10, 1930. Serial No. 467,139. 1 Claim. (Cl. 99—12.)

That method of mellowing stringed instruments, which consists in applying with a rubbing action at consecutively spaced intervals of time quantities of chemically pure vaseline into the surface of the wood body of the instrument, applying separate relatively thin coatings of shellac over the vaseline treated surface, rubbing down the shellac to provide a smooth and even exterior surface to the instrument, and finally applying several independent coatings of oil varnish over the smoothed and shellacked surface.

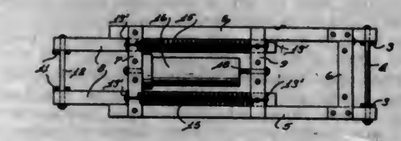
1,876,985. BATTERY CHARGING SYSTEM. LESLIE LIPPARD, Salida, Colo. Filed May 9, 1928. Serial No. 276,315. 6 Claims. (Cl. 171—314.)

1. An apparatus of the character described comprising a generator, a storage battery, a circuit including said generator and battery, controlling means for reducing the charging current in said circuit, a series coil in said circuit and a shunt coil connected with the generator



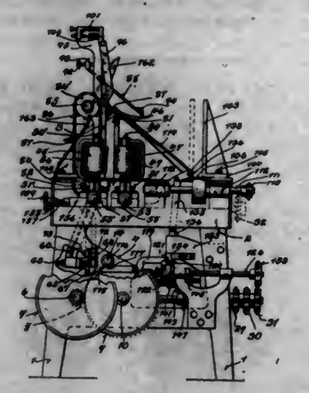
and both controlling the first named means, means operable by accumulated gas from the storage battery and yieldably controlling the first named means jointly with the second named means.

1,876,986. DOORCHECK. LYSANDER J. LISHNESS, Lapeer, Mich. Filed Mar. 12, 1931. Serial No. 521,903. 3 Claims. (Cl. 16—85.)



1. A device of the character described comprising a pair of guide bars, cross rods rigidly securing said guide bars together in parallel spaced relation, sliding bars received between said guide bars, a cross rod securing said sliding bars together in parallel spaced relation, strap members secured to the cross members on each set of bars in a manner to maintain said sliding bars between said guide bars, a cylinder attached to said cross member on said sliding bars, a piston attached to one of the cross members on said guide members and received in said cylinder, and springs having one end attached to one of the cross bars on said sliding members and the opposite end attached to one of the cross bars on said guide members.

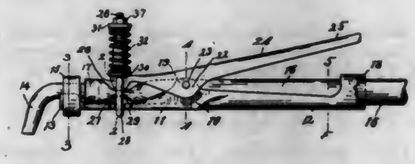
1,876,987. WOODWORKING MACHINE. WILLIAM LOEFFLER, Sheboygan, Wis. Filed Nov. 8, 1929. Serial No. 405,698. 12 Claims. (Cl. 144—242.)



1. In a machine of the class described including work receiving passageways, means for conveying the work through said passageways, elevating means operative in one of said passageways for raising the work therein,

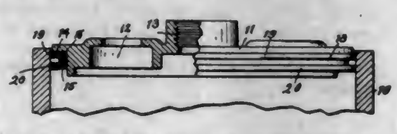
means operated by the movement of the work in said latter passageway for controlling the raising means, an inclined wall upon which the work is discharged when raised in the first passageway and conveyed to the other passageway and means for correctly positioning the work in the second passageway.

1,876,988. SHUT-OFF VALVE FOR FILLING NOZZLES. HENRY W. LORMOR, Cleveland Heights, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Sept. 10, 1927. Serial No. 218,820. 5 Claims. (Cl. 251—5.)



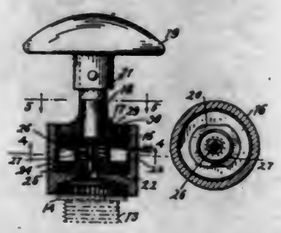
1. In a device of the type described, an elongated substantially channel-shaped handle portion adapted to support a flexible tube therein, a discharge nozzle attached to one end of said handle portion and adapted to receive one end of said flexible tube, a second handle portion pivotally attached to said first handle portion and having its forward end terminating short of the adjacent end of said first handle portion, aligned means on said handle portions disposed between said discharge nozzle and the pivot of said handle portions and adapted to engage the flexible tube upon opposite sides thereof, and means normally urging said aligned means toward each other.

1,876,989. STORAGE BATTERY. HENRY W. LORMOR, Cleveland Heights, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Oct. 10, 1928. Serial No. 311,485. 4 Claims. (Cl. 136—170.)



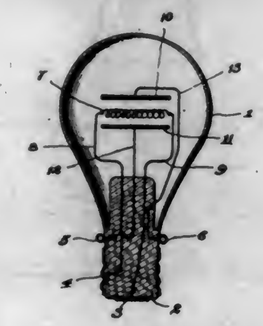
1. In a storage battery, the combination of a container, a cover for said container, a rubber ring carried by said cover, and a groove in said ring whereby when said cover is inserted into said container, the ring is maintained in engagement with the container through suction.

1,876,990. VENT PLUG WRENCH. HENRY W. LORMOR, Cleveland Heights, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Apr. 11, 1930. Serial No. 443,413. 5 Claims. (Cl. 81—53.)



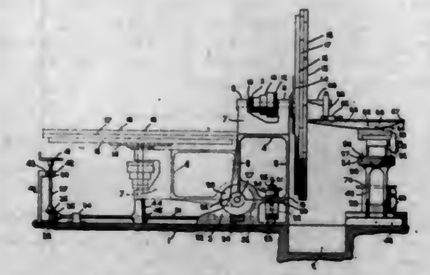
1. A tool comprising a casing having a work engaging portion at one end thereof and a cover at the opposite end thereof, an operating handle journaled in said cover and having a non-circular portion extending into said casing, means for preventing relative axial movement between said handle and cover and means whereby rotation of said handle imparts a predetermined torque to said casing, said means including a friction surface within said casing, a friction member within said casing having a correspondingly shaped portion engaged by the non-circular portion of said handle, and means in said casing for moving said friction member axially into engagement with said friction surface.

1,876,991. ELECTRIC DISCHARGE TUBE. RUDOLF LÖWITT, Berlin-Halensee, Germany, assignor to Deutsche Gluhfadenfabrik Rich. Kurtz & Dr. Ing. Paul Schwarzkopf G. m. b. H., Berlin-Halensee, Germany. Filed Jan. 19, 1928, Serial No. 248,017, and in Germany Jan. 20, 1927. 2 Claims. (Cl. 250—27.5.)



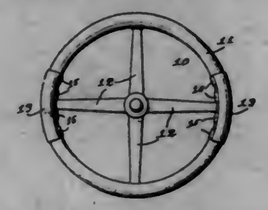
2. An electric rectifier comprising an electric discharge vessel having an anode, a cathode of molybdenum and an addition of from 0.25% to 10% thorium, in metallic state, and a filling of inert gas in said vessel at a pressure from about 3 mm. up to about 30 mm. mercury column.

1,876,992. PATTERN TURNING LATHE. CHARLES MACLEOD, North Easton, Mass. Filed Feb. 6, 1930. Serial No. 426,217. 9 Claims. (Cl. 142—1.)



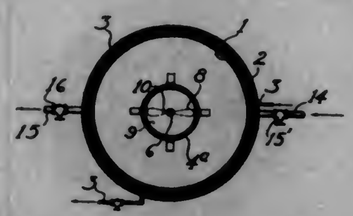
1. A lathe for turning large wooden patterns comprising a head stock column formed in superimposed sections, the upper section having a head stock provided with a horizontal shaft provided with a vertical face plate, means for driving said shaft, means pivotally connecting the upper and lower sections of said column, operable to permit the said shaft to be swung from horizontal to vertical position after being disconnected from its driving means, and means for supporting said head stock, when said shaft is in vertical position, to permit free rotation of said face plate and thereby enable the work to be conveniently assembled upon said face plate.

1,876,993. STEERING WHEEL GRIP. HAROLD G. MANNING, Waterbury, Conn. Filed Nov. 27, 1928. Serial No. 322,190. 1 Claim. (Cl. 74—33.)



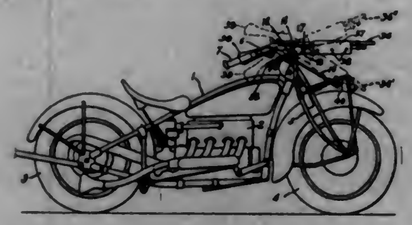
In a steering wheel grip, a sheet of rectangular flexible absorbent material for embracing the outer surface of a portion of the steering wheel rim, a plurality of closely spaced parallel rectangular elastic strips attached to one edge of said sheet, and means to fasten the ends of said strips to the other edge of said sheet, said elastic strips being spaced apart to permit any adjacent pair to closely embrace one of the spokes of the steering wheel to position said grip relative to said wheel.

1,876,994. DISTRIBUTOR FOR REACTIVE LIQUIDS AND METHOD OF USING THE SAME. MATTHEW D. MANN, Jr., Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,842. 12 Claims. (Cl. 259—97.)



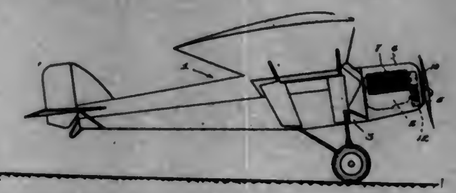
1. Method of distributing a liquid reagent upon the surface of a liquid, comprising projecting the liquid reagent outwardly by centrifugal force against an intercepting surface above the body of the liquid, and causing the liquid to flow separately from said surface in a plurality of small streams upon the surface of the body of the liquid.

1,876,995. ARMED MOTOR CYCLE. ARTHUR E. MANZER, San Gabriel, Calif. Filed Dec. 21, 1931. Serial No. 582,210. 10 Claims. (Cl. 89—40.)



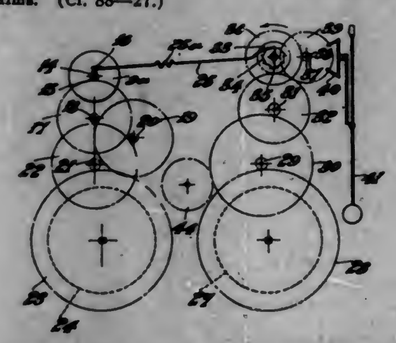
1. In a motorcycle provided with a body portion, a front fork pivoted in the longitudinal axis of the body portion and handlebars connected to said fork, the combination of a gun mount attached to said handlebars and provided with a trough-shaped holder mounted with its open side upwardly on a horizontal pivot, said holder being adapted to receive and support a gun, and means for releasably retaining a gun in said holder.

1,876,996. AIR COOLING SYSTEM FOR AEROPLANE ENGINES. EDWARD S. MARKS, Syracuse, N. Y., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,092. 5 Claims. (Cl. 128—171.)



1. In an aeroplane, a frame, a multi-cylinder, air cooled, in line internal combustion engine mounted on the frame with the cylinders one behind the other, a propeller connected to the crank shaft of the engine to be actuated thereby and located in front of the engine, an air conduit arranged to discharge air onto the cylinders to cool the same, the inlet end of said air conduit being arranged in position behind the propeller to receive air therefrom, and means independent of the propeller, for supplying air to the conduit.

1,876,997. ADVERTISING CLOCK. STEPHEN ARNOLD MARPLES, London, England. Filed Aug. 9, 1929, Serial No. 384,644, and in Great Britain Aug. 10, 1928. 15 Claims. (Cl. 88—27.)

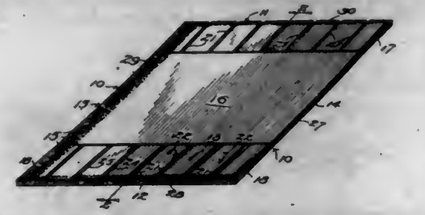


1. Intermittently operated mechanism, comprising motor operated mechanism, an interconnecting transmission member therefor, motor operated speed controlling mechanism, an interconnecting transmission member therefor, an intermittently rotated member, means for driving the same from the motor operated mechanism, and a connecting member, the connecting member being at one end continuously connected to the interconnecting transmission member of the motor operated mechanism and at the other end intermittently connected to the interconnecting transmission member of the speed controlling mechanism, the relative directions of movement of both interconnecting transmission members being such that any pressure exerted by the motor operated mechanism through the connecting member will be in the operative direction of motion of the interconnecting transmission member of the speed controlling mechanism.

1,876,998. PARTITION SHEET FOR BINDERS. ALFRED M. MARTIN, Chicago, Ill. Filed May 25, 1929. Serial No. 365,853. 6 Claims. (Cl. 129—1.)

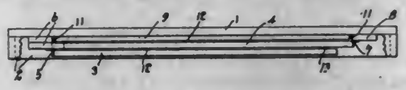
6. A partition sheet for loose-leaf binders of the character described, said sheet being substantially rectangular and having an inner side edge and an outer side edge defining the substantially rectangular shape, the sheet having means at the inner side edge portion thereof for holding it in the binder, said sheet being of integral construc-

tion and of flexible material and being substantially thin at the middle portion thereof and gradually increasing in thickness from said middle portion, and to a material ex-



tent, toward and substantially to an edge of the sheet other than a side edge thereof, with recesses in said substantially thick portions extending in the up-and-down directions of the sheet for the purposes specified.

1,876,999. FOLDING TABLE. CLIFFORD H. MCCASLIN, Oakland, Calif. Filed July 2, 1928. Serial No. 289,888. 5 Claims. (Cl. 45—11.)



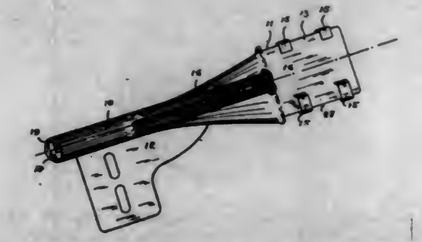
1. A folding table comprising a one piece top, aprons disposed around the sides of the table and with the top forming a recess, legs of substantially the width of the table being hinged to the underside of the top so as to be swingable into a position within the recess, a bracing member of substantially the same width as that of the recess and a length equal to the distance between the two legs when in operative position, and cooperating means carried by the inner surfaces of said legs and the edges of said bracing member for securing them together, said bracing member being received in the recess and held in place by the apron and legs when the latter are folded.

1,877,000. ANTISKID DEVICE. EMERSON MCKENNEY and HARRY MCKENNY, Wakefield, Mass., and NELSON T. FOX, Portland, Me., assignors to McKenney Chain Co., Portland, Me., a Corporation of Maine. Filed Dec. 27, 1930. Serial No. 505,014. 3 Claims. (Cl. 152—14.)



1. An anti-skid device comprising in combination a plurality of links including central track engaging links formed to extend across the tread portion of a tire, and end links formed to extend from the ends of the central links partly across the sides of the tire, the ends of the central links being connected with the inner ends of the end links by hinges permitting swinging movements of the side links toward and from the tire sides, said hinges being composed of members formed on the opposite ends of the central links and on the inner ends of the end links, and provided with means inseparably connecting said members when the said links bear on the tire sides and permitting the separation of the members when the end links are swung outwardly from the tire sides, means connecting the outer ends of the end links in series, the connected central links, end links, and connecting means constituting a girdle adapted to surround the major portion of the tire, the ends of said girdle being separated by a gap, and contractible binding means separably connecting the ends of said girdle, to tension the girdle and confine the end links against the tire sides, thereby preventing separation of the end links from the central links.

1,877,001. FOLDER FOR ANTISQUEAK MATERIAL. FRANCIS BERRY MCILROY, Hammond, Ind. Filed July 8, 1930. Serial No. 466,543. 4 Claims. (Cl. 112—139.)

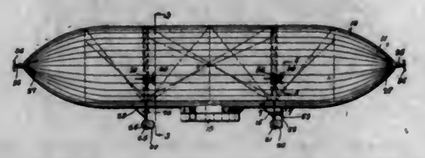


2. In a device of the character described, a casing flat in cross-section at the entrance and tapering until oval in cross-section at the outlet, a guide plate extending longitudinally from the entrance of the casing, said guide plate being slightly narrower than the entrance, and bands extending across the guide plate for holding the material thereon.

1,877,002. APPARATUS FOR THE MANUFACTURE OF ARTIFICIAL THREADS. FRITZ MELMS, Premnitz, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 13, 1928, Serial No. 319,057, and in Germany Nov. 15, 1927. 4 Claims. (Cl. 18—8.)

1. An apparatus for the manufacture of uniform artificial threads of high total titer comprising an open spinning trough containing the setting liquid, a supply pipe for the spinning solution, a number of spinning pipes branched from the supply pipe and provided with spinning nozzles having a number of openings, said nozzles being so arranged as to lie on a curved surface, the axes of all the nozzles being directed to the center of the surface, and at this center at a point equidistant from the nozzles a thread guide for collecting the filaments formed at the nozzles and for guiding the collected fiber bundle out of the setting trough.

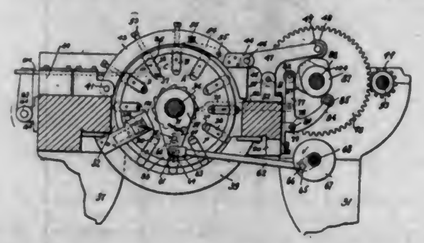
1,877,003. FLYING MACHINE. FREDERICK A. MENG, Dearborn, Mich. Filed Sept. 24, 1931. Serial No. 564,868. 4 Claims. (Cl. 244—6.)



1. An airship comprising a bag, propellers at front and rear thereof, side propellers, frameworks depending from the bag, wheels carried by the frameworks, a propelling unit carrid by one of the frameworks adapted for operation when the wheel means are engaged with the ground, the last mentioned framework having an upright, the propelling

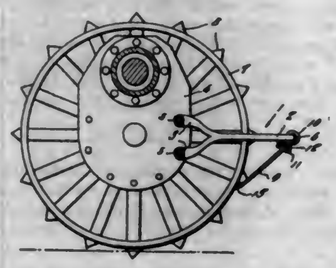
means being journaled thereon, a casing carried by the upright, a cushioning spring in the casing, and the ground wheel means having a portion in cushioning engagement with the spring.

1,877,004. APPARATUS FOR FORMING METALLIC RETAINING MEMBERS. JOHN B. MENZL, Clayton, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 19, 1927. Serial No. 185,052. 12 Claims. (Cl. 10—158.)



1. In a machine for securing the heads to the stems of metallic retaining members, a rotary disk adapted to receive stems in a horizontal position, means for rotating said disk step by step, means for upsetting shoulders adjacent both ends of said stems, means for supplying heads adjacent the ends of said stems, means for piercing said heads and positioning them on the stems, and means for riveting the heads to the stems against said shoulders.

1,877,005. WHEEL CLEANING ATTACHMENT FOR TRACTORS. GEORGE MERKLIN, Bonilla, S. Dak. Filed Feb. 6, 1931. Serial No. 514,039. 1 Claim. (Cl. 280—158.)



A tractor having ground wheels on the peripheries of each of which are spaced circumferential sets of ground engaging lugs, and also having at the inner sides of said ground wheels gear casing, and further having in combination with said ground wheels and gear casings, scraper attachments each of which comprises a bracket fixed to the inner side of and extending rearwardly from one gear casing and provided with a transverse arm of circular form in cross section, said arm resting in rear of and in spaced relation to the periphery of the adjacent wheel, and a scraper adjustable on and in the direction of the length of said arm and also adjustable about the axis of the arm and arranged with its free end in a plane between the circumferential sets of lugs on the adjacent wheel, and means complementary to the scraper for adjustably fixing the scraper against movement lengthwise of the arm and about the axis thereof.

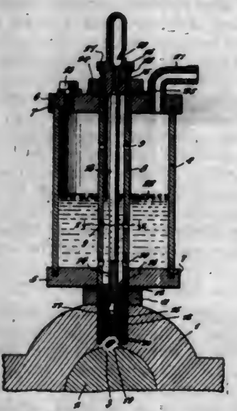
1,877,006. CLAMP. WILLIAM ESTEL MERRYMAN, Richmond, Ind. Filed Nov. 9, 1931. Serial No. 573,931. 4 Claims. (Cl. 24—255.)

1. A clamp comprising a main member formed of a single piece of material and forming an arm, a circular jaw remote from the arm, and a helix located between the jaw and the arm; an auxiliary complementary member formed of a single piece of material and forming an arm, a circular jaw remote from the last mentioned arm, a cup-shaped spiral forming a continuation of the jaw of the auxiliary member and adapted to pass through the space



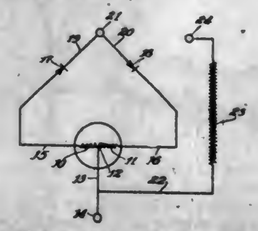
encircled by the jaw of the main member when the two jaws are in occlusion and a helix located between the jaw and arm of the auxiliary member, an axle extending through both the first and the second mentioned helix, and means whereby the two arms may be detachably locked together to cause said jaws to normally contact together.

1,877,007. OILER. CHARLES MEYER, Milwaukee, Wis. Filed May 8, 1931. Serial No. 536,014. 8 Claims. (Cl. 184—1.)



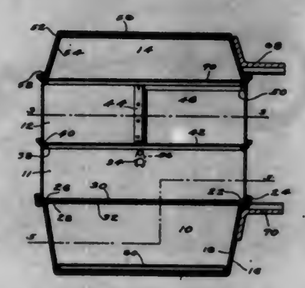
1. A lubricating device comprising a container, means for securing the container upon a bearing, said means constituting an outlet from the container, means whereby communication may be established through the last mentioned means between the container and the bearing to which the device is fitted, a fuse normally cutting off said communication, and a valve normally supported by said fuse and arranged to establish a flow of lubricant from the container to the bearing when said fuse melts.

1,877,008. ELECTRIC METER. JOHN H. MILLER, Oak Park, Ill., assignor, by mesne assignments, to Jewell Electrical Instrument Company, a Corporation of New Jersey. Filed May 1, 1931. Serial No. 534,315. 4 Claims. (Cl. 171—95.)



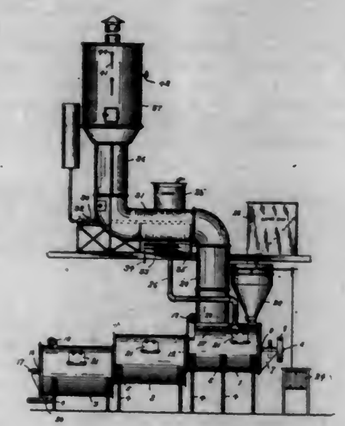
3. An alternating current meter comprising a moving coil instrument having a pair of oppositely wound coils, and rectifiers connected to said coils to supply current in opposite directions from an alternating current source of supply.

1,877,009. COOKING UTENSIL. LEWIS H. MILLS, Seattle, Wash., assignor to Neverburn Cooker Co., Seattle, Wash., a Corporation of Washington. Filed Feb. 1, 1930. Serial No. 425,185. 1 Claim. (Cl. 53—1.)



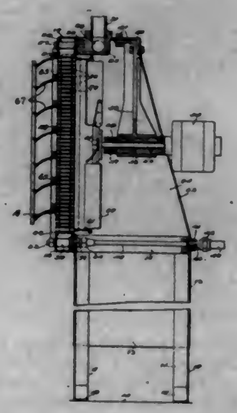
A cooking utensil consisting of a lower pan formed of two thicknesses of sheet metal, a third heat distributing sheet included between said two sheets; an inverted upper pan of similar construction; intermediate vessel members positioned between said upper and lower pans; an annular ledge formed on said lower pan adapted to receive said intermediate members or said upper pan; an annular ledge formed on said intermediate members adapted to receive another intermediate member or said upper pan; divisional partitions in one or more of said intermediate members; handle brackets secured to said upper and lower pan members and a detachable handle adapted to engage either member separately or both at the same time when said pans are used without intermediate members.

1,877,010. LIME HYDRATOR. HUGH MISCAMPBELL, Duluth, Minn., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 30, 1929. Serial No. 417,447. 9 Claims. (Cl. 23—287.)



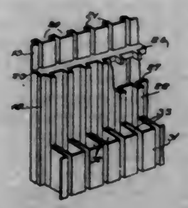
1. A batch hydrating unit of the class described comprising a plurality of vertically stepped mixing drums, said drums being arranged and to end and discharging one into the next adjacent lower one, a mixing shaft within each drum, and a gate in one drum for selectively discharging a batch of material into the next succeeding drum.

1,877,011. AIR HEATER. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 7, 1929. Serial No. 384,203. 21 Claims. (Cl. 257—137.)



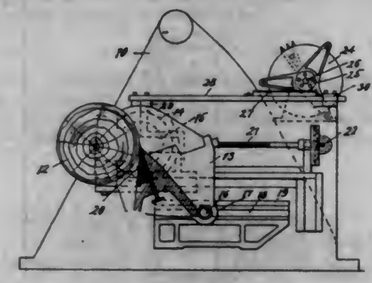
4. In a device of the class described, a hollow member, a heating unit forming a wall of said hollow member and comprising spaced tanks connected by tubular means, and serving also as a conduit for heating fluid, means for supporting said hollow member in spaced relation to a floor, a connection between said supporting means and said heating unit such connection providing means compensating for movement of said unit, relatively to said supporting means, an air conduit carried by said last mentioned supporting means and communicating with said hollow member, flexible tubular means for conducting fluid away from said heating unit, and means for inducing a current of air to flow upwardly through said conduit into said hollow member and out through said heating unit.

1,877,012. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 22, 1929. Serial No. 409,017. 16 Claims. (Cl. 257—136.)



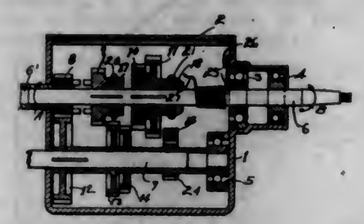
6. In a heat exchange device, the combination of a chambered member having a fluid inlet and a fluid outlet, an element extending from said chambered member and being arranged relatively to said chambered member to provide a wall of a recess located above said chambered member, said element and walls of said chamber having a plurality of vertically arranged extensions and recesses, the recesses provided in one wall of said chamber providing air passages leading to said recess located above the chambered member, and heat radiating fins connected with said chambered member.

1,877,013. VENEER LATHE. RICHARD C. MOORE, Painesville, Ohio, assignor to The Coe Manufacturing Company, Painesville, Ohio, a Corporation of Ohio. Filed June 25, 1929. Serial No. 373,509. 3 Claims. (Cl. 144—209.)



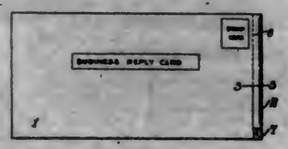
1. In a veneer lathe, rotatable spindles adapted to support a log, a motor for operating said spindles, means for cutting veneer strips from said log and automatically adjustable to compensate for variations in the diameter of the log, and means for automatically controlling the speed of operation of said motor, said means including a rheostat in the motor circuit and having an operating shaft provided with a wheel, and a rack bar connected to said cutting means and engaging said wheel.

1,877,014. AUTOMOBILE NO BACK SAFETY STOP. JOHN H. MORGAN, Piedmont, Calif., assignor to Max L. Rosenfeld, San Francisco, Calif. Filed Mar. 5, 1929. Serial No. 344,843. 8 Claims. (Cl. 192—4.)



1. A mechanism of the class described comprising a gear casing having a main drive shaft extending therethrough, a spiral spring wound upon and bearing on said drive shaft, one end being fixed, and the other end free, whereby said shaft can turn freely in one direction, but the coils of said spring will wrap and tighten on said shaft to prevent its rotation in the other direction, and means operated with the reverse gear to release the pressure of the spring to allow the shaft to revolve.

1,877,015. COMBINATION CARD AND DETACHABLE PENCIL. THOMAS MUNROE, Dayton, Ohio. Filed Apr. 18, 1931. Serial No. 531,053. 5 Claims. (Cl. 281—1.)



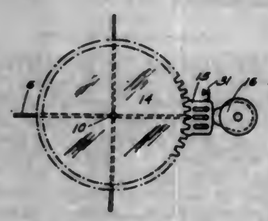
1. A card having a sleeve portion detachable along one edge thereof, and a piece of lead secured in said sleeve portion, the latter, where detached, adapted to hold the lead for writing upon said card.

1,877,016. REMOVABLE GUNSTOCK FOR PISTOLS. LAWRENCE J. MUNSON, San Francisco, Calif. Filed June 15, 1931. Serial No. 544,542. 4 Claims. (Cl. 42—71.)



4. A pistol attachment having a cup-shaped portion for snugly engaging with the rear and sides of a pistol, said cup-shaped portion having two sides, one of which is longer than the other, and a spring pressed pin carried by the longer side and disposed in that portion extending beyond the shorter side and manually controlled means for moving the pin into retracted position.

1,877,017. ROTARY DOORLOCK. DAVID F. MURPHY and SIMON SCHNEIDER, Oakland, Calif. Filed Sept. 2, 1930. Serial No. 479,289. 1 Claim. (Cl. 70—50.)



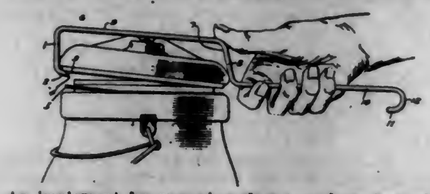
In combination with a revolving door having a central pivot shaft, a spur gear secured on the end of said shaft, a sector gear having a plurality of teeth formed on a radius from the center of said shaft and radially slidable, and a cam adapted by rotation thereof to engage said sector gear with said spur gear, said sector gear being releasable from said spur gear only by independent retraction thereof.

1,877,018. RACKET FOR GAMES AND THE MANUFACTURE THEREOF. ROBERT JOHN NASH, Birmingham, England. Filed Nov. 25, 1929, Serial No. 409,491, and in Great Britain Feb. 4, 1929. 5 Claims. (Cl. 273—73.)



1. An improved racket for games in which the faces of the lower part of the bow frame are each shaved off at an inclination to leave a flat inclined face terminating at or near the throat, and the junction with the handle is made by a double inclined overlay member secured to the frame and to the handle, all the joints being made on flat faces all of which taper to feather edges where an edge is exposed at a joint.

1,877,019. OPENER FOR JARS AND BOTTLES. GEORGE NATHAN, Buffalo, N. Y. Filed Apr. 14, 1930. Serial No. 444,213. 1 Claim. (Cl. 81—3.1.)



An implement for removing glass tops from jars wherein the top is seated on a rubber gasket and may be lifted from the jar upon breaking the air seal, comprising a one-piece body of elonagted design having a penetrating toe extended beneath a reach portion, the latter being offset to form a handle and a connecting shoulder, said shoulder opposing the toe and formed with a camming face opposing the toe for engaging the jar cover at the opposite side thereof from the toe for drawing the toe inwardly beneath the cover upon exerting a downward pressure on the handle and shoulder.

1,877,020. THE PROCESS OF IMPROVING HALOGEN DERIVATIVES OF N-DIHYDRO-1.2.2'.1'-ANTHRAQUINONEAZINE. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1930, Serial No. 447,415, and in Germany May 10, 1929. 2 Claims. (Cl. 260—31.)
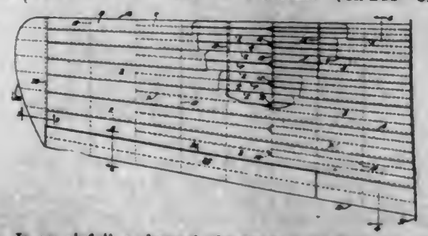
1. A process of improving halogen derivatives of N-dihydro-1.2.2'.1'-anthraquinoneazine, which comprises treating a halogen derivative of N-dihydro-1.2.2'.1'-anthraquinoneazine in sulphuric acid solution with a manganese oxide.

1,877,021. INSTRUMENT BOARD. JOHN K. NORTHROP, Glendale, and OLIN B. CLARK, Burbank, Calif., assignors to Northrop Aircraft Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,121. 4 Claims. (Cl. 244—31.)
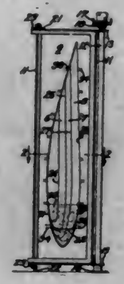


1. In combination with an instrument panel, resilient supporting means for the panel, and resilient bumpers for the panel.

1,877,022. AIRFOIL. JOHN K. NORTHROP, Glendale, Calif., assignor to Northrop Aircraft Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed July 19, 1930. Serial No. 469,012. 6 Claims. (Cl. 244—31.)



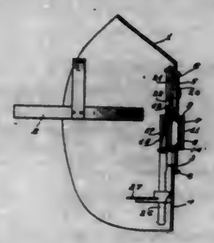
1. In an airfoil, a channel, the flanges of which diminish in thickness toward the tip of the airfoil approximately in ratio to the decrease in stress, the top flange being thicker than the bottom flange at any transverse section.

1,877,023. METHOD OF CONSTRUCTING AIRFOILS. JOHN K. NORTHROP, Glendale, Calif., assignor to Northrop Aircraft Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed July 19, 1930. Serial No. 469,013. 6 Claims. (Cl. 244—31.)



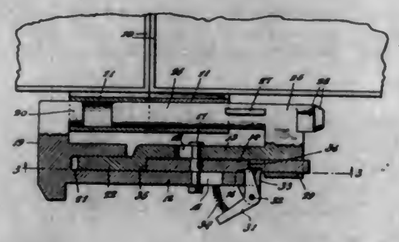
1. The method of fabricating an airplane wing from a plurality of members which comprises forming a jig defining the complete outline of a plurality of cross-sections through the assembled wing, conforming the members to a jig, and while in the conformed position conditioning the members for permanent assembly.

1,877,024. WELDER'S HOOD. JOHN S. NORTON, San Francisco, Calif., assignor of one-half to William F. Hoilingsworth, San Francisco, Calif. Filed Mar. 31, 1931. Serial No. 526,723. 2 Claims. (Cl. 2—8.)



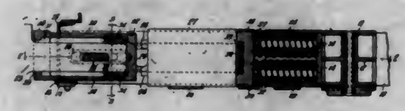
1. A welder's hood having an eye opening therein, a framed protecting glass movable vertically into and out of registration with the opening, and chin-actuated means connected to the top of the frame for lifting the glasss out of registration.

1,877,025. PAN FASTENER FOR CONVEYER MACHINERY. ADAM J. NOUSI, Superior, Wyo. Filed July 13, 1931. Serial No. 550,520. 6 Claims. (Cl. 198—220.)



1. A pan fastener for conveyers comprising spaced plates pivotally and slidably connected together and having opposite jaws, each plate having a socket at one end receiving the free end of the other plate, a bolt carried by the socket end of one plate, a lug carried by the socket end of the other plate, and a cam disposed between the plates and engaging the jaws of the plates for moving the plates longitudinally with consequent movements of the bolt and lug toward each other for entry into the contiguous eyes of adjoining conveyer pans.

1,877,026. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,479. 10 Claims. (Cl. 213—7.)



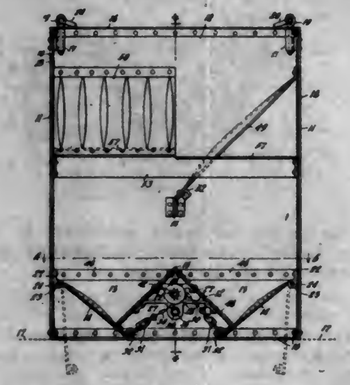
1. In a railway draft rigging, the combination with center sills; of a coupler; shock absorbing means; yoke means connecting the coupler and shock absorbing means; a movable supporting member for the coupler shank, said supporting member supporting the coupler shank forwardly of the connection thereof with the yoke, in all operative positions of the coupler; an outer follower cooperating with the shock absorbing means, said follower being rigid with said supporting member; and outer stop means for said follower fixed to the center sills.

1,877,027. HAND BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,258. 13 Claims. (Cl. 74—112.)



1. In a hand brake mechanism, the combination with a rotary chain winding member; of a driving element connected thereto; a rotary manually actuated operating means rotatable in reverse directions; a ratchet member normally operative for preventing rotation of the winding member in unwinding direction; means for connecting said operating means with and disconnecting the same from said driving element when said operating means is rotated in directions corresponding to the chain winding and unwinding directions respectively, said operating means when engaged with said driving member and rotated in chain winding direction effecting tightening of the brakes, said operating means when rotated in a reverse direction being disconnected from said driving means and thereby rendering said ratchet member ineffective and permitting free running of the chain winding member and complete release of the brakes; and auxiliary means for actuating said chain winding member to ease off the brakes.

1,877,028. BULK FREIGHT CONTAINER. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,138. 12 Claims. (Cl. 105—366.)



1. A bulk freight container of rectangular box-like form open at the top and having inclined bottom dumping doors, said doors being entirely within the limits of the bottom edge of the container, said bottom edge lying in a single plane to rest on a flat door of a car.

2. A bulk freight container of rectangular box-like form, open at the top and having dumping doors at the bottom portion thereof, said container having a base portion lying in a single plane and adapted to rest on a flat support, said base portion forming extensions of the vertical walls thereof and having the bottom edge thereof disposed in alinement with the bottom edges of the doors when closed.

1,877,029. CAR CONSTRUCTION. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,238. 5 Claims. (Cl. 105—200.)

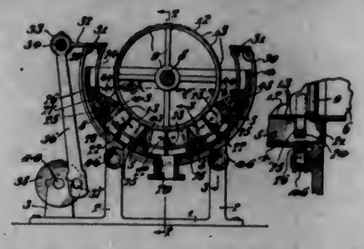


1. In car construction, the combination with body and truck bolsters having cooperating center bearing means thereon; of link members at opposite sides of said center bearing means anchored to said bolsters respectively to limit relative separation thereof in a vertical direction, each of said links having bearing openings at opposite ends thereof; and pins fixed to said bolsters and extending through said bearing openings respectively and having rocking bearing engagement with the walls of said openings to take the load upon relative approach of said bolsters during relative rotative movement thereof about said center bearing.

1,877,030. ROTARY PULP SCREEN. THOMAS O'CONNOR, Philadelphia, Pa. Filed Apr. 16, 1930. Serial No. 444,687. 13 Claims. (Cl. 92—36.)

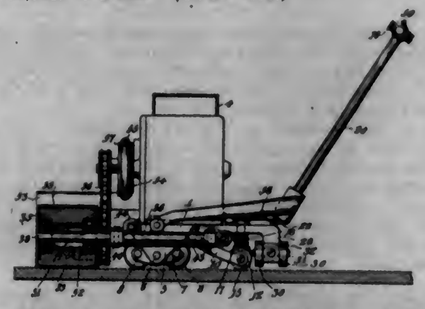
1. A screening apparatus comprising in combination a tank having projections therein which extend lengthwise

thereof and which project inwardly, the said projections being spaced from each other to form compartments, agitating means located within the said compartments, and



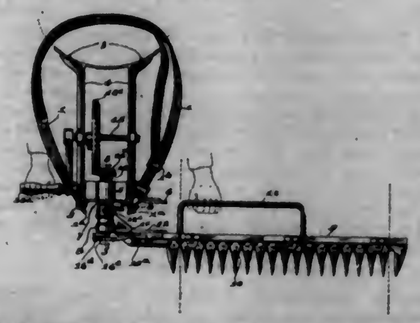
means for causing oscillatory movements of the said agitating means in the said compartments back and forth between the said projections.

1,877,031. FLOOR SURFACER. CHARLES J. OLSON, Muskegon, Mich. Filed Dec. 11, 1929. Serial No. 413,348. 6 Claims. (Cl. 51—176.)



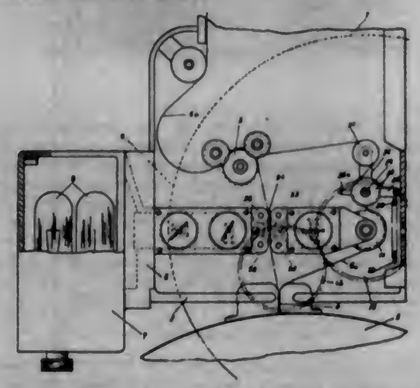
1. A floor-dressing machine comprising a portable frame, an abrading mechanism mounted at the front of the frame and comprising a pair of pulleys and an endless abrading belt carried by the pulleys, a frame comprising a bar disposed at one side of the main frame parallel therewith and a rod slidably mounted on the front of the main frame, means connecting said frame bar with the main frame and adjusting it transversely thereto, an axle carrying one of said pulleys and pivotally mounted upon said frame bar, and means at the rear end of the axle for adjusting the same relative to the main frame and locking it in adjusted position.

1,877,032. HEDGE TRIMMER AND THE LIKE. ROWLEY K. ORTT, Dixon, Ill. Filed Oct. 28, 1929. Serial No. 401,669. 5 Claims. (Cl. 30—11.)



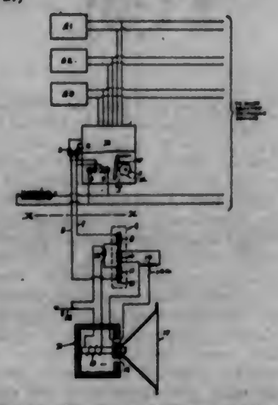
1. A portable trimmer embodying a supporting frame adapted to extend forwardly from the body and at its rear end formed to fit the body and at its front end having a forwardly projecting rigid stud; a shoulder strap coupled to the front end of said frame for supporting the same; a cutter bar including reciprocatory knife bar extending laterally from said frame stud and supported thereby and rotatable thereon clear of said frame for adjustment to any angular position around the stud; and actuating mechanism carried by and extending from said frame through said stud to said knife bar for reciprocating the same.

1,877,033. SOUND REPRODUCING ATTACHMENT FOR MOTION PICTURE PROJECTORS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,383. 6 Claims. (Cl. 179—100.3.)



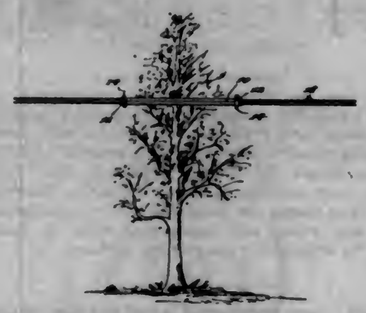
1. A sound film reproducing attachment for motion picture projectors comprising a housing, means for moving a film past said housing in position for reproduction of a sound record on said film, and means provided for moving said film through said housing out of sound reproducing position, said last named means including an opening through said housing.

1,877,034. SYSTEM FOR TRANSMITTING SOUND-CARRYING AND FIELD CURRENTS TO REMOTELY LOCATED DYNAMIC LOUD SPEAKERS. LAWRENCE O. PAINTER and HOWARD L. JOHNSON, St. Paul, Minn., assignors to Program Service Company, St. Paul, Minn. Filed June 14, 1930. Serial No. 461,095. 4 Claims. (Cl. 179—1.)



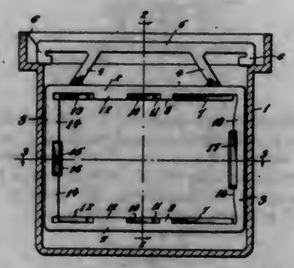
1. In a system for transmitting sound-carrying current, a central station, a distantly located dynamic loud speaker having a field coil and a voice coil, a number of sources of sound-carrying currents available at said central station, amplifiers for each of said sources of sound-carrying current, a selective uni-directionally progressive switching device located at a point convenient to said central station and having a series of switch units each connected with one of said sources of sound-carrying current, a pair of conductors extending between said central station and said dynamic loud speaker, a source of direct current at said central station connected with said conductors for supplying current for energizing the field coil of said distantly located dynamic loud speaker, and for also magnetically operating said selective switching device, said same pair of conductors transmitting sound-carrying currents from said central station to said distantly located dynamic speaker.

1,877,035. INSULATOR. DEWARD B. PALMER, Aurora, Ill. Filed Aug. 17, 1931. Serial No. 557,621. 3 Claims. (Cl. 173—28.)



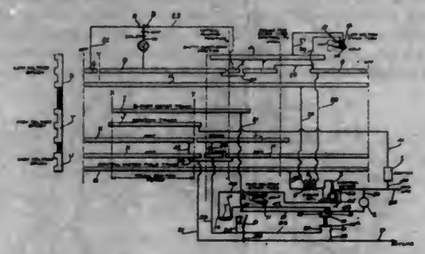
1. A cable deflector comprising a tubular insulator formed of longitudinal sections adapted to receive the cable between them, a pair of split ring clamps surrounding the sections, a set screw carried by each clamp, and a clamp plate swivelly mounted on the end of each set screw for clamping the cable against movement in the insulator, there being annular seats formed in the sections of the insulator to receive the split rings and prevent longitudinal creeping of the rings upon the insulator, there being slots formed longitudinally in the sections of the insulator receiving the set screws, the walls of the slots forming stops to prevent radial movement of the set screws should the split rings become loose whereby the set screws permanently maintain the cables in position in the insulator.

1,877,036. FILM HANGER. GEORGE D. PAPPAJION, Danielson, Conn. Filed Aug. 14, 1931. Serial No. 557,185. 2 Claims. (Cl. 95—100.)



1. A film hanger comprising a frame consisting of top, bottom and end bars, and film-retaining lugs on the inner sides of all said bars along the opposite edges of the same and in staggered relation, each lug having one edge beveled.

1,877,037. BURNER APPARATUS CONTROL MECHANISM. ARTHUR C. PARKER, Elkhart, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,510. 1 Claim. (Cl. 158—28.)



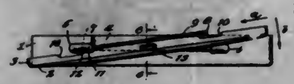
In combination, a motor operated burner and control means therefor comprising: a solenoid operated switch; switch means responsive to combustion to operate; a control motor of the type having switches operated thereby to control starting and stopping operation of both the control and burner motors; and electrical means so interconnecting the recited elements that successful initiation of combustion during starting operation causes (1) said switch means to energize said solenoid to close its switch, and (2) said control motor switches to establish the running circuit for said burner motor and the holding circuit for said solenoid through said solenoid switch, whereby momentary power failure results in opening said solenoid switch and the circuits of said burner motor and solenoid.

1,877,038. HINGED BOX AND METHOD OF ASSEMBLY. MAURICE PARTIOT, Paterson, N. J. Filed Jan. 20, 1930. Serial No. 422,033. 7 Claims. (Cl. 220—31.)



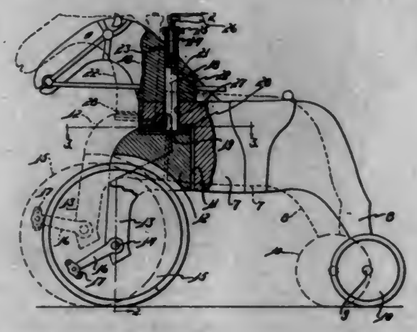
1. A hinged box comprising a section having two fluted hinge pivots of substantially circular cross section adjacent one edge, and a second section having two spaced hinge knuckles each with one end open and the other sides closed and adapted to receive said hinge pivots, the last mentioned section having at least one longitudinal slot communicating with the open end of one hinge knuckle narrower than the maximum thickness of the cooperating pivot but wide enough to admit said pivot when canted edgewise therethrough.

1,877,039. HINGED BOX AND METHOD OF ASSEMBLY. MAURICE PARTIOT, Paterson, N. J. Filed Apr. 26, 1930. Serial No. 447,488. 7 Claims. (Cl. 220—31.)



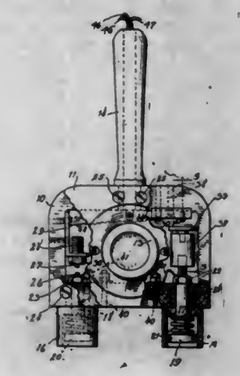
1. A hinged box comprising a section having two hinge pivots adjacent one edge, and another section having two spaced hinge knuckles each with one end open to receive said pivots, one of said knuckles having a slot communicating with its open end to admit the edge of the first section when the adjacent pivot is inserted into said knuckle and thereby permit the second pivot to be fitted into the second knuckle, and means on at least one of said sections to prevent the edge adjacent the first pivot from registering with said slot.

1,877,040. RIDING TOY. FRANK PASCETTI, Detroit, Mich. Filed Nov. 9, 1931. Serial No. 573,882. 2 Claims. (Cl. 208—42.)



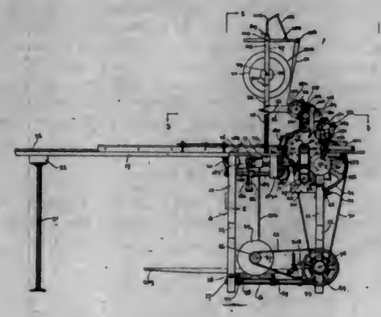
1. In a riding toy of the class described, a supporting body, having the under portion of its forward end provided with a recess; a wear plate mounted on the upper surface of said recess and having an opening formed therein communicating with a vertically extended passage communicating with said recess; a block engaging in said recess; an inverted clevis embracing said block; a tubular pivot pin fixedly connected at its lower end to said clevis and projected through said wear plate and through said passage; an eccentrically mounted wheel carried by said block; and means for rotating said pivot pin for effecting a swinging of said block.

1,877,041. METHOD AND MEANS FOR TESTING STORAGE BATTERIES. WILLIAM K. PATTERSON, Lakewood, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Feb. 2, 1929. Serial No. 337,128. 11 Claims. (Cl. 175—183.)



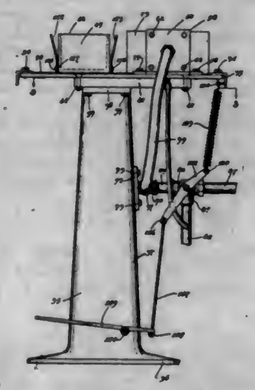
1. A method of testing storage batteries and the like, which comprises connecting the terminals of the battery into a testing circuit having associated therewith an electric indicating circuit, supplying current to said testing and indicating circuits to operate the latter, and supplying additional current to the testing circuit in the event of a short circuit in the battery being tested, to cause the generation of sufficient heat at the point of short circuit to indicate the location of the latter within the battery.

1,877,042. MACHINE FOR AND METHOD OF BANDING PACKAGES. SIDNEY PEARCE, Minneapolis, Minn., assignor to J. N. Collins Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 11, 1929. Serial No. 398,908. 16 Claims. (Cl. 93—93.)



1. A package banding machine comprising a pair of spaced wheels for peripherally supporting a band, one of said wheels having an opening therethrough, means for feeding packages in succession to a position adjacent said opening, means for moving a package thus positioned through said opening and into a position between said wheels, and means for thereafter moving the package between said wheels into engagement with the band, and means for affixing the band to the package.

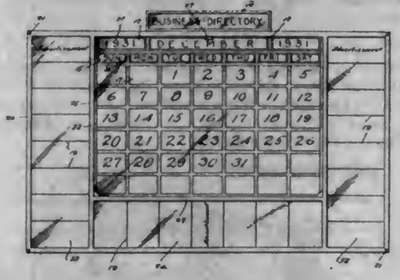
1,877,043. BOX FORMING AND GLUING MACHINE. SIDNEY PEARCE, Minneapolis, Minn. Filed Nov. 28, 1930. Serial No. 498,671. 6 Claims. (Cl. 93—49.)



1. In combination, a support, a forming block for the reception of a box blank on said support, a pair of pressers on said support one on each side of said forming block, said pressers being adapted to exert pressure against said block, and means for equalizing the pressure exerted by both of said pressers upon said block.

1,877,044. ILLUMINATED ADVERTISING CALENDAR. LAWRENCE C. PECK and JAMES HENRY LAMBERT, Ely, Nev. Filed Jan. 26, 1932. Serial No. 588,974. 1 Claim. (Cl. 40—110.)

In a device of the character described, a member provided with a plurality of horizontal and vertical rows of apertures, transparent cards in the apertures bearing indicia germane to a calendar, a plurality of vertically spaced horizontal guide bars mounted rearwardly of said



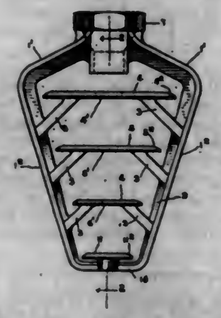
member parallel to the horizontal rows of apertures, an arm engageable with a selected one of said guide bars, and an electric lamp mounted on said arm.

1,877,045. DEVICE FOR TESTING WHEEL ALIGNMENTS. CLYDE H. PHELPS, Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind., a Corporation of Indiana. Filed Apr. 7, 1931. Serial No. 528,385. 2 Claims. (Cl. 33—203.)



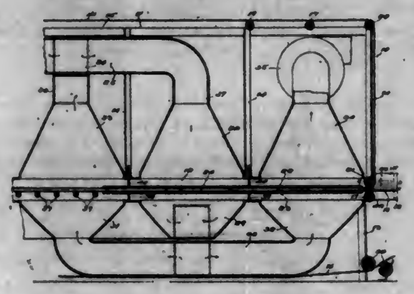
1. A tool for the purpose set forth comprising a bar, sleeves mounted upon said bar, means carried by the sleeves for supporting the bar adjacent the wheels of a vehicle, indicator arms carried by the sleeves to rest against the vehicle wheels, one of said sleeves having a scale thereon, and an indicator mounted on the bar adjacent said sleeve to cooperate with the scale thereon.

1,877,046. SPRINKLER DISTRIBUTOR. LOUIS A. PHILLIPS, Dobbs Ferry, N. Y., assignor to The Cooling Tower Co., Inc., New York, N. Y., a Corporation of New York. Filed May 29, 1930. Serial No. 456,854. 1 Claim. (Cl. 299—121.)



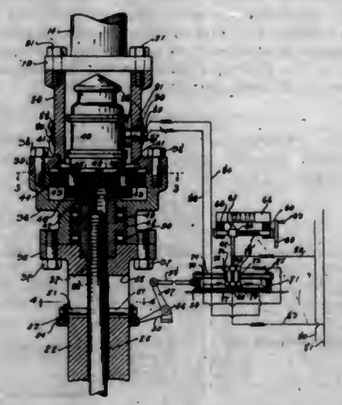
In a device for spraying water, the combination of a head having a discharge port therein directed to discharge water downward in the direction of discs arranged therebelow, a plurality of graduated, horizontal, circular discs below said discharge port and axially disposed with reference thereto, said discs being of progressively, graduated, decreasing size and having a flat, horizontal, upper surface and rounded, peripheral, downwardly turned margins on their upper surface terminating in a sharp edge at the under side, each of said discs having a single, axially disposed aperture, said apertures being progressively diminishing in size in said respective discs, and an imperforate circular disc below the lowermost perforated disc.

1,877,047. METHOD OF AND MEANS FOR MAKING SLABS. LOUIS C. PIAZZA, Western Springs, Ill., assignor to Soundex Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 20, 1930. Serial No. 496,879. 20 Claims. (Cl. 25—42.)



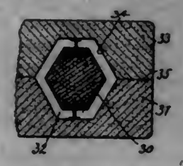
11. In an apparatus for forming heat and sound insulating material of binder coated fibers, means for guiding a loose mass of moving fibers, and means for forming a crust along the edges of said mass.

1,877,048. ADJUSTABLE VANE HYDRAULIC TURBINE. HARRY E. POPP, York, Pa. Filed July 5, 1928, Serial No. 290,483. Renewed Jan. 13, 1932. 8 Claims. (Cl. 253—148.)



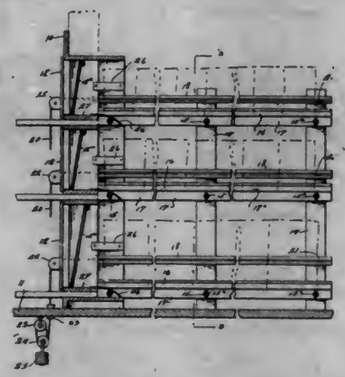
1. In a hydraulic turbine, a rotating shaft, runner vanes carried thereby and adjustable upon their axes, an electric motor carried by the shaft, operative connections between said motor and said vanes for turning the latter upon their axes, and means operable during the rotation of the shaft for starting said motor in either direction and automatically stopping the same upon the completion of a predetermined change in runner vane adjustment.

1,877,049. CHAPLET. CHARLES G. RAIBLE, Shaker Heights, Ohio. Filed Feb. 25, 1930. Serial No. 431,145. 6 Claims. (Cl. 22—184.)



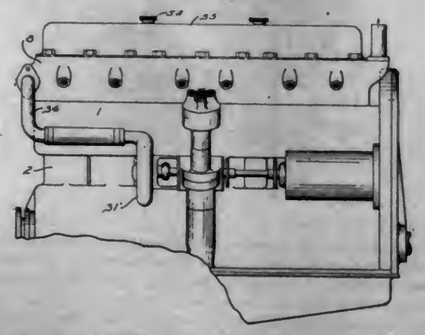
1. A chaplet having spaced heads of different sizes, means connecting said heads and holding the same in spaced relation, and an anchorage on the larger head extending in a plane other than parallel with the plane of said connecting means.

1,877,050. ICE SERVER. REMBERT RAY, Venice, Calif. Filed Jan. 16, 1930. Serial No. 421,269. 4 Claims. (Cl. 312—71.)



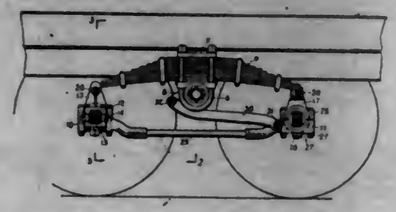
4. A vending apparatus including a trackway, a tubular guide extending parallel to the trackway, the guide being longitudinally slotted, the tubular guide being conterminous with the trackway, a flexible element extending through the tubular guide and having a dog at its rear end projecting outward through said slot and engageable behind the last article on the trackway, and means at the forward end of the tubular guide for taking up slack in the flexible element as the flexible element is drawn forward through the guide.

1,877,051. INTERNAL COMBUSTION ENGINE. BALFOUR READ, Detroit, Mich. Filed May 9, 1930. Serial No. 450,934. 4 Claims. (Cl. 123—173.)



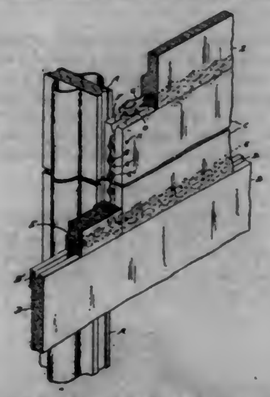
1. In an internal combustion engine, a block having a cylinder therein, and a water jacketed cylinder head on said block having a combustion chamber and a communicating passage, the respectively opposite end portions of said passage having substantially arcuate curves of reverse curvature and portions of said passage being in alignment from end to end with the length of said cylinder.

1,877,052. VEHICLE RUNNING GEAR. FREDERICK MALCOLM REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 3, 1930. Serial No. 492,924. 4 Claims. (Cl. 280—124.)



1. A running gear for vehicles, comprising in combination, a vehicle frame, a spring pivotally mounted near its central portion at each side of the frame and extending lengthwise of the frame, an axle connected to the forward ends of the springs with a tight and loose connection respectively, an axle connected to the rearward end of the springs with a loose and tight connection respectively, distance rods connecting the axles and holding them definitely spaced apart, a radius rod pivotally connected to one axle, and means mounting the other end of the radius rod to pivot around the pivotal mounting of the spring.

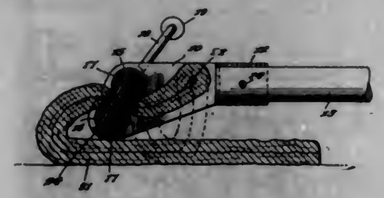
1,877,053. SECTIONAL WALL PANEL CONSTRUCTION. FRANK S. ROBINSON, Detroit, Mich. Filed Nov. 14, 1931. Serial No. 575,113. 8 Claims. (Cl. 72—16.)



1. A fabricated sectional wall unit, comprising a marginally grooved panel and an inserted metallic webbing positioned in the grooves on selected edges of the panel, with its outer edge projecting beyond the confines of the panel for interfitting engagement in the complementarily grooved adjacent edge of a companion panel, said metallic webbing and the adjacent portions of the panel being adapted to be traversed by penetrating holding members driven into suitably positioned permanent structural pieces.

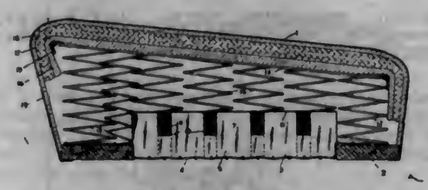
1,877,054. MOP WRINGER. JAMES G. ROSS, Seattle, Wash. Filed Aug. 22, 1931. Serial No. 558,803. 2 Claims. (Cl. 15—119.)

1. A combined mop and wringer comprising spaced side plates, spreaders at the rear ends of the side plates directed toward each other and terminating in a ferrule, a handle secured in said ferrule, a pair of superposed wringing rollers carried by said side plates, a crank handle attached to one of said rollers, a bar extending between said side plates in rear of said wringing rollers, a mop cloth doubled upon itself and having the bight passed rearwardly between said wringing rollers and engaged



around said bar, and an arcuate guard carried by said side plates below and in front of the lowermost wringing roller over the front side of which said mop cloth is directed and from thence carried rearwardly underneath said guard, the guard having the dual function of preventing the mop cloth working back between the wringing rollers and elevating the side plates so as to prevent the side plates touching and scratching the floor.

1,877,055. SEAT CUSHION. ALBERT A. RUPPERT, Pleasant Ridge, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 31, 1930. Serial No. 492,490. 7 Claims. (Cl. 155—179.)

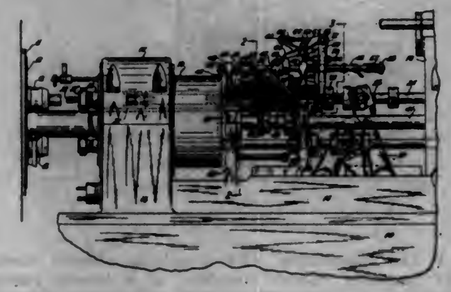


1. A seat cushion for an automotive vehicle or the like comprising in combination a plurality of coil springs, a sponge rubber portion arranged to support a part of the coil springs and a cover for the said coil spring and sponge rubber assembly.

1,877,056. AUTOMATIC REVERSE FOR THREADING TOOLS. HARRY W. RUPPLE, Cleveland, Ohio, assignor to The Cleveland Automatic Machine Company, a Corporation of Ohio. Filed Aug. 17, 1931. Serial No. 557,572. 3 Claims. (Cl. 29—37.)

1. In a machine of the character described, the combination of a frame, a work holder supported thereby, a tool spindle supported by said frame, means for reciprocating said spindle, means for rotating said spindle at different speeds, clutch means for controlling the speed of rotation of said member, resilient means for engaging the clutch in one direction, holding means for holding said resilient means inoperative, and a member pivotally supported by said frame and adapted to be operated by the tool spindle for releasing said resilient means upon predetermined movement of said spindle permitting it to shift said clutch.

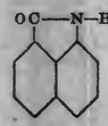
3. In a machine of the character described, the combination of a frame, a tool carrying member including a shaft, a lever pivotally connected to said shaft for reciprocating the same, a rotatable sleeve splined on said shaft, two gears rotatably mounted on said sleeve and provided with clutch teeth on their adjacent sides, means for driving said gears at different speeds, a slidable clutch member keyed on said sleeve and provided with clutch teeth adapted to engage the clutch teeth on said gears, a rod slidably mounted in said frame, an arm mounted on said rod engaging the slidable clutch member, a lever for moving the rod in one direction, a resilient means for moving said rod in the other direction, a catch pivoted on said frame and adapted to engage a member carried



on said rod and prevent operation of said spring after the rod has been moved by said lever, an arm pivoted on said frame, an adjustable screw on said arm adapted to engage said catch and move it to an inoperative position, and a collar on said shaft adapted to engage said arm and move the same about its pivot.

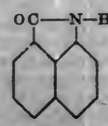
1,877,057. PROCESS FOR MANUFACTURING MONOHALOGENATED NAPHTHOSTYRIL COMPOUNDS. HEINZ SCHEYER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1928, Serial No. 244,775, and in Germany Jan. 12, 1927. 9 Claims. (Cl. 260—124.)

1. A step in the preparation of nuclear halogenated naphthostyrils which consists in treating a compound of the formula:



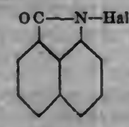
wherein the naphthalene nucleus may contain an alkoxy group, with a salt of the group of acids consisting of hypochlorous and hypobromous acid.

4. The process which comprises treating a compound of the formula:



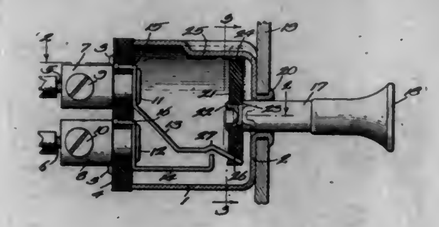
wherein the naphthalene nucleus may contain an alkoxy group, with a salt of the group of acids consisting of hypochlorous and hypobromous acid and heating the N-halogenated compound thus obtained in the presence of an organic diluent.

8. As new products N-halogenated naphthostyril compounds of the formula:



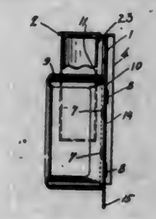
wherein Hal means chlorine or bromine and the naphthalene nucleus may contain an alkoxy group, which products are colorless to yellowish colored crystalline substances, having a definite melting point and being soluble in the usual organic solvents.

1,877,058. ELECTRIC SWITCH. WILLIAM SCHMID, Bronson, Mich., assignor to Harry A. Douglas, Bronson, Mich. Filed Aug. 8, 1930. Serial No. 473,872. 5 Claims. (Cl. 200—159.)



1. The combination with a guiding element having two angularly related branches; of a handle passing through and reciprocable within a hole formed in one of said branches; and an electric switch having a contact actuator on said handle, said actuator and the other guide branch having interengaging formations positioned to guide the handle and direct movement of said actuator angularly to the first mentioned guiding element branch, the actuator controlled contact being a leaf spring contact mounted apart from the actuator and pressing said interengaging formations together.

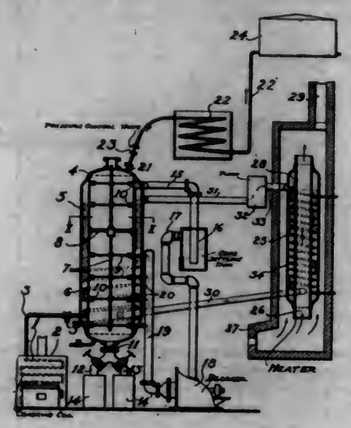
1,877,059. SMOKING CASE. WILLIAM SCHNELL, Detroit, Mich. assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 9, 1929. Serial No. 412,589. 4 Claims. (Cl. 206—19.5.)



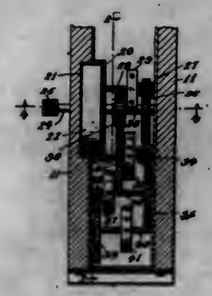
1. A smoking case for an automotive vehicle or the like, comprising in combination a stamped two-piece outer casing arranged to receive an ash receiver, said outer casing comprising a unitary back and bottom plate and a unitary front and end plate having a flange along the upper edge, the said back plate having an integral struck-out projecting portion cooperating with said flange for positioning the said ash receiver in spaced relation with the front and back plates, the sad struck-out projecting portion being positioned between the top and bottom edges of the back plate.

1,877,060. METHOD AND APPARATUS FOR CARRYING OUT CHEMICAL REACTIONS. JACKSON R. SCHONBERG, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 22, 1926. Serial No. 143,310. 12 Claims. (Cl. 196—119.)

1. Method of applying heat to a body of flowing vapor comprising bringing the vapor into an enlarged zone, withdrawing a portion of the vapor from the zone, taking off a part of said vapor, returning the remaining part to said zone, supplying additional vapor to compensate for that withdrawn from the system heating said zone by flowing thereabout a fused solid material, and maintaining the heat of said fused material by passing it through a reheating stage in at least one part of its circulation.



1,877,061. MEASURING METER. ROSS V. SCHROLL, North Manchester, Ind. Filed Apr. 22, 1931. Serial No. 532,036. 4 Claims. (Cl. 33—141.)

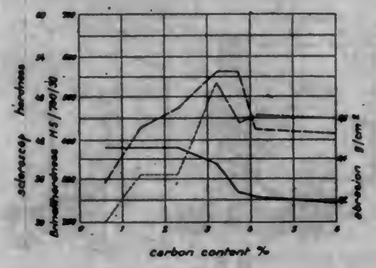


4. A measuring meter comprising a casing, terminal flanges on the ends of the casing projecting below the bottom of the casing and directed outwardly at the ends to engage corners between which measurement is to be made, a friction wheel rotatably mounted in the casing and projecting below the casing to be rotated by travel upon the work to be measured, and dials carried by the casing geared to the friction wheel for indicating travel of the wheel.

1,877,062. POWDER FOR PREVENTING BATTERY POST CORROSION. FRED L. SCHUBBING, Baraboo, Wis. Filed Apr. 7, 1931. Serial No. 528,451. 1 Claim. (Cl. 134—1.)

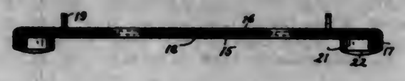
A composition of matter for use in the treatment of battery terminals which includes seven parts air slack lime, two parts baking soda, and one part borax.

1,877,063. METHOD OF PRODUCING HARD ALLOYS. ERNST HERRMANN SCHULZ, Dortmund, and KARL LÖBECKE, Rheinhausen, Germany, assignors to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed May 8, 1930, Serial No. 450,818, and in Germany Mar. 26, 1929. 5 Claims. (Cl. 148—8.)



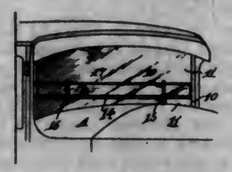
1. A method of producing hard alloys of the stellite type on the basis of cobalt, chromium, tungsten and not over 3.5% carbon, a part of which is present in the form of graphite, consisting in forming the alloy by combining the requisite alloy components, casting the alloy thus formed and cooling with retarded velocity.

1,877,064. SCALE STRUCTURE. HOWARD W. SCHULTZ, Lakewood, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 23, 1930. Serial No. 446,519. 2 Claims. (Cl. 248—41.)



1. A composite base comprising a metal plate having a depending marginal flange, and rubber covering vulcanized to opposite sides of said plate and extending around said flange, said covering having thickened portions providing supporting pads for the base.

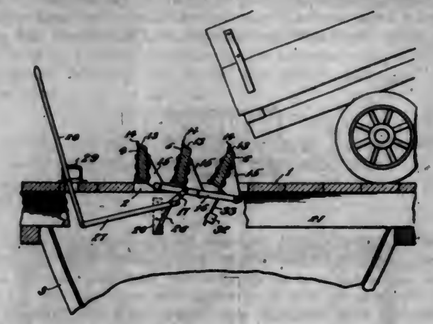
1,877,065. AUTOMOBILE WINDSHIELD SCREEN. JOHN A. SELBY, Providence, R. I. Filed Dec. 14, 1931. Serial No. 581,002. 1 Claim. (Cl. 296—94.)



A screen of the class described, comprising a base adapted to fit within the lower portion of the windshield opening of an automobile body, a pintle sleeve at the upper edge of the base and having cut-away portions, a pintle in said sleeve and bridging the cut-away portions, a screen section, and inverted substantially U-shaped clamping brackets embracing the screen section and having jaw terminals adjustably and detachably engaging the pintle at the cut-away portions.

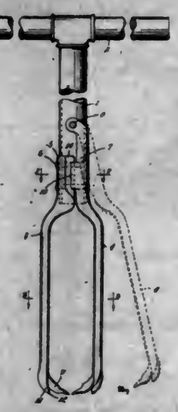
1,877,066. DUMPING PLATFORM. LAFE SHADLE, Boxholm, Iowa. Filed Jan. 5, 1931. Serial No. 506,726. 1 Claim. (Cl. 214—49.)

In an apparatus for the purpose set forth, a closure consisting of a series of similar sections each hingedly mounted at one side edge, brackets secured to the under sides of the sections and each having a depending arm, said arms being of successively increasing length from one side of the series of sections toward the opposite side



thereof, a connecting bar pivoted to the lower end of each of said arms, and means connected to said bar for swinging the several sections to raised or lowered position.

1,877,067. SOIL AUGER. LESLIE T. SHARP, Santa Paula, Calif. Filed Mar. 2, 1931. Serial No. 519,821. 2 Claims. (Cl. 255—67.)

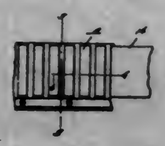


1. In a soil auger for making a hole in the ground, the combination of a rotary spindle, a pair of cutter blades carried on the lower end of the spindle and having bodies offset outwardly from the spindle and disposed on opposite sides of the axis of the spindle, one of said blades having a shank rigidly attached to the spindle, and the other of said blades having an integral shank extending upwardly with a pivot pin connecting the same to the spindle, the shank of the pivoted blade also having a pair of ears extending from the same on opposite sides of the spindle for engaging the same to brace the movable blade when the auger is being rotated, the said blades having inwardly disposed downwardly inclined extensions at their lower ends for engaging and lifting the earth from the hole.

1,877,068. HEAT EXCHANGE ARTICLE. GERTRUDE SHOOP, Shamokin, Pa. Original application filed Apr. 4, 1930, Serial No. 441,607. Divided and this application filed July 15, 1931. Serial No. 550,986. 4 Claims. (Cl. 257—263.)

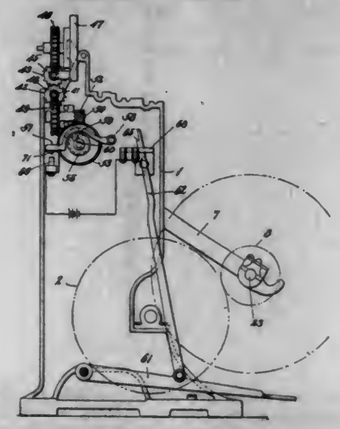
1. A radiation structure of the type described comprising a metallic conductor, a strip of radiating material

formed with alternating recesses and projections and arranged longitudinally of the conductor, and means for attaching the strips upon the conductor comprising a web for engaging the conductor spaced ribs projecting from the web adapted to be bent to lie in the recesses of the strips between the projections and be then further bent so as to meet and be clamped at the side of the con-



ductor opposite that engaged by the web, and a pair of clamp bars for longitudinal arrangement with respect to the conductor and in engagement with the meeting ends of the ribs, a web connecting the meeting ends of the ribs and bolts through said clamp bars and through the second webs for drawing them together whereby to clamp the ribs to constrict them about the strips and conductor.

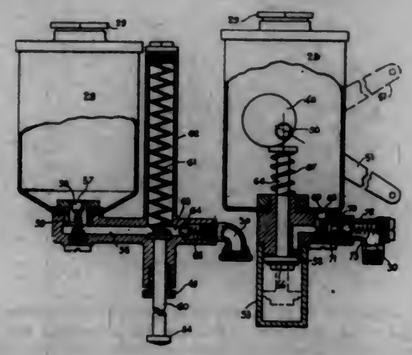
1,877,069. STOP MECHANISM FOR WARPERS. JOHN W. SIDEBOTTOM, Lowell, Mass., assignor to T. C. Entwistle Company, Lowell, Mass., a Corporation of Massachusetts. Original application filed Aug. 2, 1927, Serial No. 210,041. Divided and this application filed Feb. 23, 1928. Serial No. 256,149. 14 Claims. (Cl. 192—142.)



4. In a warper, the combination with a drum which actuates the warp-beam by surface-friction against the periphery of the cylindrical yarn-mass that is wound upon the warp-beam, and clock-mechanism which stops the winding after a predetermined amount has been wound on the beam, said clock-mechanism including a clock worm-gear and an actuating worm which engages said worm-gear, of a gear-wheel corresponding in the number of its teeth with the number of inches in the circumference of the drum and revolving at the same angular speed as the drum, and driving connections from said gear-wheel to communicate one revolution to the said actuating worm for each unit-length of warp that is wound upon the warp-beam.

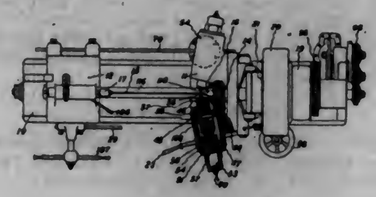
1,877,070. LUBRICATING SYSTEM. GEORGE R. SIEGRIST, Port Huron, Mich. Filed Apr. 28, 1926. Serial No. 105,097. 2 Claims. (Cl. 184—7.)

1. In a lubricating system for a road vehicle, having a part adapted to receive lubricant, lubricant pumping mechanism communicating therewith to feed lubricant thereto, said pumping mechanism responsive to the vibration produced by travel of the vehicle over the road to pump lubricant under pressure to the part adapted to receive the same, said pumping mechanism responsive only to a de-



termined range of vibration which range is less than the permitted range of vibration, said lubricant pumping mechanism including a pump chamber communicating with a lubricant container by a valve controlled passageway to receive lubricant therefrom and having a valve controlled discharge outlet to the part to be lubricated.

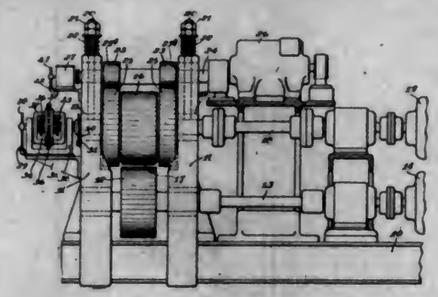
1,877,071. FILE CUTTING MACHINE. HARRY GEORGE SMITH, Kings Cross, near Sydney, New South Wales, Australia. Filed June 23, 1931, Serial No. 546,383, and in Australia June 26, 1930. 7 Claims. (Cl. 76—16.)



1. A machine for cutting files and for like purposes, comprising a chuck adapted for holding one end of a blank, means for applying forward movement continuously to said chuck, opposed plungers disposed radially oppositely in angular relation to the blank, chisel tools carried by said plungers, cam operated means for retiring and releasing said plungers, springs for driving said plungers inwardly to drive said chisel tools simultaneously into opposite sides of the blank at spaced intervals in the forward progression of the blank, hydraulic cylinders and variable piston abutments therein for the plunger springs, and means for supplying liquid under variable compression to said cylinders for varying the tension on said springs.

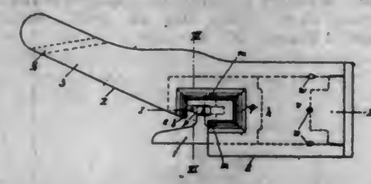
1,877,072. FLYING CUTTER. JOHN A. SMITMANS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1929. Serial No. 402,384. 6 Claims. (Cl. 164—68.)

1. A flying cutter comprising a continuously rotating blade member, a member adapted to cooperate therewith when said members are in approached relation with each other, said members being normally separated, a device, independent of said blade member, for effecting an approaching movement between said members thereby to bring them into cooperative relation to produce a cut, and means for starting the effective operation of said device



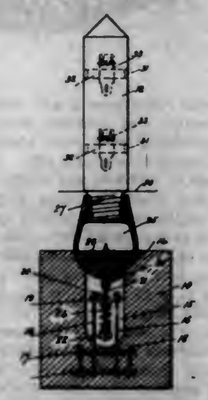
at such time as to complete said approaching movement substantially when said blade member is opposite said cooperating member.

1,877,073. DEVICE FOR CUTTING THE CABLES OF SUBMARINE MINES. JAN HAJO SOLKEMA, Sourabaia Java, Dutch East Indies. Filed June 19, 1930, Serial No. 462,348, and in the Netherlands Apr. 11, 1929. 4 Claims. (Cl. 114—221.)



1. A device for cutting the cables of submarine mines, comprising a rigid member and a movable member, the latter containing a clenching device cooperative with the rigid member to clamp the mine cable, and a knife on the rigid member to cut the cable beneath the clenching device during rearward movement of said movable member.

1,877,074. HIGHWAY GUARD FENCE. ANTHONY J. STANZIALE, Shickshinny, Pa. Filed Jan. 30, 1931. Serial No. 512,455. 1 Claim. (Cl. 189—28.)



A fence post structure comprising a foundation block adapted to be embedded in the ground and having a hemispherical recess in its upper side and a cavity extending

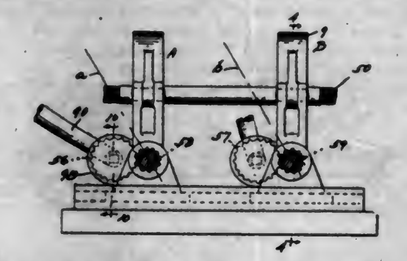
downwardly from said recess part way through the block, parallel guide rods anchored in the block below the recess and extending upwardly in the recess, a cross-piece upon the rods having a central opening, a post having a base, hemispherical at its lower end, fitting in said socket, a rod hingedly connected to the central part of the base and extending downwardly from said base through the opening in said cross-piece, and a compression spring interposed between the lower end of the rod and the cross-piece.

1,877,075. LICENSE PLATE HOLDER. FRANK STEPHENSON, Piscatway, West New Brunswick, N. J. Filed Sept. 5, 1931. Serial No. 561,484. 1 Claim. (Cl. 40—125.)



A cover for license plates consisting of a sheet of clear celluloid of the same form and dimensions as a standard license plate an having its edge portions increased in thickness to be relatively opaque and ornamented to contrast with the clear area of the sheet, the back of the sheet being entirely in one plane to rest flat against the edges of the license plate, means for securing the sheet to a license plate, and means for securing the sheet and license plate upon a vehicle.

1,877,076. WIRE SPLICING TOOL. WARNER D. STETSON, Ferndale, Mich., assignor of one-fourth to Charles E. Wisner, Detroit, Mich. Filed Aug. 4, 1930. Serial No. 473,070. 14 Claims. (Cl. 140—119.)



1. In a wire splicing tool, a base, a pair of twisting heads secured thereon in adjustably spaced relation, said heads providing the sole means to hold a sleeve and enclosed wire ends on an axis extending from center to center thereof, and means for operating the said heads to twist the sleeve.

1,877,077. INSPECTION LAMP. ARTHUR L. STEVENS, Buffalo, N. Y., assignor to The Vol-U-Meter Co., Inc., Buffalo, N. Y. Filed June 12, 1930. Serial No. 460,601. 8 Claims. (Cl. 240—10.6.)

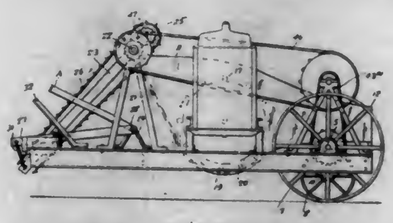
8. An inspection lamp for use in the vicinity of inflammable vapors, comprising a tube, a cap removably secured to one end thereto, a gasket between the end of said tube and said cap to seal the same, a coupling removably attached to the other end of said tube, a gasket interposed between the coupling and the end of the tube to which it is attached to seal the joint between them, said coupling having a stem extending therefrom and terminating in a hollow head, a light bulb mounted in said head, means

for closing the outer end of said head and inclosing said bulb within the head and having a transparent member across the open end of said head, gasket means interposed between said head and said closing means to seal said head, said tube having a chamber of a size to receive and hold a battery unit, and means within said tube and



stem for electrically connecting said unit and said bulb and controlling selectively the lighting of said bulb, said last named means including a closed tube mercury switch mounted within said stem and closing the circuit between the battery and the bulb when the stem is downwardly inclined from said coupling.

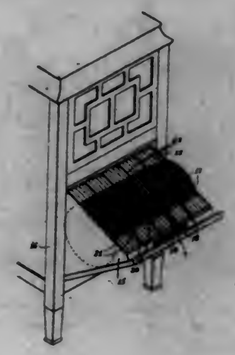
1,877,078. AGRICULTURAL MACHINE. ARTHUR F. STUBENBERG, Honolulu, Territory of Hawaii. Filed Apr. 8, 1931. Serial No. 528,651. 5 Claims. (Cl. 55—118.)



1. A machine of the character described comprising a wheel supported frame provided at the forward end thereof with means for coupling to a draft vehicle, a casing mounted on said frame and adapted to be disposed laterally of the draft vehicle, said casing being open at its forward end, an endless conveyor pivotally mounted at one end adjacent the forward end of said casing, means for supporting the free end of said conveyor, said means including means for raising and lowering said end of the conveyor, a pair of bars pivoted at one end to said frame and disposed one at each side of said conveyor, a toothed cylinder journalled between the free end of said bars in operative relation to the free end of said conveyor, and yieldable members connecting said bars with the conveyor.

1,877,079. PHONOGRAPH RECORD. EDWARD STURGIS, Jr., Boston, Mass. Filed Apr. 1, 1931. Serial No. 526,915. 6 Claims. (Cl. 274—42.)

1. A phonograph record having a marginal distinguishing means indicative of the character of the composition recorded on the record, said distinguishing means extending entirely around the record whereby the exposure



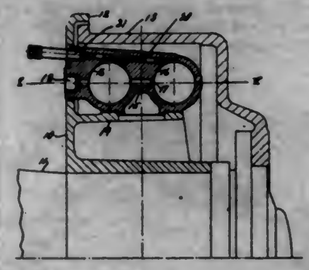
of any marginal portion of the record is sufficient to indicate the character of the composition recorded on the record.

1,877,080. WADING OVERSHOE. ISAGO TESHIMA, San Francisco, Calif. Filed May 28, 1930. Serial No. 456,524. 1 Claim. (Cl. 36—11.6.)



A wading overshoe comprising a sole member formed of one pair of longitudinal stay members secured together at front and rear, diverging from each other at front and rear, extending substantially parallel to each other throughout the body of said sole and adapted and arranged to extend along and constitute edge stay members for the sole member; an intermediate pair of longitudinal stay members secured in contact with each other and with said first stay members at front and rear, diverging from each other at front and rear, extending substantially parallel to each other and to said first stay members throughout the body of said sole, arranged in the interior of said sole member, and adapted to constitute intermediate stay members therefor; transverse contact members of fiber woven over said edge stay members and over and under said intermediate stay members to constitute the body of the sole member; and a network body secured to said sole member by means of loops looped around the edge stay members and adapted and arranged to hold the overshoe in position of use on the foot of the user.

1,877,081. FLUID PRESSURE BRAKE. ALFRED TEVES, Frankfort-on-the-Main, Germany. Filed July 12, 1929, Serial No. 377,683, and in Germany Nov. 12, 1928. 1 Claim. (Cl. 188—152.)



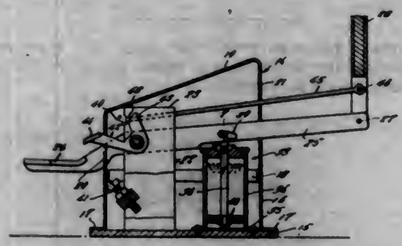
The combination with an axle housing and a brake drum having an annular braking flange providing an annular space between the housing and the flange, a braking motor between the housing and flange and having a dimension radially of the drum approximating the radial width of the annular space so as to occupy substantially an entire cross section of the available annular space, the motor having a plurality of adjacent piston receiving bores whose axes are parallel and are in a plane parallel to the axis of the axle housing.

1,877,082. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,170. 7 Claims. (Cl. 30—12.)



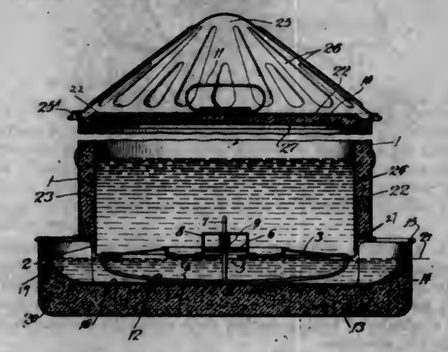
5. A safety razor comprising, in combination, a guard member having a fulcrum shoulder, a flexible blade having spaced apertures therein, and a cap member having correspondingly spaced projecting studs arranged to engage the blade and bend its cutting edge over said fulcrum shoulder or to pass into said apertures without bending the blade according to the position in which the blade is presented.

1,877,083. TOILET CLOSURE OPERATING DEVICE. LEROY C. THRASHER, Ronceverte, W. Va., assignor of one-half to Ashby D. Ferrell, Ronceverte, W. Va. Filed May 19, 1931. Serial No. 538,509. 2 Claims. (Cl. 4—251.)



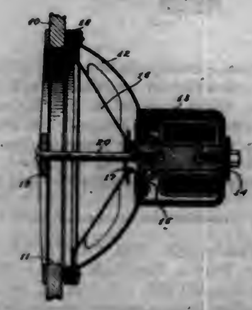
1. A commode closure operating device comprising a casing, a standard in said casing, a lever fulcrumed between its ends on a pivot carried by said standard, one end of the lever being fashioned to provide a foot pedal, an extensible operating connection pivoted to the opposite end of said lever, a bracket for securing the upper extensible section of said operating connection to an adjacent hinged end of the closure, a dash pot in said casing including a piston, an anti-friction pin and slot connection between the upper end of the piston and the adjacent intermediate portion of said lever a bar having one end pivoted to the extensible operating connection above the pivotal point of said connection to the lever, latch means on the opposite end of the bar for holding said bar against rearward movement and manually operated means including a foot pedal for moving the bar forwardly to swing the said connection to a position to lower the closure.

1,877,084. POULTRY FOUNTAIN. DONALD B. TOLLEY, Macomb, Ill., assignor, by mesne assignments, to Globe American Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Oct. 10, 1929. Serial No. 398,769. 6 Claims. (Cl. 119—77.)



1. A base member for a poultry fountain, comprising a shallow base part, an upper wall-forming part supported from the upper edge of the outer wall of the said base part and otherwise freely spaced from the latter part, and a filling of heat-insulating material between the said two parts, the said upper part being formed to afford a plurality of substantially quarter-spherical well extensions adjacent at their upper and outward edges to the upper edge of the outer wall of the said base part, and a generally cylindrical and relatively larger central well portion; each of the well extensions opening both upwardly, and radially inward of the base to the central well portion.

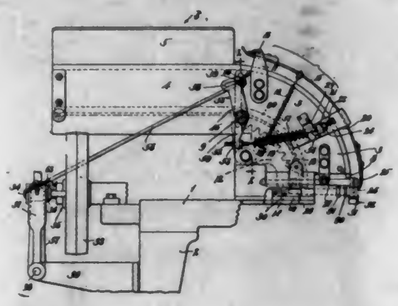
1,877,085. LOUD SPEAKER. LAURENCE D. TREFRY, Chicago, Ill., assignor to The Magnavox Company, Chicago, Ill., a Corporation of Arizona. Filed July 15, 1931. Serial No. 550,869. 15 Claims. (Cl. 181—31.)



1. In sound reproducing apparatus and the like, the combination of an outwardly extending sound deflecting baffle having an opening therethrough for the passage of sound waves, a conical sound producing diaphragm disposed in the opening of said baffle, a support for the rim of said diaphragm adapted to engage the back of said baffle and

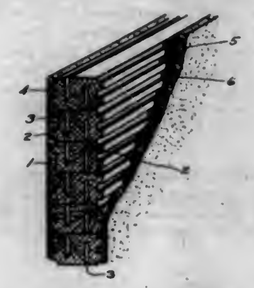
also carry a diaphragm actuating means, and a grille like member adapted to engage the front of said baffle and cooperate with said diaphragm support to retain the diaphragm in operative relation with the opening through said baffle.

1,877,086. STOP MECHANISM FOR BOBBIN STRIPPERS. WILLIAM H. TROGDON, Worthville, N. C., assignor to The Terrell Machine Company, Charlotte, N. C., a Corporation of North Carolina. Filed Mar. 24, 1931. Serial No. 524,914. 29 Claims. (Cl. 28—20.)



1. A bobbin stripping machine having in combination driving means, stripping means, means for producing relative stripping movement of the bobbin and stripping means, and mechanism including a yieldable element and actuated by a misplaced bobbin during such stripping movement to stop the machine.

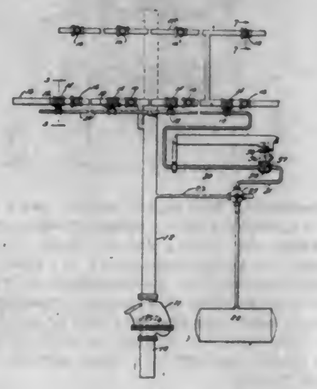
1,877,087. TIMBER SHAPE. EZRA J. THURBER, Seattle, Wash. Filed Jan. 16, 1930. Serial No. 421,123. 2 Claims. (Cl. 72—38.)

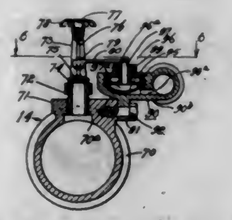


1. A timber shape consisting of a piece of timber having on the lateral sides thereof continuous upwardly inclined plaster holding tongues, and in the intermediate part thereof ventilating openings adjacent the sides providing dead air spaces insulating the interior from moisture of the side surfaces and preventing expansion and contraction of the interior being transmitted to said side surfaces.

1,877,088. APPARATUS FOR PROTECTION AGAINST FIRE. EMIL TYDEN, Hastings, Mich. Filed June 30, 1930. Serial No. 464,938. 12 Claims. (Cl. 169—5.)

4. In a fire extinguishing apparatus comprising a service pipe system in the apartment to be protected with water discharge heads carried by the pipe system, each of said discharge heads having a valve seating against the discharge pressure, and a displaceable strut positioned for holding the valve seated; a fluid pressure line extending adjacent the pipes of the service pipe system and having adjacent the discharge heads respectively, fluid-pressure-operated means with connections for mechanically actuating the strut for displacement thereof to open the discharge head; valve means controlling fluid pressure access to the fluid pressure line, and a temperature-responsive device for opening the valve in the fluid pressure line upon predetermined temperature conditions effecting said temperature-responsive device.





7. A water discharge head for a fire extinguishing apparatus having a discharge controlling valve arranged to be opened by the water pressure, and a displaceable strut holding the valve seated; an arm carried by the strut extending therefrom for encouter by operating means to move it for displacing the strut; a fluid-pressure pipe line arranged for connection with a source of fluid pressure and having proximate the discharge head, means operated by the pressure in the line for encountering the strut arm for displacing the strut to open the discharge controlling valve when the fluid pressure is admitted to the fluid pressure line.

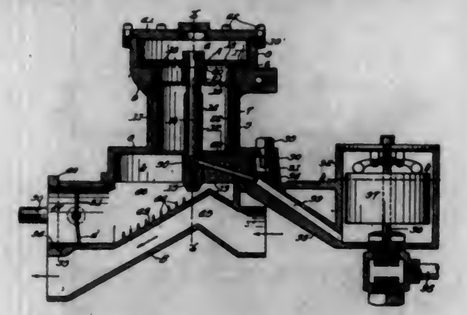
1,877,089. LENS-MOUNT. WILLIAM R. UHLEMANN, Evanston, Ill. Filed June 4, 1930. Serial No. 459,209 1 Claim. (Cl. 88—47.)



A lens mount comprising a U-shaped clip for engaging around the edge of a lens having a depression therein to hold a substantial amount of cement, and movable means cooperating with said depression and arranged to compress cement applied therein for locking cooperation between all of the parts, and means to prevent the impingement of said movable means against sa'd lens.

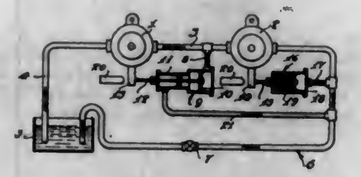
CARNEGIE LIBRARY OF ATLANTA

1,877,090. CARBURETOR. VINCENT O. VAN BRIGGLE, Bridgeville, Pa. Filed May 16, 1929. Serial No. 363,527. 11 Claims. (Cl. 261—12.)



1. In a carburetor, a mixing chamber, a vacuum controlled valve for controlling the admission of both a liquid fuel and air to the mixing chamber, a heating element, and means for causing a downward flow of both of said fluids into contact with the heating element prior to admixture in said chamber.

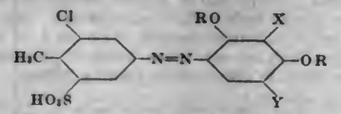
1,877,091. VARIABLE VOLUME PUMP. HARRY F. VICKERS, Detroit, Mich. Filed Oct. 19, 1931. Serial No. 569,611. 7 Claims. (Cl. 103—11.)



3. A liquid circulating system comprising a source of supply, a main liquid operating conduit and a plurality of variable volume pumps connected in series for feeding liquid under pressure from said source of supply to said main conduit, and means connecting the main conduit with a conduit in between two pumps in series and arranged to automatically vary the volume of the pump farthest away from the main conduit to maintain predetermined proportionate pressures in the conduit connecting the two pumps and the main conduit.

1,877,092. YELLOW MONO-AZO DYESTUFF. HERMANN WAGNER, Bad Soden Am Taunus, and BARTHOLOMÄUS VOSSEN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1929, Serial No. 370,153, and in Germany June 19, 1928. 5 Claims. (Cl. 260—97.)

1. As new products, mono-azo dyestuffs of the following general formula:



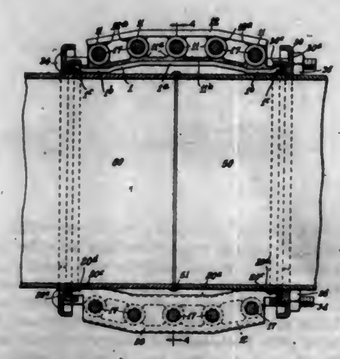
wherein R stands for hydrogen or CH_3 and X and Y stand for hydrogen or each for a carboxylic group, being when dried orange to light-brown powders, dyeing chrome leather pure yellow to orange yellow t'nts, dissolving in concentrated sulfuric acid to a brownish-yellow to reddish-yellow solution and being difficultly soluble in alcohol and glacial acetic acid.

1,877,093. SLIP COUPLING. ARTHUR THOMAS WAKEFIELD, Baltimore, Md., assignor to The American Oil Company, Baltimore, Md. Filed Aug. 24, 1931. Serial No. 559,110. 2 Claims. (Cl. 285—163.)



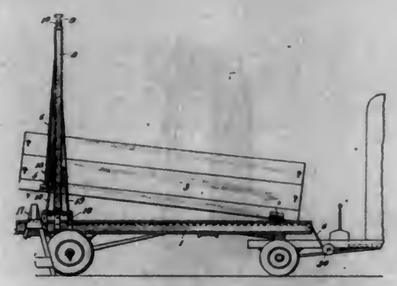
1. A slip joint connection comprising a ring member having a reduced size connecting part, and an inwardly directed annular flange constituting a wall for an internal annular groove and an annular seat for a washer, spring means in said annular groove, and a washer secured on said seat having an apron extending within the spring means.

1,877,094. WROUGHT METAL REPAIR DEVICE FOR PIPE LINES. JOSEPH E. WALBORN, Bradford, Pa., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1929. Serial No. 335,339. 3 Claims. (Cl. 285—132.)



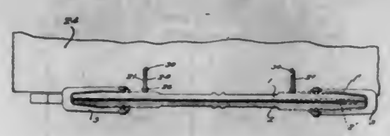
1. As a new article of manufacture, a split sleeve for repairing pipe lines, formed of wrought metal and divided longitudinally into segments, said sleeve being provided at each end with outwardly flared portions forming end packing recesses, and terminating at the outer edges of said recesses, each segment of the sleeve being provided along each longitudinal edge thereof with a longitudinal series of tubes welded thereto with their axes perpendicular with the adjacent edge of the sleeve segment, a separately formed reinforcing bar welded to the outer sides of the tubes of each section, side packings between the meeting edges of said segments, side clamping bolts engaging the tubes of adjacent sections, end packing rings engaging said end packing recess of the sleeve, and projecting beyond the ends of said sleeve, followers provided with annular plate members provided with bolt holes and annular flanges forming packing recesses, said flanges having sufficient internal diameter to fit over and reinforce the split flared end portions of the sleeve, and clamping bolts and nuts for said followers.

1,877,095. TRUCK. EARL R. WALKER, Middletown, Ind. Filed May 7, 1931. Serial No. 535,775. 1 Claim. (Cl. 214—65.)



Apparatus for the purpose set forth comprising carriages adapted to span the sills of a truck chassis, rollers mounted within the carriages to engage the flanges of said sills, a derrick comprising standards secured upon and rising from the carriages and a cross beam connecting the upper ends of the standards, pulleys mounted upon the carriages and upon the cross beam, cables trained about said pulleys and connected with a winding member upon the truck chassis, and body-suspending pulleys mounted upon the cables.

1,877,096. SAW CLAMP. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed May 26, 1930. Serial No. 455,648. 5 Claims. (Cl. 76—78.)

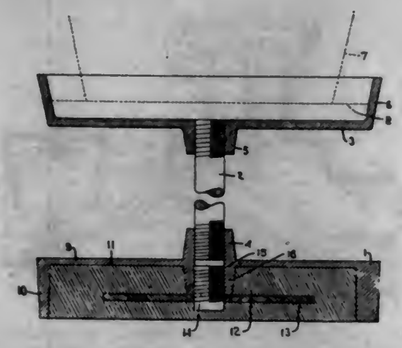


1. In a saw clamp, two clamp bars extending side by side, means engaging the respective bars adjacent the ends thereof and operable to one position to permit separation of the bars and insertion of a saw blade therebetween and to another position to force the bars inwardly to clamp said saw blade therebetween, said clamp bars being formed as angle bars with their salient angles disposed outwardly and with the edges of the two flaring portions thereof in substantial alignment with one another to clamp the saw, said clamp bars being weakened in cross-section adjacent the salient angles thereof and throughout the major portion of the distance between the points of engagement of the means for forcing said clamp members inwardly.

1,877,097. PROCESS FOR DEGUMMING SILK. LEO WALLERSTEIN, New York, N. Y., assignor to Wallerstein Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1927. Serial No. 165,490. 1 Claim. (Cl. 8—2.)

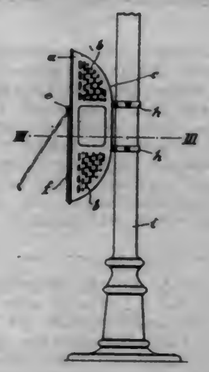
The process of degumming silk which comprises subjecting the silk fiber for a short time to the action of a bacterial liquor solution which is produced by cultivating bacteria which produce or secrete an enzyme having the property of dissolving or hydrolyzing sericin, removing the silk from the solution, exposing the silk to action of moist warm air until the desired amount of degumming has occurred, and washing the silk.

1,877,098. PLANT STAND. WILLIAM S. WASHBURN, Brockton, Mass. Filed Oct. 20, 1930. Serial No. 489,828. 3 Claims. (Cl. 248—41.)



1. In a plant stand, the combination with a supporting base comprising a base member having a peripheral depending flange and a depending central boss, concrete filling the cavity in said base formed by said flange, an anchoring member embedded in said concrete and a stud secured to the anchoring member and screw threaded into said boss, of a stem detachably secured to the supporting base, and a flower-pot-supporting member detachably secured to the upper end of the stem.

1,877,099. REFUSE RECEPTACLE. EMIL WATTMANN, Csepel, Hungary, assignor to Manfred Weiss Stahl- und Metallwerke Aktiengesellschaft, Budapest, Hungary. Filed Sept. 29, 1930, Serial No. 485,213, and in Germany Oct. 18, 1929. 2 Claims. (Cl. 220—18.)



1. A refuse receptacle comprising a body having an open front and including side walls and an arched back wall constituting the containing portion for the contents, the concavity of said back wall facing said front, and a hinged door covering substantially the lower half of the open front, the hinge of said door being so disposed as to cause the door to gravitate to closed position.

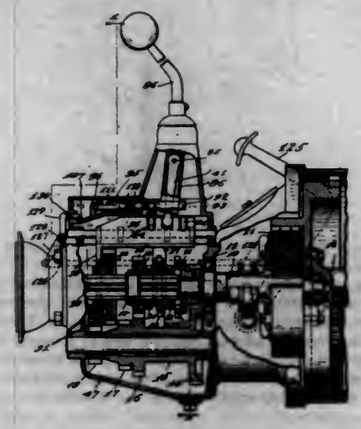
1,877,100. HAND PROPELLED PROJECTILE. HARRY WAYTE, Kalamazoo, Mich. Filed July 21, 1930. Serial No. 469,455. 4 Claims. (Cl. 273—106.5.)

1. In a projectile the combination of a metal shaft, a body member on said shaft of a material lighter than the shaft and having opposed longitudinal grooves in its sides and a transverse groove in its rear end, a centrally disposed spindle projecting rearwardly from said body member and constituting a hand piece, a pair of outwardly curved feathers of substantial length disposed in a pitched relation to the plane of the spindle with their shafts in



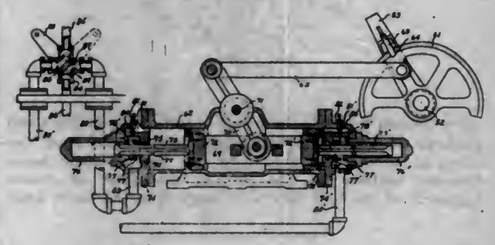
said longitudinal grooves, staples at the forward ends of said grooves adapted to receive the ends of the feather shafts, and an elastic band disposed in said transverse groove in the end of said body member to embrace the shafts of the said feathers.

1,877,101. SYNCHRONIZER. JARL M. WEYDELL, Indianapolis, Ind., assignor of one-half to Edward E. Stout. Filed May 6, 1929. Serial No. 360,710. 9 Claims. (Cl. 74—58.)



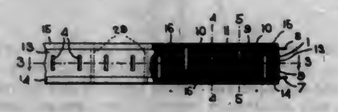
9. In a change-speed gearing, the combination of a driving shaft, a driven shaft, a plurality of alternative drive connection of different speed-ratios between said driving shaft and said driven shaft, said alternative drive connections including relatively shiftable parts by which they are respectively rendered operative, a gear-shifting mechanism controlling the shifting of said relatively shiftable parts, a supplemental synchronizing drive-train between certain of said relatively shiftable parts, said supplemental synchronizing drive-train including a normally inoperative electro-magnetic clutch, and gear-shifting mechanism including an operating handle which has a limited relative movement on the gear-shifting mechanism proper to provide lost-motion which is taken up before a movement of the handle produces any shifting of said shiftable parts, and switching means operated by said operating handle for controlling said clutch.

1,877,102. HYDRAULIC CONTROL MEANS. FREDERICK N. WHITESELL, Chicago, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Original application filed Nov. 6, 1926, Serial No. 146,720. Divided and this application filed Feb. 10 1928. Serial No. 253,412. 15 Claims. (Cl. 121—38.)



1. In a hydraulic control system, a cylinder having a fluid supply opening therein, a piston in said cylinder, a fluid valve assembly for said cylinder comprising a supply valve member carried by said piston, said member having a passage extended into the cylinder, and a valve portion fixedly spaced from the piston face and a second valve member having an opening therein adapted to receive said first named valve member, said valve members coacting to open and close said supply opening.

1,877,103. CONTINUOUS CONTACT RECEPTACLE. ERNEST C. WHITING, Brighton, Mass. Filed July 21, 1930. Serial No. 469,401. 1 Claim. (Cl. 247—3.)



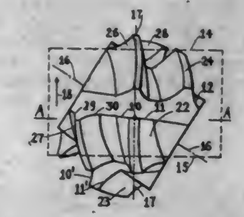
A continuous electric contact receptacle for a standard plug connection comprising a member in the form of a strip having in one face a plurality of equi-spaced terminal-receiving apertures arranged in a row, the spacing between adjacent apertures corresponding to the space between the terminals of a standard plug connection, and a pair of conductors embedded in said strip, one conductor having contact portions for the alternate apertures and the other having contact portions for the other apertures, each contact portion being situated entirely within the strip and being in the form of a socket adapted to receive the terminal of a standard plug connection.

1,877,104. ROTARY MEMBER FOR FORMING GEARS. ERNEST WILDHABER, Brooklyn, N. Y. Filed June 1, 1927. Serial No. 195,716. 32 Claims. (Cl. 29—103.)

1. A rotary member for forming gears, adapted to operate with its axis offset from and angularly disposed to the axis of a gear blank and to be moved across the face of said gear blank substantially in the direction of the axis of the gear blank, said member having a working profile formed to finish a line of a different tooth surface in each revolution, said line extending from top to root on said tooth surface, and other working profiles arranged in a thread with said working profile.

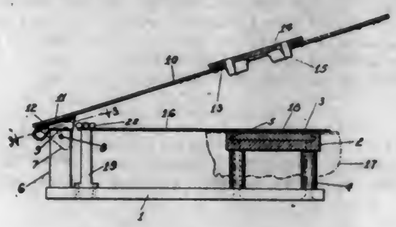
32. A gear cutting tool adapted to be moved across the face of a gear blank substantially in the direction of the

axis of said gear blank, having a plurality of equal cutting teeth disposed to enter successive tooth spaces of said gear blank while being turned on an axis angularly disposed to and offset from the axis of said gear blank, said cutting teeth containing identical curved side cutting



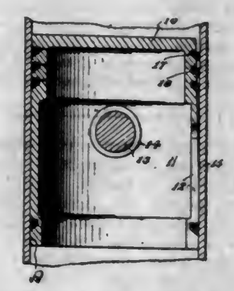
edges formed to finish the whole height of the active tooth surfaces of said gear blank and having the same position along the tool axis, said side cutting edges being disposed entirely on one side of the point of closest approach of the tool axis with respect to the blank axis.

1,877,105. SHOE CUT-OUT MEANS. DON DUN WILKERSON, St. Louis, Mo., assignor of one-fifth to Herman L. Huelhorst, St. Louis, Mo. Filed May 29, 1929. Serial No. 366,826. 9 Claims. (Cl. 164—29.)



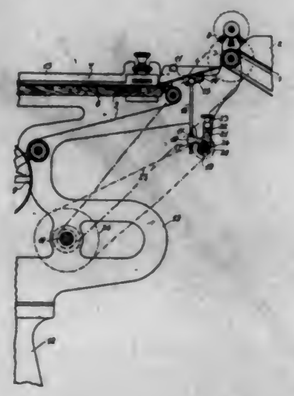
1. A shoe cut-out mechanism of the kind described, comprising a work-supporting stilt anvil member, a work-cutting die mounted above said member and movable thereagainst, and stationary work-holding gauge means interposed between said member and die and adapted to frictionally hold said work on said member.

1,877,106. PISTON AND RING ASSEMBLY. JUDSON WILLIAMS, Philadelphia, Pa. Filed June 29, 1929. Serial No. 374,736. 12 Claims. (Cl. 74—108.)



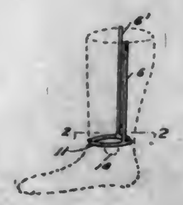
1. The combination with a cylinder, of a piston movable therein and having an eccentric side, a ring carried by the piston, and an annular tensioning element acting on the ring for forcing the piston laterally and holding the opposite side thereof in contact with the cylinder wall.

1,877,107. FEEDING APPARATUS. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany. Filed May 31, 1930, Serial No. 457,769, and in Germany Oct. 2, 1929. 3 Claims. (Cl. 198—30.)



1. Apparatus for supplying articles in an upright position having feed mechanism of the character described, comprising endless bands for conveying the articles, an inclined slide interposed between the bands, means for shaking the slide and means for adjusting the amplitude of the shaking movement.

1,877,108. SOCK SUPPORTER. LEONARD WOODS, St. Louis, Mo. Filed June 13, 1931. Serial No. 544,205. 2 Claims. (Cl. 241—6.)

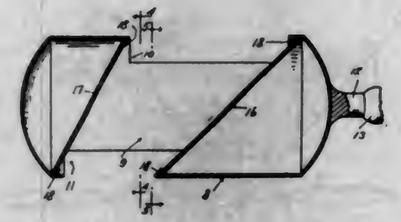


1. A sock supporter comprising a horizontal resilient sheet metal strip and two strips integral therewith and rigidly disposed upward and adapted at their upper ends to engage and support the top of a sock, the horizontal strip being formed to engage the front and sides only of the wearer's ankle after being sprung open to apply it thereon, substantially as described.

1,877,109. VEHICLE REFLECTING MIRROR STRUCTURE. JOHN WILLIAM WULLENWEBER, Belvidere, Ill. Filed June 9, 1930. Serial No. 459,949. 1 Claim. (Cl. 45—97.)

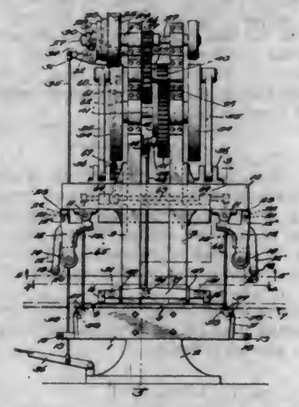
An attachment of the character described for automobiles comprising an elongated cylinder of circular cross section for disposition transversely relative to the automobile, said cylinder having overlapping openings in its diametrically opposite front and rear sides, one of the openings being adjacent one end of the cylinder, the other of said openings being adjacent the other end of the cylinder, a pair of spaced oval mirrors mounted obliquely in the cylinder, said mirrors being cooperative

to reflect to the operator of the automobile objects in front and to one side of said automobile through the openings, a shank rigidly mounted centrally on one end



of the cylinder and projecting therefrom longitudinally with respect to the cylinder, said cylinder being closed at both ends thereof to protect said mirrors.

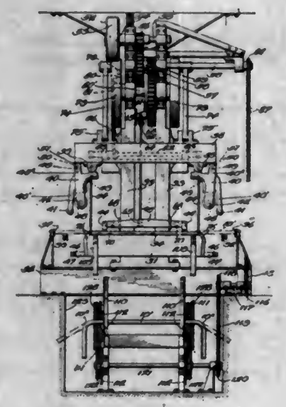
1,877,110. SHAPING MACHINE. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,566. 9 Claims. (Cl. 153—33.)



1. A shaping machine including relatively movable anvil and head members, the head member including two elements so relatively positioned that one will engage the work upon the anvil and partially shape it and the other element will thereafter effectively engage the work to further shape it; and positive means for moving the second element transversely of the direction of relative movement of the anvil and head in concluding the shaping operation wherein the work engaging elements are in the form of rollers, the roller which first engages the work having a tapering peripheral groove and the roller which operates upon the work secondly having a straight-sided groove.

1,877,111. SHAPING MACHINE. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,567. 14 Claims. (Cl. 153—2.)

1. The combination with a shaping machine that is inclusive of an anvil and a head in cooperative relation therewith for shaping bars delivered to the anvil; of a furnace for heating the aforesaid bars; an endless conveyor related to the furnace for removing such bars, after heating, from the furnace, said endless conveyor being spaced apart from the aforesaid anvil; a bridging member positioned to receive heated bars trans-



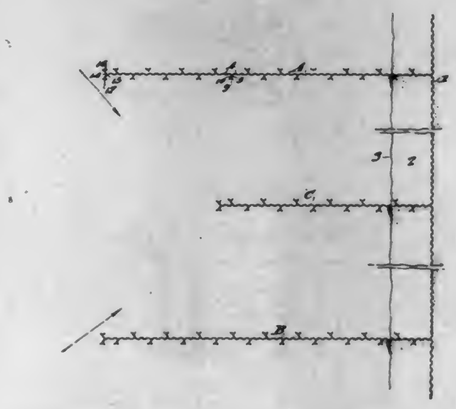
ferred thereto by said endless conveyor; and reciprocating mechanism for engaging the bars upon said bridging member and moving the same onto said anvil.

1,877,112. TRAVELING TUBE PUMP. JOHN A. YERKES and REES H. LEMMON, Long Beach, Calif. Filed Jan. 3, 1930. Serial No. 418,264. 6 Claims. (Cl. 103—181.)



1. In combination with a well tube having a support, an inserted well pump, mounted in said tube and on said support to seal the space above said support from that below, said pump comprising nested tubular stand pipes, one of said stand pipes being provided with a piston, said stand pipes being spaced from one another to provide an annular non-working space therebetween, openings terminating in stationary ports placing said annular space in communication with the space surrounding said stand pipes, a working barrel surrounding said piston and forming therewith a working pump space, said working barrel reciprocating with respect to said stand pipes to cause play of liquid contained in said annular non-working space and surging of such liquid back and forth through said openings.

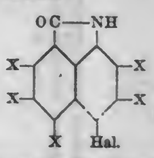
1,877,113. PILE STRUCTURE AND METHOD OF MAKING AND USING THE SAME. OLIVER E. YOUNG, West Palm Beach, Fla. Filed July 15, 1931. Serial No. 550,982. 14 Claims. (Cl. 61—61.)



1. A groyne structure comprising a line of sheet piles extending from the shore out into the water and buttress sheet piles disposed laterally at spaced points along said line interlocking substantially throughout their length with adjacent piles in the line.

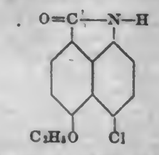
1,877,114. PROCESS FOR MANUFACTURING MONOHALOGEN DERIVATIVES OF NAPHTHOSTYRIL AND SUBSTITUTION PRODUCTS THEREOF. WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1928, Serial No. 267,810, and in Germany Apr. 9, 1927. 3 Claims. (Cl. 260—124.)

1. A process for manufacturing monohalogen derivatives of naphthostyril compounds corresponding probably to the general formula:



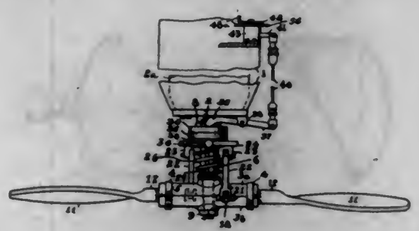
wherein the X's mean hydrogen atoms of which one may be replaced by an alkoxy group, which process comprises treating a naphthostyril compound in which the paraposition to the imino group is free with a nuclear halogenating agent in amounts not considerably above the theoretical quantity for introducing one halogen atom into the nucleus.

3. As a new product the 4-chloro-5-ethoxynaphthostyril corresponding probably to the formula:



which product represents light yellow compact needles melting at about 250–252°, soluble in organic solvents, insoluble in water.

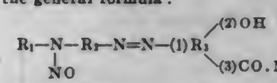
1,877,115. VARIABLE PITCH PROPELLER MECHANISM. JOHN RAPP ZIPAY, Pittsburgh, Pa. Filed Sept. 26 1929. Serial No. 395,261. 2 Claims. (Cl. 74—14.)



1. The combination with a tubular support, of a shaft carrying said support, alined bearings adjacent opposite ends of and within said tubular support, a pair of shafts each mounted in the bearings at a respective end of said support, arms keyed to the inner ends of said pair of shafts and projecting in opposite directions from respective shafts of the pair, said support being slotted and the arms projecting through the slots, a disk splined on the first mentioned shaft for movement longitudinally thereof, ears on said disk, links each pivoted at one end to the projecting end of an arm and at its other end to a respective ear, a spring interposed between said disk and support, an antifriction bearing carried by said disk on the side remote from the support, a second disk mounted revolubly on the first disk and bearing against said antifriction bearing, and a forked lever pivoted adjacent said second disk and bearing at the forked end thereagainst.

1,877,116. PROCESS FOR TREATING WATER-INSOLUBLE AZO DYESTUFFS. ARTHUR ZITSCHER and WILHELM WÜTERICH, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 2, 1929, Serial No. 396,931, and in Germany Oct. 31, 1928. 4 Claims. (Cl. 8—5.)

1. A process which comprises treating a water-insoluble azo-dyestuff fixed on the fiber and corresponding probably to the general formula:



wherein R_1 represents a radical of the benzene or naphthalene series, R_2 a radical of the benzene series, R_3 a radical of the naphthalene series and wherein the —N=N— group is attached in para-position to the



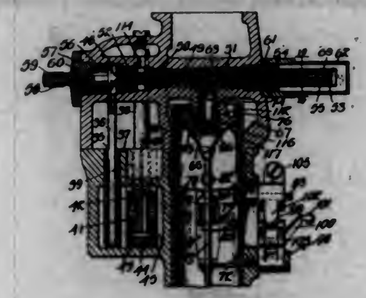
group, with a sulfite and with a leuco-quinone compound of the general formula:



wherein R represents a radical of the benzene or naphthalene series and X, standing in ortho- or para-position to OH, means a hydroxy-, amino- or alkyl-amino-group.

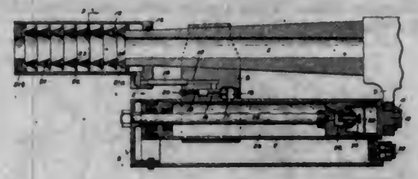
1,877,117. CARBURETOR. ARTHUR R. BAKER, Indianapolis, Ind., assignor to Ira T. Swartz, Indianapolis, Ind. Filed May 29, 1930. Serial No. 457,362. 22 Claims. (Cl. 261—66.)

1. A carburetor comprising a casing having an inlet for fuel and one or more inlets for air, a fuel well and a fuel pan in said casing, means for replenishing the pan with fuel from the well, said pan being positioned so that the fuel first enters into it and overflows into the



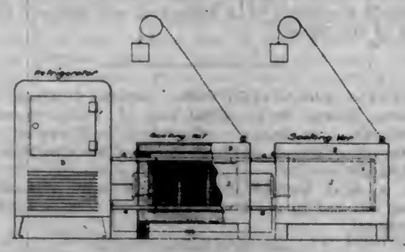
well, a float in said well for controlling the admission of fuel into the casing, and means for drawing fuel out of the well and the pan and mixing it with carbureting air, substantially as set forth.

1,877,118. GUN. GLADEON M. BARNES, U. S. Army, Hastings, Mich. Filed Dec. 10, 1930. Serial No. 501,325. 6 Claims. (Cl. 89—42.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



4. In a reciprocating gun, a recoil mechanism utilizing the gases of discharge to check recoil and restore the gun to battery, and a muzzle brake on the gun having a series of baffle rings arranged to deliver gases of discharge to the recoil mechanism.

1,877,119. METHOD OF TREATING LEATHER. PETER A. BLATZ, Westover Hills, Del. Filed Mar. 29, 1930. Serial No. 439,881. 8 Claims. (Cl. 149—5.)



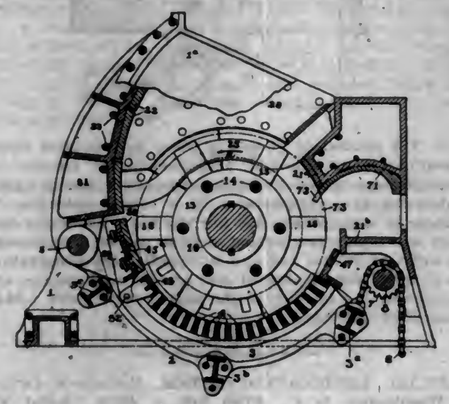
1. In the manufacture of leather in which the leather has been chrome-tanned, the step which comprises transferring said tanned skins while in a wet condition from the last step of the tanning operation to a cold water bath in which said skins are stored, and maintaining said cold water bath at a relatively definite low temperature while said skins are stored therein.

1,877,120. TOY AIRCRAFT. GUSTAV BOEHME, Berlin-Zehlendorf, Germany. Filed Nov. 2, 1929, Serial No. 404,414, and in Germany Nov. 7, 1928. 11 Claims. (Cl. 46—50.)



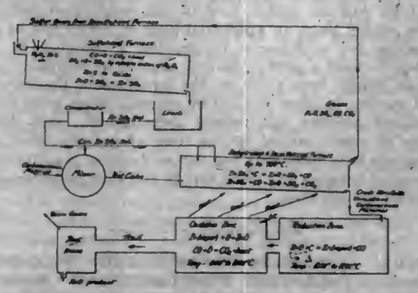
1. A toy aeroplane comprising an assemblage of parts including wings in the form of thick hollow aerofoil bodies, and means for adjusting the angle of inclination of said wings through any angle within given limits.

1,877,121. HAMMER CRUSHER. GEORGE W. BORTON, New Lisbon, N. J., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Original application filed Aug. 25, 1928, Serial No. 302,080. Divided and this application filed Jan. 20, 1930. Serial No. 422,239. 9 Claims. (Cl. 83—11.)



1. The combination, in a crusher of the hammer mill type, of a cage forming the lower part of the crushing chamber, a pivotal support for said cage, a rotor structure having hammers cooperating with said cage, a supplemental breaker plate disposed within the area of said cage and hung from the same pivotal support, means for holding said supplemental breaker plate in operative position, and means for adjusting the same toward and from the hammer circle.

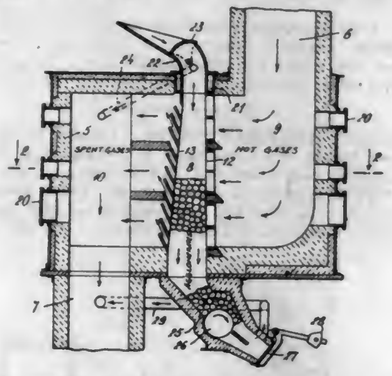
1,877,122. PROCESS FOR PRODUCING CRUDE AND FUMED ZINC OXIDE. FREDERIC A. BRINKER, Denver, Colo. Filed Apr. 20, 1927. Serial No. 185,190. 8 Claims. (Cl. 23—147.)



6. In the production of zinc oxide a process comprising heat treating zinc ores to form sulfates, leaching out the

zinc sulfate so formed, mixing the resulting zinc solution with a carbonaceous material, dehydrating the mixture and desulfatizing the dehydrated mixture to yield zinc oxide.

1,877,123. PRODUCING COKED AGGLOMERATES. EARL H. BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed July 30, 1929. Serial No. 382,273. 12 Claims. (Cl. 75—65.)



1. The method of producing coked agglomerates which comprises preparing and agglomerating a mixture of metalliferous material and an appropriate coking agent, subjecting the agglomerates to a coking operation in which the agglomerates are initially heated by direct contact with a gaseous heating medium passed therethrough in sufficient volume and at a sufficiently high temperature to promptly form a shell of coke on each agglomerate, and continuing the heating of the agglomerates until coking thereof is completed.

1,877,124. LUBRICATING SYSTEM. RICHARD M. CUTTS, Washington, D. C. Filed Feb. 2, 1928. Serial No. 251,396. 15 Claims. (Cl. 184—7.)



1. In a lubricating system, a valve for a bearing comprising a casing provided with openings constituting an inlet and an outlet, and in communication with the main supply line; an apertured plug engaging one of said openings for a distance to provide a chamber in said casing to hold a predetermined amount of lubricant; and means singly responsive to the hydrostatic pressures in said system to close the outlet opening when each predetermined amount has passed therethrough, said means being reversely moved by the urge of gravity when said pressures have been removed and said means constituting a separator between the main supply and each predetermined amount of lubricant.

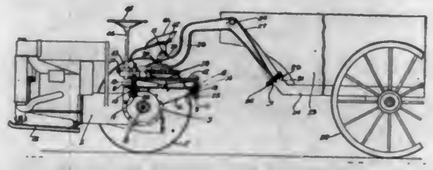
1,877,125. MOP HANDLE STRUCTURE. WILL EVANS, Hermosa Beach, Calif. Filed Jan. 21, 1930. Serial No. 422,321. 4 Claims. (Cl. 15—122.)

1. In a mop of the class described, a long slender longitudinally ridged handle, a mop secured at one end thereof, a crank means inserted transversely through the handle, and a ridged crank retaining member slidably mounted on the longitudinally ridged handle adapted to retain the crank means in a fixed position relative to the handle, said crank retaining member comprising a yieldable and



resilient band partially surrounding the longitudinally ridged handle and having rigid means at its outer side for receiving the crank portion of the crank means for holding the same with respect to the ridged handle when the member is shifted along the handle.

1,877,126. TRACTOR HITCH. EDWARD R. GREER, Minneapolis, Minn. Filed Oct. 3, 1928. Serial No. 309,998. 11 Claims. (Cl. 180—12.)



1. The combination with a tractor having rear traction wheels and a semi-trailer, of means for coupling the forward end of the trailer to the tractor, said coupling means comprising an element yieldably and non-rotatably supported upon the tractor, an upright pivot mounted in said element and located rearwardly of the axis of said traction wheels so that the weight of the trailer on said element will counterbalance the weight of the forward end of the tractor, whereby the tractor front wheels may be dispensed with and the tractor and trailer operated as a four-wheeled unit, said element being mounted for oscillatory movement on a horizontal axis disposed lengthwise of the tractor.

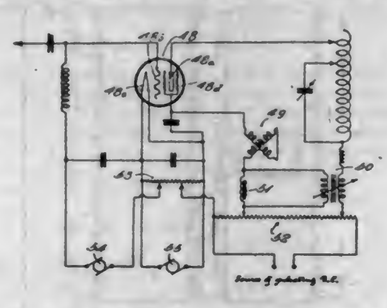
1,877,127. DELAY POWDER. GEORGE C. HALE, U. S. Army, Dover, N. Y. Filed Jan. 11, 1932. Serial No. 586,063. 10 Claims. (Cl. 52—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A delay powder including a metallic chromate, a metal adapted to react with oxygen to form a solid, and linseed oil.

1,877,128. ELECTRON DISCHARGE DEVICE CIRCUIT ARRANGEMENT. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 5, 1929. Serial No. 376,181. 2 Claims. (Cl. 250—27.)

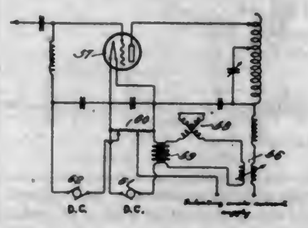
1. In a power supply system for electron tubes, an electron tube having a cathode, anode, grid and shielding grid,

a source of pulsating direct current for energizing said anode, a source of pulsating direct current for energizing said shielding grid, and a current source for energizing said cathode, said source for energizing said shielding grid being connected to said shielding grid and to the circuit of



said cathode, the pulsations applied to said shielding grid being of magnitude and phase for neutralizing in the circuit of said anode the pulsations of the potential directly applied by said source for energizing said anode, whereby a smooth continuous anode current is produced.

1,877,129. ELECTRON DISCHARGE DEVICE CIRCUIT ARRANGEMENT. ERNEST R. HENTSCHEL, deceased, Springfield, Mo., by John Olson, administrator, Springfield, Mo., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed July 5, 1929, Serial No. 376,181. Divided and this application filed July 31, 1931. Serial No. 554,345. 2 Claims. (Cl. 250—27.)

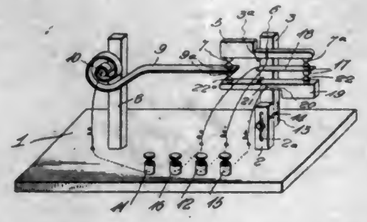


2. In a power supply system for an electron tube using pulsating direct current supply for energizing the cathode and anode, the method of obtaining smooth continuous anode current which consists in applying the pulsating current to the anode in phase with the pulsating current applied to the cathode, and applying to the grid of the electron tube a portion of the pulsating supply impressed upon the cathode of the electron tube in such phase relation that the greatest negative potential is impressed upon the grid at the instant when the greatest positive potential is impressed upon the cathode, and of such magnitude that the pulsations of potential supplied directly to said anode and the effect upon the anode current of the pulsations impressed upon the cathode are neutralized by the effect upon the anode current of the pulsations impressed upon the grid.

1,877,130. RESINOUS COMPOSITION AND PROCESS OF MAKING SAME. ROWLAND HILL and ERIC EVERARD WALKER, Blackley, Manchester, England. Filed Mar. 4, 1930, Serial No. 433,169, and in Great Britain Jan. 25, 1929. 18 Claims. (Cl. 260—8.)

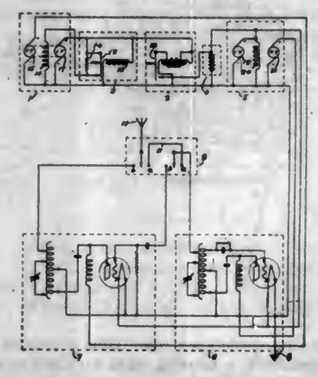
1. The process of making rapid-hardening resinous compositions which comprises heating together a resin of the polyhydric alcohol-organic polybasic acid type and a urea-formaldehyde condensation product in an alcoholic solvent for the polyhydric alcohol-organic polybasic acid resin.

1,877,131. THERMOSTAT. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,866. 3 Claims. (Cl. 200—138.)



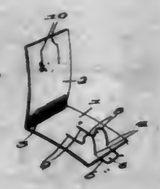
1. In a thermostat, a supporting member, a bimetallic strip thermally responsive to temperature variations connected at one end to said supporting member, the other end of said strip projecting in a substantially horizontal direction, contacts carried by opposite faces of the last mentioned end of said strip, a second supporting member, a resilient strip carried by said second supporting member, a set of contacts carried by said resilient strip, a pair of balanced levers pivotally mounted on said second supporting member above and below said resilient strip and contacts carried by each of said balanced levers in alignment with the contacts on said bimetallic strip and on said resilient strip.

1,877,132. RADIO TRANSMITTER. LAWRENCE A. HYLAND, Washington, D. C. Filed Jan. 15, 1932. Serial No. 586,909. 3 Claims. (Cl. 250—27.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



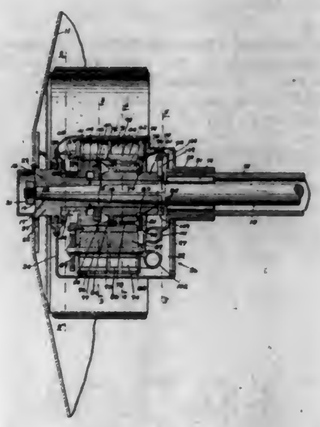
1. In combination, a power-driven generator having low potential and high potential windings, a storage battery, means for connecting the low potential winding of said generator to said battery responsive to the generation of a predetermined potential by said generator, a dynamotor having a high voltage winding, means connecting said dynamotor to be driven by said battery, an electron tube oscillator, means connecting the high voltage winding of said dynamotor in the plate circuit of said electron tube oscillator, means connecting said battery in the filament circuit of said electron tube oscillator, a radio frequency amplifier, means connecting the high voltage winding of said power driven generator in the plate circuit of said amplifier, means connecting said battery in the filament circuit of said amplifier, a radiating system, and means for selectively connecting said radiating system to the output circuit of said amplifier or said oscillator whereby said radiating system may be energized by said amplifier when said power driven generator is functioning or by said oscillator when said generator is not functioning.

1,877,133. FOLDING PIN TICKET. MARTIN M. KEENER, Lancaster, Pa. Filed Mar. 28. 1931. Serial No. 526,069. 18 Claims. (Cl. 40—25.)



1. A pin ticket of the character described comprising a ticket side, a wire formed hingedly connected with the ticket side and having portions to engage a fabric to hold the same in place, and a handle connected with the wire form and at the opposite end thereof from the fabric engaging portions to manipulate the form.

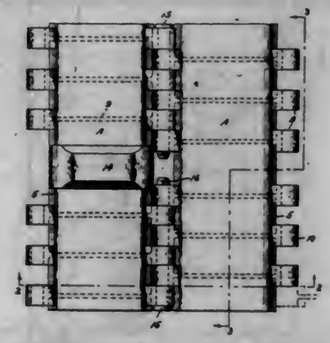
1,877,134. HYDRAULIC BRAKE. DE FOREST KELLOGG, Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 440,994. 14 Claims. (Cl. 188—90.)



1. A braking mechanism comprising a pair of relatively revoluble members, a housing rigid with one of said members, a fluid therein, means actuated by the other of said members during relative movement thereof for moving said fluid within the housing, means for restricting movement of the fluid, releasable means for locking said fluid-moving means to its actuating member for movement therewith in respect to the other of said members, and means operable prior to operation of said locking means for synchronizing said fluid-moving means with its actuating member.

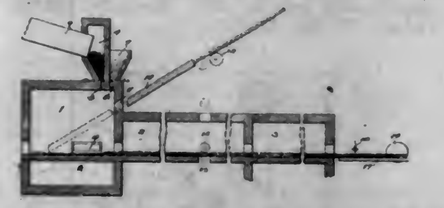
1,877,135. BELT. HARRY A. KNOX, Davenport, Iowa. Filed Mar. 5, 1930. Serial No. 433,421. 13 Claims. (Cl. 305—10.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A track for track-laying vehicles embodying articulated sections, each section consisting of a channel plate having diverging side walls provided with a plurality of aligned kerfs, and a plurality of links inserted in the aligned kerfs of the side walls of the channel plate and engaging the web thereof, enlarged bearings on each end of the links engaging the outer face of the corresponding side wall of the channel plate and constituting ground engaging cleats, the assembled height being no greater than the



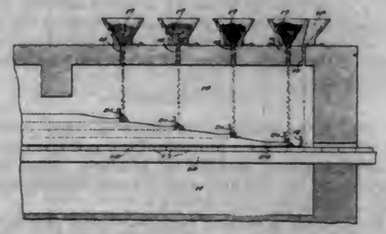
height of the component members and the links composed of a metal of higher quality than the metal of the channel plate.

1,877,136. PROCESS AND PRODUCT OF REENFORCING BLOATED BUILDING MATERIAL. SHERMAN Q. LEE, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 8, 1930. Serial No. 465,512. 9 Claims. (Cl. 154—2.)



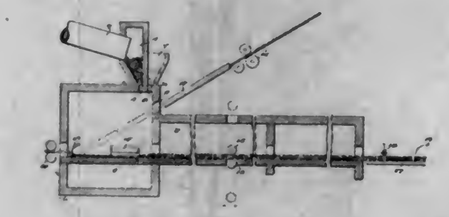
1. The process of producing a reenforced cellular product which consists in embedding and covering over a metallic reenforcing element in a mass of granular earthy material, bloating the granular material to form an expanded cellular product surrounding the reenforcing element, and cooling the product.

1,877,137. METHOD OF PROGRESSIVELY BLOATING EARTHY MATERIALS. SHERMAN Q. LEE, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,994. 10 Claims. (Cl. 25—156.)



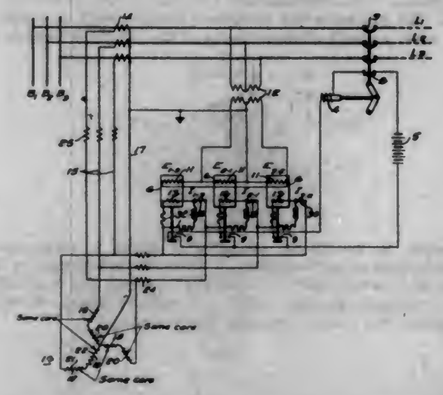
1. The method of producing a continuous slab of bloated earthy material, which consists in subjecting a first layer of granular earthy material to a bloating temperature to cause bloating thereof, and in thereafter depositing a second layer of granular earthy material upon the first layer and subjecting the second layer to a bloating temperature to cause bloating thereof and adherence to the first bloated layer in the production of a bloated slab of progressively increasing thickness.

1,877,138. PROCESS OF BLOATING AND ANNEALING CELLULAR BLOCKS. SHERMAN Q. LEE and WARNER HATHAWAY, Madison, Wis.; said Lee assignor, by mesne assignments, of his entire right to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 21, 1930. Serial No. 469,614. 15 Claims. (Cl. 25—156.)



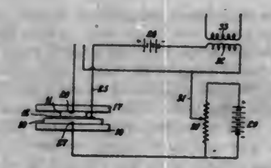
1. The process of treating earthy material in the production of a cellular mass, which consists in subjecting the material while under agitation to a temperature not exceeding that at which the particles retain their granular condition, continuing the heating at a higher temperature and with the material in a non-agitated condition to produce bloating to the desired dimensions, and continuing the heating at a soaking temperature intermediate the temperature at which active bloating occurs and the congealing temperature, for a sufficient period of time to eliminate internal strains, and finally in gradually cooling the material.

1,877,139. CURRENT TRANSFORMER CONNECTION FOR RELAY OPERATION. WILLIAM A. LEWIS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania.. Filed May 1, 1930. Serial No. 448,990. 17 Claims. (Cl. 175—294.)



1. The combination with a three-phase line, of a set of star-connected current transformers, a set of delta-connected current-responsive devices, and means whereby substantially all of the current from the current transformers is supplied to the terminals of said current-responsive devices except the zero-phase-sequence component, said means including three conducto s connected between the terminals of said current-responsive devices and the respective terminals of said current transformers, and a set of interconnected-star transformer windings connected across said conductors, with the neutral point of said windings connected to the neutral point of said current transformers, said interconnected-star transformer windings having three pairs of in-phase windings mounted non-inductively on three cores, respectively.

1,877,140. AMPLIFIER FOR ELECTRIC CURRENTS. JULIUS EDGAR LILIENFELD, Cedarhurst, N. Y. Filed Dec. 8, 1928. Serial No. 324,794. 16 Claims. (Cl. 179—171.)

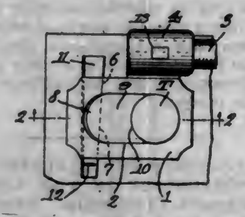


1. An amplifier for electric currents, comprising two outer layers and an intermediate layer in intimate contact therewith the layers being of material such that asymmetric couples are formed by the respective outer layers with the opposite faces of the intermediate layers and being interconnected in part thereby, means to apply potentials of same sign to the outer layers, and means to apply a potential of the opposite sign to the intermediate layer.

1,877,141. ALUMINUM CASTING ALLOY. ALFRED J. LYON, Harshmanville, Ohio. Filed Apr. 7, 1930. Serial No. 442,467. 6 Claims. (Cl. 75—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

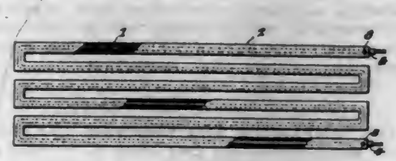
1. The method of producing an aluminium alloy, which consists in forming a composition of an intermediate aluminum alloy of 10 parts of iron, 4 parts of silicon, 5 parts of magnesium and 81 parts of aluminum, and then melting together a quantity of said composition metal with aluminum, copper and nickel.

1,877,142. TERMINAL CONNECTER. BERTTIE O. MERRITT, Scottsbluff, Nebr., assignor of one-half to John A. Germiquet, Edgemont, S. Dak. Filed Feb. 9, 1931. Serial No. 514,605. 3 Claims. (Cl. 173—259.)



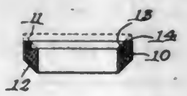
1. A terminal connecter including a head having a terminal receiving slot one end wall of which is shaped to embrace and fit snugly against a terminal, a jaw slidable in the slot and having a recessed end for embracing and fitting snugly upon a terminal, there being registering transverse slots in the head and jaw, and a wedge adjustably seated in the transverse slots for holding the jaw in the head when released from the terminal and adjusting said jaw into gripping engagement with the terminal, said head having an impact receiving end.

1,877,143. REFRIGERATING APPARATUS. TRACY D. MONTEE, Pasay, Philippine Islands. Filed Dec. 29, 1930. Serial No. 505,439. 1 Claim. (Cl. 62—95.)



Refrigerating apparatus comprising a coil consisting of inner and outer tubes, the outer tube having heads closing its ends and necks projecting outwardly from the heads, the inner tube being of greater length than the outer tube and projecting through the necks carried by the heads at the ends thereof, the inner tube being of small diameter and the outer tube of appreciably greater diameter than the inner tube and oblong in cross section to provide flat faces presenting a large area for contact by air surrounding the coil, and a fluid having heat transmitting qualities filling the outer tube and constituting means for conducting heat through the outer tube to the inner tube for absorption by a heat absorbing meduim passed through the inner tube, the outer tube having filling openings formed near its ends, reinforcing blocks in said openings having threaded openings formed therein, and plugs screwed into the threaded openings to close the same.

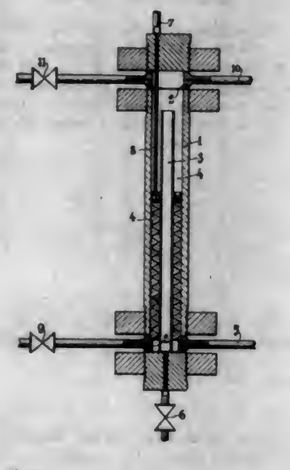
1,877,144. BOTTLE NECK RING AND METHOD FOR MAKING THE SAME. RUTH OLIVER and GEORGE R. PENN, New York, N. Y., assignors, by direct and mesne assignments, to Incorporated Paper Industries, New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 540,130. 6 Claims. (Cl. 93—1.)



1. The hereindescribed method of producing a tubular paper product which includes the step of drawing a sheet of paper stock over an adhesive applying element, winding the sheet into a tube the length of which is equal to the width of the sheet of paper stock, severing the sheet along a straight transverse line to produce a beveled edge, and applying pressure to said edge to flatten it upon the formed tubular product.

1,877,145. APPARATUS FOR CARRYING OUT REACTIONS CONTINUOUSLY IN THE LIQUID PHASE UNDER INCREASED PRESSURE. KENNETH HERBERT SAUNDERS, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed Oct. 29, 1928. Serial No. 315,906. 8 Claims. (Cl. 23—290.)

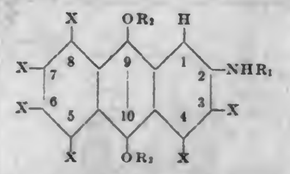
1. An apparatus for carrying out reactions continuously in the liquid phase under increased pressure, comprising two concentric chambers, the inner one being without a top, so that there is a space at the top common to both chambers, inlet and outlet pipes for the admission of the reagents and the exit of the reaction products, means for heating or cooling the outer chamber, an inlet pipe and an outlet pipe opening at the bottom of the outer chamber, a pipe opening at the bottom of the inner chamber, a pipe passing through the cover and descending into the outer chamber, below the open top of the inner chamber, and an additional outlet pipe opening at the common



space at the top of the two chambers, the annular space being partly filled with Raschig rings surmounted by a distributor plate into which dips the pipe passing through the cover and descending into the outer chamber, said distributor plate consisting of an annular perforated ring.

1,877,146. PROCESS FOR PREPARING DYESTUFFS OF THE N.N-DIHYDRO-1.2.2'.1'-ANTHRAQUINONE AZINE SERIES AND PRODUCTS OBTAINABLE THEREBY. KARL SCHIRMACHER, WILHELM SCHAICH, ARTHUR WOLFRAM, HANS TAMPKE, KURT BILLIG, and WERNER SCHIRMACHER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 26, 1927, Serial No. 194,523, and in Germany June 15, 1926. 21 Claims. (Cl. 260—31.)

1. The process which comprises treating with an oxidizing agent an anthrahydraquinone of the following formula:

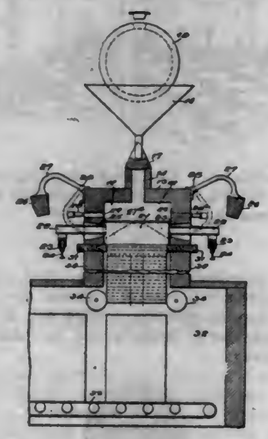


wherein R_1 stands for hydrogen or alkyl, 2_2 stands for alkyl, aralkyl, carboxyalkyl, a sulfonic acid group, or a salt of a carboxyalkyl or sulfonic acid group, and X stands for hydrogen, halogen, alkyl or a carboxy group, or two adjacent X's jointly represent the grouping:



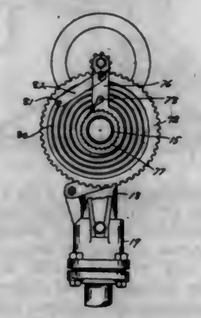
in which case the other X's are hydrogen and splitting off by means of a saponifying agent the residues situated at the oxygen atoms in 9.10-position, and finally oxidizing the leuco compounds thus obtained.

1,877,147. METHOD OF PRODUCING COLUMNS OF BLOATED MATERIAL. KEMPER SLIDELL and SHERMAN Q. LEE, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 21, 1930. Serial No. 469,615. 14 Claims. (Cl. 25—156.)



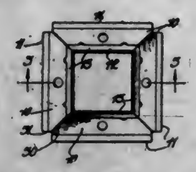
1. The method of producing columns of bloated material, which consists in depositing a layer of granular earthy material, subjecting the layer to a bloating temperature to cause fusion of the particles and expansion thereof by bloating into a cellular block, lowering the bloated block a distance equal to the thickness of the block after bloating, depositing a second layer of granular material on the surface of the first layer so bloated, and subjecting the second layer to a bloating temperature to cause expansion by bloating thereof and fusion with the first bloated layer.

1,877,148. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 15, 1923, Serial No. 663,002. Renewed Oct. 16, 1931. 34 Claims. (Cl. 122—392.)



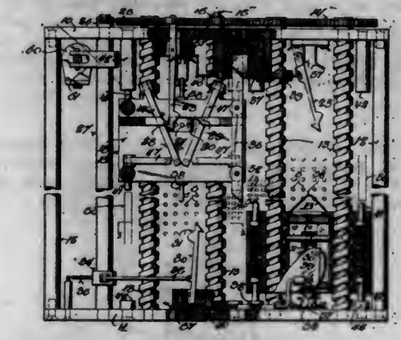
12. In a boiler cleaner, the combination of a movable blower pipe, means for moving the blower pipe through a plurality of similar cycles of movement, means operable upon completion of a predetermined number of said cycles to lock the blower pipe against movement, and means for releasing the said locking means.

1,877,149. RAZOR BLADE. BENJAMIN M. SYLVAN, New York, N. Y. Filed Aug. 21, 1931. Serial No. 558,597. 4 Claims. (Cl. 30—12.)



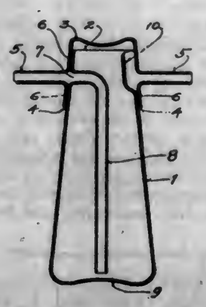
1. A multiple edge razor blade of truncated pyramidal form comprising, a rigid, rectangular frame member, and a plurality of separable blade elements carried by said frame.

1,877,150. ELECTRICAL VOTING APPARATUS. MARSHALL F. THOMPSON, Washington, D. C. Original application filed Sept. 11, 1923, Serial No. 662,115, now Patent No. 1,773,891, dated Aug. 26, 1930. Divided and this application filed Aug. 26, 1930. Serial No. 477,967. 7 Claims. (Cl. 235—52.)



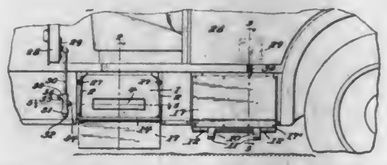
1. A mechanism for making a permanent record of votes cast through a plurality of individual voting circuits in an electrical voting apparatus comprising a plurality of plungers for making indications on a card, a traveling carriage, and means carried by the carriage and controlled by the individual voting circuits for actuating said plungers.

1,877,151. ABSORPTION BULB FOR COMBUSTION ANALYSIS. WILLIAM D. TURNER, New York, N. Y. Filed May 15, 1930. Serial No. 452,800. 5 Claims. (Cl. 23—292.)



5. A piece of apparatus comprising a body with spaced openings therein, and movable means engaging the exterior side of said body for sealing said openings, said means having openings therein spaced for simultaneous alignment with said openings in the body.

1,877,152. VEHICLE STEP. CARL HENRY VOGEL, Buffalo, N. Y. Filed Nov. 4, 1929, Serial No. 404,751. Renewed Dec. 4, 1931. 5 Claims. (Cl. 280—166.)



1. A step designed to be supported between the door of an automobile or like vehicle in which said door opens outwardly and has a depending element thereon, said step including a riser, pivotally supported spring influenced hooks on the riser, a step pivotally secured to the riser and spring influenced to swing thereagainst and to receive the element depending from the door between the step and riser, lugs on the step to be engaged by the hooks when the step is closed, catch means for holding the step closed, said hook designed to be swung to release position by contact with the depending element on the door, the step designed also to be swung to open position by contact with the said element to release the hooks and to permit of the latter engaging the lugs on the door for holding the step in open position.

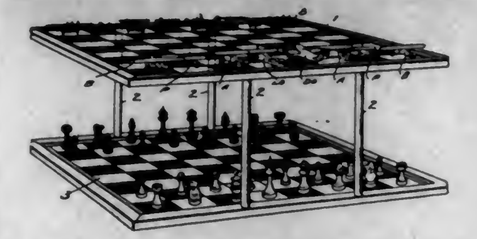
1,877,153. CONTAINER. GEORGE F. WALTER, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 23, 1928. Serial No. 271,994. 13 Claims. (Cl. 221—62.)



1. A self-closing sifter top for containers comprising an undercap member having an opening, an overcap member having sifter openings registrable with the opening of the undercap when in sifting position, a washer plate on the inside of said undercap and having sifter openings corresponding with those in the overcap, a collar spring having integral spring leaves between said overcap member and said undercap member and adapted to resist yieldingly the shifting in any direction of said overcap member to sifting position and to return the same to closed position, and a rivet connecting said members and said plate.

1,877,154. MILITARY GAME. WALTER REED WEAVER, Montgomery, Ala. Filed May 7, 1930. Serial No. 450,460. 13 Claims. (Cl. 273—131.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In a game, a playing board comprising a plurality of supporting planes positioned one above another in spaced relation and bearing checkered designs composed of squares of distinguishable visual characteristics designating the paths of movement and stations for movable game



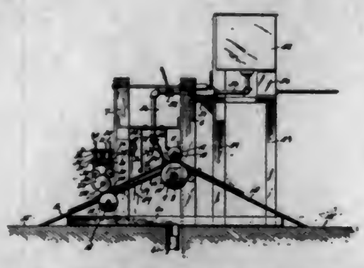
pieces, the squares of like visual characteristics of each plane being directly in vertical registration with the corresponding squares of each other plane.

1,877,155. ARTIFICIAL SPONGE AND DEVICE FOR MANUFACTURING SAME. LEWIS CROWFORD ABRAHAM, Auderghem, Belgium. Filed Oct. 8, 1930, Serial No. 487,852, and in Belgium Oct. 14, 1929. 2 Claims. (Cl. 15—208.)



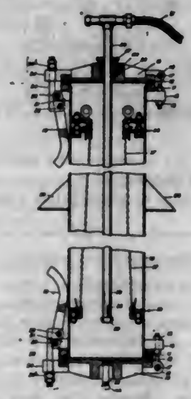
1. A scouring device comprising an elastic body, a cover of wire gauze for the elastic body, the edge of the wire gauze being drawn together to enclose the elastic body, and a cap closing the opening in the cover and having an annular series of prongs projecting into the edge of the cover and crimped toward the center of the cap to secure the edges of the gauze together.

1,877,156. WASHING MACHINE FOR RUGS, CARPETS, ETC. BENJAMIN F. BEHRINGER, West Caldwell, N. J. Filed May 4, 1929. Serial No. 360,405. 2 Claims. (Cl. 141—1.)



1. In a rug cleaning machine, a pair of driven feed rollers and a pair of driven wringer rollers, the latter being spaced in a plane below the plane of the former, a downwardly inclined supporting platform extending between said feed and wringer rollers so pitched as to permit gravity to aid said feed rollers in delivering a rug to engagement by said wringer rollers, a cleansing solution spray pipe disposed rearwardly of and substantially parallel to said feed rollers, said spray pipe having a plurality of nozzles spaced along its length adapted to discharge forceful whirling sprays of cleansing solution directly upon the rug issuing from said feed rollers with both penetrating and brushing effect thereupon, and a rinse water spray pipe disposed forwardly of and substantially parallel to said wringer rollers.

1,877,157. TUBULAR FILTER. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed Oct. 2, 1929. Serial No. 396,901. 5 Claims. (Cl. 210—183.)



4. In a vertical filter having a shell, tube sheets therein and a perforate tube supported by said tube sheets, tube sheet construction comprising: a plate extending horizontally across said shell; an opening through said plate of sufficient diameter to pass a larger end of said perforate tube; a ring concentric with said opening and removably attached to said plate; a skirt fixed inside said ring, said skirt substantially fitting the outside of a smaller end of said perforate tube; a second ring concentric with said opening; a skirt fixed inside said second ring, said skirt substantially fitting the inside of said smaller end of said perforate tube, and means for drawing said second ring toward first said ring.

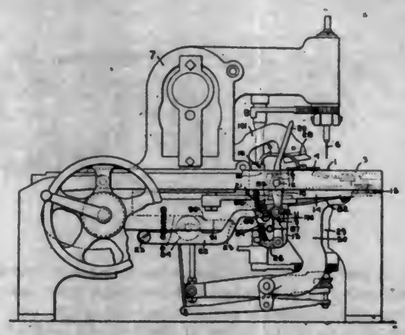
1,877,158. PAPER CUP. HERMAN CAREW, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1930. Serial No. 477,099. 7 Claims. (Cl. 229—53.)



1. A receptacle formed from connected pieces of material, one piece being shaped to form a tapered body with an open face and the other piece being secured over the open face to hold the body in its tapered form and having a portion folded to provide a closure for the bottom of the receptacle.

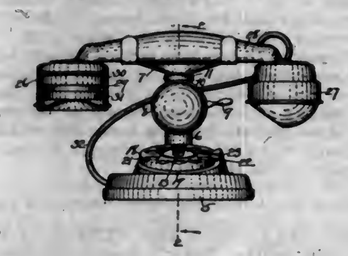
1,877,159. THREAD TRIMMER FOR SEWING MACHINES. AXEL F. CARLSON, Cambridge, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Jan. 22, 1927. Serial No. 162,890. 33 Claims. (Cl. 112—252.)

1. In a sewing machine adapted to perform a predetermined sewing operation and then come to rest, the combination with stitch-forming mechanism and work-holding means movable relative to each other during and subsequent to the stitching operation, of a throat plate through which thread is led to the work, the relative movement after the stitching operation drawing out a length of thread from the throat plate, means to separate said



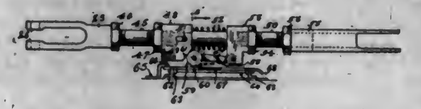
thread from the under side of the work, and other means operating independently from the last-named means to cut the thread close to the work.

1,877,160. TOY TELEPHONE. JOHN H. CONKLIN, East Hampton, Conn. Filed Feb. 12, 1931. Serial No. 515,156. 6 Claims. (Cl. 46—46.)



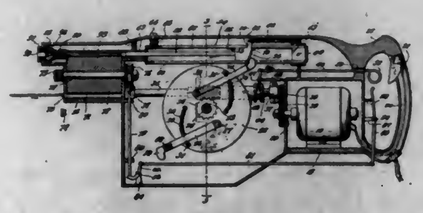
1. A toy telephone including a base provided with means for supporting a receiver, an earpiece simulating a receiver adapted to be supported by said base and to be removed therefrom and inverted for use, and a gravity actuated sounding device located within said earpiece and arranged to be sounded when said earpiece is inverted.

1,877,161. MECHANISM FOR REVERSING MOTIVE DEVICES FOR OPERATING DOORS AND THE LIKE. ROSCOE D. CONKLIN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Original application filed June 7, 1929, Serial No. 369,205, now Patent No. 1,828,860, dated Oct. 27, 1931. Divided and this application filed May 24, 1930. Serial No. 455,264. 2 Claims. (Cl. 268—50.)



1. In a door operating apparatus in combination with a motive device, of a link for connecting the motive device with the object to be operated, the link comprising two relatively movable members, means for resisting relative movement of the members, a cam element attached to one of the members and engaging a cam surface formed on the other member and a control device operated by the cam element when the reaction on the motor through the link exceeds a predetermined value.

1,877,162. PORTABLE NAILING MACHINE. WALTER A. DAY, Washington, Pa. Filed Jan. 29, 1931. Serial No. 512,132. 6 Claims. (Cl. 1—46.)

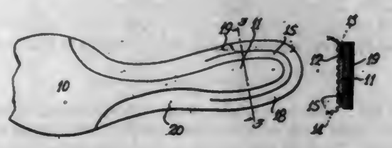


1. A portable nailing machine including a hollow driver, a nail setter in the driver, a driver guide tube, means coacting with the guide tube for extending the nail setter from the bore of the driver at the forward limit of movement of the driver, a nail feed cylinder in advance of the driver, and power-driven centrifugal hammers adapted to enter said guide tube and deliver blows against the driver.

1,877,163. METHOD OF SUPPLYING FUEL TO INTERNAL COMBUSTION ENGINES. LUDWIG DÜRR, Friedrichshafen, Germany, assignor to Luftschiffbau Zeppelin G. m. b. H., Friedrichshafen, Bodensee, Germany. Filed Oct. 29, 1928, Serial No. 315,679½, and in Germany Nov. 28, 1927. 2 Claims. (Cl. 62—175.)

1. The method of handling fuel on aircraft which consists of enclosing a liquefied fuel, gaseous at normal temperatures and pressures, in a light-weight, thin-walled vessel, bleeding off a sufficient amount of the vapor from the liquid so that the pressure inside the vessel will be substantially that of the atmosphere and feeding the fuel to the motor of the aircraft.

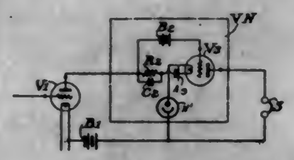
1,877,164. OUTER SOLE AND METHOD OF PREPARING THE SAME. NEWTON ELKIN, Philadelphia, Pa. Filed Apr. 11, 1929. Serial No. 354,203. 7 Claims. (Cl. 12—146.)



1. A method of forming an outer sole prior to its application to a lasted upper, which includes, in combination, removing the margin of the heel-portion for a distance approximately equal to the width of the lasting allowance of the lasted upper to which the said sole is to be applied, thereby leaving a tongue-portion adapted substantially to fill the cavity formed at the heel-seat by said lasting allowance, said removal being effected by making a U-shaped cut freeing said margin and severing the ends of said margin by shanking-out the shank portion of said outer sole.

1,877,165. ELECTRIC CONTROL CIRCUIT. OLIVER T. FRANCIS, Quantico, Va. Filed Dec. 27, 1928. Serial No. 328,662. 6 Claims. (Cl. 179—171.)

1. In an electric circuit, a vacuum tube amplifier having an input and an output circuit, a source of signals for said input circuit, a source of voltage for said output circuit, a load in said output circuit, means for controlling the plate voltage impressed on said vacuum tube in accordance with the envelope of said signals, said means comprising a second vacuum tube having an anode, a cathode and a control electrode, said anode and said cathode being connected

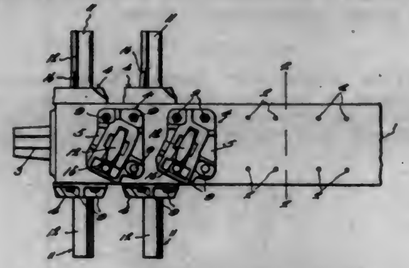


in said output circuit in series with said load, and an impedance connected between said cathode and said control electrode and common to said output circuit.

1,877,166. REDUCTION OF 4-NITROSO-1-PHENYL-2.3-DIMETHYL-5-PYRAZOLONE. LOUIS FREEDMAN, Far Rockaway, N. Y., and ALFRED E. SHERNDAL, Upper Montclair, N. J., assignors to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed July 25, 1931. Serial No. 553,194. 7 Claims. (Cl. 260—45.)

1. A process of reducing 4-nitroso-1-phenyl-2.3-dimethyl-5-pyrazolone to the corresponding 4-amino compound by means of alkali metal salts of hydrogen sulfide, which process comprises causing 4-nitroso-1-phenyl-2.3-dimethyl-5-pyrazolone to react with alkali metal salts of hydrogen sulfide.

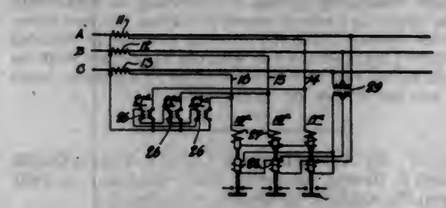
1,877,167. PADDLE AND BASE FOR WASHER LOGS. WILLIAM A. FYE, State College, Pa., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1932. Serial No. 587,395. 1 Claim. (Cl. 259—1.)



A washer log having openings extending therethrough, a base mounted on the log having openings therein registering with the openings in said log, a socket integral with the base, one of the openings in the base communicating with the socket, said socket being substantially wedge-shaped, a paddle, a substantially wedge-shaped foot on one end of the paddle slidably engageable in the socket, a spring mounted in one end portion of the socket and engaged with the paddle for yieldingly urging said paddle toward the small end of the socket, and bolts extending through the registering openings for securing the base in position on the log, one of said bolts extending through the spring for securing said spring in position in the socket.

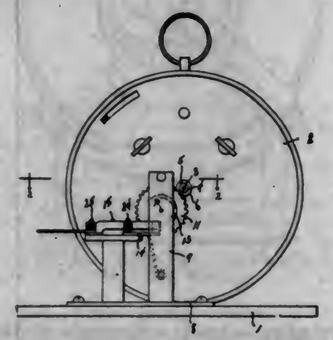
1,877,168. PROTECTIVE RELAY SYSTEM. SHIRLEY L. GOLDSBOROUGH, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 18, 1930, Serial No. 462,052. Renewed Jan. 13, 1932. 17 Claims. (Cl. 175—294.)

1. In combination with a polyphase circuit to be protected, a current transformer associated with each of the phase conductors thereof, the secondary windings of said transformers being star-connected and having a conductor extending from the neutral point thereof, relays respectively connected for energization from said secondary



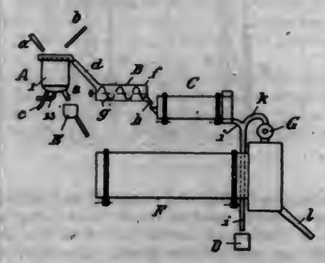
windings, and means associated with each relay and said neutral conductor for preventing zero-sequence currents from traversing said relays.

1,877,169. AUTOMATIC TIME SWITCH. VICTOR GONZALEZ, Winnetka, Ill. Filed June 27, 1931. Serial No. 547,397. 4 Claims. (Cl. 200—38.)



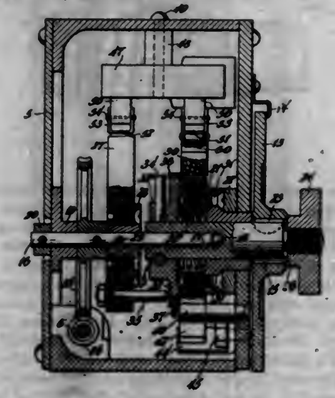
1. In combination with the hour shaft of a clock time mechanism, a small gear wheel having a single tooth secured on the hour shaft for rotation therewith, a larger gear wheel having twenty-four teeth supported in the path of movement of the smaller gear wheel, a pair of normally spaced contacts mounted adjacent the larger gear wheel, and means carried by the larger gear wheel for moving one of the contacts into engagement with the other and holding the contacts in engagement with each other for a predetermined period.

1,877,170. PROCESS FOR OPENING UP OF CEREALS. PAUL GROSS, Berlin-Hermsdorf, Germany. Filed Dec. 2, 1930, Serial No. 499,440, and in Germany Sept. 21, 1929. 10 Claims. (Cl. 83—28.)



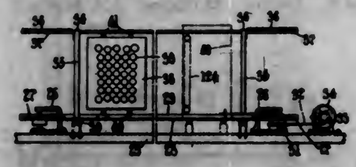
1. A process for opening up cereals, especially bread cereals, consisting in vigorously agitating the cereal in warm water for a short time, so as to cause a considerable part of the outer ligneous husks to loosen from the kernels without swelling of the latter, removing the husks already separated from the kernels, drying the cereal and removing the remainder of the husks from the kernels.

1,877,171. SWITCH CONTROL MECHANISMS. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Feb. 11, 1932. Serial No. 592,432. 13 Claims. (Cl. 200—47.)



1. In a switch actuating mechanism for controlling an electric motor circuit, the combination of a pair of rotating cams adapted to trip switches, one of the cams being geared to the motor, and the other cam being adapted to be engaged by the first and rotated to its tripping position after a predetermined and variable angular advance of the first with respect to the second.

1,877,172. ADVERTISING AND SIGNALING DEVICE. HENRY KINGSFORD HARRIS, Westminster, London, England. Filed Aug. 26, 1926, Serial No. 131,744, and in Great Britain Sept. 8, 1925. 13 Claims. (Cl. 40—52.)

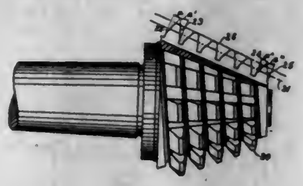


1. A device of the character described comprising a selectively operating composing means provided with projections adapted to be selectively actuated to operative or inoperative position, means for selectively setting said projections in operative positions, display elements adapted to be moved to display positions and having projections associated therewith, means for causing the projections of the composing means which have been set selectively into operative positions to be moved across the path of the display elements to engage and operate the projections of the display elements to cause the projections of the display elements interposed in their path to effect setting of the display elements.

1,877,173. METHOD OF CUTTING GEARS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Original application filed May 16, 1928, Serial No. 278,209, and in Great Britain Apr. 29, 1929. Divided and this application filed Apr. 24, 1930. Serial No. 447,010. 18 Claims. (Cl. 90—4.)

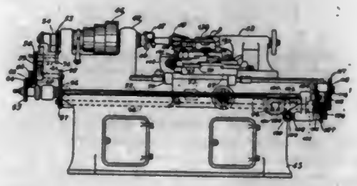
1. The method of cutting a tapered gear which comprises positioning a hob, having a plurality of helically

arranged cutting teeth, the side cutting edges of which are of continuously varying pressure angle from one end of the hob to the other, so that said hob extends diagonally of the face of the blank and rotating the hob and blank continuously in engagement while simultaneously producing a relative rolling motion between the hob and blank.



18. The method of cutting a tapered gear which comprises positioning a taper hob, having a plurality of helically arranged cutting teeth which increase in height from the small to the large end of the hob and which are arranged in a thread which in an axial plane is of constant pitch measured on the pitch surface of the hob, said teeth having said cutting edges which are of continuously increasing pressure angle from the large to the small end of the hob, so that said hob extends diagonally of the face of a tapered gear blank with the cutting edges of smaller pressure angle operating at the outside of the toothed portion of the blank and the cutting edges of larger pressure angle operating at the inside of the toothed portion of the blank and rotating the hob and blank continuously in engagement while simultaneously producing a relative rolling motion between the hob and blank.

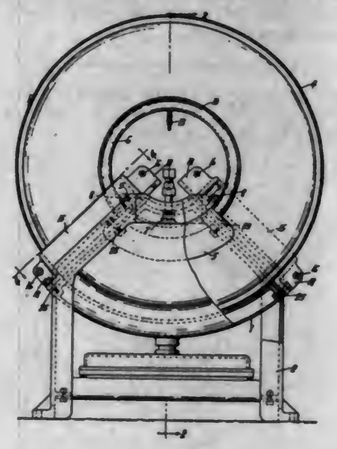
1,877,174. METHOD AND APPARATUS FOR RELIEVING HOBS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Original application filed May 16, 1928, Serial No. 278,208, and in Great Britain Apr. 29, 1929. Divided and this application filed Apr. 24, 1930. Serial No. 447,011. 29 Claims. (Cl. 82—19.)



1. The method of relieving a hob which comprises effecting a relative relieving movement between a relieving tool and hob blank for each tooth of the hob while rotating the hob blank on its axis and moving the relieving tool and blank relative to one another longitudinally of the blank and tilting the relieving tool as it moves from one end of the hob to the other to cause the tool to produce teeth on the hob having side cutting edges of changing pressure angle from one end of the hob to the other.

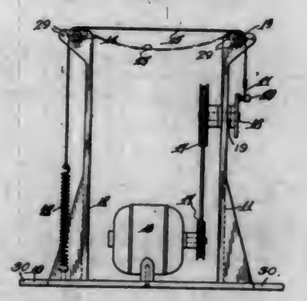
26. In apparatus for relieving taper hobs, a tool support, a rotatable work support, a carriage upon which one of said supports is mounted, means for moving the carriage longitudinally of the work, means for rotating the work support on its axis, means for imparting relieving movements between the tool and work supports in timed relation with the work and carriage movements, means for producing a relative feed movement between the tool and work supports to maintain the tool in operative relation with the conical blank as it moves relatively from one end of the blank to the other, means whereby the relieving movement of the tool operates to tilt the relieving tool continuously during the relieving of each tooth of the blank, and means operative during the feed movement for further tilting the relieving tool during relieving of different teeth of the hob whereby to produce teeth on the hob having side cutting edges of varying pressure angle from one end of the hob to the other.

1,877,175. SECTIONAL TIRE REPAIR VULCANIZER. JAMES C. HEINTZ, Lakewood, Ohio. Filed May 19, 1930. Serial No. 453,641. 20 Claims. (Cl. 18—18.)



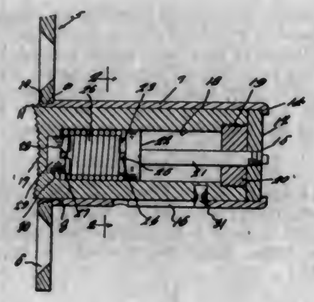
1. A tire repair equipment comprising a flexible flanged rim, having a gap therein, bead plates attached to the ends of the rim and completing the full annular seat for the tire, an air container within the tire, and a sectional cavity mold located at the bead plates.

1,877,176. VIBRATOR. ROBERT HETHERINGTON, Sharon Hill, Pa. Filed Dec. 2, 1930. Serial No. 499,453. 6 Claims. (Cl. 128—63.)



3. A strap, spaced guides engaging and guiding one side of an intermediate portion thereof and being mounted in a frame, a crankshaft having a crank pin loosely connected to one end of the shaft, an electric motor for operating the shaft, a spring secured to the frame and continuously pulling the other end of the strap and a frame for supporting the guides, crankshaft, motor and spring.

1,877,177. PUSH BUTTON WINDOW LOCK. LOUIS C. HINDERER and WALTER F. HINDERER, Kankakee, Ill. Filed Feb. 11, 1931. Serial No. 515,100. 3 Claims. (Cl. 292—57.)



1. An automatic push button window lock of the type described comprising a tubular cylinder having at its front end an attaching plate and at its rear end a back plate, an outwardly spring pressed hollow plunger closely slidable in the cylinder, said plunger having a spring therein for moving said plunger outwardly of the cylinder into locking position in the cylinder, and a stationary piston in the plunger, the spring having a connection with the said piston and with the forward end of the plunger so that the spring acts to yieldably resist rotation of the plunger.

1,877,178. VAT DYESTUFFS OF THE BENZANTHRONE SERIES AND PROCESS OF MAKING SAME. ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1929, Serial No. 343,506, and in Germany Mar. 2, 1928. 5 Claims. (Cl. 260—61.)

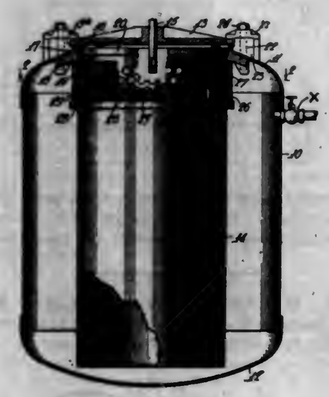
1. A process for the manufacture of vat dyestuffs of the benzanthrone series which comprises nitrating a 2.2'-dibenzanthronyl compound which may contain halogen atom with an excess of nitrating agent at between about 5° C. and about 20° C. and then heating the vattable product, thus obtained, with a compound of the group consisting of alkali metal sulfides and caustic alkali.

1,877,179. HYDROGENATED RESIN ESTERS AND METHOD OF PRODUCING. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 16, 1929. Serial No. 333,033. 50 Claims. (Cl. 260—98.)

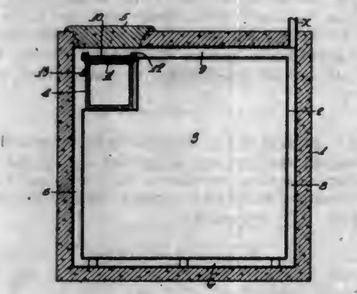
6. The method of preparing a hydrogenated abietic acid ester which includes forming an alkyl ester of abietic acid and hydrogenating the unsaturated bonds in the abietyl radical in the presence of a hydrogenation catalyst.

1,877,180. APPARATUS FOR AND METHOD OF FREEZING CARBON DIOXIDE. CHARLES L. JONES, Pittsburgh, Pa., assignor to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 13, 1929. Serial No. 346,546. 12 Claims. (Cl. 62—121.)

1. An apparatus for solidifying carbon dioxide, including a chamber constructed to withstand internal pressures greater than 75 pounds per square inch, having an opening whereby it is accessible only through the top, a closure for said opening and means adapted to discharge liquid carbon dioxide into the chamber and conduit for escape of gas, said conduit being formed or provided with means for imposing desired back pressure in said chamber.



1,877,181. REFRIGERATIVE APPARATUS. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 343,860. 2 Claims. (Cl. 62—91.5.)

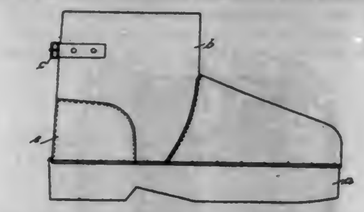


1. A refrigerative apparatus including an outer container for enclosing products to be refrigerated, means within said container affording a restricted path for thermo circulation of a refrigerant atmosphere in combination with a container of solid carbon dioxide in heat absorbing relation to said atmosphere, and having gas outlet means of cross sectional area and flow resistance suitable for maintaining substantially internal pressure to impart substantial velocity to the escaping gas and means for directing said escaping gas into said refrigerant atmosphere, in a region and in a direction of natural thermo flow thereof.

1,877,182. OVERSHOE. FRIEDRICH KÖNECKE, Hanover, Germany. Filed July 22, 1929, Serial No. 380,142, and in Germany July 27, 1928. 1 Claim. (Cl. 36—1.)

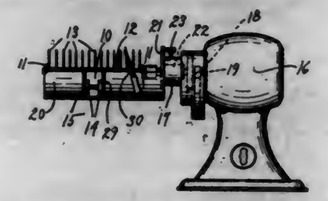
An overshoe, comprising, in combination, a wooden sole with a heel and a leather upper having at its rear a ver-

tical opening, the width of which is less than the transverse diameter of the heel of the shoe; reinforcing pieces



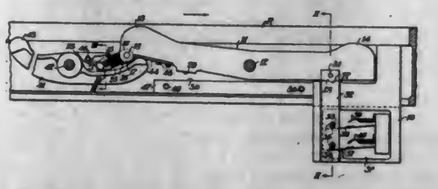
provided right-hand and left-hand from said opening at those places where the upper is affixed to the sole, and means for fastening the overshoe to the leg of the wearer.

1,877,183. SUPPORTING TRAY. HERMAN H. KUHLMANN, Spokane, Wash. Filed Apr. 11, 1931. Serial No. 529,449. 4 Claims. (Cl. 17—25.)



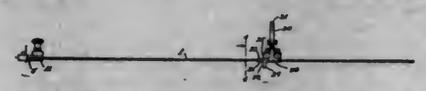
1. The combination with a device including a frame having a shaft journaled therein provided with a plurality of spaced disk blades and a handle projecting therefrom, of an electric motor having a shaft and casing, a tray arranged to receive and support said frame, means for detachably connecting the tray to the motor casing, means for coupling the shaft of the device with the shaft of the motor, and an angular shaped extension projecting from the tray arranged to receive the handle whereby the device is held against longitudinal movement with relation to the tray.

1,877,184. TRACK RAIL CONTACTOR. JOHN W. LIVINGSTON, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 1, 1932. Serial No. 596,005. 8 Claims. (Cl. 246—246.)



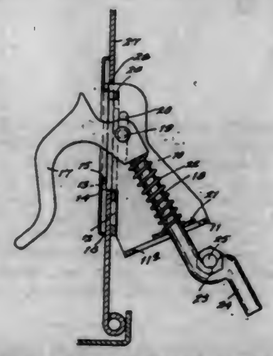
1. A track rail contactor comprising a member having a normal position and a reverse position adapted to be moved from its normal position to its reverse position and then back to its normal position in response to a car wheel moving on the track rail in a normal direction and to be moved from its normal position to its reverse position only in response to a car wheel moving on the track rail in a reverse direction, a circuit controlling contact actuated by said member having a normal and a reverse position corresponding to the normal and reverse positions of said member, and a second member actuated by a car wheel moving on the track rail in the reverse direction to restore the first mentioned member to its normal position.

1,877,185. SCRIBING TOOL AND T-SQUARE FOR MECHANICS. WILLIAM LOWE, Plainfield, N. J. Filed Feb. 8, 1929. Serial No. 338,376. 6 Claims. (Cl. 33—42.)



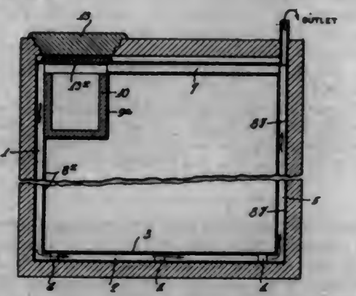
1. In a device of the class described an elongated body, having thereon a rule receiving slot, said slot being disposed lengthwise of said body, means for removably locking said body to a rule, an adjustable metal scriber blade carried by said body, said blade being centrally positioned at said slot, and a locking wedge on said body for adjustably locking said blade in position at said slot.

1,877,186. HOOD CATCH. ARTHUR CLAUD-MANTLE, Trumbull, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 14, 1931. Serial No. 529,901. 8 Claims. (Cl. 292—114.)



1. In a hood catch, a frame adapted to be engaged in an opening in a hood, means connected to said frame adapted to engage the outer side of said hood, and fastening means adapted to engage said frame at the inner side of the hood through engaging movement parallel to the hood surface and cooperating with said first mentioned means to secure the frame to the hood.

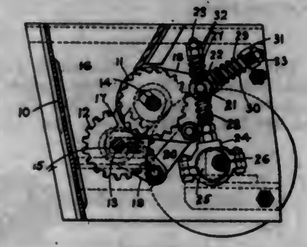
1,877,187. REFRIGERATING APPARATUS AND METHOD. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Dec. 8, 1928, Serial No. 324,639. Divided and this application filed Mar. 21, 1930. Serial No. 437,651. 20 Claims. (Cl. 62—91.5.)



1. A refrigerating apparatus including an outer receptacle, a container for solid carbon dioxide which permits escape of gas only by overflow into a circuit for flow

of said gas from the container, including a downflow conduit therefrom and an upflow conduit in communication with said downflow conduit and a return conduit to the solid carbon dioxide container, said circuit having an outlet for excess gas to the outside of said apparatus.

1,877,188. MACHINE FOR CRUSHING COAL, STONE, AND SIMILAR MATERIALS. HENRY MARTINEZ and ROBERT HUTCHISON KIRK, Newcastle-upon-Tyne, England, assignors, by mesne assignments, to Winget Limited, Warwick, England, a Corporation of Great Britain and Northern Ireland. Filed May 14, 1930, Serial No. 452,316, and in Great Britain May 21, 1929. 6 Claims. (Cl. 83—53.)



1. A machine for crushing coal, stone and similar materials comprising a casing, opposed crushing members mounted in said casing, one of said crushing members being a floating operative member, bearings carried by said casing, a rotary driving shaft mounted in said bearings, oscillatory mechanism on said shaft, a connection between said oscillatory mechanism and said operative crushing member, an anchorage in said casing, and a resilient device interposed between said connection and said anchorage and absorbing the drive to the intake end of said operative crushing member when it meets abnormal resistance.

1,877,189. FRAME FOR PICTURES, PORTRAITS, AND THE LIKE. PEDRO MASSOBRIO and ESTEBAN CAPELLO, Buenos Aires, Argentine. Filed May 19, 1931, Serial No. 538,474, and in Argentina Apr. 9, 1931. 3 Claims. (Cl. 40—155.)
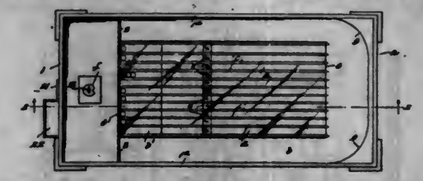


1. A picture frame composed of several sections adapted to be assembled together, each section comprising an elastic outer member and elastic inner members movable within said outer member and formed so as to have inserted therein the edges of a picture, and elastic means secured to said inner members and adapted to cause said inner members to frictionally engage said outer member.

1,877,190. GAME TABLE. LACY B. MCCORMICK, Greenville, N. C., assignor to Daniel E. Taylor, Norfolk, Va. Filed Aug. 4, 1931. Serial No. 555,066. 7 Claims. (Cl. 273—124.)

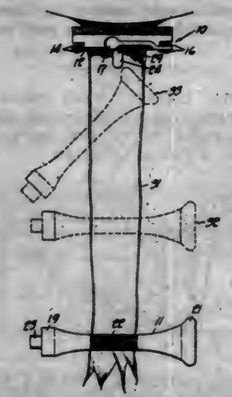
7. A game table adapted for playing games with rolled balls comprising an oblong game board having a transversely extending curved shoulder at its upper end against which the balls may be projected, a group of parallel ribs and intervening channels extending longitudinally of the board and spaced from one of its sides and from said shoulder, the lower ends of said channels being closed and the upper ends being open to receive the balls, check valves within the channels adapted to permit the balls to roll downwardly therein and to prevent their return, a cover-

ing extending over said channels, said board having a hinged section at the lower ends of the channels for releasing the balls, coin-controlled means for tilting said section to release the balls from the channels, a trap below said



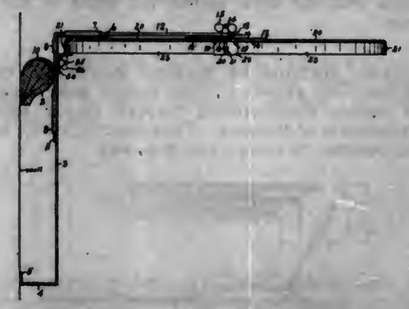
section for trapping the balls when they are released from the channels, said trap having a door connected with said section and adapted to close when said section is moved to release the balls and to open when said section is returned to normal position.

1,877,191. HAIR WAVING APPARATUS AND METHOD. TOMLINSON I. MOSELEY, San Francisco, Calif., assignor to Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif., a Corporation of California. Filed Oct. 6, 1931. Serial No. 567,214. 6 Claims. (Cl. 132—36.)



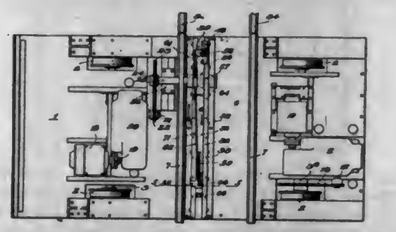
1. In a method of waving hair, the steps of winding a strand of hair, both croquignole and spiral fashion, maintaining the convolutions tensioned, and then applying heat to the strand while so wound and tensioned.

1,877,192. COLLAPSIBLE CANOPY SUPPORT. VIRGINIA P. NELSON, New York, N. Y. Filed Dec. 2, 1931. Serial No. 578,494. 7 Claims. (Cl. 135—9.)



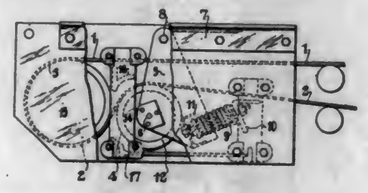
1. A canopy support adapted to be mounted upon a wall comprising a supporting plate having hooks thereon and a rearwardly extending spacing portion, a horizontally extending arm secured thereto, and a collapsible circular frame detachably secured to said arm.

1,877,193. CAR TRANSFER DEVICE. CHARLES E. NORTON, Bradford, Pa., assignor to Hanley Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1928. Serial No. 249,570. 18 Claims. (Cl. 104—48.)



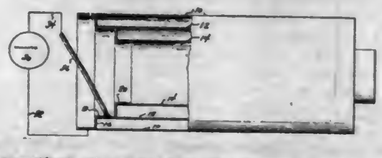
1. In a car transfer device, the combination with a wheeled truck and a motor thereon having a driving connection with the wheels of said truck whereby the same may be driven in either direction, of track rails extending across said truck and adapted to receive and support a car, a member mounted to reciprocate across the truck, a pivoted element carried by said member adapted to engage a part of a car for either pushing or pulling, means for reciprocating said members, and means actuated in the pushing movement of said member for changing the position of said element from a pulling position to a pushing position.

1,877,194. BELT DRIVE. TAGE GEORG NYBORG and MARK FREDERICK HIGGINS, Worcester, England. Filed Apr. 4, 1930, Serial No. 441,458, and in Great Britain May 16, 1929. 3 Claims. (64—5.)



1. A belt drive, comprising a drum, a jockey pulley, a member pivotally supporting the jockey pulley, spring operated means adapted to maintain the jockey pulley in contact with the belt on the slack side of the drum, a fixed abutment for supporting one end of the spring and a fixed transverse shield in spaced relation to the jockey pulley, between which and the face of the jockey pulley the belt is adapted to pass whereby in the event of a breakage occurring in the belt the belt will pile up between the shield and the jockey pulley to force the jockey pulley out of contact with the drum against the action of the said spring.

1,877,195. METHOD OF MAKING MUFFLER. VIRGIL OLDBERG and ARTHUR C. BORN, Detroit, Mich., assignors to Oldberg Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 16, 1931. Serial No. 522,885. 1 Claim. (Cl. 219—10.)



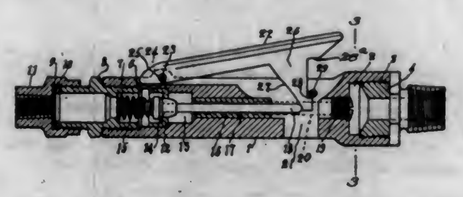
The method of making a muffler comprising a plurality of relatively telescoped preformed cylindrical shells and two heads, the first of which may be of any desired form and the second of which has radially spaced outer and inner cylindrical portions, the inner one of which laps the end of an inner one of the shells in such a manner that a pressure spot weld cannot be employed to weld the inner portion of the second head to the end of the shell which it laps, when both heads are on the shell, which comprises the following steps, performed in the order given: (a) Disposing the first head in assembled relation with the ends of the preformed cylindrical shells, (b) Disposing the second head in assembled relation with the other ends of the preformed cylindrical shells and (c) Welding the inner cylindrical portion of the second head to the end of the inner shell which it laps by a metallic arc spot weld, employing the muffler as one electrode and a metallic rod as the other, the arc being drawn between the latter and spots on the inner cylindrical portion of the second head.

1,877,196. SHELF BRACKET. CHARLES S. PARKER, Meriden, Conn., assignor to The Charles Parker Company, Meriden, Conn., a Corporation. Filed Jan. 30, 1932. Serial No. 589,798. 1 Claim. (Cl. 248—18.)



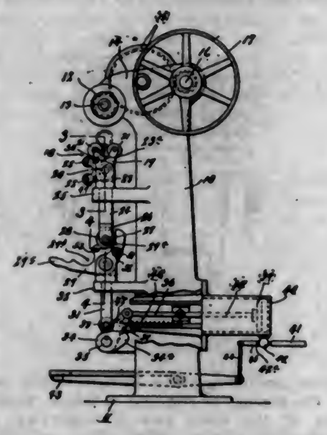
In a shelf-bracket, the combination with a base, serving as a wall-plate, of an arm projecting outwardly therefrom at a right angle thereto, a retaining-lug carried by the base at a point directly above the said arm and spaced apart therefrom, an upwardly-and-inwardly-extending hook located at the outer end of the arm and containing an inwardly-and-downwardly-opening chamber closed at its top, bottom and sides, a vertically-movable L-shaped clamping-member located in the said chamber, and a screw passing upwardly through the outer end of the arm into the said chamber and engaging with the clamp therein whereby the same may be drawn downwardly upon the edge of the glass entered into the said hook.

1,877,197. THROTTLE. WILLIAM W. PRICE and CHARLES W. RIPSCH, Dayton, Ohio, assignors to The Buckeye Portable Tool Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,264. 18 Claims. (Cl. 251—132.)



14. In a throttle, a body therefor having at each end an air chamber and a pair of longitudinally extending air passageways extending from one chamber to the other, an air valve member in one of said air chambers, a spring engaging said valve to hold it closed, a plunger extending from said valve, a trigger pivoted to said body member and adapted to have longitudinal motion, a dog on said trigger having a cam surface adapted to engage said plunger and to open said valve against the action of said spring, a second cam surface on said dog ending in a shoulder, a pin extending through said body member and adapted to engage said second cam surface on said dog and to snap onto said shoulder to hold the trigger in position to hold the valve open.

1,877,198. PIPE CUT-OFF MACHINE. JOHN M. READEY, St. Louis, Mo., assignor to John M. Readey, Inc., St. Louis, Mo., a Corporation of Delaware. Filed July 21, 1930. Serial No. 469,378. 10 Claims. (Cl. 164—60.)



1. A pipe cut-off machine comprising in combination a frame, a pipe cutter disk revolubly mounted thereon, a slidable plunger mounted in said frame below said disk for movement in a vertical plane, a roller cage mounted on the upper end of said plunger and provided with a pair of spaced rollers for supporting the pipe relatively to said cutter, a rock shaft, a cam fixed on said shaft and engaging the lower end of said plunger for raising the same, and fluid pressure operated means for actuating said shaft.

1,877,199. D-HANDLE. WILLIAM A. READY, Brookline, Mass. Filed Sept. 4, 1930. Serial No. 479,665. 11 Claims. (Cl. 294—57.)



1. In a D-handle construction for shovels and the like, a sheet metal casing composed of two similar pieces each having a flat inner face facing the flat face of the other and each piece having means adjacent to its flat face interlocked with the other piece to lock the two pieces together.

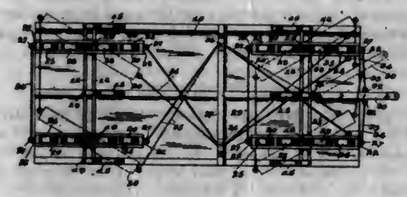
1,877,200. D-HANDLE. WILLIAM A. READY, Brookline, Mass. Filed Sept. 4, 1930. Serial No. 479,666. 8 Claims. (Cl. 294—57.)

1. In a D-handle construction for shovels and the like, a metal casing composed of two similar parts secured together and adapted to receive a stale, each of said casing pieces having a flat inner face portion adjacent to the stale-receiving end, a reinforcing tab extending from the lower edge of the flat face over the lower edge of the flat face of the other piece and against the inner surface thereof thereby to be hooked into engagement therewith, said reinforcing portion being located at one side of the vertical center of the casing piece and a vertical edge



flange at the opposite side of the center adjacent to the stale-receiving end of said casing piece and overlapping said other casing piece and rigidly secured thereto.

1,877,201. VEHICLE. JOHN E. RIGHTMIRE, Yakima, Wash. Filed Nov. 11, 1930. Serial No. 494,950. 1 Claim. (Cl. 280—102.)



A truck comprising a body portion, pairs of front and rear transverse beams secured in spaced apart parallel relation across the under side of the body portion, pivot blocks secured between said pairs of beams adjacent the front and rear corners of the body portion, and connected wheeled frames carried beneath the front and rear corner portions of the body portion and each comprising a pair of spaced apart parallel beams, a bearing block secured between the intermediate portions of the pair of beams adapted to register with the bearing blocks of the body portion, a king pin connecting said bearing blocks together in superposed relation, and a plurality of wheels mounted between the parallel beams for supporting the same.

1,877,202. PLYWOOD BOARD AND PROCESS OF MAKING THE SAME. TEIKICHI SATOW, Tokyo, Japan. Filed Apr. 24, 1930. Serial No. 447,038. 13 Claims. (Cl. 144—309.)

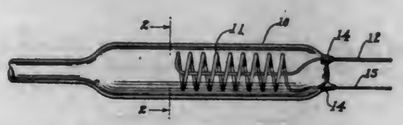


1. The process of forming composite boards which consists in applying to the surfaces of thin sheets of wood a dry thermoplastic glue comprising a proteidal product indurated with a methylene compound and possessing high binding and waterproofing qualities, stacking said sheets the one upon another, and applying heat and pressure to the stack.

1,877,203. METHOD OF SIMULTANEOUS HYDROGENATION AND DEHYDROGENATION. WALTER SCHOELLER, Berlin-Westend, HANS JORDAN, Berlin-Steglitz, and WALTER LINDE, Berlin, Germany, assignors to the Firm Schering-Kahlbaum A.-G., Berlin, Germany. Filed Apr. 6, 1929, Serial No. 353,255, and in Germany Apr. 21, 1928. 3 Claims. (Cl. 260—134.)

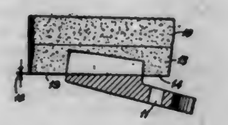
1. The method of producing a cyclic ketone, comprising acting under increased pressure with a saturated cyclic alcohol on phenol in the presence of a hydrogenation catalyst and at a temperature of about 200° C.

1,877,204. ELECTRODE FOR NEON VACUUM TUBES. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1926. Serial No. 96,162. 4 Claims. (Cl. 176—126.)



1. An electrode in a luminescent positive column tube of light comprising a continuous, coiled wire having the ends thereof sealed into and insulated by the end of said tube whereby an electric current can be passed through the wire of the electrode to heat the same to incandescence to remove the occluded impurities therefrom, and means electrically joining together the ends of said wire.

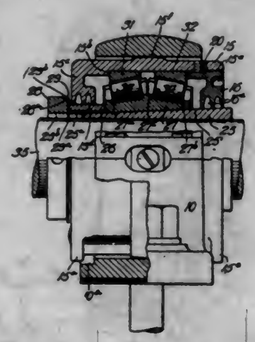
1,877,205. METHOD OF AND APPARATUS FOR GRINDING CURVED TOOTH GEARS. ARTHUR L. STEWART, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed May 19, 1927. Serial No. 192,722. 7 Claims. (Cl. 51—52.)



1. The method of grinding the side tooth surfaces of a longitudinally curved toothed tapered gear, which consists in rotating an annular grinding wheel, having an active side surface of curved of curved profile, in engagement with the gear and simultaneously imparting a relative rolling motion between the wheel and gear through the distance only of face advance of the gear teeth then relatively separating the wheel and gear and indexing the gear.

1,877,206. SHAFT BEARING. ARTHUR P. STRONG, Chicago, Ill., assignor to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,889. 3 Claims. (Cl. 308—207.)

1. A shaft bearing device embodying a case and a contained shaft bearing in fixed assembly therewith, said bearing comprising a double bearing cone ring and two separate bearing cup rings and two annular trains of tapered bearing rollers interposed between the respective cup rings and cones of the cone ring, the said trains of rollers and their bearing surfaces being in symmetry and arranged with the larger ends of the rollers of the two trains confronting one another, the bearing case having an external spherical surface by which said case with the contained bearing may be mounted in a supporting housing with capacity to adjust itself angularly to suit shaft alinement, and the said bearing constructed and arranged with the two trains of rollers adjacent and with the outer bearing surfaces of the rollers approximately tangential to a sphere concentric with the center of the bearing, thereby providing for a limited minute self-adjustment of the bearing in response to minor fluctuations in alinement of the shaft axis accompanying individual shaft revolutions at high speed, while any misalinement in excess of that to which the bearing can respond in this way will cause an adjustment of the case by motion imparted through the bearing.



1,877,207. METHOD OF MAKING TUBULAR OBJECTS FROM RUBBER COMPOSITIONS. DOUGLAS FRANK TWISS and EDWARD ARTHUR MURPHY, Birmingham, England, assignors to Dunlop Rubber Company Limited, a British Company. Filed Oct. 2, 1928, Serial No. 309,890, and in Great Britain Oct. 5, 1927. 2 Claims. (Cl. 18—58.)

1. A method for manufacturing tubular objects of rubber material which comprises passing a core through a bath of an aqueous dispersion of a rubber compound uniformly depositing thereon dispersed material from said dispersion medium, withdrawing the core and its deposit of rubber material centrally through a circular area of dispersion surface, setting said deposit on said core, and removing it in tubular form from said core.

1,877,208. PROCESS FOR PRESERVATION OF METAL SURFACES. CHARLES A. VAN DUSEN and LOUIS HAASE, Baltimore, Md., assignors to The Glenn L. Martin Co., Baltimore, Md., a Corporation of Maryland. Filed June 30, 1930. Serial No. 465,057. 12 Claims. (Cl. 91—68.)

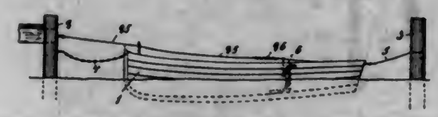
1. The process for protecting predominantly aluminum surfaces against atmospheric corrosion which consists of forming thereon an anodic film; hot cleansing said filmed surfaces; applying a film wetting bituminous material to said film; manipulating said material into the pores of said film; removing the overlying material from said film.

1,877,209. PLASTER BOARD. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 26, 1930. Serial No. 447,586. 1 Claim. (Cl. 72—124.)



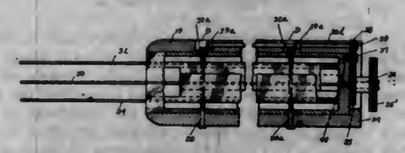
A plaster board of the character stated comprising a rectangular shaped, relatively thin body of plaster composition of dry powdery consistency the particles thereof being held together by a reinforcing sheet of fibrous material only composed of loosely woven wefts and warps which material may be readily severed, said sheet being embedded in said body throughout its extent considered in length and breadth, the inner face of said body having a plane surface, and the outer face of said body being corrugated in parallelism with the wefts of said sheet of fibrous material to provide a roughened surface more readily to accept a coat of plaster, and a thin sheet of paper possessing moisture resisting properties applied to the inner plane face of said body, the combined body, sheet of fibrous material, and paper forming a unitary structure.

1,877,210. DEVICE FOR PUMPING OUT BOATS. CARL GUSTAF OTTO HJALMAR VON KÖHLER, Stockholm, Sweden. Filed May 6, 1931, Serial No. 535,370, and in Sweden May 6, 1930. 1 Claim. (Cl. 114—188.)



A device for pumping water from boats, comprising a collapsible elastic bulb disposed within the boat, a suction pipe and a delivery pipe communicating with said bulb, each of said pipes having a check valve, a double-armed lever mounted for pivotal movement on said boat, a flexible member secured at one end to one arm of said lever and at its opposite end to a fixed point outside of the boat, the other arm of said lever being disposed in contact with said bulb, whereby the vibrations of said flexible member will cause the lever to swing on its pivot thereby to produce alternate collapse and expansion of said bulb.

1,877,211. CULINARY KNIFE. GERTRUDE WEBSTER, Los Angeles, Calif. Filed Mar. 24, 1930. Serial No. 438,815. 1 Claim. (Cl. 30—9.)

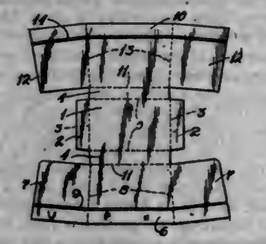


A three-bladed cutter consisting of an elongated rectangular handle closed at its rear end and open at its front end, a channel-shaped carrier having its cross-piece normally seated against a side wall of the handle and having parallel cross flanges of a length greater than one half the cross area of the handle, a second channel-shaped carrier having parallel flanges of the same length as the other flanges but slidably and snugly fitting the inner faces of the first carrier, with its cross piece normally engaging another side wall of the handle, a plurality of screw bolts spanning the cross-pieces of the carriers and having terminal right and left handed screw threads engaging the same, whereby when they are turned the carriers are moved to and from each other transversely, a central fixed partition operatively disposed in the handle against the opposing edges of which the flanges of the second carrier slides, gears on the ends of said screw-bolts, a longitudinal shaft carried externally of the handle and having gears thereon meshing with the first gears to operate them, manually controlled means for actuating the longitudinal shaft and a lining around the handle in which the longitudinal shaft is mounted.

1,877,212. NONINFLAMMABLE PHOTOGRAPHIC FILM. LOUIS WESTON, London, England. Filed July 5, 1928, Serial No. 290,714, and in Great Britain Jan. 5, 1928. 1 Claim. (Cl. 18—41.)

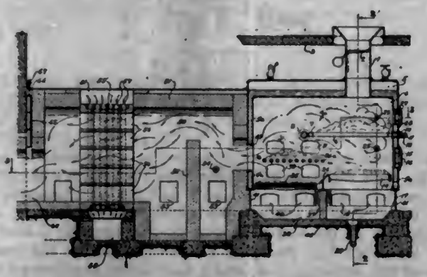
A process for rendering non-inflammable photographic films immune from shrinkage or crinkling when subjected to the usual treatment of developing, etc., characterized by treating the film base, before it is coated with the sensitive gelatine emulsion with water heated to a temperature of at least 40° C. but not exceeding 70° C. to which a small amount of ammonia has been added.

1,877,213. CARTON. WILLIAM R. WILLADER, Philadelphia, Pa., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Feb. 13, 1930. Serial No. 428,001. 3 Claims. (Cl. 229—32.)



1. A carton integrally formed from a single blank comprising a bottom wall having, at opposite ends, short flanges folded downwardly to provide free bottom edges and having intermediate extensions folded downwardly with adjacent extending edges of said flanges and extensions in abutting relationship, side walls folded upwardly from said extensions to provide folded bottom edges in the same plane as said free bottom edges and a flap on each of said side walls folded into substantially coextensive overlapping relation to form end walls having bottom edges coincident with said free bottom edges.

1,877,214. SCREENINGS BURNER. JOSEPH C. WOODMAN, Flushing, N. Y., assignor to Decarie Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed May 23, 1929. Serial No. 365,378. 9 Claims. (Cl. 122—2.)



1. In an incinerator, the combination with a combustion chamber having a plurality of air inlets and a gas outlet, of horizontal refuse supporting means comprising a preliminary treating section and a combustion section, drying means proximate to said preliminary treating section and combustion means below said combustion section, said sections being vertically spaced apart and the combustion section being located between the preliminary treating section and the gas outlet, the end portion of said combustion section proximate the gas outlet being slightly raised to prevent the refuse on said section from being carried out through the gas outlet and the other end portion under-

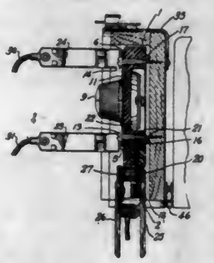
lying a portion of the preliminary treating section to prevent the refuse transferred from the preliminary treating section to the combustion section from falling directly onto the combustion means beneath the preliminary treating section.

1,877,215. APPARATUS FOR THE DISCHARGE OF PROJECTILES. JOSÉ ANTONIO ALBISO, Saladillo, Argentina. Filed July 17, 1931. Serial No. 551,336. 1 Claim. (Cl. 124—14.)



Apparatus for discharging a projectile having a notch intermediate its ends, comprising a stock having an elongated frontal portion, a hollow barrel piece supported on the frontal portion of the stock, a trigger set in the stock pivoted thereto and having an upwardly extending contact end for engaging the notch in the projectile to retain the same in the barrel while under tension, a pair of extending side opposing arms at the forward portion of the stock disposed at an acute angle with respect to the longitudinal axis of the barrel, elastic resilient means in connection with the extending side arms, and a flattened S-shaped member having its lower curved portion set within the barrel for impelling the projectile from the barrel, and its upper curved portion for retaining the resilient means when extended, said elastic means upon extension being inclined from the side opposing arms toward the S-shaped member to permit maximum, uninterfered impulsion of the projectile upon its release by the trigger and contraction of the elastic means.

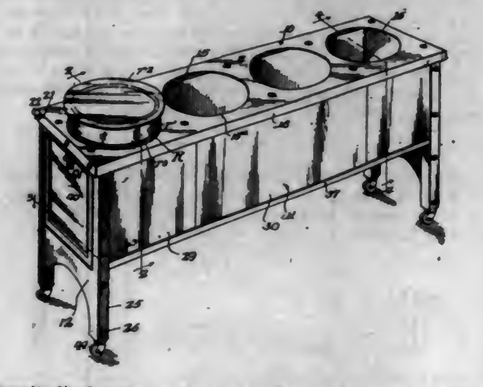
1,877,216. RESISTANCE MEASURING APPARATUS. CLARENCE A. ANDERSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 404,145. 18 Claims. (Cl. 175—183.)



1. A coil spool of insulating material assembled integrally with the base of an auxiliary resistance measuring device for use with a lineman's test set, a depression in the upper side of the spool adapted to accommodate the upper jaw of the exploring coil of the test set, a slot in the lower side of the spool adapted to engage the lower jaw of the exploring coil, and a continuous slot around the perimeter of the spool for supporting the windings of the inductance coil of the device.

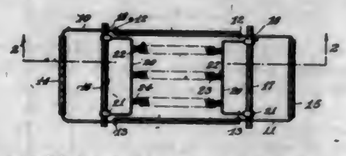
1,877,217. TABLE FOR DISPLAYING FOOD CONTAINING RECEPTACLES. LOUIS SIDNEY ANDERSON, Chicago, Ill., assignor to Reid, Murdoch & Co., Chicago, Ill., a Corporation of Illinois. Filed June 28, 1929. Serial No. 374,445. 4 Claims. (Cl. 211—74.)

1. A table for supporting centrally flanged jars, comprising a rectangular sheet metal top having formed therein a longitudinal series of circular openings through which the bottom parts of the jars are adapted to extend respectively, the portions of the top that surround said openings forming abutments or rests for the flanges of the jars, the side margins of the top being bent downwardly and then inwardly to form a pair of oppositely facing channels, a



longitudinal series of bars extending transversely across the under face of the top, said bars having the ends thereof confined in the channels and being arranged to extend between the openings and underlie the abutment-forming portions for reinforcing purposes, and legs connected to the corner portions of the top.

1,877,218. EXERCISING APPARATUS. RUDOLPH BLANK, Emerson, N. J., assignor to Anna Marie Blank, née Lechner, Emerson, N. J. Filed Feb. 21, 1927. Serial No. 169,995. 5 Claims. (Cl. 272—79.)

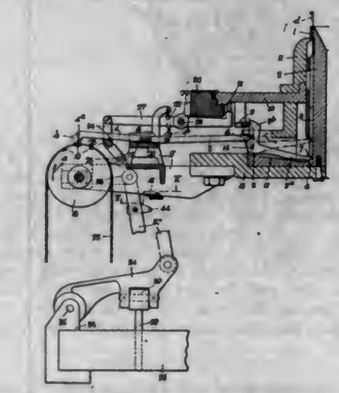


1. An exercising apparatus comprising a pair of frames positioned one within the other and slidable along each other, loops formed on the inner ends of each of said frames the loops of one frame adapted to encircle the other frame, a handle fixedly mounted on the outer end of each of said frames, a second handle slidably mounted on each of said frames, a bail detachably mounted on each of said slidable handles and spiral springs detachably mounted on said bails and passing therebetween.

1,877,219. PRODUCTION OF CHEMICAL PULP. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburgh, N. Y. Filed Sept. 2, 1926. Serial No. 133,291. Renewed Oct. 26, 1929. 12 Claims. (Cl. 92—11.)

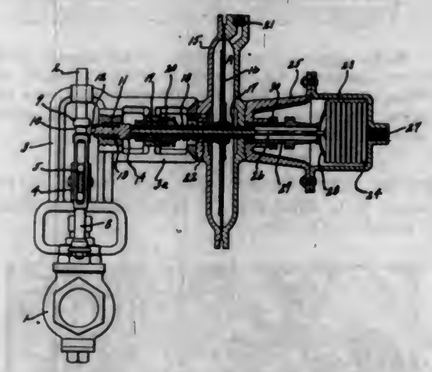
1. The process of treating residual liquor resulting from cooking wood with a cooking liquor which contains sodium bisulfite, which comprises adding thereto some alkaline liquor formed by dissolving the sodium carbonate and sodium sulfid produced by the hereinafter-mentioned reducing furnace treatment, thereby rendering the mixture of liquors non-acid and forming some sodium thiosulfate therein, subjecting the treated liquor to concentration and solid constituents thereof to a reducing furnace treatment whereby a melt is formed which contains sodium carbonate and sodium sulfid, dissolving such sodium carbonate and sodium sulfid, thereby forming an alkaline liquor, and using a portion of the thus formed alkaline liquor to treat the residual liquor first mentioned.

1,877,220. CIRCULAR KNITTING MACHINE. THOMAS CHARLES BROMLEY, Leicester, England, assignor to Jacquard Knitting Machine Company, Inc., Philadelphia, Pa., a Corporation of New York. Filed Sept. 27, 1926, Serial No. 137,987, and in Great Britain Oct. 1, 1925. Renewed Sept. 16, 1931. 16 Claims. (Cl. 66—50.)



1. In a circular knitting machine having slidable needles, jacquard mechanism for effecting actuation of individual needles for patterning purposes, comprising in combination, a racking drum, a jacquard member carried by said drum, a series of feelers between which and with the jacquard member there is relative to and fro movement whereby feelers are selected to engage the drum, and a series of needles engaging selectors coupled to the feelers so that upon rotary movement of the racking drum the force exerted thereby on the selected feelers is applied directly to the corresponding needles to move the latter and determine the function thereof.

1,877,221. AUTOMATIC SHUT-OFF VALVE. GEORGE R. BROWN and GEORGE F. NAAB, Cleveland, Ohio, assignors to The North American Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1932. Serial No. 598,757. 4 Claims. (Cl. 137—153.)



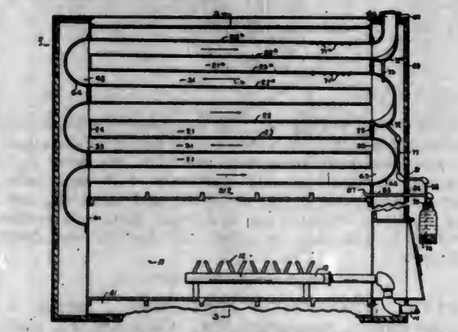
1. In a valve control device of the class described, means balancing said valve toward closed position, and means for conditionally maintaining said valve in open position and including a plurality of units arranged to be responsive to separate fluid pressures for independent effect upon said valve toward maintaining the latter open, said units being together capable of so maintaining said valve, but each alone incapable of so maintaining said valve.

1,877,222. SHINGLE. FENTON R. BRYDLE, Jamaica, N. Y., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 21, 1924. Serial No. 744,886. 5 Claims. (Cl. 108—7.)



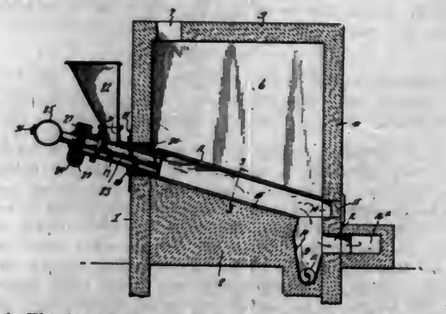
1. A flexible shingle having a corner portion provided with relatively long and narrow flanking projections separated for a portion of their length from the adjacent diverging edges of the shingle by slots whose widths are substantially equal to the thickness of a shingle, the outer edges of the projections being substantially parallel to said diverging edges, and the combined widths being substantially less than the width of the interposed corner portion of the shingle.

1,877,223. METHOD OF HUMIDIFYING AIR. EVERETT S. BUCK, Cincinnati, Ohio, assignor, by mesne assignments, to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Feb. 27, 1929, Serial No. 343,047. Divided and this application filed Apr. 30, 1930. Serial No. 448,615. 9 Claims. (Cl. 261—1.)



1. A method of humidifying air being heated which comprises heating the air by flue gases, simultaneously condensing water vapor constituent of said flue gases and simultaneously transferring the condensate to the air being heated.

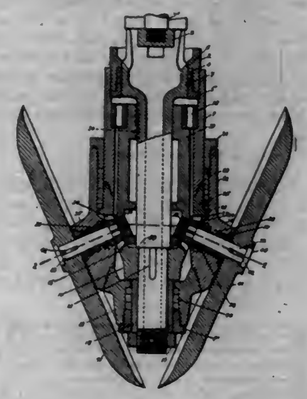
1,877,224. PROCESS OF AND APPARATUS FOR THE COMBUSTION OF SOLID FUEL. HIRAM B. CANNON, Erie, Pa. Filed Oct. 24, 1929. Serial No. 401,993. 12 Claims. (Cl. 110—85.)



1. The herein described process of burning solid lump and granular fuel which consists in introducing such fuel into one end of a retort and combustion chamber having

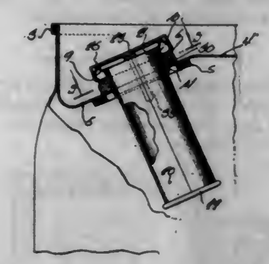
one or more walls of high heat radiating material, supplying air to said combined retort and combustion chamber, igniting the fuel so introduced, and conveying the fuel mainly by gravity through the said chamber at a rate which will insure complete dissociation of the same by the time the fuel mass shall have progressed to the delivery end of the said chamber.

1,877,225. DRILLING TOOL. MATVEY A. CAPELIUSCHNICOFF, New York, N. Y. Filed Jan. 12, 1931. Serial No. 508,064. 4 Claims. (Cl. 255—71.)



1. In a well drilling tool, the combination with a central stem adapted to be rotated by a motor, of a stationary shell rotatively supporting said stem, an outer shell rotatively mounted on said stationary shell, said outer shell being adapted to be rotated by said stem, disc cutters rotatively mounted on said outer shell, and means actuated by said stem to rotate said disc cutters about their axes.

1,877,226. DISPENSING CONTAINER. ALFRED J. CHAMBERLAIN, Milwaukee, Wis. Filed Mar. 11, 1931. Serial No. 521,664. 5 Claims. (Cl. 221—27.)



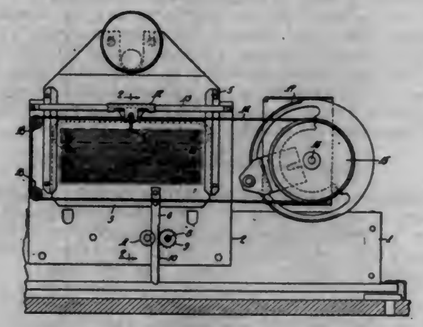
1. A container having a top provided with a portion inclining outwardly and downwardly toward the periphery of the container, an outlet fitting carried by said inclined portion and a short spout slidably fitted in said outlet fitting and having its discharge end overlying the edge of the upper portion of the container when the spout is pulled outwardly to its dispensing position, said spout having a diameter relatively great with respect to the length of the spout and being straight and free from bends throughout its length whereby to automatically vent the container through said spout when discharging the contents of the container.

1,877,227. AIR-VENT PARACHUTE. WILLIAM LESLIE CUNNINGHAM, Salina, Kans. Filed Aug. 1, 1931. Serial No. 554,395. 6 Claims. (Cl. 244—21.)



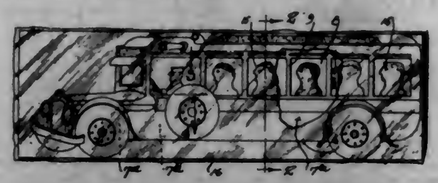
5. In a parachute, a main air receiving body having a plurality of openings in the wall about the edge thereof, a foldable body secured to the main body over each of said openings, upon the outside of the main body, said foldable body when unfolded forming an air scoop, a frame secured to a free edge of each foldable body to maintain the same in a desired form when the foldable body is unfolded, the frame being oscillatably connected to the main body, and resilient means carried by the main body and engaging the frame and normally urged to move the same in a direction to unfold the foldable body.

1,877,228. RADIO TUNING APPARATUS. LESLIE F. CURTIS and FRANK S. COE, Springfield, Mass., assignors to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed May 4, 1932. Serial No. 609,104. 13 Claims. (Cl. 116—124.1.)



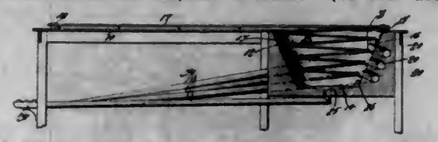
1. Radio apparatus comprising a scale member having separate portions for separarate tuning ranges, said portions each being distinctive in appearance, the scale member being slidably mounted to move transversely of said portions.

1,877,229. ARTICLE HOLDER. LOUIS DEL PAPA, Pawtucket, R. I. Filed Sept. 21, 1931. Serial No. 564,245. 7 Claims. (Cl. 206—44.)



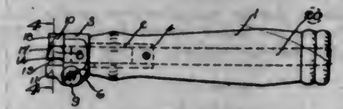
1. In a candy holder of the character described, a body having the representation of a vehicle thereon with window openings in the body, candy sticks supported by the body with a candy block on each stick viewable through the window openings, and said candy blocks simulating the heads of persons or objects and representing passengers.

1,877,230. WHIRLPOOL GAME DEVICE. CHESTER C. DE PEW, Keyport, N. J., assignor to Whirlpool Incorporated, a Corporation of New York. Filed July 18, 1931. Serial No. 551,642. 6 Claims. (Cl. 273—125.)



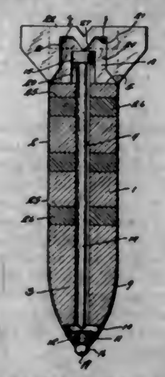
6. In apparatus of the class described, the combination with a rollable element, of a relatively straight guiding means for said element, a conically formed helicoid having a vertical axis and connecting with said straight guiding means, walls having openings and arranged in spaced relation to said helicoid to form a track therewith for said rollable element, a bottom wall under said helicoid having at least one opening, and conduits connected to all of said openings and extending away from said helicoid.

1,877,231. CHANNELING TOOL. ERNEST DUNFORD, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 16, 1931. Serial No. 516,260. 8 Claims. (Cl. 12—106.)



1. A hand channeling tool including a knife member having a flat face with a cutting edge, and a guide member having a guide surface in the plane of the face and edge of said knife member and at the side of said knife member opposite to said cutting edge to control the relative inclination of the knife and the work as they move past each other.

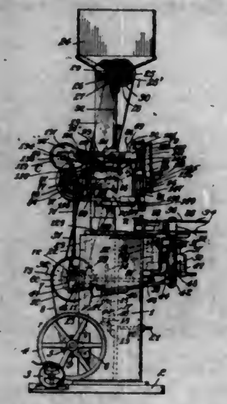
1,877,232. INCENDIARY BOMB. THOMAS P. DUNCAN, Jr., Newport News, Va. Filed Feb. 11, 1932. Serial No. 592,363. 6 Claims. (Cl. 102—2.1.)



6. An incendiary bomb comprising an inflammable body, an inflammable plate carried thereby and serving as a guiding medium for the bomb in its flight, and a potential means for igniting the plate.

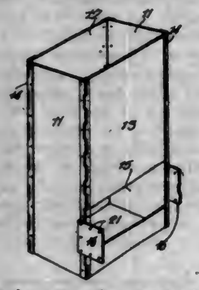
1,877,233. CORK FEEDING AND INSERTING MACHINE. CHARLES R. FREDSELL, Brooklyn, N. Y. Filed Feb. 19, 1927, Serial No. 169,667. Renewed July 29, 1932. 19 Claims. (Cl. 226—92.)

1. In a cork feeding and inserting machine, a hopper, rectifying means and a passageway from the hopper connecting with the rectifying means, said means having side walls one of which is movable relative to the other



lengthwise thereof and an outlet leading to a magazine to receive the rectified corks, and means to force the corks into the magazine.

1,877,234. CHUTE FOR WASTE BUILDING MATERIAL. SAMUEL GALLAGHER, New York, N. Y. Filed Oct. 31, 1930. Serial No. 492,572. 1 Claim. (Cl. 193—34.)



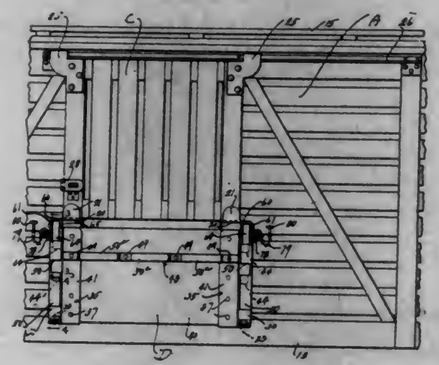
In a structure for removing waste building material from buildings having windows, a chute comprising a plurality of substantially rectangular sections arranged in end to end relation and each section having side and inner and outer walls, the inner wall being provided with an opening registering with one of the windows for waste building materinl, and plates attached rigidly to said side walls and located at the ends of said opening, and means hingedly joining the side walls to said front and rear walls to permit collapsing of the chute section, said plates being provided with means at greatly spaced points by which the plates may be secured rigidly within a window opening to hold the chute in an open position.

1,877,235. HULL OF SHIPS. JAMES WALLIS GOODYEAR, Birkenhead, England. Filed Aug. 20, 1931, Serial No. 558,393, and in Great Britain Oct. 30, 1930. 18 Claims. (Cl. 114—79.)



1. A ship's hull including plating above the water line, plating below the water line, all arranged and secured in overlapping relationship and tapered insertions for fairing those edges which are formed by said overlapping plates below the water line and which extend substantially normally to the longitudinal axis of the hull.

1,877,236. STOCK CAR DOOR. FRED M. GUNN, El Paso, Tex., assignor of one-half to Peter Barbogilo, El Paso, Tex. Filed May 16, 1929. Serial No. 363,672. 3 Claims. (Cl. 20—21.)



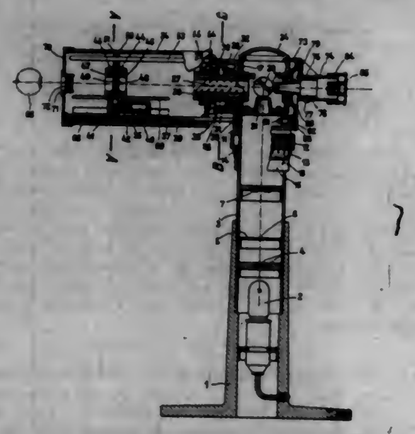
1. In a car door construction the combination of a car having a door opening, an upper door section, a lower door section, means connecting the upper door section upon the car for movement with respect to the doorway independently of the lower door section, and means mounting the lower door section at its lower end on a horizontal pivot normally below the top of the door sill for swinging in a vertical plane away from the doorway and into a horizontal position substantially level with the top of said sill, said means permitting lifting of the lower door section pivot above its normal swinging axis, and said lower and upper door sections being relatively spaced at their facing edges to permit such lifting of the lower door section, and latch means to releasably hold the lower door section against lifting.

1,877,237. COMPOUND FOR THE PREVENTION AND TREATMENT OF ANEMIA. EDWIN B. HART, Madison, Wis., assignor to Wisconsin Alumni Research Foundation, Madison, Wis., a Corporation of Wisconsin. Filed June 18, 1928. Serial No. 286,497. 6 Claims. (Cl. 167—72.)

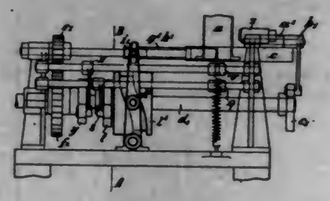
6. A therapeutic agent for the treatment of anemia containing salts of the elements of iron and copper combined to render effective the utilization of said salts for increasing the hemoglobin content of the blood.

1,877,238. OPHTHALMIC INSTRUMENT. HANS HARTINGER, Jena, Germany, assignor to Firm Carl Zeiss, Jena, Germany. Filed Jan. 5, 1931, Serial No. 506,682, and in Germany Jan. 15, 1930. 6 Claims. (Cl. 88—20.)

1. In an instrument for objectively determining the refractive power of the principal point of an eye and the vertex refraction of the spectacle lens required to correct ametropia, a case, two test marks each lying in a plane perpendicular to the optical axis of the instrument and being provided in the case for rotation about and displacement in the direction of the said optical axis, means permitting to displace the test marks independently of each other as well as conjointly, a light source disposed on the case, deviating means provided in the case and adapted to direct to the test marks a plurality of non-axial partial pencils of rays of the rays emitted by the light source, a lens system disposed between the light source and the test marks, a lens provided in the end of the case and adapted to produce together with the eye lens an image of the test marks on the fundus of the eye, and an observation instrument attached to the case and being adapted to observe the test marks as well as the image of the fundus of the eye under examination, which is produced by the said lens and the lens of the said eye.



1,877,239. MACHINE FOR THE MANUFACTURE OF MATCH BOXES. LUDWIG HENNINGER, Durlach, Germany, assignor to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Germany. Filed June 24, 1930, Serial No. 463,431, and in Germany Oct. 12, 1929. 1 Claim. (Cl. 93—40.)

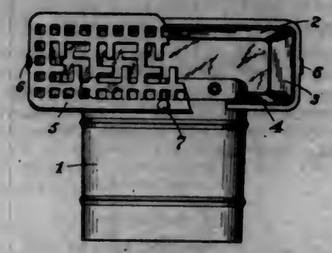


In a match box machine for forming the outer casings of the boxes from wood strips, the combination of a magazine for the strips and from which the same are ejected, a rotary mandrel to receive the ejected strips and form them into casings, reciprocating ejector plates embracing and stripping the casings from the mandrel, and a cam operating to reciprocate said plates timing their advance movement to first control the advancing strips from the front of the magazine and into the mandrel and causing the plate to clear the magazine on their return movement to strip the mandrel during a rotary movement thereof through an angle of 105° from the point where the succeeding strip is inserted.

1,877,240. DEFLECTOR FOR GAS STOVES. PAUL A. HENTSCHEL, Baltimore, Md., assignor to Ventflector Company, Incorporated, Baltimore, Md., a Corporation of Maryland. Filed Aug. 25, 1931. Serial No. 559,293. 6 Claims. (Cl. 126—299.)

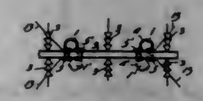
1. A deflector for the fumes of gas stoves comprising a chimney portion to fit the collar of the gas stove, a hood attached to said chimney, said hood being of elongated form and reaching beyond the opposite sides of the chimney portion, said hood being made up of a top, back and end walls, together with bottom wall portions between the

said end walls and the adjacent sides of the chimney, the discharge opening from said hood being only at the front thereof, substantially in the same vertical plane with a



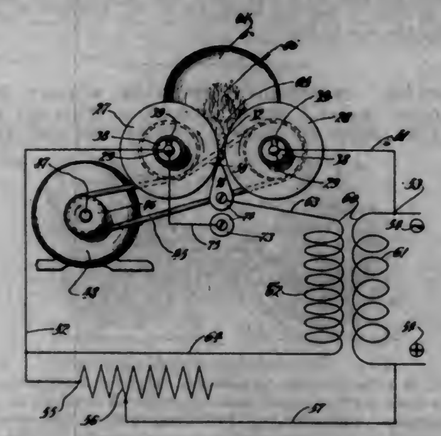
front wall portion of the chimney, the rear wall of the hood being substantially in the same vertical plane with a rear wall portion of the chimney.

1,877,241. METHOD OF AND APPARATUS FOR CHANGING-OVER POWER-LINE POLES. GUSTAF HULTMAN, Ramnas Kyrkby, Sweden, assignor to Aktiebolaget Bergslagens Gemensamma Kraftforvaltning, Vasteras, Sweden, a Joint-Stock Company Limited. Filed Sept. 22, 1928, Serial No. 307,693, and in Sweden Sept. 29, 1927. 13 Claims. (Cl. 189—33.)



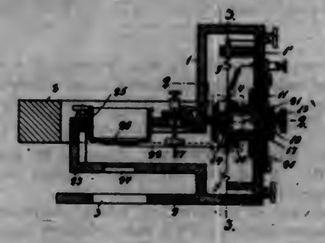
1. The method of replacing a pole carrying wires by means of a cross bar, which comprises erecting a new pole adjacent the cross bar, fastening the cross bar on the new pole, unfastening the cross bar from the old pole, and removing the old pole.

1,877,242. ARC LAMP. EDWIN S. HUMPHREYS, Aurora, Ill., assignor, by mesne assignments, to Aurora X-Ray Corporation, a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,602. 16 Claims. (Cl. 176—66.)



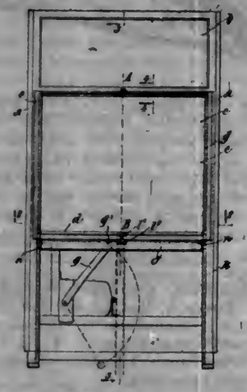
1. In an ultra violet ray generating device, the combination with spaced electrodes for producing primary arcing at a predetermined potential, of another electrode spaced from said first electrodes to produce secondary arcing at a lower potential effecting ultra violet ray generation, said secondary arcing being initiated by said primary arcing in continuity therewith, and means for creating a flaring therapeutic arc of considerable expanse between said electrodes.

1,877,243. GALVANOMETER. GUSTAF ISING, Stocksund, Sweden. Filed Oct. 16, 1929, Serial No. 399,991, and in Sweden Oct. 19, 1928. 9 Claims. (Cl. 171—95.)



1. In a galvanometer in combination, a magnetic field system, a moving-coil cooperating therewith, a stiffening rod connecting two opposite points of the coil, elastic suspending means connected with said rod and allowing of small rotary movements of the coil about the axis of said rod, a pointer projecting from the coil, a light passage through the instrument extending perpendicular to the plane of movement of the pointer end, and means for applying microscopic instrumentalities to said light passage for observing the movements of the pointer.

1,877,244. WINDOW ASSEMBLY. GEORGES KLEIN, Paris, France. Filed Aug. 20, 1931, Serial No. 558,268, and in Belgium Sept. 25, 1930. 9 Claims. (Cl. 20—52.1.)

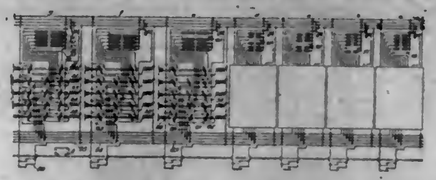


1. In combination, a fixed casement, guiding means rigidly attached to said casement, a transverse element slidably mounted, in said guides, a pane, and a rotatable slidable, frame assembly supporting said pane and pivotally supported on said transverse element, said frame assembly including pairs of lateral, exterior and interior guide elements and means maintaining corresponding interior and exterior guide elements in assembled relation on opposite sides of said pane.

1,877,245. RAILWAY SIGNALING SYSTEM. FRANZ KRUCKENBERG and FRITZ HEYNER, Heidelberg, Germany; said Heyner assignor to said Kruckenberg. Filed Apr. 30, 1928, Serial No. 274,089, and in Germany May 5, 1927. 9 Claims. (Cl. 246—90.)

5. In a sectionalized signaling system for high speed vehicle travel, the combination with means for displaying

bands of light which extend substantially continuously along an entire section of the path of travel of the ve-

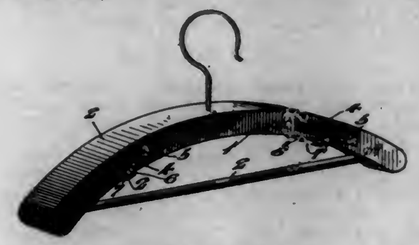


hicle, of means actuated by the progress of a vehicle for controlling said displaying means in accordance with the position of said vehicle relative to said section.

1,877,246. BLUE PRINTING. ROBERT E. KWECH, Chicago, Ill. Filed Aug. 31, 1931. Serial No. 560,507. 9 Claims. (Cl. 95—6.)

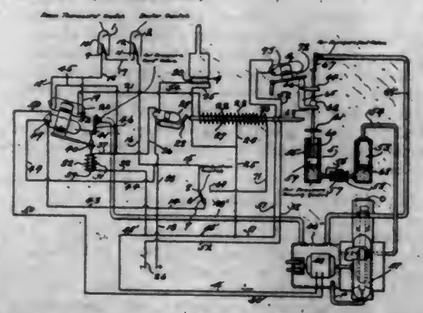
9. A process of blueprinting, which comprises exposing paper photosensitized with a light-sensitive ferric salt and a ferricyanide compound to light modified by a design, treating the exposed paper with an alkaline solution containing a ferrocyanide compound, and then treating said paper with a solution of potassium dichromate.

1,877,247. COAT HANGER. JAMES MALLEY, Richmond, Va. Filed Nov. 3, 1931. Serial No. 572,754. 1 Claim. (Cl. 223—61.)



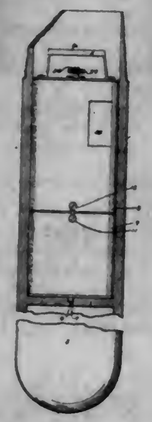
A coat hanger comprising a garment supporting member having cut-out portions therein, cakes of moth-killing volatile substance positioned in said cut-out portions, and fastening straps embedded in and projecting beyond the edges of said cakes, said straps being made of flexible material whereby the ends thereof may be twisted around said garment supporting member to secure said cakes within said cut-out portions.

1,877,248. ELECTRIC CONTROL SYSTEM FOR OIL BURNERS. JAMES N. MACRAE and CALVIN P. PACKARD, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,061. 4 Claims. (Cl. 158—28.)



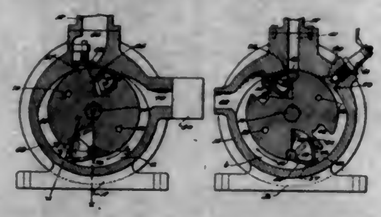
2. In a control system for an oil burner mechanism having a source of fluid pressure, a fuel tank in communication therewith to place the fuel therein under fluid pressure, and an electrically operated igniter, said control system comprising a vent valve for said tank, a solenoid operative when energized for actuating said valve to close, a switch in circuit with said igniter and solenoid and a second solenoid for actuating said switch.

1,877,249. RECORDING DRIFT INDICATOR. ARTHUR C. MCHUGH, Norwalk, and HARRY F. RASNEOR, Long Beach, Calif. Filed Feb. 15, 1929. Serial No. 340,303. 2 Claims. (Cl. 234—1.)



1. In a device for indicating and recording the vertical inclination of well bores, in combination, a cage adapted to conform to the inclination of the well bore, a progressively movable recording tape having an exposed portion which extends in a generally horizontal direction with respect to the axis of said cage, said cage being weighted on one side and mounted upon a vertical axis to permit rotation thereof under the influence of the weighted side thereof, a horizontally swinging device having a pivotal mounting in substantially the longitudinal axis of said cage, said device having two pen points mounted in fixed relation to each other and circumferentially spaced apart, said pen points being positioned to engage the exposed portion of said record tape and swinging under the action of gravity to indicate variations in the direction of inclination of said cage.

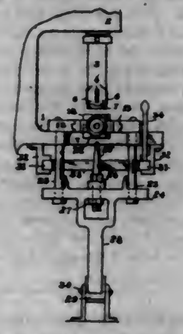
1,877,250. INTERNAL COMBUSTION ROTARY ENGINE. RALPH J. MEYER, Denver, Colo. Filed Apr. 19, 1929. Serial No. 356,541. 2 Claims. (Cl. 123—17.)



2. A rotary engine including a casing, a rotor therein, the rotor having approximately segmental recesses in its periphery, approximately segmental pistons, swingingly mounted in the corresponding recesses whereby the pistons may swing outward against the wall of the casing, each piston having a convexly curved working face concentric to the pivotal axis of the piston, and a fixed sealing member carried on the wall of each recess and bearing against the curved working face of the corresponding piston, the

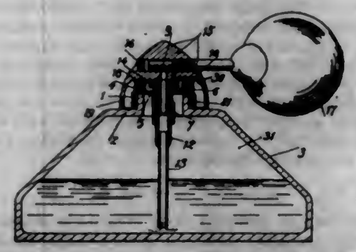
piston having a port leading from the peripheral face of the piston into said recess, the piston having a nose forming a continuation of the peripheral face of the piston and extending beyond said working face, said nose being of such length that a line disposed at an angle of approximately 22½ degrees to a radius extending through the axis of the motor and the pivotal axis of the piston will intersect the face of the sealing member and the extremity of said nose when the piston is fully open and that a plane at right angles to said radius will intersect said 22½ degree line half way between the extremity of the nose and the adjacent corner of the sealing member, when the piston is fully open whereby there will be an equal pressure receiving area on each side of said plane in all positions of the piston.

1,877,251. TAPPING MACHINE. GEORGE E. MILLER, Etna, Pa. Filed Jan. 23, 1931. Serial No. 510,735. 3 Claims. (Cl. 10—129.)



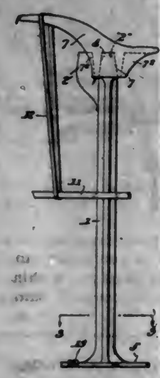
1. In a machine for threading couplings from their centers outwardly, a rotatable and reciprocable die holder, dies carried thereby and movable radially, a coupling holder constructed to hold a coupling with its axial center line in axial alinement with the die holder, and a mandrel positioned when idle at the opposite side of the coupling holder from the die holder and tapering toward the die holder and wholly outside of the same and movable longitudinally into a fixed position in the axial center line of the coupling, the dies surrounding and contacting with the surface of the mandrel as the die holder feeds the dies from the center of a coupling in the coupling holder to one end thereof, the said holder being rotatable to bring the opposite ends of the coupling into working positions.

1,877,252. ATOMIZER. JEAN PATOU, Paris, France. Filed May 4, 1931, Serial No. 534,900, and in France Mar. 21, 1931. 1 Claim. (Cl. 299—88.)



An atomizer comprising a flask having a neck and adapted to contain a liquid such as perfume, a mounting secured to said neck, webs carried by said mounting and having orifices for the free passage of liquid into the flask, a socket connected by the webs to said mounting, a tube supported by said socket and extending into the flask, and a vaporizer assembly adapted to receive perfume through said tube, said vaporizer assembly being removably mounted in said socket while said tube remains mounted therein.

1,877,253. IRON LAST AND STAND. THOMAS RENDLE, Ottawa, Ill. Filed Mar. 5, 1929. Serial No. 344,205. 1 Claim. (Cl. 12—123.)



The combination in a shoe repairing stand of a last support provided with a tapered circular last mount rigidly fixed at one end of the standard and a special tapered circular last cleat rigidly fixed at one side divided by a special tapered slot mount therebetween, adapted to co-operate with the socket of a whole last, and the cleats of a two sole last and the cleat of a whole last positioned between the two circular mounts, a two sole last, a heel part having a breast projection and the two tapered arms circular at the inner sides to co-operate with the cleats of the two sole last and a slot between the circular mounts, a shoe holder provided with a gripping device tapered one way to co-operate with the corrugated standard and a looped strap fastened to the holder to connect a shoe, a rigidly fixed base at the opposite end of the standard provided with four perforated tapered projections at the opposite sides, and a perforated base band adapted to receive fasteners, whereby the stand may be held and released to reverse the last support.

1,877,254. SHEET MATERIAL. CARL C. RITTER, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 12, 1930. Serial No. 481,479. 5 Claims. (Cl. 175—356.)

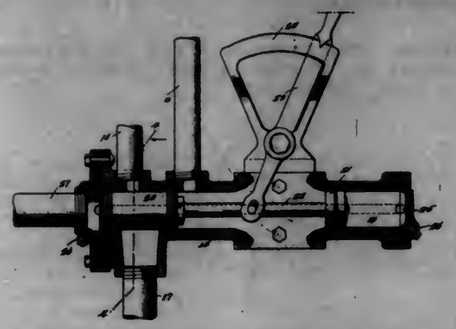


1. The method of making laminations, comprising the steps of coating the sheet material with a thermal-responsive binding material and severing the laminations from the coated sheet material.

1,877,255. SAND BLAST APPARATUS. DONALD S. SAMMIS, Stratford, Conn., assignor to The New Haven Sand Blast Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 2, 1929. Serial No. 397,103. 6 Claims. (Cl. 51—12.)

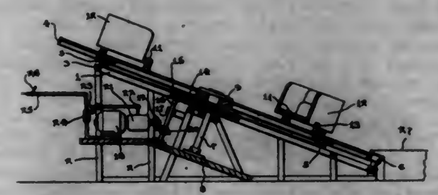
1. In a sand blast apparatus, a sand bin, a sand tank, a sand bin valve between said bin and said sand tank, and a mixing chamber operatively associated with said

sand tank, in combination with an air valve, a connection between said air valve and said sand bin valve, a separate connection between said air valve and said sand tank, and another connection between said air valve and said mixing



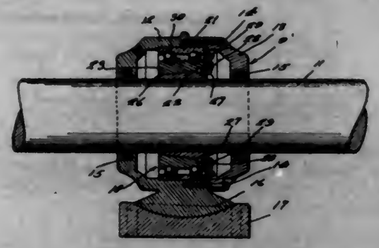
chamber, said air valve being adapted to apply air pressure to said sand bin valve connection to close said sand bin valve, while holding pressure within said sand tank by closing said connection between said air valve and said sand tank.

1,877,256. AMUSEMENT DEVICE. IRWIN J. SIEBERT, Cleveland, Ohio. Filed June 17, 1931. Serial No. 545,116. 5 Claims. (Cl. 272—51.)



1. In an amusement device, a rotatable platform positioned at an angle to the horizontal, cars movable upon and pivotally mounted relative to said movable platform, stops for limiting motion of said cars about their pivots, and means for rotating said platform to impart variable motions to said cars.

1,877,257. BEARING STRUCTURE. ARTHUR W. SIMMONS, Nacogdoches, Tex. Filed Dec. 15, 1928, Serial No. 326,271. Renewed Jan. 26, 1932. 3 Claims. (Cl. 308—189.)



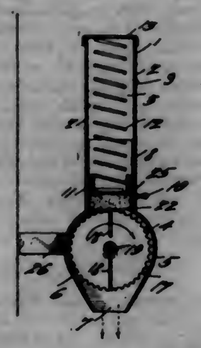
1. In a bearing structure of the class described, an outer ring like race, an inner complemental race embodying a bushing and a surrounding annulus, said bushing having an inner concentric opening for passage around a shaft, the outer periphery of said bushing being provided with oppositely directed circumferential bevels, said bushing being formed with slots dividing it into relatively adjustable resilient portions, said annulus having a bevelled inner periphery for cooperation with one of the bevels on said bushing, and adjusting screws carried by said annulus and cooperable with the remaining bevels on the bushing for shifting the annulus longitudinally thereon.

1,877,258. JAR CLOSURE. AUGUST C. SPAHN, Evansville, Ind., assignor to Bernardin Bottle Cap Company, Evansville, Ind., a Corporation of Indiana. Filed Apr. 11, 1929. Serial No. 354,219. 1 Claim. (Cl. 215—43.)



In a jar closure the combination of a sheet metal cap comprising a top wall and a skirt, a jar, said skirt and jar being provided with coacting screw-means for forcing and securing the cap on the jar, an elastic sealing member between the jar and said wall, and a series of arcuate indentations projecting from the under face of said wall and operative to press sharply into portions of the elastic sealing member to limit positively the movement of the cap toward the jar when the cap is secured thereon, said indentations being comparatively narrow and sharp and adapted to limit the compression of other portions of the sealing member so they will retain their elasticity and being so spaced apart that the inner and outer portions of the sealing members are adequately cross connected and hence remain in connection relation regardless of the extent to which the indentations cut into the member.

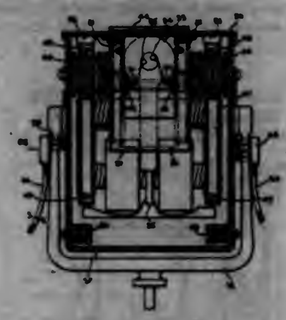
1,877,259. SOAP DISPENSING DEVICE. RICHARD S. WALKER, Petersburg, Va. Filed Mar. 7, 1928. Serial No. 259,852. 4 Claims. (Cl. 146—61.)



1. A cutter for soap dispensing devices, comprising a shaft mounted for rotation, a series of disks mounted on the shaft and held in relatively spaced relation, the disks being divided diametrically from their free edges to a point short of the center, the respective halves of each disk as thus provided being reversely twisted to cause the peripheral edge of one half of each disk to register with the peripheral edges of the opposing halves of adjacent disks, whereby to present a spiral edge.

1,877,260. X-RAY APPARATUS. JULIUS B. WANTZ, Oak Park, Ill., assignor to Victor X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed June 14, 1928. Serial No. 285,390. 2 Claims. (Cl. 250—34.)

1. The combination with an X-ray apparatus comprising a tank and a tube, tube energizing instrumentalities mounted in said tank and having oil insulation thereabout, of a bracket to support said tank, a cable comprising a plurality of conduits and detachably connected to said bracket and insulated therefrom, and contacts upon said tank and insulated therefrom whereby to establish

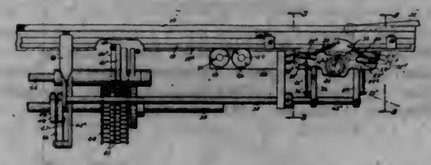


electrical connections with the instrumentalities within such tank irrespective of the position of said tank relative to said bracket and without movement of said cable relative to said bracket.

1,877,261. ELECTRICAL MAKE-AND-BREAK CONTACT AND COMPOSITION THEREFOR. JOSEPH A. WEIGER, Indianapolis, Ind., assignor to P. R. Mallory & Co., Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 17, 1931. Serial No. 563,466. 5 Claims. (Cl. 200—166.)

1. An electrical make-and-break contact containing rhenium.

1,877,262. YARN-CARRIER-CONTROLLING MEANS FOR KNITTING MACHINES. DIETRICK J. WERFELMAN, New York, N. Y., assignor to Dubied Machinery Company, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929. Serial No. 402,341. 18 Claims. (Cl. 66—128.)



10. In a knitting machine the combination with the yarn-carrier, of means for controlling the strokes of said yarn-carrier and means for adjusting said controlling means for formation of designs, said adjusting means including slidable bars, means for coupling said slidable bars to said controlling means, and means for moving said slidable bars, said last named means including toothed sections formed on said slidable bars, means for engaging said toothed sections and means for actuating said engaging means to cause them to engage said toothed sections, said means for controlling the strokes of said yarn carriers including stop blocks slidably mounted on said machine in the path of said yarn carriers.

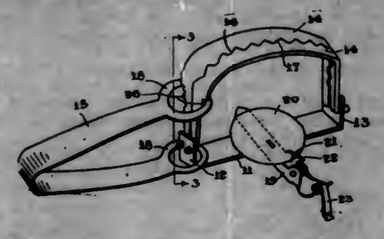
1,877,263. DOORLOCK. WILFRED A. BEAUCHAMP, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1930. Serial No. 487,939. 5 Claims. (Cl. 292—283.)

2. In a door lock, in combination, a hasp fastener, a hasp, said hasp being supported by said fastener, a lock member, a pin, said member supporting said pin for relative substantially vertical movement and a lug provided on said hasp and having abutting relation with said pin to determine the position of the latter, said pin being capable



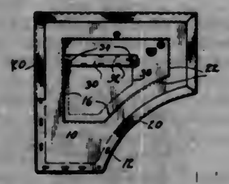
of automatic movement to reestablish said abutting relation with the lug when such relationship is broken by movement of said hasp.

1,877,264. ANIMAL TRAP. SAMUEL C. BOOTH, Montreal, Quebec, Canada. Filed June 12, 1928. Serial No. 284,760. 1 Claim. (Cl. 43—88.)



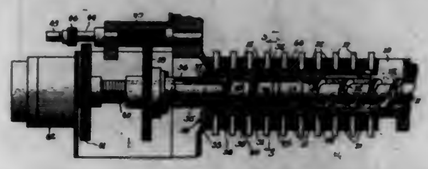
A pivoted jaw trap comprising a pair of pivotally mounted jaws, a jaw closing spring having an eye receiving corresponding ends of the jaws therethrough and a series of pressure relieving notches formed in the eye engaging edges of the jaws, each pressure relieving notch being formed with a major wall portion sloping inwardly and upwardly from the eye engaging edge of the jaw and with a minor wall portion sloping upwardly and outwardly from the upper end of the major wall portion to the upper end of the notch, the relative length and inclination of said major and minor wall portions being such that the spring pressure is relieved during the entire period that the spring eye is ascending the major wall portion of the notch and is increased only to a limited extent by engagement of the eye with the minor wall portion before said eye is permitted to pass into the next upper notch.

1,877,265. VEHICLE BODY PANEL STRUCTURE. FRANCIS L. CHADWICK, Detroit, Mich., assignor to Woodall Industries Incorporated, Detroit, Mich., a Corporation of Michigan. Filed June 15, 1931. Serial No. 544,326. 5 Claims. (Cl. 296—44.)



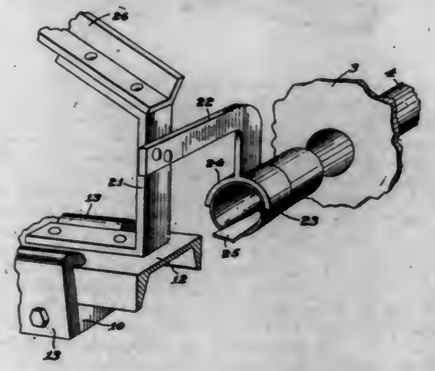
1. A vehicle body panel comprising an embossed sheet of flexible material, a flexible frame of incomplete polygonal contour secured at its extremities to the upper face of the embossed portion of said sheet, and a strip of relatively rigid material having a thickness substantially equal to the depth of the embossment secured to the opposite face of the sheet in superposed relation to the incomplete side of said frame.

1,877,266. APPARATUS FOR THE MANUFACTURE OF FEED FOR CHICKENS AND OTHER ANIMALS. GEORGE MAXSON CHAPIN and HUGH HARDING GOFF, Hammond, Ind. Filed June 2, 1928. Serial No. 282,486. 3 Claims. (Cl. 99—2.)



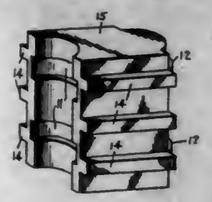
2. An apparatus for converting different feed meals into compressed state, comprising a compressing chamber having an inlet opening at one end and a variable discharge opening at the other end and a plurality of additional discharge apertures formed in the upper half only of the chamber wall adjacent the discharge outlet, means for feeding a heated plastic mass of granulated feed materials through the inlet opening, and means within the chamber for extruding said mass through the discharge outlet and the additional discharge apertures.

1,877,267. BOILER TUBE CLEANER. FRANK H. COLE, Chelsea, Mass. Filed Dec. 29, 1930. Serial No. 505,405. 14 Claims. (Cl. 122—391.)



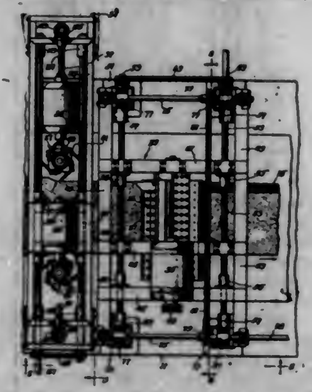
1. In a fire tube boiler, the combination of a tube sheet and tubes supported therein, of a tube cleaner, and supporting means for said cleaner comprising devices permanently anchored in certain of the boiler tubes, said devises being so constructed and arranged as to leave the last mentioned tubes open for the cleaning operation.

1,877,268. STUFFING BOX AND PACKING THEREFOR. JAMES R. COLE, Tulsa County, Okla. Filed May 9, 1931. Serial No. 536,181. 6 Claims. (Cl. 286—16.)



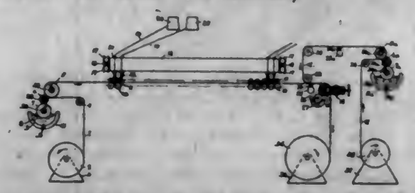
1. A packing element adapted to use in a stuffing box wherein a plurality of packing elements are arranged opposed to one another about the reciprocating element passed thru the stuffing box and against which said packing elements pack off in said stuffing box; a transverse groove in the front surface of said packing element and a ridge in the rear surface of said packing element and with said ridge positioned and adapted to enter into a corresponding groove in another similar packing element when the two are placed one behind the other in the stuffing box.

1,877,269. STONE MILLING MACHINE. CHARLES A. COLGREN, Bloomington, Ind. Filed Jan. 17, 1929. Serial No. 333,098. 2 Claims. (Cl. 125—5.)



2. A stone milling machine comprising a rotatable holder, blades extending from the holder in sets, each set comprising an elongated straight edge blade extending substantially tangentially of the holder with its cutting edge pointing in the direction of rotation of the holder and a blade of substantially lesser width and having a configurated cutting edge extending radially of the holder in front and closely adjacent said edge and projecting outwardly beyond said edge whereby the elongated blade will cut a flat surface and the configurated blade will undercut the flat surface.

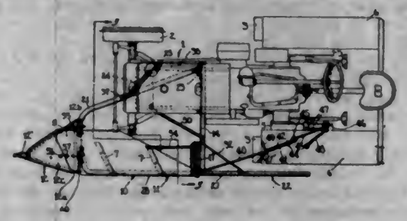
1,877,270. MANUFACTURE OF A COMPOSITE SHEET. WILLIAM R. COLLINGS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 3, 1929. Serial No. 368,190. 13 Claims. (Cl. 154—40.)



1. In a method of the character described, the steps which consist in assembling a plurality of component sheets with reenforcement and adhesive therebetween and temporarily softening at least one component thereof by treating the back of same with a low percentage of water prior to applying final pressure to consolidate the assembly.

1,877,271. STALK LIFTER. NOLAN D. COLVIN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 8, 1931. Serial No. 542,749. 21 Claims. (Cl. 56—119.)

10. The combination with a tractor, of a grain stalk lifter shield having a ground engaging front portion, said shield being pivotally mounted on the tractor on an axis transversely of the tractor and at one side thereof, whereby the weight of the shield normally pivots the shield so that the front portion thereof is lower than the rear portion, a diagonal brace connecting the frame of the shield to the tractor and extending between the front wheels of the tractor, said brace being pivotally mounted to the tractor on an axis coincident with the pivotal mounting of the shield, link mechanism connecting the shield with the tractor for limiting the normal downward lowering of the front portion of the shield, and a counter-balancing spring means connecting the tractor forwardly of the shield pivot axis to said diagonal bar tending to counter-balance said downward pivotal movement of the shield, said link mechanism including toggle means mounted on the tractor and being manually operative for raising the shield into inoperative position and holding the same in said position.



1,877,272. MOWER. WILBUR J. COULTAS, Rock Island, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,511. 17 Claims. (Cl. 56—313.)



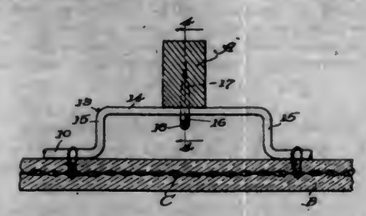
1. A lifting guard for the guard finger of a mower, comprising a member having a cavity formed therein intermediate its ends for receiving the forward end of said guard finger, a spring in said cavity for cooperating with said guard finger, and means at the rear end of said member for pivotally connecting the same to the mower.

1,877,273. BOW. ROBERT H. COWDERY, Geneva, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 28, 1927. Serial No. 229,297. 3 Claims. (Cl. 273—107.5.)



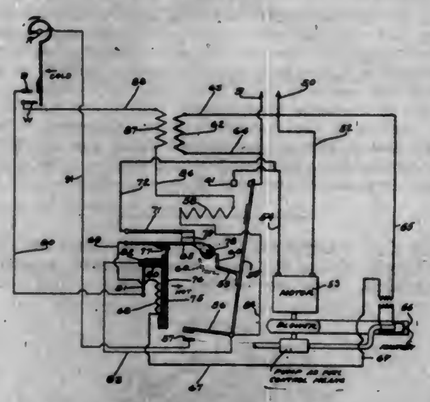
1. A bow for archery comprising a pair of oppositely-extended bow limbs and an intermediately disposed handle joining the shanks of said limbs, said limbs each provided with an integrally formed reenforcing rib on its back side, extending longitudinally thereof, said rib being progressively tapered from the handle towards the tip of the limb.

1,877,274. BUILDING CONSTRUCTION. FRANK SCOTT CROWHURST, Los Angeles Calif. Filed Apr. 9, 1928. Serial No. 268,704. 8 Claims. (Cl. 72—118.)



1. Furring material having portions offset from the plane of the body of the material and adapted to come against the studs of a building frame, and means for loosely attaching the material to the studs at the said offset portions, thereby permitting the studs and the material to move relatively when the furring material is incorporated with a plastic wall surface.

1,877,275. FUEL CONTROL APPARATUS. LEWIS L. CUNNINGHAM, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 25, 1928. Serial No. 256,922. 5 Claims. (Cl. 175—375.)

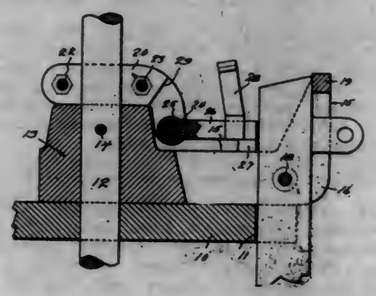


1. A switch biased to open, a latch for securing the switch in closed position, an electrically controllable timer and a control circuit therefor controlled by the switch, electrically controllable means having means for closing the switch when energized, a control circuit for said electrical controllable means including a contact controlled by said timer to be closed only when the timer is in a predetermined de-activated timer-starting position, and means by which said timer controls the latch to release the switch at the end of a predetermined time after timer activation.

5. In combination, a timer including a movable thermal element and an electrically operable heater for controlling the element, a circuit for the heater controlled by a switch biased to open, a relay controlling energization of the heater circuit and having means for moving the switch to closed position when the relay closes, a control circuit for the relay having therein a starting contact which must be closed to obtain relay closure and means by which the starting contact is controlled by the thermal element to be closed on sufficient cooling of said element, an element

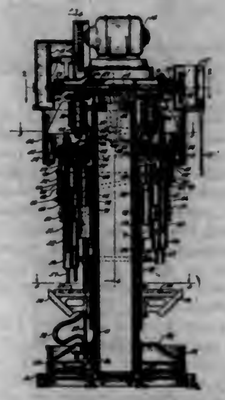
controlled by the thermal element to latch the switch in closed position only after the thermal element has closed the starting contact and adapted to be positively moved by the thermal element as it heats and to release the switch for quick opening after the predetermined degree of heating motion, said thermal element being adapted to move independently of the latch element during cooling movement, means controlled by the switch when in open position and after latch release to prevent return of the latch element to latching position, action of said means during switch closure being to cause release of the latch element to permit it to assume latch position after switch closure, control means and circuit therefor controlled by said relay to be activated by closure of the relay.

1,877,276. SWITCH STAND. CLIFTON B. DAVIDSON, Decatur, Ill. Filed Mar. 28, 1932. Serial No. 601,611. 6 Claims. (Cl. 246—413.)



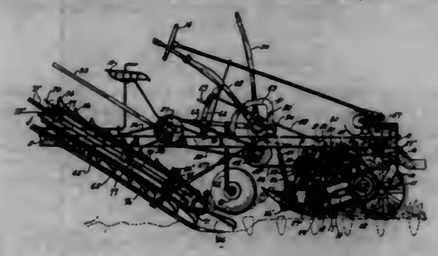
1. In combination with a switch stand having the usual fixed table provided with notches, an upright shaft passing therethrough and adapted to be connected in operating relation to a switch, a movable member carried by said shaft and movable over said table for operating the shaft, an operating lever pivoted thereto and adapted to be received in said notches, a clamp connected to said shaft and a latch pivoted to said clamp and adapted to fall in behind the upper end of said lever to prevent accidental removal of the same from said notches.

1,877,277. VERTICAL CONTINUOUS DRILLING MACHINE. FRANK M. DAVIS, Milwaukee, Wis. Filed Dec. 16, 1929. Serial No. 414,460. 6 Claims. (Cl. 77—23.)



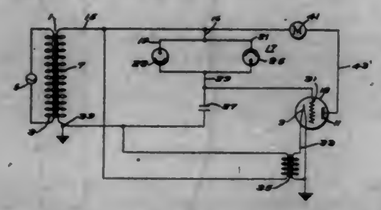
1. A vertical continuous drilling machine, comprising a base member having a vertical standard and a cam extending partly around the upper portion of the standard, a sleeve journaled on the standard and having at its upper end a plurality of circumferentially spaced and vertically reciprocal end thrust bearings, a ring gear mounted on the upper end portion of the sleeve, a vertical shaft having a pinion in mesh with the ring gear for rotating the sleeve, means for rotating the vertical shaft, pinions journaled on the ring gear in vertical alinement with the bearings, tool spindles for holding work tools journaled in and extending through the bearings and slidably engaging the pinions and rotated thereby, a double gear ring journaled on rollers carried by the ring gear and in mesh with the pinions for rotating the tool spindles while they are being reciprocated and being carried by the sleeve, a vertical shaft carried by the standard and having a pinion meshing with one of the gears of the double gear ring for rotating said double gear ring, work holding members carried by the sleeve and positioned below the tool spindles, an oil receiver located below the work holding members, a pump means for forcing oil from the receiver to the tool spindles, said bearings and tool spindles being moved downwardly towards the work holding members by the cam, and means for moving the bearings and the tool spindles away from the work holding members when the end of the cam is reached.

1,877,278. BEET TOPPER AND HARVESTER. FRANK M. DAVIS, Milwaukee, Wis. Filed June 30, 1930. Serial No. 464,963. 5 Claims. (Cl. 55—9.)



2. A beet topper and harvester, comprising a vehicle, a cutter carried by the vehicle for severing the leaves from the beets, an inclined slotted trough carried by the vehicle and having a lower forward end portion extending toward and movable in the path of travel of the cutter for dislodging the beets from the ground after removal of the tops by the cutter, an endless conveyor means having wire basket flights coacting with the trough for engaging and elevating the dislodged beets to the upper end portion of the trough, a receptacle carried by the vehicle for receiving the beets from the trough, and means actuated by the travel of the vehicle for rotating the cutter and the conveyor.

1,877,279. PHOTO-SENSITIVE DEVICE. JOHN W. DAWSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930. Serial No. 453,917. 10 Claims. (Cl. 250—41.5.)



1. A photo-sensitive device comprising a source of potential, an electron-discharge tube connected thereto, said tube being of a type having a control electrode and a plurality of principal electrodes, an impedance connected between said control electrode and one of said principal electrodes, and a plurality of photo-sensitive cells connected between the remaining principal electrode and said control electrode, certain of said cells being so connected as to pass current in one direction relative to said control electrode and the remainder of said cells being so connected as to pass current in the opposite direction relative to said control electrode.

1,877,280. ADJUSTABLE SASH. JOHN S. DEATS, Los Angeles, Calif., assignor to Deats Sash and Door Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 20, 1931. Serial No. 517,260. 9 Claims. (Cl. 20—52.1.)



1. An adjustable sash mounting, including a frame, a recess in the frame for receiving a sash in lowered position, and a water-table cover for the recess, together with means for automatically forcing the water-table cover into position.

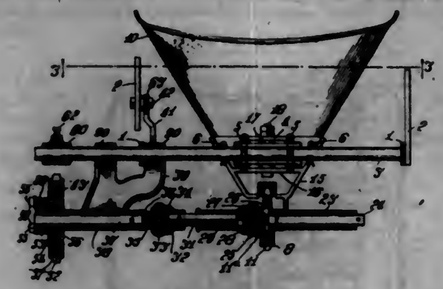
1,877,281. STOCKING. ELLEN W. DECKER, South Orange, N. J. Filed Oct. 20, 1931. Serial No. 569,946. 2 Claims. (Cl. 2—240.)



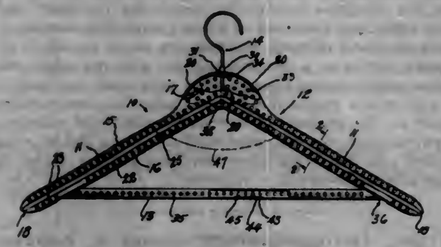
1. A stocking of shrinkable material having garter attaching means comprising a plurality of garter-receiving members of substantially unshrinkable material and stitching attaching said members to the stocking with said members in a slightly puckered or unstretched condition so as to be under tension only when the stocking is stretched due to the pull of the garter, so as to properly distribute the garter pull.

1,877,282. CORN SHELLER. ARTHUR B. DIETERICH, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed Apr. 6, 1927, Serial No. 181,298. Divided and this application filed July 31, 1929. Serial No. 382,347. 3 Claims. (Cl. 198—119.)

1. In a corn sheller, the combination with a frame, of a cob stacker comprising a conveyor and a sprocket wheel for driving the conveyor, a bar mounted on the frame, a swivel member on said bar, on which member the stacker is pivotally supported by means of a vertical pivot, a drive shaft bearing pivotally supported on said bar, a drive shaft in said bearing, said sprocket wheel being capable of swinging movement relatively to said drive shaft, means for holding the bearing in alternative positions, and a driving connection between the drive shaft and the sprocket wheel comprising a pair of universal joints and a telescopic connection.

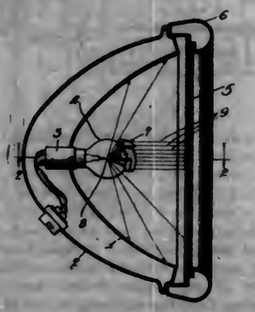


1,877,283. CHAMBERED CLOTHES HANGER FOR CONTAINING AN INSECT REPELLING MATERIAL. HARRY DISKIN, New York, N. Y. Filed May 21, 1931. Serial No. 538,902. 14 Claims. (Cl. 223—61.)



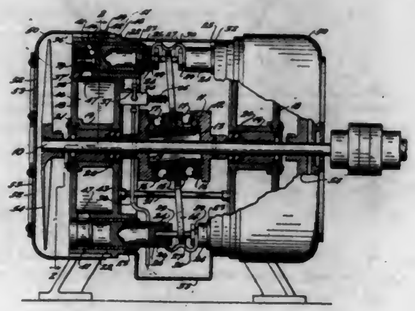
1. A coat hanger having angular related arms consisting of a plurality of longitudinally coextensive longitudinally beaded channel members coacting to form a tubular chamber therein.

1,877,284. LIGHT PROJECTION APPARATUS. ADIEL Y. DODGE, South Bend, Ind. Filed May 2, 1930. Serial No. 449,108. 8 Claims. (Cl. 240—48.6.)



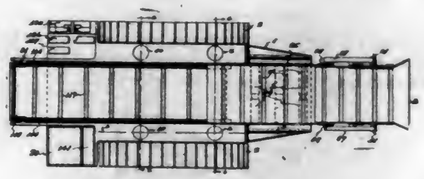
2. A lens formation for use with the bulb member of a horizontally disposed electric lamp for forwardly projecting reflectors, said lens formation having its front face generally convex, the rear face having a portion of its surface in the form of a cylinder having its axis transverse to the horizontal plane through the axis of the bulb and having another portion of its surface in the form of a cylinder coaxial with said first cylinder but of a different diameter.

1,877,285. SWASH PLATE. PARL O. ECKELS, Cleveland, Ohio, assignor to The Eckels Engineering Corporation, Cleveland, Ohio. Filed Oct. 1, 1931. Serial No. 566,328. 8 Claims. (Cl. 230—186.)



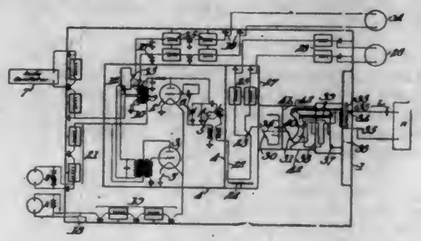
1. In a swash plate apparatus, a shaft, a swash plate having a central opening through which said shaft passes, said opening being of greater diameter than the shaft to permit rotation of the shaft independently of the swash plate, an operative mechanism connecting the shaft and swash plate and arranged to effect gyratory movement of the swash plate without rotating the plate, cylinders arranged in series on a circle concentric with the shaft, pistons in said cylinders, and piston rods each engaged at one end with a piston for free oscillatory movement with respect to the piston and having its other end engaging the swash plate, the last mentioned end of the piston being rounded and the swash plate having a shallow recess in which said rounded end is received.

1,877,286. LOADING DEVICE. SIDNEY W. FARNHAM, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1928. Serial No. 326,927. 20 Claims. (Cl. 198—7.)



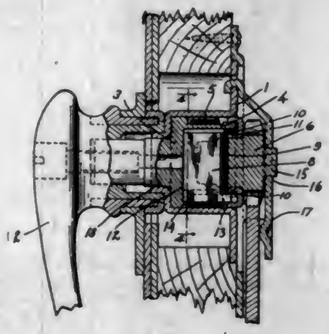
1. In a loading device, the combination with a main frame, continuous tread devices for supporting said main frame and moving said main frame about a mine, a stationary holding jack on said main frame engageable with a mine roof, a movable holding jack on said main frame engageable with both a mine roof and mine bottom, hydraulically actuated means operated independently of said movable holding jack for moving said movable holding jack longitudinally of said main frame, said means moving said main frame into the material to be loaded when said movable holding jack is engaging both a mine roof and mine bottom, and mechanically operated means for moving said main frame through said continuous tread devices independently of said hydraulically actuated means at the speed of advance of said main frame moved by said hydraulically actuated means so said loading device may be moved into the material to be loaded at a slow feeding speed either by means of said hydraulic actuated means or said continuous tread devices.

1,877,287. STANDARD SIGNAL GENERATOR. MALCOLM FERRIS, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed July 13, 1929. Serial No. 378,091. 9 Claims. (Cl. 250—20.)



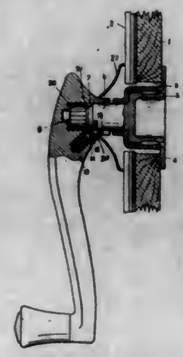
1. The combination with an oscillator for generating radio frequency signals, a voltage attenuator comprising a resistance network and an adjusting switch therefor, and means including an indicating instrument for adjusting the signal energy delivered to said attenuator to a predetermined value; of metallic spaced casings providing a double shield about said oscillator, a metallic casing positioned in the interspace of said double shield casings and providing a shield for said attenuator, and shields within said last-mentioned casing for substantially eliminating coupling between the terminal resistance thereof and the other parts of said attenuator, whereby the voltage available across said terminal resistance is predetermined by the adjustment of said attenuator switch.

1,877,288. ANTIRATTLING DEVICE FOR A WINDOW REGULATOR CLUTCH. HERBERT C. FIELD, Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,846. 1 Claim. (Cl. 192—8.)



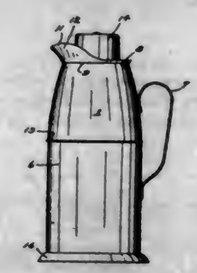
A window regulator clutch of the expanding coil spring type having a fixed braking drum, a slotted driven member journaled in the braking drum, a driving member having a slot, a coil spring carried by the driving member having bent ends projecting into the slot of the driving member, the said driving and driven members having a limited lost motion, a key fitted in the slot of the driven member between the driving and driven members and the spring ends and a flat spring having bent ends positioned in the slot of the driven member between the driven member and the key, the bent ends of the flat spring engaging the driven member to yieldably retain the flat spring on the driven member whereby assembly of the clutch is facilitated, the said flat spring being adapted to create a frictional drag between the key and the driving member to prevent relative movement between the driving and driven members within limits of their lost motion.

1,877,289. HANDLE ASSEMBLY. HERBERT C. FIELD, Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 28, 1931. Serial No. 533,503. 5 Claims. (Cl. 292—352.)



1. A handle assembly comprising in combination, a handle having an opening therein, a spindle arranged to engage the handle in the said opening, said spindle having a recess, a second opening in the said handle inclined relative to the longitudinal axis of the said spindle, and a spring pressed plunger carried in the said opening adapted to engage the spindle in the said recess to lock the said handle to the said spindle.

1,877,290. HEAT INSULATING CONTAINER. NEIL FORREST, Lakewood, Ohio. Filed Apr. 24, 1930. Serial No. 446,853. 6 Claims. (Cl. 215—12.)

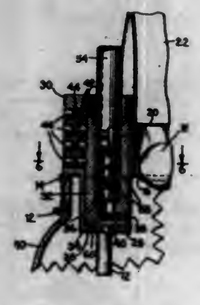


1. A heat insulated container comprising a metal outer casing open at both ends, a lip member having an annular flange attached to the upper edge of said casing, an inner container having an annular enlarged upper edge for fitting snugly against the inner surface of said flange, a flared base having a reduced annular central portion adapted to be detachably inserted within the lower opening of the casing, means for detachably securing the base to the casing comprising tongue extensions on one part for entering slots in the other, and heat insulating filling material packed into the space between the casing and container.

1,877,291. CONTINUOUS METHOD OF PRODUCING ESTERS FROM OLEFINS. PER K. FROLICH, Elizabeth, N. J., and PHILIP L. YOUNG, New York, N. Y., assignors to Standard Oil Development Company. Filed Jan. 21, 1930. Serial No. 422,288. 11 Claims. (Cl. 260—106.)

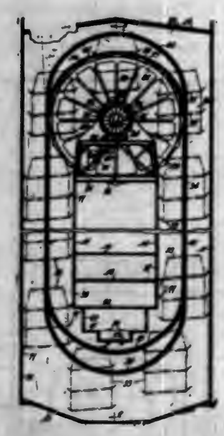
1. An improved process for obtaining esters from olefins comprising continuously bringing an olefin in vapor form and a substantially anhydrous fatty acid, with each in counter current flow to the other, into a reaction zone in the presence of a catalyst and at a temperature above 50° C. but insufficient to cause the distillation of the esters formed, and continuously withdrawing liquid esterified olefin.

1,877,292. COMBINATION INFLOW-CONTROLLING AND FLUID-DISCHARGE MEANS. THOMAS P. GARDNER, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1931. Serial No. 569,807. 10 Claims. (Cl. 221—2.)



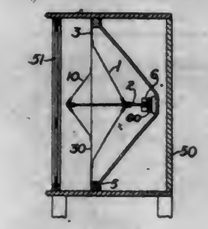
1. The combination with a bottle having a filling opening, a closure for said opening, and means for locking said closure in a non-filling position, of a key like member adapted to unlock and move the said closure into a filling position.

1,877,293. MECHANICAL GARAGE. ERNST GEIGER, Irvington, N. J. Filed Nov. 15, 1928. Serial No. 319,510. 21 Claims. (Cl. 214—16.1.)



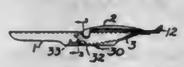
1. In a storage building a pair of vertical shaftways, crossways connecting the said shaftways at the top and bottom, pairs of sprocket wheels arranged in the upper crossway, endless chains running over the sprocket wheels and through the shaftways and lower crossways, guideways in which the chains travel, storage cabins hung on the chains at points above the centers of gravity of the cabins, said cabins passing through the upper crossway between the sprocket wheels, means preventing the swaying of the cabins on their hangers as they pass through the crossways, comprising secondary endless guideways and means on the cabins cooperating therewith said means being spaced from the points of attachment of the chains to the cabins.

1,877,294. LOUD SPEAKING REPRODUCER. ROSS F. GEORGE, Seattle, Wash. Filed Dec. 10, 1928. Serial No. 324,826. 14 Claims. (Cl. 181—31.)



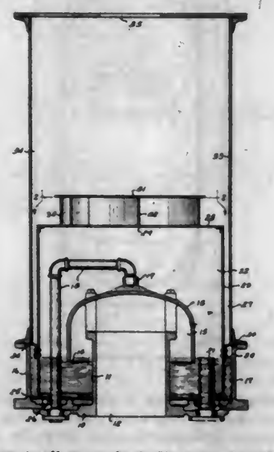
1. In a loud speaker, in combination, a membrane tensioned to a point where it has resonance, a tympanum associated therewith to transmit sound impulses thereto, and actuating means operatively connected to said tympanum.

1,877,295. UNDER AND OVERFEEDER FOR PENS. ROSS F. GEORGE, Seattle, Wash. Filed Nov. 18, 1929. Serial No. 407,975. 21 Claims. (Cl. 120—114.)



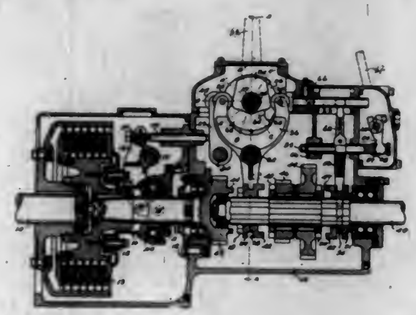
1. In combination with a pen, an underfeeder and an overfeeder supported therefrom to lie close to the pen towards its tip, or to move away therefrom, and means controlling movement of one feeder from the other.

1,877,296. CLEANING AND SILENCING MEANS FOR ENGINE EXHAUSTS. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 350,977. 11 Claims. (Cl. 183—22.)



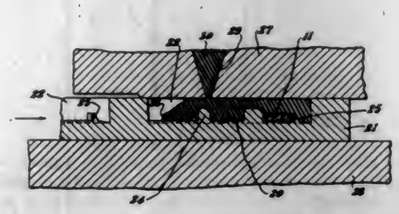
1. An exhaust silencer including a plurality of compartments, arranged one exteriorily of another, means for supplying a body of liquid to an inner one of said compartments, means for directing the engine exhaust gases into contact with said liquid, means formed by said inner compartment for conducting the gases from said liquid, means connected with said compartment for removing liquid particles carried by the gases, after being carried beyond said liquid, and means formed by an exterior compartment, for returning the separated particles to the body of liquid.

1,877,297. CLUTCH AND TRANSMISSION MECHANISM. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 21, 1929. Serial No. 387,349. 8 Claims. (Cl. 74—39.)



1. In a transmission, a driven shaft, a high speed driving connection, and low speed and reverse gears carried by said shaft, a friction clutch, a high speed, reverse gear and clutch control shaft, a manual control lever operatively associated with said shaft, control connections from the control shaft to certain of said gears, including an assembly of gear- and clutch-control cams operatively and detachably carried by said control shaft, said assembly including a friction-clutch actuating cam, and a cam adapted for selectively bringing said high speed and reverse gear connections into inaction positions, in sequence with control movements of said friction clutch; a low speed control lever, a locking member operable therewith, one of said cams having a recess arranged to receive said locking member, and coacting therewith to prevent movement of the low speed lever into operative position, while said first named lever is in speed- or direction-controlling position.

1,877,298. HEEL MOLDING METHOD. JOHN O. GOODWIN, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,900. 11 Claims. (Cl. 18—59.)

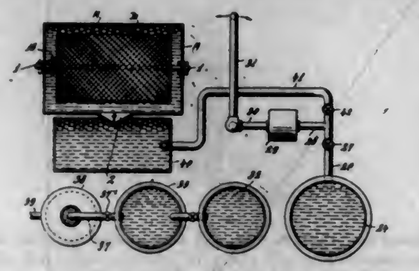


1. The method of making rubber heels which comprises inserting a plastic attaching layer in the top side of a cushion rubber heel body, confining said layer within the margin of the heel, along an outer edge of said layer, during its insertion in the body rubber, sufficiently to prevent flow thereof to the adjacent outer edge face of the heel, and vulcanizing the heel under heat and molding pressure.

1,877,299. PROCESS FOR THE RECOVERY OF CHICLE AND SIMILAR GUM FROM FILTER PRESS RESIDUE. MARCUS A. GORDON, Little Neck, N. Y., assignor to American Chicle Company, Long Island City, N. Y., a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,274. 5 Claims. (Cl. 18—49.)

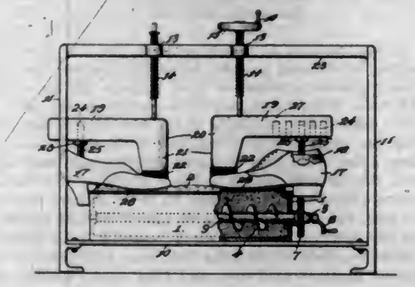
1. A method of recovering chicle and similar gum from filter press residue which comprises agitating the residue

in the presence of a solid waxy material having a definite characteristic in that it is substantially innocuous to and capable of mixture with chicle, the said waxy material be-



ing in hot fluid state, draining off said material with its absorbed gum, and restoring the solid form of the compound ingredients by cooling.

1,877,300. SHOE SOLE CEMENTING MACHINE. WILLIAM F. GREEN, St. Louis, Mo. Filed Sept. 22, 1930. Serial No. 483,519. 1 Claim. (Cl. 12—33.)



A shoe sole cementing machine of the class described, comprising a frame having substantially V-shaped ends terminating at their lower ends in feet adapted to support said frame upon a work bench, the upper portions of said V-shaped ends being rigidly joined together by a tie-beam disposed horizontally and provided with screw-threaded openings adapted to receive a screw, a screw fitted with a detachable handwheel adapted to operatively engage said openings and exert pressure upon a clamp, a clamp having one end turned downwardly at right angles to its major axis and provided with a cushion adapted to engage the toe of a shoe and provided at its opposite end with a plurality of bores adapted to receive one end of an adjusting bolt, a bolt adapted to engage the openings in said clamp at one end and to engage a like opening in a shoe last at the other end, a threaded nut on said bolt adapted to adjust the horizontal position of said clamp, a floor affixed in said frame, a box filled with a mobile, compactible substance and having a bottom, side and end walls and a heavy flexible and resilient top, agitators journalled in said box, and means for rotating said agitators.

1,877,301. METHOD OF MAKING DERIVATIVES OF DIARYLETHERS. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 28, 1928. Serial No. 289,081. 8 Claims. (Cl. 260—150.)

3. In a method for making a sulfonated naphthylphenyl ether, the step which consists of reacting between a naphthyl-phenyl ether and sulfuric acid.

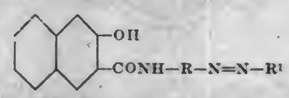
6. As a new product, a sulfonic acid of a naphthylphenyl ether, wherein at least one sulfonic acid group is attached to the naphthalene residue.

1,877,302. AZO DYESTUFFS AND METHOD OF MAKING SAME. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 19, 1929. Serial No. 348,362. 6 Claims. (Cl. 260—89.)

1. The method of making new azo dyestuffs which comprises diazotizing 1-amino-4-phenoxy-naphthalene and coupling with an arylide of 2.3-hydroxy-naphthoic acid.

1,877,303. AZO ARYLIDES OF 2.3 HYDROXY-NAPHTHOIC ACID AND AZO DYESTUFFS DERIVED THEREFROM. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 27, 1929. Serial No. 358,756. 4 Claims. (Cl. 260—76.)

1. The method of making an azo dye which comprises coupling a diazotized aromatic amino compound with an azo-arylide of 2.3-hydroxynaphthoic acid having the general formula;



wherein R and R' represent nuclei of the benzene or naphthalene series which may also bear substituents of the class consisting of nitro-alkyl, and alkoxy groups.

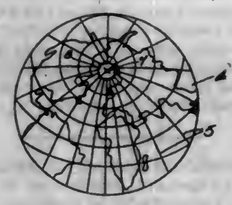
1,877,304. CARBONATES OF SALICYLIC ESTERS AND METHOD OF MAKING SAME. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 13, 1929. Serial No. 370,728. 9 Claims. (Cl. 260—104.)

1. The method of making a salicylic ester carbonate which comprises reacting between the corresponding ester, phosgene and an alkali in an acetone medium.

1,877,305. METHOD OF MAKING SALICYLIC ESTER CARBONATES. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 26, 1931. Serial No. 571,290. 4 Claims. Cl. 260—104.)

1. The method of making the carbonate of a salicylic acid ester which comprises reacting the corresponding ester with phosgene and an alkali metal hydroxide in a medium comprising methyl ethyl ketone.

1,877,306. GEOGRAPHICAL GLOBE STRUCTURE. WILLIAM A. HANSES, Chicago, Ill., assignor to Rand McNally & Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 457,057. 5 Claims. (Cl. 35—5.)



1. A geographical globe structure comprising a geographical globe, means for supporting said globe and comprising a rod extending through said globe coincident with

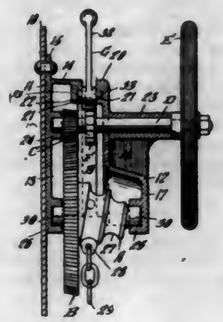
its polar extremities, a dial having hour-indicating markings at its circumferential edge, and a grommet through which said rod extends and on which said dial is mounted for rotation relative to said globe, said grommet having a portion spacing said dial from said globe.

1,877,307. TOLERANCE ZONE ON GAUGES. JAMES HARTNESS, Springfield, Vt. Filed Aug. 23, 1928. Serial No. 301,616. 4 Claims. (Cl. 33—199.)



2. In combination with a gage comprising a pair of gaging members capable of limited relative gaging movement, an index on one said member, and means carried by the other of said members for indicating a pair of zones of tolerance for gaging movements of said members, said means being adjustable to cause said zones to be adjustably movable with respect to said carrying member without alteration of size of said zones.

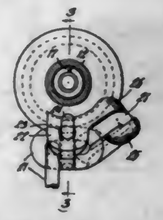
1,877,308. HAND BRAKE. JOSEPH HARRIS, Wheaton, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,359. 3 Claims. (Cl. 74—112.)



1. In a hand brake, the combination with a tapered drum on which the brake chain is wound; of a tapered gear of relatively large diameter fixed to the drum; a tapered driving pinion meshing with said gear, said gear and pinion being tapered reversely and said gear being tapered reversely to the conical drum; and means for rotating said pinion to wind the brake chain on the drum.

1,877,309. BRAKE CHAIN ATTACHMENT. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 14, 1931. Serial No. 508,791. 4 Claims. (Cl. 242—117.)

1. In a chain attachment for brake mechanisms, the combination with a winding drum; of a brake chain including a plurality of inter-connected links; an anchoring hook on said drum with which one of the links of the chain is engaged; abutment means on said drum having shouldered engagement with another link of the chain for restricting endwise movement of the connected links of the chain including said first named link to maintain said first



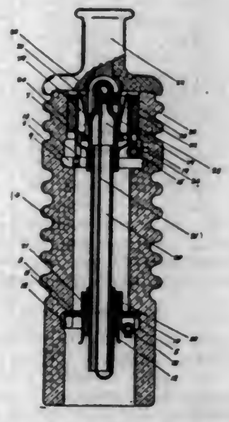
named link engaged with said hook; and detachable means for maintaining the chain in position with said second named link in said shouldered engagement.

1,877,310. METHOD FOR THE MANUFACTURE OF SCREENS. JOHANNES HEIDENHAIN, Berlin, Germany. Filed July 9, 1930, Serial No. 466,892, and in Germany Aug. 10, 1929. 3 Claims. (Cl. 95—81.)



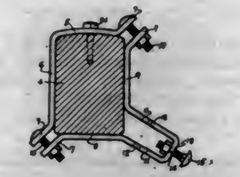
1. In the method of manufacturing screens the steps consisting of dipping smooth faced transparent material into an aqueous solution of lead acetate, thiourea, and caustic soda, warming the solution containing the plate to deposit a film of lead sulphide on the face of said material, coating the deposited lead sulphide with an emulsion of albumen ammonium dichromate to form a superposed layer thereon, drying said resultant layer, covering the films of the plate with a negative screen to cover certain portions of the film, subjecting the film to photochemical action to obtain impressions on said film corresponding to those of the negative, then developing the film, washing out the unexposed parts of said film, and then finally etching the plate.

1,877,311. EXPULSION CUTOUT. WALTER A. HEINRICH, St. Louis, Mo. Filed Oct. 22, 1928. Serial No. 314,158. 19 Claims. (Cl. 200—129.)



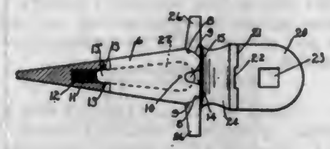
1. In a fuse switch and the like, an enclosure, a fuse, a manipulating element therefor and locking means whereby the fuse may be released from the enclosure and disposed therein for securement against expulsion, said means adapted to be operated by reciprocating movement of the manipulating element.

1,877,312. SUPPORTING DEVICE FOR ELECTRICAL EQUIPMENTS. WALTER A. HEINRICH, St. Louis, Mo. Filed Oct. 10, 1930. Serial No. 487,890. 6 Claims. (Cl. 248—31.)



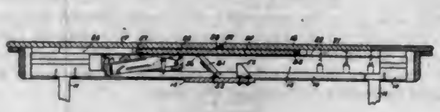
4. A universal cross arm hanger including a pair of substantially V shaped clamping members, means for securing said members together about a cross arm, one of said members being bent away from its arm-engaging portion to form a loop portion, and holding means engaging said loop portion.

1,877,313. HARVESTER. WALTER F. HELMKAMP, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 368,017. 15 Claims. (Cl. 56—311.)



1. In a guard finger for harvesters, arcuate shoulder means, a ledger plate having a round end conforming to the arc of said shoulder means, a socket disposed in said finger opposite said shoulder means, a tongue on said plate registering with said socket, and means in said socket for holding the round end of said plate firmly against said arcuate shoulder means.

1,877,314. CYCLIC LIMIT MECHANISM. FRANK A. HERBERT, Cincinnati, Ohio. Filed May 28, 1930. Serial No. 456,461. 8 Claims. (Cl. 45—112.)



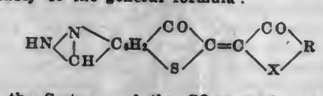
1. The combination with a pair of members having relative reciprocating movement of a cyclic limit mechanism comprising a pivoted plate having spaced stops thereon, a track portion connecting with one of the stops, a track portion adjacent and in non-continuous relation to the other of said stops, a gate track movable to a position of continuity with the last mentioned track portion, said mechanism being mounted on one of the reciprocating members and a lug on the other of said members and extending into the path of said stops.

1,877,315. BROMINATED VAT DYESTUFFS OF THE ANTHANTHRONE SERIES AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., of New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. Divided and this application filed Dec. 11, 1929. Serial No. 413,319½. 3 Claims. (Cl. 260—61.)

1. The process which comprises reacting upon anthanthrone with bromine in the presence of sulfuric acid monohydrate and of a small amount of iodine, with the addition of fuming sulfuric acid so that the hydrobromic acid evolved during the bromination is directly reoxidized to bromine and consequently for introducing approximately two atoms of bromine approximately one molecule of bromine is required, at a temperature of about 60°, until approximately two bromine atoms have been introduced into the anthanthrone molecule.

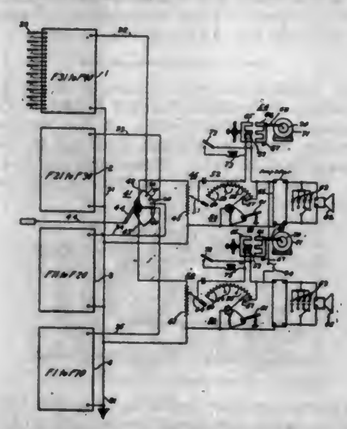
1,877,316. NEW INDIGOID DYESTUFFS. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT and WALTER BRUNNER, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1929, Serial No. 415,352, and in Germany Dec. 22, 1928. 4 Claims. (Cl. 260—45.)

1. As new compounds the indigoid dyestuffs corresponding probably to the general formula:



wherein the S-atom and the CO-group in the thiophene ring are attached to ortho-carbons of the benzene nucleus and the CH-group stands in the para position to the CO group, the benzene as well as the pyrazole nucleus may contain alkyl groups, R means an aromatic residue and X means NH or S, which compounds are when dry colored powders, dyeing cotton bluish-grey to olive shades of an excellent fastness to light and chlorine and of a remarkable levelling property, having a likely good affinity both for vegetable and animal fiber, and being capable of being easily fixed on the fiber when used for printing cotton.

1,877,317. MUSICAL INSTRUMENT. RICHARD C. HITCHCOCK, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 421,953. 11 Claims. (Cl. 84—1.)



3. In an electrical musical instrument, a plurality of minor groups of oscillators, each minor group being adapt-

ed to generate the frequencies required for a musical tone, a source of potential for said oscillators, keying means individual to each minor group for controlling the application of potential from said source to said oscillators, and means for preventing "key-thumps."

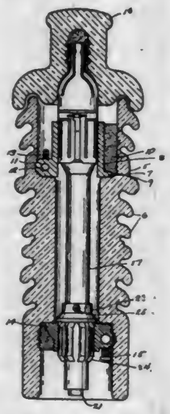
1,877,318. PROCESS OF PRODUCING AZO DYESTUFFS ON THE FIBER. EDWIN HOFFA and CARL SEIB, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1928, Serial No. 283,126, and in Germany June 13, 1927. 6 Claims. (Cl. 8—5.)

1. The process of producing azo dyestuffs on the fiber which comprises treating a hydroxynaphthoic acid arylide on the fiber with a diazonium borofluoride of the following general formula:

$$[R—N_2—]BF_4$$

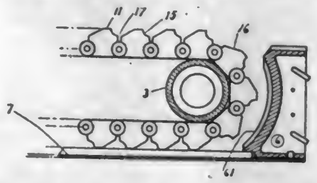
wherein R stands for an aromatic residue.

1,877,319. DISCONNECTING SWITCH. JOSEPH D. P. HOFFMAN, Kirkwood, Mo., assignor to James R. Kearney Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 21, 1931. Serial No. 517,453. 19 Claims. (Cl. 200—127.)



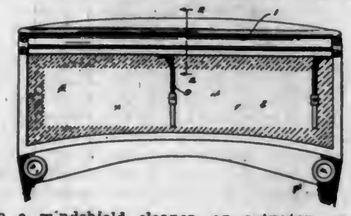
1. In an expulsion cutout, a housing, a closure for the housing, a fuse cartridge within the housing, means carried by the cartridge and means carried by the closure, said means adapted to coact, responsive to blowing of the fuse, to maintain the closure on the housing.

1,877,320. CHAIN GRATE. HARRIS B. HOLT, Dormont, Pa., assignor to Rosedale Foundry & Machine Company, a Corporation of Pennsylvania. Refiled for abandoned application, Serial No. 364,096, filed May 18, 1929, and in Canada Jan. 22, 1931. This application filed May 5, 1932. Serial No. 609,544. 2 Claims. (Cl. 110—40.)



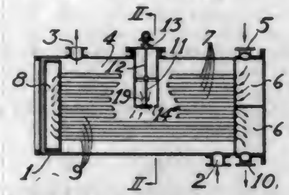
1. A furnace structure including an endless chain grate arranged in upper and lower reaches and a drag plate underlying the lower reach of the grate, the grate surface affording substantially continuous support for fuel and being provided with pockets each of which extends transversely and in continuity throughout the width of the grate, the pocket-wall on the leading side being inclined at a smaller angle to the general plane of the grate surface, and the pocket-wall on the following side being inclined at a larger angle to the general plane of the grate surface.

1,877,321. WIPER ARM MOUNTING FOR WINDSHIELD CLEANERS. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Jan. 30, 1929. Serial No. 336,245. 4 Claims. (Cl. 15—253.)



1. In a windshield cleaner, an actuator, and wiper-mounting means carried thereby and comprising a carrier body having spaced ears provided with apertures, a bushing mounted in the apertures of said ears, a cleaner arm having a lateral extension removably journalled in said bushing to permit said arm to swing to and from the windshield, and a torsion spring anchored with respect to the carrier body, said spring being disposed about said bushing and having an arm interlockingly and removably engaging said cleaner arm, and acting to both secure the cleaner arm against displacement from said bearing and maintain said cleaner arm in an operative position with the windshield.

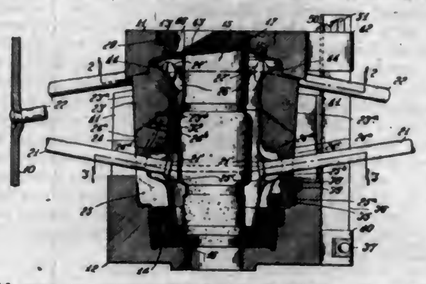
1,877,322. METHOD AND APPARATUS FOR HEAT EXCHANGES. STEWART H. HULSE, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 513,873. 4 Claims. (Cl. 257—239.)



1. In heat exchange apparatus, a tank for holding a body of liquid, means for conveying liquid into the tank, means for conveying liquid out of the tank, pipes through which a liquid of different temperature flows and arranged to be immersed in the body of liquid, connections with said pipes for supplying the liquid thereto and conveying it therefrom, and a means within the tank for ejecting the liquid from a common center radially outwardly in all directions thereby effecting turbulent circulation of the liquid uniformly throughout the tank.

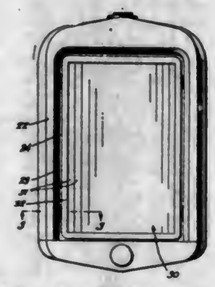
1,877,323. MOLD. WILLIAM A. HYLAND, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 19, 1931. Serial No. 509,582. 18 Claims. (Cl. 22—120.)

1. In a mold for casting a scalloped hub on a wheel having its outer and inner sets of spokes initially assembled with the rim, and wherein the free ends of said spokes are adapted to be embedded within the scallops of the finished hub, the combination of a cope, a drag, a center core extending between said cope and drag, a first means carried by said drag and disposed about said center core, a second means mounted adjacent said first means and also disposed about said center core, said first and second means cooperating to support the free ends of one set of spokes in fixed relation within the mold cavity, and a third means seated upon said second means and disposed about the center core, said third means cooperating with



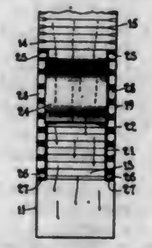
said cope to support the free ends of the other set of spokes in fixed relation within the mold cavity, said first means and said cope being adapted to form the contour of the laterally outer extremities of the scalloped hub, respectively, said second and third means cooperating to form the outer contour of the portion of the scalloped hub that extends between the two sets of spokes.

1,877,324. MOUNTING FOR RADIATOR SHUTTERS. AUGUST F. IHDE, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Filed July 31, 1930. Serial No. 472,098. 9 Claims. (Cl. 180—68.)



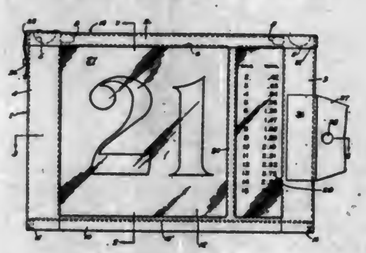
1. In combination with a radiator, a saddle for resiliently mounting said radiator to a vehicle, said saddle including upright bars attached to said radiator, a radiator shell connected to said saddle and provided with a central opening, and a shutter unit extending through said central opening and secured directly to said saddle.

1,877,325. RADIATOR CRANK BOX. AUGUST F. IHDE, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Filed Feb. 28, 1931. Serial No. 519,141. 4 Claims. (Cl. 257—125.)



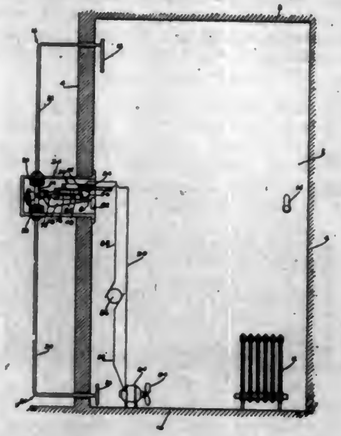
4. A crank box for radiators comprising a pair of plates each having a peripheral flange extending outwardly to a face of the radiator, and each of said plates having an annular flange defining an opening therethrough, and a tubular member telescoped to said annular flanges and joining said plates, the upper and lower portions of the peripheral flanges presenting surfaces adapted for continuous contact with portions of a cooling unit of the radiator and a water tank of the radiator, and the side portions of the peripheral flanges presenting irregular surfaces for contact with irregular surfaces of portions of the cooling unit of the radiator.

1,877,326. PRICE SIGN. RUDOLPH L. SCHWARTZ and WILLIAM PAUL MARTIN, Buffalo, N. Y., assignors to Martin & Schwartz, Inc., Buffalo, N. Y. Filed Apr. 4, 1930. Serial No. 441,538. 6 Claims. (Cl. 40—64.)



1. In a card holding sign, a rectilinear frame having an open edge, side walls on said frame having apertures, spaced transparent panes in said frame covering the apertures in the side walls, a holder member having a pair of spaced rail members, spaced flange members on each rail member, said flange members on the opposite rail members extending toward each other, said holder member positioned within said frame with the rail members extending toward said open edge and with the flanges of each in contacting relation with the transparent panes, and cards inserted in said frame through said open edge, retained between the opposite rails of the holder and spaced from the panes by the flanges thereof.

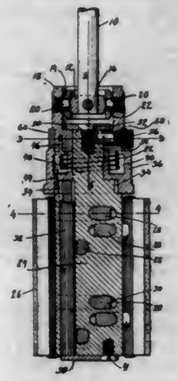
1,877,327. TEMPERATURE CONTROL APPARATUS. WARD H. INGERSOLL, St. Paul, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed July 6, 1931. Serial No. 548,753. 11 Claims. (Cl. 236—1.)



2. In an apparatus for controlling the temperature of air in a room, a first thermostat having a heat sens'tive part within said room adjacent its ceiling, a second ther-

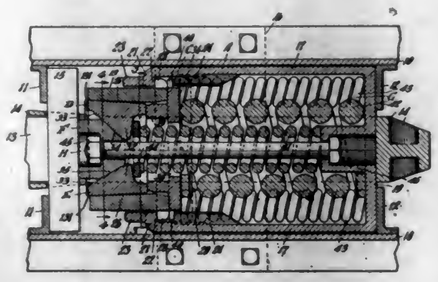
mostat having a heat sensitive part within the room adjacent the floor thereof, and means associated with said thermostats for agitating the air within said room when there is a predetermined difference between the temperatures of the said heat sensitive parts of the first and second thermostats.

1,877,328. GRINDING MECHANISM. FRANK J. JESCHKE, Detroit, Mich., assignor of one-half to James J. Young, Detroit, Mich. Filed Feb. 5, 1931. Serial No. 513,494. 4 Claims. (Cl. 51—184.1.)



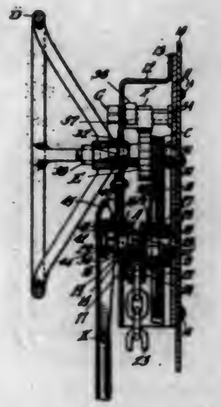
1. A grinding tool having, in combination, a body, abrasives carried thereby to rotate therewith and radially adjustable with respect to the body, a driving part coupled with the body through a lost motion connection to drive the body directly upon the taking up of said lost motion, adjustment mechanism including a rotatable member coupled with the abrasives to adjust their grinding diameter upon rotation of the member and a yieldable element coupling the member with the driving part to be tensioned during the lost motion movement of said part in picking up the body for rotation to urge said member rotatably.

1,877,329. FRICTION SHOCK ABSORBING MECHANISM. GEORGE A. JOHNSON, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,674. 2 Claims. (Cl. 213—24.)



1. In a friction shock absorbing mechanism, the combination with a spring cage having a set of top and bottom opposed walls and a set of spaced side walls, one of said sets of opposed walls having outer retaining shoulders, and the other set of said walls having end abutment shoulders spaced inwardly from said retaining shoulders; of a hexagonal friction shell having lateral flanges engaged in back of said retaining shoulders, said shell being movable lengthwise of the cage and having its inward movement arrested by engagement with the abutment shoulders of the cage, thereby limiting the relative movement of the shell and cage to less than the full compression stroke of the mechanism; friction shoes within the shell; wedge means cooperating with the shoes, said shoes being movable with respect to the shell to a predetermined extent; a spring resistance within the cage; a spring follower interposed between the spring resistance and the inner end of the friction shell, said spring follower having an enlargement on the front face thereof telescoped within the shell to an extent exceeding the amount of relative movement of the shell and shoes, thereby holding said shell and cage against relative lateral displacement in all operative positions thereof.

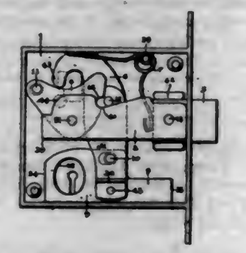
1,877,330. HAND BRAKE. GEORGE A. JOHNSON and STACY B. HASELTINE, Chicago, Ill., assignors to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 7, 1930. Serial No. 473,560. 5 Claims. (Cl. 74—112.)



1. In a hand brake mechanism, the combination with a chain winding drum member; of a gear member coaxial therewith, said gear member and drum member having alined axial openings of angular cross section; a supporting bearing means; a clutch element slidably mounted in said drum opening, said clutch element having a portion of circular cross section rotatably supported on the bearing means, and a portion of angular cross section interfitting with said opening of one of said members, said portion of angular cross section being operatively engaged with the opening of the other member during a chain winding operation; and lever means for reciprocating said clutch element to disengage said angular portion from one of said members and permit free running of the chain during release of the brakes.

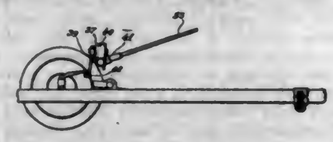
1,877,331. DOORLOCK. CARLETON JOHNSTONE, San Mateo, Calif. Filed Aug. 3, 1931. Serial No. 554,818. 13 Claims. (Cl. 70—29.)

1. In a door lock, a latch bolt, operating mechanism therefor, inner and outer door knob supporting spindles mounted for swinging movement in a vertical plane for selectively actuating the bolt operating mechanism to retract the bolt, spring means for normally holding the latch bolt in its projected position, the inner door knob supporting spindle being further capable of swinging move-



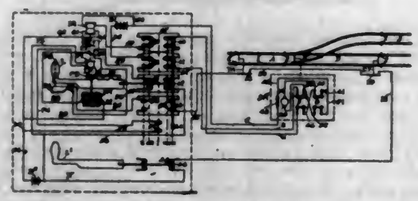
ment in a horizontal plane, and means controlled by the movement of the inner door knob spindle in a horizontal plane for locking the bolt in its projected position.

1,877,332. MOTOR VEHICLE. LEON LAISNE, Nantes, France. Filed Sept. 11, 1928, Serial No. 305,256, and in Belgium Sept. 19, 1927. 3 Claims. (Cl. 280—96.)



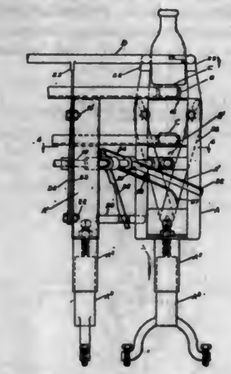
1. In steering mechanism for the chassis of an automobile vehicle means transmitting to the wheels the movement of the governing rod actuated by the steering shaft, comprising two independent connecting bars of adjustable length substantially in extension of one another, and a universal ball joint articulating the inner ends of said bars to the said governing rod which allows liberty of movement in all directions substantially as described.

1,877,333. INTERLOCKING SYSTEM FOR RAILROADS. EDWIN C. LARBY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 7, 1930. Serial No. 465,863. 12 Claims. (Cl. 246—135.)



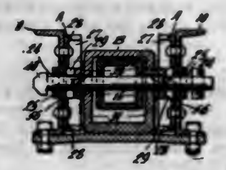
1. In combination; a switch machine for operating railway track switches; a lever having a half normal position and a half reverse position for operating said switch machine; and locking means for preventing said lever being moved to the full normal position unless said switch machine has been operated to the normal position and preventing said lever being moved to the full reverse position unless said switch machine has been first operated to the reverse position comprising; a stick relay having a pick-up and a stick circuit, said pick-up circuit including the armature of the operating motor of said switch machine when said switch machine is being dynamically braked, and said stick circuit including a contact of said lever closed when said lever applies operating current to said switch machine to operate it to the last operated position, and means controlled by said stick relay for permitting said lever to be moved to the corresponding full position.

1,877,334. CONVEYER. HARRY D. LATHROP and WALTER H. PAULSON, Chicago, Ill.; said Paulson assignor to said Lathrop. Filed Apr. 20, 1932. Serial No. 606,497. 14 Claims. (Cl. 198—204.)



1. In a device of the character set forth, a conveyer chain, means for supporting the chain, a guide rail supported above and at one side of said chain, means for raising and lowering the rail, and guide means for directing the rail away from the chain as the rail is raised and toward the chain as the rail is lowered.

1,877,335. RAILWAY DRAFT RIGGING. HARVEY J. LOUNSBURY, Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Nov. 5, 1928, Serial No. 317,148, and in Canada Sept. 18, 1929. Divided and this application filed Jan. 14, 1931. Serial No. 508,679. 3 Claims. (Cl. 213—50.)



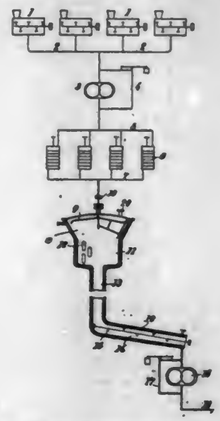
2. A combined front stop and striking casting for railway cars having spaced side walls provided with coupler key receiving slot sections, said slot sections being defined by outwardly projecting wall portions, said wall portions converging outwardly and having their outermost sections cooperating with the coupler key to guide the same.

1,877,336. PANEL FOR THE WALLS AND DOORS OF REFRIGERATORS AND COLD STORAGE ROOMS. GEORGE LOVELL and GEORGE DIGBY LOVELL, Stratford, London, England. Filed May 1, 1931, Serial No. 534,268, and in Great Britain Dec. 18, 1930. 3 Claims. (Cl. 20—56.5.)



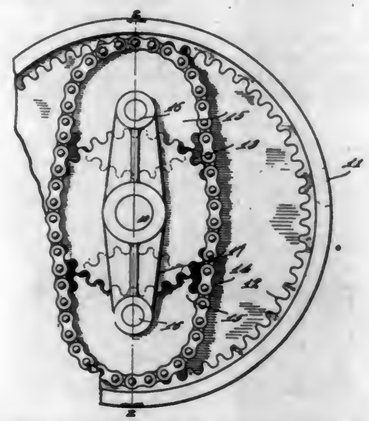
1. A heat insulating transparent doublewalled panel for the walls and doors of refrigerators and cold storage rooms, comprising in combination: two glass plates; air-tightly adherent metal rims on each of said glass plates; a metal frame into which said metal rims are inserted; and soldered joints uniting said metal rims air-tightly with said metal frame, substantially as described.

1,877,337. APPARATUS FOR PREPARING HIGHLY UNIFORM SOLUTIONS FOR THE MANUFACTURE OF ARTIFICIAL PRODUCTS. ADOLF KIMPF, Dessau-Ziebigk in Anhalt, and ARNULF HAGER, Wolfen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 25, 1930, Serial No. 438,870, and in Germany Mar. 27, 1929. 3 Claims. (Cl. 18—8.)



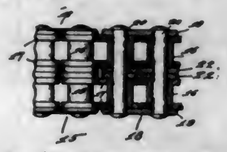
1. In a machine for producing highly uniform solutions for the manufacture of artificial products consisting of cellulose derivatives a homogenizing and deaerating means comprising a vessel with a funnel-shaped head part, a circularly rotary swivel-tube adapted to distribute the spinning solution in the form of a thin layer on the funnel-shaped head part, means to evacuate the said vessel, a cylindrical collecting part, a tubular extension piece of substantial height, a slightly inclined almost horizontally mounted receptacle and in the latter a mixing device.

1,877,338. CHAIN DRIVE. CLARENCE P. KOTTLOWSKI, Indianapolis, Ind., assignor to Diamond Chain and Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 23, 1929. Serial No. 401,906. 3 Claims. (Cl. 74—31.)



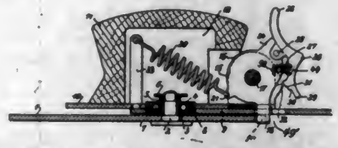
1. A power-transmitting drive, comprising two members relatively rotatable on parallel axes, one of said members being provided with a plurality of circumferential series of internal sprocket teeth and the other of said members being provided with a plurality of circumferential series of external sprocket teeth respectively co-planar with the series of interior teeth, a multiple chain operatively interconnecting said two members through their respective series of teeth, alternate strands of said chain engaging said internal and external teeth, and one or more auxiliary sprockets engaging some or all of the remaining strands of said chain, said auxiliary sprockets being rotatable about an axis parallel to the axes of the driving and driven members for holding the chain in engagement with said internal series of teeth.

1,877,339. CHAIN. CLARENCE P. KOTTLOWSKI, Indianapolis, Ind., assignor to Diamond Chain and Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed July 20, 1928. Serial No. 294,203. 3 Claims. (Cl. 74—31.)



1. A chain for co-operating with a sprocket having a plurality of axially spaced rows of teeth, said chain comprising a plurality of series of blocks co-operating respectively with said rows of sprocket teeth, each of said blocks being formed of two side-bars and two spaced bushings mounted therebetween for engagement with the teeth of said sprocket, said bushings having a press fit in holes in said block side-bars, links connecting said blocks, each of said links comprising outer side-bars and pins extending therebetween, each of said pins passing through one bushing of a block in each series of blocks, and one or more intermediate side-bars extending between the two pins of each link and located between adjacent series of blocks.

1,877,340. DRAFTING MACHINE. FRANZ KUHLMANN, Rustringen, Germany. Filed May 2, 1930, Serial No. 449,203, and in Germany May 7, 1929. 4 Claims. (Cl. 33—79.)



1. A drafting machine, comprising a carrier adapted to be moved across the surface of the paper, a member rotatably mounted on said carrier and carrying a drafting instrument, means for locking said member relatively to said carrier comprising a locking member mounted on said rotatable member and adapted for locking engagement with said carrier, a two-armed lever mounted on said locking member and adapted to be coupled therewith when acting on one of its arms to move the same into non-locking position and means on said lever operative when acting on the other arm thereof for moving and locking said locking member in non-locking position.

1,877,341. RULER FOR USE BY DRAFTSMEN AND OTHERS IN DRAWING. DANIEL W. B. KURTZ, Jr., Columbia, Mo. Filed Apr. 17, 1928. Serial No. 270,611. 1 Claim. (Cl. 33—107.)



An improved ruler having one edge provided with uniform notches and having transverse unit indicia lines and having a plurality of longitudinally aligned holes of rectangular shape each of unit length and arranged to extend between alternate pairs of indicia lines, said holes being uniformly spaced apart and spaced from said notches and positioned in predetermined relationship to the said notches whereby the units are emphasized and one to three parallel broken lines may be drafted as desired.

1,877,342. METHOD OF MAKING QUILLS. SETH G. MALBY, Tenafly, N. J., assignor to Aluminum Screw Machine Products Company, Edgewater, N. J., a Corporation of New Jersey. Filed June 17, 1930. Serial No. 461,698. 8 Claims. (Cl. 29—170.)



1. A method of producing a one-piece quill which comprises forming a bearing in the closed end of a tubular member, swaging the tubular member to provide a cylindrical stem at one end thereof of a reduced diameter and a conical portion intermediate said bearing and cylindrical stem, and grooving said conical portion.

1,877,343. HANGER. SETH G. MALBY, Tenafly, N. J., assignor to Aluminum Screw Machine Products Company, Edgewater, N. J., a Corporation of New Jersey. Filed Mar. 6, 1930. Serial No. 433,847. 7 Claims. (Cl. 248—22.)



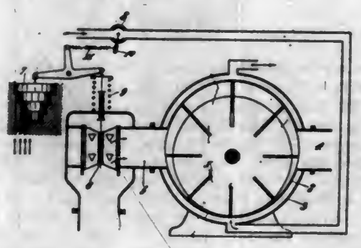
7. In combination with a wall having two apertures therethrough, a hanger having the shank portion thereof passing through one of said apertures, an angular offset at one end of said shank disposed along the back of the wall, said offset being provided with an angular end which passes through the other aperture of said wall, and means associated with those portions of the shank and the angular end extending in front of said wall for interlocking said hanger to said wall.

1,877,344. NONSOILING PLASTER BACKING AND METHOD OF MAKING IT. GUSTAVE S. MATHEY and CHARLES F. SLOTTER, New Brunswick, N. J., assignors to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 17, 1929. Serial No. 414,808. 2 Claims. (Cl. 91—68.)



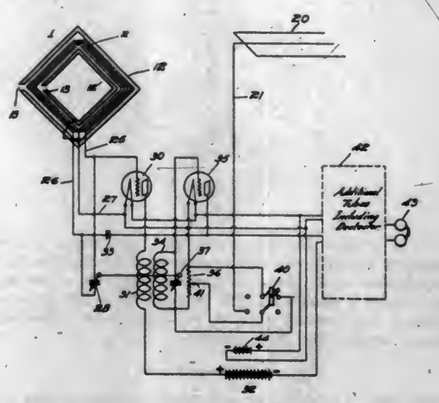
1. In the manufacture of plaster of the character set forth, the method which consists in singeing one surface of the foundation fabric and then applying to that surface a film of cellulose acetate for the purpose and with the result of laying the fuzz or fiber-down and to present a water-repellent, non-soiling, non-sticking, smooth-finished surface, and applying adhesive mass to the other or rough side of the fabric, said film being essentially superficial as to depth so as not to impair the flexible or pliable properties of the fabric.

1,877,345. COOLING WATER REGULATOR FOR ROTARY COMPRESSORS. JOSEF MATTMANN, Winterthur, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation of Switzerland. Filed Oct. 10, 1929, Serial No. 398,737, and in Germany Oct. 31, 1928. 3 Claims. (Cl. 230—209.)



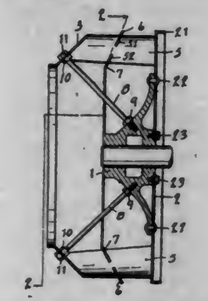
1. A device for regulating the quantity of cooling water of a rotary compressor controlled by a throttle valve operated from a compressed air regulator, comprising in combination a regulating member in the pipe supplying cooling water to the compressor, and adjustable means operatively connecting said member with said valve and air regulator to cause the closure position of said member to be exactly regulated.

1,877,346. SHIELDED LOOP. LESTER O. MARSTELLER, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 251,851. 10 Claims. (Cl. 250—11.)



8. In a radio receiving system, a non-directive antenna, a vacuum-tube amplifier, a resistor in the input circuit thereof, a directive antenna connected to said input circuit, and a switch, in one position, connecting said non-directive antenna to an adjustable point of said resistor and, in another position, establishing a shunt about said resistor.

1,877,347. FAN WHEEL. FRANCIS J. MCMURDIE, Kalamazoo, Mich., assignor to Clarage Fan Company, Kalamazoo, Mich. Filed Aug. 19, 1927. Serial No. 214,079. 1 Claim. (Cl. 230—134.)



A fan wheel comprising a suitable hub, a circular back plate secured thereto, a front fan ring open to form an intake at the center, peripherally-disposed volute fan blades slotted at their mid portions on their outside margins and on their inside margins, and tenoned into said back plate and front ring and welded at the tenons, and intermediate rings of conical sections disposed in said slots in each of said blades outside and inside, and welded at the meeting points of the slots in the blades to the rings whereby the full tensile strength of the rings is preserved with minimum obstruction to air flow, as specified.

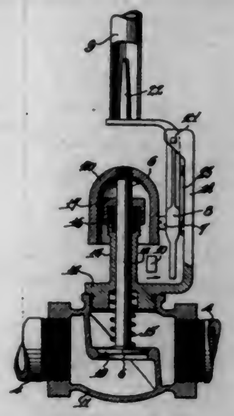
1,877,348. VALVE GRINDER. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1931. Serial No. 573,816. 5 Claims. (Cl. 51—29.)



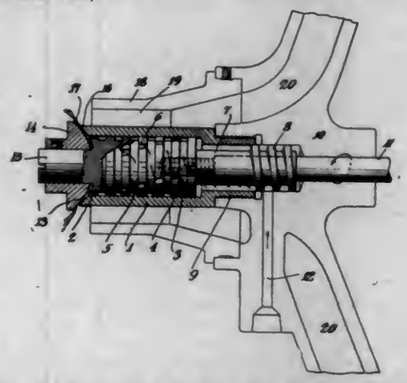
2. In a valve grinder of the class described, a handle provided at its lower end with means for facilitating its attachment to a valve, an annulus rotatably mounted on the handle a hand's breadth or more from the upper end thereof, and means carried by the handle affording a thrust bearing for said annulus.

1,877,349. AUTOMATIC SHUT-OFF MEHCANISM. EDWARD W. MEARS, Merion, Pa., assignor to Mears-Kane-Ofeldt, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 3, 1931. Serial No. 548,501. 7 Claims. (Cl. 137—139.)

1. In automatic valve shut-off mechanism including a valve unit having an axis and resiliently pressed longitudinally inwardly when latched from inward movement at an outward open valve position, a latch, a movable lever carried by the latch and having an arm extending into line with the extended axis of the unit and releasing the latch when pressed longitudinally inwardly by a release member at the said axis and means for supporting the lever to permit and control the character of movement of the lever.



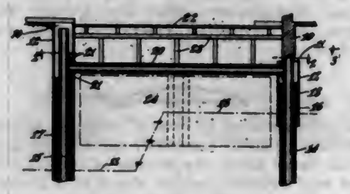
1,877,350. ATOMIZER. HARRY MEACHEM, Teaneck, N. J., assignor to Todd Dry Dock, Engineering & Repair Corporation, Brooklyn, N. Y. Filed Feb. 25, 1931, Serial No. 518,139. Renewed June 29, 1932. 7 Claims. (Cl. 299—63.)



7. In an atomizer for liquid fuel, in combination, a tubular casing, a spindle rotatable therein, said spindle carrying a screw thread near one end of said casing, means for introducing fuel to an interspace of said thread, a series of spaced apart flanges on said spindle, in coaction with said casing, said flanges having peripheral notches for the passage of fuel, and means at the other end of said casing for fuel delivery.

1,877,351. TRENCH BRACING. JAMES C. MEEM, Brooklyn, N. Y., assignor to Underpinning and Foundation Company, New York, N. Y., a Corporation of New York. Filed May 7, 1928. Serial No. 275,583. 5 Claims. (Cl. 61—41.)

1. The method of excavating trenches, subways, tunnels and the like which consists of sinking pits on opposite sides of the soil to be excavated, protecting said pits with sheeting material, inserting vertical girders within said pits, filling in material within said sheeting material to encase said girders, securing cross girders to said vertical girders, excavating soil between said pits and beneath said girders in the line of excavation, and placing sheeting material between pits along the line of excavation as the excavation progresses to form coil retaining walls which are supported by and transmit the soil pressures to said vertical girders.



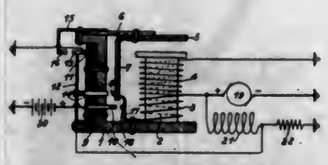
1,877,352. RESISTOR UNIT. GEORGE E. MEGOW, South Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 11, 1929. Serial No. 346,086. 5 Claims. (Cl. 201—76.)



2. In a resistor unit of the character described, a body member, an insulating member enclosing the body member to substantially the end thereof, an end cap engaged over the end of the body member and the insulating member, conducting material disposed between the end cap and the body member and to provide an electrical connection therebetween, and ribs of conducting material extended inwardly from the conducting material between the end cap and the body member and overlying the insulating member for insuring electrical connection between the end cap and the body member in the event the end cap moves slightly away from the end of the body member, said ribs of conducting material being received in grooves formed in the end cap.

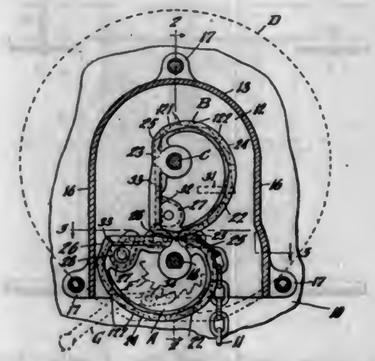
4. The hereindescribed method of forming resistor units which consists in encasing the unit in insulating material to a point spaced slightly from its ends, in dipping the ends of the encased unit in conducting cement, and in pressing cap members onto the ends of the encased unit whereby contact is made between the cap members and the resistor unit only at its very ends.

1,877,353. ELECTROMAGNETIC SWITCH. FRIEDRICH MENZEL, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 28, 1927, Serial No. 209,001, and in Germany Jan. 20, 1927. 8 Claims. (Cl. 200—104.)



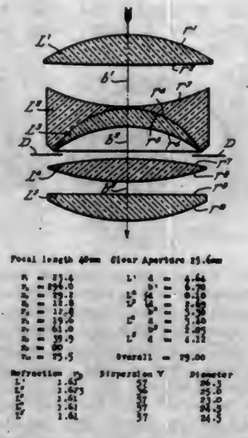
1. In an automatic cut-out and regulator for battery charging systems, a cut-out switch, a vibratory regulator switch, tension means tending to close the cut-out switch, a common actuating magnet and armature for both said switches, said armature being normally in engagement with the cut-out switch to hold the same open and arranged upon actuation first to move out of operative engagement with the cut-out switch permitting the same to close and upon further movement to come into cooperative engagement with the regulator switch only.

1,877,354. HAND BRAKE. WILLIAM H. MINER, Chazy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,773. 12 Claims. (Cl. 254—149.)



1. In a hand brake, the combination with a chain; of a pair of rotary members having gripping surfaces between which the chain is clamped, and to one of which the chain is anchored, each of said surfaces being provided with spaced seats adapted to accommodate the corresponding sides of the chain links; means for rotating the other of said rotary members to thereby wind the chain on the first named member; and means for preventing backward rotation of said members in an unwinding direction.

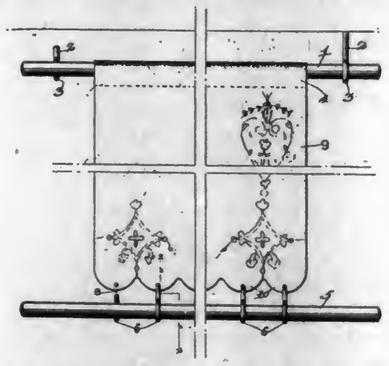
1,877,355. OBJECTIVE. CHARLES CLAYTON MINOR, Hollywood, Calif. Filed Nov. 19, 1928. Serial No. 320,251. 5 Claims. (Cl. 88—57.)



1. A photographic objective comprising, in combination, four positive lenses of crown glass, all having the same index of refraction and identical dispersion, a negative lens of flint glass having an index of refraction substantially as low as the crown glass and dispersion materially higher than the crown glass, the lenses being arranged as follows: First, a double convex crown receiving the incident rays;

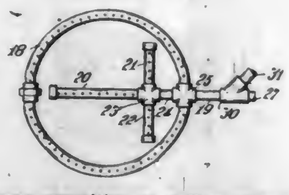
second, a double concave flint; third, a concavo-convex crown fitted into the flint and cemented thereto; fourth, a double convex crown; and fifth, a plano-convex crown, and a diaphragm between the third and fourth lenses.

1,877,356. CURTAIN STRETCHER. FRIEDA MOLDENHAUER, Watertown, Wis. Filed Feb. 25, 1930. Serial No. 431,113. 1 Claim. (Cl. 45—24.)



In a curtain stretcher and drier, a curtain having a loop at its upper end and ornamental, spaced points at its lower end, a supporting rod adapted to be in removable position in the upper curtain loop for evenly supporting the curtain throughout its entire width, in combination with a gravity stretcher comprising a rod of predetermined weight and a plurality of hooks slidable thereon adapted to engage the curtain points for imparting a plurality of even applications of the weight rod to the curtain throughout its width whereby the upper portion of the curtain is smoothly stretched and the lower portion thereof is stretched at spaced intervals to develop a series of gentle folds or flutes at said lower end of the curtain resulting from unduly stretching the fabric of said curtain at spaced intervals.

1,877,357. GAS BURNER. CORNELIUS MOOR, Calumet City, Ill. Filed Mar. 8, 1928. Serial No. 260,193. 1 Claim. (Cl. 158—104.)



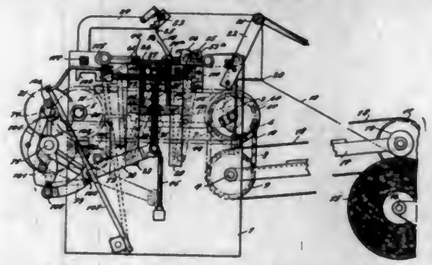
A gas burner comprising an endless outer pipe, an X-coupling interposed therein, a burner element consisting of a series of associated pipes disposed within the area bordered by the first-named pipe and connected at one point with said X-coupling, a plug having a central opening disposed in the intake end of said burner element, a fuel supply pipe connected with the arm of the coupling opposite to that connected with the said burner element, a gas supply and an air supply pipe associated with said fuel supply pipe, the air supply pipe including a delivery end portion of small diameter extending axially through the fuel supply pipe and providing an annular gas passage in the latter around said small pipe, an air compressor feeding the air supply pipe, and connection between the gas supply pipe and a source of combustible gas, there being perforations in the first-named pipe and said burner element.

1,877,358. MANUFACTURING PROCESS OF WATCH GLASSES MADE OF TRANSPARENT ELASTIC MATERIAL. ERNEST MORF, La Chaux-De-Fonds, Switzerland, assignor to the Firm Meyer & Studeli S. A., Soleure, Switzerland. Filed Apr. 9, 1931, Serial No. 528,936, and in Switzerland Oct. 29, 1930. 1 Claim. (Cl. 29—84.)



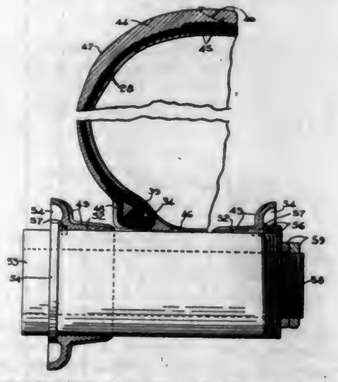
In a manufacturing process of cambered watch glasses of transparent elastic material especially for rectangular and other fancy bezels the process of cutting out from a plate of said material and by means of a profiled cutter a plane pattern shaped according to geometrical calculation such that it fits in the predetermined cambered state exactly into the profiled bezel.

1,877,359. PAPER FOLDING MACHINE. LOUIS H. MORIN, New York, N. Y., assignor to West Disinfecting Company, a Corporation of New York. Filed Dec. 12, 1929. Serial No. 413,461. 18 Claims. (Cl. 270—79.)



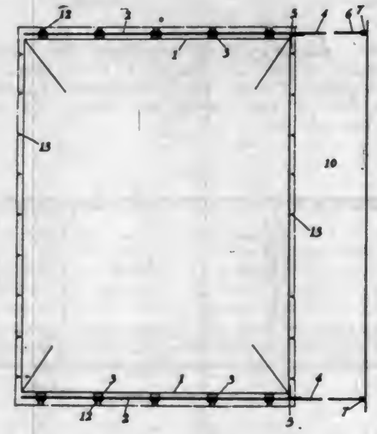
1. A web folding machine comprising a yieldably mounted platen, gripper jaws pivoted on fixed pivots and overhanging opposite edges of the platen, means for directing web material toward the platen between the jaws, two folder blades on opposite sides of the web connected to reciprocate together each to and from a position underneath the jaw on the side of the web opposite to it, and means for raising and lowering the jaws in timed relation to the entrance and withdrawal of the blade coacting therewith.

1,877,360. PNEUMATIC WHEEL. ALVIN J. MUSSELMAN, Cuyahoga Falls, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Oct. 4, 1929, Serial No. 397,892. Divided and this application filed Feb. 10, 1931. Serial No. 514,746. 3 Claims. (Cl. 152—13.)



1. A pneumatic balloon tire wheel comprising an axle, a hub-barrel journaled thereon and equipped with retaining flanges, and a balloon tire mounted directly on said hub-barrel and secured to said retaining flanges, said tire including an endless fabric band having looped edges shirred to form small annuli, gathering rings in said loops, inextensible beads secured to said structure at said annuli, and a rubber compound incorporated with the fabric, the balloon tire being vulcanized as a whole.

1,877,361. SHIP'S HATCH. EDWARD PERKINS, Rhodes, Aegean Sea. Filed Mar. 10, 1932, Serial No. 598,017, and in Great Britain Mar. 12, 1931. 5 Claims. (Cl. 114—202.)



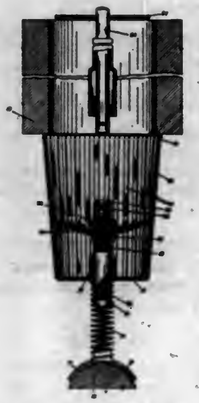
1. Means for covering and uncovering hatchways comprising movable rails extending alongside two parallel walls of the hatch coaming for substantially the whole length thereof, continuation rails across the deck, means for raising said movable rails into alignment with the continuation rails, and anti-friction bearing members on the hatch cover to support the latter transportably on the rails.

1,877,362. PROTECTING HOOD FOR CIGAR AND CIGARETTE LIGHTERS. WARREN W. SACKETT, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 28, 1931. Serial No. 571,527. 6 Claims. (Cl. 67—4.)



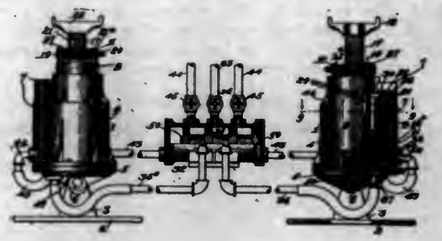
3. A protecting enclosure for cigar and cigarette lighters comprising a pair of opposed open ended hoods of the same size in cross section, and a tubular spacer having its ends telescoped with the open ends of the hoods and having an opening through which a cigar or cigarette may be inserted into the enclosure.

1,877,363. ADJUSTABLE WASTE RECEIVER. GEORGE A. SAVILLE, Jr., Lincoln, Nebr. Filed Feb. 20, 1932. Serial No. 594,371. 6 Claims. (Cl. 51—270.)



1. A waste receiver for use beneath an engine cylinder which is open at the top and bottom, said waste receiver having an expansible mouth which is contractible for insertion through the cylinder from the top thereof.

1,877,364. AUTOMOBILE OR VEHICLE GREASING JACK. JACOB A. SCHOENBERG, Spokane, Wash. Filed Sept. 25, 1930. Serial No. 484,424. 12 Claims. (Cl. 254—93.)

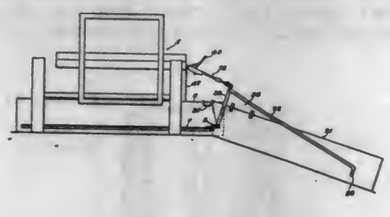


1. In a grease jack, the combination with a support, of a casing mounted on said support, a sliding piston in said casing, means in the side of said casing and in the side of said piston for varying the stroke of the piston, and a jack screw mounted on the piston.

1,877,365. ROAD GRADER ATTACHMENT. CARL B. SCHEFFOLD, Marquis, Saskatchewan, Canada. Filed Feb. 8, 1932. Serial No. 591,696. 4 Claims. (Cl. 37—156.)

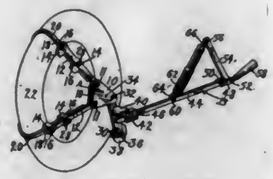
1. An attachment for a road grader comprising, in combination, a conventional road grader having a "circle" carrying a road surfacing blade, a sloping blade mounted to extend from the outward end of the grader blade, ad-

justable means connected between the inward end portion of the sloping blade and the "circle" of the grader for supporting the sloping blade at a desired adjusted angle



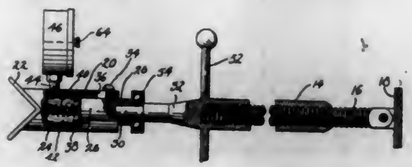
with the horizontal, and a draft means connected between the outer end portion of the sloping blade and a forepart of the grader.

1,877,366. BRAKE TESTER. ALFRED B. SEPPMANN, Lake Crystal, Minn. Filed Apr. 4, 1927. Serial No. 180,821. 10 Claims. (Cl. 265—1.)



1. A tester for automobile brakes comprising a wheel engaging device including a plate, a pair of tire engaging hooks and a tire engaging lever pivoted on said plate, an operating lever secured to said tire engaging lever, a hand lever pivoted to said operating lever and a scale device interposed between one arm of said hand lever and said operating lever for registering the force applied to the hand lever relative to the operating lever.

1,877,367. PEDAL DEPRESSING MEANS FOR BRAKE TESTERS. ALFRED B. SEPPMANN, Lake Crystal, Minn. Filed Oct. 15, 1928. Serial No. 312,586. 4 Claims. (Cl. 265—47.)

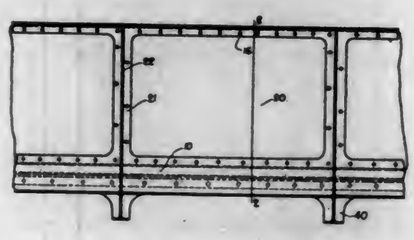


4. A pedal depressing means comprising a pair of interengaging threaded members, means at the outer end of one of said members for engaging a stationary object, a cylinder having at one end a pedal-engaging seat, a piston movably mounted in said cylinder, a fluid in said cylinder, means for rotating one of said threaded members, one of said threaded members having an operative connection with said piston, and a fluid pressure gauge communicating with said cylinder for indicating the amount of pressure exerted by the extension of the threaded members.

1,877,368. PROCESS FOR DRYING NATURAL SODIUM CARBONATE. WILLIAM FRED SEYER, Vancouver, British Columbia, Canada. Filed Apr. 10, 1929, Serial No. 354,174, and in Canada Apr. 10, 1928. 2 Claims. (Cl. 23—1.)

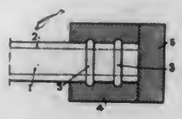
1. The process of drying a dekahydrate salt which consists of mixing with one volume thereof 8 volumes of dry salt of the same kind and of evaporating the moisture from the mass.

1,877,369. RAILWAY CAR CONSTRUCTION. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 13, 1929. Serial No. 406,801. 12 Claims. (Cl. 105—406.)



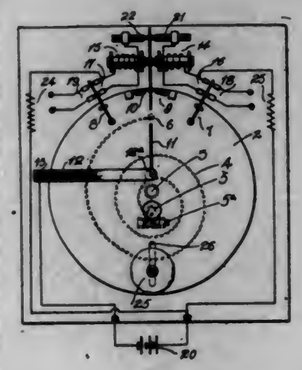
1. A wall for a railway car consisting of a one piece casting forming a load sustaining element comprising a tension member, a compression member, vertical posts connecting the tension and compression members, and diagonal braces extending from the upper end of one post to the lower end of an adjacent post, said members, posts and braces having flush interior surfaces.

1,877,370. METHOD OF MAKING LOOSENING STRETCHERS FOR CABLES, RODS AND THE LIKE. ALBERT PAUL STREIT, Cachan, France. Filed Mar. 15, 1929, Serial No. 347,263, and in France Mar. 20, 1928. 3 Claims. (Cl. 29—148.)



2. The method of manufacturing a tubular metal article having a reduced portion adapted to be threaded internally, which consists in taking a tubular blank whose bore corresponds to that of the body of the article to be produced, and exerting a transverse inward pressure on that portion of the blank which is to form said reduced portion of the article, while holding the metal at the outer peripheral surface of said portion of the blank against longitudinal flow, by the interlocking of circumferential ribs and grooves formed on the blank and ont he adjacent face of the pressure-exerting device, whereby the pressure exerted against said portion will operate not only to reduce said portion but to increase the density and strength of the metal in said portion.

1,877,371. THERMOSTAT. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 335,109. 18 Claims. Cl. 200—139.)



1. A thermostat comprising in combination a support, an angularly movable disc member, a bimetallic thermoexpansive element connected at one end with said support and at the other end with said angularly movable disc member, and a counterbalancing weight carried by said disc, magnetic means disposed adjacent said disc member for retaining said element in predetermined position and an electrical contact system controlled by said element.

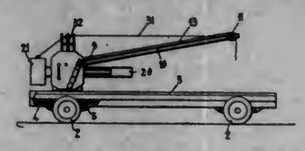
1,877,372. CONTAINER. FRED C. TRUESBURY, Rockford, Ill., assignor to J. L. Clark Manufacturing Co., Rockford, Ill., a Corporation of Illinois. Filed June 20, 1931. Serial No. 545,682. 7 Claims. (Cl. 221—64.)



1. A container having side walls and an end wall, said end wall having an opening formed therein, a closure member mounted on said wall for rotation about an axis positioned at one side of said opening and shaped to close said opening or in rotation about said axis to gradually uncover said opening, said opening being formed to provide a mouth having a thin straight edge and a thin curved edge, said mouth being of a size adapted to permit the bowl of a spoon to be withdrawn therefrom with its edges in contact with either of the side edges of the mouth to measure different quantities of material on the spoon, and said wall having a plurality of sifter holes formed therein adjacent to one end of said opening and positioned to permit closure thereof by said closure member while said opening is closed.

1,877,373. CRANE. CARLO COHEN-VENEZIAN, Turin, Italy. Filed Mar. 5, 1931, Serial No. 520,453, and in Italy Mar. 13, 1930. 5 Claims. (Cl. 212—49.)

1. A vehicle crane comprising a body consisting of two plates spaced from and connected with each other, means in said body for pivotal mounting on the vehicle, a jib fulcrumed on said body plates, a lifting winch located in said body, an arm mounted to move longitudinally intermediate said body plates, a counterweight on the outer end of said arm, a gear located intermediate said body plates to move said arm and a member connecting said outer end of said

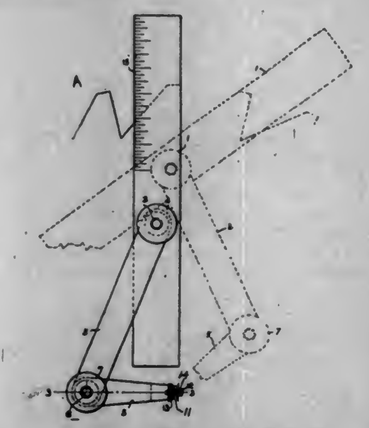


arm with the free end of said jib to raise and depress the same in accordance with outward and inward movements of said arm and counterweight with respect to said crane body.

1,877,374. MOISTURE ABSORBING COMPOSITION AND METHOD OF MAKING THE SAME. GEORGE WITTY, New York, N. Y., assignor to Structural Products Corporation, a Corporation of Delaware. Filed June 18, 1930. Serial No. 462,187. 2 Claims. (Cl. 134—46.)

1. A moisture absorbing composition for newly plastered surfaces consisting of a mixture of a spirit soluble gum, titanium-barium pigment, zinc oxide, denatured alcohol and xylene.

1,877,375. DRAFTING TOOL. ERIC A. WOLFRAM, Rock Island, Ill. Filed Jan. 19, 1931. Serial No. 509,845. 5 Claims. (Cl. 33—75.)

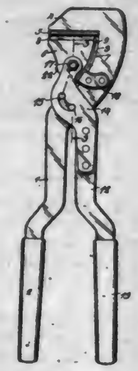


1. A drafting tool, comprising a linear rule, a compound arm support therefor provided at one end with a needle-point for insertable engagement with a drawing-board, and about which said arm may rotate freely and pivotally connected with the rule at the other end, and means for holding said rule immovable with relation to said support.

1,877,376. CORD SEVERING IMPLEMENT. MARCUS G. WRIGHT and FRANCIS D. WOOTTON, Denver, Colo., assignors to The O. M. Franklin Blackley Serum Company, Denver, Colo., a Corporation of Colorado. Filed Apr. 7, 1932. Serial No. 603,762. 7 Claims. (Cl. 128—306.)

5. A funis severing implement comprising, a handle member having one end provided with a jaw, that portion of the handle adjacent the jaw being curved in the arc of a circle, the side of the jaw adjacent the curved portion of the handle being substantially radial with

respect to the arcuate surface, second jaw member movably connected with the arcuate portion of the handle, one side of the second jaw member being curved on the same radius as the arcuate portion of the handle, the side of the second jaw member adjacent the first jaw being substantially radial with respect to the curved surface, means for holding the second jaw member in

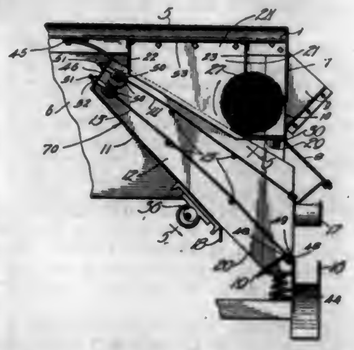


contact with the arcuate surface of the handle, and a lever having one end pivotally connected with the second jaw member, said lever crossing the handle, the handle being provided with a pivot pin and the lever having a curved slot through which the pivot pin extends, the curvature of the slot being such that the pressure between the pivot pin and the side of the slot is on the convex surface of the slot.

1,877,377. PROCESS OF PRODUCING FELTED SHEETS CONTAINING BITUMEN. GIBSON YUNGBLUT, Dayton, Ky., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed June 15, 1929. Serial No. 371,290. 15 Claims. (Cl. 92—21.)

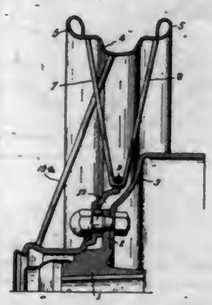
1. That process of forming a feltable mass of fibers and heat plastic waterproofing substance, which comprises associating fibrous aggregates with thin superficial layers of said heat plastic substance, transferring said coated aggregates to a beater and beating them to a pulp.

1,877,378. MATERIAL TREATING APPARATUS. ALFRED L. ADRIANSON, Racine, Wis. Filed Feb. 7, 1930. Serial No. 426,487. 4 Claims. (Cl. 209—245.)



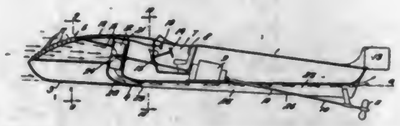
1. In a machine of the class described the combination of a frame, an inclined screen resiliently mounted on the frame, a hopper in front of and spaced horizontally from the upper end of the screen, a rotary feed member at the side of the hopper and between the latter and the upper end of the screen for feeding material laterally from the hopper to the upper end portion of the screen, and a resiliently mounted guide extending from the hopper under and in proximity to the periphery of the rotary feed member.

1,877,379. VEHICLE WHEEL. CHARLES S. ASH, Birmingham, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 9, 1927. Serial No. 204,544. 8 Claims. (Cl. 301—55.)



1. A spoked vehicle wheel having a rim member, a hub mounting member and spokes connecting said rim and hub mounting members, said hub mounting member having transverse openings therethrough and said spokes being arranged in pairs with the inner ends of each pair of spokes within an opening in said hub mounting member and rigidly connected to each other and to said hub mounting member.

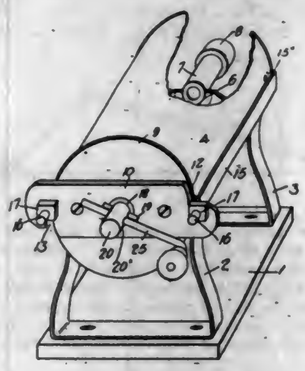
1,877,380. MARINE CRAFT. EDWARD E. BALDWIN, New York, N. Y. Filed Nov. 12, 1929, Serial No. 406,604. Renewed Jan. 29, 1932. 12 Claims. (Cl. 114—67.)



1. In marine craft, a hull, the bottom of which is provided with a cutwater and forward concave planing surfaces at opposite sides of the cutwater, and aft planing surfaces forming an angular channel of inverted V type, the angle of the channel being graduated in acuteness from end to end, in combination with means within the hull for receiving air pressure as the craft moves forward, and means having an outlet for delivering air into said channel under the hull, and said channel directing the current flow in fluid and liquid with a secondary fluid streamline formation.

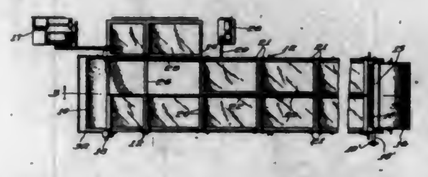
1,877,381. GREASE GUN FILLER. JOHN LORNE BEATON, Parkland, Alberta, Canada, assignor of one-fourth to Gustav Ernest Anton Malchow, Stavely, Canada. Filed Nov. 5, 1930. Serial No. 493,539. 1 Claim. (Cl. 221—47.5.)

A grease gun filler comprising a cylindrical member forming a grease containing chamber having a discharge orifice in the bottom, a discharge tube extending from such orifice, a piston operable within the cylinder against the grease, means operable exteriorly of the piston for forcing the piston against the grease, a closure for the open end of the cylinder, a cross bar secured to the closure and projecting diametrically from each side thereof and having concentrically slotted end portions, and re-



inforcing bars having hooks at one end engaging one end of the cylindrical member, and threaded stems at the opposite end of such reinforcing bars extending through the aforesaid concentric slots, and nuts threaded upon the stems against the cross bar.

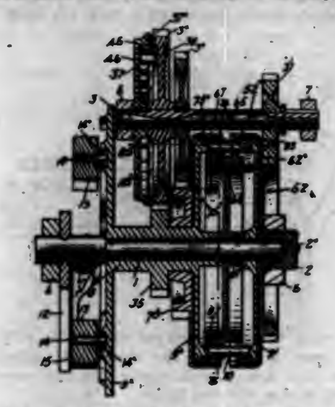
1,877,382. INSOLATING APPARATUS. CHARLES EVERETT BILLS, Evansville, Ind., assignor to Mead Johnson & Company, Evansville, Ind., a Corporation of Indiana. Filed Aug. 8, 1930. Serial No. 474,042. 8 Claims. (Cl. 99—2.)



1. Insolating apparatus comprising a support for material to be insolated, and a cover located above the support, forming a substantially closed chamber between the cover and support, said cover comprising a plurality of frames and sheets of material transparent to ultra violet light mounted in the frames, said frames extending upwardly toward each other from the sides of the apparatus and from approximately the horizontal plane in which the upper lap of the conveyor is located.

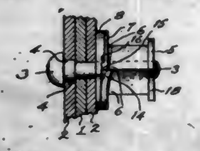
1,877,383. CHANGE GEAR DEVICE. GIBBS BLACKSTOCK, Toronto, Ontario, Canada. Filed Feb. 18, 1930. Serial No. 428,195. 34 Claims. (Cl. 74—59.)

1. In a change gear device of the type described, the combination with the drive and driven shaft, and a plurality of gear trains therebetween each having a releasable link with interengaging locking members, of a controlling device comprising two adjacent parts of the transmission having some mutual angular freedom of movement and a resilient driving connection between them, weights subject to centrifugal force and inward force due to load incorporated in the driving connection, mechanism by which the controlling device actuated by inward movement of the weights due to load operates the change from a higher to a lower gear train and by backward drag on the drive shaft operates the opposite gear change and whereby the load is gradually exerted after a gear train has been closed and not exerted or transmitted during the opening or closing of a gear



train, and catch devices carried between the related locking members to actuate their engagement on synchronization.

1,877,384. NUT-LOCK. WILLIAM T. BURKHALTER, Reidsville, Ga. Filed Nov. 18, 1929. Serial No. 408,137. 1 Claim. (Cl. 151—39.)

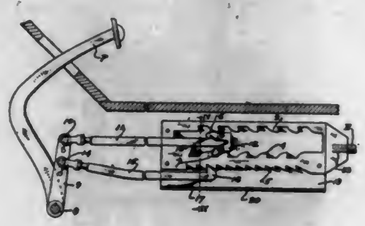


In a nut-lock, the combination of a bolt and a nut threaded thereon provided with ratchet teeth on its inner face, with contacting washers of the same diameter on the bolt between the nut and the object through which the bolt passes and with the inner washer provided with means for frictional engagement with the abutting face of the object, said washers having flat contacting faces oblique to the axis of the washers and their outer faces at right-angles to said axis and with the inclination of the contacting faces at a greater pitch than that of the engaged threads of the bolt and nut, said washers being arranged in normal contact relation with the thin edge of one washer opposite to the thick edge of the other washer, the inner of said washers having a radial shoulder on its inner face at the thicker part of the washer, the outer of said washers being radially cut across at its thinner part to provide separated end parts, one of said end parts being bent outwardly to form a pawl to engage the ratchet teeth of the nut on backward turning of the nut, the backward turning of the nut operating to rotate the engaged washer relatively to the other washer so that the contacting faces siding on each other at a greater pitch than that of the engaged threads of the bolt and nut effect a wedging thrust of the washers between the object and the nut to prevent loosening of the latter, and a radial lug on the other end part of the outer washer operating to engage the radial shoulder on the inner washer to maintain the two washers in their normal relation should the outer washer be turned by the forward turning of the nut on the bolt.

1,877,385. AUTOMATIC TAKE-UP MECHANISM. JOSEPH A. CASALETTO, Los Gatos, Calif. Filed Oct. 6, 1930. Serial No. 486,714. 8 Claims. (Cl. 188—196.)

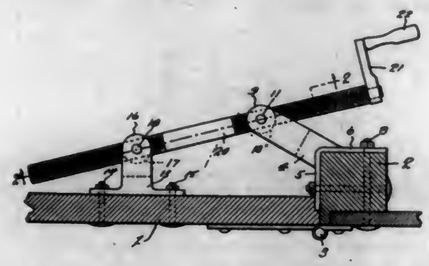
1. A brake mechanism comprising a brake, a brake lever, a pivotally mounted shaft to which the brake lever is secured, a crank arm secured on said shaft and movable

in unison with the brake lever, a pair of rods pivotally connected to said crank arm, one at the outer end thereof and one at a point intermediate the shaft and the outer end, a take-up device including a pair of toothed rack



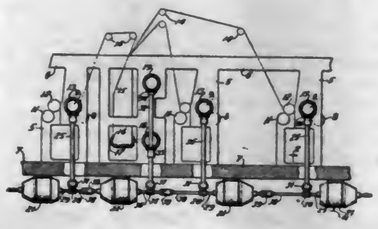
bars, a pawl on the outermost rod engageable with one of said rack bars, a pawl on the inner rod engaging the other rack bar, and a link mechanism connected with said take-up device and the brake.

1,877,386. DOOR OPERATING DEVICE. JOHN L. CHRISTOPHER, Euclid, Ohio. Filed Aug. 5, 1931. Serial No. 555,321. 3 Claims. (Cl. 268—61.)



1. A door opening and closing device comprising a bracket secured to the door jamb, a second bracket secured to the door, a nut carried by each of said brackets, a shaft extending through said nuts, the opposite end portions of said shaft having right and left hand threads respectively and a crank for turning said shaft.

1,877,387. DRIVING MECHANISM FOR PRINTING PRESSES. ALLAN J. CLINE, Chicago, Ill. Filed Aug. 8, 1931. Serial No. 555,956. 7 Claims. (Cl. 270—5.)



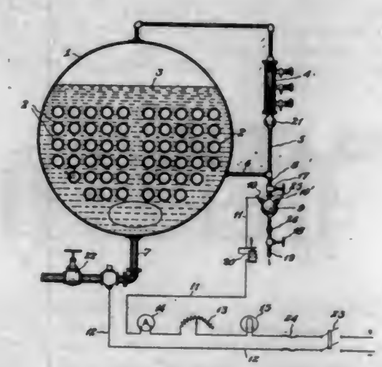
1. A unit type press comprising a series of associated printing units, individual motors for driving each of said units, said motors being positioned with their armature shafts in axial alignment with one another, and connecting means extending between said armature shafts for equalizing the speed of the motors.

1,877,388. SPRINKLER AND LAWN SWEEPER. MANUEL T. COELHO, Redwood City, Calif. Filed Nov. 27, 1931. Serial No. 577,606. 2 Claims. (Cl. 299—111.)



2. A lawn sprinkler comprising a pipe bent intermediate of its ends so as to present two substantially parallel end sections arranged in spaced relation, an offset portion connecting the sections, a spray nozzle attached to one end of the pipe, a conduit-receiving member mounted on the other end and a surface-engaging base fixed to and projecting laterally of the pipe for supporting the latter.

1,877,389. MEANS FOR REMOVING BOILER SCALE AND PREVENTING THE FORMATION THEREOF. HERMAN H. DAUM, Hudson, Ohio, assignor, by direct and mesne assignments, to Electro-Matic Scale Eliminator, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,891. 11 Claims. (Cl. 204—25.)

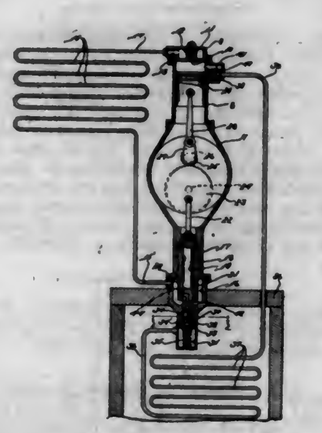


1. Means for removing boiler scale and preventing the formation thereof comprising, in combination with a water column line including a sediment chamber, a pipe connection to said line below said chamber, said pipe connection being formed with an enlarged chambered portion provided with an anode plug intersecting the wall thereof, but insulated from the latter, and having a terminal portion extending into the chamber of said enlarged portion, so as to be subject to the blow-down action therethrough.

1,877,390. MECHANICAL REFRIGERATOR. MERRILL DAVIS, Detroit, Mich. Filed Dec. 13, 1929. Serial No. 413,727. 16 Claims. (Cl. 62—115.)

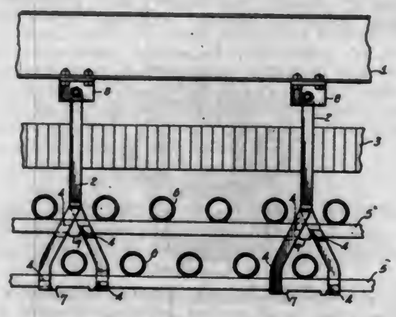
1. In a mechanical refrigerator, a compressing mechanism; a receiving compartment; a cooling coil communicating with said compressing mechanism and with said receiving compartment and positioned therebetween; a refrigerating coil adapted for communicating with said receiving compartment and with said compressing mechanism; movable means for controlling communication of

said coil with said receiving compartment; a plunger for moving said movable means to open position, said plunger being constructed and arranged to permit the inflow of



fluid under pressure between said plunger and said movable means upon withdrawal of said plunger from said movable means.

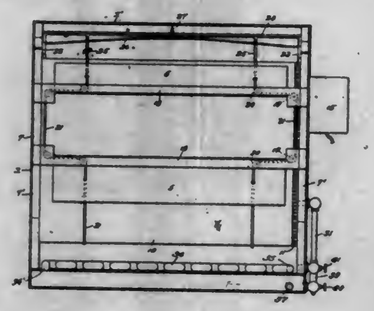
1,877,391. TUBE HANGER. STEPHEN B. DE BENCE, New York, N. Y., assignor to Alco Products, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1932. Serial No. 605,905. 3 Claims. (Cl. 248—34.)



2. A tube supporting assembly comprising in combination a pair of hanging members disposed in abutting position, oppositely extending hook-like members carried by the hanging members, a tube supporting bar extending substantially at right angles to said hanging members sustained by the hook-like members, and means integral with said bar adapted to engage said hook-like member to prevent lateral motion thereof.

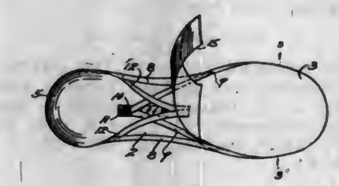
1,877,392. STERILIZER AND HOT LIQUID EXTRACTOR. DOMINICK DE PASQUALE and JOHN L. HOWARD, Mount Vernon, N. Y. Filed Oct. 1, 1931. Serial No. 566,364. 5 Claims. (Cl. 167—3.)

3. A device of the class described comprising a housing containing a sterilizing liquid, a drum rotatably supported in the housing, said housing having inlet and outlet openings at its front, cables passing around the drum, supporting means in front of the drum, pulleys carried thereby and over which the cables pass which space the cables from the front of the drum, said pulleys being so arranged as to space the cables a greater distance apart at the front of the drum than on other parts of the drum, a plate extending downwardly from the lower edge of



the inlet opening for directing articles between the cables and the drum, a plate extending upwardly from the lower edge of the outlet opening for removing articles from the drum and causing them to pass through the outlet opening, a spring pressed roller engaging the top of the drum for removing superfluous liquid from the articles, and electric means for heating the liquid in the housing.

1,877,393. INVISIBLE FOOT COVER FOR STOCKINGLESS LEGS. SAMUEL L. FRIEDMAN and HARRY B. FRIEDMAN, Los Angeles, Calif. Filed Apr. 1, 1930. Serial No. 440,805. 1 Claim. (Cl. 2—61.)

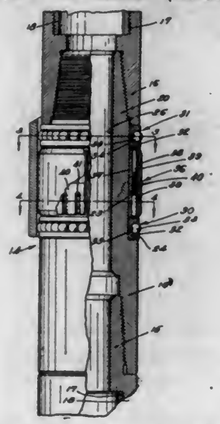


A foot cover of the class described including a sole part laterally terminating at the sides of the sole of a given size foot and having toe and heel sacks, a foundation tape attached along the axis of the sole and disposed between the toe and heel sacks, diagonal tension elastics whose ends are attached to the tape foundation and are so attached to the rims of the sacks as to close them on the inserted foot, and an inner sole piece over the elastic ends and the foundation.

1,877,394. FABRIC AND PROCESS OF MAKING THE SAME. JOHN E. GEORGE, St. Louis, Mo., assignor to The Alligator Company, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,800. 4 Claims. (Cl. 91—68.)

1. The process of treating a fabric which comprises passing it through a liquid bath containing a metallic pigment, then passing the fabric between rolls one of which has a smooth rigid surface and the other a smooth resilient surface, and then drying the fabric.

1,877,395. ANTIFRICTION DEVICE FOR DRILL PIPE. EDWIN W. GORSER, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed May 14, 1928. Serial No. 277,630. 10 Claims. (Cl. 308—6.)

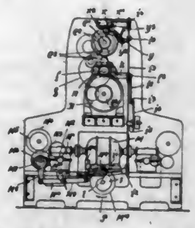


1. An anti-friction device for drill pipe comprising: a sleeve bearing for absorbing friction during a rotary movement of the drill pipe; and a bearing above and a bearing below said sleeve bearing for absorbing friction during a longitudinal movement of the drill pipe.

1,877,396. IMPROVED THERMO PACKING MATERIAL. CHRISTIAN GOTTWALD, Cleveland, Ohio, assignor to The Ric-Wil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,592. 3 Claims. (Cl. 106—18.)

1. A heat insulating composition comprising a fluffy, unmatted mass consisting of an intimate mixture of shredded fibrous mineral material, and comminuted sponge which has been treated with a metallic soap to render the same water repellent.

1,877,397. MACHINE FOR SPINNING RAYON. CARL HAASE, Schonau, near Chemnitz, Germany, assignor to Hauboldt A. G., Chemnitz, Germany, a Joint-Stock Company of Germany. Filed Nov. 4, 1930, Serial No. 493,447, and in Germany July 16, 1927. 7 Claims. (Cl. 18—8.)

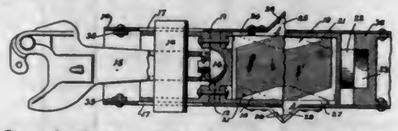


3. A machine for spinning rayon, comprising a rockable carrier adapted to carry a pair of bobbins, means for rocking said carrier for alternately throwing said bobbins into and out of spinning position, mechanism for rotating the bobbin occupying the spinning position, a rotary member, a coupling mechanism for connecting said rotary member with said rocking means, a spring acting on one of the coupling members and tending to shift the same into coupling engagement with the other coupling member, an abutment member adapted to hold said spring actuated coupling member in non-coupling position, controlling mechanism adapted to throw said abutment member out of arresting position, and a cam connected with said spring pressed coupling member and adapted to engage said abutment member for retracting the spring pressed coupling member out of coupling position.

1,877,398. PROCESS OF COOLING INTERNAL COMBUSTION ENGINES. CHARLES K. HAGUE, Detroit, Mich., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 18, 1930. Serial No. 469,005. 13 Claims. (Cl. 123—170.)

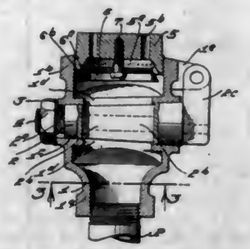
1. The process of cooling such part of an internal combustion engine as it is desired to cool while minimizing corrosion which comprises circulating, in heat exchange relation with such engine part and the atmosphere, water to which has been added a relatively small proportion of an oil-containing composition which is miscible with water in any proportion forming an emulsion.

1,877,399. RAILWAY DRAFT GEAR. WILLIAM R. HEWITT, New York, N. Y. Filed Sept. 3, 1929. Serial No. 390,109. 3 Claims. (Cl. 213—30.)



2. In a draft gear of the character described, a housing, a socket member reciprocable therein, resilient means resisting reciprocation of said socket member, a stop member limiting movement of the socket in one direction and having a cylinder formed therein, and a piston carried by the socket and positioned to enter said cylinder upon movement of the socket toward the stop member.

1,877,400. AIR RELIEF VALVE FOR PIPE LINES. JOHN C. HIGGINS, San Diego, Calif. Filed Mar. 19, 1928. Serial No. 262,678. 7 Claims. (Cl. 277—64.)



1. In a valve apparatus of the class described, a housing, including upper, central and lower portions, a stop cock mounted within said central portion adapted to disconnect said upper and lower portions, means for coupling the lower end of said housing to a conventional water pipe line, a cap secured to the upper end of said housing, said cap being provided with openings therein, a valve seat integral with said cap, a valve head support forming a stem rigidly secured to the inner side of said cap, and a valve head reciprocally mounted on said stem adapted to permit the escape of gas and to close when under normal water pressure.

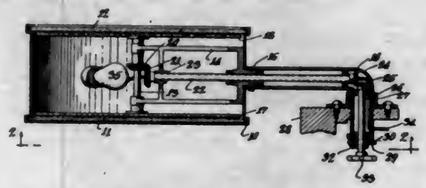
1,877,401. BUILT-IN TABLE. DAVID A. HILDEBRAND, Oakland, Calif. Filed Feb. 3, 1930. Serial No. 425,526. 4 Claims. (Cl. 45—51.)

1. A roll top presenting a continuous unbroken surface when extended and comprising a multiplicity of narrow rigid strips transversely disposed and attached on the under side thereof to strips of flexible material extending throughout the length of said top, said narrow rigid strips being of substantially equal height and width and provided with perpendicular contact sides adjacent the



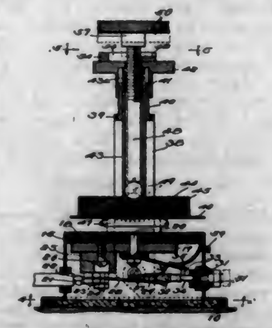
top thereof, an approximately centrally disposed arcuate groove on one side thereof and a cooperating arcuately formed tongue on the opposite side thereof, the width of said strips being greater at the top surface than at the bottom surface.

1,877,402. DIRECTION INDICATOR. THOMAS HINRICHSEN, Davenport, Iowa. Filed Feb. 10, 1931. Serial No. 514,750. 1 Claim. (Cl. 116—47.)



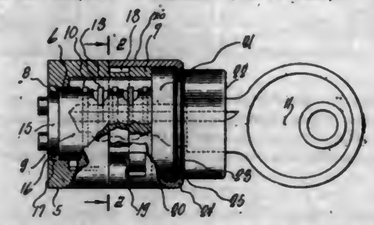
A direction indicator for vehicles comprising a circular frame having spaced transparent panels, a bracket fixed in said frame extending to its center, an axial spindle in said bracket carrying transparent discs each bearing direction indicia adjacent said panels, a tubular shaft in said bracket at a right angle to said spindle, a hollow radial arm extending outwardly from the bracket, said arm being bent at a right angle, means to engage the bent portion of said arm to a vehicle, a shaft in said bent portion, positive driving connections between said shafts and spindles, manual operable means for rotating the last named shaft whereby said discs may be rotated in unison, means to visually indicate the movement imparted by said manual means, an illuminating means in said frame, and a conductor to said illuminating means passing through said hollow shaft.

1,877,403. APPARATUS FOR FORMING CRYSTALS. ALEXANDER HORVATH, Chicago, Ill. Filed Sept. 19, 1929. Serial No. 393,714. 11 Claims. (Cl. 18—1.)



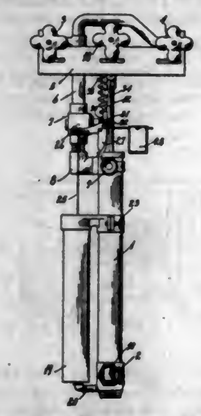
1. In a device of the class described, the combination of a base for supporting thereon the bezel of a watch case or the like and material to provide a crystal therefor, thermostatically controlled means mounted on said base for heating said material, means cooperable with the bezel for shaping said material to form the crystal, and a gauge for controlling the operation of such shaping means.

1,877,404. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed July 29, 1929. Serial No. 381,948. 6 Claims. (Cl. 70—46.)



1. In a lock device, a mounting member, a lock cylinder rotatable therein, an approximately rectangular projection extended from the outer end of the lock cylinder and at all times projecting beyond the mounting member, and a cap rotatably fitted over the outer end of the lock cylinder and the mounting member to retain the lock cylinder assembled in the mounting member and having an aperture therein complementary and corresponding in shape to the enlargement of the lock cylinder through which said enlargement passes to provide a grip by which the cylinder may be rotated in the mounting member.

1,877,405. AUTOMATIC OVERFLOW CONTROL. FREDERICK O. JOHNSON, Long Beach, Calif. Filed June 23, 1931. Serial No. 546,194. 4 Claims. (Cl. 4—205.)

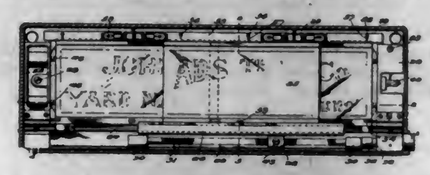


1. An automatic over-flow control comprising an intake pipe, a valve in said pipe, means engaging the valve whereby the same is held open, means urging the valve into closed position, a cylinder, a basket in said cylinder, liquid intake means into said cylinder whereby the basket is filled, and means extending from the basket to the means holding the valve open, whereby said holding means is released when the basket is filled.

1,877,406. ADVERTISING EXHIBITOR. ALBERT JOHN KAUFFMAN, Chicago, Ill., assignor to Adometer Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 514,013. 4 Claims. (Cl. 40—78.)

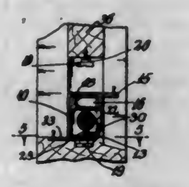
1. In a device of the character described, a supporting frame equipped with a carriage, indicia bearing plates mounted in said frame and superimposed upon the car-

riage, the latter being movable from one extremity of the frame to the other to transfer only the cards mounted on the carriage, a drive shaft mounted on the frame, and a single bearing block supported by said carriage and en-



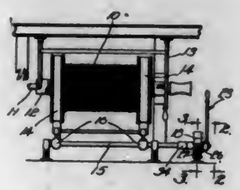
gaged with said drive shaft, the co-acting faces of said block and shaft being complemental whereby movement of the carriage, from one end of the casing to the other and return, is effected during rotation to the drive shaft.

1,877,407. ROLL SCREEN FASTENER. SAM KRANZ, New York, N. Y. Filed Oct. 21, 1930. Serial No. 490,162. 5 Claims. (Cl. 156—39.)



3. Means for attaching a screen casing upon the bottom edge of an inner window sash, said means including pivoted strips on the said casing formed with rectangular apertures engageable with rectangular shaped heads on screws attached upon the bottom of the window sash.

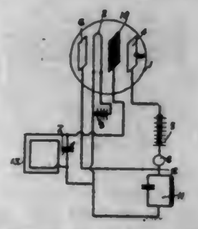
1,877,408. BRAKE OPERATING MECHANISM. ERNIE LLOYD LAUNDER, Montebello, and WILLIAM T. LAUNDER, Anaheim, Calif. Filed Apr. 3, 1931. Serial No. 527,460. 12 Claims. (Cl. 192—8.)



1. In combination, the operating shaft of a brake mechanism, a stationary housing, a shaft extending completely through the housing and directly rigidly connected with the operating shaft, and means for stopping movement of said shaft transmitted to it from the operating shaft including a brake shoe for cooperating with the housing, and a toggle connection between the said shaft and shoe.

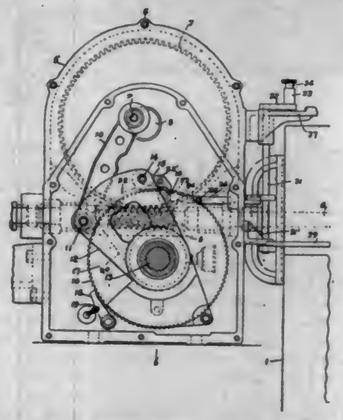
1,877,409. FREQUENCY CHANGER. LUCIEN LEVY, Paris, France. Filed May 24, 1928, Serial No. 280,354, and in France May 30, 1927. 1 Claim. (Cl. 250—20.)

A frequency changer comprising a vacuum tube inside which are included a cathode emitting electrons, on one side of said cathode an anode and a grid between cathode and anode, on the other side a controlling electrode whose distance from the cathode is much smaller than that of the anode, a circuit receiving the waves whose frequency F is to be changed connected on one hand to the cathode and on the other to the grid, an oscillatory circuit whose natural frequency F′ differs from F by the predetermined frequency f into which the frequency F must be changed, said oscillatory circuit being connected on one hand to the cathode and on the other hand simultaneously to the controlling electrode and to the negative pole of a battery



whose positive pole is connected to the anode, between said oscillatory circuit and the anode a receiving device adapted to work at the frequency $f=F-F'$ of the beats produced.

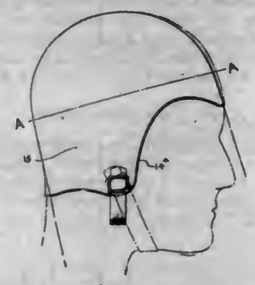
1,877,410. AUTOMATIC STOKER. CLARENCE B. LITTLE, Dayton, Ohio, assignor to The Brownell Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 25, 1928. Serial No. 302,637. 2 Claims. (Cl. 110—101.)



2. In a stoker, in combination with a furnace, means for feeding coal to the furnace at regular intervals including a worm conveyer, a ratchet wheel, and pawl and operating means therefor for actuating the conveyor, a cam associated with the ratchet wheel and pawl to control the length of the feed stroke, means for supplying air to the furnace, an air passage through the furnace, a damper in said air passage, and means for simultaneously actuating said cam and damper including an adjustable rock shaft, an arm and link connection between said shaft and cam, an arm connected with said shaft, a link connected with said arm, and a slidable adjustable connection between said link and damper comprising an arm on the damper having a rotatable stud having an opening therein to receive said link, and clamping means for securing the link in various positions of adjustment in said stud.

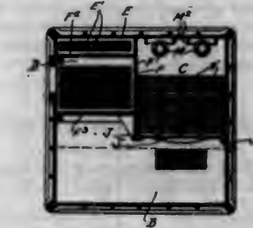
1,877,411. BATHING CAP. MELVIN S. LOWER, Barberton, Ohio, assignor to The Sun Rubber Company, Barberton, Ohio, a Corporation of Ohio. Filed Feb. 10, 1931. Serial No. 514,804. 1 Claim. (Cl. 2—68.)

A bathing cap of flexible, elastic rubber formed in helmet-shape for fitting to the head by stretching, and having depending side and rear portions for fitting over the ears and against the back of the neck, said cap tapering outwardly continuously from its top down to its edge all the way around the cap, said edge being reinforced by a beading of rubber thicker than the body of the cap, the body of the cap above said beaded edge being free of mold rind marks or seams, and said cap when applied having its maximum stretch distributed over a comparatively broad area on the head above said beaded edge and above said



depending portions whereby the beaded edge of the cap will not embed in the skin causing discomfort to the wearer and whereby there will be a minimum of pressure of the depending portions of the cap against the ears.

1,877,412. DEAERATING WATER HEATER. PERCY S. LYON, Fort Wayne, Ind., assignor to Cochrane Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1928. Serial No. 313,716. 9 Claims. (Cl. 183—2.5.)



1. A self-contained water heating and deaerating unit comprising a casing having a deaerating space in the upper portion thereof, a tray stack in said space, water distributing means in said space above said tray stack, a water storage compartment below and open to said deaerating space, means for passing heating steam into said storage compartment, a plurality of water tubes in said casing at one side of said deaerating space and above said storage compartment, a closed vent condensing chamber in said casing at one side of said deaerating space and adjacent said water tubes, and a port connecting said condensing chamber with the upper portion of said deaerating space.

8. A tray stack adapted for use in liquid degasifying apparatus and formed by a plurality of superposed shallow trays of rectangular form and wholly similar in construction, each of said trays having a plurality of transversely spaced slots extending longitudinally thereof and symmetrically arranged relative to a line parallel to the longitudinal center line thereof, and means insuring a staggering of the slots in superposed adjacent trays when said trays are arranged horizontally and stacked consisting of lugs on one side of each tray adjacent the ends thereof, said lugs being spaced differently from the corresponding tray ends, flanges projecting from the opposite side of each tray adjacent the ends thereof, and notches formed in said flanges for receiving said lugs therein, each of said notches being positioned relative to the adjacent tray end a distance corresponding to the spacing of the lug at the opposite end of the tray, whereby in stacking said trays alternate trays must be reversed to permit the lugs thereon to be positioned in the proper notches in an adjacent tray.

1,877,413. PISTON PACKING FOR INTERNAL COMBUSTION ENGINES. LEWIS C. MARSHALL, Walpole, Mass., assignor, by mesne assignments, to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 14, 1924. Serial No. 706,261. 6 Claims. (Cl. 74—109.)



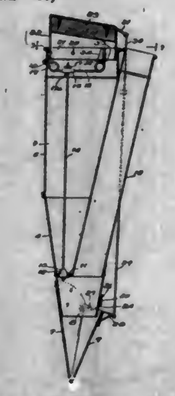
1. The combination with relatively reciprocating members, one of which has an annular groove therein, of a trans-split ring peripherally insertable in said groove, said ring being circumferentially slotted to form an axially flexible portion integrally connecting opposite side portions, and auxiliary resilient means reacting upon said side portions to hold the same in sealing contact with the side walls of the groove and with a predetermined pressure limited to permit radial movement of the ring in the groove under working conditions.

1,877,414. PISTON PACKING. LEWIS C. MARSHALL, Walpole, Mass., assignor, by mesne assignments, to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 13, 1925, Serial No. 8,933. Renewed Jan. 12, 1932. 12 Claims. (Cl. 74—109.)



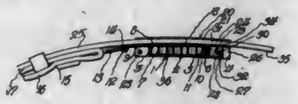
1. A piston packing comprising a main split ring provided with a plurality of slits extending through its entire radial thickness, said slits being so disposed in planes inclined to the plane of the ring as to make the ring axially elastic, and a follower ring engaging the inner surface of the main ring and arranged to exert force on the main ring tending to expand it axially and radially.

1,877,415. PLANT SETTER. EDWIN L. MASTERS, Chicago, Ill. Filed Oct. 6, 1930. Serial No. 486,706. 10 Claims. (Cl. 111—4.)



1. In a plant setter, the combination of a casing comprising a reservoir, a pair of relatively movable hole forming shovels mounted on said casing, a handle movably mounted on said casing, a valve positioned in said reservoir, means for actuating one of said shovels, and means operatively related to said valve and handle for actuating the valve by the movement of said handle.

1,877,416. BELT BUCKLE. KARL MATHEUS, Chicago, Ill. Filed Nov. 6, 1931. Serial No. 573,481. 2 Claims. (Cl. 24—191.)

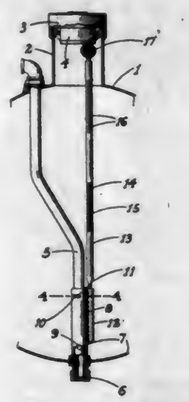


1. A buckle comprising a concavoconvex base, said base having side and end walls adapted to form a chamber, an expansion spring arranged in said chamber, a slide plate arranged above said chamber and having a depending lip adapted to engage one end of said spring, said side walls extending beyond said end walls and having aligned perforations in their corresponding ends, a cover having depending side walls adapted to straddle the side walls of said base and having perforated ends adapted to align with the corresponding ends of said first mentioned side walls, a guide member comprising a cross plate spaced from said cover and having depending side walls adapted to straddle said cover side walls and having perforated ends adapted to align with the corresponding perforated ends of said cover side walls, cross pins adapted to be inserted through the corresponding ends of said base, cover, and guide whereby to connect the same together, means for connecting the other end of said slide plate to one end of a belt, and means pivotally carried by one of said cross pins and adapted to releasably connect the free end of a belt to said buckle.

1,877,417. IMPROVED CARBOHYDRATE-PHENOL RESIN AND PROCESS OF MAKING SAME. JOSEPH V. MEIGS, Brooklyn, N. Y., assignor, by mesne assignments, to Plastix Corporation, a Corporation of Delaware. Filed Nov. 10, 1927. Serial No. 232,459. 21 Claims. (Cl. 260—2.)

1. The reaction product of a carbohydrate phenol resin, a hardening agent and a compound of the group consisting of oxides and hydroxides of metals.

1,877,418. COMBINATION GAS-TANK CAP, FUEL PIPE, AND DRAIN PIPE LOCK. TONY S. GREER, Sacramento, Calif. Filed Nov. 7, 1930. Serial No. 494,058. 4 Claims. (Cl. 137—21.)



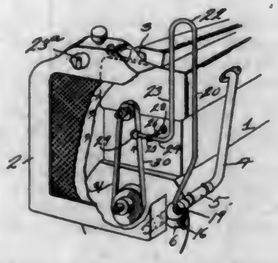
1. In a fuel tank having a filler tube on top, a cap for the tube and a fuel pipe leading from the tank and having a vertical portion at its lower end directly under the tube, a valve structure associated with said vertical portion of the pipe including a member rotatable axially of the pipe and whose rotation in one direction or the other provides or prevents communication between the tank and the interior of the pipe, a stem rigid with and upstanding from said member, a finger rod extending upwardly into the tube from the stem and slidably but non-rotatably connected to the latter, and a spring between the stem and rod tending to force the stem upwardly; said spring being overcome and the rod depressed by the cap when the latter is in place.

1,877,419. MULTITERMINAL ELECTRICAL SOCKET. CLAUDE M. METELSKI, Detroit, Mich., assignor to Spaulding Fibre Company, Incorporated, North Rochester, N. H., a Corporation of New Hampshire. Filed Dec. 15, 1930. Serial No. 502,601. 6 Claims. (Cl. 173—328.)



5. A multi-terminal electrical socket comprising an insulator plate having means for securing the same to a mounting panel and dished intermediate said securing means into a plane spaced from said panel, said dished portion having a further dished central portion and a series of apertures for the passage of the pin terminals in said further dished portion, the annular shoulder between said dished portions forming a guide for said pins into registration with said apertures, and contacts mounted on the opposite sides of said plate adjacent to the respective apertures.

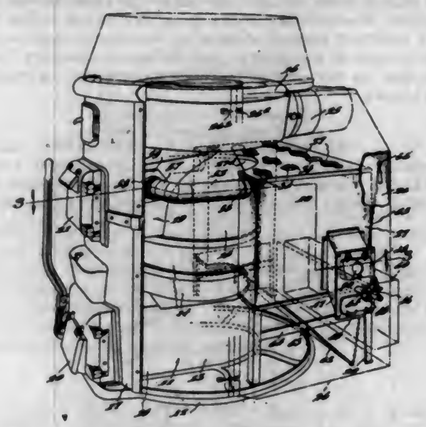
1,877,420. IMPELLING DEVICE FOR COOLING SYSTEMS OF INTERNAL COMBUSTION ENGINES. GEORGE S. MOORE, Harrisburg, and WILLIAM H. MILLER, Penbrook, Pa. Filed Nov. 3, 1931. Serial No. 572,866. 6 Claims. (Cl. 123—175.)



1. The combination with an internal combustion engine having a circulating cooling system, a radiator in connection with said cooling system in which a liquid level is maintained, pipe connections between said radiator and engine, a pipe in one of said pipe connections, of a flexible drive connection between said pump and a movable part of the engine and a pliable tubular member connected to the pump and supporting the flexible driving connection.

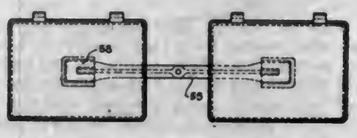
1,877,421. HEATING APPARATUS. ADOLPH E. MUNKEL, Columbus, Ohio. Filed Apr. 22, 1930. Serial No. 446,229. 8 Claims. (Cl. 126—116.)

1. In a gas heater unit, a casing constituting a combustion chamber, radiator tubes extending through said casing and providing passageways entirely therethrough, a gas burner disposed in the combustion chamber and extending between the tubes, a baffle located across the interior of said combustion chamber above said burner, said baffle having clearance openings through which said tubes extend



for causing a retarded flow of the products of combustion around all the tubes and means for exhausting the combustion chamber above the baffle.

1,877,422. RAILWAY CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 14, 1929, Serial No. 332,326. Divided and this application filed June 22, 1931. Serial No. 545,977. 1 Claim. (Cl. 105—289.)



In a railway car, a pair of hinged dumping doors, each provided with a T shaped groove, and a spreader having spaced apart T shaped portions slidably engaging said grooves so as to permit slidable movement between the door and the spreader in a plane substantially parallel to the plane of the door.

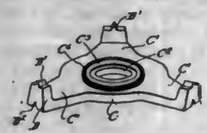
1,877,423. RAILWAY CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 14, 1929, Serial No. 332,326. Divided and this application filed June 22, 1931. Serial No. 545,978. 2 Claims. (Cl. 105—219.)



1. In a railway car, a pair of hinged dumping doors, each provided with a cylindrical bearing, and a spreader having spaced apart cylindrical journals engaging said bearings so as to permit pivotal movement between the door and the spreader about a substantially vertical axis.

1,877,424. CRANK. HARRY EDGAR FEAR, Lakewood, Ohio, assignor to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed June 4, 1929. Serial No. 368,234. 9 Claims. (Cl. 25—153.)

1. A light weight ware support for ceramic firing comprising a base member on which a single ware piece is adapted to be directly supported in a horizontal position, and means for centering and preventing movement of said



ware piece on said base member comprising a projecting member on the upper side of said base member and extending within the foot of said ware piece.

1,877,425. BUILDING FLASHING. GEORGE W. ORTH, Philadelphia, Pa. Filed Mar. 27, 1931. Serial No. 525,678. 12 Claims. (Cl. 72—127.)

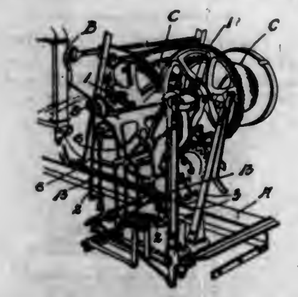


10. A building flashing comprising a substantially plane waterproof plate, and wires bent and threaded through from side to side of the same.

1,877,426. METHOD FOR MAKING RUBBER ARTICLES. ERIC WILLIAM BOWER OWEN, Walmley, England, assignor to Dunlop Rubber Company Limited, Birmingham, England, a Corporation of Great Britain. Filed May 19, 1930, Serial No. 453,869, and in Great Britain May 31, 1929. 6 Claims. (Cl. 18—58.)

1. A process of producing seamless multi-compartment articles of rubber material which comprises spacing the component parts of a former, dipping said parts into an aqueous dispersion of rubber-like material to form a deposit thereon and between said component parts and decreasing the space between said component parts.

1,877,427. ACCELERATOR FOR POWER SHOVELS. CLAUDE PENNINGTON, San Diego, Calif., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Dec. 26, 1929. Serial No. 416,675. 4 Claims. (Cl. 192—.01.)



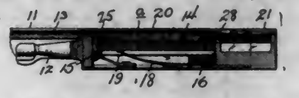
1. Excavating apparatus of the class described, comprising the combination with an excavating machine and a power source therefor provided with instrumentalities for accelerating the speed of the power source, of a control device comprising reach rods for controlling one of the movements of the excavating machine, and accelerating means including flexible cables directly connected at all times to the reach rods of the control device and to the accerelating instrumentalities of the power source and automatically operable simultaneously with the operation of the control device for accelerating the rate of speed of the power source during the said movement.

1,877,428. MOTOR VEHICLE STEERING SIGHT. OSCAR RENSONNET, Etterbeek-Brussels, Belgium, assignor to Henry Dujardin, New York, N. Y. Original application filed Dec. 26, 1929, Serial No. 416,720, and in Belgium Feb. 11, 1929. Divided and this application filed Dec. 8, 1930. Serial No. 500,899. 7 Claims. (Cl. 116—31.)



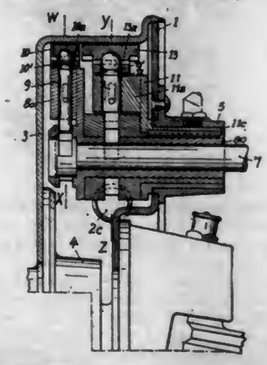
1. A steering sight adapted to be fitted to the mudguards of motor vehicles, comprising an upstanding member having a height materially elevating the upper end thereof above the said mudguard, and having means at its lower end for obtaining a gripping engagement with the bead on the said mudguard.

1,877,429. MAGAZINE RAZOR. OCTAVIUS VICTOR RODRIGUES, New York, N. Y., assignor to Magazine Repeating Razor Company, New York, N. Y. Filed Oct. 29, 1930. Serial No. 491,843. 4 Claims. (Cl. 30—12.)



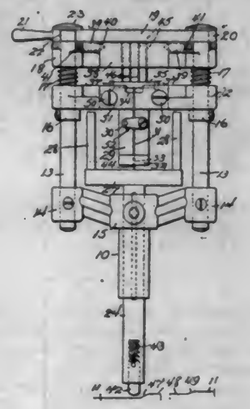
1. A magazine razor comprising a magazine for blades, an ejector for feeding blades successively from the magazine, a lever having one end slightly in advance of blades in the magazine and its other end above the blades in the magazine whereby a blade when advanced depresses the remaining blades out of the path of travel of the ejector.

1,877,430. DIFFERENTIAL SERVOMOTOR BRAKING DEVICE. OSKAR LUDWIG SKOPIK, Berlin, Germany. Filed Mar. 18, 1930, Serial No. 436,918, and in Germany Nov. 3, 1927. 6 Claims. (Cl. 188—78.)



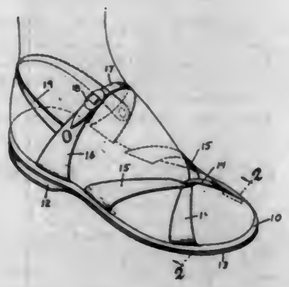
1. In a differential servomotor braking device in combination with a rotating drum, of two braking cheeks arranged within the drum, a braking cam to press the cheeks against the inner surface of the drum, two auxiliary braking shoes arranged side by side in the interstice between the cheeks to be brought one after the other in contact with the inner surface of the drum, and means to use the first auxiliary braking shoe as servomotor to tighten the second braking shoe and to use the second auxiliary braking shoe as servomotor to rock the cam for tightening the cheeks.

1,877,431. HEAD FOR BEADING MACHINES. KENNETH P. SWANSON, Irvington, N. J., assignor to Eisler Electric Corporation, Newark, N. J. Filed May 31, 1930. Serial No. 458,006. 3 Claims. (Cl. 49—2.)



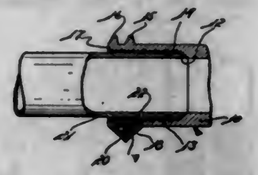
1. A head for beading machines comprising a framework, a sliding holder for a bead, a guide to hold wires that rest on the bead against movement, the bead holder having a groove to receive a wire under the bead and a plunger to successively engage the lower wire and then the bead holder to successively insert the lower and upper wires in the bead.

1,877,432. SANDAL. HAIGHES TOPOOZIAN, New York, N. Y. Filed July 16, 1931. Serial No. 551,127. 1 Claim. (Cl. 36—11.5.)



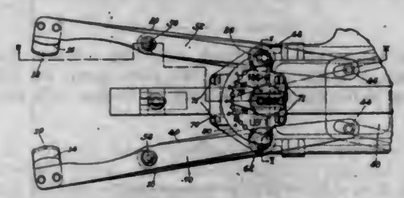
A sandal comprising, an insole having a plurality of slits adjacent the edge thereof extending obliquely downwardly and inwardly, an outsole for the underside of said insole, an upper comprising a plurality of straps having flared ends wider than said slits, the flared ends of said straps passing through said slits into the space between the insole and outsole, and cement securing means to secure together the insole, the outsole and the flared ends of the straps located therebetween.

1,877,433. FITTING. ANDREW TEN BROOK, Detroit, Mich. Filed Feb. 9, 1931. Serial No. 514,452. 2 Claims. (Cl. 285—111.)



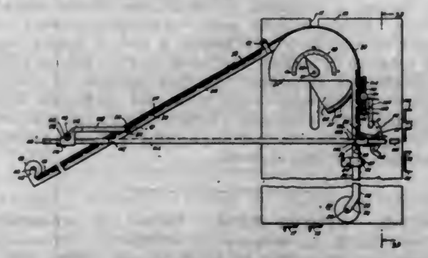
1. A fitting of the class described, comprising: a pipe receiving portion having a pipe receiving bore therein; a seat at the inner end of said bore for engaging the end of a pipe inserted therein; interiorly threaded nozzle on the periphery of said pipe receiving portion inclined to the axis thereof; and a hollow plug threaded in said nozzle engaging with the pipe inserted in said bore for forcing the same against said seat.

1,877,434. SHOE AND SOLE POSITIONING MECHANISM. WILLIAM DUSTIN THOMAS, Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 29, 1931. Serial No. 565,841. 7 Claims. (Cl. 12—33.)



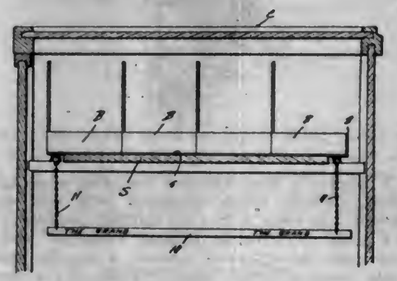
7. A machine for use in the manufacture of shoes having, in combination, a pair of levers pivoted between their ends, shoe-engaging members mounted upon one end of the levers, a link connecting the opposite ends of the levers, a slotted plate mounted over the link having thereon a circular flange, a stud mounted for rotation in the plate concentrically with said flange, a slotted slide mounted in said stud on the upper face of the flange and having an end formed to engage recesses in the circular flange, a pin passing eccentrically through the stud and engaging a transverse slot in the link, said pin passing through the slot in the slide, and a spring connected between said pin and the slide to hold the end of the slide in engagement with the recesses.

1,877,435. COURSE CALCULATOR. ALBERT D. TRENOR, Gloucester, Mass., assignor to John Hays Hammond, jr., Gloucester, Mass. Filed Oct. 29, 1929. Serial No. 403,346. 6 Claims. (Cl. 33—76.)



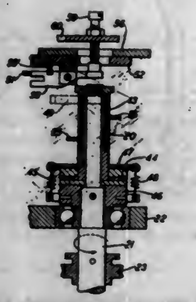
1. A device for determining the redirecting angle and time delay of a self propelled body which has missed its target comprising first and second elements, means for generating courses by said elements corresponding to the actual courses effectuated by the escaping target and said self propelled body, means for relatively shifting the position of said first and second elements in a direction corresponding to the original direction of the torpedo, whereby the courses generated by said elements will bear the same relative position with each other as the relative position of the courses of the target and the missile, and means responsive to the generation of said courses and the relative displacement of said courses for indicating the redirecting angle and time delay of said self propelled body.

1,877,436. COMBINATION HUMIDOR AND ADVERTISING DEVICE. LOUIS UNTERBERGER, Wilkes-Barre, Pa. Filed Jan. 12, 1931. Serial No. 508,302. 1 Claim. (Cl. 131—30.)



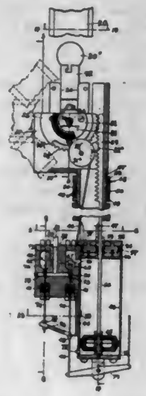
In a device of the class described, a substantially rectangular perforated plate adapted to rest on a support and accommodate a plurality of boxes of cigars or the like, said plate having an upstanding flange at one end thereof and formed at each of its corners with a pair of spaced apertures providing an anchoring web therebetween, said webs being offset below the bottom of the plate for receiving suspension means for a moistening element.

1,877,437. START-STOP TELEGRAPH SYSTEM. EDWARD F. WATSON, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 25, 1931. Serial No. 525,253. 11 Claims. (Cl. 178—53.1.)



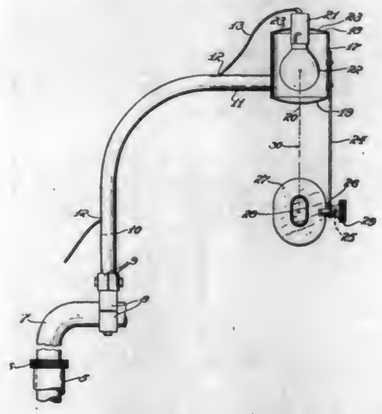
1. In a communication system, a rotary distributor of the start-stop type, a relay having an armature whose position is determined by the polarity of received impulses, and means for arresting the distributor between successive cycles, said arresting means being under the control of said armature, characterized by the provision of elements of intercoaction between said armature and said means whereby said arresting means is rendered non-arresting by the movement of said armature from either of two positions to the other.

1,877,438. SIGNALING DEVICE. HENRY E. WHIPPLE and FRANK P. MEEKER, Los Angeles, Calif. Filed Nov. 11, 1929. Serial No. 406,211. 17 Claims. (Cl. 116—54.)



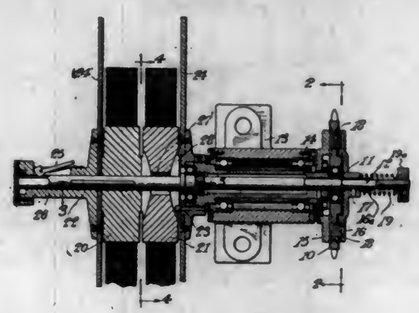
1. A device of the character described comprising a signaling member, means connected with said member and adapted to move it into its farthest position to indicate a stop, an arresting element connected with and movable with the signaling member, a dog for engaging the said element, means under control of the operator for moving said dog into position to engage the said arresting element, and means operable upon the return of the dog to normal position for automatically returning the signaling member to its normal position.

1,877,439. OPTICAL INSTRUMENT. WILLIAM F. WICHART, Los Angeles, Calif. Filed May 8, 1929. Serial No. 361,314. 3 Claims. (Cl. 88—20.)



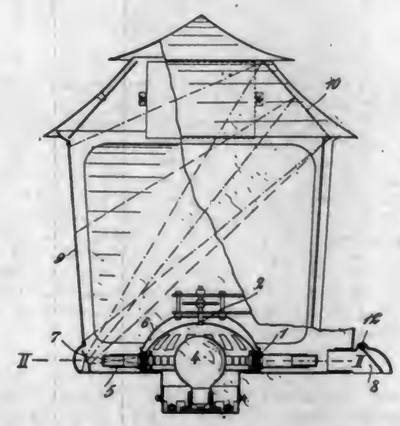
1. An optical instrument comprising a suitable support, a lamp-house carried thereby and having an aperture in its lower wall through which a light beam is projected downwardly, a transparent reflector below and spaced from the lamp-house and disposed transversely across the light beam to change the direction of the latter, a holder secured to and supporting the reflector, and a hanger secured to and depending from said lamp house for pivotally supporting said holder whereby the reflector may be readily positioned at different angles of inclination to the axis of the beam and the illuminated object may be viewed through the reflector.

1,877,440. DOUBLE FILM WINDING REEL. ALBERT L. ADATTE, North Plainfield, N. J., assignor to Pathe Exchange, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 28, 1927. Serial No. 229,299. 11 Claims. (Cl. 242—55.)



11. A device of the class described comprising a plurality of bobbins, a rotary driving element having friction faces, and means for frictionally driving each bobbin from a friction face of said driving element, said last mentioned means including members relatively movable rotatably, one member connected to each bobbin.

1,877,441. ADVERTISING DEVICE. HANS ANDVIG, Oslo, Norway. Filed Nov. 13, 1928, Serial No. 319,063, and in Germany Jan. 24, 1928. 2 Claims. (Cl. 88—24.)



1. In an advertising device, in combination a stationary casing, a plurality of projection means mounted radially therein, a light source centrically located with respect to said projection means, a picture holder rotatably mounted in optical relation to said projection means, a plurality of adjustable reflecting surfaces in incident relation to and cooperation with said projection means and a plurality of secondary reflecting surfaces, positioned in optical relation to and cooperating with the aforesaid adjustable reflecting surfaces.

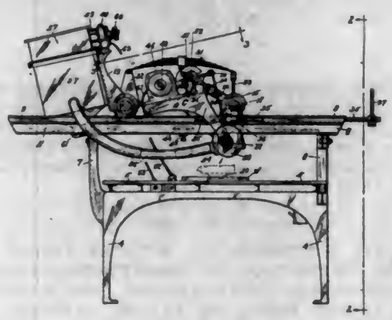
1,877,442. FINGER RING. GEORGE A. ARMSTRONG, Cranston, R. I., assignor to William C. Greene Company, a Corporation of Rhode Island. Filed Feb. 8, 1932. Serial No. 591,483. 4 Claims. (Cl. 63—15.)

4. In a finger ring of the character described a band comprising a shank and a base continuous therewith provided with a central orifice, a vertical peripheral flange integral with the base surrounding the orifice and having portions cut out to provide spaced lugs, a housing upon



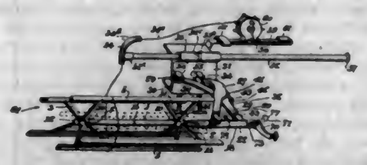
the base exterior of the flange and spaced from said flange, and an ornament upon the lugs engaged by the housing.

1,877,443. CUTTING AND GROOVING MACHINE. EDWIN B. BINFORD, Beverly Hills, Calif., assignor of one-half to Continental Building Specialties, Inc., Los Angeles, Calif. Filed Feb. 14, 1930. Serial No. 428,420. 7 Claims. (Cl. 51—37.)



1. In a cutting and grooving machine, in combination, a supporting track, a carrier mounted to move on said track, a cutting wheel carried by said carrier with driving connections for driving the same, power means for driving said cutting wheel through said connections, said carrier being jointed and adapted at its joint to be raised and lowered to move said cutter wheel to and from the work, a spring normally holding said carrier in its raised position, and means for manually moving said carrier joint downwardly to control the position of said cutter wheel.

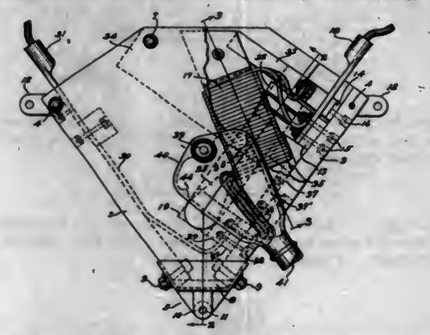
1,877,444. FISHLINE DRYING REEL. JOSEPH M. BUTLER, Vernon, N. Y. Filed May 22, 1929. Serial No. 365,180. 7 Claims. (Cl. 242—104.)



1. In a fish line drying reel, a collapsible reel for holding a fish line, means for rotating said reel, a clamp for holding said reel in operative position, links pivotedly connecting said reel with said clamp whereby to swing said reel into inoperative position and a sliding member mounted on said clamp for distributing said fish line on said reel.

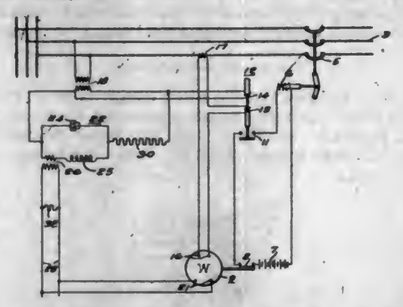
1,877,445. SWITCH. HOMER P. CHANDLER, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 14, 1929. Serial No. 407,114. 1 Claim. (Cl. 200—67.)

A switch mechanism comprising a switch blade operable to either an open or a closed position, housing therefor, an operating shaft for the switch member pivotally mounted on one of the walls of the housing and having two metallic members connected in fixed insulated relation by an insulating collar and all three parts rotatable in unison, one metallic member fixed to the switch member and the other metallic member having a crank arm extension outside the housing, a handle having a hand grip at one end and a receptacle at the other end pivoted to the housing, the



pivotal points of the shaft and handle being spaced apart and the receptacle portion enclosing the free end of the crank arm and an overcenter spring connected to the free end of the crank arm and to the handle intermediate its end to pivot the shaft with a snap action in either direction to move the switch blade to either its open or closed position.

1,877,446. VOLTAGE-SUPPLY MEANS FOR DIRECTIONAL RELAYS. RICHARD C. CURTIS, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,619. 18 Claims. (Cl. 175—294.)

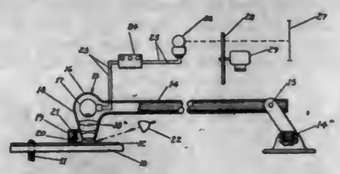


1. Voltage-supply means for alternating-current relay-elements comprising a tuned parallel resonant circuit in series with an external impedance having a value sufficient to permit said tuned circuit to oscillate, a relay-voltage bus, and means for applying a voltage from the tuned circuit to said bus, characterized by the fact that the ratio of reactance to resistance in the equivalent circuit of said tuned circuit is of the order of 30, more or less.

1,877,447. MEANS AND METHOD OF REPRODUCING PICTURES OR SCENES FROM RECORDED IMPULSES. REGINALD T. FRIESUS, Montclair, N. J., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Sept. 25, 1929. Serial No. 394,999. 4 Claims. (Cl. 178—6.)

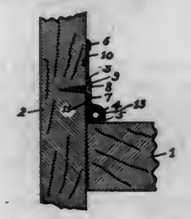
1. In a means for taking scene from a disc record, in combination, a disc record having a scene recorded thereon in the form of a series of impulses, means for rotating the disc record, means for casting a beam of light onto the record, a lens system for collecting the reflected light beams, a photo-electric cell positioned to have the reflected

light beams thrown thereon by the lens system, an amplifier connected with the photo-electric cell, a lamp connected with the amplifier, a scanning wheel positioned to receive



light beams from the lamp, and a projection screen in the rear of said scanning wheel positioned to receive light passing through the scanning wheel.

1,877,448. CLOSURE STRIP. RALPH D. FITZGERALD, New Kensington, Pa. Filed Mar. 16, 1931. Serial No. 522,855. 2 Claims. (Cl. 20—69.)



1. In combination, a closure strip of the character described, comprising an elongated body portion constructed from metal and being provided with a channel extending along one side edge thereof, a cylindrical cushioning element being removably mounted in said channel and projecting from one side of the latter throughout its length, and a seating ridge formed on the back side of said body portion and extending throughout the length of the latter.

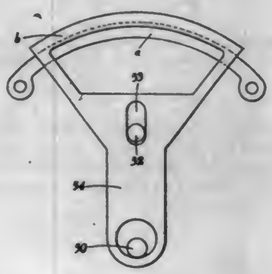
1,877,449. FILTERING OR FINE STRAINING APPARATUS FOR LIQUIDS. FRANK CHRISTIAN FULCHER, Purley, England. Filed Feb. 25, 1932, Serial No. 595,056, and in Great Britain Aug. 15, 1930. 6 Claims. (Cl. 210—152.)



1. Filtering or fine straining apparatus for liquids comprising in combination, a series of stationary members; a series of movable members intervening said stationary members and in non-contacting relation therewith so that a series of fine slots is formed therebetween, said movable members being adapted for straight reciprocatory movement across the stationary members in the direction of the flow of liquid through the members, the upstream edges of the movable members being shaped and arranged to dislodge entrapped foreign matter and cause same to gravitate downwardly; and means for moving said movable members.

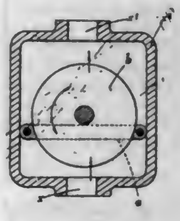
1,877,450. FILTERING OR FINE STRAINING APPARATUS FOR LIQUIDS. FRANK CHRISTIAN FULCHER, Purley, England. Filed Feb. 25, 1932, Serial No. 595,057, and in Great Britain Aug. 15, 1930. 4 Claims. (Cl. 210—152.)

1. Filtering or fine straining apparatus for liquids comprising in combination, a series of alternate moving and stationary members arranged in spaced relation so that a series of fine slots is formed between opposed adjacent surfaces of said members, said members being so staggered that a graduated trapping of any foreign matter is obtained as the liquid passes through the filter; a crank mechanism for moving said movable series of members; and means including a guide cooperable with the said crank mechanism



to effect a combined oscillatory and reciprocatory movement to the movable members across the stationary members, the guide being so positioned that the reciprocatory motion is effected in a direction substantially perpendicular to the length of the slots formed between the stationary and movable members.

1,877,451. FILTERING OR FINE STRAINING APPARATUS FOR LIQUIDS. FRANK CHRISTIAN FULCHER, Purley, England. Filed Feb. 25, 1932, Serial No. 595,058, and in Great Britain Aug. 15, 1930. 3 Claims. (Cl. 210—152.)

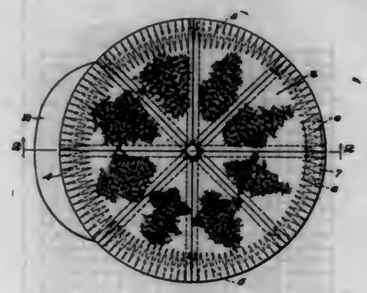


1. A filter or fine straining apparatus combining a casing member having inlet and discharge ports formed therein; a series of stationary strip members supported by said casing and arranged in spaced relation so that a series of slots is formed between the opposed surfaces of said members; a series of discs arranged in parallel relation and interposed between the members of said first series and in spaced relation therewith so that the entire flow and discharge of the liquid through the filter takes place between the opposed surfaces of adjacent discs and strips and in a direction paralleling the plane of the discs, said series of discs being fixedly mounted upon a rotatable shaft member journaled adjacent said series of strip members; and means for rotating said discs across or transverse to said strips.

1,877,452. FORM-HOLDING DEVICE FOR CAPS OR LIKE HEADWEAR. AUGUSTIN GAGNE, Central Falls, R. I. Filed Feb. 20, 1931. Serial No. 517,258. 1 Claim. (Cl. 2—185.)

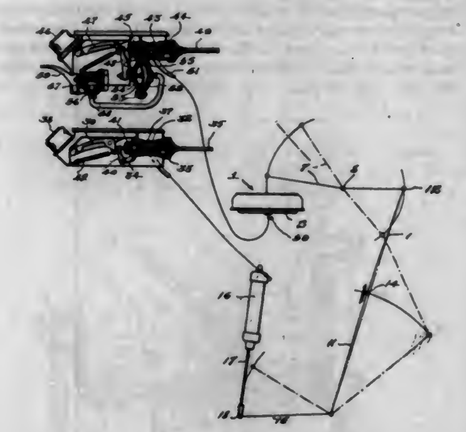
A form-retaining or form-holding hollow device for a cap, comprising a light spring wire closely coiled throughout its entire extent and of sufficient length entirely to encompass the head of the wearer and when positioned inside the cap beyond the sweat band thereof to lie entirely

about the cap, thereby to distend the top portion of the cap throughout and to cause it to lie flat upon the head, the said coil having a part of maximum diameter adapted to be placed at the front of the cap in position to overlie the



visor thereof, the coils decreasing in diameter toward both ends of the said wire device, and a light core member adapted to engage both ends of the said wire device and to retain them in fixed relation to each other.

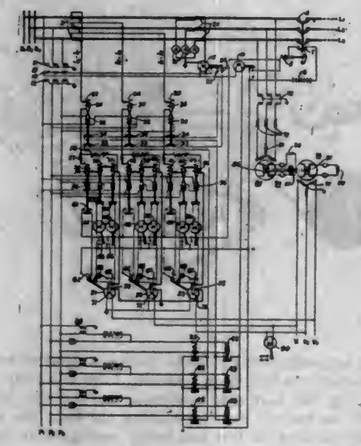
1,877,453. PRESSING MACHINE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 23, 1929. Serial No. 334,493. 2 Claims. (Cl. 68—9.)



1. A pressing machine including a buck having a compressible chamber, a head movable into cooperative relation with the buck to compress the same, means for actuating the head, manual means for controlling the flow of a fluid to said chamber to expand the same against the head, and springs in said chamber for resisting compression thereof.

1,877,454. HIGH-SPEED DIRECTIONAL RELAY ELEMENT. SHIRLEY L. GOLDSBOROUGH, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 1, 1930. Serial No. 448,938. 8 Claims. (Cl. 175—294.)

1. A protective relay system for an alternating current transmission line, comprising a high-speed directional relay-element having a current coil and a voltage coil, characterized by a source of voltage for said voltage coil having a phase dependent upon the line voltage but having means for preventing a rapid change in phase and/or magnitude even though the phase and/or magnitude of the line voltage should change suddenly, said means com-



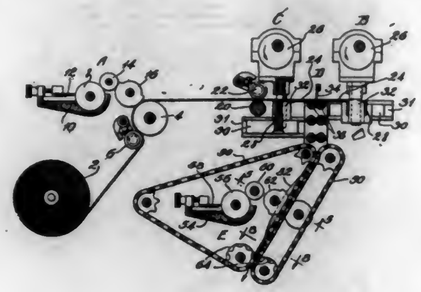
prising a small two-pole synchronous-synchronous motor-generator set, and means for adjusting the relative spatial phases of the primary windings of the motor and generator, respectively.

1,877,455. LEVEL. GRANVILLE J. GORDON, Noxon, Mont. Filed May 31, 1930. Serial No. 458,856. 1 Claim. (Cl. 33—220.)



The combination in a level of the pendulum type with a stock having an opening, of a fixed retaining-ring in the opening and having a retaining flange thereon, a complementary screw retaining-ring having a retaining flange thereon, spaced lenses supported by said retaining rings and alined bearings in said lenses, an intermediate spacing ring between the lenses, a pivot pin journaled in the bearings, a pendulum having a hub provided with a bore having a convex wall resting on the pin to permit lateral tilt of the pendulum, and a pair of collars on the pin at opposite sides of the hub.

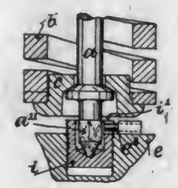
1,877,456. BAG MAKING. IRVING GURWICK, New York, N. Y., assignor, by mesne assignments, to Transparent Packaging & Printing Corporation, New York, N. Y., a Corporation of New York. Filed May 9, 1929. Serial No. 361,583. 23 Claims. (Cl. 93—35.)



1. A bag comprising a blank folded on a transverse line intermediate its length in order to form the body portion of the bag, the back side projecting beyond the front side in order to form a flap for closing the bag, the edges of the body portion of the bag being permanently cemented by means of an adhesive cement, and said cemented edges being folded over upon and permanently cemented to a side of the bag by means of an adhesive cement, the resulting doubly cemented seam being left in a flat and uncrimped condition.

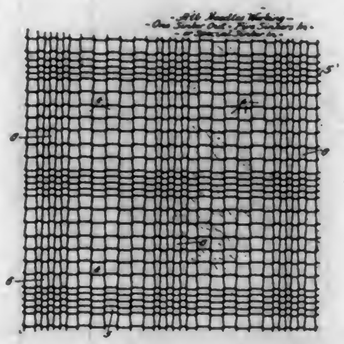
12. The method of making a bag from cellophane or like thin transparent relatively brittle paper, which includes folding a blank across a transverse line intermediate its length and cementing the edges to form a bag body, applying strips of cement to a side of the bag, folding the edges of the bag over onto the strips of cement on the side of the bag, and finally squeezing the folded edges of the bag in order to bring the cemented surfaces into intimate contact.

1,877,457. SAFETY VALVE. WILLIAM HARGREAVES, Timperley, England, assignor of one-half to R. L. Ross and Company Limited, Stockport, England. Filed Mar. 14, 1930, Serial No. 435,751, and in Great Britain Apr. 25, 1929. 5 Claims. (Cl. 137—53.)



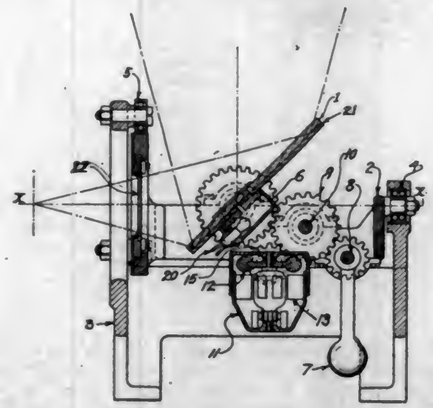
1. A safety valve for vessels under fluid pressure, comprising a housing, means for closing and sealing said housing, a spindle mounted for rotation in said housing and protruding from the housing at one end thereof, said end being engageable for rotating the spindle, a spring-pressed member disposed on said spindle, a valve proper adjacent the lower end of the valve spindle, means associated with said spindle and said valve proper and effective on the rotation of the spindle to vary the operative length of said spindle thereby to increase or diminish the spring tension on said member, and means for expressly controlling the rotary movement of the spindle in either direction within narrow limits relative to the valve proper.

1,877,458. KNITTED FABRIC FOR HOSIERY. HARRY HARRIS, Croydon, Pa., assignor to Largman, Gray Company, Croydon, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1931. Serial No. 581,754. 6 Claims. (Cl. 66—180.)



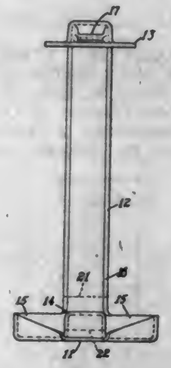
1. A machine knitted fabric simulating lace, which comprises loops knitted to a size below the normal of the machine, interspersed in a predetermined pattern with loops at least of a size normal for that machine, and loops between the constricted and normal size loops being of an intermediate size.

1,877,459. MACHINE FOR USE IN DETERMINING THE LONGITUDE AND LATITUDE AND DIRECTION OF FLIGHT OF AN OBSERVER. GEORGE M. HAYES, New York, N. Y., assignor of one-half to Thomas P. Conlon, New York, N. Y. Filed Apr. 24, 1929. Serial No. 357,761. 10 Claims. (Cl. 88—2.2.)



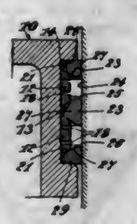
1. A machine for use in determining the position among the stars of the zenith point of an observer comprising a scale plate and a mirror balanced about a common axis, means for marking on the scale plate the position of the zenith point as reflected by the mirror, means for marking the center of incidence of the optical ray from the zenith point on and as reflected by the mirror to the mark on the scale plate, means for compensating for a change of level, said means turning the mirror about an axis, at right angles to the axis about which the mirror and scale plate are balanced, one half the angular change of level about this axis.

1,877,460. METHOD OF MAKING RAIL BRACKETS. ANDREW A. HOCHER, Etna, Pa., assignor to Hubbard & Company, a Corporation of Pennsylvania. Filed May 9, 1929. Serial No. 361,627. 3 Claims. (Cl. 29—150.)



1. The method of fabricating a third rail support which includes stamping out a sheet metal piece and forming a base member having an upturned flange around three sides thereof, upwardly displacing the metal in the substantial center of said base member to form an upwardly extending annular flange, forming a fourth side of the base having a slotted flange forming an inverted cup-shaped member and welding the edges of the cup-shaped member to the upwardly extending annular edges of said base member, forming a bracket member having a downwardly extending channel member terminating in an edge portion, and welding the lower edge portion of the channel member to one end of the base member.

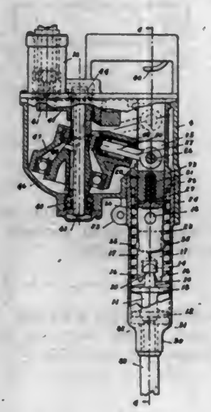
1,877,461. PISTON RING STRUCTURE. JAMES G. HODGE, East Orange, N. J. Filed May 15, 1930. Serial No. 452,539. 6 Claims. (Cl. 74—109.)



1. A piston and ring structure comprising in combination with a piston having a ring groove, an inner and outer ring in the groove, the inner ring having a cylindrical inner face engaging the piston, the outer ring having cylinder wall engagement, the inner ring being split and axially expansive and the inner and outer ring having cooperating means by which axial expansion of the inner ring produces radial expansion of the outer ring.

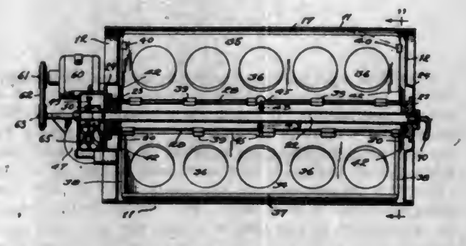
1,877,462. MECHANICAL HAMMER. ROY HOLLE, Cincinnati, Ohio. Filed Jan. 13, 1931. Serial No. 508,416. 3 Claims. (Cl. 125—33.)

2. In combination with a hollow cylinder having a tool receiving socket at one end, of a power reciprocated piston in the cylinder, a pair of grippers pivoted together and carried by the piston, cooperating means on the grippers and cylinder for opening the grippers as the piston reaches one end of its path of travel, spring means disposed axially within the piston and yieldably



resisting opening of the grippers, an impact member slidable in the cylinder, and a coiled compression spring urging the impact member toward the tool socket beyond the reach of the grippers.

1,877,463. ADVERTISING DEVICE. JOSEPH C. HOUCK, Los Angeles, Calif. Filed May 26, 1932. Serial No. 613,717. 8 Claims. (Cl. 40—35.)

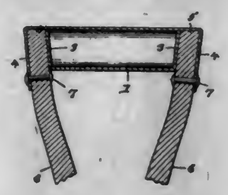


1. In a display device, the combination of a casing having a display opening, with a shaft journaled in the casing opposite to the display opening, means for rotating the shaft, secured in the casing having opposite guide-grooves approximately concentric with the shaft, rods extending parallel to the shaft with their ends registering with the guide-grooves, followers fixed on the shaft engaging the rods to hold the latter in spaced relation and to propel the same around the guide-grooves, and card-holding frames hinged on the rods to be displayed in the casing opening as the rods travel around the guide-grooves.

1,877,464. HANDLE GRIP. SAMUEL W. HUSTON, Trinity, Tex., assignor of one-half to Robert T. Gann, Trinity, Tex. Filed Sept. 28, 1931. Serial No. 565,654. 1 Claim. (Cl. 294—57.)

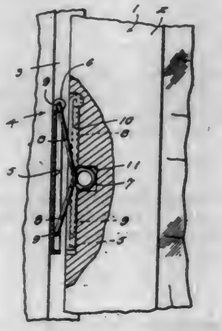
A handle grip consisting of a metallic tube section having slits leading in from the ends and having tongues between said slits, the tongues at one side of the sec-

tion being bent into the section and disposed transversely across the interior thereof, and the tongues at the opposite side of the section being bent down in



spaced parallel relation to the first mentioned tongues forming socket walls adapted to bear against opposite sides of branches of the handle.

1,877,465. SASH HOLDING DEVICE. HUBERT G. KIMBRO, Bell, Calif. Filed Oct. 22, 1931. Serial No. 570,467. 1 Claim. (Cl. 292—76.)



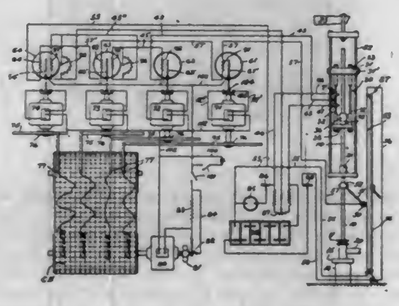
A window sash holding device, comprising an elongated friction plate having a sleeve formed transversely of one end, a coil spring disposed transversely of said plate substantially midway between its ends, said spring having its ends extended in opposite directions and longitudinally of the plate and each terminating in an arm extending transversely of the plate, one of said arms being mounted in said sleeve, said device being designed to be mounted in one side of a sash bar and said spring operating to force the plate outwardly for frictional engagement with the adjacent frame.

1,877,466. WRENCH SET UNIT. EDWARD C. KOSTER, Shaker Heights, Ohio, assignor to The Vichek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 29, 1928. Serial No. 289,103. 7 Claims. (Cl. 206—16.)



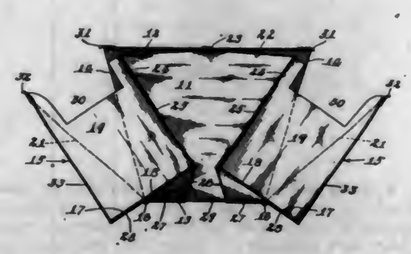
1. A wrench set unit, comprising a plurality of wrenches each having enlargements at opposite ends and assembled side by side, and a holding device for said wrenches including plate means cooperating with said wrenches and adapted to interabut with the enlargements of said wrenches to prevent substantial longitudinal shifting thereof relative to said holding means, said plate means having a series of corrugations adapted to receive the handles of said wrenches, and forming seats therefor.

1,877,467. COMPUTING DYNAMOMETER AND STROKE METER WITH MOTOR DRIVEN RECORDING MEANS. FRANCIS W. LAKE, Whittier, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Dec. 11, 1928. Serial No. 325,140. 53 Claims. (Cl. 265—2.)



1. A method for measuring stroke of a remote point of an elastic member, comprising measuring stroke of said member at a near point, measuring load variations imposed on said member at the near point, computing stretch changes caused by load variations, and combining stretch movements with stroke movement to obtain resultant movements.

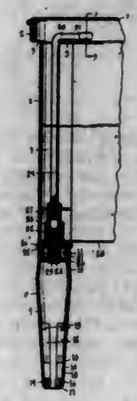
1,877,468. CONTAINER. CHARLES L'ENFANT, New York, N. Y. Original application filed Feb. 5, 1926, Serial No. 86,129. Divided and this application filed Mar. 6, 1929. Serial No. 344,726. 2 Claims. (Cl. 206—41.)



1. A container of the character described comprising a box-formed case section having side walls receding from the top wall to the bottom wall and having open ends between the top and bottom walls, article holders arranged at said open ends and extending part way into the case section, said article holders having bottom walls and open tops, hinge means connecting the bottom walls of the article holders at intermediate points with the ends of the bottom wall of the case section, to provide for tilting the article holders to and from a position in

which their open tops will be exposed adjacent said open ends, there being an opening in the bottom wall of the case section through which to enter a finger and exert pressure upon the bottom walls of the article holders whereby to tilt the article holders into position for exposing their open tops.

1,877,469. METAL FURNITURE. RAYMOND H. SOPER, Muskegon, Mich., assignor to Browne-Morse Company, Muskegon, Mich. Filed Aug. 30, 1930. Serial No. 478,899. 14 Claims. (Cl. 45—6.)



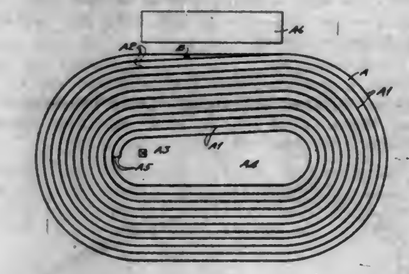
9. The combination with a pedestal, a top, a tie rod for said top mounted directly on said pedestal, a leg socket connected to said tie rod, and a leg engaged in said socket.

1,877,470. TELEPHONE CABINET. FRANK MASTRANGELO and ALPHONSO MASTRANGELO, Fitchburg, Mass. Filed Mar. 26, 1931. Serial No. 525,542. 8 Claims. (Cl. 312—25.)



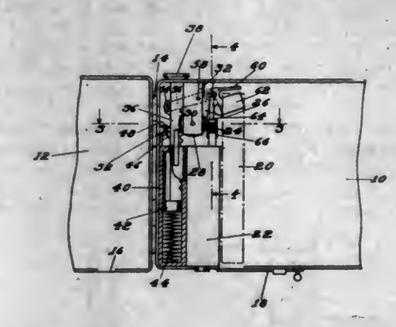
1. A cabinet including a compartment having side walls, a back and top, a shelf slidingly mounted between the side walls, the side walls each having a groove extending upward and rearward and then downward, a roll top having its ends disposed in said grooves, bell crank levers mounted upon the side walls of the compartment, each having an arm extending rearwardly and connected to one end of the roll top and having an arm extending downward and operatively connected to the shelf.

1,877,471. RACE TRACK. ALLEN FRENCH MCCLAIN, Sr., Knoxville, Tenn. Filed Dec. 8, 1931. Serial No. 579,774. 8 Claims. (Cl. 272—4.)



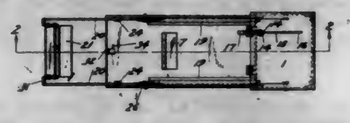
1. A trackway made in a general spiral shape with more than a complete convolution thereof arranged approximately in a horizontal plane.

1,877,472. CIGARETTE LIGHTER AND DISPENSER. NILS ARVIDSSON, Chicago, Ill. Filed Apr. 11, 1930. Serial No. 443,411. 2 Claims. (Cl. 206—41.4.)



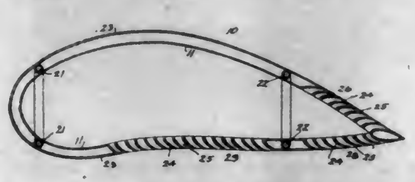
1. A cigarette lighter and dispenser, comprising in combination, a container for cigarettes, an automatically operated lighting element in the container, a wick at one end of the lighting element, a flint and steel adjacent the wick, a shaft upon which the wheel is mounted, a gear fitted on the shaft, a vertically movable rack in mesh with the gear, an operating rod integral with the rack, a push-button at one end of the operating rod outside of the container, a piston mounted on the other end of the rack bar, a cylinder in which the piston is slidably fitted, a helical spring in the cylinder below the piston, a projection integral with the rack bar, a trigger adapted to cooperate with said projection, and a trip bar for the trigger extending outwardly through the side wall of the container, together with a leaf spring adapted to cooperate with the lower face of the projection, said leaf spring having a curved end allowing the projection to ride beneath the same upon downward movement, and latching the same upon initiation of an upward movement, a pair of integral lugs on the rack bar, a lever pivotally mounted adjacent the rack bar, a pin in one end of the lever between the lugs, and a cigarette expelling paddle at the other end of the lever.

1,877,473. MAIL BOX. JOHN R. GRAHAM, Linwood, Iowa. Filed Dec. 26, 1930. Serial No. 504,701. 7 Claims. (Cl. 232—28.)



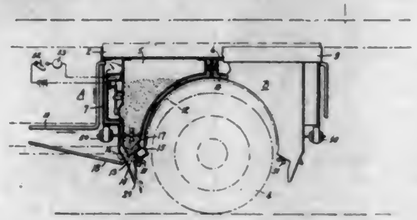
1. A mail box having a door hinged to one side thereof, said door having guideways for slides, slides in said guideways, a mail container carried by said slides, and means to cause projection of said slides and container when the door is opened.

1,877,474. FLYING MACHINE. EDDIE BURKHART, Tacoma, Wash. Filed July 21, 1930. Serial No. 469,422. 6 Claims. (Cl. 244—18.)



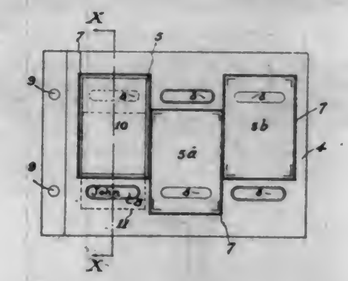
1. A flying machine, having a forwardly-exposed opening; a propelling means within said opening and adapted to draw air thereinto; a hollow wing; an air conduit leading from said propelling means to said hollow wing; and fixed vanes forming a substantial portion of the wing area, said vanes being separated by passages, each such passage starting at its inner end in a direction substantially at right-angles to the wing surface and curving therefrom towards the rear and adapted to release the air from said hollow wing and to direct it towards the rear.

1,877,475. SANDING APPARATUS. ANDREW T. COWAN, Rensselaer, N. Y. Filed Oct. 6, 1931. Serial No. 567,161. 8 Claims. (Cl. 291—19.)



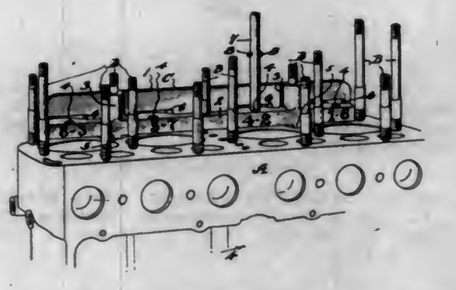
1. In a road vehicle, a unit comprising a sand container and a jacket, an air passage between the jacket and the container, an engine for driving said vehicle having an exhaust line, an air heater comprising a jacket about said line and having an air passage between the jacket last mentioned, and said line, whereby air entering said passage at one end, while the engine is running, is heated by the time it reaches the other end thereof, said other end being connected with the air passage in said unit, said container having an outlet and a valve thereat, said jacket first mentioned having a nozzle enclosing said outlet and valve, the opening in the nozzle being located below and in proximity to said valve whereby when the valve is opened the sand will fall through said nozzle and whereby the heated air will maintain the valve and the nozzle warm, said nozzle being located to allow the sand to fall in the path of a wheel of the vehicle.

1,877,476. PHOTOGRAPH ALBUM. HOWARD E. GILLESPIE, Malden, Mass., assignor of one-half to David J. Abrahams, Boston, Mass. Filed Feb. 18, 1931. Serial No. 516,633. 9 Claims. (Cl. 129—20.)



1. A sheet of material having two openings therein, combined with a photographic print secured to said sheet between said openings and covering one of them, and a photographic print secured to the opposite side of said sheet between said openings and covering the opposite opening.

1,877,477. EXPLOSIVE ENGINE ATTACHMENT TO FACILITATE VALVE GRINDING. CHARLES B. GLADDING, Geneva, Ohio. Filed June 2, 1928. Serial No. 282,444. 10 Claims. (Cl. 33—180.)

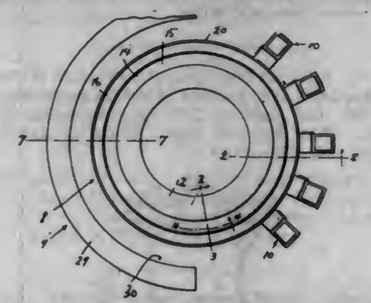


1. A valve timing device of the class described, comprising, in combination, a main body member formed with means adapting it to be detachably fastened to a cylinder block in position over the cylinders when the head is removed and leaving the valves accessible, and an instrumentality associated with the main body member for limiting movement of one of the pistons in the cylinder block and thereby determining the setting of certain of the valves, said valves being adjustable while the device is in operative position.

1,877,478. PROCESS FOR THE MANUFACTURE OF CYCLIC SULPHUR COMPOUNDS SUCH AS THIOPHENE AND ITS DERIVATIVES. ERIC T. HESSLE, Lockport, Ill., assignor to Thiophene Products Company, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1927. Serial No. 209,185. 11 Claims. (Cl. 260—53.)

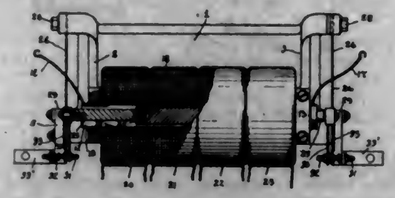
1. A process for the manufacture of organic sulphur compounds of cyclic nature bearing sulphur in the ring structure which consists in submitting hydrocarbon sulphur compounds containing sulphur in non-cyclic combinations to the action of an oxygen containing compound of the iron group and molecular sulphur under heat and distilling in the presence of a vacuum and super-heated steam.

1,877,479. FRUIT PACKING DEVICE. CURTIS LINDLEY, Jr., Empire, Calif. Filed Feb. 18, 1930. Serial No. 429,306. 1 Claim. (Cl. 209—124.)



An apparatus for facilitating reception, assorting, and packing of fruit and the like as described, comprising a continuously rotatable table in the form of a closed ring, an arcuate stationary table radially spaced outwardly from and at one side of the rotatable table and defining therewith an aisle, an arcuate row of circumferentially spaced stationary packing stands arranged close to the rotatable table and spaced from the ends of the arcuate stationary table, and means for rotating said rotatable table, said rotatable table comprising a base in the form of a ring, bearings on the base, a top in the form of a ring carried by the bearings, said top being rotatable relative to the base, and said top comprising a substantially horizontal surface having on the radially inward marginal portion thereof a raised platform overhanging the edge thereof, the remainder of the said surface being provided with a partition transversely dividing it into distinct annular compartments on the same level enabling continual separation of the assortments of the fruit made.

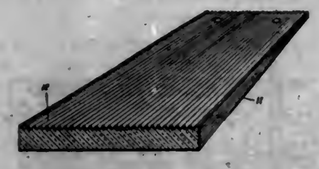
1,877,480. ELECTRICAL RELAY. SAMUEL C. OSBORNE, Cleveland Heights, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 16, 1930. Serial No. 502,679. 6 Claims. (Cl. 200—102.)



1. In apparatus of the character described, the combination of an oscillatable armature, a plurality of electromagnetic means arranged successively axially of said armature for effecting movement thereof, an electromagnetic coil arranged coaxially of said armature and including in its axial extent more than one of said first named electromagnetic means; leaves of resilient material for supporting said armature secured intermediately of their ends to opposite ends thereof and at one end to rigid supports, and contact making means carried by the free ends of said resilient leaves.

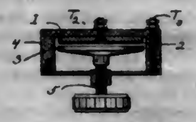
1,877,481. ROOFING TILE AND PROCESS. THEODORE C. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Nov. 12, 1928. Serial No. 318,759. 1 Claim. (Cl. 41—19.)

As an article of manufacture, a roof tile or shingle having a surface that has elevations and depressions, said elevations having different colors on different faces thereof, and of such proportions with relation to the depressions that they can serve substantially to screen the color on one side and to expose the color on the



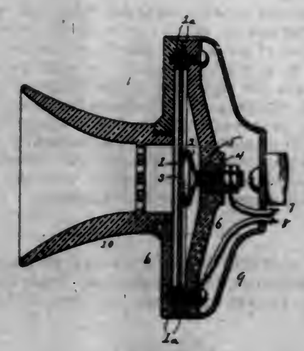
other side, and said depression having a color different from the above mentioned colors, and which is the color of the material forming the tile, whereby a view from above causes the tile to assume the color of the depression.

1,877,482. RESISTANCE DEVICE. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Patents Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,608. 3 Claims. (Cl. 201—50.)



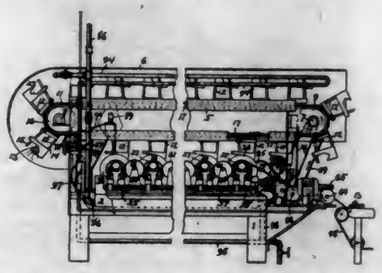
1. An electrical resistance device comprising an electrode composed of a conductive material and a contacting electrode of copper having upon its surface adjacent to the other electrode, an integrally formed, homogeneous crystalline layer of a compound of copper and means for varying the resistance of the compound of copper by varying the surface pressure between the first mentioned electrode and the compound layer.

1,877,483. ELECTRICAL MICROPHONE. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Ruben Patents Company, New Rochelle, N. Y., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,904. 4 Claims. (Cl. 179—140.)



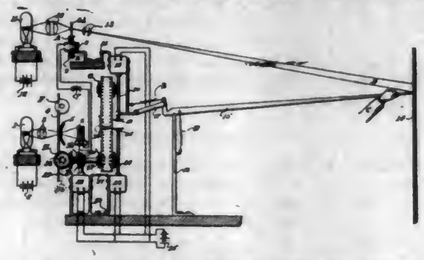
1. A device for translating audio frequency oscillations into oscillations of like frequencies in an electrical circuit, which comprises a vibratory electrode in surface contact with vanadium pentoxide as a cooperating electrode, means for directing audio frequency oscillations upon one of said electrodes, means for supporting the electrodes, and means for protecting said electrodes from extraneous audio frequency oscillations.

1,877,484. MACHINERY FOR SEALING ELECTRICAL COILS. EDWARD SNYDER, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 1, 1929. Serial No. 396,589. 21 Claims. (Cl. 91—47.)



19. In apparatus of the class described, the combination of a conveyer comprising a traveling belt provided with a series of claspers attached thereto, wheels spaced apart supporting said belt, each of said claspers having two connected relatively movable members pivotally secured to said belt respectively at points thereon spaced apart whereby said claspers are automatically opened upon passing around said wheels, and are closed during their passage in the straight course from one wheel to the other; and means for applying a sealing fluid to coils while held and conveyed in said claspers.

1,877,485. SOUND RECORDING AND REPRODUCING DEVICE. JACK L. WALKER, Dallas, Tex. Filed June 29, 1928. Serial No. 289,256. 3 Claims. (Cl. 179—100.3.)



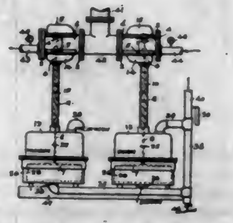
1. In a device of the character described, means for causing variations in opacity of a sound record film to vary the value of an electric current, means for producing variations in a shutter position by said variations in opacity, means for projecting a light image of said variations of said shutter positions, means for producing travel of a lever in accordance with the travel of said light image of said shutter and means for mechanically producing sound variations in accordance with the variations in position of said lever and in accordance with the variations in said sound record film varying in opacity.

1,877,486. ANTIFRICTION JOURNAL BEARING. DALMAR T. BROWNLEE, Indianapolis, Ind. Filed Feb. 8, 1930. Serial No. 426,930. 4 Claims. (Cl. 308—174.)



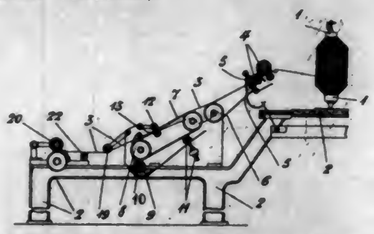
1. In an anti-friction journal bearing, a retaining cage including an outer spacing ring and a diametrically smaller inner spacing ring to rotate in unison, each ring having roller-retaining slots in one edge portion thereof and the rings arranged reversely each relatively to the other, to radially position cylindrical bearing rollers and enable the rings to co-operate to retain all the rollers on one and the same plane of rotation.

1,877,487. REGULATOR VALVE. STEPHEN H. BROOKS, Los Angeles, Calif., assignor to Brooks Engineering Corporation, Los Angeles, Calif., a Corporation of California. Filed Dec. 23, 1926. Serial No. 156,614. 4 Claims. (Cl. 137—153.)



2. In super-sensitive controls, an upper casing, a pair of balanced valves in the casing, a separate and lower casing remote from the valve casing, a tube attached to both castings, a light weight flanged float in the lower casing, a rod passing through the tube connecting the valves to the float, a mercury seal in the tube for the rod, a liquid seal for the float, means for subjecting the float on its upper face to a negative pressure, and means adapted to subject the float on its under side to a positive pressure.

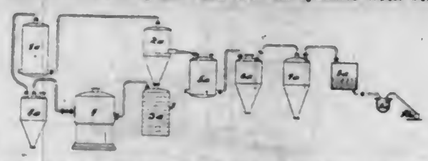
1,877,488. MEANS FOR THE MANUFACTURE OF YARNS SUITABLE FOR USE IN THE PRODUCTION OF FABRICS THEREWITH. WILLIAM RUPERT ALLEN, Holcombe, near Bury, England. Filed July 6, 1931, Serial No. 548,950, and in Great Britain Sept. 12, 1930. 2 Claims. (Cl. 28—1.)



1. Means for the manufacture of yarns suitable for use in the production of fabrics, or for other purposes, from twistless slivers of fibres of roving material, comprising an adhesive-supplied carrier for said twistless fibres, and for wetting the latter with said adhesive, a moving device and a closely adjacent carrier, between which device and carrier the fibres are passed, said movement of the device being a reciprocatory and sidewise one relatively to said carrier, whereby the fibres are rolled closer together for attachment purposes, and a device for exposing the twistless fibres so attached to a drying agent, as herein set forth.

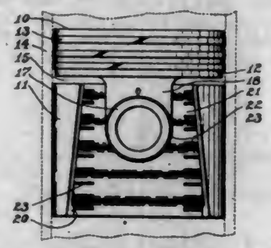
1,877,489. AMMONIA-SODA PROCESS FOR THE PRODUCTION OF SODIUM HYDROXIDE, NaOH, WITH SIMULTANEOUS PRODUCTION OF AMMONIA. FRIEDRICH BARTLING, Hugliing, Germany. Filed Mar. 6, 1930, Serial No. 433,700, and in Germany Mar. 26, 1929. 8 Claims. (Cl. 23—185.)

1. The method of producing ammonium chloride and sodium hydroxide comprising introducing carbon dioxide into a solution containing sodium chloride and ammonia, whereby sodium bicarbonate is precipitated and ammonium chloride is obtained in solution, treating the precipitated sodium bicarbonate in the presence of carbon with nitrogen at an elevated temperature, whereby sodium cyanide is produced, reacting the said sodium cyanide with steam



at an elevated temperature, whereby ammonia and sodium hydroxide are produced and returning the evolved ammonia to the ammonium chloride solution, whereby the latter compound is obtained in solid form.

1,877,490. PISTON. OTTO CARTER BERRY, Indianapolis, Ind. Filed Mar. 20, 1922. Serial No. 545,312. 41 Claims. (Cl. 74—108.)

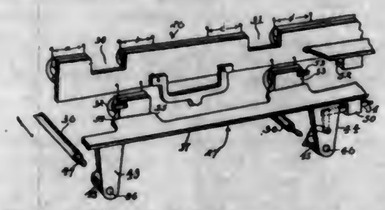


6. A piston, comprising a head-part of non-ferrous metal, wrist-pin bosses rigidly connected to said head-part, skirt segments spaced from said wrist-pin bosses, and members made of sheet metal connecting said skirt segments together and to said wrist-pin bosses.

1,877,491. METHOD OF LUBRICATING HIGH TEMPERATURE EQUIPMENT FOR COOKING FOOD. EDWIN J. BOHNEN, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept. 16, 1929. Serial No. 393,110. 1 Claim. (Cl. 87—9.)

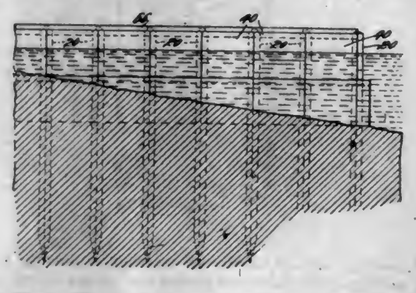
The method of lubricating high temperature equipment for cooking food which comprises applying thereto at low temperatures a suspension of graphite in a treated, tasteless, non-odorous, light hydrocarbon oil whereby the oil penetrates and carries the graphite into remote portions of said equipment, and vaporizing said oil in situ, leaving the graphite in said remote parts of the equipment to serve as a lubricant, the vaporized oil being unobjectionable because it is tasteless and non-odorous.

1,877,492. KNITTING APPARATUS. CORNELIUS BOMHOFF, Rockaway, N. J., assignor to Gotham Silk Hosiery Company Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 13, 1929. Serial No. 385,548. 8 Claims. (Cl. 66—82.)



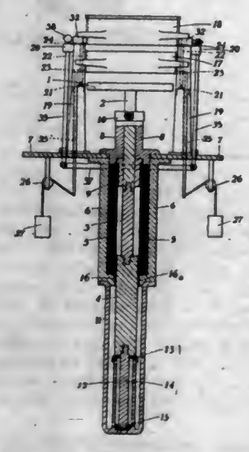
4. In a machine of the character described a first needle bar section, a second needle-bar section, means for moving the first section through a compound horizontal and vertical knitting motion, and independent means for reciprocating said second section in a horizontal direction in synchronism with the knitting movement of the first section.

1,877,493. METHOD OF CONSTRUCTING SEA WALLS. JAMES B. BROCKHURST, Red Bank, N. J. Filed Dec. 10, 1928. Serial No. 324,832. 9 Claims. (Cl. 61—4.)



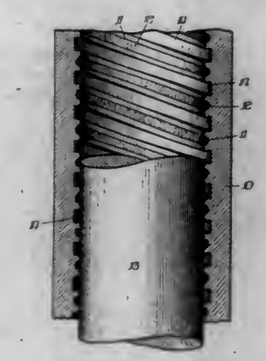
1. The method of building a concrete wall, which includes fixing a plurality of parallel members in vertical alignment, forming concrete blocks between upper portions of successive parallel members so as to fit therebetween and extend laterally at each side of each of said parallel members in plane surfaces lying in a common plane passing substantially through the axis of such member, and lowering each of such members until it adjusts itself in engagement with material beneath the same.

1,877,494. MACHINE FOR PUSHING FOUNDRY MOLDS OUT OF THEIR BOXES. THOMAS WOODWARD BULLOCK, Rainhill, England, assignor to British Insulated Cables Limited, Prescot, Lancashire, England, a British Company. Filed June 23, 1931, Serial No. 546,276, and in Great Britain July 5, 1930. 2 Claims. (Cl. 22—9.)



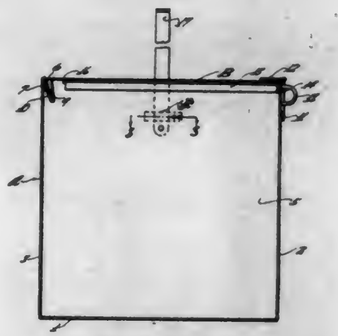
1. A pushing-out machine for foundry moulds comprising means for engaging a box or boxes containing a mould, a pushing member adapted to travel through the box when the latter is held in position, an electro-magnetic device operatively connected with the pushing member for producing the travel thereof and a frictional speed controlling device influencing the speed of movement of the said electro-magnetic device.

1,877,495. BEARING. WILLIAM H. CATER, Chicago, Ill. Filed May 15, 1931. Serial No. 537,529. 1 Claim. (Cl. 308—240.)



A bearing-member having an internal cylindrical bearing surface adapted to accommodate a rotary shaft, said surface having an empty spiral channel open at the two ends of the bearing and a second spiral groove the convolutions of which are between the convolutions of said first channel and filled with a lubricating material.

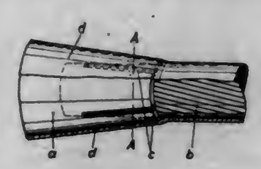
1,877,496. TOOL BOX OR CASE. EUGENE R. COLE, Toledo, Ohio. Filed Sept. 13, 1930. Serial No. 481,625. 2 Claims. (Cl. 220—38.)



1. In a device of the kind described, a receptacle, an inwardly and downwardly turned lip along the margin of one side of the receptacle forming a cleft, a cover adapted to fit within the said receptacle, a lip upon one margin of the cover, the said lip being bent downwardly and upwardly to provide a hook adapted to enter the said cleft formed by the lip on the receptacle, and a stop projected inwardly around the said receptacle, to support the said cover, the said stop terminating short of the side of the receptacle bearing the lip whereby the said cover may be dropped downward edgewise into the receptacle.

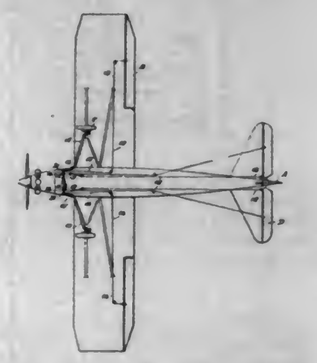
1,877,497. DEEP SEA CABLE. OTTO CORDS, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Dec. 3, 1929, Serial No. 411,375, and in Germany Dec. 13, 1928. 2 Claims. (Cl. 173—256.)

1. In submarine cables a junction between a pressure protecting hollow rope and a rigid sleeve, both of which are surrounded by a common outer lead sheathing, the said sleeve having a conical end with a number of longitudinal slots cut therein and distributed around it, the said slotted end being left unclamped so that owing to



its elasticity it can accommodate itself to the decrease in diameter of the hollow rope under increased pressure, as and for the purpose set forth.

1,877,498. COMBINED CONTROLLING DEVICE FOR STEERING AND STABILIZING AIRCRAFT. MARIO DE BERNARDI, Rome, Italy. Filed Nov. 5, 1930, Serial No. 493,662, and in Italy Feb. 21, 1930. 4 Claims. (Cl. 244—29.)

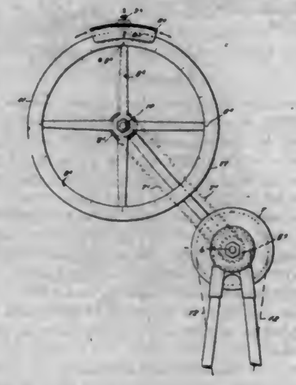


1. A combined aircraft steering and stabilizing control device for controlling the horizontal rudder, the vertical rudder and the ailerons, comprising a rockable horizontal shaft, connections between said shaft and horizontal rudder, a support connected to said shaft and movable therewith in a vertical plane, an arm provided on said support, a handwheel arranged at the free end of said arm, an axle journaled in the top of said support, single grooved and double grooved pulleys carried with the axle, an operable connection between the axle and the hand wheel, operable connections between the single pulley and the vertical rudder and between the double pulley and the ailerons so that upon forward and backward movement of the hand wheel support the horizontal shaft is oscillated and the horizontal rudder thereby controlled while on turning the hand wheel the axle carrying the pulleys is also turned regardless of the position of the support in order to simultaneously control the vertical rudder and the ailerons, the operable connections being such as to effect uniform and proportional displacements thereby reducing the number of controlling movements and preventing errors on the part of a pilot from interfering with the proportional movement of the parts.

1,877,499. COMBINED STEERING AND STABILIZING CONTROL DEVICE FOR AIRCRAFT. MARIO DE BERNARDI, Rome, Italy. Filed June 15, 1931, Serial No. 544,581, and in Italy May 11, 1931. 6 Claims. (Cl. 244—29.)

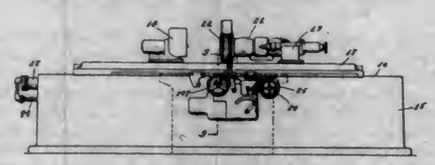
1. In a combined aircraft steering and stabilizing control device of the type having a support for a common

shaft and having a steering wheel and its supporting shaft also mounted thereon and further having operable connections between the shaft of the wheel and the common shaft and between the common shaft and the steer-



ing rudder and the ailerons of the aircraft, means for loosely mounting the operable connections between the hand wheel supporting shaft and the steering rudder, and means for releasably fixing the last mentioned operable connection to the hand wheel.

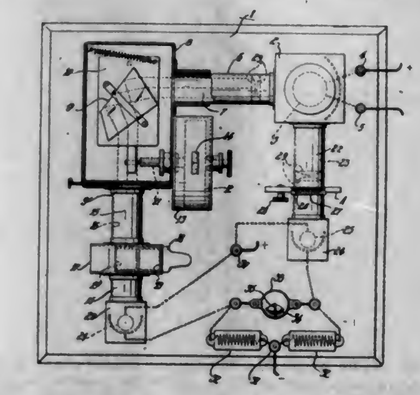
1,877,500. HYDRAULIC GRINDER. SOL EINSTEIN, Cincinnati, and HERMAN R. ISLER, Norwood, Ohio, assignors, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed July 29, 1925. Serial No. 46,817. 17 Claims. (Cl. 51—95.)



1. A grinding machine including a bed, a table reciprocable on the bed, a wheel carriage movable on the bed toward and from the table, hydraulically actuated means for reciprocating the table during the slowing down of the table movement under influence of the retarding valve, a retarding valve for said means, a plunger, means connecting the plunger with the retarding valve for operating said valve, trip dogs on the table for shifting the plunger, and connections between the plunger and the wheel carriage for feeding the carriage toward the table.

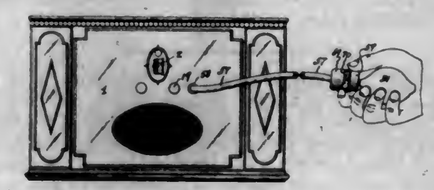
1,877,501. ELECTROOPTICAL METHOD AND MEANS FOR MEASURING SUBSTANCES FOR CONCENTRATIONS, COLORS, DISPERSIONS, ETC. WILLIAM G. EXTON, New York, N. Y. Filed June 18, 1930. Serial No. 460,862. 5 Claims. (Cl. 88—14.)

1. A method for measuring the relative ability of substances to transmit light of any selected wave length band, consisting of directing light from a source along two distinct paths, dispersing the light of the first of said paths, selecting a given wave length band of said dispersed light and passing said selected wave length band successively through substances to be compared while simultaneously varying the quantity of light passing along said second path so that the successive intensities thereof correspond to the successive intensities of the light passed through said substances, the successive



variations in the quantity of light passing along said second path being used as a measure of the relative ability of the successively tested substances to transmit light of the selected wave length band.

1,877,502. REMOTE TUNING CONTROL FOR RADIO-RECEIVERS. VINCENT FLOCCO, Newark, N. J. Filed Sept. 27, 1929. Serial No. 395,725. 5 Claims. (Cl. 250—20.)

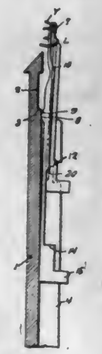


3. The combination with a control member of a radio receiver, of mechanism for actuating said radio control member from a distance, said mechanism comprising an air motor having reciprocable piston means, means operated by said piston means for actuating said control member, a bulbous portable air pump, an air conduit for delivering air from said pump to said motor to produce operative movement of said piston means in one direction, another air conduit for delivering air from said pump to produce operative movement of said piston means in the opposite direction, a manually adjustable and portable valve means included between said air pump and said conduits to selectively couple the latter for reception of air from said pump, and said valve means having an escape means to communicate with one air conduit when the other is connected to receive air from said pump.

1,877,503. KNITTING MACHINE NEEDLE ASSEMBLAGE. AUGUSTIN GAGNÉ, Central Falls, R. I., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Jan. 17, 1928. Serial No. 247,343. 9 Claims. (Cl. 66—13.)

1. In a knitting machine of the character set forth, a cylinder and a needle consisting of a hook-shaped member and a hook closing latch slidably associated therewith, said hook-shaped member being slidably rockably associated

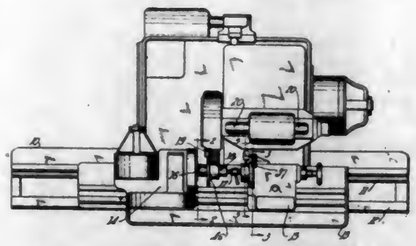
with the cylinder for downward movement to an outwardly inclined yarn engaging and loop-forming position, and coacting means upon the cylinder and the needle for moving the needle outwardly during the initial phase of its downward movement so as to effect its positive engagement with the yarn.



1,877,504. TREATMENT OF DEEP WELLS. JOHN J. GREBE and ROSS T. SANFORD, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 30, 1932. Serial No. 620,292. 11 Claims. (Cl. 166—21.)

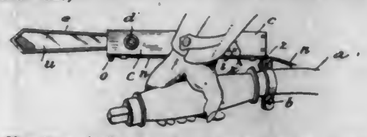
1. In a method of increasing the output of a well for producing a fluid mineral product such as oil, gas, water or brine, the step which consists in introducing into the well an aqueous hydrochloric acid solution to which has been added a relatively small amount of an agent capable of inhibiting action of the acid upon metals.

1,877,505. GRINDING MACHINE. FREDERICK S. HAAS and BERNARD A. KRAANS, Cincinnati, Ohio, assignors to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,400. 4 Claims. (Cl. 125—11.)



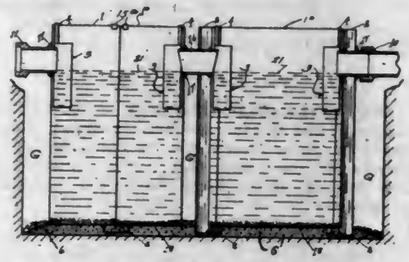
4. The combination with a grinding machine including a grinding wheel having a peripherally operative surface and a work supporting table disposed in opposition thereto, of a tail-stock carried by the table, and a truing mechanism for the grinding wheel carried by the tailstock including a ring rotatable about an axis substantially parallel with the tailstock having a plurality of truing devices projecting peripherally therefrom whereby the truing devices will be alternatively positioned in operative relation to the grinding wheel upon rotation of the ring, the alternate tool being simultaneously shifted into a remote inoperative position, and means for locking the ring at selected stations to insure proper relative position of an individual truing tool with respect to the periphery of the wheel to be operated upon thereby.

1,877,506. DIRECTION INDICATOR. WILLY HEERTSCH, Erfurt, Germany. Filed Oct. 24, 1930, Serial No. 490,870, and in Germany Sept. 25, 1930. 3 Claims. (Cl. 116—51.)



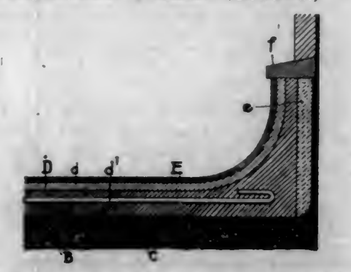
1. A direction indicator for motor cycles comprising in combination, a crane-like horizontally extending arrow casing, open at the top, and having a slot in its outer wall, an arrow within said casing, an axis for said arrow, said axis being fixed to said casing bolts arranged concentrically around said axis, on said arrow, a rack within said casing, said rack engaging said bolts and effecting the oscillation of said arrow, a bolt on said connecting rod projecting through the slot in the wall of said casing, a pivot on the outside of said casing, a control lever mounted on said engaging said last named bolt, and a spiral spring fastened at one end to said bolt and at the other end to said casing adapted to secure said control lever in both controlling positions.

1,877,507. KNOCKDOWN TANK. KEARNEY J. HENDRICKS, Pittsburgh, Pa. Filed June 20, 1925. Serial No. 38,433. 18 Claims. (Cl. 210—6.)



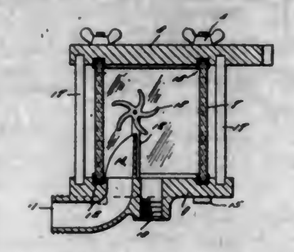
1. In a septic tank, a plurality of side wall sections adapted to be disposed in edge to edge abutting relation, one having an outlet opening and another an inlet opening, reversely bent flanges extending from each edge of said sections, a split tubular member adapted to be applied over the flanges of said sections for locking said sections in assembled position, and plastic setting means in said tubular members for preventing leakage of tank contents through the joints and securing said tubular members as a permanent unit of the tank, and to reinforce the wall sections with supporting columns.

1,877,508. FLOORING. PAUL HOFER, Basel, Switzerland. Filed May 6, 1929, Serial No. 360,821, and in Switzerland May 11, 1928. 2 Claims. (Cl. 94—3.)



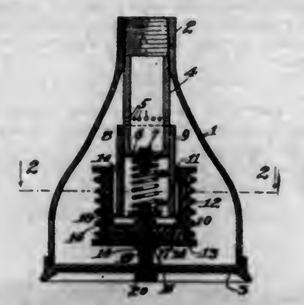
1. In sound-proof and thermically insulating flooring, the combination of a reinforced concrete ceiling, a compressed underlayer of loose cork-metal thereon, tarred paper or the like covering said cork-meal layer, and an independently reinforced self-sustaining floor arranged to freely float upon said cork-meal under-layer, the reenforcing elements of said floor terminating short of the side walls of the room.

1,877,509. SIGHT GAUGE. FRED EDWIN HUBLEY, Detroit, Mich. Filed Oct. 19, 1931. Serial No. 569,805. 3 Claims. (Cl. 116—117.)



1. In a structure of the class described, in combination, an open-ended visible glass cylinder, metal closing plates for the opposite ends thereof, the inner faces of said plates being grooved, clamping bolts for maintaining said plates in closing relationship, spacing struts interposed between the plates for limiting the clamping pressure of said bolts, and gaskets interposed between the plates and ends of said cylinder, said gaskets being seated in the grooves in said plates, each gasket being of general rectangular cross sectional shape and formed with a groove for reception of the adjacent end of the cylinder, each gasket being composed of acid-proof fibrous material for the purpose stated.

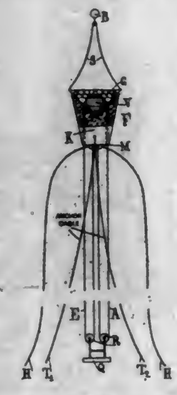
1,877,510. ANTISCALD SHOWER HEAD. GEORGE JOEL HUGHES, Trenton, N. J. Filed Apr. 6, 1931. Serial No. 528,103. 5 Claims. (Cl. 236—93.)



1. In a shower head, the combination of a main casing provided with an inlet and a perforated cap, a thermostat device in said main casing and provided with means adjustably supporting the same on said cap, and a valve device over said inlet and operably connected to said thermostat device.

1,877,511. AMPLIFIER STATION FOR DEEP-SEA SIGNALING CABLES. HERMANN HUNKEL, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Dec. 10, 1930, Serial No. 501,424, and in Germany Dec. 18, 1929. 9 Claims. (Cl. 179—171.

1. An amplifier station for deep-sea signaling cables comprising in combination with the signaling cable, an unsinkable supporting body, to which the said cable is led from the deep sea, means for anchoring the said body at a floating water depth where there are no wave movements or only weak wave movements, an amplifier, a water-tight and pressure-resistant casing freely mounted on the said supporting body and containing the said amplifier and means electrically connecting the signaling cable with the amplifier, the said means being such as to allow the casing containing the amplifier to be lifted off the supporting body and be brought to the surface of the sea, without the electrical connection between the signaling cable and the amplifier being interrupted.



1,877,512. METHOD OF PRODUCING NORMAL LIGHT EFFECTS. ALBERT B. HUBLEY, New York, N. Y., assignor to National Paper Process Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,758. 35 Claims. (Cl. 88—1.)

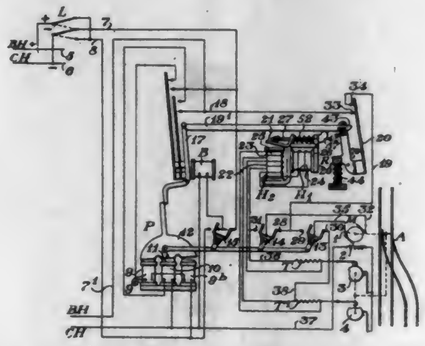


1. The method of producing a normal reflecting or transmitting surface of the type described, which consists in dividing said surface into a multiplicity of uniformly distributed circumscribed figures approximately equal in area, applying to a number of said uniformly distributed circumscribed figures a light absorbing agent of a nature that absorbs all or part of any preponderant wave lengths and reflects, or transmits, the remaining needed wave lengths of the incident light, leaving the other uniformly distributed areas exposed and reflecting, or transmitting, unchanged the hue and value of the incident light received, so as to produce a surface of uniformly distributed units, each unit comprising one absorbing area and its related normal area, reflecting, or transmitting, together a composite of wave lengths the sum of which presents to the eye white light or light within limits to which the eye can react normally and harmoniously, the size of said absorbing area and the size of the said exposed area subtending a visual angle less than that required for conscious resolution by the eye at a normal distance at which the surface is to be viewed.

1,877,518. RAILWAY TRAFFIC CONTROLLING APPARATUS. ALLAN T. JOHNSTON, Mount Lebanon, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1930. Serial No. 479,456. 1 Claim. (Cl. 172—179.)

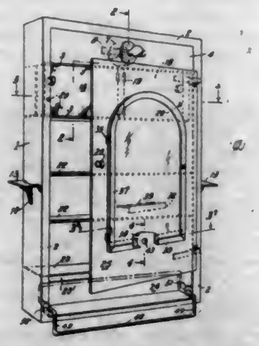
In combination, an electric motor, two circuits for said motor each including a resistor having a high positive temperature coefficient, means for supplying current to one of said circuits or the other to cause operation of the motor in one direction or the other, a circuit breaker for controlling the supply of current to said motor and having two tripping windings in inductive relation with

each other connected across the terminals of said two resistors respectively, whereby when current is supplied to one of said motor circuits the tripping winding associated with the other motor circuit will be closed through



its resistor for decreasing rapid current variations in the other tripping winding, a third winding in inductive relation to each of said tripping windings, and a holding winding for said circuit breaker connected with said third winding.

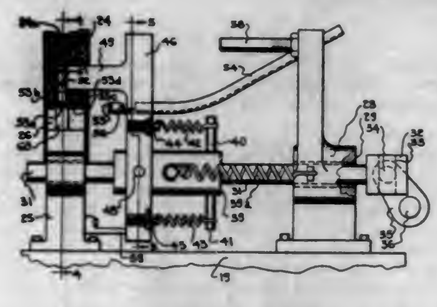
1,877,514. CABINET. HARRIS KATZMAN, Brooklyn, N. Y. Filed Sept. 18, 1928. Serial No. 306,749. 6 Claims. (Cl. 312—189.)



3. In a cabinet, a body, a mirror support hingedly connected thereto, a frame secured to said mirror support at the front thereof and having a groove to receive the edges of the mirror, said frame being open at the bottom to permit insertion of the mirror within said groove, a channel member received into the opening in said frame for completing the contour thereof and retaining the mirror in place, and threaded clamping means passing through the rear flange of the channel member and through the support and adapted to be manipulated at the rear thereof for securing said channel member to said mirror support.

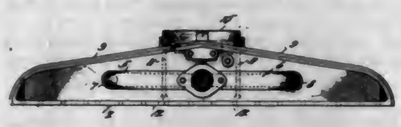
1,877,515. GRINDING MACHINE. CARL G. LILJEBERG, Pittsburgh, Pa., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 29, 1932. Serial No. 595,706. 14 Claims. (Cl. 51—103.)

1. In a centerless grinder the combination of a pair of opposed grinding and regulating wheels forming a grinding throat therebetween, a work rest blade within said throat, a work delivery chute adjacent the throat and in alignment therewith, and means for transferring work pieces individually from the work delivery chute to the



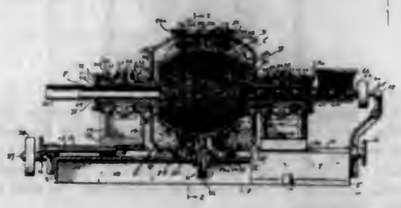
work rest blade, comprising an arm slidably and pivotally mounted for movement between the work chute and the work rest blade.

1,877,516. HEAD CASTING FOR RADIATORS. HOLMAN HARRY LINN, Morris, N. Y., assignor to The Linn Manufacturing Corporation, Morris, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,353. 4 Claims. (Cl. 257—125.)



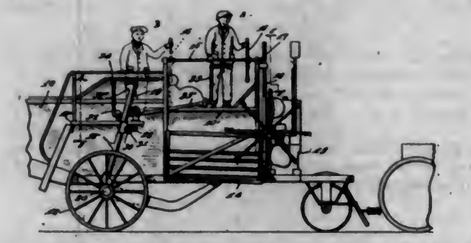
1. A radiator including an upper header section having a rear wall of relatively heavy section formed with an inlet, and conduits formed in said wall and establishing communication between said inlet and the side regions of the header.

1,877,517. METHOD OF GRINDING. JOHN H. MACARTNEY, San Francisco, Calif., assignor, by mesne assignments, to Turbo-Mill Company, Ltd., a Corporation of California. Filed Dec. 15, 1930. Serial No. 502,282. 1 Claim. (Cl. 83—94.)



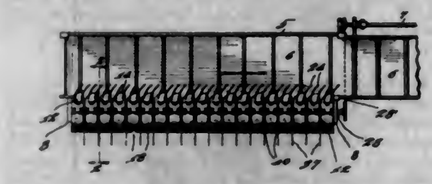
The method of grinding lumpy material which comprises the steps of subjecting two masses of said material to the action of centrifugal force by revolving them in the same direction and interposing another mass of lumpy material intermediate the first mentioned masses and with faces in contact therewith, restraining said material in such manner that each of said masses forms a separate continuous grinding surface, said masses being so placed that their grinding surface cooperate to grind the contacting material therebetween and subjecting said intermediate mass to centrifugal force by revolving same in the opposite direction to the first mentioned two masses.

1,877,518. COMBINATION HARVESTER-THRESHER. WALLACE F. MACGREGOR, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 14, 1929. Serial No. 399,503. 5 Claims. (Cl. 56—20.)



1. In a combination harvester-thresher the latter element of which embodies a platform, a shaft mounted on the platform, means connected to the shaft for adjusting the header of such machine, and a hand-wheel on the shaft for rotating the latter to actuate said adjusting means, said wheel being slidably mounted on the shaft and adapted to be moved therealong whereby the shaft may be rotated by an attendant at the forward and rear ends of the platform to actuate said adjusting means.

1,877,519. HARVESTER. WALLACE F. MACGREGOR, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed June 17, 1930. Serial No. 461,785. 20 Claims. (Cl. 56—364.)



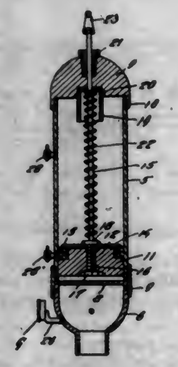
1. In a pick-up for the purpose described, a finger-guard comprising an inner member and an outer member, and means for detachably connecting said members.

1,877,520. COMBINATION HARVESTER-THRESHER. WALLACE F. MACGREGOR, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 20, 1930. Serial No. 489,855. 5 Claims. (Cl. 56—209.)



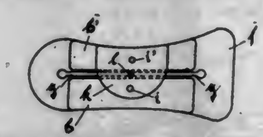
1. In a machine of the class described, a thresher, a frame embodying a wheel connected to one side of the thresher, a curved rack-bar on the frame having teeth in its convex edge, a wheeled supplemental frame on the opposite side of the thresher, a rack-bar on said latter frame having teeth in its concave edge, a continuous axle upon which the wheels of said frame are mounted, a shaft having pinions at its opposite ends engaging the rack bars, and power operated means for actuating each of said pinions to adjust the rack-bars in opposite directions to position the wheel associated therewith in such relation as to maintain the equipoise of the thresher when traversing irregular and sloping ground.

1,877,521. HIGH PRESSURE PUMP. JOHN LEE MAULDIN, Pettus, Tex. Filed June 16, 1930. Serial No. 461,445. 1 Claim. (Cl. 103—153.)



In a pressure pump of the class described, a cylinder opened at its lower end, a nipple having a closed end normally closing the opened end of said cylinder, means coupling one end of the nipple with an adjacent end of the cylinder, said nipple being provided with an outlet, a valved conduit connecting one side of the nipple with one side of the cylinder adjacent the upper end of the cylinder, a second valved conduit connecting the opposite side of the nipple with the corresponding side of the cylinder adjacent the upper end of the cylinder, a piston mounted for reciprocation in said cylinder, spring means normally urging the piston toward the lower end of the cylinder, a rod for said piston extending outwardly through the top of the cylinder, said rod at its free end adapted to be coupled to a suspension element, and said cylinder provided with a valved inlet adjacent the top thereof.

1,877,522. ARCH SUPPORT FOR FOOTWEAR. JOSEPH MAY, Frankfort-on-the-Main, Germany. Filed Nov. 12, 1928, Serial No. 318,659, and in France Oct. 6, 1928. 1 Claim. (Cl. 36—71.)

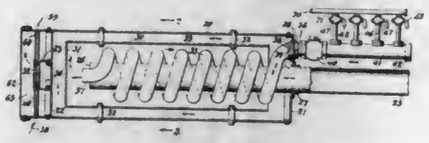


An arch support for footwear consisting of a lower longer blade spring provided with a longitudinal slot, an upper shorter blade spring, and two narrow intermediate blade springs located in spaced relation on said lower blade spring and beneath said upper blade spring and being connected to the latter, the upper blade spring bridging both the space between the intermediate blade springs and the slot in the lower blade spring and being connected directly to the lower blade spring so that the intermediate blade springs are drawn and held together by the upper spring and the lower spring.

1,877,523. APPARATUS FOR TREATING THE EXHAUST GASES OF INTERNAL COMBUSTION ENGINES. BERNARD GORDON, New York, N. Y. Filed Feb. 25, 1930. Serial No. 431,326. 5 Claims. (Cl. 60—30.)

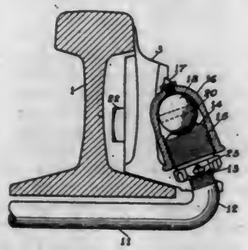
1. In a combustion apparatus for the treatment of exhaust gases of hydrocarbon engines the combination of an inner barrel, an outer barrel spaced from and encircling the inner barrel, the space between the barrels forming a mixing chamber, the exhaust pipe of a hydrocarbon engine passing through the inlet end of the outer barrel

and extending into the inner barrel, a head for and adjacent to the outlet end of the outer barrel, a screen over an opening in said head, ignition means adjacent to said



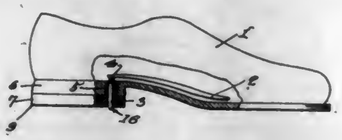
screen and a screen at the outlet end of the outer barrel spaced from the head thereof and forming a combustion chamber.

1,877,524. RAILWAY SWITCH POINT TO SWITCH BOX CONNECTING MEANS. JAMES C. MOCK, Detroit, Mich. Filed Dec. 10, 1931. Serial No. 580,182. 6 Claims. (Cl. 246—452.)



1. In combination with a track switch and a switch box, a rod connecting the switch and box, a ball and socket joint between the track switch and the adjacent end of said rod, a plate for connection to the track switch with a threaded stem thereon, the ball of said joint being threaded onto said stem, and means within the socket of the joint for pinning the ball to said threaded stem.
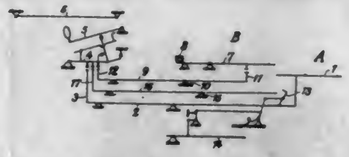
1,877,525. ARCH SUPPORTER. FRANK J. MONAGHAN, Perth Amboy, N. J. Filed July 29, 1931. Serial No. 553,810. 3 Claims. (Cl. 36—71.)



3. As a new article of manufacture, an arch supporter comprising a plate adapted to be positioned within a shoe over the arch portion of the sole, and a member depending from the plate for insertion through an opening in the sole of the shoe, said member being of a length for contact with the surface upon which the shoe is resting, said member by such contact providing a support for the plate independently of the sole of the shoe.

1,877,526. KEYBOARD INSTRUMENT. EMANUEL MOOR, Mont Pelerin, Switzerland, CARL BECHSTEIN, Jr., Berlin, and HANS JOACHIM GRAVENSTEIN, Charlottenburg, Germany. Filed Aug. 25, 1930, Serial No. 477,738, and in Germany Jan. 23, 1930. 13 Claims. (Cl. 84—235.)

2. A keyboard instrument, comprising, in combination, two keyboards arranged behind one another, means adapted to transmit the depression of any one of the front keyboard also to hammers differentiated from those pertaining normally to the depressed front board key or keys by a musical interval, said means comprising also a member adapted to be actuated by keys of both boards and extending obliquely from the keys of the rear keyboard to the hammer mechanism pertaining to the interval hammers located



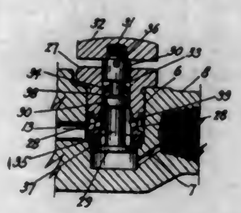
righthand from the hammers producing the tones pertaining to the depressed key or keys of the front keyboard, substantially as set forth.

1,877,527. PROCESS FOR THE MANUFACTURE OF GASSED OR SPONGE RUBBER. EDWARD J. MORAN, La Porte, Ind., assignor to Velvetex Corporation, La Porte, Ind., a Corporation of Illinois. Filed June 27, 1931. Serial No. 547,441. 2 Claims. (Cl. 18—53.)



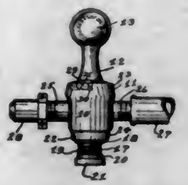
1. The process for increasing the surface skin upon gassed or sponge rubber articles by curing sponge rubber stock in direct contact with a heated metal plate having parallel grooves in the surface thereof.

1,877,528. VALVE. CARL A. NORGREN, Denver, Colo. Filed Apr. 16, 1928. Serial No. 270,399. 8 Claims. (Cl. 251—135.)



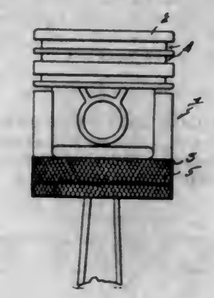
1. In an air line, an air-controlling valve comprising in combination with a body having a valve chamber and a duct for the ingress of air to the chamber and a duct for the egress of air from the chamber, a valve-cage in the body having a port in connection with the egress-duct, a valve controlling the admission of air from the ingress-duct to the valve-cage, a shouldered stem for the valve movable in the cage and projecting outside the same for its manipulation, and a resilient washer in the cage for engaging a shoulder on the stem.

1,877,529. GAS VALVE LOCKING ATTACHMENT. JOHN W. PLATT, Waterville, Conn. Filed Mar. 14, 1930. Serial No. 435,759. 7 Claims. (Cl. 251—166.)



1. In a gas valve, a casing having an arcuate slot in its upper edge, a valve plug rotatable in said casing and having a lateral pin partially filling said slot, a rotatable tubular locking member surrounding said valve plug and substantially embracing said casing, said locking member having an interior lug at its upper edge adapted to drop by gravity into said slot, said lug filling substantially the remainder of said slot to lock said valve plug in the "off" position.

1,877,530. METHOD OF TREATING PISTONS. CHARLES S. C. READ, Toronto, Ontario, Canada, assignor of one-half to George E. Matthews, Toronto, Ontario, Canada. Filed Jan. 12, 1931, Serial No. 508,177, and in Canada May 13, 1931. 3 Claims. (Cl. 29—156.5.)

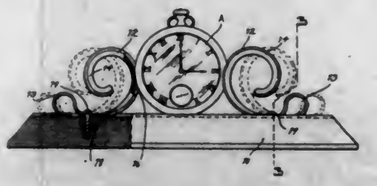


1. Method of increasing the diameter of a piston, which comprises extruding a peripheral surface thereof by knurling, thus providing a plurality of mutually crossing grooves between spaced protuberances having outer surface areas substantially defining a cylindrical surface.

1,877,531. PROCESS FOR THE MANUFACTURE OF BODIES FROM ALUMINUM OXIDE. REINHOLD REICHMANN, Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 7, 1931, Serial No. 549,309, and in Germany June 20, 1930. 4 Claims. (Cl. 25—156.)

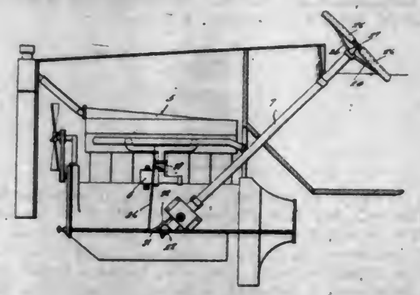
1. A process for the manufacture of insulating bodies capable of resisting the electric arc, which comprises molding finely divided aluminium oxide as free as possible from any admixtures whatsoever and then baking the same in a surrounding free from reducing carbon at a temperature of at least 1600 deg. C. until it sinters.

1,877,532. STAND FOR WATCHES. HERMAN REITZ, East Islip, N. Y. Filed June 9, 1931. Serial No. 543,194. 1 Claim. (Cl. 211—25.)



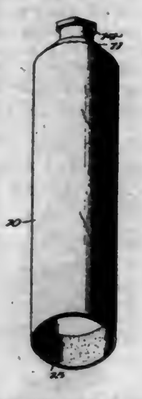
A supporting stand comprising a base having a longitudinal groove therein, a pair of coacting holder members seated in said groove for sliding movement, said holder members being provided with upstanding outwardly extending resilient coil portions, and means for securing said holder members in an adjusted position against sliding movement, the inner sides of the coiled portions having concaved seats to receive an article to be supported in a vertical position upon said base.

1,877,533. CARBURETOR CONTROL. ALLAN RINNE, Orr, Minn. Filed Dec. 7, 1929. Serial No. 412,535. 1 Claim. (Cl. 74—39.)



In combination with a motor vehicle including a steering column, the steering wheel at the upper end of the column and the throttle valve, a sectional sleeve movably arranged on the rim of the wheel for rotary movement, a shaft extending through the upper end of the column, an arm connected at the center to the upper end of the shaft, a pair of oppositely arranged cams on the hub of the wheel for engagement by the ends of the arm when the arm is moved from a neutral position between the cams, links having their inner ends connected to the ends of the arm and passing through some of the spokes of the wheel and having their outer ends connected with parts of the sleeve, and means for connecting the lower end of the shaft to the throttle valve.

1,877,534. COLLAPSIBLE TUBE. LOUIS F. ROGERS, Wilmington, Del., assignor to Bond Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,119. 3 Claims. (Cl. 221—60.)



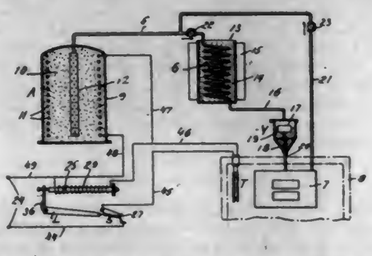
1. A collapsible tube dispensing container for a substance containing an ingredient of searching character having a strong tendency to creep and leak through the conventional folded and crimped metallic seam, comprising a collapsible metallic tubular container body adapted at one end for dispensing the contents, and having its other or charging end flattened, folded over and crimped to constitute a closure seam, and means for precluding the tendency of said searching ingredient to creep through said seam, said means comprising an endless band in the form of a thin coating disposed within and hermetically bonded to the internal surface of the flattened portion of said tubular body, said band being composed of material the surface of which is inherently resistant to wetting by said searching ingredient and upon which said ingredient will not creep.

1,877,535. MEANS FOR HANDLING INGOTS. LELAND S. ROSENER, San Francisco, Calif., assignor to Independent Smelting and Refining Co., San Francisco, Calif., a Corporation of California. Filed May 30, 1930. Serial No. 457,596. 3 Claims. (Cl. 22—1.)



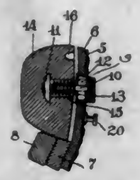
2. An insert for an ingot comprising an enlarged base portion tapering upwardly and inwardly from its lower surface, a shank portion projecting upwardly from the base, and means on the upper portions of said shank to facilitate lifting the ingot, said insert having a higher melting point and a different coefficient of expansion than the ingot.

1,877,536. REFRIGERATION. JOHN G. RUCKELSHAUS and NORMAN W. KEMPF, Newark, N. J. Filed May 6, 1931. Serial No. 535,444. 10 Claims. (Cl. 62—5.)



1. In a refrigeration system of the absorption type, in combination with an absorbent and a refrigerant and means for heating the absorbent to distill the refrigerant therefrom, a device for controlling the supply of energy to said heating means comprising means for supplying such energy and means operable by the flow of such energy to the heating means for cutting off the supply of such energy after a predetermined interval.

1,877,537. HERNIAL TRUSS. AUGUST SCHAFFER, Columbus, Ohio. Filed Oct. 25, 1929. Serial No. 402,525. 2 Claims. (Cl. 128—112.)



1. A hernial truss including a plate having an inwardly bent and downwardly inclined lower portion, a pad properly yieldingly and slidingly supported for vertical movement on the upper portion of said plate; and a supplemental pad rigidly supported on the lower bent portion of said plate said pad being horizontally elongated to rest above and be supported by the pubic bone of the wearer.

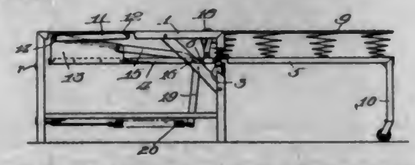
1,877,538. HAIR-DRESSER'S COMB. ALBERT T. SCHEIWER, Erie, Pa. Filed Nov. 28, 1931. Serial No. 577,842. 1 Claim. (Cl. 132—18.)

A barber's comb having two transversely divided portions, one of said portions constituting a heavy back and relatively coarse teeth extending from one side thereof, the other of said portions constituting a lighter weight back joined to the heavy back by a curved light intermediate portion and having two rows of oppositely directed teeth extending therefrom and from the said curved portion, the said lighter back being in offset sub-



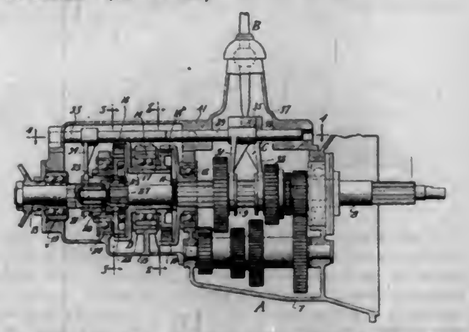
stantially parallel relation with the first back, said comb being of gradually tapering width from the free end of the coarse tooth section to the free end of the fine tooth section, each of said fine and coarse teeth being of circular cross section, and said fine and coarse teeth being all directed transversely of the comb.

1,877,539. FOLDABLE BED OR OTHER STRUCTURE. JOSEPH R. THOMAS, Chicago, Ill., assignor of one-half to The Rome Company, Inc., a Corporation of New York. Filed Nov. 14, 1930. Serial No. 495,574. 9 Claims. (Cl. 5—23.)



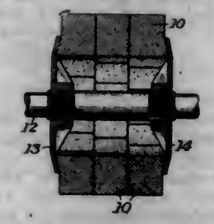
6. In a folding bed, a frame, two bed sections hinged together at meeting edges near the planes of their bottoms, the first section lying between the ends of the frame and adapted to be turned upside down and lowered therein, a longitudinal frame member adapted to support the inner side of the second section when the bed is opened, leg means to support the other side of the second section when the bed is opened, two links at each end of the frame each pivoted at one end to the frame and at the other end to the first bed section, one link at each end being connected to the frame at about the middle of the end of the frame and near the top and to the first bed section near the top and toward the side opposite the hinge side, and the other link being connected to the frame at a lower level toward the side on which said longitudinal frame member is located and to the first bed section at about the middle of the end.

1,877,540. CHANGE SPEED DEVICE. FRED C. THOMPSON, Detroit, Mich., assignor, by mesne assignments, to Automotive Research Corporation, a Corporation of Delaware. Filed Aug. 13, 1924. Serial No. 731,715. 10 Claims. (Cl. 74—59.)



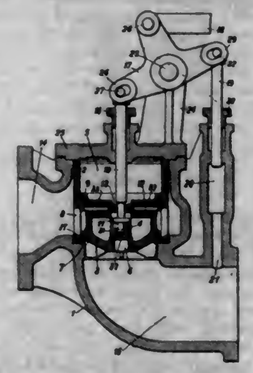
10. In a gearing, a casing, a pair of rotatable members extending thereinto, a gear drivingly rigid with one of the members, a gear for the other, an eccentric gear member for connecting said gears, said gear member having longitudinally separated sets of teeth for meshing with respective aforesaid gears, bearing means for said gear member located substantially midway between said sets of teeth for supporting the gear member on a fixed axis of rotation with equal overhang thereof at both ends of the bearing, and operating means to drivingly couple the said rotatable members to each other in two speed relationships, one speed being through the intermediacy of the gears.

1,877,541. JOINING ABRASIVE ARTICLES. FRANK J. TONE, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Feb. 13, 1929. Serial No. 339,511. 7 Claims. (Cl. 51—207.



6. An abrasive wheel consisting of a plurality of preformed abrasive blocks connected by bi-metallic joints, each of said joints comprising layers of higher melting point metal on the blocks and interlocked with said blocks by projections of said metal in the interstices thereof, and a layer of lower melting point metal connecting said higher melting point layers.

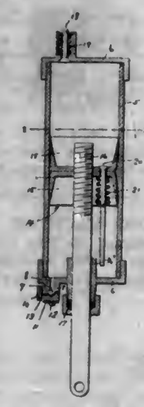
1,877,542. BALANCED VALVE. FRITZ WAGNER, Berlin-Lichterfelde, Germany. Filed Sept. 13, 1930. Serial No. 481,767, and in Germany Jan. 4, 1929. 2 Claims. (Cl. 277—37.)



1. A balanced valve having a main and an auxiliary valve, a conduit for receiving the fluid from said two valves, a spindle operatively connected to said auxiliary valve, and an equalizing piston which is acted on by the fluid in said conduit and operatively connected to said spindle so as to move in opposite direction to said auxiliary valve.

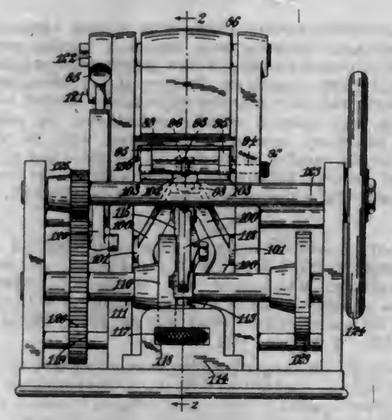
1,877,543. SHOCK ABSORBER. LUCIUS F. WENDELSTADT, Canaan, N. H. Filed Oct. 21, 1930. Serial No. 490,264. 2 Claims. (Cl. 188—88.)

1. A shock absorber comprising a barrel closed at its opposite ends, a piston operative in the barrel, a piston rod extending from the piston through one end of the barrel, a valve in the piston, a stem projecting from the valve in the piston toward one end of the barrel, an inlet check valve in the opposite end of the barrel,



the end of the barrel opposed to the valve stem of the piston being provided with a port and an adjustable needle valve for closing the said port.

1,877,544. CASTING MACHINE. VICTOR STANLEY WILLIAMS, London, England. Filed Feb. 5, 1931, Serial No. 513,736, and in Great Britain Feb. 19, 1930. 7 Claims. (Cl. 22—1.)

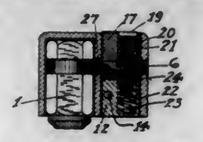


1. In a casting machine, the combination with a composite mould whereof one of the mould parts is movable in a direction substantially normal to the other mould part to open or close the mould, of an operating member for moving said movable mould part towards or away from the other mould part, on which operating member the movable mould part is mounted so as to have freedom of movement in all directions relatively to the other mould part.

1,877,545. NUT LOCK. SOLOMON WISE, Cincinnati, Ohio. Filed May 13, 1929. Serial No. 362,592. 12 Claims. (Cl. 70—122.)

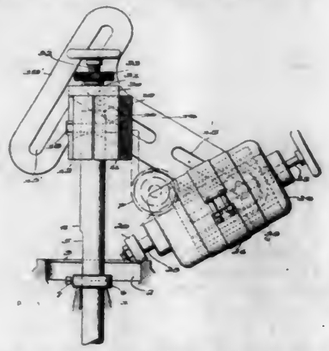
1. In a nut lock a casing comprising a cup section to cover a nut, and a barrel section, the nut having a groove thereabout, a bolt pivoted on a barrel in said barrel sec-

tion so as to revolve therewith, and means for locking said barrel in said barrel section, said means comprising an eccentric bore through said barrel registering in one



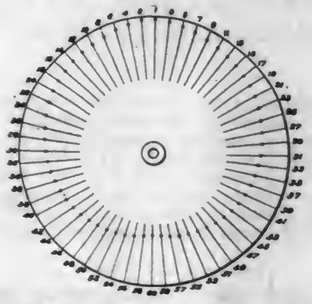
position with a bore in said barrel section, and locking means in said eccentric bores adapted for the formation of a line of cleavage to permit rotation of said barrel.

1,877,546. GRINDING MACHINE. HUGH M. ALBEE, Orange, Mass., assignor to The Leavitt Machine Company, Orange, Mass. Filed Nov. 10, 1930. Serial No. 494,778. 10 Claims. (Cl. 51—241.)



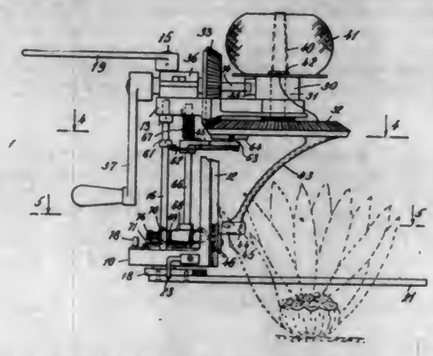
1. A grinding machine, comprising a plate having longitudinal and transverse slots therein, a bracket carried by said plate and provided with a spindle receiving sleeve having its axis parallel to the face of the plate, means engageable with said slots for securing the bracket to the plate in any selected angular adjustment, an electric motor adjustably secured to said plate with its shaft substantially parallel to the face of the plate and at any selected angular adjustment to the axis of the sleeve, and a grinding wheel on the end of the motor shaft.

1,877,547. ARRANGEMENT FOR OPENINGS IN SCANNING DISK-MULTIPLE CARDIOID. RALPH W. ARMSTRONG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,321. 2 Claims. (Cl. 178—6.)



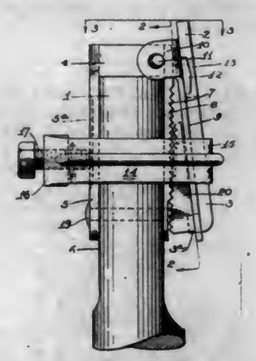
1. The method of scanning a picture in a television system comprising scanning certain of the picture elements throughout the whole picture in one direction and thereafter scanning the other elements in another direction.

1,877,548. PLANT COMPRESSING AND BINDING DEVICE. CHARLES BRIMER, Margaretville, N. Y. Filed June 19, 1931. Serial No. 545,416. 12 Claims. (Cl. 100—31.)



1. A portable device comprising a frame, a pair of plant clamping arms pivoted to the frame, manual means for actuating said clamping arms, means for wrapping a twine around a plant held within the clamping arms, a knot tying mechanism and gearing for actuating the wrapping means and the knot tying mechanism.

1,877,549. ADJUSTABLE SCYTHE BLADE FASTENING. OSCAR D. BRINSER, Richmond, Va. Filed Jan. 15, 1932. Serial No. 586,896. 6 Claims. (Cl. 56—326.4.)

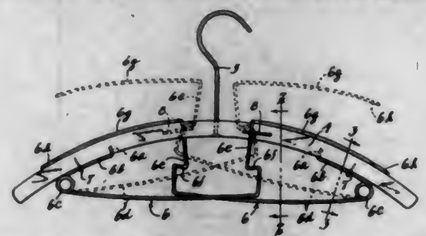


1. In combination with a snath, a scythe blade fastening comprising a heel plate and a ring encircling the snath and said plate for securing the tang of the blade by clamping engagement with the tang interposed between said ring and the plate, said ring being provided with a set screw adjustable toward and from the snath at the side opposite said heel plate, said plate being hinged to the snath at an axis transverse to that of the end portion of the snath, and adjusting means for varying the angular relation of said hinged plate to the snath.

1,877,550. GARMENT HANGER. HENRY L. BOE, Minneapolis, Minn. Filed Dec. 31, 1931. Serial No. 584,051. 5 Claims. (Cl. 223—65.)

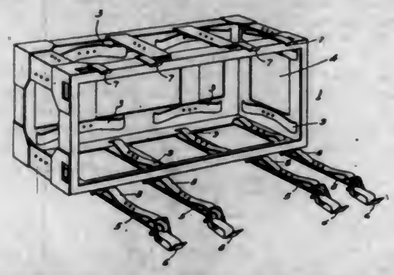
1. A garment hanger comprising a bow, a pair of spring arms attached to said bow respectively in outwardly spaced relation from the center of the bow, said spring arms having lower inwardly extending portions below the bow, intermediate upwardly extending portions and upper portions extending outwardly respectively toward the ends of said bow above the same, the intermediate portions of said spring arms forming offset noses, the upper portions of said arms normally being urged by the spring tension

of said arms into clamping relation with the upper surface of said bow and means carried by said bow with which said noses will engage under spring tension to



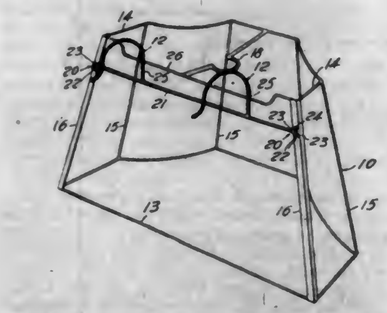
retain the upper portions of said arms in upwardly spaced relation from said bow as the lower portions of said arms are swung upwardly.

1,877,551. RADIO APPARATUS. WALTER BRUCE, East Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,407. 1 Claim. (Cl. 250—14.)



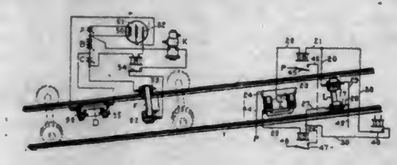
In combination, radio apparatus comprising a cabinet and thermionic devices in the interior thereof, a framework surrounding said cabinet, said framework comprising a plurality of members defining an open-work structure, a plurality of resilient means carried by certain of said members and frictionally bearing against the exterior of said cabinet, said frictional engagement providing a snubbing action against sustained vibration due to said resilient means, said open work structure permitting access to the cabinet, for operating said radio apparatus while in the framework.

1,877,552. LAMP SHADE FRAME. ALFRED BURKE, New York, N. Y. Filed July 16, 1931. Serial No. 551,093. 2 Claims. (Cl. 240—108.)



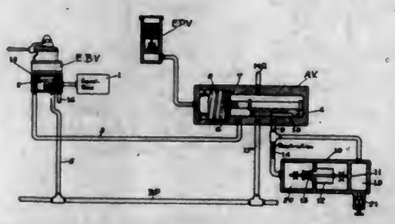
1. A lamp shade frame of the bed-lamp type comprising a pair of upright corner members each having a journal bearing near its upper end, a transverse rod mounted in said bearings, and a plurality of hooks fixed to said rod, said hooks being adapted in one position to extend beyond the frame and to be turned to a second position within the confines of the frame.

1,877,553. TRAIN CONTROL. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Mar. 9, 1922. Serial No. 542,270. 30 Claims. (Cl. 246—63.)



1. In an automatic train control system; the combination of vehicle carried apparatus comprising, a thermionic device having a plate circuit, a grid circuit, a filament circuit, an electro-responsive device connected in said plate circuit, an influence receiving coil connected in said grid circuit, a magnetic core having a normally energized winding thereon for producing a magnetic flux in said core; and of trackway apparatus including a pair of trackway elements each having a coil thereon and so positioned with respect to the trackway that one element cooperates with said influence receiving element when the other cooperates with said flux producing coil, and a circuit connecting the coils of said trackway elements in series when a control influence should be transmitted.

1,877,554. BRAKE APPLYING APPARATUS. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 27, 1928. Serial No. 302,236. 5 Claims. (Cl. 303—81.)

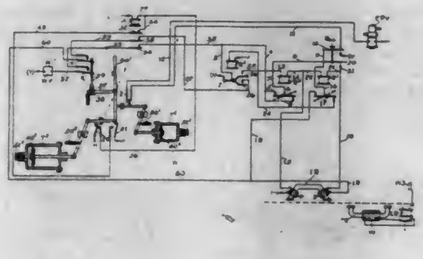


1. In automatic brake applying apparatus, the combination with air brake apparatus for railway systems including a normally charged brake pipe, engineer's brake valve main reservoir, and equalizing reservoir; of a device having a restricted vent port, means for allowing said train pipe to be vented through said vent port, pressure responsive means operated by the back pressure due to fluid pressure following through said vent port, and other venting means operated by said pressure responsive means.

1,877,555. TRAIN CONTROL SYSTEM FOR RAILROADS. CHARLES S. BUSHNELL, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 7, 1930. Serial No. 473,522. 2 Claims. (Cl. 246—63.)

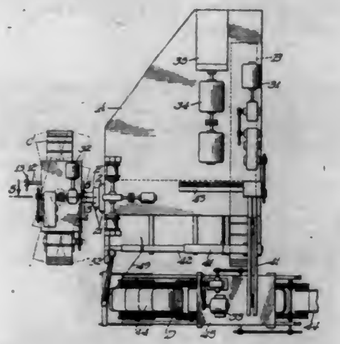
1. In a train control system, a brake control apparatus on a vehicle, traffic controlled means partly on the vehicle and partly on the track for governing said apparatus in accordance with traffic conditions, and manually operable means having a limited interval of time of effective opera-

tion for maintaining the apparatus inactive independently of its control by said traffic controlled means, said manually operable means being effective only at intervals



spaced apart a predetermined period of time and then only when said brake control apparatus is in its normal inactive condition.

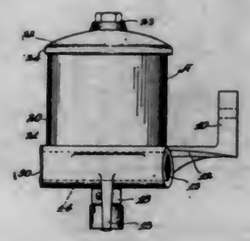
1,877,556. CANAL EXCAVATOR. ART C. CLARK and ARTHUR L. GRAVES, Imperial, Calif.; said Graves assignor to Imperial Irrigation District, a Corporation of California. Filed Aug. 6, 1928. Serial No. 297,616. 7 Claims. (Cl. 180—9.1.)



3. In a machine of the class described, a freely laterally extensible frame, means for supporting one side of the frame and for propelling the frame, similar means at the opposite lateral side of the frame, the latter means being shiftable laterally with the laterally extensible portion of the frame and shiftable about a vertical axis angularly with respect to the longitudinal axis of the frame and the first propelling means, said frame being capable of being extended and contracted when sa'd frame is propelled while the latter means is positioned angularly with respect to the frame, and means for securing the second means against angular shifting and in angular shifted position relative to the frame.

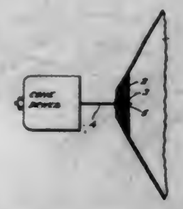
1,877,557. UNIT TYPE MULTISTAGE AUXILIARY SWITCH. FRED H. COLE and MEINICH SKAU, Chicago, Ill., assignors to Delta-Star Electric Company, Chicago, Ill., a Corporat'on of Illinois. Filed Dec. 8, 1930. Serial No. 500,697. 16 Claims. (Cl. 200—8.)

1. An auxiliary electric unit type multistage switch including, a base having a chamber therein, a standard projecting upward from said chamber, a series of insulating circuit tray units, spring operated switch arms within said units, a rotating contact within each of said units,



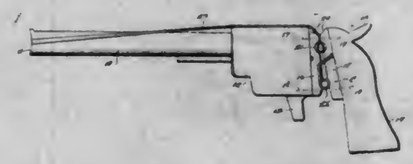
an operating sleeve supported by said standard, means for operating the same, and casing means adapted to inclose said tray units to protect the same.

1,877,558. SOUND PRODUCING DEVICE. GUERNEY H. COLE and JURJEN S. HIGH, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 22, 1929. Serial No. 380,129. 1 Claim. (Cl. 181—32.)



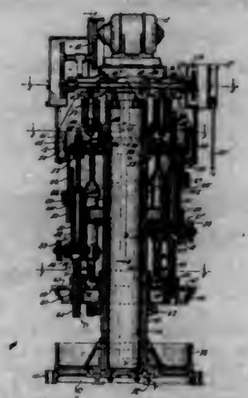
In combination, a truncated conical diaphragm, a coupling element of vibration-absorbing material affixed thereto in lieu of the apex thereof, a driver, a connecting rod extending between said driver and said coupling element and means comprising a cementitious binder for joining said connecting rod to said coupling element.

1,877,559. TOY GUN. JAMES L. COPPLE, Kansas City, Kans. Filed Oct. 24, 1931. Serial No. 570,932. 1 Claim. (Cl. 124—14.)



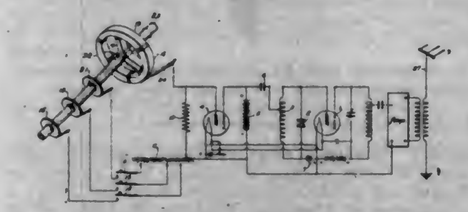
A toy gun of the character described comprising a handle, a barrel, a trigger formed with the barrel and depending therefrom, a spring clip secured to the abutting end portions of said handle and barrel, said barrel having a kerf in the forward end thereof, and an elastic having one portion positioned in said kerf and another portion yieldingly held between the jaws of said clip, rearward movement of said trigger coactively rocking said barrel and releasing said elastic from between the jaws of said clip.

1,877,560. VERTICAL CONTINUOUS MILLING MACHINE. FRANK M. DAVIS, Milwaukee, Wis. Filed Apr. 30, 1930. Serial No. 448,554. 19 Claims. (Cl. 90—20.)



1. A vertical continuous milling machine, comprising a vertical standard, a tool carrier journaled thereon and having a plurality of circumferentially spaced and vertically movable spindles, tool shafts rotated by the spindles and extending at an angle thereto, work holding means turning with the carrier, guide means for said tool shafts coacting with said work holding means, means for moving the tool shafts towards and away from the work in successive order as the carrier revolves around the standard, milling cutters carried by the tool shafts, and means for rotating the spindles.

1,877,561. TRANSMITTING CIRCUIT. ROBERT L. DAVIS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1928. Serial No. 305,722. 2 Claims. (Cl. 250—9.)



1. In a radio multiplex transmitting system, a crystal-controlled oscillation generator, circuits associated with said generator including a variable impedance for changing the frequency of the oscillations generated thereby, a plurality of separately controlled means for bringing said impedance to respectively predetermined values and cyclic means for operatively relating said impedance to each of said separately controlled means in turn, the speed of said cyclic means being sufficient to operatively relate the impedance to any one of said separately controlled means a plurality of times during the normal period of action, of the separately controlled means.

1,877,562. SIGNALING SYSTEM FOR RAILROADS. OSCAR H. DICKE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 15, 1930. Serial No. 488,898. 7 Claims. (Cl. 246—41.)

1. In combination, a section of track isolated by insulating joints from the remaining track, a track relay connected between the rails at one end of said section, a source of current to which said track relay is responsive connected between the rails at the other end of said section, and electro-responsive means independent of said track



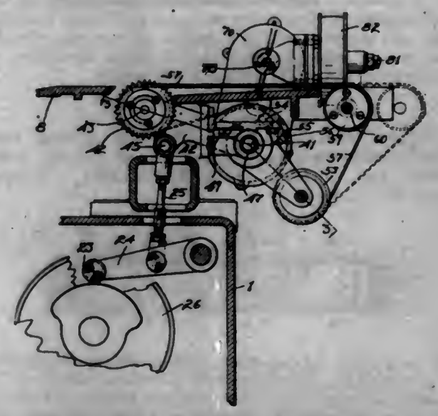
relay and responsive to the entrance of a train in said section for disconnecting said source and substituting another and distinctive source ineffective to operate said track relay.

1,877,563. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1930. Serial No. 504,259. 2 Claims. (Cl. 197—123.)



1. In a typewriting machine, the combination of a platen, a slidable platen-shaft, a cylindrical disk loosely mounted on said shaft, a second disk secured to said first disk and spaced apart therefrom, slots in said disks, levers extending longitudinally of said platen and resting loosely in said slots, a cam fixed to said slidable platen-shaft and located adjacent the end of said levers, a line-space wheel attached to one of said disks, and clutch-bands resting on said levers and within said platen, so that when said platen-shaft together with said cam is moved inwardly said clutch-bands will grip said platen to cause said line-space wheel and platen to rotate together.

1,877,564. DISCHARGE MECHANISM FOR TYING MACHINES. GUY A. DUNN, San Francisco, Calif., assignor to Eby Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed July 30, 1928. Serial No. 296,884. 13 Claims. (Cl. 100—31.)



1. A discharge mechanism for tying machines comprising the combination of a carrier; and means to lift the carrier into contact with the bundle at the end of each tie

whereby the bundle will be discharged from the machine.

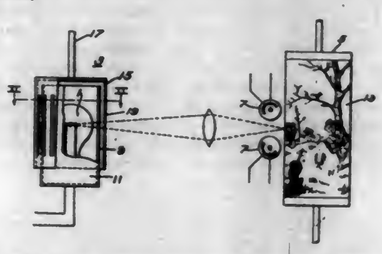
11. A discharge mechanism for bundle tying machines including a pair of endless carriers, a plurality of pulleys for each carrier, means for driving one of said pulleys for each carrier and means operatively associated with the tying machine driving mechanism operable to move another of said pulleys for each carrier to move said carriers into engagement with the bundle upon completion of the tie to discharge the bundle from the machine and operable to move said movable pulleys out of engagement with said bundle during the bundle tying operation.

1,877,565. CARD CASE. WILL J. ECKER, Jr., St. Louis, Mo. Filed Oct. 31, 1930. Serial No. 492,430. 5 Claims. (Cl. 206—39.)



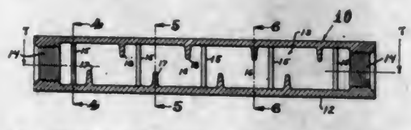
1. A card holder, prongs formed therein, sheets of tissue paper for securing cards to said holder, projections formed on said sheets of tissue paper, said projections folded around the ends of said holder and secured in said prongs.

1,877,566. FACSIMILE TRANSMITTER. HOWARD M. ELSEY, Oakmont, and LA VERNE R. PHILPOTT, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1930. Serial No. 486,662. 1 Claim. (Cl. 178—7.)



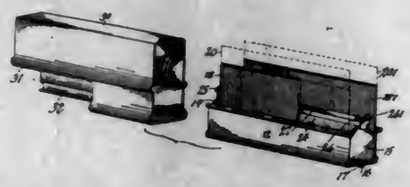
In a view-transmission system, a source of energy, an open ended masking element for said source provided with a slit for producing a ray, and means associated therewith for interrupting said ray, said means comprising an element substantially enclosing said source of energy and said mask and provided with a plurality of openings whereby said ray of light may be interrupted by movement of said element relative to said source of energy.

1,877,567. HOT AND COLD WATER MIXER FOR SHOWERS. WILLIAM P. EBBES, Los Angeles, Calif. Filed Sept. 2, 1931. Serial No. 560,727. 7 Claims. (Cl. 137—111.)



5. In a water mixing device, a hollow body, a plurality of partitions in said body, said partitions extending inwardly and being adapted to obstruct approximately one half of the passageway through said body and said partitions being alternately positioned on opposite sides of said hollow body, a plurality of baffle members in said body extending inwardly at approximately right angles to said partitions, said baffle members being adapted to obstruct less of the passageway through said hollow body than said partitions and being alternately arranged on opposite sides of said hollow body.

1,877,568. MATCH SAFE. JOSEPH ERL and CHRISTIAN J. HOFFMAN, Buffalo, N. Y. Filed Oct. 8, 1930. Serial No. 487,150. 5 Claims. (Cl. 206—20.)



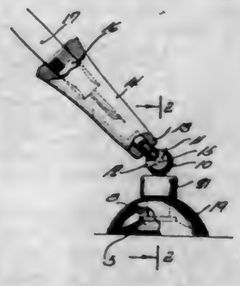
1. A match safe comprising a case; a row of matches arranged against one of its inner faces; a straight cylindrical resilient tube disposed within said case between the heads and the tails of said matches; and a striking strip also disposed between the heads and tails of said matches and pressed thereagainst by said tube.

1,877,569. ELECTROMAGNETIC APPARATUS. ERWIN FALKENTHAL, Berlin-Dahlem, Germany, assignor of fifty per cent to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1931, Serial No. 512,009, and in Germany Feb. 19, 1930. 6 Claims. (Cl. 175—356.)



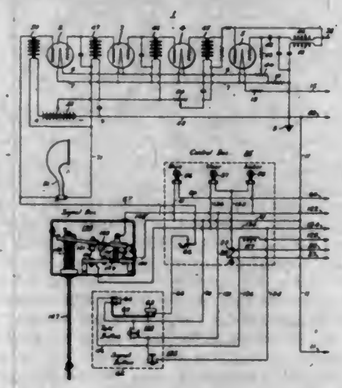
1. In an iron core for electrical apparatus composed of iron sheets provided with an aluminum coating.

1,877,570. HOLDER FOR WRITING INSTRUMENTS. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs and Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 22, 1930. Serial No. 504,042. 2 Claims. (Cl. 120—108.)



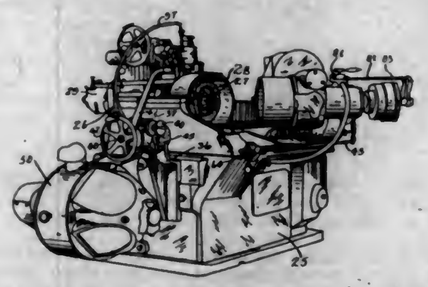
1. In a holder for writing instruments, a mounting element comprising a stem and a suction cup adapted for engagement with a supporting surface, a receptacle adapted to receive a writing instrument and carried by the stem, a casing movably mounted on said stem and adapted to have its marginal edge engaged with the supporting surface to enclose the suction cup, and means yieldably maintaining the casing marginal edge in engagement with the supporting surface.

1,877,571. SIGNALING SYSTEM. HENRY C. FORBES, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1928. Serial No. 267,585. 7 Claims. (Cl. 250—2.)



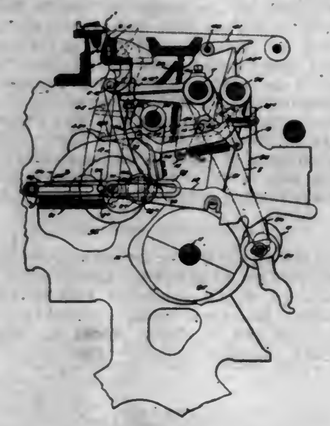
1. In a signaling system, an antenna, a radio receiving set comprising thermionic devices normally connected thereto, a radio transmitting set comprising thermionic devices, a common source of filament power for said devices, a source of anode potential for the thermionic devices in said transmitting set, means including a visual indicator for connecting said source to said receiving device, means for shifting the connection of said antenna from said receiving set to said transmitting set, a plurality of means functioning simultaneously with said shifting means for transferring said filament power from said receiving set to said transmitting set, for connecting said anode potential source to said transmitting set, and for giving a visual indication that said transmitting set is in operative condition.

1,877,572. GRINDING MACHINERY. ROBERT E. W. HARRISON, FREDERICK S. HAAS, and GEORGE W. BINNS, Cincinnati, Ohio, assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 17, 1928. Serial No. 300,228. 31 Claims. (Cl. 51—50.)



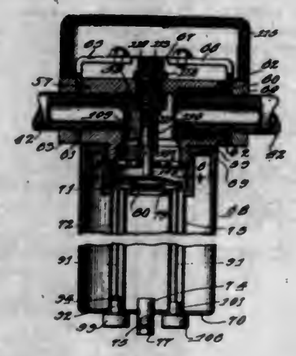
1. A grinding machine including a rotary grinding wheel, an oscillatable work carrier movable to operatively associate and disassociate a work piece with the grinding wheel, and means for automatically controlling the rotation of the work as it is presented to and withdrawn from the grinding wheel.

1,877,573. KNITTING MACHINE. MAX C. MILLER, Cumberland, R. I., assignor to Hosiery Machine Corporation, Cumberland, R. I., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,656. 8 Claims. (Cl. 66—82.)



1. In a full-fashioned knitting machine, a series of needles, a needle support to which a portion of the needles of the series are secured, a second needle support for the remaining needles, devices for importing lateral and vertical reciprocating movements to each of the supports adapted normally to cause the needle series to move as a unit, means for rendering said devices inoperative to impart vertical movements to one of said supports, means for imparting a step-by-step lateral movement to said last mentioned support while said devices are inoperative to impart vertical movements to said support to move the needles on said support out of alignment with the remaining needles, and means acting upon the completion of the last heel flap course and during the continued operation of the machine to return said last-mentioned support to said normal operating position.

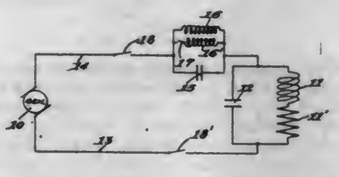
1,877,574. HIGH TENSION CUT-OUTS AND THE LIKE. ERIC N. NORDHEM, Chicago, Ill. Filed July 26, 1930. Serial No. 470,944. 12 Claims. (Cl. 200—120.)



2. In a device of the class described, the combination of a body member having a longitudinally extending bore terminating at one end in a contracted portion and terminating at the other end in a cylinder bore, a piston member located in said cylinder bore, a cylindrical extension of insulating material extending longitudinally from the contracted end of the bore of the body member and having a longitudinally extending passage for a movable

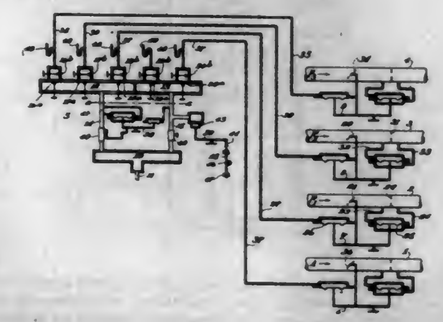
contact rod, a contact rod having one end connected to the piston aforesaid, said rod reaching through the contracted end of the body member and lengthwise through the bore of the extension of insulating material, stationary contacts in position to engage the outer end of the rod, and means for introducing compressed gas into the bore of the body member, to thereby cause said gas to exert pressure on the piston for the purpose of drawing the rod downwardly away from the stationary contacts and lengthwise of the bore of the member of insulating material, and to also simultaneously cause counter current flow of said gas through the contracted opening of the body member around the rod and lengthwise of the rod to thereby subject the rod to the influences of a cold stream of gas flowing in the direction opposite to the movement of the rod away from the stationary contact, substantially as described.

1,877,575. APPARATUS FOR INTERRUPTING ALTERNATING POWER CIRCUITS. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Dec. 27, 1928. Serial No. 328,836. 1 Claim. (Cl. 175—294.)



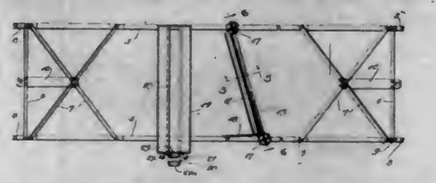
An alternating electric circuit comprising a furnace inductor, a capacity bridged across the inductor to tune it, a source of supply for the furnace circuit and an interrupting device in circuit with the source of supply having branches, two branches including balancing inductances and a switch in circuit with one of the inductances, and a third branch containing capacity to balance one of the inductances, whereby the supply current normally passes through the two inductances in parallel and when the circuit through the one is opened, the surge is dissipated within the tuned circuit formed by the capacity and the other inductance.

1,877,576. MULTIPLE QUANTITY REGULATION. GEORGE K. O'CONNOR, Fairlawn, N. J., assignor to Smoot Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed May 14, 1931. Serial No. 537,836. 17 Claims. (Cl. 158—119.)



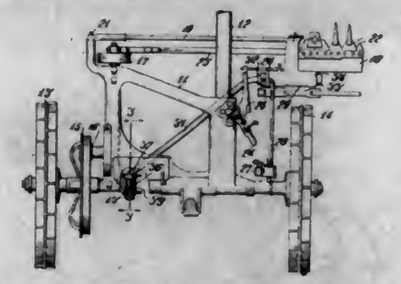
1. The method of regulating a plurality of quantities of the flow type which comprises creating a master flow of an auxiliary fluid, controlling the volume of the master flow by maintaining a predetermined pressure differential across a fixed resistance in the path thereof, dividing the master flow into a plurality of component flows, deriving a control force from each of the component flows and regulating the quantities by said control forces.

1,877,577. ROAD RESURFACING APPARATUS. RAY ELLIS PALMER, Elmira, N. Y. Filed Sept. 21, 1927. Serial No. 220,984. 1 Claim. (Cl. 94—46.)



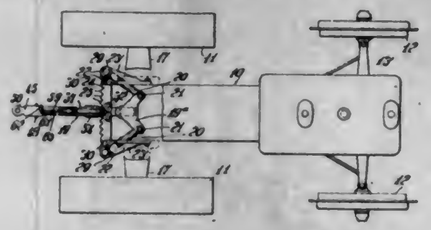
In road re-surfacing apparatus, an elongated frame having its opposite ends provided with draft means and having its side members spaced a distance less than the width of the road being resurfaced, a distributing blade structure carried by and extending diagonally between the side members approximately central of the length of the frame, individual means for operatively connecting the ends of the blade structure with the respective side members with the connections such as to provide for vertical adjustment of the structure ends independently, whereby the desired camber of half the road surface can be obtained by said vertical adjustment, said distributing structure having its blade reversibly mounted to permit its positioning on either side of the structure in operation and permit the frame to be drawn in either direction of its length without frame reversal and with the diagonal such as to place the advance end of the blade at the edge of the road, said side members being rigid and having a length such as to permit positioning of a material-supply instrumentality in spanning relation to and be supported by the side members in advance of the blade regardless of the direction of frame travel longitudinally and of a length to span depressions within the roadway, whereby the frame is adapted to resurface half the road width by travel in one direction and the remaining half by travel in one direction and the remaining half by travel in the opposite direction without frame reversal.

1,877,578. MOWER. TALBERT W. PAUL, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 18, 1930. Serial No. 475,893. 18 Claims. (Cl. 56—264.)



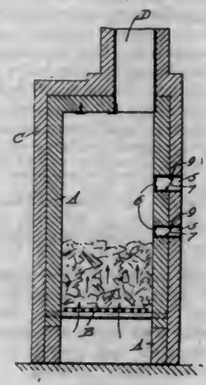
1. In combination in a mower, a supporting frame member, a cutter member associated with said frame member for lifting and tilting movement, a thrust rod having pivotal connection with one of said members, a socket in the other of said members, a passage through the said other member communicating with said socket, an enlargement on said rod cooperating with said socket of said other member, and an extension on said rod beyond said enlargement cooperating with said passage.

1,877,579. DRAFT ATTACHMENT. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 19, 1928. Serial No. 320,262. 24 Claims. (Cl. 280—33.10.)



8. A hitch connection for tractors comprising a draw bar connected with the tractor to swing laterally, holding means including a biased member for normally holding said draw bar against lateral swinging, and means actuated by the resistance of the load for releasing said holding means, said releasing means including a manually operable means for releasing the holding means.

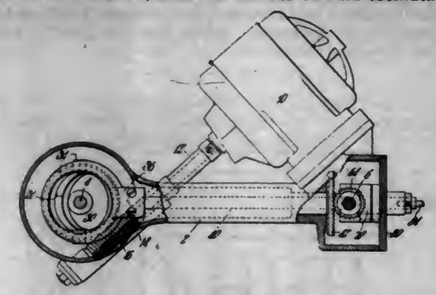
1,877,580. METHOD OF INCINERATING. CECIL CARLTON PARKER, Buffalo, N. Y. Filed Aug. 15, 1929. Serial No. 386,104. 3 Claims. (Cl. 110—8.)



1. A method of drying and incinerating wet material, which includes evaporating moisture from the material by passing currents of air through and in contact with the material, burning the dry material and producing a draft by the burning, admitting auxiliary air above the material by the action of the draft to complete combustion, and interrupting the supply of auxiliary air when the draft is reduced, thereby continuing the drying of remaining material with the air of heat conserved by intercepting the auxiliary air supply.

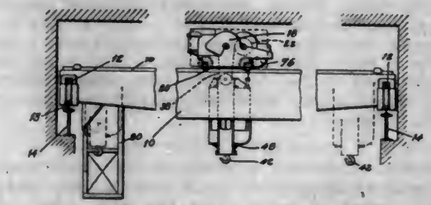
1,877,581. DRIVE FOR WASHING MACHINES OR THE LIKE. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed July 22, 1931. Serial No. 552,410. 4 Claims. (Cl. 74—14.)

1. Driving mechanism of the class described comprising in combination, a support, a rotatable shaft and an oscillatable driven shaft journalled therein, an oscillatable drive shaft having a forward end journalled in said support carrying a drive member, connections between the rear end of said oscillatable drive shaft and rotatable shaft supporting the former from the latter and arranged to impart oscillatory movements to said oscillatable driven shaft, a driven member on said oscillatable



shaft, engageable with said drive member and means for shifting said driven member into and out of engagement with the drive member.

1,877,582. CRANE. CHASE KEITH PEVEAR, New York, N. Y. Filed Feb. 9, 1928. Serial No. 252,958. 6 Claims. (Cl. 212—21.)



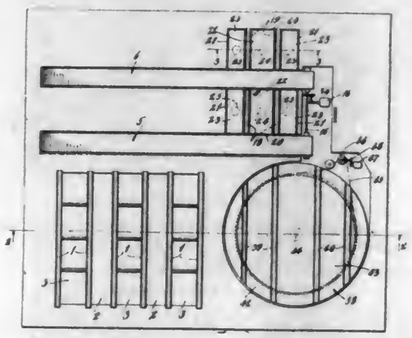
1. In a traveling crane, a carriage movable upon overhead tracks, an operator's cab suspended on cables from the carriage, power means for driving the carriage on its tracks and for elevating the cab by said cables, means including controls in the cab and flexible cable connections to the carriage for controlling the power means, a load-supporting element swivelled to and depending from the bottom of the cab, a plate located in the bottom of the cab in position to be engaged by the operator's feet, and means connecting the element and plate whereby the operator may swivel the element.

1,877,583. METHOD OF MAKING COLUMNS. HENRY C. PFAFF, Newark, N. J., assignor to Pfaff and Kendall, Newark, N. J., a Corporation of New Jersey. Filed Feb. 2, 1931. Serial No. 512,775. 3 Claims. (Cl. 29—155.)



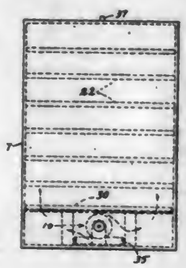
1. The method of making a column from a tube which consists in longitudinally slitting the tube, spreading one end of the slitted tube to produce a V-shaped slot, inserting a V-shaped plate in the V-shaped slot, and then uniting the edges of the tube and plate.

1,877,584. METHOD AND APPARATUS FOR WASHING AND LUBRICATING VEHICLES. IRA L. PULLIAM, Huntington Park, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Sept. 10, 1928. Serial No. 304,884. 15 Claims. (Cl. 104—48.)



1. A vehicle washing and lubricating system comprising a continuous conveyor adapted to move vehicles in a direction transversely to their longitudinal axes, a plurality of tracks for vehicles leading to said means, pits between said tracks, and a turn table means adjoining said vehicle moving means and adapted to receive vehicles therefrom.

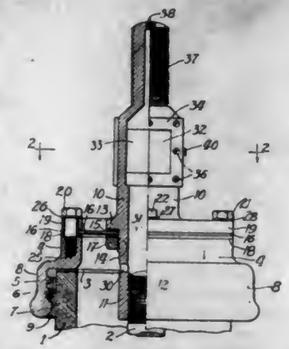
1,877,585. ELECTRIC INCUBATOR. ALBERT V. RACKSTRAW, Gardena, Calif. Filed Apr. 23, 1930. Serial No. 446,557. 7 Claims. (Cl. 119—37.)



1. In an incubator, a combined air heating and air circulating device which includes a rotary centrifugal air blower, electric resistance heating elements mounted upon said blower to be gyrated thereby, means to supply electric current to said heating elements during the rotation of said blower, means to rotate said blower, and a water pan supported near to and above said blower in position to moisten the air circulated thereby, said water pan bridging the space between and being supported by two opposite walls of said casing and being spaced away from the other two casing walls.

1,877,586. TOP CAP ASSEMBLY FOR HIGH VOLTAGE BUSHINGS. JOSEPH RAH, Chicago, Ill., assignor to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1930. Serial No. 428,615. 20 Claims. (Cl. 173—318.)

1. A device for establishing connection between two current conductors, having a tubular insulating casing for receiving a conductor, terminal means for attachment to said conductor, a flexible substantially flat ring-shaped diaphragm, means for securing the inner portion of said diaphragm to said terminal means, and means for securing the outer portion of said diaphragm to said casing.



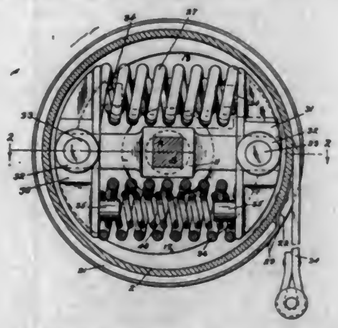
7. An oil containing bushing for establishing connection between two current conductors having a tubular insulating casing for receiving a conductor, terminal means, means for rigidly attaching said terminal means to said conductor within said casing, adjustable means for attaching said terminal means to said casing in axially movable relation thereto and in oil-tight relation therewith, means for supplying oil to said casing, and means on said terminal means for indicating the oil contents within said casing.

20. The top cap assembly for a high voltage oil containing bushing including a current conductor, having a tubular insulating casing for receiving said conductor, a terminal attached to said conductor, means for attaching said terminal to said casing in oil-tight relation therewith and axially movable and laterally yieldable thereto, and means attached to said terminal for indicating the variations of the oil contents within said bushing.

1,877,587. METHOD OF PREPARING APPLES FOR FREEZING. RUDOLPH A. RASCHE, Cincinnati, Ohio. Filed Jan. 3, 1931. Serial No. 506,502. 5 Claims. (Cl. 99—8.)

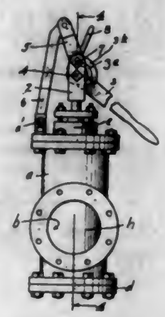
1. In the cold processing of fresh apples for cold storage the steps of placing apple pieces in a brine solution and placing them under a vacuum, then relieving the vacuum and placing them under atmospheric air pressure, then sugaring the fruit and placing it in cold storage at a temperature well below freezing.

1,877,588. SHOCK ABSORBER. JACOB HARTZLER REDHEAD, Cleveland, Ohio. Filed Jan. 1, 1929. Serial No. 329,680. 8 Claims. (Cl. 267—10.)



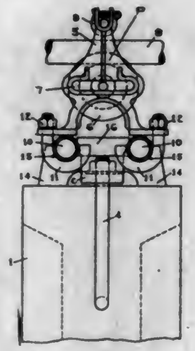
1. In a rebound snubber, a casing, helical tracks formed within said casing, a shaft, means to rotate said casing about said shaft, a frame carried by said shaft, means carried by said frame for anti-frictionally engaging said tracks, and a compression device carried by said frame for normally exerting a compressive force against said engaging means.

1,877,589. HOLLOW CYLINDRICAL VALVE. EDWARD GRANVILLE REED, Camas, Wash. Filed Mar. 3, 1930. Serial No. 432,809. 2 Claims. (Cl. 251—60.)



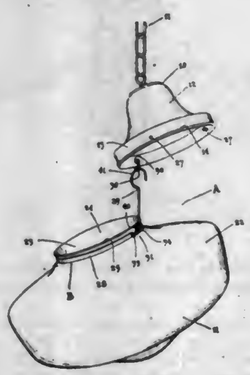
1. In a valve, a reciprocable valve member provided with a projecting stem, an operating lever pivoted to said stem, a link pivoted at one end to the adjacent end of the valve casing and pivoted at its opposite end to the extremity of said operating lever, said lever provided with an offset portion adjacent its pivotal connection with the valve stem, said offset portion provided with an arcuate slot, a bolt carried by the valve stem extending through said slot, and a clamping lever threaded on said bolt for locking the operating lever in any position to which moved.

1,877,590. ADJUSTABLE SUPPORT FOR PIPE CARRIERS. ALFRED H. RENSHAW, Noroton, Conn., assignor to General Railway Signal Company, Rochester, N. Y. Filed Apr. 16, 1925. Serial No. 23,552. 10 Claims. (Cl. 248—30.)



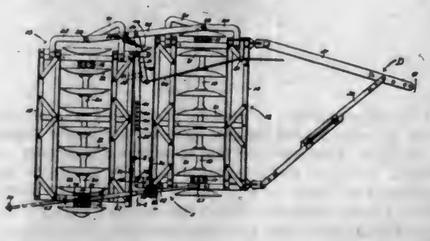
9. A structure for rigidly mounting a pair of separate parallel supporting pipes, comprising a foundation pier having two upwardly extending pedestals on the upper surface thereof with an opening therebetween, said pedestals each being grooved in its upper surface for receiving supporting pipes, a separate clamp piece located in said opening between said pedestals and having two, downwardly tapered, spaced, wedge-shaped portions engaging said pipes on each side of said pedestals, and a bolt for drawing said clamp piece toward said foundation pier.

1,877,591. GLOBE HANGER FOR LIGHTING FIXTURES. ALPHONSE R. RHEINBERGER, St. Paul, Minn. Filed Feb. 17, 1932. Serial No. 593,557. 12 Claims. (Cl. 240—128.)



1. In combination with a globe having a neck and a globe holder therefor, having a flanged rim for the reception of said neck, and a thumb screw for clamping said holder upon said neck, means attached to said screw and connected to said globe for supporting said globe in detached position with respect to said globe holder.

1,877,592. TANDEM DISK HARROW. CLIFFORD R. ROGERS, Los Angeles, ELMER H. BABEL, Alhambra, and MAX M. BRODERSEN, Monterey Park, Calif., assignors to Killefer Manufacturing Corporation, a Corporation of California. Filed Sept. 23, 1929. Serial No. 394,712. 24 Claims. (Cl. 55—83.)



1. A disk harrow embodying: two gangs arranged in tandem relation; a draft bar connecting corresponding sides of said gangs; a rear gang control link diagonally interposed between said gangs and pivotally connected thereto; and means for controlling the angularity of said gangs.

1,877,593. METHOD AND APPARATUS FOR SURVEYING BORE HOLES. IRWIN ROMAN, West Orange, N. J., assignor to Geophysical Research Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,538. 3 Claims. (Cl. 234—1.)

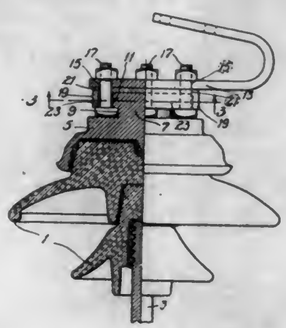
1. A method of surveying bore holes by use of two magnetic compasses definitely spaced one above the other,

which comprises recording the relative positions of the needles at one level, lowering the two compasses a dis-



tance equivalent to the distance between the two compasses, and again recording the relative position of the needles.

1,877,594. INSULATOR CAP. HUGO VAN ROSEN, Brighton, Mass., assignor to Delta-Star Electric Company, a Corporation of Illinois. Filed Sept. 23, 1929. Serial No. 394,535. 8 Claims. (Cl. 173—313.)

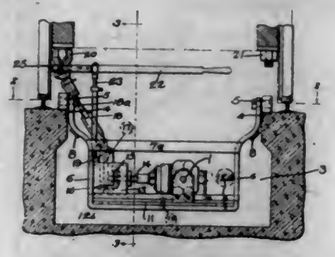


1. In combination, a support comprising an insulator, a top thereon having an enlargement, a member adapted to be held, fasteners having enlargements joining said member and top, the enlargement of the fasteners being positioned at least partly under said top enlargement and a keeper separate from said top and held in place by and adapted to hold said fasteners.

6. An insulator unit having a cap at one end thereof having a recessed extension, bolts lying along the outside of the extension with their heads in the recess, and a cylindrical member separate from the cap and surrounding the extension and the bolts, thereby holding the bolts in place.

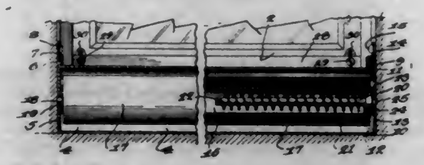
1,877,595. BINDER BOLT WRENCH. ROBERT RUTHERFORD ROYAL, Paducah, Ky. Filed Apr. 10, 1931. Serial No. 529,069. 6 Claims. (Cl. 81—57.)

1. In combination, spaced guideways, a cradle extending between said guideways and movably mounted thereon, a mechanism revolvably mounted on said cradle, a telescopic rotatable extension arm connected to said mechanism, a socket wrench on the outer end of said arm, said arm and wrench being rotated by said mechanism, said mechanism being rotatable through substantially 360



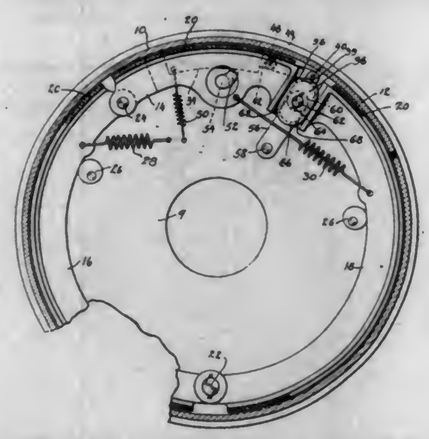
degrees to position said wrench selectively over either guideway, and at a maximum number of points along the same without movement of said carriage.

1,877,596. WINDOW SCREEN. MORRIS SALSBERG, Scranton, Pa. Filed Dec. 30, 1930. Serial No. 505,622. 4 Claims. (Cl. 156—39.)



1. A housing mounted in a window frame, a flange formed on each end of the housing, and clamping plates detachably connected to the window frame and engageable with the flanges for securing the housing within the frame.

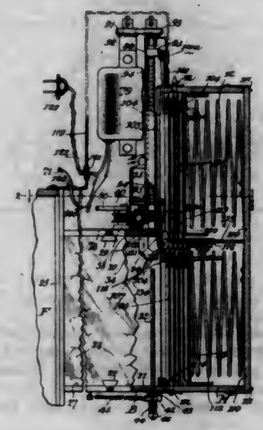
1,877,597. BRAKE MECHANISM. ROY SELDEN SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 20, 1929. Serial No. 348,515. 32 Claims. (Cl. 188—78.)



1. In brake mechanism, a brake drum, a pair of brake shoes arranged within the drum to exert a braking force thereon, a servo shoe arranged within one of said brake

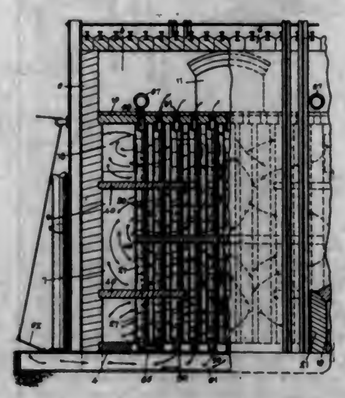
shoes, means for moving the servo shoe into engagement with the drum, and means coupling the servo shoe with the brake shoes whereby the servo shoe urges the brake shoes against the drum.

1,877,598. METHOD AND APPARATUS FOR AUTOMATIC PHOTOGRAPHIC PORTRAIT CAMERAS. SAMUEL I. SAX, New York, N. Y. Filed Feb. 11, 1931. Serial No. 514,974. 23 Claims. (Cl. 95—42.)



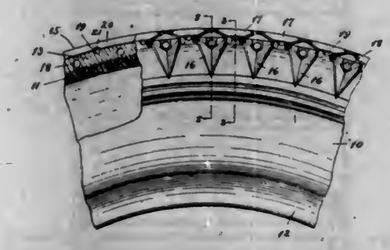
1. In a high speed magazine camera, means for storing exposed and unexposed films, a shutter; a power unit; pressure means for releasing the shutter to make an exposure, means subsequently operable by said pressure means for operating the power unit, said unit having connections for progressively moving at each of its operations the exposed film from its position when exposed to the storage means, and means for automatically resetting the said shutter for a subsequent exposure.

1,877,599. RECUPERATOR CONSTRUCTION. FRANZ G. SCHWALBE, Toledo, Ohio. Filed Jan. 10, 1931. Serial No. 507,791. 7 Claims. (Cl. 263—20.)



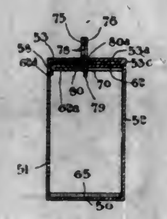
7. In a recuperator having a plurality of tube units, each of the tube units comprising a pair of concentric tubular shells, means located between the shells for forming chambers resistant to the transmission of heat to control the thermal expansion of one of the said pair of shells upon application of heat to the other of the said pair of shells.

1,877,600. PNEUMATIC TIRE. FRANK A. SEIBERLING, Akron, and WILLIAM S. WOLFE, Fairlawn, Ohio, assignors to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed May 6, 1931. Serial No. 535,372. 7 Claims. (Cl. 152—14.)



1. A pneumatic tire comprising a flexible carcass and a rubber tread united therewith, said tread being formed with anti-skid projections separated by grooves and with circumferentially spaced holes embracing the width of the tread and crossing under the projections and grooves, said holes having their outer sides substantially at the base level of said projections.

1,877,601. CARRYING CASE AND PATTERN FOR MAKING THE SAME. DAVID H. SHAPIRO, Montreal, Quebec, Canada, assignor of one-half to Edward Kolbert, New York, N. Y. Filed Dec. 2, 1930, Serial No. 499,516, and in Canada Aug. 1, 1930. 2 Claims. (Cl. 229—52.)



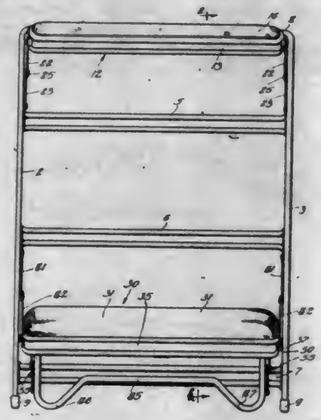
1. A container including two superposed top elements provided with registering slots, a handle consisting of flatly engaged plies of material adapted to extend outwardly through said slots to secure the top elements in superposed relation, the lower edge of one ply being integral with the lower of said top elements and the lower edge of the remaining ply being formed with lateral extensions engaging the lower surface of said lower top element.

1,877,602. KNEELING BENCH. JOSEPH SILVERMAN, Chicago, Ill. Filed Nov. 4, 1929. Serial No. 404,588. 7 Claims. (Cl. 155—166.)

1. A collapsible kneeling bench comprising a frame including transverse bracing members, an arm rest and a knee rest pivoted to said frame, separate means connected to the frame and to the arm rest and the knee

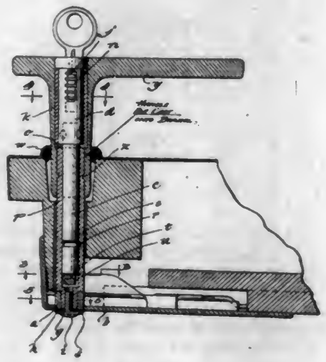
CARNEGIE LIBRARY OF ATLANTA

rest respectively to hold the rest in extended position, said connecting means being operable to permit said rests to be swung to inoperative position inwardly toward the



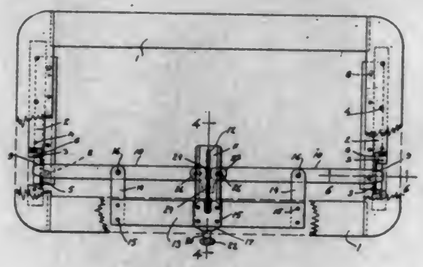
frame, said transverse frame members limiting the swinging of said rests past an aligned position with respect to said frame.

1,877,603. COACH LOCK. EMORY GLENN SIMPSON, ARTHUR J. DE SANA, and JOHN B. FLYNN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 18, 1927. Serial No. 206,415. 13 Claims. (Cl. 70—91.)



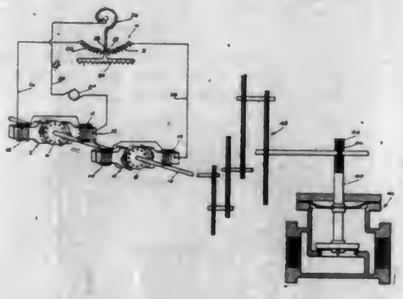
1. In a lock the combination of a roll-back, a shank, a lock bushing, a locking mechanism including a cylinder lock having tumblers locking into said bushing, and a handle cast onto the shank with a destructible connection weaker than the locking mechanism and arranged to be independent of said bushing.

1,877,604. ADJUSTABLE SEAT FOR AN AUTOMOBILE. EMORY GLENN SIMPSON, CARL G. CRONWALL, and ANDREW CHRISTIAN ANDERSEN, Detroit, Mich., and HERBERT C. FIELD, Windsor, Ontario, Canada, assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 26, 1928. Serial No. 328,416. 6 Claims. (Cl. 155—14.)



6. An adjustable vehicle seat comprising in combination a seat support, a seat slidably carried by this support, and an adjusting mechanism for adjusting said seat along said support including bowed thrust equalizing levers adapted to resiliently engage said seat support.

1,877,605. OPPOSED MOTOR CONTROL SYSTEM. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,884. 8 Claims. (Cl. 172—239.)



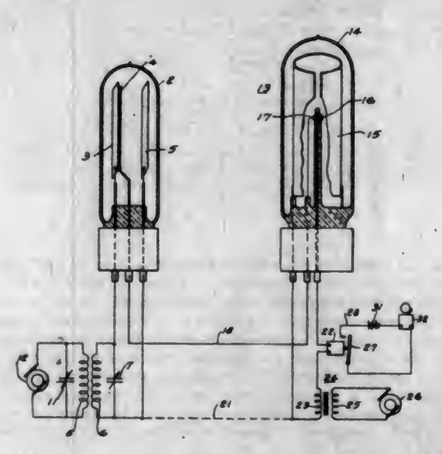
1. In an electrical remote control system, a variable resistance comprising a pair of resistances separated by a slight gap bridged by a third resistance and having a movable contact adapted to contact with said pair of resistances, a pair of electric motors, a closed loop connecting the variable resistance and the fields of the motors in series, a bridge line across the loop connecting the movable contact of the variable resistance therewith at a point between the fields of said motors, and mechanical means connecting the rotors of motors for causing the rotative force of one under the influence of its field to oppose that of the other, and a source of electrical energy connected to said loop.

1,877,606. BOTTLE CAP. MILTON J. SHOEMAKER, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,598. 11 Claims. (Cl. 215—38.)



1. A hollow article or cap comprising a film of wet hydrated hydroxy-alphyl ether of cellulose containing substantially less than one hydroxy-alphyl radicle to one unit of cellulose, adapted, when placed upon a substantially similarly shaped surface, to shrink by loss of moisture and so attach itself firmly at numerous points of contact.

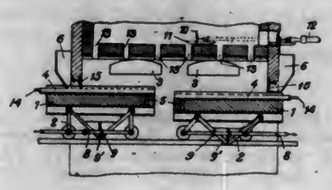
1,877,607. ELECTRIC DISCHARGE DEVICE. ALBERT M. SKELLETT, St. Louis, Mo., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 25, 1927. Serial No. 178,370. 6 Claims. (Cl. 175—320.)



1. In combination, a tube having a low-pressure gas therein, a plurality of cold electrodes mounted within said tube, the distance between certain of said electrodes being less than the mean free path of the gas molecules, means for applying a potential across certain of said electrodes in order to ionize the space between the first mentioned electrodes, and means whereby the change in resistance between said first mentioned electrodes permits the actuation of a potentially-controlled relay system.

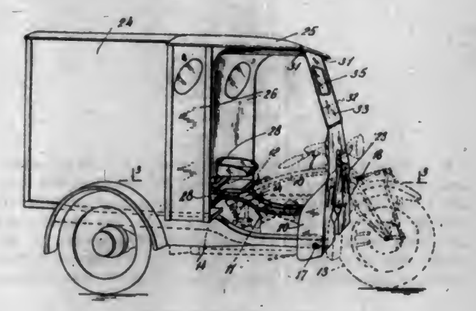
6. A gaseous valve comprising a pair of conductors separated by a distance less than the mean-free-path of the gas contained in said valve and a pair of conductors separated by a distance greater than the mean-free-path of the gas contained in said valve, and means for impressing an ionizing potential between said last named conductors.

1,877,608. APPARATUS FOR SINTERING ROASTED MATERIALS. GUSTAV STEIN, Salchendorf, near Neunkirchen, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed May 5, 1931, Serial No. 535,204, and in Germany Apr. 12, 1930. 10 Claims. (Cl. 266—21.)



1. Sintering furnace comprising a furnace chamber, means for gas-firing said furnace chamber, a laterally removable grate forming the bottom of said chamber on which first a layer of solid fuel and upon this a layer of the material to be sintered is deposited and said grate being provided with passages for conducting air to the fuel.

1,877,609. MOTOR VEHICLE. ALBERT STERN, JOSEPH STERN, JULIUS STERN, and ERNEST STERN, New York, N. Y., assignors, by mesne assignments, to Indian Motocycle Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 2, 1930. Serial No. 465,296. 15 Claims. (Cl. 208—150.)

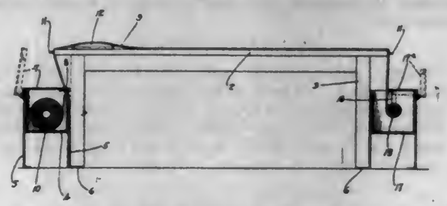


1. In a motor vehicle, the combination of a motorcycle frame having an engine, a chassis frame attached to said motorcycle frame, and wind-deflecting members secured to one of said frames for directing cooling air against the engine when the vehicle is in motion.

1,877,610. CONTINUOUS SHEET APPLIANCE FOR EXAMINATION AND OPERATING TABLES. FRANK G. STEINER, Chicago, Ill., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 15, 1931. Serial No. 508,659. 5 Claims. (Cl. 45—68.3.)

1. The combination with a table, of a receptacle adapted to receive a roll of sheeting and having an opening through which the web of sheeting may be stretched to extend over the table from end to end, a second receptacle having op-

posite vertical slots in its end walls, a winding shaft adapted to drop into said slots and on which the web of sheeting may be wound, and releasable means associated with said



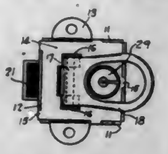
second receptacle whereby said shaft may be inserted in said slots and automatically locked therein against premature displacement.

1,877,611. WIRE CONNECTER. HENRY M. STIEGLITZ, St. Louis, Mo., assignor to Frank Adam Electric Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 19, 1929. Serial No. 333,663. 7 Claims. (Cl. 173—259.)



1. In a wire connecter, wire retaining plates, means forming opposed wire channels in said plates, a bolt engaging said plates, means formed by one of said plates and extending beyond the plane thereof, forming a spacer between the plates, and means formed by another of said plates for limiting the length of wire engaged by the connecter.

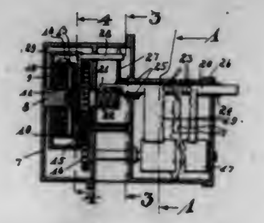
1,877,612. CATCH LOCK. HENRY M. STIEGLITZ, St. Louis, Mo., assignor to Frank Adam Electric Co., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 17, 1930. Serial No. 429,021. 7 Claims. (Cl. 70—29.)



4. A door lock including a lock body, a bolt extending from the body; a handle inseparably connected to the body and a key receiving element, the handle and element extending from one side of the lock body, the handle and lock body being spacially related for disposition on opposite sides of a door, with the handle normally overlying the key element and having an aperture for access thereto.

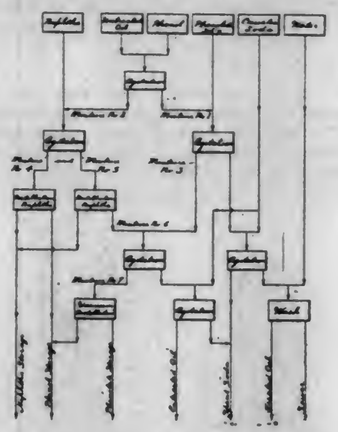
1,877,613. RAZOR STROP. WALTER STOCK, Los Angeles, Calif. Filed June 24, 1931. Serial No. 546,601. 1 Claim. (Cl. 51—85.)

In a razor-strop, sharpening-members, a blade-holder, a rotating mechanism including a screw-end, an engagement between the said screw and said blade-holder whereby the blade-holder can be moved endwise, means for operatively connecting the rotating mechanism with the sharpening-members, a tension-means for operating the rotating mechanism in one direction, a flexible member for manually operating the rotating mechanism in the opposite direction against the tension of the tension-means, a drum concentrically mounted to rotate around said tension-means and having an aperture through which the said flexible member passes outwardly, an engagement between the drum and blade-holder adapted to swing the blade-holder to opposite positions with respect to said sharpening members, and a spring for actuating the drum to swing to one position when the flexible member is released while yielding to a pulling and thereby a straightening of the flexible member adapted to result in a con-



tacting of the flexible member with a wall of said aperture and thereby resulting in a swinging of said drum and therewith of said blade-holder to the opposite position.

1,877,614. PROCESS FOR PURIFYING PETROLEUM DISTILLATES WITH AQUEOUS PHENOL AND RECOVERY OF THE SAME. REGINALD K. STRATFORD and HERBERT H. MOOR, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 8, 1929. Serial No. 338,420. 2 Claims. (Cl. 196—18.)



1. An improved process for the purification of hydrocarbon oil, comprising the steps of agitating the oil with a liquid comprising phenol and a small quantity of water, separating two immiscible liquids, the one containing a large quantity of oil and a relatively small quantity of phenol, and other containing a relatively large quantity of phenol and a small quantity of oil, agitating said first mentioned liquid with a solvent consisting of an aqueous solution of glycerine and alkali phenolate whereby phenol is substantially completely removed from the oil, and withdrawing the purified oil.

1,877,615. METALLIFEROUS AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB and HANS MAYER, Basel, Switzerland, assignors to Firm of "Society of Chemical Industry in Basle", Basel, Switzerland. Filed May 13, 1930, Serial No. 452,125, and in Switzerland May 28, 1929. 14 Claims. (Cl. 260—11.)

1. Process for the manufacture of metal compounds of unsulfonated azo-dyestuffs, consisting in treating azo-dyestuffs obtainable by coupling unsulfonated diazo components of the benzene series containing lake-forming groups

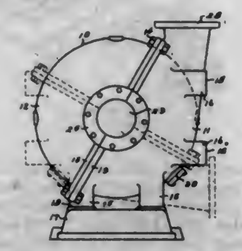
in ortho-position to the diazo group with unsulfonated coupling components of the benzene, naphthalene and pyrazolone series, with a member of the group of metal compounds consisting of the oxides, hydroxides, basic carbonates, carbonates and sulfides of such metals capable of producing complex metal compounds with the lake-forming groups of the azo-dyestuffs the atomic weights of which metals lie above 55.

1,877,616. FACE-MASSAGING APPARATUS. FRANZ PHILIPP STRELITZ, Berlin-Halensee, Germany. Filed Sept. 18, 1929, Serial No. 393,453, and in Great Britain Mar. 13, 1929. 1 Claim. (Cl. 128—54.)



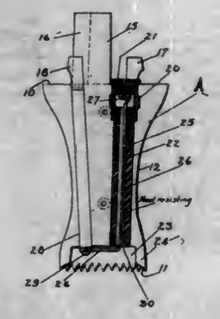
A face massaging apparatus comprising a substantially flat-perforated casing, a perforated pipe in said casing, means for connecting said pipe to a supply of liquefied carbonic acid gas, a porous vessel arranged so as to enclose the pipe inside the casing, a resilient stem connected with the casing, and an operating handle connected to the free end of said stem.

1,877,617. PUMP. HERBERT STROM, Arlington, N. J., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 367,962. 5 Claims. (Cl. 103—103.)



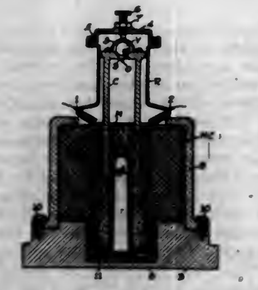
1. In a centrifugal pump, a casing including a plurality of detachably connected sections forming an intake fitting on each side of the casing, a discharge conduit associated with one of said sections, a base, a means for detachably connecting said sections to each other and means peripherally disposed on the casing, for securing the casing to said base, whereby said discharge conduit may be selectively disposed either adjacent to, or remote from said base, with the intake fitting disposed near the same end of the base.

1,877,618. EXTERNAL EXPULSION FUSE PLUG. JOHN E. SUMPTER, Minneapolis, Minn., assignor to Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 1, 1924. Serial No. 740,995. 15 Claims. (Cl. 200—127.)



1. An external expulsion fuse plug, including a handle member, a fuse receiving passage extending through said handle member, said plug having in the bottom thereof an opening communicating with said fuse passageway to permit the force of the blowing of the fuse out of the bottom thereof, and a conductor to which one end of the fuse is attached extending through said plug adjacent said fuse passage and a second conductor leading to said fuse passage to which the other end of the fuse is attached to complete the connecting circuit for said plug, both conductors being adapted to make contact with the contacts in a cut out housing.

1,877,619. ELECTROMAGNETIC RELAY. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 30, 1931. Serial No. 526,190. 7 Claims. (Cl. 200—97.)

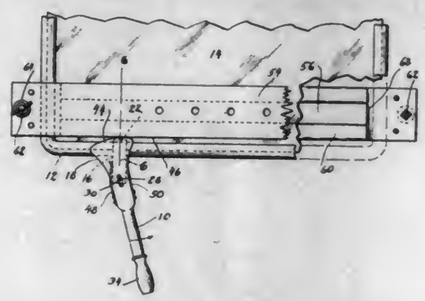


2. In an electro-magnetic relay, a solenoid, a tube of mercury within said solenoid, a cylinder of magnetic material floating in said mercury, electrical contacts extending within said mercury tube, and a magnetic circuit for said solenoid arranged to actuate said cylinder to displace said mercury during the energization of said solenoid, said cylinder being closed at its top, except for a small vent, by a check valve.

1,877,620. GLASS CHANNEL REMOVER. CHARLES J. THOMAN and WILLIAM WESTCOTT, Jackson, Mich., assignors to Hinckley-Myers Company, Jackson, Mich., a Corporation of Michigan. Filed Mar. 16, 1931. Serial No. 522,928. 4 Claims. (Cl. 29—84.)

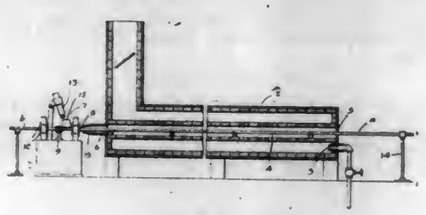
1. A pulling device comprising in combination an abutment detachably secured to and extending across a glass

pane adjacent to a frame secured about the edge of the pane and a pulling tool provided with means engaging said frame and with a part projecting beyond said means



and rockably engaging said abutment whereby upon rockable movement thereof over said abutment said frame engaging means is pulled outwardly.

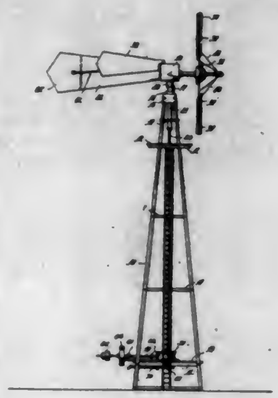
1,877,621. MANUFACTURE OF WELDED PIPE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 325,093. 3 Claims. (Cl. 78—94.)



1. The method of manufacturing butt-welded pipe and tubing, which comprises rapidly moving the material through a longitudinal course, supplying heat to the material throughout a lengthy section of its course so that the material is brought to a temperature of the order of 2000° F., then as the material proceeds, and by means of a seamwise extended oxyacetylene flame agency, putting sufficient additional increments of heat into the contiguous edges and adjacent metal on either side of the seam so that the metal is melted throughout its thickness, thereby producing an elongated puddle in the hot pipe wall, causing this puddle to partly solidify and form a homogeneous part of the wall, and while the metal is still plastic exerting compression thereon to work the fused metal.

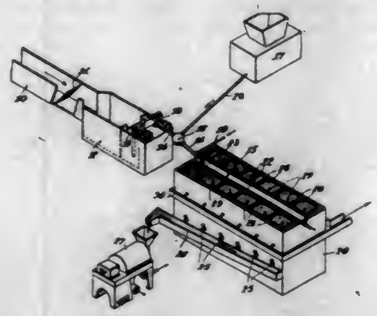
1,877,622. WIND MOTOR. GEORGE M. BEARD, Auburn, Ind. Filed May 25, 1931. Serial No. 539,927. 4 Claims. (Cl. 170—65.)

1. In a wind motor the combination with a tower, a housing rotatably mounted on the tower, and a rudder secured to the housing, of a hollow shaft journaled in the housing and having a wind wheel at its outer end with rotatable blades and means for turning the same, a tubular vertical shaft geared to the hollow shaft and extending to the bottom of the tower, a rod slidable in the hollow shaft for operating the rotatable blades, governor vanes mounted on the housing, and means responsive to the movement of the governor vanes for sliding the rod; together with a lever pivoted in the housing for sliding the aforesaid rod independently of the governor vanes, a vertical rod extending through the tubular shaft, a yoke connecting the upper end of the rod to the lever and through which yoke the aforesaid slidable rod passes, a spring interposed between the lever and yoke for exerting tension



on the lever and sliding rod operated thereby, and means for adjusting the vertical rod with respect to the lever and compression spring.

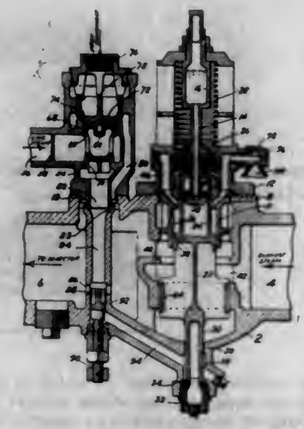
1,877,623. METHOD FOR TREATING DOMESTIC SEWAGE. WILLIAM C. LAUGHLIN, Kew Gardens, N. Y., assignor to Filtration Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 1, 1930. Serial No. 499,195. 10 Claims. (Cl. 210—2.)



1. In the treatment of domestic sewage, the method of accumulating suspended material in the mass of the sewage fluid which consists in adding hydrated cellulose slime to the sewage, and then allowing it to diffuse through the body of the sewage mass until agglomeration and deposit of the matter suspended in the sewage fluid takes place, under separation of substantially sewage-free water.

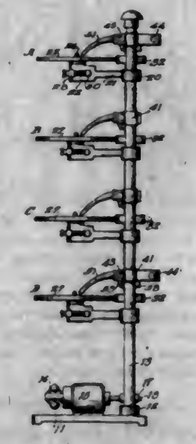
1,877,624. INJECTOR CONTROLLING MEANS. IRENÉE P. PENDRICK, Philadelphia, Pa., assignor to William Sellers & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1931. Serial No. 517,477. 12 Claims. (Cl. 103—265.)

1. Means for continuously supplying low pressure steam to an injector including valve means governing the flow of steam from a low pressure supply to the injector, other valve means governing the flow of steam from a high pressure supply to the injector, means controlling the op-



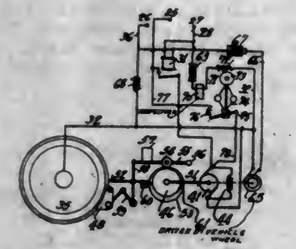
erations of said valve means to insure a flow from the low pressure supply when available and at other times a flow from the high pressure supply, and means for aperiodically damping the movements of the first mentioned valve means.

1,877,625. MULTIPLE TURNTABLE PHONOGRAPH. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed June 15, 1928. Serial No. 285,724. 28 Claims. (Cl. 274—10.)



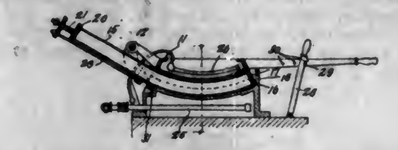
1. A phonograph as described comprising a stand supporting a row of turntables spaced one above the other, a vertical shaft located outside the peripheries of said turntables, means connecting said vertical shaft with said turntables for simultaneously driving said turntables at uniform speed and spring controlled means included with said connecting means for connecting each of said turntables with said drive.

1,877,626. RAILWAY TRAFFIC CONTROLLING SYSTEM. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Original application filed Sept. 2, 1924, Serial No. 735,276, now Patent No. 1,805,551, dated May 19, 1931. Divided and this application filed July 18, 1929. Serial No. 379,296. Renewed Feb. 8, 1932. 20 Claims. (Cl. 246—182.)



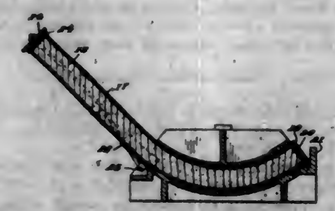
1. In a railway traffic controlling system, the combination, a track divided into blocks, vehicles on said track spaced by said blocks, means for communicating between vehicles on adjacent blocks and a centrifuge device on one of said vehicles controlled by the speed of the vehicle on the adjacent block.

1,877,627. APPARATUS FOR BENDING TUBES OF FIBER AND SIMILAR MATERIAL. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, as trustee. Filed July 28, 1928. Serial No. 296,078. 25 Claims. (Cl. 144—256.)



1. An apparatus for simultaneously bending a plurality of moist fiber tubes into the desired curvature, comprising a pair of relatively movable members carrying a plurality of complementary halves of tube bending forms, said forms having complementary grooves in their working faces to closely engage the outside surfaces of the tubes and also having a curvature conforming to that desired in the bent tubes, and means for operating within the tubes to prevent collapse and maintain the circularity of said tubes during the bending operation.

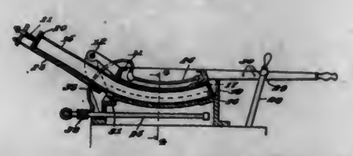
1,877,628. METHOD FOR BENDING TUBES OF PAPER, FIBER, AND SIMILAR MATERIAL. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Filed Feb. 17, 1930. Serial No. 429,187. 4 Claims. (Cl. 18—56.)



1. A method such as herein described, which comprises inserting granular material into a straight, moist, tem-

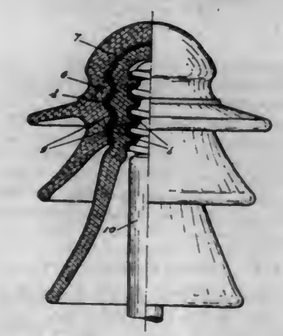
porarily plastic fiber tube, bending the tube to the desired curvature while confining it against radial outward movement in any direction, and causing said tube to set substantially rigidly while said granular material is in place.

1,877,629. METHOD FOR BENDING TUBES OF FIBER AND SIMILAR MATERIAL. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Filed Feb. 17, 1930. Serial No. 429,188. 4 Claims. (Cl. 18—56.)



1. A method of forming a fixed bent fiber tube which comprises sufficiently moistening the tube to render it flexible, closing the tube gas tight, heating the closed tube sufficiently to generate gas pressure within the tube sufficient to maintain the circularity of the tube during bending, bending said tube while maintaining said gas pressure, and drying the gas tight closed bent tube to cause it to set by continued application of heat, thereby continuing the internal gas pressure during the setting of the tube.

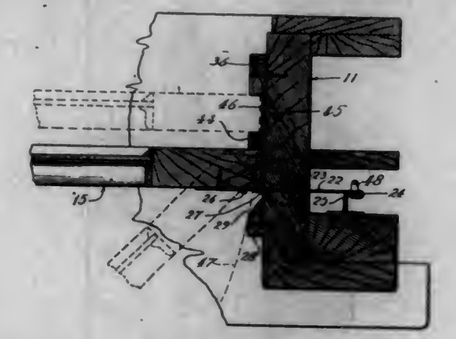
1,877,630. HIGH TENSION INSULATOR. JOHANN FRIEDRICH SCHEID, Hermsdorf, Germany, assignor to Hermsdorf-Schomburg-Isolatoren G. m. b. H., Sitz Berlin, Verwaltung Hermsdorf in Thuringen. Filed Oct. 18, 1924, Serial No. 744,324, and in Germany May 20, 1924. 3 Claims. (Cl. 173—318.)



3. An electric multipart insulator comprising a plurality of insulator cups arranged in nested relation and having opposed irregular faces secured to each other solely by an interposed elastic layer of massed fibers which are impregnated with and united to each other by varnish.

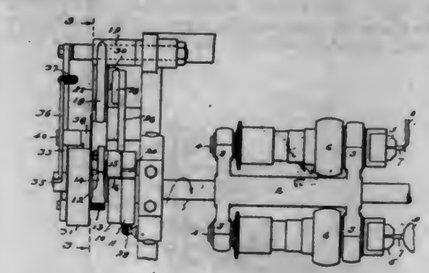
1,877,631. WINDOW AND THE LIKE. CHARLES W. LE FEBVRE, Chicago, Ill. Filed Aug. 29, 1930. Serial No. 478,755. 2 Claims. (Cl. 20—12.)

1. In a window construction, the combination of a casing, upper and lower sash therefor, and means for individually supporting said sash to permit them to slide freely up and down independently of each other, together with removable parting and guide strips located at opposite sides of the casing, said removable parting strip including a parting member, together with a relatively thin plate to which said parting member is connected, said plate normally lying in face contact with the face of one side of the casing and between the casing and the edge of the upper sash, and the slidable parting strip including



telescoping members, the larger of which is permanently secured to the upper portion of the side of the casing, and the lower of which is slidably connected to said side of the casing and in position to telescope upwardly into the first mentioned section, substantially as described.

1,877,632. SCREW SHAVING AND SLOTTING MACHINE. FRANK E. NEWTON, Hartford, Conn. Filed May 29, 1931. Serial No. 540,934. 7 Claims. (Cl. 10—3.)

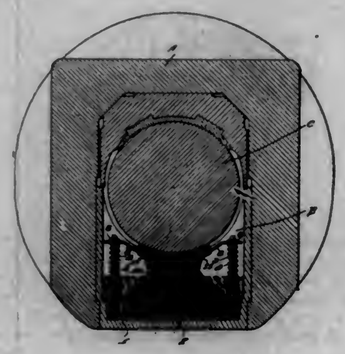


1. In combination with a shaving and slotting machine which has a rotatory shaft carrying rotatory stock-holding spindles, means for imparting intermittently rotary movements to the shaft, means for locking said shaft in exact position at the end of each movement, braking means for slowing down and stopping the rotatory movement of the shaft, and means engaged by the means for imparting said intermittently rotary movements to the shaft for applying said braking means as the shaft approaches the limits of its rotatory movements.

1,877,633. JOURNAL LUBRICATOR. CHARLES W. AKERS and WILLIAM H. FOSTER, Princeton, W. Va. Filed Oct. 12, 1928. Serial No. 312,123. 1 Claim. (Cl. 308—88.)

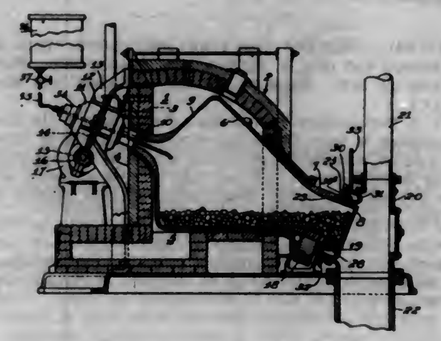
The combination with a journal box and a journal mounted therein, of a base plate disposed within the bottom of the box and having a central opening therein, rods rising from the plate adjacent the corners thereof, a packing retainer comprising an elongated body of substantially U-shaped formation in cross section having its opposed side walls extended upwardly and outwardly in spaced concentric relation to the journal, and terminat-

ing to provide horizontal flanges having openings to receive said rods, yieldable means for supporting the retainer on the rods, the bottom of said retainer having



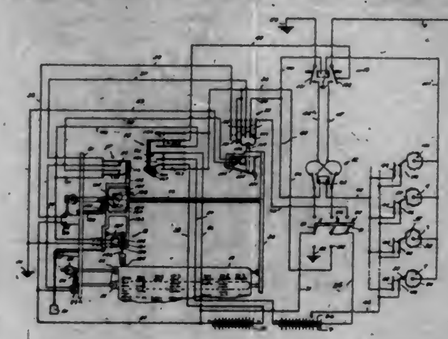
longitudinal slots at opposite sides of the longitudinal center thereof, and reinforcing strips bridging the bottom of the retainer and extending across said slots.

1,877,634. APPARATUS FOR CRACKING AND DISTILLING HYDROCARBONS. JOHN H. ANDERSON, Detroit, Mich., assignor to Altithermo Engineering Company, a Corporation of Pennsylvania. Filed Feb. 9, 1929. Serial No. 338,739. 2 Claims. (Cl. 196—112.)



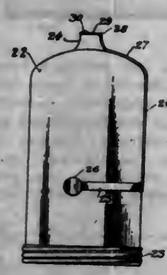
2. Apparatus for cracking and distilling hydrocarbons comprising, in combination, a heating-chamber and means for supplying heat thereto, a conical retort rotatably supported within the heating chamber with its axis inclined downwardly from its larger to its smaller end, hollow inclined axial trunnions opening out of the retort at its opposite ends and projecting through the opposite end walls of the heating chamber, means connected to the trunnion at the larger end for rotating the retort, means for supplying the substances to be treated at the larger end of the retort, a receiver for the products of the operation having an opening for the other of the said trunnions, a bearing shoulder formed upon said last named trunnion, and inclined bearing shoulder formed upon said receiver surrounding said opening, and a ring loosely mounted upon said last named trunnion between said shoulders and having an inclined face contacting with the inclined face on the shoulder surrounding said receiver opening.

1,877,635. REMOTE CONTROL SYSTEM. CAESAR ANTONIONO, Wilmette, Ill., assignor to General Electric Company, a Corporation of New York. Filed Mar. 25, 1927. Serial No. 178,369. 19 Claims. (Cl. 177—353.)



18. In a supervisory control system, a supervisor's office, a remote station, a plurality of switches at said station, means controlled by said switches for sending in succession electric impulses corresponding to each switch which is in a certain position and then electric impulses corresponding to each switch which is in another position, a chart in said office and means controlled by said impulses for printing a record of the instant position of said switches in columns corresponding to the respective positions of the several switches.

1,877,636. DISPENSER. PAULINE ARONSTAM, New York, N. Y. Filed July 28, 1930. Serial No. 471,356. 2 Claims. (Cl. 221—2.)

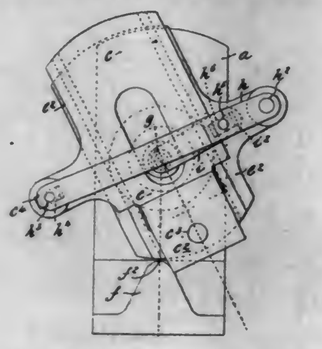


1. A closure structure for containers comprising an open resilient loop having outwardly bent end portions, said loop being adapted to embrace the body portion of a container and to be disposed in a horizontal position thereon, lid-supporting means extending above the loop at right angles thereto and adapted to lie against the container in a vertical position, a hinge secured to the upper end of the said means and a lid secured to the hinge to cover the mouth of the container.

1,877,637. MACHINE FOR DRESSING REVOLVING GRINDING WHEELS. HARRY FREDERICK ATKINS, Peterborough, England. Filed May 13, 1932, Serial No. 611,085, and in Great Britain May 21, 1931. 4 Claims. (Cl. 125—11.)

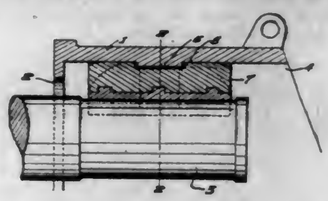
1. A machine for dressing a revolving grinding wheel, combining a stationary supporting frame, two pivoted slides mounted upon the frame one slide carrying a dressing tool and the other slide carrying a stylus, means for coupling both slides to move in unison through an equal angle about their pivotings from a movement of

one of them, means for coupling both slides for linear movement to and from the points of pivoting from a movement of one of them, and a former mounted upon



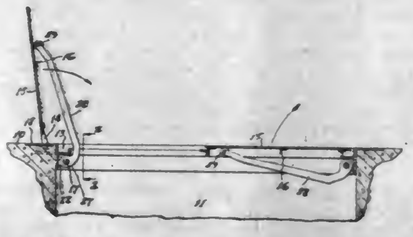
the frame and with which the stylus is adapted to make governing contact for all movements of the slides, substantially as described.

1,877,638. CAR JOURNAL BEARING. EDWARD BALDWIN, North Charleston, S. C. Filed Sept. 11, 1928. Serial No. 305,227. 4 Claims. (Cl. 308—54.)



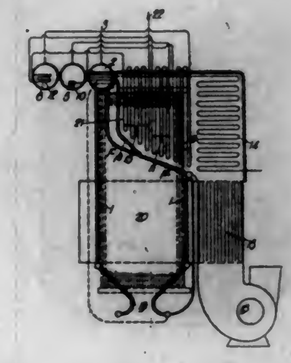
3. A car journal box having a recess in its top substantially dovetail-shaped in cross section and provided with a transversely disposed intermediate abutment, and a brass substantially dovetail-shaped in cross section and provided with a centrally disposed transverse external groove fitting upon the abutment and acting therewith to hold the brass within the box, yet permitting slight movement of the brass to accommodate the movement of the journal.

1,877,639. DOORCHECK. THOMAS H. BANFIELD, Portland, Oreg. Filed July 21, 1931. Serial No. 552,205. 2 Claims. (Cl. 16—1.)



1. A check for trap doors consisting of a pair of standards, a shaft journaling between said standards, said shaft having a ratchet wheel thereon, a rockable arm rotatably mounted on said shaft, a jaw clutch between said rockable arm and shaft, means for preventing the disengagement of said jaw clutch when said arm is in a raised position, a torsion spring for urging said ratchet in one direction of travel, and a latch cooperating with said ratchet.

1,877,640. STEAM GENERATOR. KARL BAUMANN, Urmston, England. Filed June 4, 1931, Serial No. 542,121, and in Great Britain June 16, 1930. 6 Claims. (Cl. 122—1.)

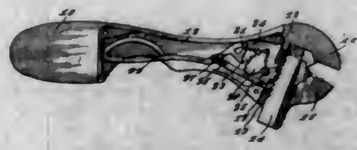


1. A steam generating plant comprising in combination a water tube boiler, an evaporator of the surface heated type, a common steam pipe connected to the steam outlet of the boiler and the steam outlet of the evaporator, a superheater element supplied with steam from the common steam pipe, an evaporator of the direct contact type into which the superheated steam is injected, a second superheater element connected to the steam outlet of the direct contact type evaporator and delivering superheated steam to the heating element of the surface heated type evaporator and a final superheater connected to the outlet of said heating element and delivering steam for consumption.

1,877,641. PROCESS FOR FOOD PRODUCTS. PAUL H. BOLTON and ERIC N. BOLTON, Youngstown, Ohio. Filed Aug. 24, 1929. Serial No. 386,268. 4 Claims. (Cl. 99—11.)

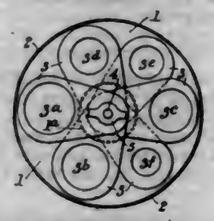
1. A food product, comprising a food article of the class consisting of nuts, fruits and cereals, a coating of honey in contact with said food article, a coating of impalpable milk sugar (lactose) covering said coating of honey, and an outside coating of honey covering said coating of sugar.

1,877,642. WRENCH. HERBERT F. BRADY, Winona, Minn. Filed Oct. 6, 1931. Serial No. 567,271. 3 Claims. (Cl. 81—36.)



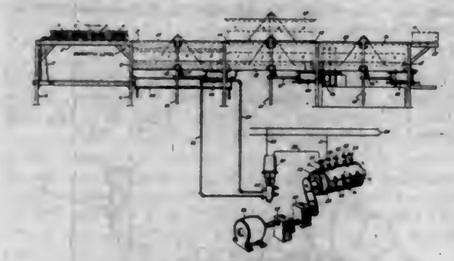
1. A wrench comprising a handle, a fixed jaw thereon, a sliding jaw mounted for movement toward and away from the fixed jaw and including a toothed shank, a gear meshing with the teeth of said shank, a spring influenced lever pivoted on said handle and connected with said gear, a pawl projecting from said lever and normally engaging said gear to hold the movable jaw stationary, and to permit adjustment of said jaw through the instrumentality of said spring and gear subsequent to the release of said jaw, and means controlled by said lever for adjusting the jaw in one direction during the movement of the lever to release said jaw.

1,877,643. DEVICE FOR TESTING SENSORY AND MENTAL FACULTIES. HAYDN BROWN, London, England. Filed Jan. 14, 1932, Serial No. 586,689, and in Great Britain Jan. 21, 1931. 1 Claim. (Cl. 35—12.)



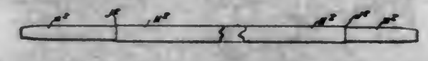
A device for testing sensory and mental faculties by touch, the said device consisting in a set of balls of graduated sizes and a tray having a centre pin upon which are loosely mounted radiating laths each having a hole adjacent its free end, the several holes being also of graduated sizes but each being of different size from that of the said balls.

1,877,644. METHOD OF IMPREGNATING ELECTRICAL DEVICES. FRANK M. CLARK, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,109. 3 Claims. (Cl. 175—41.)



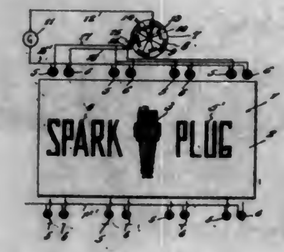
1. The method of impregnating a capacitor with a fusible dielectric material which consists in introducing said capacitor into a body of said material which is heated to a temperature of at least 150° C. and materially above its melting point, when the temperature of said capacitor has come to an equilibrium with said heated material quickly transferring said capacitor to another portion of said material which is heated to a temperature of about 80 to 90° C., when the temperature of said capacitor has been lowered in said second portion transferring the same to a dielectric material which is liquid at the congealing point of said fusible material, and cooling said capacitor in said liquid liquid dielectric material to approximately room temperature.

1,877,645. COLD ROLLING METAL. WILLIAM C. COXELL, Youngstown, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed July 19, 1930. Serial No. 469,203. 4 Claims. (Cl. 80—60.)



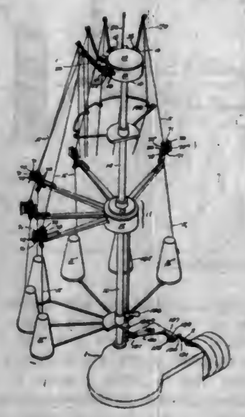
4. The method of rolling metal strip which consists in providing a piece of strip having its main portion relatively hard and an end which is relatively soft, passing said strip completely through one of the passes of said mill, and thereafter cutting off said soft end to leave a reduced hard rolled strip.

1,877,646. DISPLAY APPARATUS. RICHARD M. CRAIG, San Antonio, Tex., assignor, by mesne assignments, to Thomas W. Menefee, San Antonio, Tex. Original application filed Dec. 29, 1925, Serial No. 78,244, now Patent No. 1,698,219, dated Jan. 8, 1929. Divided and this application filed Jan. 7, 1929, Serial No. 330,935. 4 Claims. (Cl. 40—130.)



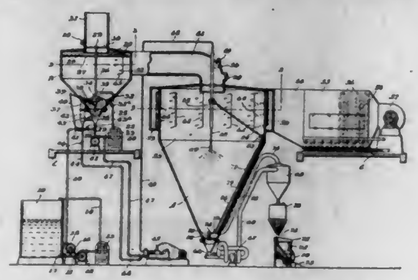
1. Apparatus for producing by illumination change effects in the appearance of represented matters which comprises a display surface having a background of a substantially neutral color and represented matter thereon, said matter being represented in substantially the same pigment color, means for simultaneously illuminating different portions of said surface containing said represented matter by means of different spectral light colors adapted to render a portion of said represented matter clearly visible and to render another portion thereof substantially invisible, thereby producing contrasting change effects on said surface.

1,877,647. ELECTRIC STOP MOTION FOR KNITTING MACHINES. ALFRED CRAWFORD, New Brunswick, N. J., assignor to Crawford Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Apr. 1, 1930. Serial No. 440,764. 15 Claims. (Cl. 66—161.)



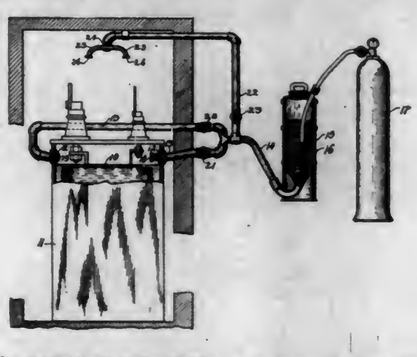
1. In a stop motion, the combination of a plurality of thread-controlled trip elements, an actuating disc common to all said trip elements and adapted to be actuated by any thereof, a normally open electric switch controlled by said actuating disc and adapted to be closed thereby for completing an electric circuit in which said switch is included, to effect the stopping of the machine to which the stop motion is applied, when an abnormal condition arises in any of the trip-controlling threads, and a normally closed switch included in said circuit and adapted to be opened to interrupt said circuit subsequent to the closing of the first said switch by the actuating disc.

1,877,648. APPARATUS FOR THE DESICCATION OF SUBSTANCES. FRANK HOWARD DOUTHITT, Chicago, Ill., assignor of one-half to Chester Earl Gray, Oakland, Calif. Original application filed June 27, 1927, Serial No. 201,847. Divided and this application filed Apr. 27, 1929. Serial No. 358,581. 4 Claims. (Cl. 159—4.)



3. Arrangement for drying and pulverizing damp or liquid raw material, in which the raw material is treated in a cone-shaped drying chamber by means of whirling streams of air and the streams of air move one or more rubbing blades along the wall of the drying chamber, thereby characterized, that every blade is attached at the lower end by a universal joint and at the upper end is hung by means of a chain attached in a known manner to a ring that can revolve around the mid-axis of the drying chamber.

1,877,649. FIRE EXTINGUISHING METHOD. LODIAS J. DUGAS, Chicago, Ill., assignor to Du-Gas Fire Extinguisher Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 19, 1927. Serial No. 220,622. 1 Claim. (Cl. 169—4.)



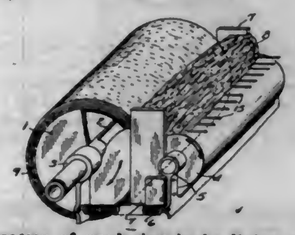
The method of extinguishing and preventing reignition of a fire in a substantially closed vessel containing an inflammable liquid by placing a material within the vessel adapted to generate a fire extinguishing gas when the liquid is ignited and to form a scum on the liquid to prevent reignition of the liquid when the fire is extinguished.

1,877,650. DRAFT EQUALIZER. VOLANDO B. EAKIN, Grass Valley, Oreg. Filed May 8, 1931. Serial No. 536,016. 14 Claims. (Cl. 97—47.)



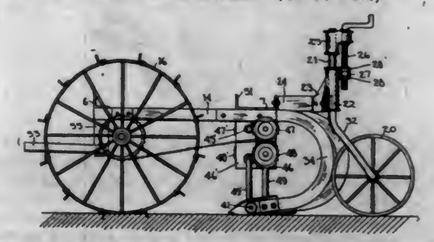
1. A draft equalizer comprising a frame, means for attaching gang plows to the frame at opposite sides of the longitudinal axis thereof, and a coupling means pivotally and adjustably secured to the frame rearwardly of the forward end thereof and capable of having itself pivotally arranged in alignment with the longitudinal axis of the frame or laterally of either side of the longitudinal axis and secured to a draft medium to deliver draft equally to the gang plows.

1,877,651. PROCESS OF MAKING BRAKE LINING AND THE LIKE. FRANK J. EISENHARDT, Waukegan, Ill., assignor to Johns-Manville Corporation, a Corporation of New York. Original application filed May 24, 1924, Serial No. 715,715. Divided and this application filed Oct. 21, 1927. Serial No. 227,685. 7 Claims. (Cl. 18—56.)



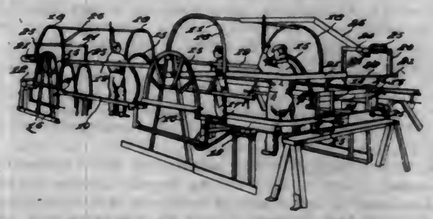
1. A process of producing brake lining material consisting of a sheet, which process includes, spirally winding layers of a compound subject to be hardened by heat together with reenforcing substance, while applying heat at the interior of said spiral winding and pressure at the exterior thereof.

1,877,652. ROD-WEEDER. CHARLES HOWARD ERWIN, Prescott, Wash., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 26, 1930. Serial No. 498,339. 23 Claims. (Cl. 97—42.)



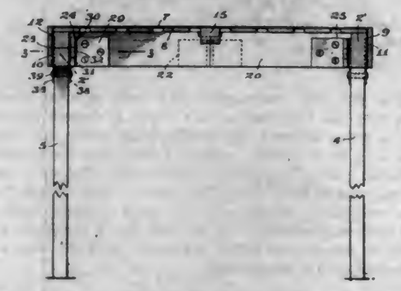
1. A rod weeder comprising a pair of rods overlapping at their inner ends and extending to opposite sides of the weeder, and means for rotating said rods through connections made with the inner ends thereof.

1,877,653. MOTOR VEHICLE AND METHOD OF CONSTRUCTING THE SAME. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,755. 17 Claims. (Cl. 29—84.)



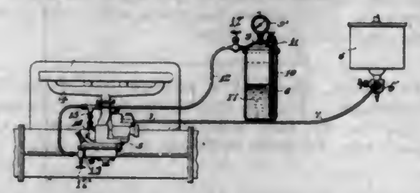
1. A method of constructing and assembling motor vehicles, comprising the formation of a relatively light base frame supporting structure by shaping relatively light structural members to conform to a template; welding said members together while supported and positioned by said template; assembling said base frame supporting structure on additional longitudinally disposed frame members positioned by a second template; and securing said base frame supporting structure to said additional frame members; said second template accurately positioning said base frame supporting structure and said additional frame members relative to each other.

1,877,654. FOLDING TABLE. CHARLES M. FLINK and JOHN OLSON, Ironwood, Mich. Filed May 26, 1931. Serial No. 540,123. 3 Claims. (Cl. 45—11.)



1. A folding table including a top, a frame for supporting the top, said frame having side bars and end bars, a plurality of legs and means for connecting said legs with the frame, said means including a hinge at each corner of the frame for connecting the ends and sides of the frame together, each of said hinges having a downwardly extending projection, a plate adjacent each hinge having a downwardly extending projection, a pin extending through the respective projections and the respective legs for pivotally connecting the legs to said projection, said legs overlapping the side bars of said frame, the end bars of said frame being movable to cause a part thereof to overlap the end of said legs whereby the legs are clamped in position when the end bars of the frame are in operative position.

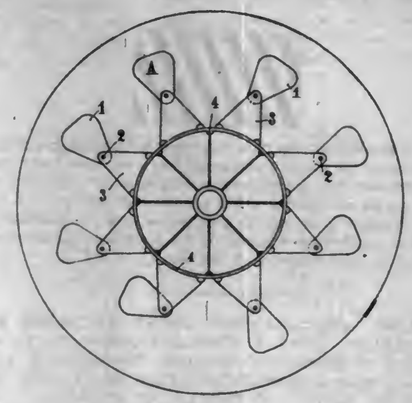
1,877,655. FUEL FEED FOR INTERNAL COMBUSTION ENGINES. GIUSEPPE GARIBALDI, Stamford, Conn., assignor to Fuel Oil Carburetion Co. Inc., New York, N. Y., a Corporation of New York. Filed Sept. 10, 1928. Serial No. 304,971. 7 Claims. (Cl. 123—122.)



1. A fuel gasifier for internal combustion engines provided with a combustion chamber, including a fuel conversion and gasifier apparatus attached to the engine manifold, an inflammable gas inlet leading into the combustion chamber of the gasifier and means for simultaneously introducing fuel into the combustion chamber.

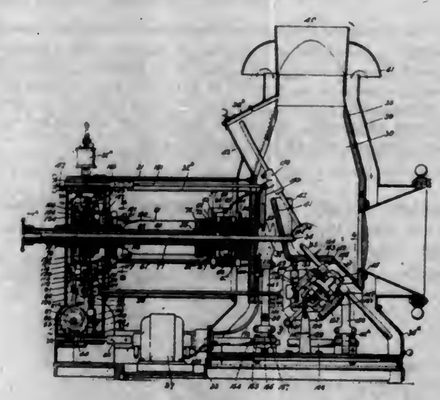
1,877,656. AMUSEMENT DEVICE. ANDRÉ JULES ACHILLE GIRAUD, Paris, France. Filed Oct. 24, 1929, Serial No. 402,069, and in France July 8, 1929. 4 Claims. (Cl. 272—43.)

1. In an amusement device, in combination with a member rotatable about a vertical axis, a plurality of carriages rotatable with said member and adapted to roll on a horizontal surface, a pivotal connection between each of said carriages and said member, whereby said member and carriages may be propelled at the same angular speed,



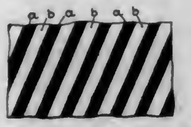
and means for modifying at will the angular speed of said carriages independently of the angular speed of said member, said means including an element engageable with the horizontal surface.

1,877,657. PROJECTOR LAMP. RUDOLPH A. GLASER, Cleveland, Ohio, assignor, by mesne assignments, to Gardner Abbott, as trustee. Filed Jan. 23, 1929. Serial No. 334,555. 21 Claims. (Cl. 176—51.)



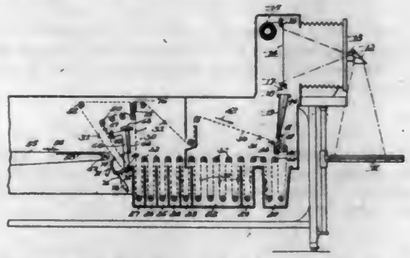
4. In an arc lamp, electrode carrying, driving and feeding means comprising, in combination, a rotatable electrode driving and feeding head provided with combined means to hold the electrode for rotation with said head and to axially feed the same; head driving means connected to said driving head for rotating the same; feed driving means comprising a differential gear train having a driving gear and a driven gear interconnected by gearing carried by a differential cage, and the driven gear of which normally rotates at such a speed relative to that of the head driving means that no feeding of the electrode will occur; said differential cage being automatically controlled by the condition of the arc for altering the speed of said driven gear relative to the speed of said head driving means to cause feeding of the electrode.

1,877,658. COLOR PHOTOGRAPHY. JOHN NAISH GOLDSMITH, London, England, assignor to Spicers Limited, London, England, a British Company. Filed May 22, 1930, Serial No. 454,833, and in Great Britain May 30, 1929. 19 Claims. (Cl. 95—81.5.)



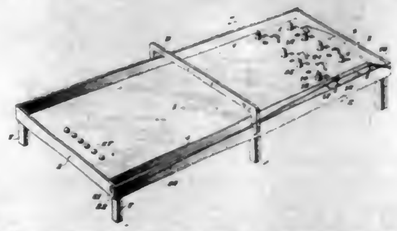
1. A method of the type described for applying a multicolor screen for colder photography to a cellulose ester base film wherein the resist-medium employed to print one or more series of lines or other geometrical patterns on the film, contains a dye which penetrates into the medium of the film, so that on removal of the medium a geometrical pattern in color remains on the film.

1,877,659. PHOTOGRAPHIC PRINT HANDLING APPARATUS. JOHN S. GREENE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed June 4, 1931. Serial No. 542,141. 19 Claims. (Cl. 95—94.)



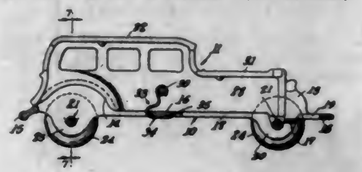
1. Photographic apparatus comprising conveying means including a movable bar having a smooth edge, means for holding a photographic print in a position extending across the path of movement of said bar, and mechanism for driving said conveying means to move said bar toward and past said print so that a portion of said print becomes wrapped around said smooth edge.

1,877,660. GAME. GEORGE S. GRINER, Cleveland, Ohio. Filed June 19, 1931. Serial No. 545,534. 1 Claim. (Cl. 273—41.)



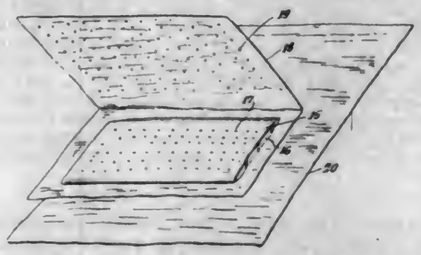
A game apparatus including a table, mounted on legs and sustained at an angle, and said table having a continuous flange, side and rear communicating gutters between the flanges and the rear gutter having its bottom wall inclined in opposite directions from the center thereof, the elevated end of the table having spaced series of longitudinal slots therein whose rear walls are rounded, a number bearing target in each slot designed to contact with the front walls of the slots when in elevated positions, rods journaled through the table at one of the side flanges thereof and on which the targets are pivoted, fingers on the rods, said rods having outer offset ends, links connecting said rods, a spring influencing the rods to hold their fingers beneath the slots and in normal horizontal position, and an operating rod for the finger carrying rods.

1,877,661. TOY CAR. CLYDE A. HEISLER and THOMAS FLETCHER, Ravenna, Ohio, assignor to The A. C. Williams Company, Ravenna, Ohio. Filed Apr. 12, 1932. Serial No. 604,838. 3 Claims. (Cl. 46—48.)



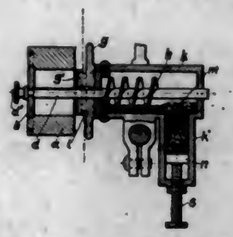
1. In a toy, the combination of a body portion having a cross member intermediate its ends, a chassis portion having a cross member intermediate its ends, said body portion and said chassis portion being constructed with cooperating parts to prevent relative forward and rearward movement and lateral movement, front and rear wheels rotatably connected with said chassis, and a spring hook mounted on one of said cross members and adapted to engage the other when the body portion and chassis portion are assembled.

1,877,662. METHOD AND APPARATUS FOR TREATING HAIR. ERNST HEINICKE, New York, N. Y. Filed May 20, 1932. Serial No. 612,419. 3 Claims. (Cl. 132—36.2.)



1. In a device of the character described a heat developing body comprising a fabric bag containing calcium oxide and calcium hydrate, a perforated tin foil cover therefor in a perforated tin foil wrapper, and a wax paper outer cover for the whole.

1,877,663. PARAFFIN DEVICE FOR TREATING THREADS. AUGUST HOFFMANN, Leipzig, Germany. Filed Dec. 21, 1929, Serial No. 415,851, and in Germany Sept. 16, 1929. 8 Claims. (Cl. 91—36.)

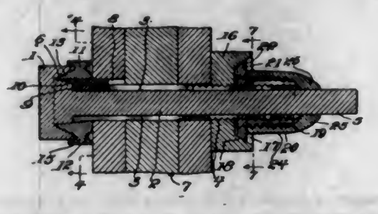


1. A paraffin device for treating thread, comprising a paraffin body, a thread tensioning wheel, a longitudinally displaceable shaft, means to rigidly fix said paraffin body upon said shaft, and means on the shaft for increasing the pressure of the paraffin body on the thread.

1,877,664. PRODUCTION OF LUBRICATING OILS. DONALD ALBERT HOWES, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Jan. 6, 1932, Serial No. 585,149, and in Great Britain Jan. 5, 1931. 4 Claims. (Cl. 196—10.)

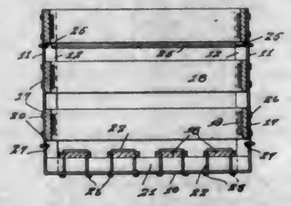
1. A process for preparing lubricating oils which comprises passing an olefine taken from the group consisting of ethylene, propylene, butylene and amylene in contact with a catalyst comprising essentially aluminium chloride and a member of the group consisting of aluminium and zinc, then distilling the reaction mixture and removing the saturated oil boiling between 150° C. and 250° C.

1,877,665. BOLT. PRYER HANS HUTCHINGS, Wewoka, Okla., assignor of one-fourth to T. F. Harrison, Wewoka, Okla. Filed Feb. 29, 1932. Serial No. 595,912. 6 Claims. (Cl. 151—27.)



2. A bolt having its shank grooved longitudinally, a nut engaging the bolt and having its outer face recessed, a split spring washer to be received in the recess and having inwardly extending lugs to be received in the grooves of the bolt and a holding element engaging the bolt and contacting with the washer, the inner face of the head of the bolt being recessed to afford substantially sharp edges and an impinging element having its opposite faces provided with continuous grooves and sharpened edges to be reversibly received in the recess of the head and a key in one of the grooves of the bolt engaging said impinging element.

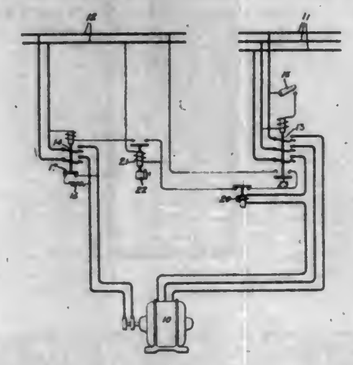
1,877,666. FRUIT AND VEGETABLE FIELD CRATE. JAMES R. KEITH, Bentonville, Ark. Filed June 11, 1930. Serial No. 460,470. 1 Claim. (Cl. 217—36.)



In a crate, a pair of U-shaped frames each having a horizontal portion of angular cross section and vertical end portions angular in cross section, bottom, side and end slots, U-shaped staples passing through said slats and frames and having ends clinched against the outer surfaces of the frames, and upper and lower tie rods disposed longitudinally of the slats and connecting the frames.

1,877,667. CONTROL SYSTEM. BENJAMIN W. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,521. 2 Claims. (Cl. 172—289.)

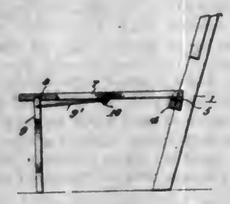
1. In combination with an alternating current supply circuit, a synchronous motor having its armature winding connected to said supply circuit, a source of excitation for said motor and means for effecting while the motor armature winding remains connected to the supply circuit the disconnection of the motor field winding from said source of excitation when the motor is pulled out of synchronism and the reconnection of said motor field winding to said source of excitation when said motor again reaches substantially synchronous speed including a time relay biased to its open position and operated to a closed position when energized for a predetermined interval, an energizing circuit for said relay, means controlled by said relay for connecting said source to the motor field winding when said relay is in its closed position, and a relay responsive to the armature current of said motor for opening the circuit of said time relay whenever said motor is pulled out of synchronism and for effecting the closing of said circuit when said motor again reaches substantially synchronous speed.



1,877,668. LUBRICATING SYSTEM AND PRODUCT. WILLIAM V. KIDDER, La Crosse, Wis. Filed Oct. 16, 1931. Serial No. 569,354. 13 Claims. (Cl. 123—196.)

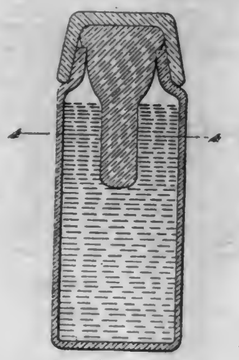
1. A method of lubricating internal combustion motors, which comprises preparing a suspension of colloidal graphite in the motor fuel, and introducing the mixture through the carbureter into the combustion chamber during the operation of the motor.

1,877,669. BLACKBOARD. HERMAN KITZE, Owen, Wis. Filed Sept. 17, 1930. Serial No. 482,590. 1 Claim. (Cl. 45—129.)



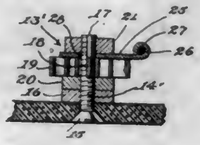
In combination with a frame having a board supported thereon, a seat pivoted to the frame upon an axis lying coplanar with the surface of the board, spring arms attached at one end to the seat and a leg member pivoted to the free ends of said arms, the seat having a notch for the reception of the end of said leg member and the free ends of said arms located opposite said notch whereby the leg member bridges the notch when closed against the seat.

1,877,670. AMALGAMATOR. LEROY E. KNIGHT, Northfield, Vt. Filed Mar. 18, 1931. Serial No. 523,626. 1 Claim. (Cl. 259—1.)



An amalgamator comprising a receptacle having sloping shoulders forming a neck, a pestle having a head fitting in the neck and closing the same, said head portion having a substantially flat surface, the head of the pestle having an annular groove which receives the edges of the shoulders, and a cup-shaped mortar fitting over the flat surface of the pestle and engaging the sloping surfaces of the shoulders.

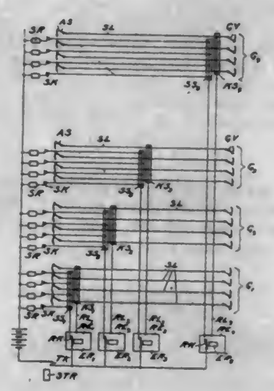
1,877,671. TERMINAL CONNECTION. LOUIS A. KOCH, Jr., Louisville, Ky. Filed Dec. 29, 1931. Serial No. 583,767. 1 Claim. (Cl. 173—328.)



A terminal connection comprising an insulated base, a screw rotatably mounted therein and having its outer end bifurcated, a coiled leaf spring having its inner end received in said bifurcation and its outer end adapted to be engaged under tension with an electric terminal, nuts threaded on said screw at each side of the inner end of the spring to secure the same to said screw, and a third nut threaded to said screw for engagement with the base to lock the screw to the latter, said last nut permitting rotatable adjustment of said screw to vary the tension of the outer end of said spring against a terminal, and said spring constituting at all times a current carrying portion of a circuit in which a terminal engaged thereby may be included.

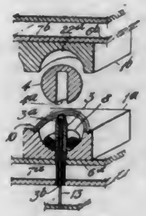
1,877,672. TELEPHONE PLANT. KNUT LARSSON and NILS GUNNAR PALMGREN, Stockholm, Sweden, assignors to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed May 26, 1931, Serial No. 540,158, and in Sweden May 31, 1930. 5 Claims. (Cl. 179—18.)

1. In a telephone system, a group of subscribers' lines, a number of call finders and cord lines allotted thereto, a number of registers connectible to the said subscribers' lines over the said cord lines and call finders, means to start upon a call a number of call finders corresponding to



the number of registers free for the time being, and switching members separate from the said starting means to connect the impulse circuits of the registers to the cord lines.

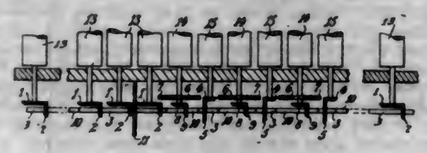
1,877,673. METHOD AND MOLD FOR MOLDING HOLLOW RUBBER ARTICLES. JAMES ALLAN LAW, Ascot Vale, Victoria, Australia. Filed Jan. 15, 1930, Serial No. 421,013, and in Australia Mar. 6, 1929. 7 Claims. (Cl. 18—55.)



7. A method for molding hollow rubber balls which consists in placing the material on a core in a mold chamber, forming a minute hole and a main hole in the ball, partly curing the material when in the mold, then removing the core and ball from the mold, then drawing the core through the main hole, then plugging the main hole and forcing air under pressure into the ball through the minute hole, and then completing the curing of the ball.

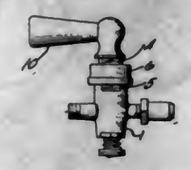
1,877,674. GLASS ANNEALING LEER. ERNEST BRISTOW LE MARE, St. Helens, England, assignor to Pilkington Brothers Limited, Liverpool, England, a Company of England. Filed Dec. 18, 1930, Serial No. 503,199, and in Great Britain Dec. 28, 1929. 1 Claim. (Cl. 198—127.)

Roller bed for a glass annealing leer comprising a first group of rollers turning at a speed corresponding to the speed of the glass, a second group of rollers turning at a speed more than three times the speed of the first group, a third group of rollers, interspersed with the rollers of



the second group, turning backwardly at a speed more than twice the speed of the first group and a final group of rollers turning at the speed of the first group.

1,877,675. SELF LOCKING VALVE. FRANK J. LIESKE, Detroit, Mich., assignor, by mesne assignments, of one-half to Anthony L. Marshall and one-fourth to John F. La Grant, Detroit, Mich. Filed Oct. 3, 1928. Serial No. 310,066. 5 Claims. (Cl. 251—164.)

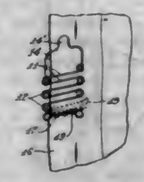


1. In a valve for gas ranges, a valve body provided with a flat side adjacent the end of the body, a valve member rotatably mounted in the body and also having an extending portion thereof flattened on one side, a locking ring longitudinally movable on the valve member to engage over the end of the valve body, the inner wall of which ring is formed with a flat surface fitting the flat face of the valve member and further having an additional flat portion adapted to fit over the flat face of the valve body, the said valve body having an upper end on which the locking ring may ride when moved out of engagement with the flat face of the valve body and the ring being adapted to engage over the flat face of the valve body when the flat face of the valve member is in alignment therewith thereby releasably holding the valve member from rotation.

1,877,676. COMPOUND FOR PREVENTING CANNIBALISM IN CHICKENS. JOHN A. LOCKWOOD, Fillmore, N. Y. Filed July 22, 1930. Serial No. 469,936. 3 Claims. (Cl. 167—53.)

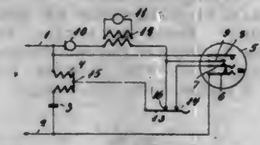
1. A blood simulating compound of the character and for the purpose described, comprising a semi-fluid body of a character to adhere to the feathers and body of a chicken, colored to represent blood and having chloramine as the principal ingredient.

1,877,677. GARMENT CONNECTER. BEN B. MANASTER, Chicago, Ill. Filed June 4, 1932. Serial No. 615,400. 6 Claims. (Cl. 24—73.)



6. A connecter formed from a single piece of resilient material and comprising a retractile structure, connecting elements arranged at the ends of the retractile structure, one of said connecting elements being provided with a bar, a crimped bar having one end connected with the first mentioned bar and free at its other end, and said crimped bar cooperating with the first mentioned bar to set up a clamping action.

1,877,678. CIRCUIT ARRANGEMENT FOR AUTOMATIC TELEPHONE SYSTEMS. FREDRIK MARKMAN, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Sept. 24, 1929, Serial No. 394,887, and in Sweden Mar. 7, 1929. 4 Claims. (Cl. 179—81.)



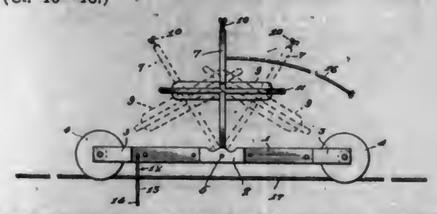
1. In a substation telephone circuit two line conductors, a bell bridge with a condenser normally shunted to said conductors, a telephone hook switch and an impulse sender, the impulse contact of said impulse sender being adapted to short-circuit a portion of said bell bridge including the condenser over contacts of the hook switch.

1,877,679. PILE FABRIC. ALFRED F. MCCOLLUM and THEODORE H. RUSH, Bloomsburg, Pa., assignors to The Magee Carpet Co., Bloomsburg, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1930. Serial No. 479,538. 2 Claims. (Cl. 139—402.)



1. A pile fabric comprising a series of body warp threads, a series of weft threads disposed solely above the body warp threads, a series of weft threads disposed solely below the body warp threads, a series of binder warp threads alternating with the body warp threads and passing over the upper wefts and under the lower wefts successively, and lengths of pile warp threads formed respectively into individual tufts each looped at its center over the top of an upper weft with the opposite ends of the thread length passing downward at and immediately adjacent the opposite sides respectively of said upper weft at one side of an underlying body warp and between said body warp and the binder warp at said side thereof, thence under and around the bottom of said body warp between two immediately successive underlying lower wefts, thence upwardly at the opposite side of said body warp between said body warp and the binder warp at the said opposite side thereof to a plane above the upper series of wefts.

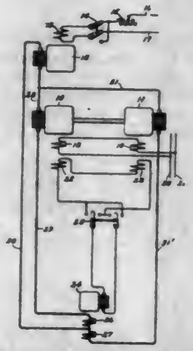
1,877,680. TOY. CHARLES A. MCPHERSON, Edgar, Mont. Filed May 24, 1932. Serial No. 613,279. 1 Claim. (Cl. 46—48.)



A gyroscopic toy designed for travel on a track whose ends are held and are susceptible to alternate vertical movement to tilt and incline the track, said toy including

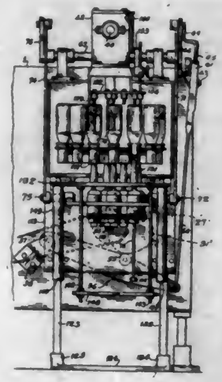
a wheeled carriage, the wheels of which being arranged for travel on the track and a gyroscope which includes a ring frame journaled on the center of the carriage, a shaft carrying a pull cord freely journaled between the bottom and top of the ring frame, and a fly wheel centrally fixed on said shaft and a guard comprising a member which is fixed adjacent one end of the frame and having depending outwardly inclined arms which merge into inwardly rounded portions that afford jaws and which jaws are in spring contact with each other and said guard receiving the track therethrough.

1,877,681. PARALLEL OPERATION OF DIRECT CURRENT MOTORS. BRUCE D. MICKEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 14, 1931. Serial No. 562,713. 6 Claims. (Cl. 171—223.)



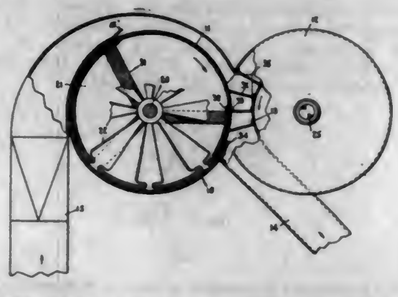
1. In a system of distribution, the combination with a plurality of mechanically connected motors, of means for exciting said motors, voltage producing means responsive to the difference in load current of said motors for producing a corrective component of excitation on each of said machines in a direction to cause the load division between said machines to remain at a substantially constant predetermined value.

1,877,682. AUTOMATIC BOTTLE WASHING AND BRUSHING MACHINE. ROBERT EUGENE MILLER, Bainbridge, Ga. Filed Apr. 18, 1929. Serial No. 356,119. 9 Claims. (Cl. 15—60.)



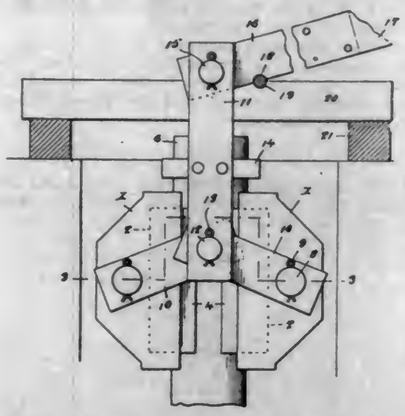
1. In a brushing machine, the combination with a frame, of an endless bottle carrying conveyor movable intermittently on said frame, means for intermittently moving said conveyor, a plate below said conveyor reciprocable on said frame vertically toward and from said conveyor, a plurality of brush supporting spindles, means for mounting said spindles to rotate and move axially on said plate, yielding means on said mounting means for holding said spindles in a predetermined position relative to said plate, a second plate supported yieldingly on said frame and adapted to contact with the ends of said spindles to move each of them into said predetermined position in the event that any of them have been moved out of said position, and means for reciprocating the first named plate toward and from said conveyor.

1,877,683. PNEUMATIC LIFT APPARATUS. HENRY T. MUSTONEN, Little Neck, N. Y. Filed Apr. 19, 1932. Serial No. 606,091. 4 Claims. (Cl. 302—59.)



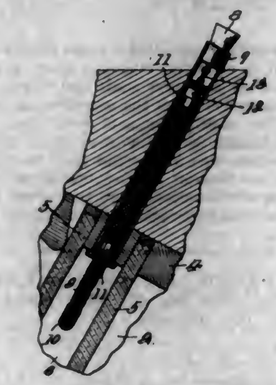
1. Pneumatic lift apparatus, comprising an uptake duct, a sealed casing communicating with the upper end of the duct, suction means connected to the casing for lifting material through the duct, a perforated and hollow rotary screen within the casing to receive material from the duct and retain the same to its periphery under the suction applied, a fan element carried by the rotary screen for effecting rotation thereof under the suction produced by the suction means, means associated with the screen to render the suction ineffective thereon over a portion of its rotation and to free thereby the retained material, and means to receive the freed material from the rotary screen.

1,877,684. PULLER. GEORGE WILSON NICKERSON, Cotuit, Mass. Filed July 27, 1931. Serial No. 553,467. 1 Claim. (Cl. 254—31.)



A holder for the driven pipes of wells, comprising facing blocks having pockets therein at the confronting faces thereof, gripping jaws removably received in the pockets, links pivotally secured to the sides of the blocks and having their outer ends arranged in lapping relation, pairs of straps contacting with the outer faces of the links and pivoted thereto, plates pivotally secured to the outer ends of the straps, a pry bar fixed between the plates, an open platform having a transverse fulcrum pin supported thereon, and the plates having their lower edges provided with semi-cylindrical depressions to engage with the pin and a laterally extending plate on each of the inner straps disposed in close proximity to the upper ends of the blocks, for the purpose set forth.

1,877,685. REFRIGERATOR. REUBEN ELI OTTENHEIMER, Baltimore, Md. Filed Aug. 25, 1927. Serial No. 215,333. 26 Claims. (Cl. 183—4.)



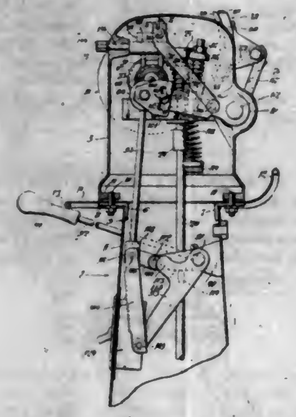
10. A structure embodying a dead-air chamber, a passage extending through a wall of said chamber, a moisture-absorbing material in said passage, and means for renewing the moisture absorbing material.

1,877,686. TWO-IN-ONE CHISEL. STANLEY PENKOSKI, New York, N. Y. Filed Oct. 1, 1930. Serial No. 485,741. 1 Claim. (Cl. 145—24.)



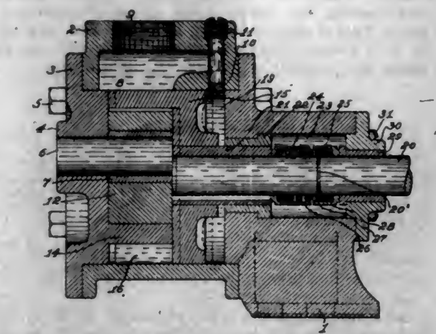
A wood working and splitting tool comprising a pair of spaced parallel shanks having wedge-shaped lower ends terminating in cutting edges and provided at their upper ends with impact surfaces parallel with said cutting edges, there being inclined arms springing from the upper inner side portions of said shanks and inclined at equal angles with relation to each other, said arms merging with each other at their upper ends and merging with an upstanding head portion, said head portion being midway between the shanks and parallel thereto, and provided at its upper end with an impact surface lying parallel with all of the cutting edges.

1,877,687. IRONING MACHINE. EDWARD C. PETER, HENRY C. SCHUKNECHT, Algonquin, and RAYMOND D. SCHNOOR, Chicago, Ill., assignors to American Ironing Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1929. Serial No. 399,296. 10 Claims. (Cl. 68—9.)



1. In an ironing machine, a rotative ironing roll, an ironing shoe located adjacent to and movable toward and from said ironing roll, a pair of connected lever arms supported and adapted to rock upon a common axis, means for connecting one of said pair of connected lever arms with the ironing shoe, an intermediate individual actuating lever connected with the other one of said pair of connected lever arms and rockingly mounted in movable relation to and adapted to rock upon the same axis with said pair of connected lever arms, a connecting rod pivotally connected with said intermediate individual rocking lever, a second pair of connected rocking lever arms supported independently of said first-mentioned pair of connected lever arms, and means associated with and adapted to be operated by said last-mentioned pair of connected lever arms and connected with and adapted to operate said connecting rod, for actuating and locking and releasing the shoe-actuating lever mechanism and ironing shoe.

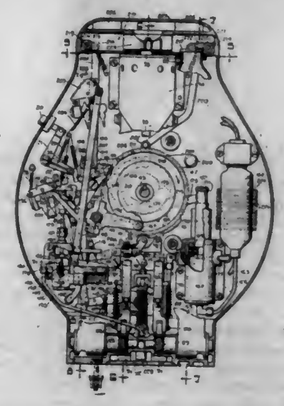
1,877,688. ROTARY PUMP. PETER C. PETERSEN, Cedar Falls, Iowa, assignor to Viking Pump Company, Cedar Falls, Iowa. Filed Apr. 16, 1931. Serial No. 530,564. 1 Claim. (Cl. 103—126.)



In a rotary pump, a cylinder having ports, and having shaft bearing leading centrally into the cylinder, said bearing having a hollow of different diameters, a driving

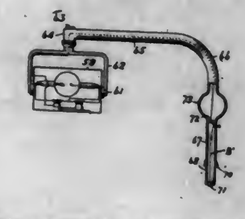
shaft seated in said hollow and in its fitting part and to extend into the cylinder, the outer end of the wider part of said hollow opening outwardly, an apertured closure for the outer end of said hollow containing a shouldered bushing fitting said shaft, and stopped by its shoulder against the closure, comeshed piston gears in said cylinder of lesser length than the cylinder, one gear being slidably mounted limitedly upon said shaft to move longitudinally in the cylinder without becoming unmeshed and while under back pressure of liquid from the discharge port, resilient means in said hollow bearing against said gear to return it into full mesh, and also sealing devices in the hollow engaged by the resilient means to prevent leakage at said bushing.

1,877,689. TOILET SEAT STERILIZER. ROBERT E. PETERSON, New York, N. Y., assignor, by mesne assignments, to Electric Steam Generators, Inc., New York, N. Y., a Corporation of Delaware. Filed June 13, 1931. Serial No. 544,183. 72 Claims. (Cl. 4—233.)



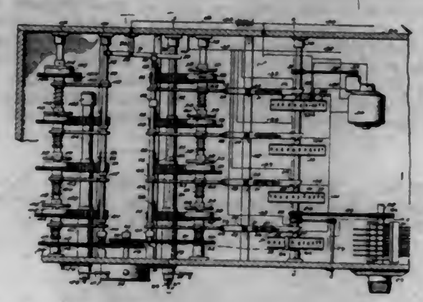
1. In a sterilizer, two compartments, two seat sections movable relatively to each other, two doors for closing the compartments respectively, means for moving the seat sections yieldingly into and out of the compartments, means for yieldingly opening and closing the doors, and means for operating the first and second mentioned means which will at times delay the closing of the doors until both seat sections are within the compartments.

1,877,690. DENTAL X-RAY UNIT. PERCY RUSSELL, Swarthmore, Pa., assignor, by mesne assignments, to Ritter Dental Manufacturing Company Inc., Rochester, N. Y., a Corporation of Delaware. Filed Feb. 25, 1927. Serial No. 171,016. 8 Claims. (Cl. 250—34.)



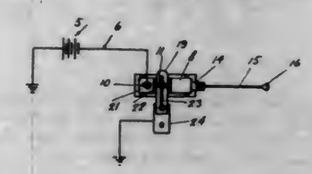
2. As a unit in a dental X-ray apparatus, an X-ray head; a hollow bracket arm upon which the head is pivotally mounted, the arm having an enlargement; a timing mechanism disposed in the enlargement of the arm; and conductors connected with the timing mechanism and housed in the hollow bracket arm.

1,877,691. AUTOMATIC TUNING DEVICE FOR RADIO-RECEIVERS. JOSEPH B. PILLEN, Cincinnati, Ohio. Filed May 17, 1930. Serial No. 453,267. 6 Claims. (Cl. 250—20.)



4. In means for controlling a radio receiver, a time controlled shaft, a manually rotatable shaft, a pair of rotatable members on said first shaft and having interlocking means for operation when the members are in a predetermined relative position on said first shaft, one of said members rotatable with the first shaft and the other member rotatable with the second shaft for manual adjustment to set the time of interlocking of the members, and a controlling device connected to one of the members and operable upon the interlocking of the latter.

1,877,692. SWITCH. EDWIN WILLIAM RASMUSSEN, Denmark, Wis. Filed Jan. 17, 1931. Serial No. 509,504. 2 Claims. (Cl. 200—163.)



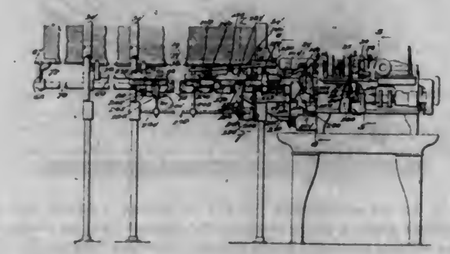
1. A switch of the character described comprising a casing, a pair of contacts in the casing, a slide, a contact plate on the slide for engagement with the contact, means for urging the conductor plate into engagement with at least one of the said contacts, said means comprising a di-electric follower plate which is positioned against one side of the slide, and a spring for urging the follower against the slide.

1,877,693. AUTOMATIC SCREW MACHINE. CHARLES A. RICH, Providence, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Nov. 17, 1927. Serial No. 233,753. 55 Claims. (Cl. 29—44.)

1. A machine for fashioning articles successively from bar stock having, in combination, means for feeding a bar to present successive portions to the work engaging tools, and mechanism controlled from the old bar acting automatically to place a new bar in the machine timed to operate only upon exhaustion of the old bar.

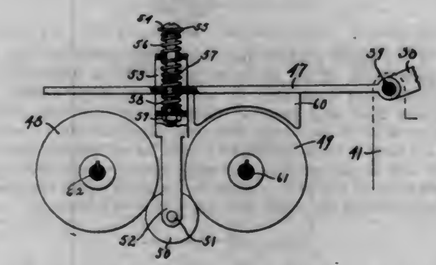
25. A machine for fashioning articles successively from bar stock having, in combination, a hollow spindle including a feed-tube for feeding a bar to present successive end portions to the work engaging tools, a guideway in alignment with the feed-tube, a feed slide having a feeding and return movement for moving a new piece of stock on the guideway into the spindle, a trip mechanism rendered operative by the passing of the end of the bar, a rack bar movable to cause the feed slide to act to place a new piece of stock in the machine, a pawl rendered operative by the

trip mechanism for advancing the rack bar for each feeding movement imparted to the bar stock, a latch mechanism for retracting the rack bar with the feed slide upon the return movement of the latter, and means for disengaging the latch mechanism to stop the rack bar adjustable to cause the pawl to act upon a number of rack teeth which exactly corresponds to the number of feeding movements necessary to exhaust the bar after the operation of the trip mechanism.



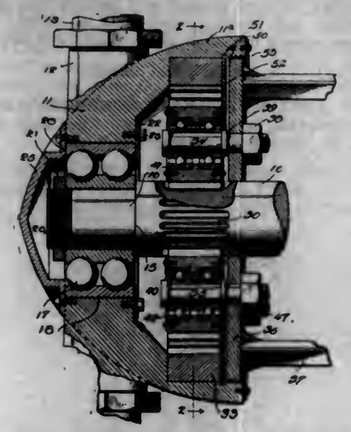
40. A machine for fashioning articles successively from bar stock having, in combination, a hollow spindle including a feed-tube for feeding a bar to present successive end portions to the work engaging tools, a guideway in alignment with the feed-tube, a feed slide having a feeding and return movement for placing a new piece of stock from the guideway in the spindle, a trip mechanism comprising a drop lever normally supported by the bar and rendered operative by the passing of the end of the bar, a rack bar movable to cause a new piece of stock to be placed in the machine by said feed slide, a pawl continuously oscillated in timed relation to the feeding movement imparted to the bar to impart a step by step movement to the rack bar, a lever controlled by the drop lever normally to hold the pawl out of engagement with the rack bar and actuated by the drop lever to release the pawl, mechanism rendered active during the return movement of the feed slide to return the rack bar to starting position and an arm adapted during the return movement of the feed slide to cause the lever to hold the pawl out of engagement with the rack teeth.

1,877,694. CLUTCH MECHANISM. COMMODORE D. RYAN, Los Angeles, Calif., assignor, by mesne assignments, to Ralph G. Whitlock Patents, Inc., a Corporation of Nevada. Filed Feb. 18, 1929. Serial No. 340,945. 5 Claims. (Cl. 192—194.)



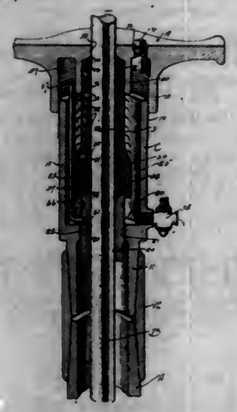
1. A clutch mechanism comprising: a driving roller; a driven roller; a clutch arm; a brake mounted on said clutch arm and positioned for engagement with said driven roller; and a friction roller yieldably mounted on said clutch arm so as to be brought into contact with said driving roller and said driven roller when said arm is moved away from said driven roller.

1,877,695. SPEED REDUCING GEAR. CHARLES M. SCHAEFFER, Emaus, Pa. Filed Feb. 7, 1930. Serial No. 426,625. 2 Claims. (Cl. 74—7.)



1. In a driving mechanism for aeronautical propellers, the combination of a power shaft, a propeller hub into which the shaft extends, a bearing common to said shaft and hub, the hub being provided with a cowling extension, a fixed partition disposed within said extension and thru which the shaft extends, an external gear surface on the shaft, a ring gear carried by the cowling extension, and gear means mounted on the partition and extending into the extension and operative between the shaft and ring gear to rotate the hub on said bearing.

1,877,696. PACKING CONSTRUCTION. JOHN A. SCHELLACK and CLARENCE J. MAYNARD, Bartlesville, Okla. Filed July 24, 1930. Serial No. 470,477. 5 Claims. (Cl. 286—16.)



2. In a stuffing box structure of the class described the combination of a housing having a chamber therein and having a reduced annular sleeve-like extension projecting into the chamber at one end of the latter, an adjustable cap upon said housing at the opposite end of the chamber from said annular extension, said extension and cap having passageways therethrough for slidably receiving a rod, a packing gland, including packing, carried by said cap, a packing adjusting sleeve surrounding said rod and mounted in said chamber, having an end opposite the first mentioned packing enlarged and providing an annular passageway about the rod, and slidably receiving said annular extension therein, packing in said annular passageway

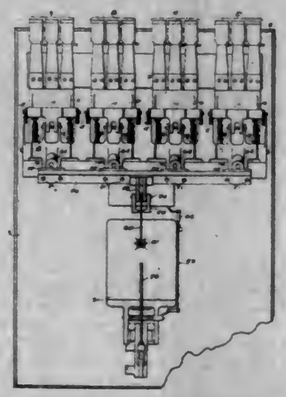
compressible therein against said annular extension upon adjustment of said cap, said adjusting sleeve being laterally perforated, and means for feeding lubricant into said chamber for flow through said perforations onto the rod between said packings, including a conduit wholly within the housing having an outlet above said sleeve.

1,877,697. DETACHABLE BATH ROBE BELT. ABRAHAM SCHLUSSELBERG, New York, N. Y. Filed July 6, 1932. Serial No. 621,028. 1 Claim. (Cl. 2—93.)



A garment belt attachment means comprising outer and inner loops secured to the garment, said outer loops being longer and wider than the inner loops and disposed thereover rendering the inner loops unobservable, flexible stiffeners enclosed in said outer loops, a belt suited to slide freely both longitudinally and vertically in said outer loops, straps permanently secured at one of their ends to the inner side of said belt to slide in said inner loops, said straps being narrower than said belt, and detachable means to secure the other end of each of said straps to the inner side of said belt.

1,877,698. SWITCHING MECHANISM. WILLIAM M. SCOTT, Jr., Philadelphia, Pa., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a Corporation of New Jersey. Filed July 12, 1930. Serial No. 467,398. 25 Claims. (Cl. 200—107.)



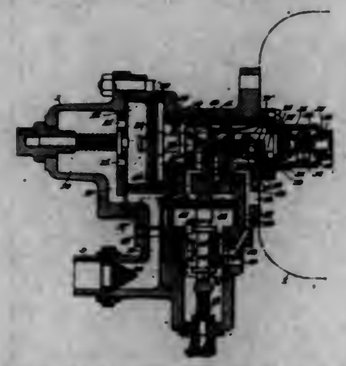
1. Switch mechanism including a plurality of movable contact elements collectively comprising one pole of the switch, stationary contact structure, means mechanically connecting said movable contact elements for effecting simultaneous movement thereof into engagement with said stationary contact structure to complete a circuit, and means for permitting the disconnection of a selected contact element from said structure and movement thereof to open circuit position without interruption of flow of current through said switch.

1,877,699. ATTACHMENT FOR TOOLS. GEORGE E. SHOWERS, Brooklyn, N. Y. Filed Mar. 16, 1931. Serial No. 523,110. 23 Claims. (Cl. 145—26.)



1. In an attachment for a tool having a shank and a cutting edge, a guide member for disposal at the front of the cutting edge, the guide member having a rearwardly extending portion, a sleeve mounted on the rearwardly extending portion of the guide member, pin and slot connections between the sides of the sleeve and the rearwardly extending portion of the guide member, the sleeve having a threaded opening at its top, and a screw meshing in the threaded opening for engaging the rearwardly extending portion of the guide member to press the rearwardly extending portion of the guide member against the shank.

1,877,700. AIR BRAKE. ANTHONY SILVENE, Victoria, British Columbia, Canada. Filed June 25, 1931. Serial No. 546,888. 7 Claims. (Cl. 303—69.)



3. In an air brake system for railways and the like, the combination of an air train pipe, a brake cylinder connected with said pipe at one end so as to receive air freely from said pipe, an auxiliary air reservoir, and a control valve connected with said pipe and said reservoir, said control valve including means for exhausting one side of said brake cylinder and for turning on air from said reservoir to the same side of the brake cylinder and means for applying air from said pipe to said reservoir.

1,877,701. MOTOR. WILLIAM C. SPECK and EUGENE BARKER, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Jan. 14, 1929, Serial No. 332,344. Divided and this application filed Mar. 9, 1931. Serial No. 521,213. 2 Claims. (Cl. 121—45.)

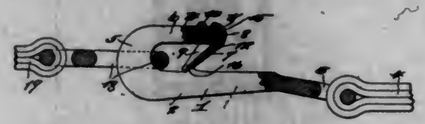
1. In a motor, a fluid-pressure cylinder having a reciprocating piston, a valve, said valve acting alternately to permit the supply and exhaust of fluid to and from one end of

said cylinder, a spring normally holding said valve closed, a plunger controlled by said cylinder and projecting into the path of the piston, a spring for moving said plunger in opposition to the movement of the piston, said plunger spring being of greater strength than said valve spring, a



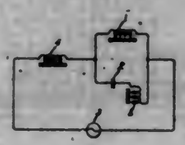
cam lever having an operative connection with said valve, and a cam surface on said plunger cooperating with said lever to open said valve when said plunger is free from the piston and permitting said valve to close when said plunger is operated by the piston.

1,877,702. SNAP HOOK FOR PARACHUTE HARNESS. MILTON H. ST. CLAIR, Trenton, N. J., assignor to The Switlik Parachute and Equipment Company, Inc., Trenton, N. J., a Corporation of New Jersey. Filed Sept. 25, 1931. Serial No. 565,178. 2 Claims. (Cl. 24—232.)



1. As an article of manufacture, a snap hook comprising a body having a loop at one end and merging into an arm beyond the loop, the arm being substantially straight and parallel to the body of the hook, said arm having a rounded terminal, a tongue snap hollowed to form a shell having a rounded wall to conform to the rounded terminal of the arm, the outer surface of the wall being free and unobstructed, thereby preventing the tongue snap from being actuated by an element in its path, said tongue snap being tapered toward the body of the hook, the larger end of the snap fulcrumed on and housing the terminal of the arm and tensioned to move to a closed position toward the body of the hook and adapted to be moved against its tension to an open position toward the arm permitting passage of a ring to be engaged into the loop of the hook, and means comprising the sides of the snap for guiding the tongue snap during its movement, thereby preventing lateral displacement of the tongue snap.

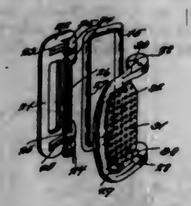
1,877,703. OSCILLATION GENERATOR. CHAUNCEY G. SUITS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 5, 1931. Serial No. 506,552. 8 Claims. (Cl. 172—281.)



1. In combination, a source of alternating electromotive force, a plurality of inductance coils connected in series across said source, each of said inductance coils having a magnetic core, said cores being adapted to saturate at different times in each half cycle of the alternating current wave, and a condenser connected across the coil, the core of which is last to saturate.

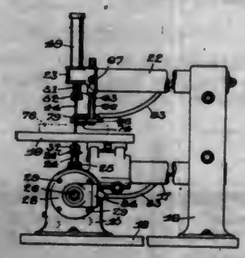
3. In combination, a source of alternating electromotive force, a saturable reactor, and a shunt resonant circuit all connected in series, said shunt resonant circuit having a natural frequency substantially higher than the frequency of said source, and said electromotive force having such magnitude that said saturable reactor becomes saturated during each half cycle of said electromotive force whereby an abrupt voltage impulse is supplied during each half cycle of said electromotive force to said shunt resonant circuit and oscillations are excited therein having the natural frequency of said circuit.

1,877,704. PILOT'S SAFETY BELT AND BUCKLE THEREFOR. STANLEY SWITLIK, Trenton, N. J. Filed July 8, 1931. Serial No. 549,542. 5 Claims. (Cl. 24—163.)



1. The combination with a pilot's safety belt, of a keeper element permanently attached to one end of the belt and having a seat, said keeper element having spaced lugs, portions of which being incident to and constituting a part of the seat, a catch loop connected to the other end of the belt and having a transverse portion to engage said seat, a latch element pivoted between said lugs, said latch element having hooks corresponding to and registering with the seat, said latch element being of substantial width and having sides and an end, said latch element being insertable through the catch loop and adapted to ride thereon to engage the catch loop in the keeper at the time the hooks of the latch element register with the seat, said latch element having a web integral with the sides and the end thereof for the prevention of the pilot's fingers being inserted between the latch element and the latch loop when disengaging the loop from the keeper seat.

1,877,705. SCROLL SAW. HERBERT E. TAUTZ, Milwaukee, Wis., assignor to Delta Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 11, 1931. Serial No. 580,340. 7 Claims. (Cl. 143—74.)

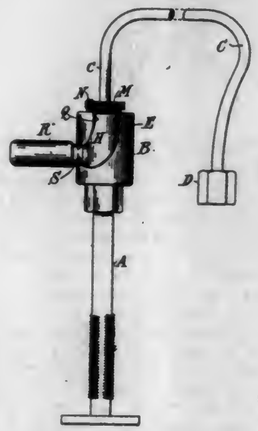


1. In a scroll saw, the combination of a reciprocatory plunger having a cross slot, a blade chuck rotatably fitting in said plunger and having a pair of threaded openings registrable with said slot, and a screw passing through said slot and releasably threaded into one or the other of said openings to permit an extended rotary adjustment of said blade chuck.

7. In a scroll saw, the combination of a frame, a reciprocatory lower plunger mounted on said frame, a lower

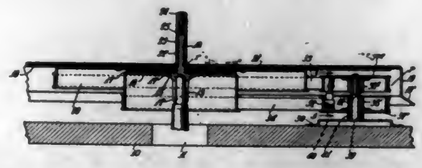
blade chuck rotatably mounted on said plunger, means for adjusting the angular position of said lower chuck, a reciprocatory upper plunger slidably and rotatably mounted in said frame above said first-named plunger, and an upper blade chuck on said upper plunger, said upper and lower blade chucks being adapted to receive the opposite end portions of a cutting blade, said frame and upper plunger having relatively slidably interfitting parts engageable in any one of a plurality of angular positions to prevent the rotation of said plunger in its normal range of movement, said interfitting parts being separable by an extended movement of said upper plunger to permit rotation of said plunger to different angular positions.

1,877,706. AIR BAG COUPLING. JOHN WAHL, Rosedale, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,582. 4 Claims. (Cl. 285—180.)



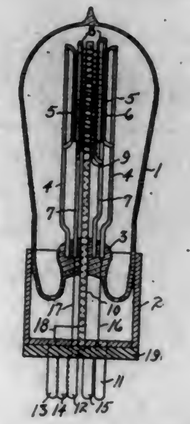
1. A coupling of the character described, comprising an entered member having a seating face in its bottom wall, an entering member having a seating face for cooperative engagement with the first mentioned seating face, a spring for said last named seating face for urging it toward the entering end of the entering member, a cam groove formed in the entered member, and an arm carried by the entering member movable in the cam groove to force the seating faces together.

1,877,707. TRANSMISSION FOR PHONOGRAPHS. MAXIMILIAN WEIL, New York, N. Y. Filed May 19, 1932. Serial No. 612,259. 23 Claims. (Cl. 274—9.)



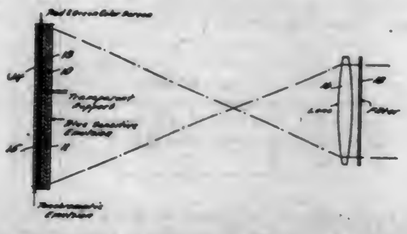
10. As an article of manufacture, a composite turn table for a conventional phonograph, and adapted alternatively for normal speed records, and for slow speed records, said turn table including a hub with a socket adapted to be telescoped over the drive spindle and a rod rising from said hub, a drum affixed to said hub and concentric therewith, a turn table encircling said rod rotatable relative to said drum and having unitary therewith a sleeve encircling said rod, a screw through the upper end and longitudinal of said sleeve having a sharp point adapted to rest upon said rod, whereby depending on the setting of said screw, the turn table may be supported from the screw point or may be rested upon the drum.

1,877,708. VACUUM DEVICE. WALTER J. WEST, Cleveland, Ohio, assignor to Lucian Tube Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 9, 1928. Serial No. 311,264. 1 Claim. (Cl. 250—275.)



In a device of the type described, the combination comprising an evacuated vessel, a base secured to said vessel having a plurality of contact prongs thereon, a plurality of electrodes supported within said vessel each connected to one of said prongs, one of said electrodes being a hollow tube extending exteriorly of the vessel, a removable member having prongs thereon and openings to fit ovr the prongs of the base, and a heater element attached to said removable member and adapted to be insertd within said hollow tub, said heater element being connected to the prongs on said removable member.

1,877,709. COLOR PHOTOGRAPHY. GEORGE SYDNEY WHITFIELD, Ingrave, England, assignor to Ilford Limited, Ilford, England, a British Company. Filed Jan. 9, 1932, Serial No. 585,768, and in Great Britain Dec. 16. 1930. 7 Claims. (Cl. 95—2.)



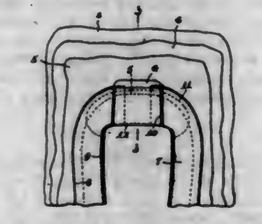
1. For use in the production of colored photographs the combination of a transparent supporting means, an emulsion adapted to record light from the blue region of the spectrum carried on that surface of the supporting means which will face the lens, a multi-color screen which is adapted to pass light corresponding to at least two other spectral regions and is carried on the rear surface of the supporting means, and an emulsion which is superimposed on the multi-colored screen and is adapted to record light passed by the screen.

1,877,710. GAS GUN. JOSEPH WILLIAMS, Jr., Pittsburgh, Pa. Filed Oct. 23, 1931. Serial No. 570,696. 4 Claims. (Cl. 42—1.)



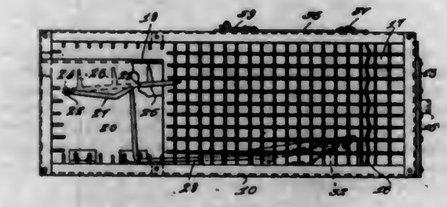
2. A device of the character described comprising a handle grip, a barrel attached to the grip, flexible tubing connected with the barrel and being open at its outer end, and a coil spring connected with the barrel and surrounding the tubing.

1,877,711. PUMP CONSTRUCTION. HENRY WOLF, Brooklyn, N. Y. Filed Feb. 20, 1931. Serial No. 517,280. 2 Claims. (Cl. 36—45.)



1. A pump including an upper formed with an integral tongue at the front of the opening thereof, said tongue being bent beneath the upper and positioned to extend toward the toe portion whereby a smooth edge is presented in the front opening of the upper and a comparatively wide smooth surface adjacent thereto, a lining for said upper, and stitching along the side edges of said tongue connecting the tongue to the lining and holding the tongue in position, said stitching being entirely beneath the upper whereby it cannot be seen when the pump is worn.

1,877,712. ANIMAL TRAP. ISAIAH Z. ZELMA, Florence, Ala., assignor of one-half to Alfred H. Grabow, Franklin Square, Long Island, N. Y. Filed Oct. 30, 1929. Serial No. 403,552. 1 Claim. (Cl. 43—61.)



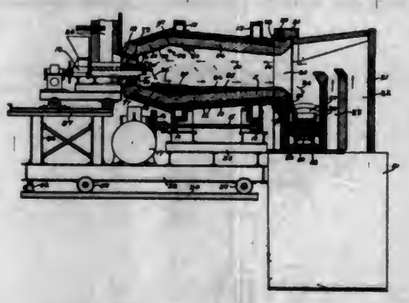
An animal trap comprising a foraminous cage having each end open, a solid door closing one end of the cage, a foraminous partition in the cage adjacent the door to provide a bait compartment separated from the remaining portion of the cage, an open end vestibule having solid walls extending inwardly of the cage from the other end thereof, a spiked gate pivoted in said vestibule and including a plurality of relatively spaced and pointed bars, an arm on said gate, a spring supported and pivotally mounted treadle in the cage adjacent the partition and spaced from and in alignment with the vestibule, and a trip member connected to the treadle and engaging the arm to hold the gate in an open position.

1,877,713. MOTION STUDY. LEO L. BECK, Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 26, 1929. Serial No. 416,560. 1 Claim. (Cl. 88—14.)
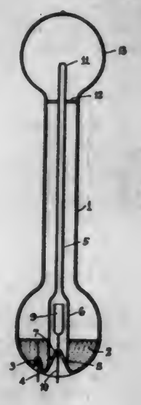


The method of determining distortion due to high speed motion of a moving object, which comprises a photographing the object under conditions in which no distortion occurs, then operating the object at high speed conditions, illuminating the object with the light radiated by helium illuminated by a high frequency electric discharge passing through the helium adjusting the frequency of the discharge with respect to the speed of the moving object and, obtaining thereby an apparent speed condition apparently identical with the said first mentioned condition, photographing the apparent condition, and comparing the photographic record of the said first mentioned and the said apparent speed conditions, respectively, to determine the extent of distortion caused by the high speed.

1,877,714. METHOD OF MELTING GLASS. FRANCIS J. BULASK, Toledo, Ohio, assignor of one-half to George W. Batchell and Franz G. Schwalbe, Toledo, Ohio. Filed Nov. 18, 1929. Serial No. 407,960. 13 Claims. (Cl. 49—54.)



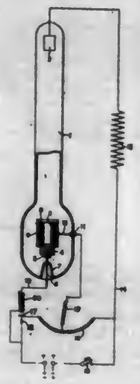
4. A method of heating glass which consists in feeding glass batch material into a heated semi-fused glass mass, continuously rolling the batch materials into the semi-fused glass mass to mix the batch materials with the semi-fused mass and carrying portions of the fused mass of increased viscosity upwards and allowing it to fall into lower portions of the fused mass of slightly less viscosity and carrying portions of glass of still higher viscosity over and allowing it to fall into the body portions of glass of substantially the same viscosity and separating and removing and discontinuing rotation of molten glass of predetermined and highest viscosity from the glass of lower viscosity and returning molten glass of lower viscosity towards the rotating semi-fused glass mass and away from the delivery point.

1,877,715. DISCHARGE TUBE. GEORGES CLAUDE, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1931, Serial No. 526,606 and in France Apr. 2 1930. 2 Claims. (Cl. 176—42.)



1. A luminous tube comprising a small diameter tube having an open end, an outer tube surrounding the small tube and connected therewith through the open end of the small tube, the outer tube having a large cooling surface in contact with the surrounding atmosphere, a mercury pool electrode at the end of the larger tube which is distant from the connecting ends of the tubes, a gas throughout both tubes, and an electrode at the closed end of the small tube.

1,877,716. GAS DISCHARGE LIGHT. GEORGES CLAUDE, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1931, Serial No. 526,607, and in France Apr. 3, 1930. 8 Claims. (Cl. 176—122.)

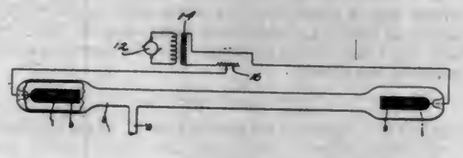


1. A luminous tube comprising a thermionic cathode at one end of the tube, a supporting member having a high thermal capacity carrying the thermionic cathode, a nickel wire secured to the supporting member, a lead-in wire connected to the nickel wire, an anode at the other end of the tube, and a conducting medium within the tube.

1,877,717. NITROCELLULOSE CEMENT. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Feb. 28, 1924. Serial No. 695,804. 8 Claims. (Cl. 87—17.)

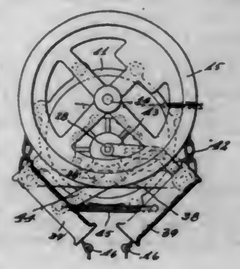
1. A free-spreading belt cement comprising a solution of ammonia-treated celluloid containing at least twenty per cent of such treated celluloid.

1,877,718. METHOD OF INSERTING MATERIALS IN ENVELOPES. AUBREY E. NOBLE, Lynbrook, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 12, 1929. Serial No. 413,480. 8 Claims. (Cl. 176—2.)



1. A method of introducing materials within an evacuated envelope comprising sealing the material within a glass capsule, scratching the surface of the glass capsule, to provide a weakened portion, inserting the capsule within the envelope, evacuating the envelope, and breaking the capsule at the weakened portion to release the material.

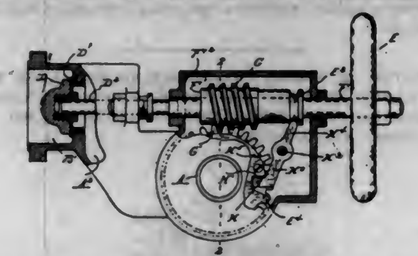
1,877,719. BOILER CLEANER. FRANK BOWERS, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 11, 1930. Serial No. 474,483. 50 Claims. (Cl. 122—392.)



1. A boiler cleaner comprising a rotatable blower unit, means for rotating said unit, means for supplying a cleaning fluid to said unit, means for controlling the supply of said fluid, operating means for said control means, guide members connected to said operating means, and a flexible member projecting through said guide members and adapted for actuating said rotating means and said control operating means.

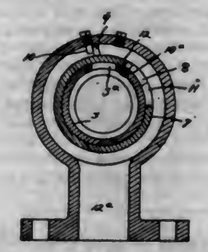
1,877,720. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., and CURTIS L. HOWSE and FRANK BOWERS, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 15, 1923, Serial No. 612,766. Renewed Jan. 20, 1931. 38 Claims. (Cl. 122—392.)

1. In a soot blower, the combination with a rotatable blower pipe and a valve for controlling the supply of cleaning fluid to said pipe of a common means for rotating said pipe and actuating said valve adapted upon movement in one direction to open said valve and then automatically



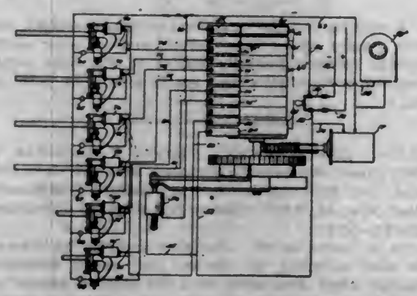
rotate the pipe and upon movement in a reverse direction to close the valve and means to prevent rotation of the pipe while the valve is being opened.

1,877,721. BOILER CLEANER. CURTIS L. HOWSE and CORNELIUS D. LOWELL, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 25, 1923, Serial No. 647,667. Renewed Mar. 26, 1930. 46 Claims. (Cl. 122—392.)



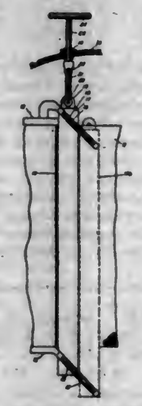
1. In a boiler cleaner, the combination with a casing, of a rotative cleaning unit having a portion disposed within said casing, said unit having a circumferentially opening port, a ported sleeve snugly embracing the ported portion of said unit, said sleeve being adapted to normally close the port in said unit during the periods of non-use of the boiler cleaner, means for angularly advancing said unit, and means for shifting said sleeve during a predetermined angular advance of said unit to register said ports for a desired proportion of said advance.

1,877,722. BOILER CLEANER. GRANT I. RAWSON, Detroit, Mich., assignor to Calorizing Corporation of America, Detroit, Mich. Filed Nov. 2, 1921, Serial No. 512,219. Renewed July 10, 1931. 22 Claims. (Cl. 122—392.)



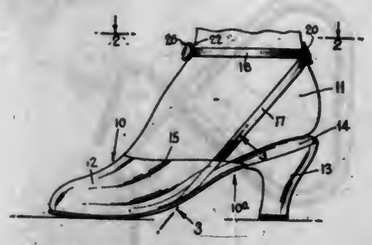
1. In a soot blowing system comprising a main header and a plurality of blower units communicating therewith, means for rotating each of said units; means for actuating the said rotating means; control means in said header; a normally open drain valve in said header; means for closing said drain valve; and means for operating said header control means synchronously with the actuation of said closing means, the operating of said header control means being incipiently more rapid than the actuation of said closing means.

1,877,723. DEVICE FOR CLEANING FILTER TUBES. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Original application filed Oct. 2, 1929, Serial No. 396,397. Divided and this application filed Sept. 24, 1930. Serial No. 484,127. 2 Claims. (Cl. 210—182.)



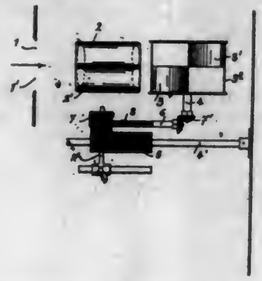
1. A device for preparing tubular filter cakes for removal from tubular filter elements, comprising: a substantially straight longitudinal bar normally positioned adjacent the inner surface of said element, and means for moving said bar away from said inner surface to create an opening through said cake through the length of said cake.

1,877,724. FOOTWEAR. MAX GUSTIN, New York, N. Y. Filed Nov. 5, 1930. Serial No. 493,479. 4 Claims. (Cl. 36—2.5.)



1. A slipper comprising a sole portion and a vamp portion, a strap comprising an elastic strip attached at the inner end thereof to said sole portion and disposed on the inside of said vamp portion, a flexible strip attached at the inner end thereof, to the outer end of said elastic strip, a skirted member attached to said end of said flexible strip forming a pocket for housing said elastic strip and disposed on the inside of said vamp portion, said skirted portion being of sufficient length to prevent exposure of said elastic strip above said vamp portion upon pulling the strap to extend the same.

1,877,725. DEVICE FOR PROJECTING COLOR AND MONOCHROME FILMS. ALBERT HÉRAULT, Paris, France. Filed May 4, 1929. Serial No. 360,462. 2 Claims. (Cl. 88—16.4.)

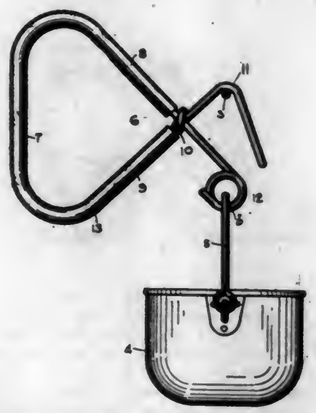


1. In an apparatus for projection of colored and black and white images, a window of a height double of the normal one, two superposed objectives, two superposed prisms, opaque, placed aside and oppositely to each other with their summits forming angle of sixty degrees, an ordinary, two-winged obturator, a helicoidal pinion on its shaft, a shorter helicoidal pinion on a supplementary shaft parallel to the shaft of the obturator, and longitudinally displaceable on this shaft, and means to transmit the motion from said supplementary shaft to said prismatic system, substantially as described.

1,877,726. CAPSULE. AUBREY E. NOBLE, Lynbrook, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 12, 1929. Serial No. 413,481. 4 Claims. (Cl. 23—239.)

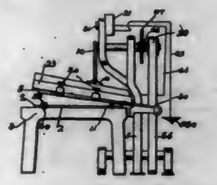
1. A method of forming a capsule having a material sealed therein comprising, evacuating a tube having a series of bulbous portions, vaporizing the material to be sealed in the capsules, leading the vaporized material into the bulbous tube, condensing the vapor therein, sealing the bulbous portions, and severing the sealed bulbous portions from each other.

1,877,727. SAFETY SOLDER-SUPPORTING HOLDER. ROY MCCLARKEY and LAURNEL C. HUFFMAN, Valley, Nebr. Filed Dec. 14, 1931. Serial No. 581,036. 5 Claims. (Cl. 248—27.)



1. In a receptacle holder for a mounting on a support, a metallic strip bent to provide a triangular part including a handle and a pair of intersecting arms each having a terminal part extending beyond its intersection, the terminal part of one arm being bent to provide a hook for engaging the support, the terminal part of the other arm being bent to a spiral form for a mounting thereon of said receptacle.

1,877,728. MACHINE FOR TREATING PYRALINE ENVELOPE BLANKS. CHARLES J. GUTBERLET, Philadelphia, Pa. Filed July 8, 1927. Serial No. 204,403. 6 Claims. (Cl. 219—19.)



1. In a machine for softening pyraline envelope blanks along the lines of the intended folds to be made therein, having a bed and a hot plate block positioned above and movable towards and away from said bed, and actuated toward said bed, the combination comprising automatic lifting mechanism positioned to lift positively the hot plate block, and to allow it to descend yieldingly upon the bed, alternately, hot plates having projecting ridges corresponding to the lines of the folds desired to be made in said blanks and electrical heaters for said hot plates the said automatic lifting mechanism having provisions allowing the hot plates to descend until stopped by contact with the blanks and pause before being again lifted.

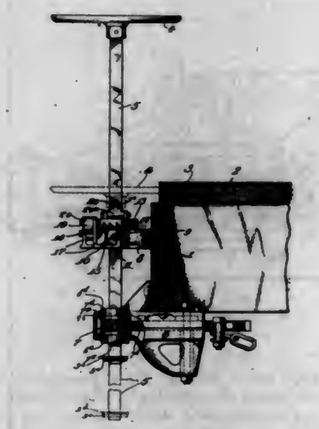
1,877,729. WEATHER OR BUFFER STRIP FOR WINDOW SASHES. EDWARD F. CHAFFEE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 24, 1930. Serial No. 484,103. 6 Claims. (Cl. 20—69.)



1. A weather or buffer strip of the class described, comprising a hard rubber base section, and an outer section of sponge rubber integrally united to the base section throughout substantially the entire length of both sections.

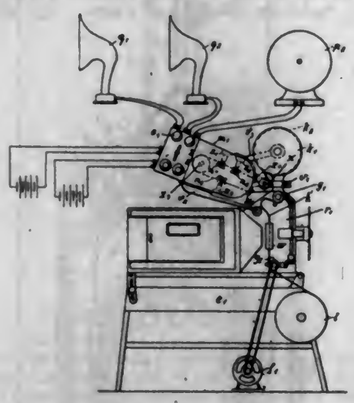
1,877,730. DROP BRAKE. THOMAS K. CUMMINS, St. Paul, Minn., assignor to Northern Malleable Iron Company, St. Paul, Minn., a Partnership of Minnesota. Filed Nov. 16, 1929. Serial No. 407,686. 12 Claims. (Cl. 74—113.)

1. In a device of the character specified including a brake staff mounted for vertical and rotary movement, a ratchet wheel associated with the staff, a bracket for mounting the ratchet wheel, lugs on the bracket, a pawl cooperating with the said ratchet wheel and fulcrumed in the said lugs, the said pawl arranged to drop for disengagement from the said ratchet wheel and a weighted arm also fulcrumed in the said lugs and cooperating with the pawl in its disengaging movement, said arm having means thereon for stopping its descent in said disengaging movement



beyond a point where the pawl becomes free from the ratchet wheel and the pawl continuing therefrom whereby a space results between the underside of the arm and the top of the pawl for ease of manipulation.

1,877,731. SOUND REPRODUCING APPLIANCE HAVING A FILM RECORD. HEINRICH KÜCHENMEISTER, Berlin, Germany. Filed Oct. 29, 1927, Serial No. 229,758, and in Germany Nov. 2, 1926. 1 Claim. (Cl. 88—16.2.)



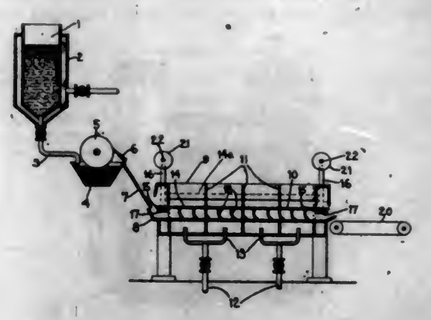
The combination with a projecting apparatus comprising film unreeling and reeling means, projecting devices, and guide means for guiding picture record films along a normal path through said projecting devices; of a detachable sound-reproducing unit for reproducing the sound from films having both sound and picture records, said unit comprising a casing containing a light source, a photoelectric cell and means for conducting a film within said casing between said light source and cell, means for supporting said unit at one side of said normal path of picture record films, and guide means with a support therefor mounted outside of and in operative relation with said casing for diverting sound and picture record films laterally from said normal path into said casing.

1,877,732. IMITATION HOUR GLASS CLOCK. HENRY DREYFUSS, New York, N. Y., assignor to The Seth Thomas Clock Company, a Corporation of Connecticut. Filed Sept. 5, 1931. Serial No. 561,448. 8 Claims. (Cl. 58—127.)



1. In a time-keeping mechanism, a fixed dial having thereon a representation of an hour glass frame, a pair of vertically arranged connected apertures in said dial located within said frame to represent the upper and lower sand containers of said hour glass, a disc, and means to rotate said disc continuously behind said dial, said disc having a pair of bands thereon of progressively decreasing and increasing widths respectively to produce the appearance of sand draining from said upper container to said lower container.

1,877,733. ANHYDROUS METALLIC CHLORIDES AND THEIR PREPARATION. OTTO V. MARTIN, Sand Springs, Okla., assignor to The Texas Chemical Products Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1930. Serial No. 483,992. 11 Claims. (Cl. 23—90.)

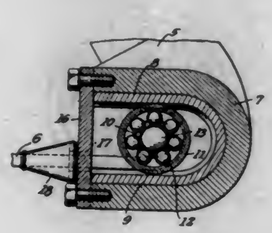


1. In the method of preparing anhydrous metallic chloride from a hydrated form of the salt, the step which comprises gradually absorbing water of hydration by exposing particles of the hydrated salt to a succession of streams of fresh relatively unsaturated drying gas whereby the anhydrous product is produced without distorting the shape of the particles.

3. In the method of preparing anhydrous calcium chloride from a hydrated form of the salt, the steps which comprise exposing the particles of the hydrated salt to

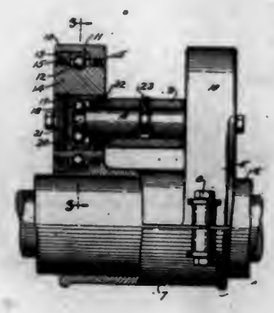
gas whereby water is absorbed from the particles, and maintaining the particles at a temperature not in excess of 200° F. during the removal of substantially all of the water of hydration.

1,877,734. SPRING CONNECTION. RAYMOND R. SEARLES, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 13, 1929. Serial No. 354,721. 12 Claims. (Cl. 267—56.)



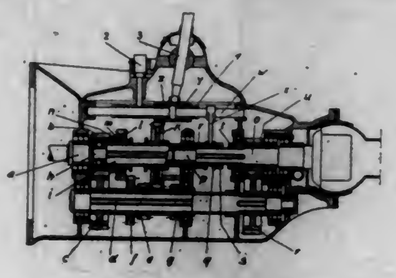
1. In a spring end connection, means to be carried by a spring and having antifriction bearings thereon at opposite sides of said spring, each bearing including an outer raceway member, means to be carried by a frame and having trackways thereon for receiving the outer raceway members in rolling engagement therewith, and means for guiding said raceway members during rolling.

1,877,735. SPRING CONNECTION. RAYMOND R. SEARLES, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 13, 1929. Serial No. 354,722. 7 Claims. (Cl. 267—54.)



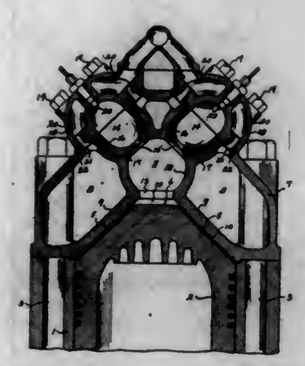
1. In a spring end connection permitting longitudinal movement of the spring relatively to the part connected thereto by said connection, a frame member having a bearing track thereon, antifriction bearing members on said track, an intermediate member engaging said bearing members for rolling contact therewith, means to be carried by a spring and antifriction bearing members interposed between said means and said intermediate member.

1,877,736. CHANGE SPEED GEARING. MAX WAGNER, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft of Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Mar. 27, 1930, Serial No. 439,315, and in Germany Mar. 30, 1929. 6 Claims. (Cl. 74—57.)



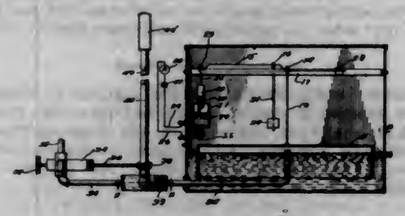
1. A change speed gear set for automobiles comprising three aligned shafts constituting a driving shaft, a driven shaft and an intermediate shaft, clutches for connecting said shafts, a countershaft common to said three shafts, pairs of gears in constant mesh between said countershaft and two of said aligned shafts respectively, pairs of gears of differing ratios between said countershaft and the third shaft and means for selectively controlling said clutches and gears whereby to provide a direct drive through the aligned shafts, a direct drive solely through said first mentioned pairs of gears which are in constant mesh and drives through one of said first mentioned pairs and one of the latter mentioned pairs.

1,877,737. COMBUSTION CHAMBER. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1928. Serial No. 302,905. 10 Claims. (Cl. 123—32.)



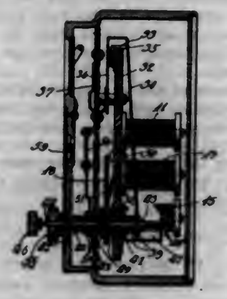
1. In an internal combustion engine, a cylinder, a piston and means therewith forming a combustion space including a main clearance adjacent the piston, and a plurality of chambers in communication with the clearance, one of said chambers constituting an expansion space adapted to receive and combine the fuel charges from a plurality of other of said chambers, and having an opening for delivery of such fuel charges to the main clearance.

1,877,738. DIFFERENTIAL GAS BALANCE. ARTHUR B. CUNNINGHAM, Chicago, Ill., assignor to Republic Flow Meters Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1924. Serial No. 708,598. 12 Claims. (Cl. 265—44.)



9. Gas testing apparatus comprising in combination, a liquid sealed bell mounted for movement responsive to gas pressure within said bell, a pair of stand pipes connected at their top portions and open to the atmosphere, a distributor connecting the bottom of said pipes, a conduit connecting said distributor with said bell, a pump connected with said distributor, means for alternately connecting said stand pipes with said pump and conduit, and an indicating instrument controlled by the movement of said bell.

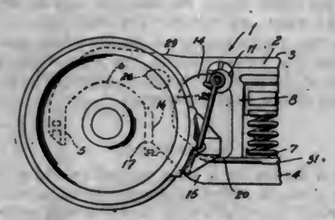
1,877,739. ELECTRICAL TESTING INSTRUMENT. ELMER SCHNEIDER, Chicago, Ill., assignor to Republic Flow Meters Co., Chicago, Ill., a Corporation of Illinois. Filed June 3, 1925. Serial No. 34,508. 14 Claims. (Cl. 201—55.)



12. A resistance unit, having in combination a resistor, means including a shaft rotatable for varying the effective resistance of said resistor, a finger-piece non-rotatable relative to said shaft for rotating said shaft and reciprocable independently thereof and a contact member actuated by the reciprocable movement of said finger-piece.

1,877,740. TRUCK SIDE FRAME. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,850. 12 Claims. (Cl. 105—205.)

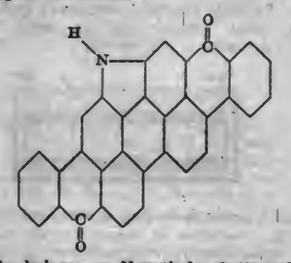
1. A truck side frame comprising a pair of jaws at each end, an upper longitudinal member, a lower longitudinal member which is inclined upwards for a slight distance near each end, then extends upwardly in a more nearly vertical direction and then is inclined in a reverse direction merging into the upper longitudinal member, and a



diagonal brace member extending from the lower longitudinal member at a point near the top of the inner jaw to the upper longitudinal member.

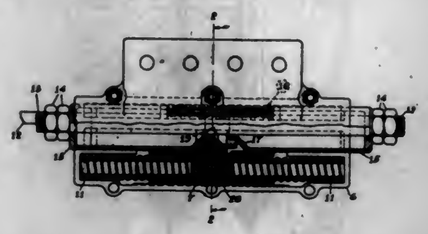
1,877,741. PRODUCTION OF NITROGENOUS ISODIBENZANTHRONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1929, Serial No. 403,354, and in Germany Nov. 7, 1928. 4 Claims. (Cl. 260—46.)

1. As new articles of manufacture dyestuffs probably corresponding to the formula:



which may be halogen or N-methyl substituted, the said dyestuffs dissolving in concentrated sulphuric acid to give green solutions and dyeing cotton from blue vats usually blue shades of particularly good fastness against chlorine.

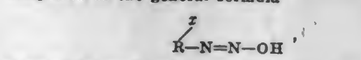
1,877,742. ADJUSTABLE TRAILING SWITCH CONNECTION FOR RAILROADS. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Jan. 14, 1931. Serial No. 508,619. 9 Claims. (Cl. 246—318.)



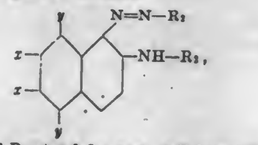
1. In a connecting means, in combination, an operating member, an operated member, a movable detent, and elastic means biasing and moving the detent to operatively interconnect said members, said elastic means acting in a line at an angle to the direction of the movement of the detent.

1,877,743. AZO-DYESTUFF AND PROCESS OF MAKING SAME. FRITZ STRAUB and WALTER ANDERAU, Basel, Switzerland, assignors to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 10, 1930, Serial No. 460,283, and in Switzerland June 12, 1929. 30 Claims. (Cl. 260—12.)

1. In the manufacture of metalliferous azo-dyestuffs containing the azine nucleus, the step which comprises coupling at least one molecular proportion of a diazo-compound of the general formula

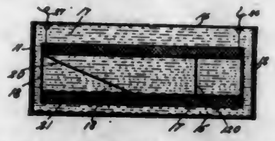


wherein R stands for a benezene radicle and x for a lake-forming group in ortho-position to the azo-group with the azines which are obtained by treating with acids the azo-dyestuffs of the general formula



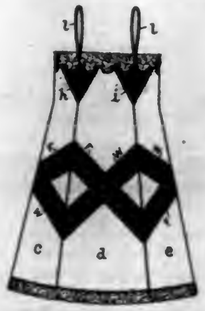
in which R_1 and R_2 stand for aryl radicles of the benzene and naphthalene series, one y is an OH-group and the other y a hoydrogen atom, one x an SO_3H-group and the other x a hydrogen atom, the SO_3H-group and the OH-group being in meta-position to each other.

1,877,744. LIQUID PRISM. DELAMERE B. GARDNER, Los Angeles, Calif. Filed Aug. 31, 1931. Serial No. 560,458. 6 Claims. (Cl. 88—61.)



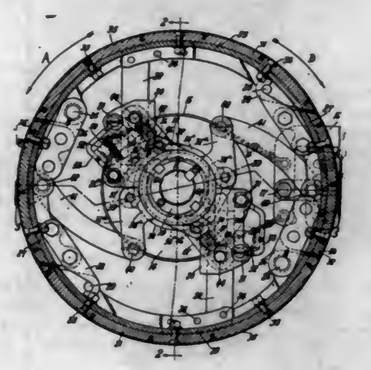
1. A liquid prism including a container having transparent ends, a solution of liquid crystals therein, a hollow core submerged in said solution, a thin sheet of transparent multi-refracting material arranged in said core to form a cleavage plane through the liquid to separate it into wedge-shaped liquid parts, and an electric coil on said core for the purpose specified.

1,877,745. GARMENT. HARRY GARFINKEL, New York, N. Y., assignor to himself, Gerald Ritter and George A. Ritter, as Copartners, constituting the Firm of Garfinkel & Ritter, New York, N. Y. Filed Nov. 28, 1931. Serial No. 577,781. 1 Claim. (Cl. 2—73.)



In a garment of the non-tubular type hereinabove described, the combination of four or more panels, each panel constructed of woven material and having tapering edges, each edge united to the immediately adjoining edge by a seam, each panel having its lengthwise bias lines extending substantially in a vertical direction when the garment is in position on the wearer, and each panel having at least such of its transverse bias lines as lie within the hip region lying substantially in horizontal planes when the garment is in position on the wearer, the warp threads of each panel forming with the warp threads of each adjoining panel angles of more than 45° but less than 135° when the panels lie in the same plane.

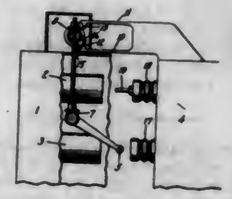
1,877,746. COLLAPSIBLE DRUM. ALLEN L. HESTON and FLORAIN J. SHOOK, Akron, and EARL W. EVANS, Columbiana, Ohio, assignors to The National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,592. 14 Claims. (Cl. 154—9.)



1. A collapsible tire building form comprising a pair of oppositely disposed form sections movable in a radial direction, and respective intermediate form sections pivotally connected at one end to each of the latter, the free ends of the intermediate sections being movable about said pivots.

7. In apparatus of the character described, the combination of a rotatable spindle, a collapsible drum carried thereby, a sleeve mounted upon said spindle and movable relatively thereof, drum collapsing means, latch mechanism connecting the drum collapsing means to the sleeve, and means for automatically engaging and disengaging said latch mechanism.

1,877,747. INTERLOCKING MECHANISM. JOHN SWINNEY, West Didsbury, England, assignor to General Electric Company, a Corporation of New York. Filed Feb. 18, 1931, Serial No. 516,761, and in Great Britain Mar. 28, 1930. 8 Claims. (Cl. 175—298.)

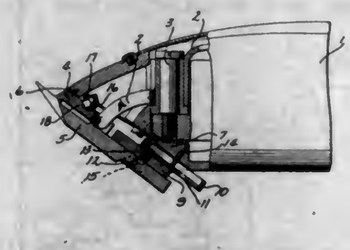


1. In electrical switchgear of the draw-out type including stationary structure having connections for alternate circuits and a movable unit having connections arranged to engage either of said circuit connections, interlocking mechanism for insuring connection between said unit and but one of said circuits comprising an interlocking bar, said bar operable, when said unit is in its withdrawn position, to block movement of said unit towards operative position in the event that the connections on said unit are operative to engage both correspodning circuit connections, and means operable by said unit for moving said bar to an unobstructing position during normal operation thereof.

1,877,748. DYE AND PROCESS OF MAKING SAME. LEONARD P. DOVE, Minot, N. Dak., assignor, by mesne assignments, to R. M. Stee, trustee, Minot, N. Dak. Filed Feb. 11, 1929. Serial No. 339,280. 12 Claims. (Cl. 8—6.)

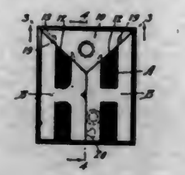
1. A dye in organic dispersion comprising (1) a dye material normally insoluble in the common organic solvents, (2) a member of a group consisting of ethylene glycols and alkyl ethers of the ethylene glycols and (3) a common organic solvent as a dispersion medium.

1,877,749. HAIR CLIPPER. MATTHEW ANDIS, Racine, Wis. Filed May 6, 1929. Serial No. 360,620. 9 Claims. (Cl. 30—1.)



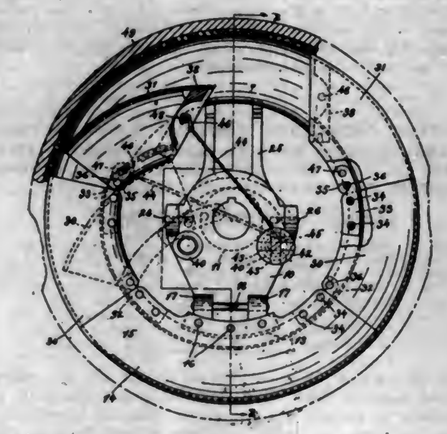
1. A clipper including the combination with a cutter blade, of power driven means for reciprocating the blade, a cooperating comb plate having teeth of tapering thickness, and manually operable adjustment means for mechanically moving the comb plate to offer portions of greater or less thickness for co-operation with the blade.

1,877,750. ATTACHING MEANS FOR INTERCHANGEABLE LETTERS OF INITIAL RINGS OR THE LIKE. CHARLES BIRNBAUM, Brooklyn, N. Y. Filed July 31, 1931. Serial No. 554,349. 4 Claims. (Cl. 63—29.)



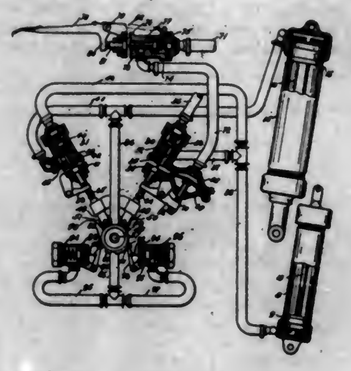
1. In an article of jewelry, the combination of a backing member and a plurality of initials or similar ornamental characters adapted to be supported on the front face thereof; means for detachably anchoring said characters to said backing member including an interiorly threaded hollow stud extending from the rear of one of said characters and through the thickness of said member and a screw having a shank threadedly engaging in said stud and having a head bearing against the rear face of the member, and a laterally projecting key lug on the remaining character receivable in a recess on the under side of the first character.

1,877,751. TIRE CORE EXTRACTOR. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 20, 1931. Serial No. 558,232. 16 Claims. (Cl. 154—9.)



15. The combination with a rotary chuck and a segmental core carried thereby, of a stationary internal gear and a segment-extracting winch including a shaft detachably assembled with said chuck and having a gear pinion at its rear end connectible with said internal gear by the longitudinal assembling movement of said shaft.

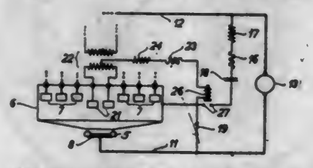
1,877,752. HIGH PRESSURE AND LOW PRESSURE PRESSING MACHINE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 12, 1929. Serial No. 370,208. 10 Claims. (Cl. 121—38.)



1. In a garment or laundry pressing machine in combination cooperative pressing elements, one of which is movable to open and close the press; operating mecha-

nism for the movable pressing element including motor means for closing the press under a light pressure and other motor means for applying heavy pressure to the pressing elements; valve means for controlling the flow of motive fluid to both motor means; a conduit connecting the valve means with the light pressure motor means, and another conduit connecting the valve means with the heavy pressure motor means; an operator-operated control member, normally in neutral position, and movable in one direction from neutral position to operate the valve means to supply working fluid to the low pressure motor means, and movable in the opposite direction from neutral position to operate the valve means to supply working fluid to the heavy pressure motor means; and means to prevent the effective operation of the control member in the second of said directions before it has been moved in the first direction.

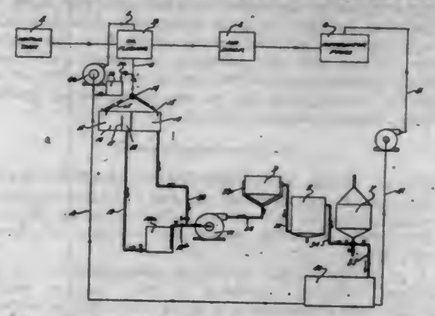
1,877,753. ELECTRIC CURRENT INTERRUPTING MEANS. ERWIN KERN, Wettingen, Switzerland. Filed July 21, 1930, Serial No. 469,417, and in Germany July 11, 1929. 4 Claims. (Cl. 175—363.)



2. In a system for quenching an electric arc, a rectifier of the metallic vapor type including a metallic tank, a plurality of anodes, and a cathode insulated electrically from the tank, the anodes and the cathode forming the points of attachment for an electric arc, a transformer having a neutral point and supplying current to the anodes, a condenser connectable with the tank of said rectifier and with the neutral point of said transformer, and a switch for connecting said condenser to quench the arc in the rectifier.

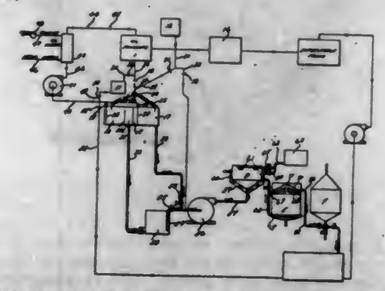
1,877,754. METHOD OF RENOVATING WASTE. EDWIN S. PEARCE, Indianapolis, Ind., assignor to Railway Service and Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed June 8, 1928. Serial No. 283,772. 5 Claims. (Cl. 308—243.)

1. The herein described steps of a method of reclaiming used journal box packing made up of a fibrous waste part and an oil part, which steps consist of the step of placing the packing in a container; the step of appreciably reducing the oil part of the packing while said packing is in said container; the step of delivering heated oil into said container for entry into said oil reduced packing; and the succeeding step of causing an appreciable portion of the oil then in the packing, while said packing is in said container, to forcibly pass through and out of



the fibrous waste part of said packing and out of said container, the oil thus removed carrying with it at least some of the impurities of the packing.

1,877,755. METHOD FOR RENOVATING JOURNAL BOX PACKING. EDWIN S. PEARCE, Indianapolis, Ind., assignor to Railway Service & Supply Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Aug. 23, 1930. Serial No. 477,442. 4 Claims. (Cl. 308—243.)



3. The herein described steps of a method of renovating journal box packing made up of a fibrous waste part and an oil part, which steps consist of the step of heating the packing by passing heated oil therethrough while said packing is supported in the perforated basket of a centrifugal extractor and is not subjected to appreciable centrifugal force; the step of thereafter rotating said basket at a high speed to remove from the packing therein as much as possible of its oil; and the step of thereafter loosening the fibres of the waste part of said packing.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office

Vol. 422—No. 3 TUESDAY, SEPTEMBER 20, 1932 Price—$10 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $10.00 per annum; including annual index, $11.50; single numbers, 25 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
ISSUE OF SEPTEMBER 20, 1932	605
INTERFERENCE DEFINED	605
NOTICE—ATTORNEY'S ADDRESS	605
SUGGESTION FOR THE USE OF COUPONS	605
DRAWINGS	606
DISCLAIMER	605
APPLICATIONS UNDER EXAMINATION	606
DECISIONS OF THE U. S. COURTS—	
In re Horton	607
In re Clark	608
In re Richardson	608
In re Lothrop	609
In re Boudin	610
In re Endacott	611
PATENT SUITS	613
TRADE-MARKS PUBLISHED (130 APPLICATIONS)	615
TRADE-MARK REGISTRATIONS GRANTED	633
TRADE-MARK REGISTRATIONS RENEWED	637
LABELS	638
PRINTS	638
REISSUES	639
PLANT PATENT	640
DESIGNS	640
PATENTS GRANTED	649

Issue of September 20, 1932

Trade-Marks	143—No.	297,509 to No.	297,651, inclusive.
T. M. Renewals	18		
Labels	20—No.	41,180 to No.	41,199, inclusive.
Prints	4—No.	13,909 to No.	13,912, inclusive.
Reissues	6—No.	18,600 to No.	18,605, inclusive.
Plant Patent	1—No.	27	
Designs	40—No.	87,774 to No.	87,822, inclusive.
Patents	1,237—No.	1,877,756 to No.	1,878,992, inclusive.
Total	1,478		

Interference Defined

RULE 98. An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention. In order to ascertain whether any question of priority arises the Commissioner may call upon any junior applicant to state in writing the date when he conceived the invention under consideration. All statements filed in compliance with this rule will be returned to the parties filing them. In case the applicant makes no reply within the time specified, not less than ten days, the Commissioner will proceed upon the assumption that the said date is the date of the oath attached to the application. The fact that one of the parties has already obtained a patent will not prevent an interference, for, although the Commissioner has no power to cancel a patent, he may grant another patent for the same invention to a person who proves to be the prior inventor.

Notice—Attorney's Address

Many letters are being returned to this Office for lack of street address. The attorney's full post-office address should be given in every power of attorney. The prompt delivery of communications will thereby be facilitated.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

Drawings

RULE 88

38. When there are drawings, the description will refer to the different views by figures and to the different parts by letters or numerals, (preferably the latter).

RULE 52—EXTRACT

(f) The different views should be consecutively numbered. Letters and figures of reference must be carefully formed. They should, if possible, measure at least one-eighth of an inch in height, so that they may bear reduction to one twenty-fourth of an inch; and they may be much larger when there is sufficient room. They must be so placed in the close and complex parts of drawings as not to interfere with a thorough comprehension of the same, and therefore should rarely cross or mingle with the lines. When necessarily grouped around a certain part, they should be placed at a little distance, where there is available space, and connected by short lines with the parts to which they refer and by short broken lines when the number or letters refers to parts shown in dotted lines. They should not be placed upon shaded surfaces, and when it is difficult to avoid this, a blank space must be left in the shading where the letter occurs, so that it shall appear perfectly distinct and separate from the work. If the same part of an invention appears in more than one view of the drawing it must always be represented by the same character, and the same character must never be used to designate different parts.

It is suggested that numerals or letters be used without exponents.

Disclaimer

1,848,160.—*Henry W. Ingle*, Hartford, Conn. GLASS BLOWING MACHINE AND METHOD. Patent dated February 2, 1932. Disclaimer filed August 30, 1932, by the assignee, *Hartford-Empire Company*, patentee, said Ingle, consenting and concurring.

Hereby disclaims each of claims 31, 32, and 33 of said Patent 1,848,160, except when the same be construed to require that the blank mold, single neck ring, and blow mold of the forming unit of each of these claims be mounted and operatively interconnected in such manner that said neck ring is caused to have regularly recurring movements between a position to cooperate with the said blank mold and a position to cooperate with said blow mold.

Condition of Applications Under Examination at Close of Business September 3, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 71,763; Trade-Mark Division, 902. Oldest new case, Feb. 25, 1932; oldest amended, Feb. 26, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	June 8	June 11	425
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	May 7	May 9	881
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 23	May 24	718
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	June 6	June 11	463
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 16	May 19	388
4898 C	6. LEWERS, A. M., Carbon Chemistry	Mar. 9	Mar. 9	2,075
5725	7. JARBOE, C. G., Optics; Photography	Apr. 6	Apr. 6	1,438
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Apr. 18	Apr. 20	1,073
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	June 6	June 9	741
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 29	Apr. 6	896
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 25	May 9	651
7701	12. HENRY, C. C., Machine Elements			
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	May 21	May 21	570
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 20	Apr. 20	1,065
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	May 13	May 14	751
5612	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 3	Apr. 3	1,887
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	May 12	May 11	908
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 14	Mar. 14	1,399
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	May 4	May 5	634
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Mar. 5	Mar. 8	1,802
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	May 12	May 12	613
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 16	Apr. 30	852
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	May 20	May 25	582
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 14	Mar. 14	866
5709	25. BLAKELY, C., F, Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	May 13	May 20	617
		Mar. 23	Mar. 23	1,405
5893	26. HODGES, J. S., Electricity, Generation; Motive Power			
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar. 4	Mar. 3	1,092
4628	28. BENSON, A. R., Internal-Combustion Engines	May 6	May 6	958
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Mar. 7	Mar. 9	1,378
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar. 3	896
		Apr. 20	May 4	835
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils			
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 17	Mar. 16	1,532
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	May 7	May 9	781
		Mar. 3	Mar. 3	2,302
6625	34. SIMPSON, O. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 5	Apr. 6	833
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet			
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	July 5	July 5	438
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 7	Mar. 18	1,608
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Mar. 29	Apr. 5	1,150
		June 15	June 16	173
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution			
7880	40. OBERLIN, J. J., Receptacles	Mar. 9	Mar. 9	1,457
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Apr. 7	Apr. 8	2,189
		June 4	June 25	569
5832	42. CUTTING, B. O., Electric Signaling			
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 15	Mar. 16	1,310
		Apr. 12	Apr. 12	1,462
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration			
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Mar. 5	Mar. 3	1,781
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	May 9	May 9	971
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	May 7	May 10	644
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Apr. 9	Apr. 9	2,021
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 4	Apr. 4	770
		Mar. 10	Mar. 11	1,523
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating			
5628	51. BACKUS, C. D., Radiant Energy	Mar. 3	Mar. 7	2,165
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 18	Apr. 18	1,188
		June 6	June 6	758
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	June 20	June 25	493
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Mar. 15	Mar. 15	1,109
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	June 26	June 26	333
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 20	Aug. 27	112
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 16	Mar. 17	1,475
		Apr. 30	Apr. 27	665
5605	58. DOWELL, E. F., Abrading; Typewriting			
4700	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 3	Mar. 4	1,261
		Feb. 25	Feb. 25	1,787
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Mar. 12	Mar. 12	1,415
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Mar. 5	Mar. 8	1,348
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Mar. 21	Mar. 21	1,729
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Mar. 11	Mar. 12	1,437
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	May 16	May 14	543
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Mar. 9	Mar. 9	1,585
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	Aug. 4	Aug. 22	814
	Labels and Prints	Aug. 11	Aug. 22	88

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Horton

No. 2,933. Decided May 23, 1932

1. Rules of the Patent Office—Force and Effect.

Rule 149 of the Patent Office is within the scope of the power conferred upon the Commissioner by section 4912 Revised Statutes and therefore has the force and effect of law.

2. Petition for Rehearing—Time for Taking Appeal.

A petition for rehearing does not extend the time for taking an appeal to the Court of Customs and Patent Appeals, and where appeal was not taken within the time fixed by Rule 149 of the Patent Office from the original decision, although taken within that time from a denial of a petition for rehearing, *Held* that the Court of Customs and Patent Appeals is without jurisdiction to view the matter and appeal is dismissed.

Appeal from the Patent Office. Dismissed.

Lenroot, *J.*, not participating.

Mr. Eugene L. Culver for Horton.

Mr. T. A. Hostetler for the Commissioner of Patents.

Mr. H. G. Grover and *Mr. Harry Tunick* for amicus curiæ.

Graham, *P. J.:*

The appellant, Harry M. Horton, filed his petition on July 5, 1928, for an extension of his patent, No. 1,165,412, dated December 28, 1915, under the provisions of the act of May 31, 1928, 45 Stat. 1012.

The statute in question provides, in brief, that any person who served honorably in the military or naval forces of the United States at any time between April 6, 1917, and November 11, 1918, both dates inclusive, and was subsequently honorably discharged, may make application for the extension of a patent which has been theretofore granted to him, and which, between the said dates and at the time of the passage of the act, was owned by the applicant. The conditions predecent to the issuance of such extension are that the applicant, between April 6, 1917, and July 2, 1921, was not receiving an income from said patent, or that his income therefrom was reduced by said military service, and that at the time of the induction of said person into the said service he was making diligent effort to exploit the invention covered by his patent.

Under the provisions of section 3 of said act, upon the publication of notice in the Official Gazette, the Radio Corporation of America duly filed opposition to said extension. For the purposes of this opinion it will not be necessary to allude further to the pleadings and proofs which were offered in the Patent Office, because, as we view the matter, the merits of the application are not now before us. On June 6, 1930, the Commissioner of Patents denied the application by his written decision filed in the Patent Office on that date. Thereafter, on July 24, 1930, the applicant filed a request for a reconsideration of said decision, and offered in support thereof an affidavit of one C. C. Culver. On July 30, 1930, the Commissioner of Patents denied the motion and request for reconsideration.

On August 20, 1930, the applicant filed in the Patent Office his notice of appeal to this court. The Solicitor for the Patent Office has filed in this court a brief in which he specifically directs attention to the fact that the said notice of appeal filed by the petitioner in the Patent Office was not filed within the 40 days fixed by rule 149 of the Patent Office, which was in part, as follows:

149. When an appeal is taken to the Court of Appeals of the District of Columbia, the appellant shall give notice thereof to the Commissioner, and file in the Patent Office, within forty days, exclusive of Sundays and holidays but including Saturday half holidays, from the date of the decision appealed from, his reasons of appeal specifically set forth in writing.

In reply to this suggestion, the applicant argues that the time for filing such notice of appeal should date from July 30, 1930, when his petition to reopen was denied by the Commissioner. The contention is that the filing of such a petition extends the time, and that the "date of the decision appealed from" should be considered as July 30, 1930, instead of June 6, 1930.

The said rule 149 was promulgated by the Commissioner in pursuance of the authority given by section 4912, Revised Statutes:

Sec. 4912. When an appeal is taken to the Court of Appeals of the District of Columbia, the appellant shall give notice thereof to the Commissioner, and file in the Patent Office, within such time as the Commissioner shall appoint, his reasons of appeal, specifically set forth in writing.

[1] No contention is made that said rule 149 is not reasonable or within the scope of the power conferred upon the Commissioner by said section 4912. It, therefore, has the force and effect of law. *Westinghouse Traction Brake Co.* v. *Christensen*, 243 Fed. 901; *Mell* v. *Midgley*, 31 App. D. C. 534, 136 O. G. 1534; *In re Mraz*, 36 App. D. C. 435, 164 O. G. 978.

No provision is made by the rules of the United States Patent Office for the filing of petitions for rehearing in matters like that here involved. Our attention is called to rule 123 of the Patent Office which, it is claimed, operates to stay the proceedings during the pendency of such petition. However, on inspection it will be found this rule has the effect only of a stay of proceedings in motions brought under rules 109 and 122 of the Office, which apply respectively to motions to file an amendment to an application, or to put in interference a claim already in the application or patent, or to substitute another application in interference matters, and to dissolve an interference, or to shift the burden of proof. Rule 123 has no reference to a petition to reopen, such as that filed in the case at bar.

It is contended by the applicant that it has been the practice of the Patent Office to consider applications for rehearing of final decisions in that office, and in support appellant cites *Ex parte Messinger*, 1897 C. D. 1.

Whatever may be the practice of the Office in that respect, it has been the uniform rule in the Office, so far as we are advised, to consider that an application or petition for rehearing, or to reopen a case, shall not be considered as extending the time for appeal provided by the rules of the Office. *Greuter* v. *Mathieu*, 1904 C. D. 380; *Felsing* v. *Nelson*, 1906 C. D. 185; *Naulty* v. *Cutler*, 1907 C. D. 8.

This has also been the rule in the courts of the District of Columbia which formerly exercised jurisdiction in this class of cases.

In *Ross* v. *Loewer*, 9 App. D. C. 563, 77 O. G. 2141, the court of appeals had under consideration an appeal from the Patent Office which had not been filed within 40 days under Rule XX of the court, which provided that such appeals—

shall be taken within *forty days* from the date of the ruling or order appealed from, *and not afterwards.*

The court held that the pendency of a motion for rehearing did not extend the time of appeal. In answer to this suggestion, appellant argues that this court has no rule similar to said Rule XX. While this is true, it is not seen why any such rule is necessary. The statute and the rule of the Patent Office fixes the time limit within which appeals may be perfected, and this we deem is sufficient.

In *Mattullath Aeroplane Co.* v. *Newton, Commissioner*, 1921 C. D. 103, the Supreme Court of the District of Columbia had before it for consideration a bill in equity, filed under section 4915, Revised Statutes, which sought a decree for the issuance of a patent which had been refused by the Patent Office. It appears from the statement of the case that upon the refusal of the plaintiff's application for a patent, he appealed to the Court of Appeals of the District of Columbia, where the decision of the Commissioner was affirmed on February 5, 1917. His bill in equity was filed on February 23, 1918, and it was pleaded that the bill was not filed within one year from the time of the decision of the court of appeals refusing the patent, as was by statute provided. It further appeared that a petition for rehearing was filed on February 21, 1917, and denied February 24, 1917, by said court of appeals. The Supreme Court, speaking through Gould, judge, held that the bill was not filed within the statutory period, and it was dismissed.

[2] In view of the facts as presented, we are of opinion the notice of appeal was not filed within the time provided by the rules of the Patent Office and that this court is without jurisdiction in the matter. The appeal is, therefore, dismissed.

Appeal dismissed.

U. S. Court of Customs and Patent Appeals

IN RE CLARK

No. 2,961. Decided May 23, 1932

PATENTABILITY—DUPLICATE POST-CARD ORDER AND WANT BOOK.

Claims for a duplicate post-card order and want book *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Samuel Herrick and *Messrs. Carr & Carr & Gravely* for Clark.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the action of the Examiner in the rejection of all of the claims (claims Nos. 2, 4 and 5) in appellant's application for a patent for what is styled a duplicate post-card order and want book, which comprises a book having alternate thin record sheets and post cards.

Claim 2 is illustrative and is as follows:

2. A device of the kind described comprising a plurality of self-addressed post cards bound together in a booklet with their address sides down, each post card having an order blank on its upper face, a sheet of paper immediately in front of each post card, each sheet of paper having thereon a duplicate of said order blank on the succeeding post card, and a printed form on the back of each of said sheets designated to receive notes for use in filling out the succeeding order sheet.

The record sheets have spaces for duplicating by carbon paper the writing which is placed on the post card. The post cards are provided with lines of perforation so that they may be easily detached from the book. Each post card is preaddressed to a stated firm. The record sheets which lie between the post cards have on one face blank spaces designed to be used as a want list. The books are supplied to customers of the firm for the use of the customer in making orders, keeping a record of the same, and for keeping a want list.

The references relied upon are: Todd, 789,395, May 9, 1905; Lewis, 972,550, October 11, 1910; Post card of Tolman Laundry, filed 1916.

The board pointed out that Lewis uses a folded sheet so that he can address a post card as well as place a duplicate order on it; that preaddressed cards were old in the art, as shown by the exhibit from the Tolman Laundry; that there was no invention in using a preaddressed card and omitting the lower half of the folded sheet, as was done in Todd; and that patentable novelty can not be predicated on printing, but that it must reside in physical structure.

Since we agree with the conclusion and the reasons assigned therefor by the Board of Appeals, its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE RICHARDSON

No. 2,957. Decided May 23, 1932

PATENTABILITY—VALVES.

Claims for a valve *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Fraley & Paul, Mr. Frank B. Fox, and *Mr. Charles L. Sturtevant* for Richardson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, Nos. 5 and 6, in appellant's application for a patent for an alleged invention relating to improvements in valves for controlling the flow of liquids, such valves being capable of operating—

responsively to suction and pressure pulses in opening and closing the valve ports.

Claim 6 is illustrative. It reads:

6. In a valve of the type described, the combination of a ported seat member, a centrally apertured sheet-metal disc valve having an annular arched ridge intermediate plane concentric seating surfaces with slightly upturned peripheral edges, a guide stem for the disc valve removably secured centrally of the ported seat member and having a shoulder near its upper end with an axial screw-threaded extension, a removable sheet metal convex-overhang having a centrally apertured flat portion seating on the stem shoulder, said overhang embodying a lateral lip flange coinciding with the disc valve high point, a helical spring about the guide stem intermediate the overhang flat portion and disc valve inner seating surface, said spring being of less diameter than the inner seating surface of the ported member, and a nut on the axial threaded extension clamping the overhang rigidly in place and thereby imposing compression on the helical spring.

The references are: Weir, 852,589, May 7, 1907; Richardson, 1,681,364, Aug. 21, 1928.

In its decision, the Board of Appeals described appellant's valve, and described and applied the references as follows:

This application relates to a valve comprising a seat threaded at the center to receive a vertical stem, the stem being provided with a shoulder and threaded at its upper end. Slidable on the stem is a valve which is limited in its upward movement by a guard clamped in place between the shoulder on the stem and the nut threaded on the upper end of the stem. The coil spring is interposed between the guard and the valve. The guard and the valve are both formed of sheet metal.

Of the references relied upon by the Examiner, applicant's prior patent discloses a valve comprising a seat threaded at its center to receive a vertical stem, the stem having cast integral with it at its upper end a guard for limiting the upward movement of a valve slidable on the stem. Interposed between the guard and valve is a coil spring.

The patent to Weir discloses a valve comprising a seat threaded at the center to receive an upwardly extending stem having a shoulder threaded at its upper end. Surrounding the stem is an annular member extending somewhat above the shoulder and clamped between the annular member and a nut threaded on the stem is a guard. Interposed between the guard and a valve is a coil spring. The valve and guard are both formed of sheet metal. It would seem evident that the member surrounding the stem might be dispensed with and the guard clamped between the shoulder on the stem and the nut threaded on the end in the same manner as in the present application.

We have carefully considered the advantages of applicant's present structure as set forth in the brief, but we are constrained to hold that no invention would be involved in view of Weir in substituting for the guard cast integrally on the stem used in applicant's prior patent a sheet metal guard held in place by a shoulder and nut on the stem.

It is argued by counsel for appellant that each of the involved claims defines a valve "having a shoulder with an axial threaded prolongation"; that neither of the references discloses either a shoulder or its equivalent; that the patent to Weir discloses a separate spacing ring, not a shoulder; and that, therefore, the tribunals of the Patent Office were wrong in holding that Weir disclosed a stem "having a shoulder threaded at its upper end."

The Solicitor for the Patent Office has replied to the arguments of counsel for appellant, and insists that a mechanic would not attempt to hold the guard member, disclosed in Weir, in place on a stem by means of a nut, without providing a shoulder or its equivalent for the guard member to rest against; and that to use a shoulder on the stem, in place of a separate ring, would not involve invention, even though improved results might be obtained thereby.

We think the position taken by the Solicitor for the Patent Office is obviously right, and that the use of a shoulder formed integrally with the stem, in view of the references, does not involve invention.

We have carefully considered the arguments of counsel for appellant, but, in our opinion, the tribunals of the Patent Office reached the right conclusion. The decision of the Board of Appeals is, accordingly, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LOTHROP

No. 2,962. Decided May 23, 1932

PATENTABILITY—ALLOY STEEL.

Claims for an alloy steel *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Samuel Herrick and *Messrs. Carr & Carr & Gravely* for Lothrop.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting all of the claims, 1 to 4, inclusive, in appellant's application for a patent for an alleged invention relating to an alloy steel, composed of iron, carbon, manganese, and molybdenum.

The claims read as follows:

1. An alloy steel containing carbon, manganese from about 1.30% to about 1.60% and molybdenum from about .20% to about .30%.

2. An alloy steel containing carbon from about .12% to about .30%, manganese from about 1.30% to about 1.60% and molybdenum from about .20% to about .30%.

3. An alloy steel containing carbon from about .15% to about .20%, manganese from about 1.30% to about 1.60% and molybdenum from about .20% to about .30%.

4. An alloy steel containing carbon from about .15% to about .20%, manganese over 1.30% and molybdenum from about .20% to about .30%.

The reference relied upon is: Sargent et al., 1,401,926, December 27, 1921.

The patent to Sargent et al., relates to an alloy steel, composed of carbon, manganese, and molybdenum. In their specification, the patentees stated:

The steel alloy which we provide contains no more than about .80% carbon, from about 1.15% to 3% manganese, and *from a fraction* of 1% to 1.25% molybdenum. The remainder of the alloy is iron with the exception of impurities, such as sulfur and phosphorus, which are usually found in steels. While the invention *contemplates alloy steels of the range of analysis just stated*, the preferred steel contains from about .30% to .50% carbon, about 1.25% manganese and from about .25% to .75% molybdenum. [Italics ours.]

It is argued by counsel for appellant that, although the patent to Sargent et al., discloses an alloy steel composed of the same ingredients as those contained in appellant's product, it specifies proportions quite different from those disclosed and claimed by appellant; that the patent—

permits a very wide range for each ingredient, and *that the proportion of each ingredient of applicant's steel falls within such wide range of the corresponding ingredient of the patent.* [Italics ours.]

It is further contended by counsel for appellant that it appears from an affidavit of record that appellant's steel possesses different properties, and is adapted for uses for which the patentees' preferred

steel is wholly unfit, and that this is true of all of the other steels "within the range" of the Sargent et al., patent.

It appears from the affidavit of Walter G. Hildorf that appellant's alloy steel is used in the manufacture of—

cups, cones and rollers for roller bearings and other articles. * * * Prior to the invention of this Lothrop alloy steel, roller bearings were made of a nickel molybdenum or other nickel alloy steel, which was very expensive on account of the high price of nickel and factors incident to manufacturing operations. The Lothrop alloy steel is rapidly superseding and will in time entirely supersede such high priced nickel alloy steel in the manufacture of roller bearings by The Timken Roller Bearing Company, which produces probably upwards of 90% of all taper roller bearings made in this country.

The affidavit also stated that:

For the purpose of comparison, I attach hereto three sets of photomicrographs of two alloy steels, one of which, marked Steel I is of the formula C .18, Mn 1.42, Mo .24 and thus conforms to the Lothrop application, while the other alloy steel marked Steel II is of the formula C .15, Mn 2.90, Mo .23 and thus represents the Sargent & Weitzenkorn patent.

Other illustrations were presented in the affidavit showing analyses of alloy steel within the limits of the Sargent et al., patent, together with illustrations of formulas referred to as being within the limits of appellant's application, for the purpose of showing the differences in the alloy steels produced from the various formulas referred to by the witness.

It may be observed in this connection that, although the witness stated that a formula consisting of carbon .15% and different proportions of manganese and molybdenum came within the Sargent et al., patent, he did not point out that the alloy steel marked "Steel I * * * of the formula C .18, Mn 1.42, Mo .24," and other alloy steels, which, he stated, came within the range of appellant's application, also came squarely within the limits of the Sargent et al., patent. Furthermore, appellant is claiming nothing more than an *alloy steel* containing, in varying proportions, carbon, manganese, and molybdenum. He, too, covers a rather wide range for each ingredient, admittedly within the "range of the corresponding ingredients of the patent." The claims do not cover the alleged discovery of a new use for alloy steel.

In view of these facts, our decision in the case of *In re Pilling*, 18 C. C. P. A. (Patents) 703, 44 F.(2d) 878, 403 O. G. 513, is applicable to the issues here. We there said:

The spread of the formula in each case covers the same territory, and there is, therefore, no invention of one over the other.

For the reasons stated, the decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BOUDIN

No. 2,980. Decided May 23, 1932

PATENTABILITY—RES ADJUDICATA.

Where a motion to dissolve an interference between an application of B. and a patent to H. was granted on the ground that the claims in issue were unpatentable to B. in view of a prior patent to him and no appeal was taken to the Board of Appeals from that decision *Held* that B. is not entitled to a claim for subject matter claimed in the patent to H. even though that claim is not identical with any claim of the H. patent.

APPEAL from the Patent Office. Affirmed.

Mr. Vernon M. Dorsey and *Mr. Alan F. Garner* for Boudin.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claims 1 to 4, inclusive, in appellant's application for a patent for an alleged invention relating to a process and an apparatus for making sheet glass.

Claims 1 and 2 were involved in an interference with the patent to Howard, No. 1,616,870, interference No. 55,420.

On motion by the patentee, the interference was dissolved by the Law Examiner on the ground that the counts were unpatentable to appellant over the claims contained in his Patent No. 1,628,353, issued May 10, 1927.

Appellant did not appeal from the decision of the Law Examiner.

Claims 2 and 4 were rejected by the Board of Appeals on the patent to Boudin, No. 1,628,353.

Appellant has withdrawn claims 1, 2, and 4 from this appeal. Accordingly, we are concerned only with the patentability of claim 3, which reads:

3. The hereinbefore described process of forming sheet glass which comprises feeding molten glass in a substantially horizontal direction through an issue opening from a furnace, moving the issued glass upwardly from the issue opening to a forming pass and forming the issued glass into sheet form at such pass.

In its original decision, and in its decision rendered in compliance with a request for a reconsideration filed by appellant, the Board of Appeals held that the subject matter of claim 3 was covered by the claims in the Howard patent, and that, as appellant failed to contest the issue of priority with the patentee, Howard, in interference No. 55,420, he was not entitled to an allowance of a claim which defined that particular subject matter.

Counsel for appellant contends in this court that claim 3 was not in the interference referred to, and could not have been put into that interference, because it was a claim not made by Howard. It is further contended by counsel for appellant that the Primary Examiner rejected claim 3 on appellant's Patent No. 1,628,353, and did not reject it on the Howard patent; that this court should reverse the decision of the Board of Appeals, and remand the case to the Patent Office for further consideration; and that, if upon such reconsideration, the Primary Examiner should reject the claim on the Howard patent, appellant would then be called upon to establish that he completed the invention involved in claim 3 prior to the filing of the application on which the patent to Howard was issued, as provided in rule 75 of the Rules of Practice of the Patent Office.

It was stated in appellant's application, filed April 9, 1927, that it was filed as a division of application No. 105,039, filed April 27, 1926.

The Howard application was filed March 1, 1926, and matured into a patent on February 1, 1927.

The applications of appellant and Howard were, therefore, copending until the Howard patent issued.

Counsel for appellant contends that the involved claim 3 could not have been put into the interference between appellant's application and the patent to Howard, because, it is contended, Howard did not claim the subject matter covered by appealed claim 3. If this is so, then, of course, appellant should have been given the opportunity, in accordance with rule 75 of the Rules of Practice of the United States Patent Office, to establish that he had completed the invention defined in claim 3, in this country, prior to the filing date of the Howard patent. *In re Smith*, 17 C. C. P. A. (Patents) 752, 36 F.(2d) 522, 393 O. G. 1029. However, if the subject matter of appealed claim 3 was claimed in the Howard patent, either claim 3 or a claim defining the subject matter contained therein should have been included in the interference, and it was the duty of appellant, if the Patent Office failed to act, to have suggested and presented such a claim or claims for adjudication in the interference, if he intended to claim that he was the prior inventor of that subject matter. *In re Ellis & Holden*, 18 C. C. P. A. (Patents) 1060, 47 F.(2d) 963, 409 O. G. 559.

The Board of Appeals held that the patentee, Howard, claimed the subject matter defined in appealed claim 3.

Appealed claim 1 was claim 4 of the Howard patent and count 1 of the interference. It reads:

1. The method which comprises directing a stream of molten glass against the periphery of a horizontally disposed roll, in a plane below the uppermost portion of said roll, and rotating the roll to advance the glass beneath a sheet-forming roll that is disposed in a plane above the first-named roll.

Claim 1 of the Howard patent reads as follows:

1. The method which comprises directing molten glass against an upwardly moving surface, spreading the glass laterally on said surface, and causing said surface to carry the glass past a sheet-forming member.

Appellant described his invention in his specification, in part, as follows:

The present application is directed to an aspect of my prior invention which does not necessarily include the formation of a meniscus, or a submerged issue opening, *but which merely embodys flowing a stream of molten glass against the periphery of a roll below the top of the roll and rotating the roll to advance the glass to the forming pass.* Hence in this application I will not make reference to the flow opening as submerged, *and such opening will be described merely as a means for feeding a stream of glass to the rolls.* (Italics ours.)

It will be observed that claim 3 refers to a "forming pass," and "forming the issued glass into sheet form at such pass." Whereas, Howard, in claim 4, and appellant, in appealed claim 1, stated that a stream of molten glass was directed—

against the periphery of a horizontally disposed roll, in a plane below the uppermost portion of said roll, and rotating the roll to advance the glass beneath a sheet-forming roll that is disposed in a plane above the first-named roll.

Claim 1 of the Howard patent, instead of referring to rolls, as in claim 4, or to a forming pass, as in appealed claim 3, states that the molten glass was directed—

against an upwardly moving surface * * * and causing said surface to carry the glass past a sheet-forming member.

It would seem to be evident from what has been said that Howard not only disclosed but claimed the subject matter of appealed claim 3. It is true that claim 3 contains somewhat different language from the process claims of the patent, nevertheless, it defines the same invention. This being so, appellant is not entitled to a patent for that claim without first obtaining an award of priority. Having had the opportunity to try out the question of priority in interference No. 55,420, it follows that, if the subject matter defined in claim 3 was there involved, appellant should have appealed from the decision of the Law Examiner. Having failed to do so, he can not now be heard to complain. If the subject matter defined in claim 3 was not involved in that interference, appellant should have suggested and presented a claim defining it. Having failed in this respect, he is not now entitled to an allowance of a claim which defines that particular subject matter. Under the circumstances of this case, rule 75 of the Rules of Practice of the Patent Office has no application. *In re Smith*, supra; *In re Ellis & Holden*, supra.

Having reached this conclusion, we deem it unnecessary to consider other issues presented by counsel for appellant. For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ENDACOTT

No. 2,914. Decided May 23, 1932

PATENTABILITY—DISTRIBUTION OF LIQUEFIED GAS.

Claims for a method and for an apparatus for the distribution of liquefied gas *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Royal R. Rommel for Endacott.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the rejection by the Examiner of twenty-eight out of twenty-nine claims in a patent application relating to alleged improvements in methods and apparatus for the distribution of liquefied gas to consumers of same.

Of the rejected claims Nos. 1 to 13, inclusive, are method claims, and Nos. 14 to 28, inclusive, are apparatus claims.

The brief for appellant divides these method and apparatus claims into two groups each. We quote Nos. 5, 11, 18, and 25 as representative of these four groups, respectively. Also, for purposes later to appear, we quote claim 1:

1. In a method of distributing liquefied gas the step which consists in weighing the same into a consumer's container at the point of delivery.

5. A method of dispensing liquefied gas to a customer's premises without interrupting the service flow of gas from a customer's liquefied gas tank to the customer's premises, which consists in weighing the customer's tank on the customer's premises during service flow of gas, to ascertain the amount of liquefied gas in the customer's tank, dispensing liquid gas into the tank for replenishing the supply therein during the service flow of gas to the customer's premises, and weighing the customer's tank after the replenishing supply is in the container to ascertain the weight of the tank and contents thereof during the service

flow of gas to the customer's premises and to determine the net amount of liquefied gas dispensed at the filling operation in the customer's tank.

11. The method of distributing high pressure liquefied gas to customers which consists in transporting a large container having a distribution supply of high pressure liquefied gas therein along a route from customer to customer, appropriately ascertaining the quantity of liquefied gas in the respective customer's tank during service flow of gas into the customer's premises, and where required connecting the distributing container with the customer's tank and discharging high pressure liquefied gas from the distributing container into the customer's tank and replenishing the customer's tank to the desired extent during the service flow of gas from the customer's tank to the customer's premises.

18. In apparatus for distributing liquefied gas and the like the combination of a customer's tank for receiving liquefied gas, service connections to the customer's tank which will enable the tank to be lifted without disconnecting service flow of gas from the tank thru said service connections, means to lift and weigh the tank, a portable distribution tank having a supply of liquefied gas therein, means for detachably connecting the distribution tank wth the customer's tank for replenishing the latter with the liquefied gas, and means for pressure forcing the liquefied gas from the distribution tank into the customer's tank.

25. In apparatus for distributing liquefied gas the combination of a customer's tank, a service line to the customer's tank including a flexible connection which will permit the tank to be moved without discontinuing the gas flow from the tank thru the service line, a frame, scales on the frame, and means associated with the scales for elevating the tank to place the weight of the same and the contents thereof on the scales.

The references cited are: Lippincott, 753,718, March 1, 1904; Kramer, 1,614,561, January 18, 1927.

It is explained before us that the liquefied gas referred to in the claims is a by-product of natural gas, comprising the lighter fractions of the natural gasoline, propane and butane, separated in the form of vapor, which is reduced to a liquid state by recondensation and kept in such state under superatmospheric pressure. When the pressure is lessened the material again vaporizes and passes to the burners in vapor form.

Appellant's structure comprises a receiving tank for the liquefied gas, located upon the premises of the consumer, connected by a flexible tube to a service line through which service line the vapor gas (into which the liquefied gas is converted by the modification of the superatmospheric pressure) may flow continuously to the burners.

In operation the liquefied gas is delivered into the consumer's container from the distributing tank wagon through a hose or tubing with the use of a pump. The container is placed in a housing, on the top of which is a frame having a base that carries scales, and, by means of turn buckle lifting tongs, the container may be suspended from the scales and the weight thereof determined before and after filling.

Much emphasis is placed by appellant upon this weighing feature and upon the fact that the tank and contents may be weighed without interrupting the low pressure service flow of gas to the burners.

The claims quoted, supra, as representative are all combination claims, except that claim No. 1 seems to be limited to the single step of weighing the gas into the container at the point of delivery. Although so limited, it is obvious that this claim is quite broad and, as worded, covers any and all processes of weighing any liquefied gas into a consumer's tank at the point of delivery. Since it claims no method of, nor any apparatus for, the step, we are unable to see wherein it embraces invention recognizable for patent protection.

As stated in the brief of the Solicitor for the Patent Office:

> There is certainly nothing inventive in weighing any saleable substance into a consumer's container. The only other feature in this claim is that the weighing is done "at the point of delivery." It is not seen how any inventive effort is required to make the public aware of the fact that the weighing can be done at any place desired.

An analysis of the broadest of appellant's remaining claims discloses that the entire combination for which patent is sought comprises the following elements:

(*a*) The customer's container; (*b*) the flexible tube (whose flexibility enables the tank to be lifted for weighing without interrupting the flow of the gas) connecting the tank with (*c*) the service line running to the burner; (*d*) means (the turn buckle lifting tongs, frame and scales) to lift and weigh the tank; (*e*) a portable distribution tank (the tank wagon or truck used by the seller in delivering the gas) "having a supply of liquefied gas therein"; (*f*) means (a detachable hose or pipe) running from the distribution tank to the customer's tank, and (*g*) means (a pump) for pressure forcing the gas from the distributing tank into the container of the customer.

Certain of the claims, such as No. 11, supra, relate more particularly to the method of transporting a large container from customer to customer and replenishing the tank of each in the manner described.

The rejection by the tribunals of the Patent Office was principally for lack of invention, chiefly in view of Lippincott. Certain of the claims, such as No. 11, and certain features of those represented by No. 18, were secondarily rejected on the ground of "aggregativeness."

The patent to Lippincott relates to soda water apparatus. In the specification thereof it is said:

> This invention has for its object to provide improved means for indicating when the tank of a soda-water fountain is being charged with soda-water the quantity or number of gallons of the water within the tank at any time.

The Lippincott apparatus shows a tank for soda water, supported by a spring whereby the tank's position vertically is determined by the weight of the water therein. It has a flexible pipe or tube connecting it with the tank of the customer. There is also a flexible tube connecting the customer's tank with the soda fountain. The customer's tank is so suspended as that it is free to change its position while being charged and while soda water is being drawn from it at the fountain. It is equipped with an annunciator which, by the aid of an electrical device, will sound an alarm when a predetermined quantity of water has entered the tank or has been withdrawn therefrom. There is also an indicator carrying a pointer which is capable of being so arranged as to indicate upon a dial the number of gallons of water entering the tank while the latter is being charged, or to indicate the diminution of the water as same is withdrawn for use at the fountain.

The Kramer patent discloses a tank similar to those in common use for delivering gasoline to filling stations.

From the description of the Lippincott combination apparatus it appears that the following elements are present therein:

(*a*) A portable distribution tank; (*b*) flexible tube; (*c*) customer's tank; (*d*) service line connecting tank with fountain; (*e*) lifting means; (*f*) means to indicate the measure or quantity of the contents of the consumer's tank, and (*g*) pressure for forcing the material from the tank of the distributor to the tank of the consumer and from the latter tank to the fountain.

The Board held the Lippincott combination to show "the full equivalent" of the combination typified in claims such as No. 18, and to be a full anticipation of claims such as No. 25, as well as of the several method claims.

Appellant's specific structure for lifting his tank, not disclosed in the references, received recognition by the Board of Appeals, and patent on the combination including same was granted by the allowance to appellant of claim No. 29.

In the light of numerous authorities, we are unable to satisfy ourselves that the decision of the Board was erroneous.

It is very earnestly argued in behalf of appellant that his invention is directed to wholly different objects than that of the Lippincott invention. In a certain sense this is true. That is to say, liquefied gas and soda water are different in nature. But in a mechanical sense there is an analogy between them, and there is, as has been shown, a striking analogy in the mechanical principles which underlie the devices for handling these substances as above described.

Every substantial mechanical principle present in every step of appellant's process (as defined, for example, in claim 5) is found in Lippincott, and the mechanical principle of every element of appellant's apparatus (as defined, for example, in claim No. 25) is present in the apparatus of Lippincott, except the specific lifting structure covered by allowed claim No. 29, and we find no new nor unobvious principle in the combination.

The foregoing statement does not, of course, apply to those claims which embrace as part of the combination the distributing tank and the features connecting it to the consumer's tank, but the rejection of these claims may very properly be rested upon the ground of aggregation, as the Board held.

It is true that modification of the elements of Lippincott's structure was essential to adapt them for use in the handling of liquefied gas, but the mechanical principles involved are simple and well known and are shown individually and in combination in the Lippincott structure.

Accordingly, we must hold that the devising of such parts and the combining of them on the part of appellant was a matter of mechanical skill and did not involve invention beyond that found and recognized by the Board of Appeals.

It must not be overlooked that in the famous case of *Potts* v. *Creager*, 155 U. S. 597, 70 O. G. 494, so strongly relied upon by appellant in the instant case, the Supreme Court, after pointing out that inventive genius might be required "to grasp the idea that a device used in one art may be made available in another," went further and said:

> As a result of the authorities upon this subject, it may be said that, if the new use be so nearly analogous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device produce a new result, it *may* at least involve an exercise of the inventive faculty. Much, however, must still depend upon the nature of the changes required to adapt the device to its new use. (Italics quoted).

It is not deemed necessary to lengthen this opinion by a discussion of other cases cited by appellant. The facts in the cases from which quotations are made by him rendered the principles there announced applicable in those cases. The facts of this case do not, in our opinion, render them applicable here.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,261,832, 1,812,704, F. X. Malocsay, Cigar banding machine, filed Aug. 12, 1932, D. C., E. D. N. Y., Doc. E 6521, *International Banding Machine Co.* v. *International Cigar Machinery Co., Inc.*

1,268,473, W. O. Kennington, Distributer cap for igniting apparatus; 1,351,714, A. E. Berdon et al., Distributer head for ignition devices; 1,372,065, O. F. Conklin, same, filed Aug. 18, 1932, D. C., N. D. Ohio, E. Div., Doc. 4384. *Delco-Remy Corp.* v. *Echlin & Echlin et al.*

1,272,056, C. F. Kettering, Ignition system; 1,286,803, H. G. Schwarze, Hydrocarbon motor; 1,305,165, W. H. Ratcliff, Circuit breaker; 1,556,901, C. E. Berkdoll, Ignition device; 1,557,207, 1,593,339, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720. J. T. Fitzsimmons, Ignition timer; Re. 18,276, C. H. Kindl, same, filed Aug. 18, 1932, D. C., N. D. Ohio, E. Div., Doc. 4383, *Delco-Remy Corp.* v. *Echlin & Echlin et al.*

1,279,454, D. H. Schweyer, Train stopping apparatus; 1,389,602, same, Automatic train control system, appeal filed July 20, 1931, C. C. A., 3d Cir., Doc. 4679, *Schweyer Electric & Mfg. Co.* v. *Reading Co. et al.*

1,286,803. (See 1,272,056.) 1,305,165. (See 1,272,056.)

1,321,150, H. C. Root, Controlling valve for vacuum operated power means, filed Aug. 16, 1932, D. C., E. D. N. Y., Doc. E 6524, *Bragg-Kliesrath Corp.* v. *W. S. Vogel & Co., Inc.* Same, D. C., S. D. N. Y., Doc. E 70/281, *Bragg-Kliesrath Corp.* v. *Fink, Dumont & White, Inc.*

1,351,714. (See 1,268,473.) 1,372,065. (See 1,268 473.)

1,382,224. (See Re. 14,916.) 1,384,258. (See 1,643,653.)

1,389,602. (See 1,279,454.) 1,391,058. (See 1,643,653.)

1,436,459, J. Reece, Seat cover, D. C., E. D. Mo., E. Div., Doc. 10030, *Evr-Klean Seat Pad Co.* v. *Western Auto Supply Co.* Consent decree for plaintiff Aug. 15, 1932.

1,462,904, S. E. Finley, Method of preparing bituminous cement aggregate composition; 1,522,431, same, Apparatus for preparing bituminous cement aggregate composition, filed July 19, 1932, D. C., E. D. Mo. (St. Louis), Doc. 10044, *S. E. Finley et al.* v. *Asphalt Paving Co. of St. Louis, Mo.*

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confections, filed Aug. 18, 1932, D. C., E. D. N. Y., Doc. E 6528, *Good Humor Corp. of America* v. *North Pole Ice Cream Co.*

1,478,786, C. E. Hazelett, Method of assembling storage battery elements; 1,659,654, same, Method of making storage battery plates; 1,611,911, same, Apparatus for casting sheet metal, C. C. A., 8th Cir. (St. Louis), Doc. 9447, *The Western Battery & Supply Co.* v. *The Hazelett Storage Battery Co.* Decree reversed Aug. 11, 1932.

1,515,390, E. L. Hubbard, Golf club, filed Aug. 16, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3680, *Pyratone Products Corp.* v. *F. E. Burghardt et al.*

1,522,431. (See 1,462,904.)

1,527,498, J. S. Wallace, Steam generator attachment for stoves, filed Aug. 11, 1932, D. C., W. D. Wash., N. Div., Doc. 950, *U. S. Range-Steam Engineering Co.* v. *Douglas Steam Engineering Co., Inc.*

1,531,747. (See 1,600,668.) 1,531,784. (See 1,600,668.)

1,545,051. (See 1,600,668.) 1,554,054. (See Re. 14,916.)

1,556,901. (See 1,272,056.) 1,557,207. (See 1,272,056.)

1,570,776, H. W. Peters, Finger ring, filed Aug. 16, 1932, D. C. Mass., Doc. E 3712, *Peters Patent Corp.* v. *Bates & Klinke, Inc.*

1,578,895, A. L. Joyce, Chart, D. C., S. D. N. Y., Doc. E 65/80, *C. Kraft* v. *R. H. Macy & Co.* Consent and order of discontinuance Aug. 12, 1932.

1,593,339. (See 1,272,056.)

1,596,507, A. L. Otto, Metallic screen, filed Aug. 15, 1932, D. C. Conn. (New Haven), Doc. E 2244, *Orange Screen Co.* v. *J. J. Walton, Inc., et al.*

1,600,668, C. W. Hazelett, Process and apparatus for casting sheet metal; 1,645,424, same, Process of making storage battery; 1,545,051, same, Battery bridge terminal lug casting machine; 1,531,747, same, Sheet casting machine; 1,531,784, same, Sheet metal; 1,611,910, same, Method of making and shipping storage battery elements, C. C. A., 8th Cir. (St. Louis), Doc. 9448, *The Western Battery & Supply Co.* v. *G. A. Webster.* Decree reversed Aug. 11, 1932.

1,611,910. (See 1,600,668.) 1,611,911. (See 1,478,786.)

1,627,278, B. Dewey, Colloidal adhesive composition, filed Aug. 16, 1932, D. C., S. D. N. Y., Doc. E 70/283, *Dewey & Almy Chemical Co.* v. *S. H. Marks* (*Marks Chemical Works*).

1,643,653, G. Den Besten, Safety hitch; 1,391,058, Hulsebos & Den Besten, Plow safety hitch; 1,384,258, same, Automatically releasing coupling, D. C. Minn., 4th Div., Doc. E 1864, *G. Den Besten et al.* v. *G. H. Sterling et al.* Dismissed Aug. 9, 1932.

1,645,424. (See 1,600,668.) 1,659,654. (See 1,478,786.)

1,669,235, J. T. Fenton, Dry cleaning system; 1,728,343, Hatfield & Alliott, Cleaning process; 1,704,604, A. E. Hatfield, Purifying dry cleaning solvent, filed Aug. 11, 1932, D. C. Mo. (Kansas City), Doc. 15, *Butler Mfg. Co.* v. *W. A. Alexander* (*Alex. Cleaners*).

1,687,040. (See 1,272,056.)

1,690,776, F. R. Elston, Woven material, filed Aug. 15, 1932, D. C., S. D. N. Y., Doc. E 70/268, *B. F. Miller* v. *I. Rittenberg et al.*

1,704,604. (See 1,669,235.) 1,718,997. (See 1,470,524.)

1,728,343. (See 1,669,235.)

1,796,855, R. H. Ahlers, Electrical condenser; 1,815,496, W. A. Chryst, Ignition apparatus; 1,830,907, C. H. Kindl, Electrical condenser, filed Aug. 18, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4385, *Delco-Remy Corp.* v. *Echlin & Echlin, Inc., et al.*

1,812,704. (See 1,261,832.) 1,815,496. (See 1,796,855.)

1,815,745, R. E. Thompson, Safety razor; 1,858,316, Thompson & Smith, same, filed Aug. 12, 1932, D. C., S. D. N. Y., Doc. E 70/266, *Gillette Safety Razor Co.* v. *Silver Rod Stoves, Inc.*

1,825,720. (See 1,272,056.)

1,830,662, C. E. Kail, Method of providing article with one or more colored bands or stripes, filed Aug. 11, 1932, D. C. Mass., Doc. E 3709, *The A. & J. Kitchen Tool Co.* v. *Hamblin & Russell Mfg. Co.*

1,830,907. (See 1,796,855.)

1,854,736, H. J. Griffith, Tool for use in assembling universal joints, filed Aug. 16, 1932, D. C. Colo. (Denver), Doc. 9928, *H. J. Griffith* v. *Snap-on Tools, Inc.*

1,858,316. (See 1,815,745.) 1,864,459. (See Re. 18,498.)

1,864,460. (See Re. 18,498.)

Re. 14,916, A. H. Pitney, Mail marking machine and package meter; Re. 15,734, same, Postage meter and mail marking machine; 1,382,224, same, Locking mechanism for numeral wheels, etc.; 1,554,054, E. N. Weyer, Envelope mailing and stamping machine, D. C. Del., Doc. E 870, *Pitney-Bowes Postage Meter Co.* v. *Whitlock Metered Mail Co., Ltd.* Dismissed Aug. 10, 1932.

Re. 15,734. (See Re. 14,916.) Re. 18,276. (See 1,272,056.)

Re. 18,464, Johnson & Leach, Fuel oil burner, filed Aug. 15, 1932, D. C. Conn. (New Haven), Doc E 2241, *Lynn Products Co.* v. *Gabriel Grobard et al.* Doc. E 2242, *Lynn Products Co.* v. *Associated Oil Burner Co., Inc.* Doc E 2243, *Lynn Products Co.* v. *G. & L. Oil Burner Corp.* Same, D. C. Mass., Doc. E 3711, *Lynn Products Co.* v. *Frazier Sales & Mfg. Co., Inc.*

Re. 18,498, H. E. Norviel, Ignition apparatus; 1,864,459, same, Switch; 1,864,460, same, Switch and coil unit, filed Aug. 16, 1932, D. C., S. D. N. Y., Doc. E 70/284, *Delco-Remy Corp.* v. *Guaranteed Parts Co., Inc.*

Des. 65,187. (See Des. 76,819.)

Des. 76,819, G. N. Mas, Bottle; Des. 65,187, C. J. Howel, same, C. C. A., 4th Cir., Doc. 3312, *Orange-Crush Co.* v. *American Ornamental Bottle Corp. et al.* Decree affirmed Aug. 4, 1932.

T. M. 155,002. (See T. M. 208,352.)

T. M. 208,352, W. Ireland, Inc., Non-alcoholic beverage, syrups, extracts, etc.; T. M. 210,881, Canadian Club Corp., Non-alcoholic, maltless beverage, syrups, etc.; T. M. 155,002, J. J. McLaughlen, Ltd., Ginger ale, C. C. A., 3d Cir., Doc. 4830, *Canadian Club Corp.* v. *Canada Dry Ginger Ale, Inc.* Plaintiff restrained from using certain words in connection with manufacture and sale of beverages Aug. 12, 1932.

T. M. 210,881. (See T. M. 208,352.)

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 20, 1932

[VOL. 422. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 328,591. ISBELL SEED COMPANY, Jackson, Mich. Filed July 5, 1932.



For Farm, Garden, and Flower Seeds.

Claims use since Jan. 1, 1882, on farm seed; since Jan. 1, 1900, on garden and flower seed.

CLASS 2

Receptacles

Ser. No. 325,438. ODORA COMPANY, INC., New York, N. Y. Filed Mar. 24, 1932.

Odora Cedar-Fold

No claim is made to the word "Cedar-Fold" apart from the mark shown.

For Paper and Cardboard Clothing Storage Chests.

Claims use since Oct. 10, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 327,254. MYRON BAG CO., INC., New York, N. Y. Filed May 19, 1932.



No claim is made to the word "Bags" apart from the mark shown in the drawing, the representation of the bag being unqualifiedly disclaimed.

For Handbags.

Claims use since May 5, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

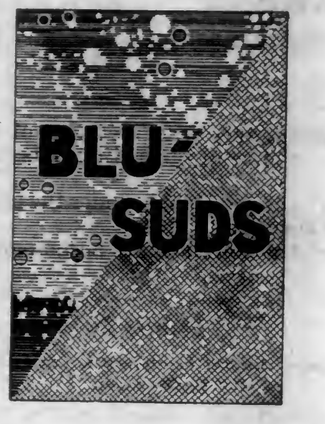
Ser. No. 324,795. MEYER & TRUDEAU, Alexandria, Va. Filed Mar. 4, 1932.

"DEFIER"

For Soap Cleaner for the Hands and for Household and Laundry Use.

Claims use since Mar. 1, 1932.

Ser. No. 326,238. WALTER D. VAUGHAN, doing business as Blu-Suds Manufacturing Company, Detroit, Mich. Filed Apr. 18, 1932.



The drawing is cross-hatched to indicate orange and blue.
For Detergents—Namely, Clothes-Washing Compounds.
Claims use since Mar. 14, 1932.

Ser. No. 327,781. JAMES H. RHODES & COMPANY, Chicago, Ill. Filed June 2, 1932.



For Steel Wool and Pumice Stone.
Claims use since January, 1914, on pumice stone; since January, 1921, on steel wool.

Ser. No. 328,135. NELSON, BAKER & COMPANY, Detroit, Mich. Filed June 20, 1932.

COLONIAL CLUB

For Shaving Cream.
Claims use since January, 10, 1919.

Ser. No. 329,326. DIVINE BROTHERS COMPANY, Utica, N. Y. Filed Aug. 4, 1932.

MIR

For Buffing Wheels, Polishing Wheels, Flexible Grinding Wheels, Buffing Belts, Polishing Belts, and Grinding Belts.
Claims use since Nov. 15, 1931.

Ser. No. 329,351. JAMES B. MCCOMB, New York, N. Y. Filed Aug. 5, 1932.

DENOVO

For Carpet and Rug Cleaning Compound in Cake, Powder, or Paste Form.
Claims use since Feb. 2, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 321,536. HECKEL BROS., Kansas City, Mo. Filed Nov. 27, 1931.



Exclusive use of the word "Oil" apart from the mark as shown on the drawing is not claimed.
For Medicated Oil for Hot Oils and Scalp Treatments.
Claims use since Oct. 24, 1931.

Ser. No. 322,666. WIEBOLDT STORES, INC., Chicago, Ill. Filed Jan. 2, 1932.

Franchette

For Skin Tonic, Astringent.
Claims use since Mar. 16, 1931.

Ser. No. 324,790. BERTRAM GRIGGS HOLT, New York, N. Y. Filed Mar. 4, 1932.

OCTOZONE

For Medicinal Preparations to be Used as a Specific in the Cutaneous and Subcutaneous Treatment of Rheumatism, Arthritis, and Allied Conditions Arising from Diseases of Microbic Origin.
Claims use since Feb. 18, 1932.

Ser. No. 326,326. KAM DRUG MANUFACTURING CO., INC., doing business as Kam Remedy Company, Durham, N. C. Filed Apr. 21, 1932.



No claim is made for the words "Trade Mark" apart from the mark shown.
For Preparation for Use in the Treatment of Simple or Nervous Headaches, Pains or Soreness Due to Colds or Neuralgia, and as a Sedative for the Nerves.
Claims use since 1917.

Ser. No. 326,410. PIETRO ZINZANI, Piacenza, Italy. Filed Apr. 22, 1932.

Premiata Magnesia al Latte di Giglio



No claim is made to the words "Premiata Magnesia al Latte di" apart from the mark shown in the drawing.
For Magnesia.
Claims use since March, 1915.

Ser. No. 327,342. COLE CHEMICAL COMPANY, Wilmington, Del., and St. Louis, Mo. Filed May 23, 1932.

(ENDO-COLE)

For Various Endocrine Compounds for the Treatment of Various Diseases—to wit, Acidosis, Agalactia, Amenorrhea, Anemia, Aspermia, Asthenia, Bronchial Asthma, Cholecystitis, Chlorosis, Diabetes Mellitus, Dysmenorrhea, Epilepsy (Pituitary), Frigidity (Sexual), Goitre Hypertension, Hypotension, Hypoadrenia, Hypogonadism, Hyperthyroidism, Hyperacidity, Impotence, Intestinal Indigestion, Liver Diseases (Functional), Malnutrition, Menorrhagia, Menopause, Menstrual Irregularities, Myxedema, Nausea and Vomiting of Pregnancy, Nephritis, Nervous Debility, Neurasthenia, Obesity, Ovarian Dysfunction, Paralysis Agitans, Pituitary Diseases, Prostatorrhea, Prostatectomy (Post-Operative), Retarded Mental and Physical Development in Children, Rickets, Sexual Frigidity, Sexual Neurasthenia, Senility, Sterility, Subinvolution of Uterus, Tetany, Tuberculosis, Uterine Hemorrage (Functional), Uterine Fibroids, Reconstructive Tonic Following Fevers, Colds, Pneumonia, and Operations; Puberty (Sexual Irregularities), Vomiting and Nausea of Pregnancy, Metorrhagia Ulcerated Conditions (Chronic), Hypo-Ovarianism, and the Like.
Claims use since Apr. 13, 1932.

Ser. No. 327,607. GEORGE J. C. SMITH, Pataskala, Ohio. Filed May 31, 1932.



No claim is made to the word "Lotion" apart from the mark as shown.
For Skin Lotion and a Liquid Shampoo.
Claims use since May 1, 1932.

Ser. No. 328,020. CHARLES L. SEVERY, Detroit, Mich. Filed June 15, 1932.

DOCTOR SEVERY'S VITALIFE

For Ointment for the Treatment of Nervous Ailments.
Claims use since May 1, 1932.

Ser. No. 328,076. THE SAN DEE COMPANY, Evansville, Ind. Filed June 17, 1932.



The drawing is lined for shading.
For Ointment Used for Treatment of Trichophytina (Athlete's Foot) and Ringworm of the Skin and Scalp.
Claims use since Feb. 18, 1932.

Ser. No. 328,077. BERNARDO SCHMUTZER, Valparaiso, Chile. Filed June 17, 1932.

ULCEROCON

For Medicine for the Stomach.
Claims use since January, 1930.

Ser. No. 328,116. GIACOMO CHELUCCI, Plains, Pa. Filed June 20, 1932.

JUVENTUS

For Hair Lotion.
Claims use since January, 1932.

Ser. No. 328,128. A. J. KRANK COMPANY, St. Paul, Minn. Filed June 20, 1932.



For Face Creams.
Claims use since Mar. 26, 1932.

Ser. No. 328,185. SAUL PHARMACAL CO. INC., New York, N. Y. Filed June 21, 1932.



The lining in the drawing indicates the color blue. All of the wording in the drawing with the exception of term "Saul's" is disclaimed.

For Ointment for the Treatment of Epidermophytosis.
Claims use since June 17, 1932.

Ser. No. 328,257. ACIDACURE COMPANY, Warrenton, Va. Filed June 20, 1932.

ACIDACURE

For Medicine Used for the Treatment of Acidity, Flatulency, Headache from Acidity, After Effect of Excessive Use of Alcoholic Beverages, Bad Breath from Acidity, Seasickness, and Other Ailments Caused by Acidity.
Claims use since May 1, 1932.

Ser. No. 328,329. HART PRODUCTS COMPANY, Toledo, Ohio. Filed June 27, 1932.

Nils

For Preparation to be Used for Dysmenorrhea.
Claims use since Apr. 3, 1931.

Ser. No. 328,333. BERTHA KOHAN, Los Angeles, Calif. Filed June 27, 1932.

EZ-EM

For Salve for Boils, Carbuncles, Fistula, Eczema, Ringworm, Acne, Burns, Cement Poison, Sunburns, Poison Ivy, and Barber's Itch.
Claims use since April, 1931.

Ser. No. 328,334.. LONJI COMPANY, Des Moines, Iowa. Filed June 27, 1932.

Lonji

For Liquid Substance for Tinting or Dyeing Lingerie, Household Silks, Artificial Silks, Rayon, Linen, Cotton Goods, etc.
Claims use since June 1, 1932.

Ser. No. 328,422. ARTHUR GOLD, Jersey City, N. J. Filed June 30, 1932.



The stippled lined portions are relatively darker green and the plain lined portions are relatively lighter green.

For Cold Cream, Cleansing Cream, Vanishing Cream, Skin and Tissue Cream, Bleach Cream, Almond Cream, Pore Cleanser—Being a Tonic Liquid for Cleansing the Pores of the Skin of Deep-Seated Impurities—Orange Blossom Skin Tonic, Astringent for Oily Skin, Astringent for Dry Skin, Rouge, Lip Stick and Face Powder.
Claims use since Sept. 30, 1931.

Ser. No. 328,436. LA COMPAGNIE FERMIÈRE DE L'ETABLISSEMENT THERMAL DE VICHY, SOCIETE ANONYME, Paris, France. Filed June 30, 1932.



The wording appearing in the drawing is disclaimed with the exception of the words "Compagnie Fermiére de l'Etablissement thermal de Vichy" apart from the mark shown.

For Pastilles Made from Mineral Waters.
Claims use since 1923.

Ser. No. 328,437. LA COMPAGNIE FERMIÈRE DE L'ETABLISSEMENT THERMAL DE VICHY, SOCIETE ANONYME, Paris, France. Filed June 30, 1932.



The color lining is to indicate shading only. The wording appearing in the drawing is disclaimed with the exception of the words "Etablissement thermal de Vichy" apart from the mark shown. The representation of the labels are also disclaimed.

For Mineral Water Salts Which Represent in Dry Form the Constituents of Natural Mineral Water Known as French Vichy.
Claims use since 1925.

Ser. No. 328,456. VIVINY PERFUMERS, INC., doing business as Dubois Laboratories, West Haven, Conn. Filed June 30, 1932.



Applicant disclaims the use of the word "Pinehurst" apart from the mark as shown.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes,

Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since February, 1930.

Ser. No. 328,530. JOUBERT CIE, INC., New York, N. Y. Filed July 2, 1932.



The portrait appearing on the drawing is fanciful.
For Brilliantine, Toilet Water, Cold Cream, Vanishing Cream, Face Powder, Perfume, Talcum Powder, Lipstick, Cream Rouge.
Claims use since Mar. 18, 1932.

Ser. No. 328,539. SAMUEL SILVERBERG, doing business as Citrasol Laboratories, New York, N. Y. Filed July 2, 1932.

CITRASOL

For Liquid Laxative.
Claims use since June 27, 1932.

Ser. No. 328,667. ADAM HILGER, LIMITED, London, England. Filed July 9, 1932.

H. S.

For Spectroscopically Standardized Chemical Substances for Use in Spectroscopic and Physical Research.
Claims use since Apr. 3, 1929.

Ser. No. 328,699. PARKE, DAVIS & COMPANY, Detroit, Mich. Filed July 11, 1932.

ARSODOXYL

For Preparation Used for the Treatment of Syphilitic and Similar Types of Infection.
Claims use since June 16, 1932.

Ser. No. 328,700. PARKE, DAVIS & Co., Detroit, Mich. Filed July 11, 1932.

MAPHARSEN

For Preparation Used in the Treatment of Syphilitic and Related Types of Infection.
Claims use since June 14, 1932.

Ser. No. 328,706. EUGENE SCHMITT, Astoria, Long Island, N. Y. Filed July 11, 1932.

RESOLUTE

For Finger Wave Preparation.
Claims use since July 8, 1932.

Ser. No. 328,708. TERRI COSMETICS CORPORATION, New York, N. Y. Filed July 11, 1932.

CLESCALP

For Hair Preparations.
Claims use since June, 1931.

Ser. No. 328,819. LUIGI PAGLIARO, doing business as California Products Company, Pittsburgh, Pa. Filed July 15, 1932.



For General Tonic.
Claims use since June 18, 1932.

Ser. No. 329,278. BLANCHE CERVELLI, San Francisco, Calif. Filed Aug. 2, 1932.



For Skin Lotion.
Claims use since July 1, 1930.

Ser. No. 329,300. J. WARREN BULLEN, doing business as The Bullen Chemical Company, Folcroft, Pa. Filed Aug. 3, 1932.

TAR-O-LENE

For Insecticide and Disinfectant.
Claims use since July 11, 1909.

CLASS 10

Fertilizers

Ser. No. 329,222. ELBERT A. CORBIN, Jr., Gradyville, Pa. Filed July 30, 1932.



For Fertilizer.
Claims use since May 2, 1932.

CLASS 12

Construction Materials

Ser. No. 318,607. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Aug. 31, 1931.

PEERLESS



The word "Peerless" is disclaimed apart from the mark as shown.
For Wall Board, Plaster Board and Plaster.
Claims use since 1907 for plaster; since April, 1921, for wall board and plaster board.

Ser. No. 329,033. THE WESTERN LIME & CEMENT CO., Milwaukee, Wis. Filed July 28, 1932.



The word "Pure" is disclaimed for registration purposes apart from the mark shown in the drawing.
For Lime.
Claims use since Jan. 13, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 328,183. PITTSBURGH PIPING AND EQUIPMENT CO., Pittsburgh, Pa. Filed June 21, 1932.

CREFLEX

For Tubular Metal Bends, of Wrought Metal in the Rough or Semi-Finished.
Claims use since Mar. 18, 1932.

CLASS 15

Oils and Greases

Ser. No. 321,821. RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y. Filed Dec. 5, 1931.

RICH-TOP-LUBE

For Petroleum Products—Namely, Lubricating Oils, Gasoline.
Claims use since Oct. 1, 1931.

Ser. No. 328,505. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla. Filed July 1, 1932.

Philkool

For Refined, Semi-Refined, and Unrefined Oils and Greases Made from Petroleum, Both With and Without Admixture of Animal, Vegetable, or Mineral Substances, for Illuminating, Burning, Power, Fuel, and Lubricating Purposes.
Claims use since June 17, 1932.

Ser. No. 328,506. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla. Filed July 1, 1932.

Philkut

For Refined, Semi-Refined, and Unrefined Oils and Greases Made from Petroleum, Both With and Without Admixture of Animal, Vegetable, or Mineral Substances for Illuminating, Burning, Power, Fuel, and Lubricating Purposes.
Claims use since June 17, 1932.

Ser. No. 328,673. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed July 9, 1932.

KOLAY

For Coal Dust Controlling Mineral Oil.
Claims use since Dec. 21, 1931.

Ser. No. 328,769. JOHNSON OIL REFINING COMPANY, Chicago, Ill. Filed July 13, 1932.



No claim is made to the words "Oiler" and "Household Oil" apart from the mark shown in the drawing. The shading on the drawing is to indicate orange color.
For Lubricating Oils for Use in the Home, Office, or Garage.
Claims use since May 10, 1932.

Ser. No. 329,225. THE EL DORADO REFINING COMPANY, El Dorado, Kans. Filed July 30, 1932.



For Gasoline.
Claims use since Oct. 15, 1928.

Ser. No. 329,251. BALLARD OIL COMPANY OF WORCESTER, INC., Worcester, Mass. Filed Aug. 1, 1932.

King Philip

For Lubricating Oils, Lubricating Greases, and Gasoline.
Claims use since May 1, 1930.

Ser. No. 329,263. NAGY BROS. MOTOR COMPANY, Bethlehem, Pa. Filed Aug. 1, 1932.



For Gasoline, Motor Lubricating Oils, Fuel Oils, and Machine Lubricating Oils.
Claims use since Feb. 11, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 321,782. HENRY SCHIEBEL, doing business as Newco Co., Mount Vernon, N. Y., assignor to Newco Manufacturing Corporation, Mount Vernon, N. Y., a Corporation of New York. Filed Dec. 4, 1931.

NEWCO

For Liquid Wax Being a Finishing Material for Wooden Composition Floors, Furniture, and Woodwork.
Claims use since Nov. 27, 1931.

Ser. No. 325,659. S. C. JOHNSON & SON, Racine, Wis. Filed Mar. 30, 1932.

PERMACOTE

For Paints and Undercoats.
Claims use since Apr. 7, 1920.

Ser. No. 328,416. BINNEY & SMITH CO., New York, N. Y. Filed June 30, 1932.

KOBLAK

For a Partly Prepared Paint Product for Use by Paint or Lacquer Manufacturers, Said Product Comprising a Combination of Pigments or Colors with Nitrocellulose, Natural Resin, Synthetic Resin, Oils, or Other Paint or Lacquer Ingredients.
Claims use since April, 1931.

Ser. No. 329,256. CHIPMAN CHEMICAL COMPANY, INC., Boundbrook, N. J. Filed Aug. 1, 1932.

RUSKILLA

For Ready-Mixed Paint.
Claims use since July 1, 1911.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 329,590. ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed Aug. 17, 1932.

LINOWALL

For Linoleum and Felt Base Wall Coverings.
Claims use since Aug. 13, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 324,416. WESTINGHOUSE LAMP COMPANY, Bloomfield, N. J. Filed Feb. 19, 1932.

GRENZ

For Vacuum or Gas-Filled Tubes and Particularly for X-Ray Tubes.
Claims use since Feb. 21, 1931.

Ser. No. 325,721. THE OKONITE COMPANY, Passaic, N. J. Filed Apr. 1, 1932.



The trade-mark consists in a design composed of alternate longitudinal stripes of black and yellow, woven into the loom of the wire or cable, such stripes crossed at regular intervals by a helical stripe consisting of a single strand colored red, as shown in the drawing which is lined to indicate the colors red and yellow. No claim is made to the representation of a section of wire.
For Insulated Wires and Cables.
Claims use since Mar. 15, 1932.

Ser. No. 329,229. THE FITZGERALD MFG. COMPANY, Torrington, Conn. Filed July 30, 1932.

THE MIXER KING

No claim is made to the word "Mixer" apart from the mark shown in the drawing.
For Electric Food Mixer and Juice Extractor.
Claims use since July 22, 1932.

Ser. No. 329,393. WITHERBEE STORAGE BATTERY CO., INC., Belleville, N. J. Filed Aug. 5, 1932.

Witherbee

For Storage Batteries.
Claims use since July 1, 1927.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 304,964. CARL F. MICHELFELDER, New Rochelle, N. Y. Filed Aug. 28, 1930.

PICKWICK DUPLEX

For a Portable Golf Game Apparatus, Consisting of a Runway and a Perforated Target Through Which the Balls are Knocked.
Claims use since Aug. 15, 1930.

Ser. No. 325,217. FINLAYSON, BOUSFIELD & CO., LTD., Johnstone, Scotland. Filed Mar. 17, 1932.

THISTLE BRAND

In the drawing no claim is made to the word "Brand."
For Fishing Lines.
Claims use since Nov. 30, 1925.

Ser. No. 328,458. ALEXANDER WEINBERG, New York, N. Y. Filed June 30, 1932.

SKOOPS

For a Board Game with Pockets and a Piece or Pieces to be Thrown Thereat.
Claims use since Apr. 10, 1932.

Ser. No. 328,988. RAYMOND A. HENNINGS, New Orleans, La. Filed July 22, 1932.

RAYMAE

For a Table Board Games Played with Balls, Coin-Controlled and Ball-Projecting Amusement Devices.
Claims use since Sept. 9, 1931.

Ser. No. 329,185. HARRISON WHOLESALE COMPANY, Chicago, Ill. Filed July 29, 1932.

DUCHESS

For Golf Clubs and Parts Thereof, Golf Balls, Golf Tees, Golf Club Bags, Tennis Rackets, Tennis Balls, Baseballs, Baseball Bats, Baseball Gloves, Baseball Catchers' Masks, Tennis Court Markers, Mechanical Toys, Toy Musical Instruments, Party and Holiday Favors, Fish Hooks, Fishing Rods, Reels, Fishing Creels, Christmas Tree Ornaments, Dolls, Spinning Tops, Toy Animals, and Toy Guns.
Claims use since Jan. 1, 1932.

Ser. No. 329,203. DAVID C. ROCKOLA, Chicago, Ill. Filed July 29, 1932.

JUGGLE BALL

No claim is made to the word "Ball" except in the association shown in the drawing.
For Skill Table Board Game Played with Pieces.
Claims use since July 15, 1932.

Ser. No. 329,210. JOSEPH M. RUSSELL, Cleveland, Ohio. Filed July 21, 1932.

BLACK HAWK

For Tennis Rackets.
Claims use since May 1, 1929.

Ser. No. 329,550. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed Aug. 15, 1932.

SNOOKERETTE

For Game Played on a Billiard Table, with Balls and Skittles or Wooden Pins.
Claims use since June 16, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 324,715. LIBERTY STARTER COMPANY, Detroit, Mich., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 2, 1932.

LIBERTY STARTER

The use of the word "Starter" apart from the trade-mark as shown is disclaimed.
For Electric Coil Making and Assembling Machinery—Namely, Winding Machines, Wrapping Machines, Stripping Machines, Positioning Machines.
Claims use since Aug. 21, 1918.

Ser. No. 329,308. HEPPENSTALL COMPANY, Pittsburgh, Pa. Filed Aug. 3, 1932.

RECORD

For Razor Blades.
Claims use since July 18, 1932.

Ser. No. 329,309. HEPPENSTALL COMPANY, Pittsburgh, Pa. Filed Aug. 3, 1932.

TRY-ME

For Razor Blades.
Claims use since July 18, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 329,201. RHODES-PERRY-MARTIN, INC., St. Louis, Mo. Filed July 29, 1932.

THE BAND BOX

For Machinery for Dry Cleaning of Fabrics.
Claims use since Nov. 28, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 328,454. UNITED STATES GAUGE COMPANY, New York, N. Y. Filed June 30, 1932.

SUPERGAUGE

No claim is made to the word "Gauge" apart from the mark disclosed in the drawing.
For Gauges.
Claims use since Feb. 16, 1932.

Ser. No. 328,455. UNITED STATES GAUGE COMPANY, New York, N. Y. Filed June 30, 1932.

SUPERGAUGE

U.S. GAUGE CO. N.Y.

Applicant claims ownership of registered trade-mark #86,747 dated May 28, 1912.
No claim is made to the word "Gauge" apart from the mark as illustrated in the drawing.
For Gauges.
Claims use since Feb. 16, 1932.

Ser. No. 329,429. RENAUD OPTICAL COMPANY, INC., Petersburg, Va. Filed Aug. 9, 1932.

LENSES OF MODERN AND SCIENTIFIC ACCURACY
SUPERAY
LENSES

Petitioner disclaims the terms "Lenses of Modern and Scientific Accuracy" and "Lenses" as shown in the drawing of the mark.
For Ophthalmic Lenses.
Claims use since July 25, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 329,285. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed July 30, 1932.

INTERNATIONAL

For Flat-Ware and Hollow-Ware Made of or Plated with Precious Metals.
Claims use since July 25, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,178. THE WOOSTER BRUSH COMPANY, Wooster, Ohio. Filed May 16, 1932.

"SHASTETTE"

For Paint and Varnish Brushes.
Claims use since 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 328,965. SERVEL, INC., New York, N. Y. Filed July 21, 1932.

Humidraft

For Household and Store Refrigerators and Parts Thereof, and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since July 9, 1932.

Ser. No. 329,004. UNIVERSAL REFRIGERATOR COMPANY, Philadelphia, Pa. Filed July 22, 1932.

POLAR BEAR

For Water Filters and Household Electric Refrigerators.
Claims use since Dec. 20, 1931.

Ser. No. 329,514. TENNESSEE ENAMEL MANUFACTURING COMPANY, Nashville, Tenn. Filed Aug. 12, 1932.

TEMCO

For Iced and Automatic Refrigerators and Porcelain Enameled Refrigerator Casings, Shelves, Drip Pans, and Pipes.
Claims use since April, 1927.

CLASS 32

Furniture and Upholstery

Ser. No. 325,358. THE WEDLER-SHUFORD CO., St. Louis, Mo. Filed Mar. 21, 1932.

FIBRETEX KOVERETTE

For Tailored Vehicle Seat Covers and Seat Pads.
Claims use since Jan. 27, 1932.

Ser. No. 329,513. TENNESSEE ENAMEL MANUFACTURING COMPANY, Nashville, Tenn. Filed Aug. 12, 1932.

TEMCO

For Porcelain Enameled Tables and Table Tops, Porcelain Enameled Kitchen Cabinets, Porcelain Enameled Display Cases, and Porcelain Enameled Slides and Shelves for Cabinets.
Claims use since September, 1921.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,479. FRED'K N. ROSS INC., Detroit, Mich. Filed May 26, 1932.

MOTOVENT

For Ventilators, Particularly Ventilators for Windows and Walls of Buildings Each Having a Fan for Propelling a Current of Air Therethrough.
Claims use since Nov. 1, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 326,818. THE GENERAL TIRE & RUBBER COMPANY, Akron, Ohio. Filed May 6, 1932.

streamline

For Non-Metallic Tires and Inner-Tubes for Use in Non-Metallic Tires.
Claims use since Apr. 21, 1931.

CLASS 37

Paper and Stationery

Ser. No. 327,083. FRANK FISCHER, Whiting, Ind. Filed May 12, 1932.

RIPPO

The representation of the cord is hereby disclaimed.
For Correspondence and Mailing Envelopes.
Claims use since Jan. 1, 1932.

Ser. No. 327,435. FANNIE GUSMAN, doing business as Mary Ann Tissue Mills Company, Brooklyn, N. Y. Filed May 25, 1932.

MARY ANN

For Paper Napkins, Facial Towels, Tissues, and Toilet Paper.
Claims use since Jan. 1, 1931.

Ser. No. 328,888. FOIL PRODUCTS CORPORATION, New York, N. Y. Filed July 19, 1932.

FOILWRAP

Applicant disclaims any and all rights to a monopoly of the use of the word "Foilwrap" apart from the mark shown in the drawing.
For Wrapping Paper.
Claims use since June 9, 1932.

Ser. No. 329,433. STRATHMORE PAPER COMPANY, West Springfield, Mass. Filed Aug. 9, 1932.

Intrinsic

For Writing and Printing Paper.
Claims use since July 13, 1932.

CLASS 38

Prints and Publications

Ser. No. 329,312. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Aug. 3, 1932.

ARCH of EVENTS

The lining on the drawing is for shading purposes only.
For Newspaper Section.
Claims use since 1912.

CLASS 39

Clothing

Ser. No. 324,691. M. N. ARNOLD SHOE COMPANY, North Abington, Mass. Filed Mar. 2, 1932.

ARNOLD
GLOVE GRIP

For Shoes of Leather, Rubber, or Fabric and of Combinations of Those Materials.
Claims use since 1910.

Ser. No. 327,169. RICH-STIX DRY GOODS CO., St. Louis, Mo. Filed May 16, 1932.

Hi-POINTE

The drawing is lined for red and green.
For Wearing Apparel for Men, Women, and Children—Namely, Men's and Boys' Dress and Work Shirts and Blouses, and Men's, Women's, Youths', and Children's Pajamas; Women's and Children's Night Gowns, and Men's and Boys' Night Shirts.
Claims use since Apr. 28, 1932.

Ser. No. 328,648. SILVERITE-GUTTERMAN CO., Boston, Mass. Filed July 8, 1932.

SKUFFER

For Leather Patches for Knees and Elbows of Garments.
Claims use since Apr. 9, 1932.

Ser. No. 328,609. KATHRYN S. JORDAN, New York, N. Y. Filed July 9, 1932.

CLOCHETTE

For Headgear in the Nature of a Cap-Veil.
Claims use since June 22, 1932.

Ser. No. 328,796. MALROY HAT AND CAP CO., Minneapolis, Minn. Filed July 14, 1932.

MALROY

For Caps and Fur Felt Hats for Men.
Claims use since 1920 on caps; since 1927 on fur felt hats.

Ser. No. 328,812. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed July 15, 1932.



The word "Hosiery" and the outline representation of the wrap are disclaimed apart from the other features of the mark as shown in the drawing.
For Hosiery.
Claims use since June 11, 1932.

Ser. No. 328,982. WALTER A. FANKHAUSER, doing business as Walters Shoe Company, New York, N. Y. Filed July 22, 1932.



No claim is made to the exclusive right to use the words "Arch" and "Health" apart from the mark shown.
For Leather Shoes.
Claims use since June 15, 1932.

Ser. No. 328,996. PENNWAY MANUFACTURING COMPANY, Harrisburg, Pa. Filed July 22, 1932.

Pennway

For Children's Clothing—Namely, Creepers, Rompers Wash Suits, Pajamas, Bath Robes, Sleepers, Play Suits, Sun Suits, and Gym Suits.
Claims use since Mar. 15, 1932.

Ser. No. 329,505. JOS. B. HABER, INC., Philadelphia, Pa. Filed Aug. 12, 1932.

GUARDAGIN

For Sweaters and Sweater Coats.
Claims use since July 28, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,204. AMERICAN BEMBERG CORPORATION, New York, N. Y. Filed June 22, 1932.

LINTELLA

For Fabrics Made Wholly or Partially of Artificial Silk.
Claims use since May 25, 1932.

Ser. No. 328,410. MARIE DORROS, INC., New York, N. Y. Filed June 25, 1932.



For Bridal Veils.
Claims use since Sept. 10, 1930.

Ser. No. 329,152. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 28, 1932.

Shaga

For Silk Fabrics in the Piece.
Claims use since May 23, 1932.

Ser. No. 329,183. THE GLEMBY COMPANY, INC., New York, N. Y. Filed July 29, 1932.

Monogram

For Hair Nets.
Claims use since July 22, 1932.

Ser. No. 329,230. GARFINKEL & RITTER, New York, N. Y. Filed July 30, 1932.

SatinDasché

No claim is made to the exclusive use of the word "Satin."
For Silk Piece Goods.
Claims use since May 1, 1932.

Ser. No. 329,246. TROY BLANKET MILLS, Troy, N. H. Filed July 30, 1932.



For Piece Goods and Blankets of Cotton, Wool, or Combinations Thereof.
Claims use since July 20, 1932.

CLASS 43

Thread and Yarn

Ser. No. 329,021. LILY MILL AND POWER COMPANY, Shelby, N. C. Filed July 23, 1932.

PANSY

For Sewing Thread.
Claims use since July 5, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 327,530. SCHEUERMAN-GRISTLINGER MFG. CO. INC., Peekskill, N. Y. Filed May 27, 1932.

BABY



NOCOLIC BOTTLE

SUPERIOR

No claim is made to the representation of a bottle apart from the mark as shown in the drawing nor to the words "Baby", "Bottle", "Nocolic" and "Superior" apart from the mark as shown.
For Nursing Bottles.
Claims use since Mar. 10, 1932.

Ser. No. 328,881. STEFFAN AND ROHRER, San Francisco, Calif. Filed July 16, 1932.



For Blowtorch as a Dental Appliance.
Claims use since May 16, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 317,106. A. J. CANFIELD CO., Chicago, Ill. Filed July 20, 1931.

KOALA

For Maltless, Carbonated Beverages Sold as Soft Drinks.
Claims use since May 27, 1931.

Ser. No. 317,164. ARTURO G. DE FAUZON, Cleveland, Ohio, assignor to The Pam-Pa Company of America, Inc., Wilmington, Del., a Corporation of Delaware. Filed July 21, 1931.

PAM-PA

For Nonalcoholic Maltless Beverage Derived from Yerba Maté and Compound for Making.
Claims use since June 19, 1931.

Ser. No. 326,828. FREDERICK C. NESSLY, doing business as Rah-Na Co., Seattle, Wash. Filed May 6, 1932.

Rah-Na

For Nonalcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since Feb. 15, 1932.

Ser. No. 329,431. CHERRIE B. STEIN, Pittsburgh, Pa. Filed Aug. 9, 1932.

FRIZ

For Nonalcoholic Maltless Beverages Sold as Soft Drinks and Syrups Therefor.
Claims use since July 1, 1931.

Ser. No. 329,556. MAX GLAZER, doing business as Real Juice Company, Dallas, Tex. Filed Aug. 15, 1932.

WOOSIES

For Root Beer.
Claims use since Mar. 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 316,150. COAST FISHING CO., Wilmington, Calif. Filed June 23, 1931.



All reading matter on the drawing with the exception of the word "Biltmore" is disclaimed. The lining on the drawing indicates the colors red and gold.
For Canned Tuna.
Claims use since April, 1929.

Ser. No. 317,761. HARRY FRANCISCO, doing business as Francisco Company, Atlanta, Ga. Filed Aug. 7, 1931.

French Cream Flakes

The words "French Cream" are disclaimed apart from the mark shown on the drawing.
For Ice Cream.
Claims use since 1908.

Ser. No. 319,034. EDWARD J. LUEBBE, doing business as Luebbe Products Co., Cincinnati, Ohio. Filed Sept. 14, 1931.

DANDE
All-Ways.

For Malt Syrup.
Claims use since Aug. 17, 1922.

Ser. No. 321,402. ROBERT B. WURGAFT, Pomona, Calif. Filed Nov. 21, 1931.

COLORBOX

For Fresh Citrous and Deciduous Fruits.
Claims use since Sept. 23, 1931.

Ser. No. 325,136. CONSOLIDATED LOBSTER CO., INC., Gloucester, Mass. Filed Mar. 15, 1932.

Ocean-Clear

For Live Lobsters and Cooked Lobsters.
Claims use since Mar. 11, 1932.

Ser. No. 327,317. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed May 21, 1932.

SUPER-X

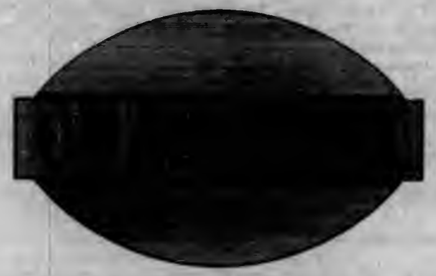
For Powdered Dehydrated Whole Egg, Powdered Dehydrated Egg Albumen, and Powdered Dehydrated Egg Yolk.
Claims use since Feb. 26, 1932.

Ser. No. 328,219. JOHN F. HUNT & CO., INC., New York, N. Y. Filed June 22, 1932.

KEY BRAND SCHLUSSEL
The Key to Better Beverages

No claim is made to the exclusive use of the words "Brand" or "Better Beverages" apart from the mark as shown in the drawing.
For Dry Yeast.
Claims use since May 25, 1932.

Ser. No. 328,331. JOHN F. JELKE COMPANY, Chicago, Ill. Filed June 27, 1932.



The lining on the drawing indicates the colors red, blue, and yellow.
For Oleomargarine, Evaporated Milk, Mayonnaise, Salad Dressing, Sandwich Spread, French Dressing, and Thousand Island Dressing.
Claims use since Mar. 24, 1932.

Ser. No. 328,735. FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed July 12, 1932.

ARTURO

For a Sauce Consisting of a Combination of Tomatoes, Mushrooms, Peppers, Onions, Condiments, and Spices.
Claims use since June 15, 1932.

Ser. No. 328,818. PACKET TEA CORPORATION OF AMERICA, New York, N. Y. Filed July 15, 1932.

WONDERLEAF

For Tea.
Claims use since May 24, 1932.

Ser. No. 328,912. CHASE-WILLIAMS CORPORATION, New York, N. Y. Filed July 20, 1932.

MELZO

The cross-hatching in the drawing is for shading purposes only.
For Concentrated Accessory Tonic Health Food.
Claims use since Jan. 15, 1932.

Ser. No. 329,142. FEDERAL TEA COMPANY, INC., Baltimore, Md. Filed July 28, 1932.

Sweet-Cup

For Tea.
Claims use since April, 1920.

Ser. No. 329,269. NICHOLAS WAPLER COMPANY, New York, N. Y. Filed Aug. 1, 1932.



For Feed for Fish.
Claims use since March, 1931.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,585. JAMES MCCRADIS & COMPANY, LIMITED, Glasgow, Scotland. Filed Aug. 16, 1932.

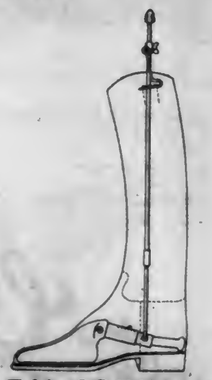
MAK' READIE

For Whiskey.
Claims use since 1927.

CLASS 50

Merchandise Not Otherwise Classified

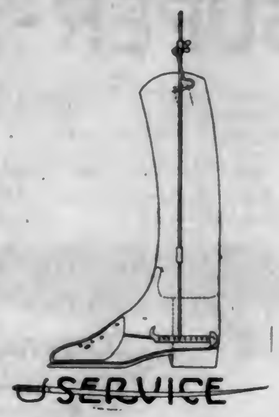
Ser. No. 328,149. WILLIAM OTTO WEISKOTTEN, doing business as Equitation Specialty Co., San Diego, Calif. Filed June 20, 1932.



EQUESTRIAN

The representation of the goods and the boot which appear on the drawing are disclaimed apart from the mark shown.
For Boot Trees.
Claims use since Aug. 25, 1931.

Ser. No. 328,150. WILLIAM OTTO WEISKOTTEN, doing business as Equitation Specialty Co., San Diego, Calif. Filed June 20, 1932.



SERVICE

The representation of the goods, the boot and the word "Service" which appear on the drawing are disclaimed apart from the mark shown.
For Boot Trees.
Claims use since Aug. 25, 1931.

Ser. No. 328,390. ANCHOR SALES COMPANY, Los Angeles, Calif. Filed June 29, 1932.

ANCHOR PHONE PHONE

For Rubber Bases Designed for Application to Telephones, to Prevent Sliding of Telephone Table or Desk Instruments.
Claims use since Apr. 1, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 20, 1932

297,509. LENSES FOR EYEGLASSES AND SPECTACLES. WALL & OCHS, INCORPORATED, Philadelphia, Pa.
Filed November 25, 1931. Serial No. 321,509. PUBLISHED JUNE 14, 1932. Class 26.

297,510. SHOES CONSTRUCTED OF LEATHER. THE H. C. GODMAN COMPANY, Columbus, Ohio.
Filed December 7, 1931. Serial No. 321,874. PUBLISHED JULY 5, 1932. Class 39.

297,511. PREPARED FOOD FOR DOGS, CATS, AND OTHER CARNIVOROUS ANIMALS. CHAPPEL BROS., INC., Rockford, Ill.
Filed December 2, 1931. Serial No. 321,678. PUBLISHED FEBRUARY 2, 1932. Class 46.

297,512. PREPARED FOOD FOR DOGS, CATS, AND OTHER CARNIVOROUS ANIMALS. CHAPPEL BROS., INC., Rockford, Ill.
Filed December 2, 1931. Serial No. 321,677. PUBLISHED JANUARY 19, 1932. Class 46.

297,513. PORTLAND CEMENT. NAZARETH CEMENT COMPANY, Nazareth, Pa.
Filed November 18, 1931. Serial No. 321,116. PUBLISHED JANUARY 19, 1932. Class 12.

297,514. SALT PORK. GEO. A. HORMEL & COMPANY, Austin, Minn.
Filed November 21, 1931. Serial No. 321,882. PUBLISHED JUNE 28, 1932. Class 46.

297,515. INHALANTS FOR THE RELIEF OF CONGESTIONS OF THE NASAL CAVITY. HART DRUG CORPORATION, Miami, Fla.
Filed December 1, 1931. Serial No. 321,645. PUBLISHED MARCH 1, 1932. Class 6.

297,516. MEN'S LEATHER AND FABRIC SHOES. HAMILTON, BROWN SHOE COMPANY, St. Louis, Mo.
Filed November 9, 1931. Serial No. 320,926. PUBLISHED JULY 5, 1932. Class 39.

297,517. MEN'S AND YOUTHS' TROUSERS AND PANTS. ISADORE MEYERS, Philadelphia, Pa.
Filed November 7, 1931. Serial No. 320,897. PUBLISHED JULY 5, 1932. Class 39.

297,518. MEN'S AND YOUTHS' TROUSERS AND PANTS. ISADORE MEYERS, Philadelphia, Pa.
Filed November 7, 1931. Serial No. 320,896. PUBLISHED JULY 5, 1932. Class 39.

297,519. DEODORANT. EDWARD S. COCKLE, doing business as Brom-O-Doro Co., New York, N. Y.
Filed November 4, 1931. Serial No. 320,778. PUBLISHED DECEMBER 22, 1931. Class 6.

297,520. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed October 16, 1931. Serial No. 320,144. PUBLISHED DECEMBER 22, 1931. Class 46.

297,521. FELT FOR VIBRATION AND SOUND DEADENING. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed February 24, 1932. Serial No. 324,440. PUBLISHED APRIL 12, 1932. Class 12.

297,522. PHOTOGRAPHIC REPRODUCTIONS OF IMPRINTED MATTER, DRAWINGS, PHOTOGRAPHS AND DOCUMENTS. FRANK G. STOBIE, doing business as Stobie Photo Copy Company, St. Louis, Mo.
Filed February 29, 1932. Serial No. 324,630. PUBLISHED JULY 5, 1932. Class 38.

297,523. COFFEE. ARTHUR DARBOVEN, doing business as J. J. Darboven, Hamburg, Germany.
Filed March 2, 1932. Serial No. 324,701. PUBLISHED JUNE 28, 1932. Class 46.

297,524. DIETARY MATERIAL USED FOR MODIFYING MILK FOR INFANT FEEDING AND ALSO AS AN ARTICLE OF GENERAL DIET. BURROUGHS WELLCOME & CO. (U. S. A.) INC., New York, N. Y.
Filed March 5, 1932. Serial No. 324,817. PUBLISHED JUNE 28, 1932. Class 46.

297,525. FOOD PRODUCTS. COMMERCIAL MERCHANDISING CORPORATION, Cincinnati, Ohio.
Filed February 25, 1932. Serial No. 324,459. PUBLISHED JUNE 28, 1932. Class 46.

297,526. FOOD PRODUCTS. COMMERCIAL MERCHANDISING CORPORATION, Cincinnati, Ohio.
Filed February 25, 1932. Serial No. 324,460. PUBLISHED JUNE 28, 1932. Class 46.

297,527. MEN'S AND WOMEN'S STRAW HATS AND HAT BODIES. STRAW HAT CORPORATION OF AMERICA, New York, N. Y.
Filed March 2, 1932. Serial No. 324,726. PUBLISHED JULY 5, 1932. Class 39.

297,528. MONTHLY PUBLICATION. SPECIAL LIBRARIES ASSOCIATION, New York, N. Y.
Filed February 11, 1932. Serial No. 324,125. PUBLISHED JUNE 28, 1932. Class 38.

297,529. STOCK AND DAIRY FEED. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y.
Filed May 24, 1932. Serial No. 327,887. PUBLISHED JUNE 28, 1932. Class 46.

297,530. DOG FOOD. NEIGHBOR PRODUCTS COMPANY, Chicago, Ill.
Filed May 24, 1932. Serial No. 327,404. PUBLISHED JUNE 28, 1932. Class 46.

297,531. METAL-LESS GARTERS AND HOSE SUPPORTERS. THE RENOVA CO., St. Petersburg, Fla.
Filed May 18, 1932. Serial No. 327,282. PUBLISHED JUNE 28, 1932. Class 39.

297,532. WEEKLY PUBLICATION. CHARLES F. STICKLER, doing business as The Paramount Press, Fort Wayne, Ind.
Filed May 19, 1932. Serial No. 327,263. PUBLISHED JULY 5, 1932. Class 38.

297,533. PERIODICAL. POWER WAGON PUBLISHING COMPANY, Chicago, Ill.
Filed May 16, 1932. Serial No. 327,168. PUBLISHED JULY 5, 1932. Class 38.

297,534. BLANK BOOKS. CHESTER M. ANDERSON and CLARENCE Q. GRAHAM (a partnership), doing business as The Distribution Systems Company, Washington, D. C.
Filed May 16, 1932. Serial No. 327,135. PUBLISHED JUNE 28, 1932. Class 37.

297,535. CLEANSING TISSUE. VELDOWN COMPANY, INC., New York, N. Y.
Filed May 26, 1932. Serial No. 327,489. PUBLISHED JULY 5, 1932. Class 37.

297,536. PAPER TOWELS. KOTEX COMPANY, Chicago, Ill.
Filed May 14, 1932. Serial No. 327,098. PUBLISHED JULY 5, 1932. Class 37.

297,537. STATIONERY SUPPLIES—NAMELY MEMORANDUM BOOKS, PADS, AND NOTE BOOKS. FELDER BROS., New York, N. Y.
Filed May 23, 1932. Serial No. 327,852. PUBLISHED JUNE 28, 1932. Class 37.

297,538. BOND PAPER. SAXON PAPER PRODUCTS INC., New York, N. Y.
Filed May 26, 1932. Serial No. 327,481. PUBLISHED JULY 5, 1932. Class 37.

297,539. COAL. THE KOPPERS COMPANY OF DELAWARE, Pittsburgh, Pa.
Filed April 8, 1932. Serial No. 325,913. PUBLISHED MAY 17, 1932. Class 1.

297,540. FRESH GRAPES. BARENGO BROS., Reno, Nev.
Filed March 26, 1932. Serial No. 325,507. PUBLISHED JUNE 28, 1932. Class 46.

297,541. SCHOOL ROOM WARDROBES, COAT RACKS, SHELVING, AND CHALK AND ERASER TRAYS. AUSTRAL WINDOW COMPANY, Augusta, Me., and New York, N. Y.
Filed March 15, 1932. Serial No. 325,132. PUBLISHED JUNE 28, 1932. Class 32.

297,542. CHILD'S TAILORED OVERALL GARMENT. LOUIS PLOTSKY, Kansas City, Mo.
Filed April 4, 1932. Serial No. 325,799. PUBLISHED JULY 5, 1932. Class 39.

297,543. CLEANSING AND POLISHING PREPARATION FOR GLASS, ENAMEL, AND METAL. WILLIAM J. DORAN, doing business as Norda Manufacturing Company, St. Louis, Mo.
Filed March 19, 1932. Serial No. 325,285. PUBLISHED JULY 5, 1932. Class 4.

297,544. TOILET SOAP. LOS ANGELES SOAP COMPANY, Los Angeles, Calif.
Filed April 7, 1932. Serial No. 325,875. PUBLISHED JULY 5, 1932. Class 4.

297,545. GENERAL CLEANING COMPOUND. TWENTIETH CENTURY MANUFACTURING CO., Cedar Rapids, Iowa.
Filed April 5, 1932. Serial No. 325,834. PUBLISHED JUNE 28, 1932. Class 4.

297,546. NARROW WOVEN ELASTICS AND ELASTIC CORDS, HAIR PINS MADE OF NON-PRECIOUS METAL, NON-ELECTRICAL HAIR WAVERS, BIAS TAPES AND COMBS. COLUMBIA PLUSH & PUFF CO., INC., Brooklyn, N. Y.
Filed April 11, 1932. Serial No. 325,981. PUBLISHED JUNE 21, 1932. Class 40.

297,547. LIQUID METERS. NEPTUNE METER COMPANY, New York, N. Y.
Filed April 6, 1932. Serial No. 325,853. PUBLISHED JUNE 7, 1932. Class 26.

297,548. LIQUID METERS. NEPTUNE METER COMPANY, New York, N. Y.
Filed April 6, 1932. Serial No. 325,854. PUBLISHED JUNE 7, 1932. Class 26.

297,549. BISCUITS AND WAFERS. ROBICO BISCUIT COMPANY, New York, N. Y.
Filed May 12, 1932. Serial No. 327,027. PUBLISHED JUNE 21, 1932. Class 46.

297,550. BUTTER. EMIL FLEISCHL & SON, New York, N. Y.
Filed May 14, 1932. Serial No. 327,093. PUBLISHED JULY 5, 1932. Class 46.

297,551. WHEAT FLOUR. PERCY E. MEYERS, doing business as Flour Mill Products Co., Philadelphia, Pa.
Filed May 16, 1932. Serial No. 327,162. PUBLISHED JUNE 28, 1932. Class 46.

297,552. DOG AND CAT FOOD. FLOYD L. MARNEY, doing business as Marney Animal Food Co., Huntington Park, Calif.
Filed May 17, 1932. Serial No. 327,193. PUBLISHED JUNE 28, 1932. Class 46.

297,553. BREAD. HARRY FAWCETT, doing business as Grocers Co-Operative Baking Co., Minneapolis, Minn.
Filed May 19, 1932. Serial No. 327,247. PUBLISHED JULY 5, 1932. Class 46.

297,554. BREAD, ROLLS, CAKES AND PIES. THE GARBER BAKING COMPANY, Frederick, Md.
Filed May 19, 1932. Serial No. 327,249. PUBLISHED JUNE 28, 1932. Class 46.

297,555. BREAKFAST FOODS IN FLAKE FORM MADE PRINCIPALLY FROM OATS. PURITY OATS COMPANY, doing business as Oat Snaps Company, Keokuk, Iowa.
Filed May 4, 1932. Serial No. 326,759. PUBLISHED JUNE 21, 1932. Class 46.

297,556. MILK, CREAM, BUTTER, CHEESE, AND EGGS. HORNBEKER'S DAIRY, North Bergen, N. J.
Filed May 10, 1932. Serial No. 326,969. PUBLISHED JULY 5, 1932. Class 46.

297,557. WHEAT FLOUR. COSBY-HODGES MILLING CO. INC., Birmingham, Ala.
Filed May 7, 1932. Serial No. 326,850. PUBLISHED JUNE 28, 1932. Class 46.

297,558. SHOES OF LEATHER AND HOSIERY FOR MEN, WOMEN, AND CHILDREN. FINK SHOE CO. INC., Brooklyn, N. Y.
Filed May 4, 1932. Serial No. 326,745. PUBLISHED JULY 5, 1932. Class 39.

297,559. SAFETY PINS NOT MADE OF PRECIOUS METAL. THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa.
Filed April 18, 1932. Serial No. 326,205. PUBLISHED JULY 5, 1932. Class 40.

297,560. LEATHER SHOES. CRADDOCK-TERRY COMPANY, Lynchburg, Va.
Filed April 19, 1932. Serial No. 326,252. PUBLISHED JUNE 21, 1932. Class 39.

297,561. BOOTS, SHOES, SLIPPERS, AND MOCCASINS OF LEATHER, RUBBER, AND FABRIC OR COMBINATIONS THEREOF. THE ABBOTT COMPANY, Wilton, Me.
Filed April 14, 1932. Serial No. 326,073. PUBLISHED JUNE 21, 1932. Class 39.

297,562. FOUNDATION GARMENTS, BRASSELETTES—NAMELY, A TYPE OF SKELETON BRASSIÈRE; GIRDLES, STEP-INS, CORSETS, AND CORSELLETTES. KABO CORSET COMPANY, Chicago, Ill.
Filed April 25, 1932. Serial No. 326,480. PUBLISHED JULY 5, 1932. Class 39.

297,563. IRONING TABLES. NATIONAL WASHBOARD COMPANY, Chicago, Ill.
Filed April 23, 1932. Serial No. 326,428. PUBLISHED JUNE 28, 1932. Class 24.

297,564. SHOES OF LEATHER, RUBBER OR FABRIC CONSTRUCTION, OR A COMBINATION OF THESE MATERIALS. MELVILLE SHOE CORPORATION, New York, N. Y.
Filed April 20, 1932. Serial No. 326,292. PUBLISHED JULY 5, 1932. Class 39.

297,565. LAUNDRY WASHING MACHINES. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed May 3, 1932. Serial No. 326,726. PUBLISHED JUNE 28, 1932. Class 24.

297,566. SHOE AND STOVE POLISH. J. L. PRESCOTT COMPANY, Passaic, N. J.
Filed May 17, 1932. Serial No. 327,200. PUBLISHED JULY 5, 1932. Class 4.

297,567. SOAP. RED & WHITE CORPORATION, Buffalo, N. Y.
Filed May 26, 1932. Serial No. 327,475. PUBLISHED JULY 5, 1932. Class 4.

297,568. COMPOUND FOR CLEANING RUGS, UPHOLSTERY, AND WOOD WORK. AMOS M. HENSLEY, doing business as Miraglo Products Co., Cleveland, Ohio.
Filed May 24, 1932. Serial No. 327,397. PUBLISHED JULY 5, 1932. Class 4.

297,569. COOKIE DOUGH. KITCHENETTE COOKIE COMPANY, Louisville, Ky.
Filed May 11, 1932. Serial No. 326,982. PUBLISHED JUNE 21, 1932. Class 46.

297,570. BIAS FOLD TAPES. WM. E. WRIGHT & SONS CO., Orange, N. J.
Filed May 11, 1932. Serial No. 326,996. PUBLISHED JULY 5, 1932. Class 40.

297,571. BOND, LEDGER, PRINTING, WRITING, RECORD, AND BOOK PAPER AND MAILING ENVELOPES. NATIONAL BANK NOTE COMPANY, Cleveland, Ohio.
Filed April 25, 1932. Serial No. 326,490. PUBLISHED JUNE 28, 1932. Class 37.

297,572. CARTOONS. DONALD F. STEWART, New York, N. Y.
Filed April 30, 1932. Serial No. 326,648. PUBLISHED JUNE 28, 1932. Class 38.

297,573. PRINTED MATTER, PARTICULARLY MULTIPLE GOODS IN THE FORM OF ENLARGED OR REDUCED MAPS, DRAWINGS, TESTIMONIAL LETTERS AND BOOKLETS, PRINTED BY AN OFFSET PROCESS. BURLEY H. WILDER, doing business as Wilder Photo Copy Co., Buffalo, N. Y.
Filed April 27, 1932. Serial No. 326,566. PUBLISHED JULY 5, 1932. Class 38.

297,574. NEWSPAPER. INTELLIGENCER PUBLISHING COMPANY, Edwardsville, Ill.
Filed April 29, 1932. Serial No. 326,612. PUBLISHED JUNE 28, 1932. Class 38.

297,575. MAGAZINE PUBLISHED EVERY MONTH. MONTEE PUBLISHING CO., INC., Baltimore, Md.
Filed April 29, 1932. Serial No. 326,628. PUBLISHED JUNE 28, 1932. Class 38.

297,576. HOSIERY. PENN ROSE HOSIERY MILLS, Philadelphia, Pa.
Filed May 21, 1932. Serial No. 327,321. PUBLISHED JULY 5, 1932. Class 39.

297,577. HOSIERY. HERMAN MANTELL, New York, N. Y.
Filed May 21, 1932. Serial No. 327,319. PUBLISHED JULY 5, 1932. Class 39.

297,578. SLEEPING JACKETS FOR MEN, WOMEN, AND CHILDREN. MARIE A. KASPER, Miami, Fla.
Filed May 13, 1932. Serial No. 327,056. PUBLISHED JULY 5, 1932. Class 39.

297,579. MEN'S AND BOYS' UNDERWEAR. ROGERS PEET COMPANY, New York, N. Y.
Filed May 19, 1932. Serial No. 327,260. PUBLISHED JULY 5, 1932. Class 39.

297,580. HOSIERY. G. M. SALES CO., Fort Wayne, Ind.
Filed May 19, 1932. Serial No. 327,248. PUBLISHED JULY 5, 1932. Class 39.

297,581. SOAPS. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn.
Filed May 17, 1932. Serial No. 327,206. PUBLISHED JUNE 28, 1932. Class 4.

297,582. HOSIERY. THE HOUSE OF BYER, INC., Cambridge, Mass.
Filed May 17, 1932. Serial No. 327,183. PUBLISHED JULY 5, 1932. Class 39.

297,583. LAUNDRY WASHING MACHINES. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind.
Filed May 16, 1932. Serial No. 327,150. PUBLISHED JUNE 28, 1932. Class 24.

297,584. MEN'S AND BOYS' NEGLIGEE AND WORK SHIRTS. SALANT & SALANT, INC., New York, N. Y.
Filed May 12, 1932. Serial No. 327,029. PUBLISHED JULY 5, 1932. Class 39.

297,585. GIRLS' COATS AND DRESSES. THE ASSOCIATED MERCHANDISING CORPORATION, New York, N. Y.
Filed May 14, 1932. Serial No. 327,087. PUBLISHED JULY 5, 1932. Class 39.

297,586. HOSIERY. LOUIS C. TOPLITZ, New York, N. Y.
Filed May 13, 1932. Serial No. 327,073. PUBLISHED JULY 5, 1932. Class 39.

297,587. PAJAMAS FOR GIRLS AND WOMEN; GYMNASIUM, SPORTS, AND PLAY SUITS FOR BOYS AND GIRLS. LEVI-OTTENHEIMER COMPANY, Baltimore, Md.
Filed May 18, 1932. Serial No. 327,062. PUBLISHED JULY 5, 1932. Class 39.

PRISING CORSETS AND BRASSIÈRES. FASHION

297,588. CORSETS, BRASSIÈRES, GARTER BRASSIÈRES, AND FOUNDATION GARMENTS, COMBRASSIERE CO., INC., New York, N. Y.
Filed May 13, 1932. Serial No. 327,052. PUBLISHED JUNE 28, 1932. Class 39.

297,589. GINGER ALE AND NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. BLUE SEAL EXTRACT COMPANY, Cambridge, Mass.
Filed May 21, 1931. Serial No. 314,838. PUBLISHED JUNE 30, 1931. Class 45.

297,590. COATS, BLOUSES, SWEATERS, ETC. THE EDW. MALLEY CO., New Haven, Conn.
Filed May 27, 1931. Serial No. 315,105. PUBLISHED AUGUST 4, 1931. Class 39.

297,591. CHEESE. SOCIETE ANONYME DES CAVES & DES PRODUCTEURS REUNIS DE ROQUEFORT, Roquefort, France.
Filed June 16, 1931. Serial No. 315,937. PUBLISHED JULY 5, 1932. Class 46.

297,592. POULTRY FEEDS. MARITIME MILLING CO., INC., Buffalo, N. Y.
Filed July 15, 1931. Serial No. 316,974. PUBLISHED AUGUST 25, 1931. Class 46.

297,593. CHOCOLATE MILK FOOD DRINK. BOTTLER'S CHOCOLATE SUPPLY CORPORATION, Brooklyn, N. Y.
Filed July 8, 1931. Serial No. 316,680. PUBLISHED SEPTEMBER 29, 1931. Class 46.

297,594. TRUNKS, VALISES, TRAVELING BAGS, SATCHELS, HAT BOXES AND SHOE BOXES USED FOR LUGGAGE, HAND BAGS AND POCKETBOOKS. VUITTON & VUITTON, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed April 29, 1931. Serial No. 313,983. PUBLISHED JUNE 21, 1932. Class 3.

297,595. BOOTS, SHOES, SLIPPERS AND MOCCASINS OF LEATHER, RUBBER, FABRIC, AND COMBINATIONS THEREOF. G. H. BASS & CO., Wilton, Me.
Filed February 17, 1931. Serial No. 311,124. PUBLISHED JULY 5, 1932. Class 39.

297,596. DRY CLEANER, FLOOR CLEANER, HAND CLEANSER, ETC. WEST DISINFECTING COMPANY, Long Island City, N. Y.
Filed March 2, 1931. Serial No. 311,633. PUBLISHED JUNE 28, 1932. Class 4.

297,597. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed February 27, 1931. Serial No. 311,512. PUBLISHED APRIL 14, 1931. Class 4.

297,598. STENCIL SHEETS. SHINJIRO HORII, Tokyo, Japan.
Filed March 11, 1931. Serial No. 312,007. PUBLISHED JULY 7, 1931. Class 37.

297,599. FRESH EGGS. J. O. PITTS, Atlanta, Ga.
Filed January 19, 1932. Serial No. 323,269. PUBLISHED JUNE 28, 1932. Class 46.

297,600. GRAHAM BREAD. BIRGER CARL LYNDELL, Somerville, Mass.
Filed January 23, 1932. Serial No. 323,345. PUBLISHED JUNE 21, 1932. Class 46.

297,601. DESKS, TABLES, FILING CABINETS FOR OFFICE AND HOUSEHOLD USE. THE CLEMETSEN COMPANY, Chicago, Ill.
Filed January 15, 1932. Serial No. 323,077. PUBLISHED JULY 5, 1932. Class 32.

297,602. BOOTS, SHOES, AND OXFORDS MADE WHOLLY OR IN PART OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. WALTER BOOTH SHOE Co., Milwaukee, Wis.
Filed January 4, 1932. Serial No. 322,681. PUBLISHED JULY 5, 1932. Class 39.

297,603. FRESH VEGETABLES—NAMELY, LETTUCE. K. R. NUTTING, doing business as K. R. Nutting Co., Salinas, Calif.
Filed February 1, 1932. Serial No. 323,671. PUBLISHED JUNE 28, 1932. Class 46.

297,604. HATS FOR MEN. JAMES LOCK & Co. LTD., London, England.
Filed December 31, 1931. Serial No. 322,590. PUBLISHED JULY 5, 1932. Class 39.

297,605. AN ARTICLE OF FOOD FOR SMALL ANIMALS, SUCH AS DOGS, CATS, AND FOXES, COMPOSED OF FRESH WHOLE GROUND FISH, WHOLE GROUND WHEAT, RICE, BRAN, MILK, YEAST, BONE MEAL, WHEAT GERM, BAKING POWDER, SALT, AND CERTAIN CONCENTRATES, AS COPRA OR SESAME MEAL. ROGER W. TRUESDAIL, Los Angeles, Calif.
Filed January 11, 1932. Serial No. 322,897. PUBLISHED JUNE 21, 1932. Class 46.

297,606. WOMEN'S HATS. WYLE HAT CORPORATION, Chicago, Ill., now by change of name 1632 Indiana Corporation.
Filed December 26, 1931. Serial No. 322,477. PUBLISHED JUNE 21, 1932. Class 39.

297,607. MAPS OR BULLETINS. SHELL EASTERN PETROLEUM PRODUCTS, INC., New York, N. Y.
Filed December 17, 1931, Serial No. 322,233. PUBLISHED JUNE 28, 1932. Class 38.

297,608. WHEAT FLOUR. CITY MILLS COMPANY, Columbus, Ga.
Filed December 22, 1931. Serial No. 322,355. PUBLISHED JUNE 21, 1932. Class 46.

297,609. LADIES' HOSIERY. HARZFELD'S, INC., Kansas City, Mo.
Filed May 7, 1932. Serial No. 326,857. PUBLISHED JUNE 14, 1932. Class 39.

297,610. MATTRESSES AND BOX SPRINGS. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y.
Filed April 20, 1932. Serial No. 326,295. PUBLISHED JUNE 28, 1932. Class 32.

297,611. BIRD SEED. WILLIAM LICHTENSTEIN, doing business as Ideal Trading Co. and Fudo Psyllium Corp., New York, N. Y.
Filed April 15, 1932. Serial No. 326,152. PUBLISHED JUNE 21, 1932. Class 46.

297,612. LACQUERS, VARNISHES, ENAMELS, AND PAINTS. JONES-DABNEY COMPANY, INC., Louisville, Ky.
Filed April 25, 1932. Serial No. 326,479. PUBLISHED JUNE 21, 1932. Class 16.

297,613. TOILET SOAP. MAISON JEURELLE, INC., Jersey City, N. J.
Filed May 10, 1932. Serial No. 326,945. PUBLISHED JUNE 28, 1932. Class 4.

297,614. SHOE POLISH. LOUIS B. KUNKEL, St. Louis, Mo.
Filed April 28, 1932. Serial No. 326,592. PUBLISHED JULY 5, 1932. Class 4.

297,615. METAL POLISH. L. K. RHODES, Little Rock, Ark.
Filed May 7, 1932. Serial No. 326,873. PUBLISHED JULY 5, 1932. Class 4.

297,616. LEATHER SHOES. WEYENBERG SHOE MFG. CO., Milwaukee, Wis.
Filed April 27, 1932. Serial No. 326,570. PUBLISHED JUNE 28, 1932. Class 39.

297,617. MALT SYRUP FOR BAKING AND COOKING PURPOSES. BROADWAY PRODUCTS CORPORATION, Buffalo, N. Y.
Filed April 22, 1932. Serial No. 326,359. PUBLISHED JUNE 28, 1932. Class 46.

297,618. PUPPY AND CAT FOOD. CLARENCE F. GAINES, doing business as Gaines Food Company, Sherburne, N. Y.
Filed April 25, 1932. Serial No. 326,468. PUBLISHED JUNE 28, 1932. Class 46.

297,619. MALT SYRUP. TONKIN DISTRIBUTING COMPANY, San Francisco, Calif.
Filed April 22, 1932. Serial No. 326,402. PUBLISHED JUNE 28, 1932. Class 46.

297,620. NEGLIGEE SHIRTS, PAJAMAS, NURSES' UNIFORMS. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass.
Filed May 3, 1932. Serial No. 326,717. PUBLISHED JULY 5, 1932. Class 39.

297,621. APRONS. M. KODANI, doing business as W. R. Honen Co., New York, N. Y.
Filed May 6, 1932. Serial No. 326,822. PUBLISHED JUNE 28, 1932. Class 39.

297,622. FOODS FLAVORS—NAMELY, GRENADINE SYRUP, TAMARIND SYRUP, AND ORGEAT SYRUP; ALSO CANNED ASPARAGUS, FRESH WATERMELONS, CANNED OYSTERS, CANNED TOMATO JUICE, STRAINED HONEY, AND HONEY IN THE COMB; CANNED TUNA FISH, ENCASED DRIED RAISINS, SEMOLINA FLOUR, CANNED ANCHOVIES, CANNED RIPE PEELED TOMATOES. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn.
Filed May 6, 1932. Serial No. 326,807. PUBLISHED JUNE 28, 1932. Class 46.

297,623. CANDY CONFECTIONS. DAVID TURCOTT, doing business as Turcott & Company, Beloit, Wis.
Filed May 6, 1932. Serial No. 326,836. PUBLISHED JUNE 28, 1932. Class 46.

297,624. PHOTOGRAPHIC APPARATUS. ZEISS IKON AKTIENGESELLSCHAFT, Dresden, Germany.
Filed April 7, 1932. Serial No. 325,889. PUBLISHED JULY 5, 1932. Class 26.

297,625. PREPARATION OF GELATINE FOR USE IN MAKING DESSERTS, SALADS, OR FOOD BEVERAGES. JELL PRODUCTS COMPANY, South Milwaukee, Wis.
Filed April 21, 1932. Serial No. 326,325. PUBLISHED JUNE 28, 1932. Class 46.

297,626. FRESH VEGETABLES. PROSPECT ISLAND FARMING COMPANY, San Francisco and Rio Vista, Calif.
Filed April 22, 1932. Serial No. 326,394. PUBLISHED JUNE 28, 1932. Class 46.

297,627. BOYS' WASH SUITS, SUN SUITS, PLAY SUITS, AND ROMPERS. ATLANTIC ROMPER CO. INC., Linden, N. J.
Filed April 18, 1932. Serial No. 326,200. PUBLISHED JULY 5, 1932. Class 39.

297,628. WHEAT FLOUR. BAY STATE MILLING CO., Winona, Minn.
Filed May 5, 1932. Serial No. 326,776. PUBLISHED JUNE 28, 1932. Class 46.

297,629. FRESH VEGETABLES. FLICK & KUPFER, Los Angeles, Calif.
Filed August 2, 1930. Serial No. 304,131. PUBLISHED AUGUST 25, 1931. Class 46.

297,630. COFFEE. DAVIES & SULLIVAN COMPANY, New York, N. Y.
Filed August 21, 1930. Serial No. 304,856. PUBLISHED JUNE 28, 1932. Class 46.

297,631. CANNED FRUITS, VEGETABLES, FISH, ETC. STEELE-WEDELES COMPANY, Chicago, Ill.
Filed May 31, 1930. Serial No. 302,079. PUBLISHED JUNE 28, 1932. Class 46.

297,632. TOILET PAPER. A. P. W. PAPER COMPANY, INC., Albany, N. Y.
Filed September 26, 1930. Serial No. 306,081. PUBLISHED JULY 5, 1932. Class 37.

297,633. LAMP BLACK, CHEMICAL SUBSTANCES, SOLVENTS, ETC. THE ASIATIC PETROLEUM COMPANY, LIMITED, London, England.
Filed September 12, 1930. Serial No. 305,601. PUBLISHED JUNE 7, 1932. Class 6.

297,634. HAND BAGS. MORRIS WHITE INC., New York, N. Y.
Filed May 16, 1930. Serial No. 300,698. PUBLISHED JULY 5, 1932. Class 3.

297,635. MASH OR MEAL, A COMPOUNDED GROUND FEED COMPOSED OF CEREALS AND OTHER SUITABLE INGREDIENTS FOR POULTRY. BLATCHFORD CALF MEAL COMPANY, Waukegan, Ill.
Filed January 22, 1931. Serial No. 310,274. PUBLISHED JULY 5, 1932. Class 46.

297,636. AUTOMOBILE CLEANER AND POLISH. WALTER T. TERRY, Jr., doing business as The Best Products Co., Kansas City, Mo.
Filed March 14, 1932. Serial No. 325,198. PUBLISHED JUNE 7, 1932. Class 16.

297,637. FRESH VEGETABLES. W. B. GRAINGER PACKING COMPANY, Salinas, Calif.
Filed May 24, 1932. Serial No. 327,395. PUBLISHED JUNE 28, 1932. Class 46.

297,638. CANDY. THOMAS I. KENT, Boston, Mass.
Filed May 21, 1932. Serial No. 327,314. PUBLISHED JUNE 28, 1932. Class 46.

297,639. LAUNDRY WASHING MACHINES. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind.
Filed May 16, 1932. Serial No. 327,151. PUBLISHED JUNE 28, 1932. Class 24.

297,640. PORTLAND CEMENT. SUPERIOR PORTLAND CEMENT, INC., Seattle, Wash.
Filed August 3, 1931. Serial No. 317,690. PUBLISHED DECEMBER 29, 1931. Class 12.

297,641. FROZEN CONFECTIONS AND FLAVORING EXTRACTS THEREFOR. S. J. LAHMAN, doing business as Fruit-Sno Co., Oklahoma City, Okla.
Filed September 12, 1931. Serial No. 318,992. PUBLISHED JUNE 28, 1932. Class 46.

297,642. CONSTRUCTION MATERIALS. BENJAMIN BERMAN, doing business as Stonhard Company, Philadelphia, Pa.
Filed September 28, 1931. Serial No. 319,471. PUBLISHED DECEMBER 29, 1931. Class 12.

297,643. DATES IN THEIR NATURAL STATE. NATIONAL DATE COMPANY, Boston, Mass.
Filed September 28, 1931. Serial No. 319,494. PUBLISHED DECEMBER 8, 1931. Class 46.

297,644. STEEL WARDROBE, STORAGE AND SUPPLY LOCKERS AND CABINETS, TOOL STANDS, TRANSFER CASES, FILING CABINETS, AND BENCH DRAWERS. ALL-STEEL-EQUIP COMPANY, Aurora, Ill.
Filed October 3, 1931. Serial No. 319,682. PUBLISHED JULY 5, 1932. Class 32.

297,645. DIETETIC FLOUR. J. G. FALLS, doing business as J. G. Falls Co., Brooklyn, N. Y.
Filed April 22, 1931. Serial No. 313,654. PUBLISHED JUNE 21, 1932. Class 46.

297,646. CORN STARCH. THE HUBINGER COMPANY, Keokuk, Iowa.
Filed May 14, 1931. Serial No. 314,563. PUBLISHED JUNE 28, 1932. Class 46.

297,647. CANNED VEGETABLES AND CANNED FISH. PIGGLY WIGGLY CORPORATION, Cincinnati, Ohio.
Filed June 20, 1929. Serial No. 285,880. PUBLISHED JUNE 28, 1932. Class 46.

297,648. SHORTENING MADE FROM LARD AND VEGETABLE FATS. SWIFT AND COMPANY, Chicago, Ill.
Filed May 20, 1932. Serial No. 327,291. PUBLISHED JUNE 28, 1932. Class 46.

297,649. SWEET CAKES. VERGANI VENCESLAO DI SECONDO, Cremona, Italy.
Filed November 28, 1928. Serial No. 276,015. PUBLISHED JULY 5, 1932. Class 46.

297,650. SOAP. MORRIS COHN, doing business as Crystal Chemical Company, Belleville, N. J.
Filed March 14, 1930. Serial No. 297,297. PUBLISHED JULY 5, 1932. Class 4.

297,651. CANNED MILK—VIZ, CONDENSED AND EVAPORATED MILK. MY OWN COMPANY, Indianapolis, Ind.
Filed February 6, 1930. Serial No. 295,686. PUBLISHED APRIL 1, 1930. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

37,606. DRESS SHIELDS. Registered January 7, 1902. I. B. KLEINERT RUBBER CO. Renewed January 7, 1932, to I. B. Kleinert Rubber Company, New York, N. Y., a Corporation of New York, successor.

39,141. TONICS AND STOMACH BITTERS. Registered October 28, 1902. JOSEPH PERSONENI, New York, N. Y. Renewed October 28, 1932.

39,295. CERTAIN NAMED OIL CLOTHS. Registered November 18, 1902. STANDARD TABLE OIL CLOTH COMPANY, Jersey City, N. J., and New York, N. Y. Renewed November 18, 1932, to The Standard Textile Products Company, New York, N. Y., a Corporation of Ohio, assignee by mesne assignments.

39,568. FIGS. Registered December 30, 1902. REISS & BRADY. Renewed December 30, 1932, to Cresca Company, Incorporated, New York, N. Y., a Corporation of New York, successor.

87,927. PREPARATIONS FOR USE IN MAKING FROZEN DESSERTS. Registered August 13, 1912. WILLIAM RIPPEY, Cincinnati Ohio. Renewed August 13, 1932.

88,399. LARD. Registered September 17, 1912. THE CLEVELAND PROVISION COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed September 17, 1932.

88,424. CERTAIN NAMED FOODS. Registered September 17, 1912. ROUNDY, PECKHAM & DEXTER CO., Milwaukee, Wis., a Corporation of Wisconsin. Renewed September 17, 1932.

88,487. CORNETS, TRUMPETS, AND DRUMS. Registered September 24, 1912. HAWKES & SON. Renewed September 24, 1932, Boosey & Hawkes, Limited, London, England, a Corporation of Great Britain, successor.

88,975. STOCK FEED. Registered October 29, 1912. TIOGA MILL & ELEVATOR CO. Renewed October 29, 1932, to Tioga-Empire Feed Mills, Inc., Waverly, N. Y., a Corporation of New York, by change of name.

89,045. TABLE-SYRUP. Registered November 5, 1912. ABRAM LYLE & SONS, LIMITED. Renewed November 5, 1932, to Tate & Lyle, Limited, London, England, a Corporation of Great Britain, assignee by mesne assignments.

89,214. STRUCTURAL FORGINGS, BAR-IRON, AND BAR-STEEL. Registered December 3, 1912. AMERICAN IRON AND STEEL MANUFACTURING COMPANY, Lebanon and Reading, Pa. Renewed December 3, 1932, to Bethlehem Steel Company, Bethlehem, Pa., a Corporation of Pennsylvania, successor.

89,301. BENZIN, NAPHTHA, AND GASOLENE. Registered December 3, 1912. STANDARD OIL COMPANY OF NEW YORK. Renewed December 3, 1932, to Socony-Vacuum Corporation, New York, N. Y., a Corporation of New York, by change of name.

89,461. WRITING AND PRINTING PAPER. Registered December 17, 1912. MAX GREENEBAUM. Renewed December 17, 1932, to Beekman Paper & Card Company, Inc., New York, N. Y., a Corporation of New York, successor.

89,462. WRITING AND PRINTING PAPER. Registered December 17, 1912. MAX GREENEBAUM. Renewed December 17, 1932, to Beekman Paper & Card Company, Inc., New York, N. Y., a Corporation of New York, successor.

89,513. REFINED OIL FOR ILLUMINATING, HEATING, AND POWER PURPOSES. Registered December 17, 1912. STANDARD OIL COMPANY OF NEW YORK. Renewed December 17, 1932, to Socony-Vacuum Corporation, New York, N. Y., a Corporation of New York, by change of name.

89,753. BLEACHED MUSLIN. Registered January 7, 1913. THE HOPE COMPANY. Renewed January 7, 1933, to Lonsdale Company, Providence, R. I., a Corporation of Rhode Island, assignee.

89,755. PERIODICALS. Registered January 7, 1913. LIBERTY PUBLISHING CO., Cleveland, Ohio, a Firm. Renewed January 7, 1933.

90,373. ILLUMINATING OILS AND LUBRICATING OILS AND GREASES. Registered February 18, 1913. THE PARAGON REFINING CO., Toledo, Ohio, a Corporation of Ohio. Renewed February 18, 1933.

LABELS

REGISTERED SEPTEMBER 20, 1932

41,180.—*Title:* ATLAS WATER PUMP PACKING RINGS. For Water Pump Packing Rings. ATLAS ASBESTOS COMPANY, North Wales, Pa. Published March 4, 1932.

41,181.—*Title:* TEE UP. For Candy. BUNTE BROTHERS, Chicago, Ill. Published April 10, 1932.

41,182.—*Title:* ORIGINATORS OF SMART SHOES. For Shoes. M. B. CLASS & SONS, INC., Randolph, Mass. Published August 20, 1932.

41,183.—*Title:* COOKED RATION. For Dog Food. ROBERT A. COYLE, doing business as Balanced Pet Foods Co., Chicago, Ill. Published July 29, 1932.

41,184.—*Title:* CROSSE & BLACKWELL. For Lamb Stew. CROSSE & BLACKWELL, INC., Baltimore, Md. Published June 1, 1932.

41,185.—*Title:* WHY GRAY. For Preparation for Restoring Gray or Faded Hair to Its Natural Color, for Retarding Falling Hair, for Stimulating Hair Growth, for Eliminating Dandruff, Etc. DICKSON & DONALDSON LABORATORIES, Glendale, Calif. Published August 1, 1932.

41,186.—*Title:* FISCHER'S VITAMIN D BREAD. For Bread. FISCHER BAKING COMPANY, Newark, N. J. Published June 23, 1932.

41,187.—*Title:* HATHAWAY NICKEL SLICED BREAD. For Bread. HATHAWAY BAKERIES, INC., Cambridge, Mass. Published August 1, 1932.

41,188.—*Title:* POPEYE DRUMMER. For a Figure Toy Representing a Drummer With a Drum. KING FEATURES SYNDICATE, INC., New York, N. Y. Published February 1, 1932.

41,189.—*Title:* ASTRASAN. For Health Food. FRANK KUMMER, doing business as Astrasan Mfg. Company, Hackensack, N. J. Published May 2, 1932.

41,190.—*Title:* SUNSHINE KRISPY CRACKERS. For Crackers. LOOSE-WILES BISCUIT COMPANY, Kansas City, Mo. Published February 16, 1931.

41,191.—*Title:* MAILLARD'S THIN MINTS. For Chocolate Covered Mint Candy. HENRY MAILLARD, INC., Long Island City, N. Y. Published July 6, 1932.

41,192.—*Title:* COFFEE. For Coffee. MARTIN NEUMANN, New York, N. Y. Published August 24, 1932.

41,193.—*Title:* FRESH ROASTED COFFEE. For Coffee. MARTIN NEUMANN, New York, N. Y. Published August 24, 1932.

41,194.—*Title:* NOPAINE. For Preparation for the Relief of Pain, Headaches, Neuralgia, Head Colds, Muscular Aches, Etc. MORRIS REGELSON, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Published August 1, 1932.

41,195.—*Title:* CHARMANTE CHYPRE LOTION. For Lotion. ROSEMARIE RUSSELL, Atchison, Kans. Published March 25, 1932.

41,196.—*Title:* SCHULZE'S KANDY CAKE. For Cake. SCHULZE BAKING COMPANY, Kansas City, Mo. Published July 14, 1932.

41,197.—*Title:* SHEFCO SANITARY TISSUE POLISHER. For Paper Tissue Chemically Treated to Dust, Clean, and Polish Furniture, Automobiles, Windshields, Etc. IRVING SHEF, doing business as Shef Manufacturing Company, Union City, N. J. Published July 30, 1932.

41,198.—*Title:* SUPERIOR. For Rice. SUPERIOR PACKING CORP., New York, N. Y. Published December 20, 1931.

41,199.—*Title:* OVOLO. For Albumen Syrup. WASHINGTON CO-OPERATIVE EGG & POULTRY ASSOCIATION, Seattle, Wash. Published February 6, 1932.

PRINTS

REGISTERED SEPTEMBER 20, 1932

13,909.—*Title:* BUY YOUR ICE FROM THE WAGON OR TRUCK WITH THE ORANGE OVAL EMBLEM. For Ice. FLORIDA POWER & LIGHT COMPANY, Miami, Coral Gables, Fort Lauderdale, Hollywood, Delray, Miami Beach, etc., Fla. Published May 2, 1932.

13,910.—*Title:* LEMONACE. For Lemon Sherbets. PANGBURN COMPANY, Fort Worth, Tex. Published June 17, 1932.

13,911.—*Title:* GOLDEN NUT ICE CREAM. For Ice Cream. PANGBURN COMPANY, Fort Worth, Tex. Published June 17, 1932.

13,912.—*Title:* YOU TOO, CAN HAVE A CLEAR SKIN. For Medicine. THE S. S. S. COMPANY, Atlanta, Ga. Published July 13, 1932.

REISSUES

SEPTEMBER 20, 1932

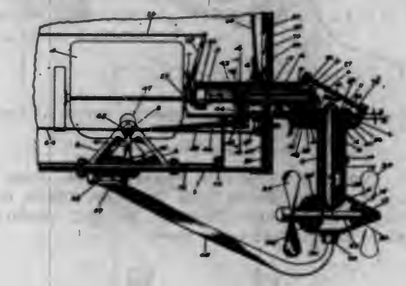
18,600. ZINC BASE DIE CASTING ALLOY. EDMUND A. ANDERSON and GEORGE L. WEBLEY, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Original No. 1,852,442, dated Apr. 5, 1932, Serial No. 476,946, filed Aug. 21, 1930. Application for reissue filed Aug. 4, 1932. Serial No. 627,534. 2 Claims. (Cl. 75—1.)

1. A zinc base alloy consisting of about 4% aluminum, about 1% copper and the balance zinc metal of high purity with at least 99.98% zinc.

18,601. PROCESS OF EXTRACTING OILS. JOHN W. BECKMAN, Oakland, Calif. Original No. 1,698,294, dated Jan. 8, 1929, Serial No. 714,520, filed May 19, 1924. Application for reissue filed Jan. 7, 1931. Serial No. 507,294. 16 Claims. (Cl. 87—6.)

10. The process set forth in claim 9 wherein the neutralizing agent is magnesium carbonate.

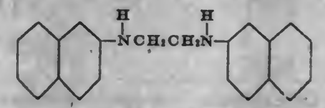
18,602. PROPELLER MOUNTING. ROBERT T. SVENDSEN and DAVID G. CHANDLER, Minneapolis, Minn. Original No. 1,735,660, dated Nov. 12, 1929, Serial No. 274,027, filed Apr. 30, 1928. Application for reissue filed Nov. 5, 1931. Serial No. 573,264. 25 Claims. (Cl. 115—41.)



1. In a propeller mounting for boats, the combination of a supporting member having a shaft journaled in one end thereof, a pivotal support within the boat for said mounting, a propeller secured to said shaft and offset from the longitudinal center line of said mounting and having its axis arranged substantially parallel to said center line, said pivotal support being located a suitable distance forwardly of the propeller to cause the mounting, when the propeller is operating in reverse position and under normal conditions, to substantially retain its normal position, but when subjected to an abnormal load, while in reverse, said mounting and propeller will automatically lift to relieve the parts of excess strains.

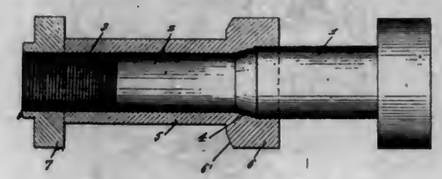
18,603. RUBBER COMPOUND AND METHOD OF PRESERVING IT. ALBERT M. CLIFFORD, Stow, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original No. 1,823,531, dated Sept. 15, 1931, Serial No. 216,780, filed Aug. 31, 1927. Application for reissue filed June 9, 1932. Serial No. 616,857. 7 Claims. (Cl. 18—50.)

1. A method of preserving rubber which comprises incorporating a substance having the chemical formula



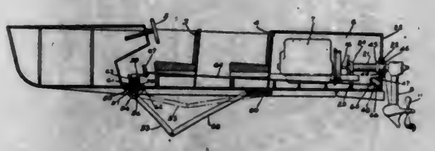
into a rubber compound and vulcanizing the mixture.

18,604. WRIST PIN. OSCAR COX, Cotton Valley, La., and ORVIS CARRY WILLIS, Norphlet, Ark. Original No. 1,667,588, dated Apr. 24, 1928, Serial No. 206,639, filed July 18, 1927. Application for reissue filed June 25, 1932. Serial No. 619,336. 6 Claims. (Cl. 74—38.)



1. A wrist pin of the class described comprising a pin having a reduced part threaded at its outer end, a beveled shoulder connecting the reduced part to the other part, a sleeve fitting over the reduced part and having a beveled wall engaging the shoulder, and a nut threaded on the pin for locking the sleeve against the shoulder.

18,605. PROPELLER MOUNTING. ROBERT T. SVENDSEN and DAVID G. CHANDLER, Minneapolis, Minn., assignors to Neptune Engineering Company, Dover, Del., a Corporation of Delaware. Original No. 1,745,235, dated Jan. 28, 1930, Serial No. 196,972, filed June 6, 1927. Application for reissue filed Mar. 3, 1931. Serial No. 519,846. 29 Claims. (Cl. 115—41.)



1. In a propeller mounting, the combination of a revoluble support, a drive shaft mounted to rotate therein, a driven shaft connected with the drive shaft and mounted to swing about the axis of said drive shaft, a propeller having a geared connection with said driven shaft, a lock for retaining the propeller in adjusted positions, said lock comprising a latch and quadrant, and means for releasing said lock to permit said support to swing to relatively adjust the position of the propeller in the water.

PLANT PATENTS

GRANTED SEPTEMBER 20, 1932

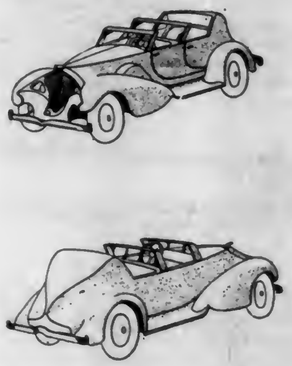
27. MUSHROOM. LOUIS F. LAMBERT, Coatesville, Pa. Filed Nov. 7, 1930. Serial No. 494,116. 1 Claim. (Cl. 47—1.)

A mushroom as shown and described characterized by a white cap with floccose scales oxidizing to a pale buff or golden tint.

DESIGNS

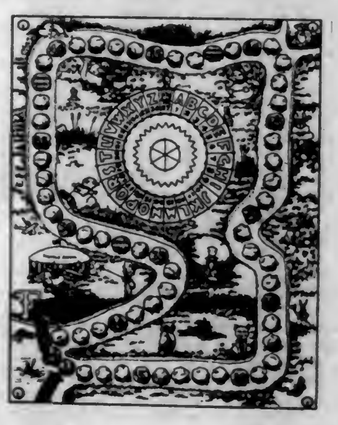
SEPTEMBER 20, 1932

87,774. AUTOMOBILE. MCCLELLAND BARCLAY, Los Angeles, Calif. Filed June 20, 1932. Serial No. 44,131. Term of patent 7 years.



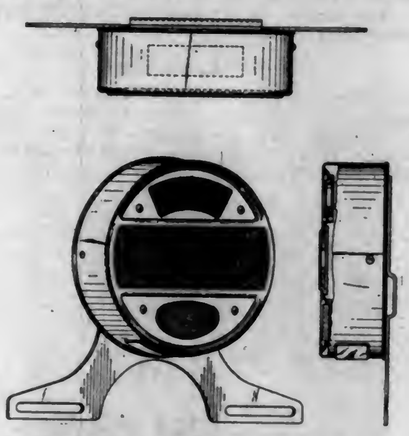
The ornamental design for an automobile, as shown.

87,775. SPELLING GAME BOARD. VERTNER DAVID BRITTINGHAM, Cincinnati, Ohio. Filed July 13, 1932. Serial No. 44,318. Term of patent 7 years.



The ornamental design for a spelling game board, as shown and described.

87,776. SIGNALING DEVICE. FRANCIS J. FARLEY, McKees Rocks, Pa. Filed Apr. 14, 1932. Serial No. 43,493. Term of patent 14 years.



The ornamental design for a signaling device, as shown.

87,777. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 26, 1932. Serial No. 44,448. Term of patent 14 years.



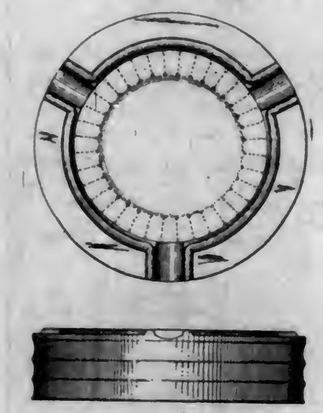
The ornamental design for a bottle substantially as shown.

87,778. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed July 8, 1932. Serial No. 44,279. Term of patent 3½ years.



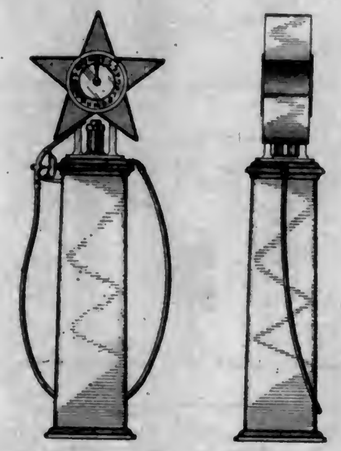
The ornamental design for a shoe buckle as shown.

87,779. ASH RECEPTACLE OR SIMILAR ARTICLE. RUTH GERTH, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed June 17, 1932. Serial No. 44,117. Term of patent 7 years.



The ornamental design for an ash receptacle or similar article as shown.

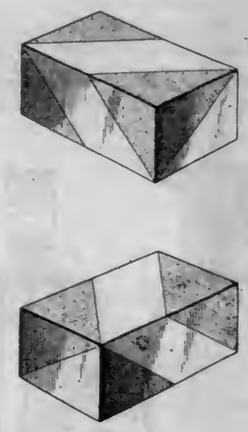
87,780. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Nov. 16, 1931. Serial No. 41,739. Term of patent 7 years.





The ornamental design for a fluid dispensing apparatus as shown and described.

87,781. CARTON OR SIMILAR ARTICLE. FREDERICK G. HAUCK, Chicago, Ill., assignor to Pabst Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 9, 1932. Serial No. 43,752. Term of patent 14 years.



An ornamental design for a carton or similar article, as shown.

87,782. KNITTED FABRIC. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed July 31, 1931. Serial No. 40,742. Term of patent 14 years.



The ornamental design for a knitted fabric as shown.

87,783. RANGE OR SIMILAR ARTICLE. CARL H. HOFFSTETTER and ROBERT F. HOFFSTETTER, Erie, Pa. Filed Jan. 6, 1932. Serial No. 42,386. Term of patent 14 years.



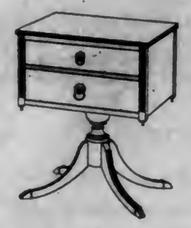
The ornamental design for a range or similar article, as shown.

87,784. STOVE OR RANGE. CARL H. HOFFSTETTER and ROBERT F. HOFFSTETTER, Erie, Pa. Filed Aug. 4, 1932. Serial No. 44,527. Term of patent 14 years.



The ornamental design for a stove or range, as shown and described.

87,785. RADIO TABLE OR SIMILAR ARTICLE. WILLIAM K. KLEAVER, Grand Rapids, Mich. Filed Mar. 12, 1932. Serial No. 43,165. Term of patent 3½ years.



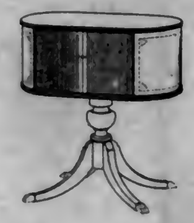
The ornamental design for a radio table or similar article, as shown.

87,786. CABINET OR SIMILAR ARTICLE OF FURNITURE. WILLIAM K. KLEAVER, Grand Rapids, Mich. Filed Mar. 12, 1932. Serial No. 43,166. Term of patent 3½ years.



The ornamental design for a cabinet or similar article of furniture, as shown.

87,787. RADIO TABLE OR SIMILAR ARTICLE. WILLIAM K. KLEAVER, Grand Rapids, Mich. Filed Mar. 12, 1932. Serial No. 43,168. Term of patent 3½ years.



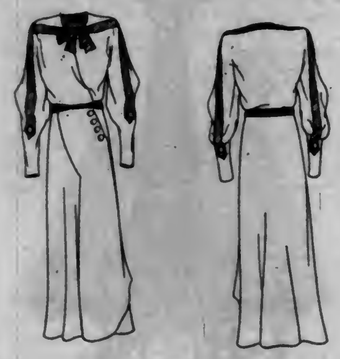
The ornamental design for a radio table or similar article, as shown and described.

87,788. BOTTLE. SOLOMON LENZNER, Buffalo, N. Y. Filed July 8, 1932. Serial No. 44,277. Term of patent 7 years.



The ornamental design for a bottle, substantially as shown.

87,789. DRESS. SALLY MILGRIM, Woodmere, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 27, 1932. Serial No. 44,458. Term of patent 3½ years.



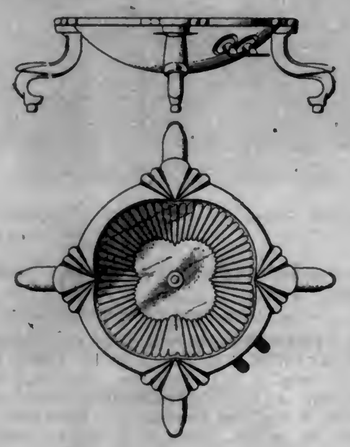
The ornamental design for a dress substantially as shown.

87,790. COMBINED CIGARETTE REST AND ASH TRAY. JACOB E. NEAHR, Scarsdale, N. Y. Filed July 7, 1931. Serial No. 40,440. Term of patent 3½ years.



The ornamental design for a combined cigarette rest and ash tray as shown.

87,791. ELECTRIC COOKER. FREDERICK J. OSIUS, Miami, Fla. Filed June 4, 1932. Serial No. 43,975. Term of patent 3½ years.



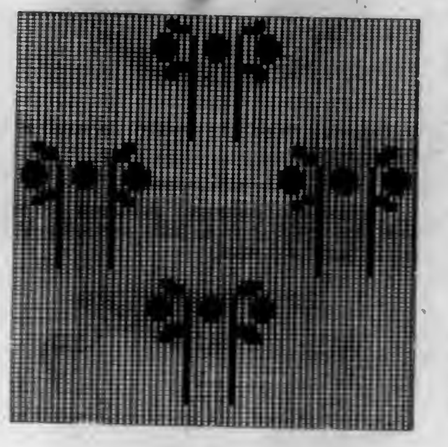
The ornamental design for an electric cooker as shown.

87,792. FOUNTAIN PEN. RUSSELL C. PARKER, Janesville, Wis. Filed Mar. 2, 1931. Serial No. 38,889. Term of patent 14 years.



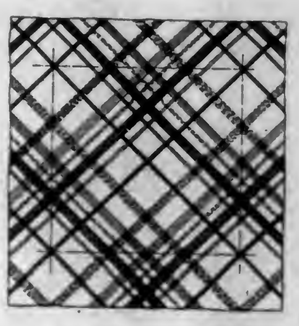
The ornamental design for a fountain pen, as shown and described.

87,793. TEXTILE FABRIC. GEORGE H. PERKINS, Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn., a Corporation of Massachusetts. Filed July 7, 1932. Serial No. 44,275. Term of patent 3½ years.



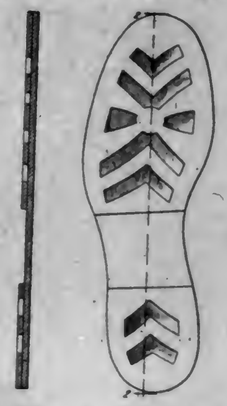
The ornamental design for textile fabric, substantially as shown.

87,794. EMBROIDERED TEXTILE FABRIC OR SIMILAR ARTICLE. FRIEDRICH H. M. POHL, Woodcliff, N. J., assignor to Co-operative Embroidery Company, Woodcliff, N. J., a Copartnership consisting of Friedrich H. M. Pohl and Eno Maedler. Filed July 29, 1932. Serial No. 44,479. Term of patent 3½ years.



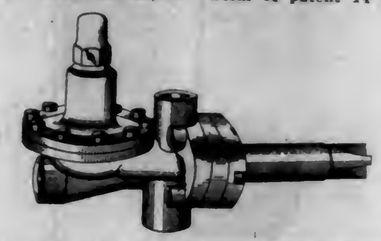
The ornamental design for an embroidered textile fabric or similar article substantially as shown and described.

87,795. COMBINED SOLE AND HEEL. WILLIAM V. REGAN, New Haven, Conn., assignor to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut. Filed July 23, 1931. Serial No. 40,649. Term of patent 3½ years.



The ornamental design for a combined sole and heel, as shown.

87,796. PUMP CASING. ALBERT J. RUTH, St. Louis, and ALBERT H. BUERMANN, Kirkwood, Mo. Filed July 11, 1932. Serial No. 44,310. Term of patent 14 years.



The ornamental design for a pump casing, substantially as shown and described.

87,797. TOWER BRIDGE. STANISLAUS RUSCKOWSKI, Los Angeles, Calif. Filed Aug. 11, 1931. Serial No. 40,817. Term of patent 7 years.



The ornamental design for a tower bridge as shown and described.

87,798. TOBACCO ASH RECEPTACLE. EDWARD SCHULTZ, Chicago, Ill. Filed Feb. 1, 1932. Serial No. 42,697. Term of patent 7 years.



The ornamental design for a tobacco ash receptacle substantially as shown.

87,799. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1932. Serial No. 44,345. Term of patent 3½ years.

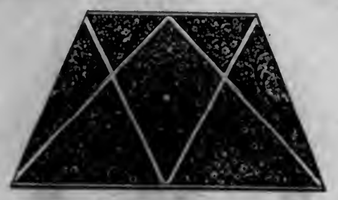
The ornamental design for a lamp shade, substantially as shown and described.

87,800. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1932. Serial No. 44,367. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,801. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,422. Term of patent 3½ years.



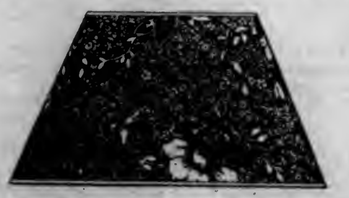
The ornamental design for a lamp shade, substantially as shown and described.

87,802. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,423. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,803. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,424. Term of patent 3½ years.



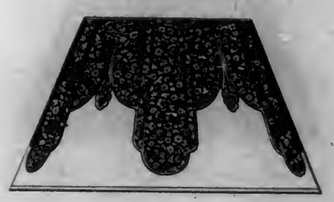
The ornamental design for a lamp shade, substantially as shown and described.

87,804. LAMP SHADE. EUGENE SCUWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,425. Term of patent 3½ years.



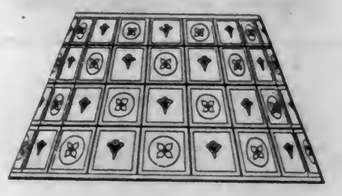
The ornamental design for a lamp shade, substantially as shown and described.

87,805. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,426. Term of patent 3½ years.



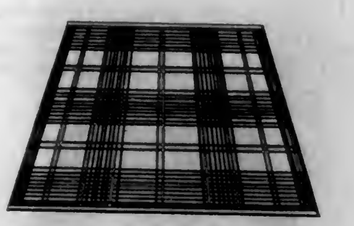
The ornamental design for a lamp shade, substantially as shown and described.

87,806. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,427. Term of patent 3½ years.



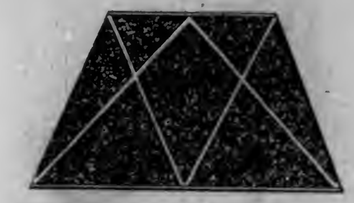
The ornamental design for a lamp shade, substantially as shown and described.

87,807. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1932. Serial No. 44,428. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,808. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1932. Serial No. 44,453. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,809. DRESS. ETTA SILVERMAN, Brooklyn, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 27, 1932. Serial No. 44,457. Term of patent 3½ years.



The ornamental design for a dress substantially as shown.

87,810. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed July 29, 1932. Serial No. 44,472. Term of patent 3½ years.



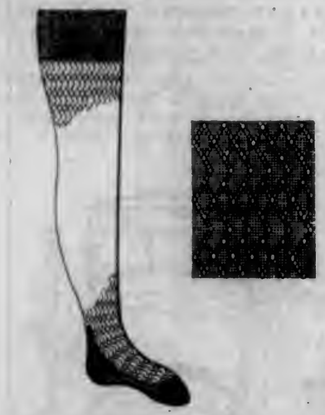
The ornamental design for a bracelet chain, substantially as shown.

87,811. TAG. EDWARD W. STIFEL, Wheeling, W. Va., assignor to J. L. Stifel & Sons, Inc., Wheeling, W. Va., a Corporation of West Virginia. Filed July 29, 1932. Serial No. 44,484. Term of patent 14 years.



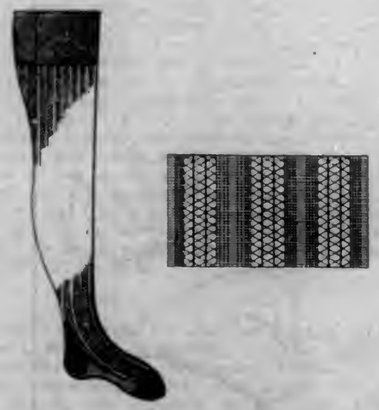
The ornamental design for a tag substantially as shown.

87,812. STOCKING. FREDERICK ELWOOD STRUVE, Philadelphia, Pa. Filed Jan. 2, 1932. Serial No. 42,356. Term of patent 3½ years.



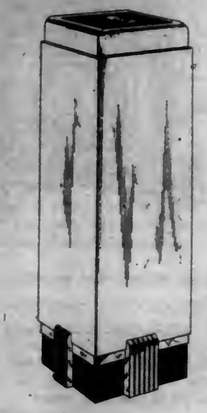
The ornamental design for a stocking as shown and described.

87,813. STOCKING. FREDERICK ELWOOD STRUVE, Philadelphia, Pa. Filed Jan. 2, 1932. Serial No. 42,359. Term of patent 3½ years.



The ornamental design for a stocking as shown and described.

87,814. TICKET ISSUING MACHINE CABINET. WALTER D. TEAGUE, Forest Hills, N. Y., assignor to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Filed Feb. 27, 1932. Serial No. 43,022. Term of patent 7 years.



The ornamental design for a ticket issuing machine cabinet, as shown.

87,815. IMPACT BAR FOR AUTOMOBILE BUMPERS. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 17, 1931. Serial No. 42,121. Term of patent 3½ years.



The ornamental design for an impact bar for automobile bumpers, as shown and described.

87,816. CEDAR CHEST OR SIMILAR ARTICLE. JOHN WEBER, Milton, Pa. Filed July 15, 1932. Serial No. 44,335. Term of patent 3½ years.



The ornamental design for a cedar chest or similar article, as shown.

87,817. CEDAR CHEST OR SIMILAR ARTICLE. JOHN WEBER, Milton, Pa. Filed July 15, 1932. Serial No. 44,336. Term of patent 3½ years.



The ornamental design for a cedar chest or similar article, as shown.

87,818. CEDAR CHEST OR SIMILAR ARTICLE. JOHN WEBER, Milton, Pa. Filed July 15, 1932. Serial No. 44,337. Term of patent 3½ years.



The ornamental design for a cedar chest or similar article, as shown.

87,819. CEDAR CHEST OR SIMILAR ARTICLE. JOHN WEBER, Milton, Pa. Filed July 15, 1932. Serial No. 44,338. Term of patent 3½ years.



The ornamental design for a cedar chest or similar article, as shown.

87,820. CEDAR CHEST OR SIMILAR ARTICLE. JOHN WEBER, Milton, Pa. Filed July 15, 1932. Serial No. 44,339. Term of patent 3½ years.



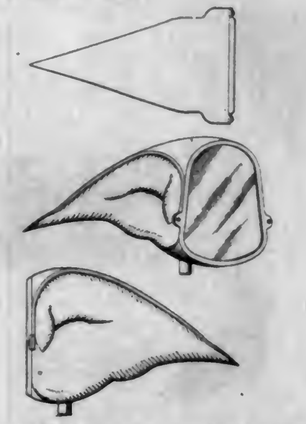
The ornamental design for a cedar chest or similar article, as shown.

87,821. VANITY DRESSING TABLE. MELVILLE M. WHEELER, Nashville, Tenn. Filed July 14, 1932. Serial No. 44,330. Term of patent 7 years.



The ornamental design for a vanity dressing table, as shown.

87,822. VEHICLE LIGHT. CLARK W. WRIGHT, Greenville, S. C. Filed Feb. 13, 1932. Serial No. 42,854. Term of patent 3½ years.



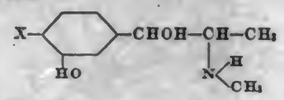
The ornamental design for a vehicle light as shown.

PATENTS

GRANTED SEPTEMBER 20, 1932

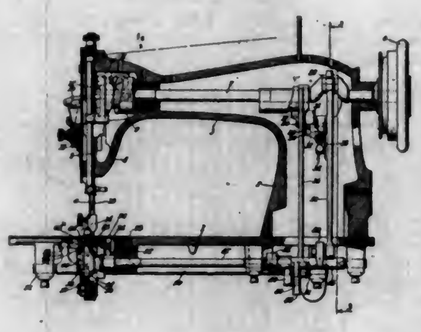
1,877,756. COMPOUNDS OF THE 1-PHENYL-2-ALKYLAMINO-ALCOHOL-1 SERIES HYDROXYLATED IN THE PHENYL RESIDUE AND PROCESS OF PREPARING THEM. MAX BOCKMÜHL, GUSTAV EHRHART, and LEONHARD STEIN, Frankfort-on-the-Main, Germany. Filed Dec. 29, 1930, Serial No. 505,460, and in Germany Dec. 6, 1929. 7 Claims. (Cl. 260—128.5.)

5. As new products, the compounds of the following general formula



wherein X stands for hydrogen or hydroxy, being therapeutic products.

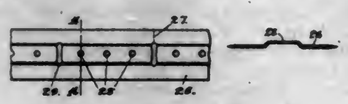
1,877,757. LOCK-STITCH SEWING MACHINE. MARTIN HEMLER, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 29, 1931. Serial No. 512,057. 1 Claim. (Cl. 112—192.)



In a sewing machine having a bed, a standard rising therefrom and an overhanging arm carried by said standard, the combination of reversible straightaway feeding mechanism, and stitch-forming mechanism having a reciprocating needle and an oscillating shuttle operating in a vertical plane parallel to the line of feed and passing bodily through a needle-loop, the shuttle having a beak arranged to seize the needle-thread loops on the side of the needle more remote from the standard, and a bobbin carried by said shuttle and accessible for removal from the side of the line of feed more remote from said standard, the lead of the bobbin-thread being across the open outer face of the shuttle and the shuttle-beak passing between the needle and the lead of the bobbin-thread for either direction of feed.

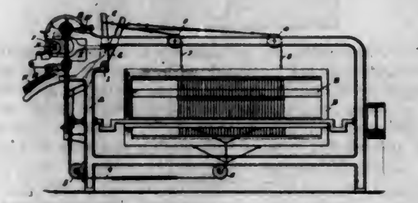
1,877,758. METHOD OF MAKING RAZOR BLADES. FOLKE KYLBERG, Gottenborg, Sweden, assignor to Aktiebolaget Tonsor, Gottenborg, Sweden, a Joint-Stock Company of Sweden. Filed Oct. 10, 1928, Serial No. 311,697, and in Sweden Feb. 10, 1928. 5 Claims. (Cl. 76—104.)

1. In the production of razor blades from a metal strip or ribbon, the process which comprises offsetting a portion of the strip to provide a shallow longitudinal channel having angular shoulders of a depth of the order of



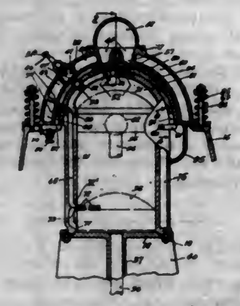
the thickness of said strip, feeding the strip longitudinally and guiding the same transversely by surfaces bearing against both sides of said shoulders.

1,877,759. HEAD MOTION FOR LOOMS. JOEL HAROLD ATWOOD and CARL S. PROCTOR, Ayer, Mass., assignors to Edith H. Priest, Ayer, Mass. Filed Feb. 8, 1929. Serial No. 338,544. 11 Claims. (Cl. 139—76.)



1. A head motion for looms including bifurcated connectors having racks on both their furcations, a single toothed cylinder, selector mechanism for moving the connectors to position either of the racks in mesh with the cylinder, a stationary rod, a pair of links pivotally connected, one of said links pivotally connected to the connector and the other to the rod, the pivotal connection between the links movable out of alinement with the other pivots of the links to lock the connectors in both of their extreme positions, and means for moving the pivotal connection of the links to permit the movement of the connector.

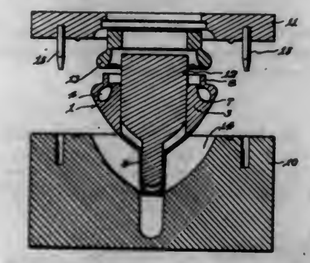
1,877,760. COMBUSTION ENGINE. LEO BERNER, South Milwaukee, and PAUL LOHR, Milwaukee, Wis. Filed Feb. 4, 1929. Serial No. 337,281. 5 Claims. (Cl. 123—81.)



1. In an internal combustion engine, the combination of an oscillatory cylinder having a semi-cylindrical head having a port therein, an outer head having a curved

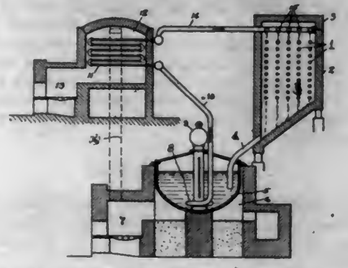
surface similar to that of said head and provided with a port, a semi-cylindrical valve between said heads and of like curvature and having a port, spring means for yieldingly pressing said outer head against said valve, and means for intermittently actuating said valve by the cylinder to intermittently bring said ports into register at the desired time in the engine's cycle.

1,877,761. APPARATUS FOR MOLDING NIPPLES. FRANKLIN BROWN, Philadelphia, Pa., assignor to General Health Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 30, 1931. Serial No. 534,114. 4 Claims. (Cl. 18—42.)



1. In an apparatus for molding a nipple, the combination of a member provided with a cavity which corresponds to the outer surface of the nipple, a core whose outer surface corresponds to the interior contour of the nipple, a ring member around the upper end of said core, and another flat member surrounding said ring member.

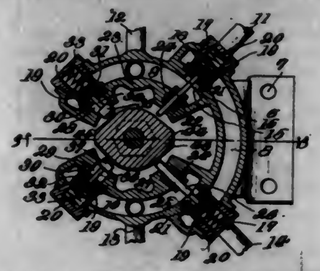
1,877,762. HIGH TEMPERATURE INDIRECT HEATING. THOMAS GRISWOLD, Jr., Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 13, 1928. Serial No. 254,154. 14 Claims. (Cl. 257—215.)



12. In an apparatus for indirect heating, the combination of a heat insulated casing, a plurality of extended passages in said casing disposed in substantially vertical arrangement one above the other wherein the substance to be heated is placed, a device located above said passages adapted to discharge a hot liquid downwardly over the surface of the latter, a vessel arranged to receive such liquid by gravity after being thus flowed over such surface and means respectively adapted to elevate and reheat such liquid and thereupon return same to said device for use over again.

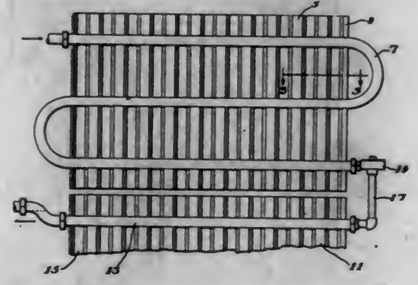
1,877,763. VALVE. GEORGE EDGAR HAZARD, Rochester, N. Y., assignor to Kellogg Manufacturing Company, Rocheater, N. Y. Filed Feb. 1, 1928. Serial No. 251,184. 5 Claims. (Cl. 277—20.)

1. A valve comprising a housing having a main air chamber of an arcuate shape and two supplemental air chambers of a similar configuration in communication therewith, said chambers forming a housing of a shape approximate to a horseshoe the communication between the supplemental chambers and the main chamber being positioned at one end of said supplemental chambers and at opposite ends of the main chamber and being normally closed by valves, escape openings in the opposite ends of each of said supplemental chambers and being normally closed by valves all of said valves having stems extending into said horseshoe-shaped housing, outlet delivery



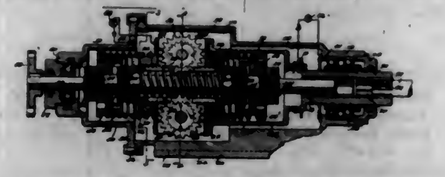
pipes constantly in communication with said supplemental chambers intermediate their ends, and means comprising a single cam to simultaneously open the escape valve of one supplemental chamber and the inlet valve of the other supplemental chamber or to simultaneously open the inlet valve of the first-named supplemental chamber and the escape valves of the last-named supplemental chamber, for the purpose described.

1,877,764. APPARATUS FOR HEATING. JOHN O. JAMES, Somerville, Mass. Filed Feb. 7, 1929. Serial No. 338,257. 2 Claims. (Cl. 257—46.)



1. Heat exchange apparatus comprising a steam pipe, a hot water pipe arranged below the level of the steam pipe to receive the water of condensation therefrom, a thermostatic valve located between the steam pipe and the hot water pipe, and an upwardly off-set outlet for the water pipe to maintain said pipe at all times filled with water of condensation, whereby heat will be abstracted from the water and the temperature of the discharge reduced.

1,877,765. AUTOMATIC CUSHION GEAR. CHARLES R. JEFFREYS, McKeesport, Pa. Filed Dec. 11, 1930. Serial No. 501,722. 10 Claims. (Cl. 64—26.)



1. Torque cushioning means comprising a pair of shafts, a housing for one of said shafts and providing a bearing

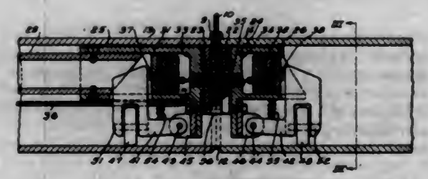
for one end thereof, splines upon said bearing, splines upon said other shaft, the splines of said bearing and shaft adapted to intermesh and operatively connect said shaft to said bearing, a worm gear carried by said first-named shaft, a gear carrier slidable upon said shaft and having gears operatively associated with said worm gear, cap members upon said first named shaft and positioned at opposite ends of said gear carrier and spring means interposed between said cap members and said carrier, whereby compression of the springs to a predetermined degree will establish driving connection between said shafts.

1,877,766. DILATOR. JAMES W. KENNEDY, Canton, Ohio. Filed May 13, 1931. Serial No. 537,172. 6 Claims. (Cl. 128—341.)



4. In a device of the class described, a set of guide wires, a sleeve for tieing the upper ends of said wires together, the lower ends of said wires embedded in a base, one of said wires being looped over at the top and fitting in said sleeve.

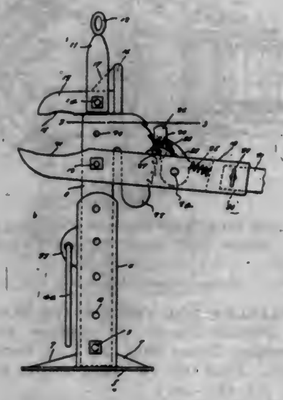
1,877,767. ELECTRIC WELDING. GUSTAV H. KOCH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 6, 1929. Serial No. 344,736. 8 Claims. (Cl. 219—6.)



1. In a welding machine, a backing member rotatably mounted on a supporting frame comprising a bearing for said backing member, a hollow cylindrical member constituting a part of said frame, a fluid-actuated piston within said cylindrical member, and means pivotally mounted on said frame and operated by said piston for raising said backing member.

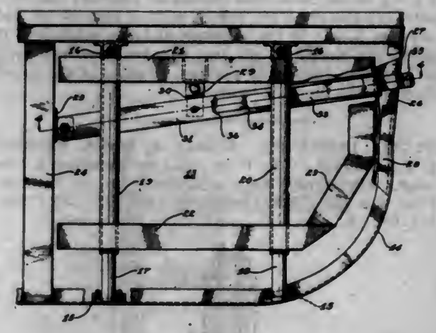
1,877,768. TOOL. HENRY A. KOESTER, Conroy, Iowa. Filed Feb. 7, 1931. Serial No. 514,239. 1 Claim. (Cl. 81—23.)

A tool of the class described comprising in combination a shank, a fixed jaw on one end of the shank, a movable jaw pivoted to an intermediate portion of the shank and cooperable with the fixed jaw, said shank having integral therewith a ratchet bar, a dog pivotally mounted on said movable jaw engageable with said ratchet bar, yieldable means normally retaining said dog



in engagement with the ratchet bar, and means for effecting movement of the dog out of engagement with the ratchet bar and subsequently locking the dog in the last referred to position.

1,877,769. MOTOR VEHICLE. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 2, 1928. Serial No. 274,420. 4 Claims. (Cl. 155—14.)

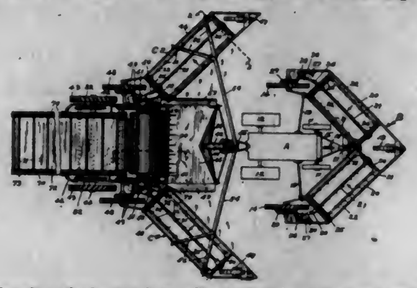


1. An adjustable seat comprising a base, a plurality of parallel tubular members, sleeves slidably mounted on the tubular members, a seat frame permanently secured to the sleeves, a seat positioned on the frame, a lever having one end pivotally secured to the base, a linkage connecting the lever with the seat frame and a telescopic arm carried by the lever extending through a slot in the base and a ratchet for retaining the lever in a plurality of positions.

1,877,770. TRACTOR PROPELLED RAKE AND LOADER. LOUIS H. LARSON, Santiago, Minn. Filed Feb. 24, 1931. Serial No. 517,663. 18 Claims. (Cl. 56—27.)

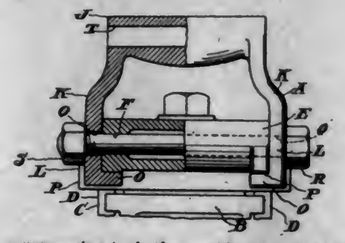
1. The combination with a tractor, of primary rake acting means propelled by the tractor for clearing a

path therefor, secondary rake acting means disposed rearwardly of and drawn by the tractor for moving the



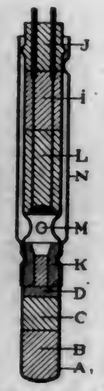
previously raked crop inwardly, and a loading mechanism arranged to receive crop from the said secondary rake acting means.

1,877,771. HANDLE FOR PERCUSSIVE TOOLS. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 399,989. 2 Claims. (Cl. 121—36.)



1. In a percussive tool, the combination of a back head and a lug on the back head having an aperture therein, a handle, extensions on the handle seating against the ends of the lug, a bolt in the aperture and the extensions for securing the handle to the lug, and hooks on the extensions engaging the lug to prevent rotation of the handle with respect to the back head.

1,877,772. INITIATOR. HAROLD A. LEWIS, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 24, 1931. Serial No. 532,472. 25 Claims. (Cl. 102—9.)



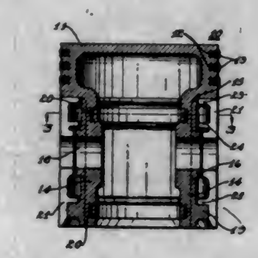
1. An initiator comprising in combination an explosive charge and a nitrided steel alloy shell encasing the charge.

1,877,773. CARTRIDGE FOR FIREARMS. WALLACE M. MINTO, Jersey City, N. J. Filed Apr. 23, 1931. Serial No. 532,364. 1 Claim. (Cl. 102—12.)



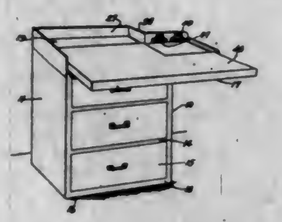
In a tear gas cartridge, having a primed shell, a propellant and heat generating filling for the inner end portion of said shell, and a substantially complete filling for the entire outer end portion of said shell consisting of a tear gas chemical and an envelope entirely surrounding said chemical and composed of such readily combustible material of such extreme thinness throughout that it will be immediately consumed as an entirety at the moment of the explosion of the shell in the gun.

1,877,774. INTERNAL COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 21, 1928. Serial No. 248,352. 11 Claims. (Cl. 74—108.)



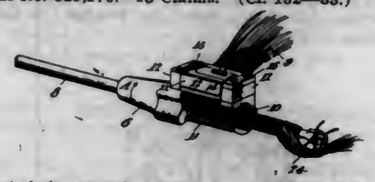
1. A piston comprising a head portion, demountable segmental skirt portions, wrist pin bearing brackets formed upon the head portion and yielding means imbedded in the brackets for positioning the demountable skirt portions radially.

1,877,775. SLIDING DESK TOP. ENOCH OHNSTRAND, Kenmore, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1927. Serial No. 184,563. 10 Claims. (Cl. 45—6.)



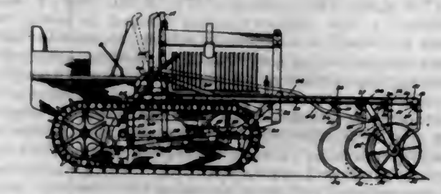
1. In a furniture construction, a housing having a top, a shelf slidable above said top and a flexible, metallic strip secured to a lower edge of said shelf, said strip being adapted to press against said top and prevent papers from lodging between said shelf and top.

1,877,776. HAIR WRAPPING INSTRUMENT. ROCCO PEZZELLA, Washington, D. C. Filed Apr. 10, 1931. Serial No. 529,176. 13 Claims. (Cl. 132—33.)



1. A hair wrapping device comprising a body having means for rotatably mounting it on a hair holding mandrel, said body having a passageway through which the lock of hair is passed, and extended coacting lips at the outlet side of said passageway and between which the lock frictionally passes as it is directed to the mandrel, said lips coacting to transversely flatten the lock for application to the mandrel.

1,877,777. TRACTOR CULTIVATOR. ARTHUR W. REYNOLDS, Leonardsville, N. Y., assignor to The Babcock Manufacturing Co., Leonardsville, N. Y., a Corporation of New York. Filed Feb. 13, 1931. Serial No. 515,476. 16 Claims. (Cl. 97—47.)



1. A cultivator including push beams, a tractor, and means for the detachable connection of said beams to a tractor, roller lift means mounted upon the tractor to engage said beams in a way to lift the cultivator from the ground, and means for operating said roller lift means.

1,877,778. COMPRESSED AIR DUSTER. DEWITT TARPAN, Rochester, N. Y., assignor to E. C. Brown Company, Rochester, N. Y. Filed Dec. 11, 1930. Serial No. 501,615. 9 Claims. (Cl. 43—147.)

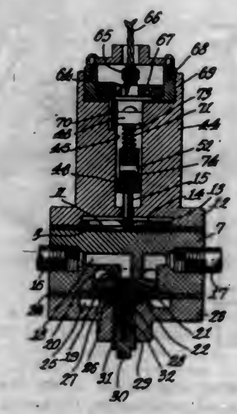


1. The combination, in a duster of the character described, of a cylindrical container having two filler openings, an air pump including a cylinder attached to the container centrally thereof and extending into one of said openings, a discharge tube attached to the container centrally thereof and extending thereinto through the other of said openings, the portion of such tube within the container being perforated, a closure at the inner end of said cylinder including spaced walls forming an air chamber, one of said walls having an opening for the inlet of air under pressure from said cylinder and the other an opening for the discharge of air to the container, and a valve within the chamber for normally closing said inlet opening.

1,877,779. ALKYL CELLULOSE ESTERS. ERNST TEUPEL, Dormagen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 11, 1929, Serial No. 331,952, and in Germany Jan. 20, 1928. 10 Claims. (Cl. 260—101.)

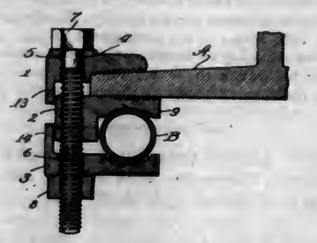
1. In the process of preparing alkyl acyl celluloses, the step which comprises acylating an alkyl cellulose, containing about ⅓ to about 1½ alkyl groups in the molecule $C_6H_{10}O_5$.

1,877,780. AUTOMATIC REGULATOR. MICHAEL HENRY ACKERMAN, Mansfield, Ohio, assignor of one-half to Louis C. Sickel, Caledonia, Ohio. Filed Aug. 28, 1929. Serial No. 389,018. 5 Claims. (Cl. 187—153.)



1. A device of the class described included opposed chambers, a diaphragm separating the same, inlet and outlet ports in communication with one of the chambers, means carried by the diaphragm for closing communication between the ports, a tubular member extending through the diaphragm and said closing means to permit leakage of fluid from one chamber to the other, a by-pass connecting the chambers, a yieldingly supported relief valve therein normally open, a pressure operated diaphragm, a lever, yielding means for retarding the movement of the lever in one direction, means for transmitting movement from the last-named diaphragm to the lever, and means for transmitting motion from the lever to the relief valve during the actuation of said lever by its yieldable retarding means.

1,877,781. HANGER. CARL O. AKERLUND, Chicago, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed Feb. 13, 1931. Serial No. 515,463. 6 Claims. (Cl. 248—32.)

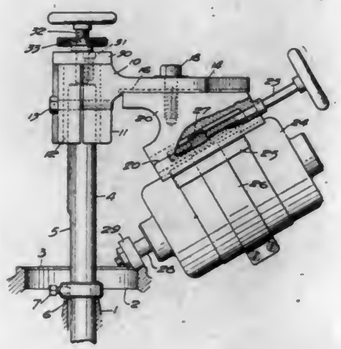


1. A hanger comprising three jaws, a bolt screw-threaded into the intermediate jaw and passing freely through openings in the other two jaws, said bolt having on one end a head and on the other end a nut, the intermediate jaw being composed of two arms radial with respect to the bolt and arranged at an angle to each other.

1,877,782. VALVE SEAT GRINDER. HUGH M. ALBEE, Orange, Mass., assignor to The Leavitt Machine Company, Orange, Mass. Filed Oct. 2, 1930. Serial No. 486,010. 5 Claims. (Cl. 51—241.)

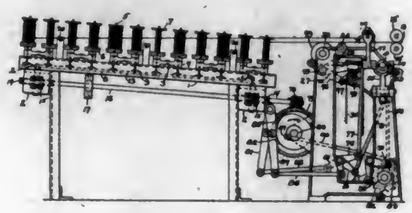
5. A machine for grinding valve seats having a central valve stem guide, comprising a spindle adapted to engage said guide, a bracket including a split sleeve engaging the end of the spindle, a guide block secured to said bracket and having a face inclined to the axis of said spindle, an elec-

tric motor having sliding engagement with the inclined face of said guide block with its shaft parallel to said face, a grinding wheel on the shaft of said motor, means



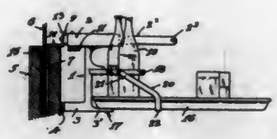
for effecting feeding adjustments of the bracket on the spindle, and means for reciprocating the motor on the guide block.

1,877,783. TUFT YARN SETTING FRAME. CHARLES C. ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester, Mass. Filed Feb. 3, 1930. Serial No. 425,487. 39 Claims. (Cl. 28—55.5.)



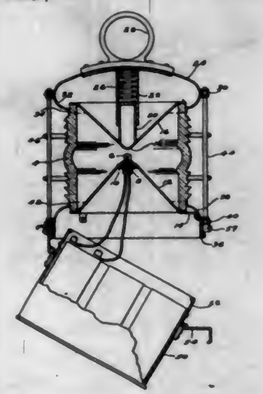
1. A setting frame for tuft yarns comprising means for selecting from yarns drawn from yarn carriers and wound upon a tuft frame spool such yarns as are to be omitted from the winding of another tuft frame spool to permit the selected yarns to be severed, and means operable to restore the severed yarns to their respective yarn carriers.

1,877,784. ADJUSTABLE TRAY SUPPORT. ARNOLD A. ANDERSON, Peoria, Ill. Filed July 24, 1930. Serial No. 470,414. 4 Claims. (Cl. 45—51.)



1. A tray support for the purpose named including in combination a tubular part including a grip portion, a foot portion spaced from both and rigid therewith, a toothed bar slidable in said part, a pawl carried by the part adapted to engage one of the teeth of said bar, a part on said bar including an extension disposed substantially at right angles to the length of the bar, a bottle rack rigid with the tubular part, and a tray below the rack and rigid with respect thereto.

1,877,785. MARINE LIGHT. PHILLIP R. ANDREWS, Seattle, Wash., assignor to Pacific Marine Supply Company, Seattle, Wash., a Corporation of Washington. Filed Dec. 16, 1929. Serial No. 414,328. 4 Claims. (Cl. 240—10.6.)



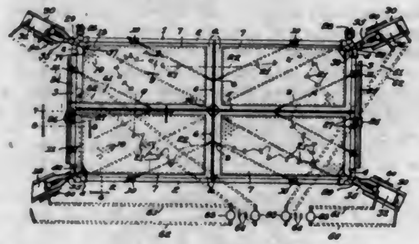
1. A signal light consisting of a tubular lens; a dome member; a base member; means adapted to secure the dome and the base members in spaced relationship; said dome member having a downwardly extending portion terminating in a cylindrical rim of reduced diameter providing a circular opening adapted to receive one end of the tubular lens; said base member having an upwardly extending portion terminating in a cylindrical rim of reduced diameter providing an opening adapted to receive the opposite end of said tubular lens; an upwardly extending conical reflector positioned concentrically with said tubular lens, a second conical reflector disposed above the first named reflector and pointing in the opposite direction therefrom adapted to rest upon the top surface of said tubular lens; an electric light disposed at the optical center of said tubular lens; a removable battery compartment adapted to be secured to the base member, and a plurality of batteries in said battery compartment adapted to supply electrical energy to said electric light.

1,877,786. MERCHANDISE GUARD. FRANK ARATA and JOY E. STILES, Sacramento, Calif. Filed Dec. 19, 1929. Serial No. 415,324. 1 Claim. (Cl. 206—60.)



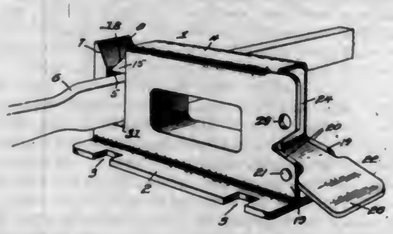
A merchandise guard constructed from a single blank or piece of metal bent to form corresponding right-angularly disposed upright side members, adapted to fit over and embrace the exposed corners of the lower cases of piled merchandise, a horizontal transverse bottom member extending from the lower end of one side member beyond the outer side edge of the other side member and adapted to fit under the bottom of the corresponding case and a vertical tongue fitting against the inner face and lower end of the last mentioned side member and rigidly secured thereto and inwardly extending hook-like teeth or barbs punched out of the metal forming the side members and the bottom member and tongue of the guard and adapted to engage adjacent faces of the corresponding cases.

1,877,787. METHOD OF AND APPARATUS FOR STRETCHING LEATHER. GEORGE M. ARGABRITE, Chicago, Ill., assignor to Leather Equipment Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1930. Serial No. 430,259. 13 Claims. (Cl. 149—21.)



13. In an apparatus for stretching leather or other sheet like materials, comprising a main frame, a plurality of carriers mounted within the main frame and arranged for movement toward and from each other in the same plane, and including means whereby the material to be stretched may be attached to said carriers, power operated devices exterior of the main frame, one for each carrier adapted to engage therewith, each device having a link to be extended across the main frame and engage the associated carrier, and means for controlling the application of power to said devices whereby the carriers may be moved to stretch the material attached thereto.

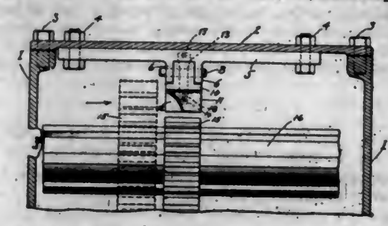
1,877,788. LATCH FOR RAILROAD SWITCHES. BENJAMIN ROBERT BARBER, Jacksonville, Fla. Filed Sept. 17, 1931. Serial No. 563,425. 6 Claims. (Cl. 70—128.)



1. A locking means for a switch lever including a body formed with a switch lever receiving channel, a bolt slidable longitudinally of and accurately fitting a rectangular bore in the upper portion of the body and having a nose portion to bridge said channel above the position occupied by the switch lever therein, spring means for normally holding the bolt in operative position, and a foot lever swingingly connected to the body and operatively connected to the bolt, the movement of the foot lever in one direction serving to withdraw the nose of the bolt from the channel.

1,877,789. AUTOMOBILE STOP. CHARLES A. BARRETT, Bridgeport, Conn. Filed July 8, 1931. Serial No. 549,362. 2 Claims. (Cl. 192—4.)

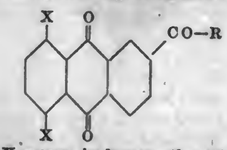
1. A retarder for connection with the transmission housing of an automobile having a first speed gear and shaft therein, comprising a bracket member on the housing, a locking lever pivotally swung from said bracket and provided with adjacent cut away portions for gear contact, the locking lever being arranged to flap back and forth during the forward movement of the gear, but adapted to



lock the gear from backward motion in the event of the automobile coming to a stop for any reason, thereby preventing the automobile from rolling backward.

1,877,790. KETONES OF THE ANTHRAQUINONE SERIES AND PROCESS OF MAKING SAME. OTTO BAYER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 9, 1931, Serial No. 567,986, and in Germany Oct. 16, 1930. 6 Claims. (Cl. 260—64.)

8. As new compounds the ketones of the anthraquinone series corresponding to the general formula



(wherein one X means hydrogen, the other X a nitro or amino group and R means a benzene nucleus which may contain as substituents phenyl, phenoxy, alkyl or halogen) which compounds represent when dry colored powders, having a definite melting point, being insoluble in water soluble in concentrated sulfuric acid.

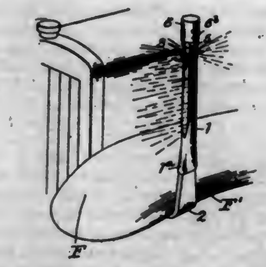
1,877,791. VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. OTTO BAYER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1931, Serial No. 571,683, and in Germany Nov. 7, 1930. 2 Claims. (Cl. 260—60.)

1. As new compounds the vat dyestuffs of the general formula

$$R^1—NH—CO—R^2$$

(wherein R^1 means a radical of the anthraquinone series and R^2 a radical of the diphenyl series), which compounds dye cotton and wool from the vat yellowish shades.

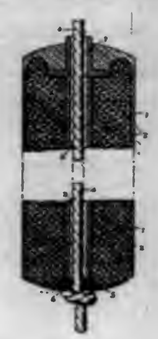
1,877,792. FENDER LAMP FOR AUTOMOBILES, ETC. JOHN P. BELL, Baltimore, Md. Filed Dec. 17, 1931. Serial No. 581,750. 4 Claims. (Cl. 240—8.1.)



1. In combination with an automobile having side fenders, a fender lamp comprising a tubular casing vertical-

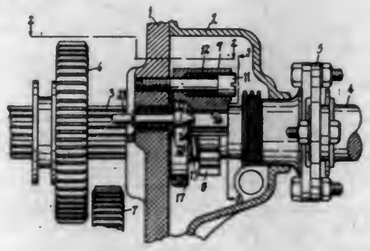
ly mounted on the left front fender at the outer edge thereof; said casing having an elongated vertical split in its front portion; a cap closing the upper end of the casing; and an electric light bulb mounted in the underside of and carried by the cap, whereby a vertical column of light is visible through the split from the front end of the automobile defining the extreme side limit of the automobile.

1,877,793. BOAT FENDER. DONALD EDMUND BEYNON, Toronto, Ontario, Canada, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Filed Nov. 24, 1930. Serial No. 497,827. 5 Claims. (Cl. 114—219.)



1. A buoyant boat fender formed of a cellular rubber body completely sealed within a rubber covering, the total volume of said covering representing only a fraction of the volume of the said cellular body whereby maximum resiliency and buoyancy is obtained and access of water to the inner cellular rubber body obviated.

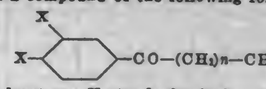
1,877,794. TRANSMISSION. LEO A. BIXBY, Kalamazoo, Mich., assignor to Fuller & Sons Manufacturing Co., Kalamazoo, Mich., a subsidiary of Unit Corporation of America. Filed Aug. 18, 1930. Serial No. 475,899. 8 Claims. (Cl. 192—4.)



1. In a structure of the class described, the combination of a transmission including a shiftable reversing gear, a driven shaft operatively associated with said transmission, a ratchet wheel rotatable with said shaft, a holding pawl coacting with said ratchet wheel to hold the same against reverse rotation and having a friction member coacting with the side of the ratchet wheel and acting to shift the pawl to engaging position on reverse rotation of the shaft, the shaft being provided with a screw thread disposed at the side of said ratchet wheel, a pawl stop disk coacting with said thread, a friction member coacting with said disk so that the disk is moved into operative position on the reverse rotation of the shaft and into inoperative position on the forward rotation of the shaft, and a pawl restraining plunger provided with a return spring and positioned to be actuated by said reversing gear when it is shifted to operated position.

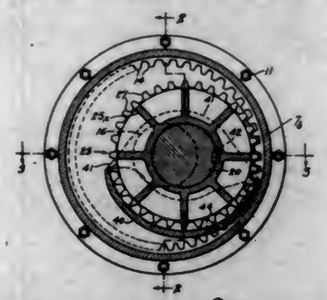
1,877,795. 1-PHENYL-2-AMINOALCOHOLS (1) HYDROXYLATED IN THE PHENYL NUCLEUS AND PROCESS OF PREPARING THEM. MAX BOCKMÜHL, GUSTAV EHRHART, and LEONHARD STEIN, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930, Serial No. 495,284, and in Germany Nov. 26, 1929. 12 Claims. (Cl. 260—128.5.)

1. The process which consists in causing nitrous acid to act upon a compound of the following formula



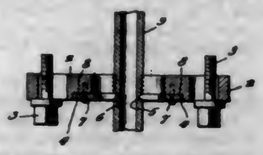
wherein at least one X stands for hydroxy, the other for hydrogen, n being 1 or a multiple thereof, and reducing the isonitroso compound thus obtained.

1,877,796. HYDRAULIC TORQUE CONVERTER. JOHN BOSSART, Los Angeles, Calif. Filed Jan. 27, 1932. Serial No. 589,207. 5 Claims. (Cl. 192—58.)



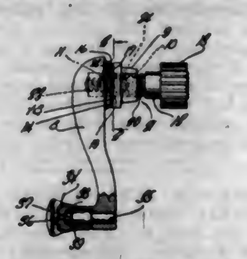
1. In a device of the kind described, a casing having a substantially cylindrical chamber therein, an axial shaft joining one end of said casing in fixed relation thereto to rotate therewith, an axial shaft projecting through the opposite end wall of said casing concentric therewith, the first named shaft being a driving element and the other a driven element, there being a fluid tight fit between the last named shaft and the end wall of the casing, an internal eccentric shaft within said casing, said internal shaft being at one end in fixed relation to the last recited axial shaft to rotate therewith in a gyratory manner and being at its other end provided with a bearing which is concentric with the first recited axial shaft, a paddle wheel mounted upon said eccentric shaft to rotate independently thereof, said paddle wheel being of less diameter than said chamber and there being a toothed relation between said wheel and the wall of said casing to cause the rotation of said casing to rotate said wheel, and a segmental liquid deflector secured in an offset manner to said eccentric shaft to receive liquid thrown against said deflector by the rotation of the said casing and of said paddle wheel, thereby to cause a relative rotation between the driving and driven elements of the device.

1,877,797. COMBINED PIPE CUTTER AND THREADER. JOHN J. BOUCHARD, Bradford, Pa. Filed Sept. 25, 1929. Serial No. 395,129. 6 Claims. (Cl. 10—110.)



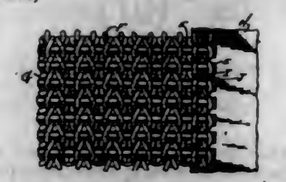
4. In a pipe cutting and threading tool, a stock, a threading die carried by said stock, and a cutter carried by said die with its cutting edge projecting beyond the thread forming face of the die.

1,877,798. CRANK HANDLE. STEPHEN F. BRIGGS and FELIX J. STUCKERT, Milwaukee, Wis. Filed May 14, 1926. Serial No. 109,089. 4 Claims. (Cl. 292—348.)



1. The combination with a lever member having a bore and a shaft having one end portion engageable in the bore, of cooperating means carried by the lever member and the shaft for securing the lever member against rotation with respect to the shaft in any position of circumferential adjustment, an abutment on the shaft, and a spring detent carried by the lever member and automatically engageable with the shaft abutment upon engagement of the lever member onto the shaft end to secure the lever member against detachment from the shaft.

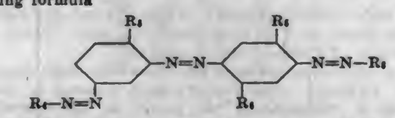
1,877,799. FABRIC. FREDERICK L. BRIGHAM, Upper Montclair, N. J. Original application filed Dec. 16, 1930, Serial No. 502,647. Divided and this application filed Sept. 15, 1931. Serial No. 562,874. 2 Claims. (Cl. 2—248.)



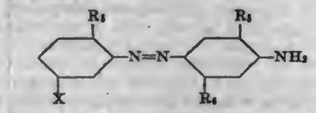
1. In combination a fabric in overlapped relation to an elastic fabric comprising braid-covered elastic threads, and stitching threads passing through the first mentioned fabric and the braid covering and the elastic core thread of each of said braid covered elastic threads of the second mentioned fabric for uniting the two fabrics.

1,877,800. AZO DYES AND THEIR PRODUCTION. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Feb. 12, 1930, Serial No. 427,961, and in Great Britain Mar. 13, 1929. 19 Claims. (Cl. 260—72.)

1. In the manufacture of trisazo dyes having the following formula

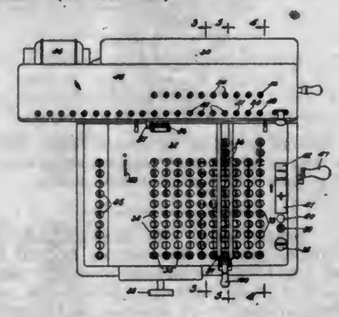


wherein R_3 and R_4 represent the coupled residues of azo dye coupling components, R_5 represents hydrogen, an alkyl or alkoxy group, R_6 represents hydrogen or an alkyl group, from 3:4'-substituted azo benzene compounds having the structure



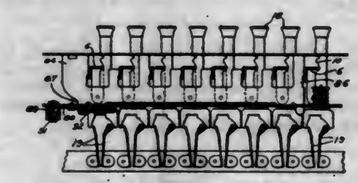
wherein R_5 and R_6 have the same significance as above and X represents an amino or nitro group, the process which comprises forming an azo group in the 4' position and coupling with an azo dye coupling component and an azo group in the 3 position and coupling with a second azo dye coupling component, when X is an amino group the said azo benzene compound being tetrazotized and coupled with two azo dye coupling components and when X is a nitro group the said azo benzene compound being diazotized and coupled with an azo coupling component, the disazo compound thus obtained reduced to convert said nitro group into an amino group, rediazotized and coupled with a second azo dye coupling component.

1,877,801. CALCULATING MACHINE. EDWIN F. BRITTEN, Jr., Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,004. 5 Claims. (Cl. 235—82.)



1. In a calculating machine, the combination with accumulators and actuating devices therefor, of selecting bails including two sets of value lugs and operable to control certain of said actuating devices, a plurality of keys, a pair of operating elements operable by each of said keys and operatively associated with said lugs, and means for shifting said keys and elements as a unit to position to coact with either of said sets of lugs at the will of the operator.

1,877,802. CALCULATING MACHINE. EDWIN F. BRITTEN, Jr., Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Feb. 13, 1932. Serial No. 592,696. 8 Claims. (Cl. 235—62.)

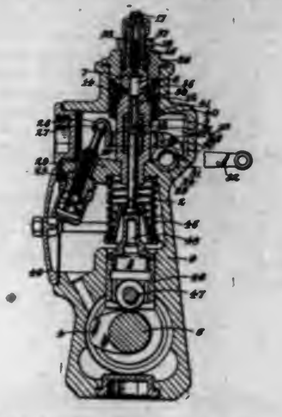


1. In a calculating machine having settable digit determining keys and operating means including an electric motor; a circuit breaker in the motor circuit having normally closed contacts, and means operable by said digit keys and acting to separate the contacts of the circuit breaker while a key is in a partially set position.

1,877,803. FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES. CLEMENT BROWN and WILLIAM COMERY, Birmingham, England, assignors to Amal Limited, Birmingham, England. Filed Jan. 23, 1932, Serial No. 588,422, and in Great Britain Feb. 26, 1931. 5 Claims. (Cl. 103—37.)

1. A fuel-injection plunger pump having a sleeve which cooperates with the plunger and is axially adjustable to

control the functioning of the pump, said sleeve having diametrically-opposite lugs which make line contact on



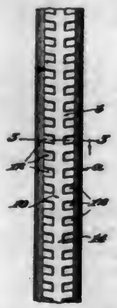
one face with an actuating bifurcated rocker and on the other side with a washer, said washer making line contact on its other face with spring-pressed means.

1,877,804. DIAPHRAGM OR DIAPHRAGM MOUNT FOR LOUDSPEAKERS OR OTHER SOUND REPRODUCING DEVICES. JOHANNES BRUIJNES and AREND THOMAS VAN UAK, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed July 15, 1927, Serial No. 205,936, and in the Netherlands Sept. 13, 1926. 5 Claims. (Cl. 181—31.)



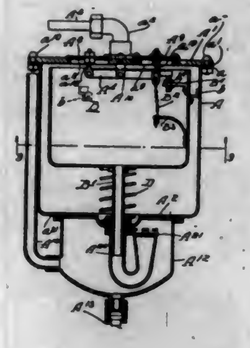
2. An acoustic device comprising a vibratile member, a stationary member having an edge portion adjacent to the periphery of said vibratile member but out of contact therewith, and a pair of flat yieldable members fastened to said edge portion on opposite sides thereof, each of said flat yieldable members being fastened to said edge portion so that a part thereof extends freely beyond said edge portion to loosely engage said vibratile member near its periphery.

1,877,805. SOLID RUBBER TIRE. HAROLD G. BRUNER, Wakefield, Mass., assignor to Boston Woven Hose & Rubber Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 14, 1927. Serial No. 219,482. 3 Claims. (Cl. 152—1.)



1. A rubber tire having a solid all-rubber body portion substantially circular in cross section and provided with a longitudinally extended bore, and having a tread member extended longitudinally of the said body portion and circumferentially of the tire and normally forming part of said substantially circular body portion, said tread member being provided with an outer surface substantially flat transversely of the tire and of less width than the diameter of the body portion through said bore and having recesses to provide said tread member with anti-skid members and said body portion having a circular outer surface extended transversely of the tire from one side of the tread member to the other side thereof.

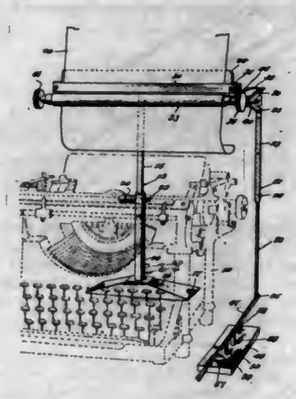
1,877,806. SUCTION FUEL FEEDING APPARATUS FOR INTERNAL COMBUSTION ENGINES. CHARLES S. BURTON, Oak Park, Ill. Filed Sept. 15, 1930. Serial No. 482,146. 7 Claims. (Cl. 103—256.)



1. A construction for moving liquid from a source at a lower level to a higher level and delivering it by gravity to a place of use comprising a chambered casing; a liquid container enclosed in a chamber of the casing and movable up and down therein, and means for yieldingly supporting it at predetermined position therein; means affording and controlling suction connection atmospheric access and liquid inflow to said container, the container being depressed against the resistance of the yielding upholding means by the weight of liquid drawn into the container while the atmosphere access is closed, the casing having a second chamber into which the container discharges; a discharge fitting through which the container discharges provided with a valve opening for discharge and normally closed and adapted to be held closed by suction operating in the container cavity.

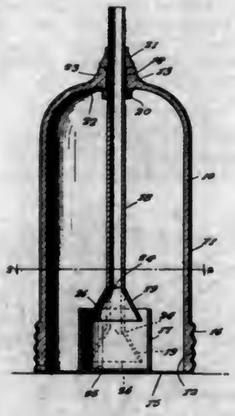
1,877,807. COPYHOLDER. ANTONY JACK CAGLIOSTRO, New York, N. Y. Filed Sept. 29, 1930. Serial No. 485,228. 8 Claims. (Cl. 120—82.)

1. A copyholder for drop top typewriter desks comprising a vertically adjustable standard adapted to be retracted to substantially the height of the typewriter whereby to fit underneath the closed drop top of the typewriter desk and adapted to be extended to support copy above and in the rear of the typewriter, a vertically adjustable key stem disposed laterally of the standard and adapted to be retracted and extended to correspond in height to the standard and cooperate therewith, a copy holding bar associated with the top of the standard centrally thereof and provided with a lug adapted to receive a portion of the vertically adjustable standard, means carried by the lug for locking the bar in position on the standard, inverted T-shaped extensions carried on the ends of the bar and integral therewith, said extensions comprising vertical legs and forwardly and rearwardly extending legs, a roller having its end portions journaled in corresponding forwardly extending legs, a second roller having its end portions journaled in said corresponding rearwardly extending legs and adapted to cooperate with



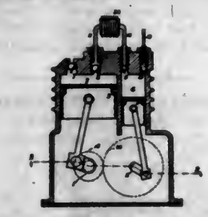
said first-mentioned roller, a ratchet and pawl feeding device operated by said key stem for actuating one of said rollers, and a pivoted key adapted to be permanently secured to a typewriter support of the desk and operatively connected to the key stem for actuating said stem.

1,877,808. SUGAR DISPENSER. ANTONY JACK CAGLIOSTRO, New York, N. Y. Filed Sept. 29, 1930. Serial No. 485,229. 5 Claims. (Cl. 221—98.)



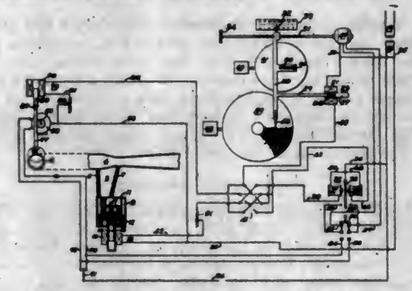
1. A dispenser comprising a jar open at the bottom, a removable disk base for the jar closing the open bottom thereof, an annular measuring cup integral with the base and of less diameter than the jar, said jar having an integral pouring neck opposite the bottom, a pouring tube removably disposed in said neck, nuts threaded on the tube and engaging the inner and outer ends of the pouring neck for adjustably securing said tube to said neck, and a funnel carried by the tube projecting into said measuring cup.

1,877,809. COMPRESSOR. MICHELE A. CASERTA, Detroit, Mich. Filed Mar. 19, 1930. Serial No. 437,238. 9 Claims. (Cl. 230—182.)



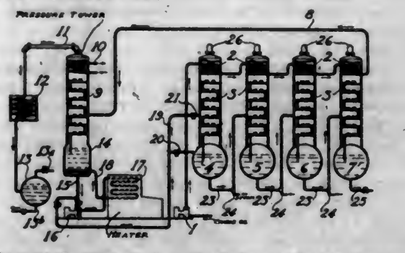
1. In a combination, means for compressing fluid through a plurality of stages, and means for driving said compressing means at a speed inversely proportional to the compression reached in each stage.

1,877,810. INDICATING AND CONTROLLING SYSTEM. LEON H. CHAMBERLAIN, Oakland, Calif., assignor to Waterworks Supply Company, San Francisco, Calif., a Corporation of California. Filed Sept. 7, 1926. Serial No. 133,869. 7 Claims. (Cl. 177—351.)



1. In an indicating and controlling system, gaging means and a source of electrical potential, an impedance associated with and variable by the gaging means in proportional relationship thereto, a second impedance associated with control means for the system and variable in proportional relationship to the position thereof; a third impedance associated with indicating means for the system and variable in proportional relationship to the position thereof; means for detecting the relative magnitudes of a selected plurality of said impedances; means for connecting said plurality of impedances to the detecting means, and means controlled by the detecting means for controlling the position of the control means or for controlling the position of the indicating means depending upon the plurality of impedances selected.

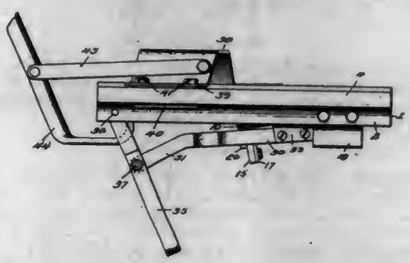
1,877,811. PROCESS FOR TREATING CRUDE OIL. STEWART P. COLEMAN, Houston, Tex., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 19, 1928. Serial No. 271,172. 10 Claims. (Cl. 196—73.)



1. Improved process for obtaining valuable products from crude oil which comprises continuously preheating

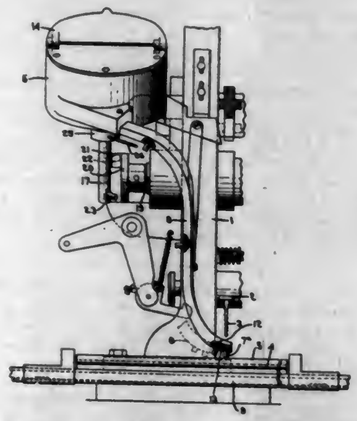
the crude under super-atmospheric pressure, rectifying the crude under said pressure and at temperature at which no substantial cracking takes place to produce a liquid distillate comprising butane and a residue substantially free of butane, and continuously distilling the residue under substantially atmospheric pressure.

1,877,812. MECHANISM FOR TRIMMING PICKERS. WILLIAM B. COLLUM, Gainesville, Ga. Filed June 19, 1931. Serial No. 545,584. 8 Claims. (Cl. 69—1.)



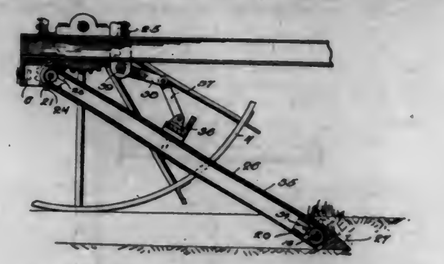
1. A picker trimming mechanism, including a bed plate, a clamp having resilient side portions for engaging the picker, means carried by the bed plate for moving the resilient clamp portions together to clamp a picker, a cutter frame guided in the bed plate, means for operating the cutter frame, and two transversely offset cutter blades carried by the frame with cutting edges inclined to the plane of movement of the cutter frame.

1,877,813. EYELET FEEDING MECHANISM FOR EYELET SETTING MACHINES. CALVIN N. COLPITTS, Malden, Mass., assignor to American Window Shade Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1930. Serial No. 495,934. 2 Claims. (Cl. 218—15.1.)



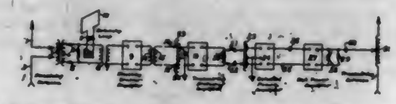
1. In an eyelet-setting machine, the combination with an eyelet-containing hopper, of a raceway communicating therewith, an oscillatory brush in the hopper for agitating the eyelets, an oscillatory shaft on which the brush is mounted, an actuating shaft situated at right angles to the oscillatory shaft, two arms extending from the oscillatory shaft at different angular positions, a cam projection on the actuating shaft which engages the arms alternately as the actuating shaft rotates, thereby to oscillate said oscillatory shaft, and means to turn the oscillatory shaft into a position in which the arms are out of the path of movement of said cam projection.

1,877,814. ROTARY ROD WEEDER. BENJAMIN JEROME CONNOR, Chappell, Nebr. Filed Sept. 23, 1930. Serial No. 483,899. 10 Claims. (Cl. 97—42.)



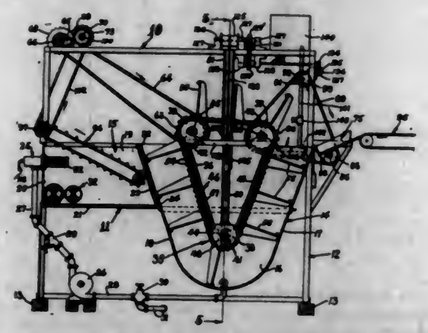
1. In a rotary rod weeder, a weeder rod supporting shoe provided with a transverse opening, a sectional rod bearing mounted in said opening, movable means for locking the sections of said bearing together in said opening, said means being held in locked position by the insertion of said weeder rod.

1,877,815. RADIO RELAY SYSTEM. FRANK CONRAD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 28, 1926. Serial No. 84,341. 9 Claims. (Cl. 250—15.)



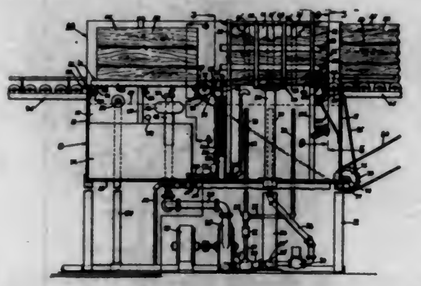
1. In combination, a source of radiant energy, means adapted to receive such energy, said means comprising a plurality of substantially vertical conductors geographically situated along a line normal to the direction from which the energy is received, a second source of radiant energy controlled by said receiving means, said second source being also located on the same line normal to the direction from which energy is received, and additional means, comprising a loop-antenna, for preventing said second source from interfering with the reception of signals by the receiving means.

1,877,816. LIQUID BATH APPARATUS. CHARLES B. COOK, Los Angeles, Calif. Filed June 17, 1929. Serial No. 371,442. 11 Claims. (Cl. 146—194.)



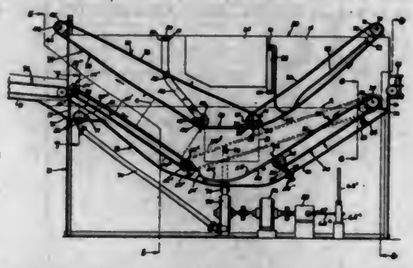
1. In a device for treating fruit with fluid, a tank, an elevator arranged in said tank, said elevator including an endless member having cleats therein, said cleats including a body having sides thereon, said cleats being arranged to move with the sides down at one end of the tank and with the sides up at the other end of the tank, said cleats acting with the walls of said tank to provide pockets and means to deliver fruit to said pockets, said cleats having their bodies inclined downwardly towards their free ends when in each end of the tank.

1,877,817. SUBMERGER. CHARLES B. COOK, Los Angeles, Calif. Filed Apr. 26, 1930. Serial No. 447,746. 18 Claims. (Cl. 91—46.)



2. In an article treating device, a tank adapted to contain a predetermined amount of fluid, means to supply fluid to said tank, elevator means to lower an article in said tank below the fluid level therein, and to thereafter raise said article above the fluid level therein, a container, said container being independent of said fluid supply means, said container being adapted to contain a treating solution and means operable upon lowering and raising of said article to deliver a predetermined amount of said solution from said container into said tank.

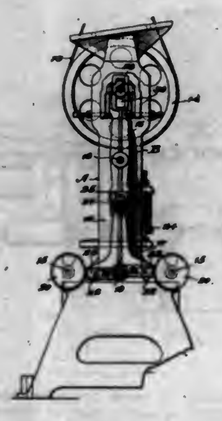
1,877,818. LIQUID BATH APPARATUS. CHARLES B. COOK, Los Angeles, Calif. Filed Nov. 7, 1930. Serial No. 494,175. 33 Claims. (Cl. 167—3.)



25. In a box treating device, a tank, an inclined conveyor in said tank sloping downward from one end of said tank, spaced shafts, said conveyor including an endless member supported on said shafts and having a plurality of spaced lugs thereon, means to operate said member to cause the upper reach thereof to travel downward, guide means positioned above said conveyor and arranged substantially parallel to said conveyor, said lugs on said conveyor being adapted to move a buoyant box downward below the fluid level in said tank and said guide means being adapted to retain said box in a position to be engaged by said lugs, a second conveyor, said second conveyor including an endless member supported on shafts and including an inclined portion sloping upwardly towards the end of said tank which is opposite to said first conveyor and a plurality of spaced lugs on said second conveyor member.

1,877,819. METAL LATH SLITTING PRESS. WILLIAM C. COFFELL, Youngstown, Ohio. Filed Apr. 20, 1929. Serial No. 356,784. 2 Claims. (Cl. 271—2.4.)

1. In a metal lath slitting press, feed rolls, a power shaft inclusive of a crank element, an intermediately pivoted lever operatively connected at one end with said crank element whereby continuous rotation of said shaft oscillates said lever, a second intermediately pivoted lever



operatively connected with said first lever whereby both levers are oscillated in unison, and pawl and ratchet connecting means between said second lever and said feed rolls.

1,877,820. GAME APPLIANCE. HENRY O. COSTELLO, Providence, R. I. Filed Sept. 30, 1930. Serial No. 485,454. 7 Claims. (Cl. 273—77.)

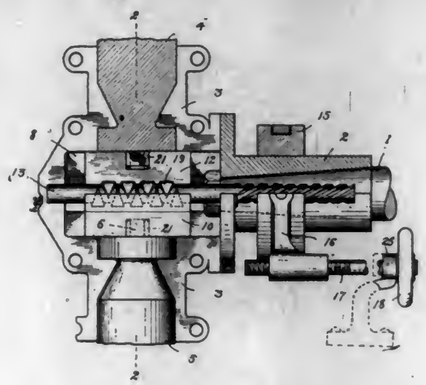


1. An improved golf club for use in practice comprising a head shaped to conform in outline with the shape of a golf club head and having an opening therein extending transversely of the head, the opening being of sufficient size to permit the passage of a golf ball therethrough.

1,877,821. AIRCRAFT PROPELLER. FELIX M. COVEY, Duluth, Minn. Filed Nov. 24, 1930. Serial No. 497,828. 5 Claims. (Cl. 170—163.)

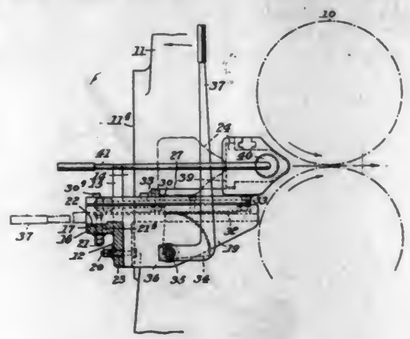
1. The combination with a hollow propeller hub fixed to the end of a driving shaft and having rotatably adjustable blades extending within the hub, of a pair of rotatable spindles disposed parallel with the shaft and extending within the hub, reciprocable means upon the spindles externally of the hub for rotating same simultaneously in

either direction, a pair of slidable members upon each spindle within the hub, diametrically opposed pintles carried



upon the extremity of each propeller blade within the hub, the diagonally opposite ones of which travel in the same direction and operable by the slidable members.

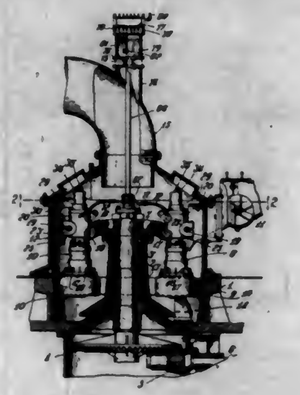
1,877,822. GUIDE BOX. PAUL L. COYLE, Coraopolis, Pa., assignor, by mesne assignments, to Republic Steel Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 12, 1929. Serial No. 406,626. 5 Claims. (Cl. 80—51.)



3. A guide box for die rolls comprising an adjustable bracket, a guideway adjustably secured thereto, a guide box slidable in said guideway having gripping means for supporting and directing a length of metal passing through said rolls, a rack on said box, a gear segment journaled in said guideway for cooperation therewith and actuating means for the segment.

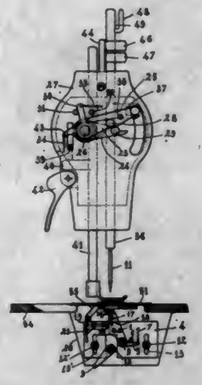
1,877,823. CENTRAL LUBRICATING SYSTEM FOR ROLLER MILL ROLLERS. JOE CRITES, Evanston, Ill., assignor to The Raymond Brothers Impact Pulverizer Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1928. Serial No. 252,223. 2 Claims. (Cl. 184—6.)

1. In a pulverizing mill, the combination with a frame rotating about a vertical axis, a bull-ring, a plurality of pulverizing rollers suspended from said frame so that they may swing out by centrifugal force against the bull-ring, means comprising a plurality of bearings for rotatably supporting each roller from the frame, and a mill housing enclosing all of these parts, of a tubular shaft secured to the frame and extending upwardly through the top of the housing in line with the axis of rotation of the frame, a plurality of conduits in the tubular shaft, one for each roller, a flexible conduit leading from each of the last



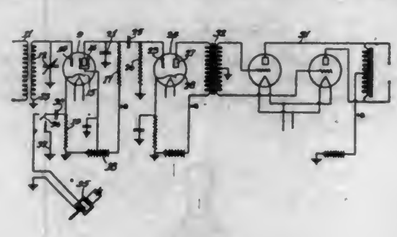
mentioned conduits to the bearings of one of the rollers, a stationary reservoir positioned outside the housing for holding a supply of lubricant, and means also outside the housing for automatically distributing oil from the reservoir to each of the conduits in the tubular shaft.

1,877,824. MACHINE FOR SEWING VELVET ON TO FABRICS OF ANY KIND. FERDINAND DELPLANQUE, Paris, France. Filed Apr. 23, 1928, Serial No. 272,160, and in France Mar. 24, 1928. 4 Claims. (Cl. 112—79.)



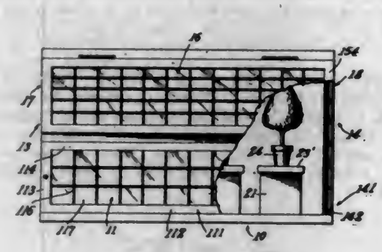
1. In a sewing machine for forming a pile upon fabrics, a needle for sewing a pile thread at regular intervals into and through a fabric, a loop-forming element engageable with the portion of said thread which is passed through said fabric, means controlling said element to retain it in engagement with a loop formed thereby until said needle has completed its down-stroke in the formation of a succeeding loop, means thereupon operable to move said loop-forming element into engagement with said next succeeding loop which is being formed, and means actuated during the movement of said loop-forming element from one loop to a succeeding one to cut the former loop.

1,877,825. RADIO CIRCUIT. ROBERT S. DOAK, Chicago, Ill., assignor to Premier Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,076. 4 Claims. (Cl. 179—100.11.)



1. In a combination radio and phonograph system, an audion having a grid, cathode, and anode, an input circuit associated with said grid, a plate circuit including the cathode and anode, an impedance element in series with said cathode, and means for impressing phonograph signals at a point between said impedance and cathode.

1,877,826. TOY. LAURA DOREMUS, New York, N. Y. Filed June 8, 1931. Serial No. 542,828. 1 Claim. (Cl. 46—37.)



A toy greenhouse, comprising a supporting bottom member, and a plurality of associated side and end members carried by said supporting bottom member, each of said side and end members comprising a plurality of channeled frame members forming a frame, and a pane of glass and a covering wide-mesh screen member carried by said frame in the channels of said channeled frame members.

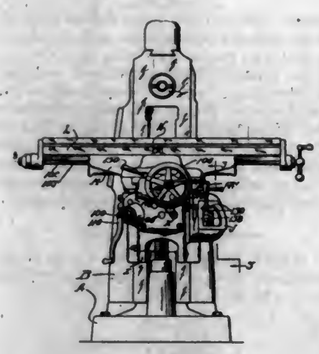
1,877,827. SURGICAL INSTRUMENT. HUBERT DRACHE, New York, N. Y. Filed June 10, 1931. Serial No. 543,358. 1 Claim. (Cl. 30—91.)

A surgical knife comprising a blade having a recessed shank portion with an eye and oppositely disposed lugs projecting laterally therefrom, a channeled plate having upwardly extending flanges offset from the side of the plate on the longitudinal edges thereof for accommodating the recessed shank portion and transverse grooves in the sides of the plates to permit the lugs on the shank portion to abut the offset ends of the flanges and also make engagement with the grooves thereof, said channeled plate having a perforation whose opposing side face is congruous with the perforation on the blade and whose outside face comprises a countersunk circular depression with gradually progressive depth toward the center of the perforation, a complemental plate for covering the channeled plate having a stud with an elliptical shaped head, and a cylindrical body projecting from said plate, passing through the perforations of the blade shank and the side opening
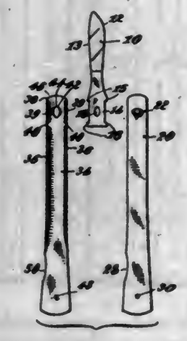


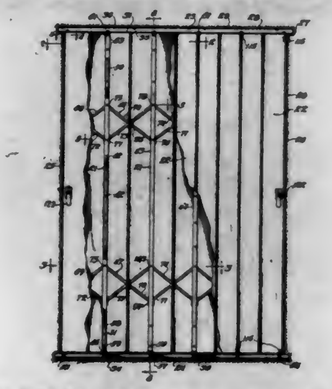
plate whereby upon angular displacement of one plate to the other around the stud as a pivot, a clamping action is effected and the plates are contracted together for rigidly retaining the blade therebetween to prevent lateral and angular displacment of the blade, and means on the second plate for retaining the plates together.

1,877,828. MILLING MACHINE. SOL EINSTEIN and LESTER F. NENNINGER, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 28, 1926. Serial No. 105,256. 7 Claims. (Cl. 90—21.)



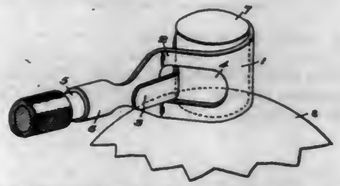
1. In a knee and column milling machine, the combination with a column, of a knee movable thereon, a saddle and table translatably supported by the knee, a feed box on the knee, a driven shaft for supplying power into the feed box, independent units for output of power from the feed box at either a feed or quick traverse rate, a common driver selectively operable at either of said rates, means for shifting the knee, saddle and table, and means for selectively coupling either of said shifting means with the common driver for actuation at a predetermined rate.

1,877,829. FOLDABLE CURTAIN. PEDER E. ERLINDER, Chicago, Ill., assignor to Folding Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,187. 13 Claims. (Cl. 20—20.)



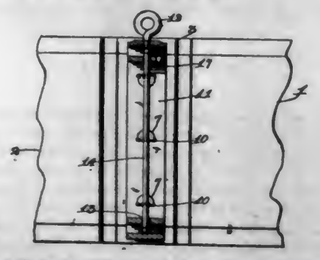
1. In a foldable curtain, the combination of a flexible envelope with an extensible framework for supporting said envelope, said framework including an extensible linkage having links bowed to increase lateral rigidity.

1,877,830. ELECTRIC TERMINAL CLIP. PHILIP A. EYRICK, Cambridge, Mass., assignor to National Company, Inc., Malden, Mass., a Corporation of Massachusetts. Filed June 19, 1929. Serial No. 372,001. 2 Claims. (Cl. 173—269.)



1. An electric terminal clip pressed from sheet metal and having a substantially continuous cylinder-like yieldable sleeve of substantial length and being in the form of a circular loop for substantially continuous contact with a contact member, and a pair of spaced finger pieces connected to said sleeve, one of said finger pieces having a slot, and the other finger piece having its end extending through said slot thereby to provide squeeze-operated means whereby when the finger pieces are pressed toward each other the sleeve will be expanded to permit engagement with and disengagement from a contact member.

1,877,831. LOOSE-LEAF BINDER. CHARLES H. FRANZ, Jr., Wauwatosa, Wis. Filed May 22, 1931. Serial No. 539,252. 3 Claims. (Cl. 129—38.)



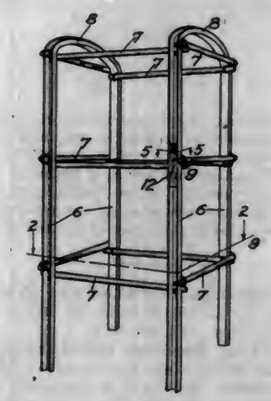
3. In a loose-leaf binder, a back member, substantially rectangular housings at the ends of the back member, and a retaining rod having one end connected with one housing, the other end of the rod being provided with a lateral extension, the other housing being provided with an opening having a short and a long slot in one wall thereof, the lateral extension of the rod being insertable through the longer slot and movable laterally behind the shorter slot to detachably connect the rod to the last-mentioned housing.

1,877,832. NURSING BOTTLE. JOHN P. FEGELY, Allentown, Pa., assignor of one-half to Ernest A. Wallis, Allentown, Pa. Filed Mar. 21, 1931. Serial No. 524,384. 1 Claim. (Cl. 215—11.)



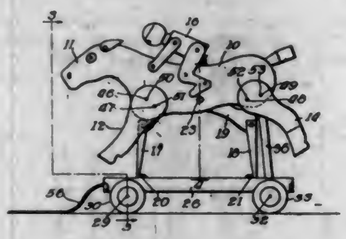
A food controlling device for use in a nursing bottle having a flexible nipple removably attached to the mouth of the bottle, a double-cone body having two grooves extending from apex to apex, the two cones being symmetrical so that either one may extend into the bottle neck to thereby render the device reversible, said body having sufficient diameter at the bases of the two cones to rest upon the upper end of the mouth of the bottle so that the nipple when properly placed on the mouth of the bottle will clamp the double-cone body in place and hold it in place while feeding.

1,877,833. CLIMBING STRUCTURE FOR PLAYGROUNDS. DANIEL D. FERRELL, Ottawa, Ill., assignor to J. E. Porter Corporation, Ottawa, Ill., a Corporation of Illinois. Refiled for abandoned application Serial No. 384,607, filed Aug. 9, 1929. This application filed Nov. 3, 1930. Serial No. 493,079. 3 Claims. (Cl. 272—60.)



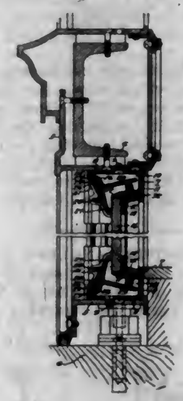
1. In climbing structures for playgrounds the combination with cross bars, of uprights having a channeled recess throughout their length and bolts engaging the cross bars with the uprights having means thereon within the channeled recess of the uprights to hold the cross bars and uprights in engagement whereby the outer surface of the uprights is rendered smooth and unobstructed.

1,877,834. FIGURE TOY. WILLIAM D. FERRIS, Sterling, Ill., assignor to Hustler Toy Corporation, Sterling, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 521,929. 5 Claims. (Cl. 46—45.)



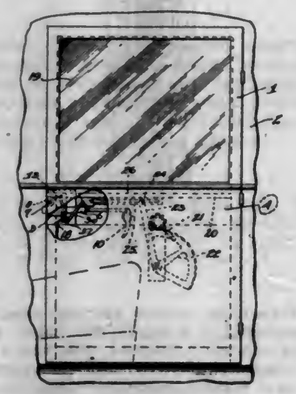
1. In a figure toy the combination of a body, said body having a longitudinal slot and transverse slots, a truck, said truck having axles and wheels and also a slot, a support intermediate said body and said truck, said support having a standard at the front end of said body and another standard at the rear end of said body, and cross-plate connecting the standards, a portion of said plate being adapted to fit into said longitudinal slot, projections at the end portions of said cross plate, said projections extending into the longitudinal slot, slots in said projections, the slots in the projections registering with said transverse slots, and pins in said slots to operate said body, and an actuating bar connecting said body with one of said axles through the slot in said truck and causing movement of said body on said support.

1,877,835. SHEET GLASS MOUNTING. PETER J. FEYKERT, San Francisco, Calif. Filed July 2, 1930 Serial No. 465,336. 1 Claim. (Cl. 20—56.4.)



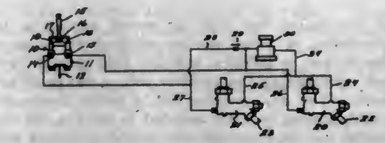
A holder for engaging a sheet of glass on opposite sides to position the same in a window, said holder comprising a frame having a base member, a shelf spaced from said base member for supporting the sheet along its edge, and an upstanding wall extending from said shelf and adapted to engage one side of the sheet of glass, an elongated rockable member having a transverse cross section corresponding generally to the outline of a bell crank lever, a raised lip extending obliquely from one of the longitudinal edges of said base member, a groove in said rockable member cooperating with said lip to provide a fulcrum for the same, and a screw having threaded engagement with said frame adapted to abut against the surface of one arm of the bell crank lever formed by said rockable member to rock the other arm thereof about said fulcrum to engage the opposite side of the sheet of glass, said rockable member being held firmly in place against the sheet of glass upon tightening of said screw by virtue of the force exerted by the screw against the arm of the member.

1,877,836. DOORLOCKING DEVICE. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 20, 1929. Serial No. 379,683. 11 Claims. (Cl. 292—169.)



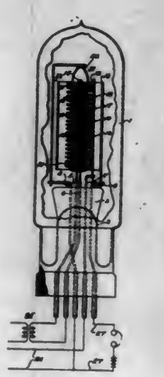
1. In a vehicle body the combination with a latch for inter-engaging a door having an opening and a door frame, said latch having bolt retracting means, of a movable closure for the opening in the said door, and means including a lever carried by the movable closure for locking the said latch bolt retracting means as the closure approaches closed position.

1,877,837. LOCOMOTIVE SANDING MECHANISM. VIRGIL L. FRANTZ, Roanoke, Va., assignor to Graham-White Sander Corporation, Roanoke, Va., a Corporation of Virginia. Filed Nov. 18, 1930. Serial No. 496,497. 8 Claims. (Cl. 291—16.)



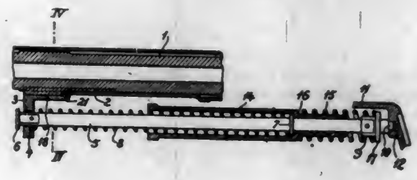
1. In a locomotive sanding mechanism, the combination of a source of fluid pressure, a two-way valve connected therewith, a plurality of sand traps each having a delivery pipe, a cleaning port and a main fluid pressure admission port, and means connected with said valve and connected with the cleaning ports of the sand traps and automatically operable for supplying fluid pressure to the cleaning ports of all of the traps when the two-way valve is opened in either direction.

1,877,838. HOT CATHODE ELECTRON DISCHARGE TUBE. HUBERT M. FREEMAN, East Pittsburgh, Pa., and WALLACE G. WADE, New York, N. Y., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Jan. 8, 1923, Serial No. 611,263. Divided and this application filed July 6, 1926. Serial No. 120,582. 10 Claims. (Cl. 250—27.5.)



1. In a hot-cathode electron discharge tube, a cathode member comprising a V-shaped flat ribbon heater element having adjacently disposed sides and a flat sheet element of conducting material disposed adjacent to the surface of said heater element and separated therefrom by a layer of insulating material.

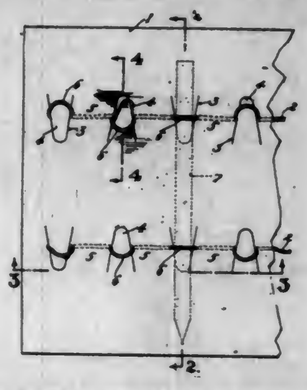
1,877,839. BARREL SPRING FOR AUTOMATIC FIREARMS. RUDOLF V. FROMMER, Budapest, Hungary. Filed Dec. 3, 1931, Serial No. 578,764, and in Hungary Dec. 4, 1930. 1 Claim. (Cl. 42—4.)



In an automatic fire arm, a barrel having a long recoil movement, a barrel spring adapted to press forward the barrel, a guiding rod for said barrel spring the latter surrounding the guiding rod, a flange situated at the rear end of said guiding rod, a buffer sleeve shiftable on said guiding rod and adapted to receive the shock of the barrel and to surround said barrel spring, a buffer spring controlling the movement of said buffer sleeve and bearing on said flange.

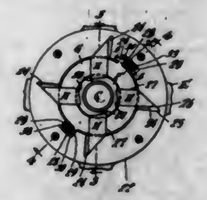
1,877,840. DISPLAY CARD. JAMES M. FROWENFELD, New York, N. Y. Filed Feb. 4, 1931. Serial No. 513,239. 4 Claims. (Cl. 206—80.)

1. A display card provided with a series of spaced openings each having side walls, a tongue-like member for each opening substantially overlying the opening and having one end secured to the card and its opposite end free, and a cord on one side face of the card having loops which latter extend on the opposite side face of the card, the cord having portions at the ends of the loops



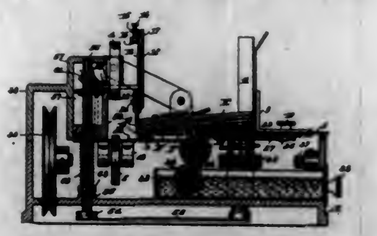
extending into the openings and wedgingly engaged by and between the sides of the tongues and the adjacent walls of the openings.

1,877,841. HAND BRAKE. HENRY FUCHS, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 15, 1930. Serial No. 488,826. 10 Claims. (Cl. 74—112.)



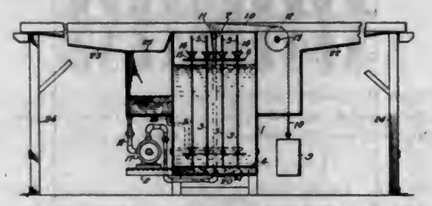
1. In a hand brake, the combination with a rotary chain winding member; of means for rotating said member, including a rotary shaft; a hand wheel; and clutch means for operatively connecting the hand wheel and shaft, said clutch means including clutch fingers having clutching engagement with the shaft, and means actuated by rotation of the hand wheel in chain tightening direction for operating said fingers to clutch the shaft.

1,877,842. ENVELOPE HANDLING MACHINE. AZEL GAY, Rochester, N. Y., assignor to Multipost Co., Rochester, N. Y., a Corporation of New York. Filed Dec. 4, 1930. Serial No. 500,015. 8 Claims. (Cl. 271—2.)



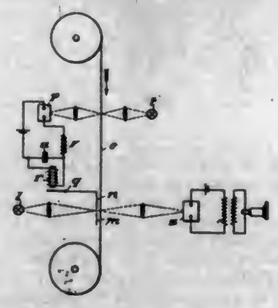
1. In an envelope handling machine, the combination with means for feeding an envelope along a certain path of travel, of a stacking device arranged at one side of said path of travel, a transfer element comprising a blade associated with the stacking device, and means for communicating a parallel motion to the blade toward and from said path of travel, said blade being adapted to engage the flap of an envelope in the stack and transfer it in a relatively lateral direction to the said feeding means.

1,877,843. MACHINE FOR WASHING BOTTLES. FREDERICK D. GATCHELL, Binghamton, N. Y. Filed Feb. 23, 1929. Serial No. 342,168. 1 Claim. (Cl. 141—7.)



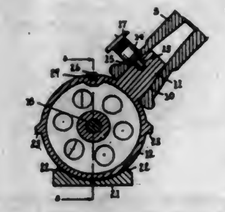
Apparatus of the character stated, comprising an elongated rectangular frame having at the top a crate runway, a tank interrupting the runway and having its mouth flush therewith, a manifold below the tank, means for supplying fluid under pressure to the manifold, fluid discharge connections extending from the manifold upwardly in the tank to near the mouth thereof, a crate receiving platform mounted for vertical movement on said fluid discharge connections and arranged so that inverted bottles carried by the crate will telescope the respective fluid discharge connections, a fluid supply tank flanking the main tank and open to drainage from the runway and operatively connected with said means for supplying the manifold, and a fluid return connecting the main tank with the supply tank.

1,877,844. REPRODUCER FOR SOUND FILMS. ERWIN GERLACH, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Original application filed Oct. 19, 1927, Serial No. 227,201, and in Germany Apr. 9, 1927. Divided and this application filed Dec. 31, 1931. Serial No. 584,079. 8 Claims. (Cl. 179—100.3.)



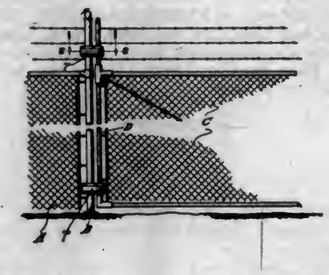
1. In an apparatus for reproducing sound by means of sound films in which the width of the darkened film portion varies according to the sounds, means for projecting a beam of light on the film, a shutter located in the path of said beam and variable perpendicularly to the path of the film, and means for controlling said shutter in such a way that the film portions extraneous to the sound record will be shuttered substantially to a line connecting the general apices of the sound record curve.

1,877,845. FISHING ROD HOLDER. OTTO GERLINE, Kalamazoo, Mich. Filed Oct. 3, 1931. Serial No. 566,617. 6 Claims. (Cl. 248—37.)



6. A device of the class described comprising a supporting bracket, a wheel-like support pivotally mounted thereon and provided with radial stops limiting its oscillating movement, said support being provided with a non-circular radial arm, and a rod holder having a non-circular socket adapted to receive said arm.

1,877,846. GATE HINGE. JOHN B. GETZ, Morton, Ill., assignor to Interlocking Fence Co., Morton, Ill., a Corporation of Illinois. Filed Sept. 20, 1930. Serial No. 483,159. 1 Claim. (Cl. 16—163.)



In a gate hinge, in combination, a segment gear arranged for securement to a fence post, a segment gear meshing with said first mentioned gear and arranged for securement to a gate member, and a housing for said gear elements arranged to embrace said fence post and gate member and having pivotal movement about said fence post and gate member, when the gate is swung, the speed of pivotal movement of the gate when swung being in excess of the speed of pivotal movement of said housing.

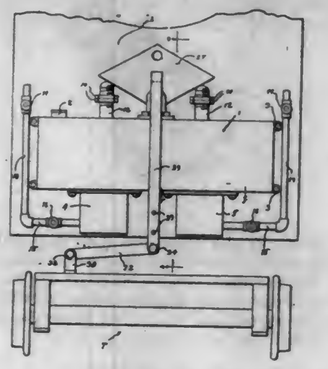
1,877,847. MANUFACTURE OF ESTERS. WILFRID GIBSON and JOSEPH BARON PAYMAN, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Dec. 11, 1928, Serial No. 325,386, and in Great Britain Dec. 21, 1927. 11 Claims. (Cl. 260—106.)

1. A process for the manufacture of esters of aliphatic acids which comprises heating together an aliphatic acid amide, an alcohol and an inorganic catalytic salt of a metal selected from a class consisting of zinc chloride, zinc sulphate, zinc-ammino-chloride and mercuric chloride.

1,877,848. LUBRICATING DEVICE. LUCIOUS EDGAR GILLIAM, Asheville, N. C. Filed Dec. 22, 1930. Serial No. 504,126. 6 Claims. (Cl. 184—3.)

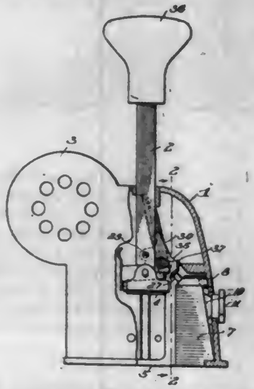
1. A lubricating device for vehicles comprising a casing adapted to contain a lubricant, means for mounting the casing on the locomotive, a pair of cylinders extending through the bottom of said casing, each of said cylinders

provided with an inlet connecting the cylinders with said casing, a valve controlled outlet for each of the cylinders, a conduit leading from each of said outlets, a piston mounted for reciprocation in each of said cylinders, a pivotally



mounted cam for actuating either of said pistons, and a lever mechanism connecting said cam and the truck of the vehicle for actuating said cam upon the turning of the vehicle in either direction.

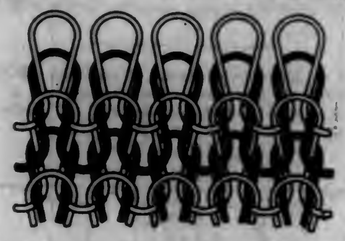
1,877,849. STAMP AFFIXING MACHINE. EDWARD W. GMELIN and AZEL GAY, Rochester, N. Y., assignors to Multipost Co., Rochester, N. Y., a Corporation of New York. Filed Sept. 23, 1931. Serial No. 564,587. 6 Claims. (Cl. 216—34.)



1. In a stamp affixing mechanism, the combination with a movable presser member and a water reservoir, of a water projecting means associated with the reservoir to be operated by the presser member and embodying an actuating member, the presser member being provided with a contact member adjustable thereon with relation to the actuating member to control the volume of delivery.

1,877,850. KNIT GOODS. RUDOLF GRABNER, Hohenstein-Ernstthal, Germany. Filed June 5, 1931, Serial No. 542,401, and in Germany June 26, 1930. 2 Claims. (Cl. 66—196.)

1. A method of producing double-sided knit goods on a hosiery or knitting machine with two downwardly inclined needle rows consisting in lowering at first only the needles of one of the two rows arranged exactly opposite one another when the needles of the opposite row are knocked over, causing the needles of the first row to pass through the meshes of the needles of the other row, supplying the needles of the first row with thread, drawing back the needles of the first row with their thread

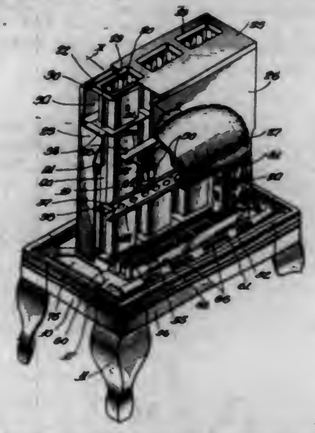


through the meshes already penetrated by them in order to form loops and in causing the penetrated meshes to be knocked over the loops drawn through them.

1,877,851. INSECTICIDE. DUDLEY H. GRANT, Moorestown, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 5, 1929. Serial No. 390,655. 5 Claims. (Cl. 167—43.)

3. A homogenous insecticide or insect repellent emulsion comprising a petroleum white oil, a compound of nicotine with an oil-soluble sulphonic acid derived from petroleum, an emulsifying agent and water.

1,877,852. COMBINATION RADIANT AND CIRCULATING GAS HEATER. WILLIAM A. GRISWOLD, Nashville, Tenn. Filed Sept. 4, 1930. Serial No. 479,638. 12 Claims. (Cl. 126—90.)

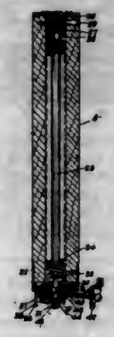


1. In a heating structure of the class described, the combination of a stove body, flue structures within said body having vertical passageways therethrough for the upward flow of air to be heated, a single burner structure at the bottom of said stove body having a rear row of gas outlet ports, means for deflecting around and through said flue structure the products of combustion resulting from the burning of gas at said ports, said burner having a front row of gas ports, and upright radiant elements mounted in a row above said front row of ports to receive gas only from said ports and to be heated by the burning of the gas at said ports and to radiate the heat forwardly to the exterior of said heating structure.

1,877,853. SCREEN ROLLER ADJUSTMENT DEVICE. HANS PETER GRONBECH, Pacific Beach, Calif. Filed Dec. 18, 1931. Serial No. 581,882. 3 Claims. (Cl. 156—39.)

1. In a device of the kind described, manually adjustable means to rotationally adjust a screen roller having

tensioning means, said adjustable means comprising a ratchet disc rigidly fastened to the tensioning means, the teeth of said disc being directed away from the plane occupied by said disc, a washer mounted upon the face of



said disc and concentric therewith, and an arm maintained by said washer in spaced relation to said disc, said arm being resilient and extending radially outward beyond said teeth, said arm being provided with a lip to cooperate with said teeth.

1,877,854. ELASTIC PRODUCT. MAX HAGEDORN, Dessau in Anhalt, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 12, 1929, Serial No. 392,242, and in Germany Sept. 13, 1928. 9 Claims. (Cl. 260—17.)

1. Products having the properties of rubber, guttapercha and balata, withstanding the action of acids, alkalies and atmospheric oxygen, being moldable, having a considerable elastic extensibility markedly independent of the temperature, and comprising a vulcanized polymeric carbohydrate ester containing in its molecule the radical of an acid of the group consisting of saturated and unsaturated, substituted and unsubstituted aliphatic acids, and of a second acid of the group consisting of saturated and unsaturated cyclic substituted fatty acids, both acids being directly combined with the carbohydrate.

1,877,855. PROCESS OF PRESERVING WOOD. MAX HAGEDORN and EUGEN GÜHRING, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 20, 1928, Serial No. 327,473, and in Germany Dec. 20, 1927. 4 Claims. (Cl. 99—12.)

4. The process of preserving wood by impregnating it with a cellulose ester of lauric acid.

1,877,856. MANUFACTURE OF MIXED CELLULOSE ETHERS. MAX HAGEDORN and ERICH ROSSBACH, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 22, 1930, Serial No. 422,673, and in Germany Feb. 25, 1929. 7 Claims. (Cl. 260—152.)

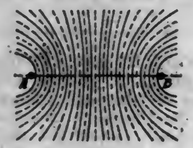
1. The process which comprises reacting upon alkali cellulose with an alkyl halide in the presence of an unsubstituted alkalene oxide.

1,877,857. ABSORPTION MACHINE. KURT HÄHNEL, Falkensee, near Spandau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 9, 1929, Serial No. 377,028, and in Germany July 20, 1928. 3 Claims. (Cl. 62—119.5.)



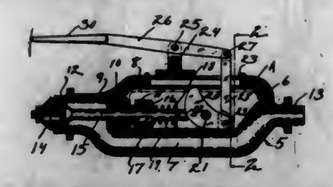
1. A combined boiler and gas lift pump comprising a main vessel, conduit means including a pipe disposed at a predetermined level with respect to said vessel and connected to both the upper and lower portions thereof for supplying liquid to said vessel and for maintaining at least a certain level of liquid therein, a vertically disposed outlet conduit of small diameter connected to the upper end of said vessel, and heating means associated with said vessel whereby gas may be evenly generated without violent surges in the liquid supplied to the vessel through said pipe by the application of heat to the vessel and act to pump liquid out of the vessel through said outlet conduit.

1,877,858. SYSTEM OF MULTIPLE RADIO TRANSMISSION. WALTER HAHNEMANN, Berlin-Marienfelde, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin, Germany. Filed Jan. 24, 1928, Serial No. 249,158, and in Germany Feb. 3, 1927. 10 Claims. (Cl. 250—2.)



3. In a system of multiple radio transmission comprising a number of spaced transmitters, normally operating on substantially identical wave lengths and producing an interference pattern within the radiated range, the method of reducing the effect of said interference which comprises periodically shifting the interference pattern by a fraction of the wave length, at a cadence above the limit of audible frequency.

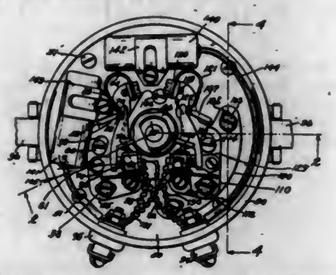
1,877,859. VALVE. CHARLES S. HANSEN, South Milwaukee, Wis. Filed Aug. 10, 1931. Serial No. 556,125. 3 Claims. (Cl. 251—182.)



2. A valve comprising a valve casing, a longitudinally extending partition in the casing defining a longitudinally extending fluid passageway and a longitudinally extending chamber, the passageway and chamber being separate from one another, inlet and outlet nipples carried by the casing communicating with the passageway, one of said nipples being provided with a valve seat, a longitudinally extending valve stem slidably supported by the partition extending into the chamber, a valve head carried by the valve stem for the seat, spring means arranged within the chamber normally holding the valve body on its seat, a cam rockably mounted in the chamber engaging the inner end of the valve stem, an operating lever rockably

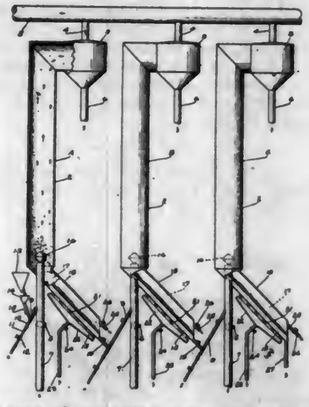
mounted exteriorly of the casing, and a link pivotally connected to one end of the operating lever and to one end of the cam at one side of its pivot.

1,877,860. IGNITION DEVICE. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Original application filed May 23, 1930, Serial No. 455,083. Divided and this application filed Oct. 28, 1931. Serial No. 571,523. 19 Claims. (Cl. 200—21.)



1. An ignition device comprising in combination, a housing; a plate in said housing providing a fulcrum; a spring blade anchored at one end and having an indenture adjacent its free end, said indenture fitting upon the fulcrum; a contact lever secured to the free end of said spring blade; a rubbing block on said lever; and a cam engaged by said rubbing block, said cam rocking the lever and spring about the fulcrum against the effect of said spring blade.

1,877,861. PROCESS OF AND APPARATUS FOR SEPARATING MATERIALS. LLOYD A. HATCH, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 2, 1927. Serial No. 237,224. 12 Claims. (Cl. 209—139.)
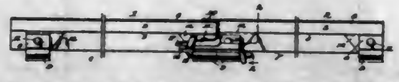


1. A process of separating coarser from finer material, which consists in subjecting the material to an upwardly directed substantially eddyless air current within a closed sorting chamber, regulating said air current so as to cause it to sort and separate out the finer particles and carry them upwardly to a suitable collector, allowing the coarser particles to descend by gravity against such air current into an auxiliary refining chamber wherein said coarsher particles are subjected to the scrubbing action of upwardly directed high velocity air jets to remove therefrom the finer particles adhering thereto, returning said scrubbed off finer particles to the sorting chamber, and separately collecting the refined coarser particles.

1,877,862. CONVEYER. ANGUS J. HATT, Rock Springs, Wyo., assignor, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1929. Serial No. 346,650. 17 Claims. (Cl. 198—220.)



2. The combination in a conveyer, of a pair of conveyer sections disposed end to end, said sections being provided with cooperating perforate fastening lugs; and a pair of adjustably connected members one of which has a lug-engaging portion and the other an end portion located in the perforations in said fastening lugs.

1,877,863. CONVEYER. ANGUS J. HATT, AXEL JOHNSON, and JAMES PAYDE, Rock Springs, Wyo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1929. Serial No. 346,977. 20 Claims. (Cl. 198—220.)

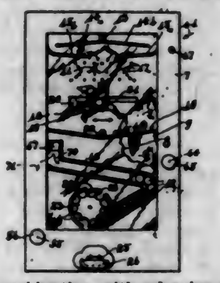


1. The combination in a conveyer of a pair of adjoining conveyer sections, said sections being provided with adjoining fastening lugs and means mounted on said lugs and swingable longitudinally thereof to engage the outer surfaces of said lugs and force the lugs into alinement with each other.

1,877,864. ART OF PRODUCING COMPRESSED PRODUCTS. ADOLF HAWERLANDER, New York, N. Y., assignor to Halsite Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,811. 6 Claims. (Cl. 18—55.)

1. The process of making compressed fibrous products which comprises impregnating a mass of porous fibrous material with a liquid fuming agent of organic nature, applying a binder to said fibrous material subjecting said mass of fibrous material to heat of a character adapted to cause the evaporation of said fuming agent prior to the hardening of said binder, and compressing the said heated mass of fibrous material to produce a compressed stable product.

1,877,865. GAME. JOSEPH HEIDEMANN, Los Angeles, Calif. Filed Sept. 8, 1930, Serial No. 480,374, and in Mexico Sept. 12, 1929. 1 Claim. (Cl. 273—138.)



In a game, in combination with releasing and operating members, a controlling means to form the support for the operating member in inoperative position, a pivotally disposed pawl in cooperative relation to said support with its free end extending down to a point to keep the operating member in such inoperative position, a chute for releasing members, a centrally pivotally supported lever with one end locking said pawl in inoperative position and with the other end disposed under said chute operative by a releasing member dropping upon it from the chute for releasing the said pawl so as to free the operating member to move to operative position, a conduit, actuating means for forcing the operating member from said operative position through said conduit to dropping position, catching means adapted to be moved to catch the operating member from the dropping position, a receiver for the used releasing member, a conduit to hold a number of received releasing members, a stop-rotor to hold the releasing members in the last named conduit, a pawl-mechanism adapted at one end to hold said rotor locked against rotating movements and at the other end disposed so that the caught operating member will actuate the mechanism by dropping on this end and thereby adapted to release a predetermined number of said releasing members next to said rotor, and means for controlling the said catching means.

1,877,866. PROCESS OF HALOGENATING ANTHANTHRONE. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. Divided and this application filed Dec. 11, 1929. Serial No. 413,320½. 1 Claim. (Cl. 260—61.)

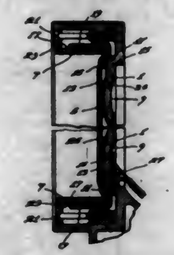
The process which comprises reacting in an open vessel upon anthanthrone with bromine in excess of a small amount of iodine, at a temperature of about 60° C., until approximately two bromine atoms have been introduced into the anthanthrone molecule.

1,877,867. ALLOY METAL FLUX AND PROCESS OF MAKING THE SAME. ERNEST HEY, Bellingham, Wash., assignor to All-Sol Company, Bellingham, Wash., a Corporation of Washington. Filed May 9, 1928. Serial No. 276,515. 14 Claims. (Cl. 148—23.)

1. The process of making a flux of the character described comprising the steps of intermixing an organic acid with a solution of hydrochloric acid saturated with ammonium chloride salts; and adding a solution of hydrochloric acid saturated with zinc chloride salts.

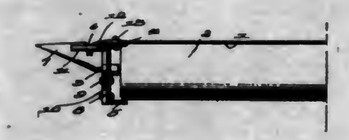
12. A flux composition of matter comprising a saturated solution of zinc chloride in hydrochloric acid; a saturated solution of ammonium chloride in hydrochloric acid; and glacial acetic acid, all of said materials being intermixed into a single composition.

1,877,868. LOUD SPEAKER. JURJEN S. HIGH, Oaklyn Manor, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 2, 1931. Serial No. 519,403. 1 Claim. (Cl. 179—111.)



An energy translating device comprising a support, a diaphragm mounted on said support, said diaphragm comprising a plurality of layers of substantially insulating material under tension and a layer of conductive material frictionally supported between certain layers of said insulating material, and means for securing said conductive layer to one of said insulating layers at its center only.

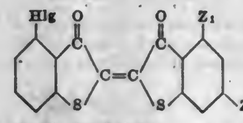
1,877,869. SICKLE GUARD AND BAR. WILLIAM J. HILD, Pekin, Ill. Filed May 13, 1930. Serial No. 452,076. 6 Claims. (Cl. 56—298.)



1. In a harvester, the combination with an endless canvas conveyor, of a finger bar associated therewith, and having openings arranged therein at different heights, guard fingers having plates arranged at the back ends thereof, means projecting outwardly from the plates and adapted to extend into the openings in the finger bar for securing the guard fingers thereto at different elevations, and a sickle bar operatively mounted in the guard fingers.

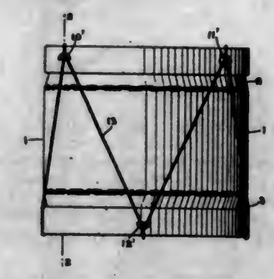
1,877,870. NEW DYESTUFF OF THE THIOINDIGO SERIES. ERWIN HOFFA and HANS HEYNA, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 5, 1930, Serial No. 450,054, and in Germany May 18, 1929. 5 Claims. (Cl. 260—53.)

1. As new products, the compounds of the following formula:



wherein Hlg stands for halogen,
Z_1 and Z_2 are different substituents and
Z_1 may stand for halogen, methyl or hydrogen and
Z_2 for halogen or hydrogen,
being dyestuffs possessing good fastness properties especially to light and yielding on cotton clear tints.

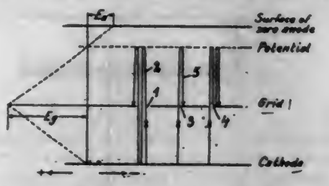
1,877,871. TOY DRUM. SAMUEL HOFFMAN, South Orange, N. J., assignor to J. Chein & Company, Harrison, N. J., a Corporation of New York. Filed Sept. 12, 1931. Serial No. 562,475. 2 Claims. (Cl. 46—46.)



1. A toy drum comprising in combination a cylinder, shoulders inwardly disposed adjacent the ends of said cylinder, heads each having a peripheral flange set at a right angle to the head with its marginal edge seated on one of said shoulders within the marginal edge of the cylinder, tongues cut out of the said marginal edge sec-

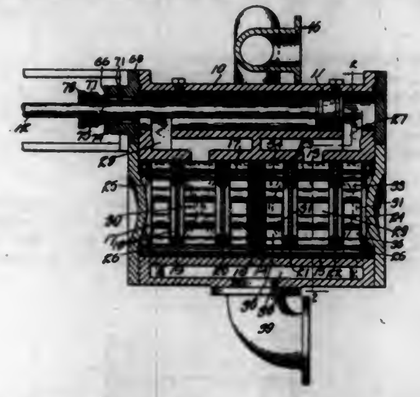
tion of the cylinder and pressed down upon said heads, eyelets formed by said cut out tongue apertures in the marginal edge sections of said cylinder and a cord laced in said eyelets.

1,877,872. PRODUCTION OF SHORT ELECTRIC WAVES. HANS ERICH HOLLMANN, Darmstadt, Germany, assignor, by mesne assignments, to American Telephone and Telegraph Company, a Corporation of New York. Filed June 20, 1929, Serial No. 372,405, and in Germany Mar. 15, 1928. 1 Claim. (Cl. 250—36.)



An electron tube for generating ultra high frequency oscillations comprising a heatable cathode, an anode, a grid electrode between said cathode and anode, the proportion of free cross-sectional area of said grid for passage of electrons to the cross-sectional area thereof covered by the grid conductors having such a value that when the proper potentials are applied to the anode, cathode and grid to produce oscillations in the tube by the swinging of the electrons emitted from the cathode the said swinging movement of the electrons is maintained substantially exclusively in the grid-anode space whereby the frequency of the oscillations produced by the swinging of said electrons is substantially increased.

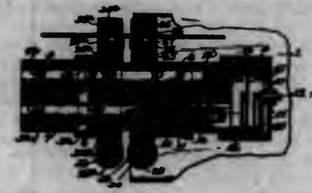
1,877,873. DIAPHRAGM PUMP. RICHARD J. HOLMGREEN, San Antonio, Tex. Filed Jan. 9, 1931. Serial No. 507,671. 7 Claims. (Cl. 103—44.)



1. A pump comprising a casing having a cylinder and a piston movable therein, a chamber having a plurality of flexible diaphragms therein, said diaphragms separating the piston from the fluid to be pumped, a body of liquid contained between said piston and the said diaphragm, the said fluid acting as an operating medium between the piston and the diaphragms, substantially as set forth.

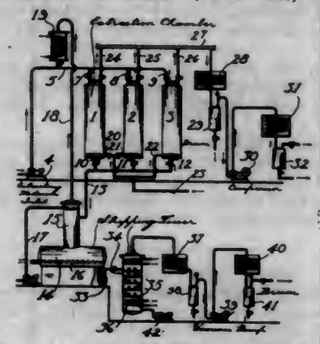
1,877,874. WELDING MACHINE. DURWARD K. HOPKINS, Peoria, Ill., assignor to W. E. Kastien and J. F. Jenks, Peoria, Ill. Filed Jan. 5, 1931. Serial No. 506,532. 54 Claims. (Cl. 219—4.)

1. In a machine for butt-welding metallic articles, in combination, sets of article gripping members, means to effect the movement of one set of members in selective spaced relation to the other set and to fixedly hold the same in such selective spaced relation during the securement of an article by a set of members, means for opening and



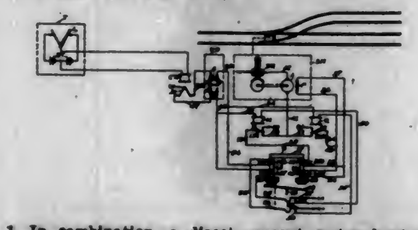
closing each set of members, means to electrically energize said members, and means to effect movement of the movable set of members toward the other set during the fusing of the articles being welded.

1,877,875. PROCESS FOR THE EXTRACTION OF VALUABLE INGREDIENTS FROM HEAT SENSITIVE RAW MATERIALS. MARION B. HOPKINS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 29, 1929. Serial No. 382,009. 3 Claims. (Cl. 87—28.)



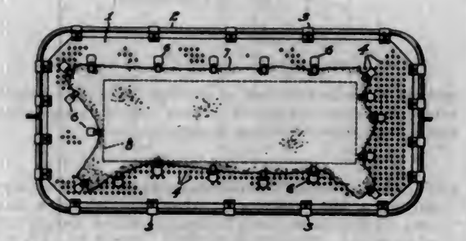
1. Method of extracting insecticidal matter from pyrethrum flowers and the like, comprising the use of two solvents having different boiling points, first extracting the flowers under superatmospheric pressure with a lower boiling hydrocarbon solvent boiling below about 70° C., whereby insecticidal matter is dissolved, passing the resulting solution into a distillation zone in which the solution is mixed with a higher boiling solvent for the insecticidal matter, vaporizing the lower boiling solvent at a temperature below about 100° C., and withdrawing the remaining solution of insecticidal matter in the heavier solvent.

1,877,876. CONTROL APPARATUS FOR POWER OPERATED SWITCH MACHINES. WALTER H. HOPPE, Rochester, and CHARLES L. SWANTON, Churchville, N. Y., assignors to General Railway Signal Company, Rochester, N. Y. Filed Aug. 12, 1930. Serial No. 474,758. 14 Claims. (Cl. 246—240.)



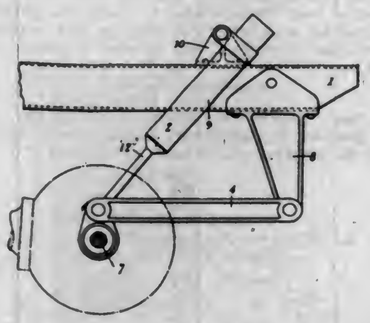
1. In combination, a direct current motor having an armature winding and a field winding, a source of direct current potential, means for energizing said motor from said source, an overload protective device associated with said motor effective to deenergize said motor upon excessive current flow therein, and a means automatically preventing said overload device from becoming effective to deenergize said motor upon the initial operation of said energizing means.

1,877,877. TENSION FRAME. WILLIAM F. HORSTING, Wilmette, Ill., assignor to Leather Equipment Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,753. 2 Claims. (Cl. 149—21.)



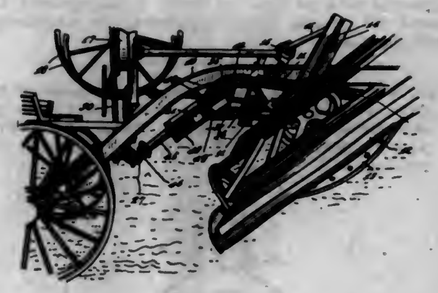
1. A device for stretching and drying hides comprising a foraminated plate to which the side of a hide may be toggled, said plate having a large opening therein, the foraminations along the border of said opening being employed for toggling the hide whereby substantially the whole hide is superposed above the opening and both sides of the hide are accessible for operations involved in treating the hide.

1,877,878. SUSPENSION SYSTEM FOR MOTOR CARS AND VEHICLES OF ALL KINDS. SIDNEY ADOLPH HORSTMANN, Bath, England, assignor, by mesne assignments, to Slow Motion Suspension Limited, Bath, England. Filed Jan. 8, 1929. Serial No. 331,085. 4 Claims. (Cl. 267—20.)



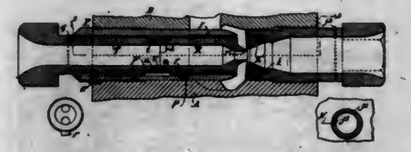
1. In a vehicle, a running gear, a chassis, and means for suspending the chassis from the running gear comprising two levers and a spring device connected together at adjacent ends, the spring device and one of said levers being connected at their other ends to the chassis and the other lever being connected at its other end to the running gear, said levers and spring device having a normal angular relationship such that they cooperate to yieldably support the load of the chassis upon the frame and also such that the mechanical advantage of the spring device is increased with increase in the load.

1,877,879. ROAD GRADER. EMIL C. IVERSON, Indianapolis, Ind., assignor to J. D. Adams Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 23, 1931. Serial No. 576,699. 4 Claims. (Cl. 37—159.)



4. In a road grader, a frame, a mold board, a drawbar having its front end connected to said frame, means for adjusting the rear end of said draw-bar vertically relative to said frame, a part mounted on said frame for transverse movement in rear of said draw-bar, and means interconnecting said draw-bar with said transversely movable part, said means including a member having a universal connection with said draw-bar, and adjustable means for limiting relative movement of said draw bar and member to pivotal movement about a single axis.

1,877,880. DIE BLOCK. CONRAD C. JACOBSON, Glen Ridge, N. J., and JAMES SCHWEDER, Brooklyn, N. Y., assignors to John Robertson Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 26, 1931. Serial No. 547,046. 10 Claims. (Cl. 207—2.)



1. A die block of the character described, having a core and a die, at least one of said parts being transversely divided, and means for detachably holding said divided parts against relative axial movement, but permitting relative rotational movement therebetween.

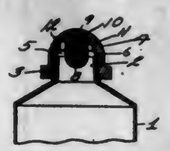
1,877,881. HONING MACHINE. ALBERT M. JOHNSON, Rockford, Ill., assignor to Barnes Drill Company, Rockford, Ill., a Corporation of Illinois. Filed June 2, 1928. Serial No. 282,440. 12 Claims. (Cl. 51—34.)



1. A honing machine comprising, in combination, an elongated frame, a head mounted on said frame for relative movement longitudinally thereof, a spindle journaled

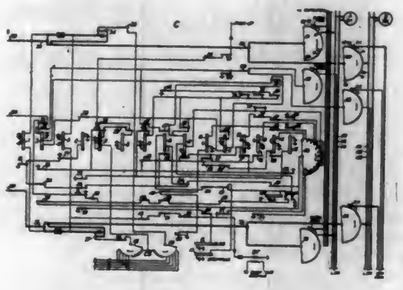
in said head and movable therewith, means at one end of said frame for supporting the work concentrically of the axis of said spindle, a honing tool adapted to enter the work on said supporting means and having a shank secured to said spindle, a hydraulically operated means for reciprocating the head including a driving sprocket and a chain connected with the head and driven by said sprocket, and means for rotating the spindle during its reciprocation with the head.

1,877,882. CLOSURE CAP. CLARENCE M. JONES, Tulsa, Okla., assignor of three-eighths to Brent F. Cahoon and three-eighths to Leo Steinberg, Tulsa, Okla. Filed Nov. 28, 1931. Serial No. 577,814. 7 Claims. (Cl. 221—60.)



1. The combination with a collapsible tube cap having a discharge port, a tube neck, a threaded connection between said cap and neck, of a valve seat in the cap, said seat being in the path of the neck, and an annular valve carried by the neck in the path of the seat, said valve being formed from pliable material whereby when the cap is screwed to closed position, it will bend and conform to the shape of the valve seat.

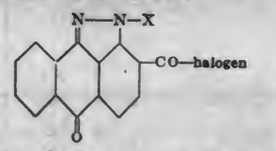
1,877,883. AUTOMATIC TELEPHONE SYSTEM. FREDERICK L. KAHN, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 19, 1931. Serial No. 569,558. 15 Claims. (Cl. 179—18.)



1. In a telephone system, a trunk line terminating in an automatic switch, called lines divided into groups accessible to said switch, an operating magnet for said switch, a first circuit for said operating magnet including a control wiper of said switch, bank contacts adapted to be engaged by said control normally having ground potential connected thereto, another circuit for said magnet independent of said control wiper, means operated responsive to impulses transmitted over said trunk line for directively controlling the operation of said magnet over said other circuit, means effective at the termination of said directive control for closing said first circuit, whereby said magnet is automatically controlled to advance its wipers into selective relation with a certain particular group of said lines, and means included in said first circuit for removing the ground potential from certain of said bank contacts to determine the group of lines.

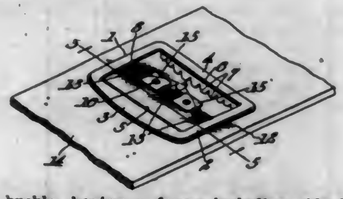
1,877,884. DYESTUFFS OF PYRAZOLANTHRONE SERIES AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, HEINRICH RITTER, Frankfort-on-the-Main-Fechenheim, HEINZ SCHEYER and OTTO BAYER, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 15, 1930, Serial No. 468,198, and in Germany July 20, 1929. 5 Claims. (Cl. 260—45.)

1. A process for manufacturing new vat dyestuffs which process comprises condensing a pyrazolanthrone-2-carboxylic acid halide of the formula:



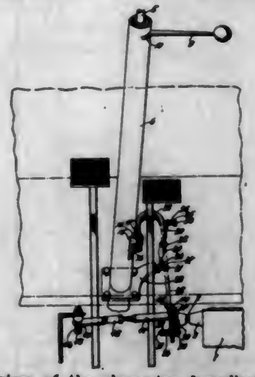
wherein X means hydrogen or an alkyl-group with a cyclic ketone compound containing at least one free amino-group and at least three condensed benzene nuclei.

1,877,885. GARMENT BUCKLE. ALLEN H. KERNGOOD, Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed Sept. 3, 1930. Serial No. 479,570. 4 Claims. (Cl. 24—198.)



1. A buckle, having a frame including side bars and end bars, and a center bar carried by said side bars intermediate said end bars, said center bar being bent throughout its width to provide spaced apart depressed inclined offsets extending out of the plane of the buckle frame and each serving as a means for receiving a plurality of attaching stitches spanning said center bar, the contour of said offsets serving to bunch said stitches and thus position said buckle relatively to said stitches, and serving also to position said switches relatively to said center bar.

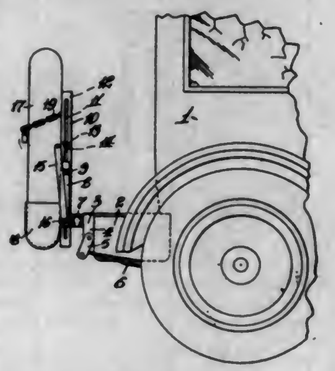
1,877,886. SPEED CHANGING MECHANISM. ELMER G. KESLING, Bloomfield, Mo. Filed Mar. 7, 1931. Serial No. 520,942. 24 Claims. (Cl. 74—39.)



1. Mechanism of the character described comprising a rockable and longitudinally movable shaft, a rockable and longitudinally movable spindle, cranks attached to said shaft and said spindle respectively, an actuator element pivotally connecting said cranks for rocking said spindle by rocking movements of said shaft, and fulcrum devices pivotally connected with and controlling said actuator whereby longitudinal movements of said shaft will move said spindle longitudinally.

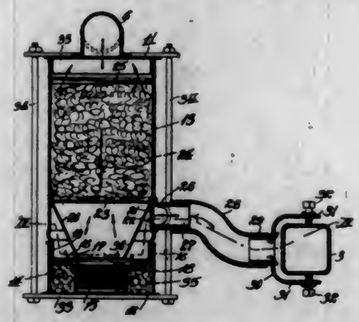
CARNEGIE LIBRARY OF ATLANTA

1,877,887. COMBINED TIRE AND LUGGAGE CARRIER FOR AUTOMOBILES. CLAUDE C. FULTON, St. Louis, Mo. Filed Feb. 25, 1929. Serial No. 342,433. 2 Claims. (Cl. 224—29.)



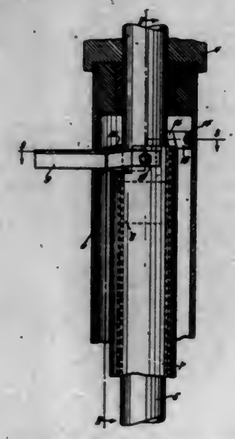
1. A luggage carrier for an automobile comprising a supporting frame having a tire holding pocket, a pair of fixed vertically extending supporting legs between which said frame is slidably secured at the upper ends of said legs, and a brace extending from the lower end of each leg, each brace being slidably secured at its extending end to said frame.

1,877,888. AIR CLEANER. ERWIN A. REICHERT and WILLIAM S. HOLZINGER, Highland, Ill. Filed Sept. 23, 1929. Serial No. 394,540. 2 Claims. (Cl. 183—10.)



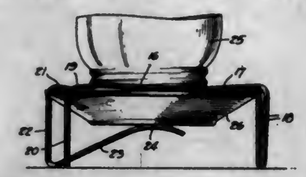
1. An air cleaner comprising a container having a compartment therein at its lower end adapted to contain a fluid, a baffle plate forming a top wall to said compartment having an opening therein, a funnel in said container above said compartment having its reduced end disposed adjacent the opening of said baffle plate, an air inlet opening formed in said container in communication with the outside of said funnel, a saturated porous body material disposed above said funnel in said container, and outlet means leading from said container above said saturated porous body material.

1,877,889. CONTROL FOR SPEED CHANGING MECHANISM. ELMER G. KESLING, Bloomfield, Mo. Filed Apr. 10, 1931. Serial No. 529,028. 14 Claims. (Cl. 74—39.)



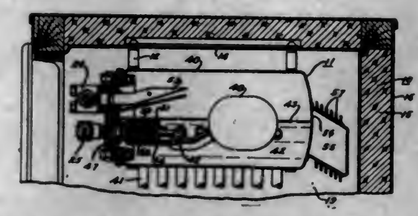
1. In a control for speed changing mechanism, a tubular housing, a shaft supported in said housing for longitudinal and rocking movements, a lever extending through the wall of said housing and having one end pivoted to said shaft for imparting longitudinal and rocking movements to said shaft, and an abutment rigid in said housing in position to be engaged by the end of said lever in one operated position of said lever to limit extent of turning movement of said shaft by said lever.

1,877,890. POULTRY-FEEDING DEVICE. REUBEN P. KIELSMEIER, Baldwin Park, Calif. Filed Aug. 5, 1929. Serial No. 383,655. 5 Claims. (Cl. 119—52.)



2. A poultry-feeding device comprising a stand having companion jaws for embracing and supporting a reservoir, extensions on the jaws bent to form legs for supporting the jaws in elevated position, and means beneath the jaws and coacting with the extensions for securing a vessel beneath the reservoir.

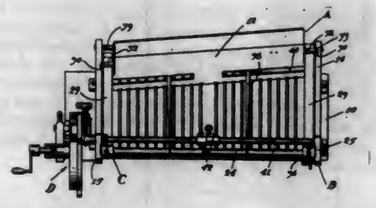
1,877,891. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 29, 1931. Serial No. 541,000. 9 Claims. (Cl. 62—126.)



1. In a refrigerating system comprising in combination, an evaporator including a liquid refrigerant inlet

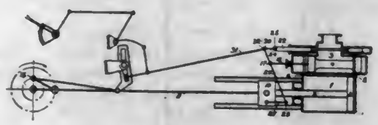
opening and a gaseous refrigerant outlet opening, means controlling the ingress of liquid refrigerant through said inlet opening to said evaporator and for normally preventing liquid refrigerant from rising above a predetermined level therein, conduit means communicating with the interior of said evaporator and extending outwardly therefrom, the point of communication of said conduit means with said evaporator being disposed in a plane between the plane of said outlet opening of said evaporator and the liquid refrigerant level being maintained therein, said conduit means being normally entirely free of liquid refrigerant and arranged to receive liquid refrigerant rising above the normal level maintained in said evaporator by said first named means and said conduit means being also arranged to insolate liquid refrigerant received therein out of contact with the main body thereof in said evaporator.

1,877,892. STOCK MAGAZINE. ABEL KLUGE and ENEVAL KLUGE, St. Paul, Minn., assignors to Brandtjen and Kluge, Inc., St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 11, 1930. Serial No. 501,534. 10 Claims. (Cl. 271—62.)



1. In a stock feeding magazine for units varying in thickness at their ends and, in stacked relation, forming a pack deeper at one end thereof than at the other, a movable rest for advancing a pack of such units, and mechanism for shifting the rest to advance one end thereof relatively faster than the other end.

1,877,893. STEAM ENGINE STARTING DEVICE. RONALD FRANK KNIGHT, Ramsey, N. J. Filed Sept. 7, 1927. Serial No. 217,970. 2 Claims. (Cl. 121—142.)



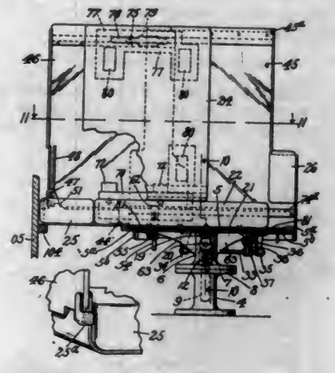
1. A steam engine, including, (1) a cylinder having a main steam port and an auxiliary steam port each in direct connection with the cylinder bore, (2) a main valve to control said main port, (3) means for operating said main valve, (4) an auxiliary valve—independent of said main valve—to control said auxiliary port, (5) a lap on said auxiliary valve, (6) means for operatively connecting said auxiliary valve with a member of said main valve operating means at a point on the latter to give said auxiliary valve actuation which, in conjunction with said lap, gives said auxiliary valve negative lead and a cut-off which is later than that of said main valve, and (7) means for shortening the cut-off of the main valve and for automatically shortening the travel of said auxiliary valve to close said auxiliary port when the main valve cut-off is shortened.

1,877,894. PAPER CONTAINER. LYDIA B. KOCH and JOSEPH BUCHINA, New York, N. Y., assignors, by direct and mesne assignments, to said Lydia B. Koch. Filed Dec. 19, 1929. Serial No. 415,208. 2 Claims. (Cl. 229—1.5.)



1. A container comprising a suitable bottom, a body connected thereto by a suitable rim and of a flattened truncated form, terminating at the top in straight opposing edges, the centre of one flattened side having an extension designed to be folded over the opposite edge of the opposing flattened side and means forming part of the extension for holding it in the turned down position.

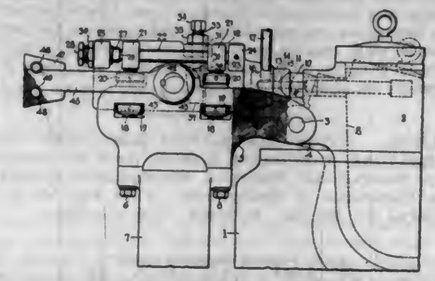
1,877,895. CHAIR CONSTRUCTION. FRANKLIN W. KOHLER, Chicago, Ill. Filed July 28, 1927. Serial No. 209,051. 3 Claims. (Cl. 155—6.)



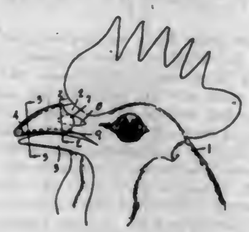
1. A chair construction comprising a base, a bottom movably connected with said base, two arms connected with the bottom, a back comprising relatively movable sections, and means for moving one of said arms to widen the chair bottom and back, said bottom and back being movably connected to said base so that the bottom and back may be moved to permit the base to project beyond said bottom.

1,877,896. DIE CASTING MACHINE. TORBJORN C. KORSMO, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Aug. 21, 1930. Serial No. 476,909. 15 Claims. (Cl. 22—69.)

1. In a casting apparatus, the combination of a die charging member adapted for movement between operative and inoperative positions; a pressure fluid conducting member adapted for sealing connection with the die charging member when in its operative position; and cam means acting on said pressure fluid conducting member for effecting such connection.

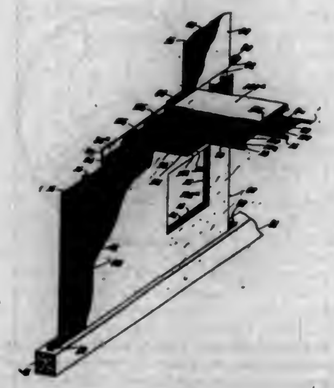


1,877,897. DEVICE FOR PREVENTING FEATHER-PULLING IN FOWLS. JOHANNES KOSTEN and FRANK ZUIDEMA, Grand Rapids, Mich. Filed Mar. 23, 1931. Serial No. 524,508. 8 Claims. (Cl. 119—97.)



1. A device for preventing feather-pulling in fowls consisting of a sheath of resilient rubber conformed to receive the upper mandible of a fowl and having inwardly turned edges embracing the edges thereof and inwardly projecting lug portions at its rear end engageable in the nasal fossa.

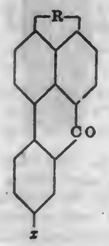
1,877,898. BUILDING CONSTRUCTION. GUY F. KOTRBATY, New York, N. Y. Filed July 27, 1928. Serial No.295,705. 16 Claims. (Cl. 72—48.)



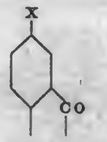
1. A self-contained and self-supporting closed structural unit comprising front and back walls of foraminous metallic material and end walls of solid metallic material, said end walls being formed with integral reentrant keyways forming vertical supporting members.

1,877,899. VAT DYESTUFFS OF THE DIBENZPYRENEQUINONE SERIES. GEORG KRÄNZLEIN, MARTIN CORELL, and HEINRICH VOLLMANN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1931, Serial No. 557,944, and in Germany July 6, 1929. 4 Claims. (Cl. 260—61.)

1. As new products, the compounds of the general probable formula:



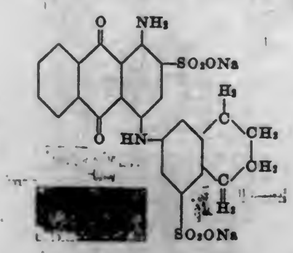
wherein R represents the bivalent radical



and X stands for a substituent of the group consisting of —OH, —OCH_3, —OC_2H_5 and NH.CO aryl.

1,877,900. NEW ACID DYESTUFFS AND A PROCESS OF PREPARING THEM. ERICH KRONHOLZ, Bad Soden-on-the-Taunus, and HANS SCHLICHENMAIER, Kelkheim in Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1931, Serial No. 522,174, and in Germany Mar. 20, 1930. 2 Claims. (Cl. 260—60.)

2. As a new product, the compound of the following formula:



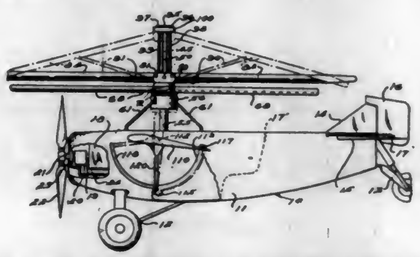
forming in the dry state a dark blue powder, dyeing wool from an acid bath a greenish blue tint of excellent fastness properties.

1,877,901. REAMER. VAN J. KUBIN, Brea, Calif., assignor to Chiksan Oil Tool Co., Limited, Fullerton, Calif., a Corporation of Nevada. Filed Aug. 25, 1930. Serial No. 477,627. 9 Claims. (Cl. 255—78.)



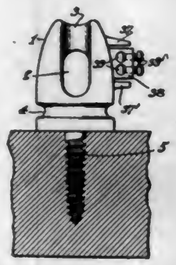
1. A well tool of the character described including, a body, annular cutters surrounding the body rotatable in planes tilted relative to the longitudinal axis of the body and having peripheral cutting parts, and spacers between the cutters rotatably supporting the cutters.

1,877,902. AIRPLANE. LUVERN L. KUETHE, Albert Lea, Minn. Filed Apr. 29, 1931. Serial No. 533,706. 20 Claims. (Cl. 244—15.)



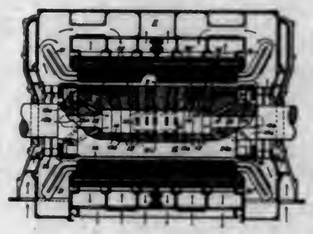
1. In an aircraft, a pair of horizontally arranged propellers, axially aligned, means for rotating the propellers relatively and means for tilting the blades of one propeller as to a dihedral angle with respect to the other.

1,877,903. ELECTRIC INSULATOR. WILLIAM D. KYLE, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,247. 1 Claim. (Cl. 173—28.)



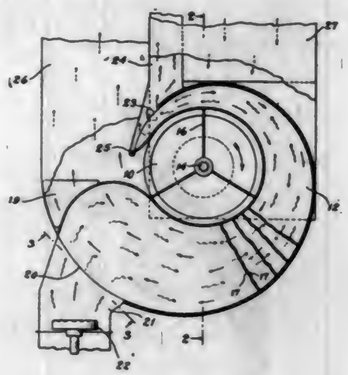
As an article of manufacture, a combined insulator and terminal comprising a unitary body of frangible insulation having a preformed curved configuration including an eye for holding a conductor in place thereon, said configuration being provided with well rounded edges to prevent injury to a conductor held thereon, and a terminal member having one end extending into the insulator and being held in place thereby, said insulator including integrally formed portions of insulation lying over and under the terminal for protecting the same.

1,877,904. ROTOR VENTILATION FOR TURBO GENERATORS. CARTHRAE M. LAFFOON, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,785. 8 Claims. (Cl. 171—252.)



1. In a rotor body for a turbo-generator, a rotor core comprising a plurality of discs disposed in face-to-face relation, extra thick end plates, means for holding said discs in fixed axial relation between said end plates, said rotor core having coil slots and teeth portions, insulated windings in said coil slots, said discs having radially-extending ventilating grooves disposed in the faces thereof in said teeth portions between adjacent slots but removed from the walls of said slots so that the ventilating air is kept from passing over said winding insulation, and means for supplying ventilating air to said radial grooves from the ends of the core.

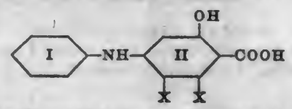
1,877,905. AIR CONDITIONING BLOWER. JOSEPH M. LE GRAND, New York, N. Y., assignor to Carrier Engineering Corporation, Newark, N. J., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,219. 8 Claims. (Cl. 257—244.)



1. A combined blower and conditioner for air comprising in combination, a rotary blower having a volute discharge, conditioning means housed within said volute, each element of said means having a form substantially that of a cross-section of the volute, and means to admit and exhaust air conditioning fluids to and from said means.

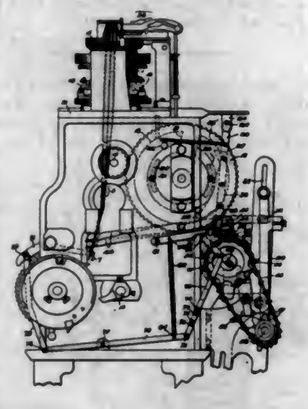
1,877,906. META - HYDROXY - DIARYLAMINE - CARBOXYLIC ACID. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 27, 1930, Serial No. 464,330, and in Germany July 2, 1929. 5 Claims. (Cl. 260—109.)

1. As new compounds the meta-hydroxy-diarylamine carboxylic acids of the probable general formula:



wherein one X means hydrogen, the other X methyl and the benzene nucleus signified by I may contain alkyl or halogen, which compounds are when dry crystallized substances, having a definite melting point, soluble in alkalies, yielding a violet to bluish coloration by mixing their alcoholic solution with ferric chloride.

1,877,907. HORIZONTAL STRIPING ATTACHMENT FOR CIRCULAR KNITTING MACHINES. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Aug. 13, 1926. Serial No. 129,074. 10 Claims. (Cl. 66—140.)

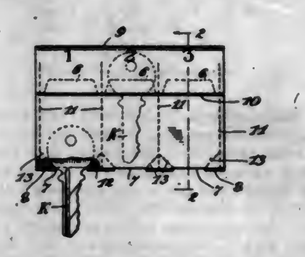


1. A horizontal striper attachment for circular knitting machines comprising in combination, a series of yarn guides adapted to be moved into and out of feeding relation with respect to the needle circle, a primary pattern chain member at the front of the machine whereby the said yarn guides may be primarily controlled, and auxiliary controlling means for said yarn guides at the rear of the machine, said auxiliary controlling means including a gear driven at a fixed ratio with respect to the rotation of the knitting head and having spaced impulse-giving members thereon, an actuator pivotally carried by the machine and depending into position to be swung by said impulse-giving members, a shaft at the rear of the machine, a pattern drum carried by said shaft, lever connections between said pattern drum and a plurality of said yarn guides, an auxiliary pattern member also carried by said shaft, and having spaced indicating parts, a ratchet also carried by said shaft, a pawl carried by said depending actuator and adapted periodically to actuate said ratchet, a latch member adapted to be released by the indicating parts upon said auxiliary pattern member, a pawl stop adapted in one position to hold said depending actuator from engagement by said impulse-giving members upon said gear, and adapted in another position to be held by said latch member, and means connecting in operation the said pawl stop and the said primary pattern chain member, whereby said pawl stop is moved from engagement with the actuator and into latching engagement with the latch by said primary pattern chain member, thereby releasing said actuator to initiate the horizontal striping.

1,877,908. PROCESS FOR THE FORMATION OF ALCOHOLS. ROBERT B. LEBO, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,891. 2 Claims. (Cl. 260—156.)

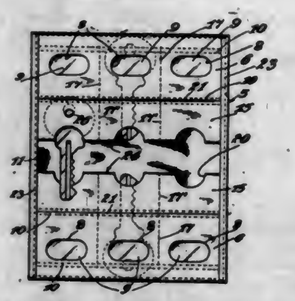
1. An improved process for obtaining alcohols from a reactive acid liquor formed by the reaction of olefins and sulphuric acid under sulphating conditions, comprising adding water to the liquor until an oily layer separates, decanting the layer, and recovering alcohol from the aqueous layer.

1,877,909. KEY HOLDER. CHARLES L'ENFANT, New York, N. Y. Filed Mar. 23, 1929, Serial No. 349,343. Renewed Aug. 18, 1930. 10 Claims. (Cl. 150—40.)



1. A case for holding a plurality of rigid articles in segregated relation to each other consisting of side walls of flexible material secured together along spaced parallel lines to provide a series of separate pockets, each adapted to receive a single article, said case having a part completely closing said pockets at one of their ends, and said part freely flexing under externally applied pressure to transmit movement to the articles in the respective pockets and project the same beyond the other ends of the pockets, and means partially closing the pockets at their latter ends to prevent the complete removal of the articles therefrom.

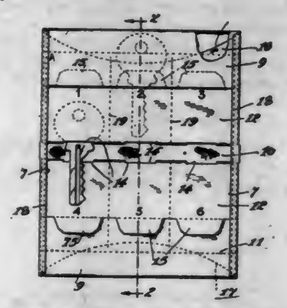
1,877,910. COMBINED CARDCASE AND KEY HOLDER. CHARLES L'ENFANT, New York, N. Y. Filed Oct. 11, 1929. Serial No. 398,885. 6 Claims. (Cl. 150—40.)



1. A case of flexible material having a card receiving pocket, one side of said pocket having parallel flexible walls stitched together along spaced parallel lines to provide a plurality of individual key receiving pockets hav-

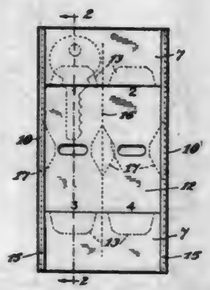
ing their lengthwise dimension disposed at right angles to the open side of the card receiving pocket, each of said key receiving pockets at the end thereof adjacent the open side of the card receiving pocket having its wall centrally cut away to expose the shank of the key contained in said pocket to permit the same to be grasped and withdrawn therefrom, the remaining portion of said pocket end being closed to prevent the movement of the key head therethrough.

1,877,911. ARTICLE HOLDER. CHARLES L'ENFANT, New York, N. Y. Filed Nov. 13, 1929. Serial No. 406,764. 3 Claims. (Cl. 150—40.)



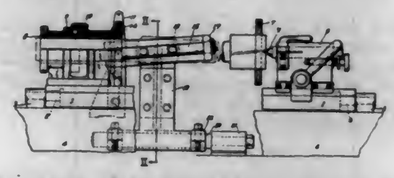
1. A case having a flexible body wall folded at one of its ends inwardly and downwardly upon one side of said wall, a reinforcing fabric sheet secured to said side of the body wall, an additional sheet of flexible material associated with said end portion of the body wall of the case and having an end portion folded and disposed in substantially the same plane as the folded end portion of the body wall with the opposed edges of said folded portions of the body wall and said flexible sheet in meeting relation, spaced parallel lines of stitching securing the folded portions and said flexible sheet of materials to the body wall to form a series of key receiving pockets, the lateral edges of the body wall being turned inwardly upon the corresponding edges of the folded end of said body wall and said flexible sheet and secured thereto, the inner end of each of said pockets being provided with an opening through which the shank of the key contained in the pocket may be withdrawn, said key being insertable within the pocket and removable therefrom between the meeting edges of said folded end of the body wall and the flexible sheet secured thereto, and said reinforcing fabric on the body wall at the other ends of the pockets being cut away to permit free flexing of said body wall at the folded end thereof whereby the individual keys may be projected through the pocket openings.

1,877,912. ARTICLE HOLDER. CHARLES L'ENFANT, New York, N. Y. Filed Nov. 18, 1929. Serial No. 406,765. 3 Claims. (Cl. 150—40.)



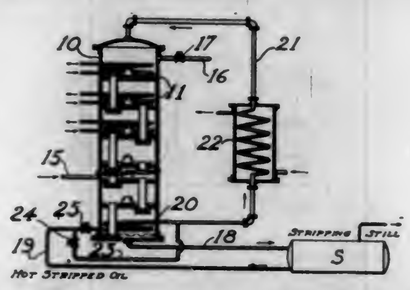
1. A case having a body wall of flexible material, the opposite end portions of said body wall being inwardly folded upon one side of said wall, and a separate sheet of material secured to said side of the body wall by spaced parallel lines of stitching and having opposite end portions thereof cooperating with said inwardly folded end portions of said body wall to constitute closure means for pockets formed between said body wall and the inwardly folded end portions thereof.

1,877,913. ANGULAR BLADE GRINDER. PATRICK T. LENNON, Cleveland, Ohio. Filed June 24, 1927. Serial No. 201,061. 9 Claims. (Cl. 51—101.)



1. Feeding mechanism for a cutting machine having a rotating cutter and a table translatable axially past the same, which comprises a rotatable holder for an article being cut, a movable support therefor mounted on said table, means urging the support toward the cutter, a cam fixed to the holder to rotate therewith, a stop engaging the cam to limit the movement of the support toward the cutter, and a support for said stop carried by a part of the machine stationary relative the cutter.

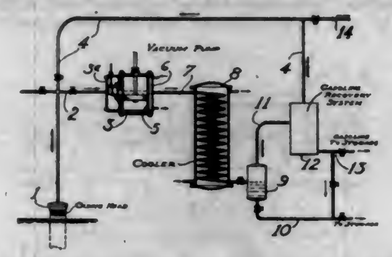
1,877,914. ART OF OBTAINING GASOLINE HYDROCARBONS. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 21, 1928. Serial No. 263,410. 3 Claims. (Cl. 196—8.)



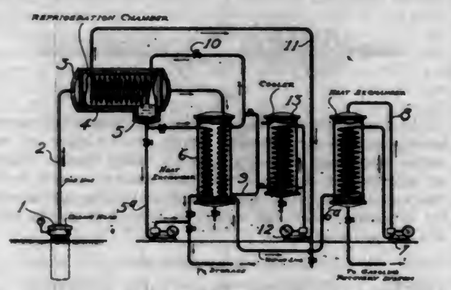
1. Apparatus of the character described, which comprises a tower containing means for providing contact between gas and liquid, an inlet for gas at the lower portion of said tower, an outlet for stripped gas at the top of the tower, means for maintaining pressure in the tower, cooling coils in the upper portion of the tower, a coil for liquid in the lower portion of the tower, a cooling box, a connecting pipe from said coil, through the cooling box to the top of the tower, and a stripping still communicating with the bottom of the tower to receive liquid therefrom and communicating with the inlet of the coil.

1,877,915. PROCESS FOR PUMPING VAPORS UNDER HIGH VACUUM. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,006. 5 Claims. (Cl. 166—21.)

1. Methods of compressing through a vacuum pump vapors which condense on adiabatic compression, which comprises actuating the vacuum pump adiabatically to draw the vapors from a body thereof in a confined stream under less than atmospheric pressure, adding to the confined stream on the intake side of the pump gas which does not condense on adiabatic compression whereby condensation is lessened at pressures greater than the pressure in the intake, and delivering the mixture from the pump under said increased pressure.

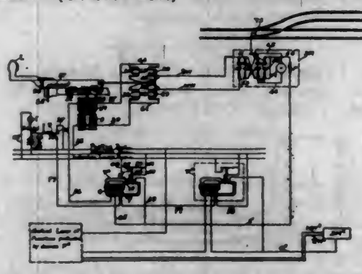


1,877,916. PROCESS FOR OBTAINING HYDROCARBONS FROM WELLS. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,007. 5 Claims. (Cl. 166—21.)



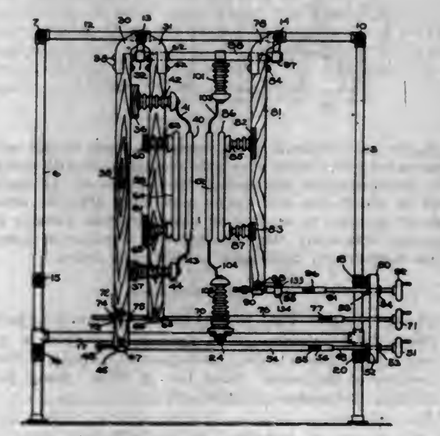
1. The method of compressing through a vacuum pump vapors which condense on adiabatic compression, which comprises atuating the pump adiabatically to draw the vapors from a body thereof in a confined stream under less than atmospheric pressure, heating the stream of vapors on the intake side of the pump to at least the temperature of their dew point at pressures greater than the pressure in the intake, and delivering the vapors from the pump under said increased pressures.

1,877,917. PROTECTIVE DEVICE FOR INTERLOCKING SYSTEMS. JOHN C. LINDNER, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Aug. 15, 1930. Serial No. 475,464. 13 Claims. (Cl. 246—135.)



1. An interlocking system comprising, in combination, an electrically operated traffic controlling device; a source of current; an operating circuit for said device including contacts controlled by a lever of the interlocking system, control wires and common return wire; a dynamic indicating circuit for said traffic controlling device including one of said control wires, said common return wire, an indicating means, and a cross protection device with an armature included in its magnetic circuit; said source of current being disconnected by the operation of said armature to its abnormal position; and an electro-responsive, manually controllable means for restoring said armature to its normal position.

1,877,918. AMPLIFIER. DONALD G. LITTLE, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1928. Serial No. 247,033. 8 Claims. (Cl. 175—41.5.)



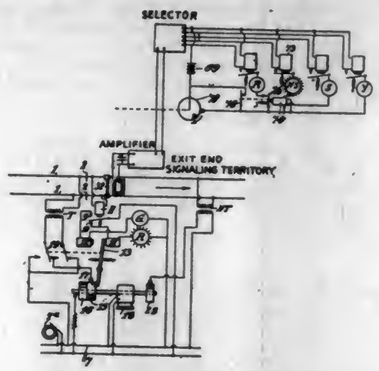
7. In a radio-frequency power structure, means for varying the capacity between parts thereof and retaining substantially constant capacity between the structure and the ground including condenser elements disposed in planes substantially normal to a major reference ground base and means for adjusting said elements in a direction substantially normal to the planes thereof.

1,877,919. NAME PLATE. IRA W. LIVINGSTON, Bridgeport, Ohio. Filed May 2, 1931. Serial No. 534,474. 1 Claim. (Cl. 40—140.)



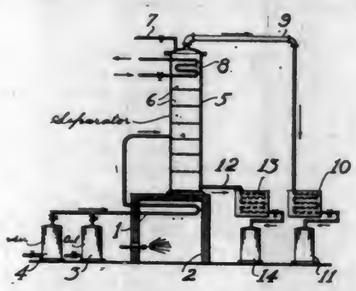
A name plate including an integral glass body having a recess in its rear, a holder conformably fitted in the recess and having upper and lower flanges with free side edges for receiving indicia bearing plates therein, said flanges being engaged with the bottom wall of the recess, and a backing mounted in the recess and having frictional engagement with the bounding walls of the recess and being engaged with the rear face of the holder so as to retain the flanges thereof in firm engagement with the bottom wall of said recess.

1,877,920. METHOD OF AND APPARATUS FOR ELECTRICAL SIGNALING. EDWARD H. LOFTIN, New York, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 4, 1924. Serial No. 741,702. 41 Claims. (Cl. 246—63.)



38. In an automatic train control system of the continuous inductive coded type; the combination with trackway apparatus for impressing code cycles on the track rails in which the code cycles may have different numbers of impulses in a cycle or have the same number of impulses differently time spaced, and car-carried apparatus distinctively responsive to said code cycles.

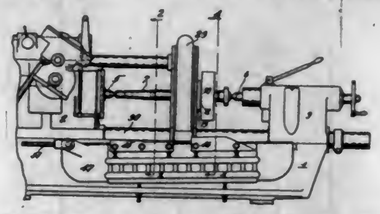
1,877,921. ART OF PREPARING HYDROCARBON PRODUCTS. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Dec. 3, 1929. Serial No. 411,381. 2 Claims. (Cl. 196—87.)



1. The process of preparing dehydrogenated hydrocarbons having an anti-knock effect when used in a motor fuel which comprises feeding normally liquid petroleum distillate free of asphaltic constitutents and rich in saturated hydrocarbon in liquid state to a sone free from an added catalyst of restricted cross section heated to a temperature of between 400° and 700° F. while injecting an effective quantity of air at a rate of less than about 25 cu. feet per pound of distillate, and segregating lighter hydrocarbon fractions of suitable boiling range for motor fuel.

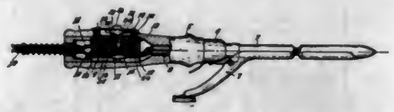
1,877,922. LATHE WITH CENTER DRIVE. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Jan. 31, 1931. Serial No. 512,582. 5 Claims. (Cl. 82—2.)

1. A machine of the class described, comprising a bed, a headstock and a tailstock carried by said bed, a support carried by said bed between said head and tailstocks, a work driving fixture carried by said support for driving work supported between said head and tailstocks, tool bars supported by said head and tailstocks and by said support, one of said bars being positioned



beneath the work carried by said head and tailstocks, tool carriers on said bars, a drive shaft extending from said headstock to said support above the work, driving connections from said shaft to said fixture, and driving connections to said shaft at said headstock.

1,877,923. ELECTRIC SWITCH. LOUIS V. LUCIA, Waterbury, Conn., assignor to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Nov. 29, 1929. Serial No. 410,326. 4 Claims. (Cl. 200—68.)



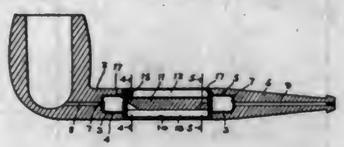
1. In an electric snap switch, an insulating casing having a V-shaped recess, means at the apex of said recess providing a spring seat, a coiled spring resting on said seat, a circuit closing ball member seated on the free end of said coiled spring, and a slidable cam member for depressing said ball and then forcing it to the opposite end of its path.

1,877,924. AUTOMATIC TRAIN LINE COUPLER. ALBERT O. MACKIN, Johnstown, Pa. Filed Dec. 17, 1930. Serial No. 503,072. 27 Claims. (Cl. 284—5.)



1. In train line couplers wherein is provided a pair of opposing coupler heads; said heads each including a coupling pin and a coupling pin socket, a train line terminal having a coupling face, a shut-off valve for said terminal, means operative upon the coming together of the train line terminals of opposing heads for opening the shut-off valve to establish train line pressure through the coupler heads and means operated by train line pressure for securing the heads together.

1,877,925. TOBACCO PIPE. LOUIS L. MARTIN, Toronto, Ontario, Canada. Filed Jan. 10, 1931. Serial No. 507,886. 8 Claims. (Cl. 131—12.)



1. In a tobacco pipe, a tubular member adapted to be inserted in the pipe stem and having a core formed with

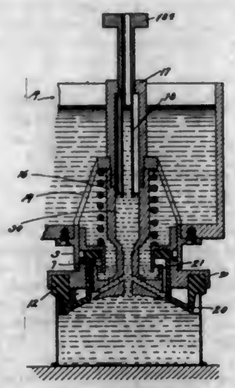
longitudinal channels communicating alternately at opposite ends and forming a continuous passage, the terminal ends of which open through the ends of the core, said tubular member having its ends reduced to confine and seal said core permanently therein.

1,877,926. RHEOSTAT. RAYMOND P. MATTERN, Wauwatosa, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1930. Serial No. 432,210. 1 Claim. (Cl. 201—63.)



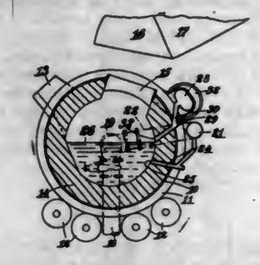
A rheostatic resistor, comprising a split ring of molded material of high resistance value and having sufficient rigidity to be self-supporting, a series of elongated contact members and having all portions save their outer ends permanently embedded in the ring of molded material, terminal members permanently embedded in the ring of molded material at the ends of the series of contact members and having their outer ends exposed to provide contact surfaces and their sides exposed to facilitate the connection of conductors therewith, and material of high conductivity characteristics between the contact and terminal members and the molded material to provide an intimate electrical contact between the molded material of high resistance value and the contact and terminal members.

1,877,927. FILLING VALVE FOR SIRUPERS. THURMAN MCGHEE, Hayward, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed June 14, 1926. Serial No. 115,776. 8 Claims. (Cl. 226—124.)



1. A can filling valve for sirupers comprising a movable displacement member adapted to enter a can to determine a liquid level therein, a complementary head member forming a discharge opening through which liquid flows into the can and having a passage for receiving sirup during the filling operation and for returning sirup into the can after the completion of the filling operation, and means for varying the capacity of the passage.

1,877,928. SMELTING OF METALLIC ORES, PARTICULARLY COPPER SULPHIDE ORES. ALEXANDER GRANT MCGREGOR, London, England. Filed July 25, 1930. Serial No. 470,708. 4 Claims. (Cl. 75—62.)



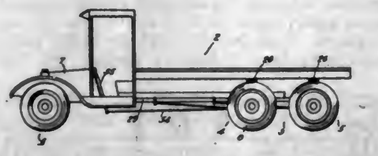
1. The process of Bessemerizing a copper matte, which consists in blowing high-pressure air intermittently into the material below the surface level thereof and blowing low-pressure air continuously into the gas space above said level, whereby the temperature of the material may be maintained within predetermined limits.

1,877,929. COIN CONTROLLED DOORLOCK. GERALD J. MCLAREN, Ballston Spa, N. Y. Filed Sept. 18, 1930. Serial No. 482,838. 11 Claims. (Cl. 194—54.)



1. A coin controlled lock for doors and the like including a door locking element, a hand casing mounted for rotation, means carried by the casing to operate said element, and coin controlled means for normally preventing such rotative movement of the hand casing, said casing serving as a coin receptacle for the reception of the coins following their cooperation with the coin controlled locking means.

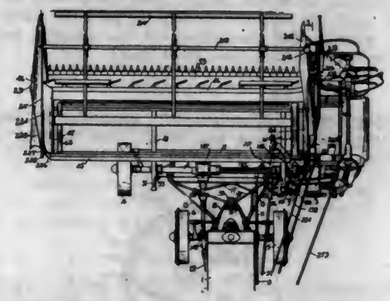
1,877,930. TANDEM MULTIPLE SUPPORTING, DRIVING, AND BRAKING MECHANISM. PHILIP MEHREN, Toppenish, Wash. Filed Feb. 12, 1930. Serial No. 427,819. 1 Claim. (Cl. 180—22.)



In a tandem multiple supporting, driving and braking mechanism, the combination of a plurality of supporting structures arranged in tandem, and having a driving shaft associated therewith, and comprising a front structure adapted to engage the driving shaft at its front end, a brake structure mounted thereon, and a rear supporting structure identical with the front structure, and provided with a like brake structure, means to operate said brakes simultaneously, a connecting shaft engageable with said rear supporting structure in like manner and in lieu of said driving shaft, said structures, each including a worm barrel provided with bearings in each end thereof and containing a worm mounted on a worm shaft extended at both ends and mounted in said bearings, the rear exten-

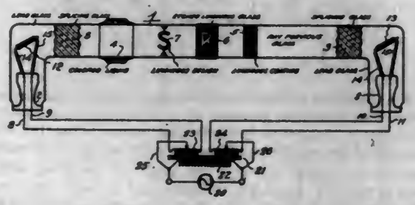
sion of said shaft having a shoulder, a thrust bearing disposed to engage said shoulder, and a rear end cap removably attached to and closing said rear supporting structure barrel, and a connecting mechanism adapted to progressively and operatively unite said structures and consisting of a dust proof bearing cap attachable to the front supporting structure barrel, and comprising a coupling flange provided with a bearing formed therein and having a packing gland, a connecting piece journalled in said bearing and provided with an offset sleeve rigidly secured to and rotatable with said worm shaft, in said bearing, and a universal coupling joint attached to and rotatable with the connecting piece, and provided with a splined sleeve disposed and adapted to receive the front end of said connecting shaft.

1,877,931. HARVESTER. EDGAR E. METCALF, Moville, Iowa, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 11, 1929. Serial No. 406,192. 22 Claims. (Cl. 198—170.)



1. A conveyor structure for harvesting machines, comprising a casing having an upper compartment and a lower compartment, a conveyor comprising an endless flexible element having a forward run and a return run operating in said upper and lower compartments respectively, a plurality of fingers pivoted to said element for movement about an axis thereon, said fingers having guiding means projecting forwardly with respect to said pivot axis on said forward run, means cooperating with said guiding means to maintain the fingers in projected operative position during travel thereof through the upper compartment of the casing, and means to turn the fingers about their pivots at each end of the casing.

1,877,932. ELECTRIC LAMP. FRIEDRICH MEYER, Berlin-Halensee, HANS-JOACHIM SPANNER, Berlin, Germany, and EDMUND GERMER, Stockholm, Sweden, assignors, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Filed Dec. 19, 1927, Serial No. 241,035, and in Germany Dec. 10, 1926. 2 Claims. (Cl. 176—124.)

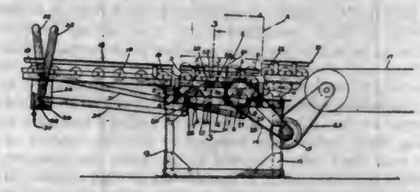


1. In a glow lamp system including an envelope having a gas therein, and a plurality of incandescible electrodes spaced apare therein, the combination of a transformer having a primary and a plurality of secondaries corresponding in number to said electrodes, connections between each secondary and its corresponding electrode and means for maintaining the mid-point of each secondary at a predetermined potential relative to the terminals of said primary whereby each of said incandescible electrodes acts alternately as a cathode and as an anode when said primary is energized by alternating current.

1,877,933. MANUFACTURE OF ARTIFICIAL TEXTILES. HARRY MEYER, Dessau, and WILHELM ELLER, Berlin-Wilmersdorf, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 27, 1929, Serial No. 366,517, and in Germany May 31, 1928. 9 Claims. (Cl. 18—54.)

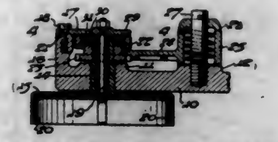
1. The process which comprises incorporating into a viscose solution an organic base capable of forming with the spinning solution an emulsion and of forming a water-soluble salt with the acid constituents of the precipitating bath, emulsifying the organic base in the viscose solution and spinning threads of said viscose solution in an acid precipitating bath.

1,877,934. FEEDING AND SPACING MECHANISM. ALFRED E. MILBRATH, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1930. Serial No. 492,448. 9 Claims. (Cl. 198—26.)



1. In an apparatus of the class described, a conveyor section adapted for up-and-down movement, a stop means at the discharge end of said movable section adapted to be engaged by and temporarily retain a commodity upon said section, when the latter is in a lowered position, and an auxiliary stop member situated intermediately of the ends of said movable section and adapted to be moved into the path of commodities delivered thereto to limit the number of commodities fed onto said movable section, and means for operating said auxiliary stop member.

1,877,935. ICE CREAM DIPPER. ERNEST S. MILLO, Bronx, N. Y., assignor to David Shlaifer, Bronx, N. Y. Filed June 6, 1931. Serial No. 542,628. 4 Claims. (Cl. 107—48.)



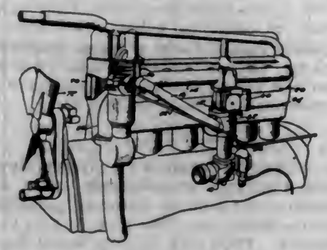
1. An ice cream dipper, comprising a handle having an opening adjacent one of its ends, a member carried by said handle and overhanging and spaced from the part of said handle in which said opening is formed, a cup having a sleeve journalled in said opening and extending across the space between said handle and overhanging member, a collar rotatable on said sleeve in said space, clutch means between said collar and sleeve for imparting rotation to said sleeve when said collar is rotated in one direction, means carried by said handle for partially rotating said collar in either direction, said last-named means being manually operable to partially rotate said collar in a direction to impart rotation to said sleeve, means urging said last-named means in the opposite direction, a cutter bearing against the interior of said cup, and a stem extending through said sleeve, said stem having one of its ends secured to said cutter and its other end secured to the overhanging member of said handle.

1,877,936. STARTING CARTRIDGE. ARTUR MÖHRLE, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Apr. 24, 1929, Serial No. 357,823, and in Germany Oct. 2, 1928. 10 Claims. (Cl. 123—184.)



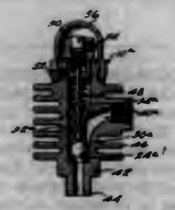
1. A cartridge adapted to be inserted in the combustion chamber for starting crude oil engines and containing a combustible element adapted by its combustion to provide heat of sufficient intensity and duration to start the normal ignition process and a phosphorus compound ignitable by the heat of air compression in said combustion chamber at a temperature below the ignition point of the oil.

1,877,937. AUXILIARY FUEL SUPPLY MEANS FOR INTERNAL COMBUSTION ENGINES OF LOW INTAKE DEPRESSION. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,326. 28 Claims. (Cl. 123—127.)



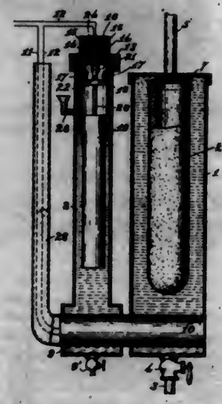
1. The combination with the carburetor and intake conduit of an internal combustion engine for consuming volatile liquid fuel, of auxiliary constant level fuel supply means communicating with said intake conduit, and a valve controlling the fuel passage from said constant level means to the intake and operated adjunctively to engine throttling, said fuel passage and said valve being disposed below the level of the fuel in said constant level fuel supply means for effecting gravity delivery of fuel to the intake conduit.

1,877,938. PRESSURE REDUCING OR RELIEF VALVE. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed June 28, 1928. Serial No. 289,023. 12 Claims. (Cl. 251—121.)



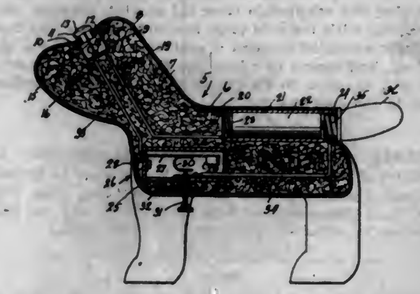
3. A device of the character described comprising a member having a passage therethrough, a valve therein for controlling said passage, a member for controlling the extent of opening of said valve, and a tubular member having a recessed inner end freely movable on said second named member for maintaining said valve centered to insure the return thereof to seated position.

1,877,939. ART OF LIQUID PURIFICATION. GEORGE MOORE, New York, N. Y. Filed June 2, 1923. Serial No. 642,988. 12 Claims. (Cl. 210—1.)



1. In the art of liquid purification, passing liquid through a filter temporarily impervious to germs, and destroying accumulated and generated germs on or in the filter before any of the germs find their way through the filter while retaining the filter in its operative position.

1,877,940. EYE FLICKERING MEANS FOR TOYS AND THE LIKE. NATHAN MORGENSTERN and JOSEPH TASCHER, Brooklyn, N. Y. Filed Oct. 30, 1931. Serial No. 572,014. 2 Claims. (Cl. 46—40.)



1. An animal toy figure comprising a body, a casing therein, a glass eye in communication with the interior of the casing, an electric lamp in the casing in operative relation to the eye, a compartment in the rear of the toy, a battery in the said compartment in electric circuit with the lamp, a pulsator in circuit with the said lamp, and a removable member closing the said compartment and forming a tail for the toy figure and also forming a connector between the battery and pulsator.

1,877,941. TALKING PICTURE SCREEN. WILLIAM H. MORRIS, Philadelphia, Pa., assignor to Keasbey & Mattison Company, Ambler, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1930. Serial No. 494,262. 3 Claims. (Cl. 88—24.)

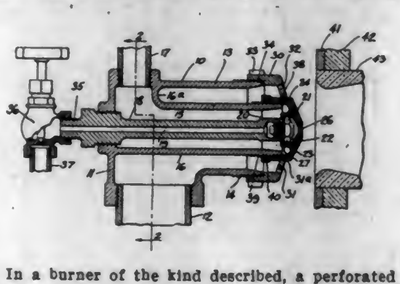
1. A moving picture screen adapted to transmit sound and reflect light and comprising woven threads of asbestos

fibres spaced to provide orifices between them, and having outer fibres of said threads extending over and tending to



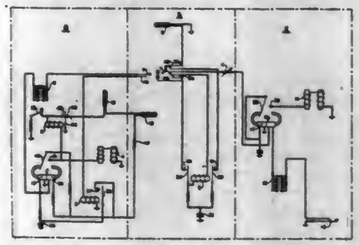
cover and partially fill said orifices to form a plurality of light reflecting surfaces therein while permitting sound waves to pass therethrough.

1,877,942. COMBINATION GAS AND OIL BURNER. ALBERT W. MORSE, Forest Hills, N. Y. Filed May 16, 1930. Serial No. 452,883. 4 Claims. (Cl. 158—11.)



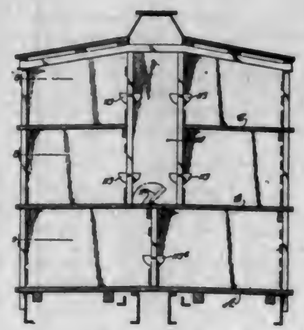
1. In a burner of the kind described, a perforated gas cap at the end of the burner, a liquid fuel supply pipe extending through the burner, an atomizer plug at the outlet end of the said pipe, an air chamber surrounding the said pipe, an air supply connection to the said chamber, a deflector cap having a central outlet surrounding the said plug and adapted to close the said air chamber when contacting with the said plug, the said deflector cap being slidingly extended through a central opening of the said gas cap, and means to admit gas into the burner around the said chamber to be discharged through the perforations in the said gas cap.

1,877,943. PRINTER CONCENTRATOR SYSTEM. ANTHONY J. MOTTO, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,193. 2 Claims. (Cl. 178—69.6.)



1. In a printing telegraph exchange system, a concentration board provided with a cord circuit having a printer associated therewith, a cord circuit supervisory signal associated with the printer and another associated with the concentration board, a subscriber's line circuit terminating in the concentration board, a relay in the sleeve of the cord circuit operable when the cord circuit is connected to the subscriber's line circuit for effecting the operation of both supervisory signals, a receiving relay, in the tip of the cord circuit, responsive to the actuation of the sleeve relay, for conditioning a third relay for operation, and means under control of the printer operator for thereafter actuating and locking the third relay to effect the release of both supervisory signals.

1,877,944. STOCK CAR. FRANK X. MUDD, Oak Park, Ill. Filed May 18, 1929. Serial No. 364,206. 1 Claim. (Cl. 119—9.)



A three-deck stock car with a central longitudinal aisle having its floor substantially in the same plane as the top of the first deck the floor serving as a portion of the cover for the stock compartment of the first deck.

1,877,945. DYEING WITH VAT DYESTUFFS SENSITIVE TO CALCIUM COMPOUNDS. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 9, 1928, Serial No. 291,496, and in Germany July 19, 1927. 3 Claims. (Cl. 8—6.)

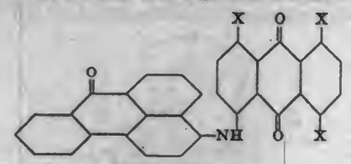
1. A composition of matter comprising a vat dyestuff sensitive, in dyeing, to the action of calcium compounds and a compound selected from the group consisting of phosphoric acid and its water-soluble salts.

1,877,946. HALOGEN DERIVATIVES OF THE ANTHRAQUINONEAZINE SERIES AND PROCESS OF MAKING SAME. HEINRICH NERESHEIMER and WILHELM SCHNEIDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 25, 1930, Serial No. 470,764, and in Germany Aug. 1, 1929. 9 Claims. (Cl. 260—31.)

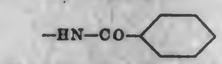
1. A process of producing halogen derivatives of the N-dihydro-1.2.2'.1'-anthraquinoneazine series, which comprises treating a condensation product of N-dihydro-1.2.2'.1'-anthraquinoneazine and formaldehyde with a halogenating agent.

1,877,947. PROCESS FOR PRODUCING VAT DYESTUFFS OF THE ANTHRAQUINONE ACRIDINE SERIES. HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, and GEORG BÖHNER, Friedrichsfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 9, 1930, Serial No. 460,089, and in Germany Aug. 30, 1929. 2 Claims. (Cl. 260—36.)

1. A process for producing vat dyestuffs of the anthraquinone series which comprises subjecting bz-1-benzanthronyl-1-amino-benzoylamino-anthraquinone compounds corresponding probably to the general formula:



wherein one X means the group



and the other X's mean hydrogen, to the action of an alkaline condensing agent, which is practically free from hydroxyl-groups selected from the group consisting of alkali metal salts of aromatic amines and of alcoholates.

1,877,948. VAT DYESTUFFS OF THE N-DIHYDRO 1.2.2'.1'.-ANTHRAQUINONEAZINE SERIES AND PROCESS OF MAKING SAME. HEINRICH NERESHEIMER and WILHELM SCHNEIDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 19, 1930, Serial No. 469,282, and in Germany July 25, 1929. 5 Claims. (Cl. 260—31.)

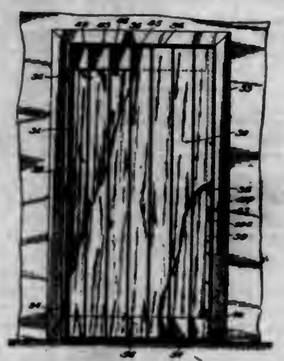
1. A process of producing vat dyestuffs of the anthraquinoneazine series, which comprises treating with a halogenating agent the products obtainable by oxidation of the condensation products of N-dihydro-1.2.2'.1'-anthraquinoneazine and formaldehyde.

1,877,949. DEVICE FOR INFLATING CONTAINERS. HARRY J. NEUMILLER, Peoria, Ill., assignor to Humitube Mfg. Co., Peoria, Ill., a Corporation of Illinois. Filed Oct. 24, 1930. Serial No. 490,864. 8 Claims. (Cl. 226—129.)



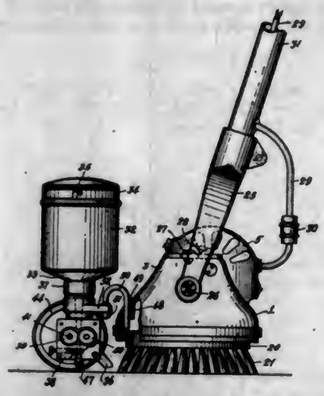
1. A device for inflating containers which are normally in collapsed condition comprising a supporting member, a blower beneath said member, a spout leading from the blower up through the member, a conductor attached to said member in communication with said spout and of substantially arcuate shape whereby the discharge end of the conductor overlies the member in a near horizontal position, the discharge end of the conductor having means for positioning an open end of containers for the introduction of air from the conductor into the containers and also provided with means by which articles of merchandise may be guided into the inflated containers.

1,877,950. FOLDABLE CURTAIN. CARL H. NORDELL, Chicago, Ill. Filed July 21, 1930. Serial No. 469,598. 19 Claims. (Cl. 45—106.)



1. A foldable curtain frame comprising a pair of extensible members each having a plurality of pivoted links, and a pair of transverse frame members each having its ends fixedly secured to one of the links of said extensible members whereby the torsion of said transverse frame members resists unequal extension of said extensible members.

1,877,951. FLOOR MACHINE. ALFRED E. NORRIS, Westfield, N. J., assignor to The Regina Corporation, Rahway, N. J., a Corporation of New Jersey. Filed Sept. 26, 1930. Serial No. 484,501. 4 Claims. (Cl. 91—25.)



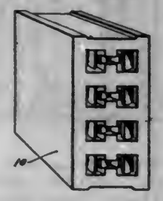
1. In a floor polishing machine, the combination of a housing, a motor journalled on a shaft within said housing, a brush shaft journalled in said housing to rotate on a vertical axis, a brush at the end of said shaft and a waxing unit detachably secured to said housing by means including a pair of U-shaped elements rigidly connected to said waxing unit and having one of the leg portions of each of said pair of U-shaped elements positioned within a vertical recess in said housing, whereby said waxing unit is freely movable vertically and independently of said housing.

1,877,952. DERMAL COVER PREPARATION. LYDIA O'LEARY, Pelham, N. Y. Filed Dec. 31, 1930. Serial No. 505,985. 1 Claim. (Cl. 167—90.)

A composition for concealing skin blemishes such as birthmarks, which comprises zinc in impalpable powder form, glycerine and water, in approximately the propor-

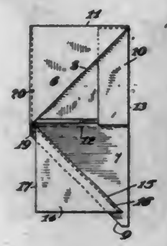
tions of 2041 grams of the zinc powder, 300 cubic centimeters of the glycerine and 720 cubic centimeters of the water, the said composition constituting a thick opaque liquid adapted for application with a brush, providing a yielding non-cracking coating that adheres to the blemish, simulating the normal skin and concealing by its opaque character the underlying discoloration.

1,877,953. HOLLOW BLOCK STRUCTURE. PETER C. OLSEN, Perth Amboy, N. J., assignor to Federal Seaboard Terra Cotta Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1931. Serial No. 514,087. 3 Claims. (Cl. 72—41.)



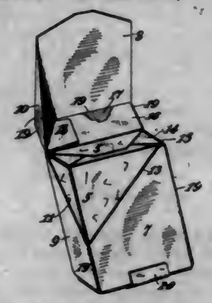
1. As an article of manufacture hollow masonry tile block comprising in combination parallel exterior walls and an intermediate web separated by spaces of greater width than the thickness of said walls and web, cross walls connecting the exterior walls and web, tongues provided on edges of said exterior walls and projecting inwardly over said spaces, each of said tongues extending substantially the full length of a wall portion between a pair of cross walls, and coacting tongues provided on said web and extending toward said first named tongues, each of said last named tongues extending partially of the full length of a web portion between a pair of cross walls.

1,877,954. BRIEF CASE OR PORTFOLIO. NATHAN OTTINGER, New York, N. Y. Filed Mar. 11, 1931. Serial No. 521,760. 3 Claims. (Cl. 150—52.)



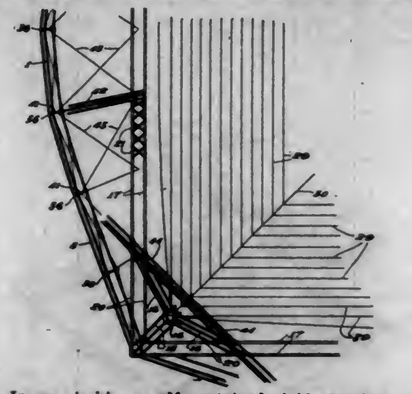
1. A container of the kind described having a body comprising a blank of parallelogrammatic shape embodying an intermediate section and relatively foldable triangular shaped end sections, one of said end sections of the body being inwardly folded upon one side of said intermediate section to cooperate therewith and form a pocket-like retainer with one free edge of said triangular shaped end section extending diagonally at the open side of said pocket, the other triangular shaped end section constituting closure means for said pocket and having a part projecting over said free edge on one side of said first named triangular shaped section, and said closure means also having an obliquely extending part projecting over said diagonal edge upon the other side of said first named triangular shaped section, and means for closing the container between the lateral edge of said intermediate section and the corresponding edge of said foldable pocket closing section.

1,877,955. ORIGINAL PACKAGE. NATHAN OTTINGER, New York, N. Y. Filed May 15, 1931. Serial No. 537,565. 2 Claims. (Cl. 229—87.)



1. An original package for cigarettes and the like, comprising an outer paper wrapper formed from a blank having relatively foldable parts providing opposite side walls and longitudinal edge walls, one of said side walls having an edge extending obliquely from one end thereof adjacent one of the edge walls to a point intermediate the ends of the other edge wall, and said blank also including closure means for one end of the package embodying an end wall hingedly connected with one end of the opposite side wall of the wrapper and a part extending in angular relation to said end wall and adapted to be flexed relative thereto for insertion under the obliquely inclined edge of said first named side wall of the wrapper to extend longitudinally between said wall and the contents of the package.

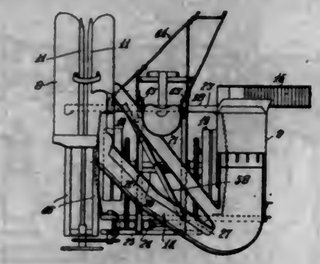
1,877,956. AIRSHIP. WILLIAM WATTERS PAGON, Baltimore, Md. Filed Feb. 10, 1928, Serial No. 253,437. Renewed Mar. 25, 1932. 58 Claims. (Cl. 244—3.)



4. In an airship, a self contained rigid structure comprising trusswork forming the main framework of the airship, auxiliary framework comprising ring members surrounding said framework at intervals and longitudinals disposed in spaced relation therearound and extending to adjacent ring members, said auxiliary framework being of comparatively light materials, said self contained rigid structure being adapted to sustain all major loading on said airship.

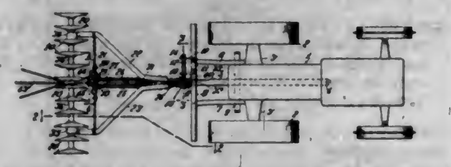
1,877,957. CORN PICKER. LOUIS A. PARADISE and WILBUR J. COULTAS, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 28, 1927. Serial No. 194,883. 15 Claims. (Cl. 56—104.)

1. In a corn picker, the combination with corn picking and husking mechanisms, of a main frame, two side wheels for said frame, an axle for said wheels fixedly secured to said frame to transversely brace the latter, each of said mechanisms being supported on said main frame with the major portion of the weight of each dis-



posed outwardly beyond the plane of the adjacent side wheel, and an arched truss having its intermediate portion connected to said axle and having its ends connected to the side portions of said frame for reenforcing said frame against buckling stresses.

1,877,958. DISK HARROW. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 382,026. 25 Claims. (Cl. 280—33.5.)



20. A draft connection for attaching an implement to a tractor, comprising the combination of a steering hitch made to the rear and under the axis of the traction wheels by a connection which is capable of limited movement fore and aft on the tractor, with a pulling hitch made ahead of the traction wheels of the tractor.

1,877,959. STRUCTURAL MATERIAL AND PROCESS OF MAKING THE SAME. HARRY C. PEFFER, RICHARD L. HARRISON, and DAVID E. ROSS, Lafayette, Ind., assignors to Rostone, Incorporated, Lafayette, Ind., a Corporation of Indiana. Filed Sept. 22, 1930. Serial No. 483,747. 12 Claims. (Cl. 18—47.5.)

1. The process of producing an artificial structural material; consisting in mixing an alkaline earth base, a finely ground mineral material containing hydrated aluminosilicic acid, a coarse aggregate, and water in optimum quantity to produce complete reaction; and heating the mass while retaining its essential water content until it is transformed into the desired material.

1,877,960. STRUCTURAL MATERIAL AND PROCESS OF MAKING THE SAME. HARRY C. PEFFER and PAUL W. JONES, Lafayette, Ind., assignors to Rostone, Incorporated, Lafayette, Ind., a Corporation of Indiana. Filed Sept. 22, 1930. Serial No. 483,748. 12 Claims. (Cl. 18—47.5.)

1. The process of producing an artificial structural material; consisting in mixing an alkaline earth base, a finely ground mineral material containing hydrated aluminosilicic acid, fibrous material, and water in optimum quantity to produce complete reaction; and heating the mass while retaining its essential water content until it is transformed into the desired material.

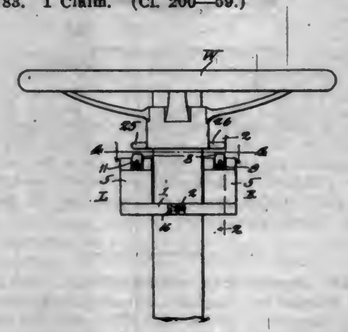
1,877,961. PROCESS FOR THE PRODUCTION OF TUNGSTEN METAL. ERNST POKORNY, Leipzig, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 18, 1930, Serial No. 503,329, and in Germany Dec. 31, 1929. 5 Claims. (Cl. 75—17.)

1. A process for the production of tungsten metal which comprises causing an ore chiefly consisting of tungstate of iron and manganese to react with a mixture of chlorine and hydrogen, the quantity of hydrogen present in said mixture being between about three and twelve times the quantity required for the formation of hydrochloric acid by combination with the chlorine present.

1,877,962. STEEL ALLOY. FRANZ POLZGUTER, Bochum, Germany, assignor to the Firm Deutsche Edelstahlwerke A.-G., Bochum, Germany. Filed Apr. 5, 1929, Serial No. 352,925, and in Germany May 5, 1928. 3 Claims. (Cl. 75—1.)

1. A cutting steel alloy comprising approximately 10% to 30% of tungsten, approximately from 10 up to and including approximately 10.4% of cobalt, small quantities from a trace to less than 1% of chromium, from 1.4% to less than 2.5% of carbon and the balance substantially all iron, excepting small quantities of impurities and small quantities of other elements commonly present in steels of this type in amounts not greater than 2% in the aggregate.

1,877,963. SIGNAL SWITCH. WILLIAM J. PORTER, Chattanooga, Tenn. Filed Apr. 24, 1929. Serial No. 357,783. 1 Claim. (Cl. 200—59.)

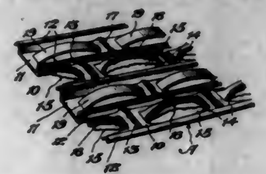


The combination with the steering post and steering wheel of a vehicle, of signal controlling means located entirely outside of the post, including a housing detachably clamped to the post, a base of insulating material within the housing, a forked contact on the base, an inclined contact yieldingly supported above the forked contact, a hand operated lever fulcrumed in the housing, one end thereof being extended through and movable in a wall of the housing for actuation by the operator, a spring for holding the lever in either of two extreme positions, a member movable with the lever for successively engaging and deflecting the yieldingly supported contact and moving into engagement with the forked contact thereby to successively close two different circuits, and means actuated by the rotation of the wheel for engaging said lever and returning it and the part connected thereto to their normal positions.

1,877,964. REENFORCED METAL LATH. WILLIAM J. PURSER, Mineral Ridge, Ohio, assignor to The Bostwick Steel Lath Company, Niles, Ohio, a Corporation of Ohio. Filed Oct. 27, 1930. Serial No. 491,544. 3 Claims. (Cl. 72—116.)

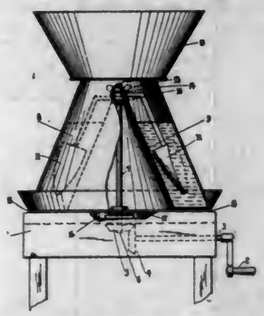
3. A metal lath structure comprising a sheet of metal corrugated to provide parallel ribs and a depression be-

tween each adjacent pair of ribs, a stiffening formation along the top of each rib at each side thereof, truss loop formations at longitudinally spaced points along the



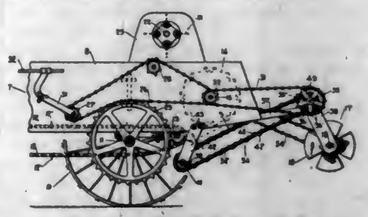
top of each rib between the stiffening formations thereof, and transversely flat longitudinally arched bands pressed from the bottom of each depression at longitudinally spaced intervals.

1,877,965. APPARATUS FOR COOLING MILK. ALVA R. PURSLEY, Eufaula, Ala. Filed May 23, 1931. Serial No. 539,457. 2 Claims. (Cl. 257—178.)



1. In a milk cooler a substantially conical shaped container for the cooling medium provided with a shaft tunnel extending upward within it from its bottom, an agitator arranged to move the contents of said chamber, and a shaft within said tunnel arranged to drive said agitator, substantially as set forth.

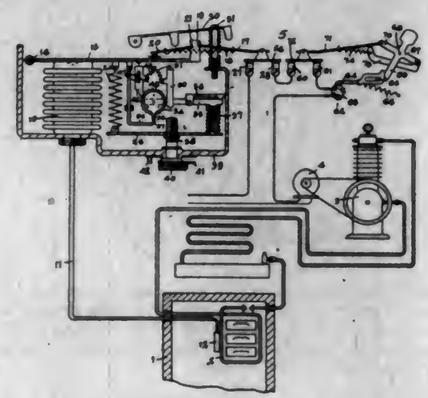
1,877,966. FERTILIZER DISTRIBUTOR. FRANK RAISBECK, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 23, 1928. Serial No. 321,298. 19 Claims. (Cl. 275—6.)



1. The combination with a manure spreader comprising a bed, a feeding apron therein and a widespreading device, of attachment means for adapting the implement to the spreading of lime and like fertilizers comprising a conveyer disposed substantially below said bed to receive a fertilizer from said feeding apron and to convey the same to a position over said widespreading device.

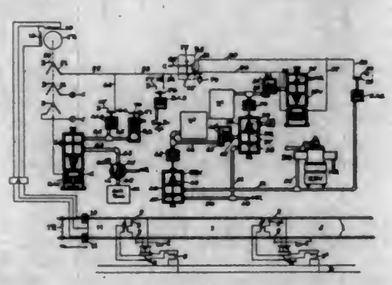
1,877,967. REFRIGERATOR CONTROL. ESTEL C. RANEY, Columbus, Ohio. Filed Apr. 29, 1932. Serial No. 608,159. 17 Claims. (Cl. 62—4.)

1. In a refrigerator control system, means for maintaining a normal operating refrigerating cycle between fixed temperature limits, means for periodically modifying the upper temperature limit, means for adjusting the temperature range of the normal operating cycle, a compensating



means whereby the upper temperature limit of the periodic cycle remains at a practically fixed value regardless of adjustment of the normal operating cycle.

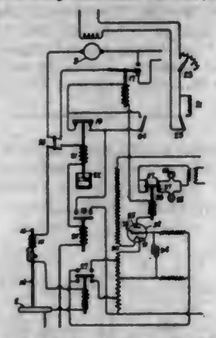
1,877,968. AUTOMATIC TRAIN CONTROL SYSTEM. WADE H. REICHARD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 14, 1928. Serial No. 292,654. 12 Claims. (Cl. 246—63.)



1. An automatic train control system comprising, a vehicle carried control relay controlled in accordance with traffic conditions ahead of said vehicle, an electro-pneumatic valve, brake control means controlled by said electro-pneumatic valve, contacts closed only when said brake control means is in its inactive condition, a circuit for said electro-pneumatic valve including said contacts, contacts closed only when said control relay is energized, means for shunting said latter contacts if the engineer has manifested his vigilance, and other means for shunting said latter contacts if the brakes have been manually applied.

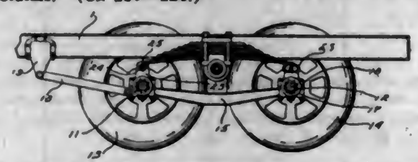
1,877,969. ELECTRIC ARC WELDING HEAD. WALTHER RICHTER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 17, 1930. Serial No. 429,059. 17 Claims. (Cl. 219—8.)

1. An arc welding head comprising, in combination, means for feeding an electrode, an electric motor for driving the feeding means to feed the welding electrode toward the work to be welded, means for withdrawing the electrode from contact with the work to establish a welding arc therebetween, means operating at the instant of striking the arc to stop the feed of the electrode toward



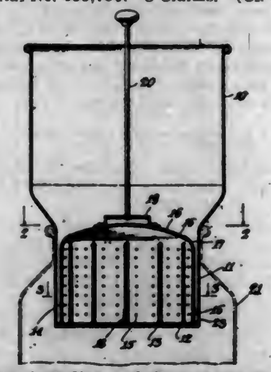
the work for a predetermined interval of time, and means for manually checking the rate of feed of the electrode toward the work to maintain the required arc length.

1,877,970. TANDEM WHEEL CONSTRUCTION. FREDERICK M. REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 12, 1930. Serial No. 435,334. 8 Claims. (Cl. 280—124.)



1. A tandem wheel construction comprising in combination with a vehicle frame, a leaf spring pivotally mounted to the frame near each side of the frame, a pair of axles, means pivotally connecting the ends of the springs to the respective axles eccentrically thereof, the means at at least one end of each spring comprising elements for compensating for variation in spring length incident to spring flexure, distance rods connecting the axles bearing substantially no load, and ball and socket means joining the distance rods and axles so that each axle can rock with respect to the distance rods around its own center, the said compensating means at one end of each spring being located at the forward end of one spring and at the rear end of the other.

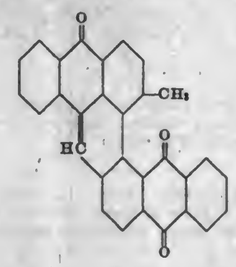
1,877,971. EXTRACTOR CUP FOR COFFEE FILTERS. HERBERT WESLEY REID, Brooklyn, N. Y. Filed Dec. 3, 1930. Serial No. 499,750. 3 Claims. (Cl. 53—3.)



1. In a filter including a shell, an extractor cup having a perforated top and side walls perforated by series of perforations, a ridge separating each group of the series of perforations projecting beyond the plane of the cup wall to space the same from the inner wall of its shell, and a means for cutting down the dropping surface of the shell for percolating a small amount of coffee.

1,877,972. NEW CONDENSATION PRODUCT OF THE ANTHRAQUINONE SERIES AND A PROCESS OF MAKING SAME. HEINRICH RITTER, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 7, 1931, Serial No. 549,321, and in Germany July 25, 1930. 2 Claims. (Cl. 260—61.)

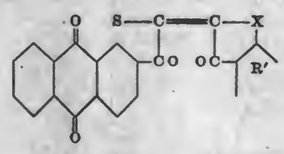
1. As a new compound the condensation product of the anthraquinone series corresponding probably to the formula:



which forms when recrystallized from the usual organic solvents yellow crystals soluble in concentrated, sulfuric acid with an intense reddish brown color, in fuming sulfuric acid of 60% SO_3 content with an intense green color, which product dyes cotton from an orange vat fast yellow shades.

1,877,973. NEW INDIGOID DYESTUFFS OF THE ANTHRAQUINONE SERIES. HEINRICH RITTER and WALTER BRUNNER, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1931, Serial No. 530,134, and in Germany Apr. 23, 1930. 4 Claims. (Cl. 260—48.)

1. As new compounds the indigoid dyestuffs of the anthraquinone series corresponding to the general formula:

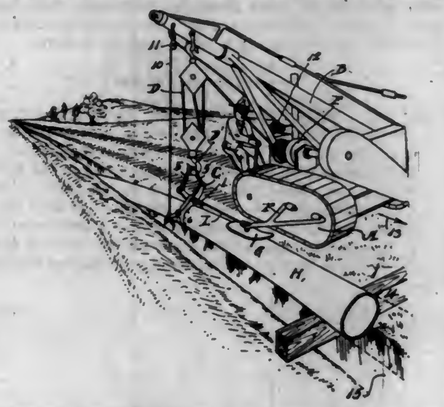


(wherein R' means a radical of the benzene, naphthalene or anthraquinone series and X means S or NH), which dyestuffs dye the vegetable fiber brown, grey to olive grey shades of a good fastness and levelling power.

1,877,974. PIPE LINE DEPOSITING MACHINE. JOHN F. ROBB, Cleveland Heights, Ohio. Filed June 16, 1931. Serial No. 544,871. 18 Claims. (Cl. 214—1.)

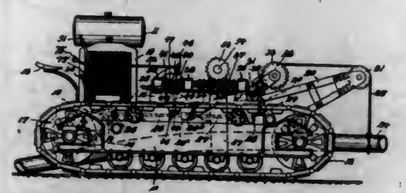
1. In a pipe line handling apparatus, a crane type machine comprising a base portable to travel along a trench in which a pipe is to be laid, a boom on said base, tackle means on said boom, a grapple device carried by the tackle means and comprising a pipe supporting member, and anti-

friction means carried by the member for supporting the pipe to be handled in spaced relation to said member,



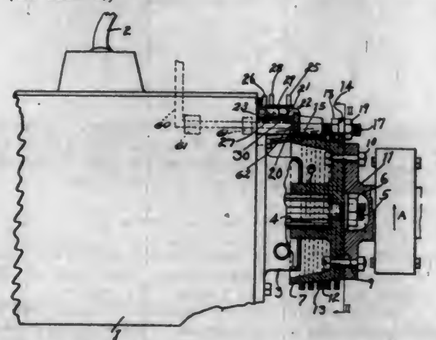
for allowing free longitudinal movement between the pipe and supporting member, the means being axially disposed transversely of the pipe.

1,877,975. MACHINE FOR LAYING PIPES IN TRENCHES. JOHN F. ROBB, Cleveland Heights, Ohio. Filed Sept. 8, 1930. Serial No. 480,544. 29 Claims. (Cl. 214—1.)



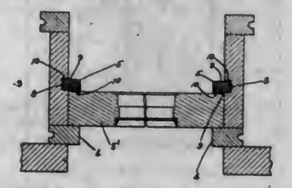
1. A pipe laying machine comprising a traction base for traveling along the trench in which a pipe is to be laid, and guiding means on the said base to continuously travel along and engage the pipe for lowering it into the trench, said guiding means including jaws movable to engage and disengage the pipe, and mechanism to operate the jaws.

1,877,976. SAFETY STOP FOR MOTOR VEHICLES. MAX L. ROSENFELD and JOHN H. MORGAN, San Francisco, Calif.; said Morgan assignor to said Rosenfeld. Filed Feb. 19, 1930. Serial No. 429,566. 8 Claims. (Cl. 192—4.)



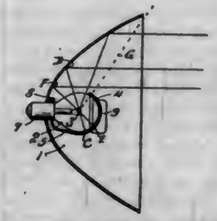
1. A reverse safety stop for motor vehicles comprising a taper drum, a coiled member around said drum, having one end adjustably fixed, the other end free, whereby the drum may run freely in one direction, but be held from rotation in the opposite direction by the action of said coiled member tending to wind up and wrap itself tightly on said drum, and means to hold said spring in inoperative position when it is desired that the drum run freely in either direction.

1,877,977. WINDOW FRAME. JOHN B. ROWLAND, New Rochelle, N. Y., and FRED C. ANDERSEN, Bayport, Minn., assignors to Andersen Frame Corporation, Bayport, Minn., a Corporation of Wisconsin. Filed Nov. 24, 1930. Serial No. 497,785. 3 Claims. (Cl. 20—11.)



1. A window frame jamb having a groove therein and a parting bead to fit said groove, said bead having ribs formed in its diagonally opposite faces whereby upon reversal of the bead and transfer thereof to an opposite jamb the width of the run for the sash stile may be increased or decreased.

1,877,978. AUTOMOBILE HEADLAMP. EMMETT F. SARVER, Kansas City, Kans., assignor to Bessie W. Stunz, Kansas City, Mo. Filed Jan. 20, 1932. Serial No. 587,685. 3 Claims. (Cl. 240—48.6.)



1. In an automobile headlamp, the combination with a main curvilinear reflector and a source of light in the focus thereof, of an auxiliary reflector forward of and in longitudinal alinement with said focus and disposed so as to reflect rays from said source rearwardly upon said main reflector, and having a sheetlike arm of substantial width extending horizontally rearwardly between said source and said main reflector adapted to obstruct rays projected thereagainst from said source, said auxiliary reflector having at opposite side edges respectively two vertical laterally and forwardly extending reflecting wings disposed so as to reflect laterally rays reflected forwardly thereupon from the main reflector.

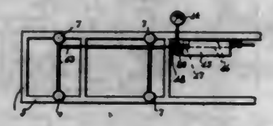
1,877,979. CONTAINER. EGBERT C. SAVAGE, Santa Monica, Calif. Filed Jan. 25, 1932. Serial No. 588,554. 5 Claims. (Cl. 43—131.)



5. In a device of the character disclosed, a container, a cover for detachable engagement with said container,

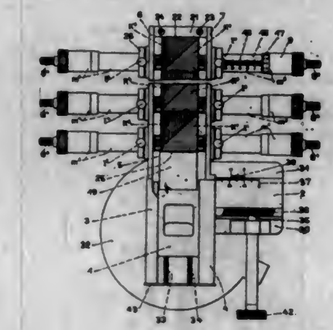
and a disc, said cover being provided with a centrally depressed portion secured to said disc and for spacing a portion of the cover from said disc, outwardly from said depressed portion; and said cover being provided with a perforation in the zone of spacing between the cover and said disc, in combination with means for securing said disc to a supporting object.

1,877,980. WEIGHT INDICATOR. LEE SCHAFER, Los Angeles, Calif. Filed Mar. 15, 1930. Serial No. 436,021. 2 Claims. (Cl. 265—47.)



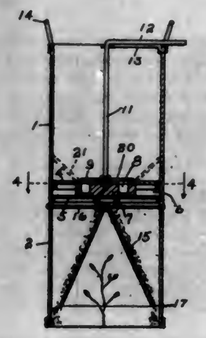
1. In a load indicator, in combination with the chassis and the body of a vehicle, movable pressure-influenced members disposed in operative relation between the said chassis and body, a container for holding a pressure medium, a pressure producing device in communication with said members and said container, a checking means for holding the produced pressure in said members, and a controlling means by which communication is formed between the said container through the said pressure producing device and the said members and adapted to form communication between the said members directly with the said container for releasing the pressure in the said members.

1,877,981. DEVICE FOR DETERMINING THE QUANTITATIVE RELATION OF THE COMPONENTS OF A COMPOSITE SUBSTANCE. WILLY SCHÄFER, Wetzlar, Germany, assignor to the Firm Ernst Leitz, Optische Werke, Wetzlar, Germany. Filed Mar. 22, 1929, Serial No. 349,170, and in Germany Apr. 2, 1928. 5 Claims. (Cl. 33—174.)



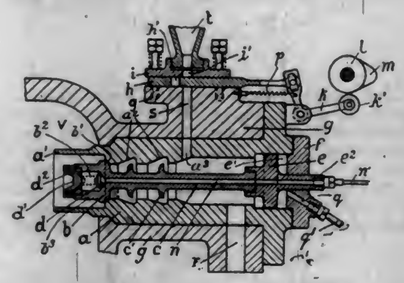
1. An instrument for measuring the component parts of a composite specimen comprising means for placing the specimen in an initial position a plurality of independently operable measuring units, means actuated by the operation of any one of said measuring units for moving the specimen successively distances in the same direction as determined by the dimensions of its component parts, each of said measuring units including means for measuring and indicating each of the movements of the specimen, and mechanism for supporting said measuring and indicating means arranged so that all of said indications remain visible at the completion of all of the said measuring operations.

1,877,982. FERTILIZER DISTRIBUTOR. WALTER F. SCHAKEL and ADOLPH C. WATERMAN, Indianapolis, Ind.; said Schakel assignor to said Waterman. Filed June 30, 1930. Serial No. 464,862. 3 Claims. (Cl. 221—119.)



1. A fertilizer distributor comprising a hopper forming section, a hollow section end to end with said hopper section, means for removably connecting said sections, a rotating distributing block adapted to distribute the contents of said hopper section, discs for confining said block, handles on said hopper section for transporting the distributor, a shaft attached to said distributing block, and a lever connected with said shaft and projecting through one of said handles, whereby the movement of the lever and rotation of said block will be limited.

1,877,983. EXPLOSION CHAMBER. RUDOLPH SCHILLING, Woodside, Calif., assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,099. 7 Claims. (Cl. 60—41.)



1. The combination with an explosion chamber, of a hollow valve member communicating with said chamber and provided with a valve seat, a valve cooperating with said seat to control the communication between the interior of said member and the explosion chamber, a valve stem carrying said valve and provided with an axial channel extending therethrough, means for forcing ignition oil through said channel, a connection leading from the interior of said member to a source of air under pressure, a hopper for containing a supply of coal dust and a connection between said hopper and the interior of said valve member for introducing a charge of coal dust into the latter for mixture with the air therein.

1,877,984. CURTAIN DRAWING DEVICE. JOHANN PETER SCHMIDT, Jr., Remscheid-Dorfmhle, Germany. Filed Mar. 18, 1931, Serial No. 523,449 and in Germany Dec. 27, 1930. 4 Claims. (Cl. 156—20.)



1. A curtain-drawing device comprising a flanged supporting rail, curtain suspending elements adapted to ride on the flange of said rail, a slide arranged on the underside of the rail and snugly embracing the rail flange, and a tongue at one end of said slide adapted to enter the suspending elements for collecting the latter on the slide.

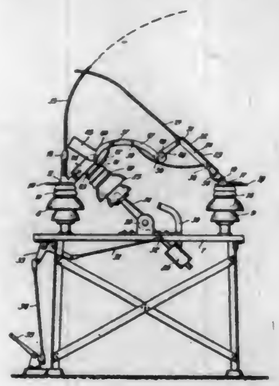
1,877,985. ALKYLATED AMINO-ACRIDINIUM COMPOUNDS AND PROCESS OF MAKING THEM. WERNER SCHMIDT and PAUL HARTMUTH, Frankfort-on-the-Main-Fechenheim, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 8, 1930, Serial No. 427,054, and in Germany Feb. 12, 1929. 3 Claims. (Cl. 260—36.)

1. The process which comprises mixing 3.6-diaminoacridine of the formula:



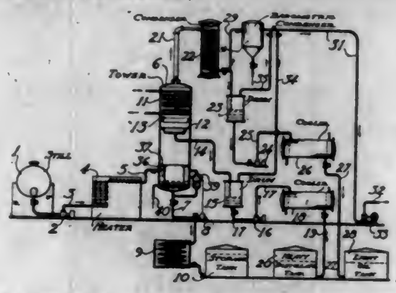
with the methylester of toluene sulfonic acid, and heating the mixture to about 95° C. for 12 hours.

1,877,986. SWITCH. JOHN SCHNEIDER, Roselle Park, N. J., assignor to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 22, 1927. Serial No. 214,501. 19 Claims. (Cl. 200—48.)



1. A switch comprising a main contact member and an auxiliary contact member, a stationary insulating support for said members, a movable main contact making member and a movable auxiliary contact making member, a movable insulating support for said main contact making member, means, including a stationary insulating support, for said auxiliary contact making member, and an actuating connection between the two movable contact making members for actuating the auxiliary contact making member upon actuation of the movable insulating support.

1,877,987. ART OF DISTILLATION UNDER VACUUM. JACKSON R. SCHONBERG, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,867. 3 Claims. (Cl. 196—77.)



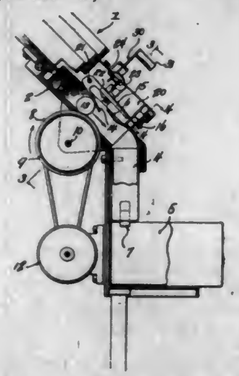
1. In a high vacuum distillation of petroleum lubricating oils, the improvement which comprises vaporizing part at least of the oils under an absolute pressure of less than one inch of mercury, and passing the vapors through a fractionating zone at a linear velocity increased over approximately 8 feet per second in inverse proportion to the square root of the absolute pressure held in the tower while maintaining the vacuum.

1,877,988. PNEUMATIC TIRE. HARRY P. SCHRANK, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Feb. 1, 1932. Serial No. 590,009. 8 Claims. (Cl. 152—14.)



1. In a resilient tire, a rubber tread formed with a longitudinal groove and with transverse internal apertures terminating at their inner ends short of the middle plane of the tire, substantially at a plane normal to the central tire axis and coinciding with said groove.

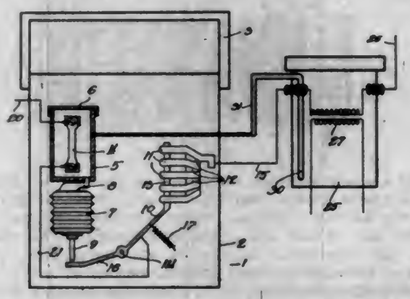
1,877,989. COIN COUNTING MACHINE. CARL SCHWARTZ, Elkhart Lake, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1926. Serial No. 100,859. 6 Claims. (Cl. 133—8.)



1. In a coin counting machine, the combination with a member having a chute through which coins may be passed,

a bell crank lever pivoted above said chute and having a first arm extending into, and partially obstructing, the chute, means to carry said coin past said first arm, a second arm having a spring on the end thereof, and a counter adapted to be operated from said spring.

1,877,990. THERMAL PROTECTIVE SYSTEM. EDMUND O. SCHWEITZER, Northbrook, Ill. Original application filed Oct. 3, 1929, Serial No. 396,976. Divided and this application filed Nov. 6, 1930. Serial No. 493,710. 13 Claims. (Cl. 175—294.)

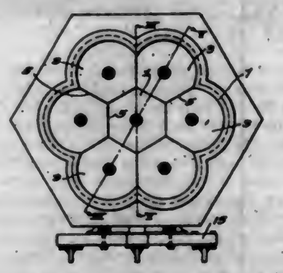


1. A cut out including a casing, insulating fluid within the casing, switching means immersed in the fluid, said switching means controlling means outside of the casing, a bellows in the casing, means for expanding the bellows upon the prolonged occurrence of an overload flowing through the switching means, additional means for expanding the bellows upon a rise in temperature of the means controlled by the switching means, and means for opening the switching means upon the expansion of the bellows.

1,877,991. PRODUCTION OF HYDROAROMATIC CARBOXYLIC ACIDS. ERWIN SCHWENK, Berlin-Neu Westend, and HANS JORDAN, Berlin-Steglitz, Germany, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Filed Jan. 3, 1931, Serial No. 506,487, and in Germany Jan. 11, 1930. 5 Claims. (Cl. 260—108.)

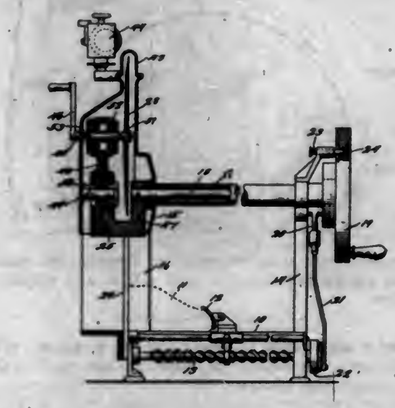
1. The process for the production of hydroaromatic carboxylic acids by treating the metal salts of aromatic carboxylic acids in aqueous solution at temperatures from 150° C. to 250° C. with hydrogen in the presence of a nickel catalyst.

1,877,992. ENERGY-TRANSLATING DEVICE. JOHN D. SEABERY, Dayton, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 6, 1930. Serial No. 480,174. 4 Claims. (Cl. 181—31.)



1. An energy-translating device comprising a vibratory element and means for actuating said element as a unit, said means comprising a plurality of independent driving units each associated with a section of said element.

1,877,993. SLICING AND CHOPPING MACHINE. ANTON C. SENSOW, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 20, 1928. Serial No. 294,225. 8 Claims. (Cl. 146—101.)



1. A slicing and chopping machine comprising in combination a continuously rotatable driving shaft, an arm projecting from said shaft, a knife shaft freely pivoted in said arm, a circular disc knife secured to said knife shaft, said shaft having means thereon for co-operating with a detachable handle for rotating said shaft, said pivoted knife shaft being wholly unconnected with the driving mechanism for rotating said knife so that said knife is free to assume its own angular position in either direction of rotation relative to its own axis during the movement of said knife through the material to be sliced.

1,877,994. SUBAQUEOUS TUNNEL. CLEVE F. SHAFFER, San Francisco, Calif. Filed Oct. 27, 1931. Serial No. 571,336. 15 Claims. (Cl. 61—42.)

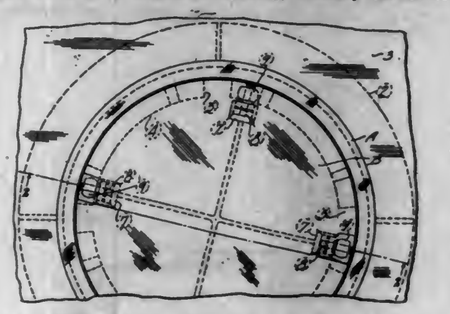


1. A subaqueous tunnel comprising a tubular body submerged intermediate the surface and bottom of a body of water and providing a way, said tubular body having an opening at each end, a buoyant unit having an entrance at a level above the surface water line and an opening in communication with the interior of the tubular body, and a spirally inclined way intermediate said entrance level and the level of the way in the submerged tubular body.

1,877,995. MANHOLE FRAME AND COVER. CONNOR B. SHANLEY, St. Louis, Mo., assignor to Semi-Steel Casting Co., St. Louis, Mo., a Corporation of Missouri. Filed Oct. 28, 1929. Serial No. 402,944. 1 Claim. (Cl. 94—34.)

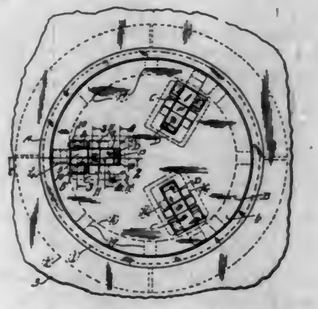
In combination, a cavity-topping frame having an annular wall provided upon its inner periphery with inwardly presented annular rib formed with a series of circumferentially spaced transverse openings and upon its under surface with spaced pairs of cam-faces, a cover adapted to seat for rotatory movement within the frame upon the rib, and means including rollers carried for rotation by the cover for projection through said openings for co-operation with respective cam-faces in cover-securing wedg-

ing engagement with the rib, the cam-faces of each respective pair extending in opposed inclination from the opposed walls of a respective opening, whereby the cover



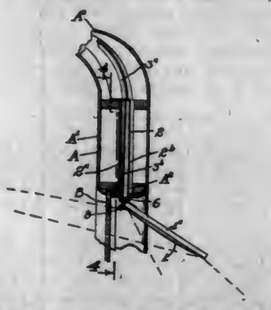
may be rotatorily actuated in either direction for wedge-securing engagement between said rollers and respective cam-faces.

1,877,996. MANHOLE COVER. CONNOR B. SHANLEY, St. Louis, Mo. Filed Aug. 29, 1930. Serial No. 478,617. 17 Claims. (Cl. 94—34.)



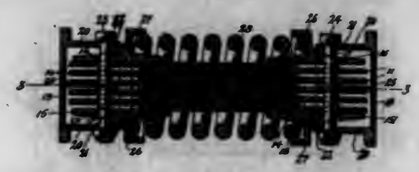
1. Means for anchoring a man-hole cover and the like including an anchor comprising a shank adapted for support upon the cover and opposed arms on the shank adapted respectively for engagement with the frame and cover, and a member for securing the anchor in cover and frame engagement.

1,877,997. VEHICLE BACKING MIRROR APPARATUS. HYMAN A. SHAPIRO, Los Angeles, and PAUL FRAUENDORF, Culver City, Calif. Filed Feb. 6, 1930. Serial No. 426,220. 11 Claims. (Cl. 45—97.)



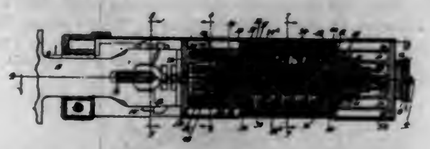
1. In an apparatus of the class described, the combination with a vehicle having a window at the rear end, a convex mirror mounted at the rear end of the vehicle at the upper portion of the window and directed downwardly and backwardly from the vehicle, a rear sight mirror mounted at the forward portion of the vehicle from which the images on the first mirror may be seen through said rear window, and manual means at the forward portion of the automobile for shifting the convex mirror from an inoperative position into view when desired so that reflected images can be seen thereby.

1,877,998. SHOCK ABSORBER. CLIFTON W. SHERMAN, Hamilton, Ontario, Canada. Filed Mar. 10, 1927. Serial No. 174,181. 5 Claims. (Cl. 213—36.)



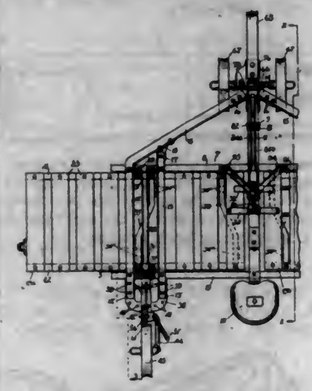
5. A shock absorber comprising a plurality of sets of intercalated friction plates which are slidable lengthwise to one another; follower means adapted to engage the outer ends of said sets of plates, respectively, for sliding one set lengthwise relative to the other set; spring means for resisting the sliding movement of one of said sets of plates relatively to the other under the action of the respective follower; and pressure means for pressing transversely together the sets of plates at opposite ends thereof upon moving one follower and the corresponding set of plates lengthwise relatively to the other follower and set of plates and releasing said transverse pressure upon moving one follower and the corresponding set of plates lengthwise from the other follower and set of plates, said pressure means including cooperating wedge members arranged at opposite ends of the sets of intercalated friction plates and connected with the respective followers and bearing against the flat sides of the sets of intercalated friction plates at opposite ends thereof, and manually operable adjusting means arranged at opposite ends of the sets of friction plates and each adapted upon being tightened to shift the wedge members at the respective end of the sets of friction plates relatively to one another and take up the wear between the opposing flat surfaces of the friction plates.

1,877,999. SHOCK ABSORBER FOR DRAFT GEARS. CLIFTON W. SHERMAN, Hamilton, Ontario, Canada. Filed June 18, 1928. Serial No. 286,095. 1 Claim. (Cl. 213—36.)



A shock absorber comprising a plurality of sets of intercalated friction plates which are slidable lengthwise relatively to one another, front and rear followers each having a transverse plate adapted to engage the outer ends of one set of friction plates and slotted parts extending from each of said transverse plates lengthwise along the opposite sides of the respective end of the sets of friction plates, transverse pressure creating means whereby upon movement of one of said followers toward the other said friction plates are pressed together and upon movement of one of said followers away from the other the transverse pressure upon said friction plates is reduced, means for guiding said followers on the sills of a car including keys passing through said slotted parts, and means for causing said sets of friction plates to be drawn apart during release of the mechanism.

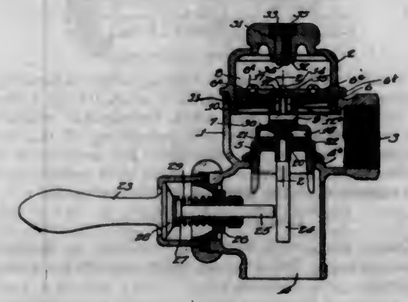
1,878,000. CULTIVATING IMPLEMENT. FREDERIC J. SIEBENMANN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 13, 1929. Serial No. 362,587. 23 Claims. (Cl. 97—233.)



1. In a rotary hoe, the combination of a frame, a caster wheel for supporting said frame, means for adjusting the vertical position of said frame relatively to said caster wheel between operative and transport positions, and means for holding said wheel against castering when the frame is in transport position.

13. In a rotary hoe implement, the combination of a frame, a plurality of rotary hoe elements carried by said frame, laterally spaced wheels supporting the main portion of said frame, a dirigible tongue truck for supporting the forward portion of said frame, said frame and tongue truck comprising two cooperating connecting members capable of relative vertical movement, mechanism for raising and lowering the forward portion of said frame relatively to said tongue truck comprising a threaded shaft, a traveling nut on said shaft, means connecting said nut with one of said members, and means for raising and lowering the rear portion of said frame relative to said laterally spaced wheels.

1,878,001. FLUSH VALVE. WILLIAM E. SLOAN, Chicago, Ill. Filed Apr. 9, 1927. Serial No. 182,517. 11 Claims. (Cl. 137—98.)



7. A flush valve comprising a casing, a piston in said casing dividing it into an upper and a lower chamber, a valve member connected with said piston, a seat with which said valve member co-operates, a discharge device beyond said seat, said piston being provided with two passageways, one connecting the upper and lower chambers, the other connecting the upper chamber with said discharge device, and an automatic control member in said first mentioned passageway.

1,878,002. EMERGENCY RELEASE VALVE. FRANCIS X. SMITH, New York, N. Y., assignor of one-half to George W. Beatty, Brooklyn, N. Y. Filed Nov. 8, 1930. Serial No. 494,378. 2 Claims. (Cl. 137—34.3.)



1. An emergency release valve comprising a head having a bore which opens into an enlarged recess therein, a valve seat provided on the walls of said recess, a valve member for engagement with said seat, an inverted conical spring having one of its ends secured in said recess and its other end connected to said valve member centrally thereof, a thermal responsive breakable liquid containing element seated against said valve member, a casing having a drain outlet, means for detachably securing said casing to said head, said means including locking pins which extend into said recess and which engage certain of the convolutions of said inverted conical spring to secure the same within said recess, and a spring interposed between said breakable liquid containing element and one end of said casing to maintain the breakable element in seated position.

1,878,003. BELT CLAMP. GUY OKLY SMITH, Whittier, Calif. Filed Aug. 3, 1931. Serial No. 554,771. 5 Claims. (Cl. 24—31.)

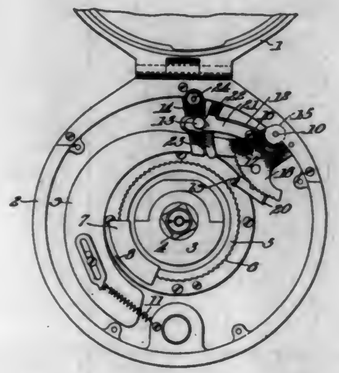


5. In a belt clamp, a metal body including a base, integrally formed side walls rising from the base, said walls diverging upwardly, a metal wedge plate, said wedge plate being positioned between said walls, a plurality of bosses extending from the side of the wedge plate, a fillet, a plurality of studs rising from the fillet and secured therein, said wedge plate having bores therein to receive the studs, and a nut screwed on each of the studs whereby the wedge plate and the fillet are drawn together to hold the belt ends in position.

1,878,004. RECORDING APPARATUS. MERLE L. SMITH, Upper Darby, Pa., assignor to The Electric Tachometer Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 13, 1930. Serial No. 502,229. 10 Claims. (Cl. 234—36.)

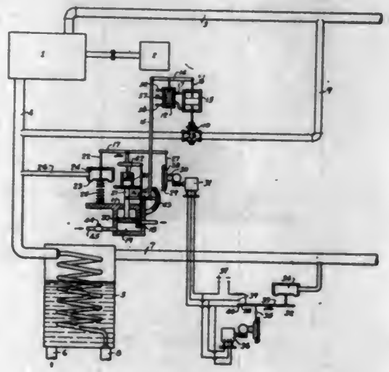
1. The combination with a vehicle having a motor, of means controlled by said motor for recording the occur-

rence and duration of the periods of energization of said motor and vibratory means additional to said motor con-



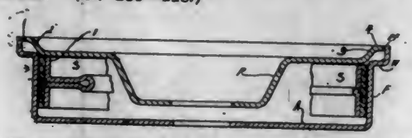
trolled means and controlled by the travel of said vehicle for recording the occurrence and duration of the periods of travel of said vehicle.

1,878,005. REGULATING SYSTEM FOR LOW PRESSURE STEAM GENERATION. CHARLES H. SMOOT, Maplewood, N. J. Filed May 3, 1930. Serial No. 449,671. 8 Claims. (Cl. 60—95.)



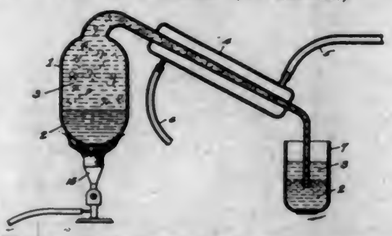
1. In combination with an evaporator receiving steam at one pressure and generating steam at a lower pressure from water delivered thereto a regulator responsive to the pressure of the steam delivered to the evaporator and to a controlling force, and adapted to so control the pressure of the steam delivered to the evaporator as to maintain it in proportion to said force, and a second regulator responsive to a force varying with the demand for the low pressure steam generated in said evaporator and adapted to vary the controlling force on said first mentioned regulator in a dircetion to cause the pressure of the steam delivered to the evaporator to increase when the demand for low pressure steam increases.

1,878,006. BRAKE DRUM. JOHN SNEED, Detroit, Mich., assigner to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 6, 1925, Serial No. 48,470. Divided and this application filed June 8, 1927. Serial No. 197,829. 9 Claims. (Cl. 188—218.)



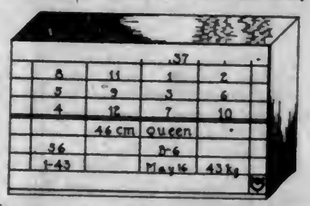
2. The combination of a brake drum having an L shaped flange extending beyond the open inner edge of the said drum and a backing plate having its periphery disposed in close proximity to and within the centrally facing portion of the L shaped reinforcing flange.

1,878,007. PROCESS OF DISTILLATION. WALTER O. SNELLING, Allentown, Pa. Filed Sept. 28, 1928. Serial No. 309,090. 5 Claims. (Cl. 202—39.)



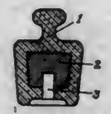
1. The process of purifying liquids which comprises distilling a volatile liquid while covered by an immiscible liquid of higher boiling point and lower specific gravity filling substantially all of the upper part of the still.

1,878,008. PSYCHOLOGICAL TESTING APPARATUS. WALTER O. SNELLING, Allentown, Pa. Filed Oct. 4, 1928. Serial No. 310,286. 4 Claims. (Cl. 35—12.)



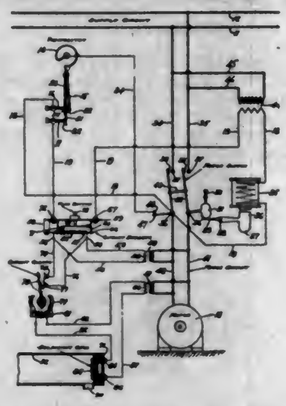
1. A pack of psychological testing cards comprising a plurality of cards each bearing a plurality of symbols each of which forms a part of an independent sequential series of such nature that the arranging of the cards in seqpential order of the symbols of any such series corresponds to the shuffling of the cards with respect to the disarrangement of the symbols of another series.

1,878,009. BALANCE WEIGHT. WALTER O. SNELLING, Allentown, Pa. Filed Oct. 29, 1928. Serial No. 315,833. 6 Claims. (Cl. 265—49.)



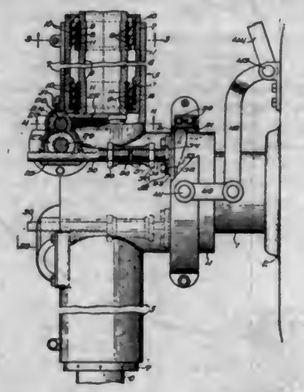
1. A weight having substantially the specific gravity of brass comprising an outer case of a chemically inert material of relatively low specific gravity and a core of a material of relatively high specific gravity.

1,878,010. APPARATUS FOR CONTROLLING BURNERS. DION G. SPAHR, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 19, 1925. Serial No. 38,822. 8 Claims. (Cl. 158—28.)



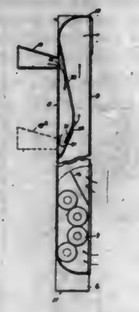
7. The combination of a furnace with means for supplying fuel thereto and a circuit including a relay and a light sensitive electric cell exposed to the light rays from the furnace for shutting off said fuel supply devices when the furnace flame goes out.

1,878,011. PROPELLING MEANS FOR AIRPLANES. JOHN SQUIRES, Detroit, Mich. Filed Apr. 6, 1929. Serial No. 353,038. 12 Claims. (Cl. 170—163.)



1. An adjusting mechanism for propeller blades comprising a hub, a plurality of blades radially journaled upon said hub, elements carried by the inner ends of said blades for turning the blades about their radial axes, a collar upon the hub, members extending from said collar, parallel to the hub axis at opposite sides of the hub, means for adjusting the lengths of said members, actuating connections from said members to said drive elements upon the blades, said collar comprising an inner ring and an outer ring, the inner ring being slidably mounted upon the hub for rotation therewith, the outer ring being fixed against relative axial displacement with respect to the inner ring and the inner ring being rotatable within the outer ring, the members extending from the collar being fixed to the inner ring, and means for actuating the collar attached to the outer ring.

1,878,012. AIR CONDITIONING AND DISTRIBUTING UNIT. ALFRED E. STACEY, Jr., Essex Fells, and CARLYLE M. ASHLEY, South Orange, N. J., assignors to Carrier Engineering Corporation, Newark, N. J., a Corporation of New York. Filed June 25, 1930. Serial No. 463,679. 8 Claims. (Cl. 257—137.)

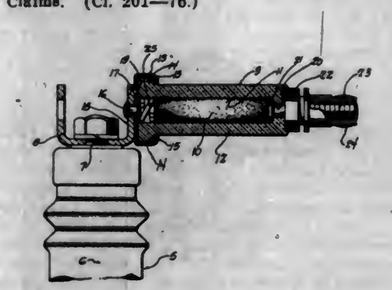


1. A unit of the character described having air heaters, means for intaking air within said unit through said heaters, means for intaking air within the unit in a course bypassing the heaters, and a nozzle arrangement fed from a desired source, for producing an induction effect capable of causing said intaking of air within the unit.

1,878,013. PRODUCTION OF ANHYDROUS METAL CHLORIDES. KARL STAIB, Bitterfeld, Germany, assignor to the Firm I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 21, 1927, Serial No. 200,499, and in Germany Aug. 13, 1926. 5 Claims. (Cl. 23—87.)

1. In the process of producing anhydrous metal chlorides by interaction of metal oxides and chlorine, the improvement which comprises the steps of forming a mixture comprising an oxide of a metal whose chloride is volatilizable with a binder and an amount of a substance of the group consisting of wood, peat and lignite in comminuted form, capable of producing, when heated, a porosity corresponding at least to the increase in volume caused by the transformation of said metal oxide to solid metal chloride, forming pieces of said mixture, heating said pieces to carbonization and subjecting them, while hot, to chlorination, so as to volatilize the metal chloride formed, the heat of the reaction alone serving to maintain the reaction temperature.

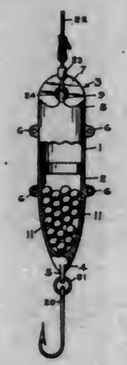
1,878,014. RESISTOR. WILLIAM F. STEENWEG, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 11, 1930. Serial No. 501,703. 4 Claims. (Cl. 201—76.)



1. A device for eliminating radio interference arising from high frequency oscillations produced by the discharge

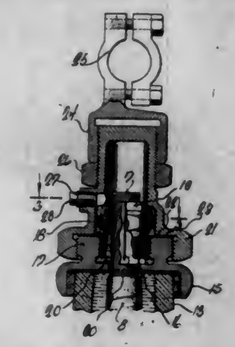
of a spark plug, comprising a tubular housing of insulating material, a terminal contact at each end portion of the housing, a self-supporting electrical resistance element having its integral end portions of lower resistance value than its medial portion, said element being disposed within the tubular housing to electrically bridge the terminal contacts, and expansible means within the housing for maintaining a tension between the low resistance end portions of the element and the adjacent terminal contacts to insure a good electrical connection between the element and the terminal contacts.

1,878,015. FISH LURE. MARIUS M. STEFFENSEN, Seattle, Wash. Filed Feb. 11, 1931. Serial No. 514,970. 4 Claims. (Cl. 43—46.)



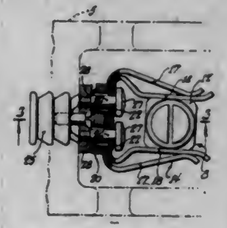
1. A fish lure of metallic construction, comprising a forward portion, a rear portion, said portions being detachably connected together and defining a hollow water-tight body member, a head extending from said member and provided with a flat face disposed on an inclined plane and surmounted by a pair of inwardly curved sections located angularly relative to said face, an integral and apertured rib disposed on said face and between said sections, an apertured fin extending from each side of said member, and a tail portion extending from said member and terminating in a support for a fish hook.

1,878,016. POTHEAD. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 22, 1929. Serial No. 409,032. 9 Claims. (Cl. 173—353.)



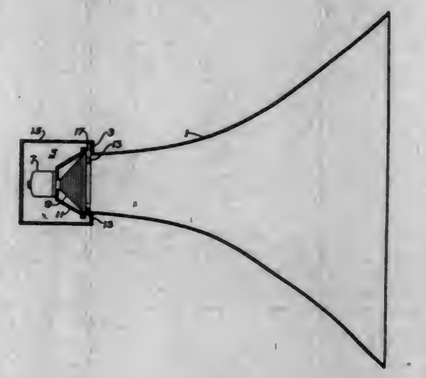
4. In a device of the character described, a tubular insulator, a member mounted at the open end of the insulator, said member having an opening, a conductor within the insulator having one end portion loosely projected through the member opening, means readily detachably connecting the conductor with the member and including a clamping nut having a threaded connection with said member, and terminal means also having a threaded connection with said member.

1,878,017. CONTACT CLIP. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Original application filed Mar. 12, 1929, Serial No. 346,341. Divided and this application filed June 22, 1931. Serial No. 545,867. 6 Claims. (Cl. 200—134.)



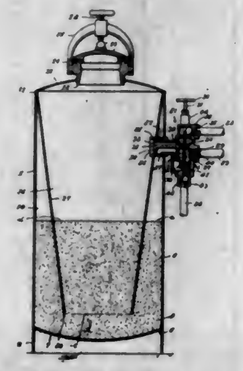
1. A contact clip comprising a member having spaced arms adapted to receive a terminal, a second member having spring arms which exert pressure on the arms of said first member to insure intimate contact with the terminal, a line conductor engaging member, tubular means fixedly connecting the three members and supporting means for the clip passed loosely through the tubular means, whereby the assembled contact clip is free to adjust itself to the terminal.

1,878,018. CONE-HORN COMBINATION. ALLAN G. STEPHENS, East Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 29, 1931. Serial No. 565,896. 8 Claims. (Cl. 181—31.)



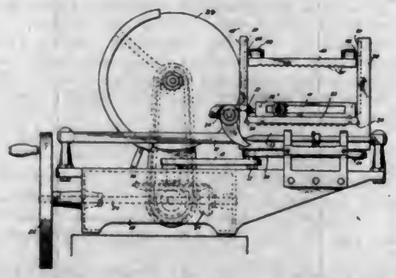
1. An energy-translating device comprising a horn, driving means associated therewith, said horn and driving means being deficient in frequency response over a range of frequencies, and means for increasing the output of said device at substantially those frequencies at which it is normally deficient.

1,878,019. WATER SOFTENER VALVE. CHARLES A. STICKNEY, deceased, Rockford, Ill., by James G. Tetlow, Rockford, Ill., administrator, assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Original application filed May 28, 1928, Serial No. 281,008. Divided and this application filed Mar. 1, 1929. Serial No. 343,766. 12 Claims. (Cl. 251—76.)



1. A water softener valve mechanism comprising a casing having two passages provided therein, one of which serves normally as an inlet for a softener tank, and the other of which serves normally as an outlet therefor, said casing also having a waste opening, there being supply and service pipes arranged to communicate with the inlet and outlet passages, and a waste pipe communicating with the waste opening, and a single shiftable valve element in said casing normally occupying one extreme position wherein the waste opening is closed thereby and wherein the supply pipe communicates with the inlet passage and the service pipe communicates with the outlet passage, said valve element being arranged to be shifted to the opposite extreme position wherein the supply pipe is placed in communication with the erstwhile outlet passage and the erstwhile inlet passage is placed in communication with the waste opening, whereby to reverse the direction of flow through the softener tank and to discharge into the waste pipe, and the service pipe is at the same time isolated from communication with both passages, and the said valve element being arranged to occupy an intermediate position wherein the supply pipe is placed directly in communication with the service pipe and at the same time with the one passage, the other passage being in communication with the waste opening.

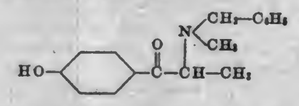
1,878,020. SLICING MACHINE. EDWARD M. STILES, Burlington, Iowa, assignor to U. S. Slicing Machine Company, a Corporation of Indiana. Filed June 25, 1925. Serial No. 39,401. 10 Claims. (Cl. 146—102.)



2. In combination, a table for supporting material to be sliced, having an abutment at one side thereof, a follower, movable along said abutment to feed material toward the front of said table, a clamp for engaging the material on said table at the side thereof remote from said abutment, and a holder for engaging the top of material upon said table, said holder being arranged to remain stationary relatively to the longitudinal feeding movement of said follower while mounted to move vertically through a wide range of operative positions.

1,878,021. α-PARA-HYDROXYPHENYL-β-METHYLAMINOPROPANOL AND PROCESS OF PREPARING IT. FRIEDRICH STOLZ, Frankfort-on-the-Main-Hochst, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 21, 1929, Serial No. 372,798, and in Germany June 27, 1928. 3 Claims. (Cl. 260—128.5.)

1. The process which consists in hydrogenating a compound of the following formula:

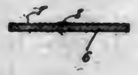


dissolved in the required quantity of normal hydrochloric acid, in the presence of a nickel catalyst for one hour at 100° C. and under a pressure of hydrogen of 40 atmospheres.

1,878,022. PROCESS FOR THE RECOVERY OF SOLVENTS USED IN THE PURIFICATION OF HYDROCARBONS. REGINALD K. STRATFORD, Sarnia, Ontario, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,602. 5 Claims. (Cl. 196—13.)

1. The process of separating extracted material from a solvent used for preferential extraction of petroleum of oil, which comprises contacting the solvent containing extract with petroleum oil, which is of lower specific gravity and lower boiling range than the extracted oil, settling the mixture, and separating the layers so formed.

1,878,028. PROCESS FOR PRODUCING MECHANICAL NEGATIVES. HANS STREUBER, Bronx, N. Y. Filed Feb. 12, 1929. Serial No. 339,370. 2 Claims. (Cl. 41—46.)

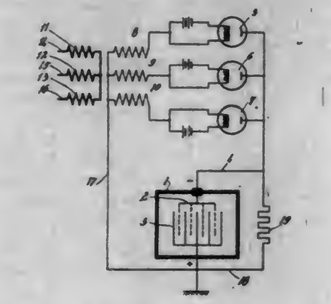


1. A diapositive, comprising a transparent film, a glossy and a dull surface on said film, grooves cut into said glossy surface, an opaque material in said grooves cut into said glossy surface, and portions of various degrees of translucency on said dull surface, serving as a background for said material in said grooves.

1,878,024. ELECTRIC GAS PURIFYING PLANT. ROBERT STRIGEL, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Aug. 5, 1929, Serial No. 383,741, and in Germany Apr. 17, 1929. 4 Claims. (Cl. 183—7.)

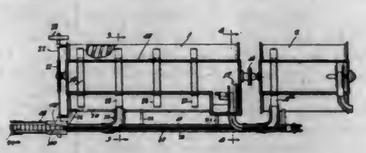
1. In an electric gas purifying plant, in combination, a gas treating chamber, discharging and collecting electrodes located in said chamber, a source of current for high-tension rectified alternating current, connecting lines between said source of current and said discharging and said collecting electrodes, and a shunt connection

between said discharging and said collecting electrodes containing a constant resistance of sufficient value to



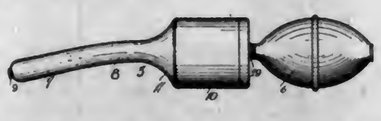
lower the electric field strength at the electrodes to a point below the corona limit between successive charging current impulses.

1,878,025. COMBINED COOKER AND COOLER. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Filed Apr. 18, 1928. Serial No. 271,070. 12 Claims. (Cl. 126—272.)



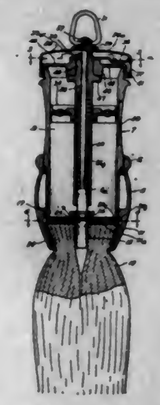
1. In a device of the class described, the combination of a plurality of chambers, one of which is provided with a plurality of inlet openings and an outlet opening, a track formed longitudinally of said chambers, a curved chute slidably mounted on said track to permit its positioning in register with any one of said inlet openings, and said chute including a pivotally mounted switch gate and a pivotally mounted drop in gate adapted to be dropped into the said opening in which the chute is positioned in register.

1,878,026. SYRINGE. WARREN A. THROOP, Spokane, Wash. Filed Sept. 15, 1930. Serial No. 481,954. 1 Claim. (Cl. 128—232.)



A syringe for depositing a jelly like substance into the vaginal cavity having in combination a large cylindrical container body with a reduced and curved nozzle end portion and having smooth inner walls joining said nozzle and cylindrical body, a cap threadedly installed on the container body and having a recessed groove therein, a gasket within the groove, a bulb connected closely and directly to the container body, a valve arranged to threadedly connect the bulb with the container body, a slidable valve for the outer end of the bulb slot and pin guide means for both of said slide valves, the first-named valve adapted to open and the second-named valve adapted to close when pressure is applied to the bulb, and the first-named valve adapted to close and the second-named valve adapted to open when pressure is released from the bulb.

1,878,027. FOUNTAIN BRUSH. GUGLIELMO ROBERTO TREMOLADA, Los Angeles, Calif. Filed Apr. 6, 1931. Serial No. 528,071. 5 Claims. (Cl. 15—138.)



1. In a fountain brush, a brush head, a fluid-feeding chamber provided with an outlet to feed fluid to said brush head, a valve to control said outlet, a fluid-feeding plunger having a working fit within said chamber, screw threaded means to advance and retract said plunger, a rotatable and outwardly and inwardly movable cap operatively connected with said screw threaded means to rotate therewith and thereby operate said plunger, a rod connecting said cap with said valve to operate said valve by the outward and inward movements of said cap, a closure head for said chamber, said head being provided with a bearing through which said screw threaded means extends, said head being provided with a peripheral locking lug and said cap having a slot which normally engages said lug to prevent rotation of said cap with relation to said head, a spring yieldingly holding said cap and valve in the normal position, said cap and valve being movable against the opposition of said spring to disengage said cap from said locking lug thereby rendering said cap rotatable together with the screw threaded means whereby said plunger is operated, and a radial arm connecting said cap with said screw threaded means to cause said cap and screw threaded means to rotate together.

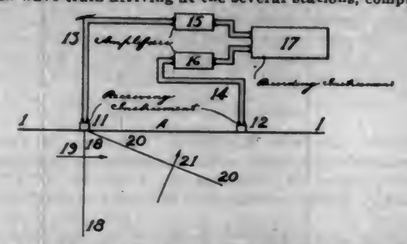
1,878,028. CLIP BROOCH. GUSTAVO TRIFARI, Brooklyn, N. Y., assignor to Trifari, Krussman & Fishel, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 17, 1932. Serial No. 593,437. 2 Claims. (Cl. 63—20.)



1. A combined brooch and clip comprising an ornamental member and a headed stud and loop carried by the latter in spaced position in combination with a frame, and means for securing the frame to a fabric, the frame having at one end spring prongs adapted to engage the headed stud and also having rearwardly of the spring prongs a projection adapted to enter the loop.

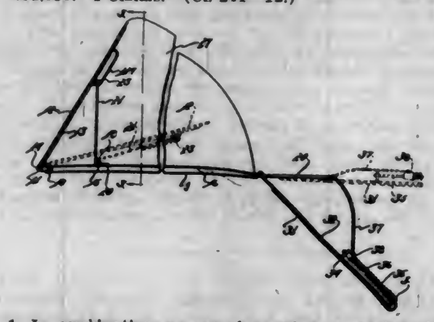
1,878,029. UNDERGROUND EXPLORATION METHOD. ORLEY H. TRUMAN, Houston, Tex., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,046. 3 Claims. (Cl. 181—0.5.)

1. In a method of locating underground structures, the improvement which comprises sending out a train of waves, receiving the waves at a plurality of spaced stations, recording the indications at each station in a form which will indicate the time interval between waves of each wave train arriving at the several stations, computing



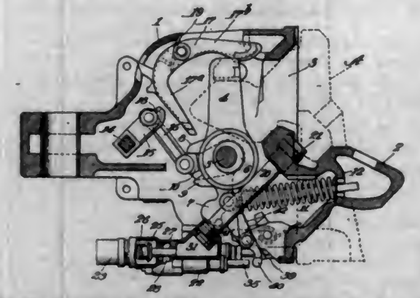
the wave velocities from the so determined time intervals and the known distances between the stations, and from the resulting data determining the angle of emergence of the waves reflected from the underground structure.

1,878,030. AUTOMATIC CAMBER PLATE. LOUIS UNGER, Warren, Mich. Filed Oct. 27, 1930. Serial No. 491,393. 4 Claims. (Cl. 244—12.)



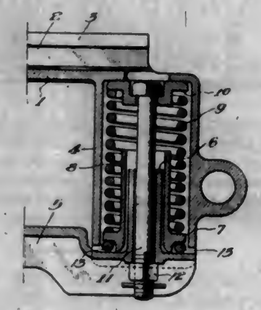
1. In combination, an aeroplane wing; a camber plate swingably mounted on said wing adjacent the forward edge thereof and normally inclined rearwardly to the vertical and adapted, upon forward movement of the aeroplane, for swinging toward the horizontal in response to the air pressure; yieldable means for resisting swinging movement of said plate toward the horizontal; a camber plate swingably mounted on said wing adjacent the rear edge thereof and normally inclined rearwardly to the vertical and adapted, upon forward movement of the aeroplane, for swinging toward the horizontal; and yieldable means for resisting swinging movement of the same toward the horizontal.

1,878,031. AUTOMATIC CAR AND AIR COUPLER. HERBERT E. VAN DORN, Chicago, Ill., assignor to William E. Van Dorn, Pasadena, Calif. Filed Jan. 6, 1928. Serial No. 244,826. 9 Claims. (Cl. 213—76.)



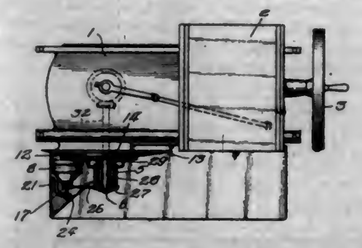
1. The combination with a car coupler, of a conduit for fluids mounted on the coupler for cooperation with a conduit on a companion coupler, two valves in said conduit, means for automatically opening the first of said valves in the act of coupling, and means for automatically closing the second valve during the act of coupling before the first valve begins to open and again opening the second valve after the coupling has been completed.

1,878,032. DRAWBAR CARRIER. HERBERT E. VAN DORN, Chicago, Ill., assignor to William E. Van Dorn, Pasadena, Calif. Filed Feb. 8, 1928. Serial No. 252,768. 9 Claims. (Cl. 213—61.)



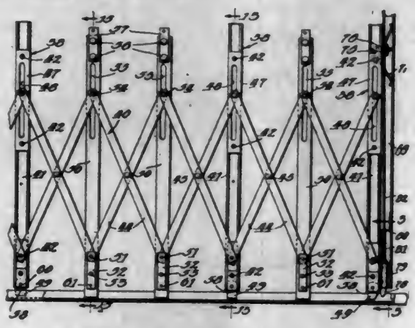
1. A drawbar carrier comprising a top member having at the sides depending legs that are hollow and open at the bottom, a bottom cross-piece having a bolt extending upwardly at each end into the corresponding hollow leg of the top member, a spring surrounding each bolt above the cross-piece, a follower at the top of each spring secured to the corresponding bolt, a second follower below each spring and above the cross-piece and bolts extending through said legs and supporting the lower followers.

1,878,033. MOTOR DRIVEN SLICING MACHINE. JETZE VAN HOORN, Voorburg, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 28, 1928. Serial No. 273,450. 9 Claims. (Cl. 146—102.)



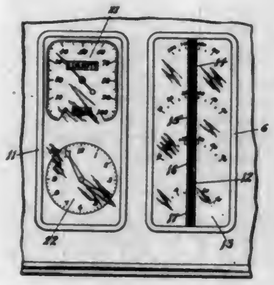
1. In combination with a slicing machine having a rotatably mounted slicing knife and a reciprocating carriage, of a motor for driving said knife and carriage, said motor having a motor shaft, one end of which is in fixed driving relation with said knife and the other end of which is connected with said carriage through a change speed mechanism concentrically mounted with respect to said motor shaft to vary the speed of said carriage independently of the speed of said knife.

1,878,034. FOLDABLE DOOR. RICHARD H. VANSANT, Chicago, Ill. Filed Oct. 24, 1930. Serial No. 490,852. 27 Claims. (Cl. 20—19.)



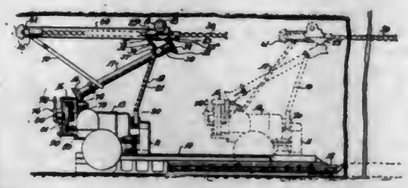
1. In a foldable door or partition, in combination, a plurality of stiles, a door covering secured thereto, members extensible transversely with respect to the stiles and connected thereto, and shorter supports parallel to the stiles carried by the extensible members intermediate the stiles to which the covering is also secured.

1,878,035. INDICATING MECHANISM FOR MOTOR CARS AND THE LIKE. CHARLES H. VICKERY, Pittsfield, Mass. Filed Dec. 15, 1931. Serial No. 581,162. 6 Claims. (Cl. 116—129.)



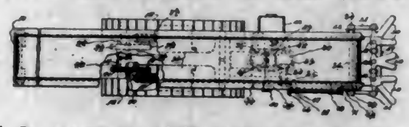
1. In a device of the character described, the combination with a support, of a plurality of visible indicating mechanisms grouped closely adjacent on the support, and means concealing the indicating mechanism from view when operating normally but permitting any of them to be viewed when not operating normally.

1,878,036. DRILLING MECHANISM. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1928. Serial No. 284,471. 17 Claims. (Cl. 255—51.)



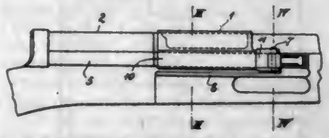
1. In a drilling apparatus, a drill, a drilling head comprising a drill supporting member, a drill rotating member on said drill supporting member, winding means on said drill supporting member, a sheave detachably connected with the rearward portion of said drill, a flexible feeding member passing rearwardly from said winding means about said sheave and forwardly to said drill supporting member, and a member pivotally connected to said sheave for holding said sheave in alignment with said winding means.

1,878,037. LOADING MACHINE. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1929. Serial No. 353,286. 16 Claims. (Cl. 198—7.)



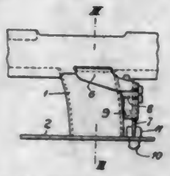
1. In an apparatus of the class described, a main frame supported on a plurality of continuous tread traction devices, a conveyor extending longitudinally over said main frame and inclined towards the mine bottom, a motor on said main frame for operating said conveyor, a shoe extending forwardly of said conveyor engageable with the mine bottom, and agitating means on said shoe projecting forwardly therefrom comprising a plurality of members pivoted thereon and operatively connected together so that pivotal movement of one of said members will cause pivotal movement of another of said members, a plurality of material agitating members projecting forwardly and outwardly from said pivotally mounted members, and means driven by said motor for operating said conveyor for reciprocably moving said material agitating members about the pivotal axis of said aforementioned members.

1,878,038. SLIDING COVER FOR AUTOMATIC FIREARMS. RUDOLF VON FROMMER, Budapest, Hungary. Filed Oct. 27, 1930, Serial No. 491,571, and in Hungary Oct. 29, 1929. 3 Claims. (Cl. 42—16.)



1. In an automatic fire arm of the type having a breech bolt, a pivoted operating handle on the breech bolt, a breech casing provided with a cartridge shell ejecting opening and with a slit enabling the operating handle to slide to and fro, a sliding cover covering the ejecting cartridge opening of the casing and the slit for the operating handle, and means for connecting said sliding cover with the pivot of said operating handle so that it takes part in the movement of the breech bolt.

1,878,039. CARTRIDGE MAGAZINE FOR SMALL ARMS. RUDOLF VON FROMMER, Budapest, Hungary. Filed Apr. 7, 1931, Serial No. 528,415, and in Hungary Apr. 12, 1930. 10 Claims. (Cl. 42—50.)

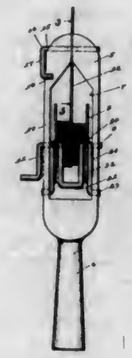


1. In a cartridge magazine for small arms adapted to contain two rows of cartridges, a magazine spring tending to push the cartridges out of the magazine, two movable levers having lips adapted to retain the cartridges in the magazine, springs pressing said levers into the position in which their lips retain the cartridges in the magazine, means for swinging said levers so as to move away from one another said lips against the action of said springs till the cartridges become free, such means being situated so as to be operated manually.

1,878,040. WATER-SOLUBLE VISCOUS CONDENSATION PRODUCTS OF ALDEHYDES AND PROCESS OF PREPARING THEM. ARTHUR VOSS, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 20, 1930, Serial No. 430,101, and in Germany Mar. 2, 1929. 14 Claims. (Cl. 260—2.)

1. Process of preparing water-soluble viscous condensation products from the water-soluble condensation products prepared from formaldehyde and saturated aliphatic aldehydes which comprises subjecting the above mentioned condensation products to the influence of a reduced pressure at a temperature below 100° C.

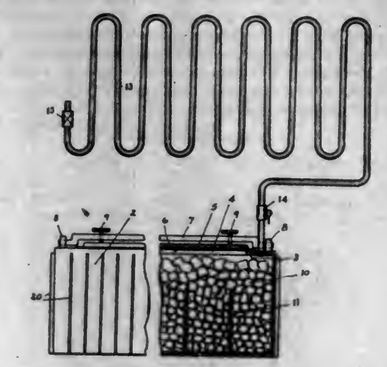
1,878,041. KITE CONTROLLER. WILLIAM J. VOSS, Hammond, Ind. Filed May 28, 1930. Serial No. 456,737. 3 Claims. (Cl. 242—96.)



1. A device of the character described comprising a frame having a longitudinal slot, a reel rotatably mounted in the slot of said frame, a cord wound upon said reel, said frame having a longitudinal passage in its upper end through which said cord is adapted to pass and a clamping member consisting of a rotatable rod extending transversely through the upper end of said frame and intersecting said passage, said rod having a notch in which said cord is disposed.

1,878,042. REFRIGERATION BY MEANS OF CARBON DIOXIDE IN SOLID STATE. JAMES S. WAGNER, Charleroi, Pa., assignor of one-fifth to George W. King, Fayette County, Pa., one-fifth to McClelland Hixenbaugh, one-fifth to Harry P. Ray, and one-fifth to Charles S. Bateman, Charleroi, Pa. Filed Jan. 18, 1930. Serial No. 421,714. 1 Claim. (Cl. 62—91.5.)

In apparatus for effecting refrigeration by means of carbon dioxide in solid state the combination of a container and a coil; the container comprising finned walls of heat-conducting material of strength to withstand great internal pressure and removable cover adapted to be secured in hermetically tight closure upon said container walls, the said container being provided interiorly with transverse partition walls preventive of shifting of a contained charge of refrigerant, and the coil being in communication with the container, the said coil at its intake end being equipped with a manually operable pressure control valve and at its delivery end with a check valve.



1,878,043. WARP STOP-MOTION FOR LOOMS. THEODORE CURT WAGNER, Chemnitz, Germany. Filed Aug. 14, 1930, Serial No. 475,208, and in Germany Mar. 26, 1929. 2 Claims. (Cl. 139—353.)



1. In an electro-magnetic warp stop-motion for looms, detector healds having end loops and having plates inserted in said loops so as to restrict the effective length of the loops in outward direction for a distance greater than the relative lift of the healds.

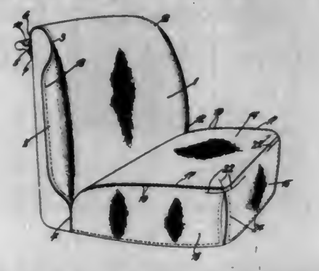
1,878,044. CONNECTER LINK. RAYMOND A. WALTER, New York, N. Y.; Bertha Baer Walter, executrix of Raymond A. Walter, deceased, assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 15, 1930. Serial No. 496,017. 3 Claims. (Cl. 198—22.)



1. A device for connecting the ends of conveyor troughs together, comprising transversely arranged members on

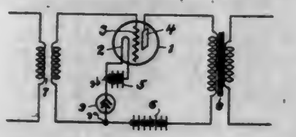
the end of each trough projecting beyond the walls thereof on each side, and having the adjacent side edges of each adapted to be juxtaposed when the ends of the conveyor troughs are connected together, links formed to loosely fit around the ends of the adjacent transverse members, and means cooperating between said links and adjacent horizontal surfaces of the transverse members to secure the latter in horizontal alignment, with the adjacent side edges thereof in juxtaposed relation.

1,878,045. SEAT COVER. HARRY G. WEDLER, St. Louis, Mo., assignor to The Wedler-Shuford Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 15, 1929. Serial No. 355,312. 2 Claims. (Cl. 155—182.)



1. A cover for a seat back that has an upwardly and rearwardly curved front and curved corners at its ends comprising a flexible and pliable body having its lower and upper marginal portions approximately equal in width to the width of the lower and upper portions respectively of the seat back and being stretched vertically against said curved front, and a lateral extension at each end of said body curved rearwardly around the adjacent curved corner and against the adjacent end of said seat back and having its marginal portion unattached to said seat back and subject to less stretching than said body.

1,878,046. DETECTOR FOR MODULATED ALTERNATING CURRENTS. PAUL G. WEILLER, Bloomfield, N. J., assignor of fifty per cent to Radio Patents Corporation, a Corporation of New York. Filed Apr. 3, 1930. Serial No. 441,306. 10 Claims. (Cl. 250—27.)



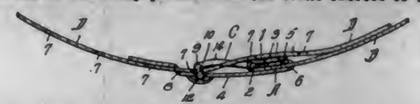
2. In a detector circuit for modulated carrier currents, comprising a space discharge device, having main electrodes and control electrode, an input circuit associated with said control electrode, an output circuit associated with said main electrodes and means common to said two circuits with non-linear current voltage characteristic.

1,878,047. METHOD OF MAKING A CELLULAR COMPOSITION. FREDERICK R. WENGER, Los Angeles, Calif. Filed Mar. 23, 1929. Serial No. 349,524. 8 Claims. (Cl. 99—21.)

1. The process of treating pulp including introducing carbon dioxide gas into a mass of wet pulp and then drying the mass.

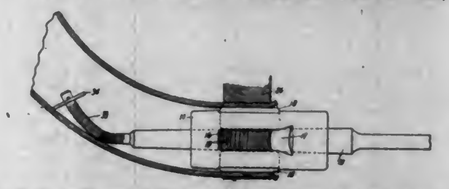
1,878,048. BELT CONSTRUCTION. LAWRENCE B. WHEELER, St. Louis, Mo. Filed May 7, 1931. Serial No. 535,665. 8 Claims. (Cl. 241—8.)

1. In a belt construction, a flexible strap having buckle tongue openings in the free end thereof, a buckle swingingly secured to the opposite end of the strap, a flap secured to the latter end of the strap and extending beyond the buckle to conceal the same from view, said flap having a transverse opening at its free end through which the free end of the strap passes from the front thereof to the



rear thereof before passing through the buckle and a fixed tongue carried by the free end of the buckle to pass through a selected strap opening for connecting the free end of the strap with the buckle when the belt has been adjusted to the size of the wearer.

1,878,049. TUBE EXPANDER. GUSTAV WIEDEKE, Dayton, Ohio, assignor to Gustav Wiedeke Company, Dayton, Ohio, a Copartnership consisting of Gustav Wiedeke, Otto Wiedeke, and Robert Wiedeke. Filed Sept. 25, 1930. Serial No. 484,295. 21 Claims. (Cl. 153—82.)

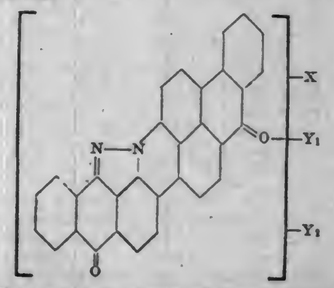


1. In a device of the character described, a frame adapted to be inserted in an opening in a tube sheet and having a longitudinal bore, a plurality of expanding rollers mounted in said frame for radial movement, one or more of said rollers having circumferential ribs so arranged that when said frame is in its operative position in said opening said ribs will be located adjacent to the wall of said opening between the ends thereof, and a mandrel extending through the bore of said frame and acting on said rollers to cause the ribbed roller to form grooves in the wall of said opening.

16. In a tube expander comprising expanding elements, a mandrel having a rigid portion to operatively engage said expanding elements and having a laterally movable end portion to extend inwardly beyond said expanding elements and adapted to be deflected by contact with the wall of a bent tube.

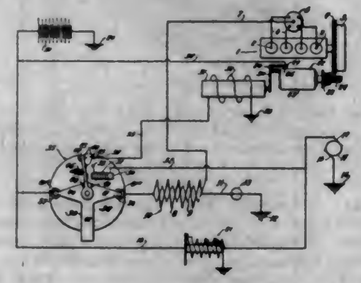
1,878,050. VAT DYESTUFFS OF THE BENZANTHRONE-PYRAZOLANTHRONE SERIES. KARL WILKE, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1931, Serial No. 514,309, and in Germany Feb. 26, 1930. 5 Claims. (Cl. 260—45.)

1. As new products, the compounds of the following general formula



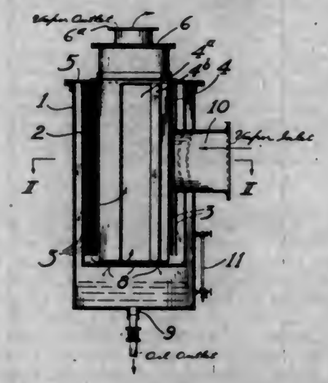
wherein X means that the dyestuff molecule contains one to six halogen atoms, Y_1 stands for alkoxy and Y_2 for the same alkoxy or hydrogen, forming in the dry state dark powders, dissolving in concentrated sulfuric acid to a reddish solution.

1,878,051. AUTOMOTIVE ELECTRICAL SYSTEM. WILLIAM J. WILLIAMS, Chicago, Ill., assignor to Motor Devices, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1930. Serial No. 475,358. 6 Claims. (Cl. 290—37.)



1. In a system of the kind described, in combination with an engine starting motor and circuit therefor, together with an ignition circuit for said engine, electromagnetic means for opening and closing said starting motor circuit, a source of current supply, a generator adapted to be driven by the engine for feeding said source of current supply, a manually operable switch capable of manipulation for connecting said ignition circuit and said electromagnetic means with said source of supply and a second electromagnetic means for maintaining said first mentioned electromagnetic means in circuit with said source of current supply after manipulation of said switch, said second electro-magnetic means being deenergized by the operation of said generator when driven by the engine for disconnecting said first mentioned electromagnetic means from said source of current supply without affecting the ignition circuit, said manually operable switch also being capable of manipulation to disconnect said first mentioned electromagnetic means from said source of supply upon failure of said generator in deenergizing said second electromagnetic means.

1,878,052. CENTRIFUGAL LIQUID AND GAS SEPARATOR. AMYUIT L. WILSON and STEWART H. HULSE, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 2, 1931. Serial No. 512,798. 4 Claims. (Cl. 183—109.)



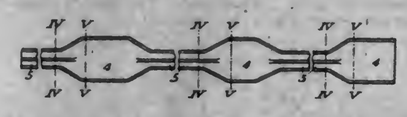
1. A gas and liquid separator comprising an outer container, concentric circular walls therein forming an annular space, means for directing a current of liquid-carrying gas against the inner concentric wall in a manner to cause the gas to acquire centrifugal motion, the outer concentric wall having openings for permitting escape of liquid thrown outward by the centrifugal motion, a bottom wall closing the outer concentric wall in spaced relation to the inner concentric wall means for deflecting the gas freed of liquid after the gas has completed the circuit of the inner concentric wall, and means for venting the gas into the space defined by the inner concentric wall and thence from the container.

1,878,053. CLUTCHING DEVICE. STOVER C. WINGER, Los Angeles, Calif., assignor of forty per cent to Henry Coe Lampher, Beverly Hills, Calif., and twenty per cent to Bruce B. Roberts, Los Angeles, Calif. Filed Dec. 26, 1929. Serial No. 416,417. 1 Claim. (Cl. 192—44.)



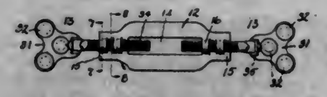
In a clutching device, a shaft, means forming a smooth concentric surface with the periphery of the shaft and spaced therefrom, said shaft having a flat surface at spaced places, a wedging rolling member disposed between each flat surface and the concentric surface, and obstructions alternating with the rolling members about the shaft to prevent said rollers from wedging, said obstructions being carried by the shaft and being capable of adjustment so as to be centrally positioned with respect to the flat surfaces, or alternately to be disposed near the flat surfaces.

1,878,054. DIE ROLLING AND ARTICLE PRODUCED THEREBY. WILLIAM P. WITHEROW, Pittsburgh, Pa., assignor, by mesne assignments, to Republic Steel Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 7, 1925, Serial No. 7,470. Renewed May 25, 1932. 5 Claims. (Cl. 80—60.)



5. The method of die rolling, comprising supplying a leader of quadrangular section and having curved top and bottom faces, to a die rolling pass, reducing the leader in all parts in the pass so as to form a blank having a substantially rectangular cross section at any point, the cross sectional area of the blank differing at different parts thereof, there being flash along the sides of the blank in at least certain portions thereof, substantially as described, whereby the maximum reduction is effected in a plane perpendicular to the roll axis.

1,878,055. STAMPED METAL ARTICLE AND METHOD OF MAKING SAME. THEODORE H. WITTLIFF, Cleveland, Ohio. Filed Nov. 14, 1925. Serial No. 68,956. 7 Claims. (Cl. 287—60.)



1. A tensioning device comprising a pair of terminal elements each provided with a sheet metal head plate,

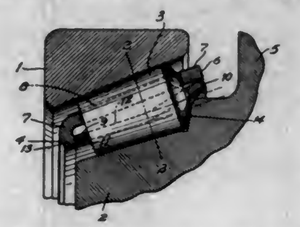
having cable-engaging elements, a screw threaded shank, means securing said plate to one end of said shank, and a body member formed of sheet metal provided with screw threaded sockets at its respective ends to engage the shanks of said terminals.

1,878,056. VAT DYESTUFFS. HUGO WOLFF, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 25, 1930, Serial No. 463,831, and in Germany July 2, 1929. 2 Claims. (Cl. 260—60.)

2. As a new article of manufacture a vat dyestuff of the benzanthrone series forming a black paste and a black powder, dissolving in concentrated sulphuric acid giving a violet brown coloration, dyeing the vegetable fibre from a blue vat fast black shades, said dyestuff being obtainable by brominating 1'-anthraquinonyl-7-aminobenzanthrone and subjecting the brominated product to alkaline condensation.

1,878,057. ROLLER BEARING AND CAGE. ERNEST WOOLER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 1, 1930. Serial No. 472,220. 5 Claims. (Cl. 308—218.)

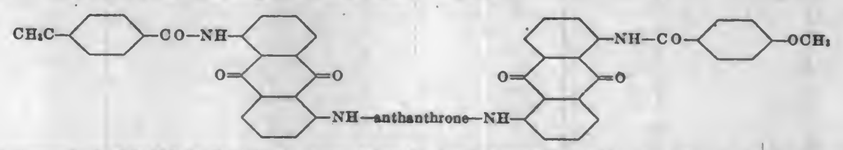
1. A roller bearing cage and roller assembly comprising spaced conical inner and outer cage members each having end rings connected by bridges to form roller pockets, and conical rollers in said pockets both end rings of both cage members overlapping the ends of said rollers, the bridges of said inner shell having a greater angle



near the large end thereof to bring the large end ring of the inner cage member in close proximity to the inner periphery of the large end ring of the outer cage.

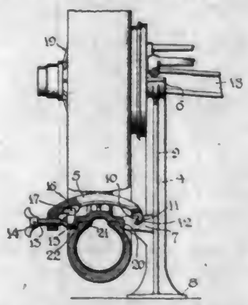
1,878,058. PROCESS FOR MANUFACTURING VAT DYESTUFFS OF THE ANTHANTHRONE SERIES. WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1929, Serial No. 360,321, and in Germany May 9, 1928. 6 Claims. (Cl. 260—60.)

6. As a new compound the vat dyestuff of the probable formula:



which compound represents a blackish-blue powder soluble in concentrated sulfuric acid with a greenish, in an alkaline hydrosulfite solution with a reddish-violet coloration. It dyes cotton bluish-grey shades from a reddish-violet vat.

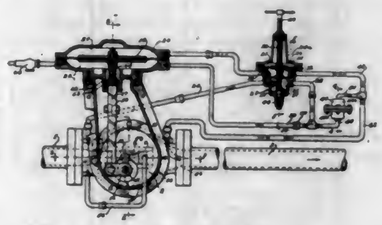
1,878,059. VEHICLE JACK. SAMUEL R. ZIMMERMAN, Greenville, S. C. Filed Nov. 14, 1929. Serial No. 407,202. 5 Claims. (Cl. 254—94.)



1. A vehicle jack comprising an upright member having an axle-engaging portion at the top and an enlarged base; an intermediate lug carried by said member; and a rim-embracing member pivotally attached to said lug.

1,878,060. GAS REGULATING APPARATUS. WALTER I. THRALL, Alhambra, Calif., assignor, by mesne assignments, to Reliance Regulator Corporation, Alhambra, Calif., a Corporation of California. Filed Nov. 6, 1931. Serial No. 573,378. 20 Claims. (Cl. 50—16.)

1. In a fluid pressure regulating apparatus, the combination of a source of supply of the fluid under pressure, a pilot-valve receiving a quantity of the fluid under pressure from the said source of supply, a static line, a reducing valve between the source of supply and the static line, a fluid-pressure controlled device having two pressure chambers with a pressure controlled member between

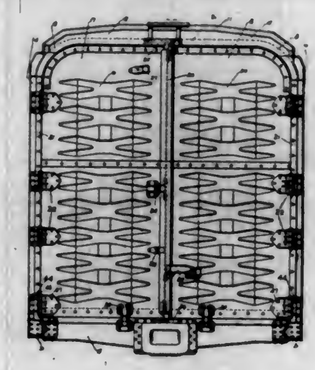


the same and connected with the reducing valve to regulate its effective opening, means for conducting the fluid from the pilot-valve to both of the said pressure chambers, and a connection from said last-named means to the static line enabling fluid to flow from either of said pressure chambers to the static line.

1,878,061. MANUFACTURE OF AROMATIC HYDROXY COMPOUNDS. ARTHUR WALSH TITHERLEY, Winchester, and DONALD PRYCE HUDSON, Llangollen, England, assignors to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 28, 1927. Serial No. 222,684. 20 Claims. (Cl. 260—137.)

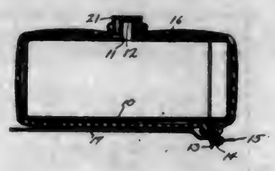
1. The process of preparing aromatic hydroxy compounds which includes the step of hydrolyzing a diazotized aromatic amino compound in presence of a solvent immiscible with water, and using said solvent to extract the reaction product, substantially continuously from the reaction mixture.

1,878,062. CAR CONSTRUCTION. KENNETH J. TOBIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1929. Serial No. 413,320. 10 Claims. (Cl. 105—410.)



1. In a house car, in combination, a corner post, a vertical door framing member secured thereto, an end sill and combined bracket and hinge butt means connecting said post and framing member to said end sill.

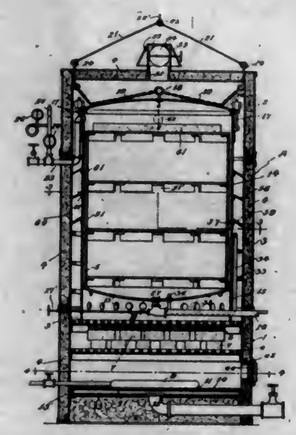
1,878,063. PROTECTIVE ENVELOPE FOR LIQUID FUEL CONTAINERS. JOSEPH A. TODD, Sioux City, Iowa. Filed July 2, 1930. Serial No. 465,354. 3 Claims. (Cl. 220—9.)



1. In combination with a rigid container for highly inflammable liquid fuel for use in connection with a vehicle subject to the danger of very serious collisions, a protective envelope of thick, highly stretchable rubber or material having properties of elasticity, toughness or non-porosity substantially equal to those of rubber, substantially completely inclosing the tank and fitting loosely thereover, and means for snugly securing the envelope about the filling neck and pipe line of the container, said means including substantially cylindrical openings in the envelope, said orifices shaped to follow the contour of the said filling neck and pipe line and securely bound thereto.

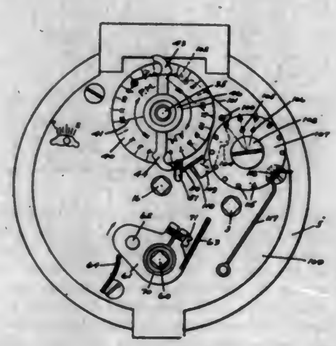
1,878,064. COOKING APPARATUS. ARMSTEAD E. TRIPLETT, Dallas, Tex. Filed Apr. 3, 1929. Serial No. 352,257. 6 Claims. (Cl. 99—2.)

5. An apparatus of the class described comprising a closed casing, said casing having insulated walls, a closed cooking vessel therein sealed air tight and annularly spaced from the walls of said casing, a burner in said casing below said vessel, baffles between said casing and said vessel for deflecting the heat against the exterior of said vessel whereby the cooking is accomplished by heat radiated from the walls of said vessel, a compressed air supply pipe encircling said vessel and adapted to be heated by said burner, said pipe discharging into said vessel, a valve controlled inlet pipe for supplying air under pressure to said supply pipe, an outlet pipe connected with said cooking vessel, a flow valve in said outlet pipe



permitting the escape of air and noxious gases continuously during the cooking period from said vessel, and a pop valve for releasing excess pressure from said vessel.

1,878,065. MECHANICAL CONTROL. JOHN TURNER, Boston, Mass., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 6, 1931. Serial No. 528,225. 9 Claims. (Cl. 200—139.)

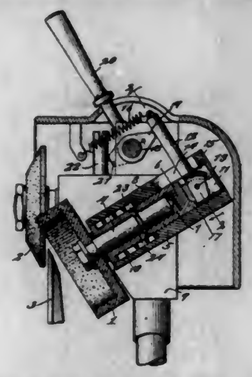


1. A thermostat having means for adjusting its contacts, means for operating the adjusting means, driving means, means for causing a step-by-step motion of said driving means, including a trip adapted to initiate the action, means for operating the trip at timed intervals and means operable by said trip-operating means for intermittently preventing trip operation.

1,878,066. SHARPENER FOR SLICING MACHINES. CORNELIS FRANCISCUS MARIA VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Oct. 28, 1927, Serial No. 229,339, and in Germany Mar. 14, 1927. 17 Claims. (Cl. 51—248.)

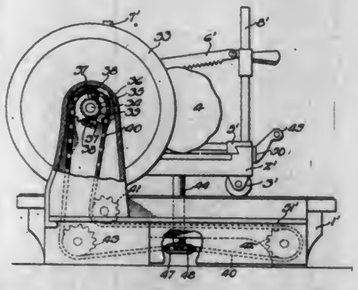
12. Sharpening mechanism for a slicing machine knife comprising a grinder, mechanism supporting said grinder

for movement into and out of engagement with the knife edge to be sharpened, and clutch mechanism co-acting



with said supporting mechanism to prevent movement of the grinder away from the knife but permitting movement of the grinder toward the knife.

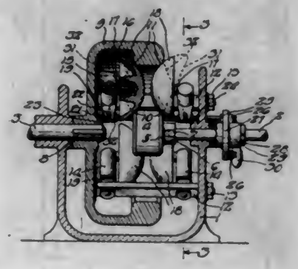
1,878,067. DRIVING MECHANISM FOR SLICING MACHINES. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Dec. 9, 1929, Serial No. 412,658, and in Great Britain Dec. 21, 1928. 1 Claim. (Cl. 146—102.)



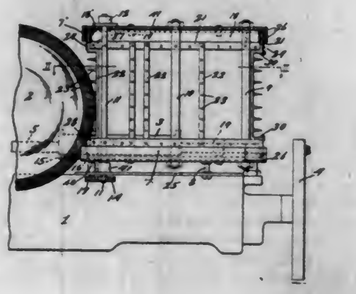
In a slicing machine, the combination with a table, of a rotating slicing knife, of a rotatable spindle upon which said knife is mounted, a free-wheel mounted on said knife spindle and adapted to rotate said knife when said free-wheel is moved in one direction but inoperative to actuate said knife when said free-wheel is moved in the opposite direction, a continuous endless flexible element for driving said free-wheel, and a rigid member on said table and connected directly to said flexible element to move said flexible element as said table and knife move relative toward and from each other, said flexible element being directly connected to drive said free-wheel and extending around idler elements to change the direction of movement of said flexible element to thereby hold said flexible element out of a position which would interfere with the slices as they are cut by the slicing knife from a substance on said support.

1,878,068. TRANSMISSION GEARING. WILHELMUS ADRIANUS VAN BERKEL, Clarens, Switzerland, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 3, 1930, Serial No. 441,206, and in Germany Apr. 4, 1929. 11 Claims. (Cl. 74—26.)

1. In a change speed transmission mechanism, the combination with a driven rotatable element having a pair of friction surfaces facing in a direction toward the axis of rotation of said element, of a second element having its axis of rotation extending in substantially the same direction as said first element and having a pair of friction surfaces opposed to said friction surfaces on said first element, a pair of spherical members each engaging different friction surfaces on said first and second elements, means for supporting said spherical members for rotation about an axis, and means for tilting said last-mentioned means to bring different portions of the surfaces of said spherical members into engagement with the said friction surfaces on said elements.

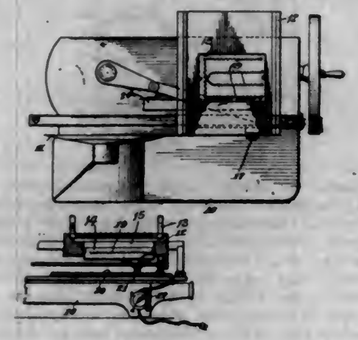


1,878,069. SLICE STACKER FOR SLICING MACHINES. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Sept. 6, 1928, Serial No. 304,232, and in The Netherlands Sept. 19, 1927. 10 Claims. (Cl. 146—94.)



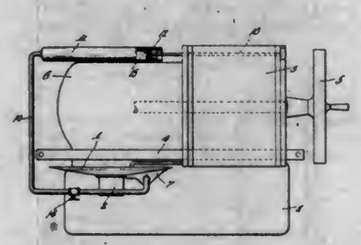
1. Conveyer mechanism for slicing machines comprising in combination a flexible metal band the ends of which are positioned in abutting relation to each other to form a substantially endless conveyer band, slice carrying members attached to said band, impaling pins on said members, said members having a portion thereof spaced inwardly from said band to position the points of said pins in substantial alignment with said band, and a latching member the ends of which directly connect slice carrying members attached to opposite ends of said band and hold the ends of said band in abutting relation.

1,878,070. SLICING MACHINE. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Nov. 12, 1926, Serial No. 148,034, and in Germany July 9, 1926. 10 Claims. (Cl. 146—102.)



1. In a meat slicing machine, a sliding table, said table having an opening therethrough, a meat supporting plate mounted over said opening, and a meat heater mounted in said opening and beneath said plate.

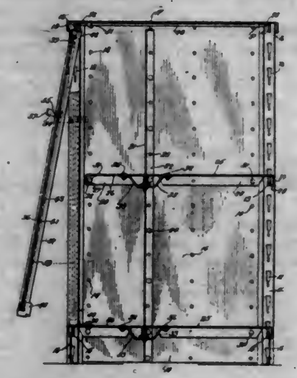
1,878,071. SLICE DEFLECTOR. JOHANNES C. VAN BERKEL, Copenhagen, Denmark, assignor, by mesne assignments, to Naamlooze Vennootschap Maatschappij tot Veraardiging Van Snijmachines Volgens Van Berkel's Patent en Van Andere Werktuigen, Rotterdam, Holland, Rotterdam, Netherlands, a Limited-Liability Company. Filed Jan. 20, 1927, Serial No. 162,228, and in Great Britain Sept. 8, 1926. 22 Claims. (Cl. 146—102.)



1. The combination with a slicing knife, of a slice deflector disposed adjacent the cutting edge of said knife at one side thereof, for deflecting slices away from said knife, and means for supplying air to the face of said deflector adjacent the slice formed by said knife to reduce the resistance offered by said deflector to the movement of the slice thereover.

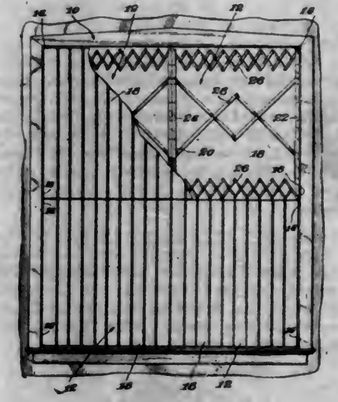
1,878,072. DISPLAY COUNTER. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,304. 14 Claims. (Cl. 312—118.)

2. A display counter comprising uprights, sides fastened to the uprights, cross bearers connecting the uprights, a bottom, a removable front, a removable vertical partition arranged in said counter, means for fastening said partition to said sides, shelves removably supported on each



side of the partition in any one of a plurality of positions, and a downturned peripheral flange on said top and engaging the uprights, sides and some of the cross bearers.

1,878,073. FOLDABLE DOOR. RICHARD H. VANSANT, Chicago, Ill. Filed Oct. 24, 1930. Serial No. 490,851. 14 Claims. (Cl. 20—20.)

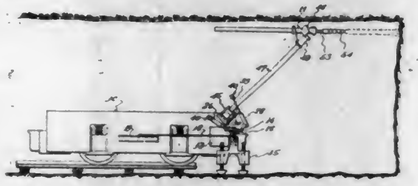


1. In a foldable door, the combination of a pair of upright frame members, a hinge member at the upper and lower ends of one of said frame members, a collapsible link mechanism connecting the upper ends and the lower ends of said members, a collapsible brace element intermediate the ends of said frame members, means associated with said brace element for aligning the extended edge of said door, and a flexible covering material enclosing said frame members and attached at the upper pivots of said upper link mechanism and at the lower pivots of said lower link mechanism, and along each upright frame member.

1,878,074. DRILLING MECHANISM. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1929. Serial No. 353,287. 16 Claims. (Cl. 255—51.)

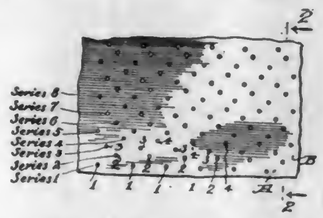
1. In a drilling mechanism, a support therefor, a drill supporting member supported on said support for pivotal

movement about horizontal axes at opposite ends thereof, and means for moving said drill supporting member about said pivotal axes comprising a plurality of mem-



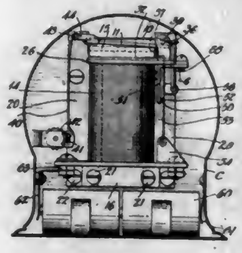
bers pivotally connected to said support, and a plurality of adjustable supporting members having movable connection with each of said last mentioned members.

1,878,075. MOTION PICTURE SCREEN. ROBERT O. WALKER, Brooklyn, N. Y. Filed Apr. 27, 1929, Serial No. 358,512. Renewed May 28, 1932. 4 Claims. (Cl. 88—24.)



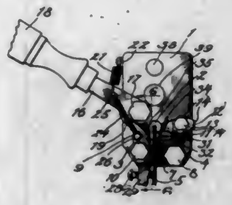
4. As a new article of manufacture, a talking motion picture screen having holes, relatively larger than could be used if arranged in a simple geometric pattern, predeterminately spaced and staggered therein, and so arranged that they form themselves, to the eye of a close observer, into no direct geometric figure, although the holes be individually apparent, while such larger sized holes permits of the screen having a very low sound impedance.

1,878,076. ELECTRICALLY ENERGIZED MOTOR. CHARLES F. WALLACE, Westfield, N. J., assignor to Wallace & Tiernan Products, Inc., Belleville, N. J., a Corporation of New Jersey. Filed Mar. 7, 1929. Serial No. 345,193. 11 Claims. (Cl. 185—40.)



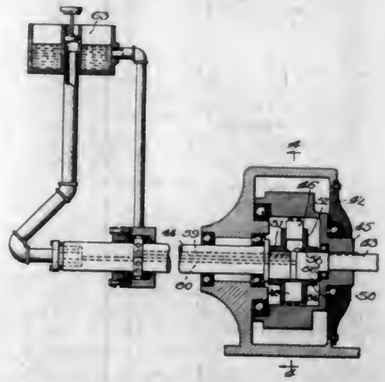
1. In an electrically energized motor a U-type electromagnet one leg of which is provided with a winding and has an elongated pole piece, and the other leg of which is formed by a plate of greater width than the winding and having an end portion bent over to form a pole piece extending parallel to the first mentioned pole piece with a narrow air gap between them, and a pivoted motor-energizing armature opposite said pole pieces.

1,878,077. DEVICE FOR SETTING CIRCULAR SAWS. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed July 16, 1929. Serial No. 378,784. 1 Claim. (Cl. 76—63.)



A device for setting circular saws comprising a supporting member, relatively fixed and movable dogs mounted on said supporting member and having opposing faces adapted to be brought into position at opposite sides of a tooth of a circular saw, said relatively fixed dog being rotatably adjustable about an axis substantially perpendicular to the plane of operation of said dogs and said relatively fixed dog extending upwardly from said axis, a tooth engaging member mounted on said relatively fixed dog intermediate the height thereof and adjustable forwardly and rearwardly with respect to said face thereof, said tooth engaging member being movable to positions projecting beyond said face of said relatively fixed dog and to positions retracted within said dog, said movable dog being adapted to move from a position free from engagement with the saw to a position to engage a tooth placed between said dogs and forcibly bend the same back against said tooth engaging member and the upper portion of said relatively fixed dog, means tending to hold said movable dog in said first named position, and manually operable means for moving said movable dog to said second named position.

1,878,078. DEVICE FOR THE TRANSMISSION OF POWER. CLIFFORD T. WALTON, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,629. 2 Claims. (Cl. 192—60.)



1. Mechanism for transmitting regulable torque comprising, in combination, a casing, driving and driven members mounted in said casing for relative rotation, a plurality of cylinders and a plurality of pistons mounted upon said driving member, inlet and outlet passages in said driven member communicating with said cylinders whereby a liquid may be drawn into and discharged from said cylinders through said passages by said pistons by relative rotation of said members, a conduit connecting

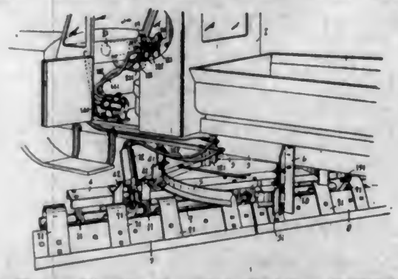
said inlet and outlet passages, and means in said conduit for opposing with regulable pressure the flow of liquid through said conduit.

1,878,079. LOOSE-LEAF BINDER AND METHOD OF FORMING THE SAME. RICHARD M. WATSON, Detroit, Mich. Filed Apr. 27, 1928. Serial No. 273,170. 14 Claims. (Cl. 129—24.)



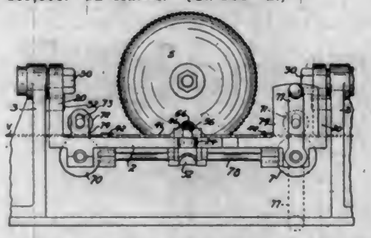
8. A base member for a loose-leaf binder, comprising in combination a one-piece shell, pivotally mounted plates adjacently positioned in said shell and carrying cooperating paper-retaining members, each of said paper-retaining members having a portion of substantially unreduced cross-section extending through its supporting plate and turned there against in alignment with said member, a portion of each paper-retaining member extending outwardly and parallel with the top of each plate to the edge thereof and then substantially at right angles thereto, the turned over portion of each member being the sole means for rigidly securing the member to the plate, whereby the retaining members and plates move as a unit in said shell.

1,878,080. HYDRAULIC ROAD SCRAPER. ERNEST A. WEEKS, Kalamazoo, Mich., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Filed Apr. 18, 1931. Serial No. 531,029. 4 Claims. (Cl. 37—155.)



3. The combination of a truck chassis, a hanger board therefor, a pair of scrapers disposed end to end carried by said hanger board, and independent means for controlling the said scrapers.

1,878,081. ART OF PATCHING VENEER. ARTHUR R. WELCH, Hoquiam, Wash. Filed July 22, 1930. Serial No. 469,838. 11 Claims. (Cl. 144—2.)

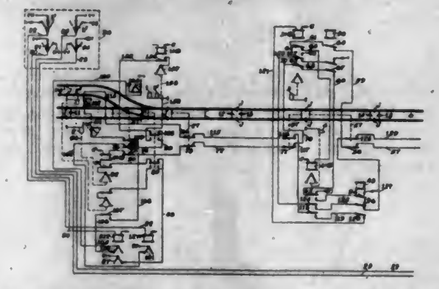


1. A veneer ply patch comprising a wooden piece of substantially the thickness of the ply to be patched, and having side edges which are like segments of a sphere, intersecting to form pointed ends.

1,878,082. HYDRATED PHENYL PHENATE PRODUCT. WILLIAM H. WILLIAMS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 17, 1930. Serial No. 502,985. 20 Claims. (Cl. 260—154.)

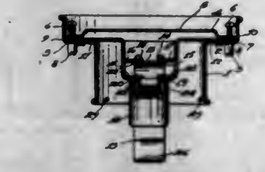
1. The method of preparing a solid form of a hydrated alkali metal phenyl phenate, which comprises preparing a liquid mixture of such salt and water in any proportion within the composition range entirely solidifiable by cooling without the separation of a mother liquor, and cooling said mixture to solidify same.

1,878,083. CENTRALIZED TRAFFIC CONTROLLING SYSTEM. ROBERT F. WELLS and DONALD W. MERSEREAU, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y. Filed Jan. 24, 1931. Serial No. 511,046. 7 Claims. (Cl. 246—3.)



3. In a signalling system for single track railroads, the combination with a single track section connecting two double track sections, of signals for governing traffic in one direction and signals for governing traffic in the other direction through said section, a relay for each signal, a tumble-down circuit for each direction of traffic each comprising successive link-circuits one for each relay and each link-circuit controlled by the next link circuit in advance, and means for interlocking individually the link-circuits of said tumble-down circuits.

1,878,084. LIGHTING APPARATUS. FREDERIC C. WINKLER, Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 3, 1930. Serial No. 499,706. 7 Claims. (Cl. 240—85.)

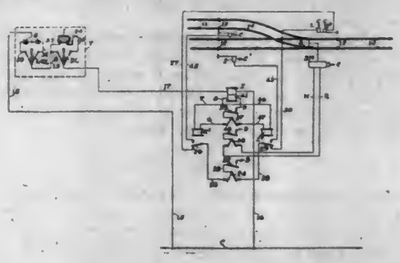


1. In a lighting fixture, the combination of two cylindrical shells slidably mounted one within the other, a flanged supporting member attached to one of said cylindrical shells, a metal globe-supporting yoke fastened to one flange of said member, and an electrical socket attached to another lower flange of said member.

1,878,085. CENTRALIZED TRAFFIC CONTROL SYSTEM FOR RAILROADS. ARTHUR R. WHITEHORN, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed June 13, 1930. Serial No. 460,920. 13 Claims. (Cl. 246—3.)

1. In combination, a line circuit, a double winding relay having one of its windings included in said line circuit, a

second relay included in circuit with the other winding of said double winding relay, and means for energizing



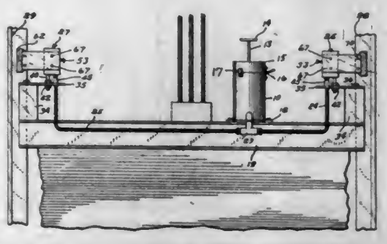
said line circuit with either continuous or pulsating unidirectional current.

1,878,086. LAMINATED PANEL AND ITS FABRICATION. HERBERT J. WOODALL and MEREDITH S. RANDALL, Detroit, Mich., assignors to Woodall Industries Incorporated, Detroit, Mich., a Corporation of Michigan. Filed May 18, 1931. Serial No. 538,368. 8 Claims. (Cl. 154—2.)



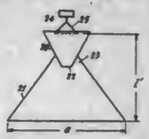
1. That method of shaping a loosely integrated fibrous sheet of insulating material comprising securing on opposite sides thereof sheets of thermoplastic material responsive to heat and pressure to assume and to retain a deformed shape, and then shaping said unitary laminated structure to the desired form.

1,878,087. LUBRICATOR. YVAN ZÉNON, Rosedale, N. Y. Filed May 15, 1931. Serial No. 537,618. 1 Claim. (Cl. 184—21.)



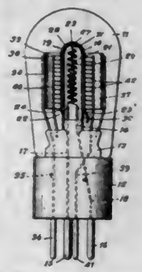
An elevator guide lubricator comprising in combination a container adapted to be mounted on an elevator car, said container having a weighted plunger for causing lubricant to feed therefrom, a lubricant applicator and a holder therefor, said applicator comprising a member containing a lubricant bearing duct having an opening, said member being spring-pressed against said guide so as to close said opening thereagainst and to follow said guide irrespective of away of said car, a lubricant feed pipe connecting said container and said applicator, and spreader members adapted to engage the sides of the guide and disposed so as to spread the lubricant fed out onto the guide.

1,878,088. ACOUSTIC APPARATUS. CORNELIS ZWIKKER, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 1, 1929, Serial No. 404,088, and in the Netherlands Dec. 4, 1928. 1 Claim. (Cl. 181—27.)



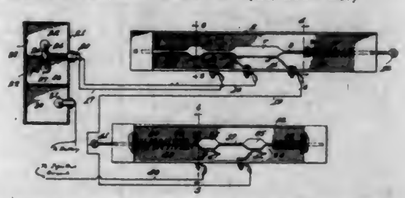
A loudspeaker comprising a conical diaphragm having a large surface, a sound amplifying body having an opening which is smaller than the said diaphragm and comparable in size with the other dimensions of the body to make a good amplifier of sound, and a sound directing body interposed between said diaphragm and said sound amplifying body, said sound directing body having a shape such that its end which is associated with the diaphragm has an opening that is larger than the diaphragm and its end which is associated with said sound amplifying body has an opening that is smaller than the opening in said sound amplifying body whereby the larger end of said sound directing body is out of contact with said diaphragm and the smaller end of said sound directing body is out of contact with the sound amplifying body.

1,878,089. ELECTRON EMITTING DEVICE. WALTER J. ALBERSHEIM, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 19, 1926. Serial No. 117,086. 5 Claims. (Cl. 250—275.)



4. A cathode mount for electron discharge devices comprising a stem having a pair of leads sealed into it, a tubular insulator fixed on said stem to surround said leads, a reverse wound bifilar helical filament mounted inside said insulator with its ends connected to said leads, and a tubular metal sleeve fitted over and supported by said insulator.

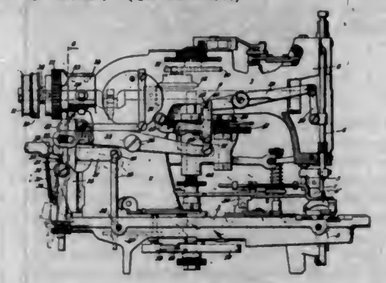
1,878,090. SIGNAL FOR MOTOR VEHICLES. SOFRONIO B. ALCORIZA, Stockton, Calif. Filed Sept. 11, 1929. Serial No. 391,891. 1 Claim. (Cl. 200—16.)



A device of the class described including an elongated casing, spring contacts arranged longitudinally within the casing and insulated therefrom, a guide sleeve carried on one end of the casing, said sleeve being formed of

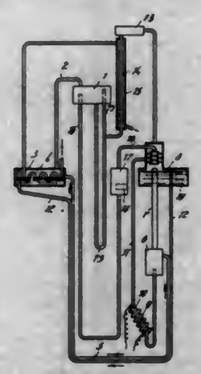
insulating material, a stem carried at one end of the casing and slidable through the guide sleeve, said stem being insulated from the casing by said sleeve and being provided with enlargements to coact with said spring contacts for closing circuits, an operating rod slidable through the opposite end of the casing and associated with the stem, a connector of insulating material coupling said rod and stem, and a coil spring surrounding the rod within the casing and cooperating with the connector and casing for normally retaining the rod in inoperative position.

1,878,091. STOP-MOTION DEVICE. EDWARD B. ALLEN, Newtown, and WALTER MYERS, Bridgeport, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 24, 1928, Serial No. 272,416. Renewed Sept. 11, 1931. 6 Claims. (Cl. 112—67.)



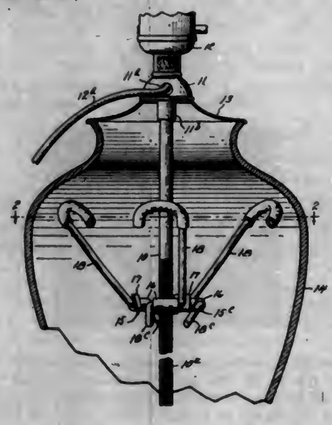
1. In a stop-motion device, the combination with the driven machine shaft, driving means and means for establishing and interrupting driving relation between the driving means and driven shaft, of a stop-cam geared to said driven shaft to run idly at a reduced speed while the machine is in operation, said stop-cam having an eccentric portion followed by a stop-notch, a stop-motion lever, and a spring-pressed plunger carried by said lever and movable into and out of cooperative relation with said stop-cam, and buttonhole cutting mechanism connected to be operated by the movement of said plunger under the influence of the eccentric portion of said stop-cam.

1,878,092. CONTINUOUS ABSORPTION REFRIGERATING APPARATUS. EDMUND ALTENKIRCH, Alt-Landsberg-Sud, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Sept. 29, 1928, Serial No. 309,262, and in Germany Oct. 12, 1927. 16 Claims. (Cl. 62—119.)



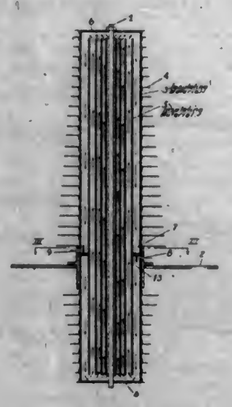
12. Apparatus for increasing the efficiency of an absorption refrigerating system having a boiler, an absorber, a device for changing a refrigerant vapor to a condensed fluid phase and an evaporator, said apparatus including means for draining excess absorption liquid from the evaporator into the boiler and means for causing an exchange of heat between said excess liquid and vapors being expelled from the boiler.

1,878,093. JAR OR VASE ANCHOR FOR ELECTRIC LAMPS. LAURITZ W. ANDERSEN, Waterbury, Conn. Filed May 11, 1928. Serial No. 276,930. 6 Claims. (Cl. 240—52.6.)



1. An anchoring construction including a centrally threaded plate member, a plurality of pivot ears turned up from said member to form bearings, a stop lug turned up adjacent one end of each bearing, an abutment adjacent the other end of each bearing, an anchor rod extending through each bearing and being bent at substantially right angles adjacent each end of the bearing, one portion of said rod being adapted to cooperate with one of said abutments to limit motion and another portion being adapted to engage one of said stop lugs.

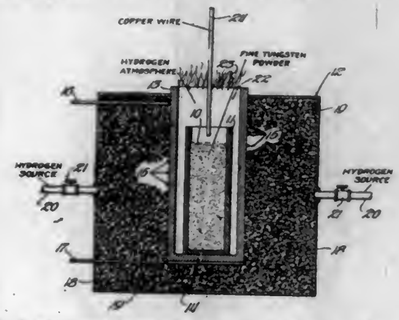
1,878,094. OIL-COOLED TERMINAL. RALPH W. ATKINSON, Perth Amboy, N. J., assignor, by mesne assignments, to General Cable Corporation, a Corporation of New Jersey. Filed Dec. 17, 1926. Serial No. 155,457. 2 Claims. (Cl. 173—318.)



2. In an electrical installation, the combination, with a conductor, of a high tension insulating bushing in-

cluding a casing of insulating material surrounding the conductor, a sleeve within the casing and surrounding the conductor, a transverse barrier across the space between said casing and said sleeve, and openings through said casing on opposite sides of said barrier to permit the circulation of fluid insulation from an external source through said bushing.

1,878,095. PRESSURE WELDING ELECTRODE. MINER M. AUSTIN, Waukegan, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Jan. 17, 1929. Serial No. 333,044. 3 Claims. (Cl. 219—4.)

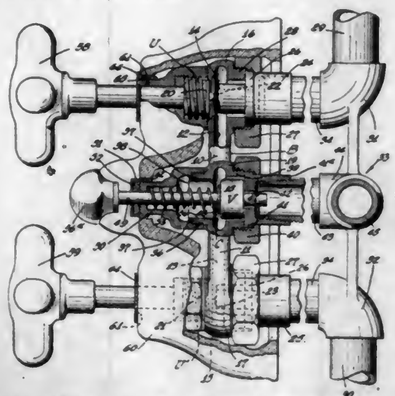


2. A welding electrode of tungsten and copper in which the tungsten is in the form of finely divided particles making up at least 65% by weight of the electrode.

1,878,096. TREATMENT OF METAL ARTICLES. FREDERICK BAMBLETT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 22, 1927. Serial No. 228,109. 3 Claims. (Cl. 204—1.)

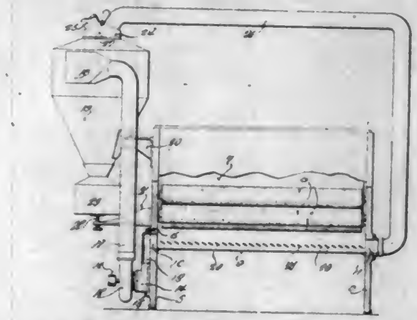
1. The process of treating hardened metal articles which consists in subjecting the same to an alkali cleaning treatment and then to an electrolytic treatment in an acid bath for a time necessary only to remove the scale, then subjecting the articles to electrolytic treatment in an alkali bath and then to an acid dip to finally remove the deposit left from the scale removing processes.

1,878,097. COMBINED MIXING AND DIVERTING VALVE. RALPH E. BLETCHER and ERNEST H. BUCKNELL, Los Angeles, Calif. Filed Dec. 13, 1927. Serial No. 239,758. 12 Claims. (Cl. 277—51.)



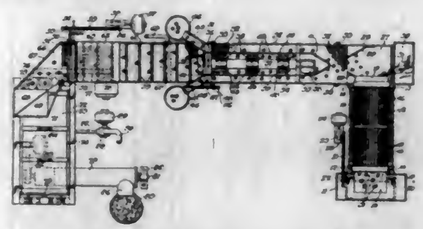
1. A combined mixing and diverting valve comprising a body having a chamber provided between its ends with a pair of inlets adapted for connection to sources of hot and cold water supply, respectively, valves for controlling the inlets, whereby either hot or cold water or a mixture of the two can be delivered to the chamber, a spout projecting from the body and constituting an outlet communicating with one end of the chamber, the chamber having a valve seat between the inlets and spout and being provided at its other end with an axial outlet constructed to provide a tubular extension projecting into the chamber and constituting a second valve seat, and a cup shaped valve in the chamber having a stem projecting from the body by which the valve can be manually reciprocated in the chamber from one extreme position to another to accordingly engage one valve seat or the other and thereby close the respective outlet.

1,878,098. BRONZING MACHINE. FRANK R. BELLUCHE, Racine, Wis. Filed July 27, 1928. Serial No. 295,718. 9 Claims. (Cl. 183—34.)



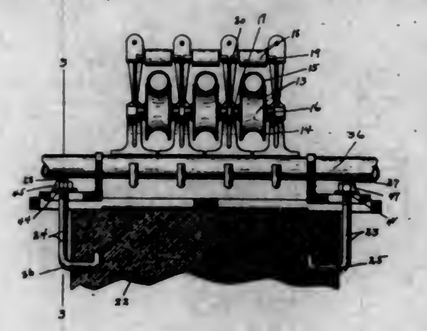
1. In a machine for applying powdered material to work passed through the machine, the excess of material being removed from the work, a plurality of spaced elements upon which the excess material drops, means for producing a vacuum to draw the excess material from the machine, means for conducting a pressure current of air over and under the spaced elements, and said spaced elements being inclined to bias the pressure current of air upwardly to assist the vacuum means in drawing the excess material from the machine.

1,878,099. APPARATUS FOR PRODUCING CITROUS FRUIT JUICES. WILLIAM D. BOST, Chicago, Ill., assignor to Orange-Brush Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 362,021. 1 Claim. (Cl. 99—2.)



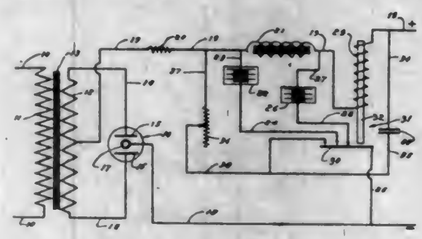
A belt conveyor, and a guide means thereover comprising a pair of opposed members having a closed end for deflecting objects on said belt to the side thereof, the other end of said members having an outwardly turned section and being open therebetween to allow the passage of objects in said belt, and discharge spouts at the end of said members, and at the side of said belt to receive material deflected by said outwardly turned sections.

1,878,100. PIPE CARRIER SUPPORT. WILLIAM F. BOSSERT, Utica, N. Y., assignor to Signal Accessories Corporation, Utica, N. Y., a Corporation of New York. Filed Jan. 3, 1928. Serial No. 244,206. 2 Claims. (Cl. 248—30.)



1. In a device of the class described in combination, a main support, a base plate having a slot, opposed pipe supports on the base plate, an L-shaped pipe clip, one arm of the pipe clip having a slot and an outwardly extending portion adapted to engage the slot in the base plate, the other arm of the pipe clip having opposed outwardly flaring ears, each adapted to engage a pipe section, a plurality of pipe sections, and means for securing the pipe sections between the base plate and the pipe clip in spaced parallel relation with the outwardly extending portion of the pipe clip engaged in the slot in the base plate, such means including a means for securing the device on the main support.

1,878,101. RECTIFIER CIRCUIT. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Apr. 29, 1927. Serial No. 187,506. 4 Claims. (Cl. 175—363.)



3. In a filter circuit, means for rectifying alternating current to direct current, means for regulating the values of current and voltage in the circuit, means for smoothing out the pulsations and means responsive to rectified current for connecting the two last mentioned means in operative relation to the circuit when a load is applied to said circuit.

4. In combination, a transformer, an electrolytic rectifier comprising one lead and two tantalum electrodes immersed in a sulphuric acid electrolyte, connections from the tantalum electrodes to the ends of the transformer secondary, a positive conductor from the middle of the secondary to a load, a negative conductor from the load to the lead electrode, a ballast coil in one of the conductors, a resistance unit connected across the conductors, a battery of electrolytic cells connected across said conductors, an inductance coil in one of the conductors, a second battery of the electrolytic cells connected across said conductors, a relay the winding of which serves as an inductance unit, a condenser connected across said conductors and switch means operated by said relay for disconnecting said resistance, batteries of cells and condenser from one of said conductors whereby short circuits through the cells are prevented.

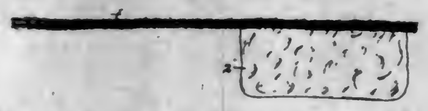
1,878,102. FINGER NAIL DETERGENT. THEODORE F. BRADLEY, Westfield, N. J., assignor to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed July 11, 1928. Serial No. 292,025. 3 Claims. (Cl. 87—5.)

3. As a composition for cleaning the finger nails, a compound boiling between 100 and 200° C. selected from the group consisting of glycols, glycol ethers, and aliphatic hydroxy esters, and a volatile carrier fluid, the composition being rapid drying and substantially free from irritating and corrosive action.

1,878,103. FINGER NAIL GLOSSIFIER. THEODORE F. BRADLEY, Westfield, N. J., assignor to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed July 16, 1928. Serial No. 293,819. 5 Claims. (Cl. 167—85.)

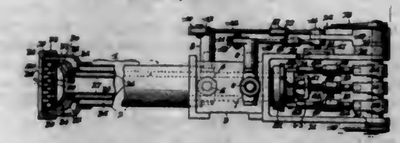
1. A finger-nail glossifier comprising nitrocellulose of approximately not over one half-second viscosity, a modicum of a perfume oil color-stable in the presence of low viscosity nitrocellulose and a substantially color-stable dye producing a shell-pink tint in the dried coating, all dissolved in a perfume-responsive solvent vehicle substantially free from "banana oil" and comprising ethyl alcohol as the major solvent and a mixture of other volatile solvents within the perfume-responsive range as the minor solvent; said glossifier when applied to the finger nails as a layer of gloss-producing thickness drying in a period of less than one minute to a smooth glossy transparent coating free from "orange peel" defacement.

1,878,104. CLEANSING ARTICLE AND METHOD OF MAKING SAME. GEORGE W. BROOKS, Evanston, and JOHN J. DUGINSKI, Chicago, Ill., assignors, by mesne assignments, to The S. O. S. Company, San Francisco, Calif., a Corporation of Delaware. Filed July 30, 1928. Serial No. 296,194. 7 Claims. (Cl. 87—23.)



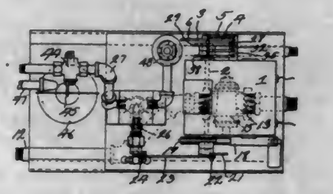
1. A cleansing article comprising a spongy mass of abrasive metal wood, piths of textile fibres distributing throughout said mass, and soap filling the interstices of said wool and fibres.

1,878,105. MEANS FOR BURNING COMBUSTIBLES WITH IMPROVED CALORIFIC EFFICIENCY. FRANCIS H. BROWN, Ridley Park Township, Delaware County, Pa. Filed Oct. 11, 1926. Serial No. 140,975. 13 Claims. (Cl. 158—77.)



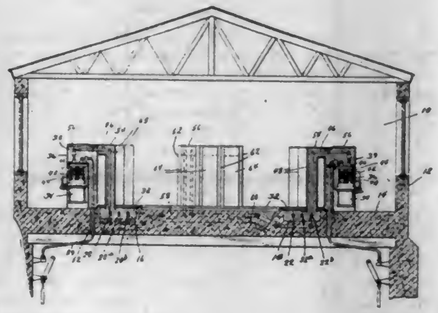
1. Means for atomizing combustibles comprising coincidently movable and relatively adjustable coaxial tubular members adapted to form variable burner outlets for intersecting discharge of fluent fuel and a suitable atomizing agent, and co-ordinate tubular means controlling a corresponding flow of combustion-supporting agent directly into the atomized discharge.

1,878,106. VALVE ACTUATING MECHANISM. RANDOLPH J. BUEHLER, Boston, Mass. Filed Sept. 26, 1927. Serial No. 222,113. 6 Claims. (Cl. 137—145)



1. The combination with a motor having a shaft, a plug valve adjacent said motor, a screw adjacent said motor, a cam carried by said motor shaft, a member connected to the plug valve and with which the cam operates whereby said plug valve will be opened upon partial rotation of the cam, an arm carried by the screw valve, a link connection between said arm and the cam and forming means whereby upon rotation of the cam substantially one hundred and eighty degrees said screw valve will be in opened position and the plug valve in closed position.

1,878,107. SWITCH HOUSE AND SWITCHING SYSTEM AND APPARATUS. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston Mass. a Corporation of Massachusetts. Filed Mar. 12, 1928. Serial No. 260,843. 17 Claims. (Cl. 175—298.)

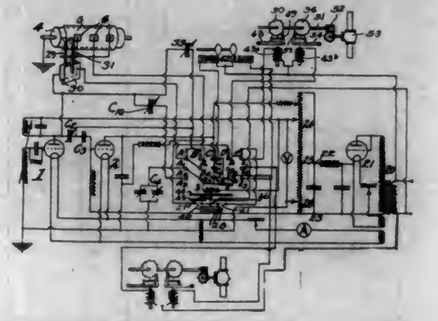


1. A switch house having a floor that is provided with a trench, an electric conductor in said trench and embedded in a mobile body of loose solid non-combustible insulating particles, and an electrical apparatus carried by the floor mainly above said trench and connected with said conductor.

1,878,108. DECOLORIZING SILICIC ACID. HANS CARSTENS, Leverkusen, near Cologne-on-the-Rhine, and GERHARD KRÖNER, Cologne-on-the-Rhine, Germany, assignors to J. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 19, 1926, Serial No. 96,051, and in Germany May 4, 1925. 6 Claims. (Cl. 23—182.)

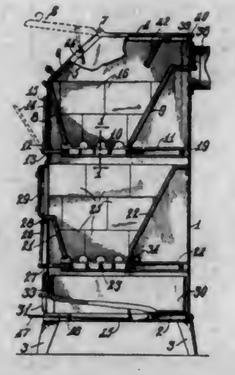
1. A process of preparing an adsorptive silicic acid gel from a silicic acid jelly precipitated from acid solution, which comprises treating said jelly with a solution containing a quantity of an alkaline agent sufficient only to insure that the solution in contact with the jelly remains permanently alkaline, and then washing and dehydrating the jelly.

1,878,109. MEANS FOR DETERMINING THE MOISTURE CONTENT AND QUALITY OF MATERIALS. JAMES D'ARGAVILLE CLARK, Kensington, England. Filed Apr. 28, 1927, Serial No. 187,405, and in Great Britain May 18, 1926. 18 Claims. (Cl. 175—183.)



1. Means for indicating a quality of a material comprising electrical oscillation producing means, a rectifier, a condenser whereof the dielectric consists of the material whose quality is to be measured connected at one side to the oscillation producing means and to the rectifier and at the other side to the other side of the rectifier, and means to indicate the current passing through the rectifier.

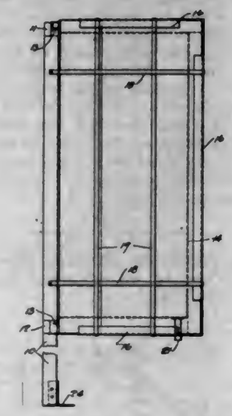
1,878,110. INCINERATOR. EDWARD P. COLE, Chicago, Ill. Filed May 12, 1928. Serial No. 277,178. 7 Claims. (Cl. 110—17.)



1. In a device of the class described, the combination of a casing having two compartments therein in superposed relation with an exhaust by-pass in the casing along the exterior of the upper compartment and leading from the lower compartment to the upper end of the casing, a smoke outlet at the upper end of the casing and leading from the uppper compartment and by-pass, and means for enforcing circulation through the upper compartment to the said outlet.

1,878,111. REFRIGERATOR CABINET CONSTRUCTION. WILLIAM D. COLLINS, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,701. 8 Claims. (Cl. 220—9.)

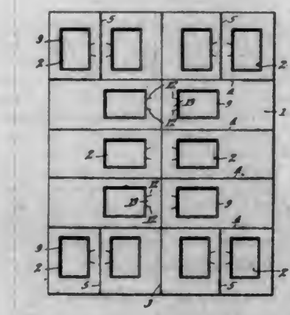
1. A refrigerator cabinet comprising an inner assembly and a detachable casing for said inner assembly, said inner assembly comprising a front supporting frame, a liner having an open side; means securing said liner to said front frame with its open side adjacent the frame, and insulating material for the liner, said insulating material being secured to the liner and front supporting frame by said means.



1,878,112. METHOD OF COATING SUBSTANCES. HUGH S. COOPER and MENAHEM MERLUB-SOBEL, Cleveland, Ohio, assignors to Kemet Laboratories, Inc., a Corporation of New York. Filed Sept. 20, 1927. Serial No. 220,832. 5 Claims. (Cl. 250—27.5.)

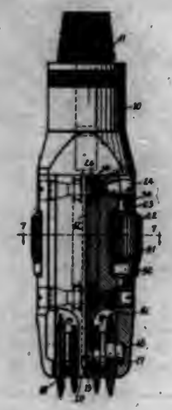
1. Process of coating substances with alkaline-earth oxid material to form an electron-emitting cathode element, which comprises treating alkaline-earth metal with an organic solvent to form an organic compound, dissolving said compound in excess of said solvent, applying the resulting solution to the substance to be coated, and converting the resulting coating to oxid.

1,878,113. MOUNT FOR FILMS. EDWARD P. CRESSLER, Newton, Kans. Filed July 28, 1928. Serial No. 295,997. 5 Claims. (Cl. 40—159.)



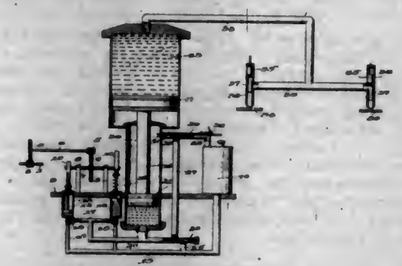
1. A film-mount comprising a facing-sheet and a backing-sheet secured together along a median line and provided with registering openings in which films are to be mounted, said backing-sheet being perforated between adjacent openings on either side of said median line, whereby films may be independently mounted in each opening, and means to secure of the films in place.

1,878,114. DRILL BIT. CHARLES S. CRICKMER, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,142. 8 Claims. (Cl. 255—71.)



1. In a drill bit, a stock having seats at its sides and an extended tongue, vertical supports disposed in said seats, bolts retained in the stock against axial movement, means adjustable upon said bolts to clamp said supports in said seats, and rolling cutters journaled between the supports and tongue.

1,878,115. HYDRAULIC LUBRICATING SYSTEM. ARTHUR B. DE COSSE, Miles City, Mont. Filed Apr. 12, 1928. Serial No. 269,383. 10 Claims. (Cl. 184—39.)

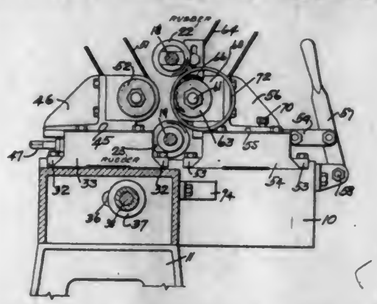


1. A lubricating system including a grease chamber, a piston mounted therein, a compression chamber associated with the grease chamber and having a piston therein connected with the first-mentioned piston, a source of fluid supply adapted to communicate with the compression chamber, and a pump for drawing the fluid from the source of supply and forcing the same under pressure into the compression chamber, the compression chamber being adapted to communicate with the source of fluid supply, and means for establishing said communication operated by the second mentioned piston when the latter reaches a predetermined position in the compression chamber.

1,878,116. RING GRINDING MACHINE. FRITZ DEUTSCH, Germantown, Tenn., assignor of one-third to Lehmann Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 7, 1927. Serial No. 231,520. 13 Claims. (Cl. 51—48.)

1. In a machine for processing rings, a rotatable member for loosely supporting internally a plurality of rings,

driven rotatable members relatively movable into frictional engagement with the outer peripheries of said rings to rotate said rings and in cooperation with said first rotatable member to firmly support said rings, the points



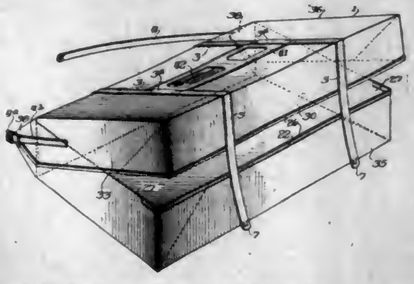
of support all lying on one side of a diameter of said rings and means relatively movable into contact with the outer peripheries of said rings to do work thereon with said first rotatable member as an abutment.

1,878,117. METHOD OF AND APPARATUS FOR METAL ROLLING. SAMUEL E. DIESCHER, Wilkinsburg, and CARL W. A. KOELKEBECK, Mount Lebanon, Pa., assignors to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1925. Serial No. 23,219. 22 Claims. (Cl. 80—13.)



20. In a machine for rolling a helical groove in a tubular body comprising a pair of cooperating rolls with their axes slightly askew to the axis of the roll pass defined by the rolls with respect to which each roll is adjustable, and driving means for each roll comprising a power driven shaft, an elongated spindle connecting said shaft to the roll, and a floating bearing for said spindle engaging the latter intermediate the ends of the latter and adjustable to accommodate the movements of the spindle as the corresponding roll is adjusted and comprising means for exerting a yielding spindle weight supporting effect in its various adjustments.

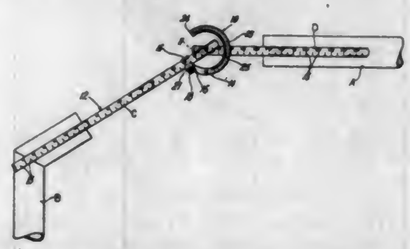
1,878,118. SHIPPING CASE. CARL P. DOUGLASS, Chicago, Ill., assignor to Chicago Pennant Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1928. Serial No. 260,334. 3 Claims. (Cl. 150—52.)



1. In a device of the class specified, the combination with a casing of a pair of straps arranged side by side and secured to said casing, said straps having corresponding unsecured portions formed with shoulders to engage and hold the ends of a shipping card holder in place.

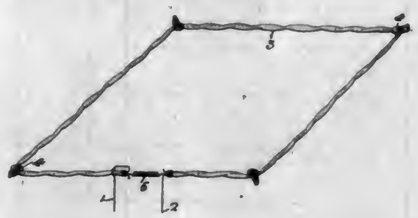
2. In a device of the class described, a rectangular casing body and a rectangular cover having one side in common made of a single rectangular piece of material with the separating corners each formed by folding in a square of surplus material at each corner as two right angle triangles which are sewed to an adjacent side and having loose triangular projections at the end of said common side formed by folding the surplus material at the ends of the common side when the body and cover are shaped, and the said projections of said cover having straps connected to each of the loose projections, one of said straps having a buckle thereon whereby said projections are drawn into position and held.

1,878,119. PROTRACTOR. THOMAS DOWD, New York, N. Y. Filed July 16, 1928. Serial No. 293,062. 2 Claims. (Cl. 33—105.)



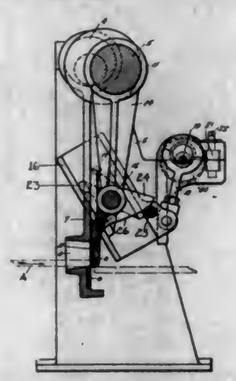
1. A protractor for attachment to a jointed rule comprising an arcuate shaped graduated plate, clamping means by which said plate may be fixedly attached to one jointed rule section to overlie the next adjacent rule section, adjustable clamping means carried by said plate for holding the rule sections in an adjusted position; said clamping means including means permitting the rule to slide to position with the axes of the rule joint and protractor plate in alignment, and said adjustable clamping means including an underlying jaw portion, whereby the next adjacent rule section may be inserted between said jaw portion and said graduated plate, said graduated plate having a slotted portion and said adjustable clamping means including a portion nonrotatably securable in adjusted position in said slot.

1,878,120. ELECTRIC FIRE ALARM. JASPER I. DOWELL, Mart, Tex. Filed July 20, 1928. Serial No. 294,291. 1 Claim. (Cl. 200—142.)



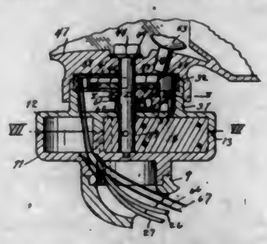
In a circuit closing means, a plurality of spaced pulleys, a fusible casement circuitously trained over the pulleys, a normally open electric circuit having current wires reversely trained in said casement and provided with spaced terminal contacts, and a spring engaged with the ends of the casement next to the terminal contacts and adapted to bring the latter together on the rupture of said casement.

1,878,121. SHEARING MACHINE. VICTOR E. EDWARDS, West Boylston, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1930. Serial No. 433,961. 13 Claims. (Cl. 164—49.)



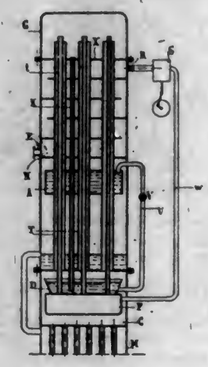
1. A shearing machine of the class described for operation on moving material, comprising upper and lower cooperating knives, a driving shaft common to said knives, cranks on said shaft for both knives to cause them to approach each other for each cut taken on said material, and an inclined guide for controlling said approach movement to produce approximately horizontal travel of both knives before and at the instant of their engagement with the moving material, in the act of taking a cut thereon.

1,878,122. SIGNAL. BARTOLEMEO ELIGGI and LUIGI LORENZI, San Francisco, Calif. Filed Mar. 7, 1928. Serial No. 259,756. 1 Claim. (Cl. 177—329.)



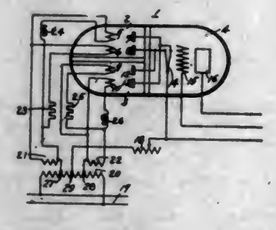
In a signal, a fixed base, a circular flange mounted on said base, a shaft rotatably mounted on said base member and concentric with respect to said flange, a signal casing rotatably carried on said base member and secured to said shaft for rotation therewith, a circular insulating ring mounted on the inner circumference of said flange, a substantially U-shaped contact member mounted on the inner circumference of said insulating ring, said contact member having diverging resilient arms, a second contact member mounted on said first contact member between said resilient arms insulated from said first mentioned contact, an insulating disc mounted on said shaft adjacent said contacts rotatable therewith, a contact ring carried by said disc, said contact ring having a nose for engagement with said second mentioned contact when said semaphore is in neutral position and for engaging either of said resilient arms when said semaphore is rotated to either the right or left signalling position, said first and said second mentioned contacts being connected to a source of electric current, a lamp carried by said signal casing one side of said lamp being grounded thereto, said lamp having a contact engaging said contact ring whereby engagement of said nose with said contacts will create a circuit through said lamp.

1,878,123. PROCESS FOR THE SEPARATION OF THE CONSTITUENTS OF GASEOUS MIXTURES BY LIQUEFACTION. ALFRED ETIENNE, Montereau, France, assignor to La Societe l'Air Liquide, Societe Anonyme Jour l'Etude et l'Exploitation des Procédés Georges Claude, Paris, France. Filed Oct. 30, 1926, Serial No. 145,232, and in France Dec. 24, 1925. 9 Claims. (Cl. 183—115.)



3. A method of separating the constituents of gaseous mixtures by cold, which comprises partially liquefying the gaseous mixture under pressure; and further cooling the gaseous mixture under pressure, by simultaneous indirect contact both with expanded gas and with the compressed, separated gaseous part.

1,878,124. THERMIONIC SYSTEM. JULIUS E. FOSTER, Pittsburgh, Pa., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 8, 1925, Serial No. 1,182. Divided and this application filed June 5, 1929. Serial No. 368,686. 3 Claims. (Cl. 250—27.)

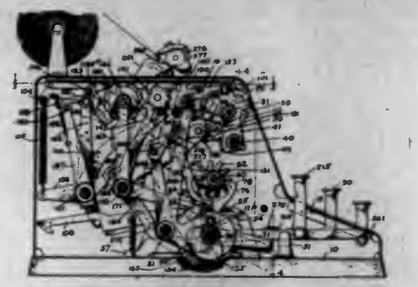


1. In a rectifying system, the combination with an alternating current supply circuit and a direct current load circuit, of means for transmitting a rectified current from the supply circuit to the load circuit, said means comprising a rectifying device provided with a plurality of cathode elements, means for maintaining the cathode elements simultaneously energized, and means for supplying out-of-phase energy impulses to the several cathode elements.

1,878,125. ACCOUNTING MACHINE. FREDERICK L. FULLER, Trenton, N. J., assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1927. Serial No. 234,338. 16 Claims. (Cl. 235—60.)

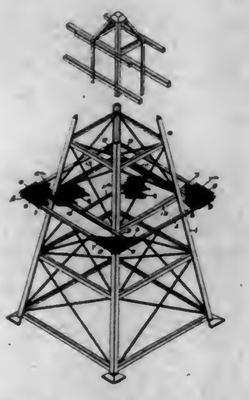
1. In a machine of the class described, the combination of a main operating shaft and means for operating it, a ten-key keyboard, a set of item indicators, a set of

item type wheels, a totalizer, means controlled by the keyboard for operating the indicators to set up amounts thereon, and means actuated by the main operating shaft



and controlled by the indicators for successively actuating the item type wheels and totalizer according to the amounts set up on the indicators.

1,878,126. POLE GUARD. CLARENCE A. GATES, Westborough, Mass. Filed Oct. 20, 1927. Serial No. 227,503. 4 Claims. (Cl. 189—32.)



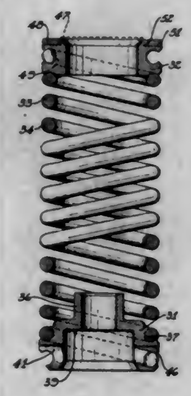
4. The combination with a skeletonized pole having a number of uprights, of a guard for said pole comprising a pair of crossbars secured to opposite sides of the pole, a framework secured to said crossbars and surrounding the pole and extending laterally a substantial distance therefrom, and a wire fabric covering the space enclosed by said framework and being free of passageways therethrough to prevent access to the pole above the framework by anyone attempting to climb the same.

1,878,127. FROZEN FOOD PRODUCT AND METHOD OF MAKING SAME. CHESTER EARL GRAY, Oakland, Calif., assignor of one-half to Grover D. Turnbow, Oakland, Calif. Filed June 22, 1926. Serial No. 117,055. 7 Claims. (Cl. 99—16.)

1. The step in the process of producing a frozen food product from a mixture containing milk solids, including milk sugar in an impalpable condition, which consists in incorporating a portion of said solids in the mixture after the latter has been partially frozen.

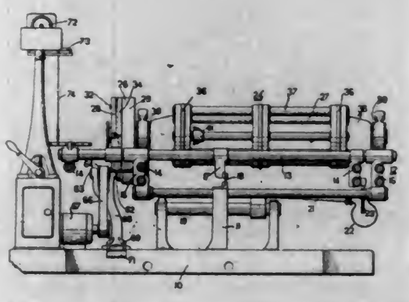
5. A frozen food product such as ice cream or the like of smooth consistency and containing milk solids including milk sugar or lactose, there being more than 6.50 per cent milk sugar or lactose in said product and a portion of said sugar being present in an undissolved and impalpable condition.

1,878,128. VALVE SPRING. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 10, 1927. Serial No. 232,241. 22 Claims. (Cl. 267—61.)



1. A spring device for high speed valves comprising coaxially arranged helical coils of substantially the same size, and a retainer member to maintain the angular disposition of said coils.

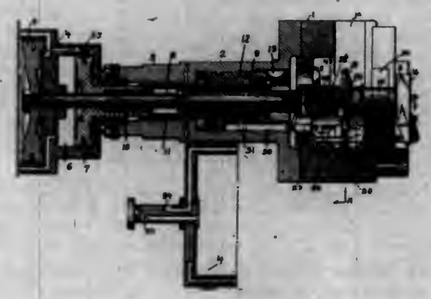
1,878,129. BALANCING MACHINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1928. Serial No. 259,152. 14 Claims. (Cl. 73—51.)



1. The combination in a balancing machine having a frame adapted to tilt from its normal position, of aligned bearings on said frame, and a rigid supporting member journaled in said bearings, having means between the bearings adapted to carry the part to be balanced in coaxial alignment on said member.

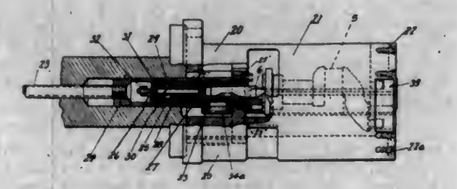
1,878,130. CHUCKING DEVICE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,881. 14 Claims. (Cl. 82—40.)

1. In a chucking device for crank shafts, fluid power actuating means, wedging elements operated thereby, and a locating abutment for engaging a web of such a shaft, and movable means actuated by the wedging elements and serving to force said web against the abutment, and to clamp said web from opposite sides thereof.



10. In a chucking device, the combination of a frame, of pivoted jaws in said frame for engaging the work, power means including an equalizer element, wedging pins to actuate the jaws, said pins driven by the equalizer element, the wedge faces of the pins formed on an arc and having a primary sharp incline and a terminating or final incline at a lesser angle.

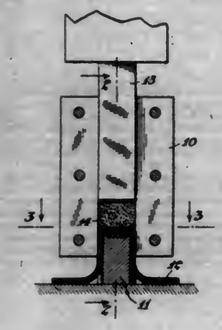
1,878,131. CRANK SHAFT LATHE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,448. 8 Claims. (Cl. 82—40.)



2. In a crank shaft lathe, the combination in a spindle of a centering element for engaging the end of a shaft being operated upon to hold it at its true journal center, and a cheek gripping device, including jaws, to engage the shaft at a point away from the centering element, and compensating means in said cheek gripping device movable relatively to said centering element and arranged to compensate both for the movements of the jaws as a whole toward the shaft, and for the position of the jaws with relation to the shaft, said gripping device including as an element to move the jaws as a whole, a wedge and slide whereby once the movement of the jaws as a whole is completed, the friction will prevent a further compensating action during operations on the work.

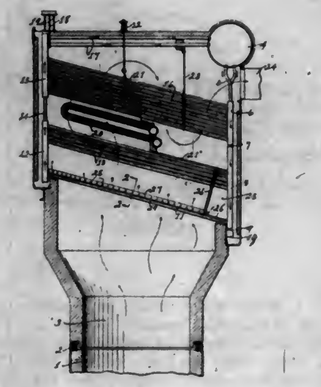
1,878,132. PROCESS OF BAKING MOLDED PIECES. EVERETT J. HALL, Elizabeth, N. J., assignor to Metals Disintegrating Company, Inc., Elizabeth, N. J., a Corporation of New Jersey. Filed July 20, 1926. Serial No. 123,699. 4 Claims. (Cl. 171—325.)

1. The process of producing a commutator brush which comprises the steps of holding the intermediate portion of an uncoated wire in spaced relation to the die block of a pill machine, pressing suitable powdered material



about the wire to form a body having the width and thickness of the finished brush, and subjecting the article to a baking operation in a non-injurious atmosphere.

1,878,133. STEAM GENERATOR. ISAAC HARTER, New York, N. Y., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Apr. 16, 1928, Serial No. 270,199. Renewed Oct. 17, 1931. 8 Claims. (Cl. 122—5.)

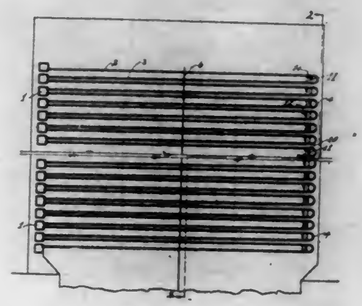


1. In a steam generator, a water tube boiler having a furnace, a gas producer below said furnace and in open communication therewith, a screen of refractory material below tubes of said boiler through which the gas from said producer passes, and means comprising air conduits to introduce combustion air into said furnace above said screen, said conduits being supported by tubes of said boiler.

1,878,134. ECONOMIZER. ISAAC HARTER, Dongan Hills, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 12, 1927, Serial No. 167,814. Renewed Mar. 5, 1931. 11 Claims. (Cl. 257—230.)

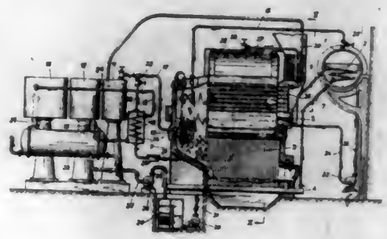
1. In a heat exchange device, return bend tubes connected together with the return bends in parallel planes, a supporting plate between the connections and the re-

turn bends through which plate said tubes extend, removable supports for said tubes near said return bends, said



tubes being arranged in rows with lanes between said rows through which tubes can be withdrawn and replaced sidewise.

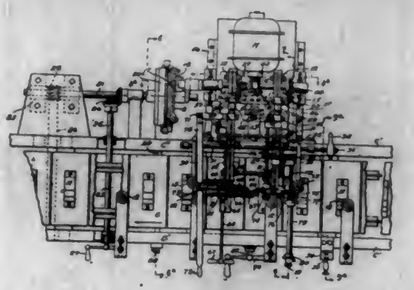
1,878,135. INTERSTAGE STEAM SUPERHEATING BY MEANS OF HIGH-PRESSURE STEAM. OTTO H. HARTMANN, Kassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany. Filed June 5, 1928, Serial No. 283,055, and in Germany July 2, 1927. 2 Claims. (Cl. 60—73.)



1. In a steam power plant, a multistage engine, a boiler generating high pressure steam, a boiler generating low pressure steam, a superheater, means for conducting steam from the high pressure boiler through the superheater to the first stage of the engine, means for conducting steam from the low pressure boiler to a stage of the engine other than the first, a reheater, means for conducting the exhaust from said first stage of the engine through the reheater to a stage other than the first, means for conducting high pressure steam from said high pressure boiler to said reheater to act as a heating medium therein, and means for conducting the condensate of said high pressure steam formed in said reheater to said low pressure boiler.

1,878,136. WELDING MACHINE. FRANKLIN C. HASSE, Chicago, and SAMUEL R. OLDHAM, La Grange, Ill., assignors to The Oxweld Railroad Service Company, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,580. 27 Claims. (Cl. 113—59.)

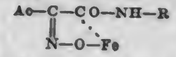
1. In a welding machine, the combination of means for heating the work, a movable arm, said heating means being mounted on one end of said arm, mechanism connected to the other end of said arm to operate the latter and a support for said arm and mechanism, said support being arranged to shield said mechanism and the adjoining end of said arm from said heating means.



23. Welding apparatus comprising the combination of a work carrier; mechanism for feeding welding strip or rod to work on said carrier; a continuously-operating device for driving said mechanism; and means whereby the feed of such strip or rod is variable while said device is operating.

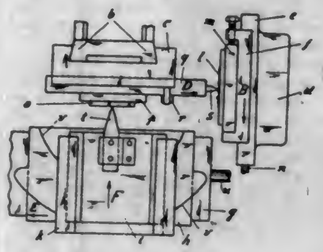
1,878,137. COMPLEX INNER ORGANO-IRON COMPOUNDS AND PROCESS OF PREPARING THE SAME. WINFRID HENTRICH and LUDWIG ZEH, Wiesdorf, near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 8, 1926, Serial No. 153,458, and in Germany Dec. 22, 1925. 5 Claims. (Cl. 260—11.)

3. As new products, the complex inner organo-iron compound of an isonitroso acidyl acetic acid aryl amide of the probable general formula:



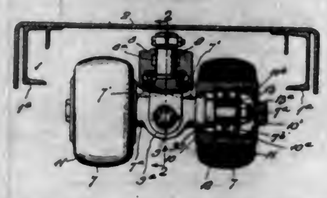
wherein Ac stands for an acetyl or benzol radical, R stands for an aromatic nucleus, which may be submitted by alkoxy, halogen or a carboxylic acid group, being generally dark blue to bluish black, water-insoluble substances which are suitable for the manufacture of size and printing colors.

1,878,138. METHOD OF PRODUCING A FLAT PICTORIAL REPRESENTATION FROM A PATTERN IN RELIEF. ERNST HERRMANN, Pforzheim, Germany. Filed Aug. 14, 1928, Serial No. 299,571, and in Germany Aug. 15, 1927. 1 Claim. (Cl. 41—25.)



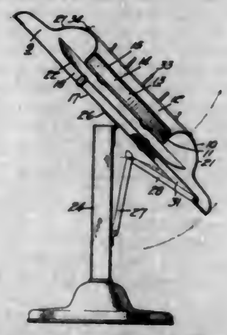
A method of producing flat pictorial reproduction from a relief pattern, consisting in mounting the work plate on which the flat reproduction is to be made perpendicularly to the pattern plate in high relief, in rigidly connecting to said work plate a feeler bearing at right angles on said pattern, in repeatedly moving said feeler over the surface of said pattern so that when said feeler advances or recedes in following the contour of said relief pattern said work plate moves backwards and forwards at the same time and carries out lateral movements corresponding to the advancing and receding movements of the feeler on the surface of said pattern, and in shifting a cutting tool pressed at right angles against the work plate and the relief pattern a certain distance in lateral direction so that said feeler travels in parallel lines over the whole surface of said pattern and the tool traces closely juxtaposed lines on the work plate, said lines deviating more or less from the straight according to the height of the relief of the pattern and therefore the distance through which the feeler is forced back and displaces the work plate.

1,878,139. VEHICLE. JOHN H. HERTNER, Lakewood, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Apr. 26, 1920, Serial No. 376,504. Divided and this application filed May 29, 1926. Serial No. 112,502. 1 Claim. (Cl. 301—5.)



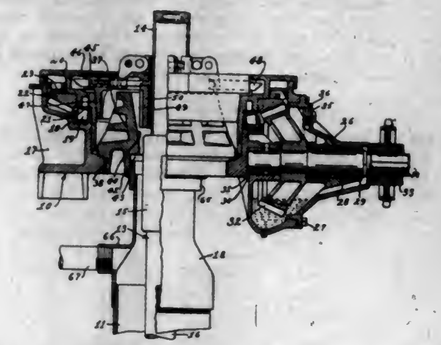
In an industrial truck construction, the combination with an axle, a tubular member into which said axle extends and forming a combined wheel hub and tire seat, sets of radial and thrust load anti-friction ball bearings disposed side by side centrally of said member to provide equal over-hanging portions of said tubular member on each side of the bearings and arranged to resist thrust movements transmitted through said member and axle, each said set of bearings having inner and outer races and the inner sides of the races for the innermost set engaging seats provided on said axle and internal wall of said member, respectively, removable means engaging the outer end portion of said axle and outer side of the inner race for the outermost set, and removable means engaging the inner wall of said member adjacent its outer end and the outer side of the outer race for the outermost set.

1,878,140. ELECTRICAL HEATING DEVICE. WILLIAM WESLEY HICKS, San Francisco, Calif., assignor to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 9, 1928. Serial No. 245,291. 1 Claim. (Cl. 219—34.)



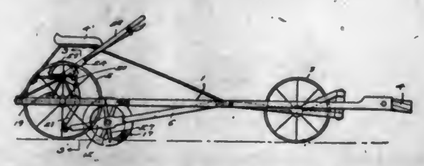
An electrical heating device for universal application comprising a body member formed to provide a concavity on one side thereof, a radiant electrical heating element disposed in said concavity, said element being formed to provide a relatively flat outer face of substantial area to receive a cooking utensil, a support, means for tiltably securing said body member to said support, said securing means permitting the body member to assume two general positions, one position for heating a room by radiation in which the face of the heating element is substantially upright, and another position for use as a hot plate in which said face is substantially horizontal, and a foraminous guard hingedly secured to said body member and adapted to extend across in front of said element when the device is utilized as a room heater, the hinge connection for said guard being upon the upper edge of the same when said body member is substantially upright.

1,878,141. ROTARY DRILLING APPARATUS. FREDERIC W. HILD, Los Angeles, Calif. Filed Oct. 16, 1928. Serial No. 312,887. 14 Claims. (Cl. 255—1.)



1. In combination: well casing, and a rotary drilling machine having means for securing the machine in a fluid tight connection to the casing in a manner to prevent separation of the machine from said casing.

1,878,142. SOIL PULVERIZER. JOHN M. HJERMSTAD, Red Wing, Minn. Filed May 7, 1928. Serial No. 275,634. 4 Claims. (Cl. 55—152.)



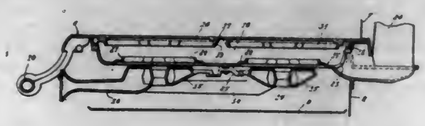
1. A soil pulverizer comprising a frame, wheels supporting the frame, cross bars carried by the frame, side bars pivoted to the cross bars, an intermediate bar adjustably connected with the cross bars, bearing members carried by the side bars and intermediate bar, shaft sections journaled in the bearing members, and soil engaging elements carried by the shaft sections.

1,878,143. GAS RANGE. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Filed May 21, 1927. Serial No. 193,276. 1 Claim. (Cl. 126—39.)

A gas range having, in combination, a Bunsen burner beneath the cooking top in such proximity thereto as to secure efficient heating of a vessel supported thereon directly over the burner, a bottom plate interposed between the burner and the cooking top and forming with the latter

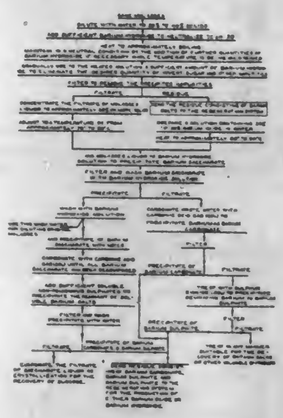
CARNEGIE LIBRARY OF ATLANTA

a confined chamber through which the products of combustion from the burner pass to a flue outlet, said burner having a central secondary air passage and radiating fingers each of which has main flame ports in the top thereof in radially spaced relation, said plate having a single secondary air opening conforming to the arrangement of said flame ports in the burner, and a plurality of auxiliary



flame ports in the burner wall arranged around said central secondary air passages near the top thereof and located between the inner ends of the radiating fingers and inclined inwardly and upwardly for projecting flame jets at such an angle with reference to the plane of the top of the burner as to serve in drawing air currents to the innermost flame ports in the top of the burner.

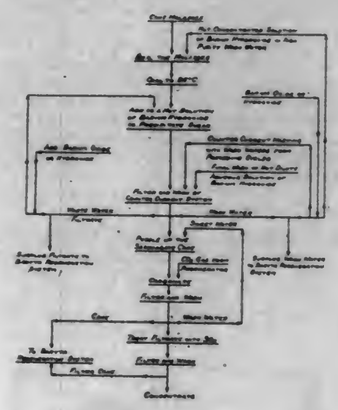
1,878,144. PROCESS OF RECOVERING SUCROSE FROM CANE MOLASSES. ALFRED L. HOLVEN, Crockett, Calif. Filed Feb. 6, 1928. Serial No. 252,078. 6 Claims. (Cl. 127—47.)



1. A process of cane molasses treatment for the recovery of the sucrose contained therein, which consists in forming a diluted solution of cane molasses, then heating said solution to a temperature between 80° and 110° C. during which time an alkaline earth metal hydroxide is added to the solution in sufficient quantities to maintain the solution in a neutral condition, and thereafter adding further quantities of the alkaline earth metal hydroxide during the continued heating of the solution so as to eliminate invert sugar and other impurities from the solution but insufficient to precipitate the sucrose and then separating the precipitated impurities from the solution.

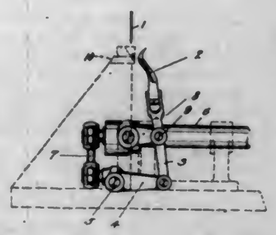
1,878,145. RECOVERY OF SUCROSE FROM CANE MOLASSES. ALFRED L. HOLVEN, Crockett, Calif. Filed Aug. 21, 1929. Serial No. 387,393. 5 Claims. (Cl. 127—47.)

1. In the process for the recovery of sucrose from cane molasses, the steps which consist in the dissolving of barium hydroxide in the mother liquor resulting from a molasses from which an alkaline earth saccharate has been



precipitated, and the mixing of said solution with defecated molasses for the purpose of precipitating the sucrose from the molasses in the form of barium saccharate.

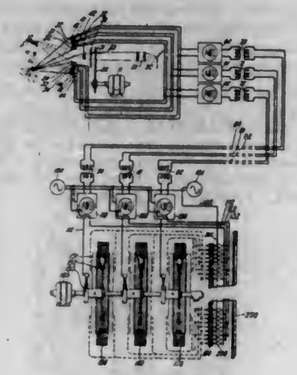
1,878,146. SEWING MACHINE. GUSTAV HUBER, Stuttgart, Germany. Filed Apr. 6, 1928, Serial No. 268,039, and in Germany Apr. 14, 1927. Renewed May 27, 1932. 3 Claims. (Cl. 112—162.)



1. In a sewing machine, the combination of a stitching device comprising a needle and cooperating looper for producing a seam uniting two pieces of fabric, a second stitching device also comprising a needle and cooperating looper for producing an overseam covering said first seam and a separate operating mechanism for each looper inclusive of a drive shaft and a link connection between said shaft and looper, said needles being spaced from one another and being disposed in a vertical plane, and the link connections between the respective shafts and loopers being disposed to opposite sides of said plane, respectively.

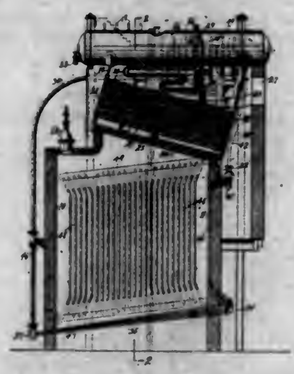
1,878,147. ELECTROOPTICAL TRANSMISSION. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1927, Serial No. 218,631. Renewed Apr. 28, 1930. 22 Claims. (Cl. 178—6.)

1. The method of color television, comprising generating and directively moving a beam of light for successively and repeatedly illuminating the elemental areas of a three dimensional object, analyzing light reflected from the elemental areas of the said object into primary color components, translating the said components into electrical energy corresponding to the light intensity of the said components, and simultaneously transmitting the corre-



sponding electrical energy components over separate channels, each channel being continuously assigned to the same color component.

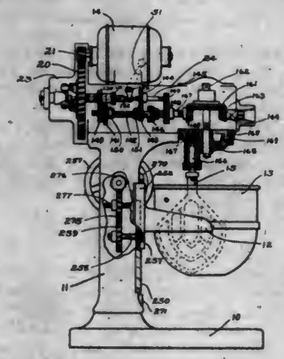
1,878,148. WATER TUBE BOILER AND FURNACE. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 9, 1926, Serial No. 100,775. Renewed Jan. 14, 1932. 14 Claims. (Cl. 122—235.)



1. In a water tube steam boiler, a plurality of steam and water drums, a furnace located below said boiler, water tubes extending along the walls, and water tubes forming a slag screen near the bottom of said furnace, said tubes being arranged in independent sets respectively connected to said drums.

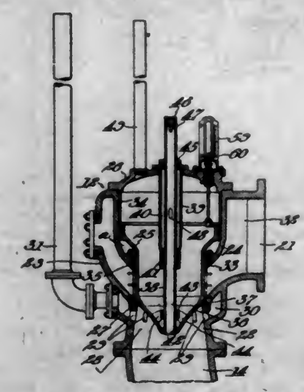
1,878,149. MIXING MACHINE. HERBERT L. JOHNSTON, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed June 6, 1927. Serial No. 196,785. 23 Claims. (Cl. 192—18.)

1. In a device of the class described, a power-transmission system comprising a driving member, a driven member, a clutch between said members, and mechanism for operating said clutch comprising an operating device, means mounted on one of said members so as to be operated by said device to operate said clutch, and wear-compensating mechanism embodied in said means, said



wear-compensating mechanism comprising a spring pressed contact member for producing engagement of said clutch, and means for adjusting the tension on said spring.

1,878,150. FLUID FLOW CONTROL APPARATUS. PHILLIP A. KINZIE and JOHN L. SAVAGE, Denver, Colo., assignors to Universal Hydraulic Corporation, Denver, Colo., a Corporation of Colorado. Filed Aug. 11, 1928. Serial No. 298,961. 11 Claims. (Cl. 137—139.)



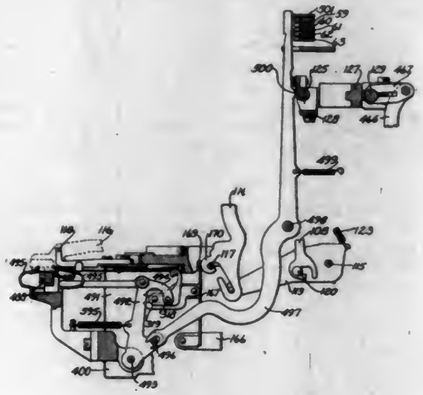
10. A fluid flow control valve comprising, a body having inlet and outlet chambers, a cylindrical guide in said body, a needle slidable in said cylindrical guide for controlling the flow of fluid through said body and means including a conduit leading from said outlet chamber for supplying sufficient air to said outlet chamber upon the closing movement of said needle to insure against a vacuum induced closure of said valve.

1,878,151. DIRECT PRODUCTION OF RUBBER ARTICLES FROM AQUEOUS DISPERSION OF RUBBER. PAUL KLEIN, Budapest, Hungary; ANDREW SZEGVÁRI, Akron, Ohio; and ROBERT FERRIER MCKAY, CECIL HAYES, and GEOFFREY WILLIAM TROBRIDGE, Birmingham, England, assignors to American Anode, Inc., Akron, Ohio. Filed Mar. 22, 1928, Serial No. 263,954, and in Great Britain Mar. 26, 1927. 4 Claims. (Cl. 204—1.)

1. A process for improving the properties of deposits obtained by electrophoresis of aqueous dispersions of rub-

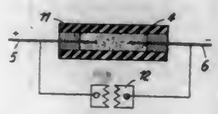
ber-like substances, which comprises adding to the dispersion an alkali ferrocyanide, and adjusting the alkalinity to a value short of that at which anodic gas formation takes place or at which the deposit becomes excessively compact.

1,878,152. PRINTING TELEGRAPH. EDWARD E. KLEINSCHMIDT, Park Ridge, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1925, Serial No. 68,307, now Patent No. 1,811,132, dated June 23, 1931, which is a continuation of application Serial No. 656,857, filed Aug. 11, 1923, Patent No. 1,567,599, dated Dec. 29, 1925. Divided and this application filed Jan. 22, 1931. Serial No. 510,537. 36 Claims. (Cl. 178—33.)



1. In a printing telegraph receiver, a plurality of characters to be recorded; means for recording said characters in offset lines; a permutation device adapted to control both the character to be recorded and the line in which the record is to be made; and solely mechanical connections between said permutation device and said means.

1,878,153. ELECTRIC RESISTANCE. ALFRED LAMPL, Berlin, Germany, assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 24, 1926, Serial No. 137,602, and in Germany Mar. 13, 1926. 4 Claims. (Cl. 200—118.)

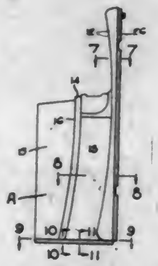


1. An electrical resistor comprising material electrically non-conductive below a predetermined voltage and conductive above said predetermined voltage and adapted to automatically again become non-conductive upon reduction of said voltage from above said predetermined voltage to below said predetermined voltage.

1,878,154. PROCESS OF CONCENTRATING ORES BY FLOTATION. JOSEPH M. F. LEAPER, Buffalo, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 16, 1928. Serial No. 247,270. 5 Claims. (Cl. 209—166.)

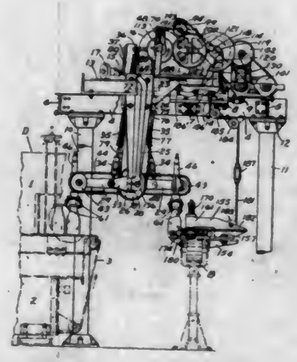
1. In the process effecting the concentration of minerals by flotation, the improvement which comprises adding a thioformaldehyde to the mineral pulp and subjecting the resulting mixture to a froth flotation operation.

1,878,155. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1928. Serial No. 280,694. 4 Claims. (Cl. 296—28.)



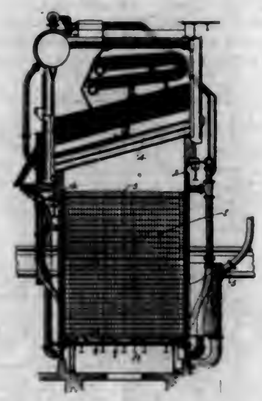
1. In a vehicle body construction, an outer cowl panel formed by a unitary stamping and having an offset therein at top and sides forming a forward extended cowl portion of reduced cross section extending a substantial distance under a hood, and an inner reinforcing panel for each of the sides of said outer panel joined to the bottom and rear edges of said sides and terminating adjacent the top of said sides.

1,878,156. APPARATUS FOR HANDLING GLASSWARE. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 11, 1927. Serial No. 204,875. 32 Claims. (Cl. 214—1.)



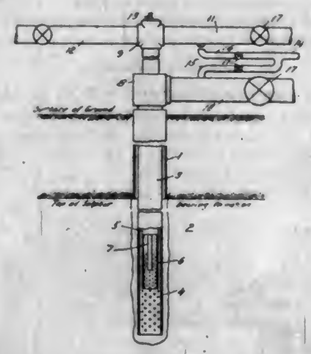
1. Apparatus for handling glassware comprising a transfer arm, continuously operating driving mechanism for swinging said transfer arm between a ware-receiving station and a ware-delivery station to transfer articles of glassware from the former to the latter, and a clutch mechanism for temporarily rendering said driving mechanism inoperative and to interrupt the movement of said arm at each of said stations.

1,878,157. FURNACE. CHARLES E. LUCKE, New York, N. Y., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Aug. 7, 1928. Serial No. 297,955. 8 Claims. (Cl. 110—28.)



1. In combination, a furnace having a bed of slag on the floor thereof, means to burn fuel in said furnace, and electrical heating elements adapted to heat said bed substantially throughout its extent.

1,878,158. PROCESS FOR MINING SULPHUR. WILSON T. LUNDY and WILLIAM DRACHENBERG, Freeport, Tex. Filed June 25, 1928. Serial No. 288,136. 3 Claims. (Cl. 262—3.)



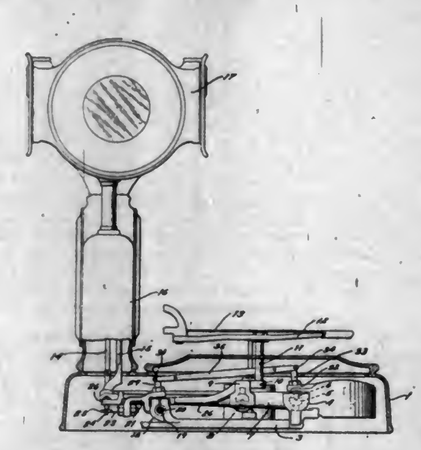
1. The improvement in the process of mining sulphur by the underground fusion method which consists in heating the hot fusion fluid to a temperature equal to the highest temperature required in a sulphur well and reducing said temperature of the fusion fluid to the temperature desired by adding thereto a fluid having a lower temperature.

1,878,159. GAS OR VAPOR ELECTRIC DEVICE AND METHOD OF CONTROLLING THE SAME. ROY D. MAILEY, East Orange, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 12, 1929. Serial No. 332,180. 7 Claims. (Cl. 176—43.)



1. The method of controlling the vapor pressure of an electric discharge device containing a condensable vapor comprising diverting a variable amount of heat from a heated portion of said device to a portion in which condensed vapor tends to collect to maintain said condensed vapor at a constant temperature.

1,878,160. WEIGHING SCALE. CHARLES O. MARSHALL and HALVOR O. HEM, Toledo, Ohio, assignors to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed July 3, 1926. Serial No. 120,294. 10 Claims. (Cl. 265—27.)

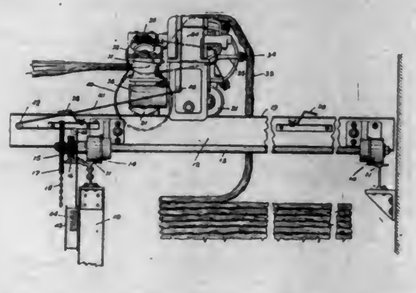


1. In a device of the class described, in combination, a frame, weighing mechanism supported upon said frame and including a lever, having a fulcrum pivot, load pivot and nose pivot in substantial alignment, a platform substantially wholly supported upon said lever, a member pivotally supported upon said frame and connected to said platform, and means connecting said lever and said member to prevent tilting of the platform.

1,878,161. PILING MACHINE. JOHN W. MCKINLEY, Pawtucket, R. I., assignor to United States Finishing Company, New York, N. Y., a Corporation of Connecticut. Filed Mar. 28, 1929. Serial No. 350,484. 4 Claims. (Cl. 8—19.)

2. A piling machine including a carriage, rails for mounting said carriage, means for reciprocating said carriage along said rails, a pot eye associated with said carriage and to be reciprocated with respect thereto, means

for operating said carriage and pot eye, a further carriage forming a part of said track members, rollers mounting said latter carriage, additional tracks for supporting



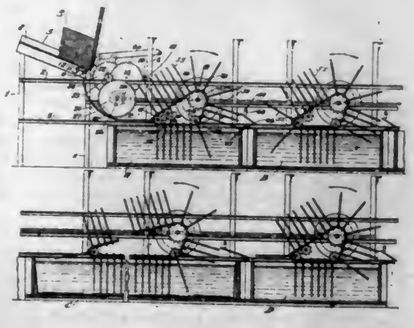
said rollers, and further means associated with said rollers for shifting said latter carriage along said last named tracks.

1,878,162. CONICAL DIAPHRAGM FOR SOUND REPRODUCING AND RECORDING APPARATUS. HAROLD BERTRAM MEAD, Ilford, England. Filed Nov. 30, 1931, Serial No. 578,076, and in Great Britain Dec. 4, 1930. 9 Claims. (Cl. 181—31.)



1. In sound reproducing and recording apparatus, a diaphragm consisting of a shaped flat blank which is bent to conical form so that the radiating edges slidably overlap one another to permit of the free expansion and contraction of the cone.

1,878,163. CONVEYING APPARATUS. MICHAEL A. MESSLEIN, Chicago, Ill. Filed Oct. 10, 1928. Serial No. 311,525. 9 Claims. (Cl. 214—17.)

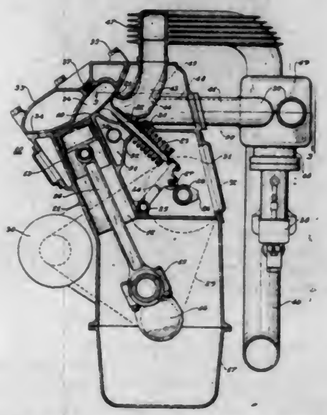


1. Transfer mechanism for conducting flat sheets through a treating tank comprising a pair of chains adjacent the sides of said tank, sprockets for driving and supporting said chains, a plurality of sheet carriers connected to said chains so as to lie transversely of the tank, said sheet carriers arranged to each receive a single sheet, a receptacle for said sheets, means for withdrawing said sheets singly from said receptacle and delivering the same successively to said sheet carriers, means for driving said chains in timed relation with said sheet withdrawing means, and automatic means including a rotating finger for dislodging a sheet from a carrier after the carrier has been moved by said chains out of said treating tank.

1,878,164. CHLORINE PREPARATION. CHARLES MINDELEFF, Jackson Heights, N. Y., assignor to Louise G. Robinovitch, Golden, Colo. Filed Aug. 3, 1928. Serial No. 297,375. 5 Claims. (Cl. 23—246.)

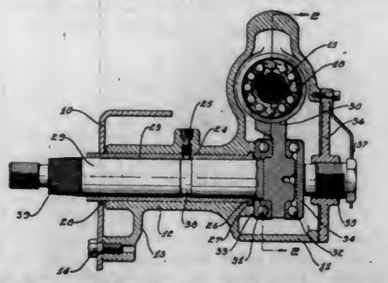
1. The method of producing a soluble active chlorine compound in solid or powder form, which consists in the absorption of a hypochlorite solution by an alkaline carbonate.

1,878,165. INTERNAL COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 10, 1928. Serial No. 276,563. 18 Claims. (Cl. 123—173.)



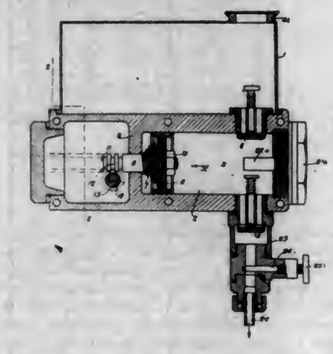
1. In an internal combustion engine, in combination, a cylinder block, and a detachable head for the cylinder block, the cooperating surfaces of the cylinder block and head being curved.

1,878,166. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 28, 1928. Serial No. 281,012. 4 Claims. (Cl. 74—79.)



1. In a steering mechanism, the combination of a housing having a bearing therein, a steering post having a worm gear thereon within the housing, a rock shaft having a gear segment at one end thereof, said rock shaft being mounted in the housing bearing with its gear segment in mesh with said worm gear, an annular ball thrust bearing between said rock shaft and the housing at one side of the gear segment, an annular ball thrust bearing for the rock shaft at the other side of said gear segment, said latter bearing including an abutment means, and adjustable means mounted in the housing and operating against said abutment means to position the rock shaft endwise and to thereby accurately hold the gear segment relative to the worm gear with which it meshes.

1,878,167. LUBRICATING PUMP. JACQUES MULLER, La Garenne Colombes, France. Filed Oct. 11, 1927, Serial No. 225,525, and in France Oct. 12, 1926. 2 Claims. (Cl. 184—28.)



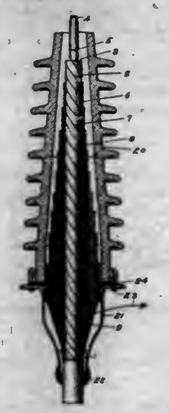
1. A control device for lubricating systems of the type described comprising, in combination, a supply tank, a measuring chamber communicating with said tank, an outlet for said chamber, a check valve for controlling the communication between said chamber and said tank, a check valve for controlling said outlet, a piston slidably mounted in said chamber, a toothed rack carried by said piston, a pinion meshing with said rack, an operating shaft for said pinion, an operating extension rod for said pinion shaft, a universal joint interconnecting said extension rod and said pinion shaft, means for manually rotating said extension rod, spring means associated with said piston adapted to return said manually operated means to its initial position upon release thereof, a pointer on said rod rotating means, and a scale cooperating with said pointer for the purpose disclosed.

1,878,168. 1-AMINO-CARBAZOLE. FRIEDRICH MUTH and ALBERT SCHMELZER, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 1, 1928, Serial No. 274,355, and in Germany May 14, 1927. 8 Claims. (Cl. 260—46.)

1. The process which comprises reacting upon a 1-hydroxy-carbazole with ammonia in the presence of a salt of the group consisting of the ammonium salts and such metallic salts as yield double salts with ammonia under superatmospheric pressure and at a temperature between about 100° C. and the melting point of the 1-amino-carbazole formed during the reaction.

1,878,169. TERMINAL. ALEXANDER M. MYERS, Wilkinsburg, Pa., assignor, by mesne assignments, to General Cable Corporation, a Corporation of New Jersey. Filed Apr. 10, 1926. Serial No. 101,112. 5 Claims. (Cl. 173—353.)

1. In an electrical installation the combination with a cable comprising an insulated and metal-sheathed conductor, of a terminal structure comprising a casing including a sleeve-like body of insulating material and a metal thimble hermetically united end-to-end, means securing the thimble mechanically upon the sheath of the cable end, the cable sheath terminating within said casing short of the sleeve of insulating material leaving the cable insulation exposed within said thimble and sleeve, and a preformed flaring metal screen applied to the cable end within the said casing and at its inner end engaging the end of the cable sheath, the said thimble and the said screen engaging the cable sheath each independently of the other, the said screen, when the parts are assembled, flaring to substantially its maximum diameter within said thimble short of said sleeve and extending beyond the said thimble and into the said sleeve.



5. An article of manufacture for use in a high voltage terminal structure comprising, in combination, a flaring metal sleeve having at its larger end a cylindrical extension, and a plurality of radially-spaced concentric cylindrical insulating members mounted within and mechanically secured to said sleeve with the ends of the said cylindrical members adjacent the flaring surface of the sleeve, the ends of said cylindrical insulating members extending beyond the cylindrical extension of the flaring sleeve progressively decreasing in length from the inner member to the outer member.

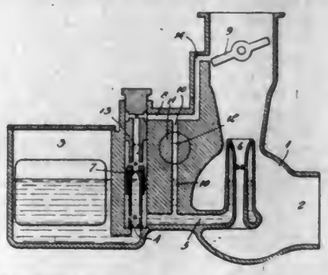
1,878,170. OXYGENATION OF SATURATED ALIPHATIC HYDROCARBONS. JULIUS M. NAIMAN and HERBERT LEGGETT, Blackwell, Okla.; said Leggett assignor to said Naiman. Filed Mar. 7, 1927. Serial No. 173,595. 10 Claims. (Cl. 260—156.)

1. The process of producing hydroxides of hydrocarbons including passing a gaseous mixture containing free oxygen and saturated aliphatic hydrocarbons over a catalytic agent, maintaining the temperature of the catalytic agent at substantially 325° F., and maintaining pressure of the mixture at approximately 1500 pounds to prevent dissociation of the hydroxides formed.

1,878,171. CARBURETOR. AUGUST LEANDER NILSSON, Sodertalje, Sweden. Filed Apr. 7, 1928, Serial No. 268,256, and in Germany Apr. 14, 1927. 3 Claims. (Cl. 261—41.)

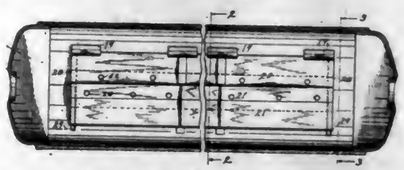
1. In a carburetor, the combination of a fuel container, an atomizer, an idling outlet, a conduit connecting said fuel container to said atomizer, a second conduit connecting said fuel container to said idling outlet, a calibrated opening between said container and said conduits, an air inlet between said calibrated opening and said idling outlet, a second calibrated opening between said air inlet and said first named calibrated opening, a third

conduit affording communication between the conduit leading to the atomizer and that portion of the conduit leading to the idling outlet, which lies between the sec-



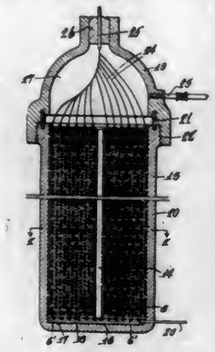
ond named calibrated opening and the idling outlet and a valve in said third conduit for closing the same after motor starting has been effected.

1,878,172. BAFFLE FOR STEAM AND WATER DRUMS. ERNEST EDWARD NOBLE, Sunderland, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 4, 1926, Serial No. 92,133, and in Great Britain Apr. 24, 1925. 2 Claims. (Cl. 122—491.)



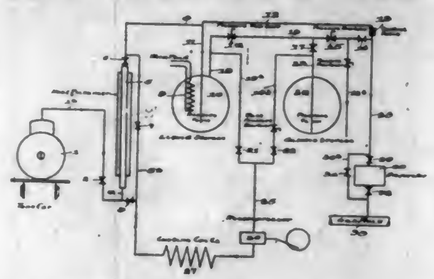
1. In a boiler drum, a baffle comprising plates spaced apart and located at different elevations, one of said plates being entirely above the normal water level in said drum, said baffle extending longitudinally of the drum and from the wall of said drum above the normal water level therein to a distance below the water level, and terminating short of the end of said drum, the spaces between the ends of said baffle and the side of the drum being closed.

1,878,173. ELECTRIC CONDENSER. EDWIN FITCH NORTHRUP, near Princeton, N. J. Filed Apr. 7, 1927. Serial No. 181,712. 14 Claims. (Cl. 175—41.)



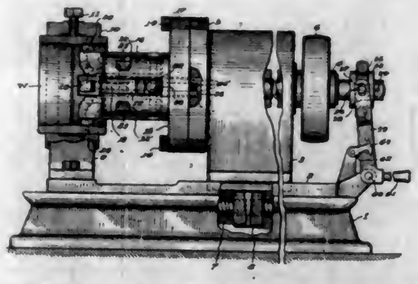
1. A heat conductive cylindrical high pressure casing, a coil condenser unit therein having two coil plate elements projecting respectively from opposite ends of the unit and spaced from one another by dielectric sheeting freely pervious to gaseous diffusion, said coil being open in the middle and externally loosely fitting the interior of the casing, a metal cooler in the bottom of the casing filling the lower end of the coil for perfect connection with the downwardly projecting plate at the end thereof and making intimate contact with the bottom of the casing and high pressure atmosphere inside the casing.

1,878,174. PROCESS AND APPARATUS FOR STORING AND UTILIZING HIGHLY VOLATILE LIQUIDS. GEORGE G. OBERFELL, Bartlesville, Okla. Filed Oct. 7, 1927. Serial No. 224,674. 3 Claims. (Cl. 196—7.)



1. A method of transferring gas enrichment gasoline and the like from one receptacle to another receptacle, including passing such gasoline under self-induced superatmospheric pressure from the first mentioned receptacle into a zone maintained at a temperature lower than the temperature of the gasoline in the receptacle from which the gasoline is being withdrawn, permitting some of the gasoline in the second mentioned receptacle to vaporize, withdrawing the vapors and mechanically compressing the same, cooling such compressed vapors and thus liquefying the same, and adding such cooled liquefied vapors to the gasoline in the zone of lower temperature.

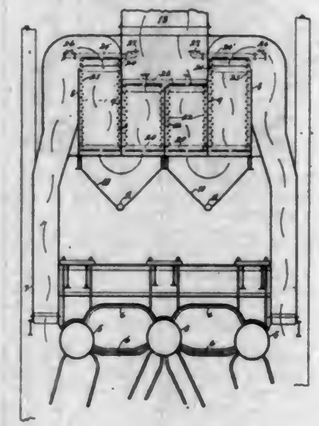
1,878,175. BORING TOOL FOR INTERNAL TAPER BORING. ERLING OYEN, Youngstown, Ohio. Filed Jan. 14, 1927. Serial No. 161,061. 2 Claims. (Cl. 77—8.)



1. In boring mechanism, a rotatable boring head having a plurality of radial slots and a central longitudinally extending channel a tool holder pivotally supported in each of said slots, a track bar polygonal in cross section extending in said channel and rotatable with the head, said bar being provided with longitudinally extending oppositely inclined bearing surfaces respectively adjacent the opposite ends of each of said holders, a lug adjacent one end of each holder adapted to bear on the adjacent inclined bearing surface of the bar, an adjusting screw adjacent the other end of each holder adapted to bear on the other adjacent but oppositely inclined bearing surface, and means operable to cause relative longitudinal movement between the bar and the

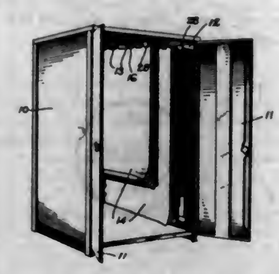
head so as to move the lug and screw of each holder over the inclined bearing surfaces respectively adjacent thereto and thereby gradually turn all of said holders simultaneously about their respetive pivots during the boring operation.

1,878,176. ECONOMIZER. JAMES W. PARKER, Ann Arbor Township, Washtenaw County, Mich., and JOHN E. BLACK, Rumson, N. J.; said Black assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 17, 1926. Serial No. 123,067. 7 Claims. (Cl. 122—421.)



1. In combination, a boiler, an outlet flue for the gases, an inner and an outer set of channels located side by side and above said boiler, fluid heaters located in the respective sets of channels, the channels of one set communicating at one end with said outlet flue and at their other ends with the respective channels of the other set, and conduits extending upwardly from opposite sides of said boiler along the outer sides of said channels for conducting gases from the boiler to the opposite ends of the last named channels.

1,878,177. MAP ROD. CARL E. PEDERSEN, San Francisco, Calif., assignor to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 13, 1927. Serial No. 219,204. 5 Claims. (Cl. 211—45.)

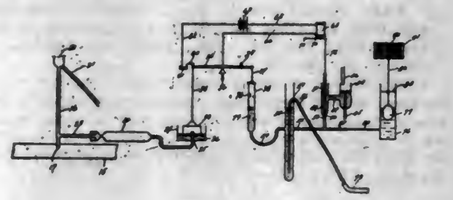


1. A rack of the character described, comprising end members, compression members for spacing said end members, tension rods alternately arranged with said end members for receiving a series of sheet supporting clips, said tension rods being more numerous than said compression members so that they will serve to support the outer edges of the filed matter engaged by said clips.

1,878,178. INSULATING COMPOSITION. LAURENCE E. POWER, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 5, 1930. Serial No. 450,064. 3 Claims. (Cl. 106—14.)

1. An insulating composition comprising a precipitate of seven parts glue, 20 parts water, five parts mica, and sodium silicate.

1,878,179. CONTROL MECHANISM. FRANCIS G. RAWLING, Chillicothe, Ohio, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 11, 1928. Serial No. 277,035. 12 Claims. (Cl. 265—44.)



1. The method of continuously analyzing a flowing gaseous mixture, which comprises continuously withdrawing a portion of the gaseous mixture, passing said portion so withdrawn through a predetermined column confined in an atmosphere of one of said gaseous constituents at the pressure of said atmosphere, continuously balancing the difference in weight of the column over the weight of a like column of said one gaseous constituent, continuously magnifying the balanced weight differences, and making a continuous indication of said weight differences in analytical units.

1,878,180. WIRE KEY FOR PLASTER AND MEANS TO SECURE SAME TO PLASTER BOARD. JOHN S. RAYNOR, Philadelphia, Pa. Filed June 2, 1927. Serial No. 195,946. 4 Claims. (Cl. 72—124.)



1. As an article of manufacture, a sheet of material, key elements for plaster on opposite faces of said sheet, and staples passing through the sheet and positively engaging said key elements on the opposite faces of said sheet with the points of the staples bent back and embedded in the sheet of material to fasten the key elements on said sheet.

1,878,181. LID FOR REFRIGERATED CABINETS. JOHN R. REPLOGLE, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 5, 1927. Serial No. 166,052. 8 Claims. (Cl. 220—24.)

1. A lid structure, for closing an opening leading to the food storage chamber in a refrigerated cabinet, comprising

a non-deformable hollow base element formed of a molded rubber composition, said base including a bottom wall ter-

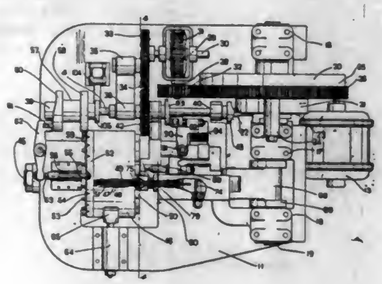


minating in a laterally flanged peripheral wall, and a sheet metal cover extending across said flange, said cover being detachably secured to said base element.

1,878,182. MANUFACTURE OF CASEIN. CHAMPLAIN L. RILEY, North Plainfield, N. J., assignor to Industrial Associates, Inc., New York, N. Y., a Corporation of New York. Filed July 12, 1928. Serial No. 292,326. 2 Claims. (Cl. 99—11.)

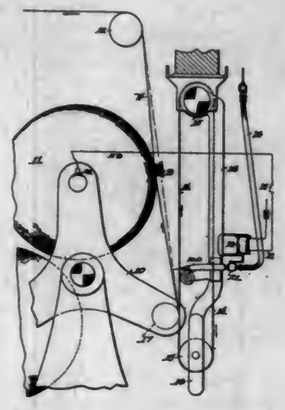
1. The method of curing casein which comprises crushing fresh washed casein curd saturated with water to produce a suspension of finely divided curd in water, spraying the suspension into a heated atmosphere to evaporate the water and continuously removing the dried casein from the zone of high temperature.

1,878,183. BOLT HEADING MACHINE. LOUIS L. ROBERTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 13, 1928. Serial No. 292,345. 4 Claims. (Cl. 219—3.)



1. In a machine for heating and forging metal blanks having a rotary blank supporting head and a drive shaft connected to rotate the head intermittently, an electrical heating device for said blanks comprising jaws associated to engage the blanks carried by the head, said jaws constituting a secondary electrode, means driven by the drive shaft and connected to the jaws to open and close them intermittently, a pin constituting a primary electrode connected to the drive shaft in a manner to be movable toward and away from said head, and means connecting the electrodes to a source of electrical current, said electrodes being timed to contact one of said blanks at the same time and between the intermittent movements of the rotary head to make an electric circuit through said blank for heating it to forging temperature.

1,878,184. PNEUMATIC WEB SEVERING DEVICE. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 15, 1927, Serial No. 233,442. Renewed Dec. 10, 1931. 5 Claims. (Cl. 242—58.)



1. The combination with means for guiding a web and means for pasting a new web roll to it, of means for projecting compressed air against the expiring end of the old web at both edges and across the web in a straight line and constituting the sole means for severing the web.

1,878,185. PROCESS FOR OBTAINING FERTILIZERS. FRITZ ROTHE and HANS BRENEK, Berlin, Germany, assignors to the Firm Rhenania-Kunhein Verein Chemischer Fabriken Aktiengesellschaft, Berlin, Germany. Original application filed June 28, 1927, Serial No. 202,156, and in Germany June 28, 1926. Divided and this application filed Apr. 17, 1928. Serial No. 270,790. 6 Claims. (Cl. 71—7.)

1. A process for obtaining fertilizers comprising heating a mixture of phosphates with silica and sodiumchloride in the presence of steam, there being present for every molecule of P_2O_5 in the mixture, an amount of silica substantially equal to and not exceeding half a molecule.

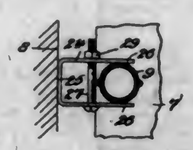
1,878,186. VENETIAN BLIND. JOEL F. RUDOLPH, Fort Thomas, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Mar. 24, 1928. Serial No. 264,372. 5 Claims. (Cl. 156—17.)



1. In a Venetian blind, a cylindrical top bar comprising a semi-cylindrical wooden section and a semi-cylindrical hollow metal section fastened together, a shaft passing through said bar and extending beyond the ends thereof, said shaft mounted upon said wooden section, brackets

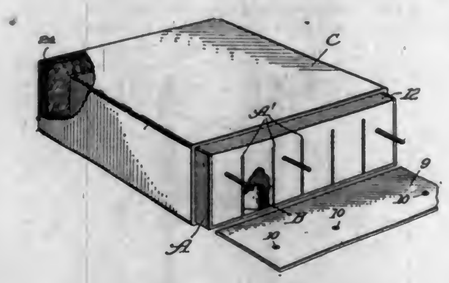
supporting said shaft, said semi-cylindrical metal section having elongated holes to permit the passage of draw ropes, pulleys suspended from said shaft and lying within said metal section, caps on the end of said bar, brake means on at least one of said caps, stop means on at least one of said caps, at least one of said caps having a hole to permit the passage of draw ropes and means for rotating said bar.

1,878,187. RADIATOR HANGER. DE WITT C. RUFF, 2d, St. Paul, Minn. Filed June 30, 1928. Serial No. 289,380. 4 Claims. (Cl. 248—17.)



1. In a radiator hanger, a wall engaging member adapted to be secured to a wall, means adapted to engage a radiator above its center of gravity for pivotally suspending the same from said wall engaging member, a separate spacing member having a side adapted to bear freely against the wall beneath said wall engaging member, gripping members integral with said side and projecting outward from the wall, said gripping members being formed with a series of perforations to receive a bolt and a bolt adapted to be selectively inserted in said perforations to adjust the spacing of the lower part of the radiator from the wall and arranged to draw said members together upon a tube of the radiator adjacent to the wall to secure said gripping member thereto, said bolt constituting an abutment for engagement with said tube.

1,878,188. DRY BATTERY. OTTO E. RUHOFF and EDGAR J. MCEACHRON, Wausau, Wis. Filed Apr. 14, 1926. Serial No. 101,945. 2 Claims. (Cl. 136—175.)



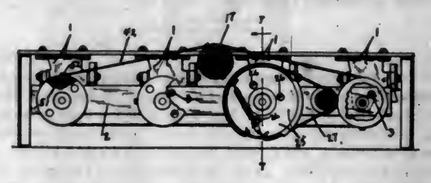
1. The method of constructing a dry-battery which comprises: coating the inner side of the bottom of a pasteboard box with a sticky compound, introducing a pasteboard egg-crate structure into said box and forcing the lower edges of the pasteboard into said coating, introducing dry-cells into the compartments thus formed with the carbon poles of said cells presented to the open side of said box, connecting said dry-cells in series, cells of a marginal row being provided with terminals which project laterally from the sides of the cells, introducing a sealing compound into the open side of said box to form a common seal for said cells in which the cell connections are embedded, slipping the assembled battery described endwise into an open-ended casing, and applying a closure to said casing which is provided with perforations through which said terminals extend.

1,878,189. CURTAIN CARRIER. HERMAN RUMPF and IRWIN RUMPF, San Francisco, Calif. Filed June 20, 1928, Serial No. 286,961. Renewed Feb. 9, 1932. 1 Claim. (Cl. 156—20.)



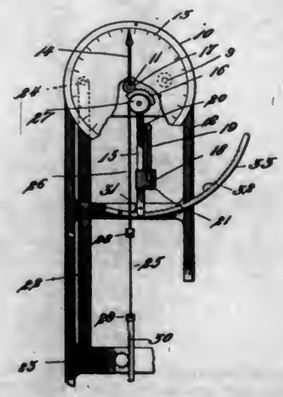
A carrier for curtains adapted to move within a divided tubular track member, and comprising a main body member and a depending hanger formed integral with the body member, said body member having a plurality of openings therein, and being offset adjacent the openings, and antifriction balls positioned in the openings of the body member and retained against accidental displacement by virtue of the offsets in said body member.

1,878,190. RADIO RECEIVING APPARATUS. THEODORE J. SCOFIELD and WILLIAM MINER, Jackson, Mich., assignors to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed July 15, 1927. Serial No. 205,938. 5 Claims. (Cl. 175—41.5.)



1. A radio receiving apparatus comprising a plurality of condensers arranged in line, and each condenser including a base, and arms extending therefrom, a subbase, means for securing the condenser base to the subbase, and a strip connected to the arms of the condensers to maintain them rigidly in pre-determined relation.

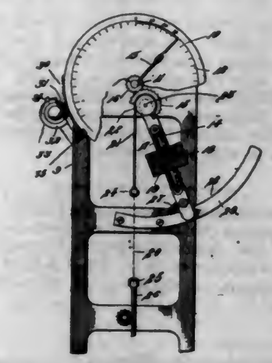
1,878,191. TESTING MACHINE. DAVID C. SCOTT, Providence, R. I., assignor to Henry L. Scott Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 8, 1927. Serial No. 166,691. 5 Claims. (Cl. 265—17.)



4. In a machine for testing the tensile strength of materials, means for exerting pull on the material to be tested, an indicator having relatively movable parts, one

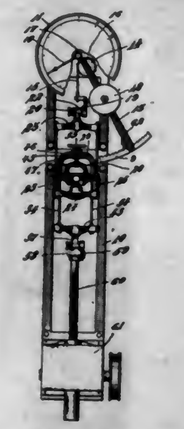
controlled by said means, for indicating the exerted pull, and means responsive to changes in atmospheric moisture content operatively connected to one of said movable parts for controlling said part to correct the reading on said indicator.

1,878,192. TESTING MACHINE. DAVID C. SCOTT, Providence, R. I., assignor to Henry L. Scott Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 8, 1927. Serial No. 166,692. 7 Claims. (Cl. 265—17.)



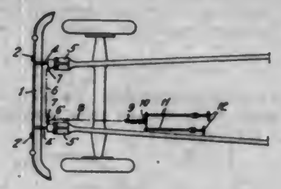
1. In the fabric tensile strength testing machine, jaw members to hold the material under test, a weighted lever connected to one of said jaw members, an indicator having relatively movable parts, means operatively connecting said lever to one of said indicator parts and means for relatively adjusting said indicator parts whereby the reading thereof may be changed to compensate for moisture content variation in the test specimen.

1,878,193. TESTING MACHINE. DAVID C. SCOTT, Providence, and FRANK A. VALENTINE, Apponaug, R. I., assignors to Henry L. Scott Company, Providence, R. I., a Corporation of Rhode Island. Filed May 23, 1927. Serial No. 193,481. 17 Claims. (Cl. 265—17.)



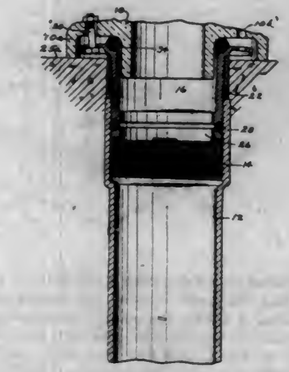
1. In a fabric-strength testing machine the combination with a plunger, of suspending means supporting the plunger for longitudinal yielding movement from a point thereabove, means for indicating the extent of such movement, and perforated clamping plates adapted to telescope over said plunger when forcibly depressed.

1,878,194. SAFETY DEVICE FOR MOTOR CARS. BORIS SILBERMANN, Lausanne, Switzerland. Filed May 28, 1927. Serial No. 195,124. 1 Claim. (Cl. 180—88.)



Apparatus of the character described comprising in combination a vehicle frame including forwardly extending side bars, brake and clutch pedals on the frame, a catcher device disposed vertically in front of the frame including a main transversely extending bumper bar having a longitudinal flange portion extending laterally from the rear face, vertical resilient uprights on the front face and adjacent the ends of the main bumper bar, upper and lower resilient cross bars connected to the lower ends of the uprights, horizontally disposed cylinders extending longitudinally from the front ends of the side bars of the frame and rigid therewith, pistons operating in the cylinders, rods extending only from the front faces of the pistons and having their opposite ends bifurcated and fastened about the flanged portion of the main bumper bar, rollers mounted on the forward ends of the cylinders, cables connected to the connecting rods and trained about the rollers and joined to each other, a pole, an extensible spring between the pole and the joined cables, other cables between the pole and the brake and clutch pedals, and means associated with the connecting rods for releasably holding the pedals in brake applying position.

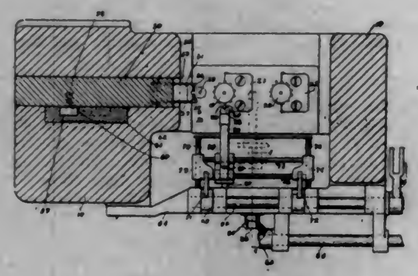
1,878,195. PLUMBING FITTING. MARTIN A. SISK, Pittsburgh, Pa. Filed July 9, 1928. Serial No. 291,244. 2 Claims. (Cl. 285—34.)



1. A plumbing fitting, for use in connecting a plumbing fixture to a pipe system, wherein it is desirable to test the system before the fixture is permanently attached, comprising a fixture-connecting nipple externally threaded to adapted it to be screwed into a pipe section of the system, an externally threaded stop ring screwed into the pipe section to provide a seat for a gasket and adapted to temporarily receive a testing cap, a gasket placed upon the ring,

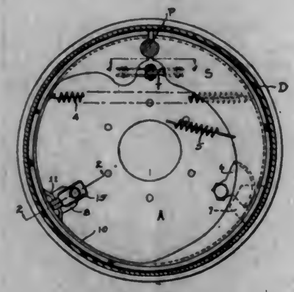
said ring and fixture nipple being so constructed and arranged that after the removal of the testing cap, the nipple can be adjusted to accommodate variations in floor thicknesses and said ring can be positioned to firmly clamp the gasket against the end of the nipple when the nipple is thus adjusted.

1,878,196. BLANK HEADING MACHINE. ROY H. SMITH, Kent, Ohio. Filed June 28, 1928. Serial No. 288,942. 3 Claims. (Cl. 10—12.)



1. In a machine for making headed blanks, a pair of parallel dies adapted to perform successive upsetting operations upon the same blank, a pair of hammers cooperating with said dies, reciprocating means moving in substantially the plane of said dies for feeding a length of material to the first die, and means moving substantially in the plane of said dies for transferring a blank from the first die to the second die, said last named means grasping said blank during ejection from the first die and releasing it after it has begun to enter the second die, and moving out of said plane during its return travel in order to clear said hammers.

1,878,197. ANTI-RATTLER. JOHN SNEED, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 13, 1928, Serial No. 269,677, and in Great Britain Feb. 6, 1928. 9 Claims. (Cl. 188—78.)



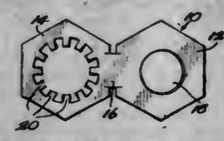
1. In a brake, an apron, a brake shoe disposed adjacent thereto, said apron having an indenture formed therein engageable with the edge of the brake shoe and having an aperture adjacent said indenture and disposed radially inward therefrom, a member having a portion extending through said aperture and extending radially outward from said aperture to said brake shoe and engaging said shoe, and means for urging said member toward said apron to hold the edge of the shoe against said apron.

1,878,198. APPARATUS FOR FREEZING FOOD PRODUCTS. JOHN G. SOUTHER, Jamaica Plain, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Dec. 27, 1928. Serial No. 328,706. 10 Claims. (Cl. 62—101.)



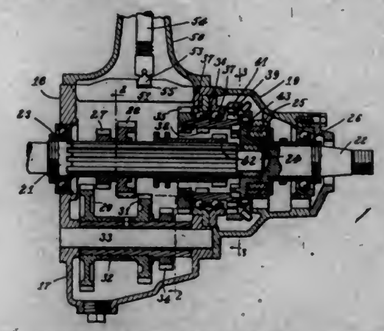
1. Apparatus for freezing food products, comprising a container having a body portion, and a cap supporting an inwardly directed deflector in spaced relation to the body of the container.

1,878,199. LOCK NUT. VICTOR R. STENGER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,247. 4 Claims. (Cl. 151—35.)



1. A lock nut comprising a pair of connected sections, said sections being folded toward each other at the point of connection, one of said sections being provided with a plurality of warped teeth for lockingly engaging the work, and one of said sections being threaded for application to a threaded member.

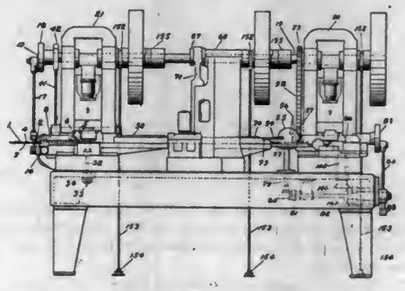
1,878,200. TRANSMISSION. CARL E. SWENSON, Rockford, Ill., assignor, by direct and mesne assignments, to Automotive Research Corporation, a Corporation of Delaware. Filed Mar. 19, 1927. Serial No. 176,621. 11 Claims. (Cl. 74—57.)



1. A transmission for motor vehicles comprising, in combination, a driving and a driven shaft in axial alignment, first and second speed gears on the driving shaft,

first and second speed counter-gears adapted to be selectively driven by said driving gears, an internal-external gear unit in driving connection with the driven shaft, means for optionally connecting the driving shaft to the internal gear of said unit or directly to the driven shaft, and means for optionally connecting the counter gears to said internal-external gear unit.

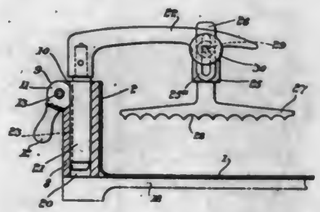
1,878,201. PUNCHING AND FORMING MACHINE. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed May 11, 1927, Serial No. 190,625. Renewed Jan. 20, 1932. 45 Claims. (Cl. 29—34.)



1. The combination with means for feeding a strip of material, of means for punching blanks from said material, means acting on each newly punched blank to cause it to move the preceding blanks forward, and inclined guide members for guiding the scrap material away from said blanks and spaced for enough apart to allow said blanks to pass between them.

26. The combination with means for feeding a strip of material, of means for punching blanks from said material, means for separating the scrap material from said blanks, means for moving said blanks forward, a press for successively indenting said blanks, means for turning the indented blanks in a horizontal plane, a rotary conveyor having means for separately engaging said blanks and turning them over in a vertical plane, a punch for forming flanges on the turned blanks, an intermittently operating rotary dial cooperating with said punch to receive and convey the formed blanks, and a knife in close proximity to said dial in the path of said blanks to shear uneven edges from said flanges.

1,878,202. DISPLAY TRAY FOR SLICING MACHINES. HENRY THOMAS, London, England, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Dec. 15, 1925, Serial No. 75,630, and in Great Britain Dec. 30, 1924. 23 Claims. (Cl. 146—217.)

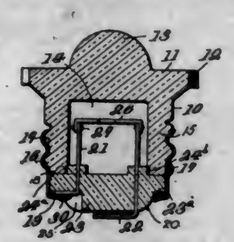


2. In a slicing machine, a substance-carrying table, a display tray arranged thereon, a movable means on said tray for positively locking the latter against removal from off the slicing machine until and unless said means is operated, a cramp on the tray for securing the substance thereon, means for adjusting said cramp towards and away from the tray, means for locking the cramp in its adjusted positions, and means for applying increased pressure to the substance by the cramp after the latter has been initially adjusted into contact with the substance.

1,878,203. FOOD PRODUCT AND METHOD OF MAKING SAME. GROVER D. TURNBOW, Davis, Calif. Filed Sept. 9, 1927. Serial No. 218,581. 7 Claims. (Cl. 99—16.)

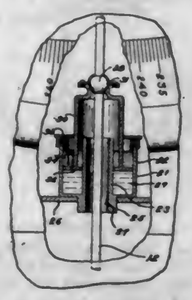
6. An agent for imparting stability and smoothness of texture to frozen food products of the type characterized by water ices and sherbets, said agent being prepared in dry powdered form, and comprising pectin and agar.

1,878,204. ELECTRIC FUSE. ALEXANDER H. TRUMBULL, Stratford, Conn., and GEORGE R. TRUMBULL, Manchester Depot, Vt., assignors, by direct and mesne assignments, to The Bulls-Eye Electric Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed May 28, 1928. Serial No. 281,086. 7 Claims. (Cl. 200—130.)



1. A fuse plug for use in electric circuits, comprising a chambered body having a chamber defining exteriorally threaded tubular wall, an insulating base member, contact members embedded therein, a shell threaded to said wall, one of said contact members contacting with said shell beneath said base, both contacts extending into the chamber and a highly fusible member connecting said contacts within the chamber, said wall having recesses therein, said base having diametrically opposed lugs fitting said recesses, and a drop of solder connecting said shell with the contacting contact member and preventing rotation of the shell.

1,878,205. WEIGHING SCALE. EDWARD F. ULRICH, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1925. Serial No. 21,478. 5 Claims. (Cl. 265—62.)



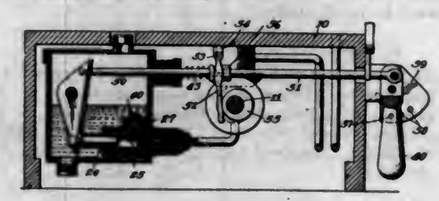
2. In a weighing scale, in combination, a weighing mechanism, a dash pot having an opening through its bottom and an upright wall surrounding said opening, a liquid in the space in the dash pot surrounding said wall and an inverted cup-shaped plunger operatively connected to the weighing mechanism and adapted to operate in the liquid in the dash pot, the plunger having means whereby the resistance to its movement in the liquid is augmented, said plunger extending over said opening and forming with said liquid a complete closure of the opening.

5. In a weighing scale, in combination, a housing having an opening, weighing mechanism enclosed in said housing, a dash pot having a plunger operating in a fluid in said dash pot and swivelly connected to the weighing mechanism, said plunger being constructed and arranged to dampen or retard the oscillations of the weighing mechanism said plunger extending over said opening and thereby acting to form a sealing means for the opening in the housing, and means on said plunger to regulate the damping action of the dash pot.

1,878,206. LIME MIXTURE. JULIUS E. UNDERWOOD and CHARLES A. CABELL, Washington, D. C., assignors to National Lime Association, a Corporation of the District of Columbia. Filed Oct. 29, 1926. Serial No. 145,097. 3 Claims. (Cl. 106—24.)

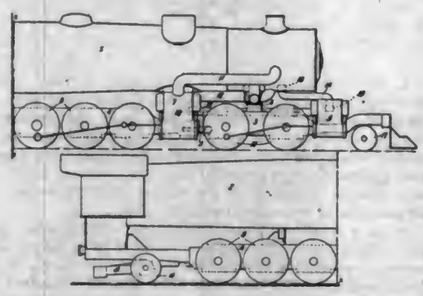
1. A composition of matter comprising hydrated lime, a carbonate, a sulphate, sugar and an oil treated aluminous material.

1,878,207. LUBRICATING MECHANISM FOR SLICING MACHINES. FRANCISCUS L. VAN WEENEN, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 16, 1927, Serial No. 184,202, and in Germany May 22, 1926. 16 Claims. (Cl. 184—6.)



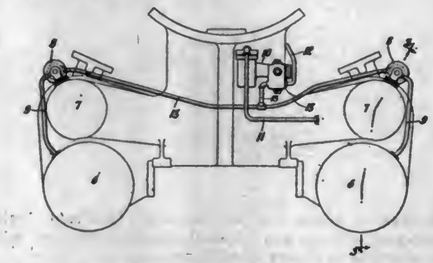
1. A slicing machine comprising a reciprocating table, a guide for said table, mechanism for supplying lubricant to said guide, and automatic means controlled by said machine for preventing operation of said mechanism when said table is in certain positions on said guide.

1,878,208. LOCOMOTIVE. HARRY S. VINCENT, Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1927. Serial No. 243,261. 5 Claims. (Cl. 105—175.)



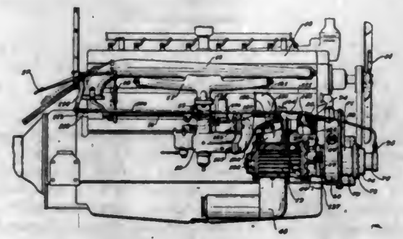
1. In an articulated locomotive having a total of not less than eight pairs of main driving wheels, a main frame having six pairs of the main drivers mounted therein, and a supplemental frame articulated to the main frame and having other pairs of main drivers mounted therein, the number of pairs of drivers mounted in said supplemental frame being less than the number mounted in the main frame.

1,878,209. LOCOMOTIVE AUXILIARY PORT CONTROLLING MEANS. HARRY S. VINCENT, Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,834. 5 Claims. (Cl. 121—142.)



1. In a limited cut-off locomotive, the combination of a supplementary passage for supplying steam to start the locomotive, a valve controlling said passage, a motor device for closing said valve, and a pilot device subject to the control of the locomotive exhaust pressure for actuating said motor device to close said valve when said exhaust pressure rises above a predetermined point.

1,878,210. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 8, 1928. Serial No. 252,718. 5 Claims. (Cl. 123—119.)

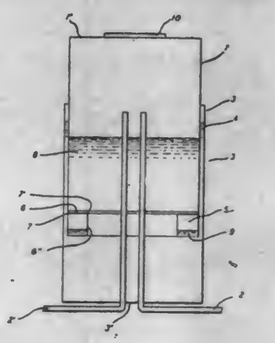


1. In an internal combustion engine, in combination, a supercharger, a carburetor, a throttle valve for the carburetor, a clutch between the supercharger and engine, means actuated by the pressure of the engine lubricant for operating the clutch, means controlling the flow of lubricant to said pressure actuated means, and a single manually operable means for causing actuation of both said controlling means and said throttle valve.

1,878,211. STORAGE GASOMETER. LEE G. VOORHEES, Long Island City, N. Y., assignor to Axweld Acetylene Company, a Corporation of West Virginia. Filed July 14, 1927. Serial No. 205,763. 5 Claims. (Cl. 48—176.)

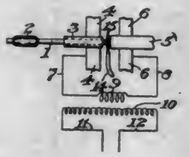
1. In a storage gasometer, the combination of a tank adapted for holding a liquid; a bell adapted for partial immersion in said liquid and also for containing a gas upon which said bell exerts a pressure; said gasometer being provided with suitable means including gas inlet and outlet conduits for varying the quantity of gas within said bell and thereby its degree of immersion;

and a submerged chamber connected to said bell and adapted to contain a gas in communication only with said liquid through an opening provided in the wall of



said chamber below said gas through which said liquid compresses said gas and varies its buoyant effect on said bell according to its degree of immersion.

1,878,212. PRODUCTION OF ELECTRICAL LEAD-IN DEVICES. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,320. 5 Claims. (Cl. 219—10.)



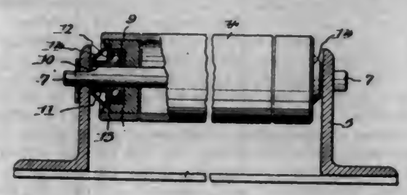
4. The method of producing a metal coating on a lead-in wire which has been sealed into a vitreous body which comprises placing a metal sleeve on the lead-in wire with the end of said lead-in protruding a small amount, applying a welding heat to the exposed end of said lead-in, and simultaneously maintaining the portion of said lead-in adjacent to said vitreous body at a low temperature.

1,878,213. METAL WHEEL. GEORGE WALTHER, near Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 8, 1927. Serial No. 223,512. 8 Claims. (Cl. 301—13.)



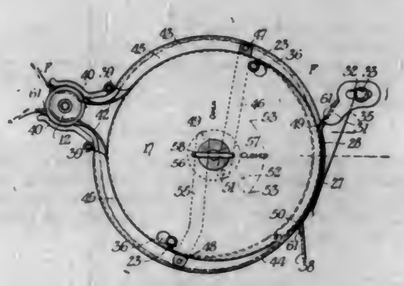
1. A metal wheel provided with two tire rim seats, a tire rim for each seat, a spacer between said rims, cam means actuated by the spacer, when moved circumferentially, to force the inboard tire rim to its true or home position upon its seat and clamping means for holding the outboard rim in place upon its seat.

1,878,214. BEARING GUARD FOR CONVEYER ROLLERS. PETER C. WEGO, St. Paul, Minn. Filed Sept. 24, 1926. Serial No. 137,498. 1 Claim. (Cl. 308—20.)



A conveyer roller having in combination, side rails, a rod supported on said rails, a roller body mounted on said rod, said body having an end recess for a bearing, a sleeve slidably fitting said rod in said recess, the outer end of said sleeve projecting to transmit end thrust to one of said rails, a bearing for said body on the inner end of said sleeve in one of said recesses, said sleeve having an annular depression and said bearing having elements to engage said sleeve in said depression to prevent longitudinal movement of said body relative to said sleeve, a guard having a collar portion fitting snugly on said sleeve and an annular rim portion projecting in spaced relation to said body and forming therewith an external, annular opening into said recess, said opening being protected from the entry of foreign matter by an overhanging end on said body and an integral, offset projecting from said collar portion and engaging said sleeve to positively retain said guard against movement toward said roller body.

1,878,215. SELF-THREADING MOTION PICTURE APPARATUS. HOWARD C. WELLMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 4, 1925, Serial No. 73,121. Renewed Dec. 2, 1931. 10 Claims. (Cl. 88—17.)



1. In a motion picture apparatus, a film gate, a sprocket for feeding film toward and from said gate, loop forming guides for directing film from the sprocket to the gate and from the gate to the sprocket, each of said guides being movable and having an operative position and an inoperative position for such purpose, and a unitary control for moving the guides simultaneously from inoperative to operative position.

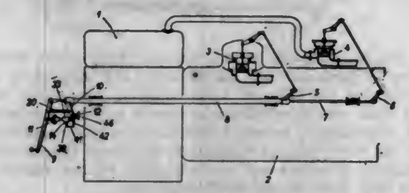
9. In a motion picture apparatus, a film gate, means for propelling a film endwise toward said gate, guides having extended guiding surfaces for directing to and from said gate the lead end of a film so propelled, said guides being movable and having operative and inoperative positions for such purposes and positive connections between said guides whereby both are positively and simultaneously moved from either position to the other.

1,878,216. SCREW CUTTING DIE. FRED W. WELLS, Greenfield, Mass. Filed Aug. 15, 1928. Serial No. 299,858. 2 Claims. (Cl. 10—118.)



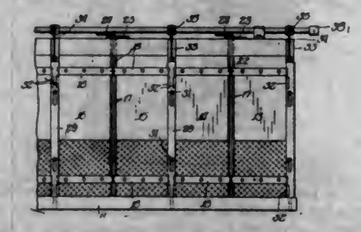
1. A screw cutting die comprising a flat integral ring-like body portion formed with a central cone-shaped opening tapering from its bottom face to the upper face of said body portion, a plurality of integral lands formed as a part of said body portion extending from its bottom fae and projecting above its upper face and inwardly toward the center of said cone-shaped opening and having their outer upper edges above the upper surface of said body portion inclined or tapering upwardly from the outer annular surface of said body portion, and a plurality of thread-forming teeth formed on the inner edge of each of said lands from the top of said lands, to the bottom face of said body portion.

1,878,217. APPARATUS FOR REGULATING THE OPERATION OF STEAM GENERATING PLANTS, ESPECIALLY FOR LOCOMOTIVES. FRIEDRICH WEMPE, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Sept. 24, 1926, Serial No. 137,423, and in Germany Oct. 8, 1925. 9 Claims. (Cl. 60—39.)



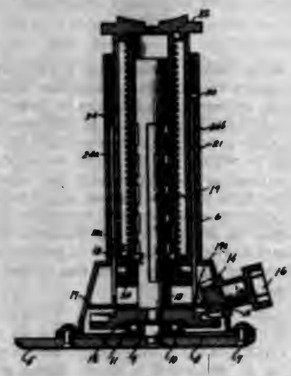
1. The combination with two steam generators of an apparatus for governing the action of regulators controlling the supply of steam from said steam generators, comprising two shafts, one located within the other, separate operative connections from the individual shafts to the respective regulators, a connection between said shafts to cause them normally to move in unison, a latching device for normally preserving said connection, and a stationary abutment cooperating with said latching device to render said connection inactive.

1,878,218. STARTING CAGE FOR RACING ANIMALS. JOHN F. WHITE, Chicago, Ill., assignor to Harry B. Staver, Chicago, Ill. Filed Feb. 9, 1927, Serial No. 166,942. Renewed May 28, 1932. 8 Claims. (Cl. 119—15.5.)



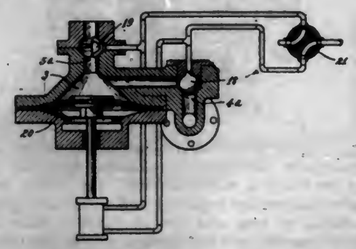
1. In an apparatus of the character described, a plurality of separate doors pivoted to swing forwardly in opening, spring means tending to swing the doors open, and a shiftably mounted bar arranged to overlap portions of the doors adjacent the free edges of the latter to prevent the doors from swinging open, said bar being shiftable into a position wherein it does not overlap said door portions, whereby to release the doors and permit the spring means to swing the latter open.

1,878,219. LIFTING JACK. GEORGE W. WIARD, Detroit, Mich., assignor, by direct and mesne assignments, to The Buckeye Jack Manufacturing Company, Alliance, Ohio, a Corporation of Ohio. Filed Nov. 1, 1926. Serial No. 145,430. 11 Claims. (Cl. 254—98.)



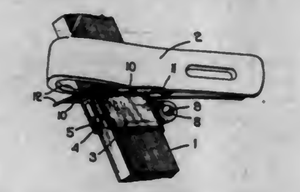
1. A device of the character described including a tubular outer casing, a tubular inner member adapted to telescope therein, and connected thereto for partial rotation relatively to the casing, a traveler nut and jack-seat carried by the inner member, a hollow screw threaded in the nut, a vertical spindle extending into said hollow screw, means for driving said spindle, and means for adjustably connecting the spindle and screw for simultaneous rotation.

1,878,220. PUMPING OF RUBBER LATEX AND THE LIKE AND APPARATUS THEREFOR. HARRY WILLSHAW, WALTER GEORGE GORHAM and ROGER FREDERICK LEE, Birmingham, England, assignors to American Anode, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1928, Serial No. 257,691, and in Great Britain Mar. 2, 1927. 5 Claims. (Cl. 103—150.)



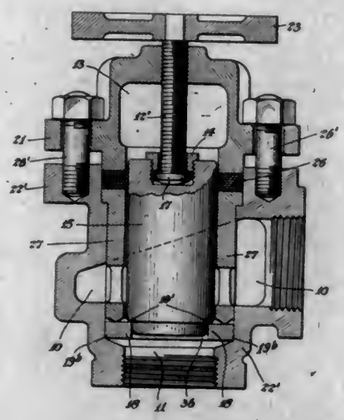
1. Means for pumping aqueous dispersions which are coagulated by friction, comprising a pump body, a resilient diaphragm constituting one wall of the pump body, means engaging the diaphragm for repeatedly changing the internal volume of the pump body, and inlet and outlet valves comprising valve chambers, inflatable members within the valve chambers adapted to obstruct the fluid passage when inflated and leave a passage for the fluid when deflated, and means for successively inflating and deflating the said members in timed relationship with the changes in the internal volume of the pump body.

1,878,221. LUG STRAP HOLDER. HERBERT E. WILSON, Antrim, N. H., assignor to The H. E. Wilson Company, Inc., Antrim, N. H., a Corporation of New Hampshire. Filed Nov. 28, 1930. Serial No. 498,571. 3 Claims. (Cl. 139—154.)



1. A lug strap holder comprising a two-part member with the two parts thereof hinged together with a readily separable hinge connection and means to clamp said member to the picker stick, each part of the member having at its upper edge a horizontally-extending lug strap supporting flange on which the lug strap is adapted to rest, each flange extending both forwardly and rearwardly of the picker stick with the forward and rear extensions bent downwardly slightly, said forward extension providing a support for the lug strap when the picker stick is in its rearward position and the rearward extension supporting the bow end of the lug strap when the picker stick is in its forward position.

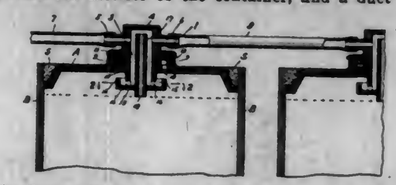
1,878,222. VALVE AND THE LIKE. WYLIE G. WILSON, Elizabeth, N. J. Filed Oct. 4, 1927. Serial No. 223,926. 25 Claims. (Cl. 251—27.)



11. In a valve, a valve-seat ledge comprising an annulus of substantially rectangular cross section radially, a valve member for coacting with such seat, and means including said valve member for engaging and pressing circumferential portions of said annulus on opposite faces and at diagonally opposite points to impart a cross-axial deflection to the annulus, to contract the opening therein about said member; said annulus being of obdurate material.

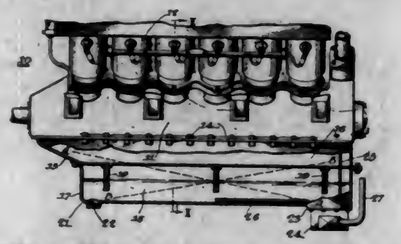
1,878,223. FILLING DEVICE FOR BATTERY CELLS. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed May 5, 1928. Serial No. 275,287. 8 Claims. (Cl. 136—162.)

1. In a filling device for a liquid container having a closure, the combination of a filling passage extending through the closure, an inlet and an outlet duct with which said passage communicates at the top, a liquid seal element through which said passage communicates at the bottom with the interior of the container, and a duct com-



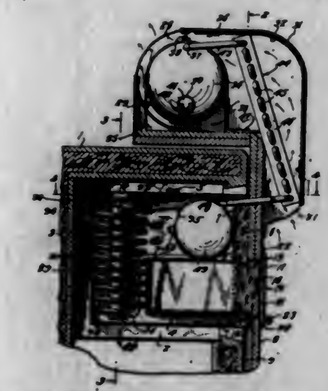
municating at its lower end with the interior of the container below the level of the liquid seal element and having at its upper end communication with the external air.

1,878,224. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 26, 1925. Serial No. 58,681. 6 Claims. (Cl. 184—6.)



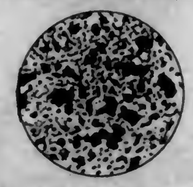
1. The combination in an internal combustion engine having a crankcase and an oil sump therefor, of an oil reservoir, a plurality of open conduits connecting said sump with said reservoir and adapted to drain the sump when the engine is steeply inclined, and a pump associated with the reservoir and adapted to supply oil therefrom to the engine at any angle of inclination of the engine at which said conduits will drain the sump.

1,878,225. REFRIGERATING APPARATUS. LEONARD KAY WRIGHT, Jackson Heights, Long Island, N. Y. Filed Jan. 4, 1928. Serial No. 244,445. 4 Claims. (Cl. 62—118.)



2. In a refrigerating apparatus, a refrigerating compartment, at one side of the compartment a tank adapted to receive a refrigerant, at the opposite end of the compartment a well connnected with the tank by a fluid line, and an evaporating coil adjacent the well and supplied with a fluid from the well.

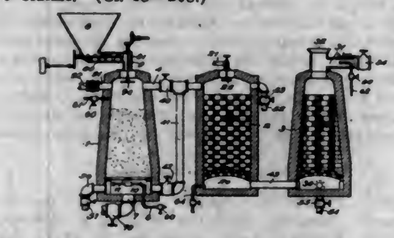
1,878,226. PROCESS OF HEAT TREATING IRON SULPHIDE MATERIAL. SAMPSON W. YATES, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Apr. 4, 1928. Serial No. 267,309. 6 Claims. (Cl. 148—3.)



8. A process of obtaining sound castings of a material comprising ferrous sulphide, which comprises casting said material and allowing it to cool rapidly while freezing to a temperature above 1300° F., at the center, then transferring the casting to a heating zone and there maintaining it at a constant temperature higher than 1000° F. but below its liquefaction point for about two hours, then cooling said casting evenly to room temperature in about one hour.

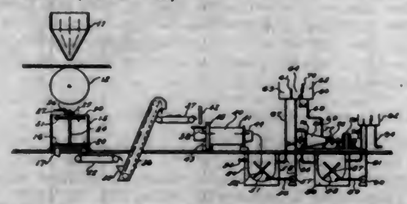
6. A sound casting of a material consisting essentially of ferrous sulphide, said casting having as the result of a heat treatment a tensile strength at least 675 pounds per square inch.

1,878,227. PROCESS OF MAKING CARBURETED WATER GAS. DANIEL J. YOUNG, Tacoma, Wash., assignor to Young-Whitwell Gas Process Company, Tacoma, Wash. Filed Mar. 26, 1926. Serial No. 97,603. 5 Claims. (Cl. 48—208.)



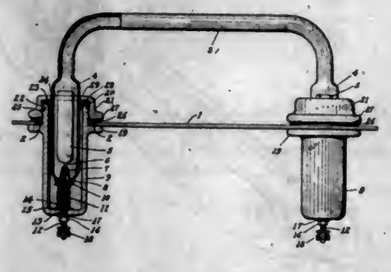
5. An improvement in the manufacture of carbureted water gas, carried out in a plant comprising a single generator having a bed of solid incandescent fuel, a single carburetor and a single superheater; which improvement comprises the step of introducing a gas having a large nitrogen content into the plant, superheating the gas and passing it through the fuel bed of the generator, whereby combustible gas is produced, and withdrawing the resulting combustible gas directly from the generator.

1,878,228. PAPER MANUFACTURE. WALTER J. ZIMMERMAN, Dayton, Ohio, assignor to Mead Paperboard Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 16, 1928. Serial No. 299,982. 8 Claims. (Cl. 92—20.)



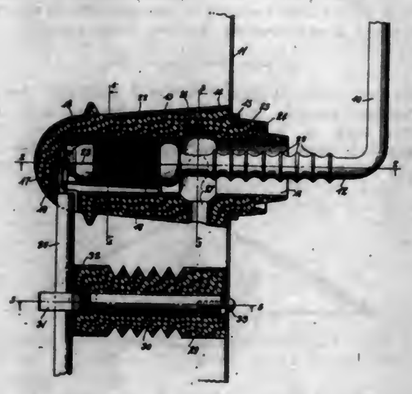
1. In the manufacture of pulp, the method which comprises cooking fibrous material with an incomplete chemical cooking treatment to soften the fibrous material without pulping thereof, whereby a cooked material of characteristics varying substantially from a more completely cooked material or soft cook to a less completely cooked material or hard cook is produced, mechanically disintegrating the softened and unpulped material, mechanically refining the disintegrated material, and coordinating the disintegrating treatment with the refining treatment in accordance with the character of the cooked material, by providing a more rigorous disintegrating treatment and a less rigorous refining treatment for a hard cook, and a less rigorous disintegrating treatment and a more rigorous refining treatment for a soft cook.

1,878,229. FIXTURE FOR VACUUM TUBE LIGHTS. LEO L. BECK, Linden, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 27, 1926. Serial No. 91,014. 7 Claims. (Cl. 173—328.)



1. A luminous gas discharge tube mounting comprising, in combination, a socket adapted to receive within it a portion at least of the said tube, a cap for said socket provided with an opening adapted to receive a tube, means cooperating with said socket and cap for normally securing said tube against longitudinal movement in said socket and cooperating means on the socket and cap for securing the mounting to a supporting member.

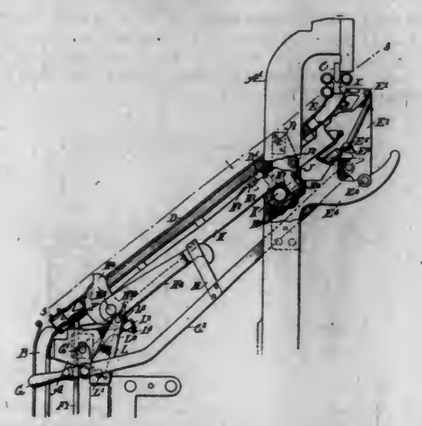
1,878,230. LUMINESCENT SIGN. MELVIN G. MORRIS, Tampa, Fla., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed July 14, 1928. Serial No. 292,762. 10 Claims. (Cl. 176—122.)



7. In a luminescent sign, an insulator having a central bore extending inwardly from one end thereof, a contact member within said bore, a tube having one end portion

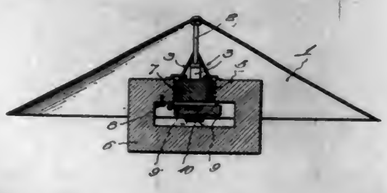
supported in said bore, an electrode on the exterior of said tube end engaging said contact member, and means formed in said insulator between the end thereof and said electrode for draining water or other moisture from the interior of said insulator.

1,878,231. TYPOGRAPHICAL COMPOSING AND DISTRIBUTING MACHINE. HAROLD A. BURT, St. Albans, and JOHN H. HILPMAN, Hollis, N. Y., assignors to Mergenthaler Linotype Company, a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,810. 20 Claims. (Cl. 199—46.)



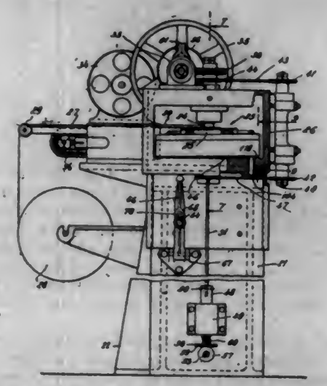
1. In a typographical composing and distributing machine, the combination with a main frame designed to support a magazine unit for movement rearwardly and downwardly about an axis located at or near the center of said unit, of means for adapting the main frame to give support to a magazine unit movable upwardly about an axis located at or near the upper end of the magazine unit, said magazine unit comprising a base frame and a magazine mounted thereon and slidable off the same in a forward direction, as well as a pair of rotary cams journaled in the base frame at or near its lower end to effect the upward swinging thereof, and said means comprising a pivot rod mounted in the main frame for the upper end of the magazine base frame, and a pair of rollers also mounted in the main frame and with which the rotary cams on the base frame engage.

1,878,232. SOUND REPRODUCING DEVICE. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,540. 7 Claims. (Cl. 179—15.5.)



1. In a sound reproducing device the combination of a diaphragm, electromagnetic means for actuating said diaphragm, and movable electromagnetic means adjacent said first named means for automatically governing the intensity of the sound reproduced.

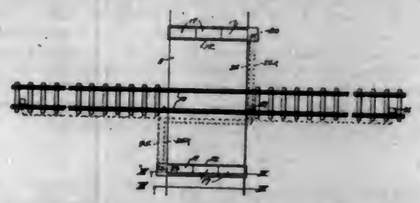
1,878,233. COILING MACHINE AND METHOD OF WINDING COILS. EDWARD A. DEWALD, Massillon, Ohio, assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1929. Serial No. 403,193. 24 Claims. (Cl. 153—64.5.)



1. The method of winding metallic ribbon edgewise to form a coil which comprises gripping the sides of the ribbon in a narrow region adjacent the edge which is to be on the inside of the coil, and carrying said gripped portion edgewise about a core form while restraining the unwound portion of the ribbon against rotation and while confining the outer ungripped sides of the ribbon to prevent the buckling thereof.

6. In a coil winding mechanism the combination of a unitary rotary winding head, a coacting sectional rotary winding head, means for guiding ribbon therebetween, and means for removing a portion of the sections of the sectional head from coacting with the unitary head during a part of each revolution of the winding mechanism to permit the coil to pass beyond the sectional winding head.

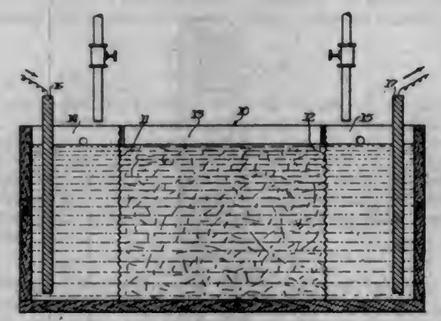
1,878,234. CROSSING GUARD. GLENN W. GOODMAN, deceased, Memphis, Tenn., by William B. Rosenfield, executor, Memphis, Tenn. Filed Apr. 27, 1931. Serial No. 533,023. 10 Claims. (Cl. 39—6.)



10. A guard for a crossing, comprising a bumper disposed across a highway approach to said crossing below the surface thereof and adapted to be elevated above said surface, means for exerting pressure to raise said bumper and for releasing said pressure, means connected to said bumper for restraining the raising speed thereof, and means for decreasing such restraining action at a predetermined point.

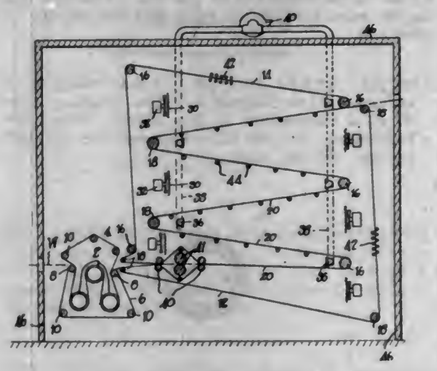
1,878,235. ELECTRODIALYSIS. ROSS AIKEN GORTNER, St. Paul, and WALTER F. HOFFMAN, Cloquet, Minn., assignors to Northwest Paper Company, Cloquet, Minn., a Corporation of Minnesota. Filed Aug. 20, 1928. Serial No. 300,662. 6 Claims. (Cl. 204—1.)

1. The method of removing impurities from chemical wood pulp which comprises subjecting an aqueous suspension of said pulp in an electrodialysis apparatus to the action of an electric potential to form a current through the mass, the pulp being present in sufficient quantity to provide towards the completion of dialysis a major portion of the current along a fiber channel



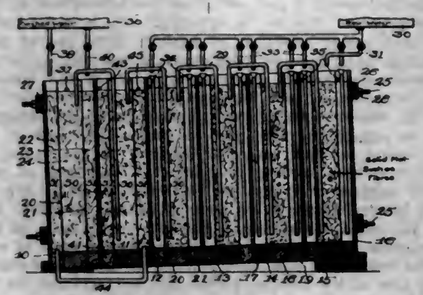
and a minor portion in a water channel, permitting impurities to migrate away from the mass, restraining movement of the pulp, and restraining movement of the liquid around electrodes from entry into the suspending liquid about the pulp.

1,878,236. PAPER MAKING. COURTLANDT B. GRIFFIN, Longmeadow, Mass., assignor to Carew Manufacturing Company, South Hadley Falls, Mass., a Corporation of Massachusetts. Filed July 7, 1930. Serial No. 466,152. 4 Claims. (Cl. 34—48.)



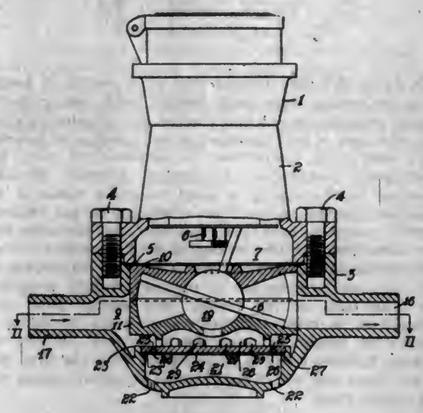
1. An apparatus for continuously drying a web of paper comprising in combination, rolls spaced apart one above the other to form separate groups, which groups are spaced from one another, endless felts having superposed portions extending back and forth between the rolls of said groups to form runs extending from one group to the other, the groups of rolls being arranged so that adjacent runs are in non-parallel relation forming converging passageways therebetween, means at the entrances to said passageways for directing warm air thereinto and means at the opposite ends of said passageway for withdrawing air therefrom, a plurality of rolls beneath said runs serving as the sole support therefor between the rolls of said groups.

1,878,237. ELECTRICAL PURIFICATION OF WATER. WALTER F. HOFFMAN, Cloquet, and ROSS AIKEN GORTNER, St. Paul, Minn., assignors to The Northwest Paper Company, Cloquet, Minn., a Corporation of Minnesota. Filed Apr. 24, 1930. Serial No. 446,845. 18 Claims. (Cl. 204—25.)



1. The method of purifying water which comprises flowing water through a series of electrodialysis cells through a continuous mass of fibrous material contained between the diaphragms of the cells.

1,878,238. FLUID METER. ABRAM G. HOLMES, Pittsburgh, Pa. Filed May 14, 1930. Serial No. 452,277. 9 Claims. (Cl. 73—98.)

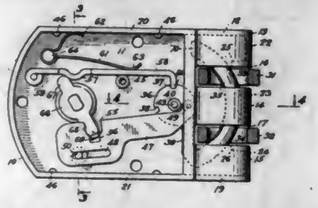


1. The combination in a water meter having a housing and a measuring chamber therein, of an annular shoulder formed on the interior of the housing bottom, a breakable plate supported on said shoulder and forming a water-tight joint therewith, and an open frame for supporting said chamber on said plate in spaced relation thereto so as to provide a water chamber between said plate and the bottom of said measuring chamber.

1,878,239. DOORLOCK. JOHN HOLTZMAN, New York, N. Y. Filed Nov. 28, 1928. Serial No. 322,826. 12 Claims. (Cl. 70—14.)

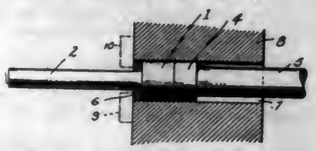
1. In a door lock, the combination of a casing having a cover plate, a keeper, a pair of parallel lugs each having an opening therein projecting from said keeper, extensions on said casing separated by a pair of parallel spaced openings therebetween, said openings being arranged to straddle the lugs of the keeper upon the clos-

ing of the door, a curved bolt rotatably mounted in said casing and adapted to pass through the opening of the keeper and into said extensions in the locked position thereof, a disc integrally connected to said bolt, a removable pin passing through said disc on which said bolt is mounted, said pin having one of its ends mounted in the casing and the other end mounted in the cover plate, said disc having a pair of spaced notches formed on the circumference thereof, a spring-pressed lever mounted in said casing arranged to register with one of said notches at a time to maintain said bolt in one of its extreme positions, a post projecting from the interior of the casing, a crank having a pair of slots therein pivotally connected to said disc, one of said slots arranged to be engaged by said post to guide said crank in its movement, a knob rotatably mounted in the casing, a bell-crank-lever secured to said knob, one arm of said lever adapted to engage the lever and the other arm of the bell-crank-lever being bent to engage the other slot of the crank for actuating the bolt, and a pair of key controlled arms mounted on the cover plate, one of said arms being bent and being shorter than the slot-engaging arm of the bell-crank-lever to pass thereover for releasing the bolt, the other of said key-controlled arms arranged to enter the second slot of the crank for transmitting reciprocatory motion to the crank for rotating the bolt in both directions.



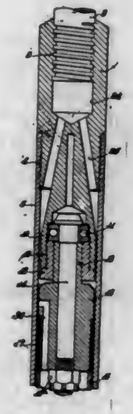
9. In a lock, the combination of a casing, a keeper, lugs projecting from said keeper, said casing having spaced openings at one end thereof and adapted to straddle said lugs, a bolt mounted in said casing to interlock with said lugs, mechanism to operate said bolt, said mechanism comprising a rocking member pivotally mounted in the casing, a lever rotatably mounted and operable from one side of the casing, a second lever coaxially mounted with the first one and operable from the other side of the casing, a knob mounted on one side of the casing to rock the first lever, to operate the bolt, key means arranged to turn the second lever from the other side of the casing, said second lever being adapted to be rotated through a complete revolution to engage the rocking member and to actuate the bolt, said rocking member being in engagement with the first lever at all times and out of engagement at certain times with the second lever.

1,878,240. FABRICATING MAGNESIUM. JOHN E. HOY, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 29, 1928. Serial No. 281,548. 12 Claims. (Cl. 29—156.8.)



1. In a method of fabricating articles of magnesium, the steps which consist in casting a billet of said metal, then extruding said billet to form a billet of uniform cross sectional area, then working and shaping said billet into approximately its final form by compression.

1,878,241. CORE DRILL. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 7, 1929. Serial No. 345,110. 12 Claims. (Cl. 255—72.)



3. A core barrel comprising an outer tube, an annular core cutting bit carried thereby, a core lifter carried by said bit, an inner core receiving tube arranged concentrically within and spaced from said outer tube and having its lower end terminating above the core lifter, and means for conducting fluid through the space between the inner and outer tubes past the core lifter and through the bit to the bottom of the drill hole including passages formed in the lower end of said inner tube and connecting the space between the tubes with the interior of said inner tube.

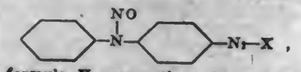
1,878,242. TUBE. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 10, 1928, Serial No. 318,351. Renewed Dec. 12, 1931. 4 Claims. (Cl. 257—262.)



2. In a tubular heat exchanger adapted as a part of a furnace wall to transmit to a contained fluid the heat received radiantly from fuel burning in the furnace; said tubular heat exchanger having a metallic inner part in contact with the contained fluid; and a composite outer structure exposed to radiant heat from the burning fuel; said outer structure comprising a continuous body of metal projecting from the inner part and constituting circumferentially arranged metallic spacers, and refractory materials contacting with the inner part and located between the spacers, said refractory materials being of greater thermal resistance than the material of the remaining structure, thereby preventing overheating of the exchanger metal and contributing to higher furnace temperatures.

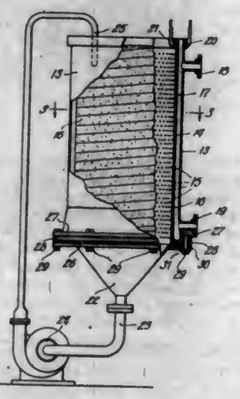
1,878,243. PROCESS FOR MANUFACTURING AZODYESTUFFS. LEOPOLD LASKA, ARTHUR ZITSCHER, WILHELM CHRIST, and ADOLF PETZOLD, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1928, Serial No. 318,993, and in Germany Dec. 13, 1927. 35 Claims. (Cl. 260—95.)

1. A process which comprises combining an N-nitroso-diphenylamine-4-diazonium salt of the general formula:



in which formula X means the acid residue of the salt and the two benzene nuclei may contain halogen-, alkyl-, oxalkyl- or oxarylgroups, with an arylamide of 2.3-hydroxynaphthoic acid, the aryl residue of which is of the benzene of naphthalene series and the naphthalene nucleus of which may contain a halogen, and splitting off the nitrosogroup from the molecule of the azodyestuffs thus formed.

1,878,244. ELECTROLYTIC TREATMENT OF MANGANESE BEARING MATERIAL. N ARTHUR LAURY, Rockville Center, N. Y., assignor to John C. Wiarda & Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 8, 1927. Serial No. 238,495. 3 Claims. (Cl. 204—9.)



1. The method of treating manganese-bearing ore which comprises subjecting the ore to the action of a cathode in the presence of sulphuric acid to form a manganous sulphate solution, and separating the solution from the insoluble portion of the ore.

1,878,245. CARBON REMOVER. CLAUDE R. MATTHIS, Corvallis, Oreg. Filed July 27, 1929. Serial No. 381,673. 2 Claims. (Cl. 87—5.)

2. A carbon-remover consisting of the following ingredients in approximately the following proportions: oil of cedar wood, ten per cent; acetone, fifty per cent; benzol, sixteen per cent; alcohol, twenty-four per cent; and naphthalene, one pound to each six gallons of the liquid.

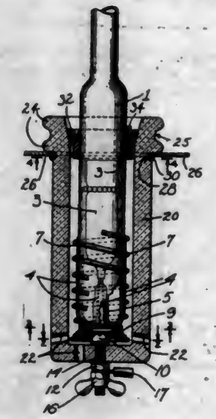
1,878,246. PROCESS OF SEPARATING IRON HALIDES FROM ALUMINUM HALIDES. CLAUDE G. MINER, Berkeley, Calif. Filed Jan. 3, 1929. Serial No. 330,153. 15 Claims. (Cl. 23—96.)

WITHDRAWN

1. The process of separating iron chloride from a mixture containing iron chloride and aluminum chloride which comprises bringing said mixture into reactive chemical relationship with carbon and an aluminous material whereby the iron chloride is decomposed forming iron and additional quantities of aluminum chloride.

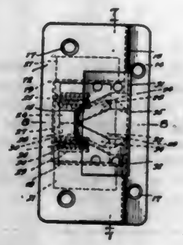
13. The process of treating an iron halide for forming an aluminum halide which comprises reacting upon the iron halide at an elevated temperature with an aluminous material in the presence of carbon.

1,878,247. FIXTURE. LEO L. BECK, Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 26, 1930. Serial No. 477,969. 2 Claims. (Cl. 176—126.)



1. A luminescent tube electrode contact comprising a lead wire which is sealed in the tube envelope and connects at one end with an internal electrode in said tube, the other end of the lead wire being bent back along the external surface of the tube and held in that position with a spiral spring cap which fits over the end of the tube.

1,878,248. ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 24, 1930. Serial No. 504,515. 8 Claims. (Cl. 16—85.)



1. In an anti-rattle device for doors, a socket member, and a wedge member adapted to be engaged therewith, one of said members comprising a pair of independently movable opposed elements adapted to be moved laterally through engagement of the other member therewith, resilient means adapted to oppose said lateral movement, means adapted to prevent vertical movement of said elements, means in association with said members, whereby one of said members is forced in a lateral direction transverse to said lateral movement of said laterally movable elements.

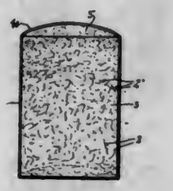
1,878,249. SYNTHETIC RESIN AND METHOD OF MAKING THE SAME. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 21, 1927. Serial No. 227,870. 18 Claims. (Cl. 260—2.)

1. A diphenylolpropane-ketone resin being soluble in benzene, acetone and alcohol.

8. Process of producing a synthetic resin comprising reacting a crystallizable condensation product of a ketone and phenol with a ketone in the presence of an acid catalyst until condensation takes place.

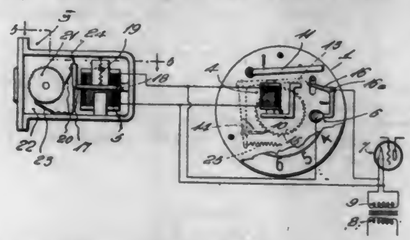
14. Process of producing a resin comprising reacting equi-molecular proportions of phenol and acetone in the presence of an acid catalyst.

1,878,250. CLEANER. ARTHUR L. PAIMEAU, Philadelphia, Pa. Filed Nov. 10, 1928. Serial No. 318,375. 5 Claims. (Cl. 87—23.)



1. A cleaning or polishing device of the character described including an impregnated interstitial body portion having a working face, and an abradable, impervious retaining cover around the body having an edge adjacent said face adapted to wear down as said face wears.

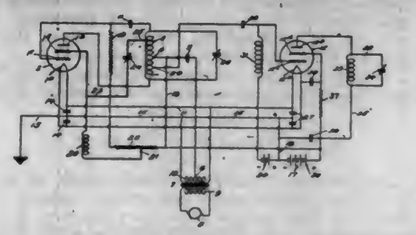
1,878,251. ELECTRON TUBE APPARATUS. CORRIE F. RUDOLPH, Washington, D. C. Filed Mar. 8, 1930. Serial No. 434,282. 10 Claims. (Cl. 250—27.)



1. In a system for measuring the effective life of electron tubes in combination with a cathode circuit of an electron tube, an electric clock, means in said electric clock for producing a characteristically timed succession of impulses, and an electrically driven counter mechanism electrically connected with said means for indicating the total time interval during which the cathode circuit of the electron tube is energized.

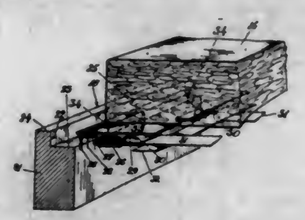
1,878,252. HIGH FREQUENCY TRANSMISSION SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,935. 8 Claims. (Cl. 250—36.)

1. In a high frequency transmission system, a master oscillator circuit, a power amplifier circuit, said circuits each including a tetrode, input and output circuits interconnecting the electrodes of said tetrodes, a resonant coupling circuit disposed between the circuits of said master oscillator and the input circuit of said power amplifier, a resonant circuit connected with the output of said power amplifier, and means connecting one of the electrodes of the tetrode constituting said master oscillator with a point in said resonant coupling circuit



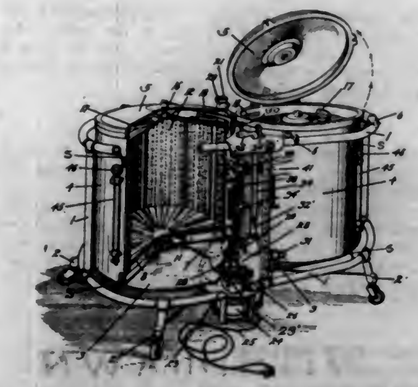
for compensating for reactionary effects developed by changing the resonant condition in the resonant circuit in the output of said power amplifier.

1,878,253. CHAIR. HERMANN RUETZ, Glendale, N. Y. Filed June 23, 1931. Serial No. 546,178. 2 Claims. (Cl. 155—179.)



1. In a chair or like furniture, in combination with a removable cushion and as a base for it, a seat frame having opposingly placed members; a plurality of straps placed transversely between said members; a spiral spring for each end of each strap, said spring having downwardly turned hook extensions at both ends, each of said frame members having a plurality of holes and each of said straps having a hole at each end, the downwardly turned ends of said springs being removably inserted in the respective holes.

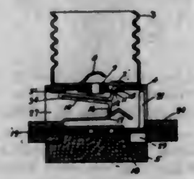
1,878,254. WASHING MACHINE. ROBERT E. WARREN, Los Angeles, Calif. Filed July 27, 1926. Serial No. 125,146. 4 Claims. (Cl. 68—18.)



1. In a washing machine, a supporting structure having a washing container mounted thereon, a perforated support rotatably mounted in said container, a cage for articles

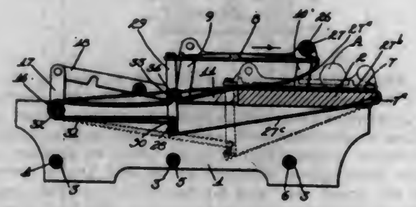
to be washed, resting on said support, propeller vanes oscillatably mounted on said support, means including nozzles for directing air and water tangentially in opposite directions and against said vanes, and means for selectively controlling the direction of the air and water through said nozzle means for reversing the direction of rotation of said cage, and a motor driven blower for furnishing the air blast.

1,878,255. ELECTRIC SOCKET SWITCH. ARCHIE REXALD WOLFE, Summit, N. J. Filed Mar. 6, 1929. Serial No. 344,889. 4 Claims. (Cl. 173—355.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



3. In an electric socket and the like comprising an insulation body supporting the two switching contacts of an electric circuit, a switch comprising a triple ended bridge member with one end hinged to one of said switching contacts, a longitudinally movable spring cam supported by said insulation body and acting on and engaging the second end of said bridge member for moving the third end into or out of contact with the other of said circuit switching contacts, and means on the outside of said insulation body for operating said spring cam.
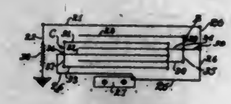
1,878,256. PASTRY MACHINE. PABLO ALCALÁ, Los Angeles, Calif., assignor to Al Pfister and James I. Cousins, Paso Robles, Calif., and A. C. Segarra and E. Roure, Los Angeles, Calif. Filed Jan. 16, 1931. Serial No. 509,140. 13 Claims. (Cl. 107—15.)



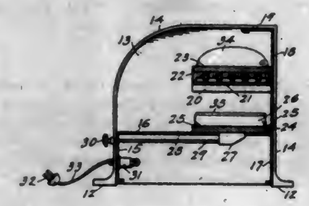
13. In a machine of the class described, a pair of plates positioned in spaced and substantially opposed relation with respect to each other, means for forcing said plates angularly toward and in spaced parallel relation with respect to each other, a flexible sheet portion positioned over the lower plate, a second sheet portion positioned loosely below the upper plate, and means for drawing said sheet portions between said plates in a substantially opposite direction to the movement of one of the plates when the plates are forced together and for drawing said sheet portions in the opposite direction when said plates are separated.

1,878,257. ANTENNA SYSTEM. THOMAS R. BAKER, Chicago, Ill., assignor of one-half to James E. Baker, Chicago, Ill. Filed June 26, 1929. Serial No. 373,804. 8 Claims. (Cl. 250—33.)

2. Means for reducing static interference, comprising a plurality of wires arranged in spaced relation, one of said wires being directly connected at one end to a radio receiving set and grounded at the other end through a resistance, the remainder of said wires being divided into two groups, the wires of one group being arranged in alternate relation with the wires of the other group to provide a condenser, and the wires forming said condenser being connected to said radio receiving set.

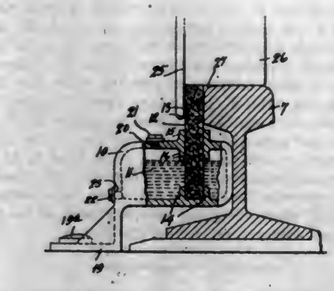


1,878,258. SANDWICH TOASTER. KENNETH E. BEMIS, Glendale, Calif. Filed June 9, 1931. Serial No. 543,049. 1 Claim. (Cl. 219—19.)



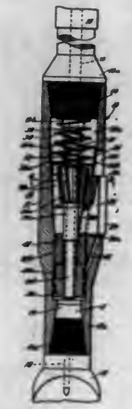
A sandwich toaster comprising a cabinet, an electric heating unit extending throughout the length thereof and intermediately mounted, a toasting plate superposed on said unit, a base plate provided with a plurality of spacedly related elongated slots forming guideways, a plurality of griddles slidably mounted on said base plate and having each an integral keel extending downwardly through said slots, and means connecting with each keel for sliding each of said griddles independently of the others.

1,878,259. FLANGE AND RAIL LUBRICATOR. JOHN A. BODKIN, New York, N. Y. Filed May 18, 1929. Serial No. 364,124. 2 Claims. (Cl. 184—3.)



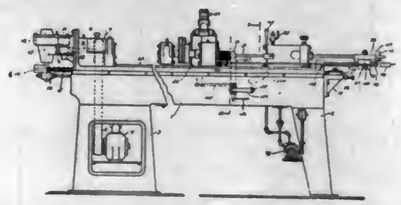
1. In a rail and flange lubricating device, a normally closed lubricant container provided with a wick slot extending substantially the entire length thereof and tapered at the ends, flanges defining the edges of the wick slot, flanges at the bottom of the receptacle in line with the first mentioned flanges, and a wick tapered at each end supported between the said flanges and extending through the slot to a predetermined height for the purpose specified.

1,878,260. UNDERREAMER. FRANK S. BUNKER, Compton, Calif., assignor to John Grant, Los Angeles, Calif. Filed Feb. 12, 1929. Serial No. 339,295. 16 Claims. (Cl. 255—75.)



16. In an underreamer, a vertical body, a cutter movable vertically and transversely therein, a vertically yielding cutter spreading wedge in the body behind the cutter and adapted to cause outward expansive movement of the cutter when the cutter is moved upwardly, and means acting on the cutter to move it upwardly.

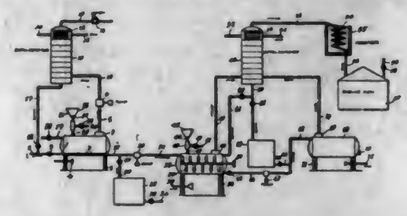
1,878,261. TUBE AND ROD FORMING MACHINE. JAMES LLOYD CASSADY, Geneva, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 16, 1929. Serial No. 386,441. 15 Claims. (Cl. 80—12.)



2. In a machine of the class described, a main supporting frame, a die head fixed on the frame, a die pass in the die through which work to be operated upon may be drawn, a work gripping head movable on the frame relative to the die head adapted to grip the work and draw it through the die pass, a steady rest device adapted to engage the work between the gripping head and the die head and means for automatically moving the device into engagement with the work when the work head is at or beyond a predetermined distance from the die head, and means for removing the steady rest from engagement with the work and when the work gripping head is nearer the die head than said predetermined distance.

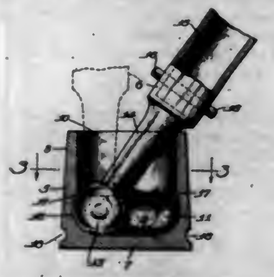
1,878,262. PROCESS OF TREATING HYDROCARBONS WITH A CHLORINATED HYDROCARBON IN THE PRESENCE OF A METALLIC HALIDE. MARVIN L. CHAPPELL, Los Angeles, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 22, 1927, Serial No. 162,752. Renewed Aug. 21, 1931. 8 Claims. (Cl. 196—54.)

8. A method of treating hydrocarbon oils containing hydrocarbons of the naphthenic type, which comprises treating said oils with a hydrocarbon oil well gas containing chlorinated hydrocarbons of the aliphatic series in the presence of aluminum chloride at temperatures suitable for the production of a condensation reaction therein between the hydrocarbons of the naphthenic type and the chlorinated hydrocarbon in a reaction zone, withdrawing said condensed oil together with the unacted upon oil



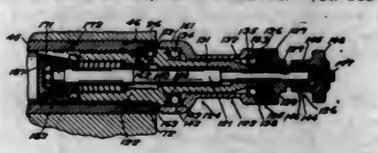
into a second reaction zone, introducing a further amount of aluminum chloride into said reaction zone, raising the temperature sufficiently therein to produce a decomposing reaction between said aluminum chloride and oil for the production of gasoline and a high boiling oil, discharging gasoline vapors from said reaction zone, and separately discharging said high boiling oil and aluminum chloride residue from said reaction zone.

1,878,263. MORTAR AND PESTLE. EDWARD L. CHOTT, Chicago, Ill. Filed Nov. 13, 1929. Serial No. 406,753. 3 Claims. (Cl. 83—10.)



1. The combination of a mortar whose working cavity has a flattened bottom, a cylindrical upper wall portion, and an annular groove in its wall transversely curved and merging tangentially with said flattened bottom without interruptive protuberance and providing an annular undercut interruptive shoulder where said groove merges with the upper side wall portion of the mortar, and a pestle having a spherical head portion, said head portion being cooperative with the annular groove in said mortar, and said annular groove being transversely curved corresponding exactly to the circumferential curvature of said spherical head.

1,878,264. SUPPORTING MEANS FOR WEB-ROLLS. LESLIE W. CLAYBOURN, Milwaukee, Wis. Filed June 3, 1931. Serial No. 541,831. 10 Claims. (Cl. 242—72.)



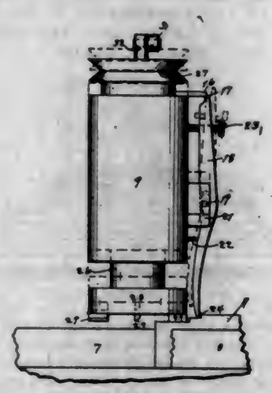
1. In a supporting means of the character described, the combination of a supporting staff, a sleeve thereabout, a second sleeve about said staff rotatable with relation to said first-named sleeve, a radially expansible chuck about the axis of said staff, an endwise movable chuck expanding member about the axis of said staff, and means causing endwise movement between said endwise movable chuck expanding member and said second-named sleeve for radially expanding said chuck.

1,878,265. CONTAINER CAP. ALBERT GEORGE CRAZ, Richmond Hill, N. Y., assignor to Brass Goods M'f'g. Co., Brooklyn, N. Y., a Corporation of New York. Filed June 12, 1931. Serial No. 543,765. 8 Claims. (Cl. 215—44.)



1. A container cap of metal adapted to be screwed on a receptacle provided with thread members, said cap having a smooth underfaced outer surface, the metal of the inner wall of said cap being slit inwardly at intervals from the peripheral edge of said cap to form thread members so positioned as to conform to the pitch of the thread members of the receptacle on which the cap is to be screwed.

1,878,266. LOW SLUGGING CUTTER MECHANISM. CHARLES W. CURLE, San Francisco, Calif. Filed May 26, 1930. Serial No. 455,665. 3 Claims. (Cl. 90—19.)



1. In a low slugging device, a support, a pair of guides positioned on said support, a movable bearing positioned adjacent said guides, a cutter-head carried by said bearing, an arm positioned on said support, a latch carried by said bearing and engaging said arm to hold said bearing in depressed position with relation to said guides and a spring for moving said bearing away from said guides when said latch is contacted by a slug passing between said guides.

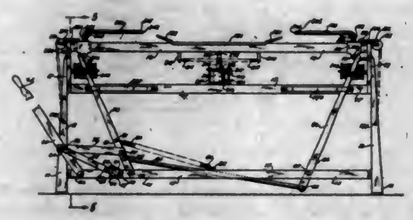
1,878,267. CRACKING RESINS AND LIKE MATERIALS. HARVEY N. DAULER, Pittsburgh, Pa. Filed Feb. 4, 1932. Serial No. 590,908. 3 Claims. (Cl. 53—94.)

1. The herein described steps in a method of dividing frangible gummy material which comprises positioning a filler core to extend into a container, introducing the material at a temperature of fluidity into the container to surround the filler core therein, cooling the material with the filler core in the body of material thus causing solidification of the material around the filler core, and causing



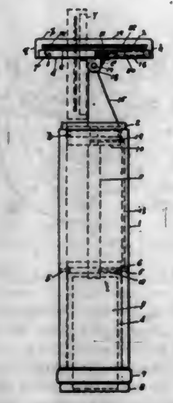
a cavity in the body of material together with initial cracking thereof by withdrawal of the filler core after solidification of the material.

1,878,268. LEASE FORMING APPARATUS FOR WARP HANDLING MACHINES. DAVID A. DAY, Gastonia, N. C. Filed July 27, 1931. Serial No. 553,367. 23 Claims. (Cl. 28—40.)



1. A warp leasing machine having lease forming means, means for operating the lease forming means while the warp is in motion, and means for guarding the lease thread from contact with the warp while the lease is being formed.

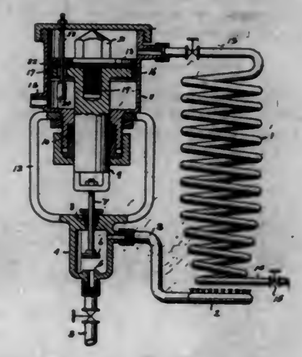
1,878,269. DEMOUNTABLE SAFETY RAZOR. WILLIAM DEUTSCH, Detroit, Mich. Filed Apr. 24, 1931. Serial No. 532,429. 1 Claim. (Cl. 30—12.)



A safety razor head adapted for mounting on a demountable head support, comprising a rectangular shaped head base formed with rectangular notches in each end thereof,

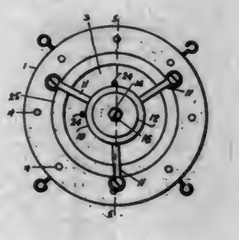
and provided with a hinge member on one side, said head base also being formed with a plug recess within one notched end, a coil spring and a hinge plug slidably mounted within said plug recess, a blade cover pivotally mounted on the outer end of said hinge plug, positioned to fold flatwise over the head base, a razor blade fitted between said blade cover and head base, said blade cover being formed with a projected end boss at the free end thereof for engaging the notched end of the head base in a manner for clamping the razor blade therebetween by the reaction of the inclosed coil spring.

1,878,270. AUTOMATIC CONTROL VALVE. OTTO EBERSPACHER, Angleton, Tex. Filed July 22, 1930. Serial No. 469,717. 5 Claims. (Cl. 236—25.)



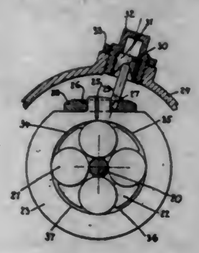
1. In combination, a gas valve for controlling the flow of gas to a burner, a cylinder having a water inlet port and a water outlet port, a movable plunger whose inner end is formed into a piston in the cylinder between said ports and having an opening for the passage of water from the inlet to the outlet port, a stationary valve arranged to partially close said opening when the piston is moved to one position and to fully open said opening when the piston moves to another position, and a stem connecting the gas valve directly to the plunger.

1,878,271. MICROPHONE. HUGH J. ELLIS, Berwyn, Ill. Filed July 7, 1930. Serial No. 466,195. 1 Claim. (Cl. 179—135.)



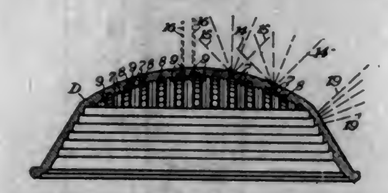
In a device of the class described, the combination of a frame composed of two sections secured together by means of screws, a diaphragm rigidly mounted between said sections, said diaphragm having perforations through which said screws extend, an annular member adjustable axially within the frame and contacting said diaphragm for stretching the latter, a centrally disposed threaded opening in the frame on each side of said diaphragm, externally threaded bushings of insulated material adjustably mounted in said opening, each of said bushings being recessed to form a resistor cup, an electrode mounted in the bottom of each of said resistor cups, a felt washer mounted in each of said resistor cups and in contact with said diaphragm, carbon granules retained in the central opening in each washer and in contact with the diaphragm, and means for locking said bushings in adjusted position.

1,878,272. FRICTION GEAR. RICHARD ERBAN, Vienna, Austria. Filed Oct. 31, 1930, Serial No. 492,475, and in Austria Nov. 22, 1929. 8 Claims. (Cl. 74—34.)



1. In a friction gear inclusive of rolling bodies and a cooperating race ring, a lever cooperating with said race ring and effective by longitudinal adjustments and by rocking movements thereof independently of one another to effect deformation of said ring, screw means for longitudinally adjusting said lever, and means whereby operation of the gear tends to rock the lever.

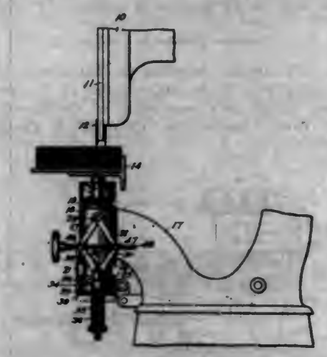
1,878,273. LIGHT SIGNAL. ARTHUR W. FISHER, Forest Hills Borough, and WESLEY B. WELLS, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1929. Serial No. 358,180. 4 Claims. (Cl. 177—329.)



3. A lens for a light signal comprising a central portion having a concave inner surface provided with parallel vertically extending round-bottomed grooves arranged in pairs and with channels parallel with said grooves and one located between each two adjacent pairs of grooves each channel having a plurality of prisms adjacent ones of which have different optical characteristics and which are arranged in horizontal rows and all of which deflect light downwardly, each channel being spaced from each adjoining groove by a non-refracting region which permits the transmission of light substantially without spread.

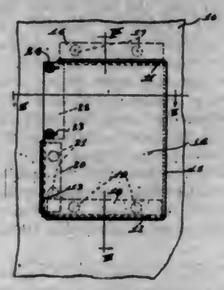
1,878,274. SPRING TOGGLE TABLE ADJUSTMENT FOR WIRE STITCHING MACHINES. THOMAS A. GIBSON, Brooklyn, N. Y. Filed Dec. 27, 1930. Serial No. 505,098. 15 Claims. (Cl. 1—7.)

1. In a wire stitching machine, a work support adapted to support a pile of paper sheets, means for stapling said sheets, a shaft depending vertically from the support, a frame provided with a bearing sleeve for the passage of said shaft, an enlarged member secured to the shaft below said bearing, a stop above and in the path of the enlarged member, means supported by the frame and connecting the stop to the frame for adjusting the height of said stop and thereby determining the uppermost position of said table, and a compression spring arranged below and in



the path of said enlarged member and adapted to be compressed on the downward movement of the table, the shaft and the member as a unit.

1,878,275. BARBER'S COAT. ISADORE GOLDMAN and JACOB COHEN, Chicago, Ill. Filed Dec. 12, 1931. Serial No. 580,540. 4 Claims. (Cl. 2—247.)



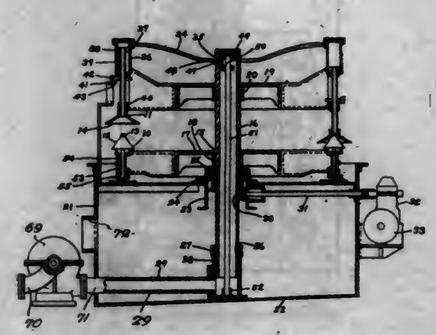
1. The combination with a slotted garment, of releasable pockets thereon closed at the top and having side entrance openings therein, and means on said pockets coacting with the garment slots for securing the pockets in place.

1,878,276. COMPOSITION OF MATTER. CHARLES ROBERTS HARRIS and ARTHUR L. PITMAN, Niagara Falls, N. Y., assignors, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930, Serial No. 418,150. Renewed Sept. 15, 1931. 9 Claims. (Cl. 252—5.)

1. A composition of matter comprising a relatively inodorous refrigerant containing allyl alcohol in amounts suitable for warming purposes.

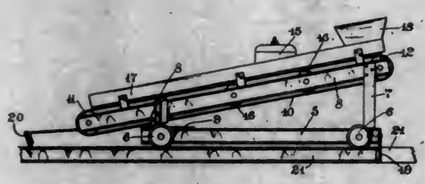
1,878,277. MACHINE FOR WASHING BALL BEARINGS. GEORGE ORVIL HODGE, Plainville, Conn., assignor to Standard Steel and Bearings, Inc., Plainville, Conn., a Corporation. Filed Nov. 17, 1928. Serial No. 320,164. 13 Claims. (Cl. 141—1.)

7. In apparatus for washing ball bearings by means of a flow of cleansing liquid, a turn-table comprising a vertically elongated tubular structure that is supported for rotation, spider-arms radiating from said structure, and bearing clamping members supported from said arms, ducts radiating from the upper end portion of said tubular structure for delivering liquid from the interior of said tubular structure to said members, said ducts connecting by their



inner ends with apertures in the side wall of the tubular structure, a stationary rod positioned axially along the interior of said tubular structure, and a valve projecting radially from said rod for periodically covering said apertures during rotation of said turn-table.

1,878,278. ROAD OR PAVEMENT MAKING APPARATUS. GERHARD JAEGER, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 22, 1928. Serial No. 327,813. 2 Claims. (Cl. 94—44.)

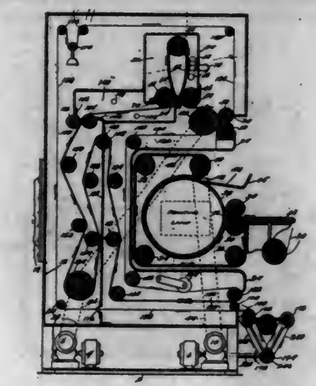


1. Apparatus for laying a concrete road or pavement on a sub-bed including a truck having a cross piece constituting a support, a frame pivoted at one end on the truck to swing transversely of the road or pavement to be laid, a concrete conveyor belt carried by said frame, said belt downwardly inclined from the pivot end of said frame, means for supporting the free end of said belt-conveying frame on said cross piece, a hopper for receiving the concrete materials and discharging the same onto the upper portion of said belt, and toothed means on the truck for testing and leveling the sub-bed in advance of depositing the concrete.

1,878,279. DEVELOPING APPARATUS. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 15, 1927. Serial No. 240,157. 12 Claims. (Cl. 95—94.)

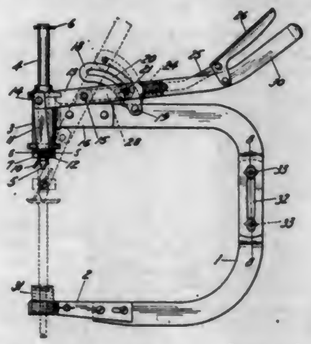
1. An apparatus for developing light sensitive material by means of a gaseous medium, the combination of means forming a developing chamber, means for supporting light sensitive material to be developed in said chamber, gas projecting means for projecting developing gas into said cham-

ber to develop the paper, means for preventing the escape of the gas from the chamber during the developing process, a valved suction exhaust connected to said chamber, a con-



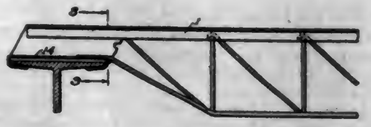
nection including a relief valve from said gas projecting means to the exhaust, and a valved air inlet to said chamber.

1,878,280. VALVE SPRING COMPRESSOR. RAY BRADLEY LAW, Muscatine, Iowa. Filed Oct. 1, 1931. Serial No. 566,195. 4 Claims. (Cl. 29—86.3.)



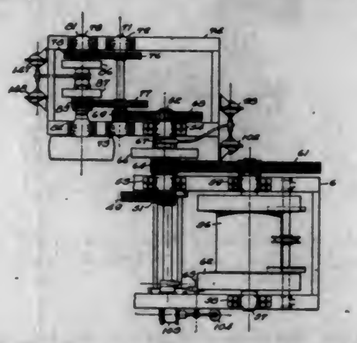
1. In a valve spring compressor, a frame having a head extending transversely to one side of the frame and in the plane thereof, said head being apertured longitudinally for the reception of a plunger, a plunger reciprocably mounted in the aperture of the head, means for reciprocating the plunger in the aperture including as a part thereof a lever mounted upon the frame, and frictional holding means capable of holding the lever in any position of adjustment thereof.

1,878,281. BAR JOIST. THOMAS A. LUCY, Birmingham, Ala., assignor to Ingalls Steel Products Company, Birmingham, Ala. Filed Nov. 15, 1929. Serial No. 407,310. 10 Claims. (Cl. 189—37.)



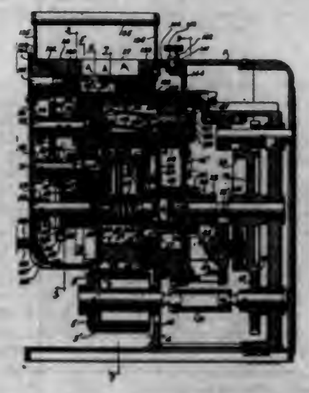
1. A bar joist comprising, an upper chord member, a web secured thereto, a pair of lower chord members secured to said web on opposite sides thereof, a bearing member secured to said upper chord member at the end thereof, and a looped anchored member engageable with said bearing member near the upper extremity of said members at the bight of its loop with its ends extending beyond the end of the joist to be bent on a support.

1,878,282. DREDGE. WALTER B. MACAULAY, Oakland, Calif., assignor to Yuba Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed June 2, 1930. Serial No. 458,986. 1 Claim. (Cl. 254—187.)



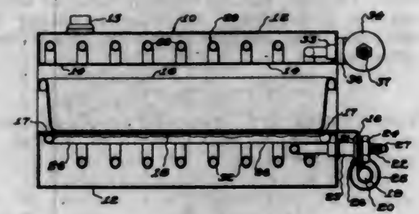
A dredge comprising a cable drum, means for driving said cable drum, a change-speed gear interposed between said drving meana and said drum, a clutch interposed between said change-speed gear and said drum, means including a first pneumatically expansible chamber for engaging said clutch, means including a second pneumatically expansible chamber for disengaging said clutch, a brake for frictionally constraining said cable drum, means for normally applying said brake, means including a third pneumatically expansible chamber for releasing said brake, means including a fourth pneumatically expansible chamber for operating said change-speed gear in one position, means including a fifth pneumatically expansible chamber for operating said change-speed gear in another position, and grouped pneumatic controllers for controlling said first to fifth, inclusive, of said expansible chambers.

1,878,283. POSTAGE METER. LUTHER L. MACK, South Pasadena, Calif., assignor to U. S. Postal Meter Corporation, a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,195. 16 Claims. (Cl. 101—91.)



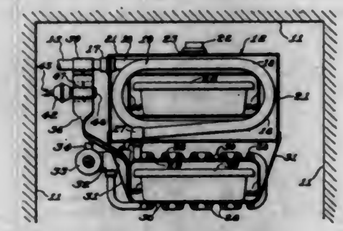
1. A postage meter comprising a housing, a meter detachably supported on said housing and including a rotatable printing cylinder, means for registering successive impressions made by the printing cylinder, means for operatively connecting said printing cylinder and said registering means with the operating means on the housing, and common means enclosed by said meter and operable only when the meter is operatively positioned on the machine for locking said meter against displacement and for unlocking said printing cylinder for operation.

1,878,284. EVAPORATOR FOR REFRIGERATORS. GEORGE W. MASON, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1929. Serial No. 354,349. 7 Claims. (Cl. 62—8.)



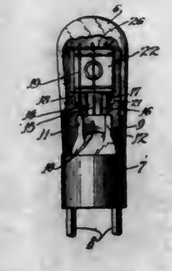
1. A refrigerant evaporating unit comprising a curved liquid refrigerant evaporating conduit disposed throughout substantially its entire length in uniform thermal contact with a bottom portion of a freezing tray, a thermostat for controlling the periods of operation of the evaporating unit, and a metallic attachment connecting the thermostat with the freezing tray to provide for the conduction of heat therebetween.

1,878,285. REFRIGERATOR EVAPORATOR AND TEMPERATURE CONTROL THEREFOR. GEORGE W. MASON, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1929. Serial No. 354,350. 8 Claims. (Cl. 62—8.)



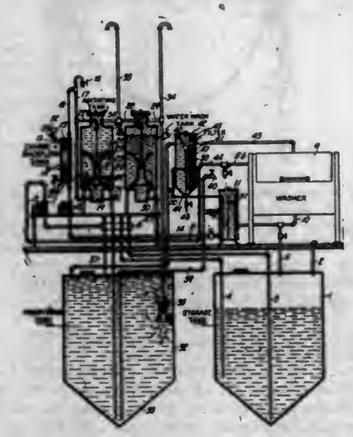
1. A refrigerant evaporating unit comprising a brine tank having a refrigerant evaporating conduit disposed therein, said conduit being in direct communication with a suction line of a refrigerant condensing unit, a freezing tray sleeve disposed within the brine tank and surrounded by the aforesaid refrigerant evaporating conduit, a freezing tray sleeve disposed externally of the brine tank and surrounded by a refrigerant evaporating conduit communicating with the first mentioned conduit, a refrigerant expansion device for discharging refrigerant fluid directly into the last mentioned conduit, a metallic heat conductor thermally contacting at its opposite ends, the aforesaid suction line and the last mentioned freezing tray sleeve, and a thermostat secured to an intermediate portion of the heat conductor for controlling the operation of the refrigerant condensing unit.

1,878,286. ELEMENT SUPPORTING STEM CONSTRUCTION. GEORGE D. MCCABE, Chicago, Ill. Filed Oct. 31, 1930. Serial No. 492,447. 2 Claims. (Cl. 250—27.5.)



1. A tube stem construction of the character described, comprising a main vertical element supporting portion, a vertical transverse element supporting portion disposed transversely of said main portion at one end thereof, a plurality of main element supporting wires embedded in said main portion and disposed substantially in the same vertical plane, and a plurality of auxiliary element supporting wires embedded in said transverse portion and disposed in a vertical plane transversely of the vertical plane of said main element supporting wires.

1,878,287. METHOD OF TREATING DRY CLEANING FLUIDS. HARRY MILLER, Okmulgee, Okla. Filed Feb. 1, 1928. Serial No. 251,218. 4 Claims. (Cl. 196—15.)

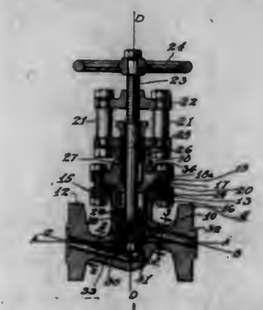


4. The method of treating dry cleaning fluids including passing a stream of impure dry cleaning fluid in contact with a chlorine-containing lime solution for liberating chlorine gas and effect initial treatment of the fluid, passing the stream of fluid from the first named solution into an alkaline solution for secondary treatment of the fluid and reaction between constituents of the first named solution carried over into the alkaline solution, and washing the fluid.

1,878,288. FORGED STEEL VALVE. WALTER W. MOHR, Chicago, Ill., assignor to The Edward Valve and Manufacturing Company, East Chicago, Ind., a Corporation of Illinois. Filed Oct. 20, 1930. Serial No. 489,784. 15 Claims. (Cl. 251—155.)

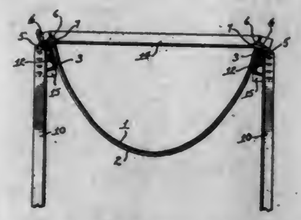
4. In a forged steel valve, a forged steel body having a drilled compartment for a valve seat, substantially

parallel pipe connection flanges having a common axis, and straight drilled passages through said flanges into said compartment above and below the valve seat location, said passages being at oblique angles to the axes of said



flanges, the metal distribution around the axes of said passages affording substantially uniform heat contraction and expansion effects and substantially uniform lateral strength of said body around the axes of said flanges.

1,878,289. FLUME. ALBERT COLWELL NORTON, Berkeley, Calif., assignor to California Corrugated Culvert Co., Berkeley, Calif., a Corporation of California. Filed Apr. 30, 1932. Serial No. 608,395. 7 Claims. (Cl. 61—14.)



1. A flume comprising a sheet metal trough initially formed to approximate catenary cross sectional curvature, and a pair of longitudinally disposed supporting members between which said trough is suspended, said members having greater depth than width and being tilted about their longitudinal axes to a position approximately parallel to the upper portions of the sides of said trough.

1,878,290. CARTON AND CONTAINER. ALAN M. OVERTON, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed July 31, 1930. Serial No. 472,083. 9 Claims. (Cl. 154—45.9.)



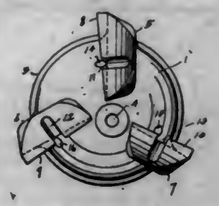
1. A composite board comprising a filler ply of felted fibers containing a binder substance in appreciable amounts and a frangible liner, the said filler ply joined by means of said frangible liner to a liner ply of felted material by an adhesive stronger than said frangible liner.

1,878,291. ANTISKID CHAIN. FRANK B. PARSONS, Plainville, Conn. Filed Oct. 16, 1930. Serial No. 489,111. 5 Claims. (Cl. 24—236.)



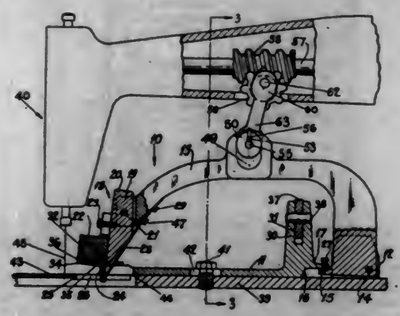
1. A snap holder for use with an attaching hook comprising spaced branches having backturned open hooks at one end, said holder comprising a base and a backturned spring tongue both having lateral extensions oppositely disposed to form, when viewed lengthwise of the holder, grooves at opposite edges thereof to receive the branches of said attaching hook when the latter are closed to normal positions, said base being adapted to project through the hook between said branches whereby the opposite ends of the base rest against the hook on opposite sides thereof.

1,878,292. DRILL BIT. FELIX L. PIVOTO, Beaumont, Tex. Filed Mar. 13, 1931. Serial No. 522,285. 3 Claims. (Cl. 255—61.)



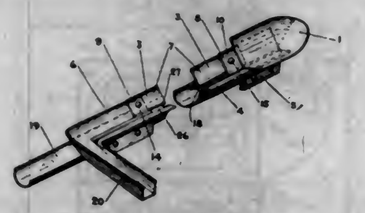
1. A drill bit comprising a head, a series of radial blades on the lower end of the head terminating at their lower ends in cutting edges, each blade having a vertical slot, said slots being arranged progressively out at different distances from the axis of the head, said head having channels for flushing fluid which terminate opposite said slots.

1,878,293. PINKING ATTACHMENT FOR SEWING MACHINES. MAX POPPER, Brooklyn, N. Y. Filed Apr. 9, 1932. Serial No. 604,160. 4 Claims. (Cl. 112—122.)



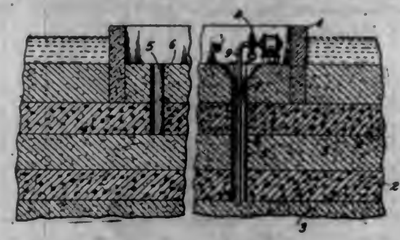
1. In combination with a sewing machine having a shaft mounted below and transverse with the needle-bar shaft, said needle-bar shaft having a worm mounted thereon and being operatively associated with a worm gear mounted on said transverse shaft for driving said shaft, said transverse shaft having an eccentric end portion, a pendant link member having its upper end in engagement with said eccentric end portion, a pinking attachment having a base mounted on the base of said sewing machine and having a cutter arm pivotally mounted on said pinking attachment base, said cutter arm having means thereon for engagement with the lower end of said link member and being thereby constrained to swing up and down solely due to the motion of said needle-bar shaft.

1,878,294. EGG SEPARATOR. RICHARD W. REGENSBURGER, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 521,904. 5 Claims. (Cl. 146—2.)



1. A device for separating the whites from the yolks of eggs, consisting of a trough having a longitudinal slot placed above another trough, both of said troughs being inclined at an angle from the horizontal, said lower trough being integral with one wall of said upper trough, said lower trough having one side thereof extending upwardly to the lower portion of one of the side members of the trough and substantially crossing the vertical lines passing downwardly through the center of the slot.

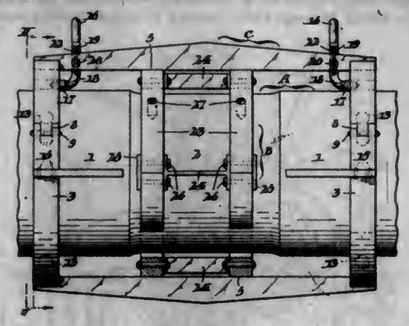
1,878,295. PROCESS FOR RECLAIMING LANDS AND MAINTAINING LANDS IN A CONDITION SUITABLE FOR CULTIVATION OR HABITATION. WALTER RICHMOND, Homestead, Fla. Filed June 28, 1927. Serial No. 202,131. 18 Claims. (Cl. 61—10.)



1. The method of water control for land overlying a porous substratum and separated therefrom by a substantially impervious stratum which consists of partially isolating a parcel of said land by partially damming off water from an elevation above the normal water level to the substantially impervious stratum and causing retarded migration of subsurface waters through the land so isolated, draining a portion of the water in said parcel to a given location below the surface of the normal water table of said parcel, removing a portion of the water from said parcel by drainage at a predetermined rate into said porous substratum whereby a water table is maintained at a predetermined depth below the surface of said isolated parcel and the water above said substratum and in said parcel may be continuously changed.

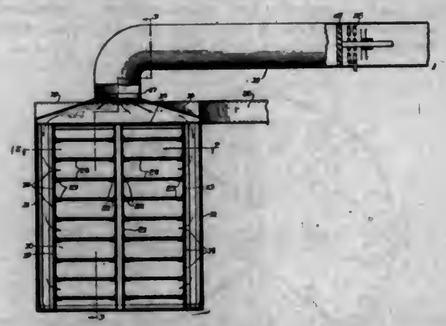
1,878,296. CENTERING GAUGE. VICTOR P. SCHMIDT and HARRY A. BRENAMAN, Altoona, Pa. Filed June 9, 1931. Serial No. 543,047. 13 Claims. (Cl. 33—180.)

1. A gauge for centering an object upon a shaft comprising a centering ring having inner cam surfaces, a straight edge carried by said centering ring, roller members adapted to engage said cam surfaces of the ring



and a portion of the shaft, and means for simultaneously advancing said roller members on said cam surfaces to clamp the ring in concentric relation to the shaft.

1,878,297. APPARATUS FOR PROCESSING FOODSTUFFS WITH FLUID CURRENTS. FLOYD SEAVER, Chiago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,800. 1 Claim. (Cl. 34—39.)

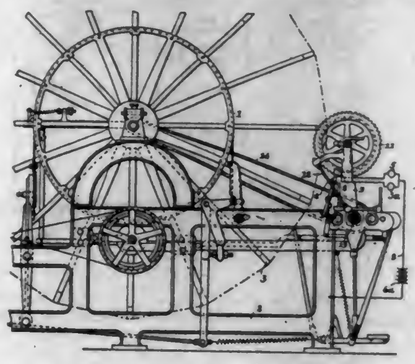


An apparatus of the character described comprising a rectangular chamber having side, top and bottom walls, a back wall and a door opposite said back wall, a plurality of superimposed spaced article supporting trays supported between said side walls of less depth than the distance between said back wall and said door, whereby to provide discharge passages in front and back of the column of superimposed trays, fluid compartments on the outside of said side walls having communication with said chamber through openings in said side walls located at the space between said trays, fluid conveying flues connected with the tops of said fluid compartments and said discharge passages, whereby processing fluids may enter said compartments from one of said flues, pass downwardly and thence through the space between said trays, forwardly and backwardly of said chamber and upwardly through said discharge passages and out of the other of said flues.

1,878,298. WARPING MACHINE. GRANT SIPP, Paterson, N. J., assignor to Sipp-Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 30, 1932. Serial No. 601,922. 4 Claims. (Cl. 28—30.)

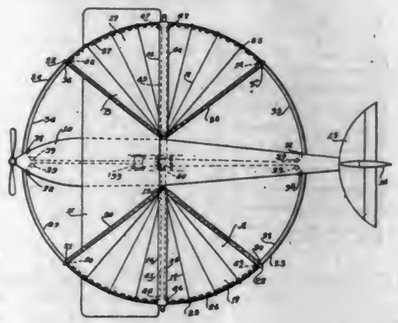
1. In combination, a rotary reel on which the material to be wound is wound, a dial connected to rotate with the reel, supports on the dial each settable to different positions thereon circumferentially thereof and all af-

fording guideways which in any position to which the supports are set extend in generally the same direction, a signalling means to be energized having the part thereof to which the signalling energy is transmitted arranged



laterally of the guideways of said supports, and a button on each support movable along its guideway into and out of position to engage said part and thus energize said means on rotation of the dial.

1,878,299. AEROPLANE PARACHUTE. BENJAMIN SLIPIKAS, Brooklyn, N. Y. Filed Apr. 22, 1931. Serial No. 531,871. 1 Claim. (Cl. 244—21.)

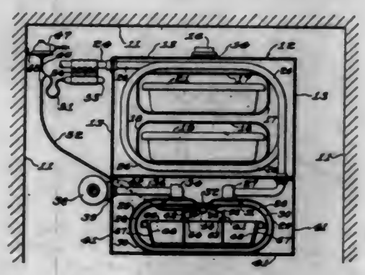


In a combined aeroplane and sectional parachute, a plurality of semi-circular hoops attached at their ends to said aeroplane, ribs guided along said hoops between which the material of the parachute is foldably arranged, rods at the outer ends of said material, eyes on said rods adapted to slide along said hoops during the folding and unfolding of the parachute, means for supporting the sections of said parachute on the aeroplane, spaced brackets between which the parachute sections can be folded, cables attached to the parachute sections, a drum over which said cables are guided and allowing an unfolding of the parachute sections, a central drum and cables guided over said central drum and attached to said parachute sections for allowing a folding of the parachute sections.

1,878,300. FELTED FIBROUS COMPOSITION. EARL P. STEVENSON, Newton, and HARRY A. BURON, Cambridge, Mass., assignors to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,964. 14 Claims. (Cl. 92—21.)

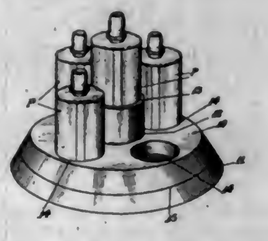
1. That process of producing a feltable fibrous pulp containing a heat plastic which comprises first mixing wetted fibrous material with bitumen, then transferring the mixed mass to a beating engine and pulping it, and during the pulping stage adding a quantity of fibrous material of different characteristics.

1,878,301. TEMPERATURE CONTROLLING DEVICE FOR REFRIGERATING MACHINES. CHARLES C. THOMAS, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1929. Serial No. 354,317. 5 Claims. (Cl. 62—8.)



1. An artificial refrigeration apparatus comprising a refrigerant fluid evaporating device adapted to receive a freezing tray therein, a grid having upwardly projecting portions disposed in said freezing tray, a metallic contacting member in thermal contact with said upwardly projecting portions, a fluid containing bulb in thermal contact with the contacting member, and a thermostat actuated by the aforesaid bulb for initiating the operation of a refrigerant condensing unit.

1,878,302. DISPLAY STAND. FERNAND TOURTOIS, New York, N. Y., assignor to Coty, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 13, 1931. Serial No. 515,448. 4 Claims. (Cl. 211—77.)



1. In a display stand for bottles, in combination, a bottle holder having a series of concavities therein and integral therewith for holding the bottles, the central portion of said holder being upraised, a spindle located on the underside of said upraised portion by which said bottle holder is revoluble, and a base for said holder having an upraised portion in the center thereof fitting the upraised portion of the holder, and a screw passing through said base into the spindle on the bottle holder and joining the bottle holder and base.

1,878,303. FLUID CONDUCTOR COUPLING. JAMES TRATHEN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 350,987. 2 Claims. (Cl. 284—18.)

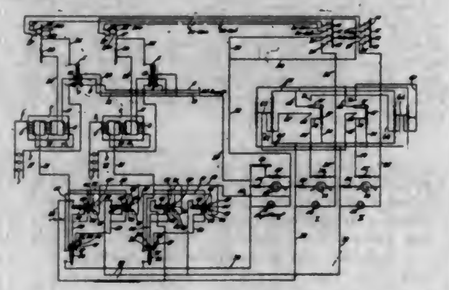
2. In a coupling, the combination of a pair of tubular members adapted to mate in telescoped relation, one of

which members is provided with a slot in its wall, valves in the respective members adapted to be opened by movement of the members into mated relation, and latching



means on said slotted member adapted to engage the other member through the slot of the first member and alone to hold the two in telescoped relation.

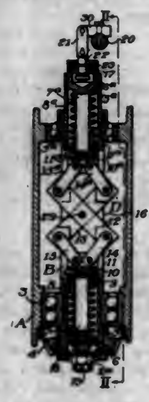
1,878,304. CONTROL SYSTEM FOR THEATER LIGHTING CIRCUITS. ALBERT LE ROY UPTON, St. Louis, Mo. Filed Oct. 20, 1930. Serial No. 489,829. 13 Claims. (Cl. 175—312.)



1. Apparatus of the character described including a plurality of lighting units, separate means for dimming each lighting unit, a plurality of direct current generators arranged to furnish effective current to the lighting units, means whereby each of said lighting units may be selectively connected to any of said generators, and means for selectively varying the field of each generator whereby the voltage from the generator supplied to the lighting units may be varied at will.

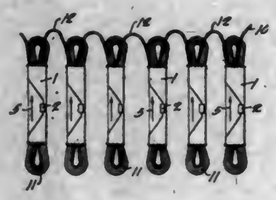
1,878,305. SPEED RESPONSIVE DEVICE. PER UTNE, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,222. 1 Claim. (Cl. 264—20.)

A speed responsive device comprising a balanced rotatable member consisting of two spaced and longitudinally aligned cylindrical housings connected by two transversely spaced side plates, a transverse shaft carried by said side plates, a pair of balanced crossed centrifuge arms pivotally mounted at their point of intersection on said shaft between said plates and tending to move into a common plane in response to centrifugal force, a piston in each housing, a rod attached to each piston and projecting toward said arms, links connecting each arm with each of said rods, springs in said housings acting on said pistons to exert equal and opposite forces on said arms in opposition to the centrifugal force acting thereon, a second shaft mounted to oscillate on an axis perpendicular to the longitudinal axis of said rotatable member, an arm fixed at one end to said second shaft, a cup formed in one of said pistons, an anti-friction bearing supported in said cup, a



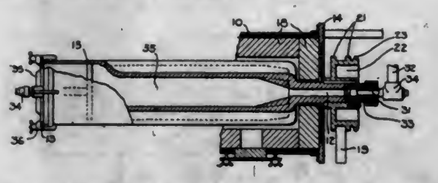
stem mounted to rotate in said anti-friction bearing, and a link pivotally connected at one end with said stem and at the other end with the free end of said arm.

1,878,306. HANK OF STRAND MATERIAL. ROGER K. WHITTIER, Chattahoochee, Ga., assignor to Silver Lake Company, Newtonville, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1931. Serial No. 518,064. 9 Claims. (Cl. 206—46.)



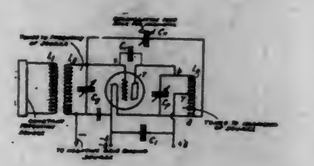
1. An article of the character referred to comprising a length of strand material bent back and forth in the form of a hank and means for holding the material in position including a strip of sheet material extending diametrically through the hank.

1,878,307. RETORT. WILLIAM CAMPBELL WHYTE, Elyria, Ohio, assignor to The Electro-Alloys Company, Elyria, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,535. 4 Claims. (Cl. 263—34.)



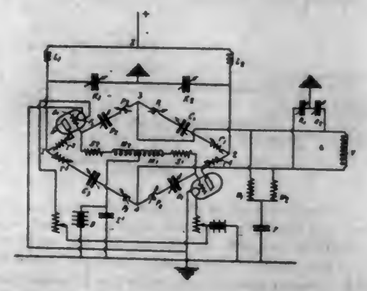
1. A rotatable retort of the class described comprising a tubular heat treating chamber, and a reduced stem portion integrally secured thereto by an end wall to align the same therewith, the chamber having a longitudinally extending tubular wall formed with longitudinally extending corrugations, the corrugations being deflected bodily inwardly from the intermediate portions of the wall, and the end wall having inwardly generally radially extending recesses aligned with the outer wall of the corrugations.

1,878,308. FREQUENCY MULTIPLIER AND AMPLIFIER. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 23, 1927. Serial No. 177,505. 38 Claims. (Cl. 250—17.)



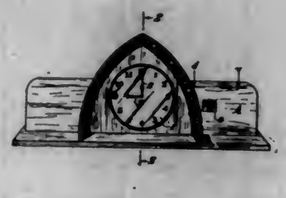
1. An apparatus of the character described, an electron discharge device having within an hermetically sealed container an electron emitting cathode, an electron receiving anode, and a control electrode intermediate said cathode and anode for controlling the flow of electrons from said electron emitting cathode to said anode, a circuit comprising an inductance coil and a condenser connected in parallel connected across said control electrode and cathode, said circuit being tuned to a fundamental frequency, a circuit comprising an inductance coil and a condenser connected in parallel connected between said anode and cathode, the circuit constants of said last mentioned circuit being such as to resonate at a frequency correesponding to a harmonic of the frequency of said circuit connected across said control electrode and cathode, means for subjecting said control electrode to a negative potential with respect to said cathode, and means for energizing said circuit connected across said control electrode and cathode with energy of fundamental frequency corresponding to the tuning of said circuit connected across said control electrode and cathode, the control electrode of said electron discharge device being subjected by said negative biasing means to a negative potential of a value such that for only brief fractions of positive input alternating potentions applied to said control electrode, plate current flows through said device from said cathode to said anode, whereby said circuit connected between said anode and cathode is caused to have engendered therein electrical oscillations of harmonic frequency, which oscillations oscillate freely for periods of time greater than the time of a cycle at the harmonic frequency intermediate successive times when plate current flows through said tube from said cathode to said anode.

1,878,309. RADIO FREQUENCY CIRCUIT ARRANGEMENT. ERNEST GREEN, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 15, 1929, Serial No. 340,049, and in Great Britain Mar. 7, 1928. 11 Claims. (Cl. 179—171.)



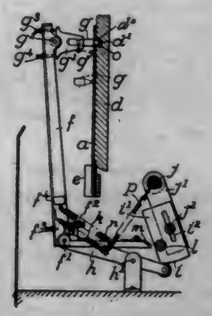
4. A Wheatstone bridge amplifying system whose output circuit is tuned to a harmonic of the input circuit frequency said system comprising bridge arms whose capacitative reactance, inductive reactance and resistance are equal each to each, while predominantly inductive reactance at output frequency is provided in the lead to the grid of the valve in the said bridge, the arrangement being such that alternating potential of output frequency is applied to the said grid and since the said bridge remains balanced, no current of output frequency is fed back to the input circuit.

1,878,310. CALENDAR CARD EXHIBITOR FOR CLOCKS. ROBERT VAUGHAN OWEN, New York, N. Y. Filed Jan. 17, 1928. Serial No. 247,273. 3 Claims. (Cl. 40—52.)



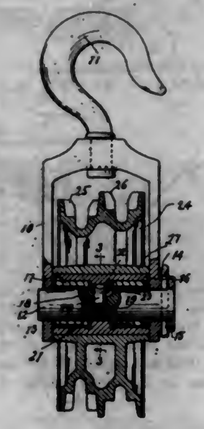
1. In a calendar card exhibiting device, opposed solenoids, a double core member adapted to coact with said solenoids, an arm carried by said core member, a ratchet wheel, a pawl actuated by said arm and engaging the ratchet wheel, a wheel driven by said ratchet wheel and adapted for rotation each twenty-four hours, an actuating member on said wheel, a plurality of cards bearing time indicia, an actuator plate for successively engaging said cards and moving them from one position to another, and an operative connection between said first named actuating member and actuator plate.

1,878,311. SOUND REPRODUCING APPARATUS. WILLIAM ROBERT OYSTON, London, England, assignor to Continuous Gramophones Limited, London, England, a British Joint-Stock Company. Filed Apr. 11, 1930, Serial No. 443,382, and in Australia May 1, 1929. 11 Claims. (Cl. 274—10.)



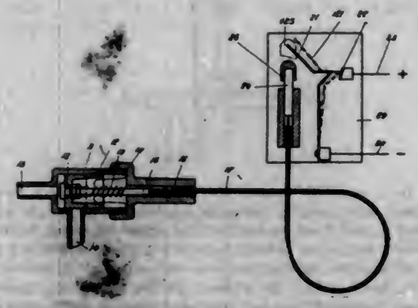
1. In a sound-reproducing apparatus comprising a vertically positioned turntable, means for centering a record disc upon the turntable, said centering means comprising supports on which the record settles on its edge, with its vertical diameter in line with the center of the turntable, a pin displaceable in a substantially vertical plane passing through the center of the turntable, said pin adapted to pass into the central aperture of the record, and means for raising said pin together with the record to a position coaxial with the turntable.

1,878,312. CHAIN BLOCK. JOHN S. PARKER, Cleveland, Ohio. Filed Feb. 26, 1931. Serial No. 518,423. 7 Claims. (Cl. 254—169.)



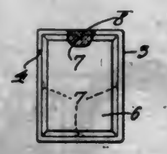
1. In a chain block, a rotatable chain member, a stationary supporting member about which said chain member rotates, and a member mounted for substantially unresisted rotation in one direction upon said supporting member, said member in turn frictionally resisting the rotation of said chain member in one direction.

1,878,313. SAFETY CONTACT DEVICE FOR AUTOMOBILES. RAUL PATERAS PESCARA, Barcelona, Spain. Filed July 29, 1930, Serial No. 471,576, and in Spain Aug. 8, 1929. 2 Claims. (Cl. 123—146.5.)



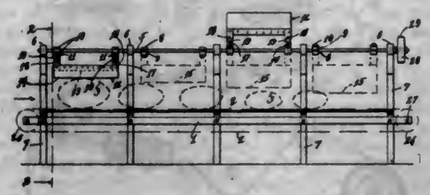
1. A safety contact device for automobile vehicles having an engine including a lubricating pump system, comprising a cylinder having a closed end with a conduit leading from the oil pump of the engine to the interior of the cylinder, another conduit opening into the side of the cylinder in a position intermediate the ends thereof, a piston mounted to reciprocate in said cylinder, a piston rod connected to the said piston with a large clearance in the connection, the said rod projecting away from the closed end with the conduit, a flexible cable connected to the end of the piston rod, a cover in which the said flexible cable works, the cover being connected to an end member adapted to be attached to the other end of the cylinder, a spring between the said end member and the piston for keeping the piston pressed towards the end of the cylinder carrying the conduit, so that when the pump is not in operation, the piston obturates the passage intermediate the ends of the cylinder, an electric contact making device located outside the engine casing and in series with the primary of the ignition coil, a sliding rod connected to the other end of the flexible cable and located to operate the electrical contact device by its movements, so that by the displacement of the piston in the cylinder by the pressure of the oil, the said sliding rod through the intermediary of the piston rod and flexible cable closes the electric contact, substantially as and for the purposes set forth.

1,878,314. METHOD OF MAKING JEWELRY. HENRY W. PETERS, Boston, Mass. Filed June 25, 1929. Serial No. 373,658. 1 Claim. (Cl. 29—160.6.)



In jewelry construction the method whereby an article may be produced with duplicate opposed faces, which includes the step of forming an elongated metal strip with spaced nodes on one face, cutting the strip into lengths each of which is adapted to form a frame, bending one of the lengths and joining its ends to form a frame having opposed faces open, inserting into the frame through either open face a stone or the like provided with marginal recesses adapted to be closed by the walls of the frame, and finally displacing the nodes inwardly into the recesses to hold the stone or the like against removal through either open face of the frame.

1,878,315. SIZING APPARATUS. ALBERT W. PHELPS, Los Angeles, Calif. Filed May 28, 1929. Serial No. 366,603. 2 Claims. (Cl. 209—91.)

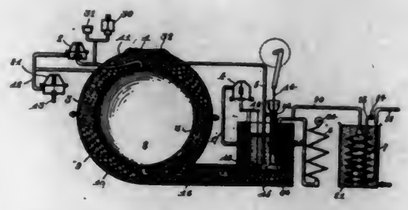


1. In sizing apparatus for melons or the like, the combination of a conveyor for advancing the melons along a path in single file, a plurality of rotary sizes located over the conveyor, each sizer comprising a pair of arms rotating on an axis above the conveyor, a bar connecting the arms with means for adjusting the bar, said bar having a flexible member attached thereto for engaging the upper side of the melons to roll the same off of the conveyor.

1,878,316. ENAMEL IMITATION LEATHER FINISH. DALE M. PHILLIPPI, Dayton, Ohio, assignor to The Kay & Ess Co., Dayton, Ohio, a Corporation of Ohio. Filed July 22, 1929. Serial No. 380,246. 2 Claims. (Cl. 134—26.)

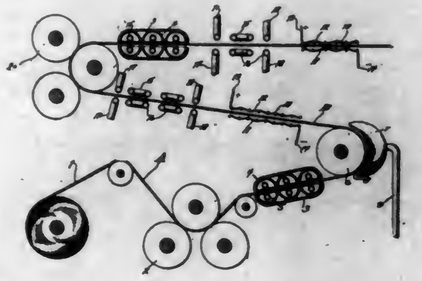
1. In a method of manufacturing and improving varnish or enamel for imitating leather finishes mixing China wood oil and linseed oil, heating said oils to approximately 480° F., cooling the oil, incorporating litharge therewith, holding the temperature between approximately 460° to 470° F., for approximately 30 minutes, adding manganese linoleate and cobalt linoleate, and adding a synthetic resin, restoring the temperature to approximately 425° F.

1,878,317. APPARATUS FOR CONSERVING AND VAPORIZING LIQUEFIED GASES. CHARLES PICARD, Joinville Le Pont, France, assignor to l'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris, France. Filed July 29, 1929, Serial No. 381,958, and in France July 31, 1928. 8 Claims. (Cl. 62—1.)



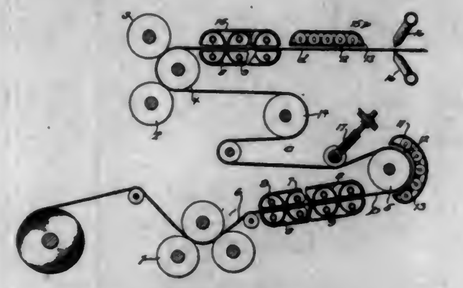
1. An apparatus for conserving liquefied gases, which comprises a liquid container, an exterior sheath and insulating material therebetween, means for automatically admitting up to a predetermined pressure a part of the evaporated gas to the space between the container and exterior sheath and means for preventing the gas pressure in the insulating material to exceed a certain limit and for allowing the gas in the insulating material to escape outwards, when the pressure of this gas has reached the said limit.

1,878,318. PRINTING. THOMAS F. PINDER, Merion, Pa. Filed Dec. 26, 1930. Serial No. 504,946. 7 Claims. (Cl. 101—416.)



7. A method of preventing offsetting of a printed web of paper which consists in subjecting the printed ink containing tong oil to the action of radiant heat and then to the action of electrical discharges passing directly through the printed web of paper, said web being subject to a cooling action while acted upon by said discharges.

1,878,319. APPARATUS FOR PREVENTING OFFSETTING IN PRINTING MACHINES. THOMAS F. PINDER, Merion, Pa. Filed May 30, 1930. Serial No. 457,609. 4 Claims. (Cl. 101—416.)



1. An apparatus for preventing offset of printing presses comprising means for subjecting freshly printed web of paper during its travel from one set of printing rolls to the other set of printing rolls to quick successive treatments of heat and cold, and means for subjecting the printed web of paper to ozone at a point between the heat and cold treatment.

1,878,320. CAMERA SUPPORT. NATHAN DUMONT POTTER, Enfield, Mass. Filed Nov. 20, 1931. Serial No. 576,235. 8 Claims. (Cl. 248—46.)

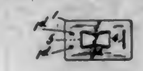


1. In a camera support the combination with a head provided with ground engaging supporting means, a bolt secured to said head, and projecting above the same, having a guiding portion of enlarged diameter and a threaded portion above the guiding portion, and forming a shoulder at the lower end of the guiding portion, of a cap having a sleeve portion fitting said head and movable longitudinally with respect thereto, said cap having a top friction surface, a guiding recess therein engaging the guiding portion of the bolt and of greater depth than said guiding portion and provided with a locking portion to engage said shoulder, and a spring interposed between said head and said cap.

1,878,321. LOOSE LEAF BINDER OR FILING COVER. GERALD POULTON, Bromley, England. Filed June 10, 1930, Serial No. 460,266, and in Great Britain Nov. 28, 1929. 11 Claims. (Cl. 129—25.)

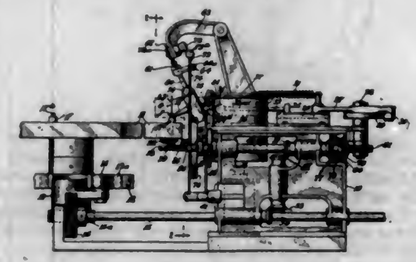
1. For use with a loose leaf binder provided with a flexible flat metal fastener, a washer formed of thin sheet

material and having therein a single transversely arranged slot, and at one side thereof, two oppositely inclined fingers arranged directly opposite each other and



adjacent to said slot, each finger being normally inclined to said washer at an angle less than a right angle for the purpose set forth.

1,878,322. PROCESS AND APPARATUS FOR MANUFACTURING CANDLE HOLDERS. JOHN E. PRESTON, Newark, and SAMUEL SOKOLOW, North Bergen, N. J., assignors, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., a Corporation of New York, and one-half to N. D. Q. Specialty Corporation, a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,751. 49 Claims. (Cl. 18—1.)



1. In combination, a rotatable support for a form, means to rotate said support at different speeds, a nozzle for squirting a ribbon of plastic material onto said form, and means to move said nozzle radially and axially of said support in timed relation to the rotation thereof.

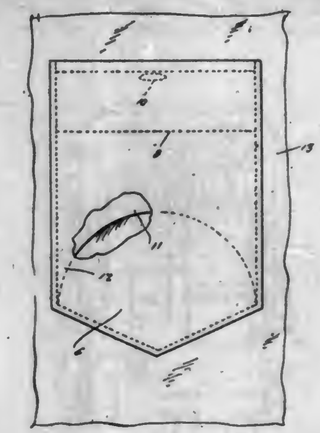
1,878,323. METAL BRUSH. FRANK J. QUIST, Worcester, Mass. Filed Mar. 3, 1930. Serial No. 432,694. 2 Claims. (Cl. 15—197.)



1. As an article of manufacture, a brush comprising a body formed of sheet metal, tufts of wire bristles doubled at their centers and passing through the bottom of said body, the doubled portions extending above said bottom, strips of metal extending along said bottom on the upper surface thereof and having notches for receiving the said doubled portions, whereby said portions are held in position, and a strip of metal resting on the tops of said folded portions to hold the bristles in the notches.

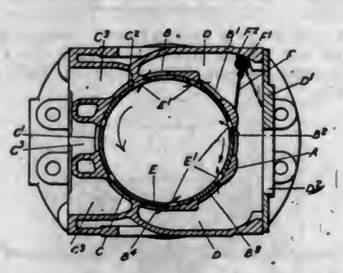
1,878,324. GARMENT POCKET CONSTRUCTION. HAROLD H. REITZ, Appleton, Wis. Filed Apr. 21, 1930. Serial No. 446,015. 2 Claims. (Cl. 2—254.)

1. In combination with a garment, a patch having its bottom and side edges sewn to the garment with its top edge free to provide a pocket and an inner patch having its sides and top connected with the sides and top of the first patch with its bottom free of the first patch and the garment, the bottom of the second patch having a recess cut therein to permit an article in the pocket to enter the space between the two patches when the wearer of



the garment bends over the upper portion of the inner patch having an opening therein for receiving a watch chain.

1,878,325. MEANS FOR FACILITATING STARTING OF INTERNAL COMBUSTION ENGINES OF THE LIQUID FUEL INJECTION COMPRESSION IGNITION TYPE. HARRY RALPH RICARDO, London, England. Filed May 27, 1931, Serial No. 540,436, and in Great Britain June 24, 1930. 6 Claims. (Cl. 123—81.)

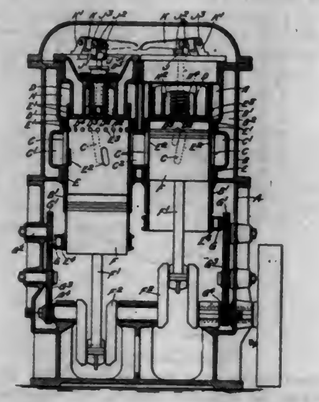


1. An internal combustion engine of the liquid fuel injection compression ignition type in which at least a part of the charge enters the cylinder during the induction period in such a manner as to cause the whole charge to be in a state of rotation about the combustion chamber axis at the end of the compression stroke, including in combination a cylinder having a plurality of inlet ports in its wall through which the charge enters the cylinder during normal operation of the engine in such a manner as to tend to rotate about the cylinder axis, and means for cutting off at least partially the flow of air through at least one of these ports for the purpose of reducing the speed of rotation of the charge during the starting period.

1,878,326. AIR COMPRESSOR OF THE MULTICYLINDER RECIPROCATING TYPE. HARRY RALPH RICARDO, London, England. Filed Apr. 13, 1932, Serial No. 605,090, and in Great Britain Apr. 28, 1931. 18 Claims. (Cl. 230—174.)

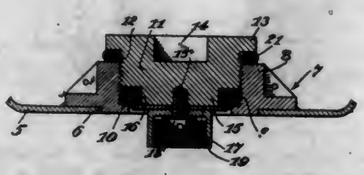
1. A compressor for gas of the multi-cylinder reciprocating type including in combination at least one group of

cylinders having inlet and outlet ports therein, each group including at least two cylinders, sleeve valves controlling the inlet and outlet ports, pistons in the cylinders the movements of the pistons in each group having such phase-relationship that the sum of the volumes of the compression spaces of the cylinders in each group remains



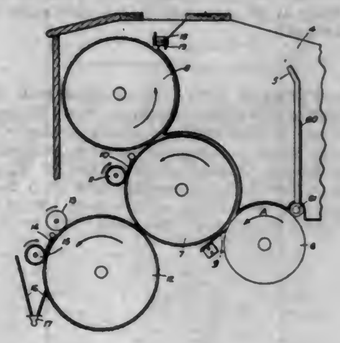
within small limits the same throughout the cycle of operations, one or more valves whereby the working spaces of the cylinders in each group can be brought into continuous direct communication with one another, and a non-return valve in the delivery passage leading from each cylinder.

1,878,327. BUNG FOR CONTAINERS. JOSEPH RIMMELSPACHER and EARNST HEPTING, Newark, N. J. Filed Dec. 8, 1930. Serial No. 500,713. 2 Claims. (Cl. 220—37.)



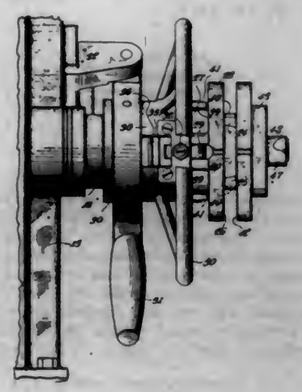
1. In combination with an internally threaded spud provided at the inner end of its threads with an inwardly projecting annular shoulder, an externally threaded bung, said bung at its inner end having a reduced axial extension, an annular sealing and locking washer engaged upon said bung extension, said washer being composed of a compressible material, a retaining plate engaged against the end face of the bung extension and overlapping upon the inner portion of said washer, and an attaching screw for said plate having threaded engagement in the bung extension, the outer part of the compressible washer engaging the shoulder of the spud upon inward threading movement of the bung whereby said washer is placed under compression to exert lateral inward and outward expansive pressure against the threads of the spud and the bung respectively and to also exert a direct outward axial pressure against the bung to frictionally lock the threads thereof with the threads of the spud and thereby prevent casual reverse turning movement of the bung.

1,878,328. APPARATUS FOR COMBING AND FEEDING TOBACCO FOR MAKING CIGARETTES AND FOR OTHER PURPOSES. FÉLIX FRÉDÉRIC RUAU, Deptford, London, England, assignor to Molins Machine Company, Limited, London, England. Filed Sept. 14, 1925, Serial No. 56,355, and in Great Britain Oct. 24, 1924. 3 Claims. (Cl. 131—39.)



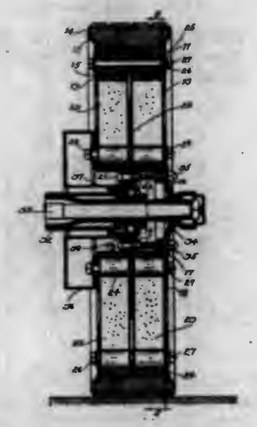
2. Apparatus for feeding tobacco to a filling trough of a continuous rod type cigarette machine comprising, in combination, a carded combing roller adapted to receive a supply of tobacco, means for removing the tobacco from said combing roller, and a carded distributing roller for receiving the removed tobacco directly from the combing roller and delivering the same directly and uniformly to the filling trough of the machine.

1,878,329. CHUCK. AUGUSTE L. SALTZMAN, Orange, N. J., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 474,009. 11 Claims. (Cl. 140—92.2.)



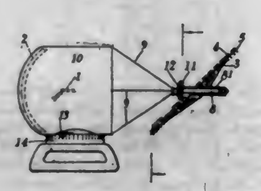
1. The combination in a coil winding chuck of a rotary spindle, a collapsible core supported by said spindle, relatively movable face plates between which a coil is wound associated with said core and mechanism for simultaneously collapsing said core and separating said face plates to free a finished coil therefrom.

1,878,330. VEHICLE WHEEL. HERMAN SAUER, New York, N. Y. Filed July 30, 1931. Serial No. 554,093. 1 Claim. (Cl. 152—28.)



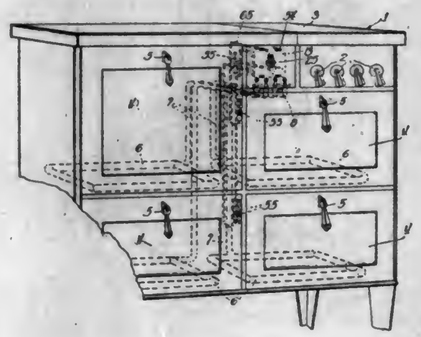
A resilient wheel comprising an annular rim section having side flanges, and an intermediate flange, a hub section including a pair of annular ring members having opposed inwardly and outwardly extending flanges, the outwardly extending flanges being in alinement with the side flanges of said rim section, an annular plate interposed between said inwardly extending flanges, securing elements passing through said inwardly extending flanges and plate, said plate being in alinement with said intermediate flange, seats of spaced radially extending resilient spokes, and inner and outer sets of bolts, the outer set of bolts passing through said side flanges, said intermediate flange and the outer ends of said spokes, while the inner set of bolts extend through said outwardly extending flanges, annular plate and the inner ends of said said resilient spokes.

1,878,331. OPTICAL PROJECTION APPARATUS. JOHN CLIFFORD SAVAGE, London, England. Filed May 23, 1929, Serial No. 365,505, and in France July 30, 1928. 6 Claims. (Cl. 40—130.)



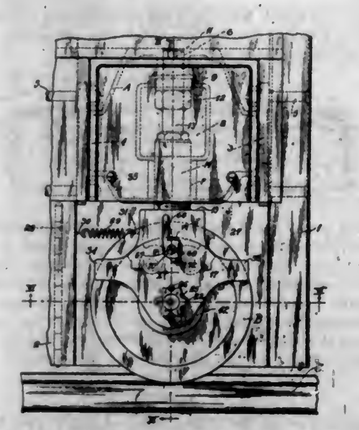
1. Optical projection apparatus comprising in combination a device for producing a substantially parallel beam of light, an element rotatable in its own plane mounted to occupy an inclined cross sectional area of said beam, and an assemblage of optical units mounted upon said element, each of said units having a predetermined angular adjustment in relation to the others.

1,878,332. MULTIOVEN HEAT REGULATOR. WALTER E. SCHIRMER, Chicago, Ill., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 4, 1932. Serial No. 596,694. 19 Claims. (Cl. 236—15.)



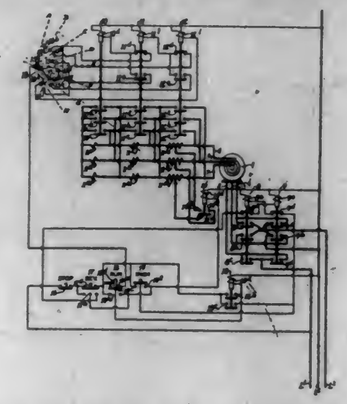
1. In an oven of the class described, a plurality of oven chambers, control means for controlling the flow of fuel to each of said chambers, and a selecting mechanism for selectively engaging each of said control means to establish a predetermined temperature within each of said ovens.

1,878,333. LOCK FOR DOOR ROLLERS. JOHN E. SCOTT, Danville, Ill., assignor to Allith-Prouty Company, Danville, Ill., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 421,914. 5 Claims. (Cl. 16—100.)



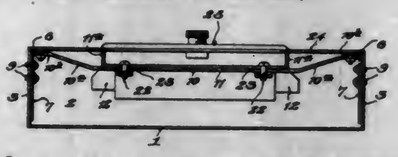
1. A hangar door roller construction including a roller frame, a roller supported in said frame, said roller having an inner annular flange and a hub, a collar on said hub, a pair of spaced ears extending radially from said collar, cams carried by said ears, springs between said collar and said cams to urge said cams against said flange, and an actuator carried by said ears and extending between said cams for moving said cams away from said flange against the action of the springs when said actuator is turned in either of two directions.

1,878,334. MOTOR CONTROLLER. EDWIN W. SEEGER, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 473,080. 6 Claims. (Cl. 172—179.)



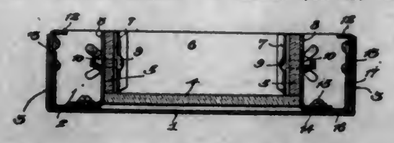
1. In a controller for alternating current motor, in combination, speed regulating resistances having ohmic values which vary in geometric progression with a ratio of two, electromagnetic switches for excluding said resistances in different groupings to provide for operation of the motor at different running speeds, a presettable control switch for said electromagnetic switches to afford selection of the running speed of the motor, and starting means for the motor including a push button switch to be depressed to effect starting and slow speed operation of the motor regardless of the setting of said presettable switch and to be returned to a given position to effect acceleration of the motor to the speed selected by said presettable switch.

1,878,335. PANEL BOARD CONSTRUCTION. FRANK T. SHULL, Washington, D. C. Filed Jan. 18, 1928. Serial No. 247,576. 8 Claims. (Cl. 247—10.)



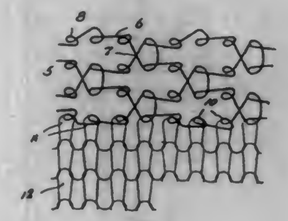
1. In a panel board construction, the combination of an enclosing housing, supports projecting between and supported by the side walls of the housing adjacent the front face of the housing, and a carrying-plate for switches and fuse connections mounted on said supports, the said plate being longitudinally adjustable with respect to the supports and the supports being inwardly or outwardly adjustable with respect to the side walls of the casing.

1,878,336. PANEL BOARD AND CABINET THEREFOR. FRANK T. SHULL, Washington, D. C. Filed Jan. 18, 1928. Serial No. 247,577. 11 Claims. (Cl. 247—10.)



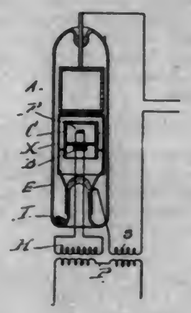
1. In a cabinet for panel boards and the like, having a base and sides, a face strip for the front edges of the sides, and means for permitting inward or outward adjustment of the face strip relative to the front edges of the sides, whereby to constitute a lining surface for the surrounding wall finish, and connections from said facing strip adapted to support a panel board or the like, whereby the latter is adjusted simultaneously with the facing strip.

1,878,337. STOCKING. RAYMOND K. SINES, Philadelphia, Pa. Filed Dec. 17, 1931. Serial No. 581,562. 10 Claims. (Cl. 66—172.)



1. A method of manufacturing fashioned hosiery which comprises forming the welt of the stocking as a single thickness flat warp knit strip, topping selvage loops of the strip to the needles of a full fashioned knitting machine and continuing thereon the knitting of the leg of the stocking as a full fashioned flat knit web.

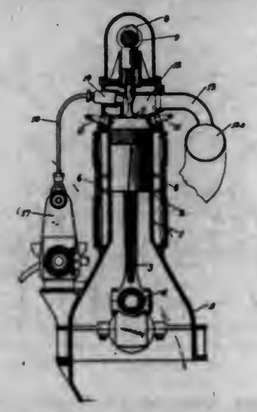
1,878,338. GASEOUS CONDUCTION APPARATUS. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 21, 1925, Serial No. 76,792. Renewed Sept. 26, 1931. 13 Claims. (Cl. 250—27.5.)



1. A gaseous discharge device comprising an enclosure containing electrodes including a hollow cathode having a restricted discharge opening, an easily ionizable gas, a second gas having low electron affinity, and means inside the hollow cathode for ionizing the first gas, whereby an electronic discharge may be started through said second gas on lower voltage.

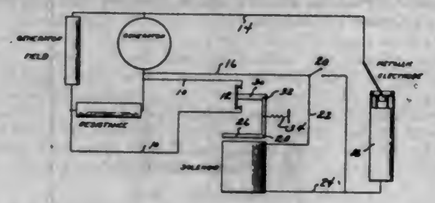
1,878,339. TWO-STROKE CYCLE ENGINE. ROBERT LEE SOUTHERN, Palo Alto, Calif., assignor, by mesne assignments, to University Engineering Company. Filed Aug. 26, 1929. Serial No. 388,350. 3 Claims. (Cl. 123—65.)

3. In a two cycle gas engine, a cylinder, a chamber at the head end of and communicating with the cylinder, an air intake passage leading to one end of the chamber, means to force air through said passage and into said chamber, a fuel intake passage leading to the opposite end



of the chamber, and means to force fuel through said fuel passage and into the chamber while the air is still flowing into the same.

1,878,340. WELDING APPARATUS. ROY C. SPAULDING, VIRGIL OLDBERG, and ARTHUR C. BORN, Detroit, Mich., assignors to Oldberg Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 16, 1931. Serial No. 522,886. 3 Claims. (Cl. 219—8.)

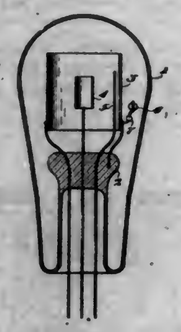


1. Welding apparatus including a generator, a field coil operatively connected to the latter, a resistance in series with said field coil, a circuit shunting the resistance, a switch in the shunt circuit, a welding electrode connected to one line of the generator, an article to be welded connected to the other line of the generator, an electrically operating shunt switch opening device in one of the generator lines, and shunt switch closing means, the device including a solenoid in series with the generator line, the armature of the solenoid being mechanically connected to the switch so that as the solenoid is energized, the armature is moved to open the switch.

1,878,341. VOLTAGE REGULATOR. PERCY L. SPENCER, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1928. Serial No. 261,976. 6 Claims. (Cl. 250—27.5.)

1. A gas discharge device comprising the combination with an envelope containing a gas at a reduced pressure, of a cathode, an anode within the cathode, and a source of alkali metal vapors supported by but insulated from one of said electrodes.

2. A gaseous regulator tube for regulating the voltage across a direct current source comprising, a gas tight vessel containing ionizable gas at a pressure sufficient to maintain a glow discharge between two spaced electrodes therein, a hollow relatively large area cathode in said vessel adapted to be connected to the negative terminal of said source, and a hollow anode of smaller area than said cathode disposed inside said cathode and adapted to be connected to the positive terminal of said source so as to



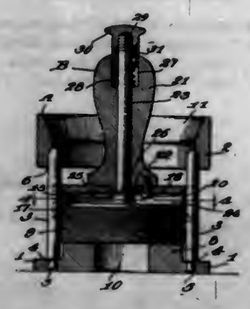
maintain through said gas a regulating glow discharge with said cathode at which a substantially constant voltage is secured across said source.

1,878,342. EDIBLE CONFECTION. LEVI A. STEVENSON, Kalispell, Mont. Filed July 20, 1929. Serial No. 379,848. 3 Claims. (Cl. 90—70.)



1. An edible confection comprising a main receptacle formed of pastry and a pair of relatively smaller auxiliary pastry receptacles attached to the main receptacle at opposite sides thereof, all of said receptacles having tapered walls, said auxiliary receptacles being complete in themselves, independent of material forming the main receptacle, and integrally united at peripheral points to the main receptacle so as to be supported thereby.

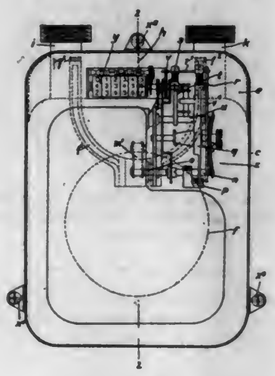
1,878,343. CAPPING DEVICE. HENRY A. STONE, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Apr. 27, 1929. Serial No. 358,636. 16 Claims. (Cl. 226—92.)



1. A capper of the character described including a member for supporting a stack of closure caps, and an applying member normally supported on the stack of caps but adapted to be removed for positioning a cap into a container or the like, said cap supporting member including a

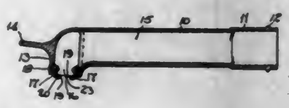
bottom plate, a top ring having its inner surface inclined from the top towards the bottom, and vertically extending members connecting the bottom plate and ring and engageable with the caps to hold the same in position.

1,878,344. DRY GAS METER. WILHELM STRELOW, Berlin-Zehlendorf-West, Germany. Filed Aug. 9, 1930, Serial No. 474,240, and in Germany Aug. 17, 1929. 3 Claims. (Cl. 73—1.)



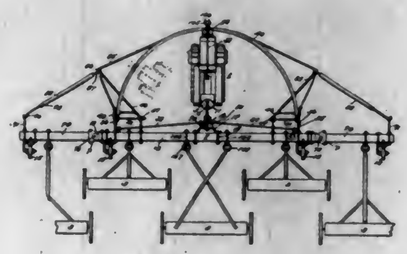
1. A valve controlled dry gas meter having two measuring chambers and comprising in combination with a casing, a valve chamber, a valve mechanism within said chamber, an inlet branch and an outlet branch combined with said valve chamber, a diaphragm connected with said valve chamber, so as to swing like a pendulum, said valve chamber and diaphragm forming together a vertical wall arranged within said casing and separating two measuring chambers from each other; a second vertical wall afranged within said casing and forming the outer boundary wall of one of said measuring chambers, valve operating means and a counting mechanism both being mounted on said second wall and outside of said measuring chambers, and means operatively connecting said valve operating means with said diaphragm and means operatively connecting said valve operating means with said counting mechanism, said second named means having a portion extending gas-tight through said second wall.

1,878,345. GROOMING TOOL. THEOPHILUS A. SUTER, Brooklyn, N. Y., assignor to Air Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,620. 3 Claims. (Cl. 119—84.)



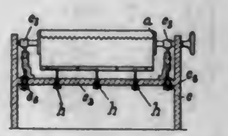
1. A vacuum grooming tool comprising a handle having a bore, a nozzle having a slot in communication with said bore, scraper means projecting in spaced relation with the plane of such slot, and comb means removably secured at the margins of the slot.

1,878,346. TRAILER CART. REUBEN D. SWANSON, Walla Walla, Wash., assignor of one-half to Oscar J. Jauslin, Walla Walla, Wash. Filed May 26, 1930. Serial No. 455,747. 12 Claims. (Cl. 280—33.44.)



3. Trailer-cart apparatus for tractors, consisting in combination with a tractor, of a beam operatively connected at its midlength to the rear of said tractor, and a rigid control-frame connected at its ends to the opposite ends of the beam and connected between its ends to the fore part of the tractor.

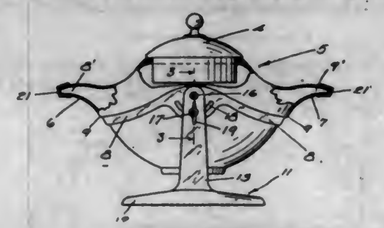
1,878,347. PROCESS AND APPARATUS FOR PREPARING PRINTING ROLLERS. ALEXANDER TAUSZ and FRANZ STÉHLIK, Budapest, Hungary. Filed Jan. 29, 1929, Serial No. 335,931, and in Hungary Dec. 12, 1928. 11 Claims. (Cl. 95—73.)



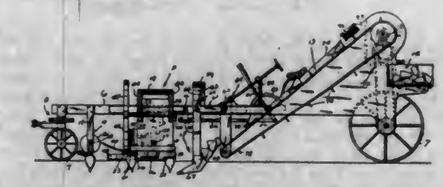
1. In the art of producing an etched printing roller having a continuous design formed upon its surface which comprises a continuous succession of design elements, those steps which consist in photographically printing said design elements successively upon aliquot parts of the circumferential dimension of the printing roller, said printing being accomplished in each stage by the same light transparent film, said film being provided with said design elements and being held in close contact with the light sensitive surface of the roller during each photographic printing operation, the relative portions of said roller and of said film being shifted after each printing operation in order to cause said film to contact with the next aliquot part of the said roller, said relative shift being solely in a circumferential direction.

1,878,348. TILTABLY MOUNTED PITCHER. POLLY D. TE SELLE, Berkeley, Calif. Filed July 29, 1929. Serial No. 381,797. 1 Claim. (Cl. 65—31.)

In combination with a transversely curvilinearly formed substantially circular band; a pitcher comprising a bowl section of substantially spherical form and provided with a cover, a drip spout and a pouring spout projecting in opposite directions from said bowl and a shoulder formed beneath said spouts and curving upwardly from both spouts to a point intermediate said spouts on both sides of said bowl, said shoulder being adapted to rest on said band and secure said pitcher against displacement said band furnishing means for pivotally mounting the pitcher upon a suitable support.

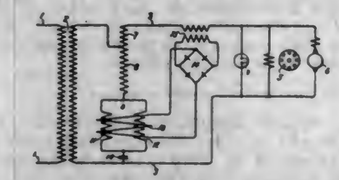


1,878,349. BEET HARVESTER. TOYOMATSU TERADA, San Francisco, Calif. Filed Jan. 26, 1931. Serial No. 511,256. 16 Claims. (Cl. 55—107.)



1. The combination with a beet harvester including a main frame, of an auxiliary frame, a series of means to adjustably suspend the auxiliary frame on the main frame, a cutter supporting element on the auxiliary frame, a cutter blade on said element, a pair of side cutter blades on the element spaced rearwardly and downwardly from the first blade, and a center leveling knife on the element disposed rearwardly of the pair of blades and at substantially the same level as the pair of blades; and means on the auxiliary frame to move over the foliage of the beets, thereby to hold the auxiliary frame and the blades in uniform relation to the tops of the beats to be harvested.

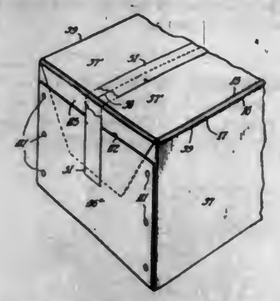
1,878,350. ELECTRICAL REGULATING MEANS. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1930. Serial No. 446,896. 8 Claims. (Cl. 171—119.)



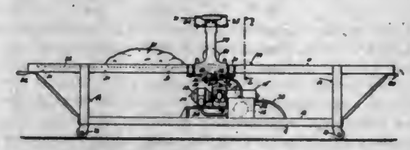
3. In combination, an alternating current circuit, a booster transformer including a series winding connected in said circuit and a shunt winding connected across said circuit, a saturable reactor and a capacitor connected in series with said shunt winding, and means for varying the saturation of said reactor in proportion to variation in the current of said circuit.

1,878,351. CONTAINER. HARRISON B. WALTER, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed May 23, 1930. Serial No. 454,965. 1 Claim. (Cl. 229—43.)

A shipping container comprising a blank of fiber or paper board providing a bottom and two side walls, flaps at each end of the bottom and the two side walls, means for securing said side and bottom wall flaps together to provide a pocket in each end of the box, a removable and separate cover likewise formed of fiber or paper board, said cover comprising a top and beveled end flaps, said flaps fitting within said pockets, and the top providing a closure for said container, said side walls having additional flaps formed integral therewith extending inwardly from the top edges of the sides, whereby said last mentioned flaps cooperate with said removable and separate cover to form a cover of a plurality of thicknesses for said container.

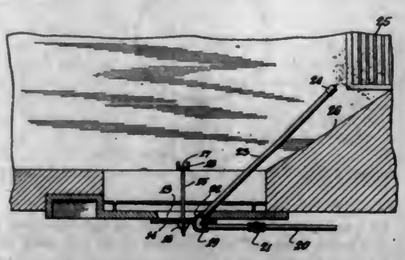


1,878,352. DOUGH ROLLING MACHINE. GEORGE E. WARD, Los Angeles, and O'NEAL S. PALMER, Glendale, Calif., assignors to Davis Standard Bread Company, a Corporation of California. Filed July 25, 1930. Serial No. 470,615. 8 Claims. (Cl. 107—12.)



1. A dough rolling machine embodying: a frame; a table adapted to travel in said frame; a roll mounted in said frame and spaced above said table; power means for driving said table and said roll; means for causing said table to travel in said frame; means for simultaneously rotating said roll to perform a rolling action in conjunction with said table; and means mounted on said table and arranged to engage a member on said frame for stopping said power means to stop the travel of the table and the rotation of the roll at a predetermined point.

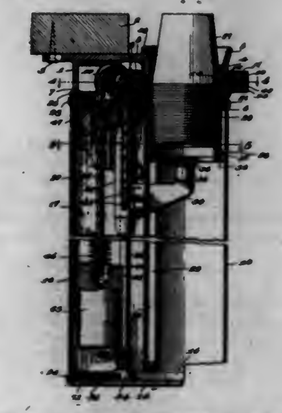
1,878,353. STEAM GENERATOR AND SPRAYER FOR BAKERY OVENS. MAX WATTER, Brooklyn, N. Y. Filed Sept. 28, 1931. Serial No. 565,537. 2 Claims. (Cl. 107—64.)



1. A steam generator and sprayer, particularly for bakery ovens having a front door provided with an opening, a plate closing said opening, means for securing said

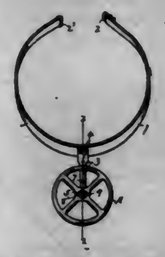
plate in place, an outer socket formed with said plate, a valve controlled water supply pipe in said socket, an inner socket on said plate arranged at an angle of 45° to the inner wall thereof and in communication with the outer socket, a water delivery pipe screwed at one end into said inner socket, a screen or strainer in said delivery pipe, and a nozzle at the inner end of same.

1,878,354. DISPENSING DEVICE. EDWIN G. WESSMAN, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Dec. 19, 1928. Serial No. 327,133. 4 Claims. (Cl. 312—43.)



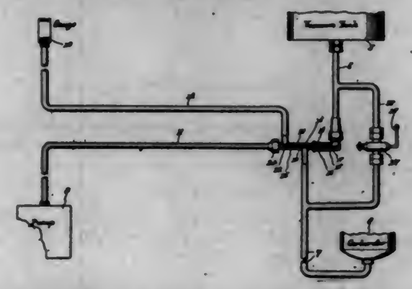
2. In a dispensing device adapted to support a stack of articles in inverted position with a portion of the terminal article exposed in position to be readily grasped, a casing having an opening through which the articles are inserted and dispensed, readily yieldable floating projections positioned intermediate the ends of the opening and extending into the opening at right angles to the vertical center of the opening, the projections normally engaging the terminal article, and means for normally urging the stack upwardly with the terminal article engaged with the projections, said projections having sufficient resistance to prevent ejection of the terminal article by the upwardly urging means but allowing the same to be withdrawn by an upward pull, the projections yielding as the articles are inserted through the opening and forced downwardly under pressure.

1,878,355. CHILD'S AMUSEMENT DEVICE. BURT H. WHITE, Syracuse, N. Y. Filed July 7, 1930, Serial No. 465,944. Renewed July 25, 1932. 3 Claims. (Cl. 46—37.)



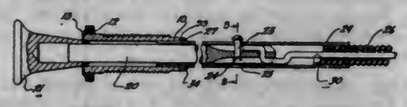
1. An amusement device of the character described comprising a band adapted to be attached to the body of the user, a bracket composed of inner and outer layers of relatively thin sheet metal having the layers at one end secured to the inner and outer faces of the intermediate portion of the band, the opposite ends of the layers being reduced in width to form a bearing, and a wheel rotatably mounted on said bearing, the ends of the layers forming said bearing being bent laterally in opposite directions to hold the wheel against upward displacement.

1,878,356. AUTOMATIC OIL STOP. GERTRUDE WILCOX, Mayville, N. Y. Filed Oct. 23, 1929. Serial No. 401,948. 2 Claims. (Cl. 123—196.)



1. In a device of the kind described, a fuel line, an oil pressure line, a sleeve extending in common to said lines, a spring pressed ball valve to engage one end of the sleeve for closing the fuel supply, a second spring pressed ball valve to seat in the opposite end of the sleeve for closing the oil supply at the same time, the last mentioned valve being acted upon by the normal oil pressure to move the same away from its seat, and a connection between the valves whereby the said movement of the oil pressure valve forces the opening of the fuel supply valve to allow the free passage of fuel through the fuel line.

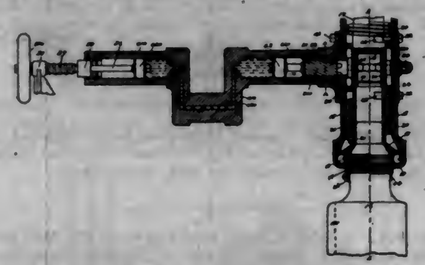
1,878,357. CONTROL ROD HOUSING. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 28, 1929. Serial No. 335,510. 4 Claims. (Cl. 285—56.)



1. A device of the character described, comprising a supporting sleeve, panel clamping means upon said sleeve, and a tubular extension fitted within said sleeve and provided therein with a peripheral rib about which an integral portion of said sleeve is interlockingly engaged, said tube comprising a sheet metal blank having side marginal portions in substantial abutting relation.

1,878,358. BLADE ROTATING MECHANISM. ROBERT YATES, Passaic, N. J., assignor of one-half to Emma Hope Yates, Passaic, N. J. Filed May 29, 1929. Serial No. 366,796. 5 Claims. (Cl. 170—163.)

1. An automatic variable pitch propeller, comprising a hub, having radial sockets, blades having shanks swiveled one in each socket, each blade having an eccentric area on the following side of its axial center line, by which the rotation of the propeller produces an axial rotative movement of the blade under pressure of the air; and a torsional spring secured to the shank of each blade and to their sockets to counteract such turning movement, with equalizing gears and pinions for conveying the turning movement of one blade to the other, and means in the form of stops for limiting such turning movement; in combination with means for reducing the pitch angle of the blades manually, comprising; a hollow propeller shaft having telescoping cylinders within, adapted to slide longitudinally while rotating with the shaft and means for producing and controlling this sliding movement; also means by which the inner cylinder is caused to turn laterally when the outer cylinder is moved longitudinally, and a coupling connecting the inner cylinder with the



equalizing gears and blades of the propeller by which the turning movement of this cylinder is transmitted to the blades, to reduce their pitch angle manually against the counteracting torsional power of the springs.

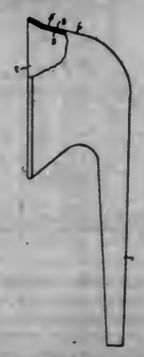
1,878,359. PROCESS FOR THE PREPARATION OF PRODUCTS WHICH LIBERATE OXYGEN. WALTER ZISCH, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 25, 1929, Serial No. 349,918, and in Germany Mar. 31, 1928. 9 Claims. (Cl. 23—6.)

1. Process for the preparation of products which liberate oxygen in contact with breathed air, comprising intimately mixing and then reacting anhydrous alkali metal peroxide with a di-hydrate of an alkali metal peroxide.

6. Process for the preparation of products which liberate oxygen in contact with breathed air, comprising making an intimate mixture of anhydrous alkali metal peroxide with a di-hydrate of an alkali metal peroxide, molding said mixture under pressure, heating the molded product until hard and then granulating.

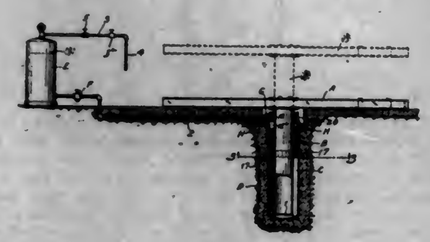
9. A composition of matter comprising an intimate heat treated mixture of small amounts of a finely divided catalyst from the group comprising iron, manganese, cobalt, copper and their oxides with sodium peroxide and its di-hydrate, in a ratio of about 1 mol of the former to about ½ to ⅛ mol of the latter.

1,878,360. ACOUSTIC HORN AND METHOD OF MANUFACTURE THEREOF. ALEXANDER I. ABRAHAMS, New York, N. Y. Filed Sept. 26, 1931. Serial No. 565,297. 12 Claims. (Cl. 181—27.)



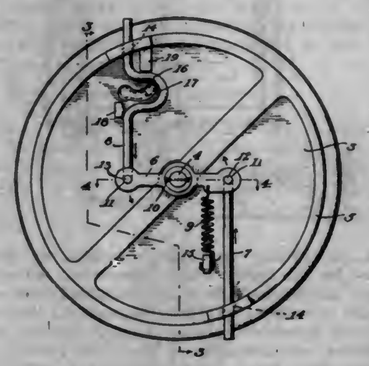
1. A water-proof horn of the type described comprising a base formed of textile fabric of the desired size and shape thoroughly impregnated with a hardened varnish insoluble in water.

1,878,361. AUTOMOBILE LIFT. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed Dec. 23, 1929. Serial No. 416,018. 7 Claims. (Cl. 254—93.)



1. An automobile lift, comprising a platform or chassis supporting structure, a cylinder provided with a piston that is adapted to be actuated by an operating medium to raise and lower the platform, a governing means for the operating medium by which the operator in charge of the lift can regulate the speed of travel of the platform when it is being raised, and a means separate and distinct from and in addition to said governing means for causing the platform to descend at a slow speed, irrespective of the desire of the operator.

1,878,362. LOCK FOR BOXES. ALOIS E. BANASIK, Amarillo, Tex., assignor to Clowe & Cowan, Inc., Amarillo, Tex., a Corporation of Texas. Filed Feb. 16, 1931. Serial No. 516,121. 2 Claims. (Cl. 70—74.)

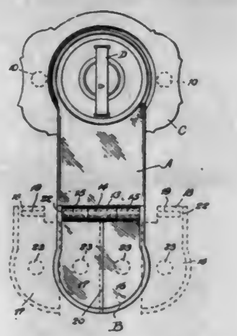


1. In a device of the class described, a lid, a flange on the under side of the lid, a pair of bolts having their outer ends extending through openings in said flange, a pivotally mounted link on the under side of the lid, the inner ends of said bolts being pivotally connected to the ends of said link, a U-shaped key-receiving bend formed in one of said bolts, said lid provided with a key-receiving slot in alignment with said key-receiving bend.

1,878,363. HINGE. OWEN MORRIS BANGS, New York, N. Y. Filed Apr. 20, 1929. Serial No. 356,675. 3 Claims. (Cl. 16—171.)

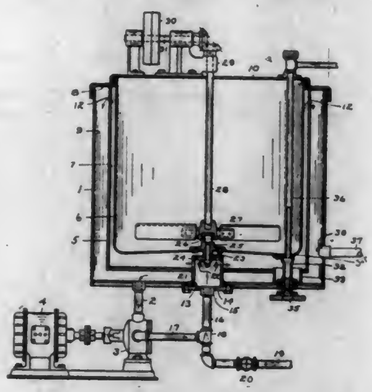
1. A hinge comprising two relatively swinging hinge members, one of said swinging members being split and

composed of two parts having an overlapping fit at their meeting portions, each of said parts having a stem formed integral therewith, and a removable plate aper-



tured to fit said stems and extending crosswise of said split member, said split member being counter-sunk to receive said cross plate.

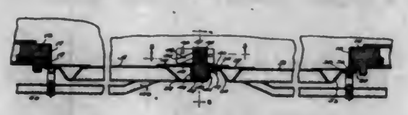
1,878,364. PASTEURIZING APPARATUS. WALTER A. BARRETT, Fort Wayne, Ind. Filed May 31, 1930. Serial No. 457,885. 12 Claims. (Cl. 257—108.)



1. A pasteurizing apparatus comprising an inner receptacle for the product to be pasteurized, an outer receptacle, an intermediate receptacle spaced from each of the other receptacles, the space between the intermediate and inner receptacles being relatively narrow laterally and having communication at the upper portion thereof with the other space, means to supply a liquid heating medium to the intermediate receptacle and to cause said medium to circulate upwardly through the relatively narrow space and downwardly through the outer space and an overflow conduit having communication with the latter space at such point that when the circulation of the said medium is stopped the portion of the medium in both spaces rapidly drops to a level immediately below the bottom of the inner receptacle.

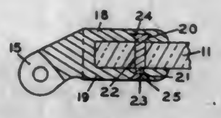
1,878,365. CAR DOOR. ALLAN S. BARROWS, Los Angeles, Calif., assignor to The Youngstown Steel Door Co., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 23, 1928. Serial No. 272,038. 12 Claims. (Cl. 189—46.)

10. As an article of manufacture, a fabricated sheet metal door having corrugations therein extended outwardly from the main plane of the door, said door being provided at the forward edge thereof with a metal post of channel formation with the channel opening inwardly



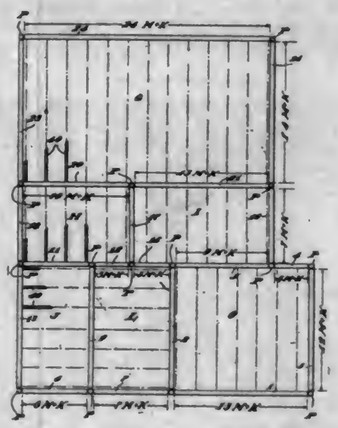
of the door, said channel formation being disposed between said main plane of the door and the plane defined by the outermost portions of said corrugations.

1,878,366. OPHTHALMIC MOUNTING AND METHOD OF MAKING SAME. CARL L. BAUSCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed June 25, 1932. Serial No. 619,306. 7 Claims. (Cl. 88—4.)



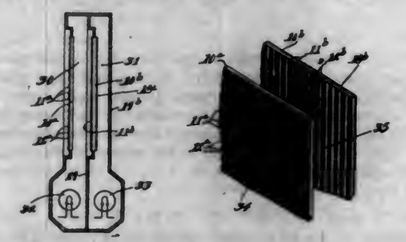
1. An ophthalmic mounting comprising a member having two spaced straps positioned on opposite faces of a lens having an opening, one of said straps being imperforate and having an undercut recess, the other strap having an aperture, and a nonmetallic retaining element positioned in said aperture and opening and having a portion anchored in said undercut recess.

1,878,367. BUILDING CONSTRUCTION. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries Incorporated, Boston, Mass., a Corporation of Delaware. Filed Dec. 14, 1929. Serial No. 414,056. 14 Claims. (Cl. 189—1.)



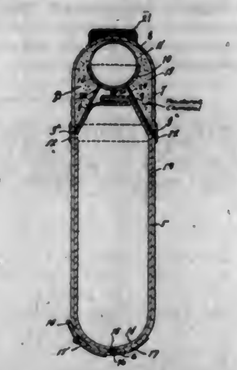
1. The new and improved method of building which involves quantity manufacture of preformed building units and avoids cutting in situ, which comprises forming frame members in a plurality of lengths which differ from each other by multiples of a predetermined module M, whereby frame members are developed of lengths equal to integral multiples of the module M plus a constant K; forming structural members with a predetermined cross sectional dimension W, and then connecting said frame and structural members into a building frame, with the ends of said frame members uniformly disposed relative to the aforesaid cross-sectional parts of the structural members so that 2C plus K plus W equals an integral multiple of M, the quantity C equalling the spacing of a frame member from the cross sectional part of the structural member.

1,878,368. ADVERTISING SIGN AND THE LIKE. JOSEPH E. BIELSKI, Oak Park, Ill. Filed May 9, 1932. Serial No. 610,030. 9 Claims. (Cl. 40—132.)



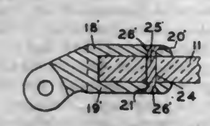
1. Composite display means, comprising a carrying element of light transmitting material having thereon indicia to be displayed on its front face by light reflection and at the rear thereof different indicia to be displayed on its front face by light transmission through the element, the matter depicted for said first mentioned display being produced by applied opaque material in sections separated by intervening spaces permitting transmission of light through said carrying element with diffusive divergence from said light transmitting spaces and convergence over the opaque material whereby to effect an illusionary obliteration of said first mentioned indicia, the second mentioned indicia being of applied light penetrable material.

1,878,369. FIRE EXTINGUISHER. ALBERT BLANKENHAGEN, Akron, Ohio. Filed Oct. 24, 1928. Serial No. 314,605. 1 Claim. (Cl. 169—82.)



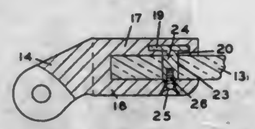
In a device of the class described, an enclosed casing, a perforated partition dividing said casing into a main chamber and a pressure generating chamber, a collapsible container in said main chamber said casing and container having coinciding discharge openings, pressure producing substances in said pressure generating chamber, frangible container enclosing one of said substances, said frangible container supported by said partition in a position close to the wall of said casing where it may be broken by forcing the wall of said casing against said frangible container and a flap removably soldered over the discharge opening in said casing.

1,878,370. OPHTHALMIC MOUNTING AND METHOD OF ATTACHING SAME. SAMUEL E. BOUCHARD, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,825. 15 Claims. (Cl. 88—47.)



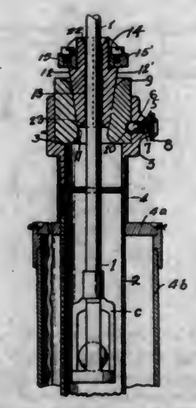
1. An ophthalmic mounting comprising a member having two spaced straps, each of said straps having an aperture, said straps being positioned on opposite faces of a lens having an opening with said apertures in alignment with the opening and a non-metallic fusible member positioned in said apertures and opening, and anchoring means on one of said straps, said means being engaged by said element whereby said mounting is secured to the lens.

1,878,371. OPHTHALMIC MOUNTING AND METHOD OF MAKING SAME. SAMUEL E. BOUCHARD, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed June 25, 1932. Serial No. 619,304. 14 Claims. (Cl. 88—47.)



1. An ophthalmic mounting comprising a strap positioned in contact with the surface of a lens having an opening, said strap being imperforate and having a bent-over portion on its inner face which forms a recess, and a non-metallic retaining element positioned in said opening and anchored in said recess.

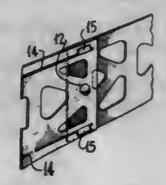
1,878,372. SAFETY DEEP WELL PUMP ASSEMBLY. JOHN V. BOX, Los Angeles, Calif., assignor of one-half to Charles A. Dailey, Torrence, Calif. Filed Oct. 15, 1928. Serial No. 312,443. 5 Claims. (Cl. 24—263.)



1. An assembly of the character set forth comprising a head adapted to be secured to pump tubing and provided with a seat having an internal horizontal shoulder

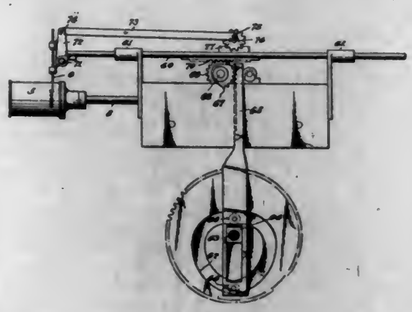
and also provided in one side with a gap adapted to admit a sucker rod; a spider seated in said seat and provided with a downwardly reduced slip seat and having in one side a vertical slot to pass a sucker rod to the slip seat; slips adapted to seat in the slip seat of the spider and having wickers adapted to fit upon a sucker rod; said slips also being provided at one side of the wickers with meeting faces and with divergent faces at the other side of the wickers; and jaws in which such slips are mounted; said jaws being adapted to be closed and having divergent extensions of the divergent faces of the slips, and forming guides to receive between them a sucker rod for the purpose of spreading the jaws apart by contact with the sucker rod when the closed jaws are moved horizontally to position above the spider to enclose the sucker rod in the slips.

1,878,373. TOY BUILDING CONSTRUCTION. EDWIN C. BREESER, Philadelphia, Pa. Filed July 16, 1931. Serial No. 551,097. 10 Claims. (Cl. 46—35.)



1. A structural couple for use in toy building construction including two complemental structural units, means for fixedly securing said units together in operative relationship when in use, and separate means for holding them together when not in use, a portion of said last named means being permanently associated with one of said units.

1,878,374. METHOD OF PRODUCING ARTIFICIAL SILK OR THE LIKE. JULIUS BRENZINGER, Fairfield, Conn., assignor to Axel V. Beeken, Bloomfield, N. J. Filed June 20, 1930. Serial No. 462,493. 6 Claims. (Cl. 18—54.)



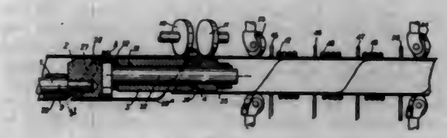
1. The method of winding thread, or the like, which consists in feeding the thread from a source of supply, and then guiding and winding the advancing thread to thereby lay it substantially devoid of tension in a slack undulating path extending first in one direction in a plurality of turns and then extending in the other direction in a plurality of turns, said slack rendering the wound body thus produced more easily penetrable by liquid.

1,878,375. POWER TRANSMISSION FOR MOTOR ROAD VEHICLES AND THE LIKE. EDMOND LOUIS CACHE, St.-Quentin, France. Filed Aug. 19, 1931, Serial No. 558,154, and in France Sept. 8, 1930. 6 Claims. (Cl. 180—75.)



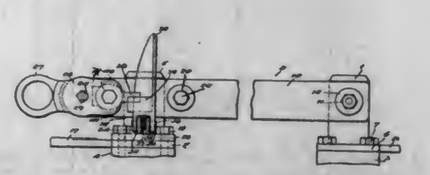
1. In a road vehicle comprising an underframe, a geared rear axle, a shaft in driving relation thereto, means for supporting said axle by said underframe and means allowing a relative movement of said supporting means relatively to said underframe in the direction of the axis of said shaft, under the effect of the angular displacement of said axle in a plane perpendicular to said shaft.

1,878,376. MACHINERY FOR MAKING WELDED PIPE. LEON CAMMEN, New York, N. Y. Filed Feb. 4, 1931. Serial No. 513,337. 8 Claims. (Cl. 219—6.)



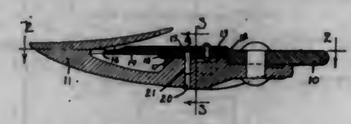
2. A machine for forming sheet metal pipe comprising a mandrel of a diameter larger than that of the pipe to be formed, means for forming a helix of sheet metal and passing the same over the mandrel, aligned and spaced rolls of smaller diameter than the mandrel and means for re-forming the helix to substantially the diameter of said aligned rolls on said rolls and means for welding the joint of the helix at the point where the joint passes between the aligned rolls, said rolls being electrically insulated from each other.

1,878,377. SWITCH. CHRISTEN CHRISTENSEN, Maywood, Ill., assignor to Electrical Engineers Equipment Co., Melrose Park, Ill., a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,848. 21 Claims. (Cl. 200—169.)



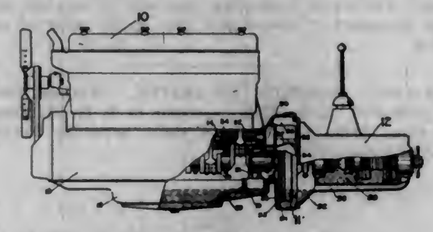
1. In combination, a switch contact, a pivoted switch blade cooperating therewith, a detent resiliently pressed towards the blade and adapted to hook thereover, the portion of the blade engaging the contact being located between the detent and the contact whereby the detent urges the blade towards the contact, and a release member for the detent pivoted on the blade and extending along the side of the blade into contact with the detent.

1,878,378. GUARD-PLATE FASTENER. HANS P. CHRISTENSEN, Davey, Nebr. Filed May 12, 1932. Serial No. 610,848. 3 Claims. (Cl. 56—307.)



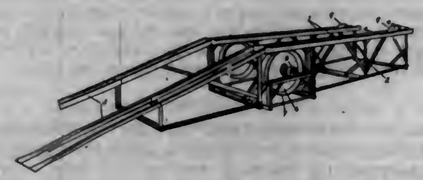
1. In a structure of the class described, the combination with a guard-finger and a ledger-plate, of means forming a socket in said guard-finger, a connector affixed beneath the ledger-plate and slidable longitudinally into and from said socket in the guard-finger, the guard-finger and said connector having vertical openings registering when the connector is seated in said socket, and a pin insertible in said registering openings to hold the connector in seated position in the socket.

1,878,379. LUBRICATING SYSTEM FOR THE POWER PLANT OF AN AUTOMOBILE. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 28, 1929. Serial No. 403,015. 3 Claims. (Cl. 184—6.)



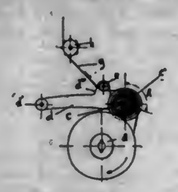
1. The combination with the power plant of an automobile comprising an engine, a clutch and a transmission, of an oil reservoir in said engine, means for delivering oil under pressure from said reservoir to bearings in said transmission, a reservoir in the flywheel housing of said engine communicating with the interior of the transmission housing and receiving oil therefrom, a trough on the side wall of the engine fly-wheel housing positioned to receive oil thrown up by the engine fly-wheel, means for conveying oil from said trough to said first named reservoir, and means for conveying oil from said trough to a wearing surface of said clutch.

1,878,380. APPARATUS FOR LOCATING NOISES IN MOTOR VEHICLES. JAMES G. COLLINS, Kalamazoo, Mich., assignor to Atlas Press Company, Kalamazoo, Mich. Filed Mar. 21, 1931. Serial No. 524,339. 2 Claims. (Cl. 73—51.)



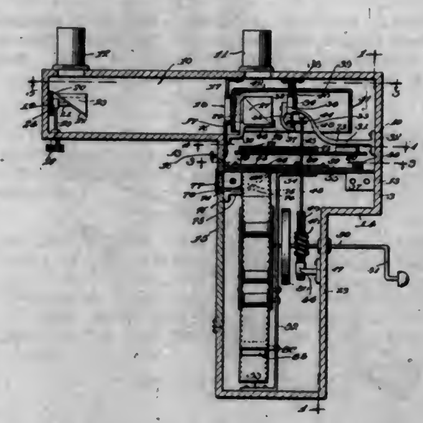
1. An apparatus of the class described comprising channel tracks, means supporting said tracks, wheel rests adjustable longitudinally of said tracks and having front and rear segmental portions adapted to engage the front wheels of a vehicle, said front portions being adapted to prevent forward movement of said wheels and said rear portions being adapted to prevent rearward movement thereof, said tracks having openings positioned to receive the rear wheels of a motor vehicle when its front wheels are in supporting relation to said rests, a shaft journaled to said supporting means and disposed transversely of said tracks below said openings, and wheel supporting pulleys eccentrically mounted on said shaft in non-alined relation whereby a vehicle with its rear wheels resting on said pulleys may be rocked from side to side by driving such rear wheels.

1,878,381. CINEMATOGRAPH. VICTOR CONTINSOUZA and MAURICE BAPTISTE COMBES, Paris, France. Filed June 11, 1929, Serial No. 369,944, and in France June 16, 1928. 8 Claims. (Cl. 242—75.)



2. A winding device for moving picture films which comprises in combination, a toothed film feed roller, a wind-up film reel, and a smooth roller between said feed roller and said reel adapted to be applied against said reel, said smooth roller being so disposed as to cause the film to be applied over a substantial arc of its periphery in the portion thereof which is opposed to that along which said smooth roller is in contact with said reel.

1,878,382. STEREOSCOPIC MOTION PICTURE CAMERA. FRANK B. CROSIER, Beloit, Wis., assignor of one-third to Arthur Boone Crosier and one-third to Minnie G. Crosier. Filed May 13, 1929. Serial No. 362,666. 8 Claims. (Cl. 88—16.6.)



1. A binocular motion picture camera comprising a camera casing mounting right and left binocular lenses in its front face, means within the camera casing for presenting successive sections of raw motion picture film to a single focal point in rear of and alined with one binocular lens, means within the casing for transmitting successive photographic light impressions from

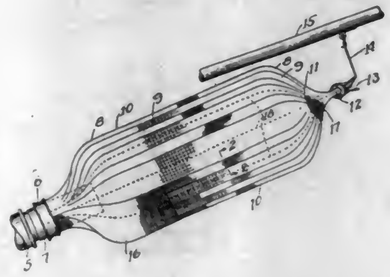
said right and left binocular lenses to said focal point in alternation comprising complemental prismatic reflecting lenses positioned rearwardly of and in focal alinement with the respective binocular lenses and in light receiving transverse alinement with each other, one of said prismatic lenses being interposed between said single focal point and its alined binocular lens and positioned to function directly to transmit light therethrough from said lens to the focal point and totally to reflect to said focal point light reflected thereto from the other of said prismatic lenses, and shutter mechanism interposed between said prismatic lenses and between said one prismatic lens and its alined binocular lens and operative alternately to permit the passage of right and left binocular lens light impressions to said single and common focal point in time with the presentation of successive sections of raw film thereto.

1,878,383. FLOOD WATER CONTROL. CHARLES W. CROUSE, Valparaiso, Ind. Filed Sept. 30, 1929, Serial No. 396,234. Renewed Aug. 8, 1932. 1 Claim. (Cl. 61—17.)



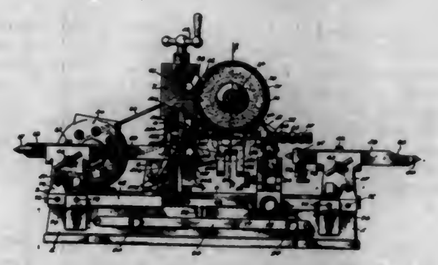
In flood water controls, an embankment across a water course, a spillway through the embankment terminating at a lower level than the intake, an intake to the spillway comprising a pair of passages positioned one above the other, a baffle wall between the passages having an opening connecting the two passages adjacent a single outlet leading from the lower passage, and adjustable means at the entrance of each passageway for restricting flow therethrough.

1,878,384. SUCTION CLEANER. WALTER C. DAVIDSON, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,098. 5 Claims. (Cl. 183—51.)



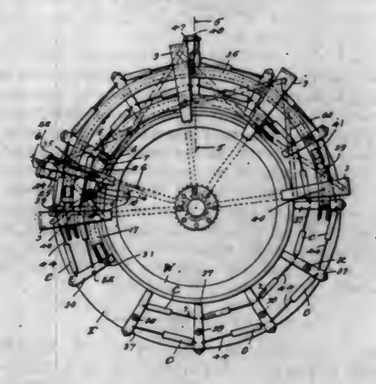
1. A dust bag for suction cleaners comprising a body portion made of a substantially open filtering material and having a reduced neck at its lower end and an opening at the upper end thereof, a reinforcing member secured on the bottom of the bag near the neck thereof, another reinforcing member arranged about said opening, and longitudinal reinforcements secured to the bag and extending substantially the full length thereof and spaced from each other.

1,878,385. TOOL GRINDING MACHINE. JOSEPH M. DOEBRICH, Tucson, Ariz. Filed Feb. 10, 1930. Serial No. 427,203. 9 Claims. (Cl. 51—95.)



9. In a combination with a tool facing means, guide means comprising a pair of spaced bars for engaging a tool face, means for mounting said bars for sliding movement, and means connecting said bars to transmit sliding movement of one of said bars to the other of said bars.

1,878,386. NONSKID APPARATUS. WALTER SCOTT DOUTHITT, Atoka, Okla., assignor to T. H. Blackburn, Atoka, Okla. Filed June 18, 1931. Serial No. 545,297. 10 Claims. (Cl. 152—14.)

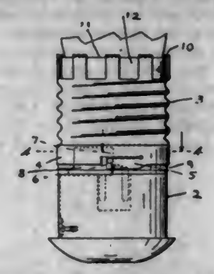


5. An anti-skidding device for a vehicle comprising a tread member adapted to straddle and to be held in engagement with the tire of a vehicle wheel by frictional clamping action against the side walls of the tire, and means independently of the tire for lengthwise spreading said tread member to free the same from the tire.

1,878,387. ELECTRIC LAMP SOCKET. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,192. 4 Claims. (Cl. 173—156.)

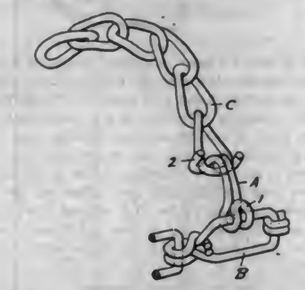
1. An electric lamp socket comprising a screw-shell to receive the threaded base of a lamp, a second screw-shell threaded upon said first shell and carrying flanged portions for holding engagements with an annular edge

CARNEGIE LIBRARY OF ATLANTA



of the threaded base, and means provided by both shells to lock the shells against relative reverse rotation.

1,878,388. SLIP LINK FOR CONNECTING CROSS CHAINS TO SIDE CHAINS. WALTER C. G. FICHTER, West Hazleton, Pa. Filed May 20, 1931. Serial No. 538,825. 2 Claims. (Cl. 59—85.)



1. A link of the class described comprising a body formed of a single piece of wire looped upon itself with the bent part turned to form an eye, with the extremities of the wire being bent outwardly to form U-shaped hooks, each hook extended at right angles to the body, and said hooks extending in opposite directions.

1,878,389. PENCIL. HOWARD L. FISCHER, St. Paul, Minn., assignor to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed Apr. 7, 1924. Serial No. 704,783. 15 Claims. (Cl. 120—18.)



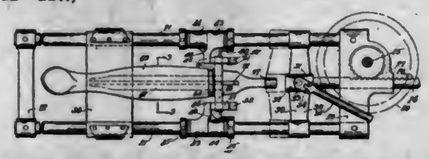
7. A mechanical pencil including a barrel, a threaded member, an unthreaded portion formed on either end of said threaded member, one end of said unthreaded portion being adapted to frictionally engage said barrel and a writing tip conically formed on either end to support the other end of said threaded member centrally within the barrel and facilitate drawing the same tight in said barrel.

9. A mechanical pencil comprising a casing, a lead feeding plunger, means for imparting movement to said plunger, and a spring guide member normally maintaining the plunger in engagement with said movement imparting means, throughout the major portion of its travel, and means in said guide member to release the plunger from said engagement at the limit of its lead feeding movement.

1,878,390. PRODUCTION OF METHANOL AND OTHER OXYGENATED ORGANIC COMPOUNDS AND PREPARATION OF CATALYSTS THEREFOR. REGINALD GEORGE FRANKLIN, Billingham, Stockton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Nov. 21, 1927, Serial No. 234,917, and in Great Britain Dec. 23, 1926. 3 Claims. (Cl. 23—237.)

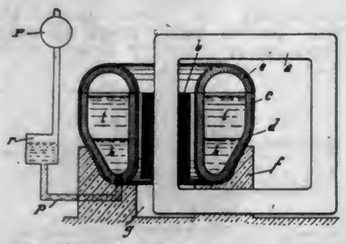
3. Catalyst containing zinc and chromium oxides for the production of oxygenated organic compounds obtained by heating to decomposition a mixture of zinc and chromium carbonates.

1,878,391. SHAPING RIDING BOOTS. JOHN A. FRAZIER, South Braintree, Mass. Filed Mar. 29, 1930, Serial No. 440,090. Renewed Apr. 12, 1932. 15 Claims. (Cl. 12—117.)



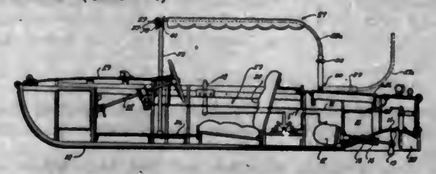
1. Apparatus of the class described comprising a pair of lasts for shaping the leg of a boot, a wedge insertable between the lasts, separators insertable between the wedge and the respective lasts, and means for holding the separators against movement inwardly of the boot when the wedge is forced between them to spread the lasts or when the expanded lasts are forced along the separators to release the wedge.

1,878,392. GLASS WORKING FURNACE. HENRI GEORGE, Paris, France. Filed Oct. 23, 1928, Serial No. 314,454, and in France Oct. 25, 1927. 7 Claims. (Cl. 13—6.)



1. In a glass working furnace, a mass of molten tin with the glass floating above, means connected to a source of electrical energy and adapted for supplying it to the molten tin.

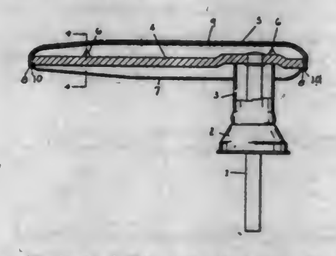
1,878,393. MOTOR BOAT TOP. KENNETH M. GRIER, North Hollywood, Calif., assignor to Kaymo Electric Speed Boat Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Original application filed Jan. 11, 1930, Serial No. 420,114. Divided and this application filed Sept. 18, 1931. Serial No. 563,479. 18 Claims. (Cl. 9—1.)



1. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of

the boat, a top extending above said cockpit, means for supporting said top on the decking at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and a pair of standards extending above the decking at the front of the cockpit and supporting the forward portion of the top.

1,878,394. DOOR HANDLE. GILBERT J. HAAN, Jr., Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed June 22, 1931. Serial No. 545,883. 2 Claims. (Cl. 292—347.)



1. In a structure of the class described, the combination with a spindle, of a handle bar fixedly secured to said spindle, a spindle housing sleeve disposed with its outer end in abutting engagement with the inner side of said bar, a conformed inner casing member embracing the edges of said handle bar and having stop lugs struck inwardly therefrom engaging the front of the bar, a conformed back plate having outwardly flanged edges disposed on the rear side of said bar in abutting engagement therewith, said back plate having an opening therein to receive said spindle sleeve, and an outer casing member embracing said inner casing member and having inturned flanges at its edges embracing the flanges of said back plate.

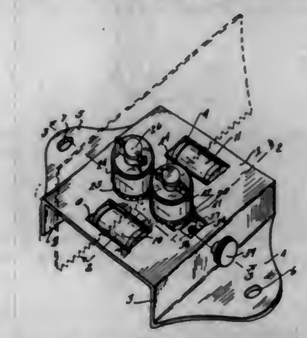
1,878,395. PASTRY CUP. ERNEST HAMWI, St. Louis, Mo. Filed Aug. 26, 1929. Serial No. 388,370. 2 Claims. (Cl. 99—11.)



2. An edible cup composed of friable farinaceous material and comprising a thin downwardly tapered wall, having notches in its lower end, downwardly extended portions between said notches at the lower end of said wall, a thickened portion integral with the outside of the upper end of the cup, a thickened portion integral with the inside of the lower end of the cup above said notches, a bottom wall formed integral with the wall of the cup above said notches and above said last named thickened portion, and ribs integral with the outer side of the wall of the cup extending from said first named portion to the lower ends of said downwardly extended portions between said notches and crossing the plane of the connection of said bottom wall with the said first named wall.

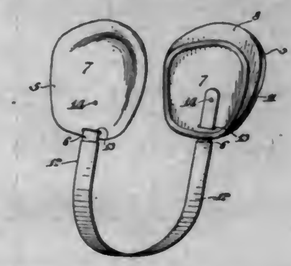
1,878,396. SAW SET. WELBY V. HAWES, Portland, Oreg. Filed Mar. 2, 1931. Serial No. 519,521. 2 Claims. (Cl. 76—59.)

1. In a device of the class described, the combination of a body element having parallelly disposed side walls extending downwardly, supporting feet extending outwardly from the lower end of the side walls; said body element having a slot through a portion of its top and a pair of openings through its top, rollers rotatably disposed in spaced relationship within the body element, means for removably securing the rollers within the body element; a shoulder shaft removably secured to the body element, a set and feeding disc rotatably disposed upon the shoulder shaft, an alignment roller disposed about the shoulder shaft and superposed upon the set and feeding disc, a locking clip removably secured about the shoulder shaft and adapted for maintaining the disc and alignment roller



in position; a fixture base slidably disposed within the slot, a guide bar for the fixture base, means for fixedly positioning the fixture base and guide bar relative to the body element, a second shoulder shaft threadedly secured to the fixture base, a second set and feeding disc rotatably mounted upon the second shoulder shaft and resting upon the guide bar; a second alignment roller superposed upon the second set and feeding disc and a second spring locking clip removably secured to the second shoulder shaft adapted for maintaining the second alignment roller and the second set and feeding disc in place upon the second shoulder shaft.

1,878,397. EAR PROTECTOR. CHARLES P. HEKLER and PAUL HORACEK, Philadelphia, Pa. Filed May 19, 1932. Serial No. 612,299. 5 Claims. (Cl. 132—45.)

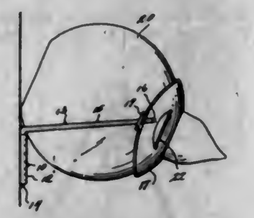


1. A protector for the ears comprising a pair of ear covering members made of sheet material, each comprising a dished body portion and shaped to form a pocket-like device having a constricted opening, and a gasket mounted at the edges of said opening; and a U-shaped spring upon the ends of which the ear covering members are mounted.

1,878,398. BRACKET. MAX HERZSTEIN and ROBERT HUGH PORTER, San Antonio, Tex.; said Herzstein assignor to said Porter. Filed Dec. 31, 1929. Serial No. 417,744. 2 Claims. (Cl. 169—26.)

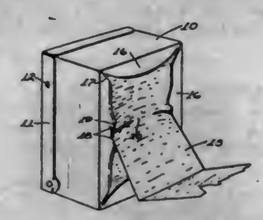
1. A bracket for supporting a frangible fire extinguishing grenade comprising a base member adapted to be secured to a plane surface, lateral resilient arms movably carried by said base normally incapable of supporting said

grenade, a retaining socket member, having an aperture, one of said arms engaging in said aperture, releasable securing means carried by said retaining member for releasably holding the other of said arms on said retaining member, said releasable means being releasable in response to fire conditions, said retaining means and arms



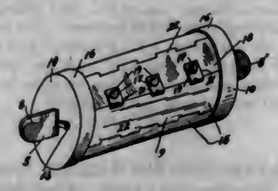
being so proportioned with respect to the grenade that upon insertion of the grenade between said base and said retaining member, with the bracket in position secured to said plane surface, tension is applied to said arms and said grenade is held in wedged position between said plane surface and said retaining member.

1,878,399. NECK-STRIP DISPENSER. SAMUEL N. HOPE, Wauwatosa, Wis., assignor to Griffith-Hope Company, West Allis, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1931. Serial No. 519,070. 4 Claims. (Cl. 312—61.)



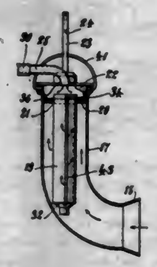
1. A dispenser for a folded web of crepe paper neckstrips and the like having weakened lines of junction between successive strips, comprising a cabinet having an opening in its front wall with marginal edges along which extend the opposite side edges of the paper web, spring means for pressing the folded web against said marginal edges of the opening, and projections along the marginal edges of the opening for engagement with the opposite side edges of the paper web at the weakened lines thereof for resisting the withdrawal and causing the paper to tear along such weakened lines.

1,878,400. TIE PRESS. JOSEPH IRSCHIK, Toronto, Ontario, Canada. Filed Mar. 19, 1932, Serial No. 599,884, and in Canada Dec. 17, 1931. 2 Claims. (Cl. 223—19.)



1. A tie press composed of a spool, a casing therefor, said casing consisting of a pair of caps mounted upon the spool, one of which is removable therefrom, and a cover constructed of hinged sections encompassing the spool with their ends fitted in the caps and means for locking the meeting end sections to each other.

1,878,401. CARTRIDGE FOR USE IN APPARATUS FOR DECARBONIZING ENGINES. LILLIAN JOHN, Middletown Township, Monmouth County, N. J., assignor, by mesne assignments, to E. Seifert, Chicago, Ill. Original application filed Aug. 15, 1928, Serial No. 299,863. Divided and this application filed Jan. 7, 1930. Serial No. 419,190. 8 Claims. (Cl. 206—56.)



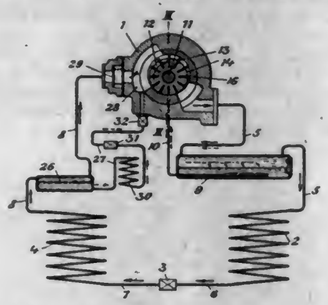
1. A cartridge comprising a container formed of easily tearable sheet metal and having an open end, a closure for said end, a fabric in the container saturated with a volatile substance, a U-shape releasing metallic ribbon having one leg embedded in the fabric, the other leg positioned between the fabric and the side of the tearable container and said other leg having an end portion projecting exteriorally of the container through the open end and providing a handle for engaging the ribbon when it is desired to cause the ribbon to tear out a portion of the side and thus form a slit in the metal of the container and expose the fabric with its volatile substance.

1,878,402. NUT SHELL INLAY AND PROCESS OF INLAYING. CECIL E. KAERCHER, Ortonville, Minn. Filed Jan. 23, 1932. Serial No. 588,326. 7 Claims. (Cl. 41—35.)



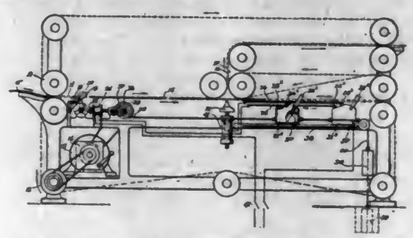
7. The process of producing a nut shell inlay, which consists in first slicing a nut shell having a grooved outer periphery to produce a nut shell section having a larger cut upper surface than the lower surface of the section, then buffing the lower portion of the periphery of said shell section to such an extent that the irregularities on the periphery at the upper surface of said shell section project outwardly beyond all portions of the shell section therebeneath, then grooving the outer periphery of the shell section adjacent the upper surface thereof downwardly in line with the grooves appearing on the periphery of the upper surface of the shell section, then recessing a body in which the shell section is to be inlaid by cutting a downwardly and outwardly flaring recess in said body from an upper face thereof, said recess being of a size at said face slightly smaller than the upper surface of said nut shell section and corresponding roughly in shape to the shape of the upper surface of said nut shell section, placing said nut shell section within said recess with the upper surface of said shell section uppermost and pressing said shell section further into the recess until the upper surface of the shell section lies substantially flush with the said face of said body to embed the grooves at the periphery of the upper surface of the shell section within said body.

1,878,403. REFRIGERATING MACHINE. EMIL KIGI, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Aug. 24, 1929, Serial No. 388,132, and in Switzerland Oct. 18, 1928. 5 Claims. (Cl. 62—115.)



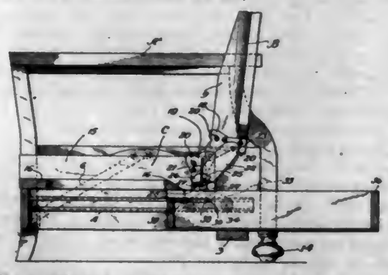
1. In a refrigerating machine the combination of a compressor, an evaporator, an oil collector, a pipe connecting the evaporator to the oil collector, a refrigerant pipe connecting the evaporator to the suction chamber of the compressor, a discharge pipe connecting the oil collector to the compressor, and means for causing a lower pressure in the discharge pipe than the pressure in the refrigerant pipe.

1,878,404. FOLDING MACHINE. LEO M. KAHN, New York, N. Y. Filed Apr. 19, 1930. Serial No. 445,716. 14 Claims. (Cl. 270—83.)



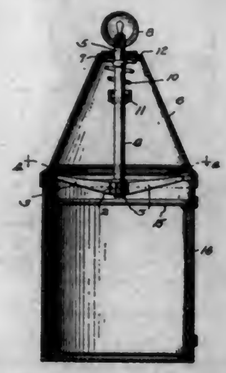
1. In a machine of the class described, the combination with means for moving fabric articles toward a folder, of a carrier switch, means actuated by the rear end of any of said articles for moving said carrier switch oppositely toward the front end of said article, and means for actuating said folder when said switch is contacted by the front end of said article.

1,878,405. SOFA-BED. SOLOMON KARPEN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Mar. 18, 1931. Serial No. 523,533. 7 Claims. (Cl. 5—58.)



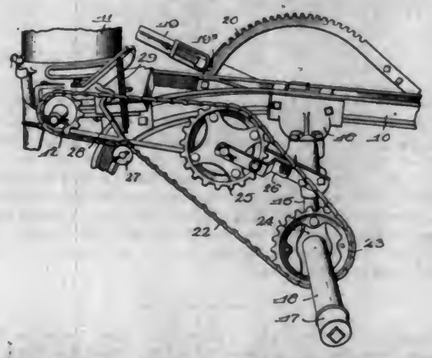
7. In a sofa-bed, a stationary supporting structure, a pair of frames constituting respectively a sofa-seat and a sofa-back, said frames being hingedly connected, means on the connected frames coacting with means on the stationary supporting structure for slidably supporting said frames upon said supporting structure, a drawer also slidably mounted in said supporting structure, and slidable connecting means between said frames and drawer.

1,878,406. CLOSURE. ABRAHAM SINGER KARPER, New York, N. Y. Filed Sept. 4, 1929. Serial No. 390,382. 7 Claims. (Cl. 220—37.)



1. A closure of the character described, comprising a container engaging portion and a cover portion and yielding means forming the sole connection between the parts and positioned to hold said cover portion above said container engaging portion and in registry therewith.

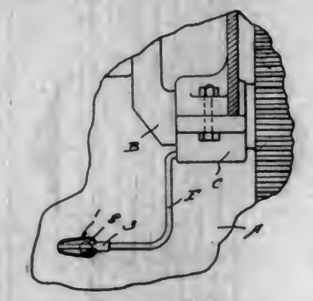
1,878,407. LISTER DRIVE. LEE H. KAUPKE, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Aug. 8, 1929. Serial No. 383,360. 3 Claims. (Cl. 111—68.)



1. In a lister, a frame, a seed can and drive means therefor mounted on the rear of said frame, a ground wheel crank axle having bearing in said frame, a sprocket and chain driving connection between said seed can and said crank axle including a single chain and an auxiliary idler carried on said crank axle in offset relation therewith to maintain the tension of said chain in the various adjusted positions of said crank axle.

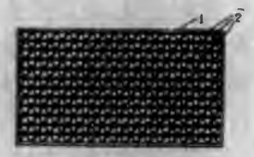
1,878,408. LUBRICANT FLOW CHECK. JAMES EDWARD KUMMER, Junction City, Kans. Filed June 16, 1928. Serial No. 285,964. 3 Claims. (Cl. 184—6.)

1. The combination of a crank case in an automobile, adapted to contain oil and having a shaft bearing in its portion toward one end of the automobile, a shaft in said bearing, a conduit extending downwardly in the crank case from the bearing and communicating at its upper end with said bearing, and an oil control check valve complementary to said conduit, confined for limited movement, and arranged when the automobile and crank case



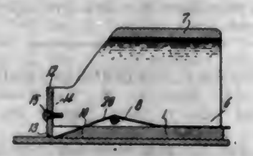
are substantially horizontal to gravitate from its seat and also arranged when the automobile and crank case are inclined in one direction from the horizontal to gravitate to its seat and check the flow of oil from the case to the bearing and in that way prevent waste of oil through and from the bearing.

1,878,409. APPARATUS AND METHOD FOR THE ABSORPTION OF SOUND. ELMORE B. LEFORD, New York, N. Y., assignor to Amy, Aceves & King, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929, Serial No. 344,729. Renewed Dec. 11, 1931. 15 Claims. (Cl. 181—30.)



1. A sound absorber comprising an assembly of a multiplicity of closely-packed relatively thin-walled, elongated pipe-like cells open at one end at least, formed in a material resembling in its action the moderately heavy paper used in the manufacture of corrugated cardboard for boxes and cartons, the cells being of the order of one-sixth of an inch in diameter, and each being of such length that the column of air contained within it tends to resonate at substantially the lowest frequency of the sound it is intended particularly to suppress.

1,878,410. PLANE FOR LEATHER AND THE LIKE. HARRY LYON, Brockton, Mass. Filed Oct. 9, 1930. Serial No. 487,445. 6 Claims. (Cl. 149—13.)



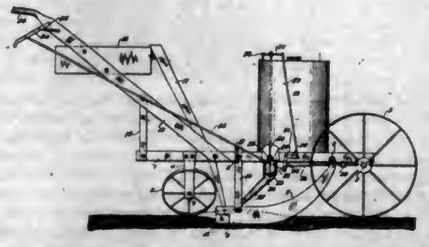
2. A device of the class described comprising a blade having a beveled cutting edge at one end, a handle member having wall portions spaced to receive said blade with its side edges therebetween and with its face at the longer side of said bevel flush with the edges of said wall portion, means for clamping said wall portions against the edges of said blade, and a gage plate bridging said wall members forwardly of said cutting edge and adjustable to move its lower edge toward and from the plane of said face.

1,878,411. TIRE DEFLATION SIGNAL. HOWARD T. LAMBERT, Johnstown, Pa.; Ira Gilbert Lambert executor of said Howard T. Lambert, deceased. Filed Oct. 5, 1931. Serial No. 566,830. 5 Claims. (Cl. 116—34.)



1. A tire deflation signal comprising signal means, a valve adapted to release air from the tire to operate said signal means, means to open said valve when the air in the tire falls below a predetermined pressure, and means to close said valve when the air pressure of the tire is further reduced.

1,878,412. TRANSPLANTER. EARLD H. LAMIELL, Greenwich, Ohio, assignor, by mesne assignments, to The Farm Specialty Company, Greenwich, Ohio, a Corporation of Ohio. Filed Oct. 16, 1928. Serial No. 312,865. 5 Claims. (Cl. 111—7.)

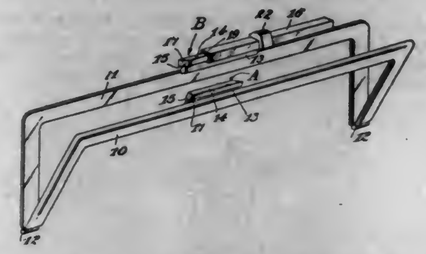


1. A portable plant setter including a frame movable over the ground, a reservoir on the frame having a valved opening in its lower portion, means carried by the frame for forming an opening in the earth, a plant tube for discharging plants adjacent to said means, traction means for moving the plant setter over the ground, and stop means on the frame normally adapted to engage the traction means at predetermined intervals.

1,878,413. FASTENING DEVICE FOR BAGS. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,381. 5 Claims. (Cl. 292—145.)

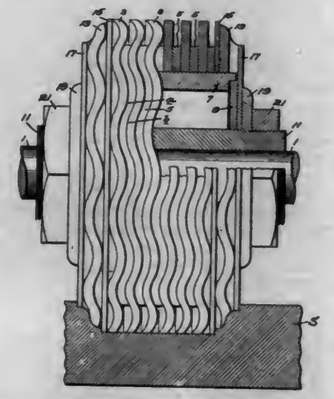
1. A fastening device for bags, comprising a pair of pivotally connected frame members, rails provided on the frames in positions in which they will come into direct

adjoining lengthwise alignment when the frames are in closed relation, an oblique end provided on each rail to lap one over the other when the rails lie in alignment, and an exterior box like locking slide on one rail shiftable into



position thereon to interlock with the other rail and across the lapped ends, said slide being of a length sufficient to encompass said lapped ends and substantial portions of the adjoining lengthwise related rails.

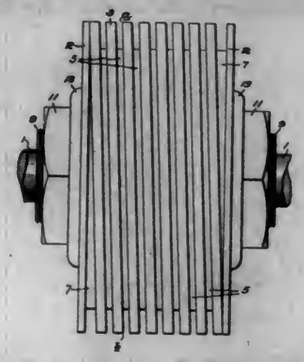
1,878,414. TOOL FOR CUTTING STONE. PETER S. LEGGE, Pompton Lakes, N. J. Filed Oct. 30, 1928. Serial No. 316,074. 2 Claims. (Cl. 125—5.)



1. A stone working tool of the type having a power driven arbor comprising, in combination, means for cutting the stone with abrasive fed to the cut to form an uncreased finished surface, said means including a plurality of projecting members formed to present peripheral band-like surfaces on a plurality of coaxial surfaces of revolution of different diameters with said band-like surfaces being so formed that their points of contact with the stone will reciprocate axially of the tool when the latter is rotated, disk saw means coaxial with said surfaces of revolution and positioned between them in abutting relation therewith, said disk saw means having a diameter not less than the diameter of the adjacent abutting surfaces of revolution of greater diameter, the cut caused by said disk saw means intersecting the cuts caused by said band-like surfaces.

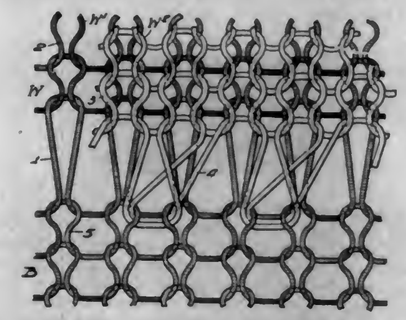
1,878,415. TOOL FOR CUTTING STONE. PETER S. LEGGE, Pompton Lakes, N. J. Filed Oct. 30, 1928. Serial No. 316,073. 2 Claims. (Cl. 125—5.)

1. A rotary tool of the type having a power driven arbor for sinking recesses in stone by use of abrasive fed to the cut having, in combination, a plurality of spaced, coaxially arranged, radially projecting members formed with band-like peripheral surfaces inclined to the axis of the tool and conforming to a surface of revolution coaxial with said axis, and means for forming a side corner of said recess operative to cut a slot in the stone at right angles to the tool axis intersecting that surface of the recess which is operated upon by said band-like surfaces, said



means comprising a saw-like member the diameter of which is not less than that of the adjacent band-like surface.

1,878,416. HOSIERY AND METHOD OF MAKING SAME. ALBERT E. MARGERISON and CARL R. HAHN, Philadelphia, Pa., assignors to Mock, Judson, Voehringer Company, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed July 10, 1931. Serial No. 550,010. 5 Claims. (Cl. 66—173.)

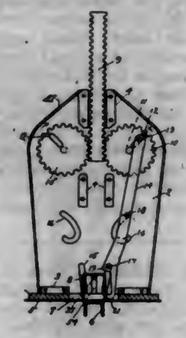


1. The method of knitting a turned welt which comprises knitting the first course of the welt, knitting successive courses of the welt fabric, knitting the last course of the welt, transferring alternate loops of the last course laterally to put them together with their respective neighboring loops, hereafter turning the welt by putting loops of the first course of the welt together with loops of the last course and thereafter drawing loops of the first course of the leg fabric through the loops of the first and last courses of the welt fabric and then continuing the knitting of the leg fabric.

1,878,417. DEVICE FOR ATTACHING FABRIC TO AIRPLANE RIBS. MICHAEL N. MATVEYEFF, Stratford, Conn. Filed Dec. 1, 1931. Serial No. 578,328. 5 Claims. (Cl. 1—49.)

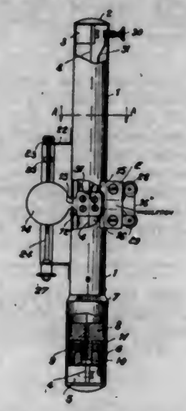
1. In a device for attaching fabric to airplane ribs, the combination with a base plate, of brackets mounted on said base plate, cam-shaped surfaces on said brackets, movable cam-shaped members on said brackets, arms movably supported on said cam-shaped members and surfaces and having dependent operating ends, said plate being adapted to be placed over a fabric on a rib, means to feed clips one at a time under the operating ends of said arms,

and means to operate said movable cam-shaped members thereby operating said arms, said operating ends of the arms being adapted to press said clips over said rib and



to bend the ends of said clips over the edges of said rib when said arms are being moved by said cam-shaped members.

1,878,418. AIR SPEED SWITCH. PIERRE MAULDE, Vircfay, France. Filed Jan. 29, 1931, Serial No. 512,183, and in France Feb. 11, 1930. 1 Claim. (Cl. 200—81.)



An automatic indicator device for aircraft comprising a tubular member having a stretched piano wire extending through the interior thereof, one end of the wire being fixed to one end of the tubular member, the other end of the wire being fixed to a sheath mounted to turn and be retained in any desired position on the other end of the tubular member, a blade attached to and supported by the wire, said blade extending exteriorly of the tubular member and having associated therewith electrical contacting devices, means to regulate the moment of closing of the electrical contacting devices, said means including a flat spring, one end of which is connected to the tubular member and the other end of which is adapted to abut against the blade, and a slide mounted upon a screw threaded rod supported by the tubular member, said slide having a finger abutting against the flat spring, for the purposes set forth.

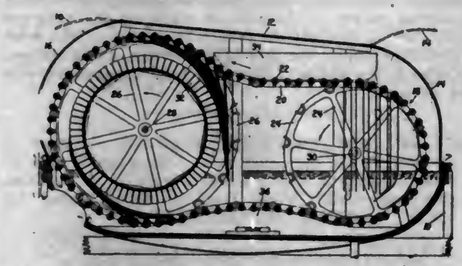
1,878,419. SHOE. ROBERT F. MCCARTHY, Webster Groves, Mo., assignor to International Shoe Company, St. Louis, Mo., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,211. 2 Claims. (Cl. 36—58.5.)

1. In a shoe, a shoe upper, a counter stiffener secured against the inner side of and shaping and holding shaped the heel portion of the upper, a pair of elastic and soft bodies having substantially flat outer walls secured to opposite sides of said counter stiffener and having substantially oval edges and convexed inner walls, said bodies being secured to said counter stiffener wholly below the upper edge of said counter stiffener and above the sole of



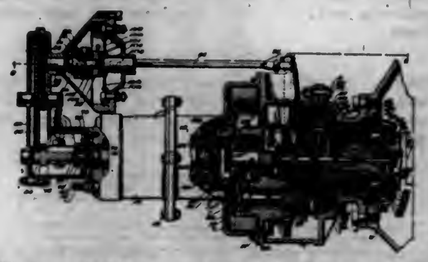
the shoe, and a lining secured to the inside of the sole and fitting against and covering said convexed inner surfaces of said bodies and having its upper edge attached to the heel portion of the shoe above said bodies.

1,878,420. MACHINE FOR TREATING HIDES, SKINS, AND LEATHERS. MATTHEW M. MERRITT, Middleton, Mass., assignor, by mesne assignments, to The Tanning Process Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1930. Serial No. 418,348. 24 Claims. (Cl. 149—9.)



1. In a machine for treating hides and skins, a conveyor for supporting hides or skins in suspended relation thereto, means for movably supporting the conveyor, a work supporting member having a curved surface located in the path of the hides or skins suspended from the conveyor, and means constructed and arranged to determine the relative positions of the conveyor and of the curved surface of the work-supporting member to control the amount of overlap between adjacent pieces of work before they reach the work-supporting member.

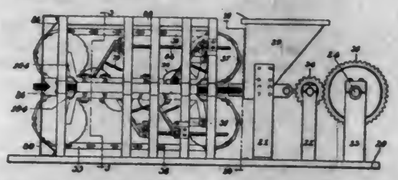
1,878,421. ENGINE STARTING APPARATUS. ROMEO M. NARDONE, East Orange, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Nov. 9, 1929. Serial No. 406,079. 22 Claims. (Cl. 290—38.)



20. In a starter for an internal combustion engine of the type having a member normally out of, but movable into, engagement with a member of the engine to be

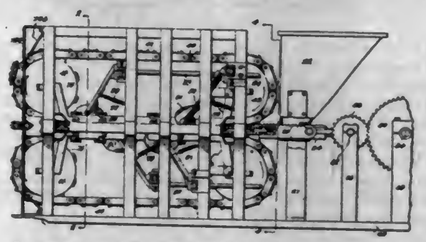
started, means for moving said first named member into engagement with said engine member within a predetermined interval of time, and power means for simultaneously rotating said first named member and actuating said first named means, said power means including an electric motor and driving connections between said motor and said member.

1,878,422. NUT OPENING AND PICKING MACHINE. AUBREY C. NOWLIN, Beggs, Okla., assignor of four-tenths to A. C. Flieg, fourteen one-hundredths to J. G. Sales, Okmulgee County, Okla., and one one-hundredth to Nathan B. Townsend. Filed Jan. 16, 1929. Serial No. 332,827. 13 Claims. (Cl. 146—10.)
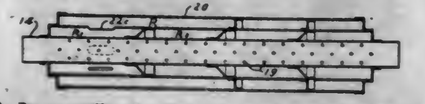


1. A nut opening and picking machine comprising a plurality of conveyors having links provided between the ends thereof with separate opposed dogs adapted for secure engagement with nuts to carry the same through the machine, a cutting device in the path of travel of the nuts and having means to limit the penetrating depth of the same, a yieldable support for said cutting device, and a stripper to remove the shells of the nuts from engagement with the conveyor.

1,878,423. NUT CRACKING MACHINE. AUBREY C. NOWLIN, Beggs, Okla., assignor of three-tenths to A. C. Flieg, Henryetta, Okla., and one-tenth to J. G. Sales, Okmulgee, Okla. Filed June 25, 1930. Serial No. 463,721. 4 Claims. (Cl. 146—10.)



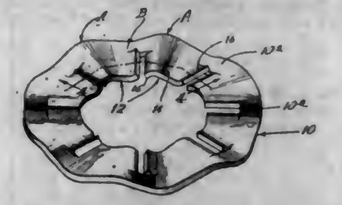
1. In a machine for deshelling nuts, a plurality of radially arranged endless conveyors having active runs in substantially parallel relation about a common center to define a nut passage having inlet and outlet ends, said conveyors being provided with teeth for penetrating engagement with the shells, yieldable guiding devices for the active runs of the conveyors, and a common yieldable supporting means for the conveyors and said guiding devices.

1,878,424. MUFFLER. VIRGIL OLDBERG, Detroit, Mich., assignor to Oldberg Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 26, 1931. Serial No. 571,136. 3 Claims. (Cl. 137—160.)



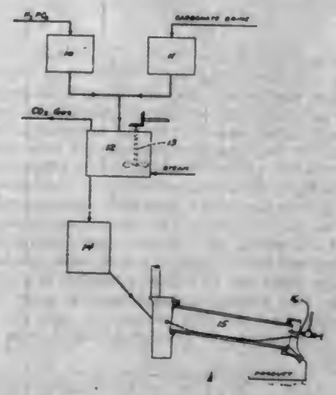
1. In a muffler for the exhaust gases of an internal combustion engine, wherein exhaust gases and sound waves travel in the same direction, the combination of an intermediate shell having apertured end headers, a shell telescoped therein and providing a thru and unobstructed passage for exhaust gases thru the muffler from an engine to the atmosphere, the latter shell having a relatively large portion of its entire surface covered with a plurality of relatively small, closely spaced, perforations, there being a plurality of annular, spaced, substantially imperforate diaphragms in the annular space between the aforementioned shells to provide a plurality of annular, elongated, sound attenuating chambers in said space, the perforations opening into said chambers, the muffler also having an outer imperforate shell surrounding the aforementioned shells, the outer shell being closed at its ends and also being placed in communication with the interior of the intermediate shell thru large openings therein.

1,878,425. LOCK WASHER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 17 1930. Serial No. 468,486. 8 Claims. (Cl. 151—35.)



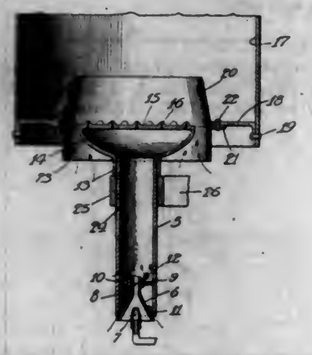
2. A lock washer including an undulated annular body portion of flat stock and a plurality of marginal prongs extending from said body portion, said prongs being narrower at their outer extremities than at their roots, each prong including a body portion inclined with respect to the bounding planes of the washer in accordance with the undulations in the body portion, and having oppositely disposed work engaging teeth projecting out of the said bounding planes of the washer.

1,878,426. PROCESS FOR MANUFACTURE OF MONO-POTASSIUM PHOSPHATE. ROBERT D. PIKE, Piedmont, Calif. Filed July 5, 1928. Serial No. 290,472. 7 Claims. (Cl. 23—107.)



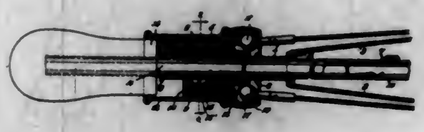
5. The process for producing crude mono-potassium phosphate, which consists in mixing potassium carbonate brine with phosphoric acid, made by treatment of phosphate materials containing iron and aluminum with acid, in such an amount as to produce a solution having a hydrogen ion concentration between 10—3.4 and 10—6.4, and evaporating the solution to dryness, whereby a stable non-hygroscopic product is obtained.

1,878,427. GAS BURNING HEATER. THOMAS A. RONSTROM, Chicago, Ill. Filed Aug. 31, 1927, Serial No. 216,592. Renewed Feb. 8, 1932. 6 Claims. (Cl. 158—99.)



1. A gas burner comprising a heating chamber; a combustion chamber extending through a wall of said heating chamber and open at both ends; a burner head mounted in said combustion chamber, there being an air space around the periphery of said head; an elongated cylindrical secondary mixing chamber threaded at one end into said burner head; a support for said secondary mixing chamber having threaded connection therewith permitting of adjustments of said head; a threaded spider at the other end of said secondary mixing chamber; a primary mixing chamber in inverted funnel form, the throat of said funnel being threaded in said spider and the flaring portion of said funnel protruding from the end of said secondary mixing chamber, the edges of the latter being flared to correspond with said funnel and there being air openings in the walls of said secondary mixing chamber adjacent the throat of said primary mixing chamber; and a gas nozzle discharging into said primary mixing chamber.

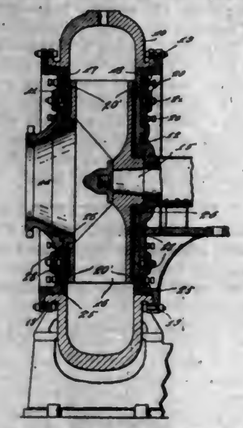
1,878,428. UMBRELLA RUNNER AND TIP CUP. JOHN ROSE, Atlantic City, N. J. Filed Feb. 7, 1930, Serial No. 426,609. Renewed Jan. 21, 1932. 8 Claims. (Cl. 135—44.)



1. A runner, and a tip cup composed of plastic material slidably arranged on the runner, the interior of the tip cup being provided with a bushing having opposed gradually inclined inner faces.

1,878,429. DREDGE PUMP. JOHN W. STAUP, Terre Haute, Ind. Filed May 9, 1930. Serial No. 450,909. 4 Claims. (Cl. 103—114.)

1. In a centrifugal pump having an impeller and a casing provided with end-walls between which the impeller rotates, a wearing plate between said impeller and one of said end-walls, means for adjusting said wearing plate toward or away from said impeller, provisions associated with said wearing plate and its associated wall for preventing radial flow of liquid between such end-wall and wearing plate comprising an annular flange on one of said parts and an annular flange-receiving groove on the other part, the axially extending sides of such flange and groove being concentric cylindrical surfaces, the cylindrical surfaces of said flange cooperating with those of said groove to provide seals preventing radial flow of liquid between such end-wall and wearing plate.

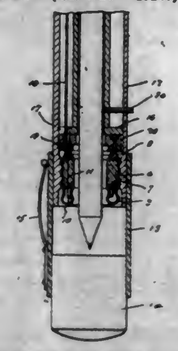


1,878,430. CAR ROOF. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,837. 10 Claims. (Cl. 108—5.)



2. In a flexible roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, and insulating material underlying the roof sheets, said insulating material being carried by the carlines and serving to support roof sheets.

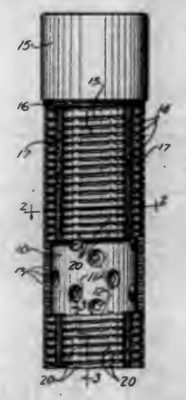
1,878,431. ILLUMINATED PENCIL. RALPH ELON TURTON, Lexington, Ky. Filed Oct. 26, 1931. Serial No. 571,197. 1 Claim. (Cl. 240—6.46.)



A pencil comprising a barrel having a di-electric plug therein adjacent one end thereof defining a compartment, a battery in the compartment, a tube extending from the

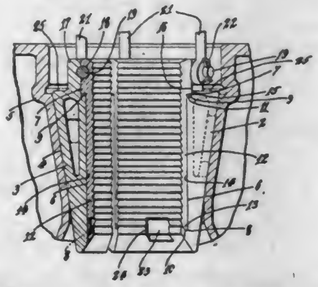
plug toward the opposite end of the valve, a ring in the last-mentioned end portion of the barrel for supporting the tube, said ring being provided with a notch therein, a lead extending from the battery between the tube and the barrel and through the notch, a conductor ring, a dielectric spacer between the ring aforementioned, and the conductor ring and being provided with an opening therein for receiving the lead, said lead being attached to the conductor ring, a threaded socket in the last-mentioned end of the valve, a tubular bulb provided with a threaded base engageable into the socket and against the conductor ring, and a pencil adjustably mounted in the tube for extending through the said tubular bulb.

1,878,432. OIL WELL SCREEN. JESSE P. WHANN, Los Angeles, Calif., assignor to Layne & Bowler Corporation, Los Angeles, Calif., a Corporation of California. Filed Mar. 25, 1929. Serial No. 349,612. 4 Claims. (Cl. 166—5.)



1. A well screen of the character described, including: a perforate tubular member; and a bar wound on said tubular member, said bar having substantially continuous side walls extending approximately radially with respect to the axis of said tubular member and bridge lugs projecting from the upper portions of said bar for holding the separate turns of the bar apart, there being depressions in the side wall of said bar under said lugs of substantially the same length as said lugs.

1,878,433. SLIP WITH REMOVABLE LINER. FORREST JOSEPH YOUNG, Torrance, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 11, 1928, Serial No. 245,876. Divided and this application filed Mar. 11, 1930. Serial No. 434,980. 8 Claims. (Cl. 24—263.)



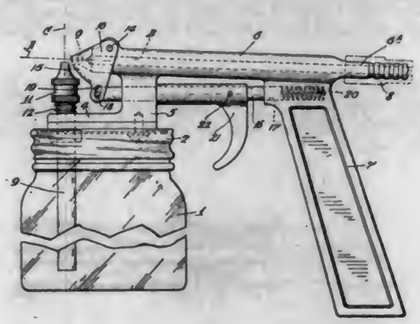
1. A segmental slip including a tapered body, a liner mounted on the inner periphery of said body, a pair of vertically spaced shoulders formed on the inner periphery of said slip, one end of said liner engaging the said lower shoulder, an arcuate shoulder formed on the rear periphery of said liner and adapted to engage the said upper shoulder, and means secured to said body and engaging said liner to hold the same from movement transversely relative to said body.

1,878,434. LIFE-SAVING HOOD. ANGELO BELLONI, Portovenere, Italy. Filed Feb. 8, 1930, Serial No. 426,954, and in Italy Jan. 4, 1930. 4 Claims. (Cl. 9—20.)



1. A life saving garment comprising a hood forming an air bell to prevent entry of water therein, attaching means to fasten the hood under the armpits and about the chest of the wearer, so that he can throw it back on his head when the sea is smooth, an inflatable bag attached to the hood, a conduit within said hood for supplying air to said bag, and another conduit extending from the inside to the outside of the top of the hood, whereby the wearer may receive free air either in an upright or in a reclining position, whether the sea be rough or smooth.

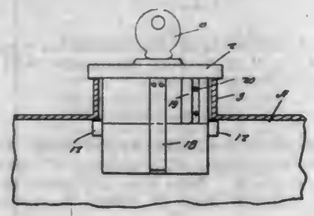
1,878,435. PAINT SPRAYING APPLIANCE. SVEND BRAMSEN and FRITZ WAHLIN, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,836. 9 Claims. (Cl. 91—45.)



1. In a spraying appliance, a container for liquid, a body member including a base seated on the container, a riser on the base, an air tube extending across the top of the riser, and a handle depending from the rear end of the air tube, the air tube having its outlet above the said base; a liquid tube extending upwardly through the top of the container and the base, and having its outlet disposed forwardly of the outlet of the air tube, the axes of both outlets being in a common vertical plane and the upper end of the outlet of the liquid tube outlet being below the axis of the air tube; an air deflector pivoted to a forward portion of the air tube on a horizontal axis transverse of the axis of the air tube, the air deflector having a portion thereof adapted to extend across the mouth of the air tube when the air deflector is in one position; a slide extending through the riser below the air tube and connected to the air deflector; spring means interposed between the slide and a portion of the body member for

continually urging the slide in a direction in which the slide causes the deflector to be in the aforesaid position; and means operable by a hand grasping the handle, for moving tthe slide in the opposite direction against the resistance of the spring.

1,878,436. LOCK CAP FOR GASOLINE AND OTHER TANKS. ROBERT IRWIN BURROUGHS, Henderson, N. C. Filed Jan. 29, 1932. Serial No. 589,747. 4 Claims. (Cl. 70—90.)



1. A tank cap comprising a body part having a bore, a key operated barrel rotatably arranged in the bore, spring pressed latch members extending transversely through the body, a member in the lower part of the bore having means thereon for operating the latch members, and a slide operated by the key of said barrel for engaging a part of the member to cause a turning movement of the member by the barrel to operate the latch means.

1,878,437. NAPKIN FOLDER. SAMUEL J. CAMPBELL, Green Bay, Wis. Filed Mar. 24, 1928. Serial No. 264,410. 20 Claims. (Cl. 270—66.)



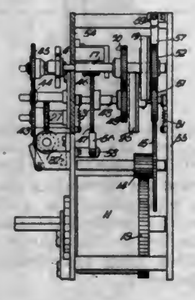
2. In a device of the character described, the combination with a pair of folding rolls, of paper supporting and guiding means comprising a conveyor belt adapted to carry paper past said rolls, and co-operative guide plates opposing said belt and spaced from each other in the direction of paper advance at a point substantially in a plane tangent to the line of bite between said rolls, together with a tucker blade notched to receive said belt and mounted for movement between said guide plates to and from the line of bite between said rolls whereby to be adapted to thrust between said guide plates and into said rolls paper supported, guided and conveyed by said means.

6. In a device of the character described, the combination with means for feeding material along a given path including spaced guide plates intermediate of said path, of a tucker blade movable transversely of said path into the space between said guide plates whereby to be adapted to fold therebetween an intermediate portion of material advancing along said path, and a set of creasing rolls disposed with their line of bite adjacent the most advanced position of said tucker blade and provided with radially projecting yieldable portions adapted for engagement before reaching the normal line of bite between said rolls, said rolls being synchronized with said blade whereby said portions are adapted to pluck folded material from the blade.

9. In a device of the character described, the combination with a set of feed rolls of a set of cut off rolls, and actuating connections for said rolls so timed as to operate said cut off rolls at a higher peripheral speed than said feed rolls, said connections being adapted to vary the relative rate of operation of said feed rolls without exceeding the peripheral rate of said cut off rolls, together with folding rolls synchronized with said cut off rolls and provided with non-yieldable actuating connections therewith.

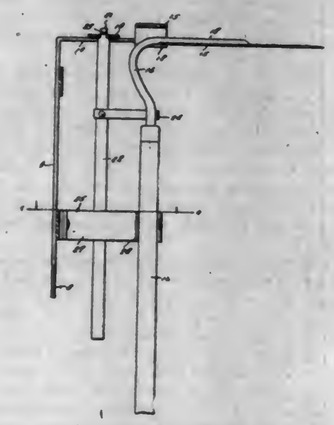
16. In a device of the character described, the combination with web feeding rolls of cut off rolls adapted to sever blanks from the web and paper converting mechanism synchronized with said cut off rolls for the advance and folding of the blanks so severed, said mechanism comprising a conveyor adapted to receive blanks from said cut off rolls, a set of folding rolls adjacent the path of said conveyor, a tucker blade associated with said folding rolls and adapted to deliver thereto an intermediate portion of a blank supported by said conveyor, a second conveyor adapted to receive blanks from said folding rolls, said second set of folding rolls having their axes inclined with reference to the margin of a blank supported by said second conveyor together with a second tucking blade adapted to press an inclined fold line of a napkin blank so supported into the line of bite of said second folding rolls, a slotted table adapted to receive folded napkins from said second folding rolls, a third set of folding rolls having their line of bite in registry with the slot in said table, and a tucker blade cooperative with said third set of folding rolls to thrust a fold line of said napkin through said slot and into the line of bite of said third set of folding rolls, the slot in said table being inclined with reference to the side of a napkin supported on said table at the time of engagement of the tucker blade therewith.

1,878,438. TAXIMETER. FRANK HAROLD CLAUSE, Camberwell, London, England, assignor to Waddington Tamperproof Taximeters, Limited, London, England. Filed June 27, 1930, Serial No. 464,288, and in Great Britain July 25, 1929. 19 Claims. (Cl. 235—30.)



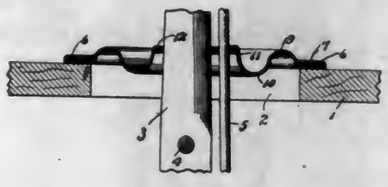
1. In a road wheel and clock drive device for taximeters, the combination of gearing adapted to be driven by the road wheel drive, clock driven gearing, an indicator device operating member, drive mechanism for transmitting drive to the operating member from the gearing driven by the road wheels or from clock driven gearing, whichever be moving at the greater rate, and individual spring means for so urging each gearing as continuously to maintain the drive mechanism associated with each gearing free from backlash with respect to said operating member.

1,878,439. PORTABLE GARDEN HOE VISE. HENRY A. DAUDE, Killeen, Tex. Filed Apr. 8, 1932. Serial No. 604,093. 2 Claims. (Cl. 76—82.)



1. A portable garden hoe holding vise of the class described comprising a frame having a right angularly positioned rack at one end thereof, handle seating means on the frame disposed parallel to said rack and spaced longitudinally therefrom, a lever pivotally and detachably connected at one end to the rack and provided intermediate its ends with a hook to engage over the shank of the hoe, a relatively stationary rack bar mounted on the frame, and a detent carried by the lever and engageable with the teeth of the rack bar.

1,878,440. EMERGENCY BRAKE PAD. JAMES FRANCIS DUFFY, Holland, Mich., assignor to Duffy Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed Dec. 1, 1930. Serial No. 499,288. 5 Claims. (Cl. 180—90.6.)



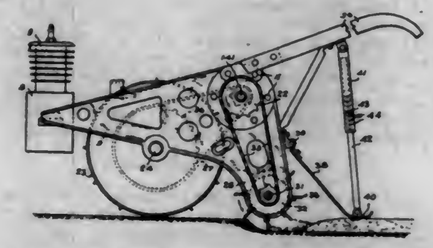
1. A device of the class described comprising, a horizontal central section of rubber having an opening therethrough, an integral alternate annular trough and upwardly extending concaved rib surrounding the central portion, and a surrounding marginal portion of rubber around said trough and rib having a reinforcing member of stiff material molded therein between its opposite sides, said horizontal central section being approximately in the plane of said marginal portion.

1,878,441. ORNAMENTING RING FOR SPOKED WHEELS. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 28, 1931. Serial No. 525,984. 13 Claims. (Cl. 41—10.)

1. Means for ornamenting a wheel rim, comprising a sheet metal ring bearing for a portion of its width flatwise against the outwardly directed lateral face of the rim; and a plurality of spaced resilient clips each composed of a metal strip having one end portion secured flatwise to the ring and having its other end portion composed of a coil having its axis parallel to a flat face of the strip and radially outward of the bore of the rim and having a peripheral portion of the coil in hooking engagement with the inwardly directed face of the rim.

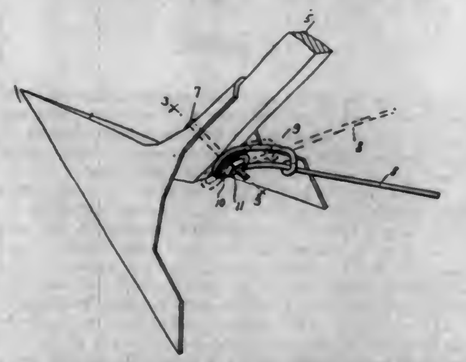


1,878,442. ROTARY GARDEN CULTIVATOR. CLARENCE M. HAMSHAW, Chicago, Ill., assignor of one-tenth to Mrs. H. W. Goode. Filed June 20, 1929, Serial No. 372,270. Renewed Apr. 19, 1932. 8 Claims. (Cl. 97—40.)



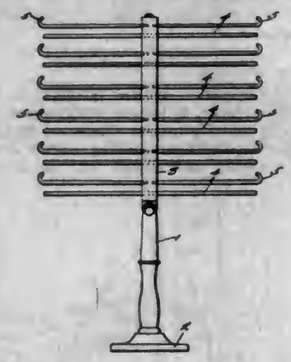
1. A cultivator of the class described embodying a frame, wheels supporting said frame for movement over the ground, a multiple blade rotor mounted in the frame to the rear of the wheels and arranged to dig into the ground, a motor mounted on the forward end of said frame, driving means connecting the motor with said wheels and said rotor, handles extending rearwardly from the frame and a soil guard at the rear end of said rotor, said soil guard having a portion which rests on and slides over the freshly cultivated soil, and means for adjusting said soil guard vertically to govern the depth of cut of said rotor.

1,878,443. CULTIVATOR ATTACHMENT. ANTON HUDEC and THOMAS T. SEFCIK, Temple, Tex. Filed Oct. 27, 1931. Serial No. 571,387. 1 Claim. (Cl. 97—193.)



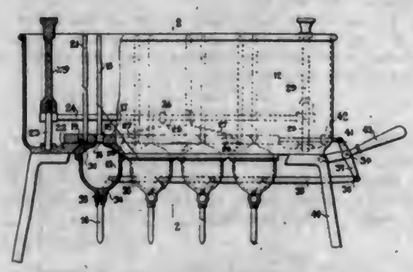
A device of the class described comprising an upright, a diagonally arranged bar connected to the upper end of the upright intermediate the ends of the bar, said bar sloping downwardly and forwardly, a number of spaced pairs of wires extending from the bar with one wire of each pair arranged in a vertical plane about the other wire of the pair, the upper wires having hooked outer ends, said wires projecting from opposite sides of the bar, the hooked wires being longer than the other wires.

1,878,444. TIE RACK. RUDOLPH JOSEPH KOPP, Sandusky, Ohio. Filed Jan. 20, 1932. Serial No. 587,775. 1 Claim. (Cl. 211—154.)



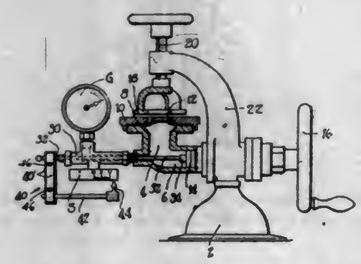
A device of the class described comprising an upright, a diagonally arranged bar connected to the upper end of the upright intermediate the ends of the bar, said bar sloping downwardly and forwardly, a number of spaced pairs of wires extending from the bar with one wire of each pair arranged in a vertical plane about the other wire of the pair, the upper wires having hooked outer ends, said wires projecting from opposite sides of the bar, the hooked wires being longer than the other wires.

1,878,445. MACHINE FOR FILLING BOTTLES AND OTHER VESSELS. HEINRICH VALDEMAR NIELSEN, Cardiff, Wales, assignor, by direct and mesne assignments, to The Hygienic Manufactures and Supplies Company Limited, London County, England, a British Company. Filed Apr. 19, 1930, Serial No. 445,657, and in Great Britain Apr. 23, 1929. 4 Claims. (Cl. 226—108.)



1. For a machine for filling bottles and other vessels with liquid and other flowable material comprising a container, fixed measuring chambers provided with ports through which said chambers are filled, an orificed bottom to said container for filling said chambers from the container, a spring pressed valve slidable on the bottom of the container for opening and cutting off supply of flowable material to said chambers, conduits for the escape of air from the measuring chambers through the source of supply, said conduits forming air exits when the measuring chambers are being filled, subsidiary conduits forming air ducts in connection with said ports, said subsidiary conduits forming air passages to the measuring chambers when discharge thereof takes place, means being provided for opening and cutting off supply between the measuring chambers and a vessel to be filled.

1,878,446. TESTING APPARATUS. SAMUEL N. SENNA, Chicopee, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1929. Serial No. 353,170. 1 Claim. (Cl. 205—14.)



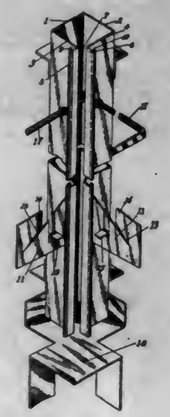
A testing machine comprising in combination, a base provided with a piston bore and a fluid chamber in communication therewith, a piston reciprocable in said bore, a T member extending from said base having a bore, a gauge in communication with said bore of said T, a scale on said T member, a rod slidable in said T member in the path of movement of said piston having a part outside said T member, and a pointer associated with said part of the rod for registering with the said scale.

1,878,447. ILLUMINATED FLAGPOLE. ROBERT MORRIS SUTPHEN, Newark, N. J., assignor to Pfaff and Kendall, Newark, N. J., a Corporation of New Jersey. Filed Feb. 20, 1931. Serial No. 517,140. 2 Claims. (Cl. 240—2.)



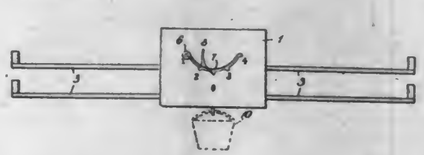
1. In a flag pole, a section formed of translucent material, the section being at least equal in length to the width of the flag to be flown from the flag-pole, means for dividing the section into a plurality of longitudinal compartments, and light sources of different colors mounted in the compartments, whereby, as the flag moves into the range of the various lights of different colors, many color variations may be obtained, the flag at the same time being constantly illuminated.

1,878,448. BRICKLAYER'S LEVELING AND PLUMBING DEVICE. GEORGE CORNUELLE, Cincinnati, Ohio. Filed Mar. 29, 1929. Serial No. 351,021. 2 Claims. (Cl. 33—85.)



1. A bricklayer's leveling and plumbing device comprising an upright support composed of metal formed in the shape of a hollow square, opposed meeting portions of said support at one corner being bent outwardly and then inwardly thus providing vertical guides, said guides providing an opening therebetween in the hollow square extending vertically, said outwardly bent portions extending at right angles to one another on either side of the opening to provide angles for mounting the support on the outer corner of a brick wall during its construction, sliders vertically movable in said guides, said sliders having ledge portions for seating on the top surface of a course of bricks, and slotted portions for the reception of a chalk line.

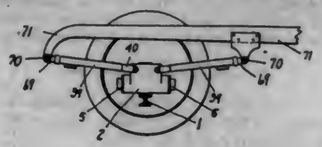
1,878,449. RACK ATTACHMENT FOR POCKET BILLIARD TABLES. THOMAS E. DUNN, New York, N. Y. Filed June 20, 1929. Serial No. 372,323. 1 Claim. (Cl. 273—11.)



A rack attachment for a pocket billiard table of the type having chutes for conveying balls from all the pockets to a common discharge outlet at one end of the table, comprising a group of racks adapted for attachment to said end of the table with their inner ends positioned adjacent the discharge outlet and disposed in an arc of a circle in a vertical plane, and a rotatable tubular sleeve supported in registration with the discharge outlet and adapted to convey balls from said outlet to each of the racks successively.

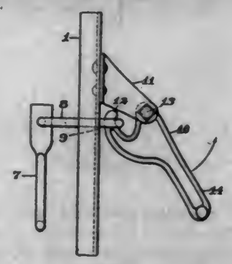
1,878,450. HYDRAULIC SPRING DEVICE FOR AUTOMOBILES. EDWARD J. FISCHER, Covington, Ky., assignor of one-half to Frank A. Aman. Filed Aug. 6, 1928. Serial No. 297,601. 11 Claims. (Cl. 267—2.)

1. In combination with relatively movable running gear elements of a vehicle, a cylinder attached to one element, cushioned plungers in the cylinder, one plunger having a sleeve and the other plunger having a cushioned extension slidable in said sleeve, and arms fulcrumed on the cylinder, operatively connected to the respective plungers,



extending in opposite directions from the cylinder, and having their extended ends operatively connected to the other running gear element.

1,878,451. CANE CAR. GEORGE W. GRASER, San Juan, Puerto Rico, assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1931. Serial No. 507,611. 10 Claims. (Cl. 105—308.)

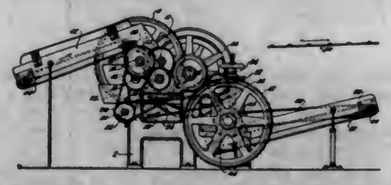


1. In a cane car having an outwardly swinging door, a lever journaled to the body adjacent the free edge of said door, offset portions on said lever for engaging with the door to hold the door in closed position, and locking means for maintaining the lever in door-holding position, said means comprising a link mounted on said lever, a link engaging hook member mounted on the body and manually operable to engage with said link when the lever is moved to door-holding position.

1,878,452. LAMINATED TUBULAR STRUCTURE. CHARLES L. KELLER, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Mar. 23, 1929. Serial No. 349,479. 5 Claims. (Cl. 92—41.)

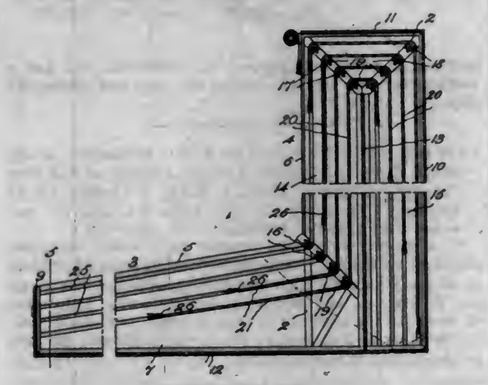
1. Tubular stock comprising layers of the felted product of a bituminous pulp as defined, spirally wound and cemented with additional bitumen, said structure coated on the outside with bitumen.

1,878,453. RUBBER CUTTING MACHINE. ARCHIBALD LADE, Northampton, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1930. Serial No. 482,741. 6 Claims. (Cl. 164—68.)



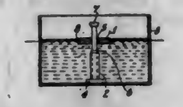
1. A cutting machine of the class described comprising in combination, slitter shafts carrying interleaving slitter disks, the said disks having transverse grooves and ridges on the peripheries thereof, a clearer shaft having clearing disks operating between said slitter disks, a feed conveyor for delivering material to said slitter disks, a rotatable cutting member having spiral cutting elements, a cutter bar located forward of said slitter for coacting with said cutting elements and clearer disks and an intermediate conveyor below said slitter disks for delivering material to said cutting member.

1,878,454. DISPLAY CABINET FOR RUGS AND OTHER TEXTILE FABRICS. ALFRED J. MURPHY, New York, N. Y. Filed Mar. 31, 1932. Serial No. 602,155. 8 Claims. (Cl. 40—28.)



1. In a display cabinet for rugs and other textile fabrics, the combination of a casing having vertically arranged sections one of said sections providing a rear storage compartment and the other providing an open front display compartment, a plurality of independently operable rug carriers, each of which is adapted to support a rug in extended position, said rug carriers being mounted in said casing and adapted to travel in said compartments and means for operating the carriers.

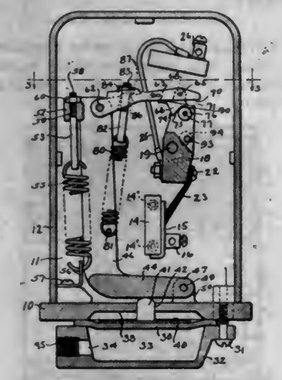
1,878,455. APPARATUS FOR GUIDING THREADS. THOMAS F. BANIGAN, Buffalo, N. Y., assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,443. 9 Claims. (Cl. 18—8.)



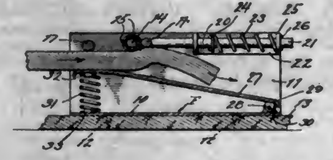
9. In an apparatus including a bath for producing artificial silk, a thread guide comprising an upwardly extending axle disposed in said bath and a roller freely mounted and capable of upward and downward movement on said axle, said roller having its periphery lying in a horizontal plane.

1,878,456. SWITCH. JACOB C. BASHIOUM, Erie, Pa., assignor to Uniflow Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1931. Serial No. 510,350. 14 Claims. (Cl. 200—83.)

1. In a device of the class described, an actuated member, actuating means therefor comprising a movable member, an arm pivotally connected to said movable member, the free end of said arm being arranged closely adjacent said actuated member, and an actuating member pivotally connected to said arm adjacent said free end and positioned to cooperate with said actuated member for movement thereof, said actuating member being adapted to move in a free and unrestrained manner independently of said arm, and spring means connected to said arm so as to hold said actuating member in tensioned engagement with said actuated member.

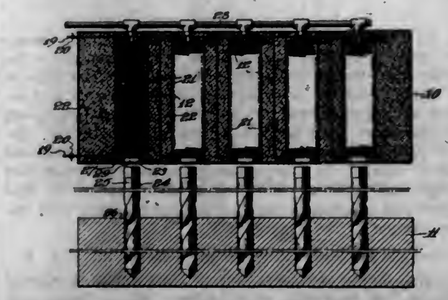


1,878,457. RIND REMOVING MACHINE. GEORGE W. BERRY, Santa Paula, Calif. Filed Mar. 18, 1929. Serial No. 348,072. 7 Claims. (Cl. 146—130.)



1. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon ring thereon, means for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, and means for urging the last means against the rind wound on the first means for the purpose described.

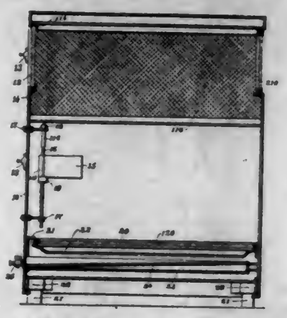
1,878,458. INDUCTION ELECTRIC FURNACE. OVILA JOSEPH BLANCHET, New Bedford, Mass. Filed Dec. 16, 1930. Serial No. 502,693. 7 Claims. (Cl. 219—11.)



1. In a tempering device for tools, the combination of a high frequency coreless inductor coil furnace, heat insulation about the furnace and a non-oxidizing atmosphere within the coil and in the space for the tool, the opening

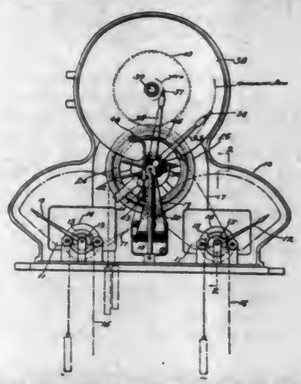
for insertion of the tool into the atmosphere being so located as to retain the atmosphere within the space by difference in density between the non-oxidizing atmosphere and the air.

1,878,459. ANIMAL CAGE. ANDREW RICHARD BLISS, JR., Memphis, Tenn., and GEORGE SUTTON BLISS, Brooklyn, N. Y. Filed Feb. 2, 1928. Serial No. 251,362. 2 Claims. (Cl. 119—18.)



1. In an animal cage, a door, vertical rod on the door, coacting means on the door and rod supporting said rod for turning movement but preventing axial movement thereof, and a receptacle carried by said rod and vertically adjustable thereon by turning said rod.

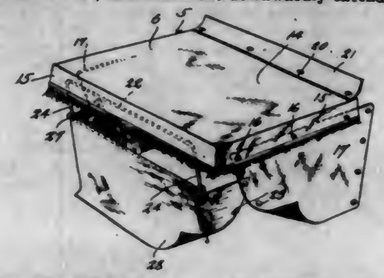
1,878,460. DOUBLE-INDICATING DOUBLE-RECORDING GAUGE. MORO M. BORDEN, Philadelphia, Pa., assignor to Simplex Valve and Meter Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 14, 1931. Serial No. 515,859. 5 Claims. (Cl. 234—6.)



1. In a double-recording gauge, bodily rotatable members, axially aligned bearings for said members, a rotatable chart-holder extending adjacent the outer face of one of the members, a penholder associated with and rotating with said member and having a pen for engagement with the chart, said member having an eccentrically disposed opening formed therein, an eccentrically disposed support carried by the other member and projecting through said opening and a penholder carried by said support and adapted to carry a pen for coaction with the chart carried by the chart-holder.

1,878,461. DETACHABLE TOP FOR THE RUMBLE SEATS OF MOTOR VEHICLES. EDGAR BRADSHAW BRADLEY, Gastonia, N. C. Filed Oct. 18, 1928. Serial No. 313,281. 2 Claims. (Cl. 296—138.)

1. In an auxiliary top for the rumble seat of a motor vehicle, a frame comprising a rear horizontal rod having downwardly extended end portions adapted to fit into openings of the rumble seat, a horizontal rod having loops at its ends, into which the downwardly extended end



portions fit to slidably support the horizontal rod, and a curtain secured to the horizontal rod and supported thereby.

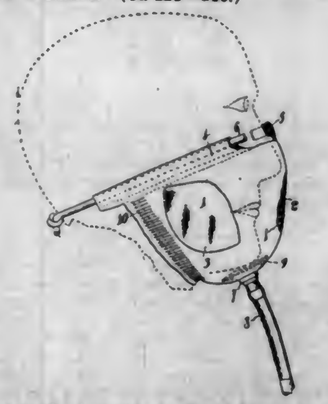
1,878,462. PROCESS OF MAKING BENZOIC ACID. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 30, 1926, Serial No. 145,375. Renewed Feb. 4, 1931. 5 Claims. (Cl. 260—108.)

1. A process of making benzoic acid, which comprises chlorinating toluene, fractionating the chlorinated product to obtain a substantially pure benzotrichloride and treating it with an approximately equi-molecular proportion of water in the presence of iron chloride, then fractionally distilling and subjecting the benzoyl chloride fraction to the action of boiling water.

1,878,463. METHOD OF MAKING HALOGENATED BENZOIC ACID DERIVATIVES. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 6, 1929. Serial No. 353,265. 3 Claims. (Cl. 260—108.)

2. The method of making a halogenated benzoic acid which comprises chlorinating the corresponding halogen substituted toluene, whereby chiefly the halogenated benzotrichloride is produced, purifying the latter by fractional distillation, reacting such purified compound and water in equimolecular proportions in the presence of a catalyst, fractionally distilling the halogenated benzoyl chloride so obtained and then hydrolyzing the latter.

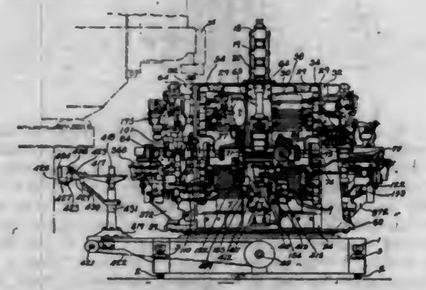
1,878,464. MASK. FREDERICK R. M. BULMER, Toronto, Ontario, Canada. Filed July 24, 1929. Serial No. 380,580. 2 Claims. (Cl. 128—146.)



1. A face mask of roughly segmento spherical form comprising a body portion formed from flexible sheet material

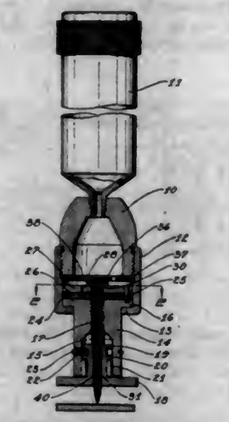
adapted to be fitted over the mouth and nostrils of the wearer and provided with an air supply connection; means for securing the upper margin of said mask snugly about the head; and resilient means for holding the rear margin of said mask snugly against the sides of the face and under side of the chin, said mask being arranged to permit only a restricted escape of air whereby the mask may be maintained in inflated condition.

1,878,465. GLASSWARE FORMING APPARATUS. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,109. 28 Claims. (Cl. 49—5.)



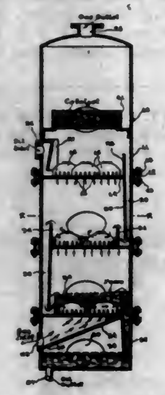
1. In a machine for making blown glass articles, a continuous rotating turret, a support mounted thereon, a neck ring rotatably mounted in said support, automatic means adapted selectively to rotate or oscillate said neck ring in said support during the continuous rotation of said turret, and means for shifting from one of such movements to the other or for causing a cessation of both, all in response to the rotation of said turret.

1,878,466. STRIPING INSTRUMENT. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 22, 1928. Serial No. 321,060. 6 Claims. (Cl. 91—62.6.)



1. A nozzle having a passage provided with a restricted tapering portion adjacent the discharge end thereof, a free floating cylindrical needle in the passage having a reduced end portion forming a shoulder adapted to wedge in the restricted tapering portion of the passage when in its extended position, the reduced portion of the needle having a rounded point adapted to project beyond the passage and engage a surface to be operated upon.

1,878,467. APPARATUS FOR TREATING HYDROCARBONS. ARTHUR F. CLARKE, Tulsa, Okla.; Nell May Clarke executrix of said Arthur F. Clarke, deceased. Filed June 15, 1928. Serial No. 285,572. 4 Claims. (Cl. 261—113.)

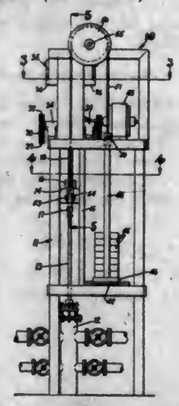


1. An apparatus of the character described, including a perforated deck member, a bubble cap member mounted on the deck member, at least one of said members being formed of catalytic material.

1,878,468. PREVENTION OF CORROSION. BRADFORD S. COVELL, Cambridge, Mass., assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1931. Serial No. 579,116. 7 Claims. (Cl. 252—5.)

1. An anti-corrosive liquid for cooling systems containing a sulfonated fatty acid partially neutralized to a point such that it is water-soluble and contains no free sulphuric acid, characterized by the presence therein of a substantial quantity of unneutralized soluble sulfonated fatty acid.

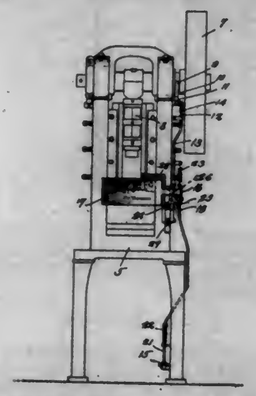
1,878,469. PUMPING JACK. WALTER E. CUMMINS, Long Beach, Calif. Filed Jan. 7, 1931. Serial No. 507,172. 4 Claims. (Cl. 74—14.)



1. For use with a well casing having a sucker rod therein, a pump jack, said pump jack including a supporting frame, a cross head, spaced guides on said frame in which said cross head actuates, means to connect said sucker rod to said cross head, means to reciprocate said sucker rod, a movable table, a plurality of weighted members on said table, a plurality of spaced, upwardly extending tubes secured to said table, a plate on said

frame, a plurality of spaced, upwardly extending rods secured to said plate, said rods being positioned in said tubes, a plurality of pulleys mounted on said frame, a cable supported by each of said pulleys, one end of each of said cables being secured to one of said tubes and the opposite end being secured to said cross head whereby when said cross head is in a lowered position said table is in a raised position and vice versa.

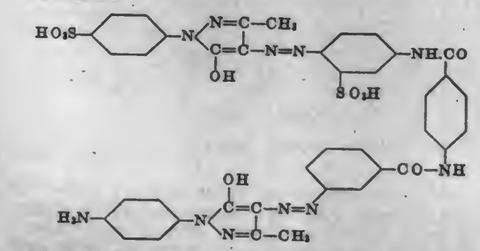
1,878,470. SAFETY DEVICE FOR PRESSES. FRANK E. DIAL and ROY R. ROGERS, Terre Haute, Ind. Filed Sept. 14, 1928. Serial No. 306,038. 1 Claim. (Cl. 192—134.)



In a press guard, a frame, a power clutch, a vertically movable pressing member, an arm pivotally mounted on the frame, a guard on one end of the arm and extended laterally to a position at the front of the pressing member, a foot lever, a rod connecting the foot lever and power clutch, a rod connecting the foot lever and arm to move the arm and guard to their active positions when the foot lever is operated to operate the clutch, a pivoted latch operated by the downward movement of the arm, and adapted to hold the arm in its active position, a latch for holding the first mentioned latch in its active position, means controlled by the downward movement of the pressing member for releasing the last mentioned latch to release the first mentioned latch, and yieldable means for returning the arm and guard to their normal positions.

1,878,471. AZO DYESTUFF. KARL DORMAIER, Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1928, Serial No. 298,620, and in Germany Aug. 20, 1927. 6 Claims. (Cl. 260—81.)

1. The azo dyestuff having in its free form the probable formula



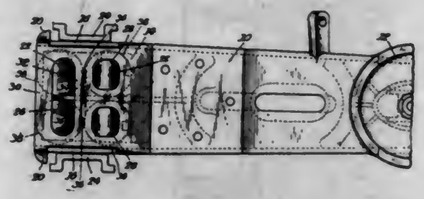
said dyestuff being a yellow powder easily soluble in water in form of its alkali metal salts, dyeing cotton a greenish yellow shade, which when diazotized and developed with β-naphthol yields a clear yellowish orange.

1,878,472. FIRE EXTINGUISHER. FRED ALBERT DODELIN, Glen Ridge, N. J., assignor to Pyrene Manufacturing Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 522,645. 8 Claims. (Cl. 299—96.)



2. In a fire extinguisher of the type including pressure and liquid chambers from the former of which pressure is directed into the latter to expel liquid therefrom, a valve mechanism for controlling the flow of pressure from the pressure chamber to the liquid chamber and for controlling the flow of liquid from the liquid chamber and comprising a housing having a pair of the valve chambers, valve-head actuating means comprising a rotatable shaft having screw-thread connection with said housing and adapted to move longitudinally thereof upon being rotated, a valve-head operating member carried by said shaft for relative rotation with respect to such shaft and having a pair of arms spaced from each other, a pair of reciprocatory valve heads disposed within said chambers and having their corresponding ends disposed intermediate said arms whereby said valve-head operating member is retained against rotation at such time as said shaft is rotated, and a connector element disposed intermediate said arms and pivotally connected to the same and connected to said corresponding ends of said valve heads for relative movement with respect to the same.

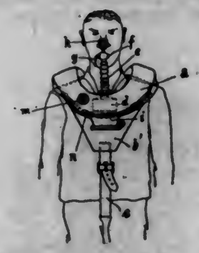
1,878,473. BOLSTER END CONSTRUCTION. HARRY E. DOERR, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 510,610. 5 Claims. (Cl. 105—230.)



1. An end construction for a box type bolster including imperforate bottom and side walls and a top wall having openings spaced apart on each side of the plane of the cooperating side frame.

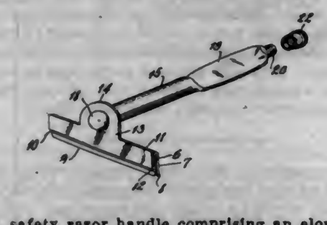
1,878,474. LIFE-SAVING GEAR. OTTO HEINRICH DRÄGER and HERMANN STELZNER, Lubeck, Germany; said Stelzner assignor to said Dräger. Filed Mar. 28, 1929, Serial No. 350,743, and in Germany Dec. 20, 1928. 8 Claims. (Cl. 128—191.)

1. A life preserving and breathing device, comprising an annular breathing bag adapted to be secured to the body of a wearer around the shoulders, respiratory apparatus secured to said bag in a water tight connection, said bag having a hollow projection open at its lower



end and adapted to be closed by a cover engaging angle-plates on said projection, whereby an air regenerating cartridge may be inserted in said bag.

1,878,475. SAFETY RAZOR. CHARLES DRIEST, Marlboro, N. J. Filed Mar. 14, 1931. Serial No. 522,644. 4 Claims. (Cl. 30—12.)



1. A safety razor handle comprising an elongated tube of flexible material, means arranged in one end portion of said tube for reinforcing the wall thereof and to provide a rigid hand gripping portion for said handle member, and means at said end of the handle member for securing the same to a blade supporting body.

1,878,476. LOOSE LEAF BINDER. EDMOND G. DUPRÉE, Richmond Hill, N. Y., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed Dec. 5, 1930. Serial No. 500,350. 22 Claims. (Cl. 129—41.)

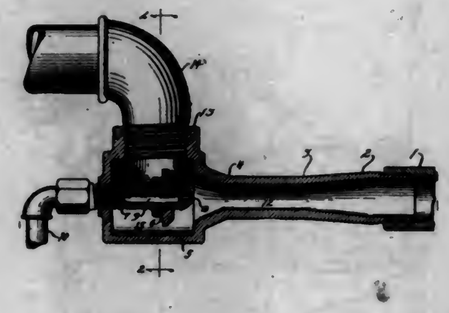


1. A post for loose leaf binder comprising a flexible member and a plurality of interfitting members threaded thereon and permitting the post to flex between them, in combination with spring means adapted to hold said post normally rigid by pressing upon said interfitting members.

1,878,477. KERATIN ENAMELING COMPOSITION. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed May 23, 1928. Serial No. 280,121. 12 Claims. (Cl. 167—85.)

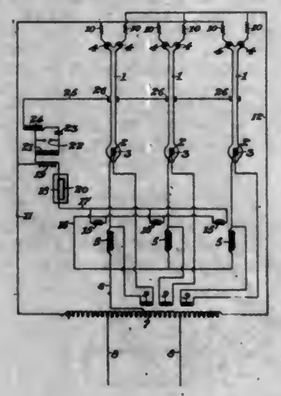
1. A keratin enameling composition comprising nitrocellulose of less than one-half second viscosity dissolved in a substantially odorless solvent vehicle comprising substantially anhydrous synthetic methanol.

1,878,478. INSPIRATOR. WILLIAM B. ENSIGN and LLOYD H. V. REYNOLDS, New York, N. Y., assignors to Ensign-Reynolds, Inc., New York, N. Y., a Corporation of New York. Filed Sept 22, 1928. Serial No. 307,635. 3 Claims. (Cl. 158—118.)



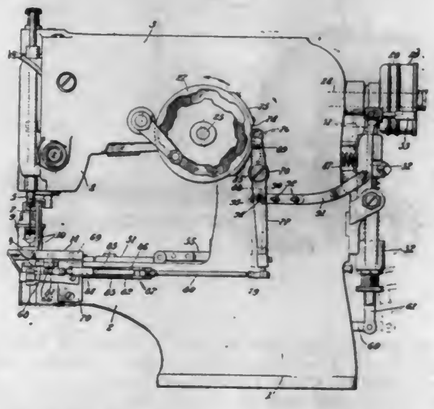
2. An inspirator for gas burners, comprising a hollow head having an integral tubular member extending therefrom, said head having a large aperture at one side and a comparatively small aperture in line with said tubular member, said tubular member having a constricted portion for part of its length, tubular means associated with said large aperture for directing air into said hollow head, a gas nozzle movably positioned in said comparatively small aperture for directing gas into said tubular member, said nozzle being adjustable toward and from said tubular member for varying the proportion of air and gas entering said tubular member.

1,878,479. SYSTEM FOR STARTING AND OPERATING GASEOUS ELECTRIC DISCHARGE DEVICES. WILLIAM A. D. EVANS, Summit, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Sept. 13, 1929. Serial No. 392,854. 15 Claims. (Cl. 176—124.)



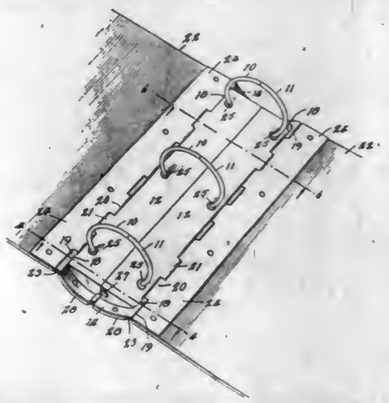
1. In combination, a gaseous discharge device, a discharge maintaining circuit therefor, means to produce a high frequency discharge in proximity to said device to imitate a discharge therein, and means to energize said last named means at a predetermined time interval after said discharge maintaining circuit is connected to a source of energy.

1,878,480. THREAD-CUTTING MECHANISM FOR SEWING MACHINES. ALBERT F. FIFIELD, Newark, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 20, 1930. Serial No. 503,699. 7 Claims. (Cl. 112—252.)



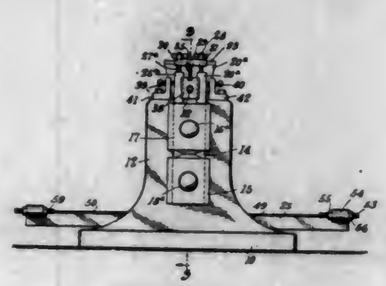
1. A sewing machine having, a reciprocating needle, a bobbin, a throat-plate, a stop-motion mechanism, a needle-loop detaining and severing implement pivotally mounted below said throat-plate, automatic means timed to impart a first stage of movement to said implement about its pivot to cause the latter to enter and detain the last needle-loop, a manually operated bobbin-thread pull-off and severing device, and an operative connection between said manually operated bobbin-thread pull-off and severing device and said needle-loop detaining and severing implement, whereby the manual operation of said device imparts a further movement to said implement about its pivot to sever the detained needle-loop.

1,878,481. LOOSE LEAF DEVICE. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1929. Serial No. 348,237. 4 Claims. (Cl. 129—17.)



1. A loose leaf ring book comprising a pair of carrying plates, complementary ring halves forming an arc greater than 180° mounted on said plates, in combination with rigid means bracing the longitudinal edges of said plates against lateral or longitudinal warping.

1,878,482. MACHINE FOR PRINTING LUMINOUS DIALS. RUFUS G. FORDICE, Chicago, and HARRIE F. TALBOT, Peru, Ill., assignors to Radium Dial Company, Ottawa, Ill., a Corporation of Illinois. Filed Aug. 8, 1929. Serial No. 384,454. 11 Claims. (Cl. 101—251.)



1. In a machine for printing luminous dials, a hopper for containing a supply of paint, a rotary die beneath said hopper, a rotary drum having resilient blades in contact with said die in said hopper for forcing paint into said die and for removing the excess therefrom, a rotary transfer roll in contact with said die, and a dial-holding bed plate reciprocable beneath said transfer roll, whereby the paint will be transferred from said die to said dial.

1,878,483. METHOD FOR THE PRODUCTION OF DEPOSITS FROM AQUEOUS DISPERSIONS OF RUBBER AND RUBBER-LIKE SUBSTANCES. MAX FORRER, Paris, France, assignor, by mesne assignments, to American Anode Inc., a Corporation of Delaware. Filed May. 19, 1928, Serial No. 279,213, and in Germany May 27, 1927. 10 Claims. (Cl. 18—58.)

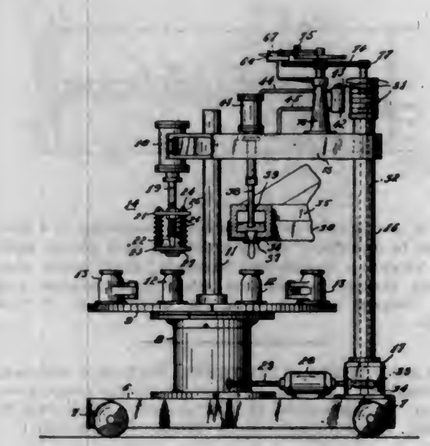
8. The method of producing a deposit of rubber which comprises adding to an aqueous dispersion of rubber a water soluble colloid capable of gelation when subjected to a change of temperature, immersing a form in the treated dispersion, causing a substantial change in temperature to progress from the surface of the form through the dispersion and effect the solidification of a layer of the aqueous dispersion medium on the form, treating the deposit on the form with a reagent adapted to be toughen the deposit and render it permanently insoluble, and drying the deposit.

1,878,484. PRODUCTION OF TRI-SUBSTITUTED GUANIDINES. HAROLD B. FOSTER, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 12, 1926. Serial No. 94,328. 19 Claims. (Cl. 260—125.)

1. In the production of a polysubstituted guanidine by a process which comprises subjecting a commixture of a thiourea having attached to each nitrogen atom at least one hydrocarbon radical and an organic primary amine to the action of a desulfurizing agent in the presence of water and of an inert non-hydroxylic organic solvent, the improvement which comprises carrying out the reaction from the beginning to substantial completion at a temperature below the boiling point of said solvent.

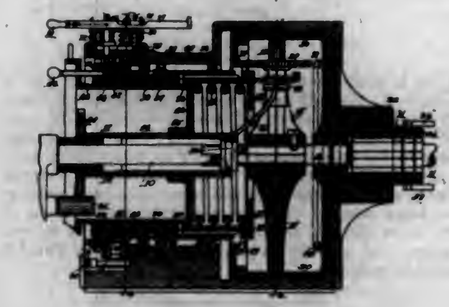
1,878,485. GLASS MAKING MACHINE. HENRY C. GANTER, Natrona, Pa., assignor to Atlantic Bottle Company, a Corporation of New York. Filed Mar. 9, 1925, Serial No. 14,098. Renewed Feb. 3, 1932. 10 Claims. (Cl. 49—1.)

1. The combination with a glass forming machine having a plurality of movable molds and a glass feeding device for depositing quantities of glass in each mold when moved into registry with the feeding device, the quantity being proportional to the time between successive move-



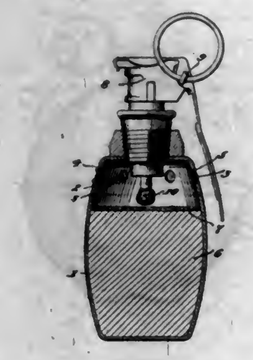
ments of the molds, of means for automatically and at predetermined intervals altering the time of movement of the molds for varying the quantity of glass delivered thereto.

1,878,486. VARIABLE SPEED TRANSMISSION MECHANISM. ERNST GESSNER, Worcester, Mass. Filed Oct. 2, 1931. Serial No. 566,501. 11 Claims. (Cl. 74—34.)



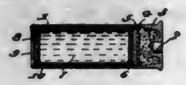
1. Variable speed transmission mechanism comprising a driving member, a driven member, a carrier rotatable with said driving member, a plurality of angularly spaced friction discs rotatably mounted in said carrier, pinions rotatable with said discs, gears engageable by said pinions and connected to rotate said driven member, means to simultaneously adjust said friction discs radially, a friction plate engaged by said friction discs and mounted to rotate about the axis of the driving member, and means effective to prevent rotation of said friction plate in one direction but leaving said plate free to rotate in the opposite direction.

1,878,487. HAND GRENADE, ETC. ALVA F. SPRING, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 550,567. 4 Claims. (Cl 102—29.)



2. A grenade comprising a body portion, perforations in said portion, and soft fusible metallic fillers of Wood's metal in said perforations and hermetically sealed by a metallic joint to said body portion.

1,878,488. GENERATION OF PERSISTENT DISABLING GASES. BYRON C. GOSS, Cleveland, Ohio. Filed July 13, 1931. Serial No. 550,599. 7 Claims. (Cl. 167—47.)



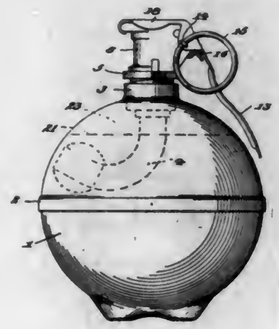
1. A unitary association containing gas generating chemicals capable of developing persistent disabling gases, consisting of diphenylamine-chlorarsine in proximity to an explosive, and a capsule containing dissolved diphenylamine-chlorarsine, said gas generating chemical adapted to be volatilized and dispersed by said explosive whereby the vaporized solvent functions as a vehicle for the vaporized diphenylamine-chlorarsine.

1,878,489. GENERATION OF PERSISTENT DISABLING GASES. BYRON C. GOSS, Cleveland, Ohio. Filed July 13, 1931. Serial No. 550,600. 5 Claims. (Cl. 102—1.)



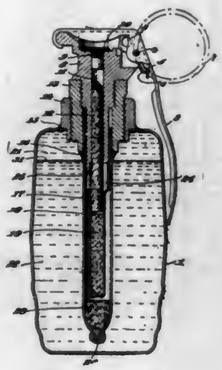
1. A receptacle containing gas generating chemicals capable of developing persistent disabling gases, consisting of diphenylamine-chlorarsine in proximity to an explosive, and a capsule containing dissolved gas generating chemicals, said gas generating chemicals adapted to be volatilized and dispersed by said explosive.

1,878,490. GRENADE OR PRESSURE CONTAINER. BYRON C. GOSS, Cleveland, Ohio. Filed Oct. 1, 1931. Serial No. 566,333. 12 Claims. (Cl. 102—29.)



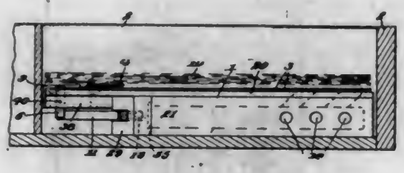
4. A vessel adapted to contain liquids under pressure, comprising a discharge tube extending within said vessel, said discharge tube having a weighted end, a destructible seal on said tube, the end of said tube bearing the seal projecting toward the inner wall of the vessel, said weight being so located as to cooperate with the mass of the vessel to establish a center of gravity adjacent said seal, said seal facing the wall of said vessel and positioned to drain the contents of said vessel, and means to destroy said seal.

1,878,491. EXPLOSIVE DEVICE. BYRON C. GOSS, Cleveland, Ohio. Filed Nov. 24, 1931. Serial No. 577,100. 27 Claims. (Cl. 102—29.)



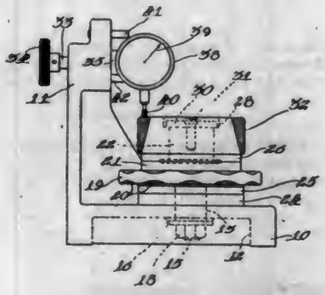
1. The method of dispersing the discharged gases generated by the gas generating chemicals contained in an explosive device when said device is "fired" which comprises intimately associating said gas generating chemicals with an agent which is normally a gas, said chemicals and agent being normally under high pressure in said device, and firing said device and delivering the contents thereof as a combined discharge of chemical gas and agent, said agent then expanding and dispersing said discharged gas chemicals over an enormous area.

1,878,492. PROTECTIVE DEVICE, CONSISTING OF A GAS GUN. BYRON C. GOSS, Cleveland, Ohio. Filed Feb. 17, 1932. Serial No. 593,654. 14 Claims. (Cl. 42—1.)



1. A cash drawer protective device consisting of a gun, means to detachably clamp papers on said device, hammer actuating mechanism, hammers, said means comprising hammer holding and releasing mechanism, and said triggers released upon the widthdrawal of said papers.

1,878,493. GAUGE STRUCTURE. MICHAEL J. GRAHAM, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 9, 1928. Serial No. 291,450. 3 Claims. (Cl. 33—147.)

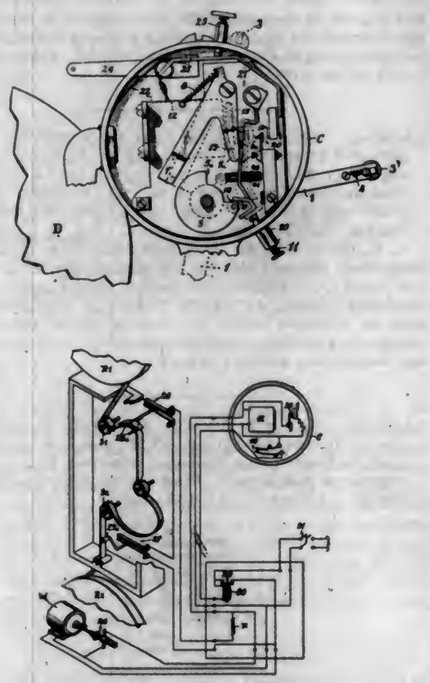


1. In a gauge, a base formed with an opening and a standard, an integral fixture comprising a horizontal rest with a vertical stud extending thereabove and another vertical stud extending therebelow, the lower stud fitting loosely in the base opening turnably to mount the fixture on the base, a masterpiece resting on the rest, means securing said masterpiece to the upper stud, said masterpiece being adapted to carry a complementary piece of work to be gauged, an arm pivotally connected to the standard, and a gauge having a work engaging element carried by said arm.

1,878,494. CONTROLLING DEVICE FOR MOTION PICTURE PROJECTORS. JOSEPH G. GRAMSA, Buffalo, N. Y., assignor of one-half to Simon Nieman, Buffalo, N. Y. Filed Jan. 2, 1929. Serial No. 329,745. 4 Claims. (Cl. 88—17.)

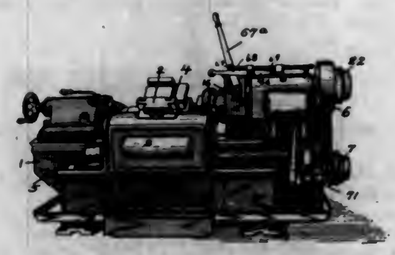
2. In a device for controlling the movement of the dowser of a motion picture projector between down and up positions to protect the film and having means normally operative to lock the dowser in the down position, the combination of automatic means normally conditioned upon the increase in the speed of travel of the film above a set value to render said locking means inoperative and thereby permit the movement of the dowser to the up position and means to hold the dowser in such position with manually controlled means to enable movement of

the dowser to the up position when the automatic means are not conditioned for operation and means for latching the dowser when so moved, said means last mentioned be-



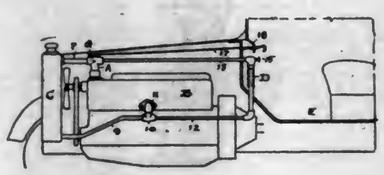
ing rendered inoperative by movement to unlatching position when said automatic means are conditioned to latch the dowser in the up position.

1,878,495. AUTOMATIC LATHE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,473. 5 Claims. (Cl. 82—29.)



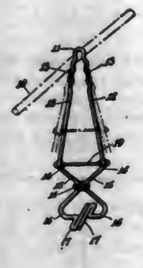
1. In a machine comprising a rotatable work holder, a driving shaft, at least three gears rotatable on said driving shaft, one gear being capable of rotation relatively to the others, a ratchet limiting said relative rotation to one direction, a clutch by which said other gears are connectible to or disconnectible from said driving shaft, means whereby said machine operatively actuates said clutch, a change-speed operative connection from said one gear to said driving shaft, a jack shaft, gears with which said jack shaft rotates, adapted to be alternatively meshed with said other gears, and a change-speed operative connection from said jack shaft to said work holder.

1,878,496. WATER CIRCULATING SYSTEM FOR AUTOMOBILES. JOHN F. GULYBAN, Bedford, Ohio, assignor, by mesne assignments, to Tropic Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,898. 6 Claims. (Cl. 123—174.)



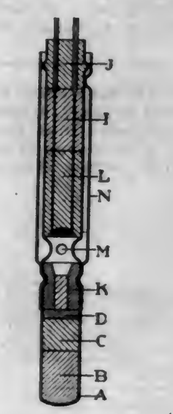
1. A cooling and heating system for an automobile, including an engine, a radiator and heater in joint water circulating connection with said engine, a three-way valve fitting connecting the radiator, the heater, and the engine, a valve within said fitting, and heat actuated automatic means contained within the three-way valve fitting and controlling said valve.

1,878,497. CLIP CONSTRUCTION. ERICH LEHR, New York, N. Y. Filed Sept. 1, 1931. Serial No. 560,547. 1 Claim. (Cl. 24—137.)



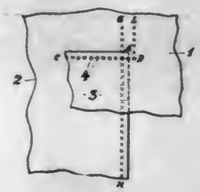
A device for the purpose described, comprising a symmetrical wire structure having angularly arranged suspension means, narrow at their upper and widening towarda their lower ends, and adapted to straddle with their upper end a suspending element in the form of a nail, screw, rod or rope, a pair of crosswise arranged arms extending from said suspension means and terminating in elongated article engaging means in the form of jaws substantially parallel and extending transversely of the length of the device, and a connecting member in engagement with said suspension means extending in a substantially right angular direction to the length of said jaws, adapted to actuate the latter for the purpose of opening or closing, and keeping closed said jaws.

1,878,498. INITIATOR. HAROLD A. LEWIS, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 24, 1931. Serial No. 532,471. 25 Claims. (Cl. 102—9.)



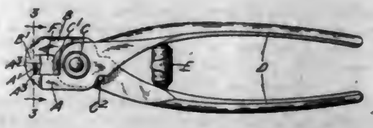
1. An initiator comprising in combination an explosive charge and a nitrided steel shell encasing the charge.

1,878,499. PROCESS FOR MAKING STOCKINGS. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany, a Corporation of Germany. Filed Feb. 5, 1932, Serial No. 591,175, and in Germany June 26, 1931. 6 Claims. (Cl. 66—187.)



1. In a process of manufacturing full fashioned stockings, the step of forming rows of loose loops in the sole portions along the lines of attachment of the sole portions to the heel caps and extending from the selvage edges of the sole portions to points on the foot inwardly of the heel corners.

1,878,500. HAND-OPERATED SHEARING TOOL. FREDERICK DONALD LINGWOOD, London, England, assignor to Manufax Limited, London, England, a Company of Great Britain. Filed Dec. 28, 1931, Serial No. 583,550, and in Great Britain June 2, 1931. 6 Claims. (Cl. 164—81.)

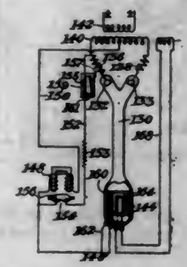


1. A hand-operated shearing tool for severing miniature girders including in combination two jaws, a pivotal joint connecting one end of one jaw to one end of the other jaw, the jaws being oppositely recessed between the pivotal joint and their free ends to provide a gap which will accommodate a flange of a girder whose web is being severed, a knife edge on the outer end of one of the jaws forming a first shearing portion, a second shearing portion on the outer end of the other jaw having a plane face constituting an anvil for supporting the part of the girder to be sheared and having a straight edge with which the first shearing portion co-operates, the second shearing portion being tapered towards the gap formed by the recesses in the jaws so as to allow the girder flange to lie in this gap without fouling the shearing portions during shearing of the web at angles other than at right angles to the length of the girder.

1,878,501. STILBENE DYE AND PROCESS OF PRODUCING THE SAME. CHAUNCEY ALLAN LYFORD, East Aurora, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,924. 15 Claims. (Cl. 260—69.)

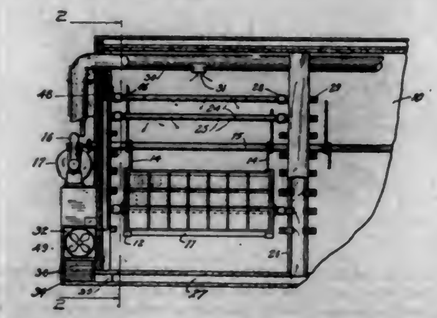
1. In the production of stilbene dyestuff by a process comprising the reduction of 4.4'-dinitrostilbene-2.2'-disulfonic acid in an alkaline medium, the improvement which comprises reducing 4.4'-dinitro stilbene-2.2'-disulfonic acid with an aldehyde having the formula RCHO, wherein R represents hydrogen, a non-hydroxylic aliphatic hydrocarbon radical, or a furfuryl radical.

1,878,502. GAS OR VAPOR DISCHARGE DEVICE. ROY D. MAILEY, East Orange, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 25, 1928. Serial No. 314,929. 8 Claims. (Cl. 176—122.)



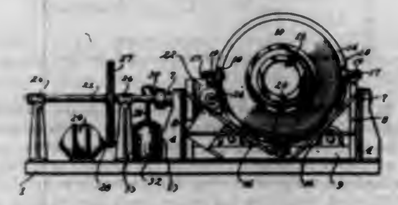
1. A gaseous discharge device comprising an envelope, electrodes therein, one of which is adapted to emit electrons when heated, means for heating said electrode, and a mixture of helium and neon therein, the helium constituting at least 85% of said mixture.

1,878,503. INCUBATOR. IRVIN L. MARTIN, Denver, Colo. Filed Dec. 12, 1930. Serial No. 501,811. 6 Claims. (Cl. 119—37.)



5. In an incubator having egg trays, means for projecting air substantially parallel with said egg trays comprising; perforated tubes arranged adjacent to and parallel with said egg trays and substantially along their medial lines, said tubes provided with orifices for directing said air oppositely outward parallel with said egg trays.

1,878,504. CONCRETE MIXER. ALFRED E. MASON, San Francisco, Calif., assignor to Norris K. Davis, San Francisco, Calif. Filed June 18, 1929. Serial No. 371,917. 3 Claims. (Cl. 83—73.)



1. A concrete mixer comprising a drum having an intake opening and a discharge opening, an apparatus frame having one of its side walls inset, a pair of pedestals extending upwardly from said apparatus frame adjacent the inset portion, a ball and socket bearing in each pedestal, a mounting frame within which said drum is seated for rotation, trunnions extended in axial alignment from opposite sides of the mounting frame and journalled one in each ball and socket bearing, means for rotating the drum, and means for tilting the mounting frame to an angle whereby the discharge opening is received within the inset of the apparatus frame.

1,878,505. FLUID PRESSURE CONNECTION. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1929. Serial No. 342,877. 2 Claims. (Cl. 18—2.)



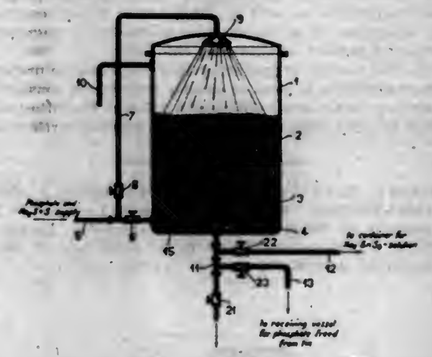
1. A fluid pressure connection comprising a casing adapted to be mounted in predetermined relation with respect to the valve stem of an article to be inflated, a spring-pressed bored plunger positioned within the casing and adapted to be held in fluid-tight engagement with the valve stem by the pressure in the article acting against the valve stem, and means mounted on the plunger to guide the valve stem into engagement with the plunger, said means being formed to conduct escaping fluid away from the article and plunger and said means having a base portion adapted when the plunger is depressed to engage the casing to limit the downward movement of the plunger.

1,878,506. TOBACCO PIPE. HUGH M. MCCLURE, Kearney, Nebr. Filed Sept. 16, 1931. Serial No. 563,041. 8 Claims. (Cl. 131—12.)



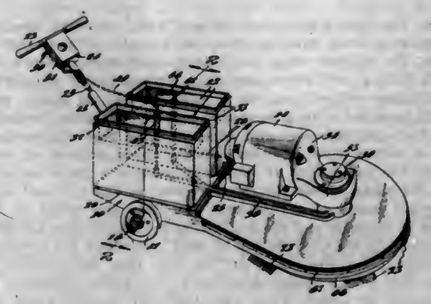
1. A longitudinally split tubular pipe strainer that is longitudinally expansible and contractible to vary its diameter.

1,878,507. PROCESS FOR THE RECOVERY OF TIN COMPOUNDS IN THE ART OF LOADING SILK. WALTER MEITNER, Vienna, Austria. Filed Dec. 11, 1931, Serial No. 580,471, and in Austria Dec. 9, 1930. 4 Claims. (Cl. 23—136.)



1. A process for recovering tin from waste phosphate baths in the art of loading silk which comprises passing the said phosphate baths through a filtering device charged with active aluminium hydroxide removing the filtrate and washing the filtering device with a solution capable of dissolving the tin.

1,878,508. FLOOR SCRUBBING MACHINE. VICTOR H. MENKHAUS, Norwood, Ohio. Filed Oct. 29, 1931. Serial No. 571,834. 10 Claims. (Cl. 15—50.)



2. In a floor scrubbing machine, a truck, a scrubbing brush unit mounted in and beneath said truck, means for

driving said scrubbing brush unit, said truck including water feed grooves extending to said scrubbing brush unit, and water supply means for supplying water to said scrubbing brush unit through said water feed grooves.

1,878,509. INSULATING OIL. RICHARD MICHEL, Uerdingen, Niederrhein, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 12, 1928, Serial No. 292,328, and in Germany July 16, 1927. 16 Claims. (Cl. 252—1.)

1. An insulating oil comprising a liquid polyalkylated naphthalene hydrocarbon compound.

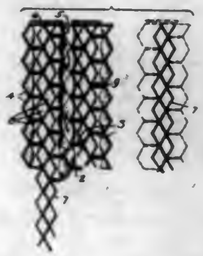
10. A composition of matter comprising a mineral oil containing a substantial proportion of a polyalkylated naphthalene hydrocarbon compound.

1,878,510. CHLORINE PREPARATION. CHARLES MINDELEFF, Jackson Heights, N. Y. assignor to Louise G. Robinovitch, Golden, Colo. Filed Nov. 26, 1928, Serial No. 322,079. Renewed July 14, 1932. 17 Claims. (Cl. 23—246.)

1. The method of producing an active chlorine preparation composition in solid or powder form which comprises the absorption of active chlorine matter by a magnesium compound capable of absorbing chlorine.

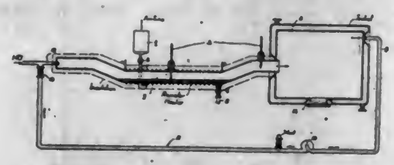
15. The method of producing an active chlorine preparation composition in solid or powder form which consists in absorbing an aqueous solution of a chlorine liberating compound in a dry oxide of a metal of the alkaline earth group.

1,878,511. RADIATOR CORE FOR AUTOMOBILE COOLING SYSTEMS. WELLINGTON W. MUIR, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,740. 5 Claims. (Cl. 257—130.)



1. The herein described radiator unit, the same comprising outer walls each provided with a plurality of cooling fins, the extreme edge portions of each wall between the fins having serrations providing a plurality of outwardly extending ridges lying in a common vertical plane, said wall provided with a depressed portion extending inwardly of the unit between said edge portions to form one-half of a water tube extending from top to bottom of said unit, the outer face of said tube lying in a plane parallel to the plane of the ridges, the metal of the serrated edge portion being of a thickness less than the metal of the rest of the wall and the angle of said thinned edge portions being such that the ridges of said serrations are disposed farther from the plane of the tube face than would be the case if the metal were all of the same thickness, as a result of which when two similarly formed units are joined together with their serrated edge portions interfitting the complete water tube formed thereby will have an increased dimension.

1,878,512. PREPARATION AND PURIFICATION OF PRIMARY AROMATIC AMINE HYDROHALIDES OF THE BENZENE SERIES. MARK E. PUTNAM and LINDLEY E. MILLS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 14, 1929. Serial No. 392,729. 6 Claims. (Cl. 260—130.5.)



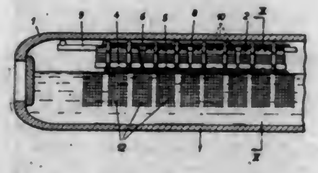
1. In a method of making a primary aromatic amine hydrohalide of the benzene series, the steps which consist in reacting a primary aromatic amine of the benzene series with a gaseous hydrogen halide in the absence of a solvent, and simultaneously vaporizing the aromatic amine hydrohalide formed, removing the vapors from the reaction zone, and separately condensing said amine hydrohalide in the presence of an excess of the gaseous hydrogen halide.

1,878,513. VAGINAL POWDER APPLICATOR. EARLE C. HAAS, Denver, Colo. Filed Aug. 29, 1931. Serial No. 560,188. 2 Claims. (Cl. 128—266.)



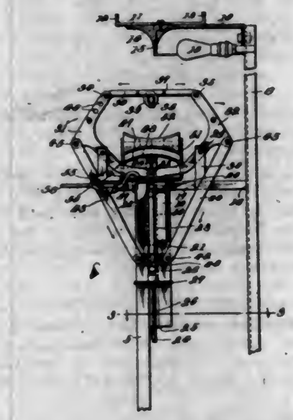
1. Means for filling the cylinder of a medicinal powder applicator comprising: an open ended tube; removable means for closing the open ends of said tube, said tube having an interior diameter substantially equal to the external diameter of said cylinder so that it may be slid thereover to fill the cylinder and so that it will be maintained in place thereon by the natural friction between the cylinder and the tube.

1,878,514. COMBINED STEAM GENERATOR AND FEED WATER PREHEATER AND PURIFIER. OTTO H. HARTMANN, Kassel-Wilhelmshohe, and HANS TREDE, Kassel, Germany, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Feb. 17, 1931, Serial No. 516,522, and in Germany Feb. 28, 1930. 15 Claims. (Cl. 122—417.)



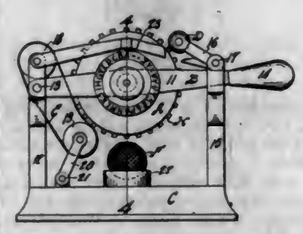
1. A feed water preheating and purifying apparatus disposed within the steam space of a drum in which steam is generated, comprising a flow member presenting a composite downwardly inclined flow surface and being constituted of a plurality of individual units each supported to present a portion of said composite flow surface, and means for directing feed water substantially uniformly against the upper portion of said composite flow surface, each of said individual units constituting a frame carrying metallic plates and detachably secured to the drum walls with its upper end near the top of the drum adjacent the median plane of the water body and with its lower end adjacent the water surface at the side of the drum, the upper surfaces of the metallic plates comprising portions of the composite flow surface and the lower surfaces of said plates being freely exposed to the steam generated from the water in the water space.

1,878,515. TIRE SPREADER. GEORGE EDGAR HAZARD, Rochester, N. Y., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Filed Jan. 9, 1928. Serial No. 245,882. 6 Claims. (Cl. 154—9.)



1. A tire spreader comprising a standard carrying a table, rocker arms pivotally supported above said table, tire casing engaging and spreading means pivotally connected to the upper ends of said rocker arms, a tire casing supporting plate and guide therefor pivotally connected to the lower ends of said rocker arms, a cylinder and piston therefor, operating arms pivotally connected to said rocker arms and to said piston, and means to drive said piston downwardly to cause said operating arms to rotate the rocker arms upon their pivotal supports, for the purpose described.

1,878,516. PRINTING MEANS. GEORGE W. HEENE, Cleveland, Ohio. Filed May 31, 1928. Serial No. 281,736. 2 Claims. (Cl. 101—20.)



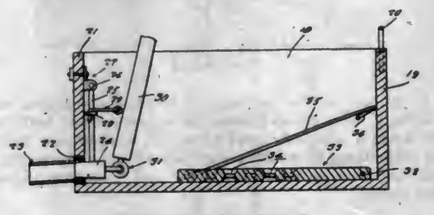
1. A printing means including a frame, a ball holder positionally fixed thereon and having a socket in the top thereof to position a ball definitely sidewise and to support the same vertically on the upper end thereof, an operating bar hinged to said frame, a shaft journaled in said bar, a type carrier on and rotatable with said shaft, type members carried by said type carrier and moving therewith for upward alinement thereof with said socket and having printing characters thereon of greater length than usual to print the characters thereof in substantially clear outline onto a ball, and printing type inking means having one end thereof positionally fixed on said frame and the other end thereof pivotally supported on said frame and adapted to be moved into and out of inking contact with the type on said type carrier.

1,878,517. ARTIFICIAL TOOTH. CARL HILTEBRANDT, Essen-on-the-Ruhr, Germany, assignor to Dr. Hiltebrandt Zahnfabrik Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Dec. 31, 1930, Serial No. 505,805, and in Germany July 23, 1930. 2 Claims. (Cl. 32—9.)



1. A pair of artificial molars having masticating surfaces forming portions of cylindrical faces extending in sagittal direction, the masticating surface of the one tooth being convex and that of the other tooth concave.

1,878,518. ANIMAL FEEDING DEVICE. WILLIAM HODKINSON, Alsey, Ill. Filed Dec. 9, 1930. Serial No. 501,148. 1 Claim. (Cl. 119—53.)

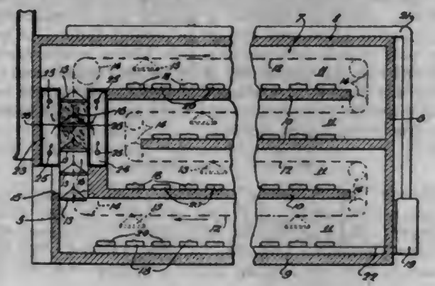


Means for introducing feed into a trough located in a hog pen comprising an elevated foundation located outside of the pen, a tank removably supported on the foundation for receiving the feed, a bushing in one side of the tank at the bottom thereof and provided with a threaded and inwardly and upwardly sloping bore, a spout having one end threaded in the bore, said spout passing through a wall of the pen and resting on one end of the trough for discharging into the trough, a valve member for closing the inner end of the spout, a hand lever projecting from the tank and connected with the valve member for moving the same to open and closed position, and an agitator in the tank for agitating the food therein.

1,878,519. HUMIDIFIER FOR BAKE OVENS. FRIEDRICH A. HOPPE, Chicago, Ill., assignor to The Petersen Oven Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1931, Serial No. 527,412, and in Germany Aug. 7, 1930. 8 Claims. (Cl. 107—57.)

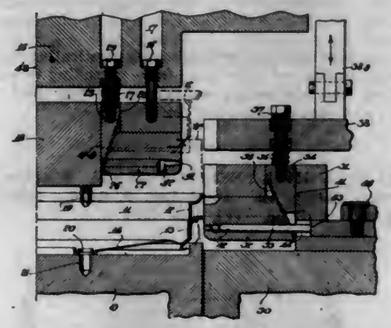
1. A bake oven comprising a housing, horizontal partitions therein providing a plurality of compartments, a structure providing a vertical chamber connecting an upper

and a lower compartment, means for humidifying the atmosphere in said passage, and traveling trays movable through said compartments and chamber, the said trays



being of such dimensions that when moving through said chamber they provide vertically spaced barriers that confine the humidified atmosphere in said chamber.

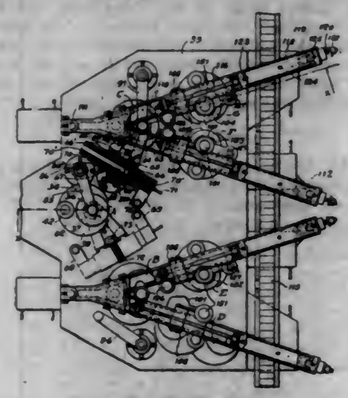
1,878,520. RIVETING MACHINE. JAMES W. HUGHES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 6, 1929. Serial No. 360,725. 11 Claims. (Cl. 164—90.)



7. A machine for performing riveting operations comprising a work clamp yieldingly moved toward and from the work, a relatively fixed abutment unyieldingly retaining said clamp in working engagement when moved thereinto, and a work punch borne by and operating through said clamp.

1,878,521. GLASSWARE FORMING APPARATUS AND METHOD. HENRY W. INGLE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 31, 1928. Serial No. 266,339. 33 Claims. (Cl. 49—9.)

5. The method of shaping hollow glassware which comprises compacting a mold charge in a blank mold to form a blank, transferring the blank to a counter-blow mold, compacting a second mold charge in said blank mold to form a second blank, transferring said second blank to another counter-blow mold, compacting a third mold charge in said blank mold to form a third blank, counterblowing the first mentioned blank in said first mentioned counter-blow mold simultaneously with the compacting of the second and third mentioned blanks in said blank mold and the transfer of the second mentioned blank to the second mentioned counter-blow mold, counterblowing the second mentioned blank in said second mentioned counter-blow mold, transferring the first mentioned blank to a blow mold and simultaneously transferring the third mentioned blank to the first mentioned counter-blow mold, compacting a fourth mold charge in said blank mold to form a fourth blank, transferring the fourth mentioned blank to the second mentioned counter-blow mold, compacting a fifth mold charge in said blank mold to form a fifth blank, transferring said fifth blank to said first mentioned counter-blow mold, compacting a sixth mold charge, in said blank mold to form a sixth blank, transferring said sixth blank to said second mentioned counter-blow mold,



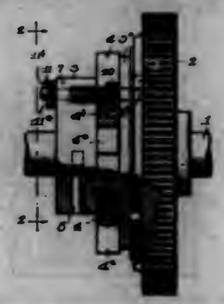
compacting a seventh mold charge in said blank mold to form a seventh blank, and blowing the first mentioned blank to final form in said first mentioned blow mold throughout the formation of a plurality of the succeeding blanks in said blank mold and the counterblowing thereof in said counter-blow molds.

1,878,522. BAKING OVEN. CARL L. IPSEN and ROBERT M. CHERRY, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,187. 15 Claims. (Cl. 219—35.)



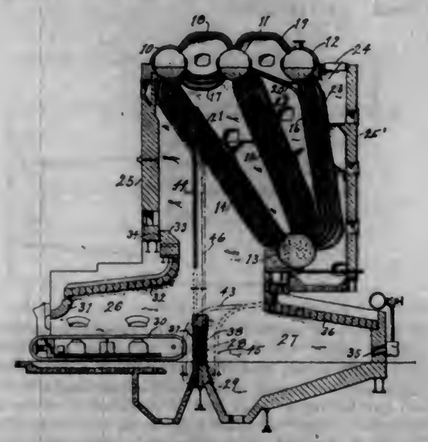
1. The combination with an oven provided with walls forming a vertically elongated baking chamber, of means for passing the material to be heated continuously through said chamber, a plurality of heating units providing a source of heat upon opposite sides of the path of said material and throughout substantially the entire length of said chamber, bracket members detachably securing said units arranged so that each unit can be removed separately of the rest, the walls of said oven being provided with openings through which said unit can be inserted and removed from said oven and closure members for said openings.

1,878,523. CLUTCH MECHANISM. ARTHUR E. JOHNSON, Oak Park, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,498. 4 Claims. (Cl. 192—25.)



1. In a clutch mechanism, the combination with a driving and a driven member, one being loosely mounted on the other, of a collar fixed to one adjacent the other of said members, a clutch pin mounted in said collar for a combined rotative and endwise movement into and out of clutching engagement with said other member, a clutch ring rotatively mounted on said collar and having toothed engagement with said clutch pin, and means operative to hold said ring against rotation to thereby impart rotation to said clutch pin.

1,878,524. FURNACE BRIDGE WALL AND COOLING MEANS THEREFOR. CHARLES H. JOHNSON, Auburndale, Mass., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 18, 1925. Serial No. 49,929. Renewed Oct. 20, 1930. 10 Claims. (Cl. 122—4.)



1. In combination, two furnaces having combustion chambers separated by a bridge wall and connected above said wall to a common combustion chamber, tubes over which the gases pass from said common combustion chamber, and a plurality of cooling tubes disposed on the opposite sides of said wall and substantially covering said sides.

1,878,525. PROCESS OF PURIFYING WATER. BENJAMIN B. KAPLAN, Morgantown, W. Va., assignor of one-half to David B. Reger, Morgantown, W. Va. Filed Feb. 27, 1929. Serial No. 343,244. 9 Claims. (Cl. 210—9.)

1. The process of purifying mine water comprising adding a cyanide to the mine water and separating the resulting precipitate from the mother liquor.

1,878,526. TRAVERSE EQUIPMENT. WILLIAM C. KENNEY and GEORGE M. KENNEY, Cranston, R. I., assignors to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Feb. 6, 1932. Serial No. 591,350. 12 Claims. (Cl. 156—20.)

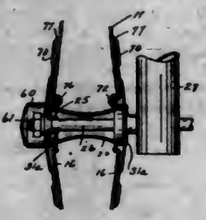


4. In traverse equipment, a master carrier having a pair of spaced alined eyes adjacent its ends, and a looped operating cord, both lengths of which are received and guided in said eyes.

1,878,527. SYNTHETIC RESIN AND METHOD OF MAKING THE SAME. ROY H. KIENLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,421. 9 Claims. (Cl. 260—130.)

1. The process of preparing a resinous product which consists in treating a primary aromatic amine with an aldehyde in the presence of an acid which forms an addition product with the amine, neutralizing the acid with an alkaline earth base, and subjecting the precipitate so formed to heat and pressure.

1,878,528. WHEEL CONSTRUCTION. HERMAN L. KRAEFT, Cleveland, Ohio, assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 30, 1931. Serial No. 572,050. 1 Claim. (Cl. 301—60.)

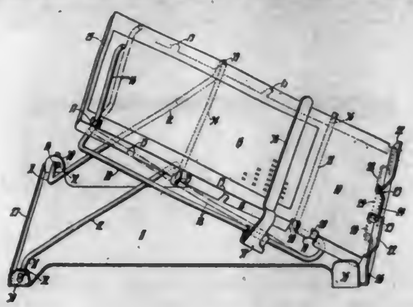


In a vehicle wheel, a hub through which the axle passes, a rim spaced apart from the hub, spokes secured to the rim and to the hub to maintain the spaced relation between the hub and the rim, said hub being provided with an end extending beyond the plane of said spokes, a dished plate provided with an opening and arranged to slidably embrace said extended end of the hub, a cup shaped member interposed between the plate and the hub to cover the end of the hub, and metal tongues carried by the cup member and secured to the plate and bent into contact with the hub to secure said plate and cap in place thereon, whereby the periphery of the dished plate is maintained in contact with the spokes.

1,878,529. COPYHOLDER. ALFRED G. F. KUBOWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 5, 1932. Serial No. 591,037. 10 Claims. (Cl. 120—33.)

1. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said

base, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip



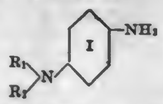
working near the top of said table and fastened thereto near the bottom thereof, and a line-finder operatively connected to said work-clip.

1,878,530. PRODUCTION OF MALACHITE GREEN. LUCAS P. KYRIDES, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 1, 1928. Serial No. 323,188. 15 Claims. (Cl. 260—68.)

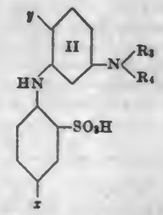
13. In the production of malachite green by a process which comprises oxidizing the leuco base in aqueous solution to the crude color base, whereby a solution containing the color base and impurities is obtained, the improvement which comprises precipitating impurities and only a small amount of the color base from the solution by an alkali, and separating the precipitate from the remaining solution of the color base.

1,878,531. DYESTUFFS OF THE SAFRANINE SERIES AND THE PROCESS OF MAKING THEM. WILHELM NEELMEIER and THEODOR NOCKEN, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1928, Serial No. 315,920, and in Germany Nov. 7, 1927. 5 Claims. (Cl. 260—29.)

1. The process which comprises oxidizing together a compound of the general formula:

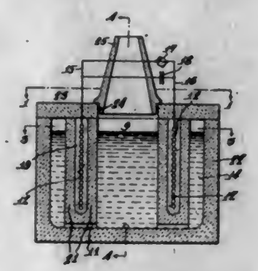


wherein R_1 and R_2 stand for a substituent of the group consisting of hydrogen, alkyl and aryl, wherein one of the ortho-positions to the NH_2 group is unoccupied, and wherein the nucleus marked as I may be substituted by a substituent of the group consisting of halogen, alkyl or the sulfonic acid group with a compound of the general formula:



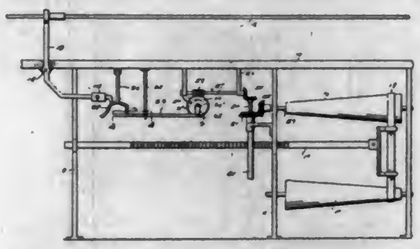
wherein the position Y is unoccupied, wherein x stands for a substituent of the group consisting of NH_2, NO_2 and NH-acidyl, and wherein the benzene nucleus marked as II may be substituted by a substituent of the group consisting of halogen, alkyl and the sulfonic acid group.

1,878,532. INDUCTOR TYPE FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electro-Thermic Corporation, Trenton, N. J., a Corporation of New Jersey. Filed Oct. 4, 1928. Serial No. 310,381. 8 Claims. (Cl. 13—8.)



1. The method of melting and vaporizing metals, which consists in utilizing the flux from an alternating current furnace inductor to set up lines of force inside the inductor to cause current flow in a vaporizing chamber to vaporize molten metal and the flux outside the inductor to set up heating currents within a melting chamber, in restraining fluid communication between the chambers at the top where vaporization takes place and in providing fluid communication between the two chambers below the vaporizing surface whereby the metal from the melting chamber flows in to take the place of the metal vaporized from the vaporizing chamber.

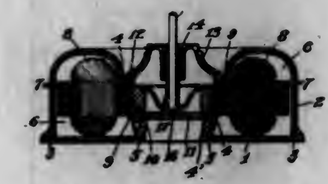
1,878,533. KNOCK-OFF MECHANISM FOR SLUBBERS AND ROVING FRAMES. JAMES C. NUNNALLY, Greer, S. C. Filed Feb. 23, 1929. Serial No. 342,142. 4 Claims. (Cl. 118—8.)



1. A knock-off mechanism for winding machines having a contact shaft, the mechanism including a horizontal shaft directly driven from the contact shaft, a worm mounted upon said horizontal shaft, a worm gear engaged by the worm and having a crank arm, a weighted knock-off arm, a swingable trigger normally supporting the weighted arm in a raised position, and a reciprocatable member connected at one end to the crank arm and carrying a lug adapted to engage the trigger and push the trigger out of supporting engagement with the knock-off arm when the worm gear has made one complete revolution.

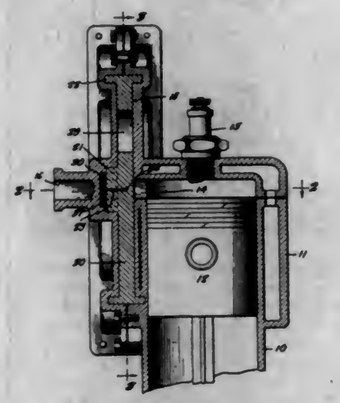
1,878,534. ELECTRIC MOTOR. EDWARD J. OVINGTON, Auburndale, Mass., assignor to Ovington Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 8, 1929. Serial No. 361,452. 4 Claims. (Cl. 172—36.)

1. In an electric motor, a stator, and a rotor adapted to be removably inserted within said stator, said stator having a tapered bore and a tapered housing, said rotor having its outer surface tapered substantially to correspond to the taper of the stator bore and having a shell tapered substantially to correspond to the taper of the stator housing so that the rotor may rest within the stator



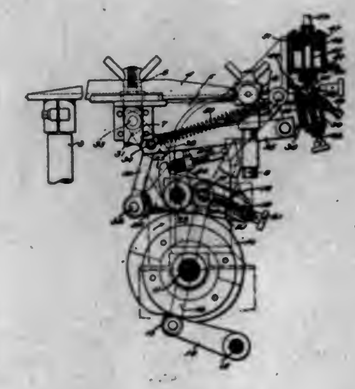
with the minimum air gap therebetween and without positive mechanical connection therewith except for the rotor shell.

1,878,535. ROTARY DISK VALVE. PETE PASHOLK, Rothschild, Wis. Filed Jan. 10, 1931. Serial No. 507,947. 1 Claim. (Cl. 123—190.)



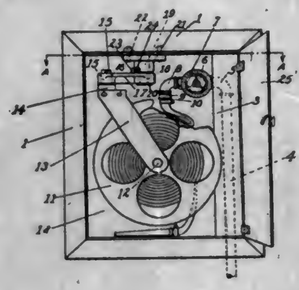
In an engine, a cylinder having intake and exhaust passages, a wall dividing the passages, and a flat valve chamber disposed transversely of said passages, a shaft journaled for rotation transversely of the valve chamber, a disk valve operated by the shaft, said disk valve having inner, outer and intermediate ring flanges provided with oil ports and the said valve and shaft having oil passages which communicate with the ports, said valve chamber having transverse and longitudinal communicating depressions disposed in a line with the inner and outer ring flanges, the wall between the intake and exhaust passages having an inner widened portion which is recessed transversely to communicate with the longitudinal passages of the valve chamber depressions and in which recess the intermediate flange is received, a packing block member having parallel sides and having one of its ends concaved and its other end convexed, and having spaced openings to register with the intake and exhaust passages when the block is received in the valve chamber depressions, the partition dividing the openings in the block being received in the depression in the wall between the intake and exhaust passages and said partition having an arcuate slot to receive therein the intermediate ring flange of the valve, and spring means influencing the block against the valve.

1,878,536. GLASS FEEDER APPARATUS. KARL E. PEILER, West Hartford, and WILLIAM T. BARKER, Jr., Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,975. 17 Claims. (Cl. 49—55.)



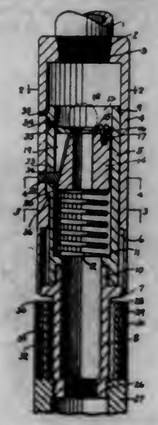
1. In apparatus for feeding molten glass in mold charges, the combination with a movable glass discharge regulating implement of mechanism including a toggle joint for reciprocating said implement to periodically vary the discharge of glass, and a plurality of independently operable devices for altering said toggle joint to vary different strokes of the implement in cyclic order.

1,878,537. FIRE EXTINGUISHING APPARATUS. ALBERT B. PHISTER and BENJAMIN H. PHISTER, Fort Thomas, Ky., assignors to The Phister Manufacturing Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Dec. 15, 1928. Serial No. 326,273. 1 Claim. (Cl. 242—86.)



Fire extinguishing apparatus comprising a wall cabinet having a hose reel, a pivotally mounted support for said reel, and mounting means for said pivotal support which will permit the movement of the pivot of said support from within said cabinet so that said reel will swing to any desired position within an arc of substantially 180° with reference to the face of said cabinet, and means for limiting the pivotal movement of said support.

1,878,538. SETTING TOOL. DEMPSON H. REED, Houston, Tex. Filed May 14, 1931. Serial No. 537,339. 10 Claims. (Cl. 166—10.)

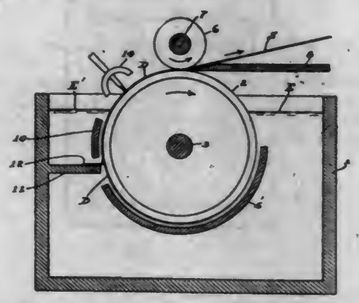


1. A device of the character described including a stem, a housing sleeve thereon, a mandrel slidable in said housing, a packer on said mandrel below said housing, means connecting said mandrel to said housing, releasable in response to fluid pressure, said housing when released being adapted to compress said packer.

1,878,539. MANUFACTURE OF FERROUS ARTICLES. GUSTAV A. REINHARDT and RICHARD H. EURICH, Youngstown, Ohio. Filed Feb. 9, 1929. Serial No. 338,882. 4 Claims. (Cl. 29—160.5.)

1. In the manufacture of a ferrous article of commerce, the steps of cold molding sponge iron by means of pressure to a form approximating that of the ultimately desired article but of dimensions greater in all directions than said article, and then heating the molded article to its thermal-critical range and allowing it to cool to thereby reduce it to the size ultimately desired.

1,878,540. ELECTROLYTIC METHOD OF CONTINUOUS SHEET MANUFACTURE AND APPARATUS THEREFOR. GUSTAV A. REINHARDT and RICHARD H. EURICH, Youngstown, Ohio. Filed Mar. 22, 1929. Serial No. 349,070. 8 Claims. (Cl. 204—6.)



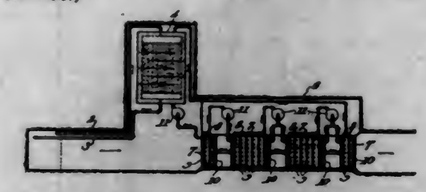
5. In apparatus for electrolytic formation of continuous metallic sheets, an electrolytic cell, a cylindrical mandrel of relatively large diameter adapted for partial immersion in and rotation through the electrolyte in the cell, an anode disposed in the cell adjacent the face of the mandrel, electric connections between the anode, mandrel and a source of direct current, means for removing included hydrogen from metal deposited on the face of the mandrel comprising an electrode disposed adjacent the mandrel and beneath the surface of the electrolyte and heating means disposed adjacent the mandrel above the surface of the electrolyte, means for loosening the deposited metal from the mandrel after said hydrogen removal, and means for thereafter stripping the deposited metal from the mandrel as a continuous sheet.

1,878,541. ADVERTISING DEVICE FOR ORDERING DAIRY PRODUCTS. JOHN J. REINHOLD, Marietta, Pa. Filed July 10, 1931. Serial No. 549,918. 2 Claims. (Cl. 40—4.)



1. The combination with a milk bottle having a large open mouthed top, of a cap of permanent circular contour slightly larger than said mouth adapted to rest thereon with a depending flange to overhang said mouth to prevent accidental removal of the cap, and an order disc attached to the inner face of the cap whereby the same is protected during use.

1,878,542. METHOD AND APPARATUS FOR COOLING MINE AIR. ALLAN S. RICHARDSON, Butte, Mont. Filed Nov. 23, 1931. Serial No. 576,857. 6 Claims. (Cl. 62—196.)



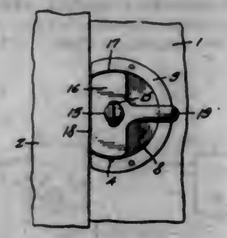
1. The method of conditioning mine air which comprises, contacting the air with water at the workings, circulating said water in heat exchange relation with a second cooling medium having a freezing point substantially lower than that of water to transfer heat from said water to said second cooling medium, circulating said second cooling medium in a closed circuit, and removing heat from said second cooling medium at a point remote from the workings.

1,878,543. MONOAROYLDIAMINES OF THE BENZENE SERIES. EUGEN RIMMLE, EUGEN GLIETENBERG, and WILHELM NEELMEIER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1930, Serial No. 500,417, and in Germany Dec. 28, 1929. 10 Claims. (Cl. 260—124.)

1. The process which comprises acylating a 1-aminobenzene which is substituted in one of the positions 3 and 4 by the group $-NH-SO_2-$aryl and which may be further substituted by substituents of the groups consisting in alkyl, oxalkyl and halogen with an acid halide of an organic acid of the group consisting of carboxylic acids of the aromatic and aromatic-aliphatic series and reacting upon the aminoacyl compound formed with concentrated sulfuric acid at room temperature for several hours.

1,878,544. LOCKING DEVICE. LOUIS D. SCHMIDT, Fond Du Lac, Wis., assignor to Combination Door Company, Fond Du Lac, Wis. Filed Dec. 23, 1930. Serial No. 504,333. 1 Claim. (Cl. 292—218.)

A latching device comprising a substantially semicircular cup shaped plate secured to a movable member and having an opening, an elongated head located within the cup shaped plate and rotatable to disposed one end thereof into and out of a keeper of a non-movable member, said head having a slot intermediate the ends thereof, a headed screw-threaded fastener extending through the slot and opening and threaded to the non-movable member, lugs on said fastener and engaging the walls of the slot to

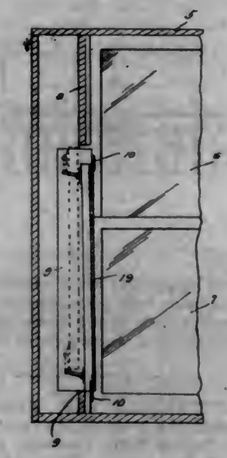


rotate the fastener by the rotation of the head and cause binding of the head against a wall of the keeper when said head is rotated in a direction for positioning a portion thereof in the keeper, and a handle formed in one edge of the head and offset and extending outwardly of the cup shaped for permitting manual rotation of the head in either direction.

1,878,545. PROCESS OF MAKING SUBSTITUTED GUANIDINES. JOHANN PAUL SCHMITTMANN, Basel, Switzerland, assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 24, 1927. Serial No. 163,805. 10 Claims. (Cl. 260—125.)

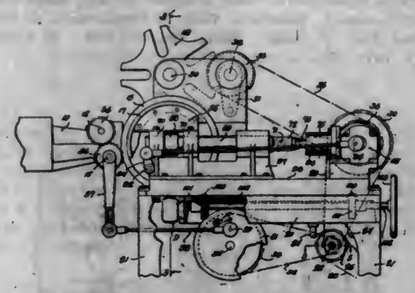
1. In the production of a substituted guanidine, the process which comprises treating an alkali metal cyanide with a halogen having an atomic number between 17 and 35, inclusive in the presence of an inert organic solvent and of a small quantity of an alcohol as an adjuvant, treating the cyanogen halide solution thus obtained with an organic amine, other than a tertiary amine, and subsequently heating the mixture with production of the substituted guanidine in the form of its hydrobalide.

1,878,546. WINDOW FRAME. ROBERT SCHOEPKE, Juneau, Wis. Filed Apr. 2, 1931. Serial No. 527,309. 7 Claims. (Cl. 20—12.)



1. A window frame including in combination a jamb provided with an opening, upper and lower members transversely disposed relative to the jamb in operative position to said opening, each of said members provided with a vertical rib adapted to substantially aline with the window stop of said jamb and a plate for disposition between said members and provided with a longitudinally extending rib adapted to aline with said rib to form a continuation of the window stop.

1,878,547. SOAP MANUFACTURE. JULIUS A. SCHWANTES, Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,320. 8 Claims. (Cl. 25—9.)

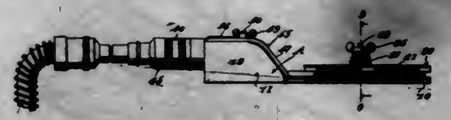


1. The combination with a conveyor means, of means for forming soap into cakes on said conveyor means, and means for polishing and finishing the cakes while on said conveyor means.

1,878,548. FAST BLUE DYEINGS ON THE FIBER. HUGO SCHWEITZER, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1928, Serial No. 252,687, and in Germany Feb. 16, 1927. 4 Claims. (Cl. 8—5.)

1. A process for the production of fast blue shades on cotton fibers which comprises treating with an aqueous copper compound solution cotton fibers which have been dyed with a trisazo dyestuff of the type aromatic-o-hydroxy carboxylic acid-azo-R_1-azo-R_2-azo-R_3, wherein R_1 and R_2 stand for naphthalene nuclei which may be substituted by sulfonic acid groups and to which azo groups are attached in para-position to each other and R_3 stands for a 2-amino-5-naphthol-7-sulfonic acid residue, which may be substituted in the amino group by a radical of the benzene series.

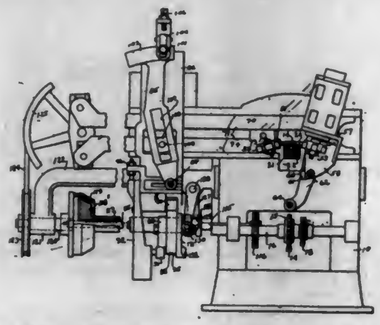
1,878,549. ELECTRIC HAIR CLIPPER. GESUALDO C. SIRECI, Brooklyn, N. Y. Filed Jan. 9, 1931. Serial No. 507,727. 1 Claim. (Cl. 30—1.)



In a hair clipper device, a housing having bottom, side and rear end walls, the bottom wall being formed with a continuation defining a guard plate, said rear wall being formed with a recess opening out through the upper edge thereof, a bearing in said recess, a shaft extending through said bearing and having a gear on the forward portion thereof, a combined bolt and spindle carried by said bottom wall and having a fastening element, a cam mounted on the combined bolt and spindle and having a beveled gear meshing with said first named gear, a cover plate extending over said bearing, said first and second named beveled gears and resting on the upper edges of said side walls, said cover plate being formed with an opening exending out through the upper surface thereof for

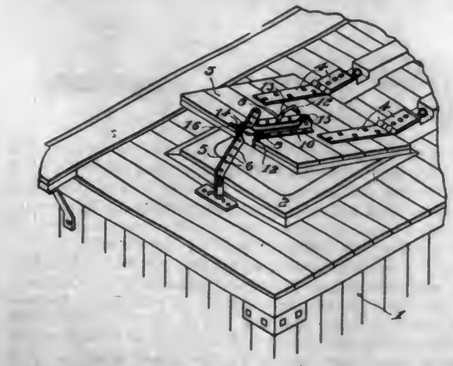
the full passage of said combined bolt and spindle, said fastening element being engaged with the top of said cover plate and being removable to allow of the removal of the cover plate without disturbing the beveled gears, the combined bolt and spindle or said cam, a movable blade mounted for reciprocation on the guard plate, a stationary cap plate engaging the movable plate, a pitman rod connecting the movable blade and the cam, said cover plate being provided with a notch formed in the outer lower end thereof for the passage of said pitman rod.

1,878,550. STAVE JOINTING MACHINE. NOAH P. SPAYD, Middletown, Ohio, assignor to The Black-Clawson Company, Hamilton, Ohio, a Corporation of Ohio. Filed Mar. 18, 1929. Serial No. 347,996. 17 Claims. (Cl. 147—27.)



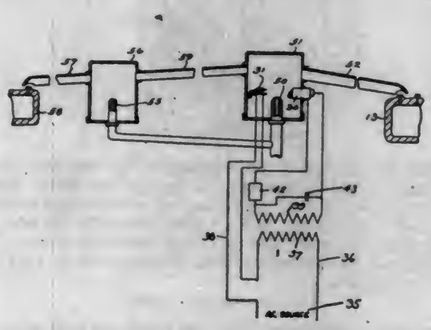
1. A stave jointing machine adapted to cut the edges of staves of different widths comprising a fixed support, cutters, a cutter head supporting member for each cutter pivotally mounted directly on said support for movement about a fixed axis, feeding mechanism for moving staves through said machine, gage members adapted to be forced apart by a stave end for initially setting said cutter heads in accordance with the width of a stave, mechanism interconnecting the cutter head supporting members for similar simultaneous angular movement from a definite normal position and means in constant driving connection with said feeding means for pivotally moving said cutter heads on said support during the cutting of the stave through angles proportionate to the initial setting of the gage members.

1,878,551. CLOSURE FASTENER, SEAL PIN TYPE. EDWARD A. SWEELEY, Alexandria, Va., and NORMAN T. ANDERSON, Washington, D. C. Filed Apr. 3, 1931. Serial No. 527,586. 6 Claims. (Cl. 292—211.)



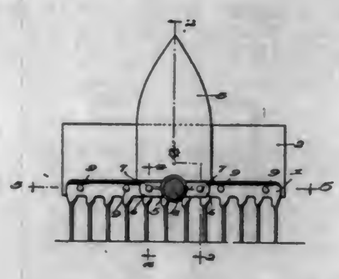
1. A seal-pin comprising a pivotal shank member, and a second member pivotally mounted on the shank member and having its free end extending in a plane substantially at right angles to the axis of both pivots, each member being free to turn on its independent axis in movement of one member into position for engagement with a cooperative locking member.

1,878,552. GAS BURNER CONTROL APPARATUS. ALBERT H. TINNERMAN, Cleveland, Ohio. Filed Mar. 9, 1929. Serial No. 345,627. 1 Claim. (Cl. 158—115.)



In a gas stove, the combination with a burner box, and an oven box, a burner in the oven box, a pilot light in the burner box, means for conducting gas from said burner to the pilot light whereby gas escaping from the burner is automatically ignited, and a relay pilot light interposed in said means.

1,878,553. COMBINATION GARDEN HAND TOOL. CHARLES A. TODD, Owensboro, Ky. Filed Dec. 21, 1931. Serial No. 582,415. 2 Claims. (Cl. 97—62.)



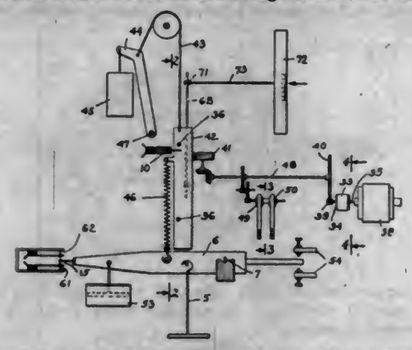
1. A cultivator attachment for a combined hoe and rake comprising a flat blade with a rounded end, the lower end adapted to be held by the joint between the rake and hoe, and a detachable fastening means between the blade and hoe

---

1,878,554. ELECTRICAL SCALE. BAILEY TOWNSHEND, Jackson Heights, and JOHN D. JOHNSTON, Corona, N. Y., assignors to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Feb. 11, 1927. Serial No. 167,395. 18 Claims. (Cl. 265—70.)

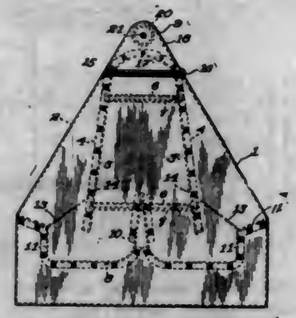
1. In a weighing scale comprising a member movable in response to a weighing load and associated yielding

load offsetting means, a motor permanently and directly connected to said means for actuating the same and means



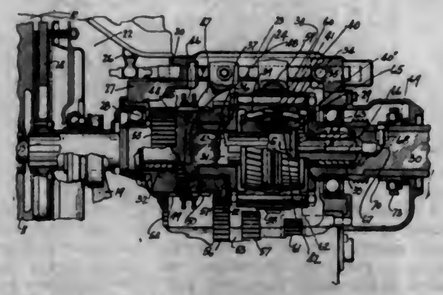
controlled in accordance with movements of said movable member for automatically operating said motor at different speeds in response to different weighing loads.

1,878,555. POULTRY FEEDER. WILLIS UHRIK, Bellville, Tex. Filed Sept. 25, 1931. Serial No. 565,177. 2 Claims. (Cl. 119—52.)



1. A poultry feeder comprising end pieces, a bottom wall attached at its end edges to the end pieces and having anticlined intermediate portions dividing the bottom wall into parallel troughs the outer sides of which are vertical and the bottom wall having synclined edge portions which join with the vertical sides of the troughs, and side wall pieces located between the end pieces, said side wall pieces being spaced from and substantially parallel with the anticlined portions of the bottom wall.

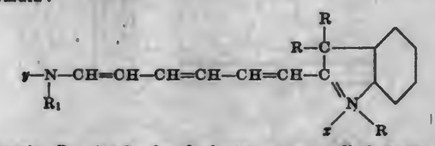
1,878,556. MOTOR VEHICLE TRANSMISSION. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 7, 1929. Serial No. 369,057. 4 Claims. (Cl. 192—48.)



1. In transmission mechanism, the combination of driving and driven shafts, oppositely acting one-way clutches between said shafts, and means actuating from the outside of one of said shafts and extending through a portion of the other shaft for releasing one of said clutches.

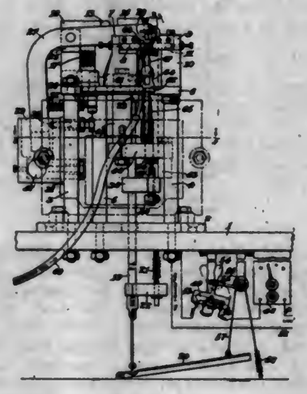
1,878,557. ASYMMETRIC POLYMETHINE DYESTUFFS. OTTMAR WAHL, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed June 24, 1929, Serial No. 373,474, and in Germany June 28, 1928. 6 Claims. (Cl. 260—47.)

4. As new products the dyestuffs of the probable general formula:



wherein R_1 stands for hydrogen or an alkyl group, a stands for a monovalent radical of a strong inorganic acid, y stands for a substituent of the group consisting of the cyano group and a radical of the benzene series, and the R's stand for alkyl groups, said dyestuffs being generally dark metallic lustrous powders, difficultly soluble in cold water, dyeing blue to green shades.

1,878,558. WELDING APPARATUS. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 13, 1929. Serial No. 346,574. 9 Claims. (Cl. 219—4.)

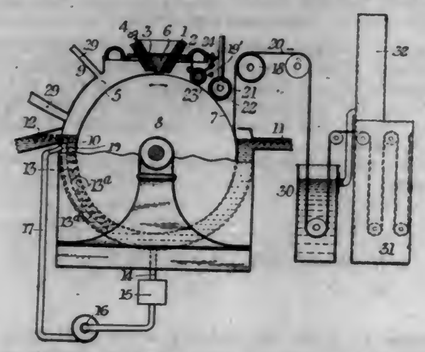


1. In combination in a welding machine, electrodes, means to apply pressure to clamp an article to one electrode, means to limit said pressure, and means to apply another electrode to another part of said article.

1,878,559. PROCESS OF MAKING CELLULOSIC FILMS. JACKSON B. WELLS and CLARENCE L. A. WYND, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 4, 1928. Serial No. 282,829. 1 Claim. (Cl. 18—37.)

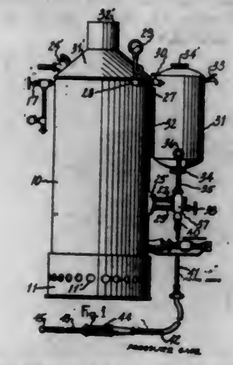
In the process of making smooth flexible films by the method in which a coagulable layer of cellulosic material is spread on a continuously moving smooth support, passed

through a setting bath, and then stripped from said support in the form of a continuous band, and then passed through an aqueous bath and a drier in turn, the steps



of recovering from the air of the drier vaporized solvents by means of a water scrubber and utilizing the water from the scrubber for the aqueous bath.

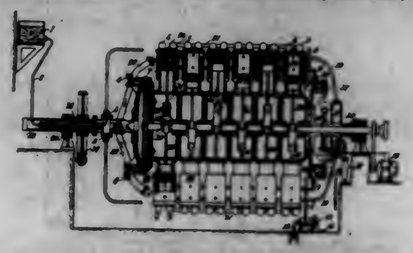
1,878,560. APPARATUS FOR CLEANING SURFACES. STUART A. WIER, Dallas, Tex., assignor to Tridex Corporation, Dallas, Tex., a Corporation of Delaware. Filed Dec. 6, 1928. Serial No. 324,220. 1 Claim. (Cl. 299—84.)



In a surface cleaning apparatus, a generator having a preheating element therein for producing hot fluids, a detergent solution tank, a pipe for conveying one of the fluids from the generators to the tank the length of the said pipe determining which of the fluids is conveyed to the tank, a discharge pipe leading from the tank for conducting a detergent solution therefrom, a steam pipe leading from the generator, a hot water pipe leading from the generator, a flexible metallic hose connected in common with the steam pipe, hot water and discharge pipes, a flexible conductor leading from the metallic hose, and a nozzle on the end of the conductor, the detergent solution being diluted by the hot water and impelled through the flexible hose, conductor and nozzle by the steam, the metallic hose acting to dissipate some of the heat of the fluids.

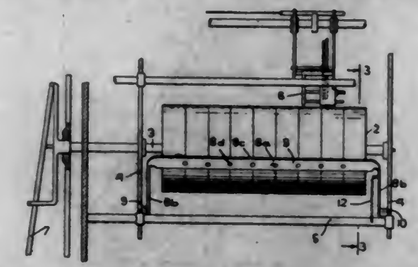
1,878,561. PISTON INTERNAL COMBUSTION ENGINE WITH CYLINDER STARS ARRANGED ONE BEHIND THE OTHER IN A COMMON FRAME. ERICH WIPPERMANN, Hagen-Delstern, Germany. Filed Jan. 8, 1931, Serial No. 507,379, and in Germany Aug. 22, 1928. 1 Claim. (Cl. 123—44.)

A piston internal combustion engine, comprising in combination a plurality of cylinder stars arranged one behind the other, a common frame carrying said cylinder stars, a driving mechanism adapted to slowly rotate said cylinder frame whilst the engine is running, and means to ensure uniform lubrication and wear of the running surfaces, said



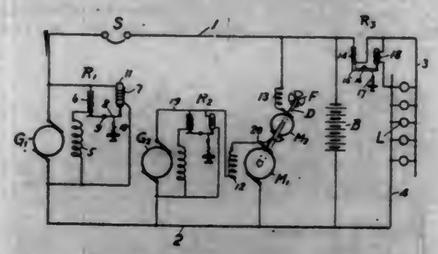
driving mechanism being arranged and adapted to vary the speed of rotation of the cylinder frame, and to be disconnected therefrom.

1,878,562. RULING ATTACHMENT FOR TIME RECORDERS. WILLIAM A. WOOD, Jr., Montreal, Quebec, Canada, assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1927, Serial No. 233,949, and in Canada Sept. 15, 1927. 3 Claims. (Cl. 33—32.)



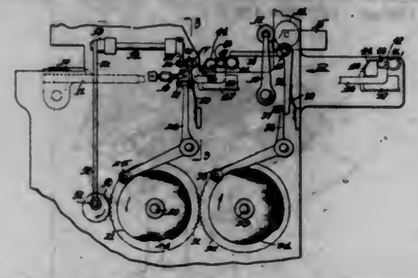
1. A ruling device comprising a support, a movable member carried by the support and having means for guiding a marker into cooperation with a sheet of paper adjacent the member, and resilient means comprising a coil spring connected at one end to the support and at the other end to the member for yieldably holding the member in a position removed from the sheet of paper and for alternately holding the member in a position adjacent the sheet of paper.

1,878,563. TRAIN LIGHTING AND POWER SYSTEM. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Oct. 6, 1931. Serial No. 567,191. 2 Claims. (Cl. 171—313.)



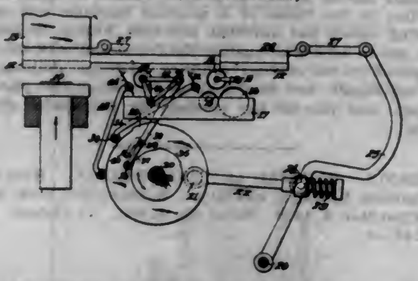
2. In combination, a storage battery, a lighting circuit connected thereto, a variable speed generator, an automatic switch adapted to connect and disconnect said generator to and from the battery, two motors having their rotors mechanically connected and their armatures electrically connected in series across the battery, a field winding for one of the motors connected in series with its armature and the battery, a field winding for the second motor having one terminal connected to a point in the circuit between the two motors and a second variable speed generator connected between the other terminal of said field winding and the opposite terminal of the second motor.

1,878,564. DOCTOR CLEANING DEVICE. JOHN E. WOODBURY, Worcester, Mass. Filed Mar. 27, 1931. Serial No. 525,824. 11 Claims. (Cl. 101—163.)



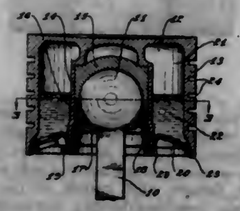
1. The combination with a doctor for removing the ink from a printing plate, of means for moving the doctor to a horizontal position and means relatively movable along the doctor horizontally on both sides thereof for cleaning the ink therefrom.

1,878,565. INTAGLIO PRINTING. JOHN E. WOODBURY, Worcester, Mass. Filed July 3, 1931. Serial No. 548,618. 12 Claims. (Cl. 101—163.)



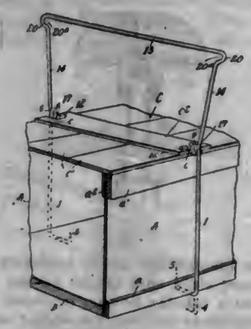
1. The method of printing from an intaglio printing plate, which consists in inking the plate, wiping the surface of the plate by means of a doctor, removing excess ink only from certain parts of the area of the engraved portion of the printing surface, and thereafter cleaning the flat surface of the plate again.

1,878,566. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,900. 4 Claims. (Cl. 123—176.)



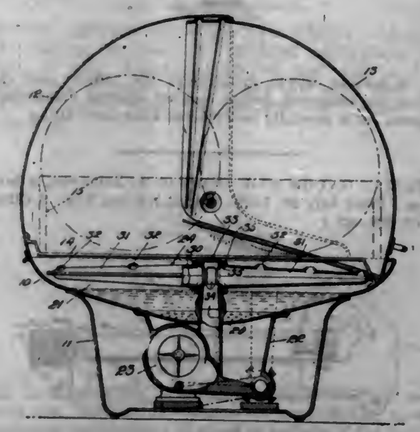
1. A piston comprising a head, a skirt, a hollow boss coextensive with the skirt, said head, skirt and boss being formed integrally, an applied wall for closing the space between the open ends of the skirt and the boss, said applied wall having flanges bent to extend parallel with the skirt and the boss, means for permanently securing the flanges to the skirt and to the boss in leak proof relation, and a heat absorbing medium intermediate the boss and the skirt.

1,878,567. HANDLE FOR WOODEN BASKETS. RALPH P. YOUNG, Marlboro, N. Y. Filed Dec. 28, 1928. Serial No. 328,940. 2 Claims. (Cl. 217—125.)



1. A metallic handle for veneer baskets, including a pair of side pieces, each comprising a rod-like member, provided at its upper end with an integral clip for engaging the upper edge of the basket side, and an integral loop adjacent thereto having its lower portion in position to engage and retain the cover, each of said side pieces being provided at its lower end with means for attaching it to the bottom of the basket, and a bail member provided at each end with means for pivotally engaging the loops of said side pieces, and lying when in folded position in a plane substantially coincident with the top surface of the cover.

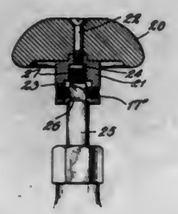
1,878,568. WASHING MACHINE. ERICH R. ZADEMACH, New Rochelle, N. Y., assignor, by mesne assignments, to Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Original application filed Mar. 5, 1926, Serial No. 92,387. Divided and this application filed July 8, 1927. Serial No. 205,858. 1 Claim. (Cl. 299—69.)



A water distributing device for washing machines comprising a reaction-driven rotary wash arm and a conduit supplying liquid thereto, the wash arm and the conduit

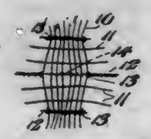
being provided with opposed freely separable annular surfaces at the upper side of the wash arm, between which the liquid in the wash arm flows out to provide a film of liquid on which the wash arm rides.

1,878,569. HANDLE FOR VALVES AND THE LIKE. JOHN G. ZOLLEIS, Philadelphia, Pa. Filed Mar. 28, 1932. Serial No. 601,632. 4 Claims. (Cl. 287—53.)
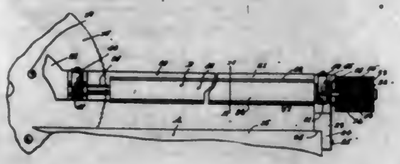


1. A handle adapted for use in association with valve stems of different sizes, said handle having a hand grasping portion and a tubular portion provided with an oversized bore adapted to fit over the end of anyone of said valve stems, and a plurality of screws mounted in circumferentially spaced threaded openings in the wall of the said tubular portion, said screws being adapted to engage the valve stem within the tubular portion and being so positioned relative to each other that upon tightening they will substantially center the tubular portion and the valve stem relative to each other and hold the handle on the stem against relative rotation between the tubular portion and stem.

1,878,570. ACOUSTIC GRILLE CLOTH. ALFRED T. ABBOTT, Philadelphia, Pa. Filed Feb. 17, 1932. Serial No. 593,555. 6 Claims. (Cl. 139—420.)



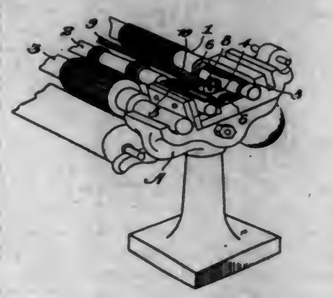
1. A loosely woven grille cloth for radios, said cloth having an embossed design secured against displacement by means of a specially constructed knot-yarn filling.

1,878,571. GAUGE BAR. HERMAN A. AGRICOLA, Atlanta, Ga. Filed July 26, 1929. Serial No. 381,376. 8 Claims. (Cl. 29—67.)



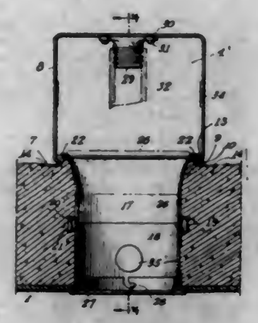
4. In a printer's sawing machine including a saw and a saw table, a guide and gauge bar for the saw table comprising an elongated longitudinally extending body polygonal shaped in cross section having a plurality of gauge faces, means rotatably supporting the body parallel to the saw and above the table of the sawing machine, three of the faces having sets of different rabbets for facilitating the cutting of one pica and one-half pica from material and for cutting stops casted with slugs higher than the face of type.

1,878,572. SPINNING MACHINE. JAMES A. ANDREWS, Augusta, Me. Filed Mar. 4, 1931. Serial No. 519,977. 2 Claims. (Cl. 19—130.)



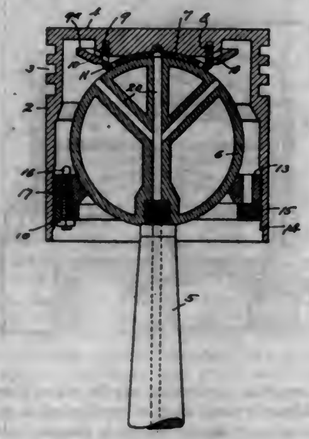
1. A device for spinning machine rolls composed of a bridge member formed to be disposed horizontally in the space between adjacent rolls and having a lip at one end, a plate having a central portion, means to attach said portion to the frame of a spinning machine, said plate having struck out inverted L-shaped fingers to engage the lips to hold same against the frame and with the lips disposed in the cut-outs resulting from the striking out of the fingers, and curved wings formed on the plate to engage and provide top bearings for the shafts of the rolls.

1,878,573. ELECTRICAL DISTRIBUTION. HARRY S. ARNOLD, Brooklyn, and RAY C. WILSON, New York, N. Y. Filed Mar. 3, 1926. Serial No. 91,883. 12 Claims. (Cl. 247—3.)



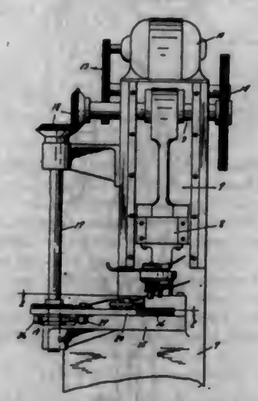
1. A raceway for electrical wiring comprising a base strip having outstanding marginal flanges for resting on a slab structure, a raised central portion forming the bottom of he raceway and connecting said portions between the marginal flanges and raised bottom portion, said connecting side portions having outwardly faced seats and an inverted trough shaped cover having dependent inwardly projecting lugs on the side edges of the same for interlocking engagement with the side seats.

1,878,574. PISTON CONSTRUCTION. BEATRICE B. BLUNDELL, Los Angeles, Calif. Filed Nov. 20, 1931. Serial No. 576,308. 3 Claims. (Cl. 74—108.)



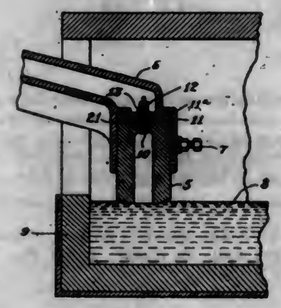
1. A trunk piston having a head provided with an annular channel in its inner face, and a ball bearing liner having a flange fitting said channel.

1,878,575. TIRE VALVE INSIDES ASSEMBLY MACHINE. LEWIS C. BROECKER, Bridgeport, Conn., assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed June 16, 1930. Serial No. 461,310. 15 Claims. (Cl. 29—33.)



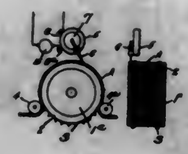
1. In combination, a punch plate and a rotatable dial, means for reciprocating said punch plate towards and away from said dial, means for rotatably stepping said dial when the punch plate is away from said dial, an annular ring of spaced bushings in said dial, each being adapted to receive a valve center pin with a loose cup thereon, a die block fixed adjacent said dial, a pair of opposite dies slidably carried in said die block, means on said punch plate adapted to move the cup, in the downwrd movement of the punch plate, against the top of its bushing when adjacent the die block, means on said punch plate for moving said dies against the cup to crimp it on the valve pin, means to test the straightness of the valve pin after the cup is crimped thereon, and means to test the tightness with which the cup is crimped thereon, said testing means being carried thereon said testing means being carried on the punch plate.

1,878,576. SUCTION DEVICE FOR GATHERING MOLTEN GLASS. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,757. 4 Claims. (Cl. 49—62.)



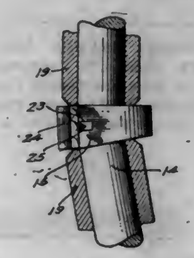
2. A suction gathering device for preshaping mold charges, comprising a rigid suction head having a recess formed therein, a one-piece cup of carbonaceous material secured to said recess, said cup being longer than said recess, and having a cavity formed therein for the shaping of mold charges and the delivery of the shaped charges through its bottom end, a flanged bushing rigidly mounted in the upper end of said cup, the flange on said bushing being arranged for engagement by a part of the suction head, whereby the mounting of the cup in the head serves to hold the bushing in position, and a vacuum cut-off valve in said bushing, said bushing serving to protect the cup from injury by said valve.

1,878,577. SOUND REPRODUCING MEANS. ALOYSIUS J. CAWLEY, Pittston, Pa. Original applications filed Oct. 3, 1919, Serial No. 328,299 and Aug. 2, 1926, Serial No. 126,648. Divided and this application filed Apr. 23, 1929, Serial No. 357,529. 38 Claims. (Cl. 274—11.)



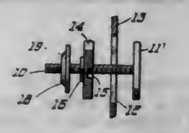
29. In combination, a flexible moving picture and sound record film, rotating mechanism having sufficient mass to maintain a uniform rate of speed, a surface of the rotating mass fixedly engaging said film along an arc of its circumference and sound translating means cooperative with said sound record at a point on said surface and means to rotate the mass of material.

1,878,578. GUARD FOR COLLAPSIBLE UNDERREAMERS. ROLAND R. CRUM, Whittier, Calif., assignor, by mesne assignments, to John Grant, Los Angeles, Calif. Filed Nov. 14, 1928, Serial No. 319,277. Renewed Dec. 3, 1931. 10 Claims. (Cl. 255—75.)



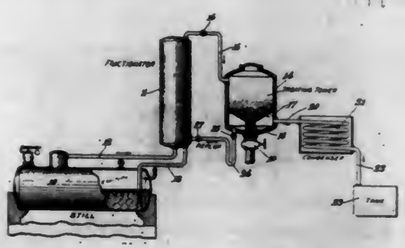
1. The combination with a collapsible underreamer having a body and laterally projectable cutters, of guards projecting from the underreamer laterally beyond the cutters, said guards being mounted on said underreamer to be displaceable by rotational movement of said underreamer.

1,878,579. TOGGLE BOLT. GEORGE GOBER, Alameda, Calif. Filed Feb. 29, 1932. Serial No. 595,757. 4 Claims. (Cl. 85—3.)



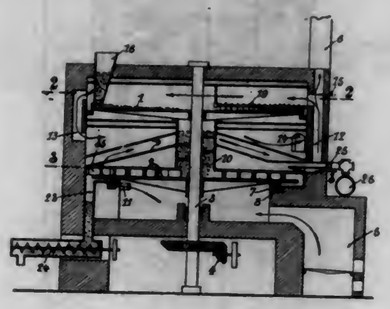
2. In combination with a threaded element and a plate provided with an elongated aperture, first means adapted to pass through said aperture and substantially coextensive therewith and second means adapted to be retained in said aperture and provided with means for retaining said first means in a position transverse to the major axis of said elongated aperture.

1,878,580. PROCESS OF TREATING CRACKED HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Jan. 10, 1927. Serial No. 160 065. 6 Claims. (Cl. 196—96.)



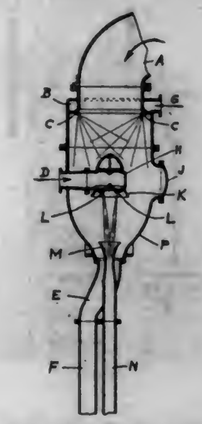
1. The process which comprises cracking petroleum oil and subsequently subjecting the cracked product at approximately 200° C. and in vapor form undiluted by extraneous gases and mixed with free hydrogen produced solely in the cracking operation, to the action of fuller's earth impregnated with a metallic hydrogenation catalyst.

1,878,581. RETORT WITH REVOLVING HEARTH. CHARLES AB-DER-HALDEN, Nancy, France, assignor to Societé pour l'Exploitation des Procedes Ab-der-Halden, Paris, France. Filed May 18, 1928, Serial No. 278,669, and in France Apr. 17, 1928. 5 Claims. (Cl. 202—104.)



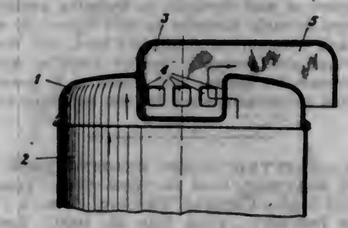
1. In a retort, a revolvable hearth plate, means for rotating said hearth plate about a vertical axis, a stationary support above said hearth plate, a number of vanes for guiding the material to be treated pivoted on said support and having their lower edges adjacent said hearth plate and adapted to assume different angular positions with relation to a radial direction from the center of said hearth plate, and rods pivoted on all of the vanes and extending through the retort on the outside of said retort, whereby the angular position of said vanes may be regulated from stationary points on the outside of the retort during the rotation of said hearth plate.

1,878,582. BAROMETRIC CONDENSER. RALPH E. HELLMER, Philadelphia, Pa., assignor to Schutte & Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1931. Serial No. 552,110. 7 Claims. (Cl. 261—116.)



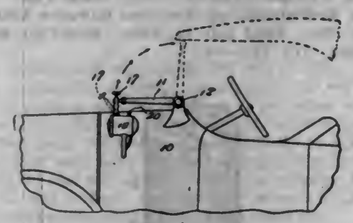
1. A barometric condenser having at its upper part means for injecting water to condense vapors and having a tail pipe for the injected water and condensed vapors, and provided internally with a water jet exhauster for removing the non-condensible gases, and with a separate tail pipe connection depending from the casing for discharging the jet water and non-condensible gases substantially unmixed with the injected water and condensed vapors.

1,878,583. GAS CHAMBER FOR OIL SWITCHES. FRANZ HOUŠT, Pilsen, Czechoslovakia. Filed Feb. 9, 1931, Serial No. 514,449, and in Czechoslovakia Feb. 10, 1930. 2 Claims. (Cl. 200—150.)



1. In an oil switch comprising an airtight container, a chamber forming an integral part of said container and projecting from the center of the top of said container into the interior thereof, a lead-off conduit connected to said chamber, the latter having a closed bottom and being provided with lateral openings to produce communication between the container and the chamber, said openings being disposed short of the lower edge of the said chamber and spaced from the top of the container; said openings allowing the gases formed in said container to readily escape through the chamber into the conduit, whereby the part of said chamber below the said openings forms a receptacle for receiving the oil forced by the escaping gas through said openings and whereby the spaced position of said openings from the container top avoids such oil from reaching the lead-off conduit.

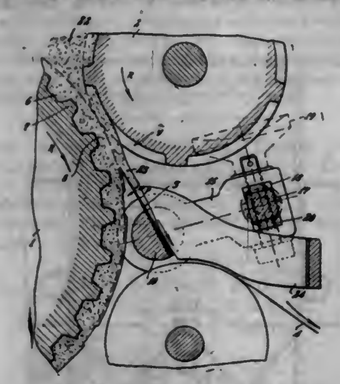
1,878,584. WINDSHIELD HOLDING DEVICE. IVAN H. JONES, Great Falls, Mont. Filed Nov. 3, 1930. Serial No. 493,166. 3 Claims. (Cl. 296—84.)



1. The combination with a motor vehicle windshield mounted to assume a horizontal open position, of a pair of normally horizontally disposed apertuerd arms pivotally mounted on the vehicle for movement independently of the windshield, and adapted to assume vertical positions to receive and support the standards of the windshield in its open position, a thumb screw carried by each arm for holding the latter and windshield fixed relatively when associated, and means for holding said arms immovable in their normal position, including said thumb screw.

1,878,585. MACHINE FOR SHAPING FIGURES FROM FAT- OR BUTTER-DOUGH OR OTHER PLASTIC MATERIAL. ARNOLDUS CORNELIS ADRIANUS KALMEIJER, The Hague, Netherlands. Filed July 29, 1931, Serial No. 553,748, and in the Netherlands June 23, 1931. 4 Claims. (Cl. 107—8.)

3. In a machine for moulding figures of plastic materials, such as fat dough, butter dough and marchpane, the combination with a rotary feeding drum adapted to carry a handle of dough enveloping the same, of a rotary forming drum provided with peripheral recesses and the axis of which forming drum is situated on a higher lever than that of the feeding drum, a knife disposed in the discharge space between said drums and inclined toward said feeding drum with the cutting edge of the knife spaced out of contact with respect to both drums, so that the individual figures of dough are cut off from the dough mantle envelop-

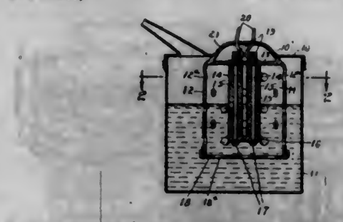


ing the feeding drum immediately after the beginning of the discharge from the recesses of the forming drum, the figures of dough being supported by and sliding down along said knife during and after the cutting operation.

1,878,586. PROCESS OF RECOVERING SODIUM, POTASSIUM AND MAGNESIUM CHLORIDES FROM NATURAL BRINES AND CONTROLLING THE CRYSTAL SIZES. HERMAN B. KIPPER, New York, N. Y. Filed Jan. 30, 1930. Serial No. 424,482. 4 Claims. (Cl. 23—38.)

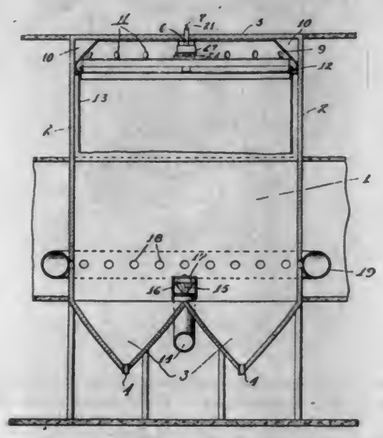
3. The recovery of sodium, potassium and magnesium chlorides from natural brines containing said salts in aqueous solution including the step of heating said brine to dissolve said potassium chloride and precipitate sodium chloride crystals, removing the latter, then artificially cooling the brine residue at a controlled rate to determine the crystal size of the resulting precipitated potassium chloride crystals, removing the latter from the residual brine and then mixing the residual brine at a controlled, fractional rate with artificially cooled brine containing a high percentage of magnesium chloride to precipitate sodium chloride and potassium chloride crystals of determined crystal size.

1,878,587. ELECTRIC VAPORIZER. NICHOLAS LAWNER, Brooklyn, N. Y., assignor to American Sundries Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 14, 1930. Serial No. 420,686. 3 Claims. (Cl. 219—40.)



1. In a vaporizer, the combination with a receptacle having a removable lid formed with a spout, of an electric heater including a perforated casing, electrodes mounted in said casing with terminals projecting upwardly and through the top of said casing, said casing having a head piece over its top adapted to enclose said terminals and said lid having a recess through which said head piece projects to the external side of said lid, said head piece constituting the support for said casing from said lid.

1,878,588. SPRAY HEAD. JOHN C. MACLACHLAN, Chicago, Ill., assignor to Dee-Hy Products Company, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1931. Serial No. 545,228. 13 Claims. (Cl. 261—89.)

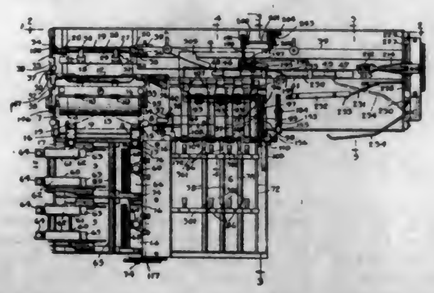


1. A distributing head for a liquid dehydration cell, comprising a rotatable member having blades alternately lying in substantially conical surfaces and means for feeding films of liquid along the inner faces of said blades to be thrown therefrom by centrifugal force and atomized by currents of air passing between said blades and over said surfaces.

1,878,589. MANUFACTURE OF NICKEL IRON ALLOYS. GEORGE CHRISTOPHER MARRIS, London, GEOFFREY RICHARD POLGREEN, Wembley, and STANLEY VAUGHAN WILLIAMS, Kenton, England. Filed Dec. 16, 1930, Serial No. 502,848, and in Great Britain Jan. 22, 1930 7 Claims. (Cl. 175—21.)

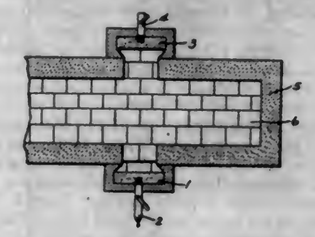
1. A process for the manufacture of alloy powders containing nickel and iron, which comprises mixing the powdered oxides of nickel and iron, reducing the mixture by heating in a reducing gas, washing the product, drying the product, and sintering the product at a temperature higher than the temperature used for the reduction of the mixture.

1,878,590. GATHERING AND INSERTING MACHINE. FLORENCE MCCARTHY, New York, N. Y., assignor, by mesne assignments, to McCarthy Business Machines Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1928. Serial No. 313,007. 15 Claims. (Cl. 93—6.)



1. In a machine of the character described, a surface onto which enclosures are delivered at a plurality of points, gathering elements supported beneath said surface in tandem relation, means for reciprocating said gathering elements forward and rearward, a longitudinal part along which said elements move, means for automatically raising and lowering said part, in upwardly projecting forward support on said carriage, an inserting pusher above said surface movably mounted on said support so as to be raisable and lowerable, a stationary part, and means on said carriage and having a member coacting with said stationary part for causing said pusher to be lowered for the forward stroke and raised for the rearward stroke.

1,878,591. ELECTRIC GLASS MELTING TANK. HAROLD W. MCINTOSH, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,950. 7 Claims. (Cl. 13—6.)



1. In the glass melting art, an electric melting tank of the type wherein the glass acts as an electric conductor, having a surface free from joints extending in an unbroken line, parallel with the flow of electricity.

1,878,592. TRANSPARENT COIN WRAPPER. MARK HANNA MCWHIRTER and ANTHONY GARLAND ADAIR, McCamey, Tex. Filed July 29, 1931. Serial No. 553,856. 2 Claims. (Cl. 133—10.)

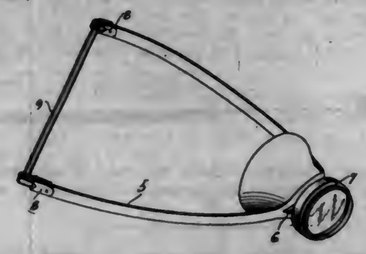


2. As a new article of manufacture, a coin wrapper comprising a transparent sheet, an adhesive strip fastened to one end of said transparent sheet, said strip extending beyond opposite edges of said transparent sheet, and said transparent sheet and strip having parallel lines of fold extending across both, said lines of fold being in from the longitudinal edges of said transparent sheet each a distance equal to approximately one-half the diameter of the particular coin to be enclosed.

1,878,593. PROCESS OF MANUFACTURING ACETIC ANHYDRIDE. RUDOLF MEINGAST and MARTIN MUGDAN, Munich, Germany, assignors to Consortium Fuer Elektrochemische Industrie, Munich, Germany. Filed June 2, 1927, Serial No. 196,137, and in Germany June 17, 1926. 8 Claims. (Cl. 260—128.)

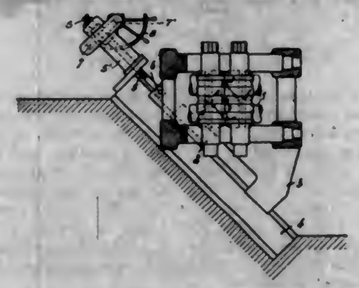
1. The process of preparing acetic anhydride comprising preheating acetic acid vapor without substantial decomposition thereof to 400–800° C. and then passing the vapor in contact with a dehydrating catalyst at 400° C. to 800° C.

1,878,594. JEWELER'S EYELOUPE HOLDER. FRANK MASTER, New York, N. Y. Filed May 21, 1930, Serial No. 454,221. Renewed July 29, 1932. 4 Claims. (Cl. 88—51.)



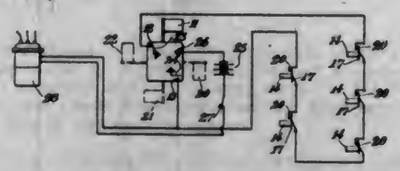
1. A holder for the nature described comprising a strap having an elongated incision forming an eyeglass receiving slit therein, and means in operative engagement with the said strap for maintaining same about the head.

1,878,595. ROLLING MILL. FRITZ MÖLLER, Duisburg, Germany. Filed Dec. 18, 1930, Serial No. 503,122, and in Germany Jan. 2, 1930. 3 Claims. (Cl. 80—36.)



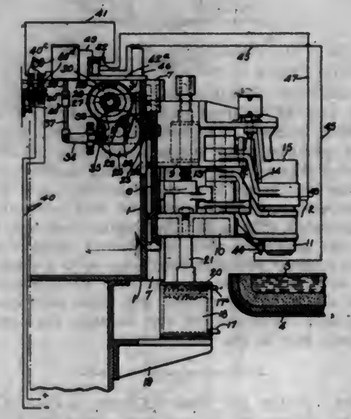
3. A rolling mill comprising two sets of rolls, each roll having a plurality of operating portions, the rolls of one set being in skew relation to those of the other set, and a slide in which the rolls of one of said sets are journaled, said slide being movable in a path oblique to the axes of the rolls of both sets, the mating operating portions of the rolls of one set being at the same distance from the plane of said oblique path as the corresponding mating operating portions of the rolls of the other set.

1,878,596. TAXIMETER FLAG CONTROL SYSTEM. DEMETRIOS PAPAETHEMEOU, New York, N. Y. Filed May 14, 1930. Serial No. 452,315. 2 Claims. (Cl. 235—30.)



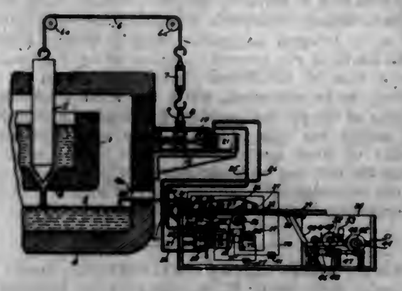
1. In a taximeter flag control system, a plurality of electric contacting devices positioned underneath the seats of the taxicab, and consisting of two groups, a taximeter having therein a clockwork actuating member and a shutter actuating member, each of said members being movable into an operative and an inoperative position by a single manipulation of a suitably positioned flag; two stationary contact elements fixed to and insulated from said taximeter, and each of said elements being so positioned with respect to one of said members as to contact therewith only in its inoperative position; a distributor circuit; electric signalling means and a circuit therefor; the contacting devices of said first group being electrically connected with a circuit containing said clockwork actuating member; said taximeter, and said distributor circuit; the contacting devices of said second group being connected with the circuit containing said clockwork actuating member, said taximeter, and said signalling means circuit; the said shutter actuating member being independently connected in series with the circuit containing said distributor.

1,878,597. AUTOMATIC DIP REGULATOR FOR SUCTION GATHERING RECEPTACLES AND THE LIKE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 10, 1929. Serial No. 361,854. 10 Claims. (Cl. 49—5.)



1. In glassware forming apparatus, the combination of a suction gathering receptacle, a gathering pool for supplying glass to said receptacle, means for effecting relative movement between said receptacle and gathering pool to cause contact between a portion of the receptacle and the glass, and means controlled in response to the relative movement of the receptacle and the glass to automatically limit the extent of dip of the receptacle in the glass.

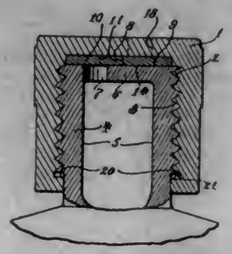
1,878,598. SUPPLY POOL LEVEL REGULATOR. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 14, 1929. Serial No. 362,954. 18 Claims. (Cl. 49—55.)



1. In combination with a pool of molten glass, a pair of feelers adapted to contact with the surface of the glass in said pool, an electric circuit including said feelers adapt-

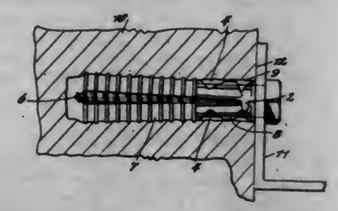
ed to be completed through the glass by the contact of said feelers therewith, and means controlled by said circuit for adjusting the level of said pool to the desired height.

1,878,599. CLOSURE. RODY P. PERKINS, Baltimore, Md. Filed Aug. 28, 1930. Serial No. 478,472. 1 Claim. (Cl. 221—00.)



A closure of the class described, having an internal member and an external member threadedly engaged, a disc-shaped member interposed between the internal and external members, said members and disc provided with an opening therein, said openings being in disaligned position when the closure is in closed position, said disc being provided with a depending lug and said internal member being provided with a slot to engage said lug, the disc being also provided with a cutaway portion and the external member provided internally with a projection to engage said cutaway portion so that simultaneous movement of said external member will align said openings of each of said members and disc so that the contents of the closure may be removed.

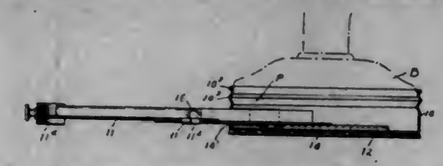
1,878,600. BOLT ANCHOR HAVING A COLLAPSIBLE HEAD. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Apr. 19, 1929. Serial No. 356,577. 3 Claims. (Cl. 85—2.4.)



1. A new article of manufacture comprising a bolt anchor having a plurality of pivoted inner rigid, noncollapsible, radially operative expanding members provided with outer integral collapsible heads to permit a portion of the heads of the pivoted members which may protrude from a hole of insufficient depth in the wall or other support, to be collapsed, while the rigid noncollapsible portions of the pivoted members are firmly and immovably held within the hole, that the work supported may be brought up flush against the surface of the wall, even though the hole has been negligently drilled, thereby avoiding the necessity of removing the bolt anchor and work, and redrilling the hole to the proper depth.

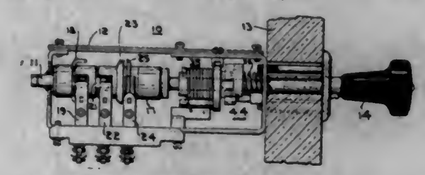
1,878,601. TELEPHONE ATTACHMENT. DARIO RAPPAPORT, New York, N. Y., assignor to Transamerica Products Co. Inc., Brooklyn, N. Y. Filed Sept. 26, 1929. Serial No. 395,270. 5 Claims. (Cl. 45—82.)

2. In a device attachable to a desk telephone stand, a cup shaped body having an open top of such diameter as to snugly fit around the circumferential edge of the base portion of said stand, an annular bead on the inner face of said cup below its open top to serve as a rest for said



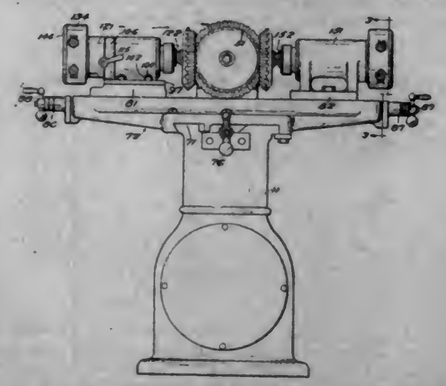
base and a member slidably mounted in said body and serving as a support for a memorandum device or other article.

1,878,602. CIRCUIT BREAKER CONTROL SWITCH. CARL A. RINGBLOOM, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 10, 1931. Serial No. 562,013. 5 Claims. (Cl. 200—4.)



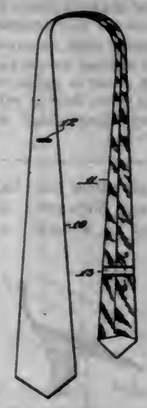
1. In a control mechanism for effecting various operations, the combination of a control member whose position determines the operation to be effected, a spring mechanism connected to the control member, and means effective upon an operation being effected by the control mechanism for disconnecting the spring mechanism and the control member and thereafter effective to reconnect the same with the spring mechanism in neutral position, so that the spring mechanism will bias the control member to a new position to indicate the last operation effected by the control mechanism.

1,878,603. LAPPING MACHINE. ALBERT E. ROBINSON, Cincinnati, Ohio, assignor to The American Tool Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 13, 1931. Serial No. 529,736. 9 Claims. (Cl. 51—26.)



1. In a gear lapping machine, the combination of a frame, a housing thereon, a shaft journaled on said housing, a saddle, a pair of housings on said saddle at the respective sides of the axis extended of said shaft, means for adjusting the respective housings of said pair of housings toward and from said axis, means for adjusting said saddle toward and from said first-named housing for simultaneously adjusting said pair of housings toward and from said first-named housing, a shaft journaled on each of said pair of housings and having axes of rotation which are normally in line with each other and at right angles to said first-named axis, means on the proximate ends of said shafts for receiving meshing gears to be lapped, and means for rotating one of said shafts.

1,878,604. NECKTIE. CHARLES HOWARD RODEBACK, San Pedro, Calif. Filed May 9, 1929. Serial No. 361,645. 2 Claims. (Cl. 2—150.)



1. As a new article of manufacture, a necktie having distinctively colored end portions of different widths, there being an opening formed through the end portion of the tie having the greater width for the accommodation of the narrow end portion of the tie and a flexible stop member secured to the rear face of the narrow end portion of the tie adjacent to the outer end thereof.

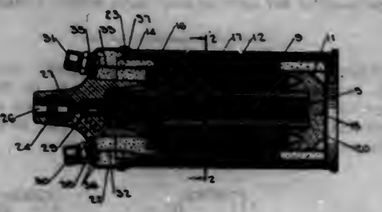
1,878,605. OVERHEAD TRACK. OSCAR C. SCHMIDT and AUGUST G. KLAWITTER, Cincinnati, Ohio, assignors to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 28, 1931. Serial No. 565,586. 8 Claims. (Cl. 104—99.)



1. An overhead switch comprising crossing tracks having gaps therein at the intersections thereof, a rotatable support, right line track sections and a curved track section thereon, and means whereby to place said track sections in the gaps in said respective tracks.

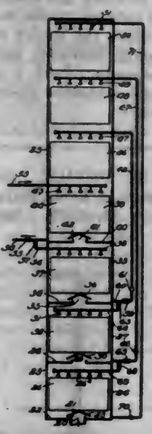
1,878,606. COIL CONSTRUCTION. WILLIAM G. SCHNEIDER and HARRISON H. EATON, Toledo, Ohio, assignors to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed July 20, 1928. Serial No. 294,143. 11 Claims. (Cl. 175—361.)

1. In a coil structure of the character disclosed comprising a core structure formed of a plurality of flat metallic strips; insulating means surrounding said core; primary and secondary windings superposed upon said core structure; a metallic casing surrounding said core and windings; a plurality of semi-cylindrical metallic laminations interposed between said casing and said windings; a metallic cap for said casing; said metallic cap having an insulating member centrally disposed thereof; a metallic



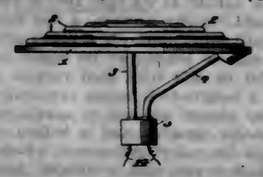
element carried by said insulating member and forming a terminal for one of said coils; and a pair of coil terminals insulatingly supported upon said metallic cap.

1,878,607. PROCESS FOR REMOVING ONE OR MORE VOLATILE CONSTITUENTS FROM A LIQUID OR GAS. MARK SHOELD, Mount Lebanon, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 20, 1931. Serial No. 509,944. 22 Claims. (Cl. 202—40.)



1. A process for removing the more volatile fraction of a plurality of volatile constituents from a liquid containing these constituents comprising treating the liquid with a gas to remove at least a portion of the more volatile fraction, and then treating said gas according to the counter-current principle with a predetermined volume of a liquid substantially free from the less volatile fraction, the predetermined volume of said last mentioned liquid being sufficient to absorb substantially all of said less volatile fraction from the gas, but insufficient to absorb all of said more volatile fraction.

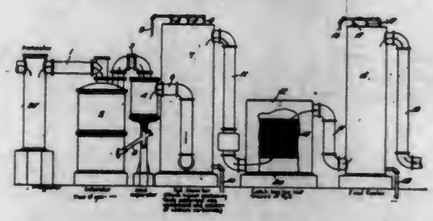
1,878,608. CONNECTION FOR ILLUMINATING DEVICES. EMANUEL C. SMALLY, Canton, Ohio. Filed Apr. 2, 1931. Serial No. 527,308. 7 Claims. (Cl. 176—126.)



1. A connection for the terminal ends of the luminous glass tubing of an illuminating device, comprising an externally threaded sleeve for the reception of each terminal,

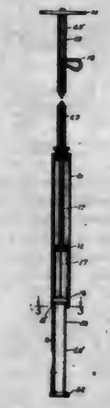
an insulating plug disposed at the end of each terminal, an electrode disposed centrally within each end of each terminal and passing through each of said plugs, and a socket member for uniting said parts within a single unit.

1,878,609. GAS PURIFICATION PROCESS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1925. Serial No. 60,870. 10 Claims. (Cl. 23—3.)



2. A process of treating gas containing ammonia and hydrogen sulphide which comprises passing the gas through sulphuric acid to effect the direct recovery of ammonia as ammonium sulphate, purifying the still hot gas of hydrogen sulphide by contact with a solution immediately subsequent to the said ammonia recovery and further cooling the purified gas.

1,878,610. TESTING DEVICE. ROBERT STERN, Union City, N. J., assignor to Louis Stern Sons, Inc., Kearny, N. J. Filed June 13, 1929. Serial No. 370,472. 1 Claim. (Cl. 187—18.)



In a testing device, a tubular member closed at its ends, a hollow tube attached to the top of said tubular member and having a handle at its free end, a plunger adapted to slide in said tubular member, a rod attached to said plunger and extending upwardly through said hollow tube, said rod having a handle at its upper end projecting through a slot in said tube, said tubular member being formed with a longitudinal recess extending from its bottom, a tubular sheath adapted to snugly but slidably fit over said tubular member, and a hollow operating tube extending from the top of said sheath which envelops said first named hollow tube and is slidable thereon, said hollow operating tube being shorter than said first named hollow tube and having a slot in alignment with said first named slot.

1,878,611. PLASTER BOARD. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Feb. 1, 1930. Serial No. 425,151. 1 Claim. (Cl. 154—45.9.)



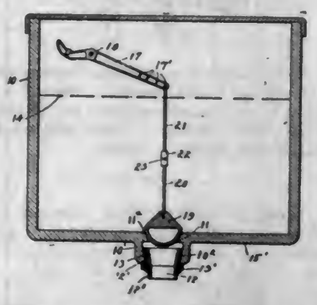
As a new article of manufacture, a plaster board the body of which comprises a plastic composition formed of plaster of Paris, powdered cork, asbestos, and calcium chloride, said body having applied to one face thereof and compressed thereon a thin sheet of paper the same being moisture resisting, and the other face of said body having compressed thereon a very thin sheet of paper of fire resisting properties.

1,878,612. COMBINED SHOE SHANK STIFFENER AND HEEL BRACE. LEON WEINSTEIN, St. Louis, Mo. Filed Oct. 1, 1930. Serial No. 485,676. 5 Claims. (Cl. 36—76.)



5. A metallic shoe shank-stiffener and heel-brace including a longitudinally channeled body member constructed of strip metallic material and comprising a first portion adapted to fit in engaging relation under the shank, a second portion projecting angularly from an end of the first portion adapted to fit in engaging relation against the breast of the heel, and an intermediate arcuate portion uniting the first and second portions, and a body-re-enforcing member of circular section fitting in said channel and over said intermediate portion and at its opposite ends permanently fixed to the said first and second portions, said body member having shank and heel biting flanges along its opposite side margins and being also provided adjacent said margins with series of nail-accommodating apertures.

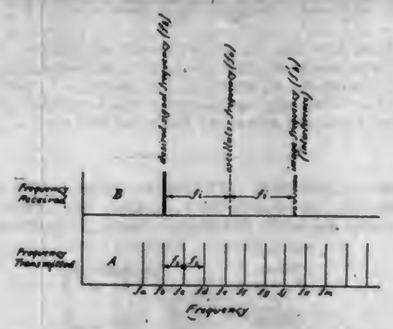
1,878,613. FLUSH BOX. JOSEPH WERNER, Perth Amboy, N. J. Filed Aug. 23, 1929. Serial No. 387,887. 3 Claims. (Cl. 4—57.)



2. In a flush box having a tank with a discharge port at its bottom, a valve for controlling said port, said valve including a valve body adapted to close said port, said body having a rigid stem projecting therefrom, a stop at the free end of said stem, a connecting block slidably

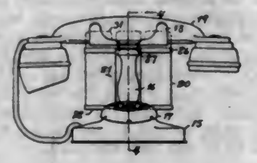
mounted on said stem, a connecting member slidably mounted in said block, setting means for fixing said member at a given position in said block, said member being provided at its free end with a suspending hook so bent as to have the suspending point of the hook in axial alignment with said stem and means in said tank from which said valve body is freely suspended whereby the latter may be displaced vertically.

1,878,614. METHOD OF OPERATING SUPERHETERODYNE RECEIVERS. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,742. 2 Claims. (Cl. 250—20.)



1. The method of operating a superheterodyne receiver to receive any one of a number of stations equally spaced in the frequency spectrum, comprising the choice of an intermediate frequency substantially equal to an odd multiple of one-quarter the frequency separation of successive stations in said spectrum, whereby the image frequency falls midway between two undesired station frequencies when the desired one of said stations is being received.

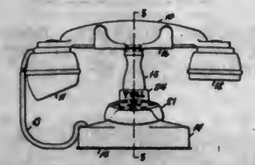
1,878,615. TOY TELEPHONE. WILLIAM C. WOOD, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Jan. 13, 1932. Serial No. 586,327. 3 Claims. (Cl. 46—36.)



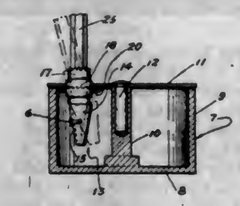
1. A toy telephone comprising a base, a post and a yoke, a coin-box having a bottom formed with a projection extending between the base and post, and a top having a projection extending between the post and yoke with means for uniting the said parts.

1,878,616. TOY TELEPHONE AND BANK. WILLIAM C. WOOD, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Mar. 18, 1932. Serial No. 599,664. 2 Claims. (Cl. 46—36.)

1. In a toy telephone, the combination with a horizontally-arranged combined toy-base and bank having a coin-slot formed in its upper face, of a dial-unit superimposed flatwise directly upon the said combined toy-base and bank at a point in front of the said coin-slot, a post rising from the said combined toy-base and bank at a point back of the said dial-unit and slot, a combined hand-grip, toy-transmitter and toy-receiver, means located at the top of the post for supporting the same, a coin-guide interposed between the top of the combined toy-base and bank and the bottom of the said post, and a bolt passing downwardly through the said support, post, coin-guide and combined toy-base and bank, whereby the said parts are held together.

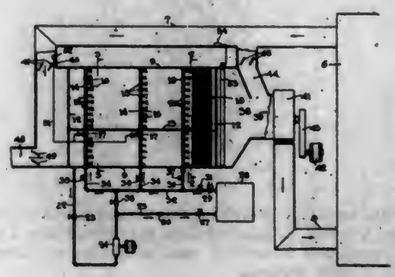


1,878,617. PENCIL SHARPENER. RICHARD H. BAIR, Camp Hill, Pa. Filed Apr. 18, 1932. Serial No. 605,891. 9 Claims. (Cl. 120—91.)



1. In a pencil sharpener, a case, a cover member rotatable on the case, a sharpening means including a tapered socket and an inclined blade extending into the socket, means mounting said sharpening means on the cover at the inner side thereof and against rotation relative thereto, and said cover having an opening therethrough to said tapered socket whereby on inserting a pencil into the socket and using the pencil as a crank to rotate the cover the sharpening means will be rotated about the pencil and sharpen it.

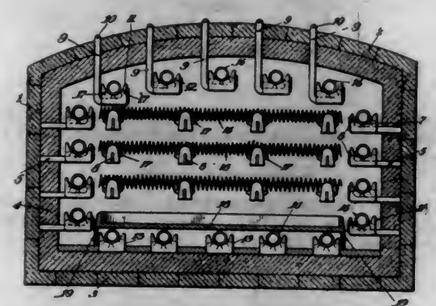
1,878,618. AIR CONDITIONING. IRVING C. BAKER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 4, 1929. Serial No. 397,330. 6 Claims. (Cl. 261—115.)



1. The method of maintaining desired conditions in a room, which consists in passing fresh air and air drawn from the room in substantially constant relative proportions through refrigerated water sprays, varying the number of sprays in operation in response to conditions in the room, to vary the averaged refrigerating effect on the air, mixing the air so treated with a substantially con-

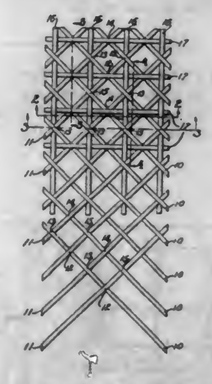
stant relative proportion of untreated air drawn from the room and discharging the resulting mixture into the room, the rate of such discharge being maintained substantially uniform.

1,878,619. ELECTRIC FURNACE. THEODORE B. BECHTEL, Salem, Ohio. Filed Mar. 21, 1928. Serial No. 263,310. 13 Claims. (Cl. 13—25.)



1. An electric resistance furnace, comprising furnace walls forming a heating chamber, helical resistors arranged horizontally in said chamber, refractory resistor supports carried by said furnace walls to support said resistors, an open resistor seat formed on each support and shaped longitudinally to retain a helical resistor therein and shaped transversely to make substantially a line contact with said resistor, and intermediate supports carried by said resistor supports and having convex supporting surfaces to engage said resistors and support the same intermediate adjacent resistor supports.

1,878,620. WOVEN FABRIC AND METHOD OF MAKING SAME. EARL C. BUNNELL, Stratford, and LESLIE W. BARNES, Trumbull, Conn. Filed May 28, 1930. Serial No. 456,490. 11 Claims. (Cl. 139—419.)

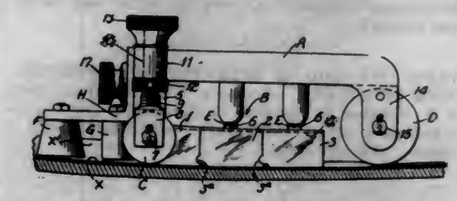


1. The method of weaving a four-strand fabric consisting in first weaving a diamond-mesh fabric and then attaching longitudinal strands to said diamond-mesh fabric by means of cross strands.

1,878,621. AMMUNITION. JAMES E. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,292. 9 Claims. (Cl. 52—4.)

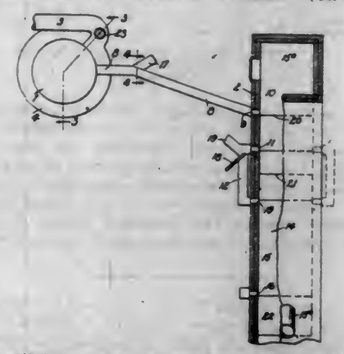
1. A priming mixture comprising a nitrated quinone diazide and a metallic salt of picric acid.

1,878,622. MACHINE FOR LOCK-SEAMING SHEETS AND STRIPS. WILLIAM T. DEACON, Richmond Heights, and HARRY F. PERKINS, Clayton, Mo., assignors to Metalfoils, Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed May 31, 1930. Serial No. 457,886. 10 Claims. (Cl. 113—55.)



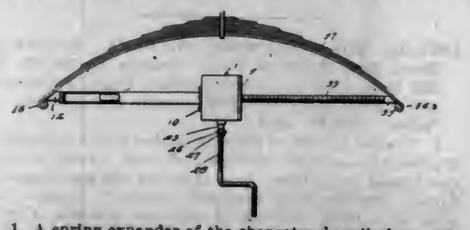
1. A machine for the purpose described, adapted to be moved over sheets or strips that are to be joined together, an articulated die structure on said machine for progressively deforming portions on said sheets or strips to form a locked seam, and means for flattening said seam.

1,878,623. DUPLEX FURNACE FOR MELTING METALS. VOTAW S. DUBBIN, St. Louis, Mo. Filed July 30, 1928. Serial No. 296,124. 3 Claims. (Cl. 266—11.)



3. An air furnace having a preliminary heating tank and a main heating tank housed therein in line with each other, means for causing a blast to enter the air furnace at the end thereof containing the main tank and to pass out at the end containing the preliminary tank, a conduit for conveying molten metal to the preliminary heating tank, an open conduit located on the outside of the air furnace and affording communication between the preliminary heating tank and the main heating tank, the main heating tank having an outlet for drawing off the molten metal to be run into the molds.

1,878,624. SPRING EXPANDER. ARTHUR P. ESTES, Jackson, Tenn., assignor to Carrie Morris Estes, Jackson, Tenn. Filed Dec. 1, 1928. Serial No. 323,132. 2 Claims. (Cl. 29—87.1.)

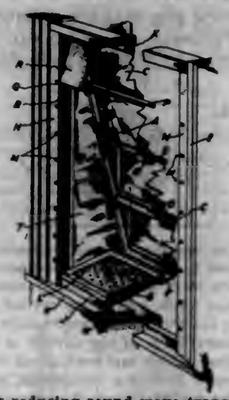


1. A spring expander of the character described comprising a casing, a tubular shaft secured to said casing and outstanding from one side thereof, a threaded shaft slidably mounted in the opposite side of the casing and adapted to move inwardly of said tubular shaft, said tubular shaft cooperating with the casing whereby to hold the threaded shaft in axial alignment with the tubular shaft and the casing, gear means in said casing engaging said threaded shaft and wedge shaped spring engaging means mounted on said tubular shaft and said threaded shaft for engagement with the eye portions of the springs.

1,878,625. ASPHALTIC CEMENT. WILLIAM C. FERGUSON, St. Louis, Mo. Filed Nov. 24, 1928. Serial No. 321,771. 1 Claim. (Cl. 106—31.)

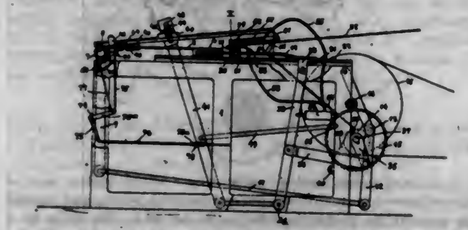
An asphaltic cement compound or mixture of troweling consistency, composed of two complemental parts, one of said parts constituting the major portion of the mixture and comprising comminuted hard asphalt having a melting point in excess of 200° F., and the other part comprising an asphaltic substance and a diluent combined in such proportions that the diluent will penetrate and be absorbed by the hard comminuted asphalt, even in the absence of air, thus causing the mixture to set or harden.

1,878,626. SCREEN FOR WALL APERTURES. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed Aug. 12, 1930, Serial No. 474,763, and in Australia Aug. 28, 1929. 9 Claims. (Cl. 98—88.)



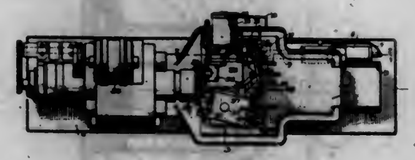
1. Means for reducing sound wave transmission through a ventilating aperture including a frame angularly inclined outwardly from the vertical, and a plurality of rollable non-sonorous screens suspended in spaced order in said frame to set in parallel planes in echelon, thus to permit ventilating currents to pass between adjacent screens and to reduce transmission of sound waves.

1,878,627. SACK INVERTING MACHINE. JOHANNES KRISTIAN FOLKER, Charlottenlund, and FREDERIK FERDINAND TRUELSEN, Copenhagen, Denmark. Filed Aug. 31, 1931, Serial No. 560,464, and in Germany Feb. 13, 1931. 4 Claims. (Cl. 223—20.)



1. In a sack inverting machine, a turnover buck and a turn-over fork coacting with said buck to invert a sack drawn over said buck, a movable gripper device operable to draw a sack over said buck, and suction means arranged to coact with the edges of the mouth of a sack to open the latter and permit introduction of the gripper device therein.

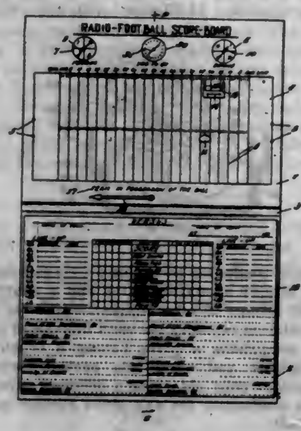
1,878,628. SLIDE MOUNTING FOR LATHES. WILLIAM H. FOSTER, Elkhart, Ind. Filed Jan. 6, 1930. Serial No. 418,704. 7 Claims. (Cl. 29—27.)



1. In a device of the character described, in combination with a supporting slide, of a cross slide mounted for movement thereon, an individual slide adapted to have movement upon said cross slide upon movement of the latter, a bridging member disposed over said cross slide, a second individual slide mounted thereon, and means operatively associating the second slide with the cross slide to cause movement thereof upon actuation of said cross slide.

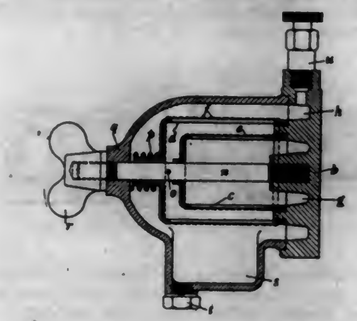
4. In a device of the character described, in combination with a supporting slide, of a cross slide mounted thereon, an individual slide mounted for movement upon said cross slide, a bridging member disposed over said cross slide, a second individual slide mounted on said bridging member, means depending from said second slide and associated with the cross slide, and other means mounted on the supporting slide and associated with the first individual slide for the purposes described.

1,878,629. SCORE CARD. EDWARD R. FUREY, New Rochelle, N. Y., and EARLE S. ANDERSON, Boston, Mass. Filed Oct. 12, 1931. Serial No. 568,462. 4 Claims. (Cl. 116—120.)



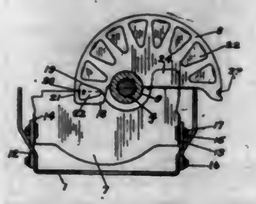
1. Means for visualizing a game from a broadcast description thereof comprising a board having a playing field marked thereon, and markers of sheet material to be set on the illustration of the playing field, one of said markers representing a ball and the other of said markers representing the direction in which the ball is to be carried and the distance over which it is to be carried.

1,878,630. OIL FILTER. JOSEPH GARDNER and JOSEPH HUGH STOTT GARDNER, Patricroft, near Manchester, England, assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England, a British Company. Filed May 26, 1930, Serial No. 455,887, and in Great Britain Jan. 18, 1930. 2 Claims. (Cl. 210—165.)



1. A fuel oil filter for a compression ignition type of internal combustion engine comprising a base or portion adapted to be secured upon a hot part of the engine so as to be heated thereby, an oil inlet passage to the filter arranged in said heated part, concentric thimble-like parts with filter gauze thereon making metal to metal contact with said heated part, an annular groove formed in the said heated portion and lying outside the larger filter, the said groove being in communication with the oil inlet passage, a second annular groove formed in the said heated portion and lying inside the smaller filter, an oil inlet from the filter arranged in said heated part and communicating with the said second annular groove, and a cover for the filter secured to said heated part by a spindle which passes through the said thimbles into said heated part.

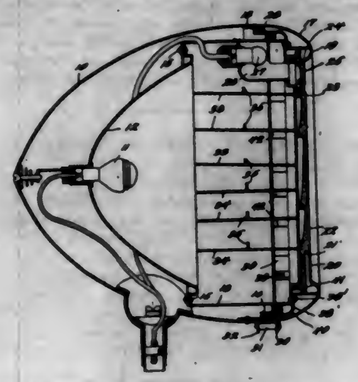
1,878,631. ELECTRICAL CONDENSER. PRESTON E. GILLINO, Haddon Heights, N. J., assignor to Radio Condenser Company, Camden, N. J. Filed May 20, 1929. Serial No. 364,392. 18 Claims. (Cl. 175—41.5.)



1. In a gang condenser including; a frame supporting a plurality of groups of stator plates and a shaft carrying a plurality of groups of rotor plates; means for providing a desired minimum capacity for each individual condenser, and means comprising a plate having a continuous unsevered periphery and adjustable partially-severed portions for automatically obtaining a different capacity from each of said condensers for any given arcuate position of the rotor shaft.

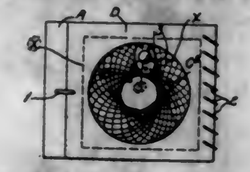
1,878,632. HEADLIGHT. FRANK C. HACHENEY, Vancouver, Wash. Filed June 5, 1930. Serial No. 459,354. 7 Claims. (Cl. 240—48.4.)

1. A headlight comprising a casing, a light source therein, a front-piece detachably secured to said casing, said front-piece having an opening, a lens closing said opening, removable means for holding said lens in place, a plurality of reflector plates detachably secured to said front piece, and a support for said plates detachably secured to said removable lens holding means whereby said support and



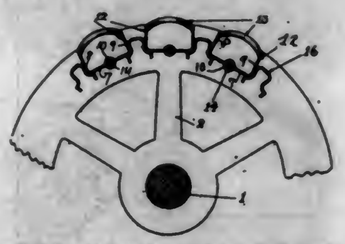
lens holding means are removable as a unit and said reflector plates are removable from said front piece independently of said lens holding means.

1,878,633. DEVICE FOR MAKING DESIGNS. MICHAEL J. HOFERER, Florissant, Mo. Filed Mar. 24, 1930. Serial No. 438,444. 3 Claims. (Cl. 33—27.)



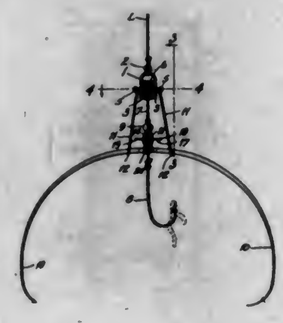
1. A device for making designs, comprising a support on which the work is adapted to be positioned, a guide arranged above said work support and provided with a continuous or endless guide surface, a carrier adapted to be superimposed on the work and moved bodily over the same while the peripheral edge of the carrier is maintained in frictional engagement with said continuous or endless guide surface, said carrier having a continuous peripheral edge of such shape that the frictional engagement between same and said guide surface will cause the carrier to turn on an axis while it is moving relatively to the guide, and a marking device on the carrier that is adapted to engage the work.

1,878,634. CARD INDEX. KARL ALBIN ABRAHAM JOHANSSON, Stockholm, Sweden. Filed Jan. 8, 1931, Serial No. 507,322, and in Sweden Nov. 17, 1928. 5 Claims. (Cl. 127—17.)



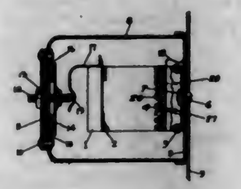
1. A card index device comprising a shaft with a pair of discs thereon, a series of channel-formed boxes, and means for removably mounting the boxes between the discs in a circular series, arranged to receive cards that are substantially parallel with axial planes of the shaft.

1,878,635. FISHING HOOK. THEODORE S. KATICH, St. Louis, Mo. Filed Mar. 17, 1932. Serial No. 599,440. 2 Claims. (Cl. 43—89.)



1. A fishing hook comprising a clevis, a pair of impaling tongs carried by said clevis, said tongs having setting elements, a bait hook carried by the clevis, a holding element connected to the bait hook for engaging the setting elements to maintain the tongs open, said holding element operating to release the setting elements with a pull on the bait hook.

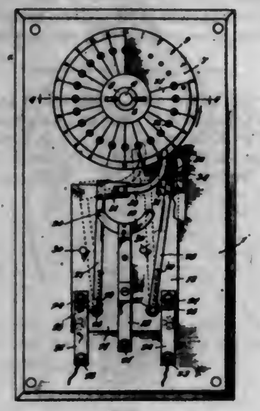
1,878,636. SHIELDED RADIO FREQUENCY TRANSFORMER AND CONDENSER UNIT. EMIL D. KOEPPING, Haddon Heights, N. J., assignor to Radio Condenser Company, Camden, N. J. Filed Aug. 18, 1930. Serial No. 476,104. 6 Claims. (Cl. 250—16.)



1. A combined tuning condenser and transformer including; a metallic shield casing, a tuning transformer structure mounted within the casing, a contact member carried by said transformer structure and connected to one winding and extending over one end of the transformer so as to intercept the axial center of said transformer structure, and a condenser positioned in the end of the casing adjacent said contact member, said condenser having one element adjustable, and means for making engagement with said contact member and an element of the condenser.
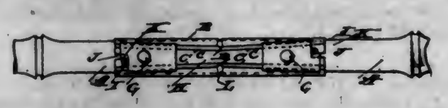
1,878,637. TIME SWITCH. JOSEPH E. KUYKENDALL, San Antonio, Tex. Filed Aug. 30, 1930. Serial No. 478,955. 4 Claims. (Cl. 200—38.)

1. A time switch comprising a dial having marginal graduations, means whereby the dial may be rotated by a clock mechanism, segments detachably mounted on the front and rear faces of the dial with their sides abutting along diameters of the dial leading to the marginal graduations, fixed contacts below the dial, and movable switch arms mounted below the dial to cooperate with the fixed contacts and having their free ends extended beyond the



periphery of the dial whereby to be engaged by the peripheral portions of the segments on the respective faces of the dial.

1,878,638. DETACHABLE COUPLING FOR JOINTED FISHING RODS. ARTHUR E. LITTLE, deceased, Elyria, Ohio, by Agnes G. Little, administratrix, Akron, Ohio. Filed Dec. 27, 1928. Serial No. 328,779. 1 Claim. (Cl. 287—110.)



In a device of the character described, the combination with the proximate extremities of a jointed rod, of a longitudinally slotted sleeve thereover, the longitudinal edges of said sleeve being reversely inclined from the center outwardly in both directions, wedge plates slidingly movable over said slot, interengaging means upon the meeting edges of said plates and sleeve, and a pin or screw in each rod, the outer ends of said sleeve being provided with angular slots for the reception of said pins, and each wedge plate being provided with a locking shoulder preventing the escape of said pins from said angular slots.

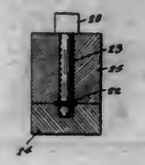
1,878,639. VARIABLE ROTARY ELECETRIC CONDENSER. ERIK OLOF LÖVGREN, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed June 30, 1927, Serial No. 202,713, and in Sweden July 22, 1926. 1 Claim. (Cl. 175—41.5.)



In a rotary condenser, a plurality of stator plates and a plurality of rotor plates disposed at right angles to their axis of rotation and adjacent to said stator plates, the

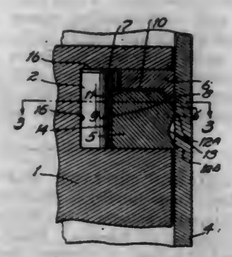
curved edges of the rotor plates intersecting the straight edges of the stator plates at a distance from the axis of rotation of the rotor plates, the said distance varying with the angle of rotation and reaching a maximum value in the maximum capacity position of the condenser plates, and said plates having their active surface distributed non-symmetrically on both sides of the maximum radius.

1,878,640. METHOD OF MAKING VACUUM TUBE BASE PINS. ANSON W. MINER, Waterbury, Conn., assignor to The Waterbury Brass Goods Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 12, 1929. Serial No. 332,187. 4 Claims. (Cl. 113—51.)



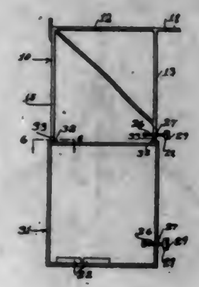
1. The method of making a contact pin for vacuum tube bases and the like which comprises cutting a blank from sheet metal, drawing the blank by successive drawing operations to a seamless tube open at one end and closed at the other end, placing the drawn tube in a die comprising two sections having aligned openings to receive said tube, one of said sections having a recess in its surface opposed to the other section and surrounding the opening, and then subjecting the tube to lengthwise pressure to cause the unconfined wall of the tube to bulge outwardly into said recess.

1,878,641. TWO-PART PISTON RING. JOHN M. NICHOLS, St. Louis, Mo., assignor to B. & N. Ring Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 1, 1929. Serial No. 403,953. 1 Claim. (Cl. 74—109.)



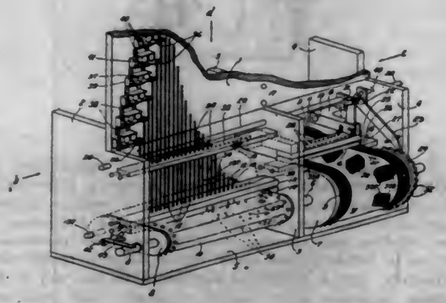
In combination with a piston having a piston ring groove, a piston ring comprising two co-operating elements disposed in said groove, one of said elements being thicker than the other and forming a base ring on which the thinner element is superimposed, said base ring having a series of outwardly presented inclined intersecting faces forming spaced ridges adapted to contact with the cylinder wall, said upper ring element having a depending flange with an inner inclined face for engagement with the upper inclined face of the base element, and an expander ring within the base element adapted to exert radial pressure on said element, said base element operating to urge the upper element both upwardly and outwardly.

1,878,642. BRACKET AS A SUPPORT FOR SCAFFOLDS. ARNOLD RASMUSSEN, Greenwich, Conn. Filed Sept. 12, 1930. Serial No. 481,380. 3 Claims. (Cl. 304—27.)



1. In a device of the class described, a scaffold-bracket, comprising a substantially square frame having T-shaped openings adjacent the lower end thereof, a horizontal projection arranged at the top of said frame, a member slidably mounted thereon, means for securing said member in adjusted position, the said member terminating in a hook for engagement with a support, a vertical projection formed integrally at the top of said frame, a lateral support adjustably mounted near the bottom of the latter, a three-sided extension frame having two of its sides bent at right angles to the third side, and substantially T-shaped angularly bent hooks formed upon the said extension frame and engageable in the T-shaped openings for attaching the latter to the square frame.

1,878,643. APPARATUS AND METHOD FOR MARKING JACQUARD TAPES. WILLIAM RECKE, Philadelphia, Pa., assignor, by mesne assignments, to Sprague Signs, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 670,125. 16 Claims. (Cl. 164—115.)



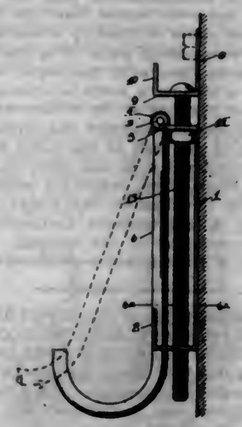
1. In apparatus for marking jacquard-tapes, a vertically stationary plate above a tape, a reciprocating plate above said first named plate, a plurality of markers, the lower end of each of said markers being supported in said first named plate, and the upper end in said reciprocating plate, marker-operating means, electromagnetic means for engaging said markers selectively with said marker-operating means, and means including said last named plate for disengaging said markers from said marker-operating means.

1,878,644. STOVE FOR BURNING DISINTEGRATED LIGNITE COKE. WALTER REMPEN, Hannover, Germany, assignor to Aaron M. Sloss, New York, N. Y. Filed Jan. 28, 1929, Serial No. 335,659, and in Germany Sept. 1, 1928. 9 Claims. (Cl. 126—78.)



1. A stove for burning disintegrated lignite coke, comprising, in combination, a receptacle adapted to receive the fuel, a plate arranged below said receptacle, a disk arranged between the said receptacle and said plate, and blades extending substantially tangentially from said disk, said disc with its blades being adapted to move the fuel from the fuel receptacle outwardly in the space between this latter and the said plate.

1,878,645. RADIATOR BRACKET. JOSEPH B. ROBINSON, Rochester, N. Y. Filed Jan. 15, 1932. Serial No. 586,748. 3 Claims. (Cl. 248—17.)



1. In a suspension bracket the combination of a fixed wall bracket, a suspension bolt suspended from said wall bracket, a spacing and supporting bracket adjustably mounted on said suspension bracket and a suspension hook mounted to swing on a fixed center on said suspension bracket.

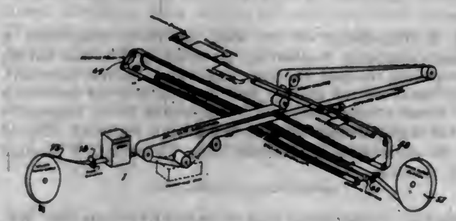
1,878,646. LIGHT REFLECTOR. BERNHARD SCHNEIDER, Lichwalde, near Berlin, Germany. Filed Oct. 24, 1929, Serial No. 402,273, and in Germany Aug. 22, 1929. 1 Claim. (Cl. 240—93.)

A combined light reflector and diffuser having a reflecting shell forming a truncated ovoid with a single plane of truncation at substantially 45° to the major axis of the shell and intersecting said axis adjacent the center thereof, and a diffusing plate extending along the



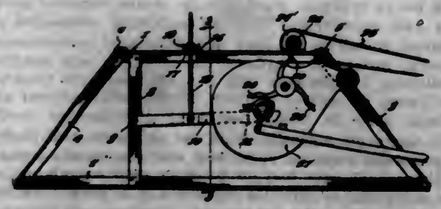
plane of truncation from the short side of the shell to the said major axis and terminating in an edge at right angles to said major axis.

1,878,647. APPARATUS FOR MAKING MATCH BOOKS. RUSSELL W. SMITH, Union, N. J. Filed June 6, 1928. Serial No. 283,160. 44 Claims. (Cl. 93—7.)



1. A match book making machine comprising; mechanism for forming the match splint strips from cardboard or the like, mechanism including a single conveyor for dipping the splint strips into inflamable material and for tipping said match splints with an igniting compound and drying said splints while on said conveyor, mechanism for forming a book cover complete, including the addition of abrasive material and printing matter if required, for the splints and mechanism for uniting said splint strips and covers into complete match books.

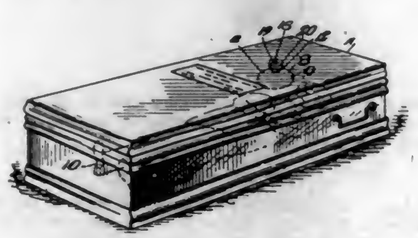
1,878,648. LAWN MOWER SHARPENER. LEONARD B. STOWELL, Ontario, Oreg., assignor to Stowell Manufacturing Co., Ontario, Oreg., a Corporation of Oregon. Filed Nov. 6, 1929. Serial No. 406,201. 8 Claims. (Cl. 51—98.)



1. A lawn mower sharpener comprising a frame, mower supporting bars pivotally mounted at one end on the frame and adjustable transversely of the frame, means

for clamping a mower in inverted position upon the free ends of the said bars including bolts and clips adjustable along the length of the bars, a grinding roll on the frame above said bars engageable with the mower blades throughout their length, hangers connected with the mower supporting bars and adjustable therewith transversely of the frame, and elements threaded on the hangers and engageable with the frame to pivotally adjust the bars and regulate the grinding of the mower blades.

1,878,649. DEHYDRATOR FOR PRESERVATION OF HUMAN BODIES AFTER DECEASE. WILLIAM H. STRINGFIELD, Philadelphia, Pa. Filed July 7, 1930. Serial No. 466,058. 4 Claims. (Cl. 183—4.)



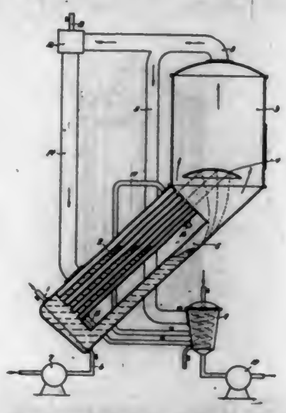
1. A dehydrator of the kind described comprising a vessel containing desiccating material, said vessel having an opening formed therein, and valve means automatically operated for sealing said opening thereby rendering the vessel inoperative, said valve means being responsive to the deliquescence of said dessicating material, effected by the extraction of moisture from air admitted through said opening.

1,878,650. PROCESS FOR CLARIFICATION OF HYDROCARBONS CONTAINING SUSPENDED OR COLLOIDAL COMPLEXES. STEPHEN SWARTZ, Long Beach, Calif., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed Feb. 2, 1929. Serial No. 337,167. 18 Claims. (Cl. 196—145.)

1. A process of clarifying petroleum hydrocarbon oil containing suspended or colloidal complexes of hydrated lime and associated carbon which comprises dissolving an organic acid containing a naphthene ring, such as naphthenic acid, in a petroleum solvent, such as gas oil; saturating a finely divided solid mineral adsorbent with such solution of said acid in said solvent; and introducing said adsorbent so treated into the petroleum hydrocarbon oil, whereby said suspended or colloidal complexes are contacted with said acid and coagulated.

12. A method of producing fuel oil substantially free from carbon and other objectionable solid materials which comprises adding lime to hydrocarbon oil and subjecting such oil to cracking conditions to obtain vaporous products and unvaporized fuel oil containing suspended or colloidal complexes of lime and associated carbonaceous material formed in a hydrocarbon oil under said cracking conditions, withdrawing said fuel oil from said cracking conditions, saturating a finely divided solid mineral adsorbent, such as fuller's earth or diatomaceous earth, with waste oil separable from the sulphuric acid sludge of petroleum refining, dispersing said adsorbent so treated throughout said fuel oil to effect such coagulation of said suspended or colloidal complexes as to permit settling thereof, settling the coagulated complexes of hydrated lime and associated carbonaceous material from said fuel oil, and drawing off the fuel oil thus clarified and substantially free from carbon and other objectionable solid materials.

1,878,651. MILK EVAPORATOR. WALDEMAR HENRY TEETSOW, Tallinn, Esthonia. Filed Oct. 26, 1931, Serial No. 571,257, and in Esthonia Nov. 7, 1930. 1 Claim. (Cl. 159—24.)



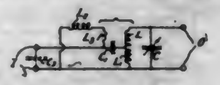
An evaporating apparatus for milk and the like products requiring low boiling temperature comprising an inclined steam chest including a shell, end plates and tubes extending through the shell and the plates, a chamber at the lower end of the chest and in communication with the tubes, means for introducing milk into the chamber; an upright vapor separator situated at the top of the chest and in communication with the tubes, a deflecting plate in the separator above the tubes, a return pipe between the separator and the liquid receiving chamber, a live steam supply, a thermo-compressor in communication with the live steam supply and having its suction side in communication with the vapor separator and its discharge side in communication with the shell of the steam chest to compress vapors from the boiling liquid by means of live steam to produce a heating steam for the purpose of evaporating water from the milk, a condenser in communication with the vapor separator and acting to create a vacuum, a pump in communication with the condenser for ensuring of the withdrawal of the condensed vapors from the condenser and pipes between the top and bottom of the shell of the steam chest and the condenser for withdrawing air and other non-condensable gases from the steam chest, means for withdrawing condensed milk from the chamber, and means for adjusting the quantity of milk introduced continuously into the evaporator to correspond to the quantity of condensed milk discharged in order to allow continuous working.

1,878,652. PROCESS OF INITIAL DETONATING EXPLOSIVE MATTER AND FOR THE MANUFACTURE OF DETONATING CAPS IN ACCORDANCE THEREWITH. EDMUND VON HERZ, Cologne-Dellbruck, near Cologne-on-the-Rhine, Germany. Filed Oct. 22, 1929, Serial No. 401,609, and in Germany Oct. 16, 1928. 5 Claims. (Cl. 52—4.)

1. A detonator containing a main charge of nitromannite and a superposed layer comprising a metal selected from the group consisting of aluminum and magnesium with oxygen carriers and lead hypophosphite, this layer being separated from the main charge by the usual perforated inner cap.

1,878,653. ELECTRIC COUPLING CIRCUITS. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Aug. 20, 1930. Serial No. 476,542. 4 Claims. (Cl. 178—44.)

1. An electric coupling system comprising a tunable secondary circuit including a fixed secondary winding and a variable capacity bridged between output terminals; and a primary circuit including in closed series connection in the order recited, a fixed inductance, a primary winding magnetically coupled to said secondary, a fixed capacity and a portion of said secondary winding, input terminals connected between said primary winding and



said fixed capacity and between said fixed inductance and said secondary winding respectively, said fixed inductance together with associated capacity being resonant at a frequency slightly below the tunable range, for controlling throughout said frequency range the resultant coupling between said primary and secondary circuits.

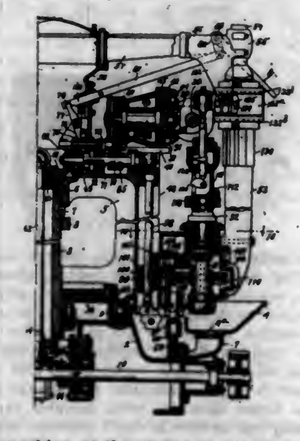
1,878,654. PROCESS OF AND COMPOUND FOR TREATING RUBBER. GEORGE STAFFORD WHITBY, Montreal, Quebec, Canada, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Aug. 2, 1929. Serial No. 383,176. 6 Claims. (Cl. 18—53.)

1. The process for the preparation of the hexamethylenetetramine benzyl ester of mercaptobenzo thiazole which comprises reacting the addition product of benzyl chloride and hexamethylenetetramine with a metal salt of mercaptobenzo thiazole.

1,878,655. PROCESS OF AND COMPOUND FOR TREATING RUBBER. GEORGE STAFFORD WHITBY, Montreal, Quebec, Canada, assignor to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1930, Serial No. 497,598, and in Great Britain July 18, 1930. 17 Claims. (Cl. 18—53.)

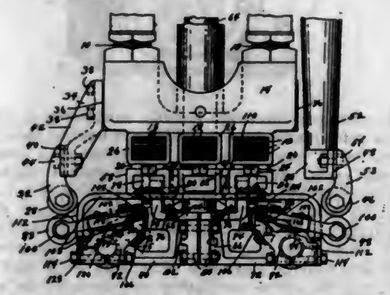
1. The process for the preparation of the hexamethylene tetramine benzyl ester of a mercapto thiazole which comprises reacting the addition product of a benzyl halide and hexamethylene tetramine with a metal salt of a mercapto thiazole.

1,878,656. HOBBING MACHINE. FRANK H. ADAMS, Cleveland Heights, Ohio, assignor to The Cleveland Hobbing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 23, 1929. Serial No. 394,424. 16 Claims. (Cl. 90—4.)



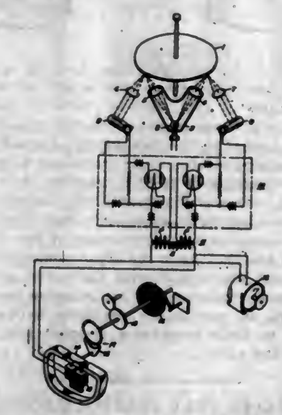
1. In a machine of the character described, a support adapted to be given a feeding movement relative to a tool, a slide slidably carried by said support, a tail stock carried by said slide and adapted to engage with one end of a work blank, and means for moving said slide laterally during said relative feeding movement laterally with respect to the direction of such movement.

1,878,657. MULTIBREAK ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,875. 17 Claims. (Cl. 200—87.)



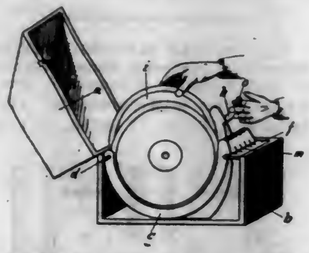
1. A movable switch member for an electric switch including a vertical lifting rod, a supporting member fixed to the lower end of said rod having oppositely extended arms, insulating bars carried by said arms and extended laterally in opposite directions therebeyond, contact supporting brackets carried by the ends of said bars, a rigid conducting member electrically connecting the brackets at similar ends of said bars, and contact members overlying said supporting brackets and having flexible connections therewith at one end by which current traverses said contact members and the supporting brackets therefor in opposite directions.

1,878,658. WATTHOUR METER TESTING DEVICE. SAMUEL ARONOFF, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,141. 5 Claims. (Cl. 175—183.)



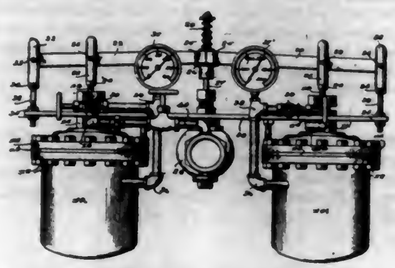
1. The combination with a rotating element and an electric circuit separate therefrom, of means for generating an alternating current in said circuit having a frequency proportional to the speed of said rotating element comprising a plurality of thermionic tubes, light-sensitive means operated by said element for alternately energizing said tubes, means for energizing said circuit in opposite directions with successive energizations of said tubes and indicating means responsive thereto.

1,878,659. SOUND RECORD RECEPTACLE. FERDINAND BADER, Hamburg, Germany. Filed Feb. 16, 1932, Serial No. 593,247, and in Germany May 29, 1931. 2 Claims. (Cl. 312—14.)



1. A receptacle for sound records, comprising in combination a box, an axle fixed in said box, a bearing plate having slots in its inner edge fixed in said box at a distance from said axle, semicircular record supports having a groove in the upper edge each adapted to carry a record oscillatably mounted at the rear end on said axle, and a downwardly extending rib-like projection on the front end of each support adapted to engage with the corresponding slot in said bearing plate and to reliably guide said support during the entire oscillating movement of the same.

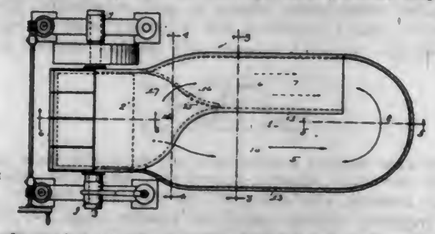
1,878,660. STEAM PRESSURE GOVERNOR. FRED L. BADGETT, Chickasha, Okla.; Billie B. Badgett administratrix of said Fred L. Badgett, deceased. Filed Aug. 20, 1929. Serial No. 387,204. 3 Claims. (Cl. 236—26.)



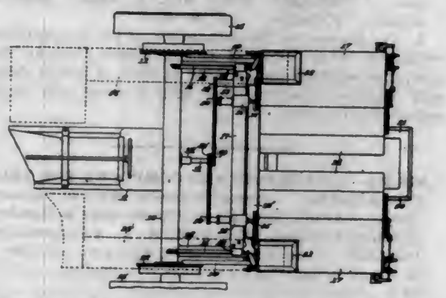
1. A governor for steam boilers fired by gaseous fuel comprising a fuel regulating valve, a pair of closed chambers, diaphragms in each chamber dividing said chamber into compartments, one of the compartments of one chamber being connected to the fuel supply, a similar compartment of the other chamber being connected with the boiler, the other compartments of the chamber each being connected with a source of compressed air, the pressure of the air to each compartment being such that it will counterbalance the normal operating pressure of the steam in one compartment and the gas in the other compartment, means connecting each diaphragm with the valve so that when the steam counterbalances the air pressure in the respective chambers an unbalanced condition between the gas and the air in their associated compartment will cause operation of the valve.

1,878,661. PAPER PULP BEATING MACHINE. BURKE M. BAXTER, Grand Rapids, Mich. Filed Oct. 3, 1929. Serial No. 397,010. 3 Claims. (Cl. 92—24.)

1. In a paper-pulp beating machine of the character described, a channel for flowing the pulp therethrough comprising successive portions, the first portion venting into the second portion and having less cross-sectional dimensions than the second portion and a bottom longitudinally inclined from the horizontal at a greater angle than is the bottom of the second portion, the cross-sectional dimensions of said portions being so related to each other and to said angle of inclination that a given amount of pulp will flow in a given time through said portions respectively, and a beater roll at one end of the machine for raising the pulp over said roll from the second portion to the first portion.

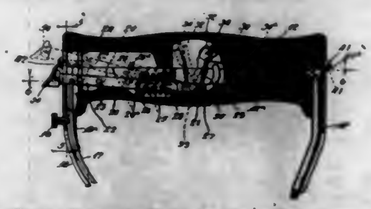


1,878,662. COTTON CLEANER. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Jan. 19, 1931. Serial No. 509,690. 3 Claims. (Cl. 56—14.)



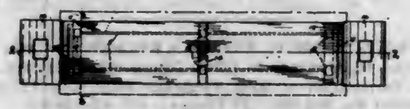
1. The combination with a tractor having cotton stripping units mounted at each side thereof and positioned to deliver rearwardly above the rear axle of the tractor, of cleaner units mounted at each side of the tractor and positioned to receive cotton from the stripping units, and a receiving means for the cleaned cotton positioned between said units and carried thereby.

1,878,663. ELECTRIC IRON. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1928. Serial No. 265,886. 9 Claims. (Cl. 200—138.)



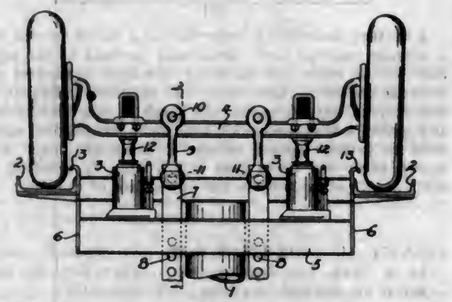
1. A thermally controlled electric switch construction for controlling the circuit for the heating element of an electric iron comprising a pair of members pivotally connected together to form a toggle construction, movable from one position to another for causing the switch to move from open to closed position, and vice versa, a spring acting on said toggle construction and tending to move the switch to open position, the pivotal connection between the toggle members being movable past a dead-center to hold the switch in "on" position, and thermostatically controlled means for breaking said toggle to allow said spring to act to cause said switch to move to open position.

1,878,664. WHEEL ALIGNMENT GAUGE. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed Sept. 3, 1929. Serial No. 390,156. 2 Claims. (Cl. 33—203.)



1. A vehicle wheel gauge, embodying a support, a runner board disposed above the support, a longitudinally extending shaft between the support and the runner board, spaced apart gear pinions fixed on said shaft, and gear racks on the support and on the runner board and meshing with the gear pinions.

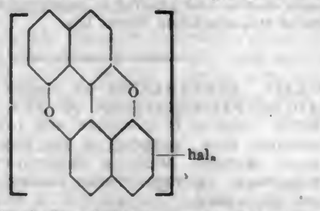
1,878,665. APPARATUS FOR BENDING AXLES. CLAUDE C. BENNETT, Seattle, Wash., assignor to A. E. Feragen, Inc., Seattle, Wash., a Corporation of Washington. Filed Oct. 15, 1930. Serial No. 488,855. 2 Claims. (Cl. 153—32.)



2. In combination with a hoist including a car-supporting platform which leaves the space beneath the car's front axle largely unobstructed, an axle press including a strong-back bar disposed beneath the axle, means interengageable between the platform and the strong-back bar to support the axle press from and to raise it with the platform, elevated substantially in operative relationship to the axle in all elevated positions of the platform.

1,878,666. HALOGEN SUBSTITUTION PRODUCT OF DINAPHTHYLENE-DIOXIDE. BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, LUDWIG ZEH, Wiesdorf-on-the-Rhine, and ERWIN KRAMER, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1929, Serial No. 385,475, and in Germany Sept. 8, 1928. 9 Claims. (Cl. 260—54.)

5. As new products the halogen substitution products of dinaphthylene-dioxide of the probable general formula:



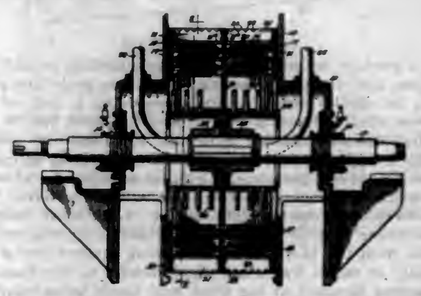
wherein "hal" stands for a halogen atom having an atomic weight between 35 and 80 and "n" stands for one of the numbers 1 to 10 and which are obtainable by halogenation of dinaphthylene-dioxide in an inert solvent, being generally yellowish to blackish-brown pigments fast to light.

1,878,667. MERCURY SWITCH. TONJES A. BOTH, Stratford, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 10, 1931. Serial No. 580,164. 9 Claims. (Cl. 200—154.)



1. A mercury switch comprising an insulating base having a pair of V-shaped bearings therein, a tiltable switch actuator having V-shaped pivots fitting in said bearings and having a lever portion extending therefrom whereby said actuator may be manually moved, a cradle secured to said actuator, a receptacle held in said cradle and containing a body of mercury and a plurality of contacts for making and breaking an electric circuit.

1,878,668. APPARATUS FOR CLEANING GASES. ARTHUR J. BOYNTON, Winnetka, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 14, 1930. Serial No. 444,097. 1 Claim. (Cl. 261—90.)

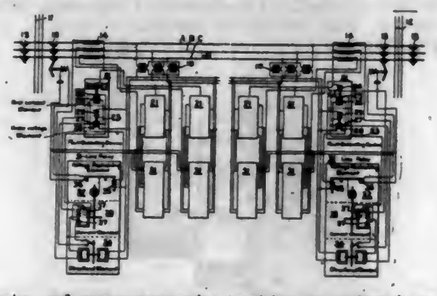


A gas cleaning apparatus embodying a casing, a rotor therein, said rotor embodying a plurality of concentric series of cone frustrums, the cone frustrums of each series being laterally spaced to form passages therebetween for the gas and a washing media, the inner edge of the outer cone frustrums being arranged to intercept and divide each stream of gas and washing media projected from the next adjacent inner row of cone frustrums, fan blades mounted upon the rotor adjacent the outer periphery thereof and beyond the outermost row of cone frustrums, and means carried by the forward outer edge of the fan blades to cause a cohesion of the particles of mist as they leave the fan blades, the said means embodying passages gradually reducing in size from the entrance to the exit thereof and through which latter passages pass the globules of moisture formed by such cohesion.

1,878,669. RELAY SYSTEM. JOHN V. BREISKY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 21, 1927. Serial No. 234,647. 9 Claims. (Cl. 175—294.)

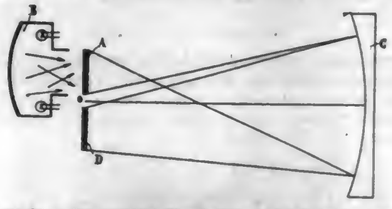
1. In a protective apparatus, the combination with a power line having circuit breakers and actuating means

therefor, of a relay normally ineffective and disconnected from service for controlling its associated circuit inter-



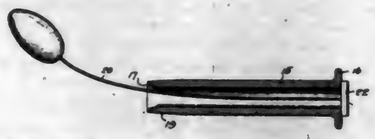
rupter and means responsive to either an undervoltage or an overcurrent of the power line for electroresponsively connecting the relay into service when a fault occurs.

1,878,670. PRINTING MACHINE FOR GOFFERED FILMS. PAUL BROSSE, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928, Serial No. 325,359, and in France Dec. 31, 1927. 1 Claim. (Cl. 88—24.)



A machine for copying film having a backing formed with linear miscroscopic refracting elements by projection printing on similar sensitive film, comprising a pair of film gates, one for the original film and the other for the sensitive film and through which the two films pass side by side in opposite directions, a concave reflecting mirror at one side of said gates and the center of curvature of which lies exactly between the two films, said films having their goffered sides facing said mirror, a diffusing lamp at the other side of the gates for illuminating the original film from the back, said mirror being divided into a plurality of bands which are perpendicular to the linear refracting elements of the films, said bands being relatively offset to one another to an extent necessary to effect disappearance of the network of the original film in projection on the sensitive film and thereby avoid watering.

1,878,671. DILATOR. JACOB J. CANTOR, Los Angeles, Calif., assignor of one-half to John Murray, Los Angeles, Calif. Filed July 2, 1929. Serial No. 375,483. 1 Claim. (Cl. 128—343.)
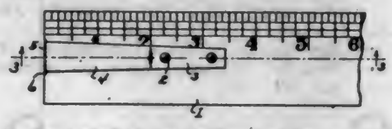


A dilator comprising a linear tube having a tapered head normally projecting from the tube at its leading end, a normally curved wire connected to the head and extending through the tube for moving the head to seat against the leading end of the tube to facilitate the insertion of the tube into a cavity, and for moving the head to a projected position beyond the leading end of the tube, said wire normally tending to assume a curved form so that when the head is projected it will occupy an offset position and a further offset position in following the curvature of the cavity being dealt with, and a handle on the wire positioned to abut the rear end of the tube so as to coact with the wire and head in retaining the tube against displacement from the cavity.

1,878,672. STENCIL SHEETS. KENNETH W. CARR, Chicago, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Apr. 17, 1929. Serial No. 355,983. 10 Claims. (Cl. 41—38.6.)

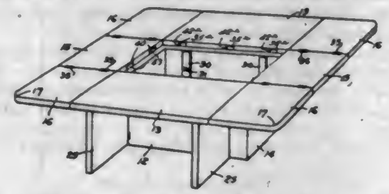
1. A stencil paper comprising a base sheet and a coating composition on said base sheet, including a reaction product of phenol, tung oil and formaldehyde, and peanut oil.

1,878,673. MARKER. JULES A. CARUFEL, St. Paul, Minn. Filed June 28, 1929. Serial No. 374,581. 1 Claim. (Cl. 33—189.)



A marker including a ruler having a notch in one end, a tapered resilient plate detachably secured to the upper face of the ruler and inclining upwardly therefrom and towards the notch, said plate bent angularly adjacent the free end and extending into the notch to be guided thereby and having a V-shaped notch with the apex disposed uppermost to provide spaced prongs to mark an object when moved below the lower face of the ruler by pressing the plate downwardly towards the upper face of the ruler.

1,878,674. COMBINATION BOX AND TABLE. SCOTT LE R. CASE, Los Angeles, Calif. Filed Nov. 24, 1928. Serial No. 321,686. 1 Claim. (Cl. 190—11.)

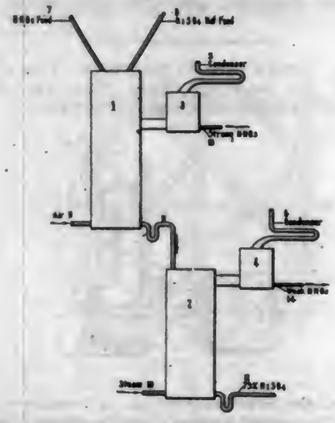


In a device of the class described, a box having long side portions provided with leaves hinged to swing over the top of the box to close the same and also adapted to swing outwardly from the box to form table top sections on opposite sides thereof; foldable leaves hinged to said long side portions of the box and adapted when extended to support said table top sections; and end leaf sections adapted to fold to a position wherein they overlap the first recited leaves when the latter are in the folded condition, said end leaf sections having also side portions hinged thereto and adapted to overhang and reinforce the sides of the completely folded box.

1,878,675. PREPARATION OF PRIMARY AROMATIC AMINE HYDROHALIDES OF THE BENZENE SERIES. GERALD H. COLEMAN and LINDLEY E. MILLS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 14, 1929. Serial No. 392,724. 4 Claims. (Cl. 260—130.5.)

1. In a method of preparing a primary aromatic amine hydrohalide of the benzene series, the step which consists in reacting a primary aromatic amine with a gaseous hydrogen halide in the presence of a lower aliphatic alcohol.

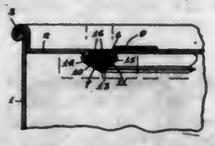
1,878,676. PROCESS OF CONCENTRATING NITRIC ACID. IRVING J. COX and WILLIAM E. KIRST, Woodbury, N. J., and CLIFFORD A. WOODBURY, Media, Pa., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,164. 10 Claims. (Cl. 23—160.)



8. The process of producing highly concentrated nitric acid which comprises mixing a dehydrating agent near its boiling point with weak nitric acid near its boiling point, passing this mixture through a tower counter-current to a gaseous medium inert to both acids, recovering the residual hot dehydrating agent and subjecting it to a denitration with a minimum of steam, and adding the resulting condensed vapors to the dehydrating agent as it enters the tower in a continuous cycle.

10. The process of producing highly concentrated nitric acid which comprises introducing into a packed tower from 2.7 to 6.0 parts of sulphuric acid of 90 to 95% strength, maintained at a temperature above 200° C., with one part of nitric acid of 50% to 66% strength, at a temperature above 20° C. so as to utilize the heat of the reaction to distill HNO_3 vapors, recovering in the condensate over 90% of the nitric acid introduced as 94% or higher strength, passing the residual dehydrating agent through a tower counter-current to steam, and obtaining the remainder of the nitric acid as a condensate above 50% strength, with a dinitrated residual of about 75% sulphuric acid.

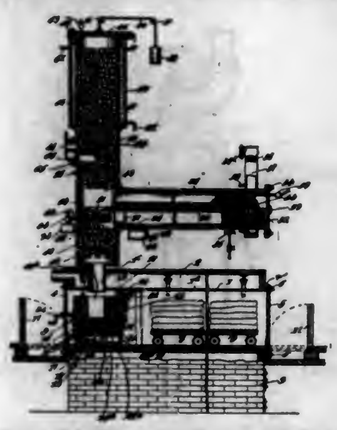
1,878,677. CONTAINER SEAL. GEORGE W. CURTIS, New York, N. Y. Filed Dec. 8, 1930. Serial No. 499,834. 5 Claims. (Cl. 220—46.)



1. In a device of the character described a closure for a container, said closure being formed of sheet material having a depending section forming a groove with facing overhanging shoulders, and a removable sealing strip of resilient material tightly fitting into and filling said groove.

1,878,678. PROCESS FOR TREATING VAPOR OF WOOD OR ITS BY-PRODUCTS. EDMUND L. DAY, Westline, Pa. Filed Dec. 17, 1928. Serial No. 326,591. 1 Claim. (Cl. 202—30.)

A process for the distilling of wood and treating its by-products, consisting of heating the wood and driving off vapor, passing the vapor through a closed circuitous substantially horizontal path of material length, positively varying the temperature of the vapor in its passage through the closed circuitous path by a controlled heating



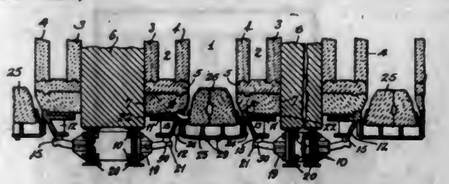
and cooling means, for fractionating the vapor, then passing the vapor in a vertical direction and then further fractionating the vapor while conveying the vapor in a downward direction.

1,878,679. PRODUCT OF MANUFACTURE. EMIL DE BRUIJN, Roslyn, Pa.; Theresa M. de Bruijn executrix of said Emil de Bruijn, deceased. Filed Nov. 12, 1930. Serial No. 495,275. 3 Claims. (Cl. 154—53.)



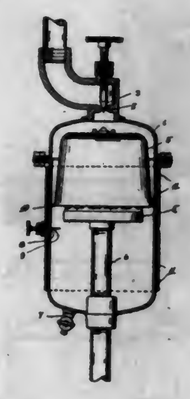
1. A new product of manufacture comprising the combination of card clothing, and a resilient composition in which the pins of the card clothing are embedded or implanted and which is secured to the body portion of the card clothing, said pins being arranged in series of rows, and the pins of one series of rows being disposed obliquely in one direction reversely of the pins of the other series of rows.

1,878,680. OVEN DOOR, FRAME, AND FASTENING DEVICE. HERBERT EDWARD DUNKLE, Jackson Heights, and JULIUS BECKER, Flushing, N. Y., assignors, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1926. Serial No. 154,875. 13 Claims. (Cl. 202—248.)



1. In a coke oven battery comprising open ended coking chambers alternating side by side with division walls having heating flue systems adjacent to the sides thereof and buck-stays adjacent to the ends of said division walls, a closure structure for a coking chamber comprising a metal frame surrounding an end opening of the coking chamber, and means supported from the buck-stays for holding the frame in place by a pressure contact at a plurality of points between said means and said frame.

1,878,681. PIPE LINE FILTER. LEWIS L. DOLLINGER, Rochester, N. Y. Filed Sept. 30, 1929. Serial No. 396,232. 4 Claims. (Cl. 62—1.)



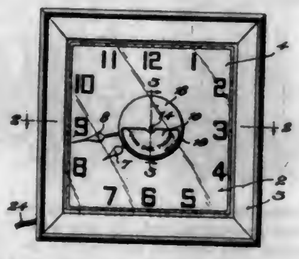
1. In a pipe line filter having a filter and a filter housing surrounding the filter, the combination of a jacket surrounding said filter housing with a space between said jacket and said filter housing, and means for allowing air and moisture from said filter housing to expand into said jacket to cause a drop in the temperature of the air and moisture entering said jacket so as to cool the outside of said jacket and cause the condensation of the moisture in the air passing through said filter housing.

1,878,682. MULTISTAGE GAS PURIFICATION. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 8, 1928. Serial No. 317,125. 17 Claims. (Cl. 23—7.)

1. The method of multi-stage gas purification which consists in passing the gas to be purified through a series of purification stages wherein the purifying agent is retained in each stage and the gas going to each purifier is compressed to a higher pressure than that attained in the proceding one.

7. The method of multi-stage gas purification which consists in passing the gas to be purified through a series of purifier stages wherein the contained surfaces of each purifier are coated with a mixture of alkali metal hydroxides.

1,878,683. ADVERTISING CLOCK. CHARLES B. DRAKE, Norfolk, Va. Filed Apr. 9, 1932. Serial No. 604,331. 10 Claims. (Cl. 40—34.)

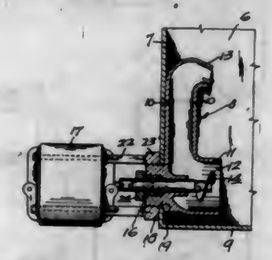


1. A clock of the character described including a shaft and means for operating the same, a display member connected to the shaft, and a shield supported by the shaft, said shield having an opening through which matter on the display member may be observed.

1,878,684. ULTRA-VIOLET SENSITIVE PAPER. LEON W. EBERLIN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 27, 1931. Serial No. 533,365. 3 Claims. (Cl. 95—7.)

1. A photo-sensitive sheet sensitive primarily to the ultra-violet comprising ortho-nitro-benzaldehyde.

1,878,685. DISHWASHING MACHINE. JAMES E. ELKINGTON, San Francisco, Calif. Filed May 27, 1930. Serial No. 456,153. 4 Claims. (Cl. 141—9.)

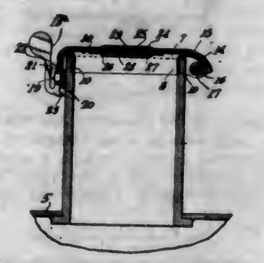


1. In a dish washing machine, a receptacle to hold dishes to be washed therein, a combined pump and spray housing disposed adjacent a wall of the receptacle, a rotary pump in the end of the housing adjacent the bottom of the receptacle, a diagonally downwardly directed nozzle on the upper end of the housing; means outside of said wall of the receptacle to drive the said rotary pump; means of connection between the housing and the driving means, extending thru the said wall to mount both the housing and the driving means on said wall, said means of connection comprising a threaded member extending from the housing and thru said wall, a bracket on the outside of the wall threadedly engaging said member to bear against the outer face of the said wall and to draw said housing against the inner face of said wall, said driving means being mounted on said bracket.

1,878,686. ALLOY. OWEN W. ELLIS, Toronto, Ontario, Canada. Filed Aug. 30, 1929. Serial No. 389,618. 4 Claims. (Cl. 75—1.)

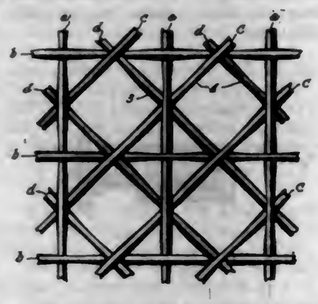
1. A bearing metal containing about 65 to 85 percent lead and 7 to 10 percent thallium as matrix alloy, with the balance suspended as antifriction metal composed essentially of about 5 to 20 per cent antimony.

1,878,687. TANK CAP. ALAN R. FERGUSSON, New York, N. Y. Filed Apr. 25, 1931. Serial No. 532,739. 8 Claims. (Cl. 220—43.)



1. In combination with a filling spout of a tank, said spout having an undercut shoulder in the mouth of the same, a mounting ring engaged over the edge of the filling spout and having an inner wall set into the undercut shoulder to permanently secure said ring in position on the spout, a cap hingedly mounted on said mounting ring, said mounting ring having an undercut outer peripheral portion about the end of the spout and a cap having spring fingers yieldingly engaging over the same for holding the cap in closed relation on the mounting ring.

1,878,688. METAL GRILLE. CROSBY FIELD, Brooklyn, N. Y. Filed May 16, 1929. Serial No. 363,470. 5 Claims. (Cl. 189—82.)



5. A grille comprising interwoven spring steel ribbons having substantially the size, shape and cross-section of the wire scrap from the metal wool cutting machine, said ribbons having one face conforming to chords and the other face conforming to arcs of the same circle, the chord face being longitudinally grooved and the ribbons having variations in thickness, from end to end, which are very small as compared with the mesh spacing of the ribbons as woven in the grille.

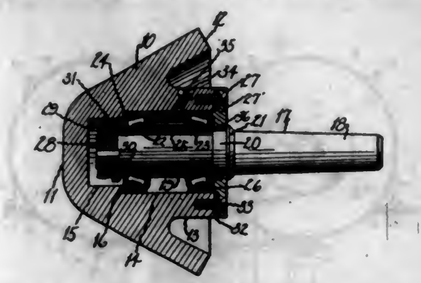
1,878,689. WEED CUTTER. THEODORE J. FLACK, Brooksville, Fla. Filed July 2, 1929. Serial No. 375,461. 1 Claim. (Cl. 30—9.)



A weed cutter comprising a handle, a blade tapering from one end to the other and having its central portion connected with one end of the handle, said blade having its side edges beveled to form cutting edges and said blade curving upwardly from its center to each end, one-half of the blade curving upwardly to greater extent than the other half, and braces connecting the handle with the blade adjacent the ends of the blade.

1,878,690. LATHE CENTER. ROSS H. FORNEY, Dallas, Tex. Filed Oct. 29, 1928. Serial No. 315,663. 2 Claims. (Cl. 82—33.)

1. A lathe enter comprising a body terminating in a rearwardly projecting flaring skirt and a rearwardly extending reduced sleeve portion integral with the body and spaced away from the skirt, the bore of the sleeve extending into the body and the exteriors of the body and skirt forming a conical surface, a mandrel having a portion extending into the bore and a plurality of



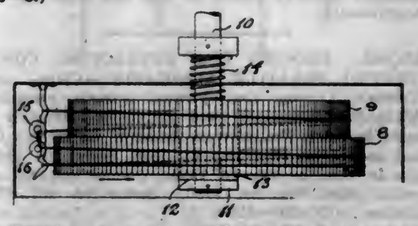
spaced sets of anti-friction bearing means interposed between said portion and the lathe center, the rearward set lying forward of a line from a point in the conical surface at its base and normal to said surface.

1,878,691. TRAFFIC MARKER. ROBERT FOSTER, New York, N. Y., assignor to Metal Traffic Marker Corporation, a Corporation of New York. Original application filed Jan. 12, 1928, Serial No. 246,151. Divided and this application filed Nov. 19, 1929. Serial No. 408,211. 1 Claim. (Cl. 94—1.5.)



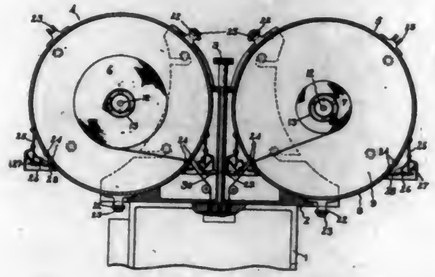
A marker, comprising an annular head element having a central aperture, an attaching means extending through said aperture and having a radially enlarged portion operative to limit the movement of said means through said aperture in one direction, and a plate unitarily carried by and covering said head element and the adjacent end of said attaching means to prevent the removal of said attaching means from said head element in the other direction, said attaching means being provided with threads of high pitch which permit said means to be driven into a surface by means of a blow upon said plate and operative to resist the removal of said last-named means from the material of a given surface after having been driven thereinto.

1,878,692. DRAWING WHEEL. WILLIAM H. FURNESS, National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 11, 1929. Serial No. 331,781. 5 Claims. (Cl. 18—8.)



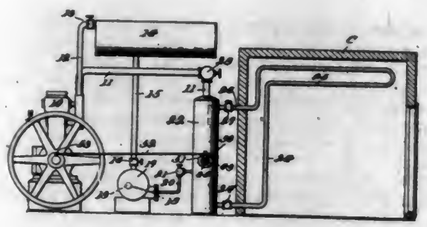
1. Drawing means for artificial silk thread and the like comprising two wheels of different diameter, and a drive shaft on which the wheels are mounted to be driven thereby, and means whereby the thread is laid first around one wheel and then around the other.

1,878,693. FILM MAGAZINE. KENT P. GAMBLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 25, 1930. Serial No. 431,276. 2 Claims. (Cl. 88—17.)



1. A film assembly comprising a member adapted to be secured to a recorder, a film magazine having a film opening and a light valve therefor, cooperating means on said member and magazine constructed to cause the magazine to have an angular movement when being attached to the member and means operative in response to said angular movement to actuate said light valve.

1,878,694. REFRIGERATING SYSTEM WITH LIQUID AND GAS TRAPS. NORMAN H. GAY, Los Angeles, Calif. Filed Aug. 9, 1930. Serial No. 474,178. 20 Claims. (Cl. 62—115.)

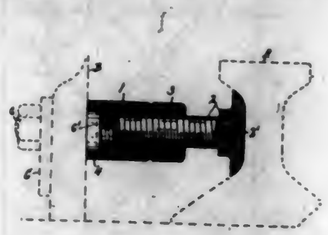


1. In a refrigerating system including a compressor, a condenser, an expander and an evaporator, and pipe lines connecting the same in circuit, the combination of a liquid trap located in the pipe line from the evaporator to the compressor, conduit means for connecting said trap to the evaporator inlet whereby liquid may be returned to the evaporator, a valve to close said conduit, and constantly operated means to open and close said valve intermittently.

1,878,695. PROCESS FOR EXTRACTING CONCENTRATED VOLATILE ALIPHATIC ACIDS. ADOLF GORHAN, Liesing, near Vienna, Austria, assignor to Firm Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Original application filed May 24, 1928, Serial No. 280,395, and in Germany Feb. 16, 1928. Divided and this application filed Nov. 24, 1930. Serial No. 497,957. 2 Claims. (Cl. 260—122.)

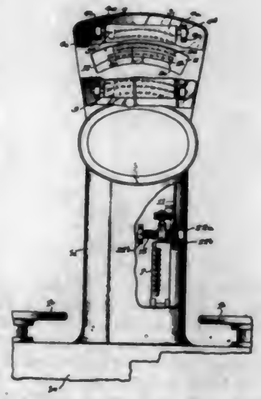
1. A process for extracting concentrated volatile aliphatic acids from solutions thereof; consisting in treating solutions of fatty acids in organic solvents with mixtures of salts, at least one of which is capable of combining with the said aliphatic acids to form a double salt, the said mixture of salts possessing a low melting point so that the said salts remain substantially liquid during the subsequent decomposition process; and then decomposing the double salts thus obtained, by heating.

1,878,696. ADJUSTABLE SWITCH BLOCK. LEWIS H. HASSEL, Utica, N. Y., assignor to Signal Accessories Corporation, Utica, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,672. 1 Claim. (Cl. 254—100.)



The combination with a main rail and a switch rail cooperating therewith, of an adjustable switch block placed between the main rail and the switch rail in a plane below the upper surfaces thereof for holding the switch rail in its open position and comprising two threaded members in screw engagement with each other for relative axial adjustment across the intervening space between the main rail and switch rail for engagement therewith, said switch rail being provided with means for engaging the adjacent end of the adjustable switch block for holding the latter against vertical or lateral movement relatively to said switch rail.

1,878,697. SCALE CHART. WILLY HEIDINGER, Berlin, Germany, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Sept. 22, 1926. Serial No. 137,070. 3 Claims. (Cl. 235—86.)



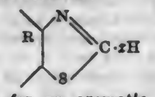
1. In a weighing scale having a movable index pointer and an enclosing housing, a movable chart having a plurality of scales thereon and means for yieldably holding the same in home position and returning it thereto when displaced, a series of keys corresponding to scales on the chart, means controlled by the keys upon actuation of any of them to bring and hold the corresponding scale into position with respect to said pointer and a releasing member having a part accessible for operation from the exterior of said housing for releasing said chart to permit it to return to home position.

1,878,698. PIGMENT DYESTUFFS. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 19, 1929, Serial No. 393,838, and in Germany Sept. 22, 1928. 4 Claims. (Cl. 260—76.)

4. As a new product the barium salt of the dyestuff 2-chloro-aniline-azo-2-naphthol-6-sulfonic acid, being a reddish-orange powder, possessing an excellent resistivity to water and oil and a satisfactory fastness to light, and being a valuable dyestuff in printing processes.

1,878,699. MANUFACTURE OF 1-HALOGEN-ARYL-THIAZOLES. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, JOSEF HILGER, Cologne-Mulheim, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 25, 1929, Serial No. 358,156, and in Germany Apr. 30, 1928. 8 Claims. (Cl. 260—44.)

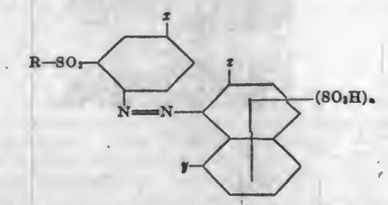
1. The process which comprises reacting upon a compound of the general formula:



wherein R stands for an aromatic nucleus which may be substituted by alkyl, a nitro or carboxylic acid group and *x* stands for an oxygen or sulfur atom with a phosphorus halogen compound of the formula: $P.Hal_5$, wherein "Hal" stands for a chlorine or bromide atom, two of which halogen atoms may be substituted by an atom of the group consisting of oxygen and sulfur, at a temperature between 80 and 130° C.

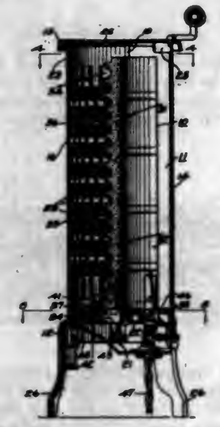
1,878,700. MONOAZODYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1929, Serial No. 348,355, and in Germany Mar. 30, 1928. 4 Claims. (Cl. 260—92.)

1. As new products monoazodyestuffs of the general formula:



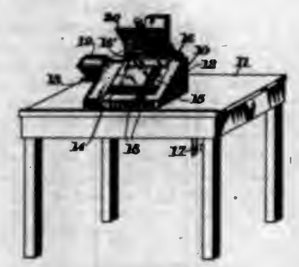
wherein R stands for a benzene nucleus which may be substituted by a substituent of the group consisting of the alkyl-, a sulfonic acid-, hydroxy- and substituted hydroxy group, *x* stands for a substituent of the group consisting of the nitro- and NH_2-group, *y* stands for a substituent of the group consisting of hydrogen and the hydroxyl-group, *z* stands for an amino group which may be substituted by alkyl- groups, *n* stands for one of the numbers one and two, being in the form of their alkali-metal salts metallic lustrous powders, soluble in water, and dyeing wool bluish-red to bluish-green even shades of excellent fastness to fulling and light.

1,878,701. AIR HEATER. WILLIAM WESLEY HICKS, San Francisco, Calif., assignor to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,434. 4 Claims. (Cl. 219—34.)



1. An electrical air heater comprising a housing, said housing having an upstanding perforated front wall curved transversely to conform substantially to a portion of the surface of a cylinder, said housing also including a substantially flat vertical back wall having its side edges retained near the side edges of the front wall, an upstanding refractory core disposed within said housing, the front surface of said core being curved similarly to the front wall of the housing and disposed substantially equidistant therefrom throughout its area, a resistance conductor disposed upon and distributed over said front surface of said core, and top and bottom end walls on said housing having openings therein to facilitate passage of convection currents of air.

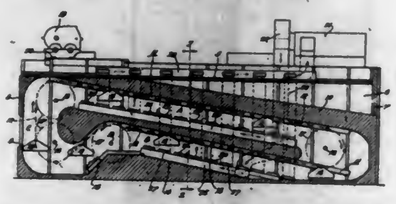
1,878,702. PHOTOGRAPHIC PRINTING MACHINE. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,427. 6 Claims. (Cl. 95—73.)



1. In a photographic printing apparatus, the combination of a printing light, a translucent printing panel above said light, a platen movable to and from a work holding position on said panel, a source of power, means normally disconnected from said source of power adapted to move the platen to and from work holding position, a clutch adapted to operatively connect said platen moving means and source of power, a plurality of keys adapted to be latched in a depressed position, means controlled by the depression of any one of the said keys for operating said clutch to move said platen to work holding position, means for releasing said depressed keys after a

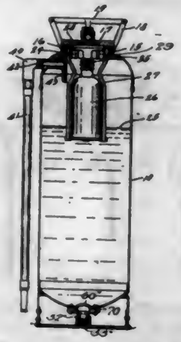
pre-determined interval of time, means controlled by the release of said key for operating said clutch to move said platen from work holding position and means actuated by the movement of said platen for rendering said printing light effective only during the interval said platen is in work holding position.

1,878,703. BAKE OVEN. FRIEDRICH A. HOPPE, Chicago, Ill., assignor to The Petersen Oven Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 20, 1930. Serial No. 496,944. 6 Claims. Cl. 107—57.)



1. A traveler oven comprising a housing consisting of vertical front, rear and side walls and a top wall inclined downwardly from the front to the rear wall, a bottom inclined substantially parallel to said top wall, a transverse partition between said top wall and bottom dividing the space there-between into superposed inclined compartments that are higher at their forward ends than at their rear ends, downwardly and forwardly inclined extensions at the front portions of said bottom and partition providing an inclined continuation leading downwardly from the high portion of the lower compartment, said partition extension terminating back of the front wall to provide an upwardly extending passage connecting the forward portion of the continuation of the lower compartment with the forward high end of the upper compartment, devices for conveying articles to be baked through said compartments, said continuation and said passage, and means for supplying heat to the interior of said housing.

1,878,704. FIRE EXTINGUISHER. ROSCOE C. IDDINGS, Dayton, Ohio, assignor to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 5, 1926. Serial No. 127,335. 8 Claims. (Cl. 169—32.)

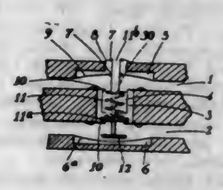


3. A fire extinguishing device of the character described comprising a container adapted to receive a fire extinguishing liquid, an outlet for said container to provide discharge of said liquid, a pressure relieving casing having a rupturable member mounted on said container independent of said outlet for automatically relieving excess pressure produced therein to prevent damage to said device, and a screen associated with said pressure relieving casing, said screen being positioned within said container on the inner side of said pressure relieving casing with reference to said rupturable member to prevent accumulation of impurities within said pressure relieving casing to thereby avoid alteration of the pressure relieving characteristics of said casing.

1,878,705. FIRE EXTINGUISHER CHARGE. ROSCOE C. IDDINGS, Dayton, Ohio, assignor to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Filed June 17, 1929. Serial No. 371,378. 10 Claims. (Cl. 23—10.)

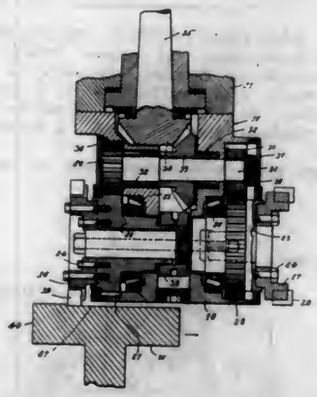
1. In a fire extinguisher charge, a normally separated gas generating portion comprising a gas forming material and a metal.

1,878,706. VALVE. GORDON BUTLER ILES, Broadstairs, England. Filed Sept. 3, 1931, Serial No. 561,052, and in Great Britain Sept. 27, 1930. 6 Claims. (Cl. 84—60.)



3. A four way valve device comprising a four-way casing one way being always open, a valve member made up of two components one component controlling communication between the open way and two of the remaining ways and the second component communicating with the other remaining way.

1,878,707. RIGHT ANGLE MILLING AND BORING ATTACHMENT FOR MILLING MACHINES. JOHN R. JOHNSON, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed June 23, 1927. Serial No. 200,839. 8 Claims. (Cl. 90—16.)



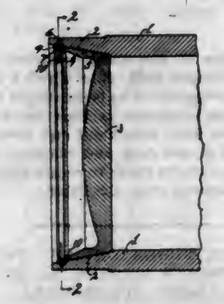
1. In a milling machine having a spindle head containing a driven spindle, an attachment for said head of the character described comprising a housing detachably mounted on said spindle head, a pair of cutter heads for different purposes mounted in the opposite ends of said housing on axes at right angles to the driven spindle, and an intermediate driven shaft disposed parallel with said cutter heads within said housing having separate gearing connections at the opposite ends thereof with said cutter heads to drive the same at suitable speeds, and having a driving connection with said spindle intermediate its ends.

1,878,708. VISUAL LENS. ALFRED E. JONES, Spokane, Wash. Filed Apr. 11, 1929. Serial No. 354,351. 2 Claims. (Cl. 88—54.)



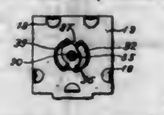
1. A concavo convex lens having a recess ground in the concave side thereof, a colored segment of a different refractive index from the glass of which the lens is formed positioned within said recess, the curved surface between the segment and the recess being sufficient to neutralize any effect produced by the juxtaposition of the two glasses of different refractive indices.

1,878,709. DRUM FOR VAPORS UNDER PRESSURE. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 25, 1928. Serial No. 308,322. 9 Claims. (Cl. 220—3.)



1. A drum and end closure therefor, the two having annular engaging walls with cooperating surfaces, a recess in the drum annulus exteriorly of the closure and having surfaces normal to the axis of the drum, a ring seated in said recess and receiving outward thrust of the closure, and welding uniting the drum, closure and ring in vapor-tight relation.

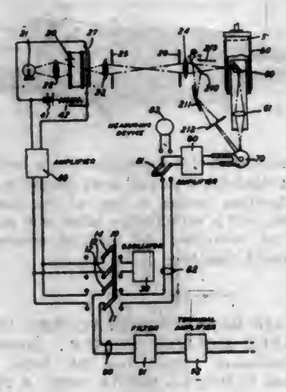
1,878,710. ROLLER WINDOW SCREEN. WILLIAM W. WATSON, Jamestown, N. Y. Filed Sept. 14, 1928. Serial No. 306,051. 6 Claims. (Cl. 156—39.)



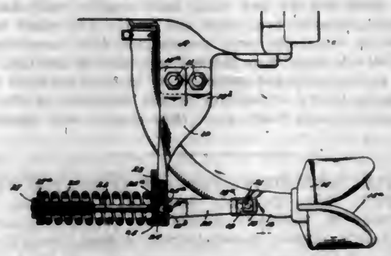
1. In a roller window screen structure, a roll case, a spring roller, spring tensioning means, said means comprising a roller axle, a lock washer secured to said axle, and means in said case engaging said washer whereby to prevent rotation of said axle in but one direction.

1,878,711. ELECTROOPTICAL TRANSMISSION SYSTEM. FREDERICK W. REYNOLDS, Grantwood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Feb. 18, 1927, Serial No. 169,322. Patent No. 1,773,119, dated Aug. 19, 1930. Divided and this application filed July 17, 1930. Serial No. 468,702. 10 Claims. (Cl. 178—7.)

1. In an electro-optical system, a source of steady light, means to intermittently vary a beam from said source, means to further vary said beam in accordance with signals, means to produce a signal modulated carrier current from said beam, and means dependent upon the operation of said intermittent beam varying means to control the amplitude of the component of carrier frequency in said modulated carrier current.



1,878,712. AUTOMATIC TRAIN PIPE COUPLING. JOSEPH ROBINSON, New York, N. Y. Filed Nov. 20, 1920, Serial No. 425,449. Renewed Feb. 2, 1932. 15 Claims. (Cl. 285—58.)

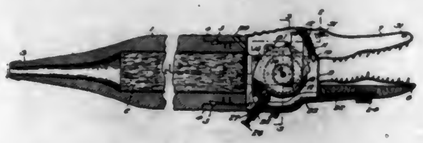


1. In an automatic train pipe coupling, a base having on each side a straight vertical edge extending from the bottom thereof upwardly, a coupling head, a yoke for supporting said head in front of said base, said yoke extending to the rear of said base, and having spaced arms provided with straight surfaces for engaging the straight vertical edges of said base, whereby undue rotation of said yoke and head are prevented, said arms being free to slide vertically relative to said vertical edges of the bracket, to thereby permit free up and down movement of said head, and means for yieldingly holding said yoke against the rear side of said base.

1,878,713. MAGNET CORE. PHILIP NORTON ROSEBY, Liverpool, England, assignor to Automatic Telephone Manufacturing Company Limited, Liverpool, England. Filed Mar. 25, 1931, Serial No. 525,839, and in Great Britain Mar. 31, 1930. 2 Claims. (Cl. 175—21.)

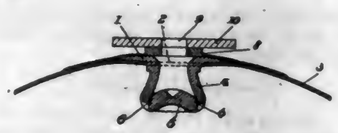
1. The method of making magnet cores which consists in drawing magnetic material into the form of a wire, flattening the wire into the form of a tape, cutting the tape into short lengths, insulating the short flat lengths of material from one another, and consolidating the same into a mass by pressure.

1,878,714. SMOKING DEVICE. ELMER A. SANDLING, Merced, Calif. Filed Feb. 9, 1929. Serial No. 338,797. 8 Claims. (Cl. 131—12.)



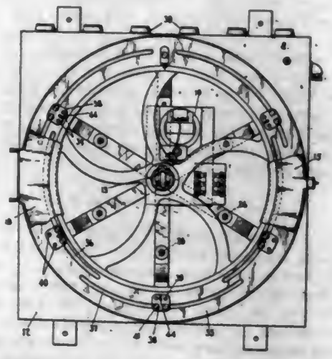
1. In a smoking device for cigarettes, a holder adapted to contain a cigarette a pair of jaws hinged to the holder, pyrophoric igniting means in one of the jaws provided with a pinion, and a rack in the other jaw meshing with the pinion for operating the igniting means when the jaws are pressed together.

1,878,715. AIR VALVE FOR BLADDERS AND OTHER INFLATABLE HOLLOW BODIES. SIEGFRIED SAUL, Aachen, Germany. Filed Jan. 24, 1930, Serial No. 423,244, and in Belgium May 14, 1929. 4 Claims. (Cl. 273—65.)



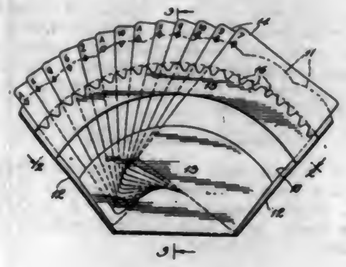
1. An air valve for bladders and other inflatable hollow bodies, comprising a hat-shaped body connected at its open end with the wall of an inflatable body and having an annular wall and an end wall, said annular wall having openings situated near said end wall, said valve being formed by inverting said hat-shaped body inwardly of the inflatable body from the natural exterior position, the lower part of said hat-shaped body in such inverted position being bulged outwardly by the pressure of the end wall against said lower part, thus closing said openings.

1,878,716. REPETITIVE-PROCESS INDICATOR APPARATUS. CARL FREDERIC SCHNUCK, New Haven, and GREGORY W. KUNTNEY, Naugatuck, Conn., assignors of one-half to Farrel-Burmingham Company, Inc., Derby, Conn., a Corporation of Connecticut, and one-half to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 2, 1930. Serial No. 449,340. 4 Claims. (Cl. 200—37.)



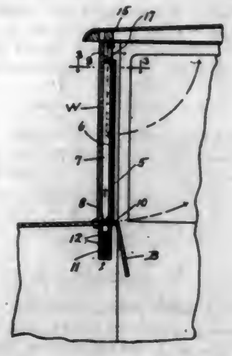
1. In a device of the character set forth: a dial provided with time graduations, a rotatable contact-making brush, a pointer member movable therewith angularly over the said dial, timed means for effecting the rotation of said brush and pointer member, and a plurality of contact bearing elements each angularly adjustable over the entire dial for contact with the said brush and carrying indicia adapted for registry with the time graduations of the dial.

1,878,717. CARD HOLDER. EVELYN SCHWARTZ, New York, N. Y. Filed Dec. 1, 1930. Serial No. 499,133. 5 Claims. (Cl. 273—150.)



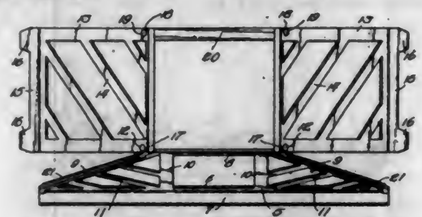
1. A card holder of the class described comprising a substantially fan-shaped body, upon which a predetermined number of cards are adapted to be arranged and supported in such manner as to expose at least one corner of each card, and a narrow band struck out and pressed forwardly from the material of said body and adapted to be arranged upon the front face of the cards to retain the cards against accidental displacement from the holder.

1,878,718. CLEAR VISION DEVICE. PETER J. SCIARRINO, Niagara Falls, N. Y. Filed Jan. 15, 1931. Serial No. 509,008. 2 Claims. (Cl. 20—40.5.)



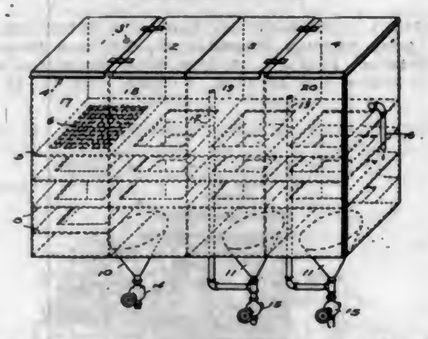
1. In an automobile, in combination, a cowl, an instrument board separated from the cowl by a transversely extending opening, a windshield at one side of said opening, an auxiliary panel paralleling the windshield and disposed at a relatively opposite side of said panel, a frame within which said auxiliary panel is mounted, said frame having apertured top and bottom members and having said bottom member disposed over said opening, a casing mounted behind the instrument board and having an open side alined with said opening, and a coil of tubing arranged in said casing and having inlet and outlet ends passing through a wall of the casing.

1,878,719. FIREPLACE CONSTRUCTION. ERIC A. SCOTT, Chicago, and GILBERT P. FLEETWOOD, Joliet, Ill. Filed June 30, 1930. Serial No. 465,028. 3 Claims. (Cl. 72—94.)



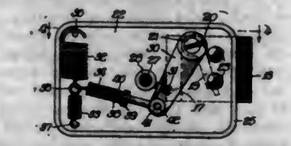
1. A frame or support of the character set forth, having end sections with outwardly projecting lugs at the lower ends thereof, a front section with tapered ends for receiving the end sections, means for pivotally securing the front and end sections together at the top and a bar for securing the rear portions of the end sections together.

1,878,720. APPARATUS FOR TREATING GASOLINE. JOSEPH SENDELBACH and ROY T. PALMER, McAlester, Okla. Filed Nov. 25, 1927. Serial No. 235,580. 1 Claim. (Cl. 210—43.)



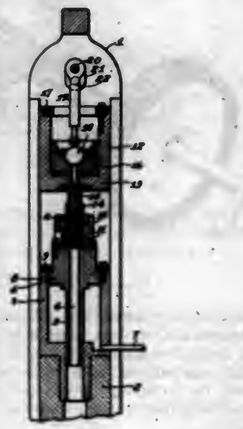
An apparatus for cleaning gasoline comprising a plurality of serially arranged tanks, filtering means in said tanks, an inlet leading to the first tank, an outlet leading from the last tank and disposed below the level of said inlet, receptacles disposed beneath said tanks for receiving chemical cleansing material, the first and second of said tanks having communication through the top portion of one of said receptacles arranged common to both so as to allow common settling therefrom to its bottom portion, a communication pipe leading from the second tank from above the filtering means therein to the bottom of the receptacle on the third tank, and communication means between the other tanks of the series.

1,878,721. GOVERNOR. ARTHUR SINGER, Chicago, Ill., assignor, by mesne assignments, to Chicago Governor & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1931. Serial No. 530,609. 6 Claims. (Cl. 137—152.)



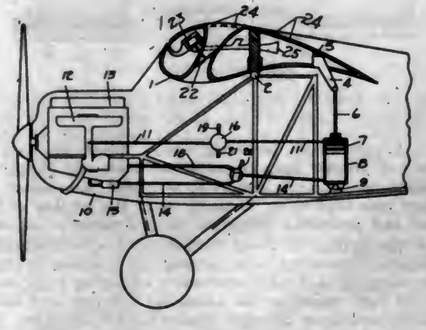
1. In a governor for use with internal combustion engines, a body having a vaporized-fuel passage, a suction-operated valve in the passage, and a plurality of consecutively yieldable springs pivotally connected with each other for holding the valve open.

1,878,722. METHOD OF EXTRUSION. FRITZ SINGER, Nuremberg, Germany. Original application filed Sept. 29, 1930, Serial No. 485,278, and in Germany Apr. 2, 1928. Divided and this application filed Aug. 29, 1931. Serial No. 560,124. 1 Claim. (Cl. 207—10.)



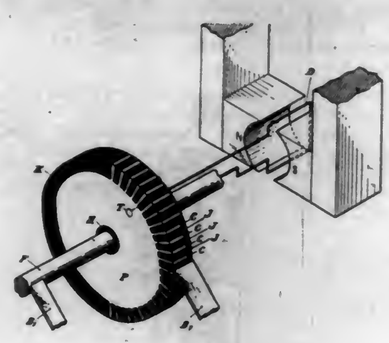
The method of extruding tubes from hot billets of metal which includes placing a hot billet in a container and imparting extruding pressure thereto by means of a reciprocating member to which is imparted a cycle of movement in the first part of which the speed increases gradually from zero to a maximum and in a second part of which the speed decreases gradually from the maximum to zero, and initiating the extrusion during the first part of said cycle and subsequent to the beginning thereof and concluding the extrusion during the second part of said cycle.

1,878,723. AIRPLANE CONSTRUCTION. EDWARD A. STALKER, Ann Arbor, Mich. Filed Nov. 29, 1929. Serial No. 410,520. 7 Claims. (Cl. 244—12.)



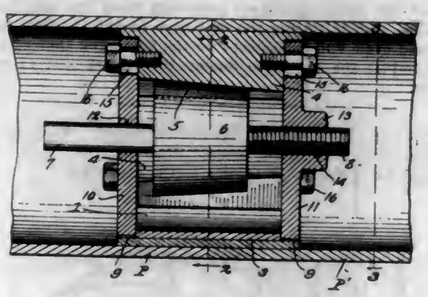
1. In an aircraft a means of varying the inclination of the wings relative to the fuselage by means of fluid pressure from the power plant, said means operating automatically when the power output of the motor falls below a predetermined value.

1,878,724. GENERATING AND MODULATING APPARATUS. WALTER A. STEVENS, North Plainfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 25, 1930. Serial No. 463,703. 4 Claims. (Cl. 171—209.)



1. Apparatus for producing modulated signaling currents comprising a two-pole generator of alternating current, and rotatable means coupled to said generator for suppressing one-half of each cycle of said alternating current and for interrupting the remaining half of each cycle a predetermined number of times.

1,878,725. EXPANSIBLE PIPE HOLDER. FRED STOVALL, Monroe, La. Filed May 25, 1931. Serial No. 539,960. 2 Claims. (Cl. 113—103.)



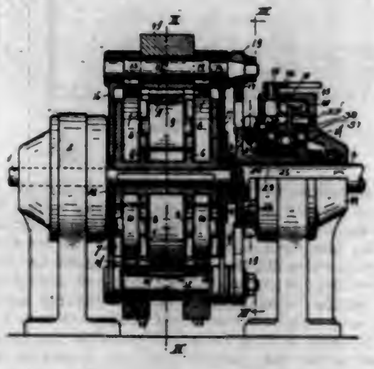
1. A pipe holder including spaced heads, an annular series of arcuate jaws between the heads and supported thereby for unrestrained relative radial movement, inclined ribs converging inwardly from the centers of the jaws and providing segmental spaces between the ribs, said ribs having relatively narrow faces, a longitudinally adjustable spreading core between the ribs and frictionally engaging said faces, oppositely extending axial stems on the core engaging the heads for rotation and longitudinal movement and for supporting the spreader, one of the stems being in screw-threaded engagement with one of the heads to feed the core longitudinally along the bearing faces to expand or collapse the holder, the meeting edges of the jaws being rabbeted and in lapped relation, thereby to maintain a substantially tight connection between the jaws when in all working positions.

1,878,726. LIFT TRUCK. WILLIAM STUEBING, Jr., Cincinnati, Ohio. Filed Apr. 21, 1928, Serial No. 271,784. Renewed June 12, 1931. 10 Claims. (Cl. 254—10.)



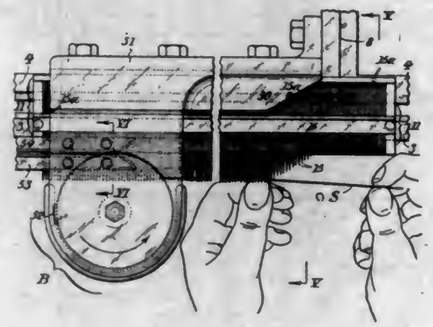
1. In a lifting truck, in combination, a main frame, an elevating frame pivotally mounted thereon for upward and rearward movement with respect thereto, a steering head mounted on said main frame, a steering tongue pivotally mounted on said steering head, a bell crank pivotally mounted on said elevating frame, a hook pivoted to one arm of said bell crank and adapted to engage said steering tongue, and a link pivotally connected to the other arm of said bell crank and pivotally connected to said main frame.

1,878,727. CENTRIFUGAL VARIABLE SPEED GEAR. LUCIEN CHARLES STURBELLE, Stockel, near Brussels, Belgium. Filed Apr. 15, 1929, Serial No. 355,011, and in Belgium Apr. 16, 1928. 2 Claims. (Cl. 74—14.)



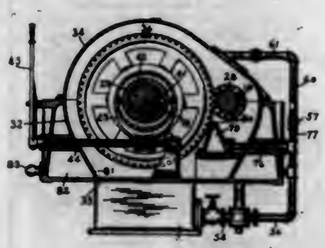
1. In a centrifugal variable speed gear in combination a driving shaft, a driven shaft, centrifugal elements, connected to be actuated by said driving shaft, a crank shaft connected to said centrifugal elements and adapted to be oscillated under the action of the centrifugal elements, a gear rotatably mounted on the end of the said driven shaft, means for transmitting the oscillations of the crank shaft to the gear, another gear rotatably mounted on the driven shaft, idler pinions connecting said gears together, flanges on said gears forming rings surrounding the driven shaft, said drive shaft being polygonal in cross section throughout the portion surrounded by the flanges on said gears, balls arranged between the said polygonal part and the said flanges, cages in which the balls are mounted, means for displacing the ball cages to lock the gears against relative rotation with respect to the driven shaft in the desired direction of rotation of the driven shaft.

1,878,728. STOCKING TOPPING MACHINE. ABRAHAM WARREN SWARTZ, Norristown, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1930. Serial No. 496,643. 20 Claims. (Cl. 66—148.)



1. In an automatic stocking topping machine, means with points to receive a stocking leg blank; and rotary means for pushing the fabric loops of the stocking blank progressively back incident to impalement on the points.

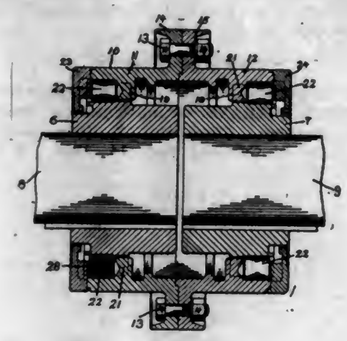
1,878,729. CHANGE SPEED GEARING FOR ROLLING MILLS AND THE LIKE. WILLIAM E. SYKES, Buffalo, N. Y. Filed June 7, 1927. Serial No. 197,101. 4 Claims. (Cl. 184—6.)



1. In a driving unit comprising a gear housing having shafts mounted in bearings in the ends thereof, and meshing gears mounted on said shafts, a main lubricant reservoir, means to convey oil from the lower part of said housing to said reservoir, means cooperating with a part of the housing to form an auxiliary reservoir within the housing, a pump adapted to pump the oil from the main reservoir to said bearings and to the auxiliary reservoir and create oil pressure therein, a nozzle mounted at the upper portion of said auxiliary reservoir in proximity to the meshing teeth of said gears and directing a spray of oil thereon, said auxiliary reservoir being of large capacity relatively to that of the nozzle.

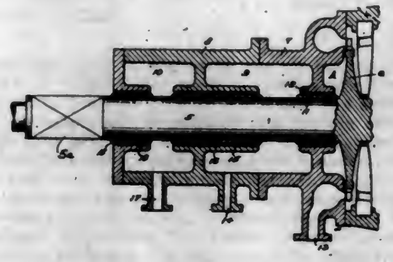
1,878,730. FLEXIBLE COUPLING. WILLIAM E. SYKES, Buffalo, N. Y. Filed Dec. 19, 1927. Serial No. 241,103. 5 Claims. (Cl. 64—26.)

1. A resilient driving element for a flexible coupling, said element being substantially barrel-shaped, provided with an axially directed bore of relatively small diameter as compared to the external diameter of the element, and



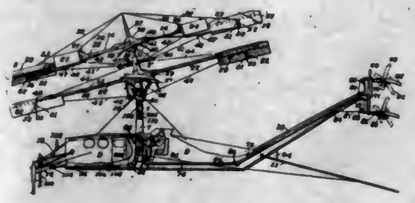
a generally axially directed slit extending into the bore and from end to end of the element, said slot being substantially parallel to the axis of the element.

1,878,731. METHOD OF AND MEANS FOR SEALING THE SHAFT PACKINGS OF TURBINES. PAUL WHEELER THOMPSON, Detroit, Mich. Filed Aug. 28, 1930. Serial No. 478,441. 7 Claims. (Cl. 286—9.)



1. The herein described method of sealing a turbine shaft packing and protecting the shaft bearing from heat which consists of maintaining a body of fluid about a rapidly rotating turbine shaft at a point outwardly of said packing and between the working chamber of the turbine and said shaft bearing, said fluid being at a higher pressure and a lower temperature than the motive fluid of the turbine.

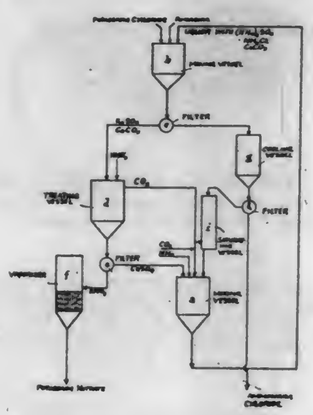
1,878,732. SPIN-O-PLANE. WILLIAM CALHOUN THOMPSON, Seattle, Wash. Filed Jan. 4, 1928. Serial No. 244,449. 24 Claims. (Cl. 244—19.)



8. The combination in a flying machine, of an upper series of revolving wings, engines for driving said series mounted to revolve in the plane thereof at a distance

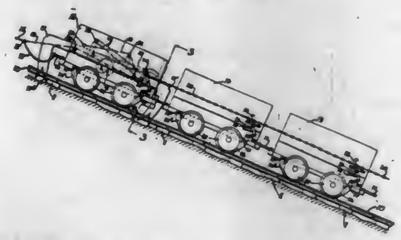
from its revolving axis, a lower series of revolving wings mounted in axial alignment with said upper series adapted to revolve oppositely to the latter during ascent and flight, and means to cause both of said series to revolve in the same direction during descent.

1,878,733. PROCESS FOR THE PRODUCTION OF POTASSIUM NITRATE. CARL THEODOR THORSELL, Kassel, Germany. Filed Aug. 7, 1930, Serial No. 473,777, and in Germany Aug. 14, 1929. 2 Claims. (Cl. 23—102.)



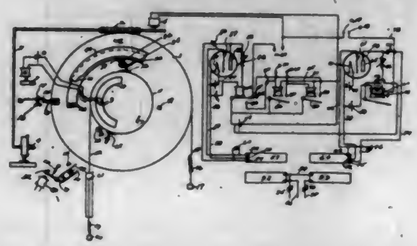
1. A process for the production of potassium nitrate, consisting in stirring a liquor consisting of ammonium carbonate and ammonium chloride, obtained in the process, with gypsum, also obtained in the process, treating the resulting liquor with calcium carbonate, treating the mixture obtained with potassium chloride and ammonia, separating off the resulting mixture of solid potassium sulphate and calcium carbonate, treating the same with nitric acid, thus obtaining gypsum and a solution of potassium nitrate, cooling the ammoniacal ammonium chloride liquor remaining after the separation of the said potassium sulphate and calcium carbonate mixture in order to remove a part of the ammonium chloride, treating the said liquor with carbonic acid for forming ammonium carbonate, and stirring the gypsum containing potassium sulphate obtained in the preparation of potassium nitrate into the solution of ammonium carbonate and ammonium chloride formed, and finally separating the potassium nitrate from the mother liquor.

1,878,734. BRAKE SYSTEM. LOUIS ULRICH, Dominion, Nova Scotia, Canada. Filed Feb. 7, 1931. Serial No. 514,089. 1 Claim. (Cl. 188—127.)



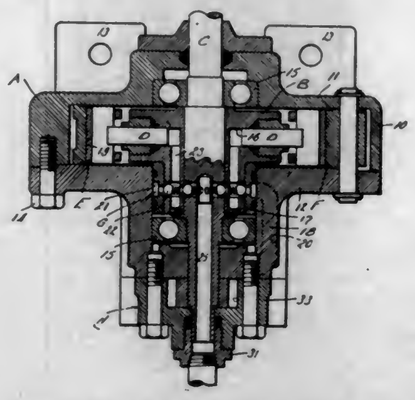
In a brake system for a train of cars adapted to be moved up and down an incline with a haulage cable, a brake control car in said train, a brake mechanism on said brake control car, brakes for the wheels of the other cars of said train, said mechanism on said brake car comprising a brake hook pivotally mounted on said brake car and normally held in raised position, means connecting said hook and said haulage cable adapted upon the severance of said cable to release said hook to drop by gravity and to engage the trackway to interpose frictional resistance to said train, and connections between said brake hook and the brakes on said other cars for actuating the brakes upon the release of said brake hook.

1,878,735. TRAIN CONTROL. THOMAS W. VARLEY and WILLIAM C. NEIN, New York, N. Y. Filed Jan. 19, 1928. Serial No. 247,792. 9 Claims. (Cl. 246—63.)



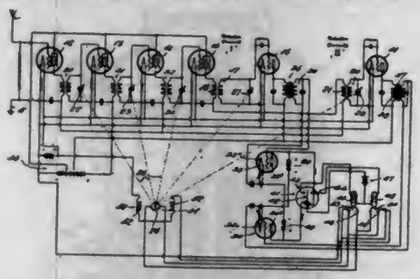
1. The combination with a vehicle adapted to travel along a right of way, of means on said vehicle for affecting the progress thereof, means biased by the progress of said vehicle to affect the aforesaid means, means including a thermionic vacuum tube becoming an oscillator under suitable circuit conditions for controlling said biased means, and an instrument on said right of way and connections on said vehicle adapted to control the character of said tube and thereby control said biased means.

1,878,736. HIGH SPEED PUMP. HARRY F. VICKERS, Los Angeles, Calif. Filed Feb. 25, 1929. Serial No. 342,603. 1 Claim. (Cl. 103—5.)



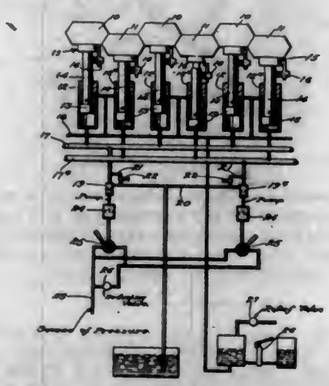
In a pump, a casing, a shaft extending into the casing, a block on the shaft within the casing and having a plurality of radial cylinders, an eccentric ring surrounding the block, pistons in the cylinders operable through engagement with the ring, valve means in the block and shaft for controlling the admission and discharge of fluid to and from the inner ends of the cylinders, a housing at an end of the casing surrounding the shaft, and a pump in the housing operable by the shaft to supply fluid under pressure to the valve means through a port in the casing.

1,878,737. RADIO BEACON SYSTEM. MARCEL WALLACE, St. George, N. Y., assignor of one-third to Edward L. Corbett, Bronx County, N. Y. Filed May 6, 1930. Serial No. 450,175. 20 Claims. (Cl. 250—11.)



1. In a system of aircraft navigation, a multiplicity of directively transmitted radiating paths of energy having progressively different signalling characteristics for marking a navigable course, means on an aircraft for receiving the energy radiated on said paths, a receiving apparatus carried by the aircraft and connected with said means, a circuit included therein for receiving signaling energy from a plurality of said radiating paths and separate circuits connected to said aforesaid circuit and selectively responsive to the progressively different signaling characteristics of the transmitted energy for tuning said apparatus to the peak signal receivable on the aircraft from said radiating paths for indicating the position of the aircraft with respect to characteristics of the energy received from said paths.

1,878,738. JACK MECHANISM. ARTHUR W. WARNER, Media, and ROSCOE F. BALLARD, Chester, Pa., assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa., a Corporation of New Jersey. Original application filed June 16, 1930, Serial No. 468,888. Divided and this application filed Apr. 11, 1931. Serial No. 529,516. 15 Claims. (Cl. 61—85.)



1. A jack for tunneling machines comprising a cylinder, a piston therein, a ram connected with the piston, an extensible head carried by the ram, a spring for extending said head, and means for retaining the head in retracted position.

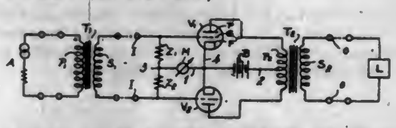
1,878,739. PUMP. JULIUS R. WELK, Churchbridge, Saskatchewan, Canada. Filed Apr. 8, 1930, Serial No. 442,600, and in Canada Dec. 12, 1929. 6 Claims. (Cl. 103—178.)

1. The combination with a pump cylinder, a pump plunger operating therein and a removable cap closing the upper end of the cylinder, of a water discharge pipe axially aligned with the cylinder and having the lower end thereof terminating at some distance above the cylinder cap, an upstanding water outlet pipe having the lower end thereof permanently secured to the cap and opening to the interior of the cylinder, an upper cylinder communicating with the water discharge pipe and freely receiving



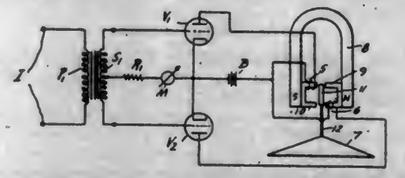
the water outlet pipe, a packed pipe head mounted on the upper end of the water outlet pipe and slidably received in the upper cylinder and a pump rod extending downwardly through the water discharge and outlet pipes and cap and detachably connected adjacent its lower end to the pump plunger.

1,878,740. PUSH-PULL AMPLIFIER. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed July 16, 1929, Serial No. 378,630, and in Canada June 26, 1930. 82 Claims. (Cl. 179—171.)



1. An electric wave repeating apparatus comprising divided input and divided output sections with a pair of electron discharge devices each including a control electrode connected in opposition therebetween, and high impedance means associated with said input section adapted to cause a signal wave applied between said control electrodes to be repeated at each instant in substantial entirety by the said device which receives a negative potential therefrom.

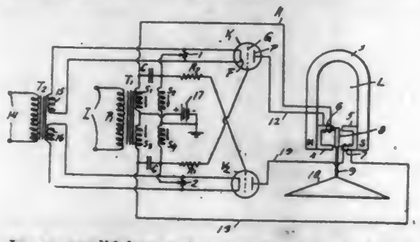
1,878,741. PUSH-PULL AMPLIFIER. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Aug. 17, 1929, Serial No. 386,543, and in Great Britain July 8, 1930. 12 Claims. (Cl. 179—171.)



1. A low-frequency amplifier for providing a high degree of substantially distortionless amplification in the absence of a negative biasing potential in the control cir-

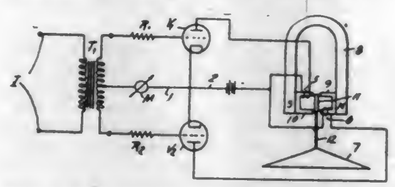
cuits of said amplifier, comprising divided input and divided output sections having connected in opposition therebetween a pair of vacuum tubes each including cathode and grid electrodes, and means interposed between said cathodes and said input section for rendering each tube substantially inactive while its grid is made positive by electric waves in said input section, whereby said waves are repeated by the tube having its grid negatively charged by said waves.

1,878,742. THERMIONIC AMPLIFIER. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Aug. 17, 1929, Serial No. 386,544, and in England July 8, 1930. 22 Claims. (Cl. 179—171.)



1. In an amplifying system for electric waves, a pair of thermionic valves each including an input section, means connecting said input sections in parallel to a pair of input terminals but in a reversed sense relatively, said means comprising high impedance elements connected between said terminals and said input sections adapted to cause signal waves present in said input sections to be impressed in substantial entirety upon the valve which momentarily receives a negative potential therefrom, whereby said latter valve alone repeats the signal.

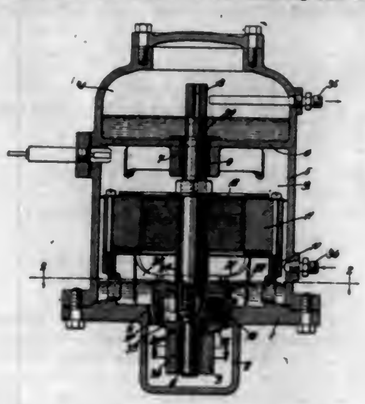
1,878,743. PUSH-PULL AMPLIFIER. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,545. 17 Claims. (Cl. 179—171.)



1. Electric wave repeating apparatus comprising divided input and divided output circuits with a pair of vacuum tubes connected in opposition therebetween, each of said tubes having a grid and a cathode, said grids being at the same potential as said cathodes in the absence of signaling waves in said input circuit, high resistance means interposed between said grids and said input circuit for rendering one tube unresponsive to positive portions and the other tube unresponsive to negative portions of electric waves in said input circuit.

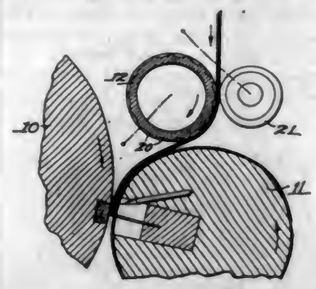
1,878,744. COMPRESSOR OR PUMP. EDWARD WILSON, St. Louis, Mo. Filed June 8, 1929. Serial No. 369,338. 4 Claims. (Cl. 230—207.)

2. A compressor or pump comprising a housing containing a body of oil, a lower end wall for said housing having a passage therethrough, a bearing supported below said lower end wall, a wall forming an enclosure around said bearing, a cylinder rotatively supported by said lower end wall and said bearing, a compression device cooperating with said cylinder, a partition dividing the inside of said housing into an upper compartment for containing a body of oil and receiving the compressed fluid and a lower compartment, a shaft journalled in said bearing and extending



into said upper compartment and having a passage for conducting compressed fluid from said cylinder to said upper compartment, and mechanism mounted in said lower compartment for rotating said shaft.

1,878,745. FOLDING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Mar. 22, 1928, Serial No. 263,909. Divided and this application filed Oct. 2, 1930. Serial No. 485,911. 5 Claims. (Cl. 270—86.)



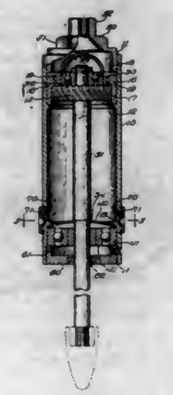
1. In a folding machine, the combination of a cylinder in position to engage the web and having an area near the end fluted, and a roll bearing only against said fluted area for forcing the longitudinal fold in the web against the fluted edges and flattening the fold.

1,878,746. DEVICE FOR WIRING HONEYCOMB FRAMES. AUGUST E. WOLKOW, Hartford, Wis. Filed Apr. 9, 1931. Serial No. 528,765. 13 Claims. (Cl. 140—93.)



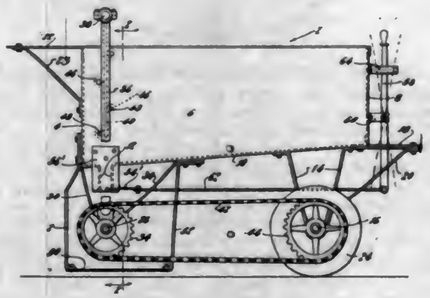
1. A device of the character described including a base, a movable platform mounted thereon, spaced guide tubes carried by the platform, channel guides carried by the base and aligned with the tubes, wires movable through said tubes and means for imparting longitudinal movement to said wires.

1,878,747. ROTARY POWER DRIVEN TOOL. HENRY J. YOUNGBLOOD, Detroit, Mich. Filed Mar. 11, 1929. Serial No. 346,169. 5 Claims. (Cl. 253—3.)



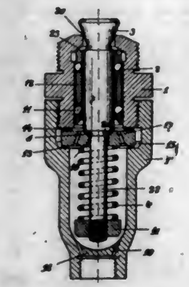
5. A fluid driven turbine having an inlet port for the fluid, a plurality of outlet ports therefor to permit the escape of the fluid after passing through the turbine, a guard element associated therewith for controlling the escape of the fluid from the outlet ports having projections which engage said ports for positioning said guard and an opening which uncovers at least one of said ports for permitting the escape of the fluid therefrom.

1,878,748. APPARATUS FOR DISTRIBUTING MATERIAL. THOMAS ZACCHEO, Windsor Locks, Conn. Filed July 7, 1930. Serial No. 466,158. 3 Claims. (Cl. 275—2.)



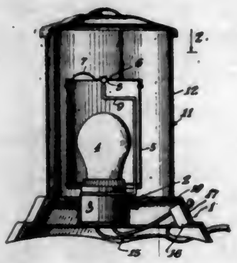
1. An apparatus for distributing material comprising in combination, a tank body having forward, side, rear and bottom walls, the said bottom wall being provided with a transverse slot adjacent said forward wall, wheels for supporting said body located adjacent said rear wall, a rotatable shaft below and parallel with said slot provided with a distributer formed by alternate longitudinal grooves and ridges, offset cranks at opposite ends of said shaft, a vertically disposed agitator extending between the side walls of the body guided for up and down movements by rolls on the inner faces of said side walls, connecting rods between said cranks and the upper side edges of said agitator, sprockets on opposite ends of said shaft and adjacent said supporting wheels connected by driving chains whereby the shaft is actuated by rotative movements of said wheel.

1,878,749. VALVE. ALEXANDER ABRAMSON, Prague, Czechoslovakia. Filed Nov. 6, 1930, Serial No. 493,890, and in Czechoslovakia Dec. 3, 1929. 1 Claim. (Cl. 299—107.6.)



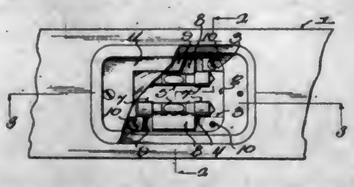
A periodic fuel injecting valve having a valve body, a narrow valve seating thereon and a conical valve, the widening part of which stands away free from the outer edge of the valve seat, a guiding bolt on the valve, rolling members in the sleeve of the valve body for guiding the bolt and a cage bearing these rolling members and slidably arranged in the said sleeve.

1,878,750. DISPLAY DEVICE. WILLIAM A. ADAMS, Brooklyn, N. Y. Filed Aug. 18, 1931. Serial No. 556,782. 2 Claims. (Cl. 40—40.)



1. The combination with a lamp of a transparent, hollow cylinder surrounding said lamp, said cylinder being rotatably supported and bearing pictorial representations, means carried by said cylinder responsive to heat waves from the lamp for rotating said cylinder, and a translucent shade outside said cylinder to expose the projected pictorial representations from the cylinder, said shade being angled in its cross-section, to present a polygonal shape, having concavo-convex sides, for the purpose of creating the effect of modified form and motion to the representations projected thereon.

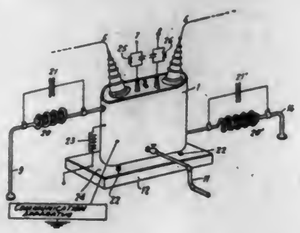
1,878,751. SPIRIT LEVEL. JOSEPH AXT and PAUL AXT, Milwaukee, Wis. Filed Mar. 5, 1931. Serial No. 520,243. 4 Claims. (Cl. 33—213.)



2. A spirit level comprising a body member provided with a transverse opening and a web disposed in said opening, a clip comprising a seat, parallel sides projecting from

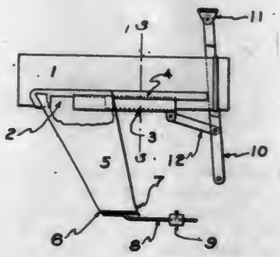
said seat for engagement with said web, fingers projecting from said seat, a spirit glass positioned on said seat and engaged by said fingers, and means for binding the sides of said clip to the sides of said web.

1,878,752. ELECTRIC SIGNALING. LUCIEN BEGIN, Paris, France, assignor of one-half to William B. Weaver, Birmingham, Ala., and Harold F. Wilhelm, New York, N. Y. Filed May 11, 1926, Serial No. 108,245, and in France May 30, 1925. 5 Claims. (Cl. 177—352.)



2. In combination, a tank, a conduit carrying a conducting fluid connecting said tank and ground, and means for making the impedance between said tank and ground high, whereby a high alternating current potential may be maintained between said tank and ground with substantially no current leakage.

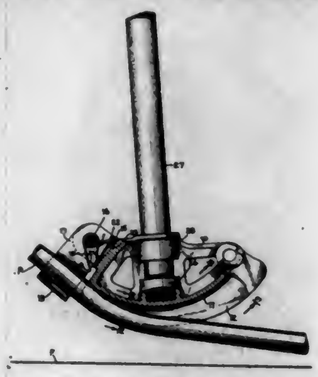
1,878,753. REFUSE SEPARATOR. JOHN H. BROWN, Haskell, Okla. Filed Nov. 22, 1930. Serial No. 497,361. 2 Claims. (Cl. 19—76.)



1. In a device for separating refuse from seed cotton, a suction pipe for conveying the cotton, said pipe having an opening in its under side and guideways at opposite sides of said opening, a refuse collecting hopper depending from said pipe and communicating with the latter through said opening, a valve plate for controlling the passage of refuse through said opening slidably engaged in said guideways, and means for adjusting said valve plate, said guideways being hook-shaped in section, said valve plate having outwardly and downwardly turned side marginal portions engaged in said guideways.

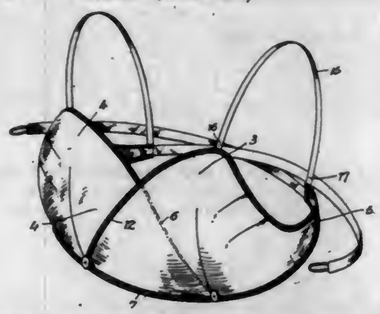
1,878,754. PIPE BENDER. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 1, 1930. Serial No. 485,594. 13 Claims. (Cl. 81—15.)

1. A pipe bender having an arcuate form substantially of the radius of the bend to be formed and along which arcuate form a pipe is bent, side walls for the arcuate form providing an arcuate groove, the side walls of the groove being arcuate throughout the length of the groove and increasing in height from one end to the other resulting in a groove of increasing depth, pipe securing



means at the end of the arcuate groove having the minimum depth, and a handle to exert bending force upon the pipe to be bent.

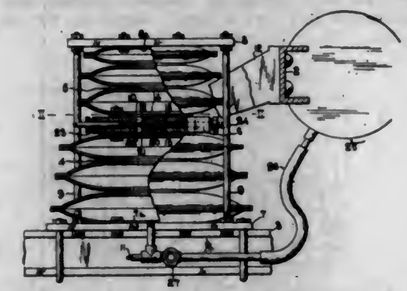
1,878,755. BATHING BRASSIÈRE. EARL S. CALDOR, New York, N. Y. Filed June 21, 1930. Serial No. 462,885. 1 Claim. (Cl. 2—42.)



A bathing brassière comprising warmth giving members having triangular breast covering portions and having elongated parts extending from the rear corners of the breast covering portions to cover those parts of the body immediately in rear of the breasts, a body encircling portion formed of a tape strip and elastic members connected at the respective ends thereof, the breast covering portions and their elongated parts being secured to and extending upwardly from the tape strip, the breast covering portions having their front corners arranged in overlapping relation to provide a pocket, the lower edges of said front corners being secured to the tape strip and the diagonal edge of the inner front corner being secured to the outer front corner to close the pocket, the diagonal edge of the outer front corner being free of connection with the inner front corner to provide an entrance for the pocket, tape strips secured to the upper edges of the breast covering portions and their elongated parts, means for securing the elastic members detachably to the said first tape strip, and shoulder straps secured to the upper corners of the breast covering portions and to the rear ends of the elongated parts of said portions.

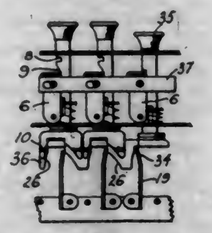
1,878,756. PNEUMATIC SPRING SUITABLE FOR VEHICLES. CHARLES WILLIAM CALDWELL, Johannesburg, Transvaal, Union of South Africa. Filed July 12, 1928. Serial No. 292,130. 8 Claims. (Cl. 267—65.)

1. A spring device suitable for vehicle suspension comprising an intermediate plate, two pneumatic springs arranged at opposite sides of said plate, said plate being perforated to put the springs in throttled communication with one another, the outer ends of the springs being rigidly connected to one another, the intermediate plate



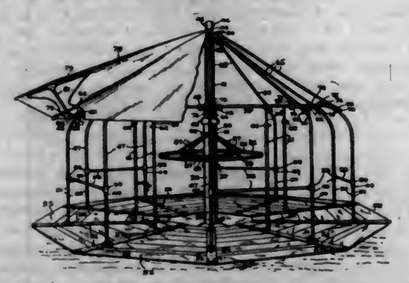
and the outer end assembly forming the mechanical ends of the spring, one of said springs offering a greater resistance than the other and forming the weight sustaining member of the combination.

1,878,757. DECIMAL EQUIVALENT SELECTOR MECHANISM. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,187. 3 Claims. (Cl. 235—82.)



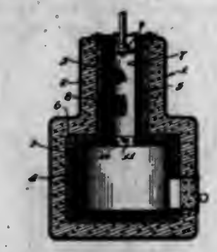
1. In a key-set calculating machine having a series of decimal numeral wheels, and carry mechanism connecting all said wheels; selector mechanism adapted to set up direct key values and decimal equivalent values in a plurality of denominational orders, comprising differentially settable elements cooperating with said numeral wheels, decimal keys controlling said elements in given ordinal places, and fractional keys controlling said elements in the same ordinal places.

1,878,758. MERRY-GO-ROUND. HERBERT D. CLAYTON, Hill City, Kans. Filed Jan. 12, 1931. Serial No. 508,141. 8 Claims. (Cl. 272—33.).



1. A merry-go-round, comprising a fixed post, a shaft projecting into the upper end of the post, means for supporting the shaft in the post, adjusting means between the shaft and the post for vertically aligning the shaft independently of the post, a rotary structure carried by the shaft, a platform surrounding the post and suspended from said structure, and propelling means mounted on the post and projecting outwardly over the platform.

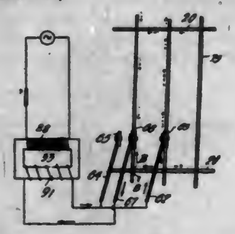
1,878,759. METHOD AND APPARATUS FOR FREEZING LIQUIDS. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Aug. 18, 1930. Serial No. 475,944. 12 Claims. (Cl. 62—172.)



1. The method of forming small particles of ice which comprises maintaining a wall at temperatures below freezing, applying the liquid to be frozen in a relatively thin film whereby it will congeal on the surface or surfaces of said wall and then distorting said wall in the direction of its length to remove the frozen particles of ice.

7. A sharp freezing unit for forming small particles of ice comprising a cooling unit, a wall of distortable material positioned adjacent the surface or surfaces of said cooling unit, means for depositing the liquid to be frozen on the surfaces of said wall and means for distorting said wall in the direction of its length to automatically dislodge the ice therefrom in small particles.

1,878,760. METHOD OF AND APPARATUS FOR USE IN THE MANUFACTURE OF METALLIC MESHING, NETTING, AND LIKE FABRIC. CLAUDE COSGROVE, Middle Park, and ALBERT EDWARD CHADWICK, Norford Grove, Kooyong, Australia, assignors to Hume Steel Limited, Melbourne, Australia. Filed Dec. 13, 1928, Serial No. 325,765, and in Australia Dec. 19, 1927. 3 Claims. (Cl. 219—4.)



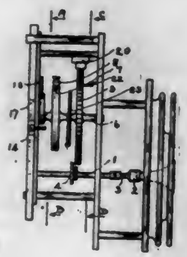
1. A method of welding rods in the manufacture of metallic mesh, consisting in successively moving the junctions between the rods to a welding position and in passing a preheating current through the said junctions as same are approaching the said welding position.

1,878,761. PROCESS OF COATING METALLIC SURFACES FOR PREVENTION OF CORROSION. JOHN DAVIES, Waterloo, Liverpool, England. Filed May 11, 1931, Serial No. 536,675, and in Great Britain June 23, 1930. 4 Claims. (Cl. 91—68.)

1. A process of protecting a metallic surface against corrosion by salt water, steam, molasses, vegetable and mineral oils, spirits or solvents, in which the surface is

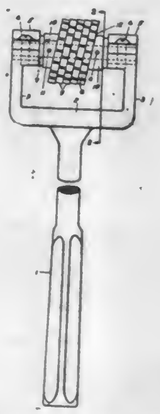
first coated with a composition containing a high percentage of free lime and a binder and this primary coating after drying is treated with a silicon ester medium in liquid form, said lime interacting with said silicon ester to form a silicate of lime.

1,878,762. AUTOMATIC TELEPHONE CALL BOX. PETER GYSBERT THOMAS DE VILLIERS, Pretoria, Transvaal, Union of South Africa, assignor of one-half to Messrs. Rogers-Jenkins & Co. (Pty.) Ltd., Durban, Natal, Union of South Africa, a Company registered in the Union of South Africa. Filed Feb. 21, 1930, Serial No. 430,240, and in Union of South Africa Oct. 4, 1929. 4 Claims. (Cl. 179—6.3.)



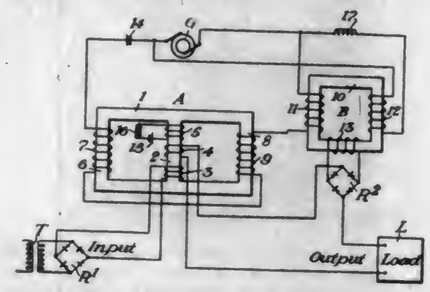
1. An automatic telephone call box of the type having a casing and operated by a standard automatic impulse dial on a shaft, a main spindle coupled to said dial shaft, a secondary spindle on said casing carrying a fixed ratchet wheel and a spring detent cooperating therewith, a pawl on the main spindle for operating said ratchet wheel, a cam fixed on said secondary spindle for operating transmitted contacts, a second cam on said secondary spindle, a bar magnet pivoted to said casing and resting in engagement with said second cam.

1,878,763. GRINDING WHEEL DRESSER. HUNTER H. DOVELL, ROBERT S. MCCONNELL and HENRY HENZ, Urbana, Ohio, assignors to George McConnell, doing business as The Desmond-Stephan Mfg. Co., Urbana, Ohio. Filed Mar. 19, 1931. Serial No. 523,676. 7 Claims. (Cl. 125—37.)



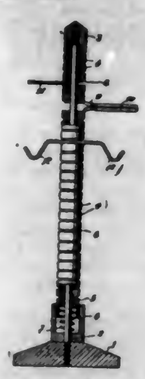
1. In a grinding wheel dresser, a frame having a pair of arms and a supporting leg on each arm, a shaft in the frame, and a plurality of diagonally disposed toothed contacting thick cutting discs on the shaft.

1,878,764. ELECTRICAL TRANSLATING APPARATUS. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed June 20, 1928, Serial No. 286,984. Divided and this application filed July 9, 1929. Serial No. 377,020. 6 Claims. (Cl. 171—119.)



3. In combination, a transformer having a primary and a secondary, an iron core reactor comprising two magnetic circuits having a common member, two windings one on each said circuit and connected in series with said primary and a source of periodic current, means for at times varying the flux in said common member, means responsive to current in said secondary for also varying the flux in said common member, and a load receiving energy from said secondary.

1,878,765. STAND FOR THE DISPLAY OF GOODS. JOHANN EHRLICH, Vienna, Austria. Filed Sept. 22, 1930, Serial No. 483,695, and in Austria Oct. 3, 1929. 4 Claims. (Cl. 211—154.)

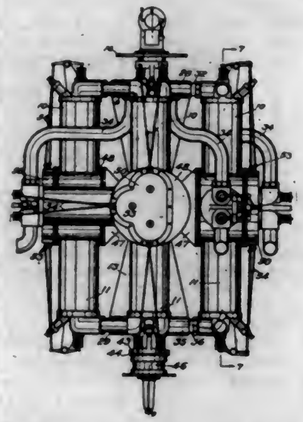


1. A display stand comprising a base, a rod supported by said base, a fixed cap upon the upper end of said rod, a plurality of clamping rings slidably mounted upon said rod between said cap and said base, resilient means cooperating with said base urging said clamping rings against said cap and detachable display supporting elements supported between adjacent clamping rings.

1,878,766. SUPPOSITORY FOR TREATING VAGINAL CONDITIONS. GILBERT F. FITZGERALD, Milwaukee, Wis. Filed Nov. 26, 1928. Serial No. 322,085. 3 Claims. (Cl. 167—64.)

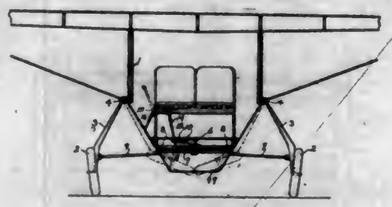
2. A suppository of the character described comprising a solid homogeneous mass of dry comminuted uniformly mixed ingredients, including silver protein, a granulated effervescent agent comprising sodium bicarbonate, and citric acid, whereby the suppository becomes effervescent immediately upon exposure to moisture.

1,878,767. INTERNAL COMBUSTION ENGINE. PHILIP FREUND, Farmingdale, N. Y., assignor of one-half to Richard William Faughnan, Farmingdale, Long Island, N. Y. Filed Nov. 8, 1929. Serial No. 405,683. 2 Claims. (Cl. 123—43.)



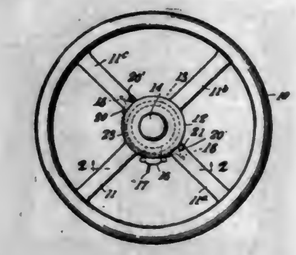
1. In an internal combustion engine, a rotating frame, cylinders carried by said frame, a stationary frame and stationary shaft forming the support for said rotating frame, pistons operating in said cylinders, and having connecting rods extending therefrom, a plurality of crank shafts journalled in said rotating frame, and operated respectively by groups of said connecting rods, a stationary gear fixedly mounted on said stationary shaft and an opposing loosely mounted gear, pinions fixedly mounted on said crank shafts and driven thereby and travelling on said stationary gear and engaging said loose gear, said cylinders arranged in pairs horizontal and parallel with the said stationary shaft, said cylinders having separate combustion chambers, and common crank cases, and valve gear operated by the rotation of said cylinders around said stationary cams.

1,878,768. AIRPLANE. HUGH W. GABBERT, Norwood, Ohio. Filed Jan. 15, 1931. Serial No. 508,880. 2 Claims. (Cl. 244—2.)



1. In a device of the class described, a triangular wheel carrying frame pivotally mounted to the machine frame, a wheel pivotally mounted on the frame at the lower vertex and means for swinging said wheel carrying frame on its pivots and locking the same in both its extreme positions comprising a hand lever provided with a locking latch to lock the lever in either of its two positions, a stiff rigid link connecting the hand lever to the free end of a crank arm integral with a vertically extending rock shaft having its bearing in the machine body, a second integral crank arm on said rock shaft connected by a stiff rigid link to the lower vertex of the wheel carrying frame, a pocket in the lower side of the machine body, said parts being so connected and arranged that locking the hand lever in one position will hold the wheel in said pocket and locking the hand lever in its other position will hold the wheel in its out position with the last named crank arm on the rock shaft in a straight line with its connected link.

1,878,769. STEERING WHEEL SWITCH CLIP. RAPHAEL C. GALLINANT, Ridgefield Park, N. J. Filed Feb. 8, 1932. Serial No. 592,148. 6 Claims. (Cl. 200—59.)



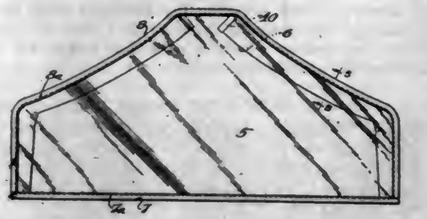
1. A pair of opposed switch actuating clips having hooks at their outer ends to engage spaced supports, and a resilient connection between said clips to tensionally retain them on the supports.

1,878,770. SOUND-BOX FOR SOUND-REPRODUCING MACHINES. RUDOLF GOLDSCHMIDT, Berlin-Charlottenburg, Germany. Filed Jan. 14, 1932, Serial No. 586,661, and in Germany Jan. 13, 1931. 13 Claims. (Cl. 274—35.)



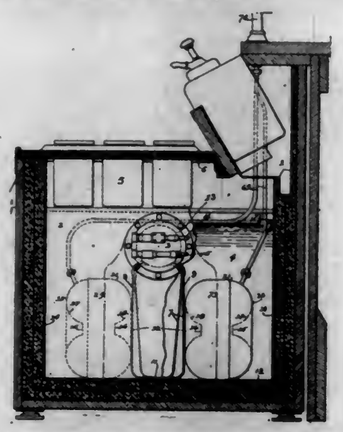
1. In a sound-box for sound-reproducing machines of the type where the record-grooves are utilized for feeding the sound-box across the record, a mechanically displaceable element, a yielding stylus-bar connected therewith and a push-weight connected with said mechanically displaceable element and pivotally connected with the stylus-bar.

1,878,771. GARMENT PROTECTOR. SAMUEL J. GOLDSMITH, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 493,126. 2 Claims. (Cl. 223—61.)



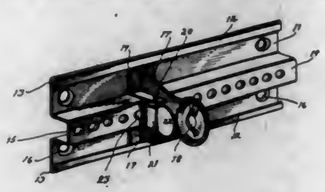
1. A garment protector of the hood type comprising similar front and back sheets formed with arched top edges and substantially vertical side edges, and a spacing strip connecting the top and side edges of said sheets and following the contour of such edges, the spacing strip having a transverse accordion formation and being interrupted at top for the passage of a coat hanger hook.

1,878,772. REFRIGERATION SYSTEM. JOHN P. GREEN, Philadelphia, Pa. Filed Oct. 4, 1928. Serial No. 310,289. 8 Claims. (Cl. 62—141.)



1. Apparatus of the character described comprising refrigerating means adapted to form ice within a predetermined region, and means comprising a wide beverage passage having a longitudinal portion thereof extending into said freezing region, the width of said passage being of such dimension that the beverage may be frozen to a predetermined extent only transversely of said passage, whereby another longitudinal portion of said passage remains unobstructed, the walls of said passage constituting heat-conducting fins for transferring heat from the beverage.

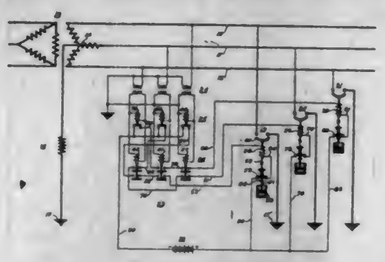
1,878,773. WINDOW SHADE BRACKET. THOMAS GRIFFITHS, Jersey City, N. J. Filed May 13, 1931. Serial No. 537,091. 2 Claims. (Cl. 156—24.)



2. In a shade support, an elongated base having a central longitudinal channel member U-shaped in cross section, the bight portion of which is disposed beyond the plane of the edge portions of the base to form a shade stop, said channel member being formed with openings, and a bracket flatly engaging the sides and bight portion of said channel member, and a latch pivoted to said bracket and having means to extend through said openings to secure the bracket in place.

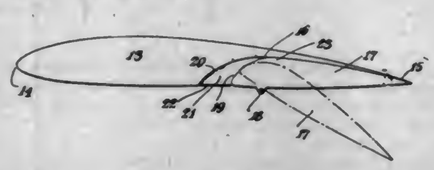
1,878,774. TRANSMISSION-LINE PROTECTIVE SYSTEM. SAMUEL B. GRISCOM, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1931. Serial No. 524,809. 6 Claims. (Cl. 175—294.)

1. A system for extinguishing arcs on alternating-current transmission lines, comprising, in combination with the several line conductors, means for establishing an electrical neutral among the conductors, an inductive circuit for connecting said neutral to the ground, an electrical connection from each line conductor to ground, a normally open switch disposed in each of said connections, and means for closing each of said switches in response to an occurrence of a ground fault on the conductor respectively associated therewith, said inductive circuit being so dimensioned electrically as to substan-



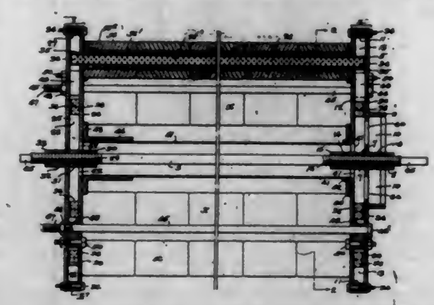
tially neutralize, when a ground fault occurs, the capacity current to ground of the ungrounded system conductors.

1,878,775. AIRFOIL. PAUL J. HENRY, Long Island City, N. Y. Filed Dec. 31, 1930. Serial No. 505,680. 2 Claims. (Cl. 244—12.)



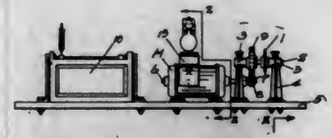
1. A supporting airfoil having a recess in its under surface, the top of said recess being contoured like the upper surface of an airfoil, and a pivotal airfoil member located at the rearward half of said supporting airfoil and normally lying snugly within said recess, against the top thereof, the nose of said pivotal airfoil being opposed to the forward wall of the recess over an intervening space, and the pivot being distanced rearwardly from said nose whereby the upper surface of said pivotal airfoil recedes from said recess to form a passage as said pivotal airfoil is swung downwardly to increase the camber of the airfoil.

1,878,776. BEAM FOR SUPPORTING YARN PACKAGES. LAFAYETTE HOLT, Burlington, N. C. Filed Oct. 29, 1929. Serial No. 403,278. 13 Claims. (Cl. 8—19.)



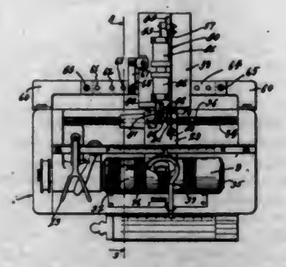
1. In an apparatus for simultaneously processing a plurality of independent yarn packages, each of which comprises a perforated hollow core member on which a quantity of yarn is wound, the combination of a pair of laterally spaced hollow heads, a carrier extending between and into the hollow portions of said heads at its opposite ends, said carrier having a plurality of said yarn packages thereon in end to end abutting contact relation to each other and provided with fluid passages permitting a flow of fluid from said hollow heads into the said perforated core members, and an imperforate duct connecting the hollow portions of said heads.

1,878,777. ELECTRIC OPERATING MECHANISM. WILBERT G. HORN, Pilot Rock, Oreg. Filed Jan. 20, 1930. Serial No. 421,977. 4 Claims. (Cl. 200—99.)



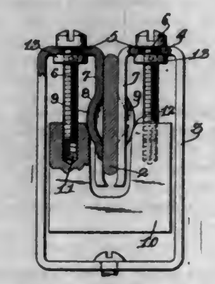
1. In an electro-magnet switch reversing mechanism, opposed sets of contact heads and each set forming terminals of a circuit, movable sets of connectors adapted to engage and close a circuit through their companion contact heads, spaced electro-magnets, an oscillatory connector supporting armature disposed between said electro-magnets to be shifted by either magnet when energized to engage a set of connectors with its companion set of contact heads to close a circuit, means yieldingly urging said armature toward a neutral position between said magnets, a movable switch locking armature abreast of the exterior of each electro-magnet and adapted to be attracted thereby when one of said electro-magnets is energized and each locking armature having a locking arm and said arms being adapted for opposing engagement with said supporting armature to lock the latter in a non-circuit closing position, a floating spring connected with said locking armatures and normally holding the latter retracted from said electro-magnets and engaging said locking arms against opposite sides of said supporting armature to lock the latter in a neutral and non-circuit closing position between said electro-magnets, and said spring yielding when one of said magnets is energized to shift its locking armature thereagainst and cause its locking arm to release said supporting armature for movement against the energized magnet, and said spring holding the remaining locking armature retracted and stops limiting retracting movement of said locking armatures under the action of said spring.

1,878,778. AUTOMATIC ANSWERING AND RECORDING TELEPHONE DEVICE. HARRIET E. HUNTINGTON, Los Angeles, and WILLIAM A. BOOZ, Whittier, Calif. Filed Mar. 3, 1930. Serial No. 432,681. 7 Claims. (Cl. 179—6.)



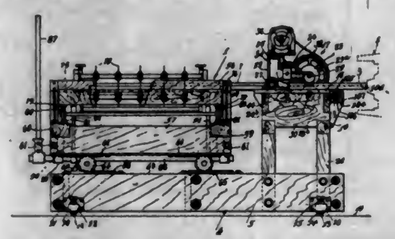
1. In an automatic answering and recording telephone device including a telephone circuit, the combination of a rotatable record carrier having a plurality of sound recordings thereon alternately spaced with sound receptive areas, a movable carriage provided with a sound box and a recording stylus and a reproducing stylus, driving means for rotating said record carrier and simultaneously moving said carriage to effect reproducing and recording movement between said record carrier and said styluses, means actuated by the telephone signal for closing the telephone circuit and energizing said driving means, and means for moving said styluses alternately into operation with said record carrier in timed relation with the movement of said carriage with respect to said record carrier and in timed relation to the reproducible recordings thereon.

1,878,779. FUSE CLIP. OSCAR H. JUNG and PAUL E. HEFFELFINGER, Milwaukee, Wis.; said Heffelfinger assignor to said Jung. Filed Aug. 16, 1930. Serial No. 475,802. 4 Claims. (Cl. 200—134.)



1. A fuse clip including opposed yieldable engaging members, an adjustable yoke adapted to embrace said yieldable members, and means carried by the clip for imparting movement to said yoke for urging said engaging members toward each other.

1,878,780. METHOD AND APPARATUS FOR PRODUCING TILE. RUFUS B. KEELER, South Gate, and RAE WARREN PHILLIPS, Los Angeles, Calif. Filed Jan. 28, 1931. Serial No. 511,760. 4 Claims. (Cl. 25—105.)

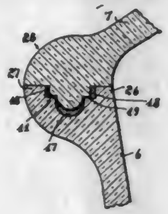


2. A machine for producing predetermined shapes from a continuously feeding ribbon of plastic material comprising a table across which said ribbon of material is fed, cutters on said table for longitudinally cutting said ribbon into one or more strips as it is feed across said table, bridging means between said carriage and said table for supporting said ribbon during movement of said carriage, a carriage movable in the direction of movement of said ribbon for receiving said strips, lateral cutters on said carriage means for moving said lateral cutters laterally with respect to said carriage for cutting said strips into short sections while said ribbon is moving longitudinally.

1,878,781. BURIAL VAULT. ALFRED N. KETTNER, Inglewood, Calif. Filed Mar. 15, 1929. Serial No. 347,275. 2 Claims. (Cl. 27—17.)

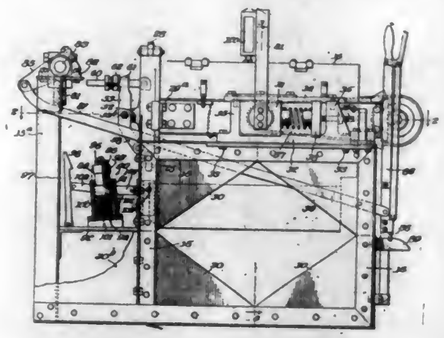
1. A vault made in upper and lower sections, the lower section having a recessed edge, and the upper section having a bead-like projection along the underside of the

contacting main edge surface, the recess in the lower section-edge forming substantial upright sides opposite one another and a rounded portion along the center spaced from the sides and forming substantially horizontal shoulders thereby, and the said bead-like projection in the contacting edge-surface of the upper section embodying a larger portion with substantial upright sides



and a rounded narrower portion along the center and below the larger portion thereby forming also substantially horizontal shoulders, there being substantially larger spaces between the upright sides and the rounded portions of the upper and lower sections when the said main contacting surfaces and shoulders approach one another.

1,878,782. APPARATUS FOR PUFFING STARCH-CONTAINING MATERIALS. OSCAR C. KIRN, Chicago, Ill., assignor to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 13, 1926. Serial No. 128,917. 50 Claims. (Cl. 99—2.)



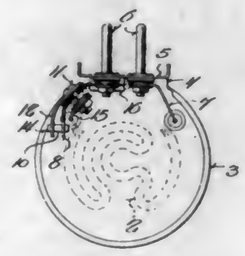
1. The method of puffing or expanding grain products which comprises heating said grains to a high pressure and then automatically reducing the pressure thereupon when the same attains a predetermined value.

3. In an apparatus of the class described, means for subjecting grain to a high pressure, and means responsive to a predetermined pressure for automatically reducing said pressure to cause an expansion of the grain.

1,878,783. CELLULOSIC MATERIALS AND PROCESS OF MAKING SAME. ALBERT LANDOLT, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 31, 1929, Serial No. 389,860, and in Switzerland Sept. 8, 1928. 5 Claims. (Cl. 8—20.)

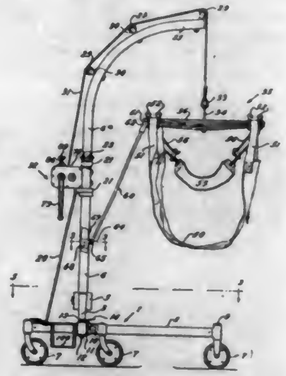
1. As a new process the immunization of vegetable textile fibers by esterification, consisting in heating such cellulose fibers, which have not been converted into alkali cellulose in the presence of a tertiary amine, and in the absence of solvents which dissolve the esters formed, and of catalysts, with a group of derivatives from organic carboxylic acids consisting of the anhydrides and halides of such acids, the process being carried out in the absence of water.

1,878,784. ELECTRICAL HEATING ELEMENT FOR UTENSILS. ALANTSER F. LARSEN, Manitowoc, Wis., assignor to Aluminum Goods Mfg. Co., Manitowoc, Wis. Filed June 5, 1929. Serial No. 368,575. 1 Claim. (Cl. 200—142.)



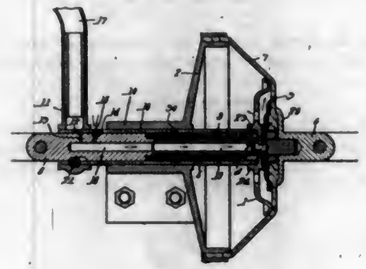
In an electrical heating element, a fusible switch comprising a resilient current conducting arm, a bolt carried by said arm and insulated therefrom, a second arm carried by the bolt and spaced from the first arm, said arms being provided with slots adjacent corresponding ends, means normally urging the slotted ends of said arms apart, a fusible link engaged in the slotted ends to connect said arms, and enlarged ends on said fusible link engaging the outer faces of the arms normally restraining said arms against the tension exerted thereon.

1,878,785. INVALID LIFTER. BYRON C. LEAVITT, Duxbury, Mass. Filed May 15, 1930. Serial No. 452,662. 2 Claims. (Cl. 5—86.)



1. An invalid lifter and conveyor comprising a running gear, invalid supporting means, an upright swivelly connected to the running gear to swing about a substantially vertical axis and having an overhanging portion, a movable cable having an end portion depending from said portion and connected to said means, and mechanism mounted on the upright and connected to the cable to vary the length of the depending cable end portion and the height of said supporting means, said supporting means including a transverse member and a body carrying element depending therefrom, the upright having a tubular portion with a vertical slot, means slidable in said tubular portion and a brace connected to said slidable means and guided by the slot, said brace being connected to the supporting means to prevent swinging of the same about the depending cable portion.

1,878,786. POWER BRAKE. NATHANIEL LOMBARD, Worcester, Mass. Filed Feb. 9, 1929, Serial No. 338,855. Renewed Sept. 24, 1931. 10 Claims. (Cl. 188—152.)



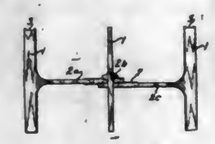
1. In a brake applying device, the combination of a casing and a flexible diaphragm connected therewith and forming an enclosed space with one side thereof, of means for connecting said space at will with an internal combustion engine intake manifold, a valve sleeve having a flange in position to be actuated by the diaphragm when said space is under reduced pressure, said casing having a perforated hub in which said sleeve fits and slides, and a compound link fitting and sliding in said sleeve, operatively connected thereto, and constituting an extensible mechanical connection.

1,878,787. BOILER STAND. LAWRENCE W. LUFF, Shaker Heights, Ohio, assignor to The Consolidated Iron-Steel Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 23, 1929. Serial No. 409,304. 1 Claim. (Cl. 248—41.)



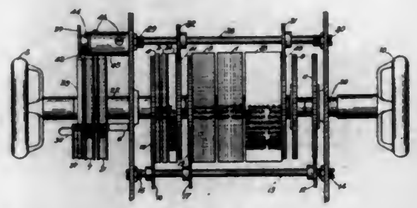
In a boiler stand of the class described, a plurality of similar support parts, each having a vertical leg member and an arm member integral therewith located in a horizontal plane, and a central bracket part, said bracket part having a plurality of radially arranged ways each adapted to receive an overlapping end portion of one of said arm members to position the corresponding support part in angularity with the other support parts about the bracket part, the ways of the bracket part having transverse horizontal serrations thereon, the arm members having transverse horizontal serrations meshed with those of the bracket part, and vertical clamp bolts in aligned perforations of the ways and arm members whereby the bolts may prevent relative rotation of the arm members and bracket part in vertical planes and the serrations may prevent relative rotation in horizontal planes and whereby the bracket part and arm members may be rigidly associated in predetermined angular and also predetermined radially spaced relation.

1,878,788. BOILER STAND. LAWRENCE W. LUFF, Shaker Heights, Ohio, assignor to The Consolidated Iron-Steel Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 23, 1929. Serial No. 409,305. 2 Claims. (Cl. 248—41.)



1. An adjustable boiler stand comprising, in boiler-supporting position, a plurality of circumferentially spaced vertical leg members and a corresponding plurality of arms members each extending radially inwards from its leg member, the adjacent ends of said arm members being arranged in parallel stacked relation, each arm member having a plurality of through openings spaced therealong, and a central securing member extending through a corresponding opening of each arm member to maintain the parts in the described relation, said securing member being adapted to extend through any corresponding set of said openings, one in each arm member, to adjust the leg members in radial relation one arm having corrugations on a lower portion thereof, another arm having corrugations on an upper portion thereof and a third arm having corrugations on both upper and lower portions thereof, the corrugations of one arm meshed with those of another to maintain said arms in predetermined angular relation against rotation in either direction at all radial adjustments.

1,878,789. CHECK WRITER. WEBSTER HENRY LULAND, Newark, N. J., assignor to Defiance Manufacturing Corporation, a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,540. 2 Claims. (Cl. 101—95.)

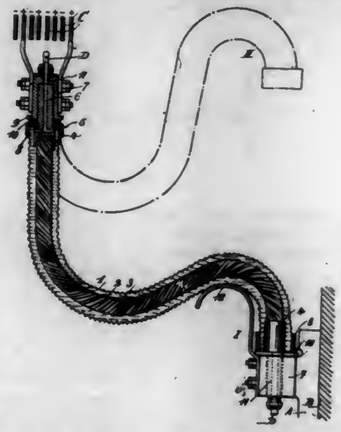


1. In a check-writer or the like, having a plurality of type carriers and means including an automatically located hand wheel adapted to be grasped in the hollow of the hand and operable to set one of said type carriers selectively to bring different type to printing position; selective setting devices for another of said type carriers, including a thumb lever located adjacent said hand wheel, and within reach of the thumb of the hand upon said wheel.

1,878,790. ELECTRIC FLEXIBLE CONDUCTOR. EINAR LUND, Notre-Dame de Briancon, France, assignor to Societe des Electrodes de la Savoie, Paris, France, a Corporation of France. Filed Dec. 8, 1928, Serial No. 324,616, and in France Dec. 17, 1927. 4 Claims. (Cl. 178—13.)

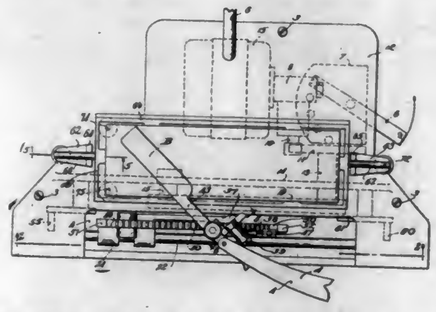
1. A fire-proof flexible electric conductor of the type described, comprising a flexible electric cable, a flexible metallic tube surrounding said cable, a fitting tightly fitted to one end of said cable, a packing member interconnecting said fitting and said tube, an aperture in said fitting for injecting water into the space between said tube

and said cable, a fitting mounted on the other end of said cable, a packing member interconnecting said fitting and said tube, and an aperture in said last mentioned



fitting adapted to pass the water in said space into an element to which said conductor is connected for cooling purposes.

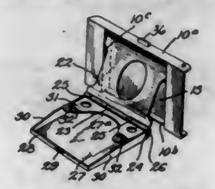
1,878,791. ABRADING APPARATUS. SEBASTIANO MAGNANO, Lawrence, Mass., assignor to Magnano Corporation, Lawrence, Mass., a Corporation of Massachusetts. Filed Aug. 3, 1928. Serial No. 297,832. 11 Claims. (Cl. 51—159.)



5. Apparatus of the class described comprising a hone carrier, a hone mounted therein a reciprocal carriage and means for actuating it, an oscillatory arm mounted on the carriage, a slidable rack bar mounted on the carriage, said bar having a notch near each end, gearing connecting the rack bar and the arm, a latch adjacent to each end of the path of travel of the carriage, said latches being arranged respectively to engage the notches at the adjacent ends of the rack bar and to hold the bar stationary as the carriage completes its stroke in either direction, whereby the arm is oscillated by the relative movement of the carriage and bar, and means operable by the carriage actuating means for releasing the latch from the notch as the carriage starts on its reverse stroke.

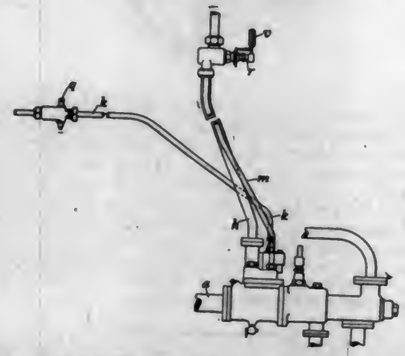
1,878,792. BUCKLE. DAVIS MARINSKY, New York, N. Y. Filed Sept. 4, 1930. Serial No. 479,681. 9 Claims. (Cl. 224—26.)

1. A buckle of the class described comprising a casing, a chamber formed in said casing and opening through one side wall thereof, a closure member for said chamber, and means for coupling said closure member with the casing to permit the movement of the entire structure thereof relatively to said casing in opening and closing said chamber, said means comprising a coupling element



pivotally supported within the chamber of said casing and to the free end of which the closure member is pivoted.

1,878,793. STEAM INJECTOR. RICHARD DAVID METCALFE and JAMES CROXON METCALFE, Romiley, England. Filed Jan. 28, 1931, Serial No. 511,834, and in France Nov. 5, 1930. 8 Claims. (Cl. 103—265.)



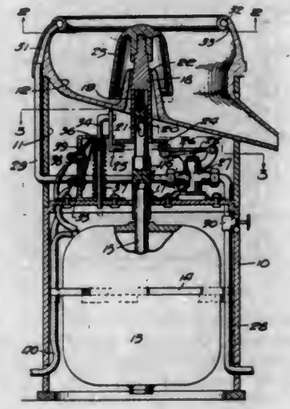
1. In an exhaust or low pressure steam injector having an automatic valve opened by steam pressure for allowing of the passage of the exhaust or low pressure steam into the injector, the arrangement of a delay valve for retarding the rate of flow of live steam to the injector control fitting so as to delay the production of full steam pressure in such fitting, such valve allowing the free unretarded return flow of steam from the injector control fitting when the live steam supply is cut off.

1,878,794. CHRISTMAS ORNAMENT. CHARLES H. MILLER, Hollidays Cove, W. Va. Filed June 29, 1931. Serial No. 547,769. 6 Claims. (Cl. 41—10.)



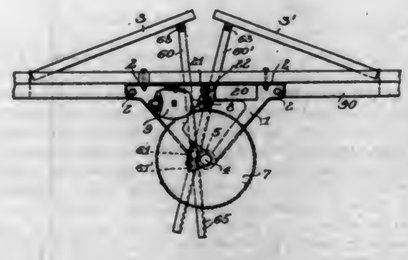
1. An ornament of the character described comprising a base, said base being provided with an opening therein, a ball provided with a shank, a crepe paper covering for the base, adhesive for the shank so that when the shank is pushed through the crepe paper to project into the opening of the base, the adhesive will contact with the crepe paper.

1,878,795. JUICE EXTRACTOR. JEROME R. MINSKY and ROY BURNHAM, Lake Village, Ark. Filed July 23, 1931. Serial No. 552,759. 2 Claims. (Cl. 146—8.)



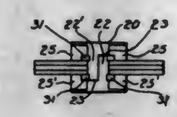
1. A juice extractor, including a rotatable and depressible extractor head having a spring support and a flanged stem, a bowl in which said head rotates having a fluid channel with openings into the bowl, fluid supply means leading to said channel, including a control valve having a control arm below and in the path of movement of said stem flange, a motor for rotating said head having current supply connections, including spring engaging contact members, and a spring actuated slide active to normally separate said contacts and having a portion thereof below the stem flange and in the path thereof for shifting said slide to inactive position upon depression of said head.

1,878,796. AUTOMATIC DOOR. FRANK L. MORSE and ROBERT V. MORSE, Ithaca, N. Y. Filed Dec. 22, 1927. Serial No. 241,835. 5 Claims. (Cl. 268—63.)



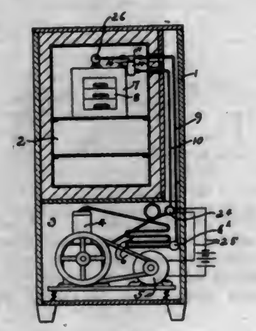
1. In a door operating mechanism, the combination of an electric motor, means for controlling said motor, a reduction gearing driven by said motor, a plurality of doors, a vertical drive shaft driven by said reduction gearing, a pair of actuating rods operatively connected to the doors at points more than half way out from the sides of the doorway, gear teeth attached to the vertical drive shaft, guides adapted to retain the actuating rods in mesh with said gear teeth, the rods being arranged so that when the doors are closed the rods will cross each other as viewed from above and the greater part of their length will overhang in a direction away from the doors.

1,878,797. LINK BELT. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Oct. 10, 1930. Serial No. 487,796. 5 Claims. (Cl. 74—64.)



1. In a link belt for power transmission, the combination of an external metallic casing of the V type having metallic side walls for friction driving surfaces and extensions of said side walls bent over across the top of the V and butting against each other to resist compressive stresses, interspersed tension links, and joints located within the casings connecting the casings and tension links.

1,878,798. REFRIGERATING MECHANISM. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., Detroit, Mich. Filed Mar. 21, 1929. Serial No. 348,834. 10 Claims. (Cl. 62—8.)

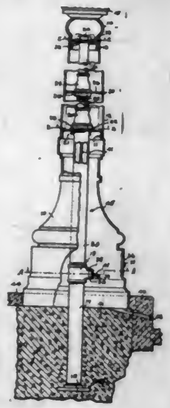


1. A refrigerant control valve comprising a body formed with a refrigerant passage, a stem reciprocatory in said body to control said passage, a head carried by said stem and spaced from said body, an expansible container engaging said head at one end thereof for actuating the stem, an abutment carried by said body for the other end of said container, a housing surrounding the container carried by said body and formed with a refrigerant inlet and outlet, an expansible container connecting said head with said body, the body being formed with an opening from said passage to the last named container.

1,878,799. METAL LAMP POST. JUSTUS F. NE PAGE, Seattle, Wash., assignor to Ne Page McKenny Co., Seattle, Wash., a Corporation of Washington. Filed Aug. 20, 1928. Serial No. 300,758. 5 Claims. (Cl. 189—23.)

1. In a sectionalized metal lighting standard, adapted to resist lateral displacement, a base section having a top head with an axial aperture, a foundation for said

standard, an axial tubular stiffening element of high bending strength secured in said foundation and engaging said head and protruding from said aperture and



means on the protruding end of said element for tensioning the same to removably anchor said base to said foundation.

1,878,800. ELECTROMAGNETIC DEVICE. HERBERT F. OBERGFELL, River Forest, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 14, 1931. Serial No. 580,895. 5 Claims. (Cl. 175—21.)

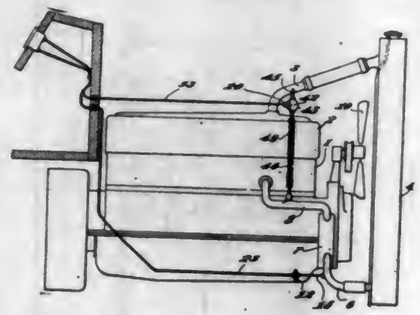


1. In an electromagnetic device, a laminated core, a combination spool head and terminal block moulded on each end of said core, each end of the core having a portion extending at an angle therefrom in the block for securely holding said blocks in spaced relationship on said core.

1,878,801. LIQUID INDICATOR. LEE PERKINS, Belmont, Mass. Filed June 11, 1929. Serial No. 369,994. 5 Claims. (Cl. 265—44.)

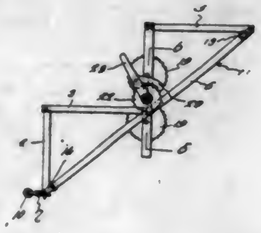
1. Apparatus of the class described comprising a pair of relatively movable indicating elements, a liquid container, a factor responsive to liquid head connected with the lower part of the container, a duct providing a liquid column and having both ends connected to the container, cooling means associated with the duct, a second factor responsive to liquid head and connected to the duct above the first factor, gas-containing ducts connected respectively to each of said factors, control means responsive to the respective gas pressures in said ducts, connections between said indicators and the control means, the indicators being movable in response to the control means to show the density of the liquid between said factors.

4. In combination a coolant circuit including a cooling jacket, a pump, a radiator and connecting ducts, a factor responsive to liquid head connected to the lower part of the circuit, a second factor responsive to liquid head connected to the circuit substantially above the first factor but somewhat below the upper part of the circuit, a gauge comprising a pair of relatively moving parts, and a fixed part with indicia thereon, actuating means between one of said moving parts and one of the factors operable to cause that part to move in response to changes in liquid head above that factor, similar actuating means between the other moving part and other factor, the position of one of said moving parts being changeable in response to a change in the liquid head in the part



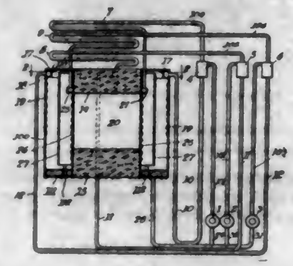
of the circuit above the upper factor, the other of said moving parts having its position changeable in response to variations in the liquid head above the other factor, so that the relative position of the parts thus automatically indicates the specific gravity of the liquid in the circuit, while the relative position of said indicia and said moving part whose position changes in response to pressure upon the upper factor, indicates the liquid level above the upper factor.

1,878,802. SCAFFOLD SUPPORT. JAMES R. ADAMS, Atlanta, Ga. Filed Mar. 13, 1931. Serial No. 522,362. 5 Claims. (Cl. 304—18.)



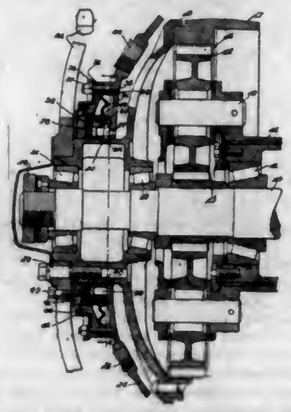
1. A scaffold support of the character described comprising a frame including upper and lower substantially horizontal portions for supporting material and workmen's platforms, respectively, drums mounted for rotation on an intermediate portion of the frame, pulleys mounted for rotation adjacent the ends of the frame, supporting cables trained under the pulleys and connected to the drums for winding on said drums, and means for simultaneously actuating the drums in the same direction relative to each other, said means comprising a shaft journaled in the frame, a gear mounted on the shaft for rotation therewith, gears on the drums engaged with the first named gear for actuation thereby, a ratchet wheel keyed to the shaft, a lever mounted for oscillation, and a pawl pivotally mounted on the lever and operatively engageable with the ratchet wheel for actuating said ratchet wheel in one direction upon oscillation of the lever.

1,878,803. CONTINUOUS ABSORPTION REFRIGERATING SYSTEM. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 21, 1931, Serial No. 538,905, and in Germany May 27, 1930. 6 Claims. (Cl. 62—119.5.)



1. A refrigerator structure including a combined evaporator and absorber consisting of a single vessel shaped to form the sides and back of a refrigerator cabinet.

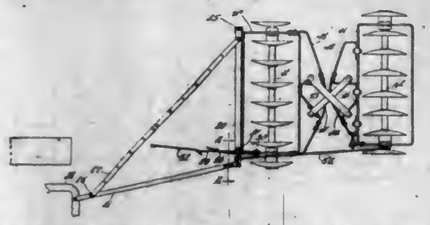
1,878,804. OIL AND DIRT SEAL FOR GEAR CASINGS. DAVID B. BAKER and NORMAN O. PANZERAU, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,868. 8 Claims. (Cl. 286—11.)



6. A seal structure between the face of a stationary casing and a wheel rotatably mounted adjacent said face, circumferentially spaced pins protruding from said face toward the wheel, a pressure plate slidably carried on the pins and held against turning movement thereby, a circular diaphragm connected to move with the pressure plate, means clamping the periphery of the diaphragm, a packing slidingly carried adjacent the pressure plate, and springs for urging the plate and packing toward the wheel.

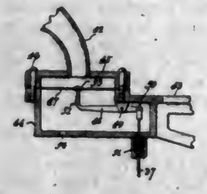
1,878,805. TRACTOR DISK HARROW. JOSEPH R. BARKER, Fall Brook, Calif., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 8, 1928. Serial No. 252,751. 10 Claims. (Cl. 55—83.)

1. A tractor harrow comprising a pair of implement frames disposed in tandem relation, means pivotally connecting the frames for relative horizontal angular movement, and draft actuated means for effecting angular adjustment of the frames on said pivotal connecting means comprising rigid interconnected draft members having a pivotal draft connection with the front frame at one side of the pivotal connecting means between the frames and



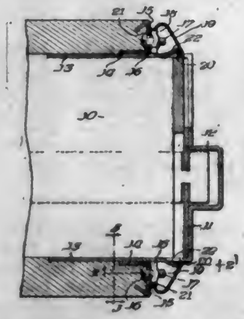
with the rear frame on the opposite side of said connecting means, and means for controlling pivotal movement of said draft members with respect to the frames.

1,878,806. SOUND REPRODUCING APPARATUS. JOSEPH BASIL and COSIMO BONGIORNO, Detroit, Mich. Filed Dec. 16, 1930. Serial No. 502,754. 1 Claim. (Cl. 274—1.)



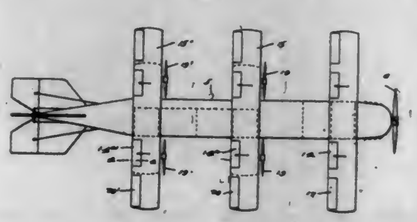
In a sound reproducing machine, a rotary record support, a reproducer arm adapted to travel over a record on said support, a lever pivoted to said arm, a horn spaced from said arm, a diaphragm supported at the throat of said horn, means on said lever for supporting a reproducer needle, another lever pivoted adjacent said diaphragm and having one end connected thereto, a link connection between said levers, the distance from the fulcrum of the first named lever to said means being less than the distance to the link connection, and the distance from the fulcrum of the second named lever to said diaphragm being greater than the distance to said link connection.

1,878,807. MOLDING FOR METAL FRAMES. ISAAC ALBERT BAUM, Chicago, Ill. Filed Oct. 3, 1928. Serial No. 310,047. 3 Claims. (Cl. 72—98.)



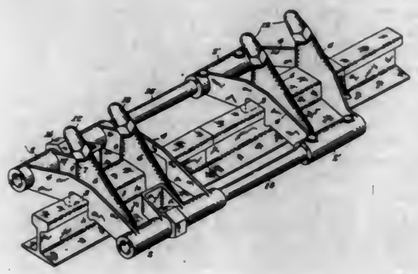
1. In combination, a frame having a rearwardly extending flange adapted to lie alongside of a wall, a plaster finish flange projecting from the face of said frame flange, a metal molding strip in the angle between the flanges, and screw means extending through the finish flange from the inside for holding one side of said molding strip.

1,878,808. AEROPLANE. EARNEST BEAVER, McAlester, Okla. Filed Nov. 5, 1931. Serial No. 573,262. 1 Claim. (Cl. 244—14.)



In an aeroplane, an elongated fuselage, a monoplane wing structure at the front of the fuselage, biplane wing structure at the center of the fuselage, and a biplane wing structure at the end of the fuselage, the lower wing of each biplane wing structure being shorter than the upper wings, motors mounted on said lower wings and having forwardly disposed propellers operatively connected thereto, all of said wings having recesses in their rear edges located adjacent the fuselage, a sustaining plane member hingedly connected at its front edge with the front wall of said recess, and means for raising and lowering the trailing edges of said member simultaneously.

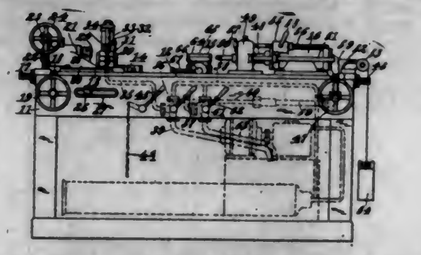
1,878,809. RAIL CLAMP. EDWARD F. BECTRUP, Jersey City, N. J. Filed June 7, 1930. Serial No. 459,679. 5 Claims. (Cl. 254—43.)



1. In a clamp for use in pressure welding rails of the type involving two yokes with bolts connecting the yokes and hook bolts carried by the yokes and engaging the respective rail heads to bring the gauge and tread surfaces into alignment, said clamp involving a three point contact with each rail end, with means for varying the pressure applied at two of said contact points.

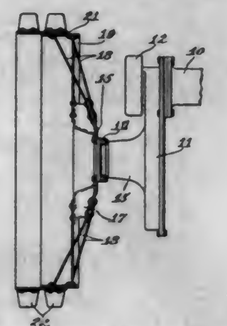
1,878,810. PROCESS FOR EFFECTING THE PRESSING OF METALS AND APPARATUS THEREFOR. GIUSEPPE BENEDETTO, Novara, Italy, assignor to The Omes Holding Company Limited, London, England, a British Company. Filed Sept. 11, 1930, Serial No. 481,334, and in Italy Sept. 14, 1929. 4 Claims. (Cl. 219—3.)

1. An electric upsetting apparatus comprising in combination an anvil, a work-holding vice in front of the anvil, means for forcing work held in the vice so as to extend toward the anvil and the anvil towards one another for forming an upset head, a constant current transformer having one of its windings movable relatively to the other under the influence of means for yieldingly urging the said movable winding towards the other winding



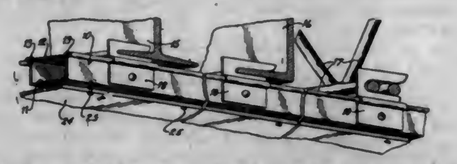
of the transformer, and means whereby the secondary circuit of the said transformer may supply electrical energy for heating the work held between the vice and the anvil.

1,878,811. TRACTION WHEEL. BERT R. BENJAMIN, Oak Park, and WALTER R. PETERSON, Park Ridge, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed June 12, 1929. Serial No. 370,279. 2 Claims. (Cl. 301—40.)



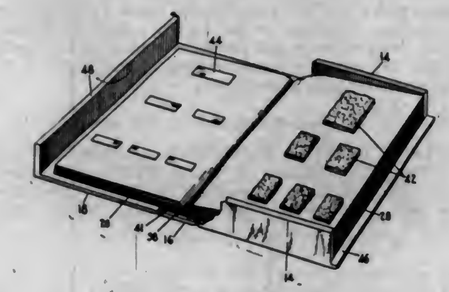
1. The combination with a traction wheel having a permanent tread provided with apertures formed at spaced points about its circumference, of an overtire wider than the tread and laterally adjustable thereon comprising a plurality of sections engaging the tread and having abutting ends cut on oblique lines, uniformly spaced lugs secured to each section from end to end thereof and disposed in staggered relation along the edges of the section, each section being formed with a series of apertures formed on oblique lines adjacent said ends of the sections and selectively registrable with the apertures in the permanent tread, and securing means selectively engageable in the registered apertures.

1,878,812. CEILING. LOUIS A. BERGER, Chicago, Ill., assignor to Ephraim Banning, Trustee, Chicago, Ill. Filed Sept. 8, 1930. Serial No. 480,803. 5 Claims. (Cl. 72—118.)



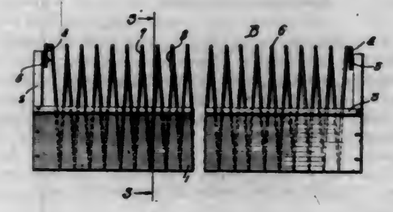
3. In combination, a hollow metal runner provided with laterally projecting beads, supports secured to the sides of the runner so as to engage the beads, said supports extending upwardly beyond the runner and provided with means for engaging an adjacent support.

1,878,813. DISPLAY CONTAINER. HERMAN W. BLOCK, New York, and BERNARD H. CHRISTENSON, North White Plains, N. Y., assignors to S. Stein & Co., New York, N. Y. Filed July 16, 1930. Serial No. 468,386. 19 Claims. (Cl. 206—44.)



19. A display container for high piled or similar fabrics, constructed to protect the same against crushing, which includes: a rigid frame open at the top thereof, a hinged cover for said frame, and a plurality of fabric receiving members, consisting of folded sheets secured, at the folds, in said container between said frame and said cover, said members being so positioned as to be substantially flat when opened away from said frame.

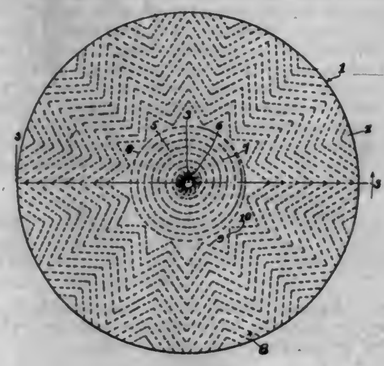
1,878,814. FEEDER. NEIL E. BRIDGMAN, Sunnyside, Wash. Filed Aug. 16, 1929. Serial No. 386,296. 3 Claims. (Cl. 119—61.)



1. A feeder of the class described comprising a trough having extensions on its ends, with its sides diverging and formed with inwardly extending flanges at their upper edges, eyelets carried by the upper ends of the extensions, a coil having straight portions at its ends engaging the eyelets whereby the coil is held in the trough in expanded position, with portions of the coil extending above the trough, said coil being formed of two sections, a socket member on the inner end of one section and a straight portion on the inner end of the other section for engaging the socket member, this straight portion engaging an eyelet when the other section is removed whereby the single section will be held in expanded position, with large spaces between its convolutions.

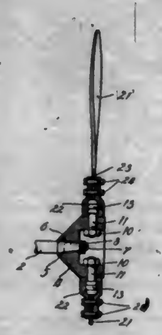
1,878,815. BUFF. A. J. BAUCH, Birmingham, Mich. Filed Sept. 26, 1930. Serial No. 484,637. 3 Claims. (Cl. 51—193.)

2. A buff comprising a series of axially apertured, opposed, abutting plies of fabric flush with each other and providing a composite circular disc, a circular row or stitching securing said plies together at a point removed from the apertures of the latter, a series of concentrically arranged, spaced, non-crossing, endless rows of zig-zag stitching for securing said plies together at points between said first mentioned row and the outer edges of the plies, each zig-zag row formed of inwardly opening V-portions merging



into each other at the inner end of the latter, the V-portions of said zig-zag rows progressively increasing in length from the inner to the outer row of the series.

1,878,816. IMPELLER. HERBERT E. BUCKLEN, Elkhart, Ind., assignor to Herbert E. Bucklen Corporation, a Corporation of Indiana. Original application filed Dec. 30, 1925, Serial No. 78,275. Divided and this application filed Dec. 28, 1928. Serial No. 328,883. 8 Claims. (Cl. 170—173.)

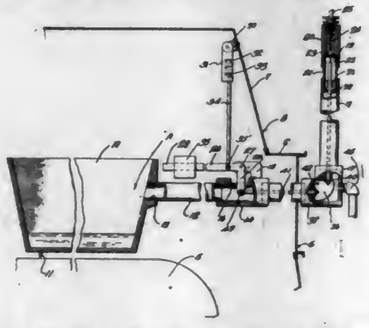


1. In a propeller, a blade member comprising a base constituting a seat for the propeller and having a stud embedded therein to form an integral unit therewith and projecting axially therefrom, said base member being slotted, a sheet metal blade lying in said slots, the stud extending to and terminating substantially at the end of the slot, and bolts passing through the blade and the metal on each side of the slots.

1,878,817. HUMIDIFYING DEVICE FOR HOT AIR FURNACES. EMIL BUEHRER, Green Bay, Wis. Filed June 28, 1930. Serial No. 464,581. 8 Claims. (Cl. 126—113.)

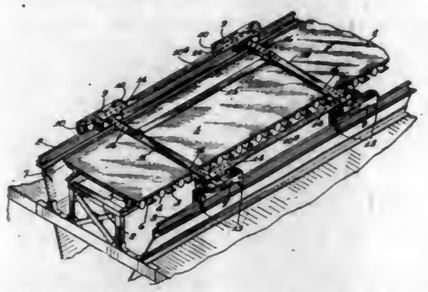
1. A humidifier for furnaces having a heating element and a shell, said humidifier comprising a pan rockably mounted at one end on the heating element, a weighted lever rockably supported intermediate its ends by said shell, means pivotally connecting the lever beyond its pivot to

the pan, a water supply pipe communicating with the pan, a water supply valve in said pipe including a normally seated valve member, a push rod for engaging the valve



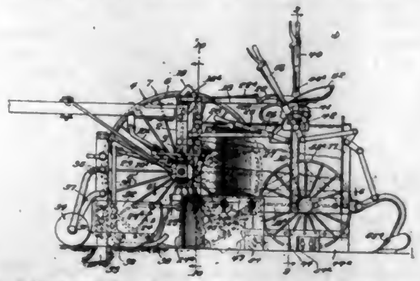
member, a segment rockable in the pipe engaging the push rod, and an operating lever pivotally connected with the weighted lever and engaging said segment.

1,878,818. GLASS CUTTING EQUIPMENT. CLARENCE FREDRICK BURDETT, Ford City, and WILLIAM OWEN, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 21, 1930. Serial No. 422,457. 3 Claims. (Cl. 33—32.)



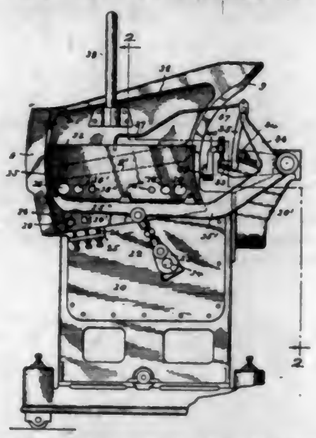
1. In combination in glass cutting apparatus, a carrier for moving the glass sheet forward, a track paralleling the line of movement of the glass and a rectangular frame mounted on the track and including a straight edge extending across the glass and relatively flexible so that it may be pressed down against the glass and move along therewith during the scoring of the glass.

1,878,819. MEANS FOR PLANTING AND CULTIVATING. WINTHROP S. DAVIS, Pueblo, Colo. Filed Jan. 21, 1927. Serial No. 162,517. 5 Claims. (Cl. 111—1.)



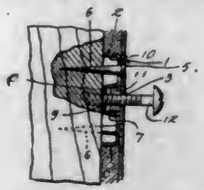
1. A device of the character set forth including a frame and supporting wheels therefor, a furrow opener pivoted to said frame, a sub-soiler associated with the furrow opener and extending above and below thereof and having the upper end pivotally connected to the frame, a substantially L-shaped pulverizer pivoted to said furrow opener in rear of the sub-soiler and including an operating arm portion and a ground engaging portion, an operating means carried by said frame and connected to the arm portion of the pulverizer to raise and lower the furrow opener and sub-soiler by moving the sub-soiler on its pivot to regulate the depth of the furrow and trench formed by the furrow opener and sub-soiler, and a combined seed planter and covering means carried by the frame to deliver and cover seed in the furrow.

1,878,820. FEEDING MECHANISM. ROBERT C. DANLY, Chicago, Ill., assignor to Danly Machine Specialties, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1931. Serial No. 572,956. 11 Claims. (Cl. 51—215.)



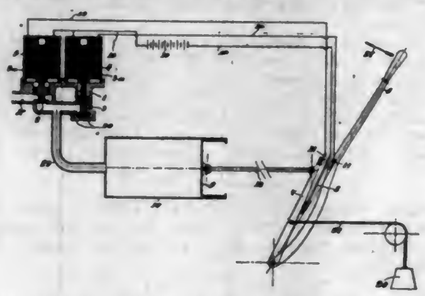
1. In a feeding mechanism of the type described, the combination of a holding hopper formed with a front outlet and with a bottom slanting downwardly to said outlet, a selector mechanism moving in front of said outlet and comprising a series of separate selector slides adapted for coupling together in series, means for imparting direct movement to the outermost of said slides independent of the remainder of said slides, and means for receiving the hopper contents as the same is removed by said selector mechanism.

1,878,821. SUPPORTING BRACKET FOR FLUSH TANKS AND OTHER PLUMBING FIXTURES. EDWIN C. DAUGHERTY, Warren, Ohio. Filed Mar. 3, 1932. Serial No. 596,656. 6 Claims. (Cl. 248—20.)



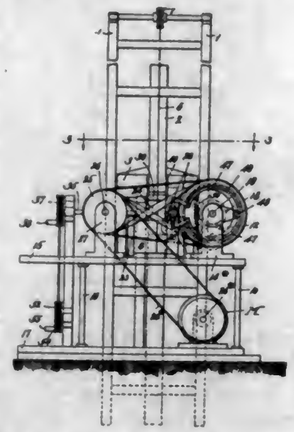
4. A supporting bracket for wall attached fixtures, comprising an elongated body bent to form a longitudinally extending channel, a plate substantially the same length as the body having a longitudinal slot therein and secured against the body with the said slot overlying the channel, means along each longitudinal edge of the body for contact with a supporting surface to maintain the plate and body properly spaced therefrom, and means for facilitating the attachment of the bracket to the supporting surface.

1,878,822. ELECTRICAL CONTROL FOR SERVO-MOTORS. ALBERT DEWANDRE, Liege, Belgium. Filed Dec. 20, 1928, Serial No. 327,271, and in Belgium Oct. 6, 1928. 18 Claims. (Cl. 121—41.)



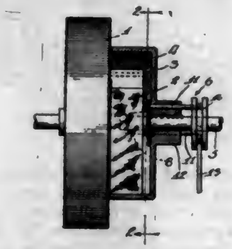
17. An electric control for servo-motors including a normally open vent valve for equalizing pressures within the motor, a normally closed suction valve for creating pressure differences within the motor, an electric responsive means including a normally open circuit for each of said valves, the electric responsive means for the vent valve serving when energized through the closing of its circuit to close the vent valve, the electric responsive means for the suction valve serving when energized through closing of its circuit to open the suction valve, a manually operable member operating under progressive movement in one direction to first close the circuit of the electric responsive means of the vent valve and then close the circuit for the electric responsive means of the suction valve, and means operated by the servo-motor in actuation to open the circuit for the electric responsible means of the suction without interfering with the circuit for the control of the electric responsive means for the vent valve, the manually operable member on further progressive movement in the same direction acting to again close the circuit opened by the servo-motor in actuation.

1,878,823. ELEVATOR APPARATUS. NICOLA DI BARTOLOMEO, Brockton, Mass. Filed July 18, 1930. Serial No. 468,811. 3 Claims. (Cl. 192—10.)



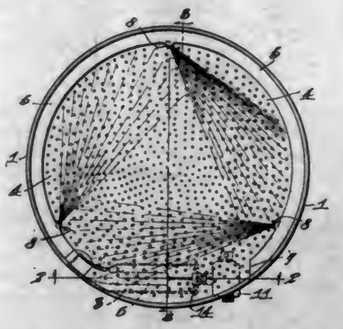
1. In an elevator apparatus, in combination, a cable-operating shaft; two pulleys loosely mounted on said shaft; a third pulley tightly mounted on said shaft between said two loose pulleys; a pair of driving belts co-operating with said pulleys one of which is crossed and the other straight; brake mechanism for said shaft including a pair of movable brake shoe members, a manually controlled shipper member for shifting both belts sidewise simultaneously, means slidably supporting said shipper member alongside of said pulleys so that it is movable endwise on a rectilinear path parallel with said shaft; a shipper operating member that is manually adjusted rotatively; a connection through which said member when rotated acts to shift said shipper member endwise; detent means for engaging and yieldingly holding said shipper operating member in either of three different predetermined positions, and two links disposed upon opposite sides of said shipper member, each having one end thereof pivotally connected with said shipper member directly opposite the pivoted end of the other link so that forces imposed endwise on said links are opposed, and having its opposite end portion connected with one of said brake shoe members.

1,878,824. CLUTCH. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Aviation Corporation, a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,728. 1 Claim. (Cl. 192—105.)



A centrifugal clutch comprising, in combination, a drum-shaped member rotatable both clockwise and counter-clockwise about a central axis, a carrier on a driving member likewise rotatable both clockwise and counterclockwise about said axis, a bell crank lever member pivoted on the carrier, said lever member provided with a friction face and urged outwardly toward said rotatable member by centrifugal force to frictionally engage said rotatable member, said lever being further provided with a radially extending projection at its end, which projection terminates adjacent said axis, and means movable along said axis and acting on said projection to force the shoe away from the rotatable drum member to release the clutch.

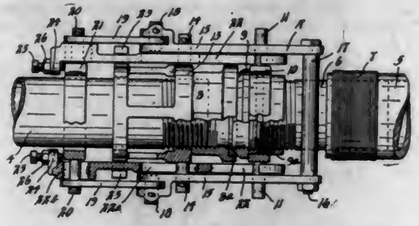
1,878,825. WASHING MACHINE. CHARLES CAISE, Brooklyn, N. Y. Filed Dec. 6, 1930. Serial No. 500,627. 15 Claims. (Cl. 259—95.)



15. In clothes washing machines; a cylindrical casing having a bottom provided with a depression constituting a water pan, a spirally arranged tube carried by the casing adjacent the periphery, the lower end of which tube is located within said water pan, an impeller and driving shaft therefor for forcing water from the water pan up-

wardly through said tube, said tube having outlets at intervals in its length to discharge water into the casing at different levels, said outlets comprising orifice nozzles directed to issue streams of water in directions between the periphery and center of the casing to whirl the contents of the casing about a vertical axis, said water pan being located adjacent the periphery of the casing and a heater located beneath the remaining area of the bottom of the casing for applying heat thereto, said heater being located to one side of said depression.

1,878,826. COUPLING. HAROLD A. CEDERSTROM, Minneapolis, Minn., assignor, by mesne assignments, to The Roscoe Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 23, 1931. Serial No. 524,474. 9 Claims. (Cl. 285—171.)



1. The combination of a pair of conduits, a pair of cooperating coupling members mounted respectively on opposing ends of said conduits, a pivot member applied to one of said conduits rearwardly from the coupling member thereon, a substantially U-shaped lever having arms pivoted to opposite sides of said pivot member, links pivotally connected to the ends of said arms, a ring mounted on the said conduit rearwardly from said pivot member, said links being pivotally connected to said ring, hook members having hook portions at their forward ends and having portions at their rear ends bearing against the rear side of said ring and means on the other of said conduits with which said hook portions are adapted to be engaged.

1,878,827. NUT LOCK WASHER. JAMES J. CONNELL, Detroit, Mich., assignor, by mesne assignments, to Allied Steel Products Corporation, a Corporation of Michigan. Filed Apr. 1, 1929. Serial No. 351,629. 2 Claims. (Cl. 151—35.)

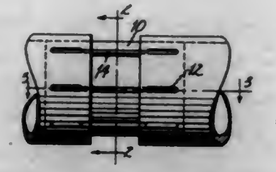


2. A lock washer comprising a sheet-metal disk having an opening therein to receive a bolt, an annular portion in said disk having rigid radial corrugations therein, a second annular portion in said disk in a plane substantially midway between the opposing apices of said corrugations, arcuate slits between said radially corrugated portion and said second portion, resilient arcuate fingers formed by radial slits through said second portion terminating at said arcuate slits having sharp edges projecting on opposite sides beyond the apices of said corrugations, thereby permitting said resilient arcuate fingers to maintain angularity against the surfaces between which the lock washer is interposed.

1,878,828. MANUFACTURE OF NEW PRODUCTS COMPRISING LIGNONE DERIVATIVES. CHARLES FREDERICK CROSS, London, England, and ALF ENGELSTAD, Vardal, Norway. Filed Sept. 15, 1926, Serial No. 135,703, and in Great Britain Sept. 21, 1925. 13 Claims. (Cl. 134—1.)

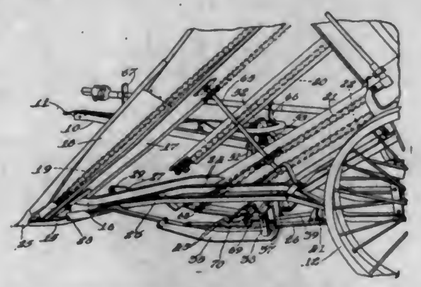
1. A method of producing stable aqueous dispersions of substances normally immiscible with water, by mixing the substance with a non-gelatinized concentrated solution constituting the product of the action of chromic acid on a concentrated solution of the soluble lignone derivatives obtainable by the treatment of wood substance with an aqueous solution containing sulphurous acid anions.

1,878,829. BRAZED OR WELDED JOINT. LOGAN R. CROUCH, Memphis, Tenn. Filed Dec. 10, 1928, Serial No. 325,102. Renewed Sept. 14, 1931. 9 Claims. (Cl. 285—111.)



1. A joint of the character described comprising members to be secured together, a connecting element telescoping said members, said members being spaced apart a substantial distance so as to provide a space for a filler, said members being provided with spaced openings near their adjacent edges, projections on the connecting element registering with the openings of said members, and a molten metal bond filled into the space between the members and fused with the projections in the openings of the members.

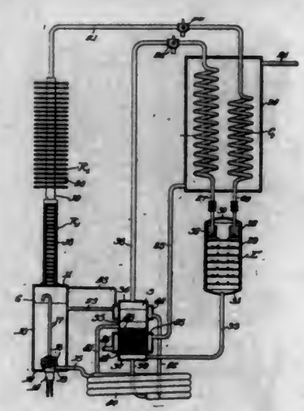
1,878,830. CORN HARVESTER. CHARLES F. CRUMB and ANDREW KOWALSKY, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Oct. 17, 1928. Serial No. 312,978. 5 Claims. (Cl. 56—102.)



1. A harvester comprising, in combination, stalk gathering devices providing a stalk passage-way, a stalk cutter oscillating across the passage-way, a main frame carrying the gathering devices, a floating auxiliary frame carried by the main frame in position to drag along the ground beneath the gathering devices, means carried by the auxiliary frame to oscillatably mount the cutter thereon, and means carried by the main frame to oscillate the cutter.

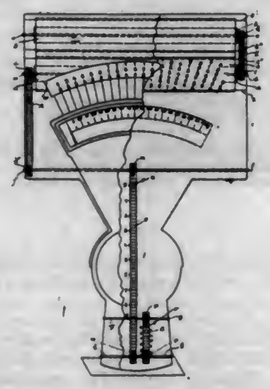
1,878,831. ABSORPTION REFRIGERATING SYSTEM. STANLEY R. CUMMINGS, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 24, 1930. Serial No. 423,075. 5 Claims. (Cl. 62—119.5.)

1. In a refrigerating system of the absorption type employing a plurality of refrigerants, the combination of a generator for expelling one refrigerant from an absorption solution, an absorber-separator, means for feeding a vapor mixture of said refrigerants into said absorber-separator, means for circulating the absorption solution between said generator and said absorber-separator to



cause one refrigerant to be absorbed and another condensed in said absorber-separator and a jacket surrounding a portion of said absorber-separator and forming part of said absorption solution circulating means for causing the absorption solution to heat said portion and vaporize the condensed refrigerant in said absorber-separator.

1,878,832. PRICE SCALES. SIMON SIEGFRIED EGGER-HANSEN, Vienna, Austria, assignor to Egger-Hansen's Naamlooze Vennootschap tot Exploitatie Van Octrooien, Rotterdam, Netherlands. Filed June 29, 1926, Serial No. 119,443, and in Austria July 16, 1925. 3 Claims. (Cl. 235—86.)



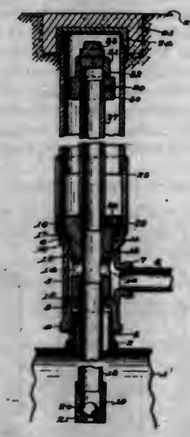
1. A computing device comprising a casing having a window therein, a pair of drums, an indicia carrying band having its end portions wound on said drums, respectively, for adjustment by rotation of said drums to have different portions thereof exposed to view through said window, and two separate endless chain devices one operatively connected with the band and the other operatively connected with the first-mentioned chain device to impart unit and fractional rotary adjustments to said drums, respectively.

1,878,833. TUBE RECEPTACLE WITH AUTOMATIC CLOSURE. FREDERICH WASHINGTON ELLYSON, St. Polten, Austria. Filed Apr. 9, 1929, Serial No. 353,847, and in Germany July 27, 1928. 2 Claims. (Cl. 221—60.)



1. In a tube of the character described adapted for holding plastic material, a nozzle secured at one end of the tube provided with lateral apertures and having a closed end, a yieldable closure member positioned about said nozzle and fitting tightly thereon normally to close said lateral apertures, and means mounted on the tube at a point spaced outwardly from said nozzle and engaging said closure member whereby to hold said member upon the nozzle against longitudinal movement.

1,878,834. PIPE LINE CONNECTION FOR TANKS. HARRY FALTERMAYER, Philadelphia, Pa. Filed Sept. 11, 1930. Serial No. 481,333. 8 Claims. (Cl. 220—85.)



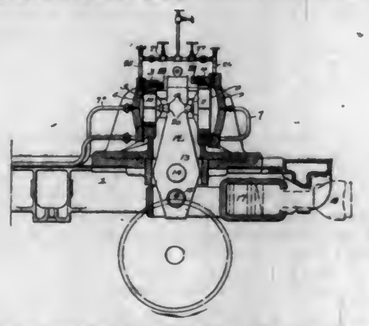
1. The combination of a tank having an aperture, a T-shaped pipe fitting connected to said aperture, an axially bored and radially apertured member removably supported within said fitting, an exhaust pipe supported by said member and extending through said aperture, a pipe rigidly secured to said member independently of said fitting and extending freely therefrom, and a removable closure for said last-named pipe.

1,878,835. WEIGHING HEAD FOR DYNAMOMETER APPARATUS. FREDERICK A. FLEISCHMANN, Drexel Hill, and ALPHA L. MARSH, Philadelphia, Pa. Filed Apr. 29, 1930. Serial No. 448,315. 2 Claims. (Cl. 265—47.)

1. The combination in a weighing head for a dynamometer car, of two horizontally arranged cylinders, one greater in diameter than the other and arranged end-to-end, the cylinders being open towards each other; a diaphragm closing the distant end of each cylinder; a cap secured to each cylinder beyond each diaphragm and spaced from the diaphragm; means placing said space in communication with indicating mechanism of the dynamometer; a piston in each cylinder; a lever for actuating the pistons, said lever extending between the pistons and in contact therewith; a draw-head of the car connected to the lever, the pistons being less in diameter than the cylinder; and a series of balls located be-

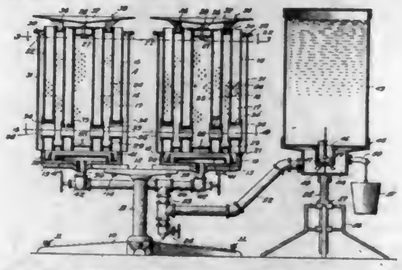
CARNEGIE LIBRARY OF ATLANTA

tween each piston and cylinder, said balls holding the pistons in alignment with the cylinders and allowing the pistons to move freely on the movement of the lever which is connected to the draw-head.



2. The combination in a weighing head for dynamometer cars, of a base; two cylinder structures mounted horizontally on the base, one cylinder structure being greater in diameter than the other; diaphragms and caps closing one end of each cylinder; a piston in each cylinder; anti-friction balls between each piston and its cylinder; an operating lever having a short and a long arm, the long arm of the lever extending between the pistons and in contact therewith and controlling the movement of the pistons of the weighing head, the short arm of the lever being connected to the draw-head; and a jack-screw on each cylinder structure to restrict the movement of the lever within its safe limit of travel.

1,878,836. OIL BURNER. JOSEPH E. FOWLER, Worcester, Mass. Filed May 19, 1930. Serial No. 453,776. 2 Claims. (Cl. 158—89.)

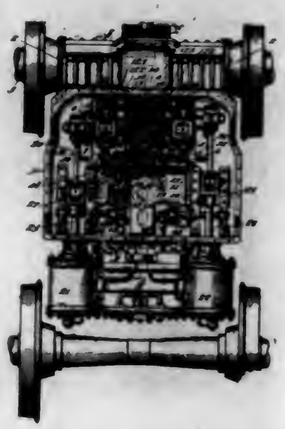


1. An oil burner comprising a plurality of perforated cylinders arranged one within another to provide inner and outer combustion chambers, an imperforated cylinder surrounding the perforated cylinder and having oppositely disposed openings, tubes extending through certain of the perforated cylinders and in alignment with the openings to admit air to said air chambers, closure secured to the perforated cylinders for closing the upper and lower ends of the air chambers and fuel supply means supporting one of the perforated cylinders while the other cylinders are supported by the last mentioned perforated cylinder.

1,878,837. METHOD OF PREPARING METALS FOR ELECTROPLATING. ARTHUR F. FRANCIS, Waterbury, Conn. Filed Sept. 3, 1930. Serial No. 479,584. 6 Claims. (Cl. 204—1.)

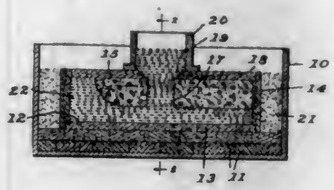
1. A method for the treatment of ferrous metals which comprises removing adherent foreign material from the surface of the metal, scouring the said surface with an abrasive material containing an oxidizing agent, removing said abrasive material from the said surface and then electroplating the said metal.

1,878,838. REVERSIBLE AUXILIARY LOCOMOTIVE. CLARENCE HERVY FROELICH, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Mar. 8, 1929. Serial No. 345,270. 31 Claims. (Cl. 105—48.)



1. In an auxiliary locomotive, comprising an axle having a gear mounted thereon, a crank-shaft having means mounted thereon for rotating the axle, a motor for rotating the crank-shaft, a jack-shaft geared to the crank-shaft and adapted to rotate in synchronism, and means coacting with the jack-shaft for reversing the rotation of the crank-shaft.

1,878,839. COMPOSITE REFRACTORY ARTICLES AND PROCESS OF MAKING THE SAME. GORDON S. FULCHER, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Feb. 28, 1931. Serial No. 519,162. 5 Claims. (Cl. 49—79.)

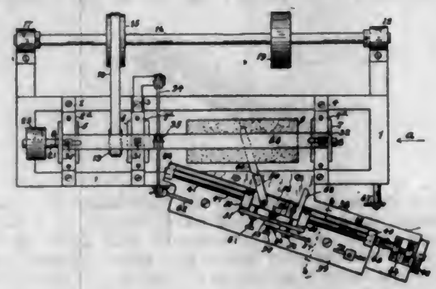


1. The method of making composite refractory articles for use in contact with molten glass which includes supporting a preformed refractory backing member in the upper part of a suitable mold so as to serve at least in part as the top slab thereof, pouring molten refractory material into the mold to fill completely the space unoccupied by the backing member and annealing the completed article.

1,878,840. CUTLERY POLISHING MACHINE. JOHN FUSCO, New Haven, Conn. Filed Aug. 8, 1929. Serial No. 384,391. 2 Claims. (Cl. 51—84.)

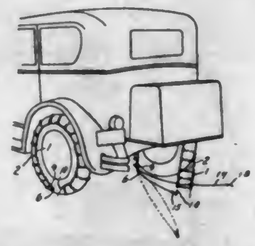
1. In a machine of the character described, in combination, a bed, opposed cylindrical abrasive rolls mounted therein, a knife blade holding carriage, a support for the carriage, a rotatable feed screw journaled on the support, means for temporarily connecting the feed screw with the carriage, automatic tripping means for breaking the

contact between the carriage and feed screw and halting the carriage, said feed screw offset at an acute angle with respect to the machine bed so that the outward



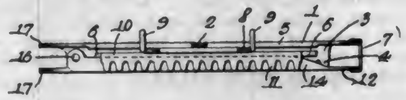
travel of the blade holding carriage will progressively change the gripping point of contact of the rolls with the blade during its passage between the rolls.

1,878,841. TIRE CHAIN. FREDERICK TAYLOR GAUSE, Wilmington, Del. Filed June 28, 1929. Serial No. 374,310. 4 Claims. (Cl. 152—14.)



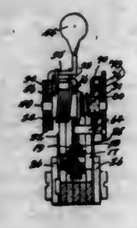
1. An attaching device for connecting the ends of a chain comprising a one-way fastener attached to one end of the side chain means independent of said chain for drawing the other end of the chain into said one way fastener and a connection between said means and said chain operatable at a distance from the chain for disconnecting said means from said chain.

1,878,842. WATER WAVER. ALZADA GOLDEN, La Fayette, Ind. Filed May 22, 1931. Serial No. 539,838. 1 Claim. (Cl. 132—32.)



A device for waving the hair, comprising straight upper and lower frames, hingedly connected adjacent to one end, the frames being open and loop-shaped, to give a good view of the hair that is being waved, the frames having oppositely-projecting, transversely-spaced flanges along their longitudinal edges, the flanges of the upper member having depending teeth, the flanges of the upper member having open-ended longitudinal tracks on their inner sides, there being a cross bar on the upper frame and extended across the same, a slide mounted to reciprocate in the tracks and provided at its ends with finger pieces that extend upwardly above the upper frame far enough to provide for the convenient manipulation of the slide, the finger pieces being located on opposite sides of the cross bar, and being engageable one at a time with the cross bar, to limit the travel of the slide, and to prevent the slide from becoming disengaged from the tracks, and a plate-like comb depending from the slide and located immediately under the finger pieces, the comb having teeth which cooperate with the teeth of the flanges of the upper member in waving the hair, the slide being shorter than the comb and being of open frame-like construction, which, with the loop shape of the frames, makes the comb and the hair engaged thereby visible and accessible throughout practically the entire length of the comb.

1,878,843. SNAP SWITCH. MONROE GUETT, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 18, 1930. Serial No. 502,225. 9 Claims. (Cl. 200—70.)



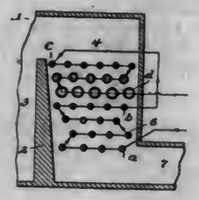
1. In a lever actuated snap switch, a supporting frame, a spindle carried by said frame, a manually actuable lever movable with said spindle, a switch member, switch actuating spring means connecting said lever and switch member, ratchet means movable with said switch member, and spring means independent of said switch actuating spring means normally urging said ratchet means into engagement with said frame to prevent movement of said switch member, cam means movable with said lever to shift said ratchet means along said spindle for disengaging said ratchet means from said frame.

1,878,844. APPARATUS FOR BREAKING IN TOBACCO PIPES. EDWIN K. HAAS and ROBERT S. DURLING, Baltimore, Md. Filed Apr. 2, 1931. Serial No. 527,230. 6 Claims. (Cl. 131—12.)



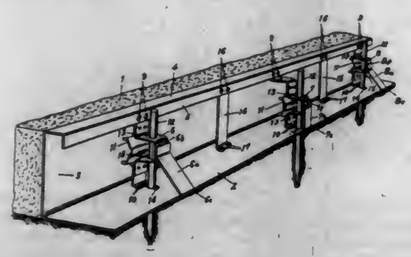
6. A device for the purpose described comprising a closed tank, an inlet for delivering liquid into the tank and a siphon for drawing it out of the tank, the siphon being so arranged as to empty the tank faster than the inlet fills it to effect alternate filling and emptying of the tank, and a smoke tube extending into said tank, the inner end of said tube being above the high water level in the tank, said smoke tube comprising a short tube secured in the tank and having its inlet end communicating with the space above the water in the tank, substantially as set forth.

1,878,845. APPARATUS FOR DISTILLING HYDROCARBON OILS. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Oct. 26, 1928. Serial No. 315,273. 1 Claim. (Cl. 196—110.)



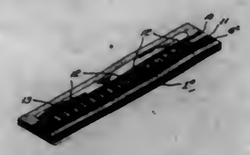
In a tube still, a setting provided internally with a transversely extending bridge wall, said wall dividing the interior of the setting into combustion and tube chambers, burners arranged in said combustion chambers, means for passing furnace gases developed by said burners over said bridge wall substantially downwardly through the tube chamber, oil heating tubes arranged in said chamber, said tubes being arranged to provide a primary heating stage and a secondary heating stage, through which stages the oils are uninterruptedly and successively passed, said primary stage being arranged in the lower portion of said tube chamber in the zone of lower furnace gas temperature in said tube chamber, and the secondary stage of tubes being arranged in substantially the upper portions of said tube chamber in the zone of higher furnace gas temperature, means for passing oil through the tubes of the primary stage in substantially countercurrent relationship to the flow of furnace gases through the tube chamber, means for passing the oils through the secondary stage in substantially parallel concurrent relation to the flow of furnace gases through said tube chamber, the tubes of the primary heating stage being of constant internal cross sectional area from the oil inlet to the oil outlet ends thereof and the tubes of the secondary stage being arranged in rows possessing progressively increasing cross sectional area from the oil inlet to the oil outlet ends thereof, and said setting between said burners and said tubes being substantially devoid of heat absorbing structures to provide a high differential in temperature between the furnace gases and the oil passing through the entrance or smaller tubes of the secondary stage.

1,878,846. ROAD RAIL. EDWARD T. HARROLD, Binghamton, N. Y., assignor to Hotchkiss Steel Products Company, Binghamton, N. Y., a Company of New York. Filed Aug. 24, 1931. Serial No. 558,865. 3 Claims. (Cl. 25—118.)



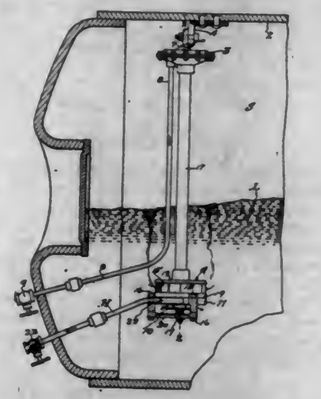
2. A road form comprising a rail having a flange, anchoring means for said rail cooperating with said flange at spaced intervals therealong, the lateral disposition of said anchoring means being alternately offset with respect to each other, and all of said anchoring means passing through said flange.

1,878,847. HEMOGLOBINOMETER. CARL ADOLPH HAUSSER and ANTHONY ADOLPH HAUSSER, Philadelphia, Pa. Filed Mar. 16, 1928. Serial No. 262,242. 18 Claims. (Cl. 88—14.)



1. A device for measuring the color shade of a test specimen against a standard which includes as a part thereof means affording a calibrated color shade differential in the test color factor, and means whereby the differential factor is divided in the direction of the differential into a plurality of segregated sections, together with means affording a simultaneous and uniformly close comparison between an adjacent plurality of said sections and the standard factor.

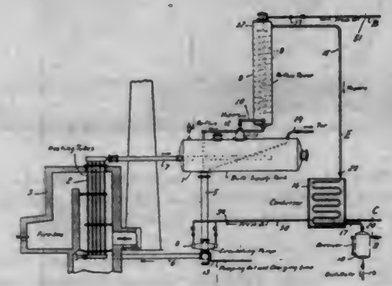
1,878,848. DECONCENTRATOR. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 29, 1929. Serial No. 335,798. 3 Claims. (Cl. 122—379.)



1. The process of deconcentration that attends the circulatory and steaming operations of a body of boiler water confined above a fire and which consists in utilizing a part of the steam generated in the boiler for imparting centrifugal motion to the water to thereby separate impurities therefrom within the boiler and independently thereof expelling the impurities from the boiler with an accompanying quantity of said water.

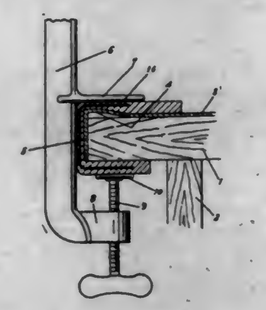
1,878,849. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Continuation of application Serial No. 24,734, filed Apr. 21, 1925. This application filed July 12, 1929. Serial No. 377,816. 2 Claims. (Cl. 196—48.)

1. In the pressure distillation of heavier hydrocarbon oils for the production of lighter hydrocarbon oils, subjecting the heavier oil to a cracking temperature and taking off under pressure the gas and vapor mixture generated thereby, subjecting the gas and vapor mixture to a condensing operation, separating condensed distillate from the remaining uncondensed vapors and gases at substantially atmospheric pressure, scrubbing uncondensed vapors and gases from the separating operation with fresh heavier oil and introducing the heavier oil containing the constituents absorbed from the vapors and gases therein directly into the hot gas and vapor mixture generated



in the cracking operation, separately discharging unabsorbed gases from the scrubbing operation, and taking off together absorbed constituents liberated from the fresh heavier oil and the vapors of the cracked oil without again subjecting them to the cracking temperature.

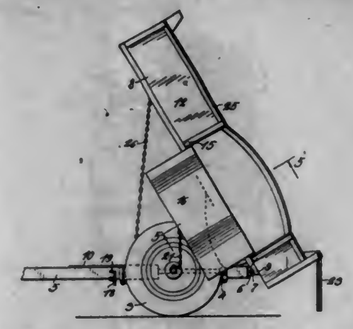
1,878,850. PROTECTIVE DEVICE FOR TABLES. JOHN HILGERS, Binghamton, N. Y. Filed Mar. 16, 1929. Serial No. 347,567. 5 Claims. (Cl. 45—75.)



1. A protective device for tables and the like comprising a separate pre-formed angular member of fixed shape having a horizontal flange and a vertical flange adapted to engage the top and side respectively of a table edge, the inner surface of said horizontal flange conforming to the contour of said table edge.

1,878,851. DUMP TRUCK. HARLEIGH R. HOLMES, Littleton, Colo. Filed Dec. 3, 1931. Serial No. 578,785. 3 Claims. (Cl. 298—17.)

1. In a dump truck having a rear axle, a rear supporting wheel at each end thereof and a chassis frame supported in part by the rear axle, a body supported by the chassis frame and movable with respect to the latter about pivots located to the rear of the rear wheels and whose axis is parallel with the axle, means for tilting the body about its pivotal connection, the bottom of the body being normally located below the tops of the wheels and when in tilted position above the wheels, the body being wider than the distance between the wheels and provided with cut-out portions in the bottom and sides for the reception of those portions of the wheels that project above the bottom and a housing for the upper portion of each of the wheels, said housings having a vertical wall member hinged at its lower edge to the bottom of the body and movable from a position substantially perpendicular to the plane of the bottom to a position substantially in the plane of

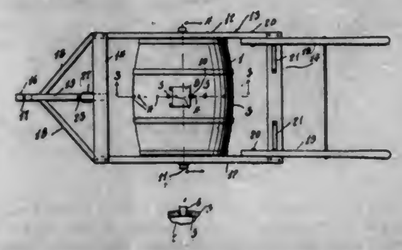


the bottom, the vertical wall member having a top and two ends, and means for returning the housing to normal position when the body is returned to normal position.

1,878,852. METHOD OF PRODUCING POWDEROUS SWELLING STARCHES ADAPTED TO FORM AN ADHESIVE WHEN MIXED WITH COLD WATER. ERNST FRITZ HÖPPLER and JULIUS WALTER HAAKE, Dresden, Germany, assignors to the Firm Henkel & Cie. Gesellschaft mit beschrankter Haftung, Dusseldorf, Germany, a Corporation of Germany. Filed July 8, 1930, Serial No. 465,778, and in Germany Nov. 28, 1927. 2 Claims. (Cl. 127—36.)

1. A method of producing swelling starches and similar products adapted to swell with cold water, consisting in heating thin layers of starch containing the normal proportion of water for a short period between two faces at temperatures above 100° C. and simultaneously applying to same a mechanical pressure of about 2500 kg/cm².

1,878,853. FERTILIZER DISTRIBUTOR. HUGH HUBBARD, Orange, Tex., assignor to W. H. Stark. Filed May 21, 1931. Serial No. 539,059. 2 Claims. (Cl. 111—74.)

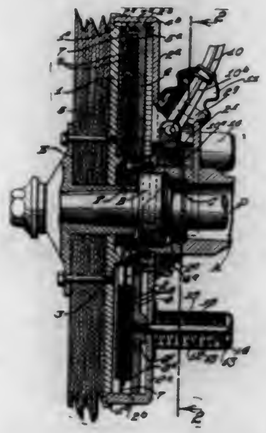


1. In a fertilizer distributor, a barrel-shaped container adapted to hold fertilizer for distribution and having a series of openings arranged around the container and located in the bulged portion thereof, said openings being of diverse diameters, plugs for selectively closing said openings for varying the delivery of material from the container, and a frame mounting said container for rotation.

1,878,854. VEHICLE BRAKE MECHANISM. RAY T. HYMER and VERNON L. EMBERY, San Diego, Calif. Filed Oct. 30, 1928. Serial No. 315,938. 4 Claims. (Cl. 188—72.)

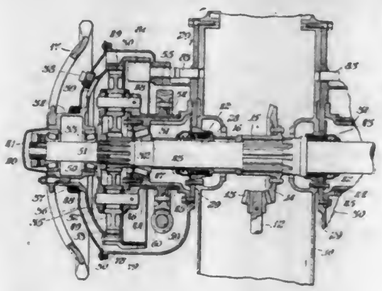
2. In a brake mechanism, a plate member revoluble with a vehicle wheel, a housing locked against rotation, a sec-

ond plate slidably mounted within said housing, a floating third plate slidably mounted in said housing, friction discs secured to the opposite sides of said third plate and



slidable therewith, and actuating means extending from said housing for shifting said second plate axially and clamping said friction discs between said first and second plates, and spring means for releasing said plates.

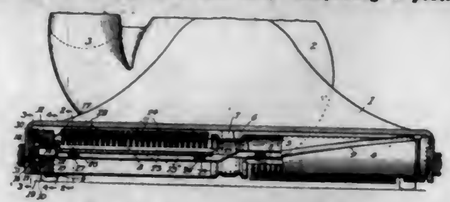
1,878,855. TRACTOR. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed June 17, 1929. Serial No. 371,669. 11 Claims. (Cl. 180—9.2.)



7. In a tractor, a frame, an axle passed therethrough, a stationary casing secured to each side of the frame with the axle ends passed therethrough, stationary hubs secured to the frame inside the casings, planet carriers journaled on said stationary hubs, planet gearing carried thereby, sun pinions on the axle ends to drive the planet gearing, ring gears in the casings driven from the planet gearing, said gears including hubs extended out of the casings and carrying sprocket wheels, tracklayer chains driven by said sprocket wheels, and means for locking and releasing the planet carriers.

1,878,856. SUCTION CLEANER. ALFRED T. JONES, Detroit, Mich., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 14, 1931. Serial No. 508,581. 6 Claims. (Cl. 15—179.)

3. In a rotary agitator for a suction cleaner, a hollow elongated body, brush-retaining means within said body extending substantially into the axis of rotation, a brush seated in said brush-retaining means, a shaft connected to and extending thru said body comprising a portion



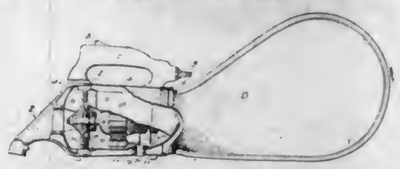
offset from the axis of rotation adjacent said brush-retaining means and having journals at its ends in said axis of rotation, and bearings supporting said journals.

1,878,857. COLOR FILTER. ISAAC KITROSER, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,274. 10 Claims. (Cl. 95—81.5.)



2. A color filter adapted for use with lenticular films comprising a plurality of transparent glass plates having different colors and different thicknesses and a protecting plate of transparent material located on the outer face of the color plates.

1,878,858. SUCTION CLEANER. WILLIAM H. KITTO, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 5, 1930. Serial No. 449,778. 3 Claims. (Cl. 15—16.)

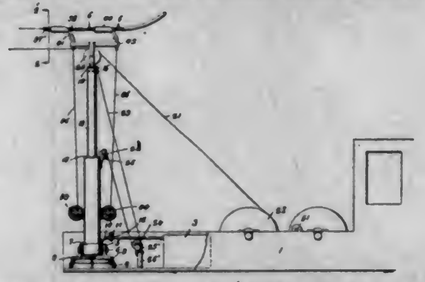


1. In a suction cleaner a main casing including a nozzle, a fan chamber and a discharge passageway, an enclosed motor including a casing positioned in said discharge passageway and sound-deadening means to support said motor comprising a metallic bushing positioned in the wall of said motor casing and spaced therefrom by sound-deadening material, a metallic bolt extending through said main casing into said bushing in screw threaded relation and serving to draw said casings together and a bushing of sound-deadening material enclosing said bolt and spacing said casings.

1,878,859. ELECTRIC WIRE STRETCHER. DELLA KNABENSHUE, Grafton, W. Va. Filed July 6, 1931. Serial No. 549,057. 1 Claim. (Cl. 175—376.)

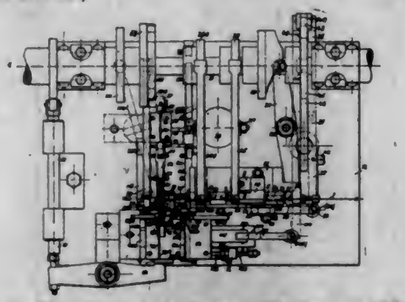
In a device for the purpose set forth, a motor driven truck, a tank thereon containing air under pressure therein, a mast which is pivotally and revolubly supported on the truck and which includes a lower section, an intermediate section and an outer section, all of which are tubular and being telescopically received one in the other, means for introducing air from the tank into the lower mast section for expanding the mast, means for exhausting such air to permit of the telescoping of the mast sections, a wire directing sheave on the outer mast, a frame supported above the sheave, oppositely disposed arched

jaw carrying rods pivoted to the frame, a toothed rod engaged by the jaws, and having a ring end for a wire, spring means influencing the arms toward each other, a spreader member between the arms, flexible elements con-



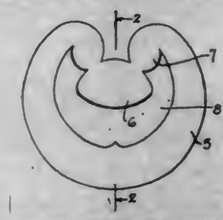
nected to the spreader member and hand operated spring influenced drums around which the flexible elements are trained and secured in bearings on the lower mast sections for the drums.

1,878,860. MACHINE FOR MAKING CHAINS. PAUL KOENIG, Maplewood, N. J., assignor to Ernst Gideon Bek, Pforzheim, Germany. Filed Jan. 21, 1930, Serial No. 422,366, and in Germany Jan. 21, 1929. 9 Claims. (Cl. 59—16.)



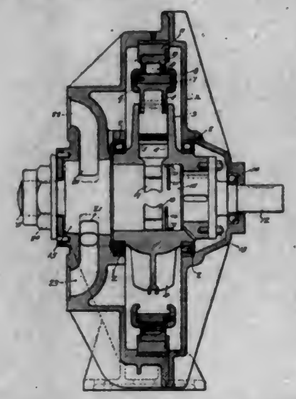
1. Machine for making chains with links of different sizes comprising a wire cutting arrangement displaceable along the frame of the machine in accordance with the sizes of the links to be formed, and means partially forming the links; and a front head having two cooperating sets of co-operating shaping tools cooperating with said means to produce links of different shapes, said front head being movable to present one or the other of said sets of shaping tools to co-operate with said means.

1,878,861. COMBINATION BOOK MARK AND CLIP. PHILIP KRASNOW, Brooklyn, N. Y. Filed Aug. 11, 1931. Serial No. 556,408. 2 Claims. (Cl. 116—119.)



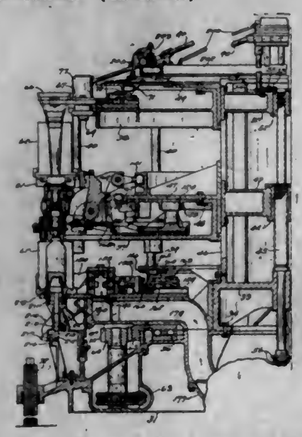
1. A book mark for use wholly between the pages of a book consisting of a piece of material tempered for normal distortion out of a plane and insufficiently resistant to oppose the straightening thereof between the pages of a book resting on one of its sides but sufficiently tempered to assume its distorted shape and open the book when the latter is unsupported on its opposite sides.

1,878,862. ROTARY PUMP. HENRY W. LANDENBERGER, Philadelphia, Pa., assignor to American Fluid Motors Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1931. Serial No. 532,917. 11 Claims. (Cl. 103—161.)



1. In combination, a casing, a valve member fixed in said casing and having a cylindrical terminal portion, ports at opposite sides of said terminal portion, a cylinder body mounted in said casing and adapted for rotation around the terminal portion of the valve member, said body having a plurality of radial cylinders arranged for communication with the said ports, plungers in said cylinders, and means operative by rotation of the cylinder body to actuate the plungers whereby the plungers withdraw a fluid from one of said valve ports and discharge the fluid into the other of said ports, and recesses in said valve body on the opposite sides thereof from the respective ports and each connected with the port on the opposite side whereby fluid pressure applied to either port will be conducted to the recess at the opposite side of the valve, said recesses tapering as to depth in the direction of rotation of said cylinder body.

1,878,863. GLASS BLOWING MACHINE. RICHARD LA FRANCE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 30, 1922, Serial No. 532,606. Renewed June 29, 1932. 34 Claims. (Cl. 49—9.)

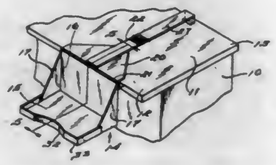


1. The combination with a continuously rotating mold carriage, of a ring of molds thereon open at their upper ends to receive charges of glass, funnel guides individual

to the molds, carrier plates on which the guides are mounted, said plates being mounted for radial sliding movement on the carriage, a stationary cam within said ring, and operating connections between said cam and said plates for successively moving the guides radially outward to a position beyond the ring of molds and for returning the guides to register with their respective molds.

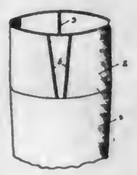
32. In a glass forming machine, the combination of a rotary mold carriage, molds thereon, each comprising separable sections, hollow arms carrying said sections, hollow shafts on which said arms swing for opening and closing the molds, said hollow shafts and arms providing communicating air passages through which cooling air is supplied, means for distributing cooling air to said hollow shafts, and means for directing the cooling air from said arms against the mold sections.

1,878,864. CHILD'S PORTABLE TRAY. THOMAS E. LANE, Detroit, and CHARLES H. WELCH, Jr., Birmingham, Mich., assignors to Fred Sanders, a Corporation of Michigan. Filed June 29, 1931. Serial No. 547,662. 3 Claims. (Cl. 45—141.)



1. A portable tray including a substantially horizontal plate adapted to be disposed below the top of a counter, an upwardly extending arm secured to the plate, a laterally extending arm pivotally connected to the upper end of the first mentioned arm, and means on the last mentioned arm for releasable connection with said counter.

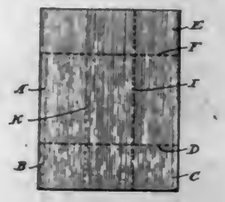
1,878,865. CENTERING MARKER FOR FULL FASHIONED HOSIERY. JOSEPH LAROMAN, Philadelphia, Pa. Filed May 26, 1931. Serial No. 540,161. 2 Claims. (Cl. 66—172.)



2. In a stocking provided with a seam extending longitudinally of the rear thereof, marker means at the frontal top portion of said stocking comprising a pair of longitudinally extending strips knitted in the fabric and defining a line along the front central portion of said stocking, said knitted-in strips converging at their lower ends toward a point on the line defined aforesaid, as and for the purposes described.

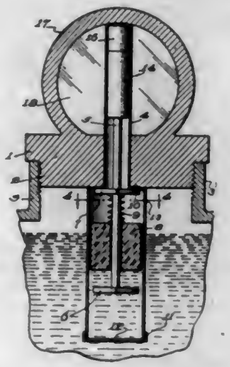
1,878,866. PAPER NAPKIN, TOWEL, AND THE LIKE. LOUIS LA VECK, Brooklyn, N. Y. Filed Mar. 26, 1930. Serial No. 438,947. 2 Claims. (Cl. 206—57.)

1. A napkin of crepe paper having opposite end portions folded toward each other upon one face of the napkin with the opposed edges of said folds spaced apart in the folded condition, and folded toward each other transversely of said first folds upon the opposite face of said napkin to cause said spaced opposed edges to provide bottomed transverse grooves upon the opposite faces



of said folded napkin to facilitate unfolding thereof, the folding being so arranged that the grain of the crepe runs lengthwise of the folded napkin to reduce the tendency thereof in its folded condition to flex upon itself.

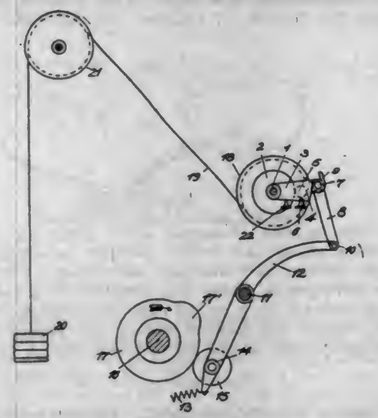
1,878,867. RADIATOR WATER LEVEL INDICATOR. JOHN C. LEUKHARDT, Jr., Washington, D. C. Filed Dec. 21, 1931. Serial No. 582,324. 8 Claims. (Cl. 116—114.)



1. The combination of a radiator cap and a float actuated liquid level indicator, comprising a vertically movable indicator rod extending below said cap and into the radiator, a float adjacent the lower end of said rod and slidably mounted thereon, means to guide the vertical movement of said rod, resilient means acting between said float and rod to reduce the vertical movement of said rod relative to the vertical movement of the liquid surface within the radiator, and means at the top of said cap to visually indicate the relative vertical position of said rod.

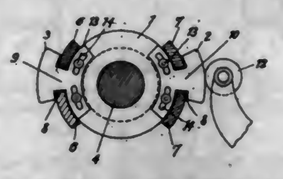
1,878,868. DEVICE FOR THE TAKING-UP SHAFT OF FLAT HOSIERY FRAMES. KARL WILLI LIEBERKNECHT, Oberlungwitz, Germany. Filed June 11, 1931, Serial No. 543,649, and in Germany June 13, 1930. 2 Claims. (Cl. 66—149.)

1. A flat hosiery frame in conjunction with a driving mechanism for the taking up shaft for the fabric, comprising in combination with the taking up shaft, a pulley keyed on said taking up shaft, a weight loaded pull rope connected to said pulley adapted to turn said shaft to put the fabric under tension, a disc keyed on said shaft, a lever loosely mounted on said shaft, a projection on the inner side of said lever having an inclined cam sur-



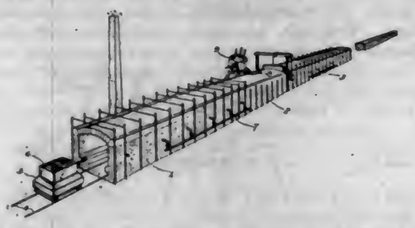
face bearing against said disc, a pin on the outer side of said lever, and means engaging said lever adapted to block said driving shaft.

1,878,869. LOOP REGULATING MECHANISM. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany. Filed Aug. 25, 1930, Serial No. 477,733, and in Germany June 11, 1930. 2 Claims. (Cl. 66—82.)



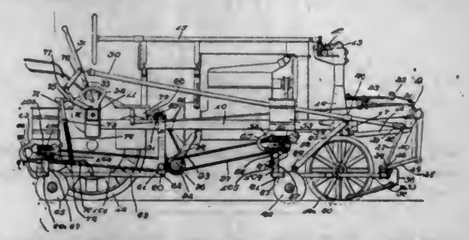
1. In an apparatus for making reinforced knitted goods the combination of needles, operating means for said needles, a pair of pressure wings adapted to control the extent of movement of said needle operating means in one direction for the purpose of stitch length determination, guiding means for automatically adjusting said pressure wings and for positively guiding same in both directions, and actuating means for axially shifting said guiding means.

1,878,870. METHOD OF MAKING A REFRACTORY CAST ARTICLE. CYRIL S. LINDER, Creighton, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Apr. 9, 1927. Serial No. 182,329. 1 Claim. (Cl. 49—77.)



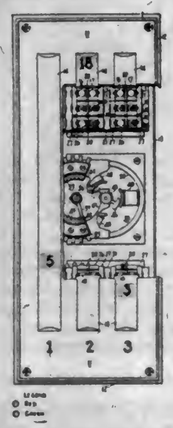
The process of making a refractory cast mullite into lump form, partially filling a mold with the crushed mullite, heating the mold and its content, and then flowing fused mullite into the mold to fill the mold, so that the fused mullite surrounds the pieces of crushed mullite.

1,878,871. TRACTOR OPERATED PLANTER. ALEXUS C. LINDGREN, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 23, 1930. Serial No. 469,959. 4 Claims. (Cl. 111—52.)



1. A tractor mounted and operated multiple row planter comprising a plurality of spaced seeding mechanisms mounted laterally at the forward end of the tractor frame, an intermediate seeding mechanism mounted at the rear of the tractor frame, and means operable from a power take-off connection with the tractor drive for operating all of said mechanisms.

1,878,872. ELEVATOR INDICATOR. WILLIAM BATES LUCAS, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 21, 1929. Serial No. 338,852. 7 Claims. (Cl. 177—336.)

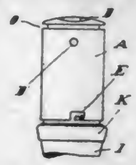


1. An indicator for an elevator car comprising; a display member; a plurality of floor symbols, one for each of a plurality of floors served by said car, mounted on said member; a row of light bulbs, one bulb for each of said floor symbols, said bulbs being adapted to illuminate their respective floor symbols in one color; an additional row of light bulbs, one bulb for each of said floor symbols, the bulbs of said additional row being adapted to illuminate their respective floor symbols in a second color; means for rendering operable the light bulbs in either row in accordance with the direction of travel of the car; and means to selectively illuminate the light bulbs which have been rendered operable in accordance with the position of the car with respect to the floors.

1,878,873. ELECTRIC LAMP. RAFAEL EDUARDO DOMINGO MARADEI, Buenos Aires, Argentina. Filed June 5, 1929, Serial No. 368,630, and in Argentina Jan. 29, 1929. 5 Claims. (Cl. 176—16.)

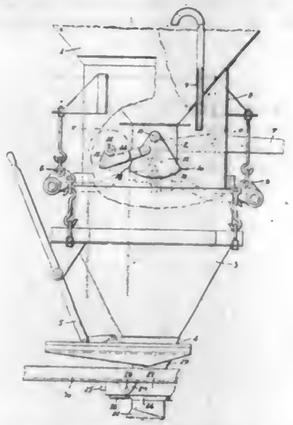
1. An electric lamp comprising a base, a hollow shell secured within said base, a globe detachably connected

to said base, an aperture in said shell connecting the interior of said shell with the lamp interior, a second aperture in said shell connecting the interior of said



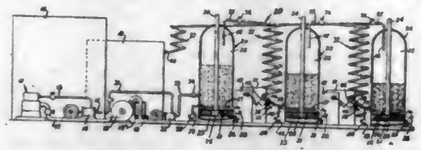
shell with the external atmosphere, and a movable valve member normally adapted to close said first named aperture.

1,878,874. BATCHER. ROBERT R. MCBRIDE, Warren, Ohio, assignor to The Heltzel Steel Form and Iron Company, Warren, Ohio, a Corporation of Ohio. Filed July 28, 1929. Serial No. 380,336. 13 Claims. (Cl. 221—110.)



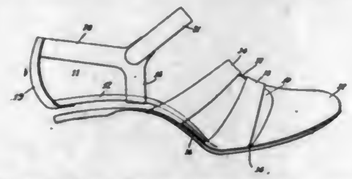
1. A batcher comprising a bin having a spout, a chamber below the spout to receive the material, a cut-off gate controlling the flow of material from the spout into said chamber, an apron surrounding the spout and extending from the bin to said chamber. and a vent tube leading upwardly from between said spout and apron into the bin.

1,878,875. APPARATUS FOR REFINING PETROLEUM. LESTER H. MILES, Los Angeles, Calif. Filed Apr. 11, 1930. Serial No. 443,412. 3 Claims. (Cl. 196—9.)



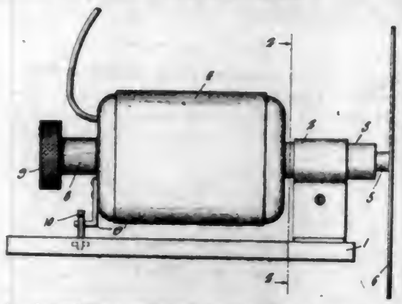
1. In combination with a reservoir. a plurality of containers, means to conduct hydrocarbon oil to the reservoir, a gas pipe line, means to conduct oil from said reservoir to the first of said containers, means to heat each of said containers, means to convey gas from said gas pipe line into said first container whereby the gas passes through the oil therein, means extending from above the liquid level in said containers to below the liquid level in each succeeding container, said means including a condenser, means to extract liquid from said condensers without drawing gas therefrom, and means to withdraw liquid from each of said containers.

1,878,876. METHOD OF MAKING SHOES. CHARLES MILLER and ALBERT LEONE, Long Island City, N. Y.; said Leone assignor to I. Miller & Sons, Incorporated, a Corporation of New York. Filed June 13, 1931. Serial No. 544,118. 7 Claims. (Cl. 12—142.)



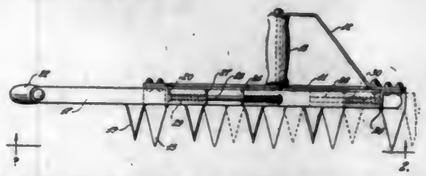
1. The method of making shoes which comprises assembling shank and counter portions including exposed upper material on a first last, assembling a forward portion including an outsole and vamp including the exposed upper material on a second last, withdrawing the second last, turning said forward portion, and joining said first mentioned portions and said forward portion together.

1,878,877. SCANNING DISK. FREDERICK E. MILLER, Wenatchee, Wash. Filed June 27, 1930. Serial No. 464,405. 2 Claims. (Cl. 178—69.5.)



1. A picture transmitting or receiving apparatus, including a rotary scanning disk, and a current driven motor on whose shaft the disk is fixed, a base having a support affording a bearing for the motor casing adjacent the scanning disk, and the casing having its second end provided with a knob, a depending substantially L-shaped member fixed on the said end of the motor, and a pivotally supported stop element in the base extending thereabove for contact with either side of the angle end of the bracket to cause a limited swinging of the stop element when the motor is imparted a complete revolution in one direction and such engagement of the angle member with the swingable stop preventing the turning of the motor in the direction of the stop susceptible for being sprung away from such contact.

1,878,878. HEDGE TRIMMER. JOHN C. MILLER, Racine, Wis. Filed Jan. 11, 1932. Serial No. 586,027. 2 Claims. (Cl. 30—11.)



2. A device of the class described comprising a support, a relatively stationary cutter bar attached to the support, a movable cutter slidable over the stationary cutter bar, spaced elements carried by the support to

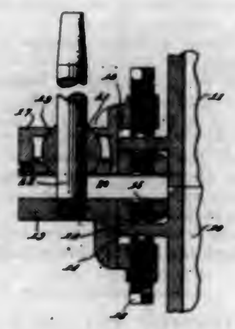
guide the movable bar over the stationary bar, a support attached to the movable bar between said elements, a bumper rod slidably mounted in the second-named support, and resilient shock-absorbing members on said rod.

1,878,879. DUPLEX PEN. PETE MON, Winnemucca, Nev. Filed Jan. 15, 1932. Serial No. 586,871. 1 Claim. (Cl. 120—112.)



In a pen structure of the character described, a barrel being closed at one end and open at the other end, a ferrule having an intermediate external annular abutment and reversibly insertable in the open end of said barrel and frictionally held, a tube fitted in the ferrule and extended beyond opposite ends thereof, the said ends of the tube being longitudinally split, and tips formed at the extremities of the tube and shaped to provide flat and rounded points respectively.

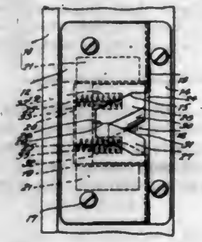
1,878,880. PIN. WILLARD A. MOORE and KENNETH L. MOORE, Muncie, Ind. Filed Jan. 20, 1931. Serial No. 510,015. 1 Claim. (Cl. 22—110.)



A guiding and aligning apparatus for the drag and cope halves of mold sections comprising supporting members having means for attachment to the mold sections, one of said members having an internally threaded socket forming a housing, an annulus engaging the thread of the socket, a ball mounted for turning movement in the annulus and provided with a diametrically disposed opening, a pin received in the opening of the ball, said pin being mounted upon the other member and held against longitudinal movement thereon and means for fixing the ball with relation to the first mentioned member.

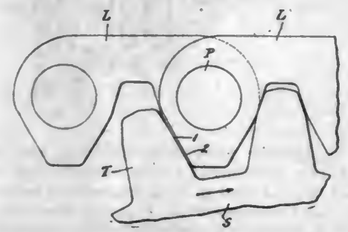
1,878,881. ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 14, 1931. Serial No. 508,574. 3 Claims. (Cl. 16—85.)

1. In an anti-rattle device for doors, members movable one relatively to the other, one of said members being yieldable in the direction of relative movement of said members into and out of engaging relation, and means in association with said members adapted to exert pressure



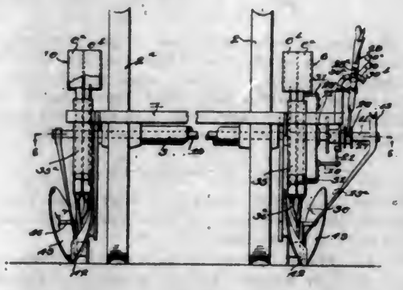
in opposed directions on one of said members whereby it is held against movement in a direction transversely to said direction of relative movement.

1,878,882. DRIVE CHAIN. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,815. 4 Claims. (Cl. 74—32.)



1. In combination, a sprocket wheel and a drive chain having links composed of a plurality of plates having tooth like heads, the plates of one link being interspersed with the plates of the adjacent link, and pintles connecting said links, the portion of the heads of the plates of one link to the rear of the pintles being wider than the corresponding portion of the heads of the interspersed plates of the adjacent link so that inside surfaces are presented to the sprocket teeth when the chain is straight and in the initial stages of bending and that outside surfaces are presented to the teeth when the chain is in the final stages of bending.

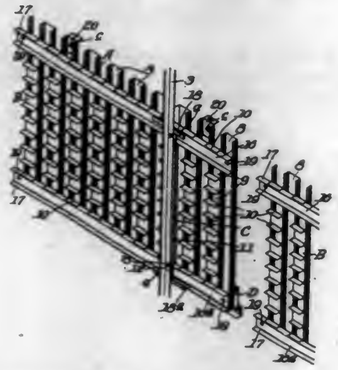
1,878,883. CORN PLANTER. EDWARD MUELLER, Alma, Wis. Filed Mar. 26, 1931. Serial No. 525,553. 3 Claims. (Cl. 111—38.)



2. In a seed planter, a frame, wheels supporting said frame, a hollow axle mounted to rotate in said frame, said wheels being free to turn on said axle, a shaft ex-

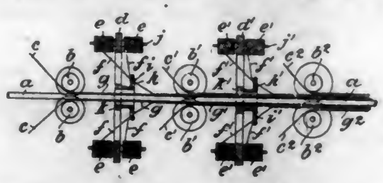
tending through said axle and rotatable therein, said shaft extending beyond said axle at its end, seed dropping means carried by said axle end clutch mechanism for controlling the operation of said dropping mechanism, means slidable on said shaft end and turnable with said shaft to control the dropping mechanism, and automatically operated means for controlling said shaft carried means.

1,878,884. OUTDOOR ADVERTISING STRUCTURE. GEORGE D. OVERHOLTZ, Leetsdale, Pa., assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1929. Serial No. 393,189. 4 Claims. (Cl. 189—84.)



1. In an outdoor advertising structure, the combination with two sheet metal lattice sections each comprising a body cut and bent to form channel-like portions and openings and fins between the adjacent channel-like portions, and a reinforcing channel member secured to the body of each section and extending substantially at right angles to the said channel-like portions, said reinforcing members having coacting means for adjustably connecting the sections.

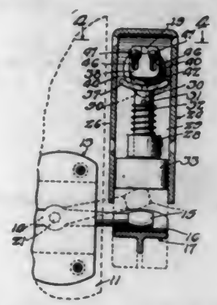
1,878,885. METHOD OF MANUFACTURING RUBBER HOSE. HEINRICH PAHL, Dusseldorf-Rath, Germany. Filed Feb. 12, 1929, Serial No. 339,442, and in Germany Feb. 14, 1928. 4 Claims. (Cl. 154—8.)



1. The herein described method of manufacturing rubber hose, which consists in forming a tube of rubber, superficially embedding therein a single fibrous layer comprising strands under tension and so that adjacent strand portions are out of contact with each other and applying on the fibrous layer thus formed a layer of rubber.

1,878,886. LOCKING DEVICE. JOSEPH S. PAULTON, Chicago, Ill. Filed Mar. 13, 1931. Serial No. 522,367. 7 Claims. (Cl. 70—29.)

1. In a locking device, a housing, a spring urged plunger slidably mounted in said housing, an arc-shaped plate on one end of said plunger, a key-slotted shaft rotatably mounted in the housing, a member providing a cam surface in said housing, a cam rotatable with said shaft, and a lug on said cam, a plate rotatably mounted on said shaft between said cam surface and said cam and having a slot formed in the periphery thereof in which said lug is disposed when the device is in unlocked position whereby upon rotation of said shaft in one direction

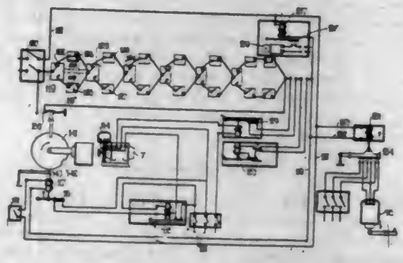


said lug will travel over said cam surface and be forced out of said slot to engage and depress said plunger and upon rotation of said shaft in the opposite direction said lug will disengage said arc-shaped plate and reenter said slot.

1,878,887. METHOD OF PREVENTING SCUM AND EFFLORESCENCE ON BRICK AND CLAY WARE. JAMES B. PIERCE, Jr., and ROBERT L. CURNES, Charleston, W. Va., assignors to Barium Reduction Corporation, Charleston, W. Va., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,749. 3 Claims. (Cl. 106—11.)

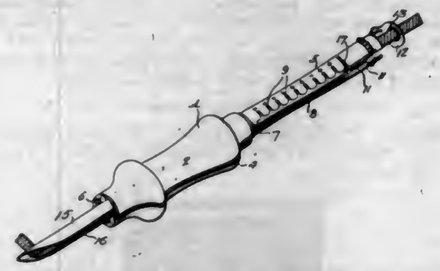
1. The method of treating clay to prevent scum formation and efflorescence subsequent to the firing thereof in the manufacture of brick or clay wares, which comprises passing a gas containing CO_2 gas, at a pressure not exceeding atmospheric pressure, through a suspension of barium carbonate, the amount of the barium radical in such carbonate being substantially sufficient to combine with the SO_3 radical of the water soluble sulphates in a batch of clay to be pugged and the amount of CO_2 gas reacting with the barium carbonate being sufficient to but partially convert the barium carbonate in suspension into soluble barium bicarbonate, pugging the batch of clay with the aqueous mixture so obtained and allowing the reaction therein to proceed until substantially all of the soluble sulphates in the mixture react with the barium bicarbonate formed therein to produce precipitated barium sulphate.

1,878,888. APPARATUS FOR THE AUTOMATIC OPERATION OF MACHINES. NIELS EDWARD RAMBUSH, Stockton-on-Tees, England, assignor to The Power Gas Corporation Limited, Stockton-on-Tees, England, a British Company. Filed July 20, 1927, Serial No. 207,303, and in Great Britain Sept. 27, 1926. 2 Claims. (Cl. 161—1.)



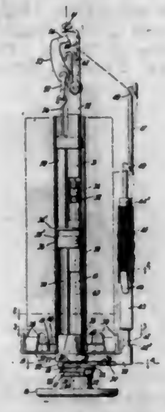
1. In a safety system for the automatic operation of the separate units of a plant, having a servo-motor for each unit and an actuating means therefor, an electric supervisory circuit and a timing mechanism, the combination of means tending normally to move said servo-motors to a safe position, an electro-magnetically operated device in said circuit, serving while energized to prevent the operation of said moving means, selecting switches in said circuit operated by said servo-motors, limit switches in said circuit closable by said units at the end of their travel, and a time switch closed at intervals by said timing mechanism and adapted to remain closed during a period of time slightly exceeding the normal period of travel of the said units, said time switch being arranged in shunt with said limit and said selective switches, whereby the said electro-magnetically operated device remains energized as long as the units are in their selected end positions and for said period of time after a servo-motor initiates the actuation of its corresponding unit towards another end position.

1,878,889. TUFTING NEEDLE. WILMER L. ROBERTS, Palmyra, N. J., assignor to Wm. H. Horstmann Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 12, 1931. Serial No. 536,880. 5 Claims. (Cl. 112—80.)



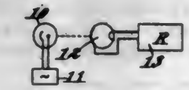
2. The combination of a holder having a plurality of parallel slots therein, a tufting needle slidable with respect to said holder, means carried by said needle arranged for engagement with said slots and means carried by and slidable with respect to the holder arranged when in abutment with said needle, to prevent the removal of the means carried by said needle from one of said slots.

1,878,890. SUPPLY CARRIER FOR BRAIDING MACHINES. HARRY G. ROBINSON, Waterbury, Conn., assignor to Industries of America, Inc., a Corporation of Delaware. Filed Mar. 15, 1930. Serial No. 435,984. 9 Claims. (Cl. 96—15.)



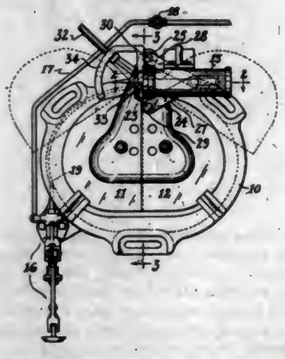
1. In a supply carrier for braiding machines, a carrier base, a support for a supply of yarn, thread or the like mounted rotatably thereon, let-off means also mounted rotatably on the carrier base and permitting regulated delivery of thread or the like from said support by rotation of the support relative to said let-off means, and a plurality of annular stop members intermediate said base and let-off means and having projections progressively interengaging to limit relative rotary motion between the let-off means and said base.

1,878,891. ELECTROOPTICAL APPARATUS. JAMES ROBINSON, Mill Hill, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed Nov. 18, 1929, Serial No. 408,129, and in Great Britain Dec. 1, 1928. 7 Claims. (Cl. 250—41.5.)



1. Apparatus for utilizing light energy to control or to convert it into other forms of energy, comprising a source of light, means for modulating the light to produce light pulses, a light-responsive device on which the light pulses impinge and produce corresponding electrical pulses, and an electrical system tuned to the modulation frequency of the light pulses, to which electrical system the corresponding electric pulses from the light-responsive device are applied.

1,878,892. DOOR MECHANISM. SAMUEL D. ROSENFELT, St. Louis, Mo., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,213. 6 Claims. (Cl. 110—178.)

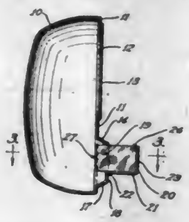


1. A door mechanism of the character described comprising swinging leaves pivoted on a common pivot, a cylinder and piston motor mounted in front of the pivot, and connecting links pivoted to the leaves and to the piston of said motor, said links being arranged to pass each other during operation of the door.

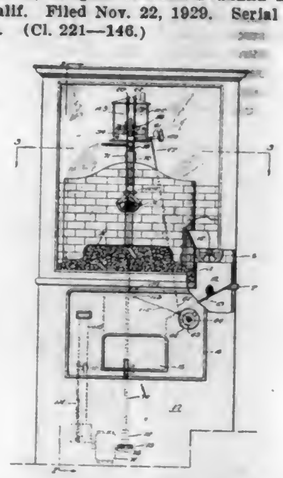
1,878,893. DRINKING CUP FOR BIRDS. SAMUEL ROTBERG, Chicago, Ill. Filed Jan. 12, 1931. Serial No. 508,203. 1 Claim. (Cl. 119—18.)

A drinking appliance for birds comprising a liquid containing housing including a front wall having an opening therein, and said wall being provided with another opening above the first named opening, diverging flanges integral with said front wall and projecting outwardly therefrom to define side walls about said first named opening, a depending flange integral with said front wall and defining a top wall over said opening, an outstanding flange integral with said front wall and including an upstanding portion providing a supporting base, a cup mount-

ed on said base, having an open upper side and including a vertical wall, said vertical wall including ear portions adapted to be secured to said side walls, said cup having an open inner side communicating with said housing, and a transparent plate over the second-named opening whereby the level of the liquid in the housing may be seen.



1,878,894. VENDING MACHINE. LOUIS H. SALLEE, Long Beach, Calif., assignor to John Franklin Meyer, Hollywood, Calif. Filed Nov. 22, 1929. Serial No. 409,048. 6 Claims. (Cl. 221—146.)



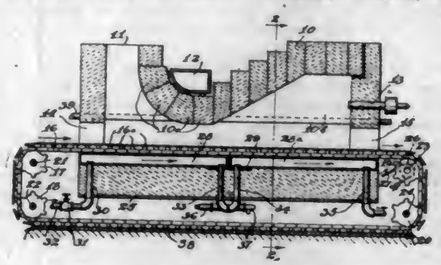
1. In a vending machine of the class described, the combination of a grapple, a laterally movable support for said grapple, means for automatically effecting lateral movement of said support, means for manually determining the extent of said lateral movement from a normal inoperative position, and means for moving said grapple longitudinally of said support.

1,878,895. METHOD OF ENGRAVING METALLIC SURFACES FOR PRINTING. WILHELM O. P. SCHUTTE, Brooklyn, N. Y. Filed Sept. 29, 1930. Serial No. 485,218. 7 Claims. (Cl. 41—43.)



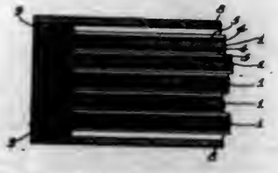
1. A method of engraving by an etching process, a metallic surface for printing purposes, including the step of spraying an acid resisting substance onto the surface to vary the intensity of the sprayed resist for varying the depth of the acid bite to develop a shaded design.

1,878,896. FURNACE FOR EFFECTING HEAT TREATMENTS. EDSON O. SESSIONS, Chicago, Ill. Filed May 23, 1930. Serial No. 454,968. 9 Claims. (Cl. 263—8.)



3. Conveyor means for heat treatment furnaces, consisting of the combination of a metal runway having lateral guides, and a metal chain movable on said runway and consisting of interengaged links for engagement with the teeth of driving and directing sprocket wheels, said links having side portions with flat bottom surfaces of engagement with said runways of widths substantially equal to the width between the said runway guides less the lateral clearances for said sprocket teeth, and of lengths substantially equal to the lengths between clearances of the interengaging portions of said links.

1,878,897. DUPLICATOR. JACOB L. SHERRICK, Scottdale, Pa. Filed July 27, 1931. Serial No. 553,285. 6 Claims. (Cl. 101—131.)



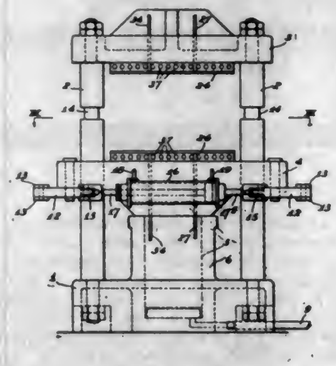
1. In combination, a duplicator unit comprising a rectangular plate having a raised border portion on each side around the four edges of the plate, and a sheet of copying material attached to each side of the plate inside the border portion and consisting of flexible material coated with a layer of hectographing composition, a cover plate for one of the sides, and pin and socket connections between said border portion and the cover for securing the cover removably in position.

1,878,898. SCREW MOUNTING. HARRY D. SEVISON, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 346,024. 7 Claims. (Cl. 292—337.)



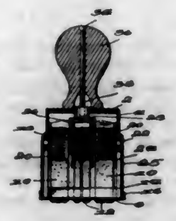
1. The combination with a hollow sheet metal sash having apertures in one of the side walls thereof, and a lock plate for application to the sash, of interiorly screw-threaded bushings positioned crosswise of the sash in such apertures behind the lock plate and terminating substantially flush with such apertured side wall, screws passing through the lock plate into the bushings, and means independent of the screws for preventing both axial and rotary movement of the bushings in the sash.

1,878,899. APPARATUS FOR MAKING COMPOSITE GLASS. JAMES H. SHERTS, Glen Ridge, N. J., assignor to Duplate Corporation, a Corporation of Delaware. Filed June 1, 1928. Serial No. 282,105. 2 Claims. (Cl. 18—17.)



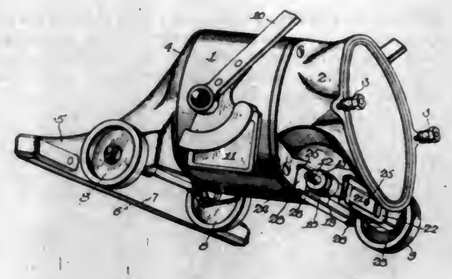
1. Apparatus for applying heat and pressure to a plurality of sheets to be joined together, comprising a pair of opposing separable platens having passages therethrough and provided on their front sides with chambers facing each other, a flexible diaphragm seated across the open face of each chamber constituting a closure therefor, means for supplying liquid under pressure to the chambers, and means for supplying a heating fluid to said passages to heat the platens so that they will in turn heat the liquid in said chambers.

1,878,900. HAND STAMP. HARRY SMALLMAN, Philadelphia, Pa., assignor to Hill Independent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 12, 1930. Serial No. 460,677. 6 Claims. (Cl. 101—111.)



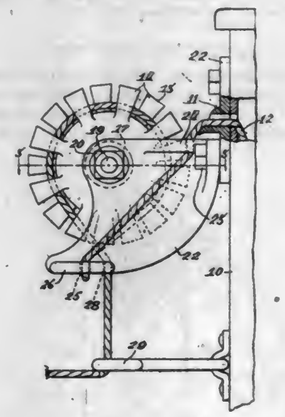
1. A hand stamp comprising a printing band roll, a saddle supporting the roll and having an opening in the top thereof, a nut having a portion extending through the opening and supporting the saddle, and a handle having screw-threaded connection with the nut for adjusting the position of the saddle.

1,878,901. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Oct. 1, 1930. Serial No. 485,614. 7 Claims. (Cl. 15—16.)



1. In a suction chamber of the movable type a body, supporting means therefor comprising a wheel, an axle rotatably supporting said wheel, means slidably supporting said axle, and other means movably supporting said last mentioned means on said body.

1,878,902. TWINE TENSION DEVICE FOR GRAIN BINDERS. DANIEL W. SMITH, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 19, 1930. Serial No. 476,357. 3 Claims. (Cl. 242—155.)



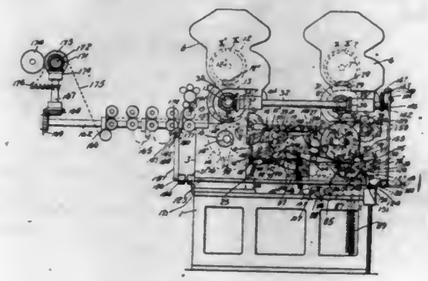
1. A twine tension device for grain binders comprising an attaching bracket, a pin carried by the bracket, a circular block formed integral with the bracket and concentric with the pin, a block mounted on said pin for relative endwise movement, means for yieldingly forcing the blocks together, a wheel turnable around the blocks, friction balls arranged between the blocks and wheel to impart a drag on the wheel, said wheel provided with a groove to receive the twine, and means for leading the twine around said wheel.

1,878,903. ANTIFREEZE SOLUTION. IRA T. SMITH, Booker, Tex. Filed Jan. 18, 1932. Serial No. 587,450. 5 Claims. (Cl. 252—5.)

1. The process of forming an anti-freeze solution which comprises producing a brine by dissolving 260 pounds of calcium chloride in water, adding to the brine one gal-

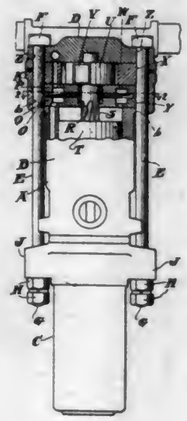
ion of glycerine dissolved in one-half gallon of alcohol and mixing into the brine a solution of coffee extract derived by boiling two pounds of coffee in water, and adding sufficient water to make 100 gallons.

1,878,904. PRINTING PRESS. WALTER HAROLD SMITH, Toronto, Ontario, Canada, assignor to Business Systems Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed May 28, 1930. Serial No. 456,760. 23 Claims. (Cl. 101—181.)



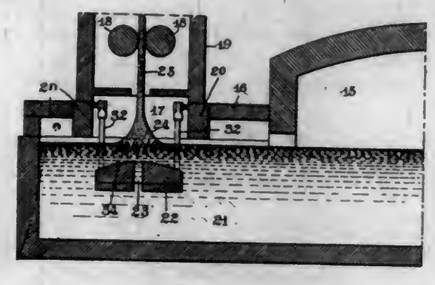
1. In a printing press of the type described, the combination with the impression cylinder, impression cylinder shaft and driving mechanism, of a clutch device for engaging or disengaging the impression cylinder shaft and drive, and means automatically actuated by the opening and closing of the clutch for moving the impression cylider in and out of its printing position.

1,878,905. ROCK DRILL. WILLIAM A. SMITH, Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of Germany. Filed Oct. 24, 1928. Serial No. 314,657. 2 Claims. (Cl. 121—31.)



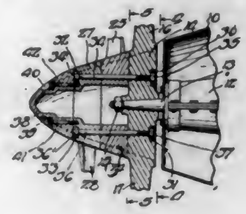
1. In a rock drill, the combination of a cylinder having apertures therein and a back head having apertures coaxial with the apertures in the cylinder, a rotation ratchet in the cylinder having notches, and side bolts extending through the apertures of the cylinder and back head and engaging the notches for holding the rotation ratchet in operative position relatively to the cylinder.

1,878,906. APPARATUS AND METHOD FOR DRAWING GLASS. ARTHUR E. SPINASSE, Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Original application filed July 5, 1927, Serial No. 203,488. Divided and this application filed Nov. 23, 1929. Serial No. 409,401. 4 Claims. (Cl. 49—17.)



2. An anchoring and temperature controlling slab for use in drawing a sheet of glass from a molten bath, comprising a solid body adapted to be submerged in a bath of molten glass beneath the meniscus of an article of sheet to be drawn, said body having an upper surface which is transversely convex and longitudinally straight and a lower surface which is longitudinally convex and transversely straight, said body having a vertical slot therethrough extending longitudinally of its central portion.

1,878,907. AIRPLANE PROPELLER. EDWARD STAATS, Jr., Merrill, Wis. Filed Oct. 17, 1930. Serial No. 489,406. 1 Claim. (Cl. 170—165.)

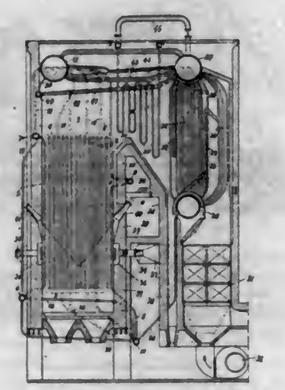


An airplane propeller structure comprising a shaft, a plurality of series of propeller blades arranged in tandem relation, each series having its blades increasing in length over the length of the blades of the preceding series, the blades of one end series including a hub, the others of said series of blades including hubs, said hubs having aligned apertures extending therethrough, and nut-bearing bolts extended through said apertures to secure the second named hubs to the first-named hub.

1,878,908. WATER TUBE BOILER. LEBRECHT STEINMÜLLER, Gummersbach, Germany. Filed June 5, 1930, Serial No. 459,280, and in Germany June 12, 1929. 6 Claims. (Cl. 122—235.)

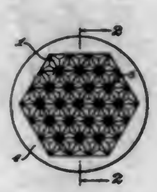
1. In a boiler furnace fired with pulverized fuel, the combination with a combustion chamber adjacent the front wall of the furnace, of fuel discharge apparatus

carried by the front wall for projecting fuel into said chamber, a tubular water heating unit disposed rearwardly of said combustion chamber, means for conducting hot gases from the combustion chamber to said unit,



means forming a chamber accessible from the exterior of said furnace and located intermediate said unit and said combustion chamber, and fuel discharge apparatus disposed within said last named chamber for projecting fuel within said combustion chamber.

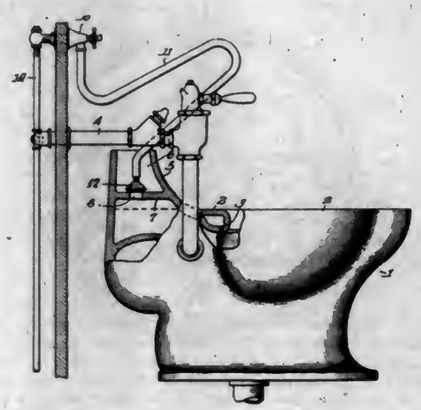
1,878,909. SIGNAL LANTERN. JONATHAN CASS STIMSON, St. Louis, Mo. Original application filed Dec. 10, 1923, Serial No. 679,724. Divided and this application filed Sept. 5, 1930. Serial No. 479,814. 14 Claims. (Cl. 177—329.)



2. A reflecting signal, comprising a glass plate having a series of total reflecting units arranged in contiguous relation on one face thereof arranged to reflect light incident thereon from the other face, the continuity of said units being interrupted to provide a series of distributed free light-transmitting zones, each of substantial area, between said units.

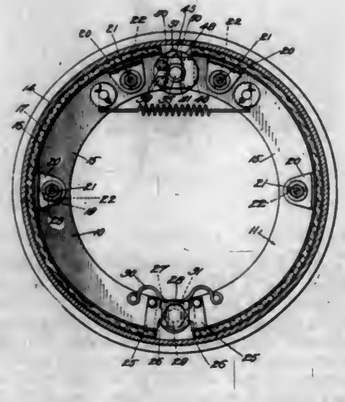
1,878,910. CLOSET BOWL WITH SPRAY RECEPTOR. LOUIS B. STINE, Niles Center, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1930. Serial No. 438,034. 1 Claim. (Cl. 4—7.)

In combination, a plumbing fixture having a bowl terminating in a rim, a fresh water supply line connected to said bowl, the connections thereto including a flush valve for controlling the supply of water to said bowl, an auxiliary hose connection from said fresh water supply, said hose connection being of sufficient length to extend into said bowl, a portion of the upper edge of the bowl being extended above the remainder thereof and shaped to provide a receptor adapted to receive the end of said



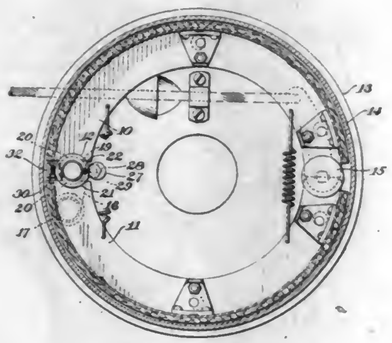
hose, said receptor having an apertured bottom positioned above the rim of said bowl and above any possible overflow level of the bowl, the aperture communicating with said bowl to drain the receptacle thereinto.

1,878,911. BRAKE. GEORGE H. STONER, Boston, Mass., assignor to Stoner-Ames Brake Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed July 26, 1930. Serial No. 470,929. 2 Claims. (Cl. 188—78.)



1. In an internal expanding brake, a brake drum, a pair of brake shoes, a disk carried by one of said shoes and having a peripheral slot to receive the other shoe, a member rotatably carried by said disk and having a slot in one face, means actuated by said member and operable in the slot in said disk to engage said other shoe, and means adapted to slidably engage the slot in said member to rotate said member.

1,878,912. BRAKE ANCHOR. GEORGE H. STONER, Boston, Mass., assignor to Stoner-Ames Brake Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1931. Serial No. 527,733. 1 Claim. (Cl. 188—78.)



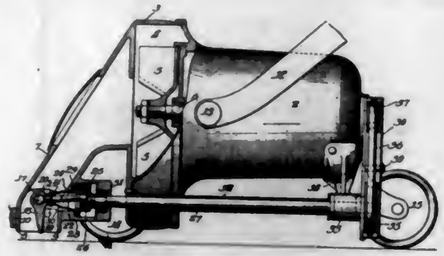
In a vehicle brake, in combination, a rotatable brake drum, a stationary backing plate, an arm pivotally mounted at one end on the backing plate, and a pair of brake shoes pivotally carried at the other end of said arm, the angle formed by the center line of said arm and a line passing from the center of the drum to the end of the arm carrying said shoes being not less than 90° when the shoes are in engagement with the drum.

1,878,913. SURGICAL SUPPORT. FRANK J. STUART, St. Louis, Mo. Filed Aug. 17, 1927. Serial No. 213,583. 2 Claims. (Cl. 128—116.)



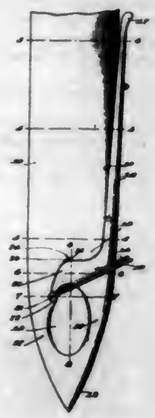
1. In a device of the character described, a central hard pad member, and a thick soft and elastic annulus fitted snugly thereon, the pad being of an altitude from bottom to top much greater than the corresponding measurement of the annulus, said pad having a series of irregularities on its lateral surfaces spaced from the top of the pad and being constructed and adapted to be embedded in the engaged part of the annulus by contraction of the latter, to prevent casual slipping of the annulus from adjusted positions on the pad, the lower side portions of said pad having a mutual relation between diametrically opposite portions such as to support the annulus in positions spaced from the bottom of the pad, whereby the annulus will be held adjustably with respect to the top of the pad, said annulus being of sufficient tensile strength to transmit effective pressure from the annulus to the person of the wearer by its inherent contractile quality acting upon the pad.

1,878,914. SUCTION CLEANER. RICHEY L. SWARTZ, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,329. 7 Claims. (Cl. 15—13.)



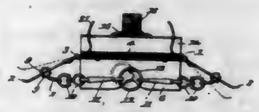
1. In a suction cleaner adapted to lift the surface covering undergoing cleaning, nozzle lips, a rigid agitating finger-member extending substantially to the plane of said nozzle lips and means to impart a horizontally reciprocating movement to said agitating finger-member.

1,878,915. NEEDLE. STELLA A. TREJO, Kansas City, Mo., assignor of fifty-five per cent to William B. Leslie, Kansas City, Mo. Filed Sept. 26, 1929. Serial No. 395,306. Renewed Aug. 8, 1932. 3 Claims. (Cl. 112—224.)



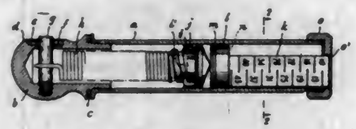
1. A needle comprising a pointed shank having an eye and a recess, a resilient arm having a horn and a base connected with the shank and defining a part of the contour of the eye, and a hump on the horn loosely engaging the recess to limit the outward movement of the arm.

1,878,916. SWIMMER'S SPEED ACCELERATING DEVICE. DECIDERIO TRUJILLO, Denver, Colo. Filed Nov. 5, 1931. Serial No. 573,102. 3 Claims. (Cl. 9—21.)



1. In a speed accelerating device for swimmers, a foot plate and securing means therefor, wings hinged to the long sides of said plate, pairs of chains secured at one end to each wing and having hooks on their free ends, a ring connecting the hooks of each pair of oppositely positioned chains, supports on the foot plate and bolts which pass through said supports and said rings, said chains limiting the spread of said wings.

1,878,917. FLUID PRESSURE INDICATOR FOR PNEUMATIC TIRES AND OTHER INFLATED BODIES. WILLIAM TURNER, Sheffield, England. Filed Jan. 8, 1930, Serial No. 418,377, and in Great Britain May 15, 1929. 4 Claims. (Cl. 73—111.)

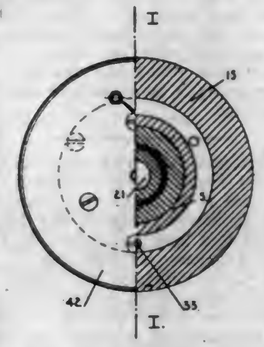


1. A fluid pressure gauge of the character herein described comprising a pressure cylinder, a hollow cap on one end thereof, said cap having a circular aperture in one of its sides, a transverse pin of a diameter slightly less than the said aperture secured within said cap and extending with small clearance through said aperture, a pressure-actuated member slidably mounted within said pressure cylinder, and a coiled spring extending into the said hollow cap and connected with said pressure member and said transverse pin.

1,878,918. MANUFACTURE OF CHROMIC ACID. MARVIN J. UDY, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed June 2, 1926. Serial No. 113,335. 3 Claims. (Cl. 204—9.)

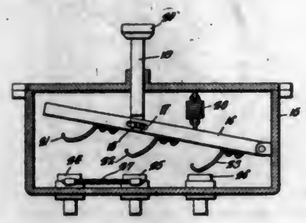
1. Process of manufacturing chromic acid which comprises electrolytically dissolving chromium from a ferrochrome anode in the anode compartment of a diaphragm cell with an anolyte strongly acid with sulphuric acid and substantially free from alkali metal and alkaline earth metal compounds; and recovering chromic acid from the anolyte.

1,878,919. DRIVING SYSTEM FOR LOUDSPEAKERS. HENDRIK VAN DAM, Capelle-on-the-Ijssel, and DIRK HERMANUS VAN DAM, Rotterdam, Netherlands. Filed Oct. 20, 1930, Serial No. 490,066, and in Germany Oct. 22, 1929. 8 Claims. (Cl. 175—339.)



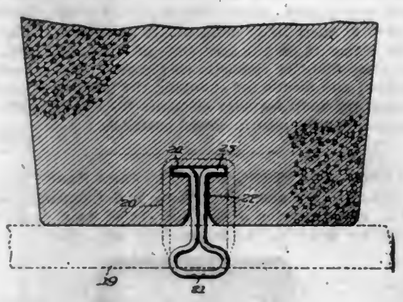
1. Driving system for a loudspeaker, comprising an armature of magnetic material, a plurality of driving coils, a casing of magnetic material for each of the coils, a polarizing magnet in the magnetic circuit of which the armature and the casings of magnetic material surrounding the coils is included, the armature being shaped substantially as a cylinder and being supported slidably in the common axis of the coils the air gaps between the armature and the magnetic material carrying the alternating fluxes of the coils remaining constant and the direction of the polarizing flux in the armature being substantially parallel to this axis.

1,878,920. AUTOMOBILE STARTING SWITCH. HARVEY H. WADDELL, Cary, N. C. Filed July 15, 1930. Serial No. 468,186. 1 Claim. (Cl. 201—48.)



In an electrical switch, a casing, a plurality of stationary contacts mounted in the casing to lie in a common plane, an inclined pivoted lever in the casing movable toward and away from the plane of said contacts, a resistance element connected to two of said contacts, flexible fingers on said switch lever each of which is adapted to engage a stationary contact and to engage therewith in succession as said lever is swung toward said contacts, means for normally and yieldably holding said lever away from said contacts, and an operating plunger slidable in a wall of said casing and pivotally connected with said lever.

1,878,921. ANCHOR. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,281. 2 Claims. (Cl. 72—101.)

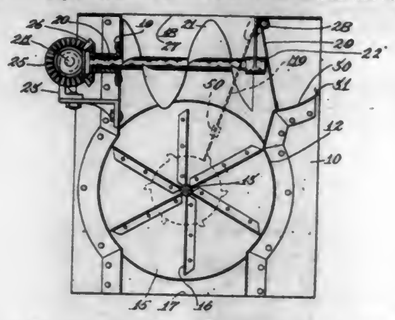


1. A device for use in providing an undercut slot in the face of concrete, consisting of a section of sheet metal bent to define a shallow, rectangular space having a side opening, and walls projecting laterally from the edges of the opening, the free edges or margins of the walls being adapted to contact a form and being outwardly and oppositely flared.

1,878,922. GRAIN MEASURING DEVICE. ARNT W. WESSMAN, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 323,919. 4 Claims. (Cl. 73—131.)

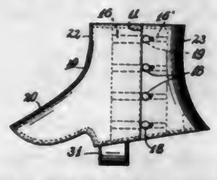
1. In a grain measuring device having a casing forming a measuring chamber with a discharge opening at its bottom, said casing at one end being extended outwardly to form a track, a charging chamber directly above the measuring chamber, an intermittently rotating compartmented measuring drum located in the measuring chamber,

an auger directly above the drum in the charging chamber, means for turning the auger, a rockshaft across the top of the charging chamber at one end thereof and above said



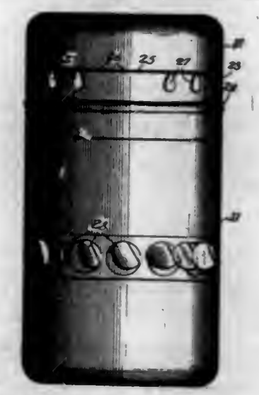
track, a flap connected to rock with said shaft and having its lower end closely engaging said track, means embodying a clutch for driving the drum, and means actuated by the rockshaft to control said clutch.

1,878,923. ELASTIC SPAT. LEO WIESENFELD, Brooklyn, N. Y. Filed June 25, 1930. Serial No. 463,603. 4 Claims. (Cl. 36—2.)



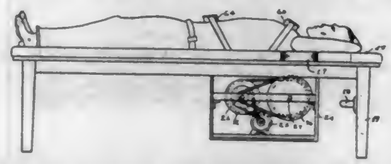
1. The combination with a spat having a side opening of a strip of material attached along one edge of said opening, stitches between said strip and spat forming spaced horizontal pockets with openings at said edge, elastic tabs secured at their inner ends within said pockets, snap fastener elements on the free ends of said tabs, complementary snap fastener elements on the other edge of said spat opening, and means for changing the position of said complementary snap fastener elements for adjustments of the tensions of said tabs in closed positions.

1,878,924. BLENDING DEVICE. JOHN HENRY WILL, Chicago, Ill., assignor to Armour and Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 6, 1930. Serial No. 480,069. 4 Claims. (Cl. 221—61.)



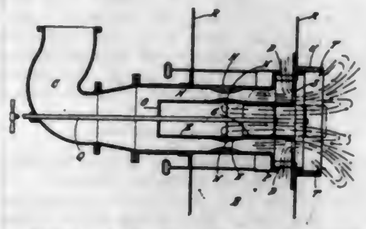
1. A blending device comprising two cup-like members of dissimilar depth, the interior provided with stationary vanes disposed about the wall thereof at an oblique angle to the axis, and an insert disposed within the members and dividing the interior into two compartments of unequal capacity, said insert provided with apertures flanked by vanes disposed at an oblique angle to the axis thereof and at an angle to the first mentioned vanes, the cup-like members arranged in alignment and in telescopic relation to the insert and separated by a rib.

1,878,925. VIBRATORY APPARATUS. KARL H. WHITNEY, Kirksville, Mo. Filed Dec. 17, 1929. Serial No. 414,758. 10 Claims. (Cl. 128—63.)



5. Vibratory apparatus comprising a support for the body of a patient having rollers at the sides thereof, a pair of rocker arms located beneath said support and each centrally pivoted, a driving motor operatively connected to said rocker arms, speed changing apparatus interposed between said motor and said rocker arms, a pair of harness members attached in pairs to opposite ends of said rocker arms, said harness members being looped over said rollers and over the body of a patient resting upon said support, and movable over said rollers and patient in opposite directions.

1,878,926. PULVERIZED FUEL BURNER. HAROLD EDGAR YARROW, Glasgow, Scotland. Filed June 13, 1929, Serial No. 370,569, and in Great Britain Aug. 24, 1928. 4 Claims. (Cl. 110—104.)

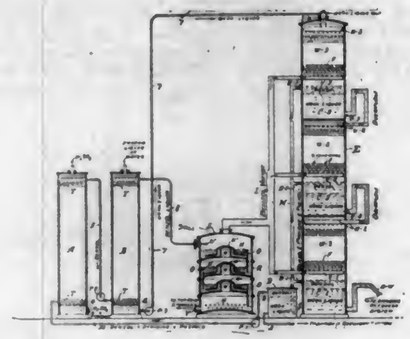


1. A pulverized fuel burner comprising a duct to convey a fuel constituent to a furnace, a second duct disposed within the first duct closed at one end and leading at the other end to the furnace, a Venturi constriction formed by the inner and outer surfaces respectively of the first and second ducts, the second duct having in its wall an aperture substantially in the transverse plane of the said Venturi constriction.

1,878,927. PROCESS FOR THE REMOVAL AND RECOVERY OF PHENOLS AND PYRIDINE FROM LIQUORS. WALTER R. KNAPP, Pelham Manor, N. Y., assignor to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1926. Serial No. 154,012. 2 Claims. (Cl. 260—154.)

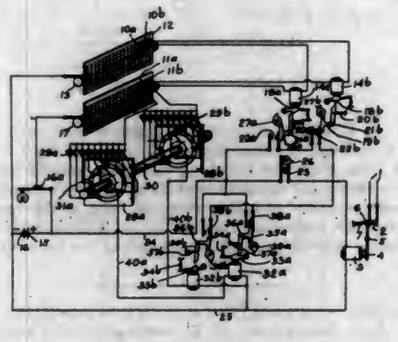
1. A continuous cyclic process for effecting the removal of phenols and pyridine from aqueous liquor containing the same, which comprises contacting the liquor with a vaporous absorbing medium having in the liquid phase a boiling point substantially different from that of the phenols so as to permit the separation of the absorbing medium from the phenols by distillation, whereby the vaporous absorbing medium is condensed and phenols and pyridine extracted from the liquor, separating the resultant solution of absorbing medium, phenols and pyridine from the extracted liquor, treating the absorbing medium containing the phenols and pyridine to remove pyridine

therefrom, thereafter distilling the resultant pyridine-free solution to distil off the absorbing medium in vaporous



form and thus separate the absorbing medium from the phenols, and utilizing the vaporous absorbing medium to extract phenols from additional aqueous liquor.

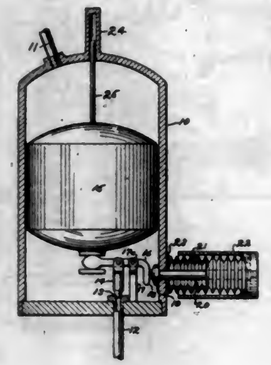
1,878,928. SELECTOR FOR GROUP CONTROL SYSTEMS. ULRICH KÖLM, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 22, 1927, Serial No. 241,767, and in Germany July 28, 1927. 19 Claims. (Cl. 235—92.)



1. A group control system for record controlled machines comprising record controlled means tending to modify machine operation on a change in classification data on successive records and means cooperating with said first named means to nullify its effect on the occurrence of preselected classification data changes.

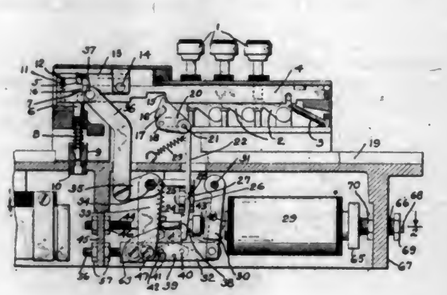
1,878,929. REFRIGERATION. WALTER A. KUENZLI, Evansville, Ind., and ALVIS YATES DOWELL, Hastings-on-Hudson, N. Y., assignors to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1930. Serial No. 486,993. 5 Claims. (Cl. 137—68.)

1. In combination, a casing, a float within said casing, a valve operable by said float, a valve unseating member extending through said casing, flexible means for sealing the opening between the casing and the valve unseating



member, and a cap operable for moving the valve unseating member and forming a stop for limiting the movement of the valve unseating member.

1,878,930. ELECTRIC KEY PUNCH. CLAIR D. LAKE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 1, 1925. Serial No. 34,080. 22 Claims. (Cl. 164—113.)

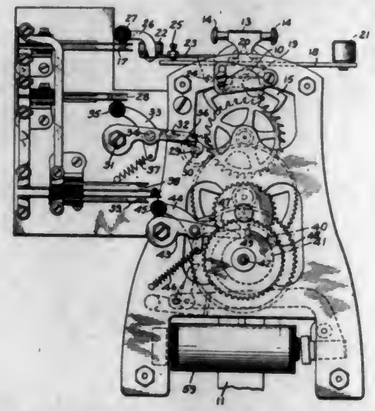


1. A punching machine of the type having light punches for perforating record cards or the like and punch-operating means including a punch-actuating device connected to the armature of an operating solenoid; characterized by the fact that retarding means are provided for the punch actuating device, comprising a stationary member and a toggle linkage connected at one end to said member and at the other end to said armature.

1,878,931. MASTER CLOCK. CLINTON E. LARRABEE, Binghamton, N. Y., assignor to International Time Recording Company of New York, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1930. Serial No. 447,611. 3 Claims. (Cl. 58—33.)

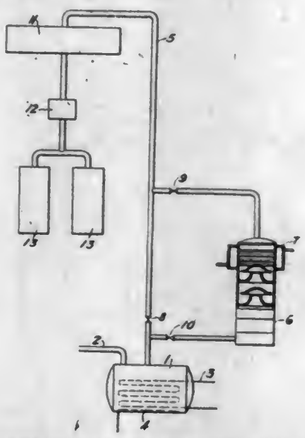
1. In a circuit controlling device, a frame, contacts mounted in said frame, a member pivotally mounted in said frame adjacent said contacts, an arm mounted on said member intermediate the ends of the latter and adapted to operate said contacts by a pivotal movement relative to said member, means for periodically permitting pivotal movement of the arm to operate said contacts and there-

after a second pivotal movement of said member to restore said contacts to their former condition, and means



connected to said arm for effecting both pivotal movements of said arm and member under control of the first named means.

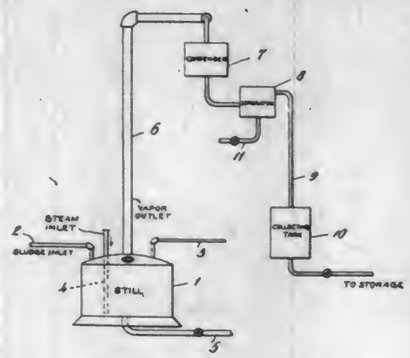
1,878,932. MOTOR FUEL PROCESS. JOSEPH J. LAWTON, Syracuse, N. Y., assignor to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,631. 2 Claims. (Cl. 196—75.)



1. The process of producing motor fuel from crude coke oven light oil which comprises slowly distilling the crude oil whereby to separate a low boiling fraction having a volume of about 10–15% based upon the crude oil and containing low boiling constituents undesirable in a motor fuel, condensing and separately collecting said low boiling fraction, further slowly distilling the crude oil and separately collecting the distillate until it has a volume of about 40–50% based upon the crude oil, whereby a fractional distillate is produced suitable for utilization as a motor fuel without further purification.

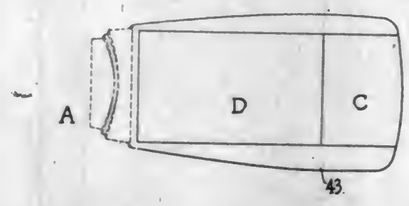
1,878,933. PROCESS OF TREATING SLUDGE ACID. JOSEPH J. LAWTON, Syracuse, N. Y., assignor to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Filed May 29, 1929. Serial No. 366,977. 7 Claims. (Cl. 196—148.)

1. A process of treating acid sludge obtained in the treatment of coke oven light oil and similar oils which comprises forming a mixture of said acid sludge and a heavy high boiling inert oil and then distilling off from



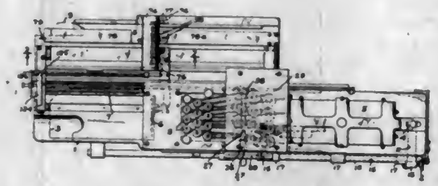
said mixture the volatile content of the acid sludge thereby causing a fluid residue to remain after the distillation of said mixture.

1,878,934. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed May 26, 1928, Serial No. 280,694, and in Germany May 27, 1929. Divided and this application filed July 31, 1929. Serial No. 382,377. 5 Claims. (Cl. 296—28.)



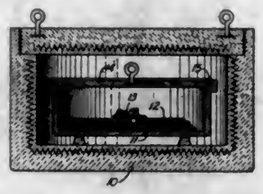
1. In a vehicle body construction, a side unit including a doorway opening and deriving its strength in large part from a unitary stamping extending around the doorway opening and flanged inwardly around said opening and curved inwardly at top to form the side of the roof, and an angular stiffening strip having an arm secured to the inwardly extending flange at the top of the doorway opening.

1,878,935. DUPLICATING PUNCHING MACHINE. FRED L. LEE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Sept. 24, 1928. Serial No. 307,819. 31 Claims. (Cl. 164—113.)



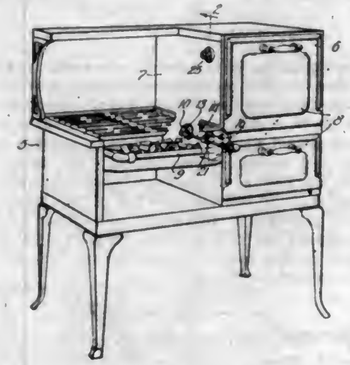
1. In a card punching machine, a conductor beneath which a master card carried by a movable carriage passes, a row of selector contacts in the form of brushes comprising a duplicator separable from the conductor by intact portions of the master card, and means automatically operable as an incident to shifting the card carriage for shifting said brushes out of contact with said card.

1,878,936. REFINING OF COPPER. VICTOR E. LEGG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1928. Serial No. 321,627. 1 Claim. (Cl. 148—11.5.)



In manufacture of loaded cables in which a copper conductor is first surrounded by loading material and the loading material is thereafter annealed in situ thus subjecting the copper to the action of vaporized oils or other reducing agents which tend to embrittle the copper, the method of inhibiting such embrittling which comprises first heat treating the copper conductor in a closed vessel in which the distillation of carbonaceous materials is effected to deoxidize the copper, subjecting the copper conductor to mechanical working, and subsequently reheating said conductor in the presence of carbonaceous material at a temperature sufficient to produce recrystallization of its structure and to render it highly ductile.

1,878,937. OVEN HEAT REGULATOR. OSCAR J. LEINS and HOWARD C. RAWLINGS, Milwaukee, Wis., assignors to Claus Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 12, 1929. Serial No. 385,424. 25 Claims. (Cl. 236—15.)



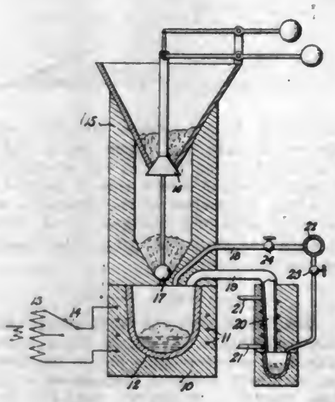
1. The combination with an oven having a wall of a heat regulator therefor, comprising an assembled unit consisting of an extension having a controlling device, a thermally operated device and a selecting device all mounted upon said extension in precorrelated relation and constituting a unitary assembly adapted for application to the oven in unitary assembled relation and by movement of the controlling device into and through the space inside of the oven wall.

1,878,938. THERMALLY OPERATED DEVICE. OSCAR J. LEINS and CLARENCE WANTZ, Milwaukee, Wis., assignors to Claus Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 12, 1929. Serial No. 385,425. 23 Claims. (Cl. 236—15.)



1. In combination, a thermally sensitive member, selecting means having free abutting contact with one end of said member, means actuated by said member and in free abutting contact with the opposite end thereof, and constraining means in free abutting contact with said thermally sensitive member intermediate the free abutting contacts of said selecting and actuated means therwith, said constraining means forming a fulcrum about which said thermally sensitive member is adapted to rock.

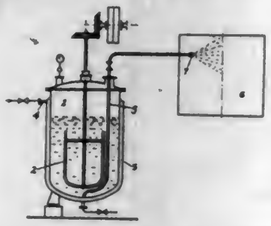
1,878,939. PRODUCTION OF METALLIC ALUMINUM AND OTHER MATERIALS. WILLIAM JUNIUS LESTER, Little Rock, Ark. Filed Dec. 13, 1928. Serial No. 325,920. 11 Claims. (Cl. 75—58.)



1. The method of producing metallic aluminum which comprises smelting an aluminum oxide material in the presence of carbon and a metal of boiling point higher than aluminum whereby to reduce the aluminum oxide present to elemental and molten condition so that it mixes with the molten metal and with the evolution of carbon monoxide gas, while maintaining the temperature of reduction below the point of substantial volatilization of

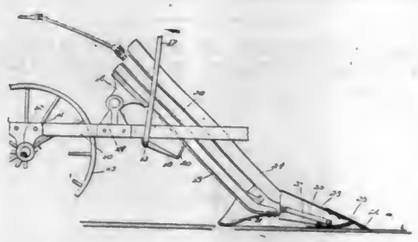
aluminum, placing the mass under vacuum to withdraw carbon monoxide gas therefrom, thereafter distilling the mixed metals whereby to evacuate the aluminum, and condensing the aluminum to the metallic state.

1,878,940. DECOMPOSITION OF WAXES. EAWIN LIESE, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 5, 1929, Serial No. 330,624, and in Germany Jan. 14, 1928. 7 Claims. (Cl. 86—16.)



1. The process which comprises, saponifying wool fat by heating the same with caustic alkali in an autoclave, spraying the hot saponification mixture into a receiver, and extracting the finely divided flocculent powder obtained with acetone.

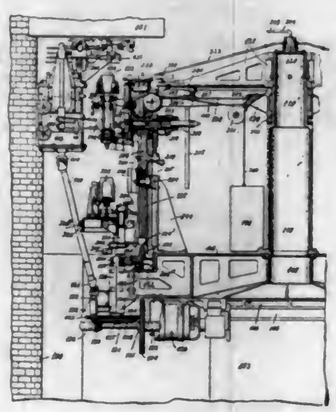
1,878,941. CORN PICKER GATHERING POINT. ALEXUS C. LINDGREN, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 20, 1930. Serial No. 489,725. 1 Claim. (Cl. 56—119.)



In a harvesting device, a frame structure adapted to be mounted on a supporting frame and a pick-up unit floatingly mounted at the forward end of said structure, said unit being provided with a runner member adapted to operate along the surface of the ground, a soil penetrating member extending forwardly and downwardly from said unit, and stalk deflecting rods extending laterally from one side thereof.

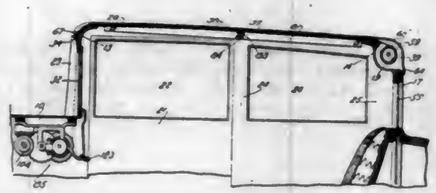
1,878,942. MACHINE FOR MAKING ARTICLES FROM MOLTEN MATERIAL. FRANK H. LOBB, Philadelphia, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 29, 1921. Serial No. 465,440. 73 Claims. (Cl. 49—9.)

1. In a machine for making molded articles, blow head and blow mold devices mounted to rotate in unison in parallel planes, a slide mounted to rotate in unison with said devices and movable relatively to them in a direction parallel to the axis of rotation, a head mounted on said slide to turn for inversion about an axis lying in a plane parallel to said planes, blank and neck mold devices carried by such invertible head, means for moving said slide to and fro between said blow head and blow mold devices, means for effecting inversion of said head, and means for operating the several molds as the said devices and slide travel around the axis of rotation.



49. In a machine for making molded articles, a blow mold, and an air-discharge nozzle arranged axially below said mold.

1,878,943. AUTOMOBILE BODY. SYLVANUS D. LOCKE, Bridgeport, and HENRY J. STEGEMAN, Fairfield, Conn. Filed Mar. 3, 1928. Serial No. 258,909. 5 Claims. (Cl. 296—98.)

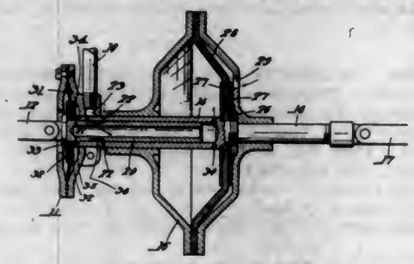


1. In combination, a removable automobile top, means to move said top into inoperative position, means to move said top to operative position, said last named means including a shaft, a shaft parallel with said shaft, an electric motor geared to said second shaft, gearing between said first and second shafts whereby the second shaft may drive the first shaft, ratchet means associated with the second shaft to prevent rotation of said shaft in one direction, a slip clutch frictionally connecting the ratchet with the second shaft, and means to shift said clutch to render said ratchet means inoperative whereby said shaft may move in said direction.

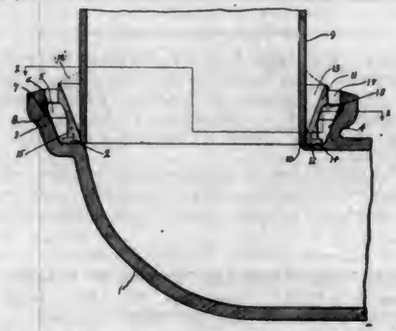
1,878,944. VACUUM BRAKE. NATHANIEL LOMBARD, Worcester, Mass. Filed Jan. 3, 1929. Serial No. 330,054. 4 Claims. (Cl. 188—152.)

1. In a vacuum brake, the combination with a brake and a brake rod connected therewith, of a pedal, a diaphragm casing, one side of which is adapted to be connected with the suction side of an internal combustion engine and the other always open to the air, a flexible diaphragm in said casing, a hollow valve connected with the diaphragm to move therewith and having a port adapted to be exposed to the suction when the pedal is moved to apply the brake, a second diaphragm chamber having a diaphragm therein connected positively with

the brake rod, said chamber being open to the air on one side and communicating with the interior of said valve on the other side, whereby when the valve communicates with the suction of the engine, the second diaphragm will be operated by the greater air pressure on the other side to apply the brake.

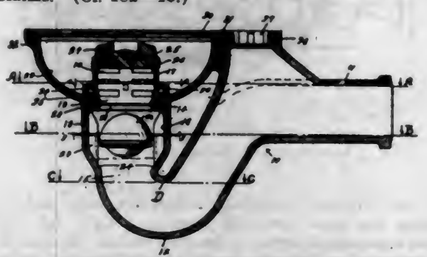


1,878,945. JOINT FOR WASTE PIPES AND THE LIKE. HENRY J. LUFF, Cleveland Heights, Ohio, assignor to Willard J. Luff, Cleveland Heights, Ohio. Filed Nov. 18, 1927. Serial No. 234,194. 2 Claims. (Cl. 285—115.)



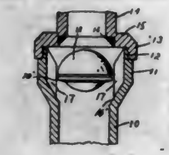
1. In a waste pipe connection, a pipe or fitting of rigid material having an inlet port, a hub surrounding said port, a seat in the base of said hub, said hub having its end portion parallel to the axis of the port, said hub being recessed outwardly from said end portion by an annular groove, and a pipe of ductile material bearing on said seat, a collar interiorly outwardly flared from said ductile pipe and having a flange bearing on said seat, said collar having its exterior surface flared outwardly and having its outer end portion parallel to the axis of the port.

1,878,946. FLOOR DRAIN. HENRY J. LUFF and WILLARD J. LUFF, Cleveland Heights, Ohio; said Henry J. Luff assignor to said Willard J. Luff. Filed Feb. 16, 1929, Serial No. 340,426. Renewed June 16, 1931. 9 Claims. (Cl. 182—15.)



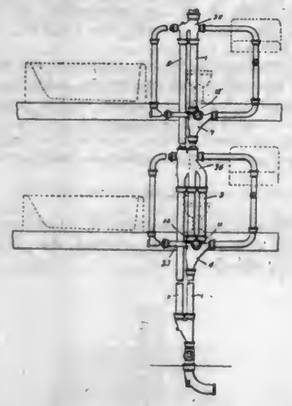
1. In combination with a floor drain trap having an inlet basin provided with a port in its bottom, a cylindrical strainer having its open end engaged in said port, a plurality of radial lugs on said strainer, and means centered on said lugs for arresting silt and the like before it reaches said strainer, while permitting complete drainage of liquid from said basin.

1,878,947. FLOAT. HENRY J. LUFF and WILLARD J. LUFF, Cleveland Heights, Ohio; said Henry J. Luff assignor to said Willard J. Luff. Original application filed Feb. 16, 1929, Serial No. 340,426. Divided and this application filed Nov. 27, 1929. Serial No. 410,133. 6 Claims. (Cl. 137—104.)



3. A float comprising a substantially hemispherical member, and a second member closing said first member, said second member being flatter than and disposed below said hemispherical member, said members having a common geometrical axis of rotation, the major weight of material of said members being disposed to bring the center of gravity of the assembled float on said axis nearer the intersection of said axis with the second member than with the first.

1,878,948. PLUMBING SYSTEM. WILLARD J. LUFF, Cleveland Heights, Ohio. Filed July 15, 1930. Serial No. 468,172. 13 Claims. (Cl. 4—212.)

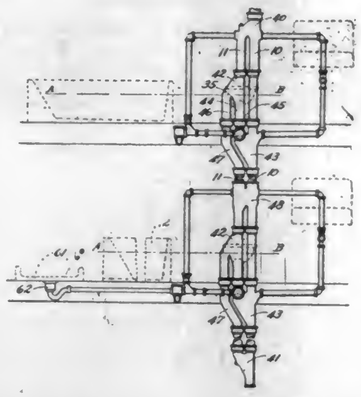


2. A waste pipe fitting constructed at top and bottom for connection into a waste pipe section of a ventilated building drainage system and having a body portion intermediate its top and bottom, a plurality of waste inlets having the axes of their inner ends directed substantially downward and the tops of the interior surfaces of said inner ends intersecting said body portion substantially at a common plane, having the axes of their outer ends substantially in said common plane, with a vent opening entering said body portion substantially at the said common plane.

1,878,949. PLUMBING SYSTEM. WILLARD J. LUFF, Cleveland Heights, Ohio. Filed July 15, 1930. Serial No. 468,173. 10 Claims. (Cl. 4—2.12.)

1. In a plumbing system, a waste stack, a vent stack adjacent thereto, a connection between said stacks entering the waste stack below the entry to the vent stack,

and means for excluding downflowing water in said waste stack from said vent stack, the lowest point of said entry of said connection into the vent stack being at a predetermined overflow level, a plurality of fixtures in said



system each having an outlet and an overflow level, said predetermined ovrflow level being situated above the outlet of at least one of said fixtures and below the lowest overflow level of any fixture.

1,878,950. REDUCTION OF ORGANIC NITRO COMPOUNDS. CHAUNCEY ALLAN LYFORD, East Aurora, N. Y., assignor to National Aniline & Chemical Company, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1929. Serial No. 388,270. 9 Claims. (Cl. 260—130.5.)

1. In the production of an aromatic nitroamino derivative, the process which comprises subjecting a metadinitro derivative of a hydrocarbon of the benzene series to the action of an alkali metal sulfide in the presence of water and of an inert, water immiscible organic liquid which is a solvent for the m-dinitro derivative.

1,878,951. GRAPPLE. CHARLES W. MADISON, Centuria, Wis. Filed Aug. 5, 1931. Serial No. 555,198. 10 Claims. (Cl. 43—5.)



1. A grapple comprising a shank having a rigid cross bar supporting a pair of spaced pivots at the opposite ends of said cross bar, a pair of pronged levers fulcrumed, intermediate their ends, on said pivots, a member slidable on the shank, and a toggle device connecting said levers and operatively attached to said slidable member.

1,878,952. COMPOSITE MOLDING MICA. RUSSELL MAHANEY, Wilkinsburg, and WILLIAM BRAZELTON, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 252,035. 9 Claims. (Cl. 154—2.6.)

1. An insulation composition comprising mica plates secured together by a composition of matter comprising a vegetable drying oil, a resin, a fluxing agent and shellac.

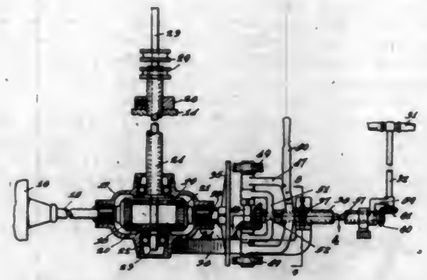
1,878,953. PROCESS FOR CHANGING SOLUBILITY OF CELLULOSE ACETATE. CARL J. MALM, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 12, 1928. Serial No. 325,597. 15 Claims. (Cl. 260—102.)

11. A process of de-acetylating a fully esterified cellulose acetate which comprises hydrolyzing the acetate in an aqueous acid bath containing a fraction of 1% of a hydrolyzing catalyst for a period exceeding 6 days.

1,878,954. PROCESS FOR RENDERING CELLULOSE ACETATE FREE FROM HAZE. CARL J. MALM, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 385,074. 7 Claims. (Cl. 260—102.)

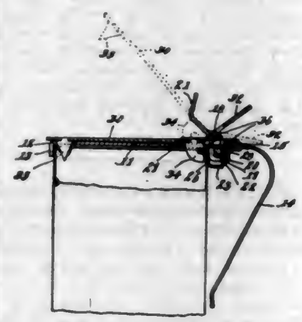
1. In the process of manufacturing cellulose acetate, the step which comprises adding hydrochloric acid to partially hydrolyzed cellulose acetate in the hydrolyzing bath.

1,878,955. AIR VEHICLE. EDWARD P. MANTELL, San Francisco, Calif. Filed Mar. 28, 1930, Serial No. 439,735. Renewed May 25, 1932. 4 Claims. (Cl. 244—15.)



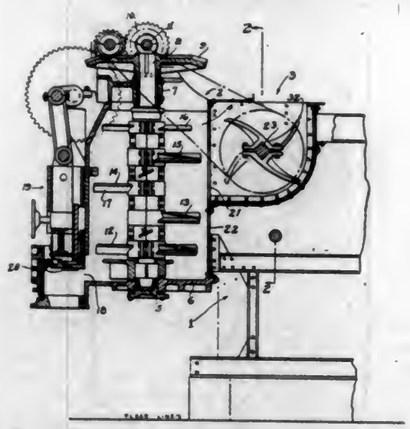
2. An airplane comprising an airplane body, means for raising the same vertically forming a rigid unit therewith, a propeller active on the tail end of the body in a transverse direction and means for revolving the propeller including means for reversing the direction of rotation and means for adjusting the propeller in a transverse plane.

1,878,956. CAN PERFORATOR. AUGUST MANTEUFEL, Chicago, Ill., assignor, by direct and mesne assignments, of one-third to August Blum, Chicago, Ill., and one-third to Royal E. Scheidler, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,554. 4 Claims. (Cl. 221—23.)



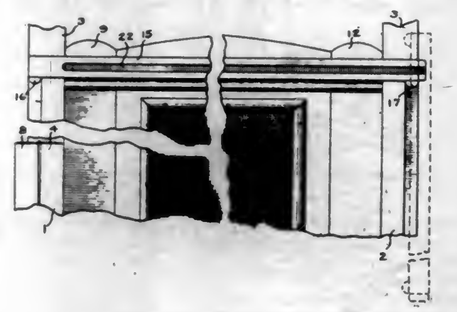
1. A device for perforating condensed milk cans or the like, comprising a supporting arm arranged to extend transversely across the top of a can, a finger member on said arm for engaging one edge of said can, a bracket member mounted upon said arm adjacent the opposite edge of said can, a clamping member pivotally mounted upon said bracket member and provided with a clamping jaw arranged to engage the adjacent edge of said can, a manually operable clamping lever constructed and arranged to force said clamping member into clamping engagement in one position and to disengage said clamping member in a second position, a perforating member pivotally mounted relative to said arm, and a prong mounted upon said perforating member and arranged when said perforating member is depressed to shear a pouring opening in the top of said can and also normally to close said opening.

1,878,957. FEEDER TUB. JAMES P. MARTIN, Lancaster, Pa., assignor to Lancaster Iron Works, Inc., Lancaster, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1930. Serial No. 495,231. 8 Claims. (Cl. 25—103.)



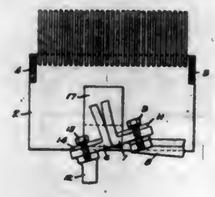
1. In a brick machine, framework including a press box having an opening in the path of a press platen, means for forcing a column of clay vertically toward said opening, and means for forcing a mass of clay into and transversely of said column.

1,878,958. FOLDING CRIB. HARRY E. MCCANDLESS, Rochester, N. Y., assignor to Kennedy-McCandless Corporation, Rochester, N. Y., a Corporation of New York. Filed Aug. 27, 1929. Serial No. 388,772. 3 Claims. (Cl. 5—97.)



3. A folding crib comprising a pair of side members each comprising end posts and side panels arranged between the posts, a pair of end members arranged between the posts and pivotally connected thereto, said end members rising above the plane of the upper edges of the side panels, a top member supported on said side members having grooves in its opposite ends each of said grooves being open at one end and closed at its other end, inwardly projecting pins on the posts of one of said sides arranged to engage said grooves and on which the top is slidable horizontally from the crib and movable to a vertical plane suspended on said pins, brackets on the posts in which the pins are mounted and resiliently engaged thereby, and keepers on the top projecting over the open ends of the grooves and having slots registering with the grooves and arranged to receive the pins when the top is in its normal position on the crib.

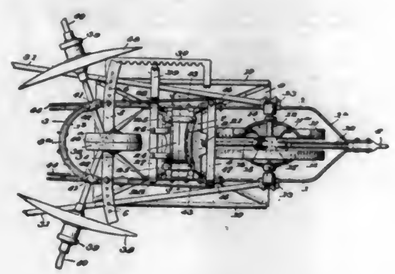
1,878,959. CIRCUIT INTERRUPTER. JOHN E. MCGEE and BENJAMIN P. BAKER, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 27, 1928. Serial No. 308,719. 4 Claims. (Cl. 200—144.)



1. The combination with a circuit interrupter having separable arcing contact members and an arc chute associated with said members having the walls thereof made of a consumable but relatively highly refractory material that is disintegrated slowly at its surface by the arc incident to separation of the contacts whereby metal vapors condensing on the surface are carried away by the particles released by disintegration, of a plate of insulating material disposed flat-wise between the contact members and the said walls having higher refractory

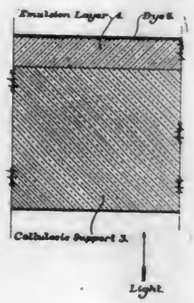
characteristics than the walls for protecting the walls in the immediate vicinity of the arc from the intense heat thereof and for condensing thereon the metal vapor in the arc.

1,878,960. FERTILIZER DISTRIBUTOR. JOHN A. McKAY and PATRICK H. LYNCH, Dunn, N. C. Filed May 27, 1930. Serial No. 456,193. 6 Claims. (Cl. 111—77.)



1. In a fertilizer distributor, the combination with a horizontal frame comprising a pair of spaced parallel members connected by an arcuate portion at the rear, a hopper and discharging mechanism therefor carried by said frame, a pair of disc supporting arms pivotally connected at one end to said frame, means whereby said arms may be secured at any desired adjusted position to the arcuate portion of said frame, and a pair of discs journalled on said arms beyond said frame.

1,878,961. PHOTOGRAPHIC ELEMENT OVERCOATED WITH A SCREENING DYE. CHARLES E. KENNETH MEES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 28, 1930. Serial No. 447,823. 3 Claims. (Cl. 95—2.)



1. A photographic element comprising a support, a sensitized layer thereon, and a very thin layer of light restraining dye of a sensitized type applied directly to the outer surface of the emulsion layer but not penetrating substantially into said layer, said dye being selected from the group consisting of the iso-cyanines, pseudocyanines, carbo-cyanines, oxycarbo-cyanines, thio-carbocyanines, krypto-cyanines, styryl-pyridines, styryl-quinolines and the acid dyes of the fluorescein series.

1,878,962. PROCESS FOR PRODUCING SICCATIVES. FRIEDRICH MEIDERT, Frankfort-on-the-Main, Griesheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 4, 1930, Serial No. 486,519, and in Germany Oct. 10, 1929. 6 Claims. (Cl. 134—57.)

1. The process for producing a siccative which comprises dissolving naphthenic acid in a volatile organic solvent having a boiling point higher than that of water, introducing into said solution an oxygen compound of a metal of the group consisting of cobalt, manganese, lead, zinc, aluminum and calcium, and heating the reaction mixture to a temperature sufficiently high to distil off the water formed by the reaction.

1,878,963. MANUFACTURE OF CONDENSATION PRODUCTS. RICHARD MICHEL, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 23, 1928, Serial No. 321,517, and in Germany Dec. 1, 1927. 7 Claims. (Cl. 260—168.)

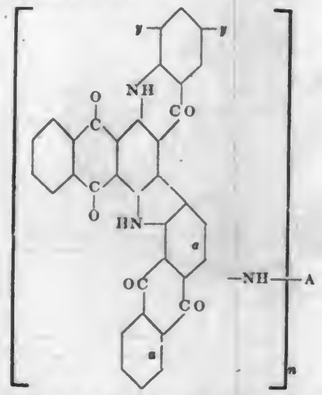
1. Process which comprises reacting with an olefine upon a polynuclear hydrocarbon compound in the presence of a catalytically acting metallic halide and of an inert solvent.

1,878,964. WATER SOLUBLE LEUCO ESTERS OF VAT DYESTUFFS. WALTER MIEG, Opladen, near Cologne, and RUDOLF M. HEIDENREICH, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1930, Serial No. 422,485, and in Germany Jan. 24, 1929. 8 Claims. (Cl. 260—31.)

1. Process which comprises reacting upon a leuco derivative of a vat dyestuff of the group consisting of the anthraquinone- and indigoid vat dyestuffs with a benzoic acid sulfo halide in the presence of a tertiary heterocyclic base.

1,878,965. VAT DYESTUFFS OF THE ANTHRAQUINONE ACRIDONE SERIES. WALTER MIEG, Opladen, and ROBERT BERLINER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1930, Serial No. 444,866, and in Germany Apr. 22, 1929. 3 Claims. (Cl. 260—37.)

1. The products of the probable formula:

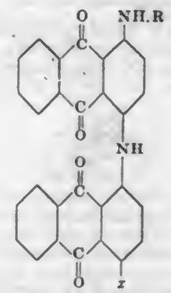


wherein y represents hydrogen or halogen, n means one of the numbers 1–4 and A stands for the radical of an anthraquinone compound, which may be substituted by a substituent of the group consisting of halogen atoms and acylamino groups, the NH-group being linked to one of the positions marked a, said products forming dark crystalline powders almost insoluble in the usual organic

solvents, soluble in strong sulfuric acid with dull red to bluish-grey colorations, dyeing cotton from an alkaline hydrosulfite vat strong brown to black shades of excellent fastness properties.

1,878,966. WOOL-DYESTUFF OF THE DIANTHRAQUINONYLAMINE SERIES. WALTER MIEG, Opladen, and KURT BAMBERGER, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 29, 1930, Serial No. 457,528, and in Germany June 7, 1929. 8 Claims. (Cl. 260—60.)

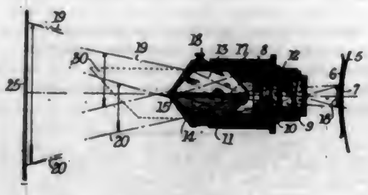
1. Process which comprises heating a compound of the probable formula



wherein R means hydrogen or alkyl, z stands for hydrogen or a substituent of the group consisting of the amino group and alkylamino groups, with fuming sulfuric acid in the presence of boric acid and of a small amount of a compound of the group consisting of mercury, its oxides and salts.

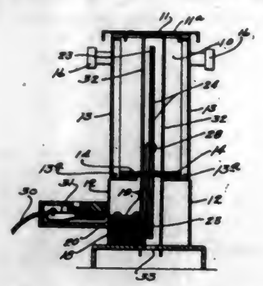
5. The sulfonated dianthraquinonylamine derivatives obtainable according to the process claimed in claim 1, forming dark powders, easily soluble in water, soluble in strong sulfuric acid with dark blue to bluish-green colorations, dyeing wool from an acid bath strong greyish-blue to greenish-blue-grey shades of excellent fastness properties.

1,878,967. OPTICAL SYSTEM FOR PROJECTION OF COLOR PICTURES. JOSEPH MIHALYI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 1, 1929. Serial No. 375,199. 2 Claims. (Cl. 98—16.4.)



1. A projection system for use in the projection of natural color images from a lenticular film upon a screen and comprising a gate with a projection window and adapted to support therein a film with a lenticulated front surface and an image bearing rear surface, an objective in front of said window, a multicolor filter associated with said objective, a reversing system comprising two reversing prisms face to face symmetrically of the system in front of the objective and so close to the objective and filter that all rays passing from the window through the objective and filter will also pass through the reversing system and a screen, whereby a single reversed image of a film at the window may be projected on the screen.

1,878,968. TOASTER. PETER J. N. MILLER and VICTOR E. EXTROM, Minneapolis, Minn. Filed Jan. 9, 1929. Serial No. 331,270. 1 Claim. (Cl. 219—19.)



In a toaster a casing having a base and hinged doors, rectangular conducting strips secured to said base but insulated therefrom and positioned with horizontal portions projecting from the casing and with vertical portions located centrally of the casing, and an electrical heating element comprising spaced bars insulated from each other, and radiating wires connected across said bars, said bars being detachably secured to the upright portions of said conducting strips.

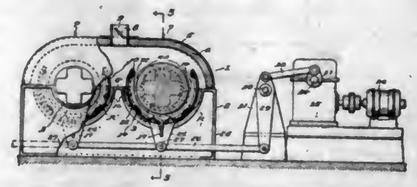
1,878,969. ACYLATING AMINE. LINDLEY E. MILLS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 20, 1929. Serial No. 364,696. 16 Claims. (Cl. 260—124.)

4. The method of making an N-acyl aromatic amine which comprises heating an aromatic amine, having an acylable hydrogen attached to the nitrogen, to approximately its boiling point and adding thereto an aliphatic carboxylic acid during the course of the ensuing reaction, such operations being conducted under substantially non-oxidizing conditions while maintaining the reaction mixture at a temperature above 110° C.

1,878,970. PURIFICATION OF PRIMARY AROMATIC AMINE HYDROHALIDES OF THE BENZENE SERIES. LINDLEY E. MILLS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 14, 1929. Serial No. 392,727. 15 Claims. (Cl. 260—130.5.)

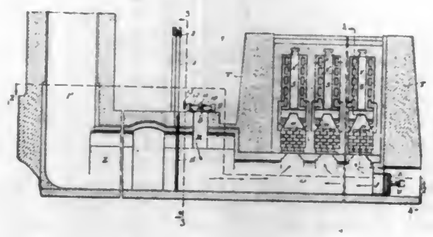
1. The method for purification of a primary aromatic amine hydrohalide of the benzene series, which comprises vaporizing such compound in presence of an excess of the corresponding gaseous hydrogen halide.

1,878,971. ROLL HEATER. JAMES MILNES, Struthers, and RAY E. HOWELL, Poland, Ohio. Filed May 2, 1931. Serial No. 534,505. 14 Claims. (Cl. 80—41.)



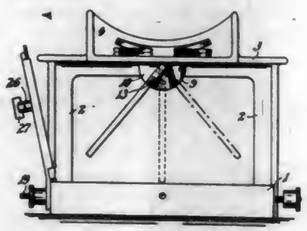
11. A roll heater comprising means for stationarily supporting a pair of rolls with their axes in parallel spaced relation, a jacket adapted to partially surround each roll when so supported, means operative to support the jackets for oscillation about their respective axes, a burner disposed in each jacket, means for supplying a heating medium to the burners, and means for oscillating both jackets simultaneously about their respective axes.

1,878,972. REGENERATIVE COKE OVEN AND METHOD OF OPERATING THE SAME. HENRY EARL MITCHELL, Buffalo, N. Y., assignor to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1926. Serial No. 152,103. 18 Claims. (Cl. 202—146.)



1. In a battery of by-product coke ovens comprising a series of alternate coking chambers and heating walls therefor arranged side by side, each of said heating walls comprising heating flues and regenerator sets in communication with said heating flues, that improvement which comprises air passages extending from one end of the battery to the other end of the battery, and communicating with each set of regenerators, sets of air ports in the walls at the opposite ends of said passages communicating therewith, and means operatively associated with each of said sets of air ports to put the latter in or out of communication with the air, each of said passages being adapted to be simultaneously opened or closed to the air at opposite ends of the battery.

1,878,973. OPTICAL INSTRUMENT AND METHOD OF TREATMENT. WALTER ANDERSON DIXEY, deceased, London, England, by Fanny Beebe Dixey, executrix, London, England, assignor, by mesne assignments, to C. W. Dixey & Son Limited, London, England. Filed Dec. 5, 1929, Serial No. 411,963, and in Great Britain Dec. 27, 1928. 5 Claims. (Cl. 88—20.)



4. An instrument for training the ocular muscles and for development of the sight of a dormant or amblyopic eye comprising, a frame with a base having an open top adapted to contain loose sheets of paper, hinged extensions on said base adapted to allow this to be tilted into a convenient position, a raised support for the patient's forehead, an upright platform for carrying an object, means for detachably mounting said upright platform at either end of said base, a mirror between said lenses and said base and support adapted to throw a reflection of the object into the field of view of one eye superimposed on the paper in said frame as seen directly by the other eye.

1,878,974. AQUEOUS DISPERSIONS AND PROCESS OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J. Filed Dec. 15, 1927. Serial No. 240,337. 3 Claims. (Cl. 134—1.)

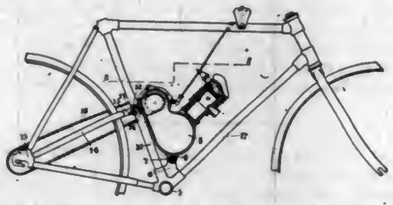
1. The herein described process of producing an aqueous bitumen-pitch type dispersion, which comprises making an aqueous paste of a carbohydric colloid, adjusting said paste to a pH value of 4.0 to 5.0, by a tannin-like substance and dispersing a bitumen-pitch type base with said adjusted paste.

1,878,975. BICYCLE WITH AUXILIARY MOTOR. ALFRED LESAGE, Schweinfurt in Bavaria, Germany. Filed Jan. 2, 1932, Serial No. 584,548, and in Germany June 7, 1930. 4 Claims. (Cl. 180—33.)



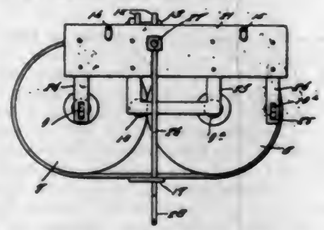
1. In a motor cycle, the combination with a usual bicycle frame, of an angular rigid bracket having two arms embracing the frame tubes above the crank axle bearing, a motor, a lug provided on the lower end of the motor, a pivot bolt passing through said lug and the top part of said bracket, and means for adjustably attaching the upper part of the motor to the frame.

1,878,976. MOTORCYCLE. ALFRED LESAGE, Schweinfurt in Bavaria, Germany. Filed Jan. 2, 1932, Serial No. 584,549, and in Germany Jan. 16, 1930. 3 Claims. (Cl. 180—33.)



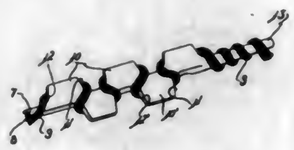
1. In a motor cycle, the combination with a frame, of a crank axle bracket forming part of the frame, a lug rigid with the bracket and projecting upwards between the adjacent frame tubes, a motor disposed in the frame and pivotally attached at its lower end to said lug, a collar disposed upon the frame, lateral lugs of the collar, screw threaded pins attached to the upper part of the motor and engaging the said lugs, and nuts screwed on said pins and adapted to adjust and immobilize the motor relatively to the frame.

1,878,977. BATTERY SWITCH. JAMES L. MCKINLEY, Appleton City, Mo. Filed July 2, 1931. Serial No. 548,456. 5 Claims. (Cl. 200—52.)



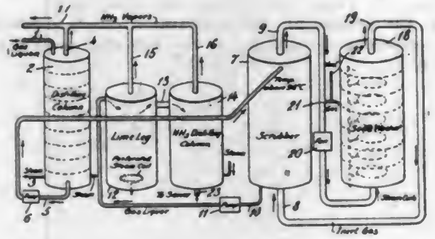
1. In a structure of the class described, in combination, a pair of conventional dry cells, a clamp detachably embracing the upper end portions of said cells, a hingedly mounted plate carried by said clamp, and contact elements on said plate co-operable with the terminals of the dry cells, together with means for raising and lowering and retaining said plates in raised and lowered positions, whereby to open and close the switch at will.

1,878,978. HAIR WAVING DEVICE. JEANNE MARIE SAGE, Detroit, Mich. Filed Feb. 25, 1931. Serial No. 518,047. 4 Claims. (Cl. 132—33.)



1. In a hair waving device of the class described, a curling prong, comprising: an elongated main body; laterally projecting spaced plates at opposite sides of said main body, the end edges of oppositely positioned plates overlapping, opposite end edges of said plates being straight and inclined to the longitudinal axis of said body.

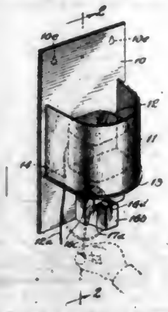
1,878,979. REMOVING PHENOLS FROM GAS LIQUOR. WILLIAM TIDDY, Jeffersonville, Pa., assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed July 20, 1928. Serial No. 294,236. 5 Claims. (Cl. 23—193.)



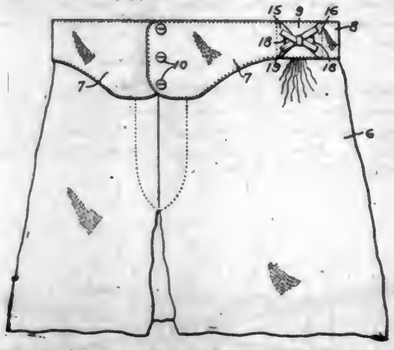
1. The improvement in the treatment of ammoniacal gas liquor, which comprises subjecting the same to distillation to remove free ammonia therefrom with substantial completeness, passing the resulting liquor from which free ammonia has been substantially completely removed while at a temperature around 98° C. or higher to a scrubber and passing an ammonia free gas through the hot liquor to remove phenols from the liquor, returning the liquor after the removal of phenols to a fixed ammonia still and there treating it with lime to set free the fixed ammonia, and recovering the ammonia so set free.

1,878,980. CORD DISPENSING DEVICE. SIDNEY R. BELL, New York, N. Y., and GEORGE W. WARDWELL, South Norwalk, Conn.; said Wardwell assignor of his right to Sidney Bell, Rutherford, N. J. Filed Feb. 24, 1931. Serial No. 517,882. 2 Claims. (Cl. 242—142.)

2. A cord dispensing device of the class described comprising an elongated mounting plate, a receptacle on the central portion of said plate and projecting forwardly therefrom, a cord severing element arranged on said plate beneath and in close proximity to the receptacle and comprising a notched body in which a blade is mounted with its cutting edge exposed through said notch, and means whereby the cord supported in said receptacle may be drawn through the lower end portion thereof and passed through the notch of the severing element to remove a desired length of the withdrawn cord.



1,878,981. UNDERGARMENT. SIDNEY BLUE, New York, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed July 18, 1931. Serial No. 551,600. 1 Claim. (Cl. 2—237.)

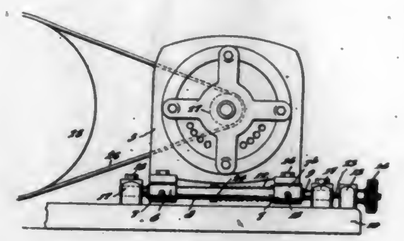


A garment having a waistband comprising an inner facing extending substantially around the band, a pair of circumferential lining strips attached to the inner facing in spaced relation, a pair of outer facing superposed upon the respective lining strips, thereby providing reinforced band sections and an intermediate, relatively flexible portion, the opposed ends of the linings and superposed outer facings overhanging the intermediate portion of the inner lining to provide oppositely directed tabs, a facing piece applied over the intermediate portion of the inner facing and to the under sides of the respective tabs, transverse seams extending through the outer facings, linings and said facing piece at the bases of the respective tabs, said tabs having apertures therethrough, and a draw string passing through said apertures to contract said portion and constrict the waistband.

1,878,982. TREATING THIOCYANATES. CHRISTIAN J. HANSEN, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Aug. 9, 1928, Serial No. 298,617, and in Germany Apr. 14, 1928. Divided and this application filed Nov. 29, 1929. Serial No. 410,650. 6 Claims. (Cl. 23—119.)

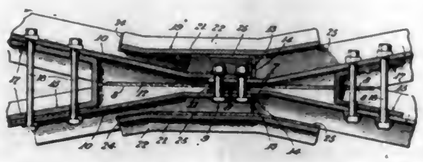
1. The method of decomposing thiocyanates and of producing ammonium compounds therefrom comprising heating an aqueous solution of such thiocyanates in the presence of a bisulfite.

1,878,983. MOTOR BASE. CLEO HARRIS, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 9, 1930. Serial No. 480,756. 5 Claims. (Cl. 308—11.)



1. In a device of the class described for tensioning a belt between a driven pulley and the driving pulley of a motor, a motor base including cross members and bearing sleeves of elongated form joining the adjacent ends of said cross members, a frame including a support rod for each bearing sleeve, and means engaging said base for urging the same along the rods to draw the belt tautly between the pulleys.

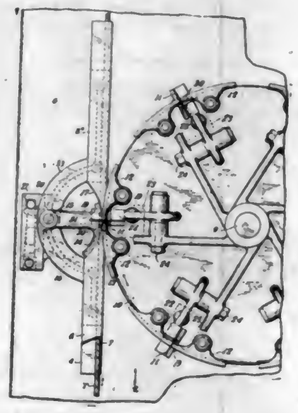
1,878,984. TRACK STRUCTURE. WILLIAM G. HULBERT, Easton, Pa., assignor to William Wharton, Jr., & Company, Incorporated, Easton, Pa., a Corporation of Pennsylvania. Filed Jan. 27, 1932. Serial No. 589,260. 4 Claims. (Cl. 246—464.)



1. The method herein described, which consists in trimming continuous or through rails whereby they may be assembled on lines of intersection, rigidly securing them in that relation, housing the trimmed area with a wear resisting unit cast shell whose top is formed with flangeways which match the flangeways of the rails and whose sides straddle the rails and are of a depth corresponding to the normal height of the rails, welding the end terminals of the shell to the through rails by continuous or unbroken weld deposit metal, and welding the bottoms of its side members to the adjoining rail flanges by weld deposit metal extending the effective length of the side members.

1,878,985. TUBE CUTTING MECHANISM. CHARLES F. SMITH, Brooklyn, N. Y., assignor, by mesne assignments, to Lily-Tulip Cup Corporation, New York, N. Y., a Corporation of Delaware. Refiled for (abandoned) application, Serial No. 309,700, filed Oct. 2, 1928. This application filed Feb. 9, 1932. Serial No. 591,828. 7 Claims. (Cl. 164—34.)

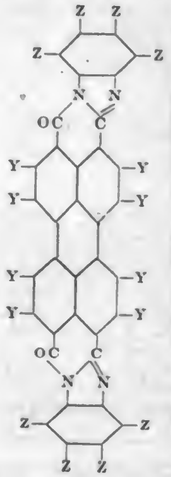
1. In a cutting mechanism of the character described the combination of a rotating disc, a frame for supporting and directing the tube, a cutter carried by said disc and mounted for movement across the path of the tube to be



cut, means for advancing said cutter and means for retracting said cutter.

1,878,986. VAT DYESTUFFS OF THE POLYNUCLEAR AROMATIC IMIDAZOLE SERIES AND THE PROCESS OF PREPARING THEM. MAXIMILIAN PAUL SCHMIDT and WILHELM NEUGEBAUER, Biebrich-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1929, Serial No. 336,915, and in Germany Dec. 27, 1922. 10 Claims. (Cl. 260—44.)

1. The process for producing vat dyestuffs consisting in condensing a compound of the following general formula:



wherein at least one Y stands for chlorine, bromine or the nitro group and the remaining Y's for hydrogen, and one Z stands for chlorine and the other Z's for hydrogen with compounds of the general formula:

R—X—H

wherein X represents O, S or NH and R stands for an alkyl or aryl group.

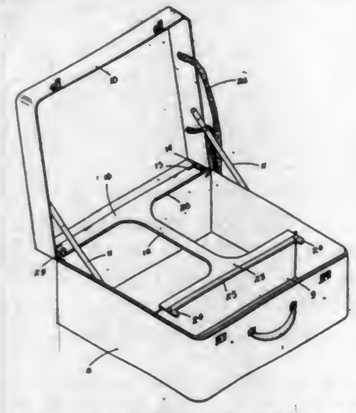
1,878,987. MANUFACTURE OF 1.4.4'-TRIHYDROXY-2.2'-DIANTHRAQUINONYL-3.1'-OXIDE. ROBERT E. SCHMIDT, Elberfeld, BERTHOLD STEIN, Mannheim, and KURT BAMBERGER, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1930, Serial No. 483,746, and in Germany Oct. 1, 1929. 3 Claims. (Cl. 260—54.)

1. Process which comprises heating 1.4.1'.4'-tetrahydroxy-2.2'-dianthraquinonyl with an organic nitro compound of the benzene or naphthalene series to a temperature above about 200° C., until a test portion dissolved in sulfuric acid containing boric acid no longer shows the spectrum of the starting material.

1,878,988. PROCESS FOR THE MANUFACTURE OF CELLULOSE ACETATE. SAMUEL E. SHEPPARD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 15, 1929. Serial No. 378,577. 9 Claims. (Cl. 260—101.)

1. The process for the manufacture of organic esters of cellulose which comprises conducting the reaction in a liquid bath containing hydrochloric acid and a reducing substance which buffers the hydrochloric acid against autoxidation.

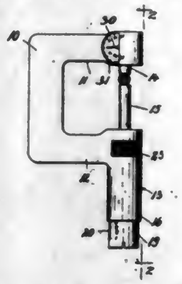
1,878,989. HAND LUGGAGE. EMANUEL J. SHOEMAKER, Kitchener, Ontario, Canada, assignor to The L. McBrine Company, Limited, Kitchener, Ontario, Canada. Filed Dec. 24, 1928. Serial No. 328,283. 28 Claims. (Cl. 190—41.)



1. Luggage, comprising a body portion; a cover portion hingedly connected to said body portion; a garment supporting member hingedly connected to the hinged side of said cover portion and a garment supporting means carried adjacent the hinged connection of said supporting member.

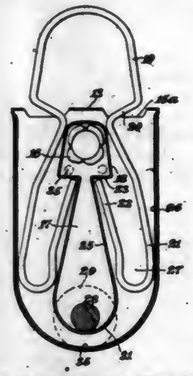
1,878,990. MICROMETER GAUGE. FRED W. SIGSBEY and HARRY D. GOSHORN, Willoughby, Ohio. Filed Sept. 26, 1928. Serial No. 308,374. 6 Claims. (Cl. 33—147.)

6. In a micrometer gauge of the character described, a housing, a plurality of relatively movable, aligned abutment members adapted to engage opposite portions of an object to be measured, means resiliently urging one of said members toward the other, a dial on the housing adjacent the resiliently urged member, indicating instrumentalities adjacent the urged member and the dial, the said instrumentalities including a pointer and a shaft therefor, the shaft and urged member being provided with inter-engaging gear teeth, whereby movement of the said urged member imparts rotary movement to the shaft and



pointer over the dial, and means normally inoperative but manually operable when desired for frictionally holding the pointer in any position on the dial.

1,878,991. SEAL. JOSEPH B. MURRAY, Brooklyn, N. Y., assignor to Metropolitan Device Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 601,972. 11 Claims. (Cl. 292—320.)



1. A seal of the character described having front and back walls, one of said walls having a continuous depressed portion forming within the casing lateral partitions and separate longitudinal partitions extending downward from the inner ends of the lateral partitions.

1,878,992. REENFORCEMENT FOR CONCRETE AND THE LIKE. MAURICE C. SHELTON, Indianapolis, Ind., assignor to Walter F. Bossert, Liberty, Ind. Filed Oct. 19, 1927, Serial No. 227,269. Renewed Feb. 29, 1932. 4 Claims. (Cl. 94—8.)



1. In a reenforcing means for road surfaces and the like, a plurality of flat bars adapted to rest edgewise to the upper and lower surfaces of the material in which they are embedded, said bars having a plurality of bends adapted to form substantially diamond shaped openings when the bars are fabricated together, clips adapted to be clamped around the abutting portions of said bars for securing them rigidly in fabricated formation, and tongues on said clips adapted to be forced between the bars adjacent the bends therein.

THE

OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 422—No. 4 TUESDAY, SEPTEMBER 27, 1932 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $16.00 per annum; including annual index, $18.25; single numbers, $5 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of September 27, 1932	901
Notice—Concerning Final Rejections	901
Changes in Price of Publications	901
Adverse Decisions in Interference	901
Cross-References in Cases Relating to Same Subject	901
Applications Under Examination	902
Decisions of the U. S. Courts—	
In re Bechman	903
Norwine Coffee Company v. Chase & Sanborn	903
In re Federal Cement Tile Company	905
In re Fischer	905
Patent Suits	907
Disclaimer	908
Trade-Marks Published (140 Applications)	909
Trade-Mark Registrations Granted	927
Trade-Mark Registrations Renewed	933
Labels	934
Prints	934
Reissues	935
Designs	936
Patents Granted	943

Issue of September 27, 1932

Trade-Marks	152—No.	297,652 to No.	297,803, inclusive.
T. M. Renewals	3		
Labels	29—No.	41,200 to No.	41,228, inclusive.
Prints	11—No.	13,913 to No.	13,923, inclusive.
Reissues	5—No.	18,606 to No.	18,610, inclusive.
Designs	38—No.	87,823 to No.	87,860, inclusive.
Patents	1197—No.	1,878,993 to No.	1,880,189, inclusive.
Total	1,435		

Notice

Concerning Final Rejections

August 18, 1932.

The attention of the Examiners is again called to the fact that Principal Examiners are expected to personally consider every application which is up for the *third* official action, with a view of finally concluding its prosecution either by allowance or final rejection, whenever this can reasonably and justly be done; see notice of October 11, 1930, Glascock's Manual, page 218. As stated in said notice, the Principal Examiners should impress their assistants with the fact that the *shortest path* to the final disposition of an application is by *finding the best references on the first search* and carefully applying them. For fear this may be misunderstood, let it be stated that the Commissioner looks with disfavor upon final rejection upon the second action where the applicant has changed his claims either by substitution or amendment in such a manner as to show that he is making a bona fide effort to convince the Examiner that the application should be allowed.

Attorneys are urged to cooperate with the Office by doing their utmost to carry out the spirit of the foregoing notice to the end that the Office may bring all of its work up to date.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Changes in Price of Publications

Attention is called to the following changes in the prices of publications obtained from the Superintendent of Documents:

	Single copy price	Subscription price a year	Foreign price
Official Gazette	$0.35	$16.00	$25.00
Same, with paper indexes		18.25	28.25
Same, with bound indexes		22.75	32.75
Decision leaflets	.05	1.25	2.05
Trade-mark supplement	.10	3.00	5.00

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,801,657, Anton Buyko, Selecting system, decided August 6, 1932, claims 1 and 2, and August 29, 1932, claim 11.

Pat. 1,793,399, C. L. Heisler, Apparatus for producing sound from film records, decided August 11, 1932, claims 6 and 7.

Pat. 1,821,586, E. H. Smythe, Acoustic device, decided August 9, 1932, claims 1, 2, and 9.

Pat. 1,821,193, W. J. Vincent, Telephone system, decided August 8, 1932, claims 1 and 2.

Pat. 1,771,376, I. F. Brynes, High frequency signaling system, decided August 27, 1932, claims 1 and 2.

Pat. 1,831,827, Wm. G. Shelton, Hair curling device, decided September 1, 1932, claim 9.

Cross-References in Cases Relating to Same Subject

RULE 43. When an applicant files two or more applications relating to the same subject-matter of invention, all showing but only one claiming the same thing, the applications not claiming it must contain references to the application claiming it.

Condition of Applications Under Examination at Close of Business September 10, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 71,248; Trade-Mark Division, 913. Oldest new case, Mar. 2, 1932; oldest amended, Mar. 2, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	June 11	June 11	418
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	May 12	May 16	858
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 23	May 28	738
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	June 13	June 16	430
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 16	May 19	397
4898 C	6. LEWERS, A. M., Carbon Chemistry	Mar. 14	Mar. 14	2,081
5725	7. JARBOE, C. G., Optics; Photography	Apr. 11	Apr. 11	1,412
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Apr. 18	Apr. 20	1,069
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	June 11	June 11	740
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Apr. 11	Apr. 13	894
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	May 5	May 16	639
7701	12. HENRY, C. C., Machine Elements	May 6	May 28	568
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Apr. 27	Apr. 27	1,073
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics: Wire Working; Metal Working, Assembling, and Blanks and Processes.	May 16	May 24	747
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Apr. 10	Apr. 10	1,861
5612	16. SPENCER, C. J., Telegraphy; Telephony	May 20	May 20	876
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 23	Mar. 23	1,394
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	May 16	May 11	642
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Mar. 14	Mar. 14	1,774
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	May 19	May 25	588
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 30	May 2	840
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	June 2	June 17	581
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Mar. 24	Mar. 14	859
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	May 16	May 28	614
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 29	Mar. 30	1,368
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 10	Mar. 11	1,076
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	May 13	May 13	918
4628	28. BENSON, A. R., Internal-Combustion Engines	Mar. 15	Mar. 18	1,385
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Mar. 16	Mar. 16	892
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 20	May 9	819
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Mar. 24	Mar. 24	1,544
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	May 18	May 18	758
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 10	Mar. 10	2,277
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 13	Apr. 11	853
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 11	July 11	420
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Mar. 12	Mar. 24	1,620
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 31	Apr. 5	1,153
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 18	June 16	180
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 17	Mar. 17	1,438
7880	40. OBERLIN, J. J., Receptacles	Apr. 10	Apr. 16	2,202
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	June 15	June 28	542
5882	42. CUTTING, H. O., Electric Signaling	Mar. 21	Mar. 22	1,299
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 18	Apr. 20	1,472
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Mar. 10	Mar. 11	1,780
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	May 14	May 14	957
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	May 14	May 17	628
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 10	Apr. 10	2,028
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Apr. 12	Apr. 12	754
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 14	Mar. 17	1,616
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Mar. 10	Mar. 10	2,165
5628	51. BACKUS, C. D., Radiant Energy	Apr. 26	Apr. 26	1,167
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	June 13	June 13	729
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	June 27	July 5	483
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Mar. 22	Mar. 22	1,099
6883	55. BOWEN, S. T., Bread, Pastry, and Confection Making; Cutlery	July 1	July 1	347
	Designs	Aug. 24	Aug. 31	122
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 24	Mar. 17	1,464
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	May 5	May 4	656
5605	58. DOWELL, E. F., Abrading; Typewriting	Mar. 10	Mar. 10	1,258
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 2	Mar. 2	1,800
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Mar. 21	Mar. 21	1,390
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Mar. 18	Mar. 23	1,353
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Mar. 30	Mar. 30	1,706
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Mar. 18	Mar. 18	1,428
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	May 25	May 18	537
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Mar. 15	Mar. 15	1,573
2099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND. Trade-Marks	Aug. 12	Aug. 26	797
	Labels and Prints	Aug. 12	Aug. 27	116

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE BECHMAN

No. 2,949. Decided May 23, 1932

PATENTABILITY—INKING MECHANISM FOR PRINTING PRESSES.

Claims for an inking mechanism for printing presses *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Alexander & Dowell, Mr. Arthur E. Dowell, and *Mr. Wm. S. Hodges* for Bechman.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claims 22 and 23 in appellant's application for a patent for an alleged invention relating to an inking mechanism for a rotary printing press.

The claims read:

22. In a printing press having a frame, and a plate cylinder mounted on the frame and adapted to be rotated in either direction according to the lead of the web; a single ink fountain; an ink drum mounted on the frame and adapted to be rotated in either direction adjacent the plate cylinder; *independently removable brackets adapted to be secured to the frame at either side of the drum according to the rotation of the plate cylinder; and ink distributing rollers carried by said brackets.*

23. In a printing press having a frame, and a plate cylinder mounted on the frame and adapted to be rotated in either direction according to the lead of the web; a single ink fountain; an ink drum mounted on the frame and adapted to be rotated in either direction, *said frame having bracket receiving recesses therein at opposite sides of the drum shaft; independently removable brackets detachably attachable to the frame in said recesses at either side of the drum shaft; and ink distributing rollers mounted in said brackets.* (Italics ours.)

The references are: Meyrueis, 618,253, January 24, 1899; Bechman, 1,293,305, February 4, 1919.

The elements in the involved claims which appellant relies upon as involving patentable subject matter are defined in the italicized portion of the claims.

The patent to Meyrueis discloses a plate cylinder mounted on a frame and adapted to be rotated in either direction, according to the lead of the web.

The patent to Bechman shows a plurality of ink distributing rollers mounted on independently removable brackets, positioned in recesses and secured to the frame.

In disposing of the issues, the Primary Examiner, among other things, said:

Claims 22 and 23 were rejected upon the patent to Meyrueis taken in connection with the patent to Bechman. The patent to Meyrueis shows it to be old to shift the ink distributing rollers from one side of the distributing drum to the other when the direction of rotation of the plate cylinder is changed. It was held that to mount the distributing rollers in Meyrueis upon removable brackets which may be secured at either side of the distributing drum would not be invention in view of Bechman in which the distributing rolls are mounted in removable brackets, the brackets being located in recesses in the sides of the frames.

The quoted statement of the Primary Examiner was approved by the Board of Appeals.

We have carefully examined the record in the light of the contentions of counsel for appellant, and, although it has been vigorously contended that the involved claims define patentable subject matter, we are unable to hold that the tribunals below reached the wrong conclusion.

In view of the fact that the issues have been fully discussed in the concurring opinions below, we deem it unnecessary to enter upon a lengthy discussion of them here. We are in accord with the views expressed by the tribunals of the Patent Office and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

NORWINE COFFEE COMPANY *v.* CHASE & SANBORN

No. 2,964. Decided May 23, 1932

TRADE-MARKS—USE OF MARK AS A TRADE-MARK.

Where the evidence showed that prior to the use by appellant of the notation "Dining Car" as a trade-mark for coffee, appellee had made no use of the notation "Dining Car Special Coffee" except in sales made to two railroad companies *Held* that such use did not constitute a trade-mark use and priority and right of registration should have been awarded to appellant.

APPEAL from the Patent Office. Reversed.

Mr. Tilian W. Johnson for Norwine Coffee Company.

Mr. Louis H. Harriman for Chase & Sanborn.

GARRETT, *J.:*

This is a trade-mark interference proceeding in which the Commissioner of Patents, reversing the Examiner of Interferences, awarded to Chase & Sanborn priority and right to register the notation "Dining Car" as a trade-mark for coffee.

The application of Norwine Coffee Company for registration of the words as a trade-mark for tea, coffee, cocoa, food flavoring extracts, and spices was filed May 7, 1928. In said application it was stated that appellant was the owner of Trade-Mark No. 99,217 registered, for use on coffee only, by the Johnson-Layne Coffee Company (a predecessor in business) August 25, 1914, upon an application filed July 5, 1913, same being the notation "Diuing Car." Use of the mark by appellant and its predecessor in business was alleged from about December 10, 1908.

Chase & Sanborn's application was filed December 11, 1928, use of the mark being alleged "since Oct. 18, 1905."

The Examiner of Trade-Mark Interferences reached the conclusion from the record in the case that the use of the mark by Chase & Sanborn was a grade mark use intended to denote quality, or distinguish the blend, rather than a trade-mark use intended to denote origin, and so, notwithstanding the earlier use by Chase & Sanborn, priority and right to register was awarded Norwine Coffee Company. Upon appeal the Commissioner of Patents, taking a different view, reversed the decision of the examiner, and appeal to this court was taken.

The vital issue in this case is one which has not heretofore been before this particular court for ad-

judication. The question presented is whether, under the facts shown, the firm of Chase & Sanborn, the junior party in interference, has established that its use of the words between October 18, 1905, the date when it claims to have begun use of same, and December 10, 1908, the date fixed by appellant as the beginning of the use of them by one of its predecessors in business, was in a legal sense a trade-mark use.

Chase & Sanborn did make use of the words "Dining Car Special Coffee" upon coffee within that period. The fact of such use is not in serious question, but whether the particular use was a trade-mark use is disputed by appellant.

We are not confronted with any issue as to the Norwine Coffee Company being entitled to the date claimed by it, nor as to the use by it having been a trade-mark use. These facts are conceded by appellee, and the record conclusively shows that said company and its predecessors in business continuously exploited the mark, advertising the particular coffee so branded extensively, and building up a large distributing business extending into more than ten States. The mark was registered, for use upon coffee only, in 1914 by appellant's predecessor, The Johnson-Layne Coffee Company. Appellant is domiciled in St. Louis, Missouri.

The firm of Chase & Sanborn prior to July 1, 1929, when it was incorporated, was a partnership composed of six members. It was domiciled in the city of Boston, Massachusetts, but had a branch business in the city of Chicago, Illinois, from about 1892. The firm is an old one and is well known. The activities out of which this issue grew all originated with the Chicago branch of the appellee firm. The coffee bearing the disputed brand was handled from that branch and the "Dining Car Special Coffee" notation seems not to have been even known to the principal office in the city of Boston until during the year 1925. The application for registration seems to have been filed by a Boston member of the firm, but most of the testimony in the case comes from persons living in Chicago and connected with the Chicago branch.

Our immediate concern is with the use by said Chase & Sanborn during the limited period from October 18, 1905, to December 10, 1908. For the purposes of this case that may be referred to as the critical period.

The only sales of coffee positively shown by the record to have been made by Chase & Sanborn, bearing the brand "Dining Car Special Coffee", during said period were sales to two railroad companies—the Louisville & Nashville and the Pennsylvania—for use upon the dining cars operated by said companies. There seems to have been something in the nature of a standing order from these companies for the particular blend of coffee which was so branded, and evidently large quantities have been shipped to them by appellees during the many years that the contract has been in force.

During the period which is critical in this case, the coffee was shipped to said railroad companies in cans of different sizes and sometimes perhaps in twenty-five pound bags, printed labels bearing the words, "Dining Car Special Coffee," being pasted upon the containers.

It is also in evidence that during said period the Chicago branch had the words printed upon paper bags of different sizes, such as 8 oz. and 1 lb. bags, and it is insisted in argument that the coffee sold in these paper bags was sold to others than the railroad companies. Of this latter fact, however, there is no clear and positive proof.

Two or three of the witnesses for Chase & Sanborn, testifying in 1929, wholly from recollection, stated that sales had been made to grocers and the trade generally at various times, but nowhere in the record is there identification of a single sale by Chase & Sanborn to any person, dealer, wholesaler, company, or concern of any kind, other than the two railroads, of any coffee marked "Dining Car" or "Dining Car Special Coffee," prior to the year 1925, when the main office at Boston seems for the first time to have noticed the notation and began to make sales in containers so marked.

It may also be remarked that there is no positive testimony that the paper bags were not utilized in the shipments of coffee to the railroad companies. We are simply asked to infer that they were not so used but were used to contain that sold to others.

Even if we were at liberty to make such an inference and treat it as a proven fact there is not a word of evidence to indicate that during the critical period the sales in the paper bags were interstate commerce transactions and that, too, would have to be inferred.

We are asked to infer too much.

The rights of Chase & Sanborn must rest upon the transactions with the railroad companies during the critical period, and the facts and circumstances connected therewith.

It is in evidence that "Seal Brand" is the principal trade-mark of Chase & Sanborn. It is also in evidence that the coffee which they sold to the railroad companies was a special blend prepared, probably secretly, in their establishment for that particular and special trade. They prepared other specials which seem to have been also branded with appropriate designations. One of their witnesses who began work in the Chicago establishment in 1902 says:

> We had a great many specials—Hotel Special and Cafe Special, Special this, that and the other, and every customer *knew his own Special*. (Italics ours.)

The witness added that when they billed the coffee to their respective customers:

> • • • it was our custom to bill them just as Special.

Under this state of facts our views upon this controversy coincide with those of the Examiner of Trade-Mark Interferences, rather than with those of the Assistant Commissioner of Patents.

The course of conduct pursued by the representatives of the appellee firm, as shown by the record, relative to the use of the words "Dining Car Special Coffee" upon the particular coffee sold and shipped in the manner heretofore stated, during the critical period, leads us to conclude that it was never intended at that time to make a trade-mark use of the words. They were used, in our opinion, largely for purposes of convenience in identification, and merely to distinguish that particular blend from other special blends which the firm was producing for different classes of customers. They were not used to denote origin. There was not, during that period, any exploitation by advertisement or otherwise of that blend of coffee to the trade. The use did not amount to what the law recognizes as a trade-mark use.

While, as has been stated, this court has not had occasion heretofore to pass upon the issue here involved, other courts have spoken upon the subject.

In *Kohler Manuf'g Co.* v. *Beeshore*, 67 O. G. 678, 1894 C. D. 277, 59 Fed. 572, the Circuit Court of the United States for the Eastern District of Pennsylvania, citing *Menendez* v. *Holt*, 128 U. S. 514, said:

> Nor will a court of equity recognize by injunction a proprietary right in a phrase or name, unless it has been used in such circumstances, as to publicity and length of use, as to show an intention to adopt it as a trade-mark for a specific article.

A case which seems to be quite in point was determined by the Court of Appeals of the District of Columbia, our immediate predecessor in this jurisdiction, February 5, 1923, the same being *Touraine Co.* v. *Washburn & Co.*, 52 App. D. C. 356, 286 Fed. 1020, 309 O. G. 676.

The facts in that case, as stated by the court, were that Washburn & Company were shown to have used the word "Touraine" as a mark upon one particular mixture (out of some 200 mixtures) of candy, its use having begun in 1897 and continued through the years until a controversy arose in which said company opposed the registration of said mark by Touraine Company, who had acquired it from a predecessor in 1907 and used it as a trade-mark for all its candy and confection products.

From the testimony in that case the court concluded and held that the use of the mark (it being used in connection with "chocolate mixture") was a grade mark use, saying:

> It was used by the opposer to indicate the character of the chocolate, not the origin of it. The distinction between a technical trade-mark and a device to denote style or quality is pointed out in *Lawrence Mfg. Co.* v. *Tennessee Mfg. Co.*, 138 U. S. 537, 546, • • • and *Columbia Mill Co.* v. *Alcorn*, 150 U. S. 460. • • •

The decision of the Commissioner of Patents is reversed and priority and right of registration are awarded to appellant.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE FEDERAL CEMENT TILE COMPANY

No. 2,977. Decided May 23, 1932

TRADE-MARKS—DESCRIPTIVENESS—"FEATHERWEIGHT" FOR CONCRETE ROOF SLABS.

The term "Featherweight" *Held* not registrable as a trade-mark for concrete roof slabs since as used it is descriptive of the goods.

APPEAL from the Patent Office. Affirmed.

Mr. J. Bernhard Thiese, Mr. Sidney Neuman, and *Mr. A. Arnold Brand* for Federal Cement Tile Company.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

This is an appeal from the decision of the Commissioner of Patents, affirming the decision of the Examiner of Trade-Mark Interferences refusing to appellant registration of the word "Featherweight" as a trade-mark for use on concrete roof slabs.

Rejection was based upon the finding that the mark is descriptive of the character or quality of the goods. The registration of such marks is prohibited by the language of section 5 of the Trade-Mark Registration Act of February 20, 1905, which reads:

> • • • That no mark which consists merely • • • in words • • • descriptive of the goods with which they are used, or of the character or quality of such goods • • • shall be registered under the terms of this Act.

Appellant's principal argument is that "Featherweight" applied to concrete roofing blocks, which by the very nature of the material composing them are necessarily heavy, is such a manifest exaggeration as not to be descriptive or misdescriptive.

It is our opinion that the decisions below were well founded and sound in principle.

"Featherweight" is a common English word, the first meaning of which, as given in the latest edition of Webster's New International Dictionary, is "A very light weight." The same authority recites that when used in relation to sports, such as horse-racing, boxing and wrestling, the word implies the lightest class of jockeys, boxers or wrestlers.

While concrete roofing slabs are naturally heavy, undoubtedly there are degrees of weight dependent upon different factors, and we can conceive of no impression which an observer would derive from seeing the word on such article except the impression that, comparatively speaking, the article was of very light weight. Hence the word as appellant proposes to use it seems obviously descriptive.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 2,966. Decided May 23, 1932

1. PATENTS—APPEALS—ASSIGNMENT OF ERROR.
   "Appellant urges here the consideration of said proposed amendments, but we find that in his notice of appeal no error is assigned upon the refusal of the Board to enter said amendments, and for that reason such refusal cannot be considered by us."
2. PATENTABILITY—OMITTING PART OF A DEVICE.
   "It is well established that there is nothing inventive in omitting a part of a device and also the function of that part. It is equally well established that omitting a part of a device while retaining the functions of the part omitted may be invention."
3. SAME—APPLICATION OF OR OMISSION OF REENFORCEMENTS.
   "The rule is that, ordinarily, the application of reenforcing devices to a structure does not involve invention. The converse, of course, is true, that ordinarily the omission of reenforcing devices from a structure does not involve invention."

4. SAME—EXPANSION JOINT.

Claims for an expansion joint *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

Appellant has taken this appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting claims 34 and 35 of appellant's application for want of invention over the prior art.

Said claims read as follows:

34. An expansion joint consisting of a preformed board-like body of plastic material having one face provided with a groove for interlocking with paving material laid adjacently and in contact with the grooved face of the joint.

35. An expansion joint consisting of a preformed board-like body of plastic material having one face provided with a series of grooves for interlocking with paving material laid adjacently and in contact with the grooved face of the joint.

The reference relied upon is Leach, 1,241,405, September 25, 1917.

After said decision by the Board of Appeals, which was rendered on October 27, 1930, appellant proposed in a petition to the Commissioner of Patents to amend said claims in certain particulars and add two new claims to be numbered 37 and 38. This petition was denied, with a statement by the Commissioner that if the Board of Appeals should be of the opinion that said amendments would make claims 34 and 35 allowable, or that proposed claims 37 and 38 should be allowed, it might make an appropriate recommendation with reference thereto.

In a decision rendered on December 27, 1930, denying a motion for rehearing upon the decision here upon appeal, the Board of Appeals declined to recommend the admission of any of said proposed amendments.

[1] Appellant urges here the consideration of said proposed amendments, but we find that in his notice of appeal no error is assigned upon the refusal of the board to enter said amendments, and for that reason such refusal cannot be considered by us. *In re Smith*, 17 C. C. P. A. (Patents) 752, 36 F.(2d) 522, 393 O. G. 1029. Therefore, the only claims before us are claims 34 and 35, above quoted.

The application relates to an expansion joint composed of fibrous material, making a preformed board-like body of plastic material, provided with a series of grooves which are adapted to interlock with paving material laid adjacent to, and in contact with, the grooved face of the joint. The purpose of the expansion joint is to prevent injury to the concrete pavement due to temperature changes.

The reference Leach discloses an expansion joint for the same purpose as that of appellant. Several forms of the joint are shown in the drawings and described in the specification. In each of the forms shown, a metal plate comprises one of the members, and in most of the forms two additional members are employed. In one of the drawings only two members are shown. The patentee states that the construction preferred by him consists of a metal plate to form one face of the joint, having grooves, a second member forming the other face of the joint which he states—

> may be constructed from a sheet of some comparatively heavy material, such as tar-treated cardboard, paper, felt or the like,

and between these members there is provided a third member, termed in the specification "an elastic cushion," which may be constructed of elastic felt.

The top edges of all three members are bent upon themselves to provide an enlarged head with the metal member exposed flush with the traffic surface to bridge the space between the paving sections and cooperate therewith as a part of the traffic surface.

The Board of Appeals held that there would be nothing inventive in dispensing with the metal plate shown by Leach, and that there was no patentable distinction between the other elements of the Leach construction and the construction here claimed by appellant.

If the Board was correct in holding that there would be nothing inventive in dispensing with the metal plate shown by Leach, then we should agree with its conclusion that the claims herein are not patentable; but we are of the opinion that the Board erred in holding that there would be nothing inventive in dispensing with said metal plate.

[2] It is well established that there is nothing inventive in omitting a part of a device and also the function of that part. *In re Trester*, 17 C. C. P. A. (Patents) 642, 36 F.(2d) 133, 391 O. G. 501; *In re Fry*, 19 C. C. P. A. (Patents) ——, 58 F.(2d) 423.

It is equally well established that omitting a part of a device while retaining the functions of the part omitted may be invention. *Richards* v. *Chase Elevator Co.*, 159 U. S. 477, 73 O. G. 1710.

The case of *In re Trester*, supra, involved a device for constructing concrete curbs. We quote from the opinion as follows:

> The applicant does not contend that his apparatus produces any different result from the Leeder and Whiteway & Sullivan devices. Therefore, the patentable feature, if any, is in the structure of the device. As we look at it, the applicant simply proposes to dispense with the member E' in Leeder and the lower portion of the member 6 in Whiteway & Sullivan, and use in lieu thereof the road rail already in situ and entirely independent of the device. In so doing he omits a member used in the prior art and omits also its function. Such a change does not constitute patentability. As is said in *Richards* v. *Chase Elevator Co.*, 159 U. S. 477 (486);
>
> The novelty, then, must be in the combination, which differs from the combination of an ordinary elevator only in the omission of the storage feature, by which grain is housed in transit, and its identity lost. While the omission of an element in a combination may constitute invention, if the result of the new combination be the same as before; yet if the omission of an element is attended by a corresponding omission of the function performed by that element, there is no invention, if the elements retained performed the same function as before.

The question in the case at bar, in view of the foregoing authorities, is whether appellant's construction performs the functions that are performed by the device of Leach, or whether the omission by appellant of the metal plate shown by Leach involved also the omission of the function performed by said plate.

If the function performed by said plate is retained by appellant in his construction, then the further question arises as to whether the omission of said plate involves invention.

The Examiner in the case at bar in his statement said, referring to the Leach patent:

> • • • He uses a corrugated metallic plate presumably for the purpose of reinforcing that structure, but the Examiner does not regard it as invention to eliminate this corrugated plate and to use such fibrated bituminous structure as that shown by Leach without such a plate. • • •

The Board of Appeals made no contrary finding as to the function of the metal plate of Leach.

[3] The rule is that, ordinarily, the application of reinforcing devices to a structure does not involve invention. *In re Campbell*, 18 C. C. P. A. (Patents) 1351, 48 F.(2d) 915, 412 O. G. 13. The converse, of course, is true, that ordinarily the omission of reinforcing devices from a structure does not involve invention.

In the case at bar, the metal plate of Leach is not merely a reenforcing device, but is an essential part of his structure which is relied upon alone to furnish rigidity to the same. It clearly was the teaching of Leach that his metal plate was necessary, not merely for strengthening his structure, but as an integral part of it, without which it would not perform the functions desired.

There is no indication or suggestion in his disclosure that the metal plate might be dispensed with. In all of his drawings showing in detail different forms of his construction, seven in number, the metal plate is shown.

Leach shows an expansion joint composed of three members, each of different material. Appellant shows an expansion joint of a single material, performing all of the functions of the joint of Leach except the bending over of the top of the metal plate of Leach, which is not here involved. As heretofore observed, the principal function of the metal plate of Leach is to secure rigidity of his joint, and appellant has found that, by his construction, sufficient rigidity of the joint could be secured without the use of the metal plate. In other words, appellant omits a part shown by Leach, but, by means of a different construction, retains its principal function.

The case is therefore differentiated from that of *In re Trester*, supra, and the question is whether appellant's construction, consisting of a single preformed plastic material, involves invention over the reference Leach.

[4] The tribunals of the Patent Office answered this question in the negative, but we are of the opinion that there is at least sufficient doubt of lack of patentability as to require the application of the rule that, in such a case, the doubt should be resolved in favor of the applicant.

For the reasons stated, we are of the opinion that said claims 34 and 35 should be allowed, and the decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,153,217, J. F. Grace, Condenser, filed Aug. 17, 1932, D. C., S. D. N. Y.. Doc. E 70/299. *Worthington Pump & Machinery Corp.* v. *Foster Wheeler Corp.*

1,234,137, J. S. Copeland, Back pedaling brake, filed Aug. 25, 1932, D. C., N. D. Ohio, E. Div., Doc. 4391, *The New Departure Mfg. Co.* v. *The Musselman Hub-Brake Co. et al.*

1,254,317, W. H. Faust, Process of converting garbage into food, D. C., S. D. Calif. (Los Angeles), Doc. T–19–C, *U. S. Mfg. Co., Ltd.*, v. *National Conservation Co., Ltd., et al.* Dismissed Aug. 19, 1932.

1,256,491, W. E. Urschel, Process for snipping string beans; 1,256,492, 1,336,991, same, Apparatus for snipping string beans, filed Aug. 22, 1932, D. C., W. D. N. Y. (Buffalo), Doc. E 1497, *Chisholm-Ryder Co., Inc.*, v. *Brocton Preserving Co.*

1,256,492. (See 1,256,491.)

1,261,832, 1,812,704, F. X. Malocsay, Cigar banding machine, filed Aug. 17, 1932, D. C., S. D. N. Y., Doc. E 70/298, *International Banding Machine Co.* v. *American Cigar Co. et al.*

1,271,775, C. V. Rucker, Packet for transparent bulletin, filed Aug. 18, 1932, D. C., S. D. N. Y., Doc. E 70/300, *Radio Mat Slide Co., Inc.*, v. *Lloyd Oppenheimer (National Slide Co.)*.

1,275,910, J. W. Hamilton, Method of and apparatus for constructing tunnels, filed Aug. 22, 1932, D. C., S. D. N. Y., Doc. E 70/325, *J. W. Hamilton* v. *P. McGovern, Inc.*

1,336,991. (See 1,256,491.)

1,382,931, A. L. Prevost, Clothespin and manufacture thereof, filed Aug. 15, 1932, D. C. Vt. (Burlington), Doc. E 131, *L. A. Hall et al.* v. *C. Sweezey, Inc.*

1,388,434, G. V. Johnston, Method of and apparatus for butt-welding thin gauge tubing and the product thereby produced; 1,435,306, same, Butt welded thin walled tubing; 1,611,875, H. Belmont, Welding apparatus, filed May 16, 1932, D. C., E. D. Pa., Doc. 7107, *Steel & Tubes, Inc.*, v. *Walker Bros., Inc.*

1,435,306. (See 1,388,434.)

1,448,279, 1,579,392, Pridham & Jensen, Electrodynamic receiver; 1,745,118, same, Sound reproducing device, filed Aug. 15, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3331–K, *The Magnavox Co.* v. *The Rudolph Wurlitzer Co.*

1,449,874, E. F. Suter, Permanent hair waving, filed Jan. 10, 1930, D. C., N. D. Ill., E. Div., Doc. 9583, *Eugene, Ltd.*, v. *The National Mineral Co.* (To correct error in 393 O. G., p. 1031, formerly reported as filed in D. C. of Ohio.)

1,461,224. (See 1,464,338.)

1,464,338, R. L. Puccinelli, Dehydrater; 1,461,224, J. W. Pearson, Drying apparatus, D. C., N. D. Calif. (San Francisco), Doc. E 3216–S, *Chapman Dehydrater Co.* v. *O. S. Crenshaw et al.* Patents held valid and not infringed, complaint and counterclaim dismissed Aug. 16, 1932.

1,470,524. (See 1,505,592.)

1,497,986, H. G. Oliver, Soffit clip for reenforced concrete structure, filed June 1, 1932, D. C., E. D. Pa., Doc. 7123, *Conver Steel & Wire Co., Inc.*, v. *Gilmour Steel Products, Inc.*

1,498,359. (See 1,526,714.)

1,505,592, F. W. Epperson, Frozen confection; 1,718,997, H. B. Burt, same; 1,470,524, same, Process of making frozen confections, filed Aug. 22, 1932, D. C., E. D. N. Y. Doc. E 6545, *The Popsicle Corp. et al.* v. *N. Y. Eskimo Pie Corp. et al.*

1,526,714, 1,563,506, J. O. Luthy, Recovery and utilization of materials of old secondary battery plates; 1,498,359, 1,785,939, H. P. Dodge, Battery Plate building, D. C., S. D. Calif. (Los Angeles), Doc. E U–26–C, *Luthy Research Laboratory* v. *T. F. Smith.* Dismissed without prejudice against W. A. McCollum and the respondent J. Feilschmidt May 24, 1932.

1,563,506. (See 1,526,714.) 1,579,392. (See 1,448,279.)

1,611,875. (See 1,388,434.)

1,633,739, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same; 1,858,316, Thompson & Smith, same, filed Aug. 23, 1932, D. C., S. D. N. Y., Doc. E 70/328, *Gillette Safety Razor Co.* v. *General Blade Corp.*

1,673,727, L. V. Aronson, Cigar lighter, C. C. A., 2nd Cir., Doc. 11946, *Art Metal Works, Inc.*, v. *Abraham & Straus, Inc.* Decree modified (notice Aug. 24, 1932).

1,690,776, F. R. Elston, Woven material, filed July 13, 1932, D. C., E. D. Pa., Doc. 7187, *B. F. Miller* v. *Prudential Worsted Co.*

1,693,286, J. J. Kaufmann, Heddle frame, filed May 23, 1932, D. C., E. D. Pa., Doc. 7117, *Steel Heddle Mfg. Co.* v. *Walker Mfg. Co.*

1,713,726, H. Vogt et al., Device for phonographs with linear phonogram carriers, filed Aug. 23, 1932, D. C., M. D. Pa., Doc. 952, *American Tri-Ergon Corp. et al.* v. *Paramount Publix Corp.* Doc. 953, *American Tri-Ergon Corp.* v. *Wilmer & Vincent Theatre Co.*

1,716,007, F. Rosenthal, Attachment for stockings, filed June 4, 1932, D. C., E. D. Pa., Doc. 7127, *F. Rosenthal* v. *Nolde & Horst Co., Inc.*

1,718,997. (See 1,505,592.)

1,725,500, V. P. Writer, Tam pressing machine, filed Aug. 22, 1932, D. C., S. D. N. Y., Doc. E 70/327, *Writer Headwear Corp.* v. *Mayfair Beret Co., Inc., et al.*

1,731,967, L. J. Antonsen, Paper excelsior machine, D. C. Wash. (Spokane), Doc. E 4408, *L. J. Antonsen* v. *J. H. Rasmussen (Spokane Waste Paper Co.)*. Patent held valid Aug. 19, 1932.

1,745,118. (See 1,448,279.)

1,758,942, Gottlieb & Stout, Machine for forming fish cakes, filed June 2, 1932, D. C., E. D. Pa., Doc. 7125, *I. Gottlieb* v. *L. Metzger.*

1,785,939. (See 1,526,714.)

1 805,251, C. L. Matthews et al., Guy guard, filed Apr. 11, 1932, D. C., E. D. Pa., Doc. 7069, *W. N. Matthews Corp.* v. *Utilities Service Co.*

1,812,704. (See 1,261,832.) 1,815,745. (See 1,633,739.)

1,828,533, H. W. Hoffmann, Full fashioned stocking and method of producing same, filed June 23, 1932, D. C., E. D. Pa., Doc. 7165, *Ajax Hosiery Mills* v. *Cambria Silk Hosiery Co.*

1,839,160, J. P. Nissen, Marking implement, filed July 15, 1932, D. C., E. D. Pa., Doc. 7195, *J. P. Nissen* v. *L. Spiegl.*

1,840,432, P. H. Bray, Pump, filed July 13, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–50–J, *P. H. Bray* v. *Hofco Pump, Ltd., et al.*

1,854,158, A. S. MacDonald, Library construction, filed Aug. 22, 1932, D. C., W. D. N. Y. (Buffalo), Doc. E 1498, *Snead & Co.* v. *Art Metal Construction Co.*

1,858,316. (See 1,633,789.)

1,864,459. (See Re. 18,498.)

1,864,460. (See Re. 18,498.)

Re. 17,961, F. H. Ellison, Game apparatus, D. C., W. D. Mo. (Kansas City), Doc. 1850, *Automatic Industries, Inc.*, v. *A. R. Jackson Kansas City Show Case Works Co.* Patent held infringed Aug. 22, 1932.

Re. 18,498, H. E. Norviel, Ignition apparatus; 1,864,459, same, Switch; 1,864,460, same, Switch and coil unit, filed Aug. 16, 1932, D. C., E. D. N. Y., Doc. E 6526, *Delco-Remy Corp.* v. *Preferred Electric & Wire Corp.* Doc. E 6527, *Delco-Remy Corp.* v. *P. Sorenson Mfg. Co., Inc.*

Disclaimer

1,424,069.—*Fred W. Blackmar*, Providence, R. I. Wrench. Patent dated July 25, 1922. Disclaimer filed September 6, 1932, by the patentee, assignee, *Snap-On Tools, Inc.*, consenting.

Hereby enters this disclaimer of so much of claims 1, 2, and 3 of said specification as is in excess of the following:

"1. A socket wrench comprising a cylindrical head, a handle, and a shank connecting one side of the head and the handle, the said handle and one end of the head occupying substantially parallel planes, and the said shank extending diagonally beyond the said end of the head and between the same and the handle, and the juncture of the shank with the side of the head being spaced inwardly from the plane of the opposite end of the head, said head being sufficiently elongated or of a depth to at least equal standard nut thickness and extend beyond said shank juncture to afford access to restricted locations, the internal wall of the head being provided with a circumferential series of notches to receive the corners of a nut or the like, the number of notches formed in the internal wall of the head being in excess of six and a multiple of both six and four, said notches having a sufficient depth to at least equal standard nut thickness, and the head being exteriorly tapered circumferentially in the direction away from the juncture of the shank with the head.

"2. A socket wrench comprising a cylindrical head having a socket of sufficient depth to at least equal standard nut thickness, the interior wall of said socket being provided with a circumferential series of notches substantially equally spaced from each other throughout the circumferential extent of the interior wall of the socket, the number of notches formed in the socket being in excess of six and a multiple of both six and four to receive the corners of a four-sided or six-sided nut when located at a variety of different angular positions relative thereto, said notches having a sufficient depth to at least equal standard nut thickness for complete registry therewith, and a handle connected to said head and extending outwardly therefrom.

"3. A socket wrench comprising a cylindrical head of comparatively thin wall thickness, a handle, a shank connecting one side of the head and the forward end of the handle, the said handle and one face of the head occupying substantially parallel planes, and the said shank extending diagonally beyond the said face of the head and between the same and the handle, the head having a socket of sufficient depth to at least equal standard nut-thickness, said head socket extending beyond its juncture with the handle shank to afford access to restricted locations, the interior wall of said socket being provided with a circumferential series of notches equally spaced from each other throughout the circumferential extent of the interior wall of the socket, the number of notches formed in the socket being in excess of six and a multiple of both six and four to receive the corners of a four-sided or six-sided nut when located at a variety of different angular positions relative thereto, said notches having a sufficient depth to at least equal standard nut thickness for complete registry therewith."

TRADE-MARKS

OFFICIAL GAZETTE, SEPTEMBER 27, 1932

[VOL. 422. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

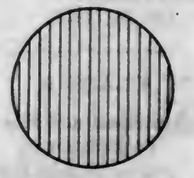
Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 313,618. E. A. WILSON CO., Lowell, Mass. Filed Apr. 21, 1931.



The drawing is lined to indicate red color.
For Coal.
Claims use since June, 1930.

Ser. No. 329,801. BURNS BROS., New York, N. Y. Filed Aug. 3, 1932.

THERMOCITE

For Solid Fuel Consisting of a Mixture of Petroleum Coke and Anthracite Coal.
Claims use since May 25, 1932.

CLASS 2

Receptacles

Ser. No. 327,615. LINCOLN BAG COMPANY, Chicago, Ill. Filed May 31, 1932.



The words "Cedar Mothproof Storage Bag" are hereby disclaimed apart from the mark shown.
For Mothproof Storage Bags.
Claims use since Jan. 1, 1932.

Ser. No. 327,616. LINCOLN BAG COMPANY, Chicago, Ill. Filed May 31, 1932.



The words "Cedarized Storage Bag" are hereby disclaimed apart from the mark shown.
For Mothproof Storage Bags.
Claims use since Jan. 1, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 329,364. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Aug. 5, 1932.

"FLYLITE"

For Hat Boxes, Over-Night Cases, Week-End Cases, Wardrobe Cases, and Hand Trunks.
Claims use since Mar. 8, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 305,714. LOCKWOOD BRACKETT CO., Waltham and Boston, Mass. Filed Sept. 15, 1930.

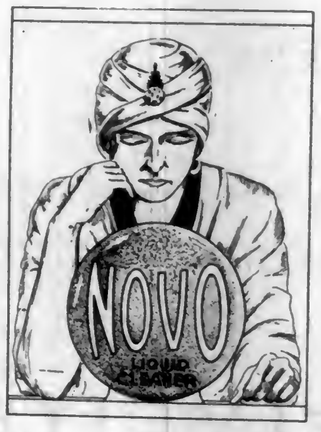


No claim is made to the representation of the carton appearing in the drawing.

For Powdered Soap—Namely, Shampoo Preparations.

Claims use since Apr. 6, 1926.

Ser. No. 323,982. EDWARD L. BATES, doing business as Novo Mfg. Co., Modesto, Calif. Filed Feb. 9, 1932.



The representation of the bust of a human figure on the drawing is fanciful. The words "Liquid Cleaner" are disclaimed apart from the mark as shown on the drawing.

For Liquid Preparation for Cleaning Painted or Varnished Surfaces, Mirrors and Glass, Glazed Fabrics, and for Removing Ink Spots and the Like.

Claims use since Nov. 14, 1931.

CLASS 5

Adhesives

Ser. No. 328,515. HARRY E. ADAMS, doing business as Northlake Products Company, Peoria, Ill. Filed July 2, 1932.

SILVER SEAL
METALLIC LIQUID SOLDER

The words "Metallic Liquid Solder" are disclaimed apart from the mark shown.

For Metallic Liquid Cement.

Claims use since Feb. 15, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 317,427. HORTON M. DOUGLASS, Seattle, Wash. Filed July 29, 1931.

DOUGLASS
INDIAN MAIDEN

For Stomachic Home Treatment for Stomach Disorders, Bowel Disorders, Liver Disorders, Arthritis, Neuritis, Rheumatism, and Partial Paralysis.

Claims use since Dec. 1, 1930.

Ser. No. 317,669. ILON AKTIENGESELLSCHAFT, Basel, Switzerland. Filed Aug. 5, 1931.

ILON

For Chemical and Pharmaceutical Products—Namely, Salves for Use in the Treatment of Abscesses, for Massaging, for Coughs, Insect Stings, Bites, Headaches, and Stomach Disorders.

Claims use since Jan. 26, 1929.

Ser. No. 317,780. GOTTFRIED SCHREITMÜLLER, doing business as Shavol Corp. of America, New York, N. Y. Filed Aug. 7, 1931.

RAZ-O-LESS

For Hair Remover—Namely, a Depilatory Cream.

Claims use since July 15, 1931.

Ser. No. 322,664. WIEBOLDT STORES, INC., Chicago, Ill. Filed Jan. 2, 1932.

ARLENE'S

For Cold Cream.

Claims use since Apr. 26, 1928.

Ser. No. 324,511. HARZFELD'S, INC., Kansas City, Mo. Filed Feb. 26, 1932.

"Petticoat Lane"

For Astringent, Skin Tonic, Tissue Cream, Foundation Cream, Cleansing Cream, and Face Powder.

Claims use since Nov. 30, 1931.

Ser. No. 325,674. ASSOCIATED LONDON FLOUR MILLERS LIMITED, London, England. Filed Mar. 31, 1932.

SALCA

For Chemical Substances Used for Veterinary Purposes and Particularly for the Treatment of Mange, Eczema, and Other Skin Diseases; Worms, Listlessness, as a General Tonic, as a Preventative Preparation for the Before-Mentioned Ailments, as a Food Supplement, and a Tissue and Bone Builder.

Claims use since the beginning of August, 1924.

Ser. No. 325,725. FRANK C. REILLY, New York, N. Y. Filed Apr. 1, 1932.

MOLNAR

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid and Solid Form, Eyebrow and Eye Lash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Body Powder, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lipsticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Depilatories, Nail Creams, Nail Polishes, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Jan. 5, 1931.

Ser. No. 325,897. VALERIA ING. PODHORSKY, Bucarest, Roumania. Filed Apr. 7, 1932.

MARCA ȘI NUMELE INREGISTRATE
V. P.
MASFEOVALYDOLON
SE VA LUA
DUPĂ PRESCRIPȚIA MEDICALĂ
4-6 TABLETE PE ZI

No claim is made to any of the wording shown in the drawings except the letters "V. P." and the word "Masfeovalydolon."

For Medicine Indicated in the Treatment of Epilepsy.

Claims use since Apr. 9, 1930.

Ser. No. 326,397. SOCIETE DES USINES CHIMIQUES RHONE-POULENC, Paris, France. Filed Apr. 22, 1932.

QUINO-STOVARSOL

For Tonic for the Treatment of Hematozosis of Paludism.

Claims use since July 27, 1927.

Ser. No. 326,763. DOCTOR ERNEST SILTEN, Berlin, Germany. Filed May 4, 1932.

JODIRENAN

For Inhalant for Asthma and Bronchial Catarrh.

Claims use since Feb. 24, 1920.

Ser. No. 327,179. ALEJANDRO GUMMÁ CASTELLÓ, Barcelona, Spain. Filed May 16, 1932.

SERVETINAL

For Preparation for Use in the Treatment of Stomach Complaints.

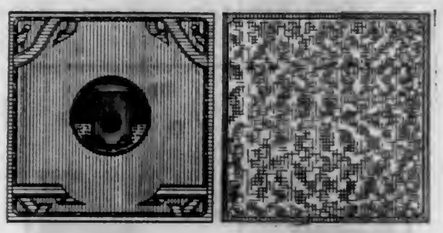
Claims use since Apr. 30, 1928.

Ser. No. 327,448. KYFFHÄUSER-LABORATORIUM FABRIKATION CHEM.-PHARM. PRÄPARATE HERMANN QUINCKE BAD FRANKENHAUSEN A. K., Frankenhausen, Germany. Filed May 25, 1932.

KYFENOL

For Medicines—Namely, Embrocations for Muscular Soreness Due to Exposure and Fatigue.
Claims use since Apr. 9, 1932.

Ser. No. 327,890. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed June 10, 1932.



The drawing is lined to represent the colors red, yellow, and blue, respectively, which are claimed as features of the trade-mark. Applicant is the owner of registered Trade-Marks 76,260, 78,828, 270,837, and 283,976.
For Baking Powder.
Claims use since April, 1873.

Ser. No. 327,923. J. S. STAEDTLER, INC., New York, N. Y. Filed June 11, 1932.

Crayon-de-Paree

The word Crayon appearing on the drawing is disclaimed.
For Eyebrow and Eyelash Coloring Pencils, Eye Shadows Pencils and Make-Up Pencils.
Claims use since Apr. 1, 1932.

Ser. No. 328,221. EDWARD D. MINTZER, doing business as The Standard Peroxide Co., Chicago, Ill. Filed June 22, 1932.

BLONDES FAMOUS



The word "Blondes" is disclaimed for registration purposes apart from the mark shown in the drawing. The portrait appearing in the drawing is fanciful.
For Hair Bleach.
Claims use since June 1, 1930.

Ser. No. 328,342. JACOB M. WIENNER, doing business as J. M. Wienner & Co., Baltimore, Md. Filed June 27, 1932.

LITTLE BROWNIES

For Laxatives.
Claims use since Nov. 20, 1919.

Ser. No. 328,387. JOSEPH W. JONES, doing business as The E. P. Remedy Co., Inc., Bristol, Tenn. Filed June 28, 1932.

E.P.

The drawing is lined for the color green.
For Preparation for the Relief of Headaches, Neuralgia, Muscular Aches, and Colds.
Claims use since June 9, 1932.

Ser. No. 328,404. WILLIAM E. PENTZ, doing business as Wep Chemical Co., St. Joseph, Mo. Filed June 29, 1932.

Wep

For Vaginal Ointment, Nose and Throat Ointment, Perspiration Powder, Dental Cream, Antiseptic Ointment, Rectal and Colon Ointment, Prophylactic Paste, and Skin Ointment.
Claims use since Mar. 1, 1912.

Ser. No. 328,425. INECTO, INC., New York, N. Y. Filed June 30, 1932.

NOTAX

For Hair Dye.
Claims use since June 27, 1932.

Ser. No. 328,426. INECTO, INC., New York, N. Y. Filed June 30, 1932.

NOTEX

For Hair Dye.
Claims use since June 24, 1932.

Ser. No. 328,427. INECTO, INC., New York, N. Y. Filed June 30, 1932.

NOTIX

For Hair Tonic.
Claims use since June 27, 1932.

Ser. No. 328,428. INECTO, INC., New York, N. Y. Filed June 30, 1932.

NOTUX

For Hair Dye.
Claims use since June 27, 1932.

Ser. No. 328,481. DRUGKRAFT, INC., doing business as Sabrol Laboratories, New York, N. Y. Filed July 1, 1932.

SABROL

For Tooth Paste.
Claims use since July, 1930.

Ser. No. 328,608. CONSTANCE A. HALL, doing business as The Keratin Company, Forest Hills, N. Y. Filed July 7, 1932.

Hall Mark
KERATIN

No claim is made to the word "Keratin" apart from the mark shown.
For Hair Tonic.
Claims use since June 1, 1932.

Ser. No. 328,717. J. H. MILLER, Chicago, Ill. Filed July 11, 1932.

Dar-Me-La

For Liniments for External Use to Relieve Pains, Aches, Strains, Rheumatism, Neuralgia, Backache, Sprained Ankles, Colds, and Chills.
Claims use since Oct. 15, 1931.

Ser. No. 328,743. GEORGE E. SCHAEFER, doing business as Baked Products Company, Newark, N. J. Filed July 12, 1932.

CRISPALAX
The Crispy Laxative

No claim is made to the words "The Crispy Laxative" apart from the showing made in the drawing.
For Laxative.
Claims use since May 25, 1932.

Ser. No. 328,808. CLARON PRODUCTS INCORPORATED, Philadelphia, Pa. Filed July 15, 1932.

BEE-EMS

For Candy Laxative.
Claims use since July 9, 1932.

Ser. No. 328,836. BOURJOIS, INC., New York, N. Y. Filed July 16, 1932.

Les Charmes du Printemps

For Face Powder.
Claims use since Nov. 13, 1907.

Ser. No. 328,857. WLADYSLAW WOJTASINSKI, doing business as W. Wojtasinski Drug Co., Dorchester, Mass. Filed July 16, 1932.



The figure in the drawing is fanciful.
For Cathartic Medicine.
Claims use since Jan. 1, 1916.

Ser. No. 328,865. CHANEL, INC., New York, N. Y. Filed July 18, 1932.

IVOIRE
DE
CHANEL

For Perfume.
Claims use since May 5, 1932.

Ser. No. 329,009. BAIRD & MCGUIRE, INC., Holbrook, Mass Filed July 21, 1932.

Baird's

For Insecticides.
Claims use since Apr. 1, 1932.

Ser. No. 329,023. NATIONAL SULPHUR CO., INC., New York, N. Y. Filed July 23, 1932.

MAGNETIC SULPHUR

The word "Sulphur" is disclaimed for registration purposes apart from the mark shown in the drawing.
For Sulphur for Dusting Purposes (Control of Insect Pests and Fungus on Vegetation and Fruit Trees).
Claims use since Feb. 3, 1932.

Ser. No. 329,024. S. B. PENICK & COMPANY, INC., New York, N. Y. Filed July 23, 1932.

ROTENOYD

For Extract of Cube Root or Derris Root.
Claims use since July 1, 1931.

Ser. No. 329,025. S. B. PENICK & COMPANY, INC., New York, N. Y. Filed July 23, 1932.

MOTHAFUME

For Concentrated Moth Proofing Solution.
Claims use since July 1, 1931.

Ser. No. 329,056. NICHOLAS M. MOLNAR, doing business as Vita-Gloss Products Co., New York, N. Y. Filed July 25, 1932.

VITA-GLOSS

For Liquid Compound for Hair Wash and Hair Treatment, Being in the Form of Water Soluble Olive Oil.
Claims use since May 1, 1932.

Ser. No. 329,085. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed July 26, 1932.

EVIPAN

For Hypnotic.
Claims use since July 1, 1932.

Ser. No. 329,109. SAMUEL BONAT & BRO., New York, N. Y. Filed July 27, 1932.

DioDane

For Face Powder, Lipstick, Rouge, Eye Shadow, Hair Dye, Lemon Cream, Almond Cream, Strawberry Cream, Hand Lotion, Muscle Cream, Waveset, Brilliantine, Cold Cream, Cleansing Cream, Bleach Pack, Lemon Pack, Facial Mask, Mud Pack, Vanishing Cream, Astringent, Dandruff Oil, Oil Shampoo, Tar Shampoo, Lemon Shampoo, Mint Shampoo and Opal Shampoo.
Claims use since Apr. 10, 1932.

Ser. No. 329,121. THE PERMUTIT COMPANY, New York, N. Y. Filed July 27, 1932.

ZEO-DUR

For Base Exchange Silicates Used as Purifying and Treating Materials for Water.
Claims use since July 15, 1932.

Ser. No. 329,134. CHASE & CO., Sanford, Fla. Filed July 28, 1932.

Chaco

For Insecticides.
Claims use since the spring of 1927.

Ser. No. 329,160. STEPHENSON MFG. CO., INC., Springfield, Mass. Filed July 28, 1932.

ANTISEPTIC
VOLENE
GERMICIDE

No claim is made to the words "Antiseptic" and "Germicide", appearing on the label, apart from the mark shown.
For Antiseptic, or Germicide, for the Relief of Colds in the Head, Throat, and Lungs, Asthma, Bronchitis, Pneumonia, Hay Fever, Sinus, and Skin Troubles.
Claims use since June 1, 1931.

Ser. No. 329,459. F. A. SCANNELL & COMPANY, Boston, Mass. Filed Aug. 10, 1932.

FUNGUSTAN

For Medicinal Preparation for the Treatment of Skin Diseases.
Claims use since Aug. 5, 1932.

CLASS 7

Cordage

Ser. No. 322,780. MENTE & CO., INC., New Orleans, La. Filed Jan. 6, 1932.

DREADNAUGHT

For Twine of Cotton or Jute.
Claims use since 1921.

Ser. No. 329,171. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y. Filed July 29, 1932.

DEFIANCE

For Manila, Sisal, Hemp, and Other Vegetable Fibre Rope.
Claims use since Jan. 2, 1932.

Ser. No. 329,172. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y. Filed July 29, 1932.

METEOR

For Manila, Hemp, Sisal and Other Vegetable Fibre Rope.
Claims use since Jan. 2, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 326,935. DAVIS PRESTO-PAK COMPANY, Los Angeles, Calif. Filed May 10, 1932.

PRESTO-PAK

No claim is made to the word "Pak" except in the relationship shown.
For Cigarette Cases.
Claims use since Apr. 27, 1932.

CLASS 10

Fertilizers

Ser. No. 329,133. CHASE & CO., Sanford, Fla. Filed July 28, 1932.

Chaco

For Fertilizers.
Claims use since spring of 1924.

CLASS 11

Inks and Inking Materials

Ser. No. 322,411. F. S. WEBSTER COMPANY, Cambridge, Mass. Filed Dec. 22, 1931.

THE WEBSTER

MULTIKOPY

Applicant is owner of Reg. Nos. 37,761 and 245,776.
For Carbon Paper.
Claims use since Jan. 18, 1897.

Ser. No. 328,406. H. M. STORMS COMPANY, Brooklyn, N. Y. Filed June 29, 1932.

CLEAN PULL

For Carbon Paper.
Claims use since June 8, 1932.

Ser. No. 329,442. THE CLASSROOM TEACHER, INC., Chicago, Ill. Filed Aug. 10, 1932.

THE CLASSROOM PRINTER

No claim is made to the word "Printer" apart from the mark shown.
For Hectograph Ink, Rubber Stamp Ink, and Inking Pads.
Claims use since Oct. 8, 1931.

CLASS 12

Construction Materials

Ser. No. 329,051. THE KELLEY ISLAND LIME AND TRANSPORT COMPANY, Cleveland, Ohio. Filed July 25, 1932.

Wyte-Bag

The exclusive use of a white bag as a container for the goods is disclaimed.
For Finishing Hydrated Lime.
Claims use since Mar. 1, 1932.

CLASS 15

Oils and Greases

Ser. No. 329,430. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Aug. 9, 1932.

ESSOL

For Lubricating Oils.
Claims use since July 11, 1932.

Ser. No. 329,600. HIL-VIN OIL COMPANY, Buffalo, N. Y. Filed Aug. 17, 1932.

Bond-Penn

For Lubricating Oils.
Claims use since Aug. 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,668. VELSICOL CORPORATION, Chicago, Ill. Filed Mar. 30, 1932.

VELSICOL

For Lacquer, Varnish, Stain, and Paint in Ready Mixed or Paste Form.
Claims use since Mar. 14, 1932.

Ser. No. 325,669. VELSICOL CORPORATION, Chicago, Ill. Filed Mar. 30, 1932.

VELSICOL

The color lining appearing in the drawing is to indicate blue and yellow.
For Lacquer, Varnish, Stain, and Paint in Ready Mixed or Paste Form.
Claims use since Mar. 14, 1932.

Ser. No. 328,962. WALTER MORGAN COMPANY INC., Washington, D. C. Filed July 21, 1932.

Brush-Rite

For Showcard Paints in the Nature of Water Color Paints for Use on Signs, Showcards, Window Back grounds, and the Like.
Claims use since Nov. 1, 1931.

Ser. No. 329,027. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed July 23, 1932.



"AROUND THE WORLD"

For Paints (Ready-Mixed, Paste Form, and Dry), Paint Enamels, Lacquers, Japans, Varnishes, Stains, Fillers, and Paints, Varnishes, Lacquers, and Enamels of a Synthetic Nature, or Containing Synthetic Resins.
Claims use since May 1, 1932.

Ser. No. 329,465. GODFREY L. CABOT, INC., Boston, Mass. Filed Aug. 11, 1932.

MOGUL

For Carbon Black.
Claims use since Mar. 10, 1932.

CLASS 17

Tobacco Products

Ser. No. 329,439. BARLOW-MOORE TOBACCO COMPANY, INC., Bowling Green, Ky. Filed Aug. 10, 1932.

KENTUCKY KING



For Smoking and Chewing Tobacco.
Claims use since 1912.

Ser. No. 329,586. G. FREDERIC RIEGEL, New York, N. Y. Filed Aug. 16, 1932.

REPEAL

For Cigars.
Claims use since July 28, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 328,118. THE AUTOCAR COMPANY, Ardmore, Pa. Filed Jan. 18, 1932.

A

For Automobile Business-Cars, and Motor Trucks and Structural Parts Thereof.
Claims use since Aug. 1, 1931.

Ser. No. 329,451. MUELLER ELECTRIC COMPANY, Cleveland, Ohio. Filed Aug. 10, 1932.

THE COCK-EYED CARRIER!

The word "Carrier" being disclaimed apart from the mark shown in the drawing.
For Battery Carriers.
Claims use since November, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 318,314. JAMES KERR, Jenners, Pa. Filed Aug. 22, 1931.

Ker-Stat

For Radio Interference and Noise Eliminator.
Claims use since June 3, 1931.

Ser. No. 329,140. ELECTRO ANTI-CORROSION CORPORATION, New York, N. Y. Filed July 28, 1932.

ANCA

For Anodes for Use in Electrolytic Systems for the Protection of Containers.
Claims use since July 14, 1932.

Ser. No. 329,248. WHISK-BRUSH VACUUM MACHINE CO., INC., New York, N. Y. Filed July 30, 1932.

Little Wonder WHISK BRUSH Vac

No claim is made herein to the words "Whisk Brush" apart from the mark shown in the drawing.
For Electrically Operated Portable Vacuum Cleaners and Attachments Therefor for Cleaning, Blowing and Fumigating.
Claims use since Jan. 2, 1932.

Ser. No. 329,418. ALPINE ELECTRIC CORPORATION, Schenectady, N. Y. Filed Aug. 9, 1932.

REX

For Fuse Plugs.
Claims use since July 21, 1932.

Ser. No. 329,580. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Aug. 16, 1932.

GOODYEAR

For Storage Batteries.
Claims use since July 23, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 327,935. JOHN H. DAVIS COMPANY, doing business as Sunset Line & Twine Company, San Francisco, Calif. Filed June 13, 1932.

FARALLON CUTTYHUNK

The word "Cuttyhunk" is disclaimed apart from the mark shown on the drawing.
For Fishing Lines.
Claims use since Feb. 18, 1932.

Ser. No. 329,381. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Aug. 6, 1932.



For Coin-Controlled Amusement Device.
Claims use since July 22, 1932.

Ser. No. 329,644. VICTOR MORAN, Bradford, Pa. Filed Aug. 18, 1932.

Pixmix

For Picture Puzzles.
Claims use since Mar. 7, 1932.

Ser. No. 329,715. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y. Filed Aug. 20, 1932.

DUCKY

For Dolls.
Claims use since Feb. 8, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 327,680. CO2 APPLIANCE COMPANY, Tulsa, Okla. Filed June 3, 1932.

SPEED-ICE

For Generators for Vaporizing Solid Carbon Dioxide for Use in Soda Fountains and the Like.
Claims use since Dec. 15, 1931.

Ser. No. 329,466. CLAWSON MACHINE CO., Flagtown, N. J. Filed Aug. 11, 1932.

HAIL KING

For Ice Chipping Machines.
Claims use since June 15, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 329,518. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Aug. 13, 1932.

BALCOR

For Ophthalmic Lenses.
Claims use since July 25, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 328,931. ANTHRACITE EQUIPMENT CORPORATION, New York, N. Y. Filed July 21, 1932.

ANTHRAFILT

For Filtering Media Composed of Freshly Mined and/or Reclaimed Anthracite in Any Size.
Claims use since July 8, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 317,666. GEYSER MANUFACTURING COMPANY, New Orleans, La. Filed Aug. 5, 1931.



OLD FAITHFUL WATER HEATERS

The phrase "Water Heaters" is disclaimed apart from its use as shown.
For Water Heaters.
Claims use since June 15, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 328,641. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed July 8, 1932.



The mark consists of a green strand and is applied or affixed to the goods by braiding, the green strand appearing on the surface of the goods at intervals as shown by the color lining in the drawing. All other lining in the drawing indicates shading only. No registration rights are claimed in the representation of the packing shown in the drawing.
For Flax Packing for Glands, Stuffing Boxes, Valve Stems, Piston Rods, and Plungers.
Claims use since Jan. 7, 1932.

CLASS 37

Paper and Stationery

Ser. No. 310,507. G. A. ACKERMANN PAPER MILLS, INC., Chicago, Ill. Filed Jan. 29, 1931.

MEDALLION

For Paper Used for Printing, Binding, and Wrapping.
Claims use since Jan. 8, 1931.

Ser. No. 318,723. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed Sept. 3, 1931.

BELINDE

For Cleaners for School Slates, Pen Wipers, and Stamp Moisteners Made in Fanciful Forms of India Rubber of All Kinds, Particularly Made of India Rubber Having Sponge-Like or Moss-Like Appearance.
Claims use since May 5, 1931.

Ser. No. 327,560. MINERVA WAX PAPER COMPANY, Minerva, Ohio. Filed May 28, 1932.

E-Z CUT

The word "Cut" is disclaimed apart from the mark as shown.
For Packages of Wax Paper.
Claims use since Mar. 5, 1932.

Ser. No. 329,527. CELLULOSE PRODUCTS CORPORATION, Shamokin, Pa., and New York, N. Y. Filed Aug. 13, 1932.

tish

For Handkerchiefs, Cleansing and Polishing Tissues, Napkins, Facial Tissues in Folded Sheets or in Rolls, and Small Towels, All Made of Soft Cellulose Tissue.
Claims use since October, 1930.

Ser. No. 329,581. THE HERRLINGER PAPER COMPANY, Cincinnati, Ohio. Filed Aug. 16, 1932.

BLACK CORE

For Paper Sealing Tape.
Claims use since Mar. 5, 1931.

Ser. No. 329,745. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Aug. 22, 1932.

SEMINAP

For Paper Napkins, Toilet Paper, and Paper Towels.
Claims use since Aug. 11, 1932.

Ser. No. 329,759. WILSON-JONES COMPANY, Chicago, Ill. Filed Aug. 22, 1932.

LeatherLife

For Filing Envelopes, Mailing Envelopes, Filing Folders, and Filing Pockets.
Claims use since Aug. 6, 1932.

CLASS 38

Prints and Publications

Ser. No. 327,828. NATIONAL SOCIETY OF PURITAN DESCENDANTS, Boston, Mass. Filed June 8, 1932.

THE PURITAN REGISTRY

For Loose-Leaf Publication Issued at Intervals.
Claims use since Dec. 15, 1931.

Ser. No. 328,444. SCOTT B. MCCAFFERTY, Washington, D. C., assignor to B. E. F. News Company, Washington, D. C., a Corporation of District of Columbia. Filed June 30, 1932.

THE B·E·F NEWS
"DONUTS" EXPEDITIONARY FORCES

For Weekly Publication.
Claims use since June 27, 1932.

Ser. No. 329,240. THE POST PRINTING AND PUBLISHING COMPANY, Denver, Colo. Filed July 30, 1932.

SO THE PEOPLE MAY KNOW

For Section or Column Appearing in a Newspaper.
Claims use since Jan. 1, 1900.

Ser. No. 329,311. KELLOGG COMPANY, Battle Creek, Mich. Filed Aug. 8, 1932.

CHART-O-FACTS

The right of exclusive use of the words "Chart" and "Facts" apart from the mark as shown is not claimed herein.
For Printed Chart.
Claims use since July 20, 1932.

Ser. No. 329,553. EVENING HERALD PUBLISHING COMPANY, Los Angeles, Calif. Filed Aug. 15, 1932.

starr-dust

For Caption or Title for Newspaper Article Published from Time to Time.
Claims use since Dec. 12, 1931.

Ser. No. 329,554. EVENING HERALD PUBLISHING COMPANY, Los Angeles, Calif. Filed Aug. 15, 1932.

starr-dust
FROM HOLLYWOOD

For Caption or Title for a Newspaper Article Published from Time to Time.
Claims use since Dec. 12, 1931.

CLASS 39

Clothing

Ser. No. 327,452. W. H. ROLAND, Bloomington, Ill. Filed May 25, 1932.

"Rolwyn" DISTINCTIVE FASHIONS

No claim is made to the words "Distinctive Fashions" apart from the mark as shown on the drawing.
For Ladies' and Children's Wearing Apparel—Namely, Coats, Dresses, Slippers, Pumps, Sandals Made of Leather and/or Fabric, Hosiery, Fabric and Kid Gloves, Blouses, Sweaters, Skirts, Bathing Suits, Brassières, Corsets, Fur Coats, Fur Neckpieces, Kimonos, Suits, and Hats.
Claims use since Jan. 1, 1931.

Ser. No. 329,438. SIMON ASCHER & CO., INC., New York, N. Y. Filed Aug. 10, 1932.

knit-O-toy

Applicant disclaims the word "Knit" apart from the mark shown.
For Sweaters.
Claims use since July 27, 1932.

Ser. No. 329,530. JULIUS KAYSER & CO., New York, N. Y. Filed Aug. 13, 1932.

Sansrun

For Hosiery.
Claims use since Aug. 1, 1932.

Ser. No. 329,561. NORTHBILT MANUFACTURING CO., Minneapolis, Minn. Filed Aug. 15, 1932.

POLAR PATROL

For Children's Play Suits and Snow Suits.
Claims use since Mar. 1, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 317,925. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931.

Barashka

For Woolen Piece Goods.
Claims use since May 15, 1931.

Ser. No. 326,777. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed May 5, 1932.

Bemberg Crêpe Oriental

Applicant disclaims the exclusive use of the words "Crêpe Oriental" apart from the mark as shown. The lining on the drawing is indicative of shading.
For Piece Goods Comprising or Containing Artificial Silk.
Claims use since Apr. 2, 1931.

Ser. No. 329,052. VICTOR W. KNIGHT, Chicago, Ill. Filed July 25, 1932.

TRICK-A-CHIEF

For Handkerchiefs.
Claims use since May, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 325,175. LATEX LABORATORIES, New York, N. Y. Filed Mar. 16, 1932.

"EL TORO"

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since October, 1930.

Ser. No. 329,250. CERTEX CORPORATION, Kansas City, Mo. Filed Aug. 1, 1932.

CERTEX

For Prophylactic Rubber Articles for Personal Hygiene and the Prevention of Contagious Diseases.
Claims use since June 11, 1932.

Ser. No. 329,531. THE KILLIAN MANUFACTURING CO., Akron, Ohio. Filed Aug. 13, 1932.

NAPOLEONS

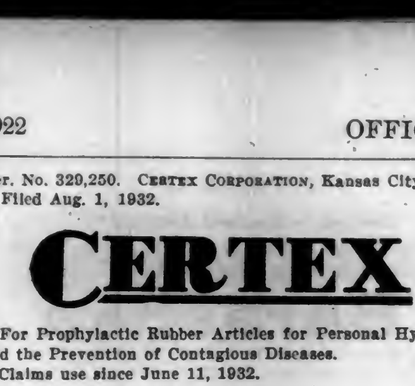
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Mar. 10, 1932.

Ser. No. 329,531. THE KILLIAN MANUFACTURING CO., Akron, Ohio. Filed Aug. 13, 1932.

DERBIES

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Mar. 10, 1932.

Ser. No. 329,552. MAXON H. DUEMMER, Kansas City, Mo. Filed Aug. 15, 1932.



For Catamenial Belts or Sanitary Napkin Holders.
Claims use since July 27, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 328,263. N. H. DARSKY, doing business as Golden Age Ginger Ale Co. of America, Youngstown, Ohio. Filed June 24, 1932.

GOLDEN AGE

For Mineral and Carbonated Water, and for Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Syrups and Extracts Used in Making the Same.
Claims use since June 2, 1932.

Ser. No. 329,455. OXO, LIMITED, London, England. Filed Aug. 10, 1932.

OXADE

For Nonalcoholic Maltless Beverages Sold as Soft Drinks; Syrups, Flavors, Compounds, Extracts, Juices, Concentrates, and Powders for Making the Same; Preservatives for Soft Drinks, Mineral and Other Potable Waters.
Claims use since March, 1931.

Ser. No. 329,758. VIRGINIA DARE EXTRACT COMPANY, INC., Brooklyn, N. Y. Filed Aug. 22, 1932.

TALL CORN

For Nonalcoholic Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since June 4, 1932.

Ser. No. 329,762. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Aug. 23, 1932.



For Ginger Ale.
Claims use since July 27, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 307,341. VAN ROOY COFFEE CO., INC., Cleveland, Ohio. Filed Oct. 29, 1930.



The words "Van Roy" associated with the pictorial representation of a yellow sun are engraved in white upon a red back ground and also a yellow sun beneath. The conventional lining for blue shown in the drawing forms a feature of the trade-mark. The words "Sun Cured" and "Coffee" are disclaimed apart from the label used.
For Coffee.
Claims use since Apr. 9, 1930.

Ser. No. 307,501. SAMUEL MARENUS, doing business as Union County Pickle Works, Elizabeth, N. J. Filed Nov. 3, 1930.

MARCO

For Preserved Pickles, Chow Chow, Pickled Relishes, Olives, Olive Oils, and Mayonnaise.
Claims use since Aug. 15, 1930.

Ser. No. 318,437. CAMPBELL SOUP COMPANY, Camden, N. J. Filed Aug. 26, 1931. Under section 5b of the act of 1905 as amended in 1920.

Campbell's

For Canned Tomato Juice.
Claims use since Aug. 15, 1931.

Ser. No. 323,018. VINCENZO PANARIELLO, Coney Island, N. Y. Filed Jan. 14, 1932.



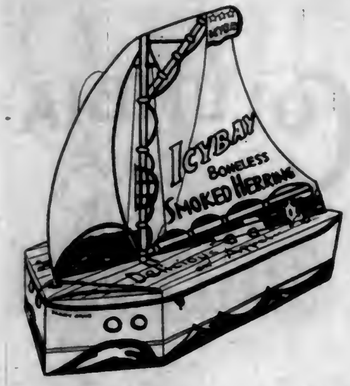
Applicant disclaims the words "Olive Oil" and the representation of the container. The figure represents no particular person.
For Canned Olive Oil.
Claims use since Aug. 18, 1931.

Ser. No. 323,306. THE PFAFFMAN EGG NOODLE COMPANY, Cleveland, Ohio. Filed Jan. 22, 1932.

Red-D-cut

No claim is made to the word "Cut" shown in the drawing except in association with the word and letter "Red-D".
For Macaroni.
Claims use since July 12, 1909.

Ser. No. 324,377. THOMAS S. GORTON, Jr., doing business as Slade Gorton Co., Chicago, Ill. Filed Feb. 23, 1932.



No exclusive claim is made to the words "Boneless Smoked Herring" and "Delicious and Appetizing" apart from the mark as shown. The representation of the container per se is disclaimed for purposes of registration.
For Smoked Herring.
Claims use since Jan. 16, 1932.

Ser. No. 326,344. SNIDER PACKING CORPORATION, Rochester, N. Y., assignor, by mesne assignments, to Snider Packing Corporation, a Corporation of New York. Filed Apr. 21, 1932. Under section 5b of the act of 1905 as amended in 1920.

Snider

For Canned Vegetables, Canned Fruits, Canned Berries, Canned Pork and Beans, Canned Cranberry Sauce, Canned Applesauce, Canned Sauer Kraut, Canned Succotash, Cocktail Sauce, Tomato Juice Cocktail, Canned Soup, Kraut Cocktail and Vinegar, Catsup, Chili Sauce and Tomato Juice.
Claims use since 1884.

Ser. No. 328,276. JOHN MORRELL & CO., Ottumwa, Iowa. Filed June 24, 1932.

Morrell's



Applicant is the owner of registered trade-marks 52,211, 127,641, 234,873, 241,193, 288,293.
For Coffee.
Claims use since Mar. 19, 1932.

Ser. No. 328,400. MRS. E. G. KIDD, INCORPORATED, Richmond, Va. Filed June 29, 1932.

COLUMBIA

No claim is made to the right to the exclusive use of the word "Columbia" except in the setting and relation in which they appear in the drawing.
For Vegetable Pickles.
Claims use since March, 1932.

Ser. No. 328,716. ISABELLA SUGAR COMPANY, Mount Pleasant, Mich. Filed July 11, 1932.

HOUSEWIFE'S FAVORITE

For Granulated Sugar.
Claims use since Apr. 2, 1932.

Ser. No. 328,754. ERNEST D. FEAR, Kansas City, Mo. Filed July 13, 1932.

TROPICAL FREEZE

For Frozen Confections.
Claims use since June 1, 1932.

Ser. No. 328,894. SAFEWAY STORES, INCORPORATED, Oakland, Calif. Filed July 19, 1932.

AMERICAN YOUTH AY

For Bread.
Claims use since May 15, 1932.

Ser. No. 328,909. THE BRADLEY, SMITH CO., New Haven, Conn. Filed July 20, 1932.

GRAND-POPS

No claim is made to the word "Pops" apart from the mark as shown.
For Candy.
Claims use since June, 1931.

Ser. No. 328,957. KING, DOBBS & COMPANY, Chattanooga, Tenn. Filed July 21, 1932.

SUP-R-FRESH

No claim is made to the word "Fresh" apart from the mark as shown.
For Coffee.
Claims use since July 1, 1932.

Ser. No. 329,016. FROZEN CONFECTIONS, INC., New York, N. Y. Filed July 28, 1932.

NIB-LIC

For Frozen Confections.
Claims use since Sept. 1, 1931.

Ser. No. 329,048. HOLMSTROM-PILCHER CO., Lockport, Ill. Filed July 25, 1932.

TUMBLER

For Rolled Oats and Macaroni.
Claims use since July 19, 1932.

Ser. No. 329,204. SWIFT AND COMPANY, Chicago, Ill. Filed July 29, 1932. Under section 5b of the act of 1905, as amended in 1920.

SWIFT'S

For Ice Cream.
Claims use since July 6, 1931.

Ser. No. 329,233. ROSALINO GONZALEZ, San Juan de la Arena, Spain. Filed July 30, 1932.

LA ARENESCA

No claim is made to the representation of a fish except in the precise relation and association in which the same appears herein.
For Preserved Fish.
Claims use since Apr. 7, 1919.

Ser. No. 329,253. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Aug. 1, 1932.

CALAVOIL

For Food Oils.
Claims use since June 20, 1932.

Ser. No. 329,257. THOS. C. COSGROVE, doing business as The Cosgrove Bakers, Vineyard Haven, Mass. Filed Aug. 1, 1932.

WEE-TANS

For Whole Wheat Wafers.
Claims use since May 15, 1932.

Ser. No. 329,268. NICHOLAS WAPLER COMPANY, New York, N. Y. Filed Aug. 1, 1932.

=GEHA=

For Feed for Fish.
Claims use since 1910.

Ser. No. 329,298. ATLAS CANNING COMPANY, INC., Brooklyn, N. Y. Filed Aug. 3, 1932.

EATWELL PET FOOD

The words "Pet Food" are disclaimed for registration purposes apart from the mark as shown in the drawing.
For Prepared Food for Dogs, Cats, and Carniverous Animals.
Claims use since Mar. 25, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,622. S. CAMPBELL & SON LIMITED, Glasgow, Scotland. Filed Aug. 18, 1932.

THE HOUSE OF CAMPBELL

For Scotch Whiskey and Gin.
Claims use since Jan. 1, 1926.

Ser. No. 329,628. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England. Filed Aug. 18, 1932.

The Victoria Vat

For Scotch Whiskey.
Claims use since 1897.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 319,203. DU FOLD BRUSH MANUFACTURING CO. INC., New York, N. Y. Filed Sept. 19, 1931.

DU FOLD

For Combined Coat Hanger and Brush.
Claims use since Aug. 10, 1931.

Ser. No. 328,057. DENSTEN FELT & HAIR COMPANY, INC., Philadelphia, Pa. Filed June 17, 1932.

Sof-Tred

For Carpet and Rug Cushions.
Claims use since Mar. 1, 1932.

Ser. No. 329,558. HENRY B. MEINHARDT, Chicago, Ill. Filed Aug. 15, 1932.

FRIGIWARM

For Canvas Dividing and Doorway Curtains for Refrigerator Cars, Refrigerated Automobile Trucks, and Cold Storage Warehouses.
Claims use since June 20, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

SEPTEMBER 27, 1932

297,652. MAYONNAISE DRESSING FOR FOOD STUFFS. HARROW-TAYLOR BUTTER COMPANY, Kansas City, Mo.
Filed May 23, 1932. Serial No. 327,357. PUBLISHED JULY 5, 1932. Class 46.

297,653. SPECIALLY PREPARED FOOD PRODUCT IN POWDERED FORM, MADE FROM WHEAT, USED TO SUPPLY WHEAT FLOUR IN SOUP MIXTURES, MALT SOUP MIXTURES, CEREAL GRUELS, AND FOR ADDITION TO COWS' MILK FOR INFANTS' DIET. MEAD JOHNSON & COMPANY, Evansville, Ind.
Filed May 7, 1932. Serial No. 326,867. PUBLISHED JULY 5, 1932. Class 46.

297,654. CRUSHED FRUIT AND CONCENTRATED FRUIT SYRUPS FOR FOOD PURPOSES SUCH AS ARE USED IN PREPARING ICE CREAM CONFECTIONS. FISCHMAN SODA FOUNTAIN SUPPLY CO., Philadelphia, Pa.
Filed April 15, 1932. Serial No. 326,139. PUBLISHED JULY 5, 1932. Class 46.

297,655. WIRE CLOTH. REYNOLDS WIRE CO., Dixon, Ill.
Filed March 17, 1932. Serial No. 325,241. PUBLISHED JULY 12, 1932. Class 13.

297,656. COAL. WINDSOR COAL COMPANY, Kansas City, Mo.
Filed June 8, 1932. Serial No. 327,840. PUBLISHED JULY 19, 1932. Class 1.

297,657. FUR SKINS. A. HOLLANDER & SON, INC., Newark, N. J.
Filed June 3, 1932. Serial No. 327,694. PUBLISHED JULY 12, 1932. Class 1.

297,658. COAL. HUNTSVILLE-SINCLAIR MINING COMPANY, Kansas City, Mo.
Filed June 2, 1932. Serial No. 327,659. PUBLISHED JULY 19, 1932. Class 1.

297,659. HARD METAL COMPOSITION OR ALLOY SUITABLE FOR OR FOR USE IN CUTTING TOOLS, DIES, AND FOR OTHER USES. CARBOLOY COMPANY, INC., Detroit, Mich.
Filed June 3, 1932. Serial No. 327,676. PUBLISHED JULY 12, 1932. Class 14.

297,660. HARD METAL COMPOSITION OR ALLOY SUITABLE FOR OR FOR USE IN CUTTING TOOLS, DIES, AND FOR OTHER USES. CARBOLOY COMPANY, INC., Detroit, Mich.
Filed June 3, 1932. Serial No. 327,675. PUBLISHED JULY 12, 1932. Class 14.

297,661. TIRE VALVES. STERLING AUTOMOTIVE PRODUCTS CORPORATION, Buffalo, N. Y.
Filed June 2, 1932. Serial No. 327,666. PUBLISHED JULY 12, 1932. Class 13.

297,662. LEATHER. THE TANNING PROCESS COMPANY, Boston, Mass.
Filed June 1, 1932. Serial No. 327,640. PUBLISHED JULY 12, 1932. Class 1.

297,663. INDIA-RUBBER BUFFING AND DRAFT SPRINGS AND BEARING SPRINGS FOR RAILWAY VEHICLES AND INDIA-RUBBER BEARING BLOCKS FOR RAILWAY VEHICLES. WAUGH EQUIPMENT COMPANY, Depew, N. Y.
Filed May 28, 1932. Serial No. 327,571. PUBLISHED JULY 12, 1932. Class 19.

297,664. TRANSPARENT HOODS FOR BABY CARRIAGES, CRIBS, AND SIMILAR ARTICLES. HARRY DERMAN, INC., Long Island City, N. Y.
Filed May 23, 1932. Serial No. 327,345. PUBLISHED JULY 19, 1932. Class 19.

297,665. LIQUID STRAINERS. THE KLEENTI CO., New York, N. Y.
Filed May 21, 1932. Serial No. 327,316. PUBLISHED JULY 12, 1932. Class 13.

297,666. RAW OR UNPREPARED SOIL. BRAGUE, INC., Hinsdale, Mass.
Filed May 19, 1932. Serial No. 327,295. PUBLISHED JULY 19, 1932. Class 1.

297,667. SLIDE FASTENERS. WALDES KOH-I-NOOR, INC., Long Island City, N. Y.
Filed May 14, 1932. Serial No. 327,115. PUBLISHED JULY 12, 1932. Class 13.

297,668. CHARCOAL. RAY FUEL COMPANY, Detroit, Mich.
Filed May 11, 1932. Serial No. 327,002. PUBLISHED JULY 12, 1932. CLASS 1.

297,669. LEATHER. MICHIGAN TANNING & EXTRACT CO., Petoskey, Mich.
Filed April 29, 1932. Serial No. 326,614. PUBLISHED JULY 12, 1932. Class 1.

297,670. CUT FLOWERS. FRANCIS W. RUZICKA, Chatham, N. J.
Filed May 27, 1932. Serial No. 327,529. PUBLISHED JULY 12, 1932. Class 1.

297,671. CIGARS. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa.
Filed May 27, 1932. Serial No. 327,527. PUBLISHED JULY 19, 1932. Class 17.

297,672. CIGARS. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa.
Filed May 27, 1932. Serial No. 327,526. PUBLISHED JULY 19, 1932. Class 17.

297,673. CIGARS. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa.
Filed May 27, 1932. Serial No. 327,524. PUBLISHED JULY 19, 1932. Class 17.

297,674. ICE CREAM. FRIGID PRODUCTS CORP., Brooklyn, N. Y.
Filed May 24, 1932. Serial No. 327,393. PUBLISHED JULY 5, 1932. Class 46.

297,675. FLOOR WAX APPLICATORS AND DUST BAGS AND COLLECTORS FOR VACUUM CLEANERS AND CLEANING SYSTEMS. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed March 17, 1932. Serial No. 325,206. PUBLISHED JUNE 7, 1932. Class 23.

297,676. WOODFLOUR, BEING GROUND SAWDUST AND GROUND WOOD REFUSE, FOR USE IN THE MANUFACTURE OF VARIOUS PRODUCTS. FREDRIKSTAD TRÆMELFABRIK AKTIESELSKAB, Fredrikstad, Norway.
Filed April 6, 1932. Serial No. 325,849. PUBLISHED JULY 12, 1932. Class 1.

297,677. PULLEYS. THE DAYTON RUBBER MANUFACTURING COMPANY, Dayton, Ohio.
Filed April 15, 1932. Serial No. 326,129. PUBLISHED JULY 19, 1932. Class 23.

297,678. ROOT BEER. WIL-MOR COMPANY, Watertown, Wis.
Filed April 20, 1932. Serial No. 326,311. PUBLISHED JULY 12, 1932. Class 45.

297,679. LIQUID FUEL CARBURETORS. THE THURBERATOR CORPORATION, New York, N. Y.
Filed April 27, 1932. Serial No. 326,562. PUBLISHED JULY 19, 1932. Class 23.

297,680. BARE AND INSULATED ELECTRICAL WIRES AND CABLES. GENERAL CABLE CORPORATION, New York, N. Y.
Filed May 6, 1932. Serial No. 326,816. PUBLISHED JULY 19, 1932. Class 21.

297,681. KITCHEN UTENSILS—NAMELY, EGG BEATERS, POTATO PARERS, BATTER BEATERS, GRATERS. PERRY WALTON, Boston, Mass.
Filed May 9, 1932. Serial No. 326,922. PUBLISHED JULY 12, 1932. Class 23.

297,682. EXERCISING MACHINES. UNITED HEALTH EQUIPMENT COMPANY, Chicago, Ill.
Filed May 9, 1932. Serial No. 326,967. PUBLISHED JULY 12, 1932. Class 22.

297,683. STAPLES FOR USE IN STAPLING MACHINES, TAGGING MACHINES, BINDING MACHINES, STITCHING MACHINES, AND TACKING MACHINES. ACME STAPLE COMPANY, Camden, N. J.
Filed March 28, 1932. Serial No. 325,548. PUBLISHED JULY 19, 1932. Class 13.

297,684. PORTABLE STOVES, RANGES, COMBINATION RANGES, FURNACES, HOT AIR AND WATER CIRCULATORS AND HEATERS AND PARTS THEREOF ADAPTED FOR EMPLOYING HARD COAL, SOFT COAL, WOOD, COKE, GAS, AND OIL AS FUELS. THE QUINCY STOVE MANUFACTURING COMPANY, Quincy, Ill.
Filed March 10, 1932. Serial No. 325,015. PUBLISHED JULY 19, 1932. Class 34.

297,685. CIGARS. T. E. BROOKS, doing business as T. E. Brooks & Co., Red Lion, Pa.
Filed June 9, 1932. Serial No. 327,844. PUBLISHED JULY 19, 1932. Class 17.

297,686. OUTFITS OR SETS CONTAINING DRAWING MATERIALS, SUCH AS PENCILS, PENS, CRAYONS, BRUSHES, INK, PAPER, ERASERS, AND INSTRUCTION BOOKS FOR USE IN MAKING AND/OR TEACHING THE MAKING OF DRAWINGS AND CARTOONS. THE PORTER CHEMICAL COMPANY, Hagerstown, Md.
Filed June 3, 1932. Serial No. 327,704. PUBLISHED JULY 19, 1932. Class 50.

297,687. MINIATURE TRAINS. AMERICAN FLYER MFG. CO., Chicago, Ill.
Filed June 2, 1932. Serial No. 327,643. PUBLISHED JULY 12, 1932. Class 22.

297,688. NON-ALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. KOFEALE CORPORATION, Pittsburgh, Pa.
Filed May 25, 1932. Serial No. 327,541. PUBLISHED JULY 12, 1932. Class 45.

297,689. CIGARS. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa.
Filed May 27, 1932. Serial No. 327,525. PUBLISHED JULY 19, 1932. Class 17.

297,690. TOY CASH REGISTERS. ARTHUR E. JACOBS, Cleveland, Ohio.
Filed May 27, 1932. Serial No. 327,510. PUBLISHED JULY 12, 1932. Class 22.

297,691. ROLLER SKATES. D. P. HARRIS HARDWARE & MANUFACTURING CO., INC., New York, N. Y.
Filed May 26, 1932. Serial No. 327,466. PUBLISHED JULY 12, 1932. Class 22.

297,692. NONALCOHOLIC, MALTLESS FRUIT SYRUPS USED FOR THE PREPARATION OF SOFT DRINKS. FELIX RYBAK, doing business as Rybak Sales Co., Brooklyn, N. Y.
Filed May 23, 1932. Serial No. 327,372. PUBLISHED JULY 12, 1932. Class 45.

297,693. POWDER PUFFS AND FOR FABRIC PADS FOR THE APPLICATION AND REMOVAL OF MAKE UP. MAGNUM PRODUCTS, INC., New York, N. Y.
Filed May 23, 1932. Serial No. 327,366. PUBLISHED JULY 19, 1932. Class 29.

297,694. REFINED, SEMI-REFINED, AND UNREFINED OILS AND GREASES MADE FROM PETROLEUM, BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE AND MINERAL SUBSTANCES, FOR ILLUMINATING, BURNING, POWER, FUEL AND LUBRICATING PURPOSES. KEYSTONE OIL REFINING CO., Detroit, Mich.
Filed May 23, 1932. Serial No. 327,361. PUBLISHED JULY 19, 1932. Class 15.

297,695. DRINKING STRAWS. EAGLE STRAW CORPORATION, New York and Brooklyn, N. Y.
Filed May 20, 1932. Serial No. 327,273. PUBLISHED JULY 12, 1932. Class 50.

297,696. MOTOR LUBRICATING OILS AND MOTOR GREASES. R. L. MORE & SON, Vernon, Tex.
Filed May 18, 1932. Serial No. 327,230. PUBLISHED JULY 12, 1932. Class 15.

297,697. REFRIGERATORS. L. KLEIN, INC., Chicago, Ill.
Filed May 16, 1932. Serial No. 327,157. PUBLISHED JULY 12, 1932. Class 31.

297,698. ICE CREAM FREEZERS. WILLIAM V. DENNIS, San Francisco, Calif.
Filed May 13, 1932. Serial No. 327,047. PUBLISHED JULY 12, 1932. Class 31.

297,699. KITCHEN CUTLERY—NAMELY, BUTCHER KNIVES, SLICING KNIVES, PARING KNIVES, BREAD KNIVES, TABLE KNIVES, TABLE FORKS MADE OF BASE METAL, AND KITCHEN FORKS. W. T. GRANT COMPANY, New York, N. Y.
Filed May 12, 1932. Serial No. 327,011. PUBLISHED JULY 12, 1932. Class 23.

297,700. GASOLINE. SHELL OIL COMPANY, San Francisco, Calif.
Filed May 11, 1932. Serial No. 326,990. PUBLISHED JULY 19, 1932. Class 15.

297,701. EXERCISING MACHINES. UNITED HEALTH EQUIPMENT COMPANY, Chicago, Ill.
Filed May 11, 1932. Serial No. 326,968. PUBLISHED JULY 12, 1932. Class 22.

297,702. VEHICLE BATTERIES, BATTERY CABLES, INSULATED WIRE, STARTING MOTORS, GENERATORS, SPARK PLUGS, DISTRIBUTORS, TRANSFORMER COILS, ELECTRIC LAMPS, CONDENSERS, SWITCHES AND CHOKE COILS. ALBERT REISCH, doing business as Springfield Auto Supply Company, Springfield, Ill.
Filed May 21, 1931. Serial No. 314,864. PUBLISHED JULY 19, 1932. Class 21.

297,703. FRESH CHERRIES. SANTA CLARA VALLEY FRUIT EXCHANGE, San Jose, Calif.
Filed May 6, 1932. Serial No. 326,844. PUBLISHED JULY 5, 1932. Class 46.

297,704. PROPELLER TYPE, WIND-DRIVEN ELECTRIC LIGHT AND POWER PLANTS. HERBERT E. BUCKLEN CORPORATION, Elkhart, Ind.
Filed March 26, 1930. Serial No. 297,890. PUBLISHED JULY 12, 1932. Class 21.

297,705. ALL VARIETIES OF FLOUR MILLED FROM WHEAT, COMPRISING CAKE FLOUR, WHOLE-WHEAT FLOUR, WHEAT FLOUR, PHOSPHATED, AND SELF-RISING FLOUR. STANARD-TILTON MILLING COMPANY, St. Louis, Mo.
Filed September 18, 1931. Serial No. 319,188. PUBLISHED JANUARY 5, 1932. Class 46.

297,706. SANITARY NAPKIN HOLDERS. SANITEX MFG. CO. LTD., Los Angeles, Calif.
Filed June 12, 1931. Serial No. 315,764. PUBLISHED JULY 12, 1932. Class 44.

297,707. CANDIES, CANDIED AND SALTED NUTS AND NUTS IN THEIR NATURAL STATE. CONSTANTINE ROUMEL, doing business as O. K. Peanut Company and O. K. Nut Company, Washington, D. C.
Filed June 16, 1931. Serial No. 315,930. PUBLISHED AUGUST 18, 1931. Class 46.

297,708. THREAD AND YARN. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed March 12, 1932. Serial No. 325,055. PUBLISHED MAY 17, 1932. Class 43.

297,709. SAUSAGE. SWIFT AND COMPANY, Chicago, Ill.
Filed May 29, 1931. Serial No. 315,224. PUBLISHED JULY 7, 1931. Class 46.

297,710. OIL AND GASOLINE SEPARATOR TRAPS. THE CENTRAL FOUNDRY COMPANY, New York, N. Y.
Filed May 29, 1931. Serial No. 315,229. PUBLISHED JULY 19, 1932. Class 13.

297,711. FRESH GRAPES, FRESH DECIDUOUS FRUITS, FRESH CITRUS FRUITS, OLIVES IN NATURAL STATE, FRESH CANTALOUPES, FRESH BERRIES, FRESH VEGETABLES. UNITED PACKING COMPANY, Fresno, Calif.
Filed May 3, 1932. Serial No. 326,724. PUBLISHED JULY 5, 1932. Class 46.

297,712. NUT CANDY BARS. K & L MANUFACTURING COMPANY, Salt Lake City, Utah.
Filed April 18, 1932. Serial No. 326,219. PUBLISHED JULY 5, 1932. Class 46.

297,713. RICE. LOUISIANA STATE RICE MILLING COMPANY, INC., Abbeville, La.
Filed March 30, 1932. Serial No. 325,661. PUBLISHED JUNE 28, 1932. Class 46.

297,714. MEMBRANEOUS AND RUBBER PROPHYLACTIC ARTICLES. ABRAHAM FLETCHER, doing business as Fletcher Company, Cincinnati, Ohio.
Filed March 28, 1932. Serial No. 325,575. PUBLISHED JULY 19, 1932. Class 44.

297,715. MALT SYRUP. SUPREME PRODUCTS COMPANY, Columbus, Ohio.
Filed March 25, 1932. Serial No. 325,487. PUBLISHED JULY 5, 1932. Class 46.

297,716. OLIVE OIL. MALLARS & COMPANY, doing business as Mandco, Chicago, Ill.
Filed March 17, 1932. Serial No. 325,232. PUBLISHED JULY 5, 1932. Class 46.

297,717. COFFEE. GOLDEN BEAR COFFEE COMPANY, LTD., Los Angeles, Calif.
Filed May 5, 1932. Serial No. 326,801. PUBLISHED JULY 5, 1932. Class 46.

297,718. BRAKES AND BRAKE SYSTEMS AND PARTS THEREOF. BRAGG-KLIESRATH CORPORATION, Long Island City, N. Y.
Filed August 22, 1930. Serial No. 304,908. PUBLISHED JULY 12, 1932. Class 19.

297,719. RESISTANCE UNITS, RHEOSTATS AND POTENTIOMETERS FOR ADJUSTING THE VOLTAGE APPLIED TO A LOAD. HARDWICK, HINDLE, INC., Newark, N. J.
Filed December 9, 1930. Serial No. 308,780. PUBLISHED JULY 19, 1932. Class 21.

297,720. GASOLINE, KEROSENE, LUBRICATING OILS, AND LUBRICATING GREASES. LINCOLN OIL REFINING COMPANY, Robinson, Ill.
Filed February 4, 1931. Serial No. 310,722. PUBLISHED APRIL 21, 1931. Class 15.

297,721. ORTHOPEDICAL CORRECTIVE DEVICES. SOCIÉTÉ ANONYME DES BAS "OCCULTA", Lyon, France.
Filed February 5, 1931. Serial No. 310,779. PUBLISHED JULY 12, 1932. Class 44.

297,722. PEPPER RELISH, MINCE MEAT, PLUM PUDDING, TOMATO-JUICE COCKTAIL, MAPLE SYRUP, CURRANT JELLY, MINT JELLY, MARMALADE, MAYONNAISE, BAKED BEANS, TEA, COFFEE, CANDY, AND NUTS. CHILDS COMPANY, New York, N. Y.
Filed March 16, 1931. Serial No. 312,173. PUBLISHED JULY 5, 1932. Class 46.

297,723. STORAGE BATTERIES. GOULD STORAGE BATTERY CORPORATION, Depew, N. Y.
Filed April 10, 1931. Serial No. 318,185. PUBLISHED JULY 12, 1932. Class 21.

297,724. PROPHYLACTIC RUBBER ARTICLES. JACQUES BALOG, doing business as Olla Spezialitäten Jacques Balog, Vienna, Austria.
Filed October 21, 1931. Serial No. 320,270. PUBLISHED JULY 19, 1932. Class 44.

297,725. HAIR WAVING PADS. NO CLI-PAD CORPORATION, New York, N. Y.
Filed November 18, 1931. Serial No. 321,252. PUBLISHED JULY 19, 1932. Class 44.

297,726. BRAIDED COTTON SASH CORD. ELEANOR S. REYNOLDS, doing business as James E. Reynolds and Company, New York, N. Y.
Filed November 18, 1931. Serial No. 321,314. PUBLISHED JULY 12, 1932. Class 7.

297,727. MEN'S, WOMEN'S, AND BOYS' PAJAMAS, NIGHT SHIRTS, ROBES AND UNDERWEAR. LEVIN & HARRIS SHIRT CO. INC., New York, N. Y., assignor to Lubin-Weeker Co. Inc., New York, N. Y., a Corporation of New York.
Filed December 7, 1931. Serial No. 321,883. PUBLISHED JULY 12, 1932. Class 39.

297,728. VANILLA EXTRACT FOR FOOD FLAVORING. BARNED PRODUCTS COMPANY, New Brunswick, N. J.
Filed January 4, 1932. Serial No. 322,678. PUBLISHED JULY 5, 1932. Class 46.

297,729. PROPHYLACTIC RUBBER ARTICLES. JOSEPH W. YORK, New York, N. Y.
Filed January 25, 1932. Serial No. 323,431. PUBLISHED JULY 19, 1932. Class 44.

297,730. ROCK DRILLS AND HAMMERS, SINKERS, ETC. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed January 30, 1932. Serial No. 323,642. PUBLISHED JULY 19, 1932. Class 23.

297,731. ROCK DRILLS AND HAMMERS, SINKERS, ETC. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed January 30, 1932. Serial No. 323,643. PUBLISHED JULY 19, 1932. Class 23.

297,732. FINGER RINGS. JOHNSON, MATTHEY & COMPANY, INCORPORATED, New York, N. Y.
Filed January 29, 1932. Serial No. 323,761. PUBLISHED JULY 12, 1932. Class 28.

297,733. SILVER-PLATED FLAT-WARE AND HOLLOW-WARE FOR TABLE USE AND THE LIKE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed February 29, 1932. Serial No. 324,609. PUBLISHED JULY 12, 1932. Class 28.

297,734. MEN'S SUITS, BUSINESS, SPORT AND FORMAL; OVERCOATS AND TOP COATS. LEBOW BROTHERS, Baltimore, Md.
Filed February 29, 1932. Serial No. 324,613. PUBLISHED JULY 5, 1932. Class 39.

297,735. ROUND AND FLAT WIRE, RIBBON AND STRIP FOR ELECTRICAL PURPOSES. GILBY WIRE COMPANY, Newark, N. J.
Filed February 25, 1932. Serial No. 324,679. PUBLISHED JULY 12, 1932. Class 21.

297,736. AUTOMATIC MOTION PICTURE MACHINES AND MOTION PICTURE FILMS. HEINRICH HERMANN DAVID KLÜSSENDORF, doing business as Heinrich H. Klüssendorf, Berlin, Germany.
Filed March 5, 1932. Serial No. 324,825. PUBLISHED JULY 19, 1932. Class 26.

297,737. BRICK KNIVES, OR CUTTING DEVICES FOR CUTTING BRICK ICE CREAM AND FROZEN CONFECTIONS, AND ALSO FOR HANDLES FOR ICE CREAM AND FROZEN CONFECTION CANS. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,896. PUBLISHED JULY 12, 1932. Class 23.

297,738. NON-ALCOHOLIC COMPOUND USED FOR THE PREPARATION OF SOFT DRINKS. FLIP BEVERAGE CORPORATION, Chicago, Ill.
Filed August 10, 1931. Serial No. 317,846. PUBLISHED NOVEMBER 10, 1931. Class 45.

297,739. KITCHEN UTENSILS—NAMELY, KITCHEN LADLES AND TEA AND COFFEE STRAINERS. P. M. C. MANUFACTURING CORP., Kingston, N. Y.
Filed December 3, 1931. Serial No. 321,733. PUBLISHED JULY 12, 1932. Class 13.

297,740. RUBBER HEELS. HOLTITE MANUFACTURING COMPANY, Baltimore, Md.
Filed February 15, 1932. Serial No. 324,166. PUBLISHED APRIL 19, 1932. Class 39.

297,741. BIRTHDAY CANDLES. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed January 8, 1932. Serial No. 322,815. PUBLISHED JULY 19, 1932. Class 15.

297,742. LUBRICATING OILS AND GREASES. HUMBLE OIL AND REFINING COMPANY, Houston, Tex.
Filed January 12, 1932. Serial No. 322,934. PUBLISHED JULY 12, 1932. Class 15.

297,743. PACKAGE CONTAINING MATERIALS AND INSTRUCTIONS FOR REPAIRING GARMENTS. SIEGFRIED J. ROOZENDAAL, doing business as Mendoc Mending Company, Brooklyn, N. Y.
Filed January 18, 1932. Serial No. 323,147. PUBLISHED JULY 12, 1932. Class 50.

297,744. NON-FERROUS WIRE, RODS, AND STRIP. THE CENTRAL IRON & METAL COMPANY, LTD., London, England, and Westphalia, Germany.
Filed January 28, 1932. Serial No. 323,525. PUBLISHED JULY 12, 1932. Class 14.

297,745. ELECTRIC AUDIBLE ANNUNCIATORS FOR HOTEL, RESTAURANT, DOMESTIC, AND SIMILAR USES. THE TELEVATOR CORPORATION, New York, N. Y.
Filed February 3, 1932. Serial No. 323,796. PUBLISHED JULY 19, 1932. Class 21.

297,746. CUTTING OIL, THREAD CUTTING COMPOUND, TEMPERING OIL, ILLUMINATING OIL, GASOLINE AND OTHER INTERNAL COMBUSTION ENGINE FUEL OILS, KEROSENE, CONCRETE FORM OILS, CRANKCASE FLUSHING OIL, HYDRAULIC OIL. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed March 8, 1932. Serial No. 324,914. PUBLISHED JULY 12, 1932. Class 15.

297,747. LADIES' UNDERWEAR. PAYNE-COWAN COMPANY, Dallas, Tex.
Filed March 28, 1932. Serial No. 325,598. PUBLISHED JULY 5, 1932. Class 39.

297,748. METAL MILITARY INSIGNIAS, METAL BELT BUCKLES, METAL BADGES, METAL TABLET PLATES, ALL PLATED WITH PRECIOUS METAL. THE IRVIN H. HAHN CO., Baltimore, Md.
Filed April 19, 1932. Serial No. 326,257. PUBLISHED JULY 12, 1932. Class 28.

297,749. MATTRESSES AND BOX SPRINGS. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y.
Filed April 20, 1932. Serial No. 326,294. PUBLISHED JULY 12, 1932. Class 32.

297,750. CYMBALS. AVEDIS ZILDJIAN COMPANY, Norfolk Downs, Mass.
Filed April 19, 1932. Serial No. 326,316. PUBLISHED JULY 12, 1932. Class 36.

297,751. DIAPER HOLDING GARMENTS OF COMBINATION TEXTILE AND WATERPROOF MATERIALS AND FILLERS THEREFOR, TO BE USED AS A UNIT, THE GARMENTS BEING DESIGNED TO HOLD THE DIAPER FILLERS IN PLACE ON THE INFANT. X-OTIC, INC., New York, N. Y.
Filed April 28, 1932. Serial No. 326,597. PUBLISHED JULY 19, 1932. Class 39.

297,752. INCANDESCENT LAMPS OR BULBS. SUN-GLO LAMP WORKS, INC., Brooklyn, N. Y.
Filed May 6, 1932. Serial No. 326,834. PUBLISHED JULY 12, 1932. Class 21.

297,753. HOSIERY. KNIT PRODUCTS CORPORATION, Belmont, N. C.
Filed May 23, 1932. Serial No. 327,363. PUBLISHED JULY 12, 1932. Class 39.

297,754. KNIT GOODS—NAMELY, SWEATERS, AND BATHING SUITS. TEICH & MAKOWER, New York, N. Y.
Filed May 23, 1932. Serial No. 327,380. PUBLISHED JULY 12, 1932. Class 39.

297,755. SAFETY RAZOR BLADES. OTTO ROTH, INC., Newark, N. J.
Filed May 25, 1932. Serial No. 327,455. PUBLISHED JULY 12, 1932. Class 23.

297,756. WOMEN'S AND MISSES' SPORT AND DRESS COATS. HIRSH & SONS, INC., Chicago, Ill.
Filed May 26, 1932. Serial No. 327,467. PUBLISHED JULY 12, 1932. Class 39.

297,757. BOYS' SUITS, GIRLS' FROCKS, AND CHILDREN'S DRESSES. THE MAYER-NOCK CO., Philadelphia, Pa.
Filed May 26, 1932. Serial No. 327,543. PUBLISHED JULY 12, 1932. Class 39.

297,758. JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES, ALL MADE OF OR PLATED WITH PRECIOUS METAL. THETA ALPHA FRATERNITY, Kenmore, N. Y.
Filed May 31, 1932. Serial No. 327,609. PUBLISHED JULY 19, 1932. Class 28.

297,759. HOUSEHOLD FURNITURE—NAMELY, CHAIRS. MARTIN H. GAMBEE, Pawling, N. Y.
Filed May 28, 1932. Serial No. 327,553. PUBLISHED JULY 19, 1932. Class 32.

297,760. HOSIERY. JULIUS KAYSER & CO., New York, N. Y.
Filed June 3, 1932. Serial No. 327,696. PUBLISHED JULY 19, 1932. Class 39.

297,761. MEN'S AND WOMEN'S PAJAMAS. EXCELSIOR VARSITY UNDERWEAR CORPORATION, Baltimore, Md.
Filed June 3, 1932. Serial No. 327,682. PUBLISHED JULY 12, 1932. Class 39.

297,762. WASH DRESSES, SMOCKS AND PAJAMAS FOR WOMEN, GIRLS AND CHILDREN. THE RHEA MANUFACTURING COMPANY, Milwaukee, Wis.
Filed June 6, 1932. Serial No. 327,772. PUBLISHED JULY 19, 1932. Class 39.

297,763. OVERALLS. SCOTT-MEBANE MANUFACTURING COMPANY, Graham, N. C.
Filed June 9, 1932. Serial No. 327,855. PUBLISHED JULY 19, 1932. Class 39.

297,764. STORAGE BATTERIES. SUPPLEE-BIDDLE HARDWARE COMPANY, Philadelphia, Pa.
Filed May 21, 1932. Serial No. 327,825. PUBLISHED JULY 19, 1932. Class 21.

297,765. COATS, VESTS, TROUSERS, KNICKERBOCKERS, TOP COATS AND OVERCOATS FOR MEN, YOUTHS AND BOYS. J. SCHOENEMAN, INCORPORATED, Baltimore, Md.
Filed May 20, 1932. Serial No. 327,290. PUBLISHED JULY 19, 1932. Class 39.

297,766. ELECTRIC FIRE ALARM SIGNALING SYSTEMS. JULIUS C. LOWRY, doing business as Lowry Electric Company, Detroit, Mich.
Filed May 20, 1932. Serial No. 327,282. PUBLISHED JULY 12, 1932. Class 21.

297,767. METAL SHELVES. SARGENT & COMPANY, New Haven, Conn.
Filed May 17, 1932. Serial No. 327,201. PUBLISHED JULY 12, 1932. Class 32.

297,768. FLAT AND HOLLOW TABLEWARE MADE OF OR PLATED WITH PRECIOUS METAL. THE STIEFF COMPANY, Baltimore, Md.
Filed May 16, 1932. Serial No. 327,180. PUBLISHED JULY 19, 1932. Class 28.

297,769. INTERNAL COMBUSTION ENGINES, AND PARTS THEREOF. GUIBERSON DIESEL ENGINE COMPANY, Dallas, Tex.
Filed May 16, 1932. Serial No. 327,146. PUBLISHED JULY 12, 1932. Class 23.

297,770. ELECTRIC HAIR CUTTING MACHINES AND THINNING-OUT CLIPPERS, ELECTRIC SHEARS FOR SHEARING SHEEP AND OTHER ANIMALS, ETC. EISEMANN-WERKE AKTIENGESELLSCHAFT, Stuttgart, Germany.
Filed May 14, 1932. Serial No. 327,092. PUBLISHED JULY 12, 1932. Class 21.

297,771. KNIFE SHARPENERS, EXCEPT ABRASIVE STONES AND STROPS, EGG BEATERS, AND VEGETABLE MASHERS. THE TURNER & SEYMOUR MANUFACTURING CO., Torrington, Conn.
Filed May 11, 1932. Serial No. 327,080. PUBLISHED JULY 12, 1932. Class 28.

297,772. MERCHANDISE DISPLAY CASES. THE COLUMBUS SHOW CASE COMPANY, Columbus, Ohio.
Filed May 13, 1932. Serial No. 327,045. PUBLISHED JULY 12, 1932. Class 32.

297,773. WALL CASES, SHOW CASES, COUNTERS, DISPLAY STANDS, USED TO HOUSE AND/OR DISPLAY MERCHANDISE OF ALL KINDS AND MERCHANDISE DISPLAY CASES. THE QUINCY SHOW CASE WORKS, Quincy, Ill.
Filed May 10, 1932. Serial No. 326,953. PUBLISHED JULY 12, 1932. Class 32.

297,774. HAIR WAVING PADS. THE NATIONAL MINERAL COMPANY, Chicago, Ill.
Filed June 3, 1932. Serial No. 327,701. PUBLISHED JULY 19, 1932. Class 44.

297,775. SACHETS FOR PERMANENT WAVING. POWDER PUFF SHOP, doing business as Myndall Cain, Minneapolis, Minn.
Filed May 7, 1932. Serial No. 326,871. PUBLISHED JULY 19, 1932. Class 44.

297,776. DENTAL MOLDING PREPARATION FOR USE IN MAKING UP CASTS AND MODELS. GORIS & ARNSTEIN, INC., Chicago, Ill.
Filed May 12, 1932. Serial No. 327,010. PUBLISHED JULY 19, 1932. Class 44.

297,777. PERMANENT WAVE SACHETS. LA MODE PERMANENT WAVE CORP., Buffalo, N. Y.
Filed May 18, 1932. Serial No. 327,224. PUBLISHED JULY 12, 1932. Class 44.

297,778. ELECTRIC SKIN STIMULATORS OR VIBRATOR MASSAGERS. ROBERTS MANUFACTURING COMPANY, INC., Maple Shade, N. J.
Filed May 26, 1932. Serial No. 327,477. PUBLISHED JULY 12, 1932. Class 44.

297,779. PERIODICAL PUBLICATION. ARTHUR JOSEPH DE MARS, Washington, D. C.
Filed May 31, 1932. Serial No. 327,582. PUBLISHED JULY 12, 1932. Class 38.

297,780. HAIR WAVING PADS. THE NATIONAL MINERAL COMPANY, Chicago, Ill.
Filed June 3, 1932. Serial No. 327,700. PUBLISHED JULY 19, 1932. Class 44.

297,781. SUITINGS OF LINEN AND COTTON MIXTURES, COTTON, WOOL, WOOL AND COTTON MIXTURES, WOOL AND SILK MIXTURES, COTTON AND SILK MIXTURES, USED IN THE MANUFACTURE OF MEN'S AND BOYS' SUITS AND KNICKERS AS DISTINGUISHED FROM SHIRTINGS. JACOB C. LAMM, doing business as Lamm Bros., Baltimore, Md.
Filed January 4, 1932. Serial No. 322,759. PUBLISHED JULY 12, 1932. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

297,782. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE HARVEL CORPORATION, Newark, N. J. Filed July 18, 1929. Serial No. 287,301.

CASHELL

For Paints in Dry, Paste, or Ready Mixed Form, Varnishes, Primers, Fillers, and Paint Bases Without Solvent Vehicle, All Made from Cashew Nut Shell Liquid.
Claims use since July 10, 1929.

297,783. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) J. A. FINN & COMPANY, New York, N. Y. Filed Aug. 11, 1930. Serial No. 304,454.

Shrunkfast

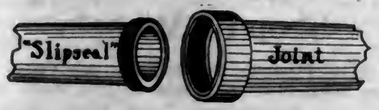
For Cotton Piece Goods.
Claims use since Apr. 16, 1930.

297,784. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ENDSLEY LAMP COMPANY, Frankfort, Ind. Filed Sept. 3, 1930. Serial No. 305,270.

ENDSLEY

For Electric Casket Lamps and Their Holding Brackets.
Claims use since Jan. 10, 1930.

297,785. (CLASS 12. CONSTRUCTION MATERIALS.) GLADDING, MCBEAN & CO., Seattle, Wash. Filed Jan. 19, 1931. Serial No. 310,124.



For Sewer and Drainage Tile.
Claims use since Oct. 1, 1930.

297,786. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) J. H. McEVOY & COMPANY, Houston, Tex. Filed Mar. 16, 1931. Serial No. 312,191.

RETRACTOR

For Well Tubing Heads and Parts Therefor.
Claims use since February, 1931.

297,787. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) GLENN C. MITCHELL, doing business as Bulk Razor Blade Company, Aurora, Ill. Filed July 23, 1931. Serial No. 317,257.

"THE BARBER BLADE"

For Razor Blades.
Claims use since Apr. 18, 1929.

297,788. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NIMS CAFE, INCORPORATED, Spokane, Wash. Filed July 25, 1931. Serial No. 317,327.

Nims

For Coffee, Tea, Bread, Pies, Cakes, Spaghetti and Beef, Sandwich Spread, Mayonnaise, Chili, Jams and Jellies, Soups, Bacon, Ham, and Sausage.
Claims use since May 1, 1925.

297,789. (CLASS 45. BEVERAGES, NONALCOHOLIC.) WILLIAM B. PORTER, Philadelphia, Pa. Filed Oct. 6, 1931. Serial No. 319,960.

PORTER'S

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since June 23, 1931.

297,790. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) C. WILSON'S PLUMBING SHOP ON WHEELS, INC., Buffalo, N. Y. Filed Mar. 12, 1932. Serial No. 325,081.

Wilson's Plumbing Shop on Wheels

For Brass Plumbing and Steam Fitting Valves, Brass Faucets, Metal Pipe, Metal Pipe Fittings, Water Closets, Water Closet Combinations, Toilet Seats, Sinks, Bath Tubs, Lavatories, Urinals, Showers, and Floor Drains.
Claims use since Feb. 4, 1929.

297,791. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BEN BROCKER, doing business as Geté Cie., New York, N. Y. Filed May 27, 1931. Serial No. 315,085.

THE ORIGINAL
LILY WHITE NAIL PENCIL
MOISTEN POINT AND APPLY UNDER NAIL TIPS
THE PERFECT MANICURE REQUISITE

For Nail Pencils.
Claims use since May 23, 1931.

297,792. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) HORACE W. HALL, Newton, Mass. Filed July 20, 1931. Serial No. 317,116.

FLEETWOOD

For Tennis Rackets.
Claims use since July 17, 1931.

297,793. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HI-POWER FLUID CO., Chicago, Ill. Filed July 30, 1931. Serial No. 317,466.

Hi-Power FLUID

For a Chemical Solution for Addition in Small Quantities to Gasoline, Namely, a Lubricant and Carbon Remover.
Claims use since May 15, 1931.

297,794. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Aug. 13, 1931. Serial No. 317,948.

PROFESSIONAL
BOXERS
PUNCH TESTER

For a Coin-Controlled Amusement Device.
Claims use since June 16, 1931.

297,795. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) N. ERLANGER, BLUMGART & CO., INC., New York, N. Y. Filed Sept. 8, 1931. Serial No. 318,824.

Everwhite

For Linen, Cotton, Silk, and Mixed Piece Goods.
Claims use since Aug. 19, 1931.

297,796. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) N. ERLANGER, BLUMGART & CO., INC., New York, N. Y. Filed Sept. 8, 1931. Serial No. 318,825.

Evershrunk

For Linen, Cotton, Silk, and Mixed Piece Goods.
Claims use since Aug. 19, 1931.

297,797. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Oct. 20, 1931. Serial No. 320,225.

The "SHELTON RUG

For Rugs.
Claims use since Aug. 18, 1931.

297,798. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. W. WOOD & SONS, Richmond, Va. Filed Nov. 17, 1931. Serial No. 321,232.

PINEHURST SPECIAL

For Lawn Grass Seed.
Claims use since November, 1921.

297,799. (CLASS 37. PAPER AND STATIONERY.) MENASHA PRODUCTS CO., Menasha, Wis. Filed Nov. 21, 1931. Serial No. 321,387.

Tiffany

For Toilet Paper.
Claims use since July 30, 1931.

297,800. (CLASS 37. PAPER AND STATIONERY.) WORTENDYKE MANUFACTURING CO., Richmond, Va. Filed Jan. 23, 1932. Serial No. 323,379.

Shirley

For Toilet Paper, Paper Towels, Paper Napkins.
Claims use since May 25, 1926.

297,801. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SUPERIOR MACHINE TOOL COMPANY, Kokomo, Ind. Filed Feb. 26, 1932. Serial No. 324,543.

HIGH SUPERIOR DUTY

For Metal Working Drilling Machines.
Claims use since July 31, 1931.

297,802. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OAK HILL CITRUS GROWERS ASSOCIATION, Oak Hill, Fla. Filed Mar. 14, 1932. Serial No. 325,108.

TURNBULL

For Fresh Citrus Fruit.
Claims use since October, 1927.

297,803. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WITHERBEE STORAGE BATTERY CO., INC., Belleville, N. J. Filed July 12, 1932. Serial No. 328,829.

Witherbee

For Storage Batteries.
Claims use since Jan. 1, 1930.

TRADE-MARK REGISTRATIONS RENEWED

38,587. CERTAIN NAMED SPORTING GOODS. Registered July 8, 1902. P. GOLDSMITH'S SONS. Renewed July 8, 1932, to The P. Goldsmith Sons Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

87,345. CERTAIN PHARMACEUTICAL PREPARATION. Registered July 9, 1912. PAUL P. KIRCHHOFER. Renewed July 9, 1932, to Louise J. Kirchhofer, Massillon, Ohio, assignee.

88,026. WRAPPING-PAPER. Registered August 20, 1912. RHINELANDER PAPER COMPANY, Rhinelander, Wis. Renewed August 20, 1932, to Nekoosa-Edwards Paper Company, Port Edwards, Wis., a Corporation of Wisconsin, assignee.

LABELS

REGISTERED SEPTEMBER 27, 1932

41,200.—*Title:* ADOHR BIG BREAKFAST EGGS. For Eggs. ADOHR CREAMERY COMPANY, Los Angeles, Calif. Published March 15, 1930.

41,201.—*Title:* VALENCIA BISCUITS. For Biscuits. ALL NATIONS BAKERS, INC., New York, N. Y. Published August 10, 1932.

41,202.—*Title:* ARMSTRONG'S ORIGINAL DUTCH SAUCE. For Sauce. CHARLES W. ARMSTRONG, New York, N. Y. Published April 7, 1931.

41,203.—*Title:* HONEY-MILK. For Frozen Confections. BRIDGEMAN-RUSSELL COMPANY, Duluth, Minn. Published February 23, 1932.

41,204.—*Title:* RADIO. For Canned Tomatoes. M. J. CAPLAN CO., INC., Lawrence, Mass. Published March 14, 1932.

41,205.—*Title:* SOFT-SITE OPTHALMIC LENS. For Lenses. CHAFFIN OPTICAL CO., INC., Boston, Mass. Published July 1, 1932.

41,206.—*Title:* SNOW-MAN. For Frozen Confections. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published May 15, 1932.

41,207.—*Title:* CERTIFIED NO. 1 PEANUTS. For Peanuts. GOLDEN WEST PRODUCTS CO., Los Angeles, Calif. Published February 1, 1932.

41,208.—*Title:* TIZINK. For Ink. JOHN HELD, Salt Lake City, Utah. Published May 1, 1932.

41,209.—*Title:* GROUND RIGHT TO TASTE RIGHT. For Coffee. HILLS BROS., San Francisco, Calif. Published August 15, 1932.

41,210.—*Title:* BLUE JEWEL IMITATION VANILLA EXTRACT. For Imitation Vanilla Extract. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published July 7, 1932.

41,211.—*Title:* BLUE JEWEL PURE LEMON EXTRACT. For Lemon Extract. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published July 7, 1932.

41,212.—*Title:* BLUE JEWEL PURE VANILLA EXTRACT. For Vanilla Extract. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published July 7, 1932.

41,213.—*Title:* JEWEL T BREAD 'N BUTTER BLEND COFFEE. For Coffee. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published June 20, 1932.

41,214.—*Title:* JEWEL T BREAD 'N BUTTER BLEND COFFEE. For Coffee. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published June 30, 1932.

41,215.—*Title:* JEWEL T RICE. For Rice. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published August 8, 1932.

41,216.—*Title:* JEWEL TALCUM POWDER. For Talcum Powder. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published July 29, 1932.

41,217.—*Title:* FRUIT-SNO SHERBET FLAVORING COMPOUND. For Sherbet Flavoring Compound. S. J. LAHMAN, doing business as Fruit-Sno Company, Oklahoma City, Okla. Published May 2, 1932.

41,218.—*Title:* WHEAT TONE THE IDEAL BREAD. For Bread. THE W. E. LONG COMPANY, Chicago, Ill. Published July 5, 1932.

41,219.—*Title:* LYON'S NORTHERN WOODS BRAND. For Maple Syrup. BENJAMIN LYONS, doing business as Benjamin Lyons Export Co., Philadelphia, Pa. Published July 26, 1932.

41,220.—*Title:* ALICE BLUE. For Chocolates. PAGE & SHAW, INC., doing business as Marquise Chocolate Co., Cambridge, Mass. Published January 7, 1932.

41,221.—*Title:* LA-CHROM METAL-PLATING. For Paste for Plating and Polishing Brass, Copper, Zinc, Bronze, Etc. JOSEPH G. SABA, doing business as General Plating Company, New York, N. Y. Published August 26, 1932.

41,222.—*Title:* RHINE CASTLE WATER SPRINGS. For Sparkling Alkaline Muriated Table Water. LOUIS B. STRAUSS, New York, N. Y. Published May 19, 1932.

41,223.—*Title:* LONDON COURT. For Cigars. ELLIS B. STRICKLER, Yorkana, Pa. Published August 3, 1932.

41,224.—*Title:* WAX-RITE LIQUID WAX. For Liquid Wax. VESTAL CHEMICAL CO., St. Louis, Mo. Published June 8, 1932.

41,225.—*Title:* WRIGLEY'S SPEARMINT THE PERFECT GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published July 25, 1932.

41,226.—*Title:* WRIGLEY'S SPEARMINT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 12, 1932.

41,227.—*Title:* WRIGLEY'S DOUBLE MINT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 10, 1932.

41,228.—*Title:* BREAD. For Bread. KARL R. ZIMMER, doing business as Zimmer Paper Products, Indianapolis, Ind. Published July 12, 1932.

PRINTS

REGISTERED SEPTEMBER 27, 1932

13,913.—*Title:* PEPPERMINT AROMINTS. For Peppermint Candy. AROMINT CORPORATION, Chicago, Ill. Published March 15, 1932.

13,914.—*Title:* BIG-FROSTY. For Ice Cream and Frozen Confections and Preparations. WILLIAM E. HOFFMANN, Niles, Mich. Published July 28, 1932.

13,915.—*Title:* AMERICA'S QUALITY BICYCLE. For Bicycles, Junior-Cycles, Scooters, and Velocipedes. IVER JOHNSON'S ARMS & CYCLE WORKS, Fitchburg, Mass. Published June 27, 1932.

13,916.—*Title:* KLO-KAY ENGLISH FINISH BOOK PAPER. For Book Paper. THE NORTHWEST PAPER COMPANY, Cloquet, Minn. Published July 14, 1932.

13,917.—*Title:* JACK PENEWELL'S ORIGINAL TWIN SIX TALKING STEEL GUITAR. For Hawaiian Steel Guitars. JACK PENNEWELL, doing business as Jack Penewell's, Wilkes-Barre, Pa. Published April 16, 1932.

13,918.—*Title:* JANDHO'S POSTOGRAPH. For Printed Blanks. THE POSTOGRAPH CO., Baltimore, Md. Published June 3, 1931.

13,919.—*Title:* WAKEFIELD DAIRY. For Milk. SIMPSON BROS., INC., doing business as Wakefield Dairy, Washington, D. C. Published May 14, 1932.

13,920.—*Title:* OLYMPIC ATHLETES TRAIN ON WELCH'S GRAPE JUICE. For Grape Juice. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y. Published August 2, 1932.

13,921.—*Title:* ASPIRIN. For Aspirin. WORLD'S PRODUCTS CO., Spencer, Ind. Published August 9, 1932.

13,922.—*Title:* ASPIRIN. For Aspirin. WORLD'S PRODUCTS CO., Spencer, Ind. Published August 9, 1932.

13,923.—*Title:* WRIGLEY'S SPEARMINT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 12, 1932.

REISSUES

SEPTEMBER 27, 1932

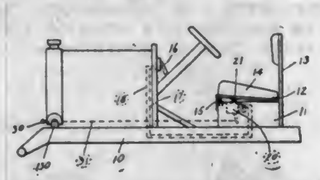
18,606. LIGHT-WEIGHT CERAMIC MATERIAL AND PROCESS OF MAKING THE SAME. RICHARD ERICSON, Chicago, Ill., assignor to United States Gypsum Co., Chicago, Ill., a Corporation of Illinois. Original No. 1,702,076, dated Feb. 12, 1929, Serial No. 226,259, filed Oct. 14, 1927. Reissue No. 17,523, dated Dec. 17, 1929, Serial No. 399,088, filed Oct. 11, 1929. This application for reissue filed June 3, 1932. Serial No. 615,264. 25 Claims. (Cl. 25—156.)

1. A porous ceramic material comprising the burned product resulting from heat-treating a mixture of foam and argillaceous material.

18,607. DETERIORATION INHIBITOR FOR RUBBER. ALBERT M. CLIFFORD, Stow, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original No. 1,813,609, dated July 7, 1931, Serial No. 457,495, filed May 29, 1930. Application for reissue filed June 13, 1932. Serial No. 617,043. 6 Claims. (Cl. 18—50.)

2. A method of treating rubber which comprises incorporating therein a mono naphthyl di-amino biaryl, said biaryl being selected from a group consisting of biphenyl, bitolyl and bixylyl groups.

18,608. IGNITION SWITCH. JAMES LE ROY DODSON, Chicago, Ill. Original No. 1,748,705, dated Feb. 25, 1930, Serial No. 175,976, filed Mar. 17, 1927. Application for reissue filed Dec. 31, 1931. Serial No. 584,235. 6 Claims. (Cl. 180—82.)

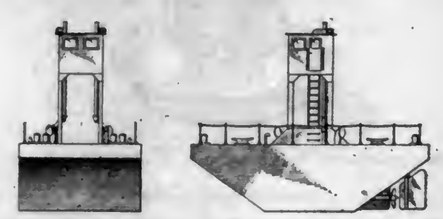


1. In a motor vehicle including an internal combustion engine, a control therefor, a movably mounted driver's seat movable by the seating of the driver thereon, the combination of a control mechanism automatically operable by the movement of the seat for actuating the control for controlling the engine, and an auxiliary control of the engine extending toward and terminating adjacent the crank portion of the engine and manually operable for rendering ineffective the control imposed by the seat controlled mechanism.

18,609. PROCESS OF TREATING ORES IN THE MANUFACTURE OF RUSTLESS STEEL. CHARLES HART, Media, Pa., assignor of one-half to Peter Shields, Washington, D. C. Original No. 1,826,932, dated Oct. 13, 1931, Serial No. 484,712, filed Sept. 26, 1930. Application for reissue filed Dec. 10, 1931. Serial No. 580,280. 4 Claims. (Cl. 75—17.)

1. A process which comprises heating an ore containing iron in large proportion, and chromium and nickel in far smaller quantities, which comprises heating said ore to a temperature at which ferric chloride is readily volatile, and contacting the ore with a stream of gases containing free chlorine until the iron content of the ore has been substantially lowered and the percentages of chromium and nickel content of the ore has been substantially increased and thereafter adding further quantities of chromium and nickel ores, and adding zirconium ore, then reducing the material in a furnace to produce a hot metal which is particularly suitable for the production of alloy steels.

Des. 18,610. MARINE TRACTOR. EADS JOHNSON, Moristown, N. J. Original No. 87,263, dated June 28, 1932, Serial No. 43,588, filed Apr. 28, 1932, for 3½ years. Application for reissue filed Aug. 2, 1932. Serial No. 44,539. Term of patent 14 years.

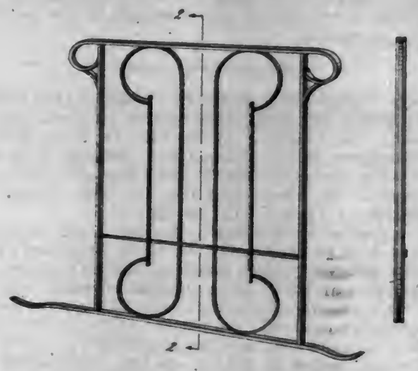


The ornamental design for a marine tractor as shown.

DESIGNS

SEPTEMBER 27, 1932

87,823. END FRAME FOR SWINGS OR SIMILAR ARTICLE. EDWARD J. BARCALO, Buffalo, N. Y. Filed Mar. 4, 1932. Serial No. 43,080. Term of patent 7 years.



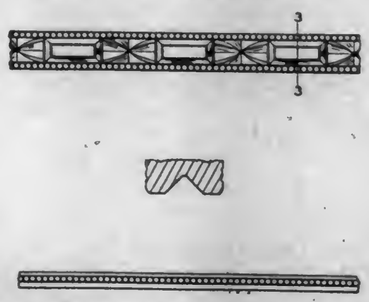
The ornamental design for an end frame for swings or similar article, substantially as shown.

87,824. FRUIT HOLDER. ALVIN P. BARNES, Minneapolis, Minn., assignor to Serv-Rite Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 21, 1931. Serial No. 38,772. Term of patent 3½ years.



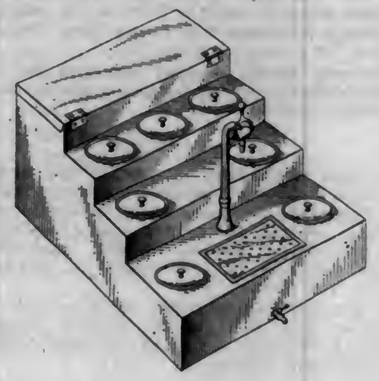
The ornamental design for a fruit holder, as shown.

87,825. BAR MATERIAL FOR OPHTHALMIC MOUNTINGS. SAMUEL E. BOUCHARD, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 20, 1932. Serial No. 43,554. Term of patent 3½ years.



The ornamental design for bar material for ophthalmic mountings substantially as shown.

87,826. FOUNTAINETTE. SAMUEL BRANDFON and JACK F. KATZ, New York, N. Y. Filed Aug. 3, 1932. Serial No. 44,517. Term of patent 7 years.



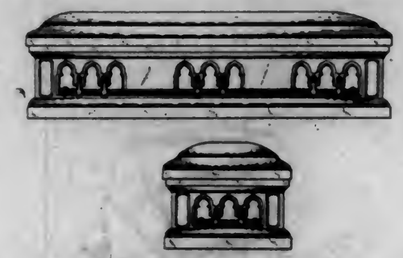
The ornamental design for a fountainette as shown.

87,827. STATUETTE OR ANALOGOUS ARTICLE. LEONARD DE WIT, Chicago, Ill. Filed Feb. 3, 1932. Serial No. 42,722. Term of patent 7 years.



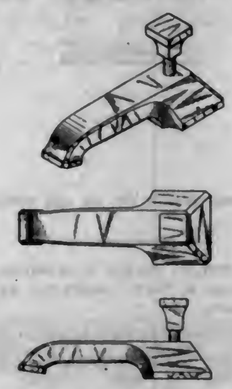
The ornamental design for a statuette or analogous article as shown.

87,828. BURIAL CASKET. JOSEPH E. FALCK, Pittsburgh, Pa. Filed July 23, 1932. Serial No. 44,434. Term of patent 14 years.



The ornamental design for a burial casket, as shown.

87,829. LAVATORY SPOUT. WILLIAM P. FERGUSON, Middlebury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Oct. 16, 1931, Serial No. 41,409. Divided and this application filed July 27, 1932. Serial No. 44,461. Term of patent 3½ years.



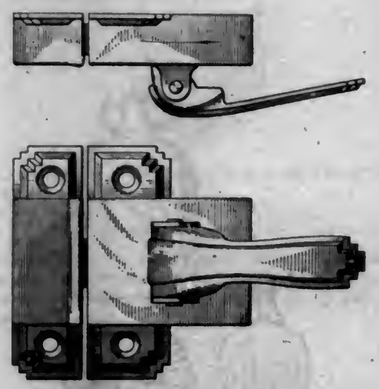
The ornamental design for a lavatory spout as shown.

87,830. COMBINED VALVE CONTROL HANDLE AND INDEXING DIAL. WILLIAM P. FERGUSON, Middlebury, Conn. Filed Aug. 16, 1932. Serial No. 44,615. Term of patent 3½ years.



The ornamental design for a combined valve control handle and indexing dial, as shown.

87,831. LATCH FOR DOORS OR OTHER CLOSURES. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed July 21, 1932. Serial No. 44,387. Term of patent 14 years.



The ornamental design for a latch for doors or other closures.

87,832. SOUVENIR TOY OR SIMILAR ARTICLE. MARY FORTE, New York, N. Y. Filed July 9, 1932. Serial No. 44,291. Term of patent 3½ years.



The ornamental design for a souvenir toy or similar article as shown.

87,833. BUCKLE. JOHN B. FREYSINGER, New Britain, Conn., assignor to North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 13, 1932. Serial No. 44,060. Term of patent 3½ years.



The ornamental design for a buckle as shown.

87,834. BOTTLE OR SIMILAR ARTICLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 8, 1932. Serial No. 44,548. Term of patent 14 years.



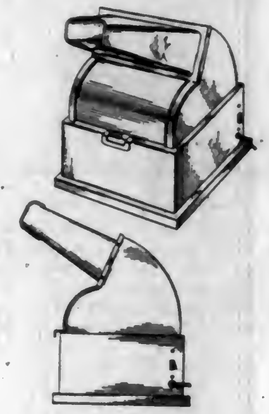
The ornamental design for a bottle or similar article substantially as shown.

87,835. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed June 6, 1932. Serial No. 43,995. Term of patent 8½ years.



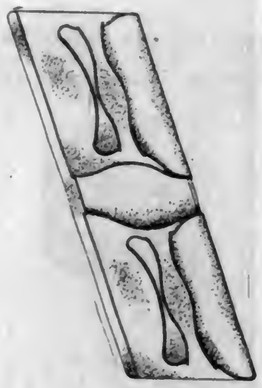
The ornamental design for a shoe buckle as shown.

87,836. EGG TESTING MACHINE. CECIL STARKE HASSELL, Miami, Fla. Filed July 20, 1932. Serial No. 44,385. Term of patent 14 years.



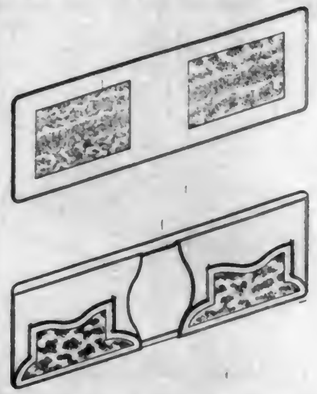
The ornamental design for an egg testing machine as shown.

87,837. BILL FOLD. PRINCE A. GARDNER, Jr., St. Louis, Mo. Filed Aug. 8, 1932. Serial No. 44,549. Term of patent 14 years.



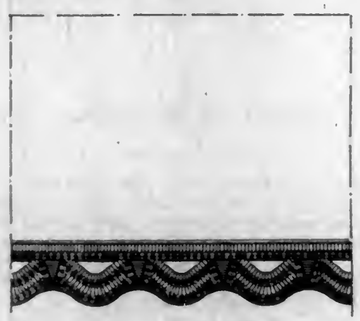
The ornamental design for a billfold, as shown and described.

87,838. BILL FOLD. PRINCE A. GARDNER, Jr., St. Louis, Mo. Filed Aug. 8, 1932. Serial No. 44,550. Term of patent 14 years.



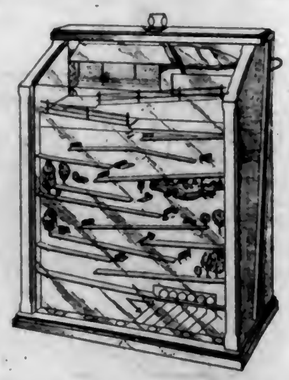
The ornamental design for a billfold, as shown.

87,839. SHELF PAPER. EDWARD KARFIOL, New York, N. Y. Filed Aug. 5, 1932. Serial No. 44,533. Term of patent 14 years.



The ornamental design for shelf paper as shown.

87,840. AMUSEMENT MACHINE CABINET. CLAUDE R. KIRK, Chicago, Ill. Filed Aug. 8, 1932. Serial No. 44,545. Term of patent 7 years.



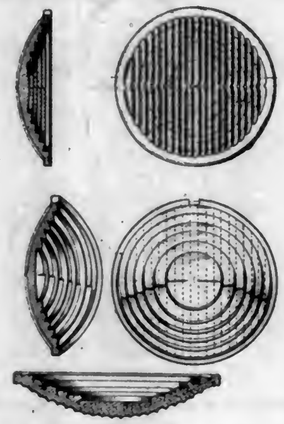
The ornamental design for an amusement machine cabinet as shown.

87,841. MEDAL. CHARLES E. KNEPPER, Indianapolis, Ind., assignor to Newspaper Boys of America, Incorporated, Indianapolis, Ind., a Corporation. Filed June 2, 1932. Serial No. 48,960. Term of patent 14 years.



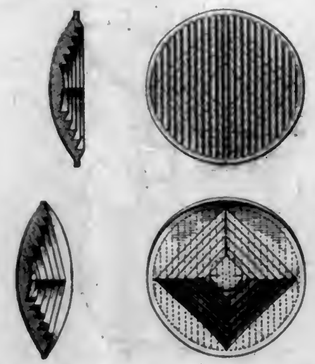
The ornamental design for a medal, as shown and described.

87,842. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,843. Term of patent 7 years.



The ornamental design for a cover glass lens for headlights, substantially as shown.

87,843. COVER GLASS LENS FOR HEADLIGHTS. GUSTAVE ALPHONSE MARIE LAMBLIN-PARENT, Lille, France. Filed Dec. 1, 1930. Serial No. 37,847. Term of patent 7 years.



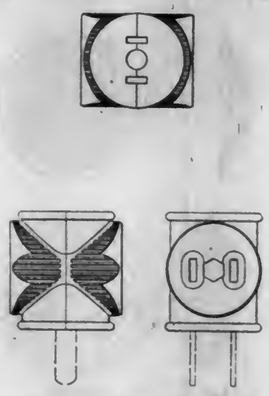
The ornamental design for a cover glass lens for headlights, substantially as shown.

87,844. MEDICINAL CONTAINER OR SIMILAR ARTICLE. HERMAN B. LERMER, Newark, N. J., assignor to Hygienic Tube and Container Co., Newark, N. J., a Corporation of New Jersey. Filed June 15, 1932. Serial No. 44,084. Term of patent 7 years.



The ornamental design for a medicinal container or similar article, as shown.

87,845. CUBE TAP. AUGUSTINE H. MASSEY, Stratford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed July 21, 1932. Serial No. 44,392. Term of patent 7 years.



The ornamental design for a cube tap, substantially as shown.

87,846. DECANTER OR SIMILAR ARTICLE. WILL CAMERON MCCARTNEY, Cambridge, Ohio. Filed Aug. 12, 1932. Serial No. 44,591. Term of patent 7 years.



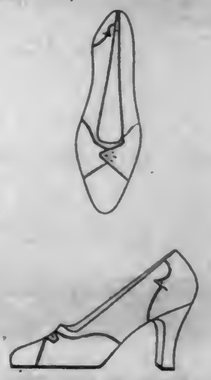
The ornamental design for a decanter or similar article, substantially as shown.

87,847. SHOE. CHARLES MILLER, New York, N. Y. Filed July 22, 1932. Serial No. 44,417. Term of patent 3½ years.



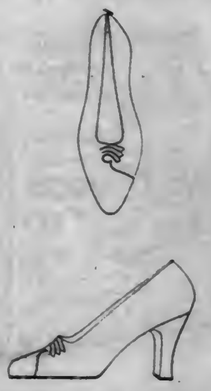
The ornamental design for a shoe, as shown.

87,848. SHOE. CHARLES MILLER, New York, N. Y. Filed July 22, 1932. Serial No. 44,418. Term of patent 3½ years.



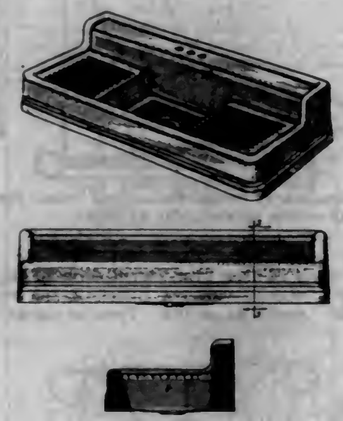
The ornamental design for a shoe, as shown.

87,849. SHOE. CHARLES MILLER, New York, N. Y. Filed July 22, 1932. Serial No. 44,419. Term of patent 3½ years.



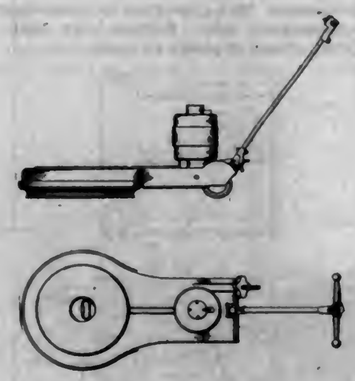
The ornamental design for a shoe, as shown.

87,850. SINK. THEODORE E. MUELLER, Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 10, 1932. Serial No. 42,802. Term of patent 14 years.



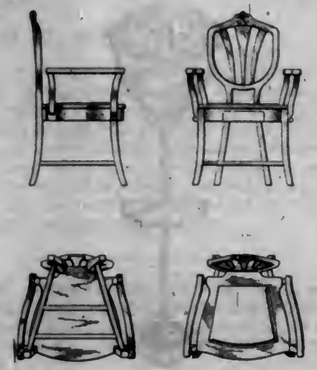
The ornamental design for a sink, as shown.

87,851. COMBINED FLOOR SCRUBBING, BRUSHING, POLISHING, AND ABRADING MACHINE. HARRY L. MYERS, Toledo, Ohio, assignor to The American Floor Surfacing Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed July 21, 1932. Serial No. 44,395. Term of patent 14 years.



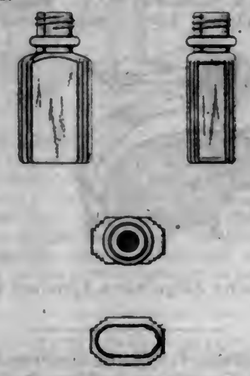
The ornamental design for a combined floor scrubbing, brushing, polishing, and abrading machine as shown.

87,852. CHAIR. MAUD W. PAINTER, Cleveland, Ohio. Filed May 12, 1932. Serial No. 43,774. Term of patent 3½ years.



The ornamental design for a chair, as shown.

87,853. BOTTLE. WILLIAM J. POPP, Loudonville, N. Y. Filed July 29, 1932. Serial No. 44,481. Term of patent 14 years.



The ornamental design for a bottle as shown.

87,854. BOTTLE. JOHN J. QUINN, Scarsdale, N. Y., assignor to Pinaud, Inc., New York, N. Y., a Corporation of New York. Filed July 8, 1931. Serial No. 40,464. Term of patent 14 years.



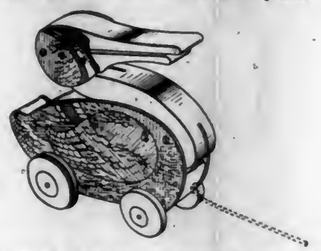
The ornamental design for a bottle substantially as shown.

87,855. LAMP. ALBERT L. SANDEL, Chicago, Ill. Filed July 11, 1932. Serial No. 44,303. Term of patent 3½ years.



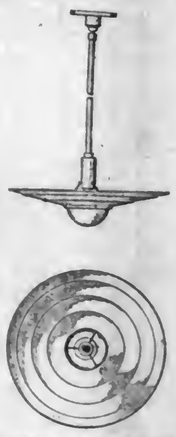
The ornamental design for a lamp, substantially as shown and described.

87,856. FIGURE TOY. EDWARD S. SAVAGE and CHARLES F. FRIEDRICH, Rochester, N. Y. Filed Aug. 6, 1932. Serial No. 44,538. Term of patent 7 years.



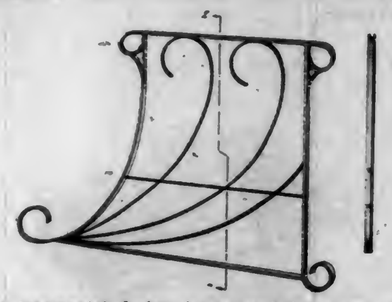
The ornamental design for a figure toy as shown and described.

87,857. LIGHTING FIXTURE. SPENCER JOHN TUCKER, Jamaica, N. Y., assignor to Edwd. F. Caldwell & Co. Inc., New York, N. Y., a Corporation of New York. Filed July 19, 1932. Serial No. 44,379. Term of patent 7 years.



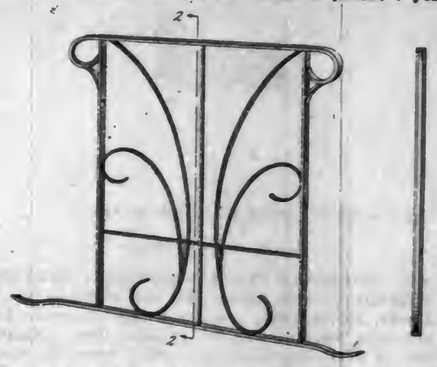
The ornamental design for a lighting fixture as shown and described.

87,858. END FRAME FOR SWINGS OR SIMILAR ARTICLE. JOSEPH M. VALLONE, Buffalo, N. Y. Filed Mar. 4, 1932. Serial No. 43,078. Term of patent 7 years.



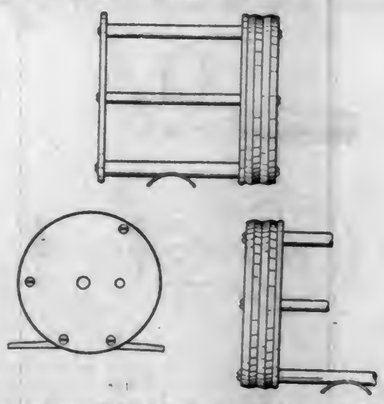
The ornamental design for an end frame for swings or similar article, substantially as shown.

87,859. END FRAME FOR SWINGS OR SIMILAR ARTICLE. CHARLES VALLONE, Buffalo, N. Y. Filed Mar. 4, 1932. Serial No. 43,079. Term of patent 7 years.



The ornamental design for an end frame for swings or similar article, substantially as shown.

87,860. FISHING REEL FRAME. PETER WORKMAN, Jr., Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Oct. 14, 1931. Serial No. 41,384. Term of patent 14 years.

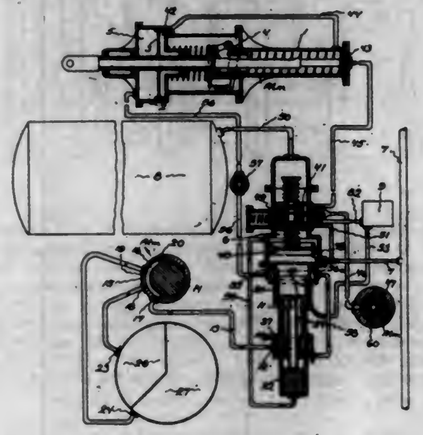


The ornamental design for a fishing reel frame, as shown and described.

PATENTS

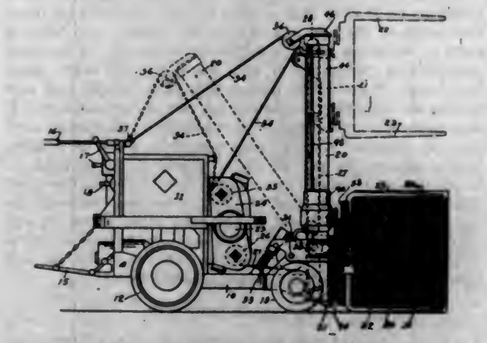
GRANTED SEPTEMBER 27, 1932

1,878,993. COMPRESSED AIR BRAKE FOR OBTAINING A VARIABLE BRAKING EFFECT. ANDERS ANDERBERG and ERIK ANDERS ANDERBERG, Lund, Sweden, assignors to Carl Holmbergs Mekaniska Verkstads Aktiebolag, Lund, Sweden, a Corporation of Sweden. Filed Feb. 14, 1930, Serial No. 428,453, and in Sweden Feb. 22, 1929. 12 Claims. (Cl. 303—23.)



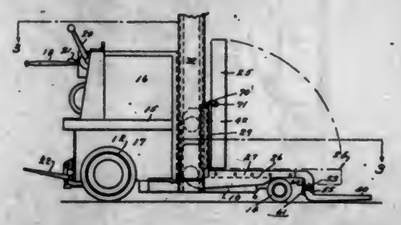
1. In compressed air brakes, a brake structure comprising a brake chamber adapted to be kept under pressure when the brake is released, means for discharge of air from such chamber for the purpose of braking, a closed container, interconnection means for transmitting the air discharged from the brake chamber into said container, so that the volume of the same will be determining for the final pressure within said chamber, and means for interrupting the said interconnection and for connecting the container with the atmosphere when the brake is released.

1,878,994. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Co., Cleveland, Ohio, a Corporation of Ohio. Filed June 3, 1931. Serial No. 541,814. 6 Claims. (Cl. 214—66.)



1. In an industrial truck, a frame, an electric power supply mounted on said frame, a vertically extending guideway at one end of the frame, a carriage mounted in the guideway, a means to cause said carriage to traverse the guideway, a pair of oppositely disposed load engaging members carried by the carriage, one of said members being movable to and from the other of said members, means adapted to cause relative movement between the said members and clamp and load therebetween, said load engaging members being rotatably mounted as a unit on the carriage, and an electric motor carried by said carriage to rotate said load engaging members.

1,878,995. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 19, 1931. Serial No. 545,439. 5 Claims. (Cl. 187—9.)



1. In an industrial truck, a normally horizontally extending load engaging platform pivoted to said truck and adapted to overlie the truck frame, a second load-engaging member pivoted to the forward end of the truck extending forwardly therefrom, the upper surface of said load engaging member adapted to lie below the plane of the platform, and wherein said load engaging member may be swung about its pivot to a position underlying the platform.

1,878,996. DRIPLESS SPOUT FOR POURING VESSELS OF CERAMIC MATERIAL. CHRISTOPH ACHTZIGER, Weiden, Germany, assignor to the Firm Porzellanfabrik Weiden Gebr. Bauscher, Weiden, Germany. Filed July 23, 1931, Serial No. 552,747, and in Germany Jan. 19, 1931. 2 Claims. (Cl. 65—81.)



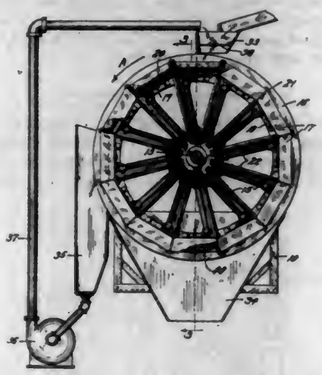
1. A spout for pouring vessels substantially in the form of an eagle's beak, having a channel in its inner surface, and a hole extending from the channel through the wall of the spout and opening at the deepest point of the beak.

1,878,997. MANUFACTURE OF PHOSPHATES AND PHOSPHORIC ACID. LUIS ADELANTADO, Barcelona, Spain. Filed June 5, 1929, Serial No. 368,738, and in Spain Feb. 19, 1929. 3 Claims. (Cl. 71—7.)

1. An industrial process for the manufacture of concentrated superphosphates and of phosphoric acid which consists in first neutralizing the free acid in superphosphate

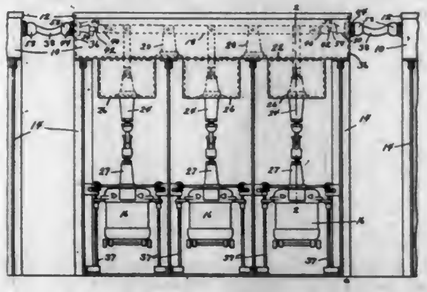
with a solution of ammonia gas, then systematically leaching the resulting product with water to obtain solutions of the soluble salts and then evaporating said solutions to an adequate density of about 35° Bé. to form crystals, and lastly washing, draining and drying the resultant crystals while cooling for about 8 hours.

1,878,998. CONTINUOUS FILTER. RANDALL P. AKINS, Denver, Colo. Filed May 1, 1931. Serial No. 534,247. 7 Claims. (Cl. 210—202.)



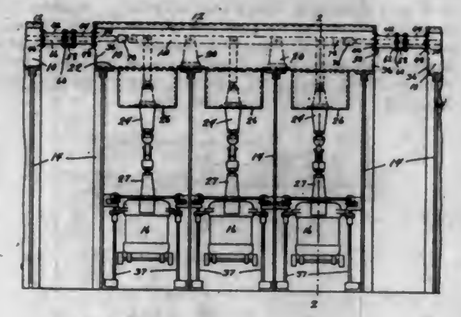
1. A continuous filter comprising: an annular series of outwardly facing receptacles, said series arranged to rotate about an axis in a vertical plane; a filter medium in said receptacles; means for creating a partial vacuum in said receptacles on the descending side of said series; means for feeding material at the top of said series; and an overflow hopper positioned to one side of said axis and extending beneath the descending side only of said series so as to receive the overflow, if any, from the receptacles at said descending side.

1,878,999. INCLOSED ELECTRIC CONDUCTOR AND SWITCH GEAR. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Jan. 22, 1930. Serial No. 422,562. 8 Claims. (Cl. 175—298.)



1. Metal clad switch gear consisting of a plurality of sets of electric switching apparatus each having a conductor inclosing casing that is structurally independent of all other casings, a plurality of high tension conductors contained entirely within each of said casings, and flexible insulated high tension cables extended through confronting walls of said casings and secured to said walls in a fluid tight manner and having their conductors connected with corresponding inclosed conductors in adjacent sections, whereby to electrically connect the conductors of the casing flexibly.

1,879,000. METAL CLAD SWITCH GEAR AND INCLOSED CONDUCTOR SYSTEM THEREFOR. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 15, 1930. Serial No. 452,623. 9 Claims. (Cl. 175—298.)



1. Metal clad switch gear consisting of a plurality of sets of electric switching apparatus each having an independent conductor-inclosing casing that is free from rigid connection with all other casings, means connecting the confronting ends of said casings together in a flexible and fluid-communicating manner, and bus conductors having rigid conducting sections located in said casings and having flexible conducting sections which are located in said flexible connections and are connected with the adjacent ends of said rigid bus conducting sections.

1,879,001. LEG SPLINT. CHARLES I. ALLEN, Wadesboro, N. C. Filed Apr. 24, 1930. Serial No. 446,910. 1 Claim. (Cl. 128—85.)

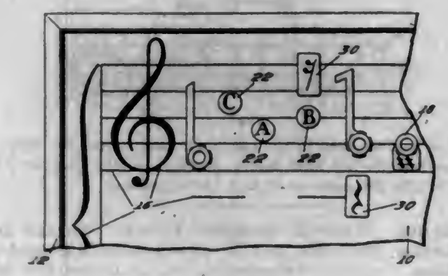


A leg splint having a limb encircling ring and track members secured to said ring to occupy positions on opposite sides of the leg, a plurality of slidable web holding cuffs mounted on said track members, means for preventing turning movement of said cuffs on said track members, each of said cuffs having a buckle therein and also having an upwardly projecting portion integral therewith, said upwardly projecting portions having two spaced horizontally disposed slots therein whereby a piece of webbing can be secured in the buckle on one cuff and extend beneath the leg then out through the lower slot in the other cuff on the other side of the leg, then back through the top slot in said other cuff, then again beneath the leg and over the top of the leg and then over the top of said projection in said other cuff and through the buckle in said other cuff to apply lateral traction to the leg.

1,879,002. MOVABLE MAGNETIC MARKER. CLIFTON C. ALLES, Los Angeles, Calif. Filed Nov. 11, 1930. Serial No. 494,860. 4 Claims. (Cl. 84—471.)

2. A means for assembling visual indicia, comprising a background of magnetic material, and magnetic markers

adapted to be applied to the background, together with means on the markers for applying various indicia thereto, said means comprising removable caps, and plugs on the

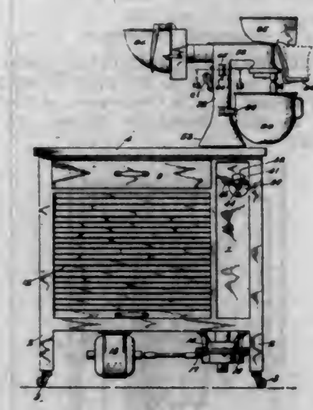


caps adapted to be fitted into openings in the magnetic markers, together with cover members on the caps, said cover members adapted for imprinting thereon.

1,879,003. SALTS OF 1-PHENYL-2-AMINOPROPANE. GORDAN A. ALLES, Monterey Park, Calif. Filed Sept. 2, 1930. Serial No. 479,427. 2 Claims. (Cl. 260—127.)

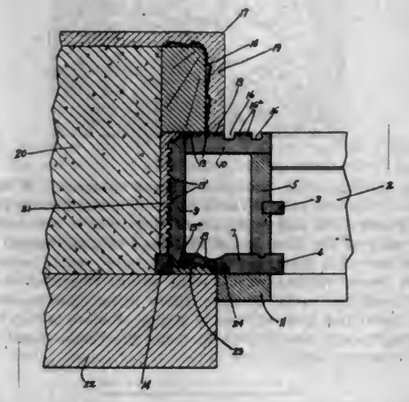
1. As a new composition of matter, a salt of 1-phenyl-2-aminopropane.

1,879,004. SERVICE TABLE. ALPHEUS W. ALTORFER, Peoria, Ill. Filed Oct. 25, 1930. Serial No. 491,150. 35 Claims. (Cl. 74—7.)



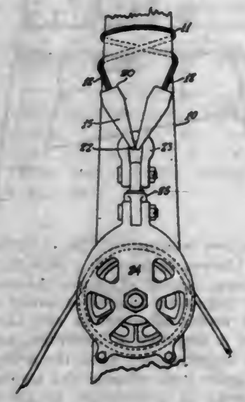
1. A service table for the purposes described comprising a cabinet having a table top, a changeable speed transmission located beneath the cabinet, an operative means arranged for attachment on the table top and having a plurality of power take-off devices projecting at different points and in different directions therefrom, operating connections between said transmission and said operative means, and means to effect a change of speed to said connections from said transmission.

1,879,005. WINDOW AND DOOR FRAME. FRED C. ANDERSEN, Bayport, Minn., assignor to Andersen Lumber Company, Bayport, Minn., a Corporation of Wisconsin. Filed Feb. 27, 1929. Serial No. 343,010. 11 Claims. (Cl. 20—11.)



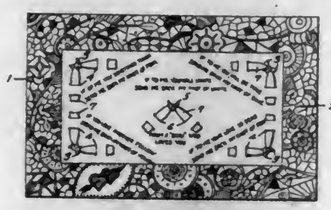
1. A window frame having a wall provided with a plurality of grooves in its surface, a studding adjacent said grooved surface, a lath on said studding having an edge to fit into one of said grooves, and a plastic material covering said lath and abutting said grooved wall.

1,879,006. SWIVEL FERRULE STRAP SOCKET. WILLIAM D. ANDERSON, San Francisco, Calif. Filed Feb. 10, 1930. Serial No. 427,409. 2 Claims. (Cl. 24—123.)



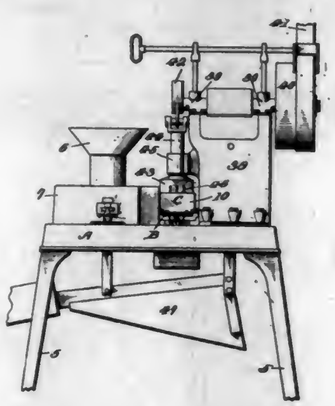
2. A strap for mounting logging blocks on spar trees consisting of a length of wire rope in combination with a pair of swivel sockets each of which has an opening formed in one end thereof to receive an end of said rope, each of said ends having a ferrule secured thereon, each of said sockets having a recess formed therein adapted to freely and rotatably receive its respective ferrule, each of said sockets having the outer end thereof pointed and transversely apertured for the reception of a shackle member.

1,879,007. CARD NOVELTY. GEORGE ANDRATON, New Bedford, Mass. Filed Oct. 17, 1930. Serial No. 489,444. 1 Claim. (Cl. 46—37.)



A mailing card provided with a plurality of spaced series of slots, each of said series defining a central pair of spaced slots and end pair of slots which are arranged laterally of the first named slots and the last named pairs of slots being arranged at right angles with respect to each other, ribbons of different colors threaded through the respective series of slots, there being upon the face of the card and adjacent each series of slots a legend referring to and identifying by color the ribbon retained in the series of slots.

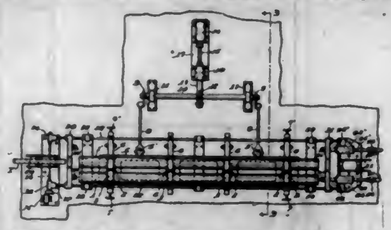
1,879,008. VEGETABLE SLICING MACHINE. MORTIMER R. ANSTICE, Rochester, N. Y., assignor to Josiah Anstice & Co., Inc., Rochester, N. Y. Filed Mar. 31, 1930. Serial No. 440,330. 10 Claims. (Cl. 146—169.)



1. In a vegetable cutting machine, a cutting mechanism for fashioning the vegetables into a plurality of triangular shapes comprising, a grid of blades intersecting one another at right angles to form a plurality of openings, a second grid of blades intersecting one another at right angles to form a plurality of openings, and said second grid of blades superimposed upon the first grid with the blades of the upper grid crossing the blades of the lower grids at the point of intersection of the blades of the lower grid, to form between the several grids of blades triangular shaped openings, and means to push the vegetables past the blades and through said openings.

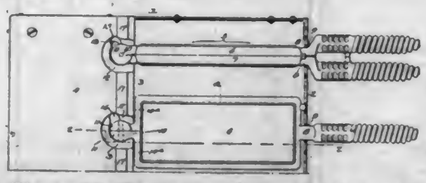
1,879,009. APPARATUS FOR FINISHING AND TESTING TUBULAR PRODUCTS. BENJAMIN F. ANTHONY, Youngstown, Ohio. Filed May 7, 1930. Serial No. 450,581. 11 Claims. (Cl. 153—79.)

1. Apparatus of the class described comprising a container having a hollow, substantially cylindrical chamber in its interior, means for supporting the container substantially horizontally, means operable to introduce a tubular article into the container, means for closing the ends



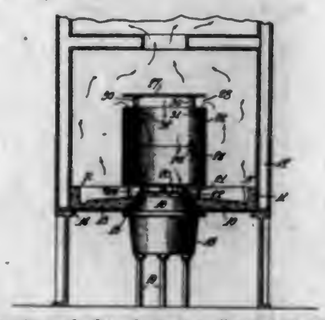
of the article when in the container, and means for thereafter introducing fluid under pressure to the interior of the article through one of said closing means.

1,879,010. WAFFLE COOKING STOVE. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1931. Serial No. 528,365. 2 Claims. (Cl. 53—10.)



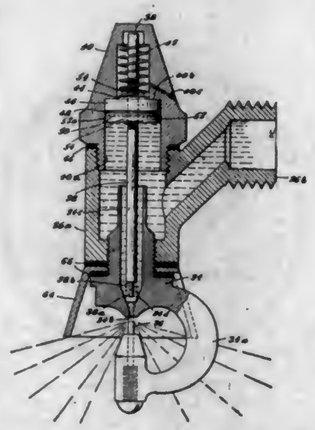
1. The combination in a waffle iron made in two sections, of a front and rear support for the iron, the rear support being in the form of a socket, each section of the iron having a rear extension in the form of a hemisphere and forming, when connected, a ball which is adapted to the socket; a pivot pin extending through both extensions; and a lug on one of said extensions of the sections arranged to come in contact with the rear end of the other section when one of said sections is raised, the socket having slots at right angles to each other, so as to allow clearance for the lug when the iron is turned and when one section is raised.

1,879,011. OIL BURNING APPARATUS. OSCAR APPEL, Paterson, N. J., assignor to Uni-Lec-Tric Burner Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 28, 1929. Serial No. 388,864. 14 Claims. (Cl. 158—4.)



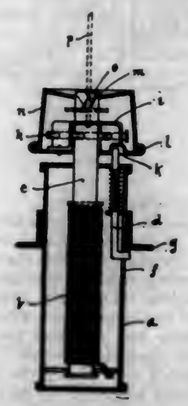
1. Apparatus of the class described, including a fire box, a refractory hearth closing in the bottom thereof, a rotary head comprising a centrifugal oil and air projector discharging horizontally above the hearth, and a refractory flame wall adjacent the periphery of the hearth, designed and operating to initiate combustion at said wall, in combination with annular baffle means adjacent the projector permitting free supply of hot gases but preventing flame from arching back through the baffle from the ignition wall to the projector.

1,879,012. ATOMIZING NOZZLE. JOSEPH ARMSTRONG, Conimicut, R. I., assignor to American Moistening Company, Providence, R. I., a Corporation of Maine. Filed Jan. 20, 1930. Serial No. 422,071. 2 Claims. (Cl. 299—59.)



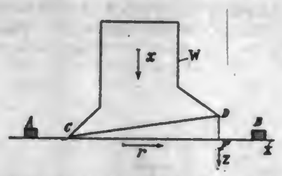
1. An atomizing nozzle having, in combination, a casing; an inlet thereinto; an outlet therefrom having a conical wall merging into a cylindrical wall; an anvil arranged adjacent said outlet to deflect the discharge therefrom in the form of spray; a chamber within said casing between said inlet and said outlet; and means housed in said chamber and actuated by the pressure therein comprising a stem constructed and arranged to enter said outlet to clean and close it simultaneously, the said stem having a cylindrical portion arranged to make sliding fit with the cylindrical wall of said outlet and having a circular shoulder arranged to seat on the conical wall of said outlet.

1,879,013. WINDING DEVICE FOR SPINNING TOYS. CARL ARNOLD, Nuremberg, Germany. Filed Nov. 17, 1931, Serial No. 575,589, and in Germany Aug. 22, 1931. 2 Claims. (Cl. 46—51.)



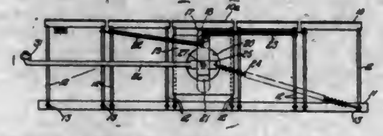
2. A winding device as specified in claim 1, in which in the upper end of the winding pin, claws are milled which are adapted to engage projections on the axle of the article to be projected so that driving the unwinding of the spiral spring and turning of the winding pin the toy article will be projected and receive a spinning movement.

1,879,014. CONSTANT CURRENT ELECTRIC GENERATOR. GILBERT AUSTIN, JAMES COLQUHOUN MACFARLANE, and WILLIAM ALLAN MACFARLANE, Glasgow, Scotland. Filed Jan. 24, 1931, Serial No. 510,928, and in Great Britain Feb. 18, 1930. 13 Claims. (Cl. 171—223.)



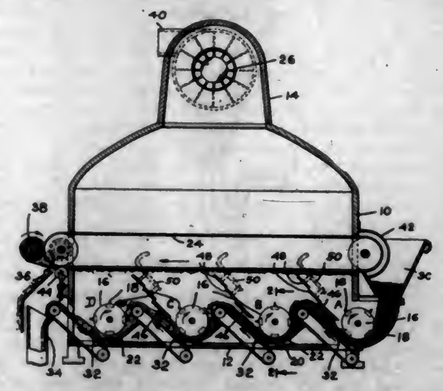
1. A constant current variable voltage electric generator of the aforesaid type, comprising an armature and a polar field system having graded polar air gaps, the air gaps increasing in radial length from the leading tips of the poles to the trailing tips of the poles, the saturation of the iron parts of the machine being maintained below the knee of the saturation curve therefor for working conditions between the voltage limits at short circuit and full load, whereby a drooping characteristic for the generator is obtained by the action of the armature cross ampere turns acting across the graded air gap of each pole to vary the value of the resultant polar flux.

1,879,015. TRACKER MECHANISM FOR MUSICAL INSTRUMENTS. JOHN T. AUSTIN, Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed May 20, 1932. Serial No. 612,500. 12 Claims. (Cl. 84—159.)



1. In a tracker bar mechanism for musical instruments, a tracker bar comprising a plurality of sections movable lengthwise towards and away from each other, tension means normally urging said sections away from each other, and operating means adapted to be controlled by the music sheet passing over the tracker bar sections for changing the length of said bar.

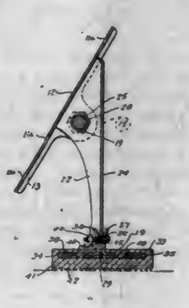
1,879,016. THRESHING MACHINE FOR TOBACCO. JOSEPH H. AUSTIN, Louisville, Ky., assignor to P. Lorillard Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,448. 8 Claims. (Cl. 131—60.)



1. In apparatus of the class described, in combination, a housing, a plurality of threshing units in said housing,

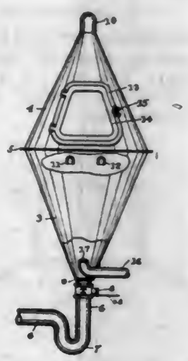
means for maintaining an upward draft of air through said housing, and means within the housing for conveying the tobacco from one unit to the next adjacent unit.

1,879,017. SAFETY APPLIANCE FOR LADDERS. JOSEPH F. BABITT, Wellington, Ohio. Filed Feb. 20, 1931. Serial No. 517,216. 1 Claim. (Cl. 228—61.)



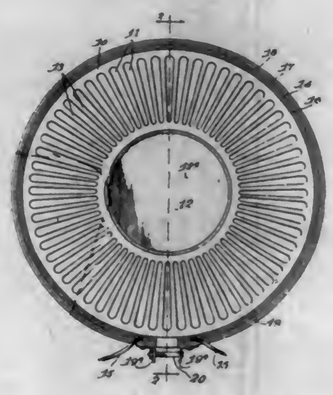
A floor piece for a safety device for ladders comprising a metal plate folded upon itself at each end, the plate having holes extending therethrough and the adjacent ends of the plate having lugs struck up therefrom for attachment to the device, and a rubber block moulded upon and around the plate and extending through said holes.

1,879,018. CLOTHES WASHING DEVICE. CHARLES W. BALL, Bellingham, Wash. Filed Nov. 9, 1931. Serial No. 573,811. 2 Claims. (Cl. 68—37.)



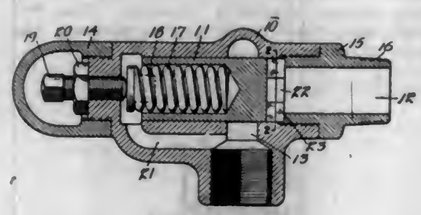
1. A clothes washing device including a closable liquid container, an outlet pipe connected with the bottom of said container, a valve in said outlet pipe, a vent pipe connecting the top of said container with said outlet pipe beneath said valve therein, and a compressed-air pipe entering said container at the bottom thereof.

1,879,019. ELECTRIC AIR HEATER. EARLE W. BALLENTINE, Chicago, Ill., assignor to Solar Industries, Inc., a Corporation of Illinois. Filed Aug. 3, 1931. Serial No. 554,911. 3 Claims. (Cl. 219—38.)



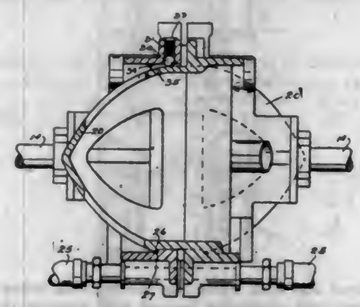
1. An electric heater, including; a circular support with air openings therethrough; an insulated resistor adjacent the outer wall of the support; and a band around the insulated resistor, said band being contracted to press the insulated resistor tightly against the wall of the support.

1,879,020. AUTOMATIC BY-PASS VALVE. HAROLD EDWARD BALSIGER, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,085. 1 Claim. (Cl. 137—53.)



A pressure relief valve comprising a casing having a relatively large chamber therein extending substantially the entire length of the casing and terminating in a small bore which extends entirely through the casing, a second bore extending radially through one wall of the casing and terminating in the said chamber, a passage connecting the said last named bore with the said chamber adjacent its inner end, a hollow plug threaded into one end of the said chamber, a screw threaded into the other end of the casing and closing the small bore, a cap threaded on the casing enclosing the said screw, a piston in the said chamber, a spring positioned between the piston and the said screw, the said spring being biased to hold the said piston seated on the inner end of the said threaded plug, the said piston having grooves cut at an angle to each other in its end to permit fluid under pressure to pass through the hollow plug and out of the radial bore when pressure exceeds a predetermined maximum, substantially as set forth.

1,879,021. AUTOMATIC TRAIN PIPE CONNECTER. MARTIN A. BARBER, Cleveland, Ohio, assignor to Consolidated Connector Patent Corporation, Wilmington, Del. Filed Mar. 9, 1929. Serial No. 345,806. 1 Claim. (Cl. 285—58.)



In an automatic train pipe connecter, the combination with a pair of connecter heads, each having a guiding projection and a conduit, a support for each head, means associated with the support for holding the heads in a predetermined angular position with reference to the support for coupling purposes, interengaging shoulders on the two heads for locking them together, and yieldable means carried on one of the heads opposite the shoulder for permitting the heads to slide together if they approach at any but the predetermined angle.

1,879,022. CATALYTIC GEL AND METHOD OF MAKING SAME. EARLE H. BARCLAY, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Oct. 3, 1929. Serial No. 397,142. 19 Claims. (Cl. 23—144.)

1. The method of preparing gels which comprises bringing together an alkaline solution and a stannic salt solution with agitation, the proportions and concentrations of the two solutions being such that the reaction mass has an acidity ranging between neutrality and 0.5 N acid.

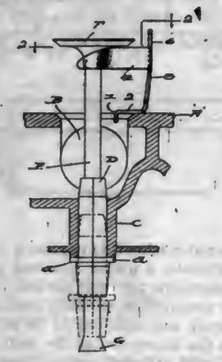
14. A hard, stable, and highly porous plural gel consisting of stannic oxide and silicon dioxide.

1,879,023. BOBBIN-THREAD TENSION-DEVICE FOR SEWING MACHINES. WILLIAM L. BARRON, Laurence Harbor, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 29, 1931. Serial No. 553,863. 2 Claims. (Cl. 112—233.)



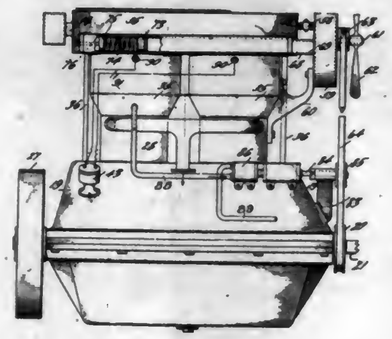
1. A bobbin-thread-case having a circular shell and a thread-tension leaf-spring applied to the outer surface of said shell, said spring having an unsprung radius of curvature less than the radius of curvature of said surface, a tension-adjusting screw passing through said spring between the ends of the latter and into said shell, the proximate surfaces of said spring and shell adjacent one end of said spring being shaped to provide a definite and fixed point of contact between the two circumferentially of the thread-case and within said end of said spring for any adjustment of the tension and curvature of said spring within the working limits provided, the extreme end of said spring adjacent said point of contact being free of interference with the thread-case under all conditions of adjustment.

1,879,024. VALVE JACK OR PROP. EDWARD J. BARTO, Jr., Lancaster, Pa., assignor to K-D Manufacturing Company, a Copartnership composed of Harry W. Kulp and Martin C. Dellinger, Lancaster, Pa. Filed Aug. 3, 1931. Serial No. 554,928. 3 Claims. (Cl. 29—86.3.)



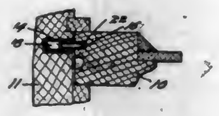
1. A valve jack for use in connection with internal combustion engines having valve stems with mushroom-type or enlarged lower end portions, cooperating valve stem guides respectively formed with cylindrical bores, and split valve guide bushings respectively each composed of a pair of cooperating members together having a composite cylindrical external face portion adapted to be shoved endwise into their respective guide and to make a snug fit in the cylindrical bore thereof and to make a snug sliding fit about the medial portion of the corresponding valve-stem, said jack consisting of a resilient integral sheet metal piece formed with a vertical post; a pair of resilient arms extending substantially perpendicular to said post and formed with cooperating opposed arcuate upwardly outwardly flaring jaw portions adjacent their respective free end portions, said jaws being adapted to yieldingly clamp about a valve-stem and to receive and support the upwardly outwardly flaring portion of said stem defining the junction between the valve head and stem; a base extending from the lower portion of said post in the same direction as, and substantially parallel to, and below, said arms and adapted to rest on the top of the engine block adjacent to, and partially extending over, a valve port opening; and a substantially vertical flange substantially of the same width as, and extending downward from the free end portion of, said base and adapted to engage with its side edges the adjacent portions of the inner wall of said valve port opening to prevent radially outward movement of said base with relation to the valve port opening beyond a certain point and also to prevent sliding movement of the jack on the engine block; the distance, in a direction parallel to said post, between the bottom face of said base and the operative or supporting faces of said jaws being such, in relation to, the length of said valve-stem, the length of said guide, the length of said bushing, and the length of the cylindrical portion of said bushing, that when the jack has been operatively positioned with its jaws embracing and supporting the upper portion of the valve-stem and with its base resting on the top of the engine block and when the bushing has dropped down on the stem until the lower end of said bushing engages and is stopped by the upper part of the enlarged lower end portion of the valve stem, a part of the cylindrical portion of said bushing will extend within the cylindrical bore of said guide which snugly embraces the members of said bushing and confines them, thus preventing any radial separation thereof such as would be necessary for them to pass over and downward beyond the enlarged lower end of the valve-stem.

1,879,025. INTERNAL COMBUSTION ENGINE. JOSEPH ALBON BASCLE, Ponchatoula, La. Filed June 17, 1930. Serial No. 461,779. 4 Claims. (Cl. 123—59.)



1. In an internal combustion engine, a body portion having a cylinder therein, a piston mounted in the cylinder, a crank shaft mounted in the body portion connected to said piston, a blower mounted on the body portion and connected to the crank shaft and adapted to be driven thereby, an intake valve on the upper end of the body portion opening into the top of said cylinder, connections between the intake valve and the crank shaft for operating the intake valve at stated intervals, a hood mounted on the upper end of the body portion and enclosing said intake valve and its connections and having an air intake opening at one end and a carburetor connection at its opposite end, a carburetor arranged between said carburetor connection of the hood and the intake side of said blower, said body portion having an intake manifold leading to said valve and provided with an intake passage connected to the outlet side of said blower whereby operation of said blower draws air in through said hood to heat the air and through said carburetor to the blower and delivers the mixture under pressure to said passage and intake manifold, and means in said passage for maintaining a constant pressure of the mixture fed to the manifold.

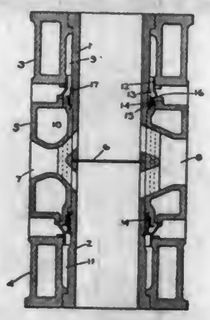
1,879,026. WEATHERSTRIP. JAMES EVERETT BASHAM, Denver, Colo., assignor of one-half to Ephraim G. Matson, Denver, Colo. Filed July 27, 1931. Serial No. 553,263. 3 Claims. (Cl. 20—68.)



1. A weather strip comprising: a channel member having a longitudinal opening along one of its edges; inwardly projecting lips along the sides of said opening; a tongue member adapted to project outwardly from said channel member between said lips; projections formed on said tongue member to prevent withdrawal of the latter; and spring means within said channel member arranged to constantly urge said tongue member outwardly.

1,879,027. INTERNAL COMBUSTION ENGINE AND THE LIKE. KURT BASSLER, Berlin-Westend, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 26, 1930, Serial No. 464,027, and in Germany June 27, 1929. 6 Claims. (Cl. 123—173.)

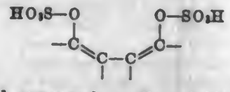
1. The combination with a machine part which is subjected to high temperature, a second machine part which surrounds it, and a packing ring between the two parts, of an intermediate protecting ring of good heat conducting material located between the packing ring and the first



named part and with which the packing ring engages, said protecting ring projecting beyond said packing ring, and means for cooling the projecting part of said packing ring.

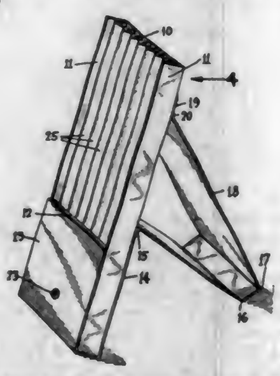
1,879,028. NEW WATER SOLUBLE SULFURIC ACID ESTERS OF LEUCO DERIVATIVES OF INDIGOID VAT DYESTUFFS. WILHELM BAUER, JOSEF HALLER, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1931, Serial No. 529,891, and in Germany Apr. 23, 1930. 3 Claims. (Cl. 260—49.)

1. The new sulfuric acid esters of leuco derivatives of indigoid vat dyestuffs containing nitro groups bound to an aromatic nucleus, said esters possessing in their free form the characteristic grouping:—



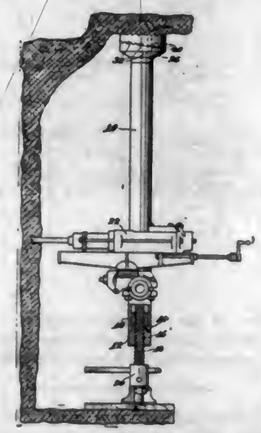
forming colored compounds easily soluble in water, particularly in the form of their alkali metal or ammonium salts, being split up by acid oxidizing agents to the starting indigoid dyestuffs containing nitro groups, being reduced by alkaline reducing agents with the formation of the sulfuric acid esters of the corresponding indigoid dyestuffs containing amino groups, and being valuable media for dyeing and printing purposes.

1,879,029. PENCIL DISPLAY CARTON. GEORGE BAUMGARD, Carlstadt, N. J., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,683. 4 Claims. (Cl. 206—67.)



1. In a device of the character described, a rectangular receptacle for pencils open at one end, a jointed member hinged on the back of the receptacle which may be fastened in position to serve as a closure for one end and the face of the receptacle and fastened to the back of the container to serve as a supporting easel for said container, and devices on the front and back of the container for fastening the jointed member in either position.

1,879,030. DRILL COLUMN. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 14, 1928. Serial No. 319,324. 6 Claims. (Cl. 255—53.)

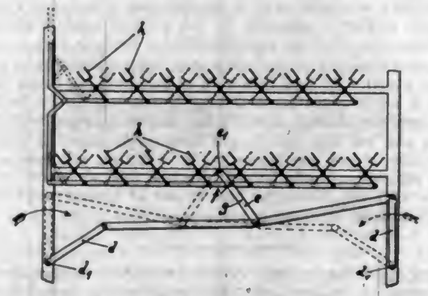


1. A rock drill column comprising a body portion and a cap on the body portion, a member having a gripping face engaging a surface of the cap preventing relative rotation therebetween and a second face not parallel to the first said face to present a tilted surface to the rock.

1,879,031. PROCESS OF PREPARING VULCANIZED FIBERS. ERNST BECKER, Hamburg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 29, 1929, Serial No. 367,135, and in Germany June 4, 1928. 4 Claims. (Cl. 8—20.)

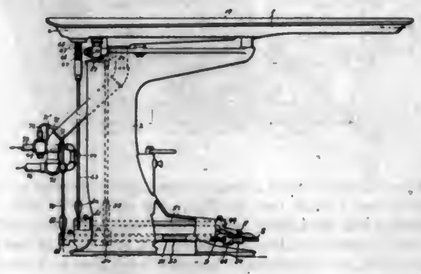
1. In the process for the manufacture of vulcanized fibers and the like, the step which comprises parchmentizing paper with sulfuric acid to which a sulfate soluble in sulfuric acid has been added.

1,879,032. SMOKING PROCESS. HEINZ BECKER, Hamburg, Germany. Filed Jan. 11, 1930, Serial No. 420,252, and in Germany Mar. 9, 1929. 1 Claim. (Cl. 99—9.)



A process for smoking sausages, consisting in suspending the sausage in pairs on smoking bars so that one sausage of each pair hangs freely on each side of the bar, and in imparting an oscillating movement to said bars causing the sausages to swing, whereby portions of the sausages bearing against the support are intermittently exposed to the action of the smoking gases, wherefrom results that all parts of the sausages are smoked at the same time.

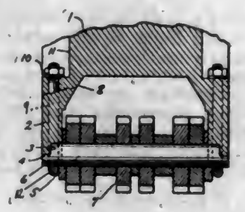
1,879,033. STEAMING BOARD. HERBERT G. BEEDE, Pawtucket, R. I., assignor to Pantex Pressing Machine, Inc., Pawtucket, R. I., a Corporation of Delaware. Original application filed Nov. 26, 1928, Serial No. 322,011. Divided and this application filed Feb. 3, 1930. Serial No. 425,512. 8 Claims. (Cl. 68—9.)



1. The combination with a steaming board, a supporting base therefor, and a steam controlling valve of a valve operating rod reciprocally movable endwise vertically, a yoke secured to the lower end of the rod and provided with oppositely extending arms, a rocker shaft journaled on said base and movable about an axis intersecting the axis of the rod, said rock shaft being provided with crank arms extending in opposite directions therefrom along the arms of the yoke for engaging adjacent arms of said yoke as the shaft is rocked in reverse directions for moving the valve-operating rod in one and the same direction, and a pair of pedals secured to and projecting laterally in opposite directions from the shaft for rocking said shaft in reverse directions.

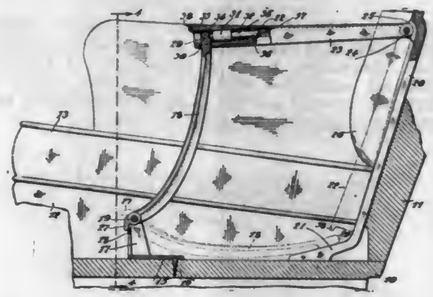
7. In a machine of the character described, separate valve-operating rods each having oppositely projecting arms, and relatively rotatable co-axial rock shafts one for each rod and each having oppositely projecting crank arms for engaging the arms of the corresponding rod, each rock shaft having a pair of oppositely projecting pedals for rocking the same in reverse directions.

1,879,034. DRILL CUTTER MOUNTING. GUY E. BEHNKE, Houston, Tex., and RUSSELL GIESEY, Oklahoma City, Okla., assignors to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Oct. 8, 1929. Serial No. 398,125. 5 Claims. (Cl. 255—71.)



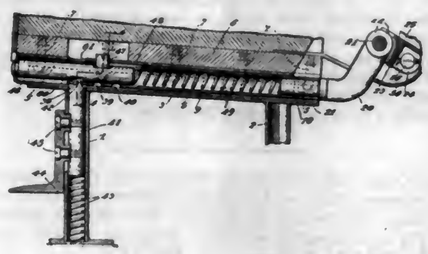
1. A bit head having a bearing extension, said extension having a recess and a slot, and a pin shaped to fit said recess and having a reduced portion shaped to fit said slot, said pin and reduced portion being slidable laterally into said recess and slot, and a substantially U-shaped bolt to hold said pin in place.

1,879,035. COLLAPSIBLE ARM REST FOR SEATS. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,969. 1 Claim. (Cl. 155—112.)



In combination with a vehicle seat having a seat cushion portion and a back rest portion, of a collapsible arm rest including an attaching lug secured to said seat cushion portion, a post member hinged at one end to said lug and adapted to lie substantially parallel with the seat cushion portion when in collapsed position, said post having a projecting portion adapted to engage said lug to limit the outward pivoting movement of the post member, and an arm support member hinged to said back rest portion and adapted to lie in a plane substantially parallel with said back rest portion when in colapsed position, said post and arm support member being detachably connected when the arm rest is erected.

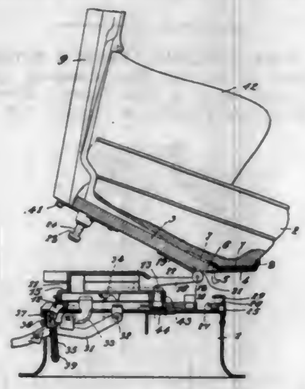
1,879,036. RECLINING CHAIR. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 403,930. 10 Claims. (Cl. 155—163.)



6. In a reclining chair of the character described, in combination, a seat frame, a seat back structure hinged thereon, a tubular guide sleeve supported against the under side of the seat frame, a rack in said guide sleeve and operatively connected to the back structure, a tubular member extending downwardly from adjacent the front end of said guide sleeve, and a detent for the rack housed in said tubular member, said guide sleeve having an aperture affording the detent access to said rack.

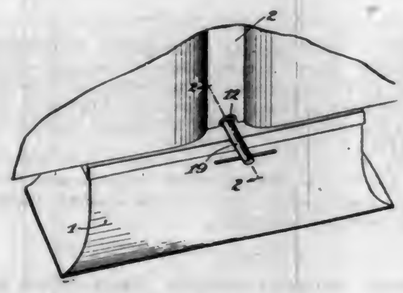
1,879,037. CAR CHAIR. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 417,864. 2 Claims. (Cl. 155—96.)

1. In a chair of the character described, in combination, a support and a seat cushion frame tiltably mounted thereon, the tilting axis being disposed intermediate the front and rear edges of a seat cushion harbored on the frame, a portion of the bottom of the frame being forward of the tilting axis and inclining upwardly with respect to the



bottom portion of the frame rearward of the tilting axis, whereby the front portion of the frame remains above the top of the support when the frame is tilted thereon.

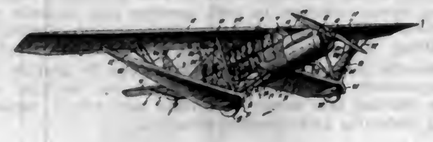
1,879,038. LOCKING DEVICE FOR CAR SEATS. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,572. 3 Claims. (Cl. 155—95.)



1. In a rotatable seat, in combination, a support, a seat frame rotatably mounted on the support, and a vertical latch bolt housed for reciprocation in the seat frame, said support having a recess adapted to receive the bolt to prevent rotation of said frame on the support, said bolt having a key engageable portion and said seat frame having an aperture through which a key may be engaged with the bolt and the bolt disengaged from said recess to permit rotation of the seat frame on the support, and means on the support engaging beneath the bolt and maintaining the bolt retracted while the bolt is out of locking alignment with a recess therefor on the support.

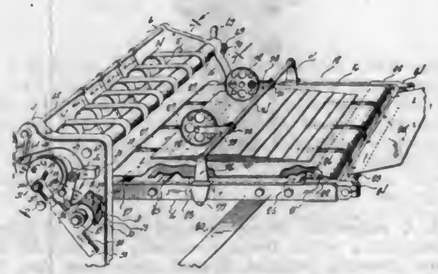
1,879,039. AIRPLANE CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Feb. 9, 1931. Serial No. 514,607. 4 Claims. (Cl. 244—30.)

1. An airplane comprising top center section panels, lower stub wings of negative dihedral, tanks in the top center section panels adjacent the fuselage for carrying fuel, compartments opening in the top surfaces of the stub wings



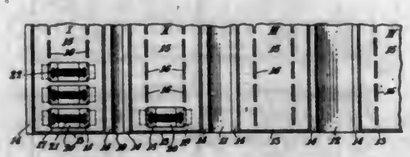
for carrying baggage, and closures for the compartments conforming with the configuration of the top surface of the stub wings.

1,879,040. SIGNATURE STITCHING MACHINE. ELMER W. BELLUCHE, Racine, Wis., assignor to Christensen Machine Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 29, 1930. Serial No. 424,266. 18 Claims. (Cl. 271—87.)



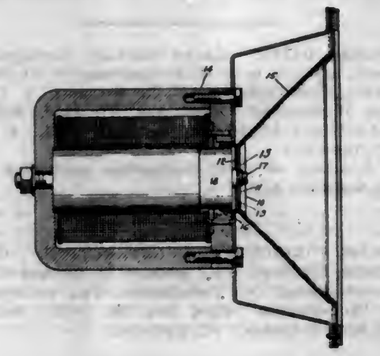
1. In a signature stitching machine or the like, a delivery mechanism including a conveyer, means including a rotatable drum for discharging completed signatures onto the conveyer, drive means for intermittently advancing the conveyer and trip means mounted above said drum and in normal contact therewith to intermittently advance the conveyer upon a signature passing between said drum and the trip means.

1,879,041. SAMPLE COLOR CARD. SYDNEY E. BENDER, Brooklyn, N. Y. Filed June 26, 1931. Serial No. 547,001. 10 Claims. (Cl. 129—20.)



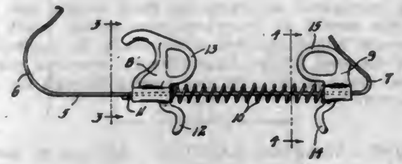
1. A sample card book of the class described, comprising a plurality of individual sections flexibly connected edge to edge with one another and adapted to form a continuous row of sections foldable to a book, each section comprising a relatively rigid base member reinforced at its long edges, a backing member provided between the rinforced edges of said base member and having a plurality of tab-receiving means, arranged in pairs.

1,879,042. ACOUSTIC DEVICE. HEINRICH BENECKE, Berlin-Pankow, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 8, 1931, Serial No. 528,643, and in Germany Apr. 25, 1930. 7 Claims. (Cl. 181—31.)



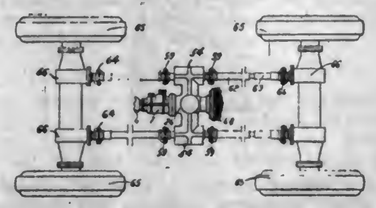
1. In an acoustic device comprising a diaphragm, a centering device for said diaphragm comprising two layers, one of said layers being composed of an elastic material, the other of said layers being composed of a material having less elasticity but greater tensile strength than said one of said layers.

1,879,043. COW-TAIL HOLDER. FRANK R. BERGSTEN, Anoka, Minn. Filed Nov. 25, 1931. Serial No. 577,196. 7 Claims. (Cl. 119—105.)



1. A holder of the class described comprising a bar, a clamping abutment at each end of said bar, a pair of clamping members slidably connected with said bar and means interposed between said clamping members for urging the same outwardly to cooperate with the respective abutments.

1,879,044. MEANS FOR OPERATION OF MOTOR VEHICLES. MARIUS BERLIET, Lyon, France, assignor to Societe Anonyme des Automobiles M. Berliet, Lyon, France. Filed Sept. 28, 1929, Serial No. 395,944, and in France Oct. 1, 1928. 4 Claims. (Cl. 180—49.)



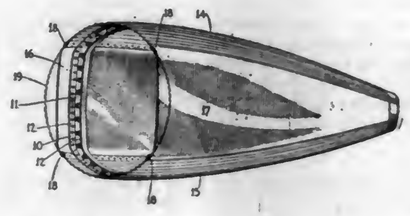
1. A four-wheel drive for vehicles comprising a speed transmission, a differential mechanism driven by the shaft thereof, said differential mechanism including shafts,

shafts extending at right angles to the outer ends of the differential shafts and driven thereby and adapted to transmit movement to the wheels of the vehicle, a shaft alined with the transmission shaft and geared with the differential mechanism, and a braking mechanism connected with the latter shaft.

1,879,045. PAINT. HANNS BERNARD, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 27, 1928, Serial No. 302,433, and in Germany Sept. 12, 1927. 4 Claims. (Cl. 134—39.)

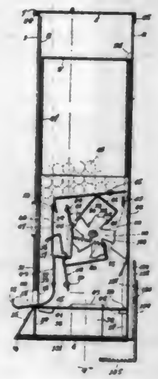
1. A drying oil paint composition containing 2.3-hydroxy naphthoic acid.

1,879,046. AIRCRAFT CONSTRUCTION. GRISCOM BETTLE, Gladwyn, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1930. Serial No. 423,943. 2 Claims. (Cl. 244—30.)



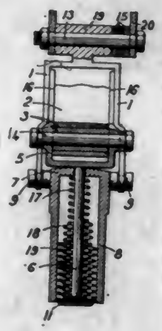
1. A tapered aircraft body having top and bottom coverings corrugated in transverse cross section and side coverings smooth in transverse cross section, which coverings are joined together substantially in longitudinal planes diagonal to the longitudinally extending central vertical plane of the body and passing through the axis of the body.

1,879,047. VENDING MACHINE. WILLIAM B. BETTS, Binghamton, N. Y. Filed May 7, 1931. Serial No. 535,767. 9 Claims. (Cl. 312—83.)



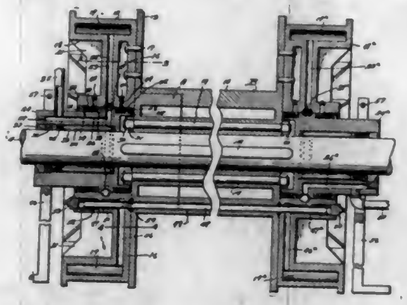
1. In a vending machine, a pivotally mounted combined article supporting, deflecting and agitating element, a pivoted shifting device for and contacting with said element, means arranged forwardly of said element to provide a passage terminating in a delivery outlet for the articles to be vended, said means arranged forwardly of said element for receiving the articles therefrom, an article arrester element having a part thereof normally extending across said passage to arrest the passage of the articles therethrough, an article retarder element having a part normally clear of said passage, a controlling spring common to said arrester and retarder elements, a rotatable actuating element for alternately shifting the said parts of said arrester and retarding elements into and out of said passage to provide for successively delivering articles from the machine and for shifting said device to actuate said article supporting, deflecting and agitating element.

1,879,048. VEHICLE SUSPENSION SPRING. ANDRÉ BEURDELEY, Paris, France. Filed Apr. 6, 1931, Serial No. 528,146, and in France Apr. 15, 1930. 6 Claims. (Cl. 267—29.)



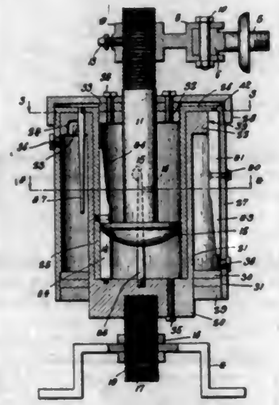
1. A suspension device mounted between a vehicle spring and a vehicle frame, comprising two parallel side plates pivotably mounted at their upper ends upon the vehicle frame, a forked member pivoted to the end of the spring, a cylinder beneath the forked member and to which the lower ends of the plates are pivoted, a plunger movable in the cylinder and fixed to the forked member, and an elastic device contained in the cylinder and subject to compression stress and interposed between the upper end of the cylinder and the plunger.

1,879,049. WATER COOLED WINDING DRUM. LEE J. BLACK, Beaumont, Tex. Filed Aug. 3, 1929. Serial No. 383,389. 20 Claims. (Cl. 188—264.)



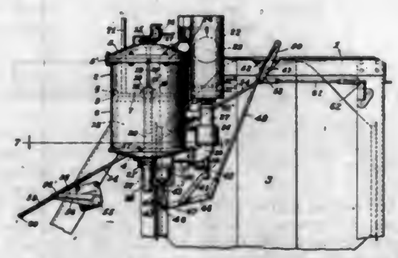
1. A winding drum having hollow brake flanges and a fluid circulating system therefor, a shaft upon which the winding drum is mounted, and means engaging each end of the drum and fixed from rotation with relation to the drum to continuously discharge fluid into the circulating system of the drum and eject it therefrom.

1,879,050. SHOCK ABSORBER. FRANCIS WILLIAM BLANDFORD, Prince Albert, Saskatchewan, Canada. Filed Apr. 25, 1931. Serial No. 532,905. 3 Claims. (Cl. 188—88.)



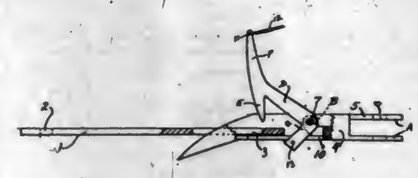
1. A hydraulic shock absorber for vehicles, comprising inner and outer fluid containing cylinders, a piston fixed to the vehicle body and working in the inner cylinder, a plunger in the outer cylinder working in the outer cylinder, and the plunger and the piston having fluid ports, and fixed means for controlling the ports to permit of a small flow of fluid therethrough to direct fluid from one to the other side of the plunger or piston when the said plunger and piston have been moved predetermined distances in the cylinders.

1,879,051. WATER MEASURING TANK FOR CONCRETE PAVERS. GEORGE E. BLOOD, Nunda, N. Y., assignor to The Foote Company, Inc., Nunda, N. Y., a Corporation of Delaware. Filed May 17, 1930. Serial No. 453,282. 19 Claims. (Cl. 221—95.)



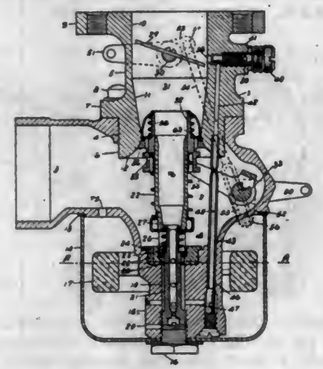
1. A water measuring tank having a piston therein, means for adjusting and setting the piston to predetermine the capacity of the tank, an auxiliary tank without said measuring tank, a conduit between the auxiliary tank and the measuring tank, a main liquid supply pipe leading to said conduit between the tanks, a main inlet valve operated by the water rising in said auxiliary tank, a valve in the conduit between the auxiliary and the measuring tanks and a discharge valve in the measuring tank and operably connected with the just forementioned valve, and means for alternately operating both of said last mentioned valves in timed relation with each other.

1,879,052. HITCH. BENJAMIN F. BOUNDS, Rosston, Okla., assignor of one-half to Orville Wear, Englewood, Kans. Filed Aug. 27, 1930. Serial No. 478,008. 1 Claim. (Cl. 200—33.15.)



In a hitch, the combination of a channel bar, of a clevis axially aligned with the bar and secured thereto, of a hook element having a right angle bend and rockably positioned within the channel bar, the right angle bent portion having a pin near the outer end thereof to extend from each side thereof to function as a stop to restrict the upward movement of the hook when a coupling is being made, all substantially as shown.

1,879,053. CARBURETOR. LEONARD D. BOYCE, Maplewood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,602. 15 Claims. (Cl. 261—45.)

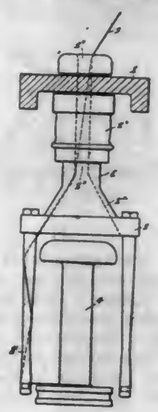


1. In a carburetor, means forming a mixing chamber, means forming primary and secondary air passages conveying air to said chamber, a fuel jet in said primary air passage, normally open valve means for controlling the admission of air to both of said passages, a single lever for operating said valve means, said valve means being constructed and arranged to close the primary air passage during the latter part of the closing movement of the control valve for the secondary air passage, and to open the control valve for said primary air passage during the first part of the opening movement of the control valve for the secondary air passage.

1,879,054. MEANS FOR PREVENTING BALLOONING OF THE YARN IN FLYER SPINNING AND LIKE FRAMES. HAROLD ARTHUR BOYD, Glasgow, Scotland. Filed Sept. 27, 1930, Serial No. 484,887, and in Great Britain Oct. 19, 1929. 5 Claims. (Cl. 118—57.)

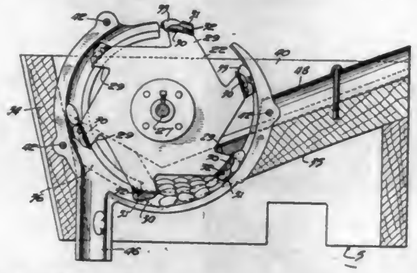
1. In flyer spinning or like frames in which the yarn passes through a hole in the axis of the flyer to the flyer leg and bobbin, the formation of the said flyer between the point of exit of the yarn through the said hole in the flyer axis and the flyer legs with a tapering surface look-

ing to the inside of the flyer and approximately in line with the yarn as it passes to the flyer leg, the said surface being so located as to prevent the yarn from flying out-



wards by centrifugal force and thereby partially or wholly overcoming the drag by which the bobbin takes up the yarn, substantially as and for the purposes described.

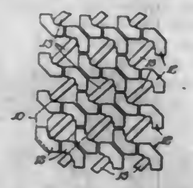
1,879,055. SEED PLANTING MACHINE. CHRISTOPHER C. BOYKIN, Norfolk, Va. Filed May 31, 1930. Serial No. 458,359. 2 Claims. (Cl. 221—135.)



1. A peanut planting machine, comprising a hopper of which the bottom slopes toward the longitudinal center of same, a shaft extending transversely of said hopper, a casing mounted in and extending longitudinally of said hopper, said casing comprising an arcuate tubular portion concentric with and disposed on one side of said shaft and an arcuate channel-shaped portion forming a continuation of said tubular portion on the opposite side of and concentric with said shaft, said tubular portion having a slot in its inner periphery and a discharge spout extending substantially tangentially therefrom adjacent its lower end, said channel-shaped portion having its lower end seated in the bottom of said hopper with its upper edges flush with the bottom thereof, a disc secured to said shaft and having projections adapted during the rotation of said shaft to successively enter the upper end and move longitudinally of the slot of the tubular portion of said casing, and a plurality of scoops carried, respectively, by said members and successively movable through the channel-shaped and tubular portions of said casing.

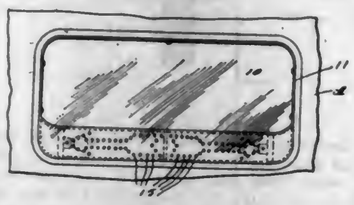
1,879,056. CHECKER CONSTRUCTION. HERMAN A. BRASSERT, Kenilworth, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1931. Serial No. 514,438. 3 Claims. (Cl. 263—51.)

1. In checker work construction, a plurality of octagonal shaped checker brick arranged in vertical columns and forming a plurality of vertical flow passages, filler brick loosely inserted diagonally of the flow passages and supporting members comprising head portions united by



an integral cross bar whereby the head portions serve as supports for the checker brick and the cross bar portions serve as supports for the filler brick.

1,879,057. AUTOMOBILE DIRECTION SIGNAL. FREEMAN M. BRAY, Columbus, Kans. Filed Apr. 5, 1930. Serial No. 441,958. 1 Claim. (Cl. 177—329.)



A signaling device for automobiles comprising a frame adapted to be inserted and fit within and having the same size and shape as a rear window opening of an automobile, a portion of the frame being formed to provide transversely extending compartments, electric lamps in said compartments, the rear wall of each compartment being formed to provide a signaling symbol through which the light from the lamps may be seen when the lamps are energized.

1,879,058. HAND VISE. ROBERT H. BROCKMAN, St. Petersburg, Fla. Filed June 9, 1931. Serial No. 543,199. 1 Claim. (Cl. 81—18.)

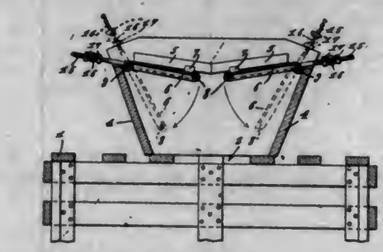


A hand vise comprising a handle, a plate fixed to said handle and having a jaw part at its forward end and having also plates fixed to its opposite sides between said handle and said jaw part, a lever pivotally mounted on said last-named plates and also having a jaw part at its forward end and a threaded socket part at its rear end, a spring interposed between the rear part of said lever and said first-named plate and by which the jaws of said vise will be normally closed, and a screw fitting said socket and arranged to engage said first-named plate and by which the jaws of the vise may be firmly locked, said screw having a head or thumb piece for convenient pressure to open the jaws when not locked.

1,879,059. POULTRY COOPER'S HELPER. ROY L. BROOKSHIRE and FRANKLIN JOHN, Weaubleau, Mo. Filed May 9, 1930. Serial No. 451,152. 2 Claims. (Cl. 119—17.)

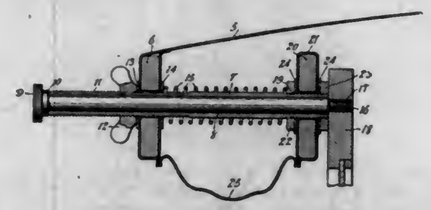
1. A chute adapted to be arranged over the door opening of a fowl shipping crate, having inwardly inclined sides, a pair of inwardly inclined doors in the chute, stop

elements on the ends of the chute for holding the doors inclined, a shaft comprising a pivot for the outer end of each of the doors, an angle arm on the outer end of each shaft, an adjustable spring connecting each pair of angle arms and a housing for the angle arms and springs, rods



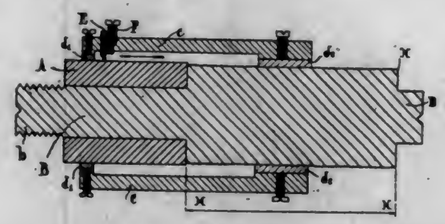
extending from the ends of the doors, passing beyond the sides of the coop and having their ends threaded, a handle member slidable on each pair of rods, and nut elements screwed on the rods to contact with the opposite sides of the handle members.

1,879,060. TENSION DEVICE FOR AUTOMOBILE TOPS. GEORGE BROOMHEAD, New York, N. Y. Filed Dec. 26, 1930. Serial No. 504,934. 11 Claims. (Cl. 296—120.)



1. In a tension device, a stud having securing means at its inner end, a sleeve mounted on the stud, means to limit the longitudinal movement of the sleeve relatively to the stud, resilient means on the sleeve for pressing a top member in one direction, and means cooperating with the sleeve for pressing the top member in an opposite direction.

1,879,061. DEVICE FOR THE CUTTING OF THREADS ON CYLINDRICAL SURFACES. PAUL BROSSE, Neuilly-sur-Seine, France, assignor to Kisiyn Corporation, a Corporation of Delaware. Filed Mar. 31, 1931, Serial No. 526,734, and in France Apr. 2, 1930. 3 Claims. (Cl. 10—101.)



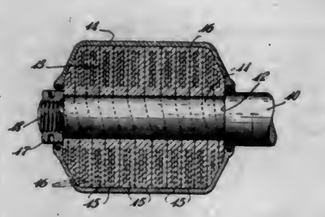
1. In combination, a shaft having a lead thread thereon, a work support integral with said shaft and extending axially thereof, means for securing a piece of work in the form of a cylinder on said support, a tool holder having a bearing in threaded engagement with said lead thread and having a second bearing adapted to engage the work on said support, and a cutting tool on said holder between said bearings and adapted to cut a thread in said work upon relative rotation between the shaft and holder.

1,879,062. BLADE FOR ROAD SCRAPERS. CHARLES HENRY BROWN and PATRICK FRAZIER, Breckenridge, Tex. Filed Mar. 6, 1931. Serial No. 520,664. 1 Claim. (Cl. 37—143.)



In a grading machine, a supporting structure, a cutting blade including a mold board arcuate in transverse cross section with its lower edge offset rearwardly to form a seat for a cutting blade, and a cutting blade also arcuate in transverse cross section and of smaller radius of curvature than the mold board disposed in said offset portion, the cutting blade being sheared off at an angle along its opposite edges to provide cutting edges of similar formation so that the blade may be reversed, the offset portion being of substantially the same width as the blade, the offset portion forming with the mold board an inclined shoulder to neatly receive the sheared off cutting edge of the blade.

1,879,063. TIRE BUILDING FORM OR CORE. ROBERT L. BRUCK, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1930. Serial No. 419,591. 9 Claims. (Cl. 154—9.)



1. A tire-building form comprising a plurality of helical, laterally-abutting convolutions of resilient material, each of said convolutions being longitudinally disposed with relation to a tire built thereupon.

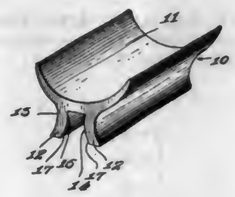
1,879,064. GELATINOUS EXPLOSIVE COMPOSITION. LEON O. BRYAN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 28, 1930. Serial No. 439,857. 6 Claims. (Cl. 52—13.)

1. A gelatinized explosive composition containing a colloidal solution of nitrocellulose in nitroglycerin, in which tetranitrodiglycerin and ethylene glycol dinitrate alone have been incorporated.

1,879,065. RAZOR BLADE SHARPENER. EDWARD C. BRYANT, Atlanta, Ga. Filed Feb. 16, 1931. Serial No. 516,169. 1 Claim. (Cl. 51—211.)

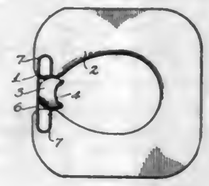
In a razor blade sharpener, including a body having an outer honing surface, a pair of spaced reversely curved finger gripping flanges extending from the body having straight aligning ends to afford a support for the body when arranged on the smooth surface, said flanges defining a

slot therebetween and the opposed parallel walls at the inner end of the slot to define a gripping portion, and outwardly curved guide walls at the outer portion of the slot,



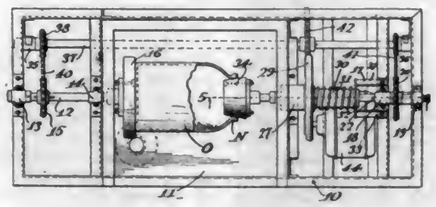
for guiding a vertical support between said flanges and into gripping engagement with the parallel inner walls thereof.

1,879,066. SHIELD FOR BOYS' TOILET SEATS. MARTHA M. BRYANT, Chicago, Ill., assignor to Juvenile Wood Products, Inc., Fort Wayne, Ind. Filed Dec. 11, 1930. Serial No. 501,617. 6 Claims. (Cl. 4—237.)



4. A shield adapted for attachment to a toilet seat having an opening extending inwardly from its forward edge, said shield comprising a bowl adapted to be seated in said opening with the mouth of said bowl facing rearwardly, and yieldable arms extending laterally from said bowl so as to be adapted to span said opening for detachably securing said bowl to the edges of the seat adjacent said opening.

1,879,067. OLLA CLEANING MACHINE. FRANK P. BUCKLEIN, Los Angeles, Calif. Filed MAR. 6, 1931. Serial No. 520,729. 4 Claims. (Cl. 15—56.)



1. An olla cleaning machine comprising two opposed rotary shafts, members on the ends of the shafts adapted to have an olla positioned therebetween, means for rotating one of the shafts, the other shaft being longitudinally movable, a screw having a swiveled connection between shoulders on said other shaft, means for holding the screw against rotation, a hand wheel threaded onto the screw, and spring means urging the hand wheel, screw and shaft toward the opposite shaft.

1,879,068. VULCANIZATION OF RUBBER. HUGH MILLS BUNBURY and WILLIAM JOHNSON SMITH NAUNTON, Prestwich, Manchester, and WILFRED ARCHIBALD SEXTON, Huddersfield, England, assignors to Imperial Chemical Industries Ltd., a Corporation of Great Britain. Filed Mar. 30, 1931, Serial No. 526,548, and in Great Britain Apr. 29, 1930. 8 Claims. (Cl. 18—53.)

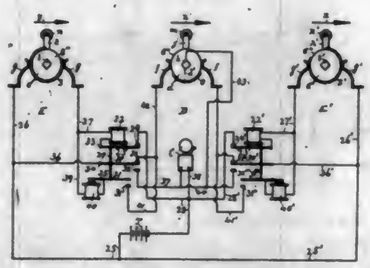
1. A method of treating rubber which comprises adding to the rubber, prior to vulcanization, a compound formed by the reaction of 1-chloro-2:4-dinitro-naphthalene with an aryl mercapto thiazole, and thereafter vulcanizing.

1,879,069. CHUTE. PEARL M. BURGESS, Reading, Mass. Filed Feb. 5, 1932. Serial No. 591,091. 9 Claims. (Cl. 193—34.)



1. In combination, a vertical wall, a vertical chute in fixed relation to the wall, and a chute adjunct including a door frame defining a doorway communicating with the chute, a door housing projecting from one edge of the frame, said frame and housing being fixed in the wall between the sides thereof and provided with door guides parallel with the wall, a sliding door movable on said guides to alternately open and close the doorway, automatic detent means adapted to releasably confine the door in its closed position, and an automatic door opener including means for moving the door into the housing when the door is released by the detent means.

1,879,070. RAILWAY SIGNAL CONTROL. WILLIAM R. BURKE, Utica, N. Y., assignor of one-half to William F. Bossert, Utica, N. Y. Filed Feb. 25, 1931. Serial No. 518,167. 7 Claims. (Cl. 246—130.)



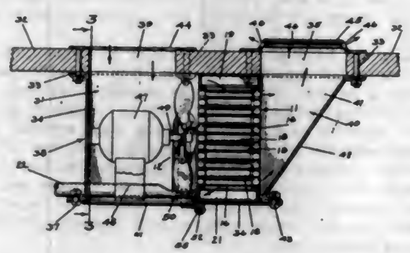
1. In a track equipment of the character described, a normally closed circuit controller adapted to be actuated by a moving car for opening the same, a second normally

open circuit controller located some distance from the first controller in the direction of movement of the car and adapted to be actuated by the car for closing the same, a normally de-energized signal circuit, means brought into action by the opening of the first-named controller for causing the energizing of the signal circuit, and means brought into action by the closing of the second-named controller for continuing the energizing of the signal circuit after the car has passed the first-named controller.

1,879,071. PRECIPITATION OF HEAVY METAL HYDROXIDES. WERNER BUSCH, Cologne-Deutz, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 29, 1929, Serial No. 367,141, and in Germany June 5, 1928. 3 Claims. (Cl. 23—147.)

2. In the process of precipitating copper hydroxide from copper-ammine containing spent liquors of the cuprammonium silk producing works, the step which comprises treating the solution with an acid in amount sufficient to destroy the copper-ammine complex but insufficient to form the normal metal salt of the acid, at a temperature between about 0–100° C.

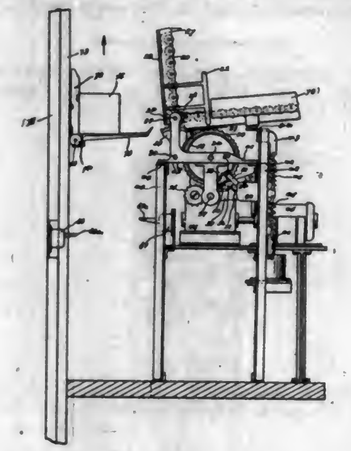
1,879,072. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. VERNON J. BUTTERFIELD, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,401. 2 Claims. (Cl. 257—137.)



1. In an automotive vehicle, a heating element situated beneath the floor of said vehicle and having a plurality of air passages, an enclosing structure for said heating element supporting the same from the vehicle floor, an air propeller housed by said enclosing structure and situated below an opening in the vehicle floor to communicate with one end of each of said air passages, and an air conduit connecting the opposite end of each of said air passages with the interior of said vehicle body through a different opening in said vehicle floor, the said air propeller being adapted to withdraw air from the vehicle body interior through one of said floor openings, to cause the withdrawn air to travel through the air passages of said heating element, and to return the withdrawn and heated air to the interior of said vehicle body through the other of said floor openings.

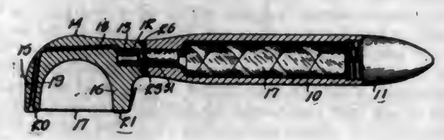
1,879,073. AUTOMATIC TRANSFER APPARATUS FOR CONVEYERS. JOHN CAESAR and SMITH EGGLESTON, St. Paul, Minn., assignors to Standard Conveyor Company, North St. Paul, Minn., a Corporation of Minnesota. Filed Sept. 22, 1930. Serial No. 483,622. 10 Claims. (Cl. 198—26.)

1. The combination with a main conveyer and a branch conveyer, said branch conveyer being spaced from the main conveyer, of a movable section for bridging the gap between said branch conveyer and main conveyer and means for actuating said movable section comprising, a rotary, power-driven cam, connections between said cam and movable section, a lock for normally retaining said



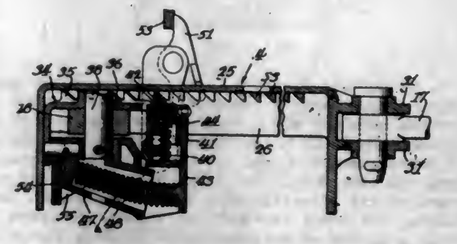
section in retracted position and means for releasing said lock to render said cam operative for actuating said section.

1,879,074. DENTAL FLOSS HOLDER. ROBERT WALTER CAMMACK, Mount Vernon, N. Y. Filed Jan. 4, 1932. Serial No. 584,675. 8 Claims. (Cl. 132—92.)



1. A dental floss holder comprising a head having spaced prongs thereon, a handle threaded into said head, a passage from said handle through said head extending to the tip of the remote prong, and means mounted at the intersection of said head and handle for severing said floss, substantially as set forth.

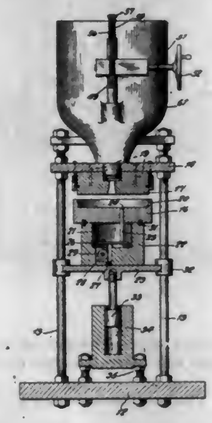
1,879,075. SLACK ADJUSTER. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Nov. 28, 1930. Serial No. 498,653. 18 Claims. (Cl. 188—200.)



12. In a slack adjuster for brake operating mechanism, an attaching member adapted to be connected to a brake rod, a holding member adjustable along said attaching member and adapted to be connected to a brake lever, interengaging teeth fixed to said members, means for ad-

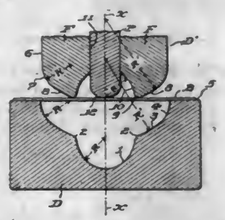
vancing said attaching member one or more steps during the application and release of said mechanism when the slack in said mechanism exceeds a predetermined amount, and means whereby said brakes may be applied irrespective of the amount of slack in said mechanism.

1,879,076. METAL CASTING MACHINE. JOHN CARLE, Garwood, N. J. Filed July 29, 1930. Serial No. 471,497. 4 Claims. (Cl. 22—73.)



1. A casting apparatus comprising a base, standards extending vertically therefrom, a platform adjustably mounted upon the upper ends of said standards, a fluid metal supply carried by said platform, a two part mold or die, means for attaching one of the mold or die parts to said platform, means for moving the other mold or die part into closing relation with said first mentioned mold or die part, a sealing ring carried by said first mentioned mold or die part and means for holding said sealing ring compressed for engagement therewith of the second mold or die member.

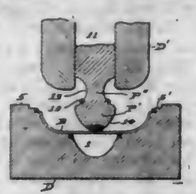
1,879,077. METHOD OF AND MEANS FOR FORMING PIPE BLANKS. CARL CARLSEN, Youngstown, Ohio. Filed Mar. 7, 1929. Serial No. 344,979. 18 Claims. (Cl. 153—49.)



1. The method of reducing a flat blank to hollow cylindrical cross-section by means of a die having relatively movable members, which comprises the steps of first positioning the blank in the die and then, by manipulation of the members of the die, curving the blank transversely from one side edge to the other, then drawing the side edges of the blank inwardly toward each other, then bulging the blank outwardly in opposite directions to bring a portion of the blank to substantially semi-cylindrical cross-section and finally forming the rest of the blank to substantially similar cross-section.

9. A die for reducing a flat blank to hollow cylindrical cross-section, comprising a female member having a central longitudinally extending channel of substantially semi-circular cross-section and curved surfaces extending oppositely outward from the edges of said channel to the upper face of the die, and a male member comprising separate elements, one of said elements having curved surfaces substantially conforming to said curved surfaces of the female member and the other element being adapted to enter the channel in said female member and operatively relatively movable with respect to the first element.

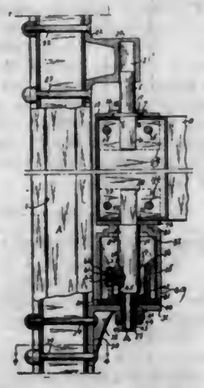
1,879,078. METHOD OF AND MEANS FOR FORMING TUBULAR ARTICLES. CARL CARLSEN, Youngstown, Ohio. Filed Apr. 4, 1930. Serial No. 441,452. 16 Claims. (Cl. 153—49.)



1. The method of producing a hollow tubular article which comprises the steps of disposing a flat blank in a die, and then, by manipulation of the members of the die and without removing the blank therefrom, first simultaneously bending the longitudinal edge portions of the blank away from the plane thereof, and next bending the center portion of the blank oppositely from said plane and thereby causing the edge portions of the blank to move oppositely inward toward each other, then removing the blank from said die to another die, and finally by manipulation of said last mentioned die closing the longitudinal edges of the blank into proximity with each other.

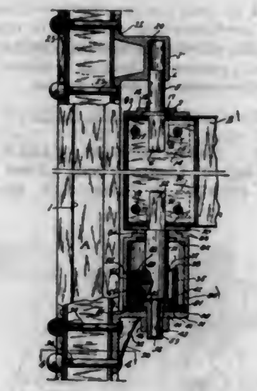
11. A die adapted for employment in reducing a flat blank to hollow tubular form comprising a female member having a central longitudinally extending channel and oppositely outwardly curving surfaces disposed on opposite sides of said channel, and a male member comprising separate relatively movable elements, one of said elements having curved surfaces substantially conforming to said curved surfaces of the female member and the other element comprising a head adapted to enter the channel in the female member and inwardly oppositely curving surfaces above the head.

1,879,079. HINGE STRUCTURE. ROBERT F. CARPENTER and THOMAS F. ANDERSON, Cleveland, Ohio, assignors to The Sanymetal Products Co., Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 24, 1930. Serial No. 423,069. 2 Claims. (Cl. 16—154.)



1. A door hinge structure, comprising two cooperating hinge parts, there being a stationary part adapted for securement to a door post and a movable part adapted for securement to a door, said movable part including an anti-friction roller movable with the door and said stationary part including a rotatably adjustable cam member having a cam surface over which said roller travels and also including a rotatably adjustable cover member enclosing said roller and said cam member and rigidly secured to said cam member, whereby adjustment of said cover member effects adjustment of said cam member.

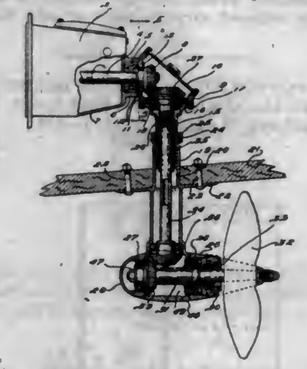
1,879,080. HINGE STRUCTURE. ROBERT F. CARPENTER and THOMAS F. ANDERSON, Cleveland, Ohio, assignors to The Sanymetal Products Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Jan. 24, 1930, Serial No. 423,069. Divided and this application filed Nov. 24, 1930. Serial No. 497,723. 2 Claims. (Cl. 16—154.)



1. A door hinge structure, comprising two cooperating hinge parts, one a stationary part adpted for securement to a door post and the other a movable part adapted for securement to a dooor, said stationary part having a vertically disposed, generally cylindrical socket, said movable part having a one-piece pintle member having a non-circular end portion for seating engagement in a correspondingly shaped opening in the door, a generally cylindrical end portion for rotatable seating engagement in said socket, and an intermediate collar, said pintle member being secured to said door with said non-circular pintle portion in said door opening by an anchoring plate member secured to said door and having a body portion overlying said pintle collar, said plate body portion being provided with an opening through which extends said generally cylindrical pintle portion.

1,879,081. PROPELLER DRIVING UNIT. MELBOURNE L. CARPENTIER, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,568. 6 Claims. (Cl. 115—34.)

1. In a motor boat, a driving member therein, a support for said driving member within the hull of said boat, a propeller driving mechanism including a pair of telescoping separable sections, one swingably mounted on said



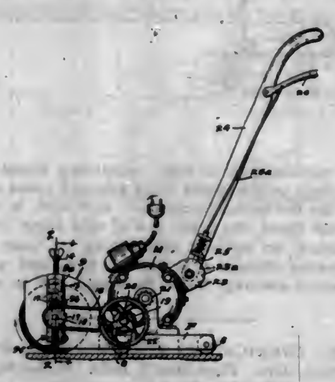
support, the other section being rigidly secured to said hull, and releasible means for rigidly fixing said swingable section to said support.

1,879,082. CLOSURE. LESLIE R. N. CARVALHO, Toledo, Ohio, assignor to The Closure Service Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 3, 1930. Serial No. 492,978. 5 Claims. (Cl. 215—43.)



1. In combination, a metal closure comprising inner and outer caps telescoped one within the other, each cap including circular top and depending flange portions, and means formed on the flange of the inner cap to provide part of a connection between the closure and a container to be sealed, one of said flanges having preformed ribs extending transversely thereof and operating to hold the caps against relative rotation.

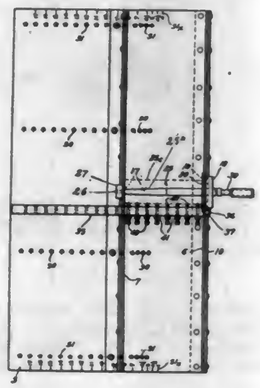
1,879,083. BUFFING AND ABRASIVE DEVICE. BENJAMIN A. CASPER, Minneapolis, Minn. Filed July 7, 1930. Serial No. 465,916. 4 Claims. (Cl. 15—98.)



1. A floor surfacing machine of the power driven type including a rotary spool arranged for rotation about an

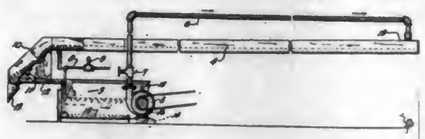
axis paralleling the floor and transverse to the direction of movement of the machine over said floor and abrasive material upon said spool in the form of a multiplicity of metallic filaments wound helically thereof so as to present spirally disposed abrasive edges of said filaments to said floor.

1,879,084. COTTON FIBER ROLLING DEVICE. HARVEY P. CHANEY, Los Angeles, Calif. Filed Apr. 6, 1931. Serial No. 528,042. 6 Claims. (Cl. 19—149.)



1. In a device of the kind described, a base plate, a plurality of upstanding guide plates mounted thereon, a substantially horizontal comb mounted upon and supported by said plates, a rotatable spindle also supported by said guide plates, said spindle being in spaced substantially parallel relation to the teeth of said comb, and said guide plates being adapted to form a guideway along which cotton may be fed to said spindle.

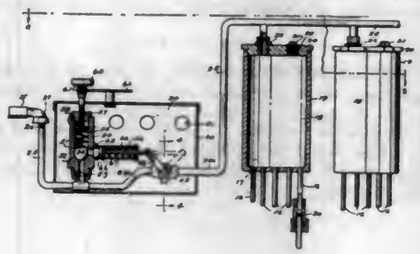
1,879,085. TREATING GRANULAR EDIBLE COMMODITIES. FRANK D. CHAPMAN, Berlin, Wis. Filed Oct. 13, 1930. Serial No. 488,217. 2 Claims. (Cl. 302—14.)



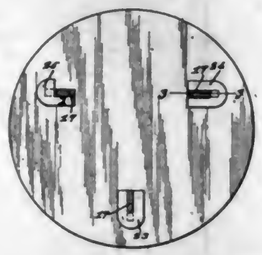
1. In combination, a tank containing liquid, a gradually inclined unobstructed flume disposed above said tank, a pump for delivering liquid from said tank to the upper end of said flume, the lower end of said flume being laterally widened, an inclined grid having its upper end disposed directly adjacent said widened flume end, and means for returning drainage liquid from said grid to said tank.

1,879,086. LUBRICATING SYSTEM. HENRY CHISHOLM, Cleveland, Ohio. Filed May 7, 1929. Serial No. 361,147. 9 Claims. (Cl. 184—7.)

1. In a lubricating system, the combination of a plurality of oil supply reservoirs, means for simultaneously pneumatically transmitting pressure to the oil in the reservoirs, oil supply lines leading from the reservoirs for connecting the reservoirs to bearing mechanisms to be lubricated and means associated with said pressure transmitting means to open the reservoirs to atmospheric pressure after a predetermined pressure is reached therein, said means being effective to maintain said reservoirs open to atmospheric pressure as long as a source of pneumatic pressure remains connected to the system.



1,879,087. BATHING GIRL TABLE OR STAND. CHARLES CHOMIK, Linnton, Oreg. Filed May 7, 1930. Serial No. 450,478. 1 Claim. (Cl. 45—48.)



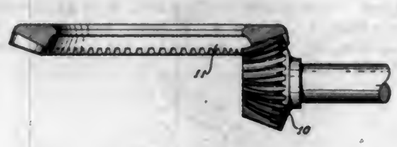
A table comprising a top, a trinity of cleats mounted at the under side of the top, two of the cleats having a recess each leading in from the end, the third cleat having a recess at its corner, said corner recess having a wall aligned with one wall of the recess in one of the first mentioned cleats, all of said recesses having under-cut wall surfaces, supporting members interlocking with each other and one of said supporting members having end portions adapted to enter the recesses of the cleats having aligned walls and the other supporting member having an end portion adapted to enter the recess of the remaining cleat.

1,879,088. SETTING TOOL. MARINUS CHRISTENSEN, Refugio, Tex., assignor of fifty per cent to B. F. Cowan, Refugio County, Tex. Filed Apr. 18, 1932. Serial No. 605,894. 7 Claims. (Cl. 166—10.)

1. A setting tool adapted for engagement with a packer barrel, including a setting stem, a tubular mandrel slidable non-rotatably therein, an expander head on said mandrel and clamping jaws mounted on said head and adapted to be expanded by said head to engage said packer barrel.



1,879,089. METHOD OF LAPPING GEAR SETS. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1931. Serial No. 517,519. 5 Claims. (Cl. 51—?78.)



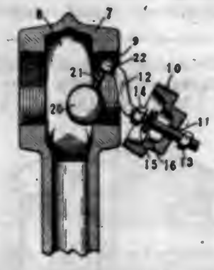
1. The method of lapping gear sets comprising coating one of the gears with a relatively soft metal, running the gears in mesh, applying a grinding compound between the teeth of the coated gear and the other gear, stripping the coating from the gear, again running the gears together uncoated, and applying a grinding compound between the teeth while the uncoated gears are running together.

1,879,090. METHOD OF PURIFYING ANTHRACENE AND OTHER SUBSTANCES. FRANCIS EDWARD CISLAK, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed July 7, 1930. Serial No. 466,047. 9 Claims. (Cl. 260—46.)

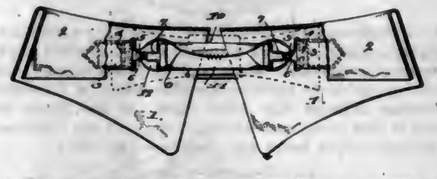
1. The process of purifying anthracene, which consists in treating with 4-hydroxy-4-methyl-2-pentanone anthracene which contains contaminants that are separated with it from coal-tar, and utilizing the solvent-power of said solvent to produce separation of purified anthracene from such contaminants.

1,879,091. AUTOMATIC AIR VALVE FOR HOT WATER RADIATORS. FRANK CLANCY, New York, N. Y., assignor to Sidney Michaels, New York, N. Y. Filed Feb. 11, 1930. Serial No. 427,682. 5 Claims. (Cl. 137—122.)

1. An attachment for a hot water radiator comprising a screw plug adapted to the threaded orifice in a radiator section, an air outlet tube adjustable through said plug and having an external screw threaded portion and a clamp nut on the outer end of said tube, the inner end of the tube being offset upwardly and provided with an air valve seat on a level above the outer end of the tube, a float suspended from the inner end of the tube and provided with a valve cooperating with said seat.

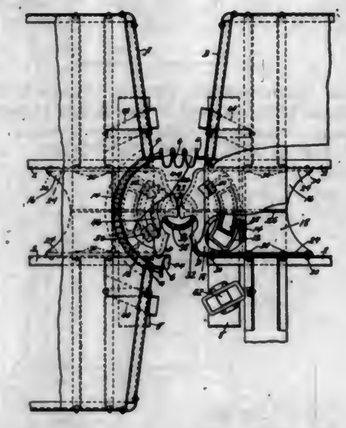


1,879,092. NECKTIE AND MEANS FOR ATTACHING SAME TO A COLLAR. HARRY A. CLARK, Detroit, Mich. Filed June 8, 1931. Serial No. 542,919. 3 Claims. (Cl. 2—141.)



1. The combination with a collar having a band with tie attaching loops secured thereto near its ends; of a tie connector having a laterally extending longitudinally yieldable element equipped with means for engaging said collar carried attaching loops, and a casing in which said connector is mounted to slide longitudinally, said casing being adapted for connection to a tie and to conceal the connector.

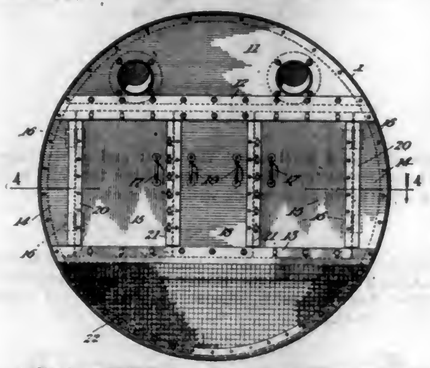
1,879,093. ARTICULATED CAR. ALLEN W. CLARKE, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,688. 24 Claims. (Cl. 105—4.)



1. In an articulated car, a plurality of car bodies, a truck for supporting the adjacent end portions of said bodies, a pair of spaced bolsters carried by the truck, body

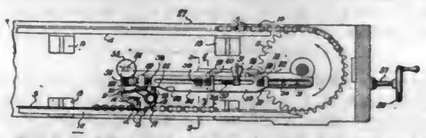
connection castings secured to the bodies at their adjacent end portions and arranged in substantially abutting relation, said castings each having a body center bearing in engagement with one of said bolsters.

1,879,094. DIAPHRAGM FOR LOCOMOTIVES. NATHANIEL P. CLATTERBUCK, Dobbs Ferry, N. Y. Filed Apr. 22, 1931. Serial No. 532,079. 3 Claims. (Cl. 110—122.)



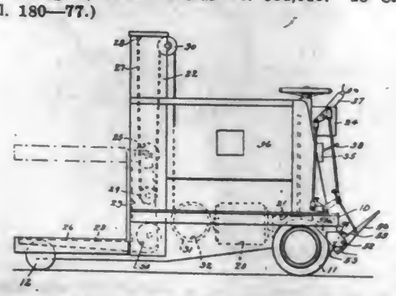
1. A diaphragm for locomotives, comprising a stationary top plate, stationary side plates, doors hinged for inward movement to the inner edges of the side plates and partly spanning the space between the side plates, a filler plate extending between the inner edges of the doors and bolted to said edges, and means for securing the diaphragm to the locomotive boiler shell adjacent the stack.

1,879,095. SHEET DELIVERY CONTROL. LESLIE W. CLAYBOURN, Milwaukee, Wis., assignor to Claybourn Process Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 25, 1929. Serial No. 402,480. 10 Claims. (Cl. 271—79.)



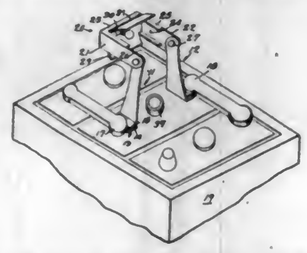
1. In sheet-delivery mechanism, the combination with the sheet-gripper mechanism, of cam control means for said gripper mechanism, and means for adjusting said cam control means while the delivery mechanism is in operation.

1,879,096. INDUSTRIAL TRUCK. CLYDE E. COCHRAN, Cleveland, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 1, 1931. Serial No. 554,519. 15 Claims. (Cl. 180—77.)



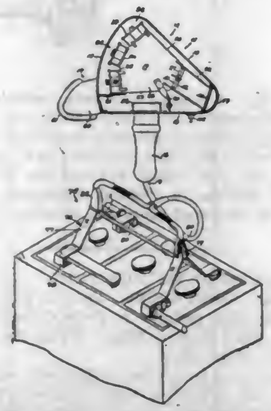
1. In an industrial truck, the combination of a motor, a controller for governing the speed of said motor, an operator's support, mechanism connecting the controller with the operator's support and adapted to operate the controller to cause the motor to rotate at a predetermined speed, and means whereby the controller may be operated independently of said operator's support.

1,879,097. STORAGE BATTERY INSPECTION LAMP. IRVEN E. COFFEY, Santa Ana, Calif. Filed Feb. 13, 1931. Serial No. 515,549. 7 Claims. (Cl. 240—2.)



1. A storage battery inspection lamp comprising in combination a lamp housing having a lamp mounted therein and with depending side straps, a leg pivotally connected to each side strap by aligned pivots, each leg being resilient and having a jaw at its lower end, the said jaws on account of their resilient legs tending to move outwardly and adapted to grip a battery terminal and form a support for the housing, each leg and each side strap forming an electrical connection, and a connection from each side strap to the opposite terminals of the lamp.

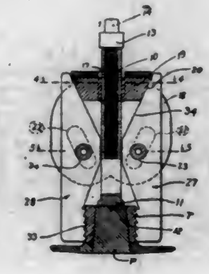
1,879,098. LUMINOUS INDICATOR FOR ELECTRICAL APPARATUS. IRVEN E. COFFEY, Santa Ana, Calif. Filed Feb. 13, 1931. Serial No. 515,550. 19 Claims. (Cl. 175—183.)



1. A method of indicating conditions of an electric circuit, comprising illuminating a plurality of sources of light by electric current through such circuit, such illuminations having different colors, and determining by the comparison of colors a difference between a normal and an abnormal condition.

1,879,099. BATTERY TERMINAL PULLER. IRVEN E. COFFEY, Playa Del Rey, Calif. Filed Apr. 29, 1931. Serial No. 533,689. 7 Claims. (Cl. 29—85.)

1. A battery terminal puller comprising a rotatable jack screw adapted to be positioned on a battery post, a nut threaded onto the screw, a yoke carried by the nut having downwardly convergent guides, and jaws having teeth engageable upon a battery terminal movable upon said downwardly convergent guides, said jaws having portions parallel to their respective guides engageable upon the nut to maintain the jaws in upright positions during their adjustments on the guides.



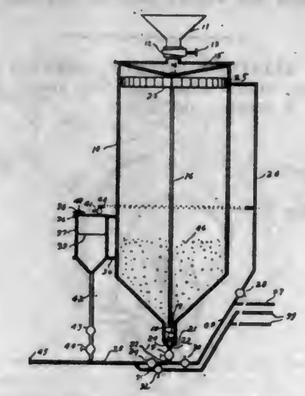
1,879,100. FASTENER. ALLAN B. COLBY, Providence, R. I. Filed May 31, 1930. Serial No. 458,555. 5 Claims. (Cl. 24—218.)



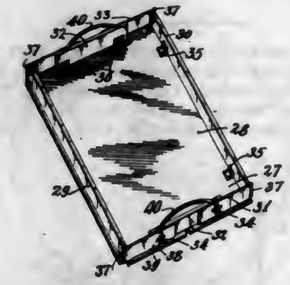
1. A fastener comprising, in combination, a stud having a head, a neck and a shank, a socket having top and bottom plates and a securing plate each having an opening therein, resilient jaws between said top and bottom plates, said openings in the top and bottom plates being staggered, whereby the edge of the opening in the bottom plate at one point extends closer to the axis of the stud than the edge of the opening in the top plate at a point in the plane with the axis of the stud and the first point, whereby a relative movement tending to tip one side of the socket toward the end of the stud is prevented by the edge of the opening in the top plate engaging the stud head and the edge of the opening in the bottom plate engaging the stud at the tapered portion of the neck, the engagement of the edge of the opening in said bottom plate with the stud being in the plane of such plate.

1,879,101. VEHICLE WASHING APPARATUS. JAMES ANDREW COLEMAN, Cleveland, Ohio. Filed Dec. 11, 1930. Serial No. 501,694. 3 Claims. (Cl. 299—84.)

1. In a vehicle washing apparatus, a chamber, means whereby pulverized wood, sawdust or the like may be fed into said chamber, the bottom of said chamber converging into an exit port within said chamber grinding means in said exit port of said chamber, an air pressure conduit, an air turbine within said chamber for operating said grinding means, a by-conduit leading air pressure from said air pressure conduit to operate said turbine, said grinding means serving to force said pulverized wood or sawdust out of said chamber into said air pressure conduit, the air pressure from said by-conduit also serving to assist in forcing said pulverized wood from said chamber into said conduit, and means leading water into said air pressure conduit.

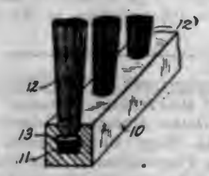


1,879,102. FOLDING TRUNK. JOHN J. COLLINS, New York, N. Y. Filed Sept. 29, 1930. Serial No. 485,063. 2 Claims. (Cl. 190—35.)



1. A collapsible tray for a collapsible trunk, comprising a flat rectangular base, front and rear sides hingedly mounted at bottom edges on the top and near the front and rear edges respectively of said base, and ends between said sides, each comprising a central section hingedly connected at its bottom edge on the top and near the ends of said base, end sections hingedly connected on the ends of said front and rear sides, and coacting means on said central and end sections to hold these parts together.

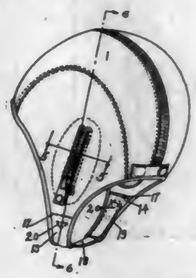
1,879,103. BRUSH AND METHOD OF HOLDING BRISTLES IN SAME. JAMES F. CONNOR, Cleveland, Ohio. Filed Mar. 23, 1931. Serial No. 524,580. 2 Claims. (Cl. 15—190.)



1. In a brush, the combination with a back member having a socket therein, said socket opening outwardly at one side of the brush and extending only partially therethrough,

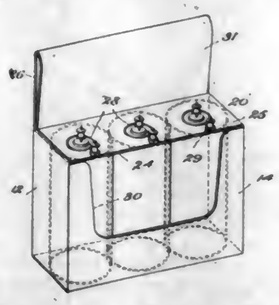
a bristle tuft folded within the socket and a retainer comprising a short length of wire extending across the fold, the back member being deformed within the socket to provide shoulders that engage the wire only and hold it in place.

1,879,104. AVIATOR'S HELMET. STEWART S. COOPER, Cincinnati, Ohio. Filed Apr. 18, 1930. Serial No. 445,365. 6 Claims. (Cl. 2—6.)



1. An aviator's helmet or the like having a head enclosing portion and a portion engaging beneath the chin, the said helmet being split in the head portion from the rear toward the front thereof, and means for joining the split edges thereof, a supplementary flap within the helmet underlying the meeting edges of said split portion, said portion engaging beneath the chin comprising interspaced pockets and a chin strap entering said pockets and resiliently held therewithin.

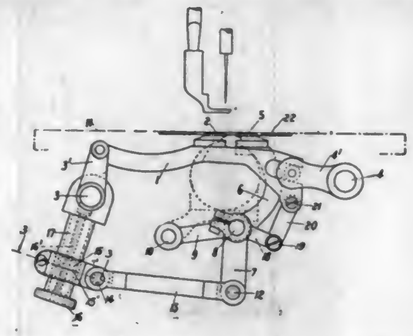
1,879,105. SHIPPING AND DISPLAY BOX FOR DRY CELLS. PETER CORIGLIANO, Brooklyn, N. Y., assignor to Bright Star Battery Company, Hoboken, N. J., a Corporation of New York. Filed Nov. 15, 1928, Serial No. 319,705. Renewed June 24, 1932. 6 Claims. (Cl. 206—44.)



1. A display container of the folding box type for a plurality of dry cells, comprising two long sides and two narrow sides, a display opening in a long side, and flaps on said sides adapted to fold over the open top of the container and form a top cover flush with the upper edges of the sides, said flaps having separate openings therein in position to register with concentric and peripheral terminals of cells in the container, in the closed position of said flaps.

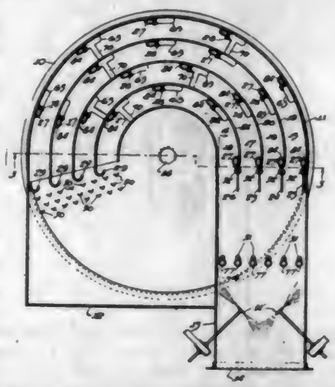
1,879,106. DIFFERENTIAL FEEDING MECHANISM FOR SEWING MACHINES. HERBERT CORRALL, Helensburgh, and JAMES HEGGIE, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 7, 1931, Serial No. 528,261, and in Great Britain Apr. 9, 1930. 5 Claims. (Cl. 112—209.)

1. Differential feed mechanism for sewing machines, comprising a feed advance rock shaft, a feed lift rock shaft, a four motion feed-bar having operative connections with said shafts, a main feed-dog carried by said feed-bar, an auxiliary feed dog, a two-armed lever carrying said



auxiliary feed-dog, an adjustable operative connection between said lever and said feed advance rock shaft, and a floating fulcrum for said lever connected to participate in rising and falling movements of said main feed bar.

1,879,107. AIR OR GAS WASHER. DAVID H. COUCH, Darien, Conn. Filed Nov. 7, 1930. Serial No. 494,153. 17 Claims. (Cl. 183—21.)

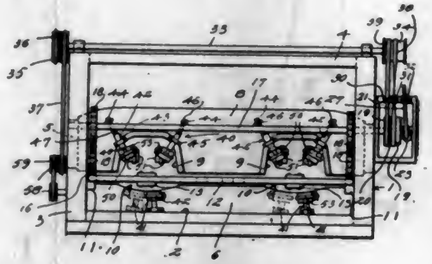


1. An air or gas washer including a gas cleaning chamber, a foul gas inlet to the chamber, a clean gas outlet, and means for producing a forced draft through the chamber, said chamber comprising a plurality of circularly curved gas passages bounded by upright circularly curved plates and a bottom plate having openings spaced apart along each of said passages, means for wetting the convex sides of said curved surfaces to absorb the impurities of the gases passing through the chamber, a plurality of upright pipes located at spaced intervals along the concave sides of said curved surfaces, each of said pipes having vertically spaced perforations facing in the direction of gas flow, and a plurality of vertical trough-like members disposed along the concave surface of each of said curved plates, one between each of the openings in the bottom plate and one of said upright pipes and each directed toward said gas inlet.

1,879,108. SHOE LAST BUFFING OR POLISHING MACHINE. WALTER G. COUSINS, Brockton, Mass. Filed Nov. 14, 1929. Serial No. 407,302. 6 Claims. (Cl. 51—84.)

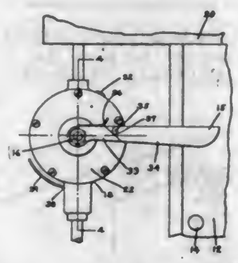
1. In a last polishing machine, a reciprocable last carrying frame, a wall disposed beneath said frame and arranged

to have the frame moved transversely thereof, a wall disposed above the frame substantially parallel with the first mentioned wall and adapted to be vertically adjusted relative thereto, said last wall having an arch formed therein to pass a last carried by the frame, and a plurality of rotatably mounted polishing elements carried by the walls



above and below the last for contact therewith, each of said polishing elements comprising an arm mounted to move toward or away from the last and a rotating member carried by the arm and supported for oscillation in a plane transversely of the last, said rotating member being adapted to carry an abrading element.

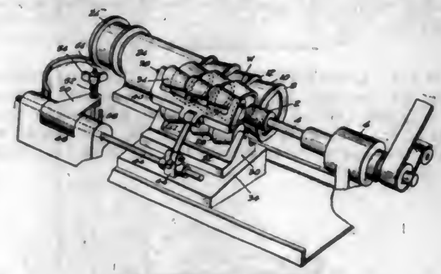
1,879,109. SOLUTION DISPENSING ATTACHMENT. JOHN COY, Hartford, Conn. Filed June 12, 1931. Serial No. 543,927. 4 Claims. (Cl. 221—116.)



3. A dispensing valve for delivering cleansing solution to a dish washing machine comprising a casing structure enclosing a horizontally disposed cylindrical valve chamber, provided with an inlet at the upper end and a vent opening adjacent thereto, and having a part of the bottom wall open for the full length for discharge, an auxiliary chamber extending along said bottom wall and provided with an open upper end that registers with said open part and having a bottom that is provided with a discharge opening, a hollow valve rotatively housed in said casing, provided with ports for alternate communication with said inlet and open part for filling and for discharge and arranged to cover said vent while filling and to uncover the same for discharge, cooperating spring and stop means tending to hold said valve to the filling position, and a crank-arm for use in rotating the valve from the filling to the discharge position.

1,879,110. GRINDING. RAYMOND H. CRAMER, Newark, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 21, 1930. Serial No. 490,146. 17 Claims. (Cl. 51—103.)

1. The method of grinding simultaneously the tapered bore walls of a plurality of rings, which consists in supporting the rings in a canted position such that one element only in the tapered bore wall of each ring is in a given straight line, rotating the rings while constantly keeping one element of each ring in the given straight line,



and presenting a grinding tool to all the bore walls for contact with the rings at the common line of said elements; substantially as described.

1,879,111. SEED PLANTER. HENRY F. CRANDALL, Silver Cliff, Wis., assignor of one-half to John T. Corr, Racine, Wis. Filed July 3, 1930. Serial No. 465,591. 20 Claims. (Cl. 111—74.)

19. In a seed planter, a rotatable seed chamber having seed receiving buckets within its walls, a hopper within the chamber, and a shoe upon the inner wall of the chamber adapted to retain seed in said buckets until such buckets reach a position above the hopper.

1,879,112. SELF-CLEANING RAKE. HURVE L. CRESS, Jr., Hygiene, Colo. Filed Feb. 10, 1931. Serial No. 514,846. 2 Claims. (Cl. 55—146.)

1. In combination with a rake structure including a handle and a rake head having a plurality of spaced tines, a cleaning member slidably engaging the tines of the rake head, an operating member, connecting means connecting

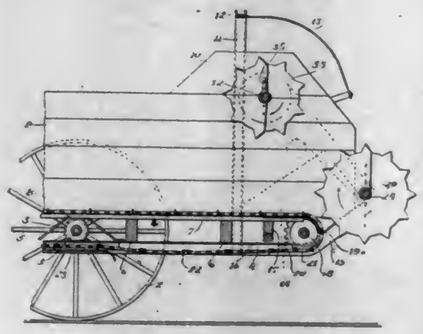
said operating member with said cleaning member, a V-shaped bracing member secured to the cleaning member and upstanding therefrom, and an elongated stop member secured to said bracing member and engaging said rake head upon downward movement of said cleaning member whereby to limit the movement of said operating member in one direction.

1,879,113. LIQUID-PROOF CARTON. WILLIAM EDMUND JACOBS CROSSBY, Harrow, England, assignor to Mono Containers Limited, London, England, a Registered Company of Great Britain. Filed Oct. 23, 1929, Serial No. 401,737, and in Great Britain Oct. 30, 1928. 5 Claims. (Cl. 229—56.)



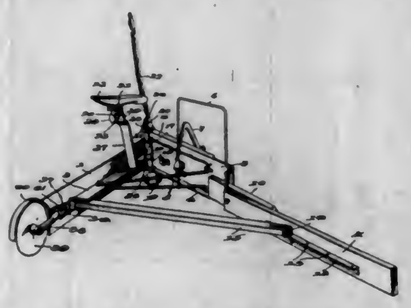
1. A carton comprising an elongated container of curved cross-section of waterproof paper material and a closing cap also of paper material adapted to be inserted into the open mouth of the container and comprising a disc-like body portion, a circumferential flange extending above the central plane of the body portion of the disc closure member and a circumferential flange extending below said plane, the container having an integral internally projecting annular bead formed in the wall of said container approximately in said central plane leaving a skirt on the container extending from the bead to the rim of the mouth of the container, said skirt adapted to be folded over the circumferential flange which extends above the central plane of the body portion of the cap.

1,879,114. MANURE SPREADER. CHARLES F. CRUMB, Chicago, and JOHN A. LATOWSKI, Harvey, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed May 12, 1930. Serial No. 451,580. 8 Claims. (Cl. 275—6.)



1. In a manure spreader, a load carrying body, means for delivering material in said body rearwardly, a wide spread spiral beater mounted at the rear of said body adjacent the bottom of the body whereby the material in the body is delivered directly thereagainst, a second spiral beater mounted forwardly of the wide spread beater and vertically thereabove, and means for driving the beaters with the adjacent portions of the respective beaters moving in opposite directions.

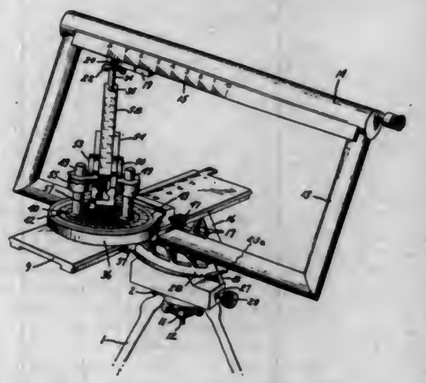
1,879,115. TERRACING-DITCHING AND GRADING MACHINE. CHARLES W. CUNDIFF and WILLIAM A. STEELE, Owensboro, Ky., assignors to Owensboro Ditcher & Grader Co., Inc., Owensboro, Ky., a Corporation of Kentucky. Filed Apr. 18, 1930. Serial No. 445,444. 20 Claims. (Cl. 37—174.)



4. In a grading machine of the character described, a bearing support, a rod slidable through said bearing support, a wheel secured to the lower end of the rod, a pivotally mounted lever, and a cam connecting the lever with the rod for adjusting the rod and bearing support relative to each other.

7. In a grading machine of the character described, the combination of a landside, a bracket connected with the landside, a shaft journaled in the bracket, a coulter connected with the shaft and adjustable to different oblique angles, and means for holding the shaft and coulter in an adjusted position.

1,879,116. CALCULATING GONIOMETER. PHILIP DALTON, Schenectady, N. Y. Filed May 2, 1929. Serial No. 359,815. 22 Claims. (Cl. 33—67.)



1. A measuring device comprising a sighting device arranged for rotation in a given plane about a given axis, a protractor mechanism, and means comprising elements including an extensible member and two universal joints for connecting said telescope with said protractor.

1,879,117. ADJUSTABLE GOLF CLUB. EARL JAMES DAVIDSON, Detroit, Mich. Filed Sept. 8, 1930. Serial No. 480,529. 3 Claims. (Cl. 273—79.)

1. In an adjustable golf club, a hollow shaft, a head having a socket therein, a sleeve secured to and extending from one end of the shaft into the socket to rotatably connect the head and shaft, a rod including a flexible section having one end secured to the head and extending through said sleeve and shaft, means at the other end of the rod by which the latter may be rotated to adjust the head

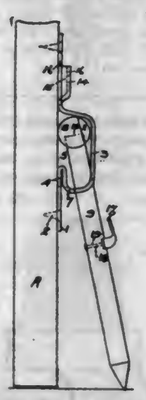


angularly, with respect to the shaft axis, and means providing a detachable interlocking engagement between the head and shaft to prevent rotation of the rod.

1,879,118. MOTOR FUEL. JOSEPH G. DAVIDSON, Yonkers, N. Y., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Dec. 27, 1928. Serial No. 328,856. 2 Claims. (Cl. 44—9.)

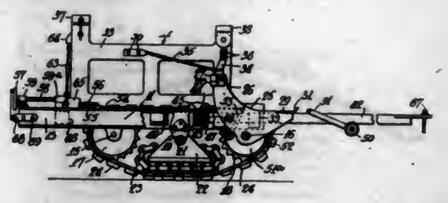
1. A motor fuel consisting of a blend of casing head gasoline having a distillation end-point not higher than about 330° F. and another liquid acting to diminish spontaneous evaporation thereof without substantially raising the distillation end-point or increasing detonation, said other liquid consisting essentially of plural-carbon-atom side chain alkyl benzenes.

1,879,119. DOORSTOP. ERIK W. DAUBLE, Detroit, Mich. Filed Feb. 2, 1932. Serial No. 590,430. 4 Claims. (Cl. 292—338.)



1. A door stop comprising a plate adapted to be secured to one side of a door, said plate having a forwardly flexed portion intermediately of its height, said forwardly flexed portion being vertically slotted so as to form two spaced and vertically elongated bearings between said flexed portions and said door, a plate extension in alignment with the plate extremities and projecting upwardly from the bottom of said forwardly flexed portion, a trunnion rotatable in said bearings, and a holding member extending from said trunnion between said spaced bearings, said plate extension being vertically slotted from its upper extremity, said trunnion having a substantially circular centre portion and aligned flat faces formed at its extremities, said central circular portion of the trunnion being adapted to lie in the plate extension slot and the flat faces at the trunnion extremities being adapted to rest in front of the plate extension thereby holding said trunnion against rotation when positioned in front of said plate extension.

1,879,120. TREE REMOVING APPARATUS. PAUL H. DAVEY, Kent, Ohio. Filed Aug. 20, 1930. Serial No. 476,530. 8 Claims. (Cl. 214—3.)



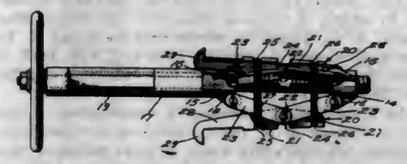
1. Apparatus for removing trees with an attached ball of earth and embedded roots, said apparatus including a caterpillar vehicle having a tread chain and sprocket wheels therefor, and a super-structure pivoted for vertical tilt on said vehicle and having tree-trunk and ball engaging cradles and trunk securing means of a height sufficient to engage the trunk of the tree when the super-structure is tilted upright while the wheels are outside the periphery of said ball, said super-sructure being pivoted on the same axis as the adjacent sprocket wheels, so that the wheels and tread chain form a stable base of support for lifting the ball when the tree trunk is tilted toward the vehicle.

1,879,121. FINISHING WELT AND METHOD OF MAKING THE SAME. ARTHUR E. DAVY, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Jan. 20, 1930. Serial No. 421,886. 9 Claims. (Cl. 155—184.)



1. A finishing welt having central and lateral bead fillers, a sheathing strip and a main body strip having registered edges attached to one edge of said central filler, said sheathing strip being wrapped about said central filler and said main strip being wrapped about said lateral filler, the other edge of the sheathing strip being concealed between two portions of the main strip, and a line of stitching passing through the main strip and said edge of the sheathing strip.

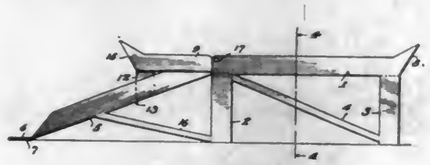
1,879,122. CLAMP FOR USE IN WELDING. CHARLES C. DAVIS, Philadelphia, Pa. Filed May 29, 1931. Serial No. 541,102. 7 Claims. (Cl. 113—102.)



1. In a clamping apparatus for holding pipe flanges and the like while welding the same to an associated pipe joint, a structure including a plurality of circumferentially

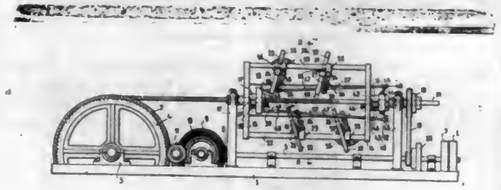
spaced centrally pivoted clamping arms, said structure adapted to be bodily inserted into the bores of the flange and pipe, means for simultaneously moving the arms radially, and means yieldably maintaining the arms with the ends thereof which are adapted to be first inserted in the bores of the flange and pipe upon a radius slightly less than the radius upon which the opposite ends thereof are disposed.

1,879,123. PORTABLE REPAIR STAND. DANIEL STEPHEN DAVIS, Wheeling, W. Va. Filed May 28, 1930. Serial No. 456,640. 2 Claims. (Cl. 254—88.)



1. A stand of the kind described comprising a horizontally disposed elevated trough closed at one end and open at its opposite end, an inclined runway leading from a foundation to the open end of the trough, and a closure extension for the open end of the trough and detachably supported to provide a continuation of the latter over the runway.

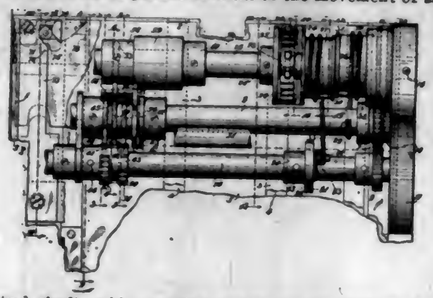
1,879,124. TAPING MACHINE. GAETANO DE DOMINICIS, Turin, Italy. Filed Mar. 13, 1930, Serial No, 435,606, and in Italy Mar. 15, 1929. 14 Claims. (Cl. 117—41.)



1. A taping machine comprising means for feeding longitudinally a core to be taped, a cage encircling said core, means for producing a respective rotation of said cage and core, tape supplying means mounted in said cage at points arranged along a helix, said tape supplying means being capable of oscillation to adjust the angularity of tape supplied thereby with respect to axis of said core, and adjustable means engaging said supplying means to control their angularity, the manipulation of said adjustable control means altering the angularities of said supplying means through different extents to cause each of them to deliver its tape under correct angularity in accordance with the diameter of the core where said tape is wound on said core.

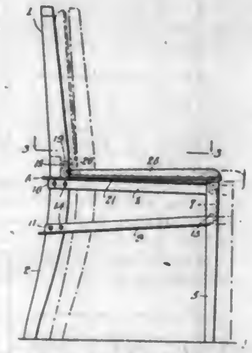
1,879,125. COMPUTING MACHINE. GUSTAVE O. DEGENER, Brooklyn, N. Y., and JULIUS C. HOCHMAN, Bradley Beach, N. J., assignors of one-half to Julius C. Hochman and one-half to Maurice Samburg, New York, N. Y. Filed Oct. 18, 1922. Serial No. 595,221. 35 Claims. (Cl. 235—139.)

1. In a computing machine, in combination, a control shaft, a succession of teeth extending circumferentially thereabout, an operating shaft, a pawl mounted thereon for coaction with said teeth to ratchet thereover when the control shaft is rotated in one direction and to block said shaft against return rotation, a shifting member mounted on said operating shaft, and means on said control shaft to actuate said shifting member at a predetermined part in the rotary path of said shaft for shifting said pawl to clear said teeth to permit reversal of the movement of said



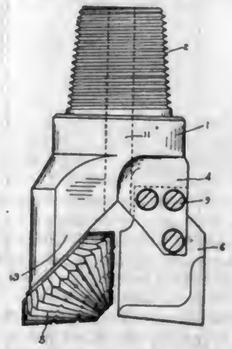
control shaft, said actuating means for the shifting member including a second succession of teeth associated with the first mentioned teeth.

1,879,126. CHAIR. LOUIS DELLERT, New York, N. Y. Filed Apr. 1, 1930. Serial No. 440,797. 11 Claims. (Cl. 155—2.)



1. A chair comprising a back having a pair of legs, a pair of front legs spaced further apart than the rear legs, and a substantially U-shaped brace connecting the rear legs and extending to the front legs, means for connecting said brace to each of said legs, and a seat carried by said legs immediately above said brace.

1,879,127. COMBINATION ROLLING AND SCRAPING CUTTER BIT. ROBERT W. SCHLUMPF, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed July 21, 1930. Serial No. 469,301. 4 Claims. (Cl. 255—61.)



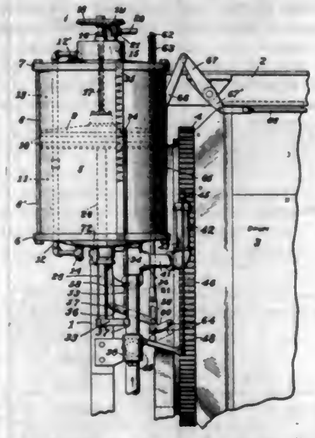
1. An earth boring drill including a head, a pair of downwardly projecting arms thereon, an approximately frusto-conical rolling cutter mounted upon one of said arms, and a flattened scraping blade secured upon the other of said arms.

1,879,128. CIGARETTE. ERNEST W. DESPER, Worcester, Mass. Filed Oct. 16, 1929. Serial No. 399,934. 8 Claims. (Cl. 131—52.)



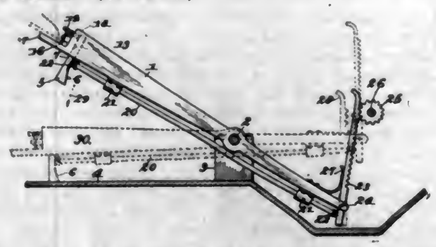
1. A cigarette having a paper wrapper impregnated with a mixture of substances comprising a tungstate and a sulphate, which become decomposed when the wrapper is burned and form tungstic oxide, and a borate and a phosphate which form a cement for holding the particles of the oxide in the form of a heat insulating enclosure for the burning filler.

1,879,129. WATER MEASURING TANK FOR CONCRETE PAVERS. FLOYD W. DE VINNEY, Nunda, N. Y., assignor to The Foote Company, Inc., Nunda, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,179. 18 Claims. (Cl. 221—95.)



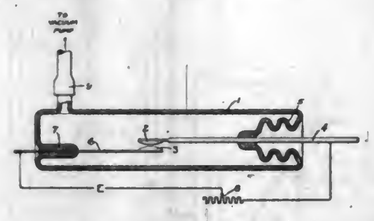
1. A water tank having a piston therein, means for adjusting and setting the piston to predetermine the capacity of the tank, an inlet and discharge for said tank, auxiliary piston means for automatically cutting off the supply to said tank after the tank is filled and manually operative means for discharging the contents of the tank.

1,879,130. ENGINE STARTER. FEDERICO G. DIAGO, Habana, Cuba. Filed June 22, 1931. Serial No. 546,117. 8 Claims. (Cl. 74—7.)



1. An engine starter comprising a pivoted lever, engine actuating means carried by said lever to cause turning of the engine crank shaft upon rocking of the lever on its pivot in one direction, abutment means toward which a part of the lever is movable during said rocking, and means reaching from said part of the lever to said actuating means being operated by engagement with said abutment means for shifting said actuating means away from the crank shaft near the end of the rocking of the lever in said direction.

1,879,131. METHOD OF DEGASSING VACUUM APPARATUS. GÜNTHER DOBKE, Reinickendorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 17, 1931, Serial No. 581,558, and in Germany Dec. 24, 1930. 4 Claims. (Cl. 200—144.)

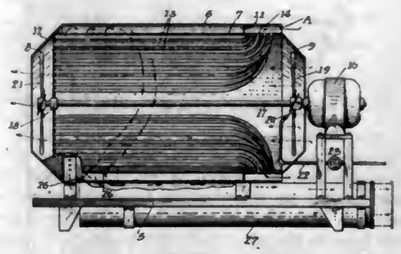


1. A method of degassing the contact structure of a vacuum switch including an envelope, a pair of contacts mounted therein and means resiliently supporting one of said contacts, which comprises separating said contacts a predetermined distance, applying an electric potential across said contacts of such magnitude that the electrostatic forces between the same overcome the bias of said resilient support resulting in rapid vibratory engagement of said contacts and heating thereof by arcing, and evacuating the evolved gases from said envelope.

1,879,132. ARYLSULPHAMINO - ALPHA - NAPHTHOL SULPHONIC ACIDS. CARL DORMAIER, Leverknausen, near Cologne-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 1, 1929, Serial No. 404,209, and in Germany Nov. 6, 1928. 5 Claims. (Cl. 260—128.)

1. Process which comprises reacting upon an arylsulphamino-naphthalene sulphonic acid containing at least two sulphonic acid groups, at least one of them standing in an alpha-position of the naphthalene nucleus with a caustic alkali at a temperature between about 140 and about 220° C.

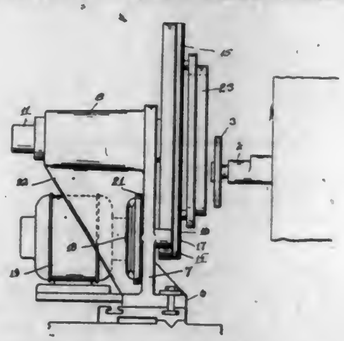
1,879,133. AIR CONDITIONER. CLEMENT L. DORLAND, Bakersfield, Calif. Filed Nov. 6, 1931. Serial No. 573,445. 3 Claims. (Cl. 62—190.)



3. In a device of the character described, an outer shell having a forwardly formed guard thereon, an inner shell spaced from said first mentioned shell and having a rearwardly formed guard thereon, said inner shell having a plate secured to one end thereof, a shaft ex-

tending through said plate and axially arranged in said inner shell, a pair of fans secured to said shaft at points adjacent said guards, and means for rotating said shaft, a nozzle positioned within said inner shell and adapted to conduct a spray of water against one of said fans, and pipes secured to said plate and having their opposite ends curved and connected to said inner shell at the rear portion forming an air intake.

1,879,134. CYLINDRICAL GRINDING ATTACHMENT FOR SURFACE GRINDERS. WARNER L. DOLPH and NORMAN H. LEWIS, Rochester, N. Y. Filed Apr. 7, 1930. Serial No. 442,319. 8 Claims. (Cl. 51—105.)



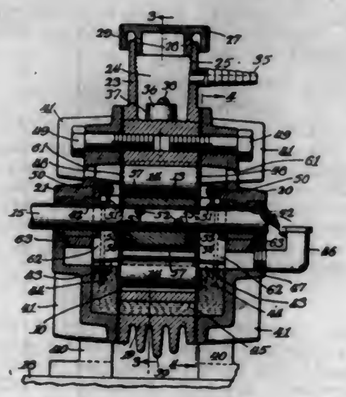
1. The combination with a grinding machine having a vertically adjustable rotating grinding wheel and a bed plate adapted to be adjusted laterally with relation to said grinding wheel and moved longitudinally toward and away from said grinding wheel, of an attachment comprising a standard adapted to be clamped in place on said bed plate driving means fixedly supported on said standard, a hollow spindle mounted to rotate in said standard, work holding means provided within and without said hollow spindle; and pulley means carried by the work supporting end of said hollow spindle and surrounding the work holding means and connected to said driving means to rotate said hollow spindle independent of said grinding wheel while moving the attachment with the bed plate toward and away from the grinding wheel and bringing the grinding wheel in frictional contact with the work supported by said attachment.

1,879,135. SEDIMENTATION TANK. JOHN R. DOWNES, Middlesex, and SAMUEL F. MILLER, Bay Head, N. J., assignors to Pacific Flush-Tank Company, New York, N. Y., a Corporation of Illinois. Filed Mar. 22, 1929. Serial No. 349,019. 10 Claims. (Cl. 210—3.)



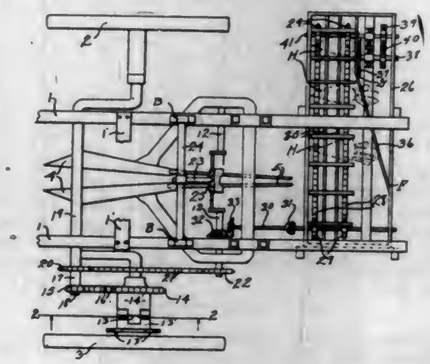
1. A sedimentation tank, a sewage inlet and an outlet for clarified liquid, a sump at the end of the tank, a scraper having an intermittent reciprocatory movement arranged to move sludge to the sump and having a part arranged to be moved periodically between the tank and the sump, and means connected with one end of the sump for evacuating the sump during the periods when said scraper part is between the tank and the sump, said scraper part being cut away at the other end of the sump to form a restricted passage between the tank and the sump.

1,879,136. BLOWER AND VACUUM PUMP. JOHN DUBAOVIN, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1929. Serial No. 414,275. 9 Claims. (Cl. 230—152.)



1. In a pump of the class described, a casing providing a pump chamber with inlet and exhaust passages and including a hollow boss for the latter passage, a connection in the side of the boss for delivering the exhaust gas, and an adjustable closure for the end of the boss comprising a threaded cap having side perforations adapted to be uncovered as the cap is moved out from its seated position.

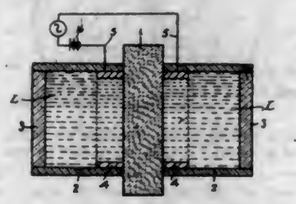
1,879,137. BEET HARVESTING MACHINE. THOMAS DUGAN, Wichita, Kans., assignor of one-half to Robert Benjamin Davis, Wichita, Kans. Filed Oct. 6, 1930. Serial No. 486,633. 3 Claims. (Cl. 55—9.)



1. In combination with a beet harvesting machine having a frame and a pair of plows and an axle and wheels to carry the same, a train of sprocket wheels and chains extending from one of the wheels as a master-wheel, and a clutch to control the train, a crank shaft trunnioned on the frame of the machine and geared in the train, a kick element carried by the crank, the said element having a body portion and a rod extending therefrom and rigidly attached, a guide element rockably trunnioned on the frame and in which the rod slidably engages as a stabilizer for the kick element, the body portion having a shovel to slidably engage thereon, a finger element attached to the rear portion of each of the plows, rearwardly extending and slanting upward as receiving means for the beets as they are pulled by the plows, the beets

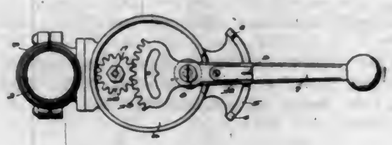
being moved rearward by the kick element, and a conveyor carried by the frame of the machine to receive the beets, and a cutting element to remove the tops therefrom as conveyed, a shaft and gears connecting the same to the crank shafts as actuating means for the conveyor, and the cutting mechanism actuated by the movement of the conveyor, substantially as shown.

1,879,138. METHOD OF AND MEANS FOR CONTROLLING LIGHT. WILLIAM HENRY ECCLES, London, and ALFRED WHITAKER, West Drayton, England, assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1928, Serial No. 315,048, and in Great Britain Oct. 29, 1927. 12 Claims. (Cl. 88—61.)



1. The method of controlling the intensity of a beam of light by means of a material exhibiting the Pockels effect which consists in passing said beam of light through said material along an axis in which the Pockels effect preponderates over the second order effect and applying voltage variations to said material.

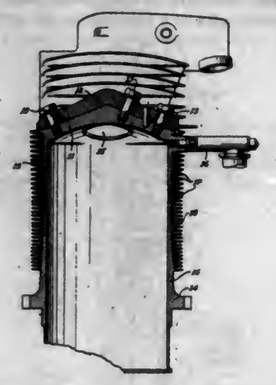
1,879,139. SIGNAL SYSTEM. CHARLES F. A. EDDY, New London, Conn. Filed May 29, 1930. Serial No. 456,980. 4 Claims. (Cl. 116—46.)



4. In a signal system, the combination with a supporting housing constructed and arranged to be secured to the side of a steering column, of means for actuating a signal indicator including a drive-shaft journaled in the housing, a drive pinion fixed on the drive-shaft, a control lever pivoted to the housing in position to extend laterally from the steering column, a sector carried by the lever and meshing with the pinion, and a quadrant carried by the outer side of the housing and cooperating with the lever.

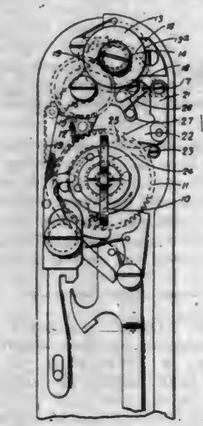
1,879,140. INTERNAL COMBUSTION ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1931. Serial No. 508,722. 5 Claims. (Cl. 257—261.)

1. In an internal combustion engine, a cylinder, heat transfer fins around the combustion chamber portion of the cylinder, and coating means for the cylinder and fins around the combustion chamber portion of the cylinder,



said coating means being thicker adjacent the cylinder wall and formed of metal having a higher rate of heat flow than the cylinder and fins.

1,879,141. COMBINED SHUTTER AND FILM WINDING MECHANISM FOR PHOTOGRAPHIC CAMERAS. VALENTINE WILLIAM EDWARDS, London, England, assignor to The Houghton Butcher Manufacturing Company Limited, London, England, an English Limited Liability. Filed June 18, 1931, Serial No. 545,281, and in Great Britain July 18, 1930. 8 Claims. (Cl. 95—31.)

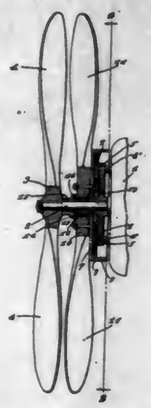


1. A roll-film photographic camera comprising a focal-plane shutter, a shutter winding spindle, a film winding spindle, combined shutter and film winding mechanism and disconnecting means for freeing the film winding spindle from the winding mechanism when the correct length of film has been wound for a new exposure, irrespective of the increasing diameter of the roll of film on the film winding spindle, and before the shutter is fully set.

1,879,142. PROPELLER. MATHEW M. EGAN, Fort Worth, Tex. Filed Feb. 17, 1930. Serial No. 429,171. 1 Claim. (Cl. 170—165.)

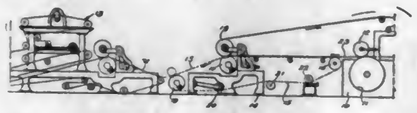
A propulsion for flying machines comprising an auxiliary propeller secured to a power shaft, an anti-friction bearing on the shaft and spaced from the hub of the propeller, a main propeller having the hub thereof mount-

ed on the bearing for free rotation relative to the shaft, a spacing sleeve on the shaft and engaging at one end the hub of the auxiliary propeller and having anti-friction engagement with the bearing at the other end, and



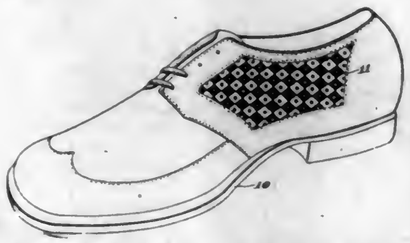
a planetary transmission between the shaft and the hub of the main propeller for rotating the latter at a different speed of rotation from the speed of rotation of the auxiliary propeller and in a reverse direction thereto.

1,879,143. BOARD MACHINE. CHARLES L. ELLIS, Bradford Hills, Pa., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,215. 10 Claims. (Cl. 92—42.)



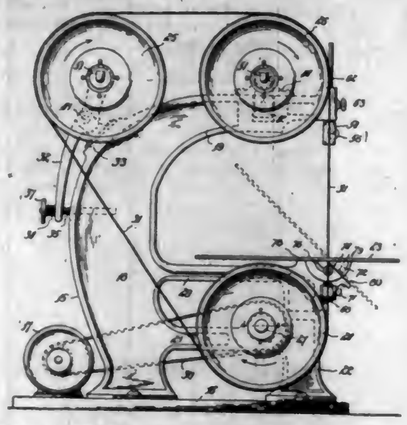
1. The combination with a cylinder board machine including the usual endless felt receiving the wet pulp from the cylinder mold, of an endless wire over which the felt passes and a pair of transfer press rolls between which the felt, the pulp and the wire pass, said transfer press rolls being so constructed and arranged that the pulp is transferred from the felt to the wire.

1,879,144. WOVEN FABRIC. LE ROY F. EMERY, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Apr. 28, 1930. Serial No. 447,924. 5 Claims. (Cl. 36—3.)



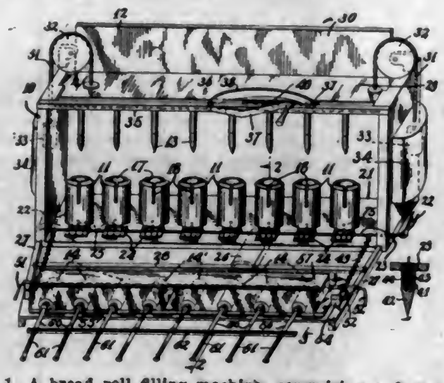
1. A shoe upper having its body portion slitted in relatively spaced lines, and strips of sheet material woven alternately through the slits in a manner producing a checkered pattern, certain of the overlapping portions of the body portion and strips having registering ventilation openings.

1,879,145. BAND SAW. BERNARD ERICKSON, Dunedin, Fla., assignor of one-half to Oscar A. Erickson, Clearwater, Fla. Filed Jan. 9, 1931. Serial No. 507,675. 1 Claim. (Cl. 143—2",)



In a sawing machine the combination with a supporting frame, of a driving wheel journaled in the lower part of the frame, spaced apart guiding wheels mounted in the upper part of the said frame on approximately the same horizontal plane, with the front wheel on a vertical line with the driving wheel, a band-saw passing over the driving and guiding wheels to be operated by said driving wheel, and spring-actuated means for moving the rear guiding wheel to exert tension thereon in a direction away from the other wheels to absorb shock on the band-saw in the operation thereof, comprising a bracket mounted on the supporting frame, a lever fulcrumed at an intermediate point on a pin supported by the bracket with a plurality of holes in the lever to receive the pin for adjusting said lever, the rear guiding wheel being mounted on the upper end of the lever, a headed adjusting screw extending loosely through a hole in the lower end of the lever and threaded into the supporting frame, and a spring interposed between the lever and head of the screw; together with a vertically adjustable bearing at the upper part of the frame in which the front guiding wheel is mounted, and means for adjusting said bearing with respect to the supporting frame and driving wheel over which the band saw passes.

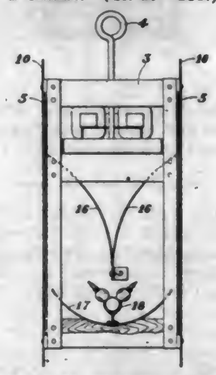
1,879,146. FRANKFURTER ROLL SANDWICH MACHINE. DAVID A. ESTRIN, Brooklyn, N. Y. Filed Nov. 18, 1930, Serial No. 496,425. Renewed Jan. 14, 1932. 7 Claims. (Cl. 107—1.)



1. A bread roll filling machine, comprising a frame, a plurality of roll holders pivotally mounted on said frame for assuming vertical positions and movable to horizontal

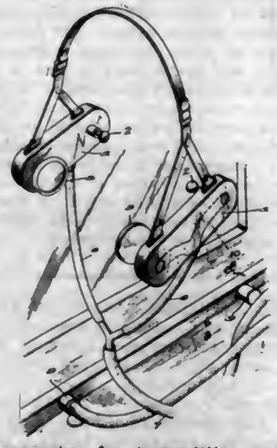
positions, a carriage movably mounted on said frame and supporting roll cutting tools for engaging into rolls in said roll holders when the latter elements are in the vertical, a gang of compartments on said frame associated with pistons to discharge food from the compartments into rolls in said roll holders in the horizontal positions of the latter elements, one of said compartments being a master compartment, and means for discharging the contents of all compartments simultaneously with discharging of the master and for discharging each compartment selectively except said master.

1,879,147. ILLUMINATED SIGN. WILLIAM AUGUSTUS DARLING EVANS, Summit, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed May 13, 1930. Serial No. 451,882. 2 Claims. (Cl. 40—133.)



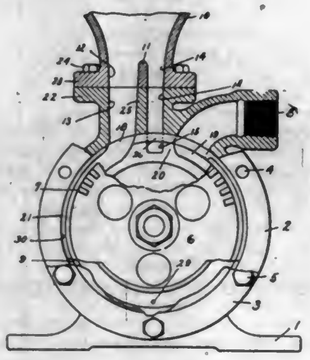
1. An illuminated sign comprising a substantially light tight box having apertures constituting a legend in the face thereof, a substantially linear light source mounted within said box, a reflector having a diffusing surface for said light source within said box and visible through said apertures, and a parabolic reflector within said box to direct the light of said source in a beam to said diffusing reflector, the first named reflector having a distinctive color and the exterior face of the box having the said apertures therein having a different color.

1,879,148. APPARATUS FOR TRANSMITTING AND RECEIVING VOCAL SOUNDS. TRUMAN E. FASSETT, Sarasota, Fla. Filed Feb. 27, 1931. Serial No. 518,873. 6 Claims. (Cl. 181—20.)



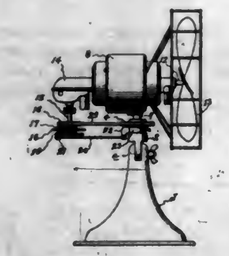
1. In an apparatus for transmitting and receiving vocal sounds, transmitters designed to be placed and held against any resonant wall of the bodies of the respective parties communicating with each other, for collecting vocal sound vibrations and excluding extraneous sounds, receivers at the opposite ends of each line, and tubular connections between the transmitters and receivers of the respective lines.

1,879,149. PUMPING APPARATUS. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa, a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,437. 4 Claims. (Cl. 103—113.)



1. In a pumping mechanism, a pair of mating casing sections, each having an annular channel therein coaxial with and forming with the other a circular fluid passageway, said sections being substantially in circumferential engagement with each other outwardly of said passageway, peripherally arranged inlet and outlet passages in said casing sections in communication with said fluid passageway, an impeller positioned between said sections and having marginal laterally disposed buckets disposed within said fluid passageway, said impeller having sealed running engagement with said sections radially inwardly of said fluid passageway, said sections having radial sealing lands closing the annular channels therein between said inlet and outlet passages and being in running engagement with said marginal buckets, said sections also having a fluid return passage in communication at one end with said outlet passage and terminating at the other end in an opening in at least one of said lands, whereby a portion of the fluid discharged may be reconducted to said buckets in the region sealed by said lands.

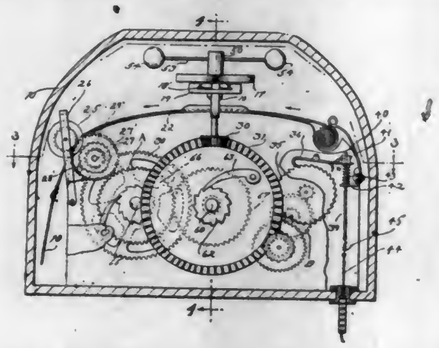
1,879,150. ROTATING DEVICE FOR FANS. JAMES R. FERGUSON, Dallas, Tex., assignor of one-half to W. H. Addington, Dallas, Tex. Filed July 8, 1929. Serial No. 376,575. 2 Claims. (Cl. 230—256.)



1. In an electric fan, the combination with the spindle shaft thereof having a gear thereon, a shaft at right angles and having operative engagement with and to be rotated

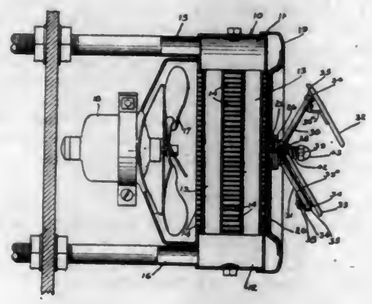
by said first shaft, a grooved pulley attached to said second shaft, a stationary base member pivotally supporting said fan, a stationary grooved pulley on said base member, a flexible belt surrounding said pulley, a frictional member also carried by said second shaft and capable of movement thereon and means for moving said frictional member against and away from said first mentioned pulley to effect the movements of said fan.

1,879,151. RECORDING MECHANISM. WILLIAM S. FINHOLM, Forest Hills West, N. Y. Filed May 6, 1931. Serial No. 535,472. 5 Claims. (Cl. 234—1.)



1. In a device of the character described, a travelling tape, and a normally inoperative marker for inscribing on said tape, said marker being floating, and resting on said tape.

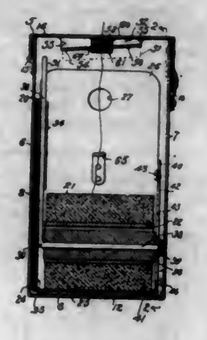
1,879,152. DEFLECTOR FOR HEATERS. HENRY W. FINK, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed June 30, 1930. Serial No. 464,977. 10 Claims. (Cl. 257—137.)



1. In a heater having an open face, a supporting bar spanning said face, a deflector mounted on said bar for rotation with respect to said heater, and cooperating means on said bar and said deflector mounting for maintaining said deflector in adjusted position, said means preventing rotation of said deflector in one direction and assisting rotation in the opposite direction.

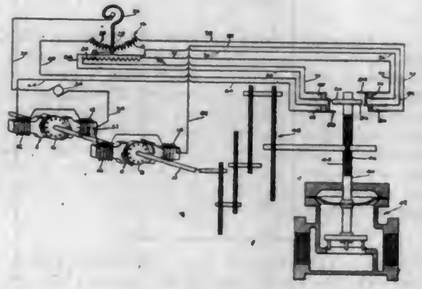
1,879,153. THREAD WAXING DEVICE. ANTONIO FIORE and RICHARD A. ADE, Philadelphia, Pa. Filed Nov. 19, 1931. Serial No. 576,130. 14 Claims. (Cl. 91—48.)

1. In a thread waxing device, a container for a waxing solution, spool holding means within the container, said container having a hole formed therein for the passage of a thread, a layer of tough material having a hole through the same for the passage of a thread, a layer of relatively soft fibrous material through which the thread



passes, said layer of fibrous material interposed between the container and said layer of tough material, and means securing said layers upon the container.

1,879,154. LIMIT FOR OPPOSED MOTOR CONTROL SYSTEMS. GEORGE H. FISHER, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,899. 8 Claims. (Cl. 172—239.)

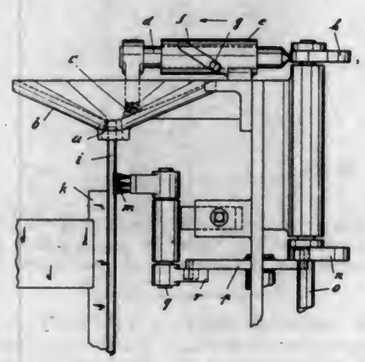


1. In an electrical remote control system for controlling the travel of an object between predetermined limits, a pair of opposing motors having their fields connected in series, a pair of series connected resistances connected in series with said motor fields to form a closed loop, a source of electrical energy connected to the loop, a bridge line connected to said loop between said fields at one end and having a movable contact adapted to slidably engage exposed surfaces of said resistances at its other end, means connecting the motors and object being controlled for actuating the latter upon rotation of the former, and means associated with the controlled object for disconnecting the motor fields from the electrical source when said object exceeds a predetermined limit of travel.

1,879,155. COLORING SLABS OF MINERAL SUBSTANCES. HARRY C. FISHER, Norwood, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Jan. 17, 1929. Serial No. 333,245. 9 Claims. (Cl. 91—70.)

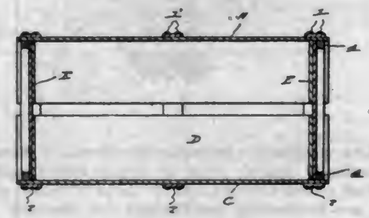
1. A rigid article of asbestos cement composition surface-coated with dehydrated silicate in which a pigment has been suspended, said silicate having a ratio of sodium or potassium oxide to SiO_2 not less than 1 : 3.25.

1,879,156. DEVICE FOR THE AUTOMATIC SINGLE FEEDING OF RING SHAPED BLANKS TO WORKING POINTS. BERNHARD FÖRSTER, Pforsheim, Germany. Filed Dec. 23, 1930, Serial No. 504,819, and in Germany Sept. 9, 1930. 2 Claims. (Cl. 140—3.)



1. A device for singly automatically feeding ring-shaped blanks, such as guide sleeves for spring rings for a storage container by means of a brush to the working points, comprising in combination with the container having a discharge aperture and the brush arranged over the discharge aperture of said container, means for imparting to said brush an oscillating and also a sliding movement in the direction of the axis of oscillation so that said brush carries out a helical movement.

1,879,157. COLLAPSIBLE SHIPPING CRATE. MASON FOSHEE, Jacksonville, Fla. Filed Apr. 12, 1932. Serial No. 604,816. 2 Claims. (Cl. 217—12.)



1. A crate of the class described comprising four side members formed of longitudinally extending thin strips and transversely extending exterior cleats, one member forming the top of the crate, another the bottom thereof and the remaining ones the sides of the crate, metallic bands of flexible material passing transversely around the crate and connecting the members together in spaced relation, each band having its ends permanently connected together, those portions of the bands between the members being of sufficient length to permit the members to be folded flat with the top member on one side member and the other side member on the bottom member, a pair of end members and cleats fastened to the inner faces of the side members adjacent the ends thereof for holding the end members in place.

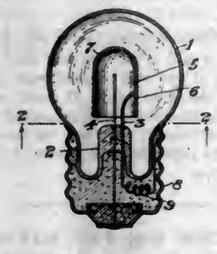
1,879,158. GLOW DISCHARGE LAMP. TED EUGENE FOULKE, Nutley, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 19, 1928. Serial No. 327,073. 12 Claims. (Cl. 176—122.)



1. In an electric lamp of the negative glow type, in combination, a gas tight envelope containing gas capable of luminous discharge upon the passage of an electric current, a cylindrical electrode support of refractory material having two longitudinal grooves oppositely disposed therein and two semi-cylindrical metallic electrodes whose edges overlap the edges of said grooves.

12. In an electric lamp of the negative glow type, in combination, a gas tight envelope containing gas capable of luminous discharge upon the passage of an electric current, and nickel electrodes therein, at least one of said electrodes having a coating of magnesium and aluminum.

1,879,159. ELECTRIC DISCHARGE DEVICE. TED E. FOULKE, Nutley, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 27, 1929. Serial No. 381,427. 4 Claims. (Cl. 250—27.5.)

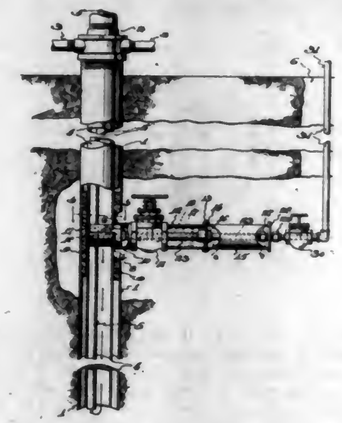


1. In a polarity indicating electric discharge device of the cathode glow type, in combination, an envelope, a gaseous atmosphere therein, electrodes of materials of given work function characteristics sealed therein, one of said electrodes substantially concealing the other of said electrodes, a coating of a material having a lower work function than that of either of said electrodes on the surface of said concealing electrode which is away from the concealed electrode, the breakdown potential when said concealed electrode is a cathode being greater than operating potential.

1,879,160. METHOD AND APPARATUS FOR EXTINGUISHING THE FLOW OF FLUID IN WELLS OUT OF CONTROL. FRANK B. FOWZER, Kilgore, Tex. Filed Aug. 13, 1931. Serial No. 556,810. 8 Claims. (Cl. 166—1.)

1. A method for interrupting the flow of fluid in a well comprising a casing, production pipe and tubing charac-

terized by tapping and sealing off said casing at a point below the head, in tapping said production pipe and in inserting a plug and finally in injecting a stream of fluid into



said production pipe below said plug under pressure to resist the pressure of the natural fluid in said production pipe and in continuing the process of injection until the rejected fluid enters said tubing to seal the same.

1,879,161. FISH MOUTH-SPREADER. MATHEW J. FRAMBACH and CHARLES P. HILLS, Hartley, Iowa. Filed June 4, 1931. Serial No. 542,119. 5 Claims. (Cl. 43—29.)



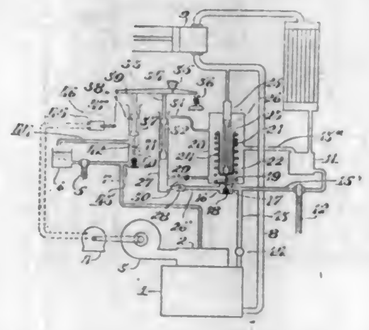
1. A device of the character described, comprising a pair of arm members, a coil spring having each arm extending as a continuation of one end thereof, said spring normally acting to move the free ends of said arms apart, an obliquely inwardly directed portion formed at the free end of each arm, an outwardly directed tip formed at the free end of each of said portions, and a point formed at the end of each of said tips.

1,879,162. PROCESS FOR THE MANUFACTURE OF SOFT CHEESE. FELIX M. FREDERIKSEN, Milwaukee, Wis., assignor to Pabst Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 17, 1931. Serial No. 545,140. 3 Claims. (Cl. 99—11.)

1. The process of manufacturing a soft cream cheese which consists in emulsifying a cheese substance substantially free of milk sugar, mixing therewith butterfat substance in weight approximately three times the original weight of the cheese substance, adding a small amount of milk sugar, pasteurizing the mixture by heating and stirring, cooling the mixture, adding starter, passing the mixture through an homogenizer, and maintaining the mixture at acid developing temperature until acid flavor is produced.

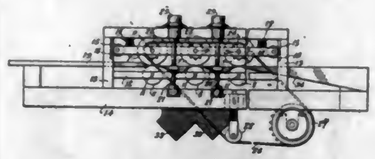
1,879,163. STEAM PRESSURE REGULATING DEVICE. CHARLES A. FRENCH, Riverside, Ill. Filed Oct. 14, 1929. Serial No. 399,686. 1 Claim. (Cl. 122—448.)

In an arrangement of the character described, the combination of a boiler having a generator therein, heating means in said boiler, electric operating means for causing said heating means to function, an electric circuit controlling said operating means, a water tank, a pumping medium adapted to deliver water from said tank to said generator, a feed pipe through which water from said pumping medium passes to said generator, a branch on said feed line, a control device on said branch, a pressure responsive means in said control device against one side of which pressure is adapted to be exerted by water in



said branch, a stem in said control device movable with said pressure responsive means, a switch movable by said stem to closed position when pressure is exerted against said pressure responsive means from said feed pipe, and means for moving said pressure responsive means, said stem and said switch, to open said switch when the water pressure against said pressure responsive means ceases, said switch being arranged in said electric circuit so that when opened said heating means is extinguished.

1,879,164. MICA SPLITTING MACHINE. JOSEPH P. FRENCH, Brooklyn, N. Y. Filed Jan. 25, 1930. Serial No. 423,422. 6 Claims. (Cl. 125—24.)

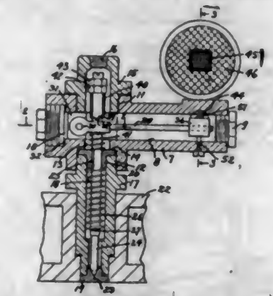


1. In a machine for splitting mica books, a plurality of longitudinally spaced pairs of upper driven and lower idler feed rollers between and by virtue of which the mica books are frictionally fed through the machine, a feed table having its upper surface disposed in alignment with the upper portion of the periphery of the lower idler of the first pair of rollers and a splitting knife and support therefor disposed in rear of each pair of rollers, said knife supports each having at the leading edge thereof a downwardly directed under surface for deflecting the separated strip away from the next succeeding lower feed roller.

1,879,165. ELECTROMAGNETICALLY-OPERATED VALVE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Aug. 25, 1930. Serial No. 477,489. 13 Claims. (Cl. 137—139.)

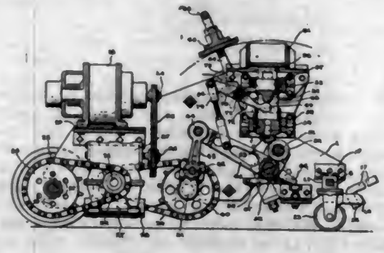
1. In an electromagnetic valve, the combination of a casing adapted to contain fluid under pressure, a control valve working in said casing and controlling the passage of fluid therethrough, a multiplying lever pivotally mounted to work wholly within said casing and having a part

engageable with said valve to open the same, means to constantly hold said lever and valve in engagement and prevent lost motion between the same, means to close said



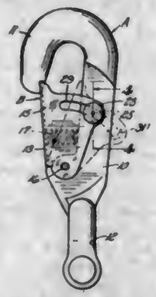
valve, an armature associated with said lever, and an operating electromagnet including pole members disposed in said casing in operative relation to said armature.

1,879,166. PORTABLE REPRESS MACHINE. WILLIAM E. FRENCH, Lancaster, Pa., assignor to Lancaster Iron Works, Inc., Lancaster, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1930. Serial No. 505,908. 14 Claims. (Cl. 25—87.)



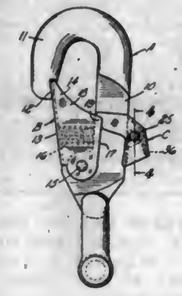
1. A press comprising an open ended mold chamber adapted to receive material to be pressed, means for exerting pressure on material in said chamber and including a closure for one end of said chamber and mechanism automatically started in operation by the closing of said chamber to drive said pressure means, said mechanism being normally inoperative.

1,879,167. SAFETY SNAP HOOK. JOHN B. FREYSINGER, New Britain, Conn., assignor to North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed July 9, 1931. Serial No. 549,661. 5 Claims. (Cl. 24—241.)



1. A safety snap hook having a hook proper provided with a shank and a curved bill, a tongue pivoted to the hook proper and adapted to close the throat between the bill and the shank, said tongue having a cheek along one side of the shank and provided with a slot having an enlarged portion at one end, a locking pin slidably carried by said shank and having a head adapted to engage in the enlarged end of said slot, and a spring normally urging said locking pin in a direction to engage said head in the enlarged end of said slot.

1,879,168. SAFETY SNAP HOOK. JOHN B. FREYSINGER, New Britain, Conn., assignor to North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed July 10, 1931. Serial No. 549,825. 7 Claims. (Cl. 24—241.)



1. In a safety snap hook, a hook proper having a shank provided with a bill at one end, said bill having at its free end a rearwardly facing seat, a tongue pivoted for swinging opening movement towards said shank and adapted to engage against said seat when the hook is closed, and means pivoted to said hook for engaging said tongue to lock the latter in closed position and for turning in the same direction as said tongue upon an opening movement of said tongue and said means.

1,879,169. ELECTRIC TIME SWITCH. ALBERT FRIEDINGER, Furstenfeldbruck, near Munich, Germany. Filed Mar. 12, 1930, Serial No. 435,121, and in Germany July 16, 1928. 2 Claims. (Cl. 200—34.)

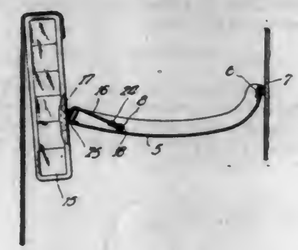


1. An electric time switch comprising in combination with the switch casing and the piston of the dash pot, a piston rod, a head on said piston rod, a lifting rod engaging under said piston rod head, a button arranged in said switch casing adapted to act on said lifting arm, and a spring on said lifting arm adapted to return said lifting arm into its initial position and to liberate thereby this piston for the return movement.

1,879,170. MATTRESS ANCHOR FOR SLEEPING CAR BERTHS. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 341,979. 5 Claims. (Cl. 5—322.)

1. In combination with a sleeping car berth or the like and a mattress therefor, a flexible anchor member extending between and secured at its opposite ends respectively

to the bottom of said mattress and to a part of said berth, the mattress end of said anchor being secured to the bottom of the mattress at a point located intermediate the sides of the mattress but nearer to the outer side thereof



than to the inner side, said anchor member being arranged to permit limited displacement of the mattress from the berth and to support the mattress in a displaced position for facilitating making up of the berth.

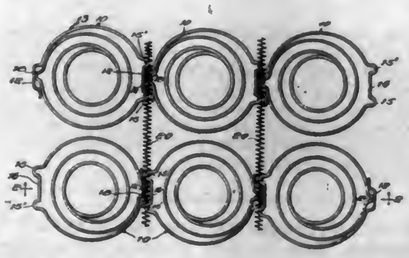
1,879,171. MATTRESS MAKING PROCESS AND MACHINE. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1929. Serial No. 344,698. 23 Claims. (Cl. 226—45.)



1. In combination in a mattress filling machine, means for continuously propelling a strip of mattress filling material, means for supporting a mattress tick to receive said propelled filling material strip, and means for advancing said tick support relative to said filling material strip, thereby to speed up the tick filling operation.

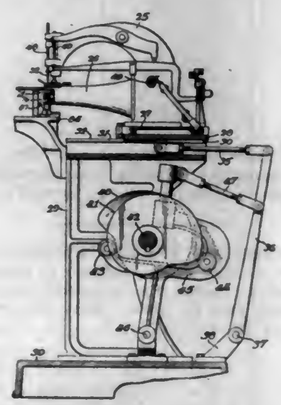
21. The method of making mattresses which comprises continuously forming and propelling a web of mattress filling material, effecting insertion of a forward end portion of the web into a mattress tick, then removing the filled mattress tick and positioning an empty tick for a succeeding filling operation while continuing the propulsion of said web.

1,879,172. BEDSPRING. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1929. Serial No. 394,891. 8 Claims. (Cl. 5—269.)



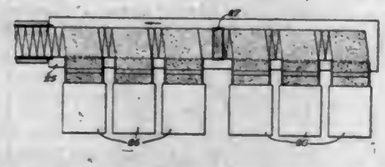
1. In a device of the class described, a pair of coil springs arranged in juxtaposition to each other and with parallel axes, an end turn of one of said coils having a single crimp on one side thereof and the adjacent turn thereof having a crimp adjacent said first crimp, the other coil having a pair of spaced crimps in the end turn thereof arranged to receive the crimps of said first coil in the space therebetween, and means hingedly engaging said crimps.

1,879,173. SEWING MACHINE. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 21, 1928, Serial No. 307,450. Divided and this application filed Oct. 25, 1929. Serial No. 402,494. 13 Claims. (Cl. 112—252.)



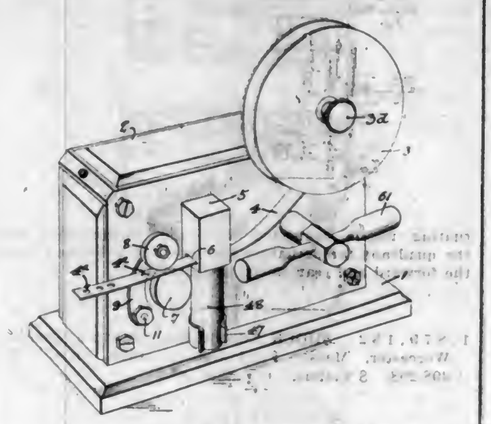
1. In combination, chain stitch sewing mechanism including a reciprocating needle, and oscillating looper, an oscillating hook, means normally retaining said hook in stationary, inoperative position, cam means oscillated with said looper for moving said hook outwardly from its normal position when the first loop of a series of stitches is formed on said looper, said hook being operative to catch the thread in said first loop and to remove the same from said looper so as to prevent said needle from passing through such first formed loop.

1,879,174. MATTRESS FILLER MAKING PROCESS AND MACHINE. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Original application filed Mar. 6, 1929, Serial No. 344,698. Divided and this application filed July 9, 1930. Serial No. 466,780. 1 Claim. (Cl. 19—163.)



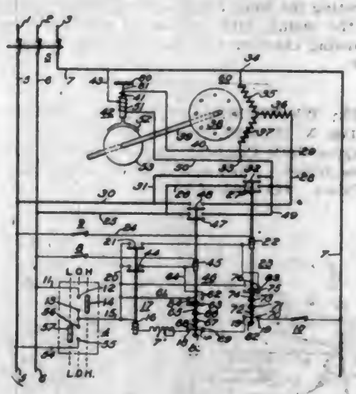
Apparatus for forming a composite mattress filler web comprising the combination of a continuously propelled belt conveyor, a set of devices for forming independent, felted webs of mattress filling material, said devices being arranged so as to deposit said felted webs on said conveyor in superposed relation, thereby forming a multi-layer bottom web of felted material, a chute connected with a source of supply and arranged to deposit unfelted material on said multi-layer bottom web in the form of a layer as an incident to the travel of said conveyor, and another set of devices for forming independent, felted webs of mattress filling material, said devices also being arranged so as to deposit the felted webs formed thereby in superposed relation on top of said layer of unfelted material.

1,879,175. PUNCH REGISTER FOR RECORDING ELECTRICALLY TRANSMITTED SIGNALS, ETC. MANIOUS GARL, Akron, Ohio; Lennie Garl executrix of said Manious Garl, deceased. Filed June 12, 1930. Serial No. 460,623. 11 Claims. (Cl. 164—89.)



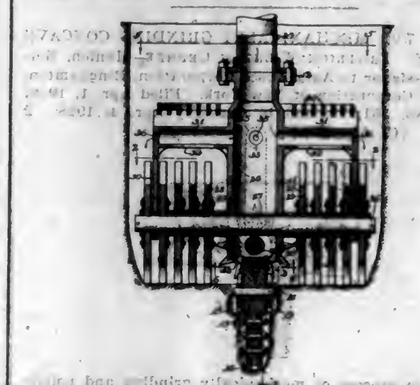
1. In a punch register for recording electrically transmitted signals, the combination of a shaft, a pair of elongated cams on the shaft said cams being disposed in a direction transversely to each other, a cam device having oppositely arranged cam slots in which the aforesaid cams travel to cause a positive upward and downward movement of the cam device, and a punch carried by the cam device.

1,879,176. REMOTE CONTROL OF THREE-PHASE MOTORS. HERBERT GAST, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1931, Serial No. 525,740, and in Germany May 2, 1930. 5 Claims. (Cl. 172—179.)



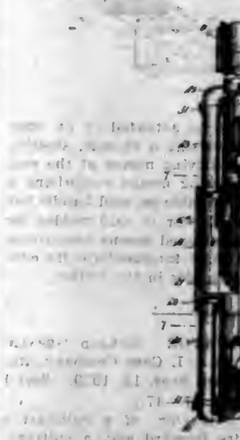
4. In a motor-control system, in combination, a polyphase motor, a source of power for the motor, reversing switches for the motor, a master switch operable to a plurality of positions for controlling the operation of the reversing switches, control means responsive to the actuation of the master switch to predetermined operating positions for initially establishing energizing circuits for the reversing switches in accordance with the position of the controller, and means responsive to the operation of the reversing switches for establishing holding circuits for the reversing switches and for rendering the control means ineffective to further control the energizing circuits for the reversing switches.

1,879,177. DRILLING APPARATUS FOR LARGE WELLS. JOHN J. GAULT, Chicago, Ill., assignor to W. J. Newman Company, Chicago, Ill. Filed May 16, 1930. Serial No. 453,042. 9 Claims. (Cl. 255—71.)



1. An apparatus for drilling large wells, comprising a rotatable pipe, a drill head secured to the lower end of said pipe and having a central hollow body portion with an integrally formed downwardly projecting stem, V-shaped drill points secured to the lower end of the stem, a shaft projecting through the stem above the drill points, rotatable cutters mounted on said shaft, a plurality of shafts projecting through the hollow central body portion of the head, rotatable cutters mounted on said shafts, tubular arms projecting from said body portion and having communication therewith, bearings at the ends of the arms for said shafts, said arms having downwardly and outwardly directed openings and the central body portion having downwardly directed openings for discharging water therethrough.

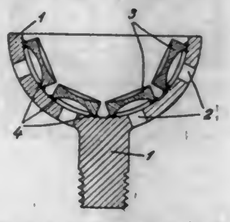
1,879,178. OIL WELL PUMP. ALFRED GEDDES, Buffalo, N. Y. Filed Feb. 24, 1930. Serial No. 430,945. 2 Claims. (Cl. 103—184.)



1. A coupling for the pump barrels of a double piston oil well pump comprising a body portion having an integral extension at one side the length of the coupling, the

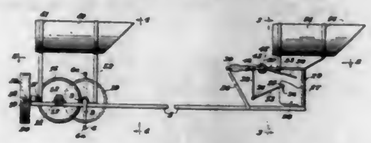
body portion being provided centrally with a stuffing box and internally threaded at the ends of said body portion to receive the pump barrels, vertical and horizontal walls in the vertical extension at one side of the coupling forming by-passes communicating respectively with the opposite ends of the body portion of the coupling and with openings at the opposite ends of the extension, said openings being threaded to receive pipes connecting the coupling with the pump barrels.

1,879,179. MECHANICALLY GRINDING CONCAVE LENSES. FRIEDRICH WILHELM GEHAKE, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 1, 1929. Serial No. 351,772, and in Germany Apr. 4, 1928. 2 Claims. (Cl. 51—278.)



1. In the process of mechanically grinding and polishing simultaneously a plurality of concave lenses in a head stock of spherical calotte form, the steps which comprise placing the glass discs cut and ground to the desired thickness and diameter to rest with their edges immediately on the surface of the head stock in such a manner that they lie radially over the perforations provided in the head stock, attaching them to the latter with a narrow annulus of cement, surrounding only the rim of the glass discs, grinding one face of the lenses, inverting the latter and securing them in the same manner as in the first grinding operation, grinding the second face of the lenses and controlling the progress of the grinding operation with a measuring device inserted through the said perforations.

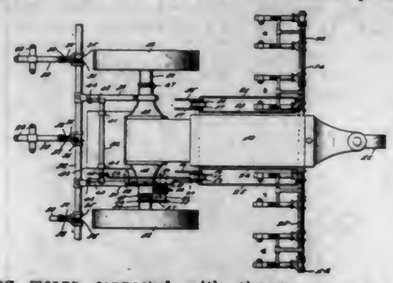
1,879,180. HYDROVEHICLE. JOSEPH A. GENDREAU and ELIE MESSIER, Hartford, Conn. Filed June 15, 1931 Serial No. 544,664. 3 Claims. (Cl. 9—18.)



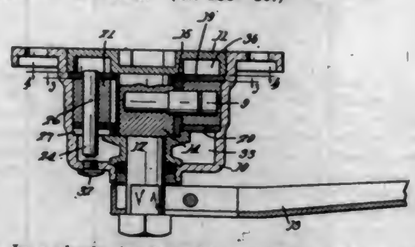
1. A water vehicle adapted to be actuated by an operator in prone position and comprising a chassis, steering means at the front portion and driving means at the rear portion of said chassis, said steering means comprising a rudder, a handle bar, a handle turnable on said handle bar and means connecting said handle bar to said rudder for turning said rudder, the last-mentioned means comprising a rod provided with a swivel joint intermediate its ends with one of the ends movable in a slot in the rudder.

1,879,181. TRACTOR CULTIVATOR. GERALD GERALDSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Sept. 18, 1929. Serial No. 393,376. 7 Claims. (Cl. 97—47.)

1. The combination, with a tractor, of a cultivating device pivotally mounted at its forward end, a cultivating device mounted at its rear end, a pivoted quadrant intermediate said forward and rear devices, a lever pivotally mounted on the quadrant, a link connecting the lever and forward devices whereby the latter may be adjusted by the lever, a lever for adjusting the rear device, a link connecting the quadrant and rear device, and power actuating means connected with the tractor and with the quadrant for actuating the latter to raise and lower the forward and rear cultivating devices.

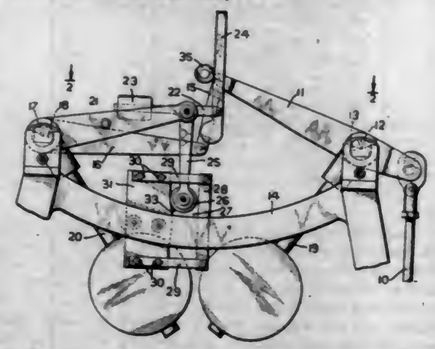


1,879,182. SHOCK ABSORBER. FRANK J. GIBBONS, Worcester, Mass. Filed Oct. 8, 1929. Serial No. 398,208. 8 Claims. (Cl. 188—89.)



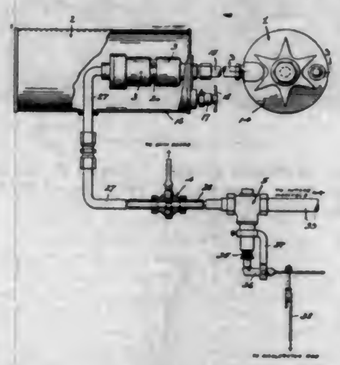
1. In a shock absorber, the combination with a casing in a single integral piece adapted to be secured in fixed position and containing a work chamber, of a shaft in the casing, an interrupter on one side of said chamber in fixed position having a port therethrough for allowing liquid to pass, a stationary sleeve on the shaft, a wing oscillatably mounted on said sleeve in the working chamber, means carried by the shaft and projecting through the sleeve for operating the wing, and a nut removably secured in the end of the casing, said nut having a recess constituting an equalizing chamber and communicating with the work chamber.

1,879,183. WEIGHING SCALE INDICATOR CONTROL. WILLIAM N. GILBERT, Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Apr. 3, 1929. Serial No. 352,236. 14 Claims. (Cl. 265—62.)



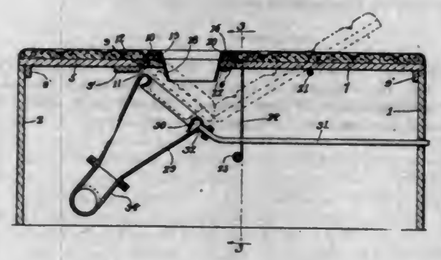
1. In a weighing scale, a pendulum, provided with an arm angularly extending relative to the pendulous portion of the pendulum, an indicator element, a device carried by said arm for actuating said element, and a cam cooperating with said device for controlling the actuation of said element.

1,879,184. DE-CLUTCHING MECHANISM. WILLIAM GILMORE, Meridian, Miss. Filed June 30, 1931. Serial No. 547,999. 8 Claims. (Cl. 192—.01.)



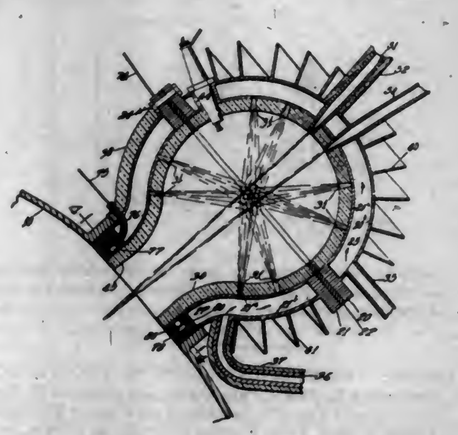
1. A clutch control comprising fluid operated means operatively connected with the clutch of an internal combustion engine driven automobile, a conduit connecting said fluid operated means with said engine, a reservoir, and valve means associating said reservoir and conduit whereby said fluid operated means may be selectively brought into communication with said reservoir and said engine.

1,879,185. BENCH. HARRY F. GLEIM, Portsmouth, Ohio. Filed Feb. 12, 1932. Serial No. 592,620. 6 Claims. (Cl. 5—1.)



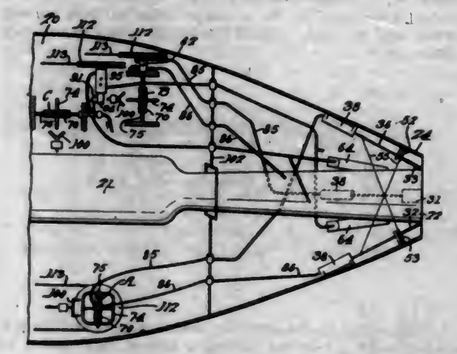
6. A bench for the purpose set forth comprising, a top formed of a stationary and a pair of shiftable sections, said stationary section having a lengthwise cutout open at its outer end, said shiftable sections arranged within said cutout, one of said shiftable sections hinged at its rear end to the other shiftable section, the said other shiftable section hinged at its rear to the closed inner end of said cutout, that shiftable section hinged at its rear to the closed end of the cutout having an opening and constituting a seat and capable of being shifted at a downward inclination with respect to the closed end of the cutout, the other shiftable section providing a back rest and capable of being shifted simultaneously with the shifting of the other shiftable section at an upward inclination with respect to the latter, a fecal matter carrying off means arranged below and coacting with said section, means common to said shiftable sections for shifting them to and from inclined positions, and a combined support and retaining means for that section constituting a back rest.

1,879,186. APPARATUS FOR IGNITING LIQUID FUEL. ROBERT H. GODDARD, Worcester, Mass. Filed Oct. 30, 1930. Serial No. 492,268. 12 Claims. (Cl. 158—28.)



7. In a combustion apparatus, an ignition chamber comprising a casing, formed with a plurality of recesses, means to deliver fuel to one of said recesses, means to deliver an oxidizing agent to the other recess, and means to feed said materials in a plurality of jets from said recesses to a common point within said casing.

1,879,187. MECHANISM FOR DIRECTING FLIGHT. ROBERT H. GODDARD, Worcester, Mass. Filed Feb. 7, 1931. Serial No. 514,290. 18 Claims. (Cl. 244—18.)

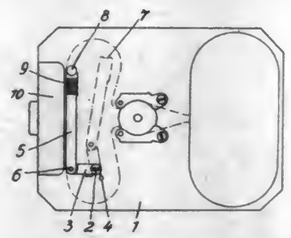


1. Directing mechanism for an air-craft having a combustion chamber with a rearwardly directed gas discharge passage, comprising vanes mounted adjacent said passage, means to advance a selected vane into said passage, and automatic devices effective to render said means operative upon deviation of the craft from a predetermined orientation.

1,879,188. FILM DOOR FOR MOTION PICTURE APPARATUS. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 25, 1929, Serial No. 358,063, and in Germany May 2, 1928. 4 Claims. (Cl. 88—17.)

4. In a motion picture apparatus in operative combination a side plate carrying the aperture plate and the film

guide, a film gate and a link hinged to the film gate, said link being pivotally connected with the side plate at a

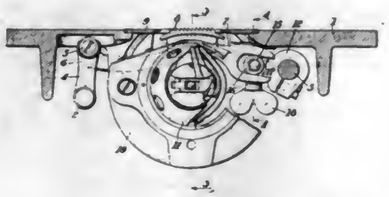


substantial lateral distance from the film guide and corresponding in its length to the distance between its pivot and the film guide.

1,879,189. METHOD OF OXIDIZING PHOSPHORUS. STAPLETON D. GOOCH, Lake Wales, and WILLIAM H. WAGGAMAN, Lakeland, Fla., assignors to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,606. 4 Claims. (Cl. 23—165.)

1. A method of producing phosphoric acid from an impure wet sludge containing elemental phosphorus comprising feeding the phosphorus sludge into one end of a rotary burner, causing combustion of the phosphorus, leading gases and vapors from the burner into an auxiliary combustion chamber and subsequently separating the phosphoric acid contained in the combustion gases.

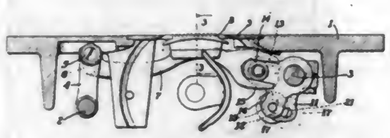
1,879,190. THROW-OUT FEED-LIFT MECHANISM FOR SEWING MACHINES. HERBERT J. GOOSMAN, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 22, 1931. Serial No. 539,158. 3 Claims. (Cl. 112—203.)



1. In feeding mechanism for sewing machines, the combination with a feed-bar having a slotted end, means for imparting feed-and-return movements to said feed-bar, and means for imparting rising and falling movements to said feed-bar, said last mentioned means including a rock-shaft, a feed-lift arm fixed to said rock-shaft, and a coupling element carried by and shiftable relative to said feed-lift arm into and out of direct working engagement with the slotted end of said feed-bar.

1,879,191. THROW-OUT FEED-LIFT MECHANISM FOR SEWING MACHINES. HERBERT J. GOOSMAN, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 3, 1931. Serial No. 572,828. 4 Claims. (Cl. 112—208.)

1. In feeding mechanism for sewing machines, a feed-advance rock-shaft, a feed-lift rock-shaft, a feed-bar connected to said feed-advance rock-shaft, a feed-lift arm fixed to said feed-lift rock-shaft, an arm loose on said feed-lift rock-shaft and connected to lift said feed-bar, and a screw and slot clamping connection between said arms permitting the feed-bar to be dropped when said screw is loosened, said slot having a sunken seat at one end for said screw.

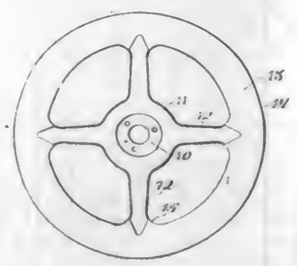


1,879,192. CLOTHES CLAMP. JOSEPH E. GOTTSCHALL, Madison, Wis. Filed Mar. 22, 1932. Serial No. 600,494. 3 Claims. (Cl. 24—137.)



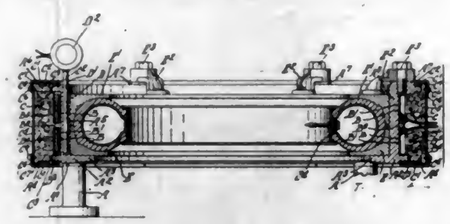
1. A clothes clamp as herein described, comprising a body having upper and lower notches, a jaw pivotally connected to the body and swingable into one of the notches, said jaw having arched spring arms extending from the pivoted portion thereof, whose upper portions are rounded inwardly and terminate in fingers designed for interlatching engagement with each other when the arms are arranged over the second notch in the body.

1,879,193. TILLAGE DISK. WILLIAM S. GRAHAM, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed June 8, 1931. Serial No. 542,770. 1 Claim. (Cl. 97—217.)



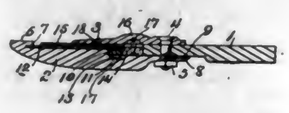
A concavo-convex skeleton tillage disk consisting of an integral metal structure formed with a central portion provided with a shaft receiving opening, a flat annular portion immediately surrounding said opening, an annular portion of arcuate cross section surrounding said flattened portion, spokes of arcuate cross section radiating from said arcuate annular portion, and a peripheral rim into which said spokes merge, the spokes being flared at their junction with the rim.

1,879,194. VULCANIZING APPARATUS. LEO O. GRANGE, Chicago, Ill., assignor to Walter J. Jarratt, Chicago, Ill. Filed Oct. 29, 1929. Serial No. 403,243. 3 Claims. (Cl. 18—18.)



3. A tire retreader comprising an annular cylindrical member having an inwardly extending flange at the base thereof to receive tread mold members within said cylindrical member with the tread mold members supported on said flange, clamps mounted on the top of said cylinder for clamping said tread mold members on said flange, said cylindrical member being provided with outer peripheral flanges at the base and top thereof, an electrical heating element about said cylindrical member between said outer peripheral flanges, insulating material about said heating element between said outer peripheral flanges, a casing about said insulating material, said casing being secured to the last-named flanges, and means between the casing and the flanges for insulating the former from the latter.

1,879,195. CUTTER BAR. THOMAS GRAY, Lyndon, Kans., assignor of one-half to John Gutsmithl and G. H. Hoerman, Lyndon, Kans. Filed Mar. 2, 1931. Serial No. 519,482. 1 Claim. (Cl. 56—298.)

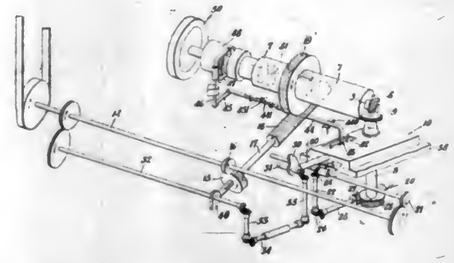


In a cutter bar the combination with a longitudinal finger bar, fingers extending forwardly therefrom, a stationary blade bar supported on said fingers, lower stationary blades fastened to said blade bar and supported on said fingers, and upper blades slidably engaging the upper sides of said lower blades, of a longitudinally slidable blade bar, to which said upper blades are attached, slidably engaging the rear edge of said stationary blade bar, the upper sides of said fingers and the front edge of said finger bar, and guard members engaging said upper blades and bearing and fastened against the upper side of said finger bar.

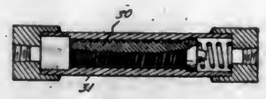
1,879,196. GEAR CUTTING APPARATUS. LINUS E. GREENE, Fitchburg, Mass., assignor to Manning, Maxwell & Moore, Inc., New York, N. Y., a Corporation of New Jersey. Filed Mar. 12, 1930. Serial No. 435,145. 15 Claims. (Cl. 90—4.)

1. In a machine for generating spiral bevel gears the combination with means for supporting and constantly rotating a conical gear blank of means for supporting and constantly rotating a gear cutter in cutting relation to the gear blank and means for repeatedly moving the cutter bodily across the face of the blank at an acute angle to the axis of the latter during the relative rotation of the cutter and blank.

15. The method of cutting spiral bevel gears which comprises reciprocating a toothed cutter at a cutting speed across the face of a blank, while maintaining the face of said cutter in the same plane, and simultaneously oscillating the blank to cause a tooth of the cutter to follow a desired spiral path on the face of the blank, continuously rotating the cutter and blank, and gradually producing a relative feeding movement between the blank and the cutter axis.

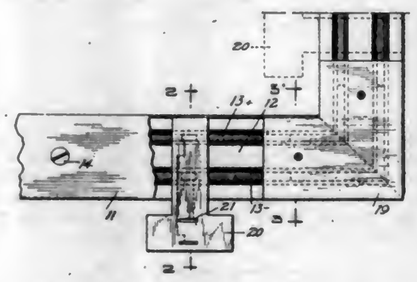


1,879,197. RESISTOR UNIT FOR REFRIGERATING APPARATUS. HAROLD A. GREENWALD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 12, 1931. Serial No. 508,249. 11 Claims. (Cl. 62—127.)



1. A molding as characterized comprising a relatively flat elongated insulatory base, electrical conductors longitudinally disposed with respect to said base and exposed at the front thereof, and a metallic covering for said base and insulators, said covering having its longitudinal front wall spaced from the said conductors providing therewith a continuous channel and said channel being downwardly open with the opening of constant width for receiving and holding removable connectors at any desired longitudinal position.

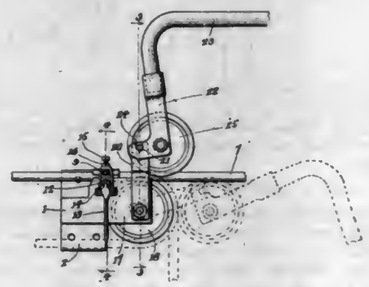
1,879,198. ELECTRIC WALL MOLDING. ALPHONSE M. GREIS, Hartsdale, N. Y., assignor of one-half to Walter L. Biery, New York, N. Y. Filed Oct. 24, 1930. Serial No. 490,833. 2 Claims. (Cl. 247—8.)



1. A molding as characterized comprising a relatively flat elongated insulatory base, electrical conductors longitudinally disposed with respect to said base and exposed at the front thereof, and a metallic covering for said base and insulators, said covering having its longitudinal front wall spaced from the said conductors providing

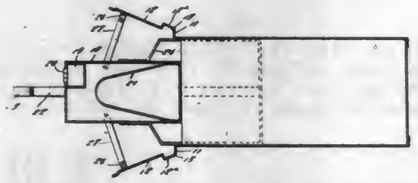
therewith a continuous channel and said channel being downwardly open with the opening of constant width for receiving and holding removable connectors at any desired longitudinal position.

1,879,199. PIPE BENDING TOOL. LEE GRIMES, Tillamook, Oreg. Filed Oct. 27, 1931. Serial No. 571,449. 5 Claims. (Cl. 153—46.)



1. A pipe bending tool comprising, a block having means for clamping a pipe to be bent, a pair of spaced plates carried by said block, a sheave wheel mounted between said plates, a pair of links, each having one end pivotally connected with the plates, an angular yoke detachably connected with the opposite ends of said links, and a sheave wheel carried by said yoke.

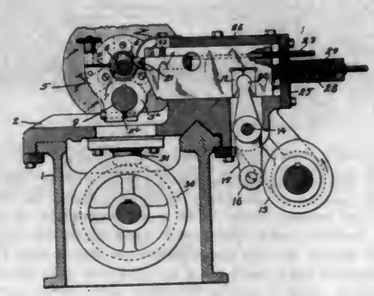
1,879,200. RURAL MAIL BOX. FRANKLIN GRIMM, Mora, Minn. Filed Mar. 25, 1931. Serial No. 525,241. 2 Claims. (Cl. 232—33.)



1. In a mailbox structure of the class described, a box, a pair of companion hingedly mounted doors for the open front of said box, a partition in said box forming a bottom compartment, a drawer slidable in said compartment, an operating handle for said drawer extending outwardly through openings in said doors, and operating connections between the drawer and doors.

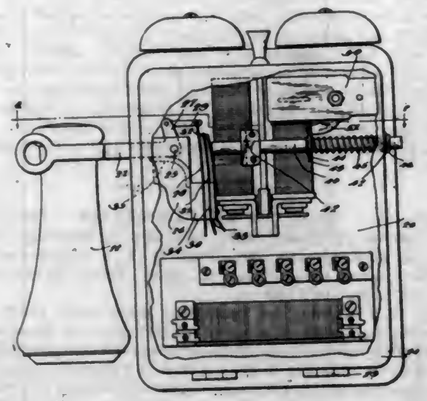
1,879,201. CAM SHAFT LATHE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 407,813. 6 Claims. (Cl. 82—19.)

1. In a lathe, a bed, a carriage movable thereon, means on the bed for supporting and rotating a cam shaft to be cut, a series of tool slides supported on the bed, a master cam shaft on the carriage having master cams for each cam to be cut, side cutting tools in slides, rockers actuated by the cams for moving the slides in and out as the work is rotated, and means for moving the carriage along the bed, said rockers being supported on a shaft mounted on the bed.



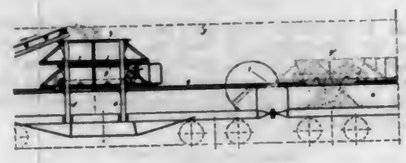
6. In a lathe for turning on a shaft an axial series of cam peripheries each of which is of axial width small relatively to the length of the series, mechanism comprising means for rotating the shaft, tool carriers and means for moving said carriers each at a substantial angle to the shaft axis in accordance with the desired peripheral contour of the respective cam, and, in combination with said mechanism, side cutting tools held by the respective holders, and mechanism whereby said carriers are fed through the relatively slight required distance in proper cutting direction to cut said contour progressively from one edge of the periphery to the other.

1,879,202. ALARM. JENS K. GRONDAHL, Red Wing, Minn. Filed Mar. 6, 1931. Serial No. 520,652. 5 Claims. (Cl. 179—5.)



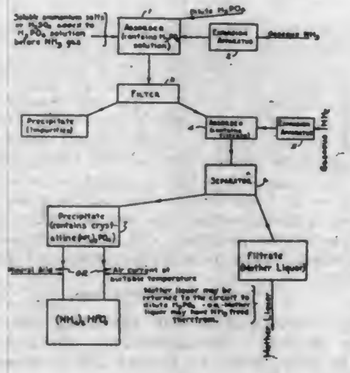
1. In a telephone receiver, a switch for controlling the circuit of the receiver, an ear piece, means for supporting the ear piece and for retaining the switch open, means for moving the supporting means for closing the switch when the ear piece is removed from the supporting means, means for moving the switch to closed position independently of the first mentioned closing means while the ear piece retains the supporting means in an inoperative position.

1,879,203. PLANT FOR LOADING AND UNLOADING WAGONS. PAUL GUILBERT, Rouen, and JULES LEGRAND, St. Mande, France. Filed Sept. 12, 1930, Serial No. 481,534, and in France Dec. 10, 1929. 3 Claims. (Cl. 214—38.)



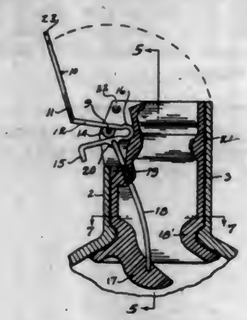
1. A truck equipment for the handling of waste produced by ballast-screening or the like comprising a truck, a hopper secured over same, a movable bottom for said hopper, means for loading the hopper, rails carried along the sides of the truck, a carriage adapted to run over said rails, a second hopper carried by said carriage and adapted to pass underneath the first hopper, a removable bottom for the second hopper and means for unloading the truck.

1,879,204. PRODUCTION OF AMMONIUM PHOSPHATES. JOSEPH GUILLISSEN, Brussels, Belgium, assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Filed Dec. 20, 1929, Serial No. 415,623, and in Germany, France, and Great Britain Feb. 22, 1929. 1 Claim. (Cl. 23—107.)



A process for obtaining solid, pure, stable di-ammonium phosphate, consisting in treating dry, crystallized, tri-ammonium phosphate with the calculated quantity of a concentrated solution of phosphoric acid in order to produce the di-ammonium salt; and then drying the product without the application of heat.

1,879,205. VALVE CLOSURE. DAMON MOTT GUNN, Fort Williams, Me. Filed Dec. 8, 1931. Serial No. 579,778. 10 Claims. (Cl. 221—60.)

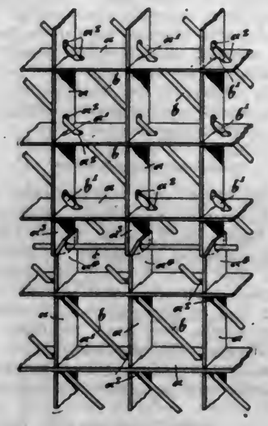


1. Valved closure comprising means forming a chamber including valves adjacent opposite ends of said chamber, and means for simultaneously actuating said valves to open or close them, a wall of said chamber being responsive to the actuation of said valves to contract the volume of said chamber when the valves are opened and to expand it when the valves have become substantially seated, creating a vacuum to draw in any matter which may have deposited on the seat of one of said valves.

1,879,206. PROCESS OF PREPARING PHENYL MERCURIC ACETATE. HEINRICH GÜNZLER and ARNOLD MORÉ, Elberfeld, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 21, 1929, Serial No. 401,378, and in Germany Oct. 30, 1928. 3 Claims. (Cl. 260—13.)

1. The process which comprises heating mercuric oxide with benzene and glacial acetic acid at a temperature between about 60° C. and the boiling point of the mixture for several hours.

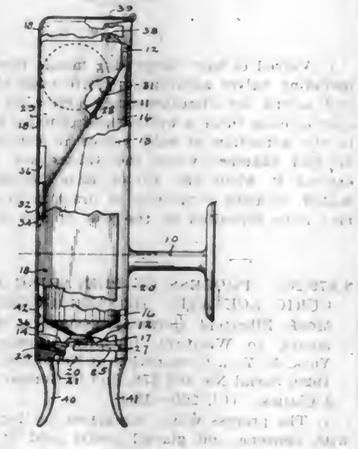
1,879,207. STEEL OR METAL MESH FOR REENFORCING CONCRETE, ASPHALT, AND LIKE MATERIAL. ALFRED PERCIVAL GUPWELL, Birmingham, England. Filed May 14, 1931, Serial No. 537,363, and in Great Britain Jan. 14, 1931. 4 Claims. (Cl. 94—8.)



1. A metal mesh for reenforcing concrete, asphalt, granolithic, or like material comprising in combination

a plurality of interslotted laths or slats adapted to constitute square or diamond-shaped pockets or cavities, wires engaging apertures in the laths or slats and extending or passing across adjacent to the corners of the pockets or cavities on lines parallel to and offset from the true diagonal, and enlargements upon the wires adapted to arrest their axial displacement and secure the structure against collapse.

1,879,208. DISPENSER. HAROLD M. GUSDORF, Indianapolis, Ind. Filed May 24, 1930. Serial No. 455,220. 14 Claims. (Cl. 221—60.)



1. In a dispenser employing a collapsible container, a support for said container, a wedge member, a movable member carried by the support adapted to carry said wedge member against the container, and weight means between the movable member and the wedge member normally causing the upper end of the wedge member to contact with said container, said wedge member being initially slidingly engaged toward its lower end by said movable member, said movable member being reciprocatably mounted on said support to permit lateral reciprocation in relation to the container and said weight means being free to drop by gravity between the movable member and the wedge member.

1,879,209. PROCESS OF PREPARING NITRILES. HERMANN HAGENEST, Leverkusen-Wiesdorf-on-the-Rhine, and FRIEDRICH WILHELM STADF, Cologne-Deutz-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Oct. 30, 1929, Serial No. 403,652, and in Germany Nov. 7, 1928. Divided and this application filed Sept. 16, 1930. Serial No. 482,369. 4 Claims. (Cl. 260—108.)

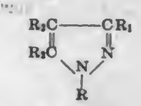
1. In the process for preparing a nitrile the step which comprises reacting with a compound of the probable general formula:

$$Alk_x\text{-}Cu(CN)_y.A_z$$

wherein Alk means an alkali metal, A stands for an alkali metal or ammonia, x stands for 2 and y for 4, or x stands for 3 and y for 5 and z stands for 1 or 2, upon an aromatic diazo compound while heating between about 40° and 100° C.

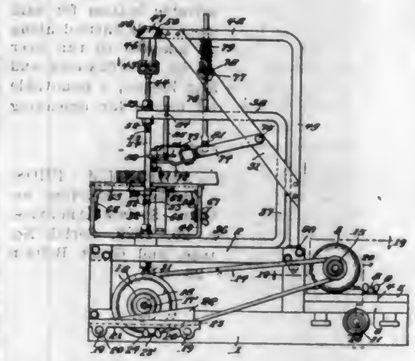
1,879,210. PYRAZOLE DERIVATIVES. HANS HAHL, Elberfeld, Germany, assignor to Winthrop Chemical Company Inc., New York, N. Y., a Corporation of New York. Filed Apr. 15, 1929, Serial No. 355,435, and in Germany Apr. 28, 1928. 5 Claims. (Cl. 260—45.)

1. As new products the compounds of the probable general formula:



wherein R stands for hydrogen, methyl, alkylaminoalkyl, phenyl or phenylalkyl, R_1 and R_2 means alkyl-groups containing at least two carbon atoms, R_3 represents hydrogen or an alkyl group, said compounds forming liquid or solid strong basic substances, having valuable pharmacological properties.

1,879,211. MACHINE. JAMES L. HAIL, Crockett, Tex., assignor of one-half to Sidnor L. Murchison, Crockett, Tex. Filed Sept. 10, 1931. Serial No. 562,157. 1 Claim. (Cl. 143—157.)



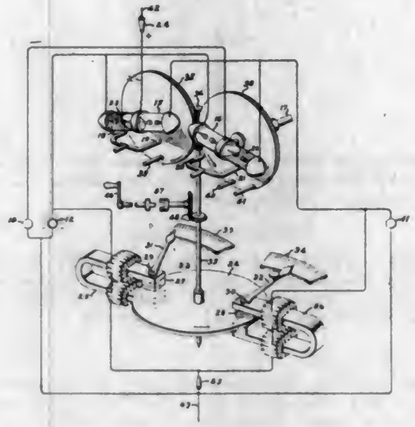
In combination with upper and lower vertically disposed reciprocatory shafts for a saw blade, of a standard having an angle end carrying a flexible element to which the upper shaft is connected, an angle brace between the standard and the angle end thereof, a strap pivotally secured to the brace, a plate secured by a nut and bolt to the strap, a work-engaging roller on the outer end of the plate, a rod movable through the angle arm of the standard and having rollers journaled thereon adjacent to its lower end to ride on the upper edge of the strap, a spring around the rod in contact with the angle arm of the standard, and an adjustable element on the rod with which the lower end of the spring contacts.

1,879,212. APPARATUS FOR COOKING OR FRYING. ADOLF HAINLEN, Geislingen-Steige, Germany. Filed Dec. 16, 1929, Serial No. 414,543, and in Germany Dec. 22, 1928. 7 Claims. (Cl. 219—37.)



6. In a hot plate, the combination of heating elements and a heat transferring portion consisting of two layers of metal rigidly and nonshiftably secured to one another, the layer nearest the heating elements having a lower specific thermal expansion than the layer more remote from the heating elements.

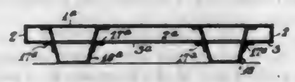
1,879,213. AUTOMATIC TIME SWITCH. CHESTER I. HALL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1924. Serial No. 730,986. 21 Claims. (Cl. 177—339.)



11. A motor driven time switch comprising an induction disc armature, a plurality of electromagnetic field elements associated with said armature, each of which when energized is capable of driving said disc by induction motor action, a switch comprising a plurality of switch contacts, circuits connecting said contacts to said field elements for energizing them, and means connecting said disc armature to said switch for operating the switch whereby said contacts selectively operate said field elements in a desired sequence.

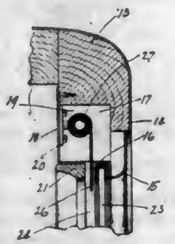
20. In a traffic regulator, a "stop" signal and a "go" signal, means including a rotary member for alternately operating said signals, and means for causing said member to travel rotatably a certain distance at one speed to operate one signal, and an approximately equal distance at the same or at a different speed to operate the other signal, said means comprising an armature, a plurality of field units, and means for adjusting said field units to vary the speed at which they drive the armature.

1,879,214. TRUCK. HOWARD T. HALLOWELL and FRANK BENNETT, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1930. Serial No. 491,789. 2 Claims. (Cl. 248—41.)



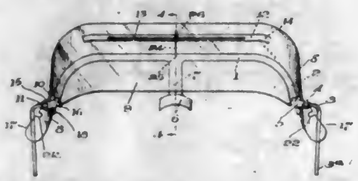
1. The combination in a platform made of a plate forming the top of the platform, having deep inturned side flanges; supports spaced from each other and secured to the underside of the plate; and angle bars extending from one side flange to the other and secured to the supports some distance from the point of attachment of the supports to the underside of the plate forming the platform, so that the excessive loads will be taken by the side flanges through the angle bars.

1,879,215. MOTOR VEHICLE. JACOB HAMMERL, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 28, 1929. Serial No. 374,356. 6 Claims. (Cl. 296—143.)



1. In a motor vehicle body, in combination with a window frame, a pocket formed in the header of the frame adaptable for the reception of a shade roller, said header and frame having communicating slots therein in order that the shade may pass therethrough and a plate covering the side of the pocket adjacent the interior of the body.

1,879,216. GLARE SHIELD. GEORGE R. HANNAN and RUTHERFORD G. GOLDMAN, Los Angeles, Calif., assignors, by direct and mesne assignments, to H. T. Barlow, Los Angeles, Calif. Filed Apr. 7, 1931. Serial No. 528,270. 10 Claims. (Cl. 2—12.)

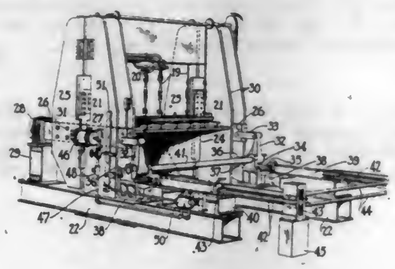


1. In combination, a supporting frame adapted to extend across the face adjacent the eyes and having hinged ear-pieces at its ends adapted to engage the ears, and a shield supported on the frame and projecting outwardly and downwardly in front of the upper portion thereof with the ends of the shield curving rearwardly alongside the frame and lying inside the ear-pieces and resting upon the frame at its hinged connections with the ear-pieces, the curved ends of the shield having shoulders adapted to hook under the ear-pieces.

1,879,217. WELDING MACHINE. ARTHUR F. HANSON, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1929. Serial No. 384,430. 9 Claims. (Cl. 219—4.)

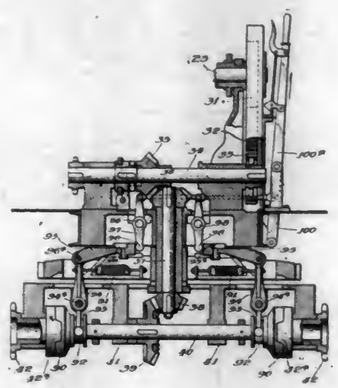
1. A welding machine comprising elongated opposed welding dies transversely relatively movable toward and

from each other, a multiple number of motors applying power at longitudinally spaced points to one of the dies



to feed it toward the other during the welding operation, and motion synchronizing devices between the motors to insure uniform movement of the die throughout its length.

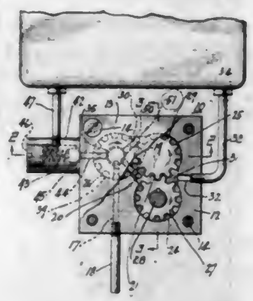
1,879,218. STEERING MECHANISM. CLIFFORD O. HANSON, Tiffin, Ohio, assignor to The Hanson Clutch & Machinery Co., Tiffin, Ohio, a Corporation of Ohio. Filed May 11, 1931. Serial No. 536,595. 2 Claims. (Cl. 180—9.2.)



1. In apparatus of the character described; a chassis mounted on traction members; a platform rotatably mounted on the chassis; a motor mounted on the platform; disengageable drive connections between the motor and traction members on both sides of the chassis, including clutches normally in engagement; members on the chassis adapted to operate said clutches; and manually operable members on the platform adjacent the clutch-operating member and adapted to operate the same when the platform is in normal position, said manually operable members being carried away from operative position adjacent the clutch operating members solely by rotation of the platform, whereby rotation of the platform is permitted without interfering with the steering mechanism.

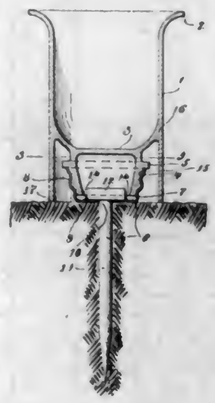
1,879,219. PUMP. WILLIAM CARL HARBISON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 27, 1929. Serial No. 381,501. 16 Claims. (Cl. 103—126.)

1. In a variable output capacity pump, a casing having fixed intake and delivery orifices, a pair of impelling gears in the casing, said casing having a duct leading from one of the gear chambers to the outlet, means for



connecting the other gear chamber with the outlet, and means for controlling the volume of fluid passing from the last mentioned gear chamber to the outlet.

1,879,220. FLOWER RECEPTACLE. HARRY H. HARMONY, Chambersburg, Pa., assignor to Florence May Harmony, Chambersburg, Pa. Filed Nov. 5, 1929. Serial No. 404,890. 3 Claims. (Cl. 47—34.)

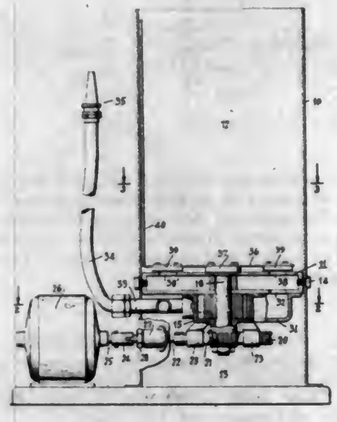


1. A flower receptacle having a bottom therein, holes in said bottom for the purpose of draining water therethrough, a threaded portion on the underside of said bottom, ground positioning means for said receptacle in the form of a threaded cup shaped member adapted to be screwed to said threaded portion of the receptacle, a protective skirt about said threaded members forming a protective enclosure against the elements when in their operative and engaged position, a pin integrally mounted on said cup shaped member for the purpose of securely positioning same to the upper surface of the ground, a head on said pin to facilitate driving the pin into the ground.

1,879,221. LUBRICATING APPARATUS. WILLIAM HARRIGAN, Jersey City, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1930. Serial No. 440,684. 2 Claims. (Cl. 221—80.)

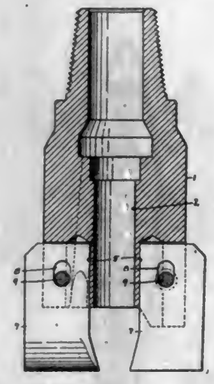
1. In grease dispensing apparatus, the combination of a vertically disposed cylindrical housing, an independent

chambered member having openings in its top and bottom walls removably secured intermediate the ends of the cylinder for dividing said cylinder into an upper compartment for the storage of grease and a lower compartment



for housing the pumping mechanism, grease pumping mechanism in said lower compartment, and means in said upper compartment for forcing grease through said chambered member to said pumping mechanism, and means for operating said pumping and forcing means.

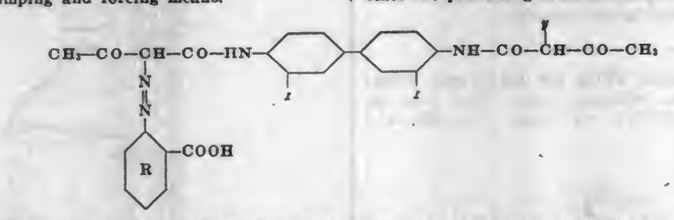
1,879,222. DRILL. GEORGE G. HARRINGTON, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed July 22, 1930. Serial No. 469,666. 3 Claims. (Cl. 255—61.)



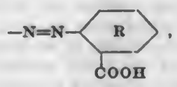
1. A well-drilling bit blade having an upper portion both tapered toward its upper end and tapered toward its outer side, and an elongated slot therein.

1,879,223. NEW AZODYESTUFFS. MAX HARDTMANN, Naunhof, near Leipzig, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1931, Serial No. 582,873, and in Germany Jan. 3, 1931. 4 Claims. (Cl. 260—76.)

1. As new products the azodyestuffs having in their free state the probable general formula:



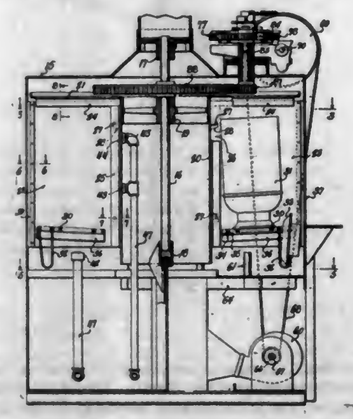
wherein the benzene nucleus R may be substituted by a sulfonic acid group, x stands for hydrogen, alkyl, alkoxy or halogen and y stands for hydrogen or the group



being in form of their alkali metal salts water soluble yellow powders, dyeing the vegetable fibre yellow shades which by after-coppering become fast to washing and light.

1,879,224. CONTAINER WASHING MACHINE. JOSEPH HAUK, Milwaukee, Wis., assignor to Hauk Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 26, 1929. Serial No. 395,360. 2 Claims. (Cl. 141—7.)

1. In a washing machine of the character described, the combination of a housing, a carrier rotatably mounted in said housing and provided with a plurality of sets of radially extending, horizontally and vertically disposed guideways, partitions slidably mounted in said guideways and having detachable, hooked connections with the carrier to form therewith a series of compartments, container supports removably connected to adjacent partitions,



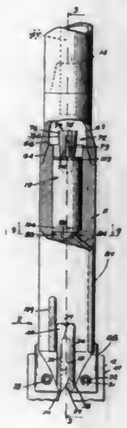
means for imparting a rotary movement to the carrier, and means for directing washing fluid into and against the containers on said carrier.

1,879,225. PROPELLER BLADE. JAKOB HAW, Berlin-Staaken, Germany, assignor to the Firm of Propeller Aktiengesellschaft, Schaffhausen on Rhine, Switzerland. Filed June 5, 1930, Serial No. 459,378, and in Germany June 28, 1929. 6 Claims. (Cl. 170—159.)



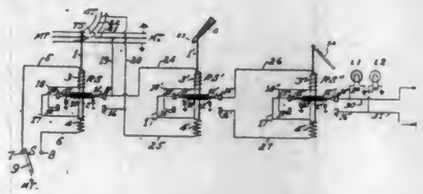
1. A hollow cast propeller blade having transverse inner walls and at least one longitudinal threaded rod anchored at the base of the blade and tensioned against the said transverse walls, the said transverse walls being in advance subjected in a direction towards the base of the blade, to different predetermined pressures, such as will enable the said transverse walls uniformly to absorb the centrifugal force acting on the different portions of the blade body at the motion of the propeller.

1,879,226. MAGAZINE TYPE OF DRILLING TOOL. EDWARD H. HEDDY, Fillmore, Calif. Filed June 26, 1929. Serial No. 373,772. 14 Claims. (Cl. 255—61.)



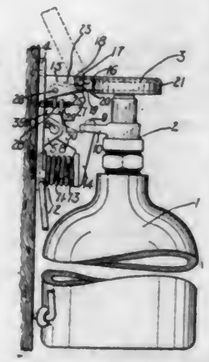
5. A drilling appliance comprising a drilling tool having a first set of cutters rigidly connected thereto, a second set of cutters shiftably mounted in the tool and means to press the second set of cutters laterally outwardly to bring said second set of cutters into operation on the bottom and side walls of the hole on dulling of the first set.

1,879,227. APPARATUS FOR TOY ELECTRIC RAILWAYS. FREDERICK W. HEHRE, Arlington, N. J., assignor to Leon W. Rosenthal, New York, N. Y. Filed Sept. 25, 1929. Serial No. 395,017. 17 Claims. (Cl. 246—232.)



1. In a toy electric railway, the combination with a plurality of associated movable track and way elements, of means for operating said elements in succession automatically after initial manual actuation, said means being arranged to operate said elements always in the same sequence at each manual actuation.

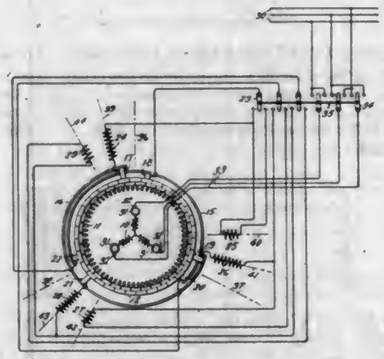
1,879,228. FIRE EXTINGUISHER SUPPORT. HENRY ERNEST HEIGIS, West Orange, N. J., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1931. Serial No. 561,400. 25 Claims. (Cl. 116—114.)



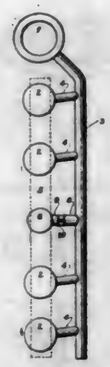
1. A loss of weight indicator for a fire extinguisher containing an extinguishing fluid, comprising a rotatably supported holding member for holding the fire extinguisher, means to yieldingly oppose the rotating effect of the weight of the fire extinguisher upon the holding member and to effect counter-rotation of the holding member upon a decrease in weight of the fire extinguisher, a pivotally supported means for indicating a predetermined decrease in the weight of the fire extinguisher and normally in a non-indicating position, and means to cause the last named means to assume an indicating position upon a predetermined counter-rotation of the holding member.

1,879,229. POWER FACTOR REGULATION OF ALTERNATING CURRENT MACHINES. ARTHUR F. HEINRICH, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1931, Serial No. 583,578, and in Great Britain Jan. 9, 1931. 14 Claims. (Cl. 172—280.)

1. In a dynamo electric machine, the combination of a rotatable armature winding, a pair of circumferentially spaced apart commutator brushes, a stationary winding, switching means having two operating positions, and connecting means between said commutator brushes, stationary winding, and switching means, said connecting means being so arranged that the effective magnetic axis of the stationary winding is displaced to one side and then to the other side of the magnetic axis of that part of the armature winding included between the commutator brushes with movement of the switching means from one to the other operating position.



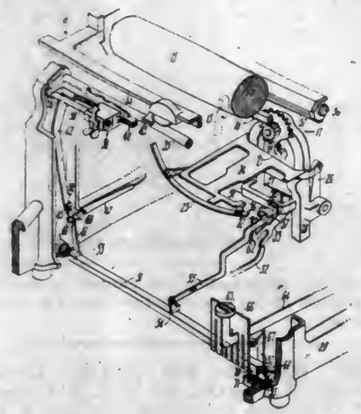
1,879,230. MEANS FOR AND METHOD OF BLAST FURNACE BACK DRAFTING. CHARLES H. HEIST, Youngstown, and BUFORD M. STUBBLEFIELD, Poland, Ohio. Filed Sept. 23, 1931. Serial No. 564,490. 7 Claims. (Cl. 263—19.)



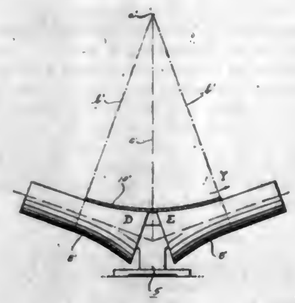
1. The combination with a blast furnace, a hot blast main interconnected therewith and a stack, of a pipe extending between said hot blast main and said stack and a valve interposed in said pipe and operable to control the passage through said pipe between the hot blast main and the stack.

1,879,231. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,513. 8 Claims. (Cl. 197—109.)

3. In a typewriting machine, the combination with a traveling carriage and a key-operated universal bar, of a rocking bar mounted to slide, a locking member connected to said bar, means operated by said carriage to rock said bar and move said locking member to position to lock said universal bar, and means for moving said bar sidewise and restoring said locking member to its ineffective position.



1,879,232. CONVEYER BELT SUPPORT. FERDINAND G. HENRY, Moline, Ill. Filed Oct. 10, 1931. Serial No. 568,157. 5 Claims. (Cl. 198—192.)

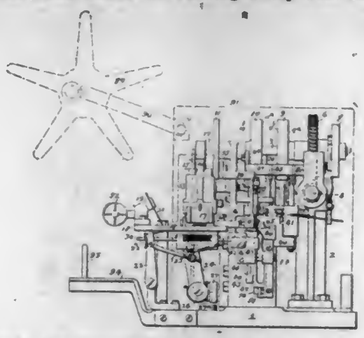


1. A support for conveyer belts comprising a pair of pulleys mounted for rotation in obtuse angular relation to one another, said pulleys being of maximum diameter at their inner ends and gradually decreasing in diameter to their outer ends providing curved supporting faces corresponding to a common arc.

1,879,233. MACHINE FOR APPLYING TICKETS TO MERCHANDISE. GEORGE W. HENRY, Jr., Philadelphia, Pa., assignor to Soabar Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 20, 1930. Serial No. 476,647. 14 Claims. (Cl. 93—88.)

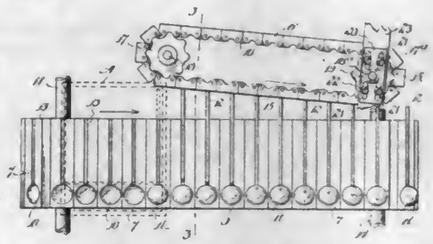
1. The combination in a machine for applying tickets to merchandise, of a bed; means for intermittently feeding a perforated ticket-strip over the bed; means for printing each ticket as it passes under the printing mech-

anism; means for cutting a ticket from the strip; a support for the merchandise, over which the cut ticket is projected; and means for bending a clip over the ticket



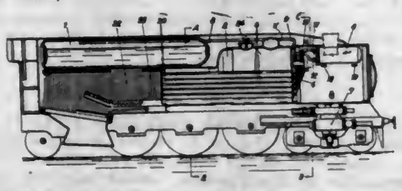
and under the merchandise, one portion of the clip forcing a portion of the merchandise into the perforation in the ticket.

1,879,234. MACHINE FOR MAKING LOLLIPOPS. VOLQUARDT O. HERMANN, New York, N. Y., assignor to The V. O. Hermann Corporation, New York, N. Y. Filed Oct. 20, 1931. Serial No. 570,014. 6 Claims. (Cl. 107—8.)



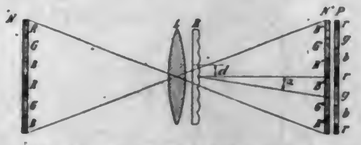
3. An apparatus for use in connection with a candy making machine for assembling a lump of confection and stick on which it is impaled comprising a carrier belt consisting of blocks connected by links to pass over spaced apart sprocket wheels, said blocks each having a recess to receive the confection and a groove in line with said recess to receive the stick; together with a pusher belt disposed at an angle to the travel of the carrier belt to engage the sticks and force them into the lumps of confection during the travel of said carrier belt.

1,879,235. HIGH PRESSURE LOCOMOTIVE WITH INTERSTAGE SUPERHEATING. ALFRED HERMANUZ and KURT KLUG, Kassel-Wilhelmshohe, Germany, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed July 9, 1930, Serial No. 466,799, and in Germany Aug. 31, 1929. 5 Claims. (Cl. 122—37.)



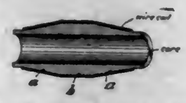
1. In a locomotive the combination of a water tube boiler forming the fire box and adapted to generate high-pressure steam, with a flue tube boiler adapted mainly to preheat the feed water of the said water tube boiler and provided with a plurality of flue tubes extending from the fire box superheating tubes of more than one flue gas heated steam superheater within said flue tubes and terminating short of the fire box ends thereof, the ratio of the flue gas touched heating surface of the superheaters to the water covered heating surface of the flue tube boiler being higher than 1 (one).

1,879,236. PRINTING COLOR PICTURES. GERD HEYMER, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Oct. 13, 1930, Serial No. 488,479, and in Germany Oct. 18, 1929. 1 Claim. (Cl. 88—24.)



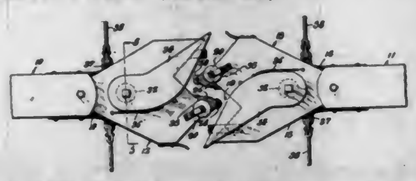
The process of printing a photographic picture having a regular screen of the group consisting of dotted and striated screens, onto a light sensitive layer provided with a like screen, which comprises inserting in the course of the light rays a lenticular screen the lens elements of which are geometrically similar to the elements of the regular screen to be printed, and have a size and focal length so as to produce only a limited number of interference images in each interference direction of the undeflected picture arising in the printing layer behind each screen element.

1,879,237. PRODUCTION OF LENTICULAR ELEMENTS ON FILMS. GERD HEYMER, Dessau-Ziebigk, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 15, 1932, Serial No. 586,826, and in Germany Jan. 20, 1931. 5 Claims. (Cl. 18—15.)



1. A roller for making lenticular embossings on films which comprises a core having a raised surface and a wire coil wound thereon.

1,879,238. TRAIN LINE COUPLER. WILLIAM H. HIDLEBAUGH, Electra, Tex. Filed June 12, 1931. Serial No. 543,955. 1 Claim. (Cl. 285—58.)



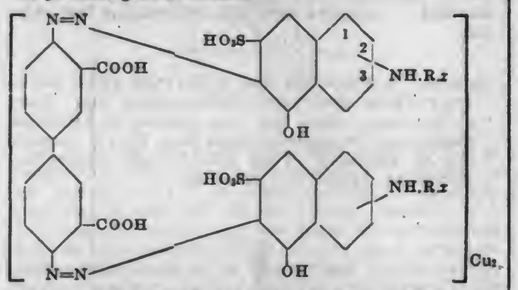
An air line coupler comprising mating coupling heads each having a recess opening through its outer end and a longitudinal air passage through the other end communicating with said recess, a wall of said recess being inclined, a laterally swingable member in the recess having a longitudinal air passage opening through an end and a side thereof, means for holding said member in its normal outward position, the air passage at the end of said member being connected with the adjacent end of the air passage of the head, and a roller on the outer end of said member for engagement with said inclined wall, upon mating of said coupling heads, whereby to register the laterally opening ends of the swingable members of said coupling heads to form a continuous air passage therethrough.

1,879,239. MANUFACTURE AND PRODUCTION OF BASE-EXCHANGING COMPOUNDS. THOMAS PERCY HILDITCH, Birkenhead, and HAROLD JOSEPH WHEATON, Hale, England, assignors to American Doucil Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Aug. 13, 1923, Serial No. 657,206, now Patent No. 1,848,127. Divided and this application filed Dec. 24, 1931. Serial No. 583,132. 11 Claims. (Cl. 23—113.)

1. In the method of manufacturing a base-exchanging compound in the wet way, mixing a solution of an alkali-metal silicate with a solution of an alkali metal salt in which the simple alkali metal oxide to acid anhydride ratio is smaller than the corresponding ratio in the normal alkali metal salt of the same constituents and with a solution of sodium aluminate under conditions, proportions and degrees of concentration which result in the formation of a gel and then in drying the gel so produced.

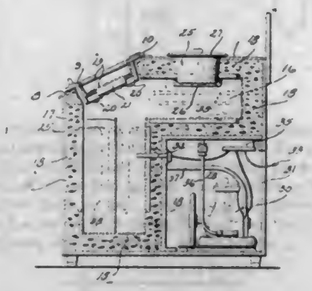
1,879,240. AZO DYESTUFFS. JOSEF HILGER and KARL WIEDEMANN, Cologne-Mulheim-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 20, 1930, Serial No. 437,595, and in Germany Mar. 30, 1929. 8 Claims. (Cl. 260—12.)

1. As new products, copper-containing azo dyestuffs of the probable general formula



wherein NHR.α stands in 2 or 3 position of the naphthalene nucleus, R means a radical of the benzene series or a benzoyl radical and α stands for a group inducing solubility in water, being generally dark metallic lustrous substances, easily soluble in water and dyeing vegetable fibers violet to blue shades of excellent fastness to light and ironing.

1,879,241. REFRIGERATED CONTAINER. JOHN W. HILL, Milwaukee, Wis., assignor of one-half to Fred A. Parsons, Milwaukee, Wis. Filed June 10, 1929. Serial No. 369,612. 8 Claims. (Cl. 62—126.)



1. A refrigerator provided with a plurality of chambers having their longer center lines angularly divergent and having communicating portions, said chambers being provided with a common door angularly intersecting said center lines at said portions and through which said chambers are substantially linearly accessible.

4. In a device of the character described, the combination with a container having faces angularly joined along their margins, of a tube having convoluted portions flatly associated with contiguous faces of said container, and an interconnecting portion traversing the angular margin between said faces in a direction more closely approaching the direction of said margin than a direction transverse thereto.

1,879,242. EXPANSION SHOE TREE. MARTIN HOFF, New York, N. Y. Filed Dec. 26, 1931. Serial No. 583,343. 8 Claims. (Cl. 12—128.2.)



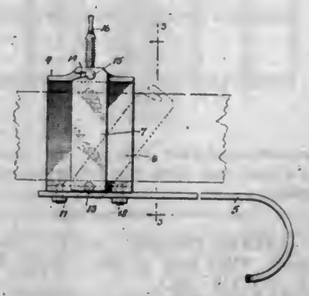
1. An expansion shoe tree, comprising a vamp portion composed of a sole section having a front projection, and a pair of adjacent right and left upper sections located above said sole section, a control plate disposed between the sole section and said upper sections and having a front lip capable of riding on said front projection, and pins depending from said upper sections through inclined slots formed in the control plate and transverse slots formed in said sole portion.

1,879,243. FABRIC. IRA C. HOFFACKER, Baltimore, Md., assignor to Mount Vernon-Woodberry Mills, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 5, 1931. Serial No. 542,421. 14 Claims. (Cl. 139—415.)



1. A fabric for dryer canvas or felts comprising core warp strands, weft or filler strands and face warp strands over and under the weft strands on both planes of the fabric so as to provide an open corrugated back to the woven fabric, and a relatively smooth uniform face thereon, substantially as set forth.

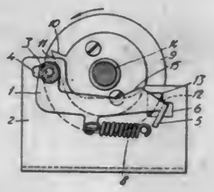
1,879,244. SCAFFOLD SUPPORT. FRED HOFFMAN, Wabash, Ind. Filed May 28, 1931. Serial No. 540,691. 3 Claims. (Cl. 304—23.)



1. A scaffold support including a hook, a substantially U-shaped body formed with a top and bottom plate and a side plate, a pair of bolts extending through said bottom

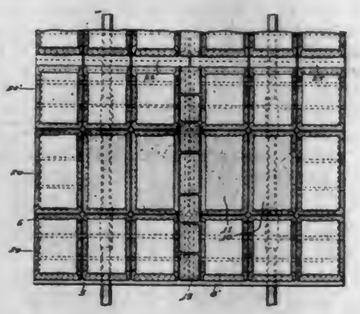
plate and through part of said hook and nuts for said bolts for rigidly clamping the hook to the body, a set screw carried by the top plate positioned to pinch a part of the scaffold support and to force the same against said bottom plate, a gate on the opposite side to said side plate pivotally mounted on said bottom plate and positioned to swing in a plane parallel to said side plate, and means carried by said top plate for detachably holding said gate in closed position.

1,879,245. TENS CARRYING MEANS. HANS FREDRIK BIRGER HÖGFORS, Stockholm, Sweden. Filed June 19, 1931, Serial No. 545,531, and in Sweden June 27, 1930. 1 Claim. (Cl. 235—133.)



In totalizers where the shaft about which the totalizer wheels turn has a to-and-fro motion for engaging and disengaging the toothed wheels or racks turning the totalizer wheels, a release slide for tens carrying which when being advanced to release position is adapted to be carried to a fixed position by a spring, the release slide being adapted to be carried back to the initial position by the totalizer shaft when the latter returns to a position out of engagement with the wheels or racks, such release slide being mounted in a frame so as to be slidden and turned, and being provided with a cam intended to cooperate with the totalizer shaft, and also with a lip positioned in an opening of the frame, said opening being provided with a catch into which the lip snaps when the slide is advanced to the release position.

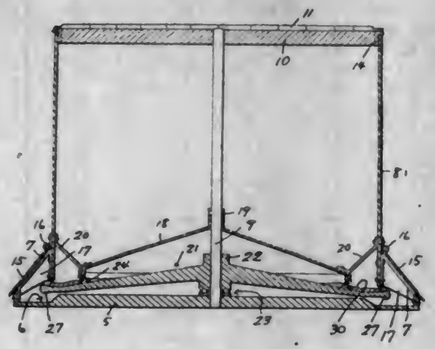
1,879,246. REFRACTORY BODY. JESSE S. HOGUE, Hammond, Ind. Filed Aug. 28, 1930. Serial No. 478,335. 11 Claims. (Cl. 25—142.)



1. An abrasion-resistant body of the class described comprising a cast iron shell and refractory material disposed therein.

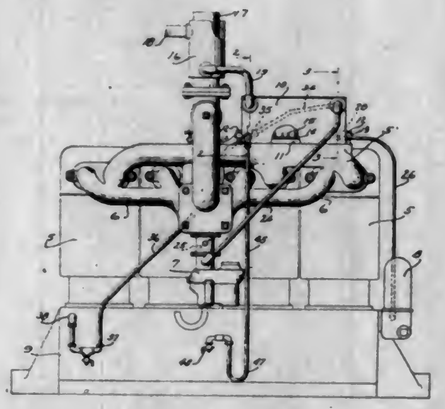
1,879,247. ANIMAL FEEDER. JOHN D. HOLLIDAY, Orchard, Nebr. Filed Sept. 5, 1931. Serial No. 561,435. 6 Claims. (Cl. 119—54.)

1. In a structure of the class described, a base plate having its marginal portion channeled to provide a feeding trough, a feed hopper supported in spaced relation above the trough portion of the base, a rotary agitator plate supported from said base and including a marginal portion projecting beyond the hopper wall into said trough, the projecting portion of said agitator being formed with animal actuated knobs a plurality of circumferentially-



ly spaced brackets connected with the lower portion of the wall of the hopper and rim of the trough, each bracket including a depending web, said web defining individual cells.

1,879,248. APPARATUS FOR REMOVING FUEL DILUTION FROM ENGINE'S LUBRICATING OIL. JOHN H. HOLLOWAY, Green Bay, Wis., assignor to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1929. Serial No. 337,905. 2 Claims. (Cl. 123—196.)



1. In apparatus for removing fuel diluent from the lubricating oil of an internal combustion engine, the combination with the pressure lubricating pump of the engine, of a retort, and means including a gravity head tube connected to said pump and to said retort for supplying oil and fuel to be treated thereto at a low flow rate and under a substantially constant low pressure gravity head.

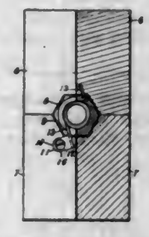
1,879,249. COLONIC TUBE. CHARLES COY HONSAKER, Philadelphia, Pa. Filed Apr. 7, 1931. Serial No. 528,267. 6 Claims. (Cl. 128—239.)

1. A device of the class described, comprising a flexible tubular body and a tip integral therewith, the wall of the body having an aperture adjacent the junction of the body and the tip, and the tip having a longitudinal passage



of less diameter than the bore in the body extending from its extremity rearwardly and forming an extension of said bore in the vicinity of the said aperture.

1,879,250. DIE. CHARLES HOPKINS, Pottstown, Pa. Filed Nov. 20, 1929. Serial No. 408,490. 1 Claim. (Cl. 10—85.)



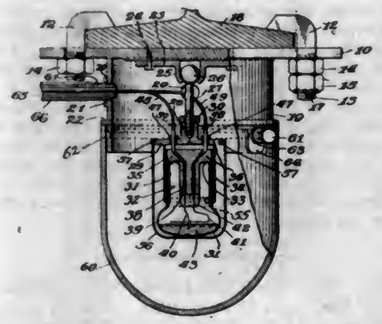
As an article of manufacture a forming die, for use in combination with a punch and crowner for producing a nut having a bore, a circumferential groove and one or more slots leading into the said groove, consisting of a body member having an aperture formed therein to produce the nut cross section desired, one or more cutter receiving slots formed in the said die, and a cutter for cutting the said nut slots detachably mounted in each of the said cutter receiving slots and positioned so that its cutting edge projects into the said aperture.

1,879,251. EASEL. WESLEY HORRATUCK, New York, N. Y. Filed Nov. 16, 1931. Serial No. 575,206. 7 Claims. (Cl. 40—125.)



1. In an easel construction for the purpose described, including a two-unit sheet stretching member and a brace, a locking arrangement for said member and brace, comprising in combination reduced unit engaging portions, one of the latter having a recess formation at about the point where its reduction commences, the end of the other reduced unit portion having provisions for lockably engaging said recess formation, one of the portions having a brace-receiving means, the other having brace engaging guide means adapted to form a continuation of said brace-receiving means, when the reduced unit portions are in operative interengagement, said brace engaging said receiving means and said guide means and forming a lock for and preventing a sidewise movement of said two-unit stretching member in its operative position.

1,879,252. ELECTRIC SIGNAL AND SWITCH THEREFOR. ANTHONY HOROCHOWSKY, Elizabeth, N. J., assignor of one-third to Charles Lefchick, Elizabeth, N. J. Filed Oct. 16, 1931. Serial No. 569,142. 5 Claims. (Cl. 246—251.)



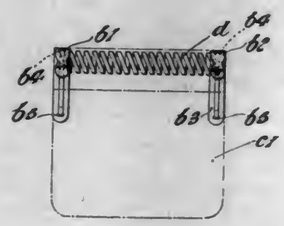
1. A relay tube comprising a cylindrical stud portion, a bulb portion extending from one of the ends of said cylindrical stud portion, the other end of said cylindrical stud portion being open, circuit closing elements within said bulb portion, a plug at the open end of said cylindrical stud portion, and a retaining wall around the outer periphery of said cylindrical stud portion, said retaining wall forming a juncture with said plug.

1,879,253. TELLURIUM RESISTOR FOR REFRIGERATORS. EDWARD H. HORSTKOTTE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 3, 1930. Serial No. 432,720 5 Claims. (Cl. 201—63.)



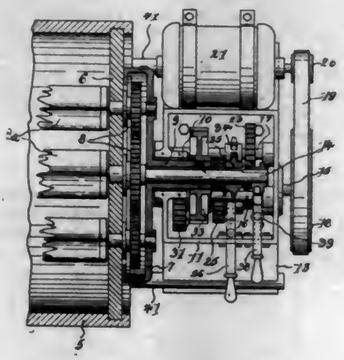
1. A self-reducing resistor unit for electric circuits having a base of insulating material provided with a passage therein, a tellurium resistor filling said passage, said base having relatively high heat storage capacity for preventing a rapid decrease in resistance of said tellurium when said resistor unit is in use, and a resistor of substantially constant value in series with said first tellurium resistor and supported on the outside of said base whereby the unit is limited to a predetermined minimum value of resistance.

1,879,254. MEANS FOR SUPPORTING ARTICLES ON WEARING APPAREL. ARTHUR EDWARD HOUGHTON, East Twickenham, England. Filed Sept. 28, 1931, Serial No. 565,671, and in Great Britain Oct. 8, 1930. 7 Claims. (Cl. 24—10.)



2. A device for supporting fountain pens, pencils and other articles within a pocket of the users' apparel from a spring clip provided on the article, comprising a single laterally resilient substantially rigid supporting strip, a clip at each end of the strip for supporting it at each extreme and within the upper portion of the pocket, the supporting strip being sufficiently rigid and thick at its upper portion as to enable the clip of the article to be sprung over it independently of and within the front edge of the pocket, and so that the clip of the article as well as the body thereof will be within and not extend over the front of the pocket.

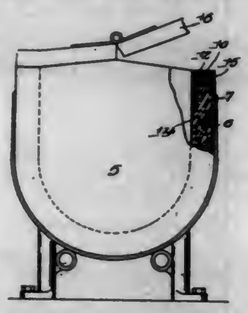
1,879,255. DRIVING MECHANISM FOR CHURNS. ALBERT C. HOUGLAND, St. Paul, Minn. Filed Feb. 10, 1930. Serial No. 427,135. 5 Claims. (Cl. 259—84.)



1. Driving mechanism for a churn having a revoluble body and butter working elements comprising, a power shaft, a second shaft operatively connected to said churn body, a third shaft operatively connected to said butter working elements, a fourth shaft disposed in axial alignment with said power shaft and operatively connected to said second shaft, and means for selectively driving said fourth shaft either directly from said power shaft or through said third shaft.

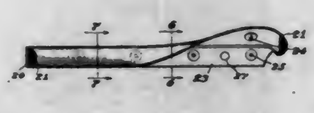
1,879,256. VAT CONSTRUCTION. ALBERT C. HOUGLAND, St. Paul, Minn. Filed Aug. 25, 1930. Serial No. 477,502. 8 Claims. (Cl. 220—9.)

1. In a vat having a wall, a narrow and relatively long strip of sheet metal extending along an edge of said wall and having a foldable flange adapted to project therefrom, means for securing said strip to said edge, a linear sheet extending from the interior of the vat across said



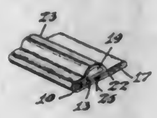
edge and overlapping said strip and having a foldable flange adapted to project beyond the flange on said strip and a lock joint formed by bending said flanges together.

1,879,257. UPHOLSTERY MOLDING STRIP. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed May 17, 1930. Serial No. 453,187. 12 Claims. (Cl. 155—184.)



1. Molding strip for upholstery, comprising a body portion and a connected relatively flat wing portion, the two portions being adapted to be folded together along the line of their junction, and separable fastener elements at the engaging faces of said portions for holding them in their folded relation.

1,879,258. FINISHING WELT AND METHOD OF MAKING THE SAME. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1929. Serial No. 417,807. 5 Claims. (Cl. 155—184.)

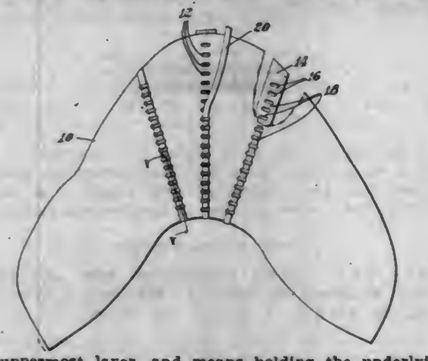


1. A finishing welt having a bead including a filler core surrounded by a body strip, a base strip having one of its edges stitched to an edge of said body strip adjacent to and laterally of said bead, an unstitched portion of said body strip being secured to and covering the said stitched edges.

1,879,259. ORNAMENTAL PRODUCT AND METHOD OF PRODUCING THE SAME. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed June 16, 1930. Serial No. 461,510. 9 Claims. (Cl. 41—10.)

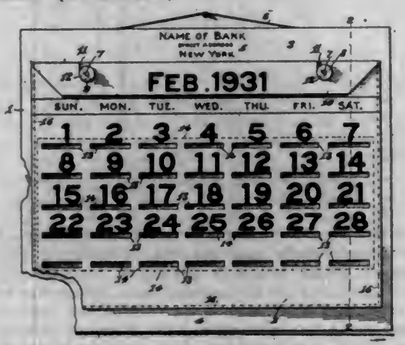
1. A composite ornamental product comprising dissimilar layers of flexible sheet material superimposed one on the other, the uppermost layer having a line of apertures of decorative outline and the underlying layer being

slotted in locations opposite to the spaces between the apertures of the uppermost layer and having intermediate portions in contact with and outlined by the apertures of



the uppermost layer, and means holding the underlying layer in immovable face to face contact with the portions of the uppermost layer bordering its said apertures.

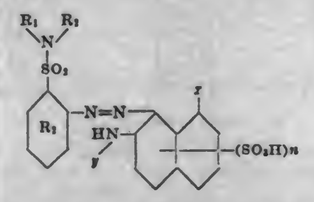
1,879,260. SAVINGS BANK. NEAL D. HOWARD, Merrick, N. Y. Filed Feb. 18, 1931. Serial No. 516,801. 7 Claims. (Cl. 40—107.)



1. A calendar savings bank comprising a container of flexible material having a calendar upon one wall, said wall having openings associated with the units of the calendar and permitting the passage of coins through the wall, and a reinforcing plate removably located within the container and supporting the wall, and said plate having openings spaced to register with the openings in the wall and permitting the passage of coins through the wall and plate into the container.

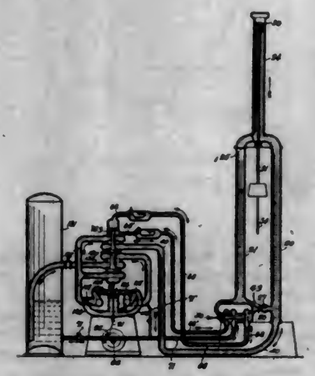
1,879,261. MONOAZO DYESTUFFS. HEINRICH HOYER and EUGEN GLIETENBERG, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1931, Serial No. 506,491, and in Germany Jan. 14, 1930. 5 Claims. (Cl. 260—92.)

1. As new products azo dyestuffs of the general formula:—



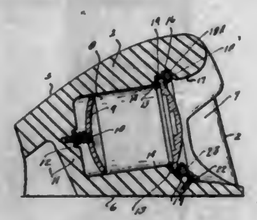
wherein R_1 stands for an alkyl group containing at least one hydroxyl group, R_2 stands for a benzene nucleus which may be substituted by halogen, alkyl or oxalkyl, x stands for hydrogen or a hydroxyl group, y stands for hydrogen, alkyl or phenyl, n stands for one of the numbers 1 and 2 and wherein the benzene nucleus R_2 may be substituted by halogen, alkyl, oxalkyl, the nitro group, the amino group or an acylamino group, said products being generally bluish-red to bluish-black powders soluble in water and dyeing wool from an acid bath bluish-red to blue shades of good fastness properties.

1,879,262. HYDRAULIC PUMPING SYSTEM. WILLIAM E. HUNBARD, Los Angeles, Calif., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed July 30, 1929. Serial No. 382,138. 8 Claims. (Cl. 60—52.)



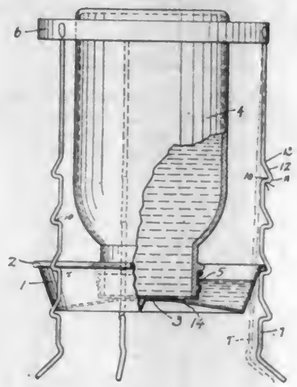
1. In a hydraulic pumping system, a load lifting unit comprising parallel pressure columns connected at their upper ends by a head, a cylinder mounted upon said head and communicating with one column, a pumping unit for supplying fluid to the column connected to said cylinder, a conduit connecting said columns, whereby a portion of the fluid supplied by said unit flows into the other column, a fluid system connected to said other column, a valve controlled by said system for affecting the operation of said pumping unit, and a working plunger disposed in said cylinder and having a rod depending parallel to said columns.

1,879,263. STREET TRAFFIC SIGNAL. ROBERT E. HUFFSCHMIDT, Portland, Oreg., assignor to K. E. Erickson, Portland, Oreg. Filed Mar. 17, 1930. Serial No. 436,568. 4 Claims. (Cl. 88—1.)



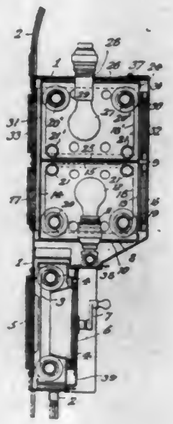
4. In a device of the class described, the combination of a body having a barrel formed therein, said barrel extending rearwardly from the front of the body element, a reflector disposed in the rear of said barrel, means for adjusting the reflector in the barrel and means for maintaining the reflector in fixed position, a recess disposed at the front of the barrel and a lens mounted within such recess, means for hermetically sealing the lens in said barrel, and means for fastening the body element relative to the supporting pavement.

1,879,264. STAND FOR POULTRY FOUNTAINS. KENNETH HUGHES and JOSEPH WILLIAMS, Elwood, Ind. Filed Apr. 6, 1931. Serial No. 527,982. 3 Claims. (Cl. 119—77.)



1. The combination with a drinking fountain comprising a pan with an outwardly projecting edge and a conically raised bottom and an inverted jar seated on the pan bottom and movable therewith, of a stand having resilient legs each formed with a series of corresponding edge supporting members which resiliently engage the edges of the pan.

1,879,265. INDICATOR. LYTLE GALE HUNTER and HARRY B. REISIGER, Flushing, N. Y., assignors to The Hunter Illuminated Car Sign Company, Flushing, N. Y., a Partnership composed of Lytle J. Hunter, Fenley Hunter, and Gale Hunter. Filed Apr. 12, 1930. Serial No. 443,726. 37 Claims. (Cl. 40—95.)



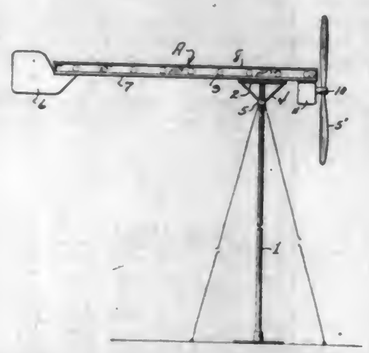
1. An indicator comprising three signs, one indicating a route and the other two indicating opposite terminals of said route, means for continually illuminating the route sign, and means for alternately illuminating said terminal signs.

1,879,266. DEVICE FOR MAKING AND CARRYING CIGARETTES. WILLIAM N. HUNTER, Blanchester, Ohio. Filed Dec. 3, 1931. Serial No. 578,786. 12 Claims. (Cl. 131—5.)



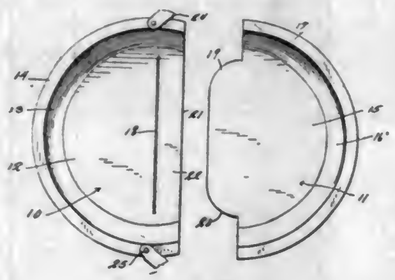
1. In combination, in a device for cigarettes or the like, a base of tray form, a rolling mechanism mounted on said base and adapted to form a part of a closure therefor, and a cover member to complete the closure.

1,879,267. WIND INDICATOR FOR AVIATORS. FORD M. HURNI, St. Joe, Ind. Filed May 7, 1930. Serial No. 450,556. 1 Claim. (Cl. 73—55.)



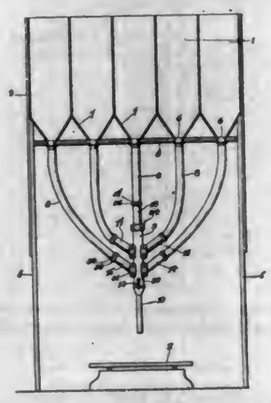
A device of the character described comprising an upright, a horizontally disposed flat substantially triangular-shaped casing rotatably supported centrally thereof at the upper end of the upright, said casing having its top, sides and ends formed of transparent material, a vertical fin at the small end of the casing, a propeller at the large end of said casing, means whereby said propeller is supported in a plane below the same, lamps arranged in the casing in rows transversely thereof, means for connecting the rows of lamps with a source of current supply, and a circuit closing device included in said means and connected with the propeller and operable for connecting the source of supply successively to the rows of lamps.

1,879,268. PIE PAN. ELIZABETH T. HURST, Olympia, Wash. Filed June 30, 1931. Serial No. 547,955. 2 Claims. (Cl. 53—6.)



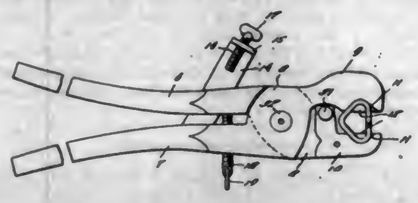
1. A pan of the character described comprising a pair of separable pan sections having straight confronting edge portions, one of said pan sections having an elongated slot therein disposed parallel with the straight edge of said one section, a lip formed with the other of said sections and removably engaging in said slot, and means for holding said sections together.

1,879,269. DISPENSING APPARATUS. GEORGE R. HUTCHISON, Beckley, W. Va. Filed Apr. 5, 1930. Serial No. 441,950. 6 Claims. (Cl. 221—146.)



1. A dispensing apparatus comprising an upstanding, tubular, open bottom receptacle having a top provided with an opening and a pair of opposed sides, each formed with a plurality of superposed spaced openings, a normally closed, horizontally slidably, spring controlled shut-off means at and connected upon said top for closing said top opening, a series of normally closed, horizontally slidable shut-off means secured to said sides and each for independently closing a side opening, a commodity discharge pipe connected with each of said means and normally closed by the latter, and a discharge nozzle attached to the open bottom of said receptacle.

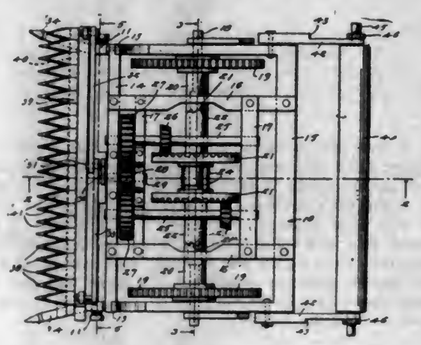
1,879,270. HOG RINGER. WILLIAM ADNA INGALSBE, Fithian, Ill. Filed July 11, 1931. Serial No. 550,259. 2 Claims. (Cl. 128—332.)



1. A ringing tool comprising a pliers implement including a pair of jaws, each of said jaws being provided with a blank supporting ledge across which a ring blank can bridge when the jaws are expanded, an arm projecting laterally from one of the handles of the pliers and under the complementary handle, said arm being provided at its free end with a flange having a threaded opening, and a set screw disposed through the threaded opening to afford an abutment for the last-mentioned pliers handle.

1,879,271. LAWN MOWER. HARRY T. INGERSON, Patten, Me. Filed May 23, 1931. Serial No. 539,599. 3 Claims. (Cl. 56—261.)

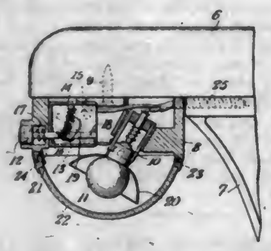
1. A mowing machine of the character described, comprising a supporting frame, a shaft passing therethrough, ground engaging wheels mounted upon the shaft and each having a laterally projecting hub provided with clutch teeth, the forward end of the frame extending downward and forward and being formed to provide a cutter bar support having fingers, a pair of gear wheels loosely mounted upon said shaft and each having a hub extending toward the hub of a driving wheel and formed with clutch teeth coacting with the clutch teeth on the hub of the driving wheel, springs urging said gear wheels toward the ground engaging wheels, longitudinally extending shafts mounted upon the frame and having pinions engaging said gear wheels, a crank shaft having a pinion thereon, gear wheels carried on the longitudinally extending shafts for engaging said pinion, a cutter bar mounted upon the cutter bar supporting element for reciprocation thereon, and connecting rods pivotally connected to opposite ends of the cutter bar and to said crank pin, a roller carrier at the rear end of the supporting frame, and handle bars extending upward and rearward from the shaft, the handle bars being vertically adjustable.



1,879,272. SAND PREPARATION. EDWIN A. INKLEY, Lyndhurst, Ohio, assignor to Foundry Materials, Inc., Lyndhurst, Ohio, a Corporation of Ohio. Filed Feb. 21, 1931. Serial No. 517,636. 4 Claims. (Cl. 22—188.)

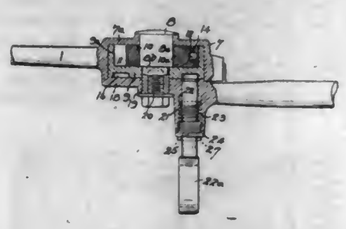
1. A self-hardening sand preparation, comprising a mixture of from 90% to 97% of ordinary molding sand, and 3% to 10% of a mixture comprising from 80% to 90% of 40 degree Baumé solution of sodium silicate, from 2% to 7% of a colloidal clay and from 8% to 18% of water.

1,879,273. THEATER CHAIR LIGHT. CAROLINE A. IRMINGER, Hoboken, N. J. Filed July 24, 1931. Serial No. 552,887. 3 Claims. (Cl. 240—4.)



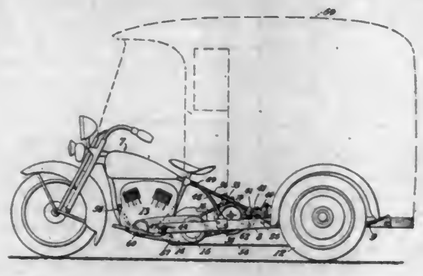
1. In combination with a row of theater chairs having arm rests, light units carried by the alternate arm rests and consisting of individual switch controlled electric lights attached to the arm rests in a manner so as to direct illumination downwardly and forwardly from said arm rests towards the aisle in front of said chairs.

1,879,274. DOOR HOLDER. GILBERT WILLIAM ISLEY, Cleveland, Ohio. Filed June 1, 1931. Serial No. 541,168. 7 Claims. (Cl. 292—275.)



1. A door holder comprising two arms one adapted to be secured to a door and the other to a door frame, a housing at one extremity of one of said arms to which the other arm is pivotally connected, a cam in said housing rotatable with said housing, a flanged disc rotatable in said housing, said cam being mounted within said flanged disc, means for causing said disc to turn with said other arm, when desired, and means adapted to engage said cam and flanged disc and prevent rotation of the latter in one direction around the former.

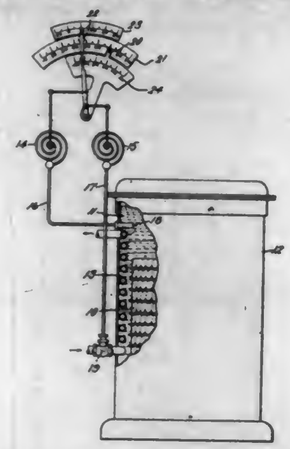
1,879,275. MOTOR VEHICLE. HARRY ISON, New York, N. Y. Filed Aug. 16, 1930. Serial No. 475,650. 14 Claims. (Cl. 180—27.)



1. A motor vehicle comprising a motorcycle power plant, frame and front wheel, the rear wheel of the motorcycle being removed, leaving the rear forks of the motorcycle equipped with the chain adjusting means for the rear sprocket, a rear axle assembly comprising a rear axle housing, differential and wheels, a frame carried by said rear axle housing, means for rigidly connecting the forward portion of said frame to the rearward portion of said motorcycle frame, a gear box shiftably positioned in the free space of the motorcycle rear forks and including a gear connected in driven relation to the power plant of said motorcycle, drive shafting from said gear to the differential housing, said drive shafting including telescopically related shaft sections and means operable by the chain adjusting mechanism of the motorcycle forks for effecting adjustment of the gear box described, independently of the connection between the two frames.

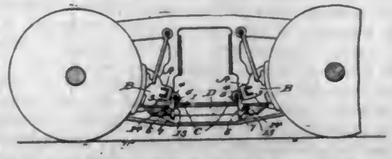
1,879,276. INDICATING DEVICE FOR ELECTRICAL APPARATUS. ARCHIBALD C. T. ISAAC, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,474. 4 Claims. (Cl. 73—52.)

1. The combination with water cooled electrical apparatus immersed in insulating liquid of an indicating device including means, responsive to temperature changes in the cooling water before it has been influenced by heat from said apparatus, means responsive to temperature changes in said insulating liquid, and means for combining the



effects of said two temperature responsive means to indicate an internal temperature dependent condition of said apparatus.

1,879,277. BRAKE BEAM SAFETY IRON. FRANK IZZO, Huntington, W. Va. Filed Sept. 5, 1930. Serial No. 479,956. 3 Claims. (Cl. 188—210.)



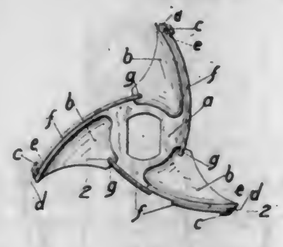
1. A bracket for supporting a safety bar from a spring plank, comprising means at the upper end of the bracket for attaching the same to the spring plank, an enlargement at the lower end of the bracket having an opening passing therethrough through which the safety bar is adapted to pass, said enlargement having a transverse opening intersecting the first mentioned opening and having an enlargement at one end thereof, a headed pin passing through the transverse opening with its head located in the enlargement, a pin passing through the projecting end of the first mentioned pin and a pin passing through the enlargement of the bracket and through the enlargement of the transverse hole for holding the head of the first mentioned pin in place.

1,879,278. CARTRIDGE. GEORGE H. JACOBS, Kings Mills, Ohio, assignor to The Peters Cartridge Company, Kings Mills, Ohio, a Corporation of Ohio. Filed Sept. 1, 1931. Serial No. 560,591. 9 Claims. (Cl. 102—12.)



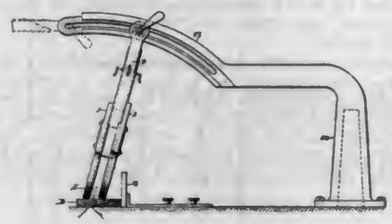
9. In a cartridge, a shell, powder in said shell, a bullet attached in said shell, and an adhesive coating of oil and waterproof material applied between the bullet and shell for sealing the cartridge between these parts.

1,879,279. MEAT CHOPPER. AUGUST JAHN, Hamburg, Germany. Filed Feb. 25, 1930, Serial No. 431,308, and in Germany Sept. 25, 1929. 2 Claims. (Cl. 146—187.)



1. The combination of a meat chopper knife body having arms thereon, a head at the end of each arm, a groove at the base of each arm and on the same side as the head, the channel thereof extending transversely of the arm, blades having a notched end to fit with lateral play under the head, the length of each blade being such that when the notched end is engaged under the head the other end can be swung sideways into the groove, the groove engaging that end of the blade.

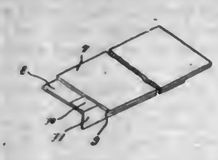
1,879,280. GUARD FOR CIRCULAR SAWS. GEORGE V. JAMES, Youngstown, Ohio. Filed Aug. 30, 1930. Serial No. 478,976. 10 Claims. (Cl. 143—159.)



1. The combination with a circular saw of the like having a work-supporting table and a saw blade extending through the table and adapted for angular operative adjustment with respect thereto, of a guard for the saw comprising supporting means mounted on the table independently of the saw blade, a depending member carried by said means, a pair of vertically movable guard plates angularly adjustable to accord with the angular adjustment of the saw blade and disposed on opposite sides of said member, and means for retaining said plates in assembled position thereon, the plates being adapted to normally embrace the saw blade and being individually slidable on said member in predetermined paths with respect to the saw blade independently of the angularly adjusted position thereof with respect to the table.

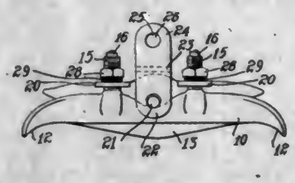
3. A guard for a circular saw or the like comprising a pedestal having an arcuate arm adapted to extend over the saw, a spacing member depending from said arm and adjustably secured thereto, a slotted guard plate disposed on each side of said member and adapted to normally lie adjacent the side of the saw, and means carried by the spacing member and engaging the slots in the plates for maintaining the plates in assembled relation thereon for independent sliding movement with respect thereto in predetermined parallel paths.

1,879,281. TRIM FOR TURF BORDERS. WARREN L. JARCHOW, Stillwater, Minn. Filed Feb. 26, 1931. Serial No. 518,405. 6 Claims. (Cl. 94—31.)



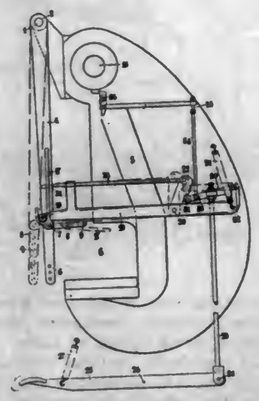
1. Trim for turf borders comprising a strip of flexible sheet material adapted to lie on the surface of the turf and to conform thereto along the edge of a walk or the like and means depending from said strip along the edge of the walk for securing said strip in place.

1,879,282. SUSPENSION CLAMP. RALPH L. JENNER, East Orange, N. J., assignor to Lapp Insulator Company, Inc., a Corporation of New York. Filed July 29, 1930. Serial No. 471,556. 4 Claims. (Cl. 248—31.)



1. A suspension clamp consisting of a grooved body member, and upstanding unitary bolts, an oppositely grooved keeper member having apertured ears for the reception of said bolts, said keeper also having laterally extending trunnions and a yoke member irremovably sprung over said trunnions.

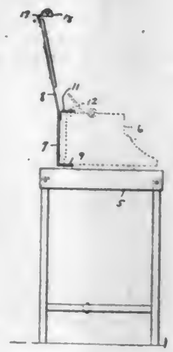
1,879,283. GUARD. WILLIAM JESSOP, Grays, England, assignor of one-third to Drums, Limited and one-third to The International Paint and Compositions Company, Limited, London, England. Filed Apr. 23, 1930, Serial No. 446,749, and in Great Britain Apr. 30, 1929. 11 Claims. (Cl. 74—105.)



1. A guard for power presses and like machines comprising a main frame pivotally connected with the body of the machine, a cam member, a pivotal connection between said cam member and a stationary part of the machine, a push rod bearing at one end against the main frame and pivotally connected at its other end with the cam member, a lever coaxially mounted with the cam

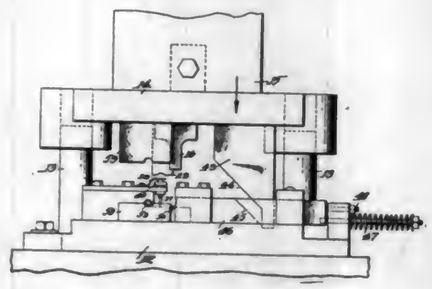
member, a spring connected at one end with said lever, and at its other end with a stationary part of the machine, a second lever pivotally connected with one end of said lever, a roller mounted on the other end of said second mentioned lever co-operating with the face of the cam member, a rod connected at one end with said second mentioned lever, a pedal lever, a pivotal connection between the other end of the said rod and the pedal lever adapted, upon actuation of the pedal lever, to rotate the said second mentioned lever about its pivotal connection with the first mentioned lever and cause the roller bearing against the face of the cam member to oscillate the cam and cause the push rod to move the main frame away from the body of the machine and towards the operator engaged in feeding the same, a second frame pivotally connected with said main frame, a two armed lever connected with the second frame, a roller mounted on the end of said first mentioned lever remote from its pivotal connection with said second mentioned lever adapted when the main frame is moving away from the body of the machine to co-operate with said two armed lever and move the second frame into a position in which it will preclude the hands of the operator entering the danger zone, a link pivotally connected at one end with the main frame, a recess adjacent to the other end of the link, a pin eccentrically mounted on the operating shaft of the machine adapted to engage within the recess, a rod connected at one end through a lost motion connection with the link, a lever connected with the second frame, a pivotal connection between the other end of the said last mentioned rod and the said last mentioned lever adapted in the event of the second frame encountering opposition to assuming the said position, to impart to the main frame further motion in an outward direction and away from the machine thereby moving the second frame beyond said position.

1,879,284. ADVERTISING RACK FOR TYPEWRITERS. ALBERT J. JOHNSON and CLAUDE B. GRACE, Omaha, Nebr. Filed July 14, 1931, Serial No. 550,740. Renewed Apr. 5, 1932. 2 Claims. (Cl. 40—130.)



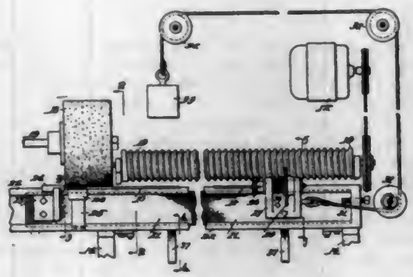
1. An advertising rack of the class described including a pair of spaced parallel coextensive strap arms having vertical sections which merge at their upper ends into upwardly and rearwardly inclined sections and at their lower ends merge into forwardly and right angularly directed extensions adapted to be placed under the rear of a typewriter or table, a pair of L-shaped strap arms having their shorter legs fixed to the upper ends of the vertical sections to project forwardly therefrom and adapted to be secured to the top of the rear portion of the typewriter or table and a panel secured on the upper portions of the inclined sections, a transparent panel on the first mentioned panel, and a frame about said panel.

1,879,285. MACHINE FOR MAKING SHEET METAL ARTICLES. ARVID S. JOHNSON, Auburn, and HERBERT W. NEUNHERZ, Gardner, Mass., assignors to Gem Crib & Cradle Company, Gardner, Mass., a Corporation of Massachusetts. Filed May 18, 1931. Serial No. 538,076. 20 Claims. (Cl. 153—49.)



1. In a machine for making articles of sheet metal, the combination with a base and a head reciprocable toward and from the base, yieldingly mounted means on the base for supporting a strip blank of sheet metal, yielding means on the last-named means for holding the sheet metal in a definite position thereon, a stop against which the forward end of the blank strip will be arrested, a cutter carried by said head for cutting a blank from the end of the sheet stock, always of the same length, a plunger carried by the head and having cam means for moving the blank sideways from the position in which it is cut off, and a spring-pressed plunger in position to engage the top surface of the blank to hold it after it is so moved.

1,879,286. BUFFING MACHINE. ARVID S. JOHNSON, Auburn, and HERBERT W. NEUNHERZ, Gardner, Mass., assignors to Gem Crib & Cradle Company, Gardner, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1931. Serial No. 555,554. 9 Claims. (Cl. 51—74.)



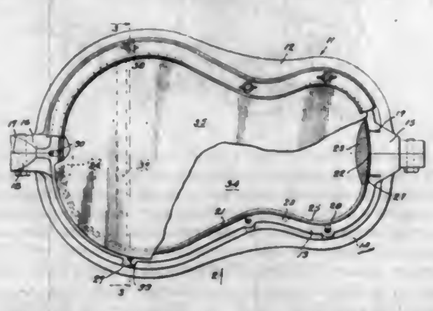
6. In a buffing machine, the combination with a rotary buffing wheel, of a frame having longitudinal ways, a slide mounted to move in said ways, a counterweight for normally moving the slide backwardly, a shaft rotatably mounted on the slide, a disc keyed to the shaft, a screw into the threads of which the disc projects and against which the disc is held by the counterweight, whereby the rotation of the screw will rotate the disc and move the slide in its ways.

1,879,287. STEERING COLUMN BUSHING. CARL W. JOHNSON, Shaker Heights, Ohio, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1928. Serial No. 327,091. 2 Claims. (Cl. 308—238.)



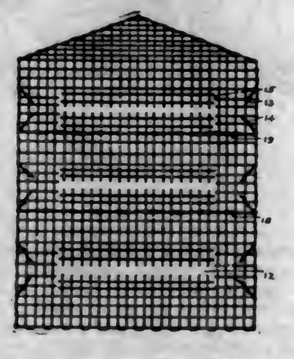
1. A bearing of the character described comprising an outer shell of expansible material and an endless inner shell integrally united to said outer shell and provided with a radially outwardly extending looped portion permitting expansion of said inner lining.

1,879,288. COMBINED MOLD AND CLAMP FOR STRINGED MUSICAL INSTRUMENTS. INGMAN J. JOHNSON, Los Angeles, Calif. Filed Apr. 10, 1931. Serial No. 529,119. 8 Claims. (Cl. 144—259.)



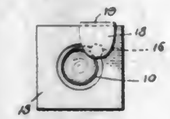
1. In a device as described, a mold for musical instruments having a neck and a tail portion with two side pieces connecting said portions, the neck and the tail pieces having longitudinally split joints secured together by bolts, said mold being adapted for holding and retaining the sides of a musical instrument clamped therein while gluing, and said mold having vertical slots or grooves on its inner surface adapted to receive vertical bolts.

1,879,289. FLUE SPARK SCREEN. JOHN A. JOHNSON, Crawfordsville, Ind., assignor to National Supply and Service Corporation, Crawfordsville, Ind. Filed Apr. 18, 1932. Serial No. 606,040. 11 Claims. (Cl. 183—97.)



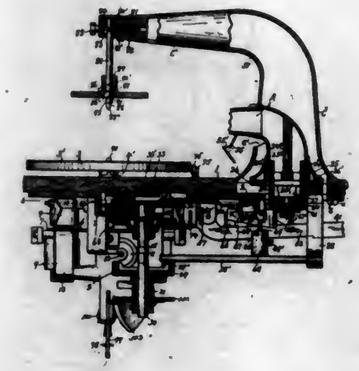
1. A spark arrestor comprising a box open across its under side and having a top and foraminous side walls and having a plurality of openings in its side walls, and guards disposed above and below each of the openings, one of said guards being above an opening to slope downwardly and inwardly and another of said guards being below the opening to slope upwardly and inwardly, the inner edges of the guards for each opening being spaced apart to define said opening.

1,879,290. LOCK NUT AND BOLT. LAURANCE BENTON JOHNSON, Spruce Lakes, Saskatchewan, Canada. Filed June 17, 1931. Serial No. 545,105. 1 Claim. (Cl. 151—8.)



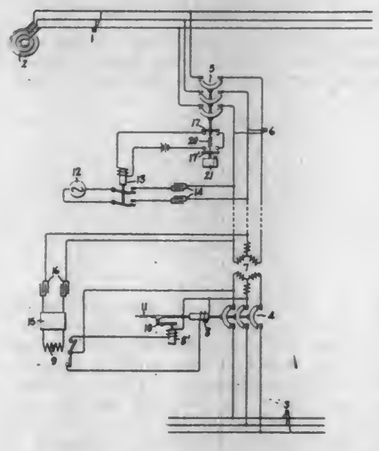
In a lock nut and bolt, a threaded bolt having a longitudinal groove, a nut having a main threaded orifice to receive said bolt and a smaller orifice parallel to and communicating with said main orifice, a circular locking member rotatably mounted in said smaller orifice, having fragmentary threads on one side thereof, adapted to aline with the threads of the main orifice when said locking member is in a non-locking position, a flat plate extending at right angles from the upper end of said locking member, adapted to turn said member to bring the smooth surface of said member into locking engagement with the groove of said bolt, said plate extending beyond the edge of said nut and adapted to be bent over the edge of said nut to secure said locking member in locked position.

1,879,291. PHONOGRAPH. LLOYD ELMER JOHNSON, ARTHUR BENJAMIN WINCHELL, FLOYD W. HARDICK, and FRED W. BILLIG, Jackson, Mich., assignors, by mesne assignments, to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed Sept. 12, 1928. Serial No. 305,380. 18 Claims. (Cl. 274—10.)



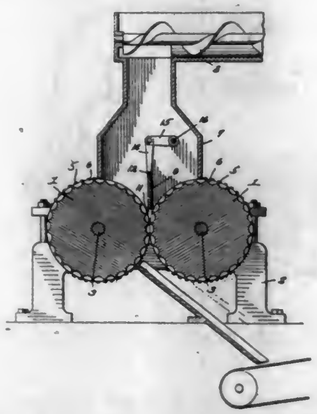
1. In a phonograph of the record disk type, a rotary table for supporting the disk to be played, means for rotating the table, a storage spindle above and co-axial with the table for supporting a plurality of disks one above the other and provided with a shoulder normally holding the lowermost disk against downward displacement from said spindle, and means reciprocally movable between said table and spindle for releasing the lowermost disk from said shoulder and transferring it to the table.

1,879,292. MEANS FOR CONTROLLING A POWER SWITCH. BENJAMIN W. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 16, 1929. Serial No. 355,543. 6 Claims. (Cl. 171—97.)



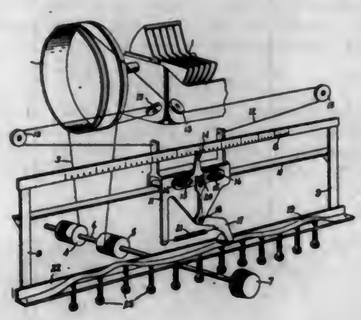
1. In combination, a power source, a load, a line, switching means connecting said load and said line, means responsive to power current supplied to said line when said first means is in its closed position for closing said second switching means, control current responsive means for opening said second switching means, and means responsive to operation of said first switching means to its open position for supplying control current to said last means.

1,879,293. BRIQUETTE PRESS. EMORY E. JONES, Bluefield, W. Va., assignor to Winding Gulf Collieries, Bluefield, W. Va. Filed Jan. 12, 1931. Serial No. 508,291. 3 Claims. (Cl. 25—77.)



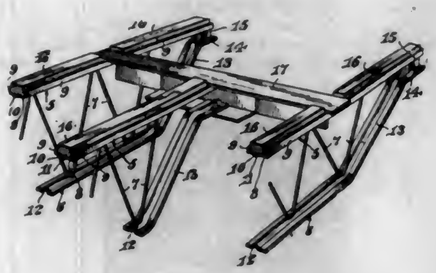
1. A briquette press embodying a housing, approximately parallel rolls, journaled in the housing and having cooperating, briquette-forming pockets, a hopper above and discharging upon the rolls, a single thin, flat plate, of fixed thickness and of unequal transverse dimensions, the vertical transverse dimension of the plate being appreciably greater than the horizontal transverse dimension of the plate, the plate being located in the hopper above the line where the rolls cooperate in making briquettes, and means under the control of an operator for adjusting the plate toward and away from said line in a direction substantially at right angles to a plane passing through the axes of rotation of both rolls.

1,879,294. TUNING INDICATOR. NEVELL R. JONES, Haddonfield, and WALLACE W. DEWHURST, Haddon Heights, N. J., assignors to General Electric Company, a Corporation of New York. Filed Jan. 30, 1932. Serial No. 589,928. 7 Claims. (Cl. 116—124.1.)



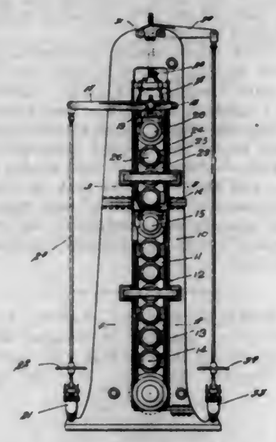
1. In an indicating apparatus for an electrical circuit including a variable impedance element, the combination of means for actuating said variable impedance element, an indicating surface, a movable carriage provided with a movable indicator which cooperates with said indicating surface, means for transferring motion from said impedance actuating means to said indicator carriage, a cam shaped in accordance with the indications to be produced, and means cooperating with said cam and indicator for imparting a corrective motion to said indicator whereby substantially accurate indications are produced.

1,879,295. JOIST. JULIUS KAHN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Oct. 13, 1930. Serial No. 488,433. 1 Claim. (Cl. 189—37.)



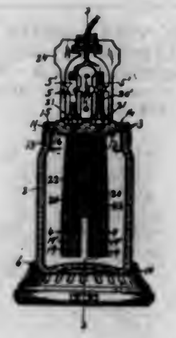
A joist or like structure comprising a chord member of formed metal providing a bottom wall and side walls integral therewith, forming a longitudinal channel, said bottom wall having a longitudinal groove on its inner side providing a longitudinal rib on its outer side, a second chord member, and a skeleton lattice electrically connecting the chord members and electrically welded to the rib, leaving the interior of the channel unobstructed, and a wood-like nailing strip located in the channel and bridging the groove.

1,879,296. CALENDERING MACHINE. THOMAS E. KANE, Mansfield, Mass., assignor to The Textile-Finishing Machinery Company, a Corporation of Rhode Island. Filed Nov. 7, 1930. Serial No. 494,075. 6 Claims. (Cl. 92—75.)



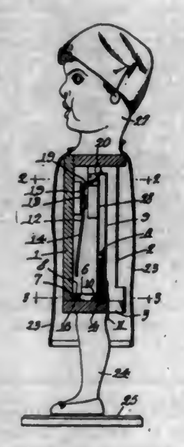
1. In a calendering machine, a series of slidably mounted rolls, means for applying pressure thereon, a second series of rolls slidably mounted in a portion of the means thru which said pressure is applied to the first series, and means for applying pressure to said second series of rolls.

1,879,297. ELECTRIC VAPORIZER. MAX KATZMAN, Utica, N. Y. Filed May 1, 1929. Serial No. 359,551. 3 Claims. (Cl. 219—40.)



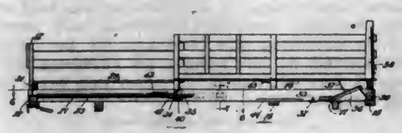
1. In an electric vaporizer, a receptacle having a removable lid provided with a section of insulating material, an electric heater having electric conductors suspended from said insulating section of the lid, said conductors having their upper ends provided with outwardly projecting terminals adapted to receive an electric plug, and metal electrodes secured to the lower ends of the conductors in transversely spaced relation, the spaces between the electrodes being open at the bottom and at opposite sides and an insulating block interposed between the electrodes and underside of the lid and having its lower end provided with a rib projecting a relatively short distance into the space between the electrodes for holding the latter against turning movement.

1,879,298. DISPENSING APPARATUS. FRANK KAYSER, Toledo, Ohio. Filed Feb. 28, 1931. Serial No. 519,157. 5 Claims. (Cl. 312—80.)



1. Dispensing apparatus including a reservoir having an extension under one side portion thereof for the reception of an article to be dispensed, there being an opening at each end of the extension, a substantially U-shaped guide below the reservoir and opening at one end into the extension, a portion of the guide being substantially parallel with the extension, a flexible ejector in the guide, a movable operating element, and means in said parallel portion of the guide actuated by said element for shifting one end of the flexible ejector into and out of the extension.

1,879,299. HAYRACK. OSCAR J. KEHL, Elizabeth, Ill. Filed Oct. 22, 1929. Serial No. 401,548. 6 Claims. (Cl. 296—7.)

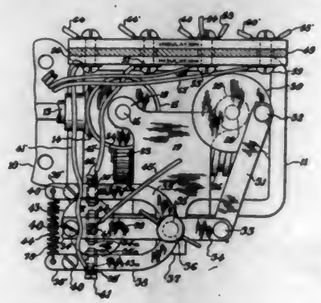


1. A hay rack of the character described comprising, in combination, a front section adapted to be supported upon the front wheels of a wagon; a rear wheel-supported section slidably connected to the front section and partially supported thereby; a fixed locking member on the front section; and yieldably mounted floor boards having cooperating locking means carried by the rear section and automatically to engage said fixed locking member when the sections are telescoped.

1,879,300. TIMER FOR TRAFFIC SIGNALS. JEREMIAH KELLER, Canton, Ohio. Filed Mar. 21, 1929. Serial No. 348,725. 3 Claims. (Cl. 200—27.)

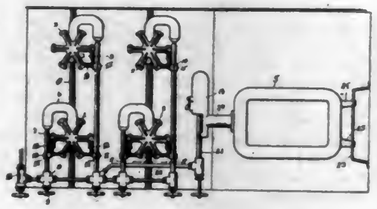
1. In a periodic switch of the class described, a shaft, two arms rotatably mounted on said shaft, the outer ends of said arms terminating in the same plane of rotation; adjustable means for holding said arms in spaced relation, a third arm rotatably mounted on said shaft, the end of said third arm disposed between the first

named arms for movement in the same plane of rotation; yieldable means pressing the first named arms toward each other; a contact head on each of said arms, means



to impart a regular oscillatory movement to said third arm to bring the same alternately in contact with the first named arms.

1,879,301. MULTIPLE UNIT MOUNTING FOR GAS BURNERS. DON G. KELLEY, Rochester, N. Y. Filed Nov. 10, 1930. Serial No. 494,583. 3 Claims. (Cl. 158—61.)



1. In a multiple unit mounting for liquid gas burners in a gas range, the combination of a front and a rear gas burner, each having a vaporizing flame burner opening in the side thereof, a mixing chamber leading into each of said burners, a drier leading into each of said mixing chambers, combined connecting and supporting means for anchoring said burners, a drier leading into each of said mixing chambers, combined connecting and supporting means for anchoring said burners to the gas range and means provided on said burners for anchoring the drier thereto in fixed relation to the vaporizing flame opening of said burners.

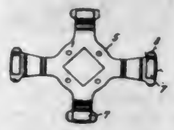
1,879,302. SHEET METAL WINDOW PANEL AND METHOD OF FORMING THE SAME. GEORGE L. KELLEY, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 9, 1930. Serial No. 459,943. 2 Claims. (Cl. 113—112.)



1. The method of forming a continuous flange between adjacent sides of an angular sheet metal plate which comprises cutting away the metal adjacent the corner of said plate between the sides to form a diagonally extending slot, forming an integral marginal flange around the edge of said slot extending substantially at right angles to the plate, providing a folded gusset member having an edge conforming to and shaped to fit the edge of said marginal flange, bringing said edges together in abutting relation, applying pressure thereto in a direction normal to the plane of the plate and uniting the said edges by flash welding, reducing the welded seam to substantially the thickness of the sheet metal, whereby the surface of the gusset extends continuously with the surface of the plate, and bending the inner portions of the adjacent sides of the plate including said gusset at an angle to the plane of the plate to unfold said gusset and form a continuous flange.

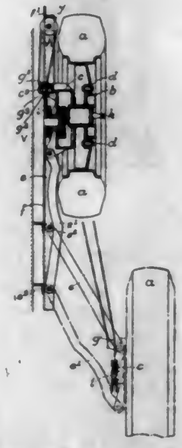
2. A face plate blank having an opening and adapted to subsequently be bent to form a continuous inner flange surrounding said opening, said blank comprising a flat sheet metal of quadrilateral form, there being a diagonal slot in the inner side of said frame at each corner thereof, said slots each having an upstruck marginal surrounding flange extending substantially at right angles to the plane of said plate, and arched gussets each having edges corresponding in shape to the edges of said flange, the edges of one of said gussets being welded to the edges of each of said marginal flanges in abutting relation to form a continuous surface.

1,879,303. SWITCH BLADE. LESLIE A. KEMPTON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Oct. 30, 1929. Serial No. 403,597. 6 Claims. (Cl. 200—146.)



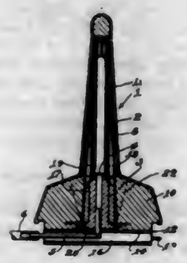
1. In combination, a pair of sheet metal switch blades, each of which has a shallow embossment pressed therefrom to form a flat contact surface of considerable area which rises above the level of the surrounding part of the blade, said embossments facing each other, with a stationary contact adapted to be engaged on opposite sides successively by the embossments and the surrounding parts of the blades as the blades move out of engagement with the stationary contact.

1,879,304. SPARE TIRE CARRIER FOR ROAD VEHICLES. DONALD STUART KENNEDY and IRWIN TREVANION KEMPE, Longparish, England. Filed Mar. 5, 1931. Serial No. 520,336, and in Great Britain Apr. 17, 1930. 10 Claims. (Cl. 224—29.)



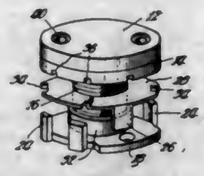
1. A device of the character described, comprising a support, a hub revolubly mounted on said support, a rotatable pulley also mounted on said support, said pulley being operatively connected with said revoluble hub, a ratchet wheel secured upon said pulley so as to rotate therewith, a pawl pivoted upon said support and engaging said ratchet wheel, a plurality of parallel links, said links being pivotally connected at one end with the vehicle and at the other end with the said support, and means operated by the rotation of said hub and pulley for moving the links and link-mounted support about the pivotal connections between said links and the vehicle.

1,879,305. DILATOR. JAMES W. KENNEDY, Canton, Ohio. Filed Sept. 23, 1931. Serial No. 564,636. 18 Claims. (Cl. 128—344.)



7. In a device of the class described, a base, an inner tube supported by said base, a set of wire guards surrounding said inner tube and embedded in said base, an outer tube covering said wire guards and said base, and means to support said dilator from the body of the patient.
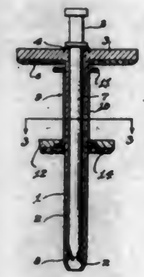
1,879,306. ADJUSTABLE PIN SPOT FOR BOWLING ALLEYS. ROBERT E. KENNEDY, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,309. 6 Claims. (Cl. 273—52.)



1. An adjustable pin spot for bowling alleys, including a plate set into the bowling alley surface and adjustable with respect to the plane of said surface, together with means for locking the plate in such adjusted position, said means comprising a support for the plate, mounted in an opening counter-sunk in the alley surface, and depressible latching means between the support and the plate.

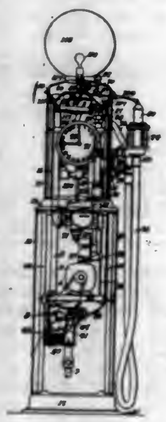
1,879,307. DILATOR. JAMES W. KENNEDY, Canton, Ohio. Filed Oct. 7, 1930. Serial No. 487,042. 8 Claims. (Cl. 128—341.)

2. In a device of the class described, the combination of a pliable tube, of a set of wire guides in said tube and running the full length thereof, a pad at the top of said tube, a sheet of soft resilient material attached to the bottom face of said pad, the tops of said wire guides



fastened to said pad while the lower ends of said guides being unfastened and free to swing, and means to expand the wall of said tube diametrically.

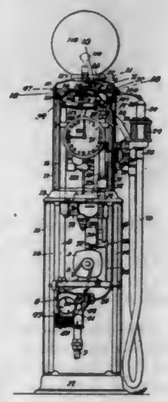
1,879,308. LIQUID DISPENSING APPARATUS. EARL W. KENT, Muskegon, Mich., assignor to Service Station Equipment Company, Conshohocken, Pa., a Corporation of Delaware. Filed Dec. 4, 1931. Serial No. 578,881. 4 Claims. (Cl. 221—95.)



1. In liquid dispensing apparatus; the combination with a hollow pump stand comprising a base, standards extending upwardly from said base, a hollow dome at the top of said standards having a gas vent to the atmosphere, and a sheet metal casing between said base and dome inclosing said standards; of a pump inclosed by said pump stand having an intake conduit for connection with a subjacent liquid supply tank and a discharge conduit for conducting liquid from said pump into said hollow dome; a liquid drain conduit extending from within the upper portion of said hollow dome back to the suction side of said pump; a float valve controlling said drain conduit; whereby liquid is drained from said dome back to the suction side of said pump by the action of the latter when the liquid in said dome reaches a predetermined level to open said valve; a liquid meter inclosed by said stand; a liquid conduit extending from

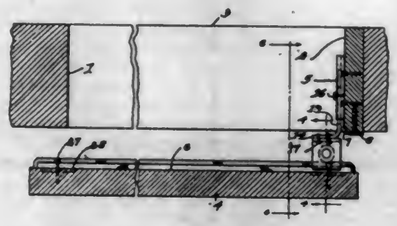
the bottom of said dome to said meter; and a liquid dispensing conduit from said meter; whereby air and other gaseous fluid is eliminated from said apparatus at said dome.

1,879,309. LIQUID DISPENSING APPARATUS. EARL W. KENT, Muskegon, Mich., assignor to Service Station Equipment Company, Conshohocken, Pa., a Corporation of Delaware. Filed Dec. 4, 1931. Serial No. 578,882. 14 Claims. (Cl. 221—95.)



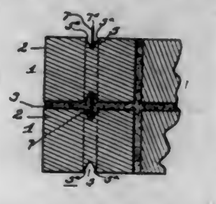
1. In liquid dispensing apparatus; the combination with a hollow pump stand comprising a hollow dome at the top thereof, having a gas vent to the atmosphere; of a liquid meter inclosed by said stand; a pump enclosed by said stand, having an intake conduit for connection with a subjacent liquid supply tank and a discharge conduit for conducting liquid from said pump through said meter; a liquid dispensing conduit from said meter; and a transparent liquid container included in said liquid dispensing conduit and having a gas chamber at the top thereof in communication with the interior of said hollow dome; whereby gas may be eliminated from said transparent container through said dome.

1,879,310. COMBINED TRACK AND COUPLING ATTACHMENT. ADOLPH L. KEUNE, Carlinville, Ill. Filed Apr. 12, 1932. Serial No. 604,815. 8 Claims. (Cl. 16—91.)



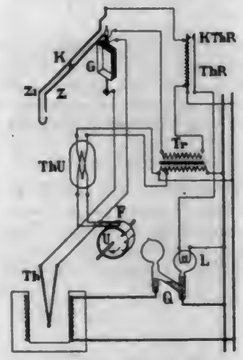
1. A combined track and coupling attachment for an end portion of a slidably suspended door comprising, a coupling element adapted to be secured to a side of the door frame, a supporting element fixedly secured to the outer end of said coupling element and including a housing and a revoluble roller in the latter, and a track element adapted to be secured to and having a portion spaced from the door, said portion being overlapped by one wall of said housing and having one face thereof bearing against the roller of said supporting element.

1,879,311. WALL STRUCTURE. HENRY P. C. KEULS, New York, N. Y., assignor to Sealed Joint Construction Corporation, a Corporation of New York. Filed July 25, 1931. Serial No. 553,087. 11 Claims. (Cl. 72—127.)



1. In a wall construction, the combination of courses of building blocks disposed one course above the other, and each block formed with grooves alined with the grooves of adjacent blocks, block centering and sealing strips extending in the grooves of the blocks of a lower course and extending upwardly into the grooves of the blocks of the next course above, said strips being maintained in upright position by the lower blocks independently of the blocks above; whereby in the building of the wall the blocks are centered relative to each other.

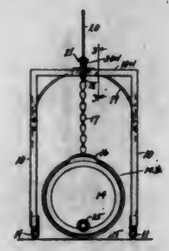
1,879,312. CURRENT SUPPLY REGULATING APPARATUS. EDUARD OTTO KILLIUS, Hanau-on-the-Main, Germany. Filed Mar. 5, 1930, Serial No. 433,409, and in Germany Mar. 30, 1929. 4 Claims. (Cl. 236—69.)



1. An apparatus for regulating electric current consumers, especially electric furnaces by means of a temperature measuring instrument controlled by a thermo element, comprising in combination with the temperature measuring instrument, a movable indicator on said instrument adjustable by temperature fluctuation, a contact on and movable with said indicator adjustable by the temperature, a minimum contact adjustable by hand connected up in the regulator circuit and adapted to support said movable indicator contact in inoperative position, thereby maintaining a closed circuit until the minimum temperature is exceeded, a main circuit, a switching device in said main circuit, a thermo-relay serving as intermediate relay adapted to be actuated by said closed circuit holding said switch in closed position so that in the event of failure of the said indicator contact the main current is interrupted.

1,879,313. BARREL LIFTER AND CONVEYER. PETER I. KING, Stanton, Minn. Filed Dec. 10, 1931. Serial No. 580,146. 3 Claims. (Cl. 254—131.)

1. A drum rack and conveyer of the class described comprising an upright roller supported main frame having downwardly open end frame members braced and connected to each other at the side and top parts, said main frame being adapted to be positioned longitudinally over and straddling a cylindrical drum or the like, a pair of ring members adapted to loosely encircle opposite end parts of such drum, a chain for each ring and extending upwardly from it toward the upper central part of each

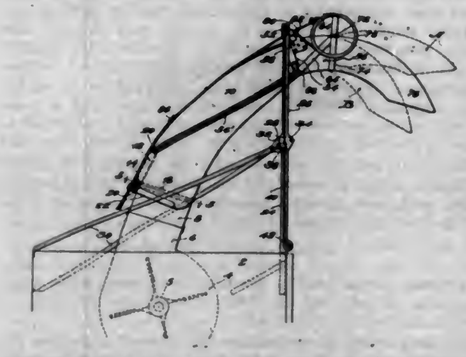


end frame member, lever actuated means at said latter part adapted to engage the chain and pull it upwardly to raise the drum in successive lever actions and means on the frame for engaging the chain, other than the lever means, before and after each hoisting action of said lever means.

1,879,314. ORNAMENTED SILK LAMP SHADE. AARON KISS, Meriden, Conn. Filed Mar. 25, 1930. Serial No. 438,719. 11 Claims. (Cl. 91—68.)

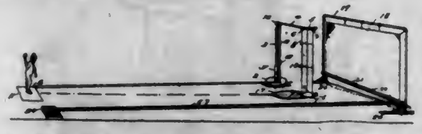
11. The method of treating a lampshade fabric which comprises applying a foundation coat of lacquer to one side of said fabric, allowing it to dry, applying a second coat over said foundation coat, allowing it to dry, applying a coat of "crackle" lacquer over said second coat, allowing it to dry, applying a coat of paint to said "crackle" coat, wiping immediately, drying, and applying a final coat of plasticized lacquer to both sides of said fabric.

1,879,315. LOADING HOOD FOR SNOW REMOVING MECHANISMS. WALTER E. KLAUER and CHARLES L. OSTRANDER, Dubuque, Iowa, assignors to Klauer Manufacturing Company, Dubuque, Iowa, a Corporation of Iowa. Filed Nov. 15, 1929. Serial No. 407,499. 25 Claims. (Cl. 37—43.)



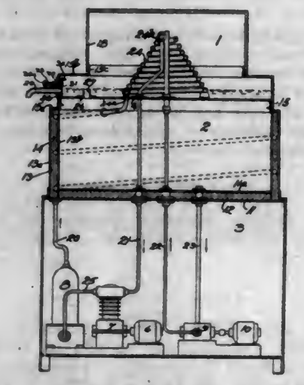
25. In a snow removing mechanism, an ejecting means ejecting snow in a straight line, and means for guiding the ejected snow, comprising an elongated downwardly concave conduit body open at its lower side and bodily curved tangential at one end to the straight line path of the ejected snow, a deflecting tip pivoted to the other end of the body of the conduit, and means for angularly adjusting said tip to a plurality of positions to vary the angle of discharge of the snow.

1,879,316. BASEBALL STRIKE ZONE TARGET. GEORGE A. KLEB, St. Louis, Mo. Filed June 20, 1931. Serial No. 545,687. 4 Claims. (Cl. 273—26.)



1. A device of the character described comprising multiple vertical cords disposed above a home plate and presenting a different appearance in the middle portion than at the ends to indicate the strike zone, a vertically adjustable ball mounted adjacent to said cords for a sight ball indicating any desired level in said zone, and means to mount said ball adjustably, substantially as described.

1,879,317. BEVERAGE DISPENSER. BENJAMIN F. KLEIN, Detroit, Mich. Filed Oct. 3, 1930. Serial No. 486,098. 4 Claims. (Cl. 225—21.)



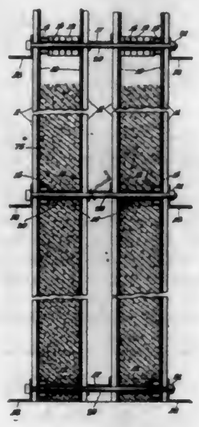
1. In a beverage dispenser, the combination of a storage tank, an upper compartment arranged thereover, a cooling coil in the latter, means for pumping a beverage from said tank into said upper compartment so that it flows downwardly over said cooling coil, a portion of said beverage being adapted to freeze around said coil and the rest of said beverage being adapted to flow downwardly over the ice thus formed, means for dispensing the beverage from said upper compartment, and means permitting surplus beverage to flow back from the upper compartment into said storage tank after a predetermined height of beverage has been attained therein, so that normally the beverage remains at a constant level therein.

1,879,318. BIRD PERCH. THOMAS J. KLEIN, Chicago, Ill. Filed Mar. 14, 1930. Serial No. 435,797. 1 Claim. (Cl. 119—26.)



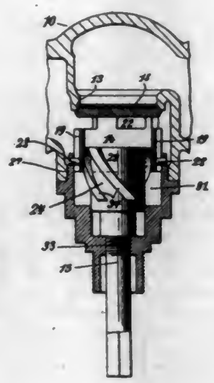
A perch for a bird cage having a curved upper portion and an integral depending and downwardly tapering portion throughout its length terminating in a curved lower portion with the sides tangential to the curved upper and lower portions.

1,879,319. CONCRETE STRUCTURE. WILLIAM KLEITZ, Albany, N. Y. Original application filed Sept. 3, 1927, Serial No. 217,323. Divided and this application filed Dec. 9, 1930. Serial No. 501,015. 4 Claims. (Cl. 72—16.)



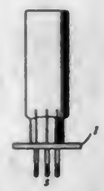
1. The combination with a plurality of formed concrete sections of means for spacing said sections comprising a plurality of spacing strips extending vertically from top to bottom at intervals between said sections, said spacing strips each having a number of portions of reduced width to permit air circulation, and means for connecting the respective sections together.

1,879,320. VALVE. HENRY G. KLETT, New York, N. Y. Filed Apr. 15, 1930. Serial No. 444,371. 3 Claims. (Cl. 251—40.)



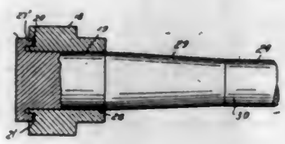
1. A valve mechanism comprising a valve body having a seat, a valve casing secured to said body, a hollow body forming a valve head, pins on the inside thereof, a valve stem having grooves fitting over said pins, means for causing operative engagement between the said means and grooves to actuate the valve head and co-operating means between said valve head and casing for selectively translating said actuating movement into a non-rotary or rotary movement of the valve head towards and away from the valve seat.

1,879,321. THERMIONIC TUBE. ALBERT KNABNER and JOHANN RICHTER, Berlin, Germany, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 31, 1930, Serial No. 505,766, and in Germany Jan. 6, 1930. 5 Claims. (Cl. 250—27.5.)



1. An electrical discharge tube comprising a tubular glass envelope enclosing electrodes and having at one end an outwardly projecting press, a base comprising an insulating member fitted to said press and having contact pins connected to said electrodes, and wires sealed into said press to project outwardly with their outer ends secured to said member to produce tension in said wires, whereby said member is held in position on said press solely by said wires.

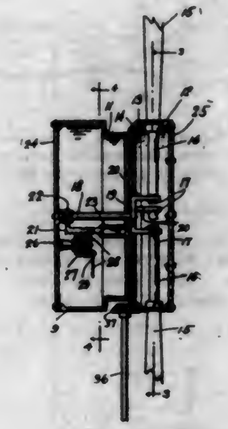
1,879,322. VALVE. WALTER H. KNISKERN, Prince George County, Va., assignor to Atmospheric Nitrogen Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1930. Serial No. 498,069. 8 Claims. (Cl. 251—28.)



7. A valve comprising a valve housing consisting of a fluid inlet chamber and a fluid outlet chamber, a valve stem movable in said housing and having one end extended exteriorly thereof, a seat for said stem connecting the inlet and outlet chambers and cooperating with the valve stem to control the flow through said valve housing, said seat comprising a cylindrical seating portion and having an annular groove in an end wall thereof, said valve stem being provided with an annular ledge adapted to fit within said annular groove, a cylindrical portion contiguous to said annular ledge arranged to fit within the cylindrical seating portion of said seat, and a truncated conical portion in alignment with and contiguous to said cylindrical portion adapted to be moved into said cylindrical portion of said seat to permit flow therethrough, initial movement of the truncated conical portion into said seat causing removal of said annular ledge away from said annular groove.

1,879,323. AIRCRAFT. EMERY KOCH, Maracaibo, Venezuela. Filed July 16, 1931. Serial No. 551,271. 2 Claims. (Cl. 244—19.)

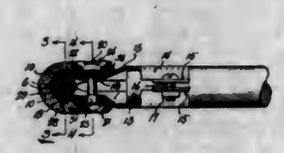
1. In a steering mechanism for aircraft including elevating means; a rudder mechanism comprising a propeller arranged on a plane extending longitudinally and vertically through the longitudinal axis of the aircraft, said rudder mechanism including a hub, a plurality of blades, each of the blades being rotatably mounted on the hub, and provided with gear teeth at its inner end, a rack assembly meshing with the teeth at the inner ends of the blades, a rack bar carried by the rack assembly and a manually operative worm meshing with the said rack bar, whereby the pitch of the blade can be reversed and drive means for rotating the hub.



1,879,324. PYRIDINE DERIVATIVES AND THE PROCESS OF PRODUCING THEM. ERNST KOENIGS and HEINZ GREINER, Breslau, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 23, 1930, Serial No. 470,242, and in Germany July 23, 1929. 17 Claims. (Cl. 260—42.)

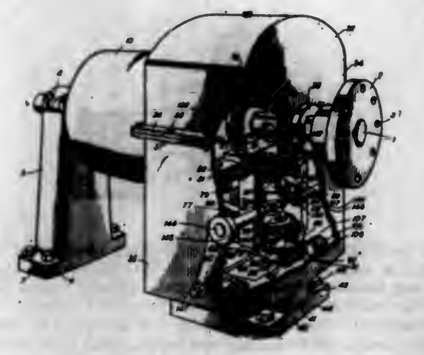
1. In the process of preparing 4-amino-pyridine the step which comprises reacting upon pyridine with a thionyl halogenide.

1,879,325. MOP. ARTHUR C. KOOTZ, Milwaukee, Wis., assignor to The Gem Hammock & Fly Net Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 3, 1929. Serial No. 368,043. 2 Claims. (Cl. 306—1.)



1. A handle connector for mops comprising a single piece of sheet metal having a tubular portion at one end with separable end parts and a pair of resilient jaw portions extending from said tubular portion and separated in a plane coinciding with that of the separable end parts of said tubular portion, said jaw portions being of generally cylindrical shape having their end portions curved to receive a mop pivot and provided with alined openings adjacent their ends and depressed portions surrounding said openings, an adjustable clamping bolt passing through said alined openings, and means for drawing the separable ends of said tubular portion into clamping engagement with a mop handle.

1,879,326. SPEED TRANSFORMER. GEORGE KRELL, Sapulpa, and GUY M. MARTINET, Tulsa, Okla.; said Martinet assignor to said Krell. Filed Mar. 15, 1930, Serial No. 436,066. Renewed June 13, 1932. 10 Claims. (Cl. 74—84.)



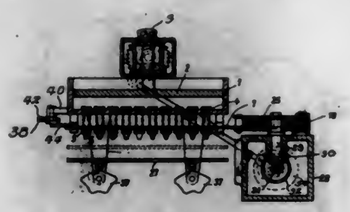
1. Speed transforming mechanism including a driving shaft, a driven member, an actuator fixed to the driven member and rotatable independently of the shaft, a driving gear wheel fixed to said actuator, a master gear wheel fixed to the shaft, a retarding gear member rotatable on the shaft, a gear wheel fixed to said retarding gear member, a gear carrier rotatable about the shaft, connected gear wheels journaled on the carrier and meshing respectively with the driving gear wheel, the master gear wheel, and the gear wheel fixed to the retarding gear member for driving the driven member reversely at speeds proportional to restriction of freedom of rotation of the retarding gear member, and means for restricting freedom of rotation of the retarding gear member including means for positively connecting said restricting means with the retarding gear member.

1,879,327. PROCESS AND APPARATUS FOR EXPRESSING BAKERS' MATERIAL. OTTO KREMMLING, Hamersleben, Germany. Original application filed Apr. 22, 1929, Serial No. 357,301, and in Germany June 16, 1926. Divided and this application filed July 9, 1930. Serial No. 466,829. 8 Claims. (Cl. 107—14.)



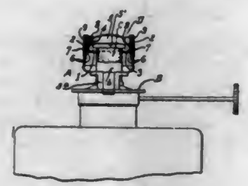
6. Apparatus for forming articles of bakers' material comprising a container, a spindle rotatably mounted in the wall of said container, a slide adjustable in said spindle and adapted to cut off a portion of the material and to express it from said container, said container having a bottom and an opening in said bottom, the said spindle lying entirely out of vertical alignment with any portion of said opening, said opening having a plurality of spaced supporting and division plates thereacross to divide the material expressed through said opening into a plurality of closely adjacent portions and to support said portions individually against a cutting action, the lower edges of said plates being close to but slightly spaced from the lower side of said bottom.

1,879,328. APPARATUS FOR MANUFACTURING PASTRIES AND CONFECTIONERY. OTTO KREMMLING, Hamersleben, Germany, assignor to Aribert Kremmling, Hamersleben, near Oschersleben, Germany. Filed May 4, 1931, Serial No. 535,014, and in Germany July 19, 1930. 2 Claims. (Cl. 107—27.)



1. In a dough machine, an expressing chamber, a plurality of nozzles disposed beneath said expressing chamber and connected thereto by flexible tubes, a nozzle plate having openings therein for said tubes and mounted for horizontal movement for guiding said nozzles, one corner of said nozzle plate having two longitudinal slots therein at right angles to each other, each of said slots being parallel to an edge of said nozzle plate, a rotating disc provided with guide grooves, a pair of pivotally mounted double-armed levers, one of said levers forming substantially a right angle and the other forming substantially a straight angle, one arm of each of said levers being engaged in one of said guide grooves, the other arm of each lever having longitudinal slots therein, and a pair of links, one end of each being adjustably secured in one of the slots in the lever arms and the other end of each being adjustably secured in one of the slots in the nozzle plate.

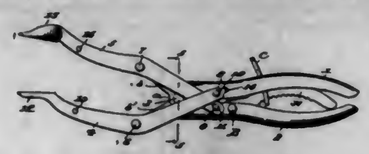
1,879,329. BURNER. LOUIS C. KUEHNER, St. Louis, Mo., assignor to Handlan-Buck Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 9, 1930. Serial No. 442,762. 4 Claims. (Cl. 67—72.)



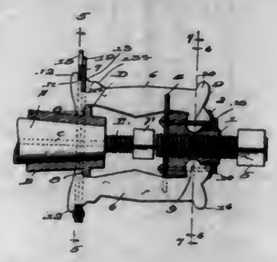
1. A burner of the character described, comprising a wick tube, a cup-shaped flame spreader secured to said wick tube, said flame spreader having end walls provided with apertures, integrally formed baffle wings flaring downwardly and outwardly from the upper portions of the side walls of said cup-shaped flame spreader, and supporting means for anchoring the lower ends of said baffle wings to said burner.

1,879,330. VALVE SPRING LIFTER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed Jan. 11, 1929. Serial No. 331,773. 10 Claims. (Cl. 29—86.3.)

1. A valve-spring lifting tool comprising a pair of levers pivoted together, in combination with an upper jaw-beam, a lower jaw-beam, each jaw-beam comprising two resilient elements substantially rigid in a vertical direction and flexible in a horizontal direction, and means for pivotally connecting both elements of each of the respective beams in their medial and rear portions to both of said levers respectively on opposite sides of their point of pivotal connection, said levers and elements of said beam having interlapped portions having their respective opposed lateral faces in sliding contact and cooperating to brace each other against twisting strains and to prevent lost motion in a transverse direction.



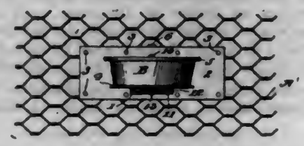
1,879,331. WHEEL, GEAR AND THE LIKE PULLING DEVICE. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed May 29, 1930. Serial No. 457,026. 1 Claim. (Cl. 29—85.)



A pulling device comprising a body, and a plurality of jaw-members mounted in said body for swinging movement in their respective radial planes with relation thereto, in combination with means disposed about said plurality of jaw-members as a unit and movable lengthwise of said jaw members in engagement with the radially outer faces thereof to adjust the radial positions of said jaw members with relation to each other, and a member mounted on said means for movement concentric with the axis thereof and having radially inwardly presented cam faces adapted to engage the radially outer faces of said jaw-members respectively to adjust the radial positions of said jaw-members with relation to each other and to prevent their radially outward relative movement.

1,879,332. ANIMAL FEEDING DEVICE. HARRY W. KULP, Lancaster, Pa., assignor of one-half to Martin C. Dellinger, Lancaster, Pa. Filed Dec. 26, 1930. Serial No. 504,928. 7 Claims. (Cl. 119—61.)

1. A feeding device comprising a pair of apertured plates to be clamped together in registering relation on opposite faces of an intervening wire mesh constituting a side of an animal pen, means for clamping said plates together, and a pan having a radially outwardly presented flange extending from its upper edge, the registering apertures in said plates corresponding in shape to the cross section of said pan at its point of greatest diameter and being of such size as to permit the insertion and withdrawal of said pan through said apertures, in combination with a U-shaped channeled protective metal member having its ends anchored to one of said plates adjacent the upper ends of the sides of the aperture in said plate with the respective ends of the channel of said member so positioned as to receive the diametrically opposite portions of the flange of said pan to guide and protect said flange, a hook pivotally connected to one of said plates and having a portion to hook under the rear portion of said flange when said pan has been pushed forward in said channeled member to its extreme forward position, a metal flap, a hinge connected to said flap and one of said plates, a helical spring disposed about the pintle of said hinge and engaging said plate and said flap and acting to force said flap upward against the bottom of said pan to suport the pan when in position and to force the flap upward into position substantially parallel with said plate to close the aperture therein when the pan is withdrawn, and a stop finger extending from the medial portion of the swinging edge of the flap to engage one of said plates to prevent said flap from swinging rearwardly through said registering apertures of said plates.



1,879,333. BUSHING REMOVER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed May 30, 1931. Serial No. 541,130. 8 Claims. (Cl. 29—88.2.)



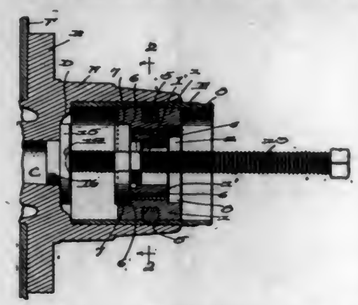
1. A poppet-valve bushing remover comprising a recessed driving head having the walls of said recess vertically slotted in transverse registry and two opposed stiffly resilient sheet metal thrust members having their upper portions substantially parallel and substantially in contact and adapted to be slidably received in the recess of said driving head and held by said head against spreading, said head and members being formed with interengaging means to prevent relative swinging movement between said members about the pin, and a pin extending through said head and the interposed portions of said thrust members and slidable in said slotted head, each said thrust member having a lower shank portion formed in substantial alignment with its upper portion and provided with a radially inner arcuate face adapted to engage the opposed cylindrical face of the valve-stem, a lower hood portion extending upwardly and outwardly at an angle of approximately 45 degrees from its point of mergence with said shank portion, and an upper hood portion extending upwardly and inwardly at an angle of approximately 90 degrees from its point of mergence with said lower hood portion and merging with the upper end portion of the said thrust member, the respective hood portions of the respective thrust members being opposed to each other in assembled operative relation and together constituting a hood accommodating the valve-head when the shank portions of said members are respectively on opposite sides of an intervening valve-stem, and the lower ends of said shank portions being adapted to engage the opposed end face of said bushing and to transmit thereto the force of hammer blows exerted on the driving head, all portions of each said thrust member being arcuate in cross section at all points and the joint between each two adjacent portions being arcuate in form.

1,879,334. PERCH BOLT REMOVER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed Aug. 3, 1931. Serial No. 554,923. 11 Claims. (Cl. 29—85.)



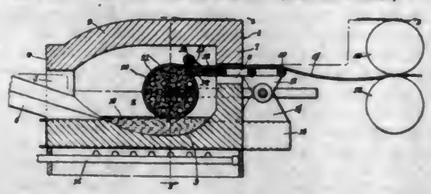
1. A spring perch extractor comprising a gripping element, said element comprising a body portion, a rearwardly and upwardly bent arm extending from one end of said body, a forwardly and upwardly bent arm extending from the other end of said body, two supporting fingers extending forwardly and rearwardly substantially parallel to each other from the upper ends of the respective arms, and having downwardly presented faces preferably in endwise registry with each other and of such length from front to rear as to extend across the face of an automobile front axle to which they are to be applied and substantially corresponding in form to the cross-sectional profile of the upper face of said axle, the supporting faces of said fingers in the direction of the length of said axle substantially corresponding in width to the width of the upper portions of the adjacent faces of their respective arms, and lugs depending downwardly from the free end portions of said fingers and having operative faces extending lengthwise of the axle for substantially the width of their respective fingers and adapted to engage the respective front and rear faces of the upper portion of the axle, said fingers being spaced from each other lengthwise of the gripping element a distance in excess of the width of the axle to permit the application of the gripping element to the axle, one of said arms being extended lengthwise of said element to a greater distance from the center of the body of said element than the other arm thereof whereby the necessary spacing of the fingers is obtained and whereby in use one of the fingers will bear on the upper face of the axle closely adjacent the spring perch to prevent deformation of the axle between the gripping fingers, the upper portions of the opposed faces of said arms lying in substantially parallel planes spaced from each other for a distance substantially equal to the width of the axle to which the gripping element is to be applied and in the same plane as, and parallel to, the operative vertical faces of the lugs depending from the fingers extending from the respective arms, the relation of the operative faces of the upper portion of each arm, its supporting finger and cooperating lug being such as to just snugly receive and fit against one vertical face, across the top, and against the upper portion of the other vertical face of the axle with a substantial bearing surface in the direction of the length of the axle, in combination with a powerful leverage starting screw-sleeve threaded through said body and adapted to exert a powerful thrust against the lower end of said spring perch through the intermediary of a thread protective nut applied to the lower end of said perch and in a vertical line closely adjacent one of said gripping fingers, and an extractor or expelling screw threaded through said sleeve and adapted to engage the lower end of said perch and to force said perch upward completely out of its bore in the axle after said protective nut shall have been removed from said perch, said extractor screw being of such length with relation to said sleeve, gripping element and axle that it may be turned up so as to project entirely through the spring perch bore of the axle.

1,879,335. SLEEVE PULLER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed Aug. 3, 1931. Serial No. 554,924. 7 Claims. (Cl. 29—88.2.)



1. A wheel hub roller bearing sleeve puller consisting of a thrust block having a portion fitting in a bore in said hub and having a portion engaging a radial face extending from adjacent said bore, and a sleeve engaging unit consisting of a pair of relatively movable blocks formed at each end with radial faces extending in the same radial planes respectively and having pairs of walls of different thicknesses in a radial direction extending axially from the respective pairs of radial faces, said blocks having their outer faces straight in an axial direction and arcuate in a peripheral direction and being formed with arcuate recesses extending axially inward from the ends of the respective radial faces, means secured in one of said blocks and slidable in the other block for connecting said blocks for relative radial movement and for limiting the separation of said blocks in a radial direction, yielding means tending to force said blocks apart in a radial direction, and removable means projecting radially at diametrically opposite points from the arcuate radially outer face portions of said blocks for engaging in the corresponding perforations in the sleeve to be pulled, in combination with a centrally axially bored internally screw-threaded disk having a radial face adapted to engage one or another of the pairs of radial faces of said blocks according to the internal diameter of the sleeve to be pulled and to engage at diametrically opposite points of its peripheral face the radially inner faces of one or another of said pairs of axially extending walls according to the internal diameter of the sleeve to be pulled, a stop pin extending axially from said disk and adapted to engage in one of said recesses, and a jack screw engaging in the screw-threaded bore of said disk, and having its threaded end portion rounded and seated in and centered by a corresponding central depression in the opposed face of said thrust plate, said jack screw extending axially outwardly between, and centrally, of said blocks.

1,879,336. APPARATUS FOR FORMING METAL STRIPS. FRANK W. FOLEY, Dollar Bay, and ANDREW T. SWEET, Houghton, Mich. Filed Feb. 27, 1932. Serial No. 595,512. 12 Claims. (Cl. 207—13.)

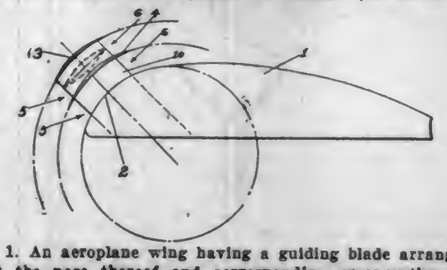


11. In an apparatus for casting metal into strip-like form, a furnace including a heating chamber adapted to contain a body of molten metal, a vertically movable, continuously chilled and continuously rotated casting element arranged in said chamber for partial submergence in said body for chilling and casting thereon in strip-like form metal removed from said body, rotatable shafts connected to said element, a combined supporting and counter-balancing device for said element connected to said shafts and arranged exteriorly of the furnace, said furnace having an outlet at its front, and a combined doctor means and supporting structure for the strip, the said structure arranged within and extended from said chamber through said outlet, and the doctor means of said structure being positioned in proximity to said element for continuously removing the strip therefrom.

1,879,337. PROCESS FOR THE MANUFACTURE OF α-NAPHTHOL. EMIL LAAGE, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 7, 1930, Serial No. 442,445, and in Germany Apr. 10, 1929. 3 Claims. (Cl. 260—154.)

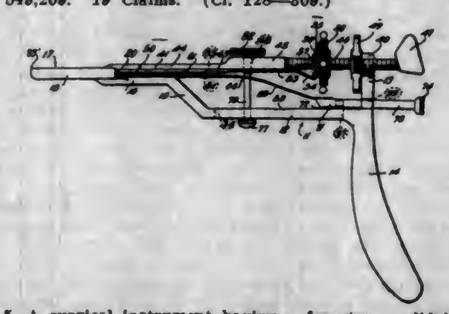
1. The new process which comprises heating α-ketotetrahydronaphthalene with sulphur, the amount of sulphur not exceeding the molar amount calculated upon the amount of the α-ketotetrahydronaphthalene.

1,879,338. AEROPLANE WING WITH GUIDE BLADES. GUSTAV LACHMANN, Akasaka-Ku, Tokyo, Japan, assignor to Handley Page Limited, Cricklewood, Middlesex, England. Filed June 11, 1929, Serial No. 370,115, and in Japan June 17, 1928. 8 Claims. (Cl. 244—12.)



1. An aeroplane wing having a guiding blade arranged at the nose thereof and corresponding cross-sectionally to the curvature of the nose of the wing so that the opposing surfaces of the nose of the wing and of the blade are substantially concentric and the channel between the wing nose and the blade is of the same width from the entrance to the outlet, and including a rod by which the blade is carried, said rod being provided with a piston and also including a cylinder in which the piston operates and means whereby the cylinder may be supplied with a compressed fluid medium to operate the piston and thereby move the blade toward and from the nose of the wing.

1,879,339. SURGICAL INSTRUMENT. BURDETTE D. LA FORCE, Altadena, Calif. Filed July 7, 1931. Serial No. 549,209. 19 Claims. (Cl. 128—309.)



5. A surgical instrument having a fenestra, a slidably mounted fixing blade to engage a tonsil, a slidably mounted hemostat blade to crush the tissues, a slidably mounted severing means, a locking device interconnecting the fixing blade and the severing means to prevent operation of the severing means until the tonsil is engaged and gripped by the fixing blade.

1,879,340. WEATHER STRIPPING FOR METAL SASHES. HARRY LAMPING, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Mar. 23, 1929. Serial No. 349,493. 7 Claims. (Cl. 20—69.)



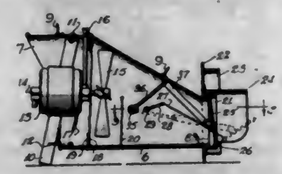
1. A metal weather stripping comprising a clamping portion formed of a piece of spring metal adapted to underlie the free edge of a sash or frame, and a gripping portion reversely bent with reference to said piece and adapted to clamp said free edge therebetween, a reverse bend at the ends of said piece and a resilient weather closing member attached to said piece by said reverse bend and adapted to be depressed into substantially parallel relationship with said piece when said window is closed, said weather closing member terminating in its outer edge in a rolled bead, said rolled bead extending beyond and towards the clamping portion and adapted when the window is closed, to seat against an outer portion of the clamping member and form a weather-tight joint therewith.

1,879,341. VEST. RALPH MORTIMER LAPHAM, Glens Falls, N. Y. Filed July 21, 1931. Serial No. 552,212. 3 Claims. (Cl. 2—102.)



1. A vest of the character described including a body, means for clamping the body in position on a person, a pocket carried by the body near the lower part thereof, and a swinging member near the upper part of the body including a loop for clamping a rod to the body, said pocket acting as means for receiving one end of said rod.

1,879,342. BLOWER FOR HEATING PLANTS. SAMUEL LAUTER, Chicago, Ill. Filed Sept. 11, 1930. Serial No. 481,167. 5 Claims. (Cl. 110—60.)



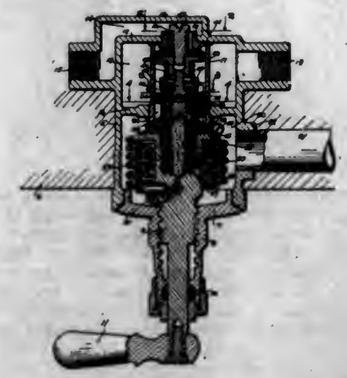
1. A device of the class described comprising a casing having an outlet, means for causing a flow of air through said casing, a gate movably mounted in said casing for controlling the passage of air through said outlet, said gate normally urged toward a closed position and being adapted to be opened by the air forced through said casing, adjustable means for limiting the opening of said gate and permitting its self-closing, said adjustable means being arranged for adjustment from the outside of said casing and having an indicator attached thereto.

1,879,343. PORTABLE LAMP. GEORGE J. LA VIGNE, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Jan. 27, 1930. Serial No. 423,809. 4 Claims. (Cl. 240—81.)



1. In a device of the class described, the combination of a column provided with a recess, a ball stud and washer having spherical inter-engaging faces located within said recess, yielding means acting directly upon said washer for pressing said parts together, trunnions and slots between said column and ball stud for confining relative movements between said parts to a single plane, a cap threaded to the column and bearing upon said trunnions for adjusting the tension of the yielding means to provide frictional engagement between the parts, and an arm connected with said ball stud.

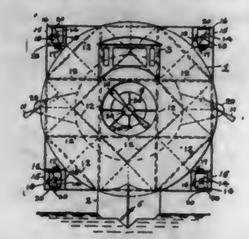
1,879,344. AUTOMATIC MIXING VALVE. JAMES J. LAWLER, Mount Vernon, N. Y. Filed Oct. 29, 1931. Serial No. 571,888. 3 Claims. (Cl. 236—12.)



1. In an automatic mixing valve, a valve casing having hot and cold water inlets and a partition therein providing a mixing chamber, a valve seat on the partition, a manually operable valve engageable with the seat, a valve controlling the flow of hot water to the mixing chamber carried by the manually operable valve, a thermostatic element in the mixing chamber in communication with the hot water valve for regulating the temperature

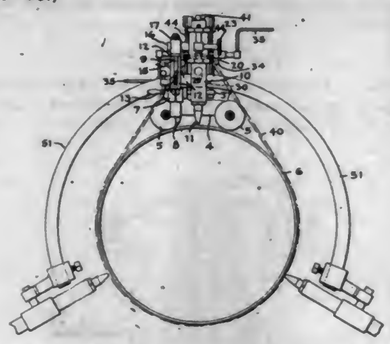
of water discharged from the mixing chamber, and a cylindrical member in the casing above the partition and surrounding the hot water valve to provide a cold water chamber.

1,879,345. DIRIGIBLE AIR SAILING CRAFT. ALVAH H. LAWRENCE, Hamlet, Ind. Filed Apr. 15, 1929. Serial No. 355,110. 7 Claims. (Cl. 244—10.)



4. In floatable air ships, an air floatable body, propellers for driving the ship, separate propellers operable independently on separate planes throughout 360 degrees at right angles to each other adapted to accelerate, retard, directly raise and lower the ship, and accessory air rudders attached to the ship whereby during cruising the main propellers will move the ship forward and the separate propellers will directly raise or lower it or bodily move it sideways or hold it at rest or in movement at a given elevation, or counteract the main propellers in stopping.

1,879,346. CIRCUMFERENTIAL PIPE CUTTING OR WELDING MACHINE. FRANK S. LAWRENCE, Dunellen, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1931. Serial No. 553,788. 24 Claims. (Cl. 266—23.)



1. A circumferential pipe cutting or welding machine, comprising a torch-carriage, wheels supporting the torch carriage to travel on and around the surface of the pipe, means comprising a flexible element adapted to be passed about the pipe and in engagement with the carriage so as to hold the carriage to the pipe, and drive mechanism on the carriage for producing relative circumferential feed between the carriage and the pipe.

1,879,347. MANIFOLDING CHECK BOOK. ALBERT ROSS LAWSON, Hamilton, Ontario, Canada. Filed Oct. 6, 1930. Serial No. 486,533. 5 Claims. (Cl. 282—22.)

1. A manifolding book comprising a cover, a series of record sheets contained within the cover and lying upon the inner face of one cover leaf when the book is opened, each of said series comprising a carbon sheet and duplicate sheet bound into the book, the carbon sheet being only carbonized upon the face adjacent the duplicate sheet, and an original sheet united along one edge to the duplicate sheet and folded over the carbon sheet, and a plurality of wire book binding staples rigidly positioned crosswise of the inner edges of the sheets and



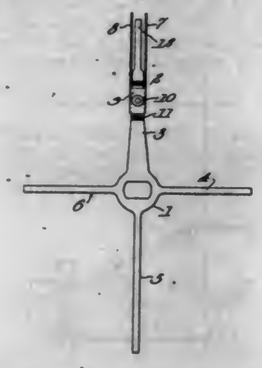
extending through the duplicate and carbon sheets and cover, the staple ends lying along the outer face of the back of the cover, the series of record sheets being positioned upon one set of staple legs and the used carbon sheets on the other set of staple legs.

1,879,348. PNEUMATIC TIRE CORE. CASTER E. LAWSON, Utica, Ohio. Filed Mar. 15, 1930, Serial No. 436,107. Renewed Dec. 10, 1931. 2 Claims. (Cl. 18—45.)



2. A pneumatic tire core of the character described comprising a plurality of connected sections, each section including a rigid cap of substantially arcuate cross section, yieldable side wall sections slidably engaged with the longitudinal marginal portions of the cap and extending inwardly therefrom in converging relation to each other, integral flanges extending inwardly from the side wall sections, hinges secured to the flanges for pivotally connecting the sections together in a manner to permit lateral movement of the side wall sections, flanges formed on the hinges adapted to limit the lateral movement of the side wall sections in an outward direction and expansible springs disposed between the side wall flanges in a manner to yieldingly urge the same outwardly.

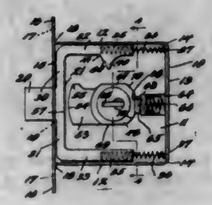
1,879,349. RELAY CONTACT. KARL M. LEDERER, Newark, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Apr. 3, 1930. Serial No. 441,411. 2 Claims. (Cl. 200—166.)



1. In a relay contact element for cooperation with a fixed contact element, the combination with a relatively rigid main member of cruciform shape having one arm

reduced in size adjacent the end thereof, of an auxiliary member of flexible material secured to the larger portion of said arm and having a pair of parallel fingers extending along and spaced from the reduced portion of said arm, the end portions of said fingers being disposed to lie against the reduced portion of said arm when said element cooperates with a fixed contact element.

1,879,350. LOCK. FRANK LEEB, Culver City, Calif. Filed Aug. 6, 1931. Serial No. 555,569. 6 Claims. (Cl. 70—29.)

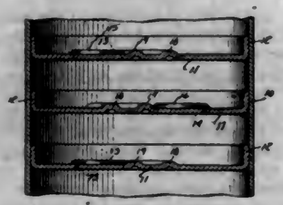


1. In a lock of the class described, in combination, a spring pressed bolt provided with two spaced parallel rearwardly extending arms, a rollback rotatably mounted between said arms, a projection on said rollback, means associated with one of said arms adapted to cooperate with said projection to retain the bolt in retracted position, an intermediate portion of said bolt connecting said arms and adapted to cooperate with said projection to retain said bolt in dead-locked position, said rollback adapted to be rotated so that said projection is directed toward the other of said arms to free said bolt for spring-latch operation.

1,879,351. PROCESS FOR SUPPRESSING THE GROWTH OF MICRO-ORGANISMS. RUDOLF LEHMANN, Uerdingen, and RICHARD MICHEL, Krefeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 12, 1929, Serial No. 406,730, and in Germany Nov. 22, 1928. 8 Claims. (Cl. 167—22.)

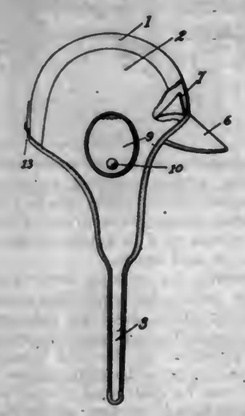
1. A composition of matter capable of preventing the growth of micro-organisms in technical materials liable to be decomposed by micro organisms comprising a compound containing a radicle of a halogenated phenol and a compound containing the radicle of an aromatic carboxylic acid.

1,879,352. ABSORBER FOR REFRIGERATORS. ALVAR LENNING, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 7, 1930. Serial No. 450,416. 4 Claims. (Cl. 261—114.)



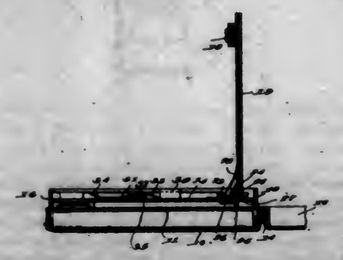
1. An absorber element for use in a gas and liquid contact apparatus for effecting a thorough commingling of the gas and liquid comprising a plate having ribs on its upper surface along its central portion in overlapping relation, said plate having openings with raised rims at one side of said ribs and an imperforate portion at the opposite side of said ribs, the rim of one of the openings being cut through to provide a discharge passage whereby liquid deposited upon the plate on the side remote from the discharge openings will be required to travel over the plate in a circuitous path between said ribs to said discharge opening.

1,879,353. AVIATOR'S HELMET. JACK W. LEVI, Cincinnati, Ohio, assignor, by mesne assignments, to Stewart S. Cooper, Cincinnati, Ohio. Filed Jan. 18, 1929. Serial No. 333,385. 4 Claims. (Cl. 2—6.)



1. An aviator's helmet having orifices extending therethrough in the portions thereof lying over the ears of a wearer, and means for detachably covering said orifices, said means comprising flaps secured along one edge and having means for fastening same to the body of the helmet along the opposite edges, said flaps having annular wind breaking members, and said helmet having registering annular wind breaking members surrounding said orifices whereby double air seals are provided for precluding the passage of air under said flaps when same are closed.

1,879,354. PORTABLE CHECK PROTECTOR. LEAYLE J. LEVI, St. Thomas, Virgin Islands. Filed Sept. 13, 1930. Serial No. 481,754. 3 Claims. (Cl. 101—19.)



1. In a device of the character described, a receptacle, a hinged cover therefor, a base plate mounted within said receptacle, a die plate forwardly thereof, a key shaft rearwardly of said base plate, key members having bearing portions formed at one end thereof for pivotal mounting upon said key shaft, springs normally urging said key members to erect position, stops projecting from said bearing portions adapted to limit rearward pivotal movement of said key members, punches adjacent the free ends of said key members adapted to cooperate with said die plate, said hinged cover serving to engage and retain said key members in lowered position when closed.

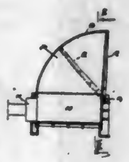
1,879,355. FILTER MAKING MACHINE. ROBERT P. F. LIDDELL, Morris Township, Morris County, N. J., assignor to Motor Improvements, Inc., Newark, N. J., a Corporation of Delaware. Filed Dec. 4, 1929. Serial No. 411,463. 12 Claims. (Cl. 29—33.)



1. In an apparatus of the character described, a pair of rollers having conical coacting surfaces, a rotatable and axially movable drum, guide means for delivering to said drum a ribbon discharged from said rollers, and means to engage said ribbon as it is wound on the drum to effect axial movement of said drum.

12. An apparatus for making filter units comprising co-acting conical rollers for converting a wire into a ribbon of definite curvature about an axis perpendicular to its wide faces, means for rotating said roller, one of said rollers having provision for forming transverse ribs projecting from one face of said ribbon, means for supporting a drum, a guide tube for delivering to said drum ribbon discharged from said rollers, friction means for rotating said drum supporting means to wind said ribbon on edge around said drum, a finger engaging one face of said ribbon to close the turns thereof and to effect axial movement of said drum, and yieldable means opposing axial movement of said drum.

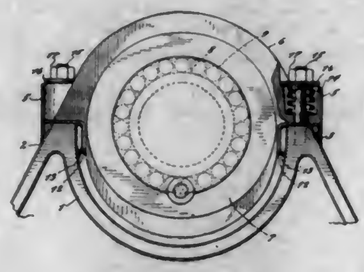
1,879,356. BRIQUETTING PRESS. WALDEMAR LINDEMANN, Dusseldorf, Germany. Filed Sept. 1, 1931, Serial No. 560,676, and in Germany Jan. 31, 1931. 7 Claims. (Cl. 78—42.)



1. A bundling press, having a pressbox, a lid suitable for closing this box, means in this pressbox, suitable for compressing the material, filled in, flappable hoppers on opposite sides of the pressbox arranged for being placed into a horizontal or vertical position, borders or flanges on these hoppers, suitable for joining, when the hoppers are in their vertical position and furthermore suitable for guiding the lid in a closed casing.

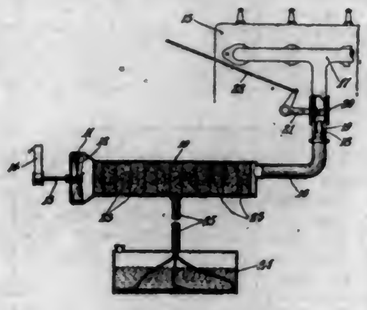
1,879,357. BEARING. NILS O. LINDSTROM, Nutley, N. J., assignor to A. B. See Elevator Company, Inc., a Corporation of Delaware. Filed July 30, 1930. Serial No. 471,663. 4 Claims. (Cl. 308—72.)

1. A bearing adapted to follow movements of a shaft journaled therein so that the bearing is at all times coaxial with the shaft, which movement of the shaft at the bearing results from the shaft bending between the bearings, comprising a bifurcated support, a bearing mounted in the support, extensions on the bearing having convexed



surfaces resting upon the ends of the stems of the support, and means for resiliently securing the bearing to the support.

1,879,358. GASOLINE VAPORIZER. WILLIAM LILLY, New York, N. Y. Filed Nov. 24, 1928. Serial No. 321,599. 5 Claims. (Cl. 261—104.)

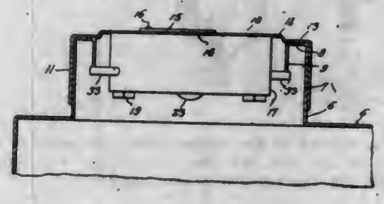


1. A gasoline vaporizer for internal combustion engines comprising a chamber, means for introducing a current of air into said chamber, two rows of parallel sheets of fibrous material supported in said chamber oblique to the direction of the air current, the ends of the sheets being arranged to define a tapering passageway whereby air is uniformly distributed between said sheets, and a tube leading from said chamber to the intake manifold of the engine.

1,879,359. LOCKING CAP FOR AUTOMOBILE GASOLINE TANKS. WILLIAM LINFERT and WILLIAM T. WALTERS, Cincinnati, Ohio, assignors, by direct and mesne assignments, of two-thirds to said Linfert and one-third to David Howe, Cincinnati, Ohio. Filed Oct. 14, 1930. Serial No. 488,670. 1 Claim. (Cl. 220—55.)

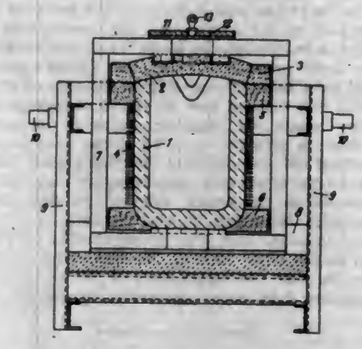
As a new article of manufacture, a locking cap structure comprising a circular top plate having a depending flange for close superposed engagement upon a filling neck, a cylindrical lock chamber having a closed bottom and removably secured to depend from the top plate, a pair of bolts integrally formed on and downwardly projecting from said top plate for passing through apertures in the bottom of said lock chamber, having nuts on the ends thereof for engaging the exterior of the bottom of said chamber for urging the chamber into engagement with the said top, and a freely rotatable stud carried by the bottom of the chamber in a vertical position and having

a transverse slot in its upper end, a flanged cylinder rotatably carried upon the rotatable member and having slots registrable with the slots in the upper end of the rotatable member, a pair of bolts slidable through apertures in the walls of said chamber for engagement under the lower edge of a portion of the filling neck for preventing the removal of the cap of the filling neck, a pair of diametrically and oppositely disposed pivots on the flanged portion of the cylinder connecting the inner ends of the bolts,



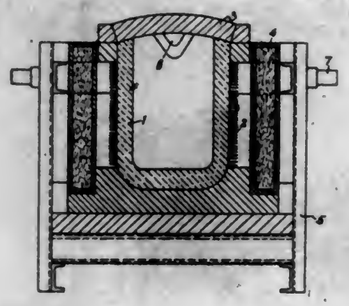
a key engageable in the slots of the said rotatable member when passed through an aperture in the top plate, said key having lateral extensions for engaging, when engaged in the slots of the rotatable member with the slots in the cylinder whereby to rotate simultaneously with the rotatable member for moving said bolts inwardly and outwardly, and a spring connected between the chamber and the rotatable cylinder for normally positioning said cylinder so as to project the bolts normally for engagement under the lower edge of the said portion of the filling neck.

1,879,360. ELECTRIC INDUCTION FURNACE. FRANZ LINNHOFF, Eberswalde, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed July 22, 1929, Serial No. 380,139, and in Germany July 24, 1928. 4 Claims. (Cl. 13—27.)



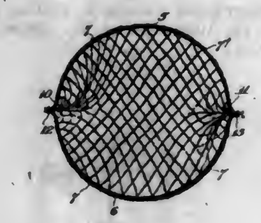
1. In an electric induction furnace, in combination, a crucible, an induction coil surrounding said crucible and a C-shaped yoke surrounding said coil, the inner part of the yoke being provided with horizontal slits and being removable bodily at the top from the side members.

1,879,361. ELECTRIC INDUCTION FURNACE. FRANZ LINNHOFF, Eberswalde, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed July 22, 1929, Serial No. 380,140, and in Germany July 24, 1928. 12 Claims. (Cl. 13—26.)



1. In an electric induction furnace, in combination, a crucible, an induction coil surrounding said crucible and a yoke of pressed magnetic powder arranged around said coil.

1,879,362. BANDEAU. CLARENCE LIPPER, Philadelphia, Pa., assignor to The Lipper Manufacturing Co., Inc., a Corporation of Pennsylvania. Filed July 25, 1929, Serial No. 380,912. Renewed May 9, 1932. 2 Claims. (Cl. 132—49.)

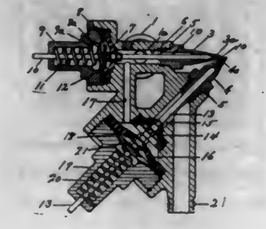


1, A bandeau comprising a body of open mesh knitted fabric, having a generally tube-like, knitted selvage edge extending around the entire periphery thereof, and a pair of juxtaposed, elastic strands encased within and extending through the two halves respectively of said tube-like, knitted peripheral selvage edge, having their juxtaposed ends secured to each other, so as to gather the open mesh knitted fabric equally, front and back, and so as to form a continuous elastic edge throughout the periphery of the bandeau.

1,879,363. SELF-CLEANING ATOMIZER. ALBERT J. LOEPSINGER, Providence, R. I., assignor to American Moistening Company, Providence, R. I., a Corporation of Maine. Filed May 29, 1931. Serial No. 540,905. 4 Claims. (Cl. 299—59.)

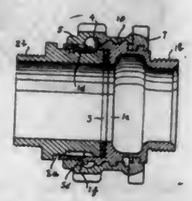
1. A self-cleaning atomizer comprising, in combination, a body having a passage adapted to receive air under pressure; a nozzle at one end of the passage for discharge of air; a pressure responsive element at the other end of said passage adapted to be moved in one direction by the

air pressure in said passage; a rod attached to said element and adapted to be moved thereby to effect cleaning of said nozzle; a spring arranged to oppose the movement of said rod occasioned by the air pressure and to cause movement of the rod upon the cessation of said air pressure; another passage in said body adapted to receive water; a nozzle at one end of said water passage arranged in proximity to the air nozzle whereby the discharge of air causes the water to be atomized; a second rod adapted to be moved to effect cleaning of the water nozzle; a chamber in said body having a second pressure



responsive element associated therewith and connected to said second rod; a passage connecting said chamber and the air passage first mentioned whereby upon the admission of air under pressure said second pressure responsive element is subjected to pressure to effect movement of said second rod; a second spring opposing movement of said second rod and adapted upon cessation of the air pressure to cause movement of said second rod to effect cleaning of the water nozzle; and means associated with said second rod to prevent leakage of air into the said water passage.

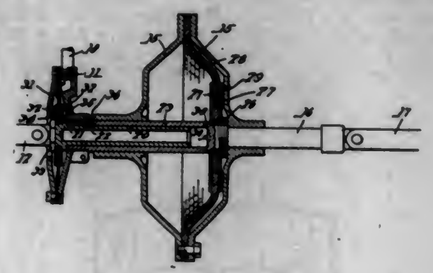
1,879,364. COUPLING. LOUIS L. LOMAR, Houston, Tex. Filed Oct. 11, 1929. Serial No. 398,884. 4 Claims. (Cl. 285—168.)



4. A coupling receiving member having a body, radial openings in said body, balls in said openings, a ball actuating ring on said body, and a ball retaining resilient ring within said body.

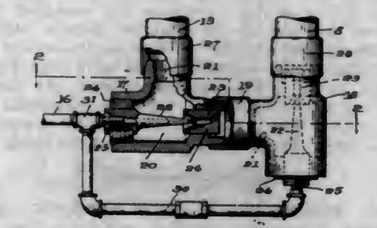
1,879,365. VACUUM BRAKE. NATHANIEL LOMBARD, Worcester, Mass. Filed Nov. 10, 1928. Serial No. 318,514. 4 Claims. (Cl. 188—152.)

4. In a vacuum operating means for a brake, the combination with the brake and its brake rod, said brake rod being hollow at its end, of a valve slidably located within the hollow part of the brake rod and having two ports therethrough, the hollow part of the brake rod having ports, a chamber and means for operating the brake in said chamber, and located at one side of the ports through the brake rod, said hollow part of the brake rod having a port through its wall normally communicating with one of the ports in the valve therein, the other port in the valve being located where it will communicate



with the suction of the engine when this valve is moved slightly to one side, whereby the suction will communicate through the valve into said chamber.

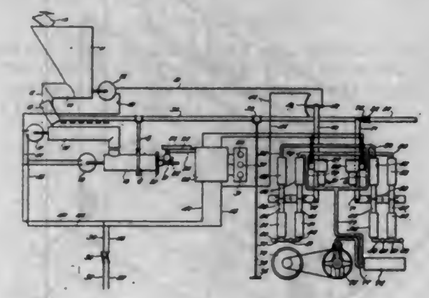
1,879,366. EJECTOR. DAVID G. LORRAINE, Los Angeles, Calif. Filed Apr. 21, 1930. Serial No. 445,873. 3 Claims. (Cl. 230—104.)



1. An ejector comprising a plurality of identical interchangeable elements; each including a casing having an axial bore and a lateral inlet, one end of the axial bore being a supply end and the opposite end of the axial bore being a discharge end, a nozzle projecting into the supply end of the axial bore and longitudinally adjustable relative to the casing, and a Venturi tube mounted in the discharge end of the axial bore, the nozzle forming a jet inducing flow through the lateral inlet and discharging said flow under pressure through the Venturi tube, and the lateral inlet being at one side of the axis of the nozzle whereby the induced flow is moved circumferentially around the nozzle for whirling discharge through the Venturi tube; a straight coupling sleeve connecting the discharge end of one of said interchangeable elements with the lateral inlet of a succeeding element, an inlet pipe connected to the lateral inlet of the first element, an outlet pipe connected to the discharge end of the succeeding element, and pipe longitudinally adjustably connected to the outer ends of the nozzles which project outwardly through the supply ends of the elements, said pipes supplying fluid under pressure to the nozzles.

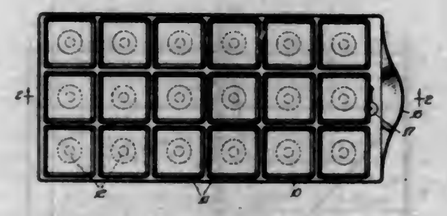
1,879,367. CLAY TEMPERING MEANS AND METHOD. ALFRED F. C. LOTZ, Chicago, Ill., assignor to Ceramic Development Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 15, 1931. Serial No. 544,857. 24 Claims. (Cl. 25—11.)

1. In a system for preparing clay, having a feeder, a mixing machine, and an extrusion machine disposed in serial relation, water supply means cooperating with said mixing machine for tempering the clay fed to said machine through said feeder, and pressure responsive means cooperating with said extrusion machine for automatically proportioning the relation of the clay from said feeder



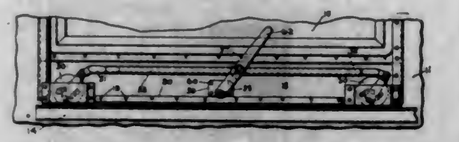
and said water supply to maintain the plasticity of the clay constant at the point of extrusion of said extrusion machine.

1,879,368. FREEZING TRAY FOR REFRIGERATORS. MCDONALD LOVELL and VICTOR SUSSIN, Chicago, Ill. Filed June 28, 1930. Serial No. 464,572. 6 Claims. (Cl. 62—108.5.)



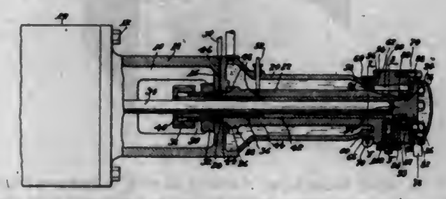
1. A freezing mould comprising a tray-like receptacle composed of a material having high thermal conductivity, and a plurality of containers also having high thermal conductivity disposed in said receptacle and secured in such relationship that the wall portions of respective containers are spaced from those of others and from the receptacle walls, the spaces between the containers having openings at the top and the receptacle being open at the top, for admission of fluid into the spaces about the containers.

1,879,369. DOOR MECHANISM. CARL LUTE and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1929. Serial No. 385,826. 7 Claims. (Cl. 16—99.)



1. In combination, a sliding door, a relatively fixed track, supporting rollers for said door adapted to travel on said track, housing members carried by said door, retaining members for said rollers received by said housing members, a plurality of connecting links between said housing members and said roller retainers, said links being pivotally connected to said roller retainers at points offset from the axis of said rollers, and means for turning said retaining members to lift said door.

1,879,370. COMPRESSOR CYLINDER. RAYMOND C. MCALLISTER, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931. Serial No. 519,801. 10 Claims. (Cl. 230—212.)



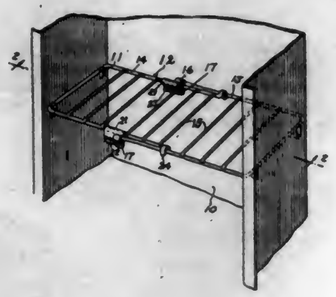
1. In a compressor, a casing having a wall, a cylinder extending longitudinally of the casing and being connected at one end to the wall, and a head on the other end of the cylinder forming a closure for the casing and being in slidable engagement with the casing and to prevent deformation of the casing upon temperature changes in the cylinder.

1,879,371. WATER LEVEL INDICATING DEVICE. ERNEST D. MCCLOSKEY, Altoona, Pa. Filed Jan. 6, 1932. Serial No. 584,973. 5 Claims. (Cl. 105—236.)



1. In combination with a locomotive tender, including a water compartment, and an adjoining frone end chamber for the accommodation of tools or other articles, a water level indicating device comprising a valve disposed within said chamber and accessible through an opening near the bottom thereof, said valve communicating at its intake side with said water compartment, a stand pipe at the discharge side of said valve having a series of vertically spaced outlets, and a rod for operating said valve, said stand pipe and operating rod extending upward within said chamber.

1,879,372. ADJUSTABLE SHELF. HENRY G. MCCOMB, Chicago, Ill., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 22, 1930. Serial No. 477,075. 6 Claims. (Cl. 211—153.)

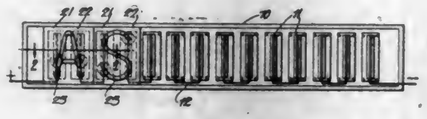


1. A shelf comprising a frame having a series of apertures, a second frame provided with a plurality of studs for selective engagement with apertures of the first frame, resilient means for maintaining said studs in said apertures and cooperative means on said frames for maintaining them in operative article supporting position.

1,879,373. METHOD OF UTILIZING CERTAIN BY-PRODUCTS OF IRON AND STEEL PLANTS. HERBERT MCCOMB, Gary, Ind. Filed Sept. 23, 1931. Serial No. 564,713. 11 Claims. (Cl. 75—73.)

2. The method of utilizing spent pickle liquor which comprises the steps of adding said liquor to relatively dry iron bearing flue dust, mixing said ingredients together to form a plastic cohesive mass, and then sintering the mixture at a temperature sufficiently great to convert the contained ferrous sulphate into iron oxide.

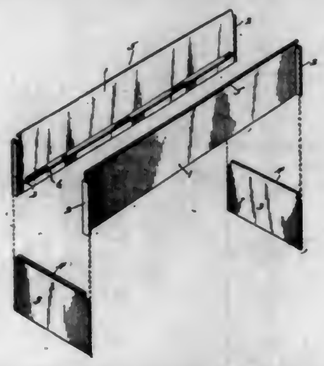
1,879,374. ELECTRICAL DISCHARGE ILLUMINATED SIGN. WILLIAM A. MCCOMBS, New York, and HENRY C. PARKE, Brooklyn, N. Y. Filed Mar. 11, 1931. Serial No. 521,849. 3 Claims. (Cl. 40—130.)



1. In an electric discharge sign, a plurality of evenly spaced pairs of vertically elongated receptacles, electric discharge sign characters, each sign character having its two electrodes extending therefrom and spaced apart for a distance at least equal to the distance between the receptacles of each pair, the receptacles being of a length substantially equal to the height of said sign characters, whereby the electrodes of said sign characters are receivable in any of said pairs of elongated receptacles along the lengths thereof.

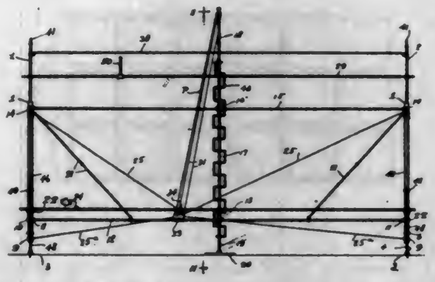
1,879,375. GRAVE FORM. BESSIE MCELROY, Chicago, Ill. Filed Nov. 12, 1930. Serial No. 495,149. 4 Claims. (Cl. 47—33.)

1. In a flower or plant box to be sunk in the ground, the combination of an outer box comprising longitudinal side walls and transverse end walls, that detachably connect together, forming a box with an open bottom, and



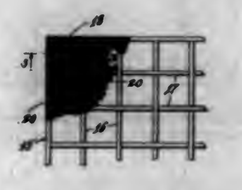
transverse inside boxes supported side by side in said outside box, on said longitudinal side walls, said inside boxes having perforated bottoms exposed to the ground.

1,879,376. SCAFFOLD. JULIAN H. MCMINN, Norene, Tenn. Filed Jan. 5, 1931. Serial No. 506,778. 9 Claims. (Cl. 304—29.)



1. A scaffold comprising in combination, a pair of spaced apart cross bars, means for slidably supporting said bars, a walk board supported between said bars, a pair of cross bars disposed above the first mentioned cross bars, means for slidably supporting the second pair of cross bars, a walk board supported between the bars of said second pair, and means for effecting simultaneous sliding movement of all of said cross bars.

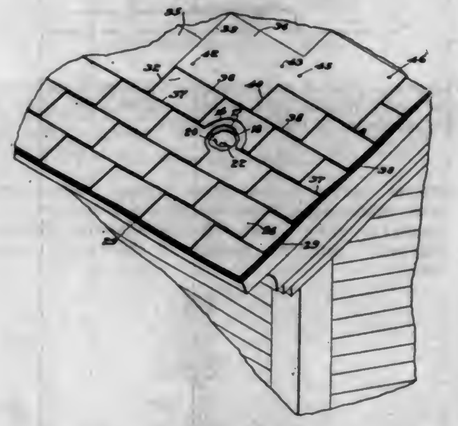
1,879,377. SCREEN AND METHOD OF MAKING THE SAME. JAMES W. MCNEELY, Long Beach, Calif. Filed Dec. 8, 1929. Serial No. 411,280. 6 Claims. (Cl. 209—403.)



1. As an article of manufacture, a unitary body comprising an open mesh flexible foundation screen, and a fine mesh screen in superimposed relation thereto, said

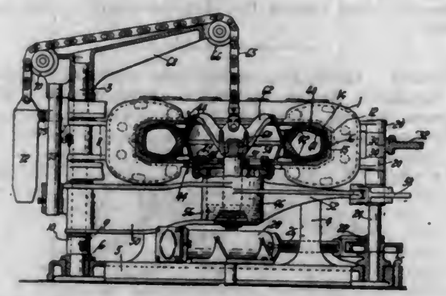
fine mesh screen being maintained under tension in such position by means connecting said foundation screen and fine mesh screen at a plurality of points distributed over the area of said screen.

1,879,378. SHINGLE ROOFING AND METHOD OF LAYING THE SAME. WILLIAM CHARLES MCWILLIAMS, Newton, Mass. Filed Jan. 11, 1930. Serial No. 420,129. 8 Claims. (Cl. 108—7.)



1. In a roofing construction, a plurality of relatively thin and flexible composition shingles each having two rectangular sections offset from one another a distance at least equal to one-half the length of the lateral edge of one of said sections to which the other section is attached, and arranged transversely of the roof in rows whose center lines are spaced apart a distance equal to the offset between sections, each section being integral with an adjacent section in a next adjacent row and overlapping an adjacent section in its rows, and the combined sections forming a roof of exposed rectangular areas each of which is comprised within a bottom of a shingle section and is respectively of less extent longitudinally and transversely than the height and width of the section.

1,879,379. VULCANIZER. COLIN MACBETH, Four Oaks, England. Filed Dec. 16, 1929, Serial No. 414,321, and in Great Britain Nov. 14, 1929. 16 Claims. (Cl. 18—17.)



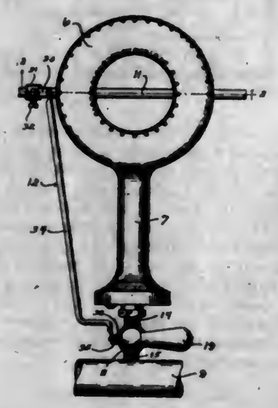
1. A vulcanizer having two sections, means to cause the sections to open and close, a support for a tire located at the axis of the vulcanizer in closed position, and means for moving said support with the opening of the sections to a position removed from the axis of the vulcanizer.

1,879,380. PERPETUAL CALENDAR. WALTER C. MALOZ, New Orleans, La. Filed Jan. 14, 1932. Serial No. 586,624. 2 Claims. (Cl. 40—107.)



1. A calendar of the class described comprising a body having an arcuate row of windows therein, a disk rotatably supported at the rear of the body and having data thereon indicating the names of the days of the week for appearing at the windows, said body having on its front face the numerals indicating days of the month, each vertical column of figures on said face being arranged under a window and a pocket on the front face of the body containing slips, each of which is marked with the name of a month, said body having a pair of alined slots therein, rollers supported in rear of the body containing a sheet, said sheet having two charts thereon for appearing through the slots, one chart having a column of figures indicating years and a row of figures opposite each year indication forming index numerals and the body above the last-mentioned slot having indications indicating the name of the month and the other chart having columns of data thereon representing the days of the week and dates in the month.

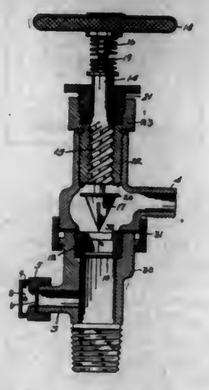
1,879,381. AUTOMATIC GAS COCK CONTROL. HENRY MARGILOFF, Brooklyn, N. Y., assignor to Elsie B. Margiloff, Brooklyn, N. Y. Filed Oct. 13, 1930. Serial No. 488,437. 4 Claims. (Cl. 158—117.1.)



1. In combination, a burner, a control valve for the burner including a plug valve provided with circumferentially arranged notches, means normally rotating the plug valve to a closed position, a thermostat adjacent the

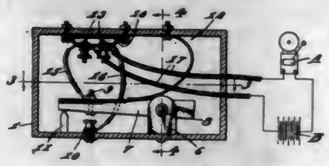
burner to extend into the flame thereof, a second thermostat mounted upon the control valve out of the path of the flame, a locking pin carried by the last mentioned thermostat and normally held out of engagement with said notches, and a heat conduction rod rigidly connected between the thermostats for actuating the locking pin in accordance with thermal conditions at said burner.

1,879,382. VALVE. GEORGE MATTHEW MARR, Woodhaven, and ARTHUR PHELPS MARR, New York, N. Y., assignors to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 354,155. 7 Claims. (Cl. 221—73.5.)



1. A frangible disk valve having a plurality of disks under constant pressure, mechanical means for rupturing one of said disks and a rotatable means for operating said mechanical rupturing means and a slidable means operable through said rotatable means for operating said rupturing means.

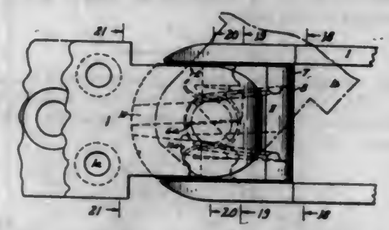
1,879,383. AUTOMATIC FIRE ALARM SWITCH. ENOCH MARSHALL, Manville, N. J., assignor of one-half to Enoch Malinowski, Manville, N. J. Filed Feb. 10, 1930. Serial No. 427,294. 2 Claims. (Cl. 200—142.)



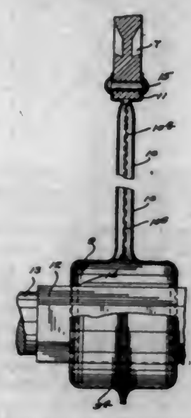
1. In a fire alarm device, a circuit closer comprising a casing of box-like form having a cover plate of grid-like form detachably secured thereto, a U-shape bracket mounted within the casing, a contact arm pivoted intermediate its ends between the arms of said U-shape bracket, a contact carried by said arm and having a conductor therewith, a stationary conductor carried by and insulated from the adjacent wall of the casing in position to be engaged by the first named contact, spring means urging said arm toward the second named contact, and a fusible post carried by said wall of the casing and engaged by said arm for normally holding the latter out of engagement with the second named contact.

1,879,384. CONVEYER SYSTEM. WILLIAM E. N. MASSICOTTE, Detroit, Mich. Filed Feb. 27, 1931. Serial No. 518,684. 21 Claims. (Cl. 198—189.)

1. A conveyer chain comprising a plurality of substantially flat links having laterally disposed buttons thereon, said links being arranged in opposed pairs, coupling blocks having slots therein, the buttons on the adjacent extremities of two pairs of links engaging the slots in each block, and means holding said buttons against other than rotary movement in their block slots.

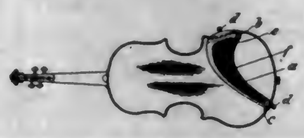


1,879,385. SEPARATING DISK. JOSEPH HOWARD MAYHEW, Minneapolis, Minn., assignor to Hart-Carter Company, Peoria, Ill., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,419. 2 Claims. (Cl. 209—96.)



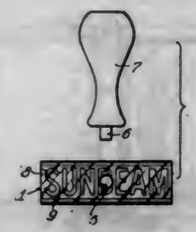
1. A rotatable grain-separating disk adapted to be mounted upon a shaft, said disk comprising a pocketed ring-like relatively light separating plate of moulded plastic composition, an annular metal member fixed to and reinforcing the inner periphery of said ring-like plate, and a metallic hub member adapted to be fastened to said shaft and connected to said reinforcing member, whereby to strengthen and support the body for rotation with said shaft.

1,879,386. SHOULDER REST FOR VIOLINS. MIRKO MEDAKOVIC, Zagreb, Jugoslavia. Filed Dec. 23, 1930. Serial No. 504,815, and in Jugoslavia Dec. 30, 1929. 2 Claims. (Cl. 84—280.)



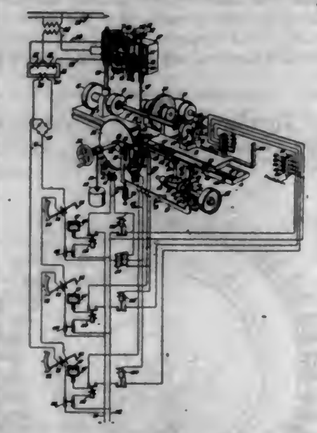
1. A violin shoulder rest, comprising in combination a flat strip having two scythe-shaped longitudinal edges and two transverse upstanding ends, bearing cheeks on said transverse ends adapted to fit the lower edge of said violin so that said strip extends bridgelike over the bearing corner of the violin, and means on said cheeks adapted to fix said strip on the edge of the violin.

1,879,387. STAMP. LOUIS MELIND, Chicago, Ill. Filed May 16, 1930. Serial No. 452,844. 11 Claims. (Cl. 101—368.)



1. In a stamping device of the character described, comprising a mounting block and stamping means carried thereby, a cover member, said member and the block having cooperating means for holding the cover member against movement away from the block, comprising inwardly extending projections on said cover member engaging into corresponding depressions in said block, an insert disposed between the cover and the block bearing identifying data visible through the cover member for identifying the stamping means of the block, a handle, and means for releasably securing the handle to the block, said securing means also acting to secure the cover member and the insert against sliding movement relative to each other and to the block.

1,879,388. AUTOMATIC CONTROL OF FEEDING MECHANISM, IN TOOL MACHINES. ALFRED V. MERSHON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1931. Serial No. 570,688. 20 Claims. (Cl. 51—165.)

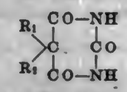


1. In a machine having work holding means, a tool, and feeding mechanism for effecting a relative movement between the work holding means and the tool to cause the latter to perform an operation on the work piece carried by the holding means; the combination of a Wheatstone bridge having a coil connected in one of its arms, a movable magnetic member adjacent to said coil to function as a part of its magnetic circuit, means for moving said magnetic member in response to the relative movement between the work holding means and the tool when the latter is performing the operation on the work piece, electroresponsive means on which is impressed a voltage whose magnitude is responsive to the difference of potential across the Wheatstone bridge, caused by an unbalance thereof, an electromagnet operatively associated with said feeding mechanism for effecting a change in the rate of the relative movement between the work holding means and the tool, and means responsive to the operation of said electroresponsive means for effecting the operation of said electromagnet when the work piece is at a predetermined size.

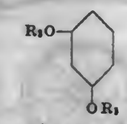
19. In a machine for reducing the size of a work piece to the size of a sample, said machine having work holding means, a reducing tool, and feeding mechanism for effecting a relative movement between the work holding means and the tool to cause the latter to reduce the size of the work piece carried by the holding means; the combination of an electromagnet operatively associated with said feeding mechanism for controlling its rate of operation, a Wheatstone bridge having a movable coil connected in one of its arms, a movable magnetic member adjacent to said coil to function as a part of its magnetic circuit, a movable gauging member whose position changes in response to changes in the size of the sample, a second movable gauging member whose position changes in response to the relative movement between the work holding means and the tool, means for transmitting the movement of one gauging member to said coil, means for transmitting the movement of the other gauging member to said magnetic member, electroresponsive means on which is impressed a voltage whose magnitude is responsive to the difference of potential across the Wheatstone bridge, caused by an unbalance thereof, and means responsive to the operation of said electroresponsive means for effecting the operation of said electromagnet when the work piece is at a predetermined size.

1,879,389. ADDITION COMPOUND OF QUINOLINES AND BARBITURIC ACIDS AND THE PROCESS OF PRODUCING SAME. FRITZ MIETZSCH, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 26, 1929, Serial No. 342,987, and in Germany Feb. 27, 1928. 10 Claims. (Cl. 260—33.)

1. The process which comprises reacting with an alkali metal salt of a di-substituted barbituric acid of the general formula:



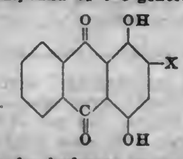
wherein R_1 and R_2 stand for substituents of the group consisting of alkyl, aryl and the radical of a hydroaromatic hydrocarbon, upon an equimolecular quantity of a mineral acid salt of a 6.8-dihydroxyquinoline ether of the general formula:



wherein one R_3 stands for an alkyl group and the other R_3 stands for hydrogen or an alkyl group, in aqueous solution.

1,879,390. PROCESS OF PREPARING QUINIZARINE SULPHONIC ACIDS. HANS MILDNER, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1929, Serial No. 347,177, and in Germany Mar. 22, 1928. 7 Claims. (Cl. 260—58.)

1. The process which comprises reacting upon the boric acid ester of a compound of the general formula:—



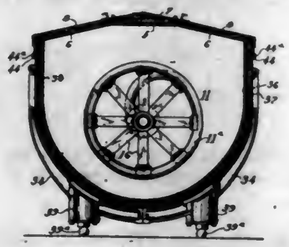
wherein X stands for hydrogen or an alkyl group, with fuming sulphuric acid of about 10–40% strength at a temperature of about 140–200° C.

1,879,391. ADJUSTABLE HORSE-COLLAR. EDWARD MILLER, St. Paul, Minn. Filed June 25, 1931. Serial No. 546,809. 1 Claim. (Cl. 54—19.)



In a draft collar comprising an elongated, suitably padded member adapted to encircle the neck of a draft animal, said collar open at its upper end, a neck pad arranged to contact with the upper part of the neck of the draft animal in transverse position, said open end of the collar comprising a pair of elongated, flat flaps normally overlapped and each comprising the upper end of a side of the collar; means fixed on said neck pad and adapted to engage said overlapped flaps in selectively overlapped positions and securely upon the neck of the draft animal, said latter means comprising a single, fixed metal loop member fixed to project vertically from the top of the neck pair, said flaps being provided in longitudinal alinement inwardly from their ends each with a row of elongated slots, said slots of both flaps arranged to be registered in pairs and slipped downwardly upon said loop member, said loop member having two vertically spaced openings, said flap retaining means comprising a pair of straps fixed to the neck pad, one arranged to be passed transversely through the lower opening of the loop to retain one flap of the collar thereunder and the other strap likewise arranged to be passed through the upper opening of the loop to retain the upper flap of the collar under it.

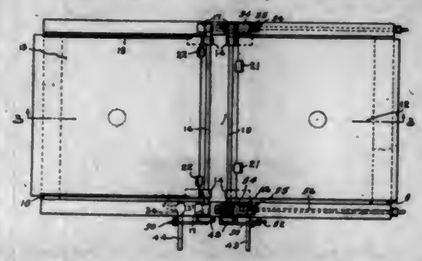
1,879,392. PASTEURIZER. HARVEY H. MILLER, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 10, 1930. Serial No. 427,403. 9 Claims. (Cl. 220—9.)



1. A container consisting of inner and outer members removably fitted together, the inner member comprising rigid end walls, longitudinal elements for connecting said end walls in rigid spaced relation, and sheet metal bottom and side walls secured to said end walls, and the outer member comprising bottom and side walls shaped to receive said inner member, and means for removably securing said members together.

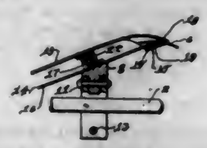
1,879,393. TRAY UNLOADER. HERMAN B. MILLER, San Francisco, Calif. Filed Mar. 25, 1930. Serial No. 438,737. 6 Claims. (Cl. 214—1.1.)

3. A tray unloader of the class described, embodying a frame; two parallel shafts rotatably mounted and extending crosswise of said frame in slightly spaced apart relation; a receiving platform secured to one of said shafts, a discharge platform secured to the other shaft; means relatively adjusting said two shafts toward and away from each other varying the clearance between said platforms



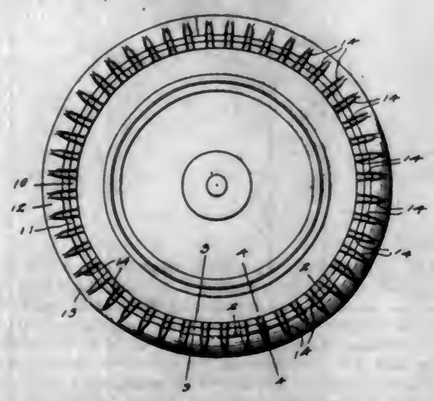
when said platforms are vertical; means for raising and lowering said platforms; and adjusting means moving said raising and lowering means relative to each other.

1,879,394. CLAMP. JAMES S. MILLER, Trenton, N. J. Filed Feb. 1, 1930. Serial No. 425,267. 1 Claim. (Cl. 24—258.)



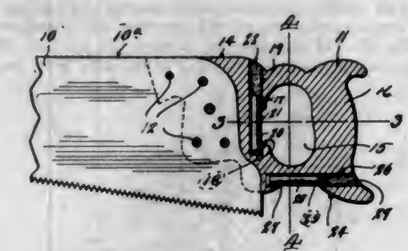
In a clamp of the class described, the combination of upper and lower members pivotally connected together, the forward end of the lower member being curved downwardly, the front and sides of the forward end of the upper member being curved downwardly, the said downwardly curved sides of the upper member extending below the sides of the said forward end of the lower member.

1,879,395. AUTOMOBILE TIRE PROTECTOR. JAMES S. MILLER, Clinton, Nebr. Filed Dec. 22, 1931. Serial No. 582,627. 1 Claim. (Cl. 152—16.)



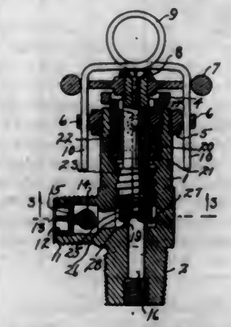
A tire protector comprising a plurality of metallic strips, each strip having its end connected, the strips being concentric to each other, the innermost strip being widest, the outermost strip narrowest, the lateral margins of all of the strips being formed with outwardly projecting crimps at intervals whereby to engage the strips with each other against circumferential movement, to cause the strips to conform transversely to the shape of the tire and provide lateral corrugations to secure traction.

1,879,396. COMBINED PLUMB AND LEVEL SAW HANDLE. PHILIP L. MILLER, Florissant, Mo. Filed June 30, 1930. Serial No. 464,774. 1 Claim. (Cl. 7—13.)



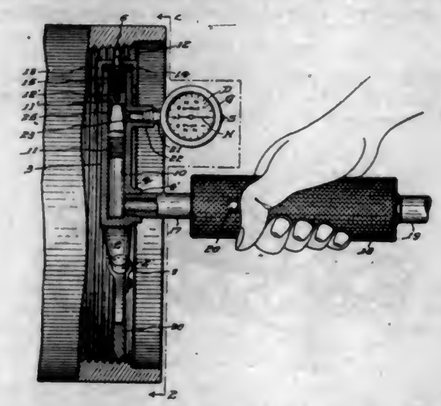
In a hand saw, the combination with a saw blade having a straight back, of a handle secured to said blade and having an opening formed therein to provide a suitable grip-piece, the wall of said opening opposite to said grip-piece being provided with a curved notch, there being a bore formed in said handle at right angle to said straight back of said saw, said bore extending from the upper edge of said handle inwardly adjacent to the lower edge thereof and intersecting said notch, a metallic tubular member driven into said bore through the open end thereof, said tubular member being substantially coextensive with said bore and provided with a cut-away portion coinciding with said notch, a liquid lever arranged in said tubular member and partially exposed through said notch and said cut-away portion whereby the bubble mark is rendered visible, said handle being provided in its lower edge with an inwardly curved portion, there being a bore formed in the lower edge of said handle in parallelism with said straight back of said saw blade, said bore intersecting said curved portion, a metallic tubular member driven into said bore through the upper end thereof and having a cut-away portion coinciding with said curved portion, and a liquid level arranged in said tubular member and partially exposed through said curved portion and said cut-away portion whereby the bubble mark of said level is rendered visible, said levels being disposed below the planes of the adjacent surfaces to protect them against injury and said tubular members forming reinforcements for said handle.

1,879,397. VALVE. HENRY R. MINOR, Ossining, N. Y., assignor to Walter Kidde & Company, Inc., a Corporation of New York. Filed Nov. 14, 1929. Serial No. 407,047. 10 Claims. (Cl. 251—163.)



1. A valve for use in carbon dioxide fire extinguishing systems comprising a valve body having a seat therein, a valve stem threadedly mounted in the valve body, a valve head on the valve stem for cooperation with the seat, means for rotating the valve stem having holes therethrough, a rotatably adjustable collar mounted on the valve body having pierced lugs, and a wire member adapted to extend through the holes in the means for rotating the valve stem and the pierced lugs to lock the valve in closed position.

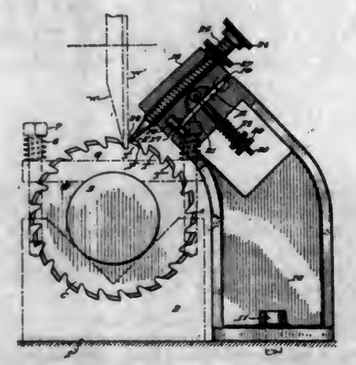
1,879,398. GAUGE FOR SIZING INTERNAL THREADS. GEORGE E. MIRFIELD, Youngstown, Ohio. Filed June 22, 1929. Serial No. 372,904. 9 Claims. (Cl. 33—199.)



1. A device of the class described, comprising three angularly divergent legs radiating from a common center, one of said legs having a cylinder formed therein, a piston slidable in said cylinder and comprising a conical surface, an indicating gauge having a plunger cooperative with said surface whereby the relative position of the piston in the cylinder is indicated on the gauge, means for supplying fluid under pressure to the inner end of the cylinder to force the piston outwardly therein, and means at the extremities of the other legs and of the pin adapted to enter the groove of an internal thread.

9. The combination with an internal thread sizing gauge comprising a plurality of divergent legs having points adapted to engage the thread to be sized, of means carried by said gauge disposed between two adjacent legs adapted to enter the thread groove between them to thereby constrain the points of all of said legs to engage a single thread convolution during the sizing operation.

1,879,399. INDEXING MEANS FOR GRINDING MILLING CUTTERS. GEORGE E. MIRFIELD, Youngstown, Ohio. Filed Jan. 25, 1930. Serial No. 423,820. 8 Claims. (Cl. 51—225.)



1. The combination with a cutter grinding machine comprising means for rotatably supporting the cutter to be ground and a grinding wheel for grinding the cutter

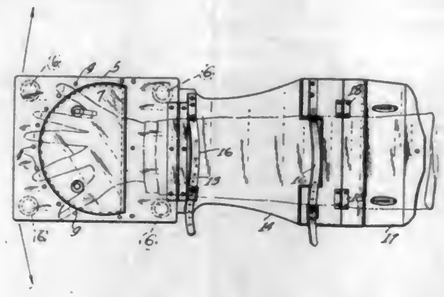
teeth, of indexing mechanism including a pointer adapted for limited movement in a plane normal to the axis of a cutter supported by said means, means for positively limiting the movement of the pointer in one direction with respect to the plane of the wheel, and means for yieldingly resisting movement of the pointer in the opposite direction, said pointer being adapted by engagement with the peripheries of the cutter teeth when at the limit of its movement in the first mentioned direction to successively maintain the teeth in grinding position.

1,879,400. ICE TRAY. JACK J. MITCHELL, St. Petersburg, Fla. Filed Aug. 20, 1930. Serial No. 476,671. 2 Claims. (Cl. 62—108.5.)



1. In a freezing tray, a plurality of separate compartments adapted to contain liquid to be frozen into separate blocks, a vertically movable member extending into said compartments to lift the frozen blocks, a threaded shaft rotatable in said member, and means threadedly engaged with the shaft and operable when the latter is rotated to move said member vertically.

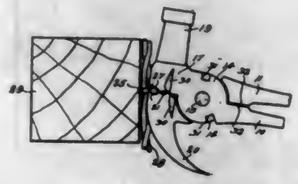
1,879,401. EXERCISING DEVICE. LOUIS P. MONACO, San Mateo, Calif. Filed Mar. 13, 1931. Serial No. 522,410. 1 Claim. (Cl. 272—67.)



In a device of the character described a movable table, a window formed in said table, an opening formed in said window, resilient washers formed in said opening whereby a pencil may be extended thru said opening, removable pegs surrounding said window and means for securing the forearm to said device.

1,879,402. HAND TOOL. EARL MONAHAN, Hyannis, Nebr. Filed Mar. 23, 1931. Serial No. 524,689. 1 Claim. (Cl. 7—3.)

A hand tool for cutting wire having outstanding spaced barbs, comprising a pair of crossed pivotally connected members providing relatively long handles at one end and a pair of relatively short jaws at their other ends, said jaws having registering curved recesses in their inner contacting faces opening through the outer ends of the jaws and further provided with lateral registering recesses opening into the curved recesses and through the opposite sides of the jaws to receive the wire in offset relation therein and with one end of the wire lying across



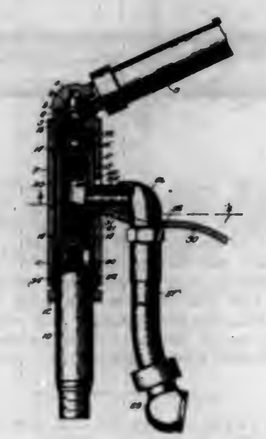
the faces of the jaws at one side of the tool, and cutting means carried upon one side of the jaws adapted to register substantially in the plane of contact of the jaws for severing the wire, said jaws also having a second pair of recesses spaced between the first recesses and said cutting means for receiving an adjacent barb of the wire to hold the latter from slipping through the first recesses when the wire is severed.

1,879,403. CHANGEABLE SIGN HOLDER. LELAND C. MONROE, Marceline, Mo. Filed Dec. 21, 1931. Serial No. 582,418. 2 Claims. (Cl. 40—146.)

1. A holder of the character described comprising a flat sheet-like metallic blank cut and bent to provide a strip-like body, side wings bent at rightangles to the body at one end thereof and having notches forming a seat for the lowermost edge of a sign, card or the like, and a resilient upwardly and outwardly curved latching extension forming a continuation of the body for engagement with the uppermost edge of the sign, card or the like.

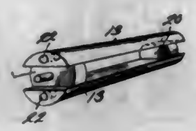
1,879,404. TIRE INFLATER. FREDERICK K. MOODY, Chicago, Ill. Filed June 30, 1930. Serial No. 465,002. 4 Claims. (Cl. 152—11.5.)

1. In a tire inflater, the combination of a chuck having the usual check valve and packing washer, a cylinder having one end connected with the chuck, a pressure gauge at the opposite end of the cylinder having the usual packing member around the inlet thereof and a valve depressor, a movable hollow member within the cylinder having valves at either end thereof with projecting operating stems, one of said valves being adapted to coact with the check valve of the chuck for opening the same and the other with the depressor of the pressure gauge, means for actuating said movable hollow member to cause the respective valves at the ends thereof to be opened when



said movable hollow member is moved in the corresponding direction, means at the ends of said movable hollow member to make tight contact with said packing washer and said packing member respectively, and means for making a connection from said movable hollow member to the tire.

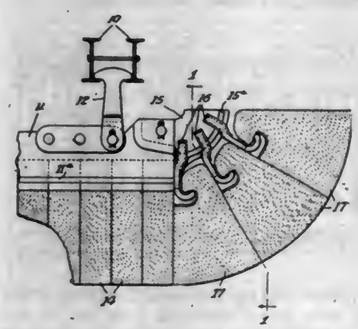
1,879,405. ROTARY PUMP. JUDSON L. MOORE, New Orleans, La. Filed Feb. 25, 1931. Serial No. 518,224. 1 Claim. (Cl. 103—144.)



The combination with a rotary pump comprising slidable vanes slidably mounted in a cage eccentrically and rotatably mounted in a pump casing chamber, of rockable bearing members for said vanes, said bearing members being cylindrically shaped and tapered, said bearing members being rotatably mounted in transverse tapered bearings of the cage, said bearings being formed from tapered segmental sections engaging opposite sides of the vanes, springs within the tapered bearings of the cage at their large ends and forcing said bearing sections longitudinally in the direction of their small ends incident to wear and packing blocks between and spaced inwardly from adjacent ends of the bearing sections and engaging opposite sides of the vanes.

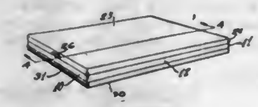
1,879,406. FURNACE ARCH CONSTRUCTION. PIERRE L. A. MOREAU, Paris, France, assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1929. Serial No. 349,294. 4 Claims. (Cl. 110—95.)

1. In furnace arch construction, in combination, a plurality of hangers disposed in a row and having tile engaging portions disposed in alignment end to end to form a ledge having an up-turned outer margin, side slotted refractories supported on said hangers and bearing thereon solely on said up-turned margin and movable longitudinally



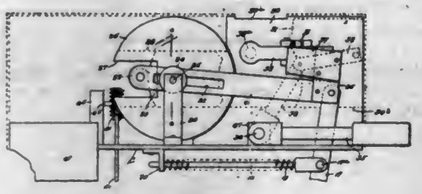
thereof from one to another of said hangers, said refractories depending below said ledge and arranged in abutment to form an arch portion.

1,879,407. COMPACT. ROBERT F. MORENUS, Portland, Oreg. Filed Nov. 21, 1931. Serial No. 576,455. 5 Claims. (Cl. 132—83.)



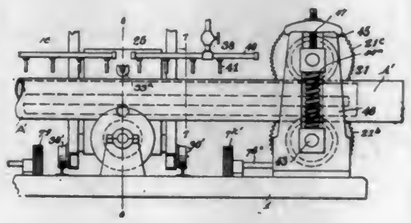
1. A compact consisting of a container divided into two compartments accessible from opposite sides of opposite ends of said container, a hinged cover for one of said compartments within said container, and outside covers for the opposite sides of said compact.

1,879,408. COIN OR CHECK CONTROL DEVICE. JOHN O. MORGAN, High Point, N. C. Filed May 16, 1931. Serial No. 537,929. 4 Claims. (Cl. 194—55.)



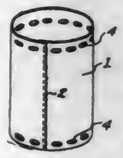
3. In a coin control apparatus, in combination, a shaft, a disk mounted thereon for rotation with the shaft, and having a radial notch, means for rotating said shaft and including a pivoted member, a shiftable member connected with said pivoted member and being also provided with a roller normally engaged in said notch, a second shiftable member and engageable with said roller for moving the latter out of the notch and into peripheral engagement with said disk, coin controlled means for shifting said second shiftable member, yieldable means acting on said pivoted member to normally retain said roller within said notch, and operable to return said shiftable member and said pivoted member to their normal positions subsequent to a complete revolution of said disk.

1,879,409. PROCESS OF AND APPARATUS FOR MAKING PIPES OR CYLINDERS. HOWARD I. MORRIS, Lakewood, Ohio, assignor to Carl M. Yoder and Harvey O. Yoder, Lakewood, Ohio. Filed Oct. 1, 1929. Serial No. 396,553. 10 Claims. (Cl. 22—203.)



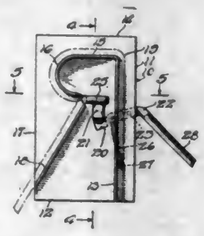
8. The herein disclosed process of welding a metal pipe having a seam groove extending from end to end, which consists in moving the pipe relative to a heating means to heat the opposed walls of the groove to a temperature below the melting point of the metal of said walls, then in pouring into the seam groove molten metal having a temperature higher than the melting temperature of the metal of said walls, and then applying heat to the metal poured into the seam groove to prevent rapid cooling of the metal.

1,879,410. ART OF INSERTING LINERS INTO CONTAINERS. WARREN A. MORRIS, Wyoming, and CARROLL L. SPANOLER, Cincinnati, Ohio, assignors to The Paper Service Company, Lockland, Ohio, a Corporation of Ohio. Filed Aug. 28, 1931. Serial No. 560,024. 12 Claims. (Cl. 93—1.)



1. A process of lining containers with lining structures of essentially different initial shape, which comprises providing a form to enter a container and conform substantially to the interior thereof, pulling a liner over said form, inserting said form and said liner into said container, and withdrawing said form.

1,879,411. FORMING DEVICE. WALTER D. MORRISON, Detroit, Mich. Filed Nov. 22, 1929. Serial No. 409,135. 4 Claims. (Cl. 49—22.)



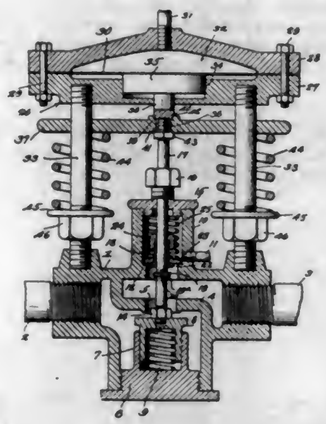
1. In a device of the character stated, a member and stationary guiding means thereon, movable guiding means, means for moving said movable guiding means, and means for normally holding said movable guiding means from guiding position.

1,879,412. SIGHTING DEVICE. EMIL M. MUELLER, New York, N. Y., assignor to C. P. Goerz American Optical Company, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929, Serial No. 346,888. Renewed July 19, 1932. 7 Claims. (Cl. 88—1.5.)



1. A sighting device comprising aperture means to frame the field being viewed, a plurality of lenses comprising a negative objective lens and a positive eyepiece lens adapted to render rays of light passing through said aperture means and falling upon said objective lens to leave said eyepiece lens substantially parallel, said objective lens and said eyepiece lens being relatively immovable, and means for adjusting the relation between said aperture means and said lenses to change the size of the field being viewed through said aperture means.

1,879,413. VALVE. JOSEPH MÜLLER, Deans, N. J. Filed Feb. 24, 1930. Serial No. 430,803. 1 Claim. (Cl. 137—153.)



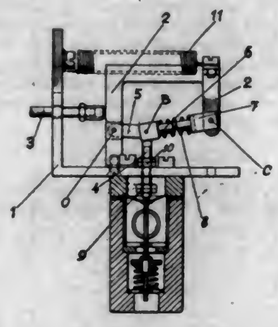
In a device of the class described, a valve casing having an inlet and an outlet, the casing being supplied with a seat located between the inlet and the outlet, the casing being supplied with a projecting nipple closed at its outer end, the nipple having a drain, and there being an opening at the inner end of the nipple which communicates with the valve casing on one side of the seat, a first valve in the casing, spring means for closing the first valve casing, spring means for closing the first valve against the first-specified seat, in one direction, a second valve in the nipple, spring means in the nipple for closing the second valve in an opposite direction with respect to the opening, a plunger slidable in the outer end of the nipple and engageable with the first valve to open the first valve when the plunger moves in one direction, the plunger passing through the opening and having means for opening the second valve when the plunger moves in an opposite direction, and fluid pressure actuated means mounted on the valve casing and coacting with the plunger to open the first valve.

1,879,414. PILE SHOE. GONZALO C. MUNOZ, Philadelphia, Pa., assignor to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 10, 1930. Serial No. 451,239. 6 Claims. (Cl. 61—53.)



1. A pile shoe embodying a hollow geometrically-configured penetrating portion with integrally formed attaching points co-extensive therewith, said points being apertured for the purpose of flexing.

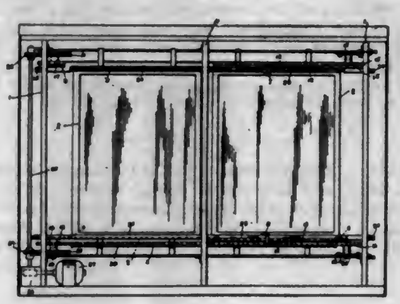
1,879,415. VALVE OPERATING MEANS. MARCEL MUTRUX and ROBERT CAILLET, Vevey, Switzerland. Filed Sept. 17, 1930. Serial No. 482,607. 2 Claims. (Cl. 137—139.)



1. In combination, a bell crank lever, a valve rod, two links arranged at both sides of the rod and pivotally connected with the latter, said links being displaced to a position of unstable equilibrium incident to movement of the bell crank lever, spring means coacting with certain of said links to effect rapid movement of the valve rod upon continued movement of the bell crank lever, said link being of variable length and subjected to the tension of the spring means, and abutments on the valve rod for limiting the opening and closing movement thereof.

1,879,416. MOVABLE POSTER DISPLAY APPARATUS. HENRY G. MUTSCHLER, Rochester, N. Y., and HARRY WHITTAKER, Montreal, Quebec, Canada. Filed June 29, 1931. Serial No. 547,664. 6 Claims. (Cl. 40—36.)

1. In a movable poster display apparatus the combination of two sets of substantially vertical frames located adjacent to each other, an endless chain mounted to travel around the ends and sides of said frames, a dog carried by said endless chain and mounted to swing thereon, a vertical guide post projecting from said dog and overhanging the edge of the frames, a horizontal arm on the end of said vertical guide post and projecting toward said frames; a fixed cam bar substantially parallel to said endless chain in front of one set of frames adapted to engage said guide post to hold said dog rigid on said chain with said horizontal arm on said guide post engaging the edge of one of the frames of said set and move it in front of the adjacent set of frames, a second cam bar substantially parallel to said endless chain in front of the adjacent set of frames to engage said guide post



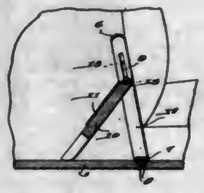
to swing said dog and move the horizontal arm on said guide post out of engagement and hold it out of engagement with the transferred frame.

1,879,417. PROCESS FOR PRINTING INSCRIPTIONS AND DRAWINGS INTENDED TO BE PLACED UPON WOOD, FABRICS, AND OTHER ABSORBENT MATERIALS. GAETANO MUZZIOLI, Milan, Italy. Filed Apr. 12, 1929, Serial No. 354,701, and in Italy May 22, 1928. 3 Claims. (Cl. 41—38.)



1. The method of printing on absorbent materials, which comprises coating a sheet with mucilage composed of dextrine of white maize, rice starch carbonate of sodium, colophony, albumen, flowers of sulphur, gum arabic and pale glycerine, printing a design or inscription onto the coated sheet with printer's ink or colors mixed with spirit of turpentine, beeswax, paraffine and powdered colophony, and offsetting the design or inscription from the sheet onto wood, fabric or other absorbent materials by pressure and heat.

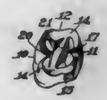
1,879,418. ADJUSTABLE FLOOR BOARD AND FOOT REST. SAMUEL L. MYATT, St. Louis, Mo. Filed July 3, 1930. Serial No. 465,740. 2 Claims. (Cl. 296—75.)



1. In combination with the front seat of an automobile, of a disappearing foot rest for passengers upon the rear seat, said foot rest comprising an inverted U-shaped frame composed of strap iron and arranged edgewise against the rear face of said front seat, the ends of said frame being inturned to form attaching feet to engage

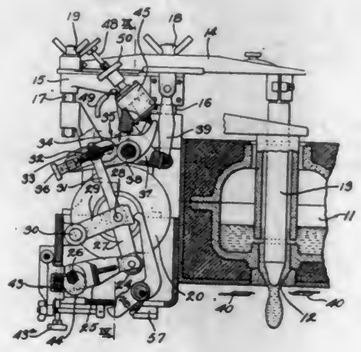
and be secured to the vehicle floor, laterally spaced bolts securing said ends, the side bars of said frame being longitudinally slotted near the cross bar of the frame, a footboard adapted to fit in said frame and having guide pins engaging said slots to provide for the outward and inward swinging of the board relatively to the frame, said board having longitudinal side extensions with the ends thereof adapted to lie between said bolts when the board is swung to inoperative position and thereby hold the board against swinging movement, said board being vertically movable to release it when desired for use.

1,879,419. ARTIFICIAL TEETH. SIMON MYERSON, Brookline, and EDMUND A. JONES, Medford, Mass., assignors to The Ideal Tooth Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1930. Serial No. 475,442. 6 Claims. (Cl. 32—9.)



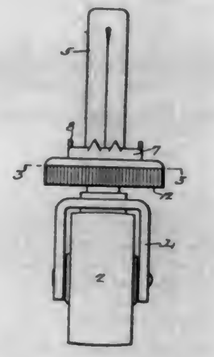
1. An artificial tooth having bearing surfaces and cutting cusps on its occlusal aspect lying in the same plane, the external edge of the cutting cusps being substantially flush with said bearing faces, and grooves to clear the masticated food from the occlusal face of the tooth.

1,879,420. APPARATUS FOR FEEDING GLASS CHARGES. CLYDE NAGLE, Elmira, N. Y., and CHESTER B. HOOPES, Three Rivers, Tex., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 393,988. 11 Claims. (Cl. 49—55.)



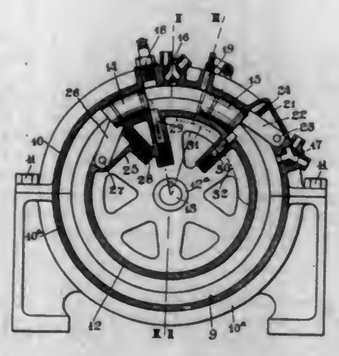
1. In a glass feeding apparatus, the combination with a container having a submerged glass discharge outlet, of an implement movable toward and from the outlet to control the discharge of glass through the outlet, means for operating said implement and automatically acting fluid pressure actuated means for altering the speed of a predetermined movement of the implement.

1,879,421. ADJUSTABLE CASTER. CHARLES R. NALLE, Philadelphia, Pa. Filed Apr. 15, 1931. Serial No. 530,381. 5 Claims. (Cl. 16—19.)



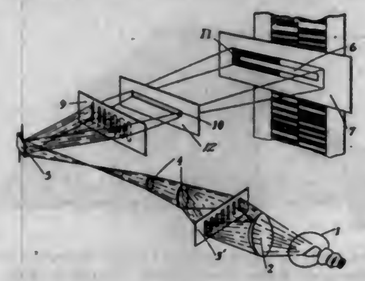
1. In an adjustable caster, an upstanding shank having grooves therein, a weight-supporting member slidable along said shank, a disk carried by said member, a rotatable disk carried by said first disk, one of said disks having eccentric slots herein, and locking dogs pivotally attached to the other of said disks and having projections engaging in said slots, said dogs having arcuate edges engaging in the grooves of said shank.

1,879,422. ROTARY ENGINE. SIMEON NASH, Columbus, Ohio. Filed Mar. 17, 1930. Serial No. 436,346. 7 Claims. (Cl. 123—11.)



1. In an engine of the class described having an interior rotor and an exterior stator forming between them an annular piston chamber, a pair of floating pistons in said piston chamber, a spring actuated abutment carried by the rotor for engagement by the front of the propelled piston, and a cam actuated carrier spacer pin carried by the rotor for engaging the rear of said piston, a spring actuated abutment mounted in the stator for the rear of the other piston and a cam actuated carrier spacer pin carried by the rotor for the rear of said latter piston.

1,879,423. SYSTEM OF SOUND RECORDING AND REPRODUCTION. JOHN NEALE, London, England. Filed June 3, 1929, Serial No. 368,038, and in Great Britain June 6, 1928. 7 Claims. (Cl. 179—100.3.)



1. A method of sound recording consisting in passing a beam of light through a slit, reflecting it from a vibrating mirror, passing it through a limiting slot in a mask and receiving it on a light-sensitive surface to form two complementary tracks thereon on opposite sides of a central neutral line.

1,879,424. WATERSOLUBLE DIAZO COMPOUND. WILHELM NEELMEIER and EUGEN GLIETENBERG, Leverkusen, near Cologne, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 28, 1929, Serial No. 350,801, and in Germany Apr. 14, 1928. 10 Claims. (Cl. 260—69.)

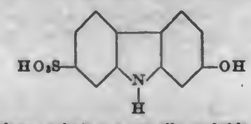
8. As new products compounds of the probable general formula:

$$R\text{—}N{=}N\text{—}\underset{\displaystyle R_2}{\overset{\displaystyle R_1}{N}}\text{—}CH\cdot O\cdot SO_3H$$

wherein R stands for an aromatic nucleus which may be substituted by halogen, the alkyl, nitro, sulfonic acid or carboxylic acid groups, R_1 stands for hydrogen alkyl, a hydrogenated benzene nucleus or the residue of an aldehyde-sulfurous acid, and R_2 stands for hydrogen, an alkyl—, or a phenyl-group, being in their dry form stable, generally yellowish colored substances, soluble in water, being split up in aqueous solution into the two starting components by the addition of a mineral acid, and being valuable substances in the manufacture of dyestuffs.

1,879,425. HYDROXYCARBAZOLE-SULPHONIC ACID. WILHELM NEELMEIER and OTTO GOLL, Leverkusen-I. G. Werk, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 24, 1931, Serial No. 577,154, and in Germany Dec. 4, 1930. 1 Claim. (Cl. 260—46.)

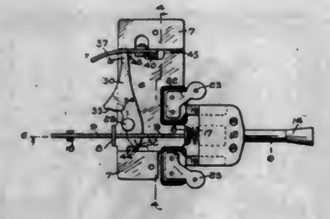
1. 2-hydroxycarbazole-7-sulphonic acid of the formula:



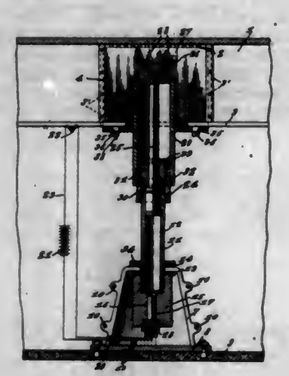
being a colorless substance, easily soluble in water and alcohol and being a valuable intermediate product in the manufacture of dyestuffs.

1,879,426. ELECTRICALLY HEATED UTENSIL. ALBERT EDWARD NEWTON, Birmingham, England, assignor to Premier Electric Heaters Limited, Birmingham, England. Filed Feb. 10, 1931, Serial No. 517,054, and in Great Britain Mar. 25, 1930. 10 Claims. (Cl. 200—138.)

1. An automatic switch for electrically heated utensils comprising a switch having a fixed and a movable part, a catch lever, a thermostat adapted to actuate said catch lever at a predetermined temperature, an intermediate lever having a short heel portion and a comparatively long toe part, the latter being adapted to engage the said catch lever and the heel part being capable of association with the movable switch part for retaining the switch closed, and means always tending to open said switch.



1,879,427. PROTECTIVE DEVICE FOR BANKS. MATTHEW NICHOLAS, ANDREW KOLLER, CARL LEDEL, and CHARLES HUSSEY, Pasadena, Calif. Filed Jan. 26, 1931. Serial No. 511,362. 8 Claims. (Cl. 268—2.)

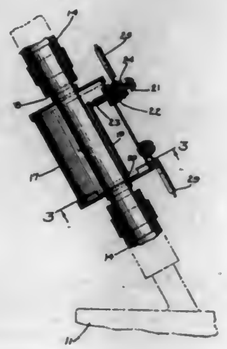


1. A protective device for tellers' windows comprising a slidable shield normally positioned below a window and adapted to move into a position for closing the window, a piston connected to said shield, a cylinder to receive the piston, means supporting an explosive to the cylinder to act on the piston, and manually controlled means for igniting the explosive.

1,879,428. TEMPERATURE INDICATOR. LEONARD D. NILSON, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,465. 3 Claims. (Cl. 200—138.)

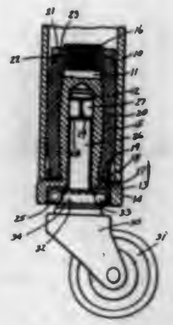
1. In a device for indicating the temperature of the cooling liquid of an internal combustion engine having a water jacket, a radiator and a connection between said water jacket and said radiator comprising an indi-

cator and an electric circuit therefor; a casing surrounding said water connection and electrically connected in said circuit, a thermostatic element within said casing and electrically connected thereto, and a contact element



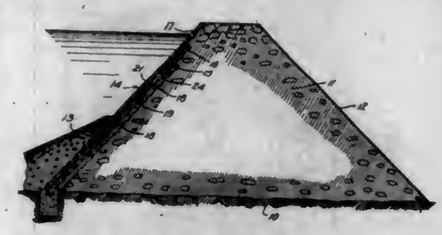
projecting into said casing and adapted to be engaged by said thermostatic element to complete said electric circuit when the temperature of the cooling liquid has reached a predetermined degree.

1,879,429. ADJUSTABLE ADAPTER FOR CASTERS. WILLIAM H. NOELTING and WALTER M. VAN DUSEN, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Mar. 13, 1931. Serial No. 522,216. 1 Claim. (Cl. 16—21.)



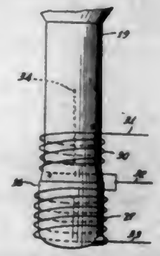
In a caster socket, the combination of a tubular body having a threaded upper end, a nut thereon, said body being adapted to receive a caster stem, a load supporting laterally projecting portion spaced below the threaded end, yielding means extending substantially from the nut to the lateral portion and operatively engaging bolt, and outwardly expansible by threading relative movement of the nut toward the lateral portion, and an interlocking operative connection between the nut and end of the yielding means adjacent thereto.

1,879,430. DAM AND METHOD OF CONSTRUCTING THE SAME. FRED A. NOETZLI, Los Angeles County, Calif. Filed June 2, 1931. Serial No. 541,616. 22 Claims. (Cl. 61—30.)



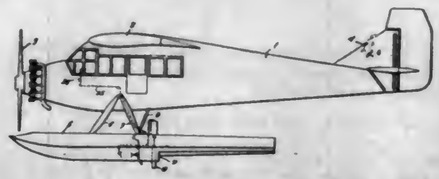
1. In a filled dam, an upwardly and rearwardly inclined wall formed of slabs, there being relatively wide joints between the slabs which space the slabs from those below and those above, and a compressible waterproof material filling the joints enabling the slabs to be crowded together during settling of the dam.

1,879,431. INDUCTION ELECTRIC FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, Ewing Township, N. J., a Corporation of New Jersey. Filed July 17, 1929. Serial No. 378,834. 23 Claims. (Cl. 13—26.)



1. The method of heating and melting uncabbaged magnetizable scrap, which consists in progressively feeding the scrap in a downward direction under a pressure equivalent to a head in excess of the head obtainable from the furnace and in passing high frequency current about the scrap through separate paths comprising belts spaced along the path of travel of the scrap to induce current in it to preheat it and to melt it, respectively.

1,879,432. HYDROSERVO BRAKE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed July 8, 1930. Serial No. 466,505. 12 Claims. (Cl. 244—2.)



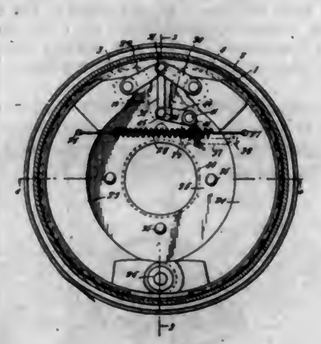
1. A seaplane having a fuselage and a float, a member associated with the float and adapted to retard the plane and means coacting with the member for controlling said member proportionally to the speed of movement of the plane over the surface of the water.

1,879,433. FRICTION FACING. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 20, 1930. Serial No. 503,852. 7 Claims. (Cl. 188—264.)



1. A brake member comprising a brake shoe, a bonded asbestos lining secured to the shoe and a highly heat conductive means embodied in the lining to transmit generated frictional heat from the frictional engaging surface to the shoe.

1,879,434. BRAKE STRUCTURE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 20, 1931. Serial No. 524,181. 9 Claims. (Cl. 188—78.)

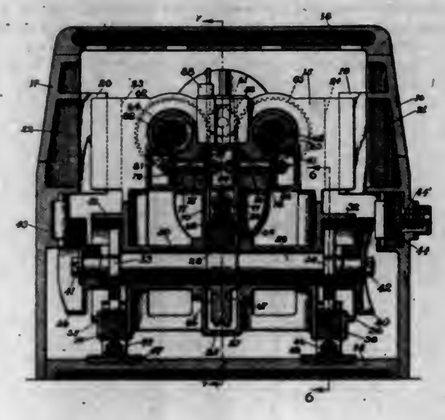


1. A duplex brake structure compring in combination, a drum, a pair of friction devices arranged side by side, each friction device having a pair of shoes, a cam for actuating the shoes of one of the friction devices to produce servo action, a link connected to one of said shoes, a toggle connected to the other pair of shoes, and means for transmitting movement of the first mentioned shoes to the last mentioned shoes.

1,879,435. PROCESS FOR MANUFACTURING PHOSPHATIC FERTILIZERS. BEVERLY OBER and EDWARD HYATT WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 23, 1929. Serial No. 394,729. 6 Claims. (Cl. 71—7.)

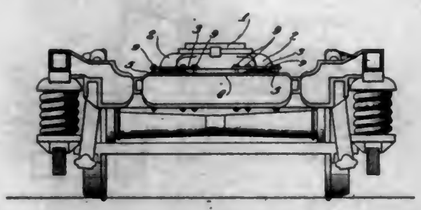
1. The process of preparing phosphatic fertilizers comprising forming a slurry of finely divided phosphatic material with a predetermined amount of aqueous ammonia, passing a stream of the slurry to a compounding stage and there conjoining it with a separate stream of a mineral acid, the concentration of which is so regulated that by dilution with the said predetermined quantity any desired ultimate concentration is attained and then passing the mixture to a reaction stage.

1,879,436. MACHINE TOOL. ALEXANDER OBERHOFFKEN, Rockford, Ill., asignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 5, 1930. Serial No. 493,545. 3 Claims. (Cl. 90—15.)



1. In a machine tool, the combination of a rotary tool, means for holding a work piece stationary when said tool is performing an operation thereon, means for effecting a relative feeding movement between the tool and work for determining the depth of the cut and means for causing the tool to describe an irregular orbit in a single plane and at an angle to its axis of rotation when the same is operating upon the work, comprising a vertically disposed support for the tool, horizontal track ways on which said support is guided for sidewise movement, vertical ways for guiding said support for vertical movement and camming means for imparting sidewise and vertical movement to the support on said track ways.

1,879,437. TRUCK CENTER BOLSTER CUSHION. RICHARD J. O'BRIEN, Depew, N. Y., assignor to Waugh Equipment Company, Depew, N. Y., a Corporation of Maine. Filed July 25, 1929. Serial No. 380,826. 5 Claims. (Cl. 105—200.)

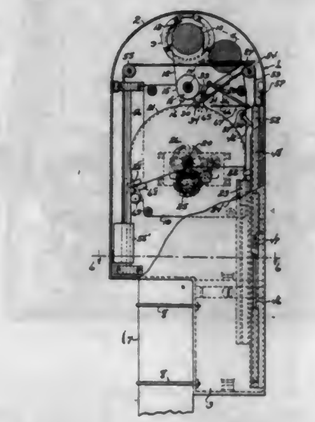


1. In a vehicle having a center bolster, means for supporting the ends thereof for relative vertical movement on the truck bolster and cushion elements under said movable ends.

1,879,488. PARKING DEVICE. FRANCIS E. OGILVIE, University, Va., assignor of one-half to William H. Sawyers, Hinton, W. Va. Filed Sept. 6, 1930. Serial No. 480,224. 6 Claims. (Cl. 116—182.)

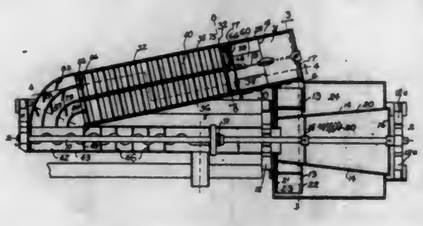
1. A parking device for vehicles, fixed in a line with the center of the parking space and including a casing having windows and having a reduced corner extension, a fixed post contacting with the bottom of the casing proper and with the inner wall of the extension, and means engaging the post and concealed in the casing extension for

locking the casing thereon, said casing having one of its sides removed and having one of its sides open, a side plate for closing said openings, a normally locked door for closing the extension, a signal pivotally supported in the casing, spring means for holding the signal away from the windows, a member pivoted in the casing, power storing means for the member for normally holding the same in one position, plunger means for swinging the



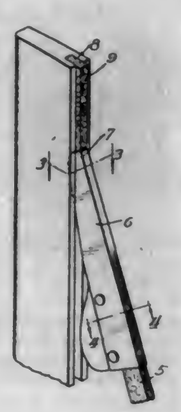
member to a second position, means between the member and the signal for swinging the signal to signaling position when the member has been influenced by the plunger, a spring influenced catch, means operated by the member for normally holding the latch in unlatching position and permitting the latch to engage with the signal to hold the signal in signaling position and said latching means being releasable by the member when the said member has been returned by the power means to its initial position.

1,879,439. VEGETABLE CLEANER AND SEPARATOR. GEORGE J. OLNEY, Westernville, N. Y. Filed Feb. 20, 1931. Serial No. 517,266. 9 Claims. (Cl. 146—193.)



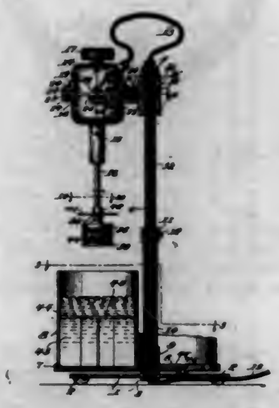
1. In a continuously-operating machine for cleaning and separating vegetables the combination of an open-topped water-operating gravity-actuated separating trough having its bottom slanting downwardly from the receiving end thereof and having the portion thereof leading towards the outlet of limited height and slanting from the bottom of the trough upwardly to an outlet below the level of the inlet, a plurality of separate inclined settling trays leading to the receiving end of said trough and having upstanding baffles therein, a separate hoper for each of said trays, a single continuous water supply to wash the vegetables from said hoppers down through the settling trays and thereafter to operate said separating trough, means to vary the water going to the separate hoppers and means for separately controlling the outlet of each hopper.

1,879,440. MEANS OF PRODUCTION OF NOISELESS STOPS FOR DOORS OR WINDOWS. OSCAR OLSON, St. Joseph, Mich. Filed July 28, 1930. Serial No. 471,226. 3 Claims. (Cl. 29—84.)



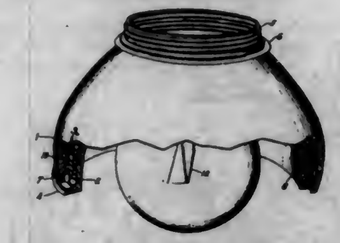
1. A tool for threading a strip of flexible material into a slot, comprising a hollow threading device through which the strip of material is drawn, said threading device having its end thereof from which the strip is drawn formed and adapted to enter and slide in said slot and leave the two combined edges of the strip therein as the threading device with its other end forward is drawn lengthwise of said slot, leaving the creased or fold line edge of the strip outside the slot.

1,879,441. WATCH CLEANING MACHINE. RAYMOND R. OLSON, Long Beach, Calif. Filed Sept. 21, 1931. Serial No. 564,230. 3 Claims. (Cl. 141—1.)



1. In a watch cleaning machine, a cup adapted to contain a cleaning fluid, baffle plates in the cup, a disc resting on the baffle plates and having an opening therethrough, a high speed motor having its case mounted for vertical movement above the cup, a reticulated basket affording a receptacle for the watchworks on the shaft of the motor, and a disc loosely mounted on the motor shaft above said basket to rest upon the disc in the cup when the basket is lowered into the cup through said opening.

1,879,442. REFRACTOR. JAMES A. O'NEIL, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 27, 1932. Serial No. 595,515. 2 Claims. (Cl. 240—106.)



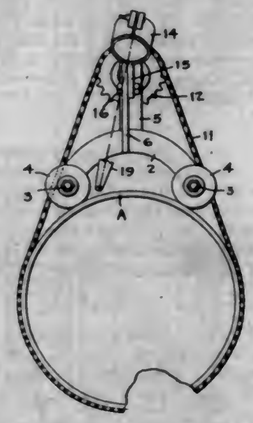
1. A refractor comprising translucent walls, transparent portions in the walls on opposite sides of the refractor through which a filament may be viewed for adjustment, and means providing a substantially opaque background in line with said transparent portions.

1,879,443. PROTECTIVE PAPER STRIPS FOR DAYLIGHT LOADING FILM ROLLS. ERICH OPPERMANN, Berlin-Charlottenburg, and WALTER FISCHER, Dessau in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Oct. 8, 1930, Serial No. 487,372, and in Germany Oct. 25, 1929. 1 Claim. (Cl. 95—9.)



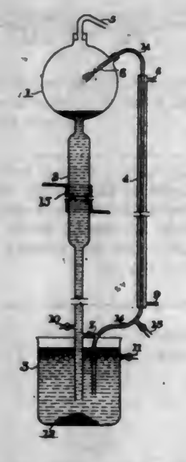
Film rolls for daylight loading comprising a film band provided at both ends with a protective strip of parchmentized paper impermeable to light having about the same stiffness as the film band.

1,879,444. CIRCUMFERENTIAL PIPE CUTTING OR WELDING APPARATUS. WILLIAM R. OST, Verona, and FRANK S. LAWRENCE, Dunellen, N. J., assignors to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1931. Serial No. 573,356. 6 Claims. (Cl. 263—23.)



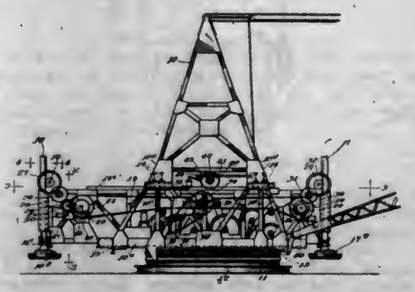
2. A torch apparatus for cutting or welding pipe, comprising a wheeled torch carriage and a revolving sling to hold and guide the same on the pipe, said carriage consisting of two side pieces, two axle rods rigidly uniting said side pieces, wheels on the projecting ends of said rods, slotted spring tubes united to said side pieces, springs in the tubes, and a sprocket-wheel shaft with its ends in the slotted tubes.

1,879,445. PROCESS OF CRYSTALLIZING SALTS FROM SOLUTIONS CONTAINING THEM. DONALD F. OTHMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,872. 4 Claims. (Cl. 159—50.)



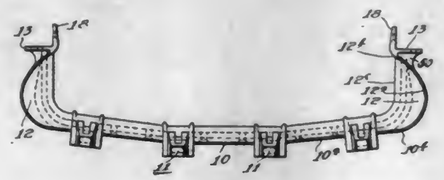
1. In a process of crystallizing a solid from solution, in which a dilute solution is heated, is sprayed into an evacuated chamber and then is allowed to cool by passing downward in a column approximating barometric height, the step of passing air upwardly through the column of liquid and through the spray of the solution.

1,879,446. SELF-PROPELLED APPARATUS. JOHN W. PAGE, Chicago, Ill. Filed Feb. 12, 1931. Serial No. 515,392. 7 Claims. (Cl. 180—8.)



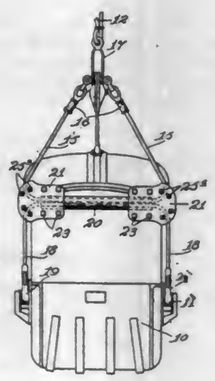
1. Apparatus of the character described, including; a main frame and an auxiliary frame, each slidably mounted on the other and each adapted to carry the other; elevating means on the auxiliary frame; and operating means, forward movement of which differentially applies power to the elevating means tending to raise the auxiliary frame, and urges the main frame forwardly on the auxiliary frame, and reverse movement of which differentially applies power to the elevating means tending to lower the auxiliary frame, and urges the auxiliary frame forwardly on the main frame.

1,879,447. BUCKET LIP. JOHN W. PAGE, Chicago, Ill.. Filed July 3, 1931. Serial No. 548,668. 7 Claims. (Cl. 37—135.)



2. In combination with a bucket having a bottom and substantially vertical side walls, a lip for said bucket having a bottom member with a forward cutting edge and side walls, said side walls of the lip being bowed outwardly in front and merging with the vertical side walls of the bucket at the back of the lip.

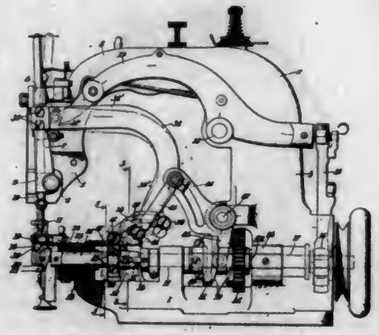
1,879,448. SPREADER. JOHN W. PAGE, Chicago, Ill. Filed Oct. 22, 1931. Serial No. 570,463. 3 Claims. (Cl. 214—145.)



1. A device of the character described including; an elongated member for holding two opposed bights of cable in spread position with portions thereof substantially straight and parallel; and means for locking the bights against longitudinal movement, said means being supported on the end of the elongated member.

1,879,449. SEWING MACHINE. JOSEF F. PALME, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 7, 1931. Serial No. 507,075. 6 Claims. (Cl. 112—159.)

1. In a sewing machine, in combination, feeding mechanism, a pivotally mounted needle-bar-carrier, a looper-carrier movable laterally of the line of feed, an arm rigidly secured at one end to said needle-bar-carrier and connected



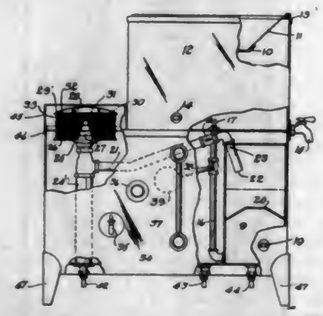
at its other end to said looper-carrier, said arm being bowed between its ends away from the line of feed, and means for vibrating said arm.

1,879,450. VENTILATOR. CLARENCE A. PALMER, Akron, Ohio, assignor to The Burt Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed June 14, 1929. Serial No. 370,797. 4 Claims. (Cl. 230—117.)



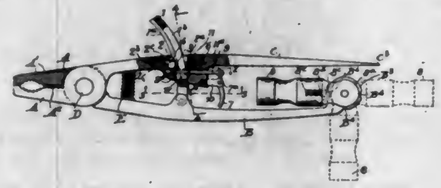
1. Apparatus for supporting a motor within a ventilating duct comprising in combination members extending radially from the motor and through the walls of the duct, fibrous vibration absorbing devices secured to said radially extending members, and means for securing said vibration absorbing devices to the outer walls of the duct.

1,879,451. METHOD OF AND APPARATUS FOR FILTERING OIL. CLARENCE A. PALMER and EDWARD LENKE, Akron, Ohio, assignors to The Burt Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed May 1, 1930. Serial No. 448,856. 7 Claims. (Cl. 210—43.)



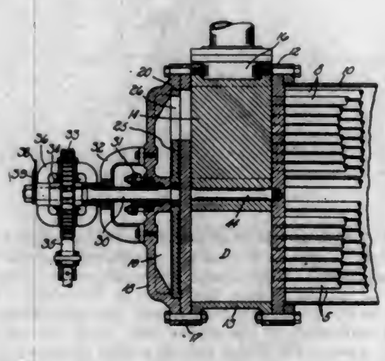
7. In an oil filter, the combination of a clean oil reservoir, a sediment pipe mounted therein, a filtering unit removably mounted on said sediment pipe and a detachable cap surrounding said filtering unit and supported by said clean oil reservoir.

1,879,452. PLIERS, ETC. JOHN J. PALOTCE, Youngstown, Ohio. Filed Feb. 18, 1931. Serial No. 516,714. 5 Claims. (Cl. 81—49.)



1. A tool having gripping jaws and operating handles, one of the handles having a slot having an inclined wall; a tongue on the other handle extending through said slot; a ball in the slot adapted to wedge against the tongue; means for yieldably urging the ball into wedging position; and a pivoted trigger whereby when the trigger is actuated the ball will be held out of wedging engagement with the tongue; and yieldable means for maintaining the trigger in adjusted position.

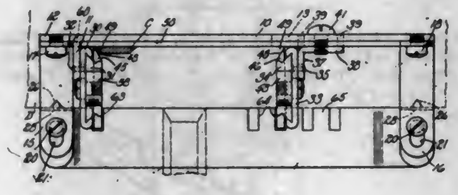
1,879,453. HEAT EXCHANGER. EMILE J. PARENT, Hartford, Conn., assignor to The Whitlock Coil Pipe Company, West Hartford, Conn., a Corporation of Connecticut. Filed May 8, 1931. Serial No. 535,837. 9 Claims. (Cl. 257—239.)



1. In a heat exchanger, a plurality of chambers, a plurality of groups of tubes arranged in a series of passes and respectively communicating with said chambers, a by-pass with which said chambers are adapted to communicate, and a valve for controlling communication between said chamber through said by-pass.

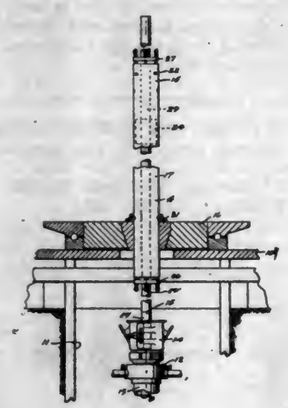
1,879,454. MORTISING TOOL. HARRY T. PARKER, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed June 17, 1931. Serial No. 544,963. 18 Claims. (Cl. 144—27.)

1. In a mortising tool, a body plate, a pair of right-angled brackets, means for connecting said brackets for vertical adjustment to the opposite ends of said body plate, a depth plate disposed in a plane at right angles to the plane of said body plate, means for connecting said depth plate to said brackets for adjustment towards and away from said body plate and in the plane of said depth plate, a fixed cutter guide carried by said body



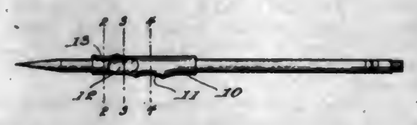
plate, an opposed cutter guide adjustably carried by said body plate, cutter holders carried by said guides, and cutters secured to said holders.

1,879,455. GRIEF STEM. BENJAMIN E. PARRISH, Cody, Wyo., and WAYNE N. BLACK, Tuxpan, Mexico, assignors of one-half to J. H. Reynolds, Houston, Tex. Filed Jan. 2, 1931. Serial No. 506,178. 6 Claims. (Cl. 255—23.)



1. In a grief stem, a rotary drive shaft having an angular exterior, means for mounting said shaft on a drill line, and means connected in the drill line for slidably engaging with the shaft throughout its length to impart rotation to said drill line.

1,879,456. WRITING INSTRUMENT. LILLIAN B. PARSONS, Pickens, S. C., assignor of one-half to John L. Valley, Pickens, S. C. Filed Oct. 17, 1930. Serial No. 489,403. 1 Claim. (Cl. 120—103.)



A finger rest for a writing instrument comprising a sleeve having a group of depressions therein, said depressions adapted to receive the tips of the thumb and first and second fingers respectively, the opposite end por-

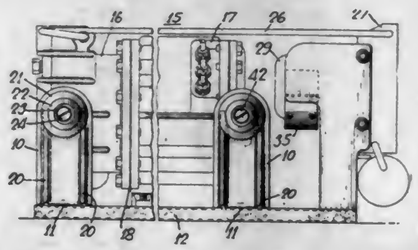
tion of the sleeve being extended away from the group of depressions and forming an outstanding abutting edge adapted to bear against the edge of the palm of the user at the basis of the thumb and first finger.

1,879,457. FASTENING MEANS FOR WALL AND CEILING BOARDS. CARLEY H. PAULSEN, Hingham, Mass. Filed Mar. 27, 1931. Serial No. 525,640. 6 Claims. (Cl. 72—115.)



4. A fastening device for wall or ceiling boards comprising a flat strip adapted to be secured to a wall structure and to underlie and form an aligning rest for the edge of a board and presenting a series of outwardly directed thin metal tongues adapted to lie between the lateral edges of one adjacent board and other tongues provided with means extending outwardly and laterally with relation to said last named tongues and oppositely to said prongs and adapted to penetrate and secure the lateral edges of the adjoining board.

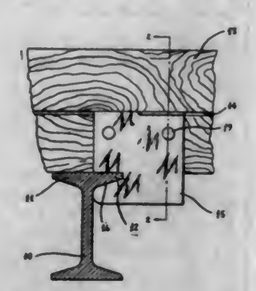
1,879,458. SUPPORT FOR POWER DRIVEN UNITS. FRANK D. PELTIER, Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,678. 2 Claims. (Cl. 248—16.)



2. A supporting device for a fan motor and condenser comprising a base, uprights secured in opposed relation on said base and having forwardly projecting portions, a transverse motor supporting cradle carried by the rear portions of said uprights, means for securing said motor in said cradle, and means for resiliently supporting said condenser in the forwardly projecting portions of said uprights.

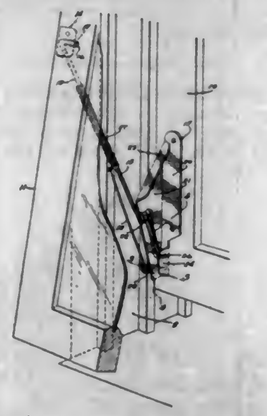
1,879,459. ANCHOR PLATE. ERNEST W. PELTON, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 20, 1930. Serial No. 429,891. 2 Claims. (Cl. 20—92.)

1. An anchor plate for inter-connecting flanged beams with cross pieces, comprising a substantially rectangular sheet of metal having a recess in one end near the lower edge of the sheet for interfitting engagement with a flange of a beam and having its upper edge portion divided intermediate the ends of the plate and bent in opposite directions to provide oppositely extending flanges in the plane of the upper edge of the sheet and co-extensive with the length of the sheet, said flanges adapted for engagement in the sides of adjacent cross pieces engaging across the flanged beam for holding the cross pieces to the beam.



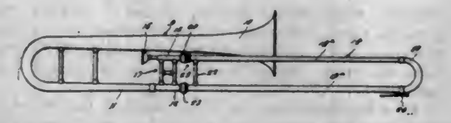
and equally distributing strains and stresses in an edgewise direction through the plate to the oppositely turned flanges at the upper edge thereof.

1,879,460. AUTOMATIC STORM SASH OPERATOR. FRANK B. PETERS, Minneapolis, Minn. Filed Feb. 13, 1931. Serial No. 515,508. 8 Claims. (Cl. 20—55.)



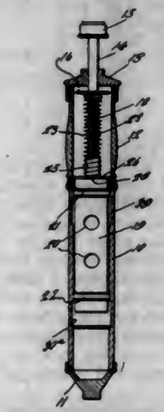
1. A device of the class described comprising a link having at each end a member applicable, the one to a swinging sash and the other to a sliding sash, said link having a slip joint that is oblique to the plane of the sliding sash and arranged to permit limited opening and closing movements of the sliding sash when the swinging sash is closed, said device having a part arranged to engage the link by lateral pressure during the final closing movement of the sliding sash and place the link under strain to hold the swinging sash closed.

1,879,461. SLIDE TROMBONE. PETER F. PETERSEN, Carbondale, Okla. Filed Dec. 11, 1931. Serial No. 580,429. 7 Claims. (Cl. 84—395.)



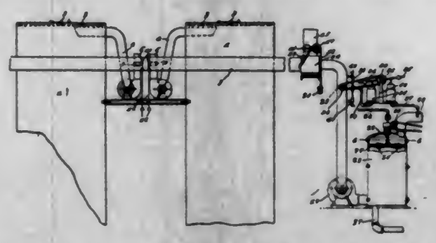
3. A slide trombone comprising a relatively stationary slide carrier unit including a pair of spaced parallel tubes and each tube being of uniform diameter from end to end and one tube of a diameter smaller than the remaining tube, a complemental reciprocatory slide embodying spaced parallel tubes fitting telescopically over the tubes of said carrier, said slide tubes being uniform in diameter from end to end and of diameters corresponding to their respective companion tubes on said carrier, a tapered gooseneck connection between tht outer end of the tubes of said slide, the terminal ends of the tubes of said carrier being provided with spacer sleeves to space the tubes of the slide and carrier from each other to minimize friction, and the terminal ends of the tubes of said carrier being flared outwardly and merging into feather-like edges to avoid the presence of air pocketing shoulders in the air passage defined by said tubes.

1,879,462. MUSICAL INSTRUMENT VALVE. PETER F. PETERSEN, Carbondale, Okla. Filed Dec. 11, 1931. Serial No. 580,430. 5 Claims. (Cl. 84—392.)



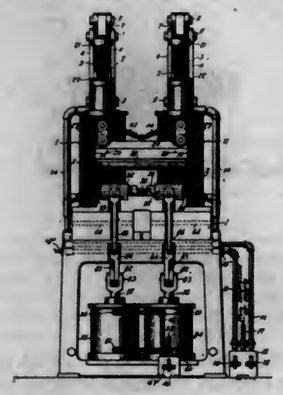
1. A valve structure of the class described, comprising a cylinder, a spring return manually depressed ported piston valve mounted for reciprocation in said cylinder, the body portion of said valve being of a diameter less than the internal diameter of the bore of the cylinder, and said valve being provided at longitudinally spaced points with circumferential rib sliding contact with the wall of said bore.

1,879,463. APPARATUS FOR TREATING GASES. FREDERIC J. PETREQUIN, St. Genevieve, Mo. Filed Nov. 3, 1930. Serial No. 493,138. 1 Claim. (Cl. 261—19.)



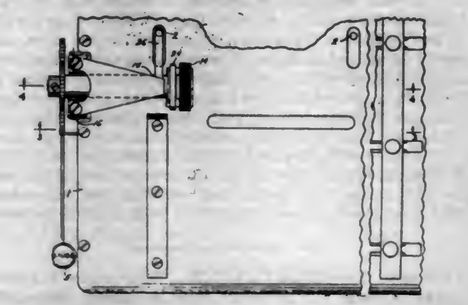
Apparatus for treating gas comprising a pipe and suction fan, a by-pass pipe mounted upon said pipe, a cylinder connected with the discharge end of the fan, a washer operating in the cylinder, an outlet pipe connected with the cylinder above the washer, a pair of oil bells, one being connected with the last mentioned pipe and the other connected with said by-pass pipe, a valve located in the first mentioned pipe between the ends of the by-pass pipe, a lever operatively connected with the oil bells and means operatively connecting said lever with said valve.

1,879,464. PIANO HAMMER FORMING MACHINE. WILLIAM J. PFRIEMER, Belvidere, N. J. Filed Jan. 23, 1931. Serial No. 510,838. 7 Claims. (Cl. 144—29.)



1. A piano hammer forming machine including a pair of clamping dies for clamping the heads of the piano hammer strip, said dies being positioned to slide toward and from each other, sliding wedge cams for locking said dies in clamping position, and means for moving the dies to a clamping position, said wedge cams automatically engaging and locking said dies against a return movement, said wedge cams functioning at all times during the movement of said dies, said dies being bodily removable from the last mentioned means while in a clamping position, whereby the operation may be repeated in quick succession.

1,879,465. PAPER FEEDING DEVICE. EDGAR ELLSWORTH PHINNEY, West Orange, N. J., assignor to Defiance Manufacturing Company, Orange, N. J., a Corporation of New York. Filed Nov. 24, 1931. Serial No. 576,976. 1 Claim. (Cl. 271—2.4.)

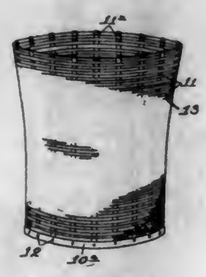


An intermittent paper feed device comprising a rotary carrier, two friction segments mounted thereon, means for adjusting said segments to varying relative angular positions about said carrier, a frame yieldable radially of the segments, a paper contact roller mounted in said frame and operable by both segments to displace the frame, a paper gripping member mounted in said frame, and a gauge projection lying out of the contact line of the segments and manipulable to raise the frame.

1,879,466. ARTICLE MADE OF WIRE AND PROCESS OF MAKING THE SAME. ROBERT C. PIERCE, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed Mar. 27, 1930. Serial No. 439,515. 4 Claims. (Cl. 220—19.)

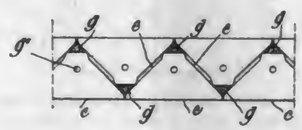
1. An article of manufacture having a body comprising staves, and a strand of metallic tape woven spirally about

said staves providing a selvage edge in substantially a single plane, said strand consisting of a multiplicity of wires enabling the same to be transversely contracted so



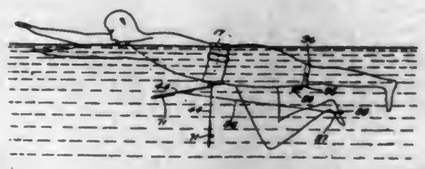
that the aforesaid selvage may be formed and means whereby the staves maintain the tape in position providing said selvage edge.

1,879,467. BUILDING STRUCTURE. RENÉ EUGÈNE MARIE PIERRÈS, Paris, France. Filed May 28, 1930, Serial No. 454,981, and in Luxemburg June 24, 1929. 2 Claims. (Cl. 72—39.)



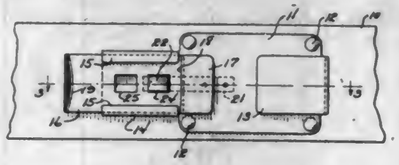
1. A wall comprised of a series of blocks each having a relatively long face, a second relatively short face parallel to said long face and generally inclined lateral faces, said blocks being laid with the short and long faces alternately in opposite directions, said lateral portions including intermediate portions inclined to the long and short faces and end portions joining said intermediate portions and said short face, said end portions being inclined at greater angles to said long and short portions than said intermediate portions, whereby said blocks contact along lines to form trianguloid spaces and quadrilateral air spaces, said trianguloid spaces being filled with binding material.

1,879,468. SWIMMING DEVICE. WLADYSLAW PIJAKOWSKI, Chicago, Ill. Filed June 8, 1931. Serial No. 542,901. 2 Claims. (Cl. 9—21.)



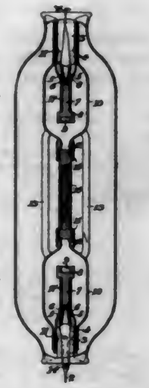
1. In a swimming device, a body encircling belt, a substantially flat hollow member pivoted on said belt, resilient means normally maintaining said member parallel with the belt, a rod telescopically received in one end of said member, a paddle carried by one end of said rod and including swingingly mounted spring influenced sections, a clamp carried by said member adjacent one end thereof, a locking element yieldably pivoted on said clamp and including a portion to engage and hold said rod fixed relatively to said hollow member in a given position, a flexible element terminally connected with said rod, and a stirrup connected with the free end of said flexible element to move said member against the influence of said resilient means.

1,879,469. BATTERY HOLDER FOR MINE LAMPS. JOHN PIOVARCHY, Uniontown, Pa. Filed Feb. 21, 1930. Serial No. 430,323. 1 Claim. (Cl. 224—5.)



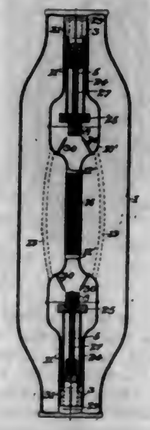
An attachment for miner's belts comprising a base plate adapted to be secured to the belt, a tongue extending from one edge of and overlapping the plate and spaced therefrom, an arm extending from the opposite edge of the plate, guide flanges extending along opposite side edges of the arm, a spring dog extending from the face of the arm and located between the flanges, a slide mounted between the guide flanges and having spaced openings therein to receive the dog and yieldingly hold the slide in position, a retaining tongue at the inner end of the arm and offset therefrom and extending over the base plate spaced from and opposed to the first mentioned tongue.

1,879,470. ELECTRIC DISCHARGE LAMP. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 15, 1929, Serial No. 378,471, and in Germany July 14, 1928. 9 Claims. (Cl. 176—122.)



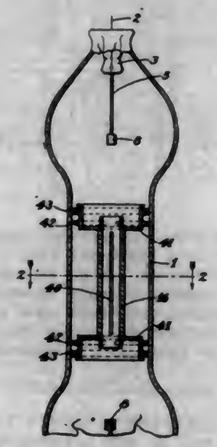
1. In an electric discharge lamp, a container, electrodes sealed therein, a gaseous filling therein, an interposed tubular body of conducting material surrounding the discharge path between the electrodes and enclosing chambers for said electrodes joined to said tubular body.

1,879,471. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, HANS EWEST, Berlin, and ALFRED RÜTTENAUER, Berlin-Charlottenburg, Germany, assignors to General Electric Company, a Corporation of New York. Filed Aug. 19, 1929, Serial No. 387,057, and in Germany Aug. 21, 1928. Renewed Jan. 29, 1931. 9 Claims. (Cl. 176—122.)



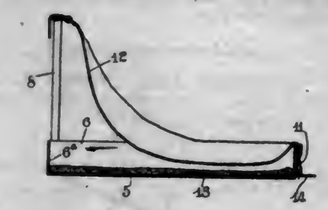
1. In an electric discharge device, a container, electrodes sealed therein, a gaseous filling therein, a tubular body of conducting material surrounding the discharge path between the electrodes, and chambers of conducting material surrounding said electrodes.

1,879,472. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1930, Serial No. 447,015, and in Germany May 27, 1929. Renewed Jan. 23, 1932. 4 Claims. (Cl. 176—122.)



1. In an electric discharge device a container, electrodes sealed therein, a gaseous filling therein, and a tubular body of conducting material surrounding the discharge path between said electrodes, said tubular body having a longitudinal opening therein.

1,879,473. SHELTER FOR DOMESTIC ANIMALS. ELVAS A. PITTS, Columbus, Ohio. Filed June 5, 1931. Serial No. 542,332. 5 Claims. (Cl. 119—19.)



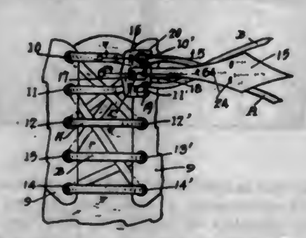
1. In a shelter for a domestic animal including a base, a door frame removable at its foot from the base, a flexible cover supported by said frame and a link hingedly connecting the door frame with the base, the sum of the height of the door frame and the length of the link being substantially equal to the length of the base from the point of connection of the link with the base.

1,879,474. FILTRATION OF SUSPENDED SEDIMENTS. CARL PONTOPPIDAN, Holte, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Nov. 7, 1930, Serial No. 493,976, and in Great Britain Nov. 11, 1929. 6 Claims. (Cl. 210—182.)



6. Apparatus for filtering suspended sediments which comprises a hollow filter body, a pressure tank to receive the suspended sediments and provided with an opening through which the filter body may be introduced into the tank and removed therefrom, and a stuffing box in operative relation with said opening and formed with a member to engage the filter body yieldingly, whereby in the removal of the filter body from the pressure tank the coating of suspended sediment is removed from the surface of the filter cake formed on the filter body.

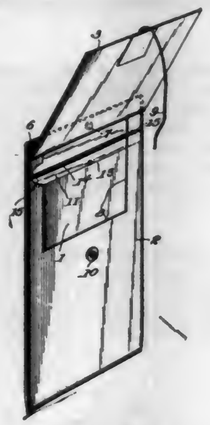
1,879,475. SHOE FASTENING DEVICE. TOM K. POON, San Francisco, Calif. Filed Aug. 22, 1930. Serial No. 477,130. 1 Claim. (Cl. 24—140.)



The combination with a shoe having eyelets formed therein, of a lace positioned in the eyelets and having a pair of lace ends, a buckle slidably secured to said lace,

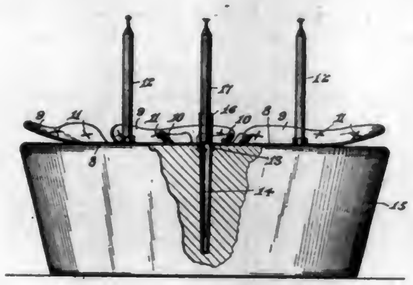
said buckle comprising a plate having openings therein through which a portion of said lace passes, said buckle serving to confine the lace ends, and hooked elements bent from said plate and detachably secured in certain of the eyelets of the shoe.

1,879,476. CLOTHING BAG. VERNON S. POULSON, Ogden City, Utah. Filed May 16, 1930. Serial No. 453,078. 2 Claims. (Cl. 206—7.)



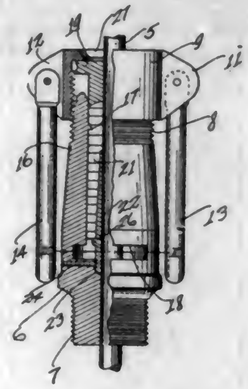
1. A bag of the kind described comprising a flexible body marginally closed throughout and having an opening in one side inset from the marginal closed edges, a rigid plate interiorly of the body and fixed to lie crosswise of the opening adjacent its outermost end, a coiled retractile spring carried by the plate and having its ends fixed thereto to present the major intermediate portion of said spring in confronting relation to the opening, and a flap formed with the body and adapted to close the opening.

1,879,477. CANDLE HOLDER. MARIAN F. POWELL, Palatka, Fla. Filed Feb. 3, 1931. Serial No. 513,178. 5 Claims. (Cl. 67—25.)



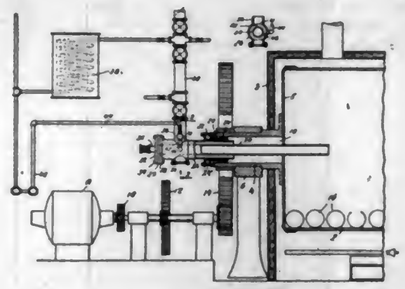
1. A multiple candle holder for the adornment of cakes or the like comprising a base tray having means for mounting a plurality of candles thereon, and an anchor post insertible through the tray and into a cake for securing the base tray thereupon, said anchor post having its upper end provided with means for mounting a candle thereon.

1,879,478. STUFFING BOX. CHARLES LEROY PRUIETT, Ventura, Calif. Filed Feb. 5, 1930. Serial No. 426,085. 1 Claim. (Cl. 286—31.)



In a stuffing box of the character described, a casting, said casting having a bore formed therein, a bushing positioned within said bore, a shoulder formed on said bushing, a shoulder formed within said bore and integral with said casting, means for forcing a packing into said bore so as to be positioned between said shoulders, said means including a compressor movable into said bore, a nut threadedly engaging said casting for the purpose of moving said compressor into said bore and handles adapted to be moved to a horizontal position for rotating said nut.

1,879,479. BALL MILL. ELLIS L. PUNNETT, Buffalo, N. Y., assignor to National Aniline & Chemical Company, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,460. 10 Claims. (Cl. 23—286.)

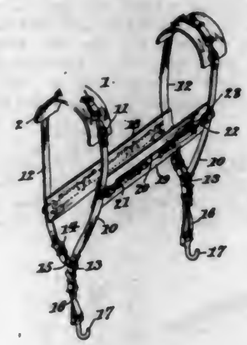


1. Apparatus for treating materials comprising a casing rotatable about a horizontal axis, a trunnion for said casing secured axially on one end thereof and provided with an opening extending therethrough, a stationary tube communicating with said casing through the opening in said trunnion, and a stationary pipe located within said tube and communicating with said casing.

1,879,480. BODY HARNESS. JOHN A. PURES, Kearney, N. J. Filed Aug. 2, 1929. Serial No. 382,988. 1 Claim. (Cl. 224—5.)

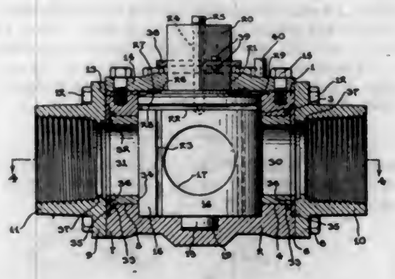
In a body harness, vertically extending front and rear straps, eyes connecting lower ends of said straps, suspension straps suspended from the eyes connecting lower ends of the front and rear straps and having article engaging hooks at their lower ends, front and rear pads

extending horizontally with their ends overlapped by intermediate portions of the front and rear straps, shoulder pads extending between upper ends of the front and rear straps, eyes carried by the front and rear straps at their upper ends and intermediate their ends, respectively, and a strap extending longitudinally upon each pad and having its free end portions folded back and



adjustably secured to form loops, and hooks carried by said loops, the hooks for the straps carried by the shoulder pads being engaged with the eyes at the upper ends of the front and rear straps and the hooks for the straps carried by the front and rear pads being engaged with the eyes intermediate the ends of the front and rear straps.

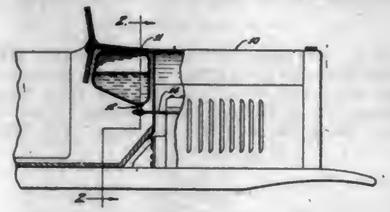
1,879,481. VALVE. JAMES K. PUTNAM, Tulsa, Okla., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Filed Dec. 13, 1930. Serial No. 502,195. 15 Claims. (Cl. 251—113.)



1. In a valve of the character described, a casing having inlet and outlet ports, a ported plug rotatably mounted in said casing, said inlet port slidably supporting a substantially elongated floating sleeve which lies entirely within the port, the inner end of said sleeve being adapted to seat against the periphery of said plug, the outer end of said sleeve terminating in a flange, whereby, when pressure is applied to said inlet port, said sleeve is forced into engagement with said plug.

1,879,482. VALVE LOCK. HARRY L. QUINTENZ, Chicago, Ill. Filed Aug. 12, 1931. Serial No. 556,687. 2 Claims. (Cl. 70—124.)

1. In combination with a liquid container having an outlet conduit provided with a valve including a stem, a member mounted upon the stem for movement therewith and including a pair of spaced elements adapted to straddle the conduit when the valve is in closed position and provided with apertures for the passage therethrough of the bolt element of a lock, so as to lock the



member to the conduit and prevent movement of the stem, unauthorized opening of the valve, and unauthorized withdrawal of liquid from the container.

1,879,483. PRODUCTION OF IMPROVED ALKALINE FILLER. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Feb. 18 1930. Serial No. 428,231. 42 Claims. (Cl. 92—21.)

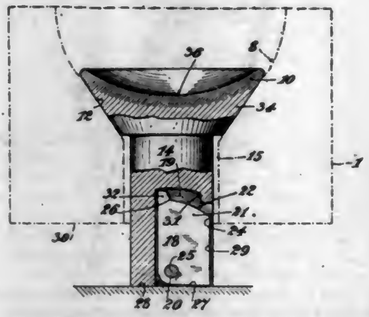
1. In a method of making paper which includes alkaline filer as one of its ingredients, the improvement which comprises reducing the pH value of alkaline filler by treating alkaline filler with water soluble acidic material prior to the use of said alkaline filler in making said paper.

1,879,484. BOOK SUPPORT. JAMES RAMAGE, Hartford, Conn. Filed Oct. 9, 1930. Serial No. 487,444. 3 Claims. (Cl. 45—80.)



1. A book support comprising a base board, a stud extending upward from the top of the base board, an arm pivoted on said stud, a shelf, a post hinged to the shelf, and a screw hinged to the shelf and adjustably conected with the post for adjusting the inclination of said shelf, said post and said screw being shaped so that either may be rotatably connected with said arm.

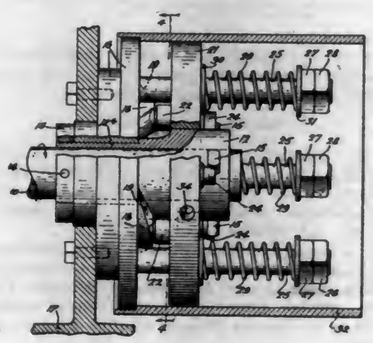
1,879,485. CLOSED BOTTOM INGOT MOLD. WILLIAM HAIG RAMAGE, Trumbull County Ohio, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Feb. 28, 1930. Serial No. 432,015. 7 Claims. (Cl. 22—148.)



4. As an article of manufacture, a closure plug for closed bottom ingot molds, said closure plug having a head portion and a stem portion, said stem portion be-

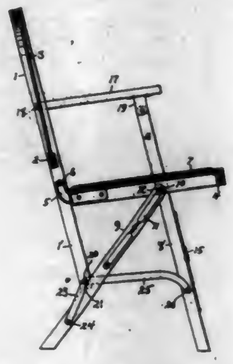
ing provided with a recess and a locking member permanently secured within said recess in the stem portion, a part of said member moving outside of the confines of said stem portion for locking the stem in a mold.

1,879,486. RELEASE DEVICE FOR DRIVE MECHANISM FOR BAKE OVENS. ALBERT H. RANCKE, Hinsdale, Ill., assignor to The Petersen Oven Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 4, 1930. Serial No. 486,341. 14 Claims. (Cl. 192—56.)



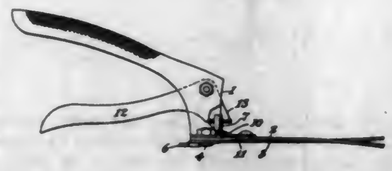
1. A throw-off device comprising a rotatable drive member, a rotatable driven member coaxially arranged with respect thereto, and means operatively connecting said members, said means consisting of axially separated plates, yielding means for urging one of said plates towards the other plate, coacting studs and sockets on the respective plates that are maintained normally engaged by said yielding means, and normally coacting elements on said drive member and said yielding plate and adapted to be disengaged upon the movement of the yieldable plate towards the other plate due to disengagement of the studs and sockets.

1,879,487. FOLDING ARMCHAIR. WILLIAM CHARLES RASTETTER, Fort Wayne, Ind. Filed Mar. 6, 1930. Serial No. 433,634. 1 Claim. (Cl. 155—139.)



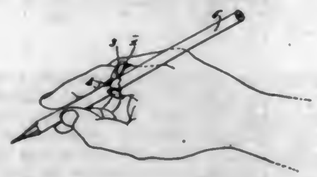
A folding chair including a back having side frame members, a seat having a frame, upwardly curved brackets pivotally connecting the seat-frame with said members, a seat-rod extending through the seat frame, fore legs pivoted on said rod exteriorly with respect to said seat-frame, each having an upwardly projecting extension, rear legs pivoted on said rod at points thereon between the sides of said seat-frame, a cross member in the lower end of the back frame members engageable with said rear legs to limit movement thereof, links connecting said cross member respectively with said fore and rear legs, arm-rests pivotedly connected with said back frame members, and pendant brackets on said arm-rests pivotally connected respectively with said extensions, said back, fore legs, rear legs, and arm-rests being so disposed that when the chair is folded, the back and arm rests lie in a common plane while the fore and rear legs and the seat lie in another common plane parallel therewith.

1,879,488. GRASS SHEARS. FREDERIC H. RAUH, South Orange, N. J., assignor to J. Wiss & Sons Co., Newark, N. J., a Corporation of New Jersey. Filed Dec. 6, 1930. Serial No. 500,461. 2 Claims. (Cl. 56—240.)



1. In grass shears embodying a handle-frame provided with a pair of downwardly extended legs, a blade pivoted to and below each leg, the blades being provided with relatively overlapping heel portions movable in parallel planes, a pin rigidly fixed in the lower heel and passing freely through the upper heel and terminating in a free end, the clearance of the pin in the upper heel being sufficient to allow the blades to open and to close upon each other through the length of their cutting edges, means for reciprocating the pin to actuate the blades toward and away from each other and a heel shield embodying a rigid plate having a depressed, central portion extending between the legs below the blades and their heels and secured to the legs by the blade pivots and constituting means for supporting the shears slidably upon the ground in operative position.

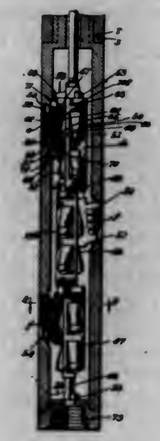
1,879,489. WRITER'S RING. GROVER C. RAY, Bisbee, Ariz. Filed Mar. 4, 1931. Serial No. 520,111. 1 Claim. (Cl. 120—107.)



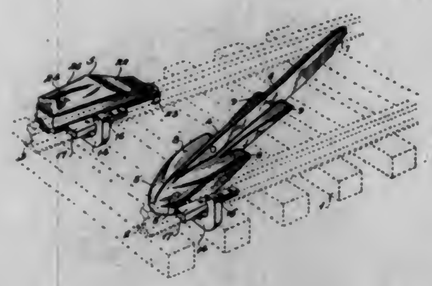
A device for the purpose set forth, a finger ring, an arched resilient element having one end pivotally secured to the finger ring, and a split spring pencil engaging clamp on the second end of the arched element.

1,879,490. UNDERREAMER. DANIEL H. REAMY and ALBERT SWANSON, Los Angeles, Calif. Filed Aug. 23, 1929. Serial No. 387,889. 8 Claims. (Cl. 255—74.)

1. In an underreamer: a plunger, a latch ring carried thereby, a mandrel and a latch dog between the mandrel and the latch ring, a cam carried by said mandrel, a cutter block provided with a cutter for engagement with said cam, resilient means normally urging said mandrel in one direction to cam the cutter block and bring the cutter into work engagement, said latch being released upon movement in one direction of said plunger to permit said movement of the mandrel.

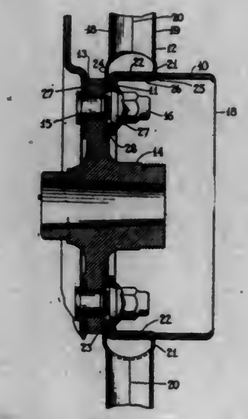


1,879,491. RERAILER. WILLIAM H. REDNOUR, Edwardsport, Ind. Filed Mar. 4, 1931. Serial No. 520,040. 4 Claims. (Cl. 104—265.)



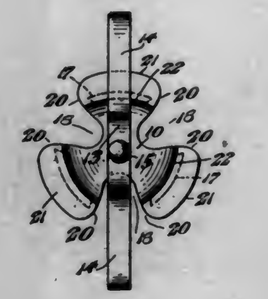
1. A reraiier for cars and the like comprising a body portion having a length greater than the distance between the rails, said reraiier provided with riding surfaces on opposite sides of its longitudinal center line and adapted to be positioned between the rails with its respective ends in engagement with the rails.

1,879,492. DEMOUNTABLE WHEEL. GEORGE B. REED, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,294. 4 Claims. (Cl. 301—9.)



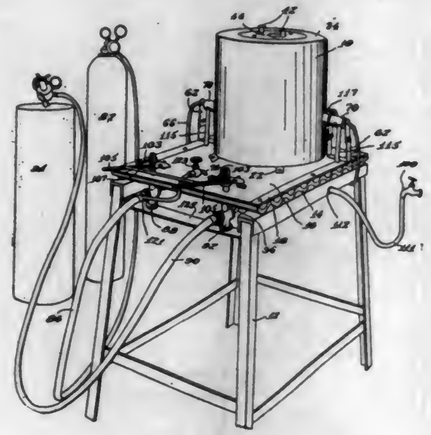
1. An artillery wheel comprising a metal wheel body and a hub shell comprising an axially extending main body and a radially inwardly extending securing flange, said wheel body being secured directly to both the main body and the securing flange of said hub shell.

1,879,493. KNEADING DEVICE. JOHN J. REINHOLD, Marietta, Pa. Filed May 8, 1930. Serial No. 450,612. 1 Claim. (Cl. 128—57.)



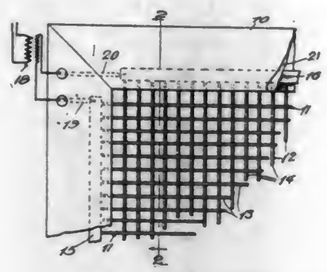
A massaging apparatus comprising a frame forming a handle, a heavy metal body rotatably mounted within said frame having a relatively small central hub portion, radially arranged circular knobs of substantial area extending from said hub portion and each having outwardly flaring side walls terminating in an enlarged head portion with a contact area of a diameter substantially that of the width of the hub portion, and a concavo-convex resilient pad member mounted on the head portion of each of said knobs and having the concave side thereof spaced from the outer face of said head portion whereby a series of heavy cushioned blows are imparted to the surface to be treated when said apparatus is moved thereover.

1,879,494. HIGH TEMPERATURE FURNACE. GEORGE BICKLEY REMMEY, Philadelphia, Pa. Filed Feb. 20, 1931. Serial No. 517,158. 11 Claims. (Cl. 263—9.)



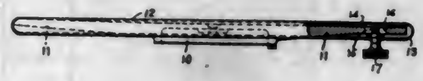
1. A fusion point test furnace, comprising a relatively thick fire-proof and heat-insulating exterior housing, relatively thick interior side and base walls of refractory material providing an interior fusion chamber, a refractory block centrally disposed within the chamber and adapted to support a test specimen, the space in the chamber above the block providing uniform testing conditions, means for projecting a high temperature fuel tangentially into the space between the chamber wall and block, and means including a pipe and valve for controlling and conducting a secondary oxygen supply into the last-named space to combine with the fuel.

1,879,495. INSECT ELECTROCUTOR. ROSS L. RENWICK, Niles, Mich. Filed Nov. 17, 1930. Serial No. 496,089. 4 Claims. (Cl. 43—112.)



1. An insect electrocutor comprising in combination a support, two electrodes of opposite polarity supported thereby in two spaced planes and insulated from each other, each electrode comprising widely spaced electrically connected metallic elements, the elements of one electrode being staggered with respect to those of the other electrode and providing wide open passageways from one side to the other through the area traversed by said electrodes, each metallic element of one electrode being spaced a sufficient distance away from an associated metallic element of the other electrode to provide a spark gap capable of being bridged by a relatively small insect entering the zone between them and not contacting with either of them, and a transformer electrically connected with said electrodes.

1,879,496. PLATFORM FOR SCALES. ERNEST ALBERT REUSSENZEHN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Aug. 7, 1931. Serial No. 555,725. 3 Claims. (Cl. 265—27.)



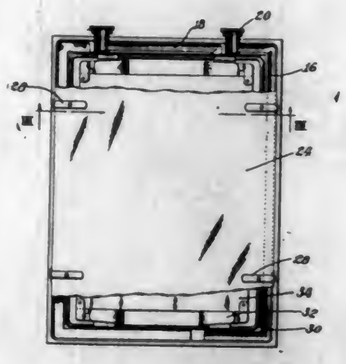
1. In a scale, a spider having a plurality of legs, one of said legs having an elongated slot, and a platter superimposed on said spider and having a depending flange concealing the spider from view, said platter being provided with a depending screw passing through said elongated slot, the platter being adjustable on said spider along said slot, and a nut threaded on said screw and engaging the spider to secure the platter in place.

3. In a scale, a support provided with radially extending legs, one of said legs being provided with a slot and a platter overlying the support and provided with a depending flange for substantially concealing the support from view, said platter being provided with a depending screw passing through said slot, and a nut threaded on the screw for clamping the platter to the support.

1,879,497. PREPARATION OF KETENE. FRANCIS OWEN RICE, Baltimore, Md., assignor to Rohm & Haas Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,873. 9 Claims. (Cl. 260—134.)

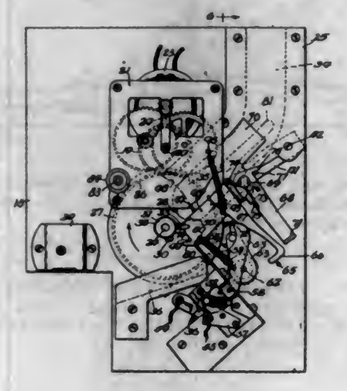
1. The method of manufacturing ketene which comprises passing the vapor of an organic compound capable of yielding ketene upon pyrogenic decomposition at a temperature of 740° to 1200° C. through a combustion chamber made of silica and which is free of all substances that may exert a deteriorating effect upon the reaction, and recovering the ketene thus formed.

1,879,498. CASSETTE FOR X-RAY WORK. THOMAS K. RICHARDS, Lexington, and HARRY M. WEBER, Newton, Mass. Filed Aug. 12, 1930. Serial No. 474,840. 6 Claims. (Cl. 250—34.)



1. A cassette for X-ray work comprising a light-tight frame having a flat wall with ray-screening properties adapted to contact with the member to be X-rayed, a holder within the frame for a sensitized film, and a liquid-tight cover cooperating with the sides of the frame to form passages for a developing liquid.

1,879,499. COIN CONTROLLED SWITCH AND TIMING MECHANISM. MYRON H. RICHARDSON, Chicago, and ALBERT E. GEBERT, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1932. Serial No. 586,498. 19 Claims. (Cl. 194—9.)



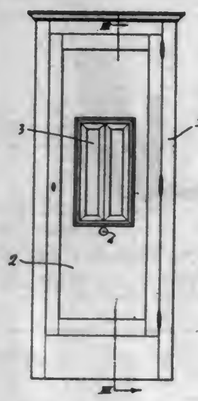
1. In a time switch, a time keeping mechanism having a main shaft, a circuit controlling switch device, means tending normally to render the switch device inactive, a check delivery chute, a check carrier movable adjacent the chute to successively receive the checks from said chute, said check carrier being responsive in its operation to the actuation of said shaft, manual means for setting the switch to render the circuit active, means for maintaining the switch in its set active position, and means rendered active in the absence of a proper check in said chute for rendering the last recited means inactive to permit the switch device to be moved by the first recited means to render the circuit inactive.

1,879,500. SEAL FOR BUNG FIXTURES. IRVIN H. RIEKE, Auburn, Ind., assignor to Rieke Metal Products Corporation, a Corporation of Indiana. Filed Nov. 2, 1929. Serial No. 404,300. 2 Claims. (Cl. 220—39.)



1. A bung fixture and seal therefor comprising a container wall having an orifice and provided with a tube upon the inner side of the wall surrounding said orifice, a bung ring having a sleeve extending through said orifice and tube, and a breakable seal closing the inner end of said ring, the lower end of said ring and the marginal portion of said seal being clinched together around the lower end of said tube whereby the sleeve, tube and seal are conjoined at the lower end of the tube whereby to permit insertion and removal of a bung in said ring without disturbance of said seal.

1,879,501. APPARATUS FOR TESTING THE EYESIGHT. RICHARD W. RIGLER, Philadelphia, Pa. Filed Feb. 21, 1931. Serial No. 517,567. 10 Claims. (Cl. 40—53.)



1. In apparatus for testing the eyesight, a series of test cards having each a plurality of lines of characters, and means for interchangeably exhibiting any test card as an entirety or any individual line of any test card.

1,879,502. METHOD OF PRODUCING VALUABLE PRODUCTS FROM VEGETABLE SUBSTANCES. ERIK LUDVIG RINMAN, Djursholm, Sweden. Filed Oct. 5, 1929, Serial No. 397,748, and in Sweden July 16, 1929. 7 Claims. (Cl. 202—34.)

1. The method of producing valuable products from the body substances of vegetation, which comprises digesting the vegetable substances with a water solution of barium hydroxide at an elevated temperature and pressure until said substances are substantially all completely decomposed and form compounds with said hydroxide, evaporating the solution thus obtained to dryness, and subjecting the evaporated mass to dry distillation.

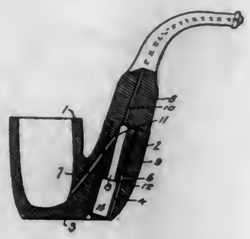
1,879,503. METHOD OF RELIEVING ALKALINE SOLUTIONS, PARTICULARLY WASTE LIQUORS FROM THE SODA OR SULPHATE PULP MANUFACTURE, OF SILICA. ERIK LUDVIG RINMAN, Djursholm, Sweden. Filed Oct. 7, 1931, Serial No. 567,476, and in Sweden Aug. 22, 1931. 5 Claims. (Cl. 92—13.)

1. The method of relieving silica-containing alkaline solutions, of silica, which consists in adding to the alkaline solution a compound of a metal the silicate of which is substantially insoluble in the alkaline solution so as to precipitate such metal silicate in the solution, treating the solution with an absorption agent capable of absorbing said silicate, and separating the absorption agent with the silicate absorbed thereby from the solution.

1,879,504. SMOKING PIPE. RICHARD RINNE, Tacoma, Wash. Filed Dec. 24, 1931. Serial No. 582,995. 2 Claims. (Cl. 131—12.)

1. A smoking pipe having a bowl, stem holder, and smoke passage, the stem holder having a long hole therein adapted to receive the stem and extending relatively far beyond the smoke passage; a stem fitting in the outer end of the hole and having a central smoke passage extending from end to end and connecting with the smoke passage leading to the bowl; a condensing chamber connected to said central smoke passage at a point beyond said smoke passage

leading to the bowl, and lying in the inner end of the hole in the stem holder, but of small diameter, thereby forming an annular air chamber in the inner end of said

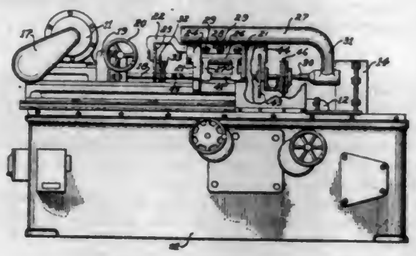


stem holder; and air openings at the ends of said annular chamber adapted to permit the circulation of air around said condensing chamber.

1,879,505. ORGANIC GOLD COMPLEX COMPOUND AND PROCESS OF MAKING SAME. OTTO RIPKE, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 24, 1931, Serial No. 532,711, and in Germany May 3, 1930. 18 Claims. (Cl. 260—9.)

1. The process which comprises reacting upon a sulfhydryl-albumose which is a degradation product containing sulfhydryl groups of a keratin substance in the presence of a solvent with at most such a quantity of a gold salt soluble in the solvent used that the coloration, resulting from the addition of the gold salt, just disappears and neutralizing the reaction mixture.

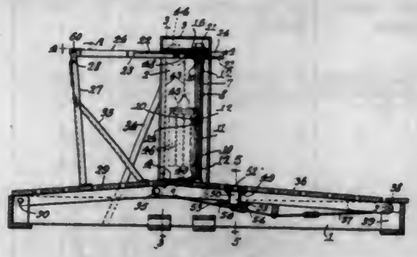
1,879,506. GRINDING MACHINE. LOUIS L. ROBERTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1931. Serial No. 517,504. 12 Claims. (Cl. 51—101.)



1. In a grinding machine, a cam carrying holder, a driven grinder element adjacent the holder, means for guiding the cam relative to the grinder, and mechanism for rotating the holder at a varying angular velocity, said holder being driven at the slower velocity during contact of the effective irregular cam surfaces with the grinder.

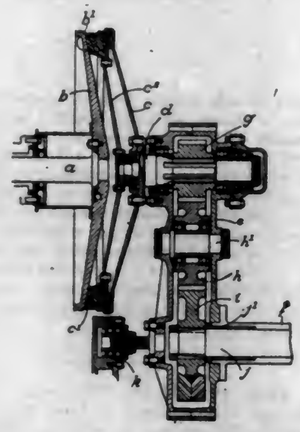
1,879,507. DOOR OPERATING MECHANISM. IVY B. ROBERTSON, Charlotte, N. C., assignor of one-third to Floyd Gresham, Charlotte, N. C. Filed Oct. 17, 1930. Serial No. 489,405. 1 Claim. (Cl. 268—35.)

In a device of the class described, a rotatably mounted member, a door carried by said member, a bar supported for sliding movement in an approximately horizontal position, a flexible element connected at its ends to the bar and engaged in its intermediate portion with the rotatably mounted member, a platform leading to the door, means for mounting the platform for vertical swinging



movement, and a substantially vertical standard secured to the platform, the bar being pivoted to the standard in spaced relation to the platform.

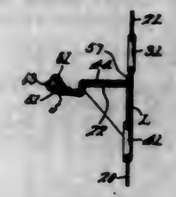
1,879,508. VARIABLE FRICTION GEARING. JOHN HOGG ROBERTSON, London, England. Filed July 20, 1929, Serial No. 379,752, and in Great Britain July 27, 1928. 12 Claims. (Cl. 74—26.)



11. A variable friction gearing comprising a conical driving member, a driven member, a radius arm supporting said driven member, stops limiting the movement of said radius arm between a position with said members coaxial and a position of relative eccentricity, said driving member being slidable axially to engage with said driven member and the engagement of said members tending to bring them to the coaxial position, a driven shaft, and positive power-transmitting means connecting said driven member to said driven shaft, said power-transmitting means being carried by said radius arm, and the reaction of said power-transmitting means upon said radius arm tending to bring said members to the eccentric position.

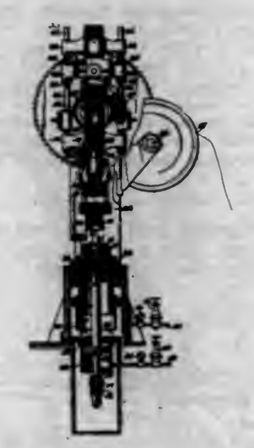
1,879,509. FUSIBLE LINK. GEORGE I. ROCKWOOD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1931. Serial No. 520,041. 6 Claims. (Cl. 169—42.)

1. A fusible link comprising two adjacent tension members having aligned openings, a locking member extending outward substantially perpendicularly to said tension members and with one end of said locking member extending through said aligned openings, fusible retaining means for said locking member, and means to positively prevent outward endwise movement of said locking member transversely of and away from said ten-



sion members during initial release movement of said locking member as said fusible retaining means is softened by a rise in temperature thereof.

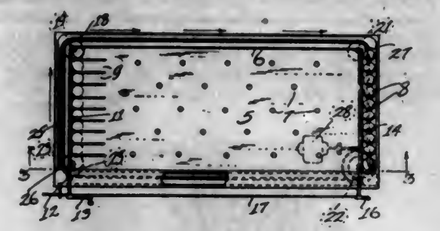
1,879,510. METAL WORKING PRESS. FREDRICH J. RODE, Chicago, Ill. Filed Jan. 9, 1931. Serial No. 507,543. 12 Claims. (Cl. 113—46.)



1. A metal working press including a plunger and crank shaft for operating the same, a plurality of work holding means adapted to successively co-operate with the plunger to hold the work, means operable to positively lock one of the work holding means against operation during the operation of the other work holding means, the said locking means embodying an operative connection with the said crank shaft, and means embodying a cam device secured to and adjustable about the axis of the crank shaft for varying the time in the cycle of operation of the crank shaft at which the said locking means will become effective.

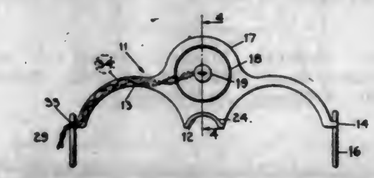
1,879,511. MECHANICALLY OPERATED GAME TABLE. CLYDE C. RODGERS, San Francisco, Calif. Filed Nov. 6, 1931. Serial No. 573,462. 1 Claim. (Cl. 273—138.)

In a game apparatus of the character described the combination with, an inclined table top having a plurality of balls movable thereover, a plurality of spaced pegs mounted in said table top, a plurality of pockets formed in the lower end of said top, a gate positioned adjacent said pockets, a gate positioned adjacent the top of said inclined table top, and adapted to retain the balls at the top of the incline of said table, means for actuating said gates independently, means for returning the balls from the lower end of the table to the upper end of the table, said means including a runway formed across the bottom of said table and along one side thereof and along the



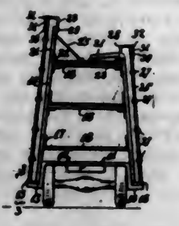
top of the table, of a chain travelling in said runway and having fingers extending through a slot formed in said runway and adapted to engage said balls.

1,879,512. SPECTACLE TYPE OF LAMP HOLDER. IRENEO ROTEA, Los Angeles, Calif. Filed July 7, 1931. Serial No. 549,205. 4 Claims. (Cl. 240—59.)



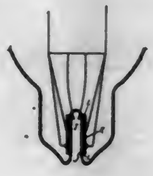
1. A lamp holder having a plate, said plate having a lower portion, the lower portion having a central nose bridge and a pair of lateral arches, a reflector secured to said plate and a lamp socket attached to the plate positioned centrally of the reflector, and ear bows connected to the plate at the outer end of the arches, said arches at their upper part being adapted for positioning approximately the level of the eyebrows, and the lamp socket being adapted for positioning in front of a person's forehead.

1,879,513. PLATE GLASS TRANSPORTING TRUCK. LOUIS ROTHHOLZ, New York, N. Y. Filed Mar. 23, 1932. Serial No. 600,599. 10 Claims. (Cl. 296—8.)



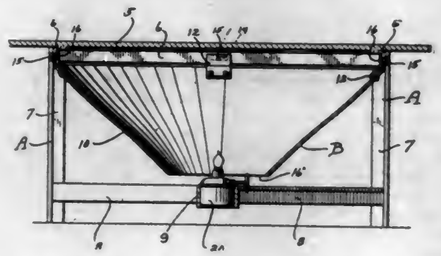
1. In combination with the chassis of a truck, a plurality of transverse longitudinally spaced support members each having a central portion attached upon the chassis and depending ends at the sides of the chassis, substantially vertical frames secured at inclinations towards each other upon said depending ends, horizontal partitions between said frames forming compartments of the truck, hinged extensions upon said frames, means for holding said extension in the same plane with the frames, support angles adapted for attachment upon the upper ends of said extensions or the upper ends of said frames and having adjustable arms, and outer frames attached upon said arms and adjustably held in the lower ends upon said depending ends.

1,879,514. MEANS FOR SUPPORTING THE ELECTRODES OF THERMIONIC DEVICES. HENRY JOSEPH ROUND, Muswell Hill, London, and WILLIAM JAMES PICKEN, Southend-on-Sea, England, assignors to Radio Corporation of America, a Corporation of Delaware. Original application filed Feb. 23, 1922, Serial No. 538,512, and in Great Britain Mar. 21, 1921. Divided and this application filed Sept. 25, 1929. Serial No. 394,949. 4 Claims. (Cl. 250—27.5.)



1. In a thermionic device, a glass envelope having a reentrant portion, an electrode supporting member mounted upon said reentrant portion, an electrode carried by said member, and an insulator of mica interposed between said supporting member and the reentrant portion.

1,879,515. MORTAR BOARD. ROBERT A. ROUTT, Hutchinson, Kans. Filed Apr. 27, 1931. Serial No. 533,300. 4 Claims. (Cl. 126—40.)



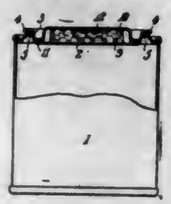
1. In a mortar board of the class described, a stand comprising a metal top plate, angle iron rails secured by one flange to the under side of the top plate and providing a square-shaped reinforcing frame, an angle iron supporting leg secured to each corner portion of the reinforcing frame, brace rods connecting diagonally opposite supporting legs, an open ended inverted frusto-conical shaped hot air shield detachably supported at its upper end upon the reinforcing frame in slightly spaced relation at its upper end below the top plate and with its lower open end spaced above the brace rods, a burner removably supported upon said brace rods below the hot air shield, a fuel container detachably secured to the stand beneath the top plate, and a fuel feed line connecting the fuel container and burner.

1,879,516. EYEGLASS MIRROR. JOHN ROWAN, New York, N. Y. Filed Oct. 8, 1930. Serial No. 487,104. 6 Claims. (Cl. 88—41.)



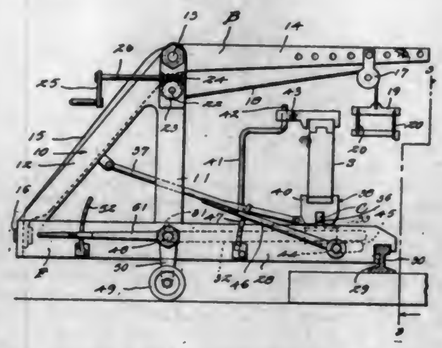
1. An eyeglass mirror, comprising a spring clip for transversely engaging on the frame of eyeglasses and formed with an enlarged rear end, a mirror support adjacent said enlarged end, a stud projecting from said enlarged end and passing through said support to pivotally hold the latter element and having a head, a spring on said stud and acting between said head and support to frictionally hold the support against said enlarged end in adjusted positions and a mirror on said support.

1,879,517. TIN, JAR, OR LIKE CONTAINER. HUBERT GEORGE ROWBOTHAM, Westcliff-on-Sea, England. Filed June 17, 1929, Serial No. 371,513, and in Great Britain Jan. 14, 1929. 3 Claims. (Cl. 220—23.)



1. The combination with a container comprising a body portion and end portions at least one of which presents a tapered recess or cavity at the exterior of the container, of a closure for said recess constituted by a lid of the press-in type having a tapered recess and a laterally projecting rim or flange at the outer edge of the tapered recess, frictionally secured to the container recess in an inverted position by engagement of the outer edge of its rim or flange with the inner wall of the last-named recess.

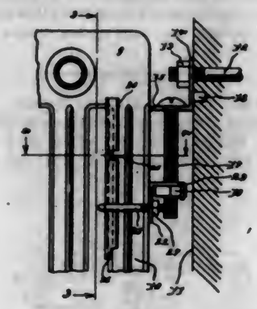
1,879,518. DEVICE FOR DISMANTLING FREIGHT CAR TRUCKS. ANTON A. RUDD, Sidney, Nebr. Filed Jan. 16, 1932. Serial No. 587,128. 8 Claims. (Cl. 214—86.)



1. A device as described comprising a frame, a carriage, guide members carried by the frame, means for swingably mounting the guide members in the frame, and guide adjusting means mounted in the frame and engaging the guides for adjusting the guides relative to the frame to raise or lower the carriage, said means including an eccentric, an operating lever and a toothed rack for holding the lever in adjusted position.

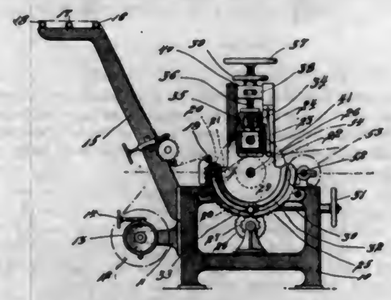
1,879,519. RADIATOR HANGER. DE WITT C. RUFF, 2d, St. Paul, Minn. Filed Feb. 11, 1931. Serial No. 515,012. 5 Claims. (Cl. 248—17.)

3. A radiator hanger having in combination a substantially vertical bolt, means for suspending said bolt from a wall, a radiator supporting member vertically adjustable on said bolt, a claw member slotted to receive said bolt and formed to removably engage said supporting member, a plate formed with a long contact surface for a radiator



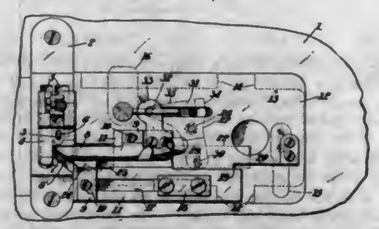
tube and having a radiator seat at its upper edge and means for rigidly connecting said plate and claw member together in clamping engagement with a tube of a radiator.

1,879,520. FABRIC IMPREGNATING MACHINE. ETHELBERT A. RUSDEN, Nayatt, R. I., assignor to The Textile-Finishing Machinery Company, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 9, 1929. Serial No. 398,548. 10 Claims. (Cl. 8—19.)



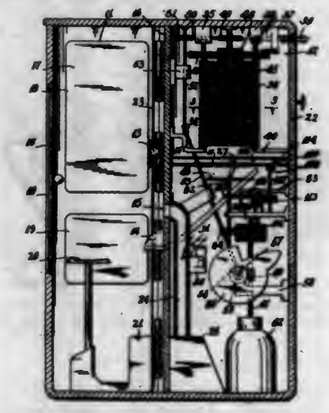
1. In a fabric impregnating machine, a pair of cooperating pressure rolls, a frame in which one of said rolls is mounted, means for swinging said frame with its roll about the axis of the other roll to vary the angularity of a plane that shall pass through the axes of both of said rolls, and means to hold said frame and its roll in any various adjusted position along its path of movement.

1,879,521. WORK-GUIDE FOR SEWING MACHINES. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 8, 1931. Serial No. 542,765. 14 Claims. (Cl. 112—138.)



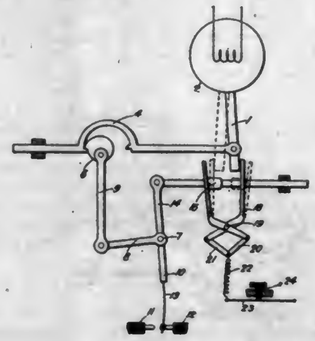
1. The combination with a sewing machine throat-plate having a recess in its upper surface, of a work-guide movable from a retracted position to a sewing position in which a portion of said guide is received in said recess, and means for filling said recess when said work-guide is retracted.

1,879,522. SOUND RECORD SLOT MACHINE. GEORGE J. SALIBA and ALFRED G. MUSHAWIR, Brooklyn, N. Y. Filed July 17, 1930. Serial No. 468,747. 10 Claims. (Cl. 274—10.)



1. An automatic slot machine for recording the human voice, music and other audible sounds on discs or other records, comprising a booth having a sound compartment and an apparatus compartment, a microphone supported in said sound compartment, and an apparatus within said apparatus compartment for automatically recording from said microphone, means for ejecting the record through a chute to said sound compartment, means for operating the ejecting means, and a vertical wire strung in the sound compartment, said microphone frictionally engaging on said wire for adjustments to a proper recording height.

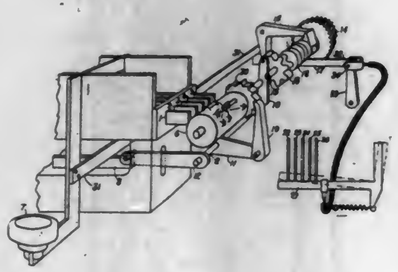
1,879,523. MECHANICALLY ACTUATED VIBRATING RELAY. REGINALD DENNIS SALMON and HARRY CLIFFORD, Croydon, England, assignors to Creed and Company, Limited, Croydon, England. Filed Mar. 3, 1930, Serial No. 432,828, and in Great Britain Jan. 1, 1930. 9 Claims. (Cl. 178—70.)



8. The combination of an electromagnetic relay having an armature operable between two positions, two elements, one for moving the armature in one direction and the other for moving it in the opposite direction, and means actuated in response to the movement of the armature to either position to render the corresponding element effective to

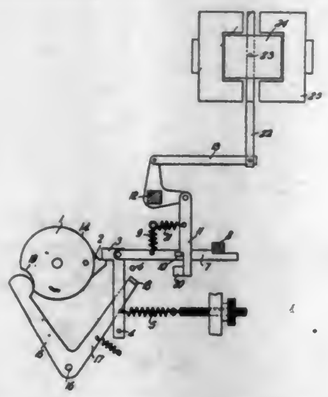
restore the armature to the position from which it was last moved, each of said elements having an effective restoring force less than the holding force of said relay when energized.

1,879,524. TELEGRAPH SYSTEM AND APPARATUS. REGINALD DENNIS SALMON and FRANK REGINALD THOMAS, Croydon, England, assignors to Creed and Company, Limited, Croydon, England. Filed Feb. 28, 1931, Serial No. 519,038, and in Great Britain Mar. 19, 1930. 13 Claims. (Cl. 178—4.)



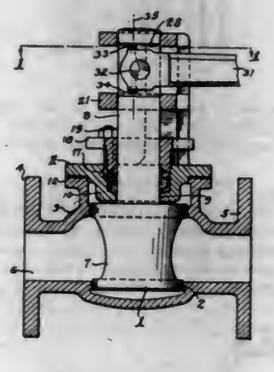
1. In a printing telegraph system, a keyboard transmitter and a receiving printer at a station associated with a line circuit, a selector bar in said printer actuated on receipt of a particular signal over said line, and mechanical means associated with said keyboard transmitter operable on the actuation of the said selector bar in said printer to transmit a signal or group of signals characteristic of said transmitter.

1,879,525. START-STOP MECHANISM. REGINALD DENNIS SALMON, Croydon, England, assignor to Creed and Company, Limited, Croydon, England. Filed July 28, 1931, Serial No. 553,577, and in Great Britain May 14, 1931. 8 Claims. (Cl. 178—53.1.)



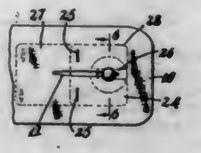
1. A start-stop mechanism comprising a rotatable friction clutch, a detent controlling the rotation of said clutch, spring means tending to actuate said detent to a position to release said clutch member for rotation, cam means actuated by said clutch during rotation except at its release, means operated by said cam means to immediately return said detent positively to a position to arrest said clutch, and means controlling the actuation of said detent under the influence of said spring means for releasing said clutch.

1,879,526. PLUG COCK. HORACE SAMMS, Holmesburg, Pa., assignor to American Manganese Bronze Company, Holmesburg, Philadelphia, Pa. Filed May 6, 1931. Serial No. 535,513. 4 Claims. (Cl. 251—97.)



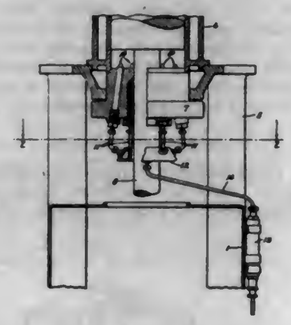
1. A plug valve casing having a tapered seat therein, a tapered valve plug rotatably mounted in said seat and axially movable relative to said seat, a valve stem extending from said plug, a standard extending from said casing and having apertures formed therein to provide bearings for said stem, and a handle pivoted directly to said stem to swing about an axis perpendicular to the axis of said plug, said handle being provided with cam means engaging said standard for moving said plug axially relative to said seat and for locking it in any desired position of angular adjustment relative to said seat.

1,879,527. PERMANENTLY ATTACHED COLLAR BUTTON. JOSEPH SANSONE, Jersey City, N. J. Filed Apr. 16, 1931. Serial No. 530,480. 5 Claims. (Cl. 2—127.)



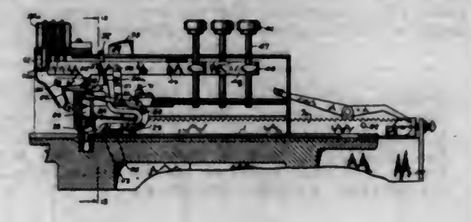
1. A permanent button support collar band or the like comprising a band, a plurality of button holes formed in the band, collar buttons supported in said button holes, and adjustable means for locking said collar buttons in place, said means including a flat semi-flexible member formed with a plurality of apertures and a cutout portion on one edge, said cutout portion of a width for substantially accommodating the shank of the collar button, said member being disposed between the front facing and rear material of the collar band and directly behind the button hole and around the shank of the collar button to prevent removal of same.

1,879,528. INTERNAL COMBUSTION ENGINE. FRIEDRICH SASS, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 27, 1929, Serial No. 366,136, and in Germany June 21, 1928. 2 Claims. (Cl. 128—32.)



1. The combination with an engine cylinder having a piston rod passing through one head of said cylinder, of a plurality of atomizing nozzles for solid injection fixed in said head, an annular shaped fuel manifold surrounding said piston rod, conduits connecting said nozzles in parallel to said fuel manifold, and a fuel valve for controlling the flow of fuel to said fuel manifold.

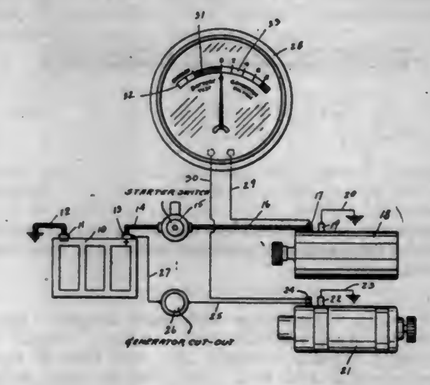
1,879,529. PERFORATED CARD CONTROLLED MACHINE. JOHN THOMAS SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1930. Serial No. 494,607. 14 Claims. (Cl. 73—51.)



1. In a machine of the class described, means for feeding record cards having columns of perforations, means for sensing the perforations in each column as the card is fed through the machine, means controlled by the sensing means for causing operation of the feeding means and means operated by each sensing means for locking the feeding means against operation.

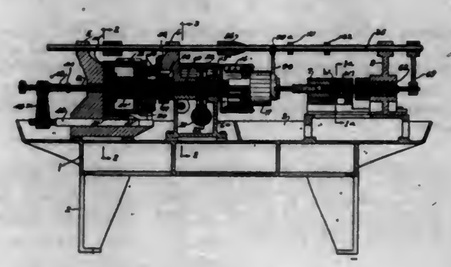
1,879,530. BATTERY AND GENERATOR TESTING APPARATUS FOR MOTOR VEHICLES. JOSEPH C. SCHAF, Jr., Indianapolis, Ind. Filed Apr. 19, 1930. Serial No. 445,536. 3 Claims. (Cl. 177—311.)

1. The combination with a storage battery, of a motor, an electric connection between one terminal of said motor and one terminal of said battery, a switch, electric connections between said switch and the opposite battery terminal and between said switch and the opposite motor terminal, a generator, an electric circuit between one terminal of said generator and the first-mentioned battery terminal, a second switch, electric connections between said second switch and the second-mentioned battery terminal and between said second switch and the opposite terminal of said generator, a meter, an electric connection between one terminal of said meter and the said opposite



motor terminal, and an electric connection between the opposite meter terminal and the said opposite generator terminal.

1,879,531. MACHINE TOOL. BERNARD P. SCHILTZ, Cleveland, Ohio, assignor to The Foote-Burt Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 22, 1929. Serial No. 387,648. 4 Claims. (Cl. 10—134.)



1. In work cutting machine wherein there is a holder for work and a holder for a tool to act on the work, the combination of a driving head and means to support the same for rotation but in axially fixed position on the machine, a driving mechanism associated with the head for rotating the same, means associated with the head carrying one of said holders, arranged to be moved longitudinally of the head to permit relative feeding movement between such work and tool, there being a permanent driving connection between said means and head, comprising a series of longitudinally extending ears on said means, radial studs carried by the ears, rollers carried by the studs comprising inner and outer ball races and respectively interposed sets of balls, there being inwardly extending longitudinally extending guideways formed in the driving head in embracing contact with said outer races.

1,879,532. CANT HOOK FOR BARRELS. OSCAR H. SCHLEBECKER, Fort Wayne, Ind., assignor of one-half to George W. Settles, Fort Wayne, Ind. Filed Mar. 3, 1932. Serial No. 596,588. 4 Claims. (Cl. 294—15.)

1. A cant hook for barrels consisting of a lever having on one end thereof a cushion, a fulcrum frame having divergent side members and a foot contiguous with the outer ends thereof, the opposite ends of said members being pivotally connected with said lever at a point

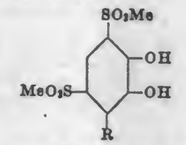
thereon adjacent its cushioned end, and a grapple frame having divergent arms and a crosspiece connecting same, the outer end of each arm having a hook formed thereon,



the opposite ends of said arms having pivotal connection with said lever at a point thereon spaced back from said fulcrum frame.

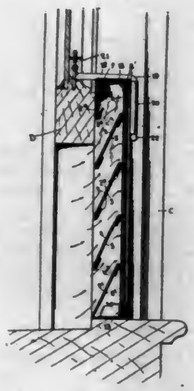
1,879,533. CALCIUM COMPLEX SALTS. HANS SCHMIDT, Wuppertal-Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 27, 1931, Serial No. 518,913, and in Germany Mar. 7, 1930. 8 Claims. (Cl. 260—155.)

1. The process which comprises reacting upon 2 mols of a compound of the probable formula:—



wherein R stands for a substituent of the group consisting of hydrogen and hydroxyl and Me stands for an alkali metal, with about 1 gram atom of calcium in its salt form in an aqueous solution and adding about 1 gram atom of calcium in its hydroxide form to render the mixture about neutral.

1,879,534. WINDOW SCREEN. JOHN SCHMIDT, Buffalo, N. Y., assignor to Schmidt Sheet Metal Works, Inc., Buffalo, N. Y. Filed Mar. 4, 1930. Serial No. 433,065. 8 Claims. (Cl. 98—99.)

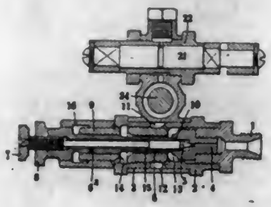


8. A window screen comprising a pair of frames, guideways formed on the frames adapted to telescope one with the other, and removable mesh filler frames slidably positioned in the guideways of the first mentioned frames.

1,879,535. NEW VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. ROBERT E. SCHMIDT, BERTHOLD STEIN, and KURT BAMBERGER, Elberfeld, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929, Serial No. 350,128, and in Germany Apr. 7, 1928. 18 Claims. (Cl. 260—60.)

1. Process which comprises reacting upon 2-amino-3-cyano anthraquinone, the nucleus of which may be further substituted by halogen atoms, amino-hydroxy- or alkoxy groups, with a compound of the group consisting of copper and copper salts in the presence of a liquid tertiary cyclic base and at a temperature between about 150–250° C.

1,879,536. CARBURETOR. HUGO SCHNEEBELI, Courbevoie, France. Filed Nov. 18, 1929, Serial No. 408,133, and in France Nov. 21, 1928. 3 Claims. (Cl. 261—49.)



1. A carburetor for internal combustion engines having an atomizing chamber therein, a fuel feed nozzle in communication with the atomizing chamber, means for introducing primary air into the atomizing chamber, said nozzle having a seat thereon, a sleeve constituting a valve for engaging the seat when the carburetor is in its inoperative position, a needle valve extending through the sleeve, said nozzle having a fuel orifice therein, said needle valve cooperating with the orifice to regulate the supply of fuel therefrom into the atomizing chamber.

1,879,537. ANTI-HALATION LAYERS FOR PHOTOGRAPHIC MATERIAL. WILHELM SCHNEIDER, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Oct. 15, 1930, Serial No. 488,990, and in Germany Oct. 30, 1929. 4 Claims. (Cl. 95—8.)



1. Photographic materials provided with an anti-halation layer containing a dye of the fuchsone series having at least one carboxylic group in the molecule.

1,879,538. QUINOLINE DERIVATIVE AND THE PROCESS OF PRODUCING THE SAME. FRITZ SCHÖNHÖFER, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 7, 1931, Serial No. 514,310, and in Germany Feb. 17, 1930. 12 Claims. (Cl. 260—38.)

1. In the process of preparing 5.6-dialkoxy-8-aminoquinolines the steps which comprise heating a 5-halogen-6-alkoxy-8-nitroquinoline with the alcoholate of a light metal in the presence of the corresponding alcohol and reducing the nitro group of the 5.6-dialkoxy-8-nitroquinoline produced to form the amino group.

1,879,539. DOUBLE COMPOUNDS OF THE ACRIDINE SERIES. KARL SCHRANZ and HANS-PAUL MÜLLER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 9, 1929, Serial No. 412,936, and in Germany Dec. 13, 1928. 5 Claims. (Cl. 260—36.)

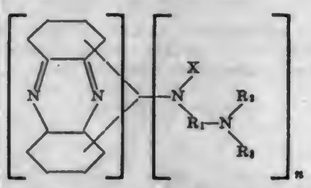
1. Double compounds of the probable general formula:



wherein Ac_1 and Ac_2 represent acid radicals and X stands for an alkyl group, said double compounds forming red crystals, being more soluble in water than each of their components and simple mixtures thereof, decomposing when heated without melting, being valuable therapeutical products especially for antiseptic purposes.

1,879,540. COMPOUNDS OF THE DIAZINE SERIES. WERNER SCHULEMANN, Vohwinkel, near Elberfeld, FRITZ MIETZSCH, Elberfeld, Germany, and AUGUST WINGLER, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,557, and in Germany Sept. 11, 1924. 4 Claims. (Cl. 260—29.)

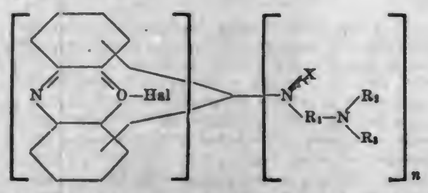
1. As new products, the azine compounds of the probable general formula:



wherein X stands for hydrogen or methyl, R_1 stands for an ethylene radical which may be substituted by the hydroxyl group, R_2 and R_3 stand for the ethyl group which may be substituted by an amino group, and "n" stands for one of the numbers one and two, and wherein the nuclei may be further substituted by a substituent of the group consisting of methyl, methoxy, phenyl, halogen and the amino group.

1,879,541. COMPOUNDS OF THE OXAZINE SERIES. WERNER SCHULEMANN, Vohwinkel, near Elberfeld, FRITZ MIETZSCH, Elberfeld, Germany, and AUGUST WINGLER, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,558, and in Germany Sept. 11, 1924. 6 Claims. (Cl. 260—28.)

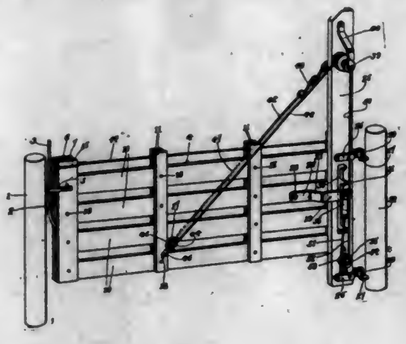
1. As new products, the oxazine compounds of the probable general formula:



wherein X stands for a substituent of the group consisting of hydrogen, alkyl, R_1 stands for an ethylene radical which may be substituted by hydroxyl groups, and R_2 and R_3 stand for ethyl groups which may be substituted by the amino group, "n" stands for one of the numbers one and two, and wherein the nuclei may be further substituted, by a substituent of the group consisting of phenyl, halogen and the dimethylamino group, said compounds being soluble in water.

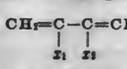
1,879,542. FARM GATE. JOHN C. SCHULTE, Norway, Iowa. Filed Nov. 7, 1931. Serial No. 573,677. 4 Claims. (Cl. 39—14.)

1. The combination with a gate, of a vertically disposed hinged carrier, a combined pivoting, supporting and connecting means for the gate extending through the gate and carrier for connecting one end of the gate to the carrier, said carrier being slotted for the vertical adjustment bodily of said means and gate relative to the carrier, one of the walls of said slot having superposed notches coacting with said means for supporting the latter in its adjusted position, and flexible elements attached to the carrier and to said means, slidably connected to said gate at a point remote from the carrier and automatically and simultaneously winding off and on the carrier for maintaining the gate in a level position.



1,879,543. PROCESS FOR THE COAGULATION OF LATEXLIKE EMULSIONS. FRITZ SCHWERDTEL, Cologne-Mulheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 16, 1930, Serial No. 502,863, and in Germany Dec. 23, 1929. 18 Claims. (Cl. 260—6.)

1. The process which comprises coagulating a latexlike emulsion obtained by the polymerization in emulsion of a diolefine hydrocarbon of the general formula:—

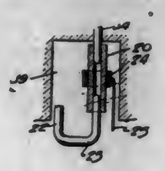


wherein z_1 and z_2 stand for hydrogen or methyl, by adding thereto an alkali metal salt.

1,879,544. ELECTRON DISCHARGE DEVICE. SALVATORE SCOGNAMILLO and PAUL ARNDT, New York, N. Y., assignors of one-third to David Shlaifer, New York, N. Y. Original application filed Apr. 9, 1928, Serial No. 268,705. Divided and this application filed July 21, 1931. Serial No. 552,257. 8 Claims. (Cl. 250—27.5.)

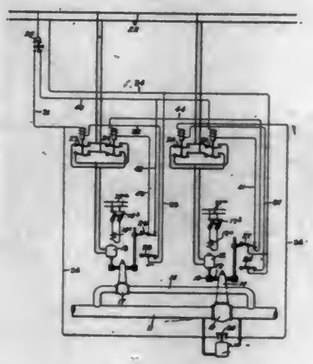
1. An electron discharge device including a base, an evacuated vessel carried thereby, a cathode and two elec-

trodes, a condenser, one of the respective terminals of the two electrodes being connected to said condenser, a metal



ring disposed in inductive relation to the condenser, and five prongs connected to the base and connected two to the cathode, one each to the electrodes, and one to the ring.

1,879,545. ELECTRICAL CONTROL SYSTEM. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Jan. 5, 1929. Serial No. 330,650. 12 Claims. (Cl. 137—139.)



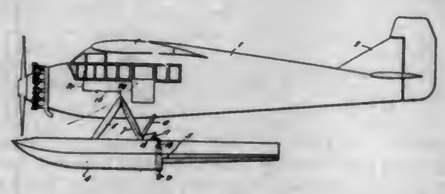
1. A system of fluid control for valves and the like comprising a motor for operating a valve, means for effecting a reduction in fluid pressure across the valve and means responsive to said reduction in pressure for controlling said motor.

1,879,546. DRIVING MEANS FOR APPLICATORS. CARL F. SEIBERT, Hamilton, and ELMER J. SEIBERT, Cincinnati, Ohio. Filed June 24, 1929. Serial No. 373,302. 9 Claims. (Cl. 192—18.)



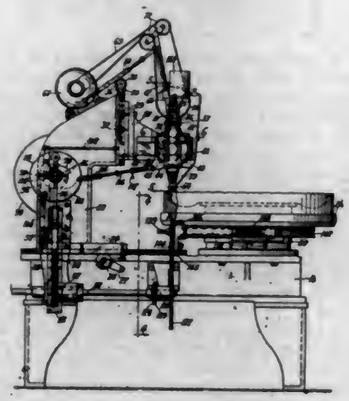
1. In a device of the character described, the combination of a rotatable head, a manipulating handle therefor, said handle comprising a tube, a drive-shaft in said tube, a flexible drive-shaft having operative connection therewith, a driving member in said tube for said head, releasable connecting means in said tube between said first-named drive-shaft and said driving member, a brake in said tube, said releasable connecting means and said brake each including a movable member and manual control means having operative connection with each of said movable members, said manual control means extending to outside said handle where it is provided with a manipulating part, said manipulating part located at one end of said handle, and said releasable connecting means located in said handle between said manipulating part and said flexible drive-shaft.

1,879,547. SEAPLANE. HARRY H. SEMMES, Chevy Chase, Md., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,402. 2 Claims. (Cl. 244—2.)



1. In a seaplane pontoon having a step, a well incorporated with the structure of said step, and a water brake retractable within said well to lie wholly within the surface of the pontoon.

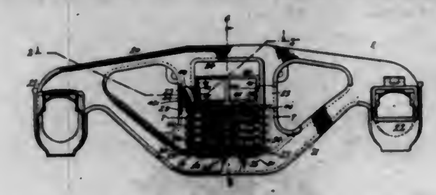
1,879,548. AUTOMATIC VENTING MACHINE. RETUS W. SETHMAN, Cuyahoga Falls, Ohio, assignor to The National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed May 21, 1930. Serial No. 454,288. 4 Claims. (Cl. 90—15.)



1. In a tire mold venting machine, a bed, an indexing table rotatably supported thereon, a head adjustably secured to said bed, a vertically adjustable arm fixed to said head, a slide on said arm, a swivel head adjustably secured to said slide, a spindle adjustably secured to said swivel head, a milling cutter journaled at the lower end of said spindle, means for driving said milling cutter, a cam shaft, means for uniformly rotating said cam shaft, a cam mounted on said shaft, a rocker arm pivoted adjacent said shaft and cooperating with said cam, linkage pivotally connecting said slide and said rocker arm, a crank secured to said cam shaft, a rack reciprocated by said crank, an indexing shaft, a pinion cooperating with said rack, ratchet means securing said pinion on said indexing shaft, and change gears connecting said indexing shaft to said table.

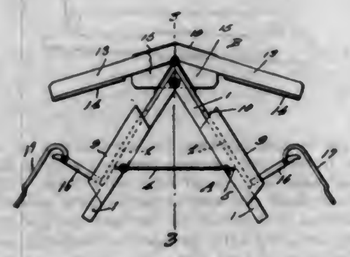
1,879,549. CAR TRUCK. CLIFTON W. SHERMAN, Hamilton, Ontario, Canada. Filed June 11, 1930. Serial No. 460,390. 3 Claims. (Cl. 105—197.)

1. A car truck comprising side frames each having a window the opposite upright sides of which are provided with vertical guideways and the bottom of which has a depressed seat forming shoulders at opposite ends of the seat and elevated shelves adjacent to said shoulders; a spring plank having its ends arranged in the seats of said frame and adapted to engage its opposite edges with said shoulders; lower wear plates resting on the ends of said spring plank and having laterally projecting lugs



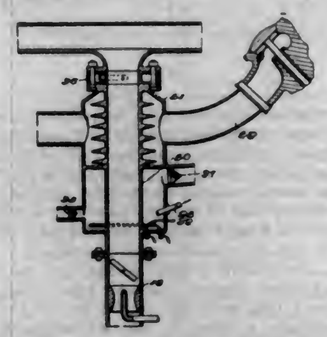
projecting into said guideways and resting on said shelves; spring means resting on said lower wear plates; and a bolster resting at its opposite ends on said spring means.

1,879,550. TOBACCO PRESS. ALEXANDER F. SHIELDS, Mount Sterling, Ky. Filed Sept. 24, 1931. Serial No. 564,928. 5 Claims. (Cl. 100—2.)



1. A tobacco press of the class described comprising a pair of end members of inverted V-shape, a board at each side of the end members having its ends connected to intermediate portions of the limbs thereof, a pressing member pivotally connected at its center to the upper end of the structure formed by the end members and comprising a pair of end members and a pair of boards connected therewith, for cooperating with the first-mentioned boards to press the tobacco between them, and means for forcing each board of the pressing member towards a first-mentioned board to clamp the tobacco leaves between the boards.

1,879,551. INTERNAL COMBUSTION ENGINE. JAMES M. SHOEMAKER, Washington, D. C. Filed June 8, 1929. Serial No. 369,459. 2 Claims. (Cl. 123—122.)



1. A device for heating the intake pipe of an internal combustion engine, prior to and after the starting of the engine, including a jacket surrounding a portion of the intake pipe and forming with the latter two annular chambers, means for introducing fuel into one of said chambers and for igniting said fuel therein, means operatively associated with said igniting means for indicating when the intake pipe has been raised to a predetermined temperature, and means for conducting exhaust gases from the engine through the other of said chambers.

1,879,552. BRUSH CONSTRUCTION. JESUS R. SILVA and ANTONY KRAHMER, El Paso, Tex. Filed Feb. 28, 1931. Serial No. 519,181. 1 Claim. (Cl. 15—194.)



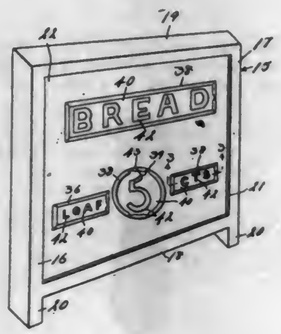
A shaving brush comprising a handle including a hollow barrel of equal diameter throughout its length, having a closed inner end provided with an opening, a cap fitting within the opposite end of the barrel and serving as a closure therefor and provided on the inner surface thereof with an internally threaded socket, a rod extending through the opening of the closed end of the barrel and threadedly engaging with the socket member of the cap, a spring surrounding said rod and abutting at one end with the closed end wall of the handle and at its opposite end with the interior of said cap for permitting movement of the cap under spring tension in a direction toward the closed end wall thereof, a frusto-conical shaped socket abutting with the closed end wall of the barrel, said rod being provided with a hooked extremity disclosed within said socket, bristles extending in the socket and detachably engaging with said hook.

1,879,553. SHAVING BRUSH. JESUS R. SILVA and ANTONIO KRAHMER, El Paso, Tex. Filed Apr. 2, 1931. Serial No. 527,256. 1 Claim. (Cl. 15—176.)



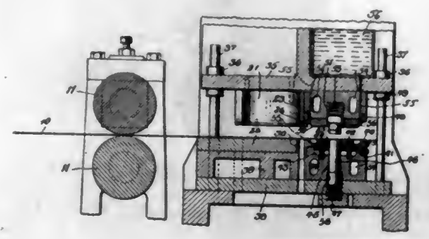
A shaving brush comprising a handle having a reduced cylindrical socket leading in from one end thereof, a sleeve mounted upon the handle and surrounding said socket and spaced therefrom, said sleeve having diametrically arranged slots leading in from the edge thereof, said slots being provided at their opposite inner ends with recesses comprising bayonet slots, a coil spring located in the socket of the handle and having one end portion extending into the sleeve, a disk secured to the last-mentioned end portion of the spring, a head having bristles and adapted to fit snugly within the sleeve and in contact with the disk and compress said spring, said head having diametrically disposed laterally extending studs adapted to enter the bayonet slots and alternately engage with the recesses thereof.

1,879,554. COMBINATION SIGN. ADELBERT C. SIMKINS, Pleasantville, N. J. Filed July 1, 1930. Serial No. 465,095. 3 Claims. (Cl. 40—63.)



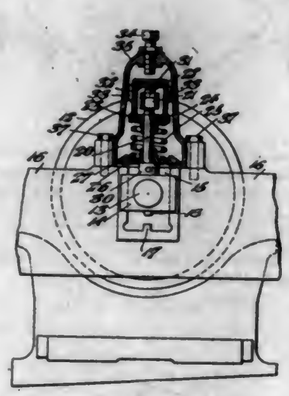
1. A combination sign consisting of a frame provided with a seat at its front portion, sign elements for interchangeable and selective mounting in the frame against said seat, a holder having its lower end journalled in the frame whereby the upper end may be swung in and out, said holder comprising a back, bottom and side walls, bars transversely mounted between the side walls and fixed thereto and rubber pads mounted on the outer faces of said bars to engage a sign element in the frame and resiliently hold said sign element on its seat and latches carried by the frame for coaction with the holder to retain the latter in place within the frame.

1,879,555. METHOD AND MACHINE FOR CUTTING AND FORMING PLATES AND OTHER ARTICLES. ECKLEY M. SIMMONS, Ridgewood, N. Y. Filed Oct. 9, 1930. Serial No. 487,602. 18 Claims. (Cl. 18—19.)



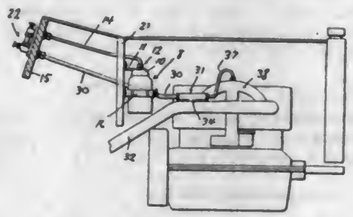
7. In a machine of the class described, means for feeding a sheet of material, cutting means for cutting the sheet of material to form one side of a blank, and additional cutting means at a greater distance from the first mentioned means than the first mentioned cutting means to subsequently form another side of the blank.

1,879,556. SUPPORT FOR IRONING MACHINE ROLLS. JAMES H. SKITT, Philadelphia, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1930. Serial No. 422,297. 6 Claims. (Cl. 68—9.)



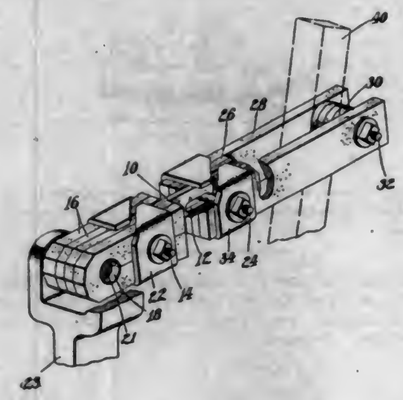
5. In an ironing machine the combination of a steam chest, an ironing roll, springs coacting with a fixed part to support said roll spaced from said chest, and means moving with said roll and operative in a predetermined lifted position of said roll to lift said springs from said fixed part, whereby said springs are rendered ineffective and the weight of said roll acts solely upon the goods being ironed.

1,879,557. VAPOR SUPPLY DEVICE FOR ENGINES. ORLANDO O. SKREEN, Minneapolis, Minn. Filed Mar. 7, 1930. Serial No. 434,012. 1 Claim. (Cl. 123—25.)



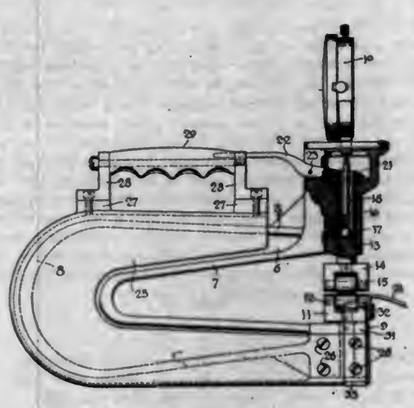
In combination with the inlet and exhaust manifolds of an internal combustion engine, a T-coupling, a cup-shaped member connected with the central part thereof and extending into the exhaust manifold, a pipe connecting one end of the coupling to the inlet manifold, a sight tube including a pair of tubular members, a transparent tubular member formed between them, a tube connecting one of the first-mentioned tubular members to the T-coupling, a water tank, a tube passing into the same adjacent the bottom thereof, a second tube connecting the last-mentioned tube with the second one of the pair of tubular members, a valve in the last-mentioned tubular member for controlling the flow of fluid therethrough into the transparent tubular member, the other tubular member of the pair having an air vent therein, and a valve for controlling the same.

1,879,558. LUG MEMBER FOR LOOMS. GRAHAM SLAUGHTER, Greenville, S. C. Filed Nov. 19, 1930. Serial No. 496,743. 8 Claims. (Cl. 139—153.)



1. A lug member for looms, including a short lug comprising a stack of flat straight blanks clamped together, perforated as a stack, and each individually slitted from its perforation through one end.

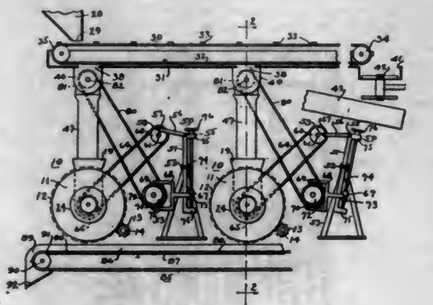
1,879,559. RUNNING SHEET MICROMETER. CHARLES E. SMART, Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed June 2, 1930. Serial No. 458,982. 5 Claims. (Cl. 33—147.)



1. The combination with a micrometer including a bowed frame having two normally substantially horizontal arms one above the other, and measuring instrumentalities mounted adjacent the ends of said arms and adapted to measure objects positioned between the arms, of a supporting member connected to the lower arm adjacent the extremity thereof, extending thence above the upper arm and having a hand grip structure above the upper arm.

1,879,560. PAPER MANUFACTURE. CHARLES E. SMITH, Sylva, N. C., assignor to Mead Paperboard Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,281. 11 Claims. (Cl. 92—20.)

1. Apparatus of the character described, comprising in combination, a mechanical disintegrator, means for feeding fibrous material to said disintegrator, means for supplying fibrous material to said feeding means, means for conveying an excess of fibrous material to said supply means,



whereby said supply means is maintained filled, and means for controlling the rate of feed of said supply means to said feeding means.

1,879,561. DIFFUSER FOR CENTRIFUGAL COMPRESSORS. CHESTER W. SMITH, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 13, 1931. Serial No. 529,697. 7 Claims. (Cl. 230—132.)

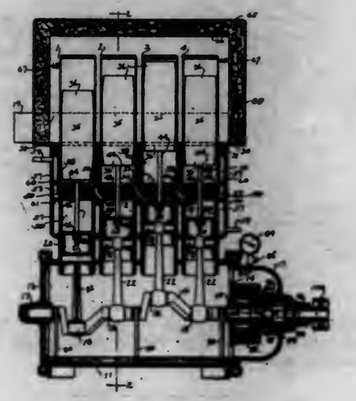


1. A centrifugal compressor comprising a casing, an impeller, and a diffuser having discharge vanes which define diffuser passages, there being an obstruction or obstructions around which the discharge vanes are built, necessitating an uneven spacing of the vanes, characterized by the fact that the vanes although unevenly spaced are so located and arranged that the ratio of the inlet height to the outlet height and of the inlet arc to the outlet arc of the diffuser passages is in each instance substantially a constant.

1,879,562. PROCESS OF MANUFACTURING STORAGE BATTERY SEPARATORS. EDWARD W. SMITH, Philadelphia, Pa. Original application filed Apr. 2, 1929, Serial No. 352,047. Divided and this application filed Apr. 21, 1930. Serial No. 446,194. 9 Claims. (Cl. 136—148.)

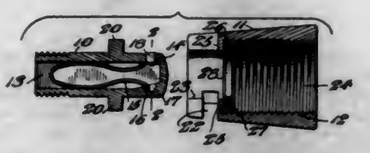
1. A process comprising, forming a sheet of a fibrous inert material and sodium silicate and a siliceous powder, allowing the sheet to set and harden, treating with sulphuric acid forming sodium sulphate, and dissolving out the resultant sodium sulphate leaving solid porous silica.

1,879,563. HEAT ENGINE. HARRY F. SMITH, Dayton, Ohio, assignor to The Gas Research Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 27, 1930. Serial No. 439,377. 7 Claims. (Cl. 60—24.)



1. In a multicylinder hot air engine, a plurality of cylinders, a piston for each of said cylinders, a like number of displacement cylinders, each of said displacement cylinders being mounted in alignment with one of said first named cylinders, a displacement member for each of said displacement cylinders, rods directly connecting each of said pistons with its aligned displacement member, a common crank shaft, a driving connection between each piston and said crank shaft, and means providing a common closed fluid system for all said displacement cylinders and said piston cylinders, including an enclosing crank case for said crank shaft and pistons, and connections providing fluid communications between each displacement cylinder and an adjacent non-aligned piston cylinder.

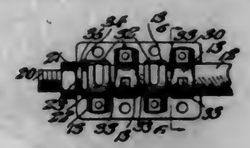
1,879,564. GREASE FITTING. JAMES J. SMITH, Philadelphia, Pa., assignor, by mesne assignments, to Endurable Products Co., Inc., Philadelphia, Pa., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,658. 3 Claims. (Cl. 184—105.)



1. As a new article of manufacture a lubricant nipple having an inlet port in the side thereof and a longitudinally disposed passage communicating with said port to form a discharge outlet from said nipple, a U-shaped spring compressed within said passage and abutting both sides thereof to close said inlet under non-operating conditions but yieldable under pressure to open said inlet and withdraw one side of said spring from contact with said passage to provide a discharge channel under operating conditions, and a plug secured to said spring to fit within said port.

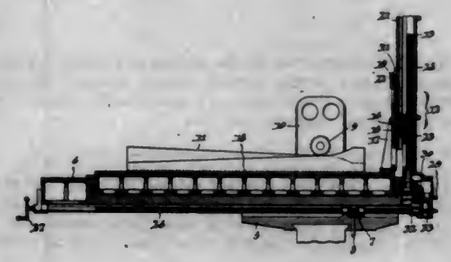
1,879,565. PRESSURE COUPLING. JAMES J. SMITH, Philadelphia, Pa. Filed Jan. 23, 1931. Serial No. 510,717. 5 Claims. (Cl. 285—84.)

1. A coupling part for the end of a hose comprising a tubular insert to enter the bore of a hose, a coupling member on said insert, clamps about the exterior of said hose for clamping said hose to said insert and arranged in spaced relation along said hose, a casing about said hose



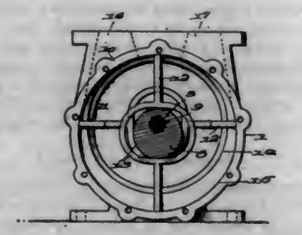
having thrust walls for engagement respectively by said clamps, and means to anchor said casing in operative position.

1,879,566. MEANS FOR MILLING SURFACES REQUIRING A UNIFORM SCREW PITCH. JOHN W. SMITH, Philadelphia, Pa. Filed June 4, 1929. Serial No. 368,208. 3 Claims. (Cl. 90—20.)



1. A pitch generating mechanism for machining die blocks and other surfaces requiring a variable twist comprising a vertical member mounted on a horizontally movable support, an adjustable slide guided by the vertical member affording pivotal support for a relatively oscillatory member, a pitch control pivot engaged with the slide and afforded bearing by a stationary element on the oscillatory member, said slide having a path of movement passing through the axis of the pitch control pivot, an element pivotally coordinated to the slide and capable of rocking movement relative to the pitch control pivot in a plane at right angles to the oscillatory member aforesaid, and means to effect uniform co-operative movements of the slide and pivotal element while progressing the article being machined.

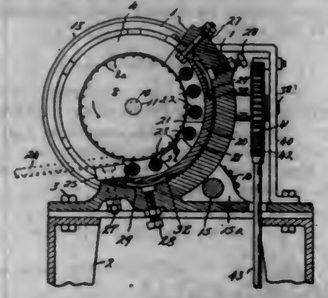
1,879,567. PUMP. ORVILLE O. SMITH, Prescott, Ariz., assignor of one-half to Louis E. Hesla and Walter H. Duncan, Prescott, Ariz. Filed Mar. 25, 1930. Serial No. 438,805. 1 Claim. (Cl. 103—137.)



A pump of the character described comprising a housing having a chamber therein, a stationary shaft disposed in said chamber, a rotary shaft journaled eccentrically

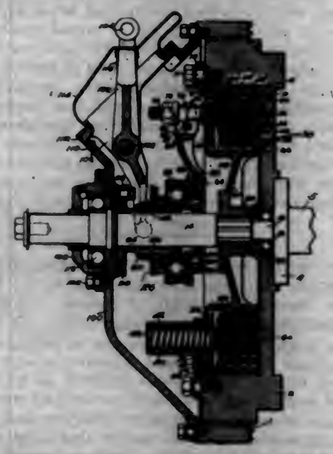
of the stationary shaft, a cylindrical guide member having a flange at an end thereof fixed to the rotary shaft at one side of the chamber, said guide member having radially extending slots in the outer wall thereof, a single pair of vane cores disposed in the chamber and having openings therein receiving the stationary shaft, the cores being arranged side by side within the cylindrical guide member, vanes extending radially in different directions from each of the vane cores and movable through the slots in the guide member, the vanes carried by each core being extended laterally on one side only thereof and overlapping the other core of the pad.

1,879,568. ROLLING MACHINE. JOHN SNEED, Royal Oak, Mich. Filed Oct. 14, 1929. Serial No. 399,653. 20 Claims. (Cl. 80—5.)



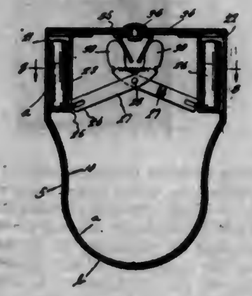
15. A rolling machine comprising a housing, a main roll journaled in said housing, a carrier partially extending around the roll within the housing, means for adjusting said carrier to and from the roll, and means upon said carrier for deflecting work around the roll, including a deflector block positioned adjacent but spaced from the ingress of the work, for bearing the major stresses incident to such deflection, and relatively lighter deflecting rolls for additionally assisting the bending operation.

1,879,569. CLUTCH. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed Aug. 16, 1928. Serial No. 300,112. 9 Claims. (Cl. 192—13.)



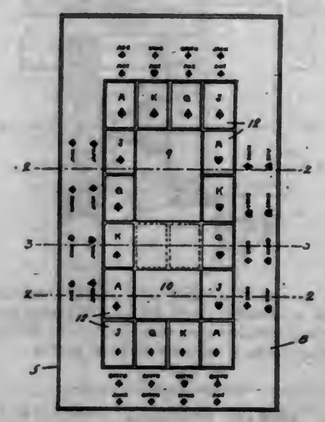
1. A friction clutch comprising, in combination, an engine fly wheel, a driving clutch member having a flange engaging the rear face of said fly wheel, said member having a cylindrical portion extending into said fly wheel, said member having an inwardly directed flange at its outer end, means by which said first flange is secured to said fly-wheel, a pressure ring arranged adjacent to the inner face of said cylindrical portion and keyed to turn therewith, but adjustable axially of said driving member, a driven shaft, a driven clutch member arranged within said driving clutch member, a series of clutch rings interposed between said pressure ring and said fly wheel and alternately keyed to the driving and driven clutch members, a series of springs interposed between said pressure ring and said second flange to apply pressure to said clutch rings, and clutch levers carried by said second flange to release said clutch rings.

1,879,570. VANITY CASE. MICHAEL SOPSKO, Cleveland, Ohio. Filed Feb. 26, 1932. Serial No. 595,367. 4 Claims. (Cl. 132—83.)



1. In combination, a container, said container having a pair of openings therein, a pair of slidable article holders in the container alined with the said openings, a single closure for the openings, and connections between the closure and the holders whereby the holders will be moved toward the openings when the closure is disposed in opened position.

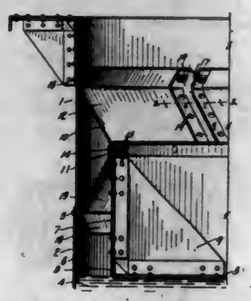
1,879,571. MOVABLE BLOCK PUZZLE. HARRIS W. SPAULDING, Haverhill, Mass. Filed July 28, 1931. Serial No. 553,519. 3 Claims. (Cl. 273—132.)



1. A movable block puzzle comprising a rectangular field having a main rectangular path and a series of blocks having characters thereon distinguishing each from all the others and slidably fitted to and supplied in sufficient number to fill said path completely, the transverse portions of said path and the longitudinal portions thereof be-

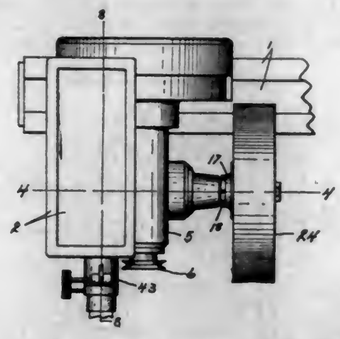
tween the transverse portions each having the same number of block spaces and said field having a transverse auxiliary path opening to directly opposite intermediate spaces in said longitudinal portions of the main path and having one half the number of block spaces between said portions as are provided in the transverse portions of the main path.

1,879,572. FLOATING DECK. ANDREW G. SPEEGLE, Iola, Kans. Filed Oct. 17, 1929. Serial No. 400,265. 5 Claims. (Cl. 220—26.)



1. In a floating deck for tanks, peripheral sealing means for the deck comprising spring metal plate sections having upper and lower wings diverging outwardly toward the walls of the tank to sealingly contact therewith and prevent leakage around the periphery of the deck, said wings being arranged for independent movement relatively to each other, whereby one of the wings is sealingly engaged with the wall of the tank when the other is moving over an obstruction on the tank.

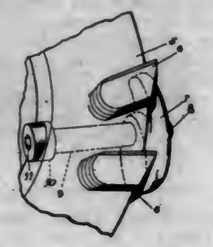
1,879,573. COMBINED MOVING PICTURE AND SOUND CAMERA. EARL IRA SPONABLE, New York, N. Y., assignor to Fox Case Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,541. 23 Claims. (Cl. 271—2.3.)



1. In a camera, a driving mechanism comprising a tubular shaft, a sprocket shaft within the tubular shaft, and a bearing in which both of said shafts are journaled having a bearing surface common to both shafts.

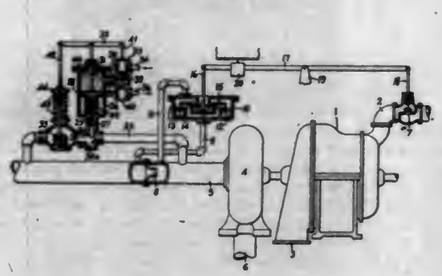
1,879,574. METAL WORKING TOOL. WILLIAM C. SPROUL, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Original application filed May 3, 1930, Serial No. 449,425. Divided and this application filed Jan. 2, 1931. Serial No. 506,132. 3 Claims. (Cl. 29—105.)

1. In an inserted tooth metal working tool the combination of a slotted head having helical half-threads formed in the base of the slot thereof and a cutter tooth for said slot having mating helical half-threads on its underside



to interlock with the helical half-threads in the base of the head slot, and means for rigidly and detachably holding the tooth in the slot.

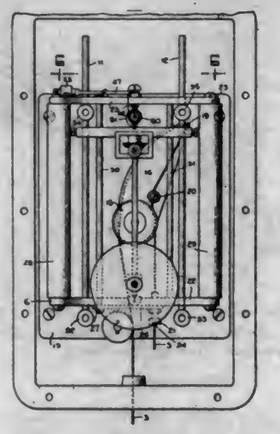
1,879,575. BAROMETER AND TEMPERATURE CORRECTING MEANS AND CONSTANT VOLUME GOVERNOR. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 5, 1931. Serial No. 520,330. 4 Claims. (Cl. 230—5.)



1. The combination with a turbine driven compressor having a governing mechanism adapted to be set to cause the compressor to deliver a constant volume of fluid under fixed conditions of temperature and pressure, the mechanism including a pressure-difference-creating device comprising a flow responsive device in the inlet conduit of said compressor, said governing mechanism being actuated by variations in pressure-difference, of means responsive to any variations in the conditions of temperature and pressure for varying the volume of fluid delivered without changing the setting of said governing mechanism, said means comprising a by-pass for said flow responsive device, a valve controlling the volume of flow through said by-pass, and a sealed diaphragm in said by-pass, containing a definite amount of fluid for causing movement of said valve, said diaphragm being responsive to variations in temperature and/or pressure of the supplied fluid.

1,879,576. SHIP SPEED INDICATOR AND DISTANCE REGISTER. RICHARD STAR, Brooklyn, N. Y. Filed Oct. 8, 1929. Serial No. 398,260. 3 Claims. (Cl. 235—61.)

3. A distance register and speed register for ships, including, a single speed pointer, means including a reciprocating carriage for moving said pointer and said distance registering means, and a band adapted to be unwound when said carriage moves in one direction and wound when the carriage moves in the opposite direction, and an accelerating arm connected to one end of said band, a bracket for loosely holding the arm in a certain position, said arm having an aperture, a stationary rod for guiding said carriage, said rod extending through said aperture and coacting with said arm, a plunger carried by said arm positioned to press against said rod, and a spring acting on the plunger for causing the plunger to continually pinch said rod, said bracket being connected with said carriage

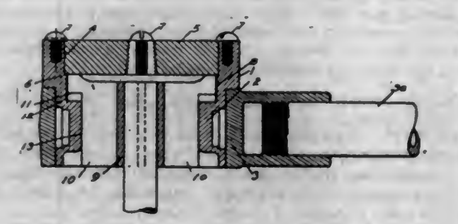


whereby when said carriage changes direction one end of the accelerator arm will in effect hesitate in following and thereby accelerate the movement of said pointer.

1,879,577. PROCESS FOR PRECIPITATING IRON FROM THE SOLUTIONS FREED FROM COPPER OBTAINED BY BURNING PYRITES WITH CHLORINE. FRIEDRICH WILHELM STAUF, Cologne-Deutz-on-the-Rhine, and HERMANN HAGENEST, Wiesdorf-Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 4, 1930, Serial No. 459,256, and in Germany July 12, 1929. 2 Claims. (Cl. 75—18.)

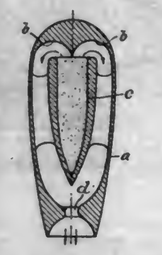
1. In the process for precipitating iron from copper free solutions obtained by lixiviating chlorinated burnt pyrites, extracting the burnt ores with solutions of the group consisting of water and diluted acids and removing the copper by cementation with iron the step which comprises oxidizing the iron and precipitating the sulfuric acid present by the addition of earth alkali metal chlorate, and precipitating the ferric ion formed by the addition of burnt lime.

1,879,578. DIESTOCK. LEO V. STOELTZLEN, Erie, Pa., assignor to Reed Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1929. Serial No. 389,276. 2 Claims. (Cl. 10—127.)



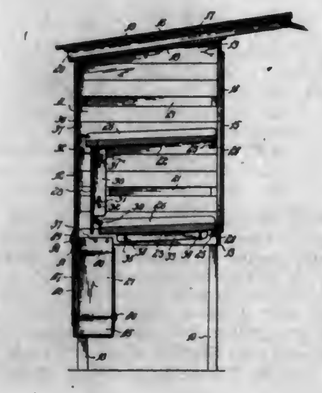
1. In a die stock, the combination of a body having a die-receiving socket and a guide-receiving socket opening through the die-receiving socket; a guide in the guide-receiving socket insertable through the die-receiving socket, said guide comprising a guide tube and radiating projections providing an opening through the guide outside of the guide tube, said radiating projections being seated in the guide socket; a die in the die socket securing the guide in the guide socket; and means securing the die in the die socket.

1,879,579. ROCKET. HERMANN STOLFA and RUDOLF ZWERINA, Vienna, Austria, assignors of one-sixth to Karl Pohl and one-sixth to Gustave I. Jahr, New York, N. Y. Filed Oct. 4, 1930, Serial No. 486,303, and in Austria Oct. 25, 1929. 5 Claims. (Cl. 102—23.)



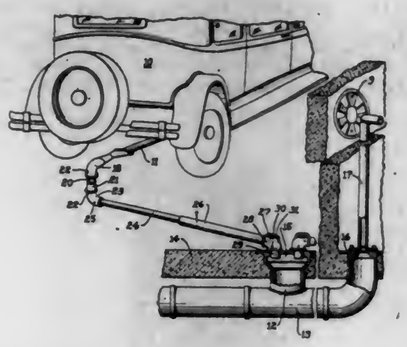
2. A rocket of the type equipped with a tapering nozzle, comprising an outer casing, a combustible charge, a combustion chamber therefor, and a passageway between said chamber and nozzle having a deflecting surface whereby the gases produced within the rocket by the burning of the combustible substance will be deflected substantially 180° from the path taken when issuing from said chamber.

1,879,580. RABBIT HUTCH. ABRAHAM DEWEY STONER, New Windsor, Md. Filed Sept. 18, 1931. Serial No. 563,604. 10 Claims. (Cl. 119—16.)



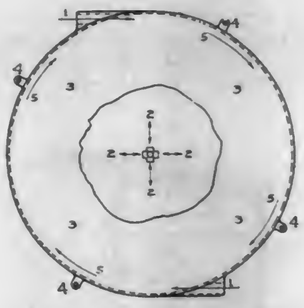
1. An animal house or rabbit hutch comprising an enclosure having a door at the front end thereof, a floor for the enclosure, and means for supporting the floor consisting of a hook extending rearwardly from the under side of the forward end thereof, a crossbar with which the hook engages located adjacent the front edges of the side walls of the enclosure against which the door closes, and adjustable means for supporting the rear end of the floor to vary the inclination thereof.

1,879,581. EXHAUST GAS CONVEYER. ROY A. STOUGAARD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 10, 1931. Serial No. 543,422. 5 Claims. (Cl. 104—52.)



1. In a system for disposing of engine exhaust gases in a garage, the combination with an outlet conduit and an engine exhaust pipe, of a connection comprised of a plurality of rigid sections, some of said sections being adjustably related.

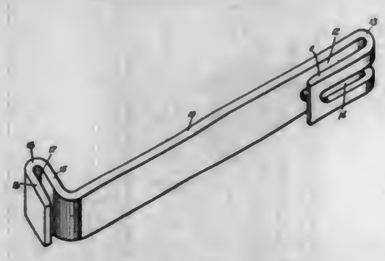
1,879,582. FLUID MIXING DEVICE. MINOR W. STOUT, Kansas City, Mo. Filed June 27, 1930. Serial No. 464,384. 4 Claims. (Cl. 261—79.)



1. In a fluid heating device of mixing type, a container having a substantially cylindrical portion and a bottom opening, means for injecting a fluid substantially at a tangent to, and on opposite sides of said cylindrical portion, a fitting forming passages for another fluid within the container, said passages being located near a transverse plane intersecting the injection means for said first named fluid and directed across the path of said first named fluid in both a lateral, and a transverse direction.

1,879,583. THREE WAY BENDING IRON. AUSTIN L. STOWELL, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 20, 1930. Serial No. 476,497. 1 Claim. (Cl. 81—15.)

A bending iron, comprising a bar having an end turned over in spaced relation to the body portion of the bar, and having a longitudinal slot in said end extending through the bent portion of the bar and oppositely into said body portion and into the spaced turned over portion to receive a piece of work in the slot and to present pairs of spaced edges of the bar against the opposite



sides of the work and prevent the rocking of the bar on the work and transmit bending stresses in an edgewise direction through the bar.

1,879,584. ANTISKID DEVICE. HENRY ST. PIERRE, Worcester, Mass. Filed May 1, 1931. Serial No. 534,304. 6 Claims. (Cl. 152—14.)

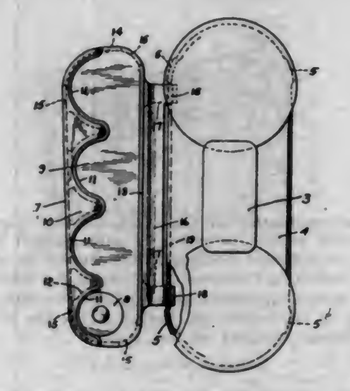


1. In an anti-skid device for automobile tires, the combination of a strap, a clamp for holding one end of it positively, a buckle to which the free end of the strap is adapted to be detachably connected and a chain connecting the clam pand buckle, said clamp and buckle being nearly of the same weight, whereby centrifugal force will not tend to advance either of them outwardly on the wheel to any material extent.

1,879,585. WEIGHT RACK FOR SCALES. THOMAS H. STRACHAN and WILLIAM H. FRYER, Dayton, Ohio, assignors to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Dec. 19, 1930. Serial No. 503,356. 1 Claim. (Cl. 248—20.)

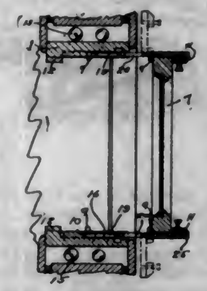
A rack for the weights used on a scale comprising an oblong integral structure, said structure having an inclined surface upon which said weights may rest, a raised portion extending longitudinally of one edge of said surface and recessed to retain said weights in spaced relation on said surface, and a rib extending longitudinally of the opposite edge of said surface for preventing said

weights from being slidably displaced from the recesses in the raised portion, and having offset portions for detachably and pivotally connecting said structure to the scale



whereby to retain said structure in spaced relation to the scale against accidental displacement relative to the latter.

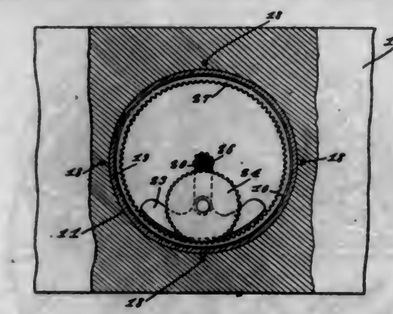
1,879,586. WINDOW CONSTRUCTION. FRANK P. J. STRUCKMEYER, San Francisco, Calif. Filed May 4, 1931. Serial No. 534,726. 3 Claims. (Cl. 20—12.)



1. A window including a frame having vertical ledges to afford runways; sashes reciprocating in said runways; telescoping means on the opposite sides of the window to removably support opposed portions of said ledges; portions of said telescoping means being hinged to swing the removable ledge portions into and out of way position, after the said ledges are simultaneously removed from the runway.

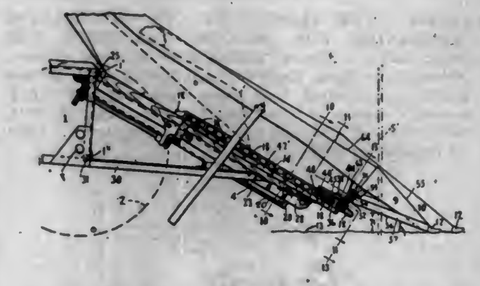
1,879,587. LEVEL AND PLUMB INDICATOR. HARRY P. SWAIN, Concord, N. H. Filed May 14, 1930. Serial No. 452,485. 1 Claim. (Cl. 33—218.)

A level comprising a beam having an opening passing transversely therethrough and having recesses at its opposite sides surrounding said opening, a housing concentrically arranged within the opening and provided at its inner surface with a set of gear teeth, dial plates closing the ends of the housing and bearing upon the inner walls of the recesses, said dial plates having peripheral slots, screws passing through the slots and entering the beam, a shaft journaled at the centers of the dial plates, indicator fingers carried at the ends of the shaft and disposed over the outer surfaces of the dial plates, a plumb member loosely mounted upon the shaft, a gear wheel journaled upon the plumb member and meshing with the teeth of the housing, a gear wheel fixed to the



shaft and meshing with the teeth of the first mentioned gear wheel and transparencies disposed over the outer surfaces of the dial plates.

1,879,588. CORN PICKING MACHINE. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed July 27, 1931. Serial No. 553,245. 10 Claims. (Cl. 56—106.)

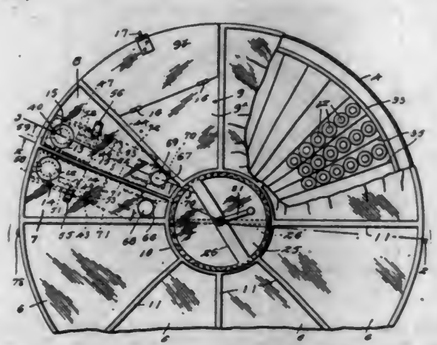


1. In a corn picking machine, a pair of inclined side-by-side snapping rolls, a pair of inclined movable side-by-side endless gathering chains above said rolls the path of each of which lies in the same inclined plane throughout and each provided with a series of gathering fingers, said chains being arranged such that the fingers move in a path over the space between said rolls for a substantial distance from the lower ends of said rolls, a pair of pivotally mounted inclined gathering shoes arranged in advance of the rolls and chains, the pivotal point of each shoe being located at its rear end and arranged in a plane above the path of travel of said fingers adjacent said shoes, the fingers moving through a path which extends at least as far forwardly in the machine as the pivotal points of said shoes, the space between the inner under surface of each shoe and the ground in advance of the path of the corresponding gathering chain and its fingers being unencumbered.

1,879,589. COMPOSITION FOR SMELTING HEARTHS. CYRANO TAMA, Berlin-Schoneberg, Germany, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Jan. 16, 1931, Serial No. 509,278, and in Germany Jan. 17, 1930. 8 Claims. (Cl. 266—43.)

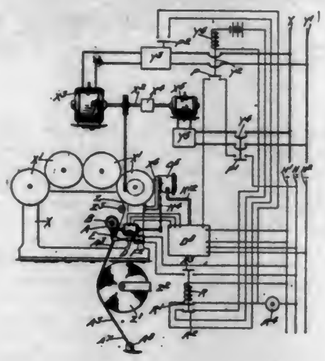
1. A refractory lining for induction furnaces, containing from 20 to 98% of beryllium oxide and another refractory material.

1,879,590. VENDING MACHINE FOR BOTTLE POP, BEER, AND THE LIKE. HAROLD PAUL TARRENCE and CHARLES HOWELL, Bloomfield, Iowa. Filed Apr. 25, 1931. Serial No. 532,938. 10 Claims. (Cl. 312—36.)



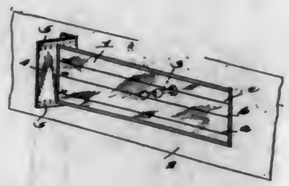
1. A bottle vending machine comprising a casing having a delivery opening, a door for the opening, a bottle supporting tray movable in tue casing to successively present the bottles to the delivery opening, and a collapsible guard under the control of the door and operated by the door into bottle receiving position during the movement of the door into opened position.

1,879,591. WEB TENSIONING AND CONTROLLING MECHANISM FOR PRINTING MACHINES AND THE LIKE. HENRY TAYLOR and WILLIAM GIBSON, Newcastle-on-Tyne, England, assignors to J. H. Holmes & Company Limited, Hebburn-on-Tyne, England, a Registered Company of Great Britain. Filed Aug. 29, 1931, Serial No. 560,180, and in Great Britain Oct. 22, 1930. 17 Claims. (Cl. 242—75.)



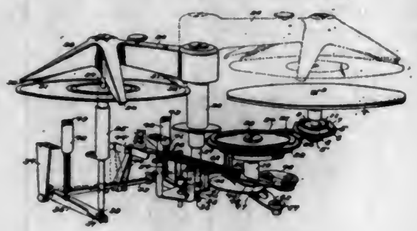
1. For use with a printing machine having a main driving motor the combination with a stop switch for the motor of web-tensioning and controlling mechanism comprising a braking apron attached at one end to a fixed point, a drum to which the other end of the apron is attached, a spindle for the drum, a spring for coupling the drum to the spindle, an electric motor operatively connected to the spindle, means for energizing the motor and means for rotating the drum independently of the spring coupling to increase the tension on the apron suddenly, such means comprising a pivoted catch lever acting directly on the drum, an operating solenoid therefor and means for energizing the solenoid controlled by the stop switch whereby the solenoid is energized to actuate the lever when the switch is operated to stop the main driving motor.

1,879,592. DISTANCE-INDICATOR FOR VEHICLES. GUYER D. THOMAS, Yakima, Wash. Filed Sept. 16, 1930. Serial No. 482,358. 2 Claims. (Cl. 88—2.2.)



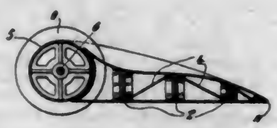
1. The combination with a vehicle having a support, of a rear-view mirror swivelled to said support and adjustable to different positions, lines carried by the mirror for indicating distances of objects to the rear of said vehicle, and a stationary gauge secured to said support adjacent to the miror and having marks for indicating the adjusted positions of the mirror.

1,879,593. TALKING MACHINE. HARRY ARCHIBALD THOMPSETT, Ealing, London, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1929, Serial No. 358,719, and in Great Britain, May 14, 1928. 17 Claims. (Cl. 274—10.)



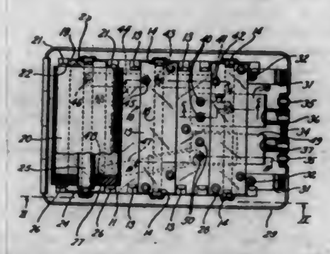
1. In a talking machine of the type embodying record transfer means including a vertically movable spindle, means for raising and lowering said spindle comprising a rock shaft operatively engaging and supporting said spindle, a cam, and means including a transmission member operatively interconnecting said shaft and cam, said member comprising two parts, and means connecting said parts whereby they are moved in unison for automatic operation of said transfer means, said parts being movable relatively to one another for manual operation of said transfer means.

1,879,594. AEROPLANE WING. SERGE TREY, College Point, N. Y. Filed July 25, 1928, Serial No. 295,274. Renewed Dec. 7, 1931. 25 Claims. (Cl. 244—14.)



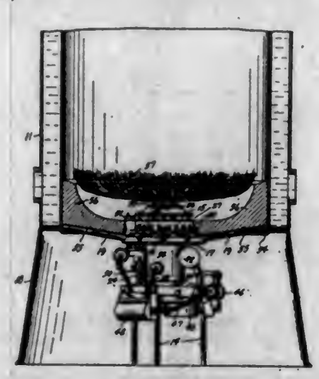
1. The combination with a wing, of a rotor at the leading edge thereof, the portion of said wing adjacent said rotor having a concave upper surface and being provided with a slot having a curvature in opposite sense to that of said concave wing portion.

1,879,595. BATTERY BOX. LEE J. VOORHEES, Long Island City, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed May 15, 1928. Serial No. 277,837. 20 Claims. (Cl. 136—173.)



1. A battery cell clip comprising opposed groups of conductors adapted to receive a battery cell therebetween in either of two positions; each of said groups having a conductor in alignment with the axis of said cell for making electrical connection with one terminal thereof in one of said positions; and a conductor out of alignment with the axis of said cell for making electrical connection with the other terminal thereof in the other of said positions; each conductor in one of said groups being in electrical connection with the corresponding conductor in the other of said groups and also with one side of a circuit so that a cell is in said circuit in a predetermined polarity when in said clip in either of said positions.

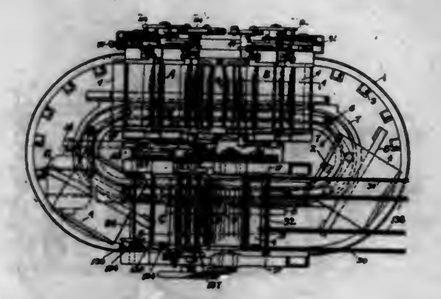
1,879,596. OIL BURNER. CHARLES L. WARNER, Milford, Conn., assignor to Baird-Warner, Incorporated, Bridgeport, Conn, a Corporation of Connecticut. Filed Dec. 27, 1930. Serial No. 505,093. 10 Claims. (Cl. 158—4.)



9. In a fuel burning device, a frame having a laterally extending flange provided with a plurality of laterally extending grooves in its top wall, rods seated in said grooves and extending laterally from the flange, a lining of refractory material carried by said rods, and a flame producing means surrounded by said lining.

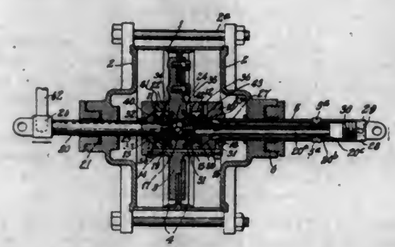
1,879,597. MULTICOLOR PRINTING PRESS. OSCAR H. BANKER, Philadelphia, Pa. Filed July 7, 1927. Serial No. 203,880. 5 Claims. (Cl. 101—186.)

1. In a multi-color printing press, a plurality of type beds, links connecting said beds, racks on said type beds, means engaging said racks to cause said type beds to travel in a continuous path in a laterally extending plane, an impression form carried by each type bed and movable in a single horizontal plane, an impression cylinder beneath which said impression forms travel, means to impart to said impression cylinder the same number of revo-



lutions as the number of type beds employed, and the same number of revolutions as the number of impressions which are to be made.

1,879,598. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Jan. 5, 1925, Serial No. 506. Renewed Nov. 27, 1931. 16 Claims. (Cl. 121—41.)

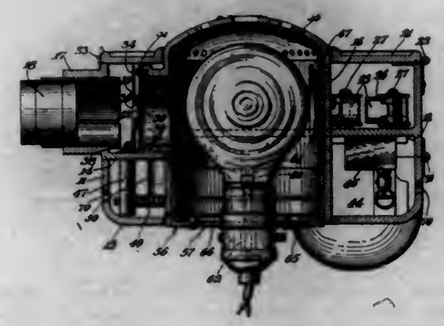


1. A vacuum-balanced power actuator for automotive vehicles having an internal combustion engine having a throttle control suction passage, comprising a cylinder closed at each end, a piston in said cylinder provided with means for connecting it with a part to be operated, suction connections for connecting the actuator cylinder on both sides of the piston with a portion of the engine in which suction is produced, connections for supplying higher pressure fluid to the actuator cylinder, valve mechanism controlling said vacuum and pressure fluid connections for connecting the actuator cylinder on both sides of the piston at the same time with said suction connections, at any point in the piston stroke, and operator operated means for moving said valve mechanism into position to disconnect either end of the cylinder from suction and connect it with higher fluid pressure to effect a movement of the piston.

1,879,599. PROCESS FOR THE LIQUID PHASE SULPHATION OF NORMAL BUTENE. BENJAMIN T. BROOKS, Greenwich, Conn., assignor to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Sept. 16, 1930. Serial No. 482,374. 2 Claims. (Cl. 260—98.)

1. Process of sulphating normal butene, which comprises admixing the same in liquid phase with aqueous sulphuric acid of from 60 to 70%, H_2SO_4 content, at temperatures between 30 and 55° C.

1,879,600. PROJECTING DEVICE. WALTER J. BURCHETT, East Orange, N. J., assignor to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Dec. 9, 1929. Serial No. 412,674. 9 Claims. (Cl. 88—24.)

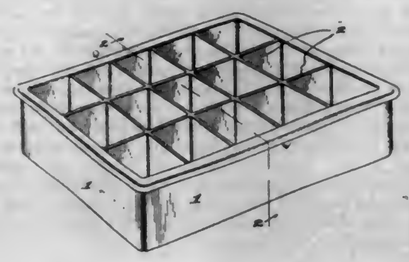


9. In a projecting apparatus comprising a main housing having opposed side walls, a lamp housing comprising an imperforate portion extending between the walls of said housing and having its ends resting in the openings of the walls of said main housing, the ends of said housing being perforated, one of said ends being removable, and a lamp supported on said removable end.

1,879,601. IODINE COMPOSITION. WALLACE IL CHANDLER, East Lansing, Mich., assignor, by mesne assignments, to Merck & Co. Inc., Rahway, N. J., a Corporation of New Jersey. Filed Mar. 18, 1926. Serial No. 94,618. 5 Claims. (Cl. 167—53.)

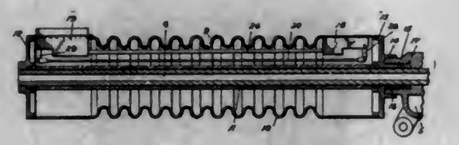
1. As a new composition of matter, a vermicide comprising iodine adsorbed in elementary form to iodo-casein.

1,879,602. FLEXIBLE SHARP FREEZING CONTAINER. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed June 20, 1928. Serial No. 286,837. 8 Claims. (Cl. 62—108.5.)



1. A sharp freezing container of the type adapted to be utilized in connection with mechanical refrigerating systems, comprising a container having walls formed of relatively thin flexible rubber, the upper edge of the outer walls of the container terminating in a relatively large containuous bead for reinforcing and maintaining the shape of the thin flexible walls, whereby the container may be readily manipulated as an individual unit when filled with liquid.

1,879,603. COOLING JACKET FOR MACHINE GUN BARRELS. RICHARD C. COUPLAND, U. S. Army, Norfolk, Va. Filed Jan. 9, 1931. Serial No. 507,618. 10 Claims. (Cl. 89—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



4. In combination with a gun barrel, an enclosed annular casing surrounding the barrel and independent thereof, and means for introducing a liquid into the casing.

6. In a cooling jacket for guns, a casing, a block on the inside wall of the casing adjacent each end, an inlet passage in each block, an outlet in one of the blocks, a tube connecting the blocks and establishing communication between the inlet passage in one block and the valve outlet in the other block, a pivotally mounted valve for closing each inlet passage and a rod connecting the valves.

1,879,604. MEANS AND METHOD FOR WELDING TANKS. EDWARD E. DILLMAN, Dallas, Tex. Filed June 15, 1931. Serial No. 544,522. 7 Claims. (Cl. 113—100.)



1. A method for holding and fitting the plates of tanks in position prior to the lap welding of the plates into a tank, which consists of welding a clamp member to the sides of the tank plates adjacent to the edges of the plates with the tank plates over-lapped to form a joint, and inserting a wedge member in the clamp member to cause the two adjacent overlapped edges of the tank plates to be held firmly in position for welding.

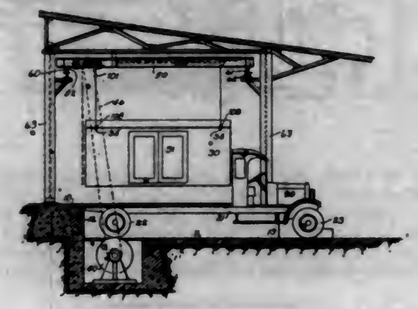
1,879,605. MANUFACTURE OF ALIPHATIC ACIDS AND THEIR ESTERS. HENRY DREYFUS, London, England. Filed Mar. 8, 1929, Serial No. 345,441, and in Great Britain Mar. 16, 1928. 14 Claims. (Cl. 260—106.)

1. Process for the manufacture of an alkacyl compound which comprises subjecting an aliphatic ether of formula $(C_nH_{2n+1})_2O$ to the action of carbon monoxide in presence of at least one metal compound capable of forming an acetate by reaction with carbon monoxide.

1,879,606. MANUFACTURE OF ALIPHATIC ACIDS AND THEIR ESTERS. HENRY DREYFUS, London, England. Filed July 29, 1930, Serial No. 471,596, and in Great Britain Oct. 1, 1929. 18 Claims. (Cl. 260—106.)

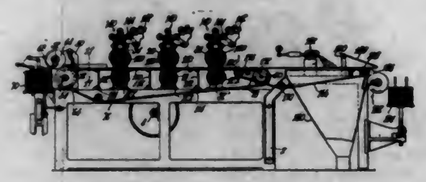
1. A process for the manufacture of an aliphatic acyl compound which comprises subjecting an ether of formula $(C_nH_{2n+1})_2O$ to the action of carbon monoxide in presence of a non-acidic catalyst capable of promoting the synthesis of aliphatic acids from carbon monoxide and aliphatic alcohols.

1,879,607. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 391,083. 12 Claims. (Cl. 214—38.)



4. The combination with a truck, a demountable body thereon, of a laterally shiftable raising mechanism adapted to engage the body, a movable device adapted to be engaged by a driving wheel of the truck, and connecting mechanism between said device and the load raising mechanism, whereby the power of the truck may raise the body from the truck, after which it may be shifted laterally in its raised condition.

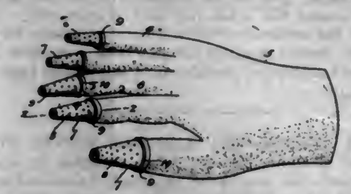
1,879,608. DECORATING MACHINE. JOSEPH N. FOUNTAIN, Westfield, Mass. Filed Oct. 21, 1930. Serial No. 490,310. 6 Claims. (Cl. 101—184.)



1. A machine for applying designs to blanks comprising in combination, shafts at opposite ends of said machine, sprockets spaced apart on said shafts, endless chains on said sprockets, pairs of design applying rolls along the upper runs of said chains, a grooved roll between one of said shafts and an adjacent pair of rolls, a driver on said shaft and connections between said driver and said grooved roll, a roll forwardly of said shafts and endless conveyor belts carried by said roll and said grooved roll.

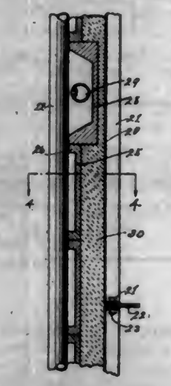
1,879,609. FINGER-SHAPING DEVICE. MILDRED HANNON, San Gabriel, Calif. Filed May 22, 1930. Serial No. 454,663. 1 Claim. (Cl. 128—77.)

A finger-shaping device comprising a flexible glove having short fingers open at their front ends, forwardly tapered substantially rigid finger forms having their rear ends snugly received in the front portions of the glove fingers, and bands snugly surrounding said front portions of said glove fingers to hold them tightly against said finger



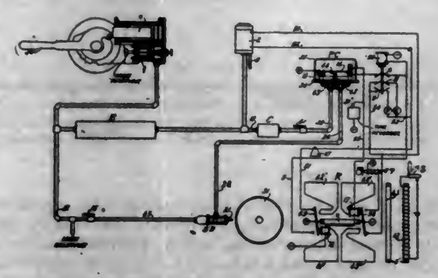
forms, the front edges of said bands being turned inwardly at the front ends of said glove fingers and being disposed in contact with said finger forms.

1,879,610. BOILER CASING. ISAAC HARTER, Dongan Hills, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 14, 1926. Serial No. 141,661. 5 Claims. (Cl. 122—494.)



4. In a water tube boiler having vertically disposed tubes, a horizontally channeled casing for said boiler having the channels on the side toward said tubes and in proximity to some of said tubes.

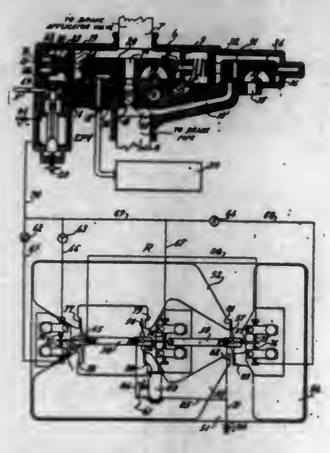
1,879,611. TRAIN STOP SYSTEM. ALFRED E. HUDD, Long Park, Chesham Bois, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 31, 1928, Serial No. 281,616. Renewed Mar. 23, 1932. 13 Claims. (Cl. 246—63.)



1. In a cab signal system, a pair of lamp signals, a normally energized relay having a pair of normally closed contacts included in a circuit including one of said sig-

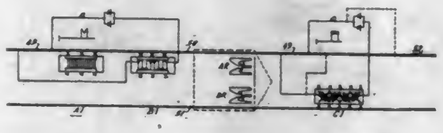
nals and having another pair of normally open contacts included in a circuit including the second signal of the pair, a second relay having a pair of normally closed contacts included in a circuit common to both of said lamp signals, means for actuating said second relay, thereby breaking the common circuit for said signals and other means for then actuating the first and restoring the second relay to complete the circuit of the second lamp signal of said pair.

1,879,612. TRAIN STOP AND CAB SIGNAL SYSTEM. ALFRED E. HUDD, Evanston, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1928. Serial No. 296,652. 6 Claims. (Cl. 175—336.)



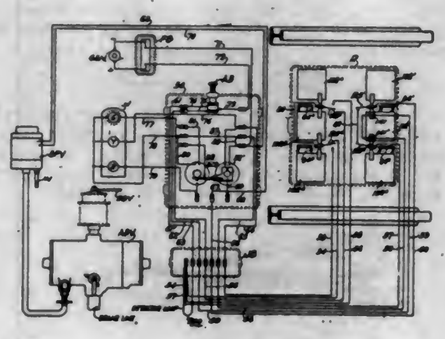
1. In a relay operable by magnetic induction, an inductor plane having three poles, a second inductor plane also having three poles and a third inductor plane having but one pole, an armature associated with one pole of each of the first inductor planes, a second armature associated with another pole of each of the first two inductor planes and a third armature associated with the third poles of the first two inductor planes and with the pole of the third inductor plane.

1,879,613. AUTOMATIC TRAIN CONTROL SYSTEM. ALFRED E. HUDD, Long Park, Chesham Bois, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 12, 1928, Serial No. 312,025, and in Great Britain Feb. 9, 1928. Renewed May 25, 1932. 12 Claims. (Cl. 246—63.)



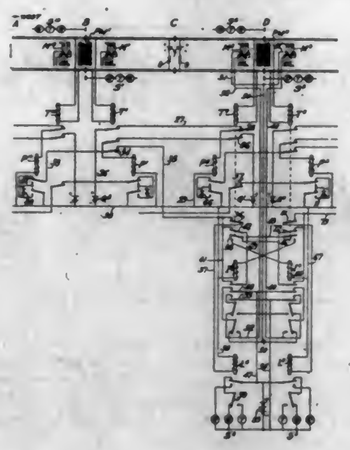
1. In a train control system, vehicle carried inductive pick-up devices, there being one on each side of the vehicle, brake control devices on the vehicle, pneumatic means operated by said pick-up devices to selectively control said brake control devices, and a reversing valve operable to enable said pick-up devices to control different brake control devices according to whether the locomotive is running forward or backward.

1,879,614. TRAIN STOP SYSTEM. ALFRED E. HUDD, Evanston, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 11, 1929. Serial No. 377,418. 15 Claims. (Cl. 246—63.)



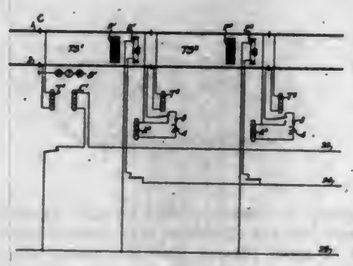
1. In a relay operable by magnetic induction, a plurality of armatures, magnetic flux collecting plates individual to each armature, and other magnetic flux collecting plates each common to two of said armatures, all said flux collecting plates being selectively magnetically influenced to selectively actuate one or a combination of said armatures.

1,879,615. RAILWAY TRAFFIC CONTROLLING APPARATUS. ALFRED E. HUDD, Evanston, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 394,454. 13 Claims. (Cl. 246—33.)



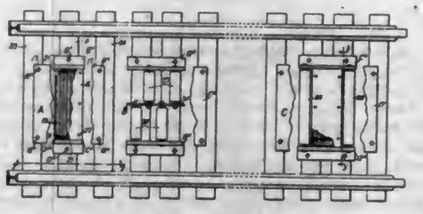
1. In combination with a single track railway equipped with an automatic block signalling system, a train control system having trackway equipment located midway between the rails thereof directly controlled by such signalling system, and vehicle equipment controlled by said trackway equipment to produce vehicle signals corresponding to the wayside signals of the signalling system encountered by the vehicle during its progress along the trackway, irrespective of the direction of movement of the vehicle.

1,879,616. RAILWAY TRAFFIC CONTROLLING APPARATUS. ALFRED E. HUDD, Evanston, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,015. 11 Claims. (Cl. 246—63.)



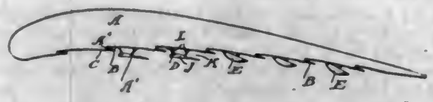
1. In a train control system, a vehicle equipped with a device responsible to impulses transmitted from the trackway, a stretch of trackway divided into a plurality of block sections; a block section in said stretch equipped with trackway means for periodically inductively transmitting brake initiating impulses to said device, irrespective of traffic conditions in advance of said block; and a single electromagnetic traffic controlled trackway element encountered, subsequent to the initiation of each brake application impulse to variably modify the condition of said device in accordance with traffic conditions in the blocks in advance.

1,879,617. TRAIN STOP SYSTEM. ALFRED E. HUDD, Sussex, England, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed July 11, 1929, Serial No. 377,418. Divided and this application filed May 26, 1930. Serial No. 455,512. 8 Claims. (Cl. 246—63.)



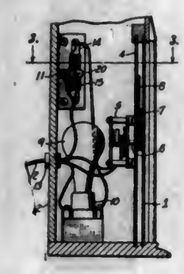
1. In a trackway device, a pair of pole pieces, a non-ferrous channel member connecting said pole-pieces, and forming a platform therebetween, a plurality of magnets placed on said platform at right angles to said pole-pieces, and means for holding said magnets in a definite spaced relation to each other and to the said pole-pieces.

1,879,618. WING FOR AIRCRAFT. JEAN BAPTISTE ICRE, New York, N. Y. Filed Nov. 1, 1930. Serial No. 492,647. 11 Claims. (Cl. 244—12.)



1. An aircraft wing the bottom of which has a plurality of surfaces located one in front of the other in stepwise fashion and transverse fins extending rearwardly from the rear ends of said surfaces, said fins being elastic so that they may bend upwardly while the craft is in motion.

1,879,619. ADVERTISING CLOCK. HARTLEY H. JACKSON, Kansas City, Mo. Filed Mar. 30, 1932. Serial No. 601,999. 8 Claims. (Cl. 40—132.)



1. An advertising clock device including in combination, a translucent medium, an advertisement exposed to an observer carried on the front of said translucent medium, the numerals of a clock dial carried on the rear of said translucent medium and concealed thereby, and means for intermittently illuminating the rear of said translucent medium whereby said clock dial is intermittently made visible from the front of said translucent medium.

1,879,620. ROTARY VISIBLE INDEX APPARATUS AND CARD. CLARENCE L. JOHNSTON, Hillsborough, and MAX M. COHN, Los Gatos, Calif. Filed July 17, 1931. Serial No. 551,504. 16 Claims. (Cl. 129—2.)

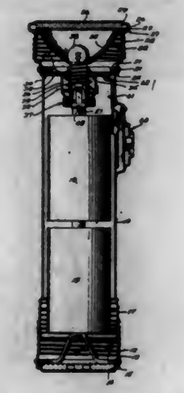


12. A plurality of index cards arranged in packed formation, a normally concealed indicia-carrying flap bendably attached to the outer edge of each card, and a second flap attached to the indicia flap and extending to a point adjacent the inner edge of each card.

1,879,621. BATTERY HAND LAMP. HOMER W. JONES, Newark, N. J., and HERMAN G. GRAUBNER, New York, N. Y., assignors to National Carbon Company, Inc., a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,738. 3 Claims. (Cl. 240—10.69.)

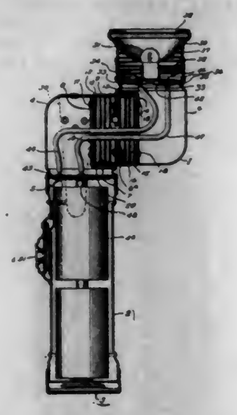
1. A lamp socket for a flashlight having a reflector; said lamp socket being in axial alignment with said reflector and having an outturned flange; a lamp in said lamp sock-

et; and a lamp support having a cylindrical body in said lamp socket, an outturned flange with portions cut away and the remaining portion attached to the flange of said



lamp socket, and an annular inturned flange upon which said lamp is seated so it is held in axial alignment with said reflector and lamp socket.

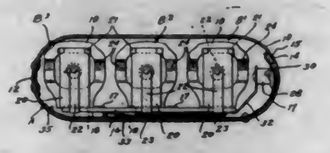
1,879,622. BATTERY HAND LAMP. HOMER W. JONES, Williamsville, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,169. 6 Claims. (Cl. 240—10.67.)



1. A hand lamp, comprising a tubular head and a base, said head having a member fixed to the base, a light projector swiveled on said member, a swivel joint between the fixed head member and said projector, said joint comprising two rings having juxtaposed inwardly flanged portions and a cylindrical portion, the cylindrical portion of one ring being joined to the tubular portion of the fixed head member, and the cylindrical portion of the other ring being joined to the projector, a clamping ring in contact with the flange of one joint ring, projections on said clamping ring extending through a circular central aperture in each of the flanges and bent along the walls of the flanges to hold them in frictional contact.

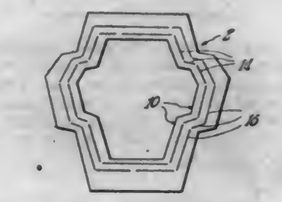
1,879,623. BATTERY BOX. HOMER W. JONES, Williamsville, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed June 12, 1930. Serial No. 460,753. 2 Claims. (Cl. 136—173.)

1. In a battery box; a plurality of battery cell clips adapted for holding a plurality of cells and connecting them in circuit; each of said clips having upturned ends adapted to receive a battery cell therebetween; each of said upturned ends having an opening therein and a contact at each side thereof adapted for making connection with the negative terminal of said cell when the cell is inserted in said clip in one position; an insulating member carried by said upturned end and extending across



said opening; a contact carried by said insulating member in said opening outside of said negative contacts and adapted to make contact with the positive terminal of sad cell when the cell is inserted in sd clp n inther position; and means for electrically connecting each contact at one end of each clip with a like contact at the other end thereof.

1,879,624. APPARATUS FOR MAKING ENVELOPES. RAY L. LOCKWOOD, West Springfield, Mass., assignor to Old Colony Envelope Company, Westfield, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,844. 1 Claim. (Cl. 33—1.)



Apparatus for making envelopes comprising in combination, the unitary pattern member of relatively thin light weight and substantially rigid material formed to the shape of an envelope blank having outer marginal edges which may be traced around to provide an envelope blank having a body portion and flaps at opposite sides thereof, said member having a central opening therein formed to the shape of an envelope blank, having inner marginal edges which may be traced around to provide another envelope blank having a main body portion and flaps at opposite sides thereof, the said member having elongated slits intermediate said outer and inner marginal edges and extending in substantial parallelism therewith for tracing around to provide an envelope blank of a size intermediate that of the said unitary member and said central opening and having a main body portion with flaps extending from the sides thereof.

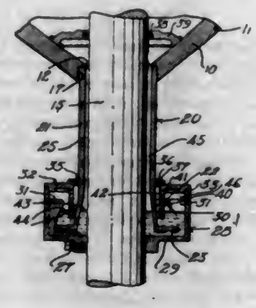
1,879,625. SUBMERSIBLE ELECTRIC MOTOR. EARL MENDENHALL and JUNIUS B. VAN HORN, Los Angeles, Calif. Filed June 8, 1926. Serial No. 114,414. 20 Claims. (Cl. 172—36.)

1. In a submersible electric motor structure, the combination of: a motor; a shell surrounding the motor and surrounded by a liquid which may be injurious to the motor; walls forming a balance chamber, said balance chamber being in communication at opposite ends with the interior of said shell and with said liquid surrounding said shell; an oil tube communicating with said shell and extending upward to a point above the surface of said liquid; a neutral liquid which is not injurious to said motor, said neutral liquid filling said shell around said motor and at least partially filling said balance chamber; a motor shaft extending longitudinally through said shell;



and a fluid-packed seal around said shaft, said fluid-packed seal preventing any emulsification between said liquids around said shaft.

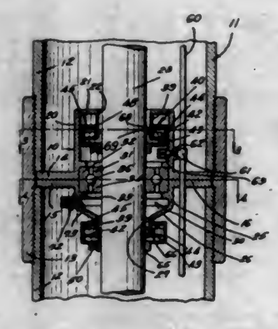
1,879,626. EMULSION-PREVENTING SEAL. EARL MENDENHALL and JUNIUS B. VAN HORN, Los Angeles, Calif. Filed Oct. 10, 1927. Serial No. 225,182. 13 Claims. (Cl. 286—9.)



1. In an emulsion-preventing seal, the combination of: a rotatable cup containing a sealing fluid; a stationary member extending below the surface of said sealing fluid; and a baffle extending into said cup and surrounding said stationary member.

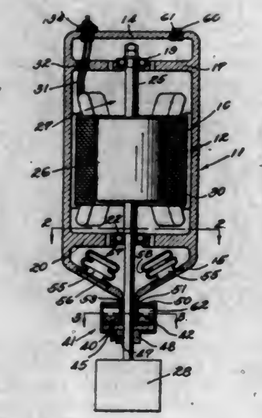
1,879,627. BEARING STRUCTURE HAVING UNBALANCED LUBRICATION. EARL MENDENHALL and JUNIUS B. VAN HORN, Los Angeles, Calif. Filed Feb. 20, 1928. Serial No. 255,544. 10 Claims. (Cl. 308—134.)

1. In a submersible bearing structure, the combination of: walls forming a bearing chamber; a shaft extending into said bearing chamber; a bearing in said bearing chamber for rotatably journalling said shaft; a pipe communicating with said bearing chamber to supply a lubricating medium thereto, said pipe extending above the fluid in which said bearing is submerged; a pressure-relief valve adapted to allow the passage therethrough of any excess



of lubricating medium reaching said bearing chamber; and a fluid-packed seal closing the junction between said shaft and said walls forming said bearing chamber.

1,879,628. SUBMERSIBLE MOTOR WITHOUT OIL-SUPPLY MEANS. EARL MENDENHALL and JUNIUS B. VAN HORN, Los Angeles, Calif. Filed Feb. 3, 1932. Serial No. 590,624. 5 Claims. (Cl. 172—36.)

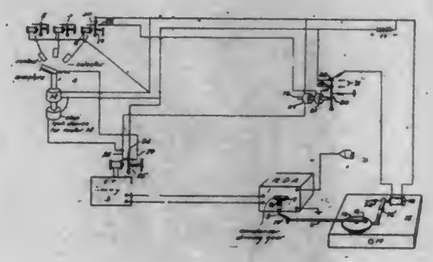


1. In a submersible motor, the combination of: a shell; a stator carried by said shell; a shaft rotatably supported relative to said shell, said shaft extending through said shell; a rotor on said shaft and cooperating with said stator in turning said shaft; a cup on said shaft; a fluid sealing means carried by said cup into which is extended an apron secured to said shell; and a bellows arrangement for equalizing the internal and external pressures on said shell.

1,879,629. REMOTE CONTROL APPARATUS. CARLOS B. MIRICK, Washington, D. C. Filed Dec. 3, 1927. Serial No. 237,578. 7 Claims. (Cl. 250—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

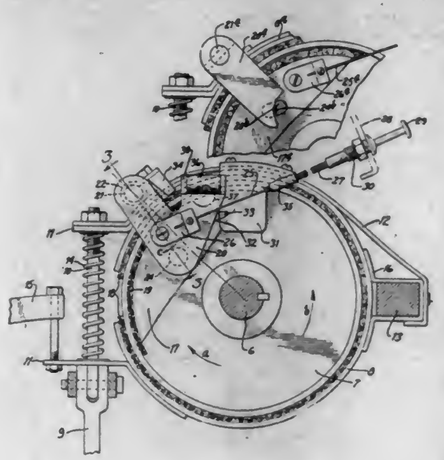
2. In a remote control device, a radio receiver, means for tuning said receiver over a band of frequencies, in-

terrupting means adapted to be actuated by a received wave for interrupting the tuning at the frequency of the received actuating wave, and means adapted to be ac-



tuated by a predetermined signal of the said received frequency to cause said interrupting means to become inoperative.

1,879,630. SAFETY BRAKE. AXEL W. MOODY, Elgin, Ill. Filed Dec. 1, 1930. Serial No. 499,197. 10 Claims. (Cl. 188—30.)



1. A brake in which is comprised a brake drum, a brake shoe within said drum and movable from an inactive to an active position, anchored means carrying said brake shoe for movement towards and away from the brake drum, and manually operated brake shoe releasing and setting means for holding said brake shoe in inactive position, whereby the brake drum may rotate in a reverse direction and for setting said brake shoe into an active position for gripping engagement with the brake drum solely when the brake drum is rotated in a reverse direction.

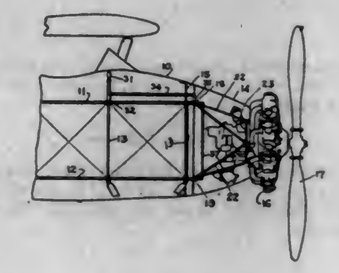
1,879,631. TORCH. CHESTER MOTT, Huntington Park, Calif., and GERALD G. SPENCER, Denver, Colo., assignors to Union Carbide and Carbon Research Laboratories, Inc., a Corporation of New York. Filed Nov. 12, 1929. Serial No. 406,645. 17 Claims. (Cl. 158—274.)

1. In a welding or cutting torch adapted to burn a mixture of an oxygen containing gas and a fuel gas, means for regulating the supply of each gas, a single control member, and means interconnecting said control member and said regulating means, said interconnecting



means including a lost-motion connection permitting independent adjustment of the regulating means for one gas.

1,879,632. ENGINE RELEASE MECHANISM. JOHN JEREMIAH O'BRIEN, Lakehurst, N. J. Filed June 4, 1931. Serial No. 542,123. 4 Claims. (Cl. 244—30.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

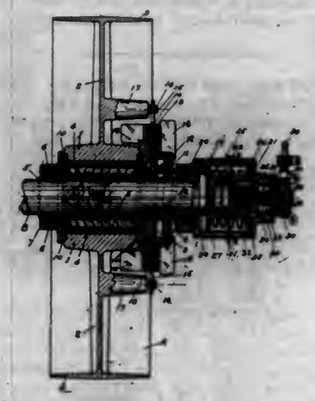


1. In an emergency release for aircraft, in combination, a fuselage having longerons terminating in a plurality of apertured lugs, a power plant including an engine and propeller mounted upon a supporting frame having registering apertured lugs, retracting bolts slidable within the apertures of said lugs, guides for said retracting bolts supported by members of said fuselage, associated keys and key-ways between said guides and bolts for restricting rotary motion, shafts having opposed right and left hand threads engaging correspondingly threaded bores of said retracting bolts, ratchet members supported by said shafts for imparting rotary motion thereto, and a manually operated lever connected by linkage to said ratchet members for the ratchets for release of said engine.

1,879,633. HYDRAULICALLY CONTROLLED VARIABLE SPEED PULLEY. REUBEN A. OLSEN and RICHARD H. SHADRICK, Minneapolis, Minn. Filed June 2, 1928. Serial No. 282,386. 1 Claim. (Cl. 60—54.6.)

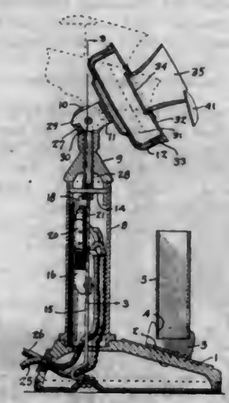
A pressure unit for applying pressure to a friction clutch to establish a relative driving speed between two members, comprising a housing secured to one of the members, pressure pins extending from the housing for engagement with the clutch, an end plate closing the outer end of the housing, a diaphragm contained within the housing for engagement with the pressure pins, said end plate having integral inner and outer hub portions and said inner hub portion having a partition forming flange, a fluid seal collar threaded in said flange, a second fluid seal collar in contact with the first seal collar, a stationary bracket head disposed in the said outer hub

portion, and a second diaphragm carried by the bracket head and resiliently supporting the said second fluid seal collar, said bracket head having a duct for supplying



fluid to the second diaphragm, and said collars having passageways through which said fluid may flow from said second to said first mentioned diaphragms.

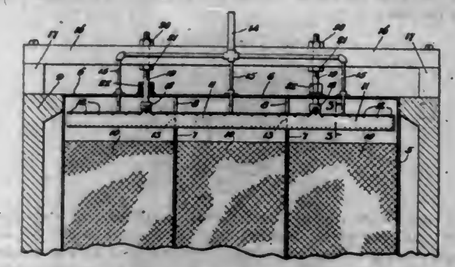
1,879,634. SMOKING SET. JAMES R. O'NEIL, San Francisco, Calif. Filed Aug. 20, 1928. Serial No. 300,934. 4 Claims. (Cl. 131—51.)



1. In a smoking set, a support, an ash tray pivotally carried thereby, a funnel-shaped member communicating with the interior of the ash tray and being rotatable with respect thereto, and a closure operatively connected to said member and normally closing the inner end thereof, said closure being swingable into open position when said member is rotated.

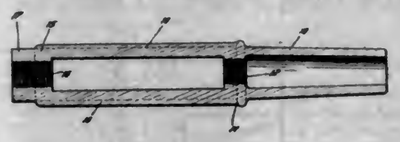
1,879,635. LIQUID-FEEDING MEANS. ARTHUR J. OSTRANDER, Woodbury, N. J., assignor to Houdry Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1931. Serial No. 570,371. 1 Claim. (Cl. 299—58.)

The combination, with a reaction chamber, of a horizontal feed-trough within the chamber, a stationary support above and independent of the chamber, connecting means between the feed-trough and said support, passing



through the top of the chamber, and means for making fluid-tight but vertically yielding joints between said connecting means and the top of the chamber.

1,879,636. CABLE END TAKE-UP FITTING. ELMER K. COLE, Winterset, Iowa. Filed Aug. 31, 1931. Serial No. 560,457. 1 Claim. (Cl. 287—75.)



A combined cable end lock and take-up fitting comprising a body portion having spaced end portions and spaced parallel arms integrally connected with and joining the same, and a cable receiving socket extending from one end portion, the said end portions being formed with axially aligned openings of which the one adjacent the socket is provided for the passage of cable securing means and the other adapted to receive anchoring means.

1,879,637. MANUFACTURE OF 1,4 DIOXANE. GEORGE H. REID, South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Feb. 20, 1930. Serial No. 430,125. 5 Claims. (Cl. 260—54.)

1. The process of making 1,4 dioxane which comprises reacting on $\beta\beta'$ dihalogen diethyl ether with a hot dilute aqueous solution of a strong inorganic base.

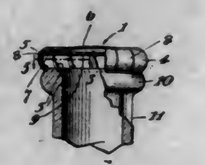
1,789,638. PROCESS OF PRODUCING COMPOSITION OF MATTER. WILLSON H. ROWLEY, Charleston, W. Va., assignor to Evans Lead Company, Charleston, W. Va., a Corporation of Delaware. Filed Nov. 7, 1930. Serial No. 494,194. 6 Claims. (Cl. 136—27.)

1. In the manufacture of a material for addition to the negative plate mix for storage batteries, the process which comprises heating a mixture of cellulosic fibrous material and sulphuric acid until the said material is a partially-carbonized fibrous material, discontinuing said heating, mixing the resulting mass with lead oxide in such amounts that substantially all of the acid of the mass will combine with the oxide, drying, and reducing to a powder.

1,879,639. COMPOSITION OF MATTER. WILLSON H. ROWLEY, Charleston, W. Va., assignor to Evans Lead Company, Charleston, W. Va., a Corporation of Delaware. Original application filed Nov. 7, 1930, Serial No. 494,194. Divided and this application filed Dec. 10, 1931. Serial No. 580,222. 2 Claims. (Cl. 136—26.)

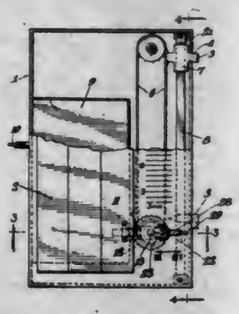
1. A dry composition of matter for addition to the negative plate mix for storage batteries and containing a partially-carbonized cellulosic material, lead sulphate and organic lead salts.

1,879,640. BOTTLE CAP. HENRY SPENCER, New York, N. Y., assignor to James S. Cushman, New York, N. Y. Filed Feb. 26, 1930. Serial No. 431,363. 6 Claims. (Cl. 215—38.)



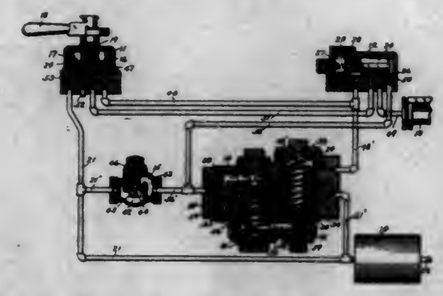
1. A closure cap of sheet metal comprising a body portion and down-bent locking fingers, similar edges of the fingers being inbent and other similar edges of the fingers overlapping the inbent portions, producing a substantially smooth and uniform peripheral finger surface contour.

1,879,641. TIME REGISTER AND RECORDING DEVICE. EDWARD W. SUNKENBERG, Cheelcroft-Hohokus, N. J., and BENJAMIN KAHN, New York, N. Y.; said Kahn assignor to said Sunkenberg. Filed June 13, 1929. Serial No. 370,564. 3 Claims. (Cl. 161—1.)



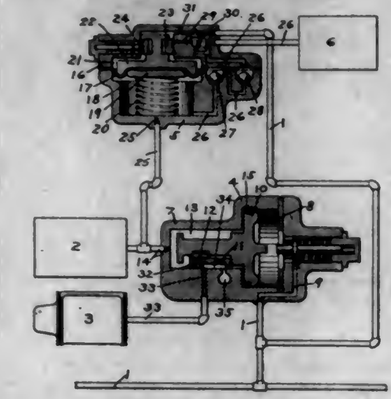
1. The combination of a slotted casing adapted to support a memorandum pad, timing mechanism within the casing, a guide bar within the casing near the slot thereof, a collar slidable on said guide bar and operatively connected with said timing mechanism, and a pointer carried by the collar and extending through the slot, the casing being provided with a graduated scale adjacent the path of movement of the pointer, for cooperation with the pointer.

1,879,642. FLUID PRESSURE BRAKE. FRANK B. THOMAS, Forest Hills, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1931. Serial No. 567,797. 11 Claims. (Cl. 303—25.)



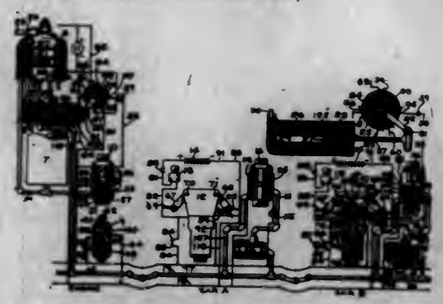
1. In a fluid pressure brake, the combination with a brake cylinder, a brake pipe, and a valve device operated upon a reduction in brake pipe pressure for supplying fluid under pressure from a chamber to the brake cylinder, of a source of fluid under pressure from which fluid is supplied to said chamber through a restricted port and valve means subject to the pressure of fluid in said chamber and operated upon a reduction of pressure in said chamber for opening a communication through which fluid is supplied from said source to said chamber.

1,879,643. QUICK RELEASE DEVICE. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1928. Serial No. 320,565. 20 Claims. (Cl. 303—69.)



1. In a fluid pressure brake, the combination with a brake pipe, of means operative by a predetermined fluid pressure differential for releasing the brakes, and means operative by a greater fluid pressure differential for increasing the pressure of fluid in said brake pipe in releasing the brakes.

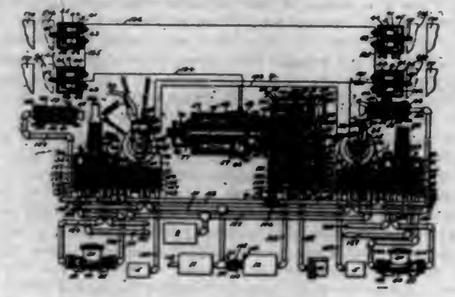
1,879,644. SIGNAL AND BRAKE SYSTEM. THOMAS H. THOMAS, Deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 9, 1929. Serial No. 384,658. 3 Claims. (Cl. 303—20.)



1. In a combined brake and signal system for a train, a train line circuit comprising a train wire and a return, a source of direct current connected to said train line circuit, electrically controlled signal devices responsive only to direct current flowing in one direction, electrically controlled brake devices responsive only to direct current flowing in the direction opposite to which the signal devices are responsive, a brake valve, a source of fluid under pressure, a switch device, and fluid pressure actuated means controlled by said brake valve for operating said switch device to control the direction in which the current flows through the circuit.

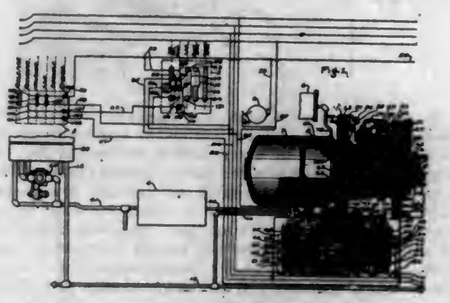
CARNEGIE LIBRARY OF ATLANTA

1,879,645. SAFETY CAR EQUIPMENT. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1929. Serial No. 390,282. 49 Claims. (Cl. 303—20.)



1. In a safety car control equipment, the combination with an electro-pneumatic brake apparatus, of a brake valve device for controlling the operation of said apparatus, and a foot pedal rockable about a single axis for controlling the operation of said brake valve device, said brake valve device being operative to one position by pressure on said pedal for effecting an emergency application of the brakes, and operative to another position upon the relief of pressure on said pedal for also effecting an emergency application of the brakes.

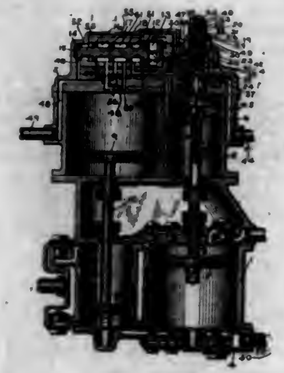
1,879,646. ELECTROPNEUMATIC BRAKE. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1929. Serial No. 400,240. 9 Claims. (Cl. 303—7.)



1. In a locomotive brake equipment, the combination with a brake pipe and a brake cylinder, of a valve device operative upon a sudden reduction in brake pipe pressure for supplying fluid under pressure to said brake cylinder to apply the locomotive brakes, discharge valve means for limiting the pressure of fluid obtained in said brake cylinder, a brake valve device having an emergency position for suddenly reducing the brake pipe pressure, and electrically controlled means operative in emergency position of said brake valve device for maintaining the pressure in said brake cylinder against leakage at the adjustment of said discharge valve means.

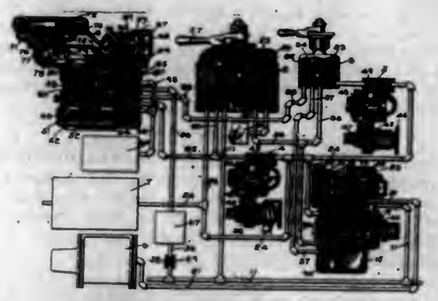
1,879,647. REVERSING VALVE FOR FLUID COMPRESSORS. BENJAMIN H. THOMPSON, Ardara, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1930. Serial No. 493,340. 7 Claims. (Cl. 121—108.)

1. In a steam engine, the combination with a steam actuated piston, and a steam actuated valve device for controlling the steam for operating said piston, of a reversing valve means comprising a plurality of connected piston heads, one of which is of greater area than the others and



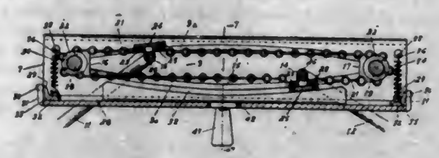
cooperates with one of the others for controlling the steam for operating said valve device, and a reversing rod carried by said reversing valve means and operatively connected to said piston.

1,879,648. GRADUATED RELEASE VALVE. UNCAS A. WHITAKER, Canton, Ohio, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1929. Serial No. 399,154. 10 Claims. (Cl. 303—7.)



1. In a fluid pressure brake, the combination with a brake pipe, a pipe through which fluid under pressure is released to effect the release of the brakes on the locomotive, a control reservoir charged with fluid under pressure, and a valve device subject to the opposing pressures of the brake pipe and said control reservoir and operated upon an increase in brake pipe pressure for releasing fluid from said release pipe.

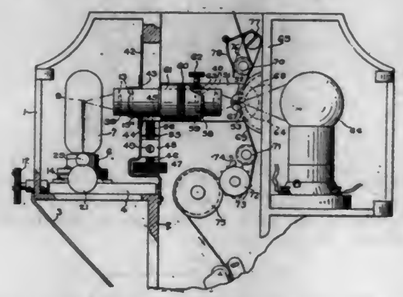
1,879,649. FOLDING TABLE. MICHAEL A. WILKINSON, Owego, N. Y. Filed Dec. 3, 1930. Serial No. 499,676. 6 Claims. (Cl. 45—11.)



3. In combination with a table having hinged legs and a top, a housing member on the underside of the table top, a pair of brace rods extending through said housing and

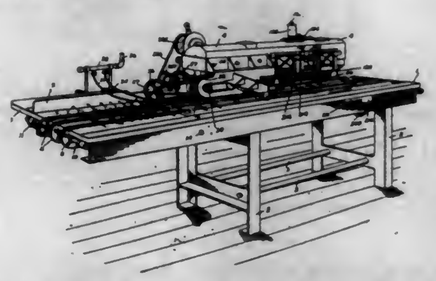
slidable therein, the ends of said rods being pivotally secured to said legs, a movable endless member in said housing to which said rods are attached, whereby movement of one of said legs results in movement of all of said legs, the sides of said housing being slotted to permit guided sliding movement of said rods, said slotted sides being flanged to form guides for said rods.

1,879,650. APPARATUS FOR REPRODUCING SOUND FROM PHOTOGRAPHIC RECORDS. ANDREW WOLLENSAK and VICTOR C. ERNST, Rochester, N. Y., assignors to Full Tone Reproduction Co., Rochester, N. Y., a Corporation of Ohio. Filed Aug. 29, 1930. Serial No. 478,644. 6 Claims. (Cl. 179—100.3.)



1. In an apparatus for reproducing sound from a photographic record thereof, the combination of a guide for a movable film having a sound record thereon and an aperture in said guide arranged behind the path of the sound record, a lamp, a filament in said lamp, a lens system for focusing a reduced image of the filament on the sound record, an arm pivoted to swing in a vertical plane in which said lens system is carried, means for adjusting said arm to swing the lens system into vertical alinement with said filament, and means for converting the light rays projected through said aperture into sound.

1,879,651. TOBACCO STEMMING AND STRIPPING MACHINE. LOUIS H. ZEUN, Catonsville, Md., assignor of one-third to Albert W. Adt and one-third to John B. Adt, Baltimore, Md. Filed July 18, 1929. Serial No. 379,204. 86 Claims. (Cl. 131—57.)

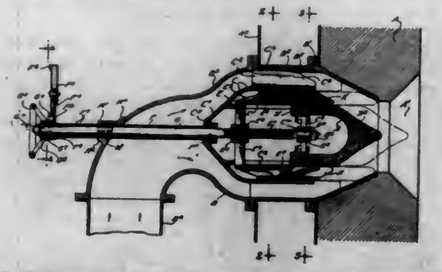


1. In a machine of the character described, in combination, stripping mechanism, and means adapted to cause relative stripping movement between said mechanism and the leaves to be stripped, said stripping mechanism including a gang of leaf strippers, strippers of which are mounted for relief movement transversely of the leaf-stems in the stripping operation, and have stem-receiving, stripping apertures, flaring in a direction opposite to that of said relief movement.

23. In a machine of the character described, in combination, stripping mechanism including a pair of mutually cooperative stem-drawing and gripping rolls and a gang of leaf strippers, strippers of which are mounted for relief movement, one independently of another, transversely of the stems in the stripping operation, one of the longitudinal axes of one of said rolls being free for angular movement toward and from the other transversely of the stems, and a spring adapted to restrain separating movement between said rolls in their different angular relations to each other.

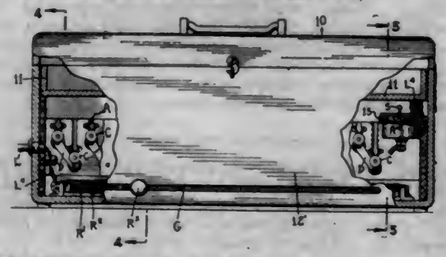
57. In a machine of the character described, in combination, leaf stripping mechanism including a plurality of leaf strippers having advancing movement in the stripping field, a leaf holding and advancing device and a stem drawing device alongside the paths of advance of said strippers, said leaf holding and advancing device including an endless series of traveling, leaf gripper blocks, a leaf separating and advancing mechanism disposed to advance the leaves to the leaf holding and advancing mechanism, said leaf separating and advancing mechanism including two endless belts, one of greater friction than the other, between which the stems of the leaves are gripped, means for driving the greater friction belt at greater speed than the other, a plurality of parallel, endless belts of soft frictional material disposed to support the leaves and advance them to said leaf separating and advancing mechanism, and means including one or more air conduits disposed to discharge air against the butts of the leaves to accelerate their advance to the leaf separating and advancing mechanism.

1,879,652. FUEL BURNER. JOHN BLIZARD, Garden City, N. Y., assignor to Foster Wheel Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 17, 1927. Serial No. 240,695. 10 Claims. (Cl. 110—104.)



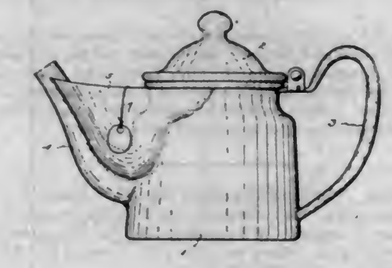
6. The combination with a combustion chamber wall having a fuel inlet opening therein, of a comminuted fuel burner comprising an outer casing communicating with said wall opening, an inner casing radially spaced from said outer casing and forming an annular flow passage therebetween, a pair of guide members mounted in said inner casing, a diffuser ring, flow directing blades connected to said ring, a refractory burner tip secured to said guide members, and means for simultaneously moving said casing, guide members and tip longitudinally in said wall opening.

1,879,653. PERMANENT WAVING APPARATUS. GEORGE EDWARD BJORKMAN, Djursholm, Sweden, and JOHN GELOSO, New York, N. Y. Filed Dec. 7, 1929. Serial No. 412,324. 9 Claims. (Cl. 219—24.)



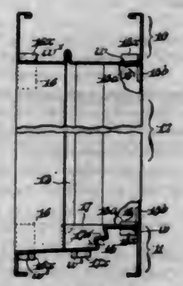
6. An apparatus adapted for permanent waving, comprising a kit having formed along the side walls thereof a series of receptacles containing resilient terminals, adjacent terminals being in different planes, alternate terminals in the same plane, the adjacent terminals being connected in pairs on each strip, the pair on one side beginning at a terminal one in advance of that on the other side, heater units adapted for disposal in the casing, and having prongs removably interfitting with opposing terminals whereby current passing through said heater units may be in series.

1,879,654. TEAPOT. HENRY J. BLAKESLEE, Marlboro, Conn. Filed Dec. 24, 1930. Serial No. 504,527. 4 Claims. (Cl. 53—3.)



1. A teapot comprising a body, cover, handle and spout, and a cup with an open upper end located between the top of the body of the pot and the upper surface of the spout and adapted to receive a tea ball or bag.

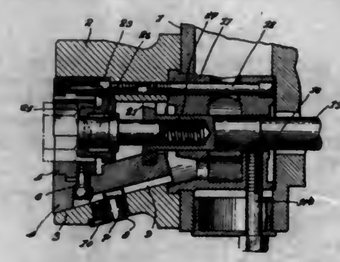
1,879,655. METALLIC FRAME CONSTRUCTION. JOAH BROGDEN, Melrose Park, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 24, 1928. Serial No. 295,035. 5 Claims. (Cl. 189—75.)



1. In a metallic frame structure for windows and the like comprising top, bottom, and side rail components of hollow cross-section; angle-section tabs at opposite ends of the side rail components with perpendicular end tongue projection from the horizontal portion thereof into the top and bottom rails whereby the several rail components are permanently connectable as a rigid whole.

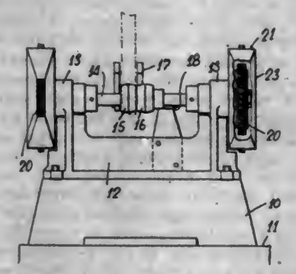
1,879,656. CHUCK. ROBERT S. BROWN, New Britain, Conn., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 20, 1926, Serial No. 103,194. Renewed July 25, 1931. 18 Claims. (Cl. 279—60.)

1. In a chuck, a chuck body having a plurality of converging cylindrical bores therein, cylindrical chuck jaws in said bores, each said jaw having a tapered longitudinal keyway therein, tapered keys in said body and coacting with said keyways to prevent rotation of said jaws in said



bores and a screw separated from but engaging each said key for maintaining the same in said keyways and for adjusting the same therein.

1,879,657. UPPER-ROUGHING MACHINE. WILLIAM C. CARD, Jr., Waverly, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 29, 1929. Serial No. 366,827. 6 Claims. (Cl. 12—51.)



1. A roughing machine for lasted shoe uppers, comprising a rotatable roughing element having angularly-disposed circumferential picking teeth adapted to rough the lasting allowance of a lasted upper to enable the same to be firmly cemented to an outer sole, and means for rotating said element; each of said teeth comprising a plurality of toothed elements.

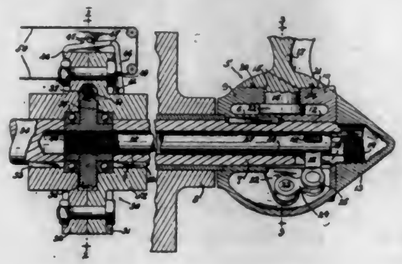
1,879,658. DISPLAY HOLDER. MYER CHAREN, Philadelphia, Pa., assignor to Universal Dental Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1929. Serial No. 397,897. 1 Claim. (Cl. 206—83.)



An artificial tooth engaging device of the character stated comprising an integral metal structure stamped from a single blank and consisting of a thin, flat, relatively broad plate arranged to horizontally penetrate the base of a carding device, said plate having a centrally ar-

ranged pointed inner end and serrated side edges, said plate having extended therefrom at substantially right angles thereto a pendant outwardly curved spring arm to removably accept an artificial tooth, said spring arm being arranged in alignment with the pointed end of said plate.

1,879,659. REGULATOR FOR ADJUSTING THE PITCH TO PROPELLER BLADES WHILE IN MOTION. LEIGH H. COOLIDGE, Seattle, Wash., assignor to Coolidge Propeller Company, Seattle, Wash., a Corporation of Washington. Filed June 17, 1929. Serial No. 371,464. 12 Claims. (Cl. 170—163.)



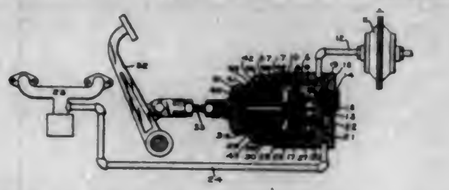
1. In a regulator for adjusting the pitch of propeller blades, in combination, a propeller hub assembly adapted to be rigidly secured to a hollow tail shaft and consisting of associated demountable parts adapted to grip the shanks of propeller blade roots therebetween, a regulating shaft axially movable within the bore of said tail shaft, crank arms rigid with said propeller blade shanks, links pivoted thereto and having the opposite ends secured between the forks of spider arms integral with said regulating shaft, guide slots provided in said tail shaft for said spider arms, and means to actuate said regulating shaft axially of said tail shaft to effect pitch setting movement to said propeller blades, said means comprising a coupling rigid with said tail shaft, an interiorly screw-threaded worm wheel mounted therein and adapted to engage a threaded portion of said regulating shaft, a worm for said worm wheel and means operable by the revolution of said coupling to impart selected rotary direction to said worm.

1,879,660. TERTIARY DERIVATIVE OF HYDROCARBONS AND PREPARATION THEREOF. HAROLD S. DAVIS, Belmont, Mass., assignor, by mesne assignments, to Petroleum Chemical Corporation, New York, N. Y., a Corporation of Delaware. Original application filed July 13, 1925, Serial No. 43,208. Divided and this application filed Feb. 24, 1927. Serial No. 170,632. 8 Claims. (Cl. 260—98.)

3. In the process of generating tertiary alcohols of from 4 to 6 carbon atoms to the molecule from a mixture of hydrocarbons derived from the pyrolysis of petroleum oil and containing olefines, said olefines consisting predominantly of secondary and tertiary olefines of not exceeding 6 carbon atoms to the molecule, the step of selectively sulphating the tertiary olefines contained in said mixture by admixing said mixture with aqueous sulphuric acid while maintaining an acid concentration and a temperature below that at which substantial proportions of the secondary olefines are sulphated.

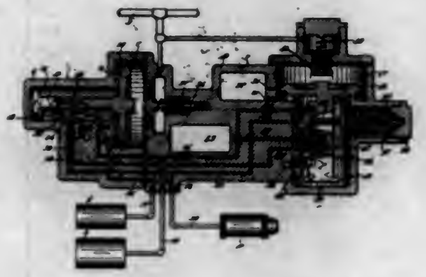
1,879,661. BRAKE CONTROLLING VALVE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1930. Serial No. 495,917. 1 Claim. (Cl. 303—54.)

A brake valve device comprising a casing, a diaphragm mounted in said casing and subject to the opposing pressures of the atmosphere and a chamber, a valve for controlling communication from a vacuum source to said chamber, a valve for controlling communication from said chamber to the atmosphere, means carried by said diaphragm for successively operating both of said valves upon movement of the diaphragm in either direction, and



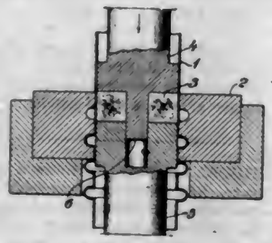
means for actuating said diaphragm comprising a sleeve slidably mounted in said casing and having a flange, a spring interposed between said flange and said casing, means for operating said sleeve, a stem connected to said diaphragm, a plate carried by said stem, and a spring interposed between said sleeve and said plate.

1,879,662. FLUID PRESSURE BRAKE. EARLE S. COOK, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1931. Serial No. 570,530. 8 Claims. (Cl. 303—35.)



1. In a fluid pressure brake, the combination with a brake pipe, a supply reservoir, a brake cylinder and a brake controlling valve device operated upon a reduction in brake pipe pressure for supplying fluid under pressure from said reservoir to the brake cylinder, of a volume reservoir, and means operative upon a rate of reduction in brake pipe pressure exceeding a predetermined rate for supplying fluid under pressure from the supply reservoir to the volume reservoir as well as to the brake cylinder.

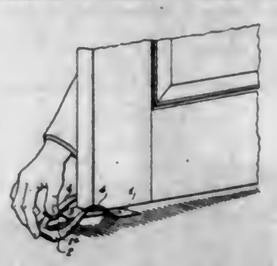
1,879,663. PROCESS AND APPARATUS FOR MANUFACTURING FLEXIBLE TUBES. ALBERT DREYER, Lucerne, Switzerland. Filed Jan. 10, 1930, Serial No. 419,848, and in Germany Jan. 18, 1929. 8 Claims. (Cl. 153—73.)



1. A process of manufacturing highly elastic corrugated tubes from plain metal tubes with thin walls, consisting in pressing out the crests of the corrugations leaving straight cylindrical tube portions therebetween and thereafter forcing in the cylindrical tube portions between said crests to form the troughs of the corrugations.

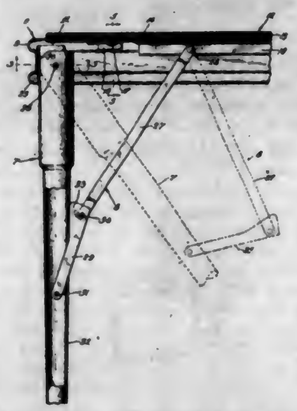
5. As a new article of manufacture for use in pressing out the crests of corrugations to be formed in plain tubes, a divided ring matrix having at least two internal grooves of the same shape as said crests, one of said grooves serving to form the corrugations and the other to accommodate the finished crests one after the other as the tube is fed stepwise through the matrix.

1,879,664. DOORCHECK. GEORGE EATON, Cleveland, Ohio, assignor to May C. Eaton. Filed July 10, 1931. Serial No. 550,018. 3 Claims. (Cl. 292—343.)



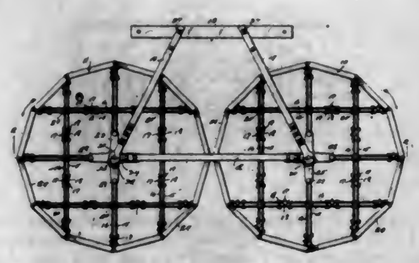
1. A door check comprising a wedge portion adapted to be inserted under the edge of the door and to extend in the same direction as the door, and a side portion connected to the wedge portion and adapted to extend above the bottom edge of the door and engage the side thereof so as to prevent disengagement of the door from said wedge portion, said side portion being formed as a bow of spring metal adapted to be compressed by engagement with the floor as the wedge portion is wedged under the door and to thereby afford means of holding the wedge portion in effective position.

1,879,665. FOLDING TABLE. EDWARD E. EKVALL, Elgin, Ill., assignor to The W. H. Howell Company, Geneva, Ill., a Corporation of Illinois. Filed Dec. 12, 1931. Serial No. 580,523. 4 Claims. (Cl. 45—11.)



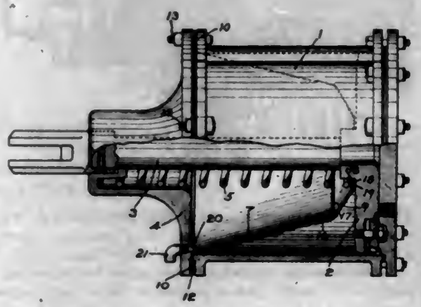
1. A folding table in which is comprised a substantially rectangular top, legs swingingly mounted at the corners thereof and arranged to be swung from a position at right angles to the top to one approximately parallel therewith, and folding braces, one for each leg, each folding brace comprising a link swingingly mounted on the leg, and a pair of links joined to the first mentioned link and extending obliquely therefrom to the top and swingingly connected thereto.

1,879,666. ROTARY HARROW. FRED ERICKSON, Waterville, Kans. Filed Jan. 21, 1932. Serial No. 588,007. 6 Claims. (Cl. 55—13.)



1. A harrow of the character described, including a rotatable harrow element, a frame with which the harrow element is rotatably connected, the harrow element comprising a series of pairs of bars running in one direction and a series of pairs of bars running at right angles thereto and interlocked with the first-named pair of bars, bolts passing through the pairs of bars at the intersections thereof, and harrow teeth detachably held between the pairs of bars.

1,879,667. BRAKE CYLINDER. CLYDE C. FARMER, Pittsburgh, and JOSEPH C. MCCUNE, Edgewood, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 11, 1927. Serial No. 225,486. 14 Claims. (Cl. 303—88.)

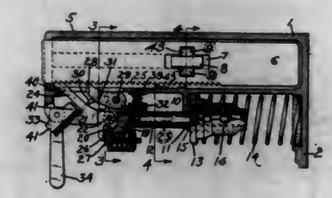


1. The combination with a brake cylinder containing a piston and having a non-pressure head, and a piston rod connected to said piston and extending through an opening in said head, and a flexible bag disposed in the cylinder between the non-pressure head and the piston and detached from said piston for collecting foreign matter entering the cylinder around the piston rod.

1,879,668. SLACK ADJUSTER. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,424. 13 Claims. (Cl. 188—200.)

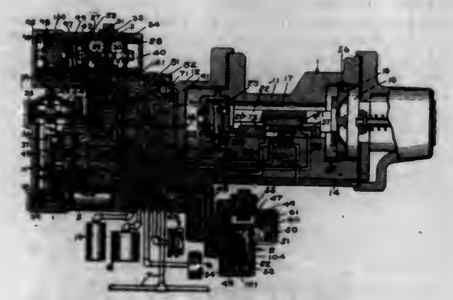
1. The combination with a truck bolster and a plurality of operatively connected brake levers, of an automatic slack adjuster comprising a casing mounted on said bolster, a member movably mounted in said casing and operatively connected with one of said levers, means operatively connected with another of said levers for adjusting said member to take up slack, and means with

which the first mentioned means is adapted to cooperate to prevent said member from moving from its adjusted position.



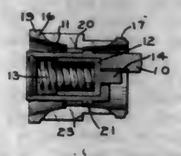
11. The combination with a plurality of brake levers, of an automatic slack adjuster comprising a movable bar loosely connected intermediate its ends with one of said levers to permit said bar to move in the direction of the length of said lever and relative thereto, and means for adjusting said bar to take up slack.

1,879,669. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, and ELLIS E. HEWITT, Edgewood, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 13, 1930. Serial No. 495,396. 19 Claims. (Cl. 303—35.)



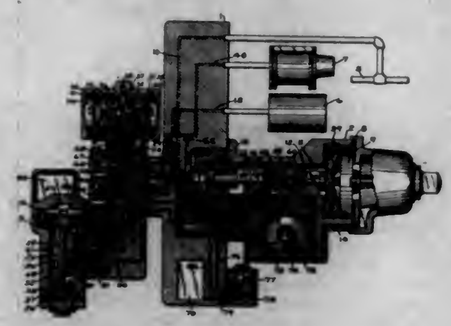
1. In a fluid pressure brake, the combination with a brake pipe, and a brake cylinder, of a chamber normally charged with fluid under pressure, valve means operative upon a reduction in brake pipe pressure for effecting the equalization of fluid under pressure from said chamber into the brake cylinder, and means operative on cars at the head end of the train for establishing communication through which fluid is supplied from the chamber to the brake cylinder and operative on cars at the rear end of the train for cutting off said communication.

1,879,670. RETARDED RELEASE STOP. CLYDE C. Farmer, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 13, 1930. Serial No. 495,397. 2 Claims. (Cl. 303—1.)



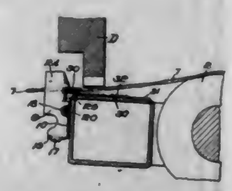
1. A triple valve device comprising valves, a piston having a piston stem for operating said valves, a bushing in which said valves are mounted, a casing carried at the rear end of said stem, and a retarded release stop device for opposing movement of said piston from normal release position to an inner retarded release position and comprising a sleeve in which said casing is mounted, said sleeve having a bearing ring engaging in said bushing, and having an internal, inwardly projecting collar within which said casing is slidably mounted, a collar carried by said casing and adapted to engage the inwardly projecting collar, and a spring for opposing movement of said sleeve from the normal release position to the inner retarded release position.

1,879,671. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1931. Serial No. 570,519. 8 Claims. (Cl. 303—35.)



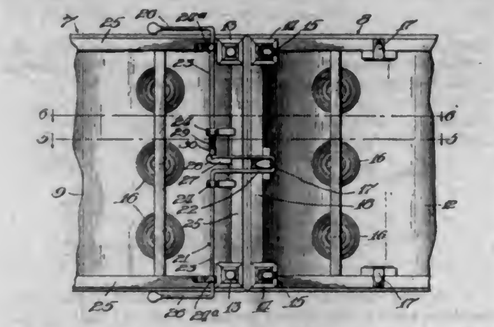
1. In a fluid pressure brake, the combination with a brake pipe, of a valve device operative upon a reduction in brake pipe pressure to establish a communication through which fluid under pressure is adapted to be vented from said brake pipe, and valve means operative in accordance with the increase in brake pipe pressure for controlling the communication from said brake pipe to said valve device through which fluid under pressure is adapted to be vented from said brake pipe by the operation of said valve device.

1,879,672. CARRIER OR MEANS FOR PREPARING TUFT YARNS FOR A LOOM. FRANK FERRARA, Medford, Mass., assignor to Shawmut Engineering Company, Dorchester, Mass., a Corporation of Massachusetts. Filed Mar. 11, 1929. Serial No. 346,017. 11 Claims. (Cl. 139—10.)



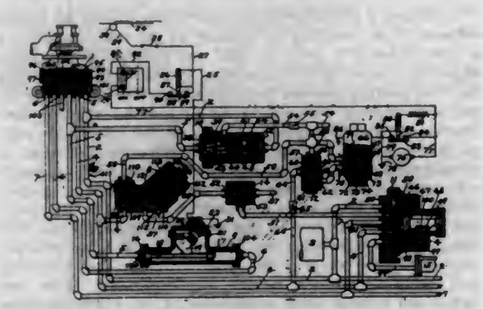
1. In a tuft yarn carrier for looms, in combination with a frame or carrier proper adapted to support one or more yarn spools, a series of yarn guides along said frame to space a like series of yarns and guide them across the frame, a strip-like spring element along said series of guides adjacent one of their ends, supported at one side of the yarn paths and having a portion normally projecting into or across said paths, and means at the opposite side of said paths against which said element is adapted to engage and tension the several yarns.

1,879,673. CHAISE LONGUE. CHARLES W. FISCHER, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 5, 1929. Serial No. 397,474. 5 Claims. (Cl. 155—45.)



1. A chaise longue comprising a chair unit and an Ottoman unit capable of conjoint and separate use, a lug depending from one unit, and link mechanism swingingly supported by the other unit and having a link co-operating with said lug to detachably connect the two units together, said link mechanism having members extending transversely to the sides of the unit and provided with handles at said sides.

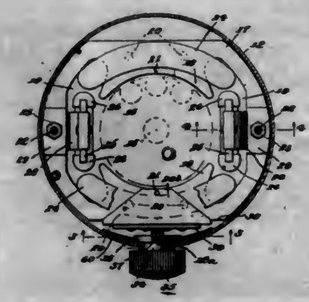
1,879,674. SAFETY CAR EQUIPMENT. ELLERY R. FITCH, Westwood, N. J., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1929. Serial No. 343,007. 27 Claims. (Cl. 303—6.1.)



1. In a vehicle controlling apparatus, the combination with mechanism for controlling the opening and closing of a car door and mechanism for controlling the application and release of the car brakes, of means for controlling the operation of the first mentioned mechanism to effect the opening of the car door and for controlling the operation of the second mentioned mechanism to effect an application of the brakes, and means operative to limit the braking power of the second mentioned mechanism when the speed of the car is reduced to a predetermined low degree and the first mentioned means is operated to control the opening of the car door and the effecting of an application of the brakes.

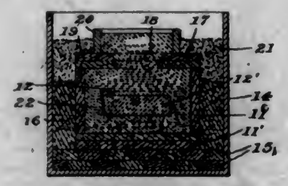
1,879,675. MOTOR ASSEMBLY INCLUDING SPEED CONTROL. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed May 9, 1930. Serial No. 451,129. 16 Claims. (Cl. 172—36.)

1. In an electric motor assembly, an enclosing shell of substantially circular section, a field core located in said shell and having a flattened portion on its exterior, a rheostat operating element of insulating material journaled in said shell opposite said flattened portion, a



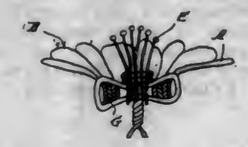
switch blade operably connected to said element, an insulating member on the flattened portion of said core, and contact points on said insulating member adapted to be engaged by said switch blade.

1,879,676. REFRACTORY ARTICLE. GORDON S. FULCHER, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,265. 3 Claims. (Cl. 49—92.)



1. An annealed cast refractory article for use in contact with molten glass, said articles being provided with a reinforcing core of refractory material having the same composition as the article.

1,879,677. ARTIFICIAL FLOWER AND METHOD OF MAKING SAME. DORA C. GOCKEL, St. Louis, Mo. Filed Aug. 12, 1929. Serial No. 385,185. 10 Claims. (Cl. 41—13.)

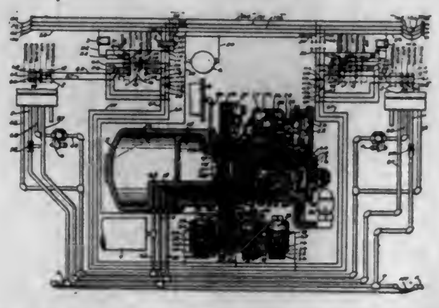


1. An artificial flower comprising a stem, a plurality of leaves each having a notched edge, and a loop extending from said stem, around said leaves and through said notches whereby said leaves will be attached to said stem.

1,879,678. ELECTROPNEUMATIC BRAKE. JOHN N. GOOD, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1929. Serial No. 399,129. 14 Claims. (Cl. 303—20.)

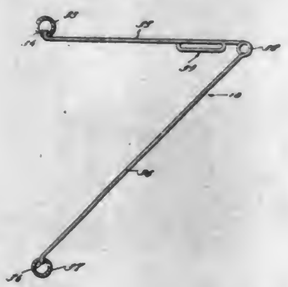
1. In an electro-pneumatic brake, the combination with an electro-responsive device operative upon deenergization to effect an application of the brakes, of another electro-

responsive device operative upon deenergization to aid in effecting an application of the brakes and operative upon energization of the first mentioned electro-responsive de-



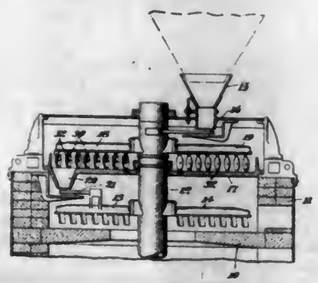
vice to effect a release of the brakes, and an independent brake switch device for controlling said electro-responsive devices.

1,879,679. GARMENT DISPLAY RACK. MILES L. GOVER, Somerset, Ky. Filed Nov. 20, 1931. Serial No. 576,385. 3 Claims. (Cl. 211—96.)



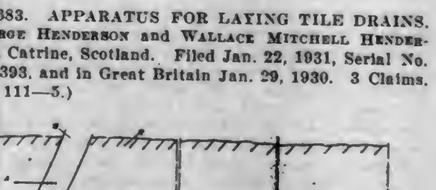
1. As a new article of manufacture, a hanger formed from a single length of wire bent between its ends into general V-shaped configuration, the intermediate portion being formed into a spring coil, and the ends of the arm portions terminating in a retaining hook, the horizontal suspension arm being formed intermediate its ends with a resilient trousers grip.

1,879,680. RABBLING MEANS. HENRY J. HARTLEY, Hastings-on-Hudson, N. Y., and DUDLEY BAIRD, Berkeley, Calif., assignors, by mesne assignments, to Nichols Engineering and Research Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1932. Serial No. 606,102. 6 Claims. (Cl. 263—26.)



1. In combination a furnace having a vertically extending rotatable shaft, rabble arms extending substantially radially from said shaft, and a plurality of rotatable disc rabbles connected to said arms by means permitting each of said disc rabbles to rise and fall independently when moving along its path of travel.

1,879,681. BOAT CONSTRUCTION. JAMES WILLARD HARVEY, Winthrop, Me. Filed Jan. 25, 1932. Serial No. 588,565. 20 Claims. (Cl. 114—71.)



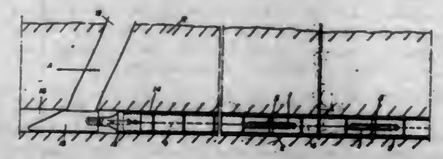
1. A boat cabin having an extensible roof section, side sections and an end section movable with the roof section and a canopy top having a windshield serving as an oppositely located end section for the extensible roof section.

1,879,682. PROTECTOR FOR FOLDED MATERIALS. WILLIAM A. HEINZE and MARC L. LISTON, Chicago, Ill., assignors to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1931. Serial No. 576,544. 2 Claims. (Cl. 24—183.)



1. A device for holding and protecting layers of folded material from breaking or creasing at the fold, comprising a body having a loop at one end thereof, a retaining finger connected to one side edge of the body and having the end portion thereof bent to extend over the body on one side thereof and substantially parallel thereto, and another retaining finger connected to the other side edge of the body and having the end portion thereof bent to extend over the body on the other side thereof, and substantially parallel thereto, said fingers being spaced from said loop, the loop being disposed in the fold in the material and the portions of the material adjacent the fold being disposed between the fingers and the body whereby one of the layers may be removed from the device by first being withdrawn in one direction from below one finger and in then being withdrawn in the other direction from below the other finger to be disengaged from the device.

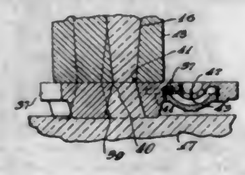
1,879,683. APPARATUS FOR LAYING TILE DRAINS. GEORGE HENDERSON and WALLACE MITCHELL HENDERSON, Catrine, Scotland. Filed Jan. 22, 1931, Serial No. 510,393, and in Great Britain Jan. 29, 1930. 3 Claims. (Cl. 111—5.)



1. In apparatus of the type referred to for laying field drains, a tile driver comprising in combination a link loosely insertable into a tile and provided at each end with a hook attachable to the adjacent flexible haulage member and tile-driving dogs arranged to be connected to said link at selected positions of adjustment lengthwise

of said link, said dogs being adapted, when said link is moved in the direction to drive said tiles, to engage the rearmost tile of a train of said tiles, and, when the link is moved in the opposite direction, to disengage said rearmost tile.

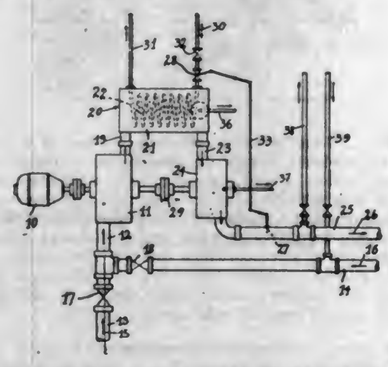
1,879,684. GLASSWARE FORMING MACHINE. OLIVER C. K. HUTCHINSON, Alton, Ill., and JOHN E. MCLAUGHLIN and LEONARD D. SOUBIER, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 29, 1929. Serial No. 381,782. 12 Claims. (Cl. 49—5.)



1. The combination of a mold having a cavity opening through one end thereof, a closure plate having a recess in one face thereof, a knife secured to said plate, means for introducing glass into the mold through said opening, means for swinging the knife and plate across the end of the mold and thereby severing the glass and bringing said recess into register with the mold opening, and means for exhausting the air from said recess substantially simultaneously with its movement into register with the mold opening and thereby drawing glass from the mold cavity to fill said recess.

10. The combination of a suction gathering mold open at one end, means for introducing molten glass by suction into the mold through said end, a closure plate, a knife, means for moving the knife across said open end of the mold and severing the glass and for bringing said plate opposite the mold opening, and pneumatic means brought into activity by said movement of the plate to cause a pressure of said plate against said end of the mold.

1,879,685. COOLING AND HEATING SYSTEM. JOSEPH JACZKO, Youngstown, Ohio. Filed Feb. 4, 1931. Serial No. 513,259. 1 Claim. (Cl. 257—9.)

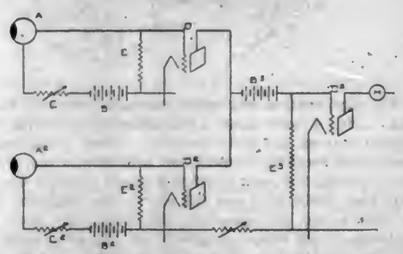


In a device for cooling rooms and the like, means to compress air, means to cool the compressed air, means to expand such compressed and cooled air, said cooling means condensing the humidity of the air to a predetermined degree and being provided with means for removing the liquid so condensed, and means to convey said expanded air into the premises to be cooled, said compressed air being cooled by water travelling in a counter direction thereto, means to regulate the amount of said cooling water, said means being operated by a thermostat in the cooled air line.

1,879,686. PURIFICATION PROCESS USING SOLVENTS. ALPHONS O. JAEGER, LLOYD C. DANIELS, HERBERT J. WEST, and CHARLES E. STEVENSON, Crafton, Pa., assignors, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 13, 1929. Serial No. 339,736. 2 Claims. (Cl. 260—57.)

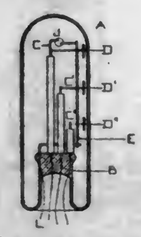
1. A method of treating impure anthracene, which comprises subjecting it to a solvent purification with a solvent containing a major portion of furfural to obtain a filter cake containing purified anthracene admixed with solvent, heating the cake until no solid phase remains, permitting vapors of furfural to escape from the cake, recovering the furfural, vaporizing the molten anthracene, and subjecting it to vapor phase catalytic oxidation to anthraquinone.

1,879,687. RESISTANCE CELL-CIRCUIT. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed Jan. 3, 1928. Serial No. 244,324. 5 Claims. (Cl. 179—171.)



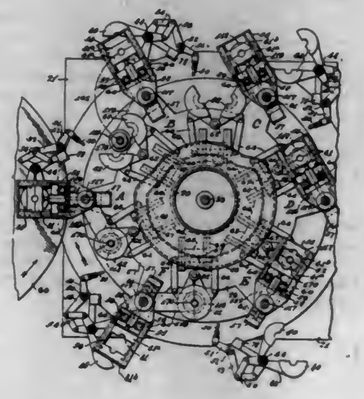
1. The combination of an electron discharge tube and a series circuit comprising a light sensitive cell of the spill-over type, a battery, an adjustable ballast impedance and a fixed resistance, said series circuit being connected to the input circuit of said discharge tube with the said fixed resistance connected across the grid and cathode of said tube, said ballast impedance being adjusted to allow the cell to work in the neighborhood of its spill-over point, said impedance serving to match the impedance of the cell to that of the discharge tube, and for maintaining said cell operating in the neighborhood of its spill-over point.

1,879,688. MULTIPLE SPOT LAMP. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed Mar. 27, 1928. Serial No. 265,032. 4 Claims. (Cl. 176—122.)



1. In an electro-optical system the combination of an evacuated envelope having a filling of conductive gas, a plurality of discrete flat plate targets, an anode common to all said targets, and means including a source of image currents and a commutator for lighting each of said targets in succession over its entire area notwithstanding the variations in the image currents, the luminous faces of said targets being disposed within the envelope so as to be completely visible when energized.

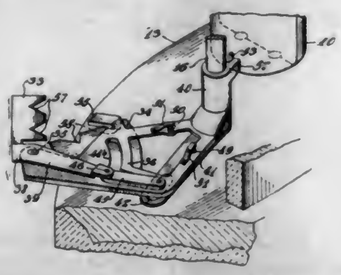
1,879,689. MACHINE FOR FORMING HOLLOW GLASS ARTICLES. AUGUST KADOW and RUSSELL G. ALLEN, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 24, 1928. Serial No. 328,118. 30 Claims. (Cl. 49—5.)



1. The combination of a mold carriage rotatable about a vertical axis, a neck mold arm mounted to swing about a vertical axis on the mold carriage, a neck mold comprising separable sections mounted on said arm, a blank mold, means to swing the neck mold arm about its axis for moving the neck mold into and out of register with the blank mold, and means for opening and closing the neck mold comprising an air motor supported on the neck mold arm.

11. The combination of a mold carriage, a blank mold, a neck mold above and in register with the blank mold, a finishing mold, a mold bottom, means for introducing a charge of glass into the blank mold and neck mold and forming a parison, means for opening the blank mold, leaving the parison supported in the neck mold, means for moving the mold bottom to a position beneath the parison after the blank mold opens, to form a bottom support for the parison, means for moving the neck mold and said bottom with the parison supported thereby, and thereby transferring the parison to the finishing mold, and means for partially developing the parison in the open.

1,879,690. GLASS CUTTING MECHANISM. AUGUST KADOW and CARL W. SCHWENZFEIER, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 25, 1929. Serial No. 357,943. 18 Claims. (Cl. 49—5.)



1. Apparatus for forming glass articles comprising, in combination, a mold, means for moving the mold over a supply body of molten glass for receiving a charge of glass by suction, a pair of shears laterally disposed at one side of the mold, and means to actuate said shears and swing them to a position beneath the mold and then cause the cutting edges thereof to meet directly beneath and in line with the mold cavity for severing the glass.

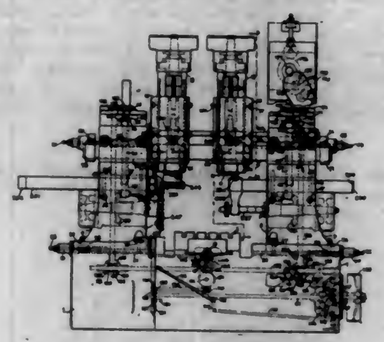
2. The combination of a suction gathering mold open at its lower end to receive a charge of glass by suction, a pair of shears, means to swing said shears into and out of a position beneath the mold, and means to impart a severing operation to the shears while beneath the mold.

1,879,691. CHENILLE FABRIC. RAYMOND B. KALBACH, Philadelphia, Pa. Original application filed Aug. 27, 1930, Serial No. 477,998. Divided and this application filed June 24, 1931. Serial No. 546,490. 2 Claims. (Cl. 112—1.)



1. As a new article of manufacture, a chenille fabric of yarn formed into a continuous strip of material which is provided with a line of stitches in parallelism with the side edges of said strip, at least one side edge of a strip being cut to provide a pile, said strip of material having associated therewith a plurality of similar strips arranged side by side, adjacent strips being sewn together.

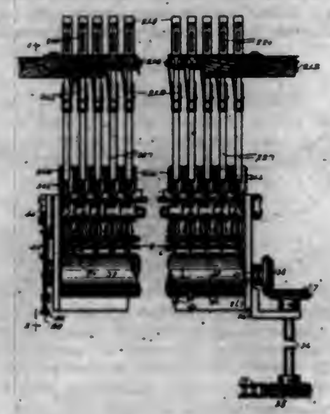
1,879,692. MACHINE TOOL. EDWARD J. KEARNEY and JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a Corporation of Wisconsin. Filed Nov. 30, 1928. Serial No. 322,796. 26 Claims. (Cl. 90—16.)



1. In a milling machine the combination of a bed, a table reciprocably supported therefrom, a plurality of supports carried by said bed respectively adjacent opposite edges of said table, a member above said table connecting said supports and horizontally adjustable relative thereto, clamp means operative between said supports and member for fixing the relative positions thereof, a cutter head adjustably guided on said member for horizontal movement between said supports, and clamp means for fixing the position of said head on said member.

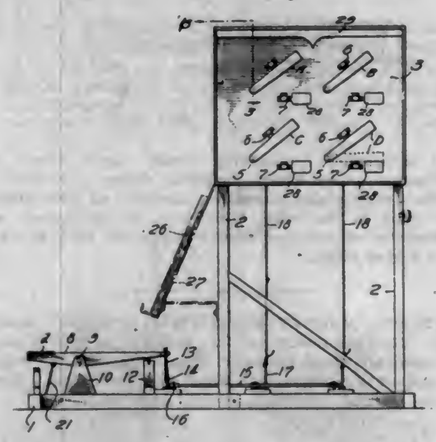
1,879,693. AUTOMATIC SOUND REPRODUCING INSTRUMENT. BERTRAM C. KENYON, WILMUR W. BOA, and CLIFFORD H. GREEN, Grand Rapids, Mich., assignors to Automatic Musical Instrument Company, Grand Rapids, Mich., a Corporation of Delaware. Filed July 15, 1927. Serial No. 205,921. 21 Claims. (Cl. 274—10.)

2. In a sound-reproducing instrument of the character described: a horizontal turntable; a stationary rack adapted to hold in horizontally spaced relation a plurality of record disks in positions wherein their sides are disposed vertically and in the turntable's radial directions; an arm swingable concentrically with the turntable; a member carried by the arm turnably about a horizontal



axis transverse the arm; record disk-gripping means carried by said member turnably about an axis transverse to the first-mentioned axis.

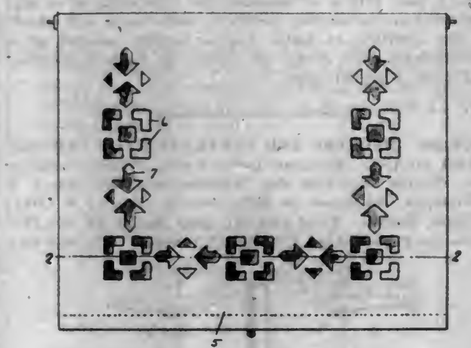
1,879,694. APPARATUS FOR THE VISUAL RECORDATION OF SOUND BEATS. GEORGE LANE, New Haven, Conn., assignor to Audio Cinema, Bronx, N. Y., a Corporation of New York. Filed June 15, 1931. Serial No. 544,315. 13 Claims. (Cl. 116—132.)



1. A device for visually indicating sound beats which comprises a plurality of signal arms movable over a background of contrasting color, means to move said arms, a stop to limit movement of each arm, and means to prevent rebound of each arm from its stop.

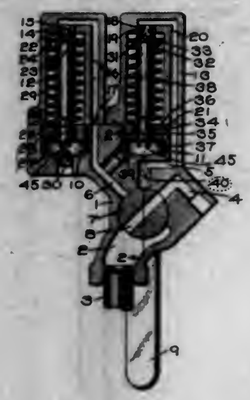
1,879,695. ARTISTIC CURTAIN. REINHARD LEISSNER, Garfield, N. J. Filed Aug. 26, 1930. Serial No. 477,918. 1 Claim. (Cl. 41—21.)

As a new article of manufacture a window shade formed of opaque material and having ornamental openings in certain parts thereof, and a cover of translucent material for each opening, each cover being located on



the rear face of the shade and embroidered through the shade with the embroidery surrounding the openings on the front face of the shade.

1,879,696. PRESSURE RETAINING VALVE. FREMONT P. LIVINGSTON, Denver, Colo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1931. Serial No. 508,399. 5 Claims. (Cl. 303—79.)

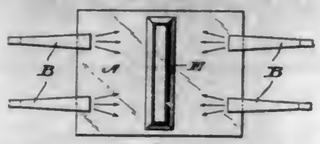


1. In a pressure retaining valve device, the combination with a body portion having a chamber formed therein, of a casing secured at its lower end in said chamber and having a valve seat located at the upper end thereof communicating with an inlet passage formed in said casing, a plug permanently secured within the lower end of said casing and having an outlet passage formed therein connecting the interior of said casing with said chamber, a valve member disposed within said casing for engagement with said valve seat and accessible for grinding through said plug, and a spring disposed entirely within said casing for urging said valve into engagement with said seat to control communication between said inlet passage and the interior of said casing.

1,879,697. PECTIN PREPARATION. HUGO G. LOESCH, Rochester, N. Y., assignor, by mesne assignments, to General Foods Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1925. Serial No. 74,626. 7 Claims. (Cl. 99—11.)

7. A new article of manufacture consisting of a concentrated syrup carrying pectin in suspension, and which, by the addition of water and a further amount of a carbohydrate will cause the pectin to go into solution and form a jellied mass.

1,879,698. PROCESS AND APPARATUS FOR TEMPERING GLASS. BERNARD LONG, Paris, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed July 30, 1930, Serial No. 471,791, and in France Aug. 7, 1929. 5 Claims. (Cl. 49—45.)



5. In an apparatus of the character described for tempering glass sheets, an air blast nozzle adjacent to and inclined at an acute angle to the plane of the surface of the sheet in combination with a vacuum nozzle adjacent to the surface of the sheet at a point remote from that at which the air from the blast nozzle strikes the sheet and in the path of the air from the blast nozzle.

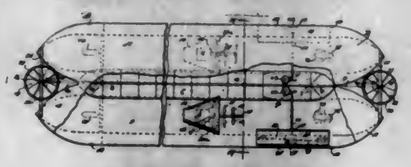
1,879,699. TEMPERING GLASS. BERNARD LONG, Paris, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed Oct. 6, 1931, Serial No. 567,287, and in France Oct. 23, 1930. 2 Claims. (Cl. 49—45.)



1. In an apparatus for tempering glass sheets, the combination with cooling elements spaced from each other a sufficient distance to permit the insertion of a heated glass sheet between them and forming a tempered skin on the sides thereof, of nozzles projecting air jets directly on the edges of such sheet to thicken the tempered skin at such edges.

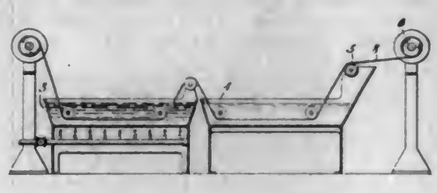
1,879,700. DUO-HYDROAIRCRAFT. OTIS E. MANTOR, Monterey, Calif. Filed Mar. 29, 1932. Serial No. 601,821. 10 Claims. (Cl. 244—14.)

1. In a craft of the kind described, twin parallel boats, a deck bridging the same and twin wings carried thereby, a cabin disposed between the boats, a horizontally-operable propeller at each end of the craft disposed above said wings in line with the valley therebetween, a keel for each boat, vertically-operable propellers axially disposed vertically above the axes of the respective keels, engines adapted to drive said horizontally-operable propellers, engines adapted to drive said vertically-operable propel-



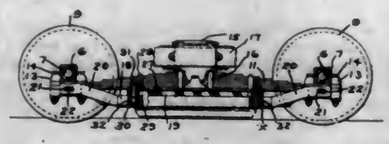
lers, a rudder and operable means therefor, a non-cuttable ground-engaging wheel mounted aft of each boat, a retractable ground-engaging, cuttable wheel mounted forward adjacent the stem of each boat, means arranged to project and retract said wheels, means arranged to cut said wheels, both said means controllable from the craft; elevators mounted forward at each side said deck and operative means therefor.

1,879,701. PROTECTIVE COATING AND METHOD OF APPLYING SAME TO NICKEL, NICKEL ALLOYS, AND CHROMIUM-IRON ALLOYS. ANTHONY J. MARINO, Union City, N. J. Filed Nov. 20, 1931. Serial No. 576,244. 12 Claims. (Cl. 148—7.)



1. A method for coating nickel, nickel alloys and chromium alloys which comprises fusing a mixture of sodium nitrate and manganese dioxide and then dipping the alloy in the fused mixture of sodium nitrate and manganese dioxide and then washing the alloy in water and drying same.

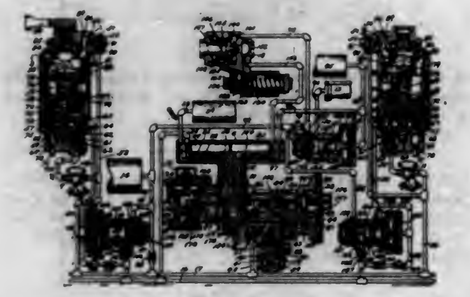
1,879,702. MAGNET SUPPORTING DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1930. Serial No. 484,293. 3 Claims. (Cl. 188—206.)



1. The combination with a car truck having a pair of spaced axles provided with housings connected together by flexible body supporting members adapted to move

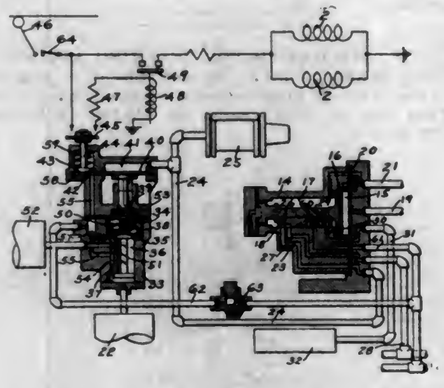
the axles toward and away from each other under influence of varying loads on the car truck, of an auxiliary magnet device, means for suspending the magnet device from the car truck, comprising a rigid member extending between the axles and supported at each end by the axle housings, and means permitting relative movement of the axles toward and away from each other with respect to said member.

1,879,703. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1930. Serial No. 497,238. 17 Claims. (Cl. 303—26.)



1. The combination with an emergency pipe and means operated upon a reduction in emergency pipe pressure for effecting an emergency application of the brakes, of a brake pipe, means operated upon a reduction in brake pipe pressure for effecting a service application of the brakes, and a single means for controlling said emergency pipe and said brake pipe pressure.

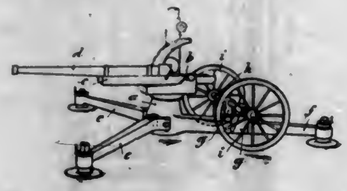
1,879,704. TRACTION INCREASING DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Original application filed Feb. 5, 1929, Serial No. 337,623. Divided and this application filed Dec. 19, 1930. Serial No. 503,476. 2 Claims. (Cl. 308—3.)



1. In a traction increasing apparatus for rail vehicles, the combination with a magnet supported on the vehicle above the rail and adapted when energized to cooperate with the rail to increase the traction of the vehicle on the rail, said magnet being constantly maintained out of contact with the rail, of a switch device operated by fluid under pressure for effecting the energization of said mag-

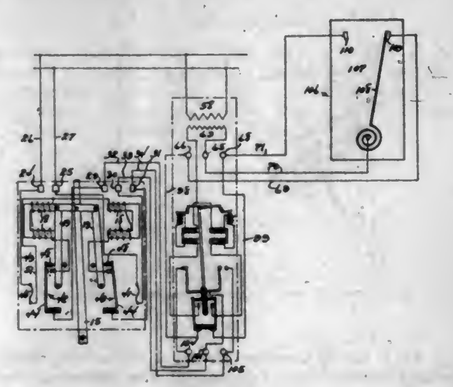
net, a reservoir normally charged with fluid under pressure, means operated upon applying the brakes for supplying fluid under pressure from said reservoir to said switch device, and means for venting fluid from said reservoir at a predetermined rate.

1,879,705. ANTIAIRCRAFT GUN. NICOLAS EMILIEN METHLIN, Paris, France, assignor to Schneider & Cie, Paris, France, a Company of France. Filed Sept. 30, 1931, Serial No. 566,147, and in France July 10, 1931. 10 Claims. (Cl. 89—40.)



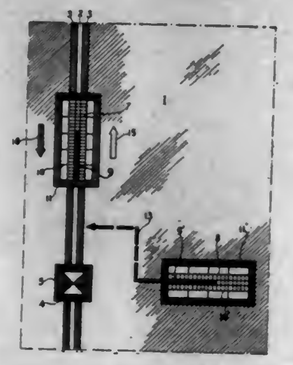
1. In a portable gun mount of the type embodying a plurality of trail members, a readily detachable wheel train comprising an axle, wheels mounted on said axle, a bearing for said axle secured to one of said trail members, a bearing cap for retaining said axle in said bearing, and means for raising said cap relatively to said bearing to permit removal of said axle therefrom.

1,879,706. AUTOMATIC CONTROLLING MEANS FOR HEATING SYSTEMS. JAMES J. MUNDORF, Sharon, Pa., assignor, by direct and mesne assignments, to Mundorf Heating Systems Company, Sharon, Pa., a Corporation of Pennsylvania. Filed July 13, 1931. Serial No. 550,563. 6 Claims. (Cl. 236—78.)



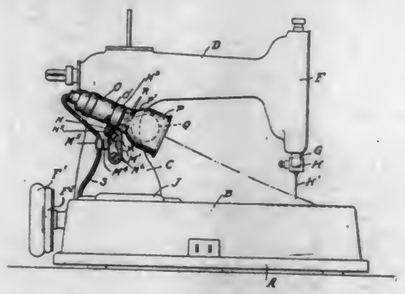
1. Means for operating a control element of a heating mechanism, comprising a thermostat embodying fixed and movable contacts, a relay operated by said thermostatic device, and an electro-magnetic apparatus responsive to the relay comprising a pivoted arm connected with the control element of the heating mechanism, armatures pivotally mounted at opposite sides of said arm, a bridge pivotally mounted on said arm and having its extremities pivotally connected with the free ends of the armatures, electromagnets, located at opposite sides of the arm in position to attract th armatures, a current supply connected with the electro-magnets, and a pair of circuit breakers connected in series with the respective electromagnets and operatively connected with the armatures for actuation by the same on attraction by the electro-magnets.

1,879,707. SUPERVISORY CONTROL PANEL. OTTO PLECHL, Pfaffstatten, near Vienna, and JOHANN LATZKO, Vienna, Austria, assignors to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 6, 1930, Serial No. 500,592, and in Germany Dec. 7, 1929. 7 Claims. (Cl. 116—117.)



1. In a control panel for supervising the distribution of flowing media, a transparent wall, a substantially opaque coating for said wall, portions of said coating being removed to form symbolic transparencies and bands of an opaque color defining the edges of the symbols.

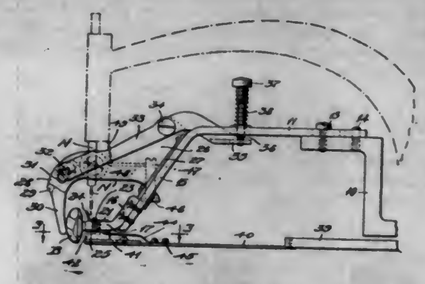
1,879,708. SEWING MACHINE LIGHT ARRANGEMENT. RAYMOND L. PLUMLEY, Brooklyn, N. Y., assignor to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed July 28, 1928. Serial No. 295,972. 5 Claims. (Cl. 240—2.14.)



1. In a sewing machine having a frame comprising a vertical standard and a horizontal arm projecting therefrom and terminating in a head portion, the combination therewith of a bracket plate secured to said frame adjacent the junction of said standard and arm on the side opposite the operator and having an integral U-shaped projecting portion, an electric lamp mounted in said U-shaped bracket portion and arranged in an inclined position for illuminating the needle and work, and means connected to the free end of said U-shaped portion for securing said lamp in position.

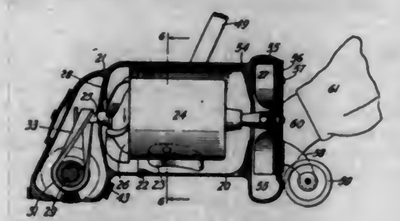
1,879,709. SEWING MACHINE. LOUIS RICH, New York, N. Y. Filed Mar. 31, 1932. Serial No. 602,357. 3 Claims. (Cl. 112—108.)

1. In a device of the kind described, a button holding member including a body having a keyhole needle slot therein opening through the free edge of the body and having its side walls provided with opposed button shank receiving grooves at the open end, a supporting bar carrying said body, a bracket carried by said bar, a presser



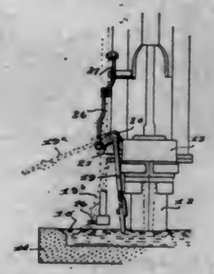
arm pivoted to said bracket and having a finger positioned opposite the open end of said slot, and spring means urging the finger toward the body.

1,879,710. VACUUM CLEANER. CHARLES E. REDDIG, Kew Gardens, N. Y., assignor to Graybar Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed July 20, 1928. Serial No. 294,193. 3 Claims. (Cl. 15—8.)



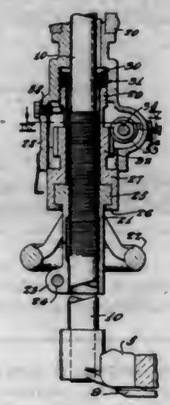
2. In a vacuum cleaner, a casing, a motor supported within the casing and spaced from the sides thereof, a vane wheel on each end of the motor shaft, curved plates in the space between the motor and the casing, and a partition in the casing having an opening adjacent the center of one vane wheel for directing the air stream produced by the other vane wheel to the center of said one vane wheel.

1,879,711. MECHANISM FOR SKIMMING AND STIRRING GLASS. JOHN F. RULE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Aug. 30, 1930. Serial No. 478,849. 9 Claims. (Cl. 49—5.)



3. The combination of a traveling mold carriage, a mold thereon, a paddle mounted on the mold carriage in advance of the mold, and means to swing said paddle on the mold carriage in the general direction of travel of the mold.

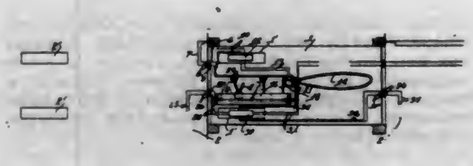
1,879,712. GLASSWARE FORMING MACHINE. CARL W. SCHWENZFEIER and JOHN E. MCLAUGHLIN, Toledo, Ohio, assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,032. 12 Claims. (Cl. 49—5.)



1. In a glassware forming machine, the combination of a suction blank mold, a knife adapted to be moved laterally across the charge receiving end of the mold, a vertical rock shaft supporting the knife, means including a hand wheel threaded on the shaft for adjusting said shaft in the direction of its length, and means to adjust the rock shaft and hand wheel in unison in the direction of the length of the shaft with respect to the mold.

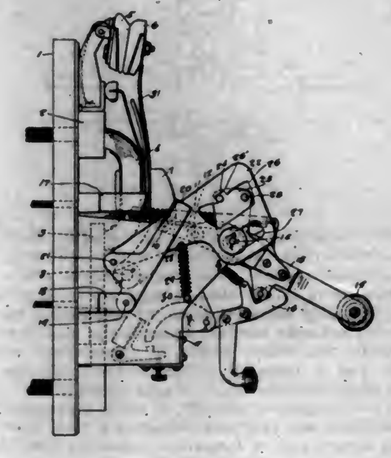
9. The combination of a rock shaft, a knife thereon, a supporting element for the rock shaft, adjusting devices having screw threaded connection respectively with said supporting element and the rock shaft, and means providing a connection between the adjusting devices, preventing relative movement in a direction lengthwise of the shaft and permitting relative rotation of said devices.

1,879,713. SELF LOADING AND UNLOADING ELEVATOR. HENARIE L. SCOTT, San Antonio, Tex. Filed Nov. 14, 1930. Serial No. 495,703. 13 Claims. (Cl. 214—95.)



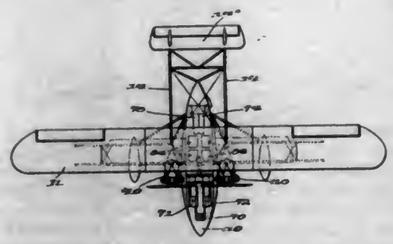
1. The combination with an elevator, of a caterpillar, a fork carried by said caterpillar for engaging the axle of an automobile, means for causing said caterpillar to move a predetermined distance and return again, and means automtaically operated after a predetermined amount of travel of said caterpillar away from said elevator for moving said fork out of engagement with said axle.

1,879,714. SWITCHING MECHANISM. WILLIAM M. SCOTT, Jr., Philadelphia, Pa., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Feb. 6, 1932. Serial No. 591,314. 19 Claims. (Cl. 200—5.)



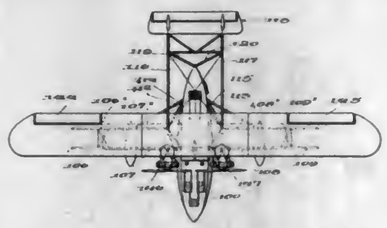
1. In combination with a circuit breaker, an auxiliary switch, and means for actuating the auxiliary switch in accordance with movement of the main switch, comprising a member having a plurality of apertures and means connected to the operating mechanism of the main switch and engaging the apertured portions of said member.

1,879,715. AMPHIBIAN BOAT STRUCTURE. IGOR SIKORSKY, College Point, Long Island, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,552. 20 Claims. (Cl. 244—30.)



1. In multi-motored amphibian aircraft a body-boat structure, a wing or supporting surface connected to said body-boat structure, two engines connected to said wing, a pilot's compartment in said body-boat forward of said wing, a passenger compartment aft of said wing, a hatchway in the ceiling of said passenger compartment, retractable landing gear attached to said body-boat and means in said body-boat for retracting said landing gear, said passenger compartment extending aft of said retractable landing gear.

1,879,716. AMPHIBIAN AIRCRAFT. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 7, 1929, Serial No. 369,113. Renewed Feb. 2, 1932. 43 Claims. (Cl. 244—2.)

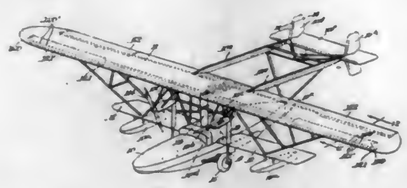


1. In an amphibian aircraft, a body member, fluid pressure actuated retractable landing gear mounted on said body member, a main plane center section above said body member in symmetrical relation to the longitudinal axis of said body member, struts interconnecting the center section and body member, a plurality of motors mounted beneath the center section in symmetrical relation thereto, and a plurality of empennage-supporting outriggers projecting rearwardly of said section.

32. In an amphibian aircraft, a motor supporting ring, a plane above said ring and including a front spar, suspension members in W formation connecting said ring at points circumferentially spaced thereon with said spar at spaced points on the latter, and suspension members connecting said ring at said circumferentially spaced points with said spar at a point midway between the first mentioned connection points thereon.

43. In an aircraft, means for attaching truss member to a structural member comprising a plate extending in a plane substantially perpendicular to said structural member, flanges on opposite edges of the plate, said flanges extending in opposite directions, means for attaching the plate to the structural member, truss members being on opposite sides of the plate and attached thereto.

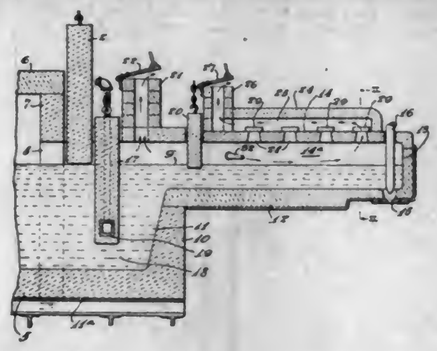
1,879,717. PNEUMATICALLY OPERATED AND CONTROLLED AIRCRAFT. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,138. 16 Claims. (Cl. 244—29.)



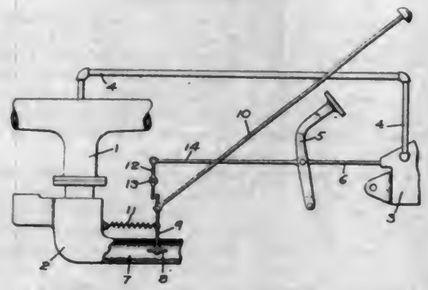
1. A method of controlling aircraft which includes pneumatically advancing one end portion of a wing or supporting surface while simultaneously pneumatically retarding the other end portion of said surface.

1,879,718. GLASS FURNACE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 17, 1929. Serial No. 355,947. 6 Claims. (Cl. 49—55.)

1. In a glass furnace, the combination of a main tank, a forehearth extension provided with an outlet opening for the glass at the forward end thereof, the walls of the forehearth being formed with ports or openings at intervals lengthwise thereof, valves individual to said ports, means providing a channel into which said ports open, and a stack communicating with said channel.

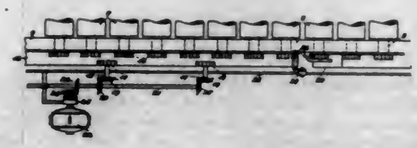


1,879,719. MOTOR VEHICLE DEVICE. CARLTON D. STEWART, Berkeley, Calif., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1927. Serial No. 219,156. 7 Claims. (Cl. 123—97.)



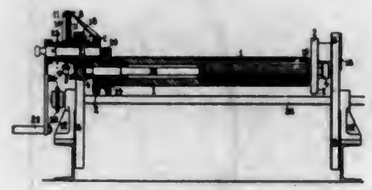
1. The combination with a carburetor of an internal combustion engine and a valve for controlling the supply of air only to the carburetor, of a brake controlled by the engine vacuum, a brake operating means and means operated by said brake operating means upon its initial movement for closing said valve and upon continued movement for reopening said valve.

1,879,720. METHOD AND DEVICE FOR CONVEYING GLASS PLATES AND OTHER ARTICLES. LAMBERT VON REIS, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicherony Company, a Corporation of Delaware. Filed May 28, 1928, Serial No. 281,291, and in Germany June 3, 1927. 6 Claims. (Cl. 198—127.)



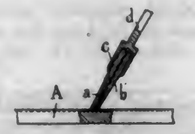
5. In a roller conveyor, means for driving all of the rollers at one speed, means for driving the rollers at a different speed, said means comprising pinions on the rollers, pinions on driven shafts, and a toothed member bridging said sets of pinions and travelling with the rollers of the conveyor.

1,879,721. APPARATUS FOR TESTING THE BRAKES OF VEHICLES. GEORGE HENRY WALKER, Worcester, England, assignor to Heenan & Froude Limited, Worcester, England. Filed Sept. 22, 1931, Serial No. 564,310, and in Great Britain Oct. 15, 1930. 7 Claims. (Cl. 265—25.)



1. Device for testing the brakes of vehicles comprising a drum which supports the wheel the brake of which is being tested, pivoted cranks carrying the drum the pivots of which are parallel with but offset from the axis of the drum, and gearing by means of which a twisting moment can be applied to the drum to rotate it against the resistance of the brake of the wheel, the said gearing being carried by one of the cranks so that when power is applied to rotate the drum the reactionary torque tends to turn the crank about its pivot so that the angle about which the crank is turned is a function of the efficiency of the brake.

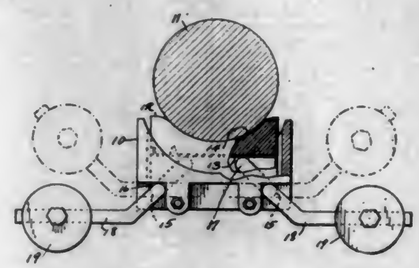
1,879,722. NEEDLE FOR SOUND REPRODUCING INSTRUMENTS. ALFRED LEONARD WALTON, Blackpool, England. Filed Nov. 10, 1930. Serial No. 494,532. 3 Claims. (Cl. 274—38.)



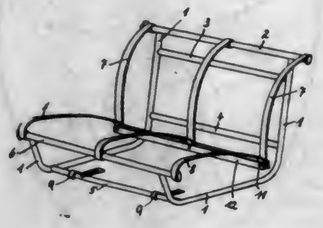
1. A needle for use in sound reproducing instruments comprising a fine hard wire core to engage the reproducing track of the gramophone and a casing of calcined material to rigidly support the core and be worn away by frictional contact with the surface of the record.

1,879,723. LUBRICATING DEVICE FOR FRICTION BEARINGS. HUGH WILSON, Grand Junction, Colo., and JAMES H. THAYER, Salt Lake City, Utah. Filed Dec. 31, 1930. Serial No. 505,831. 5 Claims. (Cl. 308—83.)

1. The combination with a journal, a lubricant containing cellar associated therewith, and a grease cartridge disposed within the cellar beneath the journal and having vertical movement within the cellar toward the journal, of shafts passing through the cellar and mounted for oscillation therein, each of said shafts having radially directed weighted arms, and each of said shafts having eccentric portions thereon operatively bearing against the grease cartridge and at all times urging it upward against the journal.



1,879,724. SEAT. EMIL WOLPERT, Stuttgart, Germany. Filed June 6, 1931, Serial No. 542,621, and in Germany Nov. 25, 1929. 7 Claims. (Cl. 155—50.)



6. In a seat the combination of a front, transverse seat rail, strip-springs supported by said rail and extending rearwards, a top transverse back rail, strip-springs suspended from said top rail, means connecting the rear ends of the first-mentioned springs to the lower ends of the second-mentioned springs, allowing freedom of substantially horizontal and vertical movement to the connected spring ends, and arched arm-rest springs having their front ends attached to the front transverse rail and having their rear ends connected to the means connecting the suspended springs to the rearwardly extending seat springs.

1,879,725. FENCE POST. MARY H. AITON, Summer Hill, Ill. Filed Apr. 29, 1930, Serial No. 448,312. Renewed Feb. 27, 1932. 1 Claim. (Cl. 256—52.)

In combination, a fence post, and wire securing means mounted on said post, said wire securing means comprising an elongated plate member bent outwardly intermediate

the ends thereof whereby to provide wire supporting lugs, each of said lugs having alined openings therethrough disposed outwardly from said plate, means for securing said

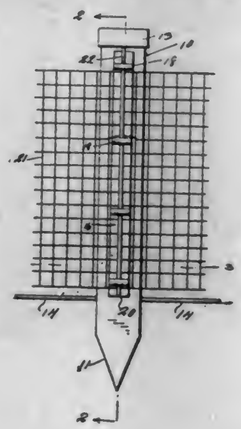
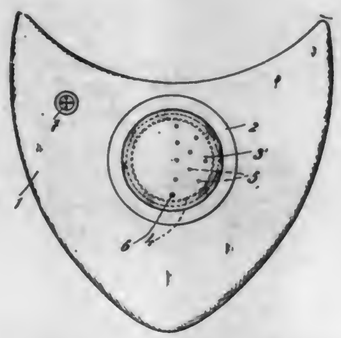


plate to said post, and a wire securing bar positioned in said openings and removably locking the wire on the lugs between the outer face of the plate and the bar.

1,879,726. SWIMMING DEVICE WITH AUTOMATIC GAS FILLING. EMIL BERGER, Salzburg, Austria. Filed Dec. 30, 1931. Serial No. 583,951. 4 Claims. (Cl. 9—19.)



1. A swimming device with automatic gas filling, comprising in combination a rubber bag, a capsule filled with calcium carbide in said rubber bag, and means for the admission of water from the outer side into said capsule so that the inflowing water generates acetylene gas from the calcium carbide, the rubber bag being thus inflated.

1,879,727. PROCESS FOR OBTAINING FAST TINTS ON THE FIBER. MAX BOMMER and ROBERT HALLER, Riehen, near Basel, Switzerland, and ENRICO POOL, Basel, Switzerland, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 16, 1931, Serial No. 581,514, and in Switzerland Jan. 15, 1931. 5 Claims. (Cl. 8—5.)

1. Process for obtaining fast tints on the fiber, which consists in causing dyeings which have been produced with such vat-dyestuffs that must in practice be vatted with the aid of hydrosulfite to react with diazo-compounds.

1,879,728. ELECTRICAL HEATING ELEMENT. GEORGE BRAY, Leeds, England, assignor to Geo. Bray & Company Limited, Leeds, England. Filed Jan. 28, 1931, Serial No. 511,910, and in Great Britain Feb. 8, 1930. 4 Claims. (Cl. 201—67.)

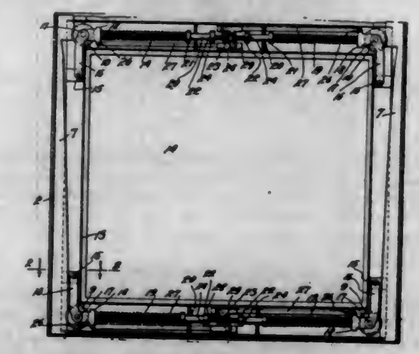
2. An electric heating element of the type referred to constructed with a case of highly resisting non-oxidizable chrome metal the exterior surface of which is coated with a fine layer of copper oxide.

1,879,729. SHOE. CHARLES H. BROWN and CHARLES B. BROWN, Flushing, N. Y. Filed Jan. 23, 1930. Serial No. 422,795. 1 Claim. (Cl. 36—71.)



A shoe as characterized comprising a heel, a ball section and a shank section intermediate said heel and ball section, said ball section and shank section being disposed on the foot-contacting side of different levels to form on the insole of the shoe a relatively sharply defined ridge intermediate said sections on a line substantially transverse the longitudinal axis of said shoe, said shank section being inclined at the inner side of said shoe, and said ridge being heightened vertically at the inner side of the shoe in correspondence with the elevation of the shank portion at that side.

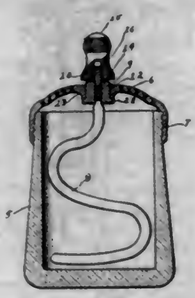
1,879,730. BALANCED WINDOW SASH. RICHARD B. BROWNE, Brooklyn, N. Y. Filed Jan. 27, 1932. Serial No. 589,101. 8 Claims. (Cl. 16—199.)



1. In a window of the class described, a sash, curved tracks within the window frame adjacent to said sash, spring pressed rollers running on said tracks, links each

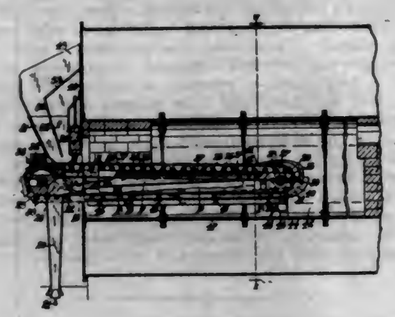
pivotally connected at one end to the sash and at the other to a roller and extending in the direction of movement of said sash and means for equalizing the pressure of said rollers on said tracks whereby the weight of the sash is counterbalanced evenly at different levels.

1,879,731. CONDIMENT HOLDER. JERRY J. BUCKLEY, Bridgewater, N. Y. Filed Jan. 8, 1931. Serial No. 507,499. 1 Claim. (Cl. 65—57.)



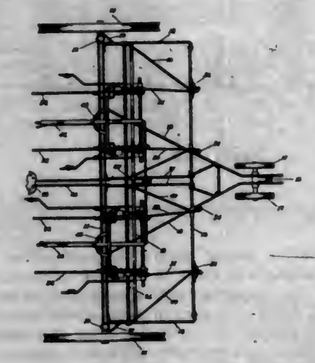
An agitator for condiment holders comprising in combination with a receptacle, a cover therefor, said cover having a central opening therein, and said cover being formed with a thickened portion through which the opening passes and which form a depending flange around the lower part of the opening, a bushing rotatably arranged in the opening and having a flange at its lower end engaging the lower end of said first named flange, with the upper end of the bushing projecting from the cover, said bushing having a vertically arranged threaded hole therein, an agitator member having a straight upper end of considerable length formed with a threaded part and which passes through the threaded opening in the bushing, and a knob having a threaded socket therein for receiving the upper end of said straight portion of the agitator member with the bottom face of the knob flat for engagement with the upper end of the bushing.

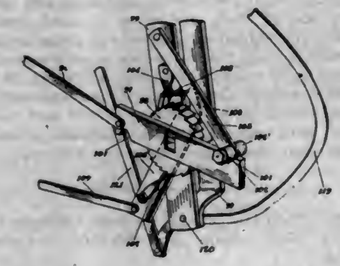
1,879,732. CHAIN GRATE STOKER. VERNER RUSSELL CHADWICK, London, England. Filed Apr. 3, 1929, Serial No. 352,297, and in Great Britain May 3, 1928. 7 Claims. (Cl. 110—40.)



1. A chain grate stoker of the type wherein the air for combustion is supplied under pressure, comprising in combination a frame-structure, an endless chain grate mounted thereon, an air-conduit extending substantially throughout the length of the grate in proximity thereto, which air-conduit is divided into two separate ducts arranged horizontally one above the other and in communication with one another at the rear end of the grate, a transverse air-chamber at the front end of the grate in open communication with one of said ducts, means for admitting air into the other duct at the front end of the grate, and a longitudinally arranged air-trough in communication with said transverse chamber and disposed beneath the upper run of the grate.

1,879,733. CULTIVATOR. LEON W. CHASE, FRANK L. ZYBACH, and JAMES C. BRAND, Lincoln, Nebr., assignors to Chase Plow Company, Lincoln, Nebr., a Corporation of Nebraska. Filed Nov. 17, 1930. Serial No. 496,216. 16 Claims. (Cl. 97—156.)





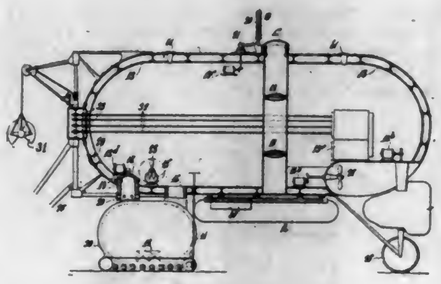
1. In a cultivator, an implement frame having a rock shaft, a tool frame suspended from said rock shaft, and means for raising and lowering said tool frame, said means including a ratchet wheel and a link connection between said ratchet wheel and said rock shaft whereby the rotation of said ratchet wheel will cause the rocking of said rock shaft to raise or lower said tool frame, and means for rotating said ratchet wheel.

16. In a cultivator, an implement frame, a plurality of tool frames suspended from said implement frame, each of said tool frames having a pair of tool carrying beams adapted to straddle a row, means on said tool frames for individually raising or lowering said beams, means on said tool frames for shifting said tool frames sidewise, means on said tool frames for shifting the beams of a pair of said beams toward or away from each other, and means on said implement frame for bodily raising or lowering all of said tool frames and said beams in unison.

1,879,734. OBTAINMENT OF VITAMIN CONCENTRATES FROM FATS. WALTER G. CHRISTIANSEN, Bloomfield, N. J., and EUGENE MONESS, New York, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1928. Serial No. 306,782. 4 Claims. (Cl. 167—81.)

1. In obtaining a vitamin concentrate from fats, the step of saponifying the fat in acetone with a non-alcoholic alkali-metal hydroxide.

1,879,735. APPARATUS FOR SUBMARINE EXPLORATIONS AT GREAT DEPTHS. JACQUES TOURNADOUR D'ALBAY, Paris, France. Filed May 8, 1928, Serial No. 276,178, and in France May 21, 1927. 1 Claim. (Cl. 61—69.)



A submarine device having in combination a shell of sufficient strength to serve as a supporting base, mechanical operating or engaging means arranged exteriorly upon said shell, electric motors in said shell, drive means between said motors and said operating or engaging means, a substantially non-corrosive dielectric compressed or incompressible fluid filling said shell, means to maintain a substantially equal pressure in said fluid and the exterior water, a second shell, connected to said first shell, a fluid under approximately atmospheric pressure filling said second shell, remote control means in said second shell for controlling said motors and said operating or engaging means, said second shell being of relatively small dimensions and having strong walls to permit said second shell to operate with approximately atmospheric pressure therein to relatively enormous depths of immersion.

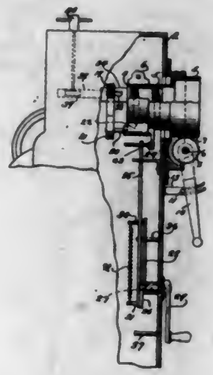
1,879,736. PENCIL. FRANK C. DELI, Chicago, Ill. Filed Apr. 18, 1929. Serial No. 356,233. 5 Claims. (Cl. 120—18.)



1. In combination, a pencil body having an axial opening, one portion of which is non-circular in cross-section, the lower end of the body being tapered, a slightly bowed threaded tube and a plunger adapted to project into the axial opening, and a tapered body that functions as a tip permanently fixed to the lower end of the tube and adapted to abut without interfitting with the pencil body.

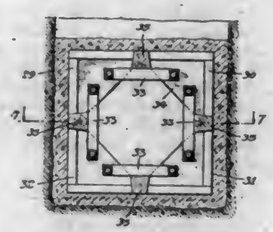
1,879,737. PROJECTION APPARATUS. LORENZO DEL RICCIO, Los Angeles, Calif., assignor to Paramount Famous Lasky Corporation, and Warner Bros. Pictures, Inc., New York, N. Y., both Corporations of New York. Filed Dec. 22, 1928. Serial No. 327,832. 8 Claims. (Cl. 88—24.)

1. Projection apparatus comprising an objective lens system, a mount therefor, means for imparting longitudinal movement to said mount, an additional lens system adapted to be moved transversely of said objective lens system into and out of operative position relatively thereto, and means for imparting bodily movement to the additional



lens system and said objective lens system when the additional lens system is in axial alignment with the objective lens system.

1,879,738. CONSTRUCTION FORM. JOHN A. DICKERSON, Chicago, Ill. Filed Jan. 31, 1929. Serial No. 336,501. 3 Claims. (Cl. 25—128.)

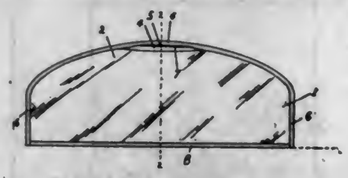


1. In a form support, the combination of a plurality of circumferentially arranged sections providing form supports, means detachably connecting adjacent ends of said form supporting sections and maintaining said ends in spaced relation to each other and providing a support for said supporting sections arranged transversely of said space, a form member adapted to be arranged in said space, said last mentioned form member providing means for completing said form and providing a space into which an end of the first mentioned form supporting sections may be moved to thereby allow said form sections to be separated from each other upon detachment of said connecting means and separation of said last mentioned form member from the form supporting sections, said detachable connecting means providing means for engaging and holding said last mentioned form member in said space.

1,879,739. PROTECTIVE COVER. NATHAN I. FLEISCHER, Cincinnati, Ohio, assignor to I. Fleischer & Sons, Cincinnati, Ohio, a Firm composed of Nathan I. Fleischer and Jacob I. Fleischer. Filed July 21, 1931. Serial No. 552,160. 2 Claims. (Cl. 223—61.)

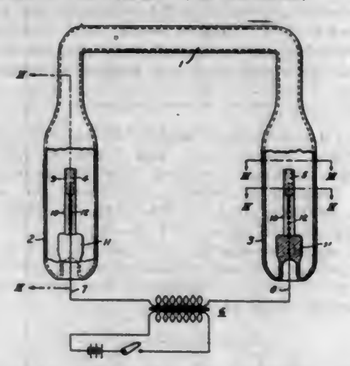
1. A protective cover comprising two sheets of transparent material shaped so as to register along their edges except at the upper central portion, where one of said

sheets is cut lower than the other, an adhesive tape secured over the registering side edges of said sheets to assemble same, and continuing as a binding overlapping the two surfaces of the higher edge at the nonregistering portions



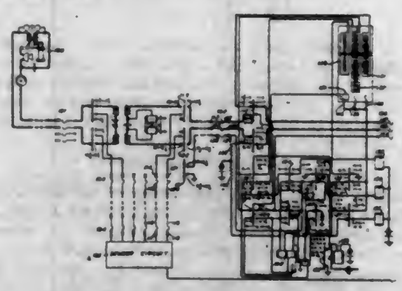
of the sheets, a second adhesive tape overlapping the two surfaces of the lower edge at said nonregistering portions, and separate adhesive tapes each overlapping the two surfaces of the lower edge of one of said sheets.

1,879,740. LUMINOUS TUBE. JOSEPH E. GROSS, Swissvale, Pa., assignor to Aurora Sign Company, a Corporation of Pennsylvania. Filed Nov. 2, 1928. Serial No. 316,707. 10 Claims. (Cl. 176—126.)



1. An electron emissive electrode for luminous tubes comprising a lead-in conductor embedded in a sintered mass of nickel, barium oxide and strontium oxide.

1,879,741. TELEPHONE SYSTEM. WILLIAM T. HAINES, Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 12, 1932. Serial No. 598,512. 6 Claims. (Cl. 179—18.)



1. In a telephone exchange system, a plurality of trunk circuits, a selector switch for extending a connection to any one of said trunk circuits, a test brush for said switch, means for advancing said test brush to test for idle trunk circuits, a sleeve relay for each trunk circuit, and a current rectifying device for connecting said relay to the test multiple of its trunk circuit.

1,879,742. TEXTILE CONTAINING ALLYL ETHERS OF CELLULOSE AND PROCESS OF MAKING SAME. ROBERT HALLER, Rieben, near Basel, and ALPHONSE HECKENDORN, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 26, 1929, Serial No. 402,793, and in Switzerland Nov. 3, 1928. 4 Claims. (Cl. 8—20.)

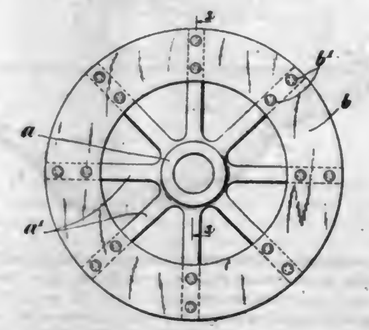
1. Process for the manufacture of textiles containing allyl ethers of cellulose which retain the original structure and strength of the fiber, consisting in treating textiles from cellulose which have been pretreated with solutions of caustic alkalies, with allyl halides selected from the group consisting of allyl bromide and allyl chloride.

1,879,743. GUIDE FOR THE MANDREL SHAFTS IN TUBE DRAWING BENCHES. HEINRICH HEETKAMP, Duisburg, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed Apr. 25, 1930, Serial No. 447,299, and in Germany Feb. 17, 1930. 2 Claims. (Cl. 205—4.)



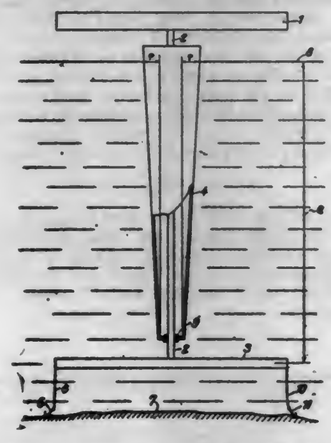
1. In tube drawing benches having a stationary mandrel shaft guide, means for changing the mandrel shaft and the guide, comprising a tubular guide for the mandrel shaft, an axially movable mandrel shaft therein, means for locking said tubular guide in position in said bench when introduced from above and means for moving said tubular guide together with said mandrel shaft into and out of the bench when said locking means are inoperative, consisting of a member co-extensive with said tubular guide for suspension from a crane and a plurality of depending elements on said member for engaging said guide.

1,879,744. BRAKE DISK. JOHN W. HEINEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1930. Serial No. 435,697. 1 Claim. (Cl. 188—264.)



A brake disk comprising a pair of annular friction plates, and a hub member having a plurality of substantially radial arms interposed between said plates, said arms constituting means for maintaining the plates in spaced relation so as to afford passages between the plates permitting the free circulation of air, the inner marginal edges of said plates being spaced from the inner ends of said arms to provide the disk with transversely extending substantially V-shaped openings communicating with the passages between the plates, said plates being rigidly secured to the arms.

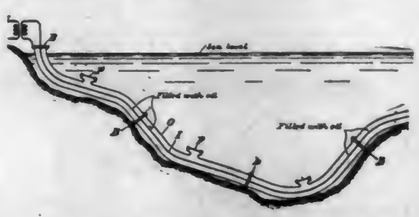
1,879,745. FLOATING SUPPORT. MAX ALBERT HENKER, Lugau, Germany. Filed Dec. 3, 1931, Serial No. 578,672, and in Germany Dec. 12, 1930. 15 Claims. (Cl. 114—0.5.)



1. A floating support structure for use in water comprising a float riding submerged in deep water substantially at rest, an actual support above the surface, a structure connecting said float and said support, and a casing surrounding said connecting structure, joined thereto in deep water substantially at rest in such a manner as to be movable with respect thereto.

11. In a floating support for use in open water, the combination of an anchored float immersed to a depth at which the water is substantially at rest, a support above the water level carried by said float, and means protecting said support from the effect of wave motion above the float.

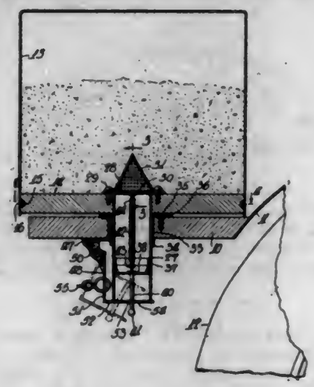
1,879,746. SUBMARINE CONCENTRIC CONDUCTOR SYSTEM. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,103. 6 Claims. (Cl. 173—264.)



1. A submarine cable comprising a central conductor, a cylindrical return-conductor concentrically arranged with respect to said central conductor, a liquid insulating material in the space between the conductors, and pressure equalizing means in said cylindrical conductor, said pressure equalizing means being responsive to the pressure of the medium surrounding the cable.

1,879,747. SANDING DEVICE FOR VEHICLES. LOREN L. HOPKINS, Woodcliff, N. J. Filed June 3, 1931. Serial No. 541,789. 14 Claims. (Cl. 291—28.)

1. A vehicle having a running board provided with an aperture therethrough, a collapsible sand bag having a lower open end, a plate closing said open end and having an opening therethrough, a tubular member connected to said plate for delivering sand in advance of the vehicle wheels, and communicating with the interior of said sand bag, said tubular member passing through the aperture of said running board, so that the sand bag

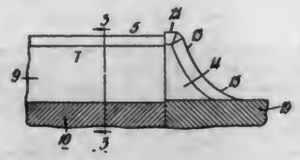


when mounted in position will be disposed over said running board in close proximity thereto, said sand bag, plate, and tubular member being connected together as a unit, and easily detachable as a unit from said running board.

1,879,748. ALUMINUM-SILICON ALLOY. BASIL T. HORSFIELD, Badin, N. C., and LOUIS W. KEMPF and WILLIAM L. FINK, Cleveland, Ohio, assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 15, 1930. Serial No. 421,060. 6 Claims. (Cl. 75—1.)

1. An aluminum-silicon alloy containing 2 to 25 per cent of silicon and also containing about 0.03 to 2 per cent of beryllium characteristically free from cavities due to surface shrinkage when cast.

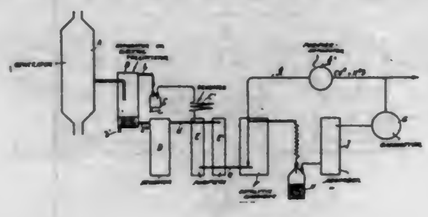
1,879,749. DIVISION FOR BOWLING ALLEYS AND GUARD THEREFOR. ARTHUR E. JAMES, Auburn, R. I. Filed Dec. 26, 1931. Serial No. 583,282. 6 Claims. (Cl. 273—54.)



1. A division guard for bowling alleys comprising a metallic cap provided with a chamber adapted to receive one end of the division of a bowling alley, and a horizontal flange extending across the front end of the guard and adapted to project beneath the floor boards of the alley approach.

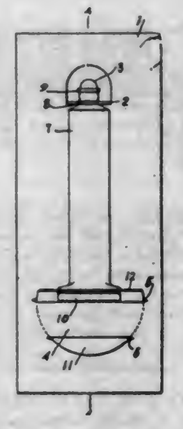
1,879,750. PROCESS FOR THE CONVERSION OF SOLID COMBUSTIBLES INTO LIQUID FUEL. ALFRED JOSEPH, Enghein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del., a Corporation of Delaware. Filed Apr. 29, 1929, Serial No. 359,146, and in France May 8, 1928. 4 Claims. (Cl. 196—53.)

1. A process for the production of synthetic liquid fuels from solid pyrobituminous starting materials containing water both in suspension and in combination, which consists in subjecting the starting materials to a low temperature destructive distillation to produce volatilized tars, gases and water vapours, separating and precipitating the tars and the water vapours derived from the water of combination from the gases and the water vapours derived from the water of suspension, condensing and eliminating said water of suspension, revapourizing



the tars and the water of combination and recombining them with the uncondensed gases, and subjecting the recombined products to a catalytic hydrogenating treatment.

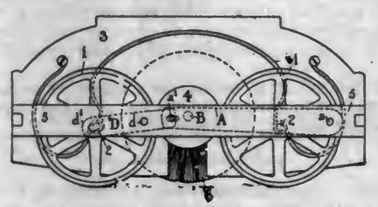
1,879,751. SUPPORT FOR COLLAPSIBLE TUBES. CHARLES R. KEISER, Dayton, Ohio, assignor to The Serton Rubber Company, Dayton, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 550,348. 13 Claims. (Cl. 206—79.)



1. A paste tube support consisting of a piece of cardboard having a loop cut therefrom to engage the neck of the tube and slits spaced from the loop, and an insert in the slits in the cardboard having a right-angular extending part to support the closed end of the tube.

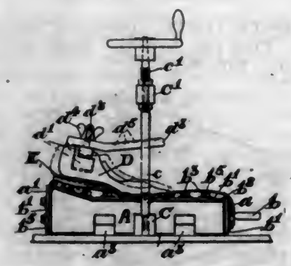
1,879,752. CARPET SWEEPER. WILLIAM HENRY KENYON, Accrington, England, assignor to Entwisle & Kenyon Limited, Ewbank Works, Accrington, England. Filed May 16, 1931, Serial No. 537,785, and in Great Britain Mar. 7, 1931. 3 Claims. (Cl. 15—41.)

1. In a carpet sweeper the combination of an end iron, a brush control lever pivoted to the end iron at its extreme end remote from the brush axis and clear of the wheel axle, a brush stud riveted thereto at the free end, an operating lever centrally pivoted to the end-iron at the opposite side of the brush axis, one end of said control lever engaged by the opposite wheel axle and the other end in pivotal engagement with the free end of the said brush control lever whereby the upward move-



ment of said second wheel axle in relation to the sweeper case causes a corresponding downward movement of the brush stud and brush.

1,879,753. SHOE SOLE PRESS. JAMES KEWLEY, Nelson, England. Filed Apr. 7, 1930, Serial No. 442,312, and in Great Britain Apr. 17, 1929. 3 Claims. (Cl. 12—33.)

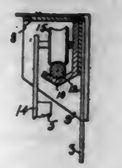


2. A press for attaching soles or part soles to boots and shoes comprising two channel shaped frames containing inflatable rubber bags maintained in position by leather or other inextensible covers, air admission valves for the inflation of the bags, a rubber strip or apron permanently attached to extend over each inextensible cover and having its free end detachably secured in position by the valve, the said frames being formed in their undersides with a series of slots for the reception of a cross bar carrying standards, a cross bar connecting the tops of the standard, and press screws threadedly passing through said latter cross bar.

1,879,754. BEARING SURFACE. CARL S. KLUMPP, Brooklyn, N. Y., and ROBERT R. POTTER, Jersey City, N. J. Continuation of application Serial No. 281,629, filed May 31, 1928. This application filed Aug. 18, 1931. Serial No. 557,796. 6 Claims. (Cl. 16—96.)

1. In an apparatus of the type described, the combination with a movable door having hangers thereon and

rollers rotatably attached to said hangers, of a support for the door comprising a free rod, said rollers being supported slightly out of longitudinal alignment so as to effect continuous movement of said rod, and means for guiding the door at its lower edge.

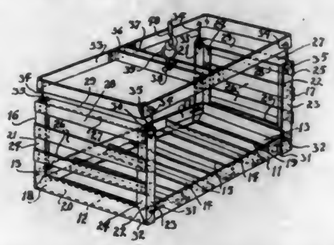


1,879,755. CONTAINER FOR ADHESIVE PLASTER AND THE LIKE. EVERETT H. KNEEN, Ansonia, Conn. Filed Sept. 30, 1931. Serial No. 566,011. 1 Claim. (Cl. 206—52.)



A container for adhesive plaster and similar material, comprising a ring, the ends of the ring rolled outwardly forming a bead and each bead formed with a plurality of inwardly-extending bumps, a spool having ends of a diameter slightly less than the diameter of the ring and adapted to spring past the said bumps, whereby the spool is interlocked with the ring.

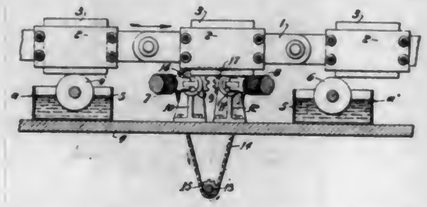
1,879,756. BRICK CRATE. DANIEL M. KUCHTA, Brooklyn, N. Y. Filed Oct. 5, 1931. Serial No. 566,932. 8 Claims. (Cl. 294—67.)



1. A brick crate embodying therein a metal tray having upwardly projecting side and end flanges, end frames each having a bottom rail adapted to pass beneath and engage said tray, uprights at opposite ends of said bottom rail, having means whereby tackle may be connected therewith adjacent the top thereof, and braces extending from upright to upright, and pivotal and slidable connections between each upright and the adjacent side flange of said tray, whereby said end frames have pivotal movement to permit the engagement of said bottom rail with the bottom of said tray so as to transmit the lifting stresses directly to said tray, or combined pivotal and sliding movement to disengage said bottom rail from, and the folding of said end frame upon, said tray.

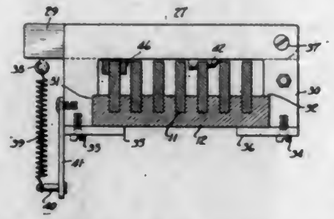
1,879,757. BOOKBINDING MACHINE. ROY P. KUSCH, Chicago, Ill., assignor to W. F. Hall Printing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,435. 2 Claims. (Cl. 91—33.)

1. In book binding machinery of the type specified, the combination of conveying means comprising clamping means for supporting gathered book sections or signatures in the form of separate leaves, means for applying adhesive to the rear edges of said packs comprising means for applying an initial coating of relatively thin, fluid adhesive thereto, a driven roller arranged diagonally to the path of movement of said packs of leaves for bending or buckling the rear edges of said leaves to separate the



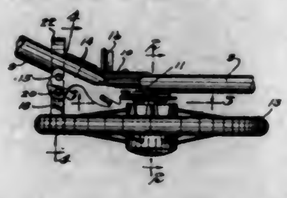
same, thereby operating to apply adhesive to the faces of the leaves adjacent the edges thereof to which adhesive is applied, means for applying a second coating of relatively thick adhesive to the severed rear edges of said packs preparatory to applying the binding, said driven diagonal roller being arranged between and outside of said glue applying means.

1,879,758. KNITTING MACHINE. STERLING C. MACK, Bangor, Pa., assignor to Julius Kayser & Co., New York, N. Y. Filed June 6, 1931. Serial No. 542,528. 12 Claims. (Cl. 66—130.)



1. In a flat knitting machine having a plurality of thread-carriers, a plurality of carrier-rods, in combination with a damping device comprising a yielding member and means on said member for engaging the ends of the carrier-rods for preventing excessive vibration thereof, and additional means on said member to serve as an abutment for certain of the carrier-rods.

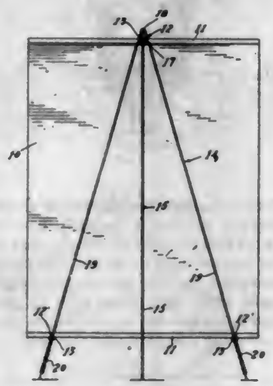
1,879,759. BRAKE FOR BABY CARRIAGES AND THE LIKE. JULIUS A. MAHR, Minneapolis, Minn., assignor to Inventors' Patent Holding Company, Minneapolis, Minn., a Corporation of South Dakota. Original application filed Dec. 12, 1928, Serial No. 325,411. Divided and this application filed Nov. 6, 1929. Serial No. 405,114. 1 Claim. (Cl. 188—20.)



The combination with a chassis of the class described, of a brake arm formed from a normally straight bar pivoted intermediate of its ends to the body of the chassis for movement to and from an operative position in which

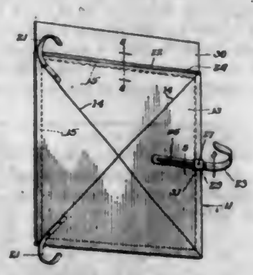
one of its end portions projects transversely between two of the spokes of one of the wheels of the chassis, the other end portion of the arm being bent to form a finger piece, and a spring washer encircling the pivot for the arm and compressed between said arm and the body for frictionally holding the arms where positioned.

1,879,760. DISPLAY DEVICE. THOMAS FRED MOORE, New York, N. Y. Filed June 6, 1931. Serial No. 542,516. 2 Claims. (Cl. 40—125.)



1. The combination with a flexible poster, of a carrier for displaying the poster including spaced legs, means for securing the upper edge of the poster to said carrier, and coiled tension springs sleeved on said legs and having their lower ends secured to said legs, the upper ends of said springs being detachably connected to the lower edge of the poster to pull downwardly thereon.

1,879,761. DISPLAY DEVICE. RICHARD NEILER and WILLIAM W. HOLMAN, Chicago, Ill. Filed Nov. 16, 1931. Serial No. 575,270. 5 Claims. (Cl. 40—129.)

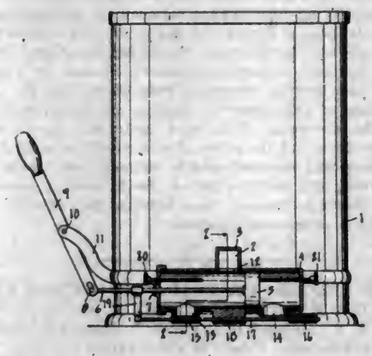


1. A display device comprising a frame forming a carrier adapted to receive and support an advertising card and means comprising hooks carried by the frame and adapted to embrace an automobile tire for the purpose of securing the carrier on the tire, one of the hooks being shiftably mounted on the frame in order to facilitate the application of the carrier to the tire, and means to clamp said shiftably mounted hook in any of its shifted positions, said clamping means being formed in the card carrier in position to clamp a portion of the card in the carrier to retain the same therein.

1,879,762. PROTECTION OF AUTOXIDIZABLE MATERIALS. FERDINAND W. NITARDY, Brooklyn, N. Y., assignor to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1931. Serial No. 515,421. 4 Claims. (Cl. 167—81.)

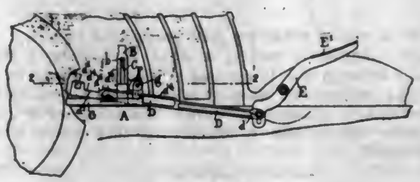
1. A tablet comprising a vitamin concentrate, an antioxidant distributed around the concentrate, and an impervious envelope over the antioxidant, the antioxidant being a substance that reacts so rapidly with any oxygen penetrating the envelope as substantially to prevent oxidative deterioration of the concentrate.

1,879,763. VALVE. GLEN OVERTON, Allegan Township, Allegan County, Mich. Filed Jan. 31, 1931. Serial No. 512,517. 1 Claim. (Cl. 221—103.)



A valve for fountain ice cream freezers comprising a hollow cylinder, a piston fitting in the bore of said cylinder, a piston rod for actuating said piston, an inlet for said cylinder in the portion of said cylinder traversed by said piston and adapted to be connected with the outlet of a freezer, outlets in said cylinder in the portion of said cylinder not traversed by said piston, slidable valves for closing said outlets, means for opening each valve as the stroke of the piston is toward it, and means for closing said valve on the return stroke.

1,879,764. GUARD FOR CARDING ENGINES. JAMES PICKFORD, Oldham, England. Filed July 31, 1930, Serial No. 472,144, and in Great Britain Aug. 15, 1929. 4 Claims. (Cl. 192—135.)



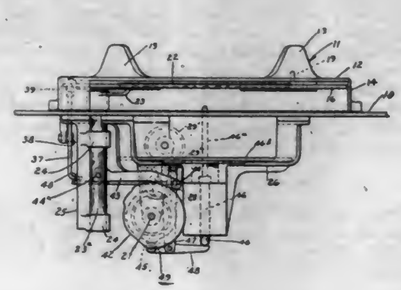
4. Guards for carding engines of the type referred to comprising the combination with a pivoted arm and a door carried thereby of a transversely recessed double surfaced bar, a stationary slotted casing through which the bar slides, a locking roller engaging the back surface on the bar and housed within the casing to project therefrom at both ends, a strap obstructing member, bearings on the side of the casing, a shaft carried in said bearings upon which the strap obstructing member is mounted and a cam on said shaft bearing upon the front surface of said bar.

1,879,765. APPARATUS FOR LAUNCHING AIRCRAFT. ARTHUR RICHARDS, London, England, assignor to Ransomes & Rapier Limited, Ipswich, Suffolk, England, a Company of Great Britain. Filed Aug. 13, 1931, Serial No. 556,874, and in Great Britain Aug. 15, 1930. 5 Claims. (Cl. 244—2.)



1. Apparatus for launching aircraft comprising in combination a prime mover, a sliding carriage directly connected to the moving element of such prime mover, a trolley adapted to travel along the sliding carriage, a movement multiplying rope linkage between the sliding carriage and the trolley, a hydraulic device of the cylinder and piston type for checking the launching movement of said moving element including members carried by the stationary and moving elements respectively of the prime mover, one of said members having an aperture through which the discharge from said hydraulic device is arranged to flow, and the other of said members being formed as an occluding element which registers with said aperture, during the latter part of the launching movement of said moving element, to diminish the effective area thereof in a progressive manner.

1,879,766. RECORD CENTERING MEANS FOR MULTI-PLAYING MACHINES. WALTER R. ROYCROFT, Ozone Park, N. Y., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,190. 12 Claims. (Cl. 274—10.)

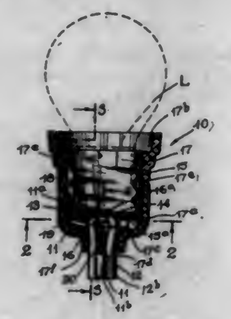


7. In a record centering and supporting means, a receptacle adapted to receive a stack of records, a plate movable through the lower end of said receptacle to engage and support the stack of records, and means within the receptacle adapted to elevate the stack away from the lower record and to center the then lower record of the stack.

1,879,767. PRODUCTION OF MENTHENES. WALTER SCHOELLER, Berlin-Westend, HANS JORDAN, Berlin-Steglitz, and KARL SCHÖLLKOPF, Dusseldorf-Oberkassel, Germany, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed Nov. 11, 1929, Serial No. 406,507, and in Germany Nov. 15, 1928. 3 Claims. (Cl. 260—167.)

1. The method of producing menthenes comprising treating a liquid menthadiene having a double bond outside the nucleus at a moderately elevated temperature in the presence of a hydrogenation catalyst containing nickel with hydrogen, until one molecule of hydrogen is bound.

1,879,768. TERMINAL CONNECTION FOR ELECTRIC LAMP SOCKETS. ISRAEL H. SHALOMITH, Brooklyn, N. Y., assignor of one-half to Ira F. Dash, New York, N. Y. Filed Mar. 1, 1930. Serial No. 432,353. 5 Claims. (Cl. 173—358.)



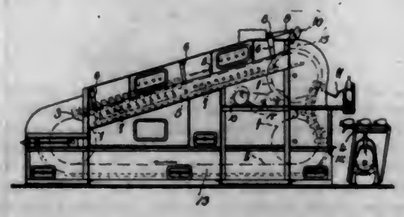
4. In an electric socket having an insulated casing, a screw shell contact portion, a resilient tab terminal, extending from said portion bent to form a loop for receiving a wire adapted to clampingly retain the latter when assembled in the socket casing, an eyelet rivet formed with a split end, said split end being bent to provide a lug terminal extending transverse another wire for clampingly engaging and securing the latter to the rivet.

1,879,769. LENS. JACK R. SILVERMAN, Dayton, Ohio, assignor, by mesne assignments, of one-half to The Univis Corporation, Wilmington, Del., a Corporation of Delaware, and one-half to United Kingdom Optical Company, Limited, London, England. Filed Oct. 22, 1930. Serial No. 490,390. 8 Claims. (Cl. 88—54.)



1. In a method of eliminating prismatic imbalance, inserting a zonal near vision insert in a distance lens blank, selectively positioning the lens blank upon the lens block to one side of the center of a grinding tool, cementing the lens blank on the lens block, and subjecting the lens blank and insert to the grinding action of a grinding tool as thus positioned to form a prism upon the upper or lower edge of the near vision insert and to control the position of the optical center of the near vision insert.

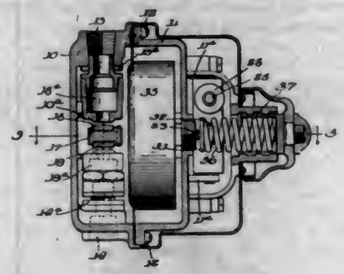
1,879,770. BOTTLE WASHING MACHINE. WILHELM SIMONSSON, Halsingborg, Sweden. Filed Dec. 22, 1928, Serial No. 327,973, and in Sweden Dec. 31, 1927. 4 Claims. (Cl. 141—7.)



1. Improvement in bottle washing machines of the kind wherein the bottles are supported in pockets on endless conveyor means running on drums, so as by the movement

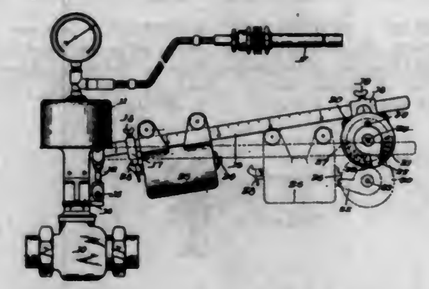
of said conveyor means successively to be brought into register with washing nozzles, characterized by movable frame means for movably supporting a series of such washing nozzles, means for imparting a reciprocating movement to said frame means, means controlling said reciprocating movement of said frame, to cause said frame means to travel with said conveyor means at the same speed and then be quickly returned to the starting position, said controlling means oscillating said frame during its movement in unison with said conveyor means, said conveyor means having the upper run thereof inclined to the lower portion and said frame means being correspondingly inclined with reference to said bottom portion of said conveyor so that said frame means may be moved in one direction by gravity.

1,879,771. MIXING VALVE. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1932. Serial No. 584,665. 11 Claims. (Cl. 236—12.)



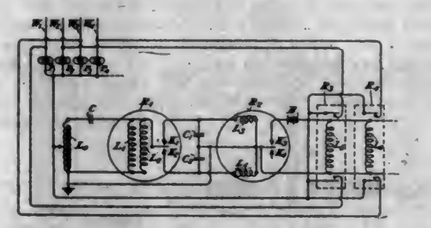
1. In combination, a casing including front and rear parts, said rear part containing hot and cold inlets and a mixed fluid outlet, said inlets having opposed discharge openings, a valve arm mounted to oscillate between said openings, a thermostatic motor, connections for causing the motor to effect oscillation of said valve arm, said motor and connections being contained in said outer casing and adapted to be removed as a unit to expose the valved inlets without disturbing the pipe connections.

1,879,772. TIME CONTROLLED HEAT REGULATOR. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1932. Serial No. 585,041. 5 Claims. (Cl. 236—46.)



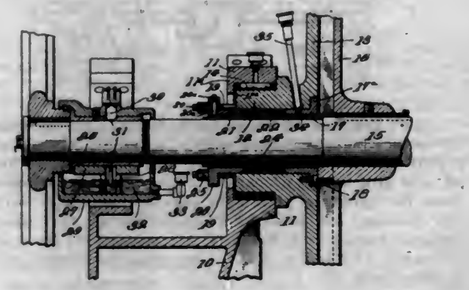
1. In combination, a heat control valve, a frame, a thermostatic motor for regulating the position of the valve, an arm fulcrumed on the frame and cooperating with the motor, a weight freely slidable between stops on the arm and adapted to act by gravity to modify the action of the motor tending to move the valve, a clock mounted on the arm, and constituting one limit stop said clock being adapted to hold the weight in a fixed position on the arm for a predetermined interval, and means for adjusting the position of the clock relative to an extreme position of the weight to determine one temperature limit.

1,879,773. ELECTRICAL PROTECTIVE SYSTEM. LELAND K. SWART, Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 22, 1930. Serial No. 477,170. 5 Claims. (Cl. 179—78.)



1. The combination of a plurality of signal circuits which are exposed to extraneous inductive effects, a plurality of protective blocks each associated with one of said circuits and operated to discharge a substantial current when a voltage exceeding a predetermined value is impressed upon the associated circuit, means for receiving the current discharged by any protective block, relay arrangements for deriving direct current from the current present in said receiving means, and means responsive to the direct current for simultaneously grounding all of said circuits.

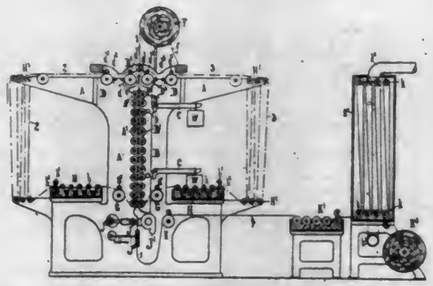
1,879,774. SUPPORTING MEANS FOR AGITATOR MECHANISM. ROBERT M. TEMPLE, Philadelphia, Pa. Filed Nov 6, 1925. Serial No. 67,393. 2 Claims. (Cl. 308—134.)



1. Supporting means for agitator mechanism comprising a bearing, an agitator casing provided with a hub-like boss extended into and rotatably engaging said bearing, said boss having an axial bore therein, a second bearing spaced from the first mentioned bearing, an agitator shaft extending through the bore of said boss and having rotative engagement with said second bearing, the diameter of said shaft being substantially less than the diameter of said bore, so that the weight of the casing is supported by the first mentioned bearing and the weight of the agitator is carried by the other bearing, a sleevelike abutment member extended into said bore from the inner end thereof, an adjustably mounted packing gland extended into said bore from the other end thereof, packing encircling said shaft and filling the space between the shaft and the wall of the bore, said packing being also interposed between and abutting the oppositely spaced ends of said abutment and said gland, the bores of said abutment

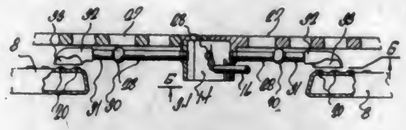
member and said packing gland being of a greater diameter than the diameter of the shaft, so that by adjustment of said packing gland leakage along the shaft into said casing is prevented and increased friction is avoided.

1,879,775. PRODUCTION OF CINEMATOGRAPH FILM POSITIVES. JOHN EDWARD THORNTON, St. Brelade, Jersey, Channel Islands, assignor to John Owden O'Brien, Manchester, England. Filed Apr. 12, 1929, Serial No. 354,714, and in Great Britain Apr. 25, 1928. 3 Claims. (Cl. 101—149.)



1. The process of producing a cinematograph or other series of two-color positive pictures upon a non-perforated transparent film by simultaneously printing in register on both sides of the non-perforated film by means of two photo-mechanical printing belts.

1,879,776. GAS RANGE. HERBERT E. TOELLE, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 2, 1930. Serial No. 418,012. 6 Claims. (Cl. 158—115.)



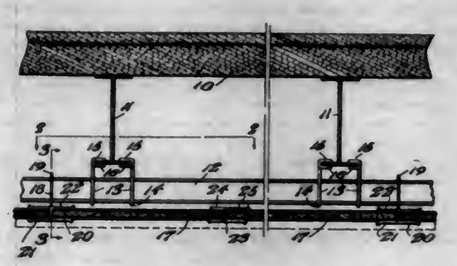
1. In a device of the character described, a burner, means for connecting the burner with a source of fuel supply, a grill over the burner for supporting articles to be heated, said grill having a chamber formed therein and spaced from the burner, a pilot light burning in a flame within the chamber, and means for communicating fuel issuing from the burner upon its initial connection with the source of supply within the chamber to cause the burner to be automatically lit.

1,879,777. COMPOSITION FOR TREATING TREES AND OTHER VEGETATION. ALBERT J. VALLE, Los Angeles, Calif. Filed July 13, 1927. Serial No. 205,535. 2 Claims. (Cl. 167—14.)

1. A composition for treating trees and the like comprising putty of whiting and slow drying oil, castor oil, and an inorganic sulphur-containing salt.

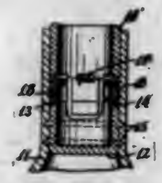
1,879,778. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed July 30, 1930. Serial No. 471,718. 3 Claims. (Cl. 72—118.)

1. In a ceiling construction of the character stated, a floor beam having upper and lower flanges, a floor supported upon the upper flange of said floor beam, U-shaped wire clips suspended from the opposite sides of said lower flange, said clips being bent horizontally U-shaped fashion at their tops to have wedging relation with said lower flange, a plasterer's channel passing endwise through and supported in said wire clips at right angles to said beam, means including a metal clip stamped from a single blank



having an upper inverted U-shaped narrow slotted part fitted over said plaster's channel, said clip having plaster board receiving fingers at its bottom, and plaster boards fitted to said fingers to form a ceiling.

1,879,779. FLAGPOLE AND THE LIKE. CHARLES G. WILKINSON, New York, N. Y. Filed Nov. 11, 1929. Serial No. 406,232. 3 Claims. (Cl. 189—26.)



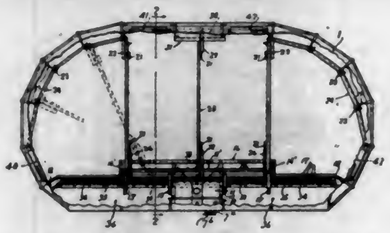
1. A flag pole or the like joint, comprising an upper pole section telescopically engaged within a lower pole section, a cup secured within the lower pole section and formed with an outer chamfered top edge engaging an inner chamfered bottom edge on said upper pole section for supporting the upper pole section and for collecting rain water and the like to reevaporate and for preventing leakage of rain water into the lower pole section and consequent decay and damage to building or foundation, said cup being provided with a plurality of peripheral ridges arranged for engaging the lower pole section and providing a water tight joint between these parts.

1,879,780. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 3, 1929. Serial No. 397,054. 4 Claims. (Cl. 88—47.)



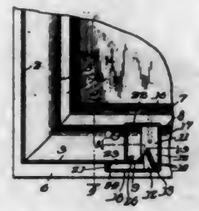
1. An ophthalmic mounting comprising a pair of split non-metallic lens rims, a metallic bridge member extending between the rims, a projecting portion on the bridge extending into the lens rims, a securing member abutting the bridge, said bridge and securing member being split adjacent the split on the lens rims and means in said securing member to secure the split portions together.

1,879,781. FARROWING HOUSE. WILLIAM D. BAYLEY, Springfield, Ohio. Filed Jan. 3, 1928. Serial No. 244,188. 10 Claims. (Cl. 119—16.)



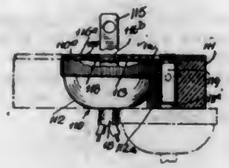
1. In a farrowing house, an enclosing structure, a rail fence in said structure adjacent one wall thereof, partitions extending from said fence to the opposite walls of said structure dividing said structure into pens, a partition closing the space between the lower rail of said fence and the floor of said structure to form nursery compartments on the outside of said fence which communicate with the end pens, rails located on the inner side of said fence to form nursery compartments communicating with the inner pens, a heating chamber common to all of said nursery compartments and separated therefrom by foraminous partitions, and a heater in said heating chamber, said heating chamber being accessible from the exterior of said house.

1,879,782. SHOWER BATH CABINET. JOHN O. BARCE, Chicago, Ill. Original application filed Aug. 19, 1929, Serial No. 386,758, and in Canada Feb. 5, 1931. Divided and this application filed Oct. 17, 1931. Serial No. 569,418. 11 Claims. (Cl. 4—145.)



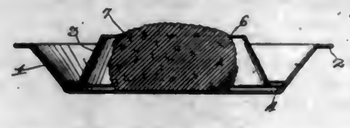
1. A hollow stile for use in cabinets or the like comprising an elongated hollow member formed by intersecting side walls, two of said walls terminating short of each other a substantial distance in one direction transverse to the length of said stile and a relatively smaller distance in a second direction transverse to the length of said stile.

1,879,783. CONVERTIBLE CAP PLUG. LOUIS BARNETT, Brooklyn, N. Y. Filed Feb. 8, 1927. Serial No. 166,630. 11 Claims. (Cl. 173—334.)



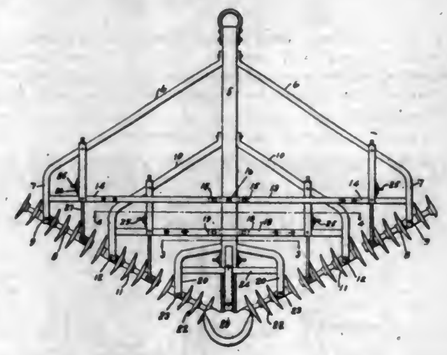
1. A fitting of the character described comprising a cap-plug having terminal blades projecting from one side thereof, said side having a recess formed therein adjacent the blades, and a receptacle outlet fitting having portions thereof extending into the said recess for detachably connecting with the terminal blades to form a unit.

1,879,784. FLOWERPOT SUPPORT AND IRRIGATING DEVICE. HENRY J. BENZ, Racine, Wis. Filed Jan. 10, 1931. Serial No. 507,895. 2 Claims. (Cl. 47—38.)



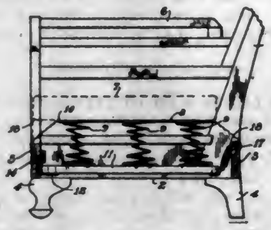
1. A flower pot supporting and plant irrigating device comprising a main water-receiving pan, and a pot support including a side wall and a top wall received within the pan, the top wall having an enlarged opening therein occupying the greater area of said wall, the other portion of said wall acting as a retaining flange and a sponge confined between the pan and pot support and engaging the retaining flange and insertible in position through said opening, the upper face of the sponge protruding through said opening.

1,879,785. DISK HARROW. JOSEPH E. BODA, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,865. 6 Claims. (Cl. 55—83.)



1. In a disk harrow, a draft member, a pair of laterally movable outer gang supports connected to the draft member, disk gangs pivotally connected to the supports, a cross member securing said supports, means securing the cross member to the draft member, and means on the cross-member and positioned adjacent the sides of the draft member for limiting lateral movement of the cross-member and parts associated therewith.

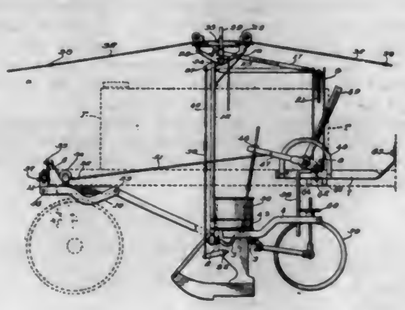
1,879,786. RESILIENT FURNITURE SLAT SUPPORT. BERNARD J. BOECKERMANN, Dayton, Ohio, assignor, by mesne assignments, to The Cappel Upholstering Company, Dayton, Ohio, a Corporation of Ohio. Filed May 7, 1930. Serial No. 450,513. 2 Claims. (Cl. 155—179.)



1. In an article of the type described, the combination with a pair of end rails, of slats horizontally disposed between and below the tops of said rails, spring angle

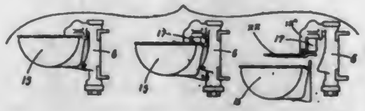
clips for securing the front ends of said slots to the front end rail, and helical springs secured to the rear ends of said slats and inclining upwardly for attachment to the rear end rail to resiliently support the slats.

1,879,787. CORN PLANTER. JOHN C. BOHMKER, Kankakee, Ill. Filed Apr. 23, 1931. Serial No. 532,218. 6 Claims. (Cl. 111—52.)



1. A multiple row corn planter comprising a plurality of laterally spaced seed dropping units, a frame structure connecting said units and including an arch for spanning a tractor, and means for rigidly connecting said frame with a tractor.

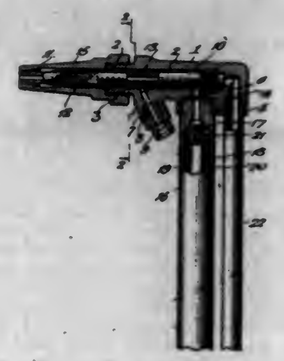
1,879,788. WATERING BOWL AND A MEANS FOR SUPPORTING THE SAME. ROBERT HAMILTON BROWN, Ottawa, Ontario, Canada. Filed Nov. 12, 1928, Serial No. 318,734, and in Canada Sept. 12, 1928. 2 Claims. (Cl. 119—75.)



1. In means for supporting a bowl, the rear wall of which extends upwardly to provide a bifurcated lug; said bowl having a notch formed in the upper edge thereof adjacent each end of said lug, and an integral rib extending outwardly from said rear wall, a hollow bracket provided with a supporting means adjacent its upper end; an outwardly extended lug on each side of said supporting means adapted to be interlocked by said bifurcated lug and seated in said notches; co-acting lugs integral with said bracket, the lower portion of said rib snugly fitting between last said lugs, a pin for retaining said rib in proper position, water connections to said bracket and a means for supporting said bracket on an upright the construction being such as to permit placement and removal of the bowl while being held in horizontal position.

1,879,789. WELDING AND CUTTING TORCH. JAMES H. BROWNING, Great Neck, N. Y., assignor to Safety Liquid Fuel Torch Corporation, a Corporation of Delaware. Filed June 11, 1931. Serial No. 543,519. 5 Claims. (Cl. 158—27.4.)

1. In a cutting and welding apparatus a burner head adapted to be connected to a source of fuel and oxygen supply and having a flame nozzle and a passage therethrough between the flame nozzle and the point of connection to a source of fuel and oxygen supply, an auxiliary flame nozzle extending from said burner head and communicating with the passage therethrough, and means within the passage through the burner head for agitating the gases passing therethrough to thoroughly mix the gases and distribute the gases uniformly about the flame



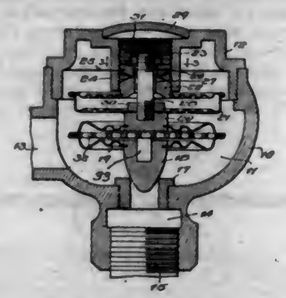
nozzle, said agitating means being directly behind the point of communication of the auxiliary flame nozzle with the passage through the burner head relative to the direction of movement of the gases through the burner head.

1,879,790. TIRE. DONALD J. CAMPBELL, Muskegon Heights, Mich. Filed Jan. 20, 1930, Serial No. 421,885. Renewed Jan. 20, 1932. 11 Claims. (Cl. 152—17.)

11. In combination, a tire casing having a circumferential groove around its outer face, a separable tread around the casing, said casing having an opening therethrough, and key means insertible through said opening and extending circumferentially in said groove to lock the tread onto the casing.

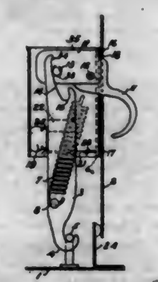
1,879,791. TRAP. ROBERT H. CARSON, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 2, 1929. Serial No. 404,424. 8 Claims. (Cl. 236—58.)

6. A device of the kind described comprising a housing having a cap, a valve, pressure responsive means and thermally operable means located in the housing and carried by said cap, said pressure responsive and thermally operable means being adjustably mounted in said cap, and



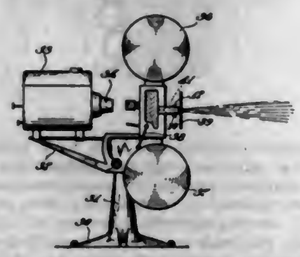
means for controlling the thermally operable means to thereby regulate temperature required for actuating said valve.

1,879,792. LATCH. WALLACE E. CHENEY, Milwaukee, Wis. Filed Nov. 20, 1929. Serial No. 408,521. 24 Claims. (Cl. 292—113.)



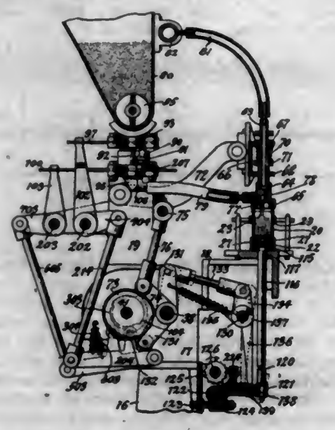
1. In a latch mechanism, a latch member, a keeper therefor, means for operating said latch member comprising means for causing said latch member to disengage said keeper with a snap action which when initiated is uncontrollable by said operating means.

1,879,793. MOTION PICTURE APPARATUS. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,100. 3 Claims. (Cl. 88—16.6.)



1. Motion-picture apparatus comprising mechanism for projecting stereoscopic pictures with light polarized at different angles according as a right or a left picture is projected and means for viewing said pictures comprising two devices for polarizing light at the same angles as those of the light for said pictures and means for adjusting the angle between said two devices.

1,879,794. CONTAINER FILLING MACHINE. ROBERT N. CUNDALL, Blasdell, N. Y., assignor to The Hoepner Automatic Machinery Corporation, Buffalo, N. Y., a Corporation of New York. Original application filed Oct. 23, 1928, Serial No. 314,469. Divided and this application filed July 23, 1931. Serial No. 552,572. 1 Claim. (Cl. 226—116.)



A machine for filling containers, comprising a filling head adapted to communicate with the inlet of a container and adapted to be connected with an exhaust device, a material reservoir adapted to supply material to said head for delivery into said container, a conduit for conveying the material from said reservoir to said head, and means for measuring the material passing through said conduit comprising a measuring chamber having an inlet and an outlet, an inlet valve for controlling said inlet, an outlet valve for controlling said outlet, and means for opening and closing said valves alternately, said measuring chamber being provided between said valves with vent openings, and said conduit being provided adjacent to said outlet valve with vent openings.

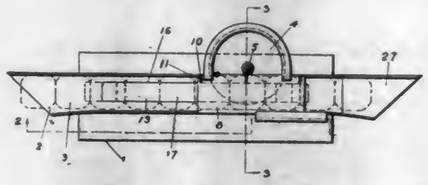
1,879,795. FISH REEL MOUNTING. WILLIAM DEERING, Torrington, Conn., assignor to Union Hardware Company, Torrington, Conn., a Corporation of Connecticut. Filed Nov. 12, 1931. Serial No. 574,594. 4 Claims. (Cl. 43—22.)



1. A reel mounting construction comprising a support having a pocket in one end, a reel plate having one end located in said pocket, a series of spaced bosses at the

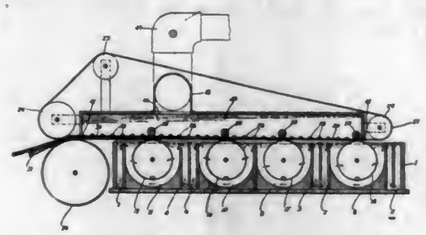
opposite side of the support, a locking ring having an inner cam surface for clamping the opposite end of the reel plate to the support, said ring having an inner groove with a transverse notch leading to the groove for receiving said bosses.

1,879,796. BUN SPLITTER. FRANCIS J. EHRLICH, Indianapolis, Ind. Filed May 29, 1930. Serial No. 457,109. 5 Claims. (Cl. 146—73.)



1. In a slitting device for slitting buns or the like in lots of different size buns or the like, said device having a stationary frame, a chute mounted on said frame for guiding the buns, the inner surface of one side wall of said chute being curved inwardly to guide the buns more closely to the opposite side wall of said chute, an adjustable section in the said opposite side wall of said chute to vary the width of the chute to conform to the size of the buns in the different lots, a rotating knife pivoted to said frame for forming slits in the buns, said knife extending horizontally into said chute through a horizontal slit at a medial point in the height of said adjustable section at a point opposite the inwardly curved portion of the first mentioned side wall, a belt the upper strand of which forms a portion of the bottom of said chute, for moving the buns past said knife, pulleys pivoted to said frame for operating said belt, means in conjunction with said belt for engagement with said buns for causing said buns to travel with said belt, and means for causing said belt to travel lengthwise and direct tension on that portion of the belt engaging the buns.

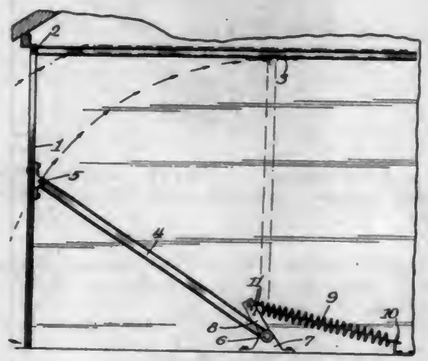
1,879,797. MACHINE AND PROCESS FOR MAKING LAMINATED PRODUCTS. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 15, 1930. Serial No. 495,914. 11 Claims. (Cl. 92—42.)



1. A paper machine having a felting cylinder, and a felting apron operatively related thereto, and means for creating suction for causing the material to adhere to the felting apron, substantially throughout the entire area of that portion of the apron which is opposed to the felting cylinder.

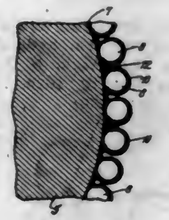
1,879,798. OVERHEAD GARAGE DOOR. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Oct. 8, 1930. Serial No. 487,112. 9 Claims. (Cl. 20—19.)

1. In overhead opening door construction, the combination of a door, horizontally disposed tracks, engaging means on the upper corner portions of the door to support the door for upward and inward movement on said tracks away from the doorway, with the upper edge of the door practically always in the same horizontal plane, an arm having an upper end pivoted on the inner side of the door at a point some distance above the floor, and some distance below the top of the door, having a lower end pivoted below on a stationary floor support, whereby said arm occupies an oblique or inclined position when the door is in closed position providing for said pivoted



point a curved path of travel on the line of a circle passing through the middle portion of the door, but whereby said arm is vertically disposed when the door is in overhead open position, to support the door horizontally, whereby said tracks and said arm co-operate to support the door in horizontally disposed position overhead, with the lower edge of the door some distance inside the doorway, when the door is fully open, whereby the lower edge of the door describes a curved path of travel, the upper portion of which is under the tracks and inside the vertical plane of the door.

1,879,799. ORNAMENT. MAX GLAESEL, New York, N. Y. Filed May 21, 1932. Serial No. 612,715. 1 Claim. (Cl. 41—36.)



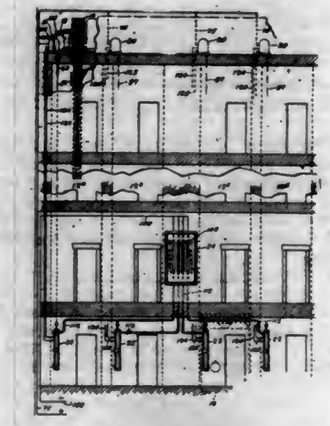
An ornament comprising a main body portion, a surface layer of glue covering the surface thereof, a plurality of relatively smaller ornamental elements secured to said body portion by said surface layer of glue, and a layer of coloring material covering the exposed portions of said relatively smaller ornamental elements, said layer of coloring material also covering the surface of the main body portion where it is exposed between the relatively small ornamental elements and forming a bond between the small ornamental elements but leaving them in relief upon the body portion, said coloring material comprising lacquer and serving to impart a uniform color to the finished product and to secure the relatively smaller elements to the main body portion.

1,879,800. OPHTHALMIC LENS. ANNA E. GLANCY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 30, 1928. Serial No. 322,873. 4 Claims. (Cl. 88—54.)



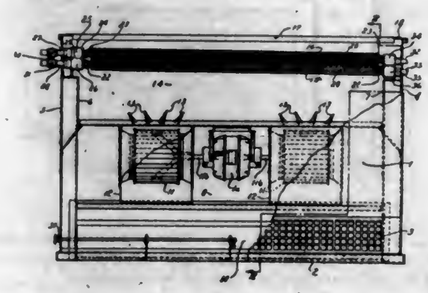
1. The process of forming a multifocal or bifocal lens comprising forming a countersink in a major portion of lens medium of one index of refraction, securing a segment of lens medium of a different index of refraction in the countersink, surfacing the exposed face of the major portion on the countersink side to substantially the same depth as that of the countersink and to a curved blending with that of the bottom of the countersink and of substantially the same radius to form a substantially continuous unbroken curve over the exposed and unexposed surfaces on the countersink side of the lens and surfacing a curve of a different radius on the exposed face of the segment to produce the power desired through said segment.

1,879,801. POSITION INDICATOR FOR ELEVATORS. JAMES M. GRAHAM and CLIFFORD NORTON, New York, N. Y., assignors, by mesne assignments, to Otis Elevator Company, a Corporation of New Jersey. Filed Apr. 6, 1926. Serial No. 100,009. 30 Claims. (Cl. 177—336.)



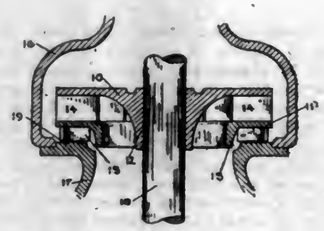
1. In an elevator signalling apparatus, the combination with an elevator, of an electric controller operating synchronously with the elevator and electric lighting devices controlled thereby and operating by the same series of lighting devices to build up a gradually lengthening column of light indicating the position and either direction of movement of the elevator, said column for the upward travel of the elevator lengthening upwardly and having a fixed base maintained in position corresponding to the down position of the elevator and for the down travel being an inverted column which lengthens downwardly while its base is maintained in position corresponding to the up position of the elevator.

1,879,802. DOUBLE RADIATOR WITH MEANS OF EXPANSION ON RADIATORS. LEWIS D. HARNETT, Columbus, Ohio, assignor to The Buckeye Blower Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 15, 1931. Serial No. 557,218. 13 Claims. (Cl. 257—137.)



8. In a heating and ventilating unit, a casing having an air inlet opening at the bottom and an air outlet opening at the top, dual radiators mounted therein therebetween, a common header supported on said casing for said dual radiators at one end thereof, and independent headers for said radiators supported on said casing in the other end thereof, said independent headers being slidably mounted one upon the other and having a common support.

1,879,803. ROTARY PUMP. ANDREW G. JOHNSON, Lincoln, Nebr. Filed Jan. 27, 1930. Serial No. 423,797. 2 Claims. (Cl. 103—103.)

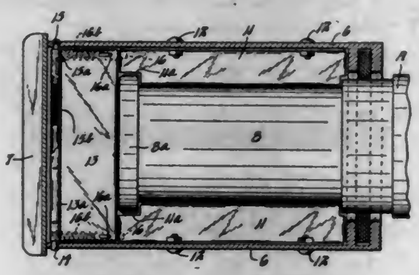


1. A rotary pump including a vertical shaft surrounded by pairs of casing members adapted for assembly in stages, each pair of said casing members containing a rotor adapted to be driven by said vertical shaft, said rotor including a circular disc having turbine blades projecting upwardly therefrom, and a plurality of spiral turbine blades depending from said circular disc and positioned tangentially with respect to said rotor, the lower of said casing members of each pair having an annular upper surface cooperating with said depending blades to provide a water seal in the form of a slowly moving body of water.

1,879,804. JOURNAL BOX PACKING RETAINER. ROBERT W. JOHNSON, Minneapolis, Minn. Filed Mar. 28, 1930. Serial No. 439,709. 4 Claims. (Cl. 308—89.)

1. In combination with a journal box and a journal disposed therein, a packing retainer comprising a pair of inwardly projecting flanges mounted within said box and extending longitudinally of the side walls thereof between

the same and the journal, said flanges terminating at their outer ends adjacent the end of the journal, and a hinged retaining plate disposed within the box between



the doorway and the end of the journal and means engageable with the outer ends of said flanges for retaining said hinged plate against upward displacement.

1,879,805. COMPENSATING GAUGE DEVICE FOR LIQUID STORAGE TANKS. HENRY ALBERT JONES, Lynwood, Calif., assignor to Frank V. Long, trustee, Compton, Calif. Filed Jan. 4, 1930. Serial No. 418,550. 4 Claims. (Cl. 73—82.)



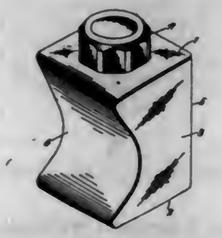
1. In a compensating gauge for a tank, to indicate the depth of liquids of different specific gravity, the combination of a measuring member, means for supporting the measuring member to permit it to move to and fro, means controlled by the liquid level and connected with the measuring member for moving the same to and fro, a relatively fixed pointer to cooperate with the measuring member, said pointer capable of being moved up and down to set it at different levels, and a compensator plate having a compensating scale extending alongside of said measuring member and adjacent the indicating pointer, said compensator scale having graduations corresponding to different specific gravities of liquids and indicating the point at which the said indicating pointer should be set to give a correct reading for the gauge for any particular specific gravity of liquid in the tank.

1,879,806. PHOTOGRAPHIC FILM. WILLIAM V. D. KELLEY, Hollywood, Calif. Filed Feb. 14, 1931. Serial No. 515,747. 2 Claims. (Cl. 95—2.)



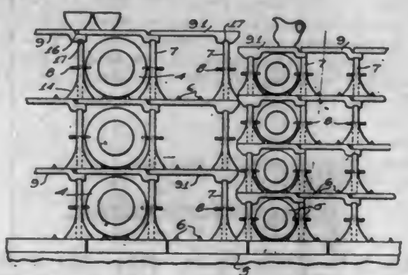
1. A photographic film adapted for bi-pack photography, consisting of; a layer of photo-sensitized material that is insensitive to red light, coated upon a transparent base; and a separately coated layer of like photo-sensitized material over the first said layer; the material of said second layer having a dye incorporated therein, and adhering thereto in such manner that it cannot bleed into the first said layer.

1,879,807. SAFETY RAZOR BLADE SHARPENER. ELMER V. KLINE, University City, Mo., assignor to Victor Pharmacal Company, Inc., St. Louis, Mo., a Corporation of Missouri. Filed July 11, 1931. Serial No. 550,087. 2 Claims. (Cl. 51—211.)



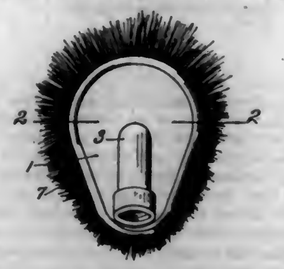
1. A safety razor blade sharpener comprising a body of generally rectangular shape having one flat wall and the opposite wall curving on uniform radius of curvature from said flat wall and having in one end wall a concavity arranged to receive and substantially fit the ball of the thumb of the operator when the operator presses and manipulates a safety razor blade against said curved wall, and an engageable projection in connection with the end of said body opposite from said concavity.

1,879,808. KILN FURNITURE. LESTER L. LADD, Lockport, Ill. Filed June 29, 1931. Serial No. 547,555. 3 Claims. (Cl. 25—153.)



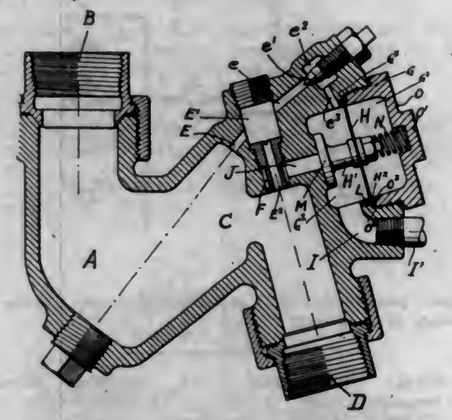
1. Kiln furniture comprising a base for supporting ceramic ware, a plurality of standards supported on said base in spaced relation to one another, each of said standards having a row of apertures therein, and pins detachably seated in said apertures, each of said pins projecting beyond opposite sides of its standard for engagement with the ware.

1,879,809. MOP. GEORGE O. LARBERG, Kansas City, Mo., assignor to Auto Mop Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 7, 1932. Serial No. 597,313. 2 Claims. (Cl. 15—228.)



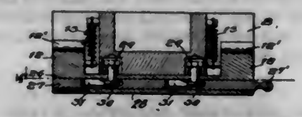
1. In a mop, an inverted cup-shaped head the depending wall of which is provided with two grooves extending circumferentially around its inner and outer sides respectively, mop supporting relatively soft sheet material covering the inner and outer sides and the lower edge of said wall, an expansible resilient member embraced by and holding said material in said inner groove, and means for holding said material in said outer groove.

1,879,810. SAND TRAP. RALPH A. LIGHT, Cynwyd, and JOSEPH W. PRICE, Jr., Philadelphia, Pa., assignors to The United States Metallic Packing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 24, 1932. Serial No. 600,934. 5 Claims. (Cl. 291—11.)



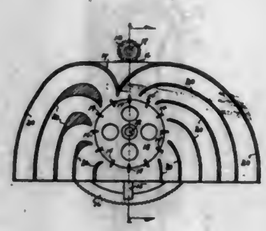
1. An air distributing valve for a pneumatic sander system comprising in combination a casing divided into an air transmitting and an air retaining chamber by a movable partition, a port connectable with the air supply conduit of the system leading into the air transmission chamber, an outlet port from said air transmission chamber connected to the clean-out nozzle of a sand trap, a valve for opening and closing said outlet port operatively connected to the movable partition, resilient means tending to shift the partition to the position in which it will shift the valve to close the outlet port and a restricted air passage leading from the air retaining chamber of the casing and connectable to the air supply conduit so that when pressure air is directed into the air supply conduit it will flow freely into the air transmission chamber of the casing and acting on the movable partition shift it to a position in which it will shift the valve to open the outlet port while at the same time the pressure air will flow through the restricted passage to the air retaining chamber and gradually build up pressure in said chamber to a point where in coaction with the resilient means it will shift the movable partition in the opposite direction and shift the valve to effect the closing of the outlet port.

1,879,811. PLATEN FOR PRINTING AND ADDRESSING MACHINES. CECIL C. MCCAIN, Glen Ellyn, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Feb. 25, 1929, Serial No. 342,367. Divided and this application filed May 21, 1930. Serial No. 454,274. 6 Claims. (Cl. 101—407.)



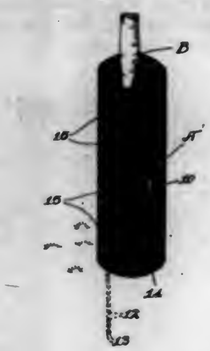
1. A platen for printing and addressing machines comprising a block, a cushion plate having a slot in the back thereof, and yielding means on the face of the block for engaging said slot to detachably mount the cushion plate on the block.

1,879,812. IMPELLER REACTION ENVELOPE. ARTHUR S. MILLER, Des Moines, Iowa. Filed June 17, 1929. Serial No. 371,322. 20 Claims. (Cl. 170—168.)



1. In a device of the class described, a rotatably mounted impeller designed to impart centrifugal action to a fluid, a reaction envelope housing around said impeller for realizing thrust from said fluid, and a means for adjusting said reaction envelope housing for obtaining thrust in various directions.

1,879,813. TREE PROTECTOR. EUGENE N. MOLITOR, St. Paul, Minn. Filed Aug. 26, 1929. Serial No. 388,307. 3 Claims. (Cl. 47—23.)

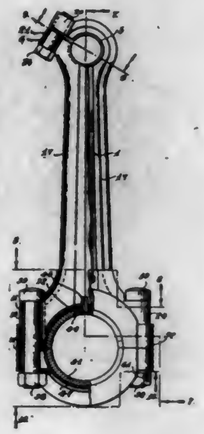


1. An integral tree guard or protector comprising a perforated mesh-like one-piece body portion and a pair of anchoring rods, the ends of said body portion being severally wrapped around said anchoring rods and integrally and rigidly secured thereto, said anchoring rods projecting from one end of the said body portion, and a plurality of hook-like connecting members adapted to engage through the mesh about the adjacent rod to thereby connect said rods and the ends of said body portion to form an annular protector.

1,879,814. CONNECTING ROD. EDWARD RAE MORGAN and CHRISTIAN ZUEFLE, Flint, Mich. Continuation of application Serial No. 471,343, filed July 28, 1930. This application filed July 8, 1931. Serial No. 549,465. 9 Claims. (Cl. 74—17.)

1. A connecting rod comprising a pair of matched sheet metal members placed together and secured around their

edges, said members at one end each having extending parts shaped to form circular hollow bosses, the bosses of



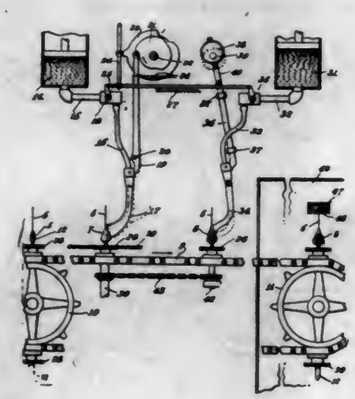
one disposed within the bosses of the other, and a sheet metal reinforcing member U shaped in cross section fitted over the ends of the members between the bosses.

1,879,815. HOIST OR TRANSFER MECHANISM. ERNST LULLAU, Buffalo, N. Y. Filed Nov. 9, 1931. Serial No. 573,889. 8 Claims. (Cl. 104—164.)

1. An apparatus of the character described, comprising longitudinally spaced overhead supports, a track fulcrumed at one end to one of said supports to swing vertically and suspended at its opposite end to the other support to move lengthwise thereof, a load-carrying element free to move longitudinally of the track, and means for raising and lowering said second-named track-support.

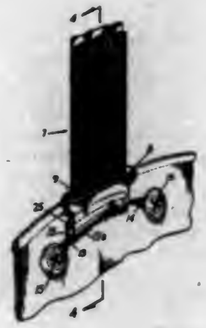
1,879,816. MANUFACTURE OF CANDLE HOLDERS. ANTHONY W. KRIEG, Brooklyn, N. Y., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., a Corporation of New York, and one-half to N. D. Q. Specialty Corporation, a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,752. 13 Claims. (Cl. 18—1.)

3. A machine for making an ornamental candle holder which comprises, means for rotating a form, means for squirting a ribbon of plastic material on to the rotating form to make a body, means for moving the body to an-



other position and other means for squirting a series of petals on to the body.

1,879,817. SUSPENDER HOOK. CHRISTIAN NELSON, Oceanside, Calif. Filed Oct. 26, 1931. Serial No. 571,006. 2 Claims. (Cl. 24—73.)

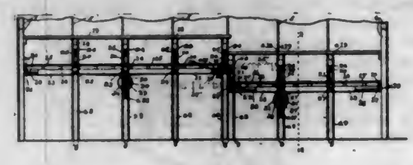


1. In means suspendable from suspenders for supporting trousers through the medium of a pucker placed in a shirt and engageable with a transversely extending connection having end portions fastened to the inner side of the trousers comprising a metallic hook, the end of the hook being directed outwardly and upwardly, said hook having a facing of material softer than its metallic portion doubled over its end portion and extending from edge to edge of the hook to protect the puckered portion of the shirt, said facing narrowing the space inclosed by the hook and thereby aiding in keeping said connection in place within the hook.

1,879,818. HENHOUSE DROPPING-BOARD CLEANER. NIELS P. NIELSEN, Custer Township, Whatcom County, Wash. Filed Dec. 7, 1927. Serial No. 238,345. 4 Claims. (Cl. 119—22.)

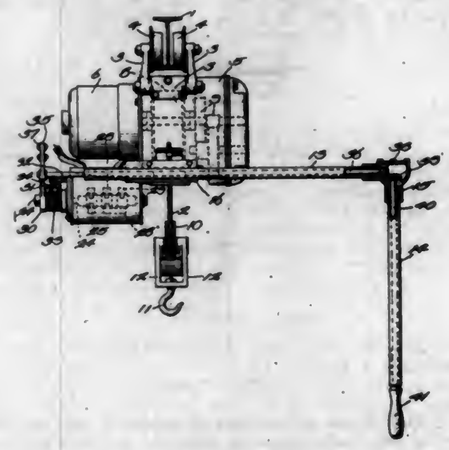
1. A mechanism of the character described consisting of a plurality of longitudinally moveable, horizontal floors,

disposed end to end and at different levels; supporting means for said floors; a revolvable shaft for each floor; flexible tension means operatively connecting said move-



able floors and said shafts, adapted to move said floors longitudinally, and scrapers mounted to bear on the top surface of said platform disposed transversely thereof.

1,879,819. CONVEYING MECHANISM. WILLIAM J. O'NEILL, River Forest, Ill., assignor to Mercil Plating Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1930. Serial No. 460,365. 1 Claim. (Cl. 212—134.)



In a conveying mechanism, including a wheeled truck having a motor operated hoisting reel mounted thereon, a housing for the reel, an adjusting arm extending a substantial distance from the reel and comprising a rigid horizontal tubular section having its inner end secured to the reel housing and its outer end extending laterally a substantial distance of the line of travel of the reel, a hollow elbow rigidly secured to the outer end of the horizontal section, a depending hollow vertical section rigidly secured at its upper end to the elbow, rotatable operating shafts in said hollow sections connected by bevel gearing in the elbow, a switch operating shaft parallel to said horizontal section and carrying a switch at the inner end of said sections operable by rotation of the shafts, link united parallel arms connecting said shafts and said switch operating shaft, a rotatable handle at the lower end of the depending section for rotating the shafts to close the switch, and automatic means for rotating the shafts to open the switch upon release of the handle.

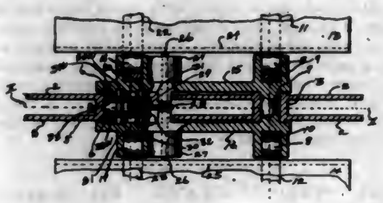
1,879,820. DRINKING VESSEL. JAMES E. PERRY, Carrollton, Tex. Filed Mar. 24, 1930. Serial No. 438,390. 1 Claim. (Cl. 65—13.)

As a new article of manufacture, a soda fountain glass comprising the combination of a body provided with a rim at its top edge having an inwardly turned head and further having walls whose exterior surfaces are vertical, the interior surfaces of said walls being substantially vertical to a point approximately midway between the top and bottom of said body whereat said interior wall bulges inwardly thence outwardly terminating in a substantially



flat bottom and defining an annular area immediately above said bottom of greater diameter than said bulge to hold a drinking straw against rising in the contents of said body.

1,879,821. AEROPLANE WING DEVICE. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Mar. 27, 1930. Serial No. 439,358. 6 Claims. (Cl. 244—12.)



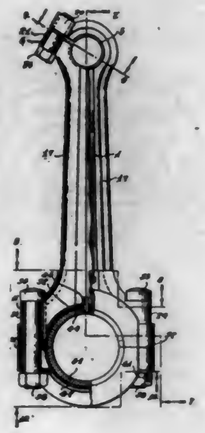
1. In an aeroplane, a fixture, a pair of wings, each wing having one universal jointed connection with the fixture, a guide rack, a gear movable on the rack, a gear fixture having jointed connection with the wings, and means for effecting movement of the gear on the rack and a complementary guiding means embodying for each wing an arm flexibly secured to the wing and flexibly secured to the fixture for effecting relative locating of the wings in alternative positions for active lift.

1,879,822. SWITCHING DEVICE. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, Valparaiso, Ind., a Corporation of Indiana. Filed June 23, 1930. Serial No. 463,141. 6 Claims. (Cl. 200—64.)



1. Switching mechanism comprising a framework including a pair of terminal posts, spring contacts mounted thereon, and means for connecting and disconnecting said spring contacts comprising a disk of insulating material provided around its periphery with ratchet teeth, bridging contact means on one side of said disk connecting and overlying certain opposite pairs of said teeth, a spindle having a polygonal portion extending part way through said disk from the side opposite said contact means and a reduced portion extending from said polyg-

edges, said members at one end each having extending parts shaped to form circular hollow bosses, the bosses of



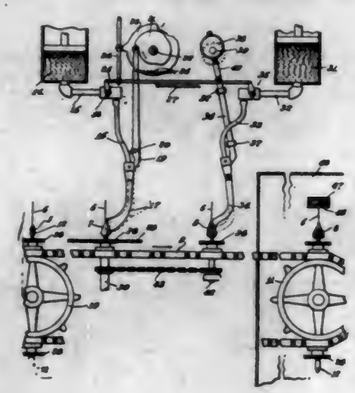
one disposed within the bosses of the other, and a sheet metal reinforcing member U shaped in cross section fitted over the ends of the members between the bosses.

1,879,815. HOIST OR TRANSFER MECHANISM. ERNST LULLAU, Buffalo, N. Y. Filed Nov. 9, 1931. Serial No. 573,889. 8 Claims. (Cl. 104—164.)

1. An apparatus of the character described, comprising longitudinally spaced overhead supports, a track fulcrumed at one end to one of said supports to swing vertically and suspended at its opposite end to the other support to move lengthwise thereof, a load-carrying element free to move longitudinally of the track, and means for raising and lowering said second-named track-support.

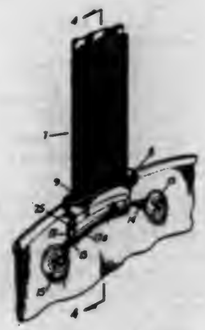
1,879,816. MANUFACTURE OF CANDLE HOLDERS. ANTHONY W. KRIEG, Brooklyn, N. Y., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., a Corporation of New York, and one-half to N. D. Q. Specialty Corporation, a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,752. 13 Claims. (Cl. 18—1.)

3. A machine for making an ornamental candle holder which comprises means for rotating a form, means for squirting a ribbon of plastic material on to the rotating form to make a body, means for moving the body to an-



other position and other means for squirting a series of petals on to the body.

1,879,817. SUSPENDER HOOK. CHRISTIAN NELSON, Oceanside, Calif. Filed Oct. 26, 1931. Serial No. 571,006. 2 Claims. (Cl. 24—73.)

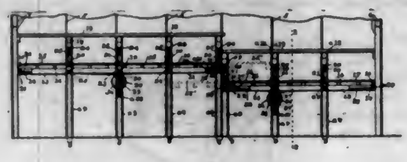


1. In means suspendable from suspenders for supporting trousers through the medium of a pucker placed in a shirt and engageable with a transversely extending connection having end portions fastened to the inner side of the trousers comprising a metallic hook, the end of the hook being directed outwardly and upwardly, said hook having a facing of material softer than its metallic portion doubled over its end portion and extending from edge to edge of the hook to protect the puckered portion of the shirt, said facing narrowing the space inclosed by the hook and thereby aiding in keeping said connection in place within the hook.

1,879,818. HENHOUSE DROPPING-BOARD CLEANER. NIELS P. NIELSEN, Custer Township, Whatcom County, Wash. Filed Dec. 7, 1927. Serial No. 238,345. 4 Claims. (Cl. 119—22.)

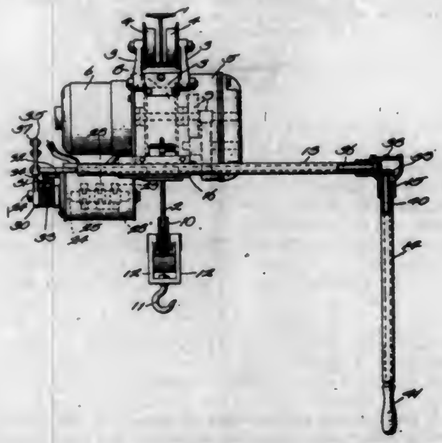
1. A mechanism of the character described consisting of a plurality of longitudinally moveable, horizontal floors,

disposed end to end and at different levels; supporting means for said floors; a revolvable shaft for each floor; flexible tension means operatively connecting said move-



able floors and said shafts, adapted to move said floors longitudinally, and scrapers mounted to bear on the top surface of said platform disposed transversely thereof.

1,879,819. CONVEYING MECHANISM. WILLIAM J. O'NEILL, River Forest, Ill., assignor to Mercil Plating Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1930. Serial No. 460,365. 1 Claim. (Cl. 212—134.)



In a conveying mechanism, including a wheeled truck having a motor operated hoisting reel mounted thereon, a housing for the reel, an adjusting arm extending a substantial distance from the reel and comprising a rigid horizontal tubular section having its inner end secured to the reel housing and its outer end extending laterally a substantial distance of the line of travel of the reel, a hollow elbow rigidly secured to the outer end of the horizontal section, a depending hollow vertical section rigidly secured at its upper end to the elbow, rotatable operating shafts in said hollow sections connected by bevel gearing in the elbow, a switch operating shaft parallel to said horizontal section and carrying a switch at the inner end of said sections operable by rotation of the shafts, link united parallel arms connecting said shafts and said switch operating shaft, a rotatable handle at the lower end of the depending section for rotating the shafts to close the switch, and automatic means for rotating the shafts to open the switch upon release of the handle.

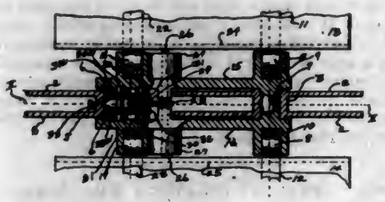
1,879,820. DRINKING VESSEL. JAMES E. PERRY, Carrollton, Tex. Filed Mar. 24, 1930. Serial No. 438,390. 1 Claim. (Cl. 65—13.)

As a new article of manufacture, a soda fountain glass comprising the combination of a body provided with a rim at its top edge having an inwardly turned head and further having walls whose exterior surfaces are vertical, the interior surfaces of said walls being substantially vertical to a point approximately midway between the top and bottom of said body whereat said interior wall bulges inwardly thence outwardly terminating in a substantially



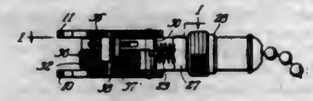
flat bottom and defining an annular area immediately above said bottom of greater diameter than said bulge to hold a drinking straw against rising in the contents of said body.

1,879,821. AEROPLANE WING DEVICE. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Mar. 27, 1930. Serial No. 439,358. 6 Claims. (Cl. 244—12.)



1. In an aeroplane, a fixture, a pair of wings, each wing having one universal jointed connection with the fixture, a guide rack, a gear movable on the rack, a gear fixture having jointed connection with the wings, and means for effecting movement of the gear on the rack and a complementary guiding means embodying for each wing an arm flexibly secured to the wing and flexibly secured to the fixture for effecting relative locating of the wings in alternative positions for active lift.

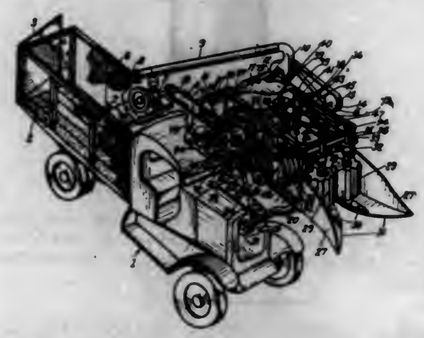
1,879,822. SWITCHING DEVICE. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, Valparaiso, Ind., a Corporation of Indiana. Filed June 23, 1930. Serial No. 463,141. 6 Claims. (Cl. 200—64.)



1. Switching mechanism comprising a framework including a pair of terminal posts, spring contacts mounted thereon, and means for connecting and disconnecting said spring contacts comprising a disk of insulating material provided around its periphery with ratchet teeth, bridging contact means on one side of said disk connecting and overlying certain opposite pairs of said teeth, a spindle having a polygonal portion extending part way through said disk from the side opposite said contact means and a reduced portion extending from said polyg-

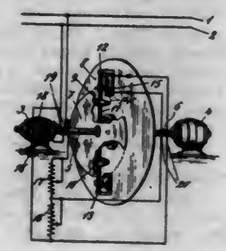
onal portion through said disk and bridging contact means, said last named means being cut away to provide a space between it and the spindle, and means for rotating said spindle.

1,879,823. COTTON BOLL HARVESTER. WILLIAM CHARLES RAY, San Diego, Calif. Filed Sept. 29, 1930. Serial No. 485,008. 12 Claims. (Cl. 56—11.)



1. In a cotton harvester, the combination, with a harvester body and propelling means therefor; of a pair of accumulator arms adapted to pass astride and collect field cotton and cotton plants with fallen branches between them, each of said arms comprising an upright outer plate and an inwardly directed substantially horizontal base flange, a pair of vertical corrugated rollers mounted upon shafts supported by the base flange of said accumulator arms, and means to rotate said shafts in a manner to entrain cotton between said rollers and toward the body portion of the harvester.

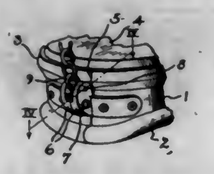
1,879,824. SPEED REGULATOR. KARL SCHMIDT, Berlin-Lichtenrade, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Jan. 5, 1929, Serial No. 330,681, and in Germany Jan. 17, 1928. 3 Claims. (Cl. 172—293.)



1. Means for maintaining two rotary electrical devices in synchronism comprising a disc rotated by each device, a pair of contacts carried by one of the discs and adapted to open and close during each revolution, a field winding for the device which rotates the other disc and influenced by the opening and closing of said contacts, and a rotary member carried by the contact carrying disc and engaging the other disc and rotated thereby when ever there is a difference in speed of said discs to vary the relative spacing of said contacts.

1,879,825. OPHTHALMIC MOUNTING. ELMER L. SCHUMACHER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 1, 1930. Serial No. 425,240. 3 Claims. (Cl. 88—42.)

1. In a device of the character described, a pair of eyecups each having split ends on their nasal sides and each split end having a projecting lug portion adjacent the split so positioned as to leave a space between the lugs when the split ends engage each other, a bridge member having a plurality of openings therein spaced longitudinally from each other, a portion of the bridge



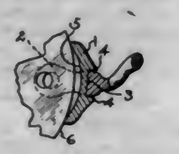
extending into the spaces between the lugs so that an opening of the bridge occupies a position between each set of lugs, means securing each set of lugs together exteriorly of said openings and means extending through each set of lugs and through the respective openings in the bridge member.

1,879,826. WALL PAPER REMOVER. NELLIE MAE SHAFFER, Des Moines, Iowa. Filed May 25, 1929. Serial No. 365,989. 2 Claims. (Cl. 126—271.1.)



2. In a device of the class described, a tray member having side walls extending upwardly and outwardly, a resilient member secured on the marginal edge of said tray member, a pipe having one end communicating with the inside of said tray member, two embracing members engaging the two end portions and bottom of said tray member respectively, a spring yoke member secured to said embracing members for yieldingly holding the same in engagement with said tray member, and an elongated handle member secured to said spring yoke member.

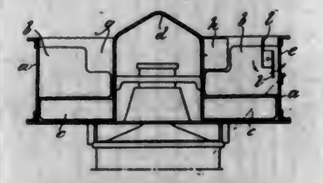
1,879,827. OPHTHALMIC MOUNTING. ROYAL H. SIMONDS, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 30, 1928. Serial No. 265,985. 4 Claims. (Cl. 88—42.)



1. In a device of the character described, a lens holding member and a flexible member in engagement with said lens holding member and adapted to engage the edge of the lens, said member having a concaved surface

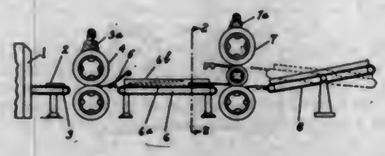
on the lens engaging side and a reentrant portion on the opposite side thereof, a portion of the lens holding member being inserted in said reentrant portion and the upper and lower walls of the reentrant portion being of a shape to provide a clearance space between the outer edges of said walls and the lens holding member, said flexible member being most flexible between the limits of said reentrant portion whereby when the member in engagement with said lens holding member is straightened to make the concaved surface less concave it will flex between the limits of said reentrant portion and cause the upper and lower reentrant walls to move towards the lens holding member.

1,879,828. MIXING APPARATUS. CLIFFORD ROSS SMITH and ALFRED BARTLETT SMITH, Wolverhampton, England. Filed Apr. 2, 1931, Serial No. 527,110, and in Great Britain Apr. 10, 1930. 8 Claims. (Cl. 259—43.)



1. Apparatus for mixing foundry sand, or other comminuted materials, comprising a container into which material may be continuously fed, means for agitating the material in the container, means for causing completely mixed material to heap up in waves above incompletely mixed material and above the normal level of the mass, means for carrying off completely mixed material from the crests of the waves, and means for retaining and further mixing the incompletely mixed material.

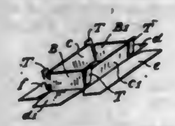
1,879,829. SHEET METAL ROLLING. RUSSELL R. SMITH, WILLIAM F. SONGER, and LAMBERT A. SALENDER, Ashland, Ky., assignors to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Dec. 29, 1930. Serial No. 505,260. 12 Claims. (Cl. 29—18.)



7. That process for forming rough plate for a succeeding rolling operation, which consists in starting with heated sheet bars, then by under and over method rolling out the sheet bars, and without reheating passing the product of this rolling to and fro between the rolls of a three-high mill having a small central working roll, and so arranging the active passes in the three-high mill as to produce material which has a substantially uniform thickness and cross sectional contour, said cross sectional contour being convex in the direction of rolling.

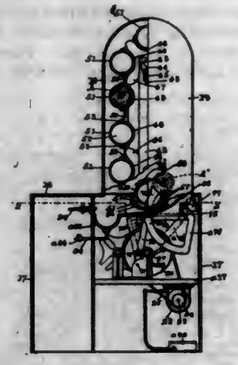
1,879,830. METHOD FOR FORMING BOXES AND THE LIKE. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 17, 1929. Serial No. 363,828. 17 Claims. (Cl. 93—43.)

1. The method of forming a wrapped box from separate box components which comprises cutting box components adapted to form opposite walls of a box from continuous strips and thereafter, without substantial



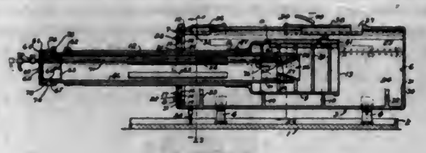
delay, the steps of arranging the separate box components in proper relation, and effecting permanent union of the separate components in box-forming position by a wrapper.

1,879,831. STEAM COMPRESS HEATER. CLARENCE D. THRELKELD, Bellingham, Wash. Filed Jan. 4, 1932. Serial No. 584,749. 5 Claims. (Cl. 167—3.)



8. In apparatus of the kind described, a steam dome, an endless conveyor of compress-tray carriers mounted for operation in said dome, power means for operating said conveyor in recurrent periods of movement and pause, a compress tray engageable in each of said tray carriers, automatic means being operable to project one of said trays at a time from said steam dome and to withdraw said tray into said dome during a said period of pause, and automatic means to eject any compress being in said tray while projected from said steam dome.

1,879,832. BURNER. ALFRED H. THOMPSON, Los Angeles, Calif. Filed Aug. 15, 1927. Serial No. 212,922. 15 Claims. (Cl. 158—28.)



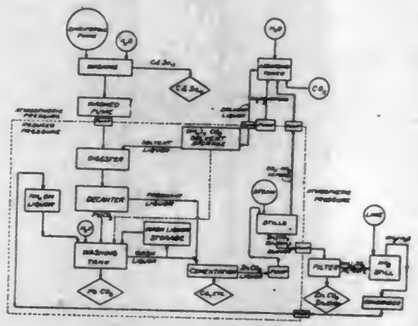
4. A burner comprising a fire box housing provided with a valve controlled air inlet in one end, and with an outlet at its other end; a burner bowl within said housing; an extension member extending from said bowl; a fuel jet in one end of said extension member; means for supplying liquid fuel through said jet into said bowl; and means for supplying air through said jet into said bowl for mixing with said fuel to support combustion within said bowl.

1,879,833. EYE TESTING DEVICE. EDGAR D. TILLYER and CHARLES HORACE POND, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 25, 1930. Serial No. 423,341. 1 Claim. (Cl. 88—20.)



A device of the character described comprising a test character having component parts and spaces therebetween, said parts and spaces subtending an angle of one minute at the nodal point of an eye and which when viewed by a normal eye will correspond in size to the movement of the circle of confusion thereover.

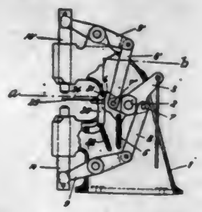
1,879,834. PROCESS OF REFINING ZINCIFEROUS MATERIAL. WILLIAM GEORGE WARING, Webb City, and GUY HULL WARING, Oronogo, Mo. Filed Oct. 13, 1928. Serial No. 312,357. 3 Claims. (Cl. 23—61.)



1. In the process of recovering lead, zinc and cadmium values from zinciferous fume or like material, the step which comprises digesting said fume under subatmospheric pressure with ammonium carbonate solution.

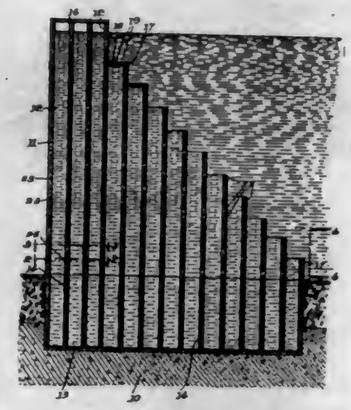
2. In the ammonium carbonate process of recovering metallic values from zinciferous fume or like material, the step which comprises washing the insoluble residues resulting from the ammonium carbonate digestion with ammonia water to dissolve cadmium values therefrom.

1,879,835. MACHINE FOR THE MANUFACTURE OF TEMPLATES. KARL WOLLNY, Weissenfels-on-the-Saale, Germany, assignor to the Firm Nollesche Werke Kommandit Gesellschaft, Weissenfels-on-the-Saale, Germany. Filed July 19, 1930, Serial No. 469,287, and in Germany Dec. 11, 1929. 1 Claim. (Cl. 1—4.)



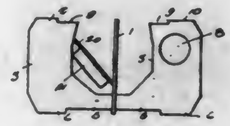
In a machine for the manufacture of templets of the kind described, means for clamping the templet to be worked upon, means for positioning the templet prior to its clamping, and means for simultaneous fastening two separate marking members on both sides of the clamped templet consisting of two plungers moved at first yieldingly for clamping the templet and then moved positively for driving the marking members.

1,879,836. DAM. RODNEY H. YALE, San Diego, Calif. Filed Aug. 3, 1931. Serial No. 554,826. 12 Claims. (Cl. 61—32.)



1. A dam comprising a monolithic body having substantially vertically disposed tubular cells representing the major portion of the volume of the body, and impervious metallic sealing tubes having closed bottoms and lining the bottoms and lower portions of the side walls of the cells.

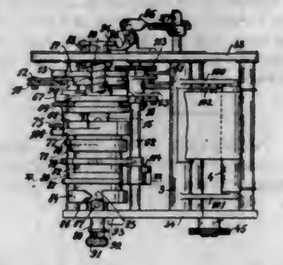
1,879,837. COLLAPSIBLE STOVE AND COOKING UTENSIL. JOHN HARALD BIERLICH, Bennington, Vt., assignor of one-half to C. E. Dooley, Philmont, N. Y., and one-fourth to K. G. Bierlich, Bennington, Vt. Filed Nov. 13, 1930. Serial No. 495,453. 3 Claims. (Cl. 126—43.)



1. A knock-down stove formed of three pieces, two of said pieces interfitting to relatively support each other to provide a frame for the stove, the third piece resting on the tops of the other two pieces and forming the top of the stove, one of said first mentioned pieces having formed integrally therewith a member bent outwardly therefrom at an angle, said member being formed to support and carry fuel for the stove.

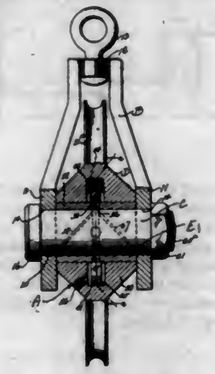
1,879,838. PRINTING MECHANISM FOR CASH REGISTERS. BRUNO BORNKESSEL, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 26, 1926, Serial No. 104,822, and in Germany July 16, 1925. 9 Claims. (Cl. 235—8.)

1. In a machine of the class described a printing mechanism including an actuating shaft, means for rotating said shaft, an actuating member shiftably but non-rotatably mounted on said shaft, a switch collar fast on said actuating member, a lug co-operating with said switch collar, and means for causing said lug to engage one or the other



flank of said switch rim, whereby said actuating member may be held during rotation of said shaft in either of two positions longitudinally of said shaft.

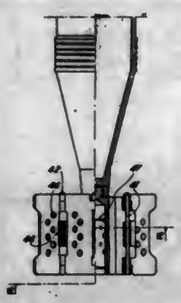
1,879,839. LUBRICATING BEARINGS. GILBERT C. BOWN and EDWARD J. MCCARTHY, Long Beach, N. Y. Filed Dec. 16, 1930. Serial No. 502,776. 2 Claims. (Cl. 308—115.)



1. In a bearing of the class described a shaft, a sleeve surrounding the shaft, said shaft and sleeve being mounted for relative rotation, the sleeve having an inner annular groove thereabout facing said shaft, said sleeve having transverse ports therethrough from the external surface thereof intersecting said groove, a part mounted on the sleeve and fixed therewith for rotation, said part having an annular chamber therein surrounding the sleeve and directly facing said ports, said chamber being adapted to receive lubricant, and a rigid lubricant feed ring loosely mounted in said annular chamber eccentrically surrounding said sleeve and said ports and having a peripheral width at least equal to the diameter of said ports.

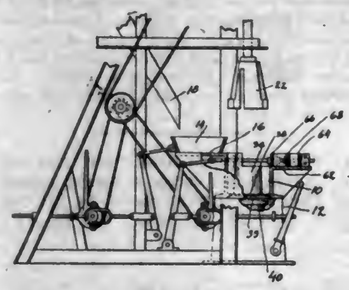
1,879,840. BLADED PROJECTILE. EDGAR WILLIAM BRANDT, Paris, France. Filed Nov. 5, 1930, Serial No. 493,675, and in France May 22, 1930. 13 Claims. (Cl. 102—29.)

1. A projectile comprising a body, pivots mounted at the rear of the body parallel to the longitudinal axis of the projectile and uniformly distributed about said axis, stabilizing wings each comprising a substantially rigid structure having the form when folded of a portion of an outwardly concave cylinder, two said wings being articulated on each said pivot and individually movable thereabout between folded and extended positions, the said wings having in folded position a diameter less than and in extended position a diameter greater than the caliber of the projectile, a wing mounted on one of said pivots being in folded position in overlapping relationship with a wing of the adjacent pivot, the wings on each pivot moving in opposite angular directions about the pivot in passing from folded to extended positions, interengaging



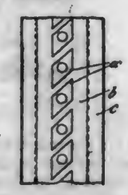
elements on each wing and on the body for limiting the extending movement of the wing, and means for moving the wings from folded to extended position upon firing of the projectile.

1,879,841. METHOD OF MANUFACTURING CONCRETE HEADER BLOCKS. THOMAS W. CASWELL, Flint, Mich., and GEORGE A. KELLY, New York, N. Y.; said Caswell assignor to said Kelly. Original application filed Jan. 23, 1928, Serial No. 248,680. Divided and this application filed Jan. 24, 1930. Serial No. 423,024. 2 Claims. (Cl. 25—155.)



1. That method of manufacturing a concrete header block comprising depositing and tamping aggregate within a mold box to form a block of substantially uniform depth, and before the block is taken from the mold box removing in a direction transverse to that of the tamping a portion thereof to the required depth and width to form a header block, stripping the header block from the mold box, and redepositing within the mold box that portion of the block removed therefrom so that it will form a part of the next block.

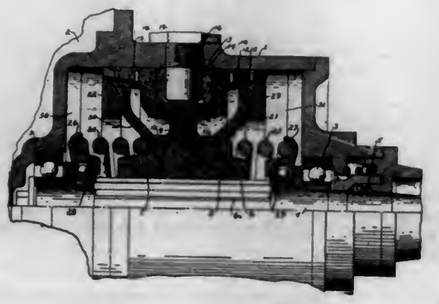
1,879,842. ELECTROLYTIC CELL AND IN ANODES USED IN SUCH CELLS. OTTMAR CONRADTY, Nuremberg, Germany. Filed Feb. 25, 1931, Serial No. 518,234, and in Germany July 23, 1930. 12 Claims. (Cl. 204—58.)



1. An electrolytic cell, comprising spaced anodes, a diaphragm, and a cathode in position for cooperating with

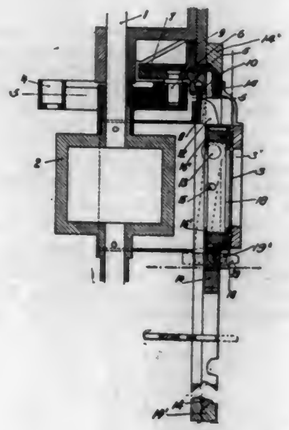
said anodes, the anodes covering one another transversely of the cathode, and presenting thereto a substantially unbroken surface, spaced substantially uniformly from the cathode.

1,879,843. POWER TRANSMISSION. HENRY E. CURTIS, San Jose, Calif. Filed Sept. 30, 1930. Serial No. 485,538. 11 Claims. (Cl. 192—59.)



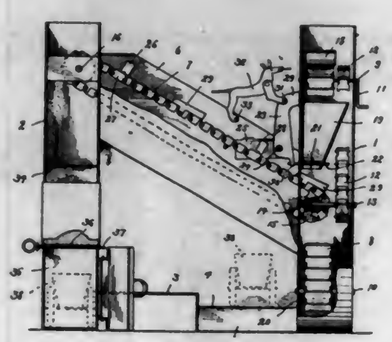
2. A power transmitting device comprising a revoluble closed cylinder, a driven shaft mounted therein, a piston mounted on the shaft, the piston and cylinder being relatively revoluble and reciprocable, driving means connecting the cylinder and piston whereby relative rotation will impart a relative reciprocating movement therebetween, passages communicating with the cylinder chamber on opposite sides of the piston, and valve means actuated by relative rotative movement between the cylinder and piston for controlling the flow of fluid through said passages.

1,879,844. CINEMATOGRAPHIC VIEW TAKING APPARATUS. ANDRÉ LÉON VICTOR CLÉMENT DEBRIE, Paris, France. Filed Sept. 6, 1927, Serial No. 217,861, and in France Oct. 18, 1926. 6 Claims. (Cl. 88—18.)



1. A control device for cinematographic apparatuses comprising film-advancing means, a shaft controlling said means, a film gate, a lever adapted to pivot round an axis parallel to the film gate and perpendicular to the direction of motion of the film, registering pins secured to said lever, a part driven by the shaft provided with a cam-shaped groove, a roller guided between the edges of the groove, a mechanical connection between the roller and the lever for positively driving same under the action of the movement of the cam first in one direction and then in the reverse direction, a pressure plate in front of the film gate and means for pivotally securing said pressure plate to the lever along an axis parallel to the pivoting axis of the lever.

1,879,845. CONVEYER TOY. PETER DELICH, Duluth, Minn., assignor of thirty per cent to Rudolph Z. Vokovan, Duluth, Minn. Filed Feb. 25, 1932. Serial No. 595,196. 4 Claims. (Cl. 46—37.)



1. A mechanical toy of the type described comprising inclined compartments, a hopper in one of the compartments, an endless bucket chain for elevating and dumping material into said hopper, and a second endless bucket chain for receiving material intermittently from said hopper and dumping it into another compartment, said second bucket chain having means for causing said hopper to intermittently dump material thereon.

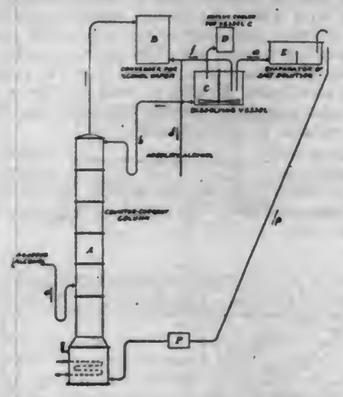
1,879,846. LIPSTICK CASE. ALFRED E. FOSTER, Wilkes-Barre, Pa. Filed Feb. 17, 1932. Serial No. 593,658. 2 Claims. (Cl. 132—79.)



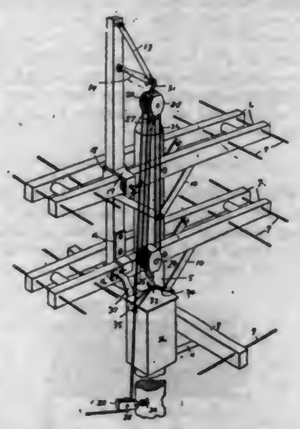
1. In combination, a frame, a mirror mounted on the frame, a wire mounted on the frame, a lipstick container having a loop about the wire to be slidable thereon.

1,879,847. PRODUCTION OF WATERFREE ETHYL ALCOHOL. ADOLF GORHAN, Liesing, near Vienna, Austria. Filed Sept. 8, 1930, Serial No. 480,576, and in Germany Sept. 9, 1929. 5 Claims. (Cl. 202—68.)

1. Process for the production of water-freed ethyl alcohol from aqueous alcohol by means of water-abstracting salts, comprising treating the aqueous alcohol in vapor form on the countercurrent principle to the action of a solution in absolute alcohol of a fusible water-abstracting salt capable of passing directly from the state of aqueous solution to the molten state, driving the resultant aqueous salt solution by heat to its substantially anhydrous and at the same time molten state and dissolving the molten salt in absolute alcohol for re-use in the process.



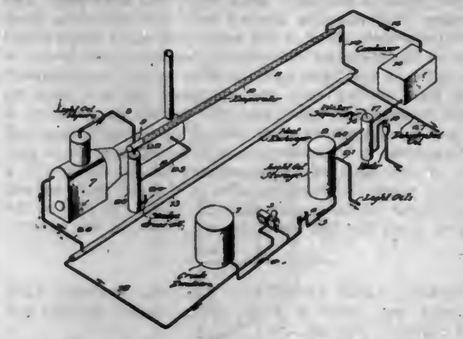
1,879,848. PORTABLE TRANSFORMER AND HOIST. CHRISTOPHER M. HORNE, Arlington, Mass. Filed July 22, 1930. Serial No. 469,754. 1 Claim. (Cl. 248—30.)



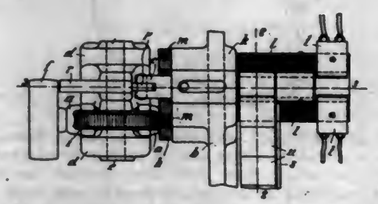
In an apparatus of the character described, the combination of a mast, means to attach said mast to a pair of cross-arms arranged one above the other, said mast including a portion to extend a considerable distance above the upper cross-arm, and two arms mounted one above the other on the upper end portion of said mast to swing both vertically and horizontally with reference to the mast when the mast is in its upright position, said swinging arms having outer end portions constructed to be secured directly to each other, and means carried by said two arms to support a hoist mechanism.

1,879,849. PROCESS AND APPARATUS FOR DEHYDRATION OF CRUDE OIL EMULSIONS. JAMES NEWTON HUNTER, Tulsa, Okla., assignor to Gulf Pipe Line Company of Oklahoma, Tulsa, Okla., a Corporation of Oklahoma. Filed Mar. 8, 1930. Serial No. 434,355. 6 Claims. (Cl. 196—5.)

2. The process of dehydrating crude oil emulsions which consists of mixing the emulsion with approximately 10% by volume of light oil distillate boiling below 350 degrees Fahrenheit, spraying the mixture into a body of oil vapor having a temperature above 300 degrees Fahrenheit, condensing the evolved water and oil vapors, and separating the condensate into water and oil.



1,879,850. DEVICE FOR HARDENING THE SURFACES OF CYLINDRICAL BODIES. FRIEDRICH KLOPP, Wald, Rhineland, Germany. Filed Mar. 5, 1931, Serial No. 520,448, and in Germany Mar. 7, 1930. 2 Claims. (Cl. 266—4.)



1. An apparatus for hardening the surface of cylindrical bodies, comprising in combination a quenching tank, parallel rotatable fluted shafts journalled at one end in the wall of said tank above the surface of the quenching liquid and projecting over part of the width of the tank adapted to support and rotate the bodies to be hardened, a chute above the journalled end of said shafts adapted to successively feed the bodies to be hardened to said shafts by gravity, burners arranged above the free end of said shafts and means for periodically shifting the bodies on said shafts a distance equal to the width of one body in the longitudinal direction of said shafts so that the body last delivered by said chute is shifted from thereunder toward said burners thus making room for the next following body and pushing the first body still supported on said shafts between said burners off the free ends of shafts into the quenching liquid.

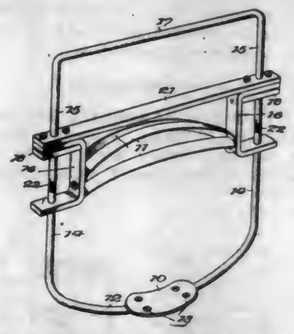
1,879,851. FRUIT CUTTING IMPLEMENT. VANE KRAVITZ, Ojai, Calif. Filed Sept. 8, 1931. Serial No. 561,760. 2 Claims. (Cl. 30—24.)



1. A fruit cutting implement adapted to be held within the palm of the hand when operating upon fruit, comprising, an elongated flat plate, a sharpened portion extending from an intermediate point of the lower longitudinal edge of the plate to one end thereof, a dull enlarged por-

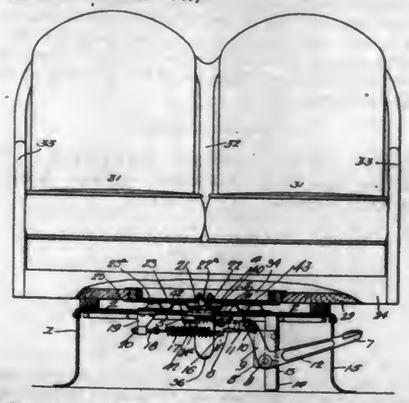
tion extending from said intermediate point to the other end of the plate for preventing cutting of the fleshy part of the palm of the hand when using the implement, and a finger receiving ring secured upon and extending from an intermediate point of the remaining upper longitudinal edge of the plate for conveniently mounting the device in the palm of the hand and assisting in its manipulation, said plate having each end angularly reduced from its upper longitudinal edge outwardly toward the terminii of its lower longitudinal edge, thereby providing at one end a formation to accommodate and be engaged by a portion of the palm of the hand, and at the other end a pointed blade for working upon the fruit, said pointed blade being extended only slightly beyond the tips of the fingers when the implement is in position in the hand.

1,879,852. CHIN SUPPORT. EMANUEL LEHMAN, Richmond, Va. Filed Aug. 25, 1931. Serial No. 559,315. 5 Claims. (Cl. 27—25.)



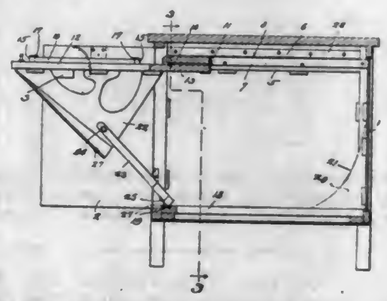
5. In a chin support for embalmers' use, a frame having a cross member, a chin rest on said cross member, side members extending from said cross member, each side member consisting of one section fixed to said cross member and a second section detachably secured to the fixed section, head bands slidable on the side members and means at the ends of the detachable side member sections for retaining the head bands thereon when said sections are detached.

1,879,853. CAR SEAT. WILLIAM J. MAYER, Philadelphia, Pa., assignor, by mesne assignments, to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 4, 1928. Serial No. 310,382. 5 Claims. (Cl. 155—96.)



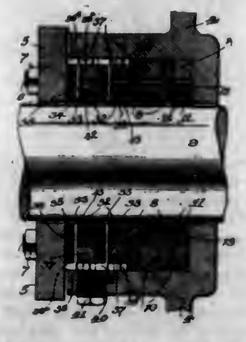
1. In a seat, a base, a slide mounted on the base, a pivot pin carried by the slide and having lost motion connection therewith, said pivot pin defining an axis of rotation, lever means for shifting the slide, locking means associated with the slide and shiftable therewith, a seat body supported by the base and rotatable about the before mentioned axis of rotation, and a locking element on the seat body with which the locking means normally cooperates to prevent movement of the seat body, said lever means operating to shift the slide and the locking means to first disengage the locking means from the locking element and then cause the slide to shift said pivot pin and its associated seat body whereby the body may be tilted and then rotated to a new position.

1,879,854. DESK. ROBERT M. MILLER, Montgomery, Pa. Filed Sept. 25, 1931. Serial No. 565,157. 5 Claims. (Cl. 312—30.)



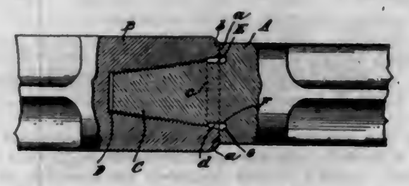
1. The combination with a housing having a door opening, of a slide therein, means for guiding the slide for movement toward and from the opening; a drop leaf hingedly connected to the slide and movable therewith, a runner carried by the leaf, a leg pivotally connected to the runner, a rail in the housing for sliding engagement by the leg and runner, and cooperating means on the leg and rail for holding the leg in position to support the leaf and runner in elevated positions.

1,879,855. PISTON ROD PACKING. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 23, 1929. Serial No. 387,981. 3 Claims. (Cl. 286—24.)



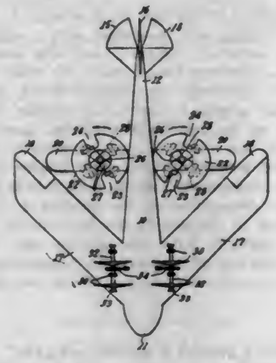
3. A metal packing comprising a stuffing box, an annular separator ring in said box, said separator ring containing radial oil channels in one side face thereof, an oil control ring adjacent the separator ring, a contracting ring surrounding and cooperating with the oil control ring to force it inwardly, said oil control ring containing a groove in direct communication with the radial oil channels of said separator ring, means for spacing said separator ring from one wall of the stuffing box, and means for clamping said separator ring and said spacing means to the box.

1,879,856. DRILL TOOL JOINT. BERT L. PETERSON, Wooster, Ohio. Filed Mar. 25, 1929. Serial No. 349,870. 1 Claim. (Cl. 287—125.)



In a well drill coupling member, a cylindrical body having a reduced integral extension at one end, a continuous end-facing groove surrounding the inner end of said extension and a continuous end-facing integral shoulder from the outer wall of said groove to the periphery of said body, said extension having a relatively short peripherally-plain neck portion whose plain periphery forms the inner wall of said groove and merges into the groove bottom by means of a fillet, said extension being tapered from said neck portion to its outer end and having a screw thread which projects beyond the plain periphery of said neck portion, the valley of said thread terminating substantially flush with said plain periphery of said neck portion.

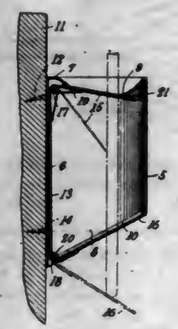
1,879,857. AIRCRAFT. ISAAC SCHAFRAN, New York, N. Y., assignor of one-half to Isidor Thornschein, New York, N. Y. Filed July 16, 1930. Serial No. 468,279. 4 Claims. (Cl. 244—15.)



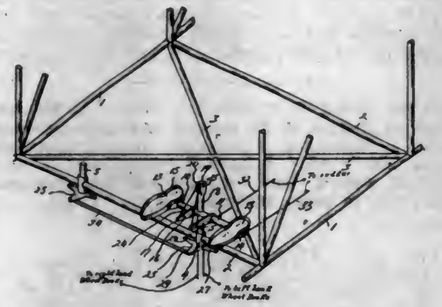
4. In an aircraft, the combination with the propellers and airfoils, of helicopters disposed in the back-stream of the propellers to be driven thereby, and a conical casing substantially enclosing each helicopter.

1,879,858. ASH RECEIVER. EDMUND SCHROEDTER, Brooklyn, N. Y. Filed Nov. 17, 1928. Serial No. 320,069. 7 Claims. (Cl. 131—51.)

1. An ash receiver comprising a receptacle for mounting on the back of a theatre chair or the like, means for securing the receptacle in position and a cover over said securing means including a back plate insertable up through the bottom of the receptacle, a closure for the bottom of the receptacle, the top of the receptacle having an inlet opening.



1,879,859. AIRPLANE CONTROL MECHANISM. EDWARD A. STINSON, Northville, Mich., assignor, by mesne assignments, to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 26, 1926. Serial No. 125,032. 23 Claims. (Cl. 244—29.)

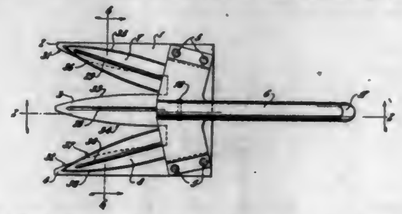


1. In an airplane, the combination with a rudder operating mechanism having movable controlling means adapted to be operated by the foot of the pilot, of a brake operating mechanism carried by said rudder operating mechanism, said rudder operating mechanism having controlling means operable by a different movement of the pilot's foot.

1,879,860. HEDGE TRIMMING SHEARS. ERNEST SWANSON, Springfield, Mass. Filed Aug. 5, 1931. Serial No. 555,213. 3 Claims. (Cl. 30—11.)

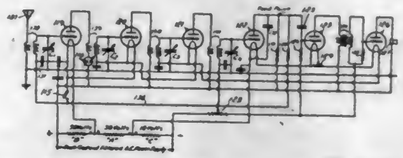
3. A shears construction comprising a base member having a plurality of blades, a plurality of cutting blades

pivotally secured to the base member, a lug and recess construction formed on the cutting blades for moving one blade from the other, a movable handle pivotally secured



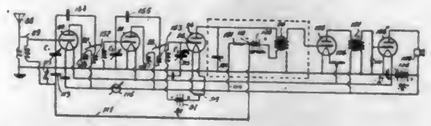
to the base member and formed with an opening in which the said lug is located for moving the cutting blades from the movable handle.

1,879,861. VOLUME CONTROL. HAROLD A. WHEELER, Jackson Heights, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Original application filed July 7, 1927, Serial No. 203,879, and in Great Britain July 3, 1928. Divided and this application filed Nov. 10, 1930. Serial No. 494,558. 7 Claims. (Cl. 250—20.)



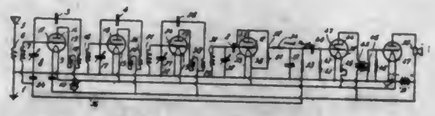
1. In a signaling system, a vacuum tube amplifier having a cathode and a control electrode, a vacuum tube detector coupled to said amplifier, said detector having more than two electrodes including an output electrode, means for maintaining said output electrode normally slightly negative relative to at least part of said amplifier cathode, means for causing said output electrode to become more negative in the presence of an amplified signal, and a direct current connection between said control electrode and said output electrode whereby the amplification of said amplifier is regulated automatically.

1,879,862. VOLUME CONTROL. HAROLD A. WHEELER, Jackson Heights, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Original application filed July 7, 1927, Serial No. 203,879, and in Great Britain July 3, 1928. Divided and this application filed Nov. 10, 1930. Serial No. 494,559. 1 Claim. (Cl. 250—20.)



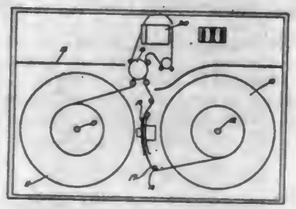
In a signaling system, a carrier frequency amplifier comprising a repeating element having a cathode and a control electrode, a detector coupled to said amplifier, said detector having a cathode and an anode, a first source of anode potential common to said repeating element and said detector, the series combination of an output transformer, a second source of direct voltage and a resistance in the output circuit of said detector, the primary winding of said transformer being connected to said detector anode, said resistance being connected to the positive terminal of said first source of anode potential, and a connection from a point between said resistance and said second source of potential to said control electrode whereby the amplification of said amplifier is regulated automatically.

1,879,863. VOLUME CONTROL. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Original application filed July 7, 1927, Serial No. 203,879, and in Great Britain July 3, 1928. Divided and this application filed Nov. 13, 1930. Serial No. 495,386. 12 Claims. (Cl. 250—20.)



1. In a signaling system, a vacuum tube amplifier having a cathode and a control electrode, a vacuum tube detector coupled to said amplifier, said detector having an output electrode, means for maintaining said output electrode normally negative relative to at least part of said amplifier cathode, means for causing said output electrode to become more negative in the presence of an amplified signal, and a direct-current connection between said control electrode and said output electrode, whereby the amplification of said amplifier is regulated automatically.

1,879,864. PORTABLE SOUND FILM BOX. WILHELM WINZENBURG, Dresden-Laubegast, Germany, assignor to Zeiss Ikon, Aktiengesellschaft Dresden, Dresden, Germany. Filed Feb. 15, 1930, Serial No. 428,691, and in Germany July 20, 1929. 1 Claim. (Cl. 179—100.3.)



In an apparatus of the character described, a container, a partition dividing said container into a main compartment and an auxiliary compartment, said partition being formed with a passage intermediate its ends establishing communication between the compartments, a source of light from the source of light, film guides in the main compartment in juxtaposition with the source of light, a photo-cell in the auxiliary compartment in the path of light from the source of light, film guides in the main compartment between said spools, and rollers in the main and auxiliary compartments for guiding a strip of film from one spool to the other, the film during such movement being engaged with the guides and rollers and passing into and out of the auxiliary compartment through the passage in said partition and about the photo-electric cell.

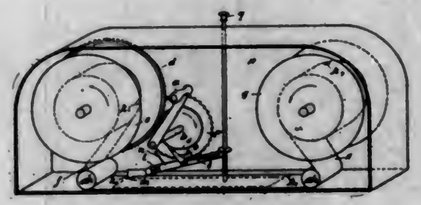
1,879,865. COLLAPSIBLE MUSIC STAND. DEXTER M. WRIGHT, New York, N. Y. Filed Apr. 12, 1930. Serial No. 443,879. 2 Claims. (Cl. 248—2.)



1. In a collapsible music stand, a post composed of a plurality of telescoping rods, a collar on each rod, an upstanding member formed with each collar, a pair of

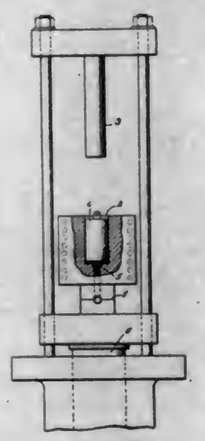
plates having median perforations allowing the passage of the rods, and a transverse slot through which said upstanding member is passed, and means for keeping the plates apart for binding with said rods.

1,879,866. MECHANISM OF FILM PROPULSION. CLAUS ABCHENBRENNER, Munich, Germany, assignor to the Firm Photogrammetrie G. m. b. H., Munich, Germany. Filed Oct. 4, 1929, Serial No. 397,205, and in Germany Oct. 8, 1928. 1 Claim. (Cl. 242—71.)



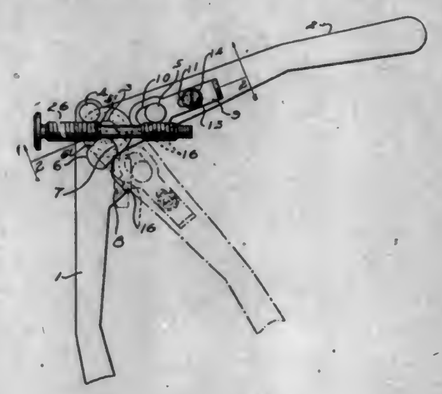
A device for feeding and controlling perforated photographic film, comprising a driven take-up spool, a detent yieldably urged into contact with said film and into the path of the perforations thereof, said detent having a toothed edge and a pivotally mounted dog yieldably urged to upright position, a rotary drive for said spool, comprising a gear meshing with the spool and engaged by the dog in its upright position to hold the detent released from the film, a toothed wheel engaged by the toothed edge of the detent to prevent movement of the drive in winding direction, and means to release the detent and toothed wheel and to permit the dog to engage the gear until the disengaged perforation of the film is advanced out of register with the detent.

1,879,867. LEAD PRESSING. CHARLES E. BENNETT, Hawthorne, N. J., assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 1, 1932. Serial No. 595,990. 2 Claims. (Cl. 207—10.)



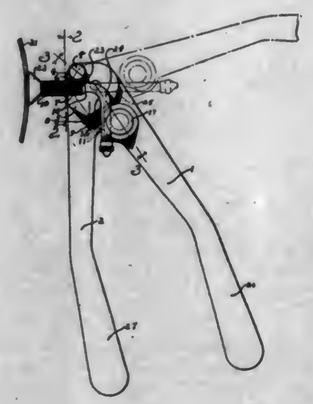
1. In lead pressing the method which comprises applying pressure to a molten lead charge to force a portion of the same through a die, relieving the pressure on the charge, then applying heat to the surface of the remainder of the charge until said surface becomes molten, and while the surface is in a molten state imposing a fresh charge of molten lead upon the same to displace the dross carried thereby, and then applying pressure to the fresh charge to form a homogeneous bond or union between the two charges.

1,879,868. BENDING TOOL. CARL BREER, Detroit, Mich. Filed Oct. 12, 1929. Serial No. 399,220. 5 Claims. (Cl. 81—15.)



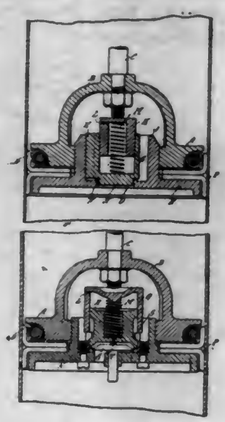
1. In a tool for bending threaded valve stems which have a longitudinal flat side face and a peripheral shoulder, a pair of pivotally connected arms, a pair of lugs on one of said arms, one having a flat side for engaging said shoulder at a point opposite from said flat face and a rounded extremity for engaging the intermediate portion of said valve stem, the other lug having a side arranged for receiving said flat face, and means on the other arm for engaging said valve stem only on one side so as to bend the latter upon said rounded extremity.

1,879,869. BENDING TOOL. CARL BAKER, Detroit, Mich. Filed May 21, 1930. Serial No. 454,458. 10 Claims. (Cl. 81—15.)



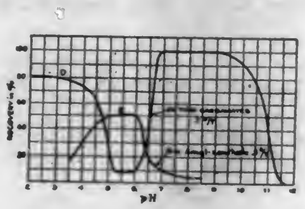
1. In a portable tool for bending valve stems, a plier-like member including a pair of pivotally connected arms, a pair of spaced jaws on one of said arms having adjacent substantially parallel flat side faces for holding one end of a valve stem, and a lug on the other member for bending said piece of work upon an extremity of one of said jaws.

1,879,870. PUMP FOR DELIVERING MEASURED QUANTITIES OF LIQUID. JOHN FRASER, Leckmelm by Garve, Scotland. Filed Apr. 25, 1929, Serial No. 357,978, and in Great Britain July 14, 1928. 8 Claims. (Cl. 103—225.)



1. In apparatus for delivering measured quantities of liquid, a plunger comprising a disc, a valve-seating on said disc, a non-return valve co-operating with said seating, a spring tending to maintain said valve on said seating and a dash-pot operative to restrict the rate of opening of said valve.

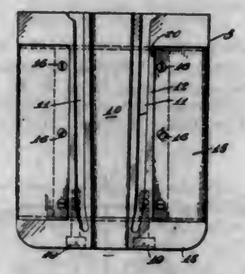
1,879,871. METHOD OF FLOTATION. ANTOINE M. GAUDIN, Salt Lake City, Utah. Filed Aug. 1, 1929. Serial No. 382,761. 2 Claims. (Cl. 209—166.)



1. A method of recovering zinc which consists in subjecting a mineral containing a zinc compound to a froth flotation operation in the presence of a dithiocarbamate, the pH of the pulp being maintained between 7 and 10

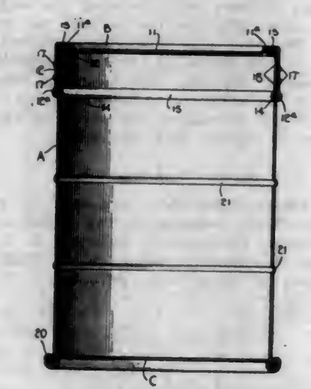
1,879,872. MOLD FOR GLASSWARE FORMING MACHINES. VICTOR E. HOFMANN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Jan. 16, 1930. Serial No. 421,153. 3 Claims. (Cl. 49—65.)

3. A mold comprising a pair of separable mold sections, each section including a body portion substantially semi-circular in cross-section, formed with one section of a mold cavity extending lengthwise of its inner face, said face being flat to provide sealing surfaces at opposite sides of the mold cavity, each mold section being formed with a semi-circular channel concentric with said mold cavity, insulating material in said channels, each mold section comprising a cover plate of sheet material overlying said insulating material and holding it within said channel,



each cover plate having end portions bent inward to extend parallel with said sealing surfaces, and means for securing the cover plates to the mold sections.

1,879,873. SHEET METAL CAN. ARTHUR G. HOPKINS, Maspeth, N. Y., assignor to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed July 27, 1932. Serial No. 625,091. 5 Claims. (Cl. 220—54.)

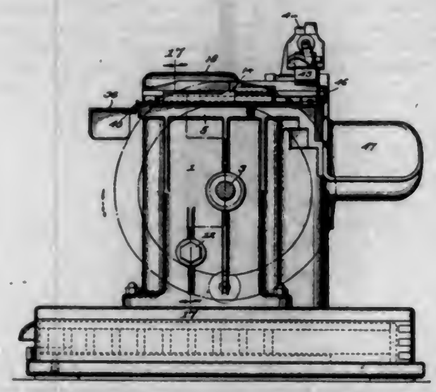


3. A sheet metal can comprising a can body having a mouth, said body having such formation as to provide a seating means below said mouth, a separate rigid anchoring element held by said seating means, a can top consisting of a cover wall adapted to fit onto and make sealing engagement with said mouth of the can body and a depending wall engaging the wall of the can body having a part overlying said anchoring element, means in said overlying part of said depending wall shaped onto and beneath and anchored to said anchoring element, the said depending wall between the anchoring element and said mouth being under tension by virtue of the action of the anchoring element against its seating means and the anchoring of said depending wall part to the anchoring means, and means in said can top separated from said anchoring element for severing the can top from the can body.

1,879,874. LUBRICATING SYSTEM AND PRODUCTS. WILLIAM V. KIDDER, La Crosse, Wis. Filed Oct. 16, 1931. Serial No. 569,855. 7 Claims. (Cl. 87—9.)

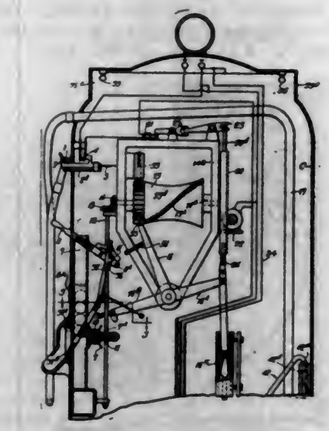
1. A crank case lubricant for internal combustion motors consisting of a lubricating oil and .05 to .005% of colloidal graphite.

1,879,875. MARKING MACHINE. FREDERICK KOHNLE, Dayton, Ohio, assignor to The Monarch Marking System Company, Dayton, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,839. 9 Claims. (Cl. 101—291.)



1. In a machine of the class described, means for supporting and guiding a tag strip, the strip notched at definitely spaced intervals at opposite longitudinal edges thereof, a carriage reciprocating over said strip supporting means, a plunger carried by said carriage, spring tensioned for moving independently longitudinally of the carriage traverse, the forward end of said plunger provided with a pair of spaced tangs for engagement with a pair of aligned notches for advancing the strip, said plunger yieldingly depressed for bearing upon the strip and snap the tangs into the notches when brought into registry therewith and a rigid stop for limiting the strip in advance of said plunger.

1,879,876. LIQUID PUMP. PAUL KRAUSE, Babylon, N. Y., assignor, by direct and mesne assignments, of one-third to William E. Sprague, Babylon, N. Y., and one-third to Harry Taylor, Babylon, N. Y.; Lucy A Sprague administratrix of the estate of said William E. Sprague, deceased. Filed Dec. 31, 1928. Serial No. 329,464. 11 Claims. (Cl. 221—103.)

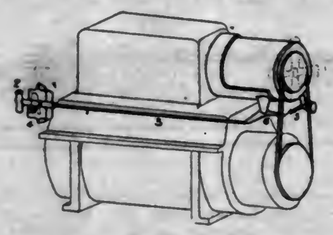


1. In a liquid dispensing device of the character described, a housing, a pump in the housing for drawing liquid from a remote source of supply, a tank into which said liquid is emptied from the pump, a cylinder for receiving said liquid, a piston for discharging the liquid from the cylinder to the exterior of the housing, a float in the tank and a switch member controlled by said float for controlling the operation of said pump.

1,879,877. PROCESS FOR THE MANUFACTURE OF PLASTERS FROM ANHYDRITE. VICTOR LEFEBURE, London, England. Filed Nov. 8, 1928. Serial No. 318,101. 7 Claims. (Cl. 106—34.)

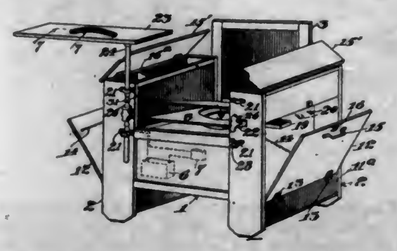
1. A process for the manufacture of an improved plaster, consisting in that a double salt of an alkali metal is formed within a mass of natural mineral anhydrite in a very highly divided and uniformly distributed state, by adding to the anhydrite the individual component inorganic salts which constitute the double salt.

1,879,878. STARTING MECHANISM FOR MOTOR VEHICLES. FERDINAND LEYVASTRE, Lyon, France, assignor to Société de Paris et du Rhone, Lyon, France, a Corporation of France. Filed Oct. 1, 1931, Serial No. 566,215, and in France Oct. 3, 1930. 2 Claims. (Cl. 290—31.)



1. Self-starter apparatus for an internal combustion engine including the combination, with a crank shaft, of a combined electric motor-generator having a common shaft, a transmission belt which is normally under predetermined tension, connecting said shaft with the engine crank shaft in order to transmit the rotation thereof to the latter, a tensioning device applied against said belt to maintain the tension thereof, means operable at will for increasing the pressure of said device against said belt, whereby to increase the tension of the latter above the predetermined value, means for closing the circuit of the motor after increasing the pressure of the tensioning device, and means for releasing the tension of said belt to the predetermined value.

1,879,879. SICK-ROOM OR COMMODE CHAIR. ANNA K. LINDSEY, Morrisonville, Ill. Filed Feb. 3, 1931. Serial No. 513,201. 2 Claims. (Cl. 155—188.)



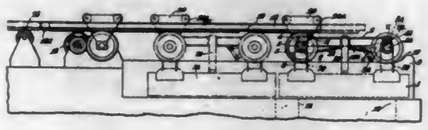
1. In a sick-room chair, the combination with two arm sections, each arm section comprising a top compartment and a lower compartment under said top compartment, said lower compartment provided with a rear wall and a front wall producing a holding pocket in the bottom of said lower compartment, and a door fastened to said front wall and adapted to close under said top compartment.

1,879,880. COMBINATION PORTABLE STOVE. ANNA K. LINDSEY, Morrisonville, Ill. Filed Apr. 6, 1931. Serial No. 528,169. 6 Claims. (Cl. 126—88.)



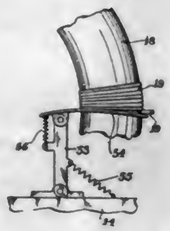
1. In an apparatus of the class described, the combination of a casing, said casing provided with a bottom, a collar plate in the upper portion of said casing, supporting plates within said casing under said collar plate, each supporting plate provided with a lug engaging said collar plate and also with a lug engaging said bottom, and fastening means extending through said lugs and through said collar plate and bottom securing the same together.

1,879,881. OPERATING MECHANISM FOR REMOVING PIT COVERS AND THE LIKE. ROBERT PALM, Fairfield, Ala. Filed June 27, 1931. Serial No. 547,293. 8 Claims. (Cl. 268—10.)



1. An operating mechanism to vertically lift and to horizontally displace furnace tops, lids, hatches, covers and the like, which comprises means to vertically lift said cover, means to horizontally displace the same, each of said means being actuated by a common source of power, and means to apply said power first to one and then to the other of said lifting and displacing means in reversible sequence, said horizontally displacing means comprising a carriage frame carried on a plurality of axles supported by idler wheels engaging a track, said cover being suspensionally supported on said axles, and automatically operating means to terminate the extent of said horizontal displacement.

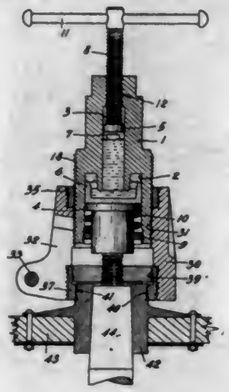
1,879,882. WREATH MAKING METHOD AND MEANS. GEORGE PULLETS, New York, N. Y., assignor of one-half to Frank C. Braun, New York, N. Y. Filed Aug. 2, 1927. Serial No. 210,090. 2 Claims. (Cl. 242—4.)



1. The method of completely covering an annular-shaped object with compressible roping material including the steps of compressing the material along its inner periphery to permit the outer periphery to be fully covered.

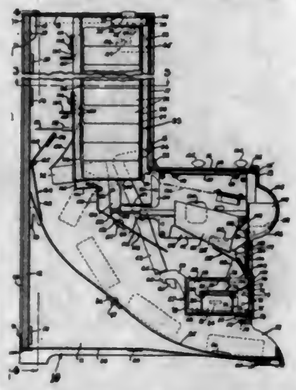
2. A device for performing the method of claim 1 including a table, a member resiliently hinged to the table, a resilient pushing member hinged to the member and adapted to compress the turns along the inner periphery of the wreath, the device being adapted to be moved away from the wreath when the same is being changed.

1,879,883. DEVICE FOR REMOVING WHEELS FROM THEIR AXLES. CHARLES REINHOLD, Geneva, Switzerland. Filed Mar. 27, 1930, Serial No. 439,347, and in Switzerland Apr. 8, 1929. 1 Claim. (Cl. 29—86.)



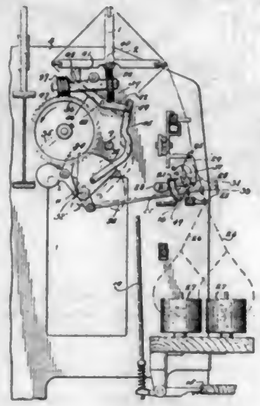
A device for detaching automobile wheels, aircraft propellers, or the like from their support, comprising the combination of a cylinder of relatively large diameter having a liquid therein, a piston movable in the cylinder and adapted to bear by one end on the end of the support, a second cylinder of relatively small diameter communicating permanently with the first and concentric therewith, a piston movable in the second cylinder, said piston being actuated by a threaded elongation thereof, a member for connecting the larger cylinder to the object to be detached, means on the larger cylinder and on said connecting member for detachably connecting the two, an interior tapped part on the connecting member, said tapped part being split, a clamping bolt for drawing the sectors of said part together, said tapped part being adapted to receive one of a series of slotted threaded rings and engageable with one of same at a time, said slotted ring having an external thread for engaging the connecting part and an internal thread for engaging a support, the arrangement being such that by rotating the elongated threaded member in the proper direction, the liquid filling the two cylinders is forced into the larger cylinder and causes a relative movement of the large cylinder and of the corresponding piston, whereby the wheel, propeller or the like is detached from the support.

1,879,884. VENDING MACHINE CABINET. WILLIAM H. ROWE, Los Angeles, Calif. Filed Mar. 23, 1929. Serial No. 349,377. 3 Claims. (Cl. 312—189.)



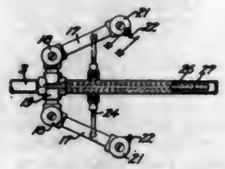
2. A vending machine cabinet comprising side walls, a back, a front, and a closure door, said front having an aperture, a closure member positioned in said aperture, a lock for said closure door, and means whereby said lock holds said closure member in position when said closure door is in a closed position.

1,879,885. REEL MECHANISM. CARL SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,486. 21 Claims. (Cl. 242—49.)



1. In a stop motion the combination of a stop motion shaft, a weight lever attached thereto, and weight-actuated mechanism for rotating the stop motion shaft against the action of said weight lever.

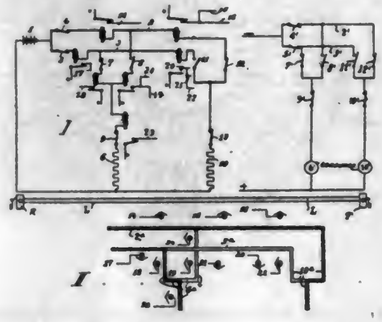
1,879,886. METHOD OF BURNING GAS. CHARLES J. SCHIFFERLE, Oakland, Calif., assignor to Harry R. Struthers, Berkeley, Calif. Original application filed Aug. 9, 1930, Serial No. 474,134. Divided and this application filed Dec. 15, 1930. Serial No. 502,299. 3 Claims. (Cl. 158—117.5.)



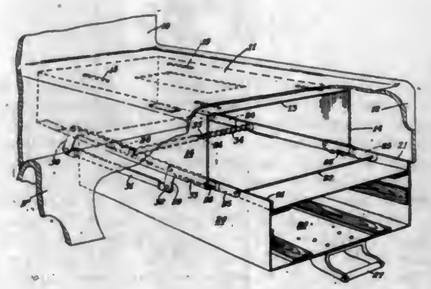
1. The method of conditioning a gas for burning, which comprises preheating the gas, directing the preheated gas in a plurality of converging streams so that the streams intersect at a focus, and adjusting the focus of said streams to a position where sufficient air is entrained by the gas to support combustion.

1,879,887. APPARATUS FOR THE SUPERVISION OF ELECTRIC POWER DISTRIBUTING SYSTEMS. MANFRED SCHLEICHER, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 20, 1929, Serial No. 348,439, and in Germany Jan. 10, 1928. 2 Claims. (Cl. 177—311.)

1. Apparatus for the supervision of electric power distributing systems, comprising a first representation of such system, said representation comprising a source of electricity, electric conductors connected therewith, switches connected with said conductors, the relative arrangement of said conductors and switches being similar to that of the corresponding parts of the distributing system, resistances connected with said conductors and located in positions corresponding to those of the consumers in the distributing system, a second representation of the power distributing system, said second representation comprising line tracings corresponding to the several portions of the distributing system, separate indicating apparatus associated with individual portions of said line tracings, actuating devices associated with different portions of the conductors of said first representation and energized whenever the respective portions carry current, and operative connections from each of said indicating apparatus to the actuating device associated with the corresponding portion of the conductors of said first representation.

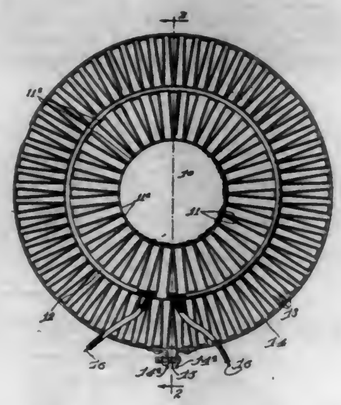


1,879,888. DRAWER FOR KITCHEN SINKS. JOHN R. SIEBER and GUY RANDOLPH ELWELL, Pittsburgh, Pa., assignors to Standard Sanitary Manufacturing Company, a Corporation of New Jersey. Filed Oct. 31, 1931. Serial No. 572,308. 12 Claims. (Cl. 45—95.)



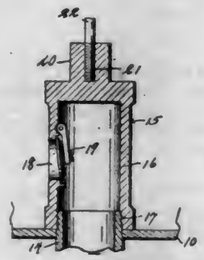
1. The combination with a sink having an apron depending therefrom, of a frame secured to the underside of said sink, a drawer supporting member having upstanding flanges along the sides thereof, a plurality of links having one end of each link pivotally connected to the frame, and the opposite end of each link pivotally connected to the flanges of the drawer supporting member, extensions on the links on one side of said drawer supporting member, and a connecting rod joining the extensions.

1,879,889. ELECTRIC AIR HEATER. EARLE W. BALLENTINE, Chicago, Ill., assignor to Solar Industries, Inc., a Corporation of Illinois. Filed June 29, 1931. Serial No. 547,708. 15 Claims. (Cl. 219—38.)



1. An electric heater, including; a ring of radiating fins, a circular heating element around the ring of radiating fins; and a circular band around the fins and heating element, said band being contracted to press the fins against the heating element.

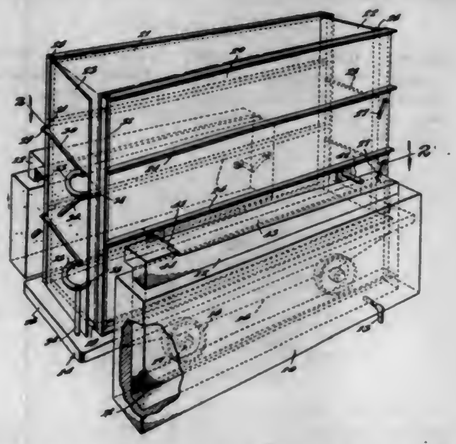
1,879,890. CHECK VALVE. WALTER A. BUEHLER, Cucamonga, Calif. Filed Mar. 26, 1931. Serial No. 525,513. 2 Claims. (Cl. 137—21.)



1. A check valve of the character described comprising a casing having a threaded outlet port in one end thereof and an intake port in one side, a gravity operated valve member mounted in the casing and controlling the passage of liquid through the casing in one direction, the end of the casing opposite the outlet port being closed, a nut member upstanding from the closed end of the casing and integrally formed therewith, said nut member having a threaded bore therein, and a rod inserted in the threaded bore whereby to facilitate removal of the casing from a closed receptacle upon application of a wrench to said nut.

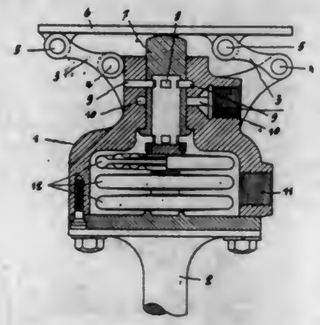
1,879,891. MOLD AND METHOD OF REMOVING THE SAME FROM THE CAST MATERIAL. LEONARD CONNETT, Cincinnati, Ohio. Filed June 6, 1930. Serial No. 459,448. 14 Claims. (Cl. 18—40.)

1. A mold stripping apparatus, comprising, a platform, a mold frame mounted on said platform, hoisting devices mounted in spaced relation so as to permit the movement therebetween of the mold and platform, each of said hoisting devices including a cylinder and a piston, means for elevating said pistons, the sides of said mold having extensions engageable by said pistons whereby the mold frame may be elevated and stripped from the cast block



within the same, and one of the ends of the mold movable to clear the end of the mold whereby the platform and block of soap may be drawn endwise out of the mold.

1,879,892. FLUID BRAKING MECHANISM. ALBERT DEWANDRE, Liege, Belgium. Filed Dec. 20, 1928, Serial No. 327,272, and in France Dec. 21, 1927. 2 Claims. (Cl. 121—41.)

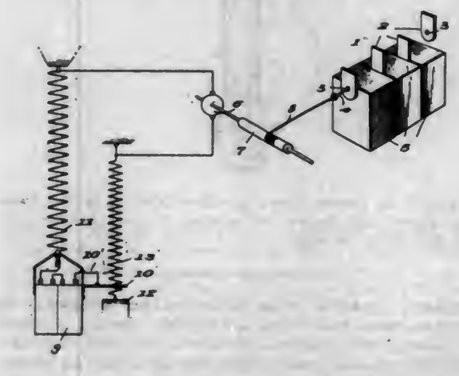


1. An automotive power brake system including a casing, manually actuated brake operating means of which the casing forms a part, a servo-motor connected to the brakes, suction means leading through the interior of the casing for controlling the operation of the servo-motor, an atmospheric vent for the servo-motor leading through the interior of the casing, manually operable means for controlling the suction means to the motor and the atmospheric vent thereof, and a bellows element forming a power connection between said manually operable means and the casing, the bellows element being exteriorly open to the suction admitted to the servo-motor and having a predetermind interior pressure to compel movement of the casing in the actuation of the manually operable means at any pressure less than said predetermined pressure within the bellows element, the predetermined interior pressure of the bellows element being of increased effect on the bellows under the admission of suction through the casing to the servo-motor whereby to create a reaction on the manually operable means by said bellows element under the increased effect of the predetermined inner pressure in proportion to the suction effect on the servo-motor.

1,879,893. REFRIGERATING COMPOSITION. FRANK J. DOBROVOLNY, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1930. Serial No. 427,424. 4 Claims. (Cl. 252—5.)

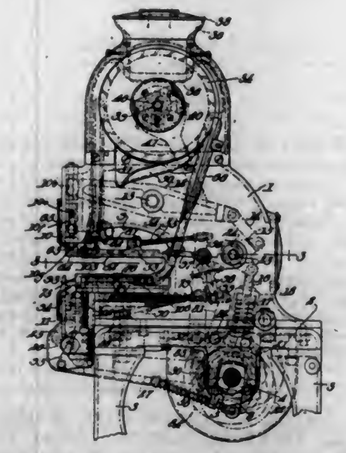
2. A composition of matter comprising methyl chloride containing 1% to 6% by weight of chloropicrin.

1,879,894. PROPAGANDA DISTRIBUTOR. JESSE E. ESHBAUGH, Flint, Mich. Filed Mar. 25, 1930. Serial No. 438,881. 10 Claims. (Cl. 244—1.)



6. A propaganda distributor for free balloons including a progressively dischargeable cargo, an electric circuit, a motor in said circuit, motor-actuated means for releasing the cargo, and acceleration-controlled means for automatically decreasing the resistance of the circuit gradually and proportionately to the rate of descent of the balloon.

1,879,895. ATTACHING MACHINE. PAUL E. FENTON, Thomaston, and EMERSON H. TOMPKINS, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 24, 1931. Serial No. 583,052. 11 Claims. (Cl. 218—6.)



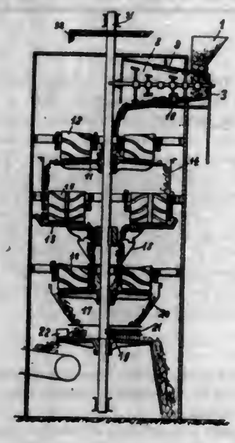
1. An attaching machine for buttons and other fasteners, including a head having bearings for a setting mechanism, said head provided with a deep throat for the purpose specified, said setting mechanism arranged at one extremity of said throat, means for feeding fastener parts to said setting mechanism, including a fastener part feeding raceway at the other extremity of said throat, a rotatable member interposed between said raceway and setting mechanism and spanning the extent of the throat between these elements, said rotatable member provided with means for receiving fastener parts from said raceway, means for imparting rotary motion to said rotatable member to cause same to advance said fastener parts from said raceway to said setting mechanism, and means for ejecting said fastener parts from said rotatable member and moving them into setting position relatively to said setting mechanism.

1,879,896. JEWEL MOUNTING. TONY E. FOSTER, Indianapolis, Ind., assignor to Herff-Jones Co., Indianapolis, Ind., a Corporation. Filed Apr. 25, 1930. Serial No. 447,377. 3 Claims. (Cl. 63—26.)



2. In an article of jewelry, a body portion having a receptacle formed therein, a shoulder within said receptacle, a stone within said receptacle, a retaining member resting upon said shoulder and engaging said stone, a rim formed about said receptacle and adapted to engage said retaining member for maintaining the same upon said shoulder, and a spring member within said receptacle adapted to maintain said stone in engagement with said retaining member.

1,879,897. GRINDING AND MIXING APPARATUS. JOSEPH EMILE GRANELLE-DANLOY, Rouen, France. Filed Apr. 29, 1929, Serial No. 359,019, and in France May 9, 1928. 5 Claims. (Cl. 88—45.)



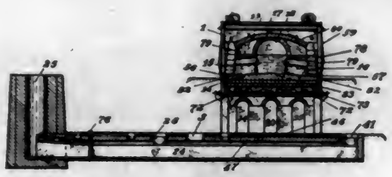
1. An apparatus for treating material used in molding comprising a driving axle, a series of superimposed plates arranged in spaced relation on and driven by said axle, grinding means cooperating with each of said plates, the uppermost plate being inclined downwardly toward the periphery to provide for peripheral discharge to the immediately adjacent lower plate and said latter plate being arranged for central discharge to the next immediately adjacent lower plate.

1,879,898. GARMENT. RICHARD W. GERISCH, Los Angeles, Calif., assignor to Los Angeles Knitting Company, Hollydale, Calif. Filed Sept. 22, 1930. Serial No. 483,613. 1 Claim. (Cl. 2—211.)



A reversible knitted skirt comprising a body part having front and back portions the same in appearance, said body part having slits in its upper portion at the sides extending from the top with overlap portions, the overlap portion at one side extending forwardly and the overlap portion at the opposite side extending rearwardly, said skirt having a belt portion around its top open at both sides of the top, the overlapping ends of said belt at one side corresponding to the overlap portion of the skirt at that side, and the overlapping ends of the belt at the other side corresponding with the overlap portion of the skirt at that side, whereby one edge of the overlap and one end of the belt are seen at one side of the skirt in front, and the overlap edge and the end of the belt at the opposite sile are seen from the rear, and means for detachably securing together the overlapping ends of the belt at opposite sides of the skirt; whereby the skirt can be reversed as to its front and back to correct bulge without changing its appearance.

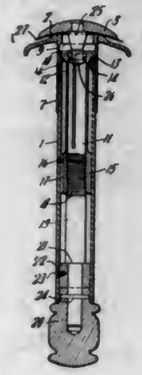
1,879,899. FURNACE. JOSEPH HAULIK, Durant City, Pa. Filed Oct. 15, 1929. Serial No. 399,797. 5 Claims. (Cl. 49—59.)



5. In a glass furnace hearth, a transverse hearth-bed surface on each side of the median line of said hearth, each surface being inclined downwardly towards the sides of same; a series of cupped cleaning stones in each hearth-bed surface, in inclined surface alignment with said bed surfaces, and each cleaning stone having a focal point of débris discharge near the side edges of the hearth; and a plurality of longitudinal cooling and ventilating flues beneath, and in proximity with the hearth-bed, each flue having a port in direct communication with atmospheric air, and means for providing a draft near the flue ports for the purpose of frequent renewal of the cooling air within the ventilating flues.

1,879,900. SAFETY RAZOR. GEORGE HOFMANN, Boston, Mass. Filed Feb. 6, 1932. Serial No. 591,288. 2 Claims. (Cl. 30—12.)

2. A safety razor, comprising a tubular handle, a guard member secured to one end of said handle and having an opening through which access exists to the interior of the handle, a clamp hinged to the guard member on an axis transverse to the length dimension of the handle, a headed stud protruding from the central part of the clamp adapted to enter the handle when the clamp is in blade-gripping relation to the guard member, a clutch longitudinally movable and having its entire range of such movement in the interior of the handle, said clutch comprising jaws adapted to overlap the rim of the stud head, said clutch in its uppermost position being free from engagement with said stud when the latter is inserted into said handle to insure the engagement of said jaws with the stud when the clamp



is placed in proper closed position relative to the blade and guard, and means for moving the clutch to engage the jaws with the stud.

1,879,901. PAPER WEB TENSIONING MEANS FOR REEL-FED PRINTING PRESSES. HENRY VINCENT JAMES, Cintra, England. Filed Aug. 25, 1930, Serial No. 477,772, and in Great Britain May 29, 1930. 10 Claims. (Cl. 242—75.)



1. In apparatus for the control of a rotary paper reel and the paper web therefrom which supplies a printing machine, a friction band which acts on the reel for restraining the rotation of the reel and tensioning the web, a tensioning roller for the band, and means for rotating the roller for tensioning the band to vary the effort of the band on the reel, said means comprising an epicyclic gear having three rotary elements, a coupling between one of said elements and the roller, an electro-dynamic machine, a coupling between said machine and another of the gear elements, and variable retarding means coupled to the remaining gear element.

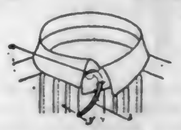
1,879,902. PAPER WEB TENSIONING MEANS FOR REEL-FED PRINTING PRESSES. HENRY VINCENT JAMES, Radlett, England. Filed July 27, 1931, Serial No. 553,398, and in Great Britain June 26, 1931. 4 Claims. (Cl. 242—75.)

1. In apparatus for the control of a rotary paper reel and the paper web therefrom which supplies a printing machine, a friction band making contact with the periphery of the reel for restraining the rotation of the reel and tensioning the said web, a roller to which one end of the band is attached, an anchorage at the other end of the band and means for rotating the roller for tautening and slackening the belt and so varying the effort of the band on the reel, the means for rotating the roller comprising an epicyclic gear, a coupling between one element of the gear and the



roller, a constant speed motor, a coupling between this motor and another element of the gear, a direct electric current generator coupled to a further element of the gear, said generator being driven continuously through the gear by the motor, and a variable ohmic regulator in circuit with the generator for adjustment of the energy generated and the turning effort or torque transmitted, through the gear, from the motor to the element coupled with the roller for imparting a rotary turning effort to the said roller.

1,879,903. CLOSING DEVICE FOR COLLAR BUTTONS. KURT KLEINER, Sandberg, Germany. Filed May 27, 1930, Serial No. 456,156, and in Germany May 29, 1929. 3 Claims. (Cl. 24—40.)

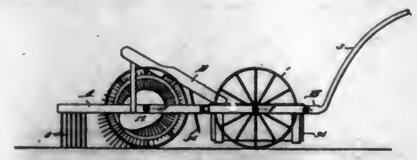


1. A collar buttoning device comprising a cup shaped head arranged to engage and receive the head of a collar button and provided with a spring to bear on one side of the flange of a button head and an arm extending from one side of said cup shaped head and adapted to pass through a button hole in the loose end of a collar.

1,879,904. POSITIVE ELECTRODE AND PROCESS OF PREPARING THE SAME. GEORG KRÄNZLEIN, Frankfort-on-the-Main-Hochst, RICHARD KARL MÜLLER, Bad Soden-on-the-Taunus, and LUDWIG WILHELM BERLIN, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 18, 1929, Serial No. 400,730, and in Germany Nov. 3, 1928. 8 Claims. (Cl. 136—28.)

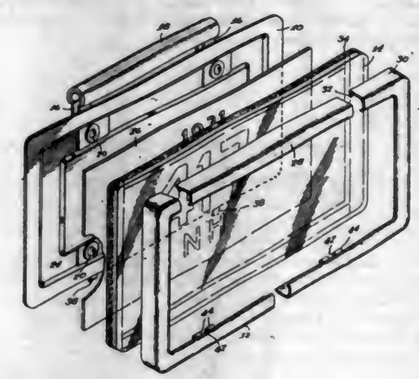
1. In a process of preparing positive electrodes for accumulators operated with an alkaline electrolyte and having oxygen compounds of a metal of the group consisting of nickel and cobalt as the active mass of the positive electrodes, the steps which consist in moistening said active mass with a highly viscous water-soluble agent and then pressing it under a pressure of between 2700 and 3500 kilos per square centimeter together with a foliated graphite, the laminæ of which are retained on a sieve of 0.06 mm. mesh, but which pass through a sieve of 0.75 mm. mesh.

1,879,905. PRUNE PICKER. JACOB LIEBFRIED, Santa Cruz, Calif. Filed Nov. 10, 1931. Serial No. 574,182. 9 Claims. (Cl. 56—328.)



1. A device for gathering fruit and the like comprising a wheel supported frame, a drum rotatably supported in the frame and having openings in its ends, said drum having openings in its periphery, a plurality of bars passing through the drum, stationary cam tracks carried by the frame and with which the ends of the bars engage said ends passing through the openings, a plurality of pins carried by each bar and passing through the openings in the periphery of the drum for picking up objects from the ground and carrying them around with the drum, and means for receiving the articles from the top part of the drum.

1,879,906. LICENSE PLATE HOLDER. PETER J. LINSTROM, Medford, Mass. Filed Sept. 24, 1931. Serial No. 564,821. 1 Claim. (Cl. 40—125.)



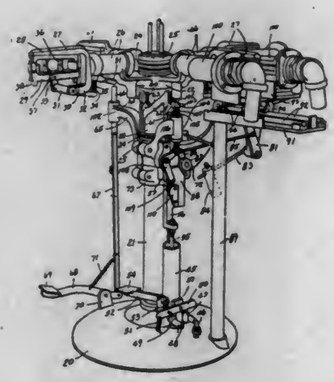
A license plate holder comprising a back plate having openings therethrough adapted to receive means for mounting the same at the rear side thereof, a one-piece open frame continuously U-shaped in cross section and having a relatively short rearwardly-extending inner portion and a relatively long rearwardly-extending outer portion, a glass within the frame and resting against said inner portion, a resilient gasket on the rear surface of the glass adjacent to its periphery and outside of said inner portion, the gasket being adapted to be engaged by a license plate in a manner spacing the plate from the glass and the back plate being adapted to engage against the license plate within said outer portion, an inwardly-extending ledge along the rear edge of one side of the frame for holding the parts within the frame, two relatively spaced metal pieces permanently secured to another side of the frame and each having a pair of relatively spaced eyes projecting rearwardly beyond the edge of the frame, two relatively spaced metal pieces permanently secured to the rear face of and adjacent to the corresponding edge of the back plate and each having an ear projecting outwardly beyond said edge and between two of said eyes, and pins extending through the eyes and over the ears in a manner cooperating with said ledge to hold the back plate within the frame.

1,879,907. APPARATUS FOR MINING. RALPH J. MEYER, Denver, Colo. Filed Sept. 11, 1930. Serial No. 481,147. 6 Claims. (Cl. 262—12.)



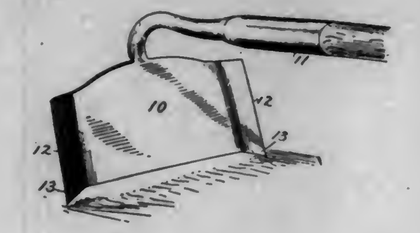
1. An appliance of the character described comprising a one-piece bag having a tubular flexible wall integral with comparatively heavy end-portions, one of said end-portions having a bore to admit a pressure-fluid to the bag, and means for supplying a pressure fluid to the bore.

1,879,908. APPARATUS FOR MANUFACTURE OF HOLLOW SILVERWARE. CHARLES R. MOON, Muncie, Ind., assignor to Ontario Manufacturing Company, Muncie, Ind., a Corporation. Filed May 18, 1931. Serial No. 538,065. 6 Claims. (Cl. 113—59.)



1. In apparatus of the class described, the combination of a support, a plurality of movable carriers carried thereby, each of said carriers being adapted to grasp the two halves of a split knife handle and maintain the same in the proper relation for a finished handle and said carriers being open at each side to permit access to said handle, indexing mechanism for moving said carriers step by step to bring the same successively to a number of operating stations, and a heater at one of said stations for heating said handles, said heater including a burner positioned at each side of a carrier when stopped at said operating station and adapted to play a flame upon each side of said handle, said heater also being movable out of the path of said carriers to permit movement thereof to the next succeeding station.

1,879,909. HOE. JOHN H. ROBERTS, Newport, Ark. Filed July 24, 1931. Serial No. 552,962. 5 Claims. (Cl. 97—65.)

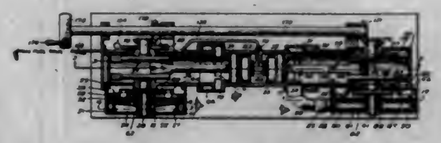


1. A hoe blade having edge portions inclined with reference to the working face of the blade in a direction to tend to carry engaged objects to such face the working face of the blade being flat between such edge portions and said edge portions being narrow compared with the area of the working face.

1,879,910. INTERNAL COMBUSTION ENGINE. WILLIAM H. ROBERTSON, Dayton, Ohio. Original application filed Dec. 13, 1919, Serial No. 344,715. Divided and this application filed June 14, 1928. Serial No. 285,414. 11 Claims. (Cl. 123—32.)

9. In an internal combustion engine, the combination with a cylinder having a combustion zone at the head thereof and a piston reciprocating therein for compressing air substantially entirely rearwardly of said zone; of a fuel injector pump connected therewith for positively controlling the rate of injection of fuel within said cylinder in accordance with the rate of air flow past said zone during expansion.

1,879,911. INTERNAL COMBUSTION ENGINE. WILLIAM H. ROBERTSON, Dayton, Ohio. Original application filed Dec. 13, 1919, Serial No. 344,715. Divided and this application filed Nov. 26, 1928. Serial No. 321,843. 3 Claims. (Cl. 60—13.)

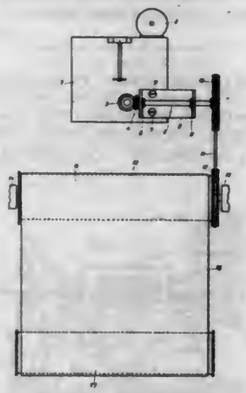


3. In an internal combustion engine, the combination with a cylinder having intake and exhaust passages, of a rotary air compressor connected with the intake passage, including a rotor serving as an engine fly-wheel of relatively small mass, a turbine connected with the exhaust passage, said turbine including a rotor serving as an engine fly-wheel of relatively small mass, a pair of oppositely reciprocating pistons in the cylinder, a pair of shafts, mechanical connections between the pistons and the shafts for rotating the latter in opposite directions, and high speed gearing between one shaft and said compressor rotor, and between the other shaft and the turbine rotor for effecting the relatively rapid rotation of said flywheel elements in opposite directions.

1,879,912. ALKYL NAPHTHALENES AND PROCESS FOR PREPARING THE SAME. ALBRECHT SCHMIDT, OTTO ERNST, and HEINRICH LANGE, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 25, 1926, Serial No. 144,167, and in Germany Oct. 28, 1925. 5 Claims. (Cl. 260—168.)

1. The process which comprises causing methyl chloride to act at a temperature of from 160° to 180° C. and at a superatmospheric pressure up to about 45 atmospheres upon naphthalene in the presence of zinc chloride and zinc oxide.

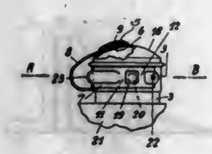
1,879,913. ELECTRICAL ADVERTISEMENT CLOCK. FERDINAND SCHNEIDER, Fulda, Germany. Filed Oct. 30, 1931. Serial No. 572,190. 1 Claim. (Cl. 40—32.)



An electrical advertisement clock of which the clockwork driving agency is tensioned at definite intervals by means of an electric motor, comprising winding up gearing, a bevel gear wheel mounted on the shaft end of a wheel of the winding up gearing, and a second bevel gear wheel meshing therewith, a driving pulley mounted on the shaft for rotation thereby said driving pulley transmitting its rotation by means of a belt to a pulley positioned on a roller carrying the advertisement band, so that the advertisements on the band are caused to appear at definite intervals, correctly positioned in the field of view.

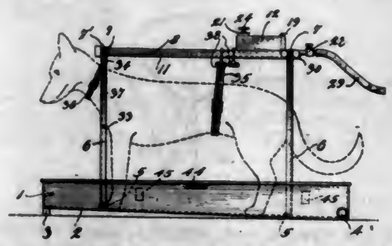
1,879,914. CLOSURE FOR RIGID OR NON-COLLAPSIBLE METAL CONTAINERS. EMIL SCHWALLER, Bern, Switzerland, assignor to Psi A.-G., Bern, Switzerland, a Swiss Firm. Filed June 17, 1930, Serial No. 461,814, and in Great Britain Aug. 6, 1929. 2 Claims. (Cl. 221—60.)

1. A receptacle having a cylindrical neck provided with a closure having a discharge opening in the end of the neck eccentrically arranged in relation to the longitudinal axis of said neck and said neck also having a lateral projection, a spring open ring embracing the neck, a spring arm extending from the ring and having a closure at its free end bearing on the closure of the neck and arranged to cover



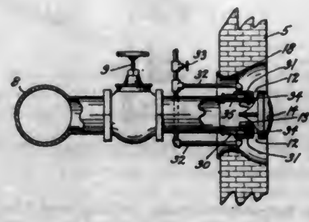
and uncover said opening when said open ring is partly turned on the neck, said open ring having a depression engageable by the lateral projection of the neck to lock said ring in closed position.

1,879,915. PORTABLE ANIMAL BATH. DAISY ELLEN SMOOT, Apopka, Fla., assignor of one-fourth to Janie Irene Carroll, Orlando, Fla. Filed June 10, 1929. Serial No. 369,883. 6 Claims. (Cl. 119—1.)



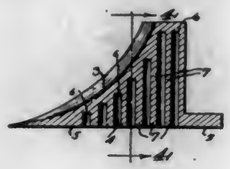
1. In an animal bath, an elongated receptacle, a spray pipe located above said receptacle and extending longitudinally of the same, a pair of collapsible supports for said spray pipe connected to said receptacle, means for detachably securing said spray pipe to said supports, and means for retaining the said supports and spray pipe in collapsed position.

1,879,916. GAS BURNER. WALTER G. BAGLEY, Pueblo, Colo. Filed Dec. 3, 1928. Serial No. 323,424. 6 Claims. (Cl. 158—99.)



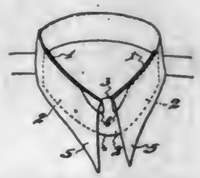
4. The combination of means providing an air duct, a plurality of sources of fuel, a nozzle connected with the sources and means on the nozzle for separately spreading the fuels in an outward direction in the air duct in sheet-like form, whereby to be intersected by an air stream in the duct.

1,879,917. CHOCK BLOCK. EDWARD S. EVANS, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Apr. 16, 1931. Serial No. 530,624. 4 Claims. (Cl. 188—32.)



1. A wooden chock block having a plurality of holes therein of a depth to provide substantially uniform thickness of walls throughout the block whereby the block may dry out evenly without checking.

1,879,918. COLLAR STIFFENER AND REENFORCING MEANS. JAMES W. STEELE, Dallas, Tex. Filed July 21, 1930. Serial No. 469,579. 5 Claims. (Cl. 223—18.6.)



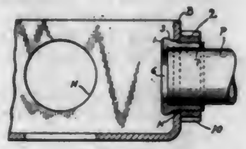
2. Collar bracing and stiffening means for collar-attached shirts, comprising a collar-bracing band of flexible stiffening material conformable to the inner neck-fold of the collar by embracing a substantial portion of the inside neck-engaging face thereof, and a collar-stiffening band connected with said first band for bracing engagement with said collar between the inner and outer folds thereof.

1,879,919. ELECTRICAL MEANS FOR OPERATING OR RAISING AND LOWERING RAILWAY BOOMS AND THE LIKE. ARTHUR BUTTERWORTH and NILS JOHN VIKEN, Johannesburg, Transvaal, Union of South Africa. Filed Jan. 24, 1931. Serial No. 511,072. 4 Claims. (Cl. 246—127.)



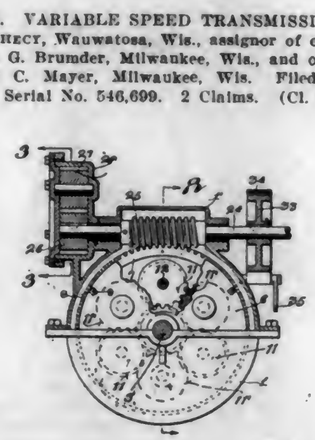
1. Means for automatically raising and lowering railway booms and the like, including, in combination, an electric power circuit, a reversing motor in said power circuit, a pair of interlocking change-over switches each adapted alternately to control the power circuit, mechanical means which are operated by the motor to raise and lower the booms, means actuated by said mechanical means for stopping the motor when the booms are raised or lowered and ensuring its rotation in the opposite direction when the interlocking change-over switches are again operated, an electric circuit for controlling the power circuit including a solenoid for each of said change-over switches, track switches in the controlling circuit at each side of the crossing, a relay circuit, and means in said relay circuit intermediate the track switches with which means the train contacts and, by closing the relay circuit, breaks the controlling circuit, as set forth.

1,879,920. BOX CONNECTER. LEWIS H. CHURCH, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 16, 1929. Serial No. 355,596. 4 Claims. (Cl. 247—25.)



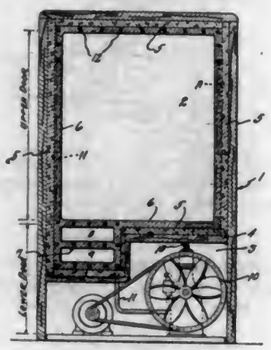
1. A box connecter to be inserted in a box hole comprising a sleeve, conical wedging means on said sleeve, the angularity of the cone being relatively large to engage the box hole edge, closely spaced axial knurling grooves having pointed ridges on the conical wedging means, operating means to pull the connecter axially in the box hole and anchor said wedging means against the box hole edge, and means to secure a pipe thereto.

1,879,921. VARIABLE SPEED TRANSMISSION. LEON G. CLOHECY, Wauwatosa, Wis., assignor of one-third to George G. Brumder, Milwaukee, Wis., and one-third to Walter C. Mayer, Milwaukee, Wis. Filed June 25, 1931. Serial No. 546,699. 2 Claims. (Cl. 74—34.)



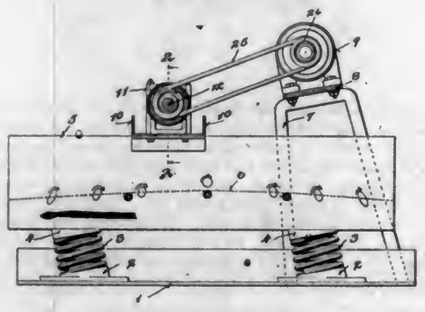
1. A variable speed transmission comprising a stationary casing, input and output shafts extending into the opposite ends of the casing, a circular housing rotatably mounted within the casing having peripheral teeth, the inner end of the input shaft rotatably extending into the rotatable housing at the axial center thereof, a pinion secured to the input shaft, a series of gears rotatably mounted within the housing meshing with the pinion, a second series of circumferential gears rotatably mounted in the housing and driven from the first mentioned series of gears rotatably mounted in the housing, an axially disposed gear meshing with the second series of rotatable gears, means operatively connecting the last mentioned gear with the output shaft, a transversely extending shaft rotatably carried by the casing having a worm meshing with the peripheral teeth of the housing, and means for creating a drag on the last mentioned shaft.

1,879,922. REFRIGERATING UNIT. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Dec. 10, 1927. Serial No. 239,053. 9 Claims. (Cl. 62—95.)



6. A refrigerating unit comprising a cabinet, a food compartment and a refrigerating mechanism compartment positioned therein, and a sharp freezing chamber having a wall formed by one of the walls of the food compartment positioned in said second named compartment, said food compartment and sharp freezing chamber being formed integrally from plastically applied material allowed to harden.

1,879,923. DRIVE MECHANISM. EMIL E. DEISTER, Fort Wayne, Ind., assignor to Deister Machine Co., Fort Wayne, Ind. Filed Feb. 24, 1931. Serial No. 517,730. 2 Claims. (Cl. 209—367.)



1. In a driving mechanism for vibrating screens including a mechanism mounted on said screen for imparting vibratory movement thereto, said mechanism comprising a transverse over-balanced shaft; an eccentric pulley mounted on said shaft for rotating the same, a transverse stationary drive shaft, a concentric pulley mounted on said drive shaft in the same plane with said eccentric pulley, and an endless belt connecting both of said pulleys.

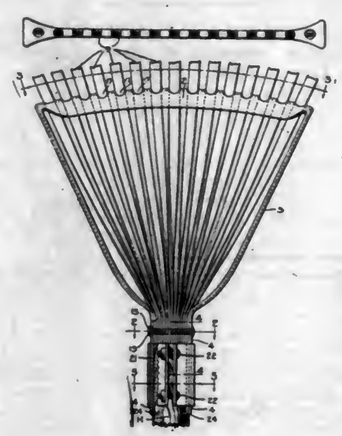
1,879,924. RAKE. CHARLES DENNIS, Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 21, 1929. Serial No. 401,175. 9 Claims. (Cl. 55—10.)

3. In a broom rake, a handle, a head element and a plurality of tines, the head element disposed transversely of the tines and provided with a series of perforations, each of the tines being provided with a neck adjacent



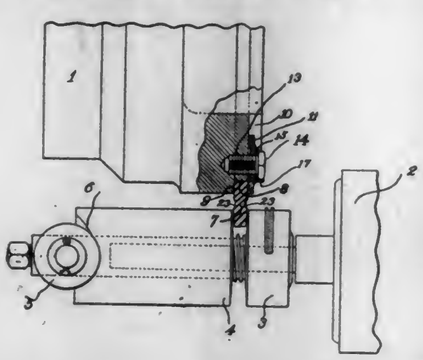
its end, the tines being disposed in pairs of adjacent tines and with the necks of each pair in one of the perforations of the head element.

1,879,925. RAKE. CHARLES DENNIS, Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,788. 8 Claims. (Cl. 55—10.)



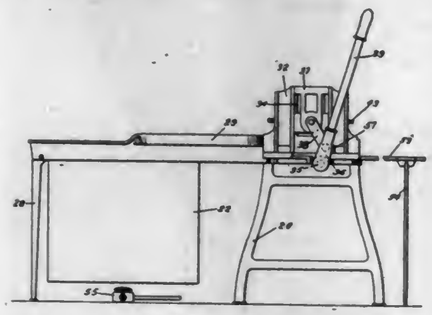
1. In a rake, the combination of a head, a handle supporting the head, said head including a pair of side arms and a cross bar, means securing said side arms at an end of each to the handle, a plurality of elongated flat steel tines twisted intermediate their ends to form longitudinally disposed portions arranged in planes substantially at right angles each to the other, one of said end portions for each tine disposed in converged relation between the side arms of the frame adjacent the end of the handle and means comprising a clamping rod carried by the frame side arms and projected through an aperture of each of said tines to clamp the tines together laterally and to prevent longitudinal movement of the tines relative to the head to form spaced substantially parallel rake head supports provided with concave opposite confronting surfaces embracing the handle.

1,879,926. STARTER MECHANISM FOR INTERNAL COMBUSTION ENGINES. ALEXANDER DOW, New York, N. Y., assignor to Dow Patents Holding Corporation, a Corporation of Delaware. Filed Apr. 13, 1932. Serial No. 605,015. 4 Claims. (Cl. 74—7.)



1. Means for cranking an internal combustion engine embodying a fly wheel associated with the engine to be cranked, a slip ring, means resiliently and frictionally binding the slip ring to the fly wheel with such degree of pressure as to permit slippage of the ring with respect to the fly wheel when rotation of the former is started to initiate rotation of the latter and to permit rotation of the fly wheel by the slip ring without appreciable relative slippage after rotation of the fly wheel has been initiated, and a power operated starter mechanism comprising means to engage with and drive the slip ring.

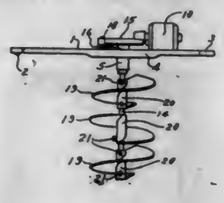
1,879,927. MACHINE FOR MAKING POP CORN CONFECTIONS. HERBERT W. EAKINS, Springfield, Ohio. Filed Jan. 16, 1931. Serial No. 509,096. 7 Claims. (Cl. 107—16.)



1. In a machine for making confections, in combination with a table, a frame member extending above the table on each side of the table, each frame member having a bearing and a guideway, a shaft in said bearings, a presser head in said guideways, an operative connection between the shaft and the presser head, and a mold removably supported by said table beneath the presser head.

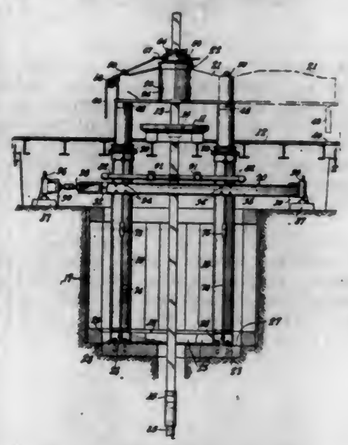
1,879,928. MACHINE AND METHOD FOR MAKING POP CORN CONFECTIONS. HERBERT W. EAKINS, Springfield, Ohio. Filed May 4, 1931. Serial No. 534,876. 3 Claims. (Cl. 259—108.)

1. In a stirrer, a portable base plate having on its under surface at one end ball bearings, on the other end a handle, near its center a boss with a hole therein, and adjacent the boss a depression forming a motor seat, means in the seat to adjust the motor, a motor in said seat, said motor having a shaft with a pinion thereon,



a shaft in said hole, a gear on said shaft in mesh with said pinion, and a plurality of spiral stirring blades on said last-named shaft.

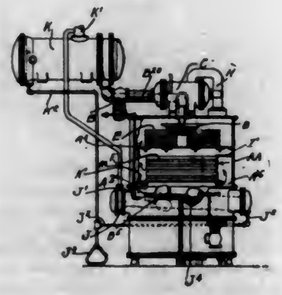
1,879,929. HYDRAULIC FEED FOR ROTARY DRILLING. JAMES C. FORTUNE, Monterey, Calif. Filed Nov. 7, 1931. Serial No. 573,663. 26 Claims. (Cl. 255—22.)



1. Hydraulic feed mechanism for rotary drilling, comprising a base in separable sections adapted for mounting on a cellar floor, a guide frame in separable sections adapted for mounting above the base and provided with guides for hydraulic cylinders, hydraulic cylinders adapted to be lowered through said guides into supported position on the base, a yoke detachably mounted on the hydraulic cylinders and provided with a bore to register with the center of the well and a bearing for supporting the drill string removably mounted in said bore in the yoke.

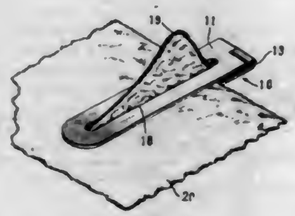
1,879,930. WATER DEAERATION. GEORGE H. GIBSON, Montclair, N. J., assignor to Cochrane Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1924, Serial No. 740,049. Renewed Oct. 7, 1926. 2 Claims. (Cl. 183—2.5.)

1. Apparatus for heating and deaerating water comprising a tank having an upper water heating space and a lower deaerating space, a bank of water spreading trays located in said water heating space, water supply means discharging onto the top of said bank of trays, a second bank of water spreading trays located in said deaerating space beneath said first mentioned tray bank and receiving water at its upper end from the upper bank of trays in divided streams distributed over a substantial horizontal area, means responsive to the accumulation of water in a lower portion of the tank for regulating said water supply means so as to maintain a water level in the tank below said second bank of trays, means for supplying steam to said deaerating space and producing a steam flow horizontally across said deaerating space in superimposed streams, and baffle means located out of the path of the water passing from the upper tray bank onto the lower tray



bank for guiding the flow of steam passing to said upper tray bank and effective in normal operation to normally prevent downflow of steam from the space surrounding the upper trays, and means for withdrawing air from the upper portion of said water heating space.

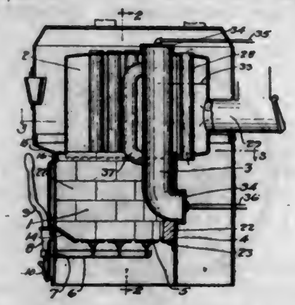
1,879,931. FUR STRETCHING DEVICE. ALEXANDER S. GREENSTEIN, New York, N. Y. Filed Sept. 9, 1930. Serial No. 480,638. 5 Claims. (Cl. 223—19.)



1. In a device for stretching furs and like materials, two elongated plate like elements hinged together at one end; a thin wall along the center line of one of said elements, the other element having a slot adapted to receive said wall and encircle the base of the same when said second plate is closed down upon said first plate, whereby a portion of said fur or like material stretched or folded over said wall may be closed upon and tightly kept thereon upon the closing of said second plate, said wall being a separate piece of material secured in a longitudinal slot in its plate and slidable into and out of said slot in a longitudinal direction for the purpose of exchanging said wall.

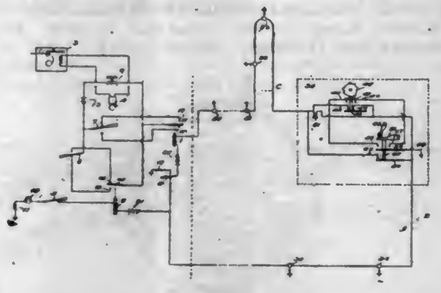
1,879,932. COMBINATION FURNACE. FRANK E. GRUNWALDT, Seattle, Wash. Filed July 18, 1928. Serial No. 293,775. 3 Claims. (Cl. 126—109.)

2. In a heating furnace of the type having a firebox, the combination of a main heating chamber surrounding the firebox and a heat extraction chamber above the firebox, and an auxiliary heating chamber positioned within the firebox and extending vertically upward through the heat extraction chamber and located to the rear of the center of the said firebox and main heating chamber, said auxiliary heating chamber having inlet and outlet connections independent of the connections of the main heating chamber, and a plurality of inwardly sloping tubes



extending through the outward portion of the said heat extraction chamber and with both ends of the tubes opening into the said main heating chamber.

1,879,933. SIGNALING SYSTEM. MICHAEL HANLEY, Chicago, Ill. Filed Dec. 29, 1928. Serial No. 329,175. 8 Claims. (Cl. 177—367.)

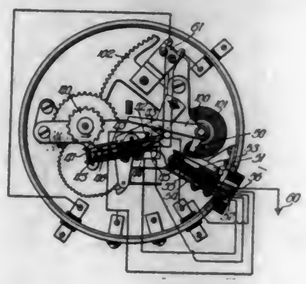


5. In an alarm system, a normally closed line circuit extending through a plurality of pull boxes in series, a relay and a potential source in series with said line, a second relay and a second potential source bridged off of said line to ground, means in said pull boxes for generating codes of impulses indicative of the box by opening and closing said line circuit once for each impulse, said means being operated each time the box is pulled to generate a plurality of complete codes, a ground connection in each box, shunt means operated each time the box is pulled to shunt said line opening means during a portion of the plurality of codes, means operated simultaneously with said shunt means for extending said ground connection to said line only during the part of each impulse that said code means has the line open to thereby transmit the code over a grounded circuit to operate said second relay, said last means opening said ground connection and said shunt means opening said shunt during the remaining portion of said plurality of codes to cause the opening of the line circuit by said code means to operate said first relay, and a single recording means controlled by each of said relays to record to said codes of impulses.

1,879,934. SIGNALING TRANSMITTER. MICHAEL HANLEY, Chicago, Ill. Original application filed Dec. 29, 1928, Serial No. 329,175. Divided and this application filed May 7, 1930. Serial No. 450,382. 7 Claims. (Cl. 177—378.)

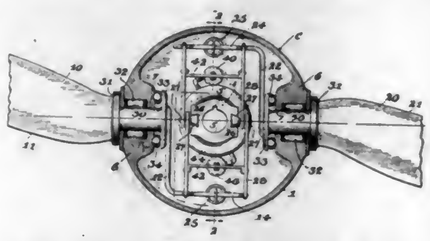
7. An alarm box comprising the combination of a code wheel operated by a clockwork driven by a segment and

spring when the box is pulled, a normally closed circuit through said box including springs momentarily opened by said code wheel, a normally open circuit in said box including springs momentarily closed by said code wheel, a set of normally open springs, segment controlled means for



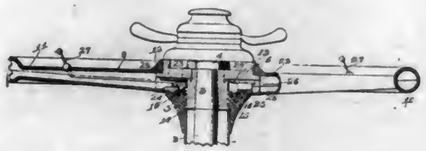
closing said normally open springs during a part of the movement of the segment, circuit connections between said code wheel springs and segment controlled springs over which said segment controlled springs when closed shunt the springs of said normally closed circuit and close a point in said normally open circuit.

1,879,935. VARIABLE PITCH PROPELLER. ROWLAND M. HILL, Milwaukee, Wis. Filed Mar. 12, 1929. Serial No. 346,355. 19 Claims. (Cl. 170—162.)



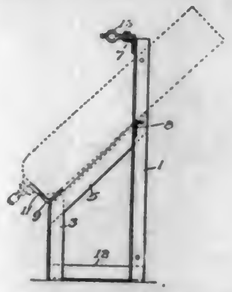
1. The combination in a variable pitch propeller, of a propeller blade rotatable on an axis longitudinally of the blade to vary its pitch and means controlling pitch varying rotation of said blade, with means for damping vibrations of said blade caused by rotation of the blade.

1,879,936. STEERING WHEEL MOUNTING. MATHEW G. IVANDICK, Waukegan, Wis. Filed Oct. 17, 1930. Serial No. 489,377. 4 Claims. (Cl. 74—33.)



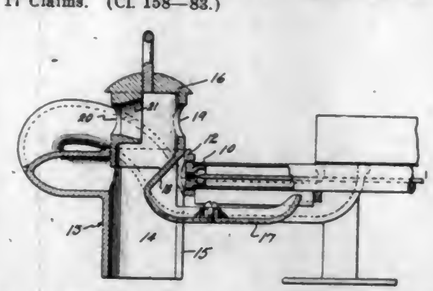
1. In an automobile steering wheel mechanism, including a steering post, a stationary column surrounding the post, a sleeve secured on the upper end of said post, and a steering wheel provided with a hub mounted on said sleeve; a flanged cap carried by said column and surrounding said sleeve, cooperating mechanism carried by said steering wheel hub and said cap, and means for locking said hub on said sleeve in various selective positions.

1,879,937. RACK FOR GAS DRUMS. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Aug. 15, 1929. Serial No. 386,212. 2 Claims. (Cl. 248—12.)



2. A rack for gas drums comprising a frame having a transverse rear support and a transverse front support, said supports being at relatively different heights, whereby to position a drum at an angle to the horizontal, said front support being the lower of the two and consisting of a bar of angular cross section having one wall thereof recessed to receive the neck portion of a drum.

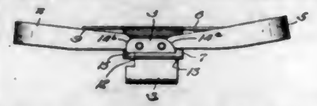
1,879,938. METHOD AND APPARATUS FOR PREHEATING LIQUID FUELS AND MAINTAINING A COMBUSTIBLE MIXTURE AFTER INITIAL VAPORIZATION. CHARLES F. LAMBERT, Detroit, Mich., assignor, by mesne assignments, to Clayton & Lambert Manufacturing Co., Detroit, Mich., a Corporation of Delaware. Filed Sept. 30, 1927. Serial No. 223,170. 17 Claims. (Cl. 158—83.)



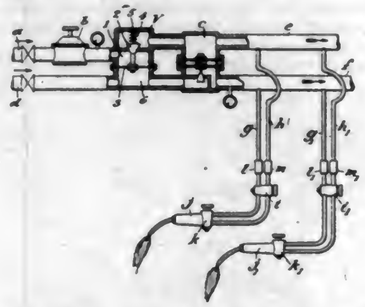
1. The method of starting, vaporizing and maintaining vaporization of liquid fuel which comprises passing the liquid fuel in a helical column of relatively large diameter, feeding the column of fuel by capillary attraction, initially applying a relatively small amount of heat directly underneath the column of liquid fuel to cause part of the fuel to issue as vaporized fuel, deflecting said fuel from its normal path and igniting the vaporized fuel and directing the flames therefrom back directly against the column of liquid fuel, continuing to direct the flames against the column of liquid fuel whereby to accelerate vaporization thereof, then permitting the free exit of vaporized fuel and mixing the same with air to form a combustible mixture and then conducting the combustible mixture upwardly whereby only the completely vaporized fuel will be conducted to the burner.

1,879,939. ANIMAL TRAP. JOHN U. LEHN and MARY A. HUEBENER, Lititz, Pa., assignors to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1930. Serial No. 480,936. 1 Cl. (Cl. 43—93.)

A spring actuated trap comprising a base having an upturned end, a pair of jaws, and a bait pan having an apertured portion through which said end passes, and a single extension on said bait pan which contacts with one of said jaws and holds it in set position, said upturned end being provided on the side nearer said extension with a notch, and on the opposite side with a shoulder, said shoulder being nearly the height of the upper edge of said notch, said shoulder and upper edge of said notch contacting with said apertured portion.

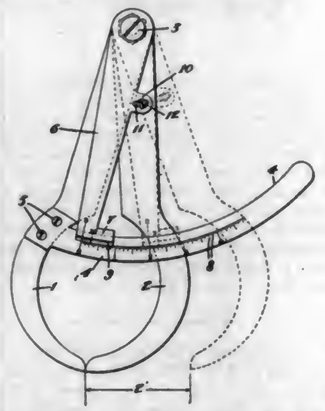


1,879,940. METHOD OF SUPPLYING GASES TO WELDING TORCHES AND THE LIKE. FRANCESCO MANGIAMELI, Dusseldorf, Germany. Filed Mar. 28, 1930, Serial No. 439,718, and in Germany Oct. 4, 1929. 4 Claims. (Cl. 137—78.)



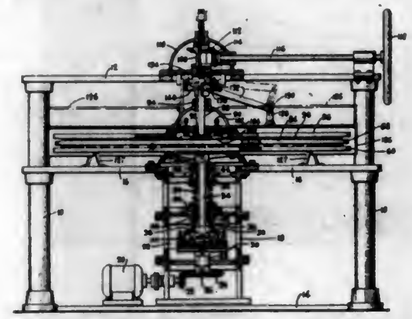
1. Apparatus for controlling the supply of gases to welding torches and the like, comprising a conduit for each gas, a balanced pressure regulating device operated by the service pressure of one of said gases to regulate and equalize the service pressure of the other of said gases, a valve in one conduit in advance of said regulating device, and means subject to pressure in both conduits for controlling said valve.

1,879,941. INDICATOR ATTACHMENT FOR CALIPERS OR THE LIKE. JAMES V. MCCABE, Boston, Mass. Filed Sept. 5, 1928. Serial No. 304,039. 2 Claims. (Cl. 33—148.)



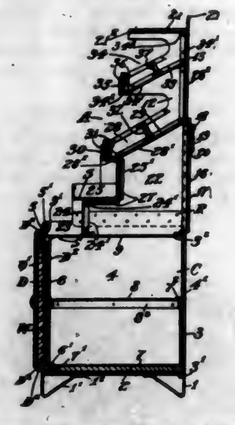
1. A pair of calipers comprising a pair of legs pivoted to each other at one end, a scale bar carried by one of said legs and extending inwardly thereof and overlapping the other leg, a pointer pivoted at one end to the leg pivot and extending inwardly between said legs and having at its other end a measuring foot overlying said scale, said pointer being adjustably secured to the leg not carrying the scale bar and slidable over said scale as said legs are moved on their pivot with relation to each other, and means adjustably securing said pointer with reference to the leg to which it is secured whereby to compensate for wear of the caliper points.

1,879,942. CENTRIFUGAL SETTING OUT MACHINE. JOSEPH A. MEYER, Newark, N. J. Filed Sept. 11, 1929. Serial No. 391,717. 17 Claims. (Cl. 149—20.)



5. The method of smoothing a hide which comprises spinning the hide at a speed to generate sufficient centrifugal force to smooth said hide.

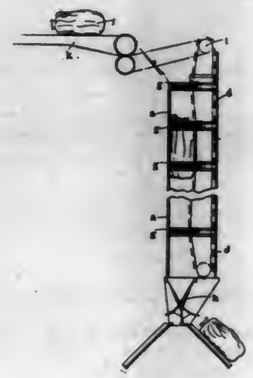
1,879,943. DISPLAY DEVICE. GEORGE C. MILLER, Brighton, Mass. Filed May 26, 1930. Serial No. 455,622. 4 Claims. (Cl. 211—128.)



1. Display apparatus comprising a support having an upturned rim, back and sides attached to said rim and supported thereby, a vertical partition spaced inwardly from the front of said rim and supported by said sides and providing with said rim a front display section, said partition having an inturned flange on its upper edge, a second display section consisting of a member bent to provide a vertical back and horizontal bottom, a forwardly turned flange on said back, said section supported by said sides with its bottom bearing on said inturned flange of said partition and disposed so that said bottom extends forwardly of said vertical partition to provide a partial cover for said front display section, a third display section comprising a member bent upon itself to provide an inclined bottom and a vertical back, said bottom having a

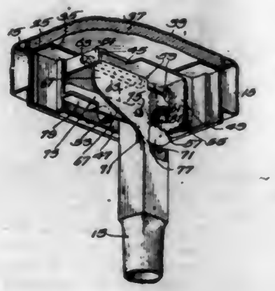
horizontally disposed pocket adapted to receive the forwardly turned flange of said second display section and said back having a forwardly turned flange, the bottom of said third section extending over said second section to provide a partial cover therefor but terminating inwardly of the front thereof.

1,879,944. APPARATUS FOR CONVEYING GOODS IN BALES, SACKS, OR THE LIKE. EMIL MUTH, Saarbrucken, Germany. Filed Oct. 8, 1931, Serial No. 567,653, and in Belgium Sept. 2, 1931. 6 Claims. (Cl. 193—32.)



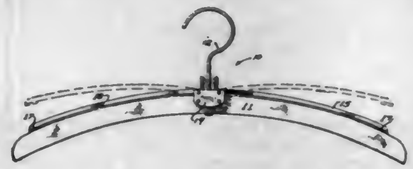
1. Apparatus for the substantially vertical downward conveyance of goods in bales, sacks and the like, comprising a slide surface of fixed position, an opposed endless conveyor, one side of which is juxtaposed to the slide surface, and means for drawing said juxtaposed side of the conveyor towards the slide surface with pressure, the sacks or bales being caused to pass between the slide surface and the conveyor and to travel downwardly under gravity.

1,879,945. FOLDING TABLE. JOHN B. O'CONNOR, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Jan. 30, 1928. Serial No. 250,462. 20 Claims. (Cl. 45—11.)



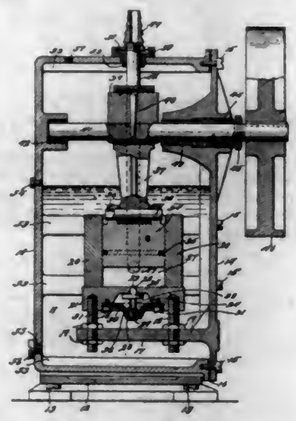
1. In a table having folding legs, a hinge connection between the table and a leg, a latch member pivoted in the leg and having an extending detent and a latch keeper comprising a cam surface and a notch formed in the table in position such that the detent registers with the notch when the leg is in open position.

1,879,946. GARMENT HANGER. WILLIAM R. PABST, Berkeley, Calif. Filed May 19, 1930. Serial No. 453,608. 1 Claim. (Cl. 223—64.)



In combination with a garment hanger comprising a crossbar and a suspending hook positioned centrally thereof, a pair of plates fixed to opposite sides of the crossbar and extending upwardly therefrom, a pair of arms overlying the crossbar and pivotally supported at one of their ends between said plates and on opposite sides of the suspending hook, extensions on said arms disposed adjacent and substantially parallel to said hook whereby they may be conveniently pressed toward each other to cause the arms to pivot away from said crossbar, and spring means engaging the crossbar and said extensions and normally urging the arms toward the crossbar.

1,879,947. VACUUM PUMP. JOSEPH PETER, Lyons, Ill., assignor of thirty per cent to Eugene L. Nusser and thirty per cent to Reinhold A. Kopp, Chicago, Ill. Filed July 3, 1930. Serial No. 465,463. 4 Claims. (Cl. 230—203.)

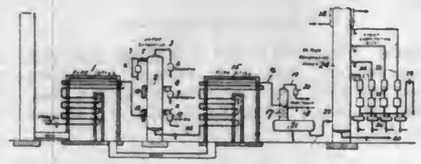


1. A device of the character described, comprising a stationary casing adapted for holding a supply of oil, a removable closure member for said casing and pumping mechanism comprising an adjustably mounted cylinder having intake and exhaust openings disposed centrally within said casing, and a piston adapted for reciprocal movement within said cylinder, said pumping mechanism being completely immersed within said supply of oil, and being carried by said closure member whereby said pumping mechanism will form a unitary structure therewith so as to permit the removal of the same from or the disposition within the casing as a single unit.

1,879,948. PROCESS OF DISTILLING OIL. ARTHUR E. PEW, Jr., Bryn Mawr, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 4, 1929. Serial No. 352,892. 6 Claims. (Cl. 196—77.)

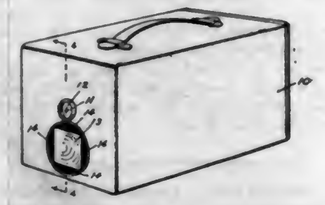
1. The process of producing lubricating oil distillates of different boiling points which comprises distilling

lower boiling oil fractions by flowing acid-neutralized lubricating oil stock, containing such lower boiling fractions and also higher boiling fractions under a relatively high absolute pressure into a tower and therein subjecting the stock to a relatively low absolute pressure and thereby vaporizing such lower boiling oil fractions and separately condensing and outflowing the vaporized oil fractions



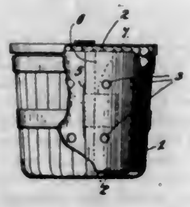
of different boiling points; and then distilling higher boiling oil fractions of said stock by flowing the residue from the specified distillation through one or more stills in which the oil is heated while flowing in a continuous stream of restricted cross-section and is partially vaporized and by condensing and separately removing the vapors.

1,879,949. CAMERA WITH CONVEX MIRROR. MICHAEL PINKOSH, Minneapolis, Minn. Filed June 23, 1930. Serial No. 463,108. 4 Claims. (Cl. 88—1.)



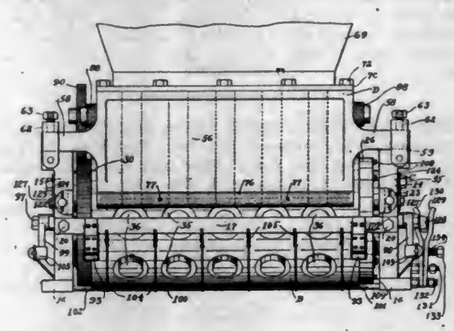
1. The combination with a portable camera having a lens adjacent a wall thereof for focusing an image upon a film or plate at the side of said lens opposite said image, of a convex finder rectangular in outline in proximity to said wall and arranged at a side of said lens out of alinement therewith, said finder mirror being adapted to make the image of a person being photographed visible to said person at a location upon said convex finder mirror substantially similar to the location at which said image is focused upon said film or plate, and the side edges of said mirror being adapted to serve as guides for situating said camera in horizontal position.

1,879,950. BASKET LINER. FREDERICK A. READ, Jr., Albion, N. Y., assignor to The Carpenter-Hiatt Sales Company, Denver, Colo., a Corporation of Colorado. Filed May 11, 1929. Serial No. 362,179. 5 Claims. (Cl. 217—3.)



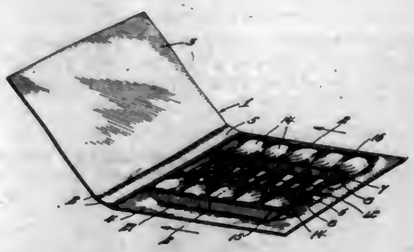
1. As a new article of manufacture, a split packing liner for use in packing fruit and the like having the ends adjustably connected together by means whereby a degree of adjustment of the liner is secured in the application of the liner within a tub whereby expansion and contraction of said liner is allowed to accommodate it to the size of the tub, said means serving to maintain the filled liner in shape after the tub is removed.

1,879,951. DOUGHNUT FORMER. FRANK M. ROEHL, Minneapolis, Minn., assignor to National Automatic Doughnut Machine Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 12, 1928. Serial No. 318,840. 15 Claims. (Cl. 107—15.)



1. A doughnut former comprising a support, a cylinder journaled in said support and having a plurality of circumferentially disposed bores forming pockets for the reception of the dough, a plurality of pistons reciprocable radially along said bores, means including cam engaging members, for reciprocating said pistons, a cam member pivoted to said support and adapted to cooperate with said cam engaging member for moving said pistons into said bores, a second cam fixed relative to said support for moving said pistons outwardly along said bores, a slide movable along said support, and means applied between said slide and cam whereby said cam may be adjusted upon its pivot upon rectilinear movement of said slide.

1,879,952. DISPLAY PACKAGE FOR EDIBLES AND THE LIKE. SAMUEL ROSEN, Providence, R. I. Filed Apr. 15, 1931. Serial No. 530,226. 3 Claims. (Cl. 206—79.)



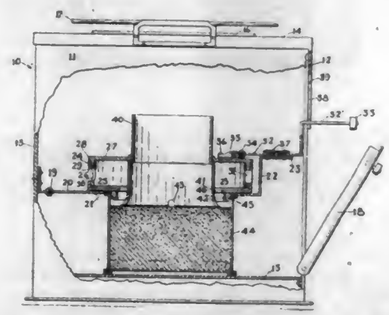
1. A holder for confections and the like comprising a stiff sheet having portions thereof shaped to form oppositely positioned cover members adapted to be spaced from each other throughout a portion of their extent, spaced retaining members carried by one of said cover portions and located at an angle to the plane of the cover portion, said retaining members being arranged in substantial parallelism with each other for holding a plurality of articles each of which is provided with a slender elongated portion adapted to be received in registering openings formed in said retaining members, and holding members carried by said cover portion and located

at substantially right angles to the plane of the cover portion, each of said holding members being spaced from and located substantially parallel with one of said retaining members.

1,879,953. CLEANSING COMPOSITION. WALTER A. SCOTT, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed May 26, 1928. Serial No. 280,954. 6 Claims. (Cl. 87—5.)

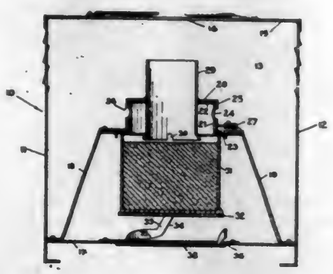
2. A composition for cleansing dairy equipment containing trisodium phosphate, sodium metasilicate, soda ash and soap in about the following relative proportions: trisodium phosphate 30–50%, sodium metasilicate 40–60%, soap 2–10%, and not over about 10% of soda ash.

1,879,954. STOVE. ARTHUR SMITH, Port Chester, N. Y., assignor to S. Sternau & Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 13, 1931. Serial No. 522,189. 18 Claims. (Cl. 126—43.)



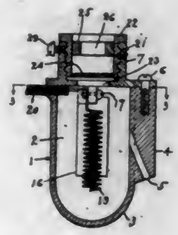
1. A burner assembly comprising, in combination, a housing having air inlet and outlet ports, means for adjusting the area of one of said ports, a seat on said housing, a fuel container having its upper rim detachably disposed in substantially air tight relationship with said seat, and a baffle fixed to said housing and disposed between said inlet and outlet and extending partially into said container, whereby incoming air is passed downwardly into said container and around said baffle.

1,879,955. STOVE. ARTHUR SMITH, Port Chester, N. Y., assignor to S. Sternau & Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 13, 1931. Serial No. 522,190. 5 Claims. (Cl. 126—43.)



1. A burner unit adapted to cooperate with a plurality of interchangeable fuel containers, comprising, in combination, an open bottomed shell having a top, and a cylindrical side wall with a series of air ports therein, a horizontally disposed annular seat at the lower edge of said side wall, an open ended tube extending through said top and closing the same, the lower end of said tube extending a substantial distance into said shell, an annular slide valve for adjustably closing said ports, and an operating handle pivotally attached to said slide valve whereby reciprocation of said handle causes rotation of said valve.

1,879,956. INSTANTANEOUS WATER HEATER. EVA SPERLING, New York, N. Y., assignor to Pittsburg Utilities, New York, N. Y., a Corporation of New York. Filed May 23, 1932. Serial No. 612,935. 5 Claims. (Cl. 219—39.)



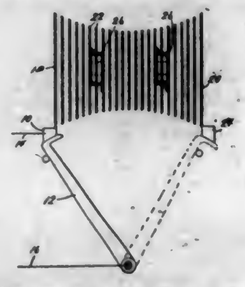
1. In an instantaneous water heater, an electrical and heat resisting flanged cup provided with an angularly arranged outlet, a flanged cap fixed to said cup, said cup carrying a water heating element therein, said flanged cap carrying a water filter, and means for attaching said cap to a conventional faucet.

1,879,957. NECKWEAR. LOUIS A. STERN and SAMUEL CARLIN, New York, N. Y. Filed Dec. 26, 1931. Serial No. 583,291. 6 Claims. (Cl. 2—146.)



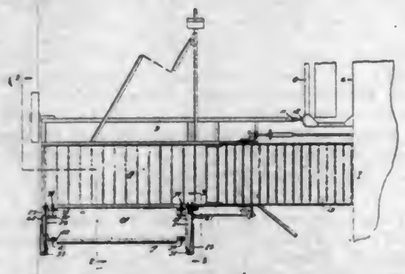
1. A necktie comprising a single piece of bias cut material having a central face or body portion defined by spaced longitudinal lines of fold, integral portions of material extending from each side of said face portion, said latter portions each folded upon itself, into superposed layers of material and then superposed upon the body portion, the material having a free edge at one of said folds extending completely across the width of the necktie at the neckband portion thereof, and partially across the width of the necktie at the ends thereof, whereby the seam is formed at an edge of the necktie only along the neckband portion thereof.

1,879,958. CIRCUIT INTERRUPTER. MAURICE B. TASKER, Danvers, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed June 29, 1929. Serial No. 374,783. 18 Claims. (Cl. 200—144.)



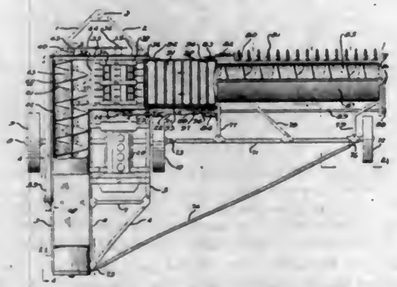
1. A circuit interrupter having a stack of spaced and insulated arcing plates between which circuit interrupting arcs are supported, the inherent electrostatic capacities of said plates being different in such manner as to provide uniform potential differences therebetween.

1,879,959. HARVESTER PICK-UP. LOWELL H. THOEN, Stockton, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Feb. 26, 1929. Serial No. 342,866. 11 Claims. (Cl. 56—364.)



1. A conveyor, comprising, a supporting framework including a side member, shafts supported by said side member, sprockets on said shafts, a chain on said sprockets, tang bars supported in said chain and provided with cranks, and a guide for said cranks consisting of a strip of metal welded to said side member.

1,879,960. COMBINED HARVESTER-THRESHER. LOWELL H. THOEN, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Apr. 29, 1931. Serial No. 583,676. 11 Claims. (Cl. 56—20.)



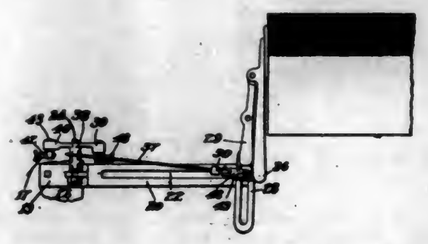
1. In a combined harvester-thresher, a frame, a cylinder and concave unit, and a separating unit for receiving all the material from said first-mentioned unit and mounted on said frame, the axes of said units being arranged parallel to the longitudinal axis of said frame.

1,879,961. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,167. 2 Claims. (Cl. 30—12.)



2. A safety razor having, in combination, cap and guard members provided with cooperating blade-shaping faces, a transversely flexible blade having plane faces bounded by sharpened longitudinal edges and unsharpened end edges, and a resilient strip secured to one face of the blade, parallel to and spaced within one edge thereof and adapted to space the cutting edge away from either the cap or guard member according to the position in which the blade is presented.

1,879,962. AUTOMATIC WIRE SCREEN GUIDE FOR PAPER MAKING MACHINES. WILLIAM J. TREMPE, North Billerica, Mass. Filed July 14, 1930. Serial No. 467,792. 10 Claims. (Cl. 74—51.)

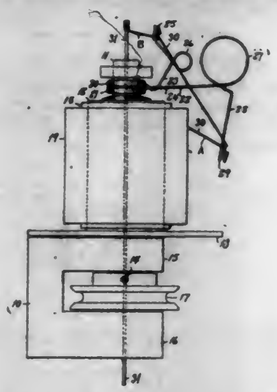


1. An automatic control mechanism for wire mesh screens on a paper making machine including a guide roller movable at one end and a wire mesh screen guided thereover, a roller positioning mechanism for shifting one end of the guiding roll to control the path or course of the wire mesh screen passing thereover, an automatic control mechanism for actuating the roll positioning mechanism in accordance with variations in the travel of the wire screen mesh from its normal course, said control mechanism including a bracket, an arm pivotally supported between its ends on said bracket, another weight balanced pan arm pivotally supported between its ends upon one end of said first named arm, the upper end of the pan arm being in contact with the edge of the traveling screen and the lower end of the pan arm being weighted, the point of pivotal support of said pan arm being intermediate its ends and between the upper pan portion of the arm and the weighted portion.

1,879,963. COVERING DEVICE FOR ELASTIC STRANDS, WIRE, AND THE LIKE. JOHN VACHER, Waterbury, Conn., assignor to The American Mills Company, Waterbury, Conn., a Corporation. Filed Aug. 4, 1931. Serial No. 555,025. 5 Claims. (Cl. 117—42.)

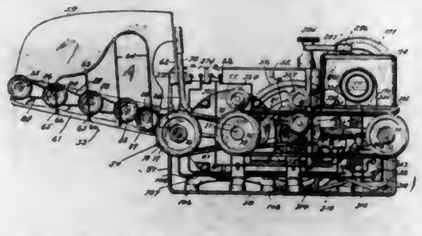
1. A flyer for a device of the class described, consisting of a hub adapted to be rotatably mounted upon a spindle;

a filamentary member looped around said hub and having its hub-adjacent portions interengaged to fix it to said



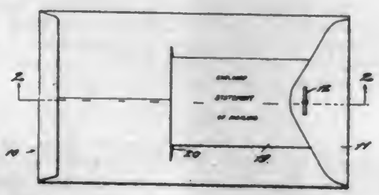
hub, said member providing a pair of thread-guiding arms respectively extending above and below the plane of the said hub.

1,879,964. POSTAL MACHINE. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Oct. 16, 1928. Serial No. 312,900. 27 Claims. (Cl. 101—287.)



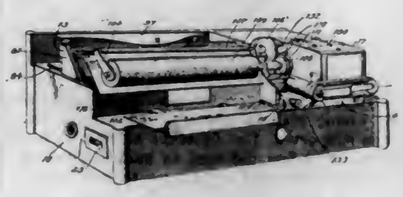
1. In a postal machine, printing means; moistening means; a conveying means relating the moistening and printing means; a driving element to operate the printing means and the conveyor; means for interrupting movements of the mail pieces during printing intervals; means for idling the printing and interrupting means through a controlled drive, for employment of the machine for moistening only, without affecting the physical relation of the printing means to the machine.

1,879,965. METHOD AND MEANS FOR HANDLING METERED PERMIT MAIL. RALPH G. WHITLOCK, Los Angeles, Calif. Filed Jan. 2, 1929. Serial No. 329,783. 7 Claims. (Cl. 229—72.)



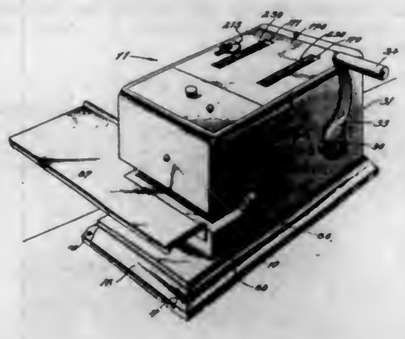
1. A pick-up package for permit metered mail comprising an envelope having a flap and means for securing the flap to the envelope body and bearing indicia denoting address to a postmaster, denoting the number and destination of contained mail pieces and indicia placing the package in the custody of the postal authorities when posted; a mailing statement having a margin for attachment to the envelope flap and there being an opening in the envelope body to receive the opposite margin of the statement.

1,879,966. POSTAL MACHINE. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed May 21, 1929. Serial No. 364,828. 5 Claims. (Cl. 271—39.)



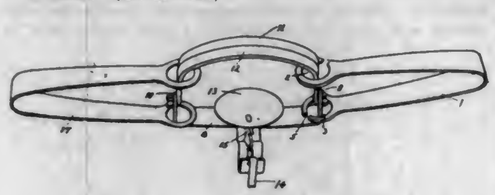
1. An envelope rack comprising a floor, a vertical endless wall at one end of said floor, an inclined block adapted to move transversely of the floor and longitudinally of the end wall, means for causing movement of said block to feed envelopes lengthwise of the floor, a feed roller disposed at the opposite end of the floor from the inclined block and acting with the end of the floor to form a throat through which envelopes may singly and successively pass as the feed roller rotates, and a pressure roller rotating in a reverse direction from the feed roller and acting against the envelopes disposed within the rack whereby the envelopes will be held in an inclined position with their lower edges feathered and the foremost envelope only will be withdrawn by the feed roller.

1,879,967. HAND OPERATED POSTAL MACHINE. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Sept. 23, 1929. Serial No. 394,602. 12 Claims. (Cl. 101—287.)



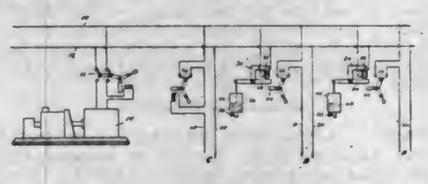
1. A postal machine comprising a printing head adapted to move toward and away from a platen, a master shaft, operating means carried by the master shaft for actuating said head, means for locking the master shaft against rotation, a jack shaft, normally idle gear means operatively disposed between the jack shaft and the main shaft and means carried upon the jack shaft for initially unlocking the main shaft and for then actuating said gear means to rotate the main shaft.

1,879,968. ANIMAL TRAP. JOSEPH D. ZAHM and JOHN U. LEHN, Lititz, Pa., assignors to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1930. Serial No. 484,494. 1 Claim. (Cl. 43—88.)



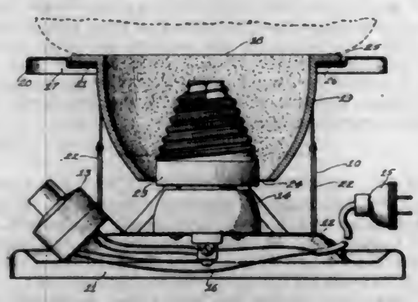
A U-shaped spring for an animal trap comprising jaws and a base, said spring having enlarged rounded ends and apertures in said ends, slots being provided leading to said apertures and in opposite quadrants of the respective ends.

1,879,969. ELECTRIC GENERATING AND DISTRIBUTING SYSTEM. JOSEPH ROBERT BARRETT, South Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 31, 1930. Serial No. 472,143. 8 Claims. (Cl. 175—294.)



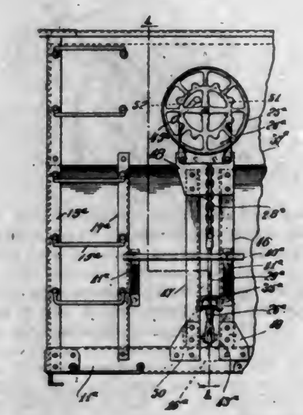
1. An electric generating and distributing system having a common feeder circuit and a plurality of load circuits of varying importance energized from said feeder circuit, and separate means associated with each load circuit which is directly responsive to a condition in said feeder circuit that results from an overload on the system to disconnect said load circuits from the system, each circuit separately from all others, in the inverse order of their importance until enough load has been disconnected from the system to reduce the loading thereof to a normal value, whereby to reduce the total load on the system and permit the more essential load circuits to remain normally energized.

1,879,970. HEAT REFLECTING AND CONDUCTING BOWL FOR HEATERS. WILLIAM S. BAEMER, Chicago, Ill. Filed Mar. 28, 1930. Serial No. 439,705. 2 Claims. (Cl. 219—34.)



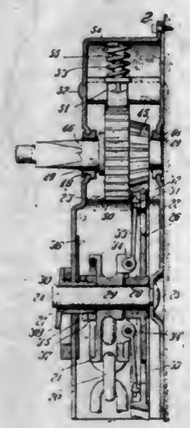
1. A heat dispensing device comprising in combination a base, a parabolically shaped heat conductive and reflective bowl supported by said base, a heating element in said bowl, a flange on said bowl adapted to hold said bowl suspended, a nonconductive washer between said flange and base, and means for controlling said heating element, said bowl having homogeneous metallic walls.

1,879,971. HAND BRAKE MOUNTING FOR RAILWAY CARS. RICHARD W. BURNETT, Chicago, Ill. Filed Aug. 23, 1926. Serial No. 130,921. 1 Claim. (Cl. 188—107.)



In combination with the end wall, the end sill, and the brake rigging of a railway car, angle bars secured together and secured to said end wall and end sill, respectively, hand brake mechanism comprising winding means secured to the end structure of the car, a bell crank supported by said angle bars in a position to be rocked in a position between said angle bars, and flexible means connecting the winding means with the bell crank.

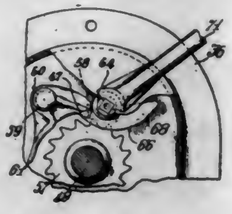
1,879,972. RAILWAY HAND BRAKE. RICHARD W. BURNETT, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,308. 6 Claims. (Cl. 74—112.)



1. In combination with the brake rigging of a railway car, means for setting the brakes comprising a chain, a drum on which the chain is wound, a shaft on which the drum is slidably mounted, mechanism for rotating the drum in the direction to set the brakes comprising a revoluble element and detent means for the same, a friction ring bearing against said revoluble element and struts

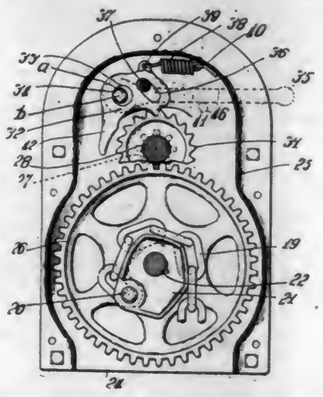
extending from said drum to said ring providing a clutch between said drum and revoluble element, and mechanism for moving said drum lengthwise of the shaft for controlling the operation of the clutch.

1,879,973. RAILWAY HAND BRAKE. RICHARD W. BURNETT, Chicago, Ill. Filed Oct. 31, 1927. Serial No. 229,967. 29 Claims. (Cl. 188—81.1.)



1. Holding and releasing mechanism for railway car hand brakes comprising a ratchet wheel, a pivoted detent to engage the ratchet wheel provided with a lateral web, a holding and tripping member pivoted at a point near the end of the detent which engages the ratchet, which tripping member is provided with a cam to bear against the under side of said web to disengage the detent from the ratchet and a lug to engage the upper surface of the web to hold the detent in engagement with the ratchet, and a lever for operating said tripping member and for increasing the pressure on the detent when the tripping member is in holding position.

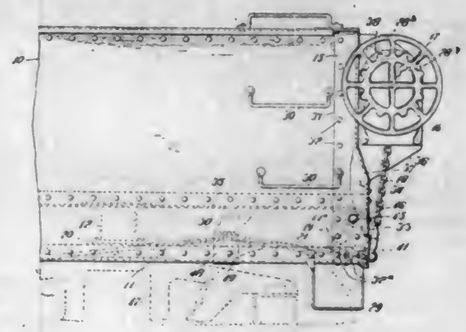
1,879,974. RAILWAY HAND BAKE. RICHARD W. BURNETT, Chicago, Ill. Filed June 13, 1928. Serial No. 285,023. 13 Claims. (Cl. 188—81.1.)



2. In mechanism for holding the brakes of a railway car in set position and for releasing them, the combination of a ratchet, a pawl, an eccentric upon which the pawl is revolubly supported, means for rotating the eccentric, and guiding means which effects the engagement of the pawl with, and its disengagement from, the ratchet at different angular positions of the eccentric, while permitting the pawl to ride over the teeth of the ratchet when the latter is given a brake-setting movement.

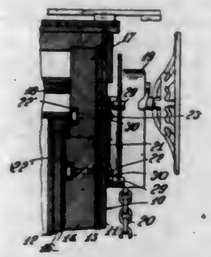
1,879,975. HAND BRAKE FOR DROP END GONDOLAS. RICHARD W. BURNETT, Chicago, Ill. Filed June 10, 1929. Serial No. 369,701. 16 Claims. (Cl. 74—112.)

1. In a hand brake for railway gondola car, the combination with the foundation brake rigging, the underframe and a corner post of the car, the latter of which is angular in cross section having a side flange overlapping the side wall of the car and a front flange overlapping the end sill of the car, of hand operated winding mechanism including a vertically disposed hand wheel positioned adjacent the vertical corner of the car body to project in advance of said corner post, means for supporting said winding mechanism on said corner post in



a plane parallel to the side of the car, a rocking member secured to the underframing of the car in the space defined by said side and front flanges of the corner post, a flexible connector connecting the winding mechanism with said rocking member and a flexible connector connecting the rocking member to the brake rigging underneath the car.

1,879,976. ATTACHING BRACKET FOR RAILWAY CAR HAND BRAKES. RICHARD W. BURNETT, Chicago, Ill. Filed Oct. 4, 1929. Serial No. 397,414. 4 Claims. (Cl. 74—121.)

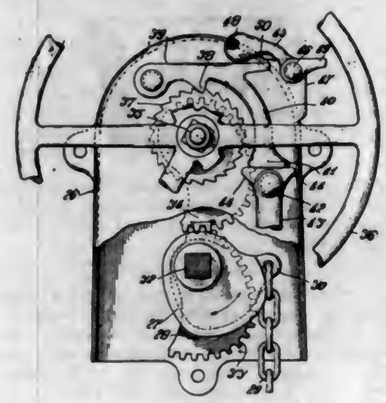


1. Means for attaching hand brake power mechanism to a wall of a railway car comprising a flat plate, angle bars secured to the plate with an out-turned flange of each bar spaced from the plate in a plane parallel thereto, bolts anchored in the car wall and extending through the marginal portions of said plate beneath said out-turned flanges for clamping said plate thereto, and means for rigidly clamping said power mechanism to the out-turned flanges of said angle bars.

1,879,977. HAND BRAKE HOLDING AND RELEASING MEANS. RICHARD W. BURNETT, Chicago, Ill. Original application filed May 28, 1928, Serial No. 281,088, and in Canada Feb. 13, 1926. Divided and this application filed Feb. 27, 1930. Serial No. 431,761. 7 Claims. (Cl. 188—81.1.)

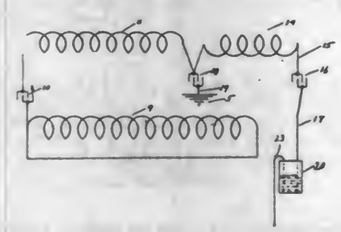
1. Means for holding the hand power mechanism of a railway car hand brake in and releasing it from its brake setting position comprising a ratchet wheel fixed to a moving part of said mechanism, a pivoted pawl having

a tooth for engaging said ratchet and formed at its toothed end with a weighted portion for normally holding it in engagement with the ratchet, and a vertically disposed



pivoted rod having a cam surface for engagement with the weighted end of said pawl to lift the pawl out of its holding position.

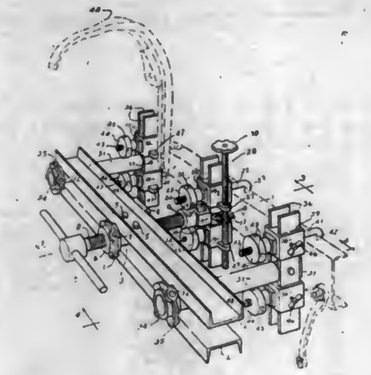
1,879,978. RADIOANTENNA DEVICE. JAMES A. CLARK, El Paso, Tex. Filed Nov. 28, 1930. Serial No. 498,809. 1 Claim. (Cl. 250—33.)



A radio antenna device of the class described comprising a metallic casing, coil forms of dielectric material disposed one inside of the other and sealed in said casing, coils on the forms, the outside of said coils having a single loop winding, a condenser having one terminal connected to both ends of the outside coil, and an inside coil consisting of a single winding turned for three quarters of its length in one direction and then reversed for the remaining quarter of its length, a tap lead taken from the turn of wire separating the reversed windings, and a condenser connected to said tap lead and having its other terminal grounded to the casing, one end of said inside coil being connected to the free terminal of the first mentioned condenser, and the other end connected to another condenser carrying at its free terminal a wire led through the casing, a filter connected between said lead wire and the antenna lead wire of a radio receiving set.

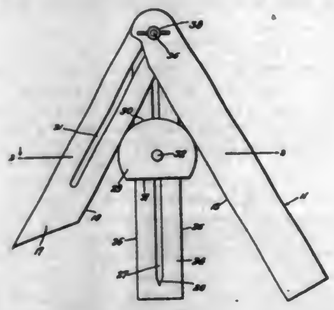
1,879,979. FRAME STRAIGHTENING TOOL. GUY A. COUNTRYMAN, Ashland, Ohio. Filed Jan. 16, 1930. Serial No. 421,090. 13 Claims. (Cl. 153—38.)

1. In a tool of the class described, a frame composed of a pair of channel irons held in spaced parallel relation to each other by a threaded sleeve and a pair of bolts adjacent the center thereof, a shaft threaded into said sleeve, a handle on one end of said shaft and a gripping means on the other end consisting of a swivel head, a pair of parallel bars attached at their centers to said head, a block slidably mounted on each end of said bars and an adjustable and rotatable hook member extending through each



block between the bars to grip a bar, and means mounted on each end of the frame to grip said bar on each side of said first named gripping means.

1,879,980. MITER GAUGE FOR SLIDING T-BEVELS. JOHN J. DRILL, Ranshaw, Pa. Filed Mar. 24, 1930. Serial No. 438,430. 4 Claims. (Cl. 33—91.)

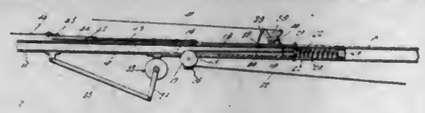


1. A bevel gauge comprising a handle, a leg having a longitudinally extending slot therein, a blade having a longitudinally extending slot therein, a pivot member passing through the two slots and an end of the handle to pivotally and slidably connect the blade and leg with the handle, a head having an arcuate edge, means extending through the head and the slot in the blade for rotatably and slidably mounting the head on the blade so that the arcuate edge will bear evenly against the adjacent edges of the leg and handle to force them apart when said head is moved on the blade toward said pivot member.

1,879,981. DRAWBAR FOR TRAILERS. VAN ALVIN HAMILTON, Palestine, Tex. Filed Mar. 21, 1932. Serial No. 600,320. 5 Claims. (Cl. 280—33.44.)

1. In a structure of the class described, a draw bar adapted for attachment to a trailer and comprising a stationary tube, a companion tube slidable therein, said tube having alined slots, a sheave fixedly attached to the first-named tube and extending through said slots, a trailer brake applying cable trained over said sheave and having one end portion extending into and through the movable tube, and attached to the inner end of said tube, the opposite end of the cable being adapted for attachment to the

trailer brake operating means, the forward free end portion of said slidable tube being apertured to accommodate a coupling pin carried by the power vehicle, a shock ab-



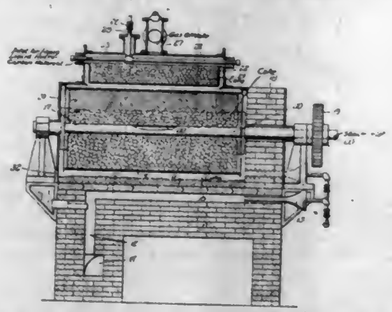
sorbing device carried by the first-named tube, and an operating link connection between the shock absorbing device and slidable tube.

1,879,982. MARKING STAMP. DONOVAN H. HARDY, Manila, P. I., assignor of one-third to Eilif V. Skar, Omaha, Nebr. Filed Oct. 14, 1930. Serial No. 488,618. 1 Claim. (Cl. 101—368.)



A hand stamp including a handle having opposed faces, marking elements mounted on said faces and each formed of a solidified inking substance adapted to be moistened on its working surface for making an impression when applied to an article to be marked, said marking elements being coated with a waterproof material, and waterproof means securing said elements to said faces, the handle being invertible within the hand of the user for presenting either of said elements for use and said handle being widened toward one of said faces whereby the element mounted on said face may be identified by feeling the handle.

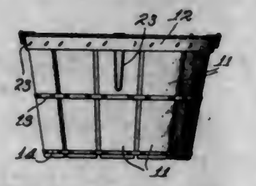
1,879,983. METHOD OF COKING LIQUID HYDROCARBONS. ALEXANDER S. KNOWLES, Chicago, Ill., assignor to Tar & Petroleum Process Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1927. Serial No. 218,453. 5 Claims. (Cl. 202—15.)



3. The method of treating heavy liquid hydrocarbon material which comprises progressively heating the material by passing said material downwardly through a mass of loose coke which is progressively hotter toward the bottom, agitating the coke during the passage of the hydrocarbon material, permitting the liquid residue to drip upon a surface heated to a coking temperature, and coking the residue on such surface.

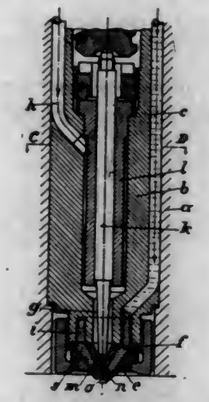
1,879,984. METHOD OF ATTACHING A COVER FASTENER. CARL G. LEIGH, Chicago, Ill., assignor to Leigh Banana Case Co., Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1930. Serial No. 477,432. 4 Claims. (Cl. 140—93.)

1. In the art of basket making of the type described, the method of attaching a cover fastener, consisting of applying the fastener to the upper end of a stave by bending the same over the top of the stave with the fastener lying substantially flat against the outer and inner sur-



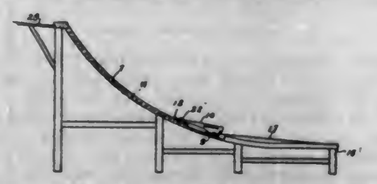
faces of the stave to form an assembly unit and then applying the upper outer hoop of the basket in the regular process of the basket making to hold said fastener permanently in place.

1,879,985. COOLED NOZZLE FOR FUEL VALVES IN INTERNAL COMBUSTION ENGINES. HANS LÜMMEN, Cologne-Deutz-on-the-Rhine, Germany, assignor to Motorenfabrik Deutz Aktiengesellschaft, Cologne-Deutz, Germany. Filed Apr. 6, 1929, Serial No. 353,089, and in Germany Apr. 13, 1928. 3 Claims. (Cl. 299—107.1.)



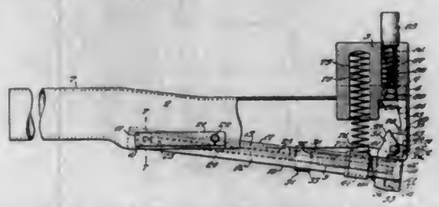
1. A fuel injection valve for an internal combustion engine having, in combination, a nozzle body portion, a needle valve carried thereby, a one-piece nozzle tip separate from said body portion formed to provide a seat for said valve; said nozzle tip also formed with a cavity for cooling water, which cavity opens on that surface of said nozzle tip which abuts with said nozzle body portion, and which cavity surrounds that portion of said nozzle tip which is formed to provide said seat; the abutting surfaces of said nozzle body portion and nozzle tip being unitary plane surfaces contacting in fluid tight relation at opposite sides of the opening of said cavity, and means including a screw cap for securing said body portion and nozzle tip in assembled relation.

1,879,986. TOY GLIDER AND RUNWAY. FREDERICK T. MACKLIN, Covington, Ky. Filed Aug. 28, 1931. Serial No. 559,894. 7 Claims. (Cl. 46—50.)



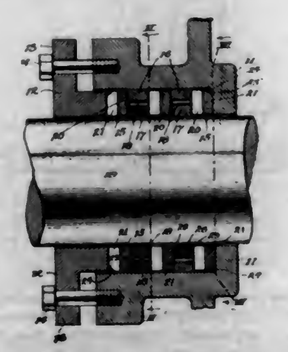
1. In a child's toy the combination with an inclined runway, of a glider adapted for gravitational movement down the runway and means comprising an elastic loop under tension, a holding means therefor, a trigger on the runway for releasing the elastic means from the holding means and a finger and hook on the glider for automatically releasing the glider to the action of the elastic loop.

1,879,987. STAPLING MACHINE OR TACKER. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Oct. 11, 1929. Serial No. 399,021. 15 Claims. (Cl. 1—49.)



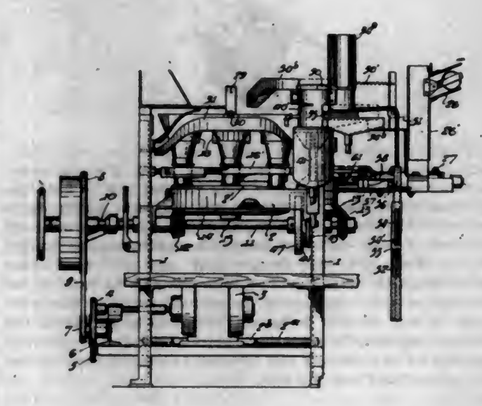
1. In a device of the type specified, the combination of a magazine for holding a supply of staples or similar fasteners arranged in series, means for urging the staples forward to feed them into position to be successively applied to the work, means for driving the staples into the work, a gateway in the magazine through which the staples may be entered, gates slidable across the gateway to hold the staples in the magazine with the foremost one in driving position, and resilient means for holding the gates in closed position while adapting them to be automatically opened when the staples are forced thereagainst to enter them into the magazine.

1,879,988. ROD PACKING. ALLEN W. MORTON and EDWARD STEAD, Baltimore, Md., assignors to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed July 19, 1930. Serial No. 469,164. 3 Claims. (Cl. 286—24.)



1. A metal packing for rods comprising a stuffing box; a packing gland mounted for adjustment in one end thereof; a plurality of separator rings in said box; means including spacer rings cooperative with said gland for holding said separator rings in rigid spaced relation one to another and to said box; a wearing ring between each two separator rings and in freely floating relation thereto; a flat spring member of irregular contour surrounding each wearing ring and tending to force it radially inwardly against the rod and away from the stuffing box wall; and means associated with each of the spacer rings to prevent rotation of the companion wearing ring relative thereto.

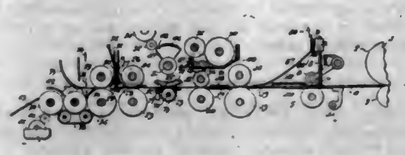
1,879,989. COMBINED FRUIT CUTTING AND CAN FILLING MACHINE. HARRY S. MORSE, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Territory of Hawaii, a Corporation of Hawaii. Filed Jan. 2, 1932. Serial No. 584,535. 10 Claims. (Cl. 226—69.)



1. The combination with a can filling machine, of mechanism for cutting slices of fruit into segments and feeding predetermined numbers of said segments to the filling machine; said mechanism including a magazine for holding a stack of slices, a pusher arm for withdrawing a predetermined number of slices from the bottom of the stack, cutting means including radial knives and a plunger for forcing the slices through said radial knives, and a stripper arm for moving the cut segments from the top of the plunger into a delivery chute to the filling machine.

8. A can filling machine including a conveyer for delivering empty cans in sequence thereto, means for delivering the material to be packed to the machine, said means comprising an oscillating pusher arm, a rotary cam for imparting feeding movements to said arm, spring mechanism for retracting said arm, and means for rendering said spring mechanism ineffective comprising a stop for engaging said mechanism, and a spring actuated lever pivoted intermediate its ends having one end normally moving the stop into operative position and its other end normally projected into the path of movement of the cans being fed.

1,879,990. ENVELOPE MAKING MACHINE. BURDETTE S. OLES, Baltimore, Md., assignor to Oles Envelope Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 3, 1931. Serial No. 578,828. 15 Claims. (Cl. 93—73.)



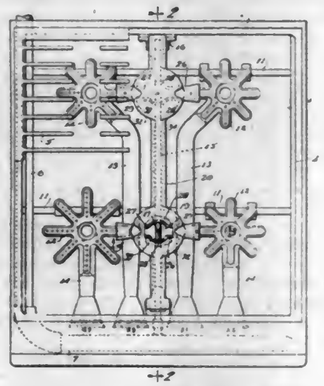
1. In an envelope making machine having means for folding side flaps of an envelope and means for folding a bottom flap against the folded side flaps, means for applying adhesive to one of the side flaps and for printing an impression on another of the side flaps after the folding of the side flaps and prior to the folding of the bottom flap.

1,879,991. LIVE DECOY HALTER. WILLIAM E. PRATT, Chicago, Ill., assignor to William E. Pratt Manufacturing Company, Joliet, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,455. 2 Claims. (Cl. 24—115.)



2. In a device of the character set forth, a spring catch member adapted to receive a loop member and to hold the strands of the loop in parallel relation, said spring catch member being formed of a metal strip bent over upon itself to form a rear wall and having inwardly turned flanges at its front end, said flanges and said rear wall being provided with elongated openings adapted to receive the strands of said loop member in parallel relation, the openings in the flanges being alignable upon springing the flanges inwardly into overlapping relation, and projections carried by said flanges and adapted to extend between the strands of said loop member.

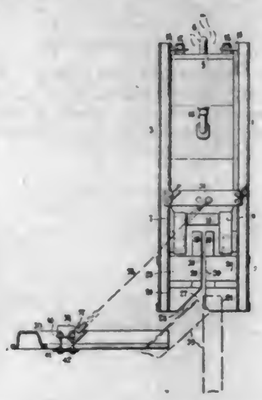
1,879,992. AUTOMATIC LIGHTER FOR GAS STOVES. WALTER F. ROGERS, Cicero, Ill. Filed Feb. 8, 1932. Serial No. 591,471. 11 Claims. (Cl. 158—115.)



1. A stove comprising a burner box, a gas burner, a pilot in said burner box, a hood above said pilot, means providing a channel for conducting to said hood gas issuing from said burner, and a support for said hood, said support being formed to provide a channel extending from said hood to one wall of said burner box to permit the escape of heated gases.

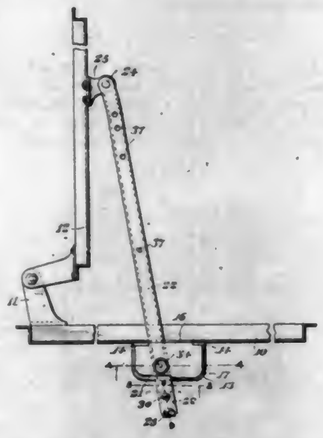
1,879,993. PILE DRIVER. REGINALD GEORGE SALMON, Barkingside, England, assignor of one-half to The British Steel Piling Company, Limited, London, England, a Corporation of Great Britain and Northern Ireland. Filed Oct. 30, 1931, Serial No. 571,992, and in Great Britain Dec. 16, 1930. 8 Claims. (Cl. 61—76.)

1. Pile driving apparatus for steel plate piling, comprising a driving member, means for suspending, lowering, and raising the driving member, an anvil face on the driving member, two jaw members projecting beyond and at right angles to the anvil face and forming a recess between them, and a connection between the pile to be driven and the driving member enabling the operation of raising the driving member from its lowered position to simultaneously move the pile from a recumbent position on the ground



into an upright position with the driven end inserted in the recess between said jaw members ready to be driven.

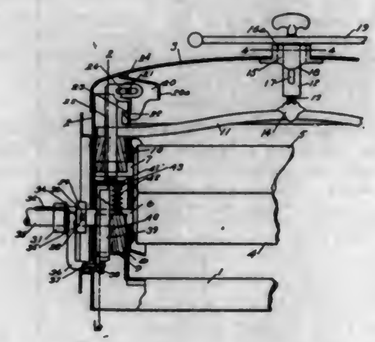
1,879,994. CLOSURE OPERATOR AND LOCK. ADOLF H. SCHAFFERT, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Dec. 8, 1931. Serial No. 579,764. 6 Claims. (Cl. 268—117.)



1. A closure operator and lock comprising a casing having a top and bottom wall and a passageway between said walls, a channeled closure-holding bar slidably passing through the passageway, a guide for the bar mounted on one of the walls within the passageway and engaged in the channel of the bar, and a locking device mounted on the casing and having a stud that interlocks with the bar to hold it.

1,879,995. WRINGER. ERNEST J. SCHUDA, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 24, 1929. Serial No. 373,251. 4 Claims. (Cl. 68—32.)

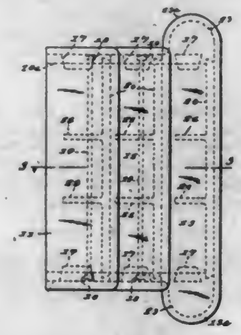
1. In a wringer, the combination of a frame; wringer rolls in the frame; means exerting pressure on the rolls; a driving connection for the rolls; a safety release device adapted to quickly release the pressure on the rolls; and means automatically breaking the driving connection subsequent to the release of pressure on the rolls comprising an actuator depressed through pressure on the rolls, a



spring lifting the actuator on the release of pressure, and means conveying the movement of the actuator to the driving connection.

CARNEGIE LIBRARY OF ATLANTA

1,879,996. SECTIONAL PORTABLE STEP. WALTER SHERWOOD, Bolivar, N. Y. Filed May 4, 1931. Serial No. 535,032. 3 Claims. (Cl. 72—96.)



1. A sectional cement step construction comprising end rest members having seating areas in stepped relation, each of said areas presenting an outwardly flaring recess, steps fitted to said seating areas with dove-tail projections engaging and fitting said recesses, and risers also fitted to said end rest members, said end rest members having undercut seat formations receiving correspondingly shaped extremities of said risers.

1,879,997. CHROMIUM COMPOUNDS OF ORTHO-HYDROXY-AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB, Basel, and HERMANN SCHNEIDER, Riehen, near Basel, Switzerland, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 7, 1928, Serial No. 283,731, and in Switzerland June 24, 1927. 4 Claims. (Cl. 260—12.)

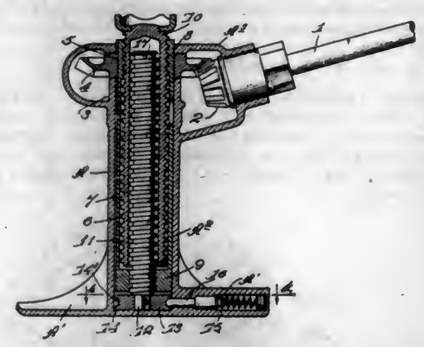
1. As an improvement in the manufacture of chromium compounds of ortho-hydroxy-azo-dyestuffs, the conversion of the dyestuffs into chromium complexes by means of chromium salts in the presence of soluble salts of aliphatic monocarboxylic acids in such a quantity that after the chroming process is complete the reaction mixture contains soluble salts of aliphatic monocarboxylic acids.

1,879,998. SHEET GLASS FORMING AND ANNEALING METHOD AND APPARATUS. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,887. 53 Claims. (Cl. 49—3.)



45. The combination with intermittently operating sheet forming means, of a leer, a primary conveyor for conveying the sheets from the forming means to the leer, a secondary conveyor for continuing the conveyance of the sheets through the leer, a transfer conveyor for transferring the sheets from the primary conveyor to the secondary conveyor, driving means for normally driving the conveyors in a forward direction, means for periodically reversing the direction of motion of the second conveyor, means for changing the direction of motion of the transfer conveyor for synchronizing actions with the primary and secondary conveyors successively, for receiving sheets from the former and transferring the same to the latter, a control mechanism governing the driving and reversing and motion changing means, a sheet actuated time controlled switch governing the control mechanism for effecting a forward movement of the transfer conveyor with the primary conveyor, and a sheet actuated time controlled switch governing the control mechanism for maintaining the forward movement of a final part of the transfer conveyor upon cessation of action of the first-named switch until the sheet has passed to the second conveyor.

1,879,999. SCREW JACK. WILLIAM C. TYLER, Joliet, Ill., assignor to William E. Pratt Mfg. Co., Joliet, Ill., a Corporation of Illinois. Filed Oct. 1, 1931. Serial No. 566,826. 15 Claims. (Cl. 254—102.)



1. A jack comprising, a hollow casing, a drive nut rotatably mounted therein, a sleeve slidably keyed to said nut, said sleeve being provided interiorly with upper and lower nuts, a hollow lifting screw engaging said upper nut, a rotatably mounted screw post engaging said lower nut, and means for restraining rotation of said screw post.

1,880,000. METHOD OF MAKING POLES. ARTHUR C. WALLEN, Bronxville, N. Y., assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Jan. 23, 1930. Serial No. 422,709. 15 Claims. (Cl. 29—155.)

5. A method of making a pole member, comprising taking sections of sheet metal of substantially the same

width but of different thickness, butt-welding the ends of the sections together to form a single strip having at least one face in stepped relationship, and then deforming the



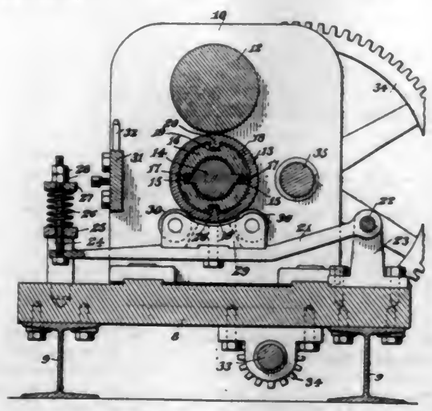
strip longitudinally and crosswise of the welds, whereby the welds are subjected to a strength test during the formation of the member.

1,880,001. DOUBLE FACED NECKTIE AND METHOD OF PREPARING THE SAME. OTTO WEINSTEIN, Boston, Mass., assignor to Standard Neckwear Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 1, 1931. Serial No. 560,617. 6 Claims. (Cl. 2—146.)



1. A reversible necktie comprising a pair of complementary sections of material, each section constituting a face of the necktie, said sections being cut on the bias and sewed together at their edges, the warp threads of one section lying parallel to the warp threads of the other section.

1,880,002. DRAWING ROLL MECHANISM. HERBERT E. WHITE, Cleveland, and WALTER F. SCHULZ, Youngstown, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Feb. 8, 1930. Serial No. 426,986. 7 Claims. (Cl. 21—12.7.)



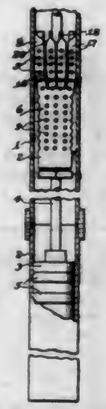
1. In a drawing roll structure, the combination with a main bearing roll, of a coacting roll comprising a shaft, roll shell sections located end to end on the shaft, and laterally movable with respect thereto, drive members interposed between the shells and shaft and having laterally movable interlocking connections with both that permit both their lateral play and the lateral play of the shells, and means for urging the shells toward the main roll and permitting their individual movements away from the same while preventing their side play toward opposite sides of the main roll.

1,880,003. METHOD OF MAKING METAL STRUCTURES. HERBERT E. WHITE and WALTER F. SCHULZ, Cleveland, Ohio, assignors to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Apr. 25, 1930. Serial No. 447,349. 1 Claim. (Cl. 29—155.)



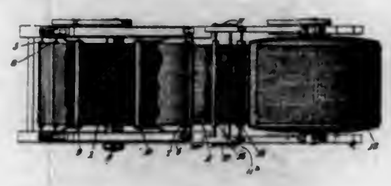
The method of forming poles and the like which consists in butt-welding end to end a plurality of sheets of successively different thicknesses and rolling the sheets to offset the longitudinal margins and provide an intermediate channeled rib, said ribs providing stiffening reinforcements throughout the structure.

1,880,004. CYLINDER PROTECTOR. RAY C. WORSWICK, Roswell, N. Mex. Filed July 23, 1931. Serial No. 552,748. 2 Claims. (Cl. 103—202.)



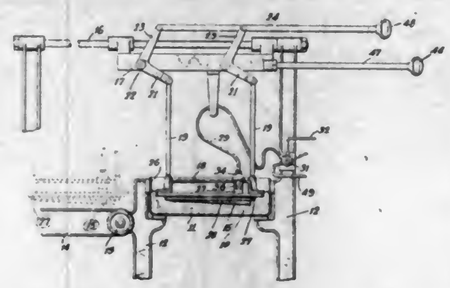
1. In a device of the class described, a receptacle comprising a flared out portion at the top, said flared out portion divided into a series of resilient strips, and a restricted portion at the tops of said strips, said restricted portions extending above said resilient strips and thickened on plane at right angles to the plane of said strips.

1,880,005. FILTER CAKE TREATING DEVICE. ARTHUR WRIGHT, Upper Montclair, and FRANK W. YOUNG, Verona, N. J. Filed June 12, 1926. Serial No. 115,481. 51 Claims. (Cl. 210—199.)



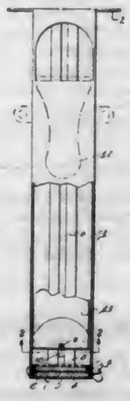
1. A cake re-enforcement comprising a plurality of separate members about which the cake is formed.

1,880,006. FILTER CAKE TREATING DEVICE. FRANK W. YOUNG, Upper Montclair, N. J. Filed Nov. 4, 1926, Serial No. 146,086. Renewed July 14, 1931. 45 Claims. (Cl. 25—42.)



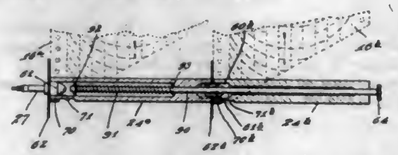
1. In a device for causing the deposit of solid particles from a liquid in which they are suspended, means for varying the rate of deposit of the said particles simultaneously at predetermined points in the deposit.

1,880,007. SANITARY RAZOR STROP HOLDER. WILLIAM O. ANDERSON, Detroit, Mich. Filed Apr. 19, 1930. Serial No. 445,591. 5 Claims. (Cl. 51—200.)



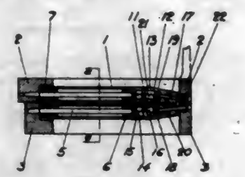
5. A device of the character described comprising an elongated casing, guide strips mounted on the inside of the rear wall of said casing, an opening formed in the front wall of said casing, a razor strop projecting through said opening, a disk pivotally attached to said strop and received in said guide strips, and a disinfectant containing receptacle mounted in the lower end of said casing.

1,880,008. GRAPHIC METER. DONALD J. ANGUS, Indianapolis, Ind. Filed Oct. 27, 1928. Serial No. 315,382. 7 Claims. (Cl. 242—74.)



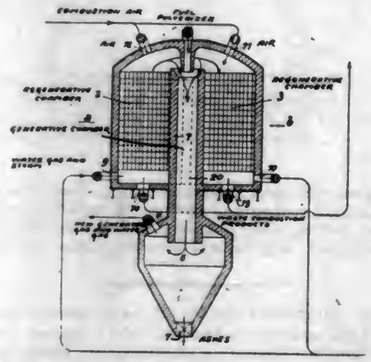
1. A re-roll roller for record sheet in a graphic meter, comprising a part by which said roller is adapted to be driven, said part including a supporting stud and a finger spaced therefrom, and a hole in one end of said re-roll roller into which said stud projects, there being different thicknesses of wall between the stud and the exterior of the roller at that end whereby relative rotation between the stud and roller varies the space between the surface of the roller and the finger.

1,880,009. CIGAR MACHINE. AUGUST BAUSCHLICHER, Pankow, near Berlin, Germany, assignor to Aktiebolaget Formator, Stockholm, Sweden, a Corporation of Sweden. Filed Oct. 26, 1931, Serial No. 571,225, and in Germany Aug. 26, 1929. 2 Claims. (Cl. 131—45.)



1. In a cigar machine a wrapping device comprising in combination rotatably mounted main rollers having concave sockets in their ends, tapered companion rollers provided with convex butt ends fitting closely into said sockets and a helical tension spring connecting said main roller and said companion roller.

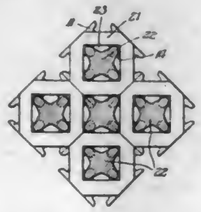
1,880,010. WATER GAS GENERATOR. WALTER BENNHOLD, Furstenwalde, Germany. Filed Aug. 15, 1928, Serial No. 299,789, and in Germany Aug. 19, 1927. 1 Claim. (Cl. 48—78.)



An apparatus for continuous generation of water gas by the use of pulverized fuel, comprising a tubular water gas generating chamber having an enlarged portion at its

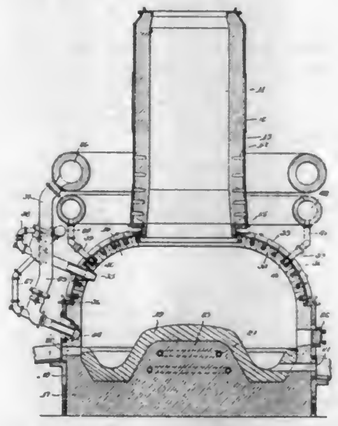
lower end forming a gas and ash separating receptacle, a double-compartment regenerative heating chamber surrounding said generating chamber, means for feeding pulverized fuel and steam to the upper end of the gas generating chamber, and other means at the lower end of said heating chamber for feeding gas and steam thereto, whereby heat is supplied for generating the water gas.

1,880,011. CHECKERBRICK AND CHECKERWORK CONSTRUCTION. ARTHUR J. BOYNTON, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 9, 1930. Serial No. 487,483. 3 Claims. (Cl. 263—51.)



2. In a checkerwork construction, checkerbrick having vertically extending passages therein, certain of the brick having portions extending into the passages, and columns of secondary brick fitted in said passageways and supported on said portions.

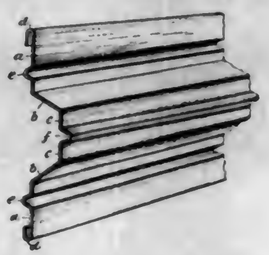
1,880,012. MELTING FURNACE. HERMAN A. BRASSERT, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1931. Serial No. 553,250. 12 Claims. (Cl. 263—27.)



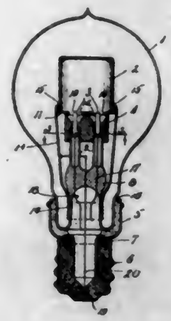
1. In a metallurgical furnace, a hearth chamber, a raised portion located centrally of the hearth chamber, an annular metal holding recess surrounding the raised portion in the chamber, and tuyères extending into the hearth.

1,880,013. ROADWAY JOINT. BERNARD BRIODY, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Jan. 14, 1930. Serial No. 420,697. 2 Claims. (Cl. 94—17.)

1. A roadway joint forming member comprising an elongated strip of metal of light gauge having a longitudinal intermediate offset portion forming a relatively wide longitudinal rib on one side and a correspondingly deep channel on the other side and providing upper and lower side portions on opposite sides of the same, the outer side margins of the strip being doubled and said strip having longitudinal corrugations of less cross sectional area than the said intermediate offset.



1,880,014. GASEOUS CONDUCTION DEVICE. VANNEBAR BUSH, West Medford, Mass., assignor to Raytheon, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1925. Serial No. 22,988. 2 Claims. (Cl. 250—27.5.)



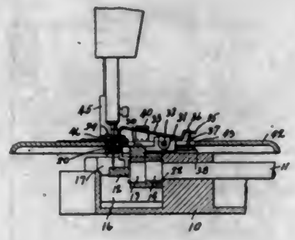
1. In a glow discharge device comprising a sealed container containing a cathode, an anode, and a gas at a pressure sufficiently high to support a discharge between said cathode and anode with substantial ionization, said cathode being of metal and operable at a temperature below that at which conduction is largely dependent upon thermionic emission, the method which comprises applying alkaline earth material to a surface of the cathode, and then oxidizing said material to produce a surface for the purpose of reducing potential drop and also of restraining gas molecules from being permanently embedded in the metallic cathode of sufficient degree substantially to reduce the gas pressure during prolonged operation of the tube.

1,880,015. TILE-SURFACED STRUCTURAL ELEMENT. JOSEPH F. DOVEN, Zanesville, Ohio, assignor to American Tile Fixture Company, Inc., a Corporation of Ohio. Filed July 28, 1931. Serial No. 553,678. 8 Claims. (Cl. 72—26.)



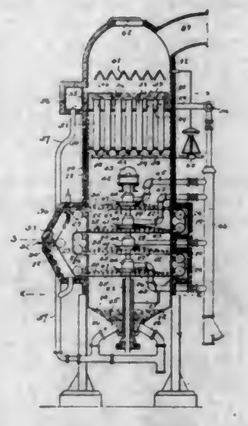
1. A constructional element embodying, in combination a flat relatively thin and normally-warpable slab of cementitious material, a reinforcing member embedded in said slab, and means for applying a bowing tension to said reinforcing member to counteract the normal warpage of said slab.

1,880,016. AUXILIARY FEED DEVICE FOR SEWING MACHINES. JAMES T. DOWDALL, Ozone Park, N. Y., assignor of one-half to John T. Keveney, Brooklyn, N. Y. Filed Aug. 1, 1931. Serial No. 554,396. 6 Claims. (Cl. 112—215.)



1. An auxiliary material feed mechanism for sewing machines comprising a reciprocative and elevatable support, a plate pivotally mounted thereon, a finger on the said plate, a stop engaging the said plate, and spring means for maintaining the plate against the stop.

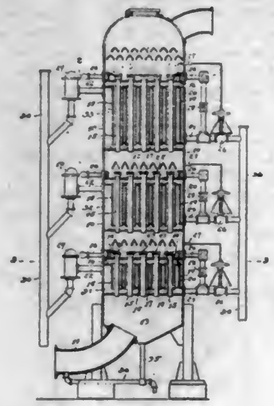
1,880,017. APPARATUS FOR REMOVING SUSPENDED PARTICLES FROM GASES AND VAPORS. ROBERT R. HARMON, Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,901. 5 Claims. (Cl. 183—23.)



1. An apparatus for cleaning gas having a chamber through which the gas to be cleaned flows, a series of endless wires extending across the chamber and across the path of the gas stream, another series of wires also extending across the chamber and the gas stream in a direction to cross the first named series of wires and form a mesh, means for moving the wires to cause them to travel, and means for directing water over the crossed wires.

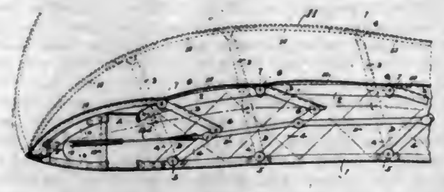
1,880,018. APPARATUS FOR CLEANING GASES. ROBERT R. HARMON, Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,902. 7 Claims. (Cl. 183—28.)

1. An apparatus for cleaning gas having a plurality of separately-arranged tubular means one in advance of another for separately and successively dividing the gas into streams and condensing out vapor in the gas streams on suspended particles therein and forming particle-centered droplets, means between each set of tubular means for liquid-filtering the gas to remove particle-centered droplets formed in the pending condensing operation and



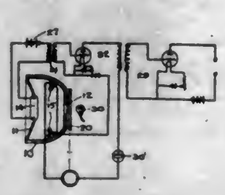
means for thermostatically controlling the condensing operation at each of the tubular means independently of the others.

1,880,019. AIRPLANE. CARL BROWN HARPER, Washington, D. C. Filed Apr. 3, 1922. Serial No. 549,225. 47 Claims. (Cl. 244—12.)



1. In an airplane wing, in combination, a flexible upper surface and a rigid lower surface, means operable from the cockpit for moving said surface up and down at will, a trailing edge flap adapted to be inclined as said upper surface is swollen, means for further lowering said trailing edge flap after said upper surface has been moved and returning said trailing edge flap to a predetermined angular relation with respect to the wing before said upper surface is collapsed.

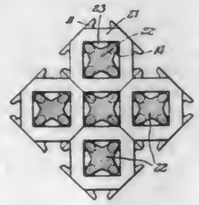
1,880,020. REGENERATIVE PHOTO-ELECTRIC CELL CIRCUIT. BERNARD KWARTIN, Philadelphia, Pa. Filed Dec. 2, 1927. Serial No. 237,323. 9 Claims. (Cl. 250—41.5.)



5. In an apparatus for converting light variations into electrical variations, a light responsive element arranged to be initially influenced by the fluctuating rays of light

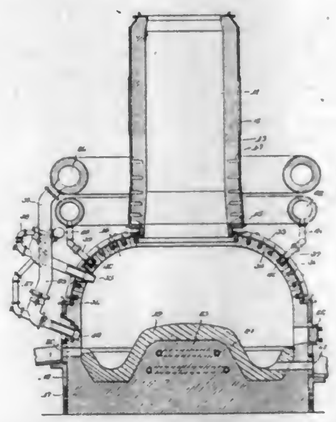
lower end forming a gas and ash separating receptacle, a double-compartment regenerative heating chamber surrounding said generating chamber, means for feeding pulverized fuel and steam to the upper end of the gas generating chamber, and other means at the lower end of said heating chamber for feeding gas and steam thereto, whereby heat is supplied for generating the water gas.

1,880,011. CHECKERBRICK AND CHECKERWORK CONSTRUCTION. ARTHUR J. BOYNTON, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 9, 1930. Serial No. 487,483. 3 Claims. (Cl. 263—51.)



2. In a checkerwork construction, checkerbrick having vertically extending passages therein, certain of the brick having portions extending into the passages, and columns of secondary brick fitted in said passageways and supported on said portions.

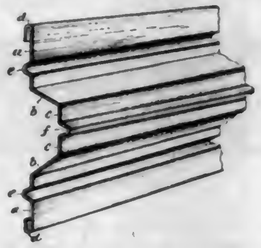
1,880,012. MELTING FURNACE. HERMAN A. BRASSERT, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1931. Serial No. 553,250. 12 Claims. (Cl. 263—27.)



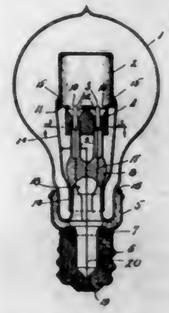
1. In a metallurgical furnace, a hearth chamber, a raised portion located centrally of the hearth chamber, an annular metal holding recess surrounding the raised portion in the chamber, and tuyères extending into the hearth.

1,880,013. ROADWAY JOINT. BERNARD BRIODY, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Jan. 14, 1930. Serial No. 420,697. 2 Claims. (Cl. 94—17.)

1. A roadway joint forming member comprising an elongated strip of metal of light gauge having a longitudinal intermediate offset portion forming a relatively wide longitudinal rib on one side and a correspondingly deep channel on the other side and providing upper and lower side portions on opposite sides of the same, the outer side margins of the strip being doubled and said strip having longitudinal corrugations of less cross sectional area than the said intermediate offset.



1,880,014. GASEOUS CONDUCTION DEVICE. VANNEBAR BUSH, West Medford, Mass., assignor to Raytheon, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1925. Serial No. 22,988. 2 Claims. (Cl. 250—27.5.)



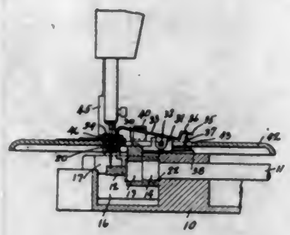
1. In a glow discharge device comprising a sealed container containing a cathode, an anode, and a gas at a pressure sufficiently high to support a discharge between said cathode and anode with substantial ionization, said cathode being of metal and operable at a temperature below that at which conduction is largely dependent upon thermionic emission, the method which comprises applying alkaline earth material to a surface of the cathode, and then oxidizing said material to produce a surface for the purpose of reducing potential drop and also of restraining gas molecules from being permanently embedded in the metallic cathode of sufficient degree substantially to reduce the gas pressure during prolonged operation of the tube.

1,880,015. TILE-SURFACED STRUCTURAL ELEMENT. JOSEPH F. DOVEN, Zanesville, Ohio, assignor to American Tile Fixture Company, Inc., a Corporation of Ohio. Filed July 28, 1931. Serial No. 553,678. 8 Claims. (Cl. 72—26.)



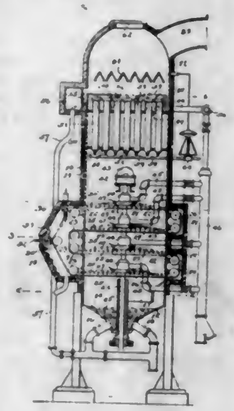
1. A constructional element embodying, in combination a flat relatively thin and normally-warpable slab of cementitious material, a reinforcing member embedded in said slab, and means for applying a bowing tension to said reinforcing member to counteract the normal warpage of said slab.

1,880,016. AUXILIARY FEED DEVICE FOR SEWING MACHINES. JAMES T. DOWDALL, Ozone Park, N. Y., assignor of one-half to John T. Keveney, Brooklyn, N. Y. Filed Aug. 1, 1931. Serial No. 554,396. 6 Claims. (Cl. 112—215.)



1. An auxiliary material feed mechanism for sewing machines comprising a reciprocative and elevatable support, a plate pivotally mounted thereon, a finger on the said plate, a stop engaging the said plate, and spring means for maintaining the plate against the stop.

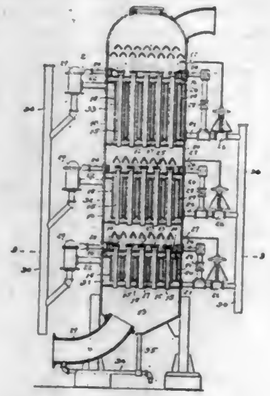
1,880,017. APPARATUS FOR REMOVING SUSPENDED PARTICLES FROM GASES AND VAPORS. ROBERT R. HARMON, Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,901. 5 Claims. (Cl. 183—23.)



1. An apparatus for cleaning gas having a chamber through which the gas to be cleaned flows, a series of endless wires extending across the chamber and across the path of the gas stream, another series of wires also extending across the chamber and the gas stream in a direction to cross the first named series of wires and form a mesh, means for moving the wires to cause them to travel, and means for directing water over the crossed wires.

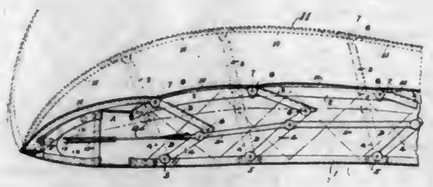
1,880,018. APPARATUS FOR CLEANING GASES. ROBERT R. HARMON, Charlottesville, Va., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,902. 7 Claims. (Cl. 183—23.)

1. An apparatus for cleaning gas having a plurality of separately-arranged tubular means one in advance of another for separately and successively dividing the gas into streams and condensing out vapor in the gas streams on suspended particles therein and forming particle-centered droplets, means between each set of tubular means for liquid-filtering the gas to remove particle-centered droplets formed in the pending condensing operation and



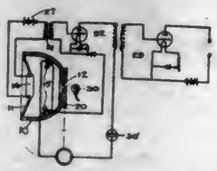
means for thermostatically controlling the condensing operation at each of the tubular means independently of the others.

1,880,019. AIRPLANE. CARL BROWN HARPER, Washington, D. C. Filed Apr. 3, 1922. Serial No. 549,225. 47 Claims. (Cl. 244—12.)



1. In an airplane wing, in combination, a flexible upper surface and a rigid lower surface, means operable from the cockpit for moving said surface up and down at will, a trailing edge flap adapted to be inclined as said upper surface is swollen, means for further lowering said trailing edge flap after said upper surface has been moved and returning said trailing edge flap to a predetermined angular relation with respect to the wing before said upper surface is collapsed.

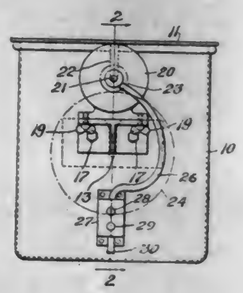
1,880,020. REGENERATIVE PHOTO-ELECTRIC CELL CIRCUIT. BERNARD KWARTIN, Philadelphia, Pa. Filed Dec. 2, 1927. Serial No. 237,323. 9 Claims. (Cl. 250—41.5.)



5. In an apparatus for converting light variations into electrical variations, a light responsive element arranged to be initially influenced by the fluctuating rays of light

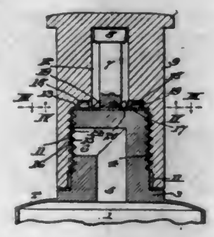
emanating or reflected from a subject located in front of said element, an electrical circuit in which said element is included and wherein electrical variations are set up corresponding in frequency to the light variations influencing said element, and means influenced by said initial electrical variations for introducing additional light variations whereby to produce final amplified electrical variations of frequencies corresponding to those of said initial electrical variations, said means being separate and distinct from and operable independently of said subject.

1,880,021. ACCESSORY UNIT FOR DOMESTIC FREEZING APPARATUS. GORDON C. MCCAULEY, Boston, and JOSEPH LEWIS HALLETT, Braintree, Mass. Filed Dec. 13, 1930. Serial No. 502,174. 1 Claim. (Cl. 259—109.)



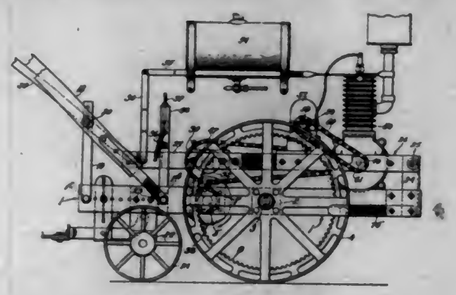
As a new article of manufacture, a portable self-contained mix-holding accessory unit for insertion within the freezing compartment of an automatic domestic freezing apparatus, said unit comprising a container comprising a bottom wall, two side walls, and two end walls; a closure lid removably fitted to the tops of said side and end walls, an agitator element within and removably supported by said container so as to turn on a horizontal axis; an electric motor for driving said element, said motor being disposed upon the exterior of said container opposite one of said end walls and below the level of the top of said closure lid; means separably and positively fastening said motor to said container; and a power transmitting mechanism connecting said agitator element with the armature shaft of said motor by which said agitator element is held in position within said container but so that removal of said motor permits of removal of said agitator element from said container.

1,880,022. CLOSURE FOR CONTAINERS. ARTHUR M. MONARCH, Brooklyn, N. Y. Filed Sept. 30, 1930. Serial No. 485,428. 11 Claims. (Cl. 221—60.)



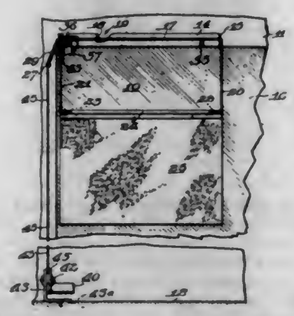
1. A closure for containers comprising, a neck on the container having an outlet therein, a cap movable on said neck, and a cup-shaped element disposed in the cap and arranged to engage the exterior of the neck for opening and closing said outlet and securing the cap against loss or displacement.

1,880,023. POWER TRACTOR UNIT. GEORGE H. NOBBS, Watertown, Mass. Filed Mar. 11, 1930. Serial No. 434,997. 5 Claims. (Cl. 180—19.)



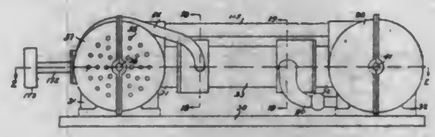
1. A power tractor comprising a main frame; two supporting traction-wheels for said main frame, one at each side thereof and each made with a concentric gear; handle means connected with said main frame by which the progress of the latter is manually directed; a shaft journaled on said main frame; a rotatably supported pinion engaging the gear of each traction-wheel; clutch means through which rotation of said shaft in one direction only operates each pinion; a driven friction-wheel fast on said shaft; a supplemental frame pivotally mounted upon said main frame; a motor mounted on one of said frames; a driving friction-wheel rotatably mounted on said supplemental frame and movable bodily with the latter into and out of engagement with said driven friction-wheel when said supplemental frame is swung on its pivot; means through which said driving friction-wheel is continuously driven by said motor while the tractor is in use and means under the control of the operator for swinging said supplemental frame on its pivot to engage and disengage said friction-wheels and for holding said supplemental frame at the limit of its movement in each direction.

1,880,024. GLARE DIMMER. JOSEPH A. RINKER, South Bend, Ind. Filed Apr. 19, 1929. Serial No. 356,397. 1 Claim. (Cl. 296—97.)



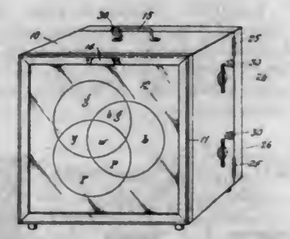
In a dimmer device of the character described, a construction comprising an elongated support adapted to be positioned above a wind shield, said support having perforated outstanding ears for holding a rod, a rod extending through the perforations of said ears for rocking movements therein, said rod having a pair of arms extending substantially in the same plane away from the rod and having free end portions, a cross member rigidly connecting the free end portions of the arms to produce a substantially rectangular dimmer frame, and a piece of substantially stiff light-weight translucent material rigidly secured to said cross member to move when the dimmer frame is moved.

1,880,025. INTERNAL COMBUSTION ENGINE. WILLIAM H. ROBERTSON, Dayton, Ohio. Filed Dec. 13, 1919, Serial No. 344,715. Renewed Apr. 5, 1929. 35 Claims. (Cl. 123—32.)



1. In an internal combustion engine, the combination with a cylinder and a piston reciprocating therein, said cylinder having inlet and outlet ports; of means for initially compressing the combustion air; means for causing the air to take up a whirling motion as it enters the cylinder; means for maintaining a rotation of the air; means for injecting fuel; and means permitting the exhaust to leave the cylinder by a similar whirling motion.

1,880,026. COLOR BOX. JOSEPH SINGERMAN, New York, N. Y. Filed Jan. 2, 1931. Serial No. 506,123. 10 Claims. (Cl. 35—12.)



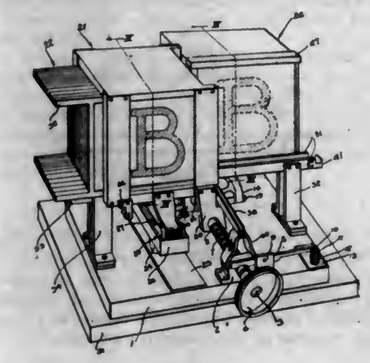
1. In a color box the combination of a screen of translucent material, an apertured opaque screen, a plurality of color filters mounted on said opaque screen contiguous with the apertures therein, and an opaque partition having a central aperture interposed between said filters and said translucent screen.

1,880,027. SHIRT FORM. JACOB SMALL, Baltimore, Md. Filed May 19, 1931. Serial No. 538,406. 2 Claims. (Cl. 223—18.4.)



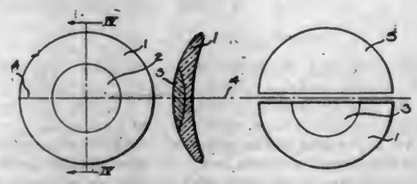
1. A form for shirts having attached collars, said form comprising a bosom-board having spaced slits therein adjacent to one edge and at said edge said board having an extension with cross-folds therein and with its free edge turned back against the board, said free edge having a tongue at each side to engage the slits in the board, the distance between the folds and the free edge of the extension being such as to form an inclined brace when the tongues thereon are engaged with the said slits.

1,880,028. EYE TESTING DEVICE. EDGAR D. TILLYER and NELSON M. BAKER, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 30, 1928. Serial No. 322,857. 6 Claims. (Cl. 88—20.)



1. In a device of the character described, an illuminated chamber having an observation opening therein, a chart holder, a plurality of charts in the holder, having test objects thereon mounted adjacent the light chamber, and adapted to be illuminated in said chamber, and a push rod member attached to the chart holder and being movable therewith in a direction substantially normal to the front plane of the light chamber to position the desired chart in a definite relation to said front plane without displacing any of the charts from the holder, and having rotatable inter-engaging means thereon engaging with the desired chart and moving said chart into and out of alignment with the observation opening when the push rod is rotated.

1,880,029. OPHTHALMIC LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 4, 1929. Serial No. 404,664. 11 Claims. (Cl. 49—82.1.)

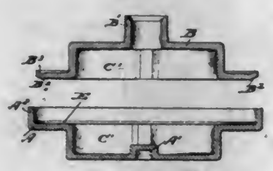


10. The process of making a bifocal or multifocal lens comprising placing two pieces of lens medium edge to edge on an abutting line of jointure, both pieces of said medium having the same index of refraction but each having a different fusion point from the other, subjecting the abutted sections to the action of heat until the section having the lower fusion point melts and fuses to the section having the higher fusion point before the said last named section has fused and surfacing the faces of the united portions to the desired optical curvatures.

1,880,030. SHOCK ABSORBER. SAMUEL A. WILSON, Detroit, Mich., assignor to Mechanical Development Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 4, 1930. Serial No. 472,854. 4 Claims. (Cl. 188—89.)

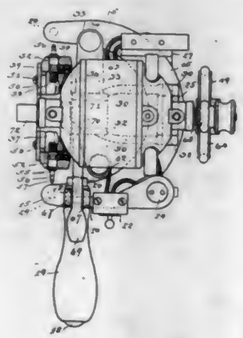
1. In a hydraulic shock absorber, a divided sheet metal casing having overlapping marginal surfaces, adapted to

be joined to form a single unit to house an oscillating piston; and a hard-metal gasket located between and embedded in the respective contiguous marginal portions of the sheet metal casing and adjacent the edge of one



portion and the corner formed by the surface of the portion overlapping said edge, whereby an intimate sealing relation is effected between the lapped and overlapped marginal surfaces of the respective members.

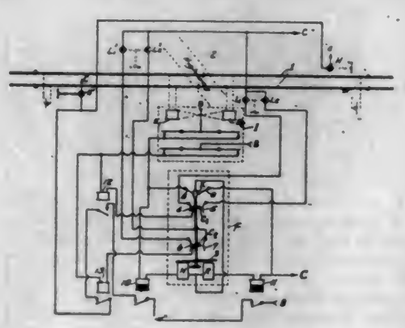
1,880,031. PORTABLE FABRIC PUNCHING MACHINE. DAVID B. ASHMAN, Baltimore, Md. Filed June 19, 1930. Serial No. 462,295. 12 Claims. (Cl. 164—123.)



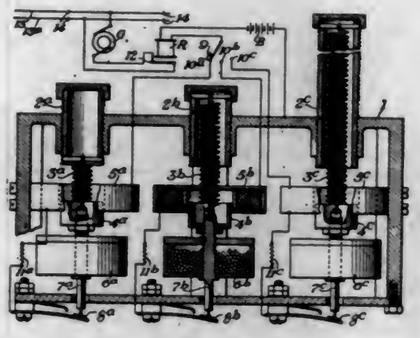
1. In a portable sheet punching machine the combination with a base movable over the sheet to be punched, of a punch-carrier movable with respect to the base and also movable with the base, an endless series of punches carried by the carrier,—said punches by contacting with the sheet as the base is moved thereover causing the carrier to be moved to present the punches in succession to the sheet, means for adjusting the depth of punch cut and means for elevating the carrier and punches with respect to the base and holding the carrier against movement when the base is moved to position the machine.

1,880,032. RAILWAY SIGNALING. CHARLES W. BELL, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1931. Serial No. 569,877. 4 Claims. (Cl. 246—130.)

1. At a highway and railroad crossing the combination comprising signals located upon the highway to give warning of the approach of a train toward the crossing and automatically operated by the approach of a train and additional signals located along the track at a distance from the crossing to give warning to the engineman of the train of the condition of the first mentioned signals, said last mentioned signals being operated automatically to give a different indication according as the first mentioned signals are operating properly, partially but not dangerously, or so imperfectly as to be dangerous.

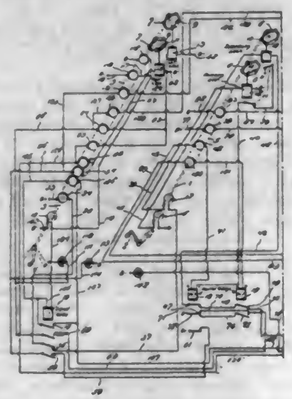


1,880,033. CIRCUIT CONTROLLING APPARATUS. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1929. Serial No. 334,345. 3 Claims. (Cl. 172—126.)



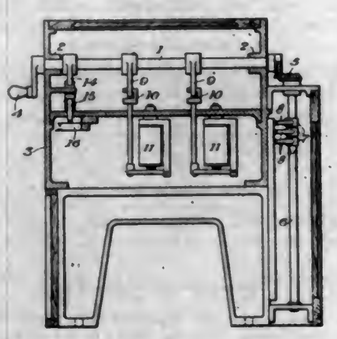
1. Circuit controlling apparatus capable of sustaining self oscillation and accurately adjustable as to frequency, said apparatus comprising a spring one end of which is fixed in a position adjustable as to height and the other end of which is free to move in a substantially vertical line, a plunger attached to the free end of said spring, a weight adjustable in mass attached to the free end of said spring, a flexible contact member having one end fixed, a movable contact member attached to the free end of said spring and engaging the free end of said flexible contact member when the free end of said spring is in its position of equilibrium but not when the spring is raised from such position, and a fixed solenoid controlled by the contact formed by said two contact members and coacting with said plunger to raise the free end of said spring from its position of equilibrium, the parts being so proportioned and so adjusted that if said solenoid is energized over the contact formed by said two contact members said spring and weight assembly will oscillate at substantially its natural period.

1,880,034. ELECTRIC INTERLOCKING MACHINE. NORMAN L. DONOVAN and CLARENCE E. LAKE, Jersey City, N. J., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporatoin of Pennsylvania. Filed Mar. 26, 1925. Serial No. 18,478. 36 Claims. (Cl. 246—133.)



16. In combination, a manually controllable traffic governing device, a stick relay having a pick-up and a stick circuit one of which is controlled by traffic conditions and the other of which is controlled by said device, and means controlled by said relay for controlling said device.

1,880,035. INTERLOCKING FRAME FOR RAILWAY POINTS AND SIGNALS AND THE LIKE. COURTENAY HAROLD WISH EDMONDS, London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1924, Serial No. 746,349, and in Great Britain Feb. 5, 1924. Renewed June 19, 1930. 20 Claims. (Cl. 246—134.)



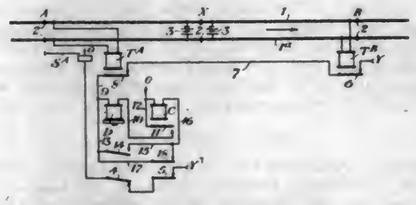
1. Railway interlocking apparatus comprising an interlocking frame containing a plurality of levers, and electric locks for said levers the energizing circuit for each lock being controlled by others of said levers and completed only when such other levers occupy such positions that the lever with which the lock is associated can safely be moved, said locks and circuits constituting the only interlocking between said levers.

1,880,036. COMPOSITION OF MATTER AND PROCESS OF MAKING THE SAME. EVERETT W. LOVERING, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 12, 1928. Serial No. 325,651. 7 Claims. (Cl. 134—17.)

1. A composition of matter comprising a preponderant proportion of previously blown petroleum asphalt, a much lesser proportion of rubber, and a still lesser proportion of waxy material.

7. A process which comprises masticating a preponderant proportion of previously blown petroleum asphalt along with a much lesser proportion of rubber and a still lesser proportion of waxy material under temperature conditions resulting in a soft, homogeneous mass, and then heating the mass to about 300° to 450° F. to produce a smooth, liquid composition.

1,880,037. RAILWAY TRAFFIC CONTROLLING APPARATUS. SAMUEL MISKELLY, Downers Grove, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 13, 1932. Serial No. 592,747. 8 Claims. (Cl. 246—41.)



1. In combination, a pair of wires, means for at times connecting said pair of wires with a source of current, two relays, means including a back contact of one of said relays for connecting the other relay with said pair of wires, means including a front contact of said other relay for at times connecting said one relay with said pair of wires, means including a front contact of said one relay for at other times connecting said one relay with said pair of wires, and an electro-responsive device controlled by a front contact of said one relay and a back contact of said other relay.

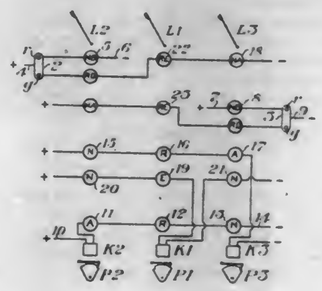
1,880,038. CEMENT COMPOSITION AND PROCESS OF PRODUCING SAME. HUGH KELSEA MOORE, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Jan. 12, 1928. Serial No. 246,385. 11 Claims. (Cl. 106—25.)

1. A hydraulic cement composition resistant after setting to attack by water and whose analysis indicates a dominant mol-proportion of barium oxide base, a smaller mol-proportion of silica, and a still smaller mol-proportion of alumina, the mol-proportion of base in said composition being much lower than that of Portland cement.

1,880,039. INTERLOCKING SIGNALING. LESLIE H. PETER and WALTER A. PEARCE, King's Cross, London, England, assignors, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930, Serial No. 430,228, and in Great Britain Mar. 15, 1929. Renewed Jan. 22, 1932. 5 Claims. (Cl. 246—134.)

1. In combination, a railway traffic governing device, a second railway traffic governing device, a manually operable lever having a normal and a reverse extreme position and an intermediate position, a second manually operable lever having a normal and a reverse position for controlling said second traffic governing device, an electric

lock which when deenergized arrests at said intermediate position an operation of said first lever from one of its said extreme positions toward the other, a contact controlled by said first lever and arranged to be closed when and only when said first lever occupies said intermediate position, a second contact controlled by said second lever



and arranged to be closed when and only when said second lever occupies one or the other of its normal and reverse positions, a control circuit for said electric lock including said first and second contacts in series, and means controlled by said first lever for controlling said first traffic governing device.

1,880,040. PULP REFINING AND BLEACHING PROCESS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 6, 1927. Serial No. 189,461. 16 Claims. (Cl. 99—2.)

1. A process which comprises subjecting cellulose pulp to a series of distinctly alkaline hypochlorite bleaching treatments, one or more of said treatments commencing at relatively low temperature and gradually increasing during treatment to a final much higher temperature, alkalinity in said bleaching treatments being afforded by the presence of free alkali throughout each bleaching treatment.

1,880,041. STABILIZATION OF CELLULOSE XANTHATE. GEORGE A. RICHTER and PHILIP C. SCHEER, Jr., Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 15, 1928. Serial No. 312,747. 12 Claims. (Cl. 260—100.)

1. An article of manufacture consisting of dehydrated cellulose xanthate treated with water-repellent material.

1,880,042. ACID PROCESS OF FIBER LIBERATION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 26, 1929. Serial No. 402,797. 5 Claims. (Cl. 92—11.)

1. A process which comprises cooking raw cellulosic material short of fiber liberation in an acid sulphite liquor containing at least about 1% combined SO_2 and then completing fiber liberation at lower temperature in a liquor containing substantially only free SO_2.

1,880,043. PRODUCTION OF HIGH GRADE CHEMICAL PULPS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 18, 1929. Serial No. 415,124. 6 Claims. (Cl. 92—9.)

1. A process which comprises treating chipped raw wood with a solution of sulphuric acid to effect reaction more particularly upon the pentosan content of the wood, and then cooking the wood at elevated temperature and under pressure in an alkaline liquor to effect fiber liberation into a pulp of high alpha cellulose content and low solution viscosity.

1,880,044. PROCESS OF ALKALINE FIBER LIBERATION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 28, 1930. Serial No. 432,272. 7 Claims. (Cl. 92—13.)

1. A process which comprises steeping raw cellulosic material at not greater than about room temperature in an alkaline liquor of a strength in excess of 10% caustic soda equivalent until a large proportion of the encrustations of such material has been dissolved, and then cooking the material at elevated temperature and under pressure in an alkaline liquor of much lower strength to complete fiber liberation.

1,880,045. PAPER MANUFACTURE. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 24, 1930. Serial No. 455,456. 18 Claims. (Cl. 92—21.)

1. A paper possessed of stability against ageing in the atmosphere and containing a stable, powdered cellulose, said powdered cellulose being derived from cellulose fiber practically free from non-cellulosic matter such as lignin and resin.

1,880,046. PROCESSING OF CELLULOSE FIBER. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 6, 1930. Serial No. 480,198. 13 Claims. (Cl. 92—9.)

1. A process which comprises digesting cellulose fiber at temperatures above 150° C. in a substantially neutral aqueous liquor containing a buffer against the generation of acids.

1,880,047. PULP REFINING PROCESS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 6, 1930. Serial No. 480,200. 4 Claims. (Cl. 92—13.)

1. A process which comprises digesting a suspension of pre-liberated wood pulp in ammoniated water at elevated temperature until said pulp acquires a high alpha cellulose content.

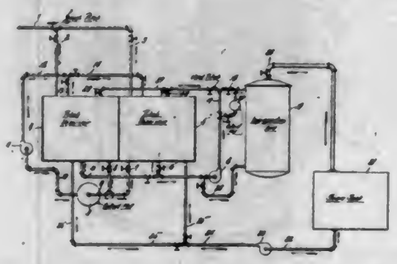
1,880,048. MULTISTAGE PROCESS OF PULPING RAW CELLULOSIC MATERIAL. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 18, 1931. Serial No. 516,843. 6 Claims. (Cl. 92—11.)

1. A process which comprises cooking raw cellulosic material under superatmospheric pressure in substantially only water at a temperature above not less than 125° C., and then cooking in a solution containing sodium sulphite as the main fiber-liberating agent to complete fiber liberation.

1,880,049. PROCESS OF PRODUCING WHITE WOOD PULP FOR HIGH GRADE PAPER MANUFACTURE. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 16, 1931. Serial No. 537,997. 6 Claims. (Cl. 92—9.)

1. A process which comprises treating unbleached, alkaline-cooked wood pulp with an oxidant of the character of chlorine or hypochlorite to react upon ligneous groups in such pulp, digesting the pulp at about 40° to 70° C. in an alkaline liquor containing about 2% to 4% alkali, calculated as caustic soda equivalent, to remove largely ligneous reaction products from such pulp while substantially preserving unchanged the alpha cellulose content of such pulp, and bleaching the digested pulp to whiteness while substantially preserving its physical characteristics.

1,880,050. METHOD OF IMPREGNATING FIBROUS ARTICLES AND MATERIAL THEREFOR. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 25, 1928. Serial No. 308,327. 21 Claims. (Cl. 91—68.)



1. A process of impregnating fibrous substances with molten thermoplastic material having solid or gummy components associated therewith, which comprises reducing such components of the molten material to particles of impalpable fineness, and treating the substances with the molten material.

1,880,051. CONDITIONING OF CELLULOSE FIBER AND THE PRODUCT THEREOF. MILTON O. SCHUR, ROYAL H. RASCH, and BENJAMIN G. HOOS, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 14, 1928. Serial No. 326,150. 15 Claims. (Cl. 260—146.)

1. A process which comprises treating cellulose fiber with an organic solvent of a substance naturally occurring therein, evaporating the solvent from the whole surface of the fiber, and nitrating the fiber.

1,880,052. SHREDDED CELLULOSE PULP ADAPTED FOR NITRATION AND THE PROCESS OF MAKING IT. MILTON O. SCHUR and BENJAMIN G. HOOS, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 21, 1929. Serial No. 394,370. 12 Claims. (Cl. 260—146.)

4. Finely shredded wood pulp of an alpha cellulose content of at least about 94% and having the physical condition resulting from shredding the pulp while wet.

1,880,053. MANUFACTURE OF BENDS FROM STRAIGHT FIBER TUBES. MILTON O. SCHUR and JOHN G. GOSSELINK, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 30, 1930. Serial No. 448,550. 2 Claims. (Cl. 18—56.)



1. A method of bending straight fiber tubes while in a plastic state, which comprises assembling such tubes with normally curved springs in straightened out condition, and permitting the springs to return to their normal curvature and to bend the tubes while they are in plastic state.

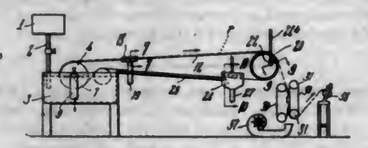
1,880,054. NITROCELLULOSE MANUFACTURE AND CELLULOSE THEREFOR. MILTON O. SCHUR and BENJAMIN G. HOOS, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 20, 1931. Serial No. 531,638. 3 Claims. (Cl. 260—146.)

2. A sheet of interfelted wood fibers of high alpha cellulose content whose thickness lies between .020 inch and .070 inch, and whose compactness in terms of ratio of basis weight to 100 times the thickness in inches lies between 40 and 70.

1,880,055. PREPARATION OF NITROCELLULOSES. MILTON O. SCHUR and BENJAMIN G. HOOS, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 3, 1931. Serial No. 561,002. 2 Claims. (Cl. 260—148.)

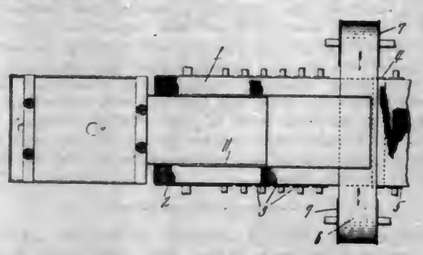
2. In the preparation of nitrocelluloses from sheets of wood pulp, those steps which comprise steeping such sheets in the mixed nitrating acids, draining the acids from the sheets, and drowning the acid-wet sheets in a sufficiently large volume of warm water but at a temperature not in excess of about 45° C. to ensure practically the same temperature throughout the drowned sheets.

1,880,056. MANUFACTURE OF ROVINGS, YARNS, TWINES, AND THE LIKE. JOHN C. SHERMAN, Gorham, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 6, 1930. Serial No. 426,273. 16 Claims. (Cl. 92—39.)



1. A method which comprises progressively depositing directly on a foraminous carrier from an aqueous pulp suspension continuous separate strips of interfelted fibers, removing said strips from said carrier, and rolling said strips as self-sustaining units into strand form while they are in practically the same condition of formation or texture as on the carrier at their removal.

1,880,057. METHOD OF AND MACHINE FOR MAKING PAPER. JOHN C. SHERMAN, Gorham, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 20, 1931. Serial No. 545,711. 10 Claims. (Cl. 92—39.)

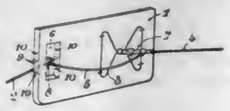


1. In a method of making paper involving the delivery of a continuous stream of pulp suspension to and in the direction of movement of a progressively moving web-forming instrumentality, that step which comprises continuously imparting to the stream immediately before it reaches said instrumentality a component of motion substantially perpendicular to the direction of motion of said instrumentality.

1,880,058. METHOD OF TREATING SOILS. HAROLD P. VANNAH, West Palm Beach, Fla., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 15, 1929. Serial No. 386,229. 2 Claims. (Cl. 71—9.)

2. A process of conditioning soil of the character of the sawgrass soil occurring in the Everglades of Florida for the cultivation of plants therein, which comprises admixing aluminum chloride with loose, free-flowing earth, incorporating zinc and copper sulphates thereinto, and adding the resulting preparation to the soil.

1,880,059. TOWING DEVICE FOR TRAWL NETS. JEAN-BAPTISTE JOSEPH ALPHONSE VIGNERON, La Rochelle, France, assignor to V. D. Limited, London, England. Filed June 12, 1931, Serial No. 543,839, and in France June 26, 1930. 5 Claims. (Cl. 43—9.)



1. A towing device for trawl nets comprising a towing line connected to one of the net wings, an otter board, a tow hawser connected to the boat, means for detachably connecting the tow hawser to the inner face of said board, means situated in the plane and within the area of said board for detachably connecting the towing line to said board, and an intermediate cable portion connecting said towing line with said hawser.

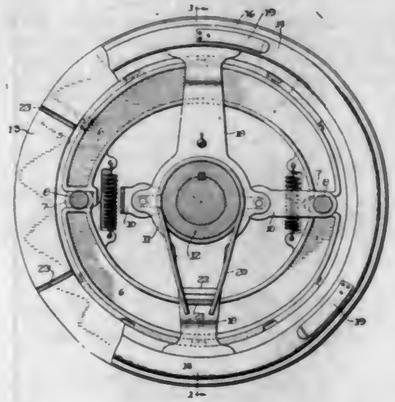
1,880,060. DEEP SEA TELEPHONE, LIFE LINE, AND DIVING CABLE. GEORGE L. WANAMAKER, Ambridge, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,238. 9 Claims. (Cl. 173—264.)



8. A combined life line and telephone cable which is flexible enough for divers' use comprising telephone conductors with associated protecting and insulating material, a life line disposed within said conductors and material and a tubular rubber outer housing encasing all of said parts, said life line affording a backing and support for the telephone conductors, and said conductors, protecting and insulating material and the outer housing, all serving to protect the life line against damage said telephone conductors being relatively smaller and accordingly more flexible than the inner life line and said protecting and insulating material being of very flexible character and being so disposed with respect to the life line and telephone conductors as not to materially impede the bending of the life line.

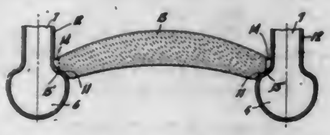
1,880,061. ELECTROMAGNETIC FRICTION DEVICE. ARTHUR P. WARNER, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Original application filed Mar. 5, 1928, Serial No. 259,050. Divided and this application filed Feb. 17, 1930. Serial No. 428,903. 3 Claims. (Cl. 188—140.)

1. In an electromagnetic friction device, the combination of a normally rotatable magnetic ring having a substantially flat friction surface disposed in a plane perpendicular to its rotational axis, a relatively non-rotatable magnetic ring having a friction surface opposing and co-acting with said first mentioned surface, and a magnetic winding carried by one of said rings and adapted when energized to cause gripping engagement of said surfaces, said



rotatable ring having a plurality of grooves formed in its friction surface at annularly spaced points and extending transversely of and entirely across said surface so as to receive particles of material accumulating between said surfaces and to throw such particles off from the rotating ring by centrifugal action.

1,880,062. SIPHON ARCH BRICK. ALFRED H. WILLETT, West Englewood, N. J., assignor to American Arch Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,270. 10 Claims. (Cl. 110—87.)

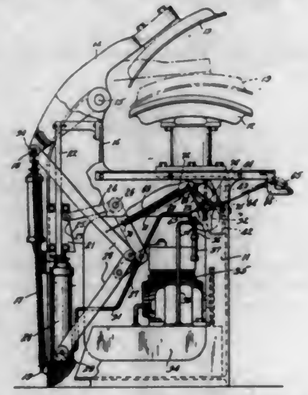


1. An arch brick for siphon equipped locomotive fire boxes adapted to be fitted between and supported by the siphons, said brick having bearing surfaces at each end adapted to engage shouldered portions of said siphons and relatively small positioning lug means at each end of said brick adapted to engage the siphon wall, said lug means being of such size as to be easily reducible to permit of ready adjustment of the brick to different siphon spacings.

1,880,063. TWO-HAND CONTROL FOR PRESSES OR THE LIKE. JOHN ZIMARIK, Akron, Ohio, assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 22, 1929. Serial No. 364,982. 18 Claims. (Cl. 192—131.)

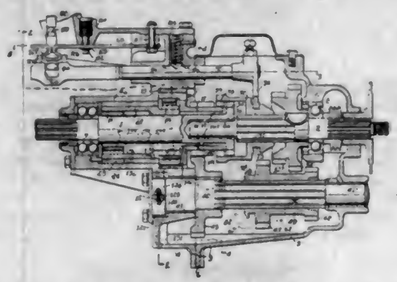
1. The combination with a press and means for actuating the same including a fluid pressure cylinder of a single valve for controlling the supply of fluid under pressure to said cylinder to close the press and the relief of pressure fluid from said cylinder to permit the press to open, a two-hand actuating means for said valve comprising separate rock shafts, each adapted to be rocked in one direction by one hand of an operator to operate the press, said shafts being arranged in line and having bevel gears secured on their adjacent ends, a rotatable sleeve about the rock shafts for operating said valve, bevel gearing on said sleeve meshed with both bevel gears on said rock shafts

whereby operation of the valve can be effected only by simultaneous operation of said rock shafts in said direction, means normally holding the valve closed, means for latching the valve open, connections between the valve and



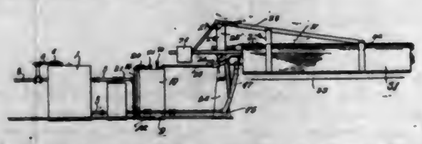
a part of the press to prevent actuation of said latching means until the press is substantially closed, and means on each rock shaft for engaging and releasing the latch by rotation of the rock shaft in the opposite direction.

1,880,064. TRANSMISSION GEARING. CHARLES E. F. AHLM, East Cleveland, Ohio, assignor, by mesne assignments, to Automotive Research Corporation, Warren, Ohio, a Corporation of Delaware. Filed Dec. 9, 1926. Serial No. 153,545. 3 Claims. (Cl. 74—57.)



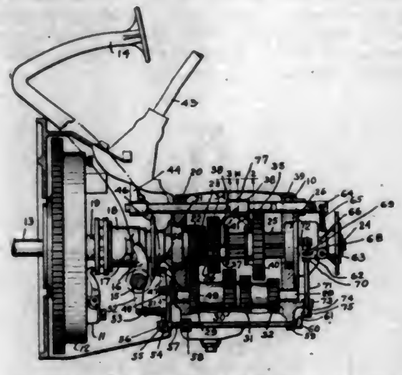
3. In a transmission, a clutch shaft, a transmission shaft in alignment therewith single clutch means to directly clutch said shafts, a countershaft, means including internal gearing and a gear ring eccentrically surrounding the aligned clutch shaft and transmission shaft by which said countershaft is driven from said driving shaft and a variable speed transmission between the countershaft and driven shaft.

1,880,065. COATING APPARATUS. EDMUND P. ARPIN, Jr., Port Edwards, Wis. Filed Sept. 16, 1926. Serial No. 135,729. 5 Claims. (Cl. 91—45.)



1. A device for coating a traveling web of paper with paraffin and the like, comprising a housing positioned above and transversely of the web of paper and having a longitudinal bottom opening the full width of said paper web, an inner casing supported in said housing and spaced therefrom, a plurality of spray blocks within said inner casing, each having a spray orifice and separate conduits for conducting air and a coating liquid to said orifices positioned within said inner casing.

1,880,066. GEAR SHIFTING MECHANISM. WILLIAM BURNETTE BARNES, Auburn, Ind., assignor to Universal Gear Shift Corporation, a Corporation of Delaware. Filed Nov. 6, 1930. Serial No. 493,719. 7 Claims. (Cl. 192—4.)

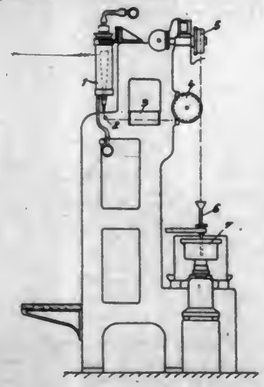


1. In combination with a transmission having gears adapted for shifting in and out of mesh, means for reducing the speed of one gear to reduce the relative difference between its peripheral speed and that of a second gear with which said first gear is to be placed in mesh when the shifting is progressing in one direction, and means to prevent the operation of said first mentioned means when the shifting is progressing in the opposite direction.

1,880,067. MANUFACTURE OF CELLULOSE ACETATE. HENRI LOUIS BARTHÉLEMY, Milan, Italy. Filed Apr. 3, 1930. Serial No. 441,428. 8 Claims. (Cl. 260—101.)

6. In the process of acetylation of cellulose, the steps which comprise carrying out partial acetylations using a catalyst and completing the acetylation with an anti-catalyst added.

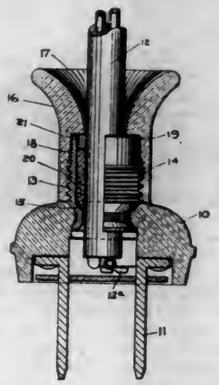
1,880,068. MACHINE FOR SPINNING ARTIFICIAL SILK. GOTTHARD BAURIEDEL and AUGUST HARTMANN, Barmen, Germany, assignors to the Firm: American Bemberg Corporation, New York, N. Y. Filed Sept. 17, 1928, Serial No. 306,518, and in Germany Sept. 21, 1927. 1 Claim. (Cl. 18—8.)



A machine for spinning artificial silk by the cuprammonium stretch-spinning process, comprising a spinning

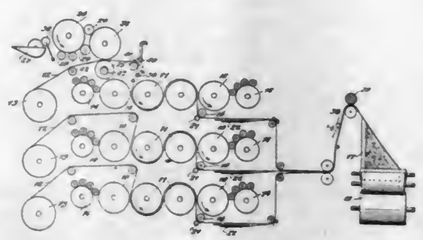
frame having spinning apparatus arranged on one side thereof, a leading and draw-off roller, a leading and stretching roller, and a collecting means associated with said spinning apparatus, and positioned on the side of the said spinning frame opposite to that side where said spinning apparatus is positioned, said two rollers being arranged one above the other in a vertical plane parallel to the length of the said spinning frame, and adapted to rotate in planes perpendicular to one another.

1,880,069. CORD PROTECTOR. BERNARD C. BECKER, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 4, 1927. Serial No. 230,970. 1 Claim. (Cl. 173—322.)



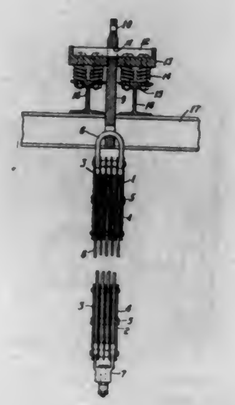
A connecting means for attachment to and protection of an electric conductor comprising a main body portion of insulating material having contact members rigidly mounted thereon, a metal sleeve permanently connected to said body portion and adapted to receive the conductor, a second part of insulating material threaded upon and substantially enclosing said metal sleeve, said sleeve and said second part having annular internal shoulders, and means within said sleeve and controlled by relative movement of said shoulders for grippingly securing said conductor when said second part is screwed on said sleeve.

1,880,070. PRINTING. WILLIAM E. BECKER, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 13, 1929. Serial No. 354,909. 7 Claims. (Cl. 91—16.)



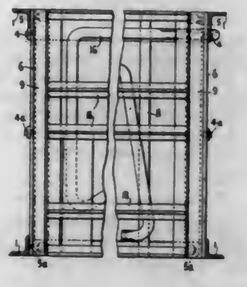
6. In a rotary printing press the combination of a high speed rotary printing couple to perfect a web, a rotary tinting roller engaging the said web and means for applying tinting material to said roller to be transferred thereby to said web.

1,880,071. SUSPENSION APPARATUS FOR WELL DRILLING OPERATIONS. OSCAR BIELER, Pittsburgh, Pa. Filed Aug. 20, 1929. Serial No. 387,137. 5 Claims. (Cl. 254—139.)



1. In a derrick, beams extending across and mounted on said derrick, springs, bolts connecting the springs to the beams, a block extending across the beams and supported on the springs, said block being movably secured to said beams by said bolts and having a recess in its upper surface, a pin positioned in the recess, a link suspended from the pin in the space between the beams and supports, and a tackle block connected to and suspended from the link.

1,880,072. MOUNTING ARRANGEMENT FOR ELECTRICAL APPARATUS. DAVID ADAM CHRISTIAN, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Apr. 14, 1930, Serial No. 444,324, and in Great Britain Apr. 29, 1929. 9 Claims. (Cl. 179—91.)



1. In a mounting arrangement for telephone apparatus and the like, a supporting rack, panels arranged horizontally in said supporting rack for mounting said apparatus, said panels slidable in and out of said supporting rack, means for limiting the sliding movement of said panels, and means for moving said panels to a vertical position with respect to said supporting rack when the panels are at the limit of one of their in and out movements.

1,880,073. DREDGE DISCHARGE CONDUIT. CHARLES H. COLTON, Chicago, Ill., assignor to Great Lakes Dredge & Dock Company, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 23, 1931. Serial No. 582,798. 16 Claims. (Cl. 302—16.)



1. A dredge discharge conduit provided at its discharge extremity with a nozzle section having a plurality of closely spaced openings in its annular wall to cause the contents of the conduit to be discharged in a spray over a relatively large area.

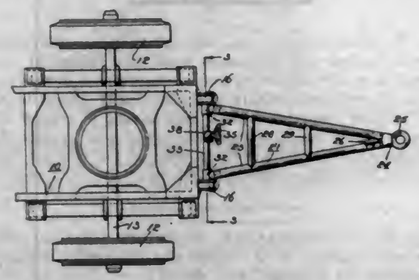
1,880,074. EGG CARTON. JOSEPH L. COYLE, London, Ontario, Canada, assignor to Ephraim Banning, trustee, Chicago, Ill. Filed June 21, 1928. Serial No. 287,089. 5 Claims. (Cl. 229—49.)



1. A carton for eggs and the like in which is comprised a separable collapsible filler having intersecting walls and partitions, interengaging means formed on the walls and partitions adapted to normally prevent collapse of the filler, and a blank enclosing the filler in the form of a wrapper having two of its opposite edges frictionally joined thereto whereby to retain the wrapper in position around the filler.

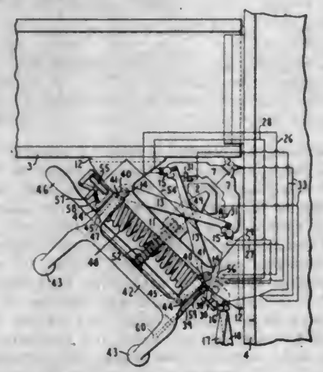
4. Packaging means for eggs comprising, in combination, a cellular filler including upright cross-members, a tubular carton or wrapper adapted to receive the filler and being open at one end, and means for retaining the filler against relative movement lengthwise of the carton in the direction of said end, comprising a bendable tab on a wall of the carton adapted to be thrust in adjacent a cross-member of the filler, at the side of said member toward the end of the carton to serve as a stop.

1,880,075. TUBULAR DRAWBAR FOR TRAILERS. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Mar. 17, 1930. Serial No. 436,355. 5 Claims. (Cl. 280—33.44.)



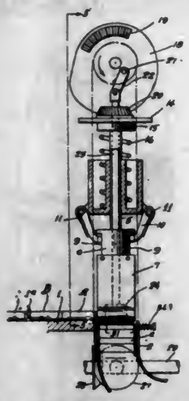
5. In combination with a vehicle having a swivel truck, a draw bar provided with laterally projecting trunnions, the truck having cheeks spaced apart to accommodate said drawbar with its trunnions engaged in sockets in said cheeks, one of the trunnions being axially movable for withdrawal from its socket to permit detachment of the drawbar from the truck, and an operating handle associated with the drawbar adapted to serve for lifting and carrying it and connected to said movable trunnion in a manner to cause its said withdrawal when the weight of the drawbar is supported by said handle.

1,880,076. WELDING APPARATUS. GEORGE M. DEMING, East Orange, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1931. Serial No. 577,284. 11 Claims. (Cl. 113—59.)



1. Apparatus for uniting members by gas welding, comprising welding torches to be disposed between and adapted to bring simultaneously to fusion a surface or surfaces of a joining piece and corresponding surface areas of the members, a frame for holding the torches and joining piece in spaced relationship to the members, means for withdrawing the torches and means for projecting the joining piece against the adjacent surfaces of the members.

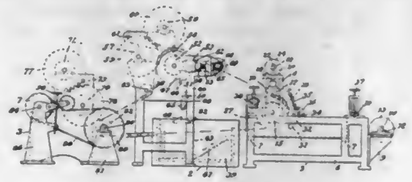
1,880,077. MATCH STACKING MECHANISM. JOHN DILL, Woodside, and ANDREW SHMYROFF, Kew Gardens, N. Y., assignors to Lion Match Co., Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,248. 6 Claims. (Cl. 226—4.)



4. In a stacking machine for match books, a chute, a feed table leading to the inlet end of the chute, a stacker head having a holder movable into and out of position at the end of the table, means to feed match books alternately into the holder and directly into the chute, means to move the holder into and out of such position and to rotate it through approximately 180 degrees while out of

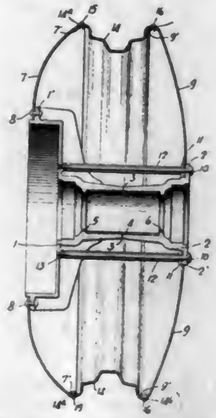
such position for the purpose of reversing the book supported by such holder, and means to discharge the book from the holder into the chute after such book has been reversed.

1,880,078. APPARATUS FOR COATING. WILLIAM J. EISNER, Newark, N. J., assignor to Newark Paraffine & Parchment Paper Co., Newark, N. J., a Corporation of New Jersey. Filed Sept. 11, 1931. Serial No. 562,362. 1 Claim. (Cl. 91—33.)



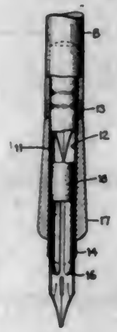
An apparatus for coating a strip of material comprising means for applying a coating substance to the strip, means for applying water to the coated strip to set the coating, means for wiping water from the coated strip, a series of rollers for engagement by the strip after being wiped and guiding the strip to a point of delivery, and scrapers engaging certain of said rollers for removing water deposited thereon by said strip, each scraper consisting of a trough extending longitudinally of a roller, heads closing ends of the trough and having arms extending transversely of the trough and pivotally mounted near their ends to mount the trough for swinging movement towards and away from the roller, the trough being open along its side facing the roller and the heads having their inner faces formed with grooves, a blade extending longitudinally in said trough with its ends seated in said grooves, said blade having a side edge portion projecting outwardly through the open side of said trough and sharpened to form a scraping edge, springs engaged with said arms to yieldably resist movement of a trough away from the roller and retain the scraping edge of the blade in close contact with the roller, and a drain leading from said trough.

1,880,079. AEROPLANE WHEEL. MURRY N. FAIRBANK, Cold Spring Harbor, N. Y. Filed July 2, 1931. Serial No. 548,324. 4 Claims. (Cl. 29—87.)



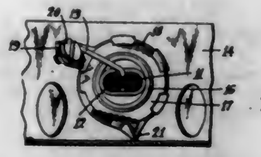
1. The method of assembling a metallic disc wheel which involves the use of a pair of centrally apertured metallic discs, a tire rim, and a hub formed of two longitudinal sections, which method consists of attaching one of said discs to said inner hub, attaching said tire rim to the other disc and making use of interior and exterior access in effecting such attachment, bringing said rim adjacent said inner disc, reaching through the aperture in said outer disc to obtain interior access to the casing, effecting an interior and exterior attachment of said rim to said inner disc, and subsequently passing said outer hub section through the aperture of said outer disc and connecting said outer hub section thereto and to said inner hub section.

1,880,080. PENHOLDER. LEONARD C. FELSER, Montclair, N. J., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,545. 3 Claims. (Cl. 120—08.)



1. In an article of the character described, a grip portion including a shell of resilient material constructed to provide pen gripping portions within the shell and a tubular receptacle for holding an extra supply of pens, a partition member inserted within the tubular member and forming the bottom of the receptacle, and a shaft constructed to engage a portion of the shell and form a removable closure for the receptacle.

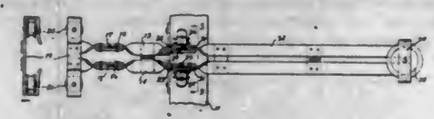
1,880,081. GROUND CLAMP FOR OUTLET AND SWITCH BOXES. OTTO A. FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 26, 1929. Serial No. 335,162. 4 Claims. (Cl. 247—1.)



1. In combination, a box for an electrical distribution system having an open side and fixed walls of cable clamping means carried by one of the walls, a ground wire connecting element within and electrically joined to said box by said clamping means and having a ground wire binding screw faced toward the open side of said box, and means cooperating with a wall of the box for insuring the retention of the binding screw in such position.

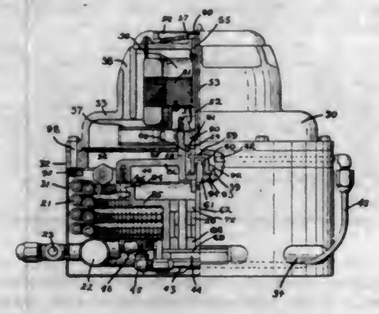
1,880,082. CLOTHESLINE SUPPORT. BJARNE FRIDHOLM, Brooklyn, N. Y. Filed Mar. 15, 1932. Serial No. 598,923. 4 Claims. (Cl. 68—8.)

1. A support for aerial clothes-lines or ropes, comprising in combination, a carrier to be fastened outside at a window-frame or wall and reaching to the outside space in front of the window-opening, a longer arm hingedly connected to parts at the end of the said carrier and adapted to be swung through the window-opening partly into the interior of a room, or to be swung back towards the open space outside of the window-opening, a reversal-pulley for the clothes-line or rope arranged at the free swinging end of the arm, a shorter arm extending from



the aforesaid end of the carrier in the direction opposite to the parts carrying the longer arm, a pair of guide-pulleys for the clothes-line or rope at the end of the said short arm, and a pair of intermediary guide-pulleys for the clothes-line or rope close to the hinges carrying the said swingable longer arm.

1,880,083. REFRIGERATING APPARATUS. ROBERT M. GETCHELL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 30, 1928. Serial No. 296,363. 10 Claims. (Cl. 62—115.)



1. A refrigerating apparatus comprising a vertical casing, a motor and compressor in said casing, a condenser in said casing, a plate located between said motor and compressor adapted to direct air flow in said casing, and a fan driven by said motor adjacent said plate for driving air upwardly through said casing.

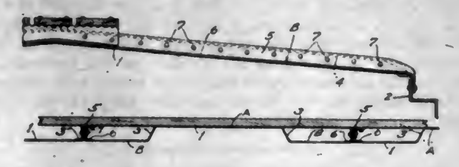
1,880,084. SPINNING OR TWISTING DEVICE. GEORGE H. GILLIGAN, Providence, R. I., assignor to U. S. Ring Traveler Company, a Corporation of Rhode Island. Filed Dec. 10, 1931. Serial No. 580,061. 6 Claims. (Cl. 118—61.)



4. A traveler for spinning and twisting rings, having a shank, a foot at one end thereof, and a head at the other end thereof, said head having a nose directed towards said shank.

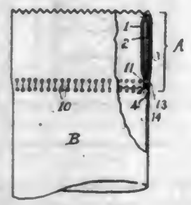
1,880,085. CAR ROOF. GARTH G. GILPIN, Riverside, Ill., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1931. Serial No. 527,983. 10 Claims. (Cl. 108—5.4.)

1. A car roof comprising roof sheets having upstanding flanges along their side margins rigidly secured together, each sheet having its longitudinal middle portion at one level and its side portions at a different level, the



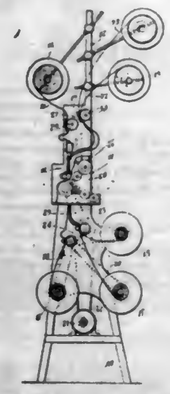
cross-sectional area of the middle portion of a sheet being substantially equal to the cross-sectional area of the two side portions thereof.

1,880,086. STOCKING. WILLIAM H. GOSCH, Reading, Pa., assignor to The Nolde and Horst Company, Reading, Pa., a Corporation of Pennsylvania. Filed Aug. 4, 1931. Serial No. 555,015. 4 Claims. (Cl. 66—173.)



1. An extensible stocking having a finished-edge top portion, and an adjacent body portion formed with a row of enlarged openings below said top portion, said top portion being turned down and secured to said body portion by a removable thread extending through said top portion and the openings in the body portion.

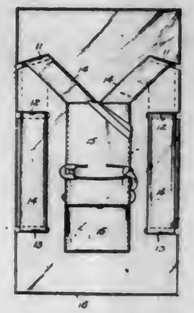
1,880,087. PRINTING MACHINE FOR CINEMATOGRAPH FILMS. PAUL J. GUERIN, Los Angeles, Calif., assignor, by mesne assignments, to Mack Sennett Color Film Co., Ltd., Los Angeles, Calif., a Corporation of California. Filed May 9, 1930. Serial No. 451,012. 5 Claims. (Cl. 95—75.)



1. The combination with a machine for handling cinematograph films, including a light aperture with which the frame of images on the films must register, a film gate therefor for holding the films against the face of the aperture, and driving means for feeding the films past the

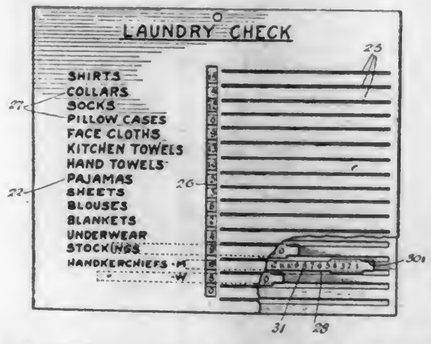
aperture, having a part thereof arranged to engage a portion of the films having a predetermined relation to the position of the images on the films, of a film having a perforation therein having a predetermined relation to the film portion to be engaged by the driving means, an aligning pin adjacent the aperture having such relation to the driving means that insertion thereof in the perforation insures the accurate positioning of an image with respect to the aperture, and means operable upon closing said gate for removing the pin from the perforations.

1,880,088. SHOW CARD. VICTOR GUINZBURG, New York, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed Feb. 26, 1931. Serial No. 518,442. 2 Claims. (Cl. 206—78.)



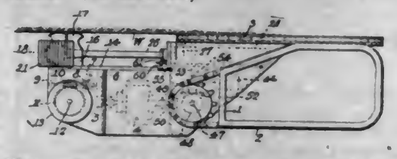
1. In combination a display card comprising a rectangular member provided along opposite sides with corresponding groups of slots, the slots adjacent one end of the card being cut at inclinations directed from the sides towards the adjacent end and a sanitary belt displayed on said card comprising front and back tabs depending from waist embracing bands attached at their ends to the tabs, the latter being arranged on the face of the card and the bands diverging from the tabs over the front of the card to enter the inclined slots to the back of the card and thereafter being disposed along the sides, emerging to the front again through the first group of slots and then to the back through the second group of slots.

1,880,089. INDICATING DEVICE. MAX HEIDECORN, Mount Vernon, and CHARLES J. MILLER, Bronx, N. Y. Filed May 11, 1932. Serial No. 610,548. 2 Claims. (Cl. 116—135.)



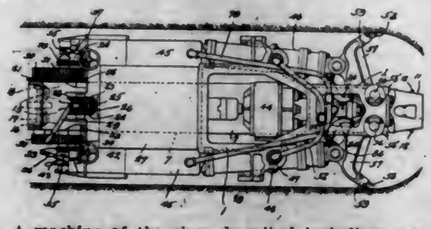
1. An indicator including a base having longitudinal slots therein, a front plate spaced from said base and also having longitudinal slots adjacent the slots in said base, said front plate also having an opening contiguous to the slots therein and extending transversely thereof, indicia on said plate substantially opposite said slots, and a plurality of slides disposed in the space between said base and plate and each having guide flanges engageable in adjacent slots in said base, each slide being provided with indicia visible through said opening and with a fingerpiece projecting through a slot in said plate.

1,880,090. MINING MACHINE. CHARLES R. HUGHES, Altoona, Pa. Filed Apr. 18, 1931. Serial No. 531,207. 6 Claims. (Cl. 262—30.)



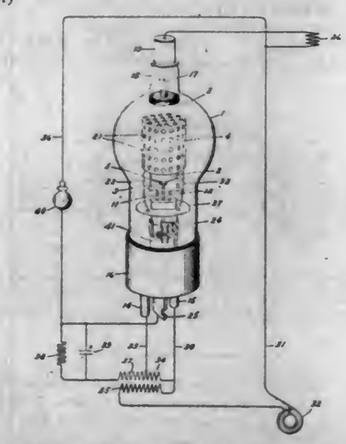
1. The combination with a structure movably mounted, and a track thereon, of a jack movably engaged by said track structure, and fluid operated means for successively expanding and collapsing the jack to anchor and release it, for advancing the structure and track relative to the expanded jack, and for advancing the collapsed jack along the track.

1,880,091. MINING MACHINE. CHARLES R. HUGHES, Altoona, Pa. Filed Sept. 11, 1931. Serial No. 562,396. 12 Claims. (Cl. 262—5.)



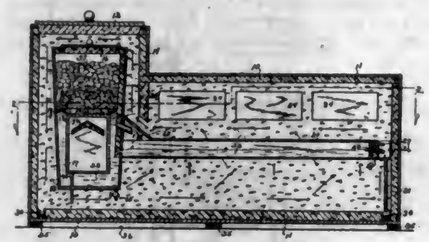
1. A machine of the class described including opposed digging jaws, means for swinging the jaws forwardly toward each other and rearwardly from each other, and means operated by the rearward movement of the jaws for advancing the machine.

1,880,092. ELECTRON DISCHARGE DEVICE. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 10, 1928. Serial No. 268,975. 6 Claims. (Cl. 250—27.5.)



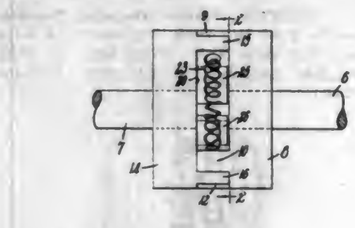
1. An electrical discharge device comprising a receptacle, a charge of gas contained therein at a sufficiently high pressure to cause the discharge therethrough to have arc-like characteristics, an anode, a cathode, and a cup-shaped perforated control electrode closely surrounding said cathode.

1,880,093. LIQUID AND AIR CIRCULATING REFRIGERATOR. CHARLES H. HUSTON, Allerton, Iowa. Filed Apr. 6, 1931. Serial No. 527,889. 5 Claims. (Cl. 62—31.)



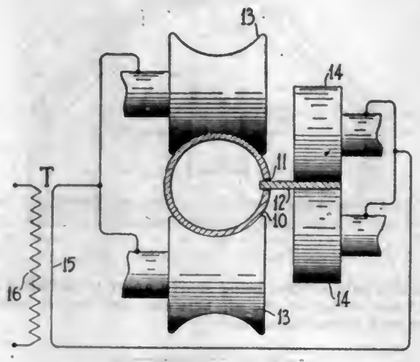
1. In a device of the class described, a housing, a vertical tank inside said housing having some of its sides spaced from the inner sides of said housing, a compartment inside said tank, a door communicating with the inside of said compartment, a second tank inside said housing and having some of its sides spaced apart from the inner sides of said housing, a pipe having one of its ends communicating with the inside of said first mentioned tank and its other end communicating with the inside of the second tank, a compartment above said second tank, a door communicating with the inside of said last mentioned compartment, an outlet pipe communicating with the inside of said second tank, and insulating material embracing a portion of each of said tanks for encouraging the circulating of air inside said housing.

1,880,094. SHAFT COUPLING. HERBERT O. JACOBSON, Everett, Mass. Filed Mar. 3, 1932. Serial No. 596,485. 16 Claims. (Cl. 64—30.)



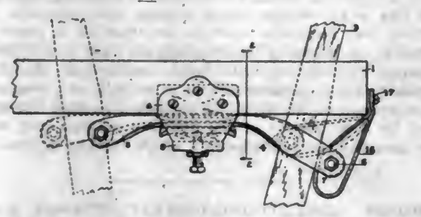
1. A shaft coupling having, in combination, a driving member and a driven member, lugs on the adjacent ends of each of said members projecting into the spaces between the lugs of the other of said members, a spring interposed between two of said lugs, means to lock said members against the movement of said last-named lugs away from each other by said spring, and means to return said locking means to its normal position and unlock said members to allow said lugs to move away from each other when said members are prevented from rotating.

1,880,095. METHOD OF MAKING TUBULAR ARTICLES. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1929. Serial No. 381,765. 4 Claims. (Cl. 219—10.)



1. The method of making hollow reinforced tubular articles which consists in bending a strip of metal into tubular form with the edges thereof spaced apart, then inserting a metal strip into the space between said spaced apart edges and extending outwardly therefrom and pressing the edges of the tubular member in firm contact with the strip, and passing electric welding current in parallel circuits through a portion of the strip extending radially outwardly of the tube and the joints between the spaced apart edges and the metal strip.

1,880,096. PICKER STICK CHECK. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine. Filed Sept. 29, 1931. Serial No. 565,771. 4 Claims. (Cl. 139—165.)

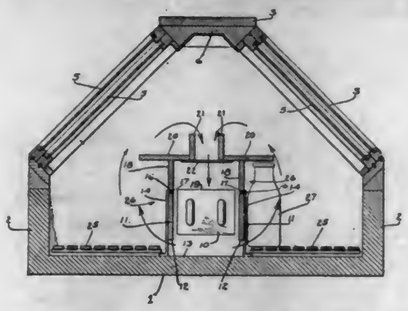


1. A picker stick check for looms comprising a loop member having flexible side runs of oblong cross section between which runs the picker stick oscillates, the picker stick engaging and moving the loop member in opposite directions as it alternately picks and checks the shuttle, a friction exerting guide for each side run of the loop member, each guide including opposed friction members having parallel contiguous surfaces engaging opposite sides of the respective run, said surfaces being inclined downwardly and outwardly away from the plane of the picker stick, and means for urging said friction members together.

1,880,097. REFRIGERATING DEVICE. CHARLES E. LONG, Minneapolis, Minn., assignor of one-half to Puffer-Hubbard Mfg. Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 30, 1929. Serial No. 396,334. 7 Claims. (Cl. 62—89.5.)

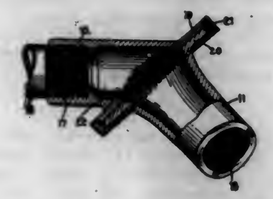
1. A device of the class described including a refrigerating chamber, a refrigerating unit, a pair of baffles arranged vertically one at each opposite side of the unit, and

having their lower ends spaced from the bottom of the chamber, said baffles extending above said refrigerating unit, and each having a shelf which partly overlies said



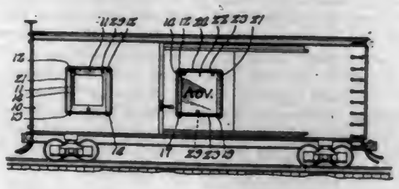
unit, the said shelves being spaced apart to permit downward circulation of the air between said shelves and toward said refrigerating unit.

1,880,098. SWIVEL CONNECTER FITTING FOR CONDUITS AND THE LIKE. JOHN E. MAIR, Mars, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed July 1, 1930. Serial No. 465,173. 2 Claims. (Cl. 247—31.)



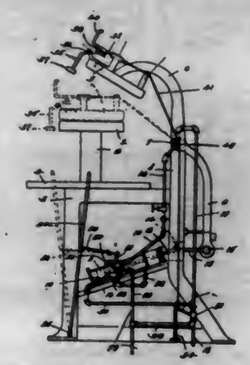
1. A connecter fitting for connecting conduits, cables and the like in an electric wiring system, said connecter comprising two elements abutting together in a plane disposed at an angle to the longitudinal axis of the opening through each fitting, said fitting walls being flared out laterally upon opposite lateral sides only of a transverse cross-section of the fitting to provide a circular configuration for the interior of the abutting fittings, and means for securing the two elements of the fitting together.

1,880,099. ADVERTISING DISPLAY. HARRY V. MARSH, Chicago, Ill. Filed May 14, 1931. Serial No. 537,281. 1 Claim. (Cl. 40—156.)



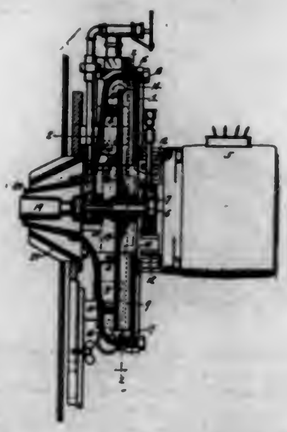
In combination, a box car, a sign holder on said car, and a sign in said holder, said holder comprising a back of an area greater than the area of said sign, and having lips at the edge thereof, certain of said lip members having extensions depending over the face of a sign therein and other lips not extending over such sign, and strap members extending from end to end of said sign and cooperating with said latter mentioned lips to prevent displacement of said sign normal to said back.

1,880,100. PRESSING MACHINE. TIMOTHY B. MCCARTHY, Syracuse, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc., a Corporation of New York. Filed Apr. 4, 1924, Serial No. 704,136. Renewed July 8, 1930. 13 Claims. (Cl. 192—133.)



1. In a pressing machine, the combination of coacting pressing element, one of which is movable toward and from the other, means for actuating the movable element comprising a cylinder, a piston movable in the cylinder, and connections between the piston and the movable element, a manually operable valve for controlling the flow of motive fluid to and from the cylinder, a supplementary exhaust conduit leading from the active end of the cylinder and the side of the piston receiving the pressure of the motive fluid during closing of the press, and a valve in the supplementary exhaust conduit, a normally stationary guard carried by the movable element, and arranged to be moved by an obstruction in the path of the guard during closing of the press, and connections between the guard and said valve to open the same, when the guard encounters an obstruction.

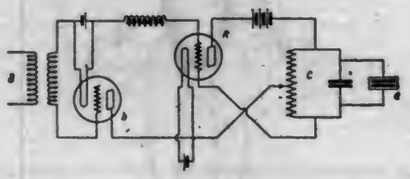
1,880,101. BLOWER. HARRY MEACHEM, Teaneck, N. J., assignor to Todd Dry Dock, Engineering & Repair Corporation, Brooklyn, N. Y. Filed Sept. 25, 1930, Serial No. 484,358. Renewed June 29, 1932. 4 Claims. (Cl. 230—132.)



1. The combination with a blower having a casing and an impeller therein, of a series of guide members disposed annularly within the casing, beyond the radius of the impeller, to turn the radially directed flowing fluid into a

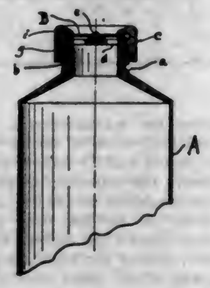
rearwardly directed whirling column, said guide members being partially spiral in form and wedge shaped at both ends with their entering edges lying parallel with the forward wall of the casing, and their delivery edges lying parallel with the peripheral wall of the casing.

1,880,102. LIGHT CONTROL ARRANGEMENT. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Filed July 2, 1926, Serial No. 120,069, and in Germany Aug. 18, 1925. 2 Claims. (Cl. 250—1.)



1. An arrangement for controlling light beams passing through a Kerr cell and its associated optical system which comprises a vacuum tube oscillator having a portion of its oscillatory circuit shunted by the Kerr cell, a modulator tube having its input circuit connected with a source of signal energy and its output circuit forming a part of the oscillatory circuit of said oscillator tube, and means provided by said connection of said modulator and oscillator tubes for causing a modulation of said high frequency energy whereby high frequency energy is supplied to said Kerr cell and the light passing therethrough is given a high frequency variation whose amplitude is modulated by incoming low frequency signal energy pulses.

1,880,103. CLOSURE OR CAP FOR COLLAPSIBLE TUBES. CHARLES P. MURDOCH, Lansdale, Pa. Filed Oct. 16, 1931. Serial No. 569,325. 5 Claims. (Cl. 221—60.)



1. The combination of a receptacle having a tubular neck, a conical valve member positioned within and adjacent to the open end of said neck, a substantially planular resilient disc having an aperture through which said member normally extends, and means to secure the marginal portion of said disc to said neck.

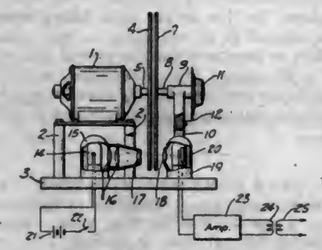
1,880,104. PROPELLER. JOHN A. PINAUD, Atlantic Highlands, N. J. Filed Nov. 1, 1930. Serial No. 492,716. 13 Claims. (Cl. 170—163.)

1. In a propeller for aircraft and the like, a supporting member for rotation about a main axis, a blade member for rotation about its own axis, said blade member being journaled on said supporting member, positive abutting shoulders between said members to engage when said blade member rotates above a predetermined speed and a compressible, rolling anti-friction type bearing holding said shoul-



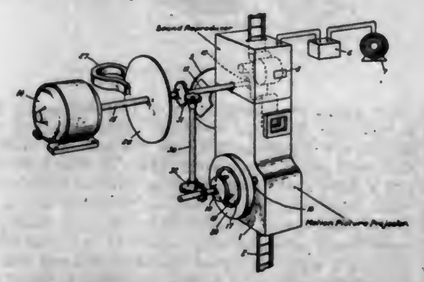
ders spaced under said predetermined speed and compressible to allow said shoulders to engage above said predetermined speed.

1,880,105. OSCILLATION GENERATION APPARATUS. HARRY REIFEL, Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1930. Serial No. 492,438. 4 Claims. (Cl. 250—41.5.)



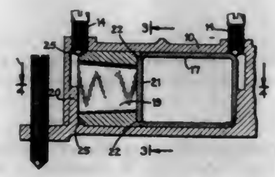
1. Oscillation generation apparatus comprising, a source of light rays, photosensitive means under control of said light rays, mechanical means for interrupting said light rays at a definite predetermined frequency, other mechanical means for interrupting said light rays at any one of several predetermined discrete frequencies, and manually operated mechanical means for rendering only a selected one of said last mentioned frequencies effective.

1,880,106. FILM DRIVE. LEWIS T. ROBINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 4, 1927. Serial No. 224,017. 3 Claims. (Cl. 88—16.2.)



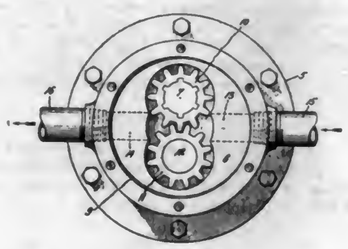
1. In combination, a sound reproducer and a motion picture projector through which a film having sound and picture records thereon is adapted to be passed in series, mechanism in the sound reproducer for moving the film uniformly, mechanism in the projector for moving the film intermittently, a single driving motor connected with both of said mechanisms and means for preventing vibrations incident to the intermittent film moving mechanism from being transmitted through said drive connections to the uniform film moving mechanism comprising a yielding member interposed in the connection with the projector and a flywheel between said yielding member and the projector.

1,880,107. FITTING AND REDUCER ADAPTER THEREFOR. OSCAR E. ROSEMAN, Pittsburgh, Pa., assignor to National Products Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1931. Serial No. 540,639. 5 Claims. (Cl. 247—25.)



1. A reducer for the socket of a fitting comprising a filler block shaped to fit the space in the socket to one side of a duct of relatively smaller lateral dimension when said duct is introduced into said socket, said filler block including a flange portion which is adapted to project over and bush the lateral end of the duct which is adjacent the filler block.

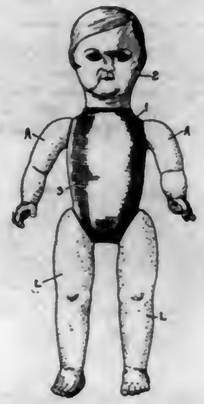
1,880,108. GEAR PUMP AND THE LIKE. AUBREY A. ROSS, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 4, 1929. Serial No. 337,316. 6 Claims. (Cl. 103—126.)



1. In a pump, the combination of an outer casing having suction and discharge openings, an inner casing having suction and discharge openings, the openings registering with each other respectively, gears in said inner casing, and a drive shaft which projects into the inner casing and upon which the inner casing is pivotally supported, said gears being driven by said shaft, the inner casing being eccentrically arranged with respect to the outer casing and defining a small clearance therewith whereby the discharge pressure may react in said clearance to move said inner casing to seal the suction inlet therein to the suction opening in said outer casing.

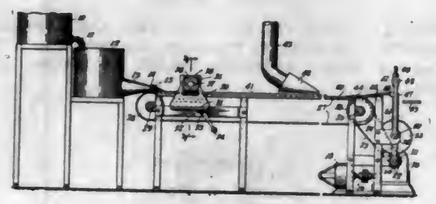
1,880,109. DOLL. MAURICE SANDERS, Brooklyn, N. Y., assignor to Ideal Novelty & Toy Co., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,676. 7 Claims. (Cl. 46—40.)

1. In a doll, a limb therefor comprising a substantially stiff core-forming limb stump attached to the body of the doll, and a full limb-length hollow flexible external limb part open at its body end mounted on the core-forming stump and forming a skin-like sheath therefor substantially coterminous with the body end of the latter and also forming a hollow empty flexible limb extension beyond the



outer end of the core formed by the said limb stump which forms the means for attaching the said full limb-length external limb part to the doll body.

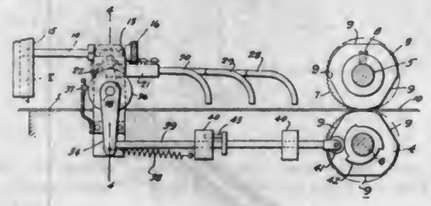
1,880,110. MACHINE AND METHOD FOR MANUFACTURING ARTICLES FROM VISCOUS SUBSTANCES. DAVID H. SHAPIRO, New York, N. Y. Filed Feb. 21, 1929. Serial No. 341,811. 14 Claims. (Cl. 18—15.)



9. In a machine for manufacturing articles of waxy material, the combination with means for rendering the material plastic and a rigidly supported horizontal conveyor belt to receive the material, of means to drive said belt continuously, combined means for shaping and separating the material on the belt into uniform strips of given cross-section, means for cooling and hardening the strips on the belt, means for separating the strips from the belt at the end of its upper run, a blade to receive the strip from said separating means, means for moving said blade reciprocatingly, a fixed shear combined with said blade, a movable shear co-operative with said fixed shear, and means for actuating the movable shear reciprocatively in unison with said blade to cut the strips into predetermined lengths.

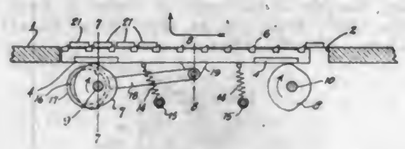
1,880,111. MATCH MAKING MACHINE. ANDREW SHMYROFF, Kew Gardens, JOHN DILL, Woodside, and EDWARD VAN HOOFSTADT, Brooklyn, N. Y., assignors to Lion Match Co., Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,256. 11 Claims. (Cl. 271—2.6.)

1. In a book match making machine, means for intermittently feeding a strip of stock along a predetermined path in the direction of positioning fingers hereinafter defined, said means being constituted to slightly overfeed the stock and to release the stock between successive periods of feeding, a member mounted to oscillate and positioned along the path of the stock beyond the feeding means, a plurality of positioning fingers carried by said member with their ends arranged in tandem and extending from the oscillating member in the direction of the



feeding means, means for oscillating said member to move the fingers into and out of engagement with the strip and to shift them in the direction of the feeding means while in engagement with the strip, said means for oscillating said member being operatively connected to the means for intermittently feeding the stock to cause the fingers to engage with the stock during non-feeding periods for the purpose of longitudinally adjusting the stock in a retrograde direction.

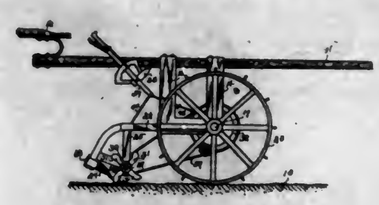
1,880,112. TRANSPORTING MECHANISM FOR BOOK MATCH MAKING MACHINES. ANDREW SHMYROFF, Kew Gardens, JOHN DILL, Woodside, and EDWARD VAN HOOFSTADT, Brooklyn, N. Y., assignors to Lion Match Co. Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,257. 2 Claims. (Cl. 198—218.)



1. In a match making machine, a horizontal table having a smooth flat upper surface along which a succession of match books is adapted to slide with edgewise rectilinear movement, said table having therein a plurality of longitudinal slots, racks operable in said slots in the table and having spaced apart fingers adapted to extend between successive books on the table, wear plates positioned below the table connecting the several racks together for conjoint movement, shafts extending transversely below the table and carrying theron cams on which the wear plates bear, means for holding the wear plates in engagement with the cams, an eccentric on one of said shafts, and a pitman connecting the eccentric to the several racks whereby the rotation of the shafts effects a raising and lowering of the racks into and out of engagement with the match books and simultaneously cause the operation of the eccentric to reciprocate the racks.

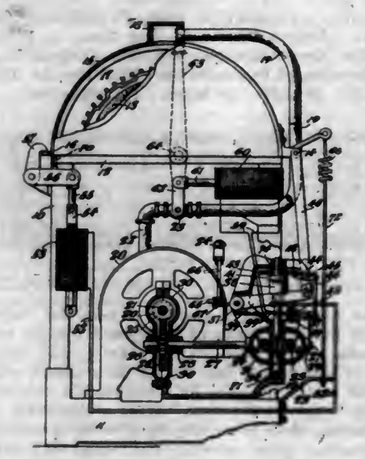
1,880,113. FIELD CONDITIONING MACHINE. CLINTON D. SMITH, Russell, Iowa. Filed Apr. 7, 1930. Serial No. 442,201. 3 Claims. (Cl. 97—40.)

1. In a device of the class described, a frame, a traction wheel rotatably mounted on said frame, a shaft rotatably mounted on said frame, a means for operatively connecting said shaft to said traction wheel, a plurality of spaced apart hubs on said shaft, a plurality of radially extending pulverizing blades on each of said hubs, and a plurality of forwardly extending curved plows cutting



paths directly below said shaft and secured to said frame and in close proximity to the pulverizing blades on each of said hubs respectively; said plows so curved as to move soil in a single direction and into the blades to which they are respectively adjacent.

1,880,114. TIMING MECHANISM FOR DRIERS, SCORCHERS, AND FORMERS. FRANK SMITH, Oak Lane, and WAYNE M. BARKER, Philadelphia, Pa. Filed Sept. 23, 1930. Serial No. 483,812. 11 Claims. (Cl. 34—16.)

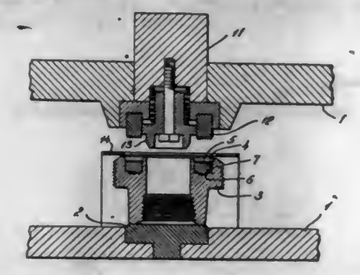


1. A matrix drier comprising a heating element, a spring pressed hinged cover enclosing said heating element, a vacuum pump for creating fluid pressure for holding a matrix firmly against the inner face of said cover, a latch for normally maintaining said cover closed, a valve for governing the fluid pressure supply, timing mechanism mechanically connected with said vacuum pump means operatively connecting said timing mechanism with said valve, and independent means operatively connecting said timing mechanism with said latch for its disengagement.

1,880,115. METHOD FOR MAKING PIPE COUPLINGS. SAMUEL N. SMITH and JAMES F. BEMIS, New York, N. Y., assignors to United States Union Corporation, a Corporation of Delaware. Filed July 12, 1930. Serial No. 467,417. 3 Claims. (Cl. 29—148.)

1. The method of making the female member of a pipe coupling which comprises forming an annular channel in the face of the socket having serrations in its bottom, forming an annular gasket with corresponding serrations

on one face, placing the gasket within the channel with the serrations in registry, the gasket making a relatively loose fit with the side walls of the channel, and then ex-

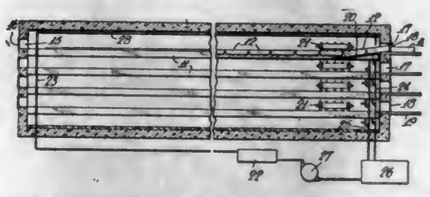


panding the gasket within the channel under pressure and simultaneously forming serrations in the outer face of the gasket.

1,880,116. EXPLOSIVE COMPOSITION. RICHARD H. STRATTON, Berkeley, Calif., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,916. 8 Claims. (Cl. 52—5.)

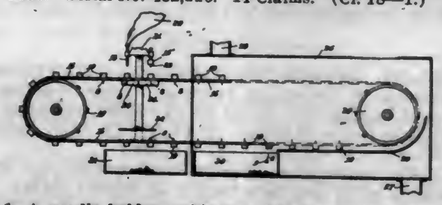
1. A dynamite containing almond hull pulp as a combustible ingredient.

1,880,117. APPARATUS FOR FREEZING COMESTIBLES. HENRY TORRANCE, New York, N. Y., assignor to The Carbondale Machine Co., Carbondale, Pa., a Corporation of Pennsylvania. Filed Feb. 14, 1929. Serial No. 339,834. 2 Claims. (Cl. 62—104.)



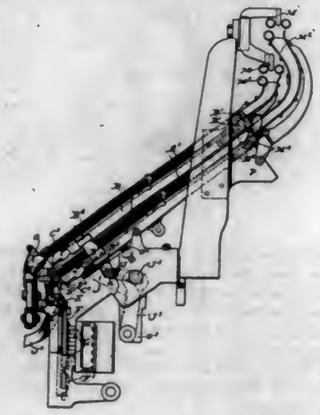
1. An apparatus for freezing comestibles including a chamber having a series of superposed troughs extending lengthwise thereof, said chamber having inlet openings in one wall adjacent to one end of each trough and outlet openings in the opposite wall adjacent to the other end of each trough, each trough having a stationary inclined wall leading from below the liquid level upwardly to the corresponding outlet opening, and means for forcing containers from each trough along said inclined wall and through said outlet opening.

1,880,118. CANDLE HOLDER MACHINE AND PROCESS. ROBERT S. ALLYN, Brooklyn, N. Y., assignor, by direct and mesne assignments, of one-half to Cypress Novelty Corporation, Brooklyn, N. Y., a Corporation of New York, and one-half to N. D. Q. Specialty Corporation, a Corporation of New York. Filed Feb. 28, 1930. Serial No. 432,116. 14 Claims. (Cl. 18—1.)



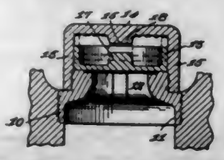
1. A candle holder making machine comprising two die elements one having a passage for the stem of a wire form and the other shaped to fit inside the helix of the form and means for injecting plastic material into the space between the dies.

1,880,119. TYPOGRAPHICAL COMPOSING AND DISTRIBUTING MACHINE. HAROLD A. BURT, St. Albans, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,592. 20 Claims. (Cl. 199—20.)



1. In a typographical composing machine, the combination of a plurality of matrix magazines, each provided with matrix releasing escapements and movably mounted so that any selected magazine may be brought into operative position, escapement actuating devices, and automatic means for increasing or diminishing the range of action of the escapement actuating devices according to the magazine selected.

1,880,120. PUMP VALVE. LEE L. CARSON, Whittier, Calif., assignor of one-fourth to George T. Dunn, San Diego, Calif. Filed Aug. 11, 1930. Serial No. 474,586. 1 Claim. (Cl. 251—128.)

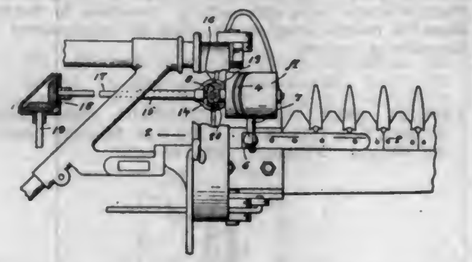


A valve comprising an annular fitting having an opening through the center thereof and provided at its top side with a seat, a cage having an annulus engaging the fitting and surrounding said seat and arms rising from said annulus, the cage having a disk at the upper ends of the arms and said disk having a stop portion at its center and under side, a cup valve member fitting snugly between the arms and having a flat under surface adapted to engage said seat and provided at its center with the stop portion adapted to engage the stop portion of the disk, the diameter of the disk being less than the external diameter of the cup valve member and greater than the internal diameter thereof whereby part of the upper surface of the valve member remains uncovered by the peripheral portion of the disk when the stop portions are in contact with each other.

1,880,121. MOWING MACHINE. GLENN A. CHADBOURNE, Chadborn, Mont. Filed Nov. 17, 1930. Serial No. 496,260. 2 Claims. (Cl. 56—262.)

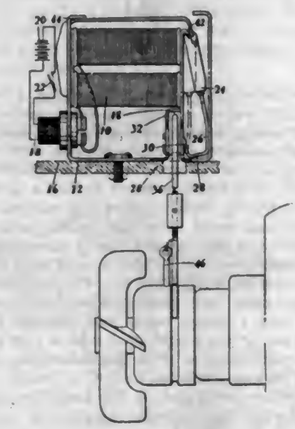
1. In a mowing machine, a rotary drum having a diagonally disposed annular groove therein, a ring fitted in

the groove for oscillatory movement on the rotation of the drum, a cutter bar mounted for reciprocation adjacent to said drum, an arm extending from the ring and having



ball and socket connection with said cutter bar, and a driving element connected with the drum for rotating the same.

1,880,122. FUSE-SETTING DEVICE FOR AIRCRAFT BOMBS. GEOFFREY HASLEWOOD COOKE, London, England, assignor to Handley Page Limited, Cricklewood, England, a British Company. Filed Mar. 31, 1932, Serial No. 602,353, and in Great Britain Apr. 9, 1931. 14 Claims. (Cl. 244—1.)



12. In a bomb fuse setting device of the kind referred to, in combination, a fusing-loop-detaining member movable into loop-detaining position by electromagnetic means, and resilient means for returning said member to normal position upon de-energization of the electromagnetic means, said member being provided with an upwardly-directed element adapted to retain the loop after such de-energization.

1,880,123. ARTICULATED SEMITRAILER CONSTRUCTION. DURREL H. DAVIS and ELMER F. HATHORN, Edgerton, Wis., assignors to Highway Trailer Company, Edgerton, Wis., a Corporation. Filed June 4, 1931. Serial No. 542,165. 2 Claims. (Cl. 280—33.1.)



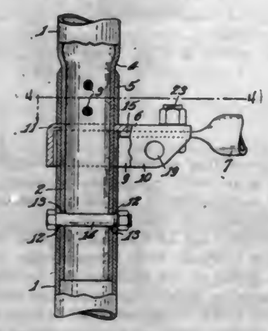
1. In a vehicular train, the combination of a plurality of semi-trailers having certain of their ends in contiguous relation, each comprising a main frame, a subframe support intermediate the contiguous ends of the trailer and arranged below the plane of the main frames in such position as to dispose the said main frames in the same horizontal plane to bring each semi-trailer into tracking relation with the remaining semi-trailers of the train, and a rocking split fifth wheel connection between the vehicles, one part thereof being mounted on the end of the subframe and the other part being carried in spaced relation to the front end of the connecting vehicle.

1,880,124. NUT LOCK. GEORGE ELWERT, Barren Hill, Pa. Filed Apr. 17, 1929. Serial No. 355,876. 1 Claim. (Cl. 151—2.)



In a nut lock, a bolt having a threaded shank, a lock washer on the shank and means to prevent the washer from rotating relative to the shank, a nut engaged on the threaded end of the shank in contact with one face of the lock washer and provided with a radial flange, said radial flange and the margin of the lock washer having radial notches being unequal in number, so that when the nut is adjusted home against one face of the washer it is possible to insure registration of the notches, a spring band engaging about the peripheries of the washer and the flange of the nut, said spring band having separable ends with means formed on the ends cooperating with certain registering notches of the margin of the lock washer and the flange, one of said separable ends of the band being bent upon itself, and a portion beyond the bend being turned outwardly and laterally and provided with an opening for the reception of a tool for the purpose of removing the band, interengaging means for connecting the separable ends in certain of said registering notches, said band having a tongue diametrically opposite said separable ends for engaging over part of the flange at a point between certain of the notches of the flange, said tongue and the interengaging means of the separable ends acting to prevent axial sliding movement of the band.

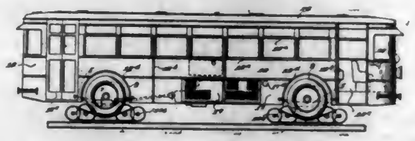
1,880,125. ELEVATOR TOWER AND THE LIKE. WYLIE B. EWING, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Feb. 18, 1931. Serial No. 516,599. 3 Claims. (Cl. 189—19.)



1. A tower of the character described comprising upright sectional columns having a rectangular arrangement, each section consisting of a length of tubing having its integral lower end reduced and telescopically received within

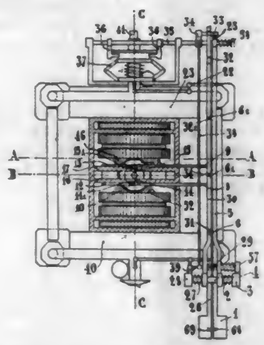
the upper end of the next lower length, a collar fixed upon said reduced end in spaced relation to the extremity of the latter, a bracket interposed between and abutted on opposite sides of said collar and said upper end of the next lower length, each bracket including angularly related horizontal arms having flanges disposed at a right angle to the general plane of said bracket, horizontally extending tie rods connecting the horizontally alined arms of adjacent columns, and crossed struts connecting diagonally related brackets of adjacent columns.

1,880,126. RAILWAY ROLLING STOCK AND ROAD VEHICLE CONSTRUCTION. FRANK R. FAGEOL, Oakland, Calif., assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Apr. 19, 1928. Serial No. 271,301. 41 Claims. (Cl. 105—159.)



1. A rail car comprising a frame, a plurality of axles arranged beneath said frame and resiliently connected thereto, mechanism to detachably connect a pair of road wheels to shafts secured to each of said axles, power means mounted on said frame and operatively connected to certain of said shafts, mechanism to brake certain of said shafts at the will of the operator of the car, a truck embodying a plurality of pairs of rail wheels arranged beneath each axle, and means operatively connecting said shafts and a plurality of said rail wheels whereby said rail wheels are controlled from said shafts.

1,880,127. SELF-PROPELLING VEHICLE. RAPHAEL FORNAIRE, Murols, France. Filed Apr. 14, 1930, Serial No. 444,244, and in France Apr. 18, 1929. 4 Claims. (Cl. 74—34.)



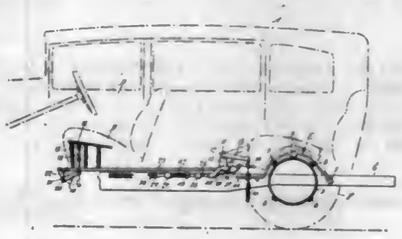
1. A self-propelling vehicle provided with a universal transmission gear which comprises in combination a main engine and a compensating engine independent from each other and rotating in reverse directions; a centrifugal governor providing for an automatic speed change of each engine; a twin epicyclic train transmission gear connected to the drive shafts of the engines, the driving sun wheels of the transmission gear being stationary while the driven sun wheels are movable and adapted to rotate in the same direction; a change-speed gear consisting of a bevel planetary train each sun wheel of which rotates in reverse direction to the other and becomes responsive to the engines to which it is connected by suitable shifting members; and planet wheels adapted to either run idle in bevel ball bearings when the rotational speeds of the planetary gears are equal or rotate about their own axes and progress circularly through a gradual and continually progressive quantity, the planetary gears in their rotations being differentially responsive to the engines the rotational speeds of which are progressively or degressively variable.

1,880,128. SELF INKING FOUNTAIN PEN. FRANK FUREDY, New York, N. Y. Filed Apr. 14, 1932. Serial No. 605,229. 2 Claims. (Cl. 120—42.)



1. An improved fountain pen comprising a barrel adapted to contain water, a feeder member mounted in said barrel and having a bore extending longitudinally therethrough communicating at its inner end with the interior of the barrel and at its outer end being exposed outwardly of the barrel, said feeder member having a slot in its side wall communicating with the bore and opening outwardly, a pen point associated with said feeder member and extending about the slot thereof, and a cartridge removably and frictionally inserted in the bore of said feeder member, said cartridge comprising an outer metallic case having an inner open end communicating with the water in the barrel and a closed outer end exposed through the outer open end of the barrel, said case having a perforated side wall communicating with the slot of the feeder member, an ink making material in said cartridge, and a hook upon the outer closed end of the cartridge case exposed for withdrawing the cartridge axially out of the feeder member.

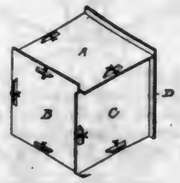
1,880,129. AUTOMATIC SAFETY WHEEL LOCK FOR VEHICLES. CHARLES GATTIE, New York, N. Y. Filed Mar. 28, 1932. Serial No. 601,645. 9 Claims. (Cl. 188—109.)



8. In a vehicle having a driver's seat and a door for gaining access thereto, the combination of a safety wheel locking device for said vehicle including means normally urged to a position to lock the wheel against rotation,

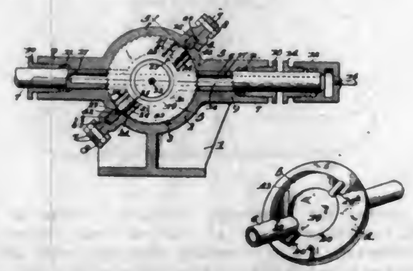
means operable by the weight of the driver for retracting and holding said locking means retracted, means operable by said vehicle door when closed for holding said first means retracted independently of the weight operated means.

1,880,130. PUZZLE. FRITZ GOLDBACH, Marysburg, Saskatchewan, Canada. Filed July 2, 1930, Serial No. 465,356, and in Canada July 3, 1929. 2 Claims. (Cl. 273—156.)



2. A puzzle of the knock-down type composed of a plurality of parts, certain of said parts being provided with slots only; certain of said parts being provided with tongues only; certain of said parts being provided with slots and tongues; certain of said parts being provided with slots and a single tongue; certain of said parts being provided with tongues and a single slot, said slots being adapted to receive said tongues to provide an interlocking of said parts to form pre-determined designs and indicia imprinted on certain of said parts in a pre-determined manner relative to each other according to the subject matter of the indicia.

1,880,131. ROTARY ENGINE. DAVID A. GRAY, Chattanooga, Tenn. Filed Sept. 4, 1930. Serial No. 479,770. 8 Claims. (Cl. 121—69.)



3. An engine comprising a casing having a globular working chamber, a shaft supported by the casing having a ball situated medially of the chamber, a piston plate fitting the chamber, being carried by the shaft and revoluble in the chamber by force of pressure fluid exerted thereagainst to rotate the shaft, said plate having diametrically opposite recesses, abutment means carried by the casing and extending into the chamber to bear on the ball, said means being situated obliquely to the shaft, and sealing joints connecting the plate with the abutment means comprising knuckles fitted in the recesses and studs connecting the knuckles with the abutment means to cause the latter to rotate.

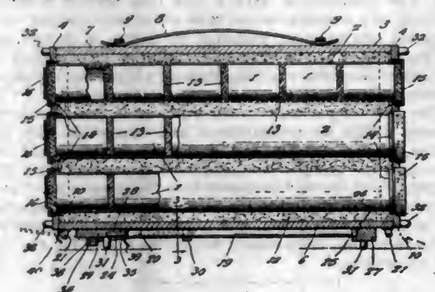
1,880,132. SHIPPING BASKET COVER FASTENER. WILLIS W. HARGROVES, Jr., Portsmouth, Va., assignor to Planters Manufacturing Co., Inc., Portsmouth, Va., a Corporation of Virginia. Filed July 2, 1931. Serial No. 548,425. 1 Claim. (Cl. 292—253.)

A fastener for a receptacle having a reinforcing hoop at the top of said receptacle, said fastener comprising a substantially U-shaped length of wire having an open and a closed end, said open end being driven through the side of said receptacle and said reinforcing hoop, one of said ends being bent upwardly on the inside of said receptacle and adapted to extend through an opening in the cover therefor and then bent downwardly over the rim



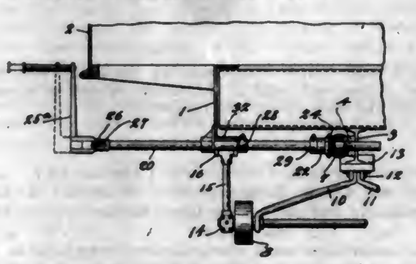
of said cover, the other of said ends being bent upwardly on the outside of said receptacle, the open end of said fastener passing through the closed end thereof and the said open end being then bent to positively engage said closed end.

1,880,133. CARRIER. LOUIS W. HASSENSALL, Toledo, Ohio. Filed Oct. 9, 1929. Serial No. 398,545. 4 Claims. (Cl. 312—36.)



1. A device of the character described comprising a housing having opposed walls formed with openings, tubes extending through said housing with their ends received in said openings, packing of heat insulating material in said housing about said tubes, discs of heat insulating material to fit snugly in said tubes between containers disposed therein, and removable closures for the ends of said tubes.

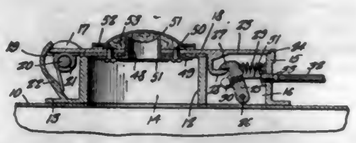
1,880,134. ADJUSTABLE SHAFT LIFT. ELMER F. HATHORN, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis. Filed June 16, 1931, Serial No. 544,905. 2 Claims. (Cl. 280—33.1.)



2. A device of the character described, comprising instrumentalities for moving the usual movable support for a trailer chassis into operative and inoperative positions,

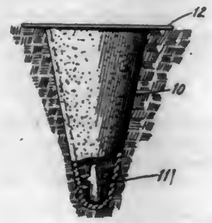
the said instrumentalities comprising a shaft operatively carrying the movable supporting member and adapted to move the supporting member therealong upon rotation of the shaft, a second shaft extending transversely of the chassis and provided with a sleeve enclosing a portion of the shaft, an operating handle for the shaft, a gear secured to the sleeve and intermeshing with a corresponding gear on the first mentioned shaft, the said sleeve being provided with releasable means adapted to engage the shaft and to rotate the sleeve and gear with the shaft, the said means when released permitting the shaft to slide through the sleeve for adjusting the position of the shaft laterally relatively to the chassis for adjustably positioning the handle to accommodate bodies of different widths mounted on the chassis.

1,880,135. AUTOMATIC LOCKING GAS TANK COVER. CHARLES W. HEATH, Sioux City, Iowa. Filed Mar. 10, 1930. Serial No. 434,775. 2 Claims. (Cl. 70—90.)



1. The combination with a fuel tank having a filling opening, of a housing on the tank about said opening with a walled compartment projected therefrom, a closure cap for the housing and pivoted to the housing, an extension on the cap to overhang the compartment for closing the same, a keeper formed at the underside of the extension to lie within the compartment when said cap is closed, a latch pivoted within the compartment and engageable with the keeper, springs located within the compartment and active upon the latch to normally hold it engaged with the keeper, a pull element projected into the compartment and connected with the latch for retracting the latter against the action of the spring, and a flange about the housing and wall of the compartment to provide a seat for the cap and extension.

1,880,136. SEED HOLDER. EUGENE H. HICKOK, Le Roy, Minn. Filed Oct. 10, 1930. Serial No. 487,842. 3 Claims. (Cl. 47—37.)



1. A seed holder comprising an elongated receptacle open at one end, and a flat flange extending outward around the open end of the receptacle.

1,880,137. SPRING CUSHIONED UPHOLSTERY. JOHN HILTON, Dublin County, Ireland. Filed Oct. 8, 1930, Serial No. 487,248, and in Great Britain Oct. 16, 1929. 1 Claim. (Cl. 155—179.)

In combination with spring cushioned upholstery embodying a base support shaped to the contour of the finished upholstery, a series of separate thin and flexible and tempered steel laths with springs of equal lengths on one side of same and springs of equal lengths on the other side of same, said laths being arranged separately with their outstanding springs and adapted to form a series with their springs following the aforesaid contours of said furniture and being thereby adapted to



form any desired contour, opposite anchoring parts arranged and secured on said furniture at opposite ends of the desired contours, the opposite ends of said laths being anchored to said opposite anchoring parts.

1,880,138. ARRANGEMENT FOR PERFORMING MECHANICAL WORKS. FRANZ HÜBL, Warnsdorf, Czechoslovakia. Filed Mar. 13, 1930, Serial No. 435,668, and in Austria Mar. 13, 1929. 4 Claims. (Cl. 212—38.)

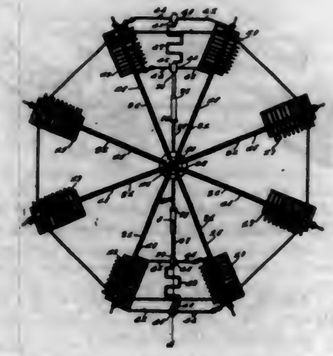


1. Device for performing mechanical works of any kind, comprising a body, at least two arms (upper arm and forearm), a link connecting these arms with one another and a second link for pivotally mounting both arms together on the upper body of the device, power driving means for the two arms and two steering devices for the power driving means, one of which by displacement from its normal position steering the turning of both arms together on the body of the device, the other by displacement from its normal position steering the turning of the forearm about the link, connecting the forearm with the upper arm.

1,880,139. AMUSEMENT DEVICE. EVERETT R. HUMM, Weatherford, Okla. Filed Dec. 22, 1930. Serial No. 504,127. 2 Claims. (Cl. 272—33.)

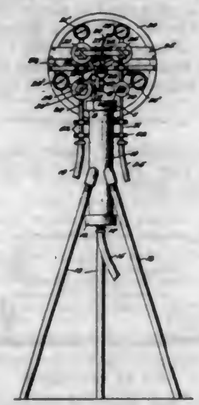
1. In an amusement device, a vertically supported standard, arms extending radially from the standard and having their inner ends connected for movement about the standard, seats swingingly supported at the outer ends of the arms, braces for said arms, horizontal shafts extending outwardly from the standard, a stationary ring gear mounted upon the standard, pinions secured to the shafts and engaging the gear, bearings for the outer ends of the shafts spaced parallel bearing supporting bars secured to the seat supporting means and having spaced

depressions in their upper edges, lugs carried by the bearings for removable engagement within the depressions to adjustably support the outer ends of the shafts, and



crank arms at the outer ends of the shafts in advance of certain of the seats, whereby the shafts may be rotated to operate the device.

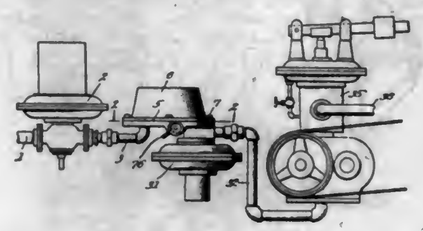
1,880,140. APPARATUS FOR MIXING GASES. ALEXANDER F. JENKINS, Baltimore, Md. Filed Oct. 11, 1929. Serial No. 399,006. 5 Claims. (Cl. 48—180.)



1. A gas mixing unit comprising in combination, a mixing chamber, two conduits for gases of different properties leading to said chamber, an individually adjustable pressure regulator in each conduit, and an additional pressure regulator in each conduit, each such additional pressure regulator being individually adjustable and both additional regulators being interconnected for simultaneous adjustment, for the purpose set forth.

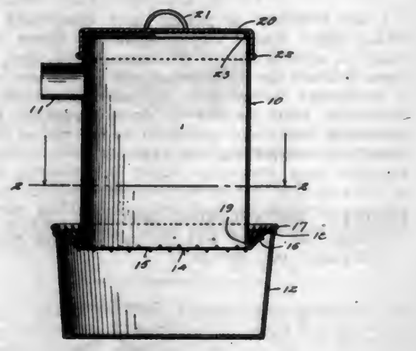
1,880,141. AIR AND GAS MIXING DEVICE. WILLIAM WALLACE KEMP and WILLIAM H. VAN HORN, Baltimore, Md., assignors to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed June 23, 1930. Serial No. 463,205. 11 Claims. (Cl. 48—184.)

1. In an air and gas mixing device, the combination of a mixing chamber comprising a base having independent air and gas inlets and a mixture outlet formed therein, a conduit depending from the base of the mixing chamber and communicating with the mixture outlet, a valve seat supported within the mixing chamber and provided with two series of ports, which series communicate, respectively, with the air and gas inlets, an apertured slide valve cooperating with said seat, a rock shaft within the mixing chamber having two arms positioned at op-



posite sides of the valve seat and connected to the valve, a diaphragm chamber communicating with the lower end of said conduit, a diaphragm in th diaphragm chamber, connections between the diaphragm and said rock shaft, whereby the valve will be actuated by movement of the diaphragm to shift the valve and vary the amounts of gas and air admitted to the mixing chamber, and a pump having its inlet connected with said outlet conduit.

1,880,142. INCINERATOR. EDWARD KLINGBEIL, Chicago, Ill. Filed Apr. 16, 1931. Serial No. 530,663. 8 Claims. (Cl. 126—224.)

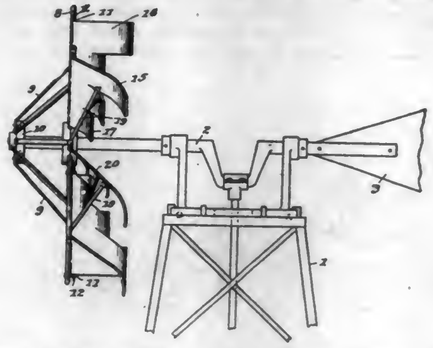


1. An incinerator of the character described comprising a cylindrical burner having open upper and lower end portions, an outlet pipe connected to the burner member adjacent the upper end thereof, an open top ash receiver disposed beneath the burner and having a diameter greater than the diameter of the burner, and a grate member mounted on the upper end of the ash receiver and engaging the lower end of the burner, said grate comprising a flat central portion and an inverted frustro-conical outer edge engaging the upper edge of said ash receiver.

1,880,143. WIND-WHEEL. LARS LARUM, McCabe, Mont. Filed July 14, 1930. Serial No. 467,941. 2 Claims. (Cl. 170—79.)

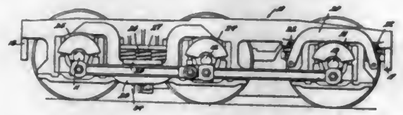
1. A wind wheel comprising a hub, radial arms mounted thereon, blades pivotally carried on said arms, a stop rod projecting laterally from each of said arms with its inner end rigidly fixed to the arm and its outer end free and adapted to abut the blade on the preceding arm, and

coil spring members, each having one end secured to one of said stop rods intermediate the ends thereof and having its opposite end secured to the preceding blade to



normally retain the latter in yielding contact with the free end of said stop rod, as and for the purposes described.

1,880,144. AUXILIARY PROPULSION UNIT. JOHN A. MCGREW, Albany, N. Y. Filed Nov. 14, 1930. Serial No. 495,772. 10 Claims. (Cl. 105—48.)



1. An auxiliary propulsion unit comprising a truck frame, three spaced axles, equalizing levers extending from one outside axle to the intermediate axle, a motor frame beneath the truck frame and having one end thereof positioned intermediate the equalizing levers, and a transverse beam having its ends supported from the equalizing levers and connected to the end of the motor frame, for supporting the same.

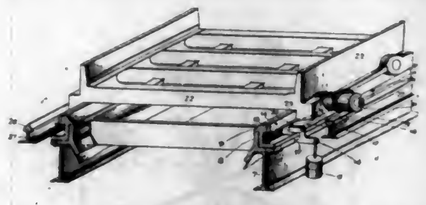
1,880,145. TOP-SPINNING HANDLE. PAUL MELYAN, Chicago, Ill. Filed May 23, 1932. Serial No. 613,045. 3 Claims. (Cl. 46—32.)



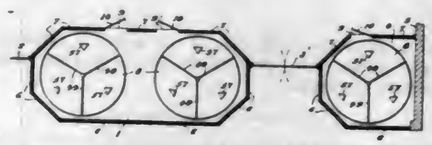
1. A top spinning handle comprising a pair of sections hingedly connected together, each of said sections having a recess provided therein on its inner side, and said recesses cooperating with each other to provide in the handle a top spindle-receiving opening adapted selectively to receive one at a time top spindles of varying diameters.

1,880,146. ORE SINTERING MACHINE. DAVID NIVEN MORISON, Carrington, Newcastle, New South Wales, Australia. Filed Jan. 20, 1931, Serial No. 509,979, and in Australia Jan. 20, 1930. 8 Claims. (Cl. 266—21.)

1. In an ore sintering machine, a wind box, a pallet rail at each side of the wind box, a slider guide at each side of the wind box, a wheeled pallet mounted to travel on said pallet rails and having inverts slidably engaging said slider guides, and means providing for lateral adjustment of at least one of said slider guides to maintain a close sliding engagement of the slider guides with the inverts.

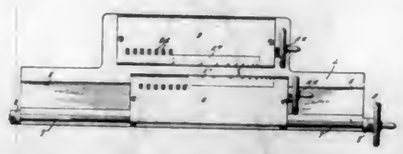


1,880,147. SHOW WINDOW. WILLIAM H. MULLINS, South Boston, Va. Filed Sept. 8, 1930. Serial No. 480,539. 15 Claims. (Cl. 20—40.4.)



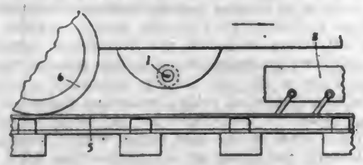
1. A show window for a building having inner and outer walls of transparent material whereby contents of the window may be viewed from within and outside the building, a turntable in said window rotatably mounted, means below the turntable for imparting rotary motion thereto, a display device rotatably mounted and projecting upwardly from the turntable, and means to rotate said display device as the turntable rotates.

1,880,148. CALCULATOR. TERUO NARAHARA, Setagaya, Japan. Filed July 29, 1929. Serial No. 381,913. 1 Claim. (Cl. 235—80.)



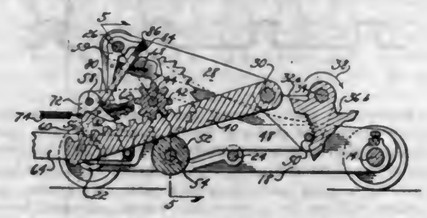
A device of the class described comprising a base having a longitudinally extending dovetail groove therein, a stationary housing on the base, a dovetail slide in the groove, a movable housing thereon, a threaded shaft journaled to the base and passing through threaded openings in the movable housing whereby turning movement of the shaft will cause longitudinal movement of the slide and housing, a cylinder rotatably arranged in each housing and having one end projecting therefrom, said housings being arranged side by side in parallel relation to each other, a handle on said end, a spiral rib on each cylinder, a needle supported for sliding movement in each housing and having its inner end engaging the rib, each housing having a slot therein through which the needle projects, a scale on the housing cooperating with the needle, a drum having numerals thereon attached to the cylinder, other drums having numerals thereon rotatably mounted on the cylinder, each housing having windows therein through which the numerals on the drums are visible and gearing connecting the drums together whereby each drum will be rotated ten times while the preceding drum is making a complete revolution.

1,880,149. SYSTEM OF RAILWAY CONTROL AND SIGNALING. JOHN NEALE, St. John's Wood, London, England. Filed May 29, 1929, Serial No. 366,995, and in Great Britain May 31, 1928. 7 Claims. (Cl. 246—29.)



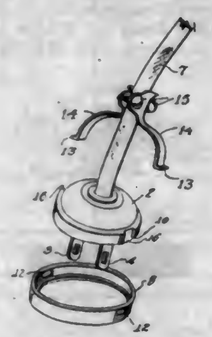
1. In a railway control and signaling system the combination with train stopping means, of a light-sensitive unit, said light-sensitive unit consisting of a light-sensitive cell and a source of light, light interrupting means, a relay circuit in which said light-sensitive cell is included, time control means controlling said relay circuit, signaling mechanism controlled by said relay circuit, control means arranged at predetermined distances apart along a track, the passage of a vehicle past one of said control points serving to actuate the control means at another point for a limited time only, and control means on said vehicle adapted to be actuated by the control means at the second mentioned point.

1,880,150. LIFTING JACK. LEONARD D. NILSON, Wayzata, Minn. Filed Apr. 20, 1931. Serial No. 531,467. 20 Claims. (Cl. 254—6.)



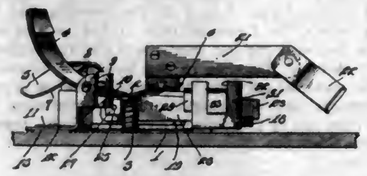
1. In a lifting jack, a frame, a lifting arm having one end pivoted thereto, a pinion journalled on said frame at a point spaced from the pivotal connection of the lifting arm thereto, a rack bar having one end pivoted to the other end of the lifting arm and meshing with said pinion, means for rotating said pinion and a lifting head carried by said other end of said lifting arm.

1,880,151. ELECTRICAL CONNECTING DEVICE. JOHANN G. PETERSON, West Hartford, Conn. Filed July 13, 1925. Serial No. 43,123. 31 Claims. (Cl. 173—322.)



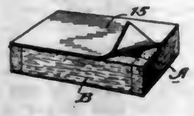
1. A strain relieving device for electric plugs having cable connections comprising a plug receiving member having plug seating means thereon engageable upon relative longitudinal movement with a plug and also having pivot forming means thereon, and cooperating connecting means for said member and plug disposable around a plug and connectable to a cable and having portions pivotally connected to said pivot forming means on said seating member.

1,880,152. FOOT CONTROL FOR MOTOR CARS. HENRY J. RIES, Iowa City, Iowa. Filed Feb. 26, 1930. Serial No. 431,505. 9 Claims. (Cl. 74—81.)



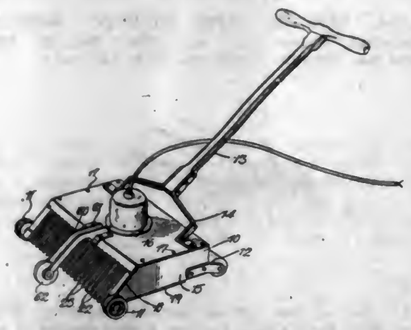
1. A foot control comprising a rocker engageable with an element to be moved, a member having means engaging the rocker to rock it and so move said element, pivot means on which said member is loosely pivoted both for turning and canting to one side, a rack in respect to which said member is turnable, and a pair of dogs carried by the member in offset relationship, engaging the rack to cant the member in respect to the pivot means and require a lifting force to disengage the dogs from the rack for an adjustment of the member.

1,880,153. SOUND INSULATING AND VIBRATION DAMPENING STRUCTURAL UNIT. SIEGFRIED ROSENZWEIG, New York, N. Y. Filed Mar. 19, 1931. Serial No. 523,879. 15 Claims. (Cl. 20—4.)



1. A construction unit of the character described comprising a plurality of sound insulating and vibration dampening members disposed in side to side relation to form a plate, and means for binding said members together comprising a coating of elastic adhesive material disposed over exposed faces of said members.

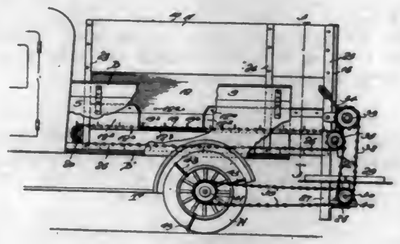
1,880,154. LAWN MOWER. SEBASTIANO ROTONDO and ANTHONY ROTONDO, Brooklyn, N. Y. Filed Feb. 25, 1931. Serial No. 518,196. 2 Claims. (Cl. 56—25.)



1. A mowing device of the class described comprising a substantially rectangular shaped housing including sides, an end member, a top member, a forwardly and downwardly sloping front member and a bottom member ex-

tending rearwardly from the lower edge of the front member to a point spaced forwardly from the lower edge of the rear member, said front member and the front part of the bottom member having vertically arranged slots therein spaced apart, the slots in the bottom member forming continuations of the slots in the front member, roller means connected to the housing for supporting the same in spaced relation from the ground, an arm connected to the central part of the top portion of the housing and extending forwardly and downwardly, a roller at the forward end of said arm for contacting the ground, cutting means located in the forward part of the housing and located slightly above the front portion of the bottom member whereby the said cutting means will cut the material extending through the slots in the front and bottom members, the material entering the housing passing rearwardly therethrough and dropping through the opening formed by the rear end of the bottom member and the lower edge of the rear member.

1,880,155. CINDER SPREADER. WILLIAM CHESTER RUTH, Gap, Pa. Filed Aug. 26, 1931. Serial No. 559,541. 9 Claims. (Cl. 275—8.)



1. In combination with a truck whose body is open at its rear end; a hopper resting in said body, a spreader receptively related with said hopper, a spreader-driving sprocket, and means holding said hopper, spreader and sprocket assembled into a bodily-movable unit, said sprocket of said unit being rearwardly spaced from a rear wheel of the truck; a second sprocket rotatable unitarily with said wheel, and a chain trained around said sprockets, whereby said chain will exert a forward pull on said unit and may alone hold the latter against rearward sliding, said unit engaging the side walls of said body to prevent lateral shifting of said unit and having a portion abutting the front wall of said body to prohibit forward sliding of said unit.

1,880,156. ELECTRIC WIRE CONDUIT. ROBERT C. SCHEMMEL, Union City, Ind. Filed Feb. 21, 1931. Serial No. 517,597. 8 Claims. (Cl. 247—40.)

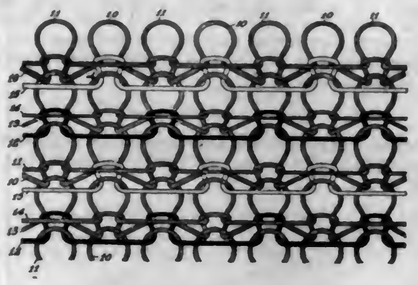


1. An electric wire conduit including a fabric folded upon itself to form a base portion, a bead formed in said base portion containing an electric wire, and another bead formed on said base portion and devoid of electric wire having its top surface extended higher above the base portion than said wire containing bead.

1,880,157. PROCESS OF MANUFACTURING POROUS REFRACTORY ARTICLES. IVAR SETTERBERG, Stockholm, Sweden. Filed Dec. 3, 1931, Serial No. 578,850, and in Sweden Oct. 15, 1931. 1 Claim. (Cl. 25—156.)

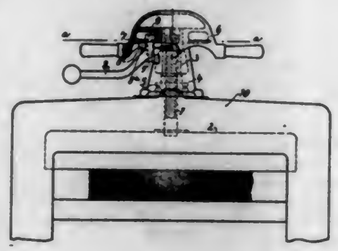
The process of making porous refractory articles, which comprises producing an intimate plastic mixture of non-setting refractory material, gas developing material and water, allowing gas development to take place in the plastic mixture while in the cold state to produce a substantially uniform distribution of voids throughout the mass thereof, molding bodies of the porous plastic mass, impregnating the surface layer of the said bodies with a binding agent while leaving the cores of the bodies free from binding agent, drying the impregnated bodies, and finally firing them at a high temperature.

1,880,158. NONRUN KNITTED FABRIC. DAVID SIEGEL, Weehawken, N. J. Filed May 6, 1932. Serial No. 609,712. 11 Claims. (Cl. 66—169.)



4. A non-run plain-knitted fabric comprising a yarn knitted at each of a series of wales in a course, two yarns knitted in alternate wales and floated across the intervening wales, said last-named yarns being each individual to a course, a yarn knitted in each wale of a course, and two yarns knitted in intervening wales only and floated over alternate wales, each of said last-named yarns being individual to a course, the stitches of the second and fifth courses being relatively long and loose and the stitches of the third and sixth courses being short and tight, and the stitches of the first and fourth courses comprising stitches approximately as long as those of the second and fifth courses together with stitches approximately as short as those of the third and sixth courses.

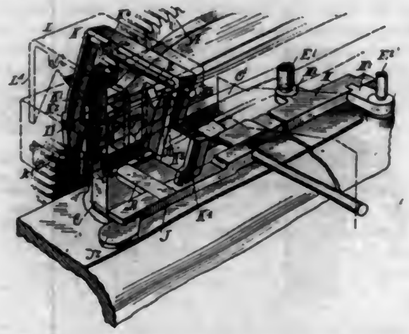
1,880,159. PILE COMPRESSING MEANS FOR PAPER CUTTING MACHINES AND THE LIKE. KARL STEGMANN, Bautzen, Germany, assignor to Johne-Werk Graflsche Maschinen-Aktiengesellschaft, Bautzen, Germany. Filed Aug. 7, 1930, Serial No. 473,654, and in Germany Oct. 30, 1929. 3 Claims. (Cl. 164—79.)



1. In a cutting machine for paper, cardboard and the like in combination, a pressure beam, a spindle, operatively connected to the beam and having comparatively steep,

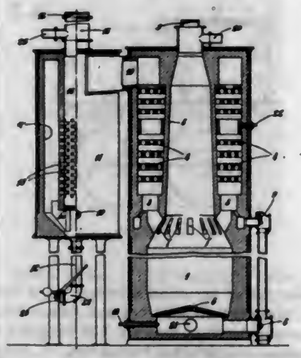
substantially non-locking threads, rotatably and non-slidably mounted means for supporting and operating the spindle and arresting means, operatively associated with the supporting means and adapted to lock the same in its particular operative position.

1,880,160. SLUG CASTING MACHINE. ANTHONY J. STOUGES, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 25, 1929. Serial No. 402,329. 17 Claims. (Cl. 199—52.)



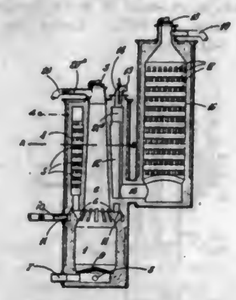
1. In a typographical casting machine, the combination of a plurality of molds of different sizes and capable of independent selection, a transporter for presenting a composed line of matrices to the selected mold, adjustable means for determining the level at which the composed line is presented to the mold, and safety devices for preventing the presentation of the composed line to the mold when said level-determining means are improperly adjusted with reference to the mold in use, said safety devices including variant banking blocks associated with the respective molds and cooperative arresting portions carried by the transporter.

1,880,161. APPARATUS FOR THE MANUFACTURE OF ENRICHED WATER GAS AND COAL GAS. ALBERT VICTOR TULLY, Newark-on-the-Trent, England. Filed Apr. 3, 1929, Serial No. 352,217, and in Great Britain Apr. 4, 1928. 2 Claims. (Cl. 48—71.)



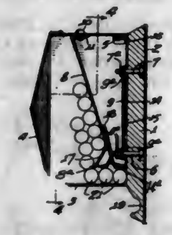
1. An apparatus for producing enriched water gas and coal gas having in combination: a water gas generator having air and steam inlets, a superposed coal distillation retort, a checkerbrick chamber surrounding the distillation retort, a gas outlet pipe connected to the top of the retort, an oil inlet connected to the checkerbrick chamber, a separate combined dust separating and oil fixing chamber connected to the checkerbrick chamber, a central flue having a perforated wall in the dust separating and fixing chamber, an inner heat retaining lining in the dust separating and fixing chamber and a steam inlet to the dust separating and fixing chamber.

1,880,162. APPARATUS FOR MAKING MIXED WATER GAS AND COAL GAS. SYDNEY JAMES BRITTIFFE TULLY and OLIVER EVAN YEO, Newark-on-the-Trent, England, Filed Nov. 11, 1927, Serial No. 232,602, and in Great Britain Dec. 31, 1926. 3 Claims. (Cl. 48—73.)



1. In a mixed water gas and coal gas making plant, a water gas generator, a coal carbonizing retort arranged above and in free and direct communication at its lower end with the upper end of said generator, a vertical heating chamber and a vertical carburetting chamber each formed in one structure with said retort and having their inner walls formed by said retort, and a gas outlet pipe extending from the top of said retort and unconnected with said carburretting chamber, the lower end of the heating chamber being in communication through ducts with the upper end of said gas generator and the lower end of said retort, and the lower end of said carburretting chamber having a gas outlet, and the upper ends of said heating chamber and carburetting chamber being in free, direct and constant communication with each other through a valveless passage within the structure.

1,880,163. DISPENSING CONTAINER. JOHN A. VILLOCHI, Easton, Pa. Filed Mar. 6, 1931. Serial No. 520,669. 4 Claims. (Cl. 312—77.)

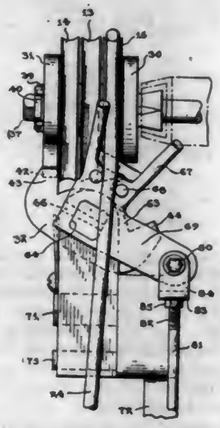


1. An article delivery apparatus, comprising a base having a pocket in its upper surface adjacent its forward end, a magazine slidable lengthwise of said base, means urging said magazine rearwardly on said base, a plate inclined downwardly from the rear wall of said magazine, said plate having its forward end turned downwardly rearwardly of the front wall of the magazine and forming with the latter wall an outlet adapted, when the magazine is moved forwardly, to align with the pocket in the base, said plate having a recess in its forward end, a feeder hinged adjacent its rear end in said recess with its forward end substantially in vertical alignment with the downwardly turned portion of said plate and caused by gravity to depend below the upper surface of said plate when the magazine is positioned with its outlet over the

pocket of the base, and means on said base engageable with said feeder during the rearward movement of said magazine relatively to said base to lift the forward end of said feeder above the upper surface of said plate.

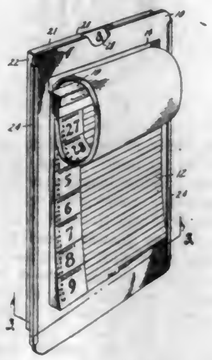
3. A delivery apparatus comprising a base, a casing mounted thereon having aligned slots in its bottom, and a bridge member having downwardly projecting ends extending through said slots and secured to said base.

1,880,164. MACHINE FOR SEWING BELTS, SUSPENDERS, GARTERS AND THE LIKE. JOHN RALPH WHITEHOUSE, Rochester, N. Y., assignor to Hickok Manufacturing Co., Inc., Rochester, N. Y., a Corporation of New York. Filed Aug. 5, 1931. Serial No. 555,276. 15 Claims. (Cl. 112—219.)



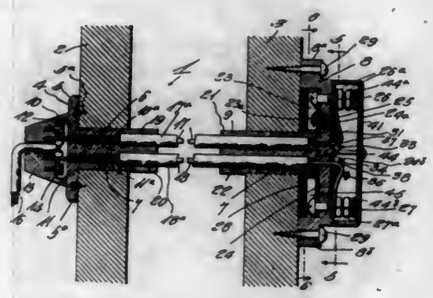
1. In a sewing machine, a power driven shaft, a needle reciprocated by the said shaft, a fast pulley mounted on the shaft, loose pulleys arranged on the said shaft at opposite sides of the fast pulley, a belt shifter for moving a driving belt from the fast pulley to a loose pulley and vice versa, fixed stop members mounted on the said shaft, and a co-acting stop member movable with the belt shifter for engaging a stop member of the shaft when the belt is shifted from the fast pulley to a loose pulley, whereby the needle may be positively stopped in a plurality of predetermined positions with relation to the work.

1,880,165. MEMORANDUM CALENDAR. HENRY S. WINZELER, Bryan, Ohio, assignor to Ohio Art Company, Bryan, Ohio, a Corporation of Ohio. Filed July 25, 1932. Serial No. 624,413. 10 Claims. (Cl. 40—119.)



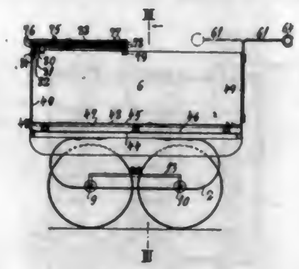
1. A device of the character set forth, comprising a base sheet, a plurality of flexible sheets fixed at their upper margins thereto, said base sheet being formed with a transverse slot above the flexible sheets through which the free end portions thereof may be inserted, and a housing mounted on the rear face of said base sheet to receive and provide a container for the inserted sheets, said housing being of sufficient size to enclose the inserted sheets throughout the entire width and length thereof.

1,880,166. RADIO LEAD AND LIGHTNING ARRESTER. BEN H. WOODRUFF, Meridian, Miss. Filed June 22, 1931. Serial No. 546,101. 12 Claims. (Cl. 175—80.)



1. A radio lead and protective device comprising a pair of insulation members adapted to be inserted in opposite sides of a wall structure, terminals formed on one of said insulation members, conductors connected with said terminals and extending through said wall structure, said conductors being threaded through the other of said insulation members, antenna ground terminals carried by the last mentioned insulation member, the conductors being connected with said terminals, and means supported on said last mentioned insulation member for stretching said conductors taut intermediate said wall structure.

1,880,167. FOLDING BABY CARRIAGE. KARL MAGNUS BÆRULFSEN, Oslo, Norway. Filed Feb. 25, 1931, Serial No. 518,211, and in Norway Mar. 14, 1930. 3 Claims. (Cl. 280—42.)



1. In vehicles of the kind adapted to be folded up in a transverse direction, and in which a link system forms the foldable interconnection between the opposite wheel axles, a link system comprising two pairs of cross-laid links turning about spaced pivots on members fastened between the wheel axles on opposite sides of the carriage and, linked together at the ends, said links being arranged as double links, each link being composed of two spaced link parts and arranged in such manner that in the links crossing each other the link parts of one link embrace and guide the link parts of the other link.

1,880,168. SOFT COLLAR HOLDER. GEORGE J. BER, Rayne, La. Filed May 25, 1931. Serial No. 539,887. 1 Claim. (Cl. 24—88.)

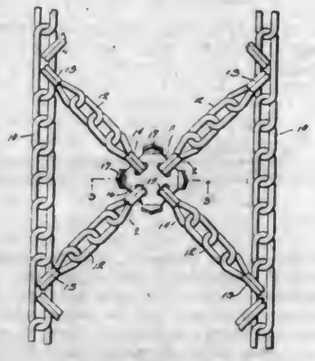


A soft collar holder, consisting of a pair of members each composed of a single piece of material, and comprising a long vertical arm for connection with the collar and a short horizontal arm connected thereto, and a spring clutch mounted on the end of one of said horizontal arms at one side and adapted to adjustably receive the end of the other horizontal arm.

1,880,169. MANUFACTURE AND PRODUCTION OF AROMATIC ACID CHLORIDES. NICHOLAS BENNETT, Appleton, Widnes; HERBERT DODD, Glazebrook, near Manchester, and WILLIAM COLIN SPRENT, Cressington, Liverpool, England, assignors to Imperial Chemical Industries Limited, Nobel House, Buckingham Gate, London, England. Filed Nov. 21, 1928, Serial No. 321,030, and in Great Britain Feb. 2, 1928. 8 Claims. (Cl. 260—123.)

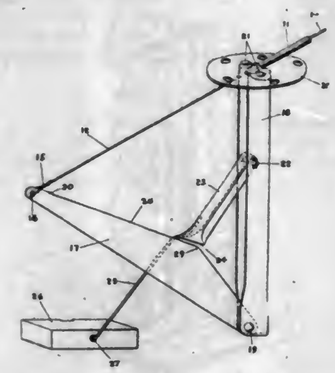
1. The manufacture and production of aromatic monocarboxylic acid chlorides of the benzene series by the reaction of aromatic chlorides of the benzene series with one of the group consisting of aromatic monocarboxylic acids and aromatic monocarboxylic acid anhydrides of the benzene series and the subsequent chlorination of the mixture formed.

1,880,170. ANTISKID CHAIN. CHARLES F. BIFFAR, Long Eddy, N. Y. Filed June 6, 1931. Serial No. 542,689. 1 Claim. (Cl. 152—14.)



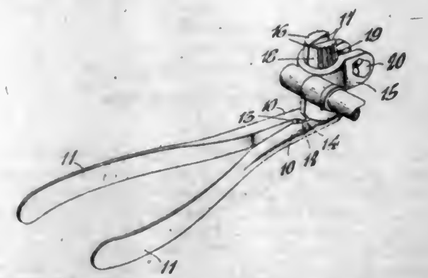
An anti-skid member of the character described adapted to be connected to the cross chains of an anti-skid chain comprising a base plate of substantially rectangular configuration adapted to be positioned on the center of the tread of a tire, said plate having the corners thereof upturned in outwardly divergent relation, the plate also having a plurality of elongated openings on each side thereof intermediate the corners to receive the cross chains, said upturned corners preventing skidding of the tire while holding the cross chains out of engagement with the ground to prevent wear of the connection between the cross chain and the base plate.

1,880,171. LIQUID LEVEL INDICATOR. ANDRE KORONSKI, now by judicial change of name Andrew King, Narberth, Pa. Filed June 4, 1928. Serial No. 643,184. 9 Claims. (Cl. 73—82.)



1. In a liquid level indicator the combination of a pivoted float positioned lever provided with a stop edge parallel to said pivot, the position of said edge being determined by the height of said liquid; a reading lever pivoted so as to swing in a plane transverse to said stop edge, the possible motion of said reading lever being limited by its engagement with said stop edge and means for operating said reading lever and indicating its position when arrested by said stop edge to show the height of said liquid as determined by the position of said float lever.

1,880,172. BATTERY TOOL. JEROME E. BERGMAN, Buffalo, and FREDERICK P. EGO, Kenmore, N. Y., assignors to Bergman Tool Mfg. Co., Buffalo, N. Y., a Firm composed of Caroline E. Bergman, Jerome E. Bergman, and Ray W. Kempner. Filed Dec. 12, 1931. Serial No. 580,623. 7 Claims. (Cl. 81—5.1.)

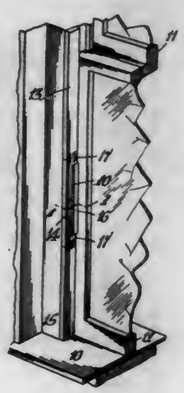


1. A tool of the character described, comprising a pair of pivotally connected handles, and spreading jaws applied to said handles and having exterior gripping faces thereon arranged eccentric to the pivot of the handles, the rear portions of said gripping faces substantially intersecting said handle-pivot.

1,880,173. ANTI-RATTLER FOR WINDOWS. EDWARD A. CARTER, Buffalo, N. Y. Filed Jan. 13, 1930. Serial No. 420,369. 2 Claims. (Cl. 292—74.)

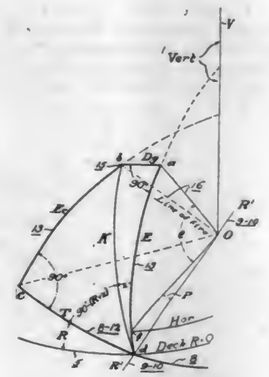
1. The combination with a window frame and a sash including the window stop and check stop thereof, of an upright abutment-strip secured to the inner side of the window frame in the plane of the window stop and provided in its front edge with a mortise extending nearly

throughout its length, forming forward extensions at the ends of said strip, said extensions having horizontal guide-grooves in their opposing edges, and a spring pressed fol-



lower-strip movable transversely of the window frame and bearing against the face of the sash and having end-tenons guided in said grooves.

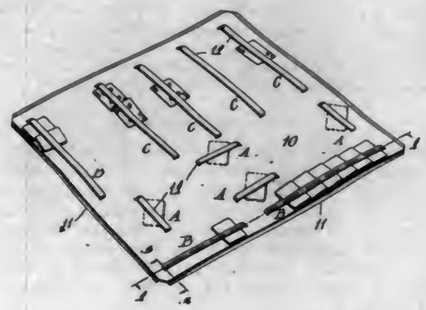
1,880,174. CONTINUOUS AIM GUNFIRE CONTROL SYSTEM. JOSEPH DUGAN, Los Angeles, Calif. Filed May 25, 1932. Serial No. 613,489. 17 Claims. (Cl. 89—41.)



1. An unstable platform, a sight, means for mounting said sight to pivot universally on said platform, a gun rotatable about train and elevation axes on said platform, means for simultaneously determining the pitch of the platform in the vertical plane of sight to the target and the roll of the platform in a plane perpendicular to said plane of sight and perpendicular to said platform at all angles of pitch, means for introducing displacements of the gun from the said vertical plane of sight and from a horizontal reference plane, and mechanism operable by both of said means for calculating and applying to the gun all of the necessary corrections in train and elevation to preserve its aim on the target throughout the roll and pitch of the platform.

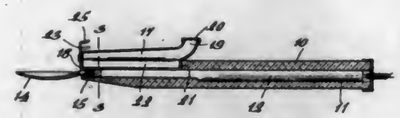
7. A movable support, a sighting device and a gun, each rotatable on said support about elevation and train axes; and means mounted to rotate on said support about an axis perpendicular thereto and adapted to have corrections applied thereto in planes parallel to said axes and with reference to vertical and horizontal planes, and operated by and in accordance with the movements of the said sighting device, for generating corrections in the movements of the gun about its said axes and for subsequently varying said generated corrections upon changes in the angular position of said axes due to movement of the support.

1,880,175. GAME BOARD. JOHN F. GEIBEL, Buffalo, N. Y., assignor to Master Metal Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 17, 1930. Serial No. 468,565. 2 Claims. (Cl. 273—136.)



1. A game board of the character described, comprising a panel constituting a support for playing a card game, and having a plurality of pairs of openings therein, and a plurality of strap-like, card-holding elements applied to the surface of said panel between the respective pairs of panel-openings and each having coupling devices at its ends for interlocking engagement with a corresponding pair of openings, said coupling devices being longer than the width of their strap-like elements and said openings and adapted to abut edgewise against the underside of the support adjoining the respective openings.

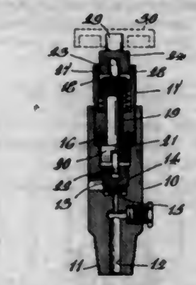
1,880,176. WAX SPATULA. MAX HARRIS, Buffalo, N. Y. Filed Apr. 17, 1931. Serial No. 530,792. 7 Claims. (Cl. 32—10.)



1. A device of the character described, comprising a body having a longitudinal opening therein, an electric heating element contained in said body-opening, a wax container mounted on said body in contact with said heating element and having a discharge port therein, and a spatula projecting forwardly from the body in heat-conducting relation to the heating element and adapted to receive the melted wax from said container-port.

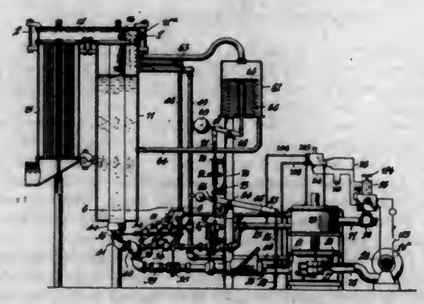
1,880,177. ADAPTER FOR VALVES. AUGUST F. H. KOHLER and ARTHUR C. KAUTZ, Lockport, N. Y.; said Kautz assignor to said Kohler. Filed Aug. 20, 1931. Serial No. 558,249. 4 Claims. (Cl. 251—48.)

2. In combination with a valve-body having a socket at its upper end containing an internal annular groove and a valve-stem extending into the socket, of an adapter for the valve-stem having a body portion shaped to fit the socket and having a corresponding annular groove therein and a recess at its lower end for engagement with the valve-stem and an expansible band seated in the groove of the adapter-body for detachable interlocking engagement



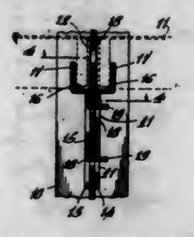
with the companion groove of the valve-body socket, said adapter-body having a lug rising therefrom for actuating the valve-stem.

1,880,178. HEATING APPARATUS. ALBERT F. KRAUSE, Buffalo, N. Y. Filed Oct. 27, 1928. Serial No. 315,525. 14 Claims. (Cl. 158—7.)



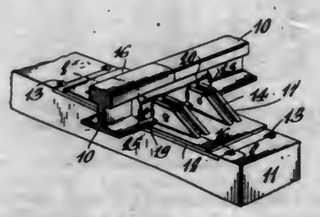
1. A heating apparatus of the character described, comprising a heating element having an inlet for a combustible mixture of gas and air and an outlet for the products of combustion, a mixing tube connected to the mixture inlet of said heating element, main gas and air supply pipes joined to said mixing tube for delivering predetermined amounts of gas and air thereto, operating valves in said supply pipes, a heat-responsive device, a slide-plate connected to said device and movable thereby in opposite directions, a push-rod actuated by said slide-plate, and connections between said push-rod and said valves for controlling their opening and closing movements.

1,880,179. ADJUSTABLE SHELVING. HERBERT J. ONIONS, Warren, Pa., assignor to De Luxe Metal Furniture Company, Warren, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,722. 10 Claims. (Cl. 248—19.)



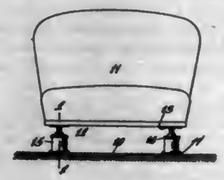
1. In a shelving unit, the combination of an upright for shelving having a series of openings therein, and brackets for the shelving applied to opposite sides of the upright in parallel relation thereto and having slidingly-fitted interlocking male and female elements thereon for jointly clamping the brackets to each other and to the upright, the male interlocking element of one bracket engaging one or another of said upright-openings and interlocking with the female element of the companion bracket whereby said brackets are jointly drawn toward the upright in contiguous engagement with its opposite sides.

1,880,180. RAIL FASTENER. LOUIS OTTROSINKA, Tonawanda, N. Y., assignor of one-half to Steven Juhasz, Tonawanda, N. Y. Filed Feb. 25, 1932. Serial No. 595,073. 7 Claims. (Cl. 238—157.)



1. A rail fastener of the character described, comprising a tie-engaging plate having ribs rising therefrom at opposite sides of its center, and fastening means for the rail superposed on said plate and including companion elements disposed at opposite sides of the rail and each consisting of a base having portions disposed beneath the rail to constitute a seat therefor, and means applied to said base for interlocking engagement with said tie-plate ribs and the rail.

1,880,181. SHOCK ABSORBING SEAT SUPPORT. JOHN Y. TURNER, Los Angeles, Calif. Filed Aug. 22, 1930. Serial No. 477,069. 1 Claim. (Cl. 155—52.)

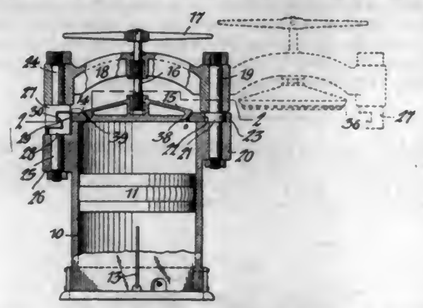


A shock-absorbing seat for vehicles and the like, comprising a substantially cylindrical casing including upper and lower reversible plates detachably applied thereto and having vertically alined bearing collars formed thereon, one of said plates being larger than the diameter of the casing and constituting an attaching flange for anchoring the casing to the vehicle-floor, tie bolts extending through said casing for securing the plates thereto, a seat-carrying post extending into the housing and guided adjacent its upper and lower ends in said bearing collars and provided intermediate its bearing points with an enlargement having openings therein for freely receiving said tie bolts, and compression springs applied to the tie bolts above and below said enlargement and each bearing at one end against one side of said enlargement and at its other end against the opposing casing-plate.

1,880,182. SAUSAGE STUFFER. ADRIAN C. VAN HOOYDONK, Buffalo, N. Y., assignor to John E. Smith's Sons Company, Buffalo, N. Y., a Corporation of New York. Filed July 26, 1928. Serial No. 295,468. 8 Claims. (Cl. 17—35.)

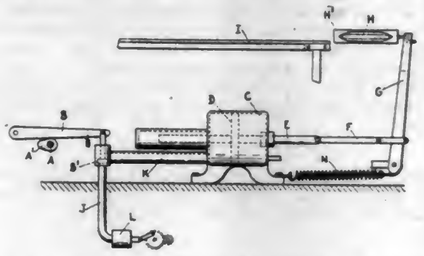
1. A sausage stuffer, comprising a cylinder open at its upper end, a piston operable therein, a cover for the cyl-

inder, a laterally-swinging yoke carrying said cover and fulcrumed at one side of said cylinder, and headed fastening devices detachably applied to the opposite side of said



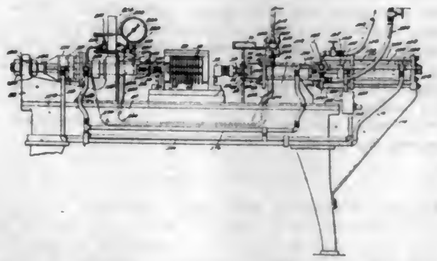
cylinder and to the adjoining end of said yoke in opposing relation for sliding and interlocking engagement with each other.

1,880,183. LOOM. EZEKIEL J. WILSON, East Greenbush, N. Y., assignor to F. C. Huyck & Sons, Albany, N. Y., a Corporation of New York. Filed Dec. 22, 1930. Serial No. 504,180. 10 Claims. (Cl. 139—144.)



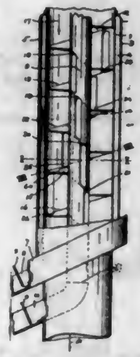
1. In a loom, picker mechanism comprising a pivotally mounted picker stick, means normally acting to move the picker stick in one direction, a cylinder, a reciprocatory piston mounted in said cylinder, means connecting the piston with the picker stick, means for exhausting air from the cylinder on one side of the piston, so as to move the picker stick in the other direction, and means for alternately connecting said cylinder with said exhausting means and to the atmosphere.

1,880,184. APPARATUS FOR PRODUCTION OF BELLOWS TUBING. WALTER B. CLIFFORD, Boston, Mass., assignor to Clifford Manufacturing Co., Boston, Mass., a Corporation of Delaware. Filed Aug. 13, 1928, Serial No. 299,164. Renewed Jan. 28, 1932. 28 Claims. (Cl. 153—73.)



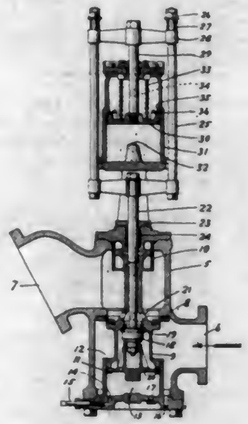
1. Apparatus for producing bellows tubing comprising a die assembly, movable members designed to engage opposite ends of a tube within the assembly, means for simultaneously moving the members toward one another into operative position in engagement with the tube, means for introducing fluid pressure to the interior of the tube through one of the members, and means for thereafter imparting a continued movement of approach to one of the members to contract the tube while subjected to the internal fluid pressure.

1,880,185. METHOD AND MEANS FOR REMOVING SAND AND THE LIKE FROM FLUIDS. FRANK W. KERNS and WARREN EGBERT, Oakland, Calif. Filed July 25, 1927, Serial No. 208,101. Renewed Dec. 8, 1930. 7 Claims. (Cl. 209—211.)



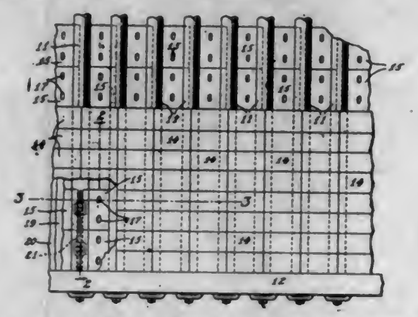
1. Apparatus for separating particles of solid matter from a flowing fluid containing the same, which consists of a duct having a helical surface over which said fluid is caused to travel, a plurality of ports spaced apart about the outer periphery of said surface, a tube substantially centrally positioned with respect to said helix and a plurality of other ports in said tube spaced about the inner periphery of said helix.

1,880,186. QUICK OPENING STEAM VALVE ACTUATED BY A CYLINDER. PAUL W. KNAUF, Cynwyd, Pa., assignor to Schutte & Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1931. Serial No. 567,174. 3 Claims. (Cl. 137—139.)



2. A valve including in combination a valve casing, a valve spool in said casing, a pilot valve in said casing, an actuating rod connected to said pilot valve, a yoke connected to said actuating rod, springs carried by said yoke, a cross head engaging said springs and said yoke by a lost motion connection, a piston rod connected to said cross-head, a piston connected to said piston rod, and a cylinder cooperating with said piston.

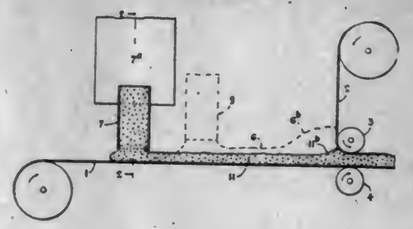
1,880,187. WATER WALL. WARREN C. DRAKE, Inwood, N. Y., assignor to Ernest B. Priebe and Harry Buchert, New York, N. Y. Filed Mar. 31, 1926. Serial No. 98,846. 31 Claims. (Cl. 122—6.)



1. A water wall comprising a series of water tubes having a series of couplings projecting from their outer sides, refractory wall elements closing the spaces between tubes, and exterior clamping members engaging such couplings and confining said wall elements in place, each consisting of a longitudinal body with side wings overlapping the wall elements and an inwardly projecting coupling extending between the wall elements and coupled with a tube coupling.

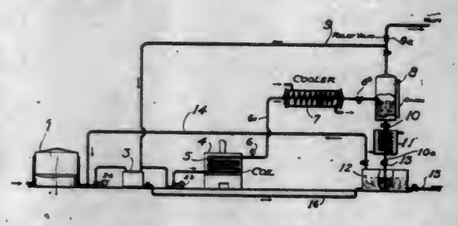
1,880,188. METHOD OF AND APPARATUS FOR MAKING WALL BOARD. LEO VANCE ROBINSON and GEORGE MILLER THOMSON, Caledonia, Ontario, Canada, assignors to Gypsum Lime and Alabastine, Canada, Limited, Paris, Ontario, Canada. Filed Feb. 3, 1930. Serial No. 425,645. 4 Claims. (Cl. 154—1.)

1. Apparatus for the manufacture of wallboard, comprising in combination, a pair of squeeze rolls, a travelling support for a bottom paper liner, means for delivering a top paper liner between the squeeze rolls in spaced rela-



tion to the bottom liner, a chute for a slurry of cementitious material discharging at its outer end and at least one intermediate point.

1,880,189. MANUFACTURING HYDROCARBON PRODUCTS. WALTER O. SNELLING, Allentown, Pa., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed July 9, 1926. Serial No. 121,367. 12 Claims. (Cl. 196—10.)



1. A process for producing heavier higher boiling normally liquid products from lighter normally gaseous hydrocarbon materials of the methane series which comprises subjecting said normally gaseous materials to temperatures in excess of 750° F. while maintaining them under a pressure between about 800 and about 3000 pounds per square inch, and recovering the higher boiling products thereby produced.

OFFICIAL GAZETTE

OF THE

UNITED STATES PATENT OFFICE

VOLUME 423

OCTOBER

1932

RG08
13

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1932

R608
13
v.423 Oct. 1932

07Fe'33

CONTENTS

	Page
DECISIONS OF THE COMMISSIONER OF PATENTS, October 4, 11, 18, 25	3, 299, 615, 931
TRADE-MARKS PUBLISHED AND REGISTERED, October 4, 11, 18, 25	9, 305, 621, 937
LABELS AND PRINTS REGISTERED, October 4, 11, 18, 25	32, 335, 649, 960
REISSUES, October 4, 11, 18, 25	33, 336, 651, 971
PLANT PATENTS, October 4, 11, 18, 25	34, 338, 654, 972
DESIGNS, October 4, 11, 18, 25	34, 339, 654, 972
PATENTS, October 4, 11, 18, 25	34, 350, 679, 980

ANNOUNCEMENTS

	Page
ADVERSE DECISIONS IN INTERFERENCE	1, 304, 618
APPLICATIONS—Condition of pending	2, 298, 614, 930
DISCLAIMERS—Claude, Georges	929
Davenport, Ransom W	936
Evans, Harold A	936
Gebhard, Louis A	929
Jenkinson, Ross E	619
Mahon, Russell C	619
Skeats, Wilfred F	619
Steckel, Abram P	619
Thiret, André	8
White, George	297
White, Edwin L	929
FEES—Payment of—Rule 194	618
MANUSCRIPT COPIES—Instructions relative to ordering	613
PATENT SUITS	7, 304, 619, 935
PATENTS—List of adjudicated	1, 297, 613
TRADE-MARKS—Canceled	1

TABLE OF CASES REPORTED

	Page
* American Cyanamid Company v. Synthetic Nitrogen Products Corp	299
* Blackwood Coal & Coke Company v. The Philadelphia and Reading Coal and Iron Company	302
* Breakstone Bros., Inc. v. Gerber & Co., Inc	618
* Fawcett Publications, Inc., v. Popular Mechanics Co	617
* Heijkenskjold. In re	3
* Jones v. Robinson	300
* Martin. In re	3
* Nisley Shoe Company, The. In re	4
* Shaw and Gillespie v. Levy	615
* Stubbs. In re	6
* Weingartner. In re	301

[Decisions of the United States Court of Customs and Patent Appeals are indicated by a star (*).]

323043

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Gauges for gauging bore limits. Serial No. 326,074; Oct. 4. Class 26.

Allen, S. L., & Co., Inc., Philadelphia, Pa. Roller coasters and see-saw merry-go-rounds. Serial No. 329,491; Oct. 4. Class 22.

Apfel, M., & Bro., Inc., New York, N. Y. Ladies' hats. Serial No. 329,173; Oct. 4. Class 39.

Archer Rubber Company, Milford, Mass. Raincoats, jackets, shoes, etc. Serial No. 329,011; Oct. 4. Class 39.

Atlas Supply Company, Newark, N. J. Automobile polishing cloths, mechanics' hand soap, powdered soap, etc. Serial No. 324,941; Oct. 4. Class 4.

B. & B. Shoe Company, Chicago, Ill. Slippers. Serial No. 328,972; Oct. 4. Class 39.

Badorf Shoe Company, Lititz, Pa. Shoes. Serial No. 328,292; Oct. 4. Class 39.

Baker Furniture Factories, Inc., Allegan, Mich. Beds, benches, bookcases, etc. Serial No. 329,395; Oct. 4. Class 32.

Barnstable Feed & Supply Co's Inc., The, doing business as The Barnstable-Schaper-Ware Feed & Supply Companies, Inc., Nokomis, Ill. Wheat flour and corn meal. Serial No. 324,648; Oct. 4. Class 46.

Bennett & Layton Inc., Susanville, Calif. Ice cream, candy, cookies, frozen confections and frozen malted milk. Serial No. 327,932; Oct. 4. Class 46.

Bentz, Frank J., doing business as Fixzit System, Miami, Fla. Compound for stopping boiler leaks, compound for cleaning waste matter from pipes, etc. Serial No. 312,736; Oct. 4. Class 6.

Bloch Bros., Glasgow, Scotland. Whiskey. Serial No. 329,572; Oct. 4. Class 49.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 329,826; Oct. 4. Class 42.

Bob, H. D., Company, Inc., New York, N. Y. Shirts, blouses, undershirts, etc. Serial No. 329,592; Oct. 4; Class 39.

Boyle, John, & Company, Incorporated, New York, N. Y. Cotton ducks and drills, awning stripe and ticking. Serial No. 329,174; Oct. 4. Class 42.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. Serial No. 329,277; Oct. 4. Class 39.

Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. Serial Nos. 329,594–5; Oct. 4. Class 39.

Bulls-Eye Electric Manufacturing Company, The, Torrington, Conn. Electrical fuse plugs and parts thereof. Serial No. 329,132; Oct. 4. Class 21.

Burd Piston Ring Company, Rockford, Ill. Piston rings. Serial No. 329,323; Oct. 4. Class 35.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. Serial No. 328,681; Oct. 4. Class 11.

Canoga Citrus Association, Canoga Park, Calif. Fresh citrus fruits. Serial No. 329,501; Oct. 4. Class 46.

Centennial Flouring Mills Company, Seattle, Wash. Stock and poultry feed, and pancake and waffle flour. Serial No. 328,159; Oct. 4. Class 46.

Centennial Flouring Mills Company, Seattle, Wash. Stock and poultry feed. Serial No. 328,417; Oct. 4. Class 46.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Bathroom fixtures. Serial No. 329,302; Oct. 4. Class 13.

Christodoulou, Konstantin, Bronx, N. Y. Compound for the treatment of burns, sores, wounds, etc. Serial No. 308,325; Oct. 4. Class 6.

City Brewing Corporation, New York and Ridgewood, N. Y. Malt beverage. Serial No. 326,741; Oct. 4. Class 48.

Cohen, Harry S., Hartford, Conn. Handkerchiefs. Serial No. 320,338; Oct. 4. Class 42.

Coryell, L. L., & Son, Lincoln, Nebr. Automobile and radio storage batteries. Serial No. 329,739; Oct. 4. Class 21.

Coudurier, Fructus & Descher, Lyon, France. Silk piece goods. Serial No. 329,784; Oct. 4. Class 42.

Crystal Home Filter Co. Inc., Brooklyn, N. Y. Compound used in the filtration of liquids and beverages. Serial No. 328,809; Oct. 4. Class 6.

Deane Plaster Co., The, Yonkers, N. Y. Surgical gauze in the piece and in cut lengths, bandages, slings, etc. Serial No. 329,081; Oct. 4. Class 44.

Deep Sea Sponge Company. (See Russell, Chris.)

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Drill presses, scroll saws, band saws, etc. Serial No. 329,675; Oct. 4. Class 23.

Devon Bakeries, Inc., New York, N. Y. Toast. Serial No. 329,574; Oct. 4. Class 46.

Du Pont Film Manufacturing Corporation, New York, N. Y. Photographic film. Serial No. 329,724; Oct. 4. Class 26.

Fenton, John, assignor to The Fenton Corporation, Los Angeles, Calif. Cushion inserts for shoe insoles. Serial No. 329,227; Oct. 4. Class 39.

Fixzit System. (See Bentz, Frank J.)

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 329,332; Oct. 4. Class 42.

Fritzsche Brothers, Inc., New York, N. Y. Essential oils for perfuming purposes. Serial No. 329,578; Oct. 4. Class 6.

Gelles, Charles S., doing business as Charles S. Gelles & Son, Boston, Mass. Neckties. Serial No. 329,444; Oct. 4. Class 39.

Giltex Manufacturing Company, The, New Haven, Conn. Aprons, coolie coats, dresses, etc. Serial No. 322,931; Oct. 4. Class 39.

Glock, Charles A., Chatham, Ontario, Canada. Golf tee holding wristlets. Serial No. 329,795; Oct. 4. Class 22.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial No. 326,092; Oct. 4. Class 22.

Graemiger Bros. Inc., New York, N. Y. Handkerchiefs. Serial No. 329,376; Oct. 4. Class 42.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Candy. Serial No. 329,895; Oct. 4. Class 46.

Hanson-Gates Co., Inc., Wakefield, Mass. Range oil burners. Serial No. 327,753; Oct. 4. Class 34.

Haram, Sevrin A., doing business as S. A. Haram, New York, N. Y. Bread. Serial No. 329,856; Oct. 4. Class 46.

Hartman, Milford W., doing business as M. W. Hartman Manufacturing Company, Hutchinson, Kans. Liquid pumps. Serial No. 329,726; Oct. 4. Class 23.

Hayman Oil Co., Los Angeles, Calif. Gasoline, lubricating oils, and crude oil. Serial No. 328,353; Oct. 4. Class 15.

Hayman Oil Co., Los Angeles, Calif. Preparation for treatment of psoriasis, eczema, and other skin diseases; an alterative and discutient; etc. Serial No. 328,354; Oct. 4. Class 6.

Hessel, Frederick A., doing business as Marfred Laboratories, New York, N. Y. Hand and skin cleaners. Serial No. 328,462; Oct. 4. Class 4.

Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. Serial No. 329,949; Oct. 4. Class 22.

Holliston Mills, Inc., The, Norwood, Mass. Cotton piece goods and filled and finished cotton piece goods. Serial No. 329,322; Oct. 4. Class 42.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Iodine preparation. Serial No. 329,086; Oct. 4. Class 6.

Iles, Thomas J., New York, N. Y. Therapeutic preparation. Serial No. 328,555; Oct. 4. Class 6.

International Nickel Company, Inc., The, New York, N. Y. Nickel, nickel ingots and alloys, etc. Serial No. 319,579; Oct. 4. Class 14.

Isaacs, I. C., & Company, Baltimore, Md. Riding breeches, jodhpurs, and riding coats, etc. Serial No. 327,154; Oct. 4. Class 39.

Ivory Star Products Company, Willimantic, Conn. Bleach water, ammonia, and laundry blueing. Serial No. 328,742; Oct. 4. Class 6.

Jackson, Byron, Co., Los Angeles, Calif. Plate valves, orifice fittings, and parts therefor. Serial No. 328,576; Oct. 4. Class 23.

Johnson, John E., Pittsburgh, Pa. Gasoline. Serial No. 329,475; Oct. 4. Class 15.

Kabushiki-Kaisha Takeda-Chobei Shoten, Osaka, Japan. Preparations of camphor used as a cardio tonic. Serial No. 328,005; Oct. 4. Class 6.

Katz, William, St. Louis, Mo. Hats. Serial No. 328,990; Oct. 4. Class 39.

Kehrer, Bertram F., doing business as Kiddipak Mfg. Co., Seattle, Wash. Packaged ready-cut strips, blocks, and round wood, for children's use in making toys. Serial No. 329,557; Oct. 4. Class 22.

Kents Orderphone Co. (See Walton, Kenneth B.)

Kern, Joseph, doing business as Oriole Drug Company, Baltimore, Md. Aqueous and tablet preparation for simple coughs from head colds, etc. Serial No. 321,062; Oct. 4. Class 6.

Keystone Lubricating Company, Philadelphia, Pa. Cleansing preparation. Serial No. 329,236; Oct. 4. Class 4.

Kiddipak Mfg. Co. (See Kehrer, Bertram F.)

King, Dobbs & Company, Chattanooga, Tenn. Coffee. Serial No. 329,476; Oct. 4. Class 46.

Klaus & Moersen, Columbus, Nebr. Canned sweet corn and tomatoes. Serial No. 287,706; Oct. 4. Class 46.

Knott, Wm. T., Company, Inc., New York, N. Y. Hosiery. Serial No. 329,683; Oct. 4. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

La Mode Chez Tappe. Inc., New York, N. Y. Hats, dresses, and coats. Serial No. 327,911; Oct. 4. Class 39.

Lansburgh & Bro., Washington, D. C. Mattresses, beds, and bed springs. Serial No. 317,361; Oct. 4. Class 32.

Lasar, William, Los Angeles, Calif. Meat and bone cutting machines. Serial No. 329,477; Oct. 4. Class 23.

Lefton, Al Paul, Company, Inc., Philadelphia, Pa. Tabloid newspaper. Serial No. 328,130; Oct. 4. Class 38.

Leitz, E., Inc., New York, N. Y. Cameras. Serial Nos. 328,793–4; Oct. 4. Class 26.

Leitz, Ernst, Optische Werke, G. m. b. H., Wetzlar, Germany. Microscopes, magnifying glasses, telescopes and their accessories. Serial No. 328,734; Oct. 4. Class 26.

Levy, S. J., & Co. Inc., New York, N. Y. Suits and overcoats. Serial No. 329,262; Oct. 4. Class 39.

Leyse Aluminum Company, Kewaunee, Wis. Electrical coffee makers. Serial No. 328,556; Oct. 4. Class 21.

Long-Bell Lumber Sales Corporation, Kansas City, Mo., and Longview, Wash. Lumber products. Serial No. 329,748; Oct. 4. Class 12.

Lowe, Joe, Corporation, Brooklyn, N. Y. Doughnuts and doughnut flour. Serial No. 323,786; Oct. 4. Class 46.

Manfred Laboratories. (See Hessel, Frederick A.)

McLellan, Wm. L., Co., The, Norwalk, Conn. Rod and sheet packing, rubber hose, etc. Serial No. 323,901; Oct. 4. Class 35.

Metro Hosiery Co., Inc., New York, N. Y. Hosiery. Serial No. 306,195; Oct. 4. Class 39.

Milch & Harrison, Minneapolis, Minn. Ice cream confections. Serial No. 326,643; Oct. 4. Class 46.

Munsingwear Corporation, The, Minneapolis, Minn. Girdles and foundation garments with garters. Serial No. 328,365; Oct. 4. Class 39.

Neer, Homer, and William D. Morgan, Springfield, Ohio. Maltless beverages and syrups and extracts for making the same. Serial No. 329,291; Oct. 4. Class 45.

North American Thread Co., Inc., New York, N. Y. Thread. Serial No. 329,751; Oct. 4. Class 43.

Nu-Pak Corporation, New York, N. Y. Cartons, packages, boxes, and blanks therefor. Serial No. 329,837; Oct. 4. Class 2.

Okonite Company, The, Passaic, N. J. Insulated wires and cables. Serial Nos. 329,533–5; Oct. 4. Class 21.

Orange-Crush Company, Chicago, Ill. Mineral water and carbonated water. Serial No. 328,697; Oct. 4. Class 45.

Oriole Drug Compny. (See Kern, Joseph.)

Petty Shoe Company, Pittsburgh, Pa. Shoes. Serial No. 317,532; Oct. 4. Class 39.

Plastergon Wall Board Company, Buffalo, N. Y. Wall board. Serial Nos. 329,651–2; Oct. 4. Class 12.

Poughkeepsie Mineral Water Works, The. (See Schlachter, Joseph.)

Reliable Packing Co., Chicago, Ill. Bacon, hams, boiled ham, sliced bacon. Serial No. 328,538; Oct. 4. Class 46.

Reliance Piece Dye Works, Paterson, N. J. Piece goods. Serial No. 329,337; Oct. 4. Class 42.

Richmond, Charlotte, Tudor City, New York, N. Y. Toilet cases. Serial No. 327,888; Oct. 4. Class 3.

Ridal Products Co., The. (See Schumacher, Emil J.)

Rossie Velvet Company, Mystic, Conn. Pile fabrics. Serial Nos. 329,357–9; Oct. 4. Class 42.

Rossie Velvet Company, Mystic, Conn. Velvets. Serial No. 329,360; Oct. 4. Class 42.

Roth, Otto, Inc., Newark, N. J. Safety razor blades. Serial No. 329,458; Oct. 4. Class 23.

Rubin Bros. Foot-Wear Inc., Long Island City, N. Y. Shoes. Serial No. 319,944; Oct. 4. Class 39.

Russell, Chris, doing business as Deep Sea Sponge Company, Tarpon Springs, Fla. Rock Island sheep wool sponges. Serial No. 328,252; Oct. 4. Class 1.

Schlachter, Joseph, doing business as The Poughkeepsie Mineral Water Works, Poughkeepsie, N. Y. Maltless beverages and sirups and extracts for making the same. Serial No. 329,903; Oct. 4. Class 45.

Schumacher, Emil J., doing business as The Ridal Products Co., Erie, Pa. Dry cleaning liquid. Serial No. 329,587; Oct. 4. Class 4.

Schwan-Bleistift-Fabrik A. G., Nuremberg, Germany. Lead pencils and colored pencils. Serial No. 329,539; Oct. 4. Class 37.

Societa Anonima Lucchese Olii E Vini, Lucca, Italy. Olive oil. Serial No. 320,012; Oct. 4. Class 46.

Southern Coal Company, Inc., Memphis, Tenn. Coal. Serial No. 329,157; Oct. 4. Class 1.

Standard Brands Incorporated, New York, N. Y. Salad dressing. Serial No. 324,853; Oct. 4. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. Serial Nos. 329,318–19; Oct. 4. Class 43.

Star Union Overall Co., Inc., The, South Norwalk, Conn. Children's overalls, playsuits and sunsuits. Serial No. 329,102; Oct. 4. Class 39.

Steinberger Bros. Glove Corp., New York, N. Y. Fabric gloves. Serial No. 325,960; Oct. 4. Class 39.

Sterilized Razor Blade Co., Inc., New York, N. Y. Razor blades. Serial No. 329,339; Oct. 4. Class 23.

Stern-Siegman Prins Company, Kansas City, Mo. Coats. Serial No. 324,195; Oct. 4. Class 39.

Stone-Mueller Company, Chicago, Ill. Typewriter ribbon revivifying liquid. Serial No. 329,508; Oct. 4. Class 11.

Sunical Packing Company, San Francisco, Calif. Canned fruits. Serial No. 329,509; Oct. 4. Class 46.

Sussberg & Feinberg, Inc., New York, N. Y. Silk and rayon piece goods. Serial No. 329,460; Oct. 4. Class 42.

Thomas Flexible Coupling Company, Warren, Pa. Flexible machinery couplings. Serial No. 318,381; Oct. 4. Class 23.

Triplex Products Corporation, Clifton, N. J., and New York, N. Y. Domestic hot water heaters, electric or electrically operated time switches, and electric flashes for sign lights. Serial No. 327,993; Oct. 4. Class 21.

United States Envelope Company, Springfield, Mass. Paper and envelopes. Serial No. 324,631; Oct. 4. Class 37.

United States Envelope Company, Springfield, Mass. Correspondence papers and envelopes. Serial No. 324,632; Oct. 4. Class 37.

United States Envelope Company, Springfield, Mass. Correspondence papers and envelopes, particularly those used for announcements. Serial No. 324,633; Oct. 4. Class 37.

United States Envelope Company, Springfield, Mass. Paper and envelopes, particularly book papers, etc. Serial No. 324,634; Oct. 4. Class 37.

Vail-Ballou Press Inc., Binghamton, N. Y. Finished printing plates. Serial No. 328,408; Oct. 4. Class 50.

Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Sausage. Serial No. 329,362; Oct. 4. Class 46.

Walton, Kenneth B., doing business as Kents Orderphone Co., Atlantic City, N. J. Electric audible annunciator equipment. Serial No. 304,265; Oct. 4. Class 21.

Weston Biscuit Co., Ltd., Passaic, N. J. Cake wafers. Serial No. 329,485; Oct. 4. Class 46.

White, S. S Dental Manufacturing Company, The, Philadelphia, Pa. Base plates. Serial No. 329,695; Oct. 4. Class 44.

Wildroot Company, Inc., The, Buffalo, N. Y. Hair tonics, wavesets, shampoos, etc. Serial No. 323,107; Oct. 4. Class 6.

Wollner & Smith, New York, N. Y. Wearing apparel. Serial No. 322,840; Oct. 4. Class 39.

LIST OF REGISTRANTS OF TRADE-MARKS

Alaskan Products Incorporated, Baltimore, Md. Canned crab meat, crab meat in the bulk and steamed crabs. 297,959; Oct. 4; Serial No. 327,036; published July 12, 1932. Class 46.

Allen, Claude S., doing business as Enzer Remedy Company, Coral Gables, Fla. Medicinal preparation. 297,936; Oct. 4; Serial No. 324,815; published June 28, 1932. Class 6.

American Agricultural Chemical Company, assignor to The American Agricultural Chemical Company, New York, N. Y. Fertilizers. 88,224; renewed Sept. 10, 1932.

American Barley Corporation, The, John D. Nunan, receiver, Minneapolis, Minn. Cereal breakfast foods. 297,966; Oct. 4; Serial No. 326,987; published July 19, 1932. Class 46.

American Nicoton Corporation, New York, N. Y. Liquid preparation. 297,861; Oct. 4; Serial No. 313,900; published June 28, 1932. Class 6.

Antimite Company, The, Wilmington, Del., and St. Louis, Mo. Antimite. 297,940; Oct. 4; Serial No. 324,923; published July 12, 1932. Class 6.

Apex Soap and Sanitary Corp., Pittsburgh, Pa. Soaps and soap powders. 297,848; Oct. 4; Serial No. 290,795; published May 6, 1930. Class 4.

Appel, Robert, Brooklyn, N. Y. Pocket books. 297,971; Oct. 4; Serial No. 327,332; published July 19, 1932. Class 3.

Arkansas Company Inc., New York, N. Y. Hydrosulfite compound. 297,931; Oct. 4; Serial No. 323,855; published Apr. 5, 1932. Class 6.

Arko Herbs Incorporated, Buffalo, N. Y. Herb teas as a tonic. 297,927; Oct. 4; Serial No. 322,478; published July 12, 1932. Class 6.

Arnesen Newsprint Publishers Corporation, Brooklyn, N. Y. Newspaper. 297,915; Oct. 4; Serial No. 327,573; published July 12, 1932. Class 38.

Aspralgin Laboratories. (See Henderson, Thomas J.)

Associated Farmers' Exchanges, Inc., Worcester, Mass. Food for stock and poultry. 297,965; Oct. 4; Serial No. 326,847; published July 12, 1932. Class 46.

Atkinson, Fenlon Co. Inc., New York, N. Y. Cotton drapery fabrics. 297,881; Oct. 4; Serial No. 323,387; published July 19, 1932. Class 42.

Ayer Company, The, Lowell, Mass. Medicinal preparation. 297,815; Oct. 4; Serial No. 327,182; published July 12, 1932. Class 6.

Battle Creek Food Company, The, Battle Creek, Mich. Vegetable food. 297,905; Oct. 4; Serial No. 326,203; published June 7, 1932. Class 46.

Beatrice Creamery Company, Chicago, Ill. Eggs and cheese. 297,970; Oct. 4; Serial No. 327,300; published July 12, 1932. Class 46.

Bidwell, Joel R., doing business as Mother's Drumstick Sandwich Company, Dallas, Tex. Sandwiches. 297,971; Oct. 4; Serial No. 326,280; published July 19, 1932. Class 46.

Bistrow, E., doing business as Syrsup Manufacturing Company, St. Louis, Mo. Syrup. 297,964; Oct. 4; Serial No. 326,003; published July 12, 1932. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 297,862; Oct. 4; Serial No. 314,319; published June 14, 1932. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 297,889; Oct. 4; Serial No. 327,407; published July 5, 1932. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 297,898; Oct. 4; Serial No. 327,864; published July 19, 1932. Class 42.

Bonanno, John, New York, N. Y. Marking paper. 297,909; Oct. 4; Serial No. 327,842; published July 19, 1932. Class 37.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, powder, and cream. 297,929; Oct. 4; Serial No. 322,731; published July 12, 1932. Class 6.

Bragg, Paul C., doing business as O. K. Lax Mfg. Co., Los Angeles, Calif., assignor to Live Food Products, Inc. Herb laxative. 297,877; Oct. 4; Serial No. 317,838; Oct. 4; published Oct. 20, 1931. Class 6.

Brignall, Guy E., doing business as Sta-Well Company (Not Incorporated), Aurora, Ill. Whole grain health flour, including whole wheat and other grains. 297,981; Oct. 4; Serial No. 327,751; published July 12, 1932. Class 46.

Brothers Corporation, Brooklyn, N. Y. Bland non-narcotic suppository for piles. 297,840; Oct. 4; Serial No. 326,668; published June 28, 1932. Class 6.

Brown, William H., & Bro. Co., Baltimore, Md. Talcum powder, sachet-powders, cold creams, and perfumes. 89,092; renewed Nov. 12, 1932.

Burton, Leonard V. A., jr., doing business as Munchee Nuts Company, Minneapolis, Minn. Nuts. 297,906; Oct. 4; Serial No. 325,869; published July 12, 1932. Class 46.

Byron Weston Company, Dalton, Mass. Paper. 297,923; Oct. 4; Serial No. 327,264; published July 12, 1932. Class 37.

Calabro, Fortunato, Berwick, Pa. Liniment. 297,830; Oct. 4; Serial No. 327,338; published June 28, 1932. Class 6.

California Wool Growers Association, San Francisco, Calif. Blankets. 297,857; Oct. 4; Serial No. 312,226; published July 12, 1932. Class 42.

Canellos, Peter G., doing business as Quality Tea & Coffee Company, Boston, Mass. Coffee. 297,962; Oct. 4; Serial No. 326,934; published July 12, 1932. Class 46.

Carbide and Carbon Chemicals Corporation, New York, N. Y. Solvents, cellulose ethers and esters, and resins. 297,849; Oct. 4; Serial No. 302,528; published Nov. 24, 1931. Class 6.

Carlo, Elpidia T., El Paso, Tex. Medicinal cigarettes. 297,948; Oct. 4; Serial No. 318,866; published July 12, 1932. Class 6.

Chicago Times Company, Chicago, Ill. Newspaper comic section. 297,939; Oct. 4; Serial No. 325,640; published July 12, 1932. Class 38.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Articles of special weave. 297,893; Oct. 4; Serial No. 327,552; published July 12, 1932. Class 42.

Clayton Magazines, Inc., The, New York, N. Y. Magazines. 297,918; Oct. 4; Serial No. 327,426; published July 12, 1932. Class 38.

Collins, D. A., Mfg. Co., Inc., Brooklyn, N. Y. Automobile polishes. 297,863; Oct. 4; Serial No. 314,685; published July 12, 1932. Class 16.

Cracker Jack Co., The, Chicago, Ill. Shelled popcorn. 297,903; Oct. 4; Serial No. 315,250; published July 12, 1932. Class 46.

Daggett & Ramsdell, New York, N. Y. Face powder, preparations for the skin and toilet, and creams. 297,627; Oct. 4; Serial No. 327,729; published July 12, 1932. Class 6.

Daisbo, Oluf, doing business as Kleereeze Company, Rochester, Minn. Liquid preparation for abnormal conditions of the skin. 297,819; Oct. 4; Serial No. 325,941; published June 28, 1932. Class 6.

Davenport Seed Company, doing business as Sunburst Pop Corn Company, Davenport, Iowa. Pop corn. 297,851; Oct. 4; Serial No. 305,851; published July 12, 1932. Class 46.

Davidson, Walter, New York, N. Y. Bacillus acidophilus culture. 297,822; Oct. 4; Serial No. 325,195; published July 12, 1932. Class 6.

Davis, R. B., Company, Hoboken, N. J. Baking powder. 297,821; Oct. 4; Serial No. 325,364; published July 12, 1932. Class 6.

Davis, R. B., Company, Hoboken, N. J. Baking soda. 297,934; Oct. 4; Serial No. 324,154; published July 12, 1932. Class 6.

Dee-Hy Products Company. (See Liquid Dehydration Corporation, assignor.)

Deland, C. M., New York, N. Y. Woolen piece goods. 297,825; Oct. 4; Serial No. 326,671; published July 12, 1932. Class 42.

Dell Publishing Co. Inc., New York, N. Y. Magazine. 297,883; Oct. 4; Serial No. 320,494; published Dec. 15, 1931. Class 38.

Distillers Preparations, Inc., Weehawken, N. J. Medicinal tonic. 297,960; Oct. 4; Serial No. 326,671; published July 12, 1932. Class 6.

Dolge, C. B., Company Inc., Westport, Conn. Insecticides, rodenticides, etc. 297,808; Oct. 4; Serial No. 325,846; published June 28, 1932. Class 6.

Dralle, Georg, Hamburg, Germany. Hair-water. 86,979; renewed June 18, 1932.

Dryolet Mfg. Co., St. Louis, Mo. Shampoo. 297,831; Oct. 4; Serial No. 327,272; published June 28, 1932. Class 6.

Eade, George, Limited, London, England. Medicines. 297,878; Oct. 4; Serial No. 322,770; published July 5, 1932. Class 6.

Eaton Paper Company, Pittsfield, Mass. Papeteries, cards, tablets, etc. 297,919; Oct. 4; Serial No. 327,385; published July 12, 1932. Class 37.

Eiseman, Alfred S., New York, N. Y. Piece goods, dish cloths, handkerchiefs. 297,884–5; Oct. 4; Serial Nos. 327,218–19; published July 12, 1932. Class 42.

Electric City Box Co., Inc., Buffalo, N. Y. Cleaning and polishing cloths. 297,945; Oct. 4; Serial No. 327,503; published July 19, 1932. Class 4.

Elgin National Watch Company, Chicago and Elgin, Ill. Publication. 297,921; Oct. 4; Serial No. 327,306; published July 12, 1932. Class 38.

Ellis, Everett, New York, N. Y. Periodical. 297,911; Oct. 4; Serial No. 327,647; published July 12, 1932. Class 38.

Emerson Glass Corporation, Jamestown, N. Y. Metallic protecting paint. 297,865; Oct. 4; Serial No. 327,307; published July 12, 1932. Class 16.

Emery, Bird, Thayer Dry Goods Company, Kansas City, Mo. Cotton and wool fabrics, etc. 297,850; Oct. 4; Serial No. 305,702; published July 12, 1932. Class 42.

Enzer Remedy Company. (See Allen, Claude S.)

Erwin Cotton Mills Co., The. (See Gribbon, Lange & Steven, assignor.)

Faber, Eberhard, Pencil Company, Brooklyn, N. Y. Boxes containing pencils, holders, sharpeners, etc. 297,920; Oct. 4; Serial No. 327,347; published July 12, 1932. Class 37.

Farm Crest Bakeries, Incorporated, Wilmington, Del., and Detroit, Mich. Bread, rolls, buns, etc. 297,972; Oct. 4; Serial No. 327,350; published July 12, 1932. Class 46.

Felder Bros., New York, N. Y. Handbags, pocket books, purses, etc. 297,957; Oct. 4; Serial No. 327,351; published July 19, 1932. Class 3.

Filippone, B., & Co., Passaic, N. J. Canned peas, tomatoes, etc. 297,901; Oct. 4; Serial No. 316,961; published July 12, 1932. Class 46.

Finch, Theodore W., doing business as T. W. Finch & Company, Rochester, N. Y. Tea, mayonnaise, and vanilla. 297,950; Oct. 4; Serial No. 321,936; published July 12, 1932. Class 46.

Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Wheat flour. 297,975; Oct. 4; Serial No. 327,686; published July 12, 1932. Class 46.

Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Flour. 297,977–9; Oct. 4; Serial Nos. 327,687–9; published July 12, 1932. Class 46.

Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. 297,859; Oct. 4; Serial No. 312,797; published July 12, 1932. Class 46.

Fluegelman, N., & Co., Inc., New York, N. Y. Woolen, silk, cotton, etc., in the piece. 297,882; Oct. 4; Serial No. 322,507; published Feb. 2, 1932. Class 42.

Four Square Products, Inc., Dover, Del. Shaving cream. 297,944; Oct. 4; Serial No. 327,430; published July 12, 1932. Class 4.

Freihofer Baking Company, Philadelphia, Pa. Bread, cakes, buns, etc. 297,951; Oct. 4; Serial No. 321,641; published July 19, 1932. Class 46.

Godefroy Manufacturing Company, St. Louis, Mo. Face powder and pressing oil. 297,858; Oct. 4; Serial No. 312,705; published Nov. 24, 1931. Class 6.

Gosse, F. A., Company, Seattle, Wash. Canned fish. 297,949; Oct. 4; Serial No. 319,174; published July 12, 1932. Class 46.

Gregg Publishing Company, The, New York, N. Y. Fountain pens. 297,917; Oct. 4; Serial No. 327,465; published July 19, 1932. Class 37.

Gribbon, Lange & Steven, New York, N. Y., assignor to The Erwin Cotton Mills Co., West Durham, N. C. Cotton piece goods. 90,325; renewed Feb. 18, 1933.

Griesemer, Adam, doing business as Saurinol Distributors, Colorado Springs, Colo. Oil used for massaging purposes. 297,811; Oct. 4; Serial No. 326,625; published July 12, 1932. Class 6.
Hale Food Company, Dayton, Ohio. Laxative preparation. 297,946; Oct. 4; Serial No. 319,752; published July 5, 1932. Class 6.
Hammermill Paper Company, Erie, Pa. Cover paper. 297,922; Oct. 4; Serial No. 327,277; published July 19, 1932. Class 37.
Hanson, H. P., & Company, Chicago, Ill. Apple candy confection. 297,904; Oct. 4; Serial No. 325,929; published July 12, 1932. Class 46.
Happy Dream Beauty Preparations Co., New York, N. Y. Powder, nail polish, astringent lotion, etc. 297,933; Oct. 4; Serial No. 323,493; published June 28, 1932. Class 6.
Hardwick & Magee Company, Philadelphia, Pa. Textile rugs. 297,891; Oct. 4; Serial No. 327,692; published July 12, 1932. Class 42.
Hardwick & Magee Company, Philadelphia, Pa. Textile rugs. 297,895; Oct. 4; Serial No. 327,693; published July 12, 1932. Class 42.
Harestol Co. (See Hertzberg, Harry.)
Harvel Corporation, The, Newark, N. J. Paints, varnishes, primers, etc. 297,846; Oct. 4; Serial No. 287,300; published July 12, 1932. Class 16.
Henderson, Thomas J., doing business as Aspraigin Laboratories, Los Angeles, Calif. Preparation for headaches, neuralgia, etc. 297,843; Oct. 4; Serial No. 326,940; published July 5, 1932. Class 6.
Hercules Powder Company, Wilmington, Del. Ester of rosin. 297,813–14; Oct. 4; Serial Nos. 326,186–7; published June 28, 1932. Class 6.
Hertzberg, Harry, doing business as Harestol Co., Brooklyn, N. Y. Preparation for the hair. 297,834; Oct. 4; Serial No. 326,941; published July 5, 1932. Class 6.
Hickok Oil Corporation, Toledo, Ohio. Paint enamels, varnishes, lacquers, etc. 297,867; Oct. 4; Serial No. 326,900; published July 12, 1932. Class 16.
Hickok Oil Corporation, Toledo, Ohio. Radiator cement, adhesive patches, etc. 297,967; Oct. 4; Serial No. 326,898; published July 12, 1932. Class 5.
Hockmeyer Bros. Inc., New York, N. Y. Cotton corduroy piece goods. 297,896; Oct. 4; Serial No. 319,779; published July 19, 1932. Class 42.
Houma Mfg. Co., Houma, La. Washboards. 297,829; Oct. 4; Serial No. 327,468; published July 12, 1932. Class 24.
Howse, Mead & Sons, Inc., New York, N. Y. Woolens in the piece. 297,887; Oct. 4; Serial No. 327,280; published July 12, 1932. Class 42.
Humko Lard Co., Memphis, Tenn. Shortening. 297,961; Oct. 4; Serial No. 327,152; published July 12, 1932. Class 46.
Hunter, Wirlie M., Gold Beach, Oreg. Preparation for the treatment of pyorrhea. 297,932; Oct. 4; Serial No. 323,663; published June 28, 1932. Class 6.
Hy'ne Co., The, Chicago, Ill. Salve. 297,820; Oct. 4; Serial No. 325,581; published July 5, 1932. Class 6.
Johnson Educator Food Company, Cambridge, Mass. Cookies and crackers. 297,974; Oct. 4; Serial No. 327,590; puolished July 12, 1932. Class 46.
Kaufmann Department Stores, Inc., Pittsburgh, Pa. Soap, soap chips, and soap flakes. 297,866; Oct. 4; Serial No. 327,223; published July 19, 1932. Class 4.
Kaylene, Limited, London, England. Medicinal preparations. 297,805; Oct. 4; Serial No. 326,684; published June 28, 1932. Class 6.
Kleane Chemical Co., New York, N. Y. Preparation for use as a temporary tooth cavity filler and toothache relief. 297,836; Oct. 4; Serial No. 326,863; published July 5, 1932. Class 6.
Kleereeze Company. (See Dalsbo, Oluf.)
Kolag Company, New York, N. Y. Medicinal preparations. 297,963; Oct. 4; Serial No. 326,771; published July 12, 1932. Class 6.
Kops Bros., to Kops Bros. Inc., New York, N. Y., successor. Elastic webbing. 89,379; renewed Dec. 10, 1932.
Krexit Company, The. (See Massey, Raymond E.)
Kristiansen, Alfred, doing business as Kristy Laboratories, Stanley, Wis. Gargle. 297,837; Oct. 4; Serial No. 326,824; published July 5, 1932. Class 6.
Kristy Laboratories. (See Kristianson, Alfred.)
Kuchle, Gustav E., doing business as Okay Distributing Service, Lakewood, Ohio. Cleaning compound. 297,869; Oct. 4; Serial No. 326,377; published July 12, 1932. Class 4.
Leco Manufacturing Co. Inc., College Point, N. Y. Paints, paint enamels, and varnishes. 297,947; Oct. 4; Serial No. 327,444; published July 19, 1932. Class 16.
Lee, Barbara, Maplewood, Mo. Skin or tissue cream. 297,804; Oct. 4; Serial No. 326,613; published June 28, 1932. Class 6.
Lee, Geo. H., Co., Omaha, Nebr. Preparation for coughs, colds, etc. 297,924; Oct. 4; Serial No. 322,217; published Mar. 22, 1932. Class 6.
Liggett, Louis K., Company, Boston, Mass., renewed to Louis K. Liggett, New York, N. Y. Watches. 90,451; renewed Feb. 25, 1933.
Liquid Dehydration Corporation, assignor, by mesne assignments, to Dee-Hy Products Company, Chicago, Ill. Soda ash, tannin extracts, etc. 297,845; Oct. 4; Serial No. 285,573; published June 28, 1932. Class 6.
Live Products, Inc. (See Bragg, Paul C., assignor.)
Lowe, Joe, Corporation, Brooklyn, N. Y. Shortening. 297,958; Oct. 4; Serial No. 327,318; published July 12, 1932. Class 46.
Luck, Hazel M., doing business as Lady Hazel M. Luck, Washington, D. C. Ointment, creams, hair tonic, etc. 297,833; Oct. 4; Serial No. 326,944; published July 5, 1932. Class 6.
M. C. Provision Co., Inc., Jersey City, N. J. Sausages. 297,823; Oct. 4; Serial No. 325,076; published July 12, 1932. Class 46.
Magner, Mrs. John A., doing business as John A. Magner, New Orleans, La. Salve. 297,875; Oct. 4; Serial No. 324,106; published July 12, 1932. Class 6.
Marschall, Adolph J., doing business as Marschall Dairy Laboratory, Madison, Wis. Disinfectant. 297,902; Oct. 4; Serial No. 316,933; published Sept. 29, 1931. Class 6.
Marshall Field & Company, Chicago, Ill. Drapery fabrics. 297,900; Oct. 4; Serial No. 321,846; published June 20, 1932. Class 42.
Martha Washington Candies Company, Chicago, Ill., assignor to Elle Sheetz Candies Company, Chicago, Ill. Candies. 297,860; Oct. 4; Serial No. 312,967; published July 12, 1932. Class 46.
Marvio Mills, Inc., New York, N. Y. Cotton, linen, etc., goods. 297,864; Oct. 4; Serial No. 327,367; published July 12, 1932. Class 42.
Massey, Raymond E., doing business as The Krexit Company, Richardson Park, Del. Medicinal preparation. 297,817; Oct. 4; Serial No. 326,688; published July 5, 1932. Class 6.
McNeil, Robert, Philadelphia, Pa. Preparation for promoting the granulation and healing of wounds. 297,810; Oct. 4; Serial No. 326,891; published June 28, 1932. Class 6.
Mead Johnson & Company, Evansville, Ind. Cereal food. 297,897; Oct. 4; Serial No. 327,942; published July 19, 1932. Class 46.
Mentmore Manufacturing Company Limited, London, England. Pens, fountain pens, and pencil cases, etc. 297,938; Oct. 4; Serial No. 326,642; published July 12, 1932. Class 37.
Meredith Publishing Company, Des Moines, Iowa. Magazine section. 297,910; Oct. 4; Serial No. 327,762; published July 12, 1932. Class 38.
Minute Tapioca Company, Inc. (See Whitman Grocery Company, assignor.)
Morrell, John, & Co., Ottumwa, Iowa. Meats and prepared food products. 297,899; Oct. 4; Serial No. 315,208; published Aug. 4, 1931. Class 46.
Mother's Drumstick Sandwich Company. (See Bidwell, Joel R.)
Mountain Varnish & Color Works, Inc., The, Toledo, Ohio. Preparation for use in protecting the skin from paint, varnish, etc. 297,807; Oct. 4; Serial No. 326,723; published June 28, 1932. Class 6.
Munchee Nuts Company. (See Burton, Leonard V. A., jr.)
National Acme Co., The, Cleveland, Ohio. Paper rolls. 297,914; Oct. 4; Serial No. 327,595; published July 12, 1932. Class 37.
National Advisory Council on Radio in Education, Inc., New York, N. Y. Publication. 297,943; Oct. 4; Serial No. 326,984; published July 19, 1932. Class 38.
Nebraska Consolidated Mills Co., Omaha, Nebr. Flour. 297,980; Oct. 4; Serial No. 327,702; published July 12, 1932. Class 46.
Nelson-Columbia, Hugh, Carpet Mills, Inc., Philadelphia, Pa. Textile rugs and carpets. 297,888; Oct. 4; Serial No. 327,256; published June 28, 1932. Class 42.
Nunan, John D., receiver. (See American Barley Corporation, The.)
Nyal Company, Detroit, Mich. Tooth powder. 297,806; Oct. 4; Serial No. 326,689; published June 28, 1932. Class 6.
O. K. Lax Mfg. Co. (See Bragg, Paul C.)
Okay Distributing Service. (See Kuchle, Gustav E.)
Philadelphia Magnesia Co., Philadelphia, Pa. Citrate of magnesia. 297,832; Oct. 4; Serial No. 27,108; published July 5, 1932. Class 6.
Pierre, Dr., Chemical Company, doing business as Spaz Mineral Company, Chicago, Ill. Reducing bath salts. 297,856; Oct. 4; Serial No. 311,828; published June 28, 1932. Class 6.
Pinkard, Elizabeth L., Swissvale, Pa. Hair gloss and restorer. 297,847; Oct. 4; Serial No. 300,540; published July 12, 1932. Class 6.
Powdrell & Alexander, Inc., Danielson, Conn. Piece goods and curtains. 297,824; Oct. 4; Serial No. 326,790; published June 28, 1932. Class 42.
Prima Manufacturing Company, Inc., Philadelphia, Pa. Laundry washing machines. 297,828; Oct. 4; Serial No. 327,473; published July 12, 1932. Class 24.
Professional Laboratories, Incorporated, Richmond, Va. Medicinal preparation. 297,812; Oct. 4; Serial No. 326,191; published June 28, 1932. Class 6.
Puritan Mills, Incorporated, Atlanta, Ga. Mixed feeds for poultry, horses, etc. 297,952; Oct. 4; Serial No. 321,969; published July 19, 1932. Class 46.
Quality Tea & Coffee Company. (See Canellos, Peter G.)
Rath, Wm. C., Co. Inc., New York, N. Y. Pocket books, hand bags and suit cases. 297,956; Oct. 4; Serial No. 327,449; published July 12, 1932. Class 3.

Renton Company, Ltd., The, Pasadena, Calif. Laxative preparation. 297,879; Oct. 4; Serial No. 322,487; published July 5, 1932. Class 6.
Reynolds & Reynolds Company, The, Dayton, Ohio. Accounting forms, blanks, sheets, etc. 297,941; Oct. 4; Serial No. 326,912; published July 12, 1932. Class 37.
Roethlisberger & Co. Inc., New York, N. Y. Cheese. 297,968; Oct. 4; Serial No. 327,069; published July 12, 1932. Class 46.
Rossie Velvet Company, Mystic, Conn. Velvets in the piece. 297,894; Oct. 4; Serial No. 327,834; published July 19, 1932. Class 42.
Sabella, Vincenzo, & Co., New York, N. Y. Canned olive oil and tomatoes. 297,953; Oct. 4; Serial No. 319,048; published July 12, 1932. Class 46.
Saks & Company, New York, N. Y. Handbags and pocketbooks. 297,954; Oct. 4; Serial No. 327,605; published July 12, 1932. Class 3.
Saks & Company, New York, N. Y. Handbags. 297,955; Oct. 4; Serial No. 327,480; published July 12, 1932. Class 3.
Saurinol Distributors. (See Griesemer, Adam.)
Schering Corporation, New York, N. Y. Preparation for the purpose of facilitating the taking of X-ray pictures of internal organs. 297,925; Oct. 4; Serial No. 320,942; published June 28, 1932. Class 6.
Sheetz, Elle, Candies Company. (See Martha Washington Candies Company, assignor.)
Silvertone Company, Inc., New York, N. Y. Bird tonics. 297,855; Oct. 4; Serial No. 310,266; published July 12, 1392. Class 6.
Simons & French Company Incorporated, New York, N. Y. Fresh deciduous and citrus fruits, vegetables, etc. 297,854; Oct. 4; Serial No. 308,756; published July 12, 1932. Class 46.
Skin Culture Laboratories, Inc., New York, N. Y. Skin lotion. 297,835; Oct. 4; Serial No. 326,915; published July 5, 1932. Class 6.
Slendress Laboratories, Dallas, Tex. Flesh reducing composition. 297,809; Oct. 4; Serial No. 326,196; published June 28, 1932. Class 6.
Smith, Margaret H., Philadelphia, Pa. Ointment. 297,839; Oct. 4; Serial No. 326,694; published July 5, 1932. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Coal-tar colors. 88,377; renewed Sept. 10, 1932.
Sotto, Eddie, Erie, Pa. Cartoon publication. 297,912; Oct. 4; Serial No. 327,612; published July 19, 1932. Class 38.
Spaz Mineral Company. (See Pierre, Dr., Chemical Company.)
Spysup Manufacturing Company. (See Bistrow, E.)
Stafford Chemical Company, Inc., Amherst, Mass. Chemical compound. 297,876; Oct. 4; Serial No. 320,837; published July 12, 1932. Class 6.
Standard Varnish Works, New York, N. Y. Paints, paint oils, varnishes, etc. 297,868; Oct. 4; Serial No. 326,502; published July 19, 1932. Class 16.
Sta-Wel Company (not incorporated). (See Brignall, Guy E.)
Sterling Products Company, Evansville, Ind. Malt extract. 297,969; Oct. 4; Serial No. 327,071; published July 12, 1932. Class 46.
Stern Brothers, New York, N. Y. Textile rugs. 297,826; Oct. 4; Serial No. 326,306; published June 28, 1932. Class 42.
Stork Infant Wear. (See Weiss, David.)
Strathmore Paper Company, West Springfield, Mass. Paper. 297,916; Oct. 4; Serial No. 327,532; published July 12, 1932. Class 37.
Sucrest Corporation, New York, N. Y. Sugar and confectionery syrup. 297,908; Oct. 4; Serial No. 325,729; published July 12, 1932. Class 46.
Sulforall Products Ltd., Hollywood, Calif. Preparation for preparing sulphur baths. 297,816; Oct. 4; Serial No. 326,060; published June 28, 1932. Class 6.
Sunburst Pop Corn Company. (See Davenport Seed Company.)
Swift and Company, Chicago, Ill. Food for animals. 297,973; Oct. 4; Serial No. 327,379; published July 12, 1932. Class 46.
Taieb, Gaston, Philadelphia, Pa. Creams, powders, lipsticks, etc. 297,844; Oct. 4; Serial No. 285,901; published June 28, 1932. Class 6.
Tower Magazines Inc., Wilkes-Barre, Pa., and New York, N. Y. Periodical. 297,872; Oct. 4; Serial No. 324,912; published June 28, 1932. Class 38.
29th Division Association, Inc., The, Newark, N. J. Publications and circulars. 297,874; Oct. 4; Serial No. 319,791; published July 19, 1932. Class 38.
Twin City Textile Mills, Incorporated, St. Paul, Minn. Jute and shoddy piece goods and wiping cloth for cleaning machinery parts. 297,880; Oct. 4; Serial No. 323,771; published July 5, 1932. Class 42.
Union Oil Company of California, Los Angeles, Calif. Dry cleaning solvent, cleaning compound, etc. 297,870; Oct. 4; Serial No. 324,916; published July 19, 1932. Class 4.
Union Oil Company of California, Los Angeles, Calif. Cleaning compound, harness oil, etc. 297,871; Oct. 4; Serial No. 324,857; published July 19, 1932. Class 4.
Union Oil Company of California, Los Angeles, Calif. Fly spray and other insecticidal sprays. 297,935; Oct. 4; Serial No. 324,201; published July 12, 1932. Class 6.
Union Oil Company of California, Los Angeles, Calif. Medicinal petroleum oil, insecticidal oils, etc. 297,937; Oct. 4; Serial No. 324,915; published July 12, 1932. Class 6.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. 297,852; Oct. 4; Serial No. 308,140; published July 12, 1932. Class 42.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. 297,853; Oct. 4; Serial No. 308,464; published July 12, 1932. Class 42.
U. S. Manufacturing Corporation, Decatur, Ill. Fabrics. 297,892; Oct. 4; Serial No. 327,617; published July 19, 1932. Class 42.
Vogt Instant Freezers Incorporated, Louisville, Ky. Ice cream, water ice, sherbet, etc. 297,907; Oct. 4; Serial No. 326,733; published July 12, 1932. Class 46.
Wahl Company, The, Chicago, Ill. Fountain pens. 297,913; Oct. 4; Serial No. 327,611; published July 12, 1932. Class 37.
Waltham Chemical Co., Waltham, Mass. Insect exterminating spray, discs, etc. 297,842; Oct. 4; Serial No. 326,171; published July 5, 1932. Class 6.
Washtien, Louis, Brooklyn, N. Y. Skin salve. 297,818; Oct. 4; Serial No. 325,961; published June 28, 1932. Class 6.
Wecoline Products Inc., New York, N. Y. Fatty acids from tallow, fish oil, whale oil, and vegetable oils. 297,926; Oct. 4; Serial No. 319,793; published June 28, 1932. Class 6.
Weiss, David, doing business as Stork Infant Wear, New York, N. Y. Textile diapers. 297,886; Oct. 4; Serial No. 326,878; published July 5, 1932. Class 42.
White-Stokes Company, Inc., Chicago, Ill. Confectionery base, consisting of butter, fat, solids not fat, and sugar. 297,928; Oct. 4; Serial No. 323,017; published July 12, 1932. Class 46.
Whitman Grocery Company, Orange, Mass., assignor, by mesne assignments, to Minute Tapioca Company, Inc., New York, N. Y. Prepared tapioca. 39,183; renewed Nov. 4, 1932.
Wieboldt Stores, Inc., Chicago, Ill. Cod liver oil. 297,930; Oct. 4; Serial No. 322,667; published June 28, 1932. Class 6.
Wilkes-Barre Lace Manufacturing Company, Wilkes-Barre, Pa. Textile material. 297,890; Oct. 4; Serial No. 327,458; published July 5, 1932. Class 42.
Wilkinson, Gaddis & Company, Newark, N. J. Ammonia, borax, camphor, etc. 297,841; Oct. 4; Serial No. 326,620; published July 5, 1932. Class 6.
Wilson-Jones Company, Chicago, Ill. Books, binders, and filler sheets. 297,942; Oct. 4; Serial No. 327,078; published July 12, 1932. Class 37.
Winter, Milo, Company, Chicago, Ill. Posters. 297,873; Oct. 4; Serial No. 323,316; published July 19, 1932. Class 38.
Wolf, Jacques, & Co., Passaic, N. J. Chemical preparation. 297,838; Oct. 4; Serial No. 326,700; published July 5, 1932. Class 6.
Yorkman Candies, Inc., New Orleans, La. Candy. 297,982; Oct. 4; Serial No. 324,865; published May 31, 1932. Class 46.

LIST OF REGISTRANTS OF LABELS

B/G Sandwich Shops, Inc., Chicago, Ill. First Call for Luncheon—B/G Eating Inn. For Sandwiches, Pastries, and Ice-Cream. 41,229; Oct. 4.
California Bottling Wks., doing business as The Hi-Ball Products Co., Los Angeles, Calif. Hi-Ball. For Lime Rickey. 41,230; Oct. 4.
Chicago Spice & Flavor Co. (See Tesoro, Sam.)
Dyer & Hall, Inc., Auburn, Me. Cinderella. For Slippers. 41,231; Oct. 4.
Easy Wash Chemical Company, Slovan, Pa. Easy-Wash. For a Scientific Combination of Chemical Agents That Bleaches, Cleans, and Disinfects. 41,232; Oct. 4.
Goldenberg, D., Inc., Philadelphia, Pa. Chew-Its. For Candy. 41,233; Oct. 4.
Hi-Ball Products Co., The. (See California Bottling Wks.)
Hills Brothers Company, The, New York, N. Y. Dromedary Golden Dates Pitted. For Dates. 41,234; Oct. 4.
Hoague-Sprague Corporation, Lynn, Mass. Style Maid. For Boxes. 41,235; Oct. 4.
Hoague-Sprague Corporation, Lynn, Mass. Style Shoes. For Boxes. 41,236; Oct. 4.
Hoague-Sprague Corporation, Lynn, Mass. Feminine Footwear Excellence. For Boxes. 41,237; Oct. 4.
Keystone Chemical Corporation, Detroit, Mich. Square Deel Cleanser. For a Preparation for Cleansing and Scouring. 41,238; Oct. 4.
Klein Chocolate Company, Elizabethtown, Pa. Klein's. For Milk Chocolate. 41,239; Oct. 4.

Knight, Victor W., doing business as Victor W. Knight Trick-A-Chief Company, Chicago, Ill. Trick-A-Chief Quality Handkerchiefs. For Handkerchiefs. 41,240; Oct. 4.

Levinson, Joseph, Los Angeles, Calif. Levinson's Ancestors Herb Tea. For Herb Tea. 41,241; Oct. 4.

Loeb, H. A., & Company, Chicago, Ill. Lady Newberry. For Hair Nets. 41,242; Oct. 4.

Mezzetta, Giuseppe L., San Francisco, Calif. Olio Ramella. For Olive Oil. 41,243; Oct. 4.

Nassour Bros., Inc., Ltd., Los Angeles, Calif. Red-Tone. For Astringent and Deodorant Mouth Wash and Gargle. 41,244; Oct. 4.

Nassour Bros., Inc., Ltd., Los Angeles, Calif. Dentone. For Astringent and Deodorant Mouth Wash and Gargle. 41,245; Oct. 4.

Palumbos Lithography & Printery, Rochester, N. Y. Home Washing Fluid. For Washing Fluid. 41,246; Oct. 4.

Schmidt, Geo. L., doing business as J. Fred Schmidt Packing Company, Columbus, Ohio. Schmidt's Montrose. For German Wieners. 41,247; Oct. 4.

Select Apples, Inc., New York, N. Y. Tasty Treat Apples. For Apples. 41,248; Oct. 4.

Tesoro, Sam, doing business as Chicago Spice & Flavor Co., and Tesoro Brand Products and Chicago Spice & Flavoring Ext. Co., Chicago, Ill. Tesoro Effervescent Preparation. For Effervescent Preparation. 41,249; Oct. 4.

Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Double Mint Chewing Gum. For Chewing Gum. 41,250; Oct. 4.

Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Juicy Fruit Chewing Gum. For Chewing Gum. 41,251–2; Oct. 4.

LIST OF REGISTRANTS OF PRINTS

Cream of Wheat Corporation, The, Minneapolis, Minn. Little Farm Children are Rich these Days. For Wheat Breakfast Food. 13,924; Oct. 4.

Elliot, H. R., & Co. Inc., New York, N. Y. We have just Delivered a Load of Blue Coal. For Coal. 13,925; Oct. 4.

Minnehaha Water Company, The, Cleveland, Ohio. Minnehaha. For Beverage. 13,926; Oct. 4.

Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Double Mint. For Chewing Gum. 13,927; Oct. 4.

Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Juicy Fruit. For Chewing Gum. 13,928; Oct. 4.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 3

Handbags. Saks & Company. 297,955; Oct. 4; Serial No. 327,480; published July 12, 1932.

Hand bags and pocketbooks. Saks & Company. 297,954; Oct. 4; Serial No. 327,605; published July 12, 1932.

Hand bags, pocketbooks, purses, etc. Felder Bros. 297,957; Oct. 4; Serial No. 327,351; published July 19, 1932.

Pocketbooks. R. Appel. 297,971; Oct. 4; Serial No. 327,332; published July 19, 1932.

Pocketbooks, hand bags, and suit cases. Wm. C. Rath Co. Inc. 297,956; Oct. 4; Serial No. 327,449; published July 12, 1932.

CLASS 4

Cleaning and polishing cloths. Electric City Box Co. 297,945; Oct. 4; Serial No. 327,503; published July 19, 1932.

Cleaning compound. G. E. Kuchle. 297,869; Oct. 4; Serial No. 326,377; published July 12, 1932.

Cleaning compound, harness oil, etc. Union Oil Company of California. 297,871; Oct. 4; Serial No. 324,857; published July 19, 1932.

Cleaning solvent, cleaning compound, etc., Dry. Union Oil Company of California. 297,870; Oct. 4; Serial No. 324,916; published July 19, 1932.

Shaving cream. Four Square Products, Inc. 297,944; Oct. 4; Serial No. 327,480; published July 12, 1932.

Soap, soap chips, and soap flakes. Kaufmann Department Stores, Inc. 297,866; Oct. 4; Serial No. 327,223; published July 19, 1932.

Soaps and soap powders. Apex Soap and Sanitary Corp. 297,848; Oct. 4; Serial No. 296,795; published May 6, 1930.

CLASS 5

Cement, adhesive patches, etc., Radiator. Hickok Oil Corporation. 297,967; Oct. 4; Serial No. 326,808; published July 12, 1932.

CLASS 6

Acids from tallow, fish oil, whale oil, and vegetable oils, Fatty. Wecoline Products Inc. 297,926; Oct. 4; Serial No. 319,793; published June 28, 1932.

Ammonia, borax, camphor, etc. Wilkinson, Gaddis & Company. 297,841; Oct. 4; Serial No. 326,620; published July 5, 1932.

Antimite. Antimite Company. 297,940; Oct. 4; Serial No. 324,923; published July 12, 1932.

Bacillus acidophilus culture. W. Davidson. 297,822; Oct. 4; Serial No. 325,195; published July 12, 1932.

Baking powder. R. B. Davis Company. 297,821; Oct. 4; Serial No. 325,304; published July 12, 1932.

Baking soda. R. B. Davis Company. 297,934; Oct. 4; Serial No. 324,154; published July 12, 1932.

Chemical compound. Stafford Chemical Company. 297,876; Oct. 4; Serial No. 320,837; published July 12, 1932.

Chemical preparation. Jacques Wolf & Co. 297,838; Oct. 4; Serial No. 326,700; published July 5, 1932.

Coal-tar colors. Society of Chemical Industry in Basle. 88,377; renewed Sept. 10, 1932.

Cod liver oil. Wieboldt, Inc. 297,930; Oct. 4; Serial No. 322,667; published June 28, 1932.

Cream, Skin or tissue. B. Lee. 297,804; Oct. 4; Serial No. 326,613; published June 28, 1932.

Creams, powders, lipsticks, etc. G. Taleb. 297,844; Oct. 4; Serial No. 285,901; published June 28, 1932.

Disinfectant. A. J. Marschall. 297,902; Oct. 4; Serial No. 316,933; published Sept. 29, 1931.

Ester of rosin. Hercules Powder Company. 297,813–14; Oct. 4; Serial Nos. 326,186–7; published June 28, 1932.

Exterminating spray, discs, etc., Insect. Waltham Chemical Co. 297,842; Oct. 4; Serial No. 326,171; published July 5, 1932.

Flesh reducing composition. Slendress Laboratories. 297,809; Oct. 4; Serial No. 326,196; published June 28, 1932.

Gargle. A. Kristianson. 297,837; Oct. 4; Serial No. 326,824; published July 5, 1932.

Hair gloss and restorer. E. L. Pinkard. 297,847; Oct. 4; Serial No. 300,540; published July 12, 1932.

Hair-water. G. Dralle. 86,979; renewed June 18, 1932.

Hydrosulfite compound. Arkansas Company Inc. 297,931; Oct. 4; Serial No. 323,855; published Apr. 5, 1932.

Insecticides, rodenticides, etc. C. B. Dolge Company Inc. 297,808; Oct. 4; Serial No. 325,846; published June 28, 1932.

Laxative, Herb. P. C. Bragg. 297,877; Oct. 4; Serial No. 317,838; published Oct. 20, 1931.

Laxative preparation. Hale Food Company. 297,946; Oct. 4; Serial No. 319,752; published July 5, 1932.

Laxative preparation. Renton Company. 297,879; Oct. 4; Serial No. 322,487; published July 5, 1932.

Liniment. F. Calabro. 297,830; Oct. 4; Serial No. 327,338; published June 28, 1932.

Liquid preparation. American Nicoton Corporation. 297,861; Oct. 4; Serial No. 313,900; published June 28, 1932.

Liquid preparation for abnormal conditions of the skin. O. Dalsbo. 297,819; Oct. 4; Serial No. 325,941; published June 28, 1932.

Lotion, Skin. Skin Culture Laboratories, Inc. 297,835; Oct. 4; Serial No. 326,915; published July 5, 1932.

Magnesia, Citrate of. Philadelphia Magnesia Co. 297,832; Oct. 4; Serial No. 327,108; published July 5, 1932.

Medicinal cigarettes. E. T. Carlo. 297,948; Oct. 4; Serial No. 318,866; published July 12, 1932.

Medicinal petroleum oil, insecticidal oils, etc. Union Oil Company of California. 297,937; Oct. 4; Serial No. 324,915; published July 12, 1932.

Medicinal preparation. C. S. Allen. 297,936; Oct. 4; Serial No. 324,815; published June 28, 1932.

Medicinal preparation. Ayer Company. 297,815; Oct. 4; Serial No. 327,182; published July 12, 1932.

Medicinal preparation. R. E. Massey. 297,817; Oct. 4; Serial No. 326,688; published July 5, 1932.

Medicinal preparation. Professional Laboratories, Incorporated. 297,812; Oct. 4; Serial No. 326,191; published June 28, 1932.

Medicinal preparations. Kaylene, Limited. 297,805; Oct. 4; Serial No. 326,684; published June 28, 1932.

Medicinal preparations. Kolag Company. 297,963; Oct. 4; Serial No. 326,771; published July 12, 1932.

Medicines. George Eade, Limited. 297,878; Oct. 4; Serial No. 322,770; published July 5, 1932.

Oil used for massaging purposes. A. Griesemer. 297,811; Oct. 4; Serial No. 326,625; published July 12, 1932.

Ointment. M. H. Smith. 297,839; Oct. 4; Serial No. 326,694; published July 5, 1932.

Ointment, creams, hair tonic, etc. H. M. Luck. 297,833; Oct. 4; Serial No. 326,944; published July 5, 1932.

Perfume, toilet water, powder, and cream. Bourjois, Inc. 297,929; Oct. 4; Serial No. 322,731; published July 12, 1932.

Powder and pressing oil, Face. Godefroy Manufacturing Company. 297,858; Oct. 4; Serial No. 312,705; published Nov. 24, 1931.

Powder, nail polish, astringent lotion, etc. Happy Dream Beauty Preparations Co. 297,933; Oct. 4; Serial No. 323,493; published June 28, 1932.

Powder, preparations for the skin and toilet, and creams. Daggett & Ramsdell. 297,827; Oct. 4; Serial No. 327,729; published July 12, 1932.

Powder, sachet-powders, cold-creams, and perfumes, Talcum. William H. Brown & Bro. Co. 89,092; renewed Nov. 12, 1932.

Powder, Tooth. Nyal Company. 297,806; Oct. 4; Serial No. 326,689; published June 28, 1932.

Preparation for coughs, colds, etc. Geo. H. Lee Co. 297,924; Oct. 4; Serial No. 322,217; published Mar. 22, 1932.

Preparation for headaches, neuralgia, etc. T. J. Henderson. 297,843; Oct. 4; Serial No. 326,940; published July 5, 1932.

Preparation for preparing sulphur baths. Sulforall Products Ltd. 297,816; Oct. 4; Serial No. 326,060; published June 28, 1932.

Preparation for promoting the granulation and healing of wounds. R. McNeil. 297,810; Oct. 4; Serial No. 326,391; published June 28, 1932.

Preparation for the hair. H. Hertzberg. 297,834; Oct. 4; Serial No. 326,941; published July 5, 1932.

Preparation for the purpose of facilitating the taking of X-ray pictures of internal organs. Schering Corporation. 297,925; Oct. 4; Serial No. 320,942; published June 28, 1932.

Preparation for the treatment of pyorrhea. W. M. Hunter. 297,932; Oct. 4; Serial No. 323,663; published June 28, 1932.

Preparation for use as a temporary tooth cavity filler and toothache relief. Kleane Chemical Co. 297,836; Oct. 4; Serial No. 326,863; published July 5, 1932.

Preparation for use in protecting the skin from paint, varnish, etc. Mountain Varnish & Color Works, Inc. 297,807; Oct. 4; Serial No. 326,723; published June 28, 1932.

Salts, Bath. Dr. Pierre Chemical Company. 297,856; Oct. 4; Serial No. 311,828; published June 28, 1932.

Salve. Hy'ne Co. 297,820; Oct. 4; Serial No. 325,581; published July 5, 1932.

Salve. Mrs. John A. Magner. 297,875; Oct. 4; Serial No. 324,106; published July 12, 1932.

Salve, Skin. L. Washtien. 297,818; Oct. 4; Serial No. 325,961; published June 28, 1932.

Shampoo. Dryolet Mfg. Co. 297,831; Oct. 4; Serial No. 327,272; published June 28, 1932.

Soda ash, tannin extracts, etc. Liquid Dehydration Corporation. 297,845; Oct. 4; Serial No. 285,573; published June 28, 1932.

Solvents for oils, cellulose ethers and esters, and natural or synthetic resins. Carbide and Carbon Chemicals. 297,849; Oct. 4; Serial No. 302,528; published Nov. 24, 1931.

Spray and other insecticidal sprays, Fly. Union Oil Company of California. 297,935; Oct. 4; Serial No. 324,201; published July 12, 1932.

Suppository for piles, Bland non-narcotic. Brothers Corporation. 297,840; Oct. 4; Serial No. 326,668; published June 28, 1932.

Tonic, Herb teas as a. Arko Herbs Incorporated. 297,927; Oct. 4; Serial No. 322,478; published July 12, 1932.

Tonic, Medicinal. Distillers Preparations, Inc. 297,960; Oct. 4; Serial No. 327,187; published July 12, 1932.

Tonics, Bird. Silvertone Company. 297,855; Oct. 4; Serial No. 310,266; published July 12, 1932.

CLASS 10

Fertilizers. American Agricultural Chemical Company. 88,224; renewed Sept. 10, 1932.

CLASS 16

Paint enamels, varnishes, lacquers, etc. Hickok Oil Corporation. 297,867; Oct. 4; Serial No. 326,900; published July 12, 1932.

Paint, Metallic protecting. Emerson Glass Corporation. 297,865; Oct. 4; Serial No. 327,307; published July 12, 1932.

Paints, paint enamels, and varnishes. Leco Manufacturing Co. Inc. 297,947; Oct. 4; Serial No. 327,444; published July 19, 1932.

Paints, paint oils, varnishes, etc. Standard Varnish Works. 297,868; Oct. 4; Serial No. 326,502; published July 19, 1932.

Paints, varnishes, primers, etc. Harvel Corporation. 297,846; Oct. 4; Serial No. 287,800; published July 12, 1932.

Polishes, Automobile. D. A. Collins Mfg. Co. 297,863; Oct. 4; Serial No. 314,685; published July 12, 1932.

CLASS 24

Laundry washing machines. Prima Manufacturing Company. 297,828; Oct. 4; Serial No. 327,473; published July 12, 1932.

Washboards. Houma Mfg. Co. 297,829; Oct. 4; Serial No. 327,468; published July 12, 1932.

Watches. Louis K. Liggett Company. 90,451; renewed Feb. 25, 1933.

CLASS 37

Accounting forms, blanks, sheets, etc. Reynolds & Reynolds Company. 297,941; Oct. 4; Serial No. 326,912; published July 12, 1932.

Books, binders, and filler sheets. Wilson-Jones Company. 297,942; Oct. 4; Serial No. 327,078; published July 12, 1932.

Paper. Byron Weston Company. 297,923; Oct. 4; Serial No. 327,264; published July 12, 1932.

Paper. Strathmore Paper Company. 297,916; Oct. 4; Serial No. 327,532; published July 12, 1932.

Paper, Cover. Hammermill Paper Company. 297,922; Oct. 4; Serial No. 327,277; published July 19, 1932.

Paper, Marking. J. Bonanno. 297,909; Oct. 4; Serial No. 327,842; published July 19, 1932.

Paper rolls. National Acme Co. 297,914; Oct. 4; Serial No. 327,595; published July 12, 1932.

Papeteries, cards, tablets, etc. Eaton Paper Company. 297,919; Oct. 4; Serial No. 327,385; published July 12, 1932.

Pencils, holders, sharpeners, etc., Boxes containing. Eberhard Faber Pencil Company. 297,920; Oct. 4; Serial No. 327,347; published July 12, 1932.

Pens, Fountain. Gregg Publishing Company. 297,917; Oct. 4; Serial No. 327,465; published July 19, 1932.

Pens, Fountain. Wahl Company. 297,913; Oct. 4; Serial No. 327,611; published July 12, 1932.

Pens, fountain pens, and pencil cases, etc. Mentmore Manufacturing Company Limited. 297,938; Oct. 4; Serial No. 326,642; published July 12, 1932.

CLASS 38

Magazine. Dell Publishing Co. Inc. 297,883; Oct. 4; Serial No. 320,494; published Dec. 15, 1931.

Magazine section. Meredith Publishing Company. 297,910; Oct. 4; Serial No. 327,762; published July 12, 1932.

Magazines. Clayton Magazines, Inc. 297,918; Oct. 4; Serial No. 327,426; published July 12, 1932.

Newspaper. Arnesen Newsprint Publishers Corporation. 297,915; Oct. 4; Serial No. 327,573; published July 12, 1932.

Newspaper comic section. Chicago Times Company. 297,939; Oct. 4; Serial No. 325,640; published July 12, 1932.

Periodical. E. Ellis. 297,911; Oct. 4; Serial No. 327,647; published July 12, 1932.

Periodical. Tower Magazines, Inc. 297,872; Oct. 4; Serial No. 324,912; published June 28, 1932.

Posters. Milo Winter Company. 297,873; Oct. 4; Serial No. 323,316; published July 19, 1932.

Publication. Elgin National Watch Company. 297,921; Oct. 4; Serial No. 327,306; published July 12, 1932.

Publication. National Advisory Council on Radio in Education, Inc. 297,948; Oct. 4; Serial No. 326,984; published July 19, 1932.

Publication, Cartoon. E. Sotto. 297,912; Oct. 4; Serial No. 327,612; published July 19, 1932.

Publications and circulars. 29th Division Association, Inc. 297,874; Oct. 4; Serial No. 319,791; published July 19, 1932.

CLASS 42

Articles of special weave. Chicopee Manufacturing Corporation. 297,893; Oct. 4; Serial No. 327,552; published July 12, 1932.

Blankets. California Wool Growers Association. 297,857; Oct. 4; Serial No. 312,226; published July 12, 1932.

Cotton and wool fabrics, etc. Emery, Bird, Thayer Dry Goods Company. 297,850; Oct. 4; Serial No. 305,702; published July 12, 1932.

Cotton corduroy piece goods. Hockmeyer Bros. Inc. 297,896; Oct. 4; Serial No. 319,779; published July 19, 1932.

Cotton, linen, etc., goods, etc. Marvlo Mills, Inc. 297,864; Oct. 4; Serial No. 327,367; published July 12, 1932.

Cotton piece goods. Gribbon, Lange & Steven. 90,325; renewed Feb. 18, 1933.

Diapers, Textile. D. Weiss. 297,886; Oct. 4; Serial No. 326,878; published July 5, 1932.

Elastic webbing. Kops Bros. 89,379; renewed Dec. 10, 1932.

Fabrics. U. S. Manufacturing Corporation. 297,892; Oct. 4; Serial No. 327,617; published July 19, 1932.

Fabrics, Cotton drapery. Atkinson, Fenlon Co. Inc. 297,881; Oct. 4; Serial No. 323,387; published July 19, 1932.

Fabrics, Drapery. Marshall Field & Company. 297,900; Oct. 4; Serial No. 321,846; published June 28, 1932.

Fabrics, Elastic. United Elastic Corporation. 297,852; Oct. 4; Serial No. 308,140; published July 12, 1932.

Fabrics, Elastic. United Elastic Corporation. 297,853; Oct. 4; Serial No. 308,464; published July 12, 1932.

Jute and shoddy piece goods and wiping cloth for cleaning machinery parts. Twin City Textile Mills, Incorporated. 297,880; Oct. 4; Serial No. 323,771; published July 5, 1932.

Piece goods and curtains. Powdrell & Alexander, Inc. 297,824; Oct. 4; Serial No. 326,790; published June 28, 1932.

Piece goods, dish cloths, handkerchiefs. A. S. Eiseman. 297,884–5; Oct. 4; Serial Nos. 327,218–19; published July 12, 1932.

Pile fabrics. Sidney Blumenthal & Co. Inc. 297,862; Oct. 4; Serial No. 314,319; published June 28, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 297,880; Oct. 4; Serial No. 327,497; published July 5, 1932.
Pile fabrics in the piece. Sidney Blumenthal & Co. Inc. 297,898; Oct. 4; Serial No. 327,864; published July 19, 1932.
Rugs and carpets, Textile. High Nelson-Columbia Carpet Mills, Inc. 297,888; Oct. 4; Serial No. 327,256; published June 28, 1932.
Rugs, Textile. Hardwick & Magee Company. 297,891; Oct. 4; Serial No. 327,692; published July 12, 1932.
Rugs, Textile. Stern Brothers. 297,826; Oct. 4; Serial No. 326,306; published June 28, 1932.
Textile material. Wilkes-Barre Lace Manufacturing Company. 297,890; Oct. 4; Serial No. 327,458; published July 5, 1932.
Textile rugs. Hardwick & Magee Company. 297,895; Oct. 4; Serial No. 327,693; published July 12, 1932.
Velvets in the piece. Rossie Velvet Company. 297,894; Oct. 4; Serial No. 327,834; published July 19, 1932.
Woolen piece goods. C. M. Deland. 297,825; Oct. 4; Serial No. 326,671; published July 12, 1932.
Woolen, silk, cotton, etc., in the piece. N. Fluegelman & Co. 297,882; Oct. 4; Serial No. 322,507; published Feb. 2, 1932.
Woolens in the piece. Howse, Mead & Sons, Inc. 297,887; Oct. 4; Serial No. 327,280; published July 12, 1932.

CLASS 46.

Apple candy confection. H. P. Hanson & Company. 297,904; Oct. 4; Serial No. 325,929; published July 12, 1932.
Bread, rolls, buns, etc. Farm Crest Bakeries, Incorporated. 297,972; Oct. 4; Serial No. 327,350; published July 12, 1932.
Breads, cakes, buns, etc. Freihofer Baking Company. 297,951; Oct. 4; Serial No. 321,641; published July 19, 1932.
Candles. Martha Washington Candles Company. 297,860; Oct. 4; Serial No. 312,967; published July 12, 1932.
Candy. Yorkman Candies, Inc. 297,982; Oct. 4; Serial No. 324,865; published May 31, 1932.
Canned crab meat, crab meat in the bulk, and steamed crabs. Alaskan Products Incorporated. 297,959; Oct. 4; Serial No. 327,036; published July 12, 1932.
Canned fish. F. A. Gosse Company. 297,949; Oct. 4; Serial No. 319,174; published July 12, 1932.
Canned olive oil and tomatoes. Vincenzo Sabella & Co. 297,953; Oct. 4; Serial No. 319,048; published July 12, 1932.
Canned peas, tomatoes, etc. B. Filippone & Co. 297,901; Oct. 4; Serial No. 316,961; published July 12, 1932.
Cereal breakfast foods. J. D. Nunan. 297,966; Oct. 4. Serial No. 326,987; published July 19, 1932.
Cereal food. Mead Johnson & Company. 297,897; Oct. 4; Serial No. 327,942; published July 19, 1932.
Cheese. Roethlisberger & Co. Inc. 297,968; Oct. 4; Serial No. 327,069; published July 12, 1932.
Coffee. P. G. Canellos. 297,962; Oct. 4; Serial No. 326,934; published July 12, 1932.
Confectionery base, consisting of butter, fats, solids not fats, and sugar. White-Stokes Company. 297,928; Oct. 4; Serial No. 323,017; published July 12, 1932.
Cookies and crackers. Johnson Educator Food Company. 297,974; Oct. 4; Serial No. 327,590; published July 12, 1932.
Eggs and cheese. Beatrice Creamery Company. 297,970; Oct. 4; Serial No. 327,300; published July 12, 1932.
Extract, Malt. Sterling Products Company. 297,969; Oct. 4; Serial No. 327,071; published July 12, 1932.
Feeds for poultry, horses, etc., Mixed. Puritan Mills, Incorporated. 297,952; Oct. 4; Serial No. 321,969; published July 19, 1932.
Flour. Fisher Flouring Mills Company. 297,975; Oct. 4; Serial No. 327,686; published July 12, 1932.
Flour. Fisher Flouring Mills Company. 297,977–9; Oct. 4; Serial Nos. 327,687–9; published July 12, 1932.
Flour. Nebraska Consolidated Mills Co. 297,980; Oct. 4; Serial No. 327,702; published July 12, 1932.
Flour, including whole wheat and other grains. Whole grain health. G. E. Brignall. 297,981; Oct. 4; Serial No. 327,751; published July 12, 1932.
Food for animals. Swift and Company. 297,973; Oct. 4; Serial No. 327,379; published July 12, 1932.
Food for stocks and poultry. Associated Farmers' Exchanges, Inc. 297,965; Oct. 4; Serial No. 326,847; published July 12, 1932.
Food, Vegetable. Battle Creek Food Company. 297,905; Oct. 4; Serial No. 326,203; published July 12, 1932.
Fruits, vegetables, etc., Fresh decidous and citrus. Simons & French Company Incorporated. 297,854; Oct. 4; Serial No. 308,756; published July 12, 1932.
Gum, Chewing. Frank H. Fleer Corporation. 297,859; Oct. 4; Serial No. 312,797; published July 12, 1932.
Ice cream, water ice, sherbet, etc. Vogt Instant Freezers Incorporated. 297,907; Oct. 4; Serial No. 325,733; published July 12, 1932.
Meats and prepared food products. John Morrell & Co. 297,899; Oct. 4; Serial No. 315,208; published Aug. 4, 1931.
Nuts. L. V. A. Burton, jr. 297,906; Oct. 4; Serial No. 325,869; published July 12, 1932.
Pop corn. Davenport Seed Company. 297,851; Oct. 4; Serial No. 305,851; published July 12, 1932.
Popcorn, Shelled. Cracker Jack Co. 297,903; Oct. 4; Serial No. 315,250; published July 12, 1932.
Sandwiches. J. R. Bidwell. 297,976; Oct. 4; Serial No. 326,280; published July 19, 1932.
Sausages. M. C. Provision Co. 297,823; Oct. 4; Serial No. 325,076; published July 12, 1932.
Shortening. Humko Lard Co. 297,961; Oct. 4; Serial No. 327,152; published July 12, 1932.
Shortening. Joe Lowe Corporation. 297,958; Oct. 4; Serial No. 327,318; published July 12, 1932.
Sugar and confectionery syrup. Sucrest Corporation. 297,908; Oct. 4; Serial No. 325,729; published July 12, 1932.
Syrup. E. Bistrow. 297,964; Oct. 4; Serial No. 326,603; published July 12, 1932.
Tapioca. Whitman Grocery Company. 39,183; renewed Nov. 4, 1932.
Tea, mayonnaise, and vanilla. T. W. Finch. 297,950; Oct. 4; Serial No. 321,936; published July 12, 1932.

LIST OF LABELS

Chew-Its. For Candy. D. Goldenberg, Inc. 41,233; Oct. 4.
Cinderella. For Slippers. Dyer & Hall, Inc. 41,231; Oct. 4.
Dentone. For Astringent and Deodorant Mouth Wash and Gargle. Nassour Bros., Inc. 41,245; Oct. 4.
Dromedary Golden Dates Pitted. For Dates. Hills Brothers Company. 41,234; Oct. 4.
Easy-Wash. For a Scientific Combination of Chemical Agents that Bleaches, Cleans, and Disinfects. Easy Wash Chemical Company. 41,232; Oct. 4.
Feminine Footwear Excellence. For Boxes. Hoague-Sprague Corporation. 41,237; Oct. 4.
First Call for Luncheon—B/G Eating Inn. For Sandwiches, Pastries, and Ice Cream. B/G Sandwich Shops, Inc. 41,229; Oct. 4.
Hi-Ball. For Lime Rickey. California Bottling Wks. 41,230; Oct. 4.
Home Washing Fluid. For Washing Fluid. Palumbos Lithography & Printery. 41,246; Oct. 4.
Klein's. For Milk Chocolate. Klein Chocolate Company. 41,239; Oct. 4.
Lady Newberry. For Hair Nets. H. A. Loeb & Company. 41,242; Oct. 4.
Levinson's Ancestors Herb Tea. For Herb Tea. J. Levinson. 41,241; Oct. 4.
Olio Ramella. For Olive Oil. G. L. Mezzetta. 41,243; Oct. 4.
Red-Tone. For Astringent and Deodorant Mouth Wash and Gargle. Nassour Bros., Inc. 41,244; Oct. 4.
Schmidt's Montrose. For German Wieners. G. L. Schmidt. 41,247; Oct. 4.
Square Deel Cleanser. For a Preparation for Cleansing and Scouring. Keystone Chemical Corporation. 41,238; Oct. 4.
Style Maid. For Boxes. Hoague-Sprague Corporation. 41,235; Oct. 4.
Style Shoes. For Boxes. Hoague-Sprague Corporation. 41,236; Oct. 4.
Tasty Treat Apples. For Apples. Select Apples, Inc. 41,248; Oct. 4.
Tesoro Effervescent Preparation. For Effervescent Preparation. S. Tesoro. 41,249; Oct. 4.
Trick-A-Chief Quality Handkerchiefs. For Handkerchiefs. V. W. Knight. 41,240; Oct. 4.
Wrigley's Double Mint Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 41,250; Oct. 4.
Wrigley's Juicy Fruit Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 41,251–2; Oct. 4.

LIST OF PRINTS

Little Farm Children Are Rich These Days. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,924; Oct. 4.
Minnehaha. For Beverage. Minnehaha Water Company. 13,926; Oct. 4.
We Have Just Delivered a Load of Blue Coal. For Coal. H. R. Elliot & Co. Inc. 13,925; Oct. 4.
Wrigley's Double Mint. For Chewing Gum. Wm. Wrigley Jr. Company. 13,927; Oct. 4.
Wrigley's Juicy Fruit. For Chewing Gum. Wm. Wrigley Jr. Company. 13,928; Oct. 4.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 4TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbot, Charles G. (See Emmet, William L. R., assignor.)
Acheson, Arthur M., Dobbs Ferry, and G. Ramsey, Brooklyn, assignors to Durium Products Corporation, New York, N. Y. Phonograph record. 1,881,110; Oct. 4.
Adams, Claude E., Seabrook, N. H. Sole for turned shoes. 1,881,339; Oct. 4.
Addler, Joseph H., Brooklyn, N. Y., assignor to Puliclean Manufacturing Corporation, Bridgeport, Conn. Towel bundling machine. 1,880,227; Oct. 4.
Aerocar Corporation, The. (See Curtiss, Glenn H., assignor.)
Agfa Ansco Corporation. (See Wendt, B., and Bincer, assignors.)
Ahern, Edmund L., Battle Creek, Mich. Pipe threading machine. 1,881,111; Oct. 4.
Ahlm, Charles E. F., East Cleveland, assignor, by mesne assignments, to Automotive Research Corporation, Warren, Ohio. Transmission gearing. 1,880,228; Oct. 4.
Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 87,861; Oct. 4.
Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 87,862; Oct. 4.
Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 87,863; Oct. 4.
Air Preheater Corporation, The. (See Dow, H. H., and Cannon, assignors.)
Akro Agate Company, The. (See Early, John F., assignor.)
Albany Corrugated Container Corp. (See Nuckols, Claude C., assignor.)
Albera, Angelo N., Concord, Calif. Baseball game. 1,881,384; Oct. 4.
Alemite Corporation. (See Carr, Moses F., assignor.)
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alexandrou, Leonidas, New York, N. Y. Grape juice composition and preparing the same. 1,881,158; Oct. 4.
Allen, Chauncey D. (See Evans, H. E., and Allen.)
Allen, Grosvenor N., and E. H. Kreps, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 87,864; Oct. 4.
Allen, Howard G. (See Bliss, H. R., and Allen.)
Allenson, David, Riley, Kans. Dandelion digger. 1,881,112; Oct. 4.
Altman, Fred E., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic objective. 1,880,393; Oct. 4.
Altman, Fred E., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic objective. 1,880,394; Oct. 4.
Amco, Incorporated. (See Morton, William A., assignor.)
American Brake Materials Corporation. (See Brackett, Tracy F., assignor.)
American Brass Company, The. (See Bassett, William H., jr., assignor.)
American Electric Fusion Corporation. (See von Henke, Edmund J., assignor.)
American Forging & Socket Co. (See Saunders, W. S., and Martindell, assignors.)
American Fork & Hoe Company, The. (See Wright, Carl, assignor.)
American Lurgi Corporation. (See Gensecke, Wilhelm, assignor.)
American Magnesium Metals Corporation. (See Norton, Raymond J., assignor.)
American Magnesium Metals Corporation. (See Wetherill, John P., 3d, assignor.)
American Meter Company. (See Kaiser, William H., assignor.)
American Radiator & Standard Sanitary Corporation. (See Phelps, George H., assignor.)
American Radiator & Standard Sanitary Corporation. (See Reynolds, Frank C., assignor.)
American Rolling Mill Company, The. (See Spaulding, Arch W., assignor.)
American Safety Razor Corporation, The. (See Dalkowitz, Godfrey, assignor.)
American Smelting & Refining Company. (See Burt, C. C., and Anderson, assignors.)
American Telephone and Telegraph Company. (See Boose, Harry B., assignor.)
American Telephone and Telegraph Company. (See Scheppmann, Wilhelm, assignor.)
Anderson, Earle S., Boston, Mass. Rumble seat step. 1,881,113; Oct. 4.
Anderson, Ivan L. (See Burt, C. C., and Anderson.)
Anderson, Roy F., Detroit, Mich., assignor to The Murray Corporation of America. Rubber door bumper. 1,880,190; Oct. 4.
Andrews, Charles W., and A. J. Hulse, assignors to H. A. Brassert & Company, Chicago, Ill. Air heating. 1,880,229; Oct. 4.
Angell, Edward C., assignor to G. Berger, New York, N. Y. Apparatus for sealing paper containers. 1,881,340; Oct. 4.
Anthracite Separator Company. (See Pardee, Frank and Frank, jr., assignors.)
App, Oliver O., New York, N. Y. Pressure fluid operated implement. 1,880,337; Oct. 4.
Apple, Vincent G., Dayton, Ohio. Lamp socket motor. 1,881,342; Oct. 4.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine with improved cooling means. 1,881,343; Oct. 4.
Apple, Vincent G., Dayton, Ohio. Motor compressor. 1,881,344; Oct. 4.
Apple, Vincent G., and F. W. Cotterman, assignors to Vincent G. Apple Laboratories, Dayton, Ohio. Armature. 1,881,341; Oct. 4.
Apple, Vincent G., Laboratories. (See Apple, V. G., and Cotterman, assignors.)
Appolionion, Peter, and S. L. Chick, New York, N. Y. Safety air craft. 1,881,159; Oct. 4.
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Joining pipes. 1,881,160; Oct. 4.
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Boiler and supporting means for use therewith. 1,881,161; Oct. 4.
Associated Electric Laboratories, Inc. (See Ray, Arthur J., assignor.)
Atlas Powder Company. (See Bashford, Raymond I., assignor.)
Atwood, James T., Rockford, Ill. Outer member of a covered joint hinge. Des. 87,865; Oct. 4.
Atwood, James T., Rockford, Ill. Hinge. Des. 87,866; Oct. 4.
Atwood, James T., Rockford, Ill. Hinge. Des. 87,867; Oct. 4.
Aull, Wilson, jr. (See Washington, B., and Aull.)
Aull, Wilson, jr., Astoria, N. Y. Remote control apparatus. 1,881,394; Oct. 4.
Aull, Wilson, jr., Astoria, N. Y. Radioreception. 1,881,395; Oct. 4.
Aurori, Frank F., Jackson Heights, and C. G. G. Schmidt, Lynbrook, assignors to Charles G. G. Schmidt & Company, Inc., New York, N. Y. Sand papering machine. 1,881,162; Oct. 4.
Autodrink Corporation. (See Smith, Harry C., assignor.)
Automotive Research Corporation. (See Ahlm, Charles E. F., assignor.)
Ayers, Bernard H., Grantsville, W. Va. Automatic producing valve. 1,881,163; Oct. 4.
Ayers, Gerald B., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Supporting and operating means for doors. 1,881,014; Oct. 4.
Ayers, Gerald B., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Supporting and operating means for doors. 1,881,015; Oct. 4.
Baars, Ernst S. H., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Refrigerating apparatus. 1,880,653; Oct. 4.
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Langvand, I. L., and Kerr, assignors.)
Baer, Lawrence E., assignor to Baer & Wilde Company, Attleboro, Mass. Holder for the points of soft collars. 1,881,039; Oct. 4.
Baer & Wilde Company. (See Baer, Lawrence E., assignor.)
Bailey, William M., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Improved capacitor. 1,881,164; Oct. 4.
Baird, Edward, Los Angeles, Calif. Footwear cushion. 1,880,654; Oct. 4.
Balts, Stuart G., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Rear axle assembly. 1,880,655; Oct. 4.
Bakelite Gesellschaft mit beschrankter Haftung. (See Elbel, E., and Seebach, assignors.)
Baker, Dexter, C., et al. (See Parr, Webster A., assignor.)
Baker, Harry A., assignor to The Lapointe Machine Tool Company, Hudson, Mich. Broach. 1,880,656; Oct. 4.
Baker, James D., Berkeley, Calif., assignor to Johns-Manville Corporation, New York, N. Y. Waterproof floor covering and laying same. 1,880,661; Oct. 4.

Baker, Jay E., et al. (See Parr, Webster A., assignor.)
Baker, John A., assignor to Delco Products Corporation, Dayton, Ohio. Universal joint. 1,880,657; Oct. 4.
Baker, J. M., Pattern Company, Inc. (See Corley, J. T., assignor.)
Baker Perkins Company. (See Silbavy, John F., assignor.)
Baker, Robert M., Toledo, Ohio. Vacuum cleaning apparatus. 1,880,658; Oct. 4.
Ball & Ball Carburetor Company. (See Ball, Frederick O. and T. M., assignors.)
Ball, Frederick O. and T. M., assignors to Ball & Ball Carburetor Company, Detroit, Mich. Carburetor. 1,881,256; Oct. 4.
Ball, Thomas M. (See Ball, Frederick O. and T. M.)
Balliet, Harry P., Slatedale, Pa. Table. 1,881,306; Oct. 4.
Balsley, James R., Beverly Hills, assignor to Fox Film Corporation, Hollywood, Calif. Sound recording system. 1,881,040; Oct. 4.
Bantam Ball Bearing Company, The. (See Herrmann, Karl L., assignor.)
Barber, Charles E. (See Berlin, M. H., Barber, and Wilt.)
Barbieri, Cesare, New York, N. Y. Mixer and dispenser. 1,880,664; Oct. 4.
Barbieri, Cesare, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Printing and cap forming machine. 1,880,662; Oct. 4.
Barbieri, Cesare, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill. Filling and capping machine for containers 1,880,663; Oct. 4.
Barker, Percy E., Shaker Heights, assignor to The Cinderella Washing Machine Company, Cleveland, Ohio. Combination washing machine and dust collector. 1,880,665; Oct. 4.
Barmer Maschinenfabrik Aktiengesellschaft. (See Sieper, Fritz, assignor.)
Barnes, John S., and R. B. Billingham, assignors to W. F. and John Barnes Company, Rockford, Ill. Boring machine. 1,880,666; Oct. 4.
Barnes, W. F. and John, Company. (See Barnes, J. S., and Billingham, assignors.)
Barnett, Harry B., Cleveland, assignor to Dayton Scale Company, Dayton, Ohio. Shipping bracket. 1,880,395; Oct. 4.
Bartenfeld, Wilford G., Lorain, Ohio. Channel construction for bulkheads. 1,880,667; Oct. 4.
Bashford, Raymond I., Philadelphia, Pa., assignor, by mesne assignments, to Atlas Powder Company. Low density explosive. 1,881,307; Oct. 4.
Bassett, Rudolph A., Los Angeles, Calif. Apparatus for treating and cleaning pile fabric materials. 1,880,668; Oct. 4.
Bassett, William H., jr., Scarsdale, N. Y., assignor to The American Brass Company, Waterbury, Conn. Wrought metal article. 1,881,257; Oct. 4.
Baston, Cyril E., and R. C. Jones, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Control apparatus. 1,880,669; Oct. 4.
Bates Albert H., assignor to Burd High Compression Ring Company, Rockford, Ill. Automotive heating system. 1,881,068; Oct. 4.
Bates, E. V., Machine Company. (See Bates, Eddo V., assignor.)
Bates, Eddo V., assignor to E. V. Bates Machine Company, Lowell, Mass. Set of cards with flat wire tummer. 1,880,670; Oct. 4.
Bates, Mortimer F., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Bomb sight alignment and rudder control. 1,880,671; Oct. 4.
Bates, Sidney E., and E. Overmier, assignors to Maintenance Equipment Company, Chicago, Ill. Wheel flange oiler. 1,880,672; Oct. 4.
Bath, John, Worcester, Mass. Worktable for grinding machines. 1,880,673; Oct. 4.
Bauer, Gustav, Hamburg, Germany. Scavenging mechanism for two-cycle engines. 1,880,674; Oct. 4.
Baughman, Leonidas H., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Wire bound packing box. 1,880,396; Oct. 4.
Baumé, Edwall J., Santa Monica, Calif. Lock. 1,880,675; Oct. 4.
Baumler, Jacob J., Minneapolis, Minn. Oil retainer for steering gears. 1,880,650; Oct. 4.
Bauroth, Walter J., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Journal bearing. 1,880,660; Oct. 4.
Bausch & Lomb Optical Company. (See Hommel, George L., assignor.)
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Percussion tool. 1,881,258; Oct. 4.
Beach and Arthur, Incorporated. (See Ristow, Caro, assignor.)
Beamer, Frank H., Buffalo, N. Y. Resilient centering device. 1,881,308; Oct. 4.
Beard, Joseph H., and H. O. Hem, assignors to Toledo Scale Company, Toledo, Ohio. Weighing scale. 1,880,397; Oct. 4.
Beardsley, Alling P., and M. L. Dolt, Plainfield, assignor to The Calco Chemical Company, Inc., Bound Brook, N. J. Catalytic contact mass. 1,880,678; Oct. 4.
Bearly, Fred D., Tulsa, Okla. Derrick leg coupling. 1,880,231; Oct. 4.
Beatty, James, L. P. Uphoff, and F. A. Sims, San Jose, Calif. Coating device. 1,881,345; Oct. 4.
Beck, Christoph, and F. Kremp, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of organic acids. 1,880,677; Oct. 4.
Beck, Gustaf, Minneapolis, Minn., assignor of forty-nine one hundredths to G. O. Darrow, Mission San Jose, Calif. Valve for internal combustion engines. 1,881,259; Oct. 4.
Beck, Leo L., Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Luminescent tube lighting. 1,880,280; Oct. 4.
Beck, William O., Ridgefield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit controlling device. 1,880,676; Oct. 4.
Becker, Frank V., Malden, Mass. Calculating instrument. 1,881,165; Oct. 4.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 87,868; Oct. 4.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 87,869; Oct. 4.
Beeler, Ivan E., San Francisco, Calif. Door closer. 1,881,114; Oct. 4.
Behrend, Oswald, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Vulcanizing rubber and products obtained thereby. 1,881,166; Oct. 4.
Bell, Eugene C. (See Bell, F. W. and E. C.)
Bell, Frank W., and E. C. Bell, Sacramento, Calif. Bicycle lock. 1,881,346; Oct. 4.
Bell, James H. (See Bonine, Charles E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Beck, William O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Björnson, Björn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Björnson, B. G., Horton, and Norwine, assignors.)
Bell Telephone Laboratories, Incorporated. (See Bouton, George M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Buckley, Oliver E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Chesnut, R. W., Terry and Kannenberg, assignors.)
Bell Telephone Laboratories, Incorporated. (See Christopher, Arthur J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cioffi, Paul B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Clarke, Harry R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Crawford, Allen I., assignor.)
Bell Telephone Laboratories, Incorporated. (See Dobs, Stephen, jr., assignor.)
Bell Telephone Laboratories, Incorporated. (See Erickson, Elmer C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Flanders, Paul B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Soreny, Ernest, assignor.)
Beloit Iron Works. (See Berry, Earl E., assignor.)
Belson, Herman, Chicago, Ill. Collar attachment. 1,881,124; Oct. 4.
Bendix Stromberg Carburetor Company. (See Chambers, Reed M., assignor.)
Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
Benjamin, Reuben B., Chicago, assignor to Benjamin Electric Mfg. Co., Des Plaines, Ill. Floodlight. 1,880,399; Oct. 4.
Benjamin, Victor C., Los Angeles, Calif. Device for producing and treating thin liquid films. 1,881,041; Oct. 4.
Benn, Alonzo N., Chicago, Ill. Method and apparatus for shaping meat. 1,880,079; Oct. 4.
Benn, Alonzo N., Chicago, Ill. Meat forming carrier. 1,880,680; Oct. 4.
Bennett, Hubert D., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,398; Oct. 4.
Benson, Irving N., Melrose, Mass., assignor to Ingersoll-Rand Company, Jersey City, N. J. Carriage for spike drivers. 1,880,338; Oct. 4.
Berg, Wilhelm, Bellefeld, Germany. Multiple-spindle automatic lathe. 1,880,681; Oct. 4.
Berger, George. (See Angell, Edward C., assignor.)
Berlin, Maurice H., C. E. Barber, and C. D. Wilt, Chicago, Ill.; said Barber and said Wilt assignors to said Berlin. Accordion case. 1,881,396; Oct. 4.
Berman, Morris, Brooklyn, N. Y. Stress determining scale. 1,880,683; Oct. 4.
Berres, Karl. (See Weiler, M., and Berres.)
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper machine. 1,880,685; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper making machine and making web material. 1,880,686; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Press felt suction roll. 1,880,687; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper making machine. 1,880,688; Oct. 4.

Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Press roll gearing. 1,880,689; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Press roll gearing differential. 1,880,690; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper making machine and making paper. 1,880,691; Oct. 4.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Method of and apparatus for making paper. 1,880,692; Oct. 4.
Berry, Eugene G., and H. G. Woodhead, assignors to B. F. Gump Co., Chicago, Ill. Coffee mill. 1,880,684; Oct. 4.
Bertomeu, Salvador, New York, N. Y. Remote control. 1,880,693; Oct. 4.
Bertsch, Heinrich, assignor to H. Th. Bohme A. G., Chemnitz, Germany. Rendering higher alcohols soluble. 1,881,347; Oct. 4.
Bertsch, Heinrich, assignor to H. Th. Bohme Aktiengesellschaft, Chemnitz, Germany. Textile treatment liquid. 1,881,348; Oct. 4.
Besley, Tom W., Council Bluffs, Iowa. Kite. 1,880,694; Oct. 24.
Betts, Thomas & Co., The. (See McMurtrie, Adnah, assignor.)
Beyer, Charles E., Rosamond, Calif. Liquid fuel burner. 1,880,695; Oct. 4.
Beynon, Rees, assignor to Dryden Rubber Company, Chicago, Ill. Header strip. 1,880,696; Oct. 4.
Beynon, Rees, assignor to Dryden Rubber Company, Chicago, Ill. Channel strip and making the same. 1,880,697; Oct. 4.
Beynon, Rees, assignor to Dryden Rubber Company, Chicago, Ill. Channel strip. 1,880,698; Oct. 4.
Beynon, Rees, assignor to Dryden Rubber Company, Chicago, Ill. Channel strip. 1,880,700; Oct. 4.
Beynon, Rees, Chicago, and G. C. Reeves, Glen Ellyn, assignors to Dryden Rubber Company, Chicago, Ill. Channel strip. 1,880,699; Oct. 4.
Bigelow, Leon G., assignor to Quality Park Box Company, St. Paul, Minn. Box. 1,880,191; Oct. 4.
Bihl, William E., and A. Ramclaw, assignors to Zerozone Incorporated, Chicago, Ill. Evaporator. 1,880,682; Oct. 4.
Billingham, Ralph B. (See Barnes, J. S., and Billingham.)
Bincer, Hans. (See Wendt, B., and Bincer.)
Binns, Frederick W., Wollaston, and J. M. Lurie, Jamaica Plain, Mass., assignors to Virginia Smelting Company, Portland, Me. Method for effecting bisulphite reactions with sulphur dioxide in substantially neutral solutions. 1,880,701; Oct. 4.
Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,880,232; Oct. 4.
Birkenmaier, Theodore. (See Boll, L. P., and Birkenmaier.)
Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Fuse link head. 1,880,702; Oct. 4.
Bischoff, Theodore C., G. W. Chubb, and A. Rettig, Detroit, Mich. Automobile trailer. 1,880,703; Oct. 4.
Bissell, Richard E., Cleveland Heights, assignor to Thompson Products Inc., Cleveland, Ohio. Making valves. 1,880,704; Oct. 4.
Bitner, Mary, New York, N. Y. Picture tape. 1,880,705; Oct. 4.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Screed for use in laying concrete and the like. 1,880,706; Oct. 4.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,880,707; Oct. 4.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,880,708; Oct. 4.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Insert anchor. 1,880,709; Oct. 4.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Reenforce support. 1,880,710; Oct. 4.
Bittorf, Louis A., assignor to National Manufacturing Company, Sterling, Ill. Door holding device. 1,880,711; Oct. 4.
Bittorf, Louis A., assignor to National Manufacturing Company, Sterling Ill. Door holding device. 1,880,712; Oct. 4.
Bittorf, Louis A., assignor to National Manufacturing Company, Sterling Ill. Door holding device. 1,880,713; Oct. 4.
Bixby, Walter. (See Hathaway, E. F., and Bixby.)
Bixby, Walter, Boston, Mass. Tube frame spool. 1,880,400; Oct. 4.
Björnson, Björn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Gas-filled tube circuits. 1,880,714; Oct. 4.
Björnson, Björn G., New York, N. Y., A. W. Horton, jr., East Orange, and A. C. Norwine, Passaic, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission control circuits. 1,880,715; Oct. 4.
Black, John C., Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc. Heating coil for cracking hydrocarbon oils. 1,880,716; Oct. 4.
Black, John C., Beverly Hills, Calif., assignor to Gasoline Products Company, Inc., Wilmington, Del. Cracking and processing petroleum. 1,880,717; Oct. 4.
Blackburn, Jasper, Webster Groves, Mo. Guy wire clamp and connection. 1,880,193; Oct. 4.
Blackhawk Manuacturing Company. (See Pfauser, Edward M., assignor.)
Blackmore, Charles C., assignor to The Dayton Toy & Specialty Company, Dayton, Ohio. Bolster for toy vehicles. 1,880,718; Oct. 4.
Blackwood, Oswald H., and P. G. Exline, Pittsburgh, Pa., assignors to The Koppers Company of Delaware. Method of and apparatus for measuring vapor. 1,880,720; Oct. 4.
Blakesley, George W., Kansas City, Mo. Gas burner. 1,880,719; Oct. 4.
Blanchard, Frederick W., Montreal, Quebec, assignor to John S. Metcalf Company Limited, Montreal, Canada. Clutch control mechanism. 1,880,721; Oct. 4.
Blanton, William B., Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Call distributing system for concentration circuits. 1,880,722; Oct. 4.
Blanton, William B., Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Message distributing system for simplex printer concentration units. 1,880,723; Oct. 4.
Blanton, William B., Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Locating an operator working any line. 1,880,724; Oct. 4.
Blaw-Knox Company. (See McDonnell, Edward J., assignor.)
Blaw-Knox Company. (See Venable, William M., assignor.)
Bleck, Henry B., Waukegan, Ill. Air cell expansion joint. 1,880,725; Oct. 4.
Bliss, H. R., Co. (See Bliss, H. R., and Allen, assignors.)
Bliss, Herbert R., and H. G. Allen, assignors to H. R. Bliss Co., Inc., Niagara Falls, N. Y. Stitching machine. 1,880,726; Oct. 4.
Blood, Harold L., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Fluid actuated device. 1,880,727; Oct. 4.
Bloom, Edward, Paterson N. J. Shuttle. 1,881,167; Oct. 4.
Blount, Harry, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Drilling mechanism. 1,880,728; Oct. 4.
Blount, Harry Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Lapping mechanism. 1,880,729; Oct. 4.
Blumenthal, Maurice, Brooklyn, N. Y. Caisson and sinking the same. 1,880,233; Oct. 4.
Bobrick Chemical Corporation. (See Palmer, John F., assignor.)
Boeing Airplane Company. (See Butler, Leo M., assignor.)
Boeing Airplane Company. (See Minshall, Robert J., assignor.)
Bogue, George A., Pine City, Minn. Lamp. 1,880,730; Oct. 4
Bohme, H. Th., Aktiengesellschaft. (See Bertsch, Heinrich, assignor.)
Bohn Aluminum & Brass Corporation. (See Nelson, Adolph L., assignor.)
Bolleou, Arthur H., assignor to Cherry-Burrell Corporation, Cedar Rapids, Iowa. Batch freezer mechanism. 1,880,731; Oct. 4.
Bolens, Harry W., Port Washington, Wis. Hydraulic jack. 1,880,732; Oct. 4.
Bolhuis, Frank, Holland, Mich. Cupboard unit construction. 1,880,733; Oct. 4.
Boll, Lester P., University City, and T. Birkenmaier, assignors to W. N. Matthews Corporation, St. Louis, Mo. Disconnecting switch. 1,880,734; Oct. 4.
Bonham, Earl D., Renton, Wash. Pressure operated switch. 1,880,401; Oct. 4.
Bonine, Charles E., Melrose Park, assignor to J. H. Bell, Philadelphia, Pa. Refrigerator. 1,880,785; Oct. 4.
Bonte, Frederick R., Beaver Falls, Pa. Manufacture of tubes. 1,881,069; Oct. 4.
Boose, Harry B., Pittsburgh, Pa., assignor to American Telephone and Telegraph Company. Printing telegraph system. 1,880,311; Oct. 4.
Booth, Clement, and F. S. Haas, Cincinnati, Ohio, assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,880,736; Oct. 4.
Booth, Earl C., Columbus, Ind. Heater casing. Des. 87,870; Oct. 4.
Boothroyd, Hubert, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for flanging shoe uppers. 1,880,737; Oct. 4.
Borland, John A., St. Paul, Minn., assignor to Borland Transportation and Manufacturing Company. Roller bearing. 1,880,738; Oct. 4.
Borland, John A., St. Paul, Minn., assignor to Borland Transportation and Manufacturing Company. Block signal checking device for railroads. 1,880,739; Oct. 4.
Borland Transportation and Manufacturing Company. (See Borland, John A., assignor.)
Boruff, Clair S. (See Buswell, A. M., and Boruff.)

Borzer, Henri E. A. (See Haigh, L. B., and Borzer.)
Bossard, Gisbert L., assignor, by mesne assignments, to The Leland Electric Company, Dayton, Ohio. Circuit interrupter. 1,880,740; Oct. 4.
Boston Machine Works Company. (See Osgood, Walter P., assignor.)
Boswell, Maitland C., Toronto, Ontario, Canada. Reduction of sulphur dioxide. 1,880,741; Oct. 4.
Bosworth, Cyrus M. (See Dickinson, Henry A., assignor.)
Bosworth, Cyrus M., Riverside, Ill. Cutting tool head. 1,880,742; Oct. 4.
Bottoms, Robert R., assignor to The Helium Company, Louisville, Ky. Extracting helium. 1,881,115; Oct. 4.
Bottoms, Robert R., assignor to The Helium Company, Louisville, Ky. Apparatus for the extraction of helium from gaseous mixtures. 1,881,116; Oct. 4.
Botts, Edward W., Chicago, Ill. Automatic switch. 1,880,743; Oct. 4.
Bouchard, Alice M., administratrix. (See Bouchard, Homer J.)
Bouchard, Homer J., deceased, Chicago, Ill., A. M. Bouchard, administratrix. Cigar lighter. 1,880,744; Oct. 4.
Boukard, Samuel L., assignor to A. Whittell, San Francisco, Calif. Sealing plug. 1,880,745; Oct. 4.
Bouton, George M., Lynbrook, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Lead alloy. 1,880,746; Oct. 4.
Bowen, William S., Westfield, N. J. Cooling system for fluid-actuated turbines. 1,880,747; Oct. 4.
Bower, Joseph E., Milwaukee, Wis. Hydraulically operated clutch. 1,880,748; Oct. 4.
Bowers, Edward C., et al. (See Ward, R. H., and Bowers.)
Bowling, Robert T., assignor, by mesne assignments, to Potlatch Forests, Inc., Lewiston, Idaho. Briquetting machine. 1,881,397; Oct. 4.
Bowman, Louis G., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Presser foot mechanism. 1,880,749; Oct. 4.
Bowman, Robert H., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Safety valve. 1,880,402; Oct. 4.
Boyce, Erskine E., Gastonia, N. C. Sewing machine. 1,880,192; Oct. 4.
Boye Needle Company, The. (See Carlson, Gustav A., assignor.)
Brackelsberg, Carl, Milspe, Germany. Rotary drum furnace for melting metals. 1,881,117; Oct. 4.
Brackett, Tracy F., assignor to American Brake Materials Corporation, New York, N. Y. . Friction brake. 1,880,750; Oct. 4.
Braddock, William J., G. Bruhn, and C. W. Haller, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company. Pickling apparatus. 1,880,751; Oct. 4.
Brady, Edmund W., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Detachable insulator for lamp leads. 1,881,168; Oct. 4.
Brady Electric & Manufacturing Company, The. (See Brady, Edmund W., assignor.)
Brand, Harry R., New York, N. Y. Dispensing mechanism. 1,880,753; Oct. 4.
Brandt, Albrecht, Ensley, Ala. Ash tray and cigar rest. 1,880,752; Oct. 4.
Braselton, Chester H. (See Whitacre, Clarence J., assignor.)
Brassert, H. A., & Company. (See Andrews, C. W., and Hulse, assignors.)
Brassert, H. A., & Company. (See Grilli, John P., assignor.)
Bratton, Clair R., and C. S. Miner, Burlingame, Kans. Incubator. 1,881,118; Oct. 4.
Braun, Herman F., Lakewood, S. L. Laughlin, Cleveland, and W. J. Smith, Lakewood, assignors to The Cleveland Steel Products Corporation, Cleveland, Ohio. Firebox construction for furnaces. 1,881,260; Oct. 4.
Bray, Joseph G., assignor to The McKay Company, Pittsburgh, Pa. Automobile bumper. Des. 87,871; Oct. 4.
Breitwieser, Edward, assignor to Buffalo Co-operative Stove Co., Buffalo, N. Y. Feed hopper for incinerator flues. 1,880,370; Oct. 4.
Brenek, Hans. (See Roth, Fritz, and Brenek.)
Brent, George R., Orange, Tex., assignor of thirty-seven and one-half one-hundredths to E. W. Brown, jr., eleven one-hundredths to W. E. Lea, ten one-hundredths to C. R. Steele, and four one-hundredths to C. C. Leedy, Chicago, Ill. Hydraulic brake. 1,880,194; Oct. 4.
Brewer, Clarence W., Decatur, Ill. Casement window lock. 1,880,312; Oct. 4.
Brière, Wilfrid, Montreal, Quebec, Canada. Holder and ejector for cigarettes and cigars. 1,880,754; Oct. 4.
Brink, Winfield S., assignor to The Firestone Steel Products Company, Akron, Ohio. Rim. 1,880,403; Oct. 4.
Bristol Company, The. (See Griggs, H. L., and Mabey, assignors.)
Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Recorder. 1,880,755; Oct. 4.
Britton, Edgar C., and L. E. Mills, assignors to The Dow Chemical Company, Midland, Mich. Dinitro-orthocyclohexylphenol. 1,880,404; Oct. 4.
Broadwell, Bartley E., Lewiston, and A. T. Hinckley, assignors to The Republic Carbon Company, Niagara Falls, N. Y. Electrode. 1,881,119; Oct. 4.
Broecker, Lewis C., Bridgeport, Conn., assignor to The Firestone Steel Products Company, Akron, Ohio. Machine for testing internal thread in valve stems. 1,880,405; Oct. 4.
Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and device for stock fitting. 1,880,756; Oct. 4.
Brosius, Edgar E., Pittsburgh, Pa. Manipulator. 1,881,169; Oct. 4.
Brossart, John A., B. F. Orr, and W. H. Spence, Indianapolis, Ind. Combined doorstop and locking means. 1,880,757 Oct. 4.
Brown, Aldrich M., Mobile, Ala. Combined pump jack and head. 1,881,349; Oct. 4.
Brown Company. (See Burke, Edmund, assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown, Edgar W., jr., et al. (See Brent, George R., assignor.)
Brown-Fayro Company, The. (See Faunce, Benjamin F., assignor.)
Brown, Freeman L., Wilmerding, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motion picture apparatus. 1,880,406; Oct. 4.
Brown, George C., Worcester, Mass. Humidifying apparatus. 1,880,758; Oct. 4.
Brown, Harold. (See Conant, Ray W., assignor.)
Brown, Roy W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Repair vulcanizer. 1,880,407; Oct. 4.
Brown, Sidney G., North Acton, London, England. Dynamo electric machine. 1,881,350; Oct. 4.
Brownell, Josephine D. (See Brownell, W. D., and J. D.)
Brownell, Walter D. and J. D., Providence, R. I. Rose. Pl. Pt. 28; Oct. 4.
Broyles, Harmon E. (See Duerr, K. B., and Broyles.)
Bruhn, George. (See Braddock, W. J., Bruhn, and Haller.)
Brush, Alanson P., Detroit, Mich. Boat. 1,880,371; Oct. 4.
Bruson, Herman A., assignor to Rohm & Haas Company, Philadelphia, Pa. Heavy metal keto-benzoates. 1,880,759; Oct. 4.
Bryant Electric Company, The. (See Johnson, George A., assignor.)
Bryant, Roy B., Dallas, Tex. Automatic phonograph. 1,880,760; Oct. 4.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Alphabetical code punching device. 1,880,408; Oct. 4.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Translating device for accounting machines. 1,880,409; Oct. 4.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Automatic control system for tabulators. 1,880,410; Oct. 4.
Buchwald, Reinhard, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Color lake. 1,880,761; Oct. 4.
Buckley, Oliver E., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine signaling cable. 1,880,764; Oct. 4.
Buckner, Robert E., Iraan, Tex. Cotton picking machine. 1,880,762; Oct. 4.
Budd, Edward G., Manufacturing Co. (See Ragsdale, Earl J. W., assignor.)
Budd, Edward G., Manufacturing Company. (See Trautvetter, George, assignor.)
Budd Wheel Company. (See Ragsdale, Earl J. W., assignor.)
Buenger, Edward, assignor to Wilson-Jones Company Chicago, Ill. Magazine or catalogue binder. 1,880,763; Oct. 4.
Buffalo Co-operative Stove Co. (See Breitwieser, Edward, assignor.)
Buffalo Pressed Steel Co. (See Haas, Lucien L., assignor.)
Bull, Arthur W., Naugatuck, assignor to Rubber Regenerating Company, New Haven, Conn. Reclaiming vulcanized rubber fiber products. 1,880,372; Oct. 4.
Bullock, Edward W., and H. J. White, assignors to Gleason Works, Rochester, N. Y. Dressing mechanism. 1,880,234; Oct. 4.
Burd High Compression Ring Company. (See Bates, Albert H., assignor.)
Bureau, Arthur A., Chicago, and E. P. Burk, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Portable platform or skid. 1,880,765; Oct. 4.
Burghard, Edward G. (See Fourness, W., and Burghard.)
Burk, Earl P. (See Bureau, A. A., and Burk.)
Burke, Edmund, Portland, Me., assignor to Brown Company, Berlin, N. H. Support for insulators. 1,880,766; Oct. 4.
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Priming mixture. 1,880,235; Oct. 4.
Burroughs Adding Machine Company. (See Doughty, Alfred J., assignor.)
Burroughs, Robert E., assignor to Eastman Kodak Company, Rochester, N. Y. Ultra-violet sensitive photographic element. 1,880,411; Oct. 4.
Burt, Alexander T., Los Angeles, Calif., assignor to A. H. Jepson, Glens Falls, N. Y. Scaffold. 1,880,767; Oct. 4.

Burt, Carl C., and I. L. Anderson, Salt Lake City, Utah, assignors to American Smelting & Refining Company, New York, N. Y. Tilting furnace. 1,880,768; Oct. 4.
Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transformer. 1,880,412; Oct. 4.
Burton, Henry, Gardena, Calif. Engine starter. 1,880,769; Oct. 4.
Burton, Kellis H., and H. Kramer, Tulsa, Okla., assignors to The Philip Carey Manufacturing Company. Wiping apron for pipe wrapping machines. 1,880,770; Oct. 4.
Burton, Kellis H., and H. Kramer, Tulsa, Okla. assignors, by direct and mesne assignments, to The Philip Carey Manufacturing Company. Truck attachment for pipe wrapping machines. 1,880,771; Oct. 4.
Buse, F. W. (See Schenk, Franz E. M., assignor.)
Bussman, Henry T., St. Louis, Mo. Electric fuse and assembling the same. 1,881,351; Oct. 4.
Buswell, Arthur M., Urbana, and C. S. Boruff, Monmouth, Ill. Apparatus for producing methane. 1,880,772; Oct. 4.
Buswell, Arthur M., Urbana, and C. S. Boruff, Monmouth, assignors to Board of Trustees of the University of Illinois, Urbana, Ill. Cellulose digestion. 1,880,773; Oct. 4.
Butler, Benjamin J., Somerville, Mass., assignor, by mesne assignments, to General Electric Company. Paper condenser winding machine. 1,881,170; Oct. 4.
Butler, Edward A., assignor, by mesne assignments, to Robert Donner, Buffalo, N. Y. Apparatus for observing rapidly moving objects. 1,880,774; Oct. 4.
Butler, Leo M., assignor to Boeing Airplane Company, Seattle, Wash. Grinding tool. 1,881,042; Oct. 4.
Butler, William L., and W. H. Fabrey, assignor to Weber Electric Company, Schenectady, N. Y. Electrical switch. 1,880,775; Oct. 4.
Butterworth, Harry W., jr., Philadelphia, Pa., and A. H. Molt, Gloucester, N. J., assignors to H. W. Butterworth & Sons Company. Cloth clamp. 1,880,776; Oct. 4.
Butterworth, H. W., & Sons Company. (See Butterworth, H. W., jr., and Molt, assignors.)
Buwalda, Abraham G., assignor to Woodrow Washing Machine Company, Pella, Ia. Engine frame. 1,881,043; Oct. 4.
Byars, Edgar W., Goshen, Ind. Wringer mop. 1,880,777; Oct. 4.
Byers, Harry J., Beaumont, Tex. Flow controlling apparatus. 1,880,778; Oct. 4.
Cabot Co. (See Duerr, Winslow A., assignor.)
Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Suspender. 1,880,779; Oct. 4.
Cahoon, William F., Birmingham, Ala., assignor to The Filer & Stowell Company, Milwaukee, Wis. Transmitter for fluid pressure and electric current. 1,880,780; Oct. 4.
Cairns, Theodore L., Lindsay, Calif. Orchard duster. 1,880,781; Oct. 4.
Calco Chemical Company, The. (See Beardsley, A. P., and Dolt, assignors.)
Callahan, William F. (See Copenhaver, P. S., Demonet, and Callahan, assignors.)
Calorizing Company, The. (See Sayles, B. J., and Schultz, assignors.)
Camel Company. (See Fehr, Eugene J., assignor.)
Cameron, Mortimer B., Edgewood, Pa., assignor, by mesne assignments, to Universal Draft Gear Attachment Company, Chicago, Ill. Friction draft gear. 1,880,782; Oct. 4.
Cameron, William J. (See Pine, Harry E., assignor.)
Campbell, Alphonso S., Winchester, assignor to A. S. Campbell Company, East Boston, Mass. Vehicle door. 1,880,783; Oct. 4.
Campbell, A. S. Company. (See Campbell, Alphonso S., assignor.)
Campbell, Charles, London, England, assignor to The Tabulating Machine Company, Endicott, N. Y. Total taking device. Re18,611; Oct. 4.
Campbell, Charles, London, England, assignor to The Tabulating Machine Company, New York, N. Y. Controlling mechanism for record-card-controlled statistical machines. 1,880,413; Oct. 4.
Campbell, Leon J., assignor to Hand's Constant Mesh Transmission Co., Chicago, Ill. Synchronizing clutch for transmission mechanisms. 1,880,784; Oct. 4.
Campbell, William H. (See Triplett, J. B.)
Campu, Gregor, Detroit, Mich., Tire. 1,881,309; Oct. 4.
Cannon, Guy H. (See Dow, H. H., and Cannon.)
Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Neutralizing acid treated oils. 1,881,044; Oct. 4.
Cannon-Prutzman Treating Processes, Ltd. (See Cannon, Hugh H., assignor.)
Canstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Illuminating system for photographic apparatus. 1,880,414; Oct. 4.
Carborundum Company, The. (See Tone, Frank J., assignor.)
Card Display, Inc. (See O'Rourke, Tex, assignor.)
Card, Jerome T., Cincinnati, Ohio, assignor to Masonite Corporation, Chicago, Ill. Edge protection for fiber boards. 1,880,785; Oct. 4.
Cardo-Hyde Company. (See Eddins, S. A., and Hannigan.)
Carey, Edward S., Milwaukee, assignor, by mesne assignments, to A. K. Reading, Mayville, Wis. Radiator manufacture. 1,880,786; Oct. 4.
Carney, Daniel E., assignor of one-third to J. M. Magee and one-third to H. I. Neaman, Pittsburgh, Pa. Refillable ferrule fuse. 1,881,369; Oct. 4.
Carroll, Lewey C., Bristol, Va. Parquetry baling machine. 1,881,370; Oct. 4.
Cary, Malcolm C., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Coiling apparatus. 1,881,018; Oct. 4.
Carey, Philip, Manufacturing Company, The. (See Burton, K. H., and Kramer, assignors.)
Cargill, Louis H., assignor of one-half to Michael Den Tino, Denver, Colo. Form letter for incorporation in a molded base. 1,880,702; Oct. 4.
Carlson, Carl T., assignor to Erie City Iron Works, Erie, Pa. Boiler. 1,880,789; Oct. 4.
Carlson, Charles B., assignor to Thomas A. Edison, Incorporated, West Orange, N. J.. Container. 1,880,788; Oct. 4.
Carlson, Elof L., assignor to The E. Ingraham Company, Bristol, Conn. Clock. 1,880,790; Oct. 4.
Carlson, Gustav A., assignor to The Boye Needle Company, Chicago, Ill. Loop-forming needle. 1,880,787; Oct. 4.
Carlston, William S., assignor to Kingston Products Corporation, Kokomo, Ind. Carburetor. 1,880,791; Oct. 4.
Carr, Moses F., Lexington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Coupling and associated means for lubricating apparatus. 1,880,793; Oct. 4.
Carroll, Fred M., Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Computing scale. 1,880,415; Oct. 4.
Carroll, Fred M., Yonkers, assignor to The Tabulatnig Machine Company, Endicott, N. Y. Printing mechanism for accounting machines. 1,880,416; Oct. 4.
Carroll, Fred M., Yonkers, assignor to Dayton Scale Company, Dayton, Ohio. Computing scale. 1,880,417; Oct. 4.
Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. Stacking mechanism for printing machines. 1,880,418; Oct. 4.
Carter, Herbert F., Roselle Park, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for preparing and distributing material. 1,880,794; Oct. 4.
Cartledge, John J., Guelph, Ontario, Canada. Athletic supporter. 1,880,795; Oct. 4.
Case Brothers, Inc., et al. (See Case, L. W., and Cude, assignors.)
Case, Harlow M., Chicago, Ill., assignor to The Western Union Telegraph Company, New York, N. Y. Vacuum tube telegraph repeater. 1,880,796; Oct. 4.
Case, Lawrence W., Highland Park, and H. E. Cude, South Manchester, assignors to Case Brothers, Inc., Manchester, and Case & Marshall, Inc., East Hartford, Conn. Manufacture of paper board. 1,880,339; Oct. 4.
Case & Marshall, Inc. (See Case, L. W., and Cude, assignors.)
Casper, Anthony B., assignor to Honde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,880,797; Oct. 4.
Celanese Corporation of America. (See Moss, W. H., and White, assignors.)
Cella, Luigi, Newark, N. J. Adjustable bust form. 1,880,798; Oct. 4.
Celotex Company, The. (See Lathrom, R. C., and Irvine, assignors.)
Celotex Company, The. (See Munroe, Treadway B., assignor.)
Celotex Company, The. (See Munroe, T. B., and Irvine, assignors.)
Celotex Company, The. (See Munroe, T. B., and Lathrop, assignors.)
Chambers, Reed M., San Francisco, Calif., assignor, by mesne assignments, to Bendix Stromberg Carburetor Company, South Bend, Ind. Gauge. 1,880,226; Oct. 4.
Chandler, Milford G., Flint, Mich. Fuel feeding means for internal combustion engines. 1,880,799; Oct. 4.
Chandler and Price Company, The. (See Tyler, R. S., and McGeorge, assignors.)
Chapin, Albert J., Los Angeles, and G. W. Shaver, San Diego, Calif., assignors to A. J. Chapin and G. W. Shaver. Rolling stock. 1,881,045; Oct. 4.
Charavay, Frederick, assignor of one half to Hartzel Industries, Inc., Piqua, Ohio. Propeller balancing mechanism. 1,880,313; Oct. 4.
Chase Companies, The. (See von Nessen, Walter, assignor.)
Cherry-Burrell Corporation. (See Bolleau, Arthur H., assignor.)
Chestnut, Roy W., Upper Montclair, N. J., D. M. Terry, Elmhurst, N. Y., and W. F. Kannenberg, Lyndhurst, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulating circuits. 1,880,800; Oct. 4.
Chick, Steven L. (See Apollonion, P., and Chick.)
Childs, Sterry H., Litchfield, Conn. Oil valve. 1,880,801; Oct. 4.

Chilson, Warren A., Wausau, Wis. Electrical micrometer for continuously gauging the thickness of moving non-magnetic material. 1,880,802; Oct. 4.
Chrisman, Horace. (See Weymouth, H. G., and Chrisman.)
Chrisman, Horace, assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Liquid meter. 1,880,195; Oct. 4.
Christensen, Alfred C., assignor to National Engineering Company, Chicago, Ill. Foundry sand aerating machine. 1,880,237; Oct. 4.
Christiansen, Christian, Swampscott, Mass., assignor to Rotary Machine Company, Lynn, Mass. Work feed mechanism. 1,880,803; Oct. 4.
Christiansen, Christian, assignor to Rotary Machine Company, Lynn, Mass. Side taping machine. 1,880,804; Oct. 4.
Christie, Vincent J., Rapid City, S. Dak. Fluid sprinkling device. 1,880 373; Oct. 4.
Christopher, Arthur J., Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Inductive device. 1,880,805; Oct. 4.
Chubb, George W. (See Bischoff, T. C., Chubb, and Rettig.)
Churchill, Robert L., assignor to Eastman Kodak Company, Rochester, N. Y. Crystallizing lacquer comprising tribromo anisole. 1,880,419; Oct. 4.
Cincinnati Shaper Company, The. (See Hazelton, Robert T., assignor.)
Cinderella Washing Machine Company, The. (See Barker, Percy E., assignor.)
Cioffi, Paul P., Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Heat treating furnace. 1,880,806; Oct. 4.
Clark, Ary C., and A. L. Graves, Imperial, Calif.; said Graves assignor to Imperial Irrigation District. Excavator. 1,880,807; Oct. 4.
Clarke, Hans T., New York, and C. J. Malm, assignors to Eastman Kodak Company, Rochester, N. Y. Acetone soluble formyl esters of cellulose and making the same. 1,880,420; Oct. 4.
Clarke, Hans T., and C. J. Malm, assignors to Eastman Kodak Company, Rochester N. Y. Making cellulose esters of carboxylic acids. 1,880,808; Oct. 4.
Clarke, Harry R., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Spool for electrical devices. 1,880,809; Oct. 4.
Clary, Jan P. (See Sundquist, Hilding G., assignor.)
Cleveland Graphite Bronze Company, The. (See Klocke, William H., assignor.)
Cleveland Steel Products Corporation, The. (See Braun, H. F., Laughlin, and Smith, assignors.)
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making disulphides of mercaptothiazoles. 1,880,421; Oct. 4.
Clinton, Harry D., Johnson City, N. Y. Tension device. 1,880,810; Oct. 4.
Clyne, Cecil B., assignor to International Precipitation Company, Los Angeles, Calif. Making collecting electrodes for electrical precipitators. 1,880,811; Oct. 4.
Coatsworth, Frank E., Chicago, Ill. Apparatus and method for treating fabrics. 1,881,310; Oct. 4.
Coblens, George E. (See Morris, Albert W., assignor.)
Cochard, Louis, Veterans Home, Calif. Ventilator. 1,880,812; Oct. 4.
Coe, Mayne R., Washington, D. C., dedicated to the free use of the Government and the Public. Preserving oil bearing commodities. 1,880,813; Oct. 4.
Coil, Otto, Near Washington Court House, Ohio. Check head. 1,881,261; Oct. 4.
Colaizzi, John, Pittsburgh, Pa. Bracketed container. 1,880,814; Oct. 4.
Cole, John M., New York, N. Y. Speed responsive mechanism and vehicle signaling. 1,880,815; Oct. 4.
Cole, Philip G., Irvington-on-the-Hudson, N. Y. Ice skate walker. 1,880,340; Oct. 4.
Cole, Robert M., Sandusky, Ohio. Apparatus for making dyes or the like. 1,880,816; Oct. 4.
Coleman, David, Chicago, Ill. Service compartment for doors. 1,880,817; Oct. 4.
Coleman, Stephen R., Los Angeles, Calif. Check book cover fold and filler. 1,880,818; Oct. 4.
Colgate-Palmolive-Peet Company. (See Schwantes, Julius A., assignor.)
Colligan, Lillis H., New Haven, Conn. Heater. 1,880,238; Oct. 4.
Collins, George J., New York, N. Y. Hat protector. 1,880,819; Oct. 4.
Columbian Carbon Company. (See Lewis, George C., assignor.)
Conant, Ray W., assignor to H. D. Brown, Los Angeles, Calif. Looper. 1,880,820; Oct. 4.
Connor, Robert A., and G. A. Jacobs, assignors to Inca Manufacturing Corporation, Fort Wayne, Ind. Coil. 1,880,821; Oct. 4.
Conradty, Ottmar, Nuremberg, Germany. Arc lamp. 1,881,262; Oct. 4.
Consolidated Ashcroft Hancock Company. (See Evans, H. E., and Allen, assignors.)
Continental Gin Company. (See Elliott, Thomas, assignor.)
Continental Mills, Inc. (See Milner, Emil, assignor.)
Cook, Frank J., and W. W. Kelly, Cleveland, Ohio, assignors, by mesne assignments, to The Nut Products Company. Electric oven. 1,880 822; Oct. 4.
Cook, Hugo, Southport, Ind. Weight printing attachment for scales. 1,880,314; Oct. 4.
Cooley, Edward H., Belmont, Mass. Preparing fish and other meats. 1,881,171; Oct. 4.
Cooper, Edwin H., assignor to Los Angeles Soap Company, Los Angeles, Calif. Dispensing device. 1,880,823; Oct. 4.
Copeland Products, Inc. (See Muffly, Glenn, assignor.)
Copeland Products, Inc. (See Replogle, John R., assignor.)
Copeland Products, Inc. (See Saunders, John B., assignor.)
Copeland Products, Inc. (See West, Frank R., assignor.)
Copenhaver, Preston S., Bayonne, N. J., E. A. Demonet, and W. F. Callahan, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Switchboard jack. 1,880,824; Oct. 4.
Corces, Ramiro, Tampa, assignor of one-half to J. A. Prieto, Miami, Fla. Cigar mold. 1,880,825; Oct. 4.
Corcoran, Edward P., and W. B. Hadley, assignors to J. L. Kellogg, Chicago, Ill. Defiberizing machine. 1,881,398; Oct. 4.
Corley, John T., assignor to J. M. Baker Pattern Company, Inc., Providence, R. I. Valve controlled standpipe. 1,880,826; Oct. 4.
Cornell Bag Corporation. (See Currier, Andrew E., assignor.)
Cornell Bag Corporation. (See Currier, Arthur L., assignor.)
Cornely, Berthold, Mannheim, and R. Richter, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of effect papers and apparatus therefor. 1,880,827; Oct. 4.
Corner, Douglas C., Webster Groves, assignor to St. Louis Power Shovel Company, St. Louis, Mo. Loading machine. 1,881,263; Oct. 4.
Coronet Phosphate Company. (See Waggaman, W. H., Gooch, and Kerschbaum, assignors.)
Cotterman, Frederick W. (See Apple, V. G., and Cotterman.)
Couade, Maurice, Paris, France. Door and passage of cinematographic apparatus. 1,881,352; Oct. 4.
Courtenay, Frederic D., Short Hills, N. J., assignor to Embosograf Corporation of America, New York, N. Y. Sign. 1,880,828; Oct. 4.
Craig, Charles F., et al. (See Moreton, Henry H., assignor.)
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,880,829; Oct. 4.
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,880,830; Oct. 4.
Cramblet, Paul K., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch and operating mechanism therefor. 1,880,831; Oct. 4.
Cramblet, Paul K., Weslaco, Tex., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,880,832; Oct. 4.
Crawford, Allen I., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,880,833; Oct. 4.
Crenshaw, Colman A., Salt Lake City, Utah. Lock. 1,880,834; Oct. 4.
Crickmer, Charles S., Dallas, Tex. Display device. 1,880,835; Oct. 4.
Cromar Co., The. (See Dittmar, Irvin F., assignor.)
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company Inc., Wilmington, Del. Process and apparatus for converting petroleum hydrocarbons. 1,880,836; Oct. 4.
Crotogino, Fritz, Neustassfurt, near Stassfurt, assignor to the Firm Kali-Chemie Aktiengeeellschaft, Berlin, Germany. Production of fritted magnesia containing iron. 1,880,315; Oct. 4.
Crouse, George B., assignor to Hardwick, Hindle, Inc., Newark, N. J. Resistor. 1,880,239; Oct. 4.
Crout, Prescott. (See Stansburg, C., and Crout.)
Crumrine, William L. (See Landon, Jesse, assignor.)
Cudahy Brothers Co. (See Cudahy, Michael, assignor.)
Cudahy, Michael, Milwaukee, assignor to Cudahy Brothers Company, Cudahy, Wis. Meat product and producing the same. 1,880,837; Oct. 4.
Cude, Harold E. (See Case, L. W., and Cude.)
Cummins, Norman W., Louisville, Ky. Cup. Des. 87,872; Oct. 4.
Curney, David J., Vineyard Haven, Mass. Sand trap for protection of shores, beaches, etc. 1,880,838; Oct. 4.
Currie, Elmer J. (See Watts, W. H., and Currie.)
Currier, Andrew E., Leominster, Mass., assignor to Cornell Bag Corporation, New York, N. Y. Method of and apparatus for adding supplemental members to bag ends. 1,880,839; Oct. 4.
Currier, Arthur L., Ashburnham, Mass., assignor, by mesne assignments, to Cornell Bag Corporation. Screw feeding device. 1,880,840; Oct. 4.

Currier, Richard D., deceased, Reading, Mass.; Walter B. Grant, executor. Stringed musical instrument. 1,881,311; Oct. 4.
Curs, Alfred, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Vessel for operations with ammonia carried out at elevated temperatures. 1,880,841; Oct. 4.
Curtis, Myron S., Pawtucket, R. I., assignor to Potter & Johnston Machine Company. Metal working machine. 1,880,843; Oct. 4.
Curtiss, Glenn H., Hialeah, Fla., assignor to The Aerocar Corporation, Wilmington, Del. Automotive vehicle. 1,880,842; Oct. 4.
Curtiss, Glenn H., Country Club Estates, Fla., assignor to The Aerocar Corporation, Wilmington, Del. Road vehicle body structure. 1,880,844; Oct. 4.
Cutler-Hammer, Inc. (See Stansbury, C., and Crout, assignors.)
Czeija, Oskar, and H. Thirring, assignors to Selenophon Licht und Tonbild-Gesellschaft m. b. H., Vienna, Austria. Sound record band with a plurality of records. 1,880,240; Oct. 4.
Czop, Andy, Allentown, Pa. Detachable button. 1,880,845; Oct. 4.
Dahlberg, Alfred E., Chicago, Ill. Cutting compound or lubricant. 1,881,173; Oct. 4.
Dahlstrom, Frank P., assignor to Morgan Construction Company, Worcester, Mass. Automatic positioning mechanism for billets and the like. 1,880,374; Oct. 4.
Dahlstrom Metallic Door Company. (See Ayers, Gerald B., assignor.)
Dahlstrom Metallic Door Company. (See Jacobson, Ludwig G., assignor.)
Dahlstrom Metallic Door Company. (See Rose, Edwin L. assignor.)
Daimler-Benz Aktiengesellschaft. (See Weber, Otto H., assignor.)
Daimler, Karl, and K. Platz, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Ester-like constituted wetting agents, foaming agents and dispersing agents and preparing them. 1,881,172; Oct. 4.
Dake, Charles W., assignor to The Pyle-National Company, Chicago, Ill. Packing for steam turbines and the like. 1,880,846; Oct. 4.
Dalkowitz, Godfrey, New York, assignor to The American Safety Razor Corporation, Brooklyn, N. Y. Holder for blade processing. 1,880 848; Oct. 4.
Daly, George F., Johnson City, and R. E. Page, Binghamton, assignors to The Tabulating Machine Company, Endicott, N. Y. Electric transfer mechanism. 1,880,422; Oct. 4.
Daly, John J., Virginville, Pa. Water gauge. 1,880,847; Oct. 4.
Damico, Armand, Woodside, N. Y. Signal device. 1,880,849; Oct. 4.
Dancer, Ben, Houston, Tex. Wall support for excavations. 1,880,316; Oct. 4.
Darco Sales Corporation. (See Owen, W. L., and Herr, assignors.)
Darrow, George O. (See Beck, Gustaf, assignor.)
Daugherty, Paul. (See Warmoth, Henry E., assignor.)
Dautrick, Owen L., Detroit, Mich. Garage door lock. 1,880,850; Oct. 4.
Davis, Albert G., Elizabeth, N. J., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Method and apparatus for treating hydrocarbons. 1,880,851; Oct. 4.
Davis, Anthony E., Philadelphia, Pa. Locking mechanism for radiators. 1,880,341; Oct. 4.
Davis, Charles H., jr., assignor to Delco-Remy Corporation, Anderson, Ind. Clamping device. 1,880,375; Oct. 4.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,881,174; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,880,852; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,880,853; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system and apparatus. 1,880,854; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,880,855; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,880,856; Oct. 4.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricant dispensing device. 1,880,857; Oct. 4.
Davis, Harry G., assignor, by mesne assignments, to Purity Fibre Products Corp., Philadelphia, Pa. Method and apparatus for forming articles. 1,880,858; Oct. 4.
Davis, Herbert A., La Grange, assignor, by mesne assignments, to J. C. Kernchen, Chicago, Ill. Automatic starting means for internal combustion engines. 1,880,859; Oct. 4.
Davis, Ralph Bernard, Okmulgee, Okla. Mattress. 1,880,860; Oct. 4.
Davis, Robert W., Ozone Park, N. Y. Spring. 1,880,861; Oct. 4.
Davol, Harry A., Methuen, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Shuttle. 1,880,862; Oct. 4.
Dawson, George H., Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill. Card tray. 1,880,863; Oct. 4.
Dayton Pump & Mfg. Company, The. (See Eickmeyer, E. E. and Eichhoff, assignors.)
Dayton Scale Company. (See Barnett, Harry B., assignor.)
Dayton Scale Company. (See Carroll, Fred M., assignor.)
Dayton Scale Company. (See Haskins, Clifford B., assignor.)
Dayton Scale Company. (See Templeton, Samuel M., assignor.)
Dayton Scale Company. (See Wood, F. L., and Townshend, assignors.)
Dayton Scale Company. (See Wood, George R., assignor.) signor.)
Dayton Toy & Specialty Company, The. (See Blackmore, Charles C., assignor.)
Dean, William E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake 1,880.864 Oct. 4.
Debs, Louis H., Chicago, Ill. Multiple baking pan. 1,880,865; Oct. 4.
Decker, Grover H. and H. A., Toledo, Ohio. Clutch control. 1,880,866; Oct. 4.
Decker, Homer A. (See Decker, Grover H. and H. A.)
De Franceschi, Reno, Washington, D. C. Thermoelectric switch. 1,880,867; Oct. 4.
De Giers, Clarence A., Forest Hills, assignor to Liquidometer Corporation, Long Island City, N. Y. Liquid level indicator. 1,881,264; Oct. 4.
De Giers, Clarence A., Forest Hills, assignor to Liquidometer Corporation, Long Island City, N. Y. Liquid level indicator. 1,881,265; Oct. 4.
De Giers, Clarence A., Forest Hills, assignor to Liquidometer Corporation, Long Island City, N. Y. Remote control apparatus. 1,881,266; Oct. 4.
De Lancey, Warren H., Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid sampling device. 1,880,868; Oct. 4.
De Lancey, Warren H., Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,880,869; Oct. 4.
Delco Products Corporation. (See Baker, John A., assignor.)
Delco-Remy Corporation. (See Davis, Charles H., jr., assignor.)
Delco-Remy Corporation. (See Dyer, John B., assignor.)
Demo, Gust, Detroit, Mich. Door closer. 1,880,870; Oct. 4.
Denison, Frederick S., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Flame controlled system. 1,880,871; Oct. 4.
Denmead, Perry T., Akron, Ohio. Match making machine. 1,880,342; Oct. 4.
Dennison Manufacturing Company. (See Flood, Carl A., assignor.)
Den Tino, Michael. (See Cargill, Louis H., assignor.)
Denton, Daniel M., San Diego, Calif. Forming roofing tile. 1,880,872; Oct. 4.
De Remer, J. G., Research Corporation. (See De Remer, Jay G., assignor.)
De Remer, Jay G., Greenwich, Conn., assignor, by mesne assignments, to J. G. De Remer Research Corporation, Jersey City, N. J. Liquid-piston type compressor system. 1,880,241; Oct. 4.
Derry, Jasper, Medford, assignor to Andrew Terkelsen, Newton, Mass. Press. 1,880,873; Oct. 4.
Derry, Jasper, Medford, assignor to Andrew Terkelsen, Newton, Mass. Press. 1,880,874; Oct. 4.
Detroit Hoist and Machine Co. (See Martin, Henry F., assignor.)
Deutch, Fritz, Memphis, Tenn., assignor, by mesne assignments, to Sparta Foundry Company, Sparta, Mich. Ring splitting machine. 1,880,875; Oct. 4.
Devereaux, William C., assignor to Ferro Stamping & Manufacturing Company, Detroit, Mich. Remote control mechanism for door latches. 1,880,876; Oct. 4.
Dews, Joseph W., assignor to Scovill Manufacturing Company, Waterbury, Conn. Slide fastener. 1,880,317; Oct. 4.
Dick, Herman J., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,880,877; Oct. 4.
Dickinson, Henry A., assignor to C. M. Bosworth, Riverside, Ill. Cutting tool head. 1,880,878; Oct. 4.
Dickson, Donald C., Montclair, N. J. Plugging means for crucibles or the like. 1,880,242; Oct. 4.
Dierker, Hugh E., Ocean Park, assignor to E. F. Hughes, Brentwood Park, Calif. Mechanical exerciser and massaging device. 1,880,879; Oct. 4.
Dieterle, Paul, Binghamton, N. Y. Framing pictures. 1,881,046; Oct. 4.
Dietsch, Charles G., Toledo, Ohio. Nozzle. 1,880,880; Oct. 4.
Dietz, Herbert J. (See Sheppard, S. E., and Dietz.)
Dietz, Karl. (See Franck, K., and Dietz.)
Dildine, Harry W., New York, N. Y. Attachment for safety razors. 1,880,881; Oct. 4.
Dillard, Benjamin P., Greer, S. C. Cotton gin feeder. 1,880,882; Oct. 4.
Dillon, Paul W., Sterling, Ill. Reenforced rail. 1,880,883; Oct. 4.

Dina, Auguste, Jersey City, N. J., assignor to the Precision Machine Co., Inc., New York, N. Y. Method of and apparatus for projection of motion pictures. 1,880,884; Oct. 4.

Dispersions Process, Inc. (See Mitchell, John K., assignor.)

Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Sawing machine. 1,880,885; Oct. 4.

Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Brush. 1,880,886; Oct. 4.

Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Strip finishing machine. 1,880,887; Oct. 4.

Dixn, Ramon V., Plymouth, assignor, by mesne assignments, to R. G. Michell, Detroit, Mich. Combination shipping and display box. 1,880,888; Oct. 4.

Doba, Stephen, jr., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signal transmission system. 1,880,889; Oct. 4.

Dobbs, Loyle D., assignor to Minneapolis Bedding Company, Minneapolis, Minn. Bed. 1,880,890; Oct. 4.

Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,880,891; Oct. 4.

Dodge, Adell Y., South Bend, Ind. Light projection apparatus. 1,880,892; Oct. 4.

Dodge, Adiel Y., South Bend, Ind. Light projecting apparatus. 1,880,893; Oct. 4.

Dolt, Maurice L. (See Beardsley, A. P., and Dolt.)

Doman, John P., Los Angeles, Calif. Folding board. 1,881,047; Oct. 4.

Donner, Robert. (See Butler, Edward A., assignor.)

Dorman, Neal W., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Connection. 1,880,894; Oct. 4.

Dorogi & Co. Rubber Goods Factory Ltd., Dr. (See Dorogi, Istvan and L., assignors.)

Dorogi, Istvan and L., Budapest, assignors of one-half to Dr. Dorogi & Co. Rubber Goods Factory Ltd., Budapest-Albertfalva, Hungary. Inflatable hollow rubber article and process for its production. 1,881,048; Oct. 4.

Dorogi, Lajos. (See Dorogi, Istvan and L.)

Dorrington, Neill E., and W. R. Peterson, Oswego, assignors to St. Regis Paper Company, New York, N. Y. Bag filling machine. 1,880,895; Oct. 4.

Doughnut Machine Corporation. (See Morris, Frank E., assignor.)

Doughty, Alfred J., assignor to Burroughs Adding Machine Company, Detroit, Mich. Keyboard for calculating machines. 1,880,896; Oct. 4.

Dow Chemical Company, The. (See Britton, E. C., and Mills, assignors.)

Dow Chemical Company, The. (See Grether, Ernest F., assignor.)

Dow Chemical Company, The. (See Smith, Albert K., assignor.)

Dow, Herbert H., and G. H. Cannon, Midland, Mich., assignors, by mesne assignments, to The Air Preheater Corporation, New York, N. Y. Air preheater. 1,880,196; Oct. 4.

Dreher, Otto, Milwaukee, assignor to G. J. Meyer Manufacturing Company, Cudahy, Wis. Bottle feeding means. 1,880,243; Oct. 4.

Drewsen, Pierre, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio. Paper board shipping container or carton. 1,880,897; Oct. 4.

Drewsen, Pierre, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio. Preparing straw pulp. 1,880,898; Oct. 4.

Drewsen, Pierre, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio. Manufacturing straw paper. 1,880,899; Oct. 4.

Drexler, Ernest, Pittsburgh, Pa., assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Conveyer roller. 1,881,267; Oct. 4.

Dreyfuss, Joseph, New York, N. Y., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Garment hanger. 1,880,900; Oct. 4.

Drossbach, Otto, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of maleic acid and its anhydride. 1,880,901; Oct. 4.

Drott, Louis W., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Force feed lubricator. 1,880,902; Oct. 4.

Dryden Rubber Company. (See Beynon, Rees, assignor.)

Dryden Rubber Company. (See Beynon, R., and Reeves, assignors.)

Dryer, William P., Newton, Mass. Humidifying. 1,880,903; Oct. 4.

Dubinsky, Harry, I. Goldenberg, Brooklyn, and M. Schachter, New York, N. Y. Latch for refrigerators. Des. 87,873; Oct. 4.

Duckworth, Theophius O., and F. L. Horspool, Salt Lake Cit, Utah. Counterbalance. 1,880,904; Oct. 4.

Duckworth, Theophius O., and F. L. Horspool, Salt Lake City, Utah. Counterbalance. 1,880,905; Oct. 4.

Duerr, Karl B., Brooklyn, and H. E. Broyles, assignors to The Western Union Telegraph Company, New York, N. Y. Multiplex extended channel system. 1,880,906; Oct. 4.

Duerr, Winslow A., Breckenridge, Tex., assignor to Cabot Co., Boston, Mass. Pneumatic separator. 1,880,907; Oct. 4.

Duffy, James T., jr., Wynnewood, Pa., assignor to Pioneer Suspender Company. Apparel belt. 1,880,908; Oct. 4.

Du-Gas Fire Extinguisher Corporation. (See Dugas, Lodias J., assignor.)

Dugas, Lodias J., assignor to Du-Gas Fire Extinguisher Corporation, Chicago, Ill. Spraying device for powdered material. 1,880,244; Oct. 4.

Du Grenier, Arthur H., Haverhill, Mass. Dispensing mechanism. 1,881,175; Oct. 4.

Duke, Edgar, et al. (See Malcom, H. L., and Harker, assignors.)

Dunlap, Charles M., South Pasadena, Calif. Hammock stand. 1,880,909; Oct. 4.

Dunlap, Clarence E., Sioux City, Iowa. Process and apparatus for beveling tire patches. 1,880,910; Oct. 4.

Dunlop Rubber Company. (See Trobridge, Goeffrey W., assignor.)

Dunlop Tire and Rubber Corporation. (See McChesney, Cuyler S., assignor.)

Dunn, William C., Chicago, Ill. Adjusting vehicle springs. 1,880,343; Oct. 4.

Du Pont, E. L., de Nemours & Company. (See Lawson, W. E., and Sandborn, assignors.)

Du Pont, E. I., de Nemours & Co. (See Zinner, Daniel, assignor.)

Durdin, Augustus C., jr., Chicago, Ill. Seal for shaft bearings. 1,880,911; Oct. 4.

Durium Products Corporation. (See Acheson, A. M., and Ramsey, assignors.)

Dutton, Percy C., Nutley, N. J., and E. Hazell, New York, N. Y., assignors to Morgan & Wright, Detroit, Mich. Mandrel joint. 1,880,376; Oct. 4.

Duwellius, Walter S., assignor to M. E. Forchheimer, Cincinnati, Ohio. Deodorant container for toilet bowls. 1,880,912; Oct. 4.

Dwyer, James E., assignor to E. Frederics, Inc., New York, N. Y. Scalp protector. 1,880,913; Oct. 4.

Dyckerhoff, Adolph H., Chicago, Ill., assignor to The Stacey Bros. Gas Construction Company, St. Bernard, Ohio. Waterless gas holder. 1,880,914; Oct. 4.

Dyer, Harold I., Detroit, Mich., assignor to Wilcox-Rich Corporation. Valve grinding means. 1,880,377; Oct. 4.

Dyer, John B., Pendleton, assignor to Delco-Remy Corporation, Anderson, Ind. Suction cleaner. 1,880,915; Oct. 4.

Earle, Theodore, Denver, Colo. Milling machine. 1,881,230; Oct. 4.

Early, John F., Clarksburg, W. Va., assignor to The Akro Agate Company, Akron, Ohio. Machine for manufacturing spherical bodies. 1,880,916; Oct. 4.

Eastern Tool & Mfg. Co. (See Dreyfuss, Joseph, assignor.)

Eastern Tool & Mfg. Co. (See Falstrom, Henry W., assignor.)

Eastlake, William H., Mount Royal, Quebec, Canada, assignor to Western Electric Company, Incorporated. Method of and apparatus for testing coating materials. 1,880,917; Oct. 4.

Eastman Kodak Company. (See Altman, Fred E., assignor.)

Eastman Kodak Company. (See Burroughs, Robert E., assignor.)

Eastman Kodak Company. (See Capstaff, John G., assignor.)

Eastman Kodak Company. (See Churchill, Robert L., assignor.)

Eastman Kodak Company. (See Clarke, H. T., and Malm, assignors.)

Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)

Eastman Kodak Company. (See Hickman, K. C. D., Sanford, and Weyerts, assignors.)

Eastman Kodak Company. (See Hickman, K. C. D., and Staib, assignors.)

Eastman Kodak Company. (See Hopkins, Roy S., assignor.)

Eastman Kodak Company. (See Murray, T. F., jr., and Staud, assignors.)

Eastman Kodak Company. (See Noller, Carl R., assignor.)

Eastman Kodak Company. (See Sandvik, Otto, assignor.)

Eastman Kodak Company. (See Shannon, Albert A., assignor.)

Eastman Kodak Company. (See Sheppard, S. E., and Dietz, assignors.)

Eastman Kodak Company. (See Smith, Henry B., assignor.)

Eastman Kodak Company. (See Staud, C. J., and McLean, assignors.)

Eastman Kodak Company. (See Staud, C. J., and Webber, assignors.)

Eastman Kodak Company. (See Tuttle, Fordyce, assignor.)

Eastman Kodak Company. (See Van Derhoef, Henry E., assignor.)

Eastman Kodak Company. (See Von Bramer, H., and Zabriskie, assignors.)

Eastman Kodak Company. (See Webber, C. S., and Staud, assignors.)

Eastman Kodak Company. (See Wittel, Otto, assignor.)

Eastman Kodak Company. (See Wynd, C. L. A., and Groth, assignors.)

Eaton, George M., Pittsburgh, Pa. Cambered spring. 1,881,385; Oct. 4.

Ebert, Georg, F. A. Fries, and P. Garbsch, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization of diolefines. 1,880,918; Oct. 4.

Eckert, Mark K., Gettysburg, Pa. Headlight set. 1,880,919; Oct. 4.

Economy Fuse and Manufacturing Co. (See Kurath, Frans, assignor.)

Eddins, Sextus A., and G. M. Hannigan, Quincy, assignors to Cordo-Hyde Company, Brockton, Mass. Making hollow shoe forms. 1,880,920; Oct. 4.

Eddy, Charles F. A., New London, Conn. Switching mechanism. 1,880,921; Oct. 4.

Eddy, Newell A., Bay City, Mich. Rail connection. 1,880,423; Oct. 4.

Edison, Thomas A., Incorporated. (See Carlson, Charles B., assignor.)

Edmond, Oscar G., assignor of one-half to White Pine Sash Company, Spokane, Wash. Woodworking machine. 1,881,400; Oct. 4.

Edwards, Alfred B., jr., Plandome, N. Y. Culinary article. 1,880,922; Oct. 4.

Edwards, Frank W., Chicago, Ill., and F. B. Farnsworth, Wadsworth, Ohio. Lubricator. 1,881,353; Oct. 4.

Edwards, Herbert E., Brookline, assignor to T. J. Edwards Incorporated, Boston, Mass. Marking device for regular graded shoe upper blanks. 1,881,399; Oct. 4.

Edwards, O. M. Company Inc., The. (See Edwards, O. M., and Levan, assignors.)

Edwards, Oliver M., Syracuse, N. Y., and J. F. Levan, Elkhart, Ind., assignors to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window guide and sash construction. 1,881,268; Oct. 4.

Edwards, T. J., Incorporated. (See Edwards, Herbert E., assignor.)

Egenol, George J., assignor to The J. L. MacDaniel Printing Company, Inc., Indianapolis, Ind. Wrapping and sealing apparatus. 1,880,926; Oct. 4.

Ehrhardt, Udo, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Electrolytic production of sodium perchlorate. 1,880,927; Oct. 4.

Eichhoff, George W. (See Eickmeyer, E. E., and Eichhoff.)

Eickmeyer, Earl E., and G. W. Eichhoff, assignors to The Dayton Pump & Mfg. Company, Dayton, Ohio. Gasoline or other article dispensing pump. Des. 87,874; Oct. 4.

Eisenhour, Bert E., Aurora, assignor of one-half to G. Fabyan, Geneva, Ill. Compensated tuning fork. 1,880,923; Oct. 4.

Eisenhut, Otto, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black, acetylene and hydrogen. 1,880,924; Oct. 4.

Elssner, Willy, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of coarse crystals. 1,880,925; Oct. 4.

Ekman, Andrew, Grank Rapids, assignor to Winters & Crampton Mfg. Co., Grandville, Mich. Refrigerator latch. 1,880,928; Oct. 4.

Ekman, Andrew, Grand Rapids, assignor to Winters & Crampton Manufacturing Company, Grandville, Mich. Locking refrigerator latch. 1,880,929; Oct. 4.

Elbel, Ernst, and F. Seebach, Erkner, near Berlin, assignors to Bakelite Gesellschaft mit beschrankter Haftung, Berlin, Germany. Method of lacquering and impregnating with artificial resins. 1,880,930; Oct. 4.

Electric Storage Battery Company, The. (See Hagspihl, Paul, assignor.)

Electrolux Servel Corporation. (See Taylor, Robert S., assignor.)

Elliot, William S., Northampton, Mass., and F. A. Parkhurst, Bethesda, Md., assignors, by mesne assignments, to Pro-Phy-Lac-Tic Brush Company, Wilmington, Del. Blank cutting machine. 1,880,935; Oct. 4.

Elliott, Harmon P., Watertown, Mass. Addressing machine. 1,880 931; Oct. 4.

Elliott, Harmon P., Watertown, Mass. Electrotype printing roll for addressing machines. 1,880,932; Oct. 4.

Elliott, Harold F., Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. High frequency tuning system. 1,880,933; Oct. 4.

Elliott, Thomas, Birmingham, Ala., assignor to Continental Gin Company. Hull extractor. 1,880,934; Oct. 4.

Else, Harry D., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. High speed motor. 1,880,936; Oct. 4.

Elsey, Howard M., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Carbonizing nickel or other metals. 1,880,937; Oct. 4.

Embossograf Corporation of America. (See Courtenay, Frederick D., assignor.)

Emmet, William L. R., Schenectady, N. Y., assignor to C. G. Abbot, Washington, D. C. Apparatus for utilizing solar heat. 1,880,938; Oct. 4.

Emmons, Arthur N., assignor to The Porter-Cable Machine Company, Syracuse, N. Y. Lathe. 1,880,939; Oct. 4.

Emonet, Eugene A. (See Copenhaver, P. S., Demonet, and Callahan.)

English, O. B., et al. (See Moreton, Henry H., assignor.)

Enninga, Dirk, Glenvil, Nebr. Tool. 1,880,940; Oct. 4.

Enslin, Herbert E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for lacing shoe uppers. 1,881,177; Oct. 4.

Enslin, Herbert E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lacing shoe uppers. 1,881,178; Oct. 4.

Epley, Frederic I., North Pelham, assignor to The Superheater Company, New York, N. Y. Rotary drilling. 1,881,176; Oct. 4.

Epling, Everett E., Arkansas City, Kans. Butter wrapping machine. 1,880,378; Oct. 4.

Erb-Joyce Foundry Company. (See Frantz, Clair E., assignor.)

Erb-Joyce Foundry Company. (See Udale, Stanley M., assignor.)

Erickson, Albert N., Elmhurst, assignor to Union Carbide Company, New York, N. Y. Apparatus for detecting and estimating inflammable gases in air. 1,880,941; Oct. 4.

Erickson, Elmer C., Woodridge, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Photographic recorder. 1,880,942; Oct. 4.

Ericsson, Erik E., Orebro, Sweden. Fixing the blades of scythes to the snath. 1,880,943; Oct. 4.

Erie City Iron Works. (See Carlson, Carl T., assignor.)

Estes, J. Edmund, Barrington, R. I. Display device. 1,880,944; Oct. 4.

Etablissements Aera. (See Martin, Georges L. J., assignor.)

Ettinger, Joe J., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Surgical splint. 1,880,945; Oct. 4.

Ettinger, Joe J., assignor to The Zimmer Manufacturing Company, Warsaw, Ind. Clavicle splint. 1,880,946; Oct. 4.

Eubanks, Lovelace P. (See Peek, William T., and Eubanks.)

Evans Appliance Company. (See Wiltse, Sumner, assignor.)

Evans Auto Loading Company, The. (See Snyder, Clifford L., assignor.)

Evans, Charles S. (See Sorg, Harold E., assignor.)

Evans, Harrison E., Belmont, Mass., and C. D. Allen, Philadelphia, Pa., assignors to Consolidated Ashcroft Hancock Company, New York, N. Y. Valve. 1,881,269; Oct. 4.

Evans, Richard, Highland Park, Ill. Stamp rack. 1,880,947; Oct. 4.

Evennett, Frederick C. F., Lee, England. Valve. 1,880,948; Oct. 4.

Everett, Charles I., Willington, Nev. Honey frame cleaning machine. 1,881,354; Oct. 4.

Evers, Arthur J., and H. J. Sauvage, Wilmette, Ill. Strainer. 1,881,270; Oct. 4.

Ewest, Hans, Berlin, and G. Gaidies, Berlin-Pankow, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,880,949; Oct. 4.

Ewing, Frank E., F. J. Clunk, Brentwood Heights, and N. M. Coats, Santa Monica, Calif., assignors, by direct and mesne assignments, to Kuts-Keen Mfg. Co., Ltd. Cutter for adhesive tapes. 1,880,950; Oct. 4.

Exact Weight Scale Company, The. (See Okey, Perry, assignor.)

Excel Magneto Company. (See Reis, Curt Frederick, assignor.)

Exline, Paul G. (See Blackwood, O. H., and Exline.)

Extruded Metal Products Company. (See Williams, Stephen L., assignor.)

Eyre, John J., Saugus, Mass., assignor to H. K. Porter, Inc. Cutting tool. 1,880,951; Oct. 4.

Fabrey, William H. (See Butler, W. L., and Fabrey.)

Fabrey, William H., assignor to The Weber Electric Company, Schenectady, N. Y. Lamp socket and adjustable support therefor. 1,880,952; Oct. 4.

Fabyan, George. (See Eisenhour, Bert E., assignor.)

Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Motor vehicle. Des. 87,875; Oct. 4.

Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Rail car construction. 1,880,953; Oct. 4.

Fahrenwald, Frank A., Chicago, Ill. Furnace. 1,880,954; Oct. 4.

Falconer, Jenny D. (See Wilkins, Thomas M., assignor.)

Falk, Clinton L., Los Angeles, Calif. Vehicle. 1,881,070; Oct. 4.

Falstrom, Henry W., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Holder for ornaments. 1,880,955; Oct. 4.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electric train wire coupling. 1,880,957; Oct. 4.

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car control device. 1,880,958; Oct. 4.

Farmer, John F., Indianapolis, Ind. Dispensing machine. 1,880,956; Oct. 4.

Farnsworth, Frodyce B. (See Edwards, F. W., and Farnsworth.)

Fassman, Sam. (See Fessler, M. J., and Fassman.)

Faunce, Benjamin F., assignor to The Brown-Fayro Company, Johnstown, Pa. Hub closure for mine car wheels. 1,881,071; Oct. 4.

Fehr, Eugen J., Hammond, Ind., assignor to Camel Company, Chicago, Ill. Stop for car doors. 1,881,401; Oct. 4.

Feldman, Charles L., et al. (See Ward, R. H., and Feldman.)
Fergusson, Alan R., New York, N. Y. Tank closure. 1,880,424; Oct. 4.
Ferro Stamping & Manufacturing Company. (See Devereaux, William C., assignor.)
Fessler, Marcus J., Yonkers, and Sam Fassman, Brooklyn, N. Y. Ash can. 1,881,120; Oct. 4.
Fiat Società Anonima. (See Pirinoli, Guglielmo, assignor.)
Filer & Stowell Company, The. (See Cahoon, William F., assignor.)
Firestone Steel Products Company, The. (See Brank, Winfield S., assignor.)
Firestone Steel Products Company, The. (See Broecker, Lewis C., assignor.)
Firestone Tire & Rubber Company, The. (See Bowman, Robert H., assignor.)
Firestone Tire & Rubber Company, The. (See Brown, Roy W., assignor.)
Firestone Tire & Rubber Company, The. (See Furnas, Aubrey R., assignor.)
Firestone Tire & Rubber Company, The. (See Hulslander, Ray D., assignor.)
Firestone Tire & Rubber Company, The. (See Mullin, Andrew B., assignor.)
Firestone Tire & Rubber Company, The. (See Roberts, Eugene A., assignor.)
Firestone Tire & Rubber Company, The. (See Shields, Jesse W., assignor.)
Firestone Tire & Rubber Company, The. (See Stevens, Horace D., assignor.)
Firestone Tire & Rubber Company, The. (See Stevens, William C. and H. D., assignors.)
Fiske, Bradley A., New York, N. Y. Reading machine. 1,881,072; Oct. 4.
Flanders, Paul B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Measurement of mechanical impedance. 1,880,425; Oct. 4.
Flood, Carl A., assignor to Dennison Manufacturing Company, Framingham, Mass. Pin strip. 1,880,197; Oct. 4.
Florman, Irving, New York, N. Y. Ornament for a radiator cap or the like. Des. 87,876; Oct. 4.
Floyd Manufacturing Company. (See Potenza, Franklin D., assignor.)
Fogal, Jay R., San Francisco, Calif. Fuse. 1,880,379; Oct. 4.
Foot, Edward H. W., Beaconsfield, England. Continuous track for vehicles. 1,881,179; Oct. 4.
Forchheimer, Mary E. (See Duwellius, Walter S., assignor.)
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Counting device. 1,880,427; Oct. 4.
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Sorting machine for record cards. 1,889,428; Oct. 4.
Ford, Eugene A., West Newton, Mass., and F. A. Story, assignors to The Tabulating Machine Company, Endicott, N. Y. Counter for tabulating machines. 1,880,426; Oct. 4.
Ford, Frank H., Hattiesburg, Miss. Preparing roof coverings. 1,880,429; Oct. 4.
Ford, Paul H., and N. Young, assignors to The Girdler Corporation, Louisville, Ky. Method of and die mandrel for shaping curved tubes. 1,881,121; Oct. 4.
Forney, Christopher C., Downs, Kans. Egg transferring and sorting trap nest. 1,881,122; Oct. 4.
Fourness Development Corporation Ltd. (See Fourness, W., and Burghard, assignors.)
Fourness, Wilfred, Oakland, and E. G. Burghard, Los Angeles, Calif., assignors to Fourness Development Corporation Ltd., New York, N. Y. Refrigerator vehicle and trailer. 1,880,245; Oct. 4.
Fox Film Corporation. (See Balsley, James R., assignor.)
Foxboro Company, The. (See Bristol, Edgar H., assignor.)
Francis, Louis, Miami, Fla. Salvage unit. 1,881,123; Oct. 4.
Franck, Karl, and K. Dietz, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Acid proof material and preparing it. 1,881,180; Oct. 4.
Franco, John S., Milwaukee, Wis. Driving clutch for track laying tractors. 1,880,344; Oct. 4.
Frantz, Clair E., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich. Mold-separating device. 1,880,380; Oct. 4.
Frederics, E., Inc. (See Dwyer, James E., assignor.)
Freeman, Benjamin W., Cincinnati, Ohio. Shank beating and stitch rubbing machine. 1,881,181; Oct. 4.
Freeman, Ira M., Chicago, Ill. Fairing device. 1,881,073; Oct. 4.
Fries, Friedrich August. (See Ebert, G., Fries, and Garbsch.)
Frigidaire Corporation. (See Dick, Herman J., assignor.)
Frings, Heinrich, Bonn-on-the-Rhine, Germany. Manufacture of vinegar. 1,880,381; Oct. 4.
Frosted Foods Company. (See Birdseye, Clarence, assignor.)
Fulenwider, Harry. (See Fulenwider, Jesse and H.)
Fulenwider, Jesse and H., assignors to The Southern States Iron Roofing Company, Inc., Savannah, Ga. Roofing fastener. 1,880,318; Oct. 4.
Fulton Company, The. (See Thorp, Joel R., assignor.)
Furnas, Aubrey R., Uniontown, assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Tire mold. 1,880,430; Oct. 4.
Gaidies, Georg. (See Ewest, H., and Gaidies.)
Galbreath, Frank R. (See Pearne, F. Y., and McClintock, assignors.)
Garbsch, Paul. (See Ebert, G., Fries, and Garbsch.)
Gardner, George H., assignor to The Menasha Products Company, Chicago, Ill. Paper napkin. 1,880,345; Oct. 4.
Garling, Rosner A., Lansing, and J. T. Ott, Detroit, assignors to Reo Motor Car Company, Lansing, Mich. Method and apparatus for electroplating. 1,880,382; Oct. 4.
Garner, Herman H., F. R. Nohavec, Claremont, and G. H. Hopkins, Pasadena, Calif., assignors to Vortox Manufacturing Company, Claremont, Calif. Air cleaner. 1,881,049; Oct. 4.
Garnett, Cuthbert V. H. (See Smith, W. S., and Garnett.)
Gas Light & Coke Company, The. (See Masterman, Cyril A., assignor.)
Gasoline Products Company. (See Black, John C., assignor.)
Gasoline Products Company. (See Davis, Albert G., assignor.)
Gasoline Products Company Inc. (See Cross, Walter M., assignor.)
Gay, Frazer W., Newark, N. J. Varying electrical capacity. 1,880,346; Oct. 4.
Gaylord Bros., Inc. (See Moulton, Lloyd W., assignor.)
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Coupling circuit arrangement. 1,880,198; Oct. 4.
Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Inductance and coupling system. 1,880,199; Oct. 4.
General Alloys Company. (See Harris, H. H., and McCormick, assignors.)
General Aniline Works, Inc. (See Buchwald, Reinhard, assignor.)
General Aniline Works, Inc. (See Heidenreich, Rudolf, assignor.)
General Aniline Works, Inc. (See Heidenreich, R. M., and Tust, assignors.)
General Aniline Works, Inc. (See Jung, Rudolph, assignor.)
General Aniline Works, Inc. (See Muller, R., and Honold, assignors.)
General Aniline Works, Inc. (See Rösch, Georg, assignor.)
General Aniline Works, Inc. (See Taube, Carl, assignor.)
General Aniline Works, Inc. (See Tschunkur, E., and Kracht, assignors.)
General Aniline Works, Inc. (See Tschunkur, E., Kracht, and Herdieckerhoff, assignors.)
General Cable Corporation. (See Kierspe, George W., assignor.)
General-Direktion der Osterr Tabakregie. (See Wenusch, Adolf, assignor.)
General Electric Company. (See Bailey, William M., assignor.)
General Electric Company. (See Butler, Benjamin J., assignor.)
General Electric Company. (See Ewest, H., and Gaidies, assignors.)
General Electric Company. (See Proctor, John A., assignor.)
General Electric Company. (See Thomas, Henry P., assignor.)
General Electric Company. (See Weir, I. R., and Richardson, assignors.)
General Electric Company. (See Wellman, Bertram, assignor.)
General Electric Company. (See Whitney, Chancy F., assignor.)
General Motors Corporation. (See Summers, Caleb E., assignor.)
Gensecke, Wilhelm, Gonsenheim, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Purification of fats and oils. 1,880,383; Oct. 4.
Geyling, Remigius, and P. Planer, Vienna, Austria; said Geyling assignor to said Planer. Device for projecting backgrounds. 1,881,355; Oct. 4.
Gilbert & Barker Manufacturing Company. (See De Lancey, Warren H., assignor.)
Gilbert, B. H. (See Gilbert, David, assignor.)
Gilbert, David, assignor of one-half to B. H. Gilbert, West New York, N. J. Sign. 1,881,371; Oct. 4.
Girdler Corporation, The. (See Ford, P. H., and Young, assignors.)
Glascodine, Richard T., assignor of one-half to G. Spencer, Moulton & Company, Limited, London, England. Buffing and draw gear for railway vehicles. 1,881,312; Oct. 4.
Gleason Works. (See Bullock, E. W., and White, assignors.)
Gold, Abe, Shreveport, La. Folding playhouse. 1,881,356; Oct. 4.

Goldenberg, Irving. (See Dubinsky, H., Goldenberg, and Schachter.)
Goldschlager, Aaron, and Isidore Raze, Brooklyn, N. Y. Bread molding device. 1,881,054; Oct. 4.
Goldsmith, Hugo, et al, executors. (See Kiefer, Karl, assignor.)
Gooch, Stapleton D. (See Waggaman, W. H., Gooch, and Kerschbaum.)
Good, John N. (See Thomas, T. H., and Good.)
Goodall, John W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tool for forcing and drawing an element through conduits. 1,880,431; Oct. 4.
Goodheim, Albert, North Bergen, and E. Wagner, Union City, N. J. Sealing device. 1,881,271; Oct. 4.
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Goodall, John W., assignor.)
Goodyear Tire & Rubber Company, The. (See Teppema, Jan, assignor.)
Goodyear Tire & Rubber Company, The. (See Woodward, Alva W., assignor.)
Goss Printing Press Company. (See Schroeder, Hans C., assignor.)
Goss Printing Press Company, The. (See Smith, Ernest J., assignor.)
Gossett, Maurice T. (See White, J. B., and Gossett.)
Government and the Public. (See Coe, Mayne R., assignor.)
Government of the United States, The. (See Hidner, Peter, assignor.)
Grace, Robert E., Barberton, Ohio. Jar lifter. 1,880,384; Oct. 4.
Graebner, Otto F., and J. Vehko, Detroit, Mich., assignors to The Murray Corporation of America. Piece kick-up and seat pan. 1,880,385; Oct. 4.
Graham, John T., assignor of one-half to J. F. Kowk, Creighton, Pa. Caster. 1,881,402; Oct. 4.
Grant, Ira O., assignor of one-half to W. R. Seese, Canton, Ohio. Spring spreading tool. 1,881,050; Oct. 4.
Grant, John. (See Triplett, J. B., assignor.)
Grant, Walter B., executor. (See Currier, Richard D.)
Graves, Arthur L. (See Clark, A. C., and Graves.)
Gray, Joseph, Brooklyn, N. Y. Baker's bench. 1,880,386; Oct. 4.
Greenstreet, Oliver P., Owensville, Mo. Windshield wiper. 1,881,182; Oct. 4.
Greenwald, Willard F. (See Weisberg, L., and Greenwald.)
Greiner, Charles F., Walla Walla, Wash. Fender tool. 1,880,246; Oct. 4.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo dyestuff and making same. 1,880,432; Oct. 4.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo dye and making same. 1,880,433; Oct. 4.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. 4-amino-2-halo-diphenyl ethers and preparing same. 1,881,074; Oct. 4.
Griffith, Enoch L., assignor to The Griffith Laboratories, Inc., Chicago, Ill. Winding machine. 1,881,183; Oct. 4.
Griffith Laboratories, Inc., The. (See Griffith, Enoch L., assignor.)
Griggs, Henry L., and A. R. Mabey, assignors to The Bristol Company, Waterbury, Conn. Double-jet controller device. 1,880,247; Oct. 4.
Grilli, John P., assignor to H. A. Brassert & Company, Chicago, Ill. Bleeder valve. 1,881,272; Oct. 4.
Groene, William F., assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio. Crankshaft lathe. 1,880,434; Oct. 4.
Groth, William H. (See Wynd, C. L. A., and Groth.)
Gruver, Perry F., Gruver, Tex. Grain pan and grain shoe. 1,880,387; Oct. 4.
Guérin, Gérard, Paris, France. Electrical commutator machine. 1,880,388; Oct. 4.
Guiberson Corporation, The. (See Lang, Charles E., assignor.)
Guiberson Diesel Engine Company. (See Thaheld, Ferl A., assignor.)
Guimont, Joseph W., Lachine, Quebec, Canada. Radiator. 1,880,248; Oct. 4.
Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)
Gump Co., B. F. (See Berry, E. G., and Woodhead, assignors.)
Gutmann, Armando, Turin, Italy. Printing cylinder for intaglio printing machines. 1,881,075; Oct. 4.
Guyer, Walter E., Spokane, Wash. Pouring can. 1,881,403; Oct. 4.
Haas, Frederick S. (See Booth, C., and Haas.)
Haas, Lucien L., assignor to Buffalo Pressed Steel Co., Buffalo, N. Y. Muffler. 1,881,051; Oct. 4.
Hadley, Walter B. (See Corcoran, E. P., and Hadley.)
Hadley, Walter B., Chicago, Ill., assignor to Kellogg-Hadley Corporation. Box board machine. 1,881,404; Oct. 4.
Haebler, Gerhard, Breslau, Germany, assignor of one-half to Theodore Haebler, New York, N. Y. Shedding mechanism for Jacquard looms. 1,881,076; Oct. 4.
Haebler, Theodore. (See Haebler, Gerhard, assignor.)
Hagenest, Hermann. (See Stauf, F. W., and Hagenest.)
Haggard & Marcusson Company. (See Vanderploeg, Henry, assignor.)
Hagspihl, Paul, Hagen, Germany, assignor to The Electric Storage Battery Company, Philadelphia, Pa. Producing electrodes for storage batteries. 1,880,249; Oct. 4.
Haigh, Leslie B., and H. E. A. Borzer, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,881,273; Oct. 4.
Haines Hosiery Mills, Inc. (See Paget, Harold F., assignor.)
Hall, Norman, Lyndhurst Grove, Low Fell, England. Electromagnet. 1,881,077; Oct. 4.
Haller, Charles W. (See Braddock, W. J., Bruhn, and Haller.)
Halwey, Charles, Santa Ana, Calif. Hinge. 1,881,078; Oct. 4.
Hand's Constant Mesh Transmission Co. (See Campbell, Leon J., assignor.)
Hannigan, Gerald M. (See Eddins, S. A., and Hannigan.)
Hardtmann, Max. (See Hentrich, W., and Hardtmann.)
Hardwick Hindle, Inc. (See Crouse, George B., assignor.)
Haring, Elizabeth J., Spokane, Wash. Portable bathtub equipment. 1,881,405; Oct. 4.
Harker, Hyrum S. (See Malcom, H. L., and Harger.)
Harris Bros. Silk Company. (See Wylie, Andrew, assignor.)
Harris, Henry H., Detroit, Mich., and G. C. McCormick, Needham, assignors to General Alloys Company, Boston, Mass. Roller rail for industrial heating furnaces. 1,881,184; Oct. 4.
Harris-Seybold-Potter Company, The. (See Seybold, Frederick W., assignor.)
Hart, Dudley W., Denver, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Locating device. 1,881,274; Oct. 4.
Hart, Walter L., Milwaukee, Wis. Agitated weighing hopper. 1,881,052; Oct. 4.
Hartford-Empire Company. (See Wadman, Harold A., assignor.)
Hartford-Empire Company. (See Wadman, H. A., and McIntosh, assignors.)
Hartzell Industries, Inc. (See Charavay, Frederick, assignor.)
Haskins, Clifford B., Maplewood, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,880,435; Oct. 4.
Haskins, Clifford B., assignor to Dayton Scale Company, Dayton, Ohio. Scale. 1,880,436; Oct. 4.
Haskins, Clifford B., assignor to Dayton Scale Company, Dayton, Ohio. Scale lock. 1,880,437; Oct. 4.
Hatch, Karl, assignor to Oneida Community, Limited, Oneida, N. Y. Emblematic trowel or similar article. Des. 87,877; Oct. 4.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Tube frame. 1,880,438; Oct. 4.
Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Spool. 1,880,439; Oct. 4.
Hawaiian Pineapple Company, Limited. (See Hjelte, Marshall C., assignor.)
Hayden, Harold R., Brooklyn, N. Y. Electrical signaling system. 1,881,357; Oct. 4.
Hazell, Eardley. (See Dutton, P. C., and Hazell.)
Hazell, Eardley, New York, N. Y., assignor to Morgan and Wright, Detroit, Mich. Form for the manufacture of rubber articles. 1,881,021; Oct. 4.
Hazeltine Corporation. (See MacDonald, William A., assignor.)
Hazelton, Robert T., assignor to The Cincinnati Shaper Company, Cincinnati, Ohio. Hydraulic hold-down. 1,881,185; Oct. 4.
Heald Machine Company, The. (See Booth, C., and Haas, assignors.)
Hegenbarth, Francis, New Orleans, La. Intermediate carrier for sugar cane mill. 1,881,186; Oct. 4.
Heidenreich, Rudolf, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs of the anthanthrone series. 1,880,440; Oct. 4.
Heidenreich, Rudolf M., and P. Tust, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Phenanthridone and making same. 1,880,441; Oct. 4.
Heilhecker, Eugene C., assignor to National India Rubber Company, Bristol, R. I. Footwear. 1,880,389; Oct. 4.
Helfaer, Bertram M., Hamburg, Germany, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Purification of R-Acid. 1,880,442; Oct. 4.
Hellum Company, The. (See Bottoms, Robert R., assignor.)
Hem, Halvor O. (See Beard, J. H., and Hem.)
Hem, Halvor O., assignor to Toledo Scale Company, Toledo, Ohio. Counting scale. 1,880,443; Oct. 4.
Hem, Halvor O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Coin operated scale. 1,880,444; Oct. 4.
Hem, Halvor W., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,445; Oct. 4.
Hem, Halvor W., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing machine. 1,880,446; Oct. 4.
Henry, Ira W., Greenwich, Conn., assignor to Ionizing Corporation of America, New York, N. Y. Method and apparatus for treatment of hydrocarbons. 1,881,406; Oct. 4.

Hentrich, Winfrid, and M. Hardtmann, Weisdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Nitro-halogenquinazoline and producing same. 1,880,447; Oct. 4.
Herdieckerhoff, Ernst. (See Tschunkur, E., Kracht, and Herdieckerhoff.)
Hermani, Henry, assignor to The Tin Decorating Company of Baltimore, Md. Can turning mechanism. 1,881,187; Oct. 4.
Herr, Edward W. (See Owen, W. L., and Herr.)
Herrmann, Karl L., assignor to The Bantam Ball Bearing Company, South Bend, Ind. Grinding bearing races. 1,880,347; Oct. 4.
Hettig, Stewart F., Warrior Run, Peely, Pa. Rail handling truck. 1,881,313; Oct. 4.
Heusser, Wilfred, Salt Lake City, Utah. Chain-poise variable-weight balance. 1,881,886; Oct. 4.
Hey, Henry W. (See Hill, E. G., and Hey.)
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Core for motion picture films. 1,880,448; Oct. 4.
Hickman, Kenneth C. D., and L. A. Staib, jr., assignors to Eastman Kodak Company, Rochester, N. Y. Tropochromic coating. 1,880,449; Oct. 4.
Hickman, Kenneth C. D., C. R. Sanford, and W. J. Weyerts, assignors to Eastman Kodak Company, Rochester, N. Y. Processing apparatus for fixing photographic sheet material. 1,880,450; Oct. 4.
Hidnert, Peter, New York, N. Y., assignor to the Government of the United States, as represented by the Secretary of Commerce. Low expanding alloy. 1,880,200; Oct. 4.
Higgin Manufacturing Company, The. (See Traut, Clifford, assignor.)
Higgins, Clark F., Melrose Highlands, Mass. Dumping land vehicle. 1,881,022; Oct. 4.
Highland Western Glass Company. (See Morton, W. A., and Paxton, assignor.)
Hill, Edward G., and H. W. Hey, assignors to Hill Engineering Corporation, Richmond, Va. Clutch operating device for motor vehicles. 1,881,188; Oct. 4.
Hill Engineering Corporation. (See Hill, E. G., and Hey, assignors.)
Hiller, Paul W., Wilmington, Calif. Ship refrigeration. 1,881,079; Oct. 4.
Hilpert, Meier G., Bethlehem, Pa. Turntable center. 1,880,201; Oct. 2.
Hinckley, Arthur T. (See Broadwell, B. E., and Hinckley.)
Hinde & Dauch Paper Company, The. (See Drewsen, Pierre, assignor.)
Hitchcock, Rex B. (See Raney, C. R., and Hitchcock.)
Hjelte, Marshall C., assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii. Slicing machine. 1,881,189; Oct. 4.
Hodgkin, Durbin C., Washington, D. C., assignor of one-half to T. B. Owens, Fort Worth, Tex. Advertising device and making the same. 1,880,202; Oct. 4.
Hodgkin, Durbin C., Washington, D. C., assignor of one-fourth to T. B. Owens, Fort Worth, Tex. Advertising device and making the same. 1,881,417; Oct. 4.
Hoeft, Adolph R. Evanston, assignor to Hoeft & Company, Inc., North Chicago, Ill. Poultry feeder. 1,881,023; Oct. 4.
Hoeft & Company. (See Hoeft, Adolph R., assignor.)
Hoffman, Roscoe C., Detroit, Mich. Steering gear. 1,880,390; Oct. 4.
Hoffman Specialty Company. (See Simpson, William K., assignor.)
Hohenstein, Frederick C., Dunkirk, N. Y. Burner device. 1,881,314; Oct. 4.
Hommel, George L., Irondequoit, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Eyeglass and spectacle case. Des. 87,878; Oct. 4.
Honda, Kotaro, and T. Kase, assignors to Research Institute for Iron, Steel and Other Metals, Sendai, Japan. Metallic alloy. 1,881,315; Oct. 4.
Honde Engineering Corporation. (See Casper, Anthony B., assignor.)
Honold, Ernst. (See Muller, R., and Honold.)
Hopkins, Arthur G., Maspeth, assignor to Metal Package Corporation, New York, N. Y. Sheet metal container. 1,880,250; Oct. 4.
Hopkins, George H. (See Garner, H. H., Nohavec, and Hopkins.)
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Flattening prints. 1,880,451; Oct. 4.
Horner, Harold A., Wilkinsburg, Pa. Smoke indicator. 1,881,190; Oct. 4.
Hornung, Anton N., Los Angeles, Calif. Latch assembly for refrigerator doors. 1,880,251; Oct. 4.
Horspool, Francis L. (See Duckworth, T. O., and Horspool.)
Horton, Arthur W., jr. (See Björnson, B. G., Horton, and Norwine.)
Horváth, Guido, Buenos Aires, Argentina. Container for tooth powder or similar medical products. 1,881,316; Oct. 4.
Howard, George H., Alhambra, Calif. Motor starter drive. 1,881,053; Oct. 4.
Howard, James E., Jeffersonville, Ind. Vessel construction. 1,881,191; Oct. 4.
Hubert, William D., Joliet, Ill. Aircraft propeller. 1,881,080; Oct. 4.
Hudson Motor Car Company. (See Baits, Stuart G., assignor.)
Huet, André. (See Magis, A., and Huet.)
Huff, Lyman C., Chicago, Ill. Heater. 1,881,275; Oct. 4.
Hughes, Benjamin, Montreal, Quebec, Canada. Radio system. 1,880,320; Oct. 4.
Hughes, Edgar F. (See Dierker, Hugh E., assignor.)
Hull, Foster J., assignor to Pangborn Corporation, Hagerstown, Md. Sand blast helmet and ventilating means. 1,881,192; Oct. 4.
Hulse, Albert J. (See Andrews, C. W., and Hulse.)
Huislander, Ray D., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Apparatus for feeding powdered material. 1,880,452; Oct. 4.
Hume, Horace D. (See Love, J. E., and Hume.)
Humphrey, Walter E., assignor to The Mason Tire & Rubber Corporation, Kent, Ohio. Fabricating beads for pneumatic tires. 1,881,276; Oct. 4.
Hunter, John G., Columbus, Ohio. Combined telephone stand and telephone directory secretary. Des. 87,870; Oct. 4.
Hunter, Percy E., Pittsburgh, Pa. Traffic guard. 1,881,376; Oct. 4.
Hurley, Percy W., Sharon Hill, Pa. Mining tool. 1,880,252; Oct. 4.
Hussmann-Ligonier Company. (See Rutishauser, Donald E., assignor.)
Hydraulic Brake Company. (See Olivier, Wallace F., assignor.)
Hymans, Henry, Hull, Iowa. Disk harrow. 1,881,358; Oct. 4.
I. G. Farbenindustrie Aktiengesellschaft. (See Beck, C., and Kremp, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Cornely, B., and Richter, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Curs, Alfred, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Daimler and K. Platz, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Drossbach, Otto, assignor.)
I. G. Farbenindustrie, Aktiengesellschaft. (See Ebert, G., Fries, and Garbsch, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ehrhardt, Udo, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Eisenhut, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Eissner, Willy, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Franck, K., and Dietz, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hentrich, W., and Hardtmann, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Weigel, Theodor, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Weller, M., and Berres, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wulff, Otto, assignor.)
Iasillo, Casper, assignor of one-half to M. Miller, Port Chester, N. Y. Supporting bracket attachment for ladders. 1,880,319; Oct. 4.
Imperial Irrigation District. (See Clark, A. C., and Graves, assignors.)
Inca Manufacturing Corporation. (See Connor, R. A., and Jacobs, assignors.)
India Tire & Rubber Company. (See Lorentz, John E., assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See Benson, Irving N., assignor.)
Ingersoll-Rand Company. (See Hart, Dudley W., assignor.)
Ingersoll-Rand Company. (See Williams, Peter A., assignor.)
Ingraham, E., Company, The. (See Carlson, Elof L., assignor.)
International Bitumenoil Corporation. (See Vickers, John H., assignor.)
International Harvester Company. (See Raney, Clemma R., assignor.)
International Harvester Company. (See Raney, C. R., and Hitchcock, assignors.)
International Harvester Company. (See Sandstrom, Felix C., assignor.)
International Precipitation Company. (See Clyne, Cecil B., assignor.)
International Seal and Knot Protector Co., The. (See Keidel, Frank, assignor.)
Ionizing Corporation of America. (See Henry, Ira W., assignor.)
Irvine, Fergus A. (See Lathrop, Elbert C., assignor.)
Irvine, Fergus A. (See Lathrop, E. C., and Irvine.)
Irvine, Fergus A. (See Munroe, T. B., and Irvine.)
Irvine, William E. (See O'Neill, W. J., and Irvine.)
Jackson, Cecil K., Washington, Mo. Closing means for safe doors. 1,881,193; Oct. 4.
Jackson, Charles A., Ridgewood, N. J. Electrical apparatus. 1,880,203; Oct. 4.
Jackson, Francis B., Tulsa, Okla. Well pumping apparatus. 1,880,321; Oct. 4.
Jackson, Robert, Chicago, Ill. Spring device. 1,881,277; Oct. 4.

Jackson, Walter C., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J. Bumper guard. 1,881,231; Oct. 4.
Jacobs, George A. (See Connor, R. A., and Jacobs.)
Jacobson, Conrad C., Glen Ridge, N. J., and J. S. Schweder, assignors to John Robertson Co. Inc., Brooklyn, N. Y. Solder wire extrusion press. 1,881,278; Oct. 4.
Jacobson, Ludwig G., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Entrance inclosure operating and control means. 1,881,017; Oct. 4.
Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Superheater boiler. 1,880,253; Oct. 4.
Jaeger, Alphons O., Crafton, assignor, by mesne assignments, to Selden Research & Engineering Corporation, Pittsburgh, Pa. Production of non-acidic carbonyl compounds. 1,880,322; Oct. 4.
James, William S. (See Paton, C. B., and James.)
Jamestown Metal Desk Company. (See Jones, Emil J., assignor.)
Jeffrey Manufacturing Company, The. (See Bauroth, Walter J., assignor.)
Jenkins, Harold O., Platteville, Wis. Hog feeding trough handling device. 1,881,194; Oct. 4.
Jenkins, William A., Wilmington, Calif. Automatic nipple threading machine. 1,880,391; Oct. 4.
Jepson, Alfred H. (See Burt, Alexander T., assignor.)
Johns-Manville Corporation. (See Baker, James D., assignor.)
Johnson, Charles G., et al. (See Parr, Webster A., assignor.)
Johnson, Clarence G., Hartford City, Ind. Sealing strip construction. 1,880,254; Oct. 4.
Johnson, Frederick W., Santa Cruz, Calif. Pool and billiard court. 1,881,387; Oct. 4.
Johnson, George A., Fairfield, assignor to The Bryant Electric Company, Bridgeport, Conn. Electrical fitting. 1,881,318; Oct. 4.
Johnson, Peter A., Portland, Oreg. Electric water heater. 1,880,255; Oct. 4.
Jones, Emil J., assignor to Jamestown Metal Desk Company, Jamestown, N. Y. Metal cabinet. 1,880,392; Oct. 4.
Jones, James W., Poplar, London, England. Oil fuel burner. 1,881,359; Oct. 4.
Jones, Robert F., Washington, D. C. Ash receiver. Des. 87,880; Oct. 4.
Jones, Ruel C. (See Baston, C. E., and Jones.)
Jung, Rudolph, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Producing nitroso diazo solutions. 1,880,959; Oct. 4.
Kaiser, William H., Erie, Pa., assignor to American Meter Company, New York, N. Y. Gas meter. 1,880,256; Oct. 4.
Kali-Chemie Aktiengesellschaft, the Firm. (See Crotogino, Fritz, assignor.)
Kali-Chemie Aktiengesellschaft. (See Rothe, F., and Brenek, assignors.)
Kanawha Manufacturing Company. (See Whittaker, Robert E., assignor.)
Kannenberg, Walter F. (See Chesnut, R. W., Terry, and Kannenberg.)
Kantzler, Leopold J., Bay City, Mich. Building construction. 1,880,453; Oct. 4.
Kase, Tsutomu. (See Honda, K., and Kase.)
Kaselitz, Oscar, Berlin, Germany. Producing magnesium ammonium phosphate. 1,881,195; Oct. 4.
Kawretzke, Robert, Kloster Wennigsen in Deister, Germany. Instrument for adjusting the teeth. 1,881,196; Oct. 4.
Kaye, James W., assignor to Kaye & MacDonald, Inc., West Orange, N. J. Automatic water logging float for steam traps. 1,880,204; Oct. 4.
Kaye & MacDonald, Inc. (See Kaye, James W., assignor.)
Keale, Charles F., jr., Stewart Manor, Long Island, New York. Aerial camera. 1,880,960; Oct. 4.
Keidel, Frank, Elmhurst, assignor to The International Seal and Knot Protector Co., New York, N. Y. Seal. 1,881,081; Oct. 4.
Keller, Jeremiah, Canton, Ohio. Traffic signal light. 1,881,407; Oct. 4.
Kellogg-Hadley Corporation. (See Hadley, Walter B., assignor.)
Kellogg, John L. (See Corcoran, E. P., and Hadley, assignors.)
Kelly, William W. (See Cook, F. J., and Kelly.)
Kennedy, Thomas A. (See Wilsea, J. B., and Kennedy.)
Kent, Alfred W., assignor to W. Spiers Limited, Leicester, England. Knitting machine. 1,881,360; Oct. 4.
Kernchen, John C. (See Davis, Herbert A., assignor.)
Kerr, Howard J. (See Langvund, I. L., and Kerr.)
Kerr, John L., Albany, Ga. Spike attachment for shoes. 1,881,319; Oct. 4.
Kerschbaum, Friedrich P. (See Waggaman, W. H., Gooch, and Kerschbaum.)
Kessler, George M., Jersey City, N. J. License plate holder for automobiles. 1,881,279; Oct. 4.
Kiefer, Karl, deceased, Cincinnati, Ohio; James A. Rheinstrom and H. Goldsmith, executors. Cleaning bottles. 1,880,257; Oct. 4.
Kiep, Johann N., Altona-Hochkamp, Germany. Hydraulic coupling. 1,881,082; Oct. 4.
Kiep, Johann N., Altona-Hochkamp, Germany. Hydraulic coupling. 1,881,083; Oct. 4.
Kierspe, George W., Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Winding machine. 1,881,377; Oct. 4.
Killgore, Robert B. (See Wood, Clarence P., assignor.)
Killman, Thomas A., Nashville, Tenn. Egg beater. 1,881,361; Oct. 4.
Kimball, John A., Taylorville, Ill. Closure mounting. 1,881,362; Oct. 4.
Kindel, William N., San Francisco, assignor to J. F. Meyer, Pasadena, Calif. Entrapment device. 1,880,258; Oct. 4.
Kingsley, Harold T., Detroit, Mich. Musical instrument. 1,880,961; Oct. 4.
Kingston Products Corporation. (See Carlston, William S., assignor.)
Kirk, William J., Wellsburg, W. Va. Medical tablet. 1,881,197; Oct. 4.
Kirk, William J., Wellsburg, W. Va. Heated cushion. 1,881,198; Oct. 4.
Klocke, William H., Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Apparatus for making bearings. 1,880,454; Oct. 4.
Knapp, Woldemar H., Charlottenburg, Germany. Insulating device for high voltage lines. 1,880,259; Oct. 4.
Koehler, Frederich, Chicago, Ill. Jack for raising truck frames. 1,881,199; Oct. 4.
Koons, George H., Chicago, Ill. Ventilator. 1,881,363; Oct. 4.
Koppelman, Harold I., assignor to U. S. Sanitary Specialties Corporation, Chicago, Ill. Deodorant container. 1,880,962; Oct. 4.
Koppers Company, The. (See Blackwood, O. H., and Erline, assignors.)
Kowk, John F. (See Graham, J. T., assignor.)
Kracht, Ernst. (See Tschunkur, E., and Kracht.)
Kracht, Ernst. (See Tschunkur, E., Kracht, and Herdieckerhoff.)
Kraft, Charles H., Kansas City, Mo. Garment hanger. 1,880,963; Oct. 4.
Krag, Grace M., Chicago, Ill. Broiling apparatus. 1,880,205; Oct. 4.
Kramer, Herman. (See Burton, K. H., and Kramer.)
Kremmling, Otto, Hamersleben, District Oschersleben, assignor to Lieselotte Kremmling, Hamersleben, near Aschersleben, Germany. Apparatus for the mechanical kneading of dough. 1,881,364; Oct. 4.
Kremp, Franz. (See Beck, C., and Kremp.)
Kreps, Elmer H. (See Allen, G. N., and Kreps.)
Kriege, John F., and E. A. Wilkins, South Sioux City, Nebr. Hand corn husking device. 1,881,368; Oct. 4.
Künsztler, Mór, Budapest, Hungary. Duodenal or stomachal tube. 1,880,964; Oct. 4.
Kurath, Franz, assignor to Economy Fuse and Manufacturing Co., Chicago, Ill. Mold. 1,881,232; Oct. 4.
Kuts-Keen Mfg. Co., Ltd. (See Ewing, F. E., Clunk, and Coats, assignors.)
Kuwada, Gompei, Komedani-Mura, Kawabegun, Japan. Meter for gas flow. 1,881,280; Oct. 4.
Lamb, Charles. (See Radford, D. R., and Lamb.)
Lamond, John, Allison Park, Pa. Threading tool. 1,881,281. Oct. 4.
Landon, Jesse, assignor of one-sixth to W. L. Crumrine, Lima, Ohio. Hardening and tempering metal. 1,881,320; Oct. 4.
Lane Company, The. (See Loftin, Lawrence K., assignor.)
Lane, Leavitt J., New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company. Fishing rod. 1,880,348; Oct. 4.
Lang, Charles E., Corsicana, assignor of one-half to The Gulberson Corporation, Dallas, Tex. Drill bit. 1,881,024; Oct. 4.
Langer, Henry C., St. Paul, Minn. Snow shovel. 1,880,260; Oct. 4.
Langford, George, assignor to McKenna Process Company, Joliet, Ill. Repairing rail joint bars in track. 1,880,349; Oct. 4.
Langvand, Ivar L., Barberton, Ohio, and H. J. Kerr, Westfield, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Water tube boiler. 1,880,350; Oct. 4.
Lapointe Machine Tool Company, The. (See Baker, Harry A., assignor.)
Larsen, Elver, Brooklyn, N. Y. Gauging round chimneys. 1,880,261; Oct. 4.
Lasenhausenwerke, Dusseldorfer Maschinenbau A. G. (See Sonntag, Alfred, assignor.)
Lathrop, Elbert C. (See Munroe, T. B. and Lathrop.)
Lathrop, Elbert C. and F. A. Irvine, assignors to The Celotex Company, Chicago, Ill. Fiber product preservation. 1,880,965; Oct. 4.
Lathrop, Elbert C., and F. A. Irvine, assignors to The Celotex Company, Chicago, Ill. Making panel board. 1,881,418; Oct. 4.
Laughlin, Samuel F. (See Braun, H. F., Laughlin, and Smith.)
Lauppe, Lorris R., and R. E. Lauppe, Sacramento, Calif. Power operated buckrake. 1,880,262; Oct. 4.
Lauppe, Raymond E. (See Lauppe, Lorris R., and R. E.)
Lawson, Walter E., and L. T. Sandborn, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Polymerizing vinyl derivatives. 1,881,282; Oct. 4.
Lea, W. E., et al. (See Brent, George R., assignor.)

Leask, John P., Glenbrook, Conn., and S. T. Warner, New York, N. Y., assignors to Peabody Engineering Corporation. Method of and apparatus for the regulation of viscosity of liquids. 1,881,200; Oct. 4.

Le Blond, R. K., Machine Tool Company, The. (See Groene, William F., assignor.)

Ledoux, John W., Swarthmore, Pa. Meter. 1,880,206; Oct. 4.

Leedy, C. C., et al. (See Brent, George R., assignor.)

Leighton, John W., Port Huron, Mich. End connection for vehicle springs and making same. 1,881,233; Oct. 4.

Leland Electric Company, The. (See Bossard, Gisbert L., assignor.)

LeMoon, Axel R., Chicago, Ill. Vehicle drive wheel axle unit mounting. 1,881,408; Oct. 4.

LeMoon, Axel R., Chicago, Ill. Segmental aprinkler nozzle. 1,881,409; Oct. 4.

Leuthner, Frank J., Sharpsville, Pa. Molding apparatus. 1,881,055; Oct. 4.

Levan, John F. (See Edwards, O. M., and Levan.)

Lewis, George C., New Dorp, assignor to Columbian Carbon Company, New York, N. Y. Manufacture of carbon black. 1,881,084; Oct. 4.

Lewis, George C., New Dorp, assignor to Columbian Carbon Company, New York, N. Y. Manufacture of carbon black. 1,881,085; Oct. 4.

Lewis Invisible Stitch Machine Company. (See Bowman, Louis G., assignor.)

Libbey-Owens-Ford Glass Company. (See Natlis, Octave C., assignor.)

Lieselotte Kremmling. (See Kremmling, Otto, assignor.)

Lilienfeld, Julius E., Winchester, Mass. Cathode for electrolytic condensers. 1,880,263; Oct. 4.

Lindley, Irma L., Laurel, Miss. Storage battery. 1,880,323; Oct. 4.

Lintelmann, George M., assignor of one-half to I. M. Lintelmann, Spokane, Wash. Commutator truing tool. 1,881,410; Oct. 4.

Lintelmann, Lola M. (See Lintelmann, George M., assignor.)

Lippert, Henry E., Pittsburgh, Pa. Control system for motor vehicles. 1,881,025; Oct. 4.

Liquidometer Corporation. (See DeGiers, Clarence A., assignor.)

Livingood, Jesse F., West Finley, Pa. Wheel attachment for front wheel drive mechanism. 1,881,201; Oct. 4.

Livingood, Jesse F., West Finley, Pa. Front wheel drive mechanism for motor vehicles. 1,881,202; Oct. 4.

Ljungstrom, Fredrik, Lidingo, Sweden, assignor, by mesne assignments, to Fed. Incorporated, New York, N. Y. Variable speed power transmission. 1,881,234; Oct. 4.

Loew, Makoto. (See Orno-Ornfeldt, E., and Loew.)

Loftin, Lawrence K., Altavista, Va., assignor to The Lane Company, Inc. Mothproof receptacle. 1,880,325; Oct. 4.

Lorentz, John E., Akron, assignor to India Tire & Rubber Company, Mogadore, Ohio. Pneumatic tire. 1,881,026; Oct. 4.

Los Angeles Manufacturing Company. (See Shipley, M. R., and Trout, assignors.)

Los Angeles Soap Company. (See Cooper, Edwin H., assignor.)

Lotto, Joseph, Astoria, N. Y. Toy cabinet. Des. 87,881; Oct. 4.

Lougheed, Victor, Washington, D. C. Porous covering for aircraft. 1,880,207; Oct. 4.

Love, James E., and H. D. Hume, Garfield, Wash. Pea harvester. 1,881,411; Oct. 4.

Lubrication Corporation, The. (See Parker, Clark W. assignor.)

Lubrication Corporation, The. (See Robbins, Azor D., assignor.)

Lucas, Hubert F. (See Pearson, Jarl, assignor.)

Ludowici, Wilhelm, Jockgrim, Pfalz, Germany. Self-discharging wagon. 1,881,203; Oct. 4.

Lukens, Hiram S., assignor to Solidon Products, Inc., Philadelphia, Pa. Magnesium oxide mixtures and making the same. 1,881,283; Oct. 4.

Lundgren, Jacob, assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Device for calculating radial forces. 1,881,204; Oct. 4.

Lundgren, Jacob, assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Apparatus for determining balances. 1,881,205; Oct. 4.

Lurie, Joseph M. (See Binns, F. W., and Lurie.)

Mabey, Arthur R. (See Griggs, H. L., and Mabey.)

MacCamy, Harry J., assignor to Union Iron Works, Spokane, Wash. Ore separator. 1,881,412; Oct. 4.

MacDaniel, J. L., Printing Company, The. (See Egenolf, George J., assignor.)

MacDonald, William A., Little Neck, N. Y., assignor to Hazeltine Corporation. Superheterodyne receiver. 1,881,235; Oct. 4.

MacDonald, William A., Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J. Wave signaling system. 1,881,284; Oct. 4.

Magee, James M., et al. (See Carney, Daniel E., assignor.)

Magis, Auguste, and André Huet, Paris, France, assignors to The Superheater Company, New York, N. Y. Boiler. 1,881,206; Oct. 4.

Magnavox Company, The. (See Metcalf, Herbert E., assignor.)

Maintenance Equipment Company. (See Bates, S. E., and Overmier, assignors.)

Malcom, Henry L., and H. S. Harker, Shelley, assignors of forty per cent to said Malcom, twenty per cent to said Harker, twenty per cent to E. Duke, Idaho Falls, twenty per cent to W. S. Wright, Shelley, Idaho. Beet harvester. 1,880,324; Oct. 4.

Malleable Iron Fittings Company. (See Williams, Rolland G., assignor.)

Malm, Carl J. (See Clarke, H. T., and Malm.)

Mann, Fred H. (See Smith, P., and Mann.)

Manning, Arthur, Rutherford, N. J. Fuel oil torch. 1,880,066; Oct. 4.

Manning, William H., Pontiac, Mich. Reciprocating engine. 1,881,027; Oct. 4.

Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)

Marsh, Henry S., and C. W. Weesner, Youngstown, Ohio, assignors to Sharon Steel Hoop Company, Sharon, Pa. Making soluble ferric sulphate. 1,880,265; Oct. 4.

Marshall, Margaret, Vancouver, British Columbia, Canada. Vacuum cleaner. 1,881,086; Oct. 4.

Martin, Emil P., Detroit, Mich. Propeller. 1,881,365; Oct. 4.

Martin, Georges L. J., Courbevoie, assignor to Etablissements Aera, Paris, France. Magnetic compass compensating device. 1,881,207; Oct. 4.

Martin, Henry F., assignor to Detroit Hoist and Machine Co., Detroit, Mich. Transfer crane locking and safety device. 1,881,087; Oct. 4.

Martindell, Robert. (See Saunders, W. S., and Martindell.)

Mason, Herbert W., Wilmington, Del. Doctor for calendering machines. 1,880,455; Oct. 4.

Mason Tire & Rubber Corporation, The. (See Humphrey, Walter E., assignor.)

Masonite Corporation. (See Card, Jerome T., assignor.)

Masterman, Cyril A., Surrey, assignor to The Gas Light & Coke Company, Westminster, London, England. Refrigerating system. 1,881,208; Oct. 4.

Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)

Matthews, W. N., Corporation. (See Boll, L. P., and Birkenmaier, assignors.)

Matuschka, Bernhard, Ternitz, Austria. Mold for ingots. 1,881,088; Oct. 4.

Maxwell, Frank R., jr., Boston, Mass. Aerofoil. 1,880,967; Oct. 4.

Maxwell, William H. (See Tripiett, J. B.)

McBain, William C., Youngstown, Ohio. Tension device. 1,881,056; Oct. 4.

McCabe, Ira E., Chicago, Ill. Constant current transformer actuated control system. 1,881,321; Oct. 4.

McCabe, John J., Cleveland, Ohio. Washing machine casing. Des. 87,897; Oct. 4.

McCanlis, Albert T., Brooklyn, N. Y. Awning. 1,881,366; Oct. 4.

McChesney, Cuyler S., Kenmore, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Golf ball winding machine. 1,880,264; Oct. 4.

McClintock, William. (See Pearne, F. Y., and McClintock.)

McCord Radiator & Mfg. Co. (See Droit, Louis W., assignor.)

McCormick, George C. (See Harris, H. H., and McCormick.)

McCrea, Arthur M., Lamar, Mo. Trap. 1,880,326; Oct. 4.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Co., Wilmerding, Pa. Fluid pressure brake. 1,881,209; Oct. 4.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Hold back valve device. 1,881,210; Oct. 4.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Signal horn. 1,881,211; Oct. 4.

McDonald, Lawrence S., Tacoma, Wash. Golf bag supporting attachment. 1,880,351; Oct. 4.

McDonnell, Edward J., assignor to Blaw-Knox Company, Pittsburgh, Pa. Port cooler. 1,881,057; Oct. 4.

McFarland, Robert E., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Winding apparatus. 1,881,019; Oct. 4.

McFarland, Robert E., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material slitting device. 1,881,020; Oct. 4.

McGeorge, Herbert. (See Tyler, R. S., and McGeorge.)

McIntosh, Harold W. (See Wadman, H. A., and McIntosh, assignors.)

McKay Company, The. (See Bray, Joseph G., assignor.)

McKelvey, Louis F., Indianapolis, Ind. Display rack. 1,881,212; Oct. 4.

McKenna Process Company. (See Langford, George, assignor.)

McKesson, William C., Chicago, Ill. Valve structure and control mechanism therefore. 1,881,367; Oct. 4.

McLean, Eric K. See Strand, C. J., and McLean.)

McMullin, Albert R., New York, N. Y. Carrying mechanism for centrifugal concrete pipe machines. 1,881,322; Oct. 4.

McMullin, Albert R., New York, N. Y. Power mechanism for operating buckets of centrifugal molding apparatus. 1,881,323; Oct. 4.

McMullen, Joseph B., Washington, D. C. Vehicle body. 1,880,208; Oct. 4.

McMurtrie, Adnah, New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding connecter. 1,880,352; Oct. 4.

Mead Research Engineering Company, The. See Traquair, J., and Rawling, assignors.)

Meader, Ralph I., Lynbrook, N. Y. Tape moistener. 1,880,266; Oct. 4.

Means, Norman E. L., Missoula, Mont. Floating fishing lure and making same. 1,881,285; Oct. 4.

Medaugh, Frederick W., Baltimore, Md. Fluid pressure meter. 1,881,213; Oct. 4.

Mekler, Lev A., assignor to Universal Oil Products Company, Chicago, Ill. Radiant and convection heat furnace, 1,881,286; Oct. 4.

Melidoni, Constantine, New York, N. Y. Resilient piston. 1,881,214; Oct. 4.

Menasha Products Company, The. (See Gardner, George H., assignor.)

Merz, Fritz, and A. F. Schauss, Frankfort-on-the-Rodelheim, Germany. Machine for fastening with wire staples. 1,880,327; Oct. 4.

Metal Package Corporation. (See Hopkins, Arthur G., assignor.)

Metcalf, Herbert E., San Leandro, assignor to The Magnavox Company, Oakland, Calif. Signal reproducer. 1,881,324; Oct. 4.

Metcalf, John S., Company. (See Blanchard, Frederick W., assignor.)

Metropolitan Engineering Company. (See Murray, Thomas E., assignor.)

Metropolitan Engineering Corporation. (See Williams, Herbert H., assignor.)

Meyer, Charles A. (See Tienken, M. A., and Meyer.)

Meyer, Geo. J., Manufacturing Company. (See Dreher, Otto, assignor.)

Meyer, George J., Cudahy, Wis. Adjustable pulley. 1,881,028; Oct. 4.

Meyer, John F. (See Kindel, William N., assignor.)

Michael, Loren P., Elmhurst, Ill., assignor to The Superheater Company, New York, N. Y. Steam separator. 1,881,215; Oct. 4.

Michell, Anthony G. M., Melbourne, Australia. Journal bearing. 1,880,353; Oct. 4.

Michell, Roy G. (See Dixn, Ramon V., assignor.)

Miescher, Karl, and E. Urech, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Basic ethers of the pyridine series. 1,881,236; Oct. 4.

Miller, Carroll, assignor to Thermatomic Carbon Company, Pittsburgh, Pa. Combustion chamber. 1,881,325; Oct. 4.

Miller, Dale O., Detroit, Mich. Furnace door. 1,881,287; Oct. 4.

Miller, Daniel H., Kearney, Nebr. Tire tube tester. 1,880,328; Oct. 4.

Miller, Daniel H., Kearney, Nebr. Tire tube tester. 1,880,329; Oct. 4.

Miller, Morris. (See Iasillo, Casper, assignor.)

Mills, Lindley E. (See Britton, E. C., and Mills.)

Milner, Emil, Germantown, assignor to Continental Mills, Inc., Philadelphia, Pa. Needle selecting mechanism for knitting machines and the like. 1,880,267; Oct. 4.

Miner, Cecil S. (See Bratton, C. R., and Miner.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Minneapolis Bedding Company. (See Dobbs, Loyle D., assignor.)

Minneapolis-Honeywell Regulator Company. (See Crambiet, Paul K., assignor.)

Minneapolis-Honeywell Regulator Company. (See Denison, Frederick S., assignor.)

Minneapolis-Honeywell Regulator Company. (See Taylor, Daniel G., assignor.)

Minshall, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. One piece ring cowl. 1,880,355; Oct. 4.

Mirkil, Harold H., Philadelphia, Pa. Block printing machine. 1,881,216; Oct. 4.

Mitchell, John K., Villanova, Pa., assignor to Dispersions Process, Inc., Dover, Del. Purifying bodies insoluble in water. 1,880,968; Oct. 4.

Mitchell, Joseph, Seattle, Wash. Smoke cleaning device. 1,881,058; Oct. 4.

Mitchell, William J., San Francisco, Calif. Drilling rig. 1,881,413; Oct. 4.

Molt, Albert H. (See Butterworth, H. W., jr., and Molt.)

Moore & White Company, The. (See White, Joseph A., assignor.)

Moore, William E., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Metal coating apparatus. 1,881,089; Oct. 4.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,880,456; Oct. 4.

Moreton, Henry H., Santa Monica, Calif. Apparatus for dehydrating oils. 1,881,218; Oct. 4.

Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Compound for treatment of oils. 1,881,217; Oct. 4.

Morgan & Wright. (See Dutton, P. C., and Hazel, assignors.)

Morgan and Wright. (See Hazell, Eardley, assignor.)

Morgan & Wright. (See Ternes, Raymond F., assignor.)

Morgan Construction Company. (See Dahlstrom, Frank P., assignor.)

Morley, Denys W., and F. C. Weller, Hong Kong, China. Free-wheel mechanism for automobile use and for like purposes. 1,880,457; Oct. 4.

Morris, Albert W., Philadelphia, Pa., assignor to G. E. Coblens, New York, N. Y. Mechanism for and method of manufacturing pulp articles. 1,880,458; Oct. 4.

Morris, Frank E., Philadelphia, Pa., assignor to Doughnut Machine Corporation, New York, N. Y. Sugared doughnuts and their manufacture. 1,880,459; Oct. 4.

Morris, Warren A., Wyoming, assignor to The Richardson Company, Lockland, Ohio. Machine for forming cartons. 1,880,460; Oct. 4.

Morton, William A., assignor to Amco, Incorporated, Pittsburgh, Pa. Recuperator for industrial furnaces. 1,881,888; Oct. 4.

Morton, William A., Pittsburgh, and E. W. Paxton, Washington; said Paxton assignor to Highland Western Glass Company, Washington, Pa. Leer. 1,880,268; Oct. 4.

Moses, Herbert B., assignor to I. H. Moses, Washington, D. C. Engine and the like and method of operation. 1,880,209; Oct. 4.

Moses, Irma H. (See Moses, Herbert B., assignor.)

Moss, William H., and B. B. White, Cumberland, Md., assignors to Celanese Corporation of America. Plastifier for cellulose derivatives and resin compositions. 1,881,219; Oct. 4.

Mot-Acs, Inc. (See Rundlett, Carl W., assignor.)

Moulton, Lloyd W., assignor to Gaylord Bros., Inc., Syracuse, N. Y. Printing machine. 1,881,090; Oct. 4.

Moyes, William R., assignor to Union Tool Chest Company, Inc., Rochester, N. Y. Receptacle with tray. 1,880,461; Oct. 4.

Mueller, Herman C., Milwaukee, Wis. Fluid gun. 1,880,354; Oct. 4.

Muffly, Glenn, Detroit, Mich., assignor to Copeland Products, Inc. Refrigerating system. 1,880,969; Oct. 4.

Müller, Jakob. (See Stocker, R., and Müller.)

Müller, Rudolf, and E. Honold, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New acid wool dyestuffs of the anthraquinone series and making same. 1,880,970; Oct. 4.

Mullin, Andrew B., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Mold separator. 1,880,462; Oct. 4.

Mullin, Andrew B., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Tire remover. 1,880,463; Oct. 4.

Munroe, Treadway B., and E. C. Lathrop, assignors to The Celotex Company, Chicago, Ill. Protective treatment of fiber products. 1,880,971; Oct. 4.

Munroe, Treadway B., and E. C. Lathrop, assignors to The Celotex Company, Chicago, Ill. Treatment of fiber products. 1,880,972; Oct. 4.

Munroe, Treadway B., and F. A. Irvine, assignors to The Celotex Company, Chicago, Ill. Fiber derivative. 1,881,419; Oct. 4.

Munroe, Treadway B., assignor to The Celotex Company, Chicago, Ill. Wallboard and joint made therewith. 1,881,420; Oct. 4.

Murray Corporation of America, The. (See Anderson, Roy F., assignor.)

Murray Corporation of America, The. (See Graebner, O. F., and Vehko, assignors.)

Murray, John F., et al., executors. (See Murray, Thomas E.)

Murray, Joseph B., et al., executors. (See Murray, Thomas E.)

Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)

Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B., T. E., jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Hollow fitting. 1,880,269; Oct. 4.

Murray, Thomas F., jr., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing ethyl cyclopentanone carboxylate. 1,880,464; Oct. 4.

Murray Thomas F., jr., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing benzyl aniline. 1,880,465; Oct. 4.

Myers, Archibald C. T., Purley, assignor to J. Stone & Company Limited, Deptford, England. Locking arrangement for electric light bulbs. 1,881,091; Oct. 4.

Myers, James E., Whitefish Bay, Wis. Humidifier and heater. 1,880,973; Oct. 4.

National Aniline & Chemical Company. (See Helfaer, Bertram M., assignor.)

National Engineering Company. (See Christensen, Alfred C., assignor.)

National India Rubber Company. (See Heilhecker, Eugene C., assignor.)

National India Rubber Company. (See Watkins, Parke H., assignor.)

National Manufacturing Company. (See Bittorf, Louis A., assignor.)

Natlis, Octave C., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass cutting machine. 1,881,220; Oct. 4.

Naugatuck Chemical Company, The. (See Nikiton, Alexander A., assignor.)

Nau-Touron, Albert, Le Vesinet, France. Ring type spinning machine. 1,881,252; Oct. 4.
Neaman, Harry I., et al. (See Carney, Daniel E., assignor.)
Nelson, Adolph L., Indianapolis, Ind., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Piston. 1,881,237; Oct. 4.
Nelson, Emil A., Detroit, Mich. Rim construction. 1,880,974; Oct. 4.
Nelson, William N. (See Sylvester, William W., assignor.)
Neon, Claude, Lights, Inc. (See Beck, Leo L., assignor.)
Nerlich, August, Beyenburg-on-the-Wupper, Germany. Projectile for toy firearms. 1,880,330; Oct. 4.
Neveu, Anselme, Livry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,881,221; Oct. 4.
New Idea Potato Machinery Co. (See Paulson, Martin A., assignor.)
Newman, David F. (Payne, A. C., and Newman.)
Nichols, Frank T. (See Nichols, Henry C., P. E., and F. T.)
Nichols, Henry C., P. E., and F. T., Chickasha, Okla. Tire carrier. 1,881,222; Oct. 4.
Nichols, Henry C., P. E., and F. T., Chickasha, Okla. Tire carrier. 1,881,223; Oct. 4.
Nichols, Percy E. (See Nichols, Henry C., P. E., and F. T.)
Nikitin, Alexander A., Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of latex. 1,880,975; Oct. 4.
Nishihara, Harukichi, Waimanalo, Oahu, Hawaii. Automobile brake. 1,881,288; Oct. 4.
Noble, Edward C., Houston, Tex. Coupling. 1,880,356; Oct. 4.
Noble, Warren, Detroit, Mich. Internal combustion engine. 1,880,270; Oct. 4.
Noble, William H., assignor to Pennsylvania Pump & Compressor Company, Easton, Pa. Magnetically operated compressor regulator. 1,881,092; Oct. 4.
Nohavec, Fred R. (See Garner, H. H., Nohavec, and Hopkins.)
Noller, Carl R., assignor to Eastman Kodak Company, Rochester, N. Y. Making cellulose acetate with vaporized acetylating agents. 1,880,466; Oct. 4.
Norton, Raymond J., Washington, D. C., assignor to American Magnesium Metal Corporation, Pittsburgh, Pa. Light metal alloy. 1,880,467; Oct. 4.
Norwine, Andrew C. (See Björnson, B. G., Horton, and Norwine.)
Nuckols, Claude C., Menanda, assignor to Albany Corrugated Container Corp., Albany, N. Y. Display stand. 1,881,224; Oct. 4.
Nut Products Company, The. (See Cook, F. J., and Kelly, assignors.)
Nye, Ralph D., assignor to Wheeling Mold & Foundry Division of the Continental Roll & Steel Foundry Company, Wheeling, W. Va. Rolling mill. 1,880,468; Oct. 4.
Oakes Manufacturing Co., The. (See Spencer, George A., assignor.)
Oatley, Henry B., Great Neck, assignor to The Superheater Company, New York, N. Y. Baffling means for locomotive fire boxes. 1,881,225; Oct. 4.
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Ammoniation of phosphate fertilizers. 1,880,469; Oct. 4.
Ober, Beverly, and E. H. Wright, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Production of phosphatic fertilizer. 1,880,470; Oct. 4.
Oberphos Company, The. (See Ober, B., and Wight, assignors.)
Oberphos Company. (See Waggaman, William H., assignor.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,881,226; Oct. 4.
Ohmer, Wilfred I., Dayton, Ohio. Safety razor. 1,881,059; Oct. 4.
Okey, Perry, assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale structure. 1,881,060; Oct. 4.
Oliver, Wallace F., assignor to Hydraulic Brake Company, Detroit, Mich. Brake mechanism. 1,881,238; Oct. 4.
Olsen, John K., assignor to Stewart-Warner Corporation, Chicago, Ill. Refrigerator casing. Des. 87,882; Oct. 4.
Olsen, John K., assignor to Stewart-Warner Corporation, Chicago, Ill. Refrigerator casing. Des. 87,883; Oct. 4.
Olsen, Tinius, Testing Machine Company. (See Lundgren, Jacob, assignor.)
Oneida Community, Limited. (See Allen, G. N., and Kreps, assignors.)
Oneida Community, Limited. (See Bedford, E. B., and Parker, assignors.)
Oneida Community, Limited. (See Hatch, Karl, assignor.)
O'Neill, William J., Denver, Colo., and W. E. Irvine, Salt Lake City, Utah. Journal bearings. 1,880,976; Oct. 4.
Orne-Ornfeldt, Eduard, Berlin-Charlottenburg, and M. Loew, Berlin, Germany. Improving South American maté. 1,881,227; Oct. 4.
O'Rourke, Tex, assignor, by mesne assignments, to Card Display, Inc., New York, N. Y. Display stand and card. 1,881,372; Oct. 4.
Orr, Benjamin F. (See Brossard, J. A., Orr, and Spence.)
Osgood, Walter P., Malden, assignor to Boston Machine Works Company, Lynn, Mass. Seam pressing machine. 1,881,414; Oct. 4.
Ott, John T. (See Garling, R. A., and Ott.)
Overmier, Emmons. (See Bates, S. E., and Overmier.)
Owen, William L., Baton Rouge, La., and E. W. Herr, Freeport, assignors to Darco Sales Corporation, New York, N. Y. Promotion of fermentation. 1,881,093; Oct. 4.
Owens, Tom B. (See Hodgkin, Durbin C., assignor.)
Pacini, August J., Chicago, Ill., assignor to Sun-A-Sured, Inc. Antiricketic substances and the production thereof. 1,880,977; Oct. 4.
Pacini, August J., Chicago, Ill., assignor to Sun-A-Sured, Inc. Synthesizing and transmuting antiricketic substances and the like. 1,880,978; Oct. 4.
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Page, Milton H., Cohoes, N. Y. Sound reproducing device. 1,880,980; Oct. 4.
Page, Ralph E. (See Daly, G. F., and Page.)
Paget, Harold F., assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa. Yarn carrier stop block control mechanism for flat knitting machines. 1,881,373; Oct. 4.
Palmer, John F., Milwaukee, Wis., assignor to Bobrick Chemical Corporation, Los Angeles, Calif. Liquid dispensing faucet. 1,880,271; Oct. 4.
Pangborn Corporation. (See Hull, Foster J., assignor.)
Panier, Antoine E., assignor to Societe Anonyme de Machines-Outils et Appareils Divers "La Samoa," Paris, France. Automatic liquid measuring and delivering apparatus. 1,881,289; Oct. 4.
Panther, Joseph, jr., Tacoma, Wash. Fire fighting apparatus. 1,880,272; Oct. 4.
Papé, Chester H., Portland, Oreg. Pouring spout. 1,881,228; Oct. 4.
Pardee, Frank, jr. (See Pardee, Frank, and Frank, jr.)
Pardee, Frank, and F. Pardee, jr., assignors to Anthracite Separator Company, Hazleton, Pa. Coal drier. 1,880,273; Oct. 4.
Parker, Albert E., Philadelphia, Pa. Needle straightening clamp. 1,880,979; Oct. 4.
Parker, Clark W., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind. Lubricating apparatus. 1,881,094; Oct. 4.
Parker, Mary G. (See Bedford, E. B., and Parker.)
Parker, Orrel A., assignor to The Parker Wheel Company, Cleveland, Ohio. Automobile wheel. 1,880,357; Oct. 4.
Parker Wheel Company, The. (See Parker, Orrel A., assignor.)
Parkhurst, Frederic A. (See Elliot, W. S., and Parkhurst.)
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Parr, Alfred, Lewisham, London, England. Machine or device for applying labels to cylindrical articles. 1,881,125; Oct. 4.
Parr, Webster A., Alameda, assignor to W. A. Parr, Alameda, D. C. Baker, Oakland, C. G. Johnson, Alameda, and J. E. Baker, Oakland, Calif. Automatic hamburger forming and frying machine. 1,881,126; Oct. 4.
Patent Purchasing Company. (See Tryon, William A., assignor.)
Patents & Royalties Corporation. (See Turney, Harry L., assignor.)
Paton, Clyde R., and W. S. James, assignors to The Studebaker Corporation, South Bend, Ind. Clutch. 1,881,127; Oct. 4.
Paulson, Martin A., assignor to New Idea Potato Machinery Co., Rice Lake, Wis. Potato and onion grader. 1,881,239; Oct. 4.
Paxton, Elisha W. (See Morton, W. A., and Paxton.)
Payne, Arthur C., Kew Gardens, and D. F. Newman, Freeport, assignors to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projection screen. 1,881,128; Oct. 4.
Payson, Aurin E. and M. P. Wetmore, Norwich, Conn. Double-walled vacuum receptacle. 1,880,358; Oct. 4.
Peabody Engineering Corporation. (See Leask, J. P., and Warner, assignors.)
Pearne, Frank Y., Alhambra, and W. McClintock, Los Angeles, Calif. Hydraulic clay molding machine. 1,881,061; Oct. 4.
Pearson, Jarl, assignor of one-half to H. F. Lucas, Ontario, Calif. Can filling machine. 1,880,471; Oct. 4.
Ped, Incorporated. (See Ljungstrom, Fredrik, assignor.)
Peek, William T., and L. P. Eubanks, Atlanta, Ga. Washing and sanding machine. 1,881,129; Oct. 4.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York. Perforating machine. 1,880,472; Oct. 4.
Pennsylvania Pump & Compressor Company. (See Noble, William H., assignor.)
Penrose, Clara A., assignor of one-half to P. O. Penrose, London, England. Convertible furniture. 1,881,095; Oct. 4.
Penrose, Philip O. (See Penrose, Clara A., assignor.)

Pentz, Albert D., assignor to Pentz Motor Brake Corporation, New York, N. Y. Hydraulic brake. 1,881,240; Oct. 4.
Pentz Motor Brake Corporation. (See Pentz, Albert D., assignor.)
Pereda, Manuel, Buenos Aires, Argentina. Flexible tires for vehicles. 1,881,290; Oct. 4.
Peters, Frederick W., Cleveland, Ohio. Universal joint. 1,881,326; Oct. 4.
Peters, Henry W., Boston, Mass. Article of jewelry. 1,881,291; Oct. 4.
Peterson, William R. (See Dorrington, N. E., and Peterson.)
Petro-Sol Corporation. (See Prussin, Adolph A., assignor.)
Pfauser, Edward M., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Socket wrench. 1,881,029; Oct. 4.
Phelps, George H., Warehouse Point, Conn., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,880,274; Oct. 4.
Phillips, Leland A., Rochester, N. Y. Humidor. 1,880,275; Oct. 4.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Cook stove. Des. 87,884; Oct. 4.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Cook stove. Des. 87,885; Oct. 4.
Pielhau, Wilhelm, Kraghammer, Germany. Track winch. 1,880,473; Oct. 4.
Pine, Harry E., assignor to W. J. Cameron, Chicago, Ill. Optical instrument. 1,880,276; Oct. 4.
Pink, Clarence E., Cambridge, Md. Wire fabric. 1,880,474; Oct. 4.
Pink, Edward F., Cambridge, Md. Wire fabric. 1,880,475; Oct. 4.
Pinkerton, Sherwood M., jr., assignor to The Pinkerton Tobacco Company, Toledo, Ohio. Multiplex bag and forming the same. 1,880,277; Oct. 4.
Pinkerton Tobacco Company, The. (See Pinkerton, Sherwood M., jr., assignor.)
Pioneer Suspender Company. (See Cahn, Tillman, assignor.)
Pioneer Suspender Company. (See Duffy, James T., jr., assignor.)
Pirinoli, Guglielmo, assignor to Fiat Società Anonima, Turin, Italy. Driving mechanism for the auxiliary apparatus of internal combustion engines. 1,881,292; Oct. 4.
Pittsburgh Equitable Meter Company. (See Chrisman, Horace, assignor.)
Pittsburgh Equitable Meter Company. (See Weymouth, H. G., and Chrisman, assignors.)
Pittsburgh Research Corporation. (See Moore, William E., assignor.)
Planer, Paul. (See Geyling, R., and Planer.)
Platz, Karl. (See Daimler, K., and Platz.)
Pleasant, Carl. (See Sifton, Clifford, assignor.)
Ploner, Friedrich, Innsbruck, Austria. Apparatus for casting horoscopes. 1,880,476; Oct. 4.
Plunkett, James W. (See Rauch, G. C., and Plunkett.)
Plympton, Donald. (See Plympton, William B., D., and R. A.)
Plympton, Ralph A. (See Plympton, William B., D., and R. A.)
Plympton, William B., D., and R. A., Ellwood City, Pa. Air cooling and circulating device. 1,881,374; Oct. 4.
Poirier, Lionel, and V. Varin, Chicopee Falls, Mass. Blueing holder. 1,881,293; Oct. 4.
Poliakoff, Rouvine, New York, N. Y., and W. C. Roe, Dormont, Pa.; said Roe assignor to said Poliakoff. Advertising device. 1,880,210; Oct. 4.
Pollitzer, Franz, Grossheselohe, near Munich, and S. Stark, Grunwald, near Munich, Germany. Separation of oxygen, nitrogen, and argon from air. 1,880,981; Oct. 4.
Polston, Mardell D., Oviedo, Fla. Internal combustion engine. 1,881,294; Oct. 4.
Porcello, Raphael, Richmond Hill, N. Y. Portable electric hand saw. 1,881,295; Oct. 4.
Porter-Cable Machine Company. (See Emmons, Arthur N., assignor.)
Porter, H. K., Inc. (See Eyre, John J., assignor.)
Potensa, Franklin D., Park Ridge, assignor to Floyd Manufacturing Company, Chicago, Ill. Electric paint softener. 1,881,241; Oct. 4.
Potez, Henry C. A., Meaulte, Somme, France. Metal built aircraft. 1,881,296; Oct. 4.
Potlatch Forests, Inc. (See Bowling, Robert T., assignor.)
Potter & Johnston Machine Company. (See Curtis, Myron S., assignor.)
Powell, William H., Mullica Hill, N. J. Apparatus and process for making window sheet or flat glass. 1,881,327; Oct. 4.
Precision Machine Co., The. (See Dina, Augusto, assignor.)
Prentice, James M., Holyoke, Mass. Electrically operated amusement and educational device. 1,881,242; Oct. 4.
Prest-O-Lite Company, The. (See Young, Lloyd W., assignor.)
Prieto, J. A. (See Corces, Ramiro, assignor.)
Proctor & Schwartz, Incorporated. (See Wanamaker, Harry F., assignor.)
Proctor, John A., Lexington, Mass., assignor, by mesne assignments, to General Electric Company. Electrical condenser. 1,881,130; Oct. 4.
Pro-Phy-Lac-Tic Brush Company. (See Elliot, W. S., and Parkhurst, assignors.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Prussin, Adolph A., New York, N. Y., assignor to Petro-Sol Corporation. Solidification of liquid hydrocarbons. 1,880,211; Oct. 4.
Pulilean Manufacturing Corporation. (See Addler, Joseph H., assignor.)
Purity Fibre Products Corp. (See Davis, Harry G., assignor.)
Pyle-National Company, The. (See Dake, Charles W., assignor.)
Quality Park Box Company. (See Bigelow, Leon G., assignor.)
Radford, Douglas R., and C. Lamb, Los Angeles, Calif. Two-piece wear-preventer. 1,881,131; Oct. 4.
Radio Corporation of America. (See Elliott, Harold F., assignor.)
Ragsdale, Earl J. W., Norristown, assignor to Budd Wheel Company, Philadelphia, Pa. Vehicle brake. 1,880,477; Oct. 4.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Airplane structure. 1,880,478; Oct. 4.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Airplane truss joint construction. 1,880,479; Oct. 4.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Airplane structure and making same. 1,880,480; Oct. 4.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Aircraft construction and making same. 1,880,481; Oct. 4.
Ramclaw, Axel. (See Bihl, W. E., and Ramclaw.)
Ramsey, George. (See Acheson, A. M., and Ramsey.)
Randolph, Oliver W., Toledo, Ohio. Descending tray drier. 1,881,062; Oct. 4.
Randolph, Oliver W., Toledo, Ohio. Multiple tray drier. 1,881,063; Oct. 4.
Raney, Clemma R., Riverside, and R. B. Hitchcock, Chicago, Ill., assignors to International Harvester Company. Ear conveyer for husking rolls. 1,880,482; Oct. 4.
Raney, Clemma R., Riverside, Ill., assignor to International Harvester Company. Grain binder. 1,880,483; Oct. 4.
Rapp, Pierre F. J., Fontenay, Sous Bois, France. Portable spraying apparatus. 1,880,331; Oct. 4.
Rappold, Hermann, Duren-on-the-Rhine, Germany. System for controlling valves or gates. 1,880,278; Oct. 4.
Rath, David E., Dubuque, Iowa. Potato sacker. 1,881,030; Oct. 4.
Rathbun, Louis C., Oelwein, Iowa. Coin-controlled exhibition apparatus. 1,880,484; Oct. 4.
Rauch, George C., and J. W. Plunkett, St. Louis, Mo., said Plunkett assignor to said Rauch. Arc lamp. 1,881,243; Oct. 4.
Raule, Clifford T., Brookline, Pa. Multiple grinder. 1,881,244; Oct. 4.
Raven, Albert L., Mount Vernon, N. Y. Motion picture screen. 1,880,279; Oct. 4.
Rawling, Francis G. (See Traquair, J., and Rawling.)
Rawlings, Arthur L., London, England, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Mounting for compasses. 1,880,982; Oct. 4.
Ray, Arthur J., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Multioffice telephone system. 1,881,297; Oct. 4.
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Raze, Isidore. (See Goldschlager, A., and Raze.)
Read, Rupert D., Kenmore, Ohio, assignor to H. B. Staver, Chicago, Ill. Decoy unit. 1,881,328; Oct. 4.
Reading, Arthur K. (See Carey, Edward S., assignor.)
Reeves, George C. (See Beynon, R., and Reeves.)
Reeves, Orwell C., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,485; Oct. 4.
Reis, Curt F., assignor to Excel Magneto Company, Chicago, Ill. Magneto mounting and connections. 1,880,983; Oct. 4.
Remington Arms Company. (See Burns, James E., assignor.)
Remington, Joseph, Gaylord, Mich. Snow scraping machine. 1,880,984; Oct. 4.
Remotrole Corporation. (See Washington, B., and Aull, assignors.)
Reo Motor Car Company. (See Garling, R. A., and Ott, assignors.)
Replogle, John R., Detroit, Mich., assignor to Copeland Products, Inc. Resilient support. 1,880,280; Oct. 4.
Republic Carbon Company, The. (See Broadwell, B. E., and Hinckley, assignors.)
Research Institute for Iron, Steel and Other Metals. (See Honda, K., and Kase, assignors.)
Rettig, Adam. (See Bischoff, T. C., Chubb, and Rettig.)
Reuter, Baptist, and M. Reuter, Krailling-Planegg, Germany. Combining 4-dimethylamino-1-phenyl-2,3-dimethyl-5-pyrazolone with one of the esters of P aminobenzoicacid and the products. 1,881,317; Oct. 4.
Reuter, Mathilde. (See Reuter, Baptist and M.)

Reynolds, Frank C., New York, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator inclosure. 1,880,281; Oct. 4.
Reynolds Spring Company. (See Rossiter, John G., assignor.)
Rheinberg, Julius, London, England. Spectacles. 1,881 132; Oct. 4.
Rheinstrom, James A., et al., executors. (See Kiefer, Karl, assignor.)
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Tigering machine. 1,880,486; Oct. 4.
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Edge shearing device. 1,880,487; Oct. 4.
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Loop cutter. 1,880,488; Oct. 4.
Richardson Company, The. (See Morris, Warren A., assignor.)
Richardson, Lycurgus W. (See Weir, I. R., and Richardson.)
Richter, Rudolf. (See Cornely, B., and Richter.)
Ricketts, James R., Richmond, Calif. Operation timing indicator for triple valves. 1,881,389; Oct. 4.
Ricks, Fred, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,880,212; Oct. 4.
Ringwald, Clarence, North Hampton, Ohio. Des. 87,886; Oct. 4.
Ristow, Carl, Berlin, Germany, assignor to Beach and Arthur, Incorporated, Indianapolis, Ind. Container. 1,881,375; Oct. 4.
Rithner, Henry, Wellsburg, W. Va. Tiled wall construction. 1,880,282; Oct. 4.
Robbins, Azor D., New York, N. Y., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind. High pressure lubricating apparatus. 1,881,096; Oct. 4.
Roberts, Eugene A., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Pneumatic tire construction. 1,880,489; Oct. 4.
Robertson, John, Co. Inc. (See Jacobson, C. C., and Schweder, assignors.)
Roe, William C. (See Poliakoff, Rouvine, and Roe.)
Roeblings, John A., Sons Company. (See Sunderland, Charles C., assignor.)
Roblin, Karl W., Merchantville, assignor to Warren Webster & Company, Camden, N. J. Fluid controlling means. 1,880,213; Oct. 4.
Rohm & Haas Company. (See Bruson, Herman A., assignor.)
Rösch. Georg, Cologne-Mulheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthraquinone series. 1,880,490; Oct. 4.
Rose, Alfred G., assignor of one half to R. Brothers (Gainsborough) Limited, Gainsborough, England. Apparatus for closing the ends of cartons or like receptacles. 1,881,133; Oct. 4.
Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)
Rose, Edwin L., Cambridge, Mass., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Door operating mechanism. 1,881,016; Oct. 4.
Rosenstein, Aaron, New York, N. Y. Textile fabric. Des. 87,888; Oct. 4.
Rosenstein, Aaron, New York, N. Y. Textile fabric. Des. 87,889; Oct. 4.
Rossiter, John G., assignor to Reynolds Spring Company, Jackson, Mich. Condiment dispenser. Des. 87,890; Oct. 4.
Rotary Machine Company. (See Christiansen, Christian, assignor.)
Rothe, Fritz, and H. Brenek, assignors to the Firm Kali-Chemie Aktiengesellschaft, Berlin, Germany. Producing calcined phosphates. 1,880,491; Oct. 4.
Rounsevelle, Phillip, Hazel Crest, Ill. Sanding machine. 1,881,031; Oct. 4.
Rubber Regenerating Company. (See Bull, Arthur W., assignor.)
Rubber Service Laboratories Co., The. (See Behrend, Oswald, assignor.)
Rubber Service Laboratories Co., The. (See Smith, A. H., and Shreiner, assignors.)
Rubber Service Laboratories Co., The. (See Ter Horst, William P., assignor.)
Rudolph, Corrie F. (See Gebhard, L. A., and Rudolph.)
Rühlemann, Fritz, Wolfsgrun, Germany. Grinding stone of concrete for wood shavings. 1,880,492; Oct. 4.
Rundlett, Carl W., Jackson Heights, assignor to Mot-Acs, Inc., New York, N. Y. Automobile heating apparatus. 1,880,493; Oct. 4.
Russell Manufacturing Company, The. (See Zimmerer, Frederick J., jr., assignor.)
Rutishauser, Donald E., assignor to Hussmann-Ligonier Company, St. Louis, Mo. Refrigerating apparatus. 1,880 359; Oct. 4.
St. Louis Power Shovel Company. (See Corner, Douglas C., assignor.)
St. Regis Paper Company. (See Dorrington, N. E., and Peterson.)
Sandage, Jacob R., Chicago, Ill. Pump. 1,880,494; Oct. 4.
Sandborn, Lloyd T. (See Lawson, W. E., and Sandborn.)
Sandrinelli, Francesco, Bern, Switzerland. Adjustable lubrication device for the molds of monotype casting machines. 1,881,298; Oct. 4.
Sandstrom, Felix C., Milwaukee, Wis., assignor to International Harvester Company. Speed indicator. 1,880,495; Oct. 4.
Sandvik, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Photographic film for sound and picture purposes. 1,880,496; Oct. 4.
Sanford, Carleton R. (See Hickman, K. C. D., Sanford, and Weyerts.)
Sapin, Antoine, Unieux, France. Machine for making concrete pipes. 1,880,360; Oct. 4.
Sargent, William D., West Orange, N. J. Vehicle wheel. 1,881,097; Oct. 4.
Saunders, John B., Bloomfield Hills, Mich., assignor to Copeland Products, Inc. Bottle opener for refrigerators. 1,880,985; Oct. 4.
Saunders, Walter S., and R. Martindell, assignors to American Forging & Socket Co., Pontiac, Mich. Seat back construction. 1,880,497; Oct. 4.
Sauvage, Herbert J. (See Evers, A. J., and Sauvage.)
Savidge, Ray W., Sunbury, Pa. Toy musical instrument. 1,881,299; Oct. 4.
Sayles, Bertram J., and H. Schultz, Pittsburgh, assignors to The Calorizing Company, Wilkinsburg, Pa. Carburizing box. 1,881,064; Oct. 4.
Schaab, Harry M., assignor to Truscon Steel Company, Youngstown, Ohio. Tunnel liner. 1,881,098; Oct. 4.
Schachter, Max. (See Dubinsky, H., Goldenberg, and Schachter.)
Schaefer, Frederic, Pittsburgh, Pa. Brake hanger. 1,880,283; Oct. 4.
Schaeffer, Charles, assignor to Societe Anonyme des Anciens Etablissements Panhard & Levassor, Paris, France. Change speed gear box. 1,880,986; Oct. 4.
Schaelchlin, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cam-actuated double-throw switch. 1,880,498; Oct. 4.
Schauss, Fritz. (See Merz, F. and Schauss.).
Schenk, Franz E. M., Altona, Germany, assignor to F. W. Buse, Pittsburgh, Pa. Conveyer. 1,880,284; Oct. 4.
Schenkel, Moritz, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Insulating mounting for anode grids. 1,880,499; Oct. 4.
Scheppmann, Wilhelm, Berlin-Tempelhof, Germany, assignor, by mesne assignments, to American Telephone and Telegraph Company. Wireless system. 1,880,285; Oct. 4.
Schling, Max, Scarsdale, N. Y. Fruit picker. 1,881,134; Oct. 4.
Schloemann Aktiengesellschaft. (See Drexler, Ernest, assignor.)
Schmidt, Adolph C., Oakland, Calif. Bumper for automotive vehicles. 1,881,390; Oct. 4.
Schmidt, Charles G. G. (See Aurori, F. F., and Schmidt.)
Schmidt, Charles G. G., & Company. (See Aurori, F. F., and Schmidt, assignors.)
Schmidt, Edwin, Catoosa, Okla. Tractor wheel. 1,881,135; Oct. 4.
Schmidt, Wilhelm, Breslau, Germany. Cycle saddle. 1,881,136; Oct. 4.
Schneider, Harold G., Wollaston, assignor to Schneider Stabilizer, Incorporated, Boston, Mass. Balancing apparatus for aircraft. 1,881,137; Oct. 4.
Schneider Stabilizer, Incorporated. (See Schneider, Harold G., assignor.)
Schneider, Stefan, Philadelphia, Pa. Adjustable article of furniture. 1,881,245; Oct. 4.
Schoonmaker, Frederick W., jr., assignor to Schoonmaker Laboratories, Inc., Caldwell, N. J. Collapsible tube. 1,881,378; Oct. 4.
Schoonmaker Laboratories, Inc. (See Schoonmaker, Frederick W., jr., assignor.)
Schott, Ferdinand J., jr., Cincinnati, Ohio. Paper guide. 1,881,138; Oct. 4.
Schroeder, Hans C., LaGrange, Ill., assignor to Goss Printing Press Company. Inking roller. 1,880,361; Oct. 4.
Schultz, Harry. (See Sayles, B. J., and Schultz.)
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Treating paper articles with viscose. 1,880,286; Oct. 4.
Schwantes, Julius A., Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Apparatus for treating soap. 1,880,500; Oct. 4.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,891; Oct. 4.
Schweder, James. (See Jacobson, C. C., and Schweder.)
Scintilla, Aktiengesellschaft. (See Steiner, Gottlieb, assignor.)
Scott, Thomas F., Patterson, La. Toy airplane. 1,880,501; Oct. 4.
Scovill Manufacturing Company. (See Dews, Joseph W., assignor.)
Seaberg, Elmer A., Pueblo, Colo. Automobile light. 1,881,329; Oct. 4.
Seebach, Fritz. (See Elbel, E., and Seebach.)
Seese, William R. (See Grant, Ira O., assignor.)
Seidel, Arnold, Berlin-Charlottenburg, Germany. Sprung bogie for railway and tramway cars. 1,881,139; Oct. 4.

Selden Research & Engineering Corporation, The. (See Jaeger, Alphons O., assignor.)
Selenophon Licht und Tonbild-gesellschaft m. b. H. (See Czelja, O. and Thirring, assignors.)
Semet-Solvay Company. (See Wingert, William B., assignor.)
Semet-Solvay Engineering Corporation. (See Tweit, Olav, assignor.)
Serrell, John A., Pass-A-Grille, Fla. Controlling interior temperature. 1,881,099; Oct. 4.
Servel Sales, Inc. (See Thomas, Albert R., assignor.)
Sestito, Natale V., Cincinnati, Ohio. Ornamental marker. 1,880,364; Oct. 4.
Settel, Benjamin, New York, N. Y. Memorandum pad. 1,881,140; Oct. 4.
Seybold, Frederick W., assignor to The Harris-Seybold-Potter Company, Dayton, Ohio. Paper cutting machine. 1,880,332; Oct. 4.
Shannon, Albert A., assignor to Eastman Kodak Company, Rochester, N. Y. Printing ink for photographic film. 1,880,502; Oct. 4.
Sharon Steel Hoop Company. (See Marsh, H. S., and Weesner, assignors.)
Shaver, George W., et al. (See Chapin, A. J., and Shaver.)
Sheppard, Samuel E., and H. J. Dietz, assignors to Eastman Kodak Company, Rochester, N. Y. Ultra-violet sensitive layer. 1,880,503; Oct. 4.
Sherwell Controls, Inc. (See Stedwell, George W., assignor.)
Shields, Jesse W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Vibration insulator. 1,880,504; Oct. 4.
Shipley, Marion R., Hermosa Beach, W. A. and O. C. Trout, assignors, by mesne assignments, to Los Angeles Manufacturing Company, Inc., Los Angeles, Calif. Stovepipe casing. 1,881,379; Oct. 4.
Shirley, Roswell R., Rockford, Ill. Feed manger. 1,881,065; Oct. 4.
Shreiner, Claude L. (See Smith, A. H., and Shreiner.)
Sieper, Fritz, Barmen-Langerfeld, assignor to Barmer Maschinenfabrik Aktiengesellschaft, Barmen, Germany. Spinning pump. 1,881,300; Oct. 4.
Siers, John A. H., Jersey City, N. J. Fastening device. Re18,612; Oct. 4.
Sifton, Clifford, Los Angeles, Calif., assignor to C. Pleasant, Tulsa, Okla. Asphalt mixer. 1,880,287; Oct. 4.
Sigg, Joseph A., Pittsburgh, Pa. Combined package and match container. 1,881,380; Oct. 4.
Sikorsky Aviation Corporation. (See Sikorsky, Igor, assignor.)
Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aircraft and concealed stanchion for same. 1,881,141; Oct. 4.
Silhavy, John F., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Lubricant for bearings operating in heated atmosphere. 1,880,987; Oct. 4.
Silverman, Joseph, Chicago, Ill. Folding chair. 1,880,365; Oct. 4.
Simmons, Richard P., New York, N. Y. Well drilling apparatus. 1,880,214; Oct. 4.
Simmons, Richard P., New York, N. Y. Drill head for core barrels. 1,880,215; Oct. 4.
Simmons, Richard P., New York, N. Y. Underreamer for well drilling apparatus. 1,880,216; Oct. 4.
Simmons, Richard P., New York, N. Y. Motor driven well drilling apparatus. 1,880,217; Oct. 4.
Simmons, Richard P., New York, N. Y. Lining oil wells and means therefor. 1,880,218; Oct. 4.
Simpson, William K., assignor to Hoffman Specialty Company, Waterbury, Conn. Thermostatic valve unit. 1,881,246; Oct. 4.
Sims, Floyd A. (See Beatty, J., Uphoff, and Sims.)
Sklovsky, Benjamin, Chicago, Ill. Heating device. 1,880,291; Oct. 4.
Smedley, John H., Babylon, N. Y. Boat construction. 1,880,366; Oct. 4.
Smith, Albert K., Shaker Heights, Ohio, assignor to The Dow Chemical Company, Midland, Mich. Preparing magnesium chloride from a basic chloride thereof. 1,880,505; Oct. 4.
Smith, Arnold H., Akron, and C. L. Shreiner, Barberton, assignors to The Rubber Service Laboratories Co., Akron, Ohio. Sealing compound for cans and other containers. 1,881,142; Oct. 4.
Smith, Christina J., Sonoma, Calif. Screen fly trap. 1,880,988; Oct. 4.
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company, Chicago, Ill. Printing press. 1,880,362; Oct. 4.
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company, Chicago, Ill. Printing press. 1,880,363; Oct. 4.
Smith, Frederick Hugh, Nottingham, England. Carburetor. 1,880,990; Oct. 4.
Smith, George A., Lynwood, Calif., assignor, by direct and mesne assignments, to George A. Smith Turntable Corporation, Ltd. Vehicle turntable. 1,881,033; Oct. 4.
Smith, George A., Turntable Corporation. (See Smith, George A., assignor.)
Smith, Harry C., New York, N. Y., assignor, by mesne assignments, to Autodrink Corporation, Dover, Del. Display and dispensing apparatus. 1,881,100; Oct. 4.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing dibenzyl succinate. 1,880,506; Oct. 4.
Smith, Henry R., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing a lower alkyl ester of malonic acid. 1,880,507; Oct. 4.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose organic ester composition of matter containing an ester of a brominated malonic acid. 1,880,508; Oct. 4.
Smith, Jesse C., New York, N. Y. Refrigerating apparatus. 1,880,509; Oct. 4.
Smith, Leonard C. New York, N. Y. Attachment for vehicles and the like. 1,881,143; Oct. 4.
Smith, Paul, and F. H. Mann, Brooklyn, N. Y. Safety device for aeroplanes. 1,881,034; Oct. 4.
Smith, Samuel B., Rocky River, Ohio. Internal combustion engine. 1,881,330; Oct. 4.
Smith, William J. (See Braun, H. F., Laughlin, and Smith.)
Smith, William O., Kimball, Nebr. Potato cutter. 1,880,510; Oct. 4.
Smith, Willoughby S., Newton Poppleford, and C. V. H. Garnett, Sevenoaks, England. Apparatus for the continuous heat treatment of metals or alloys. 1,881,331; Oct. 4.
Snow, Isaac, Lawrence, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Lateral take-up device for shuttles. 1,881,066; Oct. 4.
Snyder, Clifford L., Detroit, Mich., assignor to The Evans Auto Loading Company, Inc. Shipping deck. 1,880,989; Oct. 4.
Societe Anonyme de Machine Outils et Appareils Divers "La Samoa". (See Panier, Antoine E., assignor.)
Societe Anonyme des Anciens Etablissements Panhard & Levassor. (See Schaeffer, Charles, assignor.)
Societe Anonyme Fours & Appareils Stein. (See Woodeson, William A., assignor.)
Society of Chemical Industry in Basle. (See Miescher, K., and Urech, assignors.)
Society of Chemical Industry in Basle. (See Stocker, R., and Müller, assignors.)
Solidon Products, Inc. (See Lukens, Hiram S., assignor.)
Sonntag, Alfred, assignor to Losenhausenwerke Dusseldorfer Maschinenbau A. G., Dusseldorf, Germany. Gyratic testing instrument. 1,881,332; Oct. 4.
Soreny, Ernest, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Mounting for electrical devices. 1,880,511; Oct. 4.
Sorg, Harold E., San Carlos, assignor to C. S. Evans, Oakland, Calif. Scanning screen. 1,880,991; Oct. 4.
Southern States Iron Roofing Company, The. (See Fulenwider, Jesse and H., assignors.)
Sparke, Edith, Berkeley, Calif. Pin or needle. 1,880,219; Oct. 4.
Sparling, Eric C., Garden City, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Support for gyro-compasses. 1,880,992; Oct. 4.
Sparta Foundry Company. (See Deutsch, Fritz, assignor.)
Spaulding, Arch W., assignor to The American Rolling Mill Company, Middletown, Ohio. Earth auger. 1,881,101; Oct. 4.
Spear, Ellwood B., assignor to Thermatomic Carbon Company, Pittsburgh, Pa. Manufacture of carbon black. 1,880,512; Oct. 4.
Speetjens, Hubert, assignor to A. H. Stevens, London, England. Apparatus for permanently waving the hair. Re18,614; Oct. 4.
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,892; Oct. 4.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spence, William H. (See Brossart, J. A., Orr, and Spence.)
Spencer, George A., assignor to The Oakes Manufacturing Co., Tipton, Ind. Storage brooder. 1,880,993; Oct. 4.
Spencer, George, Moulton & Company. (See Glascodine, Richard T., assignor.)
Sperling, Frank M., Bristol, Pa. Copyholder. 1,881,102; Oct. 4.
Sperling, Frank M., Bristol, Pa. Copyholder. 1,881,103; Oct. 4.
Sperling, Joseph, New York, N. Y. Embroidering device. 1,881,247; Oct. 4.
Sperry, Elmer A., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc. Indicator for aircraft. 1,880,994; Oct. 4.
Sperry Gyroscope Company. (See Bates, Mortimer F., assignor.)
Sperry Gyroscope Company. (See Rawlings, Arthur L., assignor.)
Sperry Gyroscope Company. (See Sparling, Eric C., assignor.)
Sperry Gyroscope Company. (See Sperry, Elmer A., assignor.)
Sperry Gyroscope Company. (See Wittkuhns, Bruno A., assignor.)
Spicers Limited. (See Wickham, Alfred R., assignor.)
Spiers, William, Limited. (See Kent, Alfred W., assignor.)
Spindler, Henry, Paris, France. Process and apparatus for producing photo-chemical radiations. 1,880,333; Oct. 4.
Squires, John, Detroit, Mich. Airplane propeller. 1,880,995; Oct. 4.
Stacey Bros. Gas Construction Company, The. (See Dyckerhoff, Adolph H., assignor.)

Staib, Ludwig A., jr. (See Hickman, K. C. D., and Staib.)
Staley, Henry D., Oakland, Calif. Radio receiving system. 1,881,032; Oct. 4.
Stanley Works, The. (See Stowell, Austin L., assignor.)
Stansbury, Carroll, Wauwatosa, Wis., and P. Crout, Schenectady, N. Y., assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Circuit controller. 1,880,367; Oct. 4.
Stark Bros.'s Nurseries & Orchards Company. (See Taft, Levi R., assignor.)
Stark, Stephan. (See Pollitzer, F., and Stark.)
Staud, Cyril J. (See Murray, T. E., jr., and Staud.)
Staud, Cyril J. (See Webber, C. S., and Staud.)
Staud, Cyril J., and C. S. Webber, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate solvent and composition. 1,880,513; Oct. 4.
Staud, Cyril J., and C. S. Webber, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose derivative products. 1,880,514; Oct. 4.
Staud, Cyril J., and E. K. McLean, assignors to Eastman Kodak Company, Rochester, N. Y. Preparation of lower mixed organic esters of cellulose from partially hydrolyzed cellulose acetate. 1,880,515; Oct. 4.
Stauf, Friedrich W., Cologne-Deutz, and H. Hagenest, Wiesdorf-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Organic cupric cyanogen compounds. 1,880,516; Oct. 4.
Staver, Harry B. (See Read, Rupert D., assignor.)
Stedwell, George W., Brooklyn, assignor to Sherwell Controls, Inc., New York, N. Y. Liquid delivery apparatus. 1,880,517; Oct. 4.
Steele, Charles R., et al. (See Brent, George R., assignor.)
Stein, Rose, Los Angeles, Calif. Attachment for ironing boards. 1,881,144; Oct. 4.
Steiner, Bernhard, New York, N. Y. Combined fire screen and furniture holder. 1,881,333; Oct. 4.
Steiner, Gottlieb, assignor to Scintilla, Aktiengesellschaft, Solothurn, Switzerland. Lubricating device. 1,880,334; Oct. 4.
Stephens, LeRoy C., Cheyenne, Wyo. Individual mausoleum. 1,880,335; Oct. 4.
Steppé, Alphonse. (See Steppé, Hector, A., and G.)
Steppé, Gustave. (See Steppé, Hector, A., and G.)
Steppé, Hector, A., and G., Berchem-Ste-Agathe, Brussels, Belgium. Mold for manufacturing boots, shoes, and similar articles of rubber or other plastic material. 1,881,248; Oct. 4.
Stevens, Arthur H. (See Speetjens, Hubert, assignor.)
Stevens, Horace D. (See Stevens, William C., and H. D.)
Stevens, Horace D., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Tire building apparatus. 1,880,519; Oct. 4.
Stevens, William C., Uniontown, and H. D. Stevens, assignors to The Firestone Tire & Rubber Company, Akron, Ohio. Apparatus for making laminated articles. 1,880,518; Oct. 4.
Stewart-Warner Corporation. (See Olsen, John K., assignor.)
Stocker, Robert, Basel, and J. Müller, Munchenstein, near Basel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of leuco thioindigo acyl derivatives. 1,880,996; Oct. 4.
Stockton, Thomas J., Belleville, N. J. Joint for split rims. 1,881,249; Oct. 4.
Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Wrapping and forming boxes. 1,880,288; Oct. 4.
Stokes and Smith Company. (See Stokes, John S., assignor.)
Stolze, Heinrich, Schwanebeck, Germany. Beet-root gathering machine. 1,881,145; Oct. 4.
Stone, J., & Company Limited. (See Myers, Archibald C. T., assignor.)
Story, Frederick A. (See Ford, E. A., and Story.)
Stout, William B., Detroit, Mich. Airplane. 1,880,520; Oct. 4.
Stout, William B., Detroit, Mich. Airplane. 1,880,907; Oct. 4.
Stowell, Austin L., assignor to The Stanley Works, New Britain, Conn. Bit or drill holder. 1,880,521; Oct. 4.
Strandlund, Carl G. (See Thorne, William F., assignor.)
Stroud, William A., Wilkesboro, N. C. Drink mixer. Des. 87,893; Oct. 4.
Studebaker Corporation, The. (See Paton, C. R., and James, assignors.)
Sturtevant, Harold V., Scranton, Pa. Breathing apparatus. 1,880,998; Oct. 4.
Sugar, Gertrude, et. al. (See Sugar, Solomon S., assignor.)
Sugar, Jessie, et al. (See Sugar, Solomon S., assignor.)
Sugar, Phil, et al. (See Sugar, Solomon S., assignor.)
Sugar, Solomon S., assignor of nine-twentieths to P. Sugar, J. Sugar, and G. Sugar, New York, N. Y. Sound studio. 1,881,146; Oct. 4.
Sukumlyn, Thomas W., Los Angeles, Calif. Light sensitive device. 1,880,289; Oct. 4.
Summers, Caleb E., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Control mounting. 1,881,067; Oct. 4.
Sun-A-Sured, Inc. (See Pacini, August J., assignor.)
Sunderland, Charles C., New Brunswick, N. J., assignor to John A. Roebling's Sons Company, Trenton, N. J. Transferring load in making bridges and the like. 1,880,290; Oct. 4.
Sundquist, Hilding G., Springfield, Mass., assignor of one-fourth to J. P. Clary, Hartford, Conn. Motor vehicle brake adjusting mechanism. 1,880,368; Oct. 4.
Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)
Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Paper carriage. 1,880,220; Oct. 4.
Sunnen, Joseph, Kirkwood, Mo. Portable support for exhaust devices. 1,880,293; Oct. 4.
Superheater Company, The. (See Armacost, Wilbur H., assignor.)
Superheater Company, The. (See Epley, Frederic I., assignor.)
Superheater Company, The. (See Magis, A., and Huet, assignors.)
Superheater Company, The. (See Michael, Loren P., assignor.)
Superheater Company, The. (See Oatley, Henry B., assignor.)
Sussman, Walter A., Brooklyn, N. Y. Submarine rescue apparatus. 1,880,999; Oct. 4.
Sutcliffe, Willis J., Cedar Heights, Iowa. Automatic target trap. 1,880,292; Oct. 4.
Sutton, Harry G., Syracuse, assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y. Press. 1,881,000; Oct. 4.
Swartz, Merrell H., Wadsworth, Ohio. Combined set of book matches and container therefor. Des. 87,894; Oct. 4.
Sylvester, William W., Oakland, assignor of one-half to William N. Nelson, Berkeley, Calif. License plate. 1,881,381; Oct. 4.
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Tabulating Machine Company, The. (See Campbell, Charles, assignor.)
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)
Tabulating Machine Company, The. (See Daly, G. F., and Page, assignors.)
Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)
Tabulating Machine Company, The. (See Ford, E. A., and Story, assignors.)
Tabulating Machine Company, The. (See Peirce, John R., assignor.)
Tabulating Machine Company, The. (See Tauschek, Gustav, assignor.)
Taft, Levi R., East Jordan, Mich., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Cherry. Pl. Pt. 29; Oct. 4.
Taft, Levi R., East Jordan, Mich., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Cherry. Pl. Pt. 30; Oct. 4.
Tanseib Company, The. (See Willis, Glenn H., assignor.)
Tate, Alfred O., Toronto, Ontario, Canada. System of scanning. 1,880,294; Oct. 4.
Tate, Alfred O., Toronto, Ontario, Canada. Scanning disk. 1,880,295; Oct. 4.
Taube, Carl, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Preparation of diazo baths suitable for the production of azo dyestuffs on the fiber. 1,880,522; Oct. 4.
Tauschek, Gustav, Vienna, Austria, assignor to The Tabulating Machine Company, Endicott, N. Y. Setting device for calculating machines and the like. 1,880,523; Oct. 4.
Taylor, Daniel G., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Circuit control means. 1,880,524; Oct. 4.
Taylor, Robert S., assignor to Electrolux Servel Corporation, New York, N. Y. Absorber for refrigerators. 1,880,525; Oct. 4.
Taylor, William. (See Teahen, J. M., and Taylor.)
Taylor, William, Robinson, Ill., assignor to J. M. Teahan, Detroit, Mich. Flushing apparatus. 1,880,296; Oct. 4.
Taylor, William, Windsor, Ontario, Canada, assignor to J. M. Teahan, Detroit, Mich. Flushing apparatus. 1,880,297; Oct. 4.
Teahan, James M. (See Taylor, William, assignor.)
Teahen, James M., Detroit, Mich., and W. Taylor, Windsor, Ontario, Canada; said Taylor assignor to said Teahen. Water closet. 1,880,298; Oct. 4.
Tebault, Alfred G., Portland, Oreg. Dispensing device for gasoline. 1,880,299; Oct. 4.
Templeton, Samuel M., assignor to Dayton Scale Company, Dayton, Ohio. Clamping device. 1,880,526; Oct. 4.
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of vulcanization. 1,880,527; Oct. 4.
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of rubber vulcanization. 1,880,528; Oct. 4.
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of rubber vulcanization. 1,880,529; Oct. 4.
Ter Horst, William P., Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Reaction product of an amine salt of an alkyl-dithio-carbonic acid with benzothiazyl chlorothiocarbonate and process of producing the same. 1,880,300; Oct. 4.
Terkelsen, Andrew. (See Derry, Jasper, assignor.)

Ternes, Raymond F., assignor to Morgan & Wright, Detroit, Mich. Vulcanizing apparatus. 1,881,001; Oct. 4.
Terry, Donald M. (See Chesnut, R. W., Terry, and Kannenberg.)
Tevault, Robert, Galveston, Tex. Spring suspension and bolster ensemble. 1,880,530; Oct. 4.
Thabeld, Feri A., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del. Air intake and exhaust mechanism of Diesel type of engines. 1,880,531; Oct. 4.
Thermatonic Carbon Company. (See Miller, Carroll, assignor.)
Thermatonic Carbon Company. (See Spear, Ellwood B., assignor.)
Thibodeau, Peter, Williamsett, Mass. Foldable seat for small rooms. 1,880,532; Oct. 4.
Thirring, Hans. (See Czeija, O., and Thirring.)
Thoma, Franz, Kaan-Marienborn, Germany. Work rest for material reducing machines. 1,881,147; Oct. 4.
Thomas, Albert R., assignor to Servel Sales, Inc., New York, N. Y. Heat exchanger. 1,880,533; Oct. 4.
Thomas, Bigar B. (See Winchester, F. E., and Thomas.)
Thomas, Edward G., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Variable ratio compounding scale. 1,880,574; Oct. 4.
Thomas, Edward G., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,575; Oct. 4.
Thomas, Henry P., Schenectady, N. Y., assignor to General Electric Company. Time delay apparatus. 1,880,576; Oct. 4.
Thomas, Mable M., executrix. (See Thomas, T. H., and Good.)
Thomas, Thomas H., deceased, by M. M. Thomas, executrix, Edgewood, and J. N. Good, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Train control device. 1,881,148; Oct. 4.
Thompson, Ernest S., and J. R. Ulery, Strathmore, Calif. Cultivator. 1,880,577; Oct. 4.
Thompson Products Inc. (See Bissell, Richard E., assignor.)
Thorne, William F., assignor to C. G. Strandlund, Minneapolis, Minn. Grain shocker. 1,880,221; Oct. 4.
Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Visor. 1,880,582; Oct. 4.
Thorp, Joel R., assignor to The Fulton Company, West Allis, Wis. Pedal. 1,880,583; Oct. 4.
Thring, Leonard G. P., Cambridge, England, Torsion meter. 1,881,301; Oct. 4.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle latch. 1,880,585; Oct. 4.
Tibbits, John W., North Bend, Wis. Cultivator shield. 1,880,584; Oct. 4.
Tieaken, Martha A., New York, and C. A. Meyer, Brooklyn, N. Y. Hair waving device. 1,880,578; Oct. 4.
Tiling, Reinhold, Osnabruck, Germany. Producing rockets, especially for aeronautic purposes. 1,880,579; Oct. 4.
Tiling, Reinhold, Osnabruck, Germany. Flying rocket. 1,880,586; Oct. 4.
Tin Decorating Company of Baltimore, The. (See Hermani, Henry, assignor.)
Tingleff, Marinus, Sandpoint, Idaho. Liquid sampling instrument. 1,881,415; Oct. 4.
Tingley Reliance Rubber Corporation. (See Jackson, Walter C., assignor.)
Tobener, Robert H., jr., Kansas City, Mo. Throttle ignition switch. 1,881,251; Oct. 4.
Tokunaga, George T., San Francisco, Calif. Rake. 1,880,580; Oct. 4.
Toledo Machine & Tool Company, The. (See Dorman, Neal W., assignor.)
Toledo Scale Company. (See Beard, J. H., and Hem, assignors.)
Toledo Scale Manufacturing Company. (See Baughman, Leonidas H., assignor.)
Toledo Scale Manufacturing Company. (See Bennett, Hubert D., assignor.)
Toledo Scale Manufacturing Company. (See Hem, Halvor O., assignor.)
Toledo Scale Manufacturing Company. (See Reeves, Orwell C., assignor.)
Toledo Scale Manufacturing Company. (See Thomas, Edward G., assignor.)
Toledo Scale Manufacturing Company. (See Weckerly, Mark A., assignor.)
Toledo Scale Manufacturing Company. (See Zinke, Carl J., assignor.)
Tomlinson, Frank R., Bay City, Mich. Valve. 1,880,581; Oct. 4.
Tomlinson, George M., Philadelphia, Pa. Electrosurgical instrument. 1,881,250; Oct. 4.
Tone, Frank J., assignor to The Carborundum Company, Niagara Falls, N. Y. Refractory article. 1,881,104; Oct. 4.
Towle, Ellingwood H., Larchmont, N. Y. Hydrocarbon engine. 1,881,149; Oct. 4.
Townshend, Bailey. (See Wood, F. L., and Townshend.)
Trans-Lux Daylight Picture Screen Corporation. (See Payne, A. C., and Newman, assignors.)
Trapp, Martin, Belcourt, Miss. Thermostatic circuit controller. 1,881,150; Oct. 4.
Traquair, John, and F. G. Rawling, Chillicothe, assignors to The Mead Research Engineering Company, Dayton, Ohio. Paper manufacture. 1,880,587; Oct. 4.
Traut, Clifford, assignor to The Higgin Manufacturing Company, Newport, Ky. Protective and controlling device for rolling window screens. 1,880,588; Oct. 4.
Traut, Clifford, assignor to The Higgin Manufacturing Company, Newport, Ky. Guide for roll screens. 1,880,589; Oct. 4.
Trautvetter, George, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal door. 1,880,590; Oct. 4.
Trautvetter, George, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal vehicle body construction. 1,880,591; Oct. 4.
Traver, Harry G., Beaver Falls, Pa. Car for amusement rides. 1,881,151; Oct. 4.
Trego, Frank H., assignor to Varityper Incorporated, New York, N. Y. Type indexing means. 1,880,592; Oct. 4.
Treiber, Julius, Solingen, Germany. Making razor blades. 1,881,334; Oct. 4.
Triplett, James B., deceased, Whittier, by W. H. Campbell, Los Angeles, and W. H. Maxwell, Beverly Hills, coexecutors, assignors to John Grant, Los Angeles, Calif. Well reamer. 1,881,035; Oct. 4.
Trobridge, Geoffrey W., Sutton, Coldfield, assignor to Dunlop Rubber Company Limited, Birmingham, England. Manufacturing rubber articles. 1,881,253; Oct. 4.
Tropic-Aire, Incorporated. (See Will, Carl H., assignor.)
Tropic-Aire, Incorporated. (See Wines, Fred B., assignor.)
Trout, Oliver C. (See Shipley, M. R., and Trout.)
Trout, William A. (See Shipley, M. R., and Trout.)
Truscon Steel Company. (See Schaab, Harry M., assignor.)
Tryon, William A., assignor to Patent Purchasing Company, Elmira, N. Y. Bearing lubricating means. 1,880,301; Oct. 4.
Tschunkur, Eduard, and E. Kracht, Cologne-Mulheim, and E. Herdieckerhoff, Opladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Aminocarbazole-sulphonic acid. 1,880,593; Oct. 4.
Tschunkur, Eduard, and E. Kracht, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing 2.2' diamino-diphenyl-4.4'-disulfonic acid. 1,880,594; Oct. 4.
Turck, Allan F., South Orange, N. J. Multicolor printing press. 1,880,309; Oct. 4.
Turney, Harry L., Portland, Oreg., assignor to Patents & Royalties Corporation. Draw work. 1,880,222; Oct. 4.
Turney, Harry L., assignor to Patents & Royalties Corporation, Portland, Oreg. Hoisting engine. 1,881,302; Oct. 4.
Tursky, Charles M., Philadelphia, Pa. Fluid compressor. 1,880,595; Oct. 4.
Tust, Paul. (See Heidenreich, R. M., and Tust.)
Tuttle, Fordyce, assignor to Eastman Kodak Company, Rochester, N. Y. Photographic printing apparatus. 1,880,596; Oct. 4.
Twelt, Olav, Orange, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Scale for charging machines. 1,880,597; Oct. 4.
Twin Coach Company. (See Fageol, William B., assignor.)
Tyler, Ralph S., and H. McGeorge, Cleveland Heights, assignors to The Chandler and Price Company, Cleveland, Ohio. Paper cutting machine. 1,880,598; Oct. 4.
Udale, Stanley M., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich. Brake drum. 1,881,002; Oct. 4.
Uden, Jacob T., New York, N. Y. Shoe shining machine. 1,881,036; Oct. 4.
Uhalt, Mary A. L., Cleveland, Ohio. Meal serving mat. 1,881,416; Oct. 4.
Ukropina, Bozidar J., Los Angeles, Calif. Concrete pipe joint. 1,880,599; Oct. 4.
Ulery, James R. (See Thompson, R. S., and Ulery.)
Ulmer, Donald L., Binghamton, N. Y. Portable supports for washing machines. 1,881,335; Oct. 4.
Umbel, Roy E., Struthers, Ohio. Coke oven door. 1,880,600; Oct. 4.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Union Carbide Company. (See Erickson, Albert N., assignor.)
Union Iron Works. (See MacCamy, Harry J., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Tool Chest Company. (See Moyes, William R., assignor.)
United Shoe Machinery Corporation. (See Boothroyd, Hubert, assignor.)
United Shoe Machinery Corporation. (See Brogan, Michael F., assignor.)
United Shoe Machinery Corporation. (See Enslin, Herbert E., assignor.)
United Shoe Machinery Corporation. (See Ricks, Fred, assignor.)
U. S. Bobbin & Shuttle Company 1929. (See Davol, Harry A., assignor.)
U. S. Bobbin & Shuttle Company 1929. (See Snow, Isaac, assignor.)
United States Hoffman Machinery Corporation. (See Sutton, Harry G., assignor.)
U. S. Oil and Service Co. (See Wanamaker, Ernest, assignor.)

U. S. Sanitary Specialties Corporation. (See Koppelman, Harold I., assignor.)
Universal Draft Gear Attachment Company. (See Cameron, Mortimer B., assignor.)
Universal Oil Products Company. (See Mekler, Lev A., assignor.)
University of Illinois, Board of Trustees. (See Buswell, A. M., and Boruff, assignors.)
Untiedt, Frederick H., Chevy Chase, Md. Gypsum-rubber composition. 1,880,601; Oct. 4.
Uphoff, Leo P. (See Beatty, J., Uphoff, and Sims.)
Urech, Ernest. (See Miescher, K., and Urech.)
Utrecht, William, Tampa, Fla. Bookstand. 1,880,602; Oct. 4.
Vaglio, James, Passaic, N. J. Cage for saving fats. 1,880,603; Oct. 4.
Van Deren, James B., Kingfisher County, Okla. Automatic weighing machine. 1,881,152; Oct. 4.
Vandergon, Arthur D., Delano, Minn. Toy windmill. 1,880,604; Oct. 4.
Van Derhoef, Henry E., assignor to Eastman Kodak Company, Rochester, N. Y. Hopper mount for roll coating machines. 1,880,605; Oct. 4.
Vanderploeg, Henry, assignor to Haggard & Marcusson Company, Chicago, Ill. Hook forming tool. 1,880,606; Oct. 4.
Van Lammeren, Willem P., Voorschoten, Netherlands. Propeller for helicopters. 1,880,302; Oct. 4.
Van Winkle, Joseph R., Quitaque, Tex. Advertising means for stores and the like. 1,880,607; Oct. 4.
Varin, Victor. (See Poirier, L., and Varin.)
Varityper Incorporated. (See Trego, Frank H., assignor.)
Vedder, John W., Worcester, Mass. Suction box oscillating means. 1,881,105; Oct. 4.
Vebko, James. (See Graebner, O. F., and Vebko.)
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Sheave block. 1,880,608; Oct. 4.
Vickers, John H., Hudson, assignor to International Bitumenoil Corporation, New York. N. Y. Retort. 1,881,153; Oct. 4.
Vilter Manufacturing Company, The. (See Baars, Ernst S. H., assignor.)
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,880,609; Oct. 4.
Virag, Alexander, Townsend, Del. Shipping basket. 1,880,610; Oct. 4.
Virginia Smelting Company. (See Binns, F. W., and Lurie, assignors.)
Vodon, Ernest H., Grande Clairiere, Manitoba, Canada. Quack grass destroyer. 1,880,611; Oct. 4.
Vogt, Clarence W., and G. O. Wymond, assignors to Vogt Instant Freezers Incorporated, Louisville, Ky. Can filler. 1,881,106; Oct. 4.
Vogt, Hans, Berlin-Wilmersdorf, Germany. Sounding condenser. 1,881,107; Oct. 4.
Vogt Instant Freezers Incorporated. (See Vogt, C. W., and Wymond, assignors.)
Voignier, Gustave E., Paris, France. Apparatus for shaping the millstones for rectifying gear teeth. 1,880,612; Oct. 4.
Voigt, George Q., Medford, Mass. Color determination of any object. 1,881,336; Oct. 4.
Von Bramer, Harold, and J. W. Zabriskie, Passaic Junction, N. J., assignors to Eastman Kodak Company, Rochester, N. Y. Production of hydroquinone. 1,880,534; Oct. 4.
Von Henke, Edmund J., assignor to American Electric Fusion Corporation, Chicago, Ill. Welding machine. 1,880,535; Oct. 4.
Von Nessen, Walter, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Smoker's stand. Des. 87,895; Oct. 4.
Vortex Cup Company. (See Barbieri, Cesare, assignor.)
Vortex Manufacturing Company. (See Garner, H. H., Nohavec, and Hopkins, assignors.)
Vuchetich, Frank, Detroit, Mich. Window screen. 1,881,037; Oct. 4.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for annealing glassware. 1,880,536; Oct. 4.
Wadman, Harold A., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Woven wire conveyer belt. 1,880,537; Oct. 4.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Electrode for glass melting furnaces. 1,880,540; Oct. 4.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Process and apparatus for making glass. 1,880,541; Oct. 4.
Wadman, Harold A., Hartford, and H. W. McIntosh, Windsor, assignors to Hartford-Empire Company, Hartford, Conn. Control system. 1,880,542; Oct. 4.
Wadsworth, George E., Erlanger, Ky., assignor to The George B. Wadsworth Company, Cincinnati, Ohio. Safety fuse block. 1,880,543; Oct. 4.
Wadsworth, George B., Company. (See Wadsworth, George E., assignor.)
Waggaman, William H., Lakeland, S. D. Gooch, Lake Wales, and F. P. Kirschbaum, Winter Haven, Fla., assignors to Coronet Phosphate Company, New York, N. Y. Protection of phosphorus. 1,880,538; Oct. 4.
Waggaman, William H., Alexandria, Va., assignor, by mesne assignments, to The Oberphos Company, Baltimore, Md. Preparation of fertilizer. 1,880,544; Oct. 4.
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wagner, Ernest. (See Goodheim, A., and Wagner.)
Wagner, Jerome A., assignor to The Wagner Manufacturing Company, Sidney, Ohio. Sandwich toaster. Des. 87,896; Oct. 4.
Wagner Manufacturing Company, The. (See Wagner, Jerome A., assignor.)
Wald, Frank A., Lemoyne, Pa. Cooling system for internal combustion engines. 1,880,539; Oct. 4.
Waldman, Erwin H., Fort Mitchell, Ky. Electrode and method for welding cast iron. 1,880,545; Oct. 4.
Walker, Crawford J., Indianapolis, Ind. Filing folder. 1,880,549; Oct. 4.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Latch for cotton feeder chutes. 1,881,003; Oct. 4.
Walton, Oliver H., Needham Heights, Mass. Elastic knitted fabric. 1,880,303; Oct. 4.
Walton, Oliver H., Needham, Mass. Machine for knitting elastic fabric. 1,880,304; Oct. 4.
Wanamaker, Ernest, Chicago, Ill., assignor to U. S. Oil and Service Co., New York, N. Y. Oil drainage collecting apparatus. 1,880,546; Oct. 4.
Wanamaker, Harry F., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Automatic hosiery drier clamp closer. 1,880,547; Oct. 4.
Wanamaker, Harry F., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Automatic hosiery drier table leveling mechanism. 1,880,548; Oct. 4.
Wander, Frederick, jr., New York, N. Y. Helico-lift autorotor for aircraft and the like. 1,880,550; Oct. 4.
Wappler, Reinhold H., Yonkers, N. Y. Endoscope. 1,880,551; Oct. 4.
Ward, Richard H., Queens Village, assignor to E. C. Bowers and C. L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Dust filter for radiator covers. 1,880,552; Oct. 4.
Ward, Willis C., Orchard Lake, Mich. Card rack for bridge tables. 1,881,004; Oct. 4.
Warmoth, Henry E., Stilesville, assignor of one-half to P. Daugherty, Indianapolis, Ind. Combined vending and amusement device. 1,880,553; Oct. 4.
Warner, Samuel T. (See Leask, J. P., and Warner.)
Warren Webster & Company. (See Rohlin, Karl W., assignor.)
Washington, Bowden, New York, and W. Aull, jr., Astoria, N. Y., assignors to Remotrole Corporation. Remote control for radioreceivers. 1,881,391; Oct. 4.
Washington, Bowden, deceased, New York, by D. C. Washington, administratrix, and Wilson Aull, jr., Astoria, N. Y., assignors to Remotrolle Corporation. Radioreceiver control. 1,881,392; Oct. 4.
Washington, Dorothy C., administratrix. (See Washington, B., and Aull.)
Watkins, Parke H., Leonia, N. J., assignor to National India Rubber Company, Bristol, R. I. Pneumatic form for glove dipping. 1,881,005; Oct. 4.
Watt, Elihu D., LaGrange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Shell for concrete piles. 1,881,254; Oct. 4.
Wattleworth, John C., Cleveland, assignor to L. Whitright, Lodi, Ohio. Reversing mechanism. 1,880,554; Oct. 4.
Watts, William H., and E. J. Currie, Houlton, Me. Instrument for outlining inscriptions on monuments or the like. 1,880,555; Oct. 4.
Webber, Charles S. (See Staud, C. J., and Webber.)
Webber, Charles S., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Solvent for mixed cellulose esters. 1,880,557; Oct. 4.
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Manufacture of ether lactates of cellulose and the product thereof. 1,880,558; Oct. 4.
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Benzoylation of cellulose. 1,880,559; Oct. 4.
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Hydrolysis of cellulose acetate. 1,880,560; Oct. 4.
Weber Electric Company. (See Butler, W. L., and Fabrey, assignors.)
Weber Electric Company, The. (See Fabrey, William H., assignor.)
Weber, Otto H., Esslingen-on-the-Neckar, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Internal-combustion engine. 1,880,556; Oct. 4.
Webster, Maury L., Santa Monica, Calif. Wall construction. 1,880,561; Oct. 4.
Weckerly, Mark A., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,562; Oct. 4.
Weckerly, Mark A., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,563; Oct. 4.
Weesner, Carl W. (See Marsh, H. S., and Weesner.)
Webrle Company, The. (See Pickup, George E., assignor.)
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,880,565; Oct. 4.
Weigel, Theodor, Cologne-Mulheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of dithiocarbamates. 1,880,564; Oct. 4.

Weller, Max, Wiesdorf-Leverkusen, and K. Berres, Cologne-Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Condensation product from a non-hydroxylated benzyl alcohol. 1,880,566; Oct. 4.
Weir, Irvin R., Schenectady, and L. W. Richardson, Scotia, N. Y., assignors to General Electric Company. Signaling system. 1,880,568; Oct. 4.
Weis, John P., Nyack, N. Y. Surgical clip applying instrument. 1,880,569; Oct. 4.
Weisberg & Greenwald, Inc. (See Weisberg, L., and Greenwald, assignors.)
Weisberg, Louis, and W. F. Greenwald, assignors to Weisberg and Greenwald, Inc., New York, N. Y. Chromium coated articles and preparing same. 1,880,567; Oct. 4.
Weiss, Carl W., Brooklyn, N. Y. Power transmission device. 1,881,154; Oct. 4.
Weiss, Ludwig, Frankfort-on-the-Main, Germany. Manufacture of opacifiers. 1,881,303; Oct. 4.
Weitzenhoffer, Aaron M., McAlester, Okla. Breeches. 1,880,570; Oct. 4.
Weller, Frank C. (See Morley, D. W., and Weller.)
Wellman, Bertram, Schenectady, N. Y., assignor to General Electric Company. Glass to metal seal. 1,880,571; Oct. 4.
Wendt, Bruno, Dessau in Anhalt, and H. Bincer, Dessau-Ziebigk in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Color photography. 1,880,572; Oct. 4.
Wendt, Bruno, Dessau in Anhalt, and H. Bincer, Dessau-Ziebigk in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Light-sensitive material for the bleaching out process. 1,880,573; Oct. 4.
Wenusch, Adolf, Vienna, Austria, assignor to General-Direktion der Osterr. Tabakregie, Austrian Government Department at Vienna. Reducing the percentage of nicotine contained in raw tobaccos, intermediary products, and tobacco products ready for use. 1,880,336; Oct. 4.
West, Frank R., Highland Park, Mich., assignor to Copeland Products, Inc. Refrigerating mechanism. 1,881,006; Oct. 4.
Westbrook, John A., Powder Springs, Ga. Demountable two piece automobile rims. 1,880,613; Oct. 4.
Western Electric Company. (See Blood, Harold L., assignor.)
Western Electric Company. (See Blount, Harry, assignor.)
Western Electric Company. (See Bureau, A. A., and Burk, assignors.)
Western Electric Company. (See Carter, Herbert F., assignor.)
Western Electric Company. (See Cary, Malcolm C., assignor.)
Western Electric Company. (See Eastlake, William H., assignor.)
Western Electric Company. (See Haigh, L. B., and Borzer, assignors.)
Western Electric Company. (See McFarland, Robert E., assignor.)
Western Union Telegraph Company, The. (See Blanton, William B., assignor.)
Western Union Telegraph Company, The. (See Case, Harlow M., assignor.)
Western Union Telegraph Company, The. (See Copenhaver, P. S., Demonet, and Callahan, assignors.)
Western Union Telegraph Company, The. (See Duerr, K. B., and Broyles, assignors.)
Westinghouse Air Brake Company, The. (See Dean, William E., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Neveu, Anselme, assignor.)
Westinghouse Air Brake Company. (See Thomas, T. H., and Good, assignors.)
Westinghouse Electric and Manufacturing Company. (See Baston, C. E., and Jones, assignors.)
Westinghouse Electric & Manufacturing Company, (See Brown, Freeman L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Else, Harry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Elsey, Howard M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schneichlin, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schenkel, Moritz, assignor.)
Wetherill, John P., 3d, Washington, D. C., assignor to American Magnesium Metals Corporation, Pittsburgh, Pa. Magnesium alloy. 1,880,614; Oct. 4.
Wetmore, Miner P. (See Payson, A. E., and Wetmore.)
Weydert, Hubert J., Levallois Perret, France. Shock and vibration absorbing and damping device. 1,881,155; Oct. 4.
Weyerts, Walter J. (See Hickman, K. C. D., Sanford, and Weyerts.)
Weymouth, Harry G., and H. Chrisman, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meter chamber. 1,880,223; Oct. 4.
Wheeling Bronze Casting Company. (See Braddock, W. J., Bruhn, and Haller, assignors.)
Wheeling Mold & Foundry Division of the Continental Roll & Steel Foundry Company. (See Nye, Ralph D., assignor.)
Whitacre, Clarence J., Detroit, Mich., assignor to C. H. Braselton, New York, N. Y. Gasoline pump. 1,881,255; Oct. 4.
White, Blanche B. (See Moss, W. H., and White.)
White, Herbert J. (See Bullock, E. W., and White.)
White, James B., and M. T. Gossett, Nashville, Tenn. Flush valve repairing tool. 1,880,615; Oct. 4.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Friction clutch. 1,880,616; Oct. 4.
White, Morris, New York, N. Y., assignor to Morris White Mfg. Co. Inc. Handbag. Des. 87,898; Oct. 4.
White, Morris, Mfg. Co. (See White, Morris, assignor.)
White Pine Sash Company. (See Edmond, Oscar G., assignor.)
White, William D., Fort Sill, Okla. Dental prophylactic oscillator. 1,880,617; Oct. 4.
Whitehouse, John N., New York, N. Y. Producing a composite button. 1,881,038; Oct. 4.
Whitney, Chancy F., Scotia, N. Y., assignor to General Electric Company. Traffic signal system. 1,880,618; Oct. 4.
Whitright, Lee. (See Wattleworth, John C., assignor.)
Whittcker, Robert E., assignor to Kanawha Manufacturing Company, Charleston, W. Va. Car dumping apparatus. 1,881,156; Oct. 4.
Whitteli, Alfred. (See Bonkard, Samuel L., assignor.)
Wickham, Alfred R., Sawston, assignor to Spicers Limited, London, England. Manufacture of sheets or films of compositions containing cellulose esters or ethers. 1,881,108; Oct. 4.
Wickwire Spencer Steel Company. (See Ward, Richard H., assignor.)
Wiener, Hugo, Bisbee, Ariz. Electric pick-up for phonographs. 1,881,109; Oct. 4.
Wiesendanger, Elsie V., administratrix. (See Wiesendanger, Otto.)
Wiesendanger, Otto, deceased, Hempstead, N. Y., E. V. Wiesendanger, administratrix. Box cover. 1,881,304; Oct. 4.
Wight, Edward H. (See Ober, B., and Wight, assignors.)
Wilcox-Rich Corporation. (See Dyer, Harold I., assignor.)
Wildey, Edward M., London, England. Hair comb. 1,880,619; Oct. 4.
Wildhaber, Ernest, Rochester, N. Y. Perfecting gears and gear shaped articles. 1,881,382; Oct. 4.
Wilkins, Edward A. (See Kriege, J. F., and Wilkins.)
Wilkins, Thomas M., Garland, Pa., assignors to J. D. Falconer, Jamestown, N. Y. Automatic regulator. 1,881,007; Oct. 4.
Will, Carl H., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Automobile heater and deflector therefor. 1,880,620; Oct. 4.
Willetts, George H., Beaver Falls, Pa. Tourist table and support therefor. 1,880,621; Oct. 4.
Williams, Fred, St. Joseph, Mich. Winding device. 1,881,305; Oct. 4.
Williams, Herbert H., assignor, by mesne assignments, to Metropolitan Engineering Corporation, Brooklyn, N. Y. Axle housing. 1,880,305; Oct. 4.
Williams, Jesse, Monroe, Mich. Polishing device for rolls. 1,880,622; Oct. 4.
Williams, Peter A., White Plains, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Broaching tool. 1,880,623; Oct. 4.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Guy fixture for poles. Re18,613; Oct. 4.
Williams, Stephen L., assignor to Extruded Metal Products Company, Bridgeport, Ohio. Pickling apparatus. 1,881,157; Oct. 4.
Willis, Glenn H., Akron, assignor to The Tanseib Company, Barberton, Ohio. Sheet material and making same. 1,881,337; Oct. 4.
Willoughby, Percival N., Broadstone, Dorset England. Flying machine. 1,881,008; Oct. 4.
Wilsea, Jasper B., and T. A. Kennedy, assignors to Wilsea Works, Rocheater, N. Y. Furnace. 1,880,624; Oct. 4.
Wilsea Works. (See Wilsea, J. B., and Kennedy, assignors.)
Wilmeth, Estel E., San Benito, Tex. Roadway crack and joint filler. 1,880,625; Oct. 4.
Wilmoth, William F., Philadelphia, Pa. Pug mill for preparing asphalt paving mixtures. 1,880,626; Oct. 4.
Wilsey, Harry E., Miami, Ariz. Rotary engine. 1,880,224; Oct. 4.
Wilson, Frank C., Arcade, N. Y. Safety device for hydraulic mechanisms. 1,880,027; Oct. 4.
Wilson, Harry W., Stoughton, Mass. Heading nails and tacks. 1,880,628; Oct. 4.
Wilson-Jones Company. (See Buenger, Edward, assignor.)
Wilson-Jones Company. (See Dawson, George H., assignor.)
Wilt, Colin D. (See Berlin, M. H., Barber, and Wilt.)
Wiltse, Sumner, Detroit, Mich., assignor, by mesne assignments, to Evans Appliance Company. Pump mechanism. 1,881,012; Oct. 4.
Winchester, F. Earl, and E. B. Thomas, Connersville, Ind. Vehicle brake. 1,881,009; Oct. 4.
Winchester Repeating Arms Company. (See Lane, Leavitt J., assignor.)
Windsor, Charles H., Palmyra, N. J. Sanitary basin. 1,881,010; Oct. 4.

Wine, William E., Toledo, Ohio. Cross bearer for freight cars. 1,880,629; Oct. 4.
Wines, Fred B., assignor to Tropic-Aire Incorporated, Minneapolis, Minn. Heating apparatus for automotive vehicles. 1,880,630; Oct. 4.
Wingert, William B., Detroit, Mich., assignor to Semet-Solvay Company, New York, N. Y. Direct recovery of ammonium sulphate from hot gas. 1,880,631; Oct. 4.
Winters & Crampton Mfg. Co. (See Ekman, Andrew, assignor.)
Winthrop Chemical Company. (See Stauf, F. W., and Hagenest, assignors.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Gebhard, L. A., and Rudolph.)
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Apparatus for lapping color film embossing rollers. 1,880,632; Oct. 4.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Film spooling apparatus and reels therefor. 1,880,633; Oct. 4.
Wittkuhns, Bruno A., Chatham, N. J., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Synchronous transmission and torque-amplifying system. 1,881,011; Oct. 4.
Wolf, Will F., Centralia, Wash. Apparatus for the extraction of resinous substances from wood. 1,880,634; Oct. 4.
Wollensak, Andrew, assignor to Wollensak Optical Company, Rochester, N. Y. Micrometer mount. 1,880,635; Oct. 4.
Wollensak Optical Company. (See Wollensak, Andrew, assignor.)
Wood, Clarence P., New York, N. Y., assignor, by mesne assignments, to R. B. Kilgore, Short Hills, N. J. Turntable drive. 1,881,393; Oct. 4.
Wood, David W., Brazil, Ind. Door latch. 1,880,636; Oct. 4.
Wood, David W., Brazil, Ind. Door latch. 1,880,637; Oct. 4.
Wood, Foster L., Dayton, Ohio, and B. Townshend, Jackson Heights, N. Y., assignors to Dayton Scale Company, Dayton, Ohio. Fastening device for chopper bowls. 1,880,638; Oct. 4.
Wood, George R., Toronto, Ontario, Canada, assignor to Dayton Scale Company, Dayton, Ohio. Scale. 1,880,639; Oct. 4.
Wood, Marvin E., Stone Mountain, Va. Mouse and rat trap. 1,880,640; Oct. 4.
Woodeson, William A., Gateshead-on-Tyne, England, assignor to Societe Anonyme: Fours & Appareils Stein, Paris, France. Pulverizing apparatus. 1,881,013; Oct. 4.
Woodhead, Horace G. (See Berry, E. G., and Woodhead.)
Woodrow Washing Machine Company. (See Buwalda, Abraham G., assignor.)
Woodward, Alva W., assignor to The Good-Year Tire & Rubber Company, Akron, Ohio. Vehicle wheel. 1,880,641; Oct. 4.
Woodward, Truman W., Hutchinson, Kans. Cap. 1,880,644; Oct. 4.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,880,642; Oct. 4.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,880,643; Oct. 4.
Wright, Carl, Geneva, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Power operated furnace cover. 1,881,328; Oct. 4.
Wright, Walker S., et al. (See Malcom, H. L., and Harker, assignors.)
Wulff, Otto, Hofheim-in-Taunus, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. B-hydroxy-derivatives of alkyl-pyridines and preparing them. 1,880,645; Oct. 4.
Wulff, Otto, Hofheim-in-Taunus, asignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Process of sulphonating pyridine and its homologues. 1,880,646; Oct. 4.
Wulff, Robert G., Los Angeles, Calif. Producing high temperatures. 1,880,306; Oct. 4.
Wulff, Robert G., Los Angeles, Calif. Producing acetylene by compression. 1,880,307; Oct. 4.
Wulff, Robert G., Los Angeles, Calif. Making acetylene and other products. 1,880,308; Oct. 4.
Wulff, Robert G., Los Angeles, Calif. Partial pressure process of making acetylene and other products. 1,880,309; Oct. 4.
Wulff, Robert G., Los Angeles, Calif. Halogenation process of making acetylenes and other products. 1,880,310; Oct. 4.
Wylie, Andrew, Totowa Borough, assignor to Harris Bros. Silk Company, Paterson, N. J. Wound package. 1,881,383; Oct. 4.
Wymond, Gilbert O. (See Vogt, Clarence W., assignor.)
Wynd, Clarence L. A., and W. H. Groth, assignors to Eastman Kodak Company, Rochester, N. Y. Manufacture of film. 1,880,647; Oct. 4.
Yablick, Max, Newark, N. J. Gas cock. 1,880,648; Oct. 4.
Young, Arthur P., Kenilworth, England. Musical instrument and manufacturing the same. 1,881,229; Oct. 4.
Young, Lloyd W., Buffalo, assignor to The Fres-O-Lite Company, Inc. Soldering iron. 1,880,649; Oct. 4.
Young, Nelson. (See Ford, P. H., and Young.)
Zabriskie, John W. (See Von Bramer, H., and Zabriskie.)
Zagst, Edward V., Longview, Tex. Motor. 1,880,650; Oct. 4.
Zerozone Incorporated. (See Bibl, W. E., and Ramclaw, assignors.)
Zimmer Manufacturing Company. (See Ettinger, Joe J., assignor.)
Zimmerer, Frederick J., jr., assignor to The Russell Manufacturing Company. Middletown, Conn. Webbing. Des. 87,887; Oct. 4.
Zinke, Carl J., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,880,651; Oct. 4.
Zinner, Daniel, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Azo dyestuff and a process of preparation. 1,880,225; Oct. 4.
Zinner, Daniel, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Azo dyestuff and making the same. 1,880,226; Oct. 4.
Zirnkilton, Carl G., Philadelphia, Pa. Representing designs. 1,880,652; Oct. 4.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 4TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorber for refrigerators. R. S. Taylor. 1,880,525; Oct. 4.
Accelerator of rubber vulcanization. J. Teppema. 1,880,528–9; Oct. 4.
Accelerator of vulcanization. J. Teppema. 1,880,527; Oct. 4.
Accordion case. M. H. Berlin, C. E. Barber, and C. D. Wilt. 1,881,396; Oct. 4.
Acetone soluble formyl esters of cellulose and making the same. H. T. Clarke and C. J. Malm. 1,880,420; Oct. 4.
Acetylene and other products, Halogenation process of making. R. G. Wulff. 1,880,310; Oct. 4.
Acetylene and other products, Making. R. G. Wulff. 1,880,308; Oct. 4.
Acetylene and other products, Partial pressure of making. R. G. Wulff. 1,880,309; Oct. 4.
Acetylene by compression, Producing. R. G. Wulff. 1,880,307; Oct. 4.
Acid, Aminocarbazole-sulphonic. E. Tschunkur, E. Kracht, and E. Herdieckerhoff. 1,880,593; Oct. 4.
Acid and its anhydride, Production of. O. Drossbach. 1,880,901; Oct. 4.
Acid-proof material and preparing it. K. Franck and K. Dietz. 1,881,180; Oct. 4.
Acids, Recovery of organic. C. Beck and F. Kremp. 1,880,677; Oct. 4.
Actuating mechanism for pressing machines. E. Davis. 1,881,174; Oct. 4.
Addressing machine. H. P. Elliott. 1,880,931; Oct. 4.
Advertising device. R. Poliakoff and W. C. Roe. 1,880,210; Oct. 4.
Advertising device and making the same. D. C. Hodgkin. 1,880,202; Oct. 4.
Advertising device and making the same. D. C. Hodgkin. 1,881,417; Oct. 4.
Advertising means for stores and the like. J. R. Van Winkle. 1,880,607; Oct. 4.
Aerofoil. F. R. Maxwell, jr. 1,880,967; Oct. 4.
Agitator. C. Ringwald. Des. 87,886; Oct. 4.
Air cleaner. H. H. Garner, F. R. Nohavec, and G. H. Hopkins. 1,881,049; Oct. 4.
Air cooling and circulating device. W. B., D., and R. A. Plympton. 1,881 374; Oct. 4.
Aircraft and concealed stanchion for same. L. Sikorsky. 1,881,141; Oct. 4.
Aircraft construction and making same. E. J. W. Ragsdale. 1,880,481; Oct. 4.
Aircraft, Metal built. H. C. A. Potez. 1,881,296; Oct. 4.
Aircraft propeller. W. D. Hubert. 1,881,080; Oct. 4.
Air craft, Safety. P. Appollonlou and S. L. Chick. 1,881,159; Oct. 4.
Air heating. C. W. Andrews and A. J. Hulse. 1,880,229; Oct. 4.
Air intake and exhaust mechanism of Diesel type of engines. F. A. Thaheld. 1,880,531; Oct. 4.
Airplane. W. B. Stout. 1,880,520; Oct. 4.
Airplane. W. B. Stout. 1,880,997; Oct 4.
Airplane propeller. J. Squires. 1,880,995; Oct. 4.
Airplane structure. E. J. W. Ragsdale. 1,880,478; Oct. 4.
Airplane structure and making same. E. J. W. Ragsdale. 1,880,480; Oct. 4.
Airplane truss joint construction. E. J. W. Ragsdale. 1,880,479; Oct. 4.
Air preheater. H. H. Down and G. H. Cannon. 1,880,196; Oct. 4.
Alcohols soluble, Rendering higher. H. Bertsch. 1,881,347; Oct. 4.
Alloy, Low expanding. P. Hidnert. 1,880,200; Oct. 4.
Alloy, Metallic. K. Honda and T. Kase. 1,881,315; Oct. 4.
Alphabetical code punching device. J. W. Bryce. 1,880,408; Oct. 4.
Alternating current motor. H. Welchsel. 1,880,565; Oct. 4.
Ammonium sulphate from hot gas, Direct recovery of. W. B. Wingert. 1,880,631; Oct. 4.
Amusement and educational device, Electrically operated. J. M. Prentice. 1,881,242; Oct. 4.
Anamine salt of an alkyl-dithiocarbonic acid with benzothiazyl chlorothiocarbonate and producing the same, Reaction product of. W. P. Ter Horst. 1,880,360; Oct. 4.
Anchor, Insert. D. H. Bitney. 1,880,709; Oct. 4.
Antiricketic substances and the production thereof. A. J. Pacini. 1,880,977; Oct. 4.
Apparatus for observing rapidly moving objects. E. A. Butler. 1,880,774; Oct. 4.
Apparatus for permanently waving the hair. H. Speetjens. Re18,614; Oct. 4.
Apron for pipe wrapping machines, Wiping. K. H. Burton and H. Kramer. 1,880,770; Oct. 4.
Armature. V. G. Apple and F. W. Cotterman. 1,881,341; Oct. 4.
Article, Culinary. A. B. Edwards, jr. 1,880,922; Oct. 4.
Article of furniture, Adjustable. S. Schneider. 1,881,245; Oct. 4.
Articles, Apparatus for making laminated. W. C. and H. D. Stevens. 1,880,518; Oct. 4.
Articles, Method and apparatus for forming. H. G. Davis. 1,880,858; Oct. 4.
Ash can. M. J Fessler and S. Fassman. 1,881,120; Oct. 4.
Ash receiver. R. F. Jones. Des. 87,880; Oct. 4.
Asphalt mixer. C. Sifton. 1,880,287; Oct. 4.
Auger, Earth. A. W. Spaulding. 1,881,101; Oct. 4.
Automatic regulator. T. M. Wilkins. 1,881,007; Oct. 4.
Automatic switch. R. W. Botts. 1,880,743; Oct. 4.
Automobile brake. H. Nishihara. 1,881,288; Oct. 4.
Automobile heating apparatus. C. W. Rundlett. 1,880,493; Oct. 4.
Automobile light. E. A. Seaberg. 1,881,329; Oct. 4.
Automobile rim, Demountable two piece. J. A. Westbrook. 1,880,613; Oct. 4.
Automobile trailer. T. C. Bischoff, G. W. Chubb, and A. Rettig. 1,880,703; Oct. 4.
Automobile wheel. O. A. Parker. 1,880,357; Oct. 4.
Awning. A. T. McCanlis. 1,881,366; Oct. 4.
Axle assembly, Rear. S. G. Baits. 1,880,655; Oct. 4.
B-hydroxy-derivatives of alkyl-pyridines and preparing them. O. Wulff. 1,880,645; Oct. 4.
Backgrounds, Device for projecting. R. Geyling and P. Planer. 1,881,355; Oct. 4.
Baffling means for locomotive fire-boxes. H. B. Oatley. 1,881,225; Oct. 4.
Bag and forming the same, Multiplex. S. M. Pinkerton, jr. 1,880,277; Oct. 4.
Bag filling machine. N. E. Dorrington and W. R. Peterson. 1,880,895; Oct. 4.
Baker's bench. J. Gray. 1,880,386; Oct. 4.
Balances, Apparatus for determining. J. Lundgren. 1,881,205; Oct. 4.
Balancing apparatus for aircraft. H. G. Schneider. 1,881,137; Oct. 4.
Baseball game. A. N. Albera. 1,881,384; Oct. 4.
Basin, Sanitary. C. H. Windsor. 1,881,010; Oct. 4.
Basket, Shipping. A. Virag. 1,880,610; Oct. 4.
Batch freezer mechanism. A. H. Boileau. 1,880,731; Oct. 4.
Bathtub equipment, Portable. E. J. Haring. 1,881,405; Oct. 4.
Battery: *See*—
Storage battery.
Beads for pneumatic tires, Fabricating. W. E. Humphrey. 1,881,276; Oct. 4.
Bearing, Journal. W. J. Bauroth. 1,880,660; Oct. 4.
Bearing, Journal. A. G. M. Michell. 1,880,353; Oct. 4.
Bearing, Journal. W. J. O'Neill and W. E. Irvine. 1,880,976; Oct. 4.
Bearing lubricating means. W. A. Tryon. 1,880,301; Oct. 4.
Bearing races, Grinding. K. L. Herrmann. 1,880,347; Oct. 4.
Bearing, Roller. J. A. Borland. 1,880,738; Oct. 4.
Bearings, Apparatus for making. W. H. Klocke. 1,880,454; Oct. 4.
Beater, Egg. T. A. Killman. 1,881,361; Oct. 4.
Bed. L. D. Dobbs. 1,880,890; Oct. 4.
Beet root gathering machine. H. Stolze. 1,881,145; Oct. 4.
Belt, Apparel. J. T. Duffy, jr. 1,880,908; Oct. 4.
Belt, Woven wire conveyer. H. A. Wadman. 1,880,537; Oct. 4.
Bench: *See*—
Baker's bench.
Bicycle lock. F. W. and E. C. Bell. 1,881,346; Oct. 4.
Binder, Grain. C. R. Raney. 1,880,483; Oct. 4.
Binder, Magazine or catalogue. E. Buenger. 1,880,768; Oct. 4.
Bisulphite reactions with sulphur dioxide in substantially neutral solutions, Effecting. F. W. Binns and J. M. Lurie. 1,880,701; Oct. 4.
Bit: *See*—
Drill bit.
Blades of scythes to the snaths, Fixing the. E. E. Ericsson. 1,880,943; Oct. 4.
Blank cutting machine. W. S. Elliot and F. A. Parkhurst. 1,880,935; Oct. 4.

Block: *See*—
Safety fuse block. Sheave block.
Block printing machine. H. H. Mirkil. 1,881,216; Oct. 4.
Block signal checking device for railroads. J. A. Borland. 1,880,739; Oct. 4.
Board: *See*—
Folding board.
Board, Making panel. E. C. Lathrop and F. A. Irvine. 1,881,418; Oct. 4.
Boat. A. P. Brush. 1,880,371; Oct. 4.
Boat construction. J. H. Smedley. 1,880,366; Oct. 4.
Bodies insoluble in water, Purifying. J. K. Mitchell. 1,880,968; Oct. 4.
Bogie for railway and tramway cars, Sprung. A. Seidel. 1,881,139; Oct. 4.
Boiler: *See*—
Superheater boiler. Water tube boiler.
Boiler. C. T. Carlson. 1,880,789; Oct. 4.
Boiler. A. Magis and A. Huet. 1,881,206; Oct. 4.
Boiler and supporting means for use therewith. W. H. Armacost. 1,881,161; Oct. 4.
Bolster for toy vehicles. C. C. Blackmore. 1,880,718; Oct. 4.
Bomb sight alignment and rudder control. M. F. Bates. 1,880,671; Oct. 4.
Bookstand. W. Utrecht. 1,880,602; Oct. 4.
Boring machine. J. S. Barnes and R. B. Billingham. 1,880,666; Oct. 4.
Bottle feeding means. O. Dreher. 1,880,243; Oct. 4.
Bottles, Cleaning. K. Kiefer. 1,880,257; Oct. 4.
Box: *See*—
Carburizing box. Shipping and display box.
Gear box. Wrapping and forming box.
Packing box.
Box. L. G. Bigelow. 1,880,191; Oct. 4.
Box board machine. W. B. Hadley. 1,881,404; Oct. 4.
Boxes, Wrapping and forming. J. S. Stokes. 1,880,288; Oct. 4.
Bracket: *See*—
Shipping bracket.
Bracket attachment for ladders, Supporting. C. Iasillo. 1,880,319; Oct. 4.
Brake: *See*—
Automobile brake. Hydraulic brake.
Fluid pressure brake. Vehicle brake.
Friction brake.
Brake adjusting mechanism, Motor vehicle. H. G. Sundquist. 1,880,368; Oct. 4.
Brake drum. S. M. Udale. 1,881,002; Oct. 4.
Brake hanger. F. Schaefer. 1,880,283; Oct. 4.
Brake mechanism. W. F. Oliver. 1,881,238; Oct. 4.
Bread molding device. A. Goldschlager and I. Raze. 1,881,054; Oct. 4.
Breathing apparatus. H. V. Sturtevant. 1,880,998; Oct. 4.
Breeches. A. M. Weitzenhoffer. 1,880,570; Oct. 4.
Briquetting machine. R. T. Bowling. 1,881,397; Oct. 4.
Broach. H. A. Baker. 1,880,656; Oct. 4.
Broiling apparatus. G. M. Krag. 1,880,205; Oct. 4.
Brooder, Storage. G. A. Spencer. 1,880,993; Oct. 4.
Brush. I. F. Dittmar. 1,880,886; Oct. 4.
Buckrake, Power operated. L. R. Lauppe and R. E. Lauppe. 1,880,262; Oct. 4.
Building construction. L. J. Kantzler. 1,880,453; Oct. 4.
Bumper, Automobile. J. G. Bray. Des. 87,871; Oct. 4.
Bumper for automotive vehicles. A. C. Schmidt. 1,881,390; Oct. 4.
Bumper guard. W. C. Jackson. 1,881,231; Oct. 4.
Bumper, Rubber door. R. F. Anderson. 1,880,190; Oct. 4.
Burner: *See*—
Gas burner. Oil fuel burner.
Liquid fuel burner.
Burner device. F. C. Hohenstein. 1,881,314; Oct. 4.
Butter wrapping machine. E. E. Epling. 1,880,378; Oct. 4.
Button, Detachable. A. Czop. 1,880,845; Oct. 4.
Button, Producing a composite. J. N. Whitehouse. 1,881,038; Oct. 4.
Cabinet, Metal. E. J. Jones. 1,880,392; Oct. 4.
Cable, Submarine signaling. O. E. Buckley. 1,880,764; Oct. 4.
Cage for saving fats. J. Vaglio. 1,880,603; Oct. 4.
Caisson and sinking the same. M. Blumenthal. 1,880,233; Oct. 4.
Calculating instrument. F. V. Becker. 1,881,165; Oct. 4.
Call distributing system for concentration circuits. W. B. Blanton. 1,880,722; Oct. 4.
Cam-actuated double-throw switch. W. Schaelchlin. 1,880,498; Oct. 4.
Cambered spring. G. M. Eaton. 1,881,385; Oct. 4.
Camera, Aerial. C. F. Keale, jr. 1,880,960; Oct. 4.
Can: *See*—
Ash can. Pouring can.
Can filler. C. W. Vogt and G. O. Wymond. 1,881,106; Oct. 4.
Can filling machine. J. Pearson. 1,880,471; Oct. 4.
Can turning mechanism. H. Hermani. 1,881,187; Oct. 4.
Cap. T. W. Woodward. 1,880,644; Oct. 4.
Capacitator, Improved. W. M. Bailey. 1,881,164; Oct. 4.
Car construction, Rail. W. B. Fageol. 1,880,953; Oct. 4.
Car control device, Safety. C. C. Farmer. 1,880,958; Oct. 4.
Car dumping apparatus. R. E. Whitteker. 1,881,156; Oct. 4.
Car for amusement rides. H. G. Traver. 1,881,151; Oct. 4.
Carbon black, acetylene and hydrogen, Production of. O. Eisenhut. 1,880,924; Oct. 4.
Carbon black, Manufacture of. G. C. Lewis. 1,881,084–5; Oct. 4.
Carbon black, Manufacture of. E. B. Spear. 1,880,512; Oct. 4.
Carbonyl compounds, Production of non-acidic. A. O. Jaeger. 1,880,322; Oct. 4.
Carburetor. F. O. and T. M. Ball. 1,881,256; Oct. 4.
Carburetor. W. S. Carlston. 1,880,791; Oct. 4.
Carburetor. F. H. Smith. 1,880,990; Oct. 4.
Carburizing box. B. J. Sayle and H. Schultz. 1,881,064; Oct. 4.
Cards with flat wire tummer, Set of. E. V. Bates. 1,880,670; Oct. 4.
Carriage for spike drivers. I. N. Benson. 1,880,338; Oct. 4.
Carriage, Paper. O. J. Sundstrand. 1,880,220; Oct. 4.
Carrier: *See*—
Meat forming carrier. Tire carrier.
Carrier for sugar cane mills, Intermediate. F. Hegenbarth. 1,881,186; Oct. 4.
Case: *See*—
Accordion case.
Casing, Heater. E. C. Booth. Des. 87,870; Oct. 4.
Casing, Stovepipe. M. R. Shipley and W. A. and O. C. Trout. 1,881,379; Oct. 4.
Casing, Washing machine. J. J. McCabe. Des. 87,897; Oct. 4.
Caster. J. T. Graham. 1,881,402; Oct. 4.
Catalytic contact mass. A. P. Beardsley and M. L. Dolt. 1,880,678; Oct. 4.
Cathode for electrolytic condensers. J. E. Lilienfeld. 1,880,263; Oct. 4.
Cellulose acetate, Hydrolysis of. C. S. Webber and C. J. Staud. 1,880,560; Oct. 4.
Cellulose acetate solvent and composition. C. J. Staud and C. S. Webber. 1,880,513; Oct. 4.
Cellulose acetate with vaporized acetylating agents, Making. C. R. Noller. 1,880,466; Oct. 4.
Cellulose, Benzoylation of. C. S. Webber and C. J. Staud. 1,880,559; Oct. 4.
Cellulose composition of matter containing benzyl aniline. T. F. Murray, jr., and C. J. Staud. 1,880,465; Oct. 4.
Cellulose derivative products. C. J. Staud and C. S. Webber. 1,880,514; Oct. 4.
Cellulose digestion. A. M. Buswell and C. S. Boruff. 1,880,773; Oct. 4.
Cellulose esters of carboxylic acids, Making. H. T. Clarke and C. J. Malm. 1,880,808; Oct. 4.
Cellulose organic ester composition of matter containing an ester of a brominated malonic acid. H. B. Smith. 1,880,508; Oct. 4.
Cellulosic composition of matter containing dibenzyl succinate. H. B. Smith. 1,880,506; Oct. 4.
Cellulosic composition of matter containing ethyl cyclopentanone carboxylate. T. F. Murray, jr., and C. J. Staud. 1,880,464; Oct. 4.
Cellulosic composition of matter containing lower alkyl ester of malonic acid. H. B. Smith. 1,880,507; Oct. 4.
Centering device, Resilient. F. H. Beamer. 1,881,308; Oct. 4.
Chain, Bracelet. A. E. R. Speidel. Des. 87,892; Oct. 4.
Chain-poise variable-weight balance. W. Heusser. 1,881,386; Oct. 4.
Chair: *See*—
Folding chair.
Channel construction for bulk heads. W. G. Bartenfeld. 1,880,667; Oct. 4.
Channel strip. R. Beynon. 1,880,698; Oct. 4.
Channel strip. R. Beynon. 1,880,700; Oct. 4.
Channel strip. R. Beynon and G. C. Reeves. 1,880,699; Oct. 4.
Channel strip and making the same. R. Beynon. 1,880,697; Oct. 4.
Channel system, Multiplex extended. K. B. Duerr and H. E. Broyles. 1,880,906; Oct. 4.
Check head. O. Coil. 1,881,261; Oct. 4.
Cherry. L. R. Taft. Pl. Pt. 29; Oct. 4.
Cherry. L. R. Taft. Pl. Pt. 30; Oct. 4.
Chimneys, Gauging round. E. Larsen. 1,880,261; Oct. 4.
Chromium coated articles and preparing same. L. Weisberg and W. F. Greenwald. 1,880,567; Oct. 4.
Cigar mold. R. Corces. 1,880,825; Oct. 4.
Circuit control means. D. G. Taylor. 1,880,524; Oct. 4.
Circuit controller. C. Stansbury and P. Crout. 1,880,367; Oct. 4.
Circuit controller, Thermostatic. M. Trapp. 1,881,150 Oct. 4.
Circuit controlling device. W. O. Beck. 1,880,676, Oct. 4.
Circuit interrupter. G. L. Bossard. 1,880,740; Oct. 4.
Circuits, Gas-filled tube. B. G. Björnson. 1,880,714; Oct. 4.
Circuits, Regulating. R. W. Chesnut, D. M. Terry, and W. F. Kannenberg. 1,880,800; Oct. 4.
Circuits, Transmission control. B. G. Björnson, A. W. Horton, and A. C. Norwine. 1,880,715; Oct. 4.

Clamp: *See*—
Cloth clamp. Needle straightening clamp
Clamp and connection, Guy wire. J. Blackburn. 1,880,193; Oct. 4.
Clamping device. C. H. Davis, jr. 1,880,375; Oct. 4.
Clamping device. S. M. Templeton. 1,880,526; Oct. 4.
Clay molding machine, Hydraulic. F. Y. Pearne and W. McClintock. 1,881,061; Oct. 4.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Suction cleaner.
Clip applying instrument, Surgical. J. P. Weis. 1,880,569; Oct. 4.
Clock. E. L. Carlson. 1,880,790; Oct. 4.
Closet: *See*—
Water closet.
Closing means for safe doors. C. K. Jackson. 1,881,193; Oct. 4.
Cloth clamp. H. W. Butterworth, jr., and A. H. Holt. 1,880,776; Oct. 4.
Clutch. C. R. Paton and W. S. James. 1,881,127; Oct. 4.
Clutch control. G. H. and H. A. Decker. 1,880,866; Oct. 4.
Clutch control mechanism. F. W. Blanchard. 1,880,721; Oct. 4.
Clutch for track laying tractors, Driving. J. S. Franco. 1,880,344; Oct. 4.
Clutch for transmission mechanisms, Synchronizing. L. J. Campbell. 1,880,784; Oct. 4.
Clutch, Friction. J. A. White. 1,880,616; Oct. 4.
Clutch, Hydraulically operated. J. E. Bower. 1,880,748; Oct. 4.
Clutch operating device for motor vehicles. E. G. Hill and H. W. Hey. 1,881,188; Oct. 4.
Coal drier. F. Pardee and F. Pardee, jr. 1,880,273; Oct. 4.
Coating device. J. Beatty, L. P. Uphoff, and F. A. Sims. 1,881,345; Oct. 4.
Cock, Gas. M. Yablick. 1,880,648; Oct. 4.
Coffee mill. E. G. Berry and H. G. Woodhead. 1,880,684; Oct. 4.
Coil. R. A. Connor and G. A. Jacobs. 1,880,821; Oct. 4.
Coil for cracking hydrocarbon oils, Heating. J. C. Black. 1,880,716; Oct. 4.
Coiling apparatus. M. C. Cary. 1,881,018; Oct. 4.
Collapsible tube. F. W. Schconmaker, jr. 1,881,378; Oct. 4.
Coller attachment. H. Belson. 1,881,124; Oct. 4.
Color determination of any object. G. Q. Voigt. 1,881,336; Oct. 4.
Color film embossing rollers, Apparatus for lapping. O. Wittel. 1,880,632; Oct. 4.
Color lake. R. Buchwald. 1,880,761; Oct. 4.
Color photography. B. Wendt and H. Bincer. 1,880,572; Oct. 4.
Comb: *See*—
Hair comb.
Combustion chamber. C. Miller. 1,881,325; Oct. 4.
Compartment for doors, Service. D. Coleman. 1,880,817; Oct. 4.
Compass compensating device, Magnetic. G. L. J. Martin. 1,881,207; Oct. 4.
Compound for treatment of oils. H. H. Moreton. 1,881,217; Oct. 4.
Compressor, Fluid. C. W. Tursky. 1,880,595; Oct. 4.
Compressor regulator, Magnetically operated. W. H. Noble. 1,881,092; Oct. 4.
Compressor system, Liquid-piston type. J. G. DeRemer. 1,880,241; Oct. 4.
Concrete pipe joint. B. J. Ukropina. 1,880,599; Oct. 4.
Condensation product from a non-hydroxylated benzyl alcohol. M. Weiler and K. Berres. 1,880,566; Oct. 4.
Condenser, Electrical. J. A. Proctor. 1,881,130; Oct. 4.
Condenser, Sounding. H. Vogt. 1,881,107; Oct. 4.
Condiment dispenser. J. G. Rossiter. Des. 87,890; Oct. 4.
Connecter, Grounding. A. McMurtrie. 1,880,352; Oct. 4.
Connection. N. W. Dorman. 1,880,804; Oct. 4.
Connection for vehicle springs and making same, End. J. W. Leighton. 1,881,233; Oct. 4.
Container. C. B. Carlson. 1,880,788; Oct. 4.
Container. C. Ristow. 1,881,375; Oct. 4.
Container, Bracketed. J. Colaizzi. 1,880,814; Oct. 4.
Container, Deodorant. H. I. Koppelman. 1,880,962; Oct. 4.
Container for toilet bowls, Deodorant. W. S. Duwelius. 1,880,912; Oct. 4.
Container for tooth powder, or similar medical products. G. Horváth. 1,881,316; Oct. 4.
Container or carton, Paper board shipping. P. Drewsen. 1,880,897; Oct. 4.
Container, Sheet metal. A. G. Hopkins. 1,880,250; Oct. 4.
Containers, Apparatus for sealing paper. E. C. Angell. 1,881,340; Oct. 4.
Control apparatus. C. E. Baston and R. C. Jones. 1,880,669; Oct. 4.
Control mechanism for flat knitting machines, Yarn carrier stop block. H. F. Paget. 1,881,373; Oct. 4.
Control system. H. A. Wadman and H. W. McIntosh. 1,880,542; Oct. 4.
Control system for motor vehicles. H. E. Lippert. 1,881,025; Oct. 4.
Control system for tabulators, Automatic. J. W. Bryce. 1,880,410; Oct. 4.
Controlling mechanism for record-card-controlled statistical machine. C. Campbell. 1,880,413; Oct. 4.
Conveyer. F. E. M. Schenk. 1,880,284; Oct. 4.
Conveyer roller. E. Drexler. 1,881,207; Oct. 4.
Cooler: *See*—
Port cooler.
Cooling system for fluid-actuated turbines. W. S. Bowen. 1,880,747; Oct. 4.
Cooling system for internal combustion engines. F. A. Wald. 1,880,539; Oct. 4.
Copyholder. F. M. Sperling. 1,881,102–3; Oct. 4.
Core for motion-picture films. K. C. D. Hickman. 1,880,448; Oct. 4.
Corn husking device, Hand. J. F. Kriege and E. A. Wilkins. 1,881,368; Oct. 4.
Cotton gin feeder. B. P. Dillard. 1,880,882; Oct. 4.
Cotton picking machine. R. E. Buckner. 1,880,762; Oct. 4.
Counter for tabulating machines. E. A. Ford and F. A. Story. 1,880,426; Oct. 4.
Counterbalance. T. O. Duckworth and F. L. Horspool. 1,880,904; Oct. 4.
Counterbalance. T. O. Duckworth and F. L. Horspool. 1,880,905; Oct. 4.
Counting device. E. A. Ford. 1,880,427; Oct. 4.
Coupling: *See*—
Derrick leg coupling. Wire coupling.
Hydraulic coupling.
Coupling. E. C. Noble. 1,880,356; Oct. 4.
Coupling and associated means for lubricating apparatus. M. F. Carr. 1,880,793; Oct. 4.
Coupling circuit arrangement. L. A. Gebhard. 1,880,198; Oct. 4.
Cover, Book. O. Wiesendanger. 1,881,304; Oct. 4.
Cover fold and filler, Check book. S. R. Coleman. 1,880,818; Oct. 4.
Covering for aircraft, Porous. V. Lougheed. 1,880,207; Oct. 4.
Cowl, One piece ring. R. J. Minshall. 1,880,355; Oct. 4.
Cross bearer for freight cars. W. E. Wine. 1,880,629; Oct. 4.
Crystals, Production of coarse. W. Eissner. 1,880,925; Oct. 4.
Cultivator. E. S. Thompson and J. R. Ulery. 1,880,577; Oct. 4.
Cultivator shield. J. W. Tibbitts. 1,880,584; Oct. 4.
Cup. N. W. Cummins. Des. 87,872; Oct. 4.
Cupboard unit construction. F. Bolhuis. 1,880,733; Oct. 4.
Cushion: *See*—
Heated cushion. Footwear cushion.
Cutter: *See*—
Loop cutter. Potato cutter.
Cutter for adhesive tapes. F. E. Ewing, F. J. Clunk, and N. M. Coats. 1,880,950; Oct. 4.
Cutting compound or lubricant. A. E. Dahlberg. 1,881,173; Oct. 4.
Cyanogen compounds, Organic cuprid. F. W. Stauf and H. Hagenest. 1,880,516; Oct. 4.
Cylinder for intaglio printing machines, Printing. A. Gutmann. 1,881,075; Oct. 4.
Dandelion digger. D. Allenson. 1,881,112; Oct. 4.
Deck, Shipping. C. L. Snyder. 1,880,989; Oct. 4.
Decoy unit. R. D. Read. 1,881,328; Oct. 4.
Defiberizing machine. E. P. Corcoran and W. B. Hadley. 1,881,398; Oct. 4.
Dental prophylactic oscillator. W. D. White. 1,880,617; Oct. 4.
Derrick leg coupling. F. D. Bearly. 1,880,231; Oct. 4.
Designs, Representing. C. G. Zirnkilton. 1,880,652; Oct. 4.
Diazo baths suitable for the production of azo dyestuffs on the fiber, Preparation of. C. Taube. 1,880,522; Oct. 4.
Digger: *See*—
Dandelion digger.
Dinitro-ortho-cyclohexylphenol. E. C. Britton and L. E. Mills. 1,880,404; Oct. 4.
Diolefines, Polymerization of. G. Ebert, F. A. Fries, and P. Garbach. 1,880,918; Oct. 4.
Disconnecting switch. L. P. Boll and T. Birkenmaier. 1,880,734; Oct. 4.
Dish or similar article. E. B. Bedford and M. G. Parker. Des. 87,868–9; Oct. 4.
Disk harrow. H. Hymans. 1,881,358; Oct. 4.
Disk, Scanning. A. O. Tate. 1,880,295; Oct. 4.
Dispensing device. E. H. Cooper. 1,880,823; Oct. 4.
Dispensing device for gasoline. A. G. Tebault. 1,880,299; Oct. 4.
Dispensing machine. J. F. Farmer. 1,880,956; Oct. 4.
Dispensing mechanism. H. R. Brand. 1,880,753; Oct. 4.
Dispensing mechanism. A. H. Du Grenier. 1,881,175; Oct. 4.
Display and dispensing apparatus. H. C. Smith. 1,881,100; Oct. 4.
Display device. C. S. Crickmer. 1,880,835; Oct. 4.
Display device. J. E. S. Estes. 1,880,944; Oct. 4.
Display rack. L. F. McKelvey. 1,881,212; Oct. 4.
Display stand. C. C. Nuckols. 1,881,224; Oct. 4.
Disulphides of mercaptothiazoles, Making. A. M. Clifford. 1,880,421; Oct. 4.
Dithiocarbamates, Manufacture of. T. Weigel. 1,880,564; Oct. 4.

Doctor for calendering machines. H. W. Mason. 1,880,455; Oct. 4.
Door and passage of cinematographic apparatus. M. Couade. 1,881,352; Oct. 4.
Door closer. I. E. Beeler. 1,881,114; Oct. 4.
Door closer. G. Demo. 1,880,870; Oct. 4.
Door, Coke oven. R. E. Umbel. 1,880,600; Oct. 4.
Door, Furnace. D. O. Miller. 1,881,287; Oct. 4.
Door holding device. L. A. Bittorf. 1,880,711–13; Oct. 4.
Door operating mechanism. E. L. Rose. 1,881,016; Oct. 4.
Door, Pressed metal. G. Trautvetter. 1,880,590; Oct. 4.
Door, Vehicle. A. S. Campbell. 1,880,783; Oct. 4.
Double-jet controller device. H. L. Griggs and A. R. Mabey. 1,880,247; Oct. 4.
Dough, Apparatus for the mechanical kneading of. O. Kremmling. 1,881,364; Oct. 4.
Doughnuts and their manufacture, Sugared. F. E. Morris. 1,880,459; Oct. 4.
Draw work. H. L. Turney. 1,880,222; Oct. 4.
Dressing mechanism. E. W. Bullock and H. J. White. 1,880,234; Oct. 4.
Drier: *See*—
Coal drier. Tray drier.
Drier clamp closer, Automatic hosiery. H. F. Wanamaker. 1,880,547; Oct. 4.
Drier table leveling mechanism, Automatic hosiery. H. F. Wanamaker. 1,880,548; Oct. 4.
Drill bit. C. E. Lang. 1,881,024; Oct. 4.
Drill head for core barrels. R. P. Simmonds. 1,880,215; Oct. 4.
Drilling mechanism. H. Blount. 1,880,728; Oct. 4.
Drilling rig. W. J. Mitchell. 1,881,413; Oct. 4.
Drilling, Rotary. F. I. Epley. 1,881,176; Oct. 4.
Drink mixer. W. A. Stroud. Des. 87,893; Oct. 4.
Drive, Turntable. C. P. Wood. 1,881,393; Oct. 4.
Driving mechanism for the auxiliary apparatus of internal combustion engines. G. Pirinoli. 1,881,292; Oct. 4.
Duodenal or stomachal tube. M. Künsztler. 1,880,964; Oct. 4.
Dye and making same, Azo. E. F. Grether. 1,880,433; Oct. 4.
Dyes or the like, Apparatus for making. R. M. Cole. 1,880,816; Oct. 4.
Dyestuff and making the same, Azo. E. F. Grether. 1,880,432; Oct. 4.
Dyestuff and making the same, Azo. D. Zinner.. 1,880,226; Oct. 4.
Dyestuff and process of preparation, Azo. D. Zinner. 1,880,225; Oct. 4.
Dyestuffs of the anthraquinone series and making same, New acid wool. R. Muller and E. Honold. 1,880,970; Oct. 4.
Dyestuffs of the anthanthrone series, New vat. R. Heidenreich. 1,880,440; Oct. 4.
Dyestuffs of the anthraquinone series, Vat. G. Rösch. 1,880,490; Oct. 4.
Ear conveyer for husking rolls. C. R. Raney and R. B. Hitchcock. 1,880,482; Oct. 4.
Edge protection for fiber boards. J. T. Card. 1,880,785; Oct. 4.
Edge shearing device. C. G. Richardson. 1,880,487; Oct. 4.
Elastic knitted fabric. O. H. Walton. 1,880,303; Oct. 4.
Electric discharge device, Gaseous. H. Ewest and G. Galdies. 1,880,949; Oct. 4.
Electric machine, Dynamo. S. G. Brown. 1,881,350; Oct. 4.
Electric machine with improved cooling means, Dynamo. V. G. Apple. 1,881,343; Oct. 4.
Electric transfer mechanism. G. F. Daly and R. E. Page. 1,880,422; Oct. 4.
Electrical apparatus. C. A. Jackson. 1,880,203; Oct. 4.
Electrical capacity, Varying. F. W. Gay. 1,880,346; Oct. 4.
Electrical commutator machine. G. Guerin. 1,880,388; Oct. 4.
Electrical fitting. G. A. Johnson. 1,881,318; Oct. 4.
Electrical switch. W. L. Butler and W. H. Fabrey. 1,880,775; Oct. 4.
Electrode. B. E. Broadwell and A. T. Hinckley. 1,881,119; Oct. 4.
Electrode and method for welding cast iron. E. H. Waldman. 1,880,545; Oct. 4.
Electrode for glass melting furnaces. H. A. Wadman. 1,880,540; Oct. 4.
Electrodes for electrical precipitators, Making collecting. C. B. Clyne. 1,880,811; Oct. 4.
Electrodes for storage batteries, Producing. P. Hagspihl. 1,880,249; Oct. 4.
Electromagnet. N. Hall. 1,881,077; Oct. 4.
Electron discharge device. A. I. Crawford. 1,880,833; Oct. 4.
Electroplating, Method and apparatus for. R. A. Garling and J. T. Ott. 1,880,382; Oct. 4.
Electrosurgical instrument. G. M. Tomlinson. 1,881,250; Oct. 4.
Embroidering device. J. Sperling. 1,881,247; Oct. 4.
Endoscope. R. H. Wappler. 1,880,551; Oct. 4.
Ends of cartons or like receptacles, Apparatus for. A. G. Rose. 1,881,133; Oct. 4.
Engine: *See*—
Hoisting engine. Reciprocating engine.
Hydrocarbon engine. Rotary engine.
Internal-combustion engine.
Engine and the like and method of operation. H. B. Moses. 1,880,209; Oct. 4.
Engine frame. A. G. Buwalda. 1,881,043; Oct. 4.
Engines, Fuel feeding means for internal combustion. M. G. Chandler. 1,880,799; Oct. 4.
Entrance inclosure operating and control means. L. G. Jacobson. 1,881,017; Oct. 4.
Entrapment device. W. N. Kindel. 1,880,258; Oct. 4.
Ester-like constituted wetting agents, foaming agents and dispersing agents and preparing them. K. Daimler and K. Platz. 1,881,172; Oct. 4.
Esters of cellulose from partially hydrolyzed cellulose acetate, Preparation of lower mixed organic. C. J. Staud and E. K. McLean. 1,880,515; Oct. 4.
Ether lactates of cellulose and the product thereof, Manufacture of. C. S. Webber and C. J. Staud. 1,880,558; Oct. 4.
Ethers of the pyridine series, Basic. K. Miescher and E. Urech. 1,881,236; Oct. 4.
Evaporator. W. E. Bihl and A. Ramclaw. 1,880,682; Oct. 4.
Excavator. A. C. Clark and A. L. Graves. 1,880,807; Oct. 4.
Exerciser and massaging device, Mechanical. H. E. Dierker. 1,880,879; Oct. 4.
Exhibition apparatus, Coin-controlled. L. C. Rathbun. 1,880,484; Oct. 4.
Expansion joint, Air cell. H. B. Bleck. 1,880,725; Oct. 4.
Explosive, Low density. R. I. Bashford. 1,881,307; Oct. 4.
Extractor: *See*—
Hull extractor.
Eyeglass and spectacle case. G. L. Hommel. Des. 87,878; Oct. 4.
Fabric: *See*—
Electric knitted fabric. Wire fabric.
Fabrics, Apparatus and method for treating. F. E. Coatsworth. 1,881,310; Oct. 4.
Fairing device. I. M. Freeman. 1,881,073; Oct. 4.
Fastener, Roofing. J. and H. Fulenwider. 1,880,318; Oct. 4.
Fastener, Slide. J. W. Dews. 1,880,317; Oct. 4.
Fastening device. J. A. H. Siers. Re18,612; Oct. 4.
Fastening device for chopper bowls. F. L. Wood and B. Townshend. 1,880,638; Oct. 4.
Fats and oils, Purification of. W. Gensecke. 1,880,383; Oct. 4.
Faucet, Liquid dispensing. J. F. Palmer. 1,880,271; Oct. 4.
Feeder, Poultry. A. R. Hoeft. 1,881,023; Oct. 4.
Fermentation, Promotion of. W. L. Owen and E. W. Herr. 1,881,093; Oct. 4.
Ferric sulphate, Making soluble. H. S. Marsh and C. W. Weesner. 1,880,265; Oct. 4.
Fertilizer, Preparation of. W. H. Waggaman. 1,880,544; Oct. 4.
Fiber derivative. T. B. Munroe and F. A. Irvine. 1,881,419; Oct. 4.
Fiber product preservation. E. C. Lathrop and F. A. Irvine. 1,880,965; Oct. 4.
Fiber products, Protective treatment of. T. B. Munroe and E. C. Lathrop. 1,880,971; Oct. 4.
Fiber products, Treatment of. T. B. Munroe and E. C. Lathrop. 1,880,972; Oct. 4.
Filler, Roadway crack and joint. E. E. Wilmeth. 1,880,625; Oct. 4.
Filling and capping machine for containers. C. Barbieri. 1,880,663; Oct. 4.
Film for sound and picture purposes, Photographic. O. Sandvik. 1,880,496; Oct. 4.
Film manufacture. C. L. A. Wynd and W. H. Groth. 1,880,647; Oct. 4.
Film spooling apparatus and reels therefor. O. Wittel. 1,880,633; Oct. 4.
Filter for radiator covers, Dust. R. H. Ward. 1,880,552; Oct. 4.
Firebox construction for furnaces. H. F. Braun, S. L. Laughlin, and W. J. Smith. 1,881,260; Oct. 4.
Fire fighting apparatus. J. Panther, jr. 1,880,272; Oct. 4.
Fish and other meats, Preparing. E. H. Cooley. 1,881,171; Oct. 4.
Fishing lure and making same, Floating. N. E. L. Means. 1,881,285; Oct. 4.
Fishing rod. L. J. Lane. 1,880,348; Oct. 4.
Fitting, Hollow. T. E. Murray. 1,880,269; Oct. 4.
Fixture for poles, Guy. R. G. Williams. Re18,613; Oct. 4.
Flame controlled system. F. S. Denison. 1,880,871; Oct. 4.
Float for steam traps, Automatic water logging. J. W. Kaye. 1,880,204; Oct. 4.
Floodlight. R. B. Benjamin. 1,880,399; Oct. 4.
Floor covering and laying same, Waterproof. J. D. Baker. 1,880,661; Oct. 4.
Flow controlling apparatus. H. J. Byers. 1,880,778; Oct. 4.
Fluid actuated device. H. L. Blood. 1,880,727; Oct. 4.
Fluid controlling means. K. W. Rohlin. 1,880,213; Oct. 4.
Fluid gun. H. C. Mueller. 1,880,354; Oct. 4.

Fluid operated implement, Pressure. O. O. App. 1,880,337; Oct. 4.
Fluid pressure brake. W. E. Dean. 1,880,864; Oct. 4.
Fluid pressure brake. J. C. McCune. 1,881,209; Oct. 4.
Fluid pressure brake. A. Neveu. 1,881,221; Oct. 4.
Fluid pressure meter. F. W. Medaugh. 1,881,213; Oct. 4.
Fluid sprinkling device. V. J. Christie. 1,880,373; Oct. 4.
Flushing apparatus. W. Taylor. 1,880,296–7; Oct. 4.
Flying machine. P. N. Willoughby. 1,881,008; Oct. 4.
Folder, Filing. C. J. Walker. 1,880,549; Oct. 4.
Folding board. J. P. Doman. 1,881,047; Oct. 4.
Folding chair. J. Silverman. 1,880,365; Oct. 4.
Footwear. E. C. Hellbecker. 1,880,389; Oct. 4.
Footwear cushion. E. Baird. 1,880,654; Oct. 4.
Force feed lubricator. L. W. Drott. 1,880,902; Oct. 4.
Fork: *See*—
Tuning fork.
Form, Adjustable bust. L. Cella. 1,880,798; Oct. 4.
Form for glove dipping, Pneumatic. P. H. Watkins. 1,881,005; Oct. 4.
Form for the manufacture of rubber articles. E. Hazell. 1,881,021; Oct. 4.
Form letter for incorporation in a molded base. L. H. Cargill. 1,880,792; Oct. 4.
Forms, Making hollow shoe. S. A. Eddins and G. M. Hannigan. 1,880,920; Oct. 4.
Foundry sand aerating machine. A. C. Christensen. 1,880,237; Oct. 4.
4-amino-2-halo-diphenylethers and preparing same. E. F. Grether. 1,881,074; Oct. 4.
4-dimethylamino-1-phenyl-2,3-dimethyl-5-pyrazolone with one of the esters of p-aminobenzoicacid and the products, Combined. B. and M. Reuter. 1,881,317; Oct. 4.
Frame: *See*—
Engine frame. Tube frame.
Free-wheel mechanism for automobile use and for like purposes. D. W. Morley and F. C. Weller. 1,880,457; Oct. 4.
Friction brake. T. F. Brackett. 1,880,750; Oct. 4.
Fruit picker. M. Schling. 1,881,134; Oct. 4.
Furnace: *See*—
Heat treating furnace. Tilting furnace.
Radiant and convection heat furnace.
Furnace. F. A. Fahrenwald. 1,880,954; Oct. 4.
Furnace. J. B. Willsea and T. A. Kennedy. 1,880,624; Oct. 4.
Furnace cover, Power operated. C. Wright. 1,881,338; Oct. 4.
Furnace for melting metals, Rotary drum. C. Brackelsberg. 1,881,117; Oct. 4.
Furniture, Convertible. C. A. Penrose. 1,881,095; Oct. 4.
Fuse. J. R. Fogal. 1,880,379; Oct. 4.
Fuse and assembling the same, Electric. H. T. Bussmann. 1,881,351; Oct. 4.
Fuse link head. T. Birkemaier. 1,880,702; Oct. 4.
Fuse, Refillable ferrule. D. E. Carney. 1,881,369; Oct. 4.
Garage door lock. O. L. Dautrick. 1,880,850; Oct. 4.
Garment hanger. J. Dreyfuss. 1,880,900; Oct. 4.
Garment hanger. C. H. Kraft. 1,880,963; Oct. 4.
Gas burner. G. W. Blakesley. 1,880,719; Oct. 4.
Gas meter. W. H. Kaiser. 1,880,256; Oct. 4.
Gases in air, Apparatus for detecting and estimating inflammable. A. N. Erickson. 1,880,941; Oct. 4.
Gauge: *See*—
Water gauge.
Gauge. R. M. Chambers. 1,880,236; Oct. 4.
Gear box, Change speed. C. Schaeffer. 1,880,986; Oct. 4.
Gear for railway vehicles, Buffing and draw. R. T. Glascodine. 1,881,312; Oct. 4.
Gear, Friction draft. M. B. Cameron. 1,880,782; Oct. 4.
Gear, Steering. R. C. Hoffman. 1,880,390; Oct. 4.
Gearing differential, Press roll. E. E. Berry. 1,880,690; Oct. 4.
Gearing, Press roll. E. E. Berry. 1,880,689; Oct. 4.
Gearing, Transmission. C. E. F. Ahlm. 1,880,228; Oct. 4.
Gears and gear shaped articles, Perfecting. E. Wildhaber. 1,881,382; Oct. 4.
Glass, Apparatus and process for making window sheet or flat. W. H. Powell. 1,881,327; Oct. 4.
Glass cutting machine. O. C. Natlis. 1,881,220; Oct. 4.
Glass, Process and apparatus for making. H. A. Wadman. 1,880,541; Oct. 4.
Glass to metal seal. B. Wellman. 1,880,5[illegible]; Oct. 4.
Glassware, Apparatus for annealing. H. A. Wadman. 1,880,536; Oct. 4.
Golf bag supporting attachment. L. S. McDonald. 1,880,351; Oct. 4.
Golf ball winding machine. C. S. McChesney. 1,880,264; Oct. 4.
Grader, Potato and onion. M. A. Paulson. 1,881,239; Oct. 4.
Grape juice composition and preparing the same. L. Alexandrou. 1,881,158; Oct. 4.
Grass destroyer, Quack. E. H. Vodon. 1,880,611; Oct. 4.
Grinder, Multiple. C. T. Raule. 1,881,244; Oct. 4.
Grinding machine. C. Booth and F. S. Haas. 1,880,736; Oct. 4.
Guard, Traffic. P. E. Hunter. 1,881,376; Oct. 4.
Guide and sash construction, Window. O. M. Edwards and J. F. Levan. 1,881,268; Oct. 4.
Guide for roll screens. C. Traut. 1,880,589; Oct. 4.
Guide, Paper. F. J. Schott, jr. 1,881,138; Oct. 4.
Gypsum-rubber composition. F. H. Untiedt. 1,880,601; Oct. 4.
Gyratic testing instrument. A. Sonntag. 1,881,332; Oct. 4.
Hair comb. E. M. Wildey. 1,880,619; Oct. 4.
Hair waving device. M. A. Tienken and C. A. Meyer. 1,880,578; Oct. 4.
Hamburger forming and frying machine, Automatic. W. A. Parr. 1,881,126; Oct. 4.
Hammock stand. C. M. Dunlap. 1,880,909; Oct. 4.
Handbag. M. White. Des. 87,898; Oct. 4.
Hanger: *See*—
Brake hanger. Garment hanger.
Harvester, Beet. H. L. Malcom and H. S. Harker. 1,880,324; Oct. 4.
Harvester, Pea. J. E. Love and H. D. Hume. 1,881,411; Oct. 4.
Header strip. R. Beynon. 1,880,696; Oct. 4.
Headlight set. M. K. Eckert. 1,880,919; Oct. 4.
Heat, Apparatus for utilizing solar. W. L. R. Emmet. 1,880,938; Oct. 4.
Heat exchanger. A. R. Thomas. 1,880,533; Oct. 4.
Heat treating furnace. P. P. Cioffi. 1,880,806; Oct. 4.
Heat treatment of metals or alloys, Apparatus for the continuous. W. S. Smith and C. V. H. Garnett. 1,881,331; Oct. 4.
Heated cushion. W. J. Kirk. 1,881,198; Oct. 4.
Heater: *See*—
Water heater.
Heater. L. H. Colligan. 1,880,238; Oct. 4.
Heater. L. C. Huff. 1,881,275; Oct. 4.
Heater and deflector therefor, Automobile. C. H. Will. 1,880,620; Oct. 4.
Heating apparatus for automotive vehicles. F. B. Wines. 1,880,630; Oct. 4.
Heating device. B. Sklovsky. 1,880,291; Oct. 4.
Heating system, Automotive. A. H. Bates. 1,881,068; Oct. 4.
Helico-lift autorotor for aircraft and the like. F. Wander, jr. 1,880,550; Oct. 4.
Helium, Extracting. R. R. Bottoms. 1,881,115; Oct. 4.
Helium from gaseous mixtures, Apparatus for the extraction of. R. R. Bottoms. 1,881,116; Oct. 4.
Helmet and ventilating means, Sand blast. F. J. Hull. 1,881,192; Oct. 4.
High speed motor. H. D. Else. 1,880,936; Oct. 4.
Hinge. J. T. Atwood. Des. 87,866–7; Oct. 4.
Hinge. C. Halwey. 1,881,078; Oct. 4.
Hoisting engine. H. L. Turney. 1,881,302; Oct. 4.
Hold-down, Hydraulic. R. T. Hazelton. 1,881,185; Oct. 4.
Holder and ejector for cigarettes and cigars. W. Brière. 1,880,754; Oct. 4.
Holder, Bit or drill. A. L. Stowell. 1,880,521; Oct. 4.
Holder, Bluing. L. Poirier and V. Varin. 1,881,293; Oct. 4.
Holder for automobiles, License plate. G. M. Kessler. 1,881,279; Oct. 4.
Holder for blade processing. G. Dalkowitz. 1,880,848; Oct. 4.
Holder for ornaments. H. W. Falstrom. 1,880,955; Oct. 4.
Holder for the points of soft collars. L. E. Baer. 1,881,039; Oct. 4.
Holder, Waterless gas. A. H. Dyckerhoff. 1,880,914; Oct. 4.
Honey frame cleaning machine. C. I. Everett. 1,881,354; Oct. 4.
Hopper, Agitated weighing. W. L. Hart. 1,881,052; Oct. 4.
Hopper for incinerator flues, Feed. E. Breitwieser. 1,880,370; Oct. 4.
Hopper mount for roll coating machines. H. E. Van Derhoef. 1,880,005; Oct. 4.
Horn, Signal. J. C. McCune. 1,881,211; Oct. 4.
Horoscopes, Apparatus for casting. F. Ploner. 1,880,476; Oct. 4.
House: *See*—
Folding play house.
Housing, Axle. H. H. Williams. 1,880,305; Oct. 4.
Hub closure for mine car wheels. B. F. Faunce. 1,881,071; Oct. 4.
Hull extractor. T. Elliott. 1,880,934; Oct. 4.
Humidifier and heater. J. E. Myers. 1,880,073; Oct. 4.
Humidifying. W. P. Dryer. 1,880,903; Oct. 4.
Humidifying apparatus. G. C. Brown. 1,880,758; Oct. 4.
Humidor. L. A. Phillips. 1,880,275; Oct. 4.
Hydraulic brake. G. R. Brent. 1,880,194; Oct. 4.
Hydraulic brake. A. D. Pentz. 1,881,240; Oct. 4.
Hydraulic coupling. J. N. Klep. 1,881,082–3; Oct. 4.
Hydraulic jack. H. W. Bolens. 1,880,732; Oct. 4.
Hydrocarbon engine. E. H. Towle. 1,881,149; Oct. 4.
Hydrocarbons, Method and apparatus for treating. A. G. Davis. 1,880,851; Oct. 4.
Hydrocarbons, Method and apparatus for treatment of. I. W. Henry. 1,881,406; Oct. 4.
Hydrocarbons, Process and apparatus for converting petroleum. W. M. Cross. 1,880,836; Oct. 4.
Hydrocarbons, Solidification of liquid. A. A. Prussin. 1,880,211; Oct. 4.
Hydroquinone, Production of. H. Von Bramer and J. W. Zabriskie. 1,880,534; Oct. 4.
Illuminating system for photographic apparatus. J. G. Capstaff. 1,880,414; Oct. 4.
Incubator. C. R. Bratton and C. S. Miner. 1,881,118; Oct. 4.

Indicator: *See*—
Liquid level indicator. Speed indicator.
Smoke indicator.
Indicator for aircraft. E. A. Sperry. 1,880,994; Oct. 4.
Indicator for triple valves, Operation timing. J. R. Ricketts. 1,881,389; Oct. 4.
Inductance and coupling system. L. A. Gebhard and C. F. Rudolph. 1,880,190; Oct. 4.
Inductive device. A. J. Christopher. 1,880,805; Oct. 4.
Ink for photographic film, Printing. A. A. Shannon. 1,880,502; Oct. 4.
Inking roller. H. C. Schroeder. 1,880,361; Oct. 4.
Instrument for adjusting the teeth. R. Kawretzke. 1,881,196; Oct. 4.
Instrument for outlining inscriptions on monuments or the like. W. H. Watts and E. J. Currie. 1,880,555; Oct. 4.
Insulating device for high voltage lines. W. H. Knapp. 1,880,259; Oct. 4.
Insulating mounting for anode grids. M. Schenkel. 1,880,499; Oct. 4.
Insulator for lamp leads, Detachable. E. W. Brady. 1,881,168; Oct. 4.
Insulator, Vibration. J. W. Shields. 1,880,504; Oct. 4.
Internal combustion engine. A. Moorhouse. 1,880,456; Oct. 4.
Internal combustion engine. W. Noble. 1,880,270; Oct. 4.
Internal combustion engine. M. D. Polston. 1,881,294; Oct. 4.
Internal combustion engine. S. B. Smith. 1,881,330; Oct. 4.
Internal combustion engine. J. G. Vincent. 1,880,609; Oct. 4.
Internal combustion engine. O. H. Weber. 1,880,556; Oct. 4.
Internal combustion engine. L. M. Woolson. 1,880,643; Oct. 4.
Iron: *See*—
Soldering iron.
Ironing boards, Attachment for. R. Stein. 1,881,144; Oct. 4.
Jack: *See*—
Hydraulic jack. Switchboard jack.
Jack and head, Combined pump. A. M. Brown. 1,881,349; Oct. 4.
Jack for raising truck frames. F. Koehler. 1,881,199; Oct. 4.
Jar lifter. R. E. Grace. 1,880,384; Oct. 4.
Jewelry, Article of. H. W. Peters. 1,881,291; Oct. 4.
Joint: *See*—
Concrete pipe joint. Mandrel joint.
Expansion joint. Universal joint.
Joint for split rims. T. J. Stockton. 1,881,249; Oct. 4.
Keto-benzoated, Heavy metal. H. A. Bruson. 1,880,759; Oct. 4.
Keyboard for calculating machines. A. J. Doughty. 1,880,896; Oct. 4.
Kite. T. W. Besley. 1,880,694; Oct. 4.
Knitting machine. A. W. Kent. 1,881,360; Oct. 4.
Lacquer comprising tribromo anisole, Crystallizing. R. L. Churchill. 1,880,419; Oct. 4.
Lamp. G. A. Bogue. 1,880,730; Oct. 4.
Lamp, Arc. O. Conradty. 1,881,262; Oct. 4.
Lamp, Arc. G. C. Rauch and J. W. Plunkett. 1,881,243; Oct. 4.
Lamp socket motor. V. G. Apple. 1,881,342; Oct. 4.
Lapping mechanism. H. Blount. 1,880,729; Oct. 4.
Lasting machine. F. Ricks. 1,880,212; Oct. 4.
Latch. H. Dubinsky, I. Goldenberg, and M. Schachter. Des. 87,873; Oct. 4.
Latch assembly for refrigerator doors. A. N. Hornung. 1,880,251; Oct. 4.
Latch, Door. D. W. Wood. 1,880,636; Oct. 4.
Latch, Door. D. W. Wood. 1,880,637; Oct. 4.
Latch for cotton feeder chutes. J. J. Wallace. 1,881,003; Oct. 4.
Latch, Locking refrigerator. A. Ekman. 1,880,929; Oct. 4.
Latch, Motor vehicle. M. Tibbetts. 1,880,583; Oct. 4.
Latch, Refrigerator. A. Ekman. 1,880,928; Oct. 4.
Latches, Remote control mechanism for door. W. C. Devereaux. 1,880,876; Oct. 4.
Latex, Treatment of. A. A. Nikitin. 1,880,975; Oct. 4.
Lathe. A. N. Emmons. 1,880,939; Oct. 4.
Lathe, Crankshaft. W. F. Groene. 1,880,434; Oct. 4.
Lathe, Multiple-spindle automatic. W. Berg. 1,880,681; Oct. 4.
Lead alloy. G. M. Bouton. 1,880,746; Oct. 4.
Leer. W. A. Morton and E. W. Paxton. 1,880,268; Oct. 4.
Lenco thioindigo acyl derivatives, Manufacture of. R. Stocker and J. Müller. 1,880,996; Oct. 4.
License plate. W. W. Sylvester. 1,881,381; Oct. 4.
Lifter: *See*—
Jar lifter.
Light: *See*—
Automobile light. Signal light.
Light projection apparatus. A. Y. Dodge. 1,880,892–3; Oct. 4.
Light sensitive device. T. W. Sukumlyn. 1,880,289; Oct. 4.
Light-sensitive material for the bleaching out process. B. Wendt and H. Bincer. 1,880,573; Oct. 4.
Lighter, Cigar. H. J. Bouchard. 1,880,744; Oct. 4.
Lighting fixture. G. Ainsworth. Des. 87,861–3; Oct. 4.
Lining oil wells and means therefor. R. P. Simmons. 1,880,218; Oct. 4.
Liquid delivery apparatus. G. W. Stedwell. 1,880,517; Oct. 4.
Liquid dispensing apparatus. W. H. De Lancey. 1,880,869; Oct. 4.
Liquid films, Device for producing and treating thin. V. C. Benjamin. 1,881,041; Oct. 4.
Liquid fuel burner. C. E. Beyer. 1,880,695; Oct. 4.
Liquid level indicator. C. A. de Giers. 1,881,264; Oct. 4.
Liquid measuring and delivering apparatus, Automatic. A. E. Panier. 1,881,289; Oct. 4.
Liquid meter. H. Chrisman. 1,880,195; Oct. 4.
Liquid sampling device. W. H. De Lancey. 1,880,868; Oct. 4.
Liquid sampling instrument. M. Tingieff. 1,881,415; Oct. 4.
Liquid, Textile treatment. H. Bertsch. 1,881,348; Oct. 4.
Liquids, Method of and apparatus for the regulation of viscosity of. J. P. Leask and S. T. Warner. 1,881,200; Oct. 4.
Loading machine. D. C. Corner. 1,881,263; Oct. 4.
Locating an operator working any line, Method of. W. B. Blanton. 1,880,724; Oct. 4.
Locating device. D. W. Hart. 1,881,274; Oct. 4.
Lock: *See*—
Bicycle lock. Scale lock.
Garage door lock. Window lock.
Lock. E. J. Baumé. 1,880,675; Oct. 4.
Lock. C. A. Crenshaw. 1,880,834; Oct. 4.
Locking and safety device, Transfer crane. H. F. Martin. 1,881,087; Oct. 4.
Locking arrangement for electric light bulbs. A. C. T. Myers. 1,881,091; Oct. 4.
Locking mechanism for radiators. A. E. Davis. 1,880,341; Oct. 4.
Looms, Shedding mechanism for jacquard. G. Haebler. 1,881,076; Oct. 4.
Loop cutter. C. G. Richardson. 1,880,488; Oct. 4.
Looper. R. W. Conant. 1,880,820; Oct. 4.
Lubricant dispensing device. E. W. Davis. 1,880,857; Oct. 4.
Lubricant for bearings operating in heated atmosphere. J. F. Silhavy. 1,880,987; Oct. 4.
Lubricating apparatus. E. W. Davis. 1,880,853; Oct. 4.
Lubricating apparatus. E. W. Davis. 1,880,855; Oct. 4.
Lubricating apparatus. C. W. Parker. 1,881,094; Oct. 4.
Lubricating apparatus, High pressure. A. D. Robbins. 1,881,096; Oct. 4.
Lubricating device. G. Steiner. 1,880,334; Oct. 4.
Lubricating system. E. W. Davis. 1,880,852; Oct. 4.
Lubricating system. E. W. Davis. 1,880,856; Oct. 4.
Lubricating system and apparatus. E. W. Davis. 1,880,854; Oct. 4.
Lubrication device for the molds of monotype casting machines, Adjustable. F. Sandrinelli. 1,881,298; Oct. 4.
Lubricator: *See*—
Force feed lubricator.
Lubricator. F. W. Edwards and F. B. Farnsworth. 1,881,353; Oct. 4.
Luminescent tube lighting. L. L. Beck. 1,880,230; Oct. 4.
Machine for fastening with wire staples. F. Merz and A. F. Schauss. 1,880,327; Oct. 4.
Machine for flanging shoe uppers. H. Boothroyd. 1,880,737; Oct. 4.
Machine for forming cartons. W. A. Morris. 1,880,460; Oct. 4.
Machine for knitting elastic fabric. O. H. Walton. 1,880,304; Oct. 4.
Machine for lacing shoe uppers. H. E. Enslin. 1,881,177; Oct. 4.
Machine for making concrete pipes. A. Sapin. 1,880,360; Oct. 4.
Machine for manufacturing spherical bodies. J. F. Early. 1,880,916; Oct. 4.
Machine for testing internal thread in valve stems. L. C. Broecker. 1,880,405; Oct. 4.
Machine or device for applying labels to cylindrical articles. A. Parr. 1,881,125; Oct. 4.
Magnesia containing iron, Production of fritted. F. Crotogino. 1,880,315; Oct. 4.
Magnesium alloy. J. P. Wetherill, 3d. 1,880,614; Oct. 4.
Magnesium ammonium phosphate, Producing. O. Kaselitz. 1,881,195; Oct. 4.
Magnesium chloride from a basic chloride thereof, Preparing. A. K. Smith. 1,880,505; Oct. 4.
Magnesium oxide mixtures and making the same. H. S. Lukens. 1,881,283; Oct. 4.
Mandrel for shaping curved tubes, Method of and die. P. H. Ford and N. Young. 1,881,121; Oct. 4.
Mandrel joint. P. C. Dutton and E. Hazell. 1,880,376; Oct. 4.
Manger, Feed. R. R. Shirley. 1,881,065; Oct. 4.
Manipulator. E. E. Broslus. 1,881,169; Oct. 4.
Marker, Ornamental. N. V. Sestito. 1,880,364; Oct. 4.
Marking device for regular graded shoe upper blanks. H. E. Edwards. 1,881,399; Oct. 4.
Mat: *See*—
Meal serving mat.
Match making machine. P. T. Denmead. 1,880,342; Oct. 4.

Matches and container therefor, Combined set of book. M. H. Swartz. Des. 87,894; Oct. 4.
Material, Apparatus for feeding powdered. R. D. Hulslander. 1,880,452; Oct. 4.
Material, Apparatus for preparing and distributing. H. F. Carter. 1,880,794; Oct. 4.
Material slitting device. R. E. McFarland. 1,881,020; Oct. 4.
Mattress. R. B. Davis. 1,880,800; Oct. 4.
Mausoleum, Individual. L. C. Stephens. 1,880,335; Oct. 4.
Meal serving mat. M. A. L. Uhalt. 1,881,416; Oct. 4.
Measurement of mechanical impedance. P. B. Flanders. 1,880,425; Oct. 4.
Meat forming carrier. A. N. Benn. 1,880,680; Oct. 4.
Meat, Method and apparatus for shaping. A. N. Benn. 1,880,679; Oct. 4.
Meat product and producing the same. M. Cudahy. 1,880,837; Oct. 4.
Medical tablet. W. J. Kirk. 1,881,197; Oct. 4.
Members to bag ends, Method of and apparatus for adding supplemental. A. E. Currier. 1,880,839; Oct. 4.
Memorandum pad. B. Settel. 1,881,140; Oct. 4.
Mercury switch. P. K. Cramblet. 1,880,829–30; Oct. 4.
Mercury switch. P. K. Cramblet. 1,880,832; Oct. 4.
Message-distributing system for simplex printer concentration units. W. B. Blanton. 1,880,723; Oct. 4.
Metal alloy, Light. R. J. Norton. 1,880,467; Oct. 4.
Metal article, Wrought. W. H. Bassett. 1,881,257; Oct. 4.
Metal coating apparatus. W. E. Moore. 1,881,089; Oct. 4.
Metal, Hardening and tempering. J. Landon. 1,881,320; Oct. 4.
Metal working machine. M. S. Curtis. 1,880,843; Oct. 4.
Meter: *See*—
Fluid pressure meter. Liquid meter.
Gas meter. Torsion meter.
Meter. J. W. Ledoux. 1,880,206; Oct. 4.
Meter chamber. H. G. Weymouth and H. Chrisman. 1,880,223; Oct. 4.
Meter for gas flow. G. Kuwada. 1,881,280; Oct. 4.
Methane, Apparatus for producing. A. M. Buswell and C. S. Boruff. 1,880,772; Oct. 4.
Micrometer for continuously gauging the thickness of moving nonmagnetic material, Electrical. W. A. Chilson. 1,880,802; Oct. 4.
Micrometer mount. A. Wollensak. 1,880,635; Oct. 4.
Mill: *See*—
Coffee mill. Rolling mill.
Mill for preparing asphalt paving mixtures, Pug. W. F. Wilmoth. 1,880,626; Oct. 4.
Milling machine. T. Earle. 1,881,230; Oct. 4.
Millstones for rectifying gear teeth, Apparatus for shaping. G. E. Voignier. 1,880,612; Oct. 4.
Mixer: *See*—
Asphalt mixer.
Mixer and dispenser. C. Barbieri. 1,880,664; Oct. 4.
Mold: *See*—
Cigar mold. Tire mold.
Mold. F. Kurath. 1,881,232; Oct. 4.
Mold for ingots. B. Matuschka. 1,881,088; Oct. 4.
Mold for manufacturing boots, shoes, and similar articles of rubber or other plastic material. H. A. and G. Steppé. 1,881,248; Oct. 4.
Mold-separating device. C. E. Frantz. 1,880,380; Oct. 4.
Mold separator. A. B. Mullin. 1,880,462; Oct. 4.
Molding apparatus. F. J. Leuthner. 1,881,055; Oct. 4.
Mop, Wringer. E. W. Byars. 1,880,777; Oct. 4.
Motor: *See*—
Alternating current motor. Lamp socket motor.
High speed motor.
Motor. E. V. Zagst. 1,880,650; Oct. 4.
Motor compressor. V. G. Apple. 1,881,344; Oct. 4.
Mounting and connection, Magneto. C. F. Reis. 1,880,983; Oct. 4.
Mounting, Closure. J. A. Kimball. 1,881,362; Oct. 4.
Mounting, Control. C. E. Summers. 1,881,067; Oct. 4.
Mounting for compasses. A. L. Rawlings. 1,880,982; Oct. 4.
Mounting for electrical devices. E. Soreny. 1,880,511; Oct. 4.
Mounting, Vehicle drive wheel axle unit. A. R. LeMoon. 1,881,408; Oct. 4.
Mouse and rat trap. M. E. Wood. 1,880,640; Oct. 4.
Muffler. L. L. Haas. 1,881,051; Oct. 4.
Multiple baking pan. L. H. Debs. 1,880,865; Oct. 4.
Musical instrument. H. T. Kingsley. 1,880,961; Oct. 4.
Musical instrument and manufacturing the same. A. P. Young. 1,881,229; Oct. 4.
Musical instrument, Stringed. R. D. Currier. 1,881,311; Oct. 4.
Nails and tacks, Heading. H. W. Wilson. 1,880,628; Oct. 4.
Napkin, Paper. G. H. Gardner. 1,880,345; Oct. 4.
Needle, Loop-forming. G. A. Carlson. 1,880,787; Oct. 4.
Needle selecting mechanism for knitting machines and the like. E. Milner. 1,880,267; Oct. 4.
Needle straightening clamp. A. E. Parker. 1,880,979; Oct. 4.
Nest, Egg transferring and sorting trap. C. C. Forney. 1,881,122; Oct. 4.
Nickel or other metals, Carbonizing. H. M. Elsey. 1,880,937; Oct. 4.
Nicotine contained in raw tobaccos, intermediary products, and tobacco products ready for use, Reducing the percentage of. A. Wenusch. 1,880,336; Oct. 4.
Nipple threading machine, Automatic. W. A. Jenkins. 1,880,391; Oct. 4.
Nitro-halogenquinazolines and producing same. W. Hentrich and M. Hardtmann. 1,880,447; Oct. 4.
Nitroso diazo solutions, Producing. R. Jung. 1,880,959; Oct. 4.
Nozzle. C. G. Dietsch. 1,880,880; Oct. 4.
Nozzle, Segmental sprinkler. A. R. Le Moon. 1,881,409; Oct. 4.
Oil bearing commodities, Preserving. M. R. Coe. 1,880,813; Oct. 4.
Oil drainage collecting apparatus. E. Wanamaker. 1,880,546; Oct. 4.
Oil fuel burner. J. W. Jones. 188,359; Oct. 4.
Oil retainer for steering gears. J. J. Baumler. 1,880,659; Oct. 4.
Oils, Apparatus for dehydrating. H. H. Moreton. 1,881,218; Oct. 4.
Oils, Neutralizing acid treated. H. H. Cannon. 1,881,044; Oct. 4.
Oiler, Wheel flange. S. E. Bates and E. Overmier. 1,880,672; Oct. 4.
Opacifiers, Manufacture of. L. Weiss. 1,881,303; Oct. 4.
Opener for refrigerators, Bottle. J. B. Saunders. 1,880,985; Oct. 4.
Optical instrument. H. E. Pine. 1,880,276; Oct. 4.
Orchard duster. T. L. Cairns. 1,880,781; Oct. 4.
Ore separator. H. J. MacCamy. 1,881,412; Oct. 4.
Ornament for radiator cap or the like. I. Florman. Des. 87,876; Oct. 4.
Outer member of a covered joint hinge. J. T. Atwood. Des. 87,865; Oct. 4.
Oven, Electric. F. J. Cook and W. W. Kelly. 1,880,822; Oct. 4.
Oxygen, nitrogen, and argon from air, Separation of. F. Pollitzer and S. Stark. 1,880,981; Oct. 4.
Package and match container, Combined. J. A. Sigg. 1,881,380; Oct. 4.
Packing box, Wire bound. L. H. Baughman. 1,880,396; Oct. 4.
Packing for steam turbines and the like. C. W. Dake. 1,880,846; Oct. 4.
Pad: *See*—
Memorandum pad.
Paint softener, Electric. F. D. Potensa. 1,881,241; Oct. 4.
Pan: *See*—
Multiple baking pan.
Pan and grain shoe, Grain. P. F. Gruver. 1,880,387; Oct. 4.
Paper articles with viscose, Treating. M. O. Schur. 1,880,286; Oct. 4.
Paper board, Manufacture of. L. W. Case and H. E. Cude. 1,880,339; Oct. 4.
Paper condenser winding machine. B. J. Butler. 1,881,170; Oct. 4.
Paper cutting machine. F. W. Seybold. 1,880,332; Oct. 4.
Paper cutting machine. R. S. Tyler and H. McGeorge. 1,880,598; Oct. 4.
Paper machine. E. E. Berry. 1,880,685; Oct. 4.
Paper making machine. E. E. Berry. 1,880,688; Oct. 4.
Paper making machine and making paper. E. E. Berry. 1,880,691; Oct. 4.
Paper making machine and making web material. E. E. Berry. 1,880,686; Oct. 4.
Paper manufacture. J. Traquair and F. G. Rawling. 1,880,587; Oct. 4.
Paper, Manufacturing straw. P. Drewsen. 1,880,899; Oct. 4.
Paper, Method of and apparatus for making. E. E. Berry. 1,880,692; Oct. 4.
Papers and apparatus therefor, Manufacture of effect. B. Cornely and R. Richter. 1,880,827; Oct. 4.
Parquetry baling machine. L. C. Carroll. 1,881,370; Oct. 4.
Patches, Process and apparatus for beveling tire. C. E. Dunlap. 1,880,910; Oct. 4.
Pedal. J. R. Thorp. 1,880,583; Oct. 4.
Perforating machine. J. R. Peirce. 1,880,472; Oct. 4.
Petroleum, Cracking and processing. J. C. Black. 1,880,717; Oct. 4.
Phenanthridone and making same. R. M. Heidenreich and P. Tust. 1,880,441; Oct. 4.
Phonograph, Automatic. R. B. Bryant. 1,880,760; Oct. 4.
Phonograph record. A. M. Acheson and G. Ramsey. 1,881,110; Oct. 4.
Phonographs, Electric pickup for. H. Wiener. 1,881,109; Oct. 4.
Phosphate fertilizer, Ammoniation of. B. Ober and E. H. Wight. 1,880,469; Oct. 4.
Phosphates, Producing calcined. F. Rothe and H. Brenek. 1,880,491; Oct. 4.
Phosphatic fertilizers, Production of. B. Ober and E. H. Wight. 1,880,470; Oct. 4.
Phosphorus, Protection of. W. H. Waggaman, S. D. Gooch, and F. P. Kirschbaum. 1,880,538; Oct. 4.
Photochemical radiations, Process and apparatus for producing. H. Spindler. 1,880,333; Oct. 4.
Photographic objective. F. E. Altman. 1,880,393–4; Oct. 4.
Photographic printing apparatus. F. Tuttle. 1,880,596; Oct. 4.

Photographic recorder. E. C. Erickson. 1,880,942; Oct. 4.
Picker: *See*—
Fruit picker.
Pickling apparatus. W. J. Braddock, G. Bruhn, and C. W. Haller. 1,880,751; Oct. 4.
Pickling apparatus. S. L. Williams. 1,881,157; Oct. 4.
Picture apparatus, Motion. F. L. Brown. 1,880,406; Oct. 4.
Picture screen, Motion. A. L. Raven. 1,880,279; Oct. 4.
Pictures, Framing. P. Dieterle. 1,881,046; Oct. 4.
Pictures, Method of and apparatus for projection of motion. A. Dina. 1,880,884; Oct. 4.
Piece kick-up and seat pan. O. F. Graebner and J. Vehko. 1,880,385; Oct. 4.
Pile fabric materials, Apparatus for treating and cleaning. R. A. Bassett. 1,880,668; Oct. 4.
Pin or needle. E. Sparke. 1,880,219; Oct. 4.
Pin strip. C. A. Flood. 1,880,197; Oct. 4.
Pipe machines, Carrying mechanism for centrifugal concrete. A. R. McMullin. 1,881,322; Oct. 4.
Pipe threading machine. E. L. Ahern. 1,881,111; Oct. 4.
Pipes, Joining. W. H. Armacost. 1,881,160; Oct. 4.
Piston. A. L. Nelson. 1,881,237; Oct. 4.
Piston, Resilient. C. Melidoni. 1,881,214; Oct. 4.
Plastifier for cellulose derivatives and resin compositions. W. H. Moss and B. B. White. 1,881,219; Oct. 4.
Platform or skid, Portable. A. A. Bureau and E. P. Burk. 1,880,765; Oct. 4.
Playhouse, Folding. A. Gold. 1,881,356; Oct. 4.
Plug, Sealing. S. L. Boukard. 1,880,745; Oct. 4.
Plugging means for crucibles or the like. D. C. Dickson. 1,880,242; Oct. 4.
Pneumatic separator. W. A. Duerr. 1,880,907; Oct. 4.
Polishing device for rolls. J. Williams. 1,880,622; Oct. 4.
Pool and billiard court. F. W. Johnson. 1,881,387; Oct. 4.
Port cooler. E. J. McDonnell. 1,881,057; Oct. 4.
Positioning mechanism for billets and the like, Automatic. F. P. Dahlstrom. 1,880,374; Oct. 4.
Potato cutter. W. O. Smith. 1,880,510; Oct. 4.
Potato sacker. D. E. Rath. 1,881,030; Oct. 4.
Pouring can. W. E. Guyer. 1,881,403; Oct. 4.
Power mechanism for operating buckets of centrifugal molding apparatus. A. R. McMullin. 1,881,323; Oct. 4.
Power transmission device. C. W. Weiss. 1,881,154; Oct. 4.
Press: *See*—
Printing press. Wire extrusion press.
Press. J. Derry. 1,880,873–4; Oct. 4.
Press. H. G. Sutton. 1,881,000; Oct. 4.
Presser foot mechanism. L. G. Bowman. 1,880,749; Oct. 4.
Pressure fluid operated implement. O. O. App. 1,880,337; Oct. 4.
Pressure operated switch. E. D. Bonham. 1,880,401; Oct. 4.
Priming mixture. J. E. Burns. 1,880,235; Oct. 4.
Printing and cap forming machine. C. Barbieri. 1,880,662; Oct. 4.
Printing machine. L. W. Moulton. 1,881,090; Oct. 4.
Printing mechanism for accounting machines. F. M. Carroll. 1,880,416; Oct. 4.
Printing press. E. J. Smith. 1,880,362–3; Oct. 4.
Printing press, Multicolor. A. F. Turck. 1,880,369; Oct. 4.
Prints, Flattening. R. S. Hopkins. 1,880,451; Oct. 4.
Processing apparatus for fixing photographic sheet material. K. C. D. Hickman, C. R. Sanford, and W. J. Weyerts. 1,880,450; Oct. 4.
Projectile for toy firearms. A. Nerlich. 1,880,330; Oct. 4.
Projector screen. A. C. Payne and D. F. Newman. 1,881,128; Oct. 4.
Propeller. E. P. Martin. 1,881,365; Oct. 4.
Propeller balancing mechanism. F. Charavay. 1,880,313; Oct. 4.
Propeller for helicopters. W. P. Van Lammeren. 1,880,302; Oct. 4.
Protective and controlling device for rolling window screens. C. Traut. 1,880,588; Oct. 4.
Protector, Hat. G. J. Collins. 1,880,819; Oct. 4.
Protector, Scalp. J. E. Dwyer. 1,880,913; Oct. 4.
Pulley, Adjustable. G. J. Meyer. 1,881,028; Oct. 4.
Pulp articles, Mechanism for and method of manufacturing. A. W. Morris. 1,880,458; Oct. 4.
Pulp, Preparing straw. P. Drewsen. 1,880,898; Oct. 4.
Pulverizing apparatus. W. A. Woodeson. 1,881,013; Oct. 4.
Pump. J. R. Sandage. 1,880,494; Oct. 4.
Pump, Dispensing. E. E. Eickmeyer and G. W. Eichhoff. Des. 87,874; Oct. 4.
Pump, Gasoline. C. J. Whitacre. 1,881,255; Oct. 4.
Pump mechanism. S. Wiltse. 1,881,012; Oct. 4.
Pump, Spinning. F. Sieper. 1,881,300; Oct. 4.
Pyridine and its homologues, Sulphonating. O. Wulff. 1,880,646; Oct. 4.
R-acid, Purification of. B. M. Helfaer. 1,880,442; Oct. 4.
Rack: *See*—
Display rack. Stamp rack.
Rack for bridge tables, Card. W. C. Ward. 1,881,004; Oct. 4.
Radial forces, Device for calculating. J. Lundgren. 1,881,204; Oct. 4.
Radiant and convection heat furnace. L. A. Mekler. 1,881,286; Oct. 4.
Radiator. J. W. Guimont. 1,880,248; Oct. 4.
Radiator. G. H. Phelps. 1,880,274; Oct. 4.
Radiator inclosure. F. C. Reynolds. 1,880,281; Oct. 4.
Radiator manufacture. E. S. Carey. 1,880,786; Oct. 4.
Radioreceiver control. B. Washington and W. Aull, jr. 1,881,392; Oct. 4.
Radio receiving system. H. D. Staley. 1,881,032; Oct. 4.
Radioreception. W. Aull, jr. 1,881,395; Oct. 4.
Radio system. B. Hughes. 1,880,320; Oct. 4.
Rail connection. N. A. Eddy. 1,880,423; Oct. 4.
Rail for industrial heating furnaces, Roller. H. H. Harris and G. U. M. Needham. 1,881,184; Oct. 4.
Rail joint bars in track, Repairing. G. Langford. 1,880,349; Oct. 4.
Rail, Reinforced. P. W. Dillon. 1,880,883; Oct. 4.
Railway draft rigging. J. F. O'Connor. 1,881,226; Oct. 4.
Rake. G. T. Tokunaga. 1,880,580; Oct. 4.
Razor blades, Making. J. Treiber. 1,881,334; Oct. 4.
Razor, Safety. W. I. Ohmer. 1,881,059; Oct. 4.
Razors, Attachment for safety. H. W. Dildine. 1,880,881; Oct. 4.
Reading machine. B. A. Fiske. 1,881,072; Oct. 4.
Receptacle, Double-walled vacuum. A. E. Payson and M. P. Wetmore. 1,880,358; Oct. 4.
Receptacle, Mothproof. L. K. Loftin. 1,880,325; Oct. 4.
Receptacle with tray. W. R. Moyes. 1,880,461; Oct. 4.
Reciprocating engine. W. H. Manning. 1,881,027; Oct. 4.
Recorder: *See*—
Photographic recorder.
Recorder. E. H. Bristol. 1,880,755; Oct. 4.
Recuperator for industrial furnaces. W. A. Morton. 1,881,388; Oct. 4.
Refractory article. F. J. Tone. 1,881,104; Oct. 4.
Refrigerating apparatus. E. S. H. Baars. 1,880,653; Oct. 4.
Refrigerating apparatus. C. Birdseye. 1,880,232; Oct. 4.
Refrigerating apparatus. H. J. Dick. 1,880,877; Oct. 4.
Refrigerating apparatus. D. B. Rutishauser. 1,880,359; Oct. 4.
Refrigerating apparatus. J. C. Smith. 1,880,509; Oct. 4.
Refrigerating casing. J. K. Olsen. Des. 87,882–3; Oct. 4.
Refrigerating mechanism. F. R. West. 1,881,006; Oct. 4.
Refrigerating system. C. A. Masterman. 1,881,208; Oct. 4.
Refrigerating system. G. Muffly. 1,880,969; Oct. 4.
Refrigeration, Ship. P. W. Hiller. 1,881,079; Oct. 4.
Refrigerator. C. E. Bonine. 1,880,735; Oct. 4.
Regulator: *See*—
Automatic regulator. Compressor regulator.
Remote control. S. Bertomeu. 1,880,693; Oct. 4.
Remote control apparatus. W. Aull, jr. 1,881,394; Oct. 4.
Remote control apparatus. C. A. DeGiers. 1,881,266; Oct. 4.
Remote control for radioreceivers. B. Washington and W. Aull, jr. 1,881,391; Oct. 4.
Resinous substances from wood, Apparatus for the extraction of. W. F. Wolf. 1,880,634; Oct. 4.
Resins, Lacquering and impregnating with artificial. E. Elbel and F. Seebach. 1,880,930; Oct. 4.
Resistor. G. B. Crouse. 1,880,239; Oct. 4.
Retort. J. H. Vickers. 1,881,153; Oct. 4.
Reversing mechanism. J. C. Wattleworth. 1,880,554; Oct. 4.
Rim. W. S. Brink. 1,880,403; Oct. 4.
Rim construction. E. A. Nelson. 1,880,974; Oct. 4.
Ring splitting machine. F. Deutsch. 1,880,875; Oct. 4.
Rocket, Flying. R. Tiling. 1,880,586; Oct. 4.
Rockets, especially for aeronautic purposes, Producing. R. Tiling. 1,880,579; Oct. 4.
Rod: *See*—
Fishing rod.
Roll for addressing machines, Electrotype printing. H. P. Elliott. 1,880,932; Oct. 4.
Roller: *See*—
Conveyer roller. Inking roller.
Rolling mill. R. D. Nye. 1,880,468; Oct. 4.
Rolling stock. A. J. Chapin and G. W. Shaver. 1,881,045; Oct. 4.
Roof coverings, Preparing. F. H. Ford. 1,880,429; Oct. 4.
Rose. W. D. and J. D. Brownell. Pl. Pt. 28; Oct. 4.
Rotary engine. H. M. Wilsey. 1,880,224; Oct. 4.
Rubber and products obtained thereby, Vulcanizing. O. Behrend. 1,881,166; Oct. 4.
Rubber article and its production, Inflatable hollow. I. Dorogi, and L. Dorogi. 1,881,048; Oct. 4.
Rubber articles, Manufacturing. G. W. Trobridge. 1,881,253; Oct. 4.
Rubber fiber products, Reclaiming vulcanized. A. W. Bull. 1,880,372; Oct. 4.
Saddle, Cycle. W. Schmidt. 1,881,136; Oct. 4.
Safety device for aeroplanes. P. Smith, and F. H. Mann. 1,881,034; Oct. 4.
Safety device for hydraulic mechanisms. F. C. Wilson. 1,880,627; Oct. 4.
Safety fuse block. G. E. Wadsworth. 1,880,543; Oct. 4.
Salvage unit. L. Francis. 1,881,123; Oct. 4.
Sand papering machine. F. F. Aurori and C. G. G. Schmidt. 1,881,162; Oct. 4.

Sand trap for protection of shores, beaches, etc. D. J. Curney. 1,880,838; Oct. 4.
Sanding machine. P. Rounsevelle. 1,881,031; Oct. 4.
Saw, Portable electric hand. R. Porcello. 1,881,295; Oct. 4.
Sawing machine. I. F. Dittmar. 1,880,885; Oct. 4.
Scaffold. A. T. Burt. 1,880,767; Oct. 4.
Scale. C. B. Haskins. 1,880,436; Oct. 4.
Scale. G. R. Wood. 1,880,639; Oct. 4.
Scale, Coin operated. H. O. Hem. 1,880,444; Oct. 4.
Scale, Computing. F. M. Carroll. 1,880,415; Oct. 4.
Scale, Computing. F. M. Carroll. 1,880,417; Oct. 4.
Scale, Counting. H. O. Hem. 1,880,443; Oct. 4.
Scale for charging machines. O. Tweit. 1,880,597; Oct. 4.
Scale lock. C. B. Haskins. 1,880,437; Oct. 4.
Scale, Stress determining. M. Berman. 1,880,683; Oct. 4
Scale structure, Weighing. P. Okey. 1,881,060; Oct. 4.
Scale, Variable ratio .compounding. E. G. Thomas. 1,880,574; Oct. 4.
Scale, Weighing. J. H. Beard. 1,880,397; Oct. 4.
Scale, Weighing. H. D. Bennett. 1,880,398; Oct. 4.
Scale, Weighing. C. B. Haskins. 1,880,435; Oct. 4.
Scale, Weighing. H. W. Hem. 1,880,445; Oct. 4.
Scale, Weighing. O. C. Reeves. 1,880,485; Oct. 4.
Scale, Weighing. E. G. Thomas. 1,880,575; Oct. 4.
Scale, Weighing. M. A. Weckerly. 1,880,562–3; Oct. 4.
Scale, Weighing. C. J. Zinke. 1,880,651; Oct. 4.
Scanning screen. H. E. Sorg. 1,880,991; Oct. 4.
Scanning system. A. O. Tate. 1,880,294; Oct. 4.
Scavenging mechanism for two-cycle engines. G. Bauer. 1,880,674; Oct. 4.
Screed for use in laying concrete and the like. D. H. Bitney. 1,880,706; Oct. 4.
Screen: *See*—
Picture screen. Window screen.
Projector screen.
Screen and furniture holder, Combined fire. B. Steiner. 1,881,333; Oct. 4.
Screen fly trap. C. J. Smith. 1,880,988; Oct. 4.
Screw feeding device. A. L. Currier. 1,880,840; Oct. 4.
Seal. F. Keidel. 1,881,061; Oct. 4.
Seal for shaft bearings. A. C. Durdin, jr. 1,880,911; Oct. 4.
Sealing compound for cans and other containers. A. H. Smith and C. L. Shreiner. 1,881,142; Oct. 4.
Sealing device. A. Goodheim and E. Wagner. 1,881,271; Oct. 4.
Sealing strip construction. C. G. Johnson. 1,880,254; Oct. 4.
Seam pressing machine. W. P. Osgood. 1,881,414; Oct. 4.
Seat back construction. W. S. Saunders and R. Martindell. 1,880,497; Oct. 4.
Seat for small rooms, Foldable. P. Thibodeau. 1,880,532; Oct. 4.
Separator: *See*—
Mold separator. Pneumatic separator.
Ore separator. Steam separator.
Setting device for calculating machines and the like. G. Tauschek. 1,880,523; Oct. 4.
Sewing machine. E. E. Boyce. 1,880,102; Oct. 4.
Shade, Lamp. E. Schwarz. Des. 87,891; Oct. 4.
Shank beating and stitch rubbing machine. B. W. Freeman. 1,881,181; Oct. 4.
Sheave block. W. M. Venable. 1,880,608; Oct. 4.
Sheet material and making same. G. H. Willis. 1,881,337; Oct. 4.
Sheets or films of composition containing cellulose esters or ethers, Manufacture of. A. R. Wickham. 1,881,108; Oct. 4.
Shell for concrete piles. E. D. Watt. 1,881,254; Oct. 4.
Shipping and display box, Combination. R. V. Dixn. 1,880,888; Oct. 4.
Shipping bracket. H. B. Barnett. 1,880,395; Oct. 4.
Shock absorber. A. B. Casper. 1,880,797; Oct. 4.
Shock vibration absorbing and damping device. H. J. Weydert. 1,881,155; Oct. 4.
Shocker, Grain. W. F. Thorne. 1,880,221; Oct. 4.
Shoe shining machine. J. T. Uden. 1,881,036; Oct. 4.
Shoe uppers, Lacing. H. E. Enslin. 1,881,178; Oct. 4.
Shovel: *See*—
Snow shovel.
Shuttle. E. Bloom. 1,881,167; Oct. 4.
Shuttle. H. A. Davol. 1,880,862; Oct. 4.
Side tapping machine. C. Christiansen. 1,880,804; Oct. 4.
Sign. F. D. Courtenay. 1,880,828; Oct. 4.
Sign. D. Gilbert. 1,881,371; Oct. 4.
Signal device. A. Damico. 1,880,840; Oct. 4.
Signal light, Traffic. J. Keller. 1,881,407; Oct. 4.
Signal reproducer. H. E. Metcalf. 1,881,324; Oct. 4.
Signal transmission system. S. Doba, jr. 1,880,889; Oct. 4.
Signaling system. I. R. Weir and L. W. Richardson. 1,880,568; Oct. 4.
Signaling system, Electrical. H. R. Hayden. 1,881,357; Oct. 4.
Skate walker, Ice. P. G. Cole. 1,880,340; Oct. 4.
Slicing machine. M. C. Hjelte. 1,881,189; Oct. 4.
Smoke cleaning device. J. Mitchell. 1,881,058; Oct. 4.
Smoke indicator. H. A. Horner. 1,881,190; Oct. 4.
Smoker's stand. W. von Nessen. Des. 87,895; Oct. 4.
Snow scraping machine. J. Remington. 1,880,984; Oct. 4.
Snow shovel. H. G. Langer. 1,880,200; Oct. 4.
Soap, Apparatus for treating. J. A. Schwantes. 1,880,500; Oct. 4.
Socket and adjustable support therefor, Lamp. W. H. Fabrey. 1,880,952; Oct. 4.
Socket wrench. E. M. Pfauser. 1,881,029; Oct. 4.
Sodium perchlorate, Electrolytic production of. U. Ehrnardt. 1,880,927; Oct. 4.
Soldering iron. L. W. Young. 1,880,649; Oct. 4.
Sole for turned shoes. C. E. Adams. 1,881,339; Oct. 4.
Solvent for mixed cellulose esters. C. S. Webber and C. J. Staud. 1,880,557; Oct. 4.
Sorting machine for record cards. E. A. Ford. 1,880,428; Oct. 4.
Sound record band with a plurality of records. O. Czeija and H. Thirring. 1,880,240; Oct. 4.
Sound recording system. J. R. Balsley. 1,881,040; Oct. 4.
Sound reproducing device. M. H. Page. 1,880,980; Oct. 4.
Sound studio. S. S. Sugar. 1,881,146; Oct. 4.
South American maté, Improving. E. Orno-Ornfeldt and M. Loew. 1,881,227; Oct. 4.
Spectacles. J. Rheinberg. 1,881,132; Oct. 4.
Speed indicator. F. C. Sandstrom. 1,880,495; Oct. 4.
Speed responsive mechanism and vehicle signaling. J. M. Cole. 1,880,815; Oct. 4.
Spike attachment for shoes. J. L. Kerr. 1,881,319; Oct. 4.
Spinning machine, Ring type. A. Nau-Touron. 1,881,252; Oct. 4.
Splint, Clavicle. J. J. Ettinger. 1,880,946; Oct. 4.
Splint, Surgical. J. J. Ettinger. 1,880,945; Oct. 4.
Spool. E. F. Hathaway and W. Bixby. 1,880,439; Oct. 4.
Spool for electrical devices. H. R. Clarke. 1,880,809; Oct. 4.
Spool, Tube frame. W. Bixby. 1,880,400; Oct. 4.
Spoon or similar article. G. N. Allen and E. H. Kreps. Des. 87,864; Oct. 4.
Spout, Pouring. C. H. Pape. 1,881,228; Oct. 4.
Spraying apparatus, Portable. P. F. J. Rapp. 1,880,331; Oct. 4.
Spraying device for powdered material. I. J. Dugas. 1,880,244; Oct. 4.
Spring: *See*—
Cambered spring.
Spring. R. W. Davis. 1,880,861; Oct. 4.
Spring device. R. Jackson. 1,881,277; Oct. 4.
Spring suspension and bolster ensemble. R. Tevault. 1,880,530; Oct. 4.
Springs, Adjusting vehicle. W. C. Dunn. 1,880,343; Oct. 4.
Stacking mechanism for printing machines. F. M. Carroll. 1,880,418; Oct. 4.
Stamp rack. R. Evans. 1,880,947; Oct. 4.
Stand: *See*—
Display stand. Hammock stand.
Stand and card, Display. T. O'Rourke. 1,881,372; Oct. 4.
Stand and telephone directory secretary, Combined telephone. J. G. Hunter. Des. 87,879; Oct. 4.
Standpipe, Valve controlled. J. T. Corley. 1,880,826; Oct. 4.
Starter drive, Motor. G. H. Howard. 1,881,053; Oct. 4.
Starter, Engine. H. Burton. 1,880,769; Oct. 4.
Starting means for internal combustion engines, Automatic. H. A. Davis. 1,880,859; Oct. 4.
Steam separator. L. P. Michael. 1,881,215; Oct. 4.
Step, Rumble seat. E. S. Anderson. 1,881,113; Oct. 4.
Stitching machine. H. R. Bliss and H. G. Allen. 1,880,726; Oct. 4.
Stock fitting, Method of and device for. M. F. Brogan. 1,880,750; Oct. 4.
Stone of concrete for wood shavings, Grinding. F. Rühlemann. 1,880,492; Oct. 4.
Stop and locking means, Combined door. J. A. Brossart, B. F. Orr, and W. H. Spence. 1,880,757; Oct. 4.
Stop for car doors. E. J. Fehr. 1,881,401; Oct. 4.
Storage battery. I. L. Lindley. 1,880,323; Oct. 4.
Stove, Cook. G. E. Pickup. Des. 87,884–5; Oct. 4.
Strainer. A. J. Evers and H. J. Sauvage. 1,881,270; Oct. 4.
Strip finishing machine. I. F. Dittmar. 1,880,887; Oct. 4.
Structural unit. D. H. Bitney. 1,880,707–8; Oct. 4.
Submarine rescue apparatus. W. A. Sussman. 1,880,999; Oct. 4.
Suction box oscillating means. J. W. Vedder. 1,881,105; Oct. 4.
Suction cleaner. J. B. Dyer. 1,880,915; Oct. 4.
Suction roll, Press felt. E. E. Berry. 1,880,687; Oct. 4.
Sulphur dioxide, Reduction of. M. C. Boswell. 1,880,741; Oct. 4.
Superheater boiler. D. S. Jacobus. 1,880,253; Oct. 4.
Superheterodyne receiver. W. A. MacDonald. 1,881,235; Oct. 4.
Support for exhaust devices, Portable. J. Sunnen. 1,880,293; Oct. 4.
Support for gyro compasses. E. C. Sparling. 1,880,992; Oct. 4.
Support for insulator. E. Burke. 1,880,766; Oct. 4.
Support, Reenforce. D. H. Bitney. 1,880,710; Oct. 4.
Support, Resilient. J. R. Replogle. 1,880,280; Oct. 4.
Supporter, Athletic. J. J. Cartledge. 1,880,795; Oct. 4.
Supporting and operating means for doors. G. B. Ayers. 1,881,014; Oct. 4.
Supporting and operating means for doors. G. B. Ayers. 1,881,015; Oct. 4.
Supports for washing machines, Portable. D. L. Ulmer. 1,881,335; Oct. 4.

Suspenders. T. Cahn. 1,880,779; Oct. 4.
Switch: *See*—
Automatic switch. Electrical switch.
Cam-actuated Mercury switch.
double-throw switch. Pressure operated switch.
Disconnecting switch. Throttle ignition switch.
Switch and operating mechanism therefor, Mercury. P. K. Cramblet. 1,880,831; Oct. 4.
Switchboard jack. P. S. Copenhaver, E. A. Demonet, and W. F. Callahan. 1,880,824; Oct. 4.
Switching mechanism. C. F. A. Eddy. 1,880,921; Oct. 4.
Synthesizing and transmuting antiricketic substances and the like. A. J. Pacini. 1,880,978; Oct. 4.
Table. H. P. Balliet. 1,881,306; Oct. 4.
Table and support therefor, Tourist. G. H. Willetts. 1,880,621; Oct. 4.
Take-up device for shuttles, Lateral. I. Snow. 1,881,066; Oct. 4.
Tank closure. A. R. Fergusson. 1,880,424; Oct. 4.
Tape moistener. R. I. Meader. 1,880,266; Oct. 4.
Tape, Picture. M. Bitner. 1,880,705; Oct. 4.
Target trap, Automatic. W. J. Sutcliffe. 1,880,292; Oct. 4.
Telegraph system, Printing. H. B. Boose. 1,880,311; Oct. 4.
Telephone system. L. B. Haigh and H. E. A. Borzer. 1,881,273; Oct. 4.
Telephone system, Multi-office. A. J. Ray. 1,881,297; Oct. 4.
Temperature, Controlling interior. J. A. Serrell. 1,881,099; Oct. 4.
Temperatures, Producing high. R. G. Wulff. 1,880,306; Oct. 4.
Tension device. H. D. Clinton. 1,880,810; Oct. 4.
Tension device. W. C. McBain. 1,881,056; Oct. 4.
Testing coating materials, Method of and apparatus for. W. H. Eastlake. 1,880,917; Oct. 4.
Textile fabric. A. Rosenstein. Des. 87,888–9; Oct. 4.
Thermoelectric switch. R. De Franceschi. 1,880,867; Oct. 4.
Throttle ignition switch. R. H. Tobener, jr. 1,881,251; Oct. 4.
Tigering machine. C. G. Richardson. 1,880,486; Oct. 4.
Tile, Forming roofing. D. M. Denton. 1,880,872; Oct. 4.
Tilting furnace. C. C. Burt and I. L. Anderson. 1,880,768; Oct. 4.
Time delay apparatus. H. P. Thomas. 1,880,576; Oct. 4.
Tire. G. Campu. 1,881,309; Oct. 4.
Tire building apparatus. H. D. Stevens. 1,880,519; Oct. 4.
Tire carrier. H. C. Nichols, P. E. Nichols, and F. T. Nichols. 1,881,222–3; Oct. 4.
Tire construction, Pneumatic. E. A. Roberts. 1,880,489; Oct. 4.
Tire mold. A. R. Furnas. 1,880,430; Oct. 4.
Tire, Pneumatic. J. E. Lorentz. 1,881,026; Oct. 4.
Tire remover. A. B. Mullin. 1,880,463; Oct. 4.
Tire tube tester. D. H. Miller. 1,880,328–9; Oct. 4.
Tires for vehicles, Flexible. M. Pereda. 1,881,290; Oct. 4.
Toaster, Sandwich. J. A. Wagner. Des. 87,896; Oct. 4.
Tool. D. Enninga. 1,880,940; Oct. 4.
Tool, Broaching. P. A. Williams. 1,880,623; Oct. 4.
Tool, Commutator truing. G. M. Lintelmann. 1,881,410; Oct. 4.
Tool, Cutting. J. J. Eyre. 1,880,951; Oct. 4.
Tool, Fender. C. F. Greiner. 1,880,246; Oct. 4.
Tool, Flush valve repairing. J. B. White and M. T. Gossett. 1,880,615; Oct. 4.
Tool for forcing and drawing an element through conduits. J. W. Goodall. 1,880,431; Oct. 4.
Tool, Grinding. L. M. Butler. 1,881,042; Oct. 4.
Tool head, Cutting. C. M. Bosworth. 1,880,742; Oct. 4.
Tool head, Cutting. H. A. Dickinson. 1,880,878; Oct. 4.
Tool, Hook forming. H. Vanderploeg. 1,880,606; Oct. 4.
Tool, Mining. P. W. Hurley. 1,880,252; Oct. 4.
Tool, Percussive. L. C. Bayles. 1,881,258; Oct. 4.
Tool, Spring spreading. I. O. Grant. 1,881,050; Oct. 4.
Tool, Threading. J. Lamond. 1,881,281; Oct. 4.
Torch, Fuel oil. A. Manning. 1,880,968; Oct. 4.
Torsion meter. L. G. P. Thring. 1,881,301; Oct. 4.
Total taking device. C. Campbell. Re18,611; Oct. 4.
Towel bundling machine. J. H. Addler. 1,880,227; Oct. 4.
Toy airplane. T. F. Scott. 1,880,501; Oct. 4.
Toy cabinet. J. Lotto. Des. 87,881; Oct. 4.
Toy musical instrument. R. W. Savidge. 1,881,299; Oct. 4.
Toy windmill. A. D. Vandergon. 1,880,604; Oct. 4.
Track for vehicles, Continuous. E. H. W. Foot. 1,881,179; Oct. 4.
Track winch. W. Pielhau. 1,880,473; Oct. 4.
Tractor wheel. E. Schmidt. 1,881,135; Oct. 4.
Traffic signal system. C. F. Whitney. 1,880,618; Oct. 4.
Train control device. T. H. Thomas and J. N. Good. 1,881,148; Oct. 4.
Transferring load in making bridges and the like. C. G. Sunderland. 1,880,290; Oct. 4.
Transformer. E. T. Burton. 1,880,412; Oct. 4.
Transformer actuated control system, Constant current. I. E. McCabe. 1,881,321; Oct. 4.
Translating device for accounting machines. J. W. Bryce. 1,880,409; Oct. 4.
Transmission and torque-amplifying system, Synchronous. B. A. Wittkuhns. 1,881,011; Oct. 4.
Transmission, Variable speed power. F. Ljungstrom. 1,881,234; Oct. 4.
Transmitter for fluid pressure and electric current. W. F. Cahoon. 1,880,780; Oct. 4.
Trap: *See*—
Mouse and rat trap. Target trap.
Screen fly trap.
Trap. A. M. McCrea. 1,880,326; Oct. 4.
Tray and cigar rest, Ash. A. Brandt. 1,880,752; Oct. 4.
Tray, Card. G. H. Dawson. 1,880,863; Oct. 4.
Tray drier, Descending. O. W. Randolph. 1,881,062; Oct. 4.
Tray drier, Multiple. O. W. Randolph. 1,881,063; Oct. 4.
Tropochromic coating. K. C. D. Hickman and L. A. Staib, jr. 1,880,449; Oct. 4.
Trough handling device, Hog feeding. H. O. Jenkins. 1,881,194; Oct. 4.
Trowel or similar article, Emblematic. K. Hatch. Des. 87,877; Oct. 4.
Truck attachment for pipe wrapping machines. K. H. Burton and H. Kramer. 1,880,771; Oct. 4.
Truck, Rail handling. S. F. Hettig. 1,881,313; Oct. 4.
Tube: *See*—
Collapsible tube. Duodenal or stomachal tube.
Tube frame. E. F. Hathaway and W. Bixby. 1,880,488; Oct. 4.
Tubes, Manufacture of. F. R. Bonte. 1,881,060; Oct. 4.
Tuning fork, Compensated. B. E. Eisenhour. 1,880,923; Oct. 4.
Tuning system, High frequency. H. F. Elliott. 1,880,933; Oct. 4.
Tunnel liner. H. M. Schaab. 1,881,098; Oct. 4.
Turntable center. M. G. Hilpert. 1,880,201; Oct. 4.
2.2'-diamono-diphenyl-4.4'-disulphonic acid, Preparing. E. Tschunkur and E. Kracht. 1,880,594; Oct. 4.
Type indexing means. F. H. Trego. 1,880,592; Oct. 4.
Typewriting machine. W. A. Dobson. 1,880,891; Oct. 4.
Ultra-violet sensitive layer. S. E. Sheppard and H. J. Dietz. 1,880,503; Oct. 4.
Ultra-violet sensitive photographic element. R. E. Burroughs. 1,880,411; Oct. 4.
Under reamer for well drilling apparatus. R. P. Simmons. 1,880,216; Oct. 4.
Universal joint. J. A. Baker. 1,880,657; Oct. 4.
Universal joint. F. W. Peters. 1,881,326; Oct. 4.
Vacuum cleaner. M. Marshall. 1,881,086; Oct. 4.
Vacuum cleaning apparatus. R. M. Baker. 1,880,658; Oct. 4.
Vacuum tube telegraph repeater. H. M. Case. 1,880,796; Oct. 4.
Valve. H. E. Evans and C. D. Allen. 1,881,269; Oct. 4.
Valve. F. C. F. Evennett. 1,880,948; Oct. 4.
Valve. F. R. Tomlinson. 1,880,581; Oct. 4.
Valve, Automatic producing. B. H. Ayers. 1,881,163; Oct. 4.
Valve, Bleeder. J. P. Grilli. 1,881,272; Oct. 4.
Valve device, Hold back. J. C. McCune. 1,881,210; Oct. 4.
Valve for internal combustion engines. G. Beck. 1,881,259; Oct. 4.
Valve grinding means. H. I. Dyer. 1,880,377; Oct. 4.
Valve, Oil. S. H. Childs. 1,880,801; Oct. 4.
Valve, Safety. R. H. Bowman. 1,880,402; Oct. 4.
Valve structure and control mechanism therefor. W. C. McKesson. 1,881,367; Oct. 4.
Valve unit, Thermostatic. W. K. Simpson. 1,881,246; Oct. 4.
Valves or gates, System for controlling. H. Rappold. 1,880,278; Oct. 4.
Valves, Making. R. E. Bissell. 1,880,704; Oct. 4.
Vapor, Method of and apparatus for measuring. O. H. Blackwood and P. G. Exline. 1,880,720; Oct. 4.
Vehicle. C. L. Falk. 1,881,070; Oct. 4.
Vehicle and trailer, Refrigerator. W. Fourness and E. G. Burgbard. 1,880,245; Oct. 4.
Vehicle, Automotive. G. H. Curtiss. 1,880,842; Oct. 4.
Vehicle body. J. B. McMullen. 1,880,208; Oct. 4.
Vehicle body construction, Pressed metal. G. Trautvetter. 1,880,591; Oct. 4.
Vehicle body structure, Road. G. H. Curtiss. 1,880,844; Oct. 4.
Vehicle brake. E. J. W. Ragsdale. 1,880,477; Oct. 4.
Vehicle brake. F. E. Winchester and E. B. Thomas. 1,881,009; Oct. 4.
Vehicle, Dumping land. C. F. Higgins. 1,881,022; Oct. 4.
Vehicle, Motor. W. B. Fageol. Des. 87,875; Oct. 4.
Vehicle, Motor. L. M. Woolson. 1,880,642; Oct. 4.
Vehicle turntable. G. A. Smith. 1,881,033; Oct. 4.
Vehicle wheel. W. D. Sargent. 1,881,097; Oct. 4.
Vehicle wheel. A. W. Woodward. 1,880,641; Oct. 4.
Vehicles and the like, Attachment for. L. C. Smith. 1,881,143; Oct. 4.
Vending and amusement device, Combined. H. E. Warmoth. 1,880,553; Oct. 4.
Ventilator. L. Cochard. 1,880,812; Oct. 4.
Ventilator. G. H. Koons. 1,881,363; Oct. 4.
Vessel construction. J. E. Howard. 1,881,191; Oct. 4.
Vessel for operations with ammonia carried out at elevated temperatures. A. Curs. 1,880,841; Oct. 4.
Vinegar, Manufacture of. H. Frings. 1,880,381; Oct. 4.

Vinyl derivatives, Polymerizing. W. E. Lawson and L. T. Sandborn. 1,881,282; Oct. 4.
Visor. J. R. Thorp. 1,880,582; Oct. 4.
Vulcanizer, Repair. R. W. Brown. 1,880,407; Oct. 4.
Vulcanizing apparatus. R. F. Ternes. 1,881,001; Oct. 4.
Wage signalling system. W. A. MacDonald. 1,881,284; Oct. 4.
Wagon, Self-discharging. W. Ludowici. 1,881,203; Oct. 4.
Wallboard and joint made therewith. T. B. Munroe. 1,881,420; Oct. 4.
Wall construction. M. L. Webster. 1,880,561; Oct. 4.
Wall construction, Tiled. H. Rithner. 1,880,282; Oct. 4.
Wall support for excavations. B. Dancer. 1,880,316; Oct. 4.
Washing and sanding machine. W. T. Peek and L. P. Eubanks. 1,881,129; Oct. 4.
Washing machine and dust collector, Combination. P. E. Barker. 1,880,665; Oct. 4.
Water closet. J. M. Teahen and W. Taylor. 1,880,298; Oct. 4.
Water gauge. J. J. Daly. 1,880,847; Oct. 4.
Water heater, Electric. P. A. Johnson. 1,880,255; Oct. 4.
Water tube boiler. I. L. Langvand and H. J. Kerr. 1,880,350; Oct. 4.
Wear preventer, Two-piece. D. R. Radford and C. Lamb. 1,881,131; Oct. 4.
Webbing. F. J. Zimmerer, jr. Des. 87,887; Oct. 4.
Weighing machine. H. W. Hem. 1,880,446; Oct. 4.
Weighing machine, Automatic. J. B. Van Deren. 1,881,152; Oct. 4.
Weight printing attachment for scales. H. Cook. 1,880,314; Oct. 4.
Welding machine. E. J. Von Henke. 1,880,535; Oct. 4.
Well drilling apparatus. R. P. Simmons. 1,880,214; Oct. 4.
Well drilling apparatus, Motor driven. R. P. Simmonds. 1,880,217; Oct. 4.
Well pumping apparatus. F. Jackson. 1,880,321; Oct. 4.
Well reamer. J. B. Triplett and W. H. Maxwell. 1,881,035; Oct. 4.
Wheel: *See*—
Automobile wheel. Vehicle wheel.
Tractor wheel.
Wheel attachment for front wheel drive mechanisms. J. F. Livingood. 1,881,201; Oct. 4.
Wheel drive mechanism for motor vehicles, Front. J. F. Livingood. 1,881,202; Oct. 4.
Winding apparatus. R. E. McFarland. 1,881,019; Oct. 4.
Winding device. F. Williams. 1,881,305; Oct. 4.
Winding machine. E. L. Griffith. 1,881,183; Oct. 4.
Winding machine. G. W. Kierspe. 1,881,377; Oct. 4.
Window lock, Casement. C. W. Brewer. 1,880,312; Oct. 4.
Window screen. F. Vuchetich. 1,881,037; Oct. 4.
Wiper, Windshield. O. P. Greenstreet. 1,881,182; Oct. 4.
Wire coupling, Electric train. C. C. Farmer. 1,880,957; Oct. 4.
Wire extrusion press, Solder. C. C. Jacobson and J. Schweder. 1,881,278; Oct. 4.
Wire fabric. C. E. Pink. 1,880,474–5; Oct. 4.
Wireless system. W. Scheppmann. 1,880,285; Oct. 4.
Woodworking machine. O. G. Edmond. 1,881,400; Oct. 4.
Work feed mechanism. C. Christiansen. 1,880,803; Oct. 4.
Work rest for material reducing machines. F. Thoma. 1,881,147; Oct. 4.
Worktable for grinding machines. J. Bath. 1,880,673; Oct. 4.
Wound package. A. Wylie. 1,881,383; Oct. 4.
Wrapping and sealing apparatus. G. J. Egenolf. 1,880,926; Oct. 4.
Wrench: *See*—
Socket wrench.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 4, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

1— 11: 1,880,726
48: 1,880,327
40: 1,880,569
2— 187: 1,880,819
228: 1,880,570
4— 13: 1,880,296
1,880,298
109: 1,880,962
177: 1,881,405
229: 1,880,912
5— .91: 1,880,860
130: 1,880,909
164: 1,880,890
332: 1,881,095
7— 1: 1,881,029
8— 6: 1,880,522
20: 1,881,348
10— 26: 1,880,628
90: 1,881,111
92: 1,880,391
95: 1,880,878
100: 1,880,742
141: 1,881,281
12— 4: 1,880,212
17: 1,881,181
27: 1,880,756
51: 1,881,414
97: 1,880,737
13— 6: 1,880,540
1,880,541
19: 1,881,119
14— 19: 1,880,290
15— 10: 1,880,915
21: 1,880,887
29: 1,881,129
30: 1,881,036
93: 1,881,354
120: 1,880,777
171: 1,880,886
236: 1,880,922
255: 1,881,182
267: 1,880,257
16— 24: 1,881,402
78: 1,880,870
1,881,114
86: 1,880,190
1,881,401
138: 1,881,078
18— 2: 1,880,462
1,880,463
1,881,001
15: 1,880,605
16: 1,880,873
17: 1,880,874
1,881,232
18: 1,880,407
19: 1,880,858
35: 1,881,248
41: 1,880,376
1,881,005
1,881,021
44: 1,880,430
50: 1,880,968
1,880,975
1,881,142
52: 1,880,372
53: 1,880,527
1,880,528
1,880,529
1,881,166
56: 1,880,920
57: 1,880,647
1,881,108
58: 1,881,253
59: 1,881,038
19— 37: 1,880,934
69: 1,880,382
99: 1,880,670
20— 2: 1,881,356
12: 1,880,254
22— 92: 1,880,380
93: 1,881,055
121: 1,881,089
139: 1,881,088
203: 1,880,786
23— 1: 1,880,841

23— 1: 1,880,925
21: 1,881,303
91: 1,880,505
126: 1,880,265
196: 1,880,631
201: 1,880,315
226: 1,880,741
234: 1,880,678
242: 1,880,538
255: 1,880,941
263: 1,880,816
24— 77: 1,880,317
87: 1,881,039
1,881,124
115: R. 18,613
126: 1,880,193
1,880,356
155: 1,880,219
205: R. 18,612
208: 1,880,845
25— 1: 1,880,872
9: 1,880,500
27: 1,881,061
30: 1,880,360
1,881,322
1,881,322
66: 1,881,397
154: 1,880,811
26— 7: 1,880,487
1,880,488
29: 1,880,486
48: 1,880,668
62: 1,880,776
29— 27: 1,880,543
37: 1,880,681
70: 1,880,875
84: 1,880,615
87.1: 1,881,050
156.7: 1,880,704
169: 1,880,349
30— 12: 1,880,881
1,881,059
32— 10: 1,880,617
19: 1,881,196
33— 32: 1,881,220
85: 1,880,261
95: 1,880,683
199: 1,880,405
204: 1,880,994
225: 1,881,207
34— 11: 1,881,062
12: 1,881,063
18: 1,880,624
35: 1,880,273
35— 3: 1,880,476
10: 1,881,140
12: 1,881,242
36— 18: 1,881,339
45: 1,880,389
62: 1,881,319
71: 1,880,651
37— 42: 1,880,984
53: 1,880,260
85: 1,880,807
145: 1,881,358
40— 33: 1,880,607
36: 1,880,210
39: 1,880,335
63: 1,881,381
64: 1,881,372
125: 1,880,792
1,881,279
132: 1,880,202
140: 1,880,555
146: 1,881,371
148: 1,880,828
152: 1,881,046
41— 24: 1,880,652
42— 56: 1,880,354
43— 18: 1,880,348
48: 1,881,285
74: 1,880,640
119: 1,880,988
148: 1,880,781
44— 7: 1,880,211
45— 11: 1,881,047
26: 1,880,386

45— 51: 1,880,621
86: 1,880,602
106: 1,881,333
46— 40: 1,880,553
1,880,604
50: 1,880,501
47— 1: Pl. Pt. 28
Pl. Pt. 29
Pl. Pt. 30
38: 1,880,364
176: 1,880,914
49— 5: 1,880,916
47: 1,880,268
1,880,536
79: 1,881,327
51— 50: 1,880,736
53: 1,881,244
103: 1,880,377
106: 1,880,910
135: 1,881,031
145: 1,880,729
1,881,162
205: 1,880,632
206: 1,880,492
215: 1,880,848
241: 1,881,042
244: 1,881,410
278: 1,880,347
1,881,382
52— 3: 1,880,235
11: 1,881,307
53— 5: 1,880,205
6: 1,880,865
7: 1,880,603
55— 9: 1,881,145
33: 1,880,577
108: 1,880,324
114: 1,880,580
148: 1,881,112
56— 27: 1,880,262
37: 1,880,762
181: 1,881,411
326.3: 1,880,943
340: 1,881,134
408: 1,880,221
58— 53: 1,880,790
57: 1,881,389
60— 41: 1,880,747
54: 1,881,082
1,881,083
61— 3: 1,880,838
40: 1,880,316
45: 1,881,098
56: 1,881,254
73: 1,880,233
62— 3: 1,880,653
5: 1,880,509
1,881,208
14: 1,881,079
89.6: 1,880,359
91.5: 1,880,735
95: 1,880,682
1,880,969
1,881,374
99: 1,880,877
104: 1,880,232
116: 1,881,006
117: 1,880,245
122: 1,881,116
63— 15: 1,881,291
64— 8: 1,881,028
102: 1,881,326
65— 46: 1,880,965
53: 1,881,416
66— 9: 1,880,304
14: 1,881,360
50: 1,880,267
129: 1,881,373
190: 1,880,303
67— 7.1: 1,880,744
68— 9: 1,881,000
1,881,174
11: 1,881,293
27: 1,881,144
70— 29: 1,880,929
52: 1,880,850
90: 1,881,346

70— 91: 1,880,834
71— 7: 1,880,469
1,880,470
1,880,491
1,880,544
1,881,195
72— 7: 1,880,335
19: 1,880,282
31: 1,881,420
53: 1,880,599
101: 1,880,561
1,880,709
115: 1,880,453
118: 1,880,708
122: 1,880,706
1,880,707
73— 1: 1,880,256
51: 1,880,313
1,880,328
1,880,329
1,880,425
1,880,720
1,881,204
1,881,332
54: 1,880,236
1,880,847
82: 1,881,264
1,881,265
98: 1,880,195
1,880,223
167: 1,880,206
1,881,213
1,881,280
74— 7: 1,880,483
1,880,769
1,881,053
14: 1,881,154
1,881,234
32: 1,881,179
34: 1,880,554
56: 1,880,305
57: 1,880,228
59: 1,880,986
71: 1,880,904
1,880,905
79: 1,880,659
81: 1,880,583
88: 1,880,669
99: 1,880,655
108: 1,881,214
1,881,237
100: 1,881,271
75— 1: 1,880,200
1,880,467
1,880,614
1,881,257
1,881,315
76— 5: 1,881,274
104: 1,881,334
77— 3: 1,880,666
55: 1,880,728
78— 81: 1,881,121
94: 1,881,160
80— 1: 1,880,622
32: 1,881,056
54: 1,880,468
62: 1,881,069
81— 15: 1,880,246
199: 1,880,951
82— 2: 1,880,939
9: 1,880,434
38: 1,881,147
83— 11: 1,881,013
18: 1,880,684
75: 1,881,308
84— 95: 1,881,299
275: 1,881,311
291: 1,881,229
395: 1,880,961
457: 1,880,923
85— 1: 1,880,375
87— 9: 1,880,987
1,881,173
12: 1,880,383
88— 14: 1,880,774
1,881,190

88— 16.2: 1,880,496
17: 1,880,406
1,881,352
18: 1,880,884
24: 1,880,279
1,880,414
1,880,415
1,880,596
1,881,128
39: 1,881,072
41: 1,881,132
57: 1,880,393
1,880,394
74: 1,881,355
90— 33: 1,880,656
91— 14.5: 1,880,266
45: 1,880,331
1,881,345
92— 1: 1,881,419
5: 1,880,772
1,880,773
6: 1,880,899
7: 1,880,587
9: 1,880,898
21: 1,880,965
1,880,971
1,880,972
38: 1,880,691
1,881,404
39: 1,880,686
1,880,692
40: 1,880,296
1,880,827
1,881,418
44: 1,880,655
1,880,688
47: 1,880,687
49: 1,880,689
1,880,690
51: 1,881,105
56: 1,880,458
70: 1,880,451
74: 1,880,455
93— 1: 1,880,197
1,880,926
2: 1,880,342
1,880,460
6: 1,880,663
7: 1,880,378
1,881,133
35: 1,880,839
43: 1,880,288
51: 1,880,662
94— 3: 1,880,661
8: 1,880,710
18: 1,880,725
31: 1,881,376
39: 1,880,625
95— 2: 1,880,572
7: 1,880,411
1,880,449
1,880,503
1,880,573
12.5: 1,880,960
45: 1,880,635
94: 1,880,450
97— 10: 1,880,611
188: 1,880,584
98— 2: 1,881,363
37: 1,880,812
99— 2: 1,880,679
1,880,680
10: 1,880,459
11: 1,880,813
1,880,837
1,880,977
1,880,978
1,881,158
1,881,227
14: 1,881,171
17: 1,880,381
100— 31: 1,880,227
47: 1,881,186
101— 19: 1,881,090
49: 1,880,931
96: 1,880,419

101— 183: 1,880,369
199: 1,881,216
348: 1,880,361
378: 1,880,982
407: 1,881,399
415.1: 1,881,075
102— 21: 1,880,330
23: 1,880,579
103— 6: 1,881,012
11: 1,881,300
38: 1,881,255
44: 1,880,321
171: 1,880,494
205: 1,881,349
104— 7: 1,881,313
35: 1,880,201
41: 1,881,033
53: 1,881,151
105— 4: 1,880,953
197: 1,881,139
273: 1,881,203
368: 1,880,989
406: 1,880,629
106— 8: 1,881,180
23: 1,880,601
29: 1,881,283
40: 1,880,464
1,880,465
1,880,506
1,880,507
1,880,508
1,880,513
1,880,514
107— 4: 1,881,126
19: 1,881,054
20: 1,881,364
29: 1,880,753
108— 6: 1,880,429
33: 1,880,318
110— 173: 1,881,257
111— 47: 1,881,201
112— 5: 1,881,177
79: 1,880,192
80: 1,880,787
1,881,247
235: 1,880,749
262: 1,881,178
114— 16.4: 1,880,999
53: 1,881,123
63: 1,881,191
66.5: 1,880,366
1,880,371
116: 1,880,667
195: 1,881,306
116— 21: 1,881,266
74: 1,880,495
142: 1,881,211
119— 55: 1,881,252
119— 34: 1,880,993
35: 1,881,118
49: 1,881,122
61: 1,881,023
1,881,065
120— 28: 1,881,102
34: 1,881,103
43: 1,880,755
121— 11: 1,880,337
13: 1,881,258
157: 1,880,727
164: 1,880,650
122— 235: 1,881,206
302: 1,880,350
1,880,789
338: 1,881,275
356: 1,881,286
459: 1,880,908
478: 1,881,161
480: 1,880,253
491: 1,881,215
123— 1: 1,880,674
43: 1,880,224
52: 1,881,027
75: 1,881,330
79: 1,880,631
1,880,609
139: 1,880,799

123—146.5: 1,881,251
149: 1,880,334
1,880,963
173: 1,881,294
174: 1,881,068
178: 1,880,539
180: 1,880,556
188: 1,881,259
190: 1,880,745
191: 1,880,209
195: 1,881,292
124— 6: 1,880,292
1,880,326
125— 11: 1,880,234
1,880,612
126— 271: 1,880,938
128— 7: 1,880,551
25: 1,880,276
63: 1,880,879
78: 1,880,946
87: 1,880,945
143: 1,881,192
147: 1,880,908
160: 1,880,795
250: 1,881,378
276: 1,881,415
358: 1,880,964
129— 16: 1,880,963
16.7: 1,880,549
24: 1,880,763
130— 4: 1,881,368
5: 1,880,482
131— 6: 1,880,336
9: 1,880,825
10: 1,880,754
132— 32: 1,880,578
36.1: 1,880,913
134— 26: 1,881,219
28: 1,880,502
60: 1,880,512
1,881,064
1,881,065
1,881,325
79: 1,880,419
1,880,557
136— 43: 1,880,249
134: 1,880,323
137— 18: 1,880,868
53: 1,881,272
75: 1,881,379
78: 1,881,200
104: 1,880,297
139: 1,880,402
140: 1,880,456
144: 1,880,278
156: 1,881,240
160: 1,881,051
138— 9: 1,880,732
10: 1,880,627
139— 10: 1,880,400
1,880,438
208: 1,881,167
212: 1,880,862
215: 1,881,066
317: 1,881,076
140— 93: 1,881,370
103: 1,880,606
43: 1,881,295
52: 1,880,885
105: 1,880,780
144— 145: 1,881,400
146— 6: 1,881,189
169: 1,880,510
217: 1,880,626
148— 17: 1,880,937
21.4: 1,880,746
29: 1,881,320
150— 1.5: 1,880,351
152— 8: 1,881,290
12: 1,881,362
13: 1,880,489
21: 1,880,403
1,880,974
22: 1,881,309
39: 1,881,308
153— 21: 1,880,479
32: 1,880,979
49: 1,880,464
154— 1: 1,880,518
2: 1,880,697
1,880,930
1,881,337
10: 1,880,519
14: 1,881,026
1,881,276
37: 1,880,339
42: 1,880,804
1,881,048
45.9: 1,880,785
155— 83: 1,880,532
145: 1,880,365
156: 1,881,245
184: 1,880,497
156— 39: 1,880,588
1,880,589

156— 39: 1,881,037
42: 1,881,366
158— 4: 1,881,260
26: 1,880,649
28: 1,881,321
74: 1,880,966
1,881,359
91: 1,880,695
117.1: 1,880,871
118: 1,881,314
119: 1,880,719
164— 21: 1,880,935
49: 1,880,418
1,881,418
51: 1,880,598
52: 1,881,185
59: 1,880,332
60: 1,881,020
112: 1,880,472
113: 1,880,408
166— 2: 1,881,163
4: 1,880,218
15: 1,880,778
167— 82: 1,881,197
169— 5: 1,880,244
170— 149: 1,880,302
156: 1,881,365
159: 1,880,995
165: 1,881,060
171— 119: 1,880,199
206: 1,881,341
208: 1,881,350
228: 1,880,388
172— 36: 1,880,936
1,881,342
1,881,343
94: 1,881,225
179: 1,880,367
233: 1,880,565
239: 1,881,011
1,881,394
246: 1,880,346
173— 318: 1,880,259
321: 1,880,766
1,881,168
328: 1,880,511
333: 1,880,957
174— 89: 1,881,250
177: 1,881,262
175— 21: 1,880,805
1,880,809
1,880,821
1,881,077
41: 1,881,130
1,881,164
41.5: 1,880,933
315: 1,880,263
320: 1,880,524
1,880,576
337: 1,880,523
35.6: 1,880,412
376: 1,880,431
176— 31: 1,881,091
109: 1,881,243
122: 1,880,949
177— 311: 1,880,917
311.5: 1,880,815
327: 1,881,407
339: 1,880,618
351: 1,880,802
178— 2: 1,880,722
1,880,723
1,880,724
1,880,906
4.1: 1,880,311
6: 1,880,294
1,880,295
1,880,991
44: 1,880,196
1,880,800
1,880,889
45: 1,880,764
71: 1,880,796
75: 1,880,824
179— 16: 1,881,273
27: 1,881,297
100.3: 1,880,960
1,881,040
100.41: 1,881,109
111: 1,881,107
115.5: 1,881,324
170: 1,880,714
1,880,715
171: 1,880,320
1,880,568
180— 9.2: 1,880,344
42: 1,880,270
43: 1,881,201
1,881,202
64: 1,881,067
85: 1,881,408
181— 30: 1,881,146
183— 10: 1,881,049
37: 1,880,658
1,880,665

183— 51: 1,881,096
71: 1,880,552
93: 1,881,058
115: 1,880,981
1,881,115
184— 1.5: 1,880,546
3: 1,880,672
7: 1,880,852
1,880,854
1,880,855
1,880,856
11: 1,881,149
27: 1,880,902
1,881,353
89: 1,880,801
188— 4: 1,881,288
78: 1,880,477
1,881,009
79.5: 1,881,238
89: 1,880,797
90: 1,880,194
196: 1,880,368
209: 1,880,283
251: 1,880,750
264: 1,881,002
189— 19: 1,880,231
37: 1,880,478
1,880,480
66: 1,880,312
75: 1,881,268
192— .01: 1,880,866
1,881,188
53: 1,880,784
60: 1,880,743
69: 1,880,616
1,881,127
85: 1,881,025
93: 1,880,721
193— 17: 1,881,003
34: 1,880,370
35: 1,881,184
44: 1,880,457
194— 1: 1,880,444
12: 1,880,484
56: 1,880,397
195— 20: 1,881,093
196— 47: 1,880,851
49: 1,880,536
51: 1,880,717
104: 1,881,218
110: 1,880,716
147: 1,881,044
197— 51: 1,880,592
129: 1,880,220
198— 10: 1,881,263
33: 1,880,243
1,881,187
127: 1,881,267
193: 1,880,474
1,880,537
219: 1,880,548
199— 1: 1,881,296
200— 1: 1,880,676
6: 1,880,496
8: 1,880,921
16: 1,880,849
32: 1,880,830
1,880,831
50: 1,880,543
56: 1,881,150
58: 1,880,401
67: 1,880,775
83: 1,880,859
122: 1,880,743
131: 1,880,379
1,881,369
132: 1,881,351
135: 1,880,702
142: 1,880,867
152: 1,880,740
1,880,829
1,880,832
162: 1,880,734
168: 1,881,318
201— 63: 1,880,289
64: 1,880,239
202— 105: 1,881,153
168: 1,880,634
236: 1,881,041
248: 1,880,600
204— 1: 1,880,567
5: 1,880,362
9: 1,880,927
31: 1,880,924
1,881,406
206— 1: 1,880,275
10: 1,880,325
13: 1,881,396
37: 1,880,752
44: 1,880,888
46: 1,880,897
48: 1,881,380
57: 1,880,345
59: 1,880,448
82: 1,880,944

207— 2: 1,881,278
208— 15: 1,881,136
184: 1,880,340
209— 6: 1,881,230
110: 1,880,428
143: 1,880,907
342: 1,880,387
401: 1,881,239
210— 176: 1,881,270
211— 1.6: 1,880,642
39: 1,880,947
71: 1,881,212
157: 1,881,224
212— 21: 1,881,087
213— 36: 1,880,782
50: 1,881,226
222: 1,881,312
214— 18: 1,880,374
32: 1,881,169
51: 1,881,156
67: 1,881,143
215— 13: 1,880,358
216— 39: 1,881,125
217— 69: 1,880,396
122: 1,880,610
219— 4: 1,880,535
8: 1,880,545
21: 1,880,619
24: R. 18,614
26: 1,880,940
29: 1,881,241
35: 1,880,822
38: 1,880,238
1,880,255
1,880,973
39: 1,880,794
46: 1,881,106
220— 1: 1,880,461
1,880,788
30: 1,881,141
31: 1,880,207
1,880,355
1,880,481
1,881,296
245— 10: 1,880,475
246— 167: 1,880,739
247— 1: 1,880,352
248— 14.2: 1,880,504
16: 1,880,280
1,881,043
18.5: 1,880,891
17: 1,880,341
20: 1,880,293
1,880,814
22: 1,880,319
30: 1,880,982
1,880,992
37: 1,880,955
41: 1,880,765
249— 2: 1,880,597
22: 1,880,575
32: 1,881,152
64: 1,880,562
250— 13: 1,880,285
15: 1,881,395
20: 1,881,235
1,881,284
1,881,391
1,881,392
27: 1,881,032
1,881,357
27.5: 1,880,499
1,880,571
1,880,833
34: 1,881,310
35: 1,880,333
40: 1,880,693
251— 41: 1,881,367
50: 1,881,269
115: 1,880,948
165: 1,880,648
252— 1: 1,881,217
1,881,347
254— 18: 1,880,338
33: 1,881,199
97: 1,880,473
185: 1,881,302
192: 1,880,608
255— 4: 1,880,214
1,880,217
19: 1,880,222
20: 1,881,101
24: 1,881,176
61: 1,881,024
62: 1,880,623
72: 1,880,215
74: 1,880,216
75: 1,881,035
256— 67: 1,880,423
257— 6: 1,880,196
136: 1,880,274
137: 1,880,620
1,880,630
151: 1,880,248
241: 1,880,291

257— 246: 1,880,533
259— 4: 1,880,284
9: 1,880,237
41: 1,880,626
102: 1,880,731
113: 1,881,361
260— 2: 1,881,282
6: 1,880,918
11: 1,880,759
1,880,761
12: 1,880,516
16: 1,880,421
32: 1,880,447
40: 1,880,441
42: 1,880,645
1,880,646
1,881,236
43: 1,880,300
45: 1,881,317
46: 1,880,593
53: 1,880,490
1,880,996
57: 1,880,322
60: 1,880,970
61: 1,880,440
64: 1,880,566
69: 1,880,959
77: 1,880,225
1,880,226
97: 1,880,432
1,880,433
101: 1,880,420
1,880,466
1,880,515
1,880,558
1,880,559
1,880,808
102: 1,880,560
106: 1,881,172
112: 1,880,564
1,880,901
116: 1,880,677
129: 1,880,594
130.5: 1,881,074
143: 1,880,404
154: 1,880,534
155: 1,880,442
1,880,701
170: 1,880,306
1,880,307
1,880,308
1,880,309
1,880,310
261— 41: 1,881,256
47: 1,880,791
91: 1,880,990
93: 1,881,412
114: 1,880,525
262— 31: 1,880,252
263— 3: 1,881,331
8: 1,880,954
19: 1,880,229
20: 1,881,388
32: 1,881,117
33: 1,880,768
44: 1,881,057
1,881,228
48: 1,881,104
49: 1,881,064
265— 1: 1,880,398
5: 1,880,314
25: 1,881,301
27: 1,880,396
1,880,435
1,881,052
29: 1,880,574
36: 1,880,443
43: 1,880,436
49: 1,880,485
1,880,651
60: 1,881,080
1,881,396
61: 1,880,639
62: 1,880,437
70: 1,880,563
71: 1,880,445
266— 5: 1,880,806
7: 1,880,751
1,881,157
42: 1,880,242
267— 20: 1,880,343
28: 1,881,277
33: 1,881,155
47: 1,880,861
1,880,901
1,881,233
268— 10: 1,881,338
49: 1,881,016
1,881,017
53: 1,881,014
1,881,015
75: 1,881,193
271— 2.1: 1,880,820

271—	2.4: 1,880,803	280—	93: 1,880,390	290—	7: 1,880,203	295—	34: 1,881,045	299—	73: 1,880,272	304—	2: 1,880,767
	49: 1,881,138		104: 1,881,070	292—	164: 1,880,636		43: 1,881,071		1,880,826	308—	2: 1,880,446
272—	4: 1,881,328		124: 1,880,530		1,880,676	296—	28: 1,880,385		103: 1,880,373		3: 1,880,673
273—	26: 1,881,384		166: 1,881,113		169: 1,880,637		1,880,591		120: 1,880,880		4: 1,881,131
	34: 1,881,387	281—	19: 1,880,818		1,880,675		1,880,844	301—	6: 1,880,357		43: 1,880,976
	150: 1,881,004		29: 1,881,304		173: 1,880,251		44: 1,880,590		1,881,097		73: 1,880,353
274—	9: 1,881,393	284—	18: 1,880,793		214: 1,880,757		1,880,783		30: 1,881,249		178: 1,880,660
	10: 1,880,760	285—	120: 1,880,638		223: 1,880,928		44.5: 1,880,696		35: 1,880,613		180: 1,880,738
	42: 1,881,110		146: 1,880,269		262: 1,880,711		1,880,698		46: 1,881,135	312—	97: 1,881,175
	43: 1,880,240		170: 1,881,004		266: 1,880,712		1,880,699		63: 1,880,641		97.1: 1,880,956
277—	31: 1,880,581		1,881,006		1,880,713		1,880,700	303—	3: 1,880,958		141: 1,880,392
279—	56: 1,880,521		176: 1,880,853		317: 1,881,081		97: 1,880,582		18: 1,881,148		169: 1,880,733
280—	1: 1,880,842	286—	7: 1,880,846	293—	55: 1,881,231		137: 1,880,208		64: 1,880,864		
	33.1: 1,880,703		1,880,911		1,881,390		335: 1,880,585		74: 1,881,221		
	61: 1,881,335	287—	90: 1,880,657	294—	16: 1,881,194	298—	19: 1,881,022		81: 1,881,209		
	87.5: 1,880,718		125: 1,880,894		28: 1,880,384	299—	18: 1,881,409		84: 1,881,210		

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktien-Gesellschaft für Feinmechanik, vormals Jetter & Scheerer, Tuttlingen, Germany. Shears, pliers, tweezers, etc. Serial No. 318,700; Oct. 11. Class 28.

Alhambra Cigar & Cigarette Mfg. Co., Manila, P. I. Cigars and cigarettes. Serial Nos. 329,416–17; Oct. 11. Class 17.

American Lady Corset Co., Inc., Detroit, Mich. Corsets, camisoles, brassières and petticoats, etc. Serial No. 329,128; Oct. 11. Class 39.

American New Fashion Heel Corporation, Brooklyn, N. Y. Shoe heels. Serial No. 329,216; Oct. 11. Class 39.

Arnold, Mervin V., doing business as Radialene Properties, Cicero, N. Y. Preparations for circulatory transfer of heat. Serial No. 323,841; Oct. 11. Class 6.

Asbron, Incorporated, Cleveland, Ohio. Medicine. Serial No. 322,926; Oct. 11. Class 6.

Asphalt Laboratories Company. (See Miller, Joseph.)

Atlantic Packing Co. Inc., New York, N. Y. Yeast. Serial No. 325,898; Oct. 11. Class 46.

Atwater Paint Co., Los Angeles, Calif. Paints, colors, white lead, lacquers, etc. Serial No. 329,976; Oct. 11. Class 16.

Barker Brothers Silver Co. Inc., New York, N. Y. Silver plated hollowware. Serial No. 329,884; Oct. 11. Class 28.

Bausch & Lomb Optical Company, Rochester, N. Y. Abrasives for grinding lenses. Serial No. 329,519; Oct. 11. Class 4.

Black Bros. Flour Mills, Beatrice, Nebr. Wheat flour. Serial No. 324,454; Oct. 11. Class 46.

Bulova Watch Company, Inc., New York, N. Y. Bracelet watches and their attached bracelets. Serial Nos. 329,528–4; Oct. 11. Class 27.

Bump, Roswell J., Binghamton, N. Y. Oil. Serial No. 329,219; Oct. 11. Class 15.

Campbell's Lu-Bri-Cant Co., Newark, N. J. Lubricant. Serial No. 329,763; Oct. 11. Class 15.

Canepa, John B., Company, The, Chicago, Ill. Macaroni, spaghetti, etc. Serial No. 328,683; Oct. 11. Class 46.

Cluett, Peabody & Co., Inc., Troy, N. Y. Shirts. Serial No. 329,703; Oct. 11. Class 39.

Cocks, Aagut S., doing business as Cocks Manufacturing Company, New York, N. Y. Portable colonic irrigator. Serial No. 328,662; Oct. 11. Class 44.

Cohn & Rosenberger, Inc., New York, N. Y. Empty vanity cases. Serial No. 327,845; Oct. 11. Class 2.

Cornelius Publications, Inc., Indianapolis, Ind. Publication. Serial No. 329,423; Oct. 11. Class 38.

Dammann, Dietrich, Chicago, Ill. Scouring and polishing household utensils. Serial No. 327,206; Oct. 11. Class 4.

Daniels & Co., Messrs., Cos Cob, Conn. Sauce for meats, fish, game, etc. Serial No. 329,626; Oct. 11. Class 46.

Dauntless Shipyard, Inc., Essex, Conn. Sail boats and row boats. Serial No. 327,271; Oct. 11. Class 19.

De Oliveira, José Leite, Lisboa, Portugal. Canned, pickled, salted, smoked, and preserved fish, canned shellfish, etc. Serial No. 328,239; Oct. 11. Class 46.

Detroit Dental Manufacturing Co., Detroit, Mich. Dental investment compounds. Serial No. 329,551; Oct. 11. Class 44.

Detroit Vapor Stove Company, Detroit, Mich. Burner box linings. Serial No. 324,549; Oct. 11. Class 34.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Caulking and packing materials, lime, plaster, etc. Serial No. 318,204; Oct. 11. Class 12.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Printed sign boards, printed advertising signs, and reproductions. Serial No. 318,207; Oct. 11. Class 38.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Airplanes, motor boats, canoes, etc. Serial No. 318,238; Oct. 11. Class 19.

De Vries, William A., Spokane, Wash. Compound for cleaning and polishing automobiles, etc. Serial No. 329,516; Oct. 11. Class 16.

Dorr, Clarence, doing business as Soldax Company, Hoosick Falls, N. Y. Liquid adhesive cements. Serial No. 328,267; Oct. 11. Class 5.

Economy Macaroni Co. (See Scotland, Bayard S.)

Edwards, J., & Co., Inc., Philadelphia, Pa. Shoes. Serial No. 329,224; Oct. 11. Class 39.

Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Electric vacuum cleaners and parts thereof. Serial No. 329,891; Oct. 11. Class 21.

Empresa Mate Larangeira Sociedad Anonima, Buenos Aires, Argentina. Yerba mate. Serial No. 328,393; Oct. 11. Class 46.

Exeter Emperor Association. (See Fremont Fruit Association.)

Ferry Hats, Inc., Newark, N. J. Men's felt hats. Serial No. 329,707; Oct. 11. Class 39.

Firestone Battery Company, Akron, Ohio. Battery clamps, terminals, and connectors, etc. Serial No. 328,118; Oct. 11. Class 21.

First National Bank of Arizona at Phoenix, Phoenix, Ariz. Folders. Serial No. 327,652; Oct. 11. Class 38.

Foot Form Shoe Shops, Inc., New York, N. Y. Arch supports, foot pads, and cushions to be used in shoes. Serial No. 329,633; Oct. 11. Class 44.

Foster, Charles M., Dayton, Ohio. Ladies' shoes. Serial No. 325,203; Oct. 11. Class 39.

Fremont Fruit Association, doing business as Exeter Emperor Association, Exeter, Calif. Fresh grapes. Serial No. 325,519; Oct. 11. Class 46.

Fruit Industries, Ltd., San Francisco, Calif. Compound containing pure California brandy and cane sugar. Serial No. 327,974; Oct. 11. Class 46.

Fuller, W. P., & Co., San Francisco, Calif. Enamels. Serial No. 328,120; Oct. 11. Class 16.

Gardiner-Warring Co., Inc., Florence, Ala. Sweaters, bathing suits, and underwear. Serial Nos. 314,796–7; Oct. 11. Class 39.

Giles & Hirsch, Inc., New York, N. Y. Play suits and overalls. Serial No. 329,855; Oct. 11. Class 39.

Graham, Charles H., doing business as Magnator Company, Syracuse, N. Y. Electro-therapeutical apparatus. Serial No. 328,271; Oct. 11. Class 44.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Canned salmon. Serial No. 328,317; Oct. 11. Class 46.

Gro-Flex Corporation, Indianapolis, Ind. Massage devices. Serial No. 329,445; Oct. 11. Class 44.

Hachmeister-Lind Company, McKees Rocks, Pa. Antiseptic and germicide. Serial No. 329,261; Oct. 11. Class 6.

Harris Clothing Company, Baltimore, Md. Suits, overcoats, and topcoats. Serial No. 330,062; Oct. 11. Class 39.

Hartmann, Theodore H., doing business as Vitro Shine Mfg. Co., St. Louis, Mo. Polish. Serial No. 329,469; Oct. 11. Class 16.

Hess Warming and Ventilating Company, Chicago, Ill. Coal, wood, coke, etc., furnaces. Serial No. 328,424; Oct. 11. Class 34.

Hill, Alfred C., doing business as Hill Baking Co., Vernon, Tex. Bread. Serial No. 328,730; Oct. 11. Class 46.

Holdeman, Joseph L., Elkhart, Ind. Fluid refinish for masonry. Serial No. 327,014; Oct. 11. Class 16.

Hood-Hall Chemical Co., Inc., Montgomery, Ala. Antiseptic. Serial No. 329,582; Oct. 11. Class 6.

Horton Manufacturing Company, Fort Wayne, Ind. Electric motors. Serial No. 329,990; Oct. 11. Class 21.

Hubbard, J. W., Co., Chicago, Ill. Packing house equipment. Serial No. 328,955; Oct. 11. Class 19.

Hubinger Company, The, Keokuk, Iowa. Dessert powder. Serial No. 329,144; Oct. 11. Class 46.

Humpty Dumpty Root Beer Kegs, Inc., Denver, Colo. Dispensing booths simulating a keg. Serial No. 324,742; Oct. 11. Class 12.

Ideal Steel Products Corporation, Chicago, Ill. Ball-projecting table board game. Serial No. 327,148; Oct. 11. Class 22.

India Tire and Rubber Company, Akron and Mogadore, Ohio. Tires, inner tubes, hook-on boots, etc. Serial No. 328,731; Oct. 11. Class 35.

International Sisal Co., Minneapolis, Minn. Sweeping compound. Serial No. 329,948; Oct. 11. Class 4.

Jackson, O. W., & Co., Inc., New York, N. Y. Rubber mats and matting. Serial No. 317,917; Oct. 11. Class 50.

Janov-Abeles, I., Shirt Co., New York, N. Y. Shirts, collars. Serial No. 329,857; Oct. 11. Class 39.

Katz, David, doing business as Peekskill Products Co., Peekskill, N. Y. Malt syrup. Serial No. 318,034; Oct. 11. Class 46.

Kearns Brothers, Inc., Pinckneyville, Ill. Dresses. Serial No. 329,799; Oct. 11. Class 39.

Kendall Refining Company, Bradford, Pa. Oils and greases. Serial No. 327,761; Oct. 11. Class 15.

Koenig, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, lip stick, face rouge, etc. Serial No. 322,465; Oct. 11. Class 6.

Kress, S. H., & Co., New York, N. Y. Hand sprayer for liquid and powder insecticides. Serial No. 323,559; Oct. 11. Class 23.

Kress, S. H., & Co., New York, N. Y. Powder puffs, dusting mittens, whisk brooms, etc. Serial No. 326,549; Oct. 11. Class 29.

Lageman, Clemens, doing business as H. Trommsdorff Chemische Fabrik, Aachen, Germany. Iodine preparation. Serial No. 321,687; Oct. 11. Class 6.

Lehigh Steel Company, New York, N. Y. Tool steel. Serial No. 329,996; Oct. 11. Class 14.

Lubrea Oil Corporation, Brooklyn, N. Y. Upper motor lubricants. Serial No. 329,380; Oct. 11. Class 15.

Macy, R. H., & Co., Inc., New York, N. Y. Women's hats. Serial No. 329,717; Oct. 11. Class 39.

Magnator Company. (See Graham, Charles H.)

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Mantle Lamp Company of America, The, Chicago, Ill. Lamp bowls, shades, and chimneys, and vases made of glass. Serial No. 328,559; Oct. 11. Class 33.

Martha Washington Candies Company, assignor to Ellie Sheetz Candies Company, Chicago, Ill. Chocolate. Serial No. 316,603; Oct. 11. Class 46.

Mendes, Francisco, & Compañia Limitada, Buenos Aires, Argentina. Yerba mate. Serial No. 328,895; Oct. 11 Class 46.

Meteor Electric Corporation, New York and Brooklyn, N. Y. Electric plugs, electric receptacles electric cutouts, etc Serial No. 323,347; Oct. 11. Class 21.

Michigan Alkali Company, Wyandotte, Mich. Coke. Serial No. 329,804; Oct. 11. Class 1.

Midland Flour Milling Company, The, Kansas City, Mo. Wheat flour. Serial No. 330,098; Oct. 11. Class 46.

Miller, Joseph, doing business as Asphalt Laboratories Company, Milwaukee, Wis. Lumber, flooring, paving blocks, etc. Serial No. 310,023; Oct. 11. Class 12.

Milson Company, The, Cincinnati, Ohio. Allspice, cake icings, celery salt, chewing gum, etc. Serial No. 283,412; Oct. 11. Class 46.

Morgenstern, Felix, doing business as Morgenstern Chemical Company, New York, N. Y. Preparation used as a sedative and nervine and as a tonic. Serial No. 329,559; Oct. 11. Class 6.

National Palladium Company, Chicago, Ill. Spark plugs. Serial No. 329,959; Oct. 11. Class 21.

National Paper Napkin Mfg. Co., Chicago, Ill. Paper towels. Serial Nos. 322,965–6; Oct. 11. Class 37.

National Paper Napkin Mfg. Co., Chicago, Ill. Paper towels. Serial No. 324,690; Oct. 11. Class 37.

National Pectin Products Company, Chicago, Ill. Ice cream confection. Serial No. 327,561; Oct. 11. Class 46.

National Silk Co., Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. Serial Nos. 329,646–8; Oct. 11. Class 43.

National Silk Co., Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. Serial No. 329,650; Oct. 11. Class 43.

Nevers, Kenneth W., Irvington, N. Y. Water coolers. Serial No. 329,480; Oct. 11. Class 31.

Nirenberg & Salzman, Inc., New York, N. Y. Shirts. Serial No. 329,606; Oct. 11. Class 39.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Ice. Serial No. 325,235; Oct. 11. Class 1.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Maltless beverages and water. Serial No. 327,599; Oct. 11. Class 45.

Norge Corporation, Detroit, Mich. Refrigerators and parts thereof. Serial No. 328,562; Oct. 11. Class 31.

Norris Run Coal Mining Company, Wilkes-Barre, Pa. Coal. Serial No. 329,479; Oct. 11. Class 1.

Opler, E. & A., Inc., Chicago, Ill. Cocoa malted milk. Serial No. 328,924; Oct. 11. Class 46.

Osgood & Sons, Inc., Decatur, Ill. Dresses, pajamas, smocks, beach suits, etc. Serial No. 329,506; Oct. 11. Class 39.

Oswego Falls Corporation, Fulton, N. Y. Bottle caps. Serial No. 325,074; Oct. 11. Class 50.

Patterson-Sargent Company, The, Cleveland, Ohio. Paints, paint enamels, stains, etc. Serial No. 329,202; Oct. 11. Class 16.

Peekskill Products Co. (See Katz, David.)

Petroleum Marketers Co., Inc., Long Island City, N. Y. Gasoline, oils, and greases. Serial No. 328,711; Oct. 11. Class 15.

Powers, Patrick A., New York, N. Y. Silent and/or sound or talking motion-picture films. Serial No. 329,097; Oct. 11. Class 26.

Radbill Oil Co., Inc., Philadelphia, Pa. Lubricating oil. Serial Nos. 329,686–8; Oct. 11. Class 15.

Radialene Properties. (See Arnold, Mervin V.)

Randolph Marketing Company, San Bernardino, Calif. Fresh fruits, vegetables, and cantaloupes. Serial No. 311,340; Oct. 11. Class 46.

Red Star Cereal Co., Phoenix, Ariz. Cereal toasted wheat. Serial No. 329,093; Oct. 11. Class 46.

Riegel Textile Corporation, New York, N. Y. Cotton piece goods. Serial No. 329,122; Oct. 11. Class 42.

Ritz Cosmetic & Perfume Shoppe, Elizabeth, N. J. Facial tissues. Serial No. 329,356; Oct. 11. Class 37.

Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk piece goods in the piece. Serial No. 329,690; Oct. 11. Class 42.

Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. Serial No. 330,101; Oct. 11. Class 42.

Ruch, Max, Berlin, Germany. Collars and cuffs. Serial No. 328,647; Oct. 11. Class 39.

San-Nap-Pak Mfg. Co. Inc., New York, N. Y. Sanitary napkins and belts. Serial No. 329,860; Oct. 11. Class 44.

Scotland, Bayard S., doing business as Economy Macaroni Co., Joliet, Ill. Macaroni, spaghetti, and noodles. Serial No. 326,832; Oct. 11. Class 46.

Seiler, Karl, & Sons, Philadelphia, Pa. Liverwurst. Serial No. 329,538; Oct. 11. Class 46.

Shawmut Woolen Mills, Stoughton, Mass. Jersey garments. Serial No. 328,311; Oct. 11. Class 39.

Sheetz, Ellie, Candies Company. (See Martha Washington Candies Company, assignor.)

Smith-Junior Company, Inc., Rochester, N. Y. Acidulous compound for flavoring soft drinks. Serial No. 319,344; Oct. 11. Class 45.

Smooth-On Manufacturing Company, Jersey City, N. J. Iron compound used to repair defects and breaks. Serial No. 329,317; Oct. 11. Class 12.

Soldax Company. (See Dorr, Clarence.)

Stephen Oil Co., Morris, Ill. Lubricating oil. Serial No. 329,909; Oct. 11. Class 15.

Stephens, John, Chicago, Ill. Paper cartons and wrappers. Serial No. 302,081; Oct. 11. Class 2.

Sterling Products Company, The, Evansville, Ind. Malt extract. Serial No. 299,287; Oct. 11. Class 46.

Sterne-Jay Corporation, New York, N. Y. Lubricating oil. Serial Nos. 329,872–3; Oct. 11. Class 15.

Sunical Packing Company, San Francisco, Calif. Canned fruits. Serial No. 328,628; Oct. 11. Class 46.

Takahashi, Kotaro, Tokyo Fu, Japan. Maltless syrup. Serial No. 320,380; Oct. 11. Class 45.

Taylor, William W., Los Angeles, Calif. Soap. Serial No. 328,022; Oct. 11. Class 4.

Trommsdorff, H., Chemische Fabrik. (See Lageman, Clemens.)

Uvalde Rock Asphalt Company, San Antonio, Tex. Asphalt plank, floor and industrial tile, and expansion joints. Serial No. 329,963; Oct. 11. Class 12.

Van Houten, C. J., & Zoon, Weesp, Netherlands. Cocoa, chocolate, and cocoa-butter for food purposes. Serial No. 329,296; Oct. 11. Class 46.

Vitro Shine Mfg. Co. (See Hartmann, Theodore H.)

Wapler, Nicholas, Company, New York, N. Y. Feed for fish. Serial No. 329,301; Oct. 11. Class 46.

Waterbury Clock Company, Waterbury, Conn. Clockwork operated electric switches. Serial No. 329,320; Oct. 11. Class 21.

Wernik, Morris, Metuchen, N. J. Syrup concentrates. Serial No. 328,765; Oct. 11. Class 45.

West Branch Novelty Company, Milton, Pa. Cedar chests and cabinets. Serial No. 329,964; Oct. 11. Class 32.

Whitman, Stephen F., & Son, Inc., Philadelphia, Pa. Candy. Serial No. 329,435; Oct. 11. Class 46.

Woolsey, C. A., Paint & Color Co., Jersey City, N. J. Paint. Serial No. 328,766; Oct. 11. Class 16.

Worcester Knitting Company, Worcester, Mass. Sweaters and bathing suits. Serial No. 329,815; Oct. 11. Class 39.

Wyodak Chemical Company, The, Cuyahoga Heights Village, Cleveland, Ohio. Plaster and thermal insulating materials. Serial No. 329,211; Oct. 11. Class 12.

Yost Company, The, St. Louis, Mo. Humidifiers. Serial No. 329,271; Oct. 11. Class 34.

Zekaria Brothers, New York, N. Y. Laces and embroideries. Serial No. 329,912; Oct. 11. Class 42.

LIST OF REGISTRANTS OF TRADE-MARKS

Accurate Parts Manufacturing Company, The, Cleveland, Ohio. Clutch plates and discs. 298,002; Oct. 11; Serial No. 326,602; published Aug. 2, 1932. Class 23.

Accurate Parts Manufacturing Company, The, Cleveland, Ohio. Clutch plates and discs. 298,077; Oct. 11; Serial No. 326,601; published Aug. 2, 1932. Class 23.

Agnes. (See Rittener, Agnes.)

Air-Way Electric Appliance Corporation, Toledo, Ohio. Electrical suction cleaners and parts and accessories thereof. 298,179; Oct. 11. Class 21.

Aitken and McDonald Company, Beaumont, Tex. Gasoline. 298,008; Oct. 11; Serial No. 325,382; published Aug. 2, 1932. Class 15.

Allen-Sherman-Hoff Company, The, Philadelphia, Pa. Pumps and parts thereof. 297,989; Oct. 11; Serial No. 327,722; published July 26, 1932. Class 23.

Alonso, Antonio, Hijos, Vigo, Spain. Canned fish. 298,051; Oct. 11; Serial No. 326,773; published July 19, 1932. Class 46.

Alpha Chi Sigma Fraternity, Indianapolis, Ind. Pins, badges, and keys. 298,014; Oct. 11; Serial No. 327,211; published July 26, 1932. Class 28.

Altman, B., & Co., New York, N. Y. Gloves. 89,903; renewed Jan. 21, 1933.

American Container Corporation, St. Paul, Minn. Boxes or containers for storage batteries. 298,017; Oct. 11; Serial No. 327,671; published July 26, 1932. Class 21.

American Cystoscope Makers, Inc., New York, N. Y. Ophthalmoscopes. 298,167; Oct. 11. Class 26.

American Lady Corset Co., Detroit, Mich. Corsets. 88,228; renewed Sept. 10, 1932.

American Oil Company, The, Baltimore, Md. Oils, greases, and gasoline. 298,021; Oct. 11; Serial No. 327,964; published Aug. 2, 1932. Class 15.

American Radiator Company, Chicago, Ill., assignor to Arco Vacuum Corporation, New York, N. Y. Vacuum cleaning apparatus. 88,442; renewed Sept. 24, 1932.

American Sugar Refining Company, The, Jersey City, N. J., to The American Sugar Refining Company, New York, N. Y. Sugar. 88,229; renewed Sept. 10, 1932.

Ancco Preserving Co. (See Bama Company, The.)

Archers Company, The, Pinehurst, N. C. Bows, arrows, quivers, etc. 298,106; Oct. 11; Serial No. 327,623; published Aug. 2, 1932. Class 22.

Arco Vacuum Corporation. (See American Radiator Company, assignor.)

Arden, Elizabeth, Inc., New York, N. Y. Bath salts. 298,175; Oct. 11. Class 6.

Artform Incorporated, Philadelphia, Pa. Foundation garments. 298,050; Oct. 11; Serial No. 326,972; published July 12, 1932. Class 39.

Atlas Supply Company, Newark, N. J. Storage batteries. 298,013; Oct. 11; Serial No. 327,495; published July 26, 1932. Class 21.

B. B. Culture Laboratory, Inc. (See Harrington, Edwin I., assignor.)

Bama Company, The, doing business as Ancco Preserving Co., Birmingham, Ala. Fruit preserves and peanut butter. 298,091; Oct. 11; Serial No. 320,885; published July 19, 1932. Class 46.

Bancroft-Walker Company, Boston, Mass. Shoes. 298,082; Oct. 11; Serial No. 327,333; published July 12, 1932. Class 39.

Banister, James A., Company, Inc., Newark, N. J. Shoes. 298,146; Oct. 11; Serial No. 324,692; published July 12, 1932. Class 39.

Barber, Rita, doing business as Southland Garment Company, Stamford, Tex. Dresses, suits, slips, etc. 298,161; Oct. 11. Class 39.

Barnard Company, The. (See Peoples Drug Stores, Inc.)

Bausch & Lomb Optical Company, Rochester, N. Y. Corundum and rouge for grinding and polishing lenses. 298,061; Oct. 11; Serial No. 327,967; published July 26, 1932. Class 4.

Bechtold, Lewis, assignor to The Senefelder Company, Inc., New York, N. Y. Lithographing stones. 89,086; renewed Nov. 12, 1932.

Berry Brothers (Incorporated), Detroit, Mich. Lacquer enamels. 298,009; Oct. 11; Serial No. 327,575; published July 26, 1932. Class 16.

Biggs, John L., Chicago, Ill. Electrical cooking devices. 298,149; Oct. 11; Serial No. 323,120; published Aug. 2, 1932. Class 21.

Black Diamond Coal Mining Company, Birmingham, Ala. Coal. 298,041; Oct. 11; Serial No. 327,269; published July 26, 1932. Class 1.

Bloomingdale Bros., Inc., New York, N. Y. Hats. 298,029; Oct. 11; Serial No. 327,335; published July 19, 1932. Class 39.

Blue Plate Foods, Inc., New Orleans, La. Sauce or condiment. 298,045; Oct. 11; Serial No. 327,082; published July 19, 1932. Class 46.

Boston Gear Works, Inc., North Quincy, Mass. Chains. 297,990; Oct. 11; Serial No. 327,726; published Aug. 2, 1932. Class 13.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. 297,995; Oct. 11; Serial No. 327,618; published July 26, 1932. Class 23.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 298,046; Oct. 11; Serial No. 327,129; published July 12, 1932. Class 39.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Pocket billiard tables. 298,100; Oct. 11; Serial No. 327,002; published July 26, 1932. Class 22.

Burgess Battery Company, Madison, Wis. Electric batteries. 298,103; Oct. 11. Class 21.

California Packing Corporation, San Francisco, Calif. Canned fruits, vegetables, tomato purée, etc. 298,132; Oct. 11; Serial No. 307,255; published July 19, 1932. Class 46.

Campbell, Wyant & Cannon Foundry Company, Muskegon Heights, Mich. Iron alloy castings. 298,037; Oct. 11; Serial No. 327,579; published July 26, 1932. Class 14.

Cantor Bros., doing business as Grand Shellac Works, Brooklyn, N. Y. Ready mixed paints. 298,078; Oct. 11; Serial No. 324,984; published July 26, 1932. Class 16.

Capstone Manufacturing Co., Newark, N. J. Lubricating oils and lubricating greases. 90,290; renewed Feb. 18, 1933.

Carmo Shoe Mfg. Co., Carthage, Mo. Shoes, slippers, pumps, etc. 298,151; Oct. 11; Serial No. 321,586; published July 12, 1932. Class 39.

Case Crane & Kilbourne Jacobs Company. (See Kilbourne & Jacobs Manufacturing Company, assignor.)

Celolac Products Company, Minneapolis, Minn. Polish, lacquer, paint and enamel finishes. 298,119; Oct. 11; Serial No. 310,432; published June 21, 1932. Class 16.

Celotex Company, The, Chicago, Ill. Fiber boards. 298,036; Oct. 11; Serial No. 327,339; published July 19, 1932. Class 12.

Chicago Flexible Shaft Company, Chicago, Ill. Electric flat-irons. 89,623; renewed Dec. 31, 1932.

Clark-Dunn Manufacturing Company, St. Louis, Mo. Shoe dressing. 298,016; Oct. 11; Serial No. 326,634; published July 26, 1932. Class 4.

Clay City Pipe Company, The, Uhrichsville, Ohio. Tiles and conduits. 298,064; Oct. 11; Serial No. 327,132; published July 12, 1932. Class 12.

Colorado Milling & Elevator Co., The, Denver, Colo., and Twin Falls, Idaho. Cake flour. 298,095; Oct. 11; Serial No. 320,022; published Nov. 17, 1931. Class 46.

Continental Supply Company, The, assignor to The Continental Supply Co., St. Louis, Mo. Rubber machinery belts and composition packing for steam-joints. 89,445; renewed Dec. 17, 1932.

Cooper Manufacturing Company, Marshalltown, Iowa. Gaskets and finished sheet materials for gaskets. 298,063; Oct. 11; Serial No. 327,046; published July 12, 1932. Class 35.

Cooper Supply Company, Philadelphia, Pa. Caviar, mayonnaise, cooking wine, etc. 298,031; Oct. 11; Serial No. 327,245; published July 19, 1932. Class 46.

Crocetta Bros. & Company, Gloversville, N. Y. Gloves. 298,082; Oct. 11; Serial No. 324,733; published July 12, 1932. Class 39.

Crosley Radio Corporation, The, Cincinnati, Ohio. Electrically operated sadirons. 298,123; Oct. 11; Serial No. 315,633; published Aug. 2, 1932. Class 21.

D'Angiola, Domenico, New York, N. Y. Canned peeled tomatoes. 298,023; Oct. 11; Serial No. 327,905; published July 19, 1932. Class 46.

Daniel, Jack. (See Motlow, Lem.)

Dart, J. W., doing business as Petro-Syllium Company, Chicago, Ill., assignor to Petro-Syllium Company. Mineral oil and psyllium preparation. 298,130; Oct. 11; Serial No. 301,250; published Sept. 9, 1930. Class 6.

Davis, John H., Company, doing business as Sunset Line & Twine Company, San Francisco, Calif. Fishing lines. 298,099; Oct. 11; Serial No. 327,936; published July 26, 1932. Class 22.

Davis & Lawrence Co., New York, N. Y. Liniment. 90,515; renewed Mar. 4, 1933.

DeLong Hook and Eye Company, The, Philadelphia, Pa. Sanitary napkins. 298,140; Oct. 11; Serial No. 322,687; published July 26, 1932. Class 44.

Detroit Show Case Co., Detroit, Mich. Show-cases. 89,447; renewed Dec. 17, 1932.

Dijon Laboratories. (See Skelton, Harold.)

Dixie Mills Company, East St. Louis, Ill. Plant ration. 298,073; Oct. 11; Serial No. 326,462; published July 26, 1932. Class 10.

Drake, Harrington E., Newark, N. J. Coin-controlled ball projecting amusement devices. 298,109; Oct. 11; Serial No. 327,215; published Aug. 2, 1932. Class 22.

Dubovel Corporation, The, Jersey City, N. J. Compound oxygen vapor. 298,164; Oct. 11. Class 6.

Dunlop Rubber Company, Limited, Birmingham, England. Tennis and badminton rackets. 298,103; Oct. 11; Serial No. 327,818; published July 26, 1932. Class 22.

Duo-Tint Bulb & Battery Co. (See Riggs, Dalton W.)

Duval's Food Products Co. (See Fritsch, Emma.)

Dynamidon-Werk Engelhorn & Co. G. m. b. H., Fabrik für keramische Produkte, feuerfeste Massen und Schleifmaterialien, Mannheim-Waldhof, Germany. Refractory bricks. 298,143; Oct. 11; Serial No. 323,528; published July 12, 1932. Class 12.

Earle, Baylus E., Colfax, La. Asphalt compound, used as a joint filler, roofing compound, roof coating, etc. 298,069; Oct. 11; Serial No. 326,675; published July 12, 1932. Class 12.

Edgerton, C. A., Manufacturing Company, assignor to President Suspender Company, Shirley, Mass. Suspenders. 90,103; renewed Feb. 4, 1933.

Electric Auto-Lite Company, The, Toledo, Ohio. Storage batteries. 298,131; Oct. 11; Serial No. 299,053; published Aug. 2, 1932. Class 21.

Electric Mfg. Co., The, San Francisco, Calif. Electric hair driers. 298,056; Oct. 11; Serial No. 328,270; published Aug. 2, 1932. Class 44.

Ephrata Shoe Company, Ephrata, Pa. Shoes. 298,047; Oct. 11; Serial No. 327,007; published July 12, 1932. Class 39.

Estate Stove Company, The, Hamilton, Ohio. Heating apparatus or appliances. 298,118; Oct. 11; Serial No. 316,089; published Aug. 2, 1932. Class 34.

Fairbanks, E. and T., and Company, St. Johnsbury, Vt. Weighing machines and parts thereof. 298,116; Oct. 11; Serial No. 323,214; published Aug. 2, 1932. Class 26.

Feinstein & Company, Inc., Philadelphia, Pa. Gas ranges. 298,183; Oct. 11. Class 34.

Felco Products & Mfg. Co. (See Feldman, Jack.)

Feldman, Jack, doing business as Felco Products & Mfg. Co., New York, N. Y. Liquid wax. 298,005; Oct. 11; Serial No. 326,313; published Aug. 2, 1932. Class 16.

Fennimore, A. L., & Sons, Trenton, N. J. Medicine. 298,127; Oct. 11; Serial No. 282,289; published July 12, 1932. Class 6.

Firestone Tire & Rubber Company, The, Akron, Ohio. Brake testing machines. 297,985; Oct. 11; Serial No. 328,091; published Aug. 2, 1932. Class 26.

Firestone Tire & Rubber Company, Akron, Ohio. Brake testing machines. 297,986; Oct. 11; Serial No. 328,093; published Aug. 2, 1932. Class 26.

Florasynth Laboratories, Inc., New York, N. Y. Maltless concentrates. 298,133; Oct. 11; Serial No. 305,434; published July 26, 1932. Class 45.

Florida Citrus Exchange, Tampa, Fla. Canned citrus fruits. 298,049; Oct. 11; Serial No. 326,812; published July 19, 1932. Class 46.

Fogarty, Phillip, & Co., New York and Brooklyn, to Charles A. Fogarty, doing business as Phillip Fogarty Co., Brooklyn, N. Y., successor. Brushes. 90,106; renewed Feb. 4, 1933.

Franklin Mills Company, Batavia, N. Y. Whole wheat flour. 298,155; Oct. 11. Class 46.

Fritsch, Emma, doing business as Duval's Food Products Co., Hawthorne, N. J. Food concentrate. 298,090; Oct. 11; Serial No. 322,584; published Mar. 8, 1932. Class 46.

Fulton, William, & Sons Limited, Paisley, Scotland. Cloths and stuffs of wool, worsted or hair. 38,564; renewed July 8, 1932.

Game O' Golf, Inc., Atlanta, Ga. Game. 298,170; Oct. 11. Class 22.

Gans Company, Los Angeles, Calif. Marble projecting board game. 298,105; Oct. 11; Serial No. 327,630; published July 26, 1932. Class 22.

Garment Attachment Corporation, New York, N. Y. Attachments for sewing machines and the like. 298,122; Oct. 11; Serial No. 315,309; published July 26, 1932. Class 23.

Geiss, Jack, Cleveland, Ohio. Checker game. 298,101; Oct. 11; Serial No. 327,871; published July 26, 1932. Class 22.

General Cable Corporation, New York, N. Y. Electrical wires and cables. 298,019; Oct. 11; Serial No. 327,614; published July 26, 1932. Class 21.

General Electric Company, Schenectady, N. Y. Charts for recording instruments. 297,984; Oct. 11; Serial No. 328,082; published Aug. 21, 1932. Class 26.

Gillett, Sam B. and Idus T., El Paso, Tex. Food product. 298,172; Oct. 11. Class 46.

Gintotahevage, Jean S., Marseilles, France. Curry sauce. 298,086; Oct. 11; Serial No. 328,504; published July 19, 1932. Class 46.

Godman, H. C., Company, The, Columbus, Ohio. Shoes. 298,144; Oct. 11; Serial No. 321,871; published July 12, 1932. Class 39.

Golden West Brewing Company, Oakland, Calif. Malt beverage packed in cartons. 298,088; Oct. 11; Serial No. 322,213; published Aug. 2, 1932. Class 48.

Goldsmith, P. Sons Co., The, Cincinnati, Ohio. Swim suits, caps, coats, etc. 298,053; Oct. 11; Serial No. 326,142; published July 12, 1932. Class 39.

Golf Ball Inc., Chicago, Ill. Golf balls. 298,097–8; Oct. 11; Serial Nos. 328,121–2; published July 26, 1932. Class 22.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Automobile body polish. 298,010; Oct. 11; Serial No. 327,394; published July 26, 1932. Class 16.

Goodyear Yellow Pine Company, Picayune, Miss. Fresh fruit and vegetables. 298,169; Oct. 11, 1932. Class 46.

Gordon, Graham M., assignor to Viber Company, Limited, Los Angeles, Calif. Machinery for tamping, vibrating, etc., wet concrete mixture in molds and forms. 297,997; Oct. 11; Serial No. 326,853; published July 26, 1932. Class 23.

Gottschalk, John W., Mfg. Co., doing business as Metal Sponge Sales Corporation, Philadelphia, Pa. Abradants consisting of a metallic wire. 298,006; Oct. 11; Serial No. 326,012; published Aug. 2, 1932. Class 4.

Gouldbestos Corporation. (See S. B. G. Holding Corporation.)

Grand Shellac Works. (See Cantor Bros.)

Gray, Charles P., West Chester, Pa. Mechanical advertising displays. 297,994; Oct. 11; Serial No. 327,691; published July 26, 1932. Class 23.

Great Lakes Varnish Works Inc., Chicago, Ill. Varnish. 298,060; Oct. 11; Serial No. 328,003; published July 26, 1932. Class 16.

Greenhall, Leonard D., doing business as Greenhall Bros., Brooklyn and New York, N. Y. Suspenders, garters, and apparel belts. 298,043; Oct. 11; Serial No. 327,095; published July 19, 1932. Class 39.

H. P. Sauce, Limited. (See Midland Vinegar Company Limited, assignor.)

Hardy, Frank, Cheyenne, Wyo. Shopping bags. 298,182; Oct. 11. Class 2.

Harrington, Edwin I., assignor, by mesne assignments, to B. B. Culture Laboratory, Inc., New York, N. Y. Culture of lactic bacilli for medicinal use. 90,535; renewed Mar. 4, 1933.

Hart & Howell, assignor, by mesne assignments, to The Hart & Howell Company, Inc., Brooklyn, Mich. Popcorn. 88,180; renewed Sept. 3, 1932.

Harter Milling Co. The, Toledo and Fostoria, by change of name to The Mennel Milling Company, Toledo, Ohio. Wheat flour. 88,874; renewed Oct. 29, 1932.

Hartwig & Vogel Aktiengesellschaft, Dresden, Germany. Cacao, chocolate, sugar-wares, etc. 298,089; Oct. 11; Serial No. 322,287; published July 19, 1932. Class 46.

Hatch, Osborne F., doing business as Lee Products Co., Lee, Mass. Cleaner for general household and laundry uses. 298,018; Oct. 11; Serial No. 327,657; published Aug. 2, 1932. Class 4.

Hickok Oil Corporation, Toledo, Ohio. Batteries, cables for electric circuits and parts thereof. 298,015; Oct. 11; Serial No. 326,899; published Aug. 2, 1932. Class 21.

Holloway, Thomas, to Holloway's Pills Limited, successor, London, England. 79,340–1; renewed Aug. 30, 1930.

Holloway, Thomas, to Holloway's Pills Limited, London, England, successor. Pills. 79,342; renewed Aug. 30, 1930.

Holloway, Thomas, to Holloway's Pills Limited, London, England, successor. Ointment. 79,976; renewed Oct. 25, 1930.

Hormann-Kaess Co. Inc., New York, N. Y. Restaurant foods. 298,083; Oct. 11; Serial No. 323,538; published July 19, 1932. Class 46.

Horton Manufacturing Company, The, Bristol, Conn. Fishing lines. 298,096; Oct. 11; Serial No. 328,278; published Aug. 2, 1932. Class 22.

Howe & French, Inc., Boston, Mass. Floor and linoleum finish. 298,142; Oct. 11; Serial No. 323,407; published July 26, 1932. Class 16.

Hydrex Felt & Engineering Company, The, Portland, Me., New York, N. Y., and Rahway, N. J., to Hydrex Asphalt Products Corporation, New York, N. Y., successor. Building, sheathing, roofing, insulating and case-lining papers. 88,298; renewed Sept. 10, 1932.

Hygrade Sylvania Corporation, Salem, Mass. Electric incandescent lamps. 298,020; Oct. 11; Serial No. 327,589; published July 26, 1932. Class 21.

Hygrade Sylvania Corporation, Emporium, Pa. Radio tubes and kits of radio tubes. 298,181; Oct. 11. Class 21.

I. T. S. Company, The, Elyria, Ohio. Rubber heels. 298,025; Oct. 11; Serial No. 327,508; published July 12, 1932. Class 39.

Ice Cream Sandwich Corporation, The, Long Island City, N. Y. Ice cream confections. 298,027; Oct. 11; Serial No. 327,509; published July 19, 1932. Class 46.

International Non-Staining Cement Company, Brooklyn, N. Y. Building cement. 298,156; Oct. 11. Class 12.

Ireland & Taub Paper Co., Inc., New York, N. Y. Coated printing paper. 298,173; Oct. 11. Class 37.

Jarvis, Anna, Philadelphia, Pa. Envelopes, writing paper, and blotters. 90,540; renewed Mar. 4, 1933.

Jenkins Bros., New York, N. Y. Jar rings. 298,113; Oct. 11; Serial No. 323,050; published Mar. 8, 1932. Class 35.

Jersild Knitting Company, Neenah, Wis. Coats and jackets. 298,159; Oct. 11. Class 39.

Johnson, Mead, & Company, Evansville, Ind. Cod liver oil. 298,106; Oct. 11. Class 6.

Jönköpings och Vulcans Tändsticksfabriksaktiebolag, Jonkoping, Sweden. Matches. 89,373; renewed Dec. 10, 1932.

Keystone Steel & Wire Company, Peoria (South Bartonville), Ill. Fence stays. 297,991; Oct. 11; Serial No. 327,695; published Aug. 2, 1932. Class 18.

Kilbourne & Jacobs Manufacturing Company, assignor, by mesne assignments, to The Case Crane & Kilbourne Jacobs Company, Columbus, Ohio. Wheel scrapers, drag-scrapers, and grading-plows. 89,036; renewed Nov. 5, 1932.

Kilbourne & Jacobs Mfg. Co., The, assignor, by mesne assignments, to The Case Crane & Kilbourne Jacobs Company, Columbus, Ohio. Cars, carts, and wheelbarrows. 89,189; renewed Nov. 19, 1932.

Kirchbach'sche Werke Kirchbach & Co., Coswig, Germany. Brake and clutch bands, discs, cones, etc. 298,001; Oct. 11; Serial No. 325,431; published Aug. 2, 1932. Class 35.

Koenigsberg Bros., New York, N. Y. Bloomers, panties, brassières, etc. 297,987; Oct. 11; Serial No. 325,404; published July 12, 1932. Class 39.

Lansburgh & Bro., Washington, D. C. Shoes, slippers, oxfords, etc. 298,184; Oct. 11; Serial No. 306,403; published July 12, 1932. Class 39.

Layton Pure Food Company, East St. Louis, Ill., assignor to Rumford Chemical Works, Rumford, R. I. Baking powder and baking soda. 90,352; renewed Feb. 18, 1933.

Leather Equipment Company, Inc., Chicago, Ill. Toggles and frames for use in stretching hides and leather. 297,983; Oct. 11; Serial No. 327,800; published Aug. 2, 1932. Class 23.

Lee Products Co. (See Hatch, Osborne F.)

Leggett, Francis H., & Company, New York, N. Y. Sardines. 39,562; renewed Dec. 30, 1932.

Level Hat Co., Inc., South Norwalk, Conn. Men's hats. 298,124; Oct. 11; Serial No. 314,413; published July 26, 1932. Class 39.

Locke, Herman C., doing business as Locke Nursery and Floral Co., New Braunfels, Tex. Seeds. 298,081; Oct. 11; Serial No. 324,536; published July 26, 1932. Class 1.

Loewenthal Company, The, Akron, Ohio. Tires, inner tubes, tube repair kits, etc. 297,988; Oct. 11; Serial No. 325,952; published July 26, 1932. Class 35.

Lucky Break Co., San Diego, Calif. Ice cream and frozen confections. 298,054; Oct. 11; Serial No. 326,016; published July 19, 1932. Class 46.

Lucky Mo-Jo Products Co. (See Neumann, Morton G.)

Mackenzie, Leon R., Des Moines, Iowa, assignor to L. R. Mackenzie Incorporated, Tulsa, Okla. Soap. 298,057; Oct. 11; Serial No. 328,131; published Aug. 2, 1932. Class 4.

Makina Corporation, New York, N. Y. Cameras, sensitized photographic plates and films, etc. 297,989; Oct. 11; Serial No. 327,099; published July 26, 1932. Class 26.

Mars, Incorporated, Chicago, Ill. Whole eggs. 298,137; Oct. 11; Serial No. 324,350; published May 31, 1932. Class 46.

Mars, Incorporated, Chicago, Ill. Egg whites. 298,138; Oct. 11; Serial No. 324,351; published May 31, 1932. Class 46.

Mars, Incorporated, Chicago, Ill. Egg yolks. 298,139; Oct. 11; Serial No. 324,352; published May 31, 1932. Class 46.

Marshall Field & Company, Chicago, Ill. Writing paper and envelopes. 298,171; Oct. 11. Class 37.

May Department Stores Company, The, St. Louis, Mo. Shoes. 298,150; Oct. 11; Serial No. 320,439; published July 19, 1932. Class 39.

Mayer, M. E., Vienna, Austria. Grindstones, pumice stones, polishing powder, etc. 298,152; Oct. 11; Serial No. 316,496; published July 26, 1932. Class 4.

McCord Radiator & Mfg. Co., Detroit, Mich. Gaskets. 298,176; Oct. 11. Class 35.

McKee Refrigerator Company, Cobleskill, N. Y. Ice boxes and refrigerators. 298,112; Oct. 11; Serial No. 326,383; published July 26, 1932. Class 31.

Mennel Milling Company. (See Harter Milling Co., The.)

Metal Sponge Sales Corporation. (See Gottschalk, John W.)

Michigan Seating Co., Jackson, Mich. Furniture. 88,509; Renewed Sept. 24, 1932.

Micro Machine Company, Bettendorf, Iowa. Pistons and packing rings. 298,074; Oct. 11; Serial No. 326,019; published Aug. 2, 1932. Class 35.

Midland Vinegar Company Limited, The, assignor to H. P. Sauce Limited, Birmingham, England. Sauce and pickles. 90,229; renewed Feb. 11, 1933.

Minneapolis Show Case & Fixture Co., Minneapolis, Minn. Refrigerators, ice boxes, and refrigerator display cases. 298,174; Oct. 11. Class 31.

Moseley, Cleo P., doing business as Sumatra Jewelry Co., Upper Darby, Pa. Finger rings. 298,165; Oct. 11. Class 28.

Motlow, Lem, doing business as Jack Daniel, Lynchburg, Tenn. Whiskey. 298,102; Oct. 11; Serial No. 327,826; published July 26, 1932. Class 49.

Mueller, L. J., Furnace Company, Milwaukee, Wis. Heating and air conditioning systems. 298,115; Oct. 11; Serial No. 318,429; published Oct. 13, 1931. Class 34.

Mulvey, William F., Los Angeles, Calif. Plastic blocks. 298,117; Oct. 11; Serial No. 319,120; published July 12, 1932. Class 12.

National Aluminate Corporation, Chicago, Ill. Pumps, water motors, and mechanisms for proportioning reagents fed to a water purifying system. 298,080; Oct. 11; Serial No. 325,718; published July 26, 1932. Class 23.

National Malleable and Steel Castings Company, Cleveland, Ohio. Rolling mill castings. 298,180; Oct. 11. Class 14.

Naugatuck Chemical Company, The, New York, N. Y. Rubber paint. 298,022; Oct. 11; Serial No. 327,881; published July 26, 1932. Class 16.

Nemicide Company, Limited, Honolulu, Hawaii. Fertilizers. 298,141; Oct. 11; Serial No. 323,172; published July 26, 1932. Class 10.

Neumann, Morton G., doing business as Lucky Mo-Jo Products Co., Chicago, Ill. Incense and perfumes. 298,129; Oct. 11; Serial No. 293,678; published Mar. 17, 1931. Class 6.

New York Boat Oar Co., Inc., New York, N. Y. Boat oars and paddles. 298,160; Oct. 11. Class 19.

Nicolay, A. Russell, doing business as Nik-O-Life Battery Company, Indianapolis, Ind. Storage batteries. 298,011; Oct. 11; Serial No. 327,502; published July 26, 1932. Class 21.

Nik-O-Life Battery Company. (See Nicolay, A. Russell.)

Norge Corporation, Detroit, Mich. Refrigerator units. 298,110; Oct. 11; Serial No. 326,757; published Aug. 2, 1932. Class 31.

North Whittier Heights Citrus Association, Puente, Calif. Fresh citrus fruit. 298,024; Oct. 11; Serial No. 327,943; published July 19, 1932. Class 46.

Nusbaum, Knitters, Inc., Ozone Park, N. Y. Scarfs and jackets. 298,039; Oct. 11; Serial No. 327,662; published July 12, 1932. Class 39.

Olds Products Co., The, Chicago, Ill. Food relishes, salad spreads, dressing, etc. 298,084; Oct. 11; Serial No. 324,568; published July 19, 1932. Class 46.

Oliver Bros., Philadelphia, Pa. Hosiery. 298,158; Oct. 11. Class 39.

Otis, McAllister & Co. (See Portland Flouring Mills Company, The, assignor.)

Ottawa Products Company, Toledo, Ohio. Novelty article containing an element capable for cleaning glass. 298,003; Oct. 11; Serial No. 326,492; published Aug. 2, 1932. Class 4.

Pacific Mills, Lawrence and Boston, to Pacific Mills, Boston, Mass. Cotton piece and dress goods. 90,469; renewed Feb. 25, 1933.

Panhandle Refining Company, Wichita Falls, Tex. Gasoline. 298,012; Oct. 11; Serial No. 327,523; published July 26, 1932. Class 15.

Paramat Limited, London, England. Paper flongs for making printing plates. 298,038; Oct. 11; Serial No. 327,636; published July 26, 1932. Class 50.

Parker, Frank, assignor, by mesne assignments, to Parker-Herbex Corporation, New York, N. Y. Preparations for the hair. 39,517; renewed Dec. 23, 1932.

Paulson, John P., Chicago, Ill. Lubrication oils and greases. 298,007; Oct. 11; Serial No. 325,694; published July 26, 1932. Class 15.

Peale, Peacock & Kerr, Inc., Philadelphia, Pa. Bituminous coal. 90,400; renewed Feb. 18, 1933.

Peirce Shoe Co., Richmond, Va. Shoes. 298,035; Oct. 11; Serial No. 327,198 published July 12, 1932. Class 39.

Penn-Jersey Auto Stores, Inc., Easton, Pa. Patching repair kits. 298,079; Oct. 11; Serial No. 327,284; published July 26, 1932. Class 35.

Peoples Drug Stores, Inc., doing business as The Barnard Company, Washington, D. C. Deodorant in liquid and cream form. 298,168; Oct. 11. Class 6.

Petro-Syllium Company. (See Dart, J. W.)

Pfeiff Brothers, Brooklyn, N. Y. Leather belting. 298,066; Oct. 11; Serial No. 326,494; published July 26, 1932. Class 35.

Pharis Tire and Rubber Company, The, Newark, Ohio. Rubber tires for vehicles. 298,121; Oct. 11; Serial No. 314,961; published July 26, 1932. Class 35.

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. 88,421; renewed Sept. 17, 1932.

Planters Nut & Chocolate Company, Suffolk, Va., and Wilkes-Barre, Pa. Salted peanuts and peanut bars. 298,028; Oct. 11; Serial No. 327,766; published July 19, 1932. Class 46.

Poirette Corsets, Inc., New York, N. Y. Foundation garments, corsets, brassières, etc. 298,048; Oct. 11; Serial No. 327,024; published July 12, 1932. Class 39.

Portland Flouring Mills Company, The, Portland, Oreg., assignor, by mesne assignments, to Otis, McAllister & Co., San Francisco, Calif. Wheat flour. 88,357–9; renewed Sept. 10, 1932.

Portland Flouring Mills Company, The, Portland, Oreg., assignor, by mesne assignments, to Otis, McAllister & Co., San Francisco, Calif. Wheat flour. 88,520; renewed Sept. 24, 1932.

Portland Flouring Mills Company, The, Portland, Oreg., assignor, by mesne assignments, to Otis, McAllister & Co., San Francisco, Calif. Wheat flour. 88,948; renewed Oct. 29, 1932.

President Suspender Company. (See Edgerton, C. A., Manufacturing Company, assignor.)

Price Battery Corporation, Philadelphia, Pa. Storage batteries. 298,162; Oct. 11. Class 21.

Procter & Gamble Company, The, Cincinnati, Ohio. Soap. 298,059; Oct. 11; Serial No. 328,038; published July 26, 1932. Class 4.

Providence Fittings Company, Inc., Lockport, N. Y. Pipe fittings. 297,992; Oct. 11; Serial No. 327,706; Aug. 2. Class 13.

RCA Victor Company, Inc., Camden, N. J. Radio receiving sets, television receiving sets, etc. 298,004; Oct. 11; Serial No. 326,431; published July 26, 1932. Class 21.

Rafsky, Alex, New York, N. Y. Razor blades. 297,993; Oct. 11; Serial No. 327,663; published Aug. 2, 1932. Class 23.

Ray Fuel Company, Detroit, Mich. Charcoal. 298,040; Oct. 11; Serial No. 327,945; published Aug. 2, 1932. Class 1.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Brake and transmission lining. 298,147; Oct. 11; Serial No. 324,898; published July 26, 1932. Class 35.

Reed & Carurick, Jersey City, N. J. General tonic. 298,068; Oct. 11; Serial No. 325,185; published July 12, 1932. Class 6.

Richfield Oil Corporation of New York, New York, N. Y. Gasoline. 298,178; Oct. 11. Class 15.

Riggs, Dalton W., doing business as Duo-Tint Bulb & Battery Co., Chicago, Ill. Electric incandescent lamp bulbs and batteries. 298,135; Oct. 11; Serial No. 324,115; published July 26, 1932. Class 21.

Riker Company, The, Newark, N. J. Buckles. 298,145; Oct. 11; Serial No. 321,919; published July 12, 1932. Class 40.

Rittener, Agnes, doing business as Agnes, Paris, France. Hats. 298,093; Oct. 11; Serial No. 320,510; published July 12, 1932. Class 39.

Rumford Chemical Works. (See Layton Pure Food Company, assignor.)

S. B. G. Holding Corporation, doing business as Gouldbestos Corporation, New York, N. Y. Brake lining. 298,120; Oct. 11; Serial No. 313,055; published July 12, 1932. Class 35.

St. Louis Coffee & Spice Mills, St. Louis, Mo. Blended coffee. 88,381–2; renewed Sept. 10, 1932.

Santa Clara Pear Association, San Jose, Calif. Fresh deciduous fruit. 298,026; Oct. 11; Serial No. 327,948; published July 19, 1932. Class 46.

Seaboard Seed Company, Philadelphia, Pa. Seeds. 298,071; Oct. 11; Serial No. 326,234; published July 26, 1932. Class 1.

Sears, Roebuck and Co., Chicago, Ill. Shoes. 298,033; Oct. 11; Serial No. 327,202; published July 19, 1932. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Boots and shoes. 298,052; Oct. 11; Serial No. 326,447; published July 12, 1932. Class 39.
Selig Company, The, Atlanta, Ga. Liquid wax. 298,062; Oct. 11; Serial No. 327,990; published Aug. 2, 1932. Class 16.
Senefelder Company, Inc., The. (See Bechtold, Lewis, assignor.)
Skelton, Harold, doing business as Dijon Laboratories, Fairfield, Conn. Face cream and powder. 298,177; Oct. 11. Class 6.
Société Anonyme Lucien Lelong, Paris, France. Clothing. 298,157; Oct. 11. Class 39.
Société Générale Aéronautique, Paris, France. Automobiles, bicycles, tricycles, airplanes, etc. 297,908; Oct. 11; Serial No. 327,032; published Aug. 2, 1932. Class 19.
Société Internationale du Catalex, Paris, France. Carbureters, catalyzing apparatus, and parts. 298,128; Oct. 11; Serial No. 292,395; published July 26, 1932. Class 23.
Society of Chemical Industry in Basle, Basel, Switzerland. Pharmaceutical product. 88,376; renewed Sept. 10, 1932.
Solo Products Co., Chicago, Ill. Canned mushrooms, anchovies, tea, etc. 298,114; Oct. 11; Serial No. 324,764; published July 19, 1932. Class 46.
Southern Dairies, Inc., Washington, D. C. Frozen confections. 298,085; Oct. 11; Serial No. 322,837; published July 19, 1932. Class 46.
Southern Dairies, Inc., Washington, D. C. Frozen confections. 298,087; Oct. 11; Serial No. 322,836; published July 19, 1932. Class 46.
Southland Garment Company. (See Barber, Rita.)
Sponge Rubber Products Co., The, Derby, Conn. Rubber sponges. 298,042; Oct. 11; Serial No. 328,078; published July 26, 1932. Class 1.
Standard-Bronzefarben-Werke Carl Eckart, Furth, Germany. Bronze powder and aluminum powder, gold paint, etc. 298,153; Oct. 11; Serial No. 319,374; published July 12, 1932. Class 16.
Stern Brothers, New York, N. Y. Tennis rackets and balls; golf balls, tees, and bags; etc. 298,125; Oct. 11; Serial No. 315,706; published July 26, 1932. Class 22.
Straub, Francis J., New Kensington, Pa. Concrete building blocks. 298,070; Oct. 11; Serial No. 326,271; published July 19, 1932. Class 12.
Strauss Stores Corporation, Brooklyn, N. Y. Lubricating oils. 298,055; Oct. 11; Serial No. 328,140; published Aug. 2, 1932. Class 15.
Sumatra Jewelry Co. (See Moseley, Cleo P.)
Sunset Line & Twine Company. (See Davis, John H., Company.)
Super Concrete Emulsions, Ltd., Los Angeles, Calif. Cementitious surface coating. 298,067; Oct. 11; Serial No. 326,530; published July 19, 1932. Class 12.
Super Concrete Emulsions, Ltd., Los Angeles, Calif. Hydraulic cement concrete paving material. 298,136; Oct. 11; Serial No. 324,197; published July 19, 1932. Class 12.
Superior Packing Corp., New York, N. Y. Dried pea beans, lima beans, marrow beans, etc. 298,030; Oct. 11; Serial No. 327,487; published July 19, 1932. Class 46.
Takvorian, Hagop, doing business as James H. Takvorian, Modesto, Calif. Fresh apples. 298,044; Oct. 11; Serial No. 327,173; published July 19, 1932. Class 46.
Tarrant Company, The, New York, N. Y. Laxative medicines. 89,394; renewed Dec. 10, 1932.
Tripoli Foods, Incorporated, Baltimore, Md. Potato salad. 298,094; Oct. 11; Serial No. 319,267; published July 19, 1932. Class 46.
Union Bag & Paper Co., The, New York, N. Y., by consolidation to Union Bag & Paper Corporation, Jersey City, N. J., and New York, N. Y. Paper bags. 39,837; renewed Feb. 24, 1933.
United Shoe Machinery Company, assignor to United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass. Machines. 88,432; renewed Sept. 17, 1932.
United States Quarry Tile Company, Parkersburg, W. Va. Building tile. 298,065; Oct. 11; Serial No. 327,326; published July 10, 1932. Class 12.
United States Rubber Company, New York, N. Y. Automobile tires and inner tubes. 298,072; Oct. 11; Serial No. 325,302; published July 12, 1932. Class 35.
U. S. Slicing Machine Company, La Porte, Ind. Meat and bread slicing machines and parts thereof. 298,000; Oct. 11; Serial No. 325,251; published Aug. 2, 1932. Class 23.
U. S. Slicing Machine Company, La Porte, Ind. Meat and bread slicing machines and parts thereof. 298,075; Oct. 11; Serial No. 325,355; published Aug. 2, 1932. Class 23.
U. S. Slicing Machine Company, La Porte, Ind. Meat and bread slicing machines and parts thereof. 298,076; Oct. 11; Serial No. 325,352; published Aug. 2, 1932. Class 23.
United States Society, The, Washington, D. C. Periodical. 298,148; Oct. 11; Serial No. 321,044; published July 12, 1932. Class 38.
Vermont Hosiery and Machinery Company, Northfield and Bennington, Vt., to Vermont Hosiery and Machinery Company, New York, N. Y., and Northfield, Vt. Hosiery and knit underwear. 90,396; renewed Feb. 18, 1933.
Ver-Vac Products Co., Inc., The, Baltimore, Md. Maltless beverages and syrups. 298,111; Oct. 11; Serial No. 326,695; published July 26, 1932. Class 45.
Viber Company, Limited. (See Gordon, Graham M., assignor.)
Vita-Lax Corporation, New York and Long Beach, N. Y. Laxatives. 298,154; Oct. 11; Serial No. 321,835; published May 31, 1932. Class 6.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Slide fasteners. 297,996; Oct. 11; Serial No. 327,327; published Aug. 2, 1932. Class 13.
West Disinfecting Company, New York, to West Disinfecting Company, Long Island City, N. Y. Germicide, bactericide, and an insecticide. 88,717; renewed Oct. 15, 1932.
Whitney, Alton E., North Kansas City, Mo. Hand operated toy. 298,108; Oct. 11; Serial No. 327,492; published July 26, 1932. Class 22.
Widdis, Albert L., Long Beach, Calif. Maltless fruit beverage. 298,092; Oct. 11; Serial No. 320,562; published July 26, 1932. Class 45.
Wintersmith Chemical Co., Louisville, Ky. Fluid extract of buchu, chill-tonics and mandrake pills. 90,612; renewed Mar. 4, 1933.
Xylos Rubber Company, The, Akron, Ohio. Reclaimed rubber. 298,034; Oct. 11; Serial No. 328,110; published July 26, 1932. Class 1.
York Refrigerator Company, York, Pa. Refrigerator display cases, etc. 298,104; Oct. 11; Serial No. 327,642; published Aug. 2, 1932. Class 31.
Young, L. A., Company, The, Detroit, Mich. Golf clubs. 298,107; Oct. 11; Serial No. 327,537; published July 26, 1932. Class 22.
Youngblood, William H., Santa Rosa, Tex. Grapefruit juice, and grapefruit extract and concentrate. 298,126; Oct. 11; Serial No. 316,065; published Aug. 2, 1932. Class 45.
Zotos Corporation, New York, N. Y. Hair waving pads. 298,058; Oct. 11; Serial No. 328,111; published Aug. 2, 1932. Class 44.

LIST OF REGISTRANTS OF LABELS

Bloomer Bros. Company, Newark, N. Y. Design #511. For Ice Cream. 41,253; Oct. 11.
Bloomer Bros. Company, Newark, N. Y. 514. For Ice Cream. 41,254; Oct. 11.
Bloomer Bros. Company, Newark, N. Y. 515. For Ice Cream. 41,255; Oct. 11.
Blumberg, Abraham, doing business as Miller Soap Products, Los Angeles, Calif. White Lily Granulated Soap. For Granulated Soap. 41,356; Oct. 11.
Burton Explosives, Inc., Cleveland, Ohio. For Greater Safety in Coal Mining. For Explosives. 41,257; Oct. 11.
Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 330. For Butter. 41,258; Oct. 11.
Claff, M. B., & Sons, Inc., Randolph, Mass. Gold Seal Certified. For Footwear. 41,259; Oct. 11.
Claff, M. B., & Sons, Inc., Randolph, Mass. Smart Shoes. For Shoes. 41,260; Oct. 11.
College Inn Food Products Co., Chicago, Ill. College Inn. For Tomato Juice. 41,261; Oct. 11.
Drevenstedt, Amy, New York, N. Y. Jenny Wren—The Whistling Tea Kettle. For Tea Kettles. 41,262; Oct. 11.
Halferty, G. P., & Co., Seattle, Wash. Smart Set Salmon. For Salmon. 41,263; Oct. 11.
Holman Soap Co., Chicago, Ill. Toketa. For Soap. 41,264; Oct. 11.
Hotel Sherman Co., Chicago, Ill. College Inn. For Beverages—Namely, Soft Drinks. 41,265; Oct. 11.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Beverage Syrup. For Beverage Syrup. 41,266; Oct. 11.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Evaporated Milk. For Evaporated Milk. 41,267–8; Oct. 11.
Krenrich-Britten Company, New York, N. Y. Maple Leaf. For Butter. 41,269; Oct. 11.
Lansden, H. B., Lubbock, Tex. Sul-Fo Salts. (For Poultry). For a Preparation in Powdered Form for the Treatment of Ailments in Poultry. 41,270; Oct. 11.
Lipton, Thomas J., Inc., Hoboken, N. J.; Chicago, Ill.; and San Francisco, Calif. Lipton's Tea. (Blue Label.) For Tea. 41,271; Oct. 11.
Menasha Products Company, The, Menasha, Wis. Husky. For Frozen Custard. 41,272; Oct. 11.
Miller Soap Products. (See Blumberg, Abraham.)
Muench, Fred, Brooklyn, N. Y. Muenchner Super Five Double-Hopped Malt Syrup. For Malt Syrup. 41,273; Oct. 11.
Municipal Shoe Co. Inc., Brooklyn, N. Y. Super-Value Shoes For Active Feet 100% Leather. For Shoes. 41,274; Oct. 11.

Palumbos, Vincent, doing business as Palumbos Lithography & Printery, Rochester, N. Y. Kloro Washing Fluid. For Washing Fluid. 41,275; Oct. 11.
Reefer's No-Moth, Inc., New York, N. Y. Reefer's Continuous Sprayer. For Spray Gun for Ejecting a Spray for the Purposes of Killing Moths, Flies, Mosquitoes, Etc. 41,276; Oct. 11.
Russell Box Company, Medford, Mass. The All American. For Eggs. 41,277; Oct. 11.
Stearns & Foster Co., The, Lockland, Ohio. Mountain Mist Quilting Cotton. For Quilting Cotton. 41,278; Oct. 11.
Stemen, Fremont D., Lakeville, Ind. Razor Honing Compound. For Razor Honing Compound. 41,279; Oct. 11.
Thompson, Louise C., Cleveland, Ohio. Auntie Mary's Old English Toffee. For English Toffee. 41,280; Oct. 11.
White & Wyckoff Mfg. Co., Holyoke, Mass. Mitey Vest Pocket Memo. For Vest Pocket Memos. 41,281; Oct. 11.

LIST OF REGISTRANTS OF PRINTS

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. "Dyed in the Lively Wool." For Rugs. 13,929; Oct. 11.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. "Carrying the Story of Lively Wool." For Rugs. 13,930; Oct. 11.
Cream of Wheat Corporation, The, Minneapolis, Minn. What if he Doesn't Gain When You Start Him on Solid Food? For Wheat Breakfast Food. 13,931; Oct. 11.
Englund, John, Chicago, Ill. Pas-Tee. For Food Product Which Product Is Known and Designated by the Name Pas-Tee. 13,932; Oct. 11.
General Mills, Inc., Minneapolis, Minn. Jack O'Lantern Smiles. For Flour. 13,933; Oct. 11.
Holeproof Hosiery Co., Milwaukee, Wis. Chukker. For Socks. 13,934; Oct. 11.
Holeproof Hosiery Co., Milwaukee, Wis. Foulard—a Holeproof Hosiery Style. For Socks. 13,935; Oct. 11.
Kehrer, Bertram F., doing business as Kiddipak Mfg. Co., Seattle, Wash. Kiddipak Toys. For Assorted Pieces of Wood for Toy-Building Purposes. 13,936; Oct. 11.
Kiddipak Mfg. Co. (See Kehrer, Bertram F.)
Rowe, R. F., Milwaukee, Wis. Reducée. For Reducing Cream. 13,937; Oct. 11.
Sun Oil Company, Philadelphia, Pa. It's a Two Fisted Knockout. For Motor Fuel. 13,938; Oct. 11.
Welch Grape Juice Company, The, Westfield, N. Y. Champions of the World Keep Fit With Welch's. For Grape Juice. 13,939; Oct. 11.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Charcoal. Ray Fuel Company. 298,040; Oct. 11; Serial No. 327,945; published Aug. 2, 1932.
Coal. Black Diamond Coal Mining Company. 298,041; Oct. 11; Serial No. 327,209; published July 26, 1932.
Coal, Bituminous. Peale, Peacock & Kerr, Inc. 90,400; renewed Feb. 18, 1933.
Rubber, Reclaimed. Xylos Rubber Company. 298,034; Oct. 11; Serial No. 328,110; published July 26, 1932.
Seeds. H. C. Locke. 298,081; Oct. 11; Serial No. 324,536; published July 26, 1932.
Seeds, Grass and field. Seaboard Seed Company. 298,071; Oct. 11; Serial No. 326,234; published July 26, 1932.
Sponges, Rubber. Sponge Rubber Products Co. 298,042; Oct. 11; Serial No. 328,078; published July 26, 1932.
Stones, Lithographing. L. Bechtold. 89,086; renewed Nov. 12, 1932.

CLASS 2

Bags, Paper. Union Bag & Paper Co. 39,837; renewed Feb. 24, 1933.
Bags, Shopping. F. Hardy. 298,182; Oct. 11.

CLASS 4

Abradants. John W. Gottschalk Mfg. Co. 298,006; Oct. 11; Serial No. 326,012; published Aug. 2, 1932.
Cleanser. O. F. Hatch. 298,018; Oct. 11; Serial No. 327,657; published Aug. 2, 1932.
Corundum and rouge for grinding and polishing lenses. Bausch & Lomb Optical Company. 298,061; Oct. 11; Serial No. 327,967; published July 26, 1932.
Dressing, Shoe. Clark-Dunn Manufacturing Company. 298,016; Oct. 11; Serial No. 326,634; published July 26, 1932.
Grindstones, pumice stones, polishing powder, etc. M. E. Mayer. 298,152; Oct. 11; Serial No. 316,496; published July 26, 1932.
Novelty article containing an element capable for cleaning glass. Ottawa Products Company. 298,003; Oct. 11; Serial No. 326,492; published Aug. 2, 1932.
Soap. L. R. Mackenzie. 298,057; Oct. 11; Serial No. 328,131; published Aug. 2, 1932.
Soap. Procter & Gamble Company. 298,059; Oct. 11; Serial No. 328,038; published July 26, 1932.

CLASS 6

Baking powder and soda. Layton Pure Food Company. 90,352; renewed Feb. 18, 1933.
Bath salts. Elizabeth Arden, Inc. 298,175; Oct. 11.
Cod liver oil. Mead Johnson & Company. 298,166; Oct. 11.
Compound oxygen vapor. Duborel Corporation. 298,164; Oct. 11.
Cream and powder, Face. H. Skelton. 298,177; Oct. 11.
Culture of lactic bacilli for medicinal use. E. I. Harrington. 90,535; renewed Mar. 4, 1933.
Deodorant. Peoples Drug Stores, Inc. 298,168; Oct. 11.
Fluid extract of buchu, chill-tonics, and mandrake pills. Wintersmith Chemical Co. 90,612; renewed Mar. 4, 1933.
Germicide, bactericide, and an insecticide. West Disinfecting Company. 88,717; renewed Oct. 15, 1932.
Incense and perfumes. M. G. Neumann. 298,129; Oct. 11; Serial No. 293,678; published Mar. 17, 1931.
Laxatives. Vita-Lax Corporation. 298,154; Oct. 11; Serial No. 321,835; published May 31, 1932.
Liniment. Davis & Lawrence Co. 90,515; renewed Mar. 4, 1933.
Medicine. A. L. Fennimore & Sons. 298,127; Oct. 11; Serial No. 282,289; published July 12, 1932.
Medicines, Laxative. Tarrant Company. 89,394; renewed Dec. 10, 1932.
Mineral oil and psyllium preparation. J. W. Dart. 298,130; Oct. 11; Serial No. 301,250; published Sept. 9, 1930.
Ointment. T. Holloway. 79,340–1; renewed Aug. 30, 1930.
Ointment. T. Holloway. 79,976; renewed Oct. 25, 1930.
Pharmaceutical product. Society of Chemical Industry in Basle. 88,376; renewed Sept. 10, 1932.
Pills. T. Holloway. 79,342; renewed Aug. 30, 1930.
Preparations for the hair. F. Parker. 39,517; renewed Dec. 23, 1932.
Tonic, General. Reed & Carnrick. 298,068; Oct. 11; Serial No. 325,185; published July 12, 1932.

CLASS 9

Matches. Jönköpings och Vulcans Tändstickfabriksaktiebolag. 89,373; renewed Dec. 10, 1932.

CLASS 10

Fertilizers. Nemicide Company. 298,141; Oct. 11; Serial No. 323,172; published July 26, 1932.
Plant ration. Dixie Mills Company. 298,073; Oct. 11; Serial No. 326,462; published July 26, 1932.

CLASS 12

Asphalt compound, roofing compound, roof coating, etc. B. E. Earle. 298,069; Oct. 11; Serial No. 326,67[illegible]; published July 12, 1932.
Boards, Fiber. Celotex Company. 298,036; Oct. 11; Serial No. 327,339; published July 19, 1932.
Bricks, Refractory. Dynamidon-Werk Engelhorn & Co. G. m. b. H., Fabrik für keramische Produkte, feuerfeste Massen und Schleifmaterialien. 298,143; Oct. 11; Serial No. 323,528; published July 12, 1932.
Building, sheathing, roofing, insulating case-lining papers. Hydrex Felt & Engineering Company. 88,298; renewed Sept. 10, 1932.
Cement. International Non-Staining Cement Company. 298,156; Oct. 11.
Cement concrete paving material, Hydraulic. Super Concrete Emulsions, Ltd. 298,136; Oct. 11; Serial No. 324,197; published July 19, 1932.
Cementitious surface coating. Super Concrete Emulsions, Ltd. 298,067; Oct. 11; Serial No. 326,530; published July 19, 1932.
Concrete building blocks. F. J. Straub. 298,070; Oct. 11; Serial No. 326,271; published July 19, 1932.
Plastic blocks. W. F. Mulvey. 298,117; Oct. 11; Serial No. 319,120; published July 12, 1932.
Tile, Building. United States Quarry Tile Company. 298,065; Oct. 11; Serial No. 327,326; published July 19, 1932.
Tiles and conduits. Clay City Pipe Company. 298,064; Oct. 11; Serial No. 327,132; published July 12, 1932.

CLASS 13

Chains. Boston Gear Works, Inc. 297,990; Oct. 11; Serial No. 327,726; published Aug. 2, 1932.
Fasteners, Slide. Waldes Koh-I-Noor, Inc. 297,996; Oct. 11; Serial No. 327,327; published Aug. 2, 1932.

Fence stays. Keystone Steel & Wire Company. 297,991; Oct. 11; Serial No. 327,695; published Aug. 2, 1932.
Pipe fittings. Providence Fittings Company. 297,992; Oct. 11; Serial No. 327,706; published Aug. 2, 1932.

CLASS 14

Castings, Iron alloy. Campbell, Wyant & Cannon Foundry Company. 298,037; Oct. 11; Serial No. 327,579; published July 26, 1932.
Castings, Rolling mill. National Malleable and Steel Castings Company. 298,180; Oct. 11.

CLASS 15

Gasoline. Aitken and McDonald Company. 298,008; Oct. 11; Serial No. 325,382; published Aug. 2, 1932.
Gasoline. Panhandle Refining Company. 298,012; Oct. 11; Serial No. 327,523; published July 26, 1932.
Gasoline. Rochfield Oil Corporation of New York. 298,178; Oct. 11.
Oils and greases. J. P. Paulson. 298,007; Oct. 11; Serial No. 325,694; published July 26, 1932.
Oils and greases, Lubricating. Capstone Manufacturing Co. 90,290; renewed Feb. 18, 1933.
Oils, greases and gasoline. American Oil Company. 298,021; Oct. 11; Serial No. 327,964; published Aug. 2, 1932.
Oils, Lubricating. Strauss Stores Corporation. 298,055; Oct. 11; Serial No. 328,140; published Aug. 2, 1932.

CLASS 16

Bronze and alminum powder, gold paint, etc. Standard-Bronzefarben-Werke Carl Eckart. 298,153; Oct. 11; Serial No. 319,374; published July 12, 1932.
Finish, Floor and linoleum. Howe & French, Inc. 298,142; Oct. 11; Serial No. 323,407; published July 12, 1932.
Lacquer enamels. Berry Brothers. 298,009; Oct. 11; Serial No. 327,575; published July 26, 1932.
Paint, Rubber. Naugatuck Chemical Company. 298,022; Oct. 11; Serial No. 327,881; puolished July 26, 1932.
Paints. Cantor Bros. 298,078; Oct. 11; Serial No. 324,984; published July 26, 1932.
Polish, Automobile body. Goodyear Tire & Rubber Company. 298,010; Oct. 11; Serial No. 327,394; published July 26, 1932.
Polish, lacquer, paint and enamel finishes. Celolac Products Company. 298,119; Oct. 11; Serial No. 310,432; published June 21, 1932.
Varnish. Great Lakes Varnish Works Inc. 298,060; Oct. 11; Serial No. 328,003; published July 26, 1932.
Wax, Liquid. J. Feldman. 298,005; Oct. 11; Serial No. 326,313; published Aug. 2, 1932.
Wax, Liquid. Selig Company. 298,062; Oct. 11; Serial No. 327,990; published Aug. 2, 1932.

CLASS 19

Automobiles, bicycles, tricycles, etc. Société Générale Aéronautique. 297,998; Oct. 11; Serial No. 327,032; published Aug. 2, 1932.
Cars, carts, and wheelbarrows. Kilbourne & Jacobs Mfg. Co. 89,189; renewed Nov. 19, 1932.
Oars and paddles, Boat. New York Boat Oar Co. 298,160; Oct. 11.

CLASS 21

Batteries, cables, and parts thereof. Hickok Oil Corporation. 298,015; Oct. 11; Serial No. 326,899; published Aug. 2, 1932.
Batteries, Electric. Burgess Battery Company. 298,163; Oct. 11.
Batteries, Storage. Atlas Supply Company. 298,013; Oct. 11; Serial No. 327,495; published July 26, 1932.
Batteries, Storage. Electric Auto-Lite Company. 298,131; Oct. 11; Serial No. 299,653; published Aug. 2, 1932.
Batteries, Storage. A. R. Nicolay. 298,011; Oct. 11; Serial No. 327,562; published July 26, 1932.
Batteries, Storage. Price Battery Corporation. 298,162; Oct. 11.
Boxes or containers for storage batteries. American Container Corporation. 298,017; Oct. 11; Serial No. 327,671; published July 26, 1932.
Bulbs and Batteries. D. W. Riggs. 298,135; Oct. 11; Serial No. 324,115; published July 26, 1932.
Electric flat-irons. Chicago Flexible Shaft Company. 89,623; renewed Dec. 31, 1932.
Electric incandescent lamps. Hygrade Sylvania Corporation. 298,020; Oct. 11; Serial No. 327,589; published July 26, 1932.
Electrical cooking devices. J. L. Biggs. 298,149; Oct. 11; Serial No. 323,120; published Aug. 2, 1932.
Electrical suction cleaners and parts and accessories thereof. Air-Way Electric Appliance Corporation. 298,179; Oct. 11.
Electrical wires and cables. General Cable Corporation. 298,019; Oct. 11; Serial No. 327,614; published July 26, 1932.
Radio receiving sets, television receiving sets, etc. RCA Victor Company. 298,004; Oct. 11; Serial No. 326,431; published July 26, 1932.
Radio tubes and kits of radio tubes. Hygrade Sylvania Corporation. 298,181; Oct. 11.
Sadirons, Electrically operated. Crosley Radio Corporation. 298,123; Oct. 11; Serial No. 315,633; published Aug. 2, 1932.

CLASS 22

Amusement devices, Coin-controlled. H. E. Drake. 298,109; Oct. 11; Serial No. 327,215; published Aug. 2, 1932.
Billiard tables, Pocket. Brunswick-Balke-Collender Company. 298,100; Oct. 11; Serial No. 327,902; published July 26, 1932.
Bows, arrows, quivers, etc. Archers Company. 298,106; Oct. 11; Serial No. 327,623; published Aug. 2, 1932.
Fishing lines. John H. Davis Company. 298,099; Oct. 11; Serial No. 327,936; July 26, 1932.
Fishing lines. Horton Manufacturing Company. 298,096; Oct. 11; Serial No. 328,273; published Aug. 2, 1932.
Game. Game O'Golf, Inc. 298,170; Oct. 11.
Game, Checker. J. Geiss. 298,101; Oct. 11; Serial No. 327,871; published July 26, 1932.
Game, Marble projecting board. Gans Company. 298,105; Oct. 11; Serial No. 327,630; published July 26, 1932.
Golf balls. Golf Ball Inc. 298,097–8; Oct. 11; Serial Nos. 328,121–2; published July 26, 1932.
Golf clubs. L. A. Young Company. 298,107; Oct. 11; Serial No. 327,537; published July 26, 1932.
Tennis and badminton rackets. Dunlop Rubber Company. 298,103; Oct. 11; Serial No. 327,818; published July 26, 1932.
Tennis rackets and balls; golf clubs, balls, tees, and bags; etc. Stern Brothers. 298,125; Oct. 11; Serial No. 315,700; published July 26, 1932.
Toy, Hand operated. A. E. Whitney. 298,108; Oct. 11; Serial No. 327,492; published July 26, 1932.

CLASS 23

Advertising displays, Mechanical. C. P. Gray. 297,994; Oct. 11; Serial No. 327,691; published July 26, 1932.
Attachments for sewing machines and the like. Garment Attachment Corporation. 298,122; Oct. 11; Serial No. 315,309; published July 26, 1932.
Carbureters, catalyzing apparatus, and parts. Société Internationale Du Catalex. 298,128; Oct. 11; Serial No. 292,395; published July 26, 1932.
Clutch plates and discs. Accurate Parts Manufacturing Company. 298,002; Oct. 11; Serial No. 326,602; published Aug. 2, 1932.
Clutch plates and discs. Accurate Parts Manufacturing Company. 298,077; Oct. 11; Serial No. 326,601; published Aug. 2, 1932.
Engines, Aircraft. Bristol Aeroplane Company Limited. 297,995; Oct. 11; Serial No. 327,618; published July 26, 1932.
Machinery for tamping, vibrating, etc., wet concrete mixture in molds and forms. G. M. Gordon. 297,997; Oct. 11; Serial No. 326,853; published July 26, 1932.
Machines. United Shoe Machinery Company. 88,432; renewed Sept. 17, 1932.
Meat and bread slicing machines and parts thereof. U. S. Slicing Machine Company. 298,000; Oct. 11; Serial No. 325,351; published Aug. 2, 1932.
Meat and bread slicing machines and parts thereof. U. S. Slicing Machine Company. 298,075; Oct. 11; Serial No. 325,353; published Aug. 2, 1932.
Meat and bread slicing machines and parts thereof. U. S. Slicing Machine Company. 298,076; Oct. 11; Serial No. 325,352; published Aug. 2, 1932.
Pumps and parts thereof. Allen-Sherman-Hoff Company. 297,989; Oct. 11; Serial No. 327,722; published July 26, 1932.
Pumps, water-motors, and mechanisms for proportioning reagents fed to a water purifying system. National Aluminate Corporation. 298,080; Oct. 11; Serial No. 325,718; published July 26, 1932.
Razor blades. A. Rafsky. 297,993; Oct. 11; Serial No. 327,063; published Aug. 2, 1932.
Scrapers, drag scrapers and grading plows. Wheel. Kilbourne & Jacobs Manufacturing Company. 89,036; renewed Nov. 5, 1932.
Toggles and frames. Leather Equipment Company. 297,983; Oct. 11; Serial No. 327,800; published Aug. 2, 1932.
Vacuum cleaning apparatus. American Radiator Company. 88,442; renewed Sept. 24, 1932.

CLASS 26

Brake testing machines. Firestone Tire & Rubber Company. 297,985; Oct. 11; Serial No. 328,091; published Aug. 2, 1932.
Brake testing machines. Firestone Tire & Rubber Company. 297,986; Oct. 11; Serial No. 328,093; published Aug. 2, 1932.
Cameras, sensitized photographic plates and films, etc. Makina Corporation. 297,990; Oct. 11; Serial No. 327,099; published July 26, 1932.
Charts for recording instruments. General Electric Company. 297,984; Oct. 11; Serial No. 328,082; published Aug. 2, 1932.
Ophthalmoscopes. American Cystoscopes Makers, Inc. 298,167; Oct. 11.
Weighing machines and parts thereof. E. and T. Fairbanks and Company. 298,116; Oct. 11; Serial No. 323,214; published Aug. 2, 1932.

CLASS 28

Pins, badges, and keys. Alpha Chi Sigma Fraternity. 298,014; Oct. 11; Serial No. 327,211; published July 26, 1932.
Rings, Finger. C. P. Moseley. 298,165; Oct. 11.

CLASS 29

Brushes. Phillip Fogarty & Co. 90,106; renewed Feb. 4, 1933.

CLASS 31

Ice boxes and refrigerators. McKee Refrigerator Company. 298,112; Oct. 11; Serial No. 326,383; published July 26, 1932.
Refrigerator display cases. York Refrigerator Company. 298,104; Oct. 11; Serial No. 327,642; published Aug. 2, 1932.
Refrigerator units. Norge Corporation. 298,110; Oct. 11; Serial No. 326,757; published Aug. 2, 1932.
Refrigerators, ice boxes, and refrigerator display cases. Minneapolis Show Case & Fixture Co. 298,174; Oct. 11.

CLASS 32

Furniture. Michigan Seating Co. 88,509; renewed Sept. 24, 1932.
Show cases. Detroit Show Case Co. 89,447; renewed Dec. 17, 1932.

CLASS 34

Heating and air conditioning systems. L. J. Mueller Furnace Company. 298,115; Oct. 11; Serial No. 318,429; published Oct. 18, 1931.
Heating apparatus or appliances. Estate Stove Company. 298,118; Oct. 11; Serial No. 316,089; published Aug. 2, 1932.
Ranges, Gas. Feinstein & Company. 298,183; Oct. 11.

CLASS 35

Belts and composition packing for steam-joints, Rubber machinery. Continental Supply Company. 89,445; renewed Dec. 17, 1932.
Belting, Leather. Pfeiff Brothers. 298,066; Oct. 11; Serial No. 326,494; published July 26, 1932.
Brake and clutch bands, discs, cones, etc. Kirchbach'sche Werke Kirchbach & Co. 298,001; Oct. 11; Serial No. 325,431; published Aug. 2, 1932.
Brake lining. S. B. G. Holding Corporation. 298,120; Oct. 11; Serial No. 313,055; published July 12, 1932.
Gaskets. McCord Radiator & Mfg. Co. 298,176; Oct. 11.
Gaskets and finished sheet materials for gaskets. Cooper Manufacturing Company. 298,063; Oct. 11; Serial No. 327,046; published July 12, 1932.
Jar rings. Jenkins Bros. 298,113; Oct. 11; Serial No. 323,050; published Mar. 8, 1932.
Lining, Brake and transmission. Raybestos-Manhattan, Incorporated. 298,147; Oct. 11; Serial No. 324,398; published July 26, 1932.
Patching repair kits. Penn-Jersey Auto Stores, Inc. 298,079; Oct. 11; Serial No. 327,284; published July 26, 1932.
Pistons and packing rings. Micro Machine Company. 298,074; Oct. 11; Serial No. 326,019; published Aug. 2, 1932.
Tires and inner tubes, Automobile. United States Rubber Company. 298,072; Oct. 11; Serial No. 325,302; published July 12, 1932.
Tires for vehicles, Rubber. Pharis Tire and Rubber Company. 298,121; Oct. 11; Serial No. 314,961; published July 26, 1932.
Tires, inner tubes, tube repair kits, etc. Loewenthal Company. 297,988; Oct. 11; Serial No. 325,952; published July 26, 1932.

CLASS 37

Envelopes, writing paper and blotters. A. Jarvis. 90,540; renewed Mar. 4, 1933.
Paper and envelopes. Marshall Field & Company. 298,171; Oct. 11.
Paper, Coated printing. Ireland & Taub Paper Co. 298,178; Oct. 11.

CLASS 38

Periodical. United States Society. 298,148; Oct. 11; Serial No. 321,044; published July 12, 1932.

CLASS 39

Bloomers, panties, brassières, etc. Koenigsberg Bros. 297,987; Oct. 11; Serial No. 325,404; published July 12, 1932.
Boots and shoes. Sears, Roebuck and Co. 298,052; Oct. 11; Serial No. 326,447; published July 12, 1932.
Clothing. Société Anonyme Lucien Lelong. 298,157; Oct. 11.
Coats and jackets. Jersild Knitting Company. 298,159; Oct. 11.
Corsets. American Lady Corset Co. 88,228; renewed Sept. 10, 1932.
Dresses, suits, slips, etc. R. Barber. 298,161; Oct. 11.
Garments, corsets, brassières, etc., Foundation. Poirette Corsets, Inc. 298,048; Oct. 11; Serial No. 327,024; published July 12, 1932.
Garments, Foundation. Artform Incorporated. 298,050; Oct. 11; Serial No. 326,972; published July 12, 1932.
Gloves. B. Altman & Co. 89,903; renewed Jan. 21, 1933.
Gloves. Crocetta Bros. & Company. 298,082; Oct. 11; Serial No. 324,733; published July 12, 1932.
Hats. Bloomingdale Bros., Inc. 298,029; Oct. 11; Serial No. 327,335; published July 19, 1932.
Hats. A. Rittener. 298,093; Oct. 11; Serial No. 320,510; published July 12, 1932.
Hats, Men's. Level Hat Co. 298,124; Oct. 11; Serial No. 314,413; published July 26, 1932.
Heels, Rubber. I. T. S. Company. 298,025; Oct. 11; Serial No. 327,508; published July 12, 1932.
Hosiery. Oliver Bros. 298,158; Oct. 11.
Hosiery and knit underwear. Vermont Hosiery and Machinery Company. 90,396; renewed Feb. 18, 1933.
Scarfs and jackets. Nusbaum, Knitters, Inc. 298,039; Oct. 11; Serial No. 327,662; published July 12, 1932.
Shoes. Bancroft-Walker Company. 298,032; Oct. 11; Serial No. 327,333; published July 12, 1932.
Shoes. James A. Banister Company. 298,146; Oct. 11; Serial No. 324,602; published July 12, 1932.
Shoes. Brown Shoe Company. 298,046; Oct. 11; Serial No. 327,129; published July 12, 1932.
Shoes. Ephrata Shoe Company. 298,047; Oct. 11; Serial No. 327,007; published July 12, 1932.
Shoes. H. C. Godman Company. 298,144; Oct. 11; Serial No. 321,871; published July 12, 1932.
Shoes. May Department Stores Company. 298,150; Oct. 11; Serial No. 320,439; published July 19, 1932.
Shoes. Peirce Shoe Co. 298,035; Oct. 11; Serial No. 327,198; published July 12, 1932.
Shoes. Sears, Roebuck and Co. 298,033; Oct. 11; Serial No. 327,202; published July 19, 1932.
Shoes, slippers, oxfords, etc. Lansburgh & Bro. 298,134; Oct. 11; Serial No. 306,403; published July 12, 1932.
Shoes, slippers, pumps, etc. Carmo Shoe Mfg. Co. 298,151; Oct. 11; Serial No. 321,586; published July 12, 1932.
Suspenders. C. A. Edgerton Manufacturing Company. 90,103; renewed Feb. 4, 1933.
Suspenders, garters, and apparel belts. L. D. Greenhall. 298,043; Oct. 11; Serial No. 327,095; published July 19, 1932.
Swim suits, caps, coats, etc. P. Goldsmith Sons Co. 298,053; Oct. 11; Serial No. 326,142; published July 12, 1932.

CLASS 40

Buckles. Riker Company. 298,145; Oct. 11; Serial No. 321,919; published July 12, 1932.

CLASS 42

Cloths and stuffs of wool, worsted, or hair. William Fulton & Sons Limited. 38,564; renewed July 8, 1932.
Cotton piece and dress goods. Pacific Mills. 90,469; renewed Feb. 25, 1933.

CLASS 44

Dryers, Electric hair. Electric Mfg. Co. 298,056; Oct. 11; Serial No. 328,270; published Aug. 2, 1932.
Hair waving pads. Zotos Corporation. 298,058; Oct. 11; Serial No. 328,111; published Aug. 2, 1932.
Sanitary napkins. DeLong Hook and Eye Company. 298,140; Oct. 11; Serial No. 322,687; published July 26, 1932.

CLASS 45

Beverages and syrups for making same, Maltless. Ver-Vac Products Co. 298,111; Oct. 11; Serial No. 326,695; published July 26, 1932.
Beverages, Maltless fruit. A. L. Widdis. 298,092; Oct. 11; Serial No. 320,562; published July 26, 1932.
Concentrates, Maltless. Florasynth Laboratories, Inc. 298,133; Oct. 11; Serial No. 305,434; published July 26, 1932.
Grapefruit juice, and grapefruit extract and concentrate. W. H. Youngblood. 298,126; Oct. 11; Serial No. 316,065; published Aug. 2, 1932.

CLASS 46

Apples, Fresh. H. Takvorian. 298,044; Oct. 11; Serial No. 327,173; published July 19, 1932.
Cacao, chocolate, sugar-wares, etc. Hartwig & Vogel Aktiengesellschaft. 298,089; Oct. 11; Serial No. 322,287; published July 19, 1932.
Canned citrus fruits. Florida Citrus Exchange. 298,049; Oct. 11; Serial No. 326,812; published July 19, 1932.
Canned fish. Antonio Alonso, Hijos. 298,051; Oct. 11; Serial No. 326,773; published July 19, 1932.
Canned fruits, vegetables, tomato purée, etc. California Packing Corporation. 298,132; Oct. 11; Serial No. 307,255; published July 19, 1932.
Canned mushrooms, anchovies, tea, etc. Solo Products Co. 298,114; Oct. 11; Serial No. 324,764; published July 19, 1932.
Canned peeled tomatoes. D. D'Angiola. 298,023; Oct. 11; Serial No. 327,905; published July 19, 1932.
Caviar, mayonnaise, cooking wine, etc. Copper Supply Company. 298,031; Oct. 11; Serial No 327,245; published July 19, 1932.
Coffee, Blended. St. Louis Coffee & Spice Mills. 88,381–2; renewed Sept. 10, 1932.
Confections, Frozen. Southern Dairies, Inc. 298,085; Oct. 11; Serial No. 322,837; published July 19, 1932.
Confections, Frozen. Southern Dairies, Inc. 298,087; Oct. 11; Serial No. 322,836; published July 19, 1932.

Curry sauce. J. S. Gintotahevage. 298,086; Oct. 11; Serial No. 323,504; published July 19, 1932.
Egg whites. Mars, Incorporated. 298,138; Oct. 11; Serial No. 324,351; published May 31, 1932.
Egg yolks. Mars, Incorporated. 298,139; Oct. 11; Serial No. 324,352; published May 31, 1932.
Eggs, Whole. Mars, Incorporated. 298,137; Oct. 11; Serial No. 324,350; published May 31, 1932.
Flour, Cake. Colorado Milling & Elevator Co. 298,095; Oct. 11; Serial No. 320,022; published Nov. 17, 1931.
Flour, Wheat. Harter Milling Company. 88,874; renewed Oct. 29, 1932.
Flour, Wheat. Pillsbury Flour Mills Company. 88,421; renewed Sept. 17, 1932.
Flour, Wheat. Portland Flouring Mills Company. 88,357–9; renewed Sept. 10, 1932.
Flour, Wheat. Portland Flouring Mills Company. 88,520; renewed Sept. 24, 1932.
Flour, Wheat. Portland Flouring Mills Company. 88,948; renewed Oct. 29, 1932.
Flour, Whole wheat. Franklin Mills Company. 298,155; Oct. 11.
Food concentrate. E. Fritsch. 298,090; Oct. 11; Serial No. 322,584; published Mar. 8, 1932.
Food product. Sam B. and Idus T. Gillett. 298,172; Oct. 11.
Food relishes, salad spreads, dressing, etc. Olds Products Co. 298,084; Oct. 11; Serial No. 324,568; published July 19, 1932.
Foods, Restaurant. Hormann-Kaess Co. Inc. 298,083; Oct. 11; Serial No. 323,538; published July 19, 1932.
Fruit, Fresh citrus. North Whittier Heights Citrus Association. 298,024; Oct. 11; Serial No. 327,943; published July 19, 1932.
Fruit, Fresh deciduous. Santa Clara Pear Association. 298,026; Oct. 11; Serial No. 327,948; published July 19, 1932.
Fruit preserves and peanut butter. Bama Company. 298,091; Oct. 11; Serial No. 320,885; published July 19, 1932.
Fruits, and vegetables, Fresh. Goodyear Yellow Pine Company. 298,169; Oct. 11.
Ice cream and frozen confections. Lucky Break Co. 298,054; Oct. 11; Serial No. 326,016; published July 19, 1932.
Ice cream confections. Ice Cream Sandwich Corporation. 298,027; Oct. 11; Serial No. 327,509; published July 19, 1932.
Pea beans, lima beans, marrow beans, etc., Dried. Superior Packing Corp. 298,030; Oct. 11; Serial No. 327,487; published July 19, 1932.
Peanuts and peanut bars, Salted. Planters Nut & Chocolate Company. 298,028; Oct. 11; Serial No. 327,766; published July 19, 1932.
Popcorn. Hart & Howell. 88,180; renewed Sept. 3, 1932.
Potato salad. Tripoli Foods, Incorporated. 298,094; Oct. 11; Serial No. 319,267; published July 19, 1932.
Sardines. Francis H. Leggett & Company. 39,562; renewed Dec. 30, 1932.
Sauce and pickles. Midland Vinegar Company Limited. 90,229; renewed Feb. 11, 1933.
Sauce or condiment. Blue Plate Foods, Inc. 298,045; Oct. 11; Serial No. 327,082; published July 19, 1932.
Sugar. American Sugar Refining Company. 88,229; renewed Sept. 10, 1932.

CLASS 48

Malt beverage packed in cartons. Golden West Brewing Company. 298,088; Oct. 11; Serial No. 322,213; published Aug. 2, 1932.

CLASS 49

Whiskey. L. Motlow. 298,102; Oct. 11; Serial No. 327,826; published July 26, 1932.

CLASS 50

Paper flongs for making printing plates. Paramat Limited. 298,038; Oct. 11; Serial No. 327,636; published July 26, 1932.

LIST OF LABELS

Auntie Mary's Old English Toffee. For English Toffee. L. C. Thompson. 41,280; Oct. 11.
Blue Jewel Beverage Syrup. For Beverage Syrup. Jewel Food Stores, Inc. 41,266; Oct. 11.
Blue Jewel Evaporated Milk. For Evaporated Milk. Jewel Food Stores, Inc. 41,267–8; Oct. 11.
College Inn. For Beverages—Namely, Soft Drinks. Hotel Sherman Co. 41,265; Oct. 11.
College Inn. For Tomato Juice. College Inn Food Products Co. 41,261; Oct. 11.
Design #511. For Ice Cream. Bloomer Bros. Company. 41,253; Oct. 11.
514. For Ice Cream. Bloomer Bros. Company. 41,254; Oct. 11.
515. For Ice Cream. Bloomer Bros. Company. 41,255; Oct. 11.
For Greater Safety In Coal Mining. For Explosives. Burton Explosives, Inc. 41,257; Oct. 11.
Gold Seal Certified. For Foot Wear. M. B. Claff & Sons, Inc. 41,259; Oct. 11.
Husky. For Frozen Custard. Menasha Products Company. 41,272; Oct. 11.
Jenny Wren—The Whistling Tea Kettle. For Tea Kettles. A. Drevenstedt. 41,262; Oct. 11.
Kloro Washing Fluid. For Washing Fluid. V. Palumbos. 41,275; Oct. 11.
Lipton's Tea. (Blue Label). For Tea. Thomas J. Lipton, Inc. 41,271; Oct. 11.
Maple Leaf. For Butter. Krenrich-Britten Company. 41,269; Oct. 11.
Mitey Vest Pocket Memo. For Vest Pocket Memos. White & Wyckoff Mfg. Co. 41,281; Oct. 11.
Mountain Mist Quilting Cotton. For Quilting Cotton. Stearns & Foster Co. 41,278; Oct. 11.
Muenchner Super Five Double-Hopped Malt Syrup. For Malt Syrup. F. Muench. 41,273; Oct. 11.
Razor Honing Compound. For Razor Honing Compound. F. D. Stemen. 41,279; Oct. 11.
Reefer's Continuous Sprayer. For Spray Gun for Ejecting a Spray for the Purposes of Killing Moths, Flies, Mosquitoes, Etc. Reefer's No-Moth, Inc. 41,276; Oct. 11.
Smart Set Salmon. For Salmon. G. P. Halferty & Co. 41,263; Oct. 11.
Smart Shoes. For Shoes. M. B. Claff & Sons, Inc. 41,260; Oct. 11.
Sul-Fo-Salts. (For Poultry). For a Preparation in Powdered Form for the Treatment of Ailments in Poultry. H. B. Lansden. 41,270; Oct. 11.
Super-Value Shoes For Active Feet 100% Leather. For Shoes. Municipal Shoe Co. Inc. 41,274; Oct. 11.
Territorial Design No. 330. For Butter. Butler Paper Products Company. 41,258; Oct. 11.
The All American. For Eggs. Russell Box Company. 41,277; Oct. 11.
Toketa. For Soap. Holman Soap Co. 41,264; Oct. 11.
White Lily Granulated Soap. For Granulated Soap. A. Blumberg. 41,256; Oct. 11.

LIST OF PRINTS

Carrying the Story of Lively Wool. For Rugs. Bigelow-Sanford Carpet Co. 13,930; Oct. 11.
Champions of the World Keep Fit with Welch's. For Grape Juice. Welch Grape Juice Company. 13,939; Oct. 11.
Chukker. For Socks. Holeproof Hosiery Co. 13,934; Oct. 11.
Dyed in the Lively Wool. For Rugs. Bigelow-Sanford Carpet Co. 13,929; Oct. 11.
Foulard-A Holeproof Hosiery Style. For Socks. Holeproof Hosiery Co. 13,935; Oct. 11.
It's A Two Fisted Knockout. For Motor Fuel. Sun Oil Company. 13,938; Oct. 11.
Jack O'Lantern Smiles. For Flour. General Mills, Inc. 13,933; Oct. 11.
Kiddipak Toys. For Assorted Pieces of Wood for Toy-Building Purposes. B. F. Kehrer. 13,936; Oct. 11.
Pas-Tee. For Food Product Which Product is Known and Designated by the Name Pas-Tee. J. Englund. 13,932; Oct. 11.
Reducée. For Reducing Cream. R. F. Rowe. 13,937; Oct. 11.
What if He Doesn't Gain When You Start Him on Solid Food? For Wheat Breakfast Food. Cream of Wheat Corporation. 13,931; Oct. 11.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 11TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abboth, Gardner, trustee. (See Mueller, Albert B., assignor.)
Abbott, Walter H. (See Jelliffe, H. W., and Abbott.)
Abel, Frank J., Massapequa, N. Y. Clock case. Des. 87,950; Oct. 11.
Abele, Theodore J. (See Kuck, H. G., and Abele.)
Achterberg, Friedrich. (See Finkelstein, H., and Achterberg.)
Achurch, William H., assignor to Gorham Manufacturing Company, Providence, R. I. Ciborium. Des. 87,899; Oct. 11.
Achurch, William H., assignor to Gorham Manufacturing Company, Providence, R. I. Chalice. Des. 87,900; Oct. 11.
Adlake Company, The. (See Hendrickson, Hugh H., assignor.)
Agasote Millboard Company, The. (See Harvey, Harold C., assignor.)
Aitchison, Peter, New Rochelle, assignor to American Bank Note Company, New York, N. Y. Sizing machine. 1,882,054; Oct. 11.
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Akron Truss Company, The. (See Collins, Thomas L., assignor.)
Aktiebolaget Atmos. (See Blomquist, Johan V., assignor.)
Aktiebolaget Bästa. (See Heijkenskjöld, Gustaf O. W., assignor.)
Aktiebolaget Nomy. (See Wallgren, August G. F., assignor.)
Alco Products, Incorporated. (See Wallis, John S., assignor.)
Alden, Herbert W., and N. R. Brownyer, assignors to The Timken-Detroit Axle Company, Detroit, Mich. Car truck. 1,882,469; Oct. 11.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Fine, Charles A., assignor.)
Alemite Corporation. (See Moore, George L., assignor.)
Alemite Corporation. (See Morse, Normand W., assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Alemite Corporation. (See Raisch, Charles F., assignor.)
Alemite Corporation. (See Zerk, Oscar U., assignor.)
Allegheny Steel Company. (See McQuigg, Sanford E., assignor.)
All Fair Incorporated. (See Hewitt, Elmer L., assignor.)
Altorfer Bros. Company. (See Denbaugh, Mark A., assignor.)
Alwin, George F., Ripon, Wis. Chicken feeder. 1,882,353; Oct. 11.
Ambler Asbestos Shingle & Sheathing Company. (See Mattison, Richard V., assignor.)
American Bank Note Company. (See Aitchison, Peter, assignor.)
American Blower Corporation. (See Pfeffer, Henry W., assignor.)
American Chemical Paint Company. (See Saukaitis, Albert J., assignor.)
American Electrical Heater Company. (See Kuhn, F., and Thomas, assignors.)
American Engineering Company. (See Preston, Herbert E., assignor.)
American Face Brick Research Corporation. (See Lee, Sherman Q., assignor.)
American Face Brick Research Corporation. (See Storey, Oliver W., assignor.)
American Face Brick Research Corporation. (See Wyatt, Edwin M., assignor.)
American Foundry Equipment Company, The. (See Peik, Louis D., assignor.)
American Hammered Piston Ring Company, The. (See Justice, William N., assignor.)
American Hammered Piston Ring Company, The. (See Morton, Allen W., assignor.)
American Lurgi Corporation. (See Gensecke, Wilhelm, assignor.)
American Lurgi Corporation. (See Neumark, M., Weidmann, and Roesner, assignors.)
American Machine & Foundry Company. (See Wellman, Charles P., assignor.)
American Olympic Association. (See Graves, George W., assignor.)
American Sales Book Company, Limited. (See Bottle, Edward K., assignor.)
American Ship Building Company, The. (See Cross, Albert W., assignor.)
American Steel Foundries. (See Oelkers, Alfred H., assignor.)
American Tar Products Company. (See Hyde, Elmer H., assignor.)
American Telephone and Telegraph Company. (See Edwards, Paul G., assignor.)
American Telephone and Telegraph Company, et al. (See Hunt, A. E., assignor, and Lang.)
American Telephone and Telegraph Company. (See Kent, Robert J., assignor.)
Anaconda Wire & Cable Company. (See Kennedy, Joseph A., assignor.)
Anchor Cap & Closure Corporation. (See Hammer, Charles, assignor.)
Anchor Cap & Closure Corporation. (See Hardiman, James S., assignor.)
Anchor Cap & Closure Corporation. (See Mullen, George W., assignor.)
Anderson, Johan A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Tension device. 1,882,539; Oct. 11.
Anderson, Samuel M., Sharon, Mass., and R. T. Palmer, New York, N. Y., assignors to B. F. Sturtevant Company, Boston, Mass. Air conditioning control. 1,881,992; Oct. 11.
Andreas, Arno, Munster, Germany. Method of and apparatus for sealing bag valves. 1,882,108; Oct. 11.
Angla, Marius Robert. (See Gault, H., and Angla.)
Anglo-Persian Oil Company. (See Birch, S. F., and Scott, assignors.)
Animal Trap Company of America. (See Hancock, Charles L., assignor.)
Appleman, Boyd K., Beaumont, Tex. Drill bit. 1,882,268; Oct. 11.
Arp, Ewald A., Minneapolis, Minn., assignor to Van Norman Machine Tool Company, Springfield, Mass. Tool attachment device. 1,881,993; Oct. 11.
Arrow Tools, Inc. (See Pollard, Hugh E., assignor.)
Ashton, Ward, assignor to J. O. Kerr, Ottawa, Ontario, Canada. Animal tag. 1,882,378; Oct. 11.
Aspinwall, Robert S., Detroit, Mich. Canopy stem. 1,882,312; Oct. 11.
Assel, Walter J., assignor to The Timken Roller Bearing Company, Canton, Ohio. Furnace. 1,882,470; Oct. 11.
Associated Electric Laboratories, Inc. (See Hershey, Harry E., assignor.)
Associated Electric Laboratories, Inc. (See Saunders, Norman H., assignor.)
Audley Engineering Company Limited. (See Leach, Robert W., assignor.)
Auld, D. L., Company, The. (See Moats, DeWitt T., assignor.)
Austin, John B., East Cleveland, Ohio. High speed welding electrode. 1,882,311; Oct. 11.
Autofont Company, The. (See Olsen, Henry H., assignor.)
Automat Molding & Folding Company, The. (See Morris, Howard A., assignor.)
Avery, Charles E., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Push through socket. 1,882,055; Oct. 11.
Babcock & Wilcox Company, The. (See Black, John E., assignor.)
Babcock & Wilcox Company, The. (See Noble, Ernest E., assignor.)
Bacon, Job L., and F. H. Lobb, assignors to Whitall Tatum Company, Millville, N. J. Bottle making machine. 1,882,172; Oct. 11.
Badger, E. B., & Sons Company. (See Hall, Walter T., assignor.)
Bailey, Banks & Biddle Company, The. (See Meell, George A., assignor.)
Bailey, Ervin G., Easton, assignor to Fuller Lehigh Company, Fullerton, Pa. Distributor for gases carrying solids in suspension. 1,882,056; Oct. 11.
Baker, Geoffrey D. (See Mitchell, Maxim, assignor.)
Baker Nagle Company. (See Nagle, Walter G., assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Ball, James W. (See Billman, Carl H., assignor.)
Ballantyne, P., & Sons. (See Frelinghuysen, George G., assignor.)
Banbury, Fernley H., assignor to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Rubber working machine. 1,881,994; Oct. 11.
Bancroft Holdings Limited. (See Johns, Henry S., assignor.)
Banner Rock Corporation. (See Powell, Edward R., assignor.)
Banton, Albert W. (See Forbes, J. C., and Banton.)
Barbour, Perley E. (See Greene, Percy W., assignor.)
Barbour Welting Company. (See Greene, Percy W., assignor.)

Barkelew, James T. (See Ingman, T. M., Garbutt, and Barkelew.)
Barrett Company, The. (See Hamlin, Marston L., assignor.)
Barrett, Harry B., Los Angeles, Calif. Brake relining machine. 1,882,109; Oct. 11.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Journal box. 1,882,057; Oct. 11.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Journal box. 1,882,058; Oct. 11.
Bartlett, Kent W., assignor to Jenkins Petroleum Process Company, Chicago, Ill. Treatment of hydrocarbon dephlegmation products. 1,882,269; Oct. 11.
Bartlett, William D. (See Kelleher, D., and Bartlett.)
Bartlett, William D., Cincinnati, Ohio. Coin controlled vending machine. 1,883,563; Oct. 11.
Baten, Gordon D. (See Hamm, Hugh J., assignor.)
Beach, Chester H., assignor, by mesne assignments, to S. C. Johnson & Son, Racine, Wis. Floor polishing machine. 1,882,270; Oct. 11.
Beach, Chester H., assignor, by mesne assignments, to S. C. Johnson & Son, Racine, Wis. Floor polishing machine. 1,882,471; Oct. 11.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Beardsley & Piper Company, The. (See Naylor, Walter E., assignor.)
Beck, Rudolph H. (See Price, W. F., and Beck.)
Beckner, Wallace E., et al. (See King, George W., assignor.)
Beecroft, Henry J., San Francisco, Calif. Lighter. 1,882,110; Oct. 11.
Beetem, Frank G., Philadelphia, Pa. Emergency lighting system. 1,882,472; Oct. 11.
Beetem, Frank G., Philadelphia, Pa. Emergency lighting system. 1,882,473; Oct. 11.
Beidler, George C., Rochester, N. Y. Photographing apparatus for duplex film. 1,882,111; Oct. 11.
Beker Oil Tools, Inc. (See Burt, Clarence E., assignor.)
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Fry, Jacob R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gastonguay, A., and Puller, assignors.)
Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gillett, Glenn D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gorton, William S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Graham, Frank H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Grimley, Donald G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hunt, A. E., and Lang, assignors.)
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Jones, H. L., and Veazie, assignors.)
Bell Telephone Laboratories, Incorporated. (See Keith, Clyde R., assignors.)
Bell Telephone Laboratories, Incorporated. (See Kemp, Archie R., assignor.)
Bell Telephone Laboratories, Incorporated. (See King, G. V., and Bonomi, assignors.)
Bell Telephone Laboratories, Incorporated. (See Knoop, William A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lathrop, Hubbel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Miller, Daniel B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Olpin, Albert R., assignor.)
Bemis, Kenneth E., Glendale, Calif. Store front. Des. 87,901; Oct. 11.
Bendix-Cowdry Brake Tester, Inc. (See Cowdrey, Charles F., assignor.)
Benn, Stephen J., assignor to Merchant & Evans Company, Philadelphia, Pa. Bottle-type water cooler. Des. 87,902; Oct. 11.
Berggren, Eric N., assignor, by mesne assignments, to Chicago Cutting Die Company, Chicago, Ill. Spray gun. 1,882,271; Oct. 11.
Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)
Bernstein, Edward A., Brooklyn, N. Y. Advertising display apparatus. 1,881,995; Oct. 11.
Berry, Charles F., Boston, Mass. Cupboard for kitchenettes. 1,882,540; Oct. 11.
Berry, Simon, Seattle, Wash. Machine for molding blocks. 1,882,205; Oct. 11.
Bicknell, George M., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,881,996; Oct. 11.
Billman, Carl H., Logansport, Ind., assignor of one-half to J. W. Ball, Logansport, Ind. Sand blast apparatus. 1,882,541; Oct. 11.
Birch, Stanley F., and W. D. Scott, Sunbury-on-Thames, assignor to Anglo-Persion Oil Company, Limited, London, England. Production of mono alkyl ethers of glycol. 1,882,564; Oct. 11.
Birdsboro Steel Foundry and Machine Company. (See Martin, Mark H., assignor.)
Black & Decker Manufacturing Company, The. (See Fleming, Jared B., assignor.)
Black, John E., Rumson, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat exchange device. 1,882,474; Oct. 11.
Blackhall, John R. (See Pardee, Harvey S., assignor.)
Blake, Earl L., Tacoma, Wash. Friction brake. 1,882,173; Oct. 11.
Blake, Maurice A., assignor to New Jersey State Agricultural Experiment Station, New Brunswick, N. J. Peach. Pl. Pt. 31; Oct. 11.
Blaw-Know Company. (See Venable, William M., assignor.)
Blickhahn, George R., Chicago, Ill. Belt buckle. 1,882,475; Oct. 11.
Blinn, Harry M., Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Dry coating for alimentary products. 1,882,476; Oct. 11.
Blomquist, Johan V., assignor to Aktiebolaget Atmas, Stockholm, Sweden. Rotating boiler. 1,882,379; Oct. 11.
Boeye, Paul F., assignor to Waldorf Paper Products Company, St. Paul, Minn. Container for batteries or the like. 1,882,565; Oct. 11.
Boidin, Albert R., Seclin, and I. A. Effront, Marcq en Baroeul, France. Manufacture of proteolytic enzymes by means of microorganisms. 1,882,,112; Oct. 11.
Boland, John E., and M. C. Vivian, Arnold, assignors of one-third to W. W. Null, Springdale, Pa. Clothes line cleaner and pin carrier. 1,882,174; Oct. 11.
Bolz, William A., sr., Trenton, N. J. Four-wheel steering construction. 1,882,542; Oct. 11.
Bonomi, Felix A. (See King, G. V., and Bonomi.)
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,882,477; Oct. 11.
Boos, Francis H., Schofield Barracks, Hawaii. Spur. 1,882,050; Oct. 11.
Borden, Stephen W., Summit, N. J. Earth electrode meter. 1,882,113; Oct. 11.
Borg-Warner Corporation. (See Lyman, Kenneth E., assignor.)
Bosse, August, Herford, Germany. Preparation of a cellular raw material suitable for artificial materials, particularly artificial silk. 1,882,175; Oct. 11.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Indicator. 1,882,313; Oct. 11.
Bound, Harry H. (See Krantz, H. W., Holden, and Bound.)
Bower Roller Bearing Company. (See Strickland, Silas A., assignor.)
Boynton, Alexander, San Antonio, Tex. Automatic well flowing device. 1,882,060; Oct. 11.
Bradley, Evelyn G., et al. (See Martens, John B., assignor.)
Brady, George H., assignor to Improved Fire Detector Corporation, Baltimore, Md. Metal alloy for electric contact terminals. 1,882,114; Oct. 11.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator for brake mechanism for automotive vehicles. 1,882,543; Oct. 11.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,882,544; Oct. 11.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Braun, Fredrick A., Jenkintown, assignor to Frank Sharp, Glenside, Pa. Beetle trap. 1,882,380; Oct. 11.
Bridges, Elisha. (See Kaumans, J. N., and Bridges.)
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Brigham, Dorothea C., et al. (See Brigham, Lawrence M., assignor.)
Brigham, Lawrence M., Los Angeles, assignor of one-half to F. Oliver, Whittier, and one-half to D. C. Brigham, Los Angeles, Calif. Rotary drill bit. 1,882,545; Oct. 11.
Bright, Graham. (See Grierson, P. S., and Bright.)
Bright, Samuel. (See Oman, J. P., and Bright.)
Brittain, Richard J., jr., Bloomfield, and O. W. Young, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich. Journal box. 1,882,478; Oct. 11.
Brittin, Edward B., Chicago, Ill. Bracket. 1,882,479; Oct. 11.
Broche, Hans. (See Pott, A., and Broche.)
Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Trimming machine. 1,882,061; Oct. 11.
Brossman, Charles, Indianapolis, Ind. Sewage distributor. 1,882,546; Oct. 11.

Brouse, William H. D., Toronto, Ontario, Canada. Air and oil feeding pump. 1,882,206; Oct. 11.
Brown & Bigelow. (See Harris, B. H., and Craft, assignors.)
Brown Company. (See Goldsmith, Chester H., assignor.)
Brown Company. (See Hubbard, Barton D., assignor.)
Brown Company. (See Meglitz, W. B., and Schur, assignors.)
Brown Company. (See Meglitz, William B., assignor.)
Brown Company. (See Parker, Howard, assignor.)
Brown, Newton N., assignor to Gold Medal Folding Furniture Company, Racine, Wis. Reclining chair. 1,882,176; Oct. 11.
Browne, Vere B., Brackenridge, Pa. Making noncorrodible springs. 1,881,997; Oct. 11.
Brownyer, Nelson R. (See Alden, H. W., and Brownyer.)
Brueshaber, Martin W., Chicago, Ill., assignor to Goss Printing Press Company. Inking roller. 1,882,480; Oct. 11.
Brunell, H. A. (See Roche, Clifton R., assignor.)
Brunner, John, Chicago, Ill. Heat treatment of steel rails and shapes. 1,882,115; Oct. 11.
Bryan, George A., Peru, Ind., assignor to Bryan Steam Corporation. Water heater. 1,882,116; Oct. 11.
Bryan Steam Corporation. (See Bryan, George A., assignor.)
Brykczynski, Charles, Brooklyn, and Julius Chmurzynski, Astoria, N. Y. Delivery and loading means for bakery products or the like. 1,882,238; Oct. 11.
Bryson, Frank, administrator. (See Kageyama, Hosuku.)
Buchanan, John C. (See Morley, H., Buchanan, and Sickelsteel.)
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Fixture support. 1,881,998; Oct. 11.
Buck, Benjamin I., Lineboro, Md. Bean nipping machine. 1,882,481; Oct. 11.
Buckingham, Stephen A. (See Pierce, G. W., and Buckingham.)
Bucyrus-Erie Company. (See Lehman, Werner, assignor.)
Bucyrus-Erie Company. (See Wright, Charles G., assignor.)
Buffalo Steam Pump Company. (See Klosson, Michael M., assignor.)
Bullock, Edward W., R. S. Condon, and E. Finsen, assignors to Gleason Works, Rochester, N. Y. Machine for finishing gears. 1,881,999; Oct. 11.
Burkey, Henry T., South Pasadena, assignor, by mesne assignments, to Burkey Manufacturing Company, Los Angeles, Calif. Fish diverter for irrigation ditches, flumes, natural waterways and the like. 1,882,482; Oct. 11.
Burkey Manufacturing Company. (See Burkey, Henry T., assignor.)
Burlington Brass Works. (See Harper, George A., assignor.)
Burns, Alfred P. (See Heald, R. N., Guild, Burns, and Garno.)
Burris, Claud H., Rogers, Ark. Four-in-one steam cylinder drier. 1,882,405; Oct. 11.
Burris, Lee W., Erie, Ill. Roofing construction. 1,882,177; Oct. 11.
Burroughs Adding Machine Company. (See Mueller, Frederick O., assignor.)
Burroughs Adding Machine Company. (See Muller, Robert L., assignor.)
Burt, Clarence E., Los Angeles, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Floating and cementing shoe. 1,882,314; Oct. 11.
Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Railway truck structure. 1,882,207; Oct. 11.
Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake beam support. 1,882,239; Oct. 11.
Butticci, John, San Francisco, Calif. Portable fruit press. 1,882,117; Oct. 11.
C. H. & E. Manufacturing Company. (See Macdonald, Jason H., assignor.)
Caldwell Cypress Cistern Co. (See Caldwell, Edward L., assignor.)
Caldwell, Edward L., assignor to Caldwell Cypress Cistern Co., Inc., Corpus Christi, Tex. Stalk cutter. 1,882,272; Oct. 11.
Callahan, William F. (See Janson, G. W., and Callahan.)
Cambridge Instrument Company, The. (See Kruse, Ralph H., assignor.)
Camel Company. (See Lute, Carl, assignor.)
Cameron, Robert T., Memphis, Tenn. Cigar tip perforator. 1,882,273; Oct. 11.
Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)
Campbell, Grant, Short Hills, N. J. Liquid relief apparatus. 1,882,062; Oct. 11.
Campus, Cesare C., Santa Monica, Calif. Concealed hinge toilet seat. 1,882,274; Oct. 11.
Cannon, Patrick J., New York, N. Y. Clamping means. 1,882,483; Oct. 11.
Capston Glass Company. (See McNamara, William L., assignor.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carey, Philip, Manufacturing Company, The. (See Keller, Eugene, jr., assignor.)
Carpenter, Miles H., New Rochelle, and C. B. Kirkham, Freeport, N. Y. Independently sprung wheel construction for the front end of motor vehicles. 1,882,484; Oct. 11.
Carr, Raymond L., Boston, Mass. Combined mud guard and light for a vehicle or similar article. 87,903; Oct. 11.
Carr, Raymond L., Boston, Mass. Combined vehicle hood and radiator shell or similar article. Des. 87,904; Oct. 11.
Carter Carburetor Corporation. (See Bicknell, George M., assignor.)
Caruthers, Eugene W., Secane, Pa. Rail joint. 1,882,406; Oct. 11.
Cassidy, George W., Flushing, N. Y. Direct and indirect lighting fixture. 1,882,407; Oct. 18.
Cassidy, George W., Flushing, N. Y. Lighting fixture control. 1,882,408; Oct. 11.
Cassidy, George W., Flushing, N. Y. Bridge lamp. 1,882,409; Oct. 11.
Catalytic Process Corporation. (See Clark, Cyril B., assignor.)
Celanese Corporation of America. (See Ellis, George H., assignor.)
Celenza, Domenico, Brooklyn, N. Y. Combination square and ruler. 1,882,354; Oct. 11.
Cement-Gun Contracting Company. (See Ferry, William J., assignor.)
Chain Belt Company. (See Jewett, Maurice G., assignor.)
Chamberlain Machine Works. (See Etten, Nicholas L., assignor.)
Champion Company, The. (See Spriggs, Arthur O., assignor.)
Champion Machine & Forging Company, The. (See Johnson, Howard F., assignor.)
Champion Pneumatic Machinery Company. (See Rayfield, Frederick J., assignor.)
Chapal Donner Corporation, The. (See Donner, Philip C., assignor.)
Chapman, Frederick D., Evanston, assignor to The Harrington & King Perforating Company, Chicago, Ill. Grille panel unit. Des. 87,905; Oct. 11.
Chase, Ernest L. (See Morse, L. H., and Lockhart.)
Chemische Fabrik Milch Aktien-Gesellschaft. (See Lindner, Kurt, assignor.)
Cherry, Homer A., Montebello, Calif. Tire casing remover. 1,882,118; Oct. 11.
Chicago Automatic Conveyor Company. (See Shaw, Arthur L.)
Chicago Cutting Die Company. (See Berggren, Eric N., assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)
Chirelx, Henri, Paris, France. Radio communication. 1,882,119; Oct. 11.
Chmurzynski, Julius. (See Brykcynski, and Chmurzynski.)
Christensen, Einar C. (See Jussoy, Otto, assignor.)
Church, Walter L., Houston, Tex. Spear. 1,883,650; Oct. 11.
Churchward, Alexander, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J. Welding apparatus. 1,882,063; Oct. 11.
Cincinnati Bickford Tool Company, The. (See Klausmeyer, David C., and Sosa, assignors.)
City Machine & Tool Company, The. (See Ireland, George E., assignor.)
Clark, Cyril B., Scarsdale, assignor to Catalytic Process Corporation, New York, N. Y. Sulphuric acid. 1,882,208; Oct. 11.
Clarke, Charles M. (See McCracken, Robert T., assignor.)
Clayton Gin Compress Company. (See Mackenzie, Alexander S., assignor.)
Clayton, Walter C., Jenkintown, assignor to Pitcairn Aircraft, Inc., Philadelphia, Pa. Aircraft. 1,882,315; Oct. 11.
Cleary, Walter D., Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y. Moisture detector. 1,882,316; Oct. 11.
Clements, Wellington I., Norfolk, Va. Auxiliary seat and back rest. 1,882,485; Oct. 11.
Cleveland Pneumatic Tool Company, The. (See Wallace, John F., assignor.)
Cleveland Welding Company, The. (See Kranz, Harry W., assignor.)
Cleveland Welding Company, The. (See Kranz, H. W., Holden, and Bound, assignors.)
Clifford, Edward C., New York, N. Y. Mechanical water cooler. 1,882,120; Oct. 11.
Coal Carbonization Company. (See McQuade, James D., assignor.)
Cody, Marie D., Frostproof, Fla. Fruit juice extractor. 1,882,065; Oct 11.
Cohen, Louis, Washington, D. C. Radio signaling. 1,882,064; Oct. 11.
Cole, William H., Abington, Mass. Insulator. 1,882,486; Oct. 11.
Collins, Thomas L., Columbus, assignor to The Akron Truss Company, Akron, Ohio. Truss fitting table. 1,882,121; Oct. 11.
Colovas, George. (See La Cavera, Charles, assignor.)

Columbus Valve Manufacturing Corporation, The. (See Redding, Harry B., assignor.)
Condit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)
Condon, Robert S. (See Bullock, E. W., Condon, and Finsen.)
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Sharp freezing structure. 1,882,209; Oct. 11.
Cornell, Fred A., Windsor, Ontario, Canada, assignor to John C. Cornell. Packing machine. 1,882,317; Oct. 11.
Cornell, John C. (See Cornell, Fred A., assignor.)
Couch, Glenn F., Rochester, assignor to The Symington Company, New York, N. Y. Journal box. 1,882,066; Oct. 11.
Coughlin, John J., jr., Hachita, N. Mex. Automatic cutout. 1,882,275; Oct. 11.
Cowdrey, Charles F., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., Fitchburg, Mass. Brake testing device. 1,882,356; Oct. 11.
Cowie, Florence, Ealing, London, England. Fire Prevention device for cinematograph film apparatus. 1,882,276; Oct. 11.
Coyle, Andrew M., Mt. Vernon, N. Y. Tunnel Construction. 1,881,421; Oct. 11.
Craft, Earl F. (See Harris, B. H., and Craft.)
Crawford, McGregor and Canby Company, The. (See Hampton, W. C., and Garber, assignors.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crone, Oliver H. (See Lawrence, H. E., and Crone.)
Cross, Albert W., Lakewood, assignor to The American Ship Building Company, Cleveland, Ohio. Rudder. 1,882,357; Oct. 11.
Cross Development Corporation. (See Cross, Roy, assignor.)
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Treating oils. 1,882,000; Oct. 11.
Crumback, Sylvester F., Aurora, Ill. Cushioned airplane propeller. 1,882,410; Oct. 11.
Cuchran, Julius and H. Hinterkopf, Chicago, Ill. Game board. Des. 87,906; Oct. 11.
Culver, Charles A., Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Modulation system. 1,882,122; Oct. 11.
Cumberland, George A., assignor of one-fourth to M. S. King, Wisconsin Rapids, Wis. Paper pulp separator. 1,882,178; Oct. 11.
Cummer Manufacturing Company. (See Warren, Frank H., assignor.)
Curioni, Aldo, Larchmont, N. Y., assignor to Curioni Bros. Inc. Vaporizing apparatus. 1,882,318; Oct. 11.
Curioni Bros. Inc. (See Curioni, Aldo, assignor.)
Curran, Frank J., New York, N. Y., assignor, by mesne assignments, to Steam Power, Inc. Boiler construction. 1,882,210; Oct. 11.
Curran, Frank J., New York, N. Y., assignor, by mesne assignments, to Steam Power, Inc. Self cleaning atomizing nozzle. 1,882,241; Oct. 11.
Curran, Frank J., San Francisco, Calif., assignor, by mesne assignments, to Steam Power, Inc. Boiler construction. 1,882,240; Oct. 11.
Curran, Frank J., and W. McClellan, New York, N. Y., assignors, by mesne assignments, to Steam Power, Inc. Steam boiler. 1,882,211; Oct. 11.
Curtis Aeroplane & Motor Company. (See Stupar, M. and Page, jr., assignors.)
Curtis Companies. (See Madsen, Sern, assignor.)
Curtis Lighting, Inc. (See Hotchkin, Paul M., assignor.)
Curtis Lighting, Inc. (See Lundy, Edwin K., assignor.)
Cutler-Hammer, Inc. (See Harwood, P. B., and Stansbury.)
Dailey, William O., Portland, Oreg. Making collar snubbers. 1,882,242; Oct. 11.
Dailey, William O., Portland, Oreg. Apparatus for forming and bending flexible materials. 1,882,243; Oct. 11.
Dallett Company, The. (See Smith, Charles D., assignor.)
Dalrymple, Gerald H., Bartley, near Southampton, England, assignor to C. J. Van Bourgondein, Babylon, N. Y. Fressia. Pl. Pt. 32; Oct. 11.
Daly, Frank A., assignor to W. W. Potter, Pawtucket, R. I. Cleaning and polishing cloth. 1,882,179; Oct. 11.
Dare, Samuel T., New Westminster, British Columbia, Canada. Drink dispenser. Des. 87,907; Oct. 11.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Evaporator for refrigerating systems. Re18,621; Oct. 11.
Davis, Augustine, jr. (See Haupt, Walter H., assignor.)
Davis Boring Tool Company. (See Kilzer, James E., assignor.)
Davis Emergency Equipment Company. (See Davis, Frank R., assignor.)
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Spring pad construction. 1,882,001; Oct. 11.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,882,651; Oct. 11.
Davis, Frank R., Scarsdale, assignor to Davis Emergency Equipment Company, Incorporated, New York, N. Y. Safety belt. 1,882,381; Oct. 11.
Davidson, James E. (See Davidson, Lawrence, J. E., and W. H.)
Davidson, Lawrence, J. E., and W. H., Willoughby, Ohio. Cap or closure for receptacles. 1,882,180; Oct. 11.
Davidson, William H. (See Davidson, Lawrence, J. E., and W. H.)
Dayton Scale Company. (See Fryer, Gil N., assignor.)
De Bataafsche Petroleum Maatschappij. (See Loebel, Albert, assignor.)
De Cew, Judson A., Mount Vernon, assignor to Process Engineers, Inc., New York, N. Y. Fibrous material and making same. 1,882,212; Oct. 11.
Deihaugh, Mark A., Schenectady, N. Y., assignor to Altorfer Bros. Company, East Peoria, Ill. Washing machine. 1,882,123; Oct. 11.
De Lancey, Warren H. (See Logan, J. A., and De Lancey.)
Delaplane, Glen I. (See Koehly, P., and Delaplane.)
De Laval Separator Company, The. (See Cleary, Walter D., assignor.)
De Laval Separator Company, The. (See Dietrich, Melvin A., assignor.)
De Laval Separator Company, The. (See Hapgood, Cyrus H., assignor.)
Delco Products Corporation. (See Kindl, Carl H., assignor.)
Delco Products Corporation. (See Koehly, Paul, and Delaplane, assignors.)
Delco-Remy Corporation. (See Holmes, John Q., assignor.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Democratis, Achille, London, England. Converting and transmitting torques. 1,882,181; Oct. 11.
Demster Mill Manufacturing Company. (See Lawrence, H. E., and Crone.)
Denison, William C., jr. (See Millar, F. O., and Denison.)
De Nooy, John A., Pella, Iowa. Scraper attachment for tractors. 1,882,244; Oct. 11.
De Nure, Walter B., et al. (See Sjoberg, Leo J., assignor.)
Design Laboratories, Incorporated. (See Favreau, Walter, assignor.)
Detroit Gear & Machine Company. (See Mapson, Robert L., assignor.)
Detroit Gear & Machine Company. (See Morley, H., Buchanan, and Sickelsteel, assignors.)
Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)
Detroit Steel Products Company. (See Loucks, James F., assignor.)
Deutsche Gasglühlicht-Auer-Gesellschaft m. b. H. (See Kaiser, Wilhelm, assignor.)
De Vilbiss Company, The. (See Perrin, James E., assignor.)
Diebenkorn, Richard C., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif. Goblet or similar article. Des. 87,908; Oct. 11.
Dienst, Alexander, Hollis, and J. J. Neuman, Jamaica, N. Y. Wrapper for sugar units and like articles. 1,882,124; Oct. 11.
Dietrich, Melvin A., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Refining mineral oil. 1,882,002; Oct. 11.
Dietrichson, Otto. (See Lundius, A., and Dietrichson.)
Ditchfield, Frank. (See McWilliams, J. P., and Ditchfield.)
Dohrmann Hotel Supply Co. (See Diebenkorn, Richard C., assignor.)
Dominion Engineering Works Limited. (See Malkin, Bernard A., assignor.)
Donner, Philip C., Summit, assignor to The Chapal Donner Corporation, Newark, N. J. Hat making machinery. 1,882,003; Oct. 11.
Donovan, Edward B., Spirit Lake, Iowa. Trocar. 1,882,213; Oct. 11.
Dorr Company, The. (See Newton, Harry W., assignor.)
Doty, Wade, Jamestown, N. Y., assignor to International Air Brake Company, Salt Lake City, Utah. Vacuum controlling brake valve. 1,882,411; Oct. 11.
Doughnut Machine Corporation. (See Blinn, Harry M., assignor.)
Dow Chemical Company, The. (See Marschner, R. F., and Stoessner, assignors.)
Dow Chemical Company, The. (See Mills, Lindley E., assignor.)
Dreyer, Albert, Lucerne, Switzerland. Machine for making highly elastic resilient tubes. 1,882,182; Oct. 11.
Drummond, Louis E., Upper Darby, Pa. Apparatus for transfusion of blood. 1,882,412; Oct. 11.
Dryice Equipment Corporation. (See Jones, C. L., and McIlvain, assignors.)
Duff-Norton Manufacturing Company, The. (See Hobbs, John W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Goodrich, R. J., and Gubelmann, assignors.)
Du Pont, E. I., de Nemours and Company. (See Lawrie, James W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Powers, Donald H., assignor.)
Dupont, Joseph, Liege, Belgium. Axial ventilating device for the stators of electric machines. 1,882,487; Oct. 11.
Eastern Tool & Mfg. Co. (See Kastner, Ernest C., assignor.)
Eastman, Fred C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of shoes. 1,882,067; Oct. 11.

Eastman, Fred C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Retaining mechanism. 1,882,068; Oct. 11.
Eaton Manufacturing Company, The. (See Veale, George W., assignor.)
Economics Laboratory, Inc. (See Murray, Robert C., assignor.)
Edison General Electric Appliance Company. (See Patten, Raymond E., assignor.)
Edison, Thomas A., Incorporated. (See Grierson, P. S., and Bright, assignors.)
Edison, Thomas E., Incorporated. (See Huenlich, Charles, assignor.)
Edouart, Alexander F., assignor to Paramount Publix Corporation, Los Angeles, Calif. Film spool. 1,882,413; Oct. 11.
Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 87,909; Oct. 11.
Edward Valve and Manufacturing Company, The. (See Mohr, Walter W., assignor.)
Edwards, George W. (See Gilligan, J. P., and Edwards.)
Edwards, Paul G., Bloomfield, N. J., assignor to American Telephone and Telegraph Company. Testing system. 1,882,125; Oct. 11.
Effront, Ivan A (See Boidin, A. R., and Effront.)
Ekman, Andrew. (See Geske, C., and Ekman.)
Ekstromer, Edward C., Corporation, The, et al. (See Ekstromer, Edward C.)
Ekstromer, Edward C., San Francisco, Calif., assignor, by direct and mesne assignments, of one-half to J. F. Gallagher, Boston, Mass., and one-half to The Edward C. Ekstromer Corporation, Reno, Nev. Oil well pumping equipment and system. 1,882,069; Oct. 11.
Eldridge, Dock, Newfoundland, Ky. Pinless clothesline. 1,882,126; Oct. 11.
Electrecorder Corporation. (See Hodge, Edward A., assignor.)
Electric Boat Company. (See Grieshaber, Hugo E., assignor.)
Electric Boat Company. (See Nibbs, Ernest, assignor.)
Electric Service Supplies Company. (See Graham, Herbert J., assignor.)
Electroacustic Gesellschaft mit beschrankter Haftung. (See Rudolph, Wilhelm, assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Electrolux Servel Corporation. (See Tandberg, John G., assignor.)
Electromaster, Inc. (See Noble, Warren, assignor.)
Electromaster, Inc. (See Noble, W., and Welcome, assignors.)
Ellis, Arthur L., New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn. Driving mechanism. 1,882,004; Oct. 11.
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of materials containing natural silk. 1,882,070; Oct. 11.
Ellis, Warner C., Flint, Mich. Store. 1,882,488; Oct. 11.
Elwell, George H., assignor to Greist Manufacturing Company, New Haven, Conn. Electric switch. 1,882,245; Oct. 11.
Emerick, John W., Detroit, and W. E. Emerick, Mt. Clemens, Mich. Clam bucket. 1,882,489; Oct. 11.
Emerick, William E. (See Emerick, John W., and W. E.)
Emerson, Charles S., Manchester, N. H., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe stiffener conditioning machine. 1,882,005; Oct. 11.
Emmons, Nelson, jr., et al. (See Emmons, Nelson, 3d, assignor.)
Emmons, Nelson, 3d, assignor, by mesne assignments, to Nelson Emmons, jr., and J. W. Green, Dayton, Ohio. Culinary apparatus. 1,882,127; Oct. 11.
Entraygue, Victor L. (See Vacquier, G. H., and Entraygue.)
Etten, Nicholas L., Waterloo, Iowa, assignor, by mesne assignments, to Chamberlain Machine Works. Ironing machine. 1,882,214; Oct. 11.
Etzel, Gastao. (See Henke, C. O., and Etzel.)
Evans Elevator Equalizer Company. (See Frost, William P., assignor.)
Everson, Ever, Hattiesburg, Miss. Cupboard. 1,882,277; Oct. 11.
Evr Klean Seat Pad Company. (See Wittcoff, Edward, assignor.)
Ewald, Arno A., assignor to Remort Manufacturing Company, Oakfield, Wis. Pressure-regulating tire-inflating nozzle. 1,882,215; Oct. 11.
Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)
Fairbanks, E. and T., and Company. (See Starr, Morton H., assignor.)
Falck, Siri, Stockholm, Sweden. Massage roller. 1,882,490; Oct. 11.
Faller, Ernest A., Brooklyn, N. Y. Fire alarm succession box. 1,882,071; Oct. 11.
Farr, Henry V. (See Mallinckrodt, E., and Farr.)
Farrel-Birmingham Company. (See Banbury, Fernley H., assignor.)
Farrell, Daniel A., and J. E. Johnson, assignor to John F. Jelke Company, Chicago, Ill. Article inserting machine. 1,881,422; Oct. 11.
Fassnacht, Karl, Providence, R. I., assignor to Speidel Corporation. Chain for personal adornment. Des. 87,910; Oct. 11.
Favreau, Walter, Tompkinsville, assignor, by mesne assignments, to Design Laboratories, Incorporated, New York, N. Y. Display tree. 1,881,423; Oct. 11.
Favreau, Walter, Tompkinsville, assignor, by mesne assignments, to Design Laboratories, Incorporated, New York, N. Y. Ornamental object. 1,881,424; Oct. 11.
Fazekas, Anton, San Francisco, Calif. Illuminated house number plate. Des. 87,911; Oct. 11.
Fazekas, Anton, San Francisco, Calif. Illuminated house number plate. Des. 87,912; Oct. 11.
Fearing, Edward W., East Orange, N. J. Radiofrequency amplification system. 1,882,128; Oct. 11.
Febr, John H., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,881,426; Oct. 11.
Ferguson, Herbert V. A., Buffalo, N. Y. Liquid fuel gasifier. 1,881,425; Oct. 11.
Ferrell, Dent. (See Helmoltz, A. W., and Ferrell.)
Ferro Stamping and Mfg. Company. (See Feuerlein, Georg R., assignor.)
Ferry, William J., Allentown, Pa., assignor to Cement-Gun Contracting Company. Combined form support and spacer. 1,882,006; Oct. 11.
Fessenden, Reginald A., Chestnut Hill, and H. K. Wheeler, Newton, Mass. Parking cars. 1,882,183; Oct. 11.
Fetner, Stephen R., Jacksonville, Fla. Inner liner for tire casings. 1,882,129; Oct. 11.
Feuerlein, Georg R., assignor to Ferro Stamping and Mfg. Company, Detroit, Mich. Door latch mechanism. 1,881,427; Oct. 11.
Fiat Societa Anonima. (See Pirinoli, Guglielmo, assignor.)
Fiberloid Corporation, The. (See Parkhurst, Frederic A., assignor.)
Fielder, Nonie E., Los Angeles, Calif. Automatic screw sorting machine. 1,882,130; Oct. 11.
Finch, Arnold R., assignor to West Bend Aluminum Company, West Bend, Wis. Stand for supporting coffee pots. 1,881,428; Oct. 11.
Findley, Robert, Jamaica, N. Y. Bath spray. 1,882,216; Oct. 11.
Fine, Charles A., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,881,429; Oct. 11.
Finkelstein, Hans, and F. Achterberg, Uerdingen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of solutions containing a compound of fluorine and aluminum. 1,881,430; Oct. 11.
Finlay, Clare L., Slough, England. Color photography. 1,882,131; Oct. 11.
Finlay, Clare L., Slough, England. Color photography. 1,882,132; Oct. 11.
Finnell, Walter S., Elkhart, Ind. Floor machine. 1,881,431; Oct. 11.
Finnell, Walter S., Elkart, Ind. Brush support for floor machines. 1,881,432; Oct. 11.
Finsen, Eyvind. (See Bullock, E. W., Condon, and Finsen.)
Firth, David, assignor to Marvel Carbureter Co., Flint, Mich. Carburetor. 1,881,433; Oct. 11.
Firth, David, assignor to Marvel Carbureter Co., Flint, Mich. Explosive mixture heating control. 1,881,434; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Adhering fabrics. 1,881,435; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Bituminous mixture for expansion joints and general construction work. 1,881,436; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Expansion joint. 1,881,437; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Roofing material. 1,881,438; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Packing. 1,881,439; Oct. 11.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material. 1,881,440; Oct. 11.
Fischer, Philip A., New York, N. Y. Napkin and making it. 1,882,133; Oct. 11.
Fisher, Frank F., Detroit, Mich. Tube end cleaner. 1,881,441; Oct. 11.
Fisher, Frank S. (See Fisher, Genevieve H. and F. S.)
Fisher, Genevieve H. and F. S., Waltham, Mass. Clasp. 1881,442; Oct. 11.
Flanders, Warren B., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine and condenser construction. 1,881,443; Oct. 11.
Flanzer, Joseph A. (See Jones, L. L., Flanzer, and Reisman.)
Flanzer, Joseph A., Brooklyn, assignor to Technidyne Corporation, New York, N. Y. Manufacture of resistance units. 1,881,444; Oct. 11.
Flanzer, Joseph A., and E. Reisman, Brooklyn, assignors to Technidyne Corporation, New York, N. Y. Resistance. 1,881,445; Oct 11.

Flanzer, Joseph A., Brooklyn, assignor to Technidyne Corporation, New York, N. Y. Resistor. 1,881,446; Oct. 11.
Fleming, Jared B., assignor to The Black & Decker Manufacturing Company, Towson, Md. Portable fender straightening tool frame. Des. 87,913; Oct. 11.
Flinthote Corporation, The. (See Levin, Harold L., assignor.)
Flynn, Edmund J., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of lithopone. 1,882,072; Oct. 11.
Fogelqvist, Gunnar Per Olof. (See Granstedt, Johan A., assignor.)
Food Machinery Corporation. (See Roberts, F. B., and Huntington, assignors.)
Forbes, James C., and A. W. Banton, assignors to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,882,134; Oct. 11.
Forbes, James C., and A. W. Banton, assignors to O. F. Jordan Company, East Chicago, Ind. Wing brace arrangement for railroad spreaders. 1,882,135; Oct. 11.
Forbes Lithograph Manufacturing Company. (See Larkin, James L., assignor.)
Ford, Bruce, Philadelphia, Pa. Storage battery. 1,882,414; Oct. 11.
Ford Motor Company. (See Reed, R. A., and Hicks, assignors.)
Ford Motor Company. (See Wellman, Charles E., assignor.)
Ford, William C., Andover, Mass. Fountain pen. 1,881,447; Oct. 11.
Forde, Thomas H., and N. W. Mellars, assignors to Formell Corporation, Ltd., San Francisco, Calif. X-Ray method and means. 1,881,448; Oct. 11.
Formell Corporation, Ltd. (See Forde, T. H., and Mellars, assignors.)
Forsythe, Edwin C., Bartlesville, Okla. Operating valves. 1,881,449; Oct. 11.
Foster, Nathaniel L. (See Sipe, Harry E., assignor.)
Fox Automotive Products Corporation. (See Henke, Frederick W., jr., assignor.)
Fox, Merritt L.; assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,881,450; Oct. 11.
Foxboro Company, The. (See Mason, Clesson E., assignor.)
Franck, Edwin G., assignor to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,881,451; Oct. 11.
Francyk, George, Akron, Ohio. Lid. 1,882,278; Oct. 11.
Franklin, Laurence W., Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Automatic stop for telegraph transmitters. 1,881,452; Oct. 11.
Franklin, Laurence W., Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph printer exchange system. 1,881,453; Oct. 11.
Freeberg, Theodore C., Two Harbors, Minn. Dirigible headlight. 1,882,415; Oct. 18.
Freed, Oscar E., Seattle, Wash. Toilet article. 1,882,073; Oct. 11.
Freeze, John H., Canton, Ohio. Gate valve. 1,882,136; Oct. 11.
Frelinghuysen, George G., Morris Township, Morris County, assignor to P. Ballantine & Sons, Newark, N. J. Making a soap compound. 1,882,279; Oct. 11.
Fretz-Gross & Co. (See Zitzer, Gustave, assignor.)
Freyn Engineering Company. (See Mehler, L. A., and Westcott, assignors.)
Friesner, Charles E., assignor to The Hettrick Manufacturing Company, Toledo, Ohio. Protective covering for articles for furniture. 1,881,454; Oct. 11.
Frigidaire Corporation. (See Fehr, John R., assignor.)
Frigidaire Corporation. (See Henney, Charles F., assignor.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frisbie, Russell A., Middletown, assignor to The J. & E. Stevens Company, Cromwell, Conn. Toy pistol. 1,881,455; Oct. 11.
Frisbie, Russell A., Middletown, assignor to The J. & E. Stevens Company, Cromwell, Conn. Machine gun toy pistol. 1,881,456; Oct. 11.
Froeckman, William A., St. Louis, Mo. Circuit and polarity tester. 1,881,457; Oct. 11.
Frost, Albert E., Brooklyn, assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph receiving or repeating circuit. 1,881,458; Oct. 11.
Frost, William M., Spokane, Wash. Insect electrocutor. 1,882,550; Oct. 11.
Frost, William P., Jackson Heights, N. Y., assignor to Evans Elevator Equalizer Company, Bedford, Ind. Strain equalizing device. 1,881,459; Oct. 11.
Früchtenicht, Heinrich, Bremen, Germany. Screen for dual-intensity headlights. 1,882,137; Oct. 11.
Fry, Jacob R., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Relay. 1,881,460; Oct. 11.
Fryer, Gil N., assignor to Dayton Scale Company, Dayton, Ohio. Food mixer. Des. 87,914; Oct. 11.
Fuller Lehigh Company. (See Heller, Lewis W., assignor.)
Furtney, John E., Detroit, Mich. Battery carrier terminal assembly. 1,881,461; Oct. 11.
Fuller Lehigh Company. (See Bailey, Ervin G., assignor.)
Gabrielson, Carl, and C. Wancques, assignors to L C Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,881,462; Oct. 11.
Gagen, Thomas H., assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio. Carton. 1,881,464; Oct. 11.
Gagné, Augustin. (See Lawson, R. H., and Gagné.)
Gaines, Edmund P., Columbia, S. C. Airfoil. 1,881,463; Oct. 11.
Galbraith, Clyde O., Los Angeles, Calif. Recording and reproducing sound. 1,882,554; Oct. 11.
Gallagher, James F., et al. (See Ekstromer, Edward C., assignor.)
Gallogly, Michael J. (See Maas, George H., assignor.)
Galt, Perce R., Merchantville, N. J. Razor. 1,882,007; Oct. 11.
Ganes, Hakon A., and W. Kilde, Tacoma, Wash. Rossing machine. 1,881,465; Oct. 11.
Gano, Harlan S., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,881,466; Oct. 11.
Ganz, William, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Lock device. 1,881,467; Oct. 11.
Garber, Charles N. (See Hampton, W. C., and Garber.)
Garbutt, Frank E. (See Ingman, T. M., Garbutt, and Barkelew.)
Garbutt, Frank E., and T. M. Ingman, assignors, by mesne assignments, to Paramount Publix Corporation, Los Angeles, Calif. Sound picture printer. 1,881,468; Oct. 11.
Garno, George E. (See Heald, R. N., Guild, Burns, and Garno.)
Gas Machinery Company, The. (See Hamlink, Lazenby C., assignor.)
Gas Machinery Company, The. (See Harmon, Benjamin G., assignor.)
Gaspari, J., & Company. (See Iobenstein, Walter, assignor.)
Gastonguay, Antonio, and G. Puller, Port Washington, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Motion picture projector. 1,881,469; Oct. 11.
Gastwirth, Louis, Bronx, N. Y. Aeroplane construction. 1,882,416; Oct. 11.
Gately, Martin H., Henderson, Nebr. Machine for grinding forage. 1,882,491; Oct. 11.
Gault, Henry, and B. M. R. Angla, Lyon, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Manufacture of cellulose esters. 1,882,551; Oct. 11.
Gautschi, Frederick H., Van Nuys, Calif. Colonic excreta receptacle. Des. 87,915; Oct. 11.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Transmitting system. 1,882,074; Oct. 11.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Fluid cooled inductance system. 1,882,075; Oct. 11.
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
General Aniline Works, Inc. (See Glietenberg, E., Neelmeier, and Haller, assignors.)
General Aniline Works, Inc. (See Haller, J., Glietenberg, and Hentrich, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Taube, assignors.)
General Aniline Works, Inc. (See Kunz, Max A., assignor.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)
General Aniline Works, Inc. (See Thiess, K., and Münnchen, assignors.)
General Chain Company. (See Patten, Charles H., assignor.)
General Motors Corporation. (See Brittain, R. J., jr., and Young, assignors.)
General Motors Corporation. (See Williams, James F., assignor.)
General Railway Signal Company. (See Vallée, Armand J., assignor.)
General Salt Company. (See Girvin, Charles W., assignor.)
General Spring Bumper Corporation. (See Homan, Clayton H., assignor.)
General Spring Bumper Corporation. (See Horton, F. J., and Lewis, assignors.)
General Talking Pictures Corporation. (See Seaholm, Charles H., assignor.)
Gensecke, Wilhelm, Homburg, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Method and apparatus for heating stills. 1,882,552; Oct. 11.
Gentile, Joseph, East Boston, Mass. Safety and emergency bumper brake and locking mechanism. 1,882,138; Oct. 11.
Gentry, John H., near Greentown, Ind. Two row corn picker. 1,881,470; Oct. 11.
Gerlach, George L., Harrison, Nebr. Snow plow. 1,882,382; Oct. 11.
Gerling, Fred A., Boise, Idaho. Hydraulic variable speed gearing. 1,881,471; Oct. 11.
Gerth, Felix, assignor to C. Lorenz Aktiengesellschaft Berlin-Tempelhof, Germany. Oscillation system. 1,881,472; Oct. 11.

Geske, Carl, and A. Ekman, Grand Rapids, assignors to Winters & Crampton Mfg. Co., Grandville, Mich. Concealed pin hinge. 1,881,473; Oct. 11.
Gibbs, Oscar D., Rochester, assignor of one-third to Eric Ischinger, East Rochester, N. Y. Stapling machine. 1,881,474; Oct. 11.
Gibson, Marshall D., Webster Groves, Mo. Multitop table. 1,881,475; Oct. 11.
Gideon, Victor W., Chicago, Ill., assignor to Wilson Jones Company. Posting tray. 1,881,476; Oct. 11.
Gideon, Victor W., Chicago, Ill., assignor to Wilson Jones Company. Posting tray. 1,881,477; Oct. 11.
Giese, August F., jr., Gary, Ind. Clay gun structure. 1,881,478; Oct. 11.
Giese, August F., jr., Gary, Ind. Clay gun piston position indicating means. 1,881,479; Oct. 11.
Gilbert & Barker Manufacturing Company. (See Logan, J. A., and De Lancey, assignors.)
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Continuously loaded communication conductor. 1,881,480; Oct. 11.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Duplex telegraph system. 1,881,481; Oct. 11.
Gilkison, E. P., & Sons Company. (See Gilkison, Warren L., assignor.)
Gilkison, Warren L., assignor to E. P. Gilkison & Sons Company, Terra Haute, Ind. Trailer body. 1,881,482; Oct. 11.
Gillett, Glenn D., Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radio transmission system. 1,881,483; Oct. 11.
Gillette Safety Razor Company. (See Muros, Joseph, assignor.)
Gilligan, James P., and G. W. Edwards, Toledo, Ohio. Automatic train controlling apparatus. 1,881,484; Oct. 11.
Gilmore, Allen R., St. Louis, Mo. Flush valve construction. 1,881,485; Oct. 11.
Gilmore, Charles B. (See Jennings, O. D., and Gilmore.)
Gilstrap, Owen G., assignor of one-third to C. D. Ries, Portland, Oreg. Propeller. 1,881,486; Oct. 11.
Giminez, Julian N., Brooklyn, N. Y. Stretchboard for drawing paper. 1,882,184; Oct. 11.
Girvin, Charles W., assignor, by mesne assignments, to General Salt Company, Long Beach, Calif. Recovery of iodine. 1,881,487; Oct. 11.
Giuffre, Letterio, East Boston, Mass. Dough cutting mechanism. 1,882,139; Oct. 11.
Glascote Company, The. (See Steinen, Gustav V. D., assignor.)
Glaser, Herbert, assignor of one-fourth to Harry Radzinsky, New York, N. Y. Paste dispenser. 1,882,358; Oct. 11.
Gleason, George A., New York, N. Y. Self-closing cap for collapsible tubes. 1,881,488; Oct. 11.
Gleason Works. (See Bullock, E. W., Condon, and Finsen, assignors.)
Gleason Works. (See Head, Ernest C., assignor.)
Glidden, Alfred A., and T. M. Knowland, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Top boot vulcanizer, external type. 1,881,489; Oct. 11.
Glietenberg, Eugen. (See Haller, J., Glietenberg, and Hentrich.)
Glietenberg, Eugen, W. Neelmeier, Leverkusen-on-the-Rhine, and J. Haller, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of water-soluble azo dyestuffs. 1,882,561; Oct. 11.
Glietenberg, Eugen, W. Neelmeier, Leverkusen-on-the-Rhine, and J. Haller, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water soluble diazo-amino compound. 1,882,562; Oct. 11.
Gmelin, Paul, Mannheim, and A. Knodel, Wolfen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Process and apparatus for the separation of gas mixtures. 1,881,490; Oct. 11.
Goble, Bert G., Tulsa, Okla., assignor to W. A. Quigley. Oil bath bearing with a roof. 1,882,492; Oct. 11.
Goetz, Julius F. (See Goetz, Wilmer F. and J. F.)
Goetz, Julius J., assignor to Western Metal Specialty Company, Milwaukee, Wis. Detachable leg. 1,881,491; Oct. 11.
Goetz, Wilmer F. and J. F., Hartford, Wis. Vehicle heater. 1,881,492; Oct. 11.
Gold Medal Folding Furniture Company. (See Brown, Newton N., assignor.)
Goldsmith, Chester H., assignor to Brown Company, Berlin, N. H. Apparatus for twisting skeins of yarn. 1,881,493; Oct. 11.
Gooch, Claiborne W., jr., assignor to United Cigarette Machine Company, Inc., Lynchburg, Va. Stem cutting mechanism for tobacco stemming machines. 1,881,494; Oct. 11.
Gooch, Claiborne W., jr., assignor to Tobacco Stemming Machine Company, Lynchburg, Va. Stem cutting mechanism for tobacco machines. 1,881,495; Oct. 11.
Gooch, Claiborne W., jr., assignor to United Cigarette Machine Company, Inc., Lynchburg, Va. Tobacco stemming machine. 1,881,497; Oct. 11.
Gooch, Claiborne W., jr., and A. J. Marcotte, assignors to United Cigarette Machine Company, Inc., Lynchburg, Va. Butting blade for tobacco stemming machines. 1,881,496; Oct. 11.
Good, Robert, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Pneumatic glass feeder. 1,882,076; Oct. 11.
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodman Manufacturing Company. (See Pray, Thomas E., assignor.)
Goodrich, Robert J., and I. Gubelmann, South Milwaukee, Wis., assignor, by mesne assignments to E. I. du Pont de Nemours & Company. Isolation of pure alpha-anthraquinone-monosulphonic acid. 1,881,498; Oct. 11.
Göransson, John J. J., Linkoping, and A. T. Koch, Motala, Sweden. Lamp for motor cars. 1,882,498; Oct. 11.
Gorham Manufacturing Company. (See Achurch, William H., assignor.)
Gorton, George, and G., 3d, Racine, Wis. Engraving and other machine. 1,881,500; Oct. 11.
Gorton, George, 3d. (See Gorton, George and G., 3d.)
Gorton, William S., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine cable loading coil. 1,881,499; Oct. 11.
Gosmann, Enart, Elmwood Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Sound reproducing system. 1,881,501; Oct. 11.
Goss Printing Press Company. (See Brueshaber, Martin W., assignor.)
Gosselin, Abraham, Fisherville, Mass. Filling retaining device for looms. 1,881,502; Oct. 11.
Gould Storage Battery Corporation. (See Hubbard, Albert S., assignor.)
Gouldbourn, Joseph, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel breast flap laying and flap trimming machine. 1,882,077; Oct. 11.
Graham, Frank H., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Mounting frame for electrical apparatus. 1,881,503; Oct. 11.
Graham, Frederick M., Hollidaysburg, Pa. Apparatus for heat treating rails. 1,882,417; Oct. 11.
Graham, Herbert J., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lamp. 1,882,185; Oct. 11.
Graham, Matthew P. (See Hufferd, G. H., and Graham.)
Graham, Matthew P., and G. H. Hufferd, Detroit, Mich., assignors to Thompson Products, Inc. Vibration damper. 1,881,504; Oct. 11.
Granat, Joseph, San Francisco, Calif. Ring shank. Des. 87,916; Oct. 11.
Grand Rapids Store Equipment Corporation. (See Vanderveld, Anthony, assignor.)
Granstedt, Johan A., Sjalevad, assignor of one-half to G. P. O. Fogelqvist, Sundsvall, Sweden. Centrifugal clutch. 1,882,418; Oct. 11.
Gravely, Benjamin F., Dunbar, W. Va. Tractor. 1,881,505; Oct. 11.
Graves, George W., Detroit, Mich., assignor to American Olympic Association, New York, N. Y. Emblem or similar article. Des. 87,917; Oct. 11.
Gray, Emmet P., Detroit, Mich. Muffler supporting device. 1,882,555; Oct. 11.
Gray, Hiram L., Larchmont, N. Y. Detergent. 1,881,506; Oct. 11.
Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Grain cleaner and loader. 1,881,507; Oct. 11.
Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Pipe coupling. 1,881,508; Oct. 11.
Green, Joseph W., et al. (See Emmons, Nelson, 3d.)
Greene, Percy W., Whitman, assignor to Perley E. Barbour, doing business as Barbour Welting Company, Brockton, Mass. Welting and its manufacture. 1,881,509; Oct. 11.
Greenfield Tap and Die Corporation. (See Judge, Franklin, assignor.)
Greenhouse, Samuel, Brooklyn, N. Y. Metal foil and attaching same. 1,882,359; Oct. 11.
Greenwood, Talma T., East Templeton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Method and apparatus for providing the casings of electrical apparatus with inert atmospheres. 1,881,510; Oct. 11.
Greist Manufacturing Company, The. (See Elwell, George H., assignor.)
Grierson, Paul S., Millburn, N. J., and G. Bright, Wilkinsburg, Pa., assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Lock construction. 1,881,511; Oct. 11.
Grieshaber, Hugo E., New London, assignor to Electric Boat Company, Groton, Conn. Submarine rescue means. 1,881,512; Oct. 11.
Griffith, William B., Audubon, N. J., assignor to Star Sprinkler Corporation, Philadelphia, Pa. Exhauster for sprinkler fire extinguishing systems. 1,881,513; Oct. 11.
Grimley, Donald G., Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission circuit. 1,881,515; Oct. 11.

Griswold, Frank W., assignor to Griswold Safety Signal Company of Delaware, Minneapolis, Minn. Railroad crossing signal. 1,881,516; Oct. 11.

Griswold Safety Signal Company of Delaware. (See Griswold, Frank W., assignor.)

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Damping device. 1,882,280; Oct. 11.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,882,281; Oct. 11.

Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Method and apparatus for forming body panels. 1,881,517; Oct. 11.

Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Making hinges. 1,881,518; Oct. 11.

Groehn, Otto J., Grosse Pointe Park, L. L. Mitchell, Detroit, and C. McCurley, Halfway, assignors to Hudson Motor Car Company, Detroit, Mich. Body assembling apparatus. 1,881,519; Oct. 11.

Groove Lock Co. (See Waechter, Adam, assignor.)

Gros, Gustave A., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Composite article. 1,881,520; Oct. 11.

Gstyr, Joseph, Rochester, and E. Wildhaber, Brooklyn, N. Y. Automatic dimming device. 1,881,521; Oct. 11.

Gubelmann, Ivan. (See Goodrich, R. J., and Gubelman.)

Guide Lamp Corporation. (See Mead, Howard C., assignor.)

Guild, Waldo J. (See Heald, R. N., Guld, Burns, and Garno.)

Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Workhead. 1,881,522; Oct. 11.

Guldager, Walter E., assignor of one-half to Lawrence C. Oak, Detroit, Mich. Adjustable boring tool. 1,881,523; Oct. 11.

Gurney, Erving R., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Engine hood construction. 1,882,319; Oct. 11.

Gustafsson, Hans G., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Guarding device. 1,881,524; Oct. 11.

Gyro Process Company. (See Harnsberger, Audley E., assignor.)

Hadley, Harlan A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Even balance scale. 1,882,419; Oct. 11.

Hagan, Arthur M. (See Kurtz, Alfred W., assignor.)

Haight, Rex C., Grass Range, Mont. Graphic device. 1,882,282; Oct. 11.

Haines Hosiery Mills Inc. (See Paget, Harold F., assignor.)

Haines, Stacy A., Kansas City, Mo. Coffee maker. 1,882,140; Oct. 11.

Hall, Walter T., Glencoe, Ill., assignor to E. B. Badger & Sons Company, Boston, Mass. Distilling. 1,882,568; Oct. 11.

Hallatt, Harry H., Windsor, Ontario, Canada. Parlor golf game. 1,882,569; Oct. 11.

Haller, Josef. (See Glietenberg, E., Neelmier, and Haller.)

Haller, Josef, Wiesdorf-on-the-Rhine, E. Glietenberg, Leverkusen-on-the-Rhine, and W. Hentrich, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing preparation. 1,882,561; Oct. 11.

Haller, Oskar. (See Laska, L., and Haller.)

Hallitt, William, Huddersfield, England. Continuous discharge centrifugal machine. 1,882,383; Oct. 11.

Halpern, Mendel S., Oakland, Calif. Nonglare light projector. 1,881,525; Oct. 11.

Halterman, John, Portland, Ind. Industrial oil burner. 1,881,526; Oct. 11.

Halvorsen, Eggli J. S., Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for operating upon hides, skins and leather. 1,881,527; Oct. 11.

Hamilton Beach Manufacturing Company. (See Nielsen, Emanuel, assignor.)

Hamilton, Harry A., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Buckle holder. 1,882,570; Oct. 11.

Hamlin, Marston L., Lynbrook, assignor to The Barrett Company, New York, N. Y. Melting metals in cupola furnaces. 1,882,571; Oct. 11.

Hamlink, Lazenby C., Cleveland Heights, assignor to The Gas Machinery Company, Cleveland, Ohio. Cooking gas ovens. 1,881,528; Oct. 11.

Hamm Hugh J., assignor of one-third to G. D. Baten, Beaumont, Tex. Well testing apparatus. 1,882,572; Oct. 11.

Hammer, Charles, New York, assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Long Island City, N. Y. Sealed package. 1,881,529; Oct. 11.

Hammers, William J., and A. F. Winterhalter, Grand Rapids, Mich. Electric water heater. 1,882,573; Oct. 11.

Hammon, George L., San Francisco, Calif. Mixer for welding torches. 1,882,420; Oct. 11.

Hampton, William C., and C. N. Garber, assignors to The Crawford, McGregor and Canby Company, Dayton, Ohio. Coating articles with pyroxylin or the like. 1,882,574; Oct. 11.

Hancock, Charles L., Tuthill, S. Dak., assignor to Animal Trap Company of America, Lititz, Pa. Trap. 1,881,530; Oct. 11.

Hancock, Randolph B., Gary, Ind. Apparatus for annealing bars. 1,882,141; Oct. 11.

Handy Button Machine Co. (See Perlman, Joseph and N. H., assignors.)

Haney, Martin O., Iola, Kans. Potato masher or similar article. Des. 87,918; Oct. 11.

Hankins, Cyrus, Washington, D. C., assignor to Wine Railway Appliance Company, Toledo, Ohio. Railway car. 1,882,186; Oct. 11.

Hanks, Emily G., Brooklyn, N. Y. Educational device. 1,882,575; Oct. 11.

Hanks, Marshall W., Madison, Wis. Liquid conductor heater. 1,881,531; Oct. 11.

Hannaford, Alfred, Chicago, Ill. Bottle brush. 1,882,576; Oct. 11.

Hanson, Gustaf W., Wichita, Kans. Lubricating system. 1,881,532; Oct. 11.

Hanson, Victor A., Chicago, Ill. Arc lamp construction. 1,882,577; Oct. 11.

Hapgood, Cyrus H., Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y. Pneumatic and electric connecter for milking machines. 1,882,320; Oct. 11.

Hardiman, James S., Ridgewood, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Machine and method for assembling articles. 1,881,533; Oct. 11.

Hardiman, James S., Ridgewood, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Automatic feed device. 1,882,578; Oct. 11.

Harding, Clarke T., Baton Rouge, La., assignor to Standard-I-G. Company. Refining hydrocarbon oils. 1,881,534; Oct. 11.

Hargrave, John M., Cincinnati, Ohio. Drill. 1,881,535; Oct. 11.

Harmon, Benjamin G., Evanston, Ill., assignor to The Gas Machinery Company, Cleveland, Ohio. Industrial furnace. 1,881,536; Oct. 11.

Harnischfeger Corporation. (See Lillard, Gwynn L., assignor.)

Harnischfeger Corporation. (See Ljungkull, Rolf, assignor.)

Harnsberger, Audley E., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Oil heating still. 1,882,579; Oct. 11.

Harper, George A., assignor to Burlington Brass Works, Burlington, Wis. Valve. 1,881,537; Oct. 11.

Harrington, Claude L., assignor to White Star Refining Company, Detroit, Mich. Valve device. 1,881,538; Oct. 11.

Harrington & King Perforating Company, The. (See Crapman, Frederick D., assignor.)

Harris, Alexander B. B., Richmond, Va. Combination hose reel and sprinkler. 1,881,539; Oct. 11.

Harris, Blaine H., and E. F. Craft, assignors to Brown & Bigelow, St. Paul, Minn. Ash receiver. 1,881,540; Oct. 11.

Harris, Henry H., Detroit, Mich. Heat treating receptacle. 1,882,580; Oct. 11.

Harrison, Thomas G., assignor to Winston and Newell Company, Minneapolis, Minn. Refrigerating goods-display device. 1,881,541; Oct. 11.

Hart, Harry S., assignor to Rodger Ballast Car Company, Chicago, Ill. Control mechanism for hopper car doors. 1,882,217; Oct. 11.

Hartford-Empire Company. (See Lorenz, Edward H., assignor.)

Hartford-Empire Company. (See Peiler, Karl E., assignor.)

Harth, Philip E., assignor to National Pigments & Chemical Company, St. Louis, Mo. Lubricating composition for machining operations. 1,881,542; Oct. 11.

Hartig, Henry E., Crystal Village, and H. B. Wilcox, Minneapolis, Minn. Fluid meter. 1,881,543; Oct. 11.

Hartley, George C., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Testing device for telephone exchange systems. 1,881,544; Oct. 11.

Hartmann, Otto H., assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Steam boiler, especially marine boiler with indirect generation of the working steam. 1,881,545; Oct. 11.

Hartwig, William G., assignor to Railway Utility Company, Chicago, Ill. Heating system for railway cars and the like. 1,881,546; Oct. 11.

Hartwig, William G., assignor to Railway Utility Company, Chicago, Ill. Thermostat. 1,881,547; Oct. 11.

Harvey, Harold C., assignor to The Agasote Millboard Company, Trenton, N. J. Apparatus for making pulp board. 1,881,548; Oct. 11.

Harvey Hubbell, Incorporated. (See Avery, Charles E., assignor.)

Harvey, Leo M., Los Angeles, Calif. Fruit clipper. 1,882,218; Oct. 11.

Harwood, Paisley B., Milwaukee, and C. Stansbury, Wauwatosa, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for motor driven machines. 1,882,219; Oct. 11.

Haskins, Butler J., assignor to Joseph Weidenhoff, Inc., Chicago, Ill. Battery tester. 1,882,581; Oct. 11.

Hat Corporation of America. (See Hodshon, Alfred E., assignor.)

Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Powdering machine. 1,881,549; Oct. 11.

Hatton, William, R. D. Spann, E. J. Rousseau, and F. O. V. Larsen, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,881,550; Oct. 11.

Haubens, Henry, and L. H. Holcomb, Omaha, Nebr. Washing machine. 1,882,582; Oct. 11.

Haupt, Walter H., Ludlow, Ky., assignor to Augustine Davis, jr., Cincinnati, Ohio. Measuring dispenser. 1,882,583; Oct. 11.

Hawkins, Bert H., Royal Oak, assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Bushing attachment for valve grinding. 1,881,551; Oct. 11.

Hawkins, Walter L., assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Automobile lock. 1,881,552; Oct. 11.

Haws, Alpheus G., Berkeley, Calif. Drinking fountain bowl. Des. 87,919; Oct. 11.

Haws, Alpheus G., Berkeley, Calif. Drinking fountain bubbler head. Des. 87,920; Oct. 11.

Hayden, Harold R., Brooklyn, N. Y. Radio dial construction. 1,882,584; Oct. 11.

Hayes, Thomas R., Monrovia, Calif. Chair. 1,882,585; Oct. 11.

Haynes, Merritt W., Cranford, N. J. Engraving and routing machine. 1,882,586; Oct. 11.

Hazel-Atlas Glass Co. (See Good, Robert, assignor.)

Hazeldine, Joseph, Zion, Ill., assignor to Richmond Lace Works, Inc., Alton, R. I. Lace or article of analogous nature. Des. 87,921; Oct. 11.

Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Hob. 1,882,008; Oct. 11.

Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Method and apparatus for relieving hobs. 1,882,009; Oct. 11.

Heald Machine Company, The. (See Guild, Waldo J., assignor.)

Heald Machine Company, The. (See Heald, R. N., Guild, Burns, and Garno, assignors.)

Heald Machine Company, The. (See Nenninger, Lester F., assignor.)

Heald Machine Company, The. (See Page, D. C., and Scott, assignors.)

Heald, Roger N., W. J. Guild, A. P. Burns, and G. E. Garno, assignors to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,881,553; Oct. 11.

Heath, Howard, Rexburg, Idaho. Washing, cleaning, and polishing glove. 1,882,588; Oct. 11.

Hentwole, Floyd E., Ballston, Va. Means to improve conductivity. 1,882,587; Oct. 11.

Heckert, Frederick W., Dayton, Ohio. Fluid pump. 1,881,554; Oct. 11.

Heddon's Sons, James. (See Welch, Jack T., assignor.)

Hedrick, Richard, Los Angeles, Calif. Apparatus for producing aggregates. 1,882,421; Oct. 11.

Heggem, Alfred G., Tulsa, Okla. Oil saver. 1,881,555; Oct. 11.

Heggem, Alfred G., Tulsa, Okla. Packing casing head. 1,881,556; Oct. 11.

Heiden, Simon, Detroit, Mich. Aeroplane. 1,882,589; Oct. 11.

Hein, Gustave, Astoria, N. Y., assignor, by mesne assignments, to Leviton Manufacturing Company. Connecter plug. 1,882,590; Oct. 11.

Heinke, Frederick W., jr., assignor to Fox Automotive Products Corporation, Philadelphia, Pa. Spare tire and wheel lock. 1,881,566; Oct. 11.

Heijkenskjöld, Gustaf O. W., assignor to Aktiebolaget Bästa, Stockholm, Sweden. Manufacturing yeast. 1,881,557; Oct. 11.

Heitger, Frank H., Flint, Mich. Carburetor. 1,881,558; Oct. 11.

Heitger, Frank H., Flint, Mich. Accelerator pump. 1,881,559; Oct. 11.

Heitger, Frank H., Flint, Mich. Carburetor. 1,881,560; Oct. 11.

Heitger, Frank H., Flint, Mich. Carburetor. 1,881,561; Oct. 11.

Heitger, Frank H., Flint, Mich. Automatic charge heating control for internal combustion engines. 1,881,562; Oct. 11.

Held, Robert, Oppau, and M. Luther, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of esters. 1,881,563; Oct. 11.

Heller, Lewis W., Oak Harbor, Ohio, assignor to Fuller Lehigh Company, Fullerton, Pa. Boiler with water wall tubes. 1,882,422; Oct. 11.

Helmholtz, Arthur W., and D. Ferrell, Harrisburg, Ill. Blasting apparatus. 1,881,564; Oct. 11.

Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Full fashioned stocking. 1,882,591; Oct. 11.

Hemphill Company. (See Lawson, John and R. H., assignors.)

Hemphill Company. (See Lawson, Robert H., assignor.)

Hemphill Company. (See Lawson R. H., and Gagné, assignors.)

Hendey Machine Company, The. (See Llewellyn, Ernest R., assignor.)

Hendrickson, Hugh H., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Curtain roller. 1,882,592; Oct. 11.

Henke, Clyde O., and G. Etzel, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Industries, Inc. Preparing retene. 1,881,565; Oct. 11.

Henke, Frederick W., jr., assignor to Fox Automotive Products Corporation, Philadelphia, Pa. Spare wheel and tire lock. 1,881,567; Oct. 11.

Henney, Charles F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,881,568; Oct. 11.

Hennings, Charles H., Chicago, Ill., assignor to Hennings Manufacturing Co. Cage. 1,882,142; Oct. 11.

Hennings Manufacturing Co. (See Hennings, Charles H., assignor.)

Hennings, Oscar, Montclair, N. J. Filter. 1,882,078; Oct. 11.

Henry, Walton, Bloomfield, Belfast, Northern Ireland. Machine for molding butter and the like. 1,882,143; Oct. 11.

Hentrich, Winfrid. (See Haller, J., Glietenberg, and Hentrich.)

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, and C. Taube, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing azo dyestuffs. 1,882,556; Oct. 11.

Hentschel, Erich, Leipzig, Germany. Transfer picture and its manufacture. 1,882,593; Oct. 11.

Hercules Powder Company. (See Peters, Garrett H., assignor.)

Herdeg, Howard B., Buffalo, N. Y. Device for automatically maintaining electrolyte level in a battery. 1,882,361; Oct. 11.

Herman, Karl, Morrisville, Pa. Window cleaner. 1,882,494; Oct. 11.

Herman Nelson Corporation, The. (See Shurtleff, Wilfred, assignor.)

Herman, Wolfgang, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Spraying device for paints, varnishes, etc. 1,881,569; Oct. 11.

Hermann, Wolfgang, assignor to Metal Specialities Manufacturing Company, Chicago, Ill. Spraying device for paints, varnishes, etc. 1,881,570; Oct. 11.

Hershey, Harry E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Selective signaling system. 1,882,010; Oct. 11.

Hershey, Orville S., Chicago, assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,881,571; Oct. 11.

Herz, Alfred, Chicago, Ill. Compensating drive mechanism for gas meters. 1,881,572; Oct. 11.

Herz, Alfred, Chicago, Ill. Antiinduction shielding system. 1,881,573; Oct. 11.

Herz, Alfred, Chicago, Ill. System for preventing interference between power wires and communication wires. 1,881,574; Oct. 11.

Herzog, Carl W., Toledo, Ohio. Rotary pump. 1,881,575; Oct. 11.

Hess, Bryce M., Chicago, Ill. Mirror equipped cabinet door. 1,881,576; Oct. 11.

Hettrick Manufacturing Company, The. (See Friesner, Charles E., assignor.)

Heuner, Carl, Berlin, Germany. Starting crank for internal combustion engines. 1,882,594; Oct. 11.

Hewitt, Elmer L., assignor to All Fair Incorporated, Churchville, N. Y. Toy. 1,882,595; Oct. 11.

Heygel, Paul R., Ridgefield, N. J. Refrigerator construction. 1,882,011; Oct. 11.

Hickok Manufacturing Company. (See Hamilton, Harry A., assignor.)

Hicks, Harold A. (See Reed, R. A., and Hicks.)

Hiergesell, David, et al. (See Hiergesell, David, assignor.)

Hiergesell, David, Richmond Hill, assignor to V. Hiergesell and D. Hiergesell, copartners, doing business as Wm. Hiergesell & Sons, New York, N. W. Hydrometer. 1,882,321; Oct. 11.

Hiergesell, Valentine, et al. (See Hiergesell, David, assignor.)

Hilgenberg, Ludwig R., Leipzig-Marienhohe, Germany. Top for vehicles. 1,882,360; Oct. 11.

Hilger, George, Chicago, Ill. Refrigerating system. 1,882,596; Oct. 11.

Hilger, George, Chicago, Ill. Refrigerating system. 1,882,597; Oct. 11.

Hill, Frederic W. (See Page, R. W., and Hill.)

Hillyard, Newton S., St. Joseph, Mo. Manacle. 1,881,577; Oct. 11.

Hilton, Grover C., Hutchinson, Kans. Display case. Des. 87,922; Oct. 11.

Hinde & Dauche Paper Company, The. (See Gagen, Thomas H., assignor.)

Hindle, Joseph, Accrington, England. Braking spindles employed in ring spinning frames, or in other frames in which similarly braked spindles are used. 1,882,144; Oct. 11.

Hinds, Jackson C., Houston, Tex. Apparatus for operating stamping machines. 1,881,578; Oct. 11.

Hinterkopf, Henry. (See Cuchran, J., and Hinterkopf.)

Hipp, Andrew, Baltimore, Md. Electric time switch. 1,882,495; Oct. 11.

Hires, John E., Ardmore, Pa., assignor to Scott Paper Company. Paper roll. 1,882,012; Oct. 11.

Hirschman, Seymour S., Binghamton, N. Y. Rotary fire escape. 1,882,145; Oct. 11.

Hobbs, John W., Moline, Ill., assignor by mesne assignments, to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Lifting jack. 1,883,598; Oct. 11.
Hobert, Edward J. (See Mample, A. Z., and Hobert.)
Hoch, Edward G., and J. A. Levering, assignors to Kozekar, Inc., Minneapolis, Minn. Baby basket and support. 1,881,579; Oct. 11.
Hochschwender, Ernst. (See Krauch, C., Pier, and Hochschwender.)
Hocker Corporation, The. (See Hocker, Ivan S., assignor.)
Hocker, Ivan S., assignor to The Hocker Corporation, Philadelphia, Pa. Extraction of cocoa butter. 1,882,013; Oct. 11.
Hodenux, Walter L., Palm Beach, Fla. Electric switch for power tools. 1,882,283; Oct. 11.
Hodge, Edward A., Rye, N. Y., assignor to Electrecorder Corporation, Dover, Del. Apparatus for measuring production. 1,881,580; Oct. 11.
Hodgson, Arland L., Detroit, Mich. Vehicle signal. 1,882,322; Oct. 11.
Hodshon, Alfred E., Bethel, assignor, by mesne assignments, to Hat Corporation of America, Norwalk, Conn. Apertured hat and making the same. 1,882,599; Oct. 11.
Hoe, R., & Co. (See Horton, Albert J., assignor.)
Hoe, R., & Co. (See Meyer, Joseph, assignor.)
Hoffman, Adon J., Syracuse, assignor to W. H. Hoffman, Oneonta, N. Y. Garment pressing machine. 1,881,581; Oct. 11.
Hoffman, William H. (See Hoffman, Adaon J., assignor.)
Hoffmann, Wolfgang, New York, N. Y. Lamp. Des. 87,923; Oct. 11.
Hohl, Joseph W. (See Iesh, J. E., and Hohl.)
Hokin, Harry R., Los Angeles, Calif. Hair waving device. 1,882,557; Oct. 11.
Holcomb, Lambert H. (See Haubens, H., and Holcomb.)
Holden, Charles S. (See Kranz, H. W., Holden, and Bound.)
Hollingshead, Arthur G., and C. W. Ploen, assignors to The Okadee Company, Chicago, Ill. Blow-off valve.
Holloway, Mack T., Graymont, Ga. Two-cycle gas engine. 1,881,582; Oct. 11.
Hollup, Charles H., Chicago, Ill., assignor to Hollup Corporation. Electrode coating and method of welding. 1,882,601; Oct. 11.
Hollup Corporation. (See Hollup, Charles H., assignor.)
Holly, George S., St. Charles, Ill., assignor to United Reproducers Corporation, Rochester, N. Y. Phonograph. 1,881,583; Oct. 11.
Holmes Electric Profective Company. (See Miranda, Martin A., assignor.)
Holmes, Harry N., Oberlin, Ohio. Removal of sulphur from gasoline or the like. 1,882,146; Oct. 11.
Holmes, John Q., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for sorting commutator segments. 1,881,584; Oct. 11.
Holmsten, Nillo O., New York, N. Y. Power take-off for motor vehicles. 1,882,602; Oct. 11.
Holz, George A., Detroit, Mich. Lawn weeder. 1,882,423; Oct. 11.
Holzberg, Barend P., Washington, D. C. Fastener. 1,882,496; Oct. 11.
Homan, Clayton H., Cleveland, Ohio, assignor, by mesne assignments, to General Spring Bumper Corporation. Bumper grinding machine. 1,881,629; Oct. 11.
Honer, Michael O., Weeping Water, Nebr. Corn drill coverer. 1,882,603; Oct. 11.
Hood Rubber Company. (See Glidden, A. A., and Knowland, assignors.)
Hoover Company, The. (See White, Harry B., assignor.)
Hoover, Ray, and E. R. Wheeler, North Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Quotation board printing unit. 1,881,585; Oct. 11.
Hopkins, Ralph Z., and E. Seger, assignors to Hudson Motor Car Company, Detroit, Mich. Striping device. 1,881,586; Oct. 11.
Hopkins, Ralph Z., and E. F. Seger, assignors to Hudson Motor Car Company, Detroit, Mich. Striping device for automobile bodies. 1,881,587; Oct. 11.
Hoppe, Boris B., Kew Gardens, N. Y. Fastening or holding device. 1,883,604; Oct. 11.
Horni, Paul P., Newark, N. J. Light reflecting unit. 1,881,588; Oct. 11.
Horsley, Robert L., Memphis, Tenn. Press for making mops. 1,882,605; Oct. 11.
Horton, Albert J., White Plains, assignor to R. Hoe & Co., Inc., New York, N. Y. Web roll controlling device for printing machine. 1,881,589; Oct. 11.
Horton, Frank J., and R. W. Lewis, assignors to General Spring Bumper Corporation, Detroit, Mich. Abrasive applying machine. 1,881,590; Oct. 11.
Horton Manufacturing Company, The. (See Lagerblade, Herbert C., assignor.)
Horwitz, Alexander, New York, N. Y. Bases for use in the manufacture of greases. 1,881,591. Oct. 11.
Hossfeld, Albert, Winona, Minn. Angle-bar bending die. 1,881,592; Oct. 11.
Hossfeld, Albert, Winona, Minn. Friction grip for drilling machines. 1,881,593; Oct. 11.
Hotchkin, Paul M., assignor to Curtis Lighting, Inc., Chicago, Ill. Illuminating device. 1,881,594; Oct. 11.
Houde Engineering Corporation. (See Fox, Merritt L., assignor.)
Houde Engineering Corporation. (See Peo, Ralph F., assignor.)
Houde Engineering Corporation. (See Powis, Richard, assignor.)
Houghton, E. F., and Company. (See Leaper, Joseph M., assignor.)
Howard, Frank A., Elizabeth, N. J., W. K. Lewis, Newton, Mass., and H. M. Noel, Elizabeth, N. J., assignors to Standard Oil Development Company. Apparatus for distilling hydrocarbon oils. 1,882,606; Oct. 11.
Howard, Merton W., Lynn, assignor to Pope Machinery Corporation, Haverhill, Mass. Wood heel machine. 1,881,595; Oct. 11.
Howard, Thomas, San Antonio, Tex. Toy building block. 1,882,607; Oct. 11.
Howe, Andrew F., University City, Mo. Sand ramming machine. 1,882,608; Oct. 11.
Howe, Charles S., assignor to Los Angeles Testing Laboratory, Los Angeles, Calif. Electroluminous display. 1,882,609; Oct. 11.
Howe Folding Furniture Inc. (See Howe, Harold, assignor.)
Howe, Harold, assignor to Howe Folding Furniture Inc., New York, N. Y. Folding mechanism. 1,882,610; Oct. 11.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Perforated strip sprocket feed mechanism. 1,882,014; Oct. 11.
Howsam, Hilyard C., assignor to Hubbard Spool Company, Chicago, Ill. Spool or reel. 1,881,596; Oct. 11.
Hoyos, Ernesto J., Boston, Mass., assignor to Hudson Motor Car Company, Detroit, Mich. Striping device for automobile bodies. 1,881,597; Oct. 11.
Hubbard, Albert S., Bethel, Conn., assignor, by mesne assignments, to Gould Sto.age Battery Corporation, Depew, N. Y. Voltage control system. 1,882,611; Oct. 11.
Hubbard, Barton D., Portland, Me., assignor to Brown Company, Berlin, N. H. Yarn guide for upstroke twisters. 1,881,598; Oct. 11.
Hubbard, Elmer S., Higganum, Conn. Harrow. 1,881,599; Oct. 11.
Hubbard Spool Company. (See Howsam, Hilyard C., assignor.)
Hubbell, Harvey, jr., Bridgeport, Conn. Electrical receptacle. 1,882,080; Oct. 11.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hudson Motor Car Company. (See Groehn, O. J., Mitchell and McCurley, assignors.)
Hudson Motor Car Company. (See Hopkins, R. Z., and Seger, assignors.)
Hudson Motor Car Company. (See Hoyos, Ernesto J., assignor.)
Hudson Motor Car Company. (See Powell, Clarence H., assignor.)
Huebsch Manufacturing Company. (See Huebsch, Monte F., assignor.)
Huebsch, Monte F., assignor to Huebsch Manufacturing Company, Milwaukee, Wis. Laundry identification apparatus. 1,882,015; Oct. 11.
Huenlich, Charles, Bloomfield, assignor to T. A. Edison, Incorporated, West Orange, N. J. Sound record tablet. 1,881,600; Oct. 11.
Hufferd, George H. (See Graham, M. P., and Hufferd.)
Hufferd, George H., and M. P. Graham, assignors to Thompson Products, Incorporated, Detroit, Mich. Ball joint. 1,881,601; Oct. 11.
Hufford, Harry J., Scranton, Pa. Thread feeding and spacing means. 1,882,612; Oct. 11.
Huffman, Louis, assignor to Toronto Type Foundry Company, Limited, Toronto, Ontario, Canada. Manifolding sales book. 1,882,384; Oct. 11.
Hughes, Wendell L., New York, N. Y. Ophthalmotrope. 1,881,602; Oct. 11.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,881,603; Oct. 11.
Hull, Hiram, Brooksville, Fla. Farm tool. 1,881,604; Oct. 11.
Hullings, Otis H., Alexandria, Va. Laundry machine. 1,882,284; Oct. 11.
Hultman, Gunnard. (See Osterdahl, Martin, assignor.)
Hummert, Robert H., assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio. Combination curtain, dust guard, and drapery holding bracket. 1,881,605; Oct. 11.
Humphreville, Edwin, Lancaster, Pa. Heat conserver. 1,881,606; Oct. 11.
Humphreys, Omar R., and W. G., Omaha, Nebr. Dragline excavating bucket. 1,882,147; Oct. 11.
Humphreys, Walter G. (See Humphreys, Omar R. and W. G.)
Huncker, Karl, assignor to I. E. McCabe, Chicago, Ill. Manufacture of electric mercury bulb switches. 1,882,613; Oct. 11.
Huncker, Karl, assignor to I. E. McCabe, Chicago, Ill. Inclosed mercury switch. 1,882,614; Oct. 11.
Hunt, Arthur E., Brooklyn, N. Y., and W. Y. Lang, Towaco, N. J.; said Hunt assignor to American Telephone and Telegraph Company and said Lang assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Printing telegraph system. 1,881,607; Oct. 11

Hunter, John N., Norbury, England, assignor to Pyrene Manufacturing Company, Newark, N. J. Container-piercing mechanism. 1,881,608; Oct. 11.
Huntington, George W., Glencoe, Minn. Mower for highway sides. 1,882,016; Oct. 11.
Huntington, Willis G. (See Roberts, F. B., and Huntington.)
Hupp Motor Car Corporation. (See MacPherson, Earle S., assignor.)
Huppert, William, New York, N. Y. Armored electrical plug. 1,882,615; Oct. 11.
Hutchins Car Roofing Company. (See Franck, Edwin G., assignor.)
Hutchinson, Robert B., Wilkinsburg, Pa. Exploding wedge. 1,882,617; Oct. 11.
Hutchinson, Robert H., assignor to D. Napier & Son Limited, London, England. Socket joint. 1,882,616; Oct. 11.
Hutchinson, Thomas S., Chicago, Ill. Ejector fork. 1,882,246; Oct. 11.
Huwe, Edgar W., Noonan, N. Dak. Power take-off for motor driven vehicles. 1,881,609; Oct. 11.
Hyde, Elmer H., Pittsburgh, Pa., assignor to American Tar Products Company, Inc. Composition of matter. 1,882,618; Oct. 11.
Hyde, Rollin M., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Tubing. 1,881,610; Oct. 11.
Hynes, Sylvanus, Canon City, Colo. Fruit washer. 1,881,611; Oct. 11.
I. G. Farbenindustrie Aktiengesellschaft. (See Finkelstein, Hans, and Achterberg, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Gmelin, P., and Knodel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Held, R., and Luther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Krauch, C., and Müller-Cunradi, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Krauch, C., Pier, and Hochschwender, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lehrer, Erwin, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mueller-Cunradi, M., and Ottens, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mueller-Cunradi, M., and Pieroh, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nicodemus, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., and Wissel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Steimmig, Gerhard, assignor.)
Imperial Chemical Industries Limited. (See Lodge, F., and Tatum, assignors.)
Improved Fire Detector Corporation. (See Brady, George H., assignor.)
Independent Oil Well Cementing Company. (See Trough, John E., assignor.)
Independent Pneumatic Tool Company. (See Levedahl, Axel, assignor.)
Independent Pneumatic Tool Co. (See Norling, Reinhold A., assignor.)
Ingalls Iron Works Company, Thee. (See Jones, Russell E., assignor.)
Ingman, Thomas M. (See Garbutt, F. E., and Ingman.)
Ingman, Thomas M., and F. E. Garbutt, Los Angeles, and James T. Barkelew, Pasadena, Calif., assignors to Paramount Publix Corporation, New York, N. Y. Film developing system. 1,881,612; Oct. 11.
Ingraham, Dudley S., assignor to The E. Ingraham Company, Bristol, Conn. Watchcase. 1,881,613; Oct. 11.
Ingraham, E., Company, The. (See Ingraham, Dudley S., assignor.)
Ingram, Floyd M., Sioux Rapids, Iowa. Calf muzzle. 1,882,619; Oct. 11.
Ingwer, Carl H., Elyria, Ohio. Shoe heel or similar article. Des. 87,924; Oct. 11.
International Air Brake Company. (See Doty, Wade, assignor.)
International Combustion Engineering Corporation. (See Kreisinger, Henry, assignor.)
International Combustion Engineering Corporation. (See Mattimore, John D., assignor.)
International Motor Company. (See Gurney, Erving R., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
Investors Industries, Inc. (See Putney, Charles L., assignor.)
Ireland, George E., assignor to The City Machine & Tool Company, Toledo, Ohio. Combined radiator shell and mud-guard. 1,882,620; Oct. 11.
Irving Air Chute Company. (See Nichols, Erwin H., assignor.)
Irving, Clarence B., Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Record posting device. 1,881,614; Oct. 11.
Isaacson, William O., Chicago, Ill. Cooking utensil. 1,881,615; Oct. 11.
Ischinger, Eric. (See Gibbs, Oscar D., assignor.)
Ives, Clifford E., Chicago, Ill. Automatic lock for elevator doors. 1,882,621; Oct. 11.
Ives, Herbert E., Montclair, N. J. Making relief pictures and manner of viewing same. 1,882,424; Oct. 11.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical device. 1,881,616; Oct. 11.
Iwanowski, Waclaw, and J. Turski, Warsaw, Poland. Impregnation of wood and other vegetable substances. 1,881,617; Oct. 11.
Jackson, Harry H. (See Roberts, W. T. B., and Jackson.)
Jackson, Henry R., Newark, N. J. Shampoo chin rest. 1,882,624; Oct. 11.
Jacobi, Edward N., assignor to Briggs and Stratton Corporation, Milwaukee, Wis. Handle assembly. 1,882,625; Oct. 11.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,882,626; Oct. 11.
Jacobsen, Knud F., assignor to Jacobsen Mfg. Company, Racine, Wis. Grass catcher for lawn mowers. 1,881,618; Oct. 11.
Jacobsen Mfg. Company. (See Jacobsen, Knud F., assignor.)
James, Frederic W., Belleville, assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J. Change speed wheel. 1,882,627; Oct. 11.
James, Frederic W., Belleville, assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J. Lock shaft. 1,882,628; Oct. 11.
James, Frederic W., Belleville, assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J. Power driven loader. 1,882,629; Oct. 11.
James, George S., Long Island, N. Y., assignor, by mesne assignments, to James Neon Double Electrode Corporation, Chicago, Ill. Gaseous conduction lamp. 1,881,619; Oct. 11.
James Neon Double Electrode Corporation. (See James, George S., assignor.)
Jandus, Herbert S., Detroit, Mich., and F. A. Smith, Chicago, assignors to Oakes Products Corporation, North Chicago, Ill. Lock for spare wheels and tires. 1,881,620; Oct. 11.
Janicki, John, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand covering apparatus. 1,881,621; Oct. 11.
Janson, George W., Nutley, N. J., and W. F. Callahan, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. System for testing and recording the condition of clock setting circuits. 1,881,622; Oct. 11.
Jarvis, Christopher, Monte Video, Minn. Turbine. 1,882,630; Oct. 11.
Jarvis, Frank J., assignor to Jarvis & Jarvis Inc., Palmer, Mass. Bearing construction. 1,882,497; Oct. 11.
Jarvis, Frank J., assignor to Jarvis & Jarvis, Inc., Palmer, Mass. Tire tread. 1,882,498; Oct. 11.
Jarvis & Jarvis, Inc. (See Jarvis, Frank J., assignor.)
Jassoy, Otto, assignor to Einar C. Christensen, Buffalo, N. Y. Cheese slicer. 1,881,623; Oct. 11.
Jaumann, Andreas, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Electric filter arrangement. 1,882,631; Oct. 11.
Jaworowski, Joseph F., Cleveland, Ohio. Meter. 1,882,632; Oct. 11.
Jay, Webb, Miami Beach, Fla. Knee control steering attachment. 1,882,323; Oct. 11.
Jeffers, Clarence E., York, Pa., assignor, by mesne assignments, to Oakes Products Corporation. Demountable wheel lock. 1,881,624; Oct. 11.
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jelke, John F., Company. (See Farrell, D. A., and Johnson, assignors.)
Jelliffe, Howard W., and W. H. Abbott, assignors to Utility Products Company, Cleveland, Ohio. Spray gun. 1,881,625; Oct. 11.
Jencick, Stephen, Chagrin Falls, Ohio. Hydraulic shock absorber. 1,882,633; Oct. 11.
Jenkins Petroleum Process Company. (See Bartlett, Kent W., assignor.)
Jenkins, Raymond J., Baltimore, Md. Smoke pipe air check. 1,881,626; Oct. 11.
Jenkinson, George B., Prescott, Ontario, Canada, assignor to The Newell Mfg. Co., Inc., Ogdensburg, N. Y. Curtain fixture. 1,881,627; Oct. 11.
Jennejohn, John, assignor to Utility Manufacturing Co., Cudahy, Wis. Vulcanizer with wedge lock. 1,881,628; Oct. 11.
Jennings, O. D., & Company. (See Jennings, O. D., and Gilmore, assignors.)
Jennings, Ode D., Palatine, and C. B. Gilmore, assignors to O. D. Jennings & Company, Chicago, Ill. Check-controlled apparatus for vending machines. 1,882,634; Oct. 11.
Jensen, Louis, assignor to United Automatic Register Co., Chicago, Ill. Typewriting duplicator. 1,882,635; Oct. 11.
Jett, George C., assignor of two-fifths to W. H. Stiemke, Milwaukee, Wis. Crawler tread mechanism. 1,881,630; Oct. 11.
Jewett, Maurice G., assignor to Chain Belt Company, Milwaukee, Wis. High speed chain and making same 1,881,631; Oct. 11.
Johannessen, Ralph A., Los Angeles, Calif. Direction indicator. 1,881,632; Oct. 11.

Johns, Henry S., assignor to Bancroft Holdings, Limited, Hamilton, Ontario, Canada. Plaster base. 1,882,499; Oct. 11.

Johnson, Earl V., Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Overload clutch. 1,881,633; Oct. 11.

Johnson, Eldridge R. F., Moorestown, assignor to Mechanical Improvements Corporation, Camden, N. J. Launching device for life preserver. 1,881,634; Oct. 11.

Johnson, Elmo W., Hicksville, N. Y. Double-row potato digger. 1,882,636; Oct. 11.

Johnson, Elvin H., Winnetka, Ill. Doorstep. 1,881,635; Oct. 11.

Johnson Fare Box Company. (See Thompson, Ernest H., assignor.)

Johnson, Glen A., assignor to Stant Manufacturing Company, Connersville, Ind. Radiator cap. Des. 87,925; Oct. 11.

Johnson, Howard F., assignor to The Champion Machine & Forging Company, Cleveland, Ohio. Automatic forging machine. 1,882,362; Oct. 11.

Johnson, John E. (See Farrell, D. A. and Johnson.)

Johnson, John F., and R. B. Lawton, assignors to Weber Costello Co., Chicago Heights, Ill. Portable blackboard. 1,881,636; Oct. 11.

Johnson, Lambert D., and N. F. True, assignors to Mead Johnson & Company, Evansville, Ind. Powdered protein milk and preparing same. 1,882,637; Oct. 11.

Johnson, Lambert D., and N. F. True, assignors to Mead Johnson & Company, Evansville, Ind. Powdered acid milk and preparing same. 1,882 638; Oct. 11.

Johnson, Robert C., Seattle, Wash. Electrical appliance. 1,882,385; Oct. 11.

Johnson, Roy W., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Fuel regulating device for gas ovens. 1,881,637; Oct. 11.

Johnson, Roy W., Elkhart, Ind., assignor to Roberts Brass Manufacturing Company, Detroit, Mich. Thermostat assembly. 1,881,638; Oct. 11.

Johnson, S. C., & Son. (See Beach, Chester H., assignor.)

Johnson, William V., Washington, D. C. Bookholder. 1,882,639; Oct. 11.

Johnston Pressed Gear Co. (See Sharp, Allen W., assignor.)

Johnstone, Harold G., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Perforating apparatus. 1,881,639; Oct. 11.

Johnstone, Harold G., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Tabulating system. 1,881,640; Oct. 11.

Jones, Charles H., Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,882 500; Oct. 11.

Jones, Charles L., Pelham, N. Y., and H. S. McIlvain, Belleville, N. J., assignors to Dryice Equipment Corporation, New York, N. Y. Refrigerating and display apparatus and method. 1,882,640; Oct. 11.

Jones, Frank C., Parma, Ohio. Cigarette holder. 1,881,641; Oct. 11.

Jones, Herbert L., Morristown, N. J., and E. A. Veazie, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission control circuit. 1,881,642; Oct. 11.

Jones & Lamson Machine Company. (See Lovely, John E., assignor.)

Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Dewaxing of petroleum oils. 1,881,643; Oct. 11.

Jones, Lester L., Oradell, N. J. Electron discharge cathode. 1,881,644; Oct. 11.

Jones, Lester L., Oradell, N. J., J. A. Flanzer, and E. Reisman, Brooklyn, assignors to Technidyne Corporation, New York, N. Y. Activation and reactivation of electron emission tubes. 1,881,645; Oct. 11.

Jones, R T, Perry, Iowa. Merry-go-round. 1,881,646; Oct. 11.

Jones, Russell E., Birmingham, Ala., assignor to The Ingalls Iron Works Company. Fabricated metal grand stand. 1,882,148; Oct. 11.

Jones, Thomas H., Woodthorpe, England. Producing stockings and socks. 1 882,641; Oct. 11.

Jordhoy Hans C., North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Apparatus for separating the riser from a stereotype plate. 1 881 647; Oct. 11.

Jordhoy, Hans C., North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Separating the riser from a stereotype printing plate. 1,881,648; Oct. 11.

Jordon, O. F., Company. (See Forbes, J. C., and Banton, assignors.)

Judd, George E., Boston, Mass. Ticket and ticket cabinet. 1,881,649; Oct. 11.

Judd, George E., Boston, Mass. Ticket handling apparatus. 1,881,650; Oct. 11.

Judee, Franklin, Greenfield, Mass., assignor to Greenfield Tap and Die Corporation. Gauge. 1,881,651; Oct. 11.

Jung Arch Brace Company, The. (See Jung, George H., jr., assignor.)

Jung, George H., jr., assignor to The Jung Arch Brace Company, Cincinnati, Ohio. Preparing elastic webbing for cutting. 1,882,642; Oct. 11.

Junkers, Hugo, Dessau, Germany. Doorlock. 1,882,643; Oct. 11.

Juster, Louis H., St. Lambert, Quebec, Canada, assignor to L. E. Waterman Company, New York, N. Y. Feed for fountain pens. 1,882,644; Oct. 11.

Justice, William N., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Making a ring joint. 1,881,652; Oct. 11.

Kageyama, Hosaku, deceased, Los Angeles, Calif. Frank Bryson, public administrator. Signal device for automobiles. 1,882,324; Oct. 11.

Kail, Charles E., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Strainer. 1,882,645; Oct. 11.

Kaiser, Wilhelm, Berlin-Schmargendorf, assignor to Deutsche Gasgluhlicht-auer-Gesellschaft m. b. H., Berlin, Germany. Life restoring apparatus. 1,882,017; Oct. 11.

Kalamazoo Sled Company. (See Kidder, William E., assignor.)

Kalix, Johannes A., assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Intensifier for photography. 1,882,426; Oct. 11.

Kanolt, Clarence W., New York, N. Y. Production of stereoscopic motion pictures. 1,882,646; Oct. 11.

Kanolt, Clarence W., New York, N. Y. Illuminated display case. 1,882,647; Oct. 11.

Kanolt, Clarence W., New York, N. Y. Production of stereoscopic pictures. 1,882,648; Oct. 11.

Karpen, S., & Bros. (See Karpen, S., and Lofman, assignors.)

Karpen, Solomon, and C. Lofman, assignors to S. Karpen & Bros., Chicago, Ill. Spring structure. 1,882,649; Oct. 11.

Kasan, Louis, New York, N. Y. Awning. 1,882,425; Oct. 11.

Kashman, Jacob, New York, N. Y. Collar form preserver. 1,882,622; Oct. 11.

Kasnicka, Joseph F., Cicero, Ill. Device for treating and preventing insect bites. 1,882,018; Oct. 11.

Kasper, Christian J., Rochester, N. Y. Automatic spring roller curtain control. 1,882,623; Oct. 11.

Kastner, Ernest C., Newark, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Clip. 1,881,653; Oct. 11.

Kastner, Ernest C., Newark, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Clip. 1,881,654; Oct. 11.

Katz, Benjamin S., Brooklyn, N. Y. Tire. 1,881,655; Oct. 11.

Kaufmann, Ida, New York, N. Y. Lip guard. 1,882,019; Oct. 11.

Kaumans, John N., and E. Bridges, Montrose, Mo. Drill jar. 1,882,140; Oct. 11.

Kawneer Company, The. (See Liebetrau, Ernest J., assignor.)

Keall, Frank B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing machine. 1,881,656; Oct. 11.

Keith, Clyde R., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit for electrical discharge apparatus. 1,881,657; Oct. 11.

Kelleher, Daniel, and W. D. Bartlett, assignors to Thompson Products, Incorporated, Cleveland, Ohio, Chuck. 1,881,658; Oct. 11.

Kellems, Edgar E., Long Island City, N. Y. Cable grip form. 1,881,659; Oct. 11.

Keller, Eugene, jr., Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company. Pavement and pavement mat. 1,881,660; Oct. 11.

Keller, Henry C., Syracuse, N. Y., and M. Van Billiard, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y. Conveyer mechanism. 1,881,514; Oct. 11.

Kellett, William P., New York, N. Y. Power plant for transport vehicles. 1,882,501; Oct. 11.

Kellogg Switchboard and Supply Company. (See Wallenta, Bernard A. H., assignor.)

Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Threshold construction. 1,881,661; Oct. 11.

Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler. 1881,662; Oct. 11.

Kemp, Archie R., Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulating adhesives. 1,882,081; Oct. 11.

Kendall, David, and E. H. Kendall, Alliance, Ohio. Traveling crane. 1,882,325; Oct. 11.

Kendall, Edgar H. (See Kendall, David and E. H.)

Kennedy, John J., assignor to The Pyle-National Company, Chicago, Ill. Lamp clamp. 1,881,663; Oct. 11.

Kennedy, Joseph A., Pawtucket, R. I., assignor to Anaconda Wire & Cable Company, New York, N. Y. Choke-wire conduit. 1,882,326; Oct. 11.

Kent, Robert J., Jamaica, N. Y., assignor to American Telephone and Telegraph Company. Manhole guard. 1,882,150; Oct. 11.

Ker, John O. (See Ashton, Ward, assignor.)

Kercher, Arthur J., Berkeley, Calif. Refrigerator system and apparatus. 1,882,220; Oct. 11.

Kerr, Harold H. (See O'Connell, J., and Kerr.)

Keyting, Walter S., Salt Lake City, Utah. Confection baking device. 1,882,363; Oct. 11.

Kidder, William E., assignor to Kalamazoo Sled Company, Kalamazoo, Mich. Sled. 1,881,664; Oct. 11.

Kilde, William. (See Ganes, H. A., and Kilde.)

Kilger, James E., assignor, by mesne assignments, to Davis Boring Tool Company, St. Louis, Mo. Expansion boring tool. 1,881,665; Oct. 11.

Kikuta, Tario, Tobata, Fukuoka Ken, assignor to Tobata Imono Kabushiki Kaisha, Tokyo, Japan. Manufacturing strong black heart malleable cast iron. 1,882,327; Oct. 11.

Kindl, Carl H., assignor to Delco Products Corporation, Dayton, Ohio. Centrifugal device for electric motors. 1,881,666; Oct. 11.

King, George W., Coffeyville, Kans., assignor of five-eighths to R. T. Osborn, Bronxville, N. Y., and one-fourth to W. E. Beckner, Coffeyville, Kans. Furnace for stills, etc. 1,881,667; Oct. 11.

King, George W., Coffeyville, Kans., assignor of three-fourths to R. T. Osborn, Bronxville, N. Y. Oil still. 1,881,668; Oct. 11.

King, Gerald V., and F. A. Bonomi, St. Albans, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,881,669; Oct. 11.

King, Marvin S. (See Cumberland, George A., assignor.)

Kinkel, Heinrich, Remscheid-Vieringhausen, Germany. Blade for back saws. 1,882,328; Oct. 11.

Kinney, Fay D., Southbridge, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in making rubber shoes. 1,881,670; Oct. 11.

Kirby, Charles H., assignor to Marvel Carburetor Company, Flint, Mich. Heat control mechanism. 1,881,671; Oct. 11.

Kirchner, Carl, assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo. Making spring structure. 1,881,672; Oct. 11.

Kirkham, Charles B. (See Carpenter, M. H., and Kirkham.)

Kitchen, A. & J., Tool Co. (See Kail, Charles E., assignor.)

Kiwi, Walter, Andalusia, assignor to Peerless Springs, Incorporated, West Chester, Pa. Spring construction. 1,882,427; Oct. 11.

Klahn, Emil, New Vernon, N. J. Propulsion means for aircraft. 1,881,673; Oct. 11.

Klahn, Emil, New Vernon, N. J. Aircraft. 1,881,674; Oct. 11.

Klausmeyer, David C., deceased, Hyde Park, Cincinnati, Ohio, by H. Henry Sundermann, executor, and A. M. Sosa, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Head mount with roller bearing gib. 1,881,675; Oct. 11.

Kleaver, William K., Grand Rapids, Mich. Radio table or similar article. Des. 87,926; Oct. 11.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Kline, Lawrence J., assignor to Mercury Manufacturing Company, Chicago, Ill. Trailer or truck lock mechanism. 1,881,676; Oct. 11.

Klinetob, Dalbys B., Milton, Pa. Clamp and holding device with hook. 1,881,677; Oct. 11.

Klomparens, Roy, Providence, R. I. Furnace humidifier. 1,881,678; Oct. 11.

Klomparens, Roy, Providence, R. I. Adjustable boot. 1,881,679; Oct. 11.

Klosson, Michael M., Kenmore, assignor to Buffalo Steam Pump Company, North Tonawanda, N. Y. Double suction centrifugal pump. 1,881,680; Oct. 11.

Klumpp, Emil, Detroit, Mich. Toilet seat. 1,881,681; Oct. 11.

Knapp, James H., Beverly Hills, assignor to James H. Knapp Company, Los Angeles, Calif. Drawing furnace. 1,881,682; Oct. 11.

Knapp, James H., Beverly Hills, assignor to James H. Knapp Co., Los Angeles, Calif. Car type furnace. 1,881,683; Oct. 11.

Knapp, James H., Company. (See Knapp, James H., assignor.)

Knee, Aaron A., Charlotte, N. C., assignor to Vanak Corporation, Charlotte, N. C. Fraud preventing means for coin controlled mechanism. 1,882,502; Oct. 11.

Knee, Aaron A., Charlotte, N. C., assignor to Vanak Corporation, Charlotte, N. C. Automatic fraud preventive means for check controlled apparatus. 1,882,503; Oct. 11.

Knee, Aaron A., Charlotte, N. C., assignor, by mesne assignments, to Vanak Corporation, Charlotte, N. C. Check entrance for check control apparatus. 1,882,504; Oct. 11.

Knee, Aaron A., Charlotte, N. C., assignor to Vanak Corporation, Charlotte, N. C. Check operated fraud preventive means. 1,882,505; Oct. 11.

Knee, Aaron A., Charlotte, N. C., assignor to Vanak Corporation, Charlotte, N. C. Fraud preventive check entrance. 1,882,506; Oct. 11.

Knodel, Adolf. (See Gmelin, P., and Knodel.)

Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Synchronizing system. 1,881,684; Oct. 11.

Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Phase shifting device. 1,881,685; Oct. 11.

Knowland, Thomas M. (See Glidden, A. A., and Knowland.)

Koch, Axel T. (See Goransson, J. J. J., and Koch.)

Koeberle, Karl. (See Kunz, M. A., and Koeberle.)

Koehly, Paul, and G. I. Delaplane, assignors to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,881,686; Oct. 11.

Koenig, Werner, assignor to Landis & Gyr A. G., Zug, Switzerland. Frequency controlled mechanism. 1,882,428; Oct. 11.

Kohn, Joseph, St. Louis, Mo. Dress. Des. 87,927; Oct. 11.

Kontol Company, The. (See Peirce, J. O., and Myers, assignors.)

Koppers Company of Delaware, The. (See Totzek, Friedrich, assignor.)

Kozekar, Inc. (See Hoch, E. G., and Levering, assignors.)

Kozma, John, Rochester, N. Y. Tread attachment for vehicle tires. 1,882,386; Oct. 11.

Kraft, Selmer A., and M. J. Mais, St. Paul, Minn.; said Kraft assignor to said Mais. Oil burner. 1,881,687; Oct. 11.

Kranz, Harry W., Lakewood, assignor to The Cleveland Welding Company, Cleveland, Ohio. Making latch pivots. 1,881,689; Oct. 11.

Kranz, Harry W., Lakewood, assignor to The Cleveland Welding Co., Cleveland, Ohio. Vehicle wheel rim. 1,881,690; Oct. 11.

Kranz, Harry W., C. S. Holden, and H. H. Bound, Lakewood, assignors to The Cleveland Welding Company, Cleveland, Ohio. Tire carrying rim. 1,881,688; Oct. 11.

Krauch, Carl, Ludwigshafen-on-the-Rhine, M. Pier, Heidelberg, and E. Hochschwender, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Separation of oils from mixtures thereof with solid substances. 1,881,691; Oct. 11.

Krauch, Carl, and M. Müller-Cunradi, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Unsaturated aliphatic hydrocarbon. 1,881,692; Oct. 11.

Krebser, Herman U. (See Newcomb, Louise Z., assignor.)

Kreisinger, Henry, Piermont, assignor to International Combustion Engineering Corporation, New York, N. Y. Fuel pulverizing system. 1,882,329; Oct. 11.

Kronenberg, Rudolph, Haus Kronenberg, Post Immigrath, Germany. Constructional form of rolling mill. 1,882,507; Oct. 11.

Kruse, Ralph H., Pelham Manor, assignor to The Cambridge Instrument Company, Inc., Ossining, N. Y. Electrocardiograph. 1,882,402; Oct. 11.

Krusemark, Frederick A., Chicago, Ill., assignor, by mesne assignments, to The Lambert Tire and Rubber Company. Pneumatic tire. Re18,618; Oct. 11.

Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Pillar construction for closed vehicles. 1,881,693; Oct. 11.

Kuck, Henry G., and T. J. Abele, assignors to Stuber & Kuck Co., Peoria, Ill. Covers for receptacles. 1,881,694; Oct. 11.

Kuhn, Frank, and L. H. Thomas, assignors to American Electrical Heater Company, Detroit, Mich. Electric iron. 1,881,695; Oct. 11.

Kuhn, Frank, Detroit, and L. H. Thomas, Birmingham, assignors to American Electrical Heater Company, Detroit, Mich. Electric Iron. 1,881,696; Oct. 11.

Kunath, Richard J., Ridgefield Park, N. J. Harness motion for looms. Re18,616; Oct. 11.

Kunkely, Edward J., Bronx, N. Y. Shaker bag cap and fastener. 1,882,221; Oct. 11.

Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Bromination product of the dibenzanthrone series. 1,882,285; Oct. 11.

Kunz, Max A., Mannheim, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Manufacture of vate dyestuffs of the anthraquinone series. 1,881,697; Oct. 11.

Kuriyama, Z. Higashichofucho, Tokyo-Fu, Japan, assignor to Western Electric Company, Incorporated, New York, N. Y. Electric soldering iron. 1,881,698; Oct. 11.

Kurtz, Alfred W., Flaxville, assignor of one-half to A. M. Hagan, Redstone, Mont. Cow-tail holder. 1,882,558; Oct. 11.

L. A. B. Company, The. (See Laughlin, William C., assignor.)

LaCavera, Charles, Chicago, Ill., assignor of one-half to G. Colovos. Hat ironer. 1,881,699; Oct. 11.

LaGassé, Joseph N., Upper Darby, Pa. Hair dressing device. 1,882,508; Oct. 11.

Lagerblade, Herbert C., assignor to The Horton Manufacturing Company, Bristol, Conn. Making a golf shaft. 1,882,151; Oct. 11.

Lagerblade, Herbert C., assignor to The Horton Manufacturing Company, Bristol, Conn. Golf club. 1,882,509; Oct. 11.

Laing, Bertha V., Dearborn, Mich., assignor to Laing and Company. Sewing kit. 1,881,700; Oct. 11.

Laing and Company. (See Laing, Bertha V., assignor.)

Laird, Eversleigh R., Brockton, assignor to United Shank & Findings Company, Boston, Mass. Manufacturing shank pieces. 1,882,020; Oct. 11.

Laird, Warren C., Algona, Iowa. Starch pan for wringers. 1,882,364; Oct. 11.

Lambert Tire and Rubber Company, The. (See Krusemark, Frederick A., assignor.)

Lambert, William C., Ironton, Ohio. Combined chin rest and pipe support. 1,881,701; Oct. 11.

Lamson Company, The. (See Keller, H. C., and Van Billard, assignors.)
Landis & Gyr, A. G. (See Koenig, Warner, assignor.)
Landis & Gyr., A.-G. (See Mettler, Josef, assignor.)
Lang, Wilmarth Y. (See Hunt, A. E., and Lang.)
Langdon, Jesse D., Los Angeles, Calif. Razor blade sharpener. 1,881,702; Oct. 11.
Langdon, Jesse D., Los Angeles County, Calif. Wheel and gear puller. 1,881,703; Oct. 11.
Langenbacher, Jakob, Reutlingen, Germany. Paper-making machine. 1,882,187; Oct. 11.
Langrock, Joseph H., New Haven, Conn. Trousers support. 1,881,704; Oct. 11.
Lapointe, Francis J., Ann Arbor, Mich. Broach. 1,881,705; Oct. 11.
Larkin, James L., Lynn, assignor to Forbes Lithograph Manufacturing Company, Boston, Mass. Display stand. 1,881,707; Oct. 11.
Larmuth, John H., Upper Colwyn Bay, Wales. Winding, stranding, coiling, lapping or the like machines. 1,882,152; Oct. 11.
Larner, Chester W. (See Sanford, Sydney J., assignor.)
Larsen, Elmer J., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling articles. 1,881,706; Oct. 11.
Larsen, Fridthiof O. V. (See Hatton, W., Spann, Rousseau, and Larsen.)
Laska, Leopold, and O. Haller, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Arylamides of meta-hydroxy-diaryl-amine-carboxylic acids and making same. 1,882,286; Oct. 11.
Laska, Tony, Cle-Elum, Wash. Insulated rail joint. 1,881,708; Oct. 11.
Laswell, Maynard A., Los Angeles, Calif. Control for fire extinguishing apparatus. 1,881,709; Oct. 11.
Laswell, Maynard A., assignor to Swingspout Measure Company, Los Angeles, Calif. Gas operated switch. 1,881,710; Oct. 11.
Lathrop, Hubbel, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic structure. 1,881,711; Oct. 11.
Lauer, Rudolph L., Philadelphia, Pa. Conduit connecter. 1,882,021; Oct. 11.
Laughlin, William C., Glendale, Calif., assignor to The L. A. B. Company, New York, N. Y. Automatic cleaning device for clarifiers. 1,881,712; Oct. 11.
Laukel, Arthur K., Detroit, Mich. Flexible and adjustable anode. 1,881,713; Oct. 11.
Laukel, Arthur K., Detroit, Mich. Electrolytic reproduction. 1,881,714; Oct. 11.
Laurence, Gordon, Kew Gardens, assignor to L C Smith & Corona Typewriters Inc., New York, N. Y. Copyholder for typewriters. 1,881,715; Oct. 11.
Lavezzi, Samuel J., Chicago, Ill. Clip. 1,881,716; Oct. 11.
Lawrence, Harold E., and O. H. Crone, assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr. Well casing joint. 1,881,717; Oct. 11.
Lawrie, James W., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Distillation of fermentation glycerine. 1,881,718; Oct. 11.
Lawson, John, and R. H. Lawson, Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Tensioning means for plating knitting machines. 1,882,429; Oct. 11.
Lawson, Robert H. (See Lawson, John and R. H.)
Lawson, Robert H., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Knitting stitch measuring mechanism and process. 1,882,430; Oct. 11.
Lawson, Robert H., Pawtucket, and Augustin Gagné, assignors to Hemphill Company, Central Falls, R. I. Knitting machine operating mechanism. 1,882,431; Oct. 11.
Lawton, Robert B. (See Johnson, J. F., and Lawton.)
Leach, Robert W., assignor to Audley Engineering Company Limited, Newport, England. Valve or cock. 1,882,287; Oct. 11.
Leach, Vernon G., assignor to Modern Coal Burner Company, Chicago, Ill. Electrical control device. 1,881,719; Oct. 11.
Leach, Vernon G., assignor to Modern Coal Burner Company, Chicago, Ill. Mechanical underfeed stoker. 1,881,720; Oct. 11.
Leahy, John H., St. Louis, Mo. Capping machine. 1,882,330; Oct. 11.
Leaper, Joseph M., assignor to E. F. Houghton and Company, Philadelphia, Pa. Inhibitor and the use thereof. 1,881,721; Oct. 11.
Lee, Earle E., Zion, Ill. Heating device. 1,881,722; Oct. 11.
Lee, Harry S., Detroit, Mich. Pump. 1,881,723; Oct. 11.
Lee, Hoard. (See Schoellkopf, Jacob F., assignor.)
Lee, John A., Ogden, Utah. Combination tool. 1,882,288; Oct. 11.
Lee, Sherman Q., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Producing a continuous slab of earthy material. 1,882,082; Oct. 11.
Leggett and Platt Spring Bed and Manufacturing Company. (See Kirchner, Carl, assignor.)
Lehman, Werner, assignor to Bucyrus-Erie Company, South Milwaukee, Wis. Bank grader. 1,882,079; Oct. 11.
Lehrer, Erwin, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Magnetic piston pump. 1,881,724; Oct. 11.
Leibing, William E., Sausalito, assignor to Lyon-Magnus Incorporated, San Francisco, Calif. Cooling system for beverage dispensing apparatus. 1,881,725; Oct. 11.
Lemerond, Joseph L., Green Bay, Wis. Wall construction. 1,882,432; Oct. 11.
Lenfestey, Arthur W., Detroit, Mich. Hair brush. 1,881,726; Oct. 11.
Leonard, Joseph E., Berkeley, Calif. Gas range. 87,928; Oct. 11.
LePage, Hector, Milwaukee, Wis. Method and apparatus for treating women's hair. 1,881,727; Oct. 11.
Lesh, Jesse E., North Canton, and J. W. Hohl, Newark, Ohio. Flying craft. 1,882,387; Oct. 11.
Levedahl, Axel, Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Clutch device. 1,881,728; Oct. 11.
Levering, John A. (See Hoch, E. G. and Levering.)
Levin, Harold L., Nutley, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Aqueous dispersion and producing same. 1,881,729; Oct. 11.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal cutting machine. 1,881,730; Oct. 11.
Levings, Sherburne D., Winnetka, Ill. Coffee urn. 1,882,247; Oct. 11.
Leviton Manufacturing Company. (See Hein, Gustave, assignor.)
Levy, Aaron W., et al., executors. (See Wise, Nathan.)
Lewandowski, Edward H., Neenah, Wis., assignor to The Menasha Products Company, Chicago, Ill. Cutter box. 1,881,731; Oct. 11.
Lewera, George R., Elizabeth, N. J. Furnace. 1,881,732; Oct. 11.
Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Joining composite panels. 1,881,733; Oct. 11.
Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Corner bend in composite panels and forming same. 1,881,734; Oct. 11.
Lewis, Howard W., San Francisco, Calif. Transmission. 1,882,222; Oct. 11.
Lewis, Richard W. (See Horton, F. J., and Lewis.)
Lewis, Richard W., assignor to Lyon Cover Company, Detroit, Mich. Tire cover with wire mesh center shield. 1,881,735; Oct. 11.
Lewis, Warren K. (See Howard, F. A., Lewis, and Noel.)
Leyvastre, Ferdinand, assignor to Societe de Paris et du Rhone, Lyon, France. Starting mechanism for motor vehicles. 1,882,022; Oct. 11.
Lichter, Malvin, New York, N. Y., assignor to The Stickless Corporation. Display sheet. 1,881,736; Oct. 11.
Lidseen, Gustave, Chicago, Ill. Power manicuring device. 1,881,737; Oct. 11.
Lieber, Herman, Jackson Heights, N. Y. Shoe. Des. 87,929; Oct. 11.
Liebetrau, Ernest J., assignor to The Kawneer Company, Niles, Mich. Window construction. 1,881,738; Oct. 11.
Light, George G., Kew Gardens, assignor to The Western Union Telegraph Company, New York, N. Y. Concentration circuit for simplex printers. 1,881,739; Oct. 11.
Lilienfeld, Leon, Vienna, Austria. Artificial material and making same. 1,881,740; Oct. 11.
Lilienfeld, Leon, Vienna, Austria. Manufacture of new cellulose compounds. 1,881,741; Oct. 11.
Lilienfeld, Leon, Vienna, Austria. Manufacture of artificial threads. 1,881,742; Oct. 11.
Lillard, Gwynn L., Memphis, Tenn., assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavating system. 1,881,743; Oct. 11.
Lindgren, Frank A., Western Springs, assignor to Goodman Manufacturing Company, Chicago, Ill. Cutting and loading machine. 1,881,744; Oct. 11.
Lindner, Kurt, Oranienburg, near Berlin, assignor to Chemische Fabrik Milch Aktien-Gesellschaft, Berlin, Germany. Bleaching, dyeing, and printing vegetable and animal fiber material, fabrics, or felt. 1,881,745; Oct. 11.
Littell, F. J., Machine Company. (See Skriba, R. A., and Littell, assignors.)
Littell, Frederick J. (See Skriba, R. A., and Littell.)
Littlepage, Charles P., Ramona, Calif. Fence wire grapple. 1,881,746; Oct. 11.
Litty, Elizabeth H. (See Litty, J. R., and Lundin, assignors.)
Litty, John R., and T. B. Lundin; said Lundin assignor to E. H. Litty, Philadelphia, Pa. Cake icing machine. 1,881,747; Oct. 11.
Ljungkull, Rolf, Wauwatosa, assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavating machinery. 1,881,748; Oct. 11.
Llewellyn, Ernest R., Arlington, Mass. Screw thread lock. 1,881,749; Oct. 11.
Llewellyn, Ernest R., Arlington, Mass., assignor to The Hendey Machine Company, Torrington, Conn. Antifriction bearing mounting. 1,881,750; Oct. 11.
Lobb, Frank H. (See Bacon, J. L., and Lobb.)
Lobenstein, Walter, Brooklyn, assignor to J. Gaspari & Company, Inc., New York, N. Y. Screw retaining device for eyeglass rims. 1,882,153; Oct. 11.

Lockhart, Lewis A. (See Morse, L. H., and Lockhart.)
Lodge, Frank, and W. W. Tatum, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of anthraquinone derivatives. 1,881,751; Oct. 11.
Lodge, Frank, and W. W. Tatum, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of anthraquinone derivatives. 1,881,752; Oct. 11.
Loebel, Albert, Amsterdam, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of asphalt. 1,881,753; Oct. 11.
Lofman, Charles. (See Karpen, S., and Lofman.)
Logan, Joseph A., and W. H. De Lancey, Springfield, assignors to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,881,754; Oct. 11.
Logan, Martin C., and J. E. Philpott, Elgin, Ill.; said Logan assignor to said Philpott. Collapsible horse. 1,881,755; Oct. 11.
Lonaberger, Robert F., and C. F. Sands, Reading, Pa. Liquid fuel vaporizer. 1,882,388; Oct. 11.
Long, Edward F., Spartanburg, S. C. Main spring tester. 1,881,756; Oct. 11.
Long, James W., Plainfield, N. J., and R. Steeneck, assignors to The Western Union Telephone Company, New York, N. Y. Telegraph transmitting apparatus. 1,881,757; Oct. 11.
Longland, Herbert A., Valentia, Ireland, assignor to The Western Union Telegraph Company, New York, N. Y. Two-channel fork-controlled receiving and repeating apparatus for telegraph systems. 1,881,758; Oct. 11.
Lorber, Charles, Louisville, Ky. Key case. 1,881,759; Oct. 11.
Lorehn, Edmond L., Houston, Tex. Metallic packing. 1,882,228; Oct. 11.
Lorenz, C., Aktiengesellschaft. (See Gerth, Felix, assignor.)
Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for forming glassware. 1,882,547; Oct. 11.
Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Suction gathering glassware forming machine. 1,882,548; Oct. 11.
Los Angeles Testing Laboratory. (See Howe, Charles S., assignor.)
Lotter, Adolph G., assignor to H. C. Miller Co., Milwaukee, Wis. Ring binder. 1,822,510; Oct. 11.
Loucks, James F., Cleveland, Ohio, assignor to Detroit Steel Products Company, Detroit, Mich. Clamping device for building foundations. 1,881,760; Oct. 11.
Lougheed, Overend J. W., Portland, Oreg. Welding clamp. 1,881,761; Oct. 11.
Lourie, Nicholas R., Gloucester, Mass. Artificial tooth and supporting means therefor. 1,882,511; Oct. 11.
Lovejoy, Frank E., Seattle, Wash. Marine elevator. 1,882,512; Oct. 11.
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Lathe having double end drives. 1,881,762; Oct. 11.
Lubelsky, Ben L., Pittsburgh, Pa., assignor to Safety Mining Company, Chicago, Ill. Heating cartridge. 1,882,366; Oct. 11.
Luckhaus, Ernst, Duisburg, Germany, assignor to Röhm & Haas Company, Philadelphia, Pa. Cold dressing and drying of leather. 1,881,763; Oct. 11.
Ludwig, Abraham, Detroit, Mich. Hose reel. 1,881,764; Oct. 11.
Luisa-Vissat, Anthony, Bridgeville, Pa. Tie-plate, rail, and rail anchor. 1,881,765; Oct. 11.
Lundin, Trued B. (See Litty, J. R., and Lundin.)
Lundius, Alton, Jersey City, and O. Dietrichson, South Orange, N. J. Safety cut-off device for gas burners. 1,881,766; Oct. 11.
Lundy, Edwin K., Hubbard Woods, assignor to Curtis Lighting, Inc., Chicago, Ill. Illuminating device. 1,881,767; Oct. 11.
Lupton's, David, Sons Company. (See Walton, Howard T., assignor.)
Lush, Ernest J., London, England. Purification of gases. 1,882,289; Oct. 11.
Lute, Carl, assignor to Camel Company, Chicago, Ill. Car door elevating means. 1,881,768; Oct. 11.
Luther, Martin. (See Held, R., and Luther.)
Lyman, Kenneth E., assignor to Borg-Warner Corporation, Chicago, Ill. Oil cooling means. 1,881,769; Oct. 11.
Lyman, Kenneth E., assignor to Borg-Warner Corporation, Chicago, Ill. Oil cooling means. 1,881,770; Oct. 11.
Lyman, Kenneth E., assignor to Borg-Warner Corporation, Chicago, Ill. Thermostatic control device for oil coolers. 1,881,771; Oct. 11.
Lyon Cover Company. (See Lewis, Richard W., assignor.)
Lyon, George A., Allenhurst, assignor to Lyon, Incorporated, Asbury Park, N. J. Cover for spare automobile tires. Re18,619; Oct. 11.
Lyon, Incorporated. (See Lyon, George A., assignor.)
Lyon-Magnus Incorporated. (See Leibing, William E., assignor.)
Lytton, Cullen L., East Gastonia, N. C., assignor to Parks-Cramer Company, Fitchburg, Mass. Traveling fan. 1,882,366; Oct. 11.
M and R Dietetic Laboratories, Inc. (See Otting, Herbert E., assignor.)
Maas, George H., assignor of one-half to M. J. Gallogly, Milwaukee, Wis. Dose measuring device for liquid dispensing containers. 1,881,772; Oct. 11.
MacClatchie, John W., Compton, Calif. Valve seat. 1,882,433; Oct. 11.
MacClatchie, John W., Compton, Calif. Piston. 1,882,434; Oct. 11.
Macdonald, Jason H., assignor to C. H. & E. Manufacturing Company, Inc., Milwaukee, Wis. Steering apparatus. 1,882,367; Oct. 11.
Machlet, George F., Elizabeth, N. J. Synchronizing device. 1,881,773; Oct. 11.
MacIsaac, Vernon W., Montreal, Quebec, Canada. Centrifugal separator. 1,882,389; Oct. 11.
MacIsaac, Vernon W., Montreal, Quebec, Canada. Centrifugal machine. 1,882,390; Oct. 11.
Mackenzie, Alexander S., assignor to Clayton Gin Compress Company, Houston, Tex. Apparatus for baling material. 1,881,774; Oct. 11.
MacLean, Allen D., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Automatic regulator. 1,881,775; Oct. 11.
MacLeester, William T., Philadelphia, Pa. Manufacture of monomethyl-para-amino-phenol and its sulphate. 1,882,437; Oct. 11.
MacLeod, Daniel T., assignor to Perfex Corporation, Milwaukee, Wis. Cooling system. 1,881,776; Oct. 11.
MacPherson, Earle S. assignor to Hupp Motor Car Corporation, Detroit, Mich. Engine mounting. 1,881,777; Oct. 11.
Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Door panel construction. 1,881,778; Oct. 11.
Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Window jamb, casing, and blind stop construction. 1,881,779; Oct. 11.
Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Door latch. 1,882,248; Oct. 11.
Main, Andrew, et al. (See Martens, John B., assignor.)
Mais, Mathias J. (See Kraft, Selmer A., and Mais.)
Makaroff, Sergei, Grefsen, near Oslo, Norway. Vehicle lamp. 1,882,188; Oct. 11.
Malcolm, George Y., Toronto, Ontario, Canada. Loose pulley. 1,881,780; Oct. 11.
Malkin, Bernard A., assignor to Dominion Engineering Works Limited, Lachine, Quebec, Canada. Reel starter for paper machines. 1,881,781; Oct. 11.
Mallinckrodt Chemical Works. (See Mallinckrodt, Edward, jr., assignor.)
Mallinckrodt Chemical Works. (See Mallinckrodt, E. jr., and Farr, assignors.)
Mallinckrodt, Edward, jr., assignor to Mallinckrodt Chemical Works, St. Louis, Mo. Method of and apparatus for packaging. 1,881,782; Oct. 11.
Mallinckrodt, Edward, jr., St. Louis, and H. V. Farr, Ferguson, assignors to Mallinckrodt Chemical Works, St. Louis, Mo. Method of and apparatus for packaging. 1,881,783; Oct. 11.
Mallinckrodt, Edward, jr., assignor to Mallinckrodt Chemical Works, St. Louis, Mo. Filler. 1,881,784; Oct. 11.
Malm, Frank S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Cleaning and vulcanizing materials. 1,881,785; Oct. 11.
Malm, John F., Chicago, Ill. Measuring grease. 1,881,786; Oct. 11.
Malnick, Helene, Chicago, Ill. Brassière. 1,882,023; Oct. 11.
Mample, Adolph Z., Glen Rock, N. J., and E. J. Hobert, Hempstead, assignors to The Western Union Telegraph Company, New York, N. Y., Perforating the lead sheathing of conductor cables. 1,881,787; Oct. 11.
Mann, William B. W., and F. A. Talbot, Baltimore, Md. Storing and dispensing apparatus. 1,882,154; Oct. 11.
Männchen, Fritz. (See Thiess, K., and Männchen.)
Manning, Arthur L., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for securing and bracing articles for transportation. 1,881,788; Oct. 11.
Mantle, Joseph G. C., Leonia, N. J. Internal combustion engine. 1,881,789; Oct. 11.
Mapson, Robert L., Detroit, Mich., assignor to Detroit Gear & Machine Company. Gear shift latch mechanism. 1,881,790; Oct. 11.
Marchner, Robert F., and W. C. Stoesser, assignors to The Dow Chemical Company, Midland, Mich. Di-diphenyl oxide. 1,882,368; Oct. 11.
Marcotte, Alcidas J. (See Gooch, C. W., jr., and Marcotte.)
MaRean, Marrett F., assignor of one-half to Elbert A. Taylor, Kansas City, Mo. Tapered tooth clipper. 1,882,155; Oct. 11.
Maresh, Joseph J., Terrell, Tex. Photographic printing machine. 1,881,791; Oct. 11.
Mariani, Alfonso, Erie, Pa. Airplane. 1,881,792; Oct. 11.
Mariani, Frank N., New York, N. Y. Featherweight pipe. 1,881,793; Oct. 11.
Markle, Jacob E., Nashville, Tenn. Game board. Des. 87,930; Oct. 11.
Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Roller bearing cage. 1,881,804; Oct. 11.

Marrison, Warren A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Frequency control method and system. 1,881,810; Oct. 11.

Marsillius, Newman M., assignor to the Producto Machine Company, Bridgeport, Conn. Cam milling machine. 1,881,794; Oct. 11.

Martens, John B., assignor of one-half to Andrew Main, Cleveland, and one-half to E. G. Bradley, Cuyahoga Falls, Ohio. Bathtub support. 1,882,514; Oct. 11.

Martin, Mark H., Reading, Pa. Center sill. 1,881,797; Oct. 11.

Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. End sill structure. 1,881,795; Oct. 11.

Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa. Truck bolster. 1,881,796; Oct. 11.

Martinek, Michael, Lyons, assignor to Western Wire & Iron Works, Inc., Chicago, Ill. Folding gate. 1,882,331; Oct. 11.

Marvel Carbureter Co. (See Firth, David, assignor.)

Marvel Carburetor Company. (See Kirby, Charles H., assignor.)

Marvel Carbureter Company. (See Purdy, Frederick, assignor.)

Mashek, Frank, Chicago, Ill. Buckle. 1,881,799; Oct. 11.

Mason, Clesson E., assignor to The Foxboro Company, Foxboro, Mass. Control mechanism. 1,881,798; Oct. 11.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Automobile radiator cap. Des. 87,931; Oct. 11.

Masury, Alfred F., New York, N. Y., assignor to The Rubber Shock Insulator Corporation, Wilmington, Del. Propeller shaft bearing. 1,881,800; Oct. 11.

Mathers, George D., and H. C. Mathers, Los Angeles, Calif. Corner reenforcement. 1,881,805; Oct. 11.

Mathers, Horace C. (See Mathers, George D., and H. C.)

Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Two-way signaling system. 1,881,801; Oct. 11.

Matsch, Charles J., Lake City, Minn. Air heating and humidifying apparatus. 1,881,806; Oct. 11.

Mattimore, John D., Brooklyn, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generating installation. 1,882,332; Oct. 11.

Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Control mechanism for turning machines. 1,881,802; Oct. 11.

Mattison Machine Works. (See Mattison, Carl L., assignor.)

Mattison, Richard V., Ambler, Pa., assignor, by mesne assignments, to Ambler Asbestos Shingle & Sheathing Company. Ornamental product and producing same. 1,881,803; Oct. 11.

Maurer, Rufus H., Brookline, assignor to Spencer Thermostat Company, Cambridge, Mass. Remote heat control mechanism. 1,881,807; Oct. 11.

Maxson, Charles B., assignor of one-half to Julian W. Maxson, Westerly, R. I. Method of and machine for cutting, feeding and stacking sheet material. 1,882,403; Oct. 11.

Maxson, Julian W. (See Maxson, Charles B., assignor.)

Maxwell, Maxwell C., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Padlock. 1,881,809; Oct. 11.

Maynard, Joseph A., Boston, Mass. Relief device. 1,881,808; Oct. 11.

McCabe, Ira E. (See Hunciker, Karl, assignor.)

McCann, Clyde F., San Francisco, Calif. Radio clock system. 1,881,818; Oct. 11.

McCarthy, John H., Chicago, Ill. Gear shifting mechanism. 1,881,819; Oct. 11.

McCartney, Will C., Cambridge, Ohio. Goblet or similar article. Des. 87,932; Oct. 11.

McClellan, William. (See Curran, F. J., and McClellan.)

McCollough, George W. and M., Webster City, Iowa. Hog feeder. 1,881,820; Oct. 11.

McCollough, McKinley. (See McCollough, George W. and M.)

McConway & Torley Company, The. (See Kelso, William, assignor.)

McCord Radiator & Mfg. Co. (See Hawkins, Bert H., assignor.)

McCord Radiator & Mfg. Co. (See Hyde, Rollin M., assignor.)

McCormick, John H., Creston, Iowa. Soft-collar clip. 1,882,355; Oct. 11.

McCracken, Robert C., assignor of forty per cent to C. M. Clarke, St. Louis, Mo. Tube cleaner. 1,881,821; Oct. 11.

McCurley, Charles. (See Groehn, O. J., Mitchell, and McCurley.)

McElhinney, James J., Surrey Hills, Victoria, Australia. Internal combustion engine. 1,882,513; Oct. 11.

McIlvain, Howard S. (See Jones, C. L., and McIlvain.)

McKelligon, Alvin S., Berkeley, Calif. Shipping platform and collapsible tray for handling material with lift trucks. 1,881,822; Oct. 11.

McKenzie, Austin V., Providence, R. I. Artificial fish bait. 1,881,823; Oct. 11.

McNamara, William L., assignor to Capstan Glass Company, Connellsville, Pa. Tripping device. 1,881,824; Oct. 11.

McNamara, William L., assignor to Capstan Glass Company, Connellsville, Pa. Transferring and forming machine. 1,881,825; Oct. 11.

McQuade, James D., Monndsville, W. Va., assignor to Coal Carbonization Company. Apparatus for carbonization of coal. 1,881,826; Oct. 11.

McQuigg, Sanford E., assignor to Allegheny Steel Company, Brackenridge, Pa. Furnace charging device. 1,882,224; Oct. 11.

McWilliams, John P., and F. Ditchfield, assignors to The Youngstown Steel Door Company, Cleveland, Ohio. Car door. 1,881,827; Oct. 11.

Mead, Howard C., assignor to Guide Lamp Corporation, Anderson, Ind. Lamp socket. 1,881,811; Oct. 11.

Mead Johnson & Company. (See Johnson, L. D., and True, assignors.)

Meagher, Matthew C., Bethlehem, Pa. Frozen confection. 1,882,290; Oct. 11.

Mechanical Improvements Corporation. (See Johnson, Eldridge R. F., assignor.)

Meell, George A., Bywood, assignor to The Bailey, Banks & Biddle Company, Philadelphia, Pa. Plate or similar article. Des. 87,933; Oct. 11.

Meglitz, William B., assignor to Brown Company, Berlin, N. H. Apparatus for testing sheet material. 1,881,812; Oct. 11.

Meglitz, William B., assignor to Brown Company, Berlin, N. H. Apparatus for bending sheet material. 1,881,813; Oct. 11.

Meglitz, William B., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Sheet folding mechanism. 1,881,814; Oct. 11.

Mehler, Leo A., East Chicago, Ind., and E. J. Westcott, assignors to Freyn Engineering Company, Chicago, Ill. Waste gas superheater. 1,881,815; Oct. 11.

Mellars, Newton W. (See Forde, T. H., and Mellars.)

Menasha Products Company, The. (See Lewandowski, Edward H., assignor.)

Menger, George, Oak Park, Ill. Vehicle springs. 1,882,024; Oct. 11.

Merchant & Evans Company. (See Benn, Stephen J., assignor.)

Mercury Manufacturing Company. (See Kline, Lawrence J., assignor.)

Mesker Brothers Iron Company. (See Mesker, Francis A., assignor.)

Mesker, Francis A., assignor to Mesker Brothers Iron Company, St. Louis, Mo. Ventilator construction. 1,882,249; Oct. 11.

Metal Specialties Manufacturing Company. (See Hermann, Wolfgang, assignor.)

Met-L-Wood Corporation. (See Lewis, George K., assignor.)

Mettler, Josef, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Timing and controlling electrical circuits. 1,882,333; Oct. 11.

Meyer-Blanke Company. (See Meyer, Edwin R., assignor.)

Meyer, Edwin R., assignor to Meyer-Blanke Company, St. Louis, Mo. Freezing mold. 1,881,817; Oct. 11.

Meyer, George J., assignor to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis. Filling machine. 1,882,225; Oct. 11.

Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)

Meyer, John F., Pasadena, Calif. Amusement machine cabinet. Des. 87,934; Oct. 11.

Meyer, Joseph, Jackson Heights, assignor to R. Hoe & Co., Inc., New York, N. Y. Gripper operating mechanism. 1,881,816; Oct. 11.

Mezzapesa, Stephen, New York, N. Y. Coffee making machine. 1,882,226; Oct. 11.

Mieres, José, Buenos Aires, Argentina. Garter. 1,882,250; Oct. 11.

Millar, Floyd O., and W. C. Denison, jr., Columbus, Ohio; said Millar assignor to said Denison. Car propeller for tunnel kilns. 1,881,828; Oct. 11.

Millar, Wilford L. (See Newell, H. R., and Millar.)

Miller, Daniel D., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electromagnetic signaling device. 1,881,829; Oct. 11.

Miller, Erwin E., Fullerton, Calif. Expansible packing for plungers. 1,882,156; Oct. 11.

Miller, George W., Washington, D. C. Ice plant. 1,882,189; Oct. 11.

Miller, George W., Glen Ellyn, Ill. Hair waving apparatus. 1,882,334; Oct. 11.

Miller, H. C., Co. (See Lotter, Adolph G., assignor.)

Miller, Reginald J., London, England, assignor, by mesne assignments, to Western Electric Company, Incorporated. Electrical sound reproduction of gramaphone and like records. 1,881,830; Oct. 11.

Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Commodity vending machine. 1,881,831; Oct. 11.

Mills, Lindley E., assignor to The Dow Chemical Company, Midland, Mich. Separating halo-benzoic acids. 1,882,335; Oct. 11.

Mills Novelty Company. (See Mills, Fred L., assignor.)

Miner, George A., Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Last-pulling machine. 1,882,083; Oct. 11.

Minneapolis-Honeywell Regulator Company. (See Johnson, Roy W., assignor.)

Minton, Gustave M., New York, N. Y. Box-easel picture frame. 1,882,157; Oct. 11.

Miranda, Martin A., Middle Village, assignor to Holmes Electric Protective Company, New York, N. Y. Alarm system. 1,881,832; Oct. 11.

Mitar, Marion F., Oakland, Calif. Pants-leg stretcher. 1,881,833; Oct. 11.

Mitchell, Allister S., Oakland, Calif., assignor to National Automotive Fibres, Inc., Detroit, Mich. Stuffing-relieving process and apparatus. 1,882,515; Oct. 11.

Mitchell, John F., New York, N. Y. Transmitter cut out switch. 1,881,834; Oct. 11.

Mitchell, Leslie L. (See Groehn, O. J., Mitchell, and McCurley.)

Mitchell, Maxim, assignor to Geoffrey D. Baker, Wilton, N. H. Curtain rod threading device. 1,881,835; Oct. 11.

Mitchell, Robert, Detroit, Mich. Clinch-on nut. 1,881,836; Oct. 11.

Moats, DeWitt T., assignor to The D. L. Auld Company, Columbus, Ohio. Stenciling machine. 1,881,837; Oct. 11.

Modern Coal Burner Company. (See Leach, Vernon G., assignor.)

Mohr, Edward C., Preston, Iowa. Hog watering device. 1,881,838; Oct. 11.

Mohr, Walter W., Chicago, Ill., assignor to The Edward Valve and Manufacturing Company, East Chicago, Ind. Gate valve. 1,882,227; Oct. 11.

Mojonnier Bros. Co. (See Mojonnier, Julius J., assignor.)

Mojonnier, Julius J., Oak Park, Ill., assignor to Mojonnier Bros. Co. Conveyer stop mechanism. 1,882,435; Oct. 11.

Mojonnier, Julius J., Oak Forest, Ill., assignor to Mojonnier Bros. Co. Case conveyer and associated control mechanism. 1,882,436; Oct. 11.

Monroe Auto Equipment Company. (See Nickelsen, John M., assignor.)

Monroe, Stanley G., and F. Shepherd, Akron, Ohio. Fly swatter. 1,882,291; Oct. 11.

Monson, John P., Ann Arbor, Mich. Oscillating sander. 1,881,839; Oct. 11.

Moody, Lewis F., Philadelphia, Pa. Hydraulic pump. 1,882,025; Oct. 11.

Mooney, Fred L., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe pressing machine. 1,881,840; Oct. 11.

Moore, David P., Avon Park, Fla., assignor to Max A. Schlesinger, New York, N. Y. Electrical sound track recorder for moving picture machines. 1,882,084; Oct. 11.

Moore, George L., assignor to Alemite Corporation, Chicago, Ill. Measuring unit for lubricating systems. 1,881,841; Oct. 11.

Moore, George L., Chicago, Ill., assignor to Alemite Corporation. Measuring unit for lubricating systems. 1,881,842; Oct. 11.

Moran, Patrick J., Newark, N. J., assignor to Irving Rosner, New York, N. Y. Corselette. 1,882,292; Oct. 11.

Morin, Edward J., Wilbraham, Mass. Automobile tire or similar article. Des. 87,949; Oct. 11.

Morin, George G., Holyoke, Mass. Semiautomatic dipper trip and monkey-line winder. Re18,617; Oct. 11.

Morley, Herbert, J. C. Buchanan, and D. T. Sickelsteel, assignors to Detroit Gear & Machine Company, Detroit, Mich. Antirattle spring assembly. 1,881,843; Oct. 11.

Morris, Howard A., assignor to The Automat Molding & Folding Company, Toledo, Ohio. Article stacking mechanism. 1,881,844; Oct. 11.

Morris, Howard A., assignor to The Automat Molding & Folding Company, Toledo, Ohio. Machine for inserting slips into packages. 1,881,845; Oct. 11.

Morse, Lynn H., and L. A. Lockhart, Natick, assignor to E. L. Chase, trustee, Dorchester, Mass. Gas valve. 1,881,846; Oct. 11.

Morse, Normand W., assignor to Alemite Corporation, Chicago, Ill. Pneumatic lubricant compressor. 1,881,847; Oct. 11.

Morse, Normand W., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,881,848; Oct. 11.

Morterud, Einar, Torderod, near Moss, Norway. Apparatus for digesting wood pulp. 1,882,391; Oct. 11.

Morton, Allen W., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Piston ring. 1,881,849; Oct. 11.

Morton, Harry U., assignor to Morton Manufacturing Company, Chicago, Ill. Car vestibule diaphragm. 1,881,850; Oct. 11.

Morton, Henry E., Muskegon Heights, Mich. Bracing means for shaper rams. 1,882,158; Oct. 11.

Morton Manufacturing Company. (See Morton, Harry U., assignor.)

Moussette, Oliver J., sr., Richmond Hill, N. Y. Washing machine. 1,881,851; Oct. 11.

Mueller, Albert B., Chicago, Ill., assignor, by mesne assignments, to Gardner Abboth, as trustee. Camera back and negative frame. 1,882,293; Oct. 11.

Mueller Brass Co. (See Rader, Harold K., assignor.)

Mueller-Cunradi, Martin, and K. Pieroh, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of aldol. 1,881,853; Oct. 11.

Mueller-Cunradi, Martin, Ludwigshafen-on-the-Rhine, and B. Ottens, Neuroessen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of highly concentrated paraffin wax. 1,881,861; Oct. 11.

Mueller, Frederick O., assignor to Burroughs Adding Machine Company, Detroit, Mich. Calculating machine. 1,881,852; Oct. 11.

Muench-Kreuzer Candle Co. Inc. (See Muench, Norbert, C. H., assignor.)

Muench, Norbert C. H., assignor to Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y. Hanging lamp. Des. 87,935; Oct. 11.

Muench, Norbert C. H., assignor to Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y. Base for hanging lamps. Des. 87,936; Oct. 11.

Muir, Joseph, assignor to The Radium Emanation Corporation, New York, N. Y. Instrument for the implantation of radon seeds. 1,881,854; Oct. 11.

Mulder, Johannes G. W. (See Oosterhuis, E., and Mulder.)

Mullen, George W., Flushing, Long Island, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Preserving. 1,881,855; Oct. 11.

Mullendore, Harvey, assignor to Perfection Biscuit Company, Fort Wayne, Ind. Packaging machine. 1,881,859; Oct. 11.

Muller-Cunradi, Martin. (See Krauch, C., and Müller-Cunradi.)

Muller, Robert L., assignor to Burroughs Adding Machine Company, Detroit, Mich. Accounting machine. 1,881,856; Oct. 11.

Mulvey, Lester W., Lynn, Mass. Game. 1,882,294; Oct. 11.

Munch, Gustave E., Chicago, Ill., assignor to Welsbach Traffic Signal Company, Philadelphia, Pa. Holding device for reflecting elements. 1,882,438; Oct. 11.

Munters, Carl G., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y. Fluid heat transfer system. 1,882,026; Oct. 11.

Muros, Joseph, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety-razor. 1,882,295; Oct. 11.

Murphy, Frank J., Danbury, Conn. Machine for treating furs. 1,882,439; Oct. 11.

Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,881,857; Oct. 11.

Murphy, P. H., Company. (See Bonsall, Charles D.)

Murray, Robert C., assignor to Economics Laboratory, Inc., St. Paul, Minn. Making sodium resinate. 1,881,858; Oct. 11.

Musgrave, Joseph L., London, England. Electromagnetic double control valve. 1,882,392; Oct. 11.

Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel pump. 1,881,860; Oct. 11.

Myers, Latimer D. (See Peirce, J. O., and Myers.)

Nacey, Harry M., Chicago, Ill. Flow and pressure indicating means. 1,881,862; Oct. 11.

Nagle, Walter G., assignor to Baker Nagle Company, Belleville, Ill. Stove. 1,882,159; Oct. 11.

Nairn, John S., Detroit, Mich. Amusement device. 1,881,863; Oct. 11.

Nakken Patents Corporation. (See Nakken, Theodorus H., assignor.)

Nakken, Theodorus H., Brooklyn, N. Y., assignor to Nakken Patents Corporation. Pick-up apparatus for magnetic films. 1,882,336; Oct. 11.

Napier, D., & Son Limited. (See Hutchinson, Robert H., assignor.)

Nash, Walter H., Arlington, Calif. Handle securing means for baskets and the like. 1,881,864; Oct. 11.

National Automotive Fibres, Inc. (See Mitchell, Allister S., assignor.)

National Pigments & Chemical Company. (See Harth, Philip E., assignor.)

National Supply Company, The. (See Timbs, E., and Peck, assignors.)

Naugle, Harry M., and A. J. Townsend, Canton, Ohio, assignors to Naugle & Townsend, Inc. Making blooms, slabs, and billets. 1,882,516; Oct. 11.

Naugle & Townsend, Inc. (See Naugle, H. M., and Townsend, assignors.)

Naylor, Walter E., assignor to The Beardsley & Piper Company, Chicago, Ill. Apparatus for handling sand and similar material. 1,882,440; Oct. 11.

Neal, Thomas J., Joliet, Ill. Rotary snowplow. 1,881,865; Oct. 11.

Ne-Arga Corporation. (See Spaeth, Charles, assignor.)

Neelmeier, Wilhelm. (See Glietenberg, E., Neelmeier, and Haller.)

Nehls, Charles H., assignor to Oakes Products Corporation, North Chicago, Ill. Bolt lock. 1,881,866; Oct. 11.

Neill, John M., Newburgh, N. Y. Glass heater. 1,882,337; Oct. 11.

Nelson, Alfred M., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Attaching annular efements to supporting structures. 1,881,867; Oct. 11.

Nelson, Charles E., Chicago, Ill., assignor to Western Electric Company, Incornorated, New York, N. Y. Magazining device. 1,881,868; Oct. 11.

Nelson, Herman Corporation, The. (See Nelson, Richard H., assignor.)
Nelson, Ira S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Rolling mill guide. 1,881,869; Oct. 11.
Nelson, N. P., Iron Works, Inc. (See James, Frederic W., assignor.)
Nelson, Richard H., assignor to The Herman Nelson Corporation, Moline, Ill. Radiator. 1,882,085; Oct. 11.
Nenninger, Lester F., Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,881,870; Oct. 11.
Ne Page, Justus F., assignor to Ne Page McKenny Co., Seattle, Wash. Metal lamp post. 1,882,228; Oct. 11.
Ne Page McHenry Co. (See Ne Page, Justus F., assignor.)
Nerby, Edgar A., Wauwatosa, Wis. Animal trap. 1,881,871; Oct. 11.
Neuman, Jacob J. (See Dienst, A., and Neuman.)
Neumann, Wilhelm, Lautawerk, Germany. Producing aluminum and aluminum alloys. 1,881,872; Oct. 11.
Neumark, Moritz, Herrenwyk Im Lubeckschen, and H. Weidmann, and G. Roesner, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of ferro-phosphorus low in or practically free from silicon. 1,882,517; Oct. 11.
Neureuther, Andrew H., assignor to Western Clock Company, Peru, Ill. Electrical switch mechanism. 1,882,229; Oct. 11.
Newcomb, Louise Z., Walworth, Wis., assignor of one-half to H. U. Krebser, Elgin, Ill. Food server. 1,881,873; Oct. 11.
Newell, Harold R., and W. L. Millar, Lambton, Ontario, Canada, assignors to The Washburn Company, Worcester, Mass. Window screen. 1,881,874; Oct. 11.
Newell Mfg. Co., The. (See Jenkinson, George B., assignor.)
New England Lace Mills Inc. (See Edson, Bert, assignor.)
New Jersey State Agricultural Experiment Station. (See Blake, Maurice A., assignor.)
New Jersey Zinc Company. (See Flynn, Edmund J., assignor.)
Newport Industries, Inc. (See Henke, C. O., and Etsel, assignors.)
Newport Industries, Incorporated. (See Oliver, A. F., and Palmer, assignors.)
Newport Industries, Inc. (See Palmer, R. C., and Oliver, assignors.)
Newton, Harry W., Milwaukee, Wis., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Bowl classifier. 1,881,875; Oct. 11.
Nibbs, Ernest, New London, assignor to Electric Boat Company, Groton, Conn. Disconnecting gear. 1,881,876; Oct. 11.
Nichols, Erwin H., San Antonio, Tex., assignor to Irving Air Chute Company, Inc., Buffalo, N. Y. Back pack. 1,882,086; Oct. 11.
Nicholson, Frank H., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,882,027; Oct. 11.
Nickelson, John M., assignor to Monroe Auto Equipment Company, Monroe, Mich. Manufacturing connecters. 1,881,877; Oct. 11.
Nicodemus, Otto, Hochst-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing organic bases. 1,882,518; Oct. 11.
Nidy, Ralph E., Greentown, Ohio. Safety device for airplane pilots. 1,881,878; Oct. 11.
Nielson, Emanuel, assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Suction cleaner and attachment therefor. 1,882,441; Oct. 11.
Nixon, Jeddy D., assignor to Texas Iron Works Sales Corporation, Houston, Tex. Packing anchor. 1,822,230; Oct. 11.
Noble, Ernest E., Fulwell, Sunderland, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,881,879; Oct. 11.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Range. 1,881,880; Oct. 11.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Heating element. 1,881,881; Oct. 11.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Electric control. 1,881,882; Oct. 11.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Wall plug and receptacle. 1,881,883; Oct. 11.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Thermostatic motor. 1,881,884; Oct. 11.
Noble, Warren, and C. J. Welcome, assignors to Electromaster, Inc., Detroit, Mich. Chromium plating process. 1,881,885; Oct. 11.
Noel, Henry M. (See Howard F. A., Lewis, and Noel.)
Nordskog, Severin B. (See Northey, F. L., and Nordskog.)
Norling, Reinhold A., Aurora, assignor to Independent Pneumatic Tool Co., Chicago, Ill. Valve construction for pneumatic tools. 1,881,886; Oct. 11.
Normann, Lars, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for removing material from articles. 1,881,887; Oct. 11.
Northey, Fred L., and S. B. Nordskog, Waterloo, Iowa. Refrigerator. Des. 87,937; Oct. 11.
Northrup, Edwin F., Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Induction electric furnace. 1,881,888; Oct. 11.
Norton Company. (See Silven, Herbert A., assignor.)
Noser, Emil V., St. Louis County, assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Transmission lock for motor vehicle. 1,881,889; Oct. 11.
Null, William W. (See Boland, J. E., and Vivian.)
Ouk, Lawrence C. (See Guldager, Walter E., assignor.)
Oakes Products Corporation. (See Ganz, William, assignor.)
Oakes Products Corporation. (See Hershey, Orville S., assignor.)
Oakes Products Corporation. (See Jandus, H. S., and Smith, assignors.)
Oakes Products Corporation. (See Jeffers, Clarence E., assignor.)
Oakes Products Corporation. (See Nehls, Charles H., assignor.)
Ocker, William C., San Antonio, Tex. Fog training device for airplanes. 1,882,087; Oct. 11.
O'Connell, Joseph, and H. H. Kerr, Kensington, Victoria, Australia. Driving and actuating mechanism of butter churns. 1,882,296; Oct. 11.
O'Conner, Richard J. (See O'Connor, Joseph V., assignor.)
O'Connor, Joseph V., assignor to R. J. O'Conner, Cuyahoga Falls, Ohio. Window construction. 1,882,088; Oct. 11.
Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Roller bearing assembly. 1,882,231; Oct. 11.
Offenbacher, William L., Miami, Fla. Sack. 1,881,890; Oct. 11.
Oishei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Windshield heater. 1,882,550; Oct. 11.
Okadee Company, The. (See Hollingshead, A. G., and Ploen, assignors.)
Oleson, Henry E., Dubuque, Iowa. Cord runner. 1,881,892; Oct. 11.
Oliver, Anthony F. (See Palmer, R. C., and Oliver.)
Oliver, Anthony F., and R. C. Palmer, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc. Purifying resins. 1,881,893; Oct. 11.
Oliver, Fay, et al. (See Brigham, Lawrence M., assignor.)
Olpin, Albert R., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric discharge device. 1,881,891; Oct. 11.
Olsen, Henry H., assignor to The Autofout Company, Detroit, Mich. Magazine cup dispenser. 1,881,894; Oct. 11.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,882,089; Oct. 11.
Olson, Samuel, Oak Park, Ill. Counting conveyer. 1,881,897; Oct. 11.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Conveyer switching system. 1,881,895; Oct. 11.
Olson, Samuel, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill. Conveyer roll. 1,881,896; Oct. 11.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Restaurant service conveyer system. 1,881,898; Oct. 11.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Selective unloader mechanism for elevators. 1,881,899; Oct. 11.
Olson, Samuel & Company. (See Olson, Samuel, assignor.)
Oman, Joseph P., St. Paul, and S. Bright, Minneapolis, Minn. Receptacle. 1,881,900; Oct. 11.
Oosterhuis, Ekko, and J. G. W. Mulder, assignors to N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Discharge tube. 1,882,082; Oct. 11.
Osborn, Roy T., et al. (See King, George W., assignor.)
Osbrink, Raymond H., Los Angeles, Calif. Game board. Des. 87,938; Oct. 11.
Osmer, James H., El Segundo, assignor to Standard Oil Company of California, San Francisco, Calif. Process for the treatment of hydrocarbon oils with aluminum chloride. 1,881,901; Oct. 11.
Osterdahl, Martin, Chicago, Ill., assignor of one-half to Gunnard Hultman, Fond du Lac, Wis. Scaffold attachment and safety device for ladders. 1,881,902; Oct. 11.
Ottens, Berthold. (See Mueller-Cunradi, M., and Ottens.)
Otting, Herbert E., Westerville, assignor to M and R Dietetic Laboratories, Inc. Milk product. 1,882,028; Oct. 11.
Owen, Matthew H., Detroit, Mich. Box car door. 1,882,029; Oct. 11.
Owens, Freeman H., New York, N. Y. Motion picture camera and film magazine. 1,881,903; Oct. 11.
Owens, Freeman H., New York, N. Y. Lap dissolver for motion picture cameras. 1,881,904; Oct. 11.
P & M Company, The. (See Preston, Frederick A., assignor.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Page, Dwight C., and G. D. Scott, assignors to The Heald Machine Company, Worcester, Mass. Chuck. 1,881,905; Oct. 11.
Page, George A., jr. (See Stupar, M., and Page.)
Page, Robert W., Glen Ridge and F. W. Hill, South Orange, N. J. Tile. 1,881,906; Oct. 11.

Paget, Harold F., assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa. Welt closing mechanism for full fashioned knitting machines. 1,882,566; Oct. 11.
Palm, Hermann, Neukochen, near Unterkochen, Germany. Pattern rolls for applying coloured designs on paper, board, or the like webs. 1,882,090; Oct. 11.
Palmer, Robert C. (See Oliver, A. F., and Palmer.)
Palmer, Robert C., and A. F. Oliver, Pensacola, Fla. High melting-point rosin and preparing the same. 1,881,907; Oct. 11.
Palmer, Robert T. (See Anderson, S. M., and Palmer.)
Papac, Nicholas G., Watsonville, Calif. Apple slicing machine. 1,881,908; Oct. 11.
Paramount Publix Corporation. (See Edouart, Alexander F., assignor.)
Paramount Publix Corporation. (See Garbutt, Frank E., and Ingman, assignors.)
Paramount Publix Corporation. (See Ingman, T. M., Garbutt, and Barkelew, assignors.)
Pardee, Harvey S., Ravinia, assignor to J. R. Blackhall, Highwood, Ill. Control system. 1,881,909; Oct. 11.
Paris, Jean, Cincinnati, Ohio. Dough molding machine. 1,882,160; Oct. 11.
Parker, Henry W., assignor to Rogers Radio Tubes, Limited, Toronto, Ontario, Canada. Thermionic tube. 1,881,910; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Core for textiles. 1,881,911; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Method of and apparatus for making multiply paper. 1,881,912; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Laying multiple conduit and coupling for same. 1,881,913; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Multiple cylinder paper making machine. 1,881,914; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Coupling for fiber pipe. 1,881,915; Oct. 11.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Forming fibrous bell-mouth tube ends. 1,881,916; Oct. 11.
Parkhurst, Frederic A., Bethesda, Md., assignor to The Fiberloid Corporation, Indian Orchard, Mass. Apparatus for forming sheet material. 1,881,917; Oct. 11.
Parks-Cramer Company. (See Lytton, Cullen L., assignor.)
Patten, Charles H., Cranston, R. I., assignor to General Chain Company. Foldable bracelet buckle. 1,881,918; Oct. 11.
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Coffee maker or similar article. Des. 87,939; Oct. 11.
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Coffee maker or similar article. Des. 87,940; Oct. 11.
Patton, Arthur L., Denver, Colo. Thermostat. 1,881,919; Oct. 11.
Payne, Norval C., Detroit, Mich. Clamp. 1,882,297; Oct. 11.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread parter for weft replenishing looms. 1,881,920; Oct. 11.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutter for shuttles. 1,881,921; Oct. 11.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle for thread cutters. 1,881,922; Oct. 11.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutter and clamp for shuttles. 1,881,923; Oct. 11.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Mounting for weft parters. 1,881,924; Oct. 11.
Payzant, Henry H., Everett, assignor to Weyerhaeuser Timber Company, Tacoma, Wash. Lumber trimming machine. 1,881,954; Oct. 11.
Peck, Lester E. (See Timbs, E., and Peck.)
Peerless Springs, Incorporated. (See Kiwi, Walter, assignor.)
Peik, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Tumbling mill. 1,882,442; Oct. 11.
Peik, Louis D., Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y. Tumbling mill. 1,882,443; Oct. 11.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Transfer mechanism for rotary glassware forming machines. 1,882,091; Oct. 11.
Peirce, Joseph O., and L. D. Myers, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex. Process and reagent for treating emulsions. 1,882,444; Oct. 11.
Penn, Albert, assignor to Penn Electric Switch Co., Des Moines, Iowa. Motor actuated furnace control. 1,881,955; Oct. 11.
Penn Electric Switch Co. (See Penn, Albert, assignor.)
Penn Electric Switch Co. (See Stem, Russell W., assignor.)
Pennington, Mary E., New York, N. Y. Conditioning system for cold storage rooms. 1,882,030; Oct. 11.
Peo, Ralph F., Kenmore, assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,881,956; Oct. 11.
Peo, Ralph F., Kenmore, assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,881,957; Oct. 11.
Peo, Ralph F., assignor to Houde Engineering Corporation, Buffalo, N. Y. Joint. 1,881,958; Oct. 11.
Peo, Ralph F., assignor to Houde Engineering Corporation, Buffalo, N. Y. Coupling for relatively movable members. 1,881,959; Oct. 11.
Peo, Ralph F., assignor to Houde Engineering Corporation, Buffalo, N. Y. Sway preventing device. 1,881,960; Oct. 11.
Perfection Biscuit Company. (See Mullendore, Harvey, assignor.)
Perfex Corporation. (See MacLeod, Daniel T., assignor.)
Perkins, Frank P., assignor to Michael Yundt Company, Waukesha, Wis. Loader for bottle cleaning machinery. 1,881,961; Oct. 11.
Perlman, Joseph J., and N. H. Perlman, assignors to Handy Button Machine Co., Chicago, Ill. Tufting button. 1,881,962; Oct. 11.
Perlman, Nathan H. (See Perlman, Joseph J. and N. H.)
Perrin, James E., assignor to The De Vilbiss Company, Toledo, Ohio. Spray gun. 1,881,963; Oct. 11.
Persons, Laurence M., Chicago, Ill. Vapor motor. 1,881,964; Oct. 11.
Peters, Garrett H., assignor to Hercules Powder Company, Wilmington, Del. Safety glass. 1,882,298; Oct. 11.
Peterson, Ezra M., Ogden, Utah. Apparatus for making frozen confections. 1,881,965; Oct. 11.
Pfeffer, Henry W., Narberth, Pa., assignor, by mesne assignments, to American Blower Corporation, Detroit, Mich. Induced draft apparatus. 1,882,519; Oct. 11.
Pharis Tire & Rubber Company, The. (See Reichard, Harold D., assignor.)
Phelan, Merton D., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener-inserting machine. 1,882,031; Oct. 11.
Phelps, Alva W., assignor to Delco-Remy Corporation, Anderson, Ind. Grinding apparatus. 1,881,966; Oct. 11.
Philips', N. V., Gloeilampenfabrieken. (See Oosterhuis, E., and Mulder, assignors.)
Philpott, John E. (See Logan, M. C., and Philpott.)
Piazze, Thomas E., Brooklyn, assignor to Technidyne Corporation, New York, N. Y. Phonograph. 1,881,967; Oct. 11.
Pier, Mathias. (See Krauch, C., Pier, and Hochschwender.)
Pier, Mathias, Heidelberg, and K. Wissel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dehydrating moist fuel. 1,881,968; Oct. 11.
Pier, Mathias, Heidelberg, and K. Wissel, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Recovery of refined products from distillable carbonaceous materials. 1,881,969; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive vibrator. 1,882,393; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive vibrator. 1,882,394; Oct. 11.
Pierce, George W., Cambridge, Mass. Frequency indicator. 1,882,395; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive transformer. 1,882,396; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive vibrator. 1,882,397; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive vibrator. 1,882,398; Oct. 11.
Pierce, George W., Cambridge, Mass. Magnetostrictive vibrator. 1,882,399; Oct. 11.
Pierce, George W., Cambridge, Mass. Loud speaker. 1,882,401; Oct. 11.
Pierce, George W., Cambridge, Mass., and S. A. Buckingham, Chevy Chase, Md. Vibratory device. 1,882,400; Oct. 11.
Pierce, Leroy R., Keystone, Okla. Wire line shock absorber. 1,882,161; Oct. 11.
Pieroh, Kurt. (See Mueller-Cunradi, M., and Pierob.)
Pierson, Paul M., Ossining, N. Y. Hybrid tea rose. Pl. Pt. 33; Oct. 11.
Pignanelli, Luigi, Tacoma, Wash. Shoe. Re18,615; Oct. 11.
Pilcher, Arthur C., Pittsburgh, Pa. Fire hydrant. 1,882,299; Oct. 11.
Pilling, John E., Providence, R. I. Preparing chains for soldering and a composition of matter used in such preparations. 1,881,970; Oct. 11.
Pirinoli, Guglielmo, assignor to Fiat Societa Anonima, Turin, Italy. Reducing gear for co-axial shafts. 1,882,033; Oct. 11.
Pitcairn Aircraft, Inc. (See Clayton, Walter C., assignor.)
Pittsburgh Equitable Meter Company. (See MacLean, Allen D., assignor.)
Plath, Frederick M. (See Rolle, J. W., and Plath.)
Ploen, Curtis W. (See Hollingshead, A. G., and Ploen.)
Pollard, Hugh E., assignor to Arrow Tools, Inc., Chicago, Ill. Power operated reciprocating tool device. 1,882,520; Oct. 11.
Pope Machinery Corporation. (See Howard, Merton W., assignor.)
Popoff, John, New York, N. Y. Sky writing apparatus. 1,882,521; Oct. 11.

Porcelain Enamel and Manufacturing Company of Baltimore, The. (See Turk, Karl, assignor.)
Post, Claude L., Chicago, Ill. Type roll. 1,881,925; Oct. 11.
Post, Claude L., Chicago, Ill. Sheet feeding mechanism. 1,881,926; Oct. 11.
Pott, Alfred, and Hans Broche, Essen-Ruhr, Germany. Hydrogenerating solid carbonaceous material, particularly solid fuels such as coal. 1,881,927; Oct. 11.
Pottenger, Francis M., jr., Monrovia, Calif. Combined valve and air-tight cushion for bottled water dispensers. 1,881,929; Oct. 11.
Potter, William W. (See Daly, Frank A., assignor.)
Potter, William W., Pawtucket, R. I. Automatic metal turning lathe. 1,881,928; Oct. 11.
Potts, John, assignor to Wilson-Jones Company, Chicago, Ill. Loose leaf binder. 1,881,930; Oct. 11.
Powell, Clarence H., assignor to Hudson Motor Car Company, Detroit, Mich. Overdrive transmission. 1,881,931; Oct. 11.
Powell, Edward R., assignor to Banner Rock Corporation, Alexandria, Ind. Forming self baking insulation blocks. 1,881,932; Oct. 11.
Powell, Laurence, Columbus, assignor to The Salem Tool Company, Salem, Ohio. Apparatus for distributing comminuted material. 1,881,933; Oct. 11.
Powers, Donald H., Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber product and preparing same. 1,882,035; Oct. 11.
Powis, Richard, assignor to Houde Engineering Corporation, Buffalo, N. Y. Welding. 1,881,934; Oct. 11.
Powis, Richard, assignor to Houde Engineering Corporation, Buffalo, N. Y. Locking key. 1,881,935; Oct. 11.
Poyer, Guy R., Wichita, Kans. Connecting rod assembly. 1,882,092; Oct. 11.
Pray, Thomas E., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,881,936; Oct. 11.
Preston, Frederick A., Lake Forest, assignor to The P & M Company, Chicago, Ill. Tie plate. 1,881,937; Oct. 11.
Preston, Herbert E., assignor to American Engineering Company, Philadelphia, Pa. Ash hopper. 1,882,445; Oct. 11.
Price, William F., Bala, and R. H. Beck, Upper Darby, Pa. Battery plate filling machine. 1,882,300; Oct. 11.
Priest, George E., Syracuse, N. Y. Building stave. 1,882,301; Oct. 11.
Pritchett, Glenn A., Reno, Nev. Explosive. 1,882,190; Oct. 11.
Process Engineers, Inc. (See DeCew, Judson A., assignor.)
Prodhomme, Felix J. M., Paris, France. Automatic apparatus for shop windows. 1,881,938; Oct. 11.
Producto Machine Company, The. (See Marsilius, Newman M., assignor.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Puller, George. (See Gastonguay, A., and Puller.)
Purdy, Frederick, assignor to Marvel Carburetor Company, Flint, Mich. Pumping mechanism. 1,881,939; Oct. 11.
Purdy, Frederick, assignor to Marvel Carburetor Company, Flint, Mich. Carburetor heat control. 1,881,940; Oct. 11.
Purinton, Bernard S., East Liverpool, Ohio. Process and apparatus for casting ceramic articles. 1,882,191; Oct. 11.
Putney, Charles L., Philadelphia, Pa., assignor to Investors Industries, Inc., Baltimore, Md. Automatic clutch. 1,881,941; Oct. 11.
Pyle-National Company, The. (See Kennedy, John J., assignor.)
Pyrene Manufacturing Company. (See Hunter, John N., assignor.)
Quigley, W. A. (See Coble, Bert G., assignor.)
Quinn, Charles C., assignor to Quinn Wire & Iron Works, Boone, Iowa. Calf weaner. 1,882,232; Oct. 11.
Quinn Wire & Iron Works. (See Quinn, Charles C., assignor.)
Raber, Joseph, Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Pick-up arm. 1,881,942; Oct. 11.
Raconite Chemical Company. (See Stevens, James L., assignor.)
Rader, Harold K., assignor to Mueller Brass Co., Port Huron, Mich. Joint. 1,881,943; Oct. 11.
Radio Corporation of America. (See Raber, Joseph, assignor.)
Radium Emanation Corporation, The. (See Muir, Joseph, assignor.)
Radzinsky, Harry. (See Glaser, Herbert, assignor.)
Ragan, Stanley F., Chicago, Ill. Window lock. 1,881,944; Oct. 11.
Railway Utility Company. (See Hartwig, William G., assignor.)
Raisch, Charles F., assignor to Alemite Corporation, Chicago, Ill. Centralized lubricating system. 1,881,945; Oct. 11.
Rambusch Decorating Company. (See Rambusch, Harold W., assignor.)
Rambusch, Harold W., Brooklyn, assignor to Rambusch Decorating Company, New York, N. Y. Tabernacle. 1,882,093; Oct. 11.
Ramsden, John T., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Straight line guide for molding and other machines. 1,882,446; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigerating apparatus. 1,882,251; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,252; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,253; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,254; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,255; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,256; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,257; Oct. 11.
Randel, Bo Folke, San Diego, Calif. Refrigeration. 1,882,258; Oct. 11.
Ratzkoff, Silas M., Jackson Heights, N. Y., assignor to Troy Laundry Machinery Company, Inc., East Moline, Ill. Identification pin holder for washing machines. 1,881,946; Oct. 11.
Rauber, Margaret E., and C. L. Rogers, Washington, D. C. Container with opening equipment. 1,882,094; Oct. 11.
Raugstad, John K., Chicago, Ill. Jointed figure toy. 1,882,034; Oct. 11.
Raule, Clifford T., Brookline, Pa. Multiple grinder. 1,882,447; Oct. 11.
Rawdon, Edward W., Akron, Ohio. Fish lure. 1,881,947; Oct. 11.
Rayburn, Daniel B., Pendleton, Ind. Shackle for prisoners. 1,881,948; Oct. 11.
Rayfield, Charles L., assignor to Rayfield Manufacturing Co., Chicago, Ill. Control for oil burners. 1,881,949; Oct. 11.
Rayfield, Charles L., assignor to Rayfield Mfg. Co., Chicago, Ill. Thermostatically controlled switch. 1,881,950; Oct. 11.
Rayfield, Frederick J., assignor to Champion Pneumatic Machinery Company, Chicago, Ill. Pump. 1,881,951; Oct. 11.
Rayfield, Frederick J., assignor to Champion Pneumatic Machinery Company, Chicago, Ill. Hose reel. 1,881,952; Oct. 11.
Rayfield Manufacturing Co. (See Rayfield, Charles L., assignor.)
Redding, Harry B., Cleveland, assignor, by direct and mesne assignments, to Columbus Valve Manufacturing Corporation, Columbus, Ohio. Valve. 1,881,953; Oct. 11.
Reed, Henry M., jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company. Wall joint for plumbing fixtures. 1,882,233; Oct. 11.
Reed, Ralph A., Dearborn, and H. A. Hicks, Detroit, assignors to Ford Motor Company, Dearborn, Mich. Airplane. 1,882,338; Oct. 11.
Reggitts, John, Boonton, N. J. Tool for fastening sash weight cords. 1,882,095; Oct. 11.
Reichard, Harold D., assignor to The Pharis Tire & Rubber Company, Newark, Ohio. Tire. Des. 87,941; Oct. 11.
Reisman, Emil. (See Flanzer, J. A., and Reisman.)
Reisman, Emil. (See Jones, L. L., Flanzer, and Reisman.)
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,882,036; Oct. 11.
Reynolds Spring Company. (See Rossiter, John G., assignor.)
Richards, William F., Brownstown, Ind. Auxiliary time lock. 1,882,389; Oct. 11.
Richmond Lace Works, Inc. (See Hazeldine, Joseph, assignor.)
Ries, Chester D. (See Gilstrap, Owen G., assignor.)
Riker Company, The. (See Whitehouse, Herbert G., assignor.)
Roberts Brass Manufacturing Company. (See Johnson, Roy W., assignor.)
Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Brake for centrifugal machine. 1,882,037; Oct. 11.
Roberts, Frank B., and W. G. Huntington, Anaheim, assignors to Food Machinery Corporation, San Jose, Calif. Sizer. 1,882,038; Oct. 11.
Roberts, William T. B., and H. H. Jackson, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Machine for applying tape to sheet material. 1,882,039; Oct. 11.
Roche, Clifton R., assignor of one-half to H. A. Brunell, Los Angeles, Calif. Aviation motor. 1,882,448; Oct. 11.
Rochestie, Barnett B., Trenton, N. J. Weighing machine casing. Des. 87,942; Oct. 11.
Rockwell, Hugh M., New York, N. Y. Stop light switch and brake system for vehicles. 1,882,259; Oct. 11.
Rodger Ballast Car Company. (See Hart, Harry S., assignor.)
Roedig, Anthony, Chevoit, Ohio. Adjustable form for setting metal windows in concrete. 1,881,971; Oct. 11.
Roehm, William A., Lynbrook, N. Y. Suction-massage apparatus. 1,882,040; Oct. 11.
Roesner, Gerhard. (See Neumark, M., Weidmann, and Roesner.)
Rogers, Clyde L. (See Rauber, M. E., and Rogers.)
Rogers Radio Tubes, Limited. (See Parker, Henry W., assignor.)

Röhm & Haas Company. (See Luckhaus, Ernst, assignor.)
Rolle, Jacob W., and F. M. Plath, Philadelphia, Pa. Window frame. 1,882,260; Oct. 11.
Romort Manufacturing Company. (See Ewald, Arno A., assignor.)
Rosenberg, Emanuel, Weis, Austria. Device for connecting and switching the windings of dynamos. 1,882,162; Oct. 11.
Rosengvist, Gunnar, Pittsburgh, Pa. Joining preformed metallic articles with a galvanoplastic body. 1,882,522; Oct. 11.
Rosier, Charles A., New York, N. Y. Apparatus for producing gaseous fuels. 1,882,041; Oct. 11.
Rosner, Irving. (See Moran, Patrick J., assignor.)
Ross, Charles H. A. F. L., Washington, D. C. Fluid reactive surface. 1,882,163; Oct. 11.
Ross, Charles H. A. F. L., Washington, D. C. Fluid reactive surface. 1,882,164; Oct. 11.
Rossiter, John G., assignor to Reynolds Spring Company, Jackson, Mich. Condiment dispenser. Des. 87,943; Oct. 11.
Rothweiler, Charles O., assignor to David White Company, Milwaukee, Wis. Combination level transit. 1,882,523; Oct. 11.
Rousseau, Ernest J. (See Hatton, W., Spann, Rousseau, and Larsen.)
Rubber Shock Insulator Corporation, The. (See Masury, Alfred F., assignor.)
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Tube Company, Englewood, N. J. Electron discharge device. 1,882,449; Oct. 11.
Ruben Tube Company. (See Ruben, Samuel, assignor.)
Rudolph, Wilhelm, assignor to Electroacustic Gesellschaft mit beschrankter Haftung, Kiel, Germany. A carrying device for subaqueous sound apparatus. 1,881,972; Oct. 11.
Russell, Theodore, Naugatuck, Conn. Tongue buckle and making same. 1,882,369; Oct. 11.
Ryan, Herl J., Los Angeles, Calif. Athletic field line marker. 1,882,340; Oct. 11.
Safety Mining Company. (See Lubelsky, Ben L., assignor.)
Salem Tool Company, The. (See Powell, Laurence, assignor.)
Sanders, Henry A., Beaumont, Tex. Flashing block. 1,882,192; Oct. 11.
Sands, Charles F. (See Lonsberger, R. F., and Sands.)
Sanford, Sydney J., Alden Park Manor, assignor of one-half to C. W. Larner, Philadelphia, Pa. Spiral gear. 1,882,302; Oct. 11.
Saukaitis, Albert J., Philadelphia, assignor to American Chemical Paint Company, Ambler, Pa. Soldering flux. 1,882,507; Oct. 11.
Saunders, Norman H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,882,042; Oct. 11.
Schlesinger, Max A. (See Moore, David P., assignor.)
Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See Hartman Otto H., assignor.)
Schmiedeknecht, Victor E., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Molding hollow-ware articles. 1,882,652; Oct. 11.
Schmitt, Alfred, Cincinnati, Ohio. Screw plug for plastic walls. 1,881,973; Oct. 11.
Schoellkopf, Jacob F., and H. Lee, Dallas, Tex. Trunk. 1,882,193; Oct. 11.
Schofield, John G., assignor to C. A. M. Wells, Washington, D. C., and T. H. Welsh, Hyattsville, Md. Vending machine. 1,882,261; Oct. 11.
Schroeder, Nettie N., Los Angeles, Calif. Face massaging instrument. 1,882,370; Oct. 11.
Schröter, Fritz, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Signal recording. 1,882,043; Oct. 11.
Schur, Milton O. (See Meglitz, W. B., and Schur.)
Scott, Gherald D. (See Page, D. C., and Scott.)
Scott Paper Company. (See Hires, John E., assignor.)
Scott Paper Company. (See Von Hazmburg, Romulus S., assignor.)
Scott, William D. (See Birch, S. F., and Scott.)
Seaholm, Charles H., assignor to General Talking Pictures Corporation, New York, N. Y. Talking motion picture apparatus. 1,882,303; Oct. 11.
Sedlmayer, Josef, Berlin-Charlottenburg, assignor to Siemens and Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Signal transmission system. 1,882,653; Oct. 11.
Seger, Earl F. (See Hopkins, R. Z., and Seger.)
Seiter, Eugene R., Ridgefield Park, N. J., assignor to T. W. & C. B. Sheridan Company. Bookbinding machine. 1,882,044; Oct. 11.
Server, Herbert W., Dayton, Ohio. Paper manufacture. 1,882,194; Oct. 11.
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Shakeproof Lock Washer Company. (See Trotter, George C., assignor.)
Sharp, Allen W., assignor to Johnston Pressed Gear Co., Ottumwa, Iowa. Reel assembly. 1,882,195; Oct. 11.
Sharp, Frank. (See Braun, Fredrick A., assignor.)
Sharples Specialty Company, The. (See Jones, Leo D., assignor.)
Shaw, Abner B., assignor to S. E. Shaw, North Dartmouth, Mass. Carnation. Pl. Pt. 34; Oct. 11.
Shaw, Arthur L., deceased, Cicero, Ill., by Bertha S. Shaw, executrix, assignor to Chicago Automatic Conveyor Co., Cicero, Ill. Portable conveyer. 1,882,096; Oct. 11.
Shaw, Bertha S. (See Shaw, Arthur L.)
Shaw, Stephen E. (See Shaw, Abner B., assignor.)
Shaw, William S., Boyne City, Mich. Linting machine. 1,882,450; Oct. 11.
Shepherd, Frank. (See Monroe, S. G., and Shepherd.)
Sheridan, T. W. and C. B., Company. (See Seiter, Eugene R., assignor.)
Sherman, Cortis F., Hartford, Conn. Punch press. 1,882,451; Oct. 11.
Sherman, Francis H., Palmer, Mass. Egg case. 1,882,524; Oct. 11.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Concealed heating unit. 1,882,452; Oct. 11.
Sicklesteel, David T. (See Morley, H., Buchanan, and Sicklesteel.)
Siecke, Wolfhart, Frankfort-on-the-Main, Germany. Electrolytic production of metals of the alkalis or alkaline earths. 1,882,525; Oct. 11.
Siemens & Halske Aktiengesellschaft. (See Jaumann, Andreas, assignor.)
Siemens and Halske Aktiengesellschaft. (See Sedlmayer, Josef, assignor.)
Siems, Herman B., assignor to Swift & Company, Chicago, Ill. Device for measuring liquids. 1,882,106; Oct. 11.
Silven, Herbert A., assignor to Norton Company, Worcester, Mass. Table traverse mechanism for grinding machines. 1,882,098; Oct. 11.
Simmen, Oscar, Erlach, assignor to the Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Internal combustion engine with solid fuel injection. 1,882,165; Oct. 11.
Singer, Andrew C., McKees Rocks, Pa. Automatic control system. 1,882,234; Oct. 11.
Sipe, Harry E., New York, N. Y., assignor of one-half to Nathaniel L. Foster, Montclair, N. J. Window operating device. 1,882,304; Oct. 11.
Sjoberg, Leo J., et al. (See Sjoberg, Leo J., assignor.)
Sjoberg, Leo J., assignor to Leo J. Sjoberg and W. B. De Nure, trustees, Los Angeles, Calif. Visible liquid fuse switch. 1,882,453; Oct. 11.
Skitt, James H., assignor to Smith, Drum & Company, Philadelphia, Pa. Safety appliance for washing machines. 1,881,974; Oct. 11.
Skriba, Rudolph A., and F. J. Littell, assignors to F. J. Littell Machine Company, Chicago, Ill. Automatic feed for assembling presses. 1,882,197; Oct. 11.
Slick, Edwin E., Pittsburgh, Pa. Lifting lug and pouring spout. 1,882,198; Oct. 11.
Smith, Charles D., Sharon Hill, assignor to The Dallett Company, Philadelphia, Pa. Stencil. 1,882,526; Oct. 11.
Smith, Drum & Company. (See Skitt, James H., assignor.)
Smith, Frederick A. (See Jandus, H. S., and Smith.)
Smith, L C & Corona Typewriters Inc. (See Gabrielson, C. and Waucques, assignors.)
Smith, L C & Corona Typewriters Inc. (See Laurence, Gordon, assignor.)
Societe de Paris et du Rhone. (See Leyvastre, Ferdinand, assignor.)
Societe des Usines Chimiques Rhone-Poulenc. (See Gault, H., and Angla, assignors.)
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for electrical control systems. 1,882,404; Oct. 11.
Sosa, Augustus M. (See Klausmeyer, D. C., and Sosa.)
Spaeth, Charles, Flushing, assignor to Ne-Arga Corporation, New York, N. Y. Lamp starting device. 1,881,975; Oct. 11.
Spaeth, Charles, Flushing, assignor to Ne-Arga Corporation, New York, N. Y. Lamp starting device. 1,881,976; Oct. 11.
Spalding, John E., New Haven, Conn. Screen for projected pictures. 1,882,454; Oct. 11.
Spann, Ransom D. (See Hatton, W., Spann, Rousseau, and Larsen.)
Sparhawk, Charles E., Auburn, Wash., assignor to Ada Young, Ketchikan, Alaska. Airplane. 1,882,199; Oct. 11.
Speidel Corporation. (See Fassnacht, Karl, assignor.)
Spencer Thermostat Company. (See Maurer, Rufus H., assignor.)
Spicer Airflater, Inc. (See Spicer, Delphin H., assignor.)
Spicer, Delphin H., Lakewood, assignor to Spicer Airflater, Inc., Cleveland, Ohio. Dual tire pressure equalizer. 1,882,455; Oct. 11.
Spinasse, Arthur E., Mount Vernon, Ohio. Apparatus and method of drawing glass. 1,882,262; Oct. 11.
Spriggs, Arthur O., assignor to The Champion Company, Springfield, Ohio. Embalming instrument. 1,882,235; Oct. 11.
Stackhouse, Chester R., Cadillac, Mich. Baseball target. Des. 87,944; Oct. 11.
Standard-I.-G. Company. (See Harding, Clarke T., assignor.)
Standard-I.-G. Company. (See Pier, M., and Wissel, assignors.)

Standard Oil Company of California. (See Osmer, James H., assignor.)
Standard Oil Development Company. (See Howard, F. A., Lewis, and Noel, assignors.)
Standard Sanitary Manufacturing Company. (See Reed, Henry M., jr.)
Standard Sanitary Manufacturing Company. (See Schmiedeknecht, Victor E., assignor.)
Standard Steel Works. (See Gredell, Otto N., assignor.)
Stanley, Zach A., Muncie, Ind. Drapery bracket device. 1,882,527; Oct. 11.
Stansbury, Carroll. (See Harwood, P. B., and Stansbury.)
Stant, Kyle E., Connersville, Ind. Radiator cap. 1,882,097; Oct. 11.
Stant Manufacturing Company. (See Johnson, Glen A., assignor.)
Star Sprinkler Corporation. (See Griffith, William B., assignor.)
Starr, Morton H., assignor to E. and T. Fairbanks and Company, St. Johnsburg, Vt. Increasing the capacity of dial scales. 1,882,456; Oct. 11.
Steam Power, Inc. (See Curran, Frank J., assignor.)
Steam Power, Inc. (See Curran, F. J., and McClellan, assignors.)
Steeneck, Robert. (See Long, J. W., and Steeneck.)
Stees, Isaac, Harrisburg, Pa. Molding apparatus. 1,882,371; Oct. 11.
Steimmig, Gerhard, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of perfumes. 1,882,200; Oct. 11.
Steinen, Gustav V. D., Cleveland Heights, assignor to The Glascote Company, Euclid, Ohio. Apparatus for making glass-coated pipe coils. 1,882,347; Oct. 11.
Steinen, Gustav V. D., Cleveland Heights, assignor to The Glascote Company, Euclid, Ohio. Making glass-coated pipe coils. 1,882,348; Oct. 11.
Stem, Russell W., Bethlehem, Pa., assignor to Penn Electric Switch Co., Des Moines, Iowa. Heating furnace control. 1,882,841; Oct. 11.
Stevens, Arthur C., Shinfield, near Reading, England. Valve. 1,882,372; Oct. 11.
Stevens, J. & E., Company, The. (See Frisbie, Russell A., assignor.)
Stevens, James L., assignor to Raconite Chemical Company, Hayden, Ariz. Filtering apparatus. 1,882,045; Oct. 11.
Stewart-Warner Corporation. (See Muzzy, William H., assignor.)
Stickless Corporation, The. (See Lichter, Malvin, assignor.)
Stiemke, Walter H. (See Jett, George C., assignor.)
Stockman, William M., Chicago, Ill. Picture frame. 1,882,236; Oct. 11.
Stoesser, Wesley C. (See Marschner, R. F., and Stoesser.)
Storey, Oliver W., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Bloating and annealing blocks of earthy material. 1,882,046; Oct. 11.
Storm, Miller D., Bouton, Iowa. Tractor wheel attachment. 1,882,373; Oct. 11.
Stover, Clinton W. (See Woodhead, H., and Stover.)
Straubel, Frederick L. G., Green Bay, Wis. Filing device. 1,882,457; Oct. 11.
Strickland, Silas A., assignor to Bower Roller Bearing Company, Detroit, Mich. Gauging machine. 1,882,374; Oct. 11.
Stuber & Kuck Co. (See Kuck, H. G., and Abele, assignors.)
Stupar, Max, Buffalo, and G. A. Page, jr., Freeport, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc. Clamp. 1,882,305; Oct. 11.
Sturtevant, B. F., Company. (See Anderson, S. M., and Palmer, assignors.)
Sulzer Freres Societe Anonyme. (See Simmen, Oscar, assignor.)
Sundby, Nellie N., Minneapolis, Minn. Ironing board cover. 1,881,977; Oct. 11.
Sunderman, H. Henry, executor. (See Klausmeyer, David C., and Sosa.)
Swanson, Oscar W., Ottumwa, Iowa. Apparatus for heating brooders. 1,882,342; Oct. 11.
Swift & Company. (See Siems, Herman B., assignor.)
Swingspout Measure Company. (See Laswell, Maynard A., assignor.)
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington Company, The. (See Couch, Glenn F., assignor.)
Symons, Arthur H., assignor to Symons Clamp & Mfg. Company, Chicago, Ill. Shore. 1,882,458; Oct. 11.
Symons Clamp & Mfg., Company. (See Symons, Arthur H., assignor.)
Tabor Manufacturing Company, The. (See Ramsden, John T., assignor.)
Taetz, Paul, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Choke coil. 1,882,201; Oct. 11.
Talbot, Frank A. (See Mann, W. B. W., and Talbot.)
Tandberg, John G., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y. Temperature control apparatus. 1,881,978; Oct. 11.
Tatum, William W. (See Lodge, F., and Tatum.)
Taube, Carl. (See Hentrich, W., and Taube.)
Taylor, Albert H., and L. C. Young, Washington, D. C., assignors, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Reduction of fading effects in radio communication. 1,882,166; Oct. 11.
Taylor, Elbert A. (See MaRean, Marrett F., assignor.)
Taylor, James H., Oak Park, Ill. Pipe fitting for welding. 1,881,979; Oct. 11.
Technidyne Corporation. (See Flanzer, Joseph A., assignor.)
Technidyne Corporation. (See Flanzer, J. A., and Reisman, assignors.)
Technidyne Corporation. (See Jones, L. L., Flanzer, and Reisman, assignors.)
Technidyne Corporation. (See Piazze, Thomas E., assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Taetz, Paul, assignor.)
Texas Iron Works Sales Corporation. (See Nixon, Jeddy D., assignor.)
Thiess, Karl, Frankfort-on-the-Main-Sindlingen, and F. Männchen, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulfur containing vat dyestuffs and making them. 1,882,263; Oct. 11.
Thirlwell, Robert, Newcastle-upon-Tyne, England. Slinglock. 1,882,167; Oct. 11.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Pipe coupler. 1,881,980; Oct. 11.
Thomas, Harry W., jr., Birmingham, Mich. Reclaiming scrap metal. 1,882,528; Oct. 11.
Thomas, Lawrence H. (See Kuhn, F., and Thomas.)
Thompson, Charles F., Relay, Md. Chair attachment. 1,882,264; Oct. 11.
Thompson, Ernest H., Winnetka, assignor to Johnson Fare Box Company, Chicago, Ill. Token depositary and account device. 1,882,047; Oct. 11.
Thompson Products, Inc. (See Graham, M. P., and Hufferd, assignors.)
Thompson Products, Incorporated. (See Hufferd, G. H., and Graham, assignors.)
Thompson Products, Incorporated. (See Kelleher, D., and Bartlett, assignors.)
Thomson, S. H., Manufacturing Company, The. (See Hummert, Robert H., assignor.)
Thulin, Emil F., Chicago, Ill. Covering for walls. 1,882,529; Oct. 11.
Timbs, Edward, and L. E. Peck, Los Angeles, Calif., assignors to The National Supply Company, Toledo, Ohio. Safety throw-off iron. Re18,020; Oct. 11.
Timken-Detroit Axle Company, The. (See Alden, H. W., and Brownyer, assignors.)
Timken Roller Bearing Company, The. (See Assel, Walter J., assignor.)
Tinnerman, Albert H., Cleveland, Ohio. Fastening device. 1,882,306; Oct. 11.
Tlapek, Raymond, Elvins, Mo. Store partition. Des. 87,945; Oct. 11.
Tobacco Stemming Machine Company. (See Gooch, Claiborne W., jr., assignor.)
Tobata Imono Kabushiki Kaisha. (See Kikuta, Tario.)
Tomaino, Julian F. (See Weber, J., and Tomaino.)
Toronto Type Foundry Company. (See Huffman, Louis, assignor.)
Totzek, Friedrich, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Chamber oven for the production of gas and coke. 1,882,553; Oct. 11.
Townsend, Arthur J. (See Naugle, H. M., and Townsend.)
Trico Products Corporation. (See Oishei, John R., assignor.)
Tronnier, Albrecht W., Kreuznach, Germany. Spherically, chromatically and astigmatically corrected wide-angle lens with high aperture. 1,882,530; Oct. 11.
Troth, Walter A., Brooklyn, N. Y. Baling receptacle. 1,882,343; Oct. 11.
Trotter, George C., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Making lock washers. 1,882,100; Oct. 11.
Trouth, John E., assignor to Independent Oil Well Cementing Company, Oklahoma City, Okla. Cementing head. 1,882,099; Oct. 11.
Troy Laundry Machinery Company. (See Ratzkoff, Silas M., assignor.)
True, Nathan F. (See Johnson, L. D., and True.)
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Method and apparatus for making prongs for loose-leaf binders. 1,881,981; Oct. 11.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Turk, Karl, assignor to The Porcelain Enamel and Manufacturing Company of Baltimore, Baltimore, Md. Production of porcelain enamels. 1,882,344; Oct. 11.
Turner Tanning Machinery Company, The. (See Halvorsen, Egil J. S., assignor.)
Turski, Josef. (See Iwanowski, W., and Turski.)
Tyner, William A., Indianapolis, Ind. Wax stripper. 1,882,459; Oct. 11.

Uhlemann, Richard H. (See Uhlemann, William R., assignor.)
Uhlemann, William R., Evanston, assignor, by mesne assignments, to Richard H. Uhlemann, Winnetka, Ill. Eyeglass lens. 1,881,982; Oct. 11.
Ungar, Gustave A., Pelham Manor, N. Y. Creasing and folding machine. 1,882,531; Oct. 11.
Unger, Lloyd A., trustee. (See Lonaberger, R. F., and Sands.)
Union Chimique Belge Societe Anonyme. (See Kalix, Johannes A., assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Switch & Signal Company, The. (See Nicholson, Frank H., assignor.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
United Automatic Register Co. (See Jensen, Louis, assignor.)
United Cigarette Machine Company. (See Gooch, Claiborne W., jr., assignor.)
United Cigarette Machine Company. (See Gooch, C. W., jr., and Marcotte, assignors.)
United Reproducers Corporation. (See Holly, George S., assignor.)
United Shank & Findings Company. (See Laird, Everleigh R., assignor.)
United Shoe Machinery Corporation. (See Brogan, Michael F., assignor.)
United Shoe Machinery Corporation. (See Eastman, Fred C., assignor.)
United Shoe Machinery Corporation. (See Emerson, Charles S., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Keall, Frank B., assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United Shoe Machinery Corporation. (See Miner, George A., assignor.)
United Shoe Machinery Corporation. (See Mooney, Fred L., assignor.)
United Shoe Machinery Corporation. (See Phelan, Merton D., assignor.)
United Shoe Machinery Corporation. (See Roberts, W. T. B., and Jackson, assignors.)
Universal Patents Holding Co. (See Veitel, Fritz, assignor.)
Universal Winding Company. (See Anderson, Johan A., assignor.)
Universal Winding Company. (See Jones, Charles H., assignor.)
Upham, Franklin S., Des Moines, Iowa. Display cabinet. 1,882,345; Oct. 11.
Uring, Walter C., Baden, Pa. Adjustable audience seat. 1,881,983; Oct. 11.
Utility Manufacturing Co. (See Jennejohn, John, assignor.)
Utility Products Company. (See Jelliffe, H. W., and Abbott, assignors.)
Vacquier, Gaston H., Armentieres, and V. L. Entraygue, Maloles-Bains, France. Hydroelectric plant. 1,882,532; Oct. 11.
Valas, Alexander B., Medford, Mass. Dispensing cabinet for cigars, etc. 1,882,168; Oct. 11.
Vallée, Armand J., Albany, N. Y., assignor to General Railway Signal Company. Highway crossing signal system. 1,882,265; Oct. 11.
Vanak Corporation. (See Knee, Aaron A., assignor.)
Van Billiard, Maynard. (See Keller, H. C., and Van Billiard.)
Van Bourgondein, C. J. (See Dalrymple, Gerald H., assignor.)
Vanderveld, Anthony, assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Disappearing door structure. 1,882,375; Oct. 11.
Van Norman, Charles E., assignor to Van Norman Machine Tool Company, Springfield, Mass. Slide mechanism for precision grinding machines. 1,881,984; Oct. 11.
Van Norman Machine Tool Company. (See Arp, Ewald A., assignor.)
Van Norman Machine Tool Company. (See Van Norman, Charles E., assignor.)
Veale, George W., Cleveland Heights, assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Automobile heater. 1,882,346; Oct. 11.
Veazie, Edmund A. (See Jones, H. L., and Veazie.)
Veitel, Fritz, assignor, by mesne assignments, to Universal Patents Holding Co., Weehawken, N. J. Knitting machinery. 1,882,202; Oct. 11.
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Material handling apparatus. 1,882,307; Oct. 11.
Viggiano, Peter, Shinnston, W. Va. Salt and pepper shaker. Des. 87,946; Oct. 11.
Vilter Manufacturing Company, The. (See Nelson, Alfred M., assignor.)
Vivian, Merel C. (See Boland, J. E., and Vivian.)
Von Hazmburg, Romulus S., Chester, Pa., assignor to Scott Paper Company. Manufacture of paper. 1,881,985; Oct. 11.
Waechter, Adam, Maplewood, N. J., assignor to Groove Lock Co., Inc., New York, N. Y. Fastening device for bag frames. 1,882,101; Oct. 11.
Wainwright, Charles, Erie, Pa. Unit intercooler. 1,882,266; Oct. 11.
Waldorf Paper Products Company. (See Boeye, Paul F., assignor.)
Wallace, John F., assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Airplane strut. 1,882,349; Oct. 11.
Wallenta, Bernhard H. A., Western Springs, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Ignition coil. 1,882,460; Oct. 11.
Wallgren, August G. F., assignor to Aktiebolaget Nomy, Stockholm, Sweden. Shaft bearing. 1,882,102; Oct. 11.
Wallgren, August G. F., assignor to Aktiebolaget Nomy, Stockholm, Sweden. Shaft bearing. 1,882,103; Oct. 11.
Wallis, John S., assignor to Alco Products, Incorporated, New York, N. Y. Tray construction for bubble towers. 1,882,104; Oct. 11.
Walther, Heinrich, Frankfort-on-the-Main-Oberrad, Germany. Machine for cementing leather soles to shoes. 1,882,533; Oct. 11.
Walton, Howard T., Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa. Advertising display device. 1,882,534; Oct. 11.
Warner Electric Brake Corporation. (See Whyte, John, assignor.)
Warren, Frank H., assignor to Cummer Manufacturing Company, Paris, Tex. Folding crate. 1,882,048; Oct. 11.
Washburn Company, The. (See Newell, H. R., and Millar, assignors.)
Waterbury Tool Company, The. (See Ellis, Arthur L., assignor.)
Waterman, L. E., Company. (See Juster, Louis H., assignor.)
Waucquez, Charles. (See Gabrielson, C., and Waucquez.)
Webb, Frank C. (See Hawkins, Walter L., assignor.)
Webb, Frank C. (See Noser, Emil V., assignor.)
Weber, August, Coswig, Germany. Apparatus for painting lines. 1,882,535; Oct. 11.
Weber Costello Co. (See Johnson, J. F., and Lawton, assignors.)
Weber, Fred C., East Aurora, N. Y. Antislipping attachment for wheels. 1,882,376; Oct. 11.
Weber, Joseph, and J. F. Tomaino, Danbury, Conn. Hatter's fur carroting machine. 1,882,461; Oct. 11.
Weber, Stanley, Long Island City, N. Y. Spanner wrench. 1,882,462; Oct. 11.
Webster, Melvin L., Independence, Iowa. Display case. 1,881,986; Oct. 11.
Wedler, Harry G., assignor to Wedler-Shuford Co., St. Louis, Mo. Seat cover. 1,882,169; Oct. 11.
Wedler-Shuford Co., The. (See Wedler, Harry G., assignor.)
Weidenhoff, Joseph, Inc. (See Haskins, Butler J., assignor.)
Weidmann, Hans. (See Neumark, M., Weidmann, and Roesner.)
Weiler, Sigmond G., Milwaukee, Wis. Stove. 1,881,987; Oct. 11.
Weinheimer, Carl M., Buffalo, N. Y. Refrigerator. 1,882,536; Oct. 11.
Weiss, Arnold F., Humboldt, Iowa. Power posthole auger. 1,882,350; Oct. 11.
Welch, Jack T., assignor to James Heddon's Sons, Dowagiac, Mich. Artificial bait. 1,882,463; Oct. 11.
Welcome, Carl J. (See Noble, W., and Welcome.)
Wellman, Charles E., assignor to Ford Motor Company, Dearborn, Mich. Brake rod support. 1,882,351; Oct. 11.
Wellman, Charles P., Medford, Mass., assignor to American Machine & Foundry Company. Lined receptacles. 1,882,049; Oct. 11.
Wellman, Charles P., Medford, Mass., assignor to American Machine & Foundry Company. Lined receptacle. 1,882,170; Oct. 11.
Wellons, Charles McC., Bellevue, Pa. Crank. 1,882,203; Oct. 11.
Wells, C. A. M., et al. (See Schofield, John G., assignor.)
Welsbach Traffic Signal Company. (See Munch, Gustave E., assignor.)
Welsh, Thomas H., et al. (See Schofield, John G., assignor.)
Wender, Eugene, Frankfort-on-the-Main, Germany. Movable clamp for metallic roof coverings. 1,882,105; Oct. 11.
West Bend Aluminum Company. (See Finch, Arnold R., assignor.)
Westcott, Ellsworth J. (See Mehler, L. A., and Westcott.)
Western Clock Company. (See Neureuther, Andrew H., assignor.)
Western Electric Company. (See Gosmann, Enart, assignor.)
Western Electric Company. (See Gros, Gustave A., assignor.)
Western Electric Company. (See Gustafsson, Hans G., assignor.)
Western Electric Company. (See Hartley, George C., assignor.)
Western Electric Company. (See Hatton, W., Spann, Rousseau, and Larsen, assignors.)

Western Electric Company. (See Janicki, John, assignor.)
Western Electric Company. (See Johnson, Earl V., assignor.)
Western Electric Company. (See Johnstone, Harold G., assignor.)
Western Electric Company. (See Kuriyama, Zensuke, assignor.)
Western Electric Company. (See Larsen, Elmer J., assignor.)
Western Electric Company. (See Malm, Frank S., assignor.)
Western Electric Company. (See Manning, Arthur L., assignor.)
Western Electric Company. (See Miller, Reginald J., assignor.)
Western Electric Company. (See Nelson, Charles E., assignor.)
Western Electric Company. (See Nelson, Ira S., assignor.)
Western Electric Company. (See Normann, Lars, assignor.)
Western Metal Specialty Company. (See Goetz, Julius J., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Union Telegraph Company, The. (See Franklin, Laurence W., assignor.)
Western Union Telegraph Company, The. (See Frost, Albert E., assignor.)
Western Union Telegraph Company, The. (See Hoover, R., and Wheeler, assignors.)
Western Union Telegraph Company, The. (See Johnson, G. W., and Callahan, assignors.)
Western Union Telegraph Company, The. (See Light, George G., assignor.)
Western Union Telegraph Company, The. (See Long, J. W., and Steeneck, assignors.)
Western Union Telegraph Company, The. (See Longland, Herbert A., assignor.)
Western Union Telegraph Company, The. (See Mample, A. Z., and Hobert, assignors.)
Western Wire & Iron Works, Inc. (See Martinek, Michael, assignor.)
Westinghouse Electric & Manufacturing Company. (See Flanders, Warren B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Gano, Harlan S., assignor.)
Weston, Burt H., Wood River, Ill. Refrigerating apparatus. 1,882,237; Oct. 11.
Weston, Leroy A., Adams, Mass. Gasket device. 1,882,308; Oct. 11.
Weyerhauser Timber Company. (See Payzant, Henry H., assignor.)
Wheeler, Evan R. (See Hoover, R., and Wheeler.)
Wheeler, Holman K. (See Fessenden, R. A., and Wheeler.)
Whitall Tatum Company. (See Bacon, J. L., and Lobb, assignors.)
White, David, Company. (See Rothweiler, Charles O., assignor.)
White, Harry B., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,882,464; Oct. 11.
White Star Refining Company. (See Harrington, Claude L., assignor.)
Whitehouse, Herbert G., Newark, N. J., assignor to The Riker Company. Shoe buckle. Des. 87,947; Oct. 11.
Whitsitt, William B., Baltimore, Md. Air conditioning apparatus for passenger cars. 1,882,537; Oct. 11.
Whittelsey, Theodore, Ringoes, N. J. Regulating the growth of plants. 1,882,377; Oct. 11.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,882,050; Oct. 11.
Wiberg, Oscar A., Finspong, Sweden. Labyrinth packing. 1,882,267; Oct. 11.
Wilcox, Hugh B. (See Hartig, H. E., and Wilcox.)
Wildhaber, Ernest. (See Gstyr, J., and Wildhaber.)
Williams, Harrison R., Glens Falls, N. Y. Sanitary napkin. 1,882,309; Oct. 11.
Williams, James F., Lyndhurst, N. J., assignor to General Motors Corporation, Detroit, Mich. Centerless grinding machine. 1,882,465; Oct. 11.
Williams, Walter W., Bloomington, Ill. Electrically operated motor and controlling means therefor. 1,882,466; Oct. 11.
Wilson, Broadus, Raleigh, N. C. Curtain plaiting and hanging device. 1,882,549; Oct. 11.
Wilson Jones Company. (See Gideon, Victor W., assignor.)
Wilson-Jones Company. (See Irving, Clarence B., assignor.)
Wilson-Jones Company. (See Potts, John, assignor.)
Wilson Welder & Metals Company. (See Churchward, Alexander, assignor.)
Wilt, Clinton, Detroit, Mich. Traction device. 1,882,467; Oct. 11.
Wine Railway Appliance Company. (See Hankins, Cyrus, assignor.)
Winston and Newell Company. (See Harrison, Thomas G., assignor.)
Winter, Carl A., Inglewood, Calif. Membership roster or similar article. Des. 87,948; Oct. 11.
Winterhalter, Arthur F. (See Hammers, W. J., and Winterhalter.)
Winters & Crampton Mfg. Co. (See Geske, C., and Ekman, assignors.)
Wired Radio, Inc. (See Culver, Charles A., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Taylor, A. H., and Young, assignors.)
Wise, Nathan, Mount Vernon, by Aaron W. Levy, Brooklyn, executor, and Pearl L. Wise, executrix, Mount Vernon, N. Y. Telephone apparatus. 1,882,106; Oct. 11.
Wise, Pearl L., executrix. (See Wise, Nathan.)
Wissel, Kurt. (See Pier, M., and Wissel.)
Wittcoff, Edward, University City, assignor to Evr Klean Seat Pad Company, St. Louis, Mo. Seat cover. 1,882,468; Oct. 11.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Automobile axle press. 1,881,988; Oct. 11.
Wolff, Carl, Bremen, Germany. Warning and sounding device for ships. 1,882,171; Oct. 11.
Wood Newspaper Machinery Corporation. (See Jordhoy, Hans C., assignor.)
Woodard, William E., Forest Hills, N. Y. Limited cut-off locomotive and method of operation. 1,882,310; Oct. 11.
Woodhead, Harry, and C. W. Stover, Cleveland, Ohio. Forming hollow bracing units. 1,882,352; Oct. 11.
Woodward, Van Lear, Stone Ridge, N. Y. Chewing gum. 1,881,989; Oct. 11.
Wright, Charles G., Richmond Hill, N. Y., assignor, by mesne assignments, to Bucyrus-Erie Company, South Milwaukee, Wis. Hoisting apparatus. 1,882,051; Oct. 11.
Wunderlich, William E., Muncie, Ind. Mattress. 1,882,538; Oct. 11.
Wundrack, Otto, Pittsburgh, Pa. Baker's oven. 1,882,107; Oct. 11.
Wyatt, Edwin M., Cleveland, Ohio, assignor, by mesne assignments, to American Face Brick Research Corporation. Kiln for the manufacture of blosted clay products. 1,882,052; Oct. 11.
Yaggi, Lawrence A., East Cleveland, Ohio. Device for practicing golf strokes. 1,881,901; Oct. 11.
Yale & Towne Manufacturing Company, The. (See Maxwell, Maxwell C., assignor.)
Young, Ada. (See Sparhawk, Charles E., assignor.)
Young, Leo C. (See Taylor, A. H., and Young.)
Young, Otto W. (See Brittain, R. J., jr., and Young.)
Youngstown Steel Door Company, The. (See McWilliams, J. P., and Ditchfield, assignors.)
Yundt, Michael Company. (See Perkins, Frank P., assignor.)
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating means and method. 1,882,053; Oct. 11.
Zitzer, Gustave, assignor to Frets-Gross & Co., Philadelphia, Pa. Tilting device for umbrellas. 1,881,990; Oct. 11.
Zrna, John, Chicago, Ill. Tooth cleaner. 1,882,204; Oct. 11.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 11TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive applying machine. F. J. Horton and R. W. Lewis. 1,881,590; Oct. 11.
Accounting machine. R. L. Muller. 1,881,856; Oct. 11.
Acid, Isolation of pure alpha-anthraquinone-monosulphonic. R. J. Goodrich and I. Gubelmann. 1,881,498; Oct. 11.
Acid, Sulphuric. C. B. Clark. 1,882,208; Oct. 11.
Acids, Separating halo-benzoic. L. E. Mills. 1,882,335; Oct. 11.
Adhesive, Insulating. A. R. Kemp. 1,882,081; Oct. 11.
Adjustable audience seat. W. C. Urling. 1,881,983; Oct. 11.
Advertising display apparatus. E. A. Bernstein. 1,881,995; Oct. 11.
Advertising display device. H. T. Walton. 1,882,534; Oct. 11.
Aeroplane. S. Helden. 1,882,589; Oct. 11.
Aeroplane construction. L. Gastwirth. 1,882,416; Oct. 11.
Aggregates. Apparatus for producing. R. Hedrick. 1,882,421; Oct. 11.
Air conditioning apparatus for passenger cars. W. B. Whitsitt. 1,882,537; Oct. 11.
Air conditioning control. S. M. Anderson and R. T. Palmer. 1,881,992; Oct. 11.
Aircraft. W. C. Clayton. 1,882,815; Oct. 11.
Aircraft. E. Klahn. 1,881,674; Oct. 11.
Airfoil. E. P. Gaines. 1,881,463; Oct. 11.
Air heating and humidifying apparatus. C. J. Matsch. 1,881,806; Oct. 11.
Airplane. A. Mariani. 1,881,792; Oct. 11.
Airplane. R. A. Reed and H. A. Hicks. 1,882,838; Oct. 11.
Airplane. C. E. Sparhawk. 1,882,199; Oct. 11.
Airplane propeller, Cushioned. S. F. Crumback. 1,882,410; Oct. 11.
Airplane strut. J. F. Wallace. 1,882,849; Oct. 11.
Alarm system. M. A. Miranda. 1,881,832; Oct. 11.
Aldol, Production of. M. Mueller-Cunradi and K. Pieroh. 1,881,853; Oct. 11.
Alloy for electric contact terminals, Metal. G. H. Brady. 1,882,114; Oct. 11.
Aluminum and aluminum alloys, Producing. W. Neumann. 1,881,872; Oct. 11.
Amusement device. J. S. Nairn. 1,881,863; Oct. 11.
Anchor, Packing. J. D. Nixon. 1,882,230; Oct. 11.
Angle-bar bending die. A. Hossfeld. 1,881,592; Oct. 11.
Animal trap. E. A. Nerby. 1,881,871; Oct. 11.
Annular elements to supporting structures, Attaching. A. M. Nelson. 1,881,867; Oct. 11.
Anode, Flexible and adjustable. A. K. Laukel. 1,881,713; Oct. 11.
Anthraquinone derivatives, Manufacture of. F. Lodge and W. W. Tatum. 1,881,751-2; Oct. 11.
Antiinduction shielding system. A. Herz. 1,881,573; Oct. 11.
Anti-slipping attachment for wheels. F. C. Weber. 1,882,376; Oct. 11.
Apple slicing machine. N. G. Papac. 1,881,908; Oct. 11.
Aqueous dispersions and producing same. H. L. Levin. 1,881,729; Oct. 11.
Article inserting machine. D. A. Farrell and J. E. Johnson. 1,881,422; Oct. 11.
Article stacking mechanism. H. A. Morris. 1,881,844; Oct. 11.
Articles, Apparatus for handling. E. J. Larsen. 1,881,706; Oct. 11.
Articles for transportation, Apparatus for securing and bracing. A. L. Manning. 1,881,788; Oct. 11.
Articles with a galvanoplastic body, Joining preformed metallic. G. Rosenquist. 1,882,522; Oct. 11.
Articles with pyroxylin or the like, Coating. W. C. Hampton and C. N. Garber. 1,822,574; Oct. 11.
Arylamides of meta-hydroxy-diarylamine-carboxylic acids and making same. L. Laska and O. Haller. 1,882,286; Oct. 11.
Ash receiver. B. H. Harris and E. F. Craft. 1,881,540; Oct. 11.
Asphalt, Manufacture of. A. Loebel. 1,881,753; Oct. 11.
Augur, Power posthole. A. F. Weiss. 1,882,350; Oct. 11.
Automatic regulator. A. D. MacLean. 1,881,775; Oct. 11.
Automobile axle press. H. Wochner. 1,881,988; Oct. 11.
Automobile heater. G. W. Veale. 1,882,346; Oct. 11.
Automobile lock. W. L. Hawkins. 1,881,552; Oct. 11.
Automobile lock. O. S. Hershey. 1,881,571; Oct. 11.
Aviation motor. C. R. Roche. 1,882,448; Oct. 11.
Awning. L. Kasan. 1,882,425; Oct. 11.
Back pack. E. H. Nichols. 1,882,086; Oct. 11.
Bait, Artificial. J. T. Welch. 1,882,463; Oct. 11.
Bait, Artificial fish. A. V. McKenzie. 1,881,823; Oct. 11.
Ball joint. G. H. Hufferd and M. P. Graham. 1,881,601; Oct. 11.
Bars, Apparatus for annealing. R. B. Hancock. 1,882,141; Oct. 11.
Base for hanging lamps. N. C. H. Muench. Des. 87,936; Oct. 11.
Bases for use in the manufacture of greases. A. Horwitz. 1,881,591; Oct. 11.
Basket and support, Baby. E. G. Hoch and J. A. Levering. 1,881,579; Oct. 11.
Battery: *See*—
Storage battery.
Battery carrier terminal assembly. J. E. Furtney. 1,881,461; Oct. 11.
Battery plate filling machine. W. F. Price and R. H. Beck. 1,882,800; Oct. 11.
Battery tester. B. J. Haskins. 1,882,581; Oct. 11.
Bean nipping machine. B. I. Buck. 1,882,481; Oct. 11.
Bearing assembly, Roller. A. H. Oelkers. 1,882,231; Oct. 11.
Bearing cage, Roller. H. Marles. 1,881,804; Oct. 11.
Bearing construction. F. J. Jarvis. 1,882,497; Oct. 11.
Bearing, Propeller shaft. A. F. Masury. 1,881,800; Oct. 11.
Bearing, Shaft. A. G. F. Wallgren. 1,882,102-3; Oct. 11.
Bearing with a roof, Oil bath. B. G. Goble. 1,882,492; Oct. 11.
Beetle trap. F. A. Braun. 1,882,380; Oct. 11.
Belt, Safety. F. R. Davis. 1,882,381; Oct. 11.
Binder, Loose leaf. J. Potts. 1,881,930; Oct. 11.
Binder, Ring. A. G. Lotter. 1,882,510; Oct. 11.
Bit: *See*—
Drill bit.
Bituminous mixture for expansion joints and general construction work. A. C. Fischer. 1,881,436; Oct. 11.
Blackboard, Portable. J. F. Johnson and B. B. Lawton. 1,881,636; Oct. 11.
Blade for hack saws. H. Kinkel. 1,882,328; Oct. 11.
Blades for tobacco stemming machines, Butting. C. W. Gooch and A. J. Marcotte. 1,881,496; Oct. 11.
Blasting apparatus. A. W. Helmholtz and D. Ferrell. 1,881,564; Oct. 11.
Block: *See*—
Flashing block. Toy building block.
Blocks, Forming self baking insulation. E. R. Powell. 1,881,932; Oct. 11.
Blocks of earthy material, Bloating and annealing. O. W. Storey. 1,882,046; Oct. 11.
Blooms, slabs and billets, Making. H. M. Naugle and A. J. Townsend. 1,882,516; Oct. 11.
Board, Apparatus for making pulp. H. C. Harvey. 1,881,548; Oct. 11.
Body assembling apparatus. O. J. Groehn, L. L. Mitchell, and C. McCurley. 1,881,519; Oct. 11.
Body panels, Method and apparatus for forming. O. J. Groehn. 1,881,517; Oct. 11.
Boiler: *See*—
Rotating boiler. Steam boiler.
Boiler construction. F. J. Curran. 1,882,210; Oct. 11.
Boiler construction. F. J. Curran. 1,882,240; Oct. 11.
Boiler, especially marine boiler with indirect generation of the working steam, Steam. O. H. Hartmann. 1,881,545; Oct. 11.
Boiler with water wall tubes. L. W. Heller. 1,882,422; Oct. 11.
Bolt lock. C. H. Nehls. 1,881,866; Oct. 11.
Bookbinding machine. E. R. Seiter. 1,882,044; Oct. 11.
Bookholder. W. V. Johnson. 1,882,639; Oct. 11.
Book, Manifolding sales. L. Huffman. 1,882,384; Oct. 11.
Boot, Adjustable. R. Klomparens. 1,881,679; Oct. 11.
Bottle making machine. J. L. Bacon and F. H. Lobb. 1,882,172; Oct. 11.
Bottle-type water cooler. S. J. Benn. Des. 87,902; Oct. 11.
Bowl classifier. H. W. Newton. 1,881,875; Oct. 11.
Bowl, Drinking fountain. A. G. Haws. Des. 87,919; Oct. 11.
Box: *See*—
Cutter box. Journal box.
Fire alarm succession box.
Box-easel picture frame. G. M. Minton. 1,882,157; Oct. 11.
Bracing means for shaper rams. H. E. Morton. 1,882,158; Oct. 11.
Bracing units, Forming hollow. H. Woodhead and C. W. Stover. 1,882,352; Oct. 11.
Bracket. E. B. Brittin. 1,882,479; Oct. 11.
Bracket device, Drapery. Z. A. Stanley. 1,882,527; Oct. 11.

Brake: *See*—
Friction brake.
Brake. J. Whyte. 1,882,050; Oct. 11.
Brake and locking mechanism, Safety and emergency bumper. J. Gentile. 1,882,138; Oct. 11.
Brake beam support. E. G. Busse. 1,882,239; Oct. 11.
Brake for centrifugal machines. E. Roberts. 1,882,037; Oct. 11.
Brake relining machine. H. B. Barrett. 1,882,109; Oct. 11.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,882,544; Oct. 11.
Brake testing device. C. F. Cowdrey. 1,882,356; Oct. 11.
Brassière. H. Malnick. 1,882,023; Oct. 11.
Broach. F. J. Lapointe. 1,881,705; Oct. 11.
Bromination products of the dibenzanthrone series. M. A. Kunz and K. Koeberle. 1,882,285; Oct. 11.
Brooders, Apparatus for heating. O. W. Swanson. 1,882,342; Oct. 11.
Brush, Bottle. A. Hannaford. 1,882,576; Oct. 11.
Brush, Hair. A. W. Lenfestey. 1,881,726; Oct. 11.
Brush support for floor machines. W. S. Finnell. 1,881,432; Oct. 11.
Bucket, Clam. J. W. and W. E. Emerick. 1,882,489; Oct. 11.
Bucket, Dragline excavating. O. R. and W. G. Humphreys. 1,882,147; Oct. 11.
Buckle. F. Mashek. 1,881,799; Oct. 11.
Buckle and making same, Tongue. T. Russell. 1,882,369; Oct. 11.
Buckle, Belt. G. R. Blickhahn. 1,882,475; Oct. 11.
Buckle, Foldable bracelet. C. H. Patten. 1,881,918; Oct. 11.
Bumper grinding machine. C. H. Homan. 1,881,629; Oct. 11.
Burner: *See*—
Oil burner.
Bushing attachment for valve grinding. B. H. Hawkins. 1,881,551; Oct. 11.
Button, Tufting. J. J. and N. H. Perlman. 1,881,962; Oct. 11.
Cabinet, Amusement machine. J. F. Meyer. Des. 87,934; Oct. 11.
Cabinet, Display. F. S. Upham. 1,882,345; Oct. 11.
Cabinet for cigars, etc., Dispensing. A. B. Valas. 1,882,168. Oct. 11.
Cage. C. H. Hennings. 1,882,142; Oct. 11.
Cake icing machine. J. R. Litty and T. B. Lundin. 1,881,747; Oct. 11.
Calculating machine. F. O. Mueller. 1,881,852; Oct. 11.
Calf weaner. C. C. Quinn. 1,882,232; Oct. 11.
Cam milling machine. N. M. Marsilius. 1,881,794; Oct. 11.
Camera back and negative frame. A. B. Mueller. 1,882,293; Oct. 11.
Cameras, Lap dissolver for motion picture. F. H. Owens. 1,881,904; Oct. 11.
Canopy stem. R. S. Aspinwall. 1,882,312; Oct. 11.
Cap and fastener, Shaker bag. E. J. Kunkely. 1,882,221; Oct. 11.
Cap, Automobile radiator. A. F. Masury. Des. 87,931; Oct. 11.
Cap for collapsing tubes, Self closing. G. A. Gleason. 1,881,488; Oct. 11.
Cap or closure for receptacles. L., J. E., and W. H. Davidson. 1,882,180; Oct. 11.
Cap, Radiator. G. A. Johnson. Des. 87,925; Oct. 11.
Cap, Radiator. K. E. Stant. 1,882,097; Oct. 11.
Capping machine. J. H. Leahy. 1,882,330; Oct. 11.
Carbonaceous material particularly solid fuel such as coal, Hydrogenating solid. A. Potts and H. Broche. 1,881,927; Oct. 11.
Carnation. A. B. Shaw. Pl. Pt. 34; Oct. 11.
Carburetor. D. Firth. 1,881,433; Oct. 11.
Carburetor. F. H. Heitger. 1,881,558; Oct. 11.
Carburetor. F. H. Heitger. 1,881,560–6; Oct. 11.
Carburetor heat control. F. Purdy. 1,881,940; Oct. 11.
Car propeller for tunnel kilns. F. O. Millar and W. C. Denison, jr. 1,881,628; Oct. 11.
Car, Railway. C. Hankins. 1,882,186; Oct. 11.
Car type furnace. J. H. Knapp. 1,881,683; Oct. 11.
Car vestibule diaphragm. H. U. Morton. 1,881,850; Oct. 11.
Cars, Parking. R. A. Fessenden and H. K. Wheeler. 1,882,183; Oct. 11.
Carnation. A. B. Shaw. Pl. Pt. 34; Oct. 11.
Carrying device for subaqueous sound apparatus. W. Rudolph. 1,881,972; Oct. 11.
Carton. T. H. Gagen. 1,881,464; Oct. 11.
Cartridge, Heating. B. L. Lubelsky. 1,882,365; Oct. 11.
Case: *See*—
Display case. Key case.
Egg case.
Casing remover, Tire. H. A. Cherry. 1,882,118; Oct. 11.
Casing, Weighing machine. B. B. Rochestie. Des. 87,942; Oct. 11.
Casings of electrical apparatus with inert atmospheres, Method and apparatus for providing the. T. T. Greenwood. 1,881,510; Oct. 11.
Cathode, Electron discharge. L. L. Jones. 1,881,644; Oct. 11.
Cellulose compounds, Manufacture of new. L. Lilienfeld. 1,881,741; Oct. 11.
Cellulose esters, Manufacture of. H. Gault and B. M. R. Angla. 1,882,551; Oct. 11.
Cementing head. J. E. Trouth. 1,882,099; Oct. 11.
Centrifugal device for electric motors. C. H. Kindl. 1,881,666; Oct. 11.
Centrifugal machine. V. W. MacIsaac. 1,882,390; Oct. 11.
Centrifugal machine, Continuous discharge. W. Hallitt. 1,882,383; Oct. 11.
Centrifugal separator. V. W. MacIsaac. 1,882,389; Oct. 11.
Ceramic articles, Process and apparatus for casting. B. S. Purinton. 1,882,191; Oct. 11.
Chain and making same, High speed. M. G. Jewett. 1,881,631; Oct. 11.
Chain for personal adornment. K. Fassnacht. Des. 87,910; Oct. 11.
Chains for soldering and a composition of matter used in such preparation, Preparing. J. E. Pilling. 1,881,970; Oct. 11.
Chair: *See*—
Reclining chair.
Chair. T. R. Hayes. 1,882,585; Oct. 11.
Chair attachment. C. F. Thompson. 1,882,264; Oct. 11.
Chalice. W. H. Achurch. Des. 87,900; Oct. 11.
Change speed wheel. F. W. James. 1,882,627; Oct. 11.
Charge forming device. P. Koehly and G. I. Delaplane. 1,881,686; Oct. 11.
Charge heating control for internal combustion engines, Automatic. F. H. Heitger. 1,881,562; Oct. 11.
Check-controlled apparatus for vending machines. O. D. Jennings and C. B. Gilmore. 1,882,634; Oct. 11.
Check entrance for check controlled apparatus. A. A. Knee. 1,882,504; Oct. 11.
Chin rest and pipe support, Combined. W. C. Lambert. 1,881,701; Oct. 11.
Chin rest, Shampoo. H. R. Jackson. 1,882,624; Oct. 11.
Chromium plating process. W. Noble and C. J. Welcome. 1,881,886; Oct. 11.
Chuck. D. Kelleher and W. D. Bartlett. 1,881,658; Oct. 11.
Chuck. D. C. Page and G. D. Scott. 1,881,905; Oct. 11.
Cigar tip perforator. R. T. Cameron. 1,882,273; Oct. 11.
Circuit and polarity tester. W. A. Froeckman. 1,881,457; Oct. 11.
Circuit for electrical discharge apparatus. C. R. Keith. 1,881,657; Oct. 11.
Circuit for simplex printers, Concentration. G. G. Light. 1,881,739; Oct. 11.
Circuit, Telegraph receiving or repeating. A. E. Frost. 1,881,458; Oct. 11.
Circuit, Transmission. D. G. Grimley. 1,881,515; Oct. 11.
Circuits, Transmission control. H. L. Jones and E. A. Veazie. 1,881,642; Oct. 11.
Clamp: *See*—
Lamp clamp. Welding clamp.
Clamp. N. C. Payne. 1,882,297; Oct. 11.
Clamp. M. Stupar and G. A. Page, jr. 1,882,305; Oct. 11.
Clamp and holding device with hook. D. B. Klinetob. 1,881,677; Oct. 11.
Clamp for metallic roof coverings, Movable. E. Wender. 1,882,105; Oct. 11.
Clamping device for building foundations. J. F. Loucks. 1,881,760; Oct. 11.
Clamping means. P. J. Cannon. 1,882,483; Oct. 11.
Clasp. G. H. Fisher and F. S. Fisher. 1,881,442; Oct. 11.
Cleaner: *See*—
Suction cleaner. Tube end cleaner.
Tooth cleaner. Window cleaner.
Tube cleaner.
Cleaner and pin carrier, Clothes line. J. E. Boland and M. C. Vivian. 1,882,174; Oct. 11.
Cleaning device for clarifiers, Automatic. W. C. Laughlin. 1,881,712; Oct. 11.
Clip: *See*—
Soft collar clip.
Clip. E. C. Kastner. 1,881,653–4; Oct. 11.
Clip. S. J. Lavezzi. 1,881,716; Oct. 11.
Clipper, Fruit. L. M. Harvey. 1,882,218; Oct. 11.
Clipper, Tapered tooth. M. F. MaRean. 1,882,155; Oct. 11.
Clock case. F. J. Abel. Des. 87,950; Oct. 11.
Cloth, Cleaning and polishing. F. A. Daly. 1,882,179; Oct. 11.
Clothesline, Pinless. D. Eldridge. 1,882,126; Oct. 11.
Clutch, Automatic. C. L. Putney. 1,881,941; Oct. 11.
Clutch, Centrifugal. J. A. Granstedt. 1,882,418; Oct. 11.
Clutch device. A. Levedahl. 1,881,728; Oct. 11.
Clutch, Overload. E. V. Johnson. 1,881,633; Oct. 11.
Coal, Apparatus for carbonization of. J. D. McQuade. 1,881,826; Oct. 11.
Coal cutting machine. N. D. Levin. 1,881,730; Oct. 11.
Coating for alimentary products, Dry. H. M. Blinn. 1,882,476; Oct. 11.
Cocoa butter, Extraction of. I. S. Hocker. 1,882,013; Oct. 11.
Coffee maker. S. A. Haines. 1,882,140; Oct. 11.
Coffee maker or similar article. R. E. Patten. Des. 87,939–40; Oct. 11.
Coffee making machine. S. Mezzapesa. 1,882,226; Oct. 11.
Coil, Choke. P. Taetz. 1,882,201; Oct. 11.
Coil, Ignition. B. H. A. Wallenta. 1,882,460; Oct. 11.
Collar form preserver. J. Kashman. 1,882,622; Oct. 11.
Collar snubbers, Making. W. O. Dailey. 1,882,242; Oct. 11.
Commodity vending machine. F. L. Mills. 1,881,831; Oct. 11.

Commutator segments, Apparatus for sorting. J. Q. Holmes. 1,881,584; Oct. 11.
Composite article. G. A. Gros. 1,881,520; Oct. 11.
Composition of matter. E. H. Hyde. 1,882,618; Oct. 11.
Compressor, Pneumatic lubricant. N. W. Morse. 1,881,847; Oct. 11.
Conditioning system for cold storage rooms. M. E. Pennington. 1,882,030; Oct. 11.
Conductivity, Means to improve. F. E. Heatwole. 1,882,587; Oct. 11.
Conductor, Continuously loaded communication. J. J. Gilbert. 1,881,480; Oct. 11.
Conduit and coupling for same, Laying multiple. H. Parker. 1,881,913; Oct. 11.
Conduit, Choke-wire. J. A. Kennedy. 1,882,826; Oct. 11.
Conduit connecter. R. L. Lauer. 1,882,021; Oct. 11.
Confection baking device. W. S. Keyting. 1,882,363; Oct. 11.
Confection, Frozen. M. C. Meagher. 1,882,290; Oct. 11.
Confections, Apparatus for making frozen. E. M. Peterson. 1,881,965; Oct. 11.
Connecter for milking machines, Pneumatic and electric. C. H. Hapgood. 1,882,320; Oct. 11.
Connecters, Manufacturing. J. M. Nickelson. 1,881,877; Oct. 11.
Connecting rod assembly. G. R. Poyer. 1,882,092; Oct. 11.
Constructional material. A. C. Fischer. 1,881,440; Oct. 11.
Container for batteries or the like. P. F. Boeye. 1,882,565; Oct. 11.
Container-piercing mechanism. J. N. Hunter. 1,881,608; Oct. 11.
Container with opening equipment. M. E. Rauber and C. L. Rogers. 1,882,094; Oct. 11.
Control for fire extinguishing apparatus. M. A. Laswell. 1,881,709; Oct. 11.
Control for oil burners. C. L. Rayfield. 1,881,949; Oct. 11.
Control mechanism. C. E. Mason. 1,881,798; Oct. 11.
Control mechanism for hopper car doors. H. S. Hart. 1,882,217; Oct. 11.
Control mechanism for turning machines. C. L. Mattison. 1,881,802; Oct. 11.
Control system. H. S. Pardee. 1,881,909; Oct. 11.
Control system, Automatic. A. C. Singer. 1,882,234; Oct. 11.
Controller for motor driven machines. P. B. Harwood and C. Stansbury. 1,882,219; Oct. 11.
Conveyer and associated control mechanism, Case. J. J. Mojonnier. 1,882,436; Oct. 11.
Conveyer, Counting. S. Olson. 1,881,897; Oct. 11.
Conveyer mechanism. H. C. Keller and M. Van Billiard. 1,881,514; Oct. 11.
Conveyer, Portable. A. L. Shaw. 1,882,096; Oct. 11.
Conveyer roll. S. Olson. 1,881,896; Oct. 11.
Conveyer switching system. S. Olson. 1,881,895; Oct. 11.
Conveyer system, Restaurant service. S. Olson. 1,881,898; Oct. 11.
Cooler: *See*—
Water cooler.
Cooling system. D. T. MacLeod. 1,881,776; Oct. 11.
Cooling system for beverage dispensing apparatus. W. E. Leibing. 1,881,725; Oct. 11.
Copyholder for typewriters. G. Laurence. 1,881,715; Oct. 11.
Cord runner. H. E. Oleson. 1,881,892; Oct. 11.
Core for textiles. H. Parker. 1,881,911; Oct. 11.
Corn picker, Two row. J. H. Gentry. 1,881,470; Oct. 11.
Corner bend in composite panels and forming same. G. K. Lewis. 1,881,734; Oct. 11.
Corner reenforcement. G. D. and H. C. Mathers. 1,881,805; Oct. 11.
Corselette. P. J. Moran. 1,882,292; Oct. 11.
Coupler, Car. W. Kelso. 1,881,662; Oct. 11.
Coupling: *See*—
Pipe coupling.
Coupling for fiber pipe. H. Parker. 1,881,915; Oct. 11.
Coupling for relatively movable members. R. F. Peo. 1,881,959; Oct. 11.
Cover for spare automobile tires. G. A. Lyon. Re18,619; Oct. 11.
Cover, Ironing board. N. N. Sundby. 1,881,977; Oct. 11.
Cover, Seat. H. G. Wedler. 1,882,169; Oct. 11.
Cover, Seat. E. Wittcoff. 1,882,468; Oct. 11.
Cover with wire mesh center shield, Tire. R. W. Lewis. 1,881,735; Oct. 11.
Covering for articles of furniture, Protective. C. E. Friesner. 1,881,454; Oct. 11.
Covering for walls. E. F. Thulin. 1,882,529; Oct. 11.
Covers for receptacles. H. G. Kuck and T. J. Abele. 1,881,694; Oct. 11.
Craft, Flying. J. E. Lesh and J. W. Hohl. 1,882,387; Oct. 11.
Crane, Traveling. D. and E. H. Kendall. 1 882,325; Oct. 11.
Crank. C. McC. Wellons. 1,882,208; Oct. 11.
Crank for internal combustion engines, Starting. C. Heuner. 1,882,594; Oct. 11.
Crate, Folding. F. H. Warren. 1,882,048; Oct. 11.
Crawler tread mechanism. G. C. Jett. 1,881,630; Oct. 11.
Creasing and folding machine. G. A. Ungar. 1,882,531; Oct. 11.
Crossing signal, Railroad. F. W. Griswold. 1,881,516; Oct. 11.
Culinary apparatus. N. Emmons, 3d. 1,882,127; Oct. 11.
Cupboard. E. Everson. 1,882,277; Oct. 11.
Cupboard for kitchenettes. C. F. Berry. 1,882,540; Oct. 11.
Curtain, dust guard and drapery holding bracket, Combination. R. H. Hummert. 1,881,605; Oct. 11.
Curtain fixture. G. B. Jenkinson. 1,881,627; Oct. 11.
Curtain plaiting and hanging device. B. Wilson. 1,882,549; Oct. 11.
Curtain rod threading device. M. Mitchell. 1,881,835; Oct. 11.
Curtain roller. H. H. Hendrickson. 1,882,592; Oct. 11.
Cut-off device for gas burners, Safety. A. Lundius and O. Dietrichson. 1,881,766; Oct. 11.
Cut-out, Automatic. J. J. Coughlin, jr. 1,882,275; Oct. 11.
Cutter: *See*—
Stalk cutter.
Cutter and clamp for shuttles, Thread. O. V. Payne. 1,881,923; Oct. 11.
Cutter box. E. H. Lewandowski. 1,881,731; Oct. 11.
Cutter for shuttles, Thread. O. V. Payne. 1,881,921; Oct. 11.
Cutting and loading machine. F. A. Lindgren. 1,881,744; Oct. 11.
Damper, Vibration. M. P. Graham and G. H. Hufferd. 1,881,504; Oct. 11.
Damping device. W. R. Griswold. 1,882,280; Oct. 11.
Delivery and loading means for bakery products or the like. C. Brykczynski and J. Chmurzynski. 1,882,238; Oct. 11.
Detector: *See*—
Moisture detector.
Detergent. H. L. Gray. 1,881,506; Oct. 11.
Device for connecting and switching the windings of dynamos. E. Rosenberg. 1,882,162; Oct. 11.
Diazo-amino compound, Water soluble. E. Glietenberg, W. Neelmeier, and J. Haller. 1,882,562; Oct. 11.
Die: *See*—
Angle bar bending die.
Digger: *See*—
Potato digger.
Dimming device, Automatic. J. Gstyr and E. Wildhaber. 1,881,521; Oct. 11.
Dipper trip and monkey-line winder, Semiautomatic. G. G. Morin. Re18,617; Oct. 11.
Direction indicator. R. A. Johannessen. 1,881,632; Oct. 11.
Discharge device, Electron. S. Ruben. 1,882,449; Oct. 11.
Discharge tube. E. Oosterhuis and J. G. W. Mulder. 1,882,032; Oct. 11.
Dispenser, Condiment. J. G. Rossiter. Des. 87,943; Oct. 11.
Dispenser, Magazine cup. H. H. Olsen. 1,881,894; Oct. 11.
Dispenser, Measuring. W. H. Haupt. 1,882,583; Oct. 11.
Dispenser, Paste. H. Glaser. 1,882,358; Oct. 11.
Display case. G. C. Hilton. Des. 87,922; Oct. 11.
Display case. M. L. Webster. 1,881,986; Oct. 11.
Display case, Illuminated. C. W. Kanolt. 1,882,647; Oct. 11.
Display sheet. M. Lichter. 1,881,736; Oct. 11.
Display stand. J. L. Larkin. 1,881,707; Oct. 11.
Distilling. W. T. Hall. 1,882,568; Oct. 11.
Distributing comminuted material, Apparatus for. L. Powell. 1,881,933; Oct. 11.
Door, Box car. M. H. Owen. 1,882,029; Oct. 11.
Door, Car. J. P. McWilliams and F. Ditchfield. 1,881,827; Oct. 11.
Door elevating means, Car. C. Lute. 1,881,768; Oct. 11.
Doorlock. H. Junkers. 1,882,643; Oct. 11.
Door, Mirror-equipped cabinet. B. M. Hess. 1,881,576; Oct. 11.
Door panel construction. S. Madsen. 1,881,778; Oct. 11.
Door structure, Disappearing. A. Vanderveld. 1,882,375; Oct. 11.
Dose measuring device for liquid dispensing containers. G. H. Maas. 1,881,772; Oct. 11.
Dough cutting mechanism. L. Giuffre. 1,882,139; Oct. 11.
Dough molding machine. J. Paris. 1,882,160; Oct. 11.
Draft apparatus, Induced. H. W. Pfeffer. 1,882,539; Oct. 11.
Drawing furnace. J. H. Knapp. 1,881,682; Oct. 11.
Dress. J. Kohn. Des. 87,927; Oct. 11.
Drier: *See*—
Steam cylinder drier.
Drill. J. M. Hargrave. 1,881,535; Oct. 11.
Drill bit. B. K. Appleman. 1,882,268; Oct. 11.
Drill bit, Rotary. L. M. Brigham. 1,882,545; Oct. 11.
Drill coverer, Corn. M. O. Honer. 1,882,603; Oct. 11.
Drill jar. J. N. Kaumans and E. Bridges. 1,882,149; Oct. 11.
Drink dispenser. S. T. Dare. Des. 87,907; Oct. 11.
Drive mechanism for gas meters, Compensating. A. Herz. 1,881,572; Oct. 11.
Driving and actuating mechanism of butter churns. J. J. O'Connell and H. H. Kerr. 1,882,296; Oct. 11.
Driving mechanism. A. L. Ellis. 1,882,004; Oct. 11.
Dyeing preparation. J. Haller, E. Glietenberg, and W. Hentrich. 1,882,561; Oct. 11.
Dyestuffs and making them, Sulphur containing vat. K. Thiess and F. Münnchen. 1,882,263; Oct. 11.

Dyestuffs, Manufacture of water-insoluble azo. E. Glietenberg, W. Neelmeier, and J. Haller. 1,882,500; Oct. 11.
Dyestuffs of the anthraquinone series, Manufacture of vat. M. A. Kunz. 1,881,697; Oct. 11.
Dyestuffs, Preparing azo. W. Hentrich and C. Taube. 1,882,556; Oct. 11.
Earth electrode meter. S. W. Borden. 1,882,113; Oct. 11.
Educational device. E. G. Hanks. 1,882,575; Oct. 11.
Egg case. F. H. Sherman. 1,882,524; Oct. 11.
Ejector fork. T. S. Hutchison. 1,882,246; Oct. 11.
Elastic webbing for cutting, Preparing. G. H. Jung, jr. 1,882,642; Oct. 11.
Electric control. W. Noble. 1,881,882; Oct. 11.
Electric discharge device. A. R. Olpin. 1,881,891; Oct. 11.
Electric furnace, Induction. E. F. Northrup. 1,881,888; Oct. 11.
Electric iron. F. Kuhn and L. H. Thomas. 1,881,695–6; Oct. 11.
Electric soldering iron. Z. Kuriyama. 1,881,698; Oct. 11.
Electric switch. G. H. Elwell. 1,882,245; Oct. 11.
Electric time switch. A. Hipp. 1,882,495; Oct. 11.
Electrical appliance. R. C. Johnson. 1,882,385; Oct. 11.
Electrical control device. V. G. Leach. 1,881,719; Oct. 11.
Electrical control systems, Apparatus for. A. J. Sorensen. 1,882,404; Oct. 11.
Electrocardiograph. R. H. Kruse. 1,882,402; Oct. 11.
Electrode coating and method of welding. C. H. Hollup. 1,882,601; Oct. 11.
Electrode, High speed welding. J. B. Austin. 1,882,311; Oct. 11.
Electro-luminous display. C. S. Howe. 1,882,609; Oct. 11.
Electrolytic reproduction. A. K. Laukel. 1,881,714; Oct. 11.
Electron emission tubes, Activation and reactivation of. L. L. Jones, J. A. Flanzer, and E. Reisman. 1,881,645; Oct. 11.
Electrooptical device. H. E. Ives. 1,881,616; Oct. 11.
Elevator: *See*—
Marine elevator.
Embalming instrument. A. O. Spriggs. 1,882,235; Oct. 11.
Emblem or similar article. G. W. Graves. Des. 87,917; Oct. 11.
Emulsions, Process and reagent for treating. J. O. Peirce and L. D. Myers. 1,882,444; Oct. 11.
Engine: *See*—
Gas engine. Internal-combustion engine.
Engine hood construction. E. R. Gurney. 1,882,319; Oct. 11.
Engine with solid fuel injection, Internal combustion. O. Simmen. 1,882,165; Oct. 11.
Engraving and other machine. G. and G., 3d. Gorton. 1,881,500; Oct. 11.
Engraving and routing machine. M. W. Haynes. 1,882,586; Oct. 11.
Esters, Production of. R. Held and M. Luther. 1,881,563; Oct. 11.
Ethers of glycol, Production of mono alkyl. S. F. Birch and W. D. Scott. 1,882,564; Oct. 11.
Evaporator for refrigerating systems. R. W. Davenport. Re18,621; Oct. 11.
Excavating machinery. R. Ljungkull. 1,881,748; Oct. 11.
Excavating system. G. L. Lillard. 1,881,743; Oct. 11.
Exhauster for sprinkler fire extinguishing systems. W. B. Griffith. 1,881,513; Oct. 11.
Expansion joint. A. C. Fischer. 1,881,437; Oct. 11.
Explosive. G. A. Pritchett. 1,882,190; Oct. 11.
Explosive mixture heating control. D. Firth. 1,881,434; Oct. 11.
Extractor: *See*—
Fruit juice extractor.
Eyeglass lens. W. R. Uhlemann. 1,881,982; Oct. 11.
Fabrics, Adhering. A. C. Fischer. 1,881,435; Oct. 11.
Fabricated metal grand stand. R. E. Jones. 1,882,148; Oct. 11.
Face massaging instrument. N. N. Schroeder. 1,882,370; Oct. 11.
Fan traveling. C. L. Lytton. 1,882,366; Oct. 11.
Fastener. B. P. Holsberg. 1,882,496; Oct. 11.
Fastener-inserting machine. M. D. Phelan. 1,882,031; Oct. 11.
Fastening device. A. H. Tinnerman. 1,882,306; Oct. 11.
Fastening device for bag frames. A. Waechter. 1,882,101; Oct. 11.
Fastening or holding device. B. B. Hoppe. 1,883,604; Oct. 11.
Featherweight pipe. F. N. Mariani. 1,881,793; Oct. 11.
Feed device, Automatic. J. S. Hardiman. 1,882,578; Oct. 11.
Feeder, Chicken. G. F. Alwin. 1,882,353; Oct. 11.
Feeder, Hog. G. W. and M. McCollough. 1,881,820; Oct. 11.
Ferro-phosphorus low in or practically free from silicon, Production of. M. Neumark, H. Weidmann, and G. Roesner. 1,882,517; Oct. 11.
Fibrous material and making same. J. A. De Cew. 1,882,212; Oct. 11.
Filing device. F. L. G. Straubel. 1,882,457; Oct. 11.
Filler. E. Mallinckrodt, jr. 1,881,784; Oct. 11.
Filling machine. G. J. Meyer. 1,882,225; Oct. 11.
Film developing system. T. M. Ingman, F. E. Garbutt, and J. T. Barkelew. 1,881,612; Oct. 11.
Filter. O. Hennings. 1,882,078; Oct. 11.
Filter arrangement, Electric. A. Jaumann. 1,882,631; Oct. 11.
Filtering apparatus. J. L. Stevens. 1,882,045; Oct. 11.
Finishing machine. F. B. Keall. 1,881,656; Oct. 11.
Fire alarm succession box. E. A. Faller. 1,882,071; Oct. 11.
Fire escape, Rotary. S. S. Hirschman. 1,882,145; Oct. 11.
Fire prevention device for cinematographic film apparatus. F. Cowie. 1,882,276; Oct. 11.
Fish diverter for irrigation ditches, flumes, natural waterways and the like. H. T. Burkey. 1,882,482; Oct. 11.
Fish lure. E. W. Rawdon. 1,881,947; Oct. 11.
Fixture support. S. N. Buchanan. 1,881,998; Oct. 11.
Flashing block. H. A. Sanders. 1,882,192; Oct. 11.
Floating and cementing shoe. C. E. Burt. 1,882,314; Oct. 11.
Floor machine. W. S. Finnell. 1,881,431; Oct. 11.
Floor polishing machine. C. H. Beach. 1,882,270; Oct. 11.
Floor polishing machine. C. H. Beach. 1,882,471; Oct. 11.
Flow and pressure indicating means. H. M. Nacey 1,881,862; Oct. 11.
Fluid meter. H. E. Hartig and H. B. Wilcox. 1,881,543; Oct. 11.
Flux, Soldering. A. J. Saukaitis. 1,882,567; Oct. 11.
Fog training device for airplanes. W. C. Ocker. 1,882,087; Oct. 11.
Foil and attaching same, Metal. S. Greenhouse. 1,882,359; Oct. 11.
Folding gate. M. Martinek. 1,882,331; Oct. 11.
Folding mechanism. H. Howe. 1,882,610; Oct. 11.
Food mixer. G. N. Fryer. Des. 87,914; Oct. 11.
Food server. L. Z. Newcomb. 1,881,873; Oct. 11.
Forging machine, Automatic. H. F. Johnson. 1,882,362; Oct. 11.
Fork: *See*—
Ejector fork.
Form, Cable grip. E. E. Kellems. 1,881,659; Oct. 11.
Form for rolling mills, Constructional. R. Kronenberg. 1,882,507; Oct. 11.
Form for setting metal windows in concrete, Adjustable. A. Roedig. 1,881,971; Oct. 11.
Form support and spacer, Combined. W. J. Ferry. 1,882,006; Oct. 11.
Frame: *See*—
Box-easel picture frame. Window frame.
Picture frame.
Fraud preventing means for coin-controlled mechanism. A. A. Knee. 1,882,502; Oct. 11.
Fraud preventive check entrance. A. A. Knee. 1,882,506; Oct. 11.
Fraud preventive means, Check operated. A. A. Knee. 1,882,505; Oct. 11.
Fraud preventive means for check controlled apparatus. Automatic. A. A. Knee. 1,882,503; Oct. 11.
Freesia. G. H. Dalrymple. Pl. Pt. 32; Oct. 11.
Freezing mold. E. R. Meyer. 1,881,817; Oct. 11.
Freezing structure, Sharp. L. G. Copeman. 1,882,209; Oct. 11.
Frequency control method and system. W. A. Marrison. 1,881,810; Oct. 11.
Frequency controlled mechanism. W. Koenig. 1,882,428; Oct. 11.
Frequency indicator. G. W. Pierce. 1,882,395; Oct. 11.
Friction brake. E. L. Blake. 1,882,173; Oct. 11.
Friction grip for drilling machines. A. Hossfeld. 1,881,593; Oct. 11.
Fruit juice extractor. M. D. Cody. 1,882,065; Oct. 11.
Fruit washer. S. Hynes. 1,881,611; Oct. 11.
Fuel, Dehydrating moist. M. Pier and K. Wissel. 1,881,968; Oct. 11.
Fuel gasifier, Liquid. H. V. A. Ferguson. 1,881,425; Oct. 11.
Fuel pulverizing system. H. Kreisinger. 1,882,329; Oct. 11.
Fuel regulating device for gas ovens. R. W. Johnson. 1,881,637; Oct. 11.
Fuels, Apparatus for producing gaseous. C. A. Rosler. 1,882,041; Oct. 11.
Furnace: *See*—
Car type furnace. Electric furnace.
Drawing furnace. Industrial furnace.
Furnace. W. J. Assel. 1,882,470; Oct. 11.
Furnace. G. R. Lewers. 1,881,782; Oct. 11.
Furnace charging device. S. E. McQuigg. 1,882,224; Oct. 11.
Furnace control, Heating. R. W. Stem. 1,882,341; Oct. 11.
Furnace control, Motor actuated. A. Penn. 1,881,955; Oct. 11.
Furnace for stills, etc. G. W. King. 1,881,667; Oct. 11.
Furnace humidifier. R. Klomparens. 1,881,678; Oct. 11.
Game. L. W. Mulvey. 1,882,294; Oct. 11.
Game board. J. Cuchran and H. Hinterkopf. Des. 87,906; Oct. 11.
Game board. J. E. Markle. Des. 87,930; Oct. 11.
Game board. R. H. Osbrink. Des. 87,938; Oct. 11.
Garment pressing machine. A. J. Hoffman. 1,881,581; Oct. 11.
Garter. J. Mieres. 1,882,250; Oct. 11.
Gas engine, Two-cycle. M. T. Holloway. 1,881,582; Oct. 11.
Gas mixtures, Process and apparatus for the separation of. P. Gmelin and A. Knodel. 1,881,490; Oct. 11.

Gas operated switch. M. A. Laswell. 1,881,710; Oct. 11.
Gas range. J. E. Leonard. Des. 98,028; Oct. 11.
Gases carrying solids in suspension, Distributor for. E. G. Bailey. 1,882,056; Oct. 11.
Gases, Purification of. E. J. Lush. 1,882,289; Oct. 11.
Gasket device. L. A. Weston. 1,882,308; Oct. 11.
Gate: *See*—
Folding gate.
Gauge. F. Judge. 1,881,651; Oct. 11.
Gauging machine. S. A. Strickland. 1,882,374; Oct. 11.
Gear, Disconnecting. E. Nibbs. 1,881,876; Oct. 11.
Gear shifting mechanism. J. H. McCarthy. 1,881,819; Oct. 11.
Gear, Spiral. S. J. Sanford. 1,882,302; Oct. 11.
Gearing, Hydraulic variable speed. F. A. Gerling. 1,881,471; Oct. 11.
Gears for co-axial shafts, Reducing. G. Pirinoli. 1,882,033; Oct. 11.
Giborium. W. H. Achurch. Des. 87,899; Oct. 11.
Glass: *See*—
Safety glass.
Glass, Apparatus and method of drawing. A. E. Spinasse. 1,882,262; Oct. 11.
Glass feeder, Pneumatic. R. Good. 1,882,076; Oct. 11.
Glass heater. J. M. Neill. 1,882,337; Oct. 11.
Glassware forming machine, Suction gathering. E. H. Lorenz. 1,882,548; Oct. 11.
Glassware, Method of and apparatus for forming. E. H. Lorenz. 1,882,547; Oct. 11.
Glove, Washing, cleaning and polishing. H. Heath. 1,882,588; Oct. 11.
Glycerine, Distillation of fermentation. J. W. Lawrie. 1,881,718; Oct. 11.
Goblet or similar article. R. C. Diebenkorn. Des. 87,908; Oct. 11.
Goblet or similar article. W. C. McCartney. Des. 87,932; Oct. 11.
Golf club. H. C. Lagerblade. 1,882,509; Oct. 11.
Golf game, Parlor. H. H. Hallatt. 1,882,569; Oct. 11.
Golf shaft, Making a. H. C. Lagerblade. 1,882,151; Oct. 11.
Golf strokes, Device for practicing. L. A. Yaggi. 1,881,991; Oct. 11.
Grader, Bank. W. Lehman. 1,882,079; Oct. 11.
Grain cleaner and loader. O. N. Gredell. 1,881,507; Oct. 11.
Graphic device. R. C. Haight. 1,882,282; Oct. 11.
Grapple, Fence wire. C. P. Littlepage. 1,881,746; Oct. 11.
Grease, Measuring. J. F. Malm. 1,881,786; Oct. 11.
Grille panel unit. F. D. Chapman. Des. 87,905; Oct. 11.
Grinder, Multiple. C. T. Raule. 1,882,447; Oct. 11.
Grinding apparatus. A. W. Phelps. 1,881,966; Oct. 11.
Grinding machine. R. N. Heald, W. J. Guild, A. P. Burns, and G. E. Garno. 1,881,553; Oct. 11.
Grinding machine. L. F. Nenninger. 1,881,870; Oct. 11.
Grinding machine, Centerless. J. F. Williams. 1,882,465; Oct. 11.
Gripper operating mechanism. J. Meyer. 1,881,816; Oct. 11.
Growth of plants, Regulating the. T. Whittelsey. 1,882,377; Oct. 11.
Guard and light for a vehicle or similar article, Combined mud. R. L. Carr. Des. 87,903; Oct. 11.
Guard, Manhole. R. J. Kent. 1,882,150; Oct. 11.
Guarding device. H. G. Gustafsson. 1,881,524; Oct. 11.
Guide for molding and other machines, Straight line. J. T. Ramsden. 1,882,446; Oct. 11.
Gum, Chewing. V. L. Woodward. 1,881,989; Oct. 11.
Gun piston position indicating means, Clay. A. F. Giese, jr. 1,881,479; Oct. 11.
Gun, Spray. J. E. Perrin. 1,881,963; Oct. 11.
Gun structure, Clay. A. F. Giese, jr. 1,881,478; Oct. 11.
Hair dressing device. J. N. LaGassé. 1,882,508; Oct. 11.
Hair, Method and apparatus for treating women's. H. LePage. 1,881,727; Oct. 11.
Hair waving apparatus. G. W. Miller. 1,882,334; Oct. 11.
Hair waving device. H. R. Hokin. 1,882,557; Oct. 11.
Handle assembly. E. N. Jacobi. 1,882,625; Oct. 11.
Handle securing means for baskets and the like. W. H. Nash. 1,881,864; Oct. 11.
Harness motion for looms. R. J. Kunath. Des. 18,616; Oct. 11.
Harrow. E. S. Hubbard. 1,881,599; Oct. 11.
Hat and making the same, Apertured. A. E. Hodshon. 1,882,599; Oct. 11.
Hat making machinery. P. C. Donner. 1,882,003; Oct. 11.
Hatter's fur carroting machine. J. Weber and J. F. Tomaino. 1,882,461; Oct. 11.
Head, Drinking fountain bubbler. A. G. Haws. Des. 87,920; Oct. 11.
Headlight, Dirigible. T. C. Freeberg. 1,882,415; Oct. 11.
Head mount with roller bearing gib. D. C. Klausmeyer and A. M. Sosa. 1,881,675; Oct. 11.
Heat conserver. E. Humphreville. 1,881,606; Oct. 11.
Heat control mechanism. C. H. Kirby. 1,881,671; Oct. 11.
Heat control mechanism, Remote. R. H. Maurer. 1,881,807; Oct. 11.
Heat exchange device. J. E. Black. 1,882,474; Oct. 11.
Heat transfer system, Fluid. C. G. Munters. 1,882,026; Oct. 11.
Heat treatment of steel rails and shapes. J. Brunner. 1,882,115; Oct. 11.
Heater: *See*—
Automobile heater. Vehicle heater.
Glass heater. Water heater.
Liquid conductor heater. Windshield heater.
Heating device. E. E. Lee. 1,881,722; Oct. 11.
Heating element. W. Noble. 1,881,881; Oct. 11.
Heating system for railway cars and the like. W. C. Hartwig. 1,881,546; Oct. 11.
Heating unit, Concealed. W. Shurtleff. 1,882,452; Oct. 11.
Heel breast flap laying and flap trimming machine. J. Gouldbourn. 1,882,077; Oct. 11.
Hinge, Concealed pin. C. Geske and A. Ekman. 1,881,473; Oct. 11.
Hinges, Making. O. J. Groehn. 1,881,518; Oct. 11.
Hob. E. C. Head. 1,882,008; Oct. 11.
Hobs, Method and apparatus for relieving. E. C. Head. 1,882,009; Oct. 11.
Hog watering device. E. C. Mohr. 1,881,838; Oct. 11.
Hoisting apparatus. C. G. Wright. 1,882,051; Oct. 11.
Holder, Buckle. H. A. Hamilton. 1,882,570; Oct. 11.
Holder, Cigarette. F. C. Jones. 1,881,641; Oct. 11.
Holder, Cow-tail. A. W. Kurtz. 1,882,558; Oct. 11.
Holding device for reflecting elements. G. E. Munch. 1,882,438; Oct. 11.
Hollow-ware articles, Molding. V. E. Schmiedeknecht. 1,882,652; Oct. 11.
Hood and radiator shell or similar article, Combined vehicle. R. L. Carr. Des. 87,904; Oct. 11.
Hopper, Ash. H. E. Preston. 1,882,445; Oct. 11.
Horse, Collapsible. M. C. Logan and J. E. Philpott. 1,881,755; Oct. 11.
Hose reel. A. Ludwig. 1,881,764; Oct. 11.
Hose reel. F. J. Rayfield. 1,881,952; Oct. 11.
Hose reel and sprinkler, Combination. A. B. B. Harris. 1,881,539; Oct. 11.
Hydrant, Fire. A. C. Pilcher. 1,882,299; Oct. 11.
Hydrocarbon dephlegmation products, Treatment of. K. W. Bartlett. 1,882,269; Oct. 11.
Hydrocarbon, Unsaturated aliphatic. C. Krauch and M. Müller-Cunradi. 1,881,692; Oct. 11.
Hydroelectric plant. G. H. Vacquier and V. L. Entraygue. 1,882,532; Oct. 11.
Hydrometer. D. Hiergesell. 1,882,821; Oct. 11.
Ice plant. G. W. Miller. 1,882,189; Oct. 11.
Identification pin holder for washing machines. S. M. Ratzkoff. 1,881,946; Oct. 11.
Illuminating device. P. M. Hotchkin. 1,881,594; Oct. 11.
Illuminating device. E. K. Lundy. 1,881,767; Oct. 11.
Indicator: *See*—
Direction indicator. Frequency indicator.
Indicator. E. K. Bottle. 1,882,813; Oct. 11.
Inductance system, Fluid cooled. L. A. Gebhard. 1,882,075; Oct. 11.
Industrial furnace. B. G. Harmon. 1,881,536; Oct. 11.
Inhibitor and the use thereof. J. M. Leaper. 1,881,721; Oct. 11.
Inking roller. M. W. Brueshaber. 1,882,480; Oct. 11.
Insect bites, Device for treating and preventing. J. F. Kasnicka. 1,882,018; Oct. 11.
Insect electrocutor. W. M. Frost. 1,882,550; Oct. 11.
Instrument for the implantation of radon seeds. J. Muir. 1,881,854; Oct. 11.
Insulator. W. H. Cole. 1,882,486; Oct. 11.
Intensifier for photography. J. A. Kalix. 1,882,426; Oct. 11.
Interference between power wires and communication wires, System for preventing. A. Herz. 1,881,574; Oct. 11.
Internal combustion engine. W. R. Griswold. 1,882,281; Oct. 11.
Internal combustion engine. J. G. C. Mantle. 1,881,789; Oct. 11.
Internal combustion engine. J. J. McElhinney. 1,882,513; Oct. 11.
Iodine, Recovery of. C. W. Girvin. 1,881,487; Oct. 11.
Iron: *See*—
Electric iron. Safety throw-off iron.
Electric soldering iron.
Iron, Manufacturing strong black heart malleable cast. T. Kikuta. 1,882,327; Oct. 11.
Ironer, Hat. C. LaCavera. 1,881,699; Oct. 11.
Ironing machine. N. L. Etten. 1,882,214; Oct. 11.
Jack: *See*—
Lifting jack.
Jar: *See*—
Drill jar.
Joint: *See*—
Expansion joint. Socket joint.
Rail joint. Well casing joint.
Joint. R. F. Peo. 1,881,958; Oct. 11.
Joint. H. K. Rader. 1,881,943; Oct. 11.
Joint for plumbing fixtures, Wall. H. M. Reed, jr. 1,882,233; Oct. 11.
Joint, Making a ring. W. N. Justice. 1,881,652; Oct. 11.
Journal box. D. S. Barrows. 1,882,057–8; Oct. 11.
Journal box. R. J. Brittain, jr., and O. W. Young. 1,882,478; Oct. 11.
Journal box. G. F. Couch. 1,882,066; Oct. 11.
Key: *See*—
Locking key.
Key case. C. Lorber. 1,881,759; Oct. 11.

Kiln for the manufacture of bloated clay products. E. M. Wyatt. 1,882,052; Oct. 11.
Kit, Sewing. B. V. Laing. 1,881,700; Oct. 11.
Knitting machine operating mechanism. R. H. Lawson and A. Gagné. 1,882,431; Oct. 11.
Knitting machinery. F. Veitel. 1,882,202; Oct. 11.
Knitting machines, Tensioning means for plating. J. and R. H. Lawson. 1,882,429; Oct. 11.
Knitting stitch measuring mechanism and process. R. H. Lawson. 1,882,430; Oct. 11.
Lace. B. Edson. Des. 87,909; Oct. 11.
Lace or article of analogous nature. J. Hazeldine. Des. 87,921; Oct. 11.
Ladders, Scaffold attachment and safety device for. M. Osterdahl. 1,881,902; Oct. 11.
Lamp. H. J. Graham. 1,882,185; Oct. 11.
Lamp. W. Hoffmann. Des. 87,923; Oct. 11.
Lamp, Bridge. G. W. Cassidy. 1,882,409; Oct. 11.
Lamp clamp. J. J. Kennedy. 1,881,663; Oct. 11.
Lamp construction, Arc. V. A. Hanson. 1,882,577; Oct. 11.
Lamp for motor cars. J. J. J. Göransson and T. Koch. 1,882,493; Oct. 11.
Lamp, Gaseous conduction. G. S. James. 1,881,619; Oct. 11.
Lamp, Hanging. N. C. H. Muench. Des. 87,935; Oct. 11.
Lamp post, Metal. J. F. Ne Page. 1,882,228; Oct. 11.
Lamp starting device. C. Spaeth. 1,881,975–6; Oct. 11.
Lamp, Vehicle. S. Makaroff. 1,882,188; Oct. 11.
Last-pulling machine. G. A. Miner. 1,882,083; Oct. 11.
Latch, Door. S. Madsen. 1,882,248; Oct. 11.
Latch mechanism, Door. G. R. Feuerlein. 1,881,427; Oct. 11.
Latch mechanism, Gear shift. R. L. Mapson. 1,881,790; Oct. 11.
Latch pivots, Making. H. W. Kranz. 1,881,689; Oct. 11.
Lathe, Automatic metal turning. W. W. Potter. 1,881,928; Oct. 11.
Lathe having double end drive. J. E. Lovely. 1,881,702; Oct. 11.
Launching device for life preservers. E. R. F. Johnson. 1,881,634; Oct. 11.
Laundry identification apparatus. M. F. Huebsch. 1,882,015; Oct. 11.
Laundry machine. O. H. Hullings. 1,882,284; Oct. 11.
Lead sheathing of conductor cables, Perforating the. A. Z. Mample and E. J. Hobert. 1,881,787; Oct. 11.
Leather, Cold dressing and drying of. E. Luckhaus. 1,881,763; Oct. 11.
Leg, Detachable. J. J. Goetz. 1,881,491; Oct. 11.
Lens with high aperture, Spherically, chromatically, and astigmatically corrected wide-angle. A. W. Tronnier. 1,882,530; Oct. 11.
Level in a battery, Device for automatically maintaining electrolyte. H. B. Herdeg. 1,882,361; Oct. 11.
Level transit, Combination. C. O. Rothweiler. 1,882,523; Oct. 11.
Lid. G. Francyk. 1,882,278; Oct. 11.
Life restoring apparatus. W. Kaiser. 1,882,017; Oct. 11.
Lifting jack. J. W. Hobbs. 1,883,598; Oct. 11.
Light protector, Nonglare. M. S. Halpern. 1,881,525; Oct. 11.
Light reflecting unit. P. P. Horni. 1,881,588; Oct. 11.
Lighter. H. J. Beecroft. 1,882,110; Oct. 11.
Lighting fixture control. G. W. Cassidy. 1,882,408; Oct. 11.
Lighting fixture, Direct and indirect. G. W. Cassidy. 1,882,407; Oct. 11.
Lighting system, Emergency. F. G. Beetem. 1,882,472–3; Oct. 11.
Liner for tire casings, Inner. S. R. Fetner. 1,882,129; Oct. 11.
Lines, Apparatus for painting. A. Weber. 1,882,535; Oct. 11.
Linting machine. W. S. Shaw. 1,882,450; Oct. 11.
Lip guard. I. Kaufmann. 1,882,019; Oct. 11.
Liquid conductor heater. M. W. Hanks. 1,881,531; Oct. 11.
Liquid dispensing apparatus. J. A. Logan and W. H. De Lancey. 1,881,754; Oct. 11.
Liquid fuse switch, Visible. L. J. Sjoberg. 1,882,453; Oct. 11.
Liquid relief apparatus. G. Campbell. 1,882,062; Oct. 11.
Liquids, Device for measuring. H. B. Siems. 1,882,196; Oct. 11.
Lithopone, Manufacture of. E. J. Flynn. 1,882,072; Oct. 11.
Loader for bottle cleaning machinery. F. P. Perkins. 1,881,961; Oct. 11.
Loader, Power driven. F. W. James. 1,882,629; Oct. 11.
Lock: *See*—
- Automobile lock.
- Bolt lock.
- Screw thread lock.
- Sling lock.
- Time lock.
- Tire and wheel lock.
- Wheel lock.
- Window lock.

Lock. E. N. Jacobi. 1,882,626; Oct. 11.
Lock construction. P. S. Grierson and G. Bright. 1,881,511; Oct. 11.
Lock device. W. Ganz. 1,881,467; Oct. 11.
Lock for elevator doors, Automatic. C. E. Ives. 1,882,621; Oct. 11.
Lock for motor vehicles, Transmission. E. V. Noser. 1,881,889; Oct. 11.
Lock for spare wheels and tires. H. S. Jandus and F. A. Smith. 1,881,620; Oct. 11.
Lock mechanism, Trailer or truck. L. J. Kline. 1,881,676; Oct. 11.
Lock shaft. F. W. James. 1,882,628; Oct. 11.
Lock washer. C. G. Olson. 1,882,080; Oct. 11.
Locking key. R. Powis. 1,881,935; Oct. 11.
Locomotive and method of operation, Limited cut-off. W. E. Woodward. 1,882,310; Oct. 11.
Looms, Filling retaining device for. A. Gosselin. 1,881,502; Oct. 11.
Looms, Thread parter for weft replenishing. O. V. Payne. 1,881,920; Oct. 11.
Loud speaker. G. W. Pierce. 1,882,401; Oct. 11.
Lubricating means. O. U. Zerk. 1,882,053; Oct. 11.
Lubricating apparatus. E. W. Davis. 1,882,651; Oct. 11.
Lubricating apparatus. C. A. Fine. 1,881,429; Oct. 11.
Lubricating apparatus. N. W. Morse. 1,881,848; Oct. 11.
Lubricating apparatus. H. J. Murphy. 1,881,857; Oct. 11.
Lubricating composition for machining operations. P. E. Harth. 1,881,542; Oct. 11.
Lubricating system. G. W. Hanson. 1,881,532; Oct. 11.
Lubricating system, Centralized. C. F. Raisch. 1,881,945; Oct. 11.
Lug and pouring spout, Lifting. E. E. Slick. 1,882,198; Oct. 11.
Lumber trimming machine. H. H. Payzant. 1,881,954; Oct. 11.
Machine and method for assembling articles. J. S. Hardiman. 1,881,533; Oct. 11.
Machine for applying tape to sheet material. W. T. B. Roberts and H. H. Jackson. 1,882,039; Oct. 11.
Machine for cementing leather soles to shoes. H. Walther. 1,882,533; Oct. 11.
Machine for finishing gears. E. W. Bullock, R. S. Condon, and E. Finsen. 1,881,999; Oct. 11.
Machine for grinding forage. M. H. Gately. 1,882,491; Oct. 11.
Machine for inserting slips into packages. H. A. Morris. 1,881,845; Oct. 11.
Machine for making highly elastic resilient tubes. A. Dreyer. 1,882,182; Oct. 11.
Machine for molding blocks. S. Berry. 1,882,205; Oct. 11.
Machine for molding butter and the like. W. Henry. 1,882,143; Oct. 11.
Machine for operating upon hides, skins, and leather. E. J. S. Halvorsen. 1,881,527; Oct. 11.
Machine for treating furs. F. J. Murphy. 1,882,439; Oct. 11.
Machine for use in making rubber shoes. F. D. Kinney. 1,881,670; Oct. 11.
Machine for use in the manufacture of shoes. F. C. Eastman. 1,882,067; Oct. 11.
Machine gun toy pistol. R. A. Frisbie. 1,881,456; Oct. 11.
Magazine, Motion picture camera and film. F. H. Owens. 1,881,903; Oct. 11.
Magazining device. C. E. Nelson. 1,881,868; Oct. 11.
Magnetic structure. H. Lathrop. 1,881,711; Oct. 11.
Manacle. N. S. Hillyard. 1,881,577; Oct. 11.
Manicuring device, Power. G. Lidseen. 1,881,737; Oct. 11.
Marine elevator. F. S. Lovejoy. 1,882,512; Oct. 11.
Marker, Athletic field line. H. J. Ryan. 1,882,340; Oct. 11.
Masher or similar article, Potato. M. O. Haney. Des. 87,918; Oct. 11.
Massage roller. S. Falck. 1,882,490; Oct. 11.
Material and making same, Artificial. L. Lilienfeld. 1,881,740; Oct. 11.
Material, Apparatus for baling. A. S. Mackenzie. 1,881,774; Oct. 11.
Material, Apparatus for forming and bending flexible. W. O. Dailey. 1,882,243; Oct. 11.
Material, fabrics, or felt, Bleaching, dyeing, and printing vegetable and animal fiber. K. Lindner. 1,881,745; Oct. 11.
Material, Forming sheet. F. A. Parkhurst. 1,881,917; Oct. 11.
Material from articles, Apparatus for removing. L. Normann. 1,881,887; Oct. 11.
Material handling apparatus. W. M. Venable. 1,882,307; Oct. 11.
Material suitable for artificial materials, particularly artificial silk, Preparation of cellular raw. A. Bosse. 1,882,175; Oct. 11.
Materials, Cleaning and vulcanizing. F. S. Malm. 1,881,785; Oct. 11.
Materials containing natural silk, Treatment of. G. H. Ellis. 1,882,070; Oct. 11.
Mattress. W. E. Wunderlich. 1,882,538; Oct. 11.
Measuring production, Apparatus for. E. A. Hodge. 1,881,580; Oct. 11.
Measuring unit for lubricating systems. G. L. Moore. 1,881,841–2; Oct. 11.
Mercury switch, Enclosed. K. Hunciker. 1,882,614; Oct. 11.
Merry-go-round. R. T. Jones. 1,881,646; Oct. 11.
Metal, Reclaiming scrap. H. W. Thomas, jr. 1,882,528; Oct. 11.
Metals in cupola furnaces, Melting. M. L. Hamlin. 1,882,571; Oct. 11.
Metals of the alkalis or alkaline earths, Electrolytic production of. W. Siecke. 1,882,525; Oct. 11.
Meter: *See*—
- Earth electrode meter.
- Fluid meter.
- Meter. J. F. Jaworowski. 1,882,632; Oct. 11.

Milk and preparing same, Powdered acid. L. D. Johnson and N. F. True. 1,883,638; Oct. 11.
Milk and preparing same, Powdered protein. L. D. Johnson and N. F. True. 1,882,637; Oct. 11.
Milk product. H. E. Otting. 1,882,028; Oct. 11.
Mill: *See*—
- Tumbling mill.

Mill guide, Rolling. I. S. Nelson. 1,881,869; Oct. 11.
Mining machine. T. E. Pray. 1,881,936; Oct. 11.
Mixer for welding torches. G. L. Hammon. 1,882,420; Oct. 11.
Modulation system. C. A. Culver. 1,882,122; Oct. 11.
Moisture detector. W. D. Cleary. 1,882,316; Oct. 11.
Mold: *See*—
- Freezing mold.

Molding apparatus. I. Stees. 1,882,371; Oct. 11.
Monomethyl-para-amino-phenol and its sulphate, Manufacture of. W. T. MacLeester. 1,882,437; Oct. 11.
Motor: *See*—
- Aviation motor.
- Thermostatic motor.
- Vapor motor.

Motor and controlling means therefor, Electrically operated. W. W. Williams. 1,882,466; Oct. 11.
Mounting, Antifriction bearing. E. R. Llewellyn. 1,881,750; Oct. 11.
Mounting, Engine. E. S. MacPherson. 1,881,777; Oct. 11.
Mounting for weft parters. O. V. Payne. 1,881,924; Oct. 11.
Mounting frame for electrical apparatus. F. H. Graham. 1,881,503; Oct. 11.
Mower for highway sides. G. W. Huntington. 1,882,016; Oct. 11.
Mowers, Grass catcher for lawn. K. F. Jacobsen. 1,881,618; Oct. 11.
Muffler supporting device. E. P. Gray. 1,882,555; Oct. 11.
Multi-top table. M. D. Gibson. 1,881,475; Oct. 11.
Muzzle, Calf. F. M. Ingram. 1,882,619; Oct. 11.
Napkin and making it. F. A. Fischer. 1,882,133; Oct. 11.
Nozzle, Pressure-regulating tire-inflating. A. A. Ewald. 1,882,215; Oct. 11.
Nozzle, Self cleaning atomizing. F. J. Curran. 1,882,241; Oct. 11.
Nut, Clinch-on. R. Mitchell. 1,881,836; Oct. 11.
Oil burner. S. A. Kraft and M. J. Mais. 1,881,687; Oct. 11.
Oil burner, Industrial. J. Halterman. 1,881,526; Oct. 11.
Oil cooling means. K. E. Lyman. 1,881,709–70; Oct. 11.
Oil, Refining mineral. M. A. Dietrich. 1,882,002; Oct. 11.
Oil saver. A. G. Heggem. 1,881,555; Oct. 11.
Oil well pumping equipment and system. E. C. Ekstromer. 1,882,069; Oct. 11.
Oils, Apparatus for distilling hydrocarbon. F. A. Howard, W. K. Lewis, and H. M. Noel. 1,882,606; Oct. 11.
Oils, Dewaxing of petroleum. L. D. Jones. 1,881,643; Oct. 11.
Oils from mixtures thereof with solid substances, Separation of. C. Krauch, M. Pier, and E. Hochschwender. 1,881,691; Oct. 11.
Oils, Refining hydrocarbon. C. T. Harding. 1,881,534; Oct. 11.
Oils, Treating. R. Cross. 1,882,000; Oct. 11.
Oils with aluminum chloride, Treatment of hydrocarbon. J. H. Osmer. 1,881,901; Oct. 11.
Ophthalmotrope. W. L. Hughes. 1,881,602; Oct. 11.
Organic bases, Preparing. O. Nicodemus. 1,882,518; Oct. 11.
Ornamental object. W. Favreau. 1,881,424; Oct. 11.
Ornamental product and producing same. R. V. Mattiaon. 1,881,808; Oct. 11.
Oscillation system. F. Gerth. 1,881,472; Oct. 11.
Oven, Baker's. O. Wundrack. 1,882,107; Oct. 11.
Oven, Cooking gas. L. C. Hamlink. 1,881,528; Oct. 11.
Oven for the production of gas and coke, Chamber. F. Totzek. 1,882,553; Oct. 11.
Oxide, Di-diphenyl. R. F. Marchner and W. C. Stoesser. 1,882,368; Oct. 11.
Package, Sealed. C. Hammer. 1,881,529; Oct. 11.
Packaging machine. H. Mullendore. 1,881,859; Oct. 11.
Packaging, Method of and apparatus for. E. Mallinckrodt, jr. 1,881,782; Oct. 11.
Packaging, Method of and apparatus for. E. Mallinckrodt, jr., and H. V. Farr. 1,881,783; Oct. 11.
Packing. A. C. Fischer. 1,881,439; Oct. 11.
Packing case head. A. G. Heggem. 1,881,556; Oct. 11.
Packing for plungers, Expansible. E. E. Miller. 1,882,156; Oct. 11.
Packing, Labyrinth. O. A. Wiberg. 1,882,207; Oct. 11.
Packing machine. F. A. Cronell. 1,882,317; Oct. 11.
Packing, Metallic. E. L. Lorehn. 1,882,228; Oct. 11.
Padlock. M. C. Maxwell. 1,881,809; Oct. 11.
Pan for wringers, Starch. W. C. Laird. 1,882,304; Oct. 11.
Panels, Joining composite. G. K. Lewis. 1,881,733; Oct. 11.
Paper making machine. J. Langenbacher. 1,882,187; Oct. 11.
Paper making machine, Multiple cylinder. H. Parker. 1,881,914; Oct. 11.
Paper manufacture. H. W. Server. 1,882,194; Oct. 11.
Paper, Manufacture of. R. S. Von Hazmburg. 1,881,985; Oct. 11.
Paper, Method of and apparatus for making multiply. H. Parker. 1,881,912; Oct. 11.
Paper pulp separator. G. A. Cumberland. 1,882,178; Oct. 11.
Paper roll. J. E. Hires. 1,882,012; Oct. 11.
Paraffin wax, Production of highly concentrated. M. Mueller-Cunradi and B. Ottens. 1,881,861; Oct. 11.
Pattern rolls for applying colored designs on paper, board, or the like webs. H. Palm. 1,882,090; Oct. 11.
Pavement and pavement mat. E. Keller, jr. 1,881,660; Oct. 11.
Peach. M. A. Blake. Pl. Pt. 31; Oct. 11.
Pen, Fountain. W. C. Ford. 1,881,447; Oct. 11.
Pens, Feed for fountain. L. H. Juster. 1,882,644; Oct. 11.
Perforating apparatus. H. G. Johnstone. 1,881,639; Oct. 11.
Perfumes, Production of. G. Stemmig. 1,882,200; Oct. 11.
Phase shifting device. W. A. Knoop. 1,881,685; Oct. 11.
Phonograph. G. S. Holly. 1,881,583; Oct. 11.
Phonograph. T. E. Piazze. 1,881,967; Oct. 11.
Photographic printing machine. J. J. Maresh. 1,881,791; Oct. 11.
Photographing apparatus for duplex films. G. C. Beidler. 1,882,111; Oct. 11.
Photography, Color. C. L. Finlay. 1,882,181–2; Oct. 11.
Pick-up apparatus for magnetic films. T. H. Nakken. 1,882,336; Oct. 11.
Pick-up arm. J. Raber. 1,881,942; Oct. 11.
Picker: *See*—
- Corn picker.

Picture apparatus, Talking motion. C. H. Seaholm. 1,882,303; Oct. 11.
Picture frame. W. M. Stockman. 1,882,236; Oct. 11.
Picture printer, Sound. F. E. Garbutt and T. M. Ingman. 1,881,468; Oct. 11.
Picture projector, Motion. A. Gastonguay and G. Puller. 1,881,409; Oct. 11.
Pictures and manner of viewing same, Making relief. H. E. Ives. 1,882,424; Oct. 11.
Pictures, Production of stereoscopic. C. W. Kanolt. 1,882,648; Oct. 11.
Pictures, Production of stereoscopic motion. C. W. Kanolt. 1,882,646; Oct. 11.
Pillar construction for closed vehicles. F. J. Kubler. 1,881,693; Oct. 11.
Pipe: *See*—
- Featherweight pipe.

Pipe coils, Apparatus for making glass-coated. G. V. Steinen. 1,882,347; Oct. 11.
Pipe coils, Making glass-coated. G. V. Steinen. 1,882,348; Oct. 11.
Pipe coupler. G. C. Thomas, jr. 1,881,980; Oct. 11.
Pipe coupling. O. N. Gredell. 1,881,508; Oct. 11.
Pipe fitting for welding. J. H. Taylor. 1,881,979; Oct. 11.
Piston. J. W. MacClatchie. 1,882,434; Oct. 11.
Piston ring. A. W. Morton. 1,881,849; Oct. 11.
Plaster base. H. S. Johns. 1,882,499; Oct. 11.
Plate. G. A. Meell. Des. 87,933; Oct. 11.
Plate, Illuminated house number. A. Fazekas. Des. 87,911–2; Oct. 11.
Platform and collapsible tray for handling material with lift trucks, Shipping. A. S. McKelligon. 1,881,822; Oct. 11.
Plow, Snow. G. L. Gerlach. 1,882,382; Oct. 11.
Plug and receptacle, Wall. W. Noble. 1,881,883; Oct. 11.
Plug, Armored electrical. W. Huppert. 1,882,615; Oct. 11.
Plug, Connecter. G. Hein. 1,882,590; Oct. 11.
Plug for plastic walls, Screw. A. Schmitt. 1,881,973; Oct. 11.
Porcelain enamels, Production of. K. Turk. 1,882,344; Oct. 11.
Portable fender straightening tool frame. J. B. Fleming. Des. 87,913; Oct. 11.
Portable fruit press. J. Butticci. 1,882,117; Oct. 11.
Post: *See*—
- Lamp post.

Potato digger, Double-row. E. W. Johnson. 1,882,630; Oct. 11.
Powdering machine. C. T. Hatch. 1,881,549; Oct. 11.
Power actuator for brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,882,543; Oct. 11.
Power take-off for motor driven vehicles. E. W. Huwe. 1,881,609; Oct. 11.
Power take-off for motor vehicles. N. O. Holmsten 1,882,602; Oct. 11.
Preserving. G. W. Mullen. 1,881,855; Oct. 11.
Press: *See*—
- Automobile axle press.
- Portable fruit press.
- Punch press.

Press for making mops. R. L. Horsley. 1,882,605; Oct. 11.
Presses, Automatic feed for assembling. R. A. Skriba and F. J. Littell. 1,882,197; Oct. 11.
Printing machines, Web roll controlling device for. A. J. Horton. 1,881,589; Oct. 11.
Prongs for loose-leaf binders, Method and apparatus for making. C. D. Trussell. 1,881,981; Oct. 11.
Propeller. O. G. Gilstrap. 1,881,486; Oct. 11.
Propulsion means for aircraft. E. Klahn. 1,881,673; Oct. 11.
Proteolytic enzymes by means of microorganisms, Manufacture of. A. R. Boidin and I. A. Effront. 1,882,112; Oct. 11.

Puller: *See*—
Wheel and gear puller.
Pulley, Loose. G. Y. Malcolm. 1,881,780; Oct. 11.
Pump. H. S. Lee. 1,881,723; Oct. 11.
Pump. F. J. Rayfield. 1,881,951; Oct. 11.
Pump, Accelerator. F. H. Heitger. 1,881,559; Oct. 11.
Pump, Air and oil feeding. W. H. D. Brouse. 1,882,206; Oct. 11.
Pump, Double suction centrifugal. M. M. Klossom. 1,881,680; Oct. 11.
Pump, Fluid. F. W. Heckert. 1,881,554; Oct. 11.
Pump, Fuel. W. H. Muzzy. 1,881,860; Oct. 11.
Pump, Hydraulic. L. F. Moody. 1,882,025; Oct. 11.
Pump, Magnetic piston. E. Lehrer. 1,881,724; Oct. 11.
Pump, Rotary. C. W. Herzog. 1,881,575; Oct. 11.
Pumping mechanism. F. Purdy. 1,881,939; Oct. 11.
Punch press. C. F. Sherman. 1,882,451; Oct. 11.
Quotation board printing unit. R. Hoover and E. R. Wheeler. 1,881,585; Oct. 11.
Radiator. R. H. Nelson. 1,882,085; Oct. 11.
Radiator shell and mud-guard, Combined. G. E. Ireland. 1,882,620; Oct. 11.
Radio clock system. C. F. McCann. 1,881,818; Oct. 11.
Radio communication. H. Chireix. 1,882,119; Oct. 11.
Radio communications, Reduction of fading effects in. A. H. Taylor and L. C. Young. 1,882,166; Oct. 11.
Radio dial construction. H. R. Hayden. 1,882,584; Oct. 11.
Radio frequency amplification system. E. W. Fearing. 1,882,128; Oct. 11.
Radio signaling. L. Cohen. 1,882,064; Oct. 11.
Radio table or similar article. W. K. Kleaver. Des. 87,926; Oct. 11.
Radio transmission system. G. D. Gillett. 1,881,483; Oct. 11.
Rail joint. E. W. Caruthers. 1,882,406; Oct. 11.
Rail joint, Insulated. T. Laska. 1,881,708; Oct. 11.
Railroad spreader. J. C. Forbes and A. W. Banton. 1,882,134; Oct. 11.
Rails, Apparatus for heat treating. F. M. Graham. 1,882,417; Oct. 11.
Range. W. Noble. 1,881,880; Oct. 11.
Razor. P. R. Galt. 1,882,007; Oct. 11.
Razor, Safety. J. Muros. 1,882,295; Oct. 11.
Receptacle. J. P. Oman and S. Bright. 1,881,900; Oct. 11.
Receptacle, Baling. W. A. Troth. 1,882,343; Oct. 11.
Receptacle, Colonic excreta. F. H. Gautschi. Des. 87,915; Oct. 11.
Receptacle, Electrical. H. Hubbel, jr. 1,882,080; Oct. 11.
Receptacle, Heat treating. H. H. Harris. 1,882,580; Oct. 11.
Receptacle, Lined. C. P. Wellman. 1,882,170; Oct. 11.
Receptacles, Lined. C. P. Wellman. 1,882,049; Oct. 11.
Reclining chair. N. N. Brown. 1,882,176; Oct. 11.
Record posting device. C. B. Irving. 1,881,614; Oct. 11.
Recorder for moving picture machines, Electrical sound track. D. P. Moore. 1,882,084; Oct. 11.
Reel: *See*—
Hose reel.
Reel assembly. A. W. Sharp. 1,882,195; Oct. 11.
Reel starter for paper machines. B. A. Malkin. 1,881,781; Oct. 11.
Refined products from distillable carbonaceous materials, Recovery of. M. Pier and K. Wiseel. 1,881,969; Oct. 11.
Refrigerating and display apparatus and method. C. L. Jones and H. S. McIlvain. 1,882,640; Oct. 11.
Refrigerating apparatus. J. R. Febr. 1,881,426; Oct. 11.
Refrigerating apparatus. C. F. Henney. 1,881,568; Oct. 11.
Refrigerating apparatus. H. B. Hull. 1,881,603; Oct. 11.
Refrigerating apparatus. B. F. Randel. 1,882,251; Oct. 11.
Refrigerating apparatus. B. H. Weston. 1,882,237; Oct. 11.
Refrigerating goods-display device. T. G. Harrison. 1,881,541; Oct. 11.
Refrigerating system. G. Hilger. 1,882,596–7; Oct. 11.
Refrigeration. B. F. Randel. 1,882,252–8; Oct. 11.
Refrigerator. F. L. Northy and S. B. Nordskog. Des. 87,937; Oct. 11.
Refrigerator. C. M. Weinheimer. 1,882,530; Oct. 11.
Refrigerator construction. P. R. Heygel. 1,882,011; Oct. 11.
Refrigerator system and apparatus. A. J. Kercher. 1,882,220; Oct. 11.
Regulator: *See*—
Automatic regulator.
Relay. J. R. Fry. 1,881,460; Oct. 11.
Relief device. J. A. Maynard. 1,881,808; Oct. 11.
Resins, Purifying. A. F. Oliver and R. C. Palmer. 1,881,893; Oct. 11.
Resistance. J. A. Flanzer and E. Reisman. 1,881,445; Oct. 11.
Resistance units, Manufacture of. J. A. Flanzer. 1,881,444; Oct. 11.
Resistor. J. A. Flanzer. 1,881,446; Oct. 11.
Retaining mechanism. F. C. Eastman. 1,882,068; Oct. 11.
Retene, Preparing. C. O. Henke and G. Etzel. 1,881,565; Oct. 11.
Rim, Tire carrying. H. W. Franz, C. S. Holden, and H. H. Bound. 1,881,688; Oct. 11.
Rim, Vehicle wheel. H. W. Krans. 1,881,690; Oct. 11.
Ring: *See*—
Piston ring.
Riser from a stereotype plate, Apparatus for separating the. H. C. Jordhoy. 1,881,647; Oct. 11.
Riser from a stereotype printing plate, Separating the. H. C. Jordhoy. 1,881,648; Oct. 11.
Roller: *See*—
Curtain roller. Massage roller.
Inking roller.
Roof, Car. C. D. Bonsall. 1,882,477; Oct. 11.
Roof, Car. E. G. Franck. 1,881,451; Oct. 11.
Roofing construction. L. W. Burris. 1,882,177; Oct. 11.
Roofing material. A. C. Fischer. 1,881,438; Oct. 11.
Rose. Hybrid tea. P. M. Pierson. Pl. Pt. 33. Oct. 11.
Rosin and preparing the same, High-melting-point. R. C. Palmer and A. F. Oliver. 1,881,907; Oct. 11.
Rossing machine. H. A. Ganes and W. Kilde. 1,881,465; Oct. 11.
Roster or similar article, Membership. C. A. Winter. Des. 87,948; Oct. 11.
Rotating boiler. J. V. Blomquist. 1,882,379; Oct. 11.
Rubber product and preparing same. D. H. Powers. 1,882,035; Oct. 11.
Rubber working machine. F. H. Banbury. 1,881,994; Oct. 11.
Rudder. A. W. Cross. 1,882,357; Oct. 11.
Sack. W. L. Offenbacher. 1,881,890; Oct. 11.
Safety device for airplane pilots. R. E. Nidy. 1,881,878; Oct. 11.
Safety glass. G. H. Peters. 1,882,298; Oct. 11.
Safety throw-off iron. E. Timbs and L. E. Peck. Re18,620; Oct. 11.
Sand and similar material, Apparatus for handling. W. E. Naylor. 1,882,440; Oct. 11.
Sand blast apparatus. C. H. Billman. 1,882,541; Oct. 11.
Sand ramming machine. A. F. Howe. 1,882,608; Oct. 11.
Sander, Oscillating. J. P. Monson. 1,881,839; Oct. 11.
Sanitary napkin. H. R. Williams. 1,882,309; Oct. 11.
Scale, Even-balance. H. A. Hadley. 1,882,419; Oct. 11.
Scales, Increasing the capacity of dial. M. H. Starr. 1,882,456; Oct. 11.
Scraper attachment for tractors. J. A. de Nooy. 1,882,244; Oct. 11.
Screen: *See*—
Window screen.
Screen for dual-intensity headlights. H. Fruchtenicht. 1,882,137; Oct. 11.
Screen for projected pictures. J. E. Spalding. 1,882,454; Oct. 11.
Screw retaining device for eyeglass rims,. W. Lobenstein. 1,882,153; Oct. 11.
Screw sorting machine, Automatic. N. E. Fielder. 1,882,130; Oct. 11.
Screw thread lock. E. R. Llewellyn. 1,881,749; Oct 11.
Seat: *See*—
Adjustable audience seat. Vehicle seat.
Toilet seat.
Seat and back rest, Auxiliary. W. I. Clements. 1,882,485; Oct. 11.
Separator: *See*—
Paper pulp separator.
Sewage distributor. C. Brossman. 1,882,546; Oct. 11.
Shackle for prisoners. D. B. Rayburn. 1,881,948; Oct. 11.
Shaker, Salt and pepper. P. Viggiano. Des. 87,946; Oct. 11.
Shank pieces, Manufacturing. E. R. Laird. 1,882,020; Oct. 11.
Shank, Ring. J. Granat. Des. 87,916; Oct. 11.
Sharpener, Razor blade. J. E. Langdon. 1,881,702; Oct. 11.
Sheet feeding mechanism. C. L. Post. 1,881,926; Oct. 11.
Sheet folding mechanism. W. B. Meglitz and M. O. Schur. 1,881,814; Oct. 11.
Sheet material, Apparatus for bending. W. B. Meglitz. 1,881,813; Oct. 11.
Sheet material, Apparatus for testing. W. B. Meglitz. 1,881,812; Oct. 11.
Sheet material, Method of and machine for cutting, feeding, and stacking. C. B. Maxson. 1,882,403; Oct. 11.
Shock absorber. M. L. Fox. 1,881,450; Oct. 11.
Shock absorber. R. F. Peo. 1,881,956–7; Oct. 11.
Shock absorber, Hydraulic. S. Jencick. 1,882,633; Oct. 11.
Shock absorber, Wire line. L. R. Pierce. 1,882,161; Oct. 11.
Shoe. L. Pignanelli. Re18,615; Oct. 11.
Shoe. H. Lieber. Des. 87,929; Oct. 11.
Shoe buckle. H. G. Whitehouse. Des. 87,947; Oct. 11.
Shoe heel or similar article. C. H. Ingwer. Des. 87,924; Oct. 11.
Shoe pressing machine. F. L. Mooney. 1,881,840; Oct. 11.
Shoe stiffener conditioning machine. C. S. Emerson. 1,882,005; Oct. 11.
Shore. A. H. Symons. 1,882,458; Oct. 11.
Shuttle for thread cutters. O. V. Payne. 1,881,922; Oct. 11.
Signal: *See*—
Crossing signal. Vehicle signal.
Signal device for automobiles. H. Kageyama. 1,882,324; Oct. 11.

Signal recording. F. Schröter. 1,882,043; Oct. 11.
Signal system, Highway crossing. A. J. Vallee. 1,882,265; Oct. 11.
Signal transmission system. J. Sedlmayer. 1,822,653; Oct. 11.
Signaling device, Electromagnetic. D. D. Miller. 1,881,829; Oct. 11.
Signaling system, Selective. H. E. Hershey. 1,882,010; Oct. 11.
Signaling system, Two-way. R. C. Mathes. 1,881,801; Oct. 11.
Sill, Center. M. H. Martin. 1,881,797; Oct. 11.
Sill structure, End. M. H. Martin. 1,881,795; Oct. 11.
Sizer. F. B. Roberts and W. G. Huntington. 1,882,038; Oct. 11.
Sizing machine. P. Aitchison. 1,882,054; Oct. 11.
Skeins of yarn, Apparatus for twisting. C. H. Goldsmith. 1,881,493; Oct. 11.
Sky writing apparatus. J. Popoff. 1,882,521; Oct. 11.
Slab of earthy material, Producing a continuous. S. Q. Lee. 1,882,082; Oct. 11.
Sled. W. E. Kidder. 1,881,664; Oct. 11.
Slicer, Cheese. O. Jassoy. 1,881,623; Oct. 11.
Slide mechanism for precision grinding machines. C. E. Van Norman. 1,881,984; Oct. 11.
Sling lock. R. Thirlwell. 1,882,167; Oct. 11.
Smoke pipe air check. R. J. Jenkins. 1,881,626; Oct. 11.
Snowplow, Rotary. T. J. Neal. 1,881,865; Oct. 11.
Soap compound, Making a. G. G. Frelinghuysen. 1,882,279; Oct. 11.
Socket joint. R. H. Hutchinson. 1,882,616; Oct. 11.
Socket, Lamp. H. C. Mead. 1,881,811; Oct. 11.
Socket, Push through. C. E. Avery. 1,882,055; Oct. 11.
Sodium resinate, Making. R. C. Murray. 1,881,858; Oct. 11.
Soft-collar clip. J. H. McCormick. 1,882,355; Oct. 11.
Solutions containing a compound of fluorine and aluminum, Manufacture of. H. Finkelstein and F. Achterberg. 1,881,430; Oct. 11.
Sound record tablet. C. Huenlich. 1,881,600; Oct. 11.
Sound, Recording and reproducing. C. O. Galbraith. 1,882,554; Oct. 11.
Sound reproducing system. E. Gosmann. 1,881,501; Oct. 11.
Sound reproduction of gramaphone and like records, Electrical. R. J. Miller. 1,881,830; Oct. 11.
Spanner wrench. S. Weber. 1,882,462; Oct. 11.
Spear. W. L. Church. 1,883,650; Oct. 11.
Spindles employed in ring spinning frames, or in other frames in which similarly braked spindles are used, Braking. J. Hindle. 1,882,144; Oct. 11.
Spool, Film. A. F. Edouart. 1,882,413; Oct. 11.
Spool or reel. H. C. Howsam. 1,881,596; Oct. 11.
Spray. Bath. R. Findlay. 1,882,216; Oct. 11.
Spray gun. E. N. Berggren. 1,882,271; Oct. 11.
Spray gun. H. W. Jelliffe and W. H. Abbott. 1,881,625; Oct. 11.
Spraying device for paints, varnishes, etc. W. Hermann. 1,881,569–70; Oct. 11.
Spring assembly, Anti-rattle. H. Morley, J. C. Buchanan, and D. T. Sickelsteel. 1,881,843; Oct. 11.
Spring construction. W. Kiwi. 1,882,427; Oct. 11.
Spring pad construction. E. Davis. 1,882,001; Oct. 11.
Spring roller curtain control, Automatic. C. J. Kasper. 1,882,623; Oct. 11.
Spring structure. S. Karpen and C. Lofman. 1,882,649; Oct. 11.
Spring structures, Making. C. Kirchner. 1,881,672; Oct. 11.
Spring tester, Main. E. F. Long. 1,881,756; Oct. 11.
Springs, Making noncorrodible. V. B. Browne. 1,881,997; Oct. 11.
Springs, Vehicle. G. Menger. 1,882,024; Oct. 11.
Sprocket feed mechanism. Perforated strip. A. S. Howell. 1,882,014; Oct. 11.
Spur. F. H. Boos. 1,882,050; Oct. 11.
Square and ruler, Combination. D. Celenza. 1,882,354; Oct. 11.
Stalk cutter. E. L. Caldwell. 1,882,272; Oct. 11.
Stamping machines, Apparatus for operating. J. C. Hinds. 1,881,578; Oct. 11.
Stand: *See*—
Display stand. Fabricated metal ground stand.
Stand for supporting coffee pots. A. R. Finch. 1,881,428; Oct. 11.
Stapling machine. O. D. Gibbs. 1,881,474; Oct. 11.
Starting mechanism for motor vehicles. F. Leyvastre. 1,882,022; Oct. 11.
Stave, Building. G. E. Priest. 1,882,301; Oct. 11.
Steam boiler. F. J. Curran and W. McClellan. 1,882,211; Oct. 11.
Steam boiler. E. E. Noble. 1,881,879; Oct. 11.
Steam cylinder drier, Four-in-one. C. H. Burris. 1,882,405; Oct. 11.
Steam generating installation. J. D. Mattimore. 1,882,332; Oct. 11.
Steering apparatus. J. H. Macdonald. 1,882,367; Oct. 11.
Steering attachment, Knee control. W. Jay. 1,882,328; Oct. 11.
Steering construction, Four wheel. W. A. Bois, sr. 1,882,542; Oct. 11.
Stem cutting mechanism for tobacco machines. C. W. Gooch, jr. 1,881,495; Oct. 11.
Stem cutting mechanism for tobacco stemming machines. C. W. Gooch, jr. 1,881,494; Oct. 11.
Stencil. C. D. Smith. 1,882,526; Oct. 11.
Stencilling machine. D. T. Moats. 1,881,837; Oct. 11.
Still, Oil. G. W. King. 1,881,608; Oct. 11.
Still, Oil heating. A. E. Harnsberger. 1,882,579; Oct. 11.
Stills, Method and apparatus for heating. W. Gensecke. 1,882,552; Oct. 11.
Stocking, Full fashioned. H. Hemmerich. 1,882,591; Oct. 11.
Stockings and socks, Producing. T. H. Jones. 1,882,641; Oct. 11.
Stoker, Mechanical underfeed. V. G. Leach. 1,881,720; Oct. 11.
Stop, Door. E. H. Johnson. 1,881,635; Oct. 11.
Stop for telegraph transmitters, Automatic. L. W. Franklin. 1,881,452; Oct. 11.
Stop light switch and brake system for vehicles. H. M. Rockwell. 1,882,259; Oct. 11.
Stop mechanism, Conveyer. J. J. Mojonnier. 1,882,435; Oct. 11.
Storage battery. B. Ford. 1,882,414; Oct. 11.
Store. W. C. Ellis. 1,882,488; Oct. 11.
Store front. K. E. Bemis. Des. 87,901; Oct. 11.
Store partition. R. Tlapek. Des. 87,945; Oct. 11.
Storing and dispensing apparatus. W. B. W. Mann and F. A. Talbot. 1,882,154; Oct. 11.
Stove. W. G. Nagle. 1,882,159; Oct. 11.
Stove. S. G. Weller. 1,881,987; Oct. 11.
Strain equalizing device. W. P. Frost. 1,881,459; Oct. 11.
Strainer. C. E. Kail. 1,882,645; Oct. 11.
Strand covering apparatus. J. Janicki. 1,881,621; Oct. 11.
Stretchboard for drawing paper. J. N. Giminez. 1,882,184; Oct. 11.
Stretcher, Pants-leg. M. F. Mitar. 1,881,833; Oct. 11.
Striping device. R. Z. Hopkins and E. Seger. 1,881,586; Oct. 11.
Striping device for automobile bodies. R. Z. Hopkins and E. F. Seger. 1,881,587; Oct. 11.
Striping device for automobile bodies. E. J. Hoyos. 1,881,597; Oct. 11.
Stripper, Wax. W. A. Tyner. 1,882,459; Oct. 11.
Stuffing-relieving process and apparatus. A. S. Mitchell. 1,882,515; Oct. 11.
Submarine cable loading coil. W. S. Gorton. 1,881,499; Oct. 11.
Submarine rescue means. H. E. Grieshaber. 1,881,512; Oct. 11.
Suction cleaner. H. B. White. 1,882,464; Oct. 11.
Suction cleaner and attachment therefor. E. Nielsen. 1,882,441; Oct. 1.
Suction-massage apparatus. F. A. Roehm. 1,882,040; Oct. 11.
Sulphur from gasoline or the like, Removal of. H. N. Holmes. 1,882,146; Oct. 11.
Superheater, Waste gas. L. A. Mehler and E. J. Westcott. 1,881,815; Oct. 11.
Support, Bathtub. J. B. Martens. 1,882,514; Oct. 11.
Support, Brake rod. C. E. Wellman. 1,882,351; Oct. 11.
Support, Trousers. J. H. Langrock. 1,881,704; Oct. 11.
Surface, Fluid reactive. C. H. A. F. L. Ross. 1,882,163–4; Oct. 11.
Swatter, Fly. S. G. Monroe and F. Shepherd. 1,882,201; Oct. 11.
Sway preventing device. R. F. Peo. 1,881,960; Oct. 11.
Switch: *See*—
Electric switch. Mercury switch.
Electric time switch. Thermostatically controlled switch.
Gas operated switch.
Liquid fuse switch. Transmitter cut out switch.
Switch for power tools, Electric. W. L. Hodeaux. 1,882,283; Oct. 11.
Switch mechanism. H. S. Gano. 1,881,466; Oct. 11.
Switch mechanism, Electrical. A. H. Neureuther. 1,882,229; Oct. 11.
Switches, Manufacture of electric mercury bulb. K. Huncliker. 1,882,613; Oct. 11.
Synchronizing device. G. F. Machlet. 1,881,773; Oct. 11.
Synchronizing system. W. A. Knoop. 1,881,684; Oct. 11.
Tabernacle. H. W. Rambusch. 1,882,093; Oct. 11.
Table: *See*—
Multi-top table. Truss fitting table.
Tabulating system. H. G. Johnstone. 1,881,640; Oct. 11.
Tag, Animal. W. Ashton. 1,882,378; Oct. 11.
Target, Baseball. C. R. Stackhouse. Des. 87,944; Oct. 11.
Telegraph printer exchange system. L. W. Franklin. 1,881,453; Oct. 11.
Telegraph system, Duplex. J. J. Gilbert. 1,881,481; Oct. 11.
Telegraph system, Printing. A. E. Hunt and W. Y. Lang. 1,881,607; Oct. 11.
Telegraph systems, Two-channel fork-controlled receiving and repeating apparatus for. H. A. Longland. 1,881,758; Oct. 11.
Telegraph transmitting apparatus. J. W. Long and R. Steeneck. 1,881,757; Oct. 11.
Telephone apparatus. N. Wise. 1,882,106; Oct. 11.
Telephone system. W. Hatton, R. D. Spann, E. J. Rousseau, and F. O. V. Larsen. 1,881,550; Oct. 11.

Telephone system. G. V. King and F. A. Bonomi. 1,881,669; Oct. 11.
Telephone system. N. H. Saunders. 1,882,042; Oct. 11.
Temperature control apparatus. J. G. Tandberg. 1,881,978; Oct. 11.
Tension device. J. A. Anderson. 1,882,539; Oct. 11.
Testing and recording the condition of clock setting circuits, System for. G. W. Janson and W. F. Callahan. 1,881,622; Oct. 11.
Testing device for telephone exchange systems. G. C. Hartley. 1,881,544; Oct. 11.
Testing system. P. G. Edwards. 1,882,125; Oct. 11.
Thermionic tube. H. W. Parker. 1,881,910; Oct. 11.
Thermostat. W. G. Hartwig. 1,881,547; Oct. 11.
Thermostat. A. L. Patton. 1,881,919; Oct. 11.
Thermostat assembly. R. W. Johnson. 1,881,638; Oct. 11.
Thermostatic control device for oil coolers. K. E. Lyman. 1,881,771; Oct. 11.
Thermostatic motor. W. Noble. 1,881,884; Oct. 11.
Thermostatically controlled switch. C. L. Rayfield. 1,881,950; Oct. 11.
Thread feeding and spacing means. H. J. Hufford. 1,882,612; Oct. 11.
Threads, Manufacture of artificial. L. Lilienfeld. 1,881,742; Oct. 11.
Threshold construction. C. W. Kelly. 1,881,661; Oct. 11.
Ticket and ticket cabinet. G. E. Judd. 1,881,649; Oct. 11.
Ticket handling apparatus. G. E. Judd. 1,881,650; Oct. 11.
Tie plate. F. A. Preston. 1,881,937; Oct. 11.
Tie-plate, rail, and rail anchor. A. Luisa-Vissat. 1,881,765; Oct. 11.
Tile. R. W. Page and F. W. Hill. 1,881,906; Oct. 11.
Time lock, Auxiliary. W. F. Richards. 1,882,339; Oct. 11.
Timing and controlling electrical circuits. J. Mettler. 1,882,333; Oct. 11.
Tire. B. S. Katz. 1,881,655; Oct. 11.
Tire. H. D. Reichard. Des. 87,941; Oct. 11.
Tire and wheel lock, Spare. F. W. Heinke, jr. 1,881,566–7; Oct. 11.
Tire or similar article, Automobile. E. J. Morin. Des. 87,949; Oct. 11.
Tire, Pneumatic. F. A. Krusemark. Re18,618; Oct. 11.
Tire pressure equalizer, Dual. D. H. Spicer. 1,882,455; Oct. 11.
Tire tread. F. J. Jarvis. 1,882,498; Oct. 11.
Tires, Tread attachment for vehicle. J. Kozma. 1,882,386; Oct. 11.
Tobacco steming machine. C. W. Gooch, jr. 1,881,497; Oct. 11.
Toilet article. O. E. Freed. 1,882,073; Oct. 11.
Toilet seat. E. Klumpp. 1,881,681; Oct. 11.
Toilet seat, Concealed hinge. C. C. Campus. 1,882,274; Oct. 11.
Token depositary and account device. E. H. Thompson. 1,882,047; Oct. 11.
Tool, Adjustable boring. W. E. Guldager. 1,881,523; Oct. 11.
Tool attachment device. E. A. Arp. 1,881,993; Oct. 11.
Tool, Combination. J. A. Lee. 1,882,288; Oct. 11.
Tool device, Power operated reciprocating. H. E. Pollard. 1,882,520; Oct. 11.
Tool, Expansion boring. J. E. Kilzer. 1,881,665; Oct. 11.
Tool, Farm. H. Hull. 1,881,604; Oct. 11.
Tool for fastening sash weight cords. J. Reggitts. 1,882,095; Oct. 11.
Tooth and supporting means therefor, Artificial. N. R. Lourie. 1,882,511; Oct. 11.
Tooth cleaner. J. Zrna. 1,882,204; Oct. 11.
Torque, Converting and transmitting. A. Democratis. 1,882,181; Oct. 11.
Towers, Tray construction for bubble. J. S. Wallis. 1,882,104; Oct. 11.
Toy. E. L. Hewitt. 1,882,595; Oct. 11.
Toy building block. T. Howard. 1,882,607; Oct. 11.
Toy, Jointed figure. J. K. Raugstad. 1,882,034; Oct. 11.
Toy pistol. R. A. Frisbie. 1,881,455; Oct. 11.
Traction device. C. Wilt. 1,882,467; Oct. 11.
Tractor. B. F. Gravely. 1,881,505; Oct. 11.
Tractor wheel attachment. M. D. Storm. 1,882,373; Oct. 11.
Trailer body. W. L. Gilkison. 1,881,482; Oct. 11.
Train control system. F. H. Nicholson. 1,882,027; Oct. 11.
Train controlling apparatus, Automatic. J. P. Gilligan and G. W. Edwards. 1,881,404; Oct. 11.
Transfer mechanism for rotary glassware forming machines. K. E. Peiler. 1,882,091; Oct. 11.
Transfer picture and its manufacture. E. Hentschel. 1,882,593; Oct. 11.
Transferring and forming machine. W. L. McNamara. 1,881,025; Oct. 11.
Transformer, Magnetostrictive. G. W. Pierce. 1,882,396; Oct. 11.
Transfusion of blood, Apparatus for. L. E. Drummond. 1,882,412; Oct. 11.
Transmission. H. W. Lewis. 1,882,222; Oct. 11.
Transmission, Overdrive. C. H. Powell. 1,881,931; Oct. 11.
Transmission system. L. A. Gebhard. 1,882,074; Oct. 11.
Transmitter cut-out switch. J. F. Mitchell. 1,881,834; Oct. 11.
Trap; *See*—
  Animal trap. Beetle trap.
Trap. C. L. Hancock. 1,881,530; Oct. 11.
Traverse mechanism for grinding machines, Table. H. A. Silven. 1,882,098; Oct. 11.
Tray, Posting. V. W. Gideon. 1,881,476–7; Oct. 11.
Tree, Display. W. Favreau. 1,881,423; Oct. 11.
Trimming machine. M. F. Brogan. 1,882,061; Oct. 11.
Tripping device. W. L. McNamara. 1,881,824; Oct. 11.
Trocar. E. B. Donovan. 1,882,213; Oct. 11.
Truck bolster. M. H. Martin. 1,881,796; Oct. 11.
Truck, Car. H. W. Alden and N. R. Brownyer. 1,882,469; Oct. 11.
Truck, Industrial. E. H. Remde. 1,882,036; Oct. 11.
Truck structure, Railway. E. G. Busse. 1,882,207; Oct. 11.
Trunk. J. F. Schoellkopf and H. Lee. 1,882,193; Oct. 11.
Truss fitting table. T. L. Collins. 1,882,121; Oct. 11.
Tube: *See*—
  Discharge tube. Thermionic tube.
Tube cleaner. R. C. McCracken. 1,881,821; Oct. 11.
Tube end cleaner. F. F. Fisher. 1,881,441; Oct. 11.
Tube ends, Forming fibrous bell-mouth. H. Parker. 1,881,916; Oct. 11.
Tubing. R. M. Hyde. 1,881,610; Oct. 11.
Tumbling mill. L. D. Peik. 1,882,442–3; Oct. 11.
Tunnel construction. A. M. Coyle. 1,881,421; Oct. 11.
Turbine. C. Jarvis. 1,882,630; Oct. 11.
Turbine and condenser construction. W. B. Flanders. 1,881,443; Oct. 11.
Type, Roll. C. L. Post. 1,881,925; Oct. 11.
Typewriting duplicator. L. Jensen. 1,882,635; Oct. 11.
Typewriting machine. C. Gabrielson and C. Waucquez. 1,881,462; Oct. 11.
Umbrellas, Tilting device for. G. Zitzer. 1,881,090; Oct. 11.
Unit intercooler. C. Wainwright. 1,882,266; Oct. 11.
Unloader mechanism for elevators, Selective. S. Olson. 1,881,899; Oct. 11.
Urn, Coffee. S. D. Levings. 1,882,247; Oct. 11.
Utensil, Cooking. W. O. Isaacson. 1,881,615; Oct. 11.
Valve. G. A. Harper. 1,881,537; Oct. 11.
Valve. H. B. Redding. 1,881,953; Oct. 11.
Valve. A. C. Stevens. 1,882,372; Oct. 11.
Valve and air-tight cushion for bottled water dispensers, Combined. F. M. Pottenger, jr. 1,881,929; Oct. 11.
Valve, Blow-off. A. G. Hollingshead and C. W. Ploen. 1,882,600; Oct. 11.
Valve construction, Flush. A. R. Gilmore. 1,881,485; Oct. 11.
Valve construction for pneumatic tools. R. A. Norling. 1,881,886; Oct. 11.
Valve device. C. L. Harrington. 1,881,538; Oct. 11.
Valve, Electromagnetic double control. J. L. Musgrave. 1,882,392; Oct. 11.
Valve, Gas. L. H. Morse and L. A. Lockhart. 1,881,846; Oct. 11.
Valve, Gate. J. H. Freeze. 1,882,136; Oct. 11.
Valve, Gate. W. W. Mohr. 1,882,227; Oct. 11.
Valve or cock. R. W. Leach. 1,882,287; Oct. 11.
Valve seat. J. W. MacClatchie. 1,882,433; Oct. 11.
Valve, Vacuum controlling brake. W. Doty. 1,882,411; Oct. 11.
Valves, Method of and apparatus for sealing bag. A. Andreas. 1,882,108; Oct. 11.
Valves, Operating. E. C. Forsythe. 1,881,449; Oct. 11.
Vapor motor. L. M. Persons. 1,881,964; Oct. 11.
Vaporizer, Liquid fuel. R. F. Lonaberger and C. F. Sands. 1,882,388; Oct. 11.
Vaporizing apparatus. A. Curioni. 1,882,318; Oct. 11.
Vehicle heater. W. F. and J. F. Goetz. 1,881,492; Oct. 11.
Vehicle signal. A. L. Hodgson. 1,882,322; Oct. 11.
Vehicles, Independently sprung wheel construction for the front end of motor. M. H. Carpenter and C. B. Kirkham. 1,882,484; Oct. 11.
Vehicles, Power plant for transport. W. P. Kellett. 1,882,501; Oct. 11.
Vehicles, Top for. L. R. Hilgenberg. 1,882,360; Oct. 11.
Vending machine. J. G. Schofield. 1,882,261; Oct. 11.
Vending machine, Coin controlled. W. D. Bartlett. 1,883,563; Oct. 11.
Ventilating device for the stators of electric machines, Axial. J. Dupont. 1,882,487; Oct. 11.
Ventilator construction. F. A. Mesker. 1,882,249; Oct. 11.
Vibrator, Magnetostrictive. G. W. Pierce. 1,882,393–4; Oct. 11.
Vibrator, Magnetostrictive. G. W. Pierce. 1,882,397–8–9; Oct. 11.
Vibratory device. G. W. Pierce and S. A. Buckingham. 1,882,400; Oct. 11.
Voltage control system. A. S. Hubbard. 1,882,611; Oct. 11.
Vulcanizer, external type, Top boot. A. A. Glidden and T. M. Knowland. 1,881,489; Oct. 11.
Vulcanizer with wedge lock. J. Jennejohn. 1,881,628; Oct. 11.
Wall construction. J. L. Lemerond. 1,882,432; Oct. 11.
Warning and sounding device for ships. C. Wolff. 1,882,171; Oct. 11.
Washer: *See*—
  Fruit washer. Lock washer.
Washers, Making lock. G. C. Trotter. 1,882,100; Oct. 11.

Washing machine. M. A. Defibaugh. 1,882,123; Oct. 11.
Washing machine. H. Haubens and L. H. Holcomb. 1,882,582; Oct. 11.
Washing machine. O. J. Moussette, sr. 1,881,851; Oct. 11.
Washing machines, Safety appliance for. J. H. Skitt. 1,881,974; Oct. 11.
Watchcase. D. S. Ingraham. 1,881,613; Oct. 11.
Water cooler, Mechanical. E. C. Clifford. 1,882,120; Oct. 11.
Water heater. G. A. Bryan. 1,882,116; Oct. 11.
Water heater, Electric. W. J. Hammers and A. F. Winterhalter. 1,882,573; Oct. 11.
Wedge, Exploding. R. B. Hutchison. 1,882,617; Oct. 11.
Weeder, Lawn. G. A. Holz. 1,882,423; Oct. 11.
Welding. R. Powis. 1,881,934; Oct. 11.
Welding apparatus. A. Churchward. 1,882,063; Oct. 11.
Welding clamp. O. J. W. Lougheed. 1,881,761; Oct. 11.
Well casing joint. H. E. Lawrence and O. H. Crone. 1,881,717; Oct. 11.
Well flowing device, Automatic. A. Boynton. 1,882,060; Oct. 11.
Well testing apparatus. H. J. Hamm. 1,882,572; Oct. 11.
Welt closing mechanism for full fashioned knitting machines. H. F. Paget. 1,882,566; Oct. 11.
Welting and its manufacture. P. W. Greene. 1,881,509; Oct. 11.
Wheel: *See*—
  Change speed wheel.
Wheel and gear puller. J. D. Langdon. 1,881,703; Oct. 11.
Wheel lock, Demountable. C. E. Jeffers. 1,881,624; Oct. 11.
Winding machine. C. H. Jones. 1,882,500; Oct. 11.
Winding, stranding, coiling, lapping or the like machine. J. H. Larmuth. 1,882,152; Oct. 11.
Window cleaner. K. Herman. 1,882,494; Oct. 11.
Window construction. E. J. Liebetrau. 1,881,738; Oct. 11.
Window construction. J. V. O'Connor. 1,882,088; Oct. 11.
Window frame. J. W. Rolle and F. M. Plath. 1,882,260; Oct. 11.
Window jamb, casing and blind stop construction. S. Madsen. 1,881,779; Oct. 11.
Window lock. S. F. Ragan. 1,881,944; Oct. 11.
Window operating device. H. E. Sipe. 1,882,304; Oct. 11.
Window screen. H. R. Newell and W. L. Miller. 1,881,874; Oct. 11.
Windows, Automatic apparatus for shop. F. J. M. Prodhomme. 1,881,938; Oct. 11.
Windshield heater. J. R. Oishei. 1,882,559; Oct. 11.
Wing brace arrangement for railroad spreaders. J. C. Forbes and A. W. Banton. 1,882,135; Oct. 11.
Wood and other vegetable substances, Impregnation of. W. Iwanowski and J. Turski. 1,881,617; Oct. 11.
Wood heel machine. M. W. Howard. 1,881,595; Oct. 11.
Wood pulp, Apparatus for digesting. E. Morterud. 1,882,391; Oct. 11.
Workhead. W. J. Guild. 1,881,522; Oct. 11.
Wrapper for sugar units and like articles. A. Dienst and J. J. Neuman. 1,882,124; Oct. 11.
Wrench: *See*—
  Spanner wrench.
X-ray method and means. T. H. Forde and N. W. Mellars. 1,881,448; Oct. 11.
Yarn guide for upstroke twisters. B. D. Hubbard. 1,881,598; Oct. 11.
Yeast, Manufacturing. G. O. W. Heijkenskjold. 1,881,537; Oct. 11.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 11, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 48: 1,881,474
2— 30: 1,882,292
42: 1,882,023
46: 1,882,019
132: 1,882,355
237: 1,881,704
4— 57: 1,881,485
157: 1,882,216
159: 1,882,624
173: 1,882,514
236: 1,882,274
237: 1,881,681
5— 98: 1,881,579
193: 1,882,538
259: 1,881,716
269: 1,882,649
271: 1,882,427
7— 17: 1,882,288
8— 2: 1,881,745
5: 1,882,070
1,882,556
6: 1,882,561
21: 1,882,439
1,882,461
10— 73: 1,882,100
11— 1: 1,882,044
12— 14: 1,882,067
15. 1: 1,882,083
17: 1,882,077
33: 1,881,840
37: 1,882,533
46: 1,881,595
51: 1,881,670
1,882,039
78: 1,881,656
83. 5: 1,882,061
103: 1,881,992
123: 1,882,068
13— 26: 1,881,888
14— 72: 1,882,512
15— 9: 1,882,441
16: 1,882,464
49: 1,881,431
1,882,270
1,882,471
104. 14: 1,881,821
128: 1,882,576
166: 1,882,535
180: 1,881,432
203: 1,881,725
227: 1,882,179
1,882,588
246: 1,882,174
16— 21: 1,882,497
99: 1,881,768
128: 1,881,473
18— 1: 1,882,052
2: 1,881,994
1,882,118
12: 1,881,917
17: 1,881,628
18: 1,881,489
53: 1,882,035
54: 1,881,740
1,881,742
56: 1,881,916
59: 1,882,642
61: 1,881,803
19— 41: 1,882,450
148: 1,882,599
20— 11: 1,881,779
1,882,088
15: 1,881,778
22: 1,882,029
40. 5: 1,882,494
1,882,559
52. 1: 1,882,260
64: 1,881,661
91: 1,881,733
1,881,734
22— 2: 1,881,648
3: 1,881,647
9: 1,882,446
1,882,652
36: 1,882,608
69: 1,881,324

22— 200: 1,882,516
23— 3: 1,882,289
88: 1,881,430
178: 1,882,208
217: 1,881,487
24— 19: 1,882,305
50: 1,881,677
71: 1,881,918
90: 1,881,942
123: 1,882,167
170: 1,882,604
179: 1,881,799
243: 1,881,593
250: 1,882,570
260: 1,881,442
265: 1,881,653
1,881,654
1,882,496
25— 29: 1,882,191
41: 1,882,205
121: 1,882,371
131: 1,881,971
131. 5: 1,882,006
132: 1,881,683
156: 1,882,046
1,882,082
27— 24: 1,882,235
29— 3: 1,882,369
11: 1,881,518
33: 1,881,646
44: 1,881,928
85: 1,881,703
90: 1,881,999
103: 1,882,008
150: 1,882,352
152: 1,881,877
157. 5: 1,881,867
159. 1: 1,881,689
173: 1,881,997
30— 1: 1,882,155
5: 1,882,216
12: 1,882,007
1,882,295
24: 1,882,218
31— 9: 1,882,143
27: 1,881,623
33: 1,882,206
32— 9: 1,882,511
33— 73: 1,882,523
75: 1,882,354
126: 1,882,171
168: 1,881,651
172: 1,881,553
34— 5: 1,882,405
35— 15: 1,881,636
16: 1,881,602
1,882,575
36— 19: R 18,615
78: 1,881,509
37— 43: 1,881,865
45: 1,882,382
74: 1,882,079
105: 1,882,134
1,882,135
115: 1,881,743
135: 1,882,147
184: 1,882,489
190: 1,882,629
39— 86: 1,882,331
40— 3: 1,882,378
19. 5: 1,881,946
1,882,015
77: 1,881,995
124: 1,881,649
1,881,650
128: 1,881,736
132: 1,882,534
1,882,647
148: 1,882,157
152: 1,882,475
154: 1,882,236
41— 15: 1,881,423
1,881,424
33: 1,882,593
42— 57: 1,881,455
1,881,456

43— 42: 1,881,947
46: 1,881,823
1,882,463
63: 1,881,530
85: 1,881,871
107: 1,882,380
112: 1,882,550
137: 1,882,291
45— 11: 1,882,610
18: 1,881,576
48: 1,881,491
50: 1,882,121
86: 1,882,639
111: 1,881,475
131: 1,882,184
138: 1,882,515
46— 35: 1,882,607
40: 1,882,034
45: 1,882,595
47— 1: Pl. Pt. 31
Pl. Pt. 32
Pl. Pt. 33
Pl. Pt. 34
9: 1,882,377
48— 103: 1,882,041
107: 1,881,425
49— 5: 1,882,547
1,882,548
9: 1,882,172
14: 1,881,825
1,882,091
17: 1,882,262
55: 1,882,076
77: 1,882,344
77. 5: 1,881,932
78: 1,882,613
92: 1,882,298
50— 27: 1,881,775
51— 8: 1,882,541
14: 1,882,442
34: 1,881,839
53: 1,882,447
73: 1,881,441
74: 1,881,966
1,882,020
78: 1,881,629
103: 1,881,870
1,882,465
158: 1,881,702
163: 1,882,443
165: 1,881,984
233: 1,882,098
262: 1,881,551
52— 21: 1,882,190
53— 3: 1,882,140
1,882,226
1,882,247
7: 1,881,615
54— 83: 1,882,059
55— 51: 1,882,636
61: 1,882,272
81: 1,881,599
148: 1,882,423
56— 25: 1,882,016
105: 1,881,470
200: 1,881,618
294: 1,882,195
58— 24: 1,881,818
91: 1,881,613
59— 35: 1,881,631
60— 15: 1,881,789
25: 1,881,964
52: 1,882,004
53: 1,881,471
95: 1,881,443
61— 20: 1,882,532
43: 1,881,421
62— 3: 1,882,596
1,882,597
5: 1,882,251
51: 1,882,011
89. 5: 1,881,541
91. 5: 1,882,237
1,882,640
95: 1,881,426
116: 1,881,603

62— 117: 1,882,537
118: 1,881,568
119: 1,882,253
119. 5: 1,882,026
1,882,252
1,882,254
1,882,258
126: R. 18,621
1,882,209
141: 1,881,725
1,882,120
143: 1,881,929
160: 1,882,189
169: 1,882,256
1,882,257
179: 1,882,255
64— 99: 1,881,728
106: 1,881,633
65— 15: 1,881,873
1,882,198
61: 1,881,428
66— 8: 1,882,430
56: 1,882,431
89: 1,882,202
96: 1,882,566
146: 1,882,429
173: 1,882,591
185: 1,882,641
68— 3: 1,882,126
9: 1,881,581
1,882,001
1,882,214
10: 1,881,977
18: 1,882,284
19: 1,881,851
21: 1,882,582
28: 1,882,364
70— 16: 1,882,643
24: 1,881,577
1,881,948
46: 1,882,636
50: 1,881,511
90: 1,881,467
1,881,566
1,881,567
1,881,620
1,881,624
1,881,866
108: 1,881,800
127: 1,881,552
1,881,571
128: 1,881,889
72— 0. 5: 1,882,233
6: 1,882,301
19: 1,882,529
44: 1,882,432
116: 1,882,499
121: 1,881,805
73— 30: 1,881,786
1,882,632
51: 1,881,813
167: 1,881,543
1,881,572
74— 6: 1,882,280
1,882,281
7: 1,882,033
1,882,302
17: R. 18,620
1,882,092
31: 1,882,051
34: 1,882,181
38: 1,881,504
1,882,203
39: 1,881,790
1,881,843
1,882,326
48: 1,881,959
51: 1,882,413
58: 1,881,819
59: 1,881,981
1,882,222
1,882,627
81: 1,882,373
100: 1,882,628
106: 1,882,602
108: 1,882,434

74— 109: 1,881,849
1,882,156
75— 17: 1,882,517
1,882,571
22. 5: 1,881,872
77— 2: 1,881,998
5: 1,882,109
28: 1,881,675
58: 1,881,523
58. 1: 1,881,665
60: 1,882,262
82: 1,881,761
96: 1,881,519
80— 42: 1,882,141
51: 1,881,860
56: 1,882,507
81— 5. 1: 1,882,095
90: 1,882,462
82— 2: 1,881,762
19: 1,882,009
85— 32: 1,881,536
40: 1,881,973
87— 2: 1,881,893
1,881,907
5: 1,881,506
1,881,858
6: 1,882,013
9: 1,881,542
1,881,891
16: 1,882,279
17: 1,881,435
1,882,081
88— 1: 1,881,588
1,882,438
16: 1,881,903
1,881,904
16. 6: 1,882,646
17: 1,882,276
24: 1,881,469
1,882,298
1,882,454
53: 1,882,153
54: 1,881,982
57: 1,882,530
90— 13. 1: 1,881,500
13. 4: 1,881,794
14: 1,882,586
20: 1,881,652
33: 1,881,705
38: 1,882,158
91— 3: 1,881,747
7: 1,881,549
18: 1,881,590
45: 1,881,569
1,881,570
1,882,271
46: 1,882,005
53: 1,882,459
54: 1,882,054
60: 1,882,347
62. 6: 1,881,586
1,881,587
1,881,597
67. 8: 1,882,460
68: 1,882,574
73: 1,882,348
92— 3: 1,882,194
7: 1,882,301
13: 1,882,175
36: 1,882,178
39: 1,881,912
40: 1,882,090
1,882,212
43: 1,881,914
44: 1,881,965
51: 1,882,187
61: 1,881,548
93— 1: 1,882,133
2: 1,881,422
1,881,844
49: 1,882,049
88: 1,882,531
94— 12: 1,881,906
18: 1,881,437
1,881,440
38: 1,882,150

95— 2: 1,882,131
1,882,132
18: 1,882,424
34: 1,882,111
73: 1,881,791
75: 1,881,468
88: 1,882,426
94: 1,881,612
97— 68: 1,881,604
99— 5: 1,882,637
1,882,638
8: 1,881,855
11: 1,881,989
1,882,028
1,882,476
12: 1,881,617
16: 1,882,200
100— 1: 1,881,774
19: 1,882,343
47: 1,882,117
49: 1,882,065
101— 126: 1,881,537
127: 1,882,526
316: 1,881,578
378: 1,881,925
102— 6: 1,881,564
7: 1,882,365
11: 1,882,617
103— 3: 1,881,554
23: 1,881,939
46: 1,882,069
53: 1,881,724
88: 1,882,025
103: 1,881,723
104: 1,881,680
142: 1,881,575
104— 44: 1,882,183
162: 1,881,928
105— 18: 1,881,850
163: 1,882,325
182: 1,882,469
230: 1,881,796
280: 1,882,186
290: 1,882,217
377: 1,881,451
418: 1,881,797
421: 1,881,795
106— 31: 1,881,436
107— 19: 1,881,817
1,881,965
20: 1,882,139
23: 1,882,160
57: 1,882,107
66: 1,882,363
108— 5: 1,882,477
7: 1,881,438
20: 1,882,105
26: 1,882,192
33: 1,882,177
109— 3: 1,882,339
110— 47: 1,881,720
171: 1,882,445
111— 85: 1,882,603
113— 1: 1,881,533
33: 1,882,151
49: 1,881,517
116: 1,881,596
114— 16. 5: 1,881,512
162: 1,882,357
177: 1,881,738
190: 1,881,634
116—124. 3: 1,882,584
135: 1,882,282
117— 9: 1,881,493
21: 1,882,612
23: 1,881,598
42: 1,881,621
118— 8: 1,882,144
119— 17: 1,882,142
34: 1,882,342
53: 1,881,820
55: 1,882,353
73: 1,881,838
105: 1,882,558
130: 1,882,619

119— 131: 1,882,232
120— 46: 1,881,447
50: 1,882,644
121— 19: 1,881,886
32: 1,882,520
38: 1,881,449
41: 1,882,543
142: 1,882,310
122— 7: 1,881,815
11: 1,882,379
33: 1,881,545
235: 1,882,332
1,882,422
252: 1,882,210
1,882,240
302: 1,881,879
479: 1,882,211
123— 32: 1,882,165
54: 1,882,448
59: 1,881,382
122: 1,881,434
1,881,652
1,881,671
1,881,940
1,882,388
124: 1,881,558
139: 1,881,860
143: 1,882,513
185: 1,882,594
126— 37: 1,881,987
67: 1,882,159
113: 1,881,678
214: 1,881,606
312: 1,881,626
128— 28: 1,882,017
57: 1,882,370
1,882,490
214: 1,882,412
217: 1,881,554
269: 1,882,018
290: 1,882,309
300: 1,882,040
347: 1,882,213
129— 16: 1,881,476
1,881,477
1,882,457
16. 1: 1,881,614
24: 1,881,930
1,882,510
131— 12: 1,881,701
1,881,793
20: 1,882,273
51: 1,881,540
1,881,641
57: 1,881,494
1,881,495
1,881,496
1,881,497
132— 33: 1,882,503
36: 1,881,727
1,882,557
36. 1: 1,882,334
74: 1,881,737
91: 1,882,204
134— 1: 1,881,729
78: 1,882,072
136— 134: 1,882,414
163: 1,882,587
137— 13: 1,882,299
68: 1,882,361
75: 1,881,679
103: 1,882,062
111: 1,882,060
139: 1,881,560
1,882,392
161: 1,881,807
162: 1,881,846
139— 84: R. 18,616
195: 1,881,502
263: 1,881,920
1,881,921
1,881,922
1,881,923
1,881,924
140— 3: 1,881,672
71: 1,881,981
1,882,242
1,882,243
92. 1: 1,881,659
142— 40: 1,881,802
143— 33: 1,881,954
133: 1,882,328
144— 208: 1,881,465
304: 1,882,297
146— 86: 1,882,481
119: 1,882,491
165: 1,881,906
195: 1,881,611
148— 8: 1,881,721
12: 1,882,115
21. 8: 1,882,327
24: 1,881,970
25: 1,882,567
149— 3: 1,882,112
6: 1,881,763

140— 16: 1,881,527
150— 40: 1,881,759
54: R. 18,619
1,881,735
151— 3: 1,881,935
9: 1,881,749
32: 1,882,089
152— 1: 1,882,496
8: 1,882,129
10: R. 18,618
12: 1,882,455
14: 1,882,376
1,882,396
22: 1,881,655
153— 32: 1,881,988
39: 1,881,592
73: 1,882,152
154— 45. 5: 1,881,439
155— 117: 1,882,176
127: 1,882,264
140: 1,882,585
182: 1,881,454
1,882,169
1,882,468
1,882,485
156— 20: 1,881,627
21: 1,882,549
24: 1,881,605
29: 1,882,592
33: 1,882,527
34: 1,882,623
38: 1,881,874
42: 1,882,425
158— 27. 4: 1,882,420
28: 1,881,949
56: 1,881,687
77: 1,881,526
117. 1: 1,881,766
164— 15: 1,882,451
19: 1,881,868
68: 1,882,403
115: 1,881,539
125: 1,881,787
166— 1: 1,882,099
1,882,572
9: 1,882,314
10: 1,882,230
167— 94: 1,882,200
169— 11: 1,881,709
17: 1,881,513
26: 1,881,608
29: 1,882,618
170— 166: 1,882,163
159: 1,882,164
165: 1,882,410
171— 97: 1,881,573
1,881,574
1,882,472
1,882,473
223: 1,882,162
252: 1,882,457
313: 1,882,501
172— 126: 1,881,884
239: 1,882,234
274: 1,881,810
279: 1,881,666
1,882,466
293: 1,881,773
173— 268: 1,881,785
314: 1,882,486
324: 1,881,461
326: 1,882,320
328: 1,881,811
338: 1,881,883
346: 1,882,245
356: 1,881,663
367: 1,882,385
175— 21: 1,881,711
183: 1,881,457
1,882,113
1,882,125
1,882,581
265: 1,882,482
306: 1,881,520
320: 1,881,460
332: 1,882,615
338: 1,882,393
1,882,394
1,882,428
356: 1,882,396
359: 1,882,075
1,882,201
361: 1,882,400
368: 1,882,395
1,882,397
1,882,398
1,882,399
176— 45: 1,881,975
1,881,976
103: 1,882,577
122: 1,881,619
1,882,609
177— 7: 1,881,829
311: 1,881,878
314: 1,881,832

177— 327: 1,882,324
329: 1,881,632
355: 1,882,055
361: 1,882,071
380: 1,882,010
178— 2: 1,881,452
1,881,739
17: 1,881,757
24: 1,881,585
44: 1,882,631
45: 1,881,480
46: 1,881,499
52: 1,881,453
53: 1,881,684
1,881,685
53. 1: 1,881,607
63: 1,881,481
70: 1,881,458
1,881,788
88: 1,882,043
179— 18: 1,882,042
27: 1,881,550
1,881,669
90: 1,882,106
91: 1,881,503
100. 2: 1,882,336
100. 3: 1,882,084
1,882,554
100. 4: 1,881,501
1,881,830
100. 41: 1,881,942
1,882,400
110: 1,882,401
164: 1,881,834
170: 1,881,642
1,881,801
171: 1,881,515
1,881,657
1,882,122
1,882,128
175. 11: 1,881,544
180— 9. 1: 1,881,748
10: 1,881,505
17: 1,882,367
53: 1,881,609
54: 1,882,319
68: 1,882,620
75: 1,882,467
82: 1,881,909
83: 1,882,138
181— 0. 5: 1,881,972
183— 51: 1,882,221
115: 1,881,490
184— 7: 1,881,429
1,881,532
1,881,841
1,881,842
1,881,848
1,881,857
1,881,945
13: 1,881,951
186— 1: 1,881,898
1,882,488
187— 1: 1,881,459
11: 1,882,036
31: 1,882,621
188— 31: 1,881,676
71: 1,882,173
77: 1,882,037
88: 1,882,633
89: 1,881,450
1,881,956
1,881,957
140: 1,882,050
152: 1,882,544
205: 1,882,351
210: 1,882,239
213: 1,882,207
189— 1: 1,882,148
2: 1,881,983
26: 1,882,228
35: 1,881,760
36: 1,882,483
46: 1,881,827
69: 1,882,249
88: 1,882,305
192— .01: 1,881,876
103: 1,882,418
105: 1,881,941
135: 1,881,974
136: 1,882,123
194— 1: 1,882,047
1,882,634
93: 1,881,831
97: 1,882,504
1,882,505
102: 1,882,506
103: 1,882,502
1,882,503
195— 20: 1,881,557
196— 4: 1,882,444
13: 1,881,691
16: 1,882,002
19: 1,881,643
21: 1,881,861

196— 24: 1,881,534
1,882,146
44: 1,882,000
49: 1,882,269
53: 1,881,927
1,881,968
54: 1,881,901
62: 1,881,969
73: 1,882,568
74: 1,881,753
110: 1,882,579
116: 1,881,667
119: 1,882,606
137: 1,881,668
197— 133: 1,882,635
138: 1,881,462
143: 1,881,715
198— 11: 1,882,096
21: 1,881,514
1,881,895
1,882,436
24: 1,881,824
27: 1,881,961
34: 1,882,435
37: 1,882,317
38: 1,881,899
40: 1,881,897
200— 38: 1,882,495
15: 1,882,322
32: 1,881,719
38: 1,882,333
51: 1,882,590
52: 1,882,275
1,882,316
67: 1,881,466
1,882,229
78: 1,882,283
82: 1,881,710
83: 1,881,862
1,882,259
112: 1,882,614
120: 1,882,453
138: 1,881,919
1,881,950
141: 1,881,547
150: 1,881,510
166: 1,882,114
201— 48: 1,882,611
55: 1,881,446
76: 1,881,444
1,881,445
202— 46: 1,881,718
75: 1,882,552
118: 1,881,826
142: 1,882,553
144: 1,881,528
204— 1: 1,881,885
4: 1,881,713
6: 1,882,522
8: 1,881,714
19: 1,882,525
206— 46: 1,882,594
58: 1,881,731
59: 1,882,012
209— 18: 1,881,575
55: 1,881,584
90: 1,882,374
103: 1,882,038
107: 1,882,130
142: 1,881,507
143: 1,882,329
207: 1,882,528
210— 45: 1,881,712
69: 1,882,383
112: 1,882,078
162: 1,882,645
196: 1,882,045
211— 1. 5: 1,881,938
72: 1,881,986
73: 1,881,707
213— 126: 1,881,662
214— 16: 1,882,440
23: 1,882,224
146: R. 18,617
215— 43: 1,882,278
46: 1,881,529
57: 1,881,772
83: 1,882,359
216— 36: 1,881,788
48: 1,882,048
125: 1,881,864
218— 2: 1,882,031
1,882,197
219— 2: 1,881,934
8: 1,882,063
1,882,311
1,882,601
19: 1,881,881
20: 1,881,882
25: 1,881,695
1,881,696
26: 1,881,696
32: 1,882,110
37: 1,881,880
38: 1,881,722

219— 40: 1,881,531
47: 1,882,573
220— 24: 1,882,097
82: 1,881,694
221— 47. 3: 1,881,847
47. 4: 1,882,053
1,882,651
60: 1,881,488
1,882,180
1,882,358
95: 1,881,754
1,882,196
100: 1,882,583
146: 1,882,563
223— 18. 6: 1,882,022
19: 1,881,833
28: 1,881,699
33: 1,882,003
38: 1,881,835
56: 1,881,700
224— 29: 1,882,193
226— 2: 1,881,845
26: 1,882,225
39: 1,882,300
48: 1,882,108
68: 1,881,782
1,881,783
88: 1,882,330
93: 1,882,154
97: 1,881,784
227— 8: 1,882,381
10: 1,882,145
229— 14: 1,882,170
23: 1,882,565
27: 1,881,900
37: 1,881,464
51: 1,882,094
1,882,124
56: 1,881,890
230— 29: 1,882,220
182: 1,882,266
209: 1,882,519
253: 1,882,366
232— 24: 1,882,390
233— 24: 1,882,389
234— 1. 5: 1,881,580
1,881,622
1,882,402
235— 60: 1,881,852
1,881,856
92: 1,881,640
236— 9: 1,882,341
15: 1,881,637
1,881,638
44: 1,881,992
73: 1,881,955
78: 1,881,546
82: 1,881,798
238— 8: 1,881,660
157: 1,881,708
243: 1,882,406
304: 1,881,765
305: 1,881,937
240— 6. 45: 1,882,073
7. 1: 1,882,493
8. 2: 1,882,188
41. 1: 1,881,525
45: 1,882,137
52: 1,882,185
62. 51: 1,882,415
73: 1,882,407
81: 1,881,594
1,882,408
1,882,409
85: 1,881,998
1,882,312
93: 1,881,767
241— 6: 1,882,250
242— 43: 1,882,500
65: 1,881,781
68: 1,881,911
75: 1,881,589
1,882,578
78: 1,882,219
108: 1,881,952
130: 1,882,152
153: 1,882,539
244— 1: 1,882,521
2: 1,882,416
10: 1,882,387
12: 1,882,199
14: 1,881,792
15: 1,882,589
18: 1,881,486
1,881,673
1,881,674
21: 1,882,086
29: 1,881,463
1,882,087
30: 1,882,315
31: 1,882,338
246— 63: 1,882,077
1,882,404
128: 1,881,516
130: 1,882,265

246— 180: 1,881,484
247— 20: 1,882,080
25: 1,881,980
1,882,021
34: 1,881,913
248— 20: 1,882,555
41: 1,881,822
142: 1,881,777
249— 18: 1,881,859
250— 2: 1,881,483
1,882,166
6: 1,882,119
17: 1,882,074
20: 1,882,064
27: 1,881,645
27. 5: 1,881,616
1,881,644
1,881,891
1,881,910
1,882,032
1,882,449
35: 1,881,448
36: 1,881,472
41. 5: 1,881,521
251— 6: 1,882,372
18: 1,882,600
59: 1,882,227
71: 1,882,136
93: 1,882,287
97: 1,881,953
127: 1,881,538
144: 1,882,215
163: 1,881,537
167: 1,882,433
253— 50: 1,882,630
254— 77: 1,881,746
103: 1,882,598
104: 1,882,458
255— 5: 1,882,161
19: 1,882,350
27: 1,882,149
61: 1,882,268
63: 1,881,535
71: 1,882,545
257— 8: 1,882,030
124: 1,882,065
125: 1,881,776
136: 1,882,452
137: 1,881,492
1,882,346
168: 1,881,806
224: 1,882,474
242: 1,881,769
1,881,771
248: 1,882,116
250: 1,881,770
262: 1,881,610
259— 102: 1,882,127
260— 27: 1,882,263
38: 1,882,518
57: 1,881,498
59: 1,881,751
1,881,752
60: 1,881,697
61: 1,882,285
69: 1,882,560
1,882,562
100: 1,881,741
101: 1,882,551
106: 1,881,563
108: 1,882,335
124: 1,882,286
128: 1,882,437
140: 1,881,853
150: 1,882,368
151: 1,882,564
168: 1,881,565
170: 1,881,692
261— 15: 1,882,318
28: 1,882,206
34: 1,881,559
1,881,686
1,881,996
41: 1,881,433
1,881,561
114: 1,882,104
262— 28: 1,881,936
30: 1,881,730
1,881,744
263— 6: 1,882,470
7: 1,881,536
11: 1,881,887
26: 1,881,732
33: 1,882,421
43: 1,881,682
49: 1,882,580
265— 12: 1,881,812
19: 1,881,756
25: 1,882,356
45: 1,882,321
48: 1,882,456
59: 1,882,419
266— 4: 1,882,417
42: 1,881,478
1,881,479

267— 11: 1,881,960
17: 1,882,024
64: 1,882,349
268— 122: 1,882,304
270— 78: 1,881,816
79: 1,881,814
271— 2, 3: 1,882,014
1,882,303
62: 1,881,926
272— 30: 1,881,863
273— 35: 1,881,991
80: 1,882,509
87: 1,882,569
161: 1,882,294
274— 1: 1,881,967
2: 1,881,583
44: 1,881,600
275— 2: 1,881,933
1,882,340
277— 61: 1,881,808
279— 1: 1,881,658
106: 1,881,905
280— 15, 8: 1,882,244
22: 1,881,664
91: 1,882,542
124: 1,882,484
282— 1: 1,882,313
22: 1,882,394
285— 22: 1,881,556
25: 1,882,616
111: 1,881,979
115: 1,881,943
137: 1,881,915
186: 1,881,508
285— 186: 1,881,717
286— 10: 1,882,267
16: 1,881,555
287— 87: 1,881,958
90: 1,881,601
98: 1,881,990
288— 1: 1,882,223
1,882,306
290— 31: 1,882,022
292— 145: 1,882,101
164: 1,881,427
210: 1,881,944
221: 1,882,248
253: 1,882,625
255: 1,882,536
338: 1,881,535
294— 96: 1,882,650
294— 106: 1,881,706
295— 44: 1,882,231
296— 23: 1,881,482
24: 1,882,238
28: 1,881,693
137: 1,882,360
297— 3: 1,881,978
298— 5: 1,882,307
299— 26: 1,882,241
53: 1,881,539
69: 1,882,546
78: 1,881,764
89: 1,881,625
97: 1,881,963
154: 1,882,337
300— 16: 1,882,605
301— 30: 1,881,690
301— 33: 1,881,688
39: 1,882,373
28: 1,882,056
302— 54: 1,882,411
303— 5: 1,881,755
304— 1,882,479
34: 1,881,902
305— 10: 1,881,630
308— 20: 1,881,806
21: 1,882,492
26: 1,881,800
41: 1,882,478
47: 1,882,057
1,882,058
1,882,066
73: 1,882,102
1,882,103
308— 117: 1,881,780
178: 1,881,522
197: 1,881,750
217: 1,881,804
312— 33: 1,882,093
44: 1,881,894
56: 1,882,261
78: 1,882,168
113: 1,882,640
125: 1,882,345
138: 1,882,378
157: 1,882,277

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Admiral Products Company. (See Strauss Stores Corporation.)

Air-Way Electric Appliance Corporation, Toledo, Ohio. Blower and electric heating element, unit space heaters, etc. Serial No. 300,316; Oct. 18. Class 21.

Albert, Samuel, New York, N. Y. Dental powder and cream, face powder, etc. Serial No. 329,728; Oct. 18. Class 6.

Allen-Sandlin Laboratories, Louisville, Ky. Bacteriophages. Serial No. 329,571; Oct. 18. Class 6.

American Auto Accessories Stores, Inc., Wilkes-Barre, Pa. Spark plugs. Serial No. 330,006; Oct. 18. Class 21.

American Diamalt Company, The, Cincinnati, Ohio. Composition suitable for use as a binder. Serial No. 329,845; Oct. 18. Class 5.

American Feather Products Corporation, Chicago, Ill. Pillows and cushions. Serial No. 326,451; Oct. 18. Class 32.

American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Autographic registers. Serial No. 329,419; Oct. 18. Class 37.

Anderson, William N., doing business as Keep Bright Products Company, Kansas City, Mo. Automobile cleaner and polish. Serial No. 330,033; Oct. 18. Class 16.

Asheville Bottling Co., Asheville, N. C. Soft drinks and syrups and extracts for making the same. Serial No. 330,329; Oct. 18. Class 45.

Atlantic Products Corporation, Trenton, N. J. Hand bags. Serial No. 317,018; Oct. 18. Class 3.

Atlas Supply Company, Newark, N. J. Spark plugs. Serial No. 327,125; Oct. 18. Class 21.

Baker Ice Machine Co. Inc., Omaha, Nebr. Frozen confections. Serial No. 325,979; Oct. 18. Class 46.

Ballard Knitting Company, Norristown, Pa. Underwear. Serial No. 327,997; Oct. 18. Class 39.

Bancroft, Joseph, & Sons Co., Rockford, Wilmington, Del. Cotton piece goods. Serial No. 329,866; Oct. 18. Class 42.

Battle Creek Food Company, The, Battle Creek, Mich. Soluble iron with copper and chlorophyl for use in secondary anemia. Serial No. 329,547; Oct. 18. Class 6.

Behr-Manning Corporation, Troy, N. Y. Flexible abrasives. Serial No. 330,243; Oct. 18. Class 4.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. Serial No. 329,077; Oct. 18. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. Serial Nos. 329,827–8; Oct. 18. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. Serial No. 330,156; Oct. 18. Class 42.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. Serial Nos. 329,493–4; Oct. 18. Class 6.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Moistening preparations, thread and fibre protecting preparations, smoothing preparations, etc. Serial Nos. 329,496–8; Oct. 18. Class 6.

Boonton Full Fashioned Hosiery Mills, Boonton, N. J. Hosiery. Serial No. 329,440; Oct. 18. Class 39.

Brown Company, Portland, Me., and Berlin, N. H. Wrapping paper, bond paper, and paper towels. Serial No. 330,106; Oct. 18. Class 37.

Bugge, P. O., Bisbee, N. Dak. Medicinal preparation. Serial No. 329,131; Oct. 18. Class 6.

Bullen, J. Warren, doing business as The Bullen Chemical Company, Folcroft, Pa. Disinfectant and insecticide. Serial No. 325,561; Oct. 18. Class 6.

Burkman, George, Omaha, Nebr. Repaired and rebuilt shoes. Serial No. 328,544; Oct. 18. Class 39.

Capital Paper Company, Indianapolis, Ind. Toilet paper. Serial No. 330,221; Oct. 18. Class 37.

Capital Paper Company, Indianapolis, Ind. Toilet paper. Serial No. 330,223; Oct. 18. Class 37.

Carnrick, G. W., Co., Newark, N. J. Standardized ovarian hormone preparation. Serial No. 329,110; Oct. 18. Class 6.

Champion Chemical Works, Inc., Chicago, Ill. Lye. Serial No. 328,864; Oct. 18. Class 6.

Chappel Bros. Inc., Rockford, Ill. Hemic solution. Serial No. 328,684; Oct. 18. Class 6.

Chicago Biscuit & Cone Co., Chicago, Ill. Wafers. Serial No. 302,930; Oct. 18. Class 46.

Clore, Edward A., doing business as E. A. Clore & Sons, Madison, Va. Chairs and tables. Serial No. 329,737; Oct. 18. Class 32.

Congoleum-Nairn, Inc., Kearny, N. J. Wax preparation for floors. Serial No. 329,768; Oct. 18. Class 16.

Consolidated Dairy Products Co. (See Skagit County Dairymen's Association.)

Copeman Protex Company, Flint, Mich. Prepared liquid latex. Serial No. 324,659; Oct. 18. Class 6.

Cottonificio Valle di Susa, Turin, Italy. Thread and yarn. Serial No. 327,006; Oct. 18. Class 43.

Cromar Company, The, Williamsport, Pa. Ready mixed paints, floor and prepared waxes and varnishes. Serial No. 329,014; Oct. 18. Class 16.

Daroff, H., & Sons, Inc., Philadelphia, Pa. Clothing. Serial No. 329,785; Oct. 18. Class 39.

Deauville-Palatine Corporation, New York, N. Y. Shoe polish and cleaner. Serial No. 329,326; Oct. 18. Class 4.

Dehoff & Gaylord, Sodus, N. Y. Evaporated, or sun dried apples and fruits. Serial No. 318,193; Oct. 18. Class 46.

Dell Publishing Co. Inc., New York, N. Y. Magazine. Serial No. 329,982; Oct. 18. Class 38.

Delray Corporation, San Francisco, Calif. Ravioli and food flavoring sauce. Serial No. 323,897; Oct. 18. Class 46.

Dennis, Martin, Company, Newark, N. J. Portable receptacles. Serial No. 329,801; Oct. 18. Class 2.

Desbecker, Harold C., doing business as Tic Toc Toy Company, Buffalo, N. Y. Teething rings. Serial No. 302,213; Oct. 18. Class 44.

Detergent Products Corporation, Atlanta, Ga. Cleaning compound. Serial No. 328,479; Oct. 18. Class 4.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. House, office, porch and lawn furniture. Serial No. 318,225; Oct. 18. Class 32.

District of Columbia Paper Manufacturing Company, Washington, D. C. Blotting paper. Serial No. 304,754; Oct. 18. Class 37.

Economy Mills, Lubbock, Tex. Medicinal preparation. Serial No. 329,575; Oct. 18. Class 6.

Enterprise Manufacturing Company, The, Akron, Ohio. Fishhooks. Serial No. 328,597; Oct. 18. Class 22.

Eskimo Pie Corporation, New York and Brooklyn, N. Y. Frozen confections. Serial No. 328,867; Oct. 18. Class 46.

F. and W. Co., San Francisco, Calif. Ointment. Serial No. 326,676; Oct. 18. Class 6.

Firestone Battery Company, Akron, Ohio. Battery clamps, terminals and connectors, etc. Serial No. 328,090; Oct. 18. Class 21.

Fisher Flouring Mills Company, doing business as Gallatin Valley Milling Co., West Waterway, Harbor Island, Seattle, Wash. Wheat flour. Serial No. 329,347; Oct. 18. Class 46.

Forstmann Woolen Co., The, Passaic, N. J. Woolen piece goods. Serial No. 328,665; Oct. 18. Class 42.

Fort Howard Paper Company, Green Bay, Wis. Paper towels, napkins, and tissue paper, etc. Serial No. 329,893; Oct. 18. Class 37.

Fownide Laboratories. (See R. F. R. Chemical Co.)

Fox, Lewis I., doing business as Fox Poultry Farm, Metuchen, assignor to Irwin Kreilsheimer, Perth Amboy, N. J. Light modifying lacquer. Serial No. 325,847; Oct. 18. Class 16.

Futch, H. C., assignor to Goldencrisp Products Company, Inc., Montgomery, Ala. Peanut butter sandwiches, candies, etc. Serial No. 315,292; Oct. 18. Class 46.

Gallatin Valley Milling Co. (See Fisher Flouring Mills Company.)

Gardner, John F., doing business as Gardner's Remedies Incorporated, Walla Walla, Wash. Medicinal compound. Serial No. 326,523; Oct. 18. Class 6.

Gardner, Prince A., jr., doing business as Gardner Pocket Book Mfg. Co., St. Louis, Mo. Pocket receptacles. Serial No. 329,545; Oct. 18. Class 3.

Gluek Brewing Company, Minneapolis, Minn. Maltless beverages. Serial No. 326,211; Oct. 18. Class 45.

Goldencrisp Products Company. (See Futch, H. C.)

Grace-Lee Products, Inc., Minneapolis, Minn. Cleansing and scouring compound. Serial No. 329,401; Oct. 18. Class 4.

Graemiger Bros. Inc., New York, N. Y. Handkerchiefs. Serial No. 329,375; Oct. 18. Class 42.

Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Ice cream freezing machinery. Serial No. 329,988; Oct. 18. Class 31.

Greist Manufacturing Company, The, New Haven, Conn. Toy outboard motors. Serial No. 328,918; Oct. 18. Class 22.

Hanes Hosiery Mills Co., Winston-Salem, N. C. Yarns. Serial No. 330,086; Oct. 18. Class 43.

Hanley Milling Company, The, doing business as Wheat Division of the Wheat Krinkler Corp., Mansfield, Ohio. Whole wheat and bread made therefrom. Serial No. 328,920; Oct. 18. Class 46.

Harrison Wholesale Company, Chicago, Ill. Radio receiving sets, storage, batteries, etc. Serial No. 329,187; Oct. 18. Class 21.

Harutunian, Harry, doing business as Middlesex Laboratories, Watertown, Mass. Foot ointment. Serial No. 329,555; Oct. 18. Class 6.

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. Serial Nos. 330,088–9; Oct. 18. Class 22.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. Serial Nos. 330,126–7; Oct. 18. Class 22.

Heneph Corporation, The, Kingston, N. Y. Medicinal tablets or lozenges. Serial No. 329,947; Oct. 18. Class 6.

Hexin, Inc., Chicago, Ill. Tablets for relief of headache, neuralgia, head colds, etc. Serial No. 330,258; Oct. 18. Class 6.

Hollins, William, and Company, Limited, Nottingham, England. Yarns. Serial No. 329,636; Oct. 18. Class 43.

Hollins, William, and Company, Limited, Nottingham, England. Silk piece goods. Serial No. 329,638; Oct. 18. Class 42.

Hope Hosiery Mills. (See Stork, Homer L.)

Horne, W. Hill, doing business as Hill Horne Drug Company. Medicines. Serial No. 326,713; Oct. 18. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, bath salts, etc. Serial No. 329,446; Oct. 18. Class 6.

Ivins', J. S., Son, Inc., Philadelphia, Pa. Crackers. Serial No. 329,378; Oct. 18. Class 46.

Johnson, S. C., & Son, Racine, Wis. Polish. Serial No. 323,943; Oct. 18. Class 4.

Jones, Rosa-Lee, New York, N. Y. Preparation for stimulating the growth of the hair. Serial No. 329,167; Oct. 18. Class 6.

Kadiak Fisheries Company, Seattle, Wash. Canned salmon. Serial No. 299,136; Oct. 18. Class 46.

Kaplan, Louis, Baltimore, Md. Racing cards and newspaper columns. Serial No. 330,372; Oct. 18. Class 38.

Kaufmann, K., & Co., Inc., Newark, N. J. Traveling bags, suit cases, etc. Serial No. 329,798; Oct. 18. Class 3.

Keep Bright Products Company. (See Anderson, William N.)

Kendall Company, The, Walpole, Mass. Absorbent cotton. Serial No. 325,229; Oct. 18. Class 44.

Knickerbocker Import Co. (See Stein, William.)

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Crayons. Serial No. 329,859; Oct. 18. Class 37.

Kreielsheimer, Irwin. (See Fox, Lewis I., assignor.)

Kress, S. H., & Co., New York, N. Y. Brooches, bracelets, rings, etc. Serial No. 323,339; Oct. 18. Class 28.

Leech & Rapport Inc., New York, N. Y. Hats. Serial No. 328,756; Oct. 18. Class 39.

MacDonald, Ian, Modesto, Calif. Folding or collapsible table and sents. Serial No. 329,584; Oct. 18. Class 32.

Mass Production Corporation, New York, N. Y. Typewriters and parts. Serial No. 330,045; Oct. 18. Class 23.

McCrory Stores Corporation, New York, N. Y. Blank books and loose leaf binders. Serial No. 330,047; Oct. 18. Class 37.

McDonald, Herman M., Chicago, Ill. Underwear. Serial No. 330,067; Oct. 18. Class 39.

Meyers Pants Co. Inc., New York, N. Y. Lumberjackets, pants, coats, etc. Serial No. 330,018; Oct. 18. Class 39.

Middlesex Laboratories. (See Harutunian, Harry.)

Mülhens, Ferd, Inc., New York, N. Y. Eau de Cologne, perfumery, shampoo, etc. Serial No. 329,117; Oct. 18. Class 6.

Mustard, Harry G., Dallas, Tex. Meat. Serial No. 329,834; Oct. 18. Class 46.

National Malleable and Steel Castings Company, Cleveland, Ohio. Railway trucks and side frames. Serial No. 329,452; Oct. 18. Class 19.

Natural Products Company, Eugene, Oreg. Mineral water. Serial No. 328,903; Oct. 18. Class 45.

New York Merchandise Co. Inc., New York, N. Y. Jew's harp. Serial No. 318,285; Oct. 18. Class 36.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparation. Serial No. 327,598; Oct. 18. Class 6.

Nourse Oil Company, Kansas City, Kans. Insecticides. Serial No. 328,249; Oct. 18. Class 6.

Orr, Grace G., San Pedro, Calif. Antiseptic and germicide. Serial No. 327,960; Oct. 18. Class 6.

Ottawa River Paper Company, The, Toledo, Ohio. Containers, shipping cases, display cases, etc. Serial No. 329,198; Oct. 18. Class 2.

Ottinger, Carew and McLaughlin, New York, N. Y. Dolls. Serial Nos. 329,426–7; Oct. 18. Class 22.

Paesana Packing Co. (See Scaramelli & Company.)

Paparozzi, D. Nicola, Newark, N. J. Multless beverages. Serial No. 329,865; Oct. 18. Class 45.

Parents' Publishing Association, Inc., New York, N. Y. Weekly publication. Serial No. 328,181; Oct. 18. Class 35.

Pepsodent Co., The, Chicago, Ill. Medicinal tablets. Serial No. 329,562; Oct. 18. Class 6.

Petrolagar Laboratories, Inc., Chicago, Ill. Live surgical maggots. Serial No. 329,354; Oct. 18. Class 6.

Phoenix Oil Company, The, Cleveland, Ohio. Shampoo. Serial Nos. 329,093–4; Oct. 18. Class 6.

Prybrands, Inc., Long Island City, N. Y. Razors and razor blades. Serial No. 329,879; Oct. 18. Class 23.

Pyrrole Products Corporation, Portsmouth, Ohio. Liquid and/or its concentrated form. Serial No. 329,607; Oct. 18. Class 4.

R. F. R. Chemical Co., doing business as Fownlde Laboratories, Los Angeles, Calif. Antiseptic. Serial No. 329,408; Oct. 18. Class 6.

Rasmussen, Geo., Co., Chicago, Ill. Cream tartar. Serial No. 316,505; Oct. 18. Class 6.

Raybestos-Manhattan, Inc., Passaic, N. J. Transmission belts. Serial No. 328,801; Oct. 18. Class 35.

Reau, Paul O. A., Glenay (Deaux-Sevres), France. Glue, paste, anhydrous cement, etc. Serial No. 299,154; Oct. 18. Class 5.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, beauty creams, cold creams, etc. Serial No. 326,432; Oct. 18. Class 6.

Reliance Piece Dye Works, Paterson, N. J. Piece goods. Serial No. 329,338; Oct. 18. Class 42.

Ritz Cosmetic & Perfume Shoppe, Elizabeth, N. J. Astringents, astringent cerates, bleach creams, etc. Serial No. 328,646; Oct. 18. Class 6.

Rosen, J., & Sons, Paterson, N. J., and New York, N. Y. Ribbons. Serial No. 324,127; Oct. 18. Class 42.

Rossie Velvet Company, Mystic, Conn. Velvets in the piece. Serial Nos. 327,453–4; Oct. 18. Class 42.

Royal Typewriter Company, Inc., New York, N. Y. Typewriting machines and parts thereof. Serial No. 330,208; Oct. 18. Class 23.

Russell, Frank C., doing business as Russell & Co., New York, N. Y. Tea. Serial No. 327,808; Oct. 18. Class 46.

Sanka Coffee Corporation, New York, N. Y. Coffees. Serial No. 329,155; Oct. 18. Class 46.

Savarese, James, New York, N. Y. Tomato sauce. Serial No. 329,656; Oct. 18. Class 46.

Scaramelli & Company, Inc., doing business as Paesana Packing Co., New York, N. Y., and Boston, Mass. Canned vegetables and tomato sauce. Serial No. 327,417; Oct. 18. Class 46.

Schwendermans, Algoma, Wis. Cheese. Serial No. 328,039; Oct. 18. Class 46.

Segall, Mrs. Joseph R., doing business as Mrs. J. R. Segall, El Paso, Tex. Preparation for removing wrinkles. Serial No. 329,588; Oct. 18. Class 6.

Skagit County Dairymen's Association, doing business as Consolidated Dairy Products Co., Burlington and Seattle, Wash. Powdered preparation for malted milk beverages. Serial No. 329,100; Oct. 18. Class 46.

Spletter, Albert, Washington, D. C. Adhesive cement. Serial No. 328,021; Oct. 18. Class 5.

Standard Brands Incorporated. New York, N. Y. Coffee. Serial No. 303,391; Oct. 18. Class 46.

Stant Manufacturing Company, Connorsville, Ind. Vehicle radiator and gasoline filler caps. Serial No. 326,963; Oct. 18. Class 19.

Stark Metal Products Company, The, Massillon, Ohio. Plastic cement. Serial No. 329,657; Oct. 18. Class 5.

Stein, William, doing business as Knickerbocker Import Co., New York, N. Y. Malt beverage and extracts. Serial No. 328,929; Oct. 18. Class 48.

Sterling Button Co. Inc., New York, N. Y. Buttons, buckles, and pins made from ivory, bone, etc. Serial No. 329,125; Oct. 18. Class 40.

Stork, Homer L., doing business as Hope Hosiery Mills, Adamstown, Pa. Hosiery. Serial No. 287,849; Oct. 18. Class 39.

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Brake dressing, chromium cleaner, etc. Serial No. 328,108; Oct. 18. Class 4.

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Motor radiator cleaning compound, etc. Serial No. 328,141; Oct. 18. Class 6.

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Automobile body polish, rubber paint enamel, etc. Serial No. 328,143; Oct. 18. Class 16.

Sullivan, P., Shoe Co., The, Cincinnati, Ohio. Shoes. Serial No. 329,415; Oct. 18. Class 39.

Swann Chemical Company, Birmingham, Ala. Concentrated fertilizer. Serial No. 318,327; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable fertilizer. Serial No. 318,328; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable concentrated fertilizer. Serial No. 318,329; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. High potash accurately sized drillable fertilizer. Serial No. 318,330; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. High potash fertilizer. Serial No. 318,333; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. Fertilizer. Serial Nos. 318,334–5; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. Fertilizer. Serial No. 318,418; Oct. 18. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable fertilizer. Serial No. 319,787; Oct. 18. Class 10.

Tapo Citrus Association, Simi, Calif. Fresh citrus fruits. Serial No. 329,511; Oct. 18. Class 46.

Textiles, Incorporated, Gastonia, N. C. Yarns. Serial Nos. 330,317–18; Oct. 18. Class 43.

Tic Toc Toy Company. (See Desbecker, Harold C.)

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Toland, Robert, doing business as Robert Toland & Co., Philadelphia, Pa. Motor lubricating oils. Serial No. 330,234; Oct. 18. Class 15.

Topics Publishing Company, Inc., New York, N. Y. Publication. Serial No. 329,780; Oct. 18. Class 38.

Tranin Egg Products Co., Kansas City, Mo. Broken eggs in liquid and dried form. Serial No. 325,244; Oct. 18. Class 46.

Tricold Refrigerator Corporation, Buffalo, N. Y. Mechanical refrigerators. Serial No. 330,214; Oct. 18. Class 31.

Tulon, Inc., New York, N. Y. Beauty cream. Serial No. 329,484; Oct. 18. Class 6.

United Laboratories, Omaha, Nebr. Lining preparation used as a separating media between a porous object and a hecolite or a vulcanite covering therefor. Serial No. 324,410; Oct. 18. Class 44.

Ure Druggist, Inc., Cleveland, Ohio. Beef, iron, wine, cocoanut oil shampoo, etc. Serial No. 315,654; Oct. 18. Class 6.

Vanity Fair Silk Mills, Reading, Pa. Hosiery and knitted and textile underwear, etc. Serial No. 329,390; Oct. 18. Class 39.

Veglia, Francesco, Turin, Italy. Forceps for castration of animals. Serial No. 329,461; Oct. 18. Class 44.

Victor Saw Works, Inc., Middletown, N. Y. Saws and saw blades. Serial No. 323,151; Oct. 18. Class 23.

Wallenstein Mayer Company, The, Cincinnati, Ohio. Watches and clocks. Serial No. 325,856; Oct. 18. Class 27.

Warren, Northam, Corporation, New York, N. Y. Combination sets of preparation and implements used for the care of the feet. Serial No. 329,808; Oct. 18. Class 44.

Wheat Division of the Wheat Krinkler Corp. (See Hanley Milling Company, The.)

Whitehead Metal Products Company of New York, Inc., New York, N. Y. Gas automatic hot water storage systems. Serial No. 328,856; Oct. 18. Class 34.

Wilson, Andrew, Inc., Springfield, N. J. Agricultural insecticides. Serial No. 329,341; Oct. 18. Class 6.

Wilson Products Co., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 329,462; Oct. 18. Class 6.

Woll-Wäscherei und Kämmerei in Döhren bei Hannover, Dohren, near Hannover, Germany. Hydrous and anhydrous adeps lanæ or lanolin toilet preparations. Serial No. 328,826; Oct. 18. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Agfa Ansco Corporation, Binghamton, N. Y. Photographic films. 298,238; Oct. 18; Serial No. 320,969; published Jan. 12, 1932. Class 26.

Amtorg Trading Corporation, New York, N. Y. Santonin. 298,248; Oct. 18; Serial No. 306,255; published July 26, 1932. Class 6.

Andreallo, Geronimo, doing business as Jerome, New York, N. Y. Scalp ointment, hair gloss, rinses, etc. 298,216; Oct. 18; Serial No. 325,844; published July 12, 1932. Class 6.

Arabian Treatment Co. (See Van Dyne, Samuel W.)

Arzen Laboratories, Inc. (See Charlton and Matzen.)

Automatic Washer Company, Newton, Iowa. Insect exterminator. 298,289; Oct. 18; Serial No. 327,126; published July 19, 1932. Class 6.

Ayer Company, The, Lowell, Mass. Irradiated medicated salve. 298,215; Oct. 18; Serial No. 326,572; published Aug. 2, 1932. Class 6.

B. & B. Exterminators, Inc., Baltimore, Md. Preparations and chemicals for exterminating rats, mice, etc. 298,235; Oct. 18; Serial No. 322,734; published Apr. 19, 1932. Class 6.

Ballard, James F., Inc., St. Louis, Mo. Bath tablet. 298,204; Oct. 18; Serial No. 326,573; published July 12, 1932. Class 6.

Ballard, James F., Inc., St. Louis, Mo. Bath tablet. 298,209; Oct. 18; Serial No. 326,574; published July 12, 1932. Class 6.

Barcalo Manufacturing Company, Buffalo, N. Y. Pillows or cushions. 298,268; Oct. 18; Serial No. 327,624; published July 26, 1932. Class 32.

Barron-Gray Packing Co., San Jose, Calif. Canned cut fruits. 298,310; Oct. 18. Class 46.

Barsanti, Frank A., Tulsa, Okla. Dressed baby broiling chickens. 298,269; Oct. 18; Serial No. 327,547; published July 26, 1932. Class 46.

Bernitz, Jeannot I., doing business as Lu Laboratories, New York, N. Y. Depilatory. 298,211; Oct. 18; Serial No. 326,250; published July 26, 1932. Class 6.

Big Chief Candy Co., Inc., Wilkes-Barre, Pa. Salted peanuts and candy. 298,233; Oct. 18; Serial No. 323,119; published July 26, 1932. Class 46.

Bilhuber, E., Inc., Jersey City, N. J. Medical compound for pain and cough. 298,197; Oct. 18; Serial No. 327,970; published July 26, 1932. Class 6.

Birbeck, F. V., Watsonville, Calif. Fresh vegetables. 298,257; Oct. 18; Serial No. 328,115; published July 26, 1932. Class 46.

Bloomingdale Bros., Inc., New York, N. Y. Olive oil shampoo, essence of peppermint, etc. 298,283; Oct. 18; Serial No. 326,665; published July 19, 1932. Class 6.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. 298,229; Oct. 18; Serial No. 324,873; published July 19, 1932. Class 6.

Bonat, Samuel, & Bro., New York, N. Y. Electric permanent hair waving machines and permanent waving pads. 298,208; Oct. 18. Class 44.

Borcherdt Malt Extract Company, Chicago, Ill. Medicine. 298,284; Oct. 18; Serial No. 326,666; published July 19, 1932. Class 6.

Brantley, Lewis R., doing business as Claritone Dairy Products Co., Marietta, Ga. Preparation for consumption by milch cows for preventing objectionable odors of milk yielded. 298,287; Oct. 18; Serial No. 326,841; Published July 19, 1932. Class 6.

Brunswick-Balke-Collender Company, The, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Quarried slate. 298,275; Oct. 18; Serial No. 327,041; published Aug. 9, 1932. Class 1.

Burnham Soluble Iodine Co., Auburndale, Newton, Mass. Soluble iodine. 298,243; Oct. 18; Serial No. 290,685; published July 19, 1932. Class 6.

Cammarano Bros., Inc., Tacoma, Wash. Maltless beverages. 298,303; Oct. 18. Class 45.

Candee, L., & Company, The, New Haven, Conn., assignor to United States Rubber Company, New York, N. Y. Rubber boots and shoes. 89,341–2; renewed Dec. 10, 1932.

Capehart Corporation, The, Fort Wayne, Ind. Radio receiving sets. 298,297; Oct. 18. Class 21.

Carlisle Packing Co., Seattle, to Carlisle Packing Company, Beach, Wash. Canned salmon. 89,620–2; renewed Dec. 31, 1932.

Charlton and Matzen, doing business as Arzen Laboratories, Inc., Clinton, Iowa. Eye drops. 298,214; Oct. 18; Serial No. 326,706; published July 12, 1932. Class 6.

Claritone Dairy Products Co. (See Brantley, Lewis R.)

Clayton Magazines, Inc., The, New York, N. Y. Periodical. 298,263; Oct. 18; Serial No. 327,867; published July 26, 1932. Class 38.

Cliff, Jabez, & Co. Ltd., Walsall, England. Saddlery. 298,242; Oct. 18; Serial No. 299,391; published July 26, 1932. Class 8.

Cohn & Tracy. (See Tracy, Pierre J.)

D C A Drug Stores Inc., Portland, Oreg. Antiseptic, deodorant, and prophylactic. 298,192; Oct. 18; Serial No. 327,626; published Aug. 2, 1932. Class 6.

Daily Graphic, Inc., New York, N. Y. Newspaper column. 298,273; Oct. 18; Serial No. 327,389; published Aug. 2, 1932. Class 38.

Diamond Brand Products, Inc., Philadelphia, Pa. Insecticides. 298,196; Oct. 18; Serial No. 327,906; published July 26, 1932. Class 6.

Diamond Expansion Bolt Co., Garwood, N. J. Machine bolt expansion shields, and expansion bolts, shields, and anchors. 298,252; Oct. 18; Serial No. 323,227; published Mar. 22, 1932. Class 18.

Doyle, B. W., doing business as Doyle Packing Co., Los Angeles, Calif. Dog food. 298,281; Oct. 18; Serial No. 326,365; published July 26, 1932. Class 46.

Doyon, Alphonse M., Montreal, Quebec, Canada. Powder to be mixed with gasoline to increase the efficiency of the same. 298,207; Oct. 18; Serial No. 327,048; published July 19, 1932. Class 6.

Ely & Walker Dry Goods Company, St. Louis, Mo. Overalls. 89,635; renewed Dec. 31, 1932.

Fake, Warren H., Ephrata Borough, Pa. Hosiery and underwear. 298,267; Oct. 18; Serial No. 327,760; published Aug. 2, 1932. Class 39.

Ferbo Research Laboratories, Inc., Miami, Fla., and New York, N. Y. Therapeutic agent for control of fermentation in the human system. 298,198; Oct. 18; Serial No. 328,059; published July 26, 1932. Class 6.

Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 90,183–4; renewed Feb. 11, 1933.

Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 90,186; renewed Feb. 11, 1933.

Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 90,316–17; renewed Feb. 18, 1933.

Flather, W. T., Limited, Sheffield, England. Tool-steel, steel in certain forms, and castings and forgings. 88,481; renewed Sept. 24, 1932.

Flather, W. T., Limited, Sheffield, England. Cast-steel. 88,482; renewed Sept. 24, 1932.
Friedricks, Irving, doing business as Irving Friedricks Co., New York, N. Y. Ladies' sport coats. 298,258; Oct. 18; Serial No. 328,094; published July 26, 1932. Class 39.
Footsol Mfg. Co., New York, N. Y. Balm for feet and foot lotions. 298,203; Oct. 18; Serial No. 326,980; published July 12, 1932. Class 6.
Fowler, Harry C., doing business as Weber Pharmacal Company, Salt Lake City, Utah. Liquid chemicals. 298,241; Oct. 18; Serial No. 314,690; published July 26, 1932. Class 6.
Gabrieleen Co., Inc., New York, N. Y. Permanent waving lotion. 298,228; Oct. 18; Serial No. 324,959; published July 26, 1932. Class 6.
Gallun, A. F., & Sons Corporation, Milwaukee, Wis. Leather. 298,307; Oct. 18. Class 1.
Gassett, McKinley, Washington, D. C. Germicide. 298,189; Oct. 18; Serial No. 327,432; published July 26, 1932. Class 6.
Gessler, Siegfried. (See Ramm, Fred D.)
Getz Exterminators, Inc., St. Louis, Mo. Preparations for exterminating insects. 298,237; Oct. 18; Serial No. 322,634; published July 19, 1932. Class 6.
Glazo Company, Inc., The, New York, N. Y. Nail polish and enamel, etc. 298,230; Oct. 18; Serial No. 324,285; published Aug. 2, 1932. Class 6.
Goldblatt Bros., Inc., Chicago, Ill. Malt syrup for food purposes. 298,312; Oct. 18. Class 46.
Gould, Howard, Camden, N. J. Preparation for removing corns. 298,285; Oct. 18; Serial No. 326,782; published July 19, 1932. Class 6.
Greensboro Full Fashioned Hosiery Mills, Greensboro, N. C. Ladies' hosiery. 298,259; Oct. 18; Serial No. 328,062; published July 26, 1932. Class 39.
Grozaire Laboratories. (See Kundtz, Louvenia L.)
Halitest Company. (See Molchanoff, Stephen.)
Hampshire Shirt Co. Inc., New York, N. Y. Shirts and pajamas. 298,306; Oct. 18. Class 39.
Harzfeld's, Inc., Kansas City, Mo. Perfume. 298,223; Oct. 18; Serial No. 326,856; published July 12, 1932. Class 6.
Haspel Brothers, Inc., New Orleans, La. Suits. 298,256; Oct. 18; Serial No. 328,169; published July 26, 1932. Class 39.
Hecht, George J., New York, N. Y. Publication. 298,262; Oct. 18; Serial No. 327,873; published Aug. 2, 1932. Class 38.
Histomap, Inc., Chicago, Ill. Charts. 298,240; Oct. 18; Serial No. 311,189; published Aug. 2, 1932. Class 38.
Hoch, Forrest D., Duluth, Minn. Candied popcorn. 298,296; Oct. 18. Class 46.
Hollingsworth & Whitney Company, Boston, Mass. Writing and wrapping paper. 89,847–8; renewed Jan. 14, 1933.
Howard Chemical and Manufacturing Company, Minneapolis, Minn. Inks commonly known as ink solids. 88,492; renewed Sept. 24, 1932.
Jerome. (See Andreallo, Geronimo.)
Johnson & Johnson, New Brunswick, N. J. Antiseptic preparation. 298,222; Oct. 18; Serial No. 326,942; published July 12, 1932. Class 6.
Kellogg Company, Battle Creek, Mich. Cereal breakfast foods. 298,234; Oct. 18; Serial No. 322,920; published July 26, 1932. Class 46.
Kendall Company, The, Boston, Mass., and Chicago, Ill. Ointment. 298,218; Oct. 18; Serial No. 326,321; published July 12, 1932. Class 6.
Kent, Roger, Inc., New York, N. Y. Suits, coats, and overcoats. 298,261; Oct. 18; Serial No. 327,878; published July 26, 1932. Class 39.
Kinney & Levan Company, The, Cleveland, Ohio. Tinned, bottled, or packaged foodstuffs. 298,274; Oct. 18; Serial No. 326,042; published July 26, 1932. Class 46.
Klein, Milton H., doing business as Tipona Company, Cleveland, Ohio. Medicinal preparation for reducing weight. 298,191; Oct. 18; Serial No. 327,591; published Aug. 2, 1932. Class 6.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Paper hangers' size. 298,295; Oct. 18; Serial No. 328,493; published Aug. 9, 1932. Class 5.
Kremer, George L., New York, N. Y. Hair waving lotions. 298,282; Oct. 18; Serial No. 326,507; published July 19, 1932. Class 6.
Kresge Department Store Corp., Newark, N. J. Account and blank books, toilet paper, paper napkins, etc. 298,271; Oct. 18; Serial No. 327,441; published July 26, 1932. Class 37.
Kress, S. H., & Co., New York, N. Y. Cleansing tissues. 298,311; Oct. 18. Class 37.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Prepared mustard. 298,305; Oct. 18. Class 46.
Kundtz, Louvenia L., doing business as Grozaire Laboratories, Lakewood, Ohio. Scalp and hair tonic. 298,190; Oct. 18; Serial No. 327,517; published July 26, 1932. Class 6.
Lambert Pharmacal Company, Wilmington, Del. Medicinal compound in the nature of a kidney alterative and antilithic indicated for the treatment of urinary calculus, gout, etc. 298,193; Oct. 18; Serial No. 327,730; published July 26, 1932. Class 6.
Larsen, Waldemar, & Sigurd J. Hoff, Brooklyn, N. Y. Medicinal preparation for treatment of cuts, wounds, etc. 298,190; Oct. 18; Serial No. 328,102; published July 26, 1932. Class 6.
Lu Laboratories. (See Bernitz, Jeannot I.)
Magnuson Products Corporation, Brooklyn, N. Y. Washing sodas. 298,185; Oct. 18; Serial No. 327,064; published July 12, 1932. Class 6.
Maison Jeurelle, Inc., Jersey City, N. J. Perfume, toilet water, astringent lotion, etc. 298,208; Oct. 18; Serial No. 326,946; published July 12, 1932. Class 6.
Maryland Baking Company, Inc., The, assignor to Western Dairy Product Co., Inc., Seattle, Wash. Ice cream cones. 298,246; Oct. 18; Serial No. 301,674; published July 14, 1931. Class 46.
Mayflower Mills, Fort Wayne, Ind. Pancake flour. 298,294; Oct. 18; Serial No. 328,336; published Aug. 2, 1932. Class 46.
Meigs, Curtis C., doing business as Octane Research Laboratory, Bala, Pa. Motor fluid. 298,206; Oct. 18; Serial No. 327,161; published July 19, 1932. Class 6.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medical preparation. 298,200; Oct. 18; Serial No. 328,134; published July 26, 1932. Class 6.
Metal Process Corporation, Fairlawn, N. J. Pickle liquors. 298,225; Oct. 18; Serial No. 326,355; published July 12, 1932. Class 6.
Milam, Inc., Winston-Salem, N. C. Herb compound. 298,187; Oct. 18; Serial No. 327,402; published July 26, 1932. Class 6.
Mille Fleurs, Inc., New York, N. Y. Cream for eyelashes and eyebrows. 298,220; Oct. 18; Serial No. 326,979; published July 12, 1932. Class 6.
Molchanoff, Stephen, doing business as Halitest Company, San Diego, Calif. Antiseptic mouth wash. 298,212; Oct. 18; Serial No. 325,233; published July 19, 1932. Class 6.
Montagna, Joseph, Roxbury, Mass. Salve or unguentum. 298,213; Oct. 18; Serial No. 327,229; published July 19, 1932. Class 6.
Montero, Harry E., doing business as Tastie Tooth Paste Co., Bloomfield, N. J. Toothpaste. 298,249; Oct. 18; Serial No. 317,178; published July 12, 1932. Class 6.
Montross & Clarke Company, Inc., New York, N. Y. Paper for printing and writing. 298,260; Oct. 18; Serial No. 327,880; published July 26, 1932. Class 37.
Morrissey, William J. V., doing business as The Vizabid Co., San Francisco, Calif. Bridge table cover. 298,276; Oct. 18; Serial No. 326,904; published July 26, 1932. Class 37.
Mueller Electric Company, Cleveland, Ohio. Ground clamp. 298,300; Oct. 18. Class 21.
Munsingwear Corporation, The, Minneapolis, Minn. Swim suits or bathing suits. 298,202; Oct. 18; Serial No. 328,366; published Aug. 2, 1932. Class 39.
National Automotive Fibres, Inc., Oakland, Calif. Cotton waddding and batting. 298,266; Oct. 18; Serial No. 327,804; published Aug. 9, 1932. Class 1.
Naugatuck Chemical Company, The, New York, N. Y. Rubber adhesive. 298,292; Oct. 18; Serial No. 327,883; published Aug. 2, 1932. Class 5.
Noonan, L. F., doing business as L. F. Noonan & Co., Sacramento, Calif. Fresh vegetables. 298,301; Oct. 18. Class 46.
Northwestern Pine Tar Co., Chicago, Ill. Pine tar. 298,186; Oct. 18; Serial No. 327,283; published July 19, 1932. Class 6.
Noxacorn Company, Inc., New York, N. Y. Liquid corn remover. 298,288; Oct. 18; Serial No. 327,106; published July 19, 1932. Class 6.
Ohio Farm Bureau Service Company, The, Columbus, Ohio. Dairy feeds. 298,253; Oct. 18; Serial No. 319,720; published Aug. 2, 1932. Class 46.
Ohio Valley Drug Co., Wheeling, W. Va. Antipruritic and antiseptic healing lotion. 89,943; renewed Jan. 21, 1933.
Parke, Davis & Co., Detroit, Mich. Preparation for the treatment of acidosis. 298,194; Oct. 18; Serial No. 327,764; published July 26, 1932. Class 6.
Patermann, Myro, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany. Fruit juices, cocoa and chocolate and malt extracts. 298,254; Oct. 18; Serial No. 320,369; published July 26, 1932. Class 46.
Pecan Krisp Company, Inc., Dallas, Tex. Flavoring material in granular form for ice cream. 298,272; Oct. 18; Serial No. 327,421; published Aug. 9, 1932. Class 46.
Pennzoil Company, The, Oil City, Pa. House organ. 298,201; Oct. 18; Serial No. 328,369; published Aug. 2, 1932. Class 38.
Phenochrome Germicidal Corporation, Oxford, N. Y. Germicide. 298,221; Oct. 18; Serial No. 326,952; published July 12, 1932. Class 6.
Phoenix Slate Company. (See Brunswick-Balke-Collender Company, The.)
Pillsbury Flour Mills Company, Minneapolis, Minn. Cake and wheat flour. 298,293; Oct. 18; Serial No. 328,036; published July 26, 1932. Class 46.
Pinnix, W. Maple, doing business as The Smacks Co., New Bern, N. C. Laxative candy. 298,286; Oct. 18; Serial No. 327,001; published July 19, 1932. Class 6.

Polakoff, Allan A., doing business as Veritas Products Co., New York, N. Y. Antiseptic jelly. 298,205; Oct. 18; Serial No. 326,564; published July 12, 1932. Class 6.
Pure Cheese Corporation, Chicago, Ill. Pasteurized cheese. 298,236; Oct. 18; Serial No. 322,710; published Aug. 2, 1932. Class 46.
Ramm, Fred D., doing business as Siegfried Gessler, New York, N. Y. Bitters. 298,219; Oct. 18; Serial No. 326,791; published July 12, 1932. Class 6.
Reid, Albert S., Vancouver, British Columbia, Canada. Medicine. 298,247; Oct. 18; Serial No. 305,287; published July 19, 1932. Class 6.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 298,184; Oct. 18; Serial No. 326,989; published July 12, 1932. Class 6.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 298,188; Oct. 18; Serial No. 327,415; published July 26, 1932. Class 6.
S. M. Laboratories, Inc., Seattle, Wash. Vaginal suppositories. 298,224; Oct. 18; Serial No. 326,232; published July 12, 1932. Class 6.
Shell Oil Company, San Francisco, Calif. Petroleum pitch. 298,250; Oct. 18; Serial No. 317,382; published Aug. 9, 1932. Class 1.
Shorewood Mills, Milwaukee, Wis. Athletic union suits, shirts, and shorts. 298,278; Oct. 18; Serial No. 325,728; published July 26, 1932. Class 39.
Smacks Co., The. (See Pinnix, W. Maple.)
Soesman, Jacques, doing business as Souplex Company, Brussels, Belgium. Dentifrice, rouge, powder, etc. 298,227; Oct. 18; Serial No. 325,807; published July 12, 1932. Class 6.
Souplex Company. (See Soesman, Jacques.)
Spanier, Harry, Brooklyn, N. Y. Face powder. 298,217; Oct. 18; Serial No. 326,839; published July 12, 1932. Class 6.
Spencerian Pen Company, The, New York, N. Y. Writing pens, penholders, paper clips, etc. 298,265; Oct. 18; Serial No. 327,838; published July 26, 1932. Class 37.
Steam Pressing Iron Company, Chicago, Ill. Steam pressing irons. 298,290; Oct. 18; Serial No. 327,809; published Aug. 2, 1932. Class 24.
Stettner Corporation, New York and Brooklyn, N. Y. Radio cabinets. 298,245; Oct. 18; Serial No. 301,524; published Aug. 2, 1932. Class 32.
Strauss, Bodenheimer Saddlery Co., by change of name to Straus-Bodenheimer Company, Houston, Tex. Horse-collars. 86,961; renewed June 11, 1932.
Suffolk Knitting Company, Lowell, Mass. Wearing apparel. 298,302; Oct. 18. Class 39.
Superior Laboratories, Inc., Cleveland, Ohio. Analgesic liniment, preparations for treatment of colds and catarrh, etc. 298,239; Oct. 18; Serial No. 322,277; published July 26, 1932. Class 6.
Tastie Tooth Paste Co. (See Montero, Harry E.)
Teasdale & Co. Limited, Carlisle, England. Medicated pastilles. 298,210; Oct. 18; Serial No. 325,273; published July 19, 1932. Class 6.
Texaco Salt Products Company, New York, N. Y. Salt. 298,195; Oct. 18; Serial No. 327,868; published July 26, 1932. Class 6.
Tipona Company. (See Klein, Milton H.)
Tracy, Pierre J., doing business as Cohn & Tracy, Chicago, Ill. Suits, trousers, and slacks. 298,308; Oct. 18; Serial No. 324,135. Class 39.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. 298,244; Oct. 18; Serial No. 300,765; published July 26, 1932. Class 39.
Tully & Kolis Co., Newark, N. J. Vegetable oil made from hemp-seed. 298,277; Oct. 18; Serial No. 325,812; published July 26, 1932. Class 46.
United States Envelope Company, Springfield, Mass. Toilet paper. 298,304; Oct. 18. Class 37.
United States Rubber Company. (See Candee, L., & Company, The, assignor.)
United Stores Company, The, Abilene, Kans. Butter. 298,291; Oct. 18; Serial No. 327,641; published July 26, 1932. Class 46.
Van Dyne, Samuel W., doing business as Arabian Treatment Co., St. Louis, Mo. Preparation in paste form for restoring the luster and finish of automobile bodies. 298,309; Oct. 18. Class 16.
Veritas Products Co. (See Polakoff, Allan A.)
Vertex Hosiery Mills, Inc., Weissport, Pa. Hosiery. 298,251; Oct. 18; Serial No. 319,711; published Aug. 2, 1932. Class 39.
Virgin Diamond Syndicate, The, Kansas City, Mo. Precious stones, finger rings, bar pins, etc. 298,255; Oct. 18; Serial No. 316,709; published July 26, 1932. Class 28.
Vita-Minn Company, Minneapolis, Minn. Medicines. 298,280; Oct. 18; Serial No. 325,306; published July 12, 1932. Class 6.
Vizabid Co., The. (See Morrissey, William J. V.)
Wachusett Shirt Company, Leominster, Mass. Dress and negligee shirts. 298,270; Oct. 18; Serial No. 327,490; published Aug. 2, 1932. Class 39.
Ward, Joseph E., Long Beach, Calif. Skin tonic, powder base, hair tonic, etc. 298,231; Oct. 18; Serial No. 324,411; published July 12, 1932. Class 6.
Washington Co-Operative Egg & Poultry Association, Seattle, Wash. Egg syrup for cooking and confectionery purposes. 298,279; Oct. 18; Serial No. 325,158; published July 26, 1932. Class 46.
Weber Pharmacal Company. (See Fowler, Harry C.)
Wesco Foods Co. (See Kroger Grocery & Baking Co., The.)
Western Dairy Product Co., Inc. (See Maryland Baking Company, Inc., The, assignor.)
Whitaker Paper Company, Cincinnati, Ohio. Bond writing paper. 298,299; Oct. 18. Class 37.
White, Wilbur, Chemical Company, The, Owego, N. Y. Emulsion. 298,232; Oct. 18; Serial No. 323,470; published July 19, 1932. Class 6.
Whiting, George A., Paper Company, Menasha, Wis. Bond paper. 298,264; Oct. 18; Serial No. 327,860; published July 26, 1932. Class 37.
Yardley & Co., Limited, London, England. Bath salts, perfumes, tooth wash, etc. 298,220; Oct. 18; Serial No. 326,409; published July 12, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

Aladdin Products Corporation, Detroit, Mich. Aladdin Magic Household Cleaner. For Household Cleaner. 41,282; Oct. 18.
Angelier, Frank P., New York, N. Y. Sun Kist. For Orangeade. 41,283; Oct. 18.
Angelier, Frank P., New York, N. Y. Bottle O' Kiss. For Orangeade. 41,284; Oct. 18.
Berkshire Fine Spinning Associates, Inc., New York, N. Y. King Phillip Berkshire. For Broadcloth Apparel. 41,285; Oct. 18.
Crystal Bead Mineral Springs Co., San Diego, Calif. Crystal Bead Water. For a Natural Alkaline Carbonate Lithia Water. 41,286; Oct. 18.
Dairymen's League Co-Operative Association, Inc., Utica, N. Y. Dairylea Salt Butter. For Butter. 41,287; Oct. 18.
Dairymen's League Co-Operative Association, Inc., Utica, N. Y. Dairylea Eggs. For Eggs. 41,288; Oct. 18.
Davidson Biscuit Company, Mt. Vernon, Ill. All-Crisp Soda Crackers. For Soda Crackers. 41,289; Oct. 18.
Golden Rose Company. (See Scott, Walter.)
Halferty, G. P., & Co., Seattle, Wash. Smart Set Salmon. For Salmon. 41,290; Oct. 18.
Hammett, J. L., Company, Newark, N. J. Hammett's Practical Paste. For Paste. 41,291; Oct. 18.
Heron, Avalon D., Crystal Springs, Redland, Calif. Mountain Crystal Spring Water. For Bottled Spring Water. 41,292; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. Sport Shoes. For Boxes. 41,293; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. Tommy Tucker Shoes. For Boxes. 41,294; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. The Service Arch Health Shoe. For Boxes. 41,295; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. Betta Arch. For Boxes. 41,296; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. Fast Steppers. For Boxes. 41,297; Oct. 18.
Hoague-Sprague Corporation, Lynn, Mass. They See the Box First. For Boxes. 41,298; Oct. 18.
Jewel Food Stores, Inc., Woodbury, N. Y., and Chicago, Ill. Blue Jewel Flour. For Flour. 41,299; Oct. 18.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel Chocolate Flavored Malted Milk Mixture. For Chocolate Flavored Malted Milk Mixture. 41,300; Oct. 18.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T Graham Crackers. For Graham Crackers. 41,301; Oct. 18.
Kroger Grocery & Baking Company, The, Cincinnati, Ohio. Avondale Extra Sifted Peas. For Canned Peas. 41,302; Oct. 18.
McCormick & Co., Inc., Baltimore, Md. Pride of India. For Tea. 41,303; Oct. 18.
Miles Shoes, Inc., New York, N. Y. Miles Shoes. For Shoes. 41,304; Oct. 18.
Niles & Moser Cigar Company, Kansas City, Mo. F. C. N. For Cigars. 41,305; Oct. 18.
Saunders Products Co., Philadelphia, Pa. Saunders Products. For Fabric and Leather Cleaner. 41,306; Oct. 18.
Scott, Walter, doing business as Golden Rose Company, Cincinnati, Ohio. Golden Rose. For Medicine for the Relief of Hay Fever, Rose Fever, and Kindred Ailments. 41,307; Oct. 18.
Secord, George L., Chicago, Ill. Luster Sheen. For Liquid Polish. 41,308; Oct. 18.
Standard Brands Incorporated, New York, N. Y. Fleischmann's. For Yeast. 41,309; Oct. 18.

Standard Brands Incorporated, New York, N. Y. Arkady. For a Dough Improver. 41,310; Oct. 18.
Ulbrich, Otto, Co., Buffalo, N. Y. Perfect Penmanship Tablet. For Penmanship Tablets. 41,311; Oct. 18.
Weyl-Zuckerman & Co., Stockton, Calif. Delta Dixie Potatoes from the Golden West—Sacks from Dixie Land. For Potatoes. 41,312; Oct. 18.

LIST OF REGISTRANTS OF PRINTS

Angelier, Frank P., New York, N. Y. Bringing California to You. For Orange Products. 13,940; Oct. 18.
Hemmings, M. A., Los Angeles, Calif. The National Home Shopping Plan. For Wearing Apparel, Hosiery, Cosmetics, Jewelry, and Novelties. 13,941; Oct. 18.
Kolynos Company, The, New Haven, Conn. No. 1119. For Dental Cream. 13,942; Oct. 18.
Kresge Department Store Corporation, Newark, N. J. Let's Switch to Kresge's. For Clothing and Department Store Merchandise. 13,943; Oct. 18.
Pangburn Company, Fort Worth, Tex. Orangace. For Orange Sherbets. 13,944; Oct. 18.
Reliance Mfg. Co., Providence, R. I. Stein Song. For Badges. 13,945; Oct. 18.
Slater, J. & J., New York, N. Y. Daylong Comfort Shoe. For Shoes. 13,946; Oct. 18.
Winchester Repeating Arms Company, New Haven, Conn. Be Ready When the Great Days Come. For Firearms and Ammunition. 13,947; Oct. 18.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cotton wadding and batting. National Automotive Fibres. 298,266; Oct. 18; Serial No. 327,804; published Aug. 9, 1932.
Leather. A. F. Gallun & Sons Corporation. 298,307; Oct. 18.
Petroleum pitch. Shell Oil Company. 298,250; Oct. 18; Serial No. 317,382; published Aug. 9, 1932.
Slate, Quarried. Brunswick-Balke-Collender Company. 298,275; Oct. 18; Serial No. 327,041; published Aug. 9, 1932.

CLASS 3

Horse collars. Straus, Bodenheimer Saddlery Co. 86,961; renewed June 11, 1932.
Saddlery. Jabez Cliff & Co. Ltd. 298,242; Oct. 18; Serial No. 299,391; published July 26, 1932.

CLASS 5

Adhesive, Rubber. Naugatuck Chemical Company. 298,292; Oct. 18; Serial No. 327,883; published Aug. 2, 1932.
Size, Paper hangers'. Chas. A. Krause Milling Co. 298,295; Oct. 18; Serial No. 328,493; published Aug. 9, 1932.

CLASS 6

Antipruritic and antiseptic healing lotion. Ohio Valley Drug Co. 89,943; renewed Jan. 21, 1933.
Antiseptic, deodorant, and prophylactic. D C A Drug Stores Inc. 298,102; Oct. 18; Serial No. 327,626; published Aug. 2, 1932.
Antiseptic jelly. A. A. Polakoff. 298,205; Oct. 18; Serial No. 326,564; published July 12, 1932.
Antiseptic mouth wash. S. Molchanoff. 298,212; Oct. 18; Serial No 325,233; published July 19, 1932.
Antiseptic preparation. Johnson & Johnson. 298,222; Oct. 18; Serial No. 326,942; published July 12, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. F. C. Reilly. 298,184; Oct. 18; Serial No. 326,989; published July 12, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. F. C. Reilly. 298,188; Oct. 18; Serial No. 327,415; published July 26, 1932.
Balm for feet and foot lotions. Footsol Mfg. Co. 298,203; Oct. 18; Serial No. 326,980; published July 12, 1932.
Bath salts, perfumes, tooth wash, etc. Yardley & Co. 298,226; Oct. 18; Serial No. 326,409; published July 12, 1932.
Bath tablet. James F. Ballard, Inc. 298,204; Oct. 18; Serial No. 326,573; published July 12, 1932.
Bath tablet. James F. Ballard, Inc. 298,209; Oct. 18; Serial No. 326,574; published July 12, 1932.
Bitters. F. D. Ramm. 298,219; Oct. 18; Serial No. 326,791; published July 12, 1932.
Chemical substances. H. Th. Böhme Aktiengesellschaft. 298,229; Oct. 18; Serial No. 324,873; published July 19, 1932.
Chemicals, Liquid. H. C. Fowler. 298,241; Oct. 18; Serial No. 314,690; published July 26, 1932.
Corn remover, Liquid. Noxacorn Company. 298,288; Oct. 18; Serial No. 327,106; published July 19, 1932.
Cream for eyelashes and eyebrows. Mille Fleurs, Inc. 298,220; Oct. 18; Serial No. 326,979; published July 12, 1932.
Dentifrice, rouge, powder, etc. J. Soesman. 298,227; Oct. 18; Serial No. 325,807; published July 12, 1932.
Depilatory. J. I. Bernitz. 298,211; Oct. 18; Serial No. 326,250; published July 26, 1932.
Emulsion. Wilbur White Chemical Company. 298,232; Oct. 18; Serial No. 323,470; published July 19, 1932.
Eye drops. Charlton and Matzen. 298,214; Oct. 18; Serial No. 326,706; published July 12, 1932.
Fluid, Motor. C. C. Meigs. 298,206; Oct. 18; Serial No. 327,161; published July 19, 1932.
Germicide McK. Gassett. 298,189; Oct. 18; Serial No. 327,432; published July 26, 1932.
Germicide. Phenochrome Germicidal Corporation. 298,221; Oct. 18; Serial No. 326,952; published July 12, 1932.
Herb compound. Milam, Inc. 298,187; Oct. 18; Serial No. 327,402; published July 26, 1932.
Insect exterminator. Automatic Washer Company. 298,289; Oct. 18; Serial No. 327,126; published July 19, 1932.
Insecticides. Diamond Brand Products, Inc. 298,196; Oct. 18; Serial No. 327,906; published July 26, 1932.
Iodine, Soluble. Burnham Soluble Iodine Co. 298,243; Oct. 18; Serial No. 290,685; published July 19, 1932.
Laxative candy. W. M. Pinuix. 298,286; Oct. 18; Serial No. 327,001; published July 19, 1932.
Liniment, preparations for treatment of colds and catarrh, etc., Analgesic. Superior Laboratories, Inc. 298,239; Oct. 18; Serial No. 322,277; published July 26, 1932.
Lotion, Permanent waving. Gabrieleen Co. 298,228; Oct. 18; Serial No. 324,959; published July 26, 1932.
Lotions, Hair waving. G. L. Kremer. 298,282; Oct. 18; Serial No. 326,507; published July 19, 1932.
Medical compound for pain and cough. E. Bilhuber, Inc. 298,197; Oct. 18; Serial No. 327,970; published July 26, 1932.
Medical preparation. Wm. S. Merrell Company. 298,200; Oct. 18; Serial No. 328,134; published July 26, 1932.
Medicated pastilles. Teasdale & Co. Limited. 298,210; Oct. 18; Serial No. 325,273; published July 19, 1932.
Medicinal compound. Lambert Pharmacal Company. 298,193; Oct. 18; Serial No. 327,730; published July 26, 1932.
Medicinal preparation. M. H. Klein. 298,191; Oct. 18; Serial No. 327,591; published Aug. 2, 1932.
Medicinal preparation for treatment of cuts, wounds, etc. Waldemar Larsen & Sigurd J. Hoff. 298,190; Oct. 18; Serial No. 328,102; published July 26, 1932.
Medicine. Borcherdt Malt Extract Company. 298,284; Oct. 18; Serial No. 326,666; published July 19, 1932.
Medicine. A. S. Reid. 298,247; Oct. 18; Serial No. 305,287; published July 19, 1932.
Medicines. Vita-Minn Company. 298,280; Oct. 18; Serial No. 325,306; published July 12, 1932.
Nail polish and enamel. Glazo Company. 298,230; Oct. 18; Serial No. 324,285; published Aug. 2, 1932.
Ointment. Kendall Company. 298,218; Oct. 18; Serial No. 326,821; published July 12, 1932.
Ointment, hair gloss, rinses, etc., Scalp. G. Andreallo. 298,216; Oct. 18; Serial No. 325,844; published July 12, 1932.
Perfume. Harzfeld's, Inc. 298,223; Oct. 18; Serial No. 326,856; published July 12, 1932.
Perfume, toilet water, astringent lotion, etc. Maison Jeurelle, Inc. 298,208; Oct. 18; Serial No. 326,946; published July 12, 1932.
Pickle liquors. Metal Process Corporation. 298,225; Oct. 18; Serial No. 326,855; published July 12, 1932.
Pine tar. Northwestern Pine Tar Co. 298,186; Oct. 18; Serial No. 327,283; published July 19, 1932.
Powder, Face. H. Spanier. 298,217; Oct. 18; Serial No. 326,830; published July 12, 1932.
Powder to be mixed with gasoline to increase the efficiency of the same. A. M. Doyon. 298,207; Oct. 18; Serial No. 327,048; published July 19, 1932.
Preparation for consumption by milch cows for preventing objectionable odors of milk yielded. L. R. Brantley. 298,287; Oct. 18; Serial No. 326,841; published July 19, 1932.
Preparation for removing corns. H. Gould. 298,285; Oct. 18; Serial No. 326,782; published July 19, 1932.
Preparation for the treatment of acidosis. Parke, Davis & Co. 298,194; Oct. 18; Serial No. 327,764; published July 26, 1932.

Preparations and chemicals for exterminating rats, mice, etc. B. & B Exterminators, Inc. 298,235; Oct. 18; Serial No. 322,734; published Apr. 19, 1932.
Preparations for exterminating insects. Getz Exterminators, Inc. 298,237; Oct. 18; Serial No. 322,634; published July 19, 1932.
Salt. Texaco Salt Products Company. 298,195; Oct. 18; Serial No. 327,858; published July 26, 1932.
Salve, Irradiated medicated. Ayer Company. 298,215; Oct. 18; Serial No. 326,572; published Aug. 2, 1932.
Salve or unguentum. J. Montagna. 298,213; Oct. 18; Serial No. 327,229; published July 19, 1932.
Santonin. Amtorg Trading Corporation. 298,248; Oct. 18; Serial No. 306,255; published July 26, 1932.
Scalp and hair tonic. L. L. Kundtz. 298,190; Oct. 18; Serial No. 327,517; published July 26, 1932.
Shampo, essence of peppermint, etc., Olive oil. Bloomingdale Bros., Inc. 298,283; Oct. 18; Serial No. 326,665; published July 19, 1932.
Skin tonic, powder base, hair tonic, etc. J. E. Ward. 298,231; Oct. 18; Serial No. 324,411; published July 12, 1932.
Sodas, Washing. Magnuson Products Corporation. 298,185; Oct. 18; Serial No. 327,064; published July 12, 1932.
Suppositories, Vaginal. S. M. Laboratories, Inc. 298,224; Oct. 18; Serial No. 326,232; published July 12, 1932.
Therapeutic agent for control of fermentation in the human system. Ferbo Research Laboratories, Inc. 298,198; Oct. 18; Serial No. 328,059; published July 26, 1932.
Toothpaste. H. E. Montero. 298,249; Oct. 18; Serial No. 317,178; published July 12, 1932.

CLASS 11

Inks. Howard Chemical and Manufacturing Company. 88,492; renewed Sept. 24, 1932.

CLASS 13

Machine bolt expansion shields, and expansion bolts, shields, and anchors. Diamond Expansion Bolt Co. 298,252; Oct. 18; Serial No. 328,227; published Mar. 22, 1932.

CLASS 14

Steel, and castings and forgings, Tool. W. T. Flather Limited. 88,481; renewed Sept. 24, 1932.
Steel, Cast. W. T. Flather Limited. 88,482; renewed Sept. 24, 1932.

CLASS 16

Preparation in paste form. S. W. Van Dyne. 298,309; Oct. 18.

CLASS 21

Clamp, Ground. Mueller Electric Company. 298,300; Oct. 18.
Radio receiving sets. Capehart Corporation. 298,297; Oct. 18.

CLASS 24

Irons, Steam pressing. Steam Pressing Iron Company. 298,290; Oct. 18; Serial No. 327,809; published Aug. 2, 1932.

CLASS 26

Films, Photographic. Agfa Ansco Corporation. 298,237; Oct. 18; Serial No. 320,969; published Jan. 12, 1932.

CLASS 28

Stones, finger rings, bar pins, etc., Precious. Virgin Diamond Syndicate. 298,255; Oct. 18; Serial No. 316,709; published July 26, 1932.

CLASS 32

Cabinets, Radio. Stettner Corporation. 298,245; Oct. 18; Serial No. 301,524; published Aug. 2, 1932.
Pillows or cushions. Barcalo Manufacturing Company. 298,268; Oct. 18; Serial No. 327,624; published July 26, 1932.

CLASS 37

Books, toilet paper, paper napkins, etc., Account and blank. Kresge Department Store Corp. 298,271; Oct. 18; Serial No. 327,441; published July 26, 1932.
Cover, Bridge table. W. J. V. Morrissey. 298,276; Oct. 18; Serial No. 326,904; published July 26, 1932.
Paper, Bond. George A. Whiting Paper Company. 298,264; Oct. 18; Serial No. 327,860; published July 26, 1932.
Paper, Bond writing. Whitaker Paper Company. 298,299; Oct. 18.
Paper for printing and writing. Montross & Clarke Company. 298,260; Oct. 18; Serial No. 327,880; published July 26, 1932.
Paper, Toilet. United States Envelope Company. 298,304; Oct. 18.
Paper, Writing and wrapping. Hollingsworth & Whitney Company. 89,847–8; renewed Jan. 14, 1933.
Pens, penholders, paper clips, etc. Spencerian Pen Company. 298,265; Oct. 18; Serial No. 327,838; published July 26, 1932.
Tissues, Cleansing. S. H. Kress & Co. 298,311; Oct. 18.

CLASS 38

Charts. Histomap, Inc. 298,240; Oct. 18; Serial No. 311,189; published Aug. 2, 1932.
House organ. Pennzoil Company. 298,201; Oct. 18; Serial No. 328,369; published Aug. 2, 1932.
Newspaper column. Daily Graphic, Inc. 298,273; Oct. 18; Serial No. 327,389; published Aug. 2, 1932.
Periodical. Clayton Magazines, Inc. 298,263; Oct. 18; Serial No. 327,807; published July 26, 1932.
Publication. G. J. Hecht. 298,262; Oct. 18; Serial No. 327,873; published Aug. 2, 1932.

CLASS 39

Apparel, Wearing. Suffolk Knitting Company. 298,302; Oct. 18.
Boots and shoes, Rubber. L. Candee & Company. 89,341–2; renewed Dec. 10, 1932.
Coats, Ladies' sport. I. Friedricks. 298,258; Oct. 18; Serial No. 328,094; published July 26, 1932.
Hosiery. Trojan Hosiery Mills, Inc. 298,244; Oct. 18; Serial No. 300,765; published July 26, 1932.
Hosiery. Vertex Hosiery Mills, Inc. 298,251; Oct. 18; Serial No. 319,711; published Aug. 2, 1932.
Hosiery and underwear. W. H. Fake. 298,267; Oct. 18; Serial No. 327,760; published Aug. 2, 1932.
Hosiery, Ladies'. Greensboro Full Fashioned Hosiery Mills. 298,259; Oct. 18; Serial No. 328,062; published July 26, 1932.
Overalls. Ely & Walker Dry Goods Company. 89,635; renewed Dec. 31, 1932.
Shirts. Wachusett Shirt Company. 298,270; Oct. 18; Serial No. 327,490; published Aug. 2, 1932.
Shirts and pajamas. Hampshire Shirt Co. Inc. 298,306; Oct. 18.
Suits, coats, and overcoats. Roger Kent, Inc. 298,261; Oct. 18; Serial No. 327,878; published July 26, 1932.
Suits or bathing suits, Swim. Munsingwear Corporation. 298,202; Oct. 18; Serial No. 328,366; published Aug. 2, 1932.
Suits, shirts, and shorts, Athletic union. Shorewood Mills. 298,278; Oct. 18; Serial No. 325,728; published July 26, 1932.
Suits, Summer. Haspel Brothers, Inc. 298,256; Oct. 18; Serial No. 328,169; published July 26, 1932.
Suits, trousers, and slacks. P. J. Tracy. 298,308; Oct. 18.

CLASS 44

Hair waving machines and pads, Electric permanent. Samuel Bonat & Bro. 298,298; Oct. 18.

CLASS 45

Beverages, Maltless. Cammarano Bros., Inc. 298,303; Oct. 18.

CLASS 46

Butter. United Stores Company. 298,291; Oct. 18; Serial No. 327,641; published July 26, 1932.
Canned cut fruits. Barron-Gray Packing Co. 298,310; Oct. 18.
Canned salmon. Carlisle Packing Co. 89,620–2; renewed Dec. 31, 1932.
Cereal breakfast foods. Kellogg Company. 298,234; Oct. 18; Serial No. 322,920; published July 26, 1932.
Cheese, Pasteurized. Pure Cheese Corporation. 298,236; Oct. 18; Serial No. 322,710; published Aug. 2, 1932.
Chickens, Dressed baby broiling. F. A. Barsanti. 298,269; Oct. 18; Serial No. 327,547; published July 26, 1932.
Feeds, Dairy. Ohio Farm Bureau Service Company. 298,253; Oct. 18; Serial No. 319,729; published Aug. 2, 1932.
Flavoring material. Pecan Krisp Company. 298,272; Oct. 18; Serial No. 327,421; published Aug. 9, 1932.
Flour, Cake and wheat. Pillsbury Flour Mills Company. 298,293; Oct. 18; Serial No. 328,036; published July 26, 1932.
Flour, Pancake. Mayflower Mills. 298,294; Oct. 18; Serial No. 328,336; published Aug. 2, 1932.
Flour, Wheat. Fisher Flouring Mills Co. 90,183–4; renewed Feb. 11, 1933.
Flour, Wheat. Fisher Flouring Mills Co. 90,186; renewed Feb. 11, 1933.
Flour, Wheat. Fisher Flouring Mills Co. 90,316–17; renewed Feb. 18, 1933.
Food, Dog. B. W. Doyle. 298,281; Oct. 18; Serial No. 326,305; published July 26, 1932.
Foodstuffs, Tinned, bottled, or packaged. Kinney & Levan Company. 298,274; Oct. 18; Serial No. 326,042; published July 26, 1932.
Fruit juices, cocoa and chocolate and malt extracts. M. Patermann. 298,254; Oct. 18; Serial No. 320,369; published July 26, 1932.
Ice cream cones. Maryland Baking Company. 298,246; Oct. 18; Serial No. 301,674; published July 14, 1931.
Mustard, Prepared. Kroger Grocery & Baking Co. 298,305; Oct. 18.
Peanuts and candy, Salted. Big Chief Candy Co. 298,233; Oct. 18; Serial No. 323,119; published July 26, 1932.
Popcorn, Candied. F. D. Hoch. 298,296; Oct. 18.

Syrup for cooking and confectionery purposes, Egg. Washington Co-operative Egg & Poultry Association. 298,279; Oct. 18; Serial No. 325,158; published July 26, 1932.
Syrup for food purposes, Malt. Goldblatt Bros., Inc. 298,312; Oct. 18.
Vegetable oil. Tully & Kolis Co. 298,277; Oct. 18; Serial No. 325,812; published July 26, 1932.
Vegetables, Fresh. F. V. Birbeck. 298,257; Oct. 18; Serial No. 328,115; published July 26, 1932.
Vegetables, Fresh. L. F. Noonan. 298,301; Oct. 18.

LIST OF LABELS

Aladdin Magic Household Cleaner. For Household Cleaner. Aladdin Products Corporation. 41,282; Oct. 18.
All-Crisp Soda Crackers. For Soda Crackers. Davidson Biscuit Company. 41,289; Oct. 18.
Arkady. For a Dough Improver. Standard Brands Incorporated. 41,310; Oct. 18.
Avondale Extra Sifted Peas. For Canned Peas. Kroger Grocery & Baking Company. 41,302; Oct. 18.
Betta Arch. For Boxes. Hoague-Sprague Corporation. 41,296; Oct. 18.
Blue Jewel Flour. For Flour. Jewel Food Stores, Inc. 41,299; Oct. 18.
Botle O' Kiss. For Orangeade. F. P. Angelier. 41,284; Oct. 18.
Crystal Bead Water. For a Natural Alkaline Carbonate Lithia Water. Crystal Bead Mineral Springs Co. 41,286; Oct. 18.
Dairylea Eggs. For Eggs. Dairymen's League Co-Operative Association, Inc. 41,288; Oct. 18.
Dairylea Salt Butter. For Butter. Dairymen's League Co-Operative Association, Inc. 41,287; Oct. 18.
Delta Dixie Potatoes from the Golden West—Sacks from Dixie Land. For Potatoes. Weyl-Zuckerman & Co. 41,312; Oct. 18.
F. C. N. For Cigars. Niles & Moser Cigar Company. 41,305; Oct. 18.
Fast Steppers. For Boxes. Hoague-Sprague Corporation. 41,297; Oct. 18.
Fleischmann's. For Yeast. Standard Brands Incorporated. 41,309; Oct. 18.
Golden Rose. For Medicine for the Relief of Hay Fever, Rose Fever, and Kindred Ailments. W. Scott. 41,307; Oct. 18.
Hammett's Practical Paste. For Paste. J. L. Hammett Company. 41,291; Oct. 18.
Jewel Chocolate Flavored Malted Milk Mixture. For Chocolate Flavored Malted Milk Mixture. Jewel Tea Co. 41,300; Oct. 18.
Jewel T Graham Crackers. For Graham Crackers. Jewel Tea Co. 41,301; Oct. 18.
King Phillip Berkshire. For Broadcloth Apparel. Berkshire Fine Spinning Associates, Inc. 41,285; Oct. 18.
Luster Sheen. For Liquid Polish. G. L. Secord. 41,308; Oct. 18.
Miles Shoes. For Shoes. Miles Shoes, Inc. 41,304; Oct. 18.
Mountain Crystal Spring Water. For Bottled Spring Water. A. D. Heron. 41,292; Oct. 18.
Perfect Penmanship Tablet. For Penmanship Tablets. Otto Ulbrich Co. 41,311; Oct. 18.
Pride of India. For Tea. McCormick & Co. 41,303; Oct. 18.
Smart Set Salmon. For Salmon. G. P. Halferty & Co. 41,290; Oct. 18.
Sport Shoes. For Boxes. Hoague-Sprague Corporation. 41,293; Oct. 18.
Sun Kist. For Orangeade. F. P. Angelier. 41,283; Oct. 18.
The Service Arch Health Shoe. For Boxes. Hoague-Sprague Corporation. 41,295; Oct. 18.
They See the Box First. For Boxes. Hoague-Sprague Corporation. 41,298; Oct. 18.
Tommy Tucker Shoes. For Boxes. Hoague-Sprague Corporation. 41,294; Oct. 18.
Saunders Products. For Fabric and Leather Cleaner. Saunders Products Co. 41,306; Oct. 18.

LIST OF PRINTS

Be Ready When the Great Days Come. For Firearms and Ammunition. Winchester Repeating Arms Company. 13,947; Oct. 18.
Bringing California to You. For Orange Products. F. P. Angelier. 13,940; Oct. 18.
Daylong Comfort Shoe. For Shoes. J. & J. Slater. 13,946; Oct. 18.
Let's Switch to Kresge's. For Clothing and Department Store Merchandise. Kresge Department Store Corporation. 13,943; Oct. 18.
No. 1119. For Dental Cream. Kolynos Company. 13,942; Oct. 18.
Orangace. For Orange Sherbets. Pangburn Company. 13,944; Oct. 18.
Stein Song. For Badges. Reliance Mfg. Co. 13,945; Oct. 18.
The National Home Shopping Plan. For Wearing Apparel, Hosiery, Cosmetics, Jewelry, and Novelties. Hemmings, M. A. 13,941; Oct. 18.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 18TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Aaronson, Harry B., Camden, N. J., assignor to H. Brinton Company, Philadelphia, Pa. Yarn cutting and clamping device. 1,883,320; Oct. 18.
Abbott, George H., assignor to Woodruff & Edwards Inc., Elgin, Ill. Combined desk and seat. 1,883,322; Oct. 18.
Abbott, Scott M., assignor to L. J. Loenneke and H. Bock, Chicago, Ill. Vending machine. 1,883,440; Oct. 18.
Abilene Cotton Oil Company. (See Richardson, James R., assignor.)
Abram, John D., Detroit, Mich. Tamping machine. 1,882,681; Oct. 18.
Abram, John D., Detroit, Mich. Molding machine. 1,882,682; Oct. 18.
Abrams, Allen, Wausau, assignor to Marathon Paper Mills Company, Rothchild, Wis. Die forming articles from sulphurized paper board. 1,882,683; Oct. 18.
Achard, Joseph P. E., assignor to Societe Francaise Radio Electrique, Paris, France. Oscillation generator. 1,882,684; Oct. 18.
Adams, David G., Spartanburg, S. C. Sewer pipe tap. 1,883,439; Oct. 18.
Adams, Hale D., Galesburg, Ill. Automobile accelerator pedal. 1,883,437; Oct. 18.
Adams, Mathias J., Turkey River, Iowa. Vehicle wheel. 1,882,685; Oct. 18.
Adams, William H., Kenyon, R. I. Strand for making braided rugs and the like and the method of making. 1,883,438; Oct. 18.
Adrian & Busch. (See Sünder, Jakob, assignor.)
Aemisegger, Jean, Bergenfield, N. J. Textile fabric. Des. 87,991; Oct. 18.
Aemisegger, Jean, Bergenfield, N. J. Textile fabric. Des. 87,992; Oct. 18.
Aemisegger, Jean, Bergenfield, N. J. Textile fabric. Des. 87,993; Oct. 18.
Aemisegger, Jean, Bergenfield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 87,951; Oct. 18.
Aetna Standard Engineering Company, The. (See Melin, Hans, assignor.)
Aetna-Standard Engineering Company, The. (See Taylor, Clarence L., assignor.)
Agfa Ansco Corporation. (See Bornmann, Carl, assignor.)
Ahigrim, Max J., Shelby, Ind. Rake cleaner. 1,882,686; Oct. 18.
Ahlm, Charles E. F., Cleveland Heights, assignor to The Automotive Research Corporation, Warren, Ohio. Transmission mechanism. 1,883,441; Oct. 18.
Ahnell, Herman O., Chicago, Ill. Making brick and the like. 1,883,442; Oct. 18.
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch. 1,882,687; Oct. 18.
Akron Standard Mold Company, The. (See Bunker, Clifford C., assignor.)
Al, Jan, Amsterdam, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of acetone. 1,883,443; Oct. 18.
Alabiso, Samuel T., New York, N. Y. Razor holder. 1,882,688; Oct. 18.
Albert, Edward J., assignor to Thwing Instrument Company, Philadelphia, Pa. Temperature indicating means. 1,883,444; Oct. 18.
Albertson & Company. (See Albertson, Frans O., assignor.)
Albertson & Company. (See Albertson, F. O., and Olsen, assignors.)
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Valve seat boring tool. 1,882,689; Oct. 18.
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Valve seat reamer. 1,882,690; Oct. 18.
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Reamer cutting machine. 1,882,691; Oct. 18.
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Making valve seat finishing tools. 1,882,692; Oct. 18.
Albertson, Frans O., and G. A. Olsen, assignors to Albertson & Company, Inc., Sioux City, Iowa. Abrasive device. 1,882,693; Oct. 18.
Albright, H. Nelson, et al., executors. (See Zifferer, Lothar R., assignor.)
Aldeen, Gedor W., assignor to Fyrac Manufacturing Company, Rockford, Ill. Holder for glass cutter cartridges. 1,883,445; Oct. 18.
Alden, Herbert W., and M. A. Powers, assignors to The Timken Silent Automatic Company, Detroit, Mich. Oil burner. 1,882,694; Oct. 18.
Alderborgh, Erik H., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y. Snap gauge. 1,883,446; Oct. 18.
Aldrich, John P., Toledo, Ohio. Method of and apparatus for forming closures in bag tubes. 1,882,696; Oct. 18.
Aldrich, John P., and H. A. Morris, assignors to the Automat Molding & Folding Company, Toledo, Ohio. Roll wrapping machine. 1,882,695; Oct. 18.
Aldridge, George E., Fort Worth, Tex. Tube cap. 1,882,697; Oct. 18.
Alemite Corporation. (See Wheeler, Leonard H., assignor.)
Alemite Corporation. (See Zerk, Oscar U., assignor.)
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to Radio Corporation of America. Signaling by phase displacement. 1,882,698; Oct. 18.
Allen, Morris C., assignor to Sullivan Machinery Company, Chicago, Ill. Core drill. 1,883,321; Oct. 18.
Allen, Robert C., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine and condenser unit. 1,882,699; Oct. 18.
Allen, Scott E., and O. N. Wiswell, Los Angeles, Calif. Valve. 1,882,700; Oct. 18.
Alley, John D., Pittsburgh, Pa., assignor to The American Brake Shoe and Foundry Company, New York, N. Y. Refractory composition for brake shoe molds. 1,882,701; Oct. 18.
Alley, John D., Pittsburgh, Pa., assignor to American Brake Materials Corporation, New York, N. Y. Composition friction element. 1,882,702; Oct. 18.
All Fair Incorporated. (See Ensley, Major A., assignor.)
Allis-Chalmers Manufacturing Company. (See Greisen, Elijah C., assignor.)
Alvey-Ferguson Company, The. (See Walter, J. C., and Vogt, assignors.)
American Brake Materials Corporation. (See Alley, John D., assignor.)
American Brake Materials Corporation. (See Smith, Harry N., assignor.)
American Brake Shoe and Foundry Company, The. (See Alley, John D., assignor.)
American Brake Shoe and Foundry Company, The. (See Poe, Fred M., assignor.)
American Brake Shoe & Foundry Company, The. (See Pogue, Robert B., assignor.)
American Brake Shoe and Foundry Company, The. (See Sargent, Fitz W., assignor.)
American Fabrics Company, The. (See Aemisegger, Jean, assignor.)
American Gasaccumulator Company. (See Eskilson, Sven A., assignor.)
American Hardware Corporation, The. (See Stone, Elmer B., assignor.)
American Manufacturing Company. (See Brown, Robert B., assignor.)
American-National Company, The. (See Snell, Samuel A., assignor.)
American Rolling Screen Company. (See Rupprecht, Edgar P., assignor.)
American Safety Headlight Corporation. (See Fortney, Brauddus B., assignor.)
American Smelting and Refining Company. (See Betterton, Jesse O., assignor.)
American Smelting and Refining Company. (See Gonser, Bruce W., assignor.)
American Smelting & Refining Company. (See Lennox, L. W., and Wildman, assignors.)
American Smelting and Refining Company. (See Moore, Ralph S., assignor.)
American Smelting and Refining Company. (See Palmer, Sidney L., assignor.)
American Steel Foundries. (See Kinne, Edmund P., assignor.)
Ames, James G., Aurora, Ill. Combination gas fixture. 1,882,703; Oct. 18.
Ammen, Irvin G., Yonkers, assignor to International Agricultural Corporation, New York, N. Y. Treating trisodium phosphate crystals. 1,883,447; Oct. 18.
Anchor Cap & Closure Corporation. (See Scofield, Edgar, assignor.)
Andersen, Nils P. E., Elm Grove, Wis., and M. B. Bradley, Cleveland, Ohio, assignors to Harnischfeger Corporation, Milwaukee, Wis. Grapple. 1,882,704; Oct. 18.
Anderson, Adolph, La Grange, assignor to Independent Pneumatic Tool Co., Chicago, Ill. Manual support for portable tools. 1,882,705; Oct. 18.

Anderson, Arthur W., assignor to The Borg & Beck Company, Chicago, Ill. Driven plate. 1,882,706; Oct. 18.
Anderson, Arthur W., assignor to The Borg & Beck Company, Chicago, Ill. Driven plate. 1,882,707; Oct. 18.
Anderson, Carl E., East Orange, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Cigarette case. 1,882,708; Oct. 18.
Anderson, Emil. (See Nicholason, C. M., and Anderson.)
Anderson, Gustave, assignor to Brown Company, Berlin, N. H. Expanding mandrel. 1,882,709; Oct. 18.
Anderson, Harrison, Los Angeles, Calif. Bookholder. 1,882,710; Oct. 18.
Anderson, Robert H., assignor of one-half to A. B. Bowman, San Diego, Calif. Shaping machine. 1,882,711; Oct. 18.
Andreasen, Walter R. G., and C. A. Toleman, East Boston, assignors of one-third to P. Kane, Boston, Mass. Piston ring. 1,883,448; Oct. 18.
Andrews, Champe S., Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y. Folding box. 1,883,323; Oct. 18.
Andrews, Champe S., Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y. Packing process for silk yarn and the like. 1,883,449; Oct. 18.
Andrews, Champe S., North Chattanooga, Tenn., assignor to Carton Development Corporation, New York, N. Y. Refrigerating container. 1,883,450; Oct. 18.
Andrussow, Leonid, and F. Duerr, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of catalysts comprising phosphates. 1,882,712; Oct. 18.
Angeletti, Joseph M., New York, N. Y. Container-perforating and threading device for stoppers, faucets, and the like. 1,883,451; Oct. 18.
Angier, Edward H., Framingham, Mass. Mulching. 1,882,713; Oct. 18.
Angier, Edward H., Framingham, Mass. Waterproof sheet material and its production. 1,882,715; Oct. 18.
Angier, Edward H., Framingham, and E. R. Dearborn, Ashland, Mass.; said Dearborn assignor to said Angier. Coloring sheet material. 1,882,714; Oct. 18.
Angle, Glenn D., assignor to The Le Blond Aircraft Engine Corporation, Cincinnati, Ohio. Oil spray valve for lubrication and cooling. 1,882,716; Oct. 18.
Anson, Jerome I., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,882,717; Oct. 18.
Apple, Vincent G., Laboratories. (See Cotterman, Frederick W., assignor.)
Arkema, Harold P., Chicago, and B. M. A. Trebes, Berwyn, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Reel. 1,882,718; Oct. 18.
Armstrong, Addison C., Baltimore, Md., and A. G. Illich, New York, N. Y. Window construction comprising radiator housing. 1,882,719; Oct. 18.
Armstrong, Edward R., assignor to F. O. Schoedinger, Columbus, Ohio. Manifold heater. 1,883,452; Oct. 18.
Armstrong, Robert, Ridgefield, N. J. Tube cutting device. 1,883,453; Oct. 18.
Arnold, Charles B., Brooklyn, N. Y. Boiler feed water regulating apparatus. 1,883,454; Oct. 18.
Arnold, Harry S., Brooklyn, N. Y. Outlet box. 1,883,457; Oct. 18.
Arnold, Max, assignor to Imperial Paper and Color Corporation, Glens Falls, N. Y. Wall paper or similar article. Des. 87,952; Oct. 18.
Arnstein, Karl, and P. Helma, assignors to Goodyear-Zeppelin Corporation, Akron, Ohio. Method and apparatus for building airship bulkheads. 1,883,455; Oct. 18.
Aronson, Louis V., Newark, N. J. Safety razor. 1,883,324; Oct. 18.
Arrow-Hart & Hegeman Electric Company, The. (See Hansen, H. C., and Bennett, assignors.)
Arrow-Hart & Hegeman Electric Company, The. (See Nero, Arvid H., assignor.)
Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,882,720; Oct. 18.
Arveson, Maurice H., Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill. Mill grease. 1,882,721; Oct. 18.
Aseltine, Fred E., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,882,722; Oct. 18.
Aseltine, Fred E., assignor, by mesne assignments to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,882,723; Oct. 18.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,882,724; Oct. 18.
Asher, William J., Colorado Springs, Colo. Ironing machine. 1,883,750; Oct. 18.
Ashley, Carlyle M., Orange, assignor to Carrier Engineering Corporation, Newark, N. J. Gas treating device. 1,883,456; Oct. 18.
Ashton, Ward, assignor to J. O. Ker, Ottawa, Ontario, Canada. Animal month tongs. 1,883,751; Oct. 18.
Asire, Horace W., assignor to General Motors Research Corporation, Detroit, Mich. Carburetor. 1,882,725; Oct. 18.
Associated Electric Laboratories, Inc. (See Crocker, T. F., and Tharp, assignors.)
Associated Electric Laboratories, Inc. (See Erickson, John, assignor.)
Associated Electrical Industries Limited. (See Saunders, Norman F. T., assignor.)
Associated Manufacturers, Inc. (See Borton, Alwyn E., assignor.)
Atkins, E. C., & Company. (See Gimmel, Dewey E., assignor.)
Atkins, Thomas J., North Arlington, assignor to Carrier Research Corporation, Newark, N. J. Control system. 1,882,726; Oct. 18.
Atlantic Refining Company, The. (See Hill, Joseph B., assignor.)
Atlas-Ansonia Company, The. (See Wittstein, Herman L., assignor.)
Auñero, John M., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y. Horn. 1,883,458; Oct. 18.
Augustin, William F., Chicago, Ill. Garment support. 1,882,727; Oct. 18.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electric switch. 1,882,728; Oct. 18.
Automat Molding & Folding Company, The. (See Aldrich, J. P., and Morris, assignors.)
Automotive Maintenance Machinery Co. (See Zimmerman, Herman W., assignor.)
Automotive Research Corporation, The. (See Ahlm, Charles E. F., assignor.)
Auto-Sales Corporation. (See Grant, Garnet P., assignor.)
Auto Spring Control Company. (See Thayer, Allan A., assignor.)
Avery, Alfred H., Malden, assignor to North American Chemical Company, Cambridge, Mass. Tool for laying shoe fillers. 1,882,729; Oct. 18.
Avery, Harold T., San Luis Obispo, Calif. Automatic steering device. 1,882,730; Oct. 18.
Avery, K & T., Limited. (See Timson, William, assignor.)
Avigdor, Rifat, Berlin-Charlottenburg, Germany. Delivery-pump for liquids. 1,883,459; Oct. 18.
Ayars, Charles H., assignor to Ayars Machine Company, Salem, N. J. Can filling machine. 1,883,460; Oct. 18.
Ayars Machine Company. (See Ayars, Charles H., assignor.)
Babcock & Wilcox Company, The. (See Black, John E., assignor.)
Babcock & Wilcox Company, The. (See Davy, Christopher H., assignor.)
Babcock & Wilcox Company, The. (See Ebbets, George D., assignor.)
Babcock & Wilcox Company, The. (See Harter, Isaac, assignor.)
Babcock & Wilcox Company, The. (See Horsman, Henry S., assignor.)
Babcock & Wilcox Company, The. (See Hoxie, Vivian W., assignor.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Kerr, H. J., and Fletcher, assignors.)
Babcock & Wilcox Company, The. (See Kerr, H. J., and Savoye, assignors.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Babcock & Wilcox Company, The. (See Trainer, J. E., and Langvand, assignors.)
Babcock & Wilcox Company, The. (See Valladares, Frank, assignor.)
Baccaro, John P., assignor of one-half to Rosario Camuglia, Rochester, N. Y. Garment pocket. 1,883,461; Oct. 18.
Back, Robert, assignor to The Wahl Company, Chicago, Ill. Desk pen receptacle. Des. 87,953; Oct. 18.
Backus, Standish, et al, executors. (See Boyer, Joseph.)
Baddiley, James, and J. Hill, Blackley, Manchester, assignors to British Dyestuffs Corporation Limited, Manchester, England. Secondary disazo dyestuffs. 1,883,325; Oct. 18.
Bagnulo, Alberto, Paris, France. Liquid fuel engine 1,883,463; Oct. 18.
Baier, Alvin H., Waynesboro, Pa. Cooling unit. 1,883,462; Oct. 18.
Bakelite Gesellschaft mit beschrankter Haftung. (See Seebach, Fritz, assignor.)
Baker, Erle K., Chicago, Ill. Tie rod end connection. 1,883,748; Oct. 18.
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Balaun, John J., Canton, Ohio. Bottle capper. 1,882,731; Oct. 18.
Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Rack. 1,883,827; Oct. 18.
Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Ventilator construction. 1,883,464; Oct. 18.
Ballem, Henry J., Bywood, assignor of one-half to Philip W. Moninger, Philadelphia, Pa. Slicing machine. 1,882,732; Oct. 18.
Ballman, Edwin C., St. Louis, Mo. Single phase condenser motor. 1,882,733; Oct. 18.
Balmer, Harry T., Collingdale, assignor of one-half to R. S. Hamric, Philadelphia, Pa. Rifle support. 1,883,465; Oct. 18.

Bamford, Frank L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Combined tail-light, stop light and backing light for motor vehicles. 1,883,466; Oct. 18.
Banks, Frederick R., assignor to The Kennedy Valve Mfg. Co., Elmira, N. Y. Breakable ring for hydrants, street lamp columns, metal or concrete posts, etc. 1,883,467; Oct. 18.
Barber, Clifford L., assignor to Kester Solder Company, Chicago, Ill. Soldering flux. 1,882,734; Oct. 18.
Barber, Clifford L., assignor to Kester Solder Company, Chicago, Ill. Soldering fluid. 1,882,735; Oct. 18.
Barber Greene Company. (See Barber, Harry H., assignor.)
Barber, Harry H., assignor to Barber Greene Company, Aurora, Ill. Scraper control. 1,882,736; Oct. 18.
Barber, Harry H., assignor to Barber-Greene Company, Aurora, Ill. Weighing hopper. 1,882,737; Oct. 18.
Barbour, James G., assignor to The Metropolitan Paving Brick Company, Canton, Ohio. Trickling filter floor construction. 1,883,468; Oct. 18.
Bard, Francis N., Highland Park, Ill. Steam pipe coupling. 1,883,469; Oct. 18.
Bardsley, Carleton P. (See Weiss, M. L., and Bardsley.)
Barnard, Dean S., Hinsdale, Ill., assignor to The Rome Company, Inc. Coiled spring cushion. 1,883,470; Oct. 18.
Barnes, Joseph E., Chicago, Ill. Lighter. 1,883,752; Oct. 18.
Barrett, Alfred W., assignor to Miller Printing Machinery Company, Pittsburgh, Pa. Sheet detector. 1,883,471; Oct. 18.
Barrett Company, The. (See Ellms, Edward H., assignor.)
Barrett, Edward R., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich. Gravity dump body hoist. 1,883,472; Oct. 18.
Barrett, Edward R., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich. Adjustable tail gate. 1,883,473; Oct. 18.
Barrett, Edward R., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich. Three-way dumping body construction. 1,883,474; Oct. 18.
Bartsch, Beatrice F., Chicago, Ill. Return envelope and blank therefor. 1,883,475; Oct. 18.
Bartsch, Henry G., Washington, D. C. Radio antenna. 1,883,476; Oct. 18.
Bash, Thomas B., Kansas City, Mo. Guy anchor. 1,883,477; Oct. 18.
Bassett, Harry P., Cynthiana, Ky. Purifying cellulose material. 1,883,478; Oct. 18.
Basson, Joseph D., Brooklyn, N. Y. Combined shutter and ventilator. 1,883,753; Oct. 18.
Bastian-Blessing Company, The. (See Stein, Edward P., assignor.)
Bateman, Fred H., Company. (See Bateman, F. H., and Trolley, assignors.)
Bateman, Fred H., Grenloch, N. J., and I. Trolley, York, assignors to Fred H. Bateman Company, Philadelphia, Pa. Power sprayer. 1,883,479; Oct. 18.
Batts, John T., Pasadena, Calif. Automobile. Des. 87,954; Oct. 18.
Bauer, Jacob L., Wauwatosa, assignor of fifteen per cent to A. Raasch, Milwaukee, and twenty-five per cent to L. Reunzel, Wauwatosa, Wis. Float valve. 1,883,480; Oct. 18.
Bauer, John A., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,883,845; Oct. 18.
Baum, Charles, assignor to E. Poeter & Co., Irvington, N. J. Bag lock. 1,883,481; Oct. 18.
Baum, Howard C. (See Bausman, A. L., and Baum.)
Bausman, Alonzo L., Springfield, Mass., and H. C. Baum, Mount Vernon, N. Y., assignors to National Equipment Company, Springfield, Mass. Confection making apparatus. 1,883,482; Oct. 18.
Beardsley, Edwin W., Texas City, Tex., assignor to Petroleum Conversion Corporation, New York, N. Y. Conversion of hydrocarbon oils. 1,883,744; Oct. 18.
Beardsley, Edwin W., Los Angeles, Calif., and A. P. Sachs, Brooklyn, assignors to Petroleum Conversion Corporation, New York, N. Y. Converting oils and simultaneously recovering asphalt. 1,883,745; Oct. 18.
Beardsley, Lester A., assignor to Norwich Wire Works, Inc., Norwich, N. Y. Pin board. 1,883,483; Oct. 18.
Beatty, Howard, and C. Mongere, assignors to Glidden Food Products Company, Chicago, Ill. Edible coating for frozen products. 1,883,484; Oct. 18.
Beaver, John G. (See Bricken, John.)
Beck, Jakob, Berlin, Germany. File. 1,883,754; Oct. 18.
Becker, Albert E., Ogden, Utah. Separating extracts from grain. 1,882,738; Oct. 18.
Becker, Bernard C., York, Pa., assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,883,327; Oct. 18.
Becker & Co. (1924) Limited. (See Wieger, Bruno, assignor.)
Beckwith, Charles J., assignor to Johns-Manville Corporation, New York, N. Y. Laminated sheet building material. 1,883,485; Oct. 18.
Beckwith, Charles J., Brooklyn, assignor to Johns-Manville Corporation, New York, N. Y. Laminated sheet material. 1,883,486; Oct. 18.
Beckwith, Louis L., Dorchester, Mass. Refrigerating installation. 1,883,487; Oct. 18.
Beecher, Eugene L., East Cleveland, assignor to The Gabriel Company, Cleveland, Ohio. Shock absorber. 1,883,488; Oct. 18.
Beedle, Fred P., and H. T. Kingsbury, Keene, N. H. Cultivator. 1,883,489; Oct. 18.
Beers, George L., Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Amplifying system. 1,883,490; Oct. 18.
Begtrup, Edward F., Jersey City, N. J. Crucible for alumino-thermic reactions. 1,883,755; Oct. 18.
Behimer, Otto, Oak Park, Ill., assignor to The Texas Company, New York, N. Y. Converting hydrocarbon oils. 1,883,491; Oct. 18.
Behimer, Otto, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Making gasoline. 1,883,850; Oct. 18.
Behrman, Marcus B., assignor to Lox Seal Corporation, Brooklyn, N. Y. Pile wire. 1,882,739; Oct. 18.
Belcher, Robert F. (See Carter, Samuel C., assignor.)
Bell, Charles W., Buffalo, assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Battery charging system. 1,883,492; Oct. 18.
Bell, James A., Shelbyville, Ky. Automobile signal. 1,882,740; Oct. 18.
Bell Telephone Laboratories, Incorporated. (See Bowne, Langford J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hall, Howard, assignor.)
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bel Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Matthies, William H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mead, Edward D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Polkinghorn, Frank A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Potts, Louis M., assignor.)
Bel Telephone Laboratories, Incorporated. (See Ronci, Victor L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Schlenker, Vesper A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Schwerin, Paul, assignor.)
Bell Telephone Laboratories, Incorporated. (See Soreny, Ernest, assignor.)
Bell Telephone Laboratories, Incorporated. (See Templeton, Bryce O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Thurston, George M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ulrich, Horace W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Van Voorhis, Frank, jr., assignor.)
Beller, Hans, Ludwigshafen-on-the-Rhine, and M. Luther, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of emulsifying agents. 1,882,741; Oct. 18.
Belluche, Frank R., Racine, Wis. Bronzing machine. 1,882,743; Oct. 18.
Belluche, Frank R., Racine, Wis. Bronzing machine. 1,882,744; Oct. 18.
Beloit Iron Works. (See Simpson, James R., assignor.)
Belt, John W., West Chester, Pa. Time controlled switch. 1,882,742; Oct. 18.
Beltz, John S., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Headlight and switch. 1,882,745; Oct. 18.
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See McConkey, Montgomery W., assignor.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Electromagnetic equalizing brake. 1,882,746; Oct. 18.
Benedict, Edward L., assignor to Pittsburgh Steel Company, Pittsburgh, Pa. Reenforcing fabric. 1,882,747; Oct. 18.
Benjamin, John M., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Controlling mechanism. 1,882,748; Oct. 18.
Benn, Stephen J., assignor to Merchant & Evans Company, Philadelphia, Pa. Multiple-opening ice-cream container. Des. 87,955; Oct. 18.
Benn, Stephen J., assignor to Merchant & Evans Company, Philadelphia, Pa. Ice cream container. Des. 87,956; Oct. 18.
Benner, John F. (See Sundstrand, G. D., and Benner.)
Bennett, Alfred J.. (See Hansen, H. C., and Bennett.)
Bent, George H., Battle Creek, Mich. Carlton feeding machine. 1,883,228; Oct. 18.
Bent, George H., Battle Creek, Mich. Wrapping machine. 1,883,229; Oct. 18.
Berg, Albert W., New York, N. Y. Transferring and transporting apparatus. 1,883,493; Oct. 18.
Berger, Emil J., Hatfield, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Yarn moistening device. 1,883,494; Oct. 18.
Berger, Emil J., Hatfield, assignor to Dexdale Hosiery Mills, Landsdale, Pa., Garter top stocking. 1,883,495; Oct. 18.

Bergmann, Jean, Berlin, Germany. Calculating machine. 1,883,853; Oct. 18.
Berson, Sam, New York, N. Y. Combination floor and scale construction. 1,883,496; Oct. 18.
Betterton, Jesse O., Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y. Forming metal alloys. 1,882,749; Oct. 18.
Bicknell, Roscoe G., Worchester, Mass. Locking device for clothes driers. 1,883,497; Oct. 18.
Bihl, William E., assignor, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill. Refrigerator. 1,883,329; Oct. 18.
Bihl, William E., and A. Ramclaw, assignors by mesne assignments to Zerozone, Incorporated, Chicago, Ill. Compressor. 1,883,328; Oct. 18.
Bihl, William E., and A. Ramclaw, assignors, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill. Compressor mounting. 1,883,330; Oct. 18.
Bijur, Joseph, New York, assignor by mesne assignments to Eclipse Machine Company, Elmira, N. Y. 1,883,331; Oct. 18.
Billingsley, John P., Wilmington, and T. A. Kellum, Claymont, Del., assignors to General Chemical Company, New York, N. Y. Brake. 1,883,498; Oct. 18.
Birtles, Arthur B., Louisville, Ky. Method and apparatus for producing plywood. 1,883,499; Oct. 18.
Björndal, Magnus, Jersey City, N. J., and E. A. Wick, Brooklyn, N. Y. Variable speed gearing. 1,883,500; Oct. 18.
Black, John E., Rumson, assignor to The Babcock & Wilson Company, Bayonne, N. J. Steam generator and process. 1,882,750; Oct. 18.
Black, Theodore J., and G. E. Young, Canton, Ohio. Pickling basket. 1,883,501; Oct. 18.
Blackhall, John R. (See Pardee, Harvey S., assignor.)
Blair, Rolandis A., Columbus City, Ind. Rail anchor. 1,882,654; Oct. 18.
Blake, Joseph E., Gardner, Mass. Toy handcuffs. 1,883,502; Oct. 18.
Blondin, Peter E., North Tonawanda, N. Y. Stringed musical instrument. 1,883,503; Oct. 18.
Blood, Howard E., Detroit, Mich., assignor to Norge Corporation. Freezer. 1,882,751; Oct. 18.
Blood, Howard E., Detroit, Mich., assignor to Norge Corporation. Electric refrigerator assembly. 1,882,752; Oct. 18.
Bloom, Simon, New York, N. Y. Headgear. 1,883,756; Oct. 18.
Bock, Herman, et al. (See Abbott, Scot M., assignor.)
Bogle, John C., River Forest, Ill., assignor by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Oil burner control system. 1,883,242; Oct. 18.
Bogle, John C., River Forest, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Burner control apparatus and system. 1,883,243; Oct. 18.
Bogle, John C., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch. 1,883,245; Oct. 18.
Bolles, Dorothy J., et al. (See Bolles, Edgar S., assignor.)
Bolles, Edgar S., assignor to D. J. Bolles and E. S. Bolles, jr., Monument Beach, Mass. Combined closet and table. 1,883,504; Oct. 18.
Bolles, Edgar S., jr., et al. (See Bolles, Edgar S., assignor.)
Bolton, Andrew C., Miami, Fla. Knife gauge. 1,883,505; Oct. 18.
Bommer, Emil. (See Bommer, Gustav, assignor.)
Bommer, Gustav, assignor to E. Bommer, Brooklyn, N. Y. Spring hinge. 1,883,506; Oct. 18.
Bond, Alfred F. (See Bond, Percy C. and A. F., and Orlando.)
Bond, Percy C. and A. F., and E. Orlando, Detroit, Mich., assignors to P. C. Bond, trustee for P. C. Bond, E. F. Rauss, and A. F. Bond. Meter container. 1,883,507; Oct. 18.
Bond, Percy C., trustee, et al. (See Bond, Percy C. and A. F., and Orlando, assignors.)
Bonday, Frederick W., Baltimore, Md. Aerial support. 1,883,508; Oct. 18.
Boone, Benjamin F., Daytona Beach, Fla. Automobile brake. 1,883,757; Oct. 18.
Boone, Charles G., assignor to Magic City Specialty Company, Tulsa, Okla. Pipe union. 1,883,509; Oct. 18.
Borden, Bradford T., Lakewood, assignor of one-half to W. A. Neracher and one-half to The Borden Company, Warren, Ohio. Die stock. 1,883,332; Oct. 18.
Borden, Bradford T., Lakewood, assignor of one-half to W. A. Neracher and one-half to The Borden Company, Warren, Ohio. Die stock. 1,883,333; Oct. 18.
Borden, Bradford T., Lakewood, assignor of one-half to W. A. Neracher and one-half to The Borden Company, Warren, Ohio. Diestock. 1,883,334; Oct. 18.
Borden Company, The, et al. (See Borden, Bradford T., assignor.)
Borden Company, The, et al. (See Borden, B. T., and Neracher.)
Borden Company, The. (See Pealer, Robert B., assignor.)
Borg & Beck Company, The. (See Anderson, Arthur W., assignor.)
Borg & Beck Company, The. (See Gamble, David E., assignor.)
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Bornmann, Carl, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Enlarging apparatus. 1,883,510; Oct. 18.
Bornmann, Carl, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Film holder for cameras. 1,883,511; Oct. 18.
Bornmann, Carl A., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Camera front. 1,883,512; Oct. 18.
Borton, Alwyn E., South Orange, assignor to Associated Manufacturers, Inc., Ampere, N. J. Cutting and forming machine. 1,883,513; Oct. 18.
Bower Roller Bearing Co. (See Strickland, Silas A., assignor.)
Bowman, A. B. (See Anderson, Robert H., assignor.)
Bowne, Langford J., Howard Beach, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,882,753; Oct. 18.
Box Blank Corporation. (See Andrews, Champe S., assignor.)
Boyer, Frederick G. L., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Weighing device. 1,882,754; Oct. 18.
Boyer, Joseph, deceased, Detroit, Mich., by Detroit Trust Company; H. E. Candler, and S. Backus, executors, assignors to Burroughs Adding Machine Company, Detroit, Mich. Thermostatic dashpot. 1,883,514; Oct. 18.
Boynton, Charles T., assignor to Outing Manufacturing Company, Inc., Elkhart, Ind. Tackle box. 1,882,756; Oct. 18.
Boynton, John B., Oakpark, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Sealing joints. 1,882,757; Oct. 18.
Boynton, Stanley E., Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing assembling fixtures. 1,882,755; Oct. 18.
Bradbury, William T., Kankakee, Ill., assignor to Florence Stove Company, Gardner, Mass. Heating stove. Des. 87,957; Oct. 18.
Braden, Albert A., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making dies. 1,883,335; Oct. 18.
Bradley, Maurice B. (See Andersen, N. P. E., and Bradley.)
Brady, Thomas, Caldwell, N. J. Guide rail lubricator. 1,883,515; Oct. 18.
Brand, Harry R., New York, N. Y. Automatic sales system. 1,883,516; Oct. 18.
Brand, Harry R., New York, N. Y. Automatic sales system. 1,883,517; Oct. 18.
Brandt, Edgar W., Paris, France. Bladed projectile. 1,883,758; Oct. 18.
Branning, Ernest H., Akron, Ohio. Reel. 1,883,518; Oct. 18.
Branchler, Charles A., Canton, Ohio. Forging propeller blade. 1,883,510; Oct. 18.
Breckel, Harry F., Cincinnati, Ohio. Thermionic relay and circuits therefor. 1,883,520; Oct. 18.
Breen, John B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,521; Oct. 18.
Breer, Carl, assignor to Chrylser Corporation, Detroit, Mich. Piston ring testing machine. 1,883,522; Oct. 18.
Bre Miller, Clifford E., assignor to Cook Laboratories, Chicago, Ill. Machine for heat treating glass tubes and the like. 1,883,523; Oct. 18.
Bre Miller, Clifford E., assignor to Cook Laboratories, Inc., Chicago, Ill. Stopper inserting machine. 1,883,524; Oct. 18.
Bricken, John, (now by judicial change of name to John G. Beaver,) East Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,883,760; Oct. 18.
Briggs Manufacturing Company. (See Ball, Albert P., assignor.)
Briggs Manufacturing Company. (See Ross, Frederick N., assignor.)
Brinton, H., Company. (See Aaronson, Harry B., assignor.)
Brinton, H., Company. (See Collar, George D., assignor.)
British Dyestuffs Corporation Limited. (See Baddiley, J., and Hill, assignors.)
Britton, Edgar C. (See Hale, W. J., and Britton.)
Britton, Edgar C., and R. D. Holmes, assignors to The Dow Chemical Company, Midland, Mich. Preparation of amino-phenols and primary aryl amines conjointly. 1,882,758; Oct. 18.
Britton, Edgar C., and H. R. Slagh, assignors to The Dow Chemical Company, Midland, Mich. Prenaration of secondary aryl- and aralkylamines. 1,882,759; Oct. 18.
Britton, Joseph W. (See Hale, W. J., and Britton.)
Broomall, Jesse J., Eagle Rock, Calif., assignor to C. G. Reed, Lawrence, Mass. Dahlia. Pl. Pt. 36; Oct. 18.
Brown, Arthur E., Burlington, Ontario, Canada. Refrigerator unit. 1,884,759; Oct. 18.
Brown Company. (See Anderson, Gustave, assignor.)
Brown Company. (See Root, Bertwell C., assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Sherman, John C., assignor.)
Brown-Lipe Gear Company. (See Fawick, Thomas L., assignor.)

Brown, Robert B., Great Neck, L. I., assignor to American Manufacturing Company, Brooklyn, N. Y. Method and apparatus for piling material. 1,882,760; Oct. 18.
Browne, Lyle W., assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa. Automatic liquid extractor. 1,882,761; Oct. 18.
Bruck, Walter, Mannheim, assignor to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chloro-anthraquinone-acridones and making same. 1,883,525; Oct. 18.
Bruson, Herman A., Philadelphia, Pa., assignor to The Resinous Products & Chemical Company. Acid from petroleum hydrocarbons and producing same. 1,882,762; Oct. 18.
Bryan, Cassius M., West Springfield, assignor to Strathmore Paper Company, Mitteneague, Mass. Method of and apparatus for applying designs to papers and the like. 1,883,526; Oct. 18.
Bryant, Roy B., Dallas, Tex. Automatic sound reproducing apparatus. 1,883,527; Oct. 18.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Indicating device. 1,882,763; Oct. 18.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Electric transfer for tabulating machines. 1,882,764; Oct. 18.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Automatic control system. 1,882,765; Oct. 18.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Printing mechanism for tabulating machines. 1,882,766; Oct. 18.
Buck, Ainsworth, East Orange, N. J. Safety anchor. 1,883,761; Oct. 18.
Buck Dryer Corporation. (See Buck, Lucien A., assignor.)
Buck, Lucien A., Mount Vernon, N. Y., assignor of one-half to Buck Dryer Corporation, Manchester, Conn. Conveyer. 1,883,528; Oct. 18.
Buckwalter, Jacob S., Philadelphia, assignor to J. R. Hershey, Kinzers, Pa. Nut cracker. 1,883,529; Oct. 18.
Budd Wheel Company. (See Eksergian, Carolus L., assignor.)
Buffalo Foundry and Machine Company. (See Kermer, Martin J., assignor.)
Buffalo Wire Works Co. (See Scheeler, Charles A., assignor.)
Bugg, Kenly C., St. Louis, Mo. Striping device. 1,882,767; Oct. 18.
Bugg, Kenly C., St. Louis, Mo. Dispenser for nails, tacks, etc. 1,882,768; Oct. 18.
Bugg, Kenly C., St. Louis, Mo. Polishing machine. 1,882,769; Oct. 18.
Bugg, Kenly C., St. Louis, Mo. Striping device. 1,882,770; Oct. 18.
Buisset, André P., Mezieres, France. Tightening device. 1,883,530; Oct. 18.
Bunker, Clifford C., Tallmadge, assignor to The Akron Standard Mold Company, Akron, Ohio. Extrusion apparatus. 1,883,531; Oct. 18.
Burch Corporation, The. (See Ross, Lester T., assignor.)
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Filling end controller for replenishing looms. 1,883,532; Oct. 18.
Burdick, Frank, assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,882,771; Oct. 18.
Burhorn, Edwin, Hoboken, N. J. Cooling apparatus. 1,883,533; Oct. 18.
Burke, James P., assignor to Mack Molding Co., Wayne, N. J. Closure for containers. 1,883,534; Oct. 18.
Burnair, Inc. (See Campbell, C. W., and Cook, assignors.)
Burnett, Andre, Wausau, Wis. Producing on paper or fabric a suede-like finish of waterproof property. 1,883,535; Oct. 18.
Burnham Chemical Company. (See Woodward, Henry T., assignor.)
Burns, George J. (See Schoenfeldt, Henry W., assignor.)
Burns, Thomas H., Maplewood, N. J. System for counteracting undesired oscillations in alternating current circuits. 1,883,536; Oct. 18.
Burroughs Adding Machine Company. (See Boyer, Joseph, assignor.)
Burton, Warren D., Oak Park, assignor to Combustioneer Inc., Cicero, Ill. Transmission mechanism. 1,883,537; Oct. 18.
Bush, Vannevar. (See Spencer, J. A., and Bush.)
Bywater, Norbert W., Louisville, Ky. Store door pick up and delivery system. 1,883,538; Oct. 18.
Calco Chemical Company, The. (See Crossley, M. L., and Dolt, assignors.)
Callahan, John L., New York, N. Y., assignor to Radio Corporation of America. Wireless receiving apparatus. 1,882,772; Oct. 18.
Callsen, Albert, Stuttgart, Germany, assignor to Westinghouse Electric & Manufacturing Company. Current transformer. 1,882,773; Oct. 18.
Calumet Steel Company. (See O'Brien, Chester J., assignor.)
Camel Company. (See Tobin, Kenneth J., assignor.)
Camel Company. (See Wasberg, A., and Tobin, assignors.)
Cameron Can Machinery Co. (See Cameron, William, assignor.)
Cameron, William, assignor to Cameron Can Machinery Co., Chicago, Ill. Soldering device for can machines. 1,883,539; Oct. 18.
Campbell, Calvin, assignor to The Colorado Fuel and Iron Company, Denver, Colo. Extension clip. 1,883,540; Oct. 18.
Campbell, Carleton W., and S. J. Cook, assignors to Burnair, Inc., Denver, Colo. Gas burner. 1,883,541; Oct. 18.
Campbell, Donald J., Muskegon Heights, Mich. Molding machine. 1,883,542; Oct. 18.
Campbell, Ernest F., assignor to Lummus Cotton Gin Company, Columbus, Ga. Material handling apparatus. 1,883,543; Oct. 18.
Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Attachment hook for safety belts. 1,883,544; Oct. 18.
Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)
Campbell, William C., Davenport, Iowa. Curtain support. 1,883,545; Oct. 18.
Campos, Adolfo, and A. Ramirez, Newark, N. J. Smoker's novelty. 1,883,546; Oct. 18.
Camuglia, Rosario. (See Baccaro, John P., assignor.)
Candler, Henry E., et al, executors. (See Boyer, Joseph.)
Carbaugh, Conrad A., Dickeys Mountain, Pa. Spouting or gutter hanger. 1,883,547; Oct. 18.
Carbonaro, Mario, Paris, assignor to Societe Hordall Etablissements Harivean et Dolimier et René Porte et Cie. Réunis, Seine, France. Apparatus for measuring and feeding liquids. 1,883,762; Oct. 18.
Cardwell Westinghouse Company. (See Sproul, Donald F., assignor.)
Cardwell Westinghouse Company. (See Stevens, Roy R., assignor.)
Cardwell Westinghouse Company. (See Tucker, Herbert E., assignor.)
Carey, Philip, Manufacturing Company, The. (See Greider, Harold W., assignor.)
Carey, Philip, Manufacturing Company, The. (See Stough, Jay A., assignor.)
Carlson, Frederick E., assignor to Landers, Frary & Clark, New Britain, Conn. Weighing scale. 1,883,548; Oct. 18.
Carr, David M., Brooklyn, N. Y. Telephone register. 1,883,549; Oct. 18.
Carrier Engineering Corporation. (See Ashley, Carlyle M., assignor.)
Carrier Research Corporation. (See Atkins, Thomas J., assignor.)
Carroll, Fred M., Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Computing scale. 1,882,774; Oct. 18.
Carter Radio Company. (See Doran, Leroy O., assignor.)
Carter, Samuel C., assignor of one-half to R. F. Belcher, Los Angeles, Calif. Power transmission. 1,883,550; Oct. 18.
Carton Development Corporation. (See Andrews, Champe S., assignor.)
Carvour, Speros, Jersey City, N. J. Mop wringing apparatus. 1,883,551; Oct. 18.
Celanese Corporation of America. (See Dreyfus, H., Ellis, Ockman, and Olpin, assignors.)
Celanese Corporation of America. (See Dreyfus, H., and Hale, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Whitehead, assignors.)
Celanese Corporation of America. (See Ellis, George H., assignor.)
Celanese Corporation of America. (See Hargreaves, Clifford, assignor.)
Celanese Corporation of America. (See Mosby, D. H., Olpin, and Ellis, assignors.)
Celanese Corporation of America. (See Moss, William H., assignor.)
Celanese Corporation of America. (See Schneider, George, assignor.)
Celanese Corporation of America. (See Taylor, Howard, assignor.)
Celanese Corporation of America. (See Taylor, William I., assignor.)
Cellovis, Inc. (See Wilson, William C., assignor.)
Central Republic Bank and Trust Company of Illinois et al, executors. (See Friendly, Herbert M.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Chadeloid Chemical Company. (See Root, Frank B., assignor.)
Chagniard, Edmond, and A. Kartvelichvili, assignors to Chagnkart International Aviation Corporation, New York, N. Y. Airplane wing structure and making the same. 1,883,552; Oct. 18.
Chagnkart International Aviation Corporation. (See Chagniard, E., and Kartvelichvili, assignors.)
Chain Belt Company. (See Roddy, Gustav R., assignor.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chain, Leonard, Owensdale, Pa. Knockdown box. 1,883,553; Oct. 18.
Champion, Harry E., et al., executors. (See Zifferer, Lothar R., assignor.)
Chapin, William R., Indianapolis, Ind. Furnace for heat treating metals. 1,883,555; Oct. 18.

Chapleau, Louis A., assignor to South Bend Bait Company, South Bend, Ind. Fishing lure. Des. 87,958; Oct. 18.
Chapman, Charles F., assignor to Kraft-Phenix Cheese Corporation, Chicago, Ill. Thermometer. 1,883,554; Oct. 18.
Chase Companies. (See Hall, Frederick E., assignor.)
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Brake shoe. 1,883,550; Oct. 18.
Cheney Brothers. (See George, Robert, assignor.)
Cheney Brothers. (See Mouton, Paul, assignor.)
Cheney, Moses E., La Crosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Tire tester. 1,883,557; Oct. 18.
Chevigny, Georges P. (See Schreiber, L. J. J., Chevigny, and Lens.)
Chevrolet Motors, Incorporated. (See Chevrolet, Arthur E., assignor.)
Chevrolet, Arthur E., assignor to Chevolair Motors, Incorporated, Indianapolis, Ind. Aviation engine. 1,883,558; Oct. 18.
Chicago Flexible Shaft Company. (See Wright, Horace C., assignor.)
Chillingworth, Rudolph, Leytonstone, England. Screw propeller for aircraft. 1,883,336; Oct. 18.
Chilton Pen Company, The. (See Upton, Henry J., assignor.)
Chilton Ralph H., assignor to The Inland Manufacturing Company, Dayton, Ohio. Freezing tray. 1,882,775; Oct. 18.
Chipman, Andrew L. (See Chipman, Harry E., assignor.)
Chipman, Andrew L. (See Chipman, Harry E. and H. H., assignors.)
Chipman Chemical Company. (See Webster, Byron P., assignor.)
Chipman, Harry E., Springfield, Mass., assignor, by direct and mesne assignments, to A. Le Roy Chipman, New York, N. Y. Sound film and making same. 1,883,559; Oct. 18.
Chipman, Harry E., Springfield, Mass., assignor to A. L. Chipman, New York, N. Y. Electromagnetic sound recording and reproducing machine. 1,883,560; Oct. 18.
Chipman, Harry E., Springfield, Mass., assignor to Electro Magnetic Sound Corporation, New York, N. Y. Magnetic sound recording and reproducing head. 1,883,561; Oct. 18.
Chipman, Harry E., Springfield, Mass., and H. H. Chipman, assignors to Andrew L. Chipman, New York, N. Y. Sound film and making the same. 1,883,562; Oct. 18.
Chipman, Howard H. (See Chipman, Harry E. and H. H.)
Chodziesner, Georg. (See Wisspeintner, C., and Chodziesner.)
Christensen, Norman V., Chicago, and H. J. Le Vesconte, Western Springs, assignors to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,883,566; Oct. 18.
Christiansen, Christian, Fargo, N. Dak. Shock-forming machine. 1,883,563; Oct. 18.
Christiansen, Christian, Fargo, N. Dak. Harvester frame. 1,883,564; Oct. 18.
Christiansen, Ejnar, Birmingham, England. Variable speed friction gear. 1,883,565; Oct. 18.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Finishing machine for small articles. 1,883,567; Oct. 18.
Chromy, Ben J., Hopkins, Minn. Inductance unit and method of cooling. 1,883,565; Oct. 18.
Chrysler Corporation. (See Breer, Carl, assignor.)
Chubbuck, Clarence H., Bala-Cynwyd, assignor to Haslett Chute and Conveyor Company, Oaks, Pa. Chute door control. 1,883,569; Oct 18.
Church-Budget Envelope Company, The. (See Stanley Walter J., assignor.)
Clark, Cyril B., Scarsdale, assignor to General Chemical Company, New York, N. Y. Conducting exothermic gaseous reactions. 1,883,570; Oct. 18.
Clark, Earle A., Tulsa, Okla., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Compensating gas regulator attachment. 1,883,571; Oct. 18.
Clark, Paul J., Longport, N. J. Inking device for printing machines. 1,883,572; Oct. 18.
Clark, Peter, and G. Vail, New York, N. Y. Stage setting. 1,883,573; Oct. 18.
Clark, Walter R., Bridgeport, Conn. Machine for rolling or piercing billets. 1,882,655; Oct. 18.
Clary, Jan P. (See Smith, Wilbert P., assignor.)
Cleeland, John S., Glendale, Calif. Sinker. 1,883,574; Oct. 18.
Cleveland Rock Drill Company, The. (See Renfer, John E., assignor.)
Cliff, William H., assignor to Terre Haute Boiler Works Company, Terre Haute, Ind. Steel boiler. 1,882,776; Oct. 18.
Clyne, Robert C., St. Louis, Mo., assignor to Western Cartridge Company, East Alton, Ill. Shot shell and loading the same. 1,883,575; Oct. 18.
Cobb, Richard H., Cleveland, Ohio. Finger supported blotter. 1,883,576; Oct. 18.
Cobb, Roy L., Spencer, Iowa. Collapsible container. 1,883,577; Oct. 18.
Cochran, Ralf S., assignor to Surface Combustion Corporation, Toledo, Ohio. Walking beam conveyer. 1,883,763; Oct. 18.
Cody, Clifford S., Sharon Hill, B. A. Davis, Pittsburgh, and D. J. Mosshart, Lansdowne, Pa., assignors to Westinghouse Electric and Manufacturing Company. Ash disposal apparatus. 1,883,578; Oct. 18.
Cohen, Samuel, Brooklyn, assignor to General Instrument Corporation, New York, N. Y. Variable condenser. 1,883,579; Oct. 18.
Cohen, Samuel, Brooklyn, assignor to General Instrument Corporation, New York, N. Y. Radio receiving system. 1,883,580; Oct. 18.
Cole, Bernard T., Leicester, England. Knitting machine. 1,883,581; Oct. 18.
Cole, Edward S., New York, N. Y. Ship's log or like device. 1,883,582; Oct. 18.
Cole, Edward S., New York, N. Y. Mounting for Pitot tube connections or rod meters. 1,883,583; Oct. 18.
Cole, Ira L. (See Walker, G. H., and Cole.)
Collar, George D., Glenside, assignor to H. Brinton Company, Philadelphia, Pa. Yarn changer. 1,883,337; Oct. 18.
Collins, Berry, assignor, by mesne assignments, to Sun Bath Company, Birmingham, Ala. Sun bath apparatus. 1,883,764; Oct. 18.
Colorado Fuel and Iron Company, The. (See Campbell, Calvin, assignor.)
Columbus Vending Company, The. (See Vogel, Frank H., assignor.)
Columbus Vending Company, The. (See Vogel, Frank H. and R. A., assignors.)
Combustioneer Inc. (See Burton, Warren D., assignor.)
Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Granat, Elie, assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Cone, Charles N. (See Dike, T. W., Laucks, and Cone.)
Connecticut Hard Rubber Company, The. (See Vallé, Paul B., assignor.)
Connor, Frank H., Duluth, Minn. Interproximal compact. 1,883,584; Oct. 18.
Connors, George W., Birmingham, Ala. Continuous process and apparatus for rolling scrap rail and the like. 1,883,338; Oct. 18.
Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Bag holder. 1,883,585; Oct. 18.
Continental Can Company. (See Renshaw, Joseph H., assignor.)
Continental Mills, Inc. (See Milner, E., and Walter, assignors.)
Cook Laboratories, Inc. (See Bre Miller, Clifford E., assignor.)
Cook, Sidney J. (See Campbell, C. W., and Cook.)
Cool, Henry R., assignor to The Service Recorder Company, Cleveland, Ohio. Totaling device. 1,883,765; Oct. 18.
Cooling & Air Conditioning Corporation, The. (See Fleisher, Walter L., assignor.)
Copeland Products, Inc. (See Mumy, Glenn, assignor.)
Copperweld Steel Company. (See Whitehead, Frederick A., assignor.)
Corcoran-Brown Lamp Company, The. (See Johnson, Roy W., assignor.)
Correll, Charles J., et al. (See Marx, Louis, assignor.)
Corrington, Andrew F., Enfield, N. C. Combined level and plumb. 1,883,586; Oct. 18.
Cotterman, Frederick W., assignor to Vincent G. Apple Laboratories, Dayton, Ohio. Making commutators. 1,883,736; Oct. 18.
Coupland, Richard C., Norfolk, Va. Mount for machine guns. 1,883,339; Oct. 18.
Cowles, Edwin, Short Hills, assignor to Cowles Engineering Corporation, Sewaren, N. J. Method and apparatus for disseminating solids in liquids. 1,883,597; Oct. 18.
Cowles Engineering Corporation. (See Cowles, Edwin, assignor.)
Cox, Bryce H., and H. I. Snow, Winston-Salem, N. C.; said Snow assignor to said Cox. Heat control device. 1,883,766; Oct. 18.
Craig, William D., Meadville, Pa., assignor to Hookless Fastener Company. Garment. 1,883,587; Oct. 18.
Crane, Henry M., New York, N. Y.; assignor to General Motors Corporation, Detroit, Mich. Fluid brake. 1,883,588; Oct. 18.
Creed and Company. (See Salmon, R. D., and Kirk, assignors.)
Creedon, Joseph F., Omaha, Nebr. Automobile storage device. 1,882,656; Oct. 18.
Crewe, Samuel, East Cleveland, Ohio. Ratchet mechanism. 1,883,767; Oct. 18.
Crocker, Thomas F., Chicago, and V. S. Tharp, Elmhurst, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,883,589; Oct. 18.
Crosby, Edwin L., and A. E. Rhoads, assignors to Detroit Electric Furnace Company, Detroit, Mich. Furnace lining. 1,883,590; Oct. 18.
Crosby, Ralph H., assignor to Little Giant Manufacturing Co., Minneapolis, Minn. Radiator hanger. 1,883,591; Oct. 18.
Crosland, Edward M., Newton-Le-Willows, England. Manufacture of biscuits or the like articles and machine therefor. 1,883,592; Oct. 18.

Cross Coal-O-Matic Company. (See Cross, Walter M., assignor.)
Cross, Roy, Kansas City, Mo. Antiknock compounds for internal combustion engines and making same. 1,883,593; Oct. 18.
Cross, Walter M. (See Foster, Jack E., assignor.)
Cross, Walter M., Kansas City, Mo., assignor to Salvage Process Corporation, New York, N. Y. Method and apparatus for transporting viscous liquids. 1,883,594; Oct. 18.
Cross, Walter M., assignor to Cross Coal-O-Matic Company, Kansas City, Mo. Underfeed stocker. 1,883,595; Oct. 18.
Crossley, Moses L., and M. L. Dolt, Plainfield, assignors to The Calco Chemical Company, Inc., Bound Brook, N. J. New mordant. 1,882,777; Oct. 18.
Crossley, Moses L., and M. L. Dolt, Plainfield, assignors to The Calco Chemical Company, Inc., Bound Brook, N. J. New mordant. 1,882,778; Oct. 18.
Cullin, Jasper F., Detroit, Mich., assignor, by mesne assignments, to Delco-Remy Corporation, Anderson, Ind. Electrical apparatus. 1,882,779; Oct. 18.
Cunningham, George W., Seminole, Okla. Oil saver. 1,883,596; Oct. 18.
Cussons, Alexander T., Kersal, Manchester, England. Combined shaving soap container and shaving cup. Des. 87,959; Oct. 18.
Cutler-Hammer, Inc. (See Ferris, Willard J., assignor.)
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Cutler-Hammer, Inc. (See Millermaster, Ralph A., assignor.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Dahl, Earl A., Hooper, Nebr. Holder for hogs and other animals. 1,883,598; Oct. 18.
Dahlberg, Arthur O., Madison, Wis. Fountain pen. 1,882,780; Oct. 18.
Dahlen, Charles A., Duluth, Minn. Rug making machine. 1,883,599; Oct. 18.
Daley, James C., assignor to Jefferson Electric Company, Chicago, Ill. Sign cabinet. 1,883,768; Oct. 18.
Daniels, Evan G., Lucas, Iowa. Combined casket and burial vault. 1,883,600; Oct. 18.
Daugherty, John F., assignor of one-half to J. W. Daugherty, San Diego, Calif. Variable pitch propeller. 1,883,340; Oct. 18.
Daugherty, John W. (See Daugherty, John F., assignor.)
Dauphinais, Henry C., Jamestown, N. Dak. Underwear supporting device. 1,883,341 Oct. 18.
Dauster, John, Wilkinsburg, Pa. Hydraulic clutch. 1,883,601; Oct. 18.
Davidson, Joseph, assignor to Davidson-Kennedy Company, Atlanta, Ga. Cooker. 1,882,781; Oct. 18.
Davidson-Kennedy Company. (See Davidson, Joseph, assignor.)
Davis, Burl A. (See Cody, C. S., Davis, and Mosshart.)
Davis, Cortland W., Oak Park, assignor to The Mantle Lamp Company of America, Chicago, Ill. Mantle head. 1,883,602; Oct. 18.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressure equalizing means for multiple buck pressing machines. 1,883,603; Oct. 18.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Equalizing mechanism for pressing machine. 1,883,604; Oct. 18.
Davis, Henry H. (See Soben, Adolph F., assignor.)
Davy, Christopher H., Blackheath, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam reheater. 1,883,605; Oct. 18.
Dawson, George H., Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill. Card holding tray. 1,882,782; Oct. 18.
Dayton Scale Company. (See Carroll, Fred M., assignor.)
Dayton Scale Company. (See Strachan, Thomas H., assignor.)
Dayton Scale Company. (See Theis, Henry J., assignor.)
Deal, Paul E., Coconut Grove, Fla. Picture frame. Des. 87,960; Oct. 18.
Dearborn, Ernest R. (See Angier, E. H., and Dearborn.)
DeBack, William, Hayward, Calif., and Ogden S. Sells, assignors to Sprague-Sells Corporation, Hoopeston, Ill. Apparatus for treating food products. 1,883,606; Oct. 18.
Decker, Theodore H., Highland Park, Ill. Golf driving indicator. 1,882,783; Oct. 18.
Decker, Theodore H., Highland Park, Ill. Golf putting device. 1,882,784; Oct. 18.
Decorative Tile Corporation. (See White, Edwin H., assignor.)
Deegan, James J., et al. (See Krutt, Israel, assignor.)
Deere & Company. (See O'Donnell, John B., assignor.)
Deister Concentrator Company, The. (See Weber, Don A., assignor.)
Delco Products Corporation. (See Anson, Jerome I., assignor.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Delco-Remy Corporation. (See Arthur, James L., assignor.)
Delco-Remy Corporation. (See Cullin, Jasper F., assignor.)
Delco Remy Corporation. (See Fitzsimmons, John T., assignor.)
Delco-Remy Corporation. (See Shippy, L. C., and Goad, assignors.)
Delman, Inc. (See Morali, Charles, assignor.)
Dennedy, James H., assignor, by mesne assignments, to Servel, Inc., New York, N. Y. Refrigeration. 1,883,607; Oct. 18.
Dennis, William J., Chicago, Ill. Weather strip. 1,883,608; Oct. 18.
Dennis, William J., Chicago, Ill. Gasket. 1,883,609; Oct. 18.
Densmore, Albert A., Boston, Mass., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Power transmission mechanism. 1,883,342; Oct. 18.
Dent Hardware Company, The. (See Schrader, Thomas O., assignor.)
Dermatoid-Werke Paul Meissner, Aktien-Gesellschaft. (See Michael, Adolf, assignor.)
Derry, Gardner C., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat transfer apparatus. 1,883,769; Oct. 18.
Design Laboratories, Incorporated. (See Wilson, E. B., and Ressetar, assignors.)
Detroit Electric Furnace Company. (See Crosby, E. L., and Rhoads, assignors.)
Detroit Trust Company et al., executors. (See Boyer, Joseph.)
Devereaux, William C., Detroit, Mich. Door latch mechanism. 1,883,610; Oct. 18.
DeVlieg, Gerard A., Rockford, Ill. Tool holder. 1,883,611; Oct. 18.
DeVlieg, Gerard A., Rockford, Ill. Grinding machine. 1,883,612; Oct. 18.
Devlin, Paul. (See Young, R. S., and Devlin.)
Devol, Lee, Forest Hills, assignor to The Union Switch & Signal Company, Swissvale, Pa. Voltage regulating apparatus. 1,883,613; Oct. 18.
DeWitt, Clyde C., Houghton, Mich. Coating particles. 1,883,614; Oct. 18.
Dexdale Hosiery Mills. (See Berger, Emil J., assignor.)
Dexter Folder Company. (See Rader, Earl D., assignor.)
Dexter Folder Company. (See Waterworth, Robert J., assignor.)
Diamond Crystal Salt Company. (See Reid, John, assignor.)
Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Gas burner. 1,883,615; Oct. 18.
Dietz, Karl. (See Frank, K., and Dietz.)
Dike, Theodore W., New Westminster, British Columbia, Canada, assignor, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash. Making plywood. 1,883,616; Oct. 18.
Dike, Theodore W., New Westminster, British Columbia, Canada, and I. F. Laucks and C. N. Cone, assignors, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash. Making plywood. 1,883,617; Oct. 18.
Dixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Infolding machine. 1,883,343; Oct. 18.
Dixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Infolding machine. 1,883,344; Oct. 18.
Dixon, Walter L., assignor to Reece Folding Machine Company, Boston, Mass. Infolding machine. 1,883,345; Oct. 18.
Dodge, John S., Paxton, Mass. Reversible ratchet wrench. 1,883,618; Oct. 18.
Dodge Manufacturing Corporation. (See Mosher, J. F., and Van Derhoef, assignors.)
Dodge Manufacturing Corporation. (See Strong, Arthur P., assignor.)
Doering, Albert L., assignor to J. S. Thorn Company, Germantown, Pa. Metallic window structure. 1,883,619; Oct. 18.
Doheny-Stone Drill Co. (See Stone, Frederick, assignor.)
D'Olier, Henry, jr., Bridgeport, Conn. Fixture hanger. 1,883,620; Oct. 18.
D'Olier, Henry, jr., Bridgeport, Conn. Outlet box. 1,883,621; Oct. 18.
Dolt, Maurice L. (See Crossley, M. L., and Dolt.)
Donaldson, Francis, Yonkers, assignor to Mason & Hanger Company, Inc., New York, N. Y. Method in construction of subaqueous tunnels. 1,883,622; Oct. 18.
Donley, Charles, assignor to Wrought Iron Company of America, Lebanon, Pa. Tensioning means for feed rolls and the like. 1,883,623; Oct. 18.
Doran, Leroy O., assignor to Carter Radio Company, Chicago, Ill. Constant line and speaker impedance volume control. 1,883,624; Oct. 18.
Doughty, Addie A. (See Doughty, William J., assignor.)
Doughty, William J., assignor to A. A. Doughty, Detroit, Mich. Attachment for golf bags. 1,882,785; Oct. 18.
Douglas, Harry A., Bronson, Mich. Switching mechanism. 1,883,625; Oct. 18.
Dow Chemical Company, The. (See Britton, E. C., and Holmes, assignors.)
Dow Chemical Company, The. (See Britton, E. C., and Slagh, assignors.)
Dow Chemical Company, The. (See Grebe, John J., assignor.)
Dow Chemical Company, The. (See Grether, E. F., and Keener, jr., assignors.)
Dow Chemical Company, The. (See Hale, W. J., and Britton, assignors.)

Dow Chemical Company, The. (See Weiss, M. L., and Bardsley, assignors.)
Dowling, William, East Malvern, Victoria, Australia. Link mechanism. 1,883,770; Oct. 18.
Downes, Ralph W., Kansas City, Mo., assignor to Potter Manufacturing Corporation, Chicago, Ill. Release device for fire escape doors. 1,883,626; Oct. 18.
Doyle, Philip C., assignor to The Standard Oil Company, Cleveland, Ohio. Apparatus for making soapsuds. 1,882,786; Oct. 18.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper, Luther O., Spiceland, Ind. Supporting bracket for shade pulleys. 1,883,627; Oct. 18.
Dreifuss, Walter, Niles Center, Ill. Drawing board. 1,883,628; Oct. 18.
Dresser, Lewis W., assignor to Packard Motor Car Company, Detroit, Mich. Radiator guard mounting. 1,883,629; Oct. 18.
Dreyfus, Camille, New York, N. Y. Warp printing. 1,883,346; Oct. 18.
Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Making artificial filaments and product thereof. 1,883,347; Oct. 18.
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Treatment of fabric and product thereof. 1,883,348; Oct. 18.
Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Textile process and product. 1,883,349; Oct. 18.
Dreyfus, Henry, London, England. Treatment of materials made of or containing cellulose derivatives. 1,883,350; Oct. 18.
Dreyfus, Henry, London, England. Treatment of cellulose derivatives. 1,883,351; Oct. 18.
Dreyfus, Henry, London, England. Manufacture of aliphatic anhydrides. 1,883,353; Oct. 18.
Dreyfus, Henry, London, G. H. Ellis, T. Ockman, and H. C. Olpin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Dyeing printing or stenciling of materials made of or containing cellulose derivatives. 1,883,352; Oct. 18.
Dreyfus, Henry, London, and F. C. Hale, Spondon, near Derby, England, assignors to Celanese Corporation of America. Shuttleless loom. 1,883,354; Oct. 18.
Duckworth, Leon A. (See Stamets, O., and Duckworth.)
Duerr, Felix. (See Andrussow, L., and Duerr.)
Duff, Ralph L., Roselle, N. J., assignor to Standard Oil Development Company. Chemical apparatus and lining the same. 1,883,630; Oct. 18.
Duffy, James F., assignor to Duffy Manufacturing Company, Holland, Mich. Mat. 1,883,737; Oct. 18.
Duffy Manufacturing Company. (See Duffy, James F., assignor.)
Duftschmid, Franz. (See Schlecht, L., Schubardt, and Duftschmid.)
Duncan, Earl C., St. Anne, Ill. Combined plant duster and fertilizer. 1,883,771; Oct. 18.
Dunlevy, Charles A., Monongahela, Pa. Poultry waterer. 1,883,631; Oct. 18.
Du Pont, E. I., de Nemours & Company. (See Gilbert, John W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Graves, George D., assignor.)
Du Pont, E. I., de Nemours & Company. (See McIntyre, William A., assignor.)
Du Pont, E. I., de Nemours & Company. (See Rotherham, Walster S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Spaeth, Charles P., assignor.)
Du Pont, E. I., de Nemours & Company. (See Tuttle, David, assignor.)
Du Pont, E. I., de Nemours & Company. (See Zimmerli, A., and Lyon, assignors.)
Dupont Viscoloid Company. (See Leheney, John H., assignor.)
Duvall, George M., and J. L. Israelson, assignors, by mesne assignments, to Stevens Waldon Inc., Worcester, Mass. Multiple compartment box. 1,883,632; Oct. 18.
Dykeman, Harry E., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,883,633; Oct. 18.
E. A. Laboratories, Inc. (See Auñero, John M., assignor.)
Eagan, Leonard W. (See Von Gartzen, Joseph H., assignor.)
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor-control system. 1,882,787; Oct. 18.
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor-control system. 1,882,788; Oct. 18.
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,882,789; Oct. 18.
Eastern Tool & Mfg. Co. (See Anderson, Carl E., assignor.)
Easton, Lucian F., La Crosse, Wis. Dual purpose pumping apparatus. 1,883,634; Oct. 18.
Ebbets, George D., Kenilworth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Mercury boiler. 1,883,635; Oct. 18.
Eclipse Machine Company. (See Bijur, Joseph.)
Eclipse Machine Company. (See Densmore, Albert A., assignor.)
Eclipse Machine Company. (See Kearney, Daniel P., assignor.)
Eclipse Machine Company. (See McGrath, William L., assignor.)
Eclipse Machine Company, The. (See McGrath, W. L., and Whitney, assignors.)
Eclipse Machine Company. (See Sayles, Theo. C., assignor.)
Eclipse Machine Company. (See Sekella, Youston, assignor.)
Eclipse Machine Company. (See Wertz, Daniel L., assignor.)
Eclipse Machine Company. (See Whitney, Maurice P., assignor.)
Eclipse Textile Devices, Inc. (See Ferguson, John C., assignor.)
Edber, Silas M., assignor of twenty per cent to J. P. Spies and forty-five per cent to M. O. Steen, Bismarck, N. Dak. Transmission. 1,883,355; Oct. 18.
Edgar, John, Rockford, Ill. Making toothed power transmitting devices. 1,883,636; Oct. 18.
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Piston for internal combustion engines. 1,883,637; Oct. 18.
Egli, Arnold A., Hamburg, Germany. Multicolor intaglio printing machine. 1,883,638; Oct. 18.
Eichenbaum, Irving A., New York, N. Y. Hat making machine. 1,883,639; Oct. 18.
Elker, Thaddeus B., Jefferson Barracks, St. Louis, Mo. Carburetor. 1,883,738; Oct. 18.
Eisenhardt, William J. (See Eisenhardt, William T., assignor.)
Eisenhardt, William T., assignor to W. J. Eisenhardt, Baltimore, Md. Sugar dispenser. 1,883,640; Oct. 18.
Eksergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Dual disk wheel with spacer rings. 1,883,641; Oct. 18.
Electro Magnetic Sound Corporation. (See Chipman, Harry E., assignor.)
Electro Metallurgical Company. (See Kinzel, Augustus B., assignor.)
Electrons, Inc. (See Von Wedel, Carl J. R. H., assignor.)
Elliott, Harmon P., Watertown, Mass. Stencil printing machine. 1,883,643; Oct. 18.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Alcohol-solubilized nitrocellulose and making same. 1,883,644; Oct. 18.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Product made from mica splittings and making same. 1,883,645; Oct. 18.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H. (See Dreyfus, H., Ellis, Ockman, and Olpin.)
Ellis, George H. (See Mosby, D. H., Olpin, and Ellis.)
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Manufacture of azo dyestuffs. 1,883,356; Oct. 18.
Ellis, Hubert C., Evanston, Ill. Door for cylindrical receptacles. 1,883,646; Oct. 18.
Ellison, Luther A., Topeka, Kans. Route file. 1,883,647; Oct. 18.
Elms, Edward H., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,883,642; Oct. 18.
Elöd, Egon, Karlsruhe, Germany. Recovery of cocos fibers. 1,882,657; Oct. 18.
Emanuelli, Luigi, assignor to Societa Italiana Pirelli, Milan, Italy. Multicore oil-filled high tension electric cable. 1,883,648; Oct. 18.
Embalmers Supply Company, The. (See Ochs, Henry R., assignor.)
Emerol Manufacturing Co. (See Thompson, V. W., and Pierce, assignors.)
Engberg, Martin J., assignor to Maurice Preston Corporation, Chicago, Ill. Preparing bleaching solution. 1,883,649; Oct. 18.
Engholm, John W., Minneapolis, Minn. Washing and scrubbing apparatus for cases and boxes. 1,883,772; Oct. 18.
Engle, Edgar W., Lake Forest, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Contact material. 1,883,650; Oct. 18.
Engle, Russell, assignor to T. L. Knipfe, Kokomo, Ind. Carnation. Pl. Pt. 35; Oct. 18.
Ensley, Major A., Rochester, assignor to All Fair Incorporated, Churchville, N. Y. Combined toy and game. 1,883,651; Oct. 18.
Epstein, Albert K., Chicago, Ill. Process of producing egg product. 1,883,652; Oct. 18.
Epstein, Albert K., and B. R. Harris, Chicago, Ill. Manufacturing egg noodles. 1,883,653; Oct. 18.
Erickson, John, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Electromagnetic relay. 1,883,773; Oct. 18.
Ericsson, Arvid, assignor to Union Special Machine Company, Chicago, Ill. Thread cutter for sewing machines. 1,883,654; Oct. 18.
Erie City Iron Works. (See Wohlenberg, Walter J., assignor.)
Eskilson, Sven A., Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J. Pendulum controlled lens apparatus. 1,883,655; Oct. 18.

Estey Organ Company. (See Warren, Samuel R., assignor.)
Estock, Michael, Orange, Calif. Irrigation nozzle. 1,883,656; Oct. 18.
Ettlinger Casaks Manufacturing Company. (See Ettlinger, Ralph, assignor.)
Ettlinger, Ralph, assignor to Ettlinger Casaks Manufacturing Company, Kansas City, Mo. Sausage casing and making same. 1,883,657; Oct. 18.
Evans, Edwin R. (See Rockwell, E. A., and Evans.)
Evans, John H. (See Swart, C. A., and Evans.)
Everhart, John R., Westminster, Md. Shears sharpener. 1,883,658; Oct. 18.
Eyre, John J., Saugus, and H. W. Porter, Brookline, assignors to H. K. Porter, Inc., Everett, Mass. Portable cutting tool. 1,882,790; Oct. 18.
Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Rail car. 1,883,357; Oct. 18.
Fansteel Products Company. (See Engle, Edgar W., assignor.)
Faust, Otto, Mannheim-Neuostheim, Germany. Spinning artificial silk. 1,883,659; Oct. 18.
Fawick, Thomas L., Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Transmission. Re18,629; Oct. 18.
Felder, Dudley H. (See Gardner, E. W., and Felder.)
Feldman, Abraham G., Chicago, Ill. Infant's collapsible bathtub. 1,883,660; Oct. 18.
Feltham, Charles H., Providence, R. I. Metal broom or brush. 1,882,658; Oct. 18.
Felty, Franklin L., deceased, Chicago, by Maude M. Felty, administratrix, assignor, by mesne assignments, to Mae F. Grover, Harvey, Ill. Beater for cleaning rugs. 1,883,851; Oct. 18.
Felty, Maude M., administratrix. (See Felty, Franklin L.)
Ferguson, John C., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Spinning frame cleaner. 1,883,358; Oct. 18.
Ferguson, William P., Middlebury, assignor to Scovill Manufacturing Company, Waterbury, Conn. Shower head. Des. 87,961; Oct. 18.
Ferngren, Enoch T., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for drawing and flattening sheet glass. Re18,624; Oct. 18.
Fernstrum, Frank O., assignor to Gray Marine Motors Co., Detroit, Mich. Marine motor. 1,883,661; Oct. 18.
Ferris, Willard J., Jackson, Mich., assignor, by mesne assignments, to Cutler-Hammer, Inc. Portable outlet receptacle. 1,882,791; Oct. 18.
Filtration and Water Softening Proprietary Limited. (See Martin, M. J., and Terry, assignors.)
Finck, Joseph L., Washington, D. C. Insulating buildings and like structures. 1,883,774; Oct. 18.
Finkenbinder, Erwin O., Cedar Falls, Iowa. Automatic test-scorer. 1,883,775; Oct. 18.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Preformed composition strip and making same. 1,882,792; Oct. 18.
Fisher Governor Company, The. (See Browne, Lyle W., assignor.)
Fisher, Harold W., Elizabeth, N. J., assignor to Standard-I. G. Company. Removing liners from pressure vessels. 1,883,662; Oct. 18.
FitzGerald, Alam S., Schenectady, N. Y., assignor to General Electric Company. Casing. 1,883,663; Oct. 18.
Fitzsimmons, John T., assignor to Delco Remy Corporation, Anderson, Ind. Ignition apparatus. 1,882,793; Oct. 18.
Fleischman, Samuel, assignor to U. S. Tool Manufacturing Co., Chicago, Ill. Window cleaning device. 1,883,664; Oct. 18.
Fleisher, Walter L., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y. Air conditioning unit. 1,883,665; Oct. 18.
Fletcher, James. (See Kerr, H. J., and Fletcher.)
Flintjer, Walter J., Cheyenne, Wyo. Beet harvester. 1,883,666; Oct. 18.
Florence Stove Company. (See Bradbury, William T., assignor.)
Flynn, Benjamin H., Alexandria, La. Grading machine. 1,883,667; Oct. 18.
Foersterling, Hans, deceased, Jamesburg, N. J.; R. J. McNitt, administrator ad litem. Preparing a gas mixture suitable for substantially complete combustion. 1,882,795; Oct. 18.
Fohn, Adolf E. (See Wilson, H. S., and Fohn.)
Ford, Burdette E., assignor to The Sterolene Company, Chicago, Ill. Egg treating machine. 1,883,669; Oct. 18.
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Card counter. 1,882,796; Oct. 18.
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Perforated card interpreter. 1,882,797; Oct. 18.
Ford, John H., Washington, D. C. Roof for vehicles. 1,883,739; Oct. 18.
Foreman, Charles N., Chambersburg, Pa. Refrigerator. 1,883,668; Oct. 18.
Foreman, William B., Elizabeth City, N. C. Knockdown hogshead. 1,883,670; Oct. 18.
Forsyth, Benjamin F., assignor of one-third to E. E. Gordon and one-third to E. J. Forsyth, Chicago, Ill. Cabinet. 1,883,776; Oct. 18.
Forsyth, Edmund J., et al. (See Forsyth, Benjamin F., assignor.)
Fort, Louis, Jersey City, N. J. Insulator bracket and support. 1,883,671; Oct. 18.
Fortney, Brauddus B., Louisville, Ky., assignor to American Safety Headlight Corporation. Headlight. 1,883,359; Oct. 18.
Fortney, Brauddus B., Louisville, Ky., assignor to American Safety Headlight Corporation. Headlight. 1,883,360; Oct. 18.
Fortney, Brauddus B., Louisville, Ky., assignor to American Safety Headlight Corporation. Headlight. 1,883,361; Oct. 18.
Foster, Jack E., assignor of one-half to W. M. Cross, Kansas City, Mo. Aeroplane construction. 1,883,672; Oct. 18.
Foster Wheeler Corporation. (See Irish, David J., assignor.)
Fouquet, William F., assignor to Projection Optics Co., Rochester, N. Y. Adjustable mount for projecting lenses. 1,883,673; Oct. 18.
France, James H., Philipsburg, assignor to J. H. France Refractories Company, Snow Shoe, Pa. Checker-brick and checkerwork construction. 1,883,674; Oct. 18.
France, J. H., Refractories Company. (See France, James H., assignor.)
Francis, Jacob R. (See Redmond, Albert G., assignor.)
Frank, Karl, and K. Dietz, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cement powder and mortar powder. 1,883,675; Oct. 18.
Frazier, Bert, Pittsburgh, Pa. Concealed stairway. 1,883,777; Oct. 18.
Fredenhagen, Karl, and B. Helferich, Greifswald, Germany. Degradation of wood and other polysaccharids. 1,883,676; Oct. 18.
Fredenhagen, Karl, and B. Helferich, Greifswald, Germany. Degradation of wood and other polysaccharids. 1,883,677; Oct. 18.
Freeman, Claud W., Fort Worth, Tex. Air cleansing and cooling device. 1,883,778; Oct. 18.
Freedman, Ephraim, Brooklyn, N. Y., A. Jaekli, North Bergen, N. J., and E. J. Gnaegi, assignors to R. H. Macy & Co., Inc., New York, N. Y. Textile fabric. 1,883,678; Oct. 18.
Freese, Ira H., Clarksburg, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Automatic rotary leer feeder. 1,883,362; Oct. 18.
Friendly, Herbert M., deceased, Chicago, Ill.; M. S. Friendly and Central Republic Bank and Trust Company of Illinois, executors. Automatic telephone system. 1,883,679; Oct. 18.
Friendly, Herbert M., deceased, Chicago, Ill.; Milton S. Friendly and Central Republic Bank and Trust Company, executors. Automatic telephone system. 1,883,680; Oct. 18.
Friendly, Milton S., et al., executors. (See Friendly, Herbert M.)
Frigidaire Corporation. (See Breen, John B., assignor.)
Frigidaire Corporation. (See Schmieding, Warren H. F., assignor.)
Frigidaire Corporation. (See Smith, Harry F., assignor.)
Fry, Justus W., Renton, Wash. System and structure for high speed traffic. 1,883,363; Oct. 18.
Full, George D., Winnetka, assignor to Dudley Lock Corporation, Chicago, Ill. Lock. 1,882,794; Oct. 18.
Fuller, Charles W. (See Rolfs, E. L., and Fuller.)
Fulton Sylphon Company, The. (See Fulton, Weston M., assignor.)
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
Fulton, Weston M., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Manufacture of tubular corrugated metal walls. 1,882,708; Oct. 18.
Furukawa Denki Kogyo Kabushiki Kaisha. (See Shiomi, T., and Higuchi, assignors.)
Fyrac Manufacturing Company. (See Aldeen, Gedor W., assignor.)
Gabriel Company, The. (See Beecher, Eugene L., assignor.)
Gage, Nellie M., Dayton, Ohio. Headlight for motor vehicles. 1,883,681; Oct. 18.
Gallay, Georges, Le Sentier, Switzerland. Finishing time piece balance wheels. 1,883,779; Oct. 18.
Gamble, David E., Detroit, Mich., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,883,682; Oct. 18.
Gammeter, John R., Akron, Ohio. Method and apparatus for making thread rubber. Re18,625; Oct. 18.
Gardner, Earl W., and D. H. Felder, Jefferson County, Tex., assignors to The Texas Company, New York, N. Y. Plastic composition. 1,883,683; Oct. 18.
Gardner, William A., New York, N. Y. Badge for Spanish war veterans. Des. 87,962; Oct. 18.
Garrett, William, Beckley, W. Va. Straightening tool for sheet metal. 1,883,684; Oct. 18.
Gaskin, Edward R., assignor of one-third to A. H. Jackson and P. T. Hoehn, Buffalo, N. Y. Apparatus for treating paper with vapor preparatory to printing thereon. 1,883,364; Oct. 18.
Gasterstädt, Johannes, assignor to Hugo Junkers, Dessau, Germany. Hydraulic clutch. 1,883,685; Oct. 18.
Geiger, John C., Bryn Mawr, Pa. Internal combustion engine. 1,883,686; Oct. 18.

Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,882,799; Oct. 18.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,882,800; Oct. 18.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorber. 1,882,801; Oct. 18.
Gelfand, Hyman, Brooklyn, N. Y. Removable screen. 1,883,687; Oct. 18.
Gellert, Anthony, Brooklyn, N. Y. Hydraulic clutch. 1,883,365; Oct. 18.
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
General Cable Corporation. (See Reiner, Martin J., assignor.)
General Cable Corporation. (See Snyder, Edward, assignor.)
General Chemical Company. (See Billingsley, J. P., and Kellum, assignors.)
General Chemical Company. (See Clark, Cyril B., assignor.)
General Electric Company. (See FitzGerald, Alan S., assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Ross, Aubrey A., assignor.)
General Electric Company. (See St. Palley, Zoltan O., assignor.)
General Electric Company. (See Webb, Roy L., assignor.)
General Electric Company. (See Wiegand, Erich, assignor.)
General Instrument Corporation. (See Cohen, Samuel, assignor.)
General Motors Corporation. (See Crane, Henry M., assignor.)
General Motors Research Corporation. (See Asire, Horace W., assignor.)
General Motors Research Corporation. (See Chase, Theron P., assignor.)
General Plate Company. (See Spencer, J. A., and Bush, assignor.)
General Plate Company. (See Spencer, John A., assignor.)
General Railway Signal Company. (See Howe, Winthrop K., assignor.)
General Railway Signal Company. (See Wight, Sedgwick N., assignor.)
George, Enoch, jr. (See Regan, W. J., and George.)
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 87,994; Oct. 18.
Gerlach, Buddy. (See Gerlach, William, W. E., and B.)
Gerlach, Will E. (See Gerlach, William, W. E., and Buddy.)
Gerlach, William, W. E., and Buddy, Memphis, Texas. Automatic sprinkler. 1,883,780; Oct. 18.
Gerold, Catlin, Los Angeles, Calif. Housing for universal joints. 1,883,688; Oct. 18.
Gibbs, Oscar D., et al. (See Titchener, Paul F., assignor.)
Giesler, Jean V., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn. Method and machine for testing thin strips. 1,882,802; Oct. 18.
Giesler, Jean V., assignor to The Fulton Syphon Company, Knoxville, Tenn. Valve. 1,882,803; Oct. 18.
Gilbert, John W., Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Stabilizer for lead chromate pigments. 1,882,804; Oct. 18.
Gilbert, Louis H., Hartford, Conn. Type casting matrix. 1,883,689; Oct. 18.
Gilgenberg, Paul, Cologne-on-the-Rhine, Germany. Device for withdrawing low pressure gases from high pressure vessels. 1,883,690; Oct. 18.
Gillespie, George D., Kansas City, Mo. Beet harvester and potato digger. 1,883,691; Oct. 18.
Gillett, Edward H. J. C., Maida Vale, London, England. Transmission system. 1,882,805; Oct. 18.
Gillett, Edward H. J. C., West Hampstead, London, England. Friction clutch for the transmission of power. 1,882,806; Oct. 18.
Gillett, Edward H. J. C., West Hampstead, London, England. Transmission system. 1,882,807; Oct. 18.
Gillin, Theobald M., Aldan, assignor of one-third to W. W. Patton and one-third to A. Wine, Philadelphia, Pa. Pipe hickey. 1,883,692; Oct. 18.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,882,659; Oct. 18.
Gilson, Robert M., Pittsburgh, and B. E. O'Hagan, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,883,693; Oct. 18.
Glauser, John G., Pittsburgh, Pa. Continuous manufacture of ice cream and similar frozen products. 1,882,660; Oct. 18.
Gleaner Combine Harvester Corporation, The. (See Hale, S. H., Worthington, and Pierson, assignors.)
Gleaner Combine Harvester Corporation, The. (See Pierson, Torvald N., assignor.)
Glidden Food Products Company. (See Beatty, H., and Mongere, assignors.)
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Gnaegi, Ernest J. (See Freedman, E., Jackli, and Gnaegi.)
Goad, Louis C. (See Shippy, L. C., and Goad.)
Goble, William E., Orosi, assignor to S. P. Keithly, Fresno, Calif. Brush picking and macerating machine. 1,883,694; Oct. 18.
Goerke, Simon, Milwaukee, Wis. Fish lure. 1,883,695; Oct. 18.
Goertz, Abraham S., Reedley, Calif. Coupler. 1,883,696; Oct. 18.
Going, George G., Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,697; Oct. 18.
Going, George G., Stamford, Conn., assignor to Remington typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,698; Oct. 18.
Going, George G., Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,699; Oct. 18.
Going, George G., Glenbrook, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,700; Oct. 18.
Goldberg, Edward, Shaker Heights, Ohio. Smoker's device. 1,883,701; Oct. 18.
Gomi, Tadashi D., New York, N. Y. Hand bag. 1,883,702; Oct. 18.
Gommel, Dewey E., assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw swage. 1,883,703; Oct. 18.
Gonser, Bruce W., Amarillo, Tex., assignor to American Smelting and Refining Company, New York, N. Y. Treating zinc ores. 1,883,235; Oct. 18.
Goodwin, John O., Akron, assignor to Sieberling Latex Products Company, Barberton, Ohio. Ball covering process. 1,883,704; Oct. 18.
Goodyear Tire & Rubber Company, The. (See Weigolt, Alphonse D., assignor.)
Goodyear-Zeppelin Corporation. (See Arnstein, K., and Helma, assignors.)
Gordon, Charles W., Pleasantville, assignor to The Superheater Company, New York, N. Y. Superheater arrangement. 1,883,705; Oct. 18.
Gordon, Charles W., Pleasantville, assignor to The Superheater Company, New York, N. Y. Boiler. 1,883,706; Oct. 18.
Gordon, Charles W., Hammond, Ind., assignor to The Superheater Company, New York, N. Y. Baffle arrangement. 1,883,707; Oct. 18.
Gordon, Charles W., Munster, Ind., assignor to The Superheater Company, New York, N. Y. Superheater. 1,883,708; Oct. 18.
Gordon, Essea E., et al. (See Forsyth, Benjamin F., assignor.)
Gosden, Freeman F., et al. (See Marx, Louis, assignor.)
Gossiau, Fritz, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Multicylinder two-stroke internal combustion engine. 1,883,781; Oct. 18.
Gould Storage Battery Corporation. (See Bell, Charles W., assignor.)
Graham, John H., New York, N. Y. Shock absorbing spring shackle. 1,883,709; Oct. 18.
Graham, Matthew P., assignor to Thompson Products, Inc., Detroit, Mich. Self-adjusting ball joint. 1,883,782; Oct. 18.
Graham, Thomas, & Company. (See Ross, Taylor W., assignor.)
Graham, Volney L., Nevada, Ohio. Storage brooder. 1,883,710; Oct. 18.
Grain Machinery Company, The. (See Haines, George H., assignor.)
Granat, Elie, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France. Variable speed transmitter for distant control devices. 1,883,711; Oct. 18.
Granat, Elie, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France. Relay for distant control. 1,883,783; Oct. 18.
Grant, Garnet P., assignor to Auto-Sales Corporation, Long Island City, N. Y. Rockable delivery device for vending machines. 1,883,712; Oct. 18.
Graves, George D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Ester interchange with organic acids. 1,882,808; Oct. 18.
Gray, Charles B., Millbourne, Pa. Tool holder. 1,883,713; Oct. 18.
Gray, Daniel M., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Packing and preserving nuts in glass containers. 1,883,366; Oct. 18.
Gray, Daniel M., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Method of stabilizing the consistency of mayonnaise. 1,883,367; Oct. 18.
Gray, Fred G., Clintwood, Va. Portable desk. 1,883,714; Oct. 18.
Gray Marine Motors Co. (See Fernstrum, Frank O., assignor.)
Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Composition of matter. 1,882,809; Oct. 18.
Greene, Oscar V., Cleveland, Ohio. Armored filter element. 1,883,715; Oct. 18.
Greenlees, Russell C., Gladstone, Mich. Closure for collapsible tubes. 1,883,716; Oct. 18.
Greider, Harold W., Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company. Porous materials and the manufacturing process thereof. 1,882,810; Oct. 18.

Greig, James W. (See Toncray, M. H., and Greig.)
Greiner, Leopold E., jr., New York, N. Y. Clinical thermometer. 1,883,717; Oct. 18.
Greisen, Elijah C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Drying cylinder. 1,883,722; Oct. 18.
Grether, Ernest F., Midland, Mich. Fertilizer composition. 1,883,718; Oct. 18.
Grether, Ernest F., and J. L. Keener, jr., assignors to The Dow Chemical Company, Midland, Mich. Preparation of ortho-chlor-para-nitraniline. 1,882,811; Oct. 18.
Griffin, Oliver D., Salt Lake City, Utah. Centrifugal switch. 1,883,784; Oct. 18.
Grimes, Lester A., Montclair, assignor to Grimes Sprinkler Company, Inc., Newark, N. J. Valve accelerating device. 1,883,719; Oct. 18.
Grimes, Lester A., Montclair, N. J., assignor to Grimes Sprinkler Company, Inc., Newark, N. J. Slow leak device. 1,883,720; Oct. 18.
Grimes Sprinkler Company. (See Grimes, Lester A., assignor.)
Grimes, Thomas E., Westmount, Quebec, Canada, assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener-inserting machine. 1,883,368; Oct. 18.
Grimm, Walter E., Long Beach, Calif. Windshield construction. 1,883,721; Oct. 18.
Grosskinsky, Otto. (See Schmidt, O., and Grosskinsky.)
Groth, John H., Beaver Falls, Pa. Ash receptacle. 1,883,723; Oct. 18.
Grover, May F. (See Felty, Franklin L., assignor.)
Grubman, Leo J., Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J. Sound producing device. 1,883,724; Oct. 18.
Guiberson Corporation, The. (See Standlee, Harvey R., assignor.)
Guilmette, Joseph, St. Felicien, Quebec, Canada. Differential. 1,883,725; Oct. 18.
Gunn Furniture Company. (See Rickson, Gustaf C., assignor.)
Gunn, James B., Windsor, Ontario, Canada, assignor to Edward N. Sturdevant and George M. Jenkins, Detroit, Mich. Dispensing apparatus. 1,882,812; Oct. 18.
Guthrie, George G., Tulsa, Okla. Tire pressure alarm operating means. 1,882,661; Oct. 18.
Haag, Walther, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Catalysts for the production of carbon black. 1,882,813; Oct. 18.
Haas, Frederick S., Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,882,814; Oct. 18.
Haas, Joseph F., Forest Park, assignor to Wodack Electric Tool Corporation, Chicago, Ill. Portable power driven threading machine. 1,883,728; Oct. 18.
Haase, Jorgen I., Akron, Ohio. Tire trimming machine. 1,883,729; Oct. 18.
Hacker, Philip, Brooklyn, N. Y. Combination day bed and davenport. 1,883,730; Oct. 18.
Hadden, Gavin, New York, and C. A. Holden, New Rochelle, N. Y.; said Holden assignor to said Hadden. Indoor tennis court. 1,883,731; Oct. 18.
Haegele, Otto P., Berwyn, and C. Paulson, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for testing electrical coils. 1,882,815; Oct. 18.
Hagedorn, Max, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Enhancing the viscosity of technical oils. 1,882,816; Oct. 18.
Haglund, Hakon H., Flushing, assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph carrier system. 1,882,817; Oct. 18.
Haglund, Hakon H., Flushing, assignor to The Western Union Telegraph Company, New York, N. Y. Direction control switch for transmission over submarine cables. 1,882,818; Oct. 18.
Hahn, Otto W., San Francisco, Calif. Compensating vehicle brake. 1,883,732; Oct. 18.
Hahn, Otto W., San Francisco, Calif. Gas water heater. 1,883,733; Oct. 18.
Hahnemann, Walter, Berlin-Marienfelde, and R. Herzog, Berlin, assignors to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Device for the quick control of voltage in dynamo-electric machine. 1,882,819; Oct. 18.
Haines, George H., Caledonia, assignor to The Grain Machinery Company, Marion, Ohio. Conveyer apparatus. 1,882,820; Oct. 18.
Haines, Stacey A., Chicago, Ill., assignor of one-half to Harold F. Spencer, Kansas City, Mo. Fluid flow control means for cooking utensils. 1,882,821; Oct. 18.
Haidu, Alex, Hooversville, Pa. Toy. 1,882,822; Oct. 18.
Halbach, Howard L., Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company. Process and apparatus for making sheet glass.. 1,883,734; Oct. 18.
Hale, Frank C. (See Drefus, H., and Hale.)
Hale, Stephen H., Kansas City, and W. H. Worthington, and T. N. Pierson, Independence, assignors to The Gleaner Combine Harvester Corporation, Independence, Mo. Apparatus for harvesting corn. 1,882,823; Oct. 18.
Hale, William J., and J. W. Britton, assignors to The Dow Chemical Company, Midland, Mich. Manufacture of phenol. 1,882,824; Oct. 18.
Hale, William J., and J. W. Britton, assignors to The Dow Chemical Company, Midland, Mich. Manufacture of hydroxy aromatic compounds. 1,882,825; Oct. 18.
Hale, William J., and E. C. Britton, assignors to The Dow Chemical Company, Midland, Mich. Manufacture of phenol. 1,882,826; Oct. 18.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Mechanical relay. 1,883,735; Oct. 18.
Hall, C. M., Lamp Company. (See Bamford, Frank L., assignor.)
Hall, Frederick E., North Easton, Mass., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Hand-operated air pump and the like. 1,882,827; Oct. 18.
Hall, George S. and R. G., London, England. Masking for cinematograph and like screens. 1,882,828; Oct. 18.
Hall, Howard, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Relief picture viewing screen. 1,882,829; Oct. 18.
Hall, Joseph M., Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co. Shock absorber. 1,882,830; Oct. 18.
Hall, Joseph M., Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co. Shock absorber. 1,882,831; Oct. 18.
Hall, Joseph M., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Draft gear. 1,882,832; Oct. 18.
Hall, Joseph M., Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co. Shock absorber. 1,882,833; Oct. 18.
Hall, Lloyd A., Chicago, and E. E. Mortell, Kankakee, Ill., assignors, by mesne assignments, to J. W. Mortell Company. Asphalt emulsion and manufacture thereof. 1,882,834; Oct. 18.
Hall, Robert G. (See Hall, George S. and R. G.)
Hamm, Bertram C., Cambridge, Mass. Desk adjunct. 1,883,785; Oct. 18.
Hammond Clock Company, The. (See Stephens, George H., assignor.)
Hamric, Richard S. (See Balmer, Harry T., assignor.)
Hansen, Hans C., West Hartford, and A. J. Bennett, assignors to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Push switch. 1,883,786; Oct. 18.
Hanson, Edward C., and S. R. Ponp, assignors to O. B. McClintock Company, Minneapolis, Minn. Deal tray. 1,882,835; Oct. 18.
Hardenbergh, Clarence M., et al. (See Sholtz, Richard J., assignor.)
Hardman, Coy H., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Leer loader. 1,883,369; Oct. 18.
Hargreaves, Clifford, Drummondville, Quebec, Canada, assignor to Celanese Corporation of America. Loom attachment. 1,883,370; Oct. 18.
Harnischfeger Corporation. (See Andersen, N. P. E., & Bradley.)
Harnischfeger Corporation. (See Standfuss, Ernest R., assignor.)
Harper, Philip S., Chicago, Ill. Gas range cock. 1,882,836; Oct. 18.
Harris, Benjamin R. (See Epstein, A. K., and Harris.)
Harrison, Myrl, Cincinnati, assignor to The Kurz-Kasch Company, Dayton, Ohio. Container lid. Des. 87,963; Oct. 18.
Harter, Isaac, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,883,371; Oct. 18.
Hartmann, Otto H. (See Trede, H., and Hartmann.)
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,882,837; Oct. 18.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,882,838; Oct. 18.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Clutch actuating means. 1,882,839; Oct. 18.
Haseltine, Stacy B., assignor, by mesne assignments, to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,882,840; Oct. 18.
Haslett Chute and Conveyor Company. (See Chubbuck, Clarence H., assignor.)
Hathaway, Wellington C., Houston, Tex. Vending machine. 1,882,841; Oct. 18.
Haug, Anton J., Nashua, N. H. Centrifugal paperstock screen. 1,882,662; Oct. 18.
Hawadler, Jacques A. M., Paris, France, assignor, by mesne assignments, to Old Colony Trust Company. Valve for wireless telegraphy or telephony. Re18,628; Oct. 18.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Continuous blow-off valve. 1,883,727; Oct. 18.
Hazel-Atlas Glass Co. (See Freese, Ira H., assignor.)
Hazel-Atlas Glass Co. (See Gray, Daniel M., assignor.)
Hazel-Atlas Glass Co. (See Hardman, Coy H., assignor.)
Hazel-Atlas Glass Co. (See Stephens, Henry C., assignor.)
Hazeltine Corporation. (See Johnson, John K., assignor.)
H'Doubler, Charles W., Springfield, Mo. Thread cutter for sewing machines or the like. 1,883,746; Oct. 18.
Head, James E., and Charles F. Lukins, Tulsa, Okla. Liquid dispensing apparatus. 1,883,787; Oct. 18.

Heald Machine Company, The. (See Haas, Frederick S., assignor.)
Heald Machine Company, The. (See Page, Dwight C., assignor.)
Heald Machine Company, The. (See Schmidt, William D., assignor.)
Heald Machine Company, The. (See Scott, Gherald D., assignor.)
Hedberg, Carl W. J., Middlesex, N. J., assignor to Research Corporation, New York, N. Y. Conditioning gases for electrical precipitation. 1,883,372; Oct. 18.
Hedberg, Carl W. J., Middlesex, N. J., assignor to Research Corporation, New York, N. Y. Purification of blast furnace gases. 1,883,373; Oct. 18.
Heinen, Frederick C., Chicago, Ill. Door elevating means. 1,882,842; Oct. 18.
Helferich, Burckardt. (See Fredenhagen, K., and Helferich.)
Helma, Paul. (See Arnstein, K., and Helma.)
Hemmerly, Earl S., Allentown, Pa. Rotating fan. 1,882,663; Oct. 18.
Hepburn, William M., assignor to Surface Combustion Corporation, Toledo, Ohio. Conveying mechanism for furnaces. 1,883,788; Oct. 18.
Hershey, Jacob R. (See Buckwalter, Jacob S., assignor.)
Herzog, Robert. (See Hahnesmann, W., and Herzog.)
Higuchi, Shokichi. (See Shiomi, T., and Higuchi.)
Hill, James. (See Baddiley, J., and Hill.)
Hill, Joseph B., Wynnewood, assignor to The Atlantic Refining Company, Philadelphia, Pa. Treatment of oils. 1,883,374; Oct. 18.
Hilliard, Grant U., Youngstown, Ohio. Combined support and pickling rack. 1,883,375; Oct. 18.
Hilpert, Meier G., and C. Weiss, Bethlehem, Pa. Building construction. 1,883,376; Oct. 18.
Hodgman, Willis K., jr., Taunton, Mass. Retarding chamber. 1,882,843; Oct. 18.
Hoe, R., & Co. (See Zuckerman, Adolph M., assignor.)
Hoehn, Peter T., et al. (See Gaskin, Edward R., assignor.)
Hogin, James L. (See Smith, Robert N., assignor.)
Holden, Charles A. (See Hadden, G., and Holden.)
Holmes, Ray D. (See Britton, E. C., and Holmes.)
Hookless Fastener Company. (See Craig, William D., assignor.)
Hoover Company, The. (See Becker, Bernard C., assignor.)
Hopkins, Ralph Z., and E. F. Seger, assignors to Hudson Motor Car Company, Detroit, Mich. Striping device for automobile bodies. 1,882,844; Oct. 18.
Horsman, Henry S., London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water tube boiler. 1,882,845; Oct. 18.
Horwitz, Alexander, New York, N. Y. Compound and base for use in the manufacture of greases. 1,882,664; Oct. 18.
Houdé Engineering Corporation. (See Shultz, Albert B., assignor.)
Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Universal alternating current relay. 1,882,846; Oct. 18.
Howell, Theodore L., assignor to Kurt Versen, New York, N. Y. Lighting fixture. Des. 87,964; Oct. 18.
Hoxie, Vivian W., San Francisco, Calif., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,882,847; Oct. 18.
Hubbard and Company. (See Peirce, Charles L., jr., assignor.)
Hudson Motor Car Company. (See Hopkins, R. Z., and Seger, assignors.)
Hudson Motor Car Company. (See Toncray, Millard H., assignor.)
Hudson Motor Car Company. (See Toncray, M. H., and Greig, assignors.)
Hutchins Car Roofing Company. (See Wilson, Alfred R., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Andrussow, L., and Duerr, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Beller, H., and Luther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Bruck, Walter, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Frank, K., and Dietz, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Haag, Walther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, Max, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Korte, Helmut, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schlecht, L. Schubardt, and Duftschmid, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., and Grosskinsky, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., and Niemann, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., Niemann, and Meyer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schubardt, W., and Schlecht.)
I. G. Farbenindustrie Aktiengesellschaft. (See Steimmig, Gerhard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Webel, Franz, assignor.)
Ilich, Amson G. (See Armstrong, A. C., and Ilich.)
Imperial Paper and Color Corporation. (See Arnold, Max, assignor.)
Independent Pneumatic Tool Co. (See Anderson, Adolph, assignor.)
Ingraham, E., Company, The. (See VanVeen, Anton, assignor.)
Inland Manufacturing Company, The. (See Chilton, Ralph H., assignor.)
Innes, Edith K., Zion, Ill. Pineapple shredder. 1,882,665; Oct. 18.
International Agricultural Corporation. (See Ammen, Irvin G., assignor.)
International Communications Laboratories, Incorporated. (See Wisspeintner, C., and Chodziesner, assignors.)
International Precipitation Company. (See Ruder, Heinrich B., assignor.)
International Precipitation Company. (See Viets, Floyd H., assignor.)
International Time Recording Company of New York. (See Bryce, James W., assignor.)
International Time Recording Company of New York. (See Mutschler, Hugo, assignor.)
Irish, David J., Richmond, Staten Island, assignor to Foster Wheeler Corporation, New York, N. Y. Burner. 1,883,789; Oct. 18.
Irwin, Herbert E., Barons, Alberto, Canada. Airplane. 1,883,740; Oct. 18.
Ischinger, Eric et al. (See Titchener, Paul F.)
Israelson, John L. (See Duvall, G. M., and Israelson.)
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Projection of stereoscopic pictures. 1,883,290; Oct. 18.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Projection of stereoscopic pictures. 1,883,291; Oct. 18.
Jackson, Alexander H., et al. (See Gaskin, Edward R., assignor.)
Jackson, Harold E., Detroit, Mich. Shock absorber. 1,883,292; Oct. 18.
Jackson, John G., assignor to Square D Company, Detroit, Mich. Fuse clip. 1,883,790; Oct. 18.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler with forced return circulation through furnace walls. 1,883,293; Oct. 18.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Series boiler with superheater between boiler tubes. 1,883,294; Oct. 18.
Jaeger, Siegfried. (See Schrans, Karl, and Jaeger.)
Jaekli, Adolf. (See Freedman, E., Jaekli, and Gnaegi.)
Jay Manufacturing Company. (See Van Tuyl, Thomas, assignor.)
Jefferson Electric Company. (See Daley, James C., assignor.)
Jeffrey Manufacturing Company, The. (See Beltz, John S., assignor.)
Jeffrey Manufacturing Company, The. (See Stanley, Arba P., assignor.)
Jenkins, George M., et al. (See Gunn, James B., assignor.)
Jenkins, Raymond J., Baltimore, Md. Fuel saving and combustion regulating device. 1,883,295; Oct. 18.
Jenner, Ralph L. (See Woodruff, W. W., 3d, and Jenner.)
Jewell, Harold D., Detroit, Mich. Sign. 1,883,791; Oct. 18.
Jobes, Lawrence U., Greenville, Ohio. Gate. 1,883,792; Oct. 18.
Johns-Manville Corporation. (See Beckwith, Charles J., assignor.)
Johns-Manville Corporation. (See Ware, Melvin R., assignor.)
Johns-Manville Corporation of New York. (See Rolfe, E. L., and Fuller, assignors.)
Johnson Automatic Sealer Co., Ltd. (See Richard, Charles F., assignor.)
Johnson Bronze Company. (See Sandler, Louis, assignor.)
Johnson, Fritz R., Providence, R. I. Vanity case. 1,883,793; Oct. 18.
Johnson John K., Rye, N. Y., assignor to Hazeltine Corporation. Radio receiving apparatus. 1,883,794; Oct. 18.
Johnson, Roy W., Columbus, assignor, by mesne assignments, to The Corcoran-Brown Lamp Company, Cincinnati, Ohio. Traffic observing instrument. 1,883,296; Oct. 18.
Jones, Frederick R., Chicago, Ill. Garbage and refuse incinerator. Re18,622; Oct. 18.
Jones, Thomas H., Woodthorpe, England. Tubular knitted fabric. 1,883,297; Oct. 18.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 87,995; Oct. 18.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 87,996; Oct. 18.
Junkers, Hugo. (See Gasterstadt, Johannes, assignor.)
Kales Stamping Company. (See Zink, Fred W., assignor.)
Kane, Peter. (See Andreasen, W. R. G., and Toleman, assignors.)
Kannee, Henry M., New York, N. Y. Automatic drying device for inked sheets. 1,883,795; Oct. 18.
Kartvelichvili, Alexander. (See Chagniard, E., and Kartvelichvili.)
Kawneer Company, The. (See Plym, Francis J., assignor.)

Kearney, Daniel P., Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y. Rebound check for starter drives. 1,883,377; Oct. 18.
Keener, Joseph L., jr. (See Grether, Ernest F., and Keener.)
Kehoe, Arthur H., Rutherford, N. J., assignor to Westinghouse Electric & Manufacturing Company, Alternating current distribution system. 1,883,236; Oct. 18.
Keithly, S. P. (See Goble, William E., assignor.)
Kellum, Thomas A. (See Billingsley, J. P., and Kellum.)
Kelly, William W., assignor to The Nut Products Company, Cleveland, Ohio. Nut toaster. Des. 87,997; Oct. 18.
Kennedy Valve Mfg. Co., The. (See Banks, Frederick R., assignor.)
Kent, Everett E. (See Richards, Benjamin, assignor.)
Ker, John O. (See Ashton, Ward, assignor.)
Kermer, Martin J., Snyder, assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y. Concentrator. 1,883,378; Oct. 18.
Kermer, Martin J., Snyder, assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y. Evaporator. 1,883,379; Oct. 18.
Kerr, Franklin H., Toledo, Ohio. Muich. 1,883,381; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Chain grate stoker. 1,883,299; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Radiant heat superheater. 1,883,300; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Mercury boiler having horizontal headers. 1,883,301; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Mercury boiler feeder systems. 1,883,302; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler with superheater and reheater. 1,883,303; Oct. 18.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Superheater. 1,883,304; Oct. 18.
Kerr, Howard J., Westfield, N. J., and J. Fletcher, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Steam generator. 1,883,298; Oct. 18.
Kerr, Howard J., Westfield, and C. U. Savoye, Hackensack, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,883,380; Oct. 18.
Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)
Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Metal band or linkage. 1,882,666; Oct. 18.
Kester Solder Company. (See Barber, Clifford L., assignor.)
Kester Solder Company. (See Ripley, Perry C., assignor.)
King, John W. (See Stull, J. S., and King.)
King, Melbert, Altoona, Pa. Mounting for camera frame yoke. 1,883,796; Oct. 18.
King, Melbert, Altoona, Pa. Carriage adjustment for camera frames. 1,883,797; Oct. 18.
King, Melbert, Altoona, Pa. Camera frame elevator. 1,883,798; Oct. 18.
Kingsbury, Harry T. (See Beedle, F. P., and Kingsbury.)
Kinne, Edmund P., Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill. Coupler mechanism. Re18,631; Oct. 18.
Kinabach, Frank, Houston, Tex. Coating machine. 1,883,305; Oct. 18.
Kinzel, Augustus B., Beechhurst, N. Y., assignor to Electro Metallurgical Company. Ingot mold. 1,883,382; Oct. 18.
Kipper, Herman B., New York, assignor to R. Baylor Knox, Bronxville, N. Y. Production of acetylene from petroleum oil. 1,883,799; Oct. 18.
Kirk, Stanley E. (See Salmon, R. D., and Kirk.)
Kleckner, Arthur C., assignor to Webster Electric Company, Racine, Wis. Casing for electrical apparatus. Re18,627; Oct. 18.
Knipe, Thomas L. (See Engle, Russell, assignor.)
Knox, R. Baylor. (See Kipper, Herman B., assignor.)
Koca, James F. (See Sears, R. W. 2d., and Koca.)
Koch, Lawrence E., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch and control circuit therefor. 1,883,246; Oct. 18.
Koree, Jeane U., et al. (See Krutt, Israel, assignor.)
Korte, Helmut, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Bleaching bast fibers, especially bast fibers of linen, hemp, and the like. 1,883,846; Oct. 18.
Kraft-Phenix Cheese Corporation. (See Chapman, Charles F., assignor.)
Krider, George E., Duncansville, assignor to McLanahan & Stone Corporation, Hollidaysburgh, Pa. Material washing machine. 1,883,800; Oct. 18.
Krueger, Oscar, Chicago, Ill. Signal device. 1,883,801; Oct. 18.
Krutt, Israel, assignor of five per cent to W. A. Rappeport, New York, N. Y., forty-seven and one-half per cent to J. J. Deegan, and forty-seven and one-half per cent to J. U. Koree. 1,883,741; Oct. 18.
Kurz-Kasch Company, The. (See Harrison, Myrl, assignor.)
Laminating Patents Corporation. (See Dike, Theodore W., assignor.)
Laminating Patents Corporation. (See Dike, T. W., Laucks, and Cone, assignors.)
Lamson Company, The. (See Bauer, John A., assignor.)
Lamson, Horatio W., Arlington, Mass., assignor to The Texas Company, New York, N. Y. Radio compass. 1,883,802; Oct. 18.
Landers, Frary & Clark. (See Carlson, Frederick E., assignor.)
Langknecht, Henry J., Rochester, N. Y., assignor to Shuron Optical Company, Inc., Geneva, N. Y. Metallic pattern strip for spectacle frames or similar articles. Des. 87,998; Oct. 18.
Langvand, Ivar L. (See Trainer, J. E., and Langvand.)
LaRue, William D., Philadelphia, Pa., and S. H. Wismer, Palmyra, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound reproducing machine. 1,883,238; Oct. 18.
Laucks, Irving F. (See Dike, T. W., Laucks, and Cone.)
LeBlond Aircraft Corporation, The. (See Angle, Glenn D., assignor.)
Lee, Leif, Youngstown, Ohio. Furnace. 1,883,383; Oct. 18.
Lees, Arthur L. (See Reynolds, F., and Lees.)
Leheney, John H., Leominster, Mass., assignor to Dupont Viscoloid Company, Wilmington, Del. Whistle. Des. 87,966; Oct. 18.
Lennox, Luther W., Palo Alto, Calif., and H. S. Wildman, Villa Escobedo, Chihuahua, Mexico, assignors to American Smelting & Refining Company, New York, N. Y. Treading zinc ores. 1,883,234; Oct. 18.
Lens, Georges X. (See Schreiber, L. J. J., Chevigny, and Lens.)
Levasseur, Philemon, Three Rivers, Quebec, Canada. Stringed instrument. Des. 87,967; Oct. 18.
LeVesconte, Harold J. (See Christensen, N. V., and LeVesconte.)
Lewis, Florence N., New York, N. Y. Combination perfume bottle and container therefor. Des. 87,968; Oct. 18.
Lewis, Goodrich Q., Wheaton, assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,883,306; Oct. 18.
Libbey-Owens-Ford Glass Company. (See Ferngren, Enoch T., assignor.)
Libraverk m. b. H. (See Nagel, Carl, assignor.)
Lindquist, David E. (See Robinson, W. M., Lindquist, Rader, and Young.)
Linear Packing & Rubber Co. (See Swartz, Alfred W., assignor.)
Liquid Carbonic Corporation, The. (See Mohler, Valentine J., assignor.)
Liquid Dehydration Corporation. (See Washburn, Robert M., assignor.)
Little Giant Manufacturing Co. (See Crosby, Ralph H., assignor.)
Livingston, Elizabeth and L., Washington, D. C. Assembling machine. 1,883,307; Oct. 18.
Livingston, Louis (See Livingston, Elizabeth and L.)
Loenneke, Louis J., et al. (See Abbott, Scott M., assignor.)
Lohrke, James L., Moylan-Rose Valley, and H. H. Perry, Bryn Mawr, Pa. Producing yarn. 1,883,384; Oct. 18.
Lord, H. C. (See Whitehouse, Irving P., assignor.)
Lorant, Rudolf, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Straight and complement punch. 1,883,308; Oct. 18.
Lorenz, C., Aktiengesellschaft. (See Habnemann, W., and Herzog, assignors.)
Lorenz, C., Aktiengesellschaft. (See Schumacher, Hans, assignor.)
Lox Seal Corporation. (See Behrman, Marcus B., assignor.)
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Flow equalizing means. 1,883,309; Oct. 18.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Waste heat boiler. 1,883,310; Oct. 18.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat treating coal. 1,883,311; Oct. 18.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler and economizer. 1,883,312; Oct. 18.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,883,313; Oct. 18.
Lukins, Charles F. (See Head, J. E., and Lukins.)
Lummus Cotton Gin Company. (See Campbell, Ernest F., assignor.)
Luther, Martin. (See Beller, H., and Luther.)
Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
Lyon, Robert C. (See Zimmerli, A., and Lyon.)
Mack Molding Co. (See Burke, James P., assignor.)
Macy, R. H., & Co., Inc. (See Freedman, E., Jaekli, and Gnaegi, assignors.)
Maddox, William J., Jamestown, N. Y. Abrading roll. 1,883,747; Oct. 18.

Magic City Specialty Company. (See Boone, Charles G., assignor.)
Maintenance Equipment Company. (See Warr, Harold G., assignor.)
Manning & Co. (See Ronan, Kenneth M., assignor.)
Mantle Lamp Company of America. (See Davis, Cortland W., assignor.)
Marathon Paper Mills Company. (See Abrams, Allen, assignor.)
Marathon Paper Mills Company. (See Willauer, William R., assignor.)
Marek, Victor J., Elmhurst, N. Y. Garment hanger. 1,882,667; Oct. 18.
Marietta Concrete Corporation. (See Ross, Charles B., assignor.)
Marles, Henry, assignor, by mesne assignments, to Gemmer Manufacturing Company, Detroit, Mich. Steering gear. 1,882,848; Oct. 18.
Marqué, Léon, LaGarenne, assignor of one-half to Louis Massuger, LeVesinet, Seine-et-Oise, France. Fastening device, more specially for hoods. 1,883,804; Oct. 18.
Marrison, Warren A., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Frequency control system. 1,882,849; Oct. 18.
Marrison, Warren A., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Frequency producer. 1,882,850; Oct. 18.
Marshall, Edna H., Jerseyville, Ill. Garden hat. Des. 87,999; Oct. 18.
Martin, Horace G., jr., New York, N. Y. Electric lamp. 1,883,803; Oct. 18.
Martin, Mark H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Auxiliary spring mechanism for trucks. 1,883,742; Oct. 18.
Martin, Mark H., Reading, Pa., assignor to T. H. Symington & Sons, Inc., Baltimore, Md. Auxiliary spring mechanism for trucks. 1,883,885; Oct. 18.
Martin, Michael J., Armadale, Victoria, and W. R. Terry, Kooyong, Victoria, assignors to Filtration and Water Softening Proprietary Limited, Melbourne, Australia. Filtration of water. 1,883,805; Oct. 18.
Martin, Vernon V., Indianapolis, Ind. Cooky display jar. 1,883,806; Oct. 18.
Marvel Carburetor Company. (See Plant, Antoine P., assignor.)
Marx, Louis, New York, N. Y., assignor to C. J. Correll and F. F. Gosden, Chicago, Ill. Figure toy. Des. 87,969; Oct. 18.
Marx, Louis, New York, N. Y., assignor to C. J. Correll and F. F. Gosden, Chicago, Ill. Figure toy. Des. 87,970; Oct. 18.
Mashek, Frank. (See Sherman, Ozro G., assignor.)
Mason & Hanger Company, Inc. (See Donaldson, Francis, assignor.)
Massuger, Louis. (See Marqué, Léon, assignor.)
Master Rule Mfg. Co. (See Nicholson, C. M., and Anderson, assignors.)
Mathes Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,882,866; Oct. 18.
Mathewson, Wilfred B. (See Tervo, Oscar, assignor.)
Matthies, William H., Hackensack, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,882,851; Oct. 18.
Maybach, Karl, assignor to Maybach-Motorenbau G. m. b. H. Friedrichshafen, Germany. Change speed gear. 1,883,743; Oct. 18.
Maybach-Motorenbau G. m. b. H. (See Maybach, Karl, assignor.)
Mazer, Jacob, Stonehurst, Upper Darby Township, Delaware County, Pa. Sound-absorbing unit and making same. 1,883,386; Oct. 18.
Mazur, Samuel, Bristol, assignor to The Sessions Clock Company, Forestville, Conn. Chime clock. 1,883,887; Oct. 18.
McCabe, Junius D., Coraopolis, Pa. Filling device. 1,882,668; Oct. 18.
McClintock, O. B., Company. (See Hanson, E. C., and Popp, assignors.)
McConkey, Montgomery W., assignor to Bendix Brake Company, South Bend, Ind. Manual electric braking system. 1,882,852; Oct. 18.
McConway & Torley Company, The. (See Regan, William J., assignor.)
McConway & Torley Company, The. (See Regan, W. J., and George, assignors.)
McGough, Catherine, et al. (See Warren, John R., assignor.)
McGough, Frank R., et al. (See Warren, John R., assignor.)
McGrath, William L., and M. P. Whitney, assignors to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,388; Oct. 18.
McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,389; Oct. 18.
McGregor, Alexander G., London, England. Liquid-circulating plant. 1,882,669; Oct. 18.
McIntire, Erastus W., Ontario, Calif. Electrode holder. 1,883,807; Oct. 18.
McIntyre, William A., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company Wilmington, Del. Black Powder composition. 1,882,853; Oct. 18.
McKay, Company, The. (See Senft, John, assignor.)
McLanahan & Stone Corporation. (See Krider, George E., assignor.)
McNitt, Robert J., administrator. (See Foersterling, Hans.)
Mead, Edward D., Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Mounting frame for electrical apparatus. 1,882,854; Oct. 18.
Medoff, William, New York, N. Y. Cleansing tissue compact. 1,883,852; Oct. 18.
Meggenhofen, Charles W., and J. L. Zink, Indianapolis, Ind. Adjustable hanger for brooms or mops. 1,883,808; Oct. 18.
Meier, Frederick, Chicago, Ill. Container. 1,833,390; Oct. 18.
Melin, Hans, assignor to The Aetna Standard Engineering Company, Youngstown, Ohio. Sheet conveying apparatus. 1,882,855; Oct. 18.
Mellgren, Magnus, Gottenborg, Sweden. Frying pan. 1,882,670; Oct. 18.
Mennesson, Marcel, assignor to "Société Anonyme Solex," Neuilly-on-the-Seine, France. Carburetor. 1,883,809; Oct. 18.
Merchant & Evans Company. (See Benn, Stephen J., assignor.)
Metropolitan Paving Brick Company, The. (See Barbour, James G., assignor.)
Metropolitan Sewing Machine Corporation. (See Weis, John F., assignor.)
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Strain relieving device for electrical conductor cords. 1,882,856; Oct. 18.
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,882,857; Oct. 18.
Meyer, Egon. (See Schmidt, O., Niemann, and Meyer.)
Michael, Adolf, Heideck, near Ellenburg, assignor to Dermatoid-Werke Paul Meissner, Aktien-Gesellschaft, Leipsig, Germany. Ornamentation of celluloid. 1,883,854; Oct. 18.
Miller, Anne D., Bridgeport, Conn. Set of playing cards. Des. 87,971; Oct. 18.
Miller, Frank P., Meadville, Pa. Rotary cutter. 1,883,810; Oct. 18.
Miller Printing Machinery Company. (See Barrett, Alfred W., assignor.)
Millermaster, Ralph A., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch mechanism. 1,882,858; Oct. 18.
Mills, Albert W., East Orange, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Perforating machine. 1,882,859; Oct. 18.
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Blowing preventative for paper-machine felts. 1,883,391; Oct. 18.
Milner, Emil, and F. Walter, Germantown, Philadelphia, assignors to Continental Mills, Inc., Philadelphia, Pa. Apparatus for the production of vertical stripes on the circular type knitting frame. 1,883,811; Oct. 18.
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Lewis, Goodrich Q., assignor.)
Miner, W. H., Inc. (See Olander, Roland J., assignor.)
Minett, Wilfrid T., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Shuttle for sewing machines. 1,883,812; Oct. 18.
Minneapolis-Honeywell Regulator Company. (See Bogle, John C., assignor.)
Minneapolis-Honeywell Regulator Company. (See Koch, Lawrence E., assignor.)
Minneapolis-Honeywell Regulator Company. (See Phelan, Louis A. M., assignor.)
Minneapolis-Honeywell Regulator Company. (See Shipley, Sylvanus C., assignor.)
Minneapolis-Honeywell Regulator Company. (See Sladkey, Edwin W., assignor.)
Minneapolis-Honeywell Regulator Company. (See Warnke, Carl J., assignor.)
Minneapolis-Honeywell Regulator Company. (See Wilson, H. S., and Fohn, assignors.)
Mohler, Valentine J., Wheaton, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle filling and crowning machine. 1,882,860; Oct. 18.
Moll, Edwin, Portland, Oreg. Power driven mechanic's hand tool. 1,883,392; Oct. 18.
Mongere, Charles. (See Beatty, H., and Mongere.)
Moninger, Philip W. (See Ballem, Henry J., assignor.)
Monroe Calculating Machine Company. (See Bricken, John, assignor.)
Monroe Calculating Machine Company. (See Walter, Edward C., assignor.)
Moore Brothers Company. (See Dibble, Claude M., assignor.)
Moore, Ralph S., El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y. Feeder for pulverized materials. 1,882,861; Oct. 18.
Morali, Charles, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 87,972; Oct. 18.
Morris, Howard A. (See Aldrich, J. P., and Morris.)
Morrison, Montford, Montclair, N. J. Manometer. 1,883,813; Oct. 18.
Mortell, Edwin E. (See Hall, L. A., and Mortell.)
Mortell, J. W., Company. (See Hall, L. A., and Mortell, assignors.)

Mosby, Denis H., H. C. Olpin, and G. H. Ellis, Spondon, near Derby, England, assignors to Celanese Corporation of America. Nitration of arylsulphonyl derivatives of aromatic amines. 1,883,393; Oct. 18.
Moser, Wilhelm, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie, m. b. H., Berlin, Germany. System for keying transmitters. 1,882,862; Oct. 18.
Mosher, James F., Mishawaka, and G. N. Van Derhoef, South Bend, assignors to Dodge Manufacturing Corporation, Mishawaka, Ind. Clutch. 1,883,394; Oct. 18.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y. Coating composition and vehicle for the same. 1,883,395; Oct. 18.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Coating. 1,883,396; Oct. 18.
Mosshart, Donald J. (See Cody, C. S., Davis, and Mosshart.)
Moto Meter Gauge & Equipment Corporation. (See Cheney, Moses E., assignor.)
Mouton, Paul, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 87,973; Oct. 18.
Mouton, Paul, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,000; Oct. 18.
Mueller Brass Co. (See Robinson, W. M., Lindquist, Rader, and Young, assignors.)
Muench-Kreuzer Candle Co. (See Muench, Norbert C. H., assignor.)
Muench, Norbert C. H., assignor to Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y. Vase for candle lamps. Des. 87,974; Oct. 18.
Muffly, Glenn, Scarsdale, N. Y., assignor to Copeland Products, Inc. Expansion chamber for refrigerating mechanism. Re18,633; Oct. 18.
Mulder, Johannes G. W., assignor to N. V. Philips' Gloeilampen-Fabrieken, Eindhoven, Netherlands. Electric discharge tube. 1,882,671; Oct. 18.
Mutzebier, Hugo, Lindelfingen, Germany, assignor to International Time Recording Company of New York, Endicott, N. Y. Time recorder. 1,882,863; Oct. 18.
Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See Al, Jan, assignor.)
Nagel, Carl, assignor to Librawerk m. b. H., Gliesmarode, Germany. Automatic weighing machine. 1,883,855; Oct. 18.
National Blank Book Company. (See Schade, John, assignor.)
National Brass Company. (See Ter Meer, Herman, assignor.)
National Equipment Company. (See Bausman, A. L., and Baum, assignors.)
National Machine Products Company. (See Stoll, Albert, assignor.)
National Marking Machine Company, The. (See Constable, Charles E., assignor.)
National Rubber Machinery Company. (See Shook, Florain J., assignor.)
Neal, Franklin G. (See Welcker, Rudolph, assignor.)
Needham, John T., North Plainfield, N. J., assignor, by mesne assignments, to Pneumatic Tube Supply Co. of Delaware. Pneumatic dispatch tube apparatus. 1,883,844; Oct. 18.
Nekoosa-Edwards Paper Company. (See Wells, Sidney D., assignor.)
Neracher, William A., et al. (See Borden, Bradford T., assignor.)
Neracher, William A. (See Borden, B. T., and Neracher.)
Nero, Arvid H., West Hartford, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Combined switch and circuit breaker. 1,883,814; Oct. 18.
Nester, William A., East St. Louis, Ill., assignor to Obear-Nester Glass Company, St. Louis, Mo. Prescription bottle. Des. 87,975; Oct. 18.
New Haven Clock Co., The. (See Porter, Wilson E., assignor.)
Nicholson, Carl M., Ossining, and E. Anderson, Briarcliffe, assignors to Master Rule Mfg. Co., Inc., New York, N. Y. Hook rule. 1,882,865; Oct. 18.
Nickerson, Franklin P., assignor to The W. S. Tyler Company, Cleveland, Ohio. Method of and apparatus for distributing materials. 1,882,864; Oct. 18.
Niemann, Georg. (See Schmidt, O., and Niemann.)
Niemann, Georg. (See Schmidt, O., Niemann, and Meyer.)
Noble, F. H., & Co. (See Shields, John M., assignor.)
Nolan, Stephen J., Mount Vernon, N. Y. Weatherstrip for windows or doors. 1,883,815; Oct. 18.
Norge Corporation. (See Blood, Howard E., assignor.)
North American Chemical Company. (See Avery, Alfred H., assignor.)
North American Chemical Company. (See Thoma, Andrew, assignor.)
Norwich Wire Works, Inc. (See Beardsley, Lester A., assignor.)
Nut Products Company, The. (See Kelly, William W., assignor.)
Oakes Products Corporation. (See Smith, Frederick A., assignor.)
Obear-Nester Glass Company. (See Nester, William A., assignor.)
O'Brien, Chester J., assignor, by mesne assignments, to Calumet Steel Company, Chicago, Ill. Collapsible structural unit. 1,883,816; Oct. 18.
O'Brien, William A., Los Angeles, Calif. Card game scoring board. Des. 87,976; Oct. 18.
Ochs, Henry R., assignor to The Embalmers Supply Company, Westport, Conn. Tissue filler for corpses. 1,882,867; Oct. 18.
Ockman, Tobias. (See Dreyfus, H., Ellis, Ockman, and Olpin.)
O'Donnell, John B., Sheldon, Iowa, assignor to Deere & Company, Moline, Ill. Wagon hitch. 1,882,868; Oct. 18.
Ogden, J. Edward, Company. (See Tomkinson, Charles C., assignor.)
O'Hagan, Bernard E. (See Gilson, R. M., and O'Hagan.)
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Olander, Roland J., assignor to W. H. Miner, Inc., Chicago, Ill. Coupler and yoke connection. 1,882,869; Oct. 18.
Olander, Roland J., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,882,870; Oct. 18.
Old Colony Trust Company. (See Hawadler, Jacques A. M., assignor.)
Olpin, Henry C. (See Dreyfus, H., Ellis, Ockman, and Olpin.)
Olpin, Henry C. (See Mosby, D. H., Olpin, and Ellis.)
Olsen, Gustav A. (See Albertson, F. O., and Olsen.)
Olsen, Ludwig A., and S. J. Roach, Brooklyn, N. Y. Lawn edge trimmer. 1,883,817; Oct. 18.
Orlando, Ernest. (See Bond, Percy C. and A. F., and Orlando.)
Ostertag, Julius, Stuttgart, Germany. Water purification for locomotives. 1,883,856; Oct. 18.
Outing Manufacturing Company. (See Boynton, Charles T., assignor.)
Owens-Illinois Glass Company. (See Wade, Henry S., assignor.)
P & M Company, The. (See Warr, Harold G., assignor.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Dresser, Lewis W., assignor.)
Packard Motor Car Company. (See Edwards, Herbert C., assignor.)
Page, Dwight C., assignor to The Heald Machine Company, Worcester, Mass. Gear holding and centralizing device. 1,882,871; Oct. 18.
Palmer, Sidney L., San Francisco, Calif., assignor to American Smelting and Refining Company, New York, N. Y. Fusible metal. 1,882,872; Oct. 18.
Paper & Textile Machinery Company, The. (See Millspaugh, William H., assignor.)
Pardee, Harvey S., Ravinia, assignor to John R. Blackhall, Highwood, Ill. Brake. 1,882,873; Oct. 18.
Parker, Charles, Company, The. (See Turner, Lewis L., assignor.)
Parsons, John S., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. System of alternating-current distribution. 1,883,237; Oct. 18.
Partlow, James P., Columbiana, and H. L. Powell, Canfield, Ohio. Game table. Des. 87,977; Oct. 18.
Patton, James F., Cleveland, Ohio. Method of and mechanism for tapping articles. 1,882,874; Oct. 18.
Patton, William W., et al. (See Gillin, Theobald M., assignor.)
Paulson, Christian. (See Haegele, O. P., and Paulson.)
Pealer, Robert B., assignor to The Borden Company, Warren, Ohio. Die stock. 1,883,897; Oct. 18.
Peirce, Charles L., jr., Pittsburgh, Pa., assignor of one-half to Hubbard and Company. Secondary rack. 1,883,818; Oct. 18.
Penberthy Injector Company. (See Yoder, Howard D., assignor.)
Perry, Henry H. (See Lohrke, J. L., and Perry.)
Petroleum Conversion Corporation. (See Beardsley, Edwin W., assignor.)
Petroleum Conversion Corporation. (See Beardsley, E. W., and Sachs, assignors.)
Pfingst, Henry C., Louisville, Ky. Smoker's article. 1,883,819; Oct. 18.
Phelan, Louis A. M., Beloit, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Magnetically operated valve. 1,883,240; Oct. 18.
Phelan, Louis A. M., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch. 1,883,241; Oct. 18.
Phelan, Louis A. M., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch. 1,883,244; Oct. 18.
Philip Carey Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Philips', N. V., Gloeilampen-Fabrieken. (See Mulder, Johannes G. W., assignor.)
Phoenix Glass Company, The. (See Stewart, Andrew H., assignor.)
Pickard, Harold, H., and N., Blackpool, England. Amusement device. 1,883,857; Oct. 18.
Pickard, Harry. (See Pickard, Harold, H., and N.)
Pickard, Norman. (See Pickard, Harold, H., and N.)
Pierce, Burt N. (See Thompson, V. W., and Pierce.)

Pierson, Torvald N. (See Hale, S. H., Worthington, and Pierson.)
Pierson, Torvald N., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo. Grain divider extension. 1,882,875; Oct. 18.
Pittoni, Louis E., Jamaica, N. Y., assignor to The Rome Company, Inc., Rome, N. Y. Mattress. 1,882,876; Oct. 18.
Pittsburgh Equitable Meter Company. (See Clark, Earle A., assignor.)
Pittsburgh Plate Glass Company. (See Halbach, Howard L., assignor.)
Pittsburgh, Steel Company. (See Benedict, Edward L., assignor.)
Platt, Herbert. (See Dreyfus, C., and Platt.)
Plaut, Antoine P., assignor to Marvel Carburetor Company, Flint, Mich. Carburetor. 1,882,877; Oct. 18.
Plunkett, John W., and E. H. Roberts, Orange, Mass. Stop device for automobiles. 1,883,820; Oct. 18.
Plyler, Rush Vann, Saratoga, Tex. Portable shackle line pick-up device. 1,882,878; Oct. 18.
Plym, Francis J., assignor to The Kawneer Company, Niles Mich. Store front construction. 1,882,879; Oct. 18.
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Store front construction. 1,882,880; Oct. 18.
Plym, Francis J., assignor to The Kawneer Company, Niles, Mich. Store front construction. 1,882,881; Oct. 18.
Pneumatic Tube Supply Co. of Delaware. (See Needham, John T., assignor.)
Poe, Fred M., Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Mold facing. 1,882,882; Oct. 18.
Poeter, E., & Co. (See Baum, Charles, assignor.)
Pogue, Robert B., Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del. Brake shoe. 1,882,883; Oct. 18.
Pogue, Robert B., Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del. Brake shoe. 1,882,884; Oct. 18.
Polkinghorn, Frank A., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Holder for crystal resonators. 1,882,885; Oct. 18.
Poole, Jesse V., Abington, assignor to Puritan Manufacturing Company, Boston, Mass. Sewing machine. 1,882,886; Oct. 18.
Pope, John C., Yonkers, N. Y., assignor to Standard Oil Development Company. Sludge resisting hydrocarbon oils and making the same. 1,882,887; Oct. 18.
Pope, Philip C., Beckenham, England. Apparatus for low temperature carbonization. 1,882,888; Oct. 18.
Popp, Sylvan R. (See Hanson, E. C., and Popp.)
Poranski, Walter, Chicago, Ill. Vanity case. 1,882,889; Oct. 18.
Porter, George M., New York, N. Y. Storage magazine. 1,882,890; Oct. 18.
Porter, H. K., Inc. (See Eyre, J. J., and Porter, assignors.)
Porter, Henry W. (See Eyre, J. J., and Porter.)
Porter, Wilson E., assignor to The New Haven Clock Co., New Haven, Conn. Electric clock. 1,882,891; Oct. 18.
Potter Manufacturing Corporation. (See Downes, Ralph W., assignor.)
Potts, Louis M., Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. System for causing impulses to control the production of impulses of different frequency. 1,882,892; Oct. 18.
Potts, Louis M., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound picture camera. 1,882,893; Oct. 18.
Powell, Hoy L. (See Partlow, J. P., and Powell.)
Powers, George V., Oklahoma City, Okla. Collapsible joint for drill stems. 1,882,894; Oct. 18.
Powers, Milton A. (See Alden, H. W., and Powers.)
Preston, Maurice, Corporation. (See Engberg, Martin J., assignor.)
Proctor & Swartz, Incorporated. (See Tiers, Louis P., assignor.)
Projection Optics Co. (See Fouquet, William F., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Puc, Vojtěch, Prague-Vinohrady, Czechoslovakia. Sliding clasp fastening. 1,882,672; Oct. 18.
Puritan Manufacturing Company. (See Poole, Jesse V., assignor.)
Pyle-National Company, The. (See Westcott, Philip S., assignor.)
Raasch Arnold, et al. (See Bauer, Jacob L., assignor.)
Racz, Emanuel M. (See Sholtz, Richard J., assignor.)
Rader, Earl D., Bedford, assignor to Dexter Folder Company, New York, N. Y. Machine for automatically producing and assembling signatures. 1,882,895; Oct. 18.
Rader, Harold K. (See Robinson, W. M., Lindquist, Rader, and Young.)
Radio Corporation of America. (See Alexanderson, Ernst F. W., assignor.)
Radio Corporation of America. (See Beers, George L., assignor.)
Radio Corporation of America. (See Callahan, John L., assignor.)
Radio Corporation of America. (See LaRue, William D., and Wismer, assignors.)
Radio Corporation of America. (See Roberts, Walter Van B., assignor.)
Radio Corporation of America. (See Terrell, John A., assignor.)
Radio Corporation of America. (See Wismer, Samuel H., assignor.)
Ragan, Frederick H., Cleveland, Ohio. Brake mechanism. 1,883,316; Oct. 18.
Ragan, Frederick H., Cleveland, Ohio. Brake operating mechanism. 1,883,317; Oct. 18.
Ragan, Frederick H., Cleveland, Ohio. Brake operating mechanism. 1,883,318; Oct. 18.
Ramclaw, Axel. (See Bihl, W. E., and Ramclaw.)
Ramirez, Angel. (See Campos, A., and Ramirez.)
Rappeport, William A., et al. (See Krutt, Israel, assignor.)
Rauss, Edwin F., et al., trustees. (See Bond, Percy and A. F., and Orlando, assignors.)
Redmond, Albert G., assignor to Jacob Richard Francis, Flint, Mich. Fuel feeding system for internal combustion engines. 1,882,896; Oct. 18.
Reece Folding Machine Company. (See Dixon, Walter L., assignor.)
Reed, Charles G. (See Broomall, Jesse J., assignor.)
Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,882,897; Oct. 18.
Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Friction clutch. 1,882,898; Oct. 18.
Reeves Manufacturing Company, The. (See Wendle, Virgil P., assignor.)
Reeves, Paul B., assignor to Reeves Pully Company, Columbus, Ind. Driving belt. 1,883,821; Oct. 18.
Reeves Pulley Company. (See Reeves, Paul B., assignor.)
Regan, William J., Wilkinsburg, assignor to The McConway & Torley Company, Pittsburgh, Pa. Radial coupler mechanism. 1,883,314; Oct. 18.
Regan, William J., Wilkinsburg, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler. 1,883,315; Oct. 18.
Regan, William J., Wilkinsburg, and E. George, jr., assignors to The McConway & Torley Company, Pittsburgh, Pa. Car coupler. 1,882,899; Oct. 18.
Regan, William J., Wilkinsburg, and E. George, jr., assignors to The McConway & Torley Company, Pittsburgh, Pa. Railway draft appliance. 1,882,900; Oct. 18.
Reichert, James H., Muncie, Ind. Portable electric grill. 1,882,901; Oct. 18.
Reichert, Lester O., Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Cable forming apparatus. 1,882,902; Oct. 18.
Reid, Andrew S. (See Reid, Robert and A. S.)
Reid, James C., jr., Shaker Heights, Ohio. Apparatus for washing photographic prints. 1,882,903; Oct. 18.
Reid, John, Lyons, Kans., assignor to Diamond Crystal Salt Company, St. Clair, Mich. Apparatus for preparing preservatives. 1,882,904; Oct. 18.
Reid, Robert, and A. S. Reid, Beverly, Mass. Apparatus for filleting fish. 1,883,822; Oct. 18.
Reiner, Martin J., Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Tinsel garland. 1,882,905; Oct. 18.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,883,319; Oct. 18.
Remington Typewriter Company. (See Going, George G., assignor.)
Renfer, John E., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Tool for fluid actuated machines. 1,882,906; Oct. 18.
Renshaw, Joseph H., Cincinnati, Ohio, assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,883,823; Oct. 18.
Research Corporation. (See Hedberg, Carl W. J., assignor.)
Resinous Products & Chemical Company, The. (See Bruson, Herman A., assignor.)
Ressetar, Nicholas J. (See Wilson, E. B., and Ressetar.)
Rettich, Kurt, assignor to Reynolds Spring Company, Jackson, Mich. Combination tumbler holder and bottle opener. Des. 87,978; Oct. 18.
Reunzel, Louis, et al. (See Bauer, Jacob L., assignor.)
Rexford, Benjamin A., Alton, Ill. Sled. 1,882,907; Oct. 18.
Reynolds, Frederick, and A. L. Lees, Walkerville, Newcastle-upon-Tyne, assignor to The Thermal Syndicate Ltd., Wallsend-upon-Tyne, England. Alternating current mercury vapor apparatus. 1,883,398; Oct. 18.
Reynolds, Morley P., Cleveland Heights, assignor to The W. S. Tyler Company, Cleveland, Ohio. Screening apparatus. 1,882,908; Oct. 18.
Reynolds Spring Company. (See Rettich, Kurt, assignor.)
Rhoads, Albert E. (See Crosby, E. L., and Rhoads.)
Rhue, George H., San Diego, Calif. Eyeglass lens. 1,882,909; Oct. 18.
Rich, Ralph E., Chicago, Ill., assignor to Rich Trust. Tap. 1,882,910; Oct. 18.
Rich Trust. (See Rich, Ralph E., assignor.)
Richard, Charles F., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Carton feeding machine. 1,883,230; Oct. 18.
Richard, Charles F., assignor to Johnson Automatic Sealer Co. Ltd., Battle Creek, Mich. Carton feeding machine. 1,883,231; Oct. 18.

Richard, Charles F., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Carton feeding machine. 1,883,232; Oct. 18.
Richard, Charles F., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Filling and weighing machine. 1,883,233; Oct. 18.
Richards, Benjamin, Kenilworth, Ill., assignor to Everett E. Kent, Newton, Mass. Fire extinguishing and fire protective method. 1,882,911; Oct. 18.
Richards, Carroll H., Newton, Mass. Change speed mechanism. 1,883,399; Oct. 18.
Richardson, James R., assignor to Abilene Cotton Oil Company, Houston, Tex. Apparatus for the treatment of soil products. 1,882,912; Oct. 18.
Richey, Thomas J., deceased, Louisville, Ky.; Nell Shader, administratrix. Screw driver. 1,882,913; Oct. 18.
Richterkessing, Frank H., Louisville, Ky. Electric switch operating device. 1,882,914; Oct. 18.
Rickson, Gustaf C., assignor to Gunn Furniture Company, Grand Rapids, Mich. Card table. 1,882,915; Oct. 18.
Riddle Process Company. (See Riddle, Robert N., assignor.)
Riddle, Robert N., assignor to Riddle Process Company, Philadelphia, Pa. Manufacture of decolorizing carbon and the like. 1,882,916; Oct. 18.
Ridley, Grahame B. (See Scherer, P. A., and Ridley.)
Riegel Paper Corporation. (See Stamets, O., and Duckworth, assignors.)
Ripley, Perry C., assignor to Kester Solder Company, Chicago, Ill. Making ingots. 1,882,917; Oct. 18.
Roach, Stephen J. (See Olsen, L. A., and Roach.)
Robb, Ralph H., Oakland, Calif. Mop wringer. 1,882,918; Oct. 18.
Robbins, Charles W., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for locating objects. 1,882,919; Oct. 18.
Roberson, Bill E., Hoquiam, Wash. Log rafts. 1,883,824; Oct. 18.
Roberts, Edward H. (See Plunkett, J. W., and Roberts.)
Roberts, George H., et al. (See Skoverski, John R., assignor.)
Roberts, Walter van B., Princeton, N. J., assignor to Radio Corporation of America. Energizing thermionic tubes. 1,882,920; Oct. 18.
Robertson, Harry M., Cleveland, Ohio. Kiln. 1,883,400; Oct. 18.
Robinson, Charles A., Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Roughing tool for shoe parts. 1,882,921; Oct. 18.
Robinson, Gale S., Seattle, Wash. Calculator casing. Des. 87,979; Oct. 18.
Robinson, Ward M., D. E. Lindquist, H. K. Rader, and L. M. Young, assignors to Mueller Brass Co., Port Huron, Mich. Sprinkler head. 1,882,922; Oct. 18.
Roby, Edward B., New York, assignor to S. and R. Folding Machine Company, Inc., Green Island, N. Y. Folding machine. 1,882,923; Oct. 18.
Rock, Darrell D., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Screw driving mechanism. 1,882,924; Oct. 18.
Rock, George L., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Sealing materials. 1,882,925; Oct. 18.
Rockwell, Edward A., Chicago, Ill. Power brake apparatus. 1,882,926; Oct. 18.
Rockwell, Edward A., Long Island City, N. Y. Brake mechanism. 1,882,927; Oct. 18.
Rockwell, Edward A., Long Island City, N. Y. Fuel pumping device. 1,882,928; Oct. 18.
Rockwell, Edward A., and E. R. Evans, Chicago, Ill. Brake linkage. 1,882,929; Oct. 18.
Roddy, Gustav R., assignor to Chain Belt Company, Milwaukee, Wis. Sewage disposal system. 1,882,930; Oct. 18.
Rodriquez, John A., Portland, Oreg. Apparatus for holding the sack open while picking potatoes or onions. 1,882,931; Oct. 18.
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Tension meter. 1,882,932; Oct. 18.
Roesen, Oscar C., Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Late news printing device. 1,882,933; Oct. 18.
Rogaczewicz, Julius, Detroit, Mich. Furnace tong. 1,882,934; Oct. 18.
Rogers, Thomas H., Hammond, assignor to Standard Oil Company, Whiting, Ind. Colored wax and candle. 1,882,935; Oct. 18.
Röhm & Haas Company. (See Somerville, Ian C., assignor.)
Rolfs, Eugene L., Dallas, and C. W. Fuller, Houston, Tex., assignors to Johns-Manville Corporation, New York, N. Y. Pipe wrapping apparatus. 1,883,401; Oct. 18.
Rollway Bearing Company. (See Swart, C. A., and Evans.)
Rome Company, The. (See Barnard, Dean S., assignor.)
Rome Company, The. (See Pittoni, Louis E., assignor.)
Ronan, Kenneth M., Wayne, Mich., assignor to Manning & Co., Chicago, Ill. Tube end connection. 1,882,678; Oct. 18.
Ronci, Victor L., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,882,936; Oct. 18.
Ronning, Adolph, et al. (See Ronning, Andrean G. and A.)
Ronning, Adolph, Minneapolis, Minn. Road maintainer. 1,883,404; Oct. 18.
Ronning, Adolph, Minneapolis, Minn. Ventilator. 1,883,406; Oct. 18.
Ronning, Adolph, Minneapolis, Minn. Extension frame for tractors. 1,883,407; Oct. 18.
Ronning, Andrean G., deceased, and A. Ronning, Minneapolis, Minn.; J. A. Ronning and A. Ronning, executors of the estate of Andrean G. Ronning. Harvesting machine. 1,883,402; Oct. 18.
Ronning, Adolph, and A. G. Ronning, deceased, by A. Ronning and J. A. Ronning, Minneapolis, Minn, executors. Road machine. 1,883,403; Oct. 18.
Ronning, Adolph, and A. G. Ronning, deceased, by A. Ronning and J. A. Ronning, executors, assignors by mesne assignments, to A. Ronning, and A. Ronning and J. A. Ronning, trustees. Minneapolis, Minn. Tractor structure. 1,883,405; Oct. 18.
Ronning, Andrean G. (See Ronning, Adolph and A. G.)
Ronning, Jacob A., et al. (See Ronning, Andrean G. and A.)
Root, A. I., Company, The. (See Root, Huber H., assignor.)
Root, Bertwell C., assignor to Brown Company, Berlin, N. H. Method of and apparatus for forming articles of pulp. 1,882,937; Oct. 18.
Root, Frank B., East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Wrinkle finish coating. 1,883,408; Oct. 18.
Root, Frank B., East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Panel. Des. 88,001; Oct. 18.
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Candle and method relating thereto. Re18,623; Oct. 18.
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Comb foundation. 1,882,938; Oct. 18.
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Folding table. 1,882,939; Oct. 18.
Rosander, Albert P., Forest Park, and F. P. Tikalsky, La Grange, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Die casting machine. 1,882,940; Oct. 18.
Ross, Aubrey A., Marblehead, Mass., assignor to General Electric Company. Yieldable connection. 1,883,825; Oct. 18.
Ross, Charles B., assignor to Marietta Concrete Corporation, Marietta, Ohio. Silo. 1,882,942; Oct. 18.
Ross, Frank A., Wilmette, assignor to Stewart-Warner Corporation, Chicago, Ill. Flexible shaft ends. 1,882,943; Oct. 18.
Ross, Frederick N., assignor, by mesne assignments, to Briggs Manufacturing Company, Detroit, Mich. Cotton bat feeding machine. 1,882,944; Oct. 18.
Ross, Taylor W., assignor to Thomas Graham & Company, Madison, Ind. Commercial package. 1,882,946; Oct. 18.
Ross, Lester T., assignor to The Burch Corporation, Crestline, Ohio. Snow plow. 1,882,945; Oct. 18.
Ross, William A. (See Weaver, I. A., and Ross.)
Rosecrants, Helene, St. Joseph, Mich. Music builder. 1,882,941; Oct. 18.
Rosenstein, Aaron, New York, N. Y. Pillow cover or the like. Des. 87,980. Oct. 18.
Rotherham, Walter S., Pompton Lakes, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Wire stripping machine. 1,882,947; Oct. 18.
Routledge, Frederick J., Monroe, Mich. Starter control for gas engines. 1,882,948; Oct. 18.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Electric switch. 1,882,674; Oct. 18.
Roy, William O., Montreal, Quebec, Canada. Distributing moisture absorbing material. 1,883,409; Oct. 18.
Rüder, Heinrich B., Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif. Electrical precipitation apparatus. 1,882,949; Oct. 18.
Rulon, Watson R., jr., Philadelphia, Pa. Holder for bobbins or spools. 1,822,950; Oct. 18.
Rupprecht, Edgar P., assignor to American Rolling Screen Company, Chicago, Ill. Rolling screen. 1,882,951; Oct. 18.
Ryan, John A., Pittsburgh, Pa. Device for changing the tone of the string of a musical instrument. 1,883,410; Oct. 18.
Ryder, Frank P., Niagara Falls, N. Y. Viner. 1,882,952; Oct. 18.
S. and R. Folding Machine Company. (See Roby, Edward B., assignor.)
S. H. G. Incorporated. (See Wannack, Carl O., assignor.)
Sachs, Albert P. (See Beardsley, E. W., and Sachs.)
Saeizler, Rolla, Toledo, Ohio. Mixture valve. 1,882,953; Oct. 18.
Safe Guard Corporation. (See Whitaker, John, assignor.)
St. Dennis, Harold C., Syracuse, N. Y. Driving finger for surfacing machines. 1,882,676; Oct. 18.
St. Palley, Zoltan O., Pittsfield, Mass., assignor to General Electric Company. Electrical induction apparatus. 1,883,830; Oct. 18.
St. Regis Paper Company. (See Boyer, Frederick G. L., assignor.)

Salmon, Reginal D., and S. E. Kirk, assignors to Creed and Company, Limited, Croydon, England. Motor control device for telegraph and like signaling apparatus. 1,882,954; Oct. 18.

Salvage Process Corporation. (See Cross, Walter M., assignor.)

Sanders, Edgar L., assignor of one-half to Walter J. Sanders, Chicago, Ill. Line impression equalizer. 1,882,955; Oct. 18.

Sanders, Walter J. (See Sanders, Edgar L., assignor.)

Sanford, Hugh W., Knoxville, Tenn. Wheel and axle. 1,882,957; Oct. 18.

Sandler, Louis, assignor to Johnson Bronze Company, New Castle, Pa. Bearing. 1,882,956; Oct. 18.

Santini, Danilo, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor rheostat for acceleration. 1,882,958; Oct. 18.

Sargent, Fitz W., Mahwah, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,882,959; Oct. 18.

Sater, Samuel, New York, N. Y. Foot pedal piano accordion. 1,882,960; Oct. 18.

Saunders, Norman F. T., Newport Pagnell, England, assignor to Associated Electrical Industries Limited. Fan or blower. 1,882,961; Oct. 18.

Savoye, Charles U. (See Kerr, H. J., and Savoye.)

Sawford, Frank, assignor of one-half to F. Sawford, jr., Vancouver, British Columbia, Canada. Apparatus for measuring the thickness of paper. 1,882,962; Oct. 18.

Sawford, Frank, jr. (See Sawford, Frank, assignor.)

Sayles, Theo C., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,411; Oct. 18.

Scammell China Co. (See Schnepf, Emil L., assignor.)

Scanlan, John J., Tyler, Minn. Filler cover. 1,882,963; Oct. 18.

Schaaff, John T., Washington, D. C., assignor to the tabulating Machine Company, Endicott, N. Y. Machine for analyzing and printing upon record cards. 1,882,964; Oct. 18.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Oct. 18.

Schaffner, Frederick W., Brooklyn, N. Y. Carburetor throttle. 1,882,966; Oct. 18.

Scheeler, Charles A., assignor to Buffalo Wire Works Co., Inc., Buffalo, N. Y. Protecting device for cashiers windows and the like. 1,882,967; Oct. 18.

Schenck, LeRoy C., Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Clear top extractor. 1,882,968; Oct. 18.

Scherer, Paul A., Medford, Oreg., and G. B. Ridley, San Francisco, Calif., assignors to Southern Oregon Sales Inc., Medford, Oreg. Refrigerating system and method. 1,882,969; Oct. 18.

Schimanek, Emil, Budapest, Hungary. Internal combustion engine. 1,882,970; Oct. 18.

Schimanek, Emil, Budapest, Hungary. Engine for motor vehicles. 1,882,971; Oct. 18.

Schlecht, Leo. (See Schubardt W., and Schlecht.)

Schlecht, Leo, Ludwigshafen-on-the-Rhine, W. Schubardt, Mannheim, and F. Duftschmid, Heidelberg, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of shaped metallic articles. 1,882,972; Oct. 18.

Schlegel, Robert A., Williamsport, Pa. Ash tray and extinguisher. 1,882,973; Oct. 18.

Schlenker, Vesper A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,822,974; Oct. 18.

Schmidt, Harry H., Detroit, Mich. Toy gun. 1,883,826; Oct. 18.

Schmidt, Otto, and G. Niemann, Ludwigshafen-on-the-Rhine, and E. Meyer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of conversion products of synthetic rubber. 1,882,976; Oct. 18.

Schmidt, Otto, and G. Niemann, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of hydrogen. 1,882,977; Oct. 18.

Schmidt, Otto, and O. Grosskinsky, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of unsaturated aliphatic hydrocarbons. 1,882,978; Oct. 18.

Schmidt, William D., assignor to The Heald Machine Company, Worcester, Mass. Chuck. 1,882,975; Oct. 18.

Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung. (See Trede, H., and Hartmann, assignors.)

Schmidt'sche Heissdampf-Gesellschaft m. b. H. (See Wempe, Friedrich, assignor.)

Schmiedeskamp, August J., Berkeley, Calif. Rolling screen retaining means. 1,882,982; Oct. 18.

Schmieding, Warren H. F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,882,979; Oct. 18.

Schneider, George, Cumberland, Md., assignor to Celanese Corporation of America. Application of cellulose esters and ethers. 1,883,412; Oct. 18.

Schnepf, Emil L., assignor to Scammell China Co., Trenton, N. J. Plate. Des. 97,981; Oct. 18.

Schoedinger, F. O. (See Armstrong, Edward R., assignor.)

Schoenfeldt, Henry W., Youngstown, Ohio, assignor of sixty and eight-tenths per cent to G. J. Burns, Girard, Ohio. Puddling furnace. 1,883,413; Oct. 18.

Scholl Mfg. Co., Inc., The. (See Scholl, William M., assignor.)

Scholl, William M., assignor to The Scholl Mfg. Co., Inc., Chicago, Ill. Paper slipper. 1,882,983; Oct. 18.

Schor, Joseph, et al. (See Skoverski, John R., assignor.)

Schrader, Thomas O., Allentown, assignor to The Dent Hardware Company, Fullerton, Pa. Bracket. 1,882,980; Oct. 18.

Schrans, Karl, and S. Jaeger, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Rectal anesthetic. 1,882,984; Oct. 18.

Schreiber, Louis J. J., G. P. Chevigny and G. X. Lens, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y. Switching mechanism. 1,882,981; Oct. 18.

Schroeder, Paul E., Fort Wayne, Ind. Covering for graves. 1,882,986; Oct. 18.

Schroeder, William. (See Shewmon, D. D., and Schroeder.)

Schroeder, William, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling material. 1,882,985; Oct. 18.

Schubardt, Walter. (See Schlecht, L., Schubardt, and Duftschmid.)

Schubardt, Walter, Mannheim, and L. Schlecht, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Making metal articles. 1,882,987; Oct. 18.

Schulze, William H., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel pumping device. 1,882,988; Oct. 18.

Schumacher, Hans, Berlin-Lichterfelde-West, assignor to C. Lorenz, Aktiengesellschaft, Berlin, Germany. Thermostatically controlled piezo-crystal. 1,882,989; Oct. 18.

Schur, Milton O., assignor to Brown Company, Berlin, N. H. Self-adjusting valve. 1,882,990; Oct. 18.

Schur, Milton O., assignor to Brown Company, Berlin, N. H. Method of and apparatus for delivering pulp stock at constant tonnage rate. 1,882,991; Oct. 18.

Schwalbe, Franz G., Toledo, Ohio. Method of heating glass and apparatus therefor. 1,882,992; Oct. 18.

Schwarze, Max, Milwaukee, Wis. Plug calipering device. 1,882,993; Oct. 18.

Schwerin, Paul, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,882,994; Oct. 18.

Scofield, Edgar, New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Closure cap. 1,882,995; Oct. 18.

Scofield, Edgar, New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Friction closure cap. 1,882,996; Oct. 18.

Scott, Gherald D., assignor to The Heald Machine Company, Worcester, Mass. Gear holding and centralizing device. 1,882,997; Oct. 18.

Scott, James W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Refining copper. 1,882,998; Oct. 18.

Scovill Manufacturing Company. (See Ferguson, William P., assignor.)

Sears, Richard W. 2d, and J. F. Koca, Woodstock, Ill.; said Koca assignor to said Sears. Air vehicle. 1,883,414; Oct. 18.

Seebach, Fritz, Erkner, near Berlin, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin, Germany. Hardening phenol aldehyde condensation products. 1,883,415; Oct. 18.

Seger, Earl F. (See Hopkins, R. Z., and Seger.)

Selberling Latex Products Company. (See Goodwin, John O., assignor.)

Sekella, Youston, Elmira Heights, assignor to Eclipse Machine Company, Elmira, N. Y. Starting mechanism for internal combustion engines. 1,883,416; Oct. 18.

Sekella, Youston, assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,417; Oct. 18.

Sekella, Youston, Elmira Heights, assignor to Eclipse Machine Company, Elmira, N. Y. Rebound check for starter drives. 1,883,418; Oct. 18.

Sells, Ogden S. (See de Back, W., and Sells.)

Senft, John, York, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Antiskid chain. 1,882,999; Oct. 18.

Senft, John, York, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Antiskid chain. 1,883,000; Oct. 18.

Servel, Inc. (See Dennedy, James H., assignor.)

Service Recorder Company, The. (See Cool, Henry R., assignor.)

Service Station Equipment Company. (See Woodford, Joseph C., assignor.)

Sessions Clock Company, The. (See Mazur, Samuel, assignor.)

Settergren, Bror K., Bluffton, Ind. Musical instrument. 1,883,001; Oct. 18.

Seward, Sarah H., Minneapolis, Minn. Window ventilator. 1,883,002; Oct. 18.

Sexton, George A., Winchester, Mass. Sheet metal receptacle. 1,883,003; Oct. 18.

Seyfried, Arthur W., Cleveland, Ohio. Window ventilator. Des. 87,982; Oct. 18.

Shader, Nell, administratrix. (See Richey, Thomas J.)

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Chain. 1,883,004; Oct. 18.

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Conveyer chain. 1,883,005; Oct. 18.

Shakespeare Company. (See Burdick, Frank, assignor.)

Shakespeare Company. (See Walker, G. H., and Cole, assignor.)

Shakespeare Company. (See Walker, G. H., and Thorne, assignors.)

Shea, John R., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for working material. 1,883,006; Oct. 18.

Sheel, Harold, Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Conveyer. 1,883,007; Oct. 18.

Shelton-Jancke Corporation. (See Shelton, William G., assignor.)

Shelton, William G., St. Louis, Mo., assignor to Shelton-Jancke Corporation, East Orange, N. J. Heater for permanent wave machines. 1,883,828; Oct. 18.

Sherman, John C., Gorham, Me., assignor to Brown Company, Berlin, N. H. Paper towel package. 1,883,008; Oct. 18.

Sherman, Maybel T., administratrix. (See Sherman, Ozro G.)

Sherman, Ozro G., deceased, by Maybel T. Sherman, administratrix, assignor to Frank Masbek, Chicago, Ill. Buckle. 1,883,009; Oct. 18.

Sherwood, Glenn L., Oak Park, assignor to Western Foundation Company, Chicago, Ill. Method and apparatus for forming piles. 1,883,010; Oct. 18.

Shewmon, Dan D., Dunellen, N. J., and W. Schroeder, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for securing inclosure elements on containers. 1,883,011; Oct. 18.

Shields, John M., assignor to F. H. Noble & Co., Chicago, Ill. Box for holding and displaying pens or pencils or other articles. 1,883,012; Oct. 18.

Shinn, Edward, Harrison, N. J. Vertical foundation boring machine. 1,883,013; Oct. 18.

Shiomi, Tsutomu, Yebara-Cho, Yebara-Gun, and S. Higuchi, Omori-Machi, Yebara-Gun, Tokyo Prefecture, assignors to Furukawa Denki Kogyo Kabushiki Kaisha, Tokyo, Japan. Manufacturing storage battery plates. 1,883,014; Oct. 18.

Shipley, Sylvanus C., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Step-by-step proportional control. 1,883,015; Oct. 18.

Shippy, Lee C., Anderson, and L. C. Goad, Muncie, assignors to Delco-Remy Corporation, Anderson, Ind. Grinding apparatus. 1,883,016; Oct. 18.

Sholtz, Richard J., assignor of one-third to C. M. Hardenbergh and one-third to E. M. Racz, Kansas City, Mo. Material weighing and control apparatus. 1,883,017; Oct. 18.

Shook, Florain J., assignor to National Rubber Machinery Company, Akron, Ohio. Tire vulcanizer. 1,883,018; Oct. 18.

Shore, Albert F., New York, N. Y. View analyzer. 1,883,019; Oct. 18.

Shultz, Albert B., assignor to Houde Engineering Corporation, Buffalo, N. Y. Ball and socket joint. 1,883,020; Oct. 18.

Shuron Optical Company. (See Langknecht, Henry J., assignor.)

Siemens & Halske, Aktiengesellschaft. (See Gosslau, Fritz, assignor.)

Siemens & Halske, Aktiengesellschaft. (See Storch, Paul, assignor.)

Silknitter, George E., Sioux City, Iowa. Sampling device. 1,883,021; Oct. 18.

Simpson, James R., Wisconsin Rapids, assignor to Beloit Iron Works, Beloit, Wis. Paper making process. 1,883,022; Oct. 18.

Skoverski, John R., Berkeley, assignor of one-half to G. H. Roberts and one-half to Joseph Schor, San Francisco, Calif. Dispensing device. 1,883,829; Oct. 18.

Sladkey, Edwin W., Joliet, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical switch and control circuit therefor. 1,883,247; Oct. 18.

Slagh, Harold R. (See Britton, E. C., and Slagh.)

Slick, Edwin E., Pittsburgh, Pa. Glass furnace. 1,883,023; Oct. 18.

Smith, Elmer H., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn. Gun. 1,883,028; Oct. 18.

Smith, Elmer H., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn. Toy machine-gun. 1,883,029; Oct. 18.

Smith, Frederick A., assignor to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,883,026; Oct. 18.

Smith, Frederick A., assignor to Oakes Products Corporation, North Chicago, Ill. Spare wheel carrier and lock. 1,883,032; Oct. 18.

Smith, Harry F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating or air conditioning apparatus. 1,883,024; Oct. 18.

Smith, Harry N., Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y. Machine for cutting friction elements. 1,883,025; Oct. 18.

Smith, John H., Chicago, Ill. Racket press. 1,883,030; Oct. 18.

Smith, Robert N., Kansas City, Mo., assignor to James L. Hogin, Kansas City, Kans. Doorlock mechanism. 1,883,027; Oct. 18.

Smith Welding Equipment Corporation. (See Smith, Elmer H., assignor.)

Smith, Wilbert P., Thomaston, assignor of one-fourth to Jan P. Clary, Hartford, Conn. Combined steering and braking device for sleighs. 1,883,031; Oct. 18.

Smith, William M., Wilkinsburg, Pa. Sectional hot air furnace casing. 1,882,675; Oct. 18.

Snell, Samuel A., assignor to The American-National Company, Toledo, Ohio. Front fork assembly for juvenile vehicles and method therefor. 1,883,033; Oct. 18.

Snively, Chester B., and J. H. Wolf, Waynesboro, Pa. Music leaf turner. 1,883,034; Oct. 18.

Snively, Chester B., and H. M. Wolf, Waynesboro, Pa. Check-book stub holder. 1,883,035; Oct. 18.

Snively, Chester B., and H. M. Wolf, Waynesboro, Pa. Folding check-book holder. 1,883,036; Oct. 18.

Snook, Edward A., Los Angeles, Calif. Bridge-score tabulator. 1,883,037; Oct. 18.

Snow, Homer I. (See Cox, B. H., and Snow.)

Snyder, Auiden D., Cleveland, Ohio. Internal combustion engine and valve construction. 1,883,038; Oct. 18.

Snyder, Edward, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Unreeling appliance for wire, thread, etc. 1,883,039; Oct. 18.

Soben, Adolph F., assignor to H. H. Davis, Los Angeles, Calif. Sectional display containers. 1,883,419; Oct. 18.

Societa Italiana Pirelli. (See Emmanuell, Luigi, assignor.)

Societe Anonyme Solex. (See Mennesson, Marcel, assignor.)

Societe Francaise Radio Electrique. (See Achard, Joseph P. E., assignor.)

Societe Hardoll Etablissements Hariveau et Dolimier et René Porte et Cie. (See Carbonaro, Mario, assignor.)

Solve, Alfred B., Oakland, Calif. Warning signal for deflated tires. 1,883,040; Oct. 18.

Somers, Everett X., West Barnet, Vt. Clamp. 1,883,041; Oct. 18.

Somerville, Ian C., Fox Chase, Pa., assignor to Rohm & Haas Company. Fat liquoring. 1,883,042; Oct. 18.

Soreny, Ernest, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. 1,883,043; Oct. 18.

South Bend Bait Company. (See Chapleau, Louis A., assignor.)

Southern Oregon Sales Inc. (See Scherer, P. A., and Ridley, assignors.)

Spaeth, Charles P., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Explosive composition. 1,883,044; Oct. 18.

Spaeth, Charles P., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Explosive composition. 1,883,045; Oct. 18.

Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,983; Oct. 18.

Speidel Corporation. (See Speidel, Albert E. R., assignor.)

Spencer, Harold F. (See Haines, Stacey A., assignor.)

Spencer, John A., Newtonville, assignor to The Spencer Thermostat Company, Cambridge, Mass. Thermostatic switch. 1,883,046; Oct. 18.

Spencer, John A., Newtonville, assignor to Spencer Thermostat Company, Cambridge, Mass. Thermostat. 1,883,249; Oct. 18.

Spencer, John A., Newtonville, assignor to Spencer Thermostat Company, Cambridge, Mass. Valve. 1,883,250; Oct. 18.

Spencer, John A., Newtonville, assignor to General Plate Company, Attleboro, Mass. Thermostat. 1,883,252; Oct. 18.

Spencer, John A., Newtonville, and V. Bush, Belmont, assignors to General Plate Company, Attleboro, Mass. Thermostat. 1,883,251; Oct. 18.

Spencer Thermostat Company, The. (See Spencer, John A., assignor.)

Spies, Joseph P., et al. (See Edberg, Silas M., assignor.)

Spiess, Georg, Leipzig-Plagwitz, Germany. Sheet cutting machine. 1,883,858; Oct. 18.

Spire, William H., assignor to Thompson Products Incorporated, Cleveland, Ohio. Material sorting machine. 1,883,047; Oct. 18.

Sprague-Sells Corporation. (See de Back, W., and Sells, assignor.)

Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Cushioning device. 1,883,048; Oct. 18.

Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Cushioning device. 1,883,049; Oct. 18.

Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Draft gear. 1,883,050; Oct. 18.

Square D Company. (See Jackson, John G., assignor.)

Stamets, Oscar, Milford, and L. Duckworth, Finesville, assignors to Riegel Paper Corporation, Riegelsville, N. J. Control for motor-driven apparatus. 1,883,051; Oct. 18.

Standard Gage Company. (See Aldeborgh, Erik H., assignor.)

Standard-I. G. Company. (See Fisher, Harold W., assignor.)

Standard Oil Company, The. (See Doyle, Philip C., assignor.)
Standard Oil Company. (See Rogers, Thomas H., assignor.)
Standard Oil Company (Indiana). (See Arveson, Maurice H., assignor.)
Standard Oil Company (Indiana). (See Wilson, Robert E., assignor.)
Standard Oil Development Company. (See Duff, Ralph L., assignor.)
Standard Oil Development Company. (See Pope, John C., assignor.)
Standfuss, Ernest R., assignor to Harnischfeger Corporation, Milwaukee, Wis. Skimmer scoop. 1,883,052; Oct. 18.
Standish, Edward K., Stoughton, Mass. Variable speed transmission. 1,883,749; Oct. 18.
Standlee, Harvey R., Tulsa, Okla., assignor to The Guiberson Corporation, Dallas, Tex. Well swab. 1,883,053; Oct. 18.
Stanley, Arba P., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Conveyer structure. 1,883,054; Oct. 18.
Stanley, Arba P., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal mining apparatus. 1,883,055; Oct. 18.
Stanley Steam Motors Corporation. (See Warfield, Roy M., assignor.)
Stanley, Walter J., assignor to The Church-Budget Envelope Company, Salem, Ohio. Envelope perforator. 1,883,056; Oct. 18.
Stanyo, Desider, assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Refrigeration unit. 1,883,057; Oct. 18.
Staples, Fred W., Waterville, Me. Machine for making pulp articles. 1,883,058; Oct. 18.
Stedwell, George W., Brooklyn, N. Y. Liquid dispensing apparatus. Re18,632; Oct. 18.
Steele, Brenton L., Pullman, Wash. Wave apparatus. 1,883,059; Oct. 18.
Steen, Melvin O., et al. (See Edberg, Silas M., assignor.)
Steimmig, Gerhard, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Lacquer for application by brushing. 1,883,060; Oct. 18.
Stein, Edward P., assignor to The Bastian-Blessing Company, Chicago, Ill. Faucet. 1,883,061; Oct. 18.
Steinberger Bros. Glove Corp. (See Steinberger, Irwin, assignor.)
Steinberger, Irwin, assignor to Steinberger Bros. Glove Corp., New York, N. Y. Glove. 1,883,062; Oct. 18.
Stephens, George H., Northbrook, assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 87,984; Oct. 18.
Stephens, Henry C., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Preserving fruit juices. 1,883,420; Oct. 18.
Sterolene Company, The. (See Ford, Burdette E., assignor.)
Stevens, Jerry W., Cloquet, Minn. Sulphur burner. 1,883,063; Oct. 18.
Stevens, Percy E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Binding strip for parts of boots and shoes. 1,883,421; Oct. 18.
Stevens, Roy R., Forest Hills, Pa., assignor to Cardwell Westinghouse Company. Friction draft gear. 1,883,064; Oct. 18.
Stevens Walden Inc. (See Duvall, G. M., and Israelson, assignors.)
Stewart, Andrew H., Shields, assignor to The Phoenix Glass Company, Monaca, Pa. Glassware and making same. 1,883,065; Oct. 18.
Stewart-Warner Corporation. (See Ross, Frank A., assignor.)
Stewart-Warner Corporation. (See Schulze, William H., assignor.)
Stewart-Warner Corporation. (See Whitted, John B., assignor.)
Stickney, Burnham C., Hillside, N. J. Internal combustion engine. 1,883,066; Oct. 18.
Stocking, William R., Glastonbury, Conn. Electrically welding tableware parts. 1,883,067; Oct. 18.
Stoll, Albert, assignor to National Machine Products Company, Detroit, Mich. Coupled nut and washer assembly. 1,883,068; Oct. 18.
Stolp, Samuel S., Louisville, Ky. Switch and signal system. 1,883,069; Oct. 18.
Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Lock. 1,883,072; Oct. 18.
Stone, Frederick, Glendale, assignor to Doheny-Stone Drill Co., Los Angeles, Calif. Well drilling apparatus. 1,883,070; Oct. 18.
Stone, Frederick, assignor to Doheny-Stone Drill Co., Los Angeles, Calif. Lockable safety joint. 1,883,071; Oct. 18.
Stone, Frederick, Glendale, assignor to Doheny-Stone Drill Co., Los Angeles, Calif. Work-gripping means for well drilling apparatus. 1,883,073; Oct. 18.
Storch, Paul, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft of Siemensstadt, near Berlin, Germany. Chemical picture-telegraph equipment. 1,883,074; Oct. 18.
Storm, Adolph, and T. Thorsen, assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn. Live center for lathes, grinders and the like. 1,883,075; Oct. 18.
Storm Manufacturing Co. (See Storm, A., and Thorsen, assignors.)
Stough, Jay A., Tulsa, Okla., assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Tank roof. 1,883,076; Oct. 18.
Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Scale. 1,883,077; Oct. 18.
Strathmore Paper Company. (See Bryan, Cassius M., assignor.)
Stratton, Emil H., Boise, Idaho. String cutter. 1,883,831; Oct. 18.
Straus, Alexander H., Woodmere, N. Y. Bandage. 1,882,677; Oct. 18.
Stretch, Carl B., Bridgeton, N. J. Machine for handling canned goods. 1,883,078; Oct. 18.
Strickland, Silas A., assignor to Bower Roller Bearing Co., Detroit, Mich. Punch and die for roller bearing cages. 1,883,079; Oct. 18.
Strong, Arthur P., Mishawaka, Ind., assignor to Dodge Manufacturing Corporation. Conveyor roll. 1,883,422; Oct. 18.
Stuck, William R., Los Angeles, Calif. Flower holder. Des. 88,002; Oct. 18.
Stull, John S., Chicago, and J. W. King, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for forming articles. 1,883,080; Oct. 18.
Sturdevant, Edward N., et al. (See Gunn, James B., assignor.)
Sturm, Rudolph, St. Paul, Minn. Nonslipping plate holder. 1,883,081; Oct. 18.
Sturtevant, B. F., Company. (See Derry, Gardner C., assignor.)
Submarine Signal Corporation. (See Williams, Robert L., assignor.)
Sullivan Machinery Company. (See Allen, Morris C., assignor.)
Sun Bath Company. (See Collins, Berry, assignor.)
Sünder, Jakob, assignor to the Firm Adrian & Busch, Oberusel, Germany. Shoe sewing machine. 1,883,859; Oct. 18.
Sundstrand Engineering Co., The. (See Sundstrand, Gustaf D., assignor.)
Sundstrand, Gustaf D., deceased, by Pearl Sundstrand, executrix, and J. F. Benner, assignors to Sundstrand Machine Tool Co., Rockford, Ill. Lathe. 1,883,082; Oct. 18.
Sundstrand, Gustaf D., assignor to The Sundstrand Engineering Co., Rockford, Ill. Oil burning equipment. 1,883,832; Oct. 18.
Sundstrand Machine Tool Co. (See Sundstrand, G. D., and Benner, assignors.)
Sundstrand Machine Tool Co. (See Svenson, Ernest J., assignor.)
Sundstrand, Pearl, executrix. (See Sundstrand, G. D., and Benner.)
Superheater Company, The. (See Gordon, Charles W., assignor.)
Surface Combustion Corporation. (See Cochran, Ralf S., assignor.)
Surface Combustion Corporation. (See Hepburn, William M., asignor.)
Svenson, Ernest J., assignor to Sundstrand Machine Tool Co., Rockford, Ill. Machine tool. 1,883,084; Oct. 18.
Swart, Clarence A., and J. H. Evans, assignors to Rollway Bearing Company, Inc., Syracuse, N. Y. Roller bearing construction. 1,883,085; Oct. 18.
Swartz, Alfred W., Haverford, assignor to Linear Packing & Rubber Co., Inc., Tacony, Philadelphia, Pa. Flexible pipe and coupling. 1,883,086; Oct. 18.
Swartz, Guy E., Detroit, Mich. Clamp operating and locking means. 1,883,087; Oct. 18.
Swett, Arthur H., Chicago, Ill. Fastener. 1,883,088; Oct. 18.
Swinderman, James L., assignor of one-half to L. F. Vogt, Philadelphia, Pa. Game board. Des. 88,003; Oct. 18.
Symington, T. H., & Sons, Inc. (See Martin, Mark H., assignor.)
Symmonds, Charles J., U. S. Army, Kenosha, Wis. Legged structure. 1,883,083; Oct. 18.
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)
Tabulating Machine Company, The. (See Lorant, Rudolf, assignor.)
Tabulating Machine Company, The. (See Mills, Albert W., assignor.)
Tabulating Machine Company, The. (See Schaaf, John T., assignor.)
Tafel, Robert E., Louisville, Ky. Electric switch operating and holding device. 1,883,089; Oct. 18.
Tafel, Robert E., Louisville, Ky. Electric switching machine. 1,883,090; Oct. 18.
Tate, Edward H., Malden, Mass. Fitting for mops. 1,883,091; Oct. 18.
Taylor, Clarence L., Youngstown, Ohio. Machine for pickling sheets and the like. 1,883,092; Oct. 18.
Taylor, Clarence L., assignor to The Aetna-Standard Engineering Company, Youngstown, Ohio. Machine for cutting off pipe and the like. 1,883,093; Oct. 18.

Taylor, Edward H., Oak Park, Ill. Pipe fitting for welding. 1,883,094; Oct. 18.
Taylor, Howard, Cumberland, Md., assignor to Celanese Corporation of America. Apparatus for forming filaments. 1,883,423; Oct. 18.
Taylor, William I., Spondon, near Derby, England, assignor to Celanese Corporation of America. Production of textile products. 1,883,424; Oct. 18.
Technidyne Corporation. (See Yolles, Jacob, assignor.)
Teeter, Wilford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,883,095; Oct. 18.
Teeter, Wilford H., assignor, by mesne assignments to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,883,096; Oct. 18.
Teeter, Wilford H., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,883,097; Oct. 18.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Moser, Wilhelm, assignor.)
Templeton, Bryce O., Queens Village, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical resistance device. 1,883,098; Oct. 18.
Ter Meer, Herman, assignor to National Brass Company, Grand Rapids, Mich. Spring bolt latch. 1,883,099; Oct. 18.
Terre Haute Boiler Works Company. (See Cliff, William H., assignor.)
Terrell, John A., Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Suspension means for sound translating devices. 1,883,100; Oct. 18.
Terry, Walter R. (See Martin, M. J., and Terry.)
Tervo, Oscar, Norway, Me., assignor to Wilfred B. Mathewson, North Weymouth, Mass. Cranberry picker. 1,883,101; Oct. 18.
Teter, Paul E., Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Automatic rider circuits. 1,883,102; Oct. 18.
Texas Company, The. (See Behimer, Otto, assignor.)
Texas Company, The. (See Gardner, E. W., and Felder, assignors.)
Texas Company, The. (See Lamson, Horatio W., assignor.)
Tharp, Victor S. (See Crocker, T. F., and Tharp.)
Thayer, Allan A., assignor to Auto Spring Control Company, Inc., Jamestown, N. Y. Shock absorber. 1,883,436; Oct. 18.
Theis, Henry J., assignor to Dayton Scale Company, Dayton, Ohio. Slicing machine. 1,883,103; Oct. 18.
Thermal Syndicate Ltd. (See Reynolds, F., and Lees, assignors.)
Thoma, Andrew, assignor to North American Chemical Company, Cambridge, Mass. Tool for laying shoe filler. 1,883,104; Oct. 18.
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Filling shoes. 1,883,105; Oct. 18.
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe bottom filler. 1,883,106; Oct. 18.
Thomas, Adolph A., New York, N. Y. Automatic safety system for self-propelled vehicles. 1,883,107; Oct. 18.
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. Re18,634; Oct. 18
Thompson, Ellis J., Lynbrook, N. Y. Paper bag. 1,883,108; Oct. 18.
Thompson, Emery, New Rochelle, N. Y. Motor and pump assembly for ice cream freezers. 1,883,109; Oct. 18.
Thompson Products, Inc. (See Graham, Matthew P., assignor,)
Thompson Products Incorporated. (See Spire, William H., assignor.)
Thompson, Vernon W., and B. N. Pierce, assignors to Emerol Manufacturing Co., New York, N. Y. Lubricating system for internal combustion engines. 1,883,110; Oct. 18.
Thor, Waino A., Berkeley, Calif. Cylinder lock. 1,883,326; Oct. 18.
Thorn, J. S., Company. (See Doering, Albert L., assignor.)
Thorne, Edgar R. (See Walker, G. H., and Thorne.)
Thum, Martin, Rochester, N. Y. Table. 1,882,678; Oct. 18.
Thurston, George M., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Piezo-electric crystal mounting. 1,883,111; Oct. 18.
Thwing Instrument Company. (See Albert, Edward J., assignor.)
Tiers, Louis P., Evanston, Ill., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Scoring device for soap rolls. 1,883,112; Oct. 18.
Tikalsky, Francis P. (See Rosander, A. P., and Tikalsky.)
Tilton, George J., Modesto, Calif. Shelf device for refrigerator cabinets. 1,883,833; Oct. 18.
Timken Silent Automatic Company, The. (See Alden, H. W., and Powers, assignors.)
Timson, William, Soho Foundry, assignor to W. & T. Avery Limited, Birmingham, England. Scale housing. Des. 87,985; Oct. 18.
Titchener, Paul F., Binghamton, assignor to O. D. Gibbs and E. Ischinger, Rochester, N. Y. Making staple blocks. 1,883,113; Oct. 18.
Tobin, Kenneth J. (See Wasberg A., and Tobin.)
Tobin, Kenneth J., assignor to Camel Company, Chicago, Ill. Supporting means for car doors. 1,883,114; Oct. 18.
Tofé y Bonilla, Saturnino, Gimileo, Spain. Auxiliary keyboard. 1,883,115; Oct. 18.
Toleman, Clifford A. (See Andreasen, W. R. G., and Toleman.)
Tomkinson, Charles C., Plainfield, assignor to J. Edward Ogden Company, Inc., East Orange, N. J. Door mechanism. 1,883,118; Oct. 18.
Tomlinson, Malcolm C. W., Lock Arbour, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for determining the condition of a gas. 1,883,116; Oct. 18.
Tompkins, William J., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y. Combined floor and cove covering. 1,883,117; Oct. 18.
Toncray, Millard H., assignor to Hudson Motor Car Company, Detroit, Mich. Door handle mounting. 1,883,119; Oct. 18.
Toncray, Millard H., Detroit, and J. W. Greig, Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Windshield securing device. 1,883,120; Oct. 18.
Tornberg, Isidor, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Dispatch conveyer safety device. 1,883,121; Oct. 18.
Traill, David, Saltcoats, Scotland, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Benzyl cellulose. 1,883,122; Oct. 18.
Trainer, James E., and I. L. Lagnvand, Barberton, Ohio, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Economizer tube support. 1,883,123; Oct. 18.
Trebes, Bruno M. A. (See Arkema, H. P., and Trebes.)
Trede, Hans, and O. H. Hartmann, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany. Indirectly heated steam generator. 1,883,124; Oct. 18.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,883,125; Oct. 18.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,883,126; Oct. 18.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Push button snap switch. 1,883,127; Oct. 18.
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric snap switch. 1,883,128; Oct. 18.
Trimmer, Albert O., Cerro Gordo, Ill. Turbine. 1,883,129; Oct. 18.
Troche, Ernest R., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand handling device. 1,883,130; Oct. 18.
Trolley, Isaac. (See Bateman, F. H., and Trolley.)
Troy Laundry Machinery Company, Inc. (See Schenck, Le Roy C., assignor.)
Tua Marius, Union City, N. J. Safety razor. 1,883,131; Oct. 18.
Tucker, Herbert E., Chicago, Ill., assignor to Cardwell Westinghouse Company. Draft gear. 1,883,132; Oct. 18.
Turner, Herman F., Yukon, Okla. Seed drill. 1,883,133; Oct. 18.
Turner, Lewis L., South Meriden, assignor to The Charles Parker Company, Meriden, Conn. Mirror-support. 1,883,834; Oct. 18.
Twin Coach Company. (See Fageol, William B., assignor.)
Tyler, W. S., Company, The. (See Nickerson, Franklin P., assignor.)
Tyler, W. S., Company, The. (See Reynolds, Morley P., assignor.)
Ulrich, Horace W., Newark, N. J., assignor to Bell Telephone Labratories, Incorporated, New York, N. Y. Trunk circuit. 1,883,158; Oct. 18.
Unger, Paul O., assignor to Wilson-Jones Company, Chicago, Ill. Extension post for chain post binders. 1,883,258; Oct. 18.
Unger, Paul O., assignor to Wilson-Jones Company, Chicago, Ill. Record binder. 1,883,254; Oct. 18.
Unger, Paul O., assignor to Wilson-Jones Company, Chicago, Ill. Index stand. 1,883,255; Oct. 18.
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Special Machine Company. (See Christensen, Norman V., and LeVesconte, assignors.)
Union Special Machine Company. (See Dykeman, Harry E., assignor.)
Union Special Machine Company. (See Ericsson, Arvid, assignor.)
Union Switch & Signal Company, The. (See Devol, Lee, assignor.)
Union Switch & Signal Company, The. (See Gilson, R. M., and O'Hagan, assignors.)
United Shoe Machinery Corporation. (See Benjamin, John M., assignor.)
United Shoe Machinery Corporation. (See Braden, Albert R., assignor.)

United Shoe Machinery Corporation. (See Grimes, Thomas E., assignor.)
United Shoe Machinery Corporation. (See Minett, Wilfrid T., assignor.)
United Shoe Machinery Corporation. (See Robinson, Charles A., assignor.)
United Shoe Machinery Corporation. (See Stevens, Percy E., assignor.)
U. S. Tool and Manufacturing Co. (See Fleischman, Samuel, assignor.)
Universal Draft Gear Attachment Co. (See Hall, Joseph M., assignor.)
Unsinger, Philip H., Maplewood, N. J. Package for safety razor blades. 1,883,159; Oct. 18.
Upton, Henry J., Medford, Mass., assignor, by mesne assignments, to The Chilton Pen Company, Inc., Long Island City, N. Y. Frictional packing. 1,883,160; Oct. 18.
Utilatree Products Inc. (See Zifferer, Lothar R., assignor.)
Vail, George. (See Clark, P., and Vail.)
Valladares, Frank, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Circulator for crossdrum boilers. 1,883,161; Oct. 18.
Vallé, Paul B., assignor to The Connecticut Hard Rubber Company, New Haven, Conn. Serving tray or similar article. Des. 87,986; Oct. 18.
Vanasse, Archie L., Waterbury, Conn. Fire escape. 1,883,849; Oct. 18.
Van Derhoef, George N. (See Mosher, J. F., and Van Derhoef.)
Van Sickle, Roswell C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. Re18,630; Oct. 18.
Van Tuyl, Thomas, Oak Park, Ill., assignor to Jay Manufacturing Company. Liquid feeding device. 1,883,847; Oct. 18.
Van Tuyl, Thomas, Oak Park, Ill., assignor to Jay Manufacturing Company. Liquid feeding device. 1,883,848; Oct. 18.
VanVeen, Anton, West Hartford, Conn., assignor to The E. Ingraham Company, Bristol, Conn. Synchronous-motor electric audible-signal clock. 1,883,162; Oct. 18.
Van Voorhis, jr., Frank, Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Remote control device. 1,883,163; Oct. 18.
Vassakos, Leonidas A., New York, N. Y. Coupling. 1,883,164; Oct. 18.
Vegren, Conrad R., Chicago, Ill. Car door lock. 1,883,165; Oct. 18.
Velasquez, Ernest, New Orleans, La. Electromechanical bottle opener. 1,883,835; Oct. 18.
Versen, Kurt. (See Howell, Theodore L., assignor.)
Vettel, Albert. (See Weaver, G. E., and Vettel.)
Vickers, Harry F., Detroit, Mich. Machine tool. 1,883,166; Oct. 18.
Vickery, Frederick W., London, England, assignor to Vickery Incorporated. Doctor for paper-making machinery. 1,883,167; Oct. 18.
Vickery Incorporated. (See Vickery, Frederick W., assignor.)
Viets, Floyd H., Glendale, assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for visual measurement of concentration of suspended material in gases. 1,883,168; Oct. 18.
Vilter Manufacturing Company, The. (See Stanyo, Desider, assignor.)
Vogel, Frank H., assignor to The Columbus Vending Company, Columbus, Ohio. Vending machine structure. 1,883,169; Oct. 18.
Vogel, Frank H. and R. A., assignors to The Columbus Vending Company, Columbus, Ohio. Coin controlled vending machine. 1,883,170; Oct. 18.
Vogt, Louis F. (See Swinderman, James L., assignor.)
Voet, Rudolph. (See Walter, J. C., and Vogt.)
Voices, Incorporated. (See Grubman, Leo J., assignor.)
Volet, Albert, New York, N. Y. Lock. 1,883,171; Oct. 18.
Volgt, Albert, New York, N. Y. Lock. 1,883,172; Oct. 18.
Von Gartzen, Joseph H., assignor of forty-nine one hundredths to L. W. Eagan, Creston, Iowa. Door closing device. 1,883,173; Oct. 18.
Von Wedel, Carl J. R. H., Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc. Discharge tube fabrication. 1,883,174; Oct. 18.
Vroom, Guysbert B., New York, N. Y. Making a brush for cleaning boiler and condenser tubes. 1,883,425; Oct. 18.
Wade, Henry S., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jug or similar article. Des. 87,987; Oct. 18.
Wagner, George W., Marlinton, W. Va. Rail joint. 1,883,175; Oct. 18.
Wahl Company, The. (See Back, Robert, assignor.)
Walker, Ely, Dry Goods Company. (See Wright, Clair G., assignor.)
Walker, Glen H., Kalamazoo, Mich., and I. L. Cole, Madison, Wis., assignors to Shakespeare Company, Kalamazoo, Mich. Tackle box. 1,883,134; Oct. 18.
Walker, Glen H., and E. R. Thorne, assignors to Shakespeare Company, Kalamazoo, Mich. Minnow bucket. 1,883,135; Oct. 18.
Walker, Milton E., Chicago, Ill. Canning machine. 1,883,136; Oct. 18.
Wallace, Kieran, Clay Township, Iowa. Tractor wheel lug. 1,883,836; Oct. 18.
Wallace, Maybelle K., New York, N. Y. Combination of box spring and mattress having pockets for selectively receiving the edges of the several bed coverings. 1,883,837; Oct. 18.
Waller, Lee R., Montreal, Quebec, Canada, assignor to Western Electric Company, Incorporated, New York, N. Y. Switching device. 1,883,137; Oct. 18.
Walter, B., & Company. (See Walter, Frederick B., assignor.)
Walter, Edward C., assignor to Monroe Calculating Machine Company, Orange, N. J. Desk stand. 1,883,138; Oct. 18.
Walter, Frank. (See Milner, E., and Walter.)
Walter, Frederick B., assignor to B. Walter & Company, Inc., Wabash, Ind. Table slide support. 1,883,176; Oct. 18.
Walter, Henry L., Twin Falls, Idaho. Liquid mixing apparatus. 1,883,139; Oct. 18.
Walter, John C., and R. Vogt, Oakley, assignors to The Alvey-Ferguson Company, Cincinnati, Ohio. Conveyer. 1,883,426; Oct. 18.
Walter, Ralph C., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Rolling mill. 1,883,140; Oct. 18.
Walthers, Lawrence, Madison, Wis. Building construction. 1,883,141; Oct. 18.
Wannack, Carl O., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill. Generating a combustible gas. 1,883,142; Oct. 18.
Wannack, Carl O., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill. Apparatus for generating combustible gas. 1,883,143; Oct. 18.
Ware, Melvin R., Baltimore, Md., assignor to Johns-Manville Corporation, New York, N. Y. Making paper and felted sheet materials. 1,883,144; Oct. 18.
Warfield, Roy M., Chicago, Ill., assignor, by mesne assignments, of one-third to Stanley Steam Motors Corporation. Steam generator. 1,883,145; Oct. 18.
Warnke, Carl J., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,883,146; Oct. 18.
Warr, Harold G., Park Ridge, assignor to The P & M Company, Chicago, Ill. Rail anchor. 1,883,147; Oct. 18.
Warr, Harold G., Park Ridge, assignor to Maintenance Equipment Company, Chicago, Ill. Wheel flange oiler. 1,883,148; Oct. 18.
Warren, John R., assignor to C. and F. R. McGough, doing business as F. H. Gough & Son, Grand Rapids, Mich. Knife. 1,883,726; Oct. 18.
Warren, Samuel R., assignor to Estey Organ Company, Brattleboro, Vt. Pneumatically balanced valve. 1,883,838; Oct. 18.
Wasberg, Axel, and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Sliding refrigerator car door. 1,883,149; Oct. 18.
Washburn, Robert M., Evanston, assignor to Liquid Dehydration Corporation, Chicago, Ill. Powdered citrus fruit juices and making the same. 1,883,150; Oct. 18.
Waters, Gertrude F. and G. A., Sharon, Conn. Hair waving comb. 1,883,151; Oct. 18.
Waters, Gilbert A. (See Waters, Gertrude F. and G. A.)
Waterworth, Robert J., Sidney, Ohio, assignor, by mesne assignments, to Dexter Folder Company, New York, N. Y. Folding machine. 1,883,152; Oct. 18.
Watkins, Harold F., Oakland, Calif. Well pumping apparatus. 1,883,153; Oct. 18.
Watrous, Willis H., Oakland, Calif. Combination jack and pressure gauge. 1,883,154; Oct. 18.
Watson, Kenneth M., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating electrical conductors. 1,883,155; Oct. 18.
Weaver, Gallard E., and A. Vettel, assignors to Weaver Manufacturing Company, Springfield, Ill. Jack. 1,883,157; Oct. 18.
Weaver, Ira A. (See Weaver, I. A., and Ross, assignors.)
Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Vehicle wheel testing appliance. 1,883,180; Oct. 18.
Weaver, Ira A., and W. A. Ross, assignors by mesne assignments, to Ira A. Weaver, Springfield, Ill. Airplane service dolly. 1,883,156; Oct. 18.
Weaver, Leo L., Roselle, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Material advancing apparatus. 1,883,181; Oct. 18.
Weaver Manufacturing Company. (See Weaver, G. E., and Vettel, assignors.)
Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)
Webb, Roy L., Brooklyn, N. Y., assignor to General Electric Company. Protective arrangement. 1,883,839; Oct. 18.
Webel, Franz, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Esterification product of dicarboxylic acids and their production. 1,883,182; Oct. 18.
Weber, Don A., assignor to The Dister Concentrator Company, Fort Wayne, Ind. Apparatus for screening materials. 1,883,186; Oct. 18.
Weber, Herman G., Sheboygan, Wis. Marking roll composition. 1,883,183; July 29.

Weber, Herman G., Sheboygan, Wis. Marking roll with hard rubber surface. 1,883,184; Oct. 18.
Weber, Herman G., Sheboygan, Wis. Marking roll. 1,883,185; Oct. 18.
Weber, Herman G., Philadelphia, Pa. Marking roll with metal plates and cushion. 1,883,187; Oct. 18.
Webster, Byron P., Plainfield, assignor to Chipman Chemical Company, Inc., Bound Brook, N. J. Light-density composition of Paris green and calcium arsenate and making the same. 1,883,188; Oct. 18.
Webster Electric Company. (See Kleckner, Arthur C., assignor.)
Weigolt, Alphonse D., Cleveland, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Cord testing machine. Des. 87,988; Oct. 18.
Weis, John P., Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Machine for stitching wire fabrics. 1,883,177; Oct. 18.
Weiss, Camillo. (See Hilpert, M. G., and Weiss.)
Weiss, Morris L., Newark, and C. P. Bardsley, South Orange, N. J., assignors, by mesne assignments, to The Dow Chemical Company, Midland, Mich. Making diaryl guanidines. 1,883,189; Oct. 18.
Welcker, Rudolph, assignor of one-fourth to Franklin G. Neal, Springfield, Mass. Flow governor. 1,883,190; Oct. 18.
Wells, Hewitt L., Washington, D. C. Concrete floor construction. 1,883,191; Oct. 18.
Wells, Hewitt L., Washington, D. C. Concrete floor construction. 1,883,192; Oct. 18.
Wells, Sidney D., Quincy, Ill., assignor to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Bleaching of paper pulp. 1,883,193; Oct. 18.
Wempe, Friedrich, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Indirectly heated steam generator. 1,883,194; Oct. 18.
Wendle, Virgil P., assignor to The Reeves Manufacturing Company, Dover, Ohio. Flux box gate. 1,883,427; Oct. 18.
Wengard, Ben, Waterloo, Iowa. Advertising attachment for spare tires. 1,883,195; Oct. 18.
Wertz, Daniel L., assignor to Eclipse Machine Company, Elmira, N. Y. Generator control. 1,883,428; Oct. 18.
Wertz, Daniel L., assignor to Eclipse Machine Co., Elmira, N. Y. Rebound check for starter pinions. 1,883,429; Oct. 18.
Wertz, Louis S., Shaker Heights, Ohio. Repairing masonry structures. 1,883,196; Oct. 18.
West, John W., deceased; K. H. West executrix, Albany, Calif. Axle gauge. 1,883,197; Oct. 18.
West, Katherine H., executrix. (See West, John W.)
Westcott, Philip S., assignor to The Pyle-National Company, Chicago, Ill. Electrical distribution regulating system for railway cars. 1,883,198; Oct. 18.
Western Cartridge Company. (See Clyne, Robert G., assignor.)
Western Electric Company. (See Arkema, H. P., and Trebes, assignors.)
Western Electric Company. (See Boynton, John E., assignor.)
Western Electric Company. (See Boynton, Stanley E., assignor.)
Western Electric Company. (See Haegele, O. P., and Paulson, assignors.)
Western Electric Company. (See Potts, Louis M., assignor.)
Western Electric Company. (See Reichelt, Lester O., assignor.)
Western Electric Company. (See Robbins, Charles W., assignor.)
Western Electric Company. (See Rock, Darrell D., assignor.)
Western Electric Company. (See Rock, George L., assignor.)
Western Electric Company. (See Rosander, A. P., and Tikalsky, assignors.)
Western Electric Company. (See Schreiber, L. J. J., Chevigny, and Lens, assignors.)
Western Electric Company. (See Schroeder, William, assignor.)
Western Electric Company. (See Scott, James W., assignor.)
Western Electric Company. (See Shea, John R., assignor.)
Western Electric Company. (See Sheel, Harold, assignor.)
Western Electric Company. (See Shewmon, D. D., and Schroeder, assignors.)
Western Electric Company. (See Stull, J. S., and King, assignors.)
Western Electric Company. (See Tomlinson, Malcolm C. W., assignor.)
Western Electric Company. (See Tompkins, William J., assignor.)
Western Electric Company. (See Troche, Ernest R., assignor.)
Western Electric Company. (See Waller, Lee R., assignor.)
Western Electric Company. (See Walter, Ralph C., assignor.)
Western Electric Company. (See Watson, Kenneth M., assignor.)
Western Electric Company. (See Weaver, Leo L., assignor.)
Western Electric Company. (See Yonkers, Edward H., assignor.)
Western Foundation Company. (See Sherwood, Glenn L., assignor.)
Western Union Telegraph Company, The. (See Haglund, Hakon H., assignor.)
Western Union Telegraph Company, The. (See Teter, Paul E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Allen, Robert C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Callsen, Albert, assignor.)
Westinghouse Electric and Manufacturing Company. (See Cody, C. S., Davis, and Mosshart, assignors.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kehoe, Arthur H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Parsons, John S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Santini, Danilo, assignor.)
Westinghouse Electric & Manufacturing Company. (See Van Sickle, Roswell C., assignor.)
Whaley, William, Knoxville, Tenn. Shoveling machine. 1,883,200; Oct. 18.
Wheeler, Leonard H., assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,883,201; Oct. 18.
Whitaker, John, North Wales, assignor to Safe Guard Corporation, Lansdale, Pa. Signature machine. 1,883,204; Oct. 18.
White, Edwin H., Newark, N. J., assignor to Decorative Tile Corporation, Essex County, N. J. Method of and apparatus for manufacturing cementitious articles. Re18,626; Oct. 18.
White, Rollin H., Cleveland Heights, Ohio. Seal. 1,882,679; Oct. 18.
White, Sanford E., Santa Monica, Calif. Oil-feeding apparatus for engines. 1,883,202; Oct. 18.
Whitehead, Frederick A., assignor to Copperweld Steel Company, Glassport, Pa. Rolling bimetallic articles. 1,883,205; Oct. 18.
Whitehead, William. (See Dreyfus, C., and Whitehead, assignors.)
Whitehouse, Irving P., assignor to H. C. Lord, Erie Pa. Joint. 1,883,203; Oct. 18.
Whitney, Maurice P. (See McGrath, W. L., and Whitney.)
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,430; Oct. 18.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,883,431; Oct. 18.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Starting mechanism. 1,883,432; Oct. 18.
Whitted, John B., Hagerstown, Md., assignor to Stewart-Warner Corporation, Chicago, Ill. Hydraulic shock absorber. 1,883,206; Oct. 18.
Whittle, Earnest A., Jacksonville, Fla. Collapsible container. 1,883,207; Oct. 18.
Wick, Emil A. (See Björndal, M., and Wick.)
Wiegand, Erich, Berlin-Waldmannslust, Germany, assignor to General Electric Company. Manufacturing oxide cathodes. 1,883,840; Oct. 18.
Wieger, Bruno, Brunswick, Germany, assignor to Becker & Co. (1924), Limited, London, England. Sizing fibrous materials. 1,882,680; Oct. 18.
Wiener, Max L., Newark, N. J. Automobile. Des. 87,989; Oct. 18.
Wight, Sedgwick N., assignor to General Railway Signal Company, Rochester, N. Y. Railway traffic controlling system. 1,883,208; Oct. 18.
Wildman, Horatio S. (See Lennox, L. W., and Wildman.)
Wiley, James A., Cedar Falls, Iowa. Selective mark indicator for tests. 1,883,199; Oct. 18.
Willard, Donald E., Danville, Ill. Vehicle wheel. Des. 87,990; Oct. 18.
Willauer, William R., Philadelphia, Pa., assignor to Marathon Paper Mills Company, Chicago, Ill. Adhesive. 1,883,209; Oct. 18.
Willey, Daniel, Sulphur, Okla. Inkwell. 1,883,210; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,004; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,005; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,006; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,007; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,008; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,009; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,010; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,011; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,012; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,013; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,014; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,015; Oct. 18.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,016; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,017; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,018; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,019; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,020; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,021; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,022; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,023; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,024; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,025; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,026; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,027; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,028; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,029; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,030; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,031; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,032; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,033; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,034; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,035; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,036; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,037; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,038; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,039; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,040; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,041; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,042; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,043; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,044; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,045; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,046; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,047; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,048; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,049; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,050; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,051; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,052; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,053; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,054; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,055; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,056; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,057; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,058; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,059; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,060; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,061; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,062; Oct. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,063; Oct. 18.
Williams, Alfred C., Deal, England. Gramophone. 1,883,841; Oct. 18.
Williams, Robert L., Newton, assignor to Submarine Signal Corporation, Boston, Mass. System and apparatus for submarine signaling. 1,883,433; Oct. 18.
Wills, Victor W., Philadelphia, Pa. Pipe supporter. 1,883,178; Oct. 18.
Wilson, Alfred R., assignor to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,883,212; Oct. 18.
Wilson, Alfred R., assignor to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,883,213; Oct. 18.
Wilson, Edwin B., Forest Hills, and N. J. Ressetar, Flushing, assignors to Design Laboratories, Incorporated, New York, N. Y. Ornamental objects. 1,883,214; Oct. 18.
Wilson, Herbert S., and A. E. Fohn, assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Safety device. 1,883,248; Oct. 18.
Wilson-Jones Company. (See Dawson, George H., assignor.)
Wilson-Jones Company. (See Unger, Paul O., assignor.)
Wilson, Robert E., assignor to Standard Oil Company (Indiana), Chicago, Ill. Concentration of caustic soda. 1,883,211; Oct. 18.
Wilson, William C., assignor to Cellovis, Inc., Chicago, Ill. Low viscosity nitrocellulose and making the same. 1,883,215; Oct. 18.
Wine, Arthur, et al. (See Gillin, Theobold, assignor.)
Wine, William E., Toledo, Ohio. Intermediate side stake for freight cars. 1,883,434; Oct. 18.
Winters, Alexander F., Grand Rapids, assignor to Winters & Crampton Manufacturing Company, Grandville, Mich. Bottle opener. 1,883,216; Oct. 18.
Winters & Crampton Manufacturing Company. (See Winters, Alexander F., assignor.)
Winthrop Chemical Company. (See Schranz, K., and Jaeger, assignors.)
Wismer, Samuel H. (See La Rue, W. D., and Wismer.)
Wismer, Samuel H., Palmyra, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound reproducing machine. 1,883,239; Oct. 18.
Wisspeintner, Christian, Berlin-Charlottenburg, and G. Chodziesner, Berlin-Zehlendorf, Germany, assignors to International Communications Laboratories, Incorporated, New York, N. Y. Signaling system. 1,883,179; Oct. 18.
Wiswell, Ozro N. (See Allen, S. E., and Wiswell.)
Wittstein, Herman L., assignor to The Atlas-Ansonia Company, New Haven, Conn. Pencil sharpener. 1,883,217; Oct. 18.
Wodack Electric Tool Corporation. (See Haas, Joseph F., assignor.)
Woblenberg, Walter J., New Haven, Conn., assignor to Erie City Iron Works, Erie, Pa. Method of and apparatus for pulverizing and treating material. 1,883,218; Oct. 18.
Wolf, Aaron, Hartford, Conn. Clothes drier for indoor use. 1,883,219; Oct. 18.
Wolf, Harry E., Pittsburgh, Pa. Tufting table apparatus. 1,883,220; Oct. 18.
Wolf, Howard M. (See Snively, C. B., and Wolf.)
Wolf, Joe H. (See Snively, C. B., and Wolf.)
Womack, Henry B., Birmingham, Ala. Shears. 1,883,842; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Multiple casting and finishing machine for stereotype printing plates. 1,883,221; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Paper roll braking device. 1,883,222; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Cleaning conveyer chains. 1,883,223; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding and delivery mechanism. 1,883,224; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Automatic disconnecting device. 1,883,225; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding mechanism. 1,883,226; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Color printing press. 1,883,227; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Press unit drive. 1,883,256; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Ink supplying regulator. 1,883,257; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Finger guard. 1,883,258; Oct. 18.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Impaling pin. 1,883,259; Oct. 18.
Wood Hydraulic Hoist & Body Company. (See Barrett, Edward R., assignor.)
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Wood Newspaper Machinery Corporation. (See Tornberg, Isidor, assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodford, Joseph C., Ardmore, assignor to Service Station Equipment Company, Conshohocken, Pa. Liquid dispensing nozzles. 1,883,843; Oct. 18.
Woodruff & Edwards Inc. (See Abbott, George H., assignor.)

Woodruff, William W. 3d., Swarthmore, and R. L. Jenner, Germantown, Pa. Suspension clamp. 1,883,260; Oct. 18.
Woodward, Henry T., Berkeley, Calif., assignor to Burnham Chemical Company, Reno, Nev. Recovering geaserite. 1,883,261; Oct. 18.
Woodward, Henry T., Berkeley, Calif., assignor to Burnham Chemical Company, Reno, Nev. Recovering alkali metal salts from brines. 1,883,262; Oct. 18.
Worthington, Wayne H. (See Hales, S. H., Worthington, and Pierson.)
Wright, Clair G., Kansas City, assignor to Ely Walker Dry Goods Company, St. Louis, Mo. Undergarment. 1,883,263; Oct. 18.
Wright, Horace C., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Adjustable nozzle. 1,883,264; Oct. 18.
Wrought Iron Company of America. (See Donley, Charles, assignor.)
Wupper, Benjamin F., Chicago, Ill. Toy. 1,883,265; Oct. 18.
Yoder, Howard D., assignor to Penberthy Injector Company, Detroit, Mich. Portable sump pump. 1,883,266; Oct. 18.
Yoder, Howard D., assignor to Penberthy Injector Company, Detroit, Mich. Automatic switch. 1,883,267; Oct. 18.
Yolles, Jacob, Brooklyn, assignor to Technidyne Corporation, New York, N. Y. Apparatus for connecting electrical devices. 1,883,268; Oct. 18.
Yonkers, Edward H., Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical conductor. 1,883,269; Oct. 18.
Young, George E. (See Black, T. J., and Young.)
Young, Leon M. (See Robinson, W. M., Lindquist, Rader, and Young.)
Young, Robert S., New Brighton, N. Y. Slip holding device. 1,883,270; Oct. 18.
Young, Robert S., and P. Devlin, New Brighton, N. Y. Check holder. 1,883,271; Oct. 18.
Zellner, Harry W., Salt Lake City, Utah. Incubator and brooder. 1,883,272; Oct. 18.
Zerk, Oscar U., Chicago, Ill. Tripod. 1,883,276; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,883,273; Oct. 18.
Zerk, Oscar U., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricant reservoir and dash pump. 1,883,274; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating nipple. 1,883,275; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubrication method and means. 1,883,277; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating coupler. 1,883,278; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating coupler. 1,883,279; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,883,280; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating. 1,883,281; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,883,282; Oct. 18.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,883,283; Oct. 18.
Zerozone, Incorporated. (See Bihl, William E., assignor.)
Zerozone, Incorporated. (See Bihl, W. E., and Ramclaw, assignors.)
Zifferer, Lothar R., deceased, Columbia, Pa.; M. C. Zifferer, H. E. Champion, and H. N. Albright, executors, assignors to Utilatree Products Inc., New York, N. Y. Costumer. 1,883,435; Oct. 18.
Zifferer, Mabel C., et al, executors. (See Zifferer, Lothar R.)
Zimmerli, Adolph, and R. C. Lyon, New Brunswick, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Purification of quinone. 1,883,284; Oct. 18.
Zimmerman, Herman W., assignor to Automotive Maintenance Machinery Co., Chicago, Ill. Reaming and burnishing tool. 1,883,285; Oct. 18.
Zimmerman, Herman W., assignor to Automotive Maintenance Machinery Co., Chicago, Ill. Abrasive carrier for cylinder grinding. 1,883,286; Oct. 18.
Zink, Fred W., assignor to Kales Stamping Company, Detroit, Mich. Rear view mirror assembly. 1,883,287; Oct. 18.
Zink, James L. (See Meggenhofen, C. W., and Zink.)
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Ventilating apparatus for dynamo-electric machines. 1,883,288; Oct. 18.
Zuckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. Perforating mechanism for use in printing machines. 1,883,289; Oct. 18.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 18TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading roll. W. J. Maddox. 1,883,747; Oct. 18.
Abrasive carrier for cylinder grinding tools. H. W. Zimmerman. 1,883,286; Oct. 18.
Abrasive device. F. O. Albertson and G. A. Olsen. 1,882,693; Oct. 18.
Accelerator pedal, Automobile. H. D. Adams. 1,883,437; Oct. 18.
Acetone, Manufacture of. J. Al. 1,883,443; Oct. 18.
Acetylene from petroleum oil, Production of. H. B. Kipper. 1,883,799; Oct. 18.
Acid from petroleum hydrocarbons and producing same. H. A. Bruson. 1,882,762; Oct. 18.
Acoustic device. V. A. Schlenker. 1,882,974; Oct. 18.
Adhesive. W. R. Willauer. 1,883,209; Oct. 18.
Advertising attachment for spare tires. B. Wengard. 1,883,195; Oct. 18.
Aerial support. F. W. Bonday. 1,883,508; Oct. 18.
Aeroplane construction. J. E. Foster. 1,883,672; Oct. 18.
Air cleansing and cooling device. C. W. Freeman. 1,883,778; Oct. 18.
Air conditioning unit. W. L. Fleisher. 1,883,665; Oct. 18.
Airplane. H. E. Irwin. 1,883,740; Oct. 18.
Airplane wing structure and making the same. E. Chagnaird and A. Kartvelichvili. 1,883,552; Oct. 18.
Airship bulkheads, Method and apparatus for building. K. Arnstein and P. Helma. 1,883,455; Oct. 18.
Alkali metal salts from brines, Recovering. H. T. Woodward. 1,883,262; Oct. 18.
Amino-phenols and primary aryl amines conjointly, Preparation of. E. C. Britton and R. D. Holmes. 1,882,758; Oct. 18.
Amplifying system. G. L. Beers. 1,883,490; Oct. 18.
Amusement device. H., H., and N. Pickard. 1,883,857; Oct. 18.
Anchor, Guy. T. B. Bash. 1,883,477; Oct. 18.
Anchor, Rail. R. A. Blair. 1,882,654; Oct. 18.
Anchor, Rail. H. G. Warr. 1,883,147; Oct. 18.
Anchor, Safety. A. Buck. 1,883,761; Oct. 18.
Anesthetic, Rectal. K. Schranz and S. Jaeger. 1,882,984; Oct. 18.
Anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,883,353; Oct. 18.
Anti-knock compounds for internal combustion engines and making same. R. Cross. 1,883,593; Oct. 18.
Articles, Apparatus for forming. J. S. Stull and J. W. King. 1,883,080; Oct. 18.
Articles, Method of and mechanism for tapping. J. F. Patton. 1,882,874; Oct. 18.
Aryl- and aralkylamines, Preparation of secondary. E. C. Britton and H. R. Slagh. 1,882,759; Oct. 18.
Arylsulphonyl derivatives of aromatic amines, Nitration of. D. H. Mosby, H. C. Olpin, and G. H. Ellis. 1,883,393; Oct. 18.
Ash disposal apparatus. C. S. Cody, B. A. Davis, and D. J. Mosshart. 1,883,578; Oct. 18.
Asphalt emulsion and manufacture thereof. L. A. Hall and E. E. Mortell. 1,882,834; Oct. 18.
Assembling machine. E. and L. Livingston. 1,883,307; Oct. 18.
Automatic sprinkler. W., W. E., and B. Gerlach. 1,883,780; Oct. 18.
Automatic switch. H. D. Yoder. 1,883,267; Oct. 18.
Automatic weighing machine. C. Nagel. 1,883,855; Oct. 18.
Automobile. J. T. Batts. Des. 87,954; Oct. 18.
Automobile. M. L. Wiener. Des. 87,989; Oct. 18.
Automobile brake. B. F. Boone. 1,883,757; Oct. 18.
Automobile lock. F. A. Smith. 1,883,026; Oct. 18.
Automobile signal. J. A. Bell. 1,882,740; Oct. 18.
Automobile storage device. J. F. Creedon. 1,882,656; Oct. 18.
Aviation engine. A. E. Chevrolet. 1,883,558; Oct. 18.
Axle gauge. J. W. West. 1,883,197; Oct. 18.
Badge for Spanish war veterans. W. A. Gardner. Des. 87,962; Oct. 18.
Baffle arrangement. C. W. Gordon. 1,883,707; Oct. 18.
Bag: *See*—
Paper bag.
Bag lock. C. Baum. 1,883,481; Oct. 18.
Bags, Attachment for golf. W. J. Doughty. 1,882,785; Oct. 18.
Ball and socket joint. A. B. Shultz. 1,883,020; Oct. 18.
Ball covering process. J. O. Goodwin. 1,883,704; Oct. 18.
Band or linkage, Metal. C. H. Kestenman. 1,882,666; Oct. 18.
Bandage. A. H. Straus. 1,882,677; Oct. 18.
Base for candle lamps. N. C. H. Muench. Des. 87,974; Oct. 18.
Basket, Pickling. T. J. Black and G. E. Young. 1,883,501; Oct. 18.
Bast fibers, especially bast fibers of linen, hemp and the like, Bleaching. H. Korte. 1,883,846; Oct. 18.
Bathtub, Infant's collapsible. A. G. Feldman. 1,883,660; Oct. 18.
Battery charging system. C. W. Bell. 1,883,492; Oct. 18.
Battery plates, Manufacturing storage. T. Shiomi and S. Higuchi. 1,883,014; Oct. 18.
Bearing. L. Sandler. 1,882,956; Oct. 18.
Bearing construction, Roller. C. A. Swart and J. H. Evans. 1,883,085; Oct. 18.
Beater for cleaning rugs. F. L. Felty. 1,883,851; Oct. 18.
Bed and davenport, Combination day. P. Hacker. 1,883,730; Oct. 18.
Belt, Driving. P. B. Reeves. 1,883,821; Oct. 18.
Benzyl cellulose. D. Traill. 1,883,122; Oct. 18.
Bimetallic articles, Rolling. F. A. Whitehead. 1,883,205; Oct. 18.
Binder, Loose sheet. J. Schade. 1,882,965; Oct. 18.
Binder, Record. P. O. Unger. 1,883,254; Oct. 18.
Binding strip for parts of boots and shoes. P. E. Stevens. 1,883,421; Oct. 18.
Biscuits or the like articles and machine therefor, Manufacture of. E. M. Crosland. 1,883,592; Oct. 18.
Bleaching solution, Preparing. M. J. Engberg. 1,883,649; Oct. 18.
Blocks, Making staple. P. F. Titchener. 1,883,113; Oct. 18.
Blotter, Finger supported. R. H. Cobb. 1,883,576; Oct. 18.
Blowing preventative for paper machine felts. W. H. Millspaugh. 1,883,391; Oct. 18.
Board: *See*—
Drawing board. Pin board.
Boiler: *See*—
Mercury boiler. Waste heat boiler.
Steam boiler. Water tube boiler.
Steel boiler.
Boiler. C. W. Gordon. 1,883,706; Oct. 18.
Boiler. V. W. Hoxie. 1,882,847; Oct. 18.
Boiler. H. J. Kerr and C. U. Savoye. 1,883,380; Oct. 18.
Boiler. C. E. Lucke. 1,883,313; Oct. 18.
Boiler and economizer, Steam. C. E. Lucke. 1,883,312; Oct. 18.
Boiler feeder system, Mercury. H. J. Kerr. 1,883,302; Oct. 18.
Boiler having horizontal headers, Mercury. H. J. Kerr. 1,883,301; Oct. 18.
Boiler with forced return circulation through furnace walls. D. S. Jacobus. 1,883,293; Oct. 18.
Boiler with superheater and reheater, Steam. H. J. Kerr. 1,883,303; Oct. 18.
Boiler with superheater between boiler tubes, Series. D. S. Jacobus. 1,883,294; Oct. 18.
Boring machine, Vertical foundation. E. Shinn. 1,883,013; Oct. 18.
Bottle and container therefor, Combination perfume. F. N. Lewis. Des. 87,968; Oct. 18.
Bottle capper. J. J. Balaun. 1,882,731; Oct. 18.
Bottle filling and crowning machine. V. J. Mohler. 1,882,860; Oct. 18.
Bottle, Prescription. W. A. Nester. Des. 87,975; Oct. 18.
Box: *See*—
Compartment box. Outlet box.
Folding box. Tackle box.
Knockdown box.
Box for holding and displaying pens or pencils or other articles. J. M. Shields. 1,883,012; Oct. 18.
Box spring and mattress having pockets for selectively receiving the edges of the several bed coverings, Combination. M. K. Wallace. 1,883,837; Oct. 18.
Bracelet chain. A. E. R. Spridel. Des. 87,983; Oct. 18.
Bracket. T. O. Schrader. 1,882,980; Oct. 18.
Bracket and support, Insulator. L. Fort. 1,883,671; Oct. 18.
Bracket for shade pulleys, Supporting. L. O. Draper. 1,883,627; Oct. 18.
Brake: *See*—
Automobile brake. Fluid brake.
Electromagnetic equalizing brake. Vehicle brake.
Brake. J. P. Billingsley and T. A. Kellum. 1,883,498; Oct. 18.
Brake. H. S. Pardee. 1,882,873; Oct. 18.
Brake apparatus, Power. E. A. Rockwell. 1,882,926; Oct. 18.
Brake linkage. E. A. Rockwell and E. R. Evans. 1,882,929; Oct. 18.
Brake mechanism. F. H. Ragan. 1,883,316; Oct. 18.

Brake mechanism. E. A. Rockwell. 1,882,927; Oct. 18.
Brake operating mechanism. F. H. Ragan. 1,883,317–8; Oct. 18.
Brake shoe. T. P. Chase. 1,883,556; Oct. 18.
Brake shoe. R. B. Pogue. 1,882,883–4; Oct. 18.
Brake shoe. F. W. Sargent. 1,882,959; Oct. 18.
Brick and the like, Making. H. O. Abnell. 1,883,442; Oct. 18.
Bronzing machine. F. R. Belluche. 1,882,743–4; Oct. 18.
Brooder, Storage. V. L. Graham. 1,883,710; Oct. 18.
Broom or brush, Metal. C. H. Feltham. 1,882,658; Oct. 18.
Brush for cleaning boiler and condenser tubes, Making a. G. B. Vroom. 1,883,425; Oct. 18.
Brush, picking and macerating machine. W. E. Goble. 1,883,694; Oct. 18.
Bucket, Minnow. G. H. Walker and E. R. Thorne. 1,883,135; Oct. 18.
Buckle. O. G. Sherman. 1,883,009; Oct. 18.
Building construction. M. G. Hilpert and C. Weiss. 1,883,376; Oct. 18.
Building construction. L. Walthers. 1,883,141; Oct. 18.
Buildings and like structures, Insulating. J. L. Finck. 1,883,774; Oct. 18.
Burner: *See*—
Gas burner. Sulphur burner.
Oil burner.
Burner. D. J. Irish. 1,883,789; Oct. 18.
Burner control apparatus and system. J. C. Bogle. 1,883,243; Oct. 18.
Burner control system, Oil. J. C. Bogle. 1,883,242; Oct. 18.
Cabinet. B. F. Forsyth. 1,883,776; Oct. 18.
Cabinet, Sign. J. C. Daley. 1,883,768; Oct. 18.
Cable connecter. G. C. Thomas, Jr. Re18,634; Oct. 18.
Cable forming apparatus. L. O. Reichelt. 1,882,902; Oct. 18.
Cable, Multicore oil-filled high-tension electric. L. Emanuell. 1,883,648; Oct. 18.
Calculating machine. J. Bergmann. 1,883,853; Oct. 18.
Calculating machine. J. Bricken. 1,883,760; Oct. 18.
Calculator casing. G. S. Robinson. Des. 87,979; Oct. 18.
Camera frame elevator. M. King. 1,883,798; Oct. 18.
Camera frames, Carriage adjustment for. M. King. 1,883,797; Oct. 18.
Camera front. C. A. Bornmann. 1,883,512; Oct. 18.
Camera, Sound picture. L. M. Potts. 1,882,893; Oct. 18.
Can filling machine. C. H. Ayars. 1,883,460; Oct. 18.
Canning machine. M. E. Walker. 1,883,136; Oct. 18.
Candle and method relating thereto. H. H. Root. Re18,623; Oct. 18.
Cap, Tube. G. E. Aldridge. 1,882,697; Oct. 18.
Car construction. W. A. Geiger. 1,882,800; Oct. 18.
Car construction. G. Q. Lewis. 1,883,306; Oct. 18.
Car construction, Railway. G. G. Gilpin. 1,882,659; Oct. 18.
Car coupler. W. J. Regan. 1,883,315; Oct. 18.
Car coupler. W. J. Regan and E. George, jr. 1,882,899; Oct. 18.
Car, Rail. W. B. Fageol. 1,883,357; Oct. 18.
Carbon and the like, Manufacture of decolorizing. R. N. Riddle. 1,882,916; Oct. 18.
Carburetor. H. W. Asire. 1,882,725; Oct. 18.
Carburetor. T. B. Elker. 1,883,738; Oct. 18.
Carburetor. M. Mennesson. 1,883,809; Oct. 18.
Carburetor. A. P. Plaut. 1,882,877; Oct. 18.
Card interpreter, Perforated. E. A. Ford. 1,882,797; Oct. 18.
Card table. G. C. Rickson. 1,882,915; Oct. 18.
Cards, Set of playing. A. D. Miller. Des. 87,971; Oct. 18.
Carnation. R. Engle. Pl. Pt. 35; Oct. 18.
Carrier and lock, Spare wheel. F. A. Smith. 1,883,032; Oct. 18.
Carton feeding machine. G. H. Bent. 1,883,228; Oct. 18.
Carton feeding machine. C. F. Richard. 1,883,230–2; Oct. 18.
Case: *See*—
Cigarette case. Vanity case.
Casing. A. S. Fitz Gerald. 1,883,663; Oct. 18.
Casing and making same, Sausage. R. Ettlinger. 1,883,657; Oct. 18.
Casing for electrical apparatus. A. C. Kleckner. Re18,627; Oct. 18.
Casing, Sectional hot air furnace. W. M. Smith. 1,882,675; Oct. 18.
Casket and burial vault, Combined. E. G. Daniels. 1,883,600; Oct. 18.
Casting and finishing machine for stereotype printing plates, Multiple. H. A. W. Wood. 1,883,221; Oct. 18.
Catalysts comprising phosphates, Production of. L. Andrussow and F. Duerr. 1,882,712; Oct. 18.
Catalysts for the production of carbon black. W. Haag. 1,882,813; Oct. 18.
Celluloid, Ornamentation of. A. Michael. 1,883,854; Oct. 18.
Cellulose derivatives, Treatment of. H. Dreyfus. 1,883,351; Oct. 18.
Cellulose esters and ethers, Application of. G. Schneider. 1,883,412; Oct. 18.
Cellulose material, Purifying. H. P. Bassett. 1,883,478; Oct. 18.
Cement powder and motar powder. K. Frank and K. Dietz. 1,883,675; Oct. 18.
Cementitious articles, Method of and apparatus for manufacturing. E. H. White. Re18,626; Oct. 18.
Centrifugal paperstock screen. A. J. Haug. 1,882,662; Oct. 18.
Centrifugal switch. O. D. Griffin. 1,883,784; Oct. 18.
Chain. S. Shafer, jr. 1,883,004; Oct. 18.
Chain, Antiskid. J. Senft. 1,882,999–000; Oct. 18.
Chain, Conveyer. S. Shafer, jr. 1,883,005; Oct. 18.
Chains, Cleaning conveyer. H. A. W. Wood. 1,883,223; Oct. 18.
Chair or similar article, Children's. O. Lebeck. Des. 87,965; Oct. 18.
Charge forming device. J. I. Anson. 1,882,717; Oct. 18.
Charge forming device. F. E. Aseltine. 1,882,723–4; Oct. 18.
Charge forming device. W. H. Teeter. 1,883,095–7; Oct. 18.
Check for starter drives, Rebound. D. P. Kearney. 1,883,377; Oct. 18.
Checker-brick and checkerwork construction. J. H. France. 1,883,674; Oct. 18.
Chemical apparatus and lining the same. R. L. Duff. 1,883,630; Oct. 18.
Chemical picture-telegraph equipment. P. Storch. 1,883,074; Oct. 18.
Chloro-anthraquinone-acridones and making same. W. Bruck. 1,883,525; Oct. 18.
Chuck. W. D. Schmidt. 1,882,975; Oct. 18.
Cigarette case. C. E. Anderson. 1,882,708; Oct. 18.
Circuit, Automatic rider. P. E. Teter. 1,883,102; Oct. 18.
Circuit interrupter. R. C. Van Sickle. Re18,630; Oct. 18.
Circuit, Trunk. H. W. Ulrich. 1,883,158; Oct. 18.
Circuits, System for counteracting undesired oscillations in alternating current. T. H. Burns. 1,883,536; Oct. 18.
Circulator for crossdrum boiler. F. Valladares. 1,883,161; Oct. 18.
Clamp: *See*—
Suspension clamp.
Clamp. E. X. Somers. 1,883,041; Oct. 18.
Clamp operating and locking means. G. E. Swartz. 1,883,087; Oct. 18.
Cleaner: *See*—
Rake cleaner. Suction cleaner.
Spinning frame cleaner.
Clear top extractor. L. C. Schenck. 1,882,968; Oct. 18.
Clip: *See*—
Extension clip. Fuse clip.
Clock case. G. H. Stephens. Des. 87,984; Oct 18.
Clock, Chime. S. Mazur. 1,883,387; Oct. 18.
Clock, Electric. W. E. Porter. 1,882,891; Oct. 18.
Clock, Synchronous-motor electric audible signal. A. VanVeen. 1,883,162; Oct. 18.
Closet and table, Combined. E. S. Bolles. 1,883,504; Oct. 18.
Closure cap. E. Scofield. 1,882,995; Oct. 18.
Closure cap, Friction. E. Scofield. 1,882,996; Oct. 18.
Closure for collapsible tubes. R. C. Greenlees. 1,883,716; Oct. 18.
Closure for containers. J. P. Burke. 1,883,534; Oct. 18.
Closures in bag tubes, Method of and apparatus for forming. J. P. Aldrich. 1,882,696; Oct. 18.
Clutch. J. Mosher and G. N. Van Derhoef. 1,883,394; Oct. 18.
Clutch actuating means. S. B. Haseltine. 1,882,839; Oct. 18.
Clutch for the transmission of power, Friction. E. H. J. C. Gillett. 1,882,806; Oct. 18.
Clutch, Friction. D. E. Gamble. 1,883,682; Oct. 18.
Clutch, Friction. H. V. Reed. 1,882,807–8; Oct. 18.
Clutch, Hydraulic. J. Dauster. 1,883,601; Oct. 18.
Clutch, Hydraulic. J. Gasterstadt. 1,883,685; Oct. 18.
Clutch, Hydraulic. A. Gellert. 1,883,305; Oct. 18.
Coal, Heat treating. C. E. Lucke. 1,883,311; Oct. 18.
Coal mining apparatus. A. P. Stanley. 1,883,055; Oct. 18.
Coating. W. H. Moss. 1,883,396; Oct. 18.
Coating composition and vehicle for the same. W. H. Moss. 1,883,395; Oct. 18.
Coating for frozen products, Edible. H. Beatty and C. Mongere. 1,883,484; Oct. 18.
Coating machine. F. Kinzbach. 1,883,305; Oct. 18.
Coating particles. C. C. De Witt. 1,883,614; Oct. 18.
Coating, Wrinkle finish. F. B. Root. 1,883,408; Oct. 18.
Cock, Gas range. P. S. Harper. 1,882,836; Oct. 18.
Cocos fibers, Recovery of. E. Elöd. 1,882,657; Oct. 18.
Coils, Apparatus for testing electrical. O. P. Haegele and C. Paulson. 1,882,815; Oct. 18.
Color printing press. H. A. W. Wood. 1,883,227; Oct. 18.
Comb: *See*—
Hair waving comb.
Comb foundation. H. H. Root. 1,882,938; Oct. 18.
Commutators, Making. F. W. Cotterman. 1,883,736; Oct. 18.
Compact, Cleansing tissue. W. Medoff. 1,883,852; Oct. 18.
Compact, Interproximal. F. H. Connor. 1,883,584; Oct. 18.
Compartment box, Multiple. G. M. Duvall and J. L. Israelson. 1,883,632; Oct. 18.
Composition friction element. J. D. Alley. 1,882,702; Oct. 18.
Composition of matter. J. J. Grebe. 1,882,809; Oct. 18.
Compound and base for use in the manufacture of greases. A. Horwitz. 1,882,664; Oct. 18.
Compressor. W. E. Bihl and A. Ramclaw. 1,883,328; Oct. 18.

Compressor, Lubricant. L. H. Wheeler. 1,883,201; Oct. 18.
Concentrator. M. J. Kermer. 1,883,378; Oct. 18.
Concrete floor construction. H. L. Wells. 1,883,191; Oct. 18.
Condenser motor, Single phase. E. C. Hallman. 1,882,733; Oct. 18.
Condenser, Variable. S. Cohen. 1,883,579; Oct. 18.
Conductor, Electrical. E. H. Yonkers. 1,883,269; Oct. 18.
Conductors, Coating electrical. K. M. Watson. 1,883,155; Oct. 18.
Confection making apparatus. A. L. Bausman and H. C. Baum. 1,883,482; Oct. 18.
Connection, Tie rod end. E. K. Baker. 1,883,748; Oct. 18.
Connection, Yieldable. A. A. Ross. 1,883,825; Oct. 18
Constant line and speaker impedance volume control. L. O. Doran. 1,883,624; Oct. 18.
Contact material. E. W. Engle. 1,883,650; Oct. 18.
Container. F. Meier. 1,883,390; Oct. 18.
Container and shaving cup, Combined shaving soap. A. T. Cussons. Des. 87,959; Oct. 18.
Container, Collapsible. R. L. Cobb. 1,883,577; Oct. 18.
Container, Collapsible. E. A. Whittle. 1,883,207; Oct. 18.
Container, Ice cream. S. J. Benn. Des. 87,956; Oct. 18.
Container, Metal. J. H. Renshaw. 1,883,823; Oct. 18.
Container, Meter. P. C. and A. F. Bond and E. Orlando. 1,883,507; Oct. 18.
Container, Multiple-opening ice-cream. S. J. Benn. Des. 87,955; Oct. 18.
Container-perforating and threading device for stoppers, faucets, and the like. J. M. Angeletti. 1,883,451; Oct. 18.
Container, Refrigerating. C. S. Andrews. 1,883,450; Oct. 18.
Container, Sectional display. A. F. Soben. 1,883,419; Oct. 18.
Control for motor-driven apparatus. O. Stamets and L. Duckworth. 1,883,051; Oct. 18.
Control of voltage in dynamo-electric machines, Device for quick. W. Hahnemann and R. Herzog. 1,882,819; Oct. 18.
Control system. T. J. Atkins. 1,882,726; Oct. 18.
Control system, Automatic. J. W. Bryce. 1,882,765; Oct. 18.
Control system, Frequency. W. A. Marrison. 1,882,849; Oct. 18.
Controlling mechanism. J. M. Benjamin. 1,882,748; Oct. 18.
Conversion products of synthetic rubber, Production of. O. Schmidt, G. Niemann, and E. Meyer. 1,882,976; Oct. 18.
Conveyer. L. A. Buck. 1,883,528; Oct. 18.
Conveyer. H. Sheel. 1,883,007; Oct. 18.
Conveyer. J. C. Walter and R. Vogt. 1,883,426; Oct. 18.
Conveyer apparatus. G. H. Haines. 1,882,820; Oct. 18.
Conveyer roll. A. P. Strong. 1,883,422; Oct. 18.
Conveyer safety device, Dispatch. I. Tornberg. 1,883,121; Oct. 18.
Conveyer structure. A. P. Stanley. 1,883,054; Oct. 18.
Conveyer, Walking beam. R. S. Cochran. 1,883,763; Oct. 18.
Conveying mechanism for furnaces. W. M. Hepburn. 1,883,788; Oct. 18.
Cooker. J. Davidson. 1,882,781; Oct. 18.
Cooky display jar. V. V. Martin. 1,883,806; Oct. 18.
Cooling apparatus. E. Burborn. 1,883,533; Oct. 18.
Cooling unit. A. H. Baier. 1,883,462; Oct. 18.
Copper, Refining. J. W. Scott. 1,882,998; Oct. 18.
Cord testing machine. A. D. Weigolt. Des. 87,968; Oct. 18.
Core drill. M. C. Allen. 1,883,821; Oct. 18.
Corn, Apparatus for harvesting. S. H. Hale, W. H. Worthington and T. N. Pierson. 1,882,823; Oct. 18.
Costumer. L. R. Zifferer. 1,883,435; Oct. 18.
Cotton bat feeding machine. F. N. Ross. 1,882,944; Oct. 18.
Counter, Card. E. A. Ford. 1,882,796; Oct. 18.
Coupler. A. S. Goertz. 1,883,696; Oct. 18.
Coupler and yoke connecter. R. J. Olander. 1,882,869; Oct. 18.
Coupler, Lubricating. O. U. Zerk. 1,883,278–9; Oct. 18.
Coupler mechanism. E. P. Kinne. Re18,631; Oct. 18.
Coupler mechanism, Radial. W. J. Regan. 1,883,314; Oct. 18.
Coupling: *See*—
Pipe coupling.
Coupling. L. A. Vassakos. 1,883,164; Oct. 18.
Court, Indoor tennis. G. Hadden and C. A. Holden. 1,883,731; Oct. 18.
Cover, Filler. J. J. Scanlan. 1,882,963; Oct. 18.
Cover or the like, Pillow. A. Rosenstein. Des. 87,980; Oct. 18.
Covering, Combined floor and cove. W. J. Tompkins. 1,883,117; Oct. 18.
Covering for graves. P. E. Schroeder. 1,882,986; Oct. 18.
Cranberry picker. O. Tervo. 1,883,101; Oct. 18.
Crucible for alumino-thermic reactions. E. F. Begtrup. 1,883,755; Oct. 18.
Crystal mounting, Piezo-electric. G. M. Thurston. 1,883,111; Oct. 18.
Cultivator. F. P. Beedle and H. T. Kingsbury. 1,883,489; Oct. 18.
Current distribution system, Alternating. A. H. Kehoe. 1,883,236; Oct. 18.
Current distribution, System of alternating. J. S. Parsons. 1,883,237; Oct. 18.
Current mercury vapor apparatus, Alternating. F. Reynolds and A. L. Lees. 1,883,898; Oct. 18.
Current relays, Universal alternating. W. K. Howe. 1,882,846; Oct. 18.
Current transformer. A. Callsen. 1,882,773; Oct. 18.
Curtain support. W. C. Campbell. 1,883,545; Oct. 18.
Cushion: *See*—
Spring cushion.
Cushioning device. D. F. Sproul. 1,883,048–9; Oct. 18.
Cutter: *See*—
Rotary cutter.
String cutter.
Cutting and forming machine. A. E. Borton. 1,883,518; Oct. 18.
Cylinder, Drying. E. C. Greisen. 1,883,722; Oct. 18.
Cylinder lock. W. A. Thom. 1,883,326; Oct. 18.
Dahlia. J. J. Broomall. Pl. Pt. 36; Oct. 18.
Delivery device for vending machines, Rockable. G. P. Grant. 1,883,712; Oct. 18.
Designs to papers and the like, Method of and apparatus for applying. C. M. Bryan. 1,883,526; Oct. 18.
Desk adjunct. B. C. Hamm. 1,883,785; Oct. 18.
Desk and seat, Combined G. H. Abbott. 1,883,322; Oct. 18.
Desk, Portable. F. G. Gray. 1,883,714; Oct. 18.
Desk stand. E. C. Walter. 1,883,138; Oct. 18.
Detector: *See*—
Sheet detector.
Diaryl guanidines, Making. M. L. Weiss and C. P. Bardsley. 1,883,189; Oct. 18.
Die casting machine. A. P. Rosander and F. P. Tikalsky. 1,882,940; Oct. 18.
Die forming articles from sulphurized paper board. A. Abrams. 1,882,683; Oct. 18.
Die stock. B. T. Borden. 1,883,332–4; Oct. 18.
Die stock. R. B. Pealer. 1,883,397; Oct. 18
Dies, Making A. A. Braden. 1,883,335; Oct. 18.
Differential. J. Guilmette. 1,883,725; Oct. 18.
Disconnecting device, Automatic. H. A. W. Wood. 1,883,225; Oct. 18.
Dispatch system, Pneumatic. J. A. Bauer. 1,883,845; Oct. 18.
Dispatch tube apparatus, Pneumatic. J. T. Needham. 1,883,844; Oct. 18.
Dispenser for nails, tacks, etc. K. C. Bugg. 1,832,768; Oct. 18.
Dispensing apparatus. J. B. Gunn. 1,882,812; Oct. 18.
Dispensing device. J. R. Skoverski. 1,883,829; Oct. 18.
Doctor for paper making machinery. F. W. Vickery. 1,883,167; Oct. 18.
Dolly, Airplane service. I. A. Weaver and W. A. Ross. 1,883,156; Oct. 18.
Door closing device. J. H. Von Gartzen. 1,883,173; Oct. 18.
Door control, Chute. C. H. Chubbuck. 1,883,569; Oct. 18.
Door elevating means. F. C. Heinen. 1,882,842; Oct. 18.
Door for cylindrical receptacles. H. C. Ellis. 1,883,646; Oct. 18.
Door lock, Car. C. R. Vegren. 1,883,165; Oct. 18.
Door mechanism. C. C. Tomkinson. 1,883,118; Oct. 18.
Door, Sliding refrigerator car. A. Wasberg and K. J. Tobin. 1,883,149; Oct. 18.
Draft rigging, Railway. S. B. Haseltine. 1,882,837; Oct. 18.
Drawing board. W. Dreifuss. 1,883,628; Oct. 18.
Drier for indoor use, Clothes. A. Wolf. 1,883,219; Oct. 18.
Drill: *See*—
Core drill.
Seed drill.
Drive, Press unit. H. A. W. Wood. 1,883,256; Oct. 18.
Drying device for inked sheets, Automatic. H. M. Kannee. 1,883,795; Oct. 18.
Dumping body construction, Three-way. E. R. Barrett. 1,883,474; Oct. 18.
Dyestuffs, Manufacture of azo. G. H. Ellis. 1,883,356; Oct. 18.
Dyestuffs, Secondary disazo. J. Baddiley and J. Hill. 1,883,325; Oct. 18.
Economizer tube support. J. E. Trainer and I. L. Langvand. 1,883,123; Oct. 18.
Egg product, Process of producing. A. K. Epstein. 1,883,052; Oct. 18.
Egg treating machine. B. E. Ford. 1,883,669; Oct. 18.
Electric braking system, Manual. M. W. McConkey. 1,882,852; Oct. 18.
Electric discharge tube. J. G. W. Mulder. 1,882,671; Oct. 18.
Electric switch. C. D. Ainsworth. 1,882,687; Oct. 18.
Electric switch. A. O. Austin. 1,882,728; Oct. 18.
Electric switch. G. J. Meuer. 1,882,857; Oct. 18.
Electric switch. A. C. Rowley. 1,882,674; Oct. 18.
Electric switch. W. C. Tregoning. 1,883,125–6; Oct. 18.
Electric switching machine. R. E. Tafel. 1,883,090; Oct. 18.
Electric transfer for tabulating machines. J. W. Bryce. 1,882,764; Oct. 18.
Electrical apparatus. J. F. Cullin. 1,882,779; Oct. 18.
Electrical devices, Apparatus for connecting. J. Yolles. 1,883,268; Oct. 18.

Electrical distribution regulating system for railway cars. P. S. Westcott. 1,883,198; Oct. 18.
Electrical induction apparatus. Z. O. St. Palley. 1,883,830; Oct. 18.
Electrical precipitation apparatus. H. B. Rüder. 1,882,049; Oct. 18.
Electrical resistance device. B. O. Templeton. 1,883,098; Oct. 18.
Electrical switch. J. C. Bogle. 1,883,245; Oct. 18.
Electrical switch, L. A. M. Phelan. 1,883,241; Oct. 18.
Electrical switch. L. A. M. Phelan. 1,883,244; Oct. 18.
Electromagnetic equalizing brake. V. Bendix. 1,882,746; Oct. 18.
Electron discharge device. V. L. Ronci. 1,882,936; Oct. 18.
Electron discharge device. P. Schwerin. 1,882,994; Oct. 18.
Elevator: *See*—
Camera frame elevator.
Elevator control system. W. F. Eames. 1,882,780; Oct. 18.
Emulsifying agents, Production of. H. Beller and M. Luther. 1,882,741; Oct. 18.
Engine: *See*—
Aviation engine.
Liquid fuel engine.
Internal-combustion engine.
Engine and valve construction, Internal combustion. A. D. Snyder. 1,883,038; Oct. 18.
Engine for motor vehicles. E. Schimanek. 1,882,971; Oct. 18.
Engines, Fuel feeding system for internal combustion. A. G. Redmond. 1,882,896; Oct. 18.
Enlarging apparatus. C. Bornmann. 1,883,510; Oct. 18.
Envelope and blank therefor, Return. B. F. Bartsch. 1,883,475; Oct. 18.
Envelope perforator. W. J. Stanley. 1,883,056; Oct. 18.
Equalizing mechanism for pressing machines. E. Davis. 1,883,604; Oct. 18.
Ester interchange with organic acids. G. D. Graves. 1,882,808; Oct. 18.
Esterification product of dicarboxylic acids and their production. F. Webel. 1,883,182; Oct. 18.
Evaporator. M. J. Kermer. 1,883,379; Oct. 18.
Expansion chamber for refrigerating mechanism. G. Muffly. Re18,633; Oct. 18.
Explosive composition. C. P. Spaeth. 1,883,044–5; Oct. 18.
Extension clip. C. Campbell. 1,883,540; Oct. 18.
Extractor: *See*—
Clear top extractor.
Liquid extractor.
Extracts from grain, Separating. A. E. Becker. 1,882,738; Oct. 18.
Extrusion apparatus. C. C. Bunker. 1,883,531; Oct. 18.
Eyeglass lens. G. H. Rhue. 1,882,909; Oct. 18.
Fabric: *See*—
Knitted fabric.
Textile fabric.
Reenforcing fabric.
Fabric and product thereof, Treatment of. C. Dreyfus and H. Platt. 1,883,348; Oct. 18.
Fan or blower. N. F. T. Saunders. 1,882,961; Oct. 18.
Fan, rotating. E. S. Hemmerly. 1,882,663; Oct. 18.
Fastener. A. H. Swett. 1,883,088; Oct. 18.
Fastener-inserting machine. T. E. Grimes. 1,883,868; Oct. 18.
Fastening device, more especially for hoods. L. Marque. 1,883,804; Oct. 18.
Fastening, Sliding clasp. V. Puc. 1,882,672; Oct. 18.
Fatliquoring. I. C. Somerville. 1,883,042; Oct. 18.
Faucet. E. P. Stein. 1,883,061; Oct. 18.
Feeder for pulverized materials. R. S. Moore. 1,882,861; Oct. 18.
Fertilizer composition. E. F. Grether. 1,883,718; Oct. 18.
Figure toy. L. Marx. Des. 87,969–70; Oct. 18.
Filaments and product thereof, Making artificial. C. Dreyfus and W. Whitehead. 1,883,347; Oct. 18.
Filaments, Apparatus for forming. H. Taylor. 1,883,423; Oct. 15.
File. J. Beck. 1,883,754; Oct. 18.
File, Route. L. A. Ellison. 1,883,647; Oct. 18.
Filling and weighing machine. C. F. Richard. 1,883,233; Oct. 18.
Filling device. J. D. McCabe. 1,882,668; Oct. 18.
Film and making same, Sound. H. E. Chipman. 1,883,559; Oct. 18.
Film and making the same, Sound. H. E. and H. H. Chipman. 1,883,562; Oct. 18.
Film holder for cameras. C. Bornmann. 1,883,511; Oct. 18.
Filter element, Armored. O. V. Greene. 1,883,715; Oct. 18.
Filter floor construction, Trickling. J. G. Barbour. 1,883,468; Oct. 18.
Finishing machine for small articles. J. M. Christman. 1,883,567; Oct. 18.
Fire escape. A. L. Vanasse. 1,883,849; Oct. 18.
Fire extinguishing and fire protective method. B. Richards. 1,882,911; Oct. 18.
Fish, Apparatus for filleting. R. and A. S. Reid. 1,883,822; Oct. 18.
Fish lure. S. Goerke. 1,883,695; Oct. 18.
Fishing lure. L. A. Chaplean. Des. 87,958; Oct. 18.
Fishing reel. F. Burdick. 1,882,771; Oct. 18.
Fitting for mops. E. H. Tate. 1,883,091; Oct. 18.
Fixture hanger. H. D'Oller, jr. 1,883,620; Oct. 18.
Fixtures, Producing assembling. S. E. Boynton. 1,882,755; Oct. 18.
Floor and scale construction, Combination. S. Berson. 1,883,496; Oct. 18.
Flow equalizing means. C. E. Lucke. 1,883,309; Oct. 18.
Fluid brake. H. M. Crane. 1,883,588; Oct. 18.
Fluid control means for cooking utensils. S. A. Haines. 1,882,821; Oct. 18.
Flux box gate. V. P. Wendle. 1,883,427; Oct. 18.
Folding and delivery mechanism. H. A. W. Wood. 1,883,224; Oct. 18.
Folding box. C. S. Andrews. 1,883,323; Oct. 18.
Folding machine. E. B. Roby. 1,882,923; Oct. 18.
Folding machine. R. J. Waterworth. 1,883,152; Oct. 18.
Folding mechanism. H. A. W. Wood. 1,883,226; Oct. 18.
Folding table. H. H. Root. 1,882,939; Oct. 18.
Food products, Apparatus for treating. W. De Back and O. S. Sells. 1,883,606; Oct. 18.
Frame: *See*—
Harvester frame.
Frame for tractors, Extension. A. Ronning. 1,883,407; Oct. 18.
Freezer. H. E. Blood. 1,882,751; Oct. 18.
Frequency producer. W. A. Marrison. 1,882,850; Oct. 18.
Fruit juices and making the same, Powdered citrus. R. M. Washburn. 1,883,150; Oct. 18.
Fruit juices, Preserving. H. C. Stephens. 1,883,420; Oct. 18.
Frying pan. M. Meligren. 1,882,670; Oct. 18.
Fuel pumping device. E. A. Rockwell. 1,882,928; Oct. 18.
Fuel pumping device. W. H. Schulze. 1,882,988; Oct. 18.
Fuel saving and combustion regulating device. R. J. Jenkins. 1,883,295; Oct. 18.
Furnace: *See*—
Glass furnace.
Puddling furnace.
Furnace. L. Lee. 1,883,383; Oct. 18.
Furnace for heat treating metals. W. R. Chapin. 1,883,555; Oct. 18.
Furnace lining. E. L. Crosby and A. E. Rhoads. 1,883,590; Oct. 18.
Fuse clip. J. G. Jackson. 1,883,790; Oct. 18.
Game board. J. L. Swinderman. Des. 88,003; Oct. 18.
Game table. J. P. Partlow. Des. 87,977; Oct. 18.
Garment. W. D. Craig. 1,883,587; Oct. 18.
Garment hanger. V. J. Marek. 1,882,667; Oct. 18.
Garment pocket. J. P. Baccaro. 1,883,461; Oct. 18.
Gas, Apparatus for generating combustible. C. O. Wannack. 1,883,143; Oct. 18.
Gas burner. C. W. Campbell and S. J. Cook. 1,883,541; Oct. 18.
Gas burner. C. M. Dibble. 1,883,615; Oct. 18.
Gas, Device for determining the condition of a. M. C. W. Tomlinson. 1,883,116; Oct. 18.
Gas fixture, Combination. J. G. Ames. 1,882,703; Oct. 18.
Gas, Generating a combustible. C. O. Wannack. 1,883,142; Oct. 18.
Gas mixture suitable for substantially complete combustion, Preparing a. H. Foersterling. 1,882,795; Oct. 18.
Gas regulator attachment, Compensating. E. A. Clark. 1,883,571; Oct. 18.
Gas treating device. C. M. Ashley. 1,883,456; Oct. 18.
Gas water heater. O. W. Hahn. 1,883,733; Oct. 18.
Gaseous reactions, Conducting exothermic. C. B. Clark. 1,883,570; Oct. 18.
Gases for electrical precipitation, Conditioning. C. W. J. Hedberg. 1,883,372; Oct. 18.
Gases from high pressure vessels, Device for withdrawing low pressure. P. Gilgenberg. 1,883,690; Oct. 18.
Gases, Purification of blast furnace. C. W. J. Hedberg. 1,883,373; Oct. 18.
Gasket. W. J. Dennis. 1,883,600; Oct. 18.
Gasoline, Making. O. Behimer. 1,883,850; Oct. 18.
Gate: *See*—
Flux box gate.
Tail gate.
Gate. L. U. Jobes. 1,883,792; Oct. 18.
Gauge: *See*—
Axle gauge.
Knife gauge.
Jack and pressure gauge.
Snap gauge.
Gear, Change speed. K. Maybach. 1,883,743; Oct. 18.
Gear, Draft. J. M. Hall. 1,882,832; Oct. 18.
Gear, Draft. D. F. Sproul. 1,883,050; Oct. 18.
Gear, Draft. H. E. Tucker. 1,883,132; Oct. 18.
Gear, Friction draft. R. R. Stevens. 1,883,064. Oct. 18.
Gear holding and centralizing device. D. C. Page. 1,882,871; Oct. 18.
Gear holding and centralizing device. G. D. Scott. 1,882,997; Oct. 18.
Gear, Steering. H. Marles. 1,882,848; Oct. 18.
Gear, Variable speed friction. E. Christiansen. 1,883,565; Oct. 18.
Gearing, Variable speed. M. Björndal and E. A. Wick. 1,883,500; Oct. 18.
Generator: *See*—
Glass generator.
Steam generator.
Oscillation generator.
Generator control. D. L. Wertz. 1,883,428; Oct. 18.
Glaserite, Recovering. H. T. Woodward. 1,883,261; Oct. 18.
Glass and apparatus therefor, Heating. F. G. Schwalbe. 1,882,992; Oct. 18.
Glass furnace. E. E. Slick. 1,883,028; Oct. 18.
Glass, Method and apparatus for drawing sheet. E. T. Ferngren. Re18,624; Oct. 18.

Glass, Process and apparatus for making. H. L. Halbach. 1,883,734; Oct. 18.
Glassware and making same. A. H. Stewart. 1,883,065; Oct. 18.
Glove. I. Steinberger. 1,883,062; Oct. 18.
Golf driving indicator. T. H. Decker. 1,882,783; Oct. 18.
Golf putting device. T. H. Decker. 1,882,784; Oct. 18.
Governor, Flow. R. Welcker. 1,883,190; Oct. 18.
Grading machine. B. H. Flynn. 1,883,667; Oct. 18.
Grain divider extension. T. N. Pierson. 1,882,875; Oct. 18.
Gramophone. A. C. Williams. 1,883,841; Oct. 18.
Grapple. N. P. E. Andersen and M. B. Bradley. 1,882,704; Oct. 18.
Grease, Mill. M. H. Arveson. 1,882,721; Oct. 18.
Grille, Portable electric. J. H. Reichert. 1,882,901; Oct. 18.
Grinding apparatus. L. C. Shippy and L. C. Goad. 1,883,016; Oct. 18.
Grinding machine. G. A. De Vileg. 1,883,612; Oct. 18.
Grinding machine. F. S. Haas. 1,882,814; Oct. 18.
Guard, Finger. H. A. W. Wood. 1,883,258; Oct. 18.
Guide rail lubricator. T. Brady. 1,883,515; Oct. 18.
Gun. E. H. Smith. 1,883,028; Oct. 18.
Hair waving comb. G. F. and G. A. Waters. 1 883,151; Oct. 18.
Hand bag. T. D. Gomi. 1,883,702; Oct. 18.
Hanger: *See*—
Fixture hanger. Radiator hanger.
Garment hanger. Spouting or gutter hanger.
Hanger for brooms or mops, Adjustable. C. W. Meggenhofen and J. L. Zink. 1,883,808; Oct. 18.
Harvester and potato digger, Beet. G. D. Gillespie. 1,883,691; Oct. 18.
Harvester, Beet. W. J. Flintjer. 1,883,666; Oct. 18.
Harvester frame. C. Christiansen. 1,883,564; Oct. 18.
Harvesting machine. A. G. and A. Ronning. 1,883,402; Oct. 18.
Hat, Garden. E. H. Marshall. Des. 87,999; Oct. 18.
Hat making machine. I. A. Eichenbaum. 1,883,639; Oct. 18.
Headgear. S. Bloom. 1,883,756; Oct. 18.
Headlight. B. B. Fortney. 1,883,359–61; Oct. 18.
Headlight and switch. J. S. Beltz. 1,882,745; Oct. 18.
Headlight for motor vehicles. N. M. Gage. 1,883,681; Oct. 18.
Heat control device. B. H. Cox and H. I. Snow. 1,883,766; Oct. 18.
Heat transfer apparatus. G. C. Derry. 1,883,769; Oct. 18.
Heater: *See*—
Gas water heater. Manifold heater.
Heater for permanent wave machines. W. G. Shelton. 1,883,828; Oct. 18.
Hogshead, Knockdown. W. B. Foreman. 1,883,670; Oct. 18.
Hoist, Gravity dump body. E. R. Barrett. 1,883,472; Oct. 18.
Holder and bottle opener, Combination tumbler. K. Rettich. Des. 87,978; Oct. 18.
Holder, Bag. C. E. Constable. 1,883,585; Oct. 18.
Holder, Book. H. Anderson. 1,882,710; Oct. 18.
Holder, Check. R. S. Young and P. Devlin. 1,883,271; Oct. 18.
Holder, Check-book stub. C. B. Snively and H. M. Wolf. 1,883,035; Oct. 18.
Holder, Electrode. E. W. McIntire. 1,883,807; Oct. 18.
Holder, Flower. W. R. Stuck. Des. 88,002; Oct. 18.
Holder, Folding check-book. C. B. Snively and H. M. Wolf. 1,883,036; Oct. 18.
Holder for bobbins or spools. W. B. Rulon, jr. 1,882,950; Oct. 18.
Holder for crystal resonators. F. A. Polkinghorn. 1,882,885; Oct. 18.
Holder for glass cutter cartridges. G. W. Aldeen. 1,883,445; Oct. 18.
Holder for hogs and other animals. E. A. Dahl. 1,883,598; Oct. 18.
Holder, Nonslipping plate. R. Sturm. 1,883,081; Oct. 18.
Holder, Razor. S. T. Alabiso. 1,882,688; Oct. 18.
Holder, Tool. G. A. De Vileg. 1,883,611; Oct. 18.
Holder, Tool. C. B. Gray. 1,883,713; Oct. 18.
Hook for safety belts, Attachment. H. E. Campbell. 1,883,544; Oct. 18.
Hook rule. C. M. Nicholson and E. Anderson. 1,882,865; Oct. 18.
Hopper, Weighing. H. H. Barber. 1,882,737; Oct. 18.
Horn. J. M. Anfero. 1,883,458; Oct. 18.
Housing for universal joints. C. Gerold. 1,883,688; Oct. 18.
Housing, Scale. W. Timson. Des. 87,985; Oct. 18.
Hydrocarbons, Recovery of unsaturated aliphatic. O. Schmidt and O. Grosskinsky. 1,882,978; Oct. 18.
Hydrogen. Production of. O. Schmidt and G. Niemann. 1,882,977; Oct. 18.
Hydroxy aromatic compounds, Manufacture of. W. J. Hale and J. W. Britton. 1,882,825; Oct. 18.
Ice cream and similar frozen products, Continuous manufacture of. J. G. Glauser. 1,882,660; Oct. 18.
Ignition apparatus. J. L. Arthur. 1,882,720; Oct. 18.
Ignition apparatus. J. T. Fitzsimmons. 1,882,793; Oct. 18.
Impaling pin. H. A. W. Wood. 1,883,259; Oct. 18.
Impulses to control the production of impulses of different frequency, System for causing. L. M. Potts. 1,882,802; Oct. 18.
Incinerator, Garbage and refuse. F. R. Jones. Re18,622; Oct. 18.
Inclosure elements on containers, Method of and apparatus for securing. D. D. Shewmon and W. Schroeder, 1,883,011; Oct. 18.
Incubator and brooder. H. W. Zellner. 1,883,272; Oct. 18.
Index stand. P. O. Unger. 1,883,255; Oct. 18.
Indicating device. J. W. Bryce. 1,882,703; Oct. 18.
Indicator: *See*—
Golf driving indicator.
Inductance unit and method of cooling. B. J. Chromy. 1,883,568; Oct. 18.
Infolding machine. W. L. Dixon. 1,883,343–5; Oct. 18.
Ingot mold. A. B. Kinzel. 1,883,382; Oct. 18.
Ingots, Making. P. C. Ripley. 1,882,917; Oct. 18.
Ink supplying regulator. H. A. W. Wood. 1,883,257; Oct. 18.
Inking device for printing machines. P. J. Clark. 1,883,572; Oct. 18.
Inkwell. D. Willey. 1,883,210; Oct. 18.
Intaglio printing machine, Multicolor. A. A. Egli. 1,883,638; Oct. 18.
Internal combustion engine. J. C. Geiger. 1,883,686; Oct. 18.
Internal combustion engine. E. Schimanek. 1,882,970; Oct. 18.
Internal combustion engine. B. C. Stickney. 1,883,066; Oct. 18.
Internal combustion engine, Multiple-cylinder two-stroke. F. Gosslau. 1,883,781; Oct. 18.
Ironing machine. W. J. Asher. 1,883,750; Oct. 18.
Jack. G. E. Weaver and A. Vettel. 1,883,157; Oct. 18.
Jack and pressure gauge, Combination. W. H. Watrous. 1,883,154; Oct. 18.
Jar: *See*—
Cooky display jar.
Joint: *See*—
Ball and socket joint. Safety joint.
Rail joint. Self adjusting joint.
Joint. I. P. Whitehouse. 1,883,203; Oct. 18.
Joint for drill stems, Collapsible. G. V. Powers. 1,882,894; Oct. 18.
Joints, Method of sealing. J. E. Boynton. 1,882,757; Oct. 18.
Jug or similar article. H. S. Wade. Des. 87,987; Oct. 18.
Keyboard, Auxiliary. S. Tofé y Bonilla. 1,883,115; Oct. 18.
Kiln. H. M. Robertson. 1,883,400; Oct. 18.
Knife. J. R. Warren. 1,883,726; Oct. 18.
Knife gauge. A. C. Bolton. 1,883,505; Oct. 18.
Knitted fabric, Tubular T. H. Jones. 1,883,297; Oct. 18.
Knitting machine. B. T. Cole. 1,883,581; Oct. 18.
Knockdown box. L. Chain. 1,883,553; Oct. 18.
Lacquer for application by brushing. G. Steimmig. 1,883,060; Oct. 18.
Lamp, Electric. H. G. Martin. 1,883,803; Oct. 18.
Latch mechanism, Door. W. C. Devereaux. 1,883,610; Oct. 18.
Latch, Spring bolt. H. Ter Meer. 1,883,099; Oct. 18.
Lathe. G. D. Sundstrand. 1,883,082; Oct. 18.
Lathes, grinders and the like, Live center for. A. Storm and T. Thorsen. 1,883,075; Oct. 18.
Lawn edge trimmer. L. A. Olsen and S. J. Roach. 1,883,817; Oct. 18.
Leak device, Slow. L. A. Grimes. 1,883,720; Oct. 18.
Lebeck, Oscar, New York, N. Y. Children's chair or similar article. Des. 87,965; Oct. 18.
Leer feeder, Automatic rotary. I. H. Freese. 1,883,362; Oct. 18.
Leer loader. C. H. Hardman. 1,883,369; Oct. 18.
Legged structure. C. J. Symmonds. 1,883,083; Oct 18.
Lens apparatus, Pendulum controlled. S. A. Eskilson. 1,883,655; Oct. 18.
Level and plumb, Combined. A. F. Corrington. 1 833,586; Oct. 18.
Lid, Container. M. Harrison. Des. 87,963; Oct. 18.
Light-density composition of Paris-green and calcium arsenate and making the same. B. P. Webster. 1,833,188; Oct. 18.
Licht, stop light, and backing light for motor vehicles, Combined tail. F. L. Bamford. 1,883,466; Oct. 18.
Lighter. J. E. Barnes. 1,883,752; Oct. 18.
Lighting fixture. T. L. Howell. Des. 87,964; Oct. 18.
Line impression equalizer. E. L. Sanders. 1,882,955; Oct. 18.
Liners from pressure vessels, Removing. H. W. Fisher. 1,883,662; Oct. 18.
Link mechanism. W. Dowling. 1,883,770; Oct. 18.
Liquid dispensing apparatus. J. E. Head and C. F. Lukins. 1,883,787; Oct. 18.
Liquid dispensing apparatus. G. W. Stedwell. Re18,632; Oct. 18.
Liquid extractor, Automatic. L. W. Browne. 1,882,761; Oct. 18.
Liquid feeding device. T. Van Tuyl. 1,883,847–8; Oct. 18.
Liquid fuel engine. A. Bagnulo. 1,883,463; Oct. 18.
Liquid mixing apparatus. H. L. Walter. 1,883,139; Oct. 18.
Liquids, Method and apparatus for transporting viscous. W. M. Crosa. 1,883,594; Oct. 18.

Locating objects, Apparatus for. C. W. Robbins. 1,882,919; Oct. 18.
Lock: *See*—
Automobile lock. Cylinder lock.
Bag lock. Door lock.
Lock. G. D. Full. 1,882,794; Oct. 18.
Lock. E. B. Stone. 1,883,072; Oct. 18.
Lock. A. Voigt. 1,883,171–2; Oct. 18.
Lock mechanism, Door. R. N. Smith. 1,883,027; Oct. 18.
Locking device for clothes driers. R. G. Bicknell. 1,883,497; Oct. 18.
Loom attachment. C. Hargreaves. 1,883,370; Oct. 18.
Loom, Shuttleless. H. Dreyfuss and F. C. Hale. 1,883,354; Oct. 18.
Looms, Filling end controller for replenishing. H. H. Burdett. 1,883,532; Oct. 18.
Lubricant reservoir and dash pump. O. U. Zerk. 1,883,274; Oct. 18.
Lubricating apparatus. O. U. Zerk. 1,883,280; Oct. 18.
Lubricating apparatus. O. U. Zerk. 1,883,282–3; Oct. 18.
Lubricating means and method. O. U. Zerk. 1,883,281; Oct. 18.
Lubricating system. O. U. Zerk. 1,883,273; Oct. 18.
Lubricating system for internal combustion engines. V. W. Thompson and B. N. Pierce. 1,883,110; Oct. 18.
Lubrication method and means. O. U. Zerk. 1,883,277; Oct. 18.
Lubricator: *See*—
Guide rail lubricator.
Machine for analyzing and printing upon record cards. J. T. Schaaff. 1,882,964; Oct. 18.
Machine for automatically producing and assembling signatures. E. D. Rader. 1,882,895; Oct. 18.
Machine for cutting friction elements. H. N. Smith. 1,883,025; Oct. 18.
Machine for cutting off pipe and the like. C. L. Taylor. 1,883,093; Oct. 18.
Machine for handling canned goods. C. B. Stretch. 1,883,078; Oct. 18.
Machine for heat treating glass tubes and the like. C. E. BreMiller. 1,883,523; Oct. 18.
Machine for making pulp articles. F. W. Staples. 1,883,058; Oct. 18.
Machine for pickling sheets and the like. C. L. Taylor. 1,883,092; Oct. 18.
Machine for rolling or piercing billets. W. R. Clark. 1,882,655; Oct. 18.
Machine for stitching wire fabrics. J. P. Wels. 1,883,177; Oct. 18.
Magazine, Storage. G. M. Porter. 1,882,890; Oct. 18.
Mandrel, Expanding. G. Anderson. 1,882,709; Oct. 18.
Manifold heater. E. R. Armstrong. 1,883,452; Oct. 18.
Manometer. M. Morrison. 1,883,513; Oct. 18.
Mantle head. C. W. Davis. 1,883,602; Oct. 18.
Marine motor. F. O. Fernstrum. 1,883,661; Oct. 18.
Mark indicator for tests, Selective. J. A. Wiley. 1,883,199; Oct. 18.
Marking roll. H. G. Weber. 1,883,185; Oct. 18.
Marking roll composition. H. G. Weber. 1,883,183; Oct. 18.
Marking roll with hard rubber surface. H. G. Weber. 1,883,184; Oct. 18.
Marking roll with metal plates and cushion. H. G. Weber. 1,883,187; Oct. 18.
Masking for cinematograph and like screens. G. S. and R. G. Hall. 1,882,828; Oct. 18.
Masonry structures, Repairing. L. S. Wertz. 1,883,196; Oct. 18.
Mat. J. F. Duffy. 1,883,737; Oct. 18.
Material advancing apparatus. L. L. Weaver. 1,883,181; Oct. 18.
Material, Apparatus for handling. W. Schroeder. 1,882,985; Oct. 18.
Material, Apparatus for working. J. R. Shea. 1,883,006; Oct. 18.
Material, Distributing moisture absorbing. W. O. Roy. 1,883,409; Oct. 18.
Material handling apparatus. E. F. Campbell. 1,883,543; Oct. 18.
Material, Method and apparatus for piling. R. B. Brown. 1,882,760; Oct. 18.
Material, Method of and apparatus for pulverizing and treating. W. J. Wohlenberg. 1,883,218; Oct. 18.
Material sorting machine. W. H. Spire. 1,883,047; Oct. 18.
Material washing machine. G. E. Krider. 1,883,800; Oct. 18.
Material weighing and control apparatus. R. J. Sholtz. 1,883,017; Oct. 18.
Materials, Apparatus for screening. D. A. Weber. 1,883,186; Oct. 18.
Materials made of or containing cellulose derivatives, Dyeing, printing, or stenciling of. H. Dreyfus, G. H. Ellis, T. Ockmen, and H. C. Olpin. 1,883,852; Oct. 18.
Materials made of or containing cellulose derivatives, Treatment of. H. Dreyfus. 1,883,350; Oct. 18.
Materials, Method of and apparatus for distributing. F. P. Nickerson. 1,882,864; Oct. 18.
Materials, Sealing. G. L. Rock. 1,882,925; Oct. 18.
Matrix, Type casting. L. H. Gilbert. 1,883,689; Oct. 18.
Mattress. L. E. Pittoni. 1,882,876; Oct. 18.
Mayonnaise, Stabilizing the consistency of. D. M. Gray. 1,883,367; Oct. 18.
Measuring and feeding liquids, Apparatus for. M. Carbonaro. 1,883,762; Oct. 18.
Mercury boiler. G. D. Ebbets. 1,883,635; Oct. 18.
Mercury switch. C. J. Warnke. 1,883,146; Oct. 18.
Metal alloys, Forming. J. O. Betterton. 1,882,749; Oct. 18.
Metal articles, Making. W. Schubardt and L. Schlecht. 1,882,987; Oct. 18.
Metal, Fusible. S. L. Palmer. 1,882,872; Oct. 18.
Metallic articles, Production of shaped. L. Schlecht, W. Schubardt, and F. Duftschmid. 1,882,972; Oct. 18.
Meter: *See*—
Tension meter.
Mill: *See*—
Rolling mill.
Mirror assembly, Rear view. F. W. Zink. 1,883,287; Oct. 18.
Mirror support. L. L. Turner. 1,883,834; Oct. 18.
Mold: *See*—
Ingot mold.
Mold facing. F. M. Poe. 1,882,882; Oct. 18.
Molding machine. J. D. Abram. 1,882,682; Oct. 18.
Molding machine. D. J. Campbell. 1,883,542; Oct. 18.
Mop wringer. R. H. Robb. 1,882,918; Oct. 18.
Mop wringing apparatus. S. Carvour. 1,883,551; Oct. 18.
Mordant, New. M. L. Crossley and M. L. Dolt. 1,882,777–8; Oct. 18.
Motor: *See*—
Condenser motor. Marine motor.
Motor and pump assembly for ice cream freezers. E. Thompson. 1,883,109; Oct. 18.
Motor control device for telegraph and like signaling apparatus. R. D. Salmon and S. E. Kirk. 1,882,954; Oct. 18.
Motor control system. W. F. Eames. 1,882,788; Oct. 18.
Motor rheostat for acceleration. D. Santini. 1,882,958; Oct. 18.
Mount for machine guns. R. C. Coupland. 1,883,339; Oct. 18.
Mount for projecting lenses, Adjustable. W. F. Fouquet. 1,883,673; Oct. 18.
Mounting compresser. W. E. Bihl and A. Ramclaw. 1,883,330; Oct. 18.
Mounting, Door handle. M. H. Toncray. 1,883,119; Oct. 18.
Mounting for camera frame yoke. M. King. 1,883,796; Oct. 18.
Mounting for pitot tube connections or rod meters. E. S. Cole. 1,883,583; Oct. 18.
Mounting frame for electrical apparatus. E. D. Mead. 1,882,854; Oct. 18.
Mounting, Radiator guard. L. W. Dresser. 1,883,629; Oct. 18.
Mulch. F. H. Kerr. 1,883,381; Oct. 18.
Mulching. E. H. Angier. 1,882,713; Oct. 18.
Music builder. H. Rosecrants. 1,882,941; Oct. 18.
Music leaf turner. C. B. Snively and J. H. Wolf. 1,883,034; Oct. 18.
Musical instrument, Stringed. P. E. Blondin. 1,883,503; Oct. 18.
Musical instruments. B. K. Settergren. 1,883,001; Oct. 18.
News printing device, Late. O. C. Roesen. 1,882,933; Oct. 18.
Nipple, Lubricating. O. U. Zerk. 1,883,275; Oct. 18.
Nitrocellulose and making same, Alcohol-solubilized. C. Ellis. 1,883,644; Oct. 18.
Nitrocellulose and making the same, Low viscosity. W. C. Wilson. 1,883,215; Oct. 18.
Noodles, Manufacturing egg. A. K. Epstein and B. R. Harris. 1,883,653; Oct. 18.
Nozzle, Adjustable. H. C. Wright. 1,883,264; Oct. 18.
Nozzle, Irrigation. M. Estock. 1,883,650; Oct. 18.
Nozzle, Liquid dispensing. J. C. Woodford. 1,883,843; Oct. 18.
Nut and washer assembly, Coupled. A. Stoll. 1,883,068; Oct. 18.
Nut cracker. J. S. Buckwalter. 1,883,529; Oct. 18.
Nuts in glass containers, Packing and preserving. D. M. Gray. 1,883,366; Oct. 18.
Oil burner. H. W. Alden and M. A. Powers. 1,882,694; Oct. 18.
Oil burning equipment. G. D. Sundstrand. 1,883,832; Oct. 18.
Oil-feeding apparatus for engines. S. E. White. 1,883,202; Oct. 18.
Oil saver. G. W. Cunningham. 1,883,596; Oct. 18.
Oiler, Wheel flange. H. G. Warr. 1,883,148; Oct. 18.
Oils and making the same, Sludge resisting hydrocarbon. J. C. Pope. 1,882,887; Oct. 18.
Oils and simultaneously recovering asphalt, Converting. E. W. Beardsley and A. P. Sachs. 1,883,745; Oct. 18.
Oils, Conversion of hydrocarbon. E. W. Beardsley. 1,883,744; Oct. 18.
Oils, Converting hydrocarbon. O. Behimer. 1,883,491; Oct. 18.
Oils, Enhancing the viscosity of technical. M. Hagedorn. 1,882,816; Oct. 18.
Oils, Treatment of. J. B. Hill. 1,883,374; Oct. 18.
Opener, Bottle. A. F. Winters. 1,883,216; Oct. 18.
Opener, Electromechanical bottle. E. Velasquez. 1,883,835; Oct. 18.
Ornamental objects. E. B. Wilson and N. J. Ressetar. 1,883,214; Oct. 18.
Ortho-chlor-para-nitraniline, Preparation of. E. F. Grether and J. L. Keener, jr. 1,882,811; Oct. 18.

Oscillation generator. J. P. E. Achard. 1,882,684; Oct. 18.
Outlet box. H. S. Arnold. 1,883,457; Oct. 18.
Outlet box. H. D'Olier, jr. 1,883,621; Oct. 18.
Oxide cathodes, Manufacturing. E. Wiegand. 1,883,840; Oct. 18.
Package, Commercial. T. W. Ross. 1,882,946; Oct. 18.
Package for safety razor blades. P. H. Unsinger. 1,883,159; Oct. 18.
Packing, Frictional. H. J. Upton. 1,883,160; Oct. 18.
Packing process for silk yarn and the like. C. S. Andrews. 1,883,449; Oct. 18.
Pan: *See*—
Frying pan.
Panel. F. B. Root. Des. 88,001; Oct. 18.
Paper and felted sheet materials, Making. M. R. Ware. 1,883,144; Oct. 18.
Paper, Apparatus for measuring the thickness of. F. Sawford. 1,882,962; Oct. 18.
Paper bag. E. J. Thompson. 1,883,108; Oct. 18.
Paper making process. J. R. Simpson. 1,883,022; Oct. 18.
Paper or fabric a suede-like finish of waterproof property, Producing on. A. Burnett. 1,883,535; Oct. 18.
Paper pulp, Bleaching of. S. D. Wells. 1,883,193; Oct. 18.
Paper roll braking device. H. A. W. Wood. 1,883,222; Oct. 18.
Paper towel package. J. C. Sherman. 1,883,008; Oct. 18.
Paper with vapor preparatory to printing thereon, Apparatus for treating. E. R. Gaskin. 1,883,364; Oct. 18.
Pattern strip for spectacle frames or similar articles, Metallic. H. J. Langknecht. Des. 87,998; Oct. 18.
Pen, Fountain. A. O. Dahlberg. 1,882,780; Oct. 18.
Pencil. I. Krutt. 1,883,741; Oct. 18.
Perforating machine. A. W. Mills. 1,882,859; Oct. 18.
Perforating mechanism for use in printing machines. A. M. Zuckerman. 1,883,289; Oct. 18.
Phenol-aldehyde condensation products, Hardening. F. Seebach. 1,883,415; Oct. 18.
Phenols, Manufacture of. W. J. Hale and J. W. Britton. 1,882,824; Oct. 18.
Phenols, Manufacture of. W. J. Hale and E. C. Britton. 1,882,826; Oct. 18.
Photographic prints, Apparatus for washing. J. C. Reid, jr. 1,882,903; Oct. 18.
Piano accordion, Foot pedal. S. Suter. 1,882,960; Oct. 18.
Picker: *See*—
Cranberry picker.
Picture frame. P. E. Deal. Des. 87,960; Oct. 18.
Picture viewing screen, Relief. H. Hall. 1,882,829; Oct. 18.
Pictures, Projection of stereoscopic. H. E. Ives. 1,883,290–1; Oct. 18.
Piezo-crystal, Thermostatically controlled. H. Schumacher. 1,882,989; Oct. 18.
Piles, Method and apparatus for forming. G. L. Sherwood. 1,883,010; Oct. 18.
Pin: *See*—
Impaling pin.
Pin board. L. A. Beardsley. 1,883,483; Oct. 18.
Pipe and coupling, Flexible. A. W. Swartz. 1,883,080; Oct. 18.
Pipe coupling, Steam. F. N. Bard. 1,883,469; Oct. 18.
Pipe fitting for welding. E. H. Taylor. 1,883,094; Oct. 18.
Pipe hickey. T. M. Gillin. 1,883,692; Oct. 18.
Pipe supporter. V. W. Wills. 1,883,178; Oct. 18.
Pipe union. C. G. Boone. 1,883,509; Oct. 18.
Pipe wrapping apparatus. E. L. Rolfs and C. W. Fuller. 1,883,401; Oct. 18.
Piston for internal combustion engines. H. C. Edwards. 1,883,637; Oct. 18.
Piston ring. W. R. G. Andreasen and C. A. Toleman. 1,883,448; Oct. 18.
Piston ring testing machine. C. Breer. 1,883,522; Oct. 18.
Plant duster and fertilizer, Combined. E. C. Duncan. 1,883,771; Oct. 18.
Plant, Liquid-circulating. A. G. McGregor. 1,882,869; Oct. 18.
Plastic composition. E. W. Gardner and D. H. Felder. 1,883,683; Oct. 18.
Plate. E. L. Schnepf. Des. 87,981; Oct. 18.
Plate, Driven. A. W. Anderson. 1,882,706–7; Oct. 18.
Plug calipering device. M. Schwarze. 1,882,993; Oct. 18.
Plywood, Making. T. W. Dike. 1,883,616; Oct. 18.
Plywood, Making. T. W. Dike, I. F. Laucks, and C. N. Cone. 1,883,617; Oct. 18.
Plywood, Method and apparatus for producing. A. B. Birtles. 1,883,499; Oct. 18.
Polishing machine. K. C. Bugg. 1,882,769; Oct. 18.
Porous materials and the manufacturing process thereof. H. W. Greider. 1,882,810; Oct. 18.
Post for chain post binders, Extension. P. O. Unger. 1,883,253; Oct. 18.
Pouch. E. Soreny. 1,883,043; Oct. 18.
Powder composition, Black. W. A. McIntyre. 1,882,853; Oct. 18.
Power transmission. S. C. Carter. 1,883,550; Oct. 18.
Power transmission mechanism. A. A. Densmore. 1,883,342; Oct. 18.
Power transmitting devices, Making toothed. J. Edgar. 1,883,636; Oct. 18.
Preservatives, Apparatus for preparing. J. Reid. 1,882,904; Oct. 18.
Press: *See*—
Color printing press. Racket press.
Pressure equalizing means for multiple buck pressing machines. E. Davis. 1,883,603; Oct. 18.
Printing mechanism for tabulating machines. J. W. Bryce. 1,882,766; Oct. 18.
Product made from mica splittings and making same. C. Ellis. 1,883,045; Oct. 18.
Projectile, Bladed. E. W. Brandt. 1,883,758; Oct. 18.
Propeller blades, Forging. C. A. Brauchler. 1,883,519; Oct. 18.
Propeller, Variable pitch. J. F. Daugherty. 1,883,340; Oct. 18.
Protecting device for cashier windows and the like. C. A. Scheeler. 1,882,967; Oct. 18.
Protective arrangement. R. L. Webb. 1,883,839; Oct. 18.
Puddling furnace. H. W. Schoenfeldt. 1,883,413; Oct. 18.
Pulp, Method of and apparatus for forming articles of. B. C. Root. 1,882,937; Oct. 18.
Pulp stock at constant tonnage rate, Method of and apparatus for delivering. M. O. Schur. 1,882,991; Oct. 18.
Pump and the like, Hand-operated air. F. E. Hall. 1,882,827; Oct. 18.
Pump for liquids, Delivery-. R. Avigdor. 1,883,459; Oct. 18.
Pump, Portable sump. H. D. Yoder. 1,883,266; Oct. 18.
Pumping apparatus, Dual purpose. L. F. Easton. 1,883,634; Oct. 18.
Punch and die for roller bearing cages. S. A. Strickland. 1,883,079; Oct. 18.
Punch, Straight and complement. R. Lorant. 1,883,308; Oct. 18.
Push switch. H. Hansen and A. J. Bennett. 1,883,786; Oct. 18.
Quinone, Purification of. A. Zimmerli and R. C. Lyon. 1,883,284; Oct. 18.
Rack: *See*—
Secondary rack.
Rack. J. E. Bales. 1,883,827; Oct. 18.
Racket press. J. H. Smith. 1,883,030; Oct. 18.
Radiator hanger. R. H. Crosby. 1,883,591; Oct. 18.
Radio antenna. H. G. Bartsch. 1,883,476; Oct. 18.
Radio compass. H. W. Lamson. 1,883,802; Oct. 18.
Radio receiving apparatus. J. K. Johnson. 1,883,794; Oct. 18.
Radio receiving system. S. Cohen. 1,883,580; Oct. 18.
Rail and the like, Continuous process and apparatus for rolling scrap. G. W. Connors. 1,883,338; Oct. 18.
Rail joint. G. W. Wagner. 1,883,176; Oct. 18.
Railway draft appliance. W. J. Regan and E. George, jr. 1,882,900; Oct. 18.
Rafts, Log. B. E. Roberson. 1,883,824; Oct. 18.
Rake cleaner. M. J. Ahlgrim. 1,882,686; Oct. 18.
Ratchet mechanism. S. Crewe. 1,883,767; Oct. 18.
Ratchet wrench, Reversible. J. S. Dodge. 1,883,618; Oct. 18.
Razor, Safety. L. V. Aronson. 1,883,324; Oct. 18.
Razor, Safety. M. Tua. 1,883,131; Oct. 18.
Reamer cutting machine. F. O. Albertson. 1,882,691; Oct. 18.
Rebound check for starter drives. Y. Sekella. 1,883,418; Oct. 18.
Rebound check for starter pinions. D. L. Wertz. 1,883,429; Oct. 18.
Receptacle, Ash. J. H. Groth. 1,883,723; Oct. 18.
Receptacle, Desk pen. R. Back. Des. 87,953; Oct. 18.
Receptacle, Portable outlet. W. J. Ferris. 1,882,791; Oct. 18.
Receptacle, Sheet metal. G. A. Sexton. 1,883,003; Oct. 18.
Recorder: *See*—
Time recorder.
Reel: *See*—
Fishing reel.
Reel. H. P. Arkema and B. M. A. Trebes. 1,882,718; Oct. 18.
Reel. E. H. Branning. 1,883,518; Oct. 18.
Reenforcing fabric. E. L. Benedict. 1,882,747; Oct. 18.
Refractory composition for brake shoe molds. J. D. Alley. 1,882,701; Oct. 18.
Refrigerating apparatus. J. B. Breen. 1,883,521; Oct. 18.
Refrigerating apparatus. W. H. F. Schmieding. 1,882,979; Oct. 18.
Refrigerating installation. L. I. Beckwith. 1,883,487; Oct. 18.
Refrigerating or air conditioning apparatus. H. F. Smith. 1,883,024; Oct. 18.
Refrigerating system and method. P. A. Scherer and G. B. Ridley. 1,882,969; Oct. 18.
Refrigeration. J. H. Dennedy. 1,883,607. Oct. 18.
Refrigeration unit. D. Stanyo. 1,883,057. Oct. 18.
Refrigerator. W. E. Bihl. 1,883,329; Oct. 18.
Refrigerator. C. N. Foreman. 1,883,068; Oct. 18.
Refrigerator assembly, Electric. H. E. Blood. 1,882,752; Oct. 18.
Refrigerator unit. A. E. Brown. 1,884,759; Oct. 18.
Register: *See*—
Telephone register.
Regulator: *See*—
Ink supplying regulator.
Relay and circuits therefor, Thermionic. H. F. Breckel. 1,883,520; Oct. 18.

Relay, Electromagnetic. J. Erickson. 1,883,773; Oct. 18.
Relay for distant control. E. Granat. 1,883,783; Oct. 18.
Relay, Mechanical. C. I. Hall. 1,883,735; Oct. 18.
Release device for fire escape doors. R. W. Downes. 1,883,626; Oct. 18.
Remote control device. F. Van Voorhis, jr. 1,883,163; Oct. 18.
Removable screen. H. Gelfand. 1,883,687; Oct. 18.
Retarding chamber. W. K. Hodgman, jr. 1,882,843; Oct. 18.
Rifle support. H. T. Balmer. 1,883,465; Oct. 18.
Ring: *See*—
Piston ring.
Ring for hydrants, street lamp columns, metal or concrete posts, etc., Breakable. F. R. Banks. 1,883,467; Oct. 18.
Road machine. A. Ronning and A. G. Ronning. 1,883,403; Oct. 18.
Road maintainer. A. Ronning. 1,883,404; Oct. 18.
Roll wrapping machine. J. P. Aldrich and H. A. Morris. 1,882,695; Oct. 18.
Rolling mill. R. C. Walter. 1,883,140; Oct. 18.
Rolling screen. E. P. Rupprecht. 1,882,951; Oct 18.
Roof, Car. A. R. Wilson. 1,883,212–13; Oct. 18.
Roof for vehicles. J. H. Ford. 1,883,739; Oct 18.
Rotary cutter. F. P. Miller. 1,883,810; Oct. 18.
Rubber Method and apparatus for making thread. J. R. Gammeter. Re18,625; Oct. 18.
Rug making machine. C. A. Dahlen. 1,883,599; Oct. 18.
Sack open while picking potatoes or onions, Apparatus for holding the. J. A. Rodriquez. 1,882,931; Oct. 18.
Safety device. H. S. Wilson and A. E. Fohn. 1,883,248; Oct. 18.
Safety joint, Lockable. F. Stone. 1,883,071; Oct. 18.
Safety system for self-propelled vehicles, Automatic. A. A. Thomas. 1,883,107; Oct. 18.
Sales system, Automatic. H. R. Bland. 1,883,516–17; Oct. 18.
Sampling device. G. E. Silknitter. 1,883,021; Oct. 18.
Saw swage. D. E. Gommel. 1,883,703; Oct. 18.
Scale. T. H. Strachan. 1,883,077; Oct. 18.
Scale, Computing. F. M. Carroll. 1,882,774; Oct. 18.
Scale, Weighing. F. E. Carlson. 1,883,548; Oct. 18.
Scoring board, Card game. W. A. O'Brien. Des. 87,976; Oct. 18.
Scoring device for soap roll. L. P. Tiers. 1,883,112; Oct. 18.
Scraper control. H. H. Barber. 1,882,736; Oct. 18.
Screen: *See*—
Centrifugal paperstock screen. Removable screen. Rolling screen.
Picture viewing screen.
Screen retaining means, Rolling. A. J. Schmiedeskamp. 1,882,982; Oct. 18.
Screening apparatus. M. P. Reynolds. 1,882,908; Oct. 18.
Screw driver. T. J. Richey. 1,882,913; Oct. 18.
Screw driving mechanism. D. D. Rock. 1,882,924; Oct. 18.
Screw propeller for aircraft. R. Chillingworth. 1,883,336; Oct. 18.
Seal. R. H. White. 1,882,679; Oct. 18.
Secondary rack. C. L. Peirce, jr. 1,883,818; Oct. 18.
Seed drill. H. F. Turner. 1,883,133; Oct. 18.
Self-adjusting ball joint. M. P. Graham. 1,883,782; Oct. 18.
Sewage disposal system. G. R. Roddy. 1,882,930; Oct. 18.
Sewing machine. J. V. Poole. 1,882,886; Oct. 18.
Sewing machines, Feeding mechanism for. N. V. Christensen and H. J. LeVesconte. 1,883,566; Oct. 18.
Sewing machines, Feeding mechanism for. H. E. Dykeman. 1,883,633; Oct. 18.
Sewing machines or the like, Thread cutter for. C. W. H'Doubler. 1,883,746; Oct. 18.
Sewing machines, Thread cutter for. A. Ericsson. 1,883,054; Oct. 18.
Shackle line pick-up device, Portable. R. V. Plyler. 1,882,878; Oct. 18.
Shaft end, Flexible. F. A. Ross. 1,882,943; Oct. 18.
Shaping machine. R. H. Anderson. 1,882,711; Oct. 18.
Sharpener, Pencil. H. L. Wittstein. 1,883,217; Oct. 18.
Sharpener, Shears. J. R. Everhart. 1,883,658; Oct. 18.
Shears. H. B. Womack. 1,883,842; Oct. 18.
Sheet building material, Laminated. C. J. Beckwith. 1,883,485; Oct. 18.
Sheet conveying apparatus. H. Melin. 1,882,855; Oct. 18.
Sheet cutting machine. G. Spiess. 1,883,858; Oct. 18.
Sheet detector. A. W. Barrett. 1,883,471; Oct. 18.
Sheet material and its production, Waterproof. E. H. Angier. 1,882,715; Oct. 18.
Sheet material, Coloring. E. H. Angier and E. R. Dearborn. 1,882,714; Oct. 18.
Sheet material, Laminated. C. J. Beckwith. 1,883,486; Oct. 18.
Shelf device for refrigerator cabinets. G. J. Tilton. 1,883,883; Oct. 18.
Ship's log or like device. E. S. Cole. 1,883,582; Oct. 18.
Shock absorber. E. L. Beecher. 1,883,488; Oct. 18.
Shock absorber. W. A. Geiger. 1,882,801; Oct. 18.
Shock absorber. J. M. Hall. 1,882,830–1; Oct. 18.
Shock absorber. J. M. Hall. 1,882,833; Oct. 18.
Shock absorber. H. E. Jackson. 1,883,292; Oct. 18.
Shock absorber. A. A. Thayer. 1,883,436; Oct. 18.
Shock absorber, Hydraulic. J. B. Whitted. 1,883,206; Oct. 18.
Shock absorbing mechanism, Friction. W. A. Geiger. 1,882,799; Oct. 18.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,882,838; Oct. 18.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,882,840; Oct. 18.
Shock absorbing mechanism, Friction. R. J. Olander. 1,882,870; Oct. 18.
Shock-forming machine. C. Christiansen. 1,883,563; Oct. 18.
Shoe. C. Morali. Des. 87,972; Oct. 18.
Shoe bottom filler. A. Thoma. 1,883,106; Oct. 18.
Shoe sewing machine. J. Sünder. 1,883,859; Oct. 18.
Shoes, Filling. A. Thoma. 1,883,105; Oct. 18.
Shot shell and loading the same. R. G. Clyne. 1,883,575; Oct. 18.
Shoveling machine. W. Whaley. 1,883,200; Oct. 18.
Shower head. W. P. Ferguson. Des. 87,961; Oct. 18.
Shredder, Pineapple. E. K. Innes. 1,882,665; Oct. 18.
Shutter and ventilator, Combined. J. D. Basson. 1,883,753; Oct. 18.
Shuttles for sewing machines. W. T. Minett. 1,883,812; Oct. 18.
Sign. H. D. Jewell. 1,883,791; Oct. 18.
Signal: *See*—
Automobile signal.
Signal device. O. Krueger. 1,883,801; Oct. 18.
Signal for deflated tires, Warning. A. B. Solve. 1,883,040; Oct. 18.
Signaling by phase displacement. E. F. W. Alexanderson. 1,882,698; Oct. 18.
Signaling system. R. C. Mathes. 1,882,866; Oct. 18.
Signaling system. C. Wiaspeintner and G. Chodziesner. 1,883,179; Oct. 18.
Signature machine. J. Whitaker. 1,883,204; Oct. 18.
Silk, Spinning artificial. O. Faust. 1,883,059; Oct. 18.
Silo. C. B. Ross. 1,882,942; Oct. 18.
Sinker. J. S. Cleeland. 1,883,574; Oct. 18.
Sizing fibrous materials. B. Wieger. 1,882,680; Oct. 18.
Skimmer scoop. E. R. Standfuss. 1,883,052; Oct. 18.
Sled. B. A. Rexford. 1,882,907; Oct. 18.
Slicing machine. H. J. Ballem. 1,882,732; Oct. 18.
Slicing machine. H. J. Theis. 1,883,103; Oct. 18.
Slip holding device. R. S. Young. 1,883,270; Oct. 18.
Slipper, Paper. W. M. Scholl. 1,882,983; Oct. 18.
Smoker's article. H. C. Pfingst. 1,883,819; Oct. 18.
Smoker's device. E. Goldberg. 1,883,701; Oct. 18.
Smoker's novelty. A. Campos and A. Ramirez. 1,883,546; Oct. 18.
Snap gauge. E. H. Alderborgh. 1,883,446; Oct. 18.
Snap switch, Electric. W. C. Tregoning. 1,883,128; Oct. 18.
Snap switch, Push button. W. C. Tregoning. 1,883,127; Oct. 18.
Snowplow. L. T. Ross. 1,882,945; Oct. 18.
Soapsuds, Apparatus for making. P. C. Doyle. 1,882,786; Oct. 18.
Soda, Concentration of caustic. R. E. Wilson. 1,883,211; Oct. 18.
Soil products, Apparatus for the treatment of. J. R. Richardson. 1,882,912; Oct. 18.
Soldering device for can machines. W. Cameron. 1,883,539; Oct. 18.
Soldering flux. C. L. Barber. 1,882,734–5; Oct. 18.
Solids in liquids, Method and apparatus for disseminating. E. Cowles. 1,883,597; Oct. 18.
Sound-absorbing unit and making same. J. Mazer. 1,883,886; Oct. 18.
Sound producing device. L. J. Grubman. 1,883,724; Oct. 18.
Sound recording and reproducing head, Magnetic. H. E. Chipman. 1,883,561; Oct. 18.
Sound recording and reproducing machine, Electro-magnetic. H. E. Chipman. 1,883,560; Oct. 18.
Sound reproducing apparatus, Automatic. R. B. Bryant 1,883,527; Oct. 18.
Sound reproducing machine. W. LaRue and S. H. Wismer. 1,883,238; Oct. 18.
Sound reproducing machine. S. H. Wismer. 1,883,239; Oct. 18.
Sound translating device, Suspension. J. A. Terrell. 1,883,100; Oct. 18.
Speed mechanism, Change. C. H. Richards. 1,883,399; Oct. 18.
Speed transmission, Variable. E. K. Standish. 1,883,749; Oct. 18.
Speed transmitter for distant control devices, Variable. E. Granat. 1,883,711; Oct. 18.
Spinning frame cleaner. J. C. Ferguson. 1,883,358; Oct. 18.
Spouting or gutter hanger. C. A. Carbaugh. 1,883,547; Oct. 18.
Sprayer, Power. F. H. Bateman and I. Trolley. 1,883,479; Oct. 18.
Spring cushion, Coiled. D. S. Barnard. 1,883,470; Oct. 18.
Spring hinge. G. Bommer. 1,883,506; Oct. 18.
Spring mechanism for trucks, Auxiliary. M. H. Martin. 1,883,885; Oct. 18.
Spring mechanism for trucks, Auxiliary. M. H. Martin. 1,883,742; Oct. 18.
Spring shackle, Shock absorbing. J. H. Graham. 1,883,709; Oct. 18.

Sprinkler: *See*—
Automatic sprinkler.
Sprinkler head. W. M. Robinson, D. E. Lindquist, H. K. Rader, and L. M. Young. 1,882,922; Oct. 18.
Stabilizer for lead chromate pigments. J. W. Gilbert. 1,882,804; Oct. 18.
Stage setting. P. Clark and G. Vail. 1,883,573; Oct. 18.
Stairway, Concealed. B. Frazier. 1,883,777; Oct. 18.
Stake for freight cars, Intermediate side. W. E. Wine. 1,883,434; Oct. 18.
Stand: *See*—
Desk stand. Index stand.
Starter control for gas engines. F. J. Routledge. 1,882,948; Oct. 18.
Starter, Engine. W. L. McGrath. 1,883,380; Oct. 18.
Starter, Engine. W. L. McGrath and M. P. Whitney. 1,883,388; Oct. 18.
Starter, Engine. T. C. Sayles. 1,883,411; Oct. 18.
Starter, Engine. Y. Sekella. 1,883,417; Oct. 18.
Starter, Engine. M. P. Whitney. 1,883,430–1; Oct. 18.
Starting apparatus. J. Bijur. 1,883,331; Oct. 18.
Starting mechanism. M. P. Whitney. 1,883,432; Oct. 18.
Starting mechanism for internal combustion engines. Y. Sekella. 1,883,416; Oct. 18.
Steam boiler. I. Harter. 1,883,371; Oct. 18.
Steam generator. H. J. Kerr and J. Fletcher. 1,883,298; Oct. 18.
Steam generator. R. M. Warfield. 1,883,145; Oct. 18.
Steam generator and process. J. E. Black. 1,882,750; Oct. 18.
Steam generator, Indirectly heated. H. Trede and O. H. Hartmann. 1,883,124; Oct. 18.
Steam generator, Indirectly heated. F. Wempe. 1,883,194; Oct. 18.
Steam reheater. C. H. Davy. 1,883,605; Oct. 18.
Steel boiler. W. H. Cliff. 1,882,776; Oct. 18.
Steering and braking device for sleighs, Combined. W. P. Smith. 1,883,031; Oct. 18.
Steering device, Automatic. H. T. Avery. 1,882,730; Oct. 18.
Stencil printing machine. H. P. Elliott. 1,883,643; Oct. 18.
Step-by-step proportional control. S. C. Shipley. 1,883,015; Oct. 18.
Stocking, Garter top. E. J. Berger. 1,883,495; Oct. 18.
Stoker, Chain grate. H. J. Kerr. 1,883,299; Oct. 18.
Stoker, Underfeed. W. M. Cross. 1,883,595; Oct. 18.
Stop device for automobiles. J. W. Plunkett and E. H. Roberts. 1,883,820; Oct. 18.
Stopper inserting machine. C. E. Bre Miller. 1,883,524; Oct. 18.
Store door pick up and delivery system. N. W. Bywater. 1,883,538; Oct. 18.
Store front construction. F. J. Plym. 1,882,879–81; Oct. 18.
Stove, Heating. W. Bradbury. Des. 87,957; Oct. 18.
Strain relieving device for electrical conductor cords. G. J. Meuer. 1,882,856; Oct. 18.
Strand for making braided rugs and the like and making the same. W. H. Adams. 1,883,436; Oct. 18.
Strand handling device. E. B. Troche. 1,883,130; Oct. 18.
String cutter. E. H. Stratton. 1,883,831; Oct. 18.
Stringed instrument. P. Levasseur. Des. 87,967; Oct. 18.
Stripes on the circular type knitting frame, Apparatus for the production of vertical. E. Milner and F. Walter. 1,883,811; Oct. 18.
Striping device. K. C. Bugg. 1,882,767; Oct. 18.
Striping device. K. C. Bugg. 1,882,770; Oct. 18.
Striping device for automobile bodies. R. Z. Hopkins and E. F. Seger. 1,882,844; Oct. 18.
Strips and making same, Preformed composition. A. C. Fischer. 1,882,792; Oct. 18.
Strips, Method and machine for testing thin. J. V. Giesler. 1,882,802; Oct. 18.
Structural unit, Collapsible. C. J. O'Brien. 1,883,816; Oct. 18.
Submarine signaling, System and apparatus for. R. L. Williams. 1,883,433; Oct. 18.
Suction cleaner. B. C. Becker. 1,883,327; Oct. 18.
Sugar dispenser. W. T. Eisenhardt. 1,883,640; Oct. 18.
Sulphur burner. J. W. Stevens. 1,883,063; Oct. 18.
Sun bath apparatus. B. Collins. 1,883,764; Oct. 18.
Superheater. C. W. Gordon. 1,883,708; Oct. 18.
Superheater. H. J. Kerr. 1,883,304; Oct. 18.
Superheater arrangement. C. W. Gordon. 1,883,705; Oct. 18.
Superheater, Radiant heat. H. J. Kerr. 1,883,300; Oct. 18.
Support and pickling rack, Combined. G. U. Hilliard. 1,883,375; Oct. 18.
Support for portable tools, Manual. A. Anderson. 1,882,705; Oct. 18.
Support, Garment. W. F. Augustin. 1,882,727; Oct. 18.
Support, Table slide. F. B. Walter. 1,883,176; Oct. 18.
Supporting means for car doors. K. J. Tobin. 1,883,114; Oct. 18.
Surfacing machines, Driving finger for. H. C. St. Dennis. 1,882,676; Oct. 18.
Suspension clamp. W. W. Woodruff, 3d. 1,883,260; Oct. 18.
Swab, Well. H. R. Standlee. 1,883,053; Oct. 18.
Switch: *See*—
Automatic switch. Push switch.
Centrifugal switch. Snap switch.
Electric switch. Thermostatic switch.
Electrical switch. Time controlled switch.
Mercury switch.
Switch and circuit breaker, Combined. A. H. Nero. 1,883,814; Oct. 18.
Switch and control circuit therefor, Electrical. L. E. Koch. 1,883,246; Oct. 18.
Switch and control circuit therefor, Electrical. E. W. Sladkey. 1,883,247; Oct. 18.
Switch and signal system. S. S. Stolp. 1,883,069; Oct. 18.
Switch for transmission over submarine cables, Direction control. H. H. Haglund. 1,882,818; Oct. 18.
Switch mechanism, Electric. R. A. Millermaster. 1,882,858; Oct. 18.
Switch operating and holding device, Electric. R. E. Tafel. 1,883,089; Oct. 18.
Switch operating device, Electric. F. H. Richterkessing. 1,882,914; Oct. 18.
Switching device. L. R. Waller. 1,883,137; Oct. 18.
Switching mechanism. H. A. Douglas. 1,883,625; Oct. 18.
Switching mechanism. L. J. J. Schreiber, G. P. Chevigny, and G. X. Lens. 1,882,981; Oct. 18.
Table: *See*—
Card table. Folding table.
Table. M. Thum. 1,882,678; Oct. 18.
Table apparatus, Tufting. H. E. Wolf. 1,883,220; Oct. 18.
Tableware parts, Electrically welding. W. R. Stocking. 1,883,067; Oct. 18.
Tabulator, Bridge-score. E. A. Snook. 1,883,037; Oct. 18.
Tackle box. C. T. Boynton. 1,882,756; Oct. 18.
Tackle box. G. H. Walker and I. L. Cole. 1,883,134; Oct. 18.
Tail gate, Adjustable. E. R. Barrett. 1,883,473; Oct. 18.
Tamping machine. J. D. Abram. 1,882,681; Oct. 18.
Tank roof. J. A. Stough. 1,883,076; Oct. 18.
Tap. R. E. Rich. 1,882,910; Oct. 18.
Tap, Sewer pipe. D. G. Adams. 1,883,439; Oct. 18.
Tar, Distillation of. E. H. Ellms. 1,883,642; Oct. 18.
Telegraph carrier system. H. H. Haglund. 1,882,817; Oct. 18.
Telephone register. D. M. Carr. 1,883,549; Oct. 18.
Telephone system. L. J. Bowne. 1,882,753; Oct. 18.
Telephone system. T. F. Crocker and V. S. Tharp. 1,883,589; Oct. 18.
Telephone system. W. H. Matthies. 1,882,851; Oct. 18.
Telephone system, Automatic. H. M. Friendly. 1,883,679–80; Oct. 18.
Temperature carbonization, Apparatus for low. P. C. Pope. 1,882,888; Oct. 18.
Temperature indicating means. E. J. Albert. 1,883,444; Oct. 18.
Tension meter. O. C. Roesen. 1,882,932; Oct. 18.
Tensioning means for feed rolls and the like. C. Donley. 1,883,623; Oct. 18.
Test-scorer, Automatic. E. C. Finkenbinder. 1,833,775; Oct. 18.
Textile fabric. J. Aemisegger. Des. 87,951; Oct. 18.
Textile fabric. J. Aemisegger. Des. 87,991–3; Oct. 18.
Textile fabric. E. Freedman, A. Jaekli and E. J. Gnaegi. 1,883,678; Oct. 18.
Textile fabric. R. George. Des. 87,994; Oct. 18.
Textile fabric. M. U. Juestrich. Des. 87,995–6; Oct. 18.
Textile fabric. P. Mouton. Des. 87,973; Oct. 18.
Textile fabric. P. Mouton. Des. 88,000; Oct. 18.
Textile fabric or similar article. W. Willheim. Des. 88,004–63; Oct. 18.
Textile process and product. C. Dreyfus and W. Whitehead. 1,883,349; Oct. 18.
Textile products, Production of. W. I. Taylor. 1,883,424; Oct. 18.
Thermionic tubes, Energizing. W. V. B. Roberts. 1,882,920; Oct. 18.
Thermometer. C. F. Chapman. 1,883,554; Oct. 18.
Thermometer, Clinical. L. E. Greiner. 1,883,717; Oct. 18.
Thermostat. J. A. Spencer and V. Bush. 1,883,215; Oct. 18.
Thermostat. J. A. Spencer. 1,883,249; Oct. 18.
Thermostat. J. A. Spencer. 1,883,252; Oct. 18.
Thermostatic dashpot. J. Boyer, H. E. Candler, and S. Backus. 1,883,514; Oct. 18.
Thermostatic switch. J. A. Spencer. 1 883,046; Oct. 18.
Threading machine, Portable power driven. J. F. Haas. 1,883,728; Oct. 18.
Throttle, Carburetor. F. W. Schaffner. 1,882,966; Oct. 18.
Tightening device. A. P. Buisset. 1,883,530; Oct. 18.
Time controlled switch. J. W. Belt. 1,882,742; Oct. 18.
Time piece balance wheels, Finishing. G. Gallay. 1,883,779; Oct. 18.
Time recorder. H. Mutschler. 1,832,863; Oct. 18.
Tinsel garland. M. J. Reiner. 1,882,905; Oct. 18.
Tire pressure alarm operating means G. G. Guthrie. 1,882,661; Oct. 18.
Tire tester. M. E. Cheney. 1,883,557; Oct. 18.

Tire trimming machine. J. I. Haase. 1,883,729; Oct. 18.
Tissue filler for corpses. H. R. Ochs. 1,882,867; Oct. 18.
Toaster, Nut. W. W. Kelly. Des. 87,997; Oct. 18.
Tone of the string of a musical instrument, Device for changing the. J. A. Ryan. 1,883,410; Oct. 18.
Tongs, Animal mouth. W. Ashton. 1,883,751; Oct. 18.
Tongs, Furnace. J. Rogaczewicz. 1,882,934; Oct. 18.
Tool for fluid actuated machines. J. E. Renfer. 1,882,906; Oct. 18.
Tool for laying shoe filler. A. Thoma. 1,883,104; Oct. 18.
Tool for laying shoe fillers. A. H. Avery. 1,882,729; Oct. 18.
Tool for sheet metal, Straightening. W. Garrett. 1,883,684; Oct. 18.
Tool for shoe parts, Roughing. C. A. Robinson. 1,882,921; Oct. 18.
Tool, Machine. E. J. Svenson. 1,883,084; Oct. 18.
Tool, Machine. H. F. Vickers. 1,883,166; Oct. 18.
Tool, Portable cutting. J. J. Eyre and H. W. Porter. 1,882,790; Oct. 18.
Tool, Power driven mechanic's hand. E. Moll. 1,883,392; Oct. 18.
Tool, Reaming and burnishing. H. W. Zimmerman. 1,883,285; Oct. 18.
Tool, Valve seat boring. F. O. Albertson. 1,882,689; Oct. 18.
Tools, Making valve seat finishing. F. O. Albertson. 1,882,692; Oct. 18.
Totaling device. H. R. Cool. 1,883,765; Oct. 18.
Toy. A. Hajdu, 1,882,822; Oct. 18.
Toy. B. F. Wupper. 1,883,265; Oct. 18.
Toy and game, Combined. A. Ensley. 1,883,651; Oct. 18.
Toy gun. H. H. Schmidt. 1,883,826; Oct 18.
Toy hand-cuffs. J. E. Blake. 1,883,502; Oct 18.
Toy machine gun. E. H. Smith. 1,883,029; Oct. 18.
Tractor structure. A. and A. G. Ronning. 1,883,405; Oct. 18.
Tractor wheel lug. K. Wallace. 1,883,836; Oct. 18.
Traffic controlling apparatus, Railway. R. M. Gilson and B. E. O'Hagan. 1,883,693; Oct. 18.
Traffic controlling system, Railway. S. N. Wight. 1,883,208; Oct. 18.
Traffic observing instrument. R. W. Johnson. 1,883,296; Oct. 18.
Traffic, System and structure for high speed. J. W. Fry. 1,883,363; Oct. 18.
Transferring and transporting apparatus. A. W. Berg. 1,883,493; Oct. 18.
Transmission. S. M. Edberg. 1,883,355; Oct. 18.
Transmission. T. L. Fawick. Re18,629; Oct. 18.
Transmission mechanism. C. E. F. Ahlm. 1,883,441; Oct. 18.
Transmission mechanism. W. D. Burton. 1,883,537; Oct. 18.
Transmission system. E. H. J. C. Gillett. 1,882,805; Oct. 18.
Transmission system, E. H. J C. Gillett 1,882,807; Oct. 18.
Transmitters, System for keying. W. Moser. 1,882,862; Oct. 18.
Tray and extinguisher, Ash. R. A. Schlegel. 1,882,973; Oct. 18.
Tray, Card holding. G. H. Dawson. 1,882,782; Oct. 18.
Tray, Deal. E. C. Hanson and S. R. Popp. 1,882,835; Oct. 18.
Tray, Freezing. R. H. Chilton. 1,882,775; Oct. 18.
Tray or similar article, Serving. P. B. Vallé. Des. 87,986; Oct. 18.
Trimmer: *See*—
Lawn edge trimmer.
Tripod. O. U. Zerk. 1,883,276; Oct. 18.
Trisodium phosphate crystals, Treating. I. G. Ammen. 1,883,447; Oct. 18.
Truck, Industrial. E. H. Remde. 1,883,319; Oct. 18.
Tube: *See*—
Electric discharge tube.
Tube cutting device. R. Armstrong. 1,883,453; Oct. 18.
Tube end connections. K. M. Ronan. 1,882,673; Oct. 18.
Tube fabrication, Discharge. C. J. R. H. Von Wedel. 1,883,174; Oct. 18.
Tunnels, Method in construction of subaqueous. F. Donaldson. 1,883,622; Oct. 18.
Turbine. A. O. Trimmer. 1,883,129; Oct. 18.
Turbine and condenser unit. R. C. Allen. 1,882,699; Oct. 18.
Typewriting machine. G. G. Going. 1,883,697–700; Oct. 18.
Undergarment. C. G. Wright. 1,883,263; Oct. 18.
Underwear supporting device. H. C. Dauphinais. 1,883,341; Oct. 18.
Unreeling appliance for wire, thread, etc. E. Snyder. 1,883,039; Oct. 18.
Valve. S. E. Allen and O. N. Wiswell. 1,882,700; Oct. 18.
Valve. J. V. Giesler. 1,882,803; Oct. 18.
Valve. J. A. Spencer. 1,883,250; Oct. 18.
Valve accelerating device. L. A. Grimes. 1,883,719; Oct. 18.
Valve, Continuous blow-off. C. G. Hawley. 1,883,727; Oct. 18.
Valve, Float. J. L. Bauer. 1,883,480; Oct. 18.
Valve for lubrication and cooling, Oil spray. G. D. Angle. 1,882,716; Oct. 18.
Valve for wireless telegraphy or telephony. J. A. M. Hawadier. Re18,628; Oct. 18.
Valve, Magnetically operated. L. A. M. Phelan. 1,883,240; Oct. 18.
Valve, Mixture. R. Saelzler. 1,882,953; Oct. 18.
Valve, Pneumatically balanced. S. R. Warren. 1,883,838; Oct. 18.
Valve seat reamer. F. O. Albertson. 1,882,690; Oct. 18.
Valve, Self-adjusting. M. O. Schur. 1,882,990; Oct. 18.
Vanity case. F. R. Johnson. 1,883,793; Oct. 18.
Vanity case. W. Poranski. 1,882,889; Oct. 18.
Vehicle, Air. R. W. Sears 2d and J. F. Koca. 1,883,414; Oct. 18.
Vehicle brake, Compensating. O. W. Hahn. 1,883,732; Oct. 18.
Vehicle wheel. M. J. Adams. 1,882,685; Oct. 18.
Vehicle wheel. D. E. Willard. Des. 87,990; Oct. 18.
Vehicles and method therefor, Front fork assembly for juvenile. S. A. Snell. 1,883,033; Oct. 18.
Vending machine. S. M. Abbott. 1,883,440; Oct. 18.
Vending machine. W. C. Hathaway. 1,882,841; Oct. 18.
Vending machine, Coin controlled. R. A. and F. H. Vogel. 1,883,170; Oct. 18.
Vending machine structure. F. H. Vogel. 1,883,169; Oct. 18.
Ventilating apparatus for dynamo-electric machines. J. Zubaty. 1,883,288; Oct. 18.
Ventilator: *See*—
Window ventilator.
Ventilator. A. Ronning. 1,883,406; Oct. 18.
Ventilator construction. A. P. Ball. 1,883,464; Oct. 18.
View analyzer. A. F. Shore. 1,883,019; Oct. 18.
Viner. F. P. Ryder. 1,882,952; Oct. 18.
Visual measurement of concentration of suspended material in gases, Apparatus for. F. H. Viets. 1,883,168; Oct. 18.
Voltage regulating apparatus. L. Devol. 1,883,613; Oct. 18.
Vulcanizer, Tire. F. J. Shook. 1,883,018; Oct. 18.
Wagon hitch. J. B. O'Donnell. 1,882,868; Oct. 18.
Wall paper or similar article. M. Arnold. Des. 87,952; Oct. 18.
Walls, Manufacture of tubular corrugated metal. W. M. Fulton. 1,882,798; Oct. 18.
Warp printing. C. Dreyfus. 1,883,346; Oct. 18.
Washing and scrubbing apparatus for cases and boxes. J. W. Engholm. 1,883,772; Oct. 18.
Waste heat boiler. C. E. Lucke. 1,883,310; Oct. 18.
Water filtration. M. J. Martin and W. R. Terry. 1,883,805; Oct. 18.
Water purification for locomotives. J. Ostertag. 1,883,856; Oct. 18.
Water regulating apparatus, Boiler feed. C. B. Arnold. 1,883,454; Oct. 18.
Water tube boiler. H. S. Horsman. 1,882,845; Oct. 18.
Waterer, Poultry. C. A. Dunlevy. 1,883,631; Oct. 18.
Wave apparatus. B. L. Steele. 1,883,059; Oct. 18.
Wax and candle, Colored. T. H. Rogers. 1,882,935; Oct. 18.
Weather strip. W. J. Dennis. 1,883,608; Oct. 18.
Weatherstrip for windows or doors. S. J. Nolan. 1,883,815; Oct. 18.
Weighing device. F. G. L. Boyer. 1,882,754; Oct. 18.
Well drilling apparatus. F. Stone. 1,883,070; Oct. 18.
Well pumping apparatus. H. F. Watkins. 1,883,153; Oct. 18.
Wheel: *See*—
Vehicle wheel.
Wheel and axle. H. W. Sanford. 1,882,957; Oct. 18.
Wheel testing appliance, Vehicle. I. A. Weaver. 1,883,180; Oct. 18.
Wheel with spacer rings, Dual disk. C. L. Eksergian. 1,883,041; Oct. 18.
Whistle. J. H. Leheney. Des. 87,966; Oct. 18.
Window cleaning device. S. Fleischman. 1,883,664; Oct. 18.
Window construction comprising radiator housing. A. C. Armstrong and A. G. Ilich. 1,882,719; Oct. 18.
Window structure, Metallic. A. L. Doering. 1,883,619; Oct. 18.
Window ventilator. S. H. Seward. 1,883,002; Oct. 18.
Window ventilator. A. W. Seyfried. Des. 87,982; Oct. 18.
Windshield construction. W. E. Grimm. 1,883,721; Oct. 18.
Windshield securing device. M. H. Toncray and J. W. Greig. 1,883,120; Oct. 18.
Wire, Pile. M. B. Behrman. 1,882,739; Oct. 18.
Wire stripping machine. W. S. Rotherham. 1,882,047; Oct. 18.
Wireless receiving apparatus. J. L. Callahan. 1,882,772; Oct. 18.
Wood and other polysaccharides, Degradation of. K. Fredenhagen and B. Helferich. 1,883,676–7; Oct. 18.
Work-gripping means for well drilling apparatus. F. Stone. 1,883,073; Oct. 18.
Wrapping machine. G. H. Bent. 1,883,229; Oct. 18.
Wrench: *See*—
Ratchet wrench.
Wringer: *See*—
Mop wringer.
Yarn, Changer. G. D. Collar. 1,883,337; Oct. 18.
Yarn, Cutting and clamping device. H. B. Aaronson. 1,883,320; Oct. 18.
Yarn moistening device. E. J. Berger. 1,883,494; Oct. 18.
Yarn, Producing. J. L. Lohrke and H. H. Perry. 1,883,384; Oct. 18.
Zinc ores, Treating. B. W. Gonser. 1,883,235; Oct. 18.
Zinc ores, Treating. L. W. Lennox and H. S. Wildman. 1,883,234; Oct. 18.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 18, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 49.7: 1,882,768
56: 1,883,113
2— 38: 1,883,587
159: 1,883,062
172: 1,883,756
234: 1,883,341
237: 1,883,263
247: 1,883,461
4— 177: 1,883,660
213: 1,883,406
5— 31: 1,883,730
252: 1,883,470
345: 1,883,537
356: 1,882,876
6— 11: 1,882,938
8— 2: 1,883,193
5: 1,883,846
5: 1,883,348
1,933,350
1,883,351
1,883,352
20: 1,883,348
9— 8.3: 1,883,655
15: 1,883,824
10— 95: 1,883,726
120: 1,883,334
121: 1,883,332
1,883,397
122: 1,883,333
129: 1,882,910
134: 1,882,874
12— 103: 1,883,104
142: 1,883,105
15— 5: 1,883,851
56: 1,883,772
120: 1,883,091
126: 1,883,664
155: 1,883,327
200: 1,882,658
236: 1,883,726
262: 1,883,551
263: 1,882,918
16— 99: 1,882,842
1,883,114
154: 1,883,792
189: 1,883,506
17— 4: 1,883,822
45: 1,883,657
18— 8: 1,883,423
1,883,659
17: 1,883,018
54: R. 18,625
1,882,976
1,883,347
56: 1,882,083
59: 1,883,736
19— 1: 1,883,384
74: 1,883,543
144: 1,883,424
159: 1,882,760
20— 1: 1,883,731
1.01: 1,882,835
4: 1,883,386
19: 1,883,118
24: 1,883,149
56.4: 1,882,879
69: 1,883,608
1,883,609
1,883,815
72: 1,883,544
1,883,761
74: 1,883,117
23— 3: 1,883,221
40: 1,883,542
69: 1,882,940
139: 1,883,382
189: 1,882,882
190: 1,882,755
203: 1,882,917
23— 39: 1,883,261
41: 1,883,202
86: 1,883,649
176: 1,883,570
184: 1,883,211
212: 1,882,977
234: 1,882,712
243: 1,883,447
23— 278: 1,883,063
24— 19: 1,883,041
124: 1,883,530
141: 1,883,068
194: 1,883,009
205: 1,882,672
249: 1,883,608
263: 1,883,073
25— 41: 1,882,681
1,882,682
42: R. 18,626
131.5: 1,883,191
1,883,192
142: 1,883,400
155: 1,882,810
156: 1,883,442
27— 3: 1,883,600
22: 1,882,867
30: 1,882,986
28— 59: 1,883,340
29— 27: 1,883,729
88.2: 1,883,662
103: 1,882,690
156.8: 1,883,519
160.5: 1,882,972
1,882,987
30— 12: 1,882,688
1,883,131
1,883,324
13: 1,883,842
14: 1,883,831
20: 1,883,505
32— 6: 1,883,584
33— 18: 1,883,204
76: 1,883,628
107: 1,882,865
143: 1,883,446
178: 1,882,993
193: 1,883,197
34— 6: 1,883,722
35— 12: 1,883,059
1,883,199
1,883,775
36— 11.5: 1,882,983
37— 42: 1,882,945
106: 1,883,667
145: 1,883,404
156: 1,883,403
40— 125: 1,883,791
129: 1,883,195
130: 1,883,768
131: 1,883,065
41— 10: 1,882,905
1,883,214
26: 1,882,714
33: 1,883,854
42— 55: 1,883,028
1,883,029
72: 1,883,465
43— 22: 1,883,134
45: 1,883,095
52: 1,883,674
56: 1,883,135
44— 9: 1,883,593
45— 11: 1,882,915
1,882,939
1,883,083
22: 1,882,946
48: 1,882,678
51: 1,883,504
58: 1,883,714
85: 1,882,710
90: 1,883,138
1,883,785
97: 1,883,287
1,883,834
113: 1,883,176
46— 14: 1,882,822
46: 1,883,724
47— 1: Pl. Pt. 35
Pl. Pt. 36
9: 1,882,713
1,883,381
48— 180: 1,882,795
1,882,966
219: 1,883,142
49— 17: R. 18,624
49— 17: 1,883,734
54: 1,882,992
1,883,023
58: 1,883,523
50— 23: 1,883,690
27: 1,883,571
51— 50: 1,882,814
56: 1,883,016
69: 1,883,658
95: 1,883,612
131: 1,882,676
170: 1,882,705
1,882,769
184.3: 1,883,286
194: 1,883,747
197: 1,882,693
52— 5: 1,883,044
1,883,045
17: 1,882,853
53— 3: 1,882,821
1,882,901
55— 9: 1,883,691
108: 1,883,666
118: 1,883,694
146: 1,882,686
56— 16: 1,883,402
19: 1,883,101
65: 1,882,823
123: 1,883,564
256: 1,883,617
320: 1,882,875
402: 1,883,563
58— 13: 1,883,387
26: 1,882,763
38: 1,883,162
59— 80: 1,882,666
60— 95: 1,882,609
61— 42: 1,883,622
57: 1,883,010
62— 1: 1,883,568
89.5: 1,883,521
91.5: 1,883,462
95: 1,882,751
99: 1,883,759
101: 1,883,109
103: 1,883,487
104: 1,882,969
108.5: 1,882,775
115: 1,883,607
116: 1,882,752
1,883,320
126: R. 18,633
1,882,979
135: 1,883,057
174: 1,882,660
64— 89: 1,883,698
96: 1,883,203
65— 46: 1,883,216
66— 51: 1,883,581
135: 1,883,811
140: 1,883,320
1,883,337
173: 1,883,495
198: 1,883,297
67— 4.1: 1,883,646
7.1: 1,883,752
21: R. 18,623
101: 1,883,602
68— 9: 1,883,603
1,883,604
1,883,750
69— 1: 1,882,921
70— 24: 1,883,602
27: 1,883,072
31: 1,883,171
1,883,172
46: 1,883,326
90: 1,883,032
91: 1,883,119
113: 1,882,794
127: 1,883,026
71— 9: 1,883,718
72— 6: 1,882,942
16: 1,883,774
110: 1,883,816
118: 1,883,540
72— 120: 1,882,747
128: 1,883,196
73— 51: 1,882,802
1,883,116
51: 1,883,180
1,883,522
52: 1,883,717
109: 1,883,557
118: 1,883,554
122: 1,883,582
167: 1,883,507
1,883,583
74— 7: 1,883,331
1,883,342
1,883,377
1,883,388
1,883,389
1,883,411
1,883,416
1,883,417
1,883,418
1,883,429
1,883,430
1,883,431
1,883,432
14: 1,883,770
17: 1,882,878
26: 1,883,565
1,883,749
29: 1,883,825
34: 1,883,255
1,883,399
1,883,500
54: 1,883,537
1,883,767
57: R. 18,629
1,883,441
58: 1,883,550
62: 1,883,821
79: 1,882,848
81: 1,883,437
83: 1,882,748
90: 1,883,726
108: 1,883,637
109: 1,883,448
75— 1: 1,882,749
1,883,550
28: 1,883,234
1,883,235
62: 1,882,998
76— 54: 1,883,703
101: 1,882,692
107: 1,883,335
77— 2: 1,882,680
58: 1,883,810
76: 1,883,235
80— 5.1: 1,883,080
13: 1,882,655
37: 1,883,140
56: 1,883,623
60: 1,883,205
65: 1,883,338
81— 9.51: 1,882,947
15: 1,883,684
1,883,692
51: 1,883,081
63: 1,883,618
195: 1,883,453
196: 1,882,790
82— 1: 1,883,779
2: 1,883,082
1,883,084
25: 1,883,093
40: 1,883,075
44: 1,882,709
83— 26: 1,882,931
1,883,585
46: 1,883,218
93: 1,883,112
84— 170: 1,883,001
267: 1,883,503
312: 1,883,410
339: 1,883,838
354: 1,882,960
425: 1,883,115
471: 1,882,941
497: 1,883,034
87— 6: 1,882,781
9: 1,882,664
1,882,721
1,882,816
1,882,887
17: 1,883,209
21: 1,882,935
88— 1: 1,883,019
1,883,296
14: 1,882,962
1,883,168
16.2: 1,882,893
16.6: 1,883,291
19.3: 1,883,753
24: 1,882,774
1,882,828
1,882,829
1,883,510
1,883,673
40: 1,882,919
41: 1,882,909
166: 1,883,290
89— 36: 1,882,967
40: 1,883,339
90— 4: 1,883,636
21: 1,882,691
91— 3: 1,883,106
12.6: 1,883,427
15: 1,883,305
51: 1,883,494
59: 1,882,743
1,882,744
62.6: 1,882,767
1,882,770
1,882,844
68: 1,883,396
1,883,412
1,883,535
1,883,614
70: 1,883,155
1,883,408
92— 13: 1,883,478
14: 1,882,657
20: 1,883,597
34: 1,882,662
38: 1,883,144
42: 1,883,526
45: 1,883,022
46: 1,882,991
48: 1,883,183
1,883,184
1,883,185
1,883,187
49: 1,883,391
56: 1,882,937
1,883,058
74: 1,883,167
93— 2: 1,882,695
7: 1,883,229
1,883,449
44: 1,883,228
1,883,230
1,883,231
1,883,232
67: 1,883,056
95— 31: 1,883,511
40: 1,883,512
46: 1,883,797
51: 1,883,798
97: 1,882,903
96— 3: 1,883,181
97— 63: 1,883,489
98— 2: 1,883,464
99: 1,883,002
99— 2: 1,882,904
1,883,669
5: 1,883,150
8: 1,883,366
1,883,420
10: 1,883,653
11: 1,883,367
1,883,484
14: 1,883,652
101— 48: 1,883,643
93: 1,882,766
1,882,964
90: 1,882,797
101— 152: 1,883,638
164: 1,883,364
176: 1,883,227
216: 1,883,258
244: 1,882,955
350: 1,883,257
1,883,572
407: 1,882,923
423: 1,883,223
102— 2: 1,883,758
15: 1,883,575
103— 4: 1,883,459
5: 1,883,504
6: 1,883,634
38: 1,882,988
42: 1,883,832
87: 1,883,266
225: 1,883,053
234: 1,883,153
104— 124: 1,883,363
172: 1,883,857
105— 35: 1,883,357
197: 1,883,385
280: 1,882,659
380: 1,883,434
454: 1,883,306
106— 7.5: 1,882,702
8: 1,883,675
10: 1,882,701
31: 1,883,683
107— 1: 1,883,829
6: 1,883,592
8: 1,883,482
108— 5.4: 1,883,212
1,883,213
29: 1,883,547
32: 1,883,076
110— 8: R. 18,622
40: 1,883,299
45: 1,883,595
58: 1,883,295
104: 1,883,789
165: 1,883,678
111— 1: 1,883,771
12: 1,883,133
112— 2: 1,883,177
3: 1,883,220
49: 1,882,886
57: 1,883,859
79: 1,883,599
214: 1,883,566
216: 1,883,633
233: 1,883,812
252: 1,883,654
1,883,746
113— 61: 1,883,539
110: 1,882,872
224: 1,882,928
116— 50: 1,882,740
142: 1,883,458
117— 42: 1,883,006
49: 1,882,902
52: 1,883,438
118— 19: 1,883,358
119— 30: 1,883,272
34: 1,883,710
73: 1,883,631
153: 1,883,598
120— 17: 1,883,741
25: 1,883,576
47: 1,883,160
50: 1,882,780
59: 1,883,210
96: 1,883,217
121— 45: 1,883,166
55: 1,883,129
122— 1: 1,883,293
4: 1,883,635
7: 1,883,310
33: 1,883,124
1,883,194
225: 1,882,776
235: 1,883,313
1,883,706
250: 1,883,733
265: 1,883,208
291: 1,883,145

122— 297: 1,883,161
302: 1,882,845
308: 1,882,847
303: 1,883,371
318: 1,883,301
1,883,302
336: 1,883,380
398: 1,883,856
451.2: 1,883,454
460: 1,883,204
476: 1,883,309
478: 1,883,303
1,883,705
1,883,707
479: 1,882,750
481: 1,883,300
1,883,304
1,883,708
123— 1: 1,882,970
32: 1,883,463
55: 1,883,066
1,883,781
59: 1,883,038
1,883,558
64: 1,882,971
97: 1,883,686
117: 1,882,720
119: 1,882,724
139: 1,882,896
148: 1,882,793
196: 1,883,110
1,883,847
1,883,848
124— 14: 1,883,826
125— 20: 1,883,445
23: 1,882,906
126— 37: 1,882,703
43: 1,882,670
108: 1,883,383
114: 1,882,675
272: 1,883,606
128— 14: 1,883,751
268: 1,882,677
129— 1: 1,882,965
1,883,647
5: 1,883,754
16: 1,882,782
23: 1,883,255
24: 1,883,254
35: 1,883,270
1,883,271
41: 1,883,253
130— 30: 1,882,952
131— 10: 1,883,701
12: 1,883,178
51: 1,882,973
1,883,723
1,883,819
132— 38: 1,883,151
83: 1,882,889
1,883,793
134— 1: 1,882,834
21: 1,882,680
26: 1,883,060
60: 1,882,813
79: 1,882,804
1,883,395
1,883,644
136— 4: 1,883,444
27: 1,883,014
137— 13: 1,883,467
18: 1,883,021
78: 1,883,190
103: 1,882,761
104: 1,883,480
139: 1,882,700
1,883,240
139— 44: 1,882,739
127: 1,883,354
263: 1,883,532
326: 1,883,370
428: 1,883,678
144— 25: 1,883,011
32: 1,882,913
1,882,924
136: 1,883,392
150: 1,882,711
280: 1,883,499
309: 1,883,616
1,883,617
146— 13: 1,883,529
102: 1,883,103
153: 1,882,732
174: 1,883,531
203: 1,882,665
148— 23: 1,882,734
26: 1,882,735
149— 6: 1,883,042
150— 1.6: 1,882,785
33: 1,883,702
151— 37: 1,883,068
152— 14: 1,882,999
1,883,000
153— 2: 1,883,513
154— 2: 1,882,792
1,883,485

154— 2.6: 1,883,645
17: 1,883,704
29: 1,882,944
40: 1,882,715
42: 1,882,925
45.9: 1,883,486
49: 1,883,737
50: 1,883,421
155— 95: 1,883,322
156— 14: 1,883,687
22: 1,883,545
39: 1,882,951
1,882,962
158— 28: 1,883,242
1,883,246
1,883,247
1,883,248
77: 1,882,894
104: 1,883,615
116: 1,883,541
117.1: 1,883,046
120: 1,882,836
159— 23: 1,883,378
164— 34: 1,883,130
40: 1,883,567
47: 1,883,047
49: 1,883,025
1,883,858
90: 1,883,079
112: 1,882,859
113: 1,883,308
167— 15: 1,883,188
52: 1,882,984
169— 4: 1,882,911
17: 1,883,720
1,883,780
22: 1,883,719
23: 1,882,843
170— 159: 1,883,336
163: 1,883,340
171— 119: 1,883,613
229: 1,882,819
252: 1,882,779
1,883,288
313: 1,883,198
314: 1,883,492
327: 1,882,885
1,883,111
172— 152: 1,882,789
1,882,958
233: 1,882,733
239: 1,882,787
1,882,788
1,883,051
1,883,783
293: 1,883,711
173— 259: 1,883,268
265: 1,883,269
266: 1,883,648
321: 1,883,671
1,883,818
322: 1,882,856
334: 1,882,791
355: 1,883,127
174— 177: 1,883,764
175— 41.5: 1,883,579
183: 1,882,815
294: 1,883,236
1,883,237
1,883,839
336: 1,883,773
358: 1,882,773
373: 1,882,892
176— 42: 1,883,398
177— 327: 1,883,466
351: 1,883,813
386: 1,883,433
178— 2: 1,883,179
4.1: 1,882,954
44: 1,882,866
51: 1,882,817
62: 1,883,074
63: 1,882,818
69: 1,883,102
179— 1: 1,883,624
7: 1,883,549
16: 1,882,851
18: 1,883,679
1,883,680
27: 1,882,753
1,883,158
1,883,589
27.51: 1,882,981
91: 1,882,854
100.2: 1,883,560
1,883,561
100.41: 1,883,100
171: 1,882,920
1,883,490
1,883,520
1,883,536
1,883,580
180— 1: 1,883,405
1,883,407
181— 27: 1,883,841
31: 1,882,974

183— 7: 1,882,949
69: 1,883,715
114: 1,883,372
1,883,373
184— 3: 1,883,148
6: 1,882,716
7: 1,883,273
1,883,277
1,883,283
155: 1,883,274
21: 1,883,515
103: 1,883,202
105: 1,883,275
185— 40: 1,882,891
188— 2: 1,883,732
8: 1,882,907
1,883,031
10: 1,882,929
72: 1,882,873
78: 1,883,757
88: 1,883,206
89: 1,883,436
1,883,488
100: 1,883,514
140: 1,882,926
1,883,316
1,883,317
1,883,318
152: 1,883,588
156: 1,882,746
1,882,852
182: 1,883,498
250: 1,882,883
1,883,556
254: 1,882,884
258: 1,882,959
189— 34: 1,883,141
36: 1,883,376
78: 1,882,880
1,882,881
91: 1,883,477
192— .01: 1,882,805
1,882,806
1,882,807
3: 1,882,927
4: 1,883,743
1,883,820
8: 1,883,087
52: 1,883,682
56: 1,883,225
59: 1,883,601
60: 1,883,365
61: 1,883,685
68: 1,882,898
1,883,394
82: 1,882,839
107: 1,882,706
1,882,707
110: 1,882,897
125: 1,883,121
158: 1,883,164
193— 2: 1,882,864
24: 1,883,569
194— 57: 1,883,440
102: 1,883,170
195— 32: 1,882,738
196— 13: 1,883,374
48: 1,883,850
58: 1,883,491
61: 1,883,744
74: 1,883,745
133: 1,883,630
197— 25: 1,883,700
27: 1,883,697
112: 1,883,699
149: 1,883,698
198— 7: 1,882,736
30: 1,883,078
31: 1,883,362
1,883,369
64: 1,882,820
100: 1,883,054
127: 1,883,426
181: 1,883,007
183: 1,883,005
189: 1,882,855
1,883,004
195: 1,883,528
213: 1,883,795
219: 1,883,763
199— 63: 1,883,689
200— 8: 1,883,625
15: 1,883,125
37: 1,882,742
50: 1,882,858
58: 1,882,661
1,883,040
59: 1,882,948
67: 1,883,128
1,883,267
76: 1,882,857
80: 1,883,784
83: 1,882,674
87: R.18,630

200— 87: 1,882,667
91: 1,882,846
116: 1,883,814
122: 1,883,244
1,883,245
134: 1,883,790
150: 1,882,728
152: 1,883,146
153: 1,883,241
154: 1,883,126
166: 1,883,137
201— 56: 1,883,098
202— 17: 1,883,311
46: 1,883,284
66: 1,883,642
225: 1,882,888
204— 5: 1,882,669
31: 1,883,799
205— 4: 1,882,798
206— 16: 1,882,756
1,883,632
41: 1,882,708
44: 1,883,012
46: 1,883,159
47: 1,883,852
57: 1,883,008
1,883,108
207— 10: 1,882,757
208— 96: 1,883,033
209— 346: 1,882,908
403: 1,883,186
1,883,800
210— 3: 1,882,930
21: 1,883,139
71: 1,882,968
132: 1,883,805
148: 1,883,468
211— 113: 1,883,219
135: 1,882,653
165: 1,883,435
167: 1,883,497
213— 8: 1,882,800
21: 1,883,314
22: 1,883,048
24: 1,883,132
26: 1,882,799
32: 1,882,870
1,883,064
33: 1,882,832
36: 1,882,830
1,882,831
1,882,833
1,882,838
1,882,840
38: 1,883,050
60: 1,882,837
69: 1,882,900
1,883,315
70: 1,882,869
71: 1,882,899
167: R.18,631
214— 16.1: 1,882,656
44: 1,883,493
65: 1,883,538
90: 1,883,200
94: 1,882,965
1,883,156
102: 1,883,052
215— 1: 1,883,806
38: 1,882,995
1,882,996
217— 72: 1,883,670
218— 15: 1,883,368
219— 4: 1,883,067
8: 1,883,807
21: 1,882,729
24: 1,883,528
220— 4: 1,883,207
1,883,553
6: 1,883,577
27: 1,883,390
41: 1,882,890
1,883,646
54: 1,883,419
69: 1,883,008
85: 1,883,830
91: 1,883,823
221— 23: 1,883,451
47.4: 1,883,201
1,883,278
1,883,280
1,883,281
1,883,282
60: 1,882,697
1,883,534
1,883,716
67: R.18,632
68: 1,883,787
1,883,835
98: 1,883,640
100: 1,883,762
223— 15: 1,882,923
27: 1,883,639
55: 1,883,343
1,883,344
1,883,345

223— 64: 1,882,667
1,882,727
224— 29: 1,883,043
225— 21: 1,882,812
226— 56: 1,882,696
72: 1,883,136
77: 1,882,860
84: 1,882,731
92: 1,883,524
100: 1,883,460
125: 1,882,668
227— 5: 1,883,849
228— 50: 1,883,777
229— 14: 1,883,450
23: 1,883,323
73: 1,883,475
230— 133: 1,882,961
172: 1,883,328
206: 1,882,827
254: 1,882,663
234— 1.5: 1,883,516
54: 1,882,863
235— 60: 1,883,853
78: 1,883,037
82: 1,883,760
83: 1,883,765
92: 1,882,764
1,882,765
1,883,517
98: 1,882,796
236— 42: 1,882,803
68: 1,882,726
1,883,251
73: 1,883,735
75: 1,883,706
91: 1,883,015
1,883,243
101: 1,883,250
237— 12.3: 1,883,452
238— 205: 1,883,175
329: 1,882,654
1,883,147
240— 7.1: 1,883,681
11.2: 1,882,745
41.3: 1,883,359
1,883,360
1,883,361
81: 1,883,803
242— 5: 1,883,844
11: 1,883,401
46.2: 1,882,950
75: 1,883,222
84.5: 1,882,771
87: 1,883,518
123: 1,882,718
128: 1,883,039
131: 1,883,483
243— 31: 1,883,845
244— 2: 1,883,414
3: 1,883,455
14: 1,883,740
29: 1,882,730
31: 1,883,552
1,883,672
246— 3: 1,883,208
29: 1,883,107
220: 1,883,090
226: 1,882,914
1,883,089
231: 1,883,099
242: 1,883,693
247— 9: R.18,627
15: 1,883,457
20: 1,883,621
25: R.18,634
16: 1,883,330
17: 1,883,591
18: 1,882,980
20: 1,883,627
30: 1,883,620
1,883,796
31: 1,883,260
37: 1,883,508
43: 1,883,276
249— 2: 1,883,233
9: 1,883,663
20: 1,883,855
60: 1,882,754
250— 2: 1,883,827
8: 1,882,698
1,882,772
11: 1,883,802
19: 1,882,862
20: 1,883,794
27.5: R.18,628
1,882,671
1,882,936
1,882,994
1,883,174
1,883,840
33: 1,883,476
36: 1,882,684
1,882,849
1,882,850
1,882,969
40: 1,883,163

251— 4: 1,882,990
8: 1,883,061
90: 1,883,727
134: 1,883,843
252— 3: 1,882,916
5: 1,882,809
16: 1,882,741
254— 6: 1,883,157
95: 1,883,154
255— 19: 1,883,013
22: 1,883,070
26: 1,883,071
72: 1,883,321
257— 136: 1,882,719
227: 1,883,605
229: 1,882,912
230: 1,883,312
240: 1,883,123
245: 1,883,709
260— 4: 1,883,415
10: 1,883,676
1,883,677
20: 1,882,777
1,882,778
37: 1,883,525
81: 1,883,325
86: 1,883,356
103: 1,883,182
106: 1,882,808
108: 1,882,762
123: 1,883,353
125: 1,883,189
128: 1,882,759
130.5: 1,882,758
1,882,811
1,883,393
134: 1,883,443
145: 1,883,215
152: 1,883,122
154: 1,882,824
1,882,825
1,882,826
171: 1,882,978
261— 3: 1,883,024
26: 1,883,143
41: 1,882,723
1,882,725
1,883,809
44: 1,883,738
47: 1,882,717
1,882,722
1,883,095
54: 1,883,096
1,883,097
88: 1,883,456
91: 1,883,665
104: 1,883,778
113: 1,883,533
115: 1,883,379
121: 1,882,877
262— 28: 1,883,055
263— 6: 1,883,788
9: 1,883,555
22: 1,883,413
48: 1,883,755
51: 1,883,674
265— 1: 1,882,932
20: 1,882,783
1,882,784
27: 1,882,737
1,883,017
68: 1,883,496
1,883,548
69: 1,883,077
266— 7: 1,883,092
1,883,375
1,883,501
43: 1,883,590
267— 4: 1,883,742
8: 1,883,292
9: 1,882,801
1,883,049
29: 1,883,709
268— 119: 1,883,619
270— 5: 1,883,226
1,883,256
41: 1,883,289
47: 1,883,259
54: 1,882,895
55: 1,883,307
62: 1,883,162
66: 1,883,224
271— 56: 1,883,471
272— 22: 1,883,573
273— 34: 1,882,963
74: 1,883,030
134: 1,883,651
153: 1,883,265
274— 10: 1,883,238
1,883,239
1,883,627
43: 1,883,559
1,883,562
275— 2: 1,883,409
277— 35: 1,882,953
279— 1: 1,882,871

279— 1: 1,882,997
16: 1,883,611
56: 1,883,713
106: 1,882,975
280—33.12: 1,883,319
33.15: 1,883,696
33.44: 1,882,868
281— 19: 1,883,036
42: 1,883,035
285— 7: 1,883,469
71: 1,883,086

285— 72: 1,882,943
105: 1,883,439
115: 1,883,094
122: 1,883,509
146: 1,882,894
161: 1,883,279
286— 7: 1,882,679
16: 1,883,596
287— 54: 1,882,673
90: 1,883,090
1,883,748

287— 90: 1,883,782
103: 1,883,586
290— 36: 1,883,428
47: 1,883,661
292— 94: 1,883,626
111: 1,883,804
169: 1,883,099
134: 1,883,173
171: 1,883,027
207: 1,883,481
283: 1,883,165

292— 357: 1,883,610
293— 54: 1,883,620
294— 11: 1,882,934
67: 1,882,704
295— 44: 1,882,957
296— 10: 1,883,474
51: 1,883,473
84: 1,883,120
137: 1,883,739
297— 12: 1,883,252

297— 15: 1,883,249
298— 12: 1,883,472
299— 18: 1,882,922
41: 1,883,479
84: 1,882,786
107: 1,883,656
117: 1,883,264
300— 21: 1,883,425
301— 36: 1,883,641
46: 1,883,836
81: 1,882,685

302— 49: 1,882,861
308— 20: 1,883,422
21: 1,883,085
240: 1,882,956
312— 35: 1,883,169
36: 1,882,841
67: 1,883,712
155: 1,883,776
172: 1,883,833

U. S. GOVERNMENT PRINTING OFFICE, 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abbott Laboratories, North Chicago, Ill. Insecticidal soaps. Serial No. 329,589; Oct. 25. Class 4.

Acero, José S., Malaga, Spain. Olive oil. Serial No. 319,518; Oct. 25. Class 46.

Adams, Walter A., doing business as Adams Machine Company. Electric floor, table, wall, and ceiling lamps, etc. Serial No. 329,731; Oct. 25. Class 21.

Admiral Products Company. (See Strauss Stores Corporation.)

Adtowl Corporation, New York, N. Y. Cloth towels. Serial No. 330,078; Oct. 25. Class 42.

Alex Mo Compound Co., Redondo, Calif. Hypnotic, antispasmodic sedative, etc. Serial No. 330,005; Oct. 25. Class 6.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Metal fence posts. Serial No. 330,154; Oct. 25. Class 13.

Arden Box Toe Company, Watertown, Mass. Shoe stiffener parts. Serial No. 327,644; Oct. 25. Class 39.

Arena, A., & Co., Ltd., Los Angeles, Calif. Fresh oranges, melons, and vegetables. Serial No. 305,025; Oct. 25. Class 46.

Associated Seed Growers, Incorporated, New Haven, Conn. Seeds, bulbs and plants. Serial No. 330,175; Oct. 25. Class 1.

Associated Stationers Supply Company, Chicago, Ill. Books of notes, drafts, receipts, and checks, printed forms, loose leaf covers, etc. Serial No. 315,960; Oct. 25. Class 37.

Barnes, Sylvia O., Salem, Mass. Maltless birch beer. Serial No. 329,218; Oct. 25. Class 45.

Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. Serial No. 329,761; Oct. 25. Class 17.

Beck, Koller & Company, Inc., Detroit, Mich. Synthetic resins. Serial No. 329,700; Oct. 25. Class 6.

Berkshire Knitting Mills, Reading, Pa. Hosiery. Serial No. 328,973; Oct. 25. Class 39.

Billy Boy Nut Kitchen, Oak Park, Ill. Nuts. Serial No. 300,778; Oct. 25. Class 46.

Blish Milling Company, Seymour, Ind. Wheat flour. Serial No. 329,343; Oct. 25. Class 46.

Boss, Burton S., New York, N. Y. Face cream. Serial No. 326,068; Oct. 25. Class 6.

Boyd, Isaac N., York, Pa. Medicinal preparation. Serial No. 329,299; Oct. 25. Class 6.

Brazilian Insecticide Company, Brooklyn, N. Y. Insecticide. Serial No. 329,850; Oct. 25. Class 6.

Bronston Hat Co., Plainfield, N. J. Straw hats. Serial No. 329,851; Oct. 25. Class 39.

Brown and Findeisen, Inc., Miami, Fla. Periodical. Serial No. 330,158; Oct. 25. Class 38.

Brown, Andrew, Company, Los Angeles, Calif. Paint enamels, ready-mixed cold water and paste paints, etc. Serial No. 329,978; Oct. 25. Class 16.

Budd, Edward G., Manufacturing Company, Philadelphia, Pa. Electric welding machines. Serial No. 329,129; Oct. 25. Class 21.

Bunker, Charles M., doing business as Grip-A-Club Company, Greensboro, N. C. Preparation to be applied either to hands, golf club grip, etc. Serial No. 329,499; Oct. 25. Class 4.

Calumet Refining Co., Chicago, Ill. Penetrating oils for lubricating, etc. Serial No. 323,934; Oct. 25. Class 15.

Capital Paper Company, Indianapolis, Ind. Paper bags. Serial No. 330,222; Oct. 25. Class 2.

Champion Chemical Works, Chicago, Ill. Lye. Serial No. 330,336; Oct. 25. Class 6.

Chic Manufacturing Co., Peoria, Ill. Dresses and pajamas. Serial No. 316,877; Oct. 25. Class 39.

Chicago Mail Order Company, Chicago, Ill. Cutlery of base metal. Serial No. 327,580; Oct. 25. Class 23.

Chicago Spice & Flavor Co. (See Tesoro, Sam.)

Chicago Spice & Flavoring Ext. Co. (See Tesoro, Sam.)

Clapp, Otis, & Son, Inc., Boston, Mass. Blood food or tonic. Serial No. 329,178; Oct. 25. Class 6.

Coal Roller Pill Company. (See Granger Medicine Co. Inc., The. Serial No. 328,852; Oct. 25. Class 6.

Congost, Juan M., doing business as Hijo de Magin Mollfulleda, Arenys de Mar, Barcelona, Spain. Ethyl alcohol, rum, etc. Serial No. 329,348; Oct. 25. Class 49.

Congost, Juan M., Arenys de Mar, Barcelona, Spain. Ethyl alcohol, whiskey, liqueurs, etc. Serial No. 329,352; Oct. 25. Class 49.

Cottentex Products Co., Milwaukee, Wis. Cellulose fiber. Serial No. 325,088; Oct. 25. Class 1.

Couch, W. W., Company. (See N & W Overall Co., Inc.)

Deane Plaster Co., The, Yonkers, N. Y. Sanitary napkins and bandages and/or cellulose and sanitary belts. Serial No. 330,293; Oct. 25. Class 44.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Lathes and drill presses. Serial No. 329,674; Oct. 25. Class 23.

Dennis, Martin, Company, Newark, N. J. Adhesive preparation. Serial No. 329,802; Oct. 25. Class 5.

Detergent Products Corporation, Atlanta, Ga. Cleaning compound. Serial No. 328,480; Oct. 25. Class 4.

Detroit Stoker Company, Monroe and Detroit, Mich. Stoker castings and forgings in the rough. Serial No. 329,397; Oct. 25. Class 14.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Precious metals. Serial No. 318,230; Oct. 25. Class 14.

Duncan Coffee Co., Houston, Tex. Coffee. Serial No. 328,781; Oct. 25. Class 46.

Duplex Printing Press Co., Battle Creek, Mich. Rotary folders, matrix rollers, mat rollers, etc. Serial No. 313,469; Oct. 25. Class 23.

Du Pont Film Manufacturing Corporation, New York, N. Y. Photographic film. Serial No. 330,077; Oct. 25. Class 26.

Duralé Co., Inc., The, St. Louis, Mo. Deep wave hair lotion, nail enamel, etc. Serial No. 329,890; Oct. 25. Class 6.

Earnshaw Knitting Company, Newton, Mass. Underwear. Serial No. 329,330; Oct. 25. Class 39.

Eck-O-Lin Mfg. Co., Minneapolis, Minn. Antiseptic skin perfector and hair tonic. Serial No. 327,937; Oct. 25. Class 6.

Emerson & Stevens Mfg. Co., Inc., Oakland, Me. Scythes. Serial No. 329,705; Oct. 25. Class 23.

Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. Serial No. 330,366; Oct. 25. Class 22.

Entromul Company, The. (See McBride, Thomas J.)

Excelsior Springs Mineral Water Crystals Company, Excelsior Springs, Mo. Mineral water crystals. Serial No. 329,259; Oct. 25. Class 6.

Fame Canning Company. (See Stokely Brothers & Company.)

Farm Service Stores, Inc., Minneapolis, Minn. Field, garden and vegetable seeds. Serial No. 328,687; Oct. 25. Class 1.

Federal Motor Truck Company, Detroit, Mich. Six wheel vehicles equipped with bodies for transport purposes. Serial No. 327,784; Oct. 25. Class 19.

Ferris, Alexander T., doing business as sans Souci Products Co., Los Angeles, Calif. Prophylactic compound. Serial No. 329,331; Oct. 25. Class 6.

Fess and Fischer, Chicago, Ill. Electric reading lamps adapted to be combined with alarm clocks. Serial No. 329,776; Oct. 25. Class 21.

Fibreboard Products Inc., San Francisco, Calif. Paper. Serial No. 318,829; Oct. 25. Class 37.

Fire Proof Fabrics Sales Corporation, Philadelphia, Pa. Fire resistant fabrics. Serial No. 330,348; Oct. 25. Class 50.

Firex Chemical Co., Baltimore, Md. Powdered chemicals used as fire extinguishers. Serial No. 329,228; Oct. 25. Class 6.

Fort Pitt Bedding Company, Pittsburgh, Pa. Bed springs. Serial No. 330,390; Oct. 25. Class 32.

Fox River Paper Company, Appleton, Wis. Bond paper. Serial No. 330,295; Oct. 25. Class 37.

Gamma Phi Beta, Chicago, Ill. Jewelry. Serial No. 330,085; Oct. 25. Class 28.

Genting, A. H., Company, Philadelphia, Pa. Boots and shoes, wash suits, sweaters, etc. Serial No. 322,531; Oct. 25. Class 39.

Ginsburg, Matthew, doing business as Universal Insecticide & Disinfectant Co., assignor to Universal Insecticide & Disinfectant Co., Philadelphia, Pa. Insecticide. Serial No. 327,433; Oct. 25. Class 6.

Godissart & Pyles, Hollywood, Calif. Antiseptic, antitoxic and deodorant. Serial No. 329,232; Oct. 25. Class 6.

Gordon Brassiere Co. Inc., New York, N. Y. Brassières. Serial No. 329,986; Oct. 25. Class 29.

Goserud, Chester O., St. Paul, Minn. Storm window fasteners, etc. Serial No. 330,012; Oct. 25. Class 13.

Gotham Shock-Bilt, Inc., New York, N. Y. Watches, clocks and parts thereof, etc. Serial No. 329,709; Oct. 25. Class 27.

Goulds Pumps, Incorporated, Seneca Falls, N. Y. Centrifugal pumps. Serial No. 329,113; Oct. 25. Class 23.

Granger Medicine Co. Inc., The, doing business as Coal Roller Pill Company, New Iberia, La. Pills. Serial No. 328,352; Oct. 25. Class 6.

Grip-A-Club Company. (See Bunker, C. M.)

Hanes, P. H., Knitting Company, Winston-Salem, N. C. Wearing apparel. Serial No. 330,200; Oct. 25. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Harding-Jones Paper Company, The, Excello, Ohio. Writing and printing paper. Serial No. 330,125; Oct. 25. Class 37.
Hat Corporation of America, Norwalk, Conn. Hats. Serial No. 330,063; Oct. 25. Class 39.
Hercules Powder Company, Wilmington, Del. Depilating compound. Serial No. 329,796; Oct. 25. Class 6.
Hijo de Magín Mollfulleda. (See Congost, Juan M.)
Hirzel, Carl R., doing business as Hirzel Canning Company, Toledo, Ohio. Canned sauer kraut and tomatoes. Serial No. 329,797; Oct. 25. Class 46.
Home Run Razor Blade Co. (See World's Products Co.)
Hopkins Chemical Co., Washington, D. C., and Newark, N. J. Soap paste. Serial No. 330,346; Oct. 25. Class 4.
Hy-G-Dent Company, New York, N. Y. Toothpaste. Serial No. 329,671; Oct. 25. Class 6.
Hyo Products Company, Binghamton, N. Y. Cleaning compound. Serial No. 330,179; Oct. 25. Class 4.
Imperial Type Metal Company, Philadelphia, Pa. Type metal alloys. Serial No. 330,228; Oct. 25. Class 14.
Independent Macaroni Co., Inc., Mount Vernon, N. Y. Macaroni. Serial No. 314,158; Oct. 25. Class 46.
Inks Inc., New York, N. Y. Printing ink. Serial No. 330,065; Oct. 25. Class 11.
International Tobacco Company, Limited, London, England. Cigarettes. Serial No. 330,297; Oct. 25. Class 17.
International Trade, Finance, & Export Co., Ltd., Glasgow, Scotland. Whiskey. Serial No. 330,201; Oct. 25. Class 49.
Jaburg Brothers, Inc., New York, N. Y. Alimentary paste, butter, candies, etc. Serial No. 312,651; Oct. 25. Class 46.
Jackson, Byron, Co., Los Angeles, Calif. Pumps and parts therefor. Serial Nos. 329,191–2; Oct. 25. Class 23.
Jelke, John F., Company, Chicago, Ill. Mayonnaise, salad and French dressing, etc. Serial No. 329,898; Oct. 25. Class 46.
Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Shoes. Serial No. 330,128; Oct. 25. Class 39.
Keasbey & Mattison Company, Ambler, Pa. Brake linings. Serial No. 329,952; Oct. 25. Class 35.
Kenzlo Coats, Inc., New York, N. Y. Coats. Serial No. 329,994; Oct. 25. Class 39.
Kennedy, Andrew R., Inc., New York, N. Y. Lawn grass seed mixture. Serial No. 323,457; Oct. 25. Class 1.
Kerr, Robert A., and James F. Hopkins, Detroit, Mich. Nuts. Serial No. 324,226; Oct. 25. Class 46.
Knights Co., Cambridge, Mass. Prophylactic rubber articles. Serial No. 330,347; Oct. 25. Class 44.
Larus & Brother Company, Incorporated, Richmond, Va. Smoking tobacco, chewing tobacco, and cigarettes. Serial No. 329,639; Oct. 25. Class 17.
Library Efficiency Corporation, New York, N. Y. Bill files, filing books, file signals, etc. Serial No. 328,736; Oct. 25. Class 37.
Lombardy, David, Cleveland, Ohio. Olive oil, canned tunny fish, macaroni, etc. Serial No. 328,614; Oct. 25. Class 46.
Luntz, Joseph, Brooklyn, N. Y. Laxative tonic. Serial No. 327,825; Oct. 25. Class 6.
Mae-O Company, The. (See Peterson, T. H.)
Major Petroleum Company, Wilmington, Del., and Philadelphia, Pa. Dry cleaner. Serial No. 329,818; Oct. 25. Class 4.
McBride, Thomas J., doing business as The Entromul Company, Los Angeles, Calif. Preparation for the treatment of intestinal disorders. Serial No. 330,306; Oct. 25. Class 6.
McKay, Edna M., Akron, Ohio. Skin lotion. Serial No. 329,718; Oct. 25. Class 6.
Mearick-Ames, Inc., Dayton, Ohio. Hosiery. Serial No. 330,203; Oct. 25. Class 39.
Menasha Products Company, The, Menasha, Wis. Toilet tissue. Serial No. 329,803; Oct. 25. Class 37.
Menihan Company, The, Rochester, N. Y. Shoes. Serial No. 329,956; Oct. 25. Class 39.
Merck & Co., Inc., Rahway, N. J. Medicinal preparation used as an antisyphilitic. Serial No. 329,863; Oct. 25. Class 6.
Meyer Brothers Drug Company, St. Louis, Mo. Medicinal preparation in liquid form. Serial No. 330,408; Oct. 25. Class 6.
Michigan Casket Co., Detroit, Mich. Caskets. Serial No. 330,485; Oct. 25. Class 2.
Monroe Products Co., Los Angeles, Calif. Facial and hand creams. Serial No. 327,699; Oct. 25. Class 6.
Morse, Robert V., New York, N. Y. Check valves for vacuum control devices. Serial No. 329,089; Oct. 25. Class 13.
N & W Overall Co., Inc., doing business as W. W. Couch Company, Lynchburg, Va. Overalls, work shirts and pants. Serial No. 328,032; Oct. 25. Class 39.
National Games Corporation, Buffalo, N. Y. Shuttlecocks. Serial No. 329,750; Oct. 25. Class 22.
National Silk Company, Inc., The, South Coventry, Conn. Threads, yarn, novelty yarn. Serial No. 330,377; Oct. 25. Class 43.
Nordmark-Werke G. m. b. H., Hamburg, Germany. A medicinal dietetic food preparation. Serial No. 327,597; Oct. 25. Class 6.
Novato French Cheese Factory. (See Rudolff, Hermann.)
Nu-Ray Health Products Co. (See Possenheim, Louis.)
Oil Center Tool Company, Houston, Tex. Slush pump liners, slush pump rods, slush pump pistons, etc. Serial No. 312,768; Oct. 25. Class 23.
Pantasote Leather Company, Passaic, N. J. Coated textile fabrics for window shades, etc. Serial No. 330,351; Oct. 25. Class 50.
Paulson, Henry, doing business as Henry Paulson & Company, Chicago, Ill. Finger rings, bracelets. Serial No. 322,471; Oct. 25. Class 28.
Peerless Paper Mills, Inc., The, Oaks, Pa. Toilet paper. Serial No. 328,182; Oct. 25. Class 37.
Peterson, Thomas H., doing business as The Mae-O Company, Cody, Wyo. Stomach tablets. Serial No. 328,370; Oct. 25. Class 6.
Phoenix Oil Company, The, Cleveland, Ohio. Liquid cleaning preparation. Serial No. 329,092; Oct. 25. Class 4.
Pim Chemical Company, West Palm Beach, Fla. Asthma preparation. Serial No. 329,060; Oct. 25. Class 6.
Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Gas meters. Serial No. 318,322; Oct. 25. Class 26.
Popular Publications, Inc., New York, N. Y. Magazine. Serial No. 318,719; Oct. 25. Class 38.
Portage Draperies Co., Inc., New York, N. Y. Curtains of rayon, silk, cotton, cellanese, and tubize, draperies, and fabrics. Serial No. 329,902; Oct. 25. Class 42.
Porter, Alex. W., Atlantic City, N. J. Prepared sandwiches and box lunches. Serial No. 328,645; Oct. 25. Class 46.
Possenheim, Louis, doing business as Nu-Ray Health Products Co., New York, N. Y. Candy. Serial No. 328,105; Oct. 25. Class 46.
Potter-Wrightington, Inc., Charlestown, Mass. Flea soap. Serial No. 330,020; Oct. 25. Class 4.
Pyramid Rubber Company, The, Ravenna, Ohio. Rubber nursing bottle nipples. Serial No. 329,242; Oct. 25. Class 44.
Reading Poultry Food Company, Reading, Pa. Peat moss and mulching. Serial No. 329,463; Oct. 25. Class 1.
Renstrom, Carl W., doing business as Tip-Top Products Co., Omaha, Nebr. Liquid solder. Serial No. 328,018; Oct. 25. Class 5.
Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. Serial No. 330,102; Oct. 25. Class 42.
Romanoff Caviar Company, New York, N. Y. Anchovies and antipasto. Serial No. 324,008; Oct. 25. Class 46.
Rototiller, Inc., Wilmington, Del., and Long Island City, N. Y. Farm machine for soil cultivation. Serial No. 326,600; Oct. 25. Class 23.
Rubió, Fernando A., Barcelona, Spain. General tonics, cod liver oil, laxative medicines, etc. Serial No. 329,655; Oct. 25. Class 6.
Rudolff, Hermann, doing business as Novato French Cheese Factory, Novato, Calif. Cheese. Serial No. 330,167; Oct. 25. Class 46.
Rudolph, Anna, Cincinnati, Ohio. Preparations for promoting the growth of hair. Serial No. 329,778; Oct. 25. Class 6.
Samuels, Albert S., Co., San Francisco, Calif. Finger rings. Serial No. 330,129; Oct. 25. Class 28.
Saunders, Charles, deceased; Nellie L. Saunders and Charles M. Saunders, administrators, doing business as Charles Saunders, Key West, Fla. Sponges. Serial No. 328,934; Oct. 25. Class 1.
Saunders, Charles M., et al., administrator. (See Saunders, Charles.)
Saunders, Nellie L., et al., administratrix. (See Saunders, Charles.)
Shotwell, Albert V., Los Angeles, Calif. Shoe dressings. Serial No. 330,278; Oct. 25. Class 4.
Smith, Carroll Dunham, Pharmacal Co., doing business as Smith Pharmacal Co. Tonic and appetite stimulator. Serial No. 325,190; Oct. 25. Class 6.
Snap-On Tools, Inc., Kenosha, Wis. Wrenches, wrench handles, screw drivers, etc. Serial No. 316,137; published Oct. 25. Class 23.
"Snia-Viscosa" Società Nazionale Industria Applicazioni Viscosa, Milan, Italy. Tufts of artificial staple fibres. Serial No. 327,262; Oct. 25. Class 1.
Society of the Colonaide, Incorporated, New York, N. Y. Tablets. Serial No. 323,509; Oct. 25. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Powdered whey. Serial No. 329,905; Oct. 25. Class 46.
Stacey-Curtis Manufacturing Co., Inc., Hampton, Va. Air conditioning apparatus. Serial No. 329,756; Oct. 25. Class 34.
Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 330,209; Oct. 25. Class 15.
Stokely Brothers & Company, doing business as Fame Canning Company, Louisville, Ky. Canned vegetables, sauer kraut, catsup, etc.. Serial No. 328,282; Oct. 25. Class 46.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Penetrating and lubricating oils. Serial No. 328,142; Oct. 25. Class 15.
Sussberg & Feinberg, Inc., New York, N. Y. Silk and rayon piece goods. Serial No. 329,908; Oct. 25. Class 42.
Swann Chemical Company, Birmingham, Ala. Concentrated fertilizer. Serial No. 320,014; Oct. 25. Class 10.
Talking Golf Ball Company, Chicago, Ill. Golf balls. Serial No. 330,435; Oct. 25. Class 22.
Tampa Drug Company, Tampa, Fla. Saltpetre, cod liver oil, ammonia, etc. Serial No. 327,204; Oct. 25. Class 6.
Tartar, Max, Chicago, Ill. Playing cards. Serial No. 330,109; Oct. 25. Class 22.
Tate, John E., Boston, Mass. Glare eliminators. Serial No. 329,512; Oct. 25. Class 34.
Tennessee Cereal Company, Nashville, Tenn. Cereal breakfast food. Serial No. 329,540; Oct. 25. Class 46.
Terminal Barber Shops, Inc., New York, N. Y. Cosmetics. Serial No. 325,489; Oct. 25. Class 6.
Terminal Barber Shops, Inc., New York, N. Y. Toilet lotions. Serial No. 325,490; Oct. 25. Class 6.
Tesoro, Sam, doing business as Chicago Spice & Flavor Co., and Tesoro Brand Products, and Chicago Spice & Flavoring Ext. Co., Chicago, Ill. Effervescent citrate preparation. Serial No. 329,267; Oct. 25. Class 6.
Texas Company, The, New York, N. Y. Gasoline. Serial No. 330,213; Oct. 25. Class 15.
Tip-Top Products Co. (See Renstrom, Carl W.)
Toledo Porcelain Enamel Products Company, The, Toledo, Ohio. Porcelain enameled sheet metal. Serial No. 328,463; Oct. 25. Class 14.
United States Envelope Company, Springfield, Mass. Containers or bags of transparent paper. Serial No. 330,132; Oct. 25. Class 2.
Universal Insecticide & Disinfectant Co. (See Ginsburg, Matthew.)
Veldown Company, Inc., New York, N. Y. Cleansing tissue. Serial No. 329,910; Oct. 25. Class 37.
Viking Oil Corporation, Clarendon, Pa. Lubricants in oil and grease form. Serial No. 318,961; Oct. 25. Class 15.
Wagstaffe Limited, Hamilton, Ontario, Canada. Jams, jellies, marmalade, etc. Serial No. 324,811; Oct. 25. Class 46.
Western Auto Supply Company, Kansas City, Mo. Tires. Serial No. 330,111; Oct. 25. Class 35.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental alloys. Serial No. 329,914; Oct. 25. Class 44.
Williams, Edward M., Norway, Iowa. Medicine. Serial No. 329,566; Oct. 25. Class 6.
Williams Gold Refining Co., Inc., The, Buffalo, N. Y. Artificial fishing baits. Serial No. 329,507; Oct. 25. Class 22.
Williams Hat Stores Inc., St. Louis, Mo. Hats. Serial No. 328,343; Oct. 25. Class 39.
Wilson, C. E., & Company, Inc., Manchester, Conn. Nursery stock. Serial No. 329,568; Oct. 25. Class 1.
Wiora, Martha, Almond, Wis. Preparation for removing wrinkles. Serial No. 329,365; Oct. 25. Class 6.
Wollner & Smith, New York, N. Y. Goods in the piece. Serial No. 330,500; Oct. 25. Class 42.
World's Products Co., doing business as Home Run Razor Blade Co., Spencer, Ind. Razor blades. Serial No. 330,113; Oct. 25. Class 23.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Co., The, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Kitchen tools and utensils. 298,394–5; Oct. 25; Serial Nos. 317,292–3; published Aug. 9, 1932. Class 23.
Abell, Wallace T., doing business as Abell Laboratories, Alhambra, Calif. Surgical appliances for the treatment of prostate disorders. 298,392; Oct. 25; Serial No. 328,052; published Aug. 16, 1932. Class 44.
Akron Rubber Supply Company. (See Wyant, Willis W.)
Alpha Milk Laboratories. (See Voorhies, Grantland B.)
Alymp-Ol Soap Works, Taunton, Mass. Diamond cleaner, gold and silver polish, hand soap, etc. 298,385; Oct. 25; Serial No. 328,318; published Aug. 16, 1932. Class 4.
American Hebrew Publishing Company, New York, N. Y. Periodical. 298,499; Oct. 25; Serial No. 326,802; published Aug. 9, 1932. Class 38.
American Pop Corn Company, Sioux City, Iowa. Pop corn. 298,361; Oct. 25; Serial No. 328,151; published Aug. 9, 1932. Class 46.
American Pressed Steel Co., Philadelphia, Pa. Metallic plates. 39,796; renewed Feb. 10, 1933.
American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Paper and stationery. 298,467; Oct. 25; Serial No. 328,258; published Aug. 9, 1932. Class 37.
American Seed Company, Detroit, Mich. Vegetable and flower seeds. 298,374; Oct. 25; Serial No. 328,679; published Aug. 16, 1932. Class 1.
American Sheet Steel Company, New York, N. Y., to American Sheet and Tin Plate Company, Pittsburgh, Pa., successor. Sheet steel. 39,703; renewed Jan. 27, 1933.
American Textiles, Inc., Bay City, Mich. Underwear. 298,428; Oct. 25; Serial No. 321,088; published Aug. 16, 1932. Class 39.
American Tin Plate Co., New York, N. Y., to American Sheet and Tin Plate Company, Pittsburgh, Pa., successor. Tin plates and terne plates. 39,359; renewed Nov. 25, 1932.
American Tin Plate Co., New York, N. Y., to American Sheet and Tin Plate Company, Pittsburgh, Pa., successor. Tin plates and terne plates. 39,505; renewed Dec. 16, 1932.
American Wringer Company, Inc., Woonsocket, R. I. Printing plates. 298,387; Oct. 25; Serial No. 327,815; published Aug. 16, 1932. Class 50.
Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery, Women's. 298,345; Oct. 25; Serial No. 328,773; published Aug. 16, 1932. Class 39.
Atlas Supply Company, Newark, N. J. Storage batteries, storage battery chargers, electric fuses, etc. 298,350; Oct. 25; Serial No. 327,494; published Aug. 9, 1932. Class 21.
Atlas Supply Company, Wilmington, Del., and Newark, N. J. Storage batteries. 298,381–2; Oct. 25; Serial Nos. 328,152–3; published Aug. 9, 1932. Class 21.
Banister, James A., Company, Inc., Newark, N. J. Shoes. 298,429; Oct. 25; Serial No. 321,742; published Aug. 2, 1932. Class 39.
Bard & Margolies, Inc., Brooklyn, N. Y. Candy. 298,343; Oct. 25; Serial No. 328,654; published Aug. 16, 1932. Class 46.
Barker Bros. Incorporated, Los Angeles, Calif. Refrigerators. 298,321; Oct. 25; Serial No. 326,924; published Aug. 9, 1932. Class 31.
Barker Bros. Incorporated, Los Angeles, Calif. Furniture. 298,433; Oct. 25; Serial No. 325,455; published Aug. 9, 1932. Class 32.
Bearman, S., Shoe Company, St. Louis, Mo. Leather shoes and boots. 298,510; Oct. 25; Serial No. 327,574; published Aug. 2, 1932. Class 39.
Becton, Dickinson & Co., Rutherford, N. J. Syringes, hypodermic needles, and clinical thermometers. 298,351; Oct. 25; Serial No. 327,301; published Aug. 9, 1932. Class 44.
Benedikt, H. S., Company, Inc., New York, N. Y. Dry cleaning fluid for clothes, upholstery, etc. 298,377; Oct. 25; Serial No. 328,518; published Aug. 9, 1932. Class 4.
Berkeley Chesterfield Co., Portland, Oreg. Davenport beds and chairs. 298,520; Oct. 25. Class 32.
Block, H. & L., Ltd., San Francisco, Calif. Coats and leather coats, leather vests, necktles, gloves, etc. 298,354–5; Oct. 25; Serial Nos. 327,212–13; published Aug. 9, 1932. Class 39.
Booth, Walter, Shoe Co., Milwaukee, Wis. Boots, shoes, and oxfords. 298,450; Oct. 25; Serial No. 327,576; published Aug. 16, 1932. Class 39.
Boston Gear Works, Inc., North Quincy, Mass. Spur gears, worm gears, miter gears, etc. 298,486; Oct. 25; Serial No. 327,723; published Aug. 9, 1932. Class 23.
Bowersock, Justin D., assignor, by mesne assignments, The Lawrence Paper Company, Lawrence, Kans. Paper and fiber boxes. 89,084; renewed Jan. 28, 1933.
Bria-Shaps Company, The, Whitinsville, Mass. Leggings and overall protectors for nether garments. 298,357; Oct. 25; Serial No. 327,863; published Aug. 9, 1932. Class 39.
Brokaw, Lee M., doing business as Metab-O-Lizor Co., Glendale, Calif. Therapy apparatus. 298,375; Oct. 25; Serial No. 328,320; published Aug. 23, 1932. Class 44.
Brooks Rupture Appliance Co., assignor to Brooks Appliance Company, Inc., Marshall, Mich. Rupture appliances. 89,337; renewed Dec. 10, 1932.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Cue balls for pocket-billiards. 298,327; Oct. 25; Serial No. 327,900; published Aug. 9, 1932. Class 22.
Buermann, August, Manufacturing Co., Newark, N. J., assignor to North and Judd Manufacturing Company, New Britain, Conn. Harness and saddlery hardware. 88,465; renewed Sept. 24, 1932.
Calmec Mfg. Co. Ltd., Los Angeles, Calif. Oil field equipment. 298,464; Oct. 25; Serial No. 327,578; published Aug. 9, 1932. Class 23.
Campbell-Harris Corporation, assignor to Kansas City Smelting Company, Kansas City, Mo. Storage batteries. 298,398; Oct. 25; Serial No. 319,973; published Aug. 9, 1932. Class 21.
Carder-Martin, New Orleans, La. Carved wood plaques and silhouettes. 298,443; Oct. 25; Serial No. 311,820; published Aug. 16, 1932. Class 50.

Carthage Mills Incorporated, Cincinnati, Ohio. Floor coverings. 298,314; Oct. 25; Serial No. 326,780; published Aug. 9, 1932. Class 20.
Carthage Mills Incorporated, Cincinnati, Ohio. Floor coverings. 298,319–20; Oct. 25; Serial Nos. 326,778–79; published Aug. 9, 1932. Class 20.
Cassidy Company, Incorporated, Long Island City, N. Y. Electric lighting fixtures. 298,349; Oct. 25; Serial No. 325,208; published Aug. 9, 1932. Class 21.
Champion Coated Paper Company, The, Hamilton, Ohio. Mineral coated paper. 298,487; Oct. 25; Serial No. 316,192; published Aug. 16, 1932. Class 37.
Chemical Corporation of America, Minneapolis, Minn. Sweeping compound. 298,379; Oct. 25; Serial No. 328,548; published Aug. 16, 1932. Class 4.
Chez Francois, Inc., Miami, Fla. Confections. 298,479; Oct. 25; Serial No. 327,788; published July 26, 1932. Class 46.
Chum Razor Blade Corporation, Detroit, Mich. Razor blades. 298,393; Oct. 25; Serial No. 318,047; published Aug. 9, 1932. Class 23.
Colonial Radio Corporation, Buffalo, N. Y. Radio receiving sets and parts. 298,401; Oct. 25; Serial No. 321,378; published Aug. 9, 1932. Class 21.
Consolidated Products Co. (See Friscia, Americo B.)
Corticine Floor Covering Company, Limited, London, England. Linoleum and oil cloth. 298,326; Oct. 25; Serial No. 327,343; published Aug. 9, 1932. Class 20.
Cortland Line Company, Incorporated, Cortland, N. Y. Fish lines. 298,514; Oct. 25. Class 22.
Craddock-Terry Co., Lynchburg, Va. Shoes. 298,459; Oct. 25; Serial No. 328,161; published Aug. 16, 1932. Class 39.
Crane, Z. & W. M., Inc., Dalton, Mass. Writing paper and envelopes. 298,469; Oct. 25; Serial No. 328,414; published Aug. 9, 1932. Class 37.
Daché, Lilly, New York, N. Y. Ladies' hats. 298,420; Oct. 25; Serial No. 323,191; published Aug. 2, 1932. Class 39.
Dahlladel Nurseries. (See Maytrott, Warren W.)
Diamond "E" Orchards. (See Ewens Bros.)
Dick, A. B., Company, Chicago, Ill. Stencils and stencil sheets. 298,498; Oct. 25; Serial No. 326,130; published Aug. 16, 1932. Class 37.
Dover Stamping and Manufacturing Company, assignor to Dover Stamping and Manufacturing Company, Cambridge, Mass. Sieves for ash-barrels. 88,559; renewed Oct. 1, 1932.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Smokeless shotgun powder. 298,331; Oct. 25; Serial No. 328,482; published Aug. 16, 1932. Class 9.
Durex Abrasives Corporation, Jersey City, N. J. Adhesives. 298,424; Oct. 25; Serial No. 317,883; published Nov. 10, 1931. Class 5.
Eagle Pencil Company, assignor to Eagle Pencil Company, New York, N. Y. Lead pencils. 89,450; renewed Dec. 17, 1932.
Eagle Pencil Company, New York, N. Y. Lead pencils. 298,471; Oct. 25; Serial No. 328,552; published Aug. 16, 1932. Class 37.
Ehrlich, H., & Sons Mfg. Co., St. Joseph, Mo. Glue. 88,473; renewed Sept. 24, 1932.
Ehrlich, H., & Sons Mfg. Co., St. Joseph, Mo. Binder used as an ingredient of pork sausage. 90,177; renewed Feb. 11, 1933.
Ehrlich, H., & Sons Mfg. Co., St. Joseph, Mo. Cushions for billiard and pool tables. 90,632; renewed Mar. 11, 1933.
Empire State Flour Mills, Syracuse, to Empire State Flour Mills, New York, N. Y. Wheat flour. 89,544; renewed Dec. 24, 1932.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 298,336; Oct. 25; Serial No. 328,596; published Aug. 9, 1932. Class 22.
Ewens Bros., doing business as Diamond "E" Orchards, Sutherlin, Oreg. Fresh fruits. 298,412; Oct. 25; Serial No. 323,653; published Aug. 2, 1932. Class 46.
Exhibit Supply Company, The. (See Meyer, John F.)
F. & M. Importing Co. Inc., Los Angeles, Calif. Canned fish, canned fruits, etc. 298,422; Oct. 25; Serial No. 317,032; published Aug. 2, 1932. Class 46.
Fairchild-Wood Visaphone Corporation, New York, N. Y. Phonograph records. 298,316; Oct. 25; Serial No. 327,650; published Aug. 9, 1932. Class 36.
Fairchild-Wood Visaphone Corporation, New York, N. Y. Sensitized photographic film. 298,405–6; Oct. 25; Serial Nos. 327,648–9; published Aug. 9, 1932. Class 26.
Ferdinand, Lorrin W., Waltham, Mass. Marine glues. 298,470; Oct. 25; Serial No. 328,553; published Aug. 16, 1932. Class 5.
Fiatelle Company, The. (See Gaugler, Joseph P.)
Fidalgo Island Packing Company, Anacortes, Wash. Canned salmon. 298,447; Oct. 25; Serial No. 310,333; published Aug. 9, 1932. Class 46.
Fireside Games, Chicago, Ill. Game. 298,330; Oct. 25; Serial No. 328,060; published Aug. 16, 1932. Class 22.
Firestone Tire & Rubber Company, The, Akron, Ohio. Tire repair vulcanizing apparatus. 298,489; Oct. 25; Serial No. 328,092; published Aug. 9, 1932. Class 23.
Fisher Bros. Paper Company, Fort Wayne, Ind. Wrapping paper. 89,242; renewed Dec. 3, 1932.
Fisher Brothers Company, The, Cleveland, Ohio. Coffee and tea. 298,397; Oct. 25; Serial No. 318,944; published Aug. 9, 1932. Class 46.
Foamo Kleanzit Company, Waseca, Minn. Cleaners for fabrics, as rugs, upholstery, etc. 298,317; Oct. 25; Serial No. 327,585; published Aug. 9, 1932. Class 4.
Ford, P. A., San Francisco, Calif. Canned fish, vegetables, fruits, etc. 298,342; Oct. 25; Serial No. 328,578; published Aug. 16, 1932. Class 46.
Fort Smith Coffee Company, The, Fort Smith, Ark. Blended coffee. 90,007; renewed Jan. 28, 1933.
Foster, Charles M., Dayton, Ohio. Ladies' shoes. 298,480; Oct. 25; Serial No. 325,202; published Aug. 2, 1932. Class 39.
Friedricks, Irving, doing business as Irving Friedricks Co., New York, N. Y. Ladies' sport coats. 298,358; Oct. 25; Serial No. 328,095; published Aug. 9, 1932. Class 39.
Friscia, Americo B., doing business as Consolidated Products Co., New York, N. Y. Flavoring for maltless beverages. 298,323; Oct. 25; Serial No. 327,311; published Aug. 16, 1932. Class 45.
G L E Candy Corporation of America, Chicago, Ill. Candy. 298,511; Oct. 25. Class 46.
Gale Shoe Manufacturing Co., Boston, Mass., and Manchester, N. H. Shoes. 298,482; Oct. 25; Serial No. 326,421; published Aug. 16, 1932. Class 39.
Gale Shoe Manufacturing Co., Boston, Mass. Shoes, Leather. 298,517; Oct. 25. Class 39.
Gaugler, Joseph P., doing business as The Fiatelle Company, New York, N. Y. Color display card. 298,463; Oct. 25; Serial No. 326,014; published Aug. 9, 1932. Class 26.
Gentry, Elsie R., Newark, N. J. Maltless beverages, syrups, and extracts. 298,338; Oct. 25; Serial No. 328,638; published Aug. 16, 1932. Class 45.
Germantown Rendering Company, The, Cincinnati, Germantown, and Dayton, Ohio. Stock and poultry feeds. 298,400; Oct. 25; Serial No. 322,885; published Aug. 9, 1932. Class 46.
Gibson Canning Company, Gibson City, Ill. Canned corn. 298,494; Oct. 25; Serial No. 325,095; published Aug. 9, 1932. Class 46.
Gibson Electric Refrigerator Corporation, Greenville, Mich. Refrigerating apparatus. 298,406; Oct. 25; Serial No. 323,046; published Aug. 16, 1932. Class 31.
Gilbert Paper Co., Menasha, Wis. Safety paper. 298,497; Oct. 25; Serial No. 326,086; published Aug. 16, 1932. Class 37.
Godchaux Sugars, Inc., New Orleans, La. Sugar. 298,417; Oct. 25; Serial No. 324,103; published Aug. 9, 1932. Class 46.
Goldenberg, D., Inc., Philadelphia, Pa. Candy. 298,362; Oct. 25; Serial No. 328,165; published Aug. 9, 1932. Class 46.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Automobile top dressing. 298,373; Oct. 25; Serial No. 328,605; published Aug. 16, 1932. Class 4.
Granat, Joseph, doing business as Granat Bros., San Francisco, Calif. Finger rings. 298,346; Oct. 25; Serial No. 325,142; published Aug. 9, 1932. Class 28.
Green River Fuel Company, Incorporated, assignor to Green River Fuel Company, Inc., Mogg, Ky. Coal. 298,475; Oct. 25; 277,866; published Mar. 26, 1929. Class 1.
Gusrantee Shoe Company, The, San Antonio, Tex. Shoes. 298,513; Oct. 25. Class 39.
H & W Company, Inc., The, Newark, N. J. Bandeaus, bandettes, and corsettes. 298,451; Oct. 25; Serial No. 327,631; published Aug. 2, 1932. Class 39.
Halitosine Company. (See Reis, Oliver V.)
Hall, Horace W., Newton, Mass. Tennis rackets. 298,325; Oct. 25; Serial No. 325,097; published Aug. 9, 1932. Class 22.
Haney, Allen E., to Bertha E. Haney, Albion, Ind., successor. Rheumatic and kidney remedy. 88,872; renewed Oct. 29, 1932.
Haskins Bros. & Co., Sioux City, Iowa. Laundry soap. 89,109; renewed Nov. 12, 1932.
Hatheway & Company, Inc., New York, N. Y. Non-metallic flexible electric conduit. 298,384; Oct. 25; Serial No. 328,298; published Aug. 9, 1932. Class 21.
Hecht Co., The, doing business as The Hub, Washington, D. C., and Baltimore, Md. Women's apparel. 298,483; Oct. 25; Serial No. 327,313; published Aug. 2, 1932. Class 39.
Hildreth, H. L., Co., Boston, Mass. Confectionery. 298,368; Oct. 25; Serial No. 328,411; published Aug. 16, 1932. Class 46.
Hildreth, H. L., Co., Boston, Mass. Confectionery. 298,371; Oct. 25; Serial No. 328,528; published Aug. 16, 1932. Class 46.
Hollingsworth & Whitney Company, Boston, Mass. Wrapping paper. 298,474; Oct. 25; Serial No. 328,610; published Aug. 16, 1932. Class 37.
Hub, The. (See Hecht Co., The.)
Hut Neckwear Co. Inc., New York, N. Y. Neckties and cravats. 298,360; Oct. 25; Serial No. 328,126; published Aug. 9, 1932. Clas 39.
Jackson, Byron, Co., Los Angeles, Calif. Centrifugal and turbine pumps and parts. 298,490; Oct. 25; Serial No. 328,821; published Aug. 9, 1932. Class 23.
Jergens, Andrew, Co., The, Cincinnati, Ohio, and New York, N. Y., assignor to The Andrew Jergens Company, Cincinnati, Ohio. Toilet soaps. 90,341; renewed Feb. 18, 1933.

Johansen Bros. Shoe Company, St. Louis, Mo. Shoes. 298,457; Oct. 25; Serial No. 327,876; published Aug. 16, 1932. Class 39.
Kane, Kennedy. (See Madden, Harry T.)
Kansas City Smelting Company. (See Campbell-Harris Corporation.)
Keil, Isidore, Newark, N. J. Bread and cake, noodles, and farfel. 298,419; Oct. 25; Serial No. 322,464; published July 12, 1932. Class 46.
Kingsbury Packing Co., Chicago, Ill. Pickles. 298,365; Oct. 25; Serial No. 328,274; published Aug. 9, 1932. Class 46.
Kistner, F. N., Co., Chicago, Ill. Chemically treated polishing cloth. 298,390; Oct. 25; Serial No. 328,007; published Aug. 16, 1932. Class 4.
Kistner, F. N., Co., Chicago, Ill. Chemically treated polishing cloths. 298,391; Oct. 25; Serial No. 328,008; published Aug. 9, 1932. Class 4.
Kreymer, Gertrude A., Spokane, Wash. Furniture and automobile polish. 298,386; Oct. 25; Serial No. 327,797; published Aug. 9, 1932. Class 16.
Kroger Grocery & Baking Company, The, doing business as Wesco Foods Company, Cincinnati, Ohio. Soap flakes. 298,383; Oct. 25; Serial No. 328,220; published Aug. 16, 1932. Class 4.
Lambert Marketing Company, Sacramento, Calif. Fresh grapes, deciduous fruits, and vegetables. 298,341; Oct. 25; Serial No. 328,531; published Aug. 9, 1932. Class 46.
Larry's, Dr., Food Products Laboratories, New York, N. Y. Cookies and crackers. 298,359; Oct. 25; Serial No. 327,980; published Aug. 9, 1932. Class 46.
Law, Charles A., Los Angeles, Calif. Blank forms. 298,509; Oct. 25; Serial No. 328,177; published Aug. 16, 1932. Class 37.
Lawrence Paper Company, The. (See Bowersock, Justin D., assignor.)
Lawrenceburg Roller Mills Co., Lawrenceburg, Ind. Wheat flour. 298,340; Oct. 25; Serial No. 328,532; published Aug. 9, 1932. Class 46.
Lederer, Henry, & Co., Chicago, Ill. Non-electric signs. 298,313; Oct. 25; Serial No. 327,021; published Aug. 16, 1932. Class 50.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. 298,410; Oct. 25; Serial No. 324,615; published Aug. 9, 1932. Class 46.
Liberty Bottling Co., Inc., Chicago, Ill. Maltless beverages, syrups, and waters. 298,333; Oct. 25; Serial No. 328,494; published Aug. 9, 1932. Class 45.
Lion Neckwear Co. (See Rice, Abraham L., assignor.)
Loeser, Frederick, & Co., Inc., Brooklyn, N. Y. Radio receiving sets. 298,388; Oct. 25; Serial No. 327,851; published Aug. 9, 1932. Class 21.
Loft, George W., New York, assignor, by mesne assignments, to Loft, Inc., Long Island City, N. Y. Confectionery. 89,872; renewed March 3, 1933.
Lorch Manufacturing Company, Dallas, Tex. Silk frocks. 298,434; Oct. 25; Serial No. 325,334; published Aug. 9, 1932. Class 39.
Lunkenheimer Company, The, Cincinnati, Ohio. Tools and parts of machinery. 88,683; renewed Oct. 15, 1932.
Lunkenheimer Company, The, Cincinnati, Ohio. Pressure regulators, water-columns, nozzles, etc. 89,279; renewed Dec. 3, 1932.
Lunkenheimer Company, The, Cincinnati, Ohio. Water gages, oil gages, steam gages, etc. 89,759; renewed Jan. 7, 1933.
Mac-Roh Sales & Manufacturing Co., Bettendorf, Iowa. Bread slicing machinery. 298,492–3; Oct. 25; Serial Nos. 328,402–3; published Aug. 9, 1932. Class 23.
Madden, Harry T., doing business as Kennedy Kane, Brooklyn, N. Y. Column or section of daily newspaper. 298,508; Oct. 25; Serial No. 328,132; published Aug. 9, 1932. Class 38.
Markell, Maurice J., Brooklyn, N. Y. Shoes. 298,452; Oct. 25; Serial No. 327,732; published Aug. 16, 1932. Class 39.
Massachusetts Chocolate Company, Boston, Mass. Sweet chocolate. 298,370; Oct. 25; Serial No. 328,496; published Aug. 9, 1932. Class 46.
Maytrott, Warren W., doing business as Dahliadel Nurseries, Vineland, N. J. Catalogs. 298,476–7; Oct. 25; Serial Nos. 284,477–8; published Aug. 9, 1932. Class 38.
McCallum, D. & J., Ltd., Edinburgh, Scotland. Scotch whisky. 298,322; Oct. 25; Serial No. 326,948; published Aug. 9, 1932. Class 49.
Merrimac Paper Company, Lawrence, Mass. Index and memorandum cards, record sheets, etc. 298,503; Oct. 25; Serial No. 327,559; published Aug. 16, 1932. Class 37.
Metab-O-Lizor Co. (See Brokaw, Lee M.)
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin controlled amusement machines. 298,409; Oct. 25; Serial No. 328,416; published Aug. 16, 1932. Class 22.
Meyrowitz, E. B., Inc., New York, N. Y. Spectacle frames. 298,487; Oct. 25; Serial No. 327,913; published Aug. 9, 1932. Class 26.
Michaels Bros., Brooklyn, N. Y. Refrigerators. 298,337; Oct. 25; Serial No. 328,604; published Aug. 16, 1932. Class 31.
Midway Chemical Company, Chicago, Ill. Polish for furniture, automobiles, etc. 298,415; Oct. 25; Serial No. 322,024; published Aug. 9, 1932. Class 16.
Midwest Hardware Company, Chicago, Ill. Lawn sprinklers. 298,456; Oct. 25; Serial No. 327,914; published Aug. 9, 1932. Class 13.
Millbrook Products Co., Somerville, Mass. Beverages. 298,418; Oct. 25; Serial No. 322,262; published Feb. 23, 1932. Class 45.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Maltless beverages, syrups, extracts, etc. 298,407; Oct. 25; Serial No. 323,142; published Aug. 16, 1932. Class 45.
Mission Dry. Corporation, Ltd., Los Angeles, Calif. Beverage dispensers. 298,462; Oct. 25; Serial No. 327,164; published Aug. 9, 1932. Class 23.
Modishform Brassiere Co. Inc., New York, N. Y. Brassières, bandeaus, and girdles, etc. 298,439; Oct. 25; Serial No. 315,863; published Aug. 9, 1932. Class 39.
Monagas, John A., doing business as Monagas Trading Company, New York, N. Y. Paper, envelopes, pens, etc. 298,501; Oct. 25; Serial No. 327,403; published Aug. 16, 1932. Class 37.
Moore, Levi G., Lancaster, Pa. Milk, butter, eggs and cottage cheese. 298,353; Oct. 25; Serial No. 326,958; published Aug. 16, 1932. Class 46.
Morton, Charles D., Chicago, Ill. Vending machine for paper articles. 298,478; Oct. 25; Serial No. 328,445; published Aug. 9, 1932. Class 23.
Motor Wheel Corporation, Lansing, Mich. Air circulating oil burning furnaces. 298,453; Oct. 25; Serial No. 327,734; published Aug. 9, 1932. Class 34.
Nashua Gummed & Coated Paper Company, Nashua, N. H. Wax-coated paper. 298,515; Oct. 25. Class 37.
National Cash Register Company, The, Dayton, Ohio. Paper slitting and stacking machines. 298,405; Oct. 25; Serial No. 328,109; published Aug. 9, 1932. Class 23.
Newark Wholesale Grocery Co., Newark, N. J. Coffee. 298,364; Oct. 25; Serial No. 328,248; published Aug. 9, 1932. Class 46.
New York Merchandise Co. Inc., New York, N. Y. Abrasive pot cleaners made of metallic wire. 298,380; Oct. 25; Serial No. 328,070; published Aug. 9, 1932. Class 4.
North American Radium Corporation, New York, N. Y. Appliance for charging water and/or other fluids with radium emanation. 298,440; Oct. 25; Serial No. 313,623; published Aug. 9, 1932. Class 44.
North and Judd Manufacturing Company. (See Buermann, August, Manufacturing Co., assignor.)
Nu-Know-U-Well Medicine Company. (See Rice, Edward E.)
Odence, Charles, Company, Boston, Mass. Cigars. 298,347; Oct. 25; Serial No. 326,720; published Aug. 16, 1932. Class 17.
Odin Stove Manufacturing Company, Erie, Pa. Gas stoves and ranges. 298,418; Oct. 25; Serial No. 324,264; published Aug. 9, 1932. Class 34.
Pabst Corporation, Milwaukee, Wis. Malt extract used as a tonic. 298,446; Oct. 25; Serial No. 310,407; published June 9, 1931. Class 6.
Palmer Brothers Co., The, New London, Conn. Mattresses. 298,430; Oct. 25; Serial No. 326,869; published Aug. 9, 1932. Class 32.
Papyrus Company, The, Kenilworth, N. J. Wrapping paper, tissue, etc. 298,436; Oct. 25; Serial No. 316,566; published Aug. 16, 1932. Class 37.
Parker Pen Company, The, Janesville, Wis. Pencils, fountain pens, desk sets, and the component parts thereof. 298,403; Oct. 25; Serial No. 322,399; published Aug. 9, 1932. Class 37.
Patricia Petticoat Co. Inc., The, New York, N. Y. Underwear. 298,372; Oct. 25; Serial No. 328,504; published Aug. 16, 1932. Class 39.
Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. 298,512; Oct. 25. Class 39.
Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders and braces. 298,516; Oct. 25. Class 39.
Planters Edible Oil Company, Suffolk, Va., and Wilkes-Barre, Pa. Vegetable oil shortening compound. 298,506; Oct. 25; Serial No. 327,767; published Aug. 2, 1932. Class 46.
Planters Nut & Chocolate Co., Wilkes-Barre, Pa. Crushed peanut confection. 298,502; Oct. 25; Serial No. 327,414; published Aug. 2, 1932. Class 46.
Pond's Extract Company, New York, N. Y. Paper handkerchiefs. 298,472; Oct. 25; Serial No. 328,583; published Aug. 16, 1932. Class 37.
Procter & Gamble Company, The, Cincinnati, Ohio. Cooking-fats. 298,366; Oct. 25; Serial No. 328,279; published Aug. 9, 1932. Class 46.
Prosthetic Products, Inc., New York, N. Y. Plastic resin. 298,378; Oct. 25; Serial No. 328,587; published Aug. 9, 1932. Class 44.
Reavis, Mrs. L. O., Kansas City, Kans. Noodles. 298,411; Oct. 25; Serial No. 324,399; published Aug. 9, 1932. Class 46.
Reckitt & Sons Ld., Hull, England, assignors to Reckitts (U. S. A.) Ltd., New Brunswick, N. J. Bluing and starch for laundry purposes. 89,769; renewed Jan. 7, 1933.
Red River Valley Potato Shippers Association, Moorhead, Minn. Potatoes. 298,519; Oct. 25. Class 46.

Reis, Oliver V., doing business as Halitosine Company, St. Louis, Mo. Antiseptic. 298,449; Oct. 25; Serial No. 297,819; published June 24, 1930. Class 6.

Reynolds-Schier Co., Inc., The, Chicago, Ill. Hectograph machines. 298,500; Oct. 25; Serial No. 327,233; published Aug. 16, 1932. Class 37.

Rialto Co-Operative Citrus Association, Rialto, Calif. Fresh citrus fruits. 298,445; Oct. 25; Serial No. 310,947; published Aug. 9, 1932. Class 46.

Rice, Abraham L., assignor to Lion Neckwear Co., Boston, Mass. Neckties, neckscarfs, etc. 89,949; renewed Jan. 21, 1933.

Rice, Edward E., doing business as Nu-Know-U-Well Medicine Company, Elmira, N. Y. Liniment. 298,425; Oct. 25; Serial No. 318,115; published Aug. 2, 7932. Class 6.

Richfield Oil Corporation of New York, New York, N. Y. Petroleum products. 298,352; Oct. 25; Serial No. 327,068; published Aug. 9, 1932. Class 15.

Riley, A. Landis, doing business as Landis Manufacturing Company, Atlantic City, N. J. Battery water level indicator. 298,491; Oct. 25; Serial No. 328,371; published Aug. 9, 1932. Class 26.

Robinson, Wallace W., Portland, Me. Emergency devices for first aid treatment. 298,315; Oct. 25; Serial No. 327,664; published Aug. 9, 1932. Class 44.

Rodes-Rapier Co., Inc., Louisville, Ky. Coats, vests, trousers, etc. 298,369; Oct. 25; Serial No. 328,449; published Aug. 9, 1932. Class 39.

Rolls-Royce Limited, Osmaston, Derby, England, assignor to Rolls-Royce of America, Incorporated, Springfield, Mass. Motor cars and chassis. 86,458; renewed May 7, 1932.

Rothkopf, S., & Sons, New York, N. Y. Hosiery. 298,344; Oct. 25; Serial No. 328,740; published Aug. 16, 1932. Class 39.

Royal Baking Powder Company, New York, N. Y. Gelatin dessert and aspic. 298,504; Oct. 25; Serial No. 327,709; published Aug. 9, 1932. Class 46.

Royal Canadian Distributing Company, Columbus, Ohio. Malt syrup. 298,496; Oct. 25; Serial No. 325,806; published Aug. 2, 1932. Class 46.

Russell, John, Cutlery Company, Turners Falls, Mass. Pocket knives. 89,503; renewed Dec. 17, 1932.

Scharner, Julius F., Jersey City, N. J. Parlor game. 298,328; Oct. 25; Serial No. 327,987; published Aug. 16, 1932. Class 22.

Schlesinger, B. F., & Sons, Inc., Baltimore, Md.; San Francisco and Oakland, Calif.; Portland, Oreg.; and Tacoma, Wash. Shoes. 298,460; Oct. 25; Serial No. 328,186; published Aug. 16, 1932. Class 39.

Scott-Ballantyne Company, Omaha, Nebr. Air conditioning equipment. 298,458; Oct. 25; Serial No. 328,019; published Aug. 9, 1932. Class 34.

Scott Paper Company, Chester, Pa. Tissue, creped, and absorbent papers. 298,473; Oct. 25; Serial No. 328,592; published Aug. 9, 1932. Class 37.

Sears, Roebuck and Co., Chicago, Ill. Shoes made of leather and fabric. 298,521; Oct. 25. Class 39.

Shunk, L. E., Latex Products, Inc., Akron, Ohio. Pessaries. 298,318; Oct. 25; Serial No. 327,569; published Aug. 16, 1932. Class 44.

Sims, B., Corporation, New York, N. Y. Women's and children's hats and caps. 298,414; Oct. 25; Serial No. 324,803; published Aug. 2, 1932. Class 39.

Smith, Landon P., Inc., Irvington, N. J. Glaziers scrapers for surfaces of glass, wood, etc. 298,401; Oct. 25; Serial No. 325,759; published Aug. 9, 1932. Class 23.

Snuggle Rug Co., Goshen, Ind. Infants' garments. 298,367; Oct. 25; Serial No. 328,312; published Aug. 16, 1932. Class 39.

Snyder & Black, Inc., New York, N. Y. Bridge game package. 298,335; Oct. 25; Serial No. 328,412; published Aug. 9, 1932. Class 22.

Società Anonima Francesco Bertolli, Lucca, Italy. Olive oil. 298,441; Oct. 25; Serial No. 313,311; published Feb. 16, 1932. Class 46.

Société Anonyme: Louiseboulanger, Paris, France. Wearing apparel. 298,426; Oct. 25; Serial No. 320,516; published Aug. 16, 1932. Class 39.

Société Claire Palisseau et Juliette Levy, doing business as J. Suzanne Talbot, Paris, France. Hats, fur garments, etc. 298,518; Oct. 25. Class 39.

Solescope Incorporated, Boston, Mass. Picture projecting apparatus and slides therefor. 298,488; Oct. 25; Serial No. 328,042; published Aug. 9, 1932. Class 26.

South Bend Bait Company, South Bend, Ind. Sporting goods. 89,384; renewed Dec. 10, 1932.

Southern Dairies, Inc., Washington, D. C., and Savannah, Ga. Maltless beverages and sirups therefor. 298,334; Oct. 25; Serial No. 328,567; published Aug. 9, 1932. Class 45.

Southern Dairies, Inc., Washington, D. C. Ice cream. 298,468; Oct. 25; Serial No. 328,339; published Aug. 9, 1932. Class 46.

Spinella Brothers Bakery, Waterbury, Conn. Bread. 298,363; Oct. 25; Serial No. 328,189; published Aug. 16, 1932. Class 46.

Stamm, Benjamin I., St. Paul, Minn. Mechanical advertising signs and the like. 298,389; Oct. 25; Serial No. 327,857; published Aug. 16, 1932. Class 50.

Standard Statistics Company, Inc., The, New York, N. Y. Publications. 298,507; Oct. 25; Serial No. 328,051; published Aug. 9, 1932. Class 38.

Stearns & Foster Co., The, Cincinnati and Lockland, Ohio. Mattresses. 298,402; Oct. 25; Serial No. 322,504; published Aug. 9, 1932. Class 32.

Stearns & Foster Co., The, Cincinnati and Lockland, Ohio. Spring cushion construction. 298,404; Oct. 25; Serial No. 322,565; published Aug. 9, 1932. Class 32.

Stetson, John B., Company, Philadelphia, Pa. Soft and stiff felt hats and caps. 39,368; renewed Nov. 25, 1932.

Stewart-Warner Corporation, Chicago, Ill. Refrigerating apparatus. 298,324; Oct. 25; Serial No. 326,434; published Aug. 9, 1932. Class 31.

Story, Nelson, & Co., Bozeman, to Montana Flour Mills Company, Great Falls, Mont., successor. Flour. 38,960–1; renewed Sept. 30. 1932.

Sullivan, John J., Norfolk, Va. Sweaters, leather coats, etc. 298,485; Oct. 25; Serial No. 327,376; published Aug. 2, 1932. Class 39.

Sultana Hosiery Mills, Inc., New York, N. Y. Hosiery and lingerie. 298,432; Oct. 25; Serial No. 325,665; published Aug. 9, 1932. Class 39.

Sunbeam Products Company. (See Toledo Shoe Finding Company.)

Tabulating Machine Company, The, New York, N. Y. Tabulating machines, card punching and card sorting machines, etc. 298,435; Oct. 25; Serial No. 316,672; published Aug. 9, 1932. Class 26.

Takahashi, Kotaro, Tokyo Fu, Japan. Maltless syrup, Nonalcoholic. 298,399; Oct. 25; Serial No. 320,379; published Aug. 16, 1932. Class 45.

Talbot, J. Suzanne. (See Societe Claire Palisseau et Juliette Levy.)

Toledo Shoe Finding Company, doing business as Sunbeam Products Company, Toledo, Ohio. Dyes, dressings, polishes, etc. 298,339; Oct. 25; Serial No. 327,545; published Aug. 16, 1932. Class 4.

Towns & James, assignor to Towns & James, Inc., Brooklyn, N. Y. Ointments. 298,423; Oct. 25; Serial No. 317,820; published Nov. 24, 1931. Class 6.

Trostel, Albert, & Sons Company, Milwaukee, Wis. Grain-finish leather in the piece, either vegetable, mineral, or oil tanned. 88,601; renewed Oct. 1, 1932.

Tuttman, Louis, New York, N. Y. Infants' and children's dresses. 298,356; Oct. 25; Serial No. 327,533; published Aug. 16, 1932. Class 39.

United States Rubber Company, New York, N. Y. Golf balls. 298,329; Oct. 25; Serial No. 327,895; published Aug. 16, 1932. Class 22.

United States Rubber Company, New York, N. Y. Rubber covered wire. 298,481; Oct. 25; Serial No. 323,303; published June 14, 1932. Class 21.

Van Horne, David S., Monroe, Ga. Remedy for certain ailments and diseases. 89,163; renewed Nov. 12, 1932.

Vanity Fair Silk Mills, Reading, Pa. Knitted and textile underwear and hosiery. 298,455; Oct. 25; Serial No. 327,859; published Aug. 16, 1932. Class 39.

Van-Sen, Inc., New York, N. Y. Bandeaux and girdles. 298,454; Oct. 25; Serial No. 327,811; published Aug. 2, 1932. Class 39.

Vaughn-Gillette, Bay City, Mich. Cakes and pies. 298,431; Oct. 25; Serial No. 326,347; published Aug. 9, 1932. Class 46.

Voorhies, Grantland B., doing business as Alpha Milk Laboratories, Sacramento, Calif. Dried lacteal baby food. 298,442; Oct. 25; Serial No. 312,725; published Aug. 9, 1932. Class 46.

Wahl Company, The, Chicago, Ill. Fountain pens and pencils. 298,427; Oct. 25; Serial No. 320,882; published Aug. 9, 1932. Class 37.

Walgreen Co., Chicago, Ill. Electric clocks. 298,444; Oct. 25; Serial No. 311,403; published Apr. 19, 1932. Class 27.

Webb, C. B., Company, New York, N. Y. Play balls. 298,421; Oct. 25; Serial No. 324,689; published Aug. 16, 1932. Class 22.

Welch Grape Juice Company, The, Westfield, N. Y. Grape juice. 298,332; Oct. 25; Serial No. 328,512; published Aug. 16, 1932. Class 45.

Wesco Foods Company. (See Kroger Grocery & Baking Company.)

Whiterock Quarries, Inc., Bellefonte, Pa. Agricultural lime. 298,348; Oct. 25; Serial No. 326,036; published Aug. 16, 1932. Class 10.

Wil-Gro Products Co., Willow Grove, Pa. Liquid fertilizer and especially prepared soil. 298,488; Oct. 25; Serial No. 315,957; published Aug. 18, 1931. Class 10.

Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes. 298,484; Oct. 25; Serial No. 327,079; published Aug. 16, 1932. Class 39.

Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills, rock hammers, sinkers, etc. 298,408; Oct. 25; Serial No. 323,645; published Aug. 9, 1932. Class 23.

Wrigley, Wm., Jr., Company, Chicago, Ill. Chewing gum. 298,495; Oct. 25; Serial No. 325,540; published Aug. 2, 1932. Class 46.

Wyant, Willis W., doing business as Akron Rubber Supply Company, Akron, Ohio. Prophylactic rubber or tissue articles. 298,448; Oct. 25; Serial No. 299,359; published Aug. 9, 1932. Class 44.

Yardley & Co., Limited, London, England. Toilet soap. 298,376; Oct. 25; Serial No. 328,380; published Aug. 16, 1932. Class 4.

Yardley Mills Co., Inc., Yardley, Pa. Wheat flour. 88,439; renewed Sept. 17, 1932.

Young Brothers, New York, N. Y. Men's and boys' hats. 298,416; Oct. 25; Serial No. 324,024; published Apr. 12, 1932. Class 39.

Young, Henry, Clarion, Pa. Numerical puzzles run as a column in newspapers and magazines. 298,505; Oct. 25; Serial No. 327,721; published Aug. 9, 1932. Class 38.

LIST OF REGISTRANTS OF LABELS

American Fork & Hoe Company, The, Cleveland, Ohio. Square Hole. For Tool Handles. 41,313; Oct. 25.

Aromint Corporation, Chicago, Ill. Peppermint Aromints. For Mints. 41,314–15; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 223. For Butter. 41,316; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 226. For Butter. 41,317; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 227. For Butter. 41,318; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 228. For Butter. 41,319; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 329. For Butter. 41,320; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 333. For Butter. 41,321; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 334. For Butter. 41,322; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial Design No. 335. For Butter. 41,323; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Territorial No. 500. For Ice Cream. 41,324; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Design No. 501. For Ice Cream. 41,325; Oct. 25.

Butler Paper Products Company, The, Toledo, Ohio. Design No. 502. For Ice Cream. 41,326; Oct. 25.

Chase, Arthur C., Los Angeles, Calif. "Spain Maid". For Spanish Paprika. 41,327; Oct. 25.

Derris, Inc., New York, N. Y. Derris Flea and Lice Powder. For Flea and Lice Powder. 41,328; Oct. 25.

Frigie Corporation of America, Chicago, Ill. Frigie Ice Milk Bar. For Frozen Confections. 41,329; Oct. 25.

Goldenberg, D., Inc., Philadelphia, Pa. Zil. For Candy. 41,330; Oct. 25.

Goon Dip & Co., Seattle, Wash. Ting Chah Oiongo Blend—Genuine China Tea. For China Tea. 41,331; Oct. 25.

Hansen's, Chr., Laboratory, Inc., doing business as The Junket Folks, Little Falls, N. Y. Flavotint. For Preparation Which Flavors and Tints Food Products. 41,332; Oct. 25.

Hanson, Emily C., Bloomfield, N. J. Squaw Lotion. For Lotion. 41,333; Oct. 25.

Hoague-Sprague Corporation, Lynn, Mass. The Red Eagle. For Boxes. 41,334; Oct. 25.

Hoague-Sprague Corporation, Lynn, Mass. Smart Shoes for Men. For Boxes. 41,335; Oct. 25.

Johnston, R. F., Paint Company, The, Cincinnati, Ohio. Vi-Va Varnish. For Varnish. 41,336; Oct. 25.

Junket Folks, The. (See Hansen's, Chr., Laboratory, Inc.)

Keystone Chemical Corporation, Detroit, Mich. Square Deel Cleaner and Water Softener. For Cleaner and Water Softener. 41,337; Oct. 25.

Northern Illinois Cereal Company, Lockport, Ill. 3½ Pounds Rolled Oats. For Rolled Oats. 41,338; Oct. 25.

Ogilvie Sisters, New York, N. Y. Protectol for Suntan. For a Protective Oil to be Applied to the Face and Body Before Exposure to the Sun. 41,339; Oct. 25.

Prosperity Company, Inc., The, Syracuse, N. Y. Preshrunk Fabrics. For Fabrics. 41,340; Oct. 25.

Retort Chemical Company, The, Gainesville, Fla. Pine-O-Sote. For Wood Preservative. 41,341; Oct. 25.

Tchossitch, Krsta, and Julianna Tchossitch, doing business as Well-Again Medicine Company, East St. Louis, Ill. Well-Again Athlete's Foot Remedy. For Salve for Athlete's Foot and Trench Foot. 41,342; Oct. 25.

Well-Again Medicine Company. (See Tchossitch, Krsta and J.)

Wesco Foods Company, Cincinnati, Ohio. North Bay Brand Pink Salmon. For Canned Salmon. 41,343; Oct. 25.

LIST OF REGISTRANTS OF PRINTS

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Bigelow's Big Eight for Hotel Carpeting. For Carpets and Carpeting. 13,948; Oct. 25.

General Mills, Inc., Minneapolis, Minn. Science's Most Thrilling Food Invention. For Biscuit Flour. 13,949; Oct. 25.

San-Nap-Pak Mfg. Co. Inc., New York, N. Y. San-Nap-Pak. A Better Napkin and Lower In Price. For Sanitary Napkins. 13,950; Oct. 25.

Waukesha Pure Spring Water Company, Inc., Chicago, Ill. Two Good Mick-Sirs. For Ginger Ale and Spring Water. 13,951; Oct. 25.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Green River Fuel Company. 298,475; Oct. 25; Serial No. 277,366; published Mar. 26, 1929.

Leather in the piece, Grain-finish. Albert Trostel & Sons Company. 88,601; renewed Oct. 1, 1932.

Seeds, Vegetable and flower. American Seed Company. 298,374; Oct. 25; Serial No. 328,679; published Aug. 16, 1932.

CLASS 2

Boxes, Paper and fiber. J. D. Bowersock. 89,984; renewed Jan. 28, 1933.

CLASS 3

Harness and saddlery hardware. August Buermann Manufacturing Co. 88,465; renewed Sept. 24, 1932.

CLASS 4

Cleaner, gold and silver polish, etc., Diamond. Alymp-Ol Soap Works. 298,385; Oct. 25; Serial No. 328,318; published Aug. 16, 1932.

Cleaners for fabrics. Foamo Kleanzit Company. 298,317; Oct. 25; Serial No. 327,585; published Aug. 9, 1932.

Cleaners made of metallic wire, Abrasive. New York Merchandise Co. 298,380; Oct. 25; Serial No. 328,070; published Aug. 9, 1932.

Cleaning fluid for clothes, upholstery, etc. H. S. Benedikt Company. 298,377; Oct. 25; Serial No. 328,518; published Aug. 9, 1932.

Dressing, Automobile top. Goodyear Tire & Rubber Company. 298,373; Oct. 25; Serial No. 328,605; published Aug. 16, 1932.

Dyes, dressings, polishes, etc. Toledo Shoe Finding Company. 298,339; Oct. 25; Serial No. 327,545; published Aug. 16, 1932.

Polishing cloth. F. N. Kistner Co. 298,390; Oct. 25; Serial No. 328,007; published Aug. 16, 1932.

Polishing cloths. F. N. Kistner Co. 298,391; Oct. 25; Serial No. 328,008; published Aug. 9, 1932.

Soap flakes. Kroger Grocery & Baking Company. 298,383; Oct. 25; Serial No. 328,220; published Aug. 16, 1932.

Soap, Laundry. Haskins Bros. & Co. 89,109; renewed Nov. 12, 1932.

Soap, Toilet. Yardley & Co. 298,376; Oct. 25; Serial No. 328,380; published Aug. 16, 1932.

Soaps, Toilet. Andrew Jergens Co. 90,341; renewed Feb. 18, 1933.

Sweeping compound. Chemical Corporation of America. 298,379; Oct. 25; Serial No. 328,548; published Aug. 16, 1932.

CLASS 5

Adhesives. Durex Abrasives Corporation. 298,424; Oct. 25; Serial No. 317,883; published Nov. 10, 1931.

Glue. E. Ehrlich & Sons Mfg. Co. 88,473; renewed Sept. 24, 1932.

Glues, Marine. L. W. Ferdinand. 298,470; Oct. 25; Serial No. 328,553; published Aug. 16, 1932.

CLASS 6

Antiseptic. O. V. Reis. 298,449; Oct. 25; Serial No. 297,819; published June 24, 1930.
Bluing and starch. Reckitts & Sons Ld. 89,769; renewed Jan. 7, 1933.
Extract used as a tonic, Malt. Pabst Corporation. 298,446; Oct. 25; Serial No. 310,407; published June 9, 1931.
Liniment. E. E. Rice. 298,425; Oct. 25; Serial No. 318,115; published Aug. 2, 1932.
Ointments. Towns & James. 298,423; Oct. 25; Serial No. 317,820; published Nov. 24, 1931.
Remedy for certain ailments and diseases. D. S. Van Horne. 89,163; renewed Nov. 12, 1932.
Rheumatic and kidney remedy. A. E. Haney. 88,872; renewed Oct. 29, 1932.

CLASS 9

Powder, Smokeless shotgun. E. I. du Pont de Nemours and Company. 298,331; Oct. 25; Serial No. 328,482; published Aug. 16, 1932.

CLASS 10

Fertilizer and especially prepared soil, Liquid. Wil-Gro Products Co. 298,438; Oct. 25; Serial No. 315,957; published Aug. 18, 1931.
Lime, Agricultural. Whiterock Quarries, Inc. 298,348; Oct. 25; Serial No. 326,036; published Aug. 16, 1932.

CLASS 13

Regulators, water-columns, nozzles, etc., Pressure. Lunkenheimer Company. 89,279; renewed Dec. 3, 1932.
Sprinklers, Lawn. Midwest Hardware Company. 298,456; Oct. 25; Serial No. 327,914; published Aug. 9, 1932.

CLASS 14

Metallic plates. American Pressed Steel Co. 89,796; renewed Feb. 10, 1933.
Steel, Sheet. American Sheet Steel Company. 89,703; renewed Jan. 27, 1933.
Tin and terne plates. American Tin Plate Co. 89,359; renewed Nov. 25, 1932.
Tin and terne plates. American Tin Plate Co. 89,505; renewed Dec. 16, 1932.

CLASS 15

Petroleum products. Richfield Oil Corporation of New York. 298,352; Oct. 25; Serial No. 327,068; published Aug. 9, 1932.

CLASS 16

Polish for furniture, automobiles, etc. Midway Chemical Company. 298,415; Oct. 25; Serial No. 322,024; published Aug. 9, 1932.
Polish, Furniture and automobile. G. A. Kreymer. 298,386; Oct. 25; Serial No. 327,797; published Aug. 9, 1932.

CLASS 17

Cigars. Charles Odence Company. 298,347; Oct. 25; Serial No. 326,720; published Aug. 16, 1932.

CLASS 19

Motor cars and chassis. Rolls-Royce Limited. 86,458; renewed May 7, 1932.

CLASS 20

Coverings, Floor. Carthage Mills Incorporated. 298,314; Oct. 25; Serial No. 326,780; published Aug. 9, 1932.
Coverings, Floor. Carthage Mills Incorporated. 298,319–20; Oct. 25; Serial Nos. 326,778–9; published Aug. 9, 1932.
Linoleum and oil cloth. Corticine Floor Covering Company Limited. 298,326; Oct. 25; Serial No. 327,343; published Aug. 9, 1932.

CLASS 21

Batteries, Storage. Atlas Supply Company. 298,381–2; Oct. 25; Serial Nos. 328,152–3; published Aug. 9, 1932.
Batteries, Storage. Campbell-Harris Battery Corporation. 298,398; Oct. 25; Serial No. 319,973; published Aug. 9, 1932.
Batteries, storage battery chargers, electric fuses, etc., Storage. Atlas Supply Company. 298,350; Oct. 25; Serial No. 327,494; published Aug. 9, 1932.
Conduit, Electric. Hatheway & Company. 298,384; Oct. 25; Serial No. 328,298; published Aug. 9, 1932.
Electric lighting fixtures. Cassidy Company. 298,349; Oct. 25; Serial No. 325,208; published Aug. 9, 1932.
Radio receiving sets. Frederick Loeser & Co. 298,388; Oct. 25; Serial No. 327,851; published Aug. 9, 1932.
Radio receiving sets and parts. Colonial Radio Corporation. 298,401; Oct. 25; Serial No. 321,378; published Aug. 9, 1932.
Wire, Rubber covered. United States Rubber Company. 298,481; Oct. 25; Serial No. 325,303; published June 14, 1932.

CLASS 22

Amusement machines, Coin controlled. J. F. Meyer. 298,409; Oct. 25; Serial No. 323,416; published Aug. 16, 1932.
Bait, Artificial. Enterprise Manufacturing Company. 298,336; Oct. 25; Serial No. 328,596; published Aug. 9, 1932.
Balls, Cue for pocket-billiards. Brunswick-Balke-Collender Company. 298,327; Oct. 25; Serial No. 327,900; published Aug. 9, 1932.
Balls, Play. C. B. Webb Company. 298,421; Oct. 25; Serial No. 324,689; published Aug. 16, 1932.
Bridge game package. Snyder & Black, Inc. 298,335; Oct. 25; Serial No. 328,412; published Aug. 9, 1932.
Cushions for billiard and pool tables. H. Ehrlich & Sons Mfg. Co. 90,632; renewed Mar. 11, 1933.
Game, Fireside Games. 298,330; Oct. 25; Serial No. 328,060; published Aug. 16, 1932.
Game, Parlor. J. F. Scharner. 298,328; Oct. 25; Serial No. 327,987; published Aug. 16, 1932.
Golf balls. United States Rubber Company. 298,329; Oct. 25; Serial No. 327,895; published Aug. 16, 1932.
Lines, Fish. Cortland Line Company. 298,514; Oct. 25.
Rackets, Tennis. H. W. Hall. 298,325; Oct. 25; Serial No. 325,097; published Aug. 9, 1932.
Sporting goods. South Bend Bait Company. 89,384; renewed Dec. 10, 1932.

CLASS 23

Bread slicing machinery. Mac-Roh Sales & Manufacturing Co. 298,492–3; Oct. 25; Serial Nos. 328,402–3; published Aug. 9, 1932.
Dispensers, Beverage. Mission Dry Corporation, Ltd. 298,462; Oct. 25; Serial No. 327,164; published Aug. 9, 1932.
Drills, hammers, sinkers, etc., Rock. Worthington Pump and Machinery Corporation. 298,408; Oct. 25; Serial No. 323,645; published Aug. 9, 1932.
Gears, worm gears, miter gears, etc., Spur. Boston Gear Works, Inc. 298,486; Oct. 25; Serial No. 327,723; published Aug. 9, 1932.
Knives, Pocket. John Russell Cutlery Company. 89,503; renewed Dec. 17, 1932.
Oil field equipment. Calmec Mfg. Co. Ltd. 298,464; Oct. 25; Serial No. 327,578; published Aug. 9, 1932.
Paper slitting and stacking machines. National Cash Register Company. 298,405; Oct. 25; Serial No. 323,109; published Aug. 9, 1932.
Pumps and parts, Centrifugal and turbine. Byron Jackson Co. 298,490; Oct. 25; Serial No. 328,321; published Aug. 9, 1932.
Razor blades. Chum, Razor Blade Corporation. 298,393; Oct. 25; Serial No. 318,047; published Aug. 9, 1932.
Scrapers for surfaces of glass, wood, etc., Glaziers. Landon P. Smith, Inc. 298,461; Oct. 25; Serial No. 325,759; published Aug. 9, 1932.
Sieves. Dover Stamping and Manufacturing Company. 88,559; renewed Oct. 1, 1932.
Tools and parts of machinery. Lunkenheimer Company. 88,683; renewed Oct. 15, 1932.
Tools and utensils, Kitchen. A. & J. Manufacturing Co. 298,394–5; Oct. 25; Serial Nos. 317,292–3; published Aug. 9, 1932.
Vending machine for paper articles. C. D. Morton. 298,478; Oct. 25; Serial No. 328,445; published Aug. 9, 1932.
Vulcanising apparatus, Tire repair. Firestone Tire & Rubber Company. 298,489; Oct. 25; Serial No. 328,092; published Aug. 9, 1932.

CLASS 26

Battery water level indicator. A. L. Riley. 298,491; Oct. 25; Serial No. 328,371; published Aug. 9, 1932.
Color display card. J. P. Gaugler. 298,463; Oct. 25; Serial No. 326,014; published Aug. 9, 1932.
Film, Sensitized photographic. Fairchild-Wood Visaphone Corporation. 298,465–6; Oct. 25; Serial Nos. 327,648–9; published Aug. 9, 1932.
Gages, Water, oil, steam, etc. Lunkenheimer Company. 89,759; renewed Jan. 7, 1933.
Picture projecting apparatus. Solescope Incorporated. 298,488; Oct. 25; Serial No. 328,042; published Aug. 9, 1932.
Spectacle frames. E. B. Meyrowitz, Inc. 298,487; Oct. 25; Serial No. 327,913; published Aug. 9, 1932.
Tabulating machines, card punching and card sorting machines, etc. Tabulating Machine Company. 298,435; Oct. 25; Serial No. 316,672; published Aug. 9, 1932.

CLASS 27

Clocks, Electric. Walgreen Co. 298,444; Oct. 25; Serial No. 311,403; published Apr. 19, 1932.

CLASS 28

Rings, Finger. J. Granat. 298,346; Oct. 25; Serial No. 325,142; published Aug. 9, 1932.

CLASS 31

Refrigerating apparatus. Gibson Electric Refrigerator Corporation. 298,406; Oct. 25; Serial No. 323,046; published Aug. 16, 1932.
Refrigerating apparatus. Stewart-Warner Corporation. 298,324; Oct. 25; Serial No. 326,434; published Aug. 9, 1932.
Refrigerators. Barker Bros. Incorporated. 298,321; Oct. 25; Serial No. 326,924; published Aug. 9, 1932.

Refrigerators. Michaels Bros. 298,337; Oct. 25; Serial No. 328,694; published Aug. 16, 1932.

CLASS 32

Beds and chairs, Davenport. Berkeley Chesterfield Co. 298,520; Oct. 25.
Furniture. Barker Bros. Incorporated. 298,433; Oct. 25; Serial No. 325,455; published Aug. 9, 1932.
Mattresses. Palmer Brothers Co. 298,430; Oct. 25; Serial No. 326,869; published Aug. 9, 1932.
Mattresses. Stearns & Foster Co. 298,402; Oct. 25; Serial No. 322,564; published Aug. 9, 1932.
Spring cushion construction. Stearns & Foster Co. 298,404; Oct. 25; Serial No. 322,565; published Aug. 9, 1932.

CLASS 34

Air conditioning equipment. Scott-Ballantyne Company. 298,458; Oct. 25; Serial No. 328,019; published Aug. 9, 1932.
Furnaces, Air circulating and oil burning. Motor Wheel Corporation. 298,453; Oct. 25; Serial No. 327,784; published Aug. 9, 1932.
Stoves and ranges, Gas. Odin Stove Manufacturing Company. 298,413; Oct. 25; Serial No. 324,264; published Aug. 9, 1932.

CLASS 36

Phonograph records. Fairchild-Wood Visaphone Corporation. 298,316; Oct. 25; Serial No. 327,650; published Aug. 9, 1932.

CLASS 37

Cards, Record sheets, etc., Index and memorandum. Merrimac Paper Company. 298,503; Oct. 25; Serial No. 327,559; published Aug. 16, 1932.
Forms, Blank. C. A. Law. 298,509; Oct. 25; Serial No. 328,177; published Aug. 16, 1932.
Hectograph machines. Reynolds-Schier Co. 298,500; Oct. 25; Serial No. 327,233; published Aug. 16, 1932.
Paper and envelopes, Writing. Z. & W. M. Crane, Inc. 298,469; Oct. 25; Serial No. 328,414; published Aug. 9, 1932.
Paper and stationery. American Sales Book Company. 298,467; Oct. 25; Serial No. 328,258; published Aug. 9, 1932.
Paper, envelopes, etc. J. A. Monagas. 298,501; Oct. 25; Serial No. 327,403; published Aug. 16, 1932.
Paper handkerchiefs. Pond's Extract Company. 298,472; Oct. 25; Serial No. 328,583; published Aug. 16, 1932.
Paper, Mineral coated. Champion Coated Paper Company. 298,437; Oct. 25; Serial No. 316,192; published Aug. 16, 1932.
Paper, Safety. Gilbert Paper Co. 298,497; Oct. 25; Serial No. 326,086; published Aug. 16, 1932.
Paper, Tissue, etc., Wrapping. Papyrue Company. 298,436; Oct. 25; Serial No. 316,566; published Aug. 16, 1932.
Paper, Wax-coated. Nashua Gummed & Coated Paper Company. 298,515; Oct. 25.
Paper, Wrapping. Fisher Bros. Paper Company. 89,242; renewed Dec. 3, 1932.
Paper, Wrapping. Hollingsworth & Whitney Company. 298,474; Oct. 25; Serial No. 328,610; published Aug. 16, 1932.
Papers, Tissue, creped, and absorbent. Scott Paper Company. 298,478; Oct. 25; Serial No. 328,592; published Aug. 9, 1932.
Pencils, fountain pens, desk sets, and the component parts thereof. Parker Pen Company. 298,403; Oct. 25; Serial No. 322,399; published Aug. 9, 1932.
Pencils, Lead. Eagle Pencil Company. 89,450; renewed Dec. 17, 1932.
Pencils, Lead. Eagle Pencil Company. 298,471; Oct. 25; Serial No. 328,552; published Aug. 16, 1932.
Pens and pencils, Fountain. Wahl. 298,427; Oct. 25; Serial No. 320,882; published Aug. 9, 1932.
Puzzles run as a column in newspapers and magazines, Numerical. H. Young. 298,505; Oct. 25; Serial No. 327,721; published Aug. 9, 1932.
Stencils and stencil sheets. A. B. Dick Company. 298,498; Oct. 25; Serial No. 326,130; published Aug. 16, 1932.

CLASS 38

Catalogs. W. W. Maytrott. 298,476–7; Oct. 25; Serial Nos. 284,477–8; published Aug. 9, 1932.
Column or section of daily newspaper. H. T. Madden. 298,508; Oct. 25; Serial No. 328,132; published Aug. 9, 1932.
Periodical. American Hebrew Publishing Company. 298,499; Oct. 25; Serial No. 326,802; published Aug. 9, 1932.
Publications. Standard Statistics Company, The. 298,507; Oct. 25; Serial No. 328,051; published Aug. 9, 1932.

CLASS 39

Apparel, Wearing. Société Anonyme: Louiseboulanger. 298,426; Oct. 25; Serial No. 320,516; published Aug. 16, 1932.
Apparel, Women's. Hecht Co. 298,483; Oct. 25; Serial No. 327,313; published Aug. 2, 1932.
Bandeaux and girdles. Van-Sen. 298,454; Oct. 25; Serial No. 327,811; published Aug. 2, 1932.
Bandeaus, bandettes, and corsettes. H & W Company. 298,451; Oct. 25; Serial No. 327,631; published Aug. 2, 1932.
Belts, suspenders, and braces. Pioneer Suspender Company. 298,516; Oct. 25.
Boots, shoes, and oxfords. Walter Booth Shoe Co. 298,450; Oct. 25; Serial No. 327,576; published Aug. 16, 1932.
Brassières, bandeaus, and girdles, etc. Modishform Brassiere Co. 298,439; Oct. 25; Serial No. 315,863; published Aug. 9, 1932.
Coats, Ladies' sport. Irving Friedricks. 298,358; Oct. 25; Serial No. 328,095; published Aug. 9, 1932.
Coats, vests, neckties, etc. H. & L. Block, Ltd. 298,354–5; Oct. 25; Serial Nos. 327,212–13; published Aug. 9, 1932.
Coats, vests, trousers, etc. Rodes-Rapier Co. 298,369; Oct. 25; Serial No. 328,449; published Aug. 9, 1932.
Dresses, Infants' and children's. L. Tuttman. 298,356; Oct. 25; Serial No. 327,533; published Aug. 16, 1932.
Frocks, Silk. Lorch Manufacturing Company. 298,434; Oct. 25; Serial No. 325,334; published Aug. 9, 1932.
Garments, Infants'. Snuggle Rug Co. 298,367; Oct. 25; Serial No. 328,312; published Aug. 16, 1932.
Hats and caps. B. Sims Corporation. 298,414; Oct. 25; Serial No. 324,803; published Aug. 2, 1932.
Hats and caps, Felt. John B. Stetson Company. 89,368; renewed Nov. 25, 1932.
Hats, fur garments, etc. Société Claire Palisseau et Juliette Levy. 298,518; Oct. 25.
Hats, Ladies'. L. Daché. 298,420; Oct. 25; Serial No. 323,191; published Aug. 2, 1932.
Hats, Men's and boys'. Young Brothers. 298,416; Oct. 25; Serial No. 324,024; published Apr. 12, 1932.
Hosiery. Phoenix Hosiery Company. 298,512; Oct. 25.
Hosiery. S. Rothkopf & Sons. 298,344; Oct. 25; Serial No. 328,740; published Aug. 16, 1932.
Hosiery and lingerie. Sultana Hosiery Mills. 298,432; Oct. 25; Serial No. 325,665; published Aug. 9, 1932.
Hosiery, Women's. Artcraft Silk Hosiery Mills, Inc. 298,345; Oct. 25; Serial No. 328,778; published Aug. 16, 1932.
Leggings and overall protectors. Bria-Shaps Company. 298,357; Oct. 25; Serial No. 327,863; published Aug. 9, 1932.
Neckties and cravats. Hut Neckwear Co. 298,360; Oct. 25; Serial No. 328,126; published Aug. 9, 1932.
Neckties, neckscarfs, etc. A. L. Rice. 89,949; renewed Jan. 21, 1933.
Shoes. James A. Banister Company. 298,429; Oct. 25; Serial No. 321,742; published Aug. 2, 1932.
Shoes. Craddock-Terry Co. 298,459; Oct. 25; Serial No. 328,161; published Aug. 16, 1932.
Shoes. Gale Shoe Manufacturing Co. 298,482; Oct. 25; Serial No. 326,421; published Aug. 16, 1932.
Shoes. Guarantee Shoe Company. 298,513; Oct. 25.
Shoes. Johansen Bros. Shoe Company. 298,457; Oct. 25; Serial No. 327,876; published Aug. 16, 1932.
Shoes. M. J. Markell. 298,452; Oct. 25; Serial No. 327,732; published Aug. 16, 1932.
Shoes. B. F. Schlesinger & Sons, Inc. 298,460; Oct. 25; Serial No. 328,186; published Aug. 16, 1932.
Shoes. Sears, Roebuck and Co. 298,521; Oct. 25.
Shoes and boots. S. Bearman Shoe Company. 298,510; Oct. 25; Serial No. 327,574; published Aug. 2, 1932.
Shoes, boots, overshoes. Wohl Shoe Company. 298,484; Oct. 25; Serial No. 327,079; published Aug. 16, 1932.
Shoes, Ladies'. C. M. Foster. 298,480; Oct. 25; Serial No. 326,202; published Aug. 2, 1932.
Shoes, Leather. Gale Shoe Manufacturing Co. 298,517; Oct. 25.
Sweaters, leather coats, etc. J. J. Sullivan. 298,485; Oct. 25; Serial No. 327,376; published Aug. 2, 1932.
Underwear. American Textiles, Inc. 298,428; Oct. 25; Serial No. 321,088; published Aug. 16, 1932.
Underwear. Patricia Petticoat Co. Inc. 298,372; Oct. 25; Serial No. 328,504; published Aug. 16, 1932.
Underwear and hosiery, Knitted and textile. Vanity Fair Silk Mills. 298,455; Oct. 25; Serial No. 327,859; published Aug. 16, 1932.

CLASS 44

Appliance for charging water and/or other fluids with radium emanation. North American Radium Corporation. 298,440; Oct. 25; Serial No. 313,623; published Aug. 9, 1932.
Emergency devices for first aid treatment. W. W. Robinson. 298,315; Oct. 25; Serial No. 327,664; published Aug. 9, 1932.
Pessaries. L. E. Shunk Latex Products, Inc. 298,318; Oct. 25; Serial No. 327,569; published Aug. 16, 1932.
Prophylactic rubber or tissue articles. W. W. Wyant. 298,448; Oct. 25; Serial No. 299,359; published Aug. 9, 1932.
Resin, Plastic. Prosthetic Products, Inc. 298,378; Oct. 25; Serial No. 328,537; published Aug. 9, 1932.
Rupture appliances. Brooks Rupture Appliance Co. 89,337; renewed Dec. 10, 1932.
Surgical appliances for the treatment of prostate disorders. W. T. Abell. 298,392; Oct. 25; Serial No. 328,052; published Aug. 16, 1932.
Syringes, hypodermic needles, and clinical thermometers. Becton, Dickinson & Co. 298,351; Oct. 25; Serial No. 327,301; published Aug. 9, 1932.

Therapy apparatus. L. M. Brokaw. 298,375; Oct. 25; Serial No. 328,820; published Aug. 23, 1932.

CLASS 45

Beverages. Millbrook Products Co. 298,418; Oct. 25; Serial No. 322,262; published Feb. 23, 1932.
Beverages and sirups therefor, Maltless. Southern Dairies, Inc. 298,334; Oct. 25; Serial No. 328,567; published Aug. 9, 1932.
Beverages, sirups and extracts, Maltless. E. R. Gentry. 298,338; Oct. 25; Serial No. 328,638; published Aug. 16, 1932.
Beverages, syrups, and waters, Maltless. Liberty Bottling Co. 298,333; Oct. 25; Serial No. 328,494; published Aug. 9, 1932.
Beverages, syrups, extracts, etc., Maltless. Mission Dry Corporation, Ltd. 298,407; Oct. 25; Serial No. 323,142; published Aug. 16, 1932.
Flavoring for maltless beverages. A. B. Friscia. 298,323; Oct. 25; Serial No. 327,311; published Aug. 16, 1932.
Grape juice. Welch Grape Juice Company. 298,332; Oct. 25; Serial No. 328,512; published Aug. 16, 1932.
Syrup, Nonalcoholic Maltless. K. Takahashi. 298,399; Oct. 25; Serial No. 320,379; published Aug. 16, 1932.

CLASS 46

Bread. Spinella Brothers Bakery. 298,363; Oct. 25; Serial No. 328,189; published Aug. 16, 1932.
Bread and cake, Noodles, and farfel. I. Keil. 298,419; Oct. 25; Serial No. 322,464; published July 12, 1932.
Cakes and pies. Vaughn-Gillette. 298,431; Oct. 25; Serial No. 326,347; published Aug. 9, 1932.
Candy. Bard & Margolies, Inc. 298,343; Oct. 25; Serial No. 328,654; published Aug. 16, 1932.
Candy. G L E Candy Corporation of America. 298,511; Oct. 25.
Candy. D. Goldenberg, Inc. 298,362; Oct. 25; Serial No. 328,165; published Aug. 9, 1932.
Canned corn. Gibson Canning Company. 298,494; Oct. 25; Serial No. 325,095; published Aug. 9, 1932.
Canned fish, fruits, vegetables. F. & M. Importing Co. Inc. 298,422; Oct. 25; Serial No. 317,032; published Aug. 2, 1932.
Canned fish, vegetables, fruits, etc. P. A. Ford. 298,342; Oct. 25; Serial No. 328,578; published Aug. 16, 1932.
Canned salmon. Fidalgo Island Packing Company. 298,447; Oct. 25; Serial No. 310,333; published Aug. 9, 1932.
Chocolate, Sweet. Massachusetts Chocolate Company. 298,370; Oct. 25; Serial No. 328,496; published Aug. 9, 1932.
Coffee. Newark Wholesale Grocery Co. 298,364; Oct. 25; Serial No. 328,248; published Aug. 9, 1932.
Coffee and tea. Fisher Brothers Company. 298,397; Oct. 25; Serial No. 318,944; published Aug. 9, 1932.
Coffee, Blended. Fort Smith Coffee Company. 90,007; renewed Jan. 28, 1933.
Confection, Crushed peanut. Planters Nut & Chocolate Co. 298,502; Oct. 25; Serial No. 327,414; published Aug. 2, 1932.
Confectionery. H. L. Hildreth Co. 298,368; Oct. 25; Serial No. 328,411; published Aug. 16, 1932.
Confectionery. H. L. Hildreth Co. 298,371; Oct. 25; Serial No. 328,528; published Aug. 16, 1932.
Confectionery. G. W. Loft. 39,872; renewed Mar. 3, 1933.
Confections. Chez Francois, Inc. 298,479; Oct. 25; Serial No. 327,788; published July 26, 1932.
Cookies and crackers. Dr. Larry's Food Products Laboratories. 298,359; Oct. 25; Serial No. 327,980; published Aug. 9, 1932.
Fats, Cooking-. Procter & Gamble Company. 298,366; Oct. 25; Serial No. 328,279; published Aug. 9, 1932.
Feeds, Stock and poultry. Germantown Rendering Company. 298,400; Oct. 25; Serial No. 322,385; published Aug. 9, 1932.
Flour. Nelson Story & Co. 38,960–1; renewed Sept. 30, 1932.
Flour, Wheat. Empire State Flour Mills. 89,544; renewed Dec. 24, 1932.
Flour, Wheat. Lawrenceburg Roller Mills Co. 298,340; Oct. 25; Serial No. 328,532; published Aug. 9, 1932.
Flour, Wheat. Yardley Mills Co. 88,439; renewed Sept. 17, 1932.
Food, Dried lacteal baby. G. B. Voorhies. 298,442; Oct. 25; Serial No. 312,725; published Aug. 9, 1932.
Fruits, Fresh. Ewens Bros. 298,412; Oct. 25; Serial No. 323,653; published Aug. 2, 1932.
Fruits, Fresh citrus. Rialto Co-Operative Citrus Association. 298,445; Oct. 25; Serial No. 310,947; published Aug. 9, 1932.
Gelatin dessert and aspic. Royal Baking Powder Company. 298,504; Oct. 25; Serial No. 327,709; published Aug. 9, 1932.
Grapes, deciduous fruits, and vegetables, Fresh. Lambert Marketing Company. 298,341; Oct. 25; Serial No. 328,531; published Aug. 9, 1932.
Gum, Chewing. Wm. Wrigley Jr. Company. 298,495; Oct. 25; Serial No. 325,540; published Aug. 2, 1932.
Ice cream. Southern Dairies, Inc. 298,468; Oct. 25; Serial No. 328,339; published Aug. 9, 1932.
Milk, butter, eggs, and cottage cheese. L. G. Moore. 298,353; Oct. 25; Serial No. 326,958; published Aug. 16, 1932.
Noodles. Mrs. L. O. Reavis. 298,411; Oct. 25; Serial No. 324,399; published Aug. 9, 1932.
Olive oil. Societa Anonima Francesco Bertolli. 298,441; Oct. 25; Serial No. 313,311; published Feb. 16, 1932.
Pickles. Kingsbury Packing Co. 298,365; Oct. 25; Serial No. 328,274; published Aug. 9, 1932.
Pop corn. American Pop Corn Company. 298,361; Oct. 25; Serial No. 328,151; published Aug. 9, 1932.
Pork sausage, Binder used as an ingredient of. H. Ehrlich & Sons Mfg. Co. 90,177; renewed Feb. 11, 1933.
Potatoes. Red River Valley Potato Shippers Association. 298,519; Oct. 25.
Sugar. Godchaux Sugars, Inc.. 298,417; Oct. 25; Serial No. 324,103; published Aug. 9, 1932.
Syrup, Malt. Royal Canadian Distributing Company. 298,496; Oct. 25; Serial No. 325,806; published Aug. 2, 1932.
Vegetable oil shortening compound. Planters Edible Oil Company. 298,506; Oct. 25; Serial No. 327,767; published Aug. 2, 1932.
Vegetable shortening. Lever Brothers Company. 298,410; Oct. 25; Serial No. 324,615; published Aug. 9, 1932.

CLASS 49

Whisky, Scotch. D. & J. McCallum, Ltd. 298,322; Oct. 25; Serial No. 326,948; published Aug. 9, 1932.

CLASS 50

Plaques and silhouettes, Carved wood. Carder-Martin. 298,443; Oct. 25; Serial No. 311,820; published Aug. 16, 1932.
Printing plates. American Wringer Company. 298,387; Oct. 25; Serial No. 327,815; published Aug. 16, 1932.
Signs and the like, Mechanical advertising. B. I. Stamm. 298,389; Oct. 25; Serial No. 327,857; published Aug. 16, 1932.
Signs, Non-electric. Henry Lederer & Co. 298,313; Oct. 25; Serial No. 327,021; published Aug. 16, 1932.

LIST OF LABELS

Derris Flea and Lice Powder. For Flea and Lice Powder. Derris, Inc. 41,328; Oct. 25.
Design No. 501. For Ice Cream. Butler Paper Products Company. 41,325; Oct. 25.
Design No. 502. For Ice Cream. Butler Paper Products Company. 41,326; Oct. 25.
Flavotint. For Preparation which Flavors and Tints Food Products. Chr. Hansen's Laboratory, Inc. 41,332; Oct. 25.
Frigie Ice Milk Bar. For Frozen Confections. Frigie Corporation of America. 41,329; Oct. 25.
North Bay Brand Pink Salmon. For Canned Salmon. Wesco Foods Company. 41,343; Oct. 25.
Peppermint Aromints. For Mints. Aromint Corporation. 41,314–15; Oct. 25.
Pine-O-Sote. For Wood Preservative. Retort Chemical Company. 41,341; Oct. 25.
Preshrunk Fabrics. For Fabrics. Prosperity Company. 41,340; Oct. 25.
Protectol for Suntan. For a Protective Oil to be Applied to the Face and Body Before Exposure to the Sun. Ogilvie Sisters. 41,339; Oct. 25.
Smart Shoes for Men. For Boxes. Hoague-Sprague Corporation. 41,335; Oct. 25.
"Spain Maid". For Spanish Paprika. A. C. Chase. 41,327; Oct. 25.
Square Deel Cleaner and Water Softener. For Cleaner and Water Softener. Keystone Chemical Corporation. 41,337; Oct. 25.
Square Hole. For Tool Handles. American Fork & Hoe Company. 41,313; Oct. 25.
Squaw Lotion. For Lotion. E. C. Hanson. 41,333; Oct. 25.
Territorial Design No. 223. For Butter. Butler Paper Products Company. 41,316; Oct. 25.
Territorial Design No. 226. For Butter. Butler Paper Products Company. 41,317; Oct. 25.
Territorial Design No. 227. For Butter. Butler Paper Products Company. 41,318; Oct. 25.
Territorial Design No. 228. For Butter. Butler Paper Products Company. 41,319; Oct. 25.
Territorial Design No. 329. For Butter. Butler Paper Products Company. 41,320; Oct. 25.
Territorial Design No. 333. For Butter. Butler Paper Products Company. 41,321; Oct. 25.
Territorial Design No. 334. For Butter. Butler Paper Products Company. 41,322; Oct. 25.

Territorial Design No. 335. For Butter. Butler Paper Products Company. 41,323; Oct. 25.
Territorial No. 500. For Ice Cream. Butler Paper Products Company. 41,324; Oct. 25.
The Red Eagle. For Boxes. Hoague-Sprague Corporation. 41,334; Oct. 25.
3½ Pounds Rolled Oats For Rolled Oats. Northern Illinois Cereal Company. 41,338; Oct. 25.
Ting Chah Olongo Blend—Genuine China Tea. For China Tea. Goon Dip & Co. 41,331; Oct. 25.
Vi-Va Varnish. For Varnish. R. F. Johnston Paint Company. 41,336; Oct. 25.
Well-Again Athlete's Foot Remedy. For Salve for Athlete's Foot and Trench Foot. K. and J. Tchossitch. 41,342; Oct. 25.
Zil. For Candy. D. Goldenberg, Inc. 41,330; Oct. 25.

LIST OF PRINTS

Bigelow's Big Eight for Hotel Carpeting. For Carpets and Carpeting. Bigelow-Sanford Carpet Co. 13,948; Oct. 25.
San-Nap-Pak, A Better Napkin and Lower In Price. For Sanitary Napkins. San-Nap-Pak Mfg. Co. Inc. 13,950; Oct. 25.
Science's Most Thrilling Food Invention. For Biscuit Flour. General Mill, Inc. 13,949; Oct. 25.
Two Good Mick-Sirs. For Ginger Ale and Spring Water. Waukesha Pure Spring Water Company. 13,951; Oct. 25.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 25TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, George H., assignor to Woodruff & Edwards, Inc., Elgin, Ill. Combined desk and seat. 1,884,497; Oct. 25.
Adams, Francis E., and C. E. Chesebro, assignors to Triumph Trap Company, Inc., Oneida, N. Y. Producing trap jaws. 1,884,956; Oct. 25.
Adams, Maude, R. F. Howe, New York, N. Y., and P. G. Nutting, Washington, D. C. Illuminating device. 1,884,957; Oct. 25.
Adamson, William A., and A. J. Wuertz, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Production of dibenzoyl-alpha-alpha-dianthrimides. 1,884,498; Oct. 25.
Agfa Ansco Corporation. (See Lessler, Lew W., assignor.)
Aarens-Fox Fire Engine Company, The. (See Fox, Charles H., assignor.)
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. High current electric switch. 1,885,068; Oct. 25.
Air Reduction Company, Inc. (See Anderson, James L., assignor.)
Air Reheater Corporation. (See Dow, Herbert H., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, Frederick, jr., assignor.)
Ajax Electrothermic Corporation. (See Feehan, Thomas A., assignor.)
Aktiebolaget Elektrisk Malmletning. (See Sundberg, Karl, assignor.)
Albert, Walter P. (See Wood, Joseph K., assignor.)
Albrecht, Max. (See Koppel, A. F., and Albrecht.)
Albright, H. Nelson, et al., executors. (See Zifferer, Lothar R.)
Alco Products, Incorporated. (See Ogilvy, Walter S., assignor.)
Alexander, Clyde. (See Suppiger, G. S., and Alexander.)
Algeo, Albert M., and J. W. Ross, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Control mechanism for glass feeders. 1,884,967; Oct. 25.
Allendorff, Fritz, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Magneto electric ignition apparatus. 1,884,958; Oct. 25.
Allendorff, Fritz, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Magneto ignition apparatus. 1,884,959; Oct. 25.
Allis-Chalmers Manufacturing Company. (See Tenney, Frank L., assignor.)
Alston, Thomas H., Pagaso Springs, Colo. Animal trap. 1,884,499; Oct. 25.
Amburgen Construction Co. (See Stewart, Spencer W., assignor.)
American Bitumuls Company. (See McKesson, Claude L., assignor.)
American Bitumuls Company. (See Thompson, Lyndon G., assignor.)
American Can Company. (See Block, William I., assignor.)
American Can Company. (See Dister, Joseph, assignor.)
American Can Company. (See Herman, Henry, assignor.)
American Can Company. (See Hogan, Harry S., assignor.)
American Can Company. (See Holloway, William M., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Can Company. (See Jeneson, George E., assignor.)
American Can Company. (See Jones, Lyman L., assignor.)
American Can Company. (See McConkie, J. E., and Lueck, assignors.)
American Can Company. (See Nicholls, Henry M., assignor.)
American Can Company. (See Odquist, Victor, assignor.)
American Can Company. (See Peters, John F., assignor.)
American Can Company. (See Tolcik, John A., assignor.)
American Can Company. (See Walter, George F., assignor.)
American Can Company. (See Widell, Magnus E., assignor.)
American Engineering Company. (See Busfield, William, jr., assignor.)
American Engineering Company. (See Smith, George E., assignor.)
American Engineering Company. (See Weingartner, Anthony E., assignor.)
American Enka Corporation. (See Moritz, Adrian J. L., assignor.)
American Fluid Motors Company. (See Cannon, Earl, assignor.)
American Gas-accumulator Company. (See Luce, Richard W., assignor.)
American Gas-accumulator Company. (See Oestnaes V. L., Luce, and Merrill, assignors.)
American Lecithin Corporation. (See Sollmann, Everette I., assignor.)
American-National Company, The. (See Schibrowski, Paul M., assignor.)
American Sheet and Tin Plate Company. (See Moore, E. E., McGranahan, and Warrender, assignors.)
American Smelting and Refining Company. (See Betterton, Jesse O., assignor.)
American Tar Products Company. (See Rhodes, E. O., and Hager, assignors.)
Anderson-Barngrover Mfg. Co. (See Thompson, Albert R., assignor.)
Anderson Company, The. (See Slough, Frank M., assignor.)
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Universal torch machine. 1,884,960; Oct. 25.
Anderson, John W., Gary, Ind. Electrically operated indicating apparatus. 1,885,054; Oct. 25.
Anderson, Joseph B., U. S. Navy. Map. 1,884,500; Oct. 25.
Anderson, Rexford O., Houston, Tex. Declinometer bottle mounting. 1,884,961; Oct. 25.
Andrews, Roger W., Aspinwall, and G. D. Bradshaw, Beaver, assignors to Blaw-Knox Company, Blawnox, Pa. Fluid separator. 1,884,501; Oct. 25.
Angell, Chester M., assignor to Vesta Battery Corporation, Chicago, Ill. Pasting battery plates. 1,884,502; Oct. 25.
Anger, Edward W. (See Minier, Frederick S., assignor.)
Anthonisen, Georg B., Minneapolis, Minn. Spike, twisted or threaded. 1,884,503; Oct. 25.
Arenz, John A., Mount Vernon, N. Y., assignor to The International Screw Company, Wilmington, Del. Single thread barbed drive screw. 1,885,028; Oct. 25.
Armour Fertilizer Works. (See Moore, Harry C., assignor.)
Armstrong, Clifford H., North Finchley, England. Feed water regulator. 1,884,504; Oct. 25.
Arnold, Lem, San Angelo, Tex. Water heater. 1,885,040; Oct. 25.
Arrow-Hart & Hegeman Electric Company, The. (See Nero, Arvid H., assignor.)
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,884,962; Oct. 25.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,884,963; Oct. 25.
Associated Merchandising Corporation. (See Casabona, Bettina, assignor.)
Associated Merchandising Corporation. (See Fields, Pauline E., assignor.)
Associated Merchandising Corporation. (See Shacter, Harry, assignor.)
Associated Merchandising Corporation. (See Simpson, Adele S., assignor.)
Atwood, James T., Rockford, Ill. Door bumper. 1,884,505; Oct. 25.
Atwood, Seth B., Rockford, Ill. Door bumper. 1,884,506; Oct. 25.
Auld, George R., assignor to Frigidaire Corporation, Dayton, Ohio. Method and apparatus for making heat interchangers. 1,884,964; Oct. 25.
Autogiro Company of America. (See de la Cierva, Juan, assignor.)
Autogiro Company of America. (See Pitcairn, Harold F., assignor.)
Autogiro Company of America. (See Pitcairn, H. F., and de la Cierva, assignors.)
Autogiro Company of America. (See Stanley, Paul H., assignor.)
Automatic Paper Machinery Co. Inc. (See Marcalus, Nicholas, assignor.)
Avery, James H. (See Wentworth, P. C., and Avery.)
Ayers, Florence, Topeka, Kans. Garment. Des. 88,065; Oct. 25.
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Babcock & Wilcox Company, The. (See Lucke, C. E., and Black, assignors.)
Bacher, Rollin L., Lakewood, assignor to The U. S. Air Compressor Company, Cleveland, Ohio. Power pump. 1,884,507; Oct. 25.
Baggett, Henry T., and L. E. Garfield, assignors to Hughes Tool Company, Houston, Tex. Seal ring for conical cutters. 1,884,965; Oct. 25.

Bagshaw, Charles M., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,884,508; Oct. 25.

Bailey, George C., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Production of cyanogen chloride and substituted guanidines. 1,884,509; Oct. 25.

Bailey, Howard S., Denver, Colo. Ore oxidizing muffled retort furnace. 1,884,510; Oct. 25.

Baker, Arthur J., assignor to The Willys-Overland Company, Toledo, Ohio. Combined automobile fender and head lamp. Des. 88,064; Oct. 25.

Baker, Charles M., Youngstown, Ohio. Manure collecting device for barns. 1,885,069; Oct. 25.

Baker & Company. (See Krivig, Stephen J., assignor.)

Baker, Floyd J., Washington, D. C. Stove-cabinet. 1,885,041; Oct. 25.

Baker, Frank E., assignor of one-half to L. Will, Syracuse, N. Y. Ironing press. 1,883,861; Oct. 25.

Baker, Frank E., assignor of one-half to L. Will, Syracuse, N. Y. Garment pressing machine. 1,883,862; Oct. 25.

Baker, Frank E., assignor of one-half to L. Will, Syracuse, N. Y. Ironing press. 1,883,863; Oct. 25.

Baker, John S., Evansville, Wis. Windmill construction. 1,884,511; Oct. 25.

Baker, Marshall W., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,864; Oct. 25.

Baker-Raulang Company, The. (See Remde, Edward H., assignor.)

Baker-Raulang Company, The. (See Stoner, Frank, assignor.)

Baker, Russell W. (See Shippy, L. C., and Baker.)

Baldwin, John D., jr., assignor to A. J. Weatherhead, jr., Cleveland, Ohio. Hydraulic coupling. 1,885,042; Oct. 25.

Ballard, Ernest S., assignor to Ballard Process Co., San Francisco, Calif. Electroplating metallic cylinders. 1,884,512; Oct. 25.

Ballard Process Co. (See Ballard, Ernest S.)

Balsiger, Harold E., assignor to Landis Tool Company, Waynesboro, Pa. Tarry mechanism for grinding machines. 1,885,070; Oct. 25.

Baltimore Paper Company. (See Winkler, A., and Dünnebier, assignors.)

Banck, Hans J. E., assignor to Springfield Boiler Co., Springfield, Ill. Steam generator. 1,885,071; Oct. 25.

Bancroft, Albert F., West Newton, Mass. Shoe. Des. 88,066; Oct. 25.

Barber-Colman Company. (See Colman, Howard D., assignor.)

Barber, Joseph L., Greeley, Colo. Automatic photographic printing machine. 1,885,055; Oct. 25.

Barclay, Wright, New York, N. Y. Ramp. 1,884,513; Oct. 25.

Barney, Edwin E., New Rochelle, assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,865; Oct. 25.

Barr, John H., assignor to Barr-Morse Corporation, Ithaca, N. Y. Typewriter. 1,884,514; Oct. 25.

Barr-Morse Corporation. (See Barr, John H., assignor.)

Barrett Company, The. (See Harvey, Edward W., assignor.)

Barrett Company, The. (See McCloskey, Gregory E., assignor.)

Barrett Company, The. (See Miller, Stuart P., assignor.)

Barrett Company, The. (See Radasch, Arthur H., assignor.)

Barrett Company, The. (See Robert, John, assignor.)

Barrett Company, The. (See Rogers, Allen, assignor.)

Barrett Company, The. (See Steere, Frank W., assignor.)

Barrett Company, The. (See Wittenberg, Lester, assignor.)

Barrett Company, The. (See Woodcock, Joseph C., assignor.)

Barrett Co., The. (See Zavertnik, Joseph, jr., assignor.)

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging. 1,884,515; Oct. 25.

Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Cushioning mechanism. 1,884,516; Oct. 25.

Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Cushioning mechanism. 1,884,517; Oct. 25.

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Retaining device. 1,884,519; Oct. 25.

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Cushioning mechanism. 1,884,520; Oct. 25.

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging. 1,884,521; Oct. 25.

Barrows, Donald S., and G. F. Couch, Rochester, assignors to The Gould Coupler Company, New York, N. Y. Draft rigging. 1,884,518; Oct. 25.

Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Calcium-magnesium-chloride product and method of making same. 1,884,522; Oct. 25.

Bartsch, Henry G. (See Pagel, C. J., and Kulick, assignors.)

Bastian-Morley Co. (See Lonergan, Simon J., assignor.)

Battey, William A., Haverford, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y. Crushing machinery. 1,884,523; Oct. 25.

Baumgartner, Henry H., Belleville, N. J., assignor to Drake Non-Clinkering Furnace Block Company, Inc., New York, N. Y. Furnace. 1,884,524; Oct. 25.

Baur, Ottmar, assignor to Robert Bosch, Aktiengesellschaft, Stuttgart, Germany. Spring loaded valve. 1,883,866; Oct. 25.

Bautista, Leopoldo L., Chicago, Ill. Safety pin. 1,884,525; Oct. 25.

Baxter, James. (See Tivendale, W., and Baxter.)

Bayer, Matthew F., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Folding bed or like structure. 1,883,867; Oct. 25.

Beatty, Robert S., Toms River, N. J. Power take off. 1,884,526; Oct. 25.

Bechtold, Josef, Coleman Station, N. Y. Egg counter for hens. 1,885,072; Oct. 25.

Beck, Julius S., Los Angeles, Calif. Rotary jar. 1,885,048; Oct. 25.

Beckeman, Eric W., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine nozzle block. 1,883,868; Oct. 25.

Beckwith, Theodore D. (See Bovard, P. F., and Beckwith.)

Bell Telephone Laboratories, Incorporated. (See Catogge, Joseph J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Crawford, Allen I., assignor.)

Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Horton, Arthur W., jr., assignor.)

Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)

Belmont, Louis A., Merion, Pa. Ironing machine. 1,885,044; Oct. 25.

Bem, Joseph P., assignor to Pacific Pitting Machine Company Inc., Fresno, Calif. Pitting machine. 1,884,527; Oct. 25.

Bendix Aviation Corporation. (See McGrath, William L., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix-Cowdrey Brake Tester Inc. (See Rossetter, Charles F., assignor.)

Benjamin, Abraham S. (See Carr, J. O., and Benjamin.)

Benjamin, Foster H., Washington, D. C., dedicated to the free use of the Public. Extracting organisms from organic or inorganic substances. 1,884,989; Oct. 25.

Benner, Raymond C., P. H. Walker, and William G. Soley, assignors to The Carborundum Company, Niagara Falls, N. Y. Forming articles from granular mixes. 1,884,528; Oct. 25.

Benner, Raymond C., P. H. Walker, and William G. Soley, assignors to The Carborundum Company, Niagara Falls, N. Y. Consolidating granular materials. 1,884,529; Oct. 25.

Bennett, Charles E., Paterson, assignor to The Okonite Company, Passaic, N. J. Lead press. 1,885,045; Oct. 25.

Bennett, Edwin O. (See Sclater, K. C., and Bennett.)

Bennett, Edwin O., assignor to Continental Oil Company, Ponca City, Okla. Flexible stuffing box assembly. 1,885,046; Oct. 25.

Bentley Brake Corporation. (See Bentley, Henry M., assignor.)

Bentley, Henry M., Santa Rita, N. Mex., assignor, by mesne assignments, to Bentley Brake Corporation. Brake actuator. 1,884,530; Oct. 25.

Bentley, Henry M., Santa Rita, N. Mex., assignor, by mesne assignments, to Bentley Brake Corporation. Pneumatic brake actuator. 1,884,531; Oct. 25.

Beran, Charles F., Tuckahoe, N. Y., assignor to Celanese Corporation of America. Heat exchanger. 1,884,532; Oct. 25.

Bergaud, Félicie E. A. W., Paris, France. Fancy bottle. Des. 88,067; Oct. 25.

Bergaud, Félicie E. A. W., Paris, France. Box. Des. 88,068; Oct. 25.

Bergaud, Félicie E. A. W., Paris, France. Medallion for containers, stoppers, or the like. Des. 88,069; Oct. 25.

Beringer, Roscoe, and E. W., Seaholm, assignors to General Motors Corporation, Detroit, Mich. Overgear transmission. 1,883,869; Oct. 25.

Berkley, Clarence E. (See Weld, L. M., Ohler, and Berkley.)

Berlfein, Milton W., New York, N. Y. Pillow cover or the like. Des. 88,070; Oct. 25.

Berman, Oscar A., assignor to Morris & Company, Inc., Baltimore, Md. Uniform dress. 1,885,047; Oct. 25.

Bertell, Paul. (See LaHodny, W., and Bertell.)

Bertsch, Heinrich, assignor to H. Th. Böhme A. G., Chemnitz, Germany. Wetting agent. 1,883,860; Oct. 25.

Betterton, Jesse, Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y. Apparatus for desincing lead. 1,884,533; Oct. 25.

Betz, Harry D., Kansas City, Mo. Portable air-conditioning device. 1,884,534; Oct. 25.

Beyer, Henry L., Newark, N. J. Making grids. 1,884,535; Oct. 25.

Bickell, Charles H. (See Hayes, Fred L., assignor.)

Biddulph, Hugh, Coventry, assignor to Courtaulds Limited, London, England. Winding of threads and in apparatus therefor. 1,885,058; Oct. 25.

Bigelow-Sanford Carpet Co. (See Petersen, Elliott I., assignor.)

Birdsboro Steel Foundry and Machine Company. (See Peterson, Edward T., assignor.)

Bischoff, Heinrich. (See Rall, Max, and Bischoff.)

Black-Clawson Company. (See Crawford, Cliff R., assignor.)

Black, John E. (See Lucke. C. E., and Black.)

Blair, William R., and L. Cohen, Washington, D. C. Radio signaling. 1,884,536; Oct. 25.

Blair, William R., and L. Cohen, Washington, D. C. Radio signaling. 1,884,537; Oct. 25.

Blake, George E., assignor to Forsythe Metal Goods Company, Inc., East Aurora, N. Y. Automobile heater. 1,884,538; Oct. 25.

Blattner, Emil H., Rochester, assignor to The Symington Company, New York, N. Y. Draft gear. 1,884,539; Oct. 25.

Blaw-Knox Company. (See Andrews, R. W., and Bradshaw, assignors.)

Blaw-Knox Company. (See McCrery, Harold E., assignor.)

Bloch Freres, Inc. (See Tansley, Thomas W., assignor.)

Bloch, Isabelle H. M., Chicago, Ill. Combined flashlight and reading glass. 1,884,968; Oct. 25.

Block, William I., Chicago, Ill., assignor to American Can Company. New York, N. Y. Display device. 1,884,540; Oct. 25.

Blohm, Carl jr., Silvis, Ill. Clinker extractor. 1,884,541; Oct. 25.

Blyth, John F., Newark, and C. Ellis, Montclair, N. J., assignors to Chadeloid Chemical Company, New York, N. Y. Making arsenical insecticides. 1,884,542; Oct. 25.

Boeckeler, B. C. (See Carlsmith, L. E., Boeckeler, and Krchma.)

Boecking, Ewald. (See Frappier, L. S., and Boecking.)

Boecking, Ewald. (See Kindelmann, A., and Boecking.)

Bohme, H. Th., A. G. (See Bertsch, Heinrich, assignor.)

Bohnsack, John A., Cleveland Heights, assignor to The E. F. Hauserman Company, Cleveland, Ohio. Metallic building element. 1,883,870; Oct. 25.

Bohnsack, John A., Cleveland Heights, assignor to The E. F. Hauserman Company, Cleveland, Ohio. Interlocking construction for metal partitions. 1,883,871; Oct. 25.

Bolz, Charles, Jersey City, N. J. Collapsible tube dispensing means. 1,884,543; Oct. 25.

Borton, George W., New Lisbon, N. J., assignor to Pennsylvania Crusher Company, New York, N. Y. Crushing machinery. 1,884,544; Oct. 25.

Bosch, Robert, Aktiengesellschaft. (See Allendorff, Fritz, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Baur, Ottmar, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Breitbart, H., Kurz, and Walther, assignors.)

Bosch, Robert, Aktiengesellschaft. (See Durst, Ernst, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, August, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, A., and Dorn, assignors.)

Bosch, Robert, Aktiengesellschaft. (See Klaiber, Erich, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Kleinert, Karl, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Lang, Franz, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Menzel, Friedrich, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Rall, M., and Bischoff, assignors.)

Bosch, Robert, Aktiengesellschaft. (See Rehm, Alfred, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Rehm, A., Wolff, and Walther, assignors.)

Bosch, Robert, Aktiengesellschaft. (See Schweizer, Karl.)

Bosch, Robert, Aktiengesellschaft. (See Steinhart, Hermann, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Stockmeyer, Friedrich W., assignor.)

Bosch, Robert, Aktiengesellschaft. (See Sturm, Wilhelm, assignor.)

Boutin, Raoul L., Newburyport, Mass. Cigarette package and opening device therefor. 1,884,545; Oct. 25.

Bovard, Paul F., and T. D. Beckwith, Berkeley, Calif. Paper making technique. 1,884,546; Oct. 25.

Bower, Ward E., Washington, D. C. Electrical generating system. 1,884,547; Oct. 25.

Boyd, Truman O., et al. (See Ross, Warren A., assignor.)

Boynton, Alexander, San Antonio, Tex. Automatic stage lift flowing apparatus for wells. 1,884,548; Oct. 25.

Boynton, Alexander, San Antonio, Tex. Stage lift-flowing device. 1,884,549; Oct. 25.

Boynton, Alexander, San Antonio, Tex. Stage lift flowing device. 1,884,550; Oct. 25.

Boynton, Alexander, San Antonio, Tex. Casing head. 1,884,551; Oct. 25.

Bradford, Zerbe C., assignor to Delco Products Corporation, Dayton, Ohio. Clutch. 1,883,872; Oct. 25.

Bradley, John H., Philadelphia, Pa. Crib. 1,884,552; Oct. 25.

Bradley, Theodore F., Westfield, N. J. Composition intended for coating, decorating, and printing wood, metal, paper, cloth and other surfaces. 1,884,553; Oct. 25.

Bradshaw, Grant D. (See Andrews, Roger W., and Bradshaw.)

Breitbart, Hans, E. Kurz, and W. Walther, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Ignition apparatus. 1,883,873; Oct. 25.

Brey, Harold E., assignor to Koehring Company, Milwaukee, Wis. Traction drive mechanism for worm drive shovels. 1,883,874; Oct. 25.

Briggs, Arthur J., Syracuse, N. Y., assignor to National Carbon Company. Making depolarizers. 1,884,554; Oct. 25.

Briggs & Stratton Corporation. (See Nicholson, Stanley W., assignor.)

British Celanese Limited. (See Pool, William, assignor.)

Broome, Frank, Palmyra, N. J. Grass cutting device. 1,885,073; Oct. 25.

Brown, Charles H. (See Flake, Thomas E., assignor.)

Brown, Myron J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Translating apparatus. 1,883,875; Oct. 25.

Brown, Roger B., Trenton, N. J., assignor to Daniel M. Sutherland, jr., Morrisville, Pa. Preparation of fiber and fiber pulp. 1,883,876; Oct. 25.

Brown, Stanley, Garden City, N. Y., assignor to The Griscom-Russell Company. Scale shedding heat transfer apparatus. 1,884,555; Oct. 25.

Brueshaber, Martin W., River Forest, assignor to The Goss Printing Press Co., Chicago, Ill. Printing press. 1,884,556; Oct. 25.

Buckley, John J., Boston, Mass., assignor, by mesne assignments, to Firebar Corporation, Cleveland, Ohio. Fuel grate. 1,884,557; Oct. 25.

Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)

Budd, Edward G., Manufacturing Company. (See Meadowcroft, Joseph W., assignor.)

Budd, Edward G., Manufacturing Company. (See Uxley, Warren S., assignor.)

Budd Wheel Company. (See Wiles, Charles L., assignor.)

Buegeleisen, Nathan, Norwood, Ohio. Novelty golf game toy. Des. 88,071; Oct. 25.

Buff, Edward G., Manufacturing Company. (See Ragsdale, Earl J. W., assignor.)

Buffalo Foundry & Machine Company. (See Kermer, Martin J., assignor.)

Bunte Brothers. (See Reiche, Anton, assignor.)

Burkholder, John H., Ashland, Ohio, assignor, by mesne assignments, to Elite Manufacturing Company. Vehicle jack. 1,885,074; Oct. 25.

Busfield, William, jr., assignor to American Engineering Company, Philadelphia, Pa. Furnace front wall. 1,885,075; Oct. 25.

Bustamante, Cesar, New York, N. Y. Advertising novelty. 1,885,076; Oct. 25.

Butler Manufacturing Company. (See Norquist, Victor C., assignor.)

Byrne Manufacturing Company, The. (See Dillhoefer, Henry M., jr., assignor.)

Calcott, William S., Penns Grove, N. J., and Harry H. Reynolds, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Pulverulent phosphorus pent oxide. 1,884,558; Oct. 25.

Calcott, William S., Penns Grove, N. J., and I. E. Lee, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Gum inhibitor. 1,884,559; Oct. 25.

California Corrugated Culvert Co. (See Gladkov, V., and Hand, assignors.)

Calrew Incorporated. (See MacLean, James M., assignor.)

Cameron, William McC., New York, N. Y., and F. J. Williams, Cumberland, Md., assignors to Celanese Corporation of America. Hosiery. 1,884,560; Oct. 25.

Cannon, Earl, assignor to American Fluid Motors Company, Philadelphia, Pa. System of contact. 1,885,077; Oct. 25.

Capstan Glass Company. (See Piazzoli, Theodore J., assignor.)

Carborundum Company, The. (See Benner, R. C., Walker, and Soley, assignors.)

Card, Frederic M. (See Van Ness, W. C., and Card.)

Carlsmith, Leonard E., B. C. Boeckeler, and I. J. Krchma, assignors to Commercial Solvents Corporation, Terra Haute, Ind. Recovery of ammonia from fermentation mashes. 1,884,561; Oct. 25.

Carlsmith, Leonard E., B. C. Boeckeler, and I. J. Krchma, assignors to Commercial Solvent Corporation, Terre Haute, Ind. Apparatus for the recovery of ammonia from fermentation mashes. 1,885,003; Oct. 25.

Carpenter, Augustus, Corporation. (See Carpenter, Ernest S., assignor.)

Carpenter, Ernest S., Cleveland Heights, Ohio, assignor to Augustus Carpenter Corporation, Cleveland, Ohio. Motion picture projector. Des. 88,072; Oct. 25.

Carpenter, Ivan S., assignor to Gardner-Denver Company, Denver, Colo. Rock drill. 1,884,969; Oct. 25.

Carr, John O., and A. S. Benjamin, assignors to The Teletype Corporation, Chicago, Ill. Signaling system. 1,884,562; Oct. 25.

Carson, Francis L., assignor to The Pacific Lumber Company, San Francisco, Calif. Manufacture of pressed or filtered wood products. 1,884,563; Oct. 25.
Carter, Donald M. (See Ross, Warren A., assignor.)
Carter, Emmett F., Schenectady, N. Y., assignor to General Electric Company. Synchronism indicating means. 1,885,078; Oct. 25.
Casabona, Bettina, assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 88,073; Oct. 25.
Casey, Howard T., and C. P. Noser, Rochester, N. Y., assignors to The Symington Company. Retaining device. 1,884,564; Oct. 25.
Casto, Lloyd V., assignor to Oxford Varnish Corporation, Detroit, Mich. Graining process. 1,884,565; Oct. 25.
Casto, Lloyd V., assignor to Oxford Varnish Corporation, Detroit, Mich. Graining process. 1,884,566; Oct. 25.
Catogge, Joseph J., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph exchange system. 1,884,567; Oct. 25.
Celanese Corporation of America. (See Beran, Charles F., assignor.)
Celanese Corporation of America. (See Cameron, W. M., and Williams, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Scheidegger, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Schneider, assignors.)
Celanese Corporation of America. (See Kinsella, Edward, assignor.)
Celanese Corporation of America. (See Martin, Robert, assignor.)
Celanese Corporation of America. (See Miles, G. W., and Dreyfus, assignors.)
Celanese Corporation of America. (See Moss, W. H., and Crutchfield, assignors.)
Celanese Corporation of America. (See O'Dowd, Leslie J., assignor.)
Celanese Corporation of America. (See Williams, F. J., and Robinson, assignors.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Chadeloid Chemical Company. (See Blyth, J. F., and Ellis, assignors.)
Chadeloid Chemical Company. (See Ellis, Carleton, assignor.)
Chadeloid Chemical Company. (See Lougovoy, Boris N., assignor.)
Chalmers, Charles H., Minneapolis, Minn. Oil burner. Des. 88,074; Oct. 25.
Champion, Harry E., et al., executors. (See Zifferer, Lothar R.)
Chandler & Price Company, The. (See Root, Charles F., assignor.)
Chapin, Herbert L., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for applying a strip of tape to a piece of sheet material. 1,884,568; Oct. 25.
Chapman, Everett, assignor to The Lincoln Electric Company, Cleveland, Ohio. Electric switch. 1,884,569; Oct. 25.
Chapman, Everett, assignor to The Lincoln Electric Company, Cleveland, Ohio. Portable electrode holder. 1,884,570; Oct. 25.
Chapman, Everett, assignor to The Lincoln Electric Company, Cleveland, Ohio. Starting switch. 1,884,571; Oct. 25.
Chapman, Everett, assignor to The Lincoln Electric Company, Cleveland, Ohio. Arc snuffer. 1,884,572; Oct. 25.
Chapman, Everett, Coatesville, assignor to The Lincoln Electric Company, Cleveland, Ohio. Dynamo electric machine and cooling same. 1,884,573; Oct. 25.
Chase Foundry & Manufacturing Company, The. (See Chase, Sherwood M., assignor.)
Chase, Sherwood M., assignor to The Chase Foundry & Manufacturing Company, Columbus, Ohio. Coupler. 1,885,079; Oct. 25.
Chemical Works formerly Sandoz. (See Von Allmen, Samuel, assignor.)
Cheney Brothers. (See George, Robert, assignor.)
Cherry, George L., La Grange, and L. F. Lamplough, Chicago, Ill., assignors to Western Electric Company, Inc., New York, N. Y. Apparatus for handling treated articles. 1,885,080; Oct. 25.
Chesebro, Charles E. (See Adams, F. E., and Chesebro.)
Chicago Cardboard Company. (See Ozmun, Kenneth L., assignor.)
Chicago Signal Company, The. (See Temple, Fred W., assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See Well, Edward J., assignor.)
Church, Walter L. (See Pearce, L. M., and Church.)
Cicali, Giovannia, Bologna, Italy. Producing practically pure hydrogen. 1,885,059; Oct. 25.
Cincinnati Car Corp., The. (See Elliott, J. H., and Norbom, assignors.)
Cincinnati Milling Machine Company, The. (See Sassen, Bernard, assignor.)
Cincinnati Time Recorder, The. (See Streckfuss, Elmer G., assignor.)
Cink, Maximillian, Naugatuck, Conn. Razor honing device. 1,884,574; Oct. 25.
Clapp, Kenneth S., Cleveland, Ohio. Lubricator. 1,885,081; Oct. 25.
Clark, Harry F. (See Fish, M. W., and Clark.)
Clark, Sheldon. (See Valle, Pembroke A., assignor.)
Clarke Chapman & Company, Limited. (See Woodeson, William A., assignor.)
Clarke, Hans T. (See Webb, W. R., and Clarke.)
Clarke, Thomas B. (See Hazelton, G., and Clarke.)
Clayton Mark & Company. (See Windsor, John F., assignor.)
Cleveland Shock Absorber Company, The. (See Mallory, Bonnie L., assignor.)
Cleveland Trust Company, The, et al., executors. (See Orr, William V.)
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Age resister for rubber compounds. 1,883,877; Oct. 25.
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator for vulcanization. 1,883,878; Oct. 25.
Clifford, Albert M. (See Sebrell, L. B., and Clifford.)
Cloutier, Arthur N. (See Lawson, R. H., and Cloutier.)
Coen Company. (See Sherwood, Carlyle J., assignor.)
Coen Company. (See Voorhees, Joseph T., assignor.)
Coen Companies. (See Zoul, Charles V., assignor.)
Cohen, Louis. (See Blair, W. R., and Cohen.)
Cohn, Adolph, North Bergen, N. J. Safety-razor blade-sharpener. 1,885,082; Oct. 25.
Cole, Elmer K., Winterset, Iowa, and F. E. Shumann, Easton, Pa. Offset bracket for guard rails. 1,883,879; Oct. 25.
Cole, Jacob L., Brave, Pa., assignor to Standard Oil Development Company. Dome cover for tank cars. 1,883,880; Oct. 25.
Cole, Laurel T., Los Angeles, Calif. Automobile service hand tool. 1,885,083; Oct. 25.
Colin, David H. (See Wachs, B., and Colin.)
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Machine for producing a connected series of heddles. 1,884,575; Oct. 25.
Columbia Malleable Castings Corp. (See Zifferer, Lothar R., assignor.)
Combustion Fuel Oil Burner Co. (See Rogers, H. S., and Raddatz, assignors.)
Comer, Patrick B., Greensboro, N. C. Ignition system. 1,884,576; Oct. 25.
Commerce Guardian Trust & Savings Bank, The, trustee. (See Replogle, Daniel B., assignor.)
Commercial Solvents Corporation. (See Carlsmith, L. E., Boeckeler, and Krchma, assignors.)
Comper, Adrian, London, England, assignor to Hospital Appliances, Inc., Pittsfield, Mass. Invalid's bed. 1,884,577; Oct. 25.
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Consolidated Automatic Merchandising Corporation. (See Woods, Harold B., assignor.)
Consolidated Mining and Smelting Company of Canada, Limited, The. (See Stimmel, B. A., McBean, and Cruickshank, assignors.)
Continental Oil Company. (See Bennett, Edwin O., assignor.)
Continental Oil Company. (See Zurcher, Paul, assignor.)
Cooper, Simon, Brooklyn, N. Y. Electrical sostenuto piano. 1,884,578; Oct. 25.
Corneliussen, Elias S., called Cornell, assignor to The Delta Star Electric Company, Chicago, Ill. Electrical switching station. 1,884,580; Oct. 25.
Cornel'ussen, Elias S., called Cornell, Chicago, Ill., H. D. Freitag, Lynbrook, and P. Sporn, Manhattan Beach, N. Y.; said Corneliussen assignor to The Delta Star Electric Company, Chicago, Ill. Electric station. 1,884,579; Oct. 25.
Cornell. (See Corneliussen, Elias S.)
Couch, Glenn F. (See Barrows, D. S., and Couch.)
Couch, Glenn F., Rochester, assignor to The Symington Company, New York, N. Y. Centering device. 1,884,581; Oct. 25.
Courtaulds Limited. (See Biddulph, Hugh, assignor.)
Cox, Arthur F. (See Zimnlewicz, A. J., and Cox.)
Cox, Warren R. (See Taylor, Alvin A. W., assignor.)
Crawford, Allen I., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum tube socket. 1,884,582; Oct. 25.
Crawford, Cliff R., Middletown, assignor to The Black-Clawson Company, Hamilton, Ohio. Paper machinery. 1,884,583; Oct. 25.
Crocker-Wheeler Electric Manufacturing Company. (See Spencer, Millard C., assignor.)
Cross, Robert E., Claremont, N. H., assignor to Sullivan Machinery Company. Portable tool. 1,884,584; Oct. 25.
Crossley, Alfred, Washington, D. C. Temperature control system. 1,884,585; Oct. 25.
Crowell, Jesse W., Portland, Oreg. Double door hardware. 1,885,084; Oct. 25.
Crowell, William J., jr. (See Pullen, R. S., and Crowell.)
Cruickshank, Graham. (See Stimmell, B. A., McBean, and Cruickshank.)
Crumbaker, Allen T., Brooklyn, N. Y. Injection nozzle. 1,885,004; Oct. 25.
Crutchfield, Kenneth H. (See Moss, W. H., and Crutchfield.)

Cuban-American Sugar Company. (See Meade, G. P., and Traxler, assignors.)
Cuban-American Sugar Company. (See Spencer, Guilford L.)
Cutti, Bertha. (See Nicolich, Giuseppe, assignor.)
Daily, William H., Chicago, Ill. Automatic phonograph. 1,885,005; Oct. 25.
Daily, William H., Chicago, Ill. Automatic phonograph. 1,885,006; Oct. 25.
Dalzen, William F., Grosse Pointe Park, Mich. Rock drill. 1,885,085; Oct. 25.
Dardelet Threadlock Corporation. (See Hoke, William E., assignor.)
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Hydrocarbon treatment process and apparatus. 1,884,586; Oct. 25.
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Production of lubricating oil. 1,884,587; Oct. 25.
David, Raymond C., Clinton, Mass. Sewing machine attachment for making buttonholes. 1,885,086; Oct. 25.
Davidson, Glenn. (See Laucks, J. F., and Davidson.)
Davies, Charles H., Philadelphia, Pa. Solid ankle foot base. 1,884,588; Oct. 25.
Davies, Charles H., Philadelphia, Pa. Making artificial limbs. 1,884,589; Oct. 25.
Davies, Charles H., Philadelphia, Pa. Mold. 1,884,590; Oct. 25.
Davies, David R., Didsbury, England, assignor to General Electric Company. Electrical bus and switch station. 1,883,881; Oct. 25.
Davis, Chester L., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Electric discharge tube. 1,884,591; Oct. 25.
Davis, Chester L., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Signaling system. 1,883,492; Oct. 25.
Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Television system. 1,883,593; Oct. 25.
Davis, Donald C., Depew, assignor to The Gould Coupler Company, New York, N. Y. Draft rigging. 1,884,594; Oct. 25.
Davis, Lewis H., assignor to Delco Products Corporation, Dayton, Ohio. Universal joint. 1,883,882; Oct. 25.
Davis, Stephen J., assignor of one-half to B. C. Hallock, Willimantic, Conn. Ice cream cone carrier. 1,884,970; Oct. 25.
Day, Albert V. T., New Rochelle, N. Y. Electrical signaling and control. 1,885,009; Oct. 25.
Day, Albert Van Tuyl, Rye, N. Y. Multiplex electrical signaling and control. 1,885,010; Oct. 25.
Dayton Steel Foundry Company, The. (See Walther, George, assignor.)
Deere, John, Tractor Company. (See Liggett, John T., assignor.)
De la Cierva, Juan. (See Pitcairn, H. F., and de la Cierva.)
De la Cierva, Juan, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft and operating the same. 1,884,596; Oct. 25.
De la Cierva, Juan, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa. Sustaining rotor construction for aircraft. 1,884,597; Oct. 25.
De la Cierva, Juan, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa. Rotative sustaining blade for aircraft. 1,884,598; Oct. 25.
De la Cierva, Juan Juan, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft having rotative wings. 1,884,599; Oct. 25.
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Delco Products Corporation. (See Bradford, Zerbe C., assignor.)
Delco Products Corporation. (See Davis, Lewis H., assignor.)
Delco Products Corporation. (See Funston, Frederick D., assignor.)
Delco Products Corporation. (See Lee, John W., assignor.)
Delco Products Corporation. (See Rossman, Edwin F., assignor.)
Delco-Remy Corporation. (See Hartzell, Herman L., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Norviel, H. E., and Ecoff, assignors.)
Delco-Remy Corporation. (See Norviel, H. E., and Wikle, assignors.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Delco-Remy Corporation. (See Seabury, R. L., and Murray, assignors.)
Delco-Remy Corporation. (See Shippy, L. C., and Baker, assignors.)
Delco-Remy Corporation. (See Wilkins, Raymond A., assignor.)
Delta Star Electric Company, The. (See Corneliussen, Elias S. (called Cornell).)
Delta-Star Electric Company, The. (See Rah, Joseph, assignor.)
Dennis, John W., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Form for shaping and drying hosiery and the like. 1,883,883; Oct. 25.
Derby, Ira H., assignor to Peter C. Reilly, Indianapolis, Ind. Induction process of graphitizing carbon. 1,884,600; Oct. 25.
Detroit Vapor Stove Company. (See Giles, Oscar H., assignor.)
Detroit Vapor Stove Company, The. (See Kisselle, John M., assignor.)
Devlin, Henry W., Denver, Colo. Key cutting machine. 1,885,002; Oct. 25.
De Witt, Arthur R., assignor of one-half to C. L. Wright, Harbor Springs, Mich. Plank fitter tool. 1,885,087; Oct. 25.
De Witt, Charles W., Oakland, Calif. Detachable drill bit. 1,884,601; Oct. 25.
Dickey, W. S., Clay Manufacturing Company. (See Parker, Fred B., assignor.)
Dieckmann, Max., Graefelfing, near Muenchen, assignor of one-third to O. Scheller, Berlin, Germany, and one-third to W. H. Murphy, Oceanport, N. J. System for locating moving bodies. 1,885,023; Oct. 25.
Dilihoefer, Henry M., jr., Cleveland Heights, assignor to The Byrne Manufacturing Company, Cleveland, Ohio. Container. 1,884,602; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor, by mesne assignments, to International Projector Corporation, New York, N. Y. Light ray projector. 1,884,603; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Film gate. 1,884,604; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Shutter mechanism. 1,884,605; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Gate operating mechanism. 1,884,606; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Mechanical movement. 1,884,607; Oct. 25.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Screened and ventilating fire shutter. 1,884,608; Oct. 25.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Resilient film guide for motion picture projection machines. 1,884,609; Oct. 25.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Mechanical movement. 1,884,610; Oct. 25.
Dinzl, Richard W., Margate City, N. J., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Riveting mechanism. 1,884,611; Oct. 25.
Dinzl, Richard W., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Steam platen. 1,884,612; Oct. 25.
Dister, Joseph, Hamilton, Ohio, assignor to American Can Company, New York, N. Y. Container. 1,884,613; Oct. 25.
Dognin, Jean, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Lace. Des. 88,138; Oct. 25.
Donald, Harry G., U. S. Navy. Liquid vaporizer. 1,884,614; Oct. 25.
Donaldson, Charles H. (See Mabee, Charles R., assignor.)
Dooley, Delmar D., assignor to Dooley Improvements Inc., Rock Island, Ill. Filter. 1,884,615; Oct. 25.
Dooley, Delmar D., assignor to Dooley Improvements Inc., Rock Island, Ill. Filter. 1,884,616; Oct. 25.
Dooley Improvements Inc. (See Dooley, Delmar D., assignor.)
Doran, Albert B., assignor to Hughes Development Company, Ltd., Los Angeles, Calif. Photographic sensitometer. 1,883,884; Oct. 25.
Dorn, Walter. (See Kazenmaier, A., and Dorn.)
Dorner, Hermann J. A. (See Widmann, Adolf A., assignor.)
Dow Chemical Company, The. (See Barstow, E. O., and Heath, assignors.)
Dow Chemical Company, The. (See Dressel, Grayton F., assignor.)
Dow Chemical Company, The. (See Strosacker, C. J., and Pelton, assignors.)
Dow, Herbert H., Midland, Mich., assignor, by mesne assignments, to Air Preheater Corporation, New York, N. Y. Air preheater. 1,884,617; Oct. 25.
Dowinsky, Samuel, New York, N. Y. Apparatus for forming and finishing scalloped edges of garments. 1,885,056; Oct. 25.
Downard, James S., Fort Thomas, Ky. Apparatus for preparing asphaltic composition. 1,884,618; Oct. 25.
Drager, Otto H. (See Stelzner, Hermann, assignor.)
Drake Non-Clinkering Furnace Block Company. (See Baumgartner, Henry H., assignor.)
Dressel, Grayton F., assignor to The Dow Chemical Company, Midland, Mich. Purification of bromine. 1,885,029; Oct. 25.
Dreyfus, Camille. (See Miles, G. W., and Dreyfus.)
Dreyfus, Camille, New York, N. Y. Making laminated glass. 1,884,624; Oct. 25.
Dreyfus, Camille, New York, N. Y., and J. Scheidegger, Cumberland, Md., assignors to Celanese Corporation of America. Derivatives of cellulose compositions of low inflammability containing cinnamic acid dibromide. 1,884,619; Oct. 25.

Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Treatment of fabric containing cellulose esters. 1,884,620; Oct. 25.

Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Treatment of fabric. 1,884,621; Oct. 25.

Dreyfus, Camille, New York, N. Y., and G. Schneider, East Orange, N. J., assignors to Celanese Corporation of America. Treatment of fabric containing cellulose esters. 1,884,622; Oct. 25.

Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Partial saponification of cellulose ester material and product thereof. 1,884,623; Oct. 25.

Dreyfus, Henry, London, England. Manufacture of aliphatic acid anhydrides. 1,884,625; Oct. 25.

Dreyfus, Henry, London, England. Manufacture of aliphatic acid anhydrides. 1,884,626; Oct. 25.

Dreyfus, Henry, London, England. Manufacture of aliphatic anhydrides. 1,884,627; Oct. 25.

Dreyfus, Henry, London, England. Manufacture of aliphatic acids and their esters. 1,884,628; Oct. 25.

Dreyfus, Henry, London, England. Treatment of cellulose and derivatives thereof. 1,884,629; Oct. 25.

Driest, Charles, Marlboro, and H. D. Myers, Jersey City; said Driest assignor to R. G. Wiencke, North Bergen, N. J. Scissors. 1,884,630; Oct. 25.

Dryice Corporation of America. (See Small, John D., assignor.)

Dryice Equipment Corporation. (See Killeffer, David H., assignor.)

Dryice Equipment Corporation. (See Killeffer, D. H., and Jones, assignors.)

Duff-Norton Manufacturing Company, The. (See Schwerin, Frank H.)

Duhl, Andrew L., Dennison, Ohio. Card table ash receptacle. 1,885,088; Oct. 25.

Dukes, David L., St. George, S. C. Manually operated ground working implement. 1,885,089; Oct. 25.

Dunham, Byron W., Oakmont, assignor to Edgewater Steel Company, Pittsburgh, Pa. Preparation of blooms for rolling. 1,884,631; Oct. 25.

Dunham Company, The. (See Karl, George E., assignor.)

Dunham Company (1931), The. (See Miller, Myron D., assignor.)

Dünnebier, Max. (See Winkler, A., and Dünnebier.)

Du Pont, E. I., de Nemours & Company. (See Adamson, William A., and Wuertz, assignors.)

Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Lee, assignors.)

Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Reynolds, assignors.)

Du Pont, E. I., de Nemours & Company. (See Fielding, Edgar W., assignor.)

Du Pont, E. I., de Nemours & Company. (See Knapp, Paul, assignor.)

Du Pont, E. I., de Nemours & Company. (See Lewers, W. W., and Paterson, assignors.)

Du Pont, E. I., de Nemours & Company. (See Lubs, H. A., and Fox, assignors.)

Du Pont, E. I., de Nemours & Company. (See Patterson, Gordon D., assignor.)

Durst, Ernst, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Magneto-electric ignition apparatus. 1,883,885; Oct. 25.

Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor-control system. 1,883,886; Oct. 25.

Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)

Eastman Kodak Company. (See Malm, Carl J., assignor.)

Eastman Kodak Company. (See Othmer, Donald F., assignor.)

Eastman Kodak Company. (See Smith, Henry B., assignor.)

Eastman Kodak Company. (See Staud, Cyril J., assignor.)

Eastman Kodak Company. (See Staud, C. J., and Waring, assignors.)

Eastman Kodak Company. (See Webb, W. R., and Clarke, assignors.)

Eclipse Machine Company. (See Slayton, Robert E., assignor.)

Ecoff, Vance. (See Norviel, H. E., and Ecoff.)

Edgewater Steel Company. (See Dunham, Byron W., assignor.)

Edick, Jesse D. (See Gould, William J., assignor.)

Edison Electric Appliance Company. (See Randolph, Charles P., assignor.)

Electrolux Servel Corporation. (See Wessblad, Karl A., assignor.)

Electromaster, Inc. (See Noble, Warren, assignor.)

Electromatic Typewriters, Inc. (See Thompson, Russell G., assignor.)

Elite Manufacturing Company. (See Burkholder, John H., assignor.)

Elliott, Joseph H., and R. A. Norbom, assignors to The Cincinnati Car Corp., Cincinnati, Ohio. Truck for high speed interurban cars. 1,885,090; Oct. 25.

Ellis Adding Typewriter Company. (See Perkins, Nathan W., assignor.)

Ellis, Carleton. (See Blyth, J. F., and Ellis.)

Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Finish remover composition adapted to remove nitrocellulose coatings. 1,884,632; Oct. 25.

Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company. Paint, varnish and lacquer remover. 1,884,633; Oct. 25.

Ellis-Foster Company. (See Lougovoy, Boris N., assignor.)

Emans, Louis, Willmar, Minn. Portable hot water heater. 1,884,634; Oct. 25.

Empire Level Manufacturing Company. (See Ziemann, Harry J., assignor.)

Exact Weight Scale Company, The. (See Smith, Walter S., assignor.)

Ex-Cello-O Aircraft and Tool Corporation. (See Krueger, Henry R., assignor.)

Explosive Bait Corporation—No Stockholders' Liability. (See Karr, George, assignor.)

Fafnir Bearing Company, The. (See Houston, Levi C., assignor.)

Fafnir Bearing Company. (See Searles, R. R., and Leister, assignors.)

Fancher, Charles J., Windsor, Vt., assignor, by mesne assignments, to Woodward Hubbard Company, Hill, N. H. Glass cutter. 1,884,635; Oct. 25.

Farley, Francis S., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Drier for fiber board. 1,883,887; Oct. 25.

Farley, Francis S., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Mold for fiber pulp. 1,883,888; Oct. 25.

Farley, Francis S., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Apparatus for feeding and aligning sheet material. 1,883,889; Oct. 25.

Farley, Francis S., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Apparatus for feeding and aligning sheet material. 1,883,890; Oct. 25.

Farnham, Merton W., Batavia, N. Y. Gasoline vending machine. 1,885,091; Oct. 25.

Faultless Caster Company. (See Noelting, William H., assignor.)

Faus, Herbert W., White Plains, N. Y. Freight handling apparatus. 1,884,636; Oct. 25.

Feehan, Thomas A., Trenton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Furnace tilting mechanism. 1,884,637; Oct. 25.

Fellerman, Morris, Jersey City, N. J. Portable beverage service and dispenser. 1,885,092; Oct. 25.

Felt & Tarrant Mfg. Co. (See Hiemann, F. A., and Ziehm, assignors.)

Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Schürer, Eugen.)

Fensky, Charles, St. Louis, Mo. Hearing device. 1,884,638; Oct. 25.

Fensky, Charles, and H. J. Readey, St. Louis, Mo. Copy holder. 1,884,639; Oct. 25.

Fidler, Harry E. (See Tenney, P. L., and Fidler.)

Fielding, Edgar W., Wilmington, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Inhibiting the oxidation and hydration of lead alloys. 1,884,640; Oct. 25.

Fields, Pauline E., assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 88,075; Oct. 25.

Firebar Corporation. (See Buckley, John J.)

Firebar Corporation. (See Thompson, James S., assignor.)

Fish, Mortimer W., and H. F. Clark, assignors to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,891; Oct. 25.

Fisher, Allan W. (See Morris, Daniel, assignor.)

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company. Traveling crane. 1,884,641; Oct. 25.

Flach, Walther, Frankfort-on-the-Main, Germany, assignor to Remington Typewriter Company, Ilion, N. Y. Combined typewriting and computing machine. 1,883,892; Oct. 25.

Flaherty, Mark, Haddon Heights, N. J., assignor to General Electric Company. Chassis for electrical apparatus. 1,883,893; Oct. 25.

Flake, Thomas E., assignor of one-half to C. H. Brown, Breckenridge, Tex. Stuffing box. 1,884,642; Oct. 25.

Flannery Bolt Company. (See Landgraf, Frederick K., assignor.)

Flintkote Corporation, The. (See Gregg, Maxwell G., assignor.)

Flintkote Corporation, The. (See Kirschbraum, Lester, assignor.)

Flintkote Corporation, The. (See Levin, Harold L., assignor.)

Food Machinery Corporation. (See Moe, Andrew O., assignor.)

Food Machinery Corporation. (See Stevens, Augustus R. and F. M., assignors.)

Food Machinery Corporation. (See Yost, Oliver P., assignor.)

Forbes, Walter D., San Francisco, Calif. Nursing bottle device. 1,884,643; Oct. 25.

Ford, George G., Terre Haute, Ind. Welding apparatus. 1,884,644; Oct. 25.

Ford, George G., Terre Haute, Ind. Welding apparatus. 1,884,645; Oct. 25.

Ford, Irving A. (See Von Blix, Carlos A., assignor.)

Forsythe Metal Goods Company, Inc. (See Blake, George E. assignor.)

Fox, Arthur L. (See Lubs, H. A., and Fox.)

Fox, Charles H., assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio. Combined booster and fire pump. 1,885,093; Oct. 25.

Frankenburger, Walter. (See Mittasch, A., Frankenburger, and Winkler.)

Frappier, Louis S. and E. Boecking, Brooklyn, assignors to International Projecter Corporation, New York, N. Y. Sprocket. 1,884,646; Oct. 25.

Freitag, Henry D. (See Corneliussen, B. S., Freitag, and Sporn.)

Frigidaire Corporation. (See Auld, George R., assignor.)

Frigidaire Corporation. (See Baker, Marshall W., assignor.)

Frigidaire Corporation. (See Fish, M. W., and Clark, assignors.)

Frigidaire Corporation. (See Hull, Harry B., assignor.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frigidaire Corporation. (See Myers, Charles B., assignor.)

Frigidaire Corporation. (See Smith, Harry F., assignor.)

Frigidaire Corporation. (See Summers, Otto M., assignor.)

Frigidaire Corporation. (See Sheats, John H.)

Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 88,076; Oct. 25.

Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,883,894; Oct. 25.

Fulton Syphon Company, The. (See Reeder, Frank C., assignor.)

Funke, Fred W., Oakland, Calif. Fire-fighting tool. 1,884,990; Oct. 25.

Funston, Frederick D., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,883,895; Oct. 25.

Gabriel Company, The. (See Robbins, Walter C., assignor.)

Gage, Robert B., Trenton, N. J. Transverse joint for concrete pavement. 1,884,647; Oct. 25.

Galbraith, Arch H., Pittsburgh, Pa., assignor to Rutledge Equipment Company. Display card container. 1,884,971; Oct. 25.

Gamewell Company, The. (See King, George E., assignor.)

Gamper, Oscar. (See Haner, C., and Gamper.)

Gardner-Denver Company. (See Carpenter, Ivan S., assignor.)

Garfield, Lewis E. (See Baggett, H. T., and Garfield.)

Garland, William L., Llanerch, Pa., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Car heating system. 1,883,896; Oct. 25.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,884,648; Oct. 25.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,884,649; Oct. 25.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling apparatus. 1,884,650; Oct. 25.

Gartin, Elmer G., Claremont N. H., assignor to Sullivan Machinery Company. Rock drill. 1,884,651; Oct. 25.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,884,652; Oct. 25.

Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Demolishing pick. 1,884,653; Oct. 25.

Garton, Charles G. (See Warren, H. W. H., Garton, and Smith.)

Gatyas, Louis W. (See Klarmann, E., and Gatyas.)

Gautschi, Frederick H., Van Nuys, Calif. Colonic excreta receptacle. Des. 88,077; Oct. 25.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Relay and circuit breaker. 1,884,654; Oct. 25.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Antenna relay and control system. 1,884,655; Oct. 25.

Geier, P. A., Company, The. (See Martinet, Eugene F., assignor.)

Gelissen, Henri C. J. H., assignor to Naamlooze Vennootschap Electrochemische Industrie, Roermond, the Netherlands. Process for obtaining phosphorus-halogen compounds. 1,884,656; Oct. 25.

Gellman, Israel C., Rock Island, Ill. Bread slicing machine. Des. 88,078; Oct. 25.

General Aniline Works, Inc. (See Muth, Friedrich, assignor.)

General Cable Corporation. (See Simmons, Donald M., assignor.)

General Electric Company. (See Carter, Emmett F., assignor.)

General Electric Company. (See Davies, David R., assignor.)

General Electric Company. (See Flaherty, Mark, assignor.)

General Electric Company. (See Gosling, Joseph W., assignor.)

General Electric Company. (See Hathaway, Claude M., assignor.)

General Electric Company. (See Henningsen, Earle S., assignor.)

General Electric Company. (See Ipsen, C. L., and Otis, assignors.)

General Electric Company. (See Jackwirth, Maximilian, assignor.)

General Electric Company. (See Junggren, Oscar, assignor.)

General Electric Company. (See Morrill, Wayne J., assignor.)

General Electric Company. (See Nickle, Clifford A., assignor.)

General Electric Company. (See Robinson, Ernest L., assignor.)

General Electric Company. (See Scheldorf, Marvel W., assignor.)

General Electric Company. (See Schuhmann, H., and Streuber, assignors.)

General Electric Company. (See Schwennker, Charles F.)

General Electric Company. (See Vienneau, Jacob J.)

General Electric Company. (See Warren, H. W. H., Garton, and Smith, assignors.)

General Electric Company. (See Watts, Noble H., assignor.)

General Electric Company. (See Weir, Irvin R., assignor.)

General Motors Corporation. (See Beringer, R., and Seaholm, assignors.)

General Motors Corporation. (See Landers, Charles H., assignor.)

General Motors Corporation. (See Tenney, P. L., and Fidler, assignors.)

General Paint Corporation. (See Kramer, Herman, assignor.)

General Steel Castings Corporation. (See Meyer, W. H., Travilla, jr., and Jackson, assignors.)

General Steel Castings Corporation. (See Pfager, H. M., and Haliquist, assignors.)

George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,079; Oct. 25.

George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,080; Oct. 25.

Gerdts, Gustav F., Bremen, Germany. Blow-off valve. 1,884,991; Oct. 25.

Gerlinger, Carl F., Dallas, Oreg. Car axle drive for electric lighting systems and other purposes. 1,884,657; Oct. 25.

Gibson, William D., Company. (See Troendly, H. P., and Pareira, assignors.)

Giles, Oscar H., Windsor, Ontario, Canada, assignor to Detroit Vapor Stove Company, Detroit, Mich. Enameled article and method of assembling same. 1,883,897; Oct. 25.

Girard Model Works Inc., The. (See Smith, Anthony N., assignor.)

Gladkov, Vladimir, and A. J. Hand, assignors to California Corrugated Culvert Co., Berkeley, Calif. Spiral pipe machine. 1,884,658; Oct. 25.

Glock, Charles A., Chatham, Ontario, Canada. Golf tee holding wristlet. Des. 88,081; Oct. 25.

Goldberg, Julius. (See Kunian, P., and Goldberg.)

Gombar, Joseph, Lenox, Mich., assignor to Smith and Davis Manufacturing Company, St. Louis, Mo. Davenport. Re18,636; Oct. 25.

Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)

Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)

Goodyear Tire & Rubber Company, The. (See Kurtz, Stewart S., jr., assignor.)

Goodyear Tire & Rubber Company. (See Purdy, John F., assignor.)

Goodyear Tire & Rubber Company, The. (See Sebrell, L. B., and Clifford, assignors.)

Goodyear Tire & Rubber Company, The. (See Snyder, Robert W., assignor.)

Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Combined clock, thermometer and thermostat. Des. 88,082; Oct. 25.

Goss Printing Press Co., The. (See Brueshaber, Martin W., assignor.)

Goudiss, Charles H., jr., New York, N. Y., assignor to Richcar Corporation, Wilmington, Del. Fruit juice extractor. 1,885,011; Oct. 25.

Gould Coupler Company, The. (See Barrows, Donald S., assignor.)

Gould Coupler Company, The. (See Barrows, D. S., and Couch, assignors.)

Gould Coupler Company, The. (See Davis, Donald C., assignor.)

Gould & Eberhardt. (See Zimmerman, William F., assignor.)

Gould, William J., assignor to Jesse D. Edick, Johnstown, N. Y. Sponge mitt. 1,884,659; Oct. 25.

Gouldbourn, Joseph, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,884,660; Oct. 25.

Government and the People of the United States of America. (See Funke, Fred W.)

Grabbe, Paul J., Lewistown, Pa. Rim lug nut lock. 1,884,992; Oct. 25.

Grace, Estella F., et al. (See Marler, Eva, assignor.)

Grace, Oscar J., et al. (See Marler, Eva, assignor.)
Graham-White Sander Corporation. (See Ransom, William L., assignor.)
Graham, William S., Berkeley, Calif. File holder. 1,884,661; Oct. 25.
Grant, Karl W., assignor to The Republic Steel Corporation, Youngstown, Ohio. Mold wash. 1,885,094; Oct. 25.
Grass, William, Roslyn Heights, N. Y. Light reflecting type. 1,884,662; Oct. 25.
Gravatt, Charles M., Asheville, N. C. Game apparatus. 1,885,036; Oct. 25.
Greenberg, Alta. (See Greenberg, William, assignor.)
Greenberg, William, assignor to Alta Greenberg, Portland, Oreg. Number indicator and register for automatic telephones. 1,884,663; Oct. 25.
Gregg, Maxwell G., Ballston Spa., N. Y., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Making emulsions. 1,884,664; Oct. 25.
Greiner, Alfred, Boston, assignor of forty per cent to R. E. Schirmer, Newton, and twenty per cent to L. L. Witter, Jamaica Plain, Mass. Metallic treatment of vitreous materials. 1,884,665; Oct. 25.
Grigsby-Grunow Company. (See Miller, Henry J., assignor.)
Griscom-Russell Company, The. (See Brown, Stanley, assignor.)
Guenther, Henry L., Los Angeles, Calif. Can packer. 1,884,666; Oct. 25.
Guenther, Henry L., Los Angeles, Calif. Vacuum double seaming machine. 1,884,667; Oct. 25.
Guide Lamp Corporation. (See Michel, Clarence A., assignor.)
Guinot, Henri M. (See Ricard, E., and Guinot.)
Gury, J. B. Mfg. Co. (See Gury, John B., jr., assignor.)
Gury, John B., jr., assignor to J. B. Gury Mfg. Co., St. Louis, Mo. Punching machine. 1,884,668; Oct. 25.
Gyro Process Company, The. (See Wagner, Cary R., assignor.)
Hacker, Frank, Friend, Nebr. Feeding trough. 1,884,972; Oct. 25.
Hager, Floyd D. (See Rhodes, E. O., and Hager.)
Haley-Cate-Rockwood Company. (See Rockwood, A. W., assignor.)
Halliwell, George P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermionic cathode. 1,883,898; Oct. 25.
Hallock, Bert C. (See Davis, Stephen J., assignor.)
Hallquist, Elnar G. (See Pfager, H. M., and Hallquist.)
Hamilton, Alfred E., Pittsburgh, Pa. Chuck. 1,885,095; Oct. 25.
Hamilton Beach Manufacturing Company. (See Mross, Edward R., assignor.)
Hamilton, Florence. (See Nicolich, Giuseppe, assignor.)
Hand, Augustin J. (See Gladkov, V., and Hand.)
Haner, Carl Moylan, and Oscar Gamper, assignors to Publicker, Inc., Philadelphia, Pa. Producing butyl alcohol and acetone and ethyl alcohol. 1,885,096; Oct. 25.
Hannan, John B., deceased, Indianapolis, Ind.; M. M. E. Hannan, Indianapolis, Ind., executrix. Arrival notice book. 1,884,669; Oct. 25.
Hannan, Mary M. E., executrix. (See Hannan, John B.)
Hansen, Christian J., Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Treating thiocyanates. 1,885,035; Oct. 25.
Hansgirg, Fritz, Radenthein, Karnten, Austria. Production of metallic magnesium. 1,884,093; Oct. 25.
Hanson, Howard V., Walla Walla, Wash. Trace support. 1,884,670; Oct. 25.
Hanson, Louis, Company. (See Kincannon, Leo T., assignor.)
Harden, Johannes. (See Krook, B. J. E., and Harden.)
Harrington, Emilie F. (See Kline, C. L., and Harrington.)
Harrington, Henry B. (See Kline, C. L., and Harrington.)
Harris, Benjamin R., Chicago, Ill. Refrigerating system. 1,883,899; Oct. 25.
Harris, Reginald M., Fanwood, N. J., assignor to The Superheater Company, New York, N. Y. Header joint. 1,883,900; Oct. 25.
Harrower, James. (See Witherspoon, W. O., and Harrower.)
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Computing machine. 1,883,901; Oct. 25.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,902; Oct. 25.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,904; Oct. 25.
Hart, Frederick A., New Britain, Conn., and S. L. Walsoe, Lyndhurst, N. J., assignors to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,883,903; Oct. 25.
Hartford-Empire Company. (See Wardley, Thomas, assignor.)
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition coil. 1,883,905; Oct. 25.
Harvey, Edward W., Highland Park, N. J., assignor to The Barrett Company, New York, N. Y. Process and apparatus for the treatment of liquids with ammonia. 1,885,012; Oct. 25.
Hasselquist, Hugo S., assignor to A. O. Smith Corporation, Milwaukee, Wis. Attaching nuts to metal plates. 1,883,906; Oct. 25.
Hathaway, Claude M., Colorado Springs, Colo., assignor to General Electric Company. Automatic oscillograph. 1,883,907; Oct. 25.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Loading machine. 1,884,671; Oct. 25.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Material handling mechanism. 1,884,672; Oct. 25.
Hauserman, E. F., Company, The. (See Bohnsack, John A., assignor.)
Hauserman, E. F., Company, The. (See Heller, Edward, assignor.)
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Evaporator top. 1,883,908; Oct. 25.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Marine engine. 1,883,909; Oct. 25.
Hayes, Fred L., Port Washington, N. Y., assignor, by mesne assignments, to Charles H. Bickell, Passaic, N. J. Tank truck. 1,884,673; Oct. 25.
Hazel-Atlas Glass Co. (See Algeo, A. M., and Ross, assignors.)
Hazelton, George, and T. B. Clarke, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for conditioning parts of shoes. 1,884,674; Oct. 25.
Health Developing Apparatus Co. (See Troendly, H. P., and Pariera, assignors.)
Hearn, George K. (See White, K. M., and Hearn.)
Heath, Sheldon B. (See Barstow, E. O., and Heath.)
Hegnes, Peter J., Canton, S. Dak. Silo. 1,885,013; Oct. 25.
Heineman, Warren F., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Welding apparatus. 1,883,911; Oct. 25.
Heising, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric wave transmission system. 1,884,675; Oct. 25.
Held, Robert. (See Luther, M., and Held.)
Heller, Edward, assignor to The E. F. Hauserman Company, Cleveland, Ohio. Metal building framing element construction. 1,883,910; Oct. 25.
Hemphill Company. (See Lawson, R. H., and Cloutier, assignors.)
Hendrie, William E., Greenlawn, N. Y. Educational device. 1,884,676; Oct. 25.
Hennessy, Nicholas, Bristol, Pa., assignor to The International N S E Corporation. Preheated secondary oxygen regulator. 1,884,677; Oct. 25.
Henningsen, Earle S., Scotia, N. Y., assignor to General Electric Company. Dynamo-electric machine. 1,883,912; Oct. 25.
Hentschel, Ernest R., deceased, Washington, D. C., by John Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Piezo-electric crystal apparatus. 1,884,678; Oct. 25.
Hentschel, Ernest R., deceased, Washington, D. C., by John Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. High frequency oscillatory system. 1,884,679; Oct. 25.
Hentschel, Ernest R., deceased, Washington, D. C., by John Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Automatic volume control system. 1,884,680; Oct. 25.
Hentschel, Ernest R., deceased, Washington, D. C., by John Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Volume control system. 1,884,681; Oct. 25.
Hermani, Henry, Baltimore, Md., assignor, by mesne assignments, to American Can Company, New York, N. Y. Key opening can. 1,884,682; Oct. 25.
Hermani, Henry, Baltimore, Md., assignor, by mesne assignments, to American Can Company, New York, N. Y. Machine for attaching keys to can tops. 1,884,683; Oct. 25.
Herr, Harvey E., assignor to Herr Manufacturing Company, Inc., Buffalo, N. Y. Flyer for spinning machines and the like. 1,884,684; Oct. 25.
Herr Manufacturing Company. (See Herr, Harvey E., assignor.)
Hertan, Bernard, Brooklyn, assignor to Fred B. Hertan, Kew Gardens, N. Y. Spring knitting needle. 1,885,097; Oct. 25.
Hertan, Fred B. (See Hertan, Bernard, assignor.)
Hevi Duty Electric Company. (See Koch, H. E., and Lowe, assignors.)
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Lubricating photographic film. 1,883,913; Oct. 25.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Treating photographic film and product thereof. 1,883,914; Oct. 25.
Hill, Curtiss L., assignor of one-half to R. Clayton McRae, Tacoma, Wash. Compass control system. 1,885,098; Oct. 25.
Hill, Landon, and J. D. Hobby, Raleigh, N. C. Reconditioning printing plates. 1,884,685; Oct. 25.
Hilpert, Meier G., Bethlehem, Pa. Metal piling. 1,884,686; Oct. 25.

Hilpert, Meier G., Bethlehem, Pa. Structural span. 1,884,687; Oct. 25.
Hilpert, Meier G., Bethlehem, Pa. Truck supported load carrying structure. 1,884,688; Oct. 25.
Hilpert, Meier G., Bethlehem, Pa. Aligning the truck axles and of assembling truck supported load carrying structures. 1,884,689; Oct. 25.
Hively, Howard D., and O. C. Natlis, Charleston, W. Va., assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass cutting machine. 1,885,099; Oct. 25.
Hobby, John D. (See Hill, L., and Hobby.)
Hofmann, Fritz, Breslau, M. Otto, Ludwigshafen-on-the-Rhine, and W. Stegemann, Monheim-on-the-Rhine, Germany. Polymerization of olefines. 1,885,060; Oct. 25.
Hogan, Harry S., New Orleans, La., assignor to American Can Company, New York, N. Y. Can heading and sealing machine. 1,884,690; Oct. 25.
Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Self-locking coupled screw elements. 1,884,973; Oct. 25.
Holcomb, Alpheus E., assignor to Koehring Company, Milwaukee, Wis. Dipper stick foot piece. 1,883,915; Oct. 25.
Holloway, William M., Oak Park, Ill., assignor to American Can Company. Container. 1,884,691; Oct. 25.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,884,692; Oct. 25.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,884,693; Oct. 25.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,884,694; Oct. 25.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,884,695; Oct. 25.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,884,696; Oct. 25.
Holzer, Max. (See Schults, W. C., and Holzer.)
Hopwood, John M. (See Smith, George W., assignor.)
Horton, Arthur W., jr., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Long distance telephone system. 1,884,697; Oct. 25.
Hospital Appliances, Inc. (See Comper, Adrian, assignor.)
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Container assembling machine. 1,884,698; Oct. 25.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Method of making friction closures. 1,884,699; Oct. 25.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Drawing press hydraulic cushion. 1,884,700; Oct. 25.
Houde Engineering Corporation. (See Peo, Ralph F., assignor.)
Houston, Levi C., assignor to The Fafnir Bearing Company, New Britain, Conn. Closure ring for bearings. 1,883,916; Oct. 25.
Howard, Clinton W., Dayton, Ohio. Aircraft. 1,884,701; Oct. 25.
Howe, Raymond F. (See Adams, M., Howe, and Nutting.)
Hubacker, Earl F., assignor to Norge Corporation, Detroit, Mich. Rotary compressor unit. 1,884,702; Oct. 25.
Huber, Louis F., Baltimore, Md. Propeller. 1,884,703; Oct. 25.
Huffman, Mervin C., Claremont, N. H., assignor to Sullivan Machinery Company. Impact tool. 1,884,704; Oct. 25.
Huffman, William E., Dayton, Ohio. Pneumatic boat. 1,884,705; Oct. 25.
Hughes Development Company, Ltd. (See Doran, Albert B., assignor.)
Hughes, James R., South Bend, Ind., assignor to Pierce-Arrow Motor Car Company, Buffalo, N. Y. Automobile. Des. 88,083; Oct. 25.
Hughes, Joseph F., and J. M. Smith, Smackover, Ark. Aircraft. 1,884,706; Oct. 25.
Hughes Tool Company. (See Baggett, H. T., and Garfield, assignors.)
Hughes Tool Company. (See Ricker, Norman H., assignor.)
Hull, Foster J., assignor to Pangborn Corporation Hagerstown, Md. Sand blast nozzle wiggler. 1,883,917; Oct. 25.
Hull, Foster J., assignor to Pangborn Corporation, Hagerstown, Md. Sand blast barrel. 1,883,918; Oct. 25.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Mechanical refrigerator. 1,883,919; Oct. 25.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,883,920; Oct. 25.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Heat dissipating device for refrigerating apparatus. 1,883,921; Oct. 25.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,922; Oct. 25.
Hull, Harry B., assignor to Frigidaire Corporation. Dayton, Ohio. Refrigerating apparatus. 1,883,923; Oct. 25.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,924; Oct. 25.
Humr, Anton. (See Wagner, J., and Humr.)
Hurd, George M., South Bend, Ind. Water pump. 1,884,974; Oct. 25.
Hyde, George H., Watertown, N. Y. Boiler. 1,883,925; Oct. 25.
Hydraulic Press Manufacturing Company. (See MacMillin, Howard F., assignor.)
Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Beacon system. 1,884,707; Oct. 25.
Hyman, Henry. (See Muldoon, Bernard F., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Held, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Frankenburger, and Winkler, assignors.)
Iams, Harley, San Diego, Calif., and V. K. Zworykin, Swissvale, Pa., assignors to Westinghouse Electric and Manufacturing Company. Combination of a phototube and an amplifier. 1,883,926; Oct. 25.
Illinois Tool Works. (See Olson, Carl G., assignor.)
Imperial Chemical Industries Limited. (See Saunders, Kenneth H., assignor.)
International N S E Corporation, The. (See Hennessy, Nicholas, assignor.)
International Postal Supply Company. (See Pacher, J. V., and Zahn, assignors.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Projecter Corporation. (See Frappier, L. S., and Boecking, assignors.)
International Projector Corporation. (See Kindelmann, Albert, assignor.)
International Projector Corporation. (See Kindelmann, A., and Boecking, assignors.)
International Screw Company, The. (See Arenz, John A., assignor.)
International Standard Electric Corporation. (See Zwietusch, Edward O., assignor.)
Interstate Equipment Corporation. (See Morgan, Earle G., assignor.)
Ipsen, Carl L., and A. N. Otis, Schenectady, N. Y., assignors to General Electric Company. Electric heater. 1,883,927; Oct. 25.
Jackson, Charles C. (See Morton, Alexander W., assignor.)
Jackson, Edwin C. (See Meyer, W. H., Travilla, jr., and Jackson.)
Jackson & Perkins Company. (See Leenders, Matthias, assignor.)
Jackwirth, Maximilian, Berlin-Pankow, Germany, assignor to General Electric Company. Electrical regulating system. 1,883,928; Oct. 25.
Jacobson, Bror J., Warwick, assignor to Martin-Copeland Company, Providence, R. I. Ophthalmic mounting. 1,885,014; Oct. 25.
Jacobson, Carl H., Bridgeport, Conn. Combined weighing scale column and tare beam box. Des. 88,084; Oct. 25.
Jacobson, Carl H., Bridgeport, Conn. Column for a weighing scale. Des. 88,085; Oct. 25.
Jeneson, George R., Cincinnati, Ohio, assignor to American Can Company, New York, N. Y. Apparatus for forming sheet metal caps. 1,884,708; Oct. 25.
Jenkins, Russell L., Anniston, Ala., and J. F. Norris, Cambridge, Mass., assignors to Swann Research, Inc. Porous silica catalyst and preparing the same. 1,884,709; Oct. 25.
Jenkins, Russell L., Anniston, Ala., and J. F. Norris, Cambridge, Mass., assignors to Swann Research, Inc. A catalytic process for hydrolyzing organic halides. 1,884,710; Oct. 25.
Jensen, Axel G., Red Bank, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric wave transmission system. 1,884,711; Oct. 25.
Jerabek, Theophil E., assignor to The Lincoln Electric Company, Cleveland, Ohio. Article for use in arc welding. 1,884,712; Oct. 25.
Jerabek, Theophil E., assignor to The Lincoln Electric Co., Cleveland, Ohio. Method of and apparatus for coating wire. 1,884,713; Oct. 25.
Jerabek, Theophil E., assignor to The Lincoln Co., Cleveland, Ohio. Arc welding. 1,884,714; Oct. 25.
Jerabek, Theophil E., East Cleveland, assignor to The Lincoln Electric Company, Cleveland, Ohio. Welding electrode. 1,884,715; Oct. 25.
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1,884,716; Oct. 25.
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Chuck mechanism. 1,884,717; Oct. 25.
John, William, assignor to Pekin Wagon Company, Pekin, Ill. Trailer draft gear. 1,884,975; Oct. 25.
Johnson, Eric M., Brooklands, and H. C. Pierson, Hale, England, assignors to Westinghouse Electric and Manufacturing Company. Power system. 1,883,929; Oct. 25.
Johnson, Henning A. (See Whitfield, Joseph E., assignor.)
Johnson, James P., Cleveland, Ohio. Coupling for transmission gearing. 1,884,676; Oct. 25.
Jones, Charles L. (See Killeffer, D. H., and Jones.)

Jones, Edward C., Hoquiam, Wash. Spaceband rail for typesetting machines. 1,884,977; Oct. 25.
Jones, Frank, assignor of one-half to E. F. White, Williamsburg, Ky. Shoe dye drier. 1,884,978; Oct. 25.
Jones, Lyman L., Seattle, Wash., assignor to American Can Company, New York, N. Y. Sorting device. 1,884,718; Oct. 25.
Judd H. L., Company. (See Toelle, Walter H., assignor.)
Judd, H. L., Company. (See Vroom, Robert D. W., assignor.)
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 88,086; Oct. 25.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 88,087; Oct. 25.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 88,088; Oct. 25.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 88,089; Oct. 25.
Juestrich, Max U., Ridgefield. N. J. Textile fabric. Des. 88,090; Oct 25
Juestrich, Max U., Ridgefield. N. J. Textile fabric. Des. 88,091; Oct. 25.
Juestrich, Max U., Ridgefield, N. J. Textile fabric. Des. 88,092; Oct. 25.
Juestrich, Max U., Ridgefield. N. J. Textile fabric. Des. 88.093; Oct 25
Juestrich. Max U., Ridgefield, N. J. Textile fabric. Des. 88.094; Oct. 25.
Junggren, Oscar. Schenectady, assignor to General Electric Company. Elastic fluid turbine. 1,883,930; Oct. 25.
Källe. Torsten, Saffle. Sweden. Electrothermic indicator. 1.885,049; Oct. 25.
Karl, George E., assignor to The Dunham Company, Berea, Ohio. Transporting and depth regulating wheel. 1,884,719; Oct. 25.
Karl, George E., assignor, by mesne assignments, to The Dunham Company, Berea, Ohio. Rotary hoe cultivator. 1,884,720; Oct. 25.
Karpov, Alexander V., Pittsburgh, Pa. Dam. 1,885,057; Oct. 25.
Karr, George, Silver City, N. Mex., assignor to Explosive Bait Corporation—No Stockholders' Liability. Trap gun. 1,884,721; Oct. 25.
Katadyn, Inc. (See Krause, Georg A., assignor.)
Katz, Alexander S., Brooklyn, N. Y. Lock. 1,884,722; Oct. 25.
Kavanagh, James E., Calumet City, Ill., assignor to The Superheater Company, New York, N. Y. Superheater boiler. 1,883,931; Oct. 25.
Kazenmaier, August, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Carburetor. 1,883,933; Oct. 25.
Kazenmaier, August. and W. Dorn, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electric condenser. 1,883,932; Oct. 25.
Keilen, Saul, assignor to The Standard Electric Time Company, Springfield, Mass. Electric clock system. 1,884,723; Oct. 25.
Keith, Percy C., jr., Bernardsville, N. J., assignor to The M. W. Kellogg Company, New York, N. Y. Rectifying petroleum oils. 1,883,934; Oct. 25.
Keller, Arthur C., assignor to Western Electric Company, Incorporated, New York, N. Y. Sound box for phonic diaphragms. 1,884,724; Oct. 25.
Keller-Dorian Colorfilm Corporation. (See Kitroser, Isaac, assignor.)
Keller, John C., assignor to Keller Pneumatic Footwear Company, Chicago, Ill. Pneumatic footwear construction. 1,884,725; Oct. 25.
Keller Pneumatic Footwear Company. (See Keller, John C., assignor.)
Kelley. John J., New Haven, Conn. Pipe hanger. 1,883,935; Oct. 25.
Kellogg, M. W., Company, The. (See Keith, Percy C., jr., assignor.)
Kennedy, Absalom M. (See Lloyd, S. J., and Palmer, assignors.)
Kermer, Martin J., assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y. Evaporator. 1,884,726; Oct. 25.
Kermer, Martin J., Snyder, assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y. Rotary drum drier. 1,884,727; Oct. 25.
Kerr, Arthur G., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich. Agitating and dumping vehicle body. 1,883,936; Oct. 25.
Kestell, Thomas A. (See Woodcock, R. B., and Kestell.)
Kiesel, Charles W., Honolulu, Hawaii. Balometer. 1,884,728; Oct. 25.
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerative apparatus. 1,883,937; Oct. 25.
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Package and container. 1,883,938; Oct. 25.
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Method of and apparatus for controlling carbon dioxide gaseous mixtures. 1,883,940; Oct. 25.
Killeffer. David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Method of and apparatus for standardizing carbon dioxide gaseous mixtures. 1,883,941; Oct. 25.
Killeffer, David H., Yonkers, and C. L. Jones, Pelham, assignors to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,883,939; Oct. 25.
Kimball, George P., Stoneham, Mass. Sign board. Des. 88,095; Oct. 25.
Kincannon, Leo T., assignor to Louis Hanson Company, Chicago, Ill. Record repeater for phonographs. 1,883,942; Oct. 25.
Kindelmann, Albert, Floral Park, assignor to International Projector Corporation, New York, N. Y. Wing shutter for motion picture machines. 1,884,730; Oct. 25.
Kindelmann, Albert, Floral Park, assignor to International Projector Corporation, New York, N. Y. Lens shifting device. 1,884,731; Oct. 25.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignor to International Projector Corporation, New York, N. Y. Lens adjusting, shifting, and indicating mechanism. 1,883,943; Oct. 25.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Film gate lock. 1,884,729; Oct. 25.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Adjustable base and support for moving picture machines. 1,884,732; Oct. 25.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Lens shifting device. 1,884,733; Oct. 25.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Interlocking shaft construction. 1,884,734; Oct. 25.
King, George E., Newton, assignor to The Gamewell Company, Newton Upper Falls, Mass. Signaling mechanism. 1,884,735; Oct. 25.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,944; Oct. 25.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,883,945; Oct. 25.
King, Morgan L., assignor to Mid-West Steel Products Corporation, Carthage, Mo. Automobile trunk. 1,884,736; Oct. 25.
Kingsbaker, Clyde L., Pittsburgh, Pa. Charcoal broiler. 1,883,946; Oct. 25.
Kinsel, Anthony, assignor to The Litharge Recovery Corporation, Everett, Mass. Separating metallic-base reaction products from other derivatives in the treatment of hydrocarbon oils. 1,883,947; Oct. 25.
Kinsella, Edward, Spondon, near Derby, England, assignor to Celanese Corporation of America. Pumping apparatus. 1,884,737; Oct. 25.
Kinsella, Edward, Spondon, near Derby, England, assignor to Celanese Corporation of America. Pumping apparatus. 1,884,738; Oct. 25.
Kinsella, Edward, Spondon, near Derby, England, assignor to Celanese Corporation of America. Pumping apparatus. 1,884,739; Oct. 25.
Kirchbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Building construction. 1,884,740; Oct. 25.
Kirkpatrick, Thomas P., Decatur, Ga., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,883,948; Oct. 25.
Kisselle, John M., assignor to The Detroit Vapor Stove Company. Detroit, Mich. Combined gas oven and heat control therefor. 1,883,949; Oct. 25.
Kissick-Fenno Co. Inc. (See Kissick, Joseph, assignor.)
Kissick, Joseph, White Plains, N. Y., assignor to Kissick-Fenno Co. Inc. Method of and apparatus for feeding water to boilers. 1,883,950; Oct. 25.
Kitroser, Isaac, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y. Method and apparatus for causing the reticulation and cloudy effects in goffered films in colors to disappear. 1,884,994; Oct. 25.
Kitroser, Isaac, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y. Rotating prism apparatus. 1,884,995; Oct. 25.
Kitroser, Isaac, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y. Rotating glass apparatus for copying goffered films. 1,884,996; Oct. 25.
Klaiber, Erich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Battery ignition device. 1,883,951; Oct. 25.
Klarmann, Emil, Jersey City, and L. W. Gatyas, assignors to Lehn & Fink, Inc., Bloomfield, N. J. Hydroquinone derivative. 1,883,952; Oct. 25.
Kleffel, Harrison E., New York, N. Y. Radiant heat boiler. 1,884,741; Oct. 25.
Kleffel, Harrison E., New York, N. Y. Boiler construction. 1,884,742; Oct. 25.
Kleinert, Karl, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Signaling apparatus. 1,883,953; Oct. 25.
Kleinert, Karl, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Signaling device. 1,883,954; Oct. 25.

Kleinschmidt, Edward E., assignor, by mesne assignments, to Teletypesetter Corporation, Chicago, Ill. Selecting telegraph. 1,883,955; Oct. 25.
Kleinschmidt, Edward E., Highland Park, assignor to Teletype Corporation, Chicago, Ill. Single magnet reperforator. 1,884,743; Oct. 25.
Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Repeating system and apparatus. 1,884,744; Oct. 25.
Kleinschmidt, Edward E., Park Ridge, assignor to Teletype Corporation, Chicago, Ill. Selective system and apparatus. 1,884,745; Oct. 25.
Kline, Charles L., and H. B. Harrington, assignors to Emilie F. Harrington, Buffalo, N. Y. Gas burning heater. 1,884,746; Oct. 25.
Kling, Fred E., Youngstown, Ohio. Shears. 1,883,956; Oct. 25.
Knapp, Paul, assignor to E. I. du-Pont de Nemours & Company, Wilmington, Del. Plastic composition. 1,884,757; Oct. 25.
Knight, Ira W. (See White, E. A., and Knight.)
Koch, Harold E., Wauwatosa, and Melville Lowe, Milwaukee, assignors to Hevi Duty Electric Company, Milwaukee, Wis. Heat treatment system. 1,884,748; Oct. 25.
Koch, Lawrence E., and H. C. Roth, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Magnetically operated valve. 1,883,957; Oct. 25.
Kocour, Cyril, Chicago, Ill. Drawing compound and the like. 1,884,749; Oct. 25.
Koehring Company. (See Brey, Harold E., assignor.)
Koehring Company. (See Holcomb, Alpheus E., assignor.)
Koehring Company. (See Osman, Ralph T., assignor.)
Koeniger, Walther, Berlin-Wilmersdorf, Germany. Ice skating rink. 1,883,958; Oct. 25.
Kofler, Georg, Berlin, Germany. Automatic safety appliance for railway vehicles against overrunning of signals. 1,885,061; Oct. 25.
Kohlhepp, John V., Jersey City, N. J. Automobile radiator cap ornament. Des. 88,096; Oct. 25.
Kohn, Joseph, St. Louis, Mo. Dress. Des. 88,097; Oct. 25.
Kole, Lessing L., Milwaukee, Wis. Lipstick holder. 1,883,959; Oct. 25.
Koppel, Arthur F., Berlin-Tempelhof, and M. Albrecht, Neuenhagen, near Berlin, Germany; said Albrecht, assignor to said Koppel. Stop valve for liquid or gaseous substances. 1,883,960; Oct. 25.
Koppelman, Harold I., and B. W. Seidel, assignors to U. S. Sanitary Specialties Corporation, Chicago, Ill. Dispensing valve. 1,884,750; Oct. 25.
Koppers Company of Delaware, The. (See Hansen, Christian J., assignor.)
Kosmerl, Josiph, Lyons, Ill. Portable refrigerator. 1,883,961; Oct. 25.
Kotthoff, Hans, Newark, N. J. Cigarette lighter. 1,883,962; Oct. 25.
Kramer Brothers Foundry Company. (See Kramer, George H., assignor.)
Kramer, George H., assignor to Kramer Brothers Foundry Company, Dayton, Ohio. Molder's flask. 1,883,963; Oct. 25.
Kramer, Herman, Tulsa, Okla., assignor to General Paint Corporation, San Francisco, Calif. Dolly and return trackway. 1,883,964; Oct. 25.
Krase, Herbert J., Anniston, assignor, by mesne assignments, to Swann Research, Inc., Birmingham, Ala. Process for the production of urea and an ammonium salt of a strong mineral acid. 1,884,751; Oct. 25.
Kratz, Louis C., Brooklyn, N. Y. Paper weight. 1,883,965; Oct. 25.
Krause, Frank R., Youngstown, Ohio. Overrunning clutch. 1,883,966; Oct. 25.
Krause, Georg A., Munich, Germany, assignor to Katadyn, Inc., Dover, Del. Sterilizing container for liquids. 1,883,967; Oct. 25.
Krchma, Ignace J. (See Carlsmith, L. E., Boeckeler, and Krchma.)
Kreidler, Earl M. (See Seibert, N. J., and Kreidler.)
Krivig, Stephen J., Hillside, N. J., assignor to Baker & Company, Inc. Dental swaging press. 1,883,968; Oct. 25.
Krivig, Stephen J., Hillside, assignor to Baker & Company, Inc., Newark, N. J. Casting backing. 1,883,969; Oct. 25.
Krook, Berndt J. E., Stockholm, and J. Harden, Lidingo, Sweden. Aircraft. 1,883,970; Oct. 25.
Krueger, Henry R., assignor, by mesne assignments, to Ex-Cello-O Aircraft and Tool Corporation, Detroit, Mich. Multiple drill head. 1,884,752; Oct. 25.
Krum, Howard L., Kenilworth, assignor to Teletype Corporation, Chicago, Ill. Keyboard mechanism for printing telegraph apparatus. 1,884,753; Oct. 25.
Krum, Howard L., assignor to Teletype Corporation, Chicago, Ill. Printing telegraph. 1,884,754; Oct. 25.
Krum, Howard L., assignor to Teletype Corporation, Chicago, Ill. Coupon printer. 1,884,755; Oct. 25.
Kryzanowsky, Constant J., Baltimore, Md. Signaling device. 1,883,971; Oct. 25.
Kulick, Benjamin L. (See Pagel, C. J., and Kulick.)
Kunian, Paul, and J. Goldberg, Minneapolis, Minn.; said Goldberg assignor to said Kunian. Hair drier. 1,883,972; Oct. 25.
Kurtz, Stewart S., jr., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Union of rubber to metal. 1,883,973; Oct. 25.
Kurz, Erwin. (See Breitbart, H., Kurz, and Walther.)
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Hospital table. 1,883,974; Oct. 25.
Kutyniak, Anton, Plainfield, N. J. Combined high-gauge micrometer. 1,883,975; Oct. 25.
Kuzell, Charles R., Clarkdale, Ariz., assignor to United Verde Copper Company. Furnace charging device. 1,883,976; Oct. 25.
Lace Net Importing Co. Inc., The. (See Dognin, Jean, assignor.)
LaHodny, William, assignor to Standard Mirror Company, Buffalo, N. Y. Combined mirror and instrument. 1,884,756; Oct. 25.
LaHodny, William, assignor to Standard Mirror Company, Buffalo, N. Y. Combined mirror and instrument. 1,884,757; Oct. 25.
LaHodny, William, assignor to Standard Mirror Company, Buffalo, N. Y. Combined mirror and instrument. 1,884,759; Oct. 25.
LaHodny, William, and P. Bertell, assignors to Standard Mirror Company, Buffalo, N. Y. Combined mirror and instrument. 1,884,758; Oct. 25.
Lake, Rose A., assignor to Teletype Corporation, Chicago, Ill. Mechanism for feeding and aligning multiple printed forms. 1,884,760; Oct. 25.
Lalli, Domonic, Youngstown, Ohio. Automobile pump. 1,884,928; Oct. 25.
La Mont Corporation. (See La Mont, Walter D., assignor.)
La Mont, Walter D., North Colebrook, Conn., assignor to La Mont Corporation, New York, N. Y. Apparatus for generating steam. 1,884,979; Oct. 25.
Lamplough, Leslie F. (See Cherry, G. L., and Lamplough.)
Lanair Company. (See Millner, James A., assignor.)
Landers, Charles H., Lansing, assignor to General Motors Corporation, Detroit, Mich. Work holding means for turning machines. 1,883,977; Oct. 25.
Landgraf, Frederick K., Crafton, assignor to Flannery Bolt Company, Pittsburgh, Pa. Thermostat. 1,883,978; Oct. 25.
Landis Tool Company. (See Balsiger, Harold E., assignor.)
Landsiedel, Walter W., Cincinnati, Ohio, assignor to Remington Rand Inc., Tonawanda, N. Y. Automatic carriage returning means. 1,883,979; Oct. 25.
Lane, George S., San Anselmo, Calif., assignor to Raybestos-Manhattan, Inc., Bridgeport, Conn. Clutch or brake mechanism. 1,883,981; Oct. 25.
Lang, Franz, Munich-Nymphenburg, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Fuel pump. 1,883,980; Oct. 25.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint and bar. 1,883,982; Oct. 25.
Lanyon, Samuel H., San Francisco, Calif. Expansion joint for furnaces. 1,883,983; Oct. 25.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Punch for statistical cards. 1,883,984; Oct. 25.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Indicating means for card punching machines. 1,883,985; Oct. 25.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Automatic repeat and normalizing switch. 1,883,986; Oct. 25.
Lasowsky, Louis, New York, N. Y. Moving picture camera. 1,883,987; Oct. 25.
Latchin, Alexander E., Chicago, Ill. Article shelf. 1,883,988; Oct. 25.
Lathrop, Harry D. (See McEwan, Charles F., assignor.)
Laucks, I. F., Incorporated. (See Laucks, I. F., and Davidson, assignors.)
Laucks, Irving F., and G. Davidson, assignors to I. F. Laucks, Incorporated, Seattle, Wash. Adhesive and method of making. 1,883,989; Oct. 25.
Lawson, Robert H., Pawtucket, and A. N. Cloutier, Lonsdale, assignor to Hemphill Company, Central Falls, R. I. Knitting machine. 1,883,990; Oct. 25.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal vehicle body. 1,883,991; Oct. 25.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body construction. 1,883,992; Oct. 25.
Lee, Ira E. (See Calcott, W. S., and Lee.)
Lee, John W., assignor to Delco Products Corporation, Dayton, Ohio. Drilling machine. 1,883,993; Oct. 25.
Lee, Roger K., assignor to Chrysler Corporation, Detroit, Mich. Step plate. 1,883,994; Oct. 25.
Leenders, Matthias, Teyl, Netherlands, assignor to Jackson & Perkins Company, Newark, N. Y. Rose. Pl. Pt. 88; Oct. 25.
Lees-Bradner Company, The. (See Lees, Ernest J., assignor.)
Lees-Bradner Company, The. (See Schurr, Charles H.)
Lees, Ernest J., assignor to The Lees-Bradner Company, Cleveland, Ohio. Thread milling machine. 1,883,995; Oct. 25.

Lehman, Paul E., Woodmere, N. Y. Bottle or similar article. Des. 88,098; Oct. 25.
Lehman, Paul E., Woodmere, N. Y. Bottle or similar article. Des. 88,099; Oct. 25.
Lehman, Paul E., Woodmere, N. Y. Bottle holder or similar article. Des. 88,100; Oct. 25.
Lehman, Paul E., Woodmere, N. Y. Bottle or similar article. Des. 88,101; Oct. 25.
Lehn & Fink, Inc. (See Klarmann, E., and Gatyas, assignors.)
Leister, Fayette. (See Searles, R. R., and Leister.)
Leland Electric Company, The. (See Leland, George H., assignor.)
Leland, George H., assignor of one-half to The Leland Electric Company, Dayton, Ohio. Scrap cutter for punch presses and the like. 1,883,996; Oct. 25.
Lessler, Lew W., Johnson City, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Tripod socket for cameras and the like. 1,883,997; Oct. 25.
Lessler, Lew W., Johnson City, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Camera shutter. 1,883,998; Oct. 25.
Levi, Louis, Winthrop, Mass. Window screen. 1,883,999; Oct. 25.
Levin, Harold L., Nutley, N. J., assignor, by mesne assignments, to Flintkote Corporation, Boston, Mass. Waterproof fibrous product. 1,884,761; Oct. 25.
Lewers, William W., Flint, Mich., and G. D. Patterson, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,885,024; Oct. 25.
Lewis Differential Company. (See Tatter, John W., assignor.)
Lewis, M. J., Products Company. (See Lewis, Morgan J., assignor.)
Lewis, Morgan J., Massillon, assignor to M. J. Lewis Products Company, Canton, Ohio. Service box. 1,884,000; Oct. 25.
Lewis, Walter V., Scotia, N. Y. Shearing and cutting machine. 1,884,001; Oct. 25.
Leyes, Charles J., Jersey City, N. J. Producing 1, 3 butadiene. 1,884,002; Oct. 25.
Lhommedieu, Delbert E., Colo, Iowa. Automatic beecomb filler. 1,885,030; Oct. 25.
Libbey-Owens-Ford Glass Company. (See Hively, H. D., and Natlis, assignors.)
Lichtman, Harry, New York, N. Y. Mechanical musical instrument. 1,884,003; Oct. 25.
Lieberknecht, Karl, G. m. b. H. (See Lieberknecht, Karl R., assignor.)
Lieberknecht, Karl R., assignor to Karl Lieberknecht G. m. b. H. Oberlungwitz, Germany. Straight knitting machine attachment. 1,884,004; Oct. 25.
Liggett, John T., assignor to John Deere Tractor Company, Waterloo, Iowa. Tractor. 1,884,005; Oct. 25.
Lincoln Electric Company, The. (See Chapman, Everett, assignor.)
Lincoln Electric Company, The. (See Jerabek, Theophil E., assignor.)
Lincoln Electric Company, The. (See Peck, C. C., and Taylor, assignors.)
Lindenblad, Nils E., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 1,884,006; Oct. 25.
Lindström, Thorsten O. H. (See Sandqvist, Håkan, assignor.)
Link-Belt Company. (See Morehead, G. L., and Young, assignors.)
Litharge Recovery Corporation, The. (See Kinsel, Anthony, assignor.)
Lloyd, Stewart J., and G. D. Palmer, jr., assignors of one-third to Absalom M. Kennedy, University, Ala. Process of producing sulphur dye. 1,884,762; Oct. 25.
Loblo, Béla A., New York, N. Y. Combined cigarette receptacle and pipe. 1,884,007; Oct. 25.
Locke Steel Chain Company. (See Stegeman, Henry J., assignor.)
Lockhart, Hobart M., North Wilkesboro, N. C. Pump. 1,884,008; Oct. 25.
Loeber, Edgar O., assignor to The Lome Company, Cleveland, Ohio. Closure. 1,884,763; Oct. 25.
Lofstrand, Albin P., Chicago, Ill. Plow. 1,884,009; Oct. 25.
Lome Company, The. (See Loeber, Edgar O., assignor.)
Lonergan, Simon J., assignor to Bastian-Morley Co., La Porte, Ind. Burner structure. 1,884,764; Oct. 25.
Long, William B (See Thompson, C. S., and Long.)
Lootens, Everett E., Council Bluffs, Iowa. Direction indicator for vehicles. 1,884,010; Oct. 25.
López, Salvador H., Mexico, Mexico. Compound automatic safety apparatus. 1,884,980; Oct. 25.
Lord, Francis L., Newark, N. J. Radio oscillation system. 1,884,011; Oct. 25.
Lorenz, Herman O. (See Mennicke, Emil M., assignor.)
Losey, North H., Akron, Ohio. Vacuum cleaner. 1,884,012; Oct. 25.
Losey, North H., Akron, Ohio. Suction cleaner. 1,884,013; Oct. 25.
Loss, Frank J., Detroit, Mich. Signal lamp. 1,884,014; Oct. 25.
Lougovoy, Boris N., assignor to Ellis-Foster Company, Montclair, N. J. Rigidifying composition. 1,884,015; Oct. 25.
Lougovoy, Boris N., Montclair, N. J., assignor to Chadeloid Company, New York, N. Y. Paint and varnish remover containing ketone condensation solvents. 1,884,765; Oct. 25.
Lougovoy, Boris N., Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Paint and varnish remover containing furfural. 1,884,766; Oct. 25.
Lougovoy, Boris N., Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Paint and varnish remover containing activated acetone. 1,884,767; Oct. 25.
Lougovoy, Boris N., Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Composition for selectively removing top coatings. 1,884,768; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Heavy bodied finish remover containing a corrective of anti-penetration. 1,884,769; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Finish remover containing methyl acetate. 1,884,770; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Composition adapted to remove shellac. 1,884,771; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Low wax nonhydrocarbon finish remover. 1,884,772; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Nonbenzolic finish remover containing chlorinated hydrocarbons. 1,884,773; Oct. 25.
Lougovoy, Boris N., assignor to Chadeloid Chemical Company, New York, N. Y. Finish remover containing chlorinated hydrocarbon wax solvent. 1,884,774; Oct. 25.
Lounsbury, Harvey J., Glen Ellyn, assignor to W. H. Miner, Inc., Chicago, Ill. Clutch means for hand brakes. 1,884,016; Oct. 25.
Louttit, James E., and E. H. Records, Spokane, Wash. Distillation of coal. 1,884,017; Oct. 25.
Lowder, Ira J., Charlotte, N. C. Brush for washing automobiles. 1,884,018; Oct. 25.
Lowe, Melville. (See Koch, H. E., and Lowe.)
Löwenstein, Harry F., Washington, D. C. Intermittent thermal switch. 1,884,775; Oct. 25.
Lowman, Jesse L., Chillicothe, Ohio. Bottle box. 1,884,019; Oct. 25.
Lubs, Herbert A., and A. L. Fox, assignors to E. I. du Pone de Nemours & Company, Wilmington, Del. Manufacture of 6-chlor-o-toluidine. 1,884,776; Oct. 25.
Luce, Richard W. (See Oestnaes, V. L., Luce and Merrill.)
Luce, Richard W., Mountainside, assignor to American Gas-Accumulator Company, Elizabeth, N. J. Combined reflector and light for automobiles and the like. 1,884,020; Oct. 25.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Longitudinal flow economizer. 1,884,777; Oct. 25.
Lucke, Charles E., New York, N. Y., and J. E. Black, Rumson, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Steam reheater. 1,884,778; Oct. 25.
Ludwig, Leon R., and J. Slepian, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Commutating device for dynamo-electric machines. 1,884,021; Oct. 25.
Lueck, Roger H. (See McConkie, J. E., and Lueck.)
Lunati, Peter J., Memphis, Tenn. Vehicle lift. 1,884,022; Oct. 25.
Luther, Martin, Mannheim, and R. Held, Oppau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of plastic masses. 1,884,023; Oct. 25.
Luther, Martin, Mannheim, and R. Held, Oppau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of plastic masses. 1,884,024; Oct. 25.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filled bag closing machine. 1,884,025; Oct. 25.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Feeding mechanism for sewing machines. 1,884,026; Oct. 25.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Ornamental stitch sewing machine. 1,884,027; Oct. 25.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Thread controller for sewing machines. 1,884,028; Oct. 25.
Luyks, Edward S., assignor to Wolseley Motors 1927 Limited, Birmingham, England. Spring drive or coupling for the transmission of power. 1,884,029; Oct. 25.
Mabee, Charles R., assignor, by mesne assignments, to C. H. Donaldson, Buffalo, N. Y. Manufacture of livestock feeds. 1,884,779; Oct. 25.
Mable, Bessie. (See Walker, Sherman B., assignor.)
MacLean, James M., Oakland, assignor to Calrew Incorporated, San Francisco, Calif. Resilient connection. 1,884,780; Oct. 25.

MacMillin, Howard F., assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press. 1,884,060; Oct. 25.
Maddox, John W., Marion, Md. Cigarette container. 1,884,030; Oct. 25.
Magnus, George A., Dayton, Ohio. Daylight developing apparatus. 1,884,781; Oct. 25.
Mahle, Otto, Elmhurst, N. Y. Lingerie holder. 1,884,031; Oct. 25.
Maier, Karl, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Apparatus for stitching bag material. 1,884,032; Oct. 25.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Machine for edging fabric sections. 1,884,033; Oct. 25.
Mallory, Bonnie L., Cleveland Heights, assignor to The Cleveland Shock Absorber Company, Cleveland, Ohio. Shock Absorber. 1,884,034; Oct. 25.
Malm, Carl J., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic film with antihalation coating. 1,884,035; Oct. 25.
Malmquist, Adolph K., South Bellingham, Wash. Stop mechanism for can sealing machines or the like. 1,884,782; Oct. 25.
Malone, Adolph W., Fillmore, Utah, assignor of one-half to Albert H. Vestal, Anderson, Ind. Cushioned cable support. 1,884,036; Oct. 25.
Malone, Adolph W., Fillmore, Utah, assignor of one-half to Albert H. Vestal, Anderson, Ind. Dead end supports for electric cables. 1,884,037; Oct. 25.
Manson, George J., Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Mansons Chemical Company, Montclair, N. J. Waterproofed fibrous product. 1,884,038; Oct. 25.
Mansons Chemical Company. (See Manson, George J., assignor.)
Manz Rotogravure Company. (See Zimniewicz, A. J., and Cox, assignors.)
Marcalus, Nicholas, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc. Machine for and method of winding folded webs. 1,884,783; Oct. 25.
Marcalus, Nicholas, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc. Paper roll. 1,884,784; Oct. 25.
Marin, John B., Douglas, Alaska. Pipe. 1,884,039; Oct. 25.
Marler, Eva, assignor to O. J. and E. F. Grace, Oklahoma City, Okla. Oil well control. 1,884,040; Oct. 25.
Marley, Edward, New York, N. Y., assignor to Standard Shipping Company. Tank washing machine. 1,884,041; Oct. 25.
Marlin, Elmer E., Detroit, Mich. Indicator. 1,884,042; Oct. 25.
Marshall, Alvis T. (See Nolsworthy, Frederick E., assignor.)
Marshalltown Manufacturing Company. (See Ruopp, George F., assignor.)
Martin-Copeland Company. (See Jacobson, Bror J., assignor.)
Martin, Irl C., assignor to Woodward Governor Company, Rockford, Ill. Drive for the speed governor of a prime mover. 1,884,043; Oct. 25.
Martin, Robert, Spondon, near Derby, England, assignor to Celanese Corporation of America. Safety device. 1,884,785; Oct. 25.
Martinet, Eugene F., assignor to the P. A. Geier Company, Cleveland, Ohio. Brush attachment for suction cleaner nozzles. 1,884,044; Oct. 25.
Master Domestic Refrigerating Company. (See Strong, Archie H., assignor.)
Master Domestic Refrigerating Company. (See Winter, Joseph W., assignor.)
Matlowsky, Abraham H., Pedro Miguel, Canal Zone. Irrigator. 1,884,786; Oct. 25.
Mayer, Daniel J., Belleville, assignor to Metal Textile Corporation, West Orange, N. J. Metallic abradant. 1,884,787; Oct. 25.
McBean, Kenneth D. (See Stimmel, B. A., McBean, and Cruickshank.)
McCabe, Ira E., Chicago, Ill. Electrically operated fluid fuel burner control. 1,884,045; Oct. 25.
McCabe, Ira E., Chicago, Ill. Adjustable means for mounting electrical controls. 1,884,046; Oct. 25.
McCalmont, Edward G., West Englewood, N. J. Duplicator. 1,884,788; Oct. 25.
McCartney, Will C., Cambridge, Ohio. Plate or similar article. Des. 88,102; Oct. 25.
McCaskey Register Company, The. (See Roath, Robert C., assignor.)
McClellan, Robert K., Los Angeles, Calif. Visor. 1,884,047; Oct. 25.
McCloskey, G. E., South Orange, N. J., assignor to The Barrett Company, New York, N. Y. Fume arrestor for cupola furnaces. 1,884,048; Oct. 25.
McCombes, Esther W., administratrix. (See McCombes, Robert E.)
McCombes, Robert E., deceased; Esther W. McCombes, administratrix, Buffalo, N. Y. Neon tube by-pass. 1,884,789; Oct. 25.
McConkie, James E., Portland, Oreg., and R. H. Lueck, San Francisco, Calif., assignors to American Can Company, New York, N. Y. Corrosion inhibition. 1,884,790; Oct. 25.
McCord Radiator & Mfg. Co. (See Pickhard, George H., assignor.)
McCormack, Frank J., Lansdale, Pa. Illuminated license tag and holder. 1,884,049; Oct. 25.
McCormick, James A., Morris, Ill. Connecting rod construction. 1,884,050; Oct. 25.
McCoy, Verl E., Milwaukee, Wis., assignor to L. F. Wilson, Chicago, Ill. Boiler feed apparatus. 1,884,051; Oct. 25.
McCrery, Harold E., Apollo, assignor, by mesne assignment, to Blaw-Knox Company, Pittsburgh, Pa. Scale removing apparatus. 1,884,791; Oct. 25.
McEwan, Charles F., assignor to H. D. Lathrop, Chicago, Ill. Can washing machines. 1,884,052; Oct. 25.
McGarraugh, Robert, San Antonio, Tex. Fish lure. 1,884,053; Oct. 25.
McGinnis, Neil C., assignor to N. C. McGinnis, jr., Memphis, Tenn. Conveyer. 1,884,054; Oct. 25.
McGinnis, Neil C., jr. (See McGinnis, Neil C., assignor.)
McGranahan, Charles L. (See Moore, E. E., McGranahan, and Warrender.)
McGrath, William L., Elmira, N. Y., assignor to Bendix Aviation Corporation, Chicago, Ill. Collapsible boat. 1,884,792; Oct. 25.
McIlroy, Ronald C., Lewiston, Me., assignor to Nashua Manufacturing Company, Nashua, N. H. Blanket. 1,885,015; Oct. 25.
McIlvried, Edwin J., Cleveland, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Mill construction. 1,884,055; Oct. 25.
McIlvried, Edwin J., Cleveland, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Chain. 1,884,056; Oct. 25.
McKeague, James, assignor, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill. Evaporator. 1,884,793; Oct. 25.
McKee, Garnet W., Rockford, Ill. Thermostatic control. 1,884,794; Oct. 25.
McKelvey, John M. (See Reynolds, J. L., and McKelvey.)
McKenne Process Company of Illinois. (See Langford, George, assignor.)
McKesson, Claude L., Oakland, assignor to American Bitumuls Company, San Francisco, Calif. Emulsified asphalt penetration pavement and constructing the same. 1,884,795; Oct. 25.
McLean, Alfred P., Myers, Ky. Chain tightener. 1,884,057; Oct. 25.
McMaster, Harry J., assignor to The Sebring Pottery Company, Sebring, Ohio. Covered dish and similar article. 1,884,058; Oct. 25.
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Leaf flipper. 1,884,059; Oct. 25.
McNail, George H. S., Hastings upon Hudson, N. Y. Percolator. 1,884,061; Oct. 25.
McRae, R. Clayton. (See Hill, Curtiss L., assignor.)
McSweeney, Lewis J., Detroit, Mich. Shipping device. 1,884,062; Oct. 25.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,884,063; Oct. 25.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,884,064; Oct. 25.
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,884,065; Oct. 25.
Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)
Meade, George P., Gramercy, La., and R. N. Traxler, Rahway, N. J. Producing soluble barytic material for use as a sugar precipitant. 1,884,796; Oct. 25.
Meade, George P., Gramercy, La., and R. N. Traxler, Rahway, N. J., assignors to Cuban-American Sugar Company, New York, N. Y. Extraction of sugar from cane molasses and the like. 1,884,798; Oct. 25.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Welding machine. 1,884,066; Oct. 25.
Meem, James C., Brooklyn, N. Y. Tunnel construction. 1,884,799; Oct. 25.
Mellerio, Lucien P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machines for treating shoe stiffeners. 1,884,800; Oct. 25.
Melos, Samuel O., Des Moines, Iowa. Fan for pneumatic blowers and the like. 1,884,067; Oct. 25.
Mendel, William, Beverly, assignor to S. A. Neidich, Edgewater Park, N. J. Products of celluloid and the like. 1,884,068; Oct. 25.
Mendel, William, Beverly, assignor to Neidich Viscose Corporation, Burlington, N. J. Forming composite cords and braids. 1,884,069; Oct. 25.
Mennicke, Emil M., assignor of one-half to H. O. Lorenz, New York, N. Y. Coffee percolator. 1,884,070; Oct. 25.
Menzel, Friedrich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electric storage battery. 1,884,071; Oct. 25.
Meredith, Harold H. (See Williams, John C., assignor.)
Meredith, Percy W., Oregon City, Oreg. Brambleberry. Pl. Pt. 39; Oct. 25.

Merkle, Joseph R., Newark, N. J., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Tabulating machine. 1,884,072; Oct. 25.
Merrill, Leslie M. (See Oestnaes, V. L., Luce, and Merrill.)
Merritt Engineering & Sales Company. (See Stanley, Richard W., assignor.)
Merritt, Ericsson H. (See Meyers, Sidney E., assignor.)
Metal Textile Corporation. (See Mayer, Daniel J., assignor.)
Metzger, Albert F. (See Metzger, Ferdinand F.)
Metzger, Ferdinand and Son. (See Metzger, Ferdinand F.)
Metzger, Ferdinand F., deceased; A. F. Metzger, administrator, assignor to Ferdinand F. Metzger and Son, Philadelphia, Pa. Extensometer. 1,884,073; Oct. 25.
Meyer, Edna L. (See Perry, Ira D., assignor.)
Meyer, Oliver, Preston, Iowa. Honey uncapping machine. 1,884,074; Oct. 25.
Meyer, Raymond B., Washington, D. C. Temperature and circuit control system for high frequency signaling systems. 1,884,797; Oct. 25.
Meyer, William H., St. Louis, Mo., J. C. Travilla, jr., Philadelphia, Pa., and E. C. Jackson, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Railway car truck. 1,884,801; Oct. 25.
Meyers, Sidney E., assignor of one-half to E. H. Merritt, Lockport, N. Y. Consistency responsive device. 1,884,075; Oct. 25.
Michel, Clarence A., Lakewood, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind. Lamp door clamp arrangement. 1,884,076; Oct. 25.
Michelin, André Jules, deceased, Paris, by M. J. J. Michelin, executor, assignor to Michelin et Cie., Clermont-Ferrand, France. Tire for railway vehicles. Re18,638; Oct. 25.
Michelin et Cie. (See Michelin, André J., assignor.)
Michelin, M. J. J. (See Michelin, André J.)
Michlun, Andrew F., North Andover, Mass. Combined air compressor and gas engine. 1,884,077; Oct. 25.
Mid-West Steel Products Corporation, The. (See King, Morgan L., assignor.)
Mignery, Herbert C., Elgin, Nebr. Land leveling machine. 1,884,078; Oct. 25.
Miles, George W., Boston, Mass., and C. Dreyfus, New York, N. Y., assignors to Celanese Corporation of America. Inorganic cellulose esters and manufacture thereof. 1,884,802; Oct. 25.
Miller, Charles R., and J. E. Mountford, jr., Pittsburgh, Pa. Apparatus for lubricating railway rails. 1,884,079; Oct. 25.
Miller, Ernest F., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat transfer apparatus. 1,884,080; Oct. 25.
Miller, George W., Washington, D. C. Ice plant. 1,884,081; Oct. 25.
Miller, Henry J., assignor to Grigsby-Grunow Company, Chicago, Ill. Coated electron emitting surface. 1,884,082; Oct. 25.
Miller, John E., Huntington, W. Va. Burner. 1,884,083; Oct. 25.
Miller, Myron D., assignor, by mesne assignments, to The Dunham Company (1931), Berea, Ohio. Soil pulverizer. 1,884,803; Oct. 25.
Miller Printing Machinery Company. (See Upham, Burt F., assignor.)
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. By-product coke oven recovery system. 1,884,084; Oct. 25.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Electrical precipitation. 1,884,085; Oct. 25.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Electrical precipitation. 1,884,086; Oct. 25.
Miller, Stuart P., Englewood, N. J., assignor to The Barret Company, New York, N. Y. Production of clean oils at coal distillation plants. 1,884,087; Oct. 25.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Fume arrester for cupola furnaces. 1,884,088; Oct. 25.
Millington, Felix B., Maracaibo, Venezuela. Speed control for automobiles. 1,884,804; Oct. 25.
Millner, James A., assignor to Lanair Company, Chicago, Ill. Sanitary pack. 1,884,089; Oct. 25.
Mills, Robert K., Sherwood, England. Knitting needle. 1,884,090; Oct. 25.
Milson, John R., Mansfield, Mass., assignor to Mylon Corporation, Philadelphia, Pa. Treating jute fibers. 1,884,091; Oct. 25.
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minier, Frederick S., Kansas City, Mo., assignor to E. W. Anger, Chicago, Ill. Liquid supply for compressed air systems. 1,884,092; Oct. 25.
Minneapolis-Honeywell Regulator Company. (See Koch, L. E., and Roth, assignors.)
Mitchell & Murrow. (See Murrow, William R., assignor.)
Mittasch, Alwin, Mannheim, W. Frankenburger, and F. Winkler, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of liquid hydrocarbons of low boiling point from olefines. 1,884,093; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange apparatus. 1,884,094; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,884,095; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating device. 1,884,096; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,884,097; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Cast heat exchange device. 1,884,098; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,884,099; Oct. 25.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating apparatus. 1,884,100; Oct. 25.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moe, Andrew O., Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif. Sorting and packing belt. 1,884,101; Oct. 25.
Moeser, Hugo, New York, N. Y. Automatic faucet closer for bath tubs. 1,884,102; Oct. 25.
Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,884,103; Oct. 25.
Moore, Edwin E., Charles L., McGranahan, and C. Warrender, Gary, Ind., assignors to American Sheet and Tin Plate Company. Resurfacing rolls. 1,884,104; Oct. 25.
Moore Enameling & Manufacturing Company. (See Moore, Walter B., assignor.)
Moore, Harry C., assignor to Armour Fertilizer Works, Chicago, Ill. Manufacture of ammonium salts. 1,884,105; Oct. 25.
Moore, Morton K. (See Patterson, C. D., and Moore.)
Moore, Walter B., assignor to Moore Enameling & Manufacturing Company, West Lafayette, Ohio. Teakettle or similar article. Des. 88,103; Oct. 25.
Moran, Edward J., Chicago, assignor, by mesne assignments, to W. Scott Robinson, Evanston, and E. J. Moran, Chicago, Ill., trustees. Producing gassed sheet rubber having a shaggy or hirsute texture. 1,884,106; Oct. 25.
Moran, Edward J., et al. (See Moran, Edward J., assignor.)
Moran, Joseph F., assignor to Scoville Manufacturing Company, Waterbury, Conn. Metal box. 1,884,107; Oct. 25.
Moran, Joseph F., assignor to Scovill Manufacturing Company, Waterbury, Conn. Flash light. 1,884,108; Oct. 25.
Morehead, George L., and C. M. Young, jr., Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill. Trolley bucket. 1,884,109; Oct. 25.
Morehouse, Francis G., Greenwich, Conn., assignor to Radio Corporation of America. Electroplating of wax. 1,884,110; Oct. 25.
Morgan, Earle G., Elizabeth, N. J., assignor to Interstate Equipment Corporation, New York, N. Y. Car tripper. 1,884,111; Oct. 25.
Morgan, Horace H., assignor to Palmer Bee Company, Detroit, Mich. Conveyer. 1,884,112; Oct. 25.
Moritz, Adrian J. L., assignor to American Enka Corporation, Enka, N. C. Spool holder. 1,884,805; Oct. 25.
Moritz, Charles J., Effingham, Ill. Road grader. 1,884,113; Oct. 25.
Moroney, Lawrence F., Lara, Victoria, Australia. Grain harvesting machine. 1,884,114; Oct. 25.
Morrill, Wayne J., Fort Wayne, Ind., assignor to General Electric Company. Shaded pole motor. 1,884,115; Oct. 25.
Morris & Company. (See Berman, Oscar A., assignor.)
Morris, Daniel, assignor of one-half to Allan W. Fisher, St. Petersburg, Fla. Self-lighting cigarette. 1,884,806; Oct. 25.
Morrow, E. Leister A., Sunnyside, Wash. Asparagus knife. 1,884,116; Oct. 25.
Mortesen, La Vaughn L., Los Angeles, Calif. Control switch. 1,884,117; Oct. 25.
Morton, Alexander W., Balaclava, assignor to Charles C. Jackson, Melbourne, Australia. Reconditioning old rubber. 1,884,118; Oct. 25.
Morton, Sterling, assignor to Teletype Corporation, Chicago, Ill. Keyboard mechanism for telegraph apparatus. 1,884,807; Oct. 25.
Mosher, Ira S., Detroit, Mich. Internal combustion engine. 1,884,119; Oct. 25.
Mosher, John A., Pomona, Calif. Air cleaner. 1,884,808; Oct. 25.
Moss, William H., and K. H. Crutchfield, Cumberland, Md., assignors to Celanese Corporation of America. Laminated glass and making the same. 1,884,809; Oct. 25.
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Mountford, John E., jr. (See Miller, C. R., and Mountford.)

Moxley, Norman E., Ellicott City, Md. Automatic variable speed transmissions. 1,884,595; Oct. 25.
Mross, Edward R., Racine, Wis., assignor to Hamilton Beach Manufacturing Company. Base for food mixer supports. 1,884,120; Oct. 25.
Muldoon, Bernard F., Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Electric plug. 1,884,121; Oct. 25.
Müller, Herman, Philadelphia, Pa. Relief valve. 1,884,810; Oct. 25.
Müller, Herman, Philadelphia, Pa. Relief valve. 1,885,000; Oct. 25.
Murch, Wilfred M., Hamburg, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Pyranthrone vat dye and making same. 1,884,122; Oct. 25.
Murphy, William H., et al. (See Dieckmann, Max, assignor.)
Murray, Louis W. (See Seabury, R. L., and Murray.)
Murrill, Paul I., East Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y. Vulcanizing rubber. 1,884,123; Oct. 25.
Murrill, Paul I., East Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y. Vulcanizing rubber. 1,884,124; Oct. 25.
Murrow, William R., assignor to Mitchell & Murrow, Independence, Kans. Oil well torpedo. 1,884,125; Oct. 25.
Muth, Friedrich, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Leucoindophenols of the carbazole type. 1,885,037; Oct. 25.
Myers, Charles B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,884,126; Oct. 25.
Myers, Harvey D. (See Driest, C., and Myers.)
Myers, Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Thread-controlling device for sewing machines. 1,884,127; Oct. 25.
Myerson, Simon, Brookline, Mass. Dental anchorage. 1,884,128; Oct. 25.
Mylon Corporation. (See Milson, John R., assignor.)
Naamlooze Vennootschap Electrochemische Industrie. (See Gelissen, Henri C. J. H., assignor.)
Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See van Peski, Adrianus J., assignor.)
Nadel, Louis, assignor to Pierce Steel Pile Corporation, New York, N. Y. Method and apparatus for forming piles. 1,884,129; Oct. 25.
Nashua Manufacturing Company. (See McIlroy, Ronald C., assignor.)
National Aniline & Chemical Co. (See Bailey, George C., assignor.)
National Aniline & Chemical Company. (See Murch, Wilfred M., assignor.)
National Blank Book Company. (See Schade, John, assignor.)
National Carbon Company. (See Briggs, Arthur J., assignor.)
National Cash Register Company, The. (See Fuller, Frederick L., assignor.)
National Ring Traveler Co. (See Wentworth, P. C., and Avery, assignors.)
National Tube Company. (See Rosenkranz, M., and Webb, assignors.)
Natlis, Octave C. (See Hively, H. D., and Natlis.)
Neidich, Samuel A., Edgewater Park, N. J. Desk set. 1,884,130; Oct. 25.
Neidich, Samuel A., Edgewater Park, N. J., assignor to Sanite Corporation, Burlington, N. J. Manufacture of tapered tubes of celluloid and the like. 1,884,131; Oct. 25.
Neldich, Samuel A., Edgewater Park, N. J., assignor to Sylvania Industrial Corporation, Fredericksburg, Va. Viscose treating apparatus. 1,884,811; Oct. 25.
Neldich, Samuel A. (See Mendel, William, assignor.)
Neldich Viscose Corporation. (See Mendel, William, assignor.)
Neill, Burton J., Oakland, Calif. Grand piano action. 1,884,812; Oct. 25.
Nelson, William, Minneapolis, Minn., assignor to Burnett Walker, New York, N. Y. Radiator cap. 1,884,132; Oct. 25.
Nero, Arvid H., West Hartford, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Switch handle. 1,884,133; Oct. 25.
Nest, Richard E., Tacoma Park, Md. Dispensing apparatus for lubricating oils. 1,884,134; Oct. 25.
Nett, Clemens, Malone, and P. Pauly, Milwaukee, Wis. Purse holder for table. 1,884,135; Oct. 25.
Newell, Lester H., Sharon, Pa. Dispensing holder for paste tubes. 1,884,136; Oct. 25.
Newman, Charles. (See Schults, W. C., and Holzer, assignors.)
Newman, Ephraim A., Baltimore, Md. Optical instrument. 1,884,137; Oct. 25.
Newmier, Joseph, Stratford, Wis. Cooler. 1,884,138; Oct. 25.
Newport Industries, Inc. (See Van Romaine, E., Weiland, Powers, and Palmer, assignors.)
Nicholls, Henry M., Chicago, Ill., assignor to American Can Company, New York, N. Y. Container closure. 1,884,813; Oct. 25.
Nicholson, Stanley W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Window regulator. 1,884,139; Oct. 25.
Nickle, Clifford A., Schenectady, N. Y., assignor to General Electric Company. 1,884,140; Oct. 25.
Nicolich, Giuseppe, assignor of fifteen per cent to F. Hamilton and of five per cent to B. Cutti, New York, N. Y. Exhaust silencer for internal combustion engines. 1,885,062; Oct. 25.
Niemann, Frederick A., and K. F. Ziehm, assignors to Felt & Tarrant Mfg. Co., Chicago, Ill. Device for distribution of accounts. 1,884,814; Oct. 25.
Noble, Warren, assignor to Electromaster, Inc., Detroit, Mich. Brazing. 1,884,141; Oct. 25.
Noelting, William H., assignor to Faultless Caster Company, Evansville, Ind. Heavy duty caster. 1,884,142; Oct. 25.
Nolsworthy, Frederick E., assignor of one-half to A. T. Marshall, Wyatt, Mo. Cotton cleaning machine. 1,884,815; Oct. 25.
Norbom, Ragnar A. (See Elliott, J. H., and Norbom.)
Norge Corporation. (See Hubacker, Earl F., assignor.)
Norquist, Victor C., assignor to Butler Manufacturing Company, Kansas City, Mo. Tube punching apparatus. 1,884,143; Oct. 25.
Norquist, Victor C., assignor to Butler Manufactruing Company, Kansas City, Mo. Welding clamp for use in manufacturing welded tanks. 1,884,144; Oct. 25.
Norris, James F. (See Jenkins, R. L., and Norris.)
Northern Equipment Company. (See Veenschoten, Vincent V., assignor.)
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition device. 1,884,145; Oct. 25.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Electric switch. 1,884,147; Oct. 25.
Norviel, Harry E., and W. E. Wikle, assignors to Delco-Remy Corporation, Anderson, Ind. Lighting switch. 1,884,146; Oct. 25.
Norviel, Harry E., and V. Ecoff, assignors to Delco-Remy Corporation, Anderson, Ind. Switch. 1,884,148; Oct. 25.
Norwalk Company. (See Parks, Albert F., assignor.)
Noser, Charles P. (See Casey, H. T., and Noser.)
Nullmeyer, Frank H., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Welding rod. 1,884,149; Oct. 25.
Numberg, John N., Lakewood, R. I. Harmonica device for playing two or more harmonicas. 1,884,150; Oct. 25.
Nutting, Perley G. (See Adams, M. Howe, and Nutting.)
Nye, George F., Kearney, Nebr. Threshing machine. 1,884,151; Oct. 25.
Nye, George F., Kearney, Nebr. Centrifugal threshing and separating device. 1,884,152; Oct. 25.
Nye, George F., Kearney, Nebr. Centrifugal threshing and separating device. 1,884,153; Oct. 25.
Oakes, Bernard F., Missoula, Mont. Football blocking dummy. 1,884,816; Oct. 25.
Obear-Nester Glass Company. (See Stuckey, Samuel G., assignor.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,884,154; Oct. 25.
O'Dowd, Leslie J., Drummondville, Quebec, Canada, assignor to Celanese Corporation of America. Textile package holder. 1,884,817; Oct. 25.
Odquist, Victor, Yonkers, assignor to American Can Company, New York, N. Y. Hinge and making it. 1,884,818; Oct. 25.
Oestnaes, Victor L., Westfield, R. W. Luce, Mountainside, and L. M. Merrill, Madison, assignors to American Gas-accumulator Company, Elizabeth, N. J. Inserting and securing objects in the open ends of holders. 1,884,155; Oct. 25.
Ogilvy, Walter S., Elmhurst, assignor to Alco Products, Incorporated, New York, N. Y. Heat exchanger baffle. 1,884,156; Oct. 25.
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Motor control apparatus. 1,884,157; Oct. 25.
Ohler, John H. (See Weld, L. M., Ohler, and Berkley.)
Oil Corporation of America. (See Darlington, Homer T., assignor.)
Okadee Company, The. (See Ploen, Curtis W., assignor.)
Okonite Company, The. (See Bennett, Charles E., assignor.)
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Milling cutter. 1,883,158; Oct. 25.
Olson, Harry F., Bronx, N. Y., assignor to Radio Corporation of America. Apparatus for converting sound vibrations into electrical vibrations. 1,885,001; Oct. 25.
Olson, John, administrator. (See Hentschel, Ernest R.)
Orenstine, Benson, J. L. Schlesinger, and H. Reinschrieber, Philadelphia, Pa. Combination lamp stand and beverage set. Des. 88,104; Oct. 25.
Orent, Jacob L., Brooklyn, N. Y. Garment. 1,884,159; Oct. 25.
Orlick, John J., St. Louis, Mo. Sales service rack. 1,884,160; Oct. 25.
Orr, Adele M., et al., executors. (See Orr, William V.)
Orr, William V., Cleveland Heights, Ohio; The Cleveland Trust Company and A. M. Orr, executors. Massage appliance. 1,884,161; Oct. 25.

Osborn Manufacturing Company. (See Oyster, Earl F., assignor.)
Osborne Process, Inc. (See Osborne, William L., assignor.)
Osborne, William L., assignor to Osborne Process, Inc., Los Angeles, Calif. Apparatus for cleaning lubricant cases of engines. 1,884,819; Oct. 25.
Osborne, William L., assignor to Osborne Process, Inc., Los Angeles, Calif. Cleaning lubricant containers. 1,884,820; Oct. 25.
Osgood, Robert C., Claremont, N. H., assignor to Sullivan Machinery Company. Hoisting mechanism. 1,884,821; Oct. 25.
Osman, Ralph T., assignor to Koehring Company, Milwaukee, Wis. Tractor transmission brake and clutch control mechanism. 1,884,162; Oct. 25.
Osterberg, Eric. (See Pauly, Remigius, assignor.)
Osterstrom, Rudolph C. (See Watson, C. B., and Osterstrom.)
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Treating hydrocarbons. 1,884,163; Oct. 25.
Oswego Falls Corporation. (See Wright, W. L., and Pierce, assignors.)
Othmer, Donald F., assignor to Eastman Kodak Company, Rochester, N. Y. Composition for removing surface finishes. 1,884,164; Oct. 25.
Otis, Albert N. (See Ipsen, C. L., and Otis.)
Otis, Herbert C., Shreveport, La. Temporary seal for well tubing. 1,884,165; Oct. 25.
Otsuka, Eikichi, and E. Saegusa, Tokyo, Japan. Manufacturing positive active material for the alkaline storage batteries. 1,884,166; Oct. 25.
Otto, Fritz, Dusseldorf, Germany. Flexible suspension for rope hoisting equipment and in particular for mine cage winding. 1,884,981; Oct. 25.
Otto, Michael. (See Hofmann, F., Otto, and Stegemann.)
Overholt, Alvin J. (See Ronk, A. T., and Overholt.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Optical printer. 1,884,167; Oct. 25.
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Film guiding mechanism for sound recording and reproducing apparatus. 1,884,168; Oct. 25.
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Photographic camera. 1,884,169; Oct. 25.
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Photographic sound recording and reproducing apparatus. 1,884,170; Oct. 25.
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing device. 1,884,171; Oct. 25.
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Oxford Varnish Corporation. (See Casto, Lloyd V., assignor.)
Oyster, Earl F., Cleveland Heights, assignor to Osborn Manufacturing Company, Cleveland, Ohio. Jolt squeeze stripper latch. 1,884,172; Oct. 25.
Ozmun, Kenneth L., assignor to Chicago Cardboard Company, Chicago, Ill. Display mounting. 1,884,173; Oct. 25.
Ozmun, Kenneth L., assignor to Chicago Cardboard Company, Chicago, Ill. Mounted board and making the same. 1,884,174; Oct. 25.
Pacher, Josef V., Brooklyn, and L. J. Zahn, Long Island City, assignors to International Postal Supply Company, Brooklyn, N. Y. Combined mail-sealing, postmarking, metering and addressing machine. 1,884,175; Oct. 25.
Pacific Lumber Company, The. (See Carson, Francis L., assignor.)
Pacific Pitting Machine Company. (See Bem, Joseph P., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G.)
Packard Motor Car Company. (See Wiegman, Clarence H., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Paganello, Nunzio, Brooklyn, N. Y. Figurette. 1,884,982; Oct. 25.
Pagel, Clarence J., and B. L. Kulick, Buffalo, N. Y., assignors to H. G. Bartsch, Washington, D. C. Antenna. 1,884,176; Oct. 25.
Paine and Williams Company, The. (See Vrooman, William S., assignor.)
Palmer Bee Company. (See Morgan, Horace H., assignor.)
Palmer, George D., jr. (See Lloyd, S. J., and Palmer.)
Palmer, Robert C. (See Van Romaine, E., Welland, Powers, and Palmer.)
Pangborn Corporation. (See Hull, Foster J., assignor.)
Pareira, Fred. (See Troendly, H. P., and Pareira.)
Parker, Fred B., assignor to W. S. Dickey Clay Manufacturing Company, Kansas City, Mo. Coping tile. 1,884,522; Oct. 25.
Parkes, William N., Brooklyn, assignor to The Singer Manufacturing Company, New York, N. Y. Sewing machine. 1,884,177; Oct. 25.
Parkes, William N., Brooklyn, assignor to The Singer Manufacturing Company, New York, N. Y. Sewing machine. 1,884,178; Oct. 25.
Parks, Albert F., assignor to Norwalk Company, Inc., South Norwalk, Conn. Fluid compressor regulating valve. 1,884,179; Oct. 25.
Parks, Merritt G., Gary, Ind. Machine for forming and applying plastic gaskets to jar caps. 1,884,823; Oct. 25.
Patterson, Clarence D., Jacksonville, Fla., and M. K. Moore, Charleston, S. C.; said Patterson assignor to said Moore. Fire door apparatus. 1,884,824; Oct. 25.
Patterson, Gordon D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,885,025; Oct. 25.
Patterson, Gordon D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,885,026; Oct. 25.
Patterson, Gordon D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating Composition. 1,885,027; Oct. 25.
Patterson, Gordon D. (See Lawers, W. W., and Patterson.)
Pauly, Peter. (See Netf and Pauly.)
Pauly, Remigius, assignor of one-half to Eric Osterberg, Chicago, Ill. Dish washing machine. 1,884,180; Oct. 25.
Pauly, Remigius, assignor of one-half to Eric Osterberg, Chicago, Ill. Dish washing machine. 1,884,181; Oct. 25.
Pavelka, Joseph, St. Louis, Mo. Toaster. 1,884,825; Oct. 25.
Peabody Seating Company, The. (See Ronk, A. T., and Overholt, assignors.)
Pearce, Louis M., and W. L. Church, Houston, Tex. Drill. 1,884,182; Oct. 25.
Pearson, Oscar A., Oak Park, assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Tension device for coil winding machines and the like. 1,884,183; Oct. 25.
Pearson, Oscar A., Oak Park, assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Machine for winding coils. 1,884,184; Oct. 25.
Peck, Cecil C., Lakewood, and M. R. Taylor, East Cleveland, assignors to The Lincoln Electric Company, Cleveland, Ohio. Electric welding mechanism. 1,884,826; Oct. 25.
Peiseler, Alfred, Remscheid-Haddenbach, Germany. File. 1,884,185; Oct. 25.
Pekin Wagon Company. (See John, William, assignor.)
Peltier, Frank D., and C. E. Ploeger, Evansville, Ind., assignors, by mesne assignments, to Servel, Inc., New York, N. Y. Refrigeration. 1,884,186; Oct. 25.
Peltier, Frank D., and C. E. Ploeger, Evansville, Ind., assignors to Servel, Inc., New York, N. Y. Refrigeration. 1,884,187; Oct. 25.
Pelton, Earl L. (See Strosacker, C. J., and Pelton.)
Pennsylvania Crusher Company. (See Battey, William A., assignor.)
Pennsylvania Crusher Company. (See Borton, George W., assignor.)
Peo, Ralph F., assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,884,188; Oct. 25.
People of the United States of America, The. (See Robinson, Reginald H., assignor.)
Perfect Circle Company, The. (See Teetor, Ralph R., assignor.)
Perkins, Nathan W., East Orange, assignor to Ellis Adding Typewriter Company, Newark, N. J. Combined calculating and card printing and perforating machine. 1,884,189; Oct. 25.
Perlmutter, Harry, Brooklyn, N. Y. Baby carriage structure. 1,884,190; Oct. 25.
Perloff, Joseph, Brooklyn, N. Y. Adjustable top for tables. 1,884,191; Oct. 25.
Perry, Francis W., assignor, by mesne assignments, to Edwin L. Wiegand, Pittsburgh, Pa. Lift for automotive vehicles. 1,884,192; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Doorstop and the like. 1,884,827; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,828; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,829; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,830; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,831; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,832; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,833; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door pillar and the like. 1,884,834; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,835; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,836; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,837; Oct. 25.

Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,838; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door bumper and the like. 1,884,839; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Doorstop and the like. 1,884,997; Oct. 25.
Perry, Ira D., Chicago, assignor to E. L. Meyer, Rockford, Ill. Door pillar and the like. 1,884,998; Oct. 25.
Perry, Walter M., assignor, by mesne assignments to Sperry Products, Inc., Brooklyn, N. Y. Low rail joint recorder. 1,884,193; Oct. 25.
Pershall, Ralph H., assignor to Sanicut Manufacturing Company, Bremerton, Wash. Dispenser of various substances, such as liquids, powders, granulates. 1,884,840; Oct. 25.
Pestel, Arthur, New York, N. Y. Eraser holder. 1,884,841; Oct. 25.
Peters, John F., Leonia, N. J., assignor to American Can Company, New York, N. Y. Can body soldering apparatus. 1,884,842; Oct. 25.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Radio control device. Des. 88,105; Oct. 25.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Radiator shutter. 1,884,194; Oct. 25.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Shutter unit. 1,884,195; Oct. 25.
Petersen, Elliott I., Enfield, assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Label. 1,885,031; Oct. 25.
Petersen, Elliott I., Enfield, assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Label. 1,885,032; Oct. 25.
Petersen, Elliott I., Enfield, assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Label. 1,885,033; Oct. 25.
Petersen, Elliott I., Enfield, assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Label for floor coverings. 1,885,034; Oct. 25.
Petersime, Ray M., Gettysburg, Ohio. Incubator. 1,884,843; Oct. 25.
Peterson, Edward T., Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company. Press. 1,884,196; Oct. 25.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic wave-amplifying repeater. 1,884,844; Oct. 25.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic amplifier. 1,884,845; Oct. 25.
Peterson, Hans J., Hattiesburg, Miss., and J. C. Peterson, Manhattan, Kans. Self-instructor and tester. 1,884,197; Oct. 25.
Peterson, John C. (See Peterson, Hans J., and J. C.)
Pfiager, Harry M., St. Louis, Mo., and E. G. Hallquist, Edwardsville, assignors to General Steel Castings Corporation, Granite City, Ill. Railway car structure. 1,884,846; Oct. 25.
Phelps, Alva W., assignor to Delco-Remy Corporation, Anderson, Ind. Press. 1,884,198; Oct. 25.
Phelps, Joseph, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,884,199; Oct. 25.
Philadelphia Drying Machinery Company, The. (See Dennis, John W., assignor.)
Philadelphia Drying Machinery Company, The. (See Reumann, C. H., and Wigglesworth, assignors.)
Philipp, Herbert, assignor to Solvay Process Company, Syracuse, N. Y. Chlorinating liquids. 1,884,200; Oct. 25.
Phillippe, Elmer W., assignor to The Royal Vault Manufacturing Company, Ottumwa, Iowa. Burial vault latch. 1,884,201; Oct. 25.
Phillips, Harry A., Evanston, Ill. Refrigeration apparatus. 1,884,202; Oct. 25.
Piazzoli, Theodore J., assignor to Capstan Glass Company, Connellsville, Pa. Tumbler or similar article. Des. 88,106; Oct. 25.
Pickhard, George H., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Method of and machine for making spiral fin tubing. 1,884,203; Oct. 25.
Pierce-Arrow Motor Car Company. (See Hughes, James R., assignor.)
Pierce, Lee D. (See Wright, W. L., and Pierce.)
Pierce Steel Pile Corporation. (See Nadel, Louis, assignor.)
Pierson, Henry C. (See Johnson, E. M., and Pierson.)
Pike, Frederick J., Buffalo, N. Y. Automobile. Des. 88,107; Oct. 25.
Pilkington, Edward, Altoona, Pa. Flowerpot drainer. 1,884,204; Oct. 25.
Pines Winterfront Company. (See Petersen, Edgar G., assignor.)
Pitcairn, Harold F., Bryn Athyn, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft. 1,884,847; Oct. 25.
Pitcairn, Harold F., Bryn Athyn, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft device. 1,884,848; Oct. 25.
Pitcairn, Harold F., Bryn Athyn, Pa., and J. de la Cierva, Madrid, Spain, assignors to Autogiro Company of America, Philadelphia, Pa. Aircraft. 1,884,849; Oct. 25.
Pittsburgh Equitable Meter Company. (See Seibert, N. J., and Kreidler, assignors.)
Plantin, Bernard L. P., Bruxelles, Belgium, assignor to Societe Hardoll, Anciens Etablissements Hariveau & Dolimier et René Porte & Cie Réunis, Levallois-Perret, Seine, France. Mechanism for fluid distribution systems. 1,884,983; Oct. 25.
Platt, Herbert. (See Dreyfus, G., and Platt.)
Ploeger, Clyde E. (See Peltier, F. D., and Ploeger.)
Ploen, Curtis W., assignor to The Okadee Company, Chicago, Ill. Automatic means for blowing up engines. 1,884,205; Oct. 25.
Plummer, William B., assignor to Standard Oil Company (Indiana), Chicago, Ill. Reconditioning alloy steel. 1,884,206; Oct. 25.
Poeppelmeier, Frank H., Dayton, assignor, by mesne assignments, to Set-O-Type Manufacturing Company, Cleveland, Ohio. Tabulator for typographic machines. 1,884,850; Oct. 25.
Poeppelmeier, Frank H., Dayton, assignor, by mesne assignments, to Set-O-Type Manufacturing Company, Cleveland, Ohio. Marginal gauge for typesetting machines. 1,884,851; Oct. 25.
Pollock, Julius, Cleveland Heights, assignor to The Republic Brass Company, Cleveland, Ohio. Faucet. 1,884,207; Oct. 25.
Polushkin, Eugene P., New York, N. Y. Bearing surface. 1,884,208; Oct. 25.
Pool, William, Crayford, assignor, by mesne assignments, to British Celanese Limited, London, England. Device for delivering fluids under pressure. 1,884,852; Oct. 25.
Poole, Arthur F., assignor to Poole Manufacturing Co., Inc., Ithaca, N. Y. Clock driving mechanism. 1,884,853; Oct. 25.
Poole Manufacturing Co. (See Poole, Arthur F., assignor.)
Porsel, Joseph. (See Smith, Herman W., jr., assignor.)
Potter, John A., Prospect Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat exchange apparatus. 1,884,209; Oct. 25.
Potter, John A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Heat exchanger. 1,884,210; Oct. 25.
Powell, Gomert, Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation. Material transferring mechanism. 1,884,211; Oct. 25.
Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radio receiving system. Re18,637; Oct. 25.
Power, Michael J., Nekoosa, Wis. Press. 1,884,212; Oct. 25.
Powers, George W., Cleveland, Ohio. Cribbing. 1,884,854; Oct. 25.
Powers, Paul O. (See Van Romaine, E., Welland, Powers, and Palmer.)
Pratt, Raymond C., Chicago, Ill. Automobile condenser. 1,884,213; Oct. 25.
Priemer, Fritz, Zschachwitz, near Dresden, Germany. Printing roller and making the same. 1,884,214; Oct. 25.
Pryce, Matthew B., Rock Hill, S. C. Transparent trap. 1,884,855; Oct. 25.
Publicker, Inc. (See Haner, C., and Gamper, assignors.)
Pullen, Rodney S., and W. J. Crowell, jr., Wyncote, assignors to Pullenlite Company, Philadelphia, Pa. Match package and stapling insert. 1,884,215; Oct. 25.
Pullenlite Company. (See Pullen, R. S., and Crowell, assignors.)
Pullman Car & Manufacturing Corporation. (See Powell, Gomert, assignor.)
Purdy, John F., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Paving block. 1,884,216; Oct. 25.
Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)
Pure Oil Company, The. (See Watson, C. B., and Osterstrom, assignors.)
Pykosz, John, Chicago, Ill. Smoke consumer. 1,884,217; Oct. 25.
Quattrocchi, Guiseppe, Cleveland, Ohio. Spaghetti machine. 1,884,218; Oct. 25.
Radack, Harry E., New York, N. Y. Convenience outlet. 1,884,219; Oct. 25.
Radasch, Arthur H., South Orange, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,884,220; Oct. 25.
Raddatz, Richard. (See Rogers, H. S., and Raddatz.)
Radio Corporation of America. (See Lindenblad, Nils E., assignor.)
Radio Corporation of America. (See Morehouse, Francis G., assignor.)
Radio Corporation of America. (See Olson, Harry F., assignor.)
Ragan, Frederick H., Cleveland, Ohio. Brake mechanism. 1,884,856; Oct. 25.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Light metallic truss structure. 1,884,221; Oct. 25.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Portable welding apparatus. 1,884,222; Oct. 25.

Rah, Joseph, assignor to The Delta-Star Electric Company, Chicago, Ill. Insulating joint. 1,884,223; Oct. 25.

Rail, Max, Stuttgart, and H. Bischoff, Stuttgart-Botnang, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Lubrication of bearings. 1,884,224; Oct. 25.

Randall, Karl C., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Distributing panel. 1,884,225; Oct. 25.

Randall, William H., Chicago, Ill. Steam trap. 1,884,857; Oct. 25.

Randolph, Charles P., Oak Park, assignor to Edison Electric Appliance Company, Chicago, Ill. Gasket. 1,884,226; Oct. 25.

Ranney, Leo, New York, N. Y., assignor to Standard Oil Development Company. Apparatus for simultaneously controlling oil mine wells. 1,884,858; Oct. 25.

Ranney, Leo, New York, N. Y., assignor to Standard Oil Development Company. Method of and apparatus for installing mine wells. 1,884,859; Oct. 25.

Ransom, William L., Takoma Park, Md., assignor to Graham-White Sander Corporation, Roanoke, Va. Valve for locomotive sanders. 1,884,227; Oct. 25.

Raskin, Harry, New York, N. Y. Guard for vehicles. 1,884,228; Oct. 25.

Rawls, Paul C., assignor to Technical Equipment Company, Des Moines, Iowa. Electric condenser. 1,884,229; Oct. 25.

Raybestos Manhattan, Inc. (See Lane, George S., assignor.)

Ready, Harvey J. (See Fensky, C., and Ready.)

Records, Elmer H. (See Louttit, J. E., and Records.)

Rector, Thomas M., Rutherford, N. J., assignor, by mesne assignments, to Vitapack Corporation, New York, N. Y. Method and apparatus for extracting oil from nuts. 1,884,860; Oct. 25.

Reed, Clair S., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,884,230; Oct. 25.

Reeder, Frank C., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Apparatus for pasteurization. 1,884,231; Oct. 25.

Rehm, Alfred, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electrical heating device for curling tongs. 1,884,232; Oct. 25.

Rehm, Alfred, Stuttgart, T. Wolff, Esslingen, and W. Walther, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Centrifugal governor. 1,884,233; Oct. 25.

Reiche, Anton, Dresden, Germany, assignor to Bunte Brothers, Chicago, Ill. Candy bar. Des. 88,109; Oct. 25.

Reichelt, Raymond E., Maywood, assignor, by mesne assignments, to Union Special Machine Company, Chicago, Ill. Boxing for mattresses, cushions, and the like. 1,884,234; Oct. 25.

Reilly, Peter C. (See Derby, Ira H., assignor.)

Reinhold, John J., Marietta, Pa. Coin holder. 1,884,235; Oct. 25.

Reinschrieber, Henry. (See Orenstine, B., Schlesinger, and Reinschrieber.)

Remde, Edward H., Cleveland, Ohio. Industrial truck. 1,884,861; Oct. 25.

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,884,862; Oct. 25.

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Magnetic brake. 1,884,863; Oct. 25.

Remington Rand Inc. (See Landsiedel, Walter W.)

Remington Rand Inc. (See Lasker, William W., assignor.)

Remington Rand Inc. (See Merkle, Joseph R., assignor.)

Remington Rand Inc. (See Wolfe, Clarence H.)

Remington Typewriter Company. (See Barney, Edwin E., assignor.)

Remington Typewriter Company. (See Flach, Walther, assignor.)

Remington Typewriter Company. (See Hart, Frederick A., assignor.)

Remington Typewriter Company. (See Hart, F. A., and Walsoe, assignors.)

Remington Typewriter Company. (See Phelps, Joseph, assignor.)

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust and Savings Bank, trustee, Toledo, Ohio. Airway elbow attachment for hose extensions. 1,884,864; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Supporting standard for suction cleaners. 1,884,865; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Airway cleaner support. 1,884,866; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Support for airway cleaners. 1,884,867; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Airway cleaner supporting ledge. 1,884,868; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Making pipe sections. 1,884,869; Oct. 25.

Replogle, Daniel B., Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Hose pipe hanger for airway cleaners. 1,884,870; Oct. 25.

Republic Brass Company, The. (See Pollock, Julius, assignor.)

Republic Steel Corporation. (See Grant, Karl W., assignor.)

Retzer, Albert, Milwaukee, Wis. Egg carton. 1,884,236; Oct. 25.

Reumann, Christian H., and H. H. Wigglesworth, assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Shaping and drying form. 1,884,237; Oct. 25.

Reutter, Frederick R., assignor to Scovill Manufacturing Company, Waterbury, Conn. Hub cap. 1,884,238; Oct. 25.

Reynolds, Harry H. (See Calcott, W. S., and Reynolds.)

Reynolds, James L., Stanley, and J. M. McKelvey, Charlotte, N. C. Control mechanism for looms and the like. 1,884,239; Oct. 25.

Reynolds Spring Company. (See Reed, Clair S., assignor.)

Rhodes, Edmund O., and F. D. Hager, Pittsburgh, Pa., assignors to American Tar Products Company. Composition of matter and preparing the same. 1,884,240; Oct. 25.

Ricard, Eloi, and H. M. Guinot, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y. Process of extracting acetic acid from pyroligneous substances. 1,884,241; Oct. 25.

Rice, Merrit H., Pasadena, Calif. Weighing scale. 1,884,242; Oct. 25.

Richards, Zoe M., London, England. Device or appliance for women's wear or use. 1,884,243; Oct. 25.

Richcar Corporation. (See Goudiss, Charles H., jr., assignor.)

Richter, Max, West Reading, assignor to Textile Machine Works, Wyomissing, Pa. Automatic rod operating mechanism. 1,884,244; Oct. 25.

Hicker, Norman H., assignor to Hughes Tool Company, Houston, Tex. Casing head equipment for pneumatic swabs. 1,884,245; Oct. 25.

Riddell, W. A., Company. (See Stuckey, Robert B., assignor.)

Ridderstrom, Andrew R., Nahant, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Belt tightener. 1,884,246; Oct. 25.

Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Convertible suction cleaner. 1,884,871; Oct. 25.

Riemenschneider, Edmund W., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Pole base. 1,884,247; Oct. 25.

Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Sewing machine for binding knitted fabrics. 1,884,248; Oct. 25.

Roath, Robert C., assignor to The McCaskey Register Company, Alliance, Ohio. Continuous ledger account and statement file. 1,884,249; Oct. 25.

Robbins, John L., Denver, Colo. Thermostatic switching device. 1,884,872; Oct. 25.

Robbins, Walter C., assignor to The Gabriel Company, Cleveland, Ohio. Linkage connection. 1,884,251; Oct. 25.

Robert, John, Chicago, Ill., assignor to The Barrett Company, New York, N. Y. Graphic indicator for continuous felt weighing scales. 1,884,250; Oct. 25.

Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Clutch pulley. 1,884,873; Oct. 25.

Robinson, Ernest L., Schenectady, N. Y., assignor to General Electric Company. Rotary disk, turbine bucket wheel or the like. 1,884,252; Oct. 25.

Robinson, Frank W., Reading, Pa., assignor, by mesne assignments, to Scott and Williams, Inc., New York, N. Y. High splice attachment for circular knitting machines. 1,884,253; Oct. 25.

Robinson, Reginald H., Corvallis, Oreg., dedicated, by mesne assignments, to The People of the United States of America. Process for the renewal of natural oils, wax, and spray residues from fruits. 1,884,966; Oct. 25.

Robinson, Reginald H., Corvallis, Oreg., dedicated, by mesne assignments, to the citizens of the United States. Removal of spray residues from fruits and vegetables. 1,885,100; Oct. 25.

Robinson, Russell. (See Williams, F. J., and Robinson.)

Robinson, W. Scott, et al. (See Moran, Edward J., assignor.)

Rockwood, A. W., Winchester, assignor to Halley-Cate-Rockwood Company, Everett, Mass. Piping, welting, or the like and making same. 1,884,254; Oct. 25.

Roebrich, Carl, Berlin, assignor to the Firm Silfree Aktiengesellschaft, Silfree Limited, Vaduz. Treating photosensitive bodies. 1,885,063; Oct. 25.

Rogers, Allen, Brooklyn, assignor to The Barrett Company, New York, N. Y. 1,884,255; Oct. 25.

Rogers, Homer S., and R. Raddatz, assignors to Combustion Fuel Oil Burner Co., Milwaukee, Wis. Control for oil burning apparatus. 1,884,256; Oct. 25.

Ronk, Albert T., and A. J. Overholt, assignors to The Peabody Seating Company, North Manchester, Ind. Chair. 1,884,257; Oct. 25.

Root, Charles F., assignor to The Chandler & Price Company, Cleveland, Ohio. Sheet transferring mechanism for printing presses. 1,884,258; Oct. 25.

Rose, Warren A., assignor of one-fourth to T. O. Boyd, Long Beach, Calif., and one-fourth to D. M. Carter, Chicago, Ill. Pipe joint coupling device. 1,884,874; Oct. 25.

Rose, William R., Arlington Ridge, Va. Flashing for roofs. 1,884,259; Oct. 25.

Rosenblatt, Samuel, Brighton, assignor to Surgical Dressings, Inc., Boston, Mass. Surgical wrapping or dressing. 1,885,007; Oct. 25.

Rosenblatt, Samuel, Brighton, assignor to Surgical Dressings, Inc., Jamaica Plain, Mass. Producing a wrapping, dressing, or similar article. 1,885,008; Oct. 25.

Rosenkranz, Max, Library, and S. Webb, Pittsburgh, Pa., assignor to National Tube Company. Pipe threading machine. 1,884,260; Oct. 25.

Rosetter, Charles F., Los Angeles, Calif., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc. Brake testing device for motor vehicles. 1,884,261; Oct. 25.

Ross, Warren A., assignor of one-fourth to D. M. Carter, Chicago, Ill. Draw works. 1,884,875; Oct. 25.

Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Valve for shock absorbers. 1,884,262; Oct. 25.

Roth, Harris C. (See Koch, L. E., and Roth.)

Rouleau, Wilfred J., Quincy, Mass. Compressor. 1,884,876; Oct. 25.

Royal Electrotype Company. (See Shanks, David F.)

Royal Vault Manufacturing Company, The. (See Phillippe, Elmer W., assignor.)

Rubin, Herman H., New York, N. Y. Assist grip. Des. 18,635; Oct. 25.

Rudorff, Dagobert W., assignor to The Superheater Company, New York, N. Y. Superheater. 1,884,263; Oct. 25.

Ruopp, George F., assignor to Marshalltown Manufacturing Company, Marshalltown, Iowa. Protecting device for gauges. 1,884,264; Oct. 25.

Rush, Weaver A., Beatrice, Nebr. Automobile passing light. 1,884,265; Oct. 25.

Russell, Edward A. (See Van Vulpen, J., and Russell.)

Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible pipe structure. 1,884,266; Oct. 25.

Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Steam heating system for railway cars. 1,884,267; Oct. 25.

Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Vapor regulator. 1,884,268; Oct. 25.

Russell, Robert P., Baton Rouge, La., assignor to Standard-I. G. Company. Manufacture of motor fuel. 1,884,269; Oct. 25.

Rutledge Equipment Company. (See Galbraith, Arch H., assignor.)

Ryan, Frank G., Tulsa, Okla. Ventilating apparatus. 1,885,016; Oct. 25.

Ryiander, William P., San Marcos, Tex. Mattress-supporting spring cover. 1,884,270; Oct. 25.

Rypinski, Albert B., Laurelton, N. Y. Circuit controller. 1,884,877; Oct. 25.

S & D Loose Leaf Co. (See Swall, Oscar S., assignor.)

Saegusa, Eikichi. (See Otsuka, E., and Saegusa.)

Safety Grinding Wheel & Machine Company, The. (See Weinland, Hermon G., assignor.)

Sailer, Rudolph J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Folder for sewing machines. 1,884,271; Oct. 25.

Sak, Sren, Charlottenlund, Denmark. Controlling yeast propagation. 1,884,272; Oct. 25.

Samuels, George B., Burlington, Kans. Locking mechanism. 1,884,878; Oct. 25.

Sandeen, Ernest C., St. Paul, Minn. Disk pulverizer. 1,884,273; Oct. 25.

Sanders, Marion S., Bristol, Va. Gasket. 1,884,879; Oct. 25.

Sandqvist, Håkan, and T. O. H. Lindström, Stockholm, Sweden. Preparing lyo-phile products of fatty substances of any origin. 1,884,274; Oct. 25.

Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,884,275; Oct. 25.

Sanicut Manufacturing Company. (See Pershall, Ralph H., assignor.)

Sanite Corporation. (See Neidich, Samuel A., assignor.)

Sankey, Clinton E., Ellwood City, Pa. Foot protector. 1,884,276; Oct. 25.

Sassen, Bernard assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Self-regulating hydraulic system. 1,884,277; Oct. 25.

Saunders, Kenneth H., Blackley, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Apparatus for carrying out reactions continuously in the liquid phase under increased pressure. 1,884,880; Oct. 25.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose leaf binder. 1,884,278; Oct. 25.

Schatz, Herman A. (See Smith, William F., assignor.)

Scheel, Hans P., and H. P. Scheel, jr., Tacoma, Wash. Pulp grinding stone. 1,884,279; Oct. 25.

Scheel, Hans P., jr. (See Scheel, Hans P., and H. P., jr.)

Scheidegger, Jacques. (See Dreyfus, C., and Scheidegger.)

Scheidorf, Marvel W., Oaklyn, N. J., assignor to General Electric Company. Portable loud speaker. 1,884,280; Oct. 25.

Schelle, Otto et al. (See Dieckmann, Max, assignor.)

Schibrowski, Paul M., assignor, by mesne assignments, to The American-National Company, Toledo, Ohio. Baby carriage fifth wheel assembly. 1,884,281; Oct. 25.

Schirmer, Rens E., et al. (See Greiner, Alfred, assignor.)

Schlesinger, Joel L. (See Orenstine, B., Schlesinger, and Reinschrieber.)

Schmeller, John, sr., Lakewood, Ohio. Casting apparatus and method. 1,885,039; Oct. 25.

Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Marine sea chest. 1,884,282; Oct. 25.

Schmitthenner, Carlos, Heidenheim-on-the-Brenz, Germany. Safety device for wing type turbines, pumps, and similar pieces of apparatus with movable vanes. 1,884,881; Oct. 25.

Schneider, George. (See Dreyfus, C., and Schneider.)

Schneider, John jr., assignor of one-half to John Schneider, sr., Sloatsburg, N. Y. Automobile nonskid device. 1,884,283; Oct. 25.

Schneider, John, sr. (See Schneider, John, jr., assignor.)

Schneider, Matthew G., Binghamton, N. Y. Protective garment. 1,884,284; Oct. 25.

Schoenky, August R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Insole-positioning means. 1,884,882; Oct. 25.

Schollmeyer, William A., Yonkers, N. Y. Milk bottle closure. 1,884,883; Oct. 25.

Schriever, Otto, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Photo-electric tube. 1,884,285; Oct. 25.

Schroeder, Oscar C., Chicago, Ill. Fluid-pressure-controlled controlling mechanism. 1,884,286; Oct. 25.

Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Apparatus for receiving television pictures. 1,884,287; Oct. 25.

Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Facsimile transmission. 1,884,288; Oct. 25.

Schuhmann, Hans, Berlin-Charlottenburg, and F. Streuber, Berlin-Tegel, Germany, assignors to General Electric Company. Artificial silk. 1,884,289; Oct. 25.

Schults, William C., and M. Holzer, assignors of one-third to Charles Newman, Brooklyn, N. Y. Picture frame. 1,884,290; Oct. 25.

Schürer, Eugen, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Ingot mold. 1,884,291; Oct. 25.

Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio. Gear lapping machine. 1,884,292; Oct. 25.

Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio. Grinding apparatus. 1,884,293; Oct. 25.

Schweizer, Karl, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Automatic control device. 1,884,204; Oct. 25.

Schwennker, Charles F., Schenectady, N. Y., assignor to General Electric Company. Welding. 1,884,295; Oct. 25.

Schwerin, Frank H., Bellevue Borough, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Hoisting device. 1,884,296; Oct. 25.

Scientific Tablet Company. (See Suppiger, G. S., and Alexander, assignors.)

Sclater, Kenneth C., and E. O. Bennett, Ponca City, Okla. Hydraulic drilling method and automatic control therefor. 1,884,297; Oct. 25.

Scott and Williams, Inc. (See Robinson, Frank W., assignor.)

Scovill Manufacturing Company. (See Moran, Joseph F., assignor.)

Scovill Manufacturing Company. (See Reutter, Frederick R., assignor.)

Scurlock, Lewis H., Chicago, Ill. Group container. Des. 88,110; Oct. 25.

Scurlock, Lewis H., Chicago, Ill. Group container. Des. 88,111; Oct. 25.

Scurlock, Lewis H., Chicago, Ill. Group container. Des. 88,112; Oct. 25.

Seabury, Ralph L., and L. W. Murray, assignors to Delco-Remy Corporation, Anderson, Ind. Brush for electrical machines. 1,884,298; Oct. 25.

Seaholm, Ernest W. (See Beringer, R., and Seaholm.)

Searles, Raymond R., and F. Leister, assignors to The Fafnir Bearing Company, New Britain, Conn. Bearing. 1,884,299; Oct. 25.

Seaton, Chester O., Louisville, Ky. Electric track switch. 1,884,884; Oct. 25.

Sebrell, Lorin B., and A. M. Clifford, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant or age retarder for rubber compounds. 1,884,885; Oct. 25.

Sebring Pottery Company, The. (See McMaster, Harry J., assignor.)

Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Process for hydrocarbon oil conversion. 1,884,886; Oct. 25.

Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,884,887; Oct. 25.

Selbert, Nelson J., and E. M. Kreidler, Wilkinsburg, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Rocker shaft carrier for tin gas meters. 1,884,888; Oct. 25.

Seidel, Bruno W. (See Koppelman, H. I., and Seidel.)

Sells, Ogden S., San Francisco, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Processing corn. 1,884,300; Oct. 25.

Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,884,889; Oct. 25.

Servel, Inc. (See Peltier, F. D., and Ploeger, assignors.)

Set-O-Type Manufacturing Company. (See Poeppelmeier, Frank H., assignor.)

Sguerso, John, Brooklyn, N. Y. Heater for permanent waving. 1,884,890; Oct. 25.

Sguerso, John, Brooklyn, N. Y. Hair waver. 1,884,891; Oct. 25.

Shacter, Harry, assignor to Associated Merchandising Corporation, New York, N. Y. Ensemble dress. Des. 88,113; Oct. 25.

Shaft-Pierce Shoe Company. (See Shaft, Willis S.)

Shaft, Willis S., assignor to Shaft-Pierce Shoe Company, Faribault, Minn. Cross strap sandal. 1,884,301; Oct. 25.

Shanks, David F., Winona, N. J., assignor to Royal Electrotype Company, Philadelphia, Pa. Machine for engraving charts in wax. 1,884,302; Oct. 25.

Shanks, Jacob, St. Louis, Mo. Battery terminal. 1,884,892; Oct. 25.

Sharp, William E., Chicago, Ill. Washing machine. 1,884,893; Oct. 25.

Sheats, John H., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,884,303; Oct. 25.

Sheldon, Edgar H., Muskegon, Mich. Fume hood for laboratory tables. 1,884,304; Oct. 25.

Shelton, William G., St. Louis, Mo. Hair curling apparatus and method. 1,884,305; Oct. 25.

Shelton, William G., St. Louis, Mo. Hair waving device. 1,884,306; Oct. 25.

Sherman, John Q., Dayton, Ohio. Autographic register. 1,884,307; Oct. 25

Sherman, John Q., Dayton, Ohio. Separator for manifolding material. 1,884,308; Oct. 25.

Sherwood, Carlyle J., assignor to Coen Company, Inc., Los Angeles, Calif. Fuel burner. 1,884,894; Oct. 25.

Shipman, Bennet C., San Mateo, Calif. Refrigerating system. 1,885,017; Oct. 25.

Shippy, Leo C., and R. W. Baker, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio. Machine for surfacing the rubbing blocks of the circuit breaker levers of ignition timers. 1,884,309; Oct. 25.

Shumann, Frank E. (See Cole, E. K., and Shumann.)

Silfree Aktiengesellschaft, Silfree Limited. (See Roehrich, Carl, assignor.)

Sim, William, Saugus, Mass. Carnation. Pl. Pt. 87; Oct. 25.

Sime, James N., Chicago, Ill. Hose supporter. 1,884,310; Oct. 25.

Simmons Company. (See Baver, Matthew F., assignor.)

Simmons Company. (See Kusterle, Frank, assignor.)

Simmons, Donald M., Osborne, Pa., assignor to General Cable Corporation, New York, N. Y. Laminate insulation. 1,884,311; Oct. 25.

Simpson, Adele S., assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 88,114; Oct. 25.

Singer Manufacturing Company, The. (See Myers, Walter, assignor.)

Singer Manufacturing Company, The. (See Parkes, William N., assignor.)

Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)

Singer Manufacturing Company, The. (See Tivendale, W., and Baxter, assignors.)

Singer Manufacturing Company, The. (See Van Ness, W. C., and Card, assignors.)

Slayton, Robert E., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,884,895; Oct. 25.

Slepian, Joseph. (See Ludwig, L. R., and Slepian.)

Sloan, Harry, Fox Point, assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Refrigerating apparatus. 1,884,312; Oct. 25.

Slough, Frank M., Elyria, Ohio, assignor to The Anderson Company. Electrical system. 1,885,048; Oct. 25.

Slough, Frank M., Lakewood, Ohio, assignor to the Anderson Company, Gary, Ind. Electric control system and apparatus. 1,885,053; Oct. 25.

Small, Frank M. (See Wells, R., and Small.)

Small, John D., Douglaston, assignor to Dryice Corporation of America, New York, N. Y. Centrifugal method and apparatus for making solid carbon dioxide. 1,884,313; Oct. 25.

Smith, A. O., Corporation. (See Hasselquist, Hugo S., assignor.)

Smith, A. O., Corporation. (See Heineman, Warren F, assignor.)

Smith, A. O., Corporation. (See Uecker, Otto E., assignor.)

Smith, Albert E. (See Warren, H. W. H., Garton, and Smith.)

Smith, Anthony N., assignor to The Girard Model Works Inc., Girard, Pa. Savings bank. 1,884,314; Oct. 25.

Smith, Clarence C. (See Zeier, F. F., and Smith.)

Smith and Davis Manufacturing Company. (See Gombar, Joseph, assignor.)

Smith, Frederick H., Sherwood Rise, Nottingham, England. Carburetor. 1,884,315; Oct. 25.

Smith, George E., assignor to American Engineering Company, Philadelphia, Pa. Crusher roll construction. 1,884,316; Oct. 25.

Smith, George W., assignor to J. M. Hopwood, Pittsburgh, Pa. Fluid analysis. 1,884,896; Oct. 25.

Smith, George W., assignor to J. M. Hopwood, Pittsburgh, Pa. Method and apparatus for regulating combustion. 1,884,897; Oct. 25.

Smith, Harry F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,884,317; Oct. 25.

Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose organic derivative composition of matter containing B-ethoxy ethyl lactate. 1,884,318; Oct. 25.

Smith, Herman W., jr., Schenectady, assignor to J. Porzel, Lockport, N. Y. Air circulating and temperature changing unit. 1,884,898; Oct. 25.

Smith, J. M. (See Hughes, J. F., and Smith.)

Smith, Kenneth L., Des Plaines, Ill. Wall structure. 1,884,319; Oct. 25.

Smith, Walter S., assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. 1,884,320; Oct. 25.

Smith, William F., assignor of one-half to Herman A. Schatz, Poughkeepsie, N. Y. Air cooled internal combustion engine. 1,884,321; Oct. 25.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Indicating apparatus. 1,885,050; Oct. 25.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Gauge. 1,885,051; Oct. 25.

Smulski, Theodore J., assignor to The Anderson Company, Gary, Ind. Electrothermal apparatus. 1,885,052; Oct. 25.

Snow, Deskin D., Corpus Christi, Tex. Program clock. 1,884,322; Oct. 25.

Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Coupling bar. 1,884,323; Oct. 25.

Snyder, Robert W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vulcanizing apparatus. 1,884,324; Oct. 25.

Societe Hardoll Anciens Etablissements Harivean & Dollmier et René Porte & Cie. Réunis. (See Plantin, Bernard L. P., assignor.)

Soley, William G. (See Benner, R. C., Walker, and Soley.)

Sollmann, Everette L., Washington, D. C., assignor to American Lecithin Corporation, Atlanta, Ga. Nongumming gasoline and mode of preparing same. 1,884,809; Oct. 25.

Solvay Process Company. (See Philipp H., assignor.)

Sommer, Leon, Brooklyn, N. Y. Combination radio and convertible cabinet system. 1,884,325; Oct. 25.

Sosinski, Paul P., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,884,326; Oct. 25.

Southern Prison Co. (See White, Lloyd J., assignor.)

Southwark Foundry & Machine Company. (See Dinzl, Richard W., assignor.)

Sparke, Edith, Oakland, Calif. Hair pin. 1,884,900; Oct. 25.

Specter, Samuel, Chicago, Ill. Building front. Des. 88,108; Oct. 25.

Spencer, Emma F., executrix. (See Spencer, Guilford L.)

Spencer, Guilford L., deceased, by Emma F. Spencer, executrix, Brooksville, Me., assignor to Cuban-American Sugar Company, New York, N. Y. Extracting sugar from cane molasses containing glucose. 1,884,901; Oct. 25.

Spencer, Millard C., East Orange, assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Regulating system for alternating current generators. 1,884,902; Oct. 25.

Spencer, Percy L., Medford Mass. Electrical apparatus. 1,884,327; Oct. 25.

Sperling, Edward, New York, N. Y. Carrier for valuables. 1,884,328; Oct. 25.

Sperry Products, Inc. (See Perry, Walter M., assignor.)

Sporn, Philip. (See Cornelissen, E. S., Freitag, and Sporn.)

Sprague-Sells Corporation. (See Sells, Ogden S.)

Spray, Lester E., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Highway crossing protection. 1,884,329; Oct. 25.

Spreckels, J. D. & A. B., Investment Company. (See Witherspoon, W. O., and Harrower, assignors.)

Springfield Boiler Co. (See Banck, Hans J. E., assignor.)

Squires, John, Hagerstown, Md. Making propeller blades. 1,884,903; Oct. 25.

Squires, John, Hagerstown, Md. Propeller blade adjusting means. 1,884,904; Oct. 25.

Stabili, Gioacchino, Morrisville, Pa. Nonskid device for pneumatic tires. 1,884,330; Oct. 25.

Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Indicating paper dryness. 1,884,331; Oct. 25.

Standard Electric Time Company, The. (See Keilien, Saul, assignor.)

Standard- I. G. Company. (See Russell, Robert P., assignor.)

Standard Mirror Company. (See LaHodny, William, assignor.)

Standard Mirror Company. (See LaHodny, W., and Bertell, assignors.)

Standard Mirror Company. (See Weir, James B., assignor.)

Standard Oil Company (Indiana). (See Plummer, William B., assignor.)

Standard Oil Development Company. (See Cole, Jacob L., assignor.)

Standard Oil Development Company. (See Ranney, Leo, assignor.)

Standard Shipping Company. (See Marley, Edward, assignor.)

Standish, Myles, Council Bluffs, Iowa. Truck body. 1,884,333; Oct. 25.

Standish, Myles, Omaha Nebr. Rear gate structure. 1,884,334; Oct. 25.

Standish, Myles, Providence, R. I. Sign. 1,884,335; Oct. 25.

Stanley, Paul H., Glenside, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft sustaining rotor and making the same. 1,884,905; Oct. 25.

Stanley, Richard W., assignor to Merritt Engineering & Sales Company, Inc., Lockport, N. Y. Veneer clipping machine. 1,884,336; Oct. 25.

Stannus Propeller Corporation. (See Stannus, William, assignor.)

Stannus, William, assignor to Stannus Propeller Corporation, Detroit, Mich. Screw propeller. 1,884,906; Oct. 25.

Staud, Cyril J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing diethyl phthalate and ortho-cresyl para-toluene sulphonate. 1,884,337; Oct. 25.

Staud, Cyril J., Rochester, N. Y., and C. E. Waring, Dayton, Ohio, assignors to Eastman Kodak Company, Rochester, N. Y. Production of cellulose nitro-acylate. 1,884,338; Oct. 25.

Steere, Frank W., Scarsdale, assignor to The Barrett Company, New York, N. Y. Producing coke. 1,884,339; Oct. 25.

Stegeman, Henry J., Fairfield, assignor to Locke Steel Chain Company, Bridgeport, Conn. Roll. 1,884,340; Oct. 25.

Stegemann, Walter. (See Hofmann, F., Otto, and Stegemann.)

Steinhart, Hermann, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electric switch. 1,884,341; Oct. 25.

Stelzner, Hermann, assignor to Otto H. Drager, Lubeck, Germany. Production of masks of rubber or other suitable artificial substances. 1,884,342; Oct. 25.

Sterling, Bernard A., Chicago, Ill. Hair waver. 1,884,343; Oct. 25.

Stevens, Augustus R., and F. M. Stevens, Lindsay, assignors to Food Machinery Corporation, San Jose, Calif. Fruit drying apparatus. 1,884,344; Oct. 25.

Stevens, Francis M. (See Stevens, Augustus R. and F. M.)

Stevenson, Ashton G., Chicago, Ill. Apparatus for casting type furniture. 1,884,345; Oct. 25.

Stewart, Enos A., Canton, Ohio. Producing marbie effects in ceramics. 1,884,346; Oct. 25.

Stewart, Spencer W., White Plains, assignor to Ambursen Construction Co., Inc., New York, N. Y. Subterraneous masonry structure and making the same. 1,884,347; Oct. 25.

Stimmel, Byron A., K. D. McBean and G. Cruickschank, Trail, British Columbia, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Quebec, Canada. Roasting minerals containing the sulphides of zinc, iron, lead and copper, for the recovery of the metal and the sulphur dioxide gas therefrom. 1,884,348; Oct. 25.

Stockmeyer, Friedrich W., Vaihingen, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Regulator for the gas supply. 1,884,349; Oct. 25.

Stokes, Rupert O., London, England. Conveying mechanism. 1,885,064; Oct. 25.

Stone, Morris J., Wichita, Kans. Propeller. 1,884,984; Oct. 25.

Stoner, Frank, assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,884,907; Oct. 25.

Stoner, Frank, Lakewood, assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,884,908; Oct. 25.

Stoops, Irvin E., Detroit, Mich. Dispensing device. 1,884,350; Oct. 25.

Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Meat clamp. 1,884,351; Oct. 25.

Streuber, Friedrich. (See Schuhmann, H., and Streuber.)

Strobell, Charles W., San Diego, Calif. Ornithopter. 1,884,909; Oct. 25.

Stromberg-Carlson Telephone Manufacturing Company. (See Powell, Winfred T., assignor.)

Strong, Archie H., Norristown, assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa. Refrigerating system. 1,884,352; Oct. 25.

Strong, Archie H., Norristown, assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa. Refrigerating system. 1,884,353; Oct. 25.

Strosacker, Charles J., and E. L. Pelton, assignors to The Dow Chemical Company, Midland, Mich. Making salts of aliphatic acids. 1,884,354; Oct. 25.

Strowger Telephone Securities, Inc. (See Strowger, Walter S., assignor.)

Strowger, Walter S., Livonia, N. Y., assignor to Strowger Telephone Securities, Inc., Wilmington, Del. Automatic telephone switch. 1,884,910; Oct. 25.

Strufe, Otto, Dwight, Ill. Refrigerator. 1,884,355; Oct. 25.

Stubblefield, Charles C., Bradleyville, Mo. Window shade and curtain bracket. 1,884,911; Oct. 25.

Stuckey, Robert B., assignor to W. A. Riddell Company, Bucyrus, Ohio. Handling machine. 1,884,356; Oct. 25.

Stuckey, Samuel G., assignor to Obear-Nester Glass Company, St. Louis, Mo. Combined glass puddler and feeder. 1,884,357; Oct. 25.

Stuebing, William, jr., Cincinnati, Ohio, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Lift truck. 1,884,358; Oct. 25.

Stukart, Hendrik, assignor to U. S. Slicing Machine Company, La Porte, Ind. Bread slicing machine. 1,884,912; Oct. 25.

Sturm, Wilhelm, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Carburetor. 1,884,359; Oct. 25.

Sturm, Wilhelm, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Carburetor. 1,884,360; Oct. 25.

Suckow, Fred G., Depew, assignor to The Symington Company, New York, N. Y. Cushioning mechanism. 1,884,913; Oct. 25.

Sullivan Machinery Company. (See Cross, Robert E., assignor.)

Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)

Sullivan Machinery Company. (See Hauge, Andrew, assignor.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Company. (See Huffman, Mervin C., assignor.)

Sullivan Machinery Company. (See Johansen, Harry C., assignor.)

Sullivan Machinery Company. (See Osgood, Robert C., assignor.)

Sullivan Machinery Company. (See Whinnen, Eugene, assignor.)

Sullivan Machinery Company. (See Wineman, Wade H., assignor.)

Sullivan, Paul P., Chicago, Ill. Window frame and sash therefor. 1,884,361; Oct. 25.

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Pump for refrigerating apparatus. 1,884,362; Oct. 25.

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,884,363; Oct. 25.

Sundberg, Karl, Houston, Tex., assignor to Aktiebolaget Elektrisk Malmletning, Stockholm, Sweden. Mapping subsurface structures. 1,884,364; Oct. 25.

Superheater Company, The. (See Harris, Reginald M., assignor.)

Superheater Company, The. (See Kavanagh, James F., assignor.)

Superheater Company, The. (See Rudorff, Dagobert W., assignor.)

Superheater Company, The. (See True, Charles H., assignor.)

Superheater Company, The. (See Woynarowski, Bazil, assignor.)

Superior Trolley Slide & Equipment Company. (See Wilkins, Kenneth M., assignor.)

Suppiger, Gerhart S., and C. Alexander, Belleville, assignors to Scientific Tablet Company, East St. Louis, Ill. Apparatus for dispensing flavoring materials. 1,884,365; Oct. 25.

Surgical Dressings, Inc. (See Rosenblatt, Samuel, assignor.)

Sutherland, Daniel M., jr. (See Brown, Roger B., assignor.)

Sutherland, Daniel M., jr., Morrisville, Pa. Pulp product and its manufacture. 1,884,366; Oct. 25.

Sutherland, Daniel M., jr. (See Farley, Francis S., assignor.)

Sutherland, Daniel M., jr., Morrisville, Pa. Rot-proof fiber product. 1,884,367; Oct. 25.

Swain, Francis T., Newcastle, Ind. Gear testing machine. 1,884,368; Oct. 25.

Swall, Oscar S., Ross, Calif., assignor to S. & D. Loose Leaf Co., Ltd. Loose leaf binder. 1,885,018; Oct. 25.

Swann Research, Inc. (See Jenkins, R. L., and Norris, assignor.)
Swann Research, Inc. (See Krase, Herbert J., assignor.)
Swanson, Hugo R. (See Van Rensselaer, K. M., and Swanson.)
Swanson, Martin D. W., Omaha, Nebr. Visual information board. 1,884,369; Oct. 25.
Swanson, Olof, Chicago, Ill. Mounting device. 1,884,370; Oct. 25.
Swart, Charles G., Auburn, N. Y. Lens-holder for spectacle and eyeglass frames. 1,884,371; Oct. 25.
Swedish American Prospecting Corporation. (See Zuschlag, Theodor, assignor.)
Sylvania Industrial Corporation. (See Neidich, Samuel A., assignor.)
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington Company, The. (See Blattner, Emil H., assignor.)
Symington Company, The. (See Casey, H. T., and Noser, assignor.)
Symington Company, The. (See Couch, Glenn F., assignor.)
Symington Company, The. (See Suckow, Fred G., assignor.)
Symington Company, The. (See Townsend, Donald L., assignor.)
Symington, T. H., & Son, Inc. Symington, Thomas H., assignor.)
Symington, Thomas H., assignor to T. T. Symington & Son, Inc., Baltimore, Md. Car floor cushioning means. 1,884,372; Oct. 25.
Tansley, Thomas W., assignor to Bloch Freres Inc., New York, N. Y. Textile fabric. Des. 88,115; Oct. 25.
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Brake. 1,884,373; Oct. 25.
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Leak preventing device. 1,884,374; Oct. 25.
Taylor, Alvin A. W., Sydney, New South Wales, Australia, assignor, by mesne assignments, to W. R. Cox, Cleveland, Ohio. Radiophone loud speaker. 1,844,375; Oct. 25.
Taylor, James H., Oak Park, Ill. Making nozzles. 1,884,914; Oct. 25.
Taylor, Maurice R. (See Peck, C .C., and Taylor.)
Teague, Walter D., New York, N. Y. Camera casing. Des. 88,116; Oct. 25.
Tears, Claude F., assignor to Universal Oil Company, Chicago, Ill. 1,884,915; Oct. 25.
Technical Equipment Company. (See Rawls, Paul C., assignor.)
Tedham, William F., London, England, assignor to Victor Talking Machine Company. Thermionic amplifier for use in conjunction with photo-electric devices. 1,884,376; Oct. 25.
Teetor, Ralph R., assignor to The Perfect Circle Company, Hagerstown, Ind. Piston skirt expander. 1,885,038; Oct. 25.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Schriever, Otto, assignor.)
Teletype Corporation, The. (See Carr, J. O., and Benjamin, assignors.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Teletype Corporation. (See Krum, Howard L., assignor.)
Teletype Corporation. (See Lake, Ross A., assignor.)
Teletype Corporation. (See Morton, Sterling, assignor.)
Teletypesetter Corporation. (See Kleinschmidt, Edward E., assignor.)
Temple, Fred W., Hinsdale, assignor to The Chicago Signal Company, Chicago, Ill. Cutting device. 1,884,377; Oct. 25.
Tenney, Edward H., Webster Groves, Mo. Apparatus for feeding pulverized coal and air to a furnace. 1,884,378; Oct. 25.
Tenney, Frank L., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Carbonization device. 1,884,379; Oct. 25.
Tenney, Perry L., and H. E. Fidler, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich. Four speed step-down transmission. 1,884,380; Oct. 25.
Textile Machine Works. (See Richter, Max, assignor.)
Thibeau, Antoine, Tourcoing, France. Card. 1,884,381; Oct. 25.
Thies, Fritz, Berlin-Tempelhof, Germany. Production of soft fabric or the like from vegetable fibrous materials. 1,885,019; Oct. 25.
Thimmes, George E., Mechanicsville, Iowa. Switch. 1,884,382; Oct. 25.
Thompson, Albert R., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif. Filling containers with liquid. 1,884,916; Oct. 25.
Thompson, Charles S., Park Ridge, and W. B. Long, assignors to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,884,383; Oct. 25.
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate bar. 1,884,917; Oct. 25.
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate. 1,884,918; Oct. 25.
Thompson, Lyndon G., Oakland, assignor, by mesne assignments, to American Bitumuls Company, San Francisco, Calif. Asphaltic emulsions and making the same. 1,884,919; Oct. 25.
Thompson, Russell G., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,884,384; Oct. 25.
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Electrical apparatus and making terminal strips therefor. 1,884,385; Oct. 25.
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Transformer. 1,884,386; Oct. 25.
Thordarson Electric Manufacturing Company. (See Pearson, Oscar A., assignor.)
Thordarson Electric Manufacturing Company. (See Thordarson, Chester H., assignor.)
Thorne, Albert A., Laytown, Georgetown, Demerara, British Guiana. Surface cleaner. 1,884,387; Oct. 25.
Thwing, Charles B., assignor to Thwing Instrument Company, Philadelphia, Pa. Initial tear-testing apparatus. 1,884,388; Oct. 25.
Thwing Instrument Company. (See Thwing, Charles B., assignor.)
Tibbetts, Winnie A., Rangeley, Me. Combined automobile heater and windshield warmer. 1,884,389; Oct. 25.
Timken Roller Bearing Company, The. (See Vanderbeek, Herbert, assignor.)
Tivendale, William, Clydebank, and J. Baxter, Glasgow, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Machine for polishing the eyes of needles. 1,884,390; Oct. 25.
Toelle, Walter H., assignor to H. L. Judd Company, Inc., Wallingford, Conn. Bracket for curtain rods. 1,884,391; Oct. 25.
Tolelk, John A., West Orange, N. J., assignor to American Can Company, New York, N. Y. Method and apparatus for sorting sheet stock. 1,884,920; Oct. 25.
Toothaker, Fred E., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for conditioning shoe parts. 1,884,921; Oct. 25.
Townsend, Donald L., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging. 1,884,922; Oct. 25.
Townsend, Harry E., Brooklyn, N. Y. Hermetically sealed package. 1,884,955; Oct. 25.
Travilla, jr., James C. (See Meyer, W. H., Travilla, jr., and Jackson.)
Traxler, Ralph N. (See Meade, G. P., and Traxler.)
Treat, Fred C., Cuyahoga Falls, Ohio. Exerciser. 1,884,392; Oct. 25.
Triangle Kapok Machine Corporation. (See Van Rensselaer, K. M., and Swanson, assignors.)
Triumph Trap Company. (See Adams, F. E., and Chesebro, assignors.)
Troendly, Harry P., Chicago, Ill., and F. Pareira, New York, N. Y., assignors to Health Developing Apparatus Co., Inc., New York, N. Y., and William D. Gibson Company, Chicago, Ill. Game board. Des. 88,117; Oct. 25.
True, Charles H., Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Steam drier arrangement. 1,884,393; Oct. 25.
Turner, Anna C., Riverdale, Md. Fruit duff and preparing same. 1,884,923; Oct. 25.
Turner, Joseph V., Wilson, N. C. Casting machine. 1,884,394; Oct. 25.
Tyson, Frank, Canton, Ohio. Roller bearing. 1,884,395; Oct. 25.
Uecker, Otto E., assignor to A. O. Smith Corporation Milwaukee, Wis. Apparatus for electric arc welding. 1,884,396; Oct. 25.
Union Metal Manufacturing Company, The. (See Riemenschneider, Edmund W., assignor.)
Union Special Machine Company. (See Moffatt, James R., assignor.)
Union Special Machine Company. (See Reichelt, Raymond E., assignor.)
Union Special Machine Company. (See Riviere, Albert S., assignor.)
Union Special Machine Company. (See Thompson, C. S., and Long, assignors.)
Union Special Machine Company. (See Zeier, Frederick F., assignor.)
Union Special Machine Company. (See Zeier, F. F., and Smith, assignors.)
Union Special Maschinenfabrik G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)
Union Switch & Signal Company, The. (See Sosinski, Paul P., assignor.)
Union Switch & Signal Company, The. (See Spray, Lester E., assignor.)
United Shoe Machinery Corporation. (See Bagshaw, Charles M., assignor.)
United Shoe Machinery Corporation. (See Chapin, Herbert L., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)

United Shoe Machinery Corporation. (See Hazelton, G., and Clarke, assignors.)
United Shoe Machinery Corporation. (See Mellerio, Lucien P., assignor.)
United Shoe Machinery Corporation. (See Ridderstrom, Andrew R., assignor.)
United Shoe Machinery Corporation. (See Schoenky, August R., assignor.)
United Shoe Machinery Corporation. (See Toothaker, Fred E., assignor.)
United Shoe Machinery Corporation. (See Waterman, Bradford B., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
United Shoe Machinery Corporation. (See Woodcock, R. B., and Kestell, assignors.)
U. S. Air Compressor Company, The. (See Bacher, Rollin L., assignor.)
United States Fire Protection Corporation. (See Willenborg, Carl J., jr., assignor.)
U. S. Industrial Alcohol Co. (See Ricard, E., and Guinot, assignors.)
U. S. Sanitary Specialties Corporation. (See Koppleman, H. I., and Seidel, assignors.)
U. S. Slicing Machine Company. (See Stukart, Hendrik, assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Wilhelmus A., assignor.)
United Verde Copper Company. (See Kuzell Charles R., assignor.)
Universal Oil Products Company. (See Seguy, Jean D., assignor.)
Universal Oil Products Company. (See Tears, Claude F., assignor.)
Upham, Burt F., Brookline, Mass., assignor to Miller Printing Machinery Company, Pittsburgh, Pa. Delivery stripper finger. 1,884,397; Oct. 25.
Uxley, Warren S., assignor to Edward G. Budd Manufacturing Company, Pittsburgh, Pa. Punching fixture. 1,884,398; Oct. 25.
Vail, George L., Denver, Colo. Ice loading machine. 1,884,399; Oct. 25.
Vaile, Pembroke A., assignor of one-half to Sheldon Clark, Chicago, Ill. Submarine. 1,884,400; Oct. 25.
Vallen, Earl J., Akron, Ohio. Remote control mechanism. 1,884,401; Oct. 25.
Van Berkel, Wilhelmus A., Clarens, Montreux, Switzerland, assignor to U. S. Slicing Machine Company, La Porte, Ind. Sharpener for slicing machines. 1,884,924; Oct. 25.
Vanderbeek, Herbert, assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing. 1,884,925; Oct. 25.
Vanderbilt, R. T., Company. (See Murrill, Paul I., assignor.)
Van Devanter, Anne W., Nashville, Tenn. Luggage carrier. 1,884,402; Oct. 25.
Van Hamersveld, John J. N., Cleveland Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Hydraulic operating system for machine tools. 1,884,985; Oct. 25.
Van Hecke, Charles E., Stevens Point, Wis. Saddle clamping. 1,884,403; Oct. 25.
VanNess, Williard L., Toledo, Ohio. Glass manufacture. 1,884,926; Oct. 25.
Van Ness, William C., Brooklyn, N. Y., and F. M. Card, Bridgeport, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J. Feeding mechanisms for sewing machines. 1,884,404; Oct. 25.
Van Peski, Adrianus J., Amsterdam, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of alcohols. 1,884,405; Oct. 25.
Van Raalte, Martin, St. Louis, Mo. Surgical appliance. 1,884,927; Oct. 25.
Van Rensselaer, Killaen M., Woodmere, and H. R. Swanson, assignors to Triangle Kapok Machine Corporation, Brooklyn, N. Y. Picker mechanism. 1,884,406; Oct. 25.
Van Romaine, Eldon, Cincinnati, Ohio, H. J. Weiland, South Milwaukee, Wis., and P. O. and R. C. Palmer, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc. Liming rosin. 1,884,407; Oct. 25.
Van Vulpen, John, and E. A. Russell, assignors to Vapor Car Heating Company, Inc., Chicago, Ill. Combined heating and cooling system for railway cars. 1,884,408; Oct. 25.
Vapor Car Heating Company. (See Garland, William L., assignor.)
Vapor Car Heating Company. (See Russell, Edward T., assignor.)
Vapor Car Heating Company. (See Van Vulpen, J., and Russell, assignors.)
Vaughn Machinery Company, The. (See McIlvried, Edwin J., assignor.)
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Pump governor. 1,884,929; Oct. 25.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Feed water regulator. 1,884,930; Oct. 25.
Vernon, William F., Newton, Iowa. Mounting means for a sign or the like. 1,885,020; Oct. 25.
Vesta Battery Corporation. (See Angel, Chester M., assignor.)
Vestal, Albert H. (See Malone, Adolph W., assignor.)
Victor Talking Machine Company. (See Tedham, William F., assignor.)
Vienneau, Jacob J., Pittsfield, Mass., assignor to General Electric Company. Coil winding machine. 1,884,409; Oct. 25.
Vilter Manufacturing Company, The. (See Sloan, Harry, assignor.)
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,884,410; Oct. 25.
Vinding, Laura R., Chicago, Ill. Folding table. 1,884,411; Oct. 25.
Virchow, Frank, Waterloo, Wis. Kitchen cabinet. 1,884,412; Oct. 25.
Vitapack Corporation. (See Rector, Thomas M., assignor.)
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,118; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,119; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,120; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,121; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,122; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,123; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,124; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,125; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,126; Oct. 25.
Vogelman, Philip A., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,127; Oct. 25.
Von Allmen, Samuel, assignor to the Firm Chemical Works Formerly Sandoz, Basel, Switzerland. Easily soluble dyestuffs of the anthraquinone series. 1,885,065; Oct. 25.
Von Blix, Carlos A., assignor to I. A. Ford, Glendale, Calif. Fuel humidifying device. 1,884,413; Oct. 25.
Voorheis, Joseph T., assignor to Coen Company, Inc., Los Angeles, Calif. Liquid atomizer. 1,884,931; Oct. 25.
Vroom, Robert D. W., Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y. Bracket for curtain rods. 1,884,414; Oct. 25.
Vrooman, William S., assignor to The Paine and Williams Company, Cleveland, Ohio. Automobile floor and toe board and the like. 1,884,415; Oct. 25.
Wachs, Benjamin, and D. H. Colin, Brooklyn, N. Y. Lock for handbags. 1,884,416; Oct. 25.
Wagenhorst, James H., Jackson, Mich. Arc lamp. 1,884,417; Oct. 25.
Wagner, Cary R., Chicago, Ill., assignor to The Gyro Process Company, Detroit, Mich. Separating and fractionating oil. 1,884,418; Oct. 25.
Wagner, Charles F., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Simulating mutual impedances. 1,884,419; Oct. 25.
Wagner, Gottlob F., Limbach, Germany. Circular knitting machine. 1,884,420; Oct. 25.
Wagner, James, Peninsula, and A. Humr, Cleveland, Ohio. Tool. 1,884,421; Oct. 25.
Walbridge, John B., Drexel Hill, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine casing. 1,884,422; Oct. 25.
Waldes, Jindrich, New York, assignor to Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Fastener tape. 1,885,021; Oct. 25.
Waldes Koh-I-Noor, Inc. (See Waldes, Jindrich, assignor.)
Walker, Arthur W., Seminole, Okla. Mixer. 1,884,428; Oct. 25.
Walker, Brooks, Piedmont, Oakland, Calif. Vehicle lifting and traversing device. 1,884,932; Oct. 25.
Walker, Brooks, Piedmont, Oakland, Calif. Vehicle lifting and traversing device. 1,884,933; Oct. 25.
Walker, Burnett. (See Nelson, William, assignor.)
Walker, Hervey S., Ardmore, Pa. Under-floor duct system. 1,884,424; Oct. 25.
Walker, Prescott H. (See Benner, R. C., Walker, and Soley.)
Walker, Sherman B., Newton, assignor of two-fifths to Bessie Mabie, Monroe, N. J. Picker stick connection for looms. 1,884,425; Oct. 25.
Wallace, James D., Washington, D. C. Apparatus for measuring the percentage of modulation. 1,884,934; Oct. 25.
Walsoe, Sigurd L. (See Hart, F. A., and Walsoe.)

Walter, George F., Brooklyn, assignor to American Can Company, New York, N. Y. Soldering apparatus. 1,884,935; Oct. 25.
Walther, George, Montgomery County near Dayton, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Metal wheel. 1,884,936; Oct. 25.
Walther, Wilhelm. (See Breitbart, H., Kurtz, and Walther.)
Walther, Wilhelm. (See Rehm, A., Wolff, and Walther.)
Ward, Rufus L., Irving, Tex. Road maintenance and building machine. 1,884,426; Oct. 25.
Wardley, Thomas, Greenford, England, assignor to Hartford-Empire Company, Hartford, Conn. Glass feeding apparatus. 1,884,427; Oct. 25.
Waring, Charles E. (See Staud, C. J., and Waring.)
Warner, Douglas K., Bristol, Conn. Making frozen brine. 1,884,428; Oct. 25.
Warner, Douglas K., Watkins Glen, N. Y. Food freezing. 1,884,429; Oct. 25.
Warner & Swasey Company, The. (See Van Hamersveld, John J. N., assignor.)
Warren, H. W. H., Coventry, and C. G. Garton and A. E. Smith, Rugby, England, assignors to General Electric Company. Molding. 1,885,066; Oct. 25.
Warren, Samuel, New York, N. Y. Toy coaster. 1,884,430; Oct. 25.
Warrender, Cecil. (See Moore, E. E., McGranahan, and Warrender.)
Waterman, Bradford B., East Bridgewater, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shank stiffener and making the same. 1,884,937; Oct. 25.
Watson, Cornelius B., and R. C. Osterstrom, assignors to The Pure Oil Company, Chicago, Ill. Solution accelerator for oil dyes. 1,884,431; Oct. 25.
Watts, Noble H., Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Electrical cord terminal. 1,884,432; Oct. 25.
Weatherhead, Albert J., jr. (See Baldwin, John D., jr., assignor.)
Webb, Samuel. (See Rosenkranz, M., and Webb.)
Webb, William R., Berlin, Germany, and H. T. Clarke, New York, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition. 1,884,433; Oct. 25.
Wehmann, Walter W., Brooklyn, N. Y. Tailpiece for stringed musical instruments. 1,884,434; Oct. 25.
Weidinger, William G. G., Chicago, Ill. Hydroaeroplane. 1,884,435; Oct. 25.
Weil, Edward J., assignor to Chrysler Corporation, Detroit, Mich. Abrasive element. 1,884,436; Oct. 25.
Weiland, Henry J. (See Van Romaine, E., Weiland, Powers, and Palmer.)
Weingartner, Anthony E., Bethlehem, assignor to American Engineering Company, Philadelphia, Pa. Steering gear system. 1,884,437; Oct. 25.
Weinland, Hermon C., assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio. Spark arrester. 1,884,438; Oct. 25.
Weir, Irvin R., Schenectady, N. Y., assignor to General Electric Company. Circuit for electron discharge devices. 1,884,439; Oct. 25.
Weir, James B., New Dorp, assignor, by mesne assignments, to Standard Mirror Company, Inc., Buffalo, N. Y. Clock and mirror holder. 1,884,938; Oct. 25.
Welch, Edward J., New York, N. Y. Molding strip. 1,884,440; Oct. 25.
Welch, Edward J., New York, N. Y. Drip strip. 1,884,441; Oct. 25.
Weld, Louis M., J. H. Ohler, and F. Berkley, Meyersdale, Pa. Mining machine. 1,884,986; Oct. 25.
Wells, Richard, and F. M. Small, assignors to Wells Valve & Equipment Corp., Bartlesville, Okla. Valve. 1,884,442; Oct. 25.
Wells Valve & Equipment Corp. (See Wells, R., and Small, assignors.)
Wentworth, Philip C., Providence, R. I., and J. H. Avery, Franklin, Mass., assignors to National Ring Traveler Co., Providence, R. I. Stroboscopic apparatus. 1,885,022; Oct. 25.
Wertman, Charles E., assignor to The Whitney Mfg. Co., Hartford, Conn. Chain riveting machine. 1,884,443; Oct. 25.
Wessblad, Karl A., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation. Refrigerating apparatus. 1,884,939; Oct. 25.
Wessels, Herman, Louisville, Ky. Damper control. 1,884,987; Oct. 25.
West, Charles P., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line protective system. 1,884,444; Oct. 25.
Western Electric Company. (See Cherry, G. L., and Lamplough, assignors.)
Western Electric Company. (See Jensen, Axel G., assignor.)
Western Electric Company. (See Keller, Arthur C., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Westinghouse Electric Elevator Company. (See White, K. M., and Hearn, assignors.)
Westinghouse Electric & Manufacturing Company. (See Beckman, Eric W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brown, Myron J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Halliwell, George P., assignor.)
Westinghouse Electric and Manufacturing Company. (See Iams, H., and Zworykin, assignors.)
Westinghouse Electric and Manufacturing Company. (See Johnson, E. M., and Pierson, assignors.)
Westinghouse Electric & Manufacturing Company. (See Kirkpatrick, Thomas P., assignor.)
Westinghouse Electric and Manufacturing Company. (See Ludwig, L. R., and Slepian, assignors.)
Westinghouse Electric & Manufacturing Company. (See Miller, Ernest F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Potter, John A.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Staege, Stephen A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wagner, Charles F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Walbridge, John B., assignor.)
Westinghouse Electric & Manufacturing Company. (See West, Charles P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wilson, Earl D., assignor.)
Wever, John A., Baltimore, Md. Fuse holder. 1,884,445; Oct. 25.
Whinnen, Eugene, Okotoks, Alberta, Canada, assignor to Sullivan Machinery Company. Drill rod valve mechanism. 1,884,940; Oct. 25.
White, Edward A., and I. W. Knight, Lewiston, Idaho. Edible entity sizing mechanism and method. 1,884,999; Oct. 25.
White, Everet F. (See Jones, Frank, assignor.)
White, Kenneth M., and G. K. Hearn, Chicago, Ill., assignors to Westinghouse Electric Elevator Company. Motor-control system. 1,884,448; Oct. 25.
White, Lloyd J., assignor to Southern Prison Co., San Antonio, Tex. Vehicle barrier. 1,884,447; Oct. 25.
Whitfield, Joseph E., assignor of one-half to H. A. Johnson, Pittsburgh, Pa. Hand wheel. 1,884,448; Oct. 25.
Whitney Mfg. Co., The. (See Wertman, Charles E., assignor.)
Wickstrum, Cecil M., Omaha, Nebr. Tent construction. 1,884,449; Oct. 25.
Widell, Magnus E., Cincinnati, Ohio, assignor to American Can Company, New York, N. Y. Machine for forming metal bands. 1,884,941; Oct. 25.
Widell, Magnus E., Cincinnati, Ohio, assignor to American Can Company, New York, N. Y. Can tester. 1,884,942; Oct. 25.
Widmann, Adolf A., assignor to Hermann I. A. Dorner, Detroit, Mich. Internal combustion engine. 1,884,450; Oct. 25.
Wiegand, Edwin L. (See Perry, Francis W., assignor.)
Wiegand, Edwin L., Pittsburgh, Pa. Electric heating element. 1,884,451; Oct. 25.
Wiegman, Clarence H., assignor to Packard Motor Car Company, Detroit, Mich. Muffler for Diesel engines with single inlet and outlet port. 1,884,452; Oct. 25.
Wiencke, Robert G. (See Driest, C., and Myers.)
Wigglesworth, Harry H. (See Reumann, C. H., and Wigglesworth.)
Wikle, William E. (See Noveiel, H. E., and Wikle.)
Wilde, Francis E. J., Forest Hills, N. Y. Electric sign. 1,884,453; Oct. 25.
Wilde, Francis E. J., Forest Hills, N. Y. Control apparatus for electric signs. 1,884,454; Oct. 25.
Wiles, Charles L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Welding. 1,884,455; Oct. 25.
Wilkins, Kenneth M., assignor to Superior Trolley Slide & Equipment Company, Waukegan, Ill. Trolley slide with locking means. 1,884,456; Oct. 25.
Wilkins, Raymond A., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,884,457; Oct. 25.
Will, Louis. (See Baker, Frank E., assignor.)
Willenborg, Carl J., jr., assignor to United States Fire Protection Corporation, Hoboken, N. J. Draw-off valve. 1,884,458; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,128; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,129; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,130; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,131; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,132; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,133; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,134; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,135; Oct. 25.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,136; Oct. 25.

Willheim, William, Co. (See Vogelman, Philip A., assignor.)
Williams, Frederick J. (See Cameron, W. McC., and Williams.)
Williams, Frederick J., and R. Robinson, Cumberland, Md., assignors to Celanese Corporation of America. Method of and apparatus for winding yarn. 1,884,943; Oct. 25.
Williams, Irving B., Tulsa, Okla. Method and apparatus for producing oil. 1,884,459; Oct. 25.
Williams, John C., assignor to H. H. Meredith, Oakland, Calif. Flexible joint. 1,884,944; Oct. 25.
Williams, Joseph H., Saginaw, Mich. Facing tool. 1,884,460; Oct. 25.
Willings, Joseph B., Oil City, Pa. Adjustable tractor. 1,884,461; Oct. 25.
Willoughby, John A., Cambridge, Mass. Combined oscillator and modulator system. 1,884,945; Oct. 25.
Willson, Corwin D., Lake Orion, Mich. Building construction. 1,884,462; Oct. 25.
Willys-Overland Company, The. (See Baker, Arthur J., assignor.)
Wilson, Allen B., Chicago, Ill. Harrow. 1,884,463; Oct. 25.
Wilson, Earl D., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Light-sensitive device. 1,884,464; Oct. 25.
Wilson, Lyndon F. (See McCoy, Verl E., assignor.)
Windsor, John F., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill. Welding apparatus. 1,884,465; Oct. 25.
Windsor, John F., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill. Welding apparatus. 1,884,466; Oct. 25.
Windsor, John F., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill. Means to reduce the burrs of welded metal tubing. 1,884,467; Oct. 25.
Wineman, Wade H., Michigan City, Ind., assignor to Sullivan Machinery Company. Dislodging device. 1,844,946; Oct. 25.
Winkler, Alfred, and M. Dünnebier, Neuweid, Germany, assignors to Baltimore Paper Company, Kansas City, Mo. Method of and apparatus for the manufacture of flat bags and envelopes. 1,884,468; Oct. 25.
Winkler, Fritz. (See Mittasch, A., Frankenburger, and Winkler.)
Winkley, Erastus E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon sheet material. 1,884,947; Oct. 25.
Winter, Fred W., Chicago, Ill. Combination hand saw. 1,884,469; Oct. 25.
Winter, Joseph W., Penfield, assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa. Refrigerating apparatus. 1,884,470; Oct. 25.
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Witherspoon, William O., Burlingame, and J. Harrower, San Francisco, Calif., assignors to J. D. & A. B. Spreckels Investment Company. Apparatus for molding materials. 1,884,948; Oct. 25.
Wittenberg, Lester, New Rochelle, N. Y., assignor to The Barrett Company. Paving aggregate and producing same. 1,884,471; Oct. 25.
Witter, Lawrie L., et al. (See Greiner, Alfred, assignor.)
Wolf, Frank, New York, N. Y. Accessory for containers. 1,884,472; Oct. 25.
Wolfe, Clarence H., Norwood, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Adding and registering machine. 1,884,473; Oct. 25.
Wolff, Theodor. (See Rehm, A., Wolff, and Walther.)
Wolforth, William C., Highland Park, Mich. Front wheel drive. 1,884,474; Oct. 25.
Wolseley Motor (1927) Limited. (See Luyks, Edward S., assignor.)
Wood Hydraulic Hoist & Body Company. (See Kerr, Arthur G., assignor.)
Wood, Joseph K., Mount Vernon, N. Y., assignor to W. P. Albert, Madison, N. J. Vibration dampener. 1,884,477; Oct. 25.
Woodcock, Joseph C., Cliffside, N. J., assignor to The Barrett Company, New York, N. Y. Liquid spreading apparatus. 1,884,475; Oct. 25.
Woodcock, Reginald B., and T. A. Kestell, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Feed mechanism. 1,884,949; Oct. 25.
Woodeson, William A., assignor to Clarke Chapman & Company, Limited, and to said William A. Woodeson, Gateshead-on-Tyne, England. Fuel burner. 1,885,067; Oct. 25.
Woodings, Emanuel, Oakmont, assignor to Woodings-Verona Tool Works, Verona, Pa. Machine for reforming splice bars. 1,884,476; Oct. 25.
Woodings-Verona Tool Works. (See Woodings, Emanuel, assignor.)
Woodring, Hubert E., Denver, Colo. Means for the detection of electricity. 1,884,950; Oct. 25.
Woodruff & Edwards, Inc. (See Abbott, George H., assignor.)
Woods, Harold B., Ilion, N. Y., assignor, by mesne assignments, to Consolidated Automatic Merchandising Corporation. Vending machine. 1,884,478; Oct. 25.
Woodson, William C., jr., Brooklyn, N. Y. Motor speed regulator. 1,884,951; Oct. 25.
Woodward Governor Company. (See Martin, Irl C., assignor.)
Woodward Hubbard Company. (See Fancher, Charles J., assignor.)
Woolson, Emma F., executrix. (See Woolson, Lionel M.)
Woolson, Lionel M., Detroit, Mich.; E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine starter. 1,884,479; Oct. 25.
Woolson, Lionel M., Detroit, Mich.; E. F. Woolson, Bloomfield Village, executrix, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,884,480; Oct. 25.
Woynarowski, Bazil, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Superheater header. 1,884,481; Oct. 25.
Wright, Carl L. (See De Witt, Arthur R., assignor.)
Wright, Malcolm, Baltimore, Md. Terminal clamp. 1,884,482; Oct. 25.
Wright, Robert H., Nashville, Tenn. Apparatus for treating vegetation. 1,884,483; Oct. 25.
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Hood capping container. 1,884,952; Oct. 25.
Wuertz, Alexander J. (See Adamson, W. A., and Wuertz.)
Yacomis, John, Albany, N. Y. Window sash retainer. 1,884,484; Oct. 25.
Yale & Towne Manufacturing Company, The. (See Stuebing, William, jr., assignor.)
Yost, Oliver P., Grand Rapids, Mich., assignor to Food Machinery Corporation. Spray gun. 1,884,485; Oct. 25.
Young, Charles M., jr. (See Morehead, G. L., and Young.)
Young, William R., Fairfield, Conn. Lamp. Des. 88,137; Oct. 25.
Youngstown Sheet and Tube Company, The. (See Nullmeyer, Frank H., assignor.)
Zahn, Lawrence J. (See Pacher, J. V., and Zahn.)
Zavertnik, Joseph, jr., Harrington Park, N. J., assignor to The Barrett Co., New York, N. Y. Impregnating process. 1,884,486; Oct. 25.
Zeier, Frederick F., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,884,487; Oct. 25.
Zeier, Frederick F., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,884,488; Oct. 25.
Zeier, Frederick F., and C. C. Smith, assignors to Union Special Machine Company, Chicago, Ill. Differential feeding mechanism for sewing machines. 1,884,489; Oct. 25.
Zeier, Frederick F., and C. C. Smith, assignors to Union Special Machine Company, Chicago, Ill. Thread controller for sewing machines. 1,884,490; Oct. 25.
Zerozone, Incorporated. (See McKeague, James, assignor.)
Ziehm, Kurt F. (See Niemann, F. A., and Ziehm.)
Ziemann, Harry J., assignor to Empire Level Manufacturing Company, Milwaukee, Wis. Plasterer's hawk. 1,884,491; Oct. 25.
Zifferer, Lothar R., deceased, by M. C. Zifferer, H. N. Albright, Columbia, Pa., and H. E. Champion, Blue Point, Long Island, N. Y., assignors to Columbia Malleable Castings Corporation, Columbia, Pa. Apparatus for melting metals. 1,884,953; Oct. 25.
Zifferer, Mabel C., executor, et al. (See Zifferer, Lothar R.)
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Tip-top table for shapers. 1,884,492; Oct. 25.
Zimniewicz, Anthony J., and A. F. Cox, assignors to Manz Rotogravure Company, Chicago, Ill. Chromium plating apparatus. 1,884,493; Oct. 25.
Zorn, Charles A., St. Louis, Mo. System of drafting dress patterns. 1,884,494; Oct. 25.
Zoul, Charles V., assignor to Coen Companies, Inc., Los Angeles, Calif. Treating clay. 1,884,954; Oct. 25.
Zurcher, Paul, assignor to Continental Oil Company, Ponca City, Okla. Refining hydrocarbon. 1,884,495; Oct. 25.
Zuschlag, Theodor, assignor to Swedish American Prospecting Corporation, New York, N. Y. Electrical prospecting apparatus. 1,884,496; Oct. 25.
Zwietusch, Eduard O., Vienna, Austria, assignor to International Standard Electric Corporation, New York, N. Y. Automatic switching apparatus. 1,884,988; Oct. 25.
Zworykin, Vladimir K. (See Iams, H., and Zworkin.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 25TH DAY OF OCTOBER, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abradant, Metallic. D. J. Mayer. 1,884,787; Oct. 25.
Abrasive element. E. J. Well. 1,884,436; Oct. 25.
Accelerator of vulcanization. A. M. Clifford. 1,883,878; Oct. 25.
Acid anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,884,625; Oct. 25.
Acid from pyroligneous substances, Extracting acetic. E. Ricard and H. M. Guinot. 1,884,241; Oct. 25.
Acids and their esters, Manufacture of aliphatic. H. Dreyfus. 1,884,628; Oct. 25.
Adding and registering machine. C. H. Wolfe. 1,884,473; Oct. 25.
Adhesive and method of making. I. F. Laucks and G. Davidson. 1,883,989; Oct. 25.
Age resistor for rubber compounds. A. M. Clifford. 1,883,877; Oct. 25.
Air circulating and temperature changing unit. H. W. Smith, jr. 1,884,898; Oct. 25.
Air cleaner. J. A. Mosher. 1,884,808; Oct. 25.
Air-conditioning device, Portable. H. D. Betz. 1,884,534; Oct. 25.
Aircraft. C. W. Howard. 1,884,701; Oct. 25.
Aircraft. J. F. Hughes and J. M. Smith. 1,884,706; Oct. 25.
Aircraft. B. J. E. Krook and J. Hardon. 1,883,970; Oct. 25.
Aircraft. H. F. Pitcairn. 1,884,847; Oct. 25.
Aircraft. H. F. Pitcairn and J. de la Cierva. 1,884,849; Oct. 25.
Aircraft and operating the same. J. de la Cierva. 1,884,596; Oct. 25.
Aircraft device. H. F. Pitcairn. 1,884,848; Oct. 25.
Aircraft having rotative wings. J. de la Cierva. 1,884,599; Oct. 25.
Air preheater. H. H. Dow. 1,884,617; Oct. 25.
Alcohol and acetone and ethyl alcohol, Producing butyl. C. Haner and O. Gamper. 1,885,096; Oct. 25.
Alcohols, Manufacture of. A. J. van Peski. 1,884,405; Oct. 25.
Ammonia from fermentation mashes, Apparatus for the recovery of. L. E. Carlsmith, B. C. Boeckeler, and I. J. Krchma. 1,885,003; Oct. 25.
Ammonia from fermentation mashes, Recovery of. L. E. Carlsmith, B. C. Boeckeler, and I. J. Krchma. 1,884,561; Oct. 25.
Amplifier for use in conjunction with photo-electric devices, Thermionic. W. F. Tedham. 1,884,376; Oct. 25.
Amplifier, Magnetic. E. Peterson. 1,884,845; Oct. 25.
Anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,884,626; Oct. 25.
Anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,884,627; Oct. 25.
Animal trap. T. H. Alston. 1,884,499; Oct. 25.
Antenna. N. E. Lindenblad. 1,884,006; Oct. 25.
Antenna. C. J. Pagel and B. L. Kulick. 1,884,176; Oct. 25.
Antioxidant or age retarder for rubber compounds. L. B. Sebrell and A. M. Clifford. 1,884,885; Oct. 25.
Apparatus for carrying out reactions continuously in the liquid phase under increased pressure. K. H. Saunders. 1,884,880; Oct. 25.
Apparatus for receiving television pictures. F. Schröter. 1,884,287; Oct. 25.
Arc snuffer. E. Chapman. 1,884,572; Oct. 25.
Arc welding. T. E. Jerabek. 1,884,714; Oct. 25.
Article and assembling same, Enameled. O. H. Giles. 1,883,897; Oct. 25.
Article for use in arc welding. T. E. Jerabek. 1,884,712; Oct. 25.
Articles, Apparatus for handling treated. G. L. Cherry and L. F. Lamplough. 1,885,080; Oct. 25.
Articles from granular mixes, Forming. R. C. Benner, P. H. Walker, and W. G. Soley. 1,884,528; Oct. 25.
Asphalt penetration pavement and constructing the same, Emulsified. C. L. McKesson. 1,884,795; Oct. 25.
Asphaltic composition, Apparatus for preparing. J. S. Downard. 1,884,618; Oct. 25.
Assist grip. H. H. Ruhin. Re18,635; Oct. 25.
Atomizer, Liquid. J. T. Voorheis. 1,884,931; Oct. 25.
Autographic register. J. Q. Sherman. 1,884,307; Oct. 25.
Automatic telephone switch. W. S. Strowger. 1,884,910; Oct. 25.
Automobile. J. R. Hughes. Des. 88,083; Oct. 25.
Automobile. F. J. Pike. Des. 88,107; Oct. 25.
Automobile floor and toe board and the like. W. S. Vrooman. 1,884,415; Oct. 25.
Automobile heater. G. E. Blake. 1,884,538; Oct. 25.
Automobile passing light. W. A. Rush. 1,884,265; Oct. 25.

Bag closing machine, Filled. F. Lutz. 1,884,025; Oct. 25.
Bags and envelopes, Method of and apparatus for the manufacture of flat. A. Winkler and M. Dünnebier. 1,884,468; Oct. 25.
Balometer. C. W. Kiesel. 1,884,728; Oct. 25.
Bank, Savings. A. N. Smith. 1,884,314; Oct. 25.
Bar: *See*—
Coupling bar. Grate bar.
Barrel, Sand blast. F. J. Hull. 1,883,918; Oct. 25.
Barrier, Vehicle. L. J. White. 1,884,447; Oct. 25.
Barytic material for use as a sugar precipitant, Producing soluble. G. P. Meade and R. N. Traxler. 1,884,796; Oct. 25.
Base and support for moving picture machines, Adjustable. A. Kindelmann and E. Boecking. 1,884,732; Oct. 25.
Base for food mixer supports. E. R. Mross. 1,884,120; Oct. 25.
Base, Pole. E. W. Riemenschneider. 1,884,247; Oct. 25.
Base, Solid ankle foot. C. H. Davies. 1,884,588; Oct. 25.
Batteries, Manufacturing positive active material for the alkaline storage. E. Otsuka and E. Saegusa. 1,884,166; Oct. 25.
Battery ignition device. E. Klaiber. 1,883,951; Oct. 25.
Battery plates, Pasting. C. M. Angell. 1,884,502; Oct. 25.
Battery terminal. J. Shanks. 1,884,892; Oct. 25.
Beacon system. L. A. Hyland. 1,884,707; Oct. 25.
Bearing. R. R. Searles and F. Leister. 1,884,299; Oct. 25.
Bearing, Roller. F. Tyson. 1,884,395; Oct. 25.
Bearing, Roller. H. Vanderbeek. 1,884,925; Oct. 25.
Bearing surface. E. P. Polushkin. 1,884,208; Oct. 25.
Bearings, Lubrication of. M. Rall and H. Bischoff. 1,884,224; Oct. 25.
Bed, Invalid's. A. Comper. 1,884,577; Oct. 25.
Bed or like structure, Folding. M. F. Bayer. 1,883,867; Oct. 25.
Belt, Sorting and packing. A. O. Moe. 1,883,101; Oct. 25.
Belt tightener. A. R. Ridderstrom. 1,884,246; Oct. 25.
Berry, Bramble. P. W. Meredith. Pl. Pt. 39; Oct. 25.
Binder, Looseleaf. J. Schade. 1,884,278; Oct. 25.
Binder, Loose leaf. O. S. Swall. 1,885,018; Oct. 25.
Bit: *See*—
Detachable drill bit.
Bit, Detachable drill. C. W. De Witt. 1,884,601; Oct. 25.
Blade adjusting means, Propeller. J. Squires. 1,884,904; Oct. 25.
Blades for aircraft, Rotative sustaining. J. de la Cierva. 1,884,598; Oct. 25.
Blades, Making propeller. J. Squires. 1,884,903; Oct. 25.
Blanket. R. C. McIlroy. 1,885,015; Oct. 25.
Block: *See*—
Paving block. Turbine nozzle block.
Blooms for rolling, Preparation of. B. W. Dunham. 1,884,631; Oct. 25.
Board: *See*—
Visual information board.
Board and making the same, Mounted. K. L. Ozmun. 1,884,174; Oct. 25.
Boat, Collapsible. W. L. McGrath. 1,884,792; Oct. 25.
Boat, Pneumatic. W. E. Huffman. 1,884,705; Oct. 25.
Bodies, Treating photo-sensitive. C. Roehrich. 1,885,063; Oct. 25.
Body soldering apparatus, Can. J. F. Peters. 1,884,842; Oct. 25.
Boiler: *See*—
Radiant heat boiler. Superheater boiler.
Boiler. G. H. Hyde. 1,883,925; Oct. 25.
Boiler construction. H. E. Kieffel. 1,884,742; Oct. 25.
Boiler feed apparatus. V. E. McCoy. 1,884,051; Oct. 25.
Books, Arrival notice. J. B. Hannan. 1,884,669; Oct. 25.
Bottle. E. F. Fuerst. Des. 88,076; Oct. 25.
Bottle box. J. L. Lowman. 1,884,019; Oct. 25.
Bottle device, Nursing. W. D. Forbes. 1,884,643; Oct. 25.
Bottle, Fancy. F. E. A. W. Bergaud. Des. 88,067; Oct. 25.
Bottle or similar article. P. E. Lehman. Des. 88,098–101; Oct. 25.
Box: *See*—
Bottle box. Service box.
Metal box. Stuffing box.
Box. F. E. A. W. Bergaud. Des. 88,068; Oct. 25.
Box assembly, Flexible stuffing. E. O. Bennett. 1,885,046; Oct. 25.
Boxings for mattresses, cushions and the like. R. E. Reichelt. 1,884,234; Oct. 25.
Bracket for curtain rods. W. H. Toelle. 1,884,391; Oct. 25.
Bracket for curtain rods. R. D. W. Vroom. 1,884,414; Oct. 25.

Bracket for guard rails, Offset. E. K. Cole and F. E. Shumann. 1,883,879; Oct. 25.
Brake. R. S. Sanford. 1,884,275; Oct. 25.
Brake. J. W. Tatter. 1,884,373; Oct. 25.
Brake actuator. H. M. Bentley. 1,884,530; Oct. 25.
Brake actuator, Pneumatic. H. M. Bentley. 1,884,531; Oct. 25.
Brake and clutch control mechanism, Tractor transmission. R. T. Osman. 1,884,162; Oct. 25.
Brake mechanism. F. H. Ragan. 1,884,856; Oct. 25.
Brake testing device for motor vehicles. C. F. Rossetter. 1,884,261; Oct. 25.
Brazing. W. Noble. 1,884,141; Oct. 25.
Bread slicing machine. I. C. Gellman. Des. 88,078; Oct. 25.
Bread slicing machine. H. Stukart. 1,884,912; Oct. 25.
Breaker, Relay and circuit. L. A. Gebhard. 1,884,654; Oct. 25.
Brine, Making frozen. D. K. Warner. 1,884,428; Oct. 25.
Broiler, Charcoal. C. L. Kingsbaker. 1,883,946; Oct. 25.
Bromine, Purification of. G. F. Dressel. 1,885,029; Oct. 25.
Burner structure. S. J. Lonergan. 1,884,764; Oct. 25.
Brush attachment for suction cleaner nozzles. E. F. Martinet. 1,884,044; Oct. 25.
Brush for electrical machines. R. L. Seabury and L. W. Murray. 1,884,298; Oct. 25.
Brush for washing automobiles. I. J. Lowder. 1,884,018; Oct. 25.
Building construction. L. Kirschbraum. 1,884,740; Oct. 25.
Building construction. C. D. Willson. 1,884,462; Oct. 25.
Building element, Metallic. J. A. Bohnsack. 1,883,870; Oct. 25.
Bumper, Door. J. T. Atwood. 1,884,505; Oct. 25.
Bumper, Door. S. B. Atwood. 1,884,506; Oct. 25.
Burner: *See*—
Fuel burner.
Burner. J. E. Miller. 1,884,083; Oct. 25.
Burner control, Electrically operated fluid fuel. I. E. McCabe. 1,884,045; Oct. 25.
Burrs of welded metal tubing, Means to reduce the. J. F. Windsor. 1,884,467; Oct. 25.
Bus and switch station, Electrical. D. R. Davies. 1,883,881; Oct. 25.
Cabinet, Kitchen. F. Virchow. 1,884,412; Oct. 25.
Cabinet, Stove. F. J. Baker. 1,885,041; Oct. 25.
Calcium-magnesium-chloride product and making same. E. O. Barstow and S. B. Heath. 1,884,522; Oct. 25.
Calculating and card printing and perforating machine, Combined. N. W. Perkins. 1,884,189; Oct. 25.
Camera, Moving picture. L. Lasowsky. 1,883,987; Oct. 25.
Camera, Photographic. F. H. Owens. 1,884,169; Oct. 25.
Camera shutter. L. W. Lessler. 1,883,998; Oct. 25.
Can: *See*—
Key opening can.
Can heading and sealing machine. H. S. Hogan. 1,884,690; Oct. 25.
Can tester. M. E. Widell. 1,884,942; Oct. 25.
Can washing machine. C. F. McEwan. 1,884,052; Oct. 25.
Candy bar. A. Reiche. Des. 88,109; Oct. 25.
Cap, Hub. F. R. Reutter. 1,884,238; Oct. 25.
Cap, Radiator. W. Nelson. 1,884,132; Oct. 25.
Caps, Apparatus for forming sheet metal. G. R. Jeneson. 1,884,708; Oct. 25.
Car heating system. W. L. Garland. 1,883,896; Oct. 25.
Car tripper. E. G. Morgan. 1,884,111; Oct. 25.
Carbon dioxide, Centrifugal method and apparatus for making solid. J. D. Small. 1,884,313; Oct. 25.
Carbon dioxide gaseous mixtures, Method of and apparatus for controlling. D. H. Killeffer. 1,883,940; Oct. 25.
Carbon dioxide gaseous mixtures, Method of and apparatus for standardizing. D. H. Killeffer. 1,883,941; Oct. 25.
Carbonization device. F. L. Tenney. 1,884,879; Oct. 25.
Carburetor. A. Kazenmaier. 1,883,933; Oct. 25.
Carburetor. F. H. Smith. 1,884,815; Oct. 25.
Carburetor. W. Sturm. 1,884,350–60; Oct. 25.
Card. A. Thibeau. 1,884,381; Oct. 25.
Card punching machines, Indicating means for. W. W. Lasker. 1,883,985; Oct. 25.
Carnation. W. Sim. Pl. Pt. 37; Oct. 25.
Carriage returning means, Automatic. W. W. Landsiedel. 1,883,979; Oct. 25.
Carriage structure, Baby. H. Perlmutter. 1,884,190; Oct. 25.
Carrier: *See*—
Baggage carrier.
Carrier for tin gas meters, Rocker shaft. N. J. Seibert and E. M. Kreidler. 1,884,888; Oct. 25.
Carrier for valuables. E. Sperling. 1,884,328; Oct. 25.
Carrier, Ice cream cone. S. J. Davis. 1,884,970; Oct. 25.
Carton, Egg. A. Retzer. 1,884,236; Oct. 25.
Cases of engines, apparatus for cleaning lubricant. W. L. Osborne. 1,884,819; Oct. 25.
Cash register. F. L. Fuller. 1,883,894; Oct. 25.
Casing, Camera. W. D. Teague. Des. 88,116; Oct. 25.
Casing head. A. Boynton. 1,884,551; Oct. 25.
Casing head equipment for pneumatic swabs. N. H. Ricker. 1,884,245; Oct. 25.
Caster, Heavy duty. W. H. Noelting. 1,884,142; Oct. 25.
Casting apparatus and method. J. Schmeller, sr. 1,885,039; Oct. 25.
Casting backing. S. J. Krivig. 1,883,909; Oct. 25.
Casting machine. J. V. Turner. 1,884,394; Oct. 25.
Catalytic process for hydrolyzing organic halides. R. L. Jenkins and J. F. Norris. 1,884,710; Oct. 25.
Cathode, Thermionic. G. P. Halliwell. 1,883,898; Oct. 25.
Celluloid and the like, Products of. W. Mendel. 1,884,068; Oct. 25.
Cellulose acetate composition. W. R. Webb and H. T. Clarke. 1,884,433; Oct. 25.
Cellulose and derivatives thereof, Treatment of. H. Dreyfus. 1,884,629; Oct. 25.
Cellulose ester material and product thereof, Partial saponification of. C. Dreyfus and H. Platt. 1,884,623; Oct. 25.
Cellulose nitro-acylate, Production of. C. J. Staud and C. E. Waring. 1,884,338; Oct. 25.
Cellulose organic derivative composition of matter containing B-ethoxy ethyl lactate. H. B. Smith. 1,884,318; Oct. 25.
Cellulosic composition of matter containing diethyl phthalate and ortho-cresyl para-toluene sulphonate. C. J. Staud. 1,884,337; Oct. 25.
Centering device. G. F. Couch. 1,884,581; Oct. 25.
Ceramics, Producing marble effects in. E. A. Stewart. 1,884,346; Oct. 25.
Chain. E. J. McIlvried. 1,884,056; Oct. 25.
Chain riveting machine. C. E. Wertman. 1,884,443; Oct. 25.
Chain tightener. A. P. McLean. 1,884,057; Oct. 25.
Chair. A. E. Ronk and A. J. Overholt. 1,884,257; Oct. 25.
Charge forming device. F. E. Aseltine. 1,884,962–3; Oct. 25.
Chassis for electrical apparatus. M. Flaherty. 1,883,893; Oct. 25.
Chest: *See*—
Marine sea chest.
Chromium plating apparatus. A. J. Zimniewicz and A. F. Cox. 1,884,493; Oct. 25.
Chuck. A. E. Hamilton. 1,885,095; Oct. 25.
Chuck mechanism. H. C. Johansen. 1,884,717; Oct. 25.
Cigarette package and opening device therefor. R. L. Bontin. 1,884,545; Oct. 25.
Cigarette, Self-lighting. D. Morris. 1,884,806; Oct. 25.
Circuit controller. A. B. Rypinski. 1,884,877; Oct. 25.
Circuit for electron discharge devices. I. R. Weir. 1,884,439; Oct. 25.
Clamp: *See*—
Meat clamp.
Clamp arrangement, Lamp door. C. A. Michel. 1,884,076; Oct. 25.
Clamps for use in manufacturing welded tanks, Welding. V. C. Norquist. 1,884,144; Oct. 25.
Clay, Treating. C. V. Zoul. 1,884,954; Oct. 25.
Cleaner: *See*—
Convertible suction cleaner. Surface cleaner.
Suction cleaner. Vacuum cleaner.
Clinker extractor. C. Biohm, jr. 1,884,541; Oct. 25.
Clock driving mechanism. A. F. Poole. 1,884,853; Oct. 25.
Clock, Program. D. D. Snow. 1,884,322; Oct. 25.
Clock system, Electric. S. Keilien. 1,884,723; Oct. 25.
Clock, thermometer and thermostat, Combined. J. W. Gosling. Des. 88,082; Oct. 25.
Closure. E. O. Loeber. 1,884,763; Oct. 25.
Closure, Container. H. M. Nicholls. 1,884,813; Oct. 25.
Closure, Milk bottle. W. A. Schollmeyer. 1,884,883; Oct. 25.
Closure ring for bearings. L. C. Houston. 1,883,916; Oct. 25.
Closures, Making friction. J. M. Hothersall. 1,884,699; Oct. 25.
Clutch. Z. C. Bradford. 1,883,872; Oct. 25.
Clutch means for hand brakes. H. J. Lounsbury. 1,884,016; Oct. 25.
Closures, Making friction. J. M. Hothersall. 1,884,699; Oct. 25.
Clutch, Overrunning. F. R. Krause. 1,883,906; Oct. 25.
Coal and air to a furnace, Apparatus for feeding pulverized. E. H. Tenney. 1,884,878; Oct. 25.
Coal, Distillation of. J. E. Louttit and E. H. Records. 1,884,017; Oct. 25.
Coil, Ignition. H. L. Hartzell. 1,883,905; Oct. 25.
Coil winding machine. J. J. Vienneau. 1,884,409; Oct. 25.
Coke oven recovery system, By-product. S. P. Miller. 1,884,084; Oct. 25.
Coke, Producing. F. W. Steere. 1,884,339; Oct. 25.
Column for a weighing scale. C. H. Jacobson. Des. 88,085; Oct. 25.
Combustion, Method and apparatus for regulating. G. W. Smith. 1,884,897; Oct. 25.
Commutating device for dynamo-electric machines. L. R. Ludwig and J. Slepian. 1,884,021; Oct. 25.
Composition, Coating. W. W. Lewers and G. D. Patterson. 1,885,024; Oct. 25.
Composition, Coating. G. D. Patterson. 1,885,025–7; Oct. 25.

Composition for removing surface finishes. D. F. Othmer. 1,884,164; Oct. 25.
Composition for selectively removing top coatings. B. N. Lougovoy. 1,884,768; Oct. 25.
Composition intended for coating, decorating, and printing wood, metal, paper, cloth and other surfaces. T. F. Bradley. 1,884,553; Oct. 25.
Composition of matter and preparing the same. E. O. Rhodes and F. D. Hager. 1,884,240; Oct. 25.
Compressor. W. J. Rouleau. 1,884,876; Oct. 25.
Compressor and gas engine, Combined air. A. F. Michlun. 1,884,077; Oct. 25.
Compressor unit, Rotary. E. F. Hubacker. 1,884,702; Oct. 25.
Computing machine. F. A. Hart. 1,883,901; Oct. 25.
Condenser, Automobile. R. C. Pratt. 1,884,213; Oct. 25.
Condenser, Electric. A. Kazenmaier and W. Dorn. 1,883 932; Oct. 25.
Condenser, Electric. P. C. Rawls. 1,884,229; Oct. 25.
Connecting rod construction. J. A. McCormick. 1,884,050; Oct. 25.
Connection, Resilient. J. M. MacLean. 1,884,780; Oct. 25.
Consistency responsive device. S. E. Meyers. 1,884,075; Oct. 25.
Container. H. M. Dillhoefer, jr. 1,884,602; Oct. 25.
Container. J. Dister. 1,884,613; Oct. 25.
Container. W. M. Holloway. 1,884,691; Oct. 25.
Container assembling machine. J. M. Hothersall. 1,884,698; Oct. 25.
Container, Cigarette. J. W. Maddox. 1,884,030; Oct. 25.
Container, Display card. A. H. Galbraith. 1,884,971; Oct. 25.
Container for liquids, Sterilizing. G. A. Krause. 1,883,967; Oct. 25.
Container, Group. L. H. Scurlock. Des. 88,110–12; Oct. 25.
Container, Hood capping. W. L. Wright and L. D. Pierce. 1,884,952; Oct. 25.
Containers, Accessory for. F. Wolf. 1,884,472; Oct. 25.
Containers, Cleaning lubricant. W. L. Osborne. 1,884,820; Oct. 25.
Containers with liquid, Filling. A. R. Thompson. 1,884,916; Oct. 25.
Control apparatus for electric signs. F. E. J. Wilde. 1,884,454; Oct. 25.
Control device, Automatic. K. Schweizer. 1,884,294; Oct. 25.
Control for oil burning apparatus. H. S. Rogers and R. Raddatz. 1,884,256; Oct. 25.
Control switch. La V. L. Mortesen. 1,884,117; Oct. 25.
Control system. T. P. Kirkpatrick. 1,883,948; Oct. 25.
Control system, Compass. C. L. Hill. 1 885,098; Oct. 25.
Control, System of. E. Cannon. 1,885,077; Oct. 25.
Controlling mechanism, Fluid-pressure controlled. O. C. Schroeder. 1,884,286; Oct. 25.
Convertible suction cleaner. F. Riebel, jr. 1,884,871; Oct. 25.
Converting sound vibrations into electrical vibrations, Apparatus for. H. F. Olson. 1,885 001; Oct. 25.
Conveyer. N. C. McGinnis. 1,884,054; Oct. 25.
Conveyer. H. H. Morgan. 1,884,112; Oct. 25.
Conveying mechanism. R. O. Stokes. 1,885,064; Oct. 25.
Cooler. J. Newmier. 1,884,138; Oct. 25.
Cords and braids, Forming composite. W. Mendel. 1,884,069; Oct. 25.
Corn, Processing. O. S. Sells. 1,884,300; Oct. 25.
Corrosion inhibition. J. E. McConkie and R. H. Lueck. 1,884,790; Oct. 25.
Cotton cleaning machine. F. E. Noisworthy. 1,884,815; Oct. 25.
Counter for hens, Egg. J. Bechtold. 1,885,072; Oct. 25.
Coupler. S. M. Chase. 1,885,079; Oct. 25.
Coupling: *See*—
Hydraulic coupling.
Coupling bar. F. O. Snow, jr. 1,884,323; Oct. 25.
Coupling for transmission gearing. J. P. Johnson. 1,884,976; Oct. 25.
Coupling, Hydraulic. J. D. Baldwin, jr. 1,885,042; Oct. 25.
Cover for tank cars, Dome. J. L. Cole. 1,883,880; Oct. 25.
Cover, Mattress-supporting spring. W. P. Rylander. 1,884,270; Oct. 25.
Cover or the like, Pillow. M. W. Berlfein. Des. 88,070; Oct. 25.
Crane, Traveling. B. F. Fitch. 1,884,641; Oct. 25.
Crib. J. H. Bradley. 1,884,552; Oct. 25.
Cribbing. G. W. Powers. 1,884,854; Oct. 25.
Crossing protection, Highway. L. E. Spray. 1,884,329; Oct. 25.
Crusher roll construction. G. E. Smith. 1,884,316; Oct. 25.
Crushing machinery. W. A. Battey. 1,884,523; Oct. 25.
Crushing machinery. G. W. Borton. 1,884,544; Oct. 25.
Cultivator, Rotary hoe. G. E. Karl. 1,884,720; Oct. 25..
Cushion: *See*—
Drawing press hydraulic cushion.
Cushion, Drawing press hydraulic. J. M. Hothersall. 1,884,700; Oct. 25.
Cushioning mechanism. D. S. Barrows. 1,884,516–17; Oct. 25.
Cushioning mechanism. D. S. Barrows. 1,884,520; Oct. 25.
Cushioning mechanism. F. G. Suckow. 1,884,913; Oct. 25.
Cutter: *See*—
Glass cutter. Milling cutter.
Cutter for punch presses and the like, Scrap. G. H. Leland. 1,883,996; Oct. 25.
Cutting device. F. W. Temple. 1,884,377; Oct. 25.
Cynnogen chloride and substituted guanidines, Production of. G. C. Bailey. 1,884,509; Oct. 25.
Cylinders, Electroplating metallic. E. S. Ballard. 1,884,512; Oct. 25.
Dam. A. V. Karpov. 1,885,057; Oct. 25.
Damper control. H. Wessels. 1,884,987; Oct. 25.
Davenport. J. Gombar. Re18,636; Oct. 25.
Daylight developing apparatus. G. A. Magnus. 1,884,781; Oct. 25.
Delivery stripper finger. B. F. Upham. 1,884,397; Oct. 25.
Dental anchorage. S. Myerson. 1,884,128; Oct. 25.
Dental swaging press. S. J. Krivig. 1,883,968; Oct. 25.
Depolarizers, Making. A. J. Briggs. 1,884,554; Oct. 25.
Derivatives of cellulose compositions of low inflammability containing cinnamic acid dibromide. C. Dreyfus and J. Scheidegger. 1,884,619; Oct. 25.
Desk and seat, Combined. G. H. Abbott. 1,884,497; Oct. 25.
Desk set. S. A. Neidich. 1,884,130; Oct. 25.
Device for distribution of accounts. F. A. Niemann and K. F. Ziehm. 1,884,814; Oct. 25.
Device for delivering fluid under pressure. W. Pool. 1,884,852; Oct. 25.
Device or appliance for women's wear or use. Z. M. Richards. 1,884,243; Oct. 25.
Dibenzoyl-alpha-alpha-dianthrimides, Production of. W. A. Adamson and A. J. Wuertz. 1,884,498; Oct. 25.
Dipper stick foot piece. A. E. Holcomb. 1,883,915; Oct. 25.
Dish and similar article, Covered. H. J. McMaster. 1,884,058; Oct. 25.
Dish washing machine. R. Pauly. 1,884,180–1; Oct. 25.
Disk, turbine bucket wheel or the like, Rotary. E. L. Robinson. 1,884,252; Oct. 25.
Dislodging device. W. H. Wineman. 1,884,946; Oct. 25.
Dispenser of various substances, such as liquids, powders, granulates. R. H. Pershall. 1,884,840; Oct. 25.
Dispensing apparatus for lubricating oils. R. E. Nest. 1,884,134; Oct. 25.
Dispensing device. I. N. Stoops. 1,884,350; Oct. 25.
Display device. W. I. Block. 1,884,540; Oct. 25.
Dolly and return trackway. H. Kramer. 1,883,964; Oct. 25.
Door bumper and the like. I. D. Perry. 1,884,828–33; Oct. 25.
Door bumper and the like. I. D. Perry. 1,884,835–8; Oct. 25.
Door pillar and the like. I. D. Perry. 1,884,834; Oct. 25.
Door pillar and the like. I. D. Perry. 1,884,998; Oct. 25.
Door stop and the like. I. D. Perry. 1,884,827; Oct. 25.
Door stop and the like. I. D. Perry. 1,884,997; Oct. 25.
Draft rigging. D. C. Davis. 1,884,504; Oct. 25.
Drainer, Flower pot. E. Pilkington. 1,884,204; Oct. 25.
Draw works. W. A. Ross. 1,884,875; Oct. 25.
Drawing compound and the like. C. Kocour. 1,884,749; Oct. 25.
Dress. B. Casabona. Des. 88,073; Oct. 25.
Dress. P. E. Fields. Des. 88,075; Oct. 25.
Dress. J. Kohn. Des. 88,097; Oct. 25.
Dress. A. S. Simpson. Des. 88,114; Oct. 25.
Dress, Ensemble. H. Shacter. Des. 88,113; Oct. 25.
Dress, Uniform. O. A. Berman. 1,885,047; Oct 25
Drier: *See*—
Hair drier. Rotary drum drier.
Drier arrangement, Steam. C. H. True. 1,884,393; Oct. 25.
Drier for fiber board. F. S. Farley. 1,883,887; Oct. 25.
Drier, Rotary drum. M. J. Kermer. 1,884,727; Oct. 25.
Drill: *See*—
Rock drill.
Drill. L. M. Pearce and W. L. Church. 1,884,182; Oct. 25.
Drill head, Multiple-. H. R. Krueger. 1,884,752; Oct. 25.
Drilling apparatus. E. G. Gartin. 1,884,650; Oct. 25.
Drilling apparatus. H. C. Johansen. 1,884,716; Oct. 25.
Drilling machine. J. W. Lee. 1,883,993; Oct. 25.
Drilling mechanism. E. G. Gartin. 1,884,648–9; Oct. 25.
Drilling method and automatic control therefor, Hydraulic. K. C. Sclater and E. O. Bennett. 1,884,297; Oct. 25.
Drip strip. E. J. Welch. 1,884,441; Oct. 25.
Drive for electric lighting systems and other purposes, Car axle. C. F. Gerlinger. 1,884,657; Oct. 25.
Drive for the speed governor of a prime mover. I. C. Martin. 1,884,043; Oct. 25.
Drive, Front wheel. W. C. Wolforth. 1,884,474; Oct. 25.
Drive mechanism for worm drive shovels, Traction. H. E. Brey. 1,883,874; Oct. 25.
Dryer, Shoe dye. F. Jones. 1,884,978; Oct. 25.
Dummy, Football blocking. B. F. Oakes. 1,884,816; Oct. 25.
Duplicator. E. G. McCalmont. 1,884,788; Oct. 25.

Dye and making same, Pyranthrone vat. W. M. Murch. 1,884,122; Oct. 25.
Dye, Producing sulphur. S. J. Lloyd and G. D. Palmer, jr. 1,884,762; Oct. 25.
Dyestuffs of the anthraquinone series, Easy soluble. S. von Allmen. 1,885,065; Oct. 25.
Dynamo-electric machine. E. S. Henningsen. 1,883,912; Oct. 25.
Economizer, Longitudinal flow. C. E. Lucke. 1,884,777; Oct. 25.
Educational device. W. E. Hendrie. 1,884,676; Oct. 25.
Electric control system and apparatus. F. M. Slough. 1,885,053; Oct. 25.
Electric discharge tube. C. L. Davis. 1,884,591; Oct. 25.
Electric heater. C. L. Ipsen and A. N. Otis. 1,883,927; Oct. 25.
Electric heating element. E. L. Wiegand. 1,884,451; Oct. 25.
Electric machine and cooling same, Dynamo. E. Chapman. 1,884,573; Oct. 25.
Electric station. E. S. Corneliussen, called Cornell, H. D. Freitag, and P. Sporn. 1,884,579; Oct. 25.
Electric storage battery. F. Menzel. 1,884,071; Oct. 25.
Electric switch. E. Chapman. 1,884,569; Oct. 25.
Electric switch. H. E. Norviel. 1,884,147; Oct. 25.
Electric switch. H. Steinhart. 1,884,341; Oct. 25.
Electric truck switch. C. O. Seaton. 1,884,884; Oct. 25.
Electric wave transmission system. R. A. Heising. 1,884,675; Oct. 25.
Electric wave transmission system. A. G. Jensen. 1,884,711; Oct. 25.
Electrical apparatus. P. Le B. Spencer. 1,884,327; Oct. 25.
Electrical apparatus and making terminal strips therefor. C. H. Thordarson. 1,884,385; Oct. 25.
Electrical controls, Adjustable means for mounting. I. E. McCabe. 1,884,046; Oct. 25.
Electrical cord terminal. N. H. Watts. 1,884,432; Oct. 25.
Electrical generating system. W. E. Bower. 1,884,547; Oct. 25.
Electrical precipitation. S. P. Miller. 1,884,085–6; Oct. 25.
Electrical prospecting apparatus. T. Zuschlag. 1,884,496; Oct. 25.
Electrical regulating system. M. Jackwirth. 1,883,928; Oct. 25.
Electrical switching station. E. S. Corneliussen, called Cornell. 1,884,580; Oct. 25.
Electrical system. F. M. Slough. 1,885,048; Oct. 25.
Electricity, Detection of. H. E. Woodring. 1,884,950; Oct. 25.
Electrode, Welding. T. E. Jerabek. 1,884,715; Oct. 25.
Electron emitting surfaces, Coated. H. J. Miller. 1,884,082; Oct. 25.
Electro-thermal apparatus. T. J. Smulski. 1,885,052; Oct. 25.
Electro-thermic indicator. T. Kalle. 1,885,049; Oct. 25.
Elements, Self-locking coupled screw. W. E. Hoke. 1,884,973; Oct. 25.
Emulsions and making same, Asphaltic. L. G. Thompson. 1,884,919; Oct. 25.
Emulsions, Making. M. G. Gregg. 1,884,664; Oct. 25.
Engine: *See*—
Internal-combustion engine.
Engines, Automatic means for blowing up. C. W. Ploen. 1,884,205; Oct. 25.
Esters and manufacture thereof, Inorganic cellulose. G. W. Miles and C. Dreyfus. 1,884,802; Oct. 25.
Evaporator. M. J. Kermer. 1,884,726; Oct. 25.
Evaporator. J. McKeague. 1,884,793; Oct. 25.
Evaporator top. C. G. Hawley. 1,883,908; Oct. 25.
Exerciser. F. C. Treat. 1,884,392; Oct. 25.
Expander, Piston skirt. R. R. Teetor. 1,885,038; Oct. 25.
Extensions, Airway elbow attachment for hose. D. B. Replogle. 1,884,864; Oct. 25.
Extensometer. F. F. Metzger. 1,884,073; Oct. 25.
Extractor: *See*—
Clinker extractor. Fruit juice extractor.
Fabric containing cellulose esters, Treatment of. C. Dreyfus and H. Platt. 1,884,620; Oct. 25.
Fabric containing cellulose esters, Treatment of. C. Dreyfus and G. Schneider. 1,884,622; Oct. 25.
Fabric or the like from vegetable fibrous materials, Production of soft. F. Thies. 1,885,019; Oct. 25.
Fabric, Treatment of. C. Dreyfus and H. Platt. 1,884,621; Oct. 25.
Fan for pneumatic blowers and the like. S. O. Melos. 1,884,067; Oct. 25.
Faucet. J. Pollock. 1,884,207; Oct. 25.
Faucet closer for bath tubs, Automatic. H. Moeser. 1,883,102; Oct. 25.
Feed mechanism. R. B. Woodcock and T. A. Kestell. 1,884,949; Oct. 25.
Feed water regulator. C. H. Armstrong. 1,884,504; Oct. 25.
Feed water regulator. V. V. Veenschoten. 1,884,930; Oct. 25.
Feeders, Control mechanism for glass. A. M. Algeo and J. W. Ross. 1,884,967; Oct. 25.
Feeds, Manufacture of live stock. C. R. Mabee. 1,884,779; Oct. 25.
Fender and head lamp, Combined automobile. A. J. Baker. Des. 88,064; Oct. 25.
Fiber product, Rot proof. D. M. Sutherland, jr. 1,884,367; Oct. 25.
Fibrous product, Waterproof. H. L. Levin. 1,884,761; Oct. 25.
Fibrous product, Waterproofed. G. J. Manson. 1,884,038; Oct. 25.
Figarette. N. Paganello. 1,884,982; Oct. 25.
File. A. Peiseler. 1,884,185; Oct. 25.
Filler, Automatic bee-comb. D. E. Lhommedieu. 1,885,030; Oct. 25.
Film and product thereof, Treating photographic. K. C. D. Hickman. 1,883,914; Oct. 25.
Film gate. A. Dina. 1,884,604; Oct. 25.
Film gate lock. A. Kindelmann and E. Boecking. 1,884 729; Oct. 25.
Film guide for motion picture projection machines, Resilient. A. Dina. 1,884,609; Oct. 25.
Film guiding mechanism for sound recording and reproducing apparatus. F. H. Owens. 1,884,168; Oct. 25.
Film, Lubricating photographic. K. C. D. Hickman. 1,883,913; Oct. 25.
Film with antihalation coating, Photographic. C. J. Malm. 1,884,035; Oct. 25.
Films in colors to disappear, Method and apparatus for causing the reticulation and cloudy effects in goffered. I. Kitroser. 1,884,994; Oct. 25.
Filter. D. D. Dooley. 1,884,615–16; Oct. 25.
Finish remover composition adapted to remove nitrocellulose coatings. C. Ellis. 1,884,632; Oct. 25.
Finish remover containing a corrective of anti-penetration, Heavy bodied. B. N. Lougovoy. 1,884,769; Oct. 25.
Finish remover containing chlorinated hyrocarbon wax solvent. B. N. Lougovoy. 1,884,774; Oct. 25.
Finish remover containing chlorinated hydrocarbons, nonbenzolic. B. N. Longovoy. 1,884,773; Oct. 25.
Finish remover containing methyl acetate. B. N. Lougovoy. 1,884,770; Oct. 25.
Finish remover, Low wax nonhydrocarbon. B. N. Lougovoy. 1,884,772; Oct. 25.
Fire door apparatus. C. D. Patterson and M. K. Moore. 1,884,824; Oct. 25.
Fire shutter, Screened and ventilating. A. Dina. 1,884,608; Oct. 25.
Fish lure. R. McGarraugh. 1,884,053; Oct. 25.
Flashing for roofs. W. R. Rose. 1,884,259; Oct. 25.
Flashlight. J. F. Moran. 1,884,108; Oct. 25.
Flask: *See*—
Holder flask.
Flask, Molder's. G. H. Kramer. 1,883,963; Oct. 25.
Flavoring materials, Apparatus for dispensing. G. S. Suppiger and C. Alexander. 1,884,365; Oct. 25.
Flexible joint. J. C. Williams. 1,884,944; Oct. 25.
Flexible suspension for rope hoisting equipment and in particular for mine cage winding. F. Otto. 1,884,981; Oct. 25.
Floor cushioning means, Car. T. H. Symington. 1,884,372; Oct. 25.
Floor duct system, Under. H. S. Walker. 1,884,424; Oct. 25.
Fluid analysis. G. W. Smith. 1,884,896; Oct. 25.
Fluid distribution systems, Mechanism for. B. L. P. Plantin. 1,884,983; Oct. 25.
Fluid separator. R. W. Andrews and G. D. Bradshaw. 1,884,501; Oct. 25.
Flyer for spinning machines and the like. H. E. Herr. 1,884,684; Oct. 25.
Folder for sewing machines. R. J. Sailer. 1,884,271; Oct. 25.
Folding table. L. R. Vinding. 1,884,411; Oct. 25.
Food freezing. D. K. Warner. 1,884,429; Oct. 25.
Footwear construction, Pneumatic. J. C. Keller. 1,884,725; Oct. 25.
Form for shaping and drying hosiery and the like. J. W. Dennis. 1,883,883; Oct. 25.
Form, Shaping and drying. C. H. Reumann and H. H. Wigglesworth. 1,884,237; Oct. 25.
Forms, Mechanism for feeding and aligning multiple printed. R. A. Lake. 1,884,760; Oct. 25.
Frame: *See*—
Picture frame.
Freight handling apparatus. H. W. Faus. 1,884,036; Oct. 25.
Front, Building. S. Specter. Des. 88,108; Oct. 25.
Fruit drying apparatus. A. R. and F. M. Stevens. 1,884,344; Oct. 25.
Fruit duff and preparing same. A. C. Turner. 1,884,923; Oct. 25.
Fruit juice extractor. C. H. Goudiss, jr. 1,885,011; Oct. 25.
Fruits, Process for the removal of natural oils, wax, and spray residues from. R. H. Robinson. 1,884,966; Oct. 25.
Fuel burner. C. J. Sherwood. 1,884,894; Oct. 25.
Fuel burner. W. A. Woodeson. 1,885,067; Oct. 25.
Fuel humidifying device. C. A. Von Blix. 1,884,413; Oct. 25.
Fuel, Manufacture of motor. R. P. Russell. 1,884,269; Oct. 25.
Fume arrester for cupola furnaces. G. E. McCloskey. 1,884,048; Oct. 25.
Fume arrester for cupola furnaces. S. P. Miller. 1,884,088; Oct. 25.
Fume hood for laboratory tables. E. H. Sheldon. 1,884,304; Oct. 25.

Furnace. H. H. Baumgartner. 1,884,524; Oct. 25.
Furnace charging device. C. R. Kuzell. 1,883,976; Oct. 25.
Furnace front wall. W. Busfield, jr. 1,885,075; Oct. 25.
Furnace tilting mechanism. T. A. Feeban. 1,884,637; Oct. 25.
Furniture, Apparatus for casting type. A. G. Stevenson. 1,884,345; Oct. 25.
Game apparatus. C. M. Gravatt. 1,885,036; Oct. 25.
Game board. H. P. Troendly, F. Pareira. Des. 88,117; Oct. 25.
Garment. F. Ayers. Des. 88,065; Oct. 25.
Garment. J. L. Orent. 1,884,159; Oct. 25.
Garment pressing machine. F. E. Baker. 1,883,862; Oct. 25.
Garment, Protective. M. G. Schneider. 1,884,284; Oct. 25.
Garments, Apparatus for forming and finishing scalloped edges of. S. Dowinsky. 1,885,056; Oct. 25.
Gas burning heater. A. L. Kline and H. B. Harrington. 1,884,746; Oct. 25.
Gasket. C. P. Randolph. 1,884,226; Oct. 25.
Gasket. M. S. Sanders. 1,884,879; Oct. 25.
Gasolene and mode of preparing same, Non-gumming. E. I. Sollmann. 1,884,899; Oct. 25.
Gate operating mechanism. A. Dina. 1,884,606; Oct. 25.
Gate structure, Rear. M. Standish. 1,884,334; Oct. 25.
Gauge. T. J. Smulski. 1,885,051; Oct. 25.
Gauge for typesetting machines, Marginal. F. H. Poeppelmeier. 1,884,851; Oct. 25.
Gear, Draft. E. H. Blattner. 1,884,539; Oct. 25.
Gear lapping machine. C. H. Schurr. 1,884,202; Oct. 25.
Gear system, Steering. A. E. Weingartner. 1,884,437; Oct. 25.
Gear testing machine. F. T. Swain. 1,884,368; Oct. 25.
Gear, Trailer draft. W. John. 1,884,975; Oct. 25.
Generator: *See*—
Steam generator.
Generators, Regulating system for alternating current. M. C. Spencer. 1,884,902; Oct. 25.
Glass and making the same, Laminated. W. H. Moss and K. H. Crutchfield. 1,884,809; Oct. 25.
Glass apparatus for copying goffered films, Rotating. I. Kitroser. 1,884,996; Oct. 25.
Glass, Combined flashlight and reading. I. H. M. Bloch. 1,884,968; Oct. 25.
Glass cutter. C. J. Fancher. 1,884,635; Oct. 25.
Glass cutting machine. H. D. Hively and O. C. Natlls. 1,885,099; Oct. 25.
Glass feeding apparatus. T. Wardley. 1,884,427; Oct. 25.
Glass, Making laminated. C. Dreyfus. 1,884,624; Oct. 25.
Glass manufacture. W. L. Van Ness. 1,884,926; Oct. 25.
Glass puddler and feeder, Combined. S. G. Stuckey. 1,884,357; Oct. 25.
Governor, Centrifugal. A. Rehm, T. Wolff, and W. Walther. 1,884,233; Oct. 25.
Governor, Pump. V. V. Veenschoten. 1,884,929; Oct. 25.
Grader, Road. C. J. Moritz. 1,884,113; Oct. 25.
Grain harvesting machine. L. F. Moroney. 1,884,114; Oct. 25.
Graining process. L. V. Casto. 1,884,565–6; Oct. 25.
Grass cutting device. F. Broemme. 1,885,073; Oct. 25.
Grate. J. S. Thompson. 1,884,918; Oct. 25.
Grate bar. J. S. Thompson. 1,884,917; Oct. 25.
Grate, Fuel. J. J. Buckley. 1,884,557; Oct. 25.
Grids, Making. H. L. Beyer. 1,884,535; Oct. 25.
Grinding apparatus. C. H. Schurr. 1,884,293; Oct. 25.
Guard for vehicles. H. Raskin. 1,884,228; Oct. 25.
Gum inhibitor. W. S. Calcott and I. E. Lee. 1,884,559; Oct. 25.
Gun, Trap. G. Karr. 1,884,721; Oct. 25.
Hair curling apparatus and method. W. G. Shelton. 1,884,305; Oct. 25.
Hair drier. P. Kunian and J. Goldberg. 1,883,972; Oct. 25.
Hair pin. E. Sparke. 1,884,900; Oct. 25.
Hair waver. J. Sguerso. 1,884,891; Oct. 25.
Hair waver. B. A. Sterling. 1,884,343; Oct. 25.
Hair waving device. W. G. Shelton. 1,884,306; Oct. 25.
Handle: *See*—
Switch handle.
Handling machine. R. B. Stuckey. 1,884,356; Oct. 25.
Handsaw, Combination. F. W. Winter. 1,884,469; Oct. 25.
Hand wheel. J. E. Whitfield. 1,884,448; Oct. 25.
Hanger: *See*—
Pipe hanger.
Hanger for air-way cleaners, Hose pipe. D. B. Replogle. 1,884,870; Oct. 25.
Hardware, Double door. J. W. Crowell. 1,885,084; Oct. 25.
Harmonica device for playing two or more harmonicas. J. N. Numberg. 1,884,150; Oct. 25.
Harrow. A. B. Wilson. 1,884,463; Oct. 25.
Hawk, Plasterer's. H. J. Ziemann. 1,884,491; Oct. 25.
Header joint. R. M. Harris. 1,883,900; Oct. 25.
Hearing device. C. Fensky. 1,884,638; Oct. 25.
Heat dissipating device for refrigerating apparatus. H. B. Hull. 1,883,921; Oct. 25.
Heat exchange apparatus. A. B. Modine. 1,884,094; Oct. 25.
Heat exchange apparatus. J. A. Potter. 1,884,209; Oct. 25.
Heat exchange device. A. B. Modine. 1,884,095; Oct. 25.
Heat exchange device. A. B. Modine. 1,884,097; Oct. 25.
Heat exchange device. A. B. Modine. 1,884,099; Oct. 25.
Heat exchange device, Cast. A. B. Modine. 1,884,098; Oct. 25.
Heat exchanger. C. F. Beran. 1,884,532; Oct. 25.
Heat exchanger. J. A. Potter. 1,884,210; Oct. 25.
Heat exchanger baffle. W. S. Ogilvy. 1,884,156; Oct. 25.
Heat interchangers, Method and apparatus for making. G. R. Auld. 1,884,964; Oct. 25.
Heat transfer apparatus. E. F. Miller. 1,884,080; Oct. 25.
Heat transfer apparatus, Scale shedding. S. Brown. 1,884,555; Oct. 25.
Heat treatment system. H. E. Koch and M. Lowe. 1,884,748; Oct. 25.
Heater: *See*—
Automobile heater.
Electric heater.
Gas burning heater.
Portable hot water heater.
Water heater.
Heater and windshield warmer, Combined automobile. W. A. Tibbetts. 1,884,389; Oct. 25.
Heater for permanent waving. J. Sguerso. 1,884,890; Oct. 25.
Heater, Portable hot water. L. Emans. 1,884,634; Oct. 25.
Heating and cooling system for railway cars, Combined. J. Van Vulpen and E. A. Russell. 1,884,408; Oct. 25.
Heating apparatus. A. B. Modine. 1,884,100; Oct. 25.
Heating device. A. B. Modine. 1,884,096; Oct. 25.
Heating device for curling tongs, Electrical. A. Rehm. 1,884,232; Oct. 25.
High current electric switch. C. D. Ainsworth. 1,885,068; Oct. 25.
High-frequency oscillatory system. E. R. Hentschel. 1,884,679; Oct. 25.
Hinge and making it. V. Odquist. 1,884,818; Oct. 25.
Hoisting device. F. H. Schwerin. 1,884,296; Oct. 25.
Hoisting mechanism. R. C. Osgood. 1,884,821; Oct. 25.
Holder, Clock and mirror. J. B. Weir. 1,884,938; Oct. 25.
Holder, Coin. J. J. Reinbold. 1,884,235; Oct. 25.
Holder, Copy. C. Fensky and H. J. Readey. 1,884,639; Oct. 25.
Holder, Eraser. A. Pestel. 1,884,841; Oct. 25.
Holder, File. W. S. Graham. 1,884,661; Oct. 25.
Holder for paste tubes, Dispensing. L. H. Newell. 1,884,136; Oct. 25.
Holder for tables, Purse. C. Nett and P. Pauly. 1,884,135; Oct. 25.
Holder, Fuse. J. A. Wever. 1,884,445; Oct. 25.
Holder, Lingerie. O. Mahle. 1,884,031; Oct. 25.
Holder, Lipstick. L. L. Kole. 1,883,959; Oct. 25.
Holder, Portable electrode. E. Chapman. 1,884,570; Oct. 25.
Holder, Spool. A. J. L. Moritz. 1,884,805; Oct. 25.
Holder, Table electrode. E. Chapman. 1,884,570; Oct. 25.
Holder, Textile package. L. J. O'Dowd. 1,884,817; Oct. 25.
Holders, Inserting and securing objects in the open ends of. V. L. Oestnaes, R. W. Luce, and L. M. Merrill. 1,884,155; Oct. 25.
Honey uncapping machine. O. Meyer. 1,884,074; Oct. 25.
Hosiery. W. McC. Cameron and F. J. Williams. 1,884,560; Oct. 25.
Hospital table. F. Kusterle. 1,883,974; Oct. 25.
Hydraulic press. H. F. MacMillin. 1,884,060; Oct. 25.
Hydraulic system, Self-regulating. B. Sassen. 1,884,277; Oct. 25.
Hydroaeroplane. W. G. G. Weidinger. 1,884,435; Oct. 25.
Hydrocarbon, Refining. P. Zurcher. 1,884,495; Oct. 25.
Hydrocarbon treatment process and apparatus. H. T. Darlington. 1,884,586; Oct. 25.
Hydrocarbons of low boiling point from olefines, Production of liquid. A. Mittasch, W. Frankenburger, and F. Winkler. 1,884,093; Oct. 25.
Hydrocarbons, Treating. R. C. Osterstrom. 1,884,163; Oct. 25.
Hydrogen, Producing practically pure. G. Cicali. 1,885,059; Oct. 25.
Hydroquinone derivative. E. Klarmann and L. W. Gatyas. 1,883,952; Oct. 25.
Ice loading machine. G. L. Vail. 1,884,399; Oct. 25.
Ignition apparatus. H. Breitbart, E. Kurz, and W. Walther. 1,883,873; Oct. 25.
Ignition apparatus, Magneto. F. Allendorff. 1,884,959; Oct. 25.
Ignition apparatus, Magneto electric. F. Allendorff. 1,884,958; Oct. 25.
Ignition apparatus, Magneto-electric. E. Durst. 1,883,885; Oct. 25.
Ignition device. H. E. Norviel. 1,884,145; Oct. 25.
Ignition device. R. A. Wilkins. 1,884,457; Oct. 25.
Ignition system. P. B. Comer. 1,884,576; Oct. 25.
Illuminating device. M. Adams, R. E. Howe, and P. G. Nutting. 1,884,957; Oct. 25.
Impedances, Simulating mutual. C. F. Wagner. 1,884,419; Oct. 25.
Implement, Manually operated ground working. D. L. Dukes. 1,885,089; Oct. 25.
Impregnating process. J. Zavertnik, jr. 1,884,486; Oct. 25.

Incubator. R. M. Petersime. 1,884,843; Oct. 25.
Indicating apparatus. T. J. Smulski. 1,885,050; Oct. 25.
Indicating apparatus, Electrically operated. J. W. Anderson. 1,885,054; Oct. 25.
Indicating means, Synchronism. E. F. Carter. 1,885,078; Oct. 25.
Indicator. E. E. Marlin. 1,884,042; Oct. 25.
Indicator and register for automatic telephones, Number. W. Greenberg. 1,884,663; Oct. 25.
Indicator for continuous felt weighing scales, Graphic. J. Robert. 1,884,250; Oct. 25.
Indicator for vehicles, Direction. E. E. Lootens. 1,884,010; Oct. 25.
Induction process of graphitizing carbon. I. H. Derby. 1,884,600; Oct. 25.
Ingot mold. E. Schürer. 1,884,291; Oct. 25.
Insecticides, Making arsenical. J. F. Blyth and C. Ellis. 1,884,542; Oct. 25.
Insole-positioning means. A. R. Schoenky. 1,884,882; Oct. 25.
Insulating joint. J. Rah. 1,884,223; Oct. 25.
Interlocking construction for metal partition. J. A. Bohnsack. 1,883,871; Oct. 25.
Intermittent thermal switch. H. F. Löwenstein. 1,884,775; Oct. 25.
Internal combustion engine. I. S. Mosher. 1,884,119; Oct. 25.
Internal combustion engine. J. G. Vincent. 1,884,410; Oct. 25.
Internal combustion engine. A. A. Widmann. 1,844,450; Oct. 25.
Internal combustion engine. L. M. Woolson. 1,884,480; Oct. 25.
Internal combustion engine, Air cooled. W. F. Smith. 1,884,321; Oct. 25.
Ironing machine. L. A. Belmont. 1,885,044; Oct. 25.
Ironing press. F. E. Baker. 1,883,861; Oct. 25.
Ironing press. F. E. Baker. 1,883,863; Oct. 25.
Irrigator. A. H. Matlowsky. 1,884,786; Oct. 25.
Jack: *See*—
Vehicle jack.
Jar: *See*—
Rotary jar.
Jaws, Producing trap. F. E. Adams and C. E. Chesebro. 1,884,956; Oct. 25.
Joint: *See*—
Flexible joint.
Header joint.
Insulating joint.
Pipe joint.
Universal joint.
Joint for concrete pavements, Transverse. R. B. Gage. 1,884,647; Oct. 25.
Joint for furnaces, Expansion. S. H. Lanyon. 1,883,983; Oct. 25.
Jute fibers, Treating. J. R. Milson. 1,884,091; Oct. 25.
Keyboard mechanism for printing telegraph apparatus. H. L. Krum. 1,884,753; Oct. 25.
Keyboard mechanism for telegraph apparatus. S. Morton. 1,884,807; Oct. 25.
Key cutting machine. H. W. Devlin. 1,885,002; Oct. 25.
Key opening can. H. Hermani. 1,884,082; Oct. 25.
Knife, Asparagus. E. L. A. Morrow. 1,884,116; Oct. 25.
Knitting machine. R. H. Lawson and A. N. Cloutier. 1,883,990; Oct. 25.
Knitting machine attachment, Straight. K. R. Lieberknecht. 1,884,004; Oct. 25.
Knitting machine, Circular. G. F. Wagner. 1,884,420; Oct. 25.
Knitting machines, High splice attachment for circular. F. W. Robinson. 1,884,253; Oct. 25.
Label. E. I. Petersen. 1,885,031–3; Oct. 25.
Label for floor coverings. E. I. Petersen. 1,885,034; Oct. 25.
Lace. J. Dognin. Des. 88,138; Oct. 25
Lacquer, Nitrocellulose. A. Rogers. 1,884,255; Oct. 25.
Laminate insulation. D. M. Simmons. 1,884,311; Oct. 25.
Lamp. W. R. Young. Des. 88,137; Oct. 25.
Lamp, Arc. J. H. Wagenhorst. 1,884,417; Oct. 25.
Lamp, Signal. F. J. Loss. 1,884,014; Oct. 25.
Land leveling machine. H. C. Mignery. 1,884,078; Oct. 25.
Lasting machine. C. M. Bagshaw. 1,884,508; Oct 25.
Latch, Burial vault. E. W. Phillippe. 1,884,201; Oct. 25.
Latch, Jolt squeeze stripper. E. F. Oyster. 1 884,172; Oct. 25.
Lead alloys, Inhibiting the oxidation and hydration of. E. W. Fielding. 1,884,640; Oct. 25.
Lead, Apparatus for dezincing. J. Betterton. 1,884,533; Oct. 25.
Lead press. C. E. Bennett. 1,885,045; Oct. 25.
Leaf flipper. J. L. McMillan. 1,884,059; Oct. 25.
Leak preventing device. J. W. Tatter. 1,884,374; Oct. 25.
Ledge, Air-way cleaner supporting. D. B. Replogle. 1,884,868; Oct. 25.
Ledger account and statement file, Continuous. R. C. Roath. 1,884,249; Oct. 25.
Lens adjusting, shifting, and indicating mechanism. A. Kindelmann and E. Boecking. 1,883,943; Oct. 25.
Lens-holder for spectacle and eyeglass frames. C. G. Swart. 1,884,371; Oct. 25.
Lens shifting device. A. Kindelmann. 1,884,731; Oct. 25.
Lens shifting device. A. Kindelmann and E. Boecking. 1,884,733; Oct. 25.
Leucoindophenols of the carbazole type. F. Muth. 1,885,037; Oct. 25.
License tag and holder, Illuminated. F. J. McCormack. 1,884,040; Oct. 25.
Lift for automotive vehicles. F. W. Perry. 1,884,192; Oct. 25.
Light ray projector. A. Dina. 1,884,603; Oct. 25.
Light reflecting type. W. Grass. 1,884,662; Oct. 25.
Light-sensitive device. E. D. Wilson. 1,884,464; Oct. 25.
Lighter, Cigarette. H. Kotthoff. 1,883,962; Oct. 25.
Lighting switch. H. E. Norviel and W. E. Wikle. 1,884,146; Oct. 25.
Limbs, Making artificial. C. H. Davies. 1,884,589; Oct. 25.
Linkage connection. W. C. Robbins. 1,884,251; Oct. 25.
Liquid spreading apparatus. J. C. Woodcock. 1,884,475; Oct. 25.
Liquid supply for compressed air systems. F. S. Minier. 1,884,092; Oct. 25.
Liquids, Chlorating. H. Philipp. 1,884,200; Oct. 25.
Liquids with ammonia, process and apparatus for the treatment of. E. W. Harvey. 1,885,012; Oct. 25.
Load carrying structure, Truck supported. M. G. Hilpert. 1,884,688; Oct. 25.
Loading machine. A. Hauge. 1,884,671; Oct. 25.
Locating moving bodies, System for. M. Dieckmann. 1,885,023; Oct. 25.
Lock: *See*—
Film gate lock.
Rim lug nut lock.
Lock. A. S. Katz. 1,884,722; Oct. 25.
Lock for handbags. B. Wachs and D. H. Colin. 1,884,416; Oct. 25.
Locking mechanism. G. B. Samuels. 1,884,878; Oct. 25.
Looms and the like, Control mechanism for. J. L. Reynolds, S. and J. M. McKelvey. 1,884,239; Oct. 25.
Looms, Picker stick connection for. S. B. Walker. 1,884,425; Oct. 25.
Loud speaker, Portable. M. W. Scheldorf. 1,884,280; Oct. 25.
Loud speaker, Radiophone. A. A. W. Taylor. 1,884,375; Oct. 25.
Low rail joint recorder. W. M. Perry. 1,884,193; Oct. 25.
Lubricator. K. S. Clapp. 1,885,081; Oct. 25.
Luggage carrier. A. W. Van Devanter. 1,884,402; Oct. 25.
Lyo-phile products of fatty substances of any origin, Preparing. H. Sandqvist and T. O. H. Lindstrom. 1,884,274; Oct. 25.
Machine for and winding folded webs. N. Marcalus. 1,884,783; Oct. 25.
Machine for applying a strip of tape to a piece of sheet material. H. L. Chapin. 1,884,568; Oct. 25.
Machine for attaching keys to can tops. H. Hermani. 1,884,683; Oct. 25.
Machine for edging fabric sections. K. Maier. 1,884,038; Oct. 25.
Machine for engraving charts in wax. D. F. Shanks. 1,884,302; Oct. 25.
Machine for forming and applying plastic gaskets to jar caps. M. G. Parks. 1,884,823; Oct. 25.
Machine for forming metal bands. M. E. Widell. 1,884,041; Oct. 25.
Machine for making spiral fin tubing. G. H. Pickhard. 1,884,208; Oct. 25.
Machine for operating upon sheet material. E. E. Winkley. 1,884,947; Oct. 25.
Machine for polishing the eyes of needles. W. Tivendale and J. Baxter. 1,884,390; Oct. 25.
Machine for producing a connected series of heddles. H. D. Colman. 1,884,575; Oct. 25.
Machine for reforming splice bars. E. Woodings. 1,884,476; Oct. 25.
Machine for shaping shoe uppers. J. Gouldbourn. 1,884,660; Oct. 25.
Machine for surfacing the rubbing blocks of the circuit breaker levers of ignition timers. L. C. Shippy and R. W. Baker. 1,884,309; Oct. 25.
Machine for winding coils. O. A. Pearson. 1,884,184; Oct. 25.
Machines for treating shoe stiffeners. L. P. Mellerio. 1,884,800; Oct. 25.
Magnesium, Production of metallic. F. Hansgirg. 1,884,993; Oct. 25.
Magnet reperforator, Single. E. E. Kleinschmidt. 1,884,743; Oct. 25.
Magnetic brake. E. H. Remde. 1,884,863; Oct. 25.
Mail-sealing, post-marking, metering, and addressing machine, Combined. J. F. Pacher and L. J. Zahn. 1,884,175; Oct. 25.
Manure collecting device for barns. C. M. Baker. 1,885,069; Oct. 25.
Map. J. B. Anderson. 1,884,500; Oct. 25.
Marine engine. C. G. Hawley. 1,883,909; Oct. 25.
Marine sea chest. H. F. Schmidt. 1,884,282; Oct. 25.
Masks of rubber or other suitable artificial substances, Production of. H. Steizner. 1,884,342; Oct. 25.
Masonry structure and making the same, Subterraneous. S. W. Stewart. 1,884,347; Oct. 25.
Massage appliance. W. V. Orr. 1,884,161; Oct. 25.

Match package and stapling insert. R. S. Pullen and W. J. Crowell, jr. 1,884,215; Oct. 25.
Material handling mechanism. A. Hauge. 1,884,672; Oct. 25.
Material transferring mechanism. G. Powell. 1,884,211; Oct. 25.
Materials, Apparatus for molding. W. O. Witherspoon and J. Harrower. 1,884,948; Oct. 25.
Materials, Consolidating granular. R. C. Benner, P. H. Walker, and W. G. Soley. 1,884,529; Oct. 25.
Materials, Metallic treatment of vitreous. A. Greiner. 1,884,665; Oct. 25.
Measuring the percentage of modulation, Apparatus for. J. D. Wallace. 1,884,934; Oct. 25.
Meat clamp. E. G. Streckfuss. 1,884,351; Oct. 25.
Mechanical movement. A. Dina. 1,884,607; Oct. 25.
Mechanical movement. A. Dina. 1,884,610; Oct. 25.
Medallion for containers, stoppers, or the like. F. E. A. W. Bergaud. Des. 88,069; Oct. 25.
Metal box. J. F. Moran. 1,884,107; Oct. 25.
Metal building framing element construction. E. Heller. 1,883,910; Oct. 25.
Metal wheel. G. Walther. 1,884,936; Oct. 25.
Metals, Apparatus for melting. L. R. Zifferer, H. N. Albright, and H. E. Champion. 1,884,953; Oct. 25.
Micrometer, Combined high-gauge. A. Kutyniak. 1,883,975; Oct. 25.
Mill construction. E. J. McIlvried. 1,884,055; Oct. 25.
Milling cutter. C. G. Olson. 1,883,158; Oct. 25.
Minerals containing the sulphides of zinc, iron, lead and copper, for the recovery of the metal and the sulphur dioxide gas therefrom, Roasting. B. A. Stimmel, K. D. McBean, and G. Cruickschank. 1,884,348; Oct. 25.
Mining apparatus. M. P. Holmes. 1,884,692–3; Oct. 25.
Mining machine. M. P. Holmes. 1,884,694–6; Oct. 25.
Mining machine. L. M. Weld, J. H. Ohler, and C. F. Berkley. 1,884,986; Oct. 25.
Mirror and instrument, Combined. W. La Hodny. 1,884,756–7; Oct. 25.
Mirror and instrument, Combined. W. La Hodny. 1,884,759; Oct. 25.
Mirror and instrument, Combined. W. La Hodny and P. Bertell. 1,884,758; Oct. 25.
Mitt, Sponge. W. J. Gould. 1,884,659; Oct. 25
Mixer. A. W. Walker. 1,884,423; Oct. 25.
Mold: *See*—
Ingot mold.
Mold. C. H. Davies. 1,884,590; Oct. 25.
Mold for fiber pulp. F. S. Farley. 1,883,888; Oct. 25.
Molding. H. W. H. Warren, C. G. Garton, and A. E. Smith. 1,885,066; Oct. 25.
Molding strip. E. J. Welch. 1,884,440; Oct. 25.
Motor: *See*—
Shaded pole motor.
Motor control apparatus. B. E. O'Hagan. 1,884,157; Oct. 25.
Motor-control system. W. F. Eames. 1,883 886; Oct. 25.
Motor-control system. K. M. White and G. K. Hearn. 1,884,446; Oct. 25.
Mounting, Declinometer bottle. R. O. Anderson. 1,884,961; Oct. 25.
Mounting device. O. Swanson. 1,884,370; Oct. 25.
Mounting, Display. K. L. Ozmun. 1,884,173; Oct. 25.
Mounting means for a sign or the like. W. F. Vernon. 1,885,020; Oct. 25.
Mounting, Ophthalmic. B. J. Jacobson. 1,885,014; Oct. 25.
Muffler for Diesel engines with single inlet and outlet port. C. H. Wiegman. 1,884,452; Oct. 25.
Musical instrument, Mechanical. H. Lichtman. 1,884,003; Oct. 25.
Musical instruments, Tail piece for stringed. W. W. Wehmann. 1,884,434; Oct. 25.
Needle, Knitting. R. K. Mills. 1,884,090; Oct. 25.
Needle, Spring knitting. B. Hertan. 1,885,097; Oct. 25.
Nonskid device, Automobile. J. Schneider, jr. 1,884,283; Oct. 25.
Novelty, Advertising. C. Bustamante. 1,885,076; Oct. 25.
Nozzle block, Turbine. E. W. Beckeman. 1,883,868; Oct. 25.
Nozzle, Injection. A. T. Crumbaker. 1,885,004; Oct. 25.
Nozzle wiggler, Sand blast. F. J. Hull. 1,883,917; Oct. 25.
Nozzles, Making. J. H. Taylor. 1,884,914; Oct. 25.
Nuts, Method and apparatus for extracting oil from. T. M. Rector. 1,884,860; Oct. 25.
Nuts to metal plates, Attaching. H. S. Hasselquist. 1,883,906; Oct. 25.
Oil burner. C. H. Chalmers. Des. 88,074; Oct. 25.
Oil conversion, Hydrocarbon. J. D. Seguy. 1,884,886; Oct. 25.
Oil, Method and apparatus for producing. I. B. Williams. 1,884,459; Oct. 25.
Oil, Production of lubricating. H. T. Darlington. 1,884,587; Oct. 25.
Oil, Separating and fractionating. C. R. Wagner. 1,884,418; Oct. 25.
Oil, Treating petroleum. C. F. Tears. 1,884,915; Oct. 25.
Oil well control. E. Marler. 1,884,040; Oct. 25.
Oils at coal distillation plants, Production of clean. S. P. Miller. 1,884,087; Oct. 25.
Oils, Separating metallic-base reaction products from other derivatives in the treatment of hydrocarbon. A. Kinsel. 1,883,947; Oct. 25.
Oils, Treatment of hydrocarbon. J. D. Seguy. 1,884,887; Oct. 25.
Olefines, Polymerization of. F. Hofmann and W. Stegemann. 1,885,060; Oct. 25.
1-3 butadiene, Producing. C. J. Leyes. 1,884,002; Oct. 25.
Optical instrument. E. A. Newman. 1,884,137; Oct. 25.
Organisms from organic or inorganic substances, Extracting. F. H. Benjamin. 1,884,989; Oct. 25.
Ornament, Automobile radiator cap. J. V. Kohlhepp. Des. 88,096; Oct. 25.
Ornithopter. C. W. Strobell. 1,884,909; Oct. 25.
Oscillator and modulator system, Combined. J. A. Willoughby. 1,884,945; Oct. 25.
Oscillograph, Automatic. C. M. Hathaway. 1,883,907; Oct. 25.
Outlet, Convenience. H. E. Radack. 1,884,219; Oct. 25.
Oven and heat control therefor, Combined gas. J. M. Kisselle. 1,883,949; Oct. 25.
Oxygen regulator, Preheated secondary. N. Hennessy. 1,884,677; Oct. 25.
Package and container. D. H. Killeffer. 1,883,938; Oct. 25.
Package, Hermetically sealed. H. B. Townsend. 1,884,955; Oct. 25.
Packer, Can. H. L. Guenther. 1,884,666; Oct. 25.
Paint and varnish remover containing activated acetone. B. N. Lougovoy. 1,884,767; Oct. 25.
Paint and varnish remover containing furfural. B. N Lougovoy. 1,884,766; Oct. 25.
Paint and varnish remover containing ketone condensation solvents. B. N. Lougovoy. 1,884,765; Oct. 25.
Paint, varnish, and lacquer remover. C. Ellis. 1,884,633; Oct. 25.
Panel, Distributing. K. C. Randall. 1,884,225; Oct. 25.
Paper dryness, Indicating. S. A. Staege. 1,884,331; Oct. 25.
Paper machinery. C. R. Crawford. 1,884,583; Oct. 25.
Paper making technique. P. F. Bovard and T. D. Beckwith. 1,884,546; Oct. 25.
Paper weight. L. C. Kratz. 1,883,965; Oct. 25.
Pasteurization, Apparatus for. F. C. Reeder. 1,884,231; Oct. 25.
Pattern, System of drafting dress. C. A. Zorn. 1,884,494; Oct. 25.
Paving aggregate and producing same. L. Wittenberg. 1,884,471; Oct. 25.
Paving block. J. F. Purdy. 1,884,216; Oct. 25.
Percolator. G. H. S. McNair. 1,884,061; Oct. 25.
Percolator, Coffee. E. M. Mennicke. 1,884,070; Oct. 25.
Petroleum oils, Rectifying. P. C. Keith, jr. 1,883,934; Oct. 25.
Phonograph, Automatic. W. H. Daily. 1,885,005–6; Oct. 25.
Phosphorus-halogen compounds, Obtaining. H. C. J. H. Gelissen. 1,884,656; Oct. 25.
Phosphorus pentoxide, Pulverulent. W. S. Calcott. 1,884,558; Oct. 25.
Photo-electric tube. O. Schriever. 1,884,285; Oct. 25.
Photo tube and an amplifier, Combination of a. H. Iams and V. K. Zworykin. 1,883,926; Oct. 25.
Photographic sensitometer. A. B. Doran. 1,883,884; Oct. 25.
Piano action, Grand. B. J. Neill. 1,884,812; Oct. 25.
Piano, Electrical sostenuto. S. Cooper. 1,884,578; Oct. 25.
Pick, Demolishing. E. G. Gartin. 1,884,653; Oct. 25.
Picker mechanism. K. M. Van Rensselaer and H. R. Swanson. 1,884,406; Oct. 25.
Picture frame. W. C. Schults and M. Holzer. 1,884,290; Oct. 25.
Picture projector, Motion. E. S. Carpenter. Des. 88,072; Oct. 25.
Piezo-electric crystal apparatus. E. R. Hentschel. 1,884,678; Oct. 25.
Piles, Method and apparatus for forming. L. Nadel 1,884,129; Oct. 25.
Piling, Metal. M. G. Hilpert. 1,884,686; Oct. 25.
Pin: *See*—
Hair pin. Safety pin.
Pipe. J. B. Marin. 1,884,030; Oct. 25.
Pipe hanger. J. J. Kelley. 1,883,935; Oct. 25.
Pipe joint. J. R. McWane. 1,884,063–5; Oct. 25.
Pipe joint coupling device. W. A. Ross. 1,884,874; Oct. 25.
Pipe sections, Making. D. B. Replogle. 1,884,869; Oct. 25.
Pipe structure, Flexible. E. A. Russell. 1 884,266; Oct. 25.
Pipe threading machine. M. Rosenkranz and S. Webb. 1,884,260; Oct. 25.
Piping, welting, or the like and making same. A. W. Rockwood. 1,884,254; Oct. 25.
Pitting machine. J. P. Bem. 1,884,527; Oct. 25.
Plant, Ice. G. W. Miller. 1,884,081; Oct. 25.
Plastic composition. P. Knapp. 1,884,747; Oct. 25.
Plastic masses, Production of. M. Luther and R. Held. 1,884,023–4; Oct. 25.
Plate or similar article. W. C. McCartney. Des. 88,192; Oct. 25.
Plow. A. P. Lofstrand. 1,884,009; Oct. 25.
Plug, Electric. B. F. Muldoon. 1,884,121; Oct. 25.

Power system. E. M. Johnson and H. C. Pierson. 1,883,929; Oct. 25.
Power take off. R. S. Beatty. 1,884,526; Oct. 25.
Preparation of fiber and fiber pulp. R. B. Brown. 1,883,876; Oct. 25.
Press: *See*—
Dental swaging press. Lend press.
Hydraulic press. Printing press.
Ironing press.
Press. E. T. Peterson. 1,884,196; Oct. 25.
Press. A. W. Phelps. 1,884,198; Oct. 25.
Press. M. J. Power. 1,884,212; Oct. 25.
Printer, Coupon. H. L. Krum. 1,884,755; Oct. 25.
Printer, Optical. F. H. Owens. 1,884,167; Oct. 25.
Printing machine, Automatic photographic. J. L. Barber. 1,885,055; Oct. 25.
Printing plates, Reconditioning. L. Hill and J. D. Hobby. 1,884,685; Oct. 25.
Printing press. M. W. Brueshaber. 1,884,556; Oct. 25.
Printing presses, Sheet transferring mechanism for. C. F. Root. 1,884,258; Oct. 25.
Prism apparatus, Rotating. I. Kitroser. 1,884,995; Oct. 25.
Propeller. L. F. Huber. 1,884,703; Oct. 25.
Propeller. M. J. Stone. 1,884,984; Oct. 25.
Propeller, Screw. W. Stannus. 1,884,906; Oct. 25.
Protecting device for gauges. G. F. Ruopp. 1,884,264; Oct. 25.
Protector, Foot. C. E. Sankey. 1,884,276; Oct. 25.
Pulley, Clutch. E. Roberts. 1,884,873; Oct. 25.
Pulp product and its manufacture. D. M. Sutherland, jr. 1,884,306; Oct. 25.
Pulverizer, Disk. E. C. Sandeen. 1,884,273; Oct. 25.
Pulverizer, Soil. M. D. Miller. 1,884,803; Oct. 25.
Pump. H. M. Lockhart. 1,884,008; Oct. 25.
Pump, Automobile. D. Lalli. 1,884,928; Oct. 25.
Pump, Combined booster and fire. C. H. Fox. 1,885,093; Oct. 25.
Pump for refrigerating apparatus. O. M. Summers. 1,884,362; Oct. 25.
Pump, Fuel. F. Lang. 1,883,980; Oct. 25.
Pump, Power. R. L. Bacher. 1,884,507; Oct. 25.
Pump, Water. G. M. Hurd. 1,884,974; Oct. 25.
Pumping apparatus. E. Kinsella. 1,884,737–9; Oct. 25.
Punch for statistical cards. W. W. Lasker. 1,883,984; Oct. 25.
Punching fixture. W. S. Uxley. 1,884,398; Oct. 25.
Punching machine. J. B. Gury, jr. 1,884,668; Oct. 25.
Rack: *See*—
Sales service rack.
Radiant heat boiler. H. E. Kleffel. 1,884,741; Oct. 25.
Radio and convertible cabinet system, Combination. L. Sommer. 1,884,325; Oct. 25.
Radio control device. E. G. Peterson. Des. 88,105; Oct. 25.
Radio oscillation system. F. L. Lord. 1,884,011; Oct. 25.
Radio receiving system. W. T. Powell. Re18,637; Oct. 25.
Radio signaling. W. R. Blair and L. Cohen. 1,884,536–7; Oct. 25.
Rail for typesetting machine, Spaceband. E. C. Jones. 1,884,977; Oct. 25.
Rail joint and bar. G. Langford. 1,883,982; Oct. 25.
Rails, Apparatus for lubricating railway. C. R. Miller and J. E. Mountford, jr. 1,884,079; Oct. 25.
Railway car structure. H. M. Pflager and G. Hallquist. 1,884,846; Oct. 25.
Ramp. W. Barclay. 1,884,513; Oct. 25.
Razor honing device. M. Cink. 1,884,574; Oct. 25.
Receptacle and pipe, Combined cigarette. B. A. Loblo. 1,884,007; Oct. 25.
Receptacle, Card table ash. A. L. Duhl. 1,885,088; Oct. 25.
Receptacle, Colonic excreta. F. H. Gautschi. Des. 88,077; Oct. 25.
Record repeater for phonographs. L. T. Kincannon. 1,883,942; Oct. 25.
Recorder: *See*—
Low rail joint recorder.
Reflector and light for automobiles and the like, Combined. R. W. Luce. 1,884,020; Oct. 25.
Refrigerating apparatus. M. W. Baker. 1,883,864; Oct. 25.
Refrigerating apparatus. M. W. Fish and H. F. Clark. 1,883,891; Oct. 25.
Refrigerating apparatus. H. B. Hull. 1,883,920; Oct. 25.
Refrigerating apparatus. H. B. Hull. 1,883,922–4; Oct. 25.
Refrigerating apparatus. J. G. King. 1,883,944–5; Oct. 25.
Refrigerating apparatus. C. B. Myers. 1,884,120; Oct. 25.
Refrigerating apparatus. J. H. Sheats. 1,884,303; Oct. 25.
Refrigerating apparatus. H. Sloan. 1,884,312; Oct. 25.
Refrigerating apparatus. H. F. Smith. 1,884,317; Oct. 25.
Refrigerating apparatus. O. M. Summers. 1,884,363; Oct. 25.
Refrigerating apparatus. K. A. Wessblad. 1,884,939; Oct. 25.
Refrigerating apparatus. J. W. Winter. 1,884,470; Oct. 25.
Refrigerating apparatus and method. D. H. Killeffer and C. L. Jones. 1,883,939; Oct. 25.
Refrigerating system. B. R. Harris. 1,883,899; Oct. 25.
Refrigerating system. B. C. Shipman. 1,885,017; Oct. 25.
Refrigerating system. A. H. Strong. 1,884,352–3; Oct. 25.
Refrigeration. F. D. Peltier and C. E. Ploeger. 1,884,186–7; Oct. 25.
Refrigeration apparatus. H. A. Phillips. 1,884,202; Oct. 25.
Refrigerative apparatus. D. H. Killeffer. 1,883,937; Oct. 25.
Refrigerator. O. Strufe. 1,884,355; Oct. 25.
Refrigerator, Mechanical H. B. Hull. 1,883,919; Oct. 25.
Refrigerator, Portable. J. Kosmerl. 1,883,961; Oct. 25.
Register: *See*—
Autographic register. Cash register.
Regulator: *See*—
Feed water regulator. Window regulator.
Vapor regulator.
Regulator for the gas supply. F. W. Stockmeyer. 1,884,349; Oct. 25.
Regulator, Motor speed. W. C. Woodson, jr. 1,884,951; Oct. 25.
Relay and control system, Antenna. L. A. Gebhard. 1,884,655; Oct. 25.
Relay, Electrical. P. P. Sosinski. 1,884,326; Oct. 25.
Remote control mechanism. E. J. Vallen. 1,884,401; Oct. 25.
Repeat and normalizing switch, Automatic. W. W. Lasker. 1,883,986; Oct. 25.
Repeating system and apparatus. E. E. Kleinschmidt. 1,884,744; Oct. 25.
Residues from fruits and vegetables, Removal of spray. R. H. Robinson. 1,885,100; Oct. 25.
Retaining device. D. S. Barrows. 1,884,519; Oct. 25.
Retaining device. H. T. Casey and C. P. Noser. 1,884,564; Oct. 25.
Retort furnace, Ore oxidizing muffled. H. S. Bailey. 1,884,510; Oct. 25.
Rigging, Draft. D. S. Barrows. 1,884,515; Oct. 25.
Rigging, Draft. D. S. Barrows. 1,884,521; Oct. 25.
Rigging, Draft. D. S. Barrows and G. F. Couch. 1,884,518; Oct. 25.
Rigging, Draft. D. L. Townsend. 1,884,922; Oct. 25.
Rigging, Railway draft. J. F. O'Connor. 1,884,154; Oct. 25.
Rigidifying composition. B. N. Lougovoy. 1,884,015; Oct. 25.
Rim lug nut lock. P. J. Grabbe. 1,884,992; Oct. 25.
Ring for conical cutters, Seal. H. T. Baggett and L. E. Garfield. 1,884,965; Oct. 25.
Riveting mechanism. R. W. Dinzl. 1,884,611; Oct. 25.
Road maintenance and building machine. R. L. Ward. 1,884,426; Oct. 25.
Rock drill. I. S. Carpenter. 1,884,960; Oct. 25.
Rock drill. W. F. Dalzen. 1,885,085; Oct. 25.
Rock drill. E. G. Gartin. 1,884,651–2; Oct. 25.
Rod: *See*—
Welding rod.
Rod operating mechanism, Automatic. M. Richter. 1,884,244; Oct. 25.
Roll. H. J. Stegeman. 1,884,340; Oct. 25.
Roll, Paper. N. Marcalus. 1,884,784; Oct. 25.
Roller and making the same, Printing. F. Priemer. 1,884,214; Oct. 25.
Rolls, Resurfacing. E. E. Moore, C. L. McGranahan, and C. Warrender. 1,884,104; Oct. 25.
Rose. M. Leenders. Pl. Pt. 38; Oct. 25.
Rosin, Liming. E. Van Romaine, H. J. Weiland, P. O. Powers, and R. C. Palmer. 1,884,407; Oct. 25.
Rotary jar. J. S. Beck. 1,885,043; Oct. 25.
Rotor and making the same, Aircraft sustaining. P. H. Stanley. 1,884,905; Oct. 25.
Rotor construction for aircraft, Sustaining. J. de la Cierva. 1,884,597; Oct. 25.
Rubber composition and preserving rubber. W. L. Semon. 1,884,889; Oct. 25.
Rubber having a shaggy or hirsute texture, Producing gassed sheet. E. J. Moran. 1,884,106; Oct. 25.
Rubber, Reconditioning old. A. W. Morton. 1,884,118; Oct. 25.
Rubber to metal, Union of. S. S. Kurtz, jr. 1,883,978; Oct. 25.
Rubber, Vulcanizing. P. I. Murrill. 1,884,123; Oct. 25.
Rubber, Vulcanizing. P. I. Murrill. 1,884,124; Oct. 25.
Saddle clamping. C. E. Van Hecke. 1,884,403; Oct. 25.
Safety apparatus, Compound automatic. S. H. López. 1,884,980; Oct. 25.
Safety appliance for railway vehicles against overrunning of signals, Automatic. G. Kofler. 1,885,061; Oct. 25.
Safety device. R. Martin. 1,884,785; Oct. 25.
Safety device for wing type turbines, pumps, and similar pieces of apparatus with movable vanes. C. Schmitthenner. 1,884,881; Oct. 25.
Safety pin. L. L. Bautista. 1,884,525; Oct. 25.
Sales service rack. J. J. Orlick. 1,884,160; Oct. 25.
Salts, Manufacture of ammonium. H. C. Moore. 1,884,105; Oct. 25.
Salts of aliphatic acids, Making. C. J. Strosacker and E. L. Pelton. 1,884,354; Oct. 25.
Sandal, Cross strap. W. S. Shaft. 1,884,301; Oct. 25.
Sanitary pack. J. A. Milliner. 1,884,089; Oct. 25.
Sash retainer, Window. J. Yacomis. 1,884,484; Oct. 25.

Scale column and tare beam box, Combined weighing. C. H. Jacobson. Des. 88,084; Oct. 25.
Scale removing apparatus. H. E. McCreery. 1,884,791; Oct. 25.
Scale, Weighing. M. H. Rice. 1,884,242; Oct. 25.
Scale, Weighing. W. S. Smith. 1,884,320; Oct. 25.
Scissors. C. Driest and H. D. Myers. 1,884,630; Oct. 25.
Screen: *See*—
Window screen.
Screw, Single thread barbed drive. J. A. Arenz. 1,885,028; Oct. 25.
Seal for well tubing, Temporary. H. C. Otis. 1,884,165; Oct. 25.
Sealing machines or the like, Stop mechanism for can. A. K. Malmquist. 1,884,782; Oct. 25.
Selective system and apparatus. E. E. Kleinschmidt. A. K. Malmquist. 1,884,782; Oct. 25.
Self instructor and tester. H. J. Peterson and J. C. Peterson. 1,884,197; Oct. 25.
Separator: *See*—
Fluid separator.
Separator for manifolding material. J. Q. Sherman. 1,884,308; Oct. 25.
Service and dispenser, Portable beverage. M. Fellerman. 1,885,092; Oct. 25.
Service box. M. J. Lewis. 1,884,000; Oct. 25.
Sewing machine. W. N. Parkes. 1,884,177–8; Oct. 25.
Sewing machine attachment for making button holes. R. C. David. 1,885,086; Oct. 25.
Sewing machine for binding knitted fabrics. A. S. Riviere. 1,884,248; Oct. 25.
Sewing machine, Ornamental stitch. F. Lutz. 1,884,027; Oct. 25.
Sewing machines, Differential feeding mechanism for. F. F. Zeier and C. C. Smith. 1,884,489; Oct. 25.
Sewing machines, Feeding mechanism for. F. Lutz. 1,884,026; Oct. 25.
Sewing machines, Feeding mechanism for. J. R. Moffatt. 1,884,103; Oct. 25.
Sewing machines, Feeding mechanism for. C. S. Thompson and W. B. Long. 1,884,383; Oct. 25.
Sewing machines, Feeding mechanism for. F. F. Zeier. 1,884,487–8; Oct. 25.
Sewing machines, Feeding mechanisms for. W. C. Van Ness and F. M. Card. 1,884,404; Oct. 25.
Sewing machines, Thread controller for. F. Lutz. 1,884,028; Oct. 25.
Sewing machines, Thread controller for. F. F. Zeier and C. C. Smith. 1,884,490; Oct. 25.
Sewing machines, Thread-controlling device for. W. Myers. 1,884,127; Oct. 25.
Shade and curtain bracket, Window. C. C. Stubblefield. 1,884,911; Oct. 25.
Shaded pole motor. W. J. Morrill. 1,884,115; Oct. 25.
Shaded pole motor. C. A. Nickle. 1,884,140; Oct. 25.
Shaft construction, Interlocking. A. Kindelmann and E. Boecking. 1,884,734; Oct. 25.
Shank stiffener and making the same. B. B. Waterman. 1,884,937; Oct. 25.
Sharpener for slicing machines. W. A. van Berkel. 1,884,924; Oct. 25.
Sharpener, Safety razor blade. A. Cohn. 1,885,082; Oct. 25.
Shearing and cutting machine. W. V. Lewis. 1,884,001; Oct. 25.
Shears. F. E. Kling. 1,883,956; Oct. 25.
Sheet material, Apparatus for feeding and aligning. F. S. Farley. 1,883,889–90; Oct. 25.
Sheet stock, Method and apparatus for sorting. J. A. Tolelk. 1,884,920; Oct. 25.
Shelf, Article. A. E. Latchin. 1,883,988; Oct. 25.
Shellac, Composition adapted to remove. B. N. Lougovoy. 1,884,771; Oct. 25.
Shipping device. L. J. McSweeney. 1,884,062; Oct. 25.
Shock absorber. F. D. Funston. 1,883,895; Oct. 25.
Shock absorber. B. L. Mallory. 1,884,034; Oct. 25.
Shock absorber. R. F. Peo. 1,884,188; Oct. 25.
Shoe. A. F. Bancroft. Des. 88,066; Oct. 25.
Shoe parts, Apparatus for conditioning. F. E. Toothaker. 1,884,921; Oct. 25.
Shoes, Apparatus for conditioning parts of. G. Hazelton and T. B. Clarke. 1,884,674; Oct. 25.
Shutter mechanism. A. Dina. 1,884,605; Oct. 25.
Shutter, Radiator. E. G. Petersen. 1,884,194; Oct. 25.
Shutter unit. E. G. Petersen. 1,884,195; Oct. 25.
Sign. M. Standish. 1,884,335; Oct. 25.
Sign board. G. P. Kimball. Des. 88,095; Oct. 25.
Sign, Electric. F. E. J. Wilde. 1,884,453; Oct. 25.
Signaling and control, Electrical. A. V. T. Day. 1,885,009; Oct. 25.
Signaling and control, Multiplex electrical. A. V. T. Day. 1,885,010; Oct. 25.
Signaling apparatus. K. Kleinert. 1,883,953; Oct. 25.
Signaling device. K. Kleinert. 1,883,954; Oct. 25.
Signaling device. C. J. Kryzanowsky. 1,883,971; Oct. 25.
Signaling mechanism. G. E. King. 1,884,735; Oct. 25.
Signaling system. J. O. Carr and A. S. Benjamin. 1,884,562; Oct. 25.
Signaling system. C. L. Davis. 1,883,492; Oct. 25.
Silencer for internal combustion engines, Exhaust. G. Nicolich. 1,885,062; Oct. 25.
Silica catalyst and preparing the same, Porous. R. L. Jenkins and J. F. Norris. 1,884,709; Oct. 25.
Silk, Artificial. H. Schuhmann and F. Streuber. 1,884,289; Oct. 25.
Silo. P. J. Hegnes. 1,885,013; Oct. 25.
6-chlor-O-toluidine, Manufacture of. H. A. Lubs and A. L. Fox. 1,884,776; Oct. 25.
Sizing mechanism and method, Edible entity. E. A. White and I. W. Knight. 1,884,999; Oct. 25.
Skating rink, Ice. W. Koeniger. 1,883,958; Oct. 25.
Smoke consumer. J. Pykosz. 1,884,217; Oct. 25.
Socket for cameras and the like, Tripod. L. W. Lessler. 1,883,997; Oct. 25.
Socket, Vacuum tube. A. I. Crawford. 1,884,582; Oct. 25.
Soldering apparatus. G. F. Walter. 1,884,935; Oct. 25.
Solution accelerator for oil dyes. C. B. Watson and R. C. Osterstrom. 1,884,431; Oct. 25.
Sorting device. L. L. Jones. 1,884,718; Oct. 25.
Sound box for phonic diaphragms. A. C. Keller. 1,884,724; Oct. 25.
Sound recording and reproducing apparatus, Photographic. F. H. Owens. 1,884,170; Oct. 25.
Sound reproducing device. F. H. Owens. 1,884,171; Oct. 25.
Spaghetti machine. G. Quattrocchi. 1,884,218; Oct. 25.
Spark arrester. H. G. Weinland. 1,884,438; Oct. 25.
Speed control for automobiles. F. B. Millington. 1,884,804; Oct. 25.
Spike, twisted or threaded. G. B. Anthonisen. 1,884,503; Oct. 25.
Spiral pipe machine. V. Gladkov and A. J. Hand. 1,884,658; Oct. 25.
Spray gun. O. P. Yost. 1,884,485; Oct. 25.
Spring drive or coupling for the transmission of power. E. S. Luyks. 1,884,029; Oct. 25.
Spring structure. C. S. Reed. 1,884,230; Oct. 25.
Sprocket. L. S. Frappier and E. Boecking. 1,884,646; Oct. 25.
Stage lift-flowing device. A. Boynton. 1,884,549–50; Oct. 25.
Stand and beverage set, Combination. B. Orenstine, J. L. Schlesinger and H. Heinschrieber. Des. 88,104; Oct. 25.
Standard for suction cleaners, Supporting. D. B. Replogle. 1,884,865; Oct. 25.
Starter, Engine. R. E. Slayton. 1,884,895; Oct. 25.
Starter, Internal combustion engine. L. M. Woolson. 1,884,479; Oct. 25.
Starting switch. E. Chapman. 1,884,571; Oct. 25.
Steam, Apparatus for generating. W. D. LaMont. 1,849,979; Oct. 25.
Steam generator. H. J. E. Banck. 1,885,071; Oct. 25.
Steam heating system for railway cars. E. A. Russell. 1,884,267; Oct. 25.
Steam platen. R. W. Dinzl. 1,884,612; Oct. 25.
Steam reheater. C. E. Lucke and J. E. Black. 1,884,778; Oct. 25.
Steam trap. W. H. Randall. 1,884,857; Oct. 25.
Steel, Reconditioning alloy. W. B. Plummer. 1,884,206; Oct. 25.
Step plate. R. K. Lee. 1,883,994; Oct. 25.
Stitching bag material, Apparatus for. K. Maier. 1,884,032; Oct. 25.
Stone, Pulp grinding. H. P. Scheel and H. P. Scheel, jr. 1,884,279; Oct. 25.
Stroboscopic apparatus. P. C. Wentworth and J. H. Avery. 1,885,022; Oct. 25.
Structural span. M. G. Hilpert. 1,884,687; Oct. 25.
Stuffing box. T. E. Flake. 1,884,642; Oct. 25.
Submarine. P. A. Valle. 1,884,400; Oct. 25.
Subsurface structures, Mapping. K. Sundberg. 1,884,364; Oct. 25.
Suction cleaner. N. H. Losey. 1,884,013; Oct. 25.
Sugar from cane molasses and the like, Extraction of. G. P. Meade and R. N. Traxler. 1,884,798; Oct. 25.
Sugar from cane molasses containing glucose, Extracting. G. L. Spencer. 1,884,901; Oct. 25.
Superheater. D. W. Rudorff. 1,884,263; Oct. 25.
Superheater boiler. J. E. Kavanagh. 1,883,931; Oct. 25.
Superheater header. B. Woynarowski. 1,884,481; Oct. 25.
Support, Airway cleaner. D. B. Replogle. 1,884,866; Oct. 25.
Support, Cushioned cable. A. W. Malone. 1,884,036; Oct. 25.
Support for airway cleaners. D. B. Replogle. 1,884,867; Oct. 25.
Support, Trace. H. V. Hanson. 1,884,670; Oct. 25.
Supporter, Hose. J. N. Sime. 1,884,310; Oct. 25.
Supports for electric cables, Dead end. A. W. Malone. 1,884,037; Oct. 25.
Surface cleaner. A. A. Thorne. 1,884,387; Oct. 25.
Surgical appliance. M. Van Raalte. 1,884,927; Oct. 25. Oct. 25.
Switch: *See*—
Automatic telephone switch. Intermittent thermal switch.
Control switch. Lighting switch.
Electric switch. Starting switch.
Switch. H. E. Norviel and V. Ecoff. 1,884,148; Oct. 25.
Switch. G. E. Thimmes. 1,884,382; Oct. 25.
Switch handle. A. H. Nero. 1,884,133; Oct. 25.
Switching apparatus, Automatic. E. O. Zwietusch. 1,884,988; Oct. 25.

CARNEGIE LIBRARY OF ATLANTA

Switching device, Thermostatic. J. L. Robbins. 1,884,872; Oct. 25.
Table: *See*—
Folding table. Hospital table.
Table for shapers, Tip-top. W. F. Zimmermann. 1,884,492; Oct. 25.
Tabulating machine. J. R. Merkle. 1,884,072; Oct. 25.
Tabulator for typographic machines. F. H. Poeppiemeier. 1,884,850; Oct. 25.
Tank washing machine. E. Marley. 1,884,041; Oct. 25.
Tape, Fastener. J. Waldes. 1,885,021; Oct. 25.
Tar, Distillation of. A. H. Radasch. 1,884,220; Oct. 25
Tarry mechanism for grinding machines. H. E. Balsiger. 1,885,070; Oct. 25.
Teakettle or similar article. W. B. Moore. Des. 88,103; Oct. 25.
Tear-testing apparatus, Initial. C. B. Thwing. 1,884,388; Oct. 25.
Telegraph exchange system. J. J. Catogge. 1,884,567; Oct. 25.
Telegraph, Printing. H. L. Krum. 1,884,754; Oct. 25.
Telegraph, Selecting. E. E. Kleinschmidt. 1,883,955; Oct. 25.
Telephone system, Long distance. A. W. Horton, jr. 1,884,697; Oct. 25.
Television system. C. L. Davis. 1,883,593; Oct. 25.
Temperature and circuit control system for high frequency signaling systems. R. B. Meyer. 1,884,797; Oct. 25.
Temperature control system. A. Crossley. 1,884,585; Oct. 25.
Tension device for coil winding machines and the like. O. A. Pearson. 1,884,183; Oct. 25.
Tent construction. C. M. Wickstrum. 1,884,449; Oct. 25.
Terminal clamp. M. Wright. 1,884,482; Oct. 25.
Textile fabric. R. George. Des. 88,079–80; Oct. 25.
Textile fabric. M. U. Juestrich. Des. 88,086–94; Oct. 25.
Textile fabric. T. W. Tansley. Des. 88,115; Oct. 25.
Textile fabric or similar article. P. A. Vogelman. Des. 88,118–27; Oct. 25.
Textile fabric or similar article. W. Willheim. Des. 88,128–36; Oct. 25.
Thermostat. F. K. Landgraf. 1,883,978; Oct. 25.
Thermostatic control. G. W. McKee. 1,884,794; Oct. 25.
Thiocyanates, Treating. C. J. Hansen. 1,885,035; Oct. 25.
Thread milling machine. E. J. Lees. 1,883,995; Oct. 25.
Threshing and separating device, Centrifugal. G. F. Nye. 1,884,152–3; Oct. 25.
Threshing machine. G. F. Nye. 1,884,151; Oct. 25.
Tile, Coping. F. B. Parker. 1,884,822; Oct. 25.
Tire for railway vehicles. A. J. Michelin. Re18,638; Oct. 25.
Tires, Non-skid device for pneumatic. G. Stabili. 1,884,330; Oct. 25.
Toaster. J. Pavelka. 1,884,825; Oct. 25.
Tool. J. Wagner and A. Humr. 1,884,421; Oct. 25.
Tool, Automobile service hand. L. T. Cole. 1,885,083; Oct. 25.
Tool, Facing. J. H. Williams. 1,884,460; Oct. 25.
Tool, Fire-fighting. F. W. Funke. 1,884,990; Oct. 25.
Tool, Impact. M. C. Huffman. 1,884,704; Oct. 25.
Tool, Plank fitter. A. R. DeWitt. 1,885,087; Oct. 25.
Tool, Portable. R. E. Cross. 1,884,584; Oct. 25.
Tools, Hydraulic operating system for machine. J. J. N. Van Hamersveld. 1,884,985; Oct. 25.
Tops for tables, Adjustable. J. Perloff. 1,884,191; Oct. 25.
Torpedo, Oil well. W. R. Murrow. 1,884,125; Oct. 25.
Toy coaster. S. Warren. 1,884,430; Oct. 25.
Toy, Novelty golf game. N. Buegeleisen. Des. 88,071; Oct. 25.
Tractor. J. T. Liggett. 1,884,005; Oct. 25.
Tractor, Adjustable. J. B. Willings. 1,884,461; Oct. 25.
Transformer. C. H. Thordarson. 1,884,886; Oct. 25.
Transiating apparatus. M. J. Brown. 1,883,875; Oct. 25.
Transmission, Automatic variable speed. N. E. Moxley. 1,884,595; Oct. 25.
Transmission, Facsimile. F. Schröter. 1,884,288; Oct. 25.
Transmission, Four speed step-down. P. L. Tenney and H. E. Fidler. 1,884,380; Oct. 25.
Transmission line protective system. C. P. West. 1,884,444; Oct. 25.
Transmission, Overgear. R. Beringer and E. W. Seaholm. 1,883,869; Oct. 25.
Transparent trap. M. B. Pryce. 1,884,855; Oct. 25.
Transporting and depth regulating wheel. G. E. Karl. 1,884,719; Oct. 25.
Trap: *See*—
Animal trap. Transparent trap.
Steam trap.
Trolley bucket. G. L. Morehead and C. M. Young, jr. 1,884,109; Oct. 25.
Trolley slide with locking means. K. M. Wilkins. 1,884,456; Oct. 25.
Trough, Feeding. F. Hacker. 1,884,972; Oct. 25.
Truck axles and of assembling truck supported load carrying structures, Aligning the. M. G. Hilpert. 1,884,689; Oct. 25.
Truck body. M. Standish. 1,884,333; Oct. 25.
Truck for high speed interurban cars. J. H. Elliott and R. A. Norbom. 1,885,090; Oct. 25.
Truck, Industrial. E. H. Remde. 1,884,861–2; Oct. 25.
Truck, Industrial. F. Stoner. 1,884,907–8; Oct. 25.
Truck, Lift. W. Stuebing, jr. 1,884,358; Oct. 25.
Truck, Railway car. W. H. Meyer, J. C. Travilla and E. C. Jackson. 1,884,801; Oct. 25.
Truck, Tank. F. L. Hayes. 1,884,673; Oct. 25.
Trunk, Automobile. M. L. King. 1,884,736; Oct. 25.
Truss structure, Light metallic. E. J. W. Ragsdale. 1,884,221; Oct. 25.
Tube: *See*—
Electric discharge tube. Photo electric tube.
Tube by-pass, Neon. R. E. McCombes. 1,844,789; Oct. 25.
Tube dispensing means, Collapsible. C. Bolz. 1,884,543; Oct. 25.
Tube punching apparatus. V. C. Norquist. 1,884,143; Oct. 25.
Tubes of celluloid and the like, Manufacture of tapered. S. A. Neidich. 1,884,131; Oct. 25.
Tumbler or similar article. T. J. Piazzoll. Des. 88,100; Oct. 25.
Tunnel construction. J. C. Meem. 1,884,799; Oct. 25.
Turbine casing. J. B. Walbridge. 1,884,422; Oct. 25.
Turbine, Elastic fluid. O. Junggren. 1,883,930; Oct. 25.
Typewriter. J. H. Barr. 1,884,514; Oct. 25.
Typewriting and computing machine, Combined. W. Flach. 1,883,892; Oct. 25.
Typewriting machine. E. E. Barney. 1,883,865; Oct. 25.
Typewriting machine. F. A. Hart. 1,883,902; Oct. 25.
Typewriting machine. F. A. Hart. 1,883,904; Oct. 25.
Typewriting machine. F. A. Hart and S. L Walsoe. 1,883,903; Oct. 25.
Typewriting machine. J. Phelps. 1,884,199; Oct. 25.
Typewriting machine. R. G. Thompson. 1,884,384; Oct. 25.
Universal joint. L. H. Davis. 1,883,882; Oct. 25.
Universal torch machine. J. L. Anderson. 1,884,960; Oct. 25.
Urea and an ammonium salt of a strong mineral acid. Process for the production of. H. J. Krase. 1,884,751; Oct. 25.
Vacuum cleaner. N. H. Losey. 1,884,012; Oct. 25.
Vacuum double seaming machine H. L. Guenther. 1,884,067; Oct. 25.
Valve. R. Wells and F. M. Small. 1,884,442; Oct. 25.
Valve, Blow-off. G. Gerdts. 1,884,991; Oct. 25.
Valve, Dispensing. H. I. Koppelman and W. Seidel. 1,884,750; Oct. 25.
Valve, Draw-off. C. J. Willenborg, jr. 1,884,458; Oct. 25.
Valve, Fluid compressor regulating. A. F. Parks. 1,884,179; Oct. 25.
Valve for liquid or gaseous substances, Stop. A. F. Koppel and M. Albrecht. 1,883,960; Oct. 25.
Valve for locomotive sander. W. L. Ransom. 1,884,227; Oct. 25.
Valve for shock absorbers. E. F. Rossman. 1,884,262; Oct. 25.
Valve, Magnetically operated. L. E. Koch and H. C. Roth. 1,883,957; Oct. 25.
Valve mechanism, Drill rod. E. Whinnen. 1,884,940; Oct. 25.
Valve, Relief. H. Muller. 1,884,810; Oct. 25.
Valve, Relief. H. Muller. 1,885,000; Oct. 25.
Valve, Spring loaded. O. Baur. 1,883,866; Oct. 25.
Vapor regulator. E. A. Russell. 1,884,268; Oct. 25.
Vaporizer, Liquid. H. G. Donald. 1,884,614; Oct. 25.
Vegetation, Apparatus for treating. R. H. Wright. 1,884,483; Oct. 25.
Vehicle body, Agitating and dumping. A. G. Kerr. 1,883,936; Oct. 25.
Vehicle body construction. J. Ledwinka. 1,883,992; Oct. 25.
Vehicle body, Pressed metal. J. Ledwinka. 1,883,991; Oct. 25.
Vehicle jack. J. H. Burkholder. 1,885,074; Oct. 25.
Vehicle lift. P. J. Lunati. 1,884,022; Oct. 25.
Vehicle lifting and traversing device. B. Walker. 1,884,932–3; Oct. 25.
Vending machine. H. B. Woods. 1,884,478; Oct. 25.
Vending machine, Gasoline. M. W. Farnham. 1,885,091; Oct. 25.
Veneer clipping machine. R. W. Stanley. 1,884,336; Oct. 25.
Ventilating apparatus. F. G. Ryan. 1,885,016; Oct. 25.
Vibration dampener. J. K. Wood. 1,884,477; Oct. 25.
Viscose treating apparatus. S. A. Neidich. 1,884,811; Oct. 25.
Visor. R. K. McClellan. 1,884,047; Oct. 25.
Visual information board. M. D. W. Swanson. 1,884,369; Oct. 25.
Volume control system. E. R. Hentschel. 1,884,681; Oct. 25.
Volume control system, Automatic. E. R. Hentschel. 1,884,680; Oct. 25.
Vulcanizing aparatus. R. W. Snyder. 1,884,324; Oct. 25.
Wall structure. K. L. Smith. 1,884,319; Oct. 25.
Wash, Mold. K. W. Grant. 1,885,094; Oct. 25.
Washing machine. W. E. Sharp. 1,884,893; Oct. 25.
Water heater. L. Arnold. 1,885,040; Oct. 25.
Water to boilers, Method of and apparatus for feeding. J. Kissick. 1,883,950; Oct. 25.
Wave-amplifying repeater, Magnetic. E. Peterson. 1,884,844; Oct. 25.
Wax, Electroplating of. F. G. Morehouse. 1,884,110; Oct. 25.
Welding. C. F. Schwennker. 1,884,295; Oct. 25.
Welding. C. L. Wiles. 1,884,455; Oct. 25.
Welding apparatus. G. G. Ford. 1,884,644–5; Oct. 25.

Welding apparatus. W. F. Heineman. 1,883,911; Oct. 25.
Welding apparatus. J. F. Windsor. 1,884,465–6; Oct. 25.
Welding, Apparatus for electric arc. O. E. Uecker. 1,884,396; Oct. 25.
Welding apparatus, Portable. E. J. W. Ragsdale. 1,884,222; Oct. 25.
Welding machine. J. W. Meadowcroft. 1,884,066; Oct. 25.
Welding mechanism, Electric. C. C. Peck and M. R. Taylor. 1,884,826; Oct. 25.
Welding rod. F. H. Nullmeyer. 1,884,149; Oct. 25.
Wells, Apparatus for simultaneously controlling oil mine. L. Ranney. 1,884,858; Oct. 25.
Wells, Automatic stage lift flowing apparatus for. A. Boynton. 1,884,548; Oct. 25.
Wells, Method of and apparatus for installing mine. L. Ranney. 1,884,859; Oct. 25.
Wetting agent. H. Bertsch. 1,883,860; Oct. 25.
Wheel; *See*—
Hand wheel. Metal wheel.
Wheel assembly, Baby carriage fifth. P. M. Schibrowski. 1,884,281; Oct. 25.
Winding of threads and in apparatus therefor. H. Biddulph. 1,885,058; Oct. 25.
Windmill construction. J. S. Baker. 1,884,511; Oct. 25.
Window frame and sash therefor. P. P. Sullivan. 1,884,361; Oct. 25.
Window regulator. S. W. Nicholson. 1,884,139; Oct. 25.
Window screen. L. Levi. 1,883,999; Oct. 25.
Wing shutter for motion picture machine. A. Kindelmann. 1,884,730; Oct. 25.
Wire, Method and apparatus for coating. T. E. Jerabek. 1,884,713; Oct. 25.
Wood products, Manufacture of pressed or filtered. F. L. Carson. 1,884,563; Oct. 25.
Work holding means for turning machines. C. H. Landers. 1,883,977; Oct. 25.
Wrapping, dressing, or similar article, Producing. S. Rosenblatt. 1,885,008; Oct. 25.
Wrapping or dressing, Surgical. S. Rosenblatt. 1,885,007; Oct. 25.
Wristlet, Golf tee holding. C. A. Glock. Des. 88,081; Oct. 25.
Yarn, Method of and apparatus for winding. F. J. Williams and R. Robinson. 1,884,943; Oct. 25.
Yeast propagation, Controlling. S. Sak. 1,884,272; Oct. 25.

CLASSIFICATION OF PATENTS

ISSUED OCTOBER 25, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 2: 1,884,215
2— 12: 1,884,047
74: 1,885,047
93: 1,884,159
265: 1,885,021
267: 1,884,243
3— 6: 1,884,598
5— 31: R. 18,636
90: 1,884,577
100: 1,884,552
262: 1,884,230
313: 1,883,867
354: 1,884,270
360: 1,884,234
6— 12: 1,884,074
1,885,030
8— 2: 1,884,091
5: 1,884,620
20: 1,884,621
1,884,622
1,884,623
9— 2: 1,884,792
11: 1,884,705
10— 94: 1,884,260
12— 1: 1,884,674
1,884,921
4: 1,881,508
51: 1,884,660
61: 1,884,900
141: 1,884,882
13— 26: 1,884,637
36: 1,884,600
15— 1: 1,884,864
1,884,865
1,884,866
1,884,870
8: 1,884,013
9: 1,884,868
1,884,871
16: 1,884,012
1,884,867
50: 1,884,387
127: 1,884,018
158: 1,884,044
208: 1,884,787
227: 1,884,659
16— 21: 1,884,142
86: 1,884,505
1,884,827
1,884,828
1,884,829
1,884,830
1,884,831
1,884,832
1,884,833
1,884,835
1,884,836
1,884,837
1,884,838
1,884,839
18— 2: 1,884,055
6: 1,885,080
8: 1,884,811
19: 1,884,324
35: 1,884,342
48.8: 1,884,346
50: 1,883,877
1,884,885
1,884,889
1,885,008
51: 1,884,131
52: 1,884,118
53: 1,883,878
1,884,106
1,884,123
1,884,124
54: 1,884,289
55: 1,885,066
59: 1,883,973
1,884,099
1,884,554
19— 72: 1,884,815
90: 1,884,406
98: 1,884,381
20— 35: 1,884,226
69: 1,884,879
23— 9: 1,884,172
22— 65: 1,884,304
96: 1,883,963
144: 1,884,291
188: 1,884,640
189: 1,885,094
200: 1,885,039
23— 86: 1,884,200
87: 1,884,656
90: 1,884,522
119: 1,884,105
1,885,035
134: 1,883,947
1,884,796
193: 1,884,561
1,885,012
216: 1,885,029
233: 1,884,709
289: 1,884,880
24— 81: 1,884,031
1,884,135
135: 1,884,037
156: 1,884,525
25— 41: 1,884,528
56: 1,884,529
28— 1: 1,885,019
29— 11: 1,884,608
27: 1,883,905
33: 1,884,203
34: 1,884,476
1,884,631
42: 1,884,985
78: 1,884,155
84: 1,883,897
1,884,155
1,884,403
1,884,689
87.1: 1,885,083
88.2: 1,884,198
1,884,643
1,884,874
95: 1,884,460
105: 1,884,158
148: 1,883,906
1,884,956
148.2: 1,884,589
148.4: 1,884,104
156.8: 1,884,903
157: 1,884,869
1,884,914
30— 13: 1,884,630
32— 9: 1,883,969
12: 1,884,128
33— 17: 1,884,494
26: 1,884,302
1,885,099
148: 1,884,073
165: 1,883,975
204: 1,885,006
211: 1,884,469
215: 1,884,728
34— 4: 1,884,727
12: 1,884,344
19: 1,884,978
20: 1,883,972
35— 12: 1,884,197
1,884,676
16: 1,884,369
36— 1: 1,884,284
11.5: 1,884,301
35: 1,884,725
57: 1,884,254
72: 1,884,276
76: 1,884,937
37— 116: 1,885,009
145: 1,884,426
155: 1,884,113
40— 2: 1,885,031
1,885,032
1,885,033
1,885,034
64: 1,884,971
120: 1,885,020
130: 1,884,290
1,884,335
1,884,500
132: 1,883,953
133: 1,884,049
41— 21: 1,884,173
29: 1,884,008
43— 42: 1,884,053
84: 1,884,721
92: 1,884,499
124: 1,884,980
44— 9: 1,884,431
1,884,559
1,884,999
45— 51: 1,884,160
75: 1,883,068
97: 1,884,756
1,884,757
1,884,758
1,884,938
110: 1,883,974
113: 1,884,191
46— 40: 1,884,982
47— 1: Pl. Pt. 37
Pl. Pt. 38
Pl. Pt. 39
1,884,483
34: 1,884,204
49— 5: 1,884,357
17: 1,884,926
52: 1,884,635
55: 1,884,427
1,884,967
81: 1,884,624
1,884,665
1,884,909
51— 8: 1,884,791
13: 1,883,918
15: 1,883,917
26: 1,884,292
52: 1,884,293
53: 1,884,309
98: 1,885,082
152: 1,884,390
159: 1,884,574
197: 1,884,436
206: 1,884,279
248: 1,884,924
272: 1,884,438
53— 3: 1,884,061
3: 1,884,070
54— 1: 1,884,670
55— 11: 1,884,719
65: 1,884,116
73: 1,884,273
77: 1,884,720
1,884,803
149: 1,884,463
56— 237: 1,884,812
58— 24: 1,884,723
30: 1,884,853
59— 7: 1,884,443
60— 23: 1,884,286
48: 1,883,909
52: 1,884,277
1,885,077
53: 1,884,297
61— 30: 1,885,057
41: 1,884,347
42: 1,884,799
47: 1,884,854
57: 1,884,129
60: 1,884,686
62— 1: 1,883,899
1,884,429
5: 1,884,353
1,884,470
8: 1,883,864
1,883,924
1,883,944
1,884,317
12: 1,883,958
69: 1,884,355
91.5: 1,883,937
1,883,939
1,883,940
1,883,941
99: 1,884,126
115: 1,883,922
1,884,186
1,884,187
1,884,312
62— 115: 1,885,017
116: 1,883,919
1,883,920
1,883,921
1,883,923
1,883,961
118: 1,884,352
119.5: 1,884,939
121: 1,884,313
126: 1,884,202
1,884,303
1,884,793
129: 1,884,534
160: 1,884,061
172: 1,884,428
64— 5: 1,884,246
90.5: 1,884,233
1,884,294
91: 1,884,976
98: 1,884,646
100: 1,884,029
65— 15: 1,884,058
66— 81: 1,884,420
82: 1,884,004
112: 1,883,990
119: 1,884,090
1,885,097
126: 1,884,244
133: 1,884,253
172: 1,884,500
68— 9: 1,883,861
1,883,862
1,883,863
10: 1,884,411
70— 90: 1,884,992
72— 1: 1,884,462
22.5: 1,884,993
30: 1,884,219
86: 1,884,822
101: 1,884,524
73— 1: 1,884,888
28: 1,884,983
51: 1,884,042
1,884,231
1,884,368
1,884,718
1,884,896
1,884,942
54: 1,883,971
74— 1: 1,883,901
6: 1,884,410
1,884,480
7: 1,884,607
1,884,610
1,884,895
14: 1,884,008
27: 1,884,196
32: 1,884,056
33: 1,884,448
39: 1,884,530
1,884,804
58: 1,883,869
1,884,380
59: 1,884,595
60: 1,883,906
106: 1,884,526
108: 1,884,050
1,885,038
75— 60: 1,884,348
77— 22: 1,884,752
23: 1,883,993
78— 53.5: 1,884,511
80— 11: 1,884,467
81— 91: 1,884,421
82— 43: 1,883,977
1,885,095
83— 11: 1,884,523
1,884,544
12: 1,884,316
73: 1,884,423
91: 1,884,618
84— 92: 1,884,003
261: 1,884,578
302: 1,884,434
379: 1,884,150
85— 5: 1,884,564
8: 1,884,519
85— 20: 1,884,503
44: 1,885,028
87— 5: 1,884,164
1,884,632
1,884,633
1,884,785
1,884,766
1,884,767
1,884,768
1,884,769
1,884,770
1,884,771
1,884,772
1,884,773
1,884,774
6: 1,884,860
12: 1,884,274
17: 1,883,989
88— 1: 1,884,759
14: 1,885,022
17: 1,884,604
1,884,606
1,884,609
1,884,729
1,884,734
19.3: 1,884,605
1,884,608
1,884,730
20: 1,884,137
24: 1,884,167
1,884,603
1,884,731
1,884,904
1,884,905
1,884,906
39: 1,884,908
41: 1,884,371
47: 1,885,014
57: 1,883,943
1,884,733
90— 13.2: 1,885,002
58: 1,884,492
91— 67.8: 1,884,214
68: 1,884,486
1,884,713
69: 1,883,913
1,883,914
92— 20: 1,883,876
21: 1,884,038
1,884,367
1,884,546
1,884,761
39: 1,883,887
42: 1,884,583
46: 1,884,075
54: 1,884,563
61: 1,883,888
68: 1,884,366
93— 61: 1,884,468
94— 12: 1,854,216
18: 1,884,647
23: 1,884,795
44: 1,884,054
95— 5: 1,885,063
9: 1,884,035
10: 1,883,884
44: 1,884,169
62: 1,883,998
73: 1,885,055
85: 1,884,662
90: 1,884,781
97— 119: 1,884,009
144.1: 1,884,078
227: 1,885,073
98— 115: 1,884,304
1,885,016
99— 2: 1,884,779
8: 1,884,300
1,884,790
10: 1,884,923
15: 1,883,967
100— 49: 1,885,011
50: 1,884,212
101— 49: 1,884,175
93: 1,884,189
125: 1,884,788
211: 1,884,565
101— 211: 1,884,566
219: 1,884,556
287: 1,884,258
401.1: 1,884,685
102— 4: 1,884,125
103— 10: 1,885,093
11: 1,884,437
1,884,737
1,884,738
1,884,739
1,884,852
52: 1,884,245
96: 1,884,974
232: 1,884,459
104— 85: 1,884,687
1,884,688
44: 1,884,740
69: 1,884,430
131: 1,883,964
105— 117: 1,884,657
188: 1,884,801
249: 1,884,846
354: R. 18,635
422: 1,884,372
106— 8: 1,884,747
23: 1,884,240
31: 1,884,471
40: 1,884,318
1,884,337
1,884,433
1,884,619
107— 8: 1,884,948
9: 1,884,218
108— 26: 1,884,259
110— 75: 1,884,677
1,885,078
97: 1,884,217
99: 1,883,983
104: 1,884,378
1,885,067
150: 1,884,205
178: 1,884,824
112— 2: 1,884,575
10: 1,884,032
11: 1,884,025
77: 1,885,066
79: 1,884,127
138: 1,884,248
141: 1,884,271
159: 1,884,027
160: 1,884,033
203: 1,884,026
209: 1,884,383
1,884,487
1,884,488
1,884,489
214: 1,884,404
215: 1,884,103
241: 1,884,028
248: 1,884,490
249: 1,884,177
1,884,178
113— 1: 1,884,683
1,884,941
14: 1,884,690
24: 1,884,667
35: 1,884,658
39: 1,883,968
42: 1,884,708
44: 1,884,590
46: 1,884,700
62: 1,884,842
80: 1,884,823
97: 1,884,935
99: 1,884,144
121: 1,884,699
114— 16.4: 1,884,400
198: 1,884,282
116— 47: 1,884,010
54: 1,883,954
129: 1,884,264
117— 23: 1,884,684
119— 37: 1,884,843
61: 1,884,972
120— 33: 1,884,639
36: 1,884,841
82: 1,883,965

120— 108: 1,884,130
121— 6: 1,884,649
1,884,651
13: 1,884,652
24: 1,884,648
32: 1,884,650
1,884,704
34: 1,884,584
45: 1,885,070
122— 39: 1,884,979
118: 1,885,040
235: 1,885,071
279: 1,883,925
297: 1,884,742
303: 1,884,741
327: 1,884,614
360: 1,884,481
441: 1,884,051
451.1: 1,884,504
1,884,930
451.2: 1,883,950
459: 1,884,393
478: 1,883,931
479: 1,884,263
504.3: 1,884,980
123— 25: 1,884,413
52: 1,884,962
57: 1,884,119
64: 1,884,077
79: 1,884,452
139: 1,883,980
148: 1,883,873
1,883,951
149: 1,884,989
177: 1,884,321
179: 1,884,450
1,884,479
1,884,963
126— 14: 1,883,946
92: 1,884,746
101: 1,884,634
180: 1,884,557
1,884,917
1,884,918
127— 47: 1,884,798
1,884,901
128— 48: 1,884,161
83: 1,884,927
229: 1,884,786
268: 1,885,007
285: 1,884,089
129— 4: 1,884,059
13: 1,884,278
16: 1,884,249
16.7: 1,884,661
41: 1,885,018
130— 24: 1,884,114
27: 1,884,151
1,884,152
1,884,153
131— 12: 1,884,039
22: 1,884,007
52: 1,883,962
1,884,806
132— 33: 1,884,305
1,884,306
1,884,343
1,884,891
36: 1,884,890
50: 1,884,900
78.5: 1,885,076
134— 1: 1,884,064
1,884,919
21: 1,884,407
26: 1,884,255
39: 1,885,026
1,885,027
51: 1,885,024
1,885,025
79: 1,884,553
135— 1: 1,884,449
136— 29: 1,884,166
81: 1,884,071
137— 21: 1,884,673
53: 1,884,810
1,885,000
68: 1,884,102
72: 1,884,092
111: 1,884,548
1,884,549
1,884,550
139: 1,883,957
144: 1,884,458
153: 1,883,866
1,884,179
1,884,929
160: 1,885,062
138— 9: 1,884,022
10: 1,884,060
139— 68: 1,884,239
154: 1,884,425
426: 1,885,015
140— 107: 1,884,535
141— 7: 1,884,052
9: 1,884,180

141— 9: 1,884,181
143— 43: 1,885,087
146— 28: 1,884,527
103: 1,884,912
217: 1,884,351
219: 1,884,966
1,885,100
148— 1: 1,884,206
151— 14: 1,884,973
152— 14: 1,884,283
17: 1,884,330
153— 2: 1,884,964
154— 2: 1,884,174
42: 1,884,568
155— 80: 1,884,497
142: 1,884,257
156— 20: 1,884,391
22: 1,884,414
24: 1,884,911
38: 1,883,999
158— 11: 1,884,894
28: 1,884,045
1,884,256
99: 1,884,083
116: 1,884,764
159— 27: 1,884,726
164— 10.6: 1,883,996
41: 1,883,956
47: 1,884,236
58: 1,884,001
84: 1,884,377
86: 1,884,398
89.5: 1,884,668
108: 1,884,143
112: 1,883,984
1,883,965
113: 1,883,986
1,884,753
166— 4: 1,884,165
15: 1,884,040
21: 1,884,859
167— 15: 1,884,542
87: 1,884,015
170— 149: 1,884,703
159: 1,884,906
1,884,984
160: 1,884,904
171— 97: 1,884,419
119: 1,884,386
1,884,902
209: 1,883,885
1,884,958
228: 1,884,021
252: 1,883,912
1,884,573
308: 1,885,052
312: 1,883,926
325: 1,884,298
327: 1,884,678
172— 8: 1,883,929
1,883,948
152: 1,884,446
239: 1,883,886
1,884,401
278: 1,884,115
1,884,140
173— 259: 1,884,892
264: 1,884,311
268: 1,884,223
273: 1,884,482
328: 1,884,582
332: 1,884,121
338: 1,884,219
358: 1,884,432
174— 108: 1,884,375
175— 41: 1,883,932
41.5: 1,884,229
182: 1,884,364
1,884,496
183: 1,884,950
1,885,054
294: 1,884,444
298: 1,883,881
1,884,579
1,884,580
336: 1,884,326
341: 1,884,884
355: 1,884,951
356: 1,884,385
357: 1,883,905
371: 1,884,225
176— 39: 1,884,957
59: 1,884,417
122: 1,884,593
177— 329: 1,884,014
351: 1,885,048
1,885,049
1,885,050
1,885,051
1,885,078
361: 1,884,735
178— 2: R. 18,537
2: 1,884,567
4: 1,883,955
5: 1,883,875
6: 1,884,287
7: 1,884,288

178— 17: 1,884,807
28: 1,884,754
42: 1,884,755
53.1: 1,884,745
70: 1,884,744
71: 1,884,562
92: 1,884,743
179— 2: R. 18,537
15: 1,885,010
27.52: 1,884,910
1,884,988
90: 1,884,663
100.3: 1,884,168
1,884,170
115.5: 1,884,327
121: 1,885,001
170: 1,884,697
1,884,844
171: 1,884,011
1,884,675
1,884,711
1,884,845
1,884,934
1,884,945
180— 1: 1,883,461
1,884,932
1,884,933
9.2: 1,883,874
43: 1,884,474
68: 1,884,194
90: 1,884,146
181— 23: 1,884,538
31: 1,884,171
1,884,724
182— 7: 1,884,855
183— 7: 1,884,085
1,884,086
10: 1,884,908
85: 1,883,908
109: 1,884,501
115: 1,885,059
184— 1.5: 1,884,819
1,884,820
3: 1,884,079
4: 1,884,511
27: 1,884,363
188— 79.5: 1,884,275
88: 1,883,895
89: 1,884,188
140: 1,884,856
151: 1,884,531
152: 1,884,373
171: 1,884,863
189— 3: 1,885,013
28: 1,884,247
34: 1,883,871
37: 1,884,221
46: 1,883,870
53: 1,883,910
62: 1,884,195
72: 1,884,361
190— 51: 1,884,402
191— 59.1: 1,884,456
192— 13: 1,884,162
67: 1,884,016
105: 1,883,872
1,884,873
107: 1,883,981
125: 1,884,782
130: 1,884,795
142: 1,884,184
193— 41: 1,884,513
194— 6: 1,883,987
195— 14: 1,884,272
44: 1,885,006
196— 10: 1,884,093
11: 1,884,887
24: 1,884,269
1,884,495
48: 1,884,915
59: 1,884,586
77: 1,883,934
79: 1,884,163
96: 1,884,418
139: 1,884,886
197— 66: 1,883,979
80: 1,883,865
102: 1,884,384
127: 1,883,902
1,883,904
1,884,760
128: 1,883,903
133: 1,884,308
154: 1,884,514
176: 1,884,199
198— 2: 1,884,369
10: 1,884,671
1,884,672
30: 1,883,889
1,883,890
224: 1,885,064
199— 36: 1,884,977
55: 1,884,345
200— 4: 1,884,148

200— 16: 1,884,569
19: 1,884,145
27: 1,884,576
30: 1,884,457
33: 1,884,571
37: 1,884,322
44: 1,884,341
46: 1,884,453
1,884,454
50: 1,884,000
59: 1,884,117
1,884,382
87: 1,885,068
95: 1,884,654
118: 1,884,789
122: 1,884,775
124: 1,883,891
140: 1,884,872
144: 1,884,572
153: 1,884,147
169: 1,884,878
172: 1,884,133
201— 63: 1,884,877
202— 15: 1,884,017
30: 1,884,087
1,884,220
33: 1,884,339
105: 1,884,064
118: 1,884,379
174: 1,885,008
204— 1: 1,884,110
5: 1,884,493
6: 1,884,512
205— 19: 1,884,749
206— 41: 1,884,107
56: 1,883,959
59: 1,884,784
78: 1,884,445
207— 10: 1,885,045
209— 111: 1,884,920
121: 1,884,999
124: 1,884,101
210— 165: 1,884,615
178: 1,884,616
211— 50: 1,884,540
212— 65: 1,884,296
213— 8: 1,884,521
21: 1,884,581
22: 1,884,539
30: 1,884,516
1,884,517
1,884,518
1,884,520
1,884,594
1,884,913
61: 1,884,154
69: 1,884,515
1,884,922
214— 1: 1,884,211
59: 1,884,111
65: 1,884,356
1,884,862
1,884,907
1,884,908
145: 1,883,915
147: 1,884,861
215— 38: 1,884,883
40: 1,884,955
100: 1,884,840
216— 58: 1,884,332
217— 7: 1,883,945
12: 1,884,062
218— 8: 1,884,644
219— 4: 1,884,066
1,884,222
1,884,465
6: 1,883,911
1,884,466
8: 1,884,149
1,884,396
1,884,570
1,884,645
1,884,715
1,884,826
10: 1,884,295
1,884,455
1,884,712
1,884,714
12: 1,884,141
19: 1,884,451
1,884,585
1,884,825
24: 1,884,232
35: 1,885,041
38: 1,883,927
27: 1,884,613
31: 1,884,818
52: 1,884,682
55: 1,884,763
56: 1,883,880
221— 47.1: 1,884,507
1,885,061
60: 1,884,136
1,884,472

221— 60: 1,884,543
62: 1,884,813
80: 1,884,134
102: 1,884,750
109: 1,884,478
223— 17: 1,883,883
1,884,237
1,885,044
1,885,050
224— 5: 1,884,328
29: 1,884,736
48: 1,884,970
225— 17: 1,884,350
21: 1,885,092
226— 2: 1,884,365
22: 1,884,916
39: 1,884,502
71: 1,884,666
83: 1,884,952
229— 11: 1,884,030
29: 1,884,296
49: 1,883,938
51: 1,884,545
92.9: 1,884,235
230— 1: 1,884,362
29: 1,884,702
38: 1,884,928
212: 1,884,876
232— 41: 1,884,019
234— 1: 1,884,193
1,884,961
5.5: 1,883,907
58: 1,884,072
59: 1,883,892
60: 1,884,473
100: 1,884,314
116: 1,885,072
130: 1,883,894
236— 14: 1,884,897
15: 1,883,949
25: 1,884,349
40: 1,884,268
68: 1,885,053
96: 1,884,987
99: 1,884,794
102: 1,883,978
237— 9: 1,884,857
40: 1,883,896
1,884,267
238— 243: 1,883,982
240— 8.1: 1,884,265
10.68: 1,884,108
41.5: 1,884,076
41.36: 1,884,020
241— 6: 1,884,310
242— 9: 1,884,409
42: 1,884,943
46.2: 1,884,805
130: 1,884,817
156: 1,884,183
157: 1,885,058
244— 1: 1,883,970
2: 1,884,435
1,884,701
7: 1,884,706
15: 1,884,849
19: 1,884,596
1,884,597
1,884,598
1,884,599
1,884,847
1,884,848
1,884,905
20: 1,884,909
246— 3: 1,884,157
130: 1,884,329
200: 1,885,061
247— 3: 1,884,424
248— 1: 1,883,988
15: 1,884,732
30: 1,883,893
1,884,370
31: 1,883,879
1,883,935
1,884,036
41: 1,884,120
46: 1,883,997
249— 2: 1,885,091
250— 6: 1,885,009
8: 1,884,655
11: 1,884,006
1,884,707
1,885,023
17: 1,884,536
20: 1,884,537
1,884,680
1,884,681
27: 1,884,439
1,884,892
27.5: 1,883,898
1,883,926
1,884,082
1,884,285
1,884,591
33: 1,884,176
36: 1,884,547

250— 36: 1,884,679
1,884,797
41.5: 1,884,376
1,884,484
251— 24: 1,883,960
28: 1,884,442
134: 1,884,991
156: 1,884,207
252— 1: 1,883,860
2: 1,884,954
2.5: 1,884,538
253— 39: 1,884,252
69: 1,883,930
1,884,422
78: 1,883,868
148: 1,884,881
254— 6: 1,885,074
10: 1,884,358
72: 1,884,057
89: 1,884,192
144: 1,884,641
184: 1,884,821
255— 22: 1,884,716
27: 1,885,043
28: 1,884,940
45: 1,884,909
61: 1,884,182
64: 1,884,601
71: 1,884,965
1,885,065
256— 1: 1,884,447
257— 2: 1,884,231
1,884,555
6: 1,884,617
7: 1,884,408
25: 1,884,213
136: 1,884,096
1,884,097
1,884,098
1,884,099
1,884,100
137: 1,884,094
1,884,095
199: 1,884,138
203: 1,884,532
224: 1,884,389
227: 1,884,777
1,884,778
239: 1,884,080
1,884,156
1,884,209
240: 1,884,210
241: 1,884,538
244: 1,884,896
256: 1,884,612
259— 113: 1,884,893
260— 8: 1,884,023
1,884,024
17: 1,884,762
46: 1,885,037
60: 1,884,498
1,885,065
61: 1,884,122
101: 1,884,338
106: 1,884,628
112: 1,884,354
122: 1,884,241
123: 1,884,625
1,884,626
1,884,627
125: 1,884,509
1,884,751
130.5: 1,884,776
145: 1,884,802
150: 1,883,952
152: 1,884,629
154: 1,884,710
156: 1,884,405
170: 1,885,060
171: 1,884,002
261— 41: 1,884,359
52: 1,883,933
72: 1,884,360
92: 1,884,315
262— 1: 1,884,858
12: 1,884,946
13: 1,884,653
28: 1,884,692
1,884,693
1,884,696
30: 1,884,694
1,884,695
1,884,986
263— 1: 1,883,976
24: 1,884,510
43: 1,884,953
265— 17: 1,884,388
25: 1,884,261
27: 1,884,250
36: 1,884,320
70: 1,884,242
266— 5: 1,884,748
17: 1,884,048
1,884,068
23: 1,884,960
34: 1,884,533

267— 10: 1,884,034
35: 1,884,477
41: 1,885,090
70: 1,884,981
268— 62: 1,885,084
270— 86: 1,884,783
271— 44: 1,884,949
54: 1,884,947
163: 1,884,397
272— 79: 1,884,392
273— 55: 1,884,816
119: 1,885,086
274— 2: 1,884,280
10: 1,885,005
1,885,006

274— 15: 1,883,942
276— 12: 1,884,851
28: 1,884,850
277— 45: 1,884,262
279— 28: 1,884,717
280— 33.1: 1,884,975
33.9: 1,884,323
33.15: 1,885,079
44: 1,884,636
92: 1,884,005
113: 1,884,281
169: 1,883,994
281— 44: 1,884,814
282— 16: 1,884,307
23: 1,884,669
285— 9: 1,884,266

285— 22: 1,884,551
25: 1,883,900
30: 1,884,046
1,885,042
49: 1,884,602
91: 1,884,944
115: 1,884,063
1,884,064
1,884,065
286— 15: 1,885,046
16: 1,884,642
29: 1,884,374
287— 90: 1,883,882
93: 1,884,251
288— 1: 1,883,916
290— 40: 1,884,043

291— 16: 1,884,227
292— 41: 1,884,201
150: 1,884,484
173: 1,884,722
204: 1,884,416
135: 1,884,440
294— 11: 1,884,541
71: 1,884,109
11: 1,884,780
34: R. 18,638
296— 1: 1,883,936
1,884,415
28: 1,883,991
1,883,992
1,884,506
1,884,834

296— 28: 1,884,997
1,884,998
43: 1,884,333
51: 1,884,334
110: 1,884,100
135: 1,884,440
1,884,441
299— 34: 1,884,475
69: 1,884,041
107.3: 1,885,004
114: 1,884,931
117: 1,884,485
301— 13: 1,884,936
63: 1,884,340
108: 1,884,238
302— 37: 1,884,067

306— 23: 1,884,990
42: 1,885,089
44: 1,884,491
308— 22: 1,884,875
114: 1,884,224
207: 1,884,925
212: 1,884,299
214: 1,884,395
237: 1,884,208
312— 161: 1,884,412
189: 1,884,325

U. S. GOVERNMENT PRINTING OFFICE: 1932

Patents Nos. 1,880,190 to 1,881,420

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 423—No. 1 TUESDAY, OCTOBER 4, 1932 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $16.00 per annum; including annual index, $18.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of October 4, 1932	1
Adjudicated Patents	1
Adverse Decisions in Interference	1
Trade-Marks Canceled	1
Applications Under Examination	2
Decisions of the U. S. Courts—	
In re Martin	3
In re Heljkenskjold	3
In re The Nisley Shoe Company	4
In re Stubbs	6
Patent Suits	7
Disclaimer	8
Trade-Marks Published (130 Applications)	9
Trade-Mark Registrations Granted	25
Trade-Mark Registrations Renewed	31
Labels	32
Prints	32
Reissues	33
Plant Patents	34
Designs	34
Patents Granted	42

Issue of October 4, 1932

Trade-Marks	179—No.	297,804 to No.	297,982, inclusive.
T. M. Renewals	8		
Labels	24—No.	41,229 to No.	41,252, inclusive.
Prints	5—No.	13,924 to No.	13,928, inclusive.
Reissues	4—No.	18,611 to No.	18,614, inclusive.
Plant Patents	3—No.	28 to No.	30, inclusive.
Designs	38—No.	87,861 to No.	87,898, inclusive.
Patents	1231—No.	1,880,190 to No.	1,881,420, inclusive.
Total	1,492		

Adjudicated Patents

(C. C. A. Pa.) Peiler patent, No. 1,655,391, for method of and apparatus for feeding molten glass, *Held* valid and infringed, all sixty claims, except claims 2, 3, 5, 6, 7, 24–31, 51, 52, and 60, being in suit. *Hartford-Empire Co.* v. *Hazel-Atlas Glass Co.*, 59 F.(2d) 899.

(D. C. N. Y.) Fleisher patent, No. 1,670,656, for ventilating system, claims 1, 3, 5, and 20 *Held* valid and infringed. *Auditorium Ventilating Corporation* v. *Greater Rochester Properties.* 59 F.(2d) 450.

(D. C. N. Y.) Marcus patent, No. 1,600,091, for process for extracting the nonsaponifiable and difficultly saponifiable matter from fatty material, claims 1, 2, and 3 *Held* infringed, claim 4 *Held* not infringed. *International Vitamin Corporation* v. *E. R. Squibb & Sons*, 59 F.(2d) 433.

(D. C. N. Y.) Lewis reissue patent, No. 16,611, for method of and apparatus for cooling and ventilating, claims 8, 10, 13, 14, and 17 *Held* valid and infringed. *Auditorium Ventilating Corporation* v. *Greater Rochester Properties*, 59 F.(2d) 450.

(C. C. A. Del.) Lowell and Dunmore patent, No. 1,455,141, for radio receiving apparatus, claims 3 and 14 *Held* invalid. *Radio Corporation of America* v. *Dubilier Condenser Corporation.* 59 F.(2d) 305.

(D. C. Del.) Burt patent, No. 1,470,524, for process of making frozen confections, *Held* infringed. *Good Humor Corporation of America* v. *Popsicle Corporation of United States*, 59 F.(2d) 344.

(C. C. A. Del.) Dunmore patent, No. 1,635,117, for signal-receiving system, claim 9 *Held* invalid. *Radio Corporation of America* v. *Dubilier Condenser Corporation.* 59 F.(2d) 309.

(D. C. Del.) Burt patent, No. 1,718,997, for frozen confection, *Held* infringed. *Good Humor Corporation of America* v. *Popsicle Corporation of United States*, 59 F.(2d) 344.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,697,623, B. D. Willis, Telephone system; decided July 19, 1932, claims 1, 11, 12, 15, and 17.

Pat. 1,709,692, L. M. Swope and J. C. Zulauf, Expansion joint strip, decided August 19, 1932, claim 2.

Pat. 1,749,536, J. J. Hogan, Switch, decided September 8, 1932, claim 9.

Pat. 1,797,277, G. F. Thomas, Lubricating apparatus, decided September 7, 1932, claims 2 and 3.

Pat. 1,824,117, F. W. Brixner, Train dispatching system for railroads, decided September 6, 1932, claims 5, 6, 7, and 11.

Pat. 1,834,807, W. F. Skeats, System of electrical distribution, decided September 3, 1932, claims 1, 2, 3, 4, 8, 10, 11, and 12.

Trade-Marks Canceled

123,869. Certain named belts, hose, and tubing. United States Rubber Company, New Brunswick, N. J., and New York, N. Y. Registered December 10, 1918. Canceled September 6, 1932.

257,069. Footwear. Isidore Feldstein, doing business as Morris Feldstein & Son, New York, N. Y. Registered May 28, 1929. Canceled September 6, 1932.

266,584. Column in a daily publication. Daily Running Horse, Inc., New York, N. Y. Registered January 28, 1930. Canceled September 6, 1932.

278,690. Malt syrup for food purposes. Frank L. Linehan, doing business as F. L. Linehan Co., Minneapolis, Minn. Registered December 23, 1930. Canceled September 6, 1932.

282,087. Flour. Theo. Stivers Milling Company, Rome, Ga., Registered April 7, 1931. Canceled September 6, 1932.

291,725. Avocados. Pacific Avocado Corp., Los Angeles, Calif. Registered February 28, 1932. Canceled September 6, 1932.

Condition of Applications Under Examination at Close of Business September 17, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 70,753; Trade-Mark Division, 894. Oldest new case, Mar. 7, 1932; oldest amended, Mar. 12, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	June 20	June 21	406
6706	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	May 20	May 21	852
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	May 26	June 2	735
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	June 20	July 1	412
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 20	May 24	370
4898 C	6. LEWERS, A. M., Carbon Chemistry	Mar. 19	Mar. 21	2,096
5725	7. JARBOE, C. G., Optics; Photography	Apr. 21	Apr. 21	1,404
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Apr. 28	May 11	1,040
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	June 20	June 20	723
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Apr. 18	Apr. 20	886
5087 D	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	May 17	May 20	621
7701	12. HENRY, C. C., Machine Elements	June 4	June 4	539
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	May 5	May 5	1,055
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	May 27	May 28	746
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Apr. 17	Apr. 17	1,807
5612	16. SPENCER, C. J., Telegraphy; Telephony	May 30	May 30	862
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Mar. 28	Mar. 28	1,409
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	May 18	May 23	633
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Mar. 23	Mar. 23	1,784
5613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 25	May 26	567
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	May 10	May 12	835
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	June 9	June 28	567
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Mar. 25	Mar. 29	851
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	June 3	June 8	593
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Mar. 29	Apr. 4	1,377
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 17	Mar. 18	1,042
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	May 21	May 21	906
4628	28. BENSON, A. R., Internal-Combustion Engines	Mar. 23	Mar. 28	1,379
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Mar. 23	Mar. 23	880
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	May 12	May 9	816
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Apr. 1	Apr. 1	1,543
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	May 31	May 27	747
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 17	Mar. 17	2,294
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Apr. 18	Apr. 18	849
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 18	July 18	418
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Mar. 21	Mar. 24	1,593
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Apr. 2	Apr. 19	1,136
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 23	June 16	174
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Mar. 23	Mar. 23	1,425
7880	40. OBERLIN, J. J., Receptacles	Apr. 18	Apr. 23	2,215
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	June 20	July 14	537
5882	42. CUTTING, H. O., Electric Signaling	Mar. 21	Mar. 26	1,283
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Apr. 23	Apr. 23	1,494
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Mar. 17	Mar. 17	1,770
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	May 17	May 17	950
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	May 19	May 21	920
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 29	Apr. 20	2,006
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Apr. 22	Apr. 22	737
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Mar. 22	Mar. 28	1,510
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Mar. 19	Mar. 19	2,175
5628	51. BACKUS, C. D., Radiant Energy	May 2	May 2	1,160
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	June 18	June 20	739
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	July 6	July 13	486
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Mar. 29	Mar. 29	1,114
6883	55. BOWEN, S. T.—(Bread, Pastry, and Confection Making; Cutlery	July 7	July 7	338
	(Designs	Sept. 2	Sept. 9	127
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Apr. 2	Apr. 2	1,462
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	May 17	May 17	650
5605	58. DOWELL, E. F., Abrading; Typewriting	Mar. 17	Mar. 17	1,274
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 7	Mar. 12	1,789
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Mar. 30	Mar. 30	1,410
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Mar. 30	Apr. 4	1,340
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Apr. 8	Apr. 8	1,685
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Mar. 26	Mar. 26	1,423
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	May 28	June 6	508
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Mar. 23	Mar. 23	1,557
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—(Trade-Marks	Aug. 22	Sept. 7	816
	(Labels and Prints	Aug. 20	Sept. 2	78

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE MARTIN

No. 2,981. Decided May 23, 1932

PATENTABILITY—METHOD OF MAKING TIRES.

Claims for a method of making tires *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Albert L. Ely and *Mr. J. Ralph Barrow* for Martin.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Four claims (being all the claims) of an application for patent on a method of making rubber tires were rejected by the Examiner of the United States Patent Office on the ground that they disclosed no invention in view of the prior art. His decision was affirmed by the Board of Appeals. From the latter decision appellant appeals to this court.

Claim 5 appears to be typical:

5. The method of making tires comprising building roughly to shape entirely uncured bead units from strips of raw rubber stock containing reinforcements, constructing the tire with said uncured bead units therein, and molding and curing the tire to shape.

The references are: Tillinghast, 723,945, March 31, 1903; Seiberling et al., 948,064, February 1, 1910; Maranville, 1,485,864, March 4, 1924.

The particular feature or element which is emphasized in appellant's brief and oral argument is the specific manner of constructing the bead units of uncured rubber and incorporating them in the uncured state into the tire, which is then molded and cured as a unit.

It seems to have been the practice, at least immediately prior to appellant's development, to make up the bead unit, partly cure it, and then insert it into the tire unit, as disclosed in the Seiberling patent, supra.

Prior to Seiberling, appellant's brief says:

The process of manufacture of pneumatic tire casings first used in the rubber industry involved the obvious steps of applying separately to the tire during the building thereof each strip of material including the various parts of the bead structure such as the core and flipper in its raw, unvulcanized state and then vulcanizing the whole.

Tillinghast, in his specification, discloses the following:

* * * the beads are molded and compressed into the desired form separately from the rest of the sheath and are then attached to the edges of the sheath and the sheath and beads then vulcanized together and united into one structure by such vulcanization. The beads are preferably formed by taking a strip of thin woven fabric of the proper length, coated with rubber in the usual manner and known as "frictioned cloth", and forming the same into a mass, as by rolling it up into a roll, as shown at A, Fig. 3, said roll being of a length sufficient to extend around the periphery of the rim of the wheel. This roll is then placed in a mold E and subjected to pressure to give the mass a shape in cross section corresponding to the shape of the mold. The mold is preferably heated during the operation to soften the rubber and to cause the mass to be more thoroughly compressed and condensed.

After being shaped by the process described, and inserted into the tire unit "the whole, including the sheath proper and the attached beads, is then vulcanized in a suitable mold."

In the Seiberling patent it is stated:

This bead material has heretofore also been applied to the ring core in an uncured condition.

In its decision upon a rehearing granted, the Board of Appeals said:

Seiberling shows preformed beads of reinforced rubber flipper with rubberized fabric and describes the forming of beads of unvulcanized material. We see no invention in view of Seiberling's teaching in forming such uncured beads separately from the core or in using uncured material for the beads which he discloses.

Maranville discloses tire beads having as reinforcements parallel strands of beaded wire.

Careful consideration has been given to appellant's arguments and to the authorities cited in his brief, but we are wholly unable to see where, in view of the teachings of the prior art, he may be credited with having developed a method which comprises features that are patentably novel.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HEIJKENSKJOLD

No. 2,994. Decided May 23, 1932

PATENTABILITY—FLOATING BATHING PLANT.

Claims for a floating bathing plant *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Cameron, Kerkam & Sutton and *Mr. W. B. Kerkam* and *Mr. R. H. Hudson* for Heijkenskjold.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

This appeal is from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner rejecting, for lack of invention in view of the prior art, the three claims of an application for patent upon alleged improvements in bathing plants.

Claim 31 is quoted as typical:

A floating bathing plant comprising a swimming tank filled with water and floating in a body of water, said tank having double walls over substantially its entire area to provide buoyancy for the tank and heat insulation for the water therein, a water purifying plant carried by said floating tank, a water heating plant carried by said floating tank, a water circulating system for conducting water from said tank through said purifying plant and heating plant and back to said tank, and circulating means for circulating water through said system, said tank being water-sealed to prevent the entry of outside water therein.

The references cited are: Despoix et al, 194,808, September 4, 1877; Mitchell, 883,467, March 31, 1908; Paine, 1,088,239, February 24, 1914; Roberts (British), 2907, of 1871; Perrett (British), 4249, of 1873.

The disclosure of the application is of a floating plant designed for use as a swimming tank or pool, for which numerous advantages in comfort, sanitation and economy are claimed.

After describing appellant's structure in detail and discussing the features disclosed in the different references the brief in behalf of appellant says:

It is frankly admitted that Heijkenskjold is not first to provide a floating swimming tank; that he is not the first to heat the water in a floating swimming tank; that he is not the first to filter the water in a floating swimming tank; and that he is not the first to disclose the desirability of providing heat insulation between the water in the tank and the outside water. It is contended, however, that Heijkenskjold is the first to provide a floating swimming tank which is completely *water-sealed to prevent the entry of outside water into the tank*, and that he is the first to provide a floating swimming tank having spaced double walls over the entire area of the sides and bottom of the tank which double walls (1) provide buoyancy for the tank; (2) make it impossible for the outside water to leak into the tank; (3) provide efficient heat insulation over the entire area of the tank; and (4) provide compartments for housing the elements of the heating and filtering systems. No reference in the prior art of record discloses a floating swimming tank which is water-sealed, and aside from this feature, no one reference in the prior art of record discloses all of the claimed features. (Italics quoted).

From the foregoing quotation it is to be seen that appellant particularly emphasizes the "water-sealed" feature of his structure. The argument is that usually the water in rivers and streams near cities and towns, where the floating bathing plants at issue would generally be located, is polluted to such an extent as to render it unfit for use in swimming tanks. Appellant in argument states that, therefore, his tank is to be filled with water from other sources; that it is so sealed against leakage as to prevent the entrance into it of any water from the stream in which located, and the water introduced from other sources is kept pure by the filtration system which is a part of his combination.

It may be here said that there is nothing in the claims at issue which gives any indication as to the source of supply of the water to be used in the swimming tank, nor does the specification contain any recital as to this. However, insofar as patentability is concerned, we are unable to see wherein this is of importance. We are unable to perceive any invention in the act of taking water from some source other than that in which the structure floats.

Neither can we perceive invention in so sealing the tank as to prevent undesired water entering it.

There is also a contention on the part of appellant that the references make no disclosure of a floating swimming tank having spaced double walls over the entire area of the sides and bottom of the tank.

This may be conceded, but, at most, the extending of double walls over the *entire* area is a matter of degree, and it would seem to be in the realm of the obvious.

The several respective references disclose all the elements which appellant has combined in his structure, except elements obvious to one skilled in the art. They are pointed out in detail in the respective opinions of the tribunals of the patent office and need not be here repeated.

We discern no error in the decision appealed from and same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE THE NISLEY SHOE COMPANY

No. 2,821. Decided May 23, 1932

1. TRADE-MARKS—SURNAMES—WRITTEN IN A PARTICULAR OR DISTINCTIVE MANNER.

"We are of the opinion that the proper construction of the words 'particular or distinctive manner' in the proviso of section 5 referred to is that the word or words constituting the mark shall be written, printed, impressed or woven in such a manner as to form a distinct impression upon the eye of the observer, to the extent that he will remember such particular or distinctive form and rely upon it, in part at least, in ascribing origin of the goods to which the mark is applied."

2. SAME—SAME—NISLEY'S FOR SHOES AND HOSIERY.

The word "Nisley's" written in distorted black type *Held* to be a mere surname and not registrable as a trade-mark since not written in a particular or distinctive manner.

3. SAME—SECTION 5 OF TRADE-MARK ACT CONSTRUED.

The amendment to section 5 of the Trade-Mark Act providing that nothing shall prevent the registration of a trade-mark otherwise registrable because of it being the name of the applicant construed and *Held* not to authorize the registration as a trade-mark of a mere surname.

APPEAL from the Patent Office. Affirmed.

Mr. H. A. Toulmin, Mr. H. A. Toulmin, jr., and *Mr. Rowan A. Greer* for The Nisley Shoe Company.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Commissioner of Patents, affirming a decision of the Examiner of Trade-Marks, rejecting the application of appellant for the registration of the name "Nisley's" under the Trade-Mark Act of February 20, 1905, as a trade-mark for shoes and hosiery.

It appears from the record that one C. R. Nisley is the president of appellant company.

The registration was refused upon the ground that the mark sought to be registered is a surname, not—

written, printed, impressed, or woven in some particular or distinctive manner,

and that therefore its registration is prohibited by section 5 of said act.

With respect to the arrangement of the letters forming the word "Nisley's" shown in the specimen accompanying the application, the Examiner in his statement said:

The name is written in distorted block type such as may be found in many signs and advertisements.

This appears to be a correct statement.

The parts of said section 5 pertinent to the issue here involved read as follows:

* * * *Provided*, That no mark which consists merely in the name of an individual, firm, corporation, or association not written, printed, impressed, or woven in some particular or distinctive manner, or in association with a portrait of the individual, or merely in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods, or merely a geographical name or term, shall be registered under the terms of this subdivision of this chapter: * * * *Provided further*, That nothing herein shall prevent the registration of a trade-mark otherwise registrable because of its being the name of the applicant or a portion thereof. * * *

Appellant urges four reasons why the decision of the Commissioner should be reversed; (1) that the mark is an uncommon and rare name; (2) that the mark is not merely a surname but has other meanings; (3) that the mark is printed in a particular or distinctive manner; and (4) that the mark is entitled to registration under that proviso of said section 5 last hereinbefore quoted.

With respect to the first contention of appellant, the statute makes no exception in the case of uncommon or rare names. The word sought to be registered is conceded to be the surname of the president of appellant company. Furthermore, we would observe that the Examiner found that the name "Nisley" appeared in the directories of many cities. Therefore this contention is without merit.

As to the second contention of appellant, we find the word "Nisley" in no dictionary, and, although appellant attempts to dissect it to show that the word, so dissected, may compose words having different meanings, it is obvious that, as herein used, it is merely a surname, and its use as a trade-mark is intended to bring to the attention of buyers of shoes and hosiery the name of appellant's president. Under the facts of this case, even if the word "Nisley's" did have another meaning than that of signifying the name of appellant's president, it would be immaterial.

[1, 2] With reference to appellant's third contention, we can not hold that the word "Nisley's," as used by appellant, is written or displayed in a particular or distinctive manner within the meaning of said section 5. The Examiner of Trade-Marks in his decision, as heretofore noted, stated that the distorted block type used by appellant was such as may be found in many signs and advertisements. He further stated that—

It is not believed that the public would see in it anything unique or distinctive.

We agree with this conclusion of the Examiner, which was affirmed by the Commissioner. We may take judicial notice of the fact that it is not uncommon in signs and advertisements to use type of the character employed by appellant in the formation of the word "Nisley's." We are of the opinion that the proper construction of the words "particular or distinctive manner" in the proviso of section 5 referred to is that the word or words constituting the mark shall be written, printed, impressed or woven in such a manner as to form a distinct impression upon the eye of the observer, to the extent that he will remember such particular or distinctive form and rely upon it, in part at least, in ascribing origin of the goods to which the mark is applied.

We come now to appellant's fourth contention, that the proviso of said section 5 last hereinbefore quoted warrants the registration of the mark applied for by appellant. It is appellant's contention that the word "Nisley's" is a valid common law trade-mark, and is therefore "otherwise registrable" within the meaning of those words as used in said proviso. Whether the word "Nisley's" is a valid common law trade-mark we need not determine; we are concerned only with the interpretation of the statute, and if the registration of said word is forbidden by the statute, the decision of the Commissioner must be affirmed.

We are frank to say that, upon its face, there seems to be some conflict in said section 5 between the two provisos hereinbefore quoted. It is clear that the first proviso includes the names of applicants within the words "individual, firm, corporation, or association," therein used. If the words "otherwise registrable" in the last quoted proviso are construed to contemplate that in all cases the name of an applicant or part thereof must conform to the requirements of the proviso first hereinbefore quoted, then the last quoted proviso means nothing. On the other hand, if said words are construed to mean that the mark of an applicant is registrable without reference to the preceding provisions of said section 5, then the first quoted proviso means nothing insofar as it relates to the name of an applicant. It therefore seems clear that there is such ambiguity in the section as to necessitate construction for the purpose of arriving at the intent of Congress, and for that purpose we may resort to the legislative history of the provisos here in question.

[3] It appears that in the act of February 20, 1905, so far as said section 5 is here concerned, the section was enacted in its present form with the exception of the proviso last hereinbefore quoted, which was not contained therein. In 1910 the Court of Appeals of the District of Columbia, in the case of *In re The Success Company*, 34 App. D. C. 443, 152 O. G. 958, construed the proviso first hereinbefore quoted and held that the word "Success", when not written, printed, impressed or woven in some particular manner, was not registrable by a company, the corporate name of which was "The Success Company," even though the word was the subject of a technical trade-mark. In 1911 Congress amended said section 5 by adding thereto the proviso last hereinbefore quoted. 36 Stat. L. 918. Said amendment was embodied in H. R. 24,749, 61st Congress, 2nd session, and the report of the committee reporting the bill to the House contains the following:

The Court of Appeals of the District of Columbia has held that said section 5, as the same now stands, has the effect "to prevent the registration *by a corporation* of its own name, whether that name be the subject of a technical trade-mark or not." The decision applies to a trade-mark that forms the name, or a part of the name, of the applicant. (Italics ours.)

It is apparent that reference was made in said report to the case of *In re The Success Company*, supra.

When the bill came before the House of Representatives for consideration, the construction of the proviso contained in it was the subject of considerable debate between the chairman of the Committee on Patents, Representative Currier, and Representative Mann. This debate appears in volume 45, part 7, p. 7486, of the Congressional Record. We quote a portion of said debate:

Mr. MANN. Mr. Speaker, reserving the right to object, I would ask the gentleman in charge of this bill a question. The bill provides in the last proviso:

"That nothing herein shall prevent the registration of a trade-mark otherwise registrable because of its being the name of the applicant or a portion thereof."

Then the first proviso is:

"That no mark which consists merely in the name of an individual, firm, corporation, or association not written, printed, impressed, or woven in some particular or distinctive manner or in association with a portrait of the individual, etc., shall be registered under the terms of this act."

There is an absolute conflict between the two provisions, and nobody can reconcile the two provisions. In one place they say distinctly in the bill that a name can not be registered as a trade-mark, and in another place they say—"nothing herein shall prevent the registration of a trade-mark otherwise registrable because of its being the name of the applicant or a portion thereof."

I am not in favor of enacting legislation which on its face contains two provisions absolutely contradictory to each other.

Mr. CURRIER. *May I state to the gentleman there is no purpose here really of broadening the first provision.* This is existing law——

Mr. MANN. I understand.

Mr. CURRIER. *It is intending to prevent, and does prevent the registering of a man's name as a trade-mark.*

Mr. MANN. That is what it says.

Mr. CURRIER. *We do not intend to allow them to do that,* but the court has given this construction to it. Here is a mark, a perfectly proper technical trade-mark like "Kodak" or "Acme." If that happens to be a part of the name of a corporation, the courts have held it can not be registered under this provision of the bill. Now, it simply leads to this curious result: A company by first registering the mark and adopting the name afterwards have a trade-mark that can not be questioned. A company can change its name so as to remove that particular word from its corporate name and then register the trade-mark and then readopt the name. We do not think they should be compelled to resort to that sort of evasion, and there is no purpose here of allowing anyone to register anything which the courts do not hold is a technical mark, *like "Kodak," or things of that kind.* For instance, the word "Kodak" is part of the name of a corporation, the Eastman Kodak Company, and that occurs in many other cases.

It occurred in the case of the Success Magazine which was refused registration as a trade-mark because the word "Success" was a part of the corporate name. But they could abandon that name and register and immediately adopt the name again, and evade the law. We do not think they should be compelled to resort to an evasion of that kind, and we do not intend that anything shall be registered as a trade-mark which the court will not hold is a good technical mark. (Italics ours.)

From the foregoing legislative history, it is clear to us that in the enactment of that proviso of said section 5 last hereinbefore quoted, Congress did not intend that said provision should apply to a surname used as a trade-mark, but that, as to all surnames, the proviso of the section first quoted should be applicable.

While a surname used as a trade-mark may be valid against all the world except those bearing the same name, who have an equal right to use such name, it is not a trade-mark in the sense that any person may acquire the *exclusive* right to use it as a trade-mark. In the case of *Howe Scale* v. *Wyckoff, Seamans, etc.*, 198 U. S. 118, 116 O. G. 299, the court in its opinion said:

But it is well settled that a personal name can not be exclusively appropriated by any one as against others having a right to use it; and as the name "Remington" is an ordinary family surname, it was manifestly incapable of exclusive appropriation as a valid trade-mark, and its registration as such could not in itself give it validity. • • •

It is our opinion that Congress, in the enactment of the amendment referred to, intended to eliminate from the first proviso of said section 5 hereinbefore quoted such names of applicants or parts thereof as could be *exclusively* appropriated at common law as valid trade-marks, which names no other person could have a right to use upon goods of the same descriptive properties, and therefore the proviso last hereinbefore quoted did not include a personal name such as "Nisley's" here involved. We therefore hold that registration of the name "Nisley's", as applied for, is prohibited by said section 5 because not—

written, printed, impressed, or woven in some particular or distinctive manner.

For the reasons stated, the decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE STUBBS

No. 2,955. Decided May 23, 1932

1. PATENTABILITY—PAVING FOR STREETS, ETC. Claims for a paving for streets, roads, and the like *Held* unpatentable over the prior art.
2. SAME—PROCESS OF MAKING CUT-SURFACE SEALED CONCRETE PAVEMENT. Claims for a process of making cut-surface sealed concrete *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. A. L. Jackson for Stubbs.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting all of the claims of appellant's application for want of patentability in view of the prior art.

The rejected claims are four in number, of which claims 1 and 3 are typical and read as follows:

1. Paving for streets, roads and the like comprising a slab of cut-surface partly cured concrete, a coating of bituminous material laid on said cut surface and partly embedded therein, and a coating of sand adhering to the bituminous material.

3. A process of making cut-surface sealed concrete paving for streets, roads and the like which comprises laying partly cured concrete cutting defective material from the surface of the concrete, spreading a coating of bituminous paint material, and afterwards treating the said paint material with a coat of sand.

The references relied upon are: Stubbs, 1,214,093, January 30, 1917; McCaffrey, 1,492,255, April 29, 1924.

The alleged invention is described by the Board of Appeals in its decision as follows:

The invention relates to street paving. It comprises laying concrete and when it is partly cured cutting off a layer about one-sixteenth to one-eighth inch thick from the upper surface portion thereby removing the laitance. The concrete is then painted with a coat of bituminous paint which penetrates the pores. A coat of bitumen is then applied and a layer of sand spread on top of the bitumen.

With respect to the references the Board said:

The patent to Stubbs discloses a machine for cleaning the top surface of a layer of concrete before the upper coat of wearing material is applied. The machine consists of rotary resilient steel brushes, which loosen the material and brush the loosened material away (lines 34–37, page 2). The purpose of the machine is stated to be, "to provide a device for cleaning dirt, dust and mortar coating from fresh laid concrete, that is, concrete which has been laid and set and which has a rough surface ready to receive a wearing coat of adhering material."

McCaffrey discloses a method of resurfacing old concrete roadways which consists in sweeping off dirt, dust, etc., washing the concrete with naphtha to remove grease, roughening the upper surface by checkering, applying an asphaltic paint coat, and finally applying a surface layer of asphalt. The patent states that the paint coat penetrates into the pores of the concrete and aids in the adhesion of the asphalt surface layer to the concrete.

All of the claims were rejected upon said references, and in addition the Examiner held that claims 1 and 2 should be rejected because, while they are in the form of structure or product claims, they rely upon a method step. The Board of Appeals disagreed with the Examiner upon this ground of rejection, but held that said claims 1 and 2 were "primarily improper because as drawn they appear to claim a product in its transitory stage instead of in its final form. The finished product includes concrete which is completely cured and not partly cured."

[1] Appellant contends that said claims 1 and 2 are process claims and not product claims, but we are unable to agree with him. We agree with the Board that said claims describe a product consisting in part of partly cured concrete, whereas it is clear from appellant's specification that the product resulting from his process is a paving for streets in which there is no partly cured concrete, but consists in part of completely cured concrete. We find no error upon the part of the Board in rejecting said claims 1 and 2 upon the ground last above stated.

[2] With respect to claims 3 and 4, we are unable to agree with the Board that they lack invention in view of the prior art.

We find nothing in the Stubbs reference to indicate that the concrete cleaner there described might be used to remove the surface of partly cured concrete, or that such removal would be desirable as a step in a process for making street paving. The Board calls attention to the fact that in the specification in the Stubbs patent it is stated that the steel brushes there described are used to loosen the material as well as brushing loose material away. We are clear that the material so referred to was not any part of the surface of the concrete but only the mortar coating or other material adhering to the surface thereof.

The fact that appellant, in the application here involved, states that the surface cleaner described in said reference may be used in removing a part of the surface of partly cured concrete does not indicate in any way that the patent suggests such use.

With respect to the reference McCaffrey the Board said:

All of the claims have been further rejected as unpatentable over McCaffrey in view of Stubbs, the position being taken that there is no invention involved to remove a portion of the top surface in McCaffrey by means of the Stubbs machine instead of merely sweeping the top and roughening it. The McCaffrey patent involves resurfacing old concrete roadways and hence the concrete is hard and not readily removed. • • •

The McCaffrey patent involves a process of resurfacing completely cured concrete, in which the surface is checkered, marked or roughened, following which an asphaltic paint coat is applied and finally a surface layer of asphalt. It is stated in the patent that the paint coat, penetrating the crevices or pores of the concrete, aids in the adhesion of the asphalt surface coat which is afterwards applied.

The cleaner described in the Stubbs patent could not remove the surface of completely cured concrete, and we do not think there is anything in either the McCaffrey or Stubbs patents, singly or combined, that suggests the process here claimed by appellant.

Finally, it is stated by the Board that:

• • • It is well known that a portion could be more readily removed when concrete is in a somewhat plastic condition and that bituminous paint will penetrate deeper into the pores. To apply such knowledge is regarded well within the skill of a worker in this art. • • •

Granting the correctness of the foregoing statement, we do not think it follows that it was obvious to one skilled in the art that it was desirable to remove a portion of the surface of *partly cured* concrete, and that the bituminous paint would penetrate deeper into the pores of the surface resulting from such removal than if applied to partly cured concrete without such surface removal. Appellant's specification states that objectionable features named in the specification are found in the upper surface of the concrete to a depth of approximately one-sixteenth of an inch, and his invention lies in the removal of this defective material, when partly cured, and then spreading a coat of bituminous paint material, afterwards treating the said paint material with a coat of sand.

We do not think the process claimed is suggested by the references, and we are of the opinion that the process claimed involved the exercise of the inventive faculty.

For the reasons stated, the decision of the Board of Appeals is affirmed as to claims 1 and 2, and reversed as to claims 3 and 4.

Modified.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 15, 1922.]

1,089,405, W. S. Ferguson, Reenforced concrete dock or pier, D. C., S. D. Calif. (Los Angeles), Doc. Q–37–H, *The Dock & Terminal Engineering Co. et al.* v. *The City of Los Angeles.* Dismissed with prejudice June 8, 1932.

1,127,660, J. H. McMichael, Method of and apparatus for transporting and treating concrete, D. C. Mass., Doc. E 2747, *Concrete Mixing & Conveying Co.* v. *Stone & Webster, Inc.* Dismissed Mar. 2, 1931.

1,131,161, C. F. Root, Safety device for punching machines, D. C. Mass., Doc. E 3210, *C. F. Root et al.* v. *J. T. Robinson.* Decree for defendant Feb. 10, 1932.

1,135,108, L. Gschwind, Dish washing apparatus, D. C., W. D. Mich., S. Div,, Doc. E 2536, *L. Gschwind et al.* v. *Richards Mfg. Co. et al.* Dismissed July 25, 1932.

1,148,803, W. C. Schen, Orchard heater, filed July 21, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–60–J, *E. J. Summerhays* v. *O'Keefe & Merritt Co.*

1,151,136, Taylor & Liady, Packing spider, D. C., W. D. Okla. (Oklahoma City), Doc. E 1348, *F. G. Liady et al.* v. *Larkin Packer Co.* Claims 3 and 4 held valid Aug. 2, 1932.

1,248,715, J. Rice, Gin saw sharpener, filed July 6, 1932, D. C., W. D. Tenn. (Jackson), Doc. E 71, *J. E. Martin et al.* v. *O. Martin et al.*

1,273,703, M. J. Whelan, Closet seat, D. C., S. D. Mass., Doc. E 2909, *The Brunswick-Balke-Collender Co.* v. *C. F. Church Manufactory Co.* Dismissed without prejudice Jan. 2, 1932.

1,275,654, H. H. Boyce, Indicating means for motor propelled vehicles, filed Aug. 3, 1932, D. C., E. D. N. Y., Doc. E 6515, *Moto Meter Gauge & Equipment Corp. et al.* v. *E. A. Laboratories, Inc.*

1,326,153, W. J. Fleming, Buckle support, filed July 26, 1932, D. C., S. D. N. Y., Doc E 70/176, *H. Goodman & Sons, Inc., et al.* v. *A. S. Beck Shoe Corp.* Doc. E 70/177, *H. Goodman & Sons, Inc., et al.* v. *M. Sonshine, Inc.* Doc E 70/178, *H. Goodman & Sons, Inc., et al.* v. *J. Rubin et al. (Rubin Bros.).*

1,337,726, E. H. Ryon, Weft detector for looms, D. C. Mass., Doc. E 3383, *Crompton & Knowles Loom Works* v. *H. Demaras.* Injunction granted Feb. 2, 1932.

1,371,231, S. Elliott, Controlling means for centrifugal oil burners, D. C. Mass., Doc. E 3430, *Elliott Addressing Machine Co.* v. *Petroleum Heat & Power Co.* Consent decree dismissing bill Oct. 30, 1931.

1,379,855, J. Donner, Cream depilatory, D. C., E. D. Mo. (St. Louis), Doc. 9744, *J. Donner* v. *Sheer Pharmacal Corp.* Decree for defendant June 8, 1932.

1,383,035, C. R. Short, Bearing shim, C. C. A., 2d Cir., Doc. —, *General Motors Corp. et al.* v. *Lehr Auto Supply Co., Inc.* Decree affirmed (notice Aug. 5, 1932).

1,385,299, G. A. Bilque, Building brick and wall construction, D. C., S. D. Ga. (Augusta), Doc. E 152, *G. A. Bilque et al.* v. *Merry Bros. Brick & Tile Co., Inc.* Injunction granted July 7, 1930, dismissed July 25, 1932.

1,451,491, S. H. Calkins, Pattern and guide strip, C. C. A., 2d Cir., Doc. 12114, *Traitel Marble Co.* v. *Manhattan Terrazo Brass Strip Co., Inc.* Decree reversed (notice Aug. 2, 1932).

1,454,397, W. W. MacDonald, Hydraulic brake, D. C., N. D. Calif. (San Francisco), Doc. E 3222–L, *W. W. MacDonald* v. *The White Motor Co.* Dismissed without prejudice July 18, 1932.

1,516,383, F. E. Hoddersen-Balling, Ham boiler, D. C., 2d Cir., Doc. 12063–4, *F. E. Hoddersen-Balling* v. *D. F. Lorens et al.* Decree affirmed (notice Aug. 2, 1932).

1,525,942, M. Loughead, Fluid operated brake system, D. C., E. D. N. Y., Doc. E 6353, *Hydraulic Brake Co.* v. *B. H. Baldwin (Better Brake Service Station) et al.* Consent decree Aug. 1, 1932.

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y. Doc. E 69/75, *A. B. Dick Co.* v. *Biddle Purchasing Co.* Consent decree for plaintiff (notice July 28, 1932).

1,581,188, C. G. Fink, Process of electrodepositing chromium and of preparing baths therefor, C. C. A., 2d Cir., Doc. 12111, *United Chromium, Inc.*, v. *International Silver Co.* Decree affirmed except as to 1 claim (Aug. 2, 1932).

1,585,360, E. F. Baldwin, Twisting machine, D. C. Mass., Doc. E 2758, *American Fibre Corp.* v. *Gardner Fibre Co.* Dismissed without prejudice Jan. 2, 1932.

1,591,560, R. Prater, Grinder, D. C., W. D. Mo. (Kansas City), Doc. 1836, *Prater Pulverizer Co.* v. *Standard Steel Works.* Dismissed Aug. 4, 1932.

1,605,144, C. F. Reuter, Grouser for tractors, D. C. Mass., Doc. E 3436, *C. F. Reuter* v. *P. I. Perkins Co.* Consent decree dismissing bill Oct. 9, 1931.

1,725,500, V. P. Writer, Tam pressing machine, D. C., S. D. N. Y., Doc. E 64/48, *Anderson & Writer Corp.* v. *The Gluckin Corp. et al.* Consent decree for plaintiff (notice July 30, 1932).

1,725,787, G. H. Ellis, Building construction, C. C. A., 8th Cir. (St. Louis), Doc. 9454, *The Insulite Co.* v. *Reserve Supply Co.* Decree affirmed July 28, 1932.

1,726,832, E. H. Hollingshead, Line marker, filed Jan. 15, 1932, D. C., S. D. Tex. (Brownsville), Doc. E 228, *E. H. Hollingshead* v. *E. E. Wilmeth.*

1,739,506, C. P. Deibel, Process and apparatus for forming connectors for dry cells, D. C., S. D. N. Y., Doc. E 57/120, *General Dry Batteries, Inc.*, v. *Globe Battery Corp. et al.* Bill dismissed as to David Lind, injunction granted as to Globe Battery Corp. Same, filed Aug. 5, 1932, D. C., S. D. N. Y., Doc. E 70/199, *General Dry Batteries, Inc.*, v. *United States Electric Mfg. Corp.*

1,757,001, G. C. Beidler, Photographic apparatus, filed July 25, 1932, D. C., S. D. N. Y., Doc. E 70/168, *G. C. Beidler* v. *Photostat Corp.*

1,765,714, R. W. Bulkeley, Automobile top, D. C., W. D. Mich. (Grand Rapids), Doc. 2409, *R. W. Bulkeley* v. *F. F. Wood Motor Co. et al.* Dismissed July 28, 1932.

1,787,610, A. Blustein, Counter and method of making same, D. C. Mass., Doc. E 3414, *H. Brown et al (Brown Counter Co.)* v. *Bay State Counter Co.* Dismissed without prejudice Nov. 13, 1931.

1,790,156, J. L. Kleinman, Tennis racket, D. C. Mass. Doc. E 3413, *J. L. Kleinman* v. *R. E. Kent et al.* Dismissed without prejudice May 20, 1931.

1,794,305, A. H. Last, Fitted suit case construction, D. C., S. D. N. Y., Doc. E 65/352, *Franklin Leather Goods Co., Inc.*, v. *United Luggage Co., Inc.* Consent decree for plaintiff (notice July 26, 1932).

1,798,009, C. Arens, Power transmitting device, D. C., W. D. Mich (Grand Rapids), Doc. 2441, *C. Arens et al.* v. *The Shakespeare Products Co.* Claim 2 held infringed Aug. 4, 1932.

1,815,745, R. E. Thompson, Safety razor, filed July 28, 1932, D. C. Conn. (New Haven), Doc. E 2238, *Gillette Safety Razor Co.* v. *Standard Safety Razor Corp.*

1,834,580, Drinker & Shaw, Respiration apparatus, filed July 25, 1932, D. C. Mass., Doc. E 3699, *Warren E. Collins et al.* v. *J. H. Emerson.*

Re. 17,893, C. Meyer, Juice extractor, filed July 26, 1932, D. C., S. D. N. Y., Doc. E 70/174, *Press-Or Co.* v. *R. H. Macy & Co., Inc.*

Des. 75,818, L. E. Baer, Collar holder, D. C. Mass. Doc. E 3309, *The Baer & Wilde Co.* v. *A. Rosenberg et al.* Dismissed Nov. 10, 1931.

Disclaimer

1,829,378.—*André Thiriet*, Lyon, France. TREATMENT OF CELLULOSE MATERIALS. Patent dated October 27, 1931. Disclaimer filed September 9, 1932, by the assignee, *Papeteries Navarre.*

Therefore disclaims from the scope of each of claims 7 and 8 in said Letters Patent any process of purifying cellulose-bearing pulp except processes in which the pulp travels down an inclined screen while being subjected to the water jets passing through the pulp.

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 4, 1932

[VOL. 423. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 328,252. CHRIS RUSSELL, doing business as Deep Sea Sponge Company, Tarpon Springs, Fla. Filed June 23, 1932.

Bulldog Brand

The descriptive word "Brand" is disclaimed apart from the other features of the mark shown on the drawing.

For Rock Island Sheep Wool Sponges.

Claims use since June 10, 1930.

Ser. No. 329,157. SOUTHERN COAL COMPANY, INC., Memphis, Tenn. Filed July 28, 1932.



For Coal.

Claims use since Feb. 1, 1930.

CLASS 2

Receptacles

Ser. No. 329,837. NU-PAK CORPORATION, New York, N. Y. Filed Aug. 25, 1932.

NU-PAK

For Paper, Cardboard, and Fibreboard and Cellophane Cartons; Packages, Boxes, and Blanks Therefor.

Claims use since Mar. 17, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 327,888. CHARLOTTE RICHMOND, Tudor City, New York, N. Y. Filed June 10, 1932.

PORTAKIT

For Portable Fitted or Unfitted Toilet Cases.

Claims use since May 18, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 324,941. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Mar. 9, 1932.

AcTo

For Automobile Polishing Cloths (Wax Treated), Mechanics' Hand Soap, Powdered Soap; and Automobile Polishing Kits, Consisting of a Bottle or Can of Nickel Polish and a Piece of Cheese Cloth, a Soft Knitted Cloth, a Chemically Treated Polishing Cloth, Chamois or Sponge.

Claims use since Feb. 18, 1932.

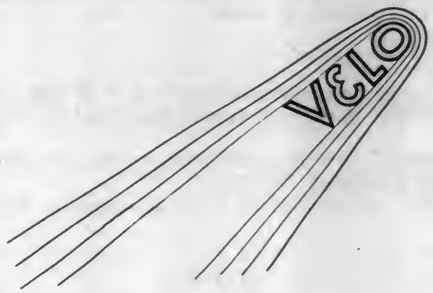
Ser. No. 328,462. FREDERICK A. HESSEL, doing business as Marfred Laboratories, New York, N. Y. Filed June 29, 1932.



For Hand and Skin Cleaners.

Claims use since May 12, 1932.

Ser. No. 329,236. KEYSTONE LUBRICATING COMPANY, Philadelphia, Pa. Filed July 30, 1932.



For Hand Cleansing Preparation, Which May Also be Used for Cleaning Floors, Metals, Woodwork, and the Like.
Claims use since July 20, 1932.

Ser. No. 329,587. EMIL J. SCHUMACHER, doing business as The Ridal Products Co., Erie, Pa. Filed Aug. 16, 1932.

RID-AL

For Dry Cleaning Liquid.
Claims use since Apr. 15, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 308,325. KONSTANTIN CHRISTODOULOU, Bronx, N. Y. Filed Nov. 26, 1930.



The portrait appearing on the drawing is that of applicant. No claim is made to the exclusive use of the words "Christo's" and "Healing Salve" apart from the mark shown on the drawing.
For Compound for the Treatment of Burns, Sores, Wounds, Pimples, Skin Diseases, Such as Eczema or Grain Pimples of Infants, Sunburn, and for the Alleviation of Coughs.
Claims use since Nov. 1, 1930.

Ser. No. 312,736. FRANK J. BENTZ, doing business as Fixzit System, Miami, Fla. Filed Mar. 30, 1931.

FIXZIT

For Compound for Stopping Boiler Leaks, a Compound for Cleaning Waste Matter from Pipes; a Compound for Cleaning Scale, Rust, and Sediment from the Inside of Pipes; a Compound for Cleaning Scale, Rust, and Sediment from the Inside of Boilers; a Disinfectant Compound.
Claims use since July, 1928.

Ser. No. 321,062. JOSEPH KERN, doing business as Oriole Drug Company, Baltimore, Md. Filed Nov. 6, 1931.

THE COUGH ROBBER

For Aqueous and Tablet Preparation of a Physician's Successful Prescription for Simple Coughs from Head Colds, and for Allaying Ordinary Irritations of the Throat, and as a Mild Laxative.
Claims use since April, 1930.

Ser. No. 323,107. THE WILDROOT COMPANY, INC., Buffalo, N. Y. Filed Jan. 16, 1932.

WILDROOT

For Hair Tonics; Wavesets, Being Powders or Liquids to be Used for Setting Waves in the Hair; Shampoos, Facial and Skin Creams, Skin Lotions; and Preparations for Waving, Cleansing, or Beautifying the Hair.
Claims use since 1911.

Ser. No. 328,005. KABUSHIKI-KAISHA TAKEDA-CHOSEI SHOTEN, Osaka, Japan. Filed June 15, 1932.

VITACAMPHER
ヴィタカンファー

The Japanese characters on the drawing are the phonetic equivalents of the word "Vitacampher".
For Preparations of Camphor Used as a Cardio Tonic.
Claims use since July, 1931.

Ser. No. 328,354. HAYMAN OIL CO., Los Angeles, Calif. Filed June 28, 1932.



The words "Quality Never Varies" are disclaimed apart from the mark as shown in the drawing.
For Preparation for Treatment of Psoriasis, Eczema, and Other Skin Diseases; an Alternative and Discutient for Use in the Treatment of Some Forms of Skin Diseases; Isoprene, Toluene, Benzol, and Xylol.
Claims use since July 29, 1931.

Ser. No. 328,555. THOMAS J. ILES, New York, N. Y. Filed July 5, 1932.

ANTIPHYMINOL

For Therapeutic Preparation for the Control of Fermentation in the Human System and Adapted for Both Internal and External Use; for a Non-Toxic Therapeutic Preparation for External Use Only, to be Used for Cuts, Sores, Bruises, Insect Bites, Burns, Sunburn, and Poison Ivy.
Claims use since June 29, 1932.

Ser. No. 328,742. IVORY STAR PRODUCTS COMPANY, Willimantic, Conn. Filed July 12, 1932.

IVORY STAR ★

For Bleach Water, Ammonia, and Laundry Blueing.
Claims use since Jan. 1, 1932.

Ser. No. 328,809. CRYSTAL HOME FILTER CO. INC., Brooklyn, N. Y. Filed July 15, 1932.



The words "Kristal-Kleer" are disclaimed apart from the mark as shown. The lines appearing in the drawing designate shading only.
For Compound in the Form of Powder Used in the Filtration of Liquids and Beverages.
Claims use since Feb. 8, 1932.

Ser. No. 329,086. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed July 26, 1932.

Immetal

For Iodine Preparation for Treatment of Arthritis.
Claims use since July 1, 1932.

Ser. No. 329,578. FRITZSCHE BROTHERS, INC., New York, N. Y. Filed Aug. 16, 1932.

JAVALLAL

For Natural and Synthetic Essential Oils Suitable for Perfuming Purposes.
Claims use since July 18, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 328,681. GODFREY L. CABOT, INC., Boston, Mass. Filed July 11, 1932.

MOGUL

For Carbon Black Sold as a Pigment for Manufacturing Inks Only.
Claims use since Mar. 10, 1932.

Ser. No. 329,508. STONE-MUELLER COMPANY, Chicago, Ill. Filed Aug. 12, 1932.

Nu-Life

The Ribbon Aid

The words "The Ribbon Aid" are disclaimed apart from the mark as shown.
For Typewriter Ribbon Revivifying Liquid.
Claims use since Mar. 3, 1932.

CLASS 12

Construction Materials

Ser. No. 329,651. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y. Filed Aug. 18, 1932.

LOCKAIRE

For Thermal and Sound Insulating Wall Board.
Claims use since Aug. 15, 1932.

Ser. No. 329,652. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y. Filed Aug. 18, 1932.

LOCKAIRE

For Thermal and Sound Insulating Wall Board.
Claims use since Aug. 15, 1932.

Ser. No. 329,748. LONG-BELL LUMBER SALES CORPORATION, Kansas City, Mo., and Longview, Wash. Filed Aug. 22, 1932.



For Lumber Products—i. e.: Dressed and Undressed Lumber, Flooring, Siding, Ship-Lap, Joists, Ceiling, Shelving, and Finished Lumber.
Claims use since Nov. 15, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 329,302. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Aug. 3, 1932.

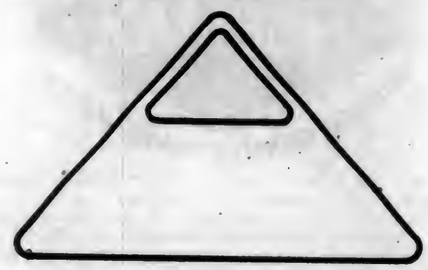
DORIC

For Bathroom Fixtures—Namely, Shower Fixtures, Tub Fixtures, Diverter Fixtures, Drains and Overflows, Shower Rail Flanges, Shower Heads and Flanges, Lavatory Fixtures and Trims, Tank Levers, Tank Trims, Supply Pipes and Flanges, and Traps and Flanges.
Claims use since June 27, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 319,579. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Sept. 30, 1931.



For Nickel, Nickel Ingots, Nickel Alloys, Reduced Nickel, Electrolytic Nickel, Powdered Nickel, Malleable Nickel Ingots, Rolled, Cast, Depolarized, and Oxidized Anodes, Nickel Alloys Containing Copper, Nickel Shot, "F"-Nickel Shot (Commercial Nickel), Copper-Nickel Shot, Nickel Oxide, Green Nickel Oxide, and Black Nickel Oxide.
Claims use since Apr. 29, 1919.

CLASS 15

Oils and Greases

Ser. No. 328,353. HAYMAN OIL CO., Los Angeles, Calif. Filed June 28, 1932.



The words "Quality Never Varies" are disclaimed apart from the mark shown in the drawing.
For Gasoline, Lubricating Oils, and Crude Oil.
Claims use since July 29, 1931.

Ser. No. 329,475. JOHN E. JOHNSON, Pittsburgh, Pa. Filed Aug. 11, 1932.



The upper triangular field of the mark is white and the lower triangular field is blue, with the lettering partially blue and partially white as shown on the drawing. The word "Gasoline" is disclaimed apart from the mark as shown.
For Gasoline.
Claims use since Aug. 16, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 304,265. KENNETH B. WALTON, doing business as Kents Orderphone Co., Atlantic City, N. J. Filed Aug. 5, 1930.



For Electric Audible Annunciator Equipment for Use in Restaurants and the Like, Consisting of Microphones, Electric Amplification Means, and Remote Loud Speakers.
Claims use since Feb. 1, 1930.

Ser. No. 327,993. TRIPLEX PRODUCTS CORPORATION, Clifton, N. J., and New York, N. Y. Filed June 14, 1932.



No claim is made to the words "Triplex Products Corporation."
For Domestic Hot Water Heaters, Electric or Electrically Operated Time Switches, and Electric Flashers for Sign Lights.
Claims use since June 1, 1932.

Ser. No. 328,556. LEYSE ALUMINUM COMPANY, Kewaunee, Wis. Filed July 5, 1932.

DRIPMASTER

For Electrical Coffee Makers.
Claims use since June 15, 1932.

Ser. No. 329,132. THE BULLS-EYE ELECTRIC MANUFACTURING COMPANY, Torrington, Conn. Filed July 28, 1932.

"BULLS-EYE"

The "spot" is red, but no claim is made herein to the circle or to the red spot in the center apart from the mark herein shown.
For Electrical Fuse Plugs and Parts Thereof.
Claims use since June 7, 1928.

Ser. No. 329,533. THE OKONITE COMPANY, Passaic, N. J. Filed Aug. 13, 1932.

OKOCORD

For Insulated Wires and Cables.
Claims use since Mar. 28, 1928.

Ser. No. 329,534. THE OKONITE COMPANY, Passaic, N. J. Filed Aug. 13, 1932.

OKOLAST

For Insulated Wires and Cables.
Claims use since Feb. 28, 1931.

Ser. No. 329,535. THE OKONITE COMPANY, Passaic, N. J. Filed Aug. 13, 1932.

OKOSHEATH

For Insulated Wires and Cables.
Claims use since Nov. 24, 1931.

Ser. No. 329,739. L. L. CORYELL & SON, Lincoln, Nebr. Filed Aug. 22, 1932.

CORYELL
C-70-L

For Automobile and Radio Storage Batteries.
Claims use since Sept. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 326,092. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

THE PRO

For Golf Balls.
Claims use since June, 1930.

Ser. No. 329,491. S. L. ALLEN & CO., INC., Philadelphia, Pa. Filed Aug. 11, 1932.

FLEXY

For Roller Coasters and See-Saw Merry-Go-Rounds.
Claims use since July 23, 1932.

Ser. No. 329,557. BERTRAM F. KEHRER, doing business as Kiddipak Mfg. Co., Seattle, Wash. Filed Aug. 16, 1932.

KIDDIPAK

For Packaged Ready-Cut Strips, Blocks, and Round Wood for Children's Use in Making Toys.
Claims use since July 22, 1932.

Ser. No. 329,795. CHARLES ANTON GLOCK, Chatham, Ontario, Canada. Filed Aug. 24, 1932.

RIS-TEE

For Golf Tee Holding Wristlets.
Claims use since May 2, 1932.

Ser. No. 329,949. HILLERICH & BRADSBY CO., Louisville Ky. Filed Aug. 29, 1932.

F. C. "Babe" Herman

The trade-mark is the facsimile signature of F. C. "Babe" Herman, permission granted.
For Baseball Bats.
Claims use since May 19, 1926.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 318,381. THOMAS FLEXIBLE COUPLING COMPANY, Warren, Pa. Filed Aug. 24, 1931.

THOMAS FLEXIBLE COUPLINGS

No claim is made for the words "Flexible Couplings" apart from the mark as shown.
For Flexible Machinery Couplings.
Claims use since 1919.

Ser. No. 328,576. BYRON JACKSON CO., Los Angeles, Calif. Filed July 6, 1932.

BJ DUPLEX

Applicant hereby disclaims any exclusive right to the word "Duplex" except when used in conjunction with the mark Bj.
For Plate Valves, Orifice Fittings, and Parts Therefor Used for Measuring the Flow of Fluids thru Pipe Lines by the Differential Pressure Method thru an Orifice Plate.
Claims use since Mar. 29, 1932.

Ser. No. 329,339. STERILIZED RAZOR BLADE CO., INC., New York, N. Y. Filed Aug. 4, 1932.

STERILO

For Razor Blades.
Claims use since July 15, 1932.

Ser. No. 329,458. OTTO ROTH, INC., Newark, N. J. Filed Aug. 10, 1932.



The word "Blade" is disclaimed apart from the mark shown. The drawing is shaded to indicate the color blue.
For Safety Razor Blades.
Claims use since Jan. 1, 1927.

Ser. No. 329,477. WILLIAM LASAR, Los Angeles, Calif. Filed Aug. 11, 1932.

BUTCHER BOY

For Meat and Bone Cutting Machines.
Claim use since May 1, 1930.

Ser. No. 329,675. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis. Filed Aug. 19, 1932.

Gray Line

For Drill Presses, Scroll Saws, Band Saws, Work Benches, Saw Tables, Pulleys, Hangers, Jointers, Lathes, and Mortisers.
Claims use since Aug. 11, 1932.

Ser. No. 329,726. MILFORD W. HARTMANN, doing business as M. W. Hartmann Manufacturing Company, Hutchinson, Kans. Filed Aug. 20, 1932.

Truflo

For Liquid Pumps.
Claims use since Mar. 3, 1927.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 326,074. AKTIEBOLAGET SVENSKA KULLAGERFABRIKEN, Gottenborg, Sweden. Filed Apr. 14, 1932.

TeBo

For Gauges for Gauging Bore Limits.
Claims use since Nov. 8, 1930.

Ser. No. 328,734. ERNST LEITZ, OPTISCHE WERKE, G. M. B. H., Wetzlar, Germany. Filed July 12, 1932.

Ultropak

For Microscopes, Magnifying Glasses, Telescopes and Their accessories—Namely, Objectives, Oculars, Condensers, Stands, and Tripods for Microscopes and Telescopes; Illuminating Apparatus for Microscopic Purposes, Object Holders for Microscopes, Preparations for Microscopic Examinations, Photographic Cameras, Photographic Enlargement Cameras, Photographic Developing and Copying Apparatus, Epidiascopes (Projection Apparatus), Film Projection Apparatus, Distance Meters, Astronomic Telescopes, Microscopes for Metal and Mineral Researches, Colorimeters, Spectroscopes, Refractometers, Micro-Photographic Cameras, Microtones, Stereoscopes, Photographic Objectives, Projection Objectives.
Claims use since Mar. 23, 1931.

Ser. No. 328,793. E. LEITZ, INC., New York, N. Y. Filed July 14, 1932.



No claim is made to the word "Camera" and the representation of the goods apart from the mark shown in the drawing.
For Cameras.
Claims use since June 15, 1932.

Ser. No. 328,794. E. LEITZ, INC., New York, N. Y. Filed July 14, 1932.



No claim is made to the word "Camera" and the representation of the goods apart from the mark shown in the drawing.
For Cameras.
Claims use since June 15, 1932.

Ser. No. 329,724. DU PONT FILM MANUFACTURING CORPORATION, New York, N. Y. Filed Aug. 20, 1932.

INFRA-D

For Photographic Film.
Claims use since 1928.

CLASS 32

Furniture and Upholstery

Ser. No. 317,361. LANSBURGH & BRO., Washington, D. C. Filed July 27, 1931.

Wonderest

For Mattresses, Beds, and Bed Springs.
Claims use since June 16, 1931.

Ser. No. 329,395. BAKER FURNITURE FACTORIES, INC., Allegan, Mich. Filed Aug. 8, 1932.



For Beds, Benches, Bookcases, Breakfast Sets, Buffets, Cabinets, Chairs, Chests of Drawers, Chiffoniers, Consoles, Davenports, Desks, Dressers, Mirrors, Secretaries, Sideboards, Stands, and Tables.
Claims use since May 15, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,753. HANSON-GATES CO., INC., Wakefield, Mass. Filed June 6, 1932.

"Hanson-Gates"

Any right to the exclusive use of the quotation marks enclosing the proper names Hanson and Gates and to the hyphen separating the said proper names Hanson and Gates is specially disclaimed apart from the mark as shown in the accompanying drawing.
For Range Oil Burners Adapted for Installation in Domestic Ranges and Stoves Originally Designed to Use Wood or Coal for Fuel.
Claims use since Jan. 1, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 323,901. THE WM. L. MCLELLAN CO., Norwalk, Conn. Filed Feb. 6, 1932.

LONE ROCK

For Rod and Sheet Packing, Rubber Hose, Fibre Hose, and Belting.
Claims use since 1901.

Ser. No. 329,323. BURD PISTON RING COMPANY, Rockford, Ill. Filed Aug. 4, 1932.

BLACKHAWK

For Piston Rings.
Claims use since July 24, 1932.

CLASS 37

Paper and Stationery

Ser. No. 324,631. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Feb. 29, 1932.

Linweave ROMNEY

Exclusive rights to the use of the word "Romney" apart from the mark shown are hereby disclaimed.
For Paper and Envelopes, Particularly Book Papers and Announcement Papers and Envelopes.
Claims use since Feb. 14, 1931.

Ser. No. 324,632. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Feb. 29, 1932.

Linweave CORTELLO

Exclusive rights to the use of the word "Cortello," apart from the mark shown, are hereby disclaimed.
For Correspondence Papers and Envelopes.
Claims use since Feb. 14, 1931.

Ser. No. 324,633. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Feb. 29, 1932.

Linweave FLORENTINE

Exclusive rights to the use of the word "Florentine", apart from the mark shown, are hereby disclaimed.
For Correspondence Papers and Envelopes, Particularly Those Used for Announcements.
Claims use since Feb. 14, 1931.

Ser. No. 324,634. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Feb. 29, 1932.

TOWN CRIER TEXT

Exclusive rights to the use of the word "Text" from the mark shown, are hereby disclaimed.
For Paper and Envelopes, Particularly Book Papers and Announcement Papers and Envelopes.
Claims use since Feb. 14, 1931.

Ser. No. 329,539. SCHWAN-BLEISTIFT-FABRIK A. G., Nuremberg, Germany. Filed Aug. 13, 1932.



For Lead Pencils and Colored Pencils.
Claims use since May, 1875.

CLASS 38

Prints and Publications

Ser. No. 328,130. AL PAUL LEFTON COMPANY, INC., Philadelphia, Pa. Filed June 20, 1932.

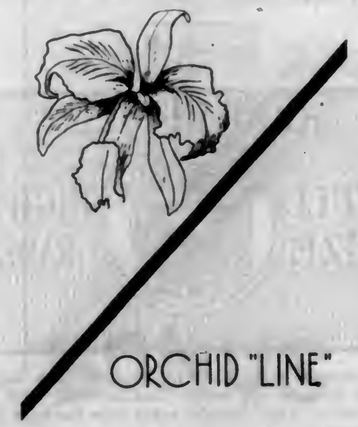
69th STREET NEWS

For Tabloid Newspaper.
Claims use since July, 1930.

CLASS 39

Clothing

Ser. No. 306,195. METRO HOSIERY CO., INC., New York, N. Y. Filed Sept. 29, 1930.



For Hosiery for Men, Women, and Children.
Claims use since Sept. 20, 1930.

Ser. No. 317,532. PETTY SHOE COMPANY, Pittsburgh, Pa. Filed July 31, 1931.



Applicant disclaims the use of the words "Petty's," "Better," and "Arch," which appear in the drawing apart from the mark shown in the drawing.
For Shoes, Constructed from Leather or Fabric or from the Combination of Leather and Fabric.
Claims use since Mar. 15, 1928.

Ser. No. 319,944. RUBIN BROS. FOOT-WEAR INC., Long Island City, N. Y. Filed Oct. 10, 1931.



Applicant disclaims the right to the exclusive use of all the wording appearing on the drawing, except "America's Pride" and "Rubin Bros."
For Shoes Made of Leather, Rubber, Fabric, or Combinations of One or More of These Materials.
Claims use since Aug. 1, 1931.

Ser. No. 322,840. WOLLNER & SMITH, New York, N. Y. Filed Jan. 8, 1932.

Wall Street

For Wearing Apparel for Men, Women, and Children—Namely, Hats, Hosiery, Underwear Made of Knitted, Netted, and Textile Fabric for Men, Women, and Children.
Claims use since Aug. 15, 1931.

Ser. No. 322,931. THE GILTEX MANUFACTURING COMPANY, New Haven, Conn. Filed Jan. 12, 1932.

GILTEX

For Aprons, Coolie Coats, Dresses, Pajamas, Women's and Children's Bloomers and Underslips, Hosiery, Leather and Fabric Gloves, Overalls, Women's and Children's Underwear.
Claims use since Nov. 1, 1932.

Ser. No. 324,195. STERN-SLEGMAN PRINS COMPANY, Kansas City, Mo. Filed Feb. 15, 1932.

Betty Rose

For Women's and Girls' Coats.
Claims use since December, 1926.

Ser. No. 325,960. STEINBERGER BROS. GLOVE CORP., New York, N. Y. Filed Apr. 9, 1932.

ARISETTE

For Men's, Women's, and Children's Fabric Gloves.
Claims use since Feb. 26, 1932.

Ser. No. 327,154. I. C. ISAACS & COMPANY, Baltimore, Md. Filed May 16, 1932.

"Over the Top" "Sport Togs"

Applicant hereby disclaims the descriptive words "Sport Togs" apart from the mark as shown on the drawing.
For Riding Breeches, Jodhpurs, and Riding Coats for Men, Women, and Children; Sleeveless Riding Coats and Vestees for Women, Knickers and Trousers for Men.
Claims use since Nov. 1, 1922.

Ser. No. 327,911. LA MODE CHEZ TAPPE, INC., New York, N. Y. Filed June 11, 1932.

LA MODE chez Tappé inc.
19 West Fifty Seventh Street New York

No claim being made to the words "La Mode Chez" or to the street address or to the words "New York" or to the name "Tappé" except in the association shown and apart from the mark shown in the drawing.
For Ladies' and Misses' Hats, Dresses, and Coats.
Claims use since May, 1918.

Ser. No. 328,292. BADORF SHOE COMPANY, Lititz, Pa. Filed June 22, 1932.

Wee Twins

For Shoes Composed of Leather.
Claims use since Jan. 1, 1930.

Ser. No. 328,365. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed June 28, 1932.

"Foundette"

For Girdles and Foundation Garments with Garters.
Claims use since June 22, 1932.

Ser. No. 328,972. B. & B. SHOE COMPANY, Chicago, Ill. Filed July 22, 1932.

SOFT STEP

For Children's Slippers Made of Leather, Fabric, or a Combination of Both Leather and Fabric.
Claims use since Jan. 1, 1930.

Ser. No. 328,990. WILLIAM KATZ, St: Louis, Mo. Filed July 22, 1932.

EVERVENT

For Men's and Women's Hats.
Claims use since June 20, 1932.

Ser. No. 329,011. ARCHER RUBBER COMPANY, Milford, Mass. Filed July 23, 1932.

CHERVEL

For Raincoats, Wind Breakers, Jackets, and Play Suits; Slippers, Shoes, and Sandals of Fabric, Rubber, or Combinations Thereof; Hats and Caps; Corsets, Garters, and Suspenders; and Belts, All for Men, Women, and Children.
Claims use since July 7, 1932.

Ser. No. 329,102. THE STAR UNION OVERALL CO., INC., South Norwalk, Conn. Filed July 26, 1932.

GUARANTEED FULL SIZE STAR UNION OVERALL HIGH GRADE

The drawing is lined to indicate the color red. No claim is made to the words "Guaranteed," "Full Size," "High Grade," and "Overall" apart from the mark shown in the drawing.
For Children's Overalls, Playsuits, and Sunsuits.
Claims use since Jan. 1, 1922.

Ser. No. 329,173. M. APFEL & BRO., INC., New York, N. Y. Filed July 29, 1932.

The Repealer

For Ladies' Hats.
Claims use since June 15, 1932.

Ser. No. 329,227. JOHN FENTON, Los Angeles, Calif., assignor to The Fenton Corporation, Los Angeles, Calif., a Corporation of California. Filed July 30, 1932.

John Fenton SHOCKPROOF Feature

The name "John Fenton" is in the handwriting of applicant. The right to the exclusive use of the words "Shockproof Feature," except in the particular association shown, is hereby disclaimed.
For Cushion Inserts for Shoe Insoles.
Claims use since June 1, 1932.

Ser. No. 329,262. S. J. LEVY & CO. INC., New York, N. Y. Filed Aug. 1, 1932.

College Fashion

The lining shown on the drawing is for shading purposes only. The words "College Fashion" are disclaimed apart from the mark shown in the drawing.
For Men's and Boys' Suits and Overcoats.
Claims use since January, 1932.

Ser. No. 329,277. BRADSTONE RUBBER COMPANY, Woodbine, N. J. Filed Aug. 2, 1932.

BONUS

For Rubber Heels, Rubber Soles, and Half Soles.
Claims use since Jan. 3, 1932.

Ser. No. 329,444. CHARLES S. GELLES, doing business as Charles S. Gelles & Son, Boston, Mass. Filed Aug. 10, 1932.

MANHATTAN
Marveltex
CRAVAT

The descriptive word "Cravat" is hereby disclaimed apart from the mark as shown on the drawing.
For Men's and Boys' Neckties of All Shapes and Forms.
Claims use since July 1, 1931.

Ser. No. 329,592. H. D. BOB COMPANY, INC., New York, N. Y. Filed Aug. 17, 1932.

ELKIDE

For Men's and Boys' Dress Shirts, Work Shirts, Flannel Shirts, Windbreakers, Blouses, Pajamas, Night Shirts, Undershirts, Shorts, Union Suits, Made of Cotton, Linen, Rayon, Worsted, Flannel, Woolen, Silk, or any Combination of These and Other Textiles.
Claims use since Aug. 11, 1932.

Ser. No. 329,594. BRADSTONE RUBBER COMPANY, Woodbine, N. J. Filed Aug. 17, 1932.

GOAL

For Rubber Heels, Rubber Soles, and Half Soles.
Claims use since June 23, 1932.

Ser. No. 329,595. BRADSTONE RUBBER COMPANY, Woodbine, N. J. Filed Aug. 17, 1932.

MARCH KING

For Rubber Heels, Rubber Soles, and Half Soles.
Claims use since May 26, 1932.

Ser. No. 329,683. WM. T. KNOTT COMPANY, INC., New York, N. Y. Filed Aug. 19, 1932.

Beau-Knot

For Hosiery.
Claims use since October, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 320,838. HARRY S. COHEN, Hartford, Conn. Filed Oct. 22, 1931.

MEDOKAYED

For Handkerchiefs.
Claims use since Sept. 2, 1929.

Ser. No. 329,174. JOHN BOYLE & COMPANY, INCORPORATED, New York, N. Y. Filed July 29, 1932. Under 10-year proviso.

BOYLE'S

For Unbleached, Bleached, Dyed, and Colored Cotton Ducks and Drills, Awning Stripe and Ticking Made of Cotton, Linen, Cotton Damask, and Combination of Cotton and Linen in the Piece.
Claims use since 1882.

Ser. No. 329,322. THE HOLLISTON MILLS, INC., Norwood, Mass. Filed Aug. 3, 1932.

PYROCRAFT

For Cotton Piece Goods and Filled and Finished Cotton Piece Goods Suitable for Use as Window Shade Cloth, Book Cloth, Draperies, Furniture Covering, Wall-Covering, Luggage Lining and Covering, Box Covering, Labels, Tags, Signs, and Similar Products.
Claims use since Dec. 16, 1931.

Ser. No. 329,332. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Aug. 4, 1932.

Lorga

For Woolen Piece Goods.
Claims use since July 1, 1932.

Ser. No. 329,337. RELIANCE PIECE DYE WORKS, Paterson, N. J. Filed Aug. 4, 1932.

"DULGLO"

For Piece Goods—Namely, Silk, Cotton, and Rayon Fabric.
Claims use since Sept. 1, 1931.

Ser. No. 329,357. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Aug. 5, 1932.

Lidovel

For Pile Fabrics in the Piece.
Claims use since July 7, 1932.

Ser. No. 329,358. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Aug. 5, 1932.

Romantavel

For Pile Fabrics in the Piece.
Claims use since July 7, 1932.

Ser. No. 329,359. ROSSIE VELVET COMPANY, Mystic Conn. Filed Aug. 5, 1932.

Swanvel

For Pile Fabrics in the Piece.
Claims use since July 7, 1932.

Ser. No. 329,360. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Aug. 5, 1932.

Vel de Lus

For Velvets in the Piece.
Claims use since Apr. 16, 1932.

Ser. No. 329,376. GRAEMIGER BROS. INC., New York, N. Y. Filed Aug. 6, 1932.



Applicant disclaims the exclusive right to the use of the words "Loom Swiss Embroidery" apart from the mark as shown in the drawing. The drawing is lined to represent the colors gold and blue.
For Handkerchiefs.
Claims use since Apr. 3, 1931.

Ser. No. 329,460. SUSSBERG & FEINBERG, INC., New York, N. Y. Filed Aug. 10, 1932.

Colette

For Silk and Rayon Piece Goods.
Claims use since Aug. 3, 1932.

Ser. No. 329,784. COUDURIER, FRUCTUS & DESCHER, Lyon, France. Filed Aug. 24, 1932.

LES PRIMITIFS

For Silk Piece Goods.
Claims use since Dec. 1, 1931.

Ser. No. 329,826. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Aug. 25, 1932.

Pawlam

For Pile Fabrics in the Piece.
Claims use since Aug. 4, 1932.

CLASS 43

Thread and Yarn

Ser. No. 329,318. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Aug. 3, 1932.

"K G T"

For Cotton Thread.
Claims use since July 6, 1932.

Ser. No. 329,319. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Aug. 3, 1932.

"COVENANT"

For Cotton Thread.
Claims use since July 6, 1932.

Ser. No. 329,751. NORTH AMERICAN THREAD CO., INC., New York, N. Y. Filed Aug. 22, 1932.

TIP-TOP

For Thread.
Claims use since Jan. 21, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 329,081. THE DEANE PLASTER CO., Yonkers, N. Y. Filed July 26, 1932.

SOFTEX

For Surgical Gauze in the Piece and in Cut Lengths, Bandages, Hospital Surgical Sponges, Bandage Rolls, Surgical Slings, and Combination Gauze Rolls Lined with Absorbent Cotton.
Claims use since May 21, 1931.

Ser. No. 329,695. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed Aug. 19, 1932.

RESOVIN

For Base Plates Used in the Manufacture of Artificial Dentures.
Claims use since Aug. 10, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 328,697. ORANGE-CRUSH COMPANY, Chicago, Ill. Filed July 11, 1932.

CRUSH

For Mineral Water and Carbonated Water, Including Carbonated Water in Siphons.
Claims use since May 1, 1927.

Ser. No. 329,291. HOMER NEER AND WILLIAM DUANE MORGAN, Springfield, Ohio. Filed Aug. 2, 1932.

GOAL

For Non-Alcoholic Non-Cereal Maltless Beverages Sold as Soft Drinks, and Sirups and Extracts for Making the Same.
Claims use since Dec. 1, 1930.

Ser. No. 329,903. JOSEPH SCHLACHTER, doing business as The Poughkeepsie Mineral Water Works, Poughkeepsie, N. Y. Filed Aug. 27, 1932.

PO'KEEPSIE SPECIAL



No claim is made for the words "Po'Keepsie Special" as shown on the drawing.

For Non-Alcoholic Non-Cereal Maltless Beverages Sold as Soft Drinks, and Sirups and Extracts for Making the Same.

Claims use since May 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 287,706. KLAUS & MOERSEN, Columbus, Nebr. Filed July 26, 1929.

K & M

For Canned Sweet Corn and Canned Tomatoes.
Claims use since Aug. 1, 1925.

Ser. No. 320,012. SOCIETA ANONIMA LUCCHESE OLII E VINI, Lucca, Italy. Filed Oct. 12, 1931.



No claim is made to the word "Marca" shown on the drawing apart from the mark.

For Olive Oil.

Claims use since Mar. 1, 1910.

Ser. No. 323,786. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Feb. 3, 1932.

JONUTS

For Doughnuts and Doughnut Flour.
Claims use since Jan. 22, 1932.

Ser. No. 324,648. THE BARNSTABLE FEED & SUPPLY CO'S INC., doing business as The Barnstable-Schaper-Ware Feed & Supply Companies, Inc., of Nokomis, Ill., Nokomis, Ill. Filed Mar. 1, 1932.



For Wheat Flour and Corn Meal.
Claims use since November, 1931.

Ser. No. 324,853. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Mar. 7, 1932.



The drawing is lined and hatched for the colors red and yellow, which are claimed as features of the mark. No claim is made to the exclusive right to use of the wording shown except the words "Royal" and "Standard Brands Inc."

For Salad Dressing.

Claims use since Jan. 11, 1932.

Ser. No. 326,643. MILCH & HARRISON, Minneapolis, Minn. Filed Apr. 30, 1932.



For Ice Cream Confections.
Claims use since Apr. 27, 1932.

Ser. No. 327,932. BENNETT & LAYTON INC., Susanville, Calif. Filed June 13, 1932.

DEMOCRAT

For Ice Cream, Candy, Cookies, Frozen Confections, and Frozen Malted Milk.
Claims use since May 31, 1932.

Ser. No. 328,159. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash. Filed June 21, 1932.

Centennial

For Stock Feed and Poultry Feed, and Pancake and Waffle Flour.
Claims use since Sept. 15, 1921.

Ser. No. 328,417. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash. Filed June 30, 1932.



The drawing is lined for blue. No claim is made to the notation "U. S. A."

For Stock Feed and Poultry Feed.
Claims use since June 8, 1932.

Ser. No. 328,538. RELIABLE PACKING CO., Chicago, Ill. Filed July 2, 1932.

SWEET NUT

For Bacon, Hams, Boiled Ham, Sliced Bacon.
Claims use since July 15, 1927.

Ser. No. 329,362. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa. Filed Aug. 5, 1932.

Vo-lōna

For Sausage.
Claims use since June 22, 1932.

Ser. No. 329,476. KING, DOBBS & COMPANY, Chattanooga, Tenn. Filed Aug. 11, 1932.

Sinpar

For Coffee.
Claims use since July 18, 1932.

Ser. No. 329,485. WESTON BISCUIT CO., LTD., Passaic, N. J. Filed Aug. 11, 1932.

Frigid-icies

For Cake Wafers.
Claims use since Mar. 1, 1932.

Ser. No. 329,501. CANOGA CITRUS ASSOCIATION, Canoga Park, Calif. Filed Aug. 12, 1932.

OUTPOST

For Fresh Citrus Fruits.
Claims use since Mar. 30, 1932.

Ser. No. 329,509. SUNICAL PACKING COMPANY, San Francisco, Calif. Filed Aug. 12, 1932.

VITA GEE

For Canned Fruits.
Claims use since June 26, 1932.

Ser. No. 320,574. DEVON BAKERIES, INC., New York, N. Y. Filed Aug. 16, 1932.

DEVONSHEER

For Toast.
Claims use since July 27, 1932.

Ser. No. 329,856. SEVERIN A. HARAM, doing business as S. A. Haram, New York, N. Y. Filed Aug. 26, 1932.

KING VASA

For Bread.
Claims use since Jan. 2, 1929.

Ser. No. 329,895. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed Aug. 27, 1932.

Bonday

For Candy.
Claims use since July 15, 1930.

CLASS 48

Malt Beverages and Liquors

Ser. No. 326,741. CITY BREWING CORPORATION, New York and Ridgewood, N. Y. Filed May 4, 1932.

"Tally Ho"

For Malt Beverage Containing Less Than One-Half of One Per Cent of Alcohol by Volume.
Claims use since Apr. 21, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,572. BLOCH BROS., Glasgow, Scotland. Filed Aug. 16, 1932.

GOLD THIMBLE

For Whiskey.
Claims use since 1923.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 328,408. VAIL-BALLOU PRESS INC., Binghamton, N. Y. Filed June 29, 1932.

KNICK-O-TYPES

The word "Types" is disclaimed apart from the mark shown.
For Finished Printing Plates Ready for the Press.
Claims use since Sept. 1, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 4, 1932

297,804. SKIN OR TISSUE CREAM. BARBARA LEE, Maplewood, Mo.
Filed April 29, 1932. Serial No. 326,613. PUBLISHED JUNE 28, 1932. Class 6.

297,805. MEDICINAL PREPARATIONS FOR HUMAN USE FOR THE TREATMENT OF INDIGESTION, RHEUMATISM, TOXÆMIA, COLITIS AND ALL FORMS OF CHRONIC INTESTINAL STASIS. KAYLENE, LIMITED, London, England.
Filed May 2, 1932. Serial No. 326,684. PUBLISHED JUNE 28, 1932. Class 6.

297,806. TOOTH POWDER. NYAL COMPANY, Detroit, Mich.
Filed May 2, 1932. Serial No. 326,689. PUBLISHED JUNE 28, 1932. Class 6.

297,807. PREPARATION IN THE FORM OF A CREAM FOR USE IN PROTECTING THE SKIN FROM PAINT, VARNISH, GREASE, OILS, AND ACID. THE MOUNTAIN VARNISH & COLOR WORKS, INC., Toledo, Ohio.
Filed May 3, 1932. Serial No. 326,728. PUBLISHED JUNE 28, 1932. Class 6.

297,808. INSECTICIDES, RODENTICIDES, ETC. C. B. DOLGE COMPANY, INC., Westport, Conn.
Filed April 6, 1932. Serial No. 325,846. PUBLISHED JUNE 28, 1932. Class 6.

297,809. FLESH REDUCING COMPOSITION. SLENDRESS LABORATORIES, Dallas, Tex.
Filed April 16, 1932. Serial No. 326,196. PUBLISHED JUNE 28, 1932. Class 6.

297,810. PREPARATION FOR PROMOTING THE GRANULATION AND HEALING OF WOUNDS. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,391. PUBLISHED JUNE 28, 1932. Class 6.

297,811. OIL USED FOR MASSAGING PURPOSES FOR THE RELIEF OF LUNG AND ASTHMA AFFLICTIONS, AILMENTS OF THE SPINE, LUMBAGO, RHEUMATISM, NEURALGIA, NEURITIS, EARACHE, SINUS TROUBLE, SPRAINS, BRUISES, ACHING FEET, NEURITIS OF ARMS AND LEGS, STIFF JOINTS, VARICOSE VEINS, RUPTURE, AND OTHER AILMENTS WHERE MASSAGING WITH SAID OIL YIELDED RELIEF. ADAM GRIESEMER, doing business as Saurinol Distributors, Colorado, Springs, Colo.
Filed April 28, 1932. Serial No. 326,625. PUBLISHED JULY 12, 1932. Class 6.

297,812. MEDICINAL PREPARATION USED IN THE TREATMENT OF HEADACHES, NEURALGIA, MUSCULAR PAINS, SIMPLE COLDS, AND SIMILAR COMPLAINTS. PROFESSIONAL LABORATORIES, INCORPORATED, Richmond, Va.
Filed April 16, 1932. Serial No. 326,191. PUBLISHED JUNE 28, 1932. Class 6.

297,813. ESTER OF ROSIN TREATED SO AS TO RETARD ITS SUSCEPTIBILITY TO OXIDATION. HERCULES POWDER COMPANY, Wilmington, Del.
Filed April 16, 1932. Serial No. 326,187. PUBLISHED JUNE 28, 1932. Class 6.

297,814. ESTER OF ROSIN. HERCULES POWDER COMPANY, Wilmington, Del.
Filed April 16, 1932. Serial No. 326,186. PUBLISHED JUNE 28, 1932. Class 6.

297,815. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF COUGHS DUE TO COLDS. THE AYER COMPANY, Lowell, Mass.
Filed May 17, 1932. Serial No. 327,182. PUBLISHED JULY 12, 1932. Class 6.

297,816. PREPARATION FOR PREPARING SULPHUR BATHS. SULFORALL PRODUCTS LTD., Hollywood, Calif.
Filed April 13, 1932. Serial No. 326,060. PUBLISHED JUNE 28, 1932. Class 6.

297,817. MEDICINAL PREPARATION TO BE TAKEN INTERNALLY FOR THE RELIEF OF INDIGESTION, HEARTBURN, SOUR STOMACH AND FULLNESS AFTER MEALS. RAYMOND E. MASSEY, doing business as The Krexit Company, Richardson Park, Del.
Filed May 2, 1932. Serial No. 326,688. PUBLISHED JULY 5, 1932. Class 6.

297,818. SKIN SALVE IN THE FORM OF MEDICATED PREPARATION FOR OUTWARD APPLICATION USED FOR SUNBURN, SORES, TO SMOOTH AND HEAL THE SKIN, AND FOR PRICKLY HEAT. LOUIS WASHTIEN, Brooklyn, N. Y.
Filed April 9, 1932. Serial No. 325,961. PUBLISHED JUNE 28, 1932. Class 6.

297,819. LIQUID PREPARATION FOR EXTERNAL APPLICATION FOR CERTAIN ABNORMAL CONDITIONS OF THE SKIN—NAMELY, RING-WORM, ATHLETE'S FOOT, BARBER'S ITCH, SUPERFICIAL PIMPLES, ACNE, NON-SPECIFIC IRRITATIONS AND ERUPTIONS OF THE SKIN. OLUF DALSBO, doing business as Kleereeze Company, Rochester, Minn.
Filed April 9, 1932. Serial No. 325,941. PUBLISHED JUNE 28, 1932. Class 6.

297,820. SALVE FOR THE TREATMENT OF SUNBURN, BRUISES, BOILS, ULCERS, CHAPPING, BURNS, SKIN DISEASES, POISON IVY, PIMPLES, WOUNDS, SPRAINS, HEMORRHOIDS, ECZEMA AND ALL ITCHING AFFECTIONS. THE HY'NE CO., Chicago, Ill.
Filed March 28, 1932. Serial No. 325,581. PUBLISHED JULY 5, 1932. Class 6.

297,821. BAKING POWDER. R. B. DAVIS COMPANY, Hoboken, N. J.
Filed March 22, 1932. Serial No. 325,364. PUBLISHED JULY 12, 1932. Class 6.

297,822. BACILLUS ACIDOPHILUS CULTURE. WALTER DAVIDSON, New York, N. Y.
Filed March 11, 1932. Serial No. 325,195. PUBLISHED JULY 12, 1932. Class 6.

297,823. SAUSAGES. M. C. PROVISION CO., INC., Jersey City, N. J.
Filed March 12, 1932. Serial No. 325,076. PUBLISHED JULY 12, 1932. Class 46.

297,824. PIECE GOODS AND CURTAINS BOTH OF COTTON, LINEN, SILK, RAYON, AND COMBINATIONS THEREOF. POWDRELL & ALEXANDER, INC., Danielson, Conn.
Filed May 5, 1932. Serial No. 326,790. PUBLISHED JUNE 28, 1932. Class 42.

297,825. WOOLEN PIECE GOODS. C. M. DE LAND, New York, N. Y.
Filed May 2, 1932. Serial No. 326,671. PUBLISHED JULY 12, 1932. Class 42.

297,826. TEXTILE RUGS. STERN BROTHERS, New York, N. Y.
Filed April 20, 1932. Serial No. 326,306. PUBLISHED JUNE 28, 1932. Class 42.

297,827. FACE POWDER, PREPARATIONS FOR TREATING THE SKIN, AND TOILET, CLEANSING, VANISHING, AND COLD CREAMS. DAGGETT & RAMSDELL, New York, N. Y.
Filed June 4, 1932. Serial No. 327,729. PUBLISHED JULY 12, 1932. Class 6.

297,828. LAUNDRY WASHING MACHINES. PRIMA MANUFACTURING COMPANY, INC., Philadelphia, Pa.
Filed May 26, 1932. Serial No. 327,473. PUBLISHED JULY 12, 1932. Class 24.

297,829. WASHBOARDS. HOUMA MFG. CO., Houma, La.
Filed May 26, 1932. Serial No. 327,468. PUBLISHED JULY 12, 1932. Class 24.

297,830. LINIMENT FOR THE TREATMENT OF RHEUMATISM, COLDS, AND HEADACHES. FORTUNATO CALABRO, Berwick, Pa.
Filed May 28, 1932. Serial No. 327,338. PUBLISHED JUNE 28, 1932. Class 6.

297,831. SHAMPOO. DRYOLET MFG. CO., St. Louis, Mo.
Filed May 20, 1932. Serial No. 327,272. PUBLISHED JUNE 28, 1932. Class 6.

297,832. CITRATE OF MAGNESIA. PHILADELPHIA MAGNESIA CO., Philadelphia, Pa.
Filed May 14, 1932. Serial No. 327,108. PUBLISHED JULY 5, 1932. Class 6.

297,833. TETTER AND DANDRUFF OINTMENT, SKIN CREAM, BLEACH CREAM, VANISHING CREAM, CLEANSING CREAM, HAIR TONIC, BALD SPOT OINTMENT, SHAMPOO AND HAIR POMADE. HAZEL M. LUCK, doing business as Lady Hazel M. Luck, Washington, D. C.
Filed May 10, 1932. Serial No. 326,944. PUBLISHED JULY 5, 1932. Class 6.

297,834. PREPARATION FOR RESTORING GRAY OR FADED HAIR TO ITS NATURAL COLOR, FOR REMOVING DANDRUFF, FOR RETARDING FALLING HAIR, AND FOR STIMULATING HAIR GROWTH. HARRY HERTZBERG, doing business as Harestol Co., Brooklyn, N. Y.
Filed May 10, 1932. Serial No. 326,941. PUBLISHED JULY 5, 1932. Class 6.

297,835. SKIN LOTION IN CREAM OR SEMI-SOLID FORM. SKIN CULTURE LABORATORIES, INC., New York, N. Y.
Filed May 9, 1932. Serial No. 326,915. PUBLISHED JULY 5, 1932. Class 6.

297,836. PREPARATION FOR THE USE AS A TEMPORARY TOOTH CAVITY FILLER AND TOOTHACHE RELIEF. KLEANE CHEMICAL CO., New York, N. Y.
Filed May 7, 1932. Serial No. 326,863. PUBLISHED JULY 5, 1932. Class 6.

297,837. GARGLE FOR USE IN THE TREATMENT OF SORE THROATS, TONSILITIS AND QUINSY. ALFRED KRISTIANSEN, doing business as Kristy Laboratories, Stanley, Wis.
Filed May 6, 1932. Serial No. 326,824. PUBLISHED JULY 5, 1932. Class 6.

297,838. CHEMICAL PREPARATION FOR THE PURPOSE OF THICKENING SOLUTIONS, ETC., OF COLORING MATTERS, AND MORDANTS USED IN TEXTILE PRINTING AND FOR FINISHING TEXTILES IN ORDER TO BIND, STRENGTHEN, STIFFEN OR OTHERWISE DESIRABLY AFFECT THE HANDLE OF THE TREATED TEXTILE MATERIALS. JACQUES WOLF & CO., Passaic, N. J.
Filed May 2, 1932. Serial No. 326,700. PUBLISHED JULY 5, 1932. Class 6.

297,839. OINTMENT FOR PILES, AND DISEASES OF THE SKIN—NAMELY, TETTER, ITCH, PIMPLES, ERYSIPELAS, ECZEMA, ULCERS, BURNS AND SCALDS. MARGARET H. SMITH, Philadelphia, Pa.
Filed May 2, 1932. Serial No. 326,694. PUBLISHED JULY 5, 1932. Class 6.

297,840. BLAND NON-NARCOTIC SUPPOSITORY FOR PILES. BROTHERS CORPORATION, Brooklyn, N. Y.
Filed May 2, 1932. Serial No. 326,668. PUBLISHED JUNE 28, 1932. Class 6.

297,841. AMMONIA, BORAX, CAMPHOR, STARCH, WATER SOFTENER, BAKING POWDER, DRAIN PIPE SOLVENT, FOOD COLORS, CREAM OF TARTAR, DISINFECTANTS, BAKING SODA. WILKINSON, GADDIS & COMPANY, Newark, N. J.
Filed April 29, 1932. Serial No. 326,620. PUBLISHED JULY 5, 1932. Class 6.

297,842. INSECT EXTERMINATING SPRAY, DISCS, CRYSTALS, TABLETS, PERFUMED SPRAYS USED AS DEODORANTS, AND AN ANIMAL WASHING AND DISINFECTING PREPARATION USED PRIMARILY FOR WASHING DOGS. WALTHAM CHEMICAL CO., Waltham, Mass.
Filed April 15, 1932. Serial No. 326,171. PUBLISHED JULY 5, 1932. Class 6.

297,843. PREPARATION IN TABLET FORM FOR RELIEF OF HEADACHES, NEURALGIA, MUSCULAR ACHES AND PAINS AND DENTAL PAINS. THOMAS J. HENDERSON, doing business as Aspralgin Laboratories, Los Angeles, Calif.
Filed May 10, 1932. Serial No. 326,940. PUBLISHED JULY 5, 1932. Class 6.

297,844. CLEANSING CREAMS, COLD CREAMS, HAND CREAMS, FOUNDATION CREAMS, TISSUE CREAMS, PORE CREAMS, CREAMS FOR TREATING THE WRINKLES AROUND THE EYES, AND TOILET CREAMS; TALCUM POWDERS, DUSTING POWDERS, AND TOILET POWDERS; LIP STICKS, ROUGES, EYE SHADOWS, MASCARA, ASTRINGENTS, SKIN TONICS, MUSCLE OILS, TOILET WATERS, AND HAIR TONICS; PERFUMES AND FACE POWDERS. GASTON TAIES, Philadelphia, Pa.
Filed June 21, 1929. Serial No. 285,901. PUBLISHED JUNE 28, 1932. Class 6.

297,845. SODA ASH, TANNIN EXTRACTS, LIME AND ALUMINUM COMPOUNDS AND EARTHY PRODUCTS USED AS INSECTICIDES. LIQUID DEHYDRATION CORPORATION, Chicago, Ill., assignor, by mesne assignments, to Dee-Hy Products Company, Chicago, Ill., a Corporation of Delaware.
Filed June 14, 1929. Serial No. 285,573. PUBLISHED JUNE 28, 1932. Class 6.

297,846. CERTAIN NAMED PAINT PRODUCTS. THE HARVEL CORPORATION, Newark, N. J.
Filed July 18, 1929. Serial No. 287,300. PUBLISHED JULY 12, 1932. Class 16.

297,847. HAIR GLOSS AND HAIR RESTORER. ELIZABETH L. PINKARD, Swissvale, Pa.
Filed May 14, 1930. Serial No. 300,540. PUBLISHED JULY 12, 1932. Class 6.

297,848. SOAPS AND SOAP POWDERS. APEX SOAP AND SANITARY CORP., Pittsburgh, Pa.
Filed March 4, 1930. Serial No. 296,795. PUBLISHED MAY 6, 1930. Class 4.

297,849. SOLVENTS FOR OILS, CELLULOSE ETHERS AND ESTERS, AND NATURAL OR SYNTHETIC RESINS. CARBIDE AND CARBON CHEMICALS CORPORATION, New York, N. Y.
Filed June 18, 1930. Serial No. 302,528. PUBLISHED NOVEMBER 24, 1931. Class 6.

297,850. COTTON AND WOOL FABRICS AND LONG CLOTH IN THE PIECE, AND COTTON NAPKINS, SHEETS, PILLOW CASES, TABLE PADS, DIAPER CLOTH, HANDKERCHIEFS, AND MATTRESS COVERS; AND COTTON AND WOOL BLANKETS. EMERY, BIRD, THAYER DRY GOODS COMPANY, Kansas City, Mo.
Filed September 15, 1930. Serial No. 305,702. PUBLISHED JULY 12, 1932. Class 42.

297,851. POP CORN OF A CERTAIN VARIETY HAVING A LARGE YELLOW KERNEL IN THE UNPOPPED, NATURAL STATE, AND THE POPPED FORM, BUT NOT CANDIED. DAVENPORT SEED COMPANY, doing business as Sunburst Pop Corn Company, Davenport, Iowa.
Filed September 19, 1930. Serial No. 305,851. PUBLISHED JULY 12, 1932. Class 46.

297,852. ELASTIC FABRICS. UNITED ELASTIC CORPORATION, Easthampton, Mass.
Filed November 20, 1930. Serial No. 308,140. PUBLISHED JULY 12, 1932. Class 42.

297,853. ELASTIC FABRICS. UNITED ELASTIC CORPORATION, Easthampton, Mass.
Filed November 29, 1930. Serial No. 308,464. PUBLISHED JULY 12, 1932. Class 42.

297,854. FRESH DECIDUOUS FRUITS, FRESH CITRUS FRUITS, FRESH VEGETABLES, FRESH PINEAPPLES, FRESH BANANAS, FRESH CANTALOUPES, FRESH PERSIAN MELONS, FRESH HONEYDEWS, FRESH HONEYBALLS AND CASABAS, FRESH GRAPES. SIMONS & FRENCH COMPANY INCORPORATED, New York, N. Y.
Filed December 8, 1930. Serial No. 308,756. PUBLISHED JULY 12, 1931. Class 46.

297,855. BIRD TONICS. SILVERTONE COMPANY, INC., New York, N. Y.
Filed January 22, 1931. Serial No. 310,266. PUBLISHED JULY 12, 1932. Class 6.

297,856. REDUCING BATH SALTS. DR. PIERRE CHEMICAL COMPANY, doing business as Spaz Mineral Company, Chicago, Ill.
Filed March 6, 1931. Serial No. 311,828. PUBLISHED JUNE 28, 1932. Class 6.

297,857. HOUSEHOLD BLANKETS MADE WHOLLY FROM WOOL. CALIFORNIA WOOL GROWERS ASSOCIATION, San Francisco, Calif.
Filed March 13, 1931. Serial No. 312,226. PUBLISHED JULY 12, 1932. Class 42.

297,858. FACE POWDER AND PRESSING OIL THAT IS HAIR STRAIGHTENER. GODEFROY MANUFACTURING COMPANY, St. Louis, Mo.
Filed March 30, 1931. Serial No. 312,705. PUBLISHED NOVEMBER 24, 1931. Class 6.

297,859. CHEWING GUM. FRANK H. FLEER CORPORATION, Philadelphia, Pa.
Filed April 1, 1931. Serial No. 312,797. PUBLISHED JULY 12, 1932. Class 46.

297,860. CANDIES. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill., assignor to Elle Sheetz Candies Company, Chicago, Ill., a Corporation of Illinois.
Filed April 4, 1931. Serial No. 312,967. PUBLISHED JULY 12, 1932. Class 46.

297,861. LIQUID PREPARATION TO BE APPLIED TO TOBACCO. CIGARS, CIGARETTES, AND THE LIKE BEFORE SMOKING, TO INTERCEPT THE NICOTINE. AMERICAN NICOTON CORPORATION, New York, N. Y.
Filed April 28, 1931. Serial No. 313,900. PUBLISHED JUNE 28, 1932. Class 6.

297,862. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 8, 1931. Serial No. 314,819. PUBLISHED JUNE 28, 1932. Class 42.

297,863. AUTOMOBILE POLISHES. D. A. COLLINS MFG. CO., INC., Brooklyn, N. Y.
Filed May 18, 1931. Serial No. 314,685. PUBLISHED JULY 12, 1932. Class 16.

297,864. COTTON, LINEN, ARTIFICIAL AND NATURAL SILK GOODS, PLAIN, COLORED AND PRINTED, IN PIECES. MARVLO MILLS, INC., New York, N. Y.
Filed May 23, 1932. Serial No. 327,367. PUBLISHED JULY 12, 1932. Class 42.

297,865. METALLIC PROTECTING PAINT FOR THE BACKS OF MIRRORS. EMERSON GLASS CORPORATION, Jamestown, N. Y.
Filed May 21, 1932. Serial No. 327,307. PUBLISHED JULY 12, 1932. Class 16.

297,866. SOAPS. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa.
Filed May 18, 1932. Serial No. 327,223. PUBLISHED JULY 19, 1932. Class 4.

297,867. CERTAIN PAINT PRODUCTS. HICKOK OIL CORPORATION, Toledo, Ohio.
Filed May 9, 1932. Serial No. 326,900. PUBLISHED JULY 12, 1932. Class 16.

297,868. CERTAIN NAMED PAINT PRODUCTS. STANDARD VARNISH WORKS, New York, N. Y.
Filed April 25, 1932. Serial No. 326,502. PUBLISHED JULY 19, 1932. Class 16.

297,869. CLEANING COMPOUND. GUSTAV EDWARD KUCHLE, doing business as Okay Distributing Service, Lakewood, Ohio.
Filed April 22, 1932. Serial No. 326,377. PUBLISHED JULY 12, 1932. Class 4.

297,870. DRY CLEANING SOLVENT AND CLEANING COMPOUND FOR REMOVING SPOTS. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed March 8, 1932. Serial No. 324,916. PUBLISHED JULY 19, 1932. Class 4.

297,871. CLEANING COMPOUND FOR REMOVING SPOTS. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed March 7, 1932. Serial No. 324,857. PUBLISHED JULY 19, 1932. Class 4.

297,872. PERIODICAL. TOWER MAGAZINES INC., Wilkes-Barre, Pa., and New York, N. Y.
Filed March 8, 1932. Serial No. 324,912. PUBLISHED JUNE 28, 1932. Class 38.

297,873. POSTERS. MILO WINTER COMPANY, Chicago, Ill.
Filed January 22, 1932. Serial No. 323,316. PUBLISHED JULY 19, 1932. Class 38.

297,874. PERIODICAL PUBLICATIONS PUBLISHED FROM TIME TO TIME, PRINTED AND MIMEOGRAPHED CIRCULARS PUBLISHED FROM TIME TO TIME. THE 29TH DIVISION ASSOCIATION, INC., Newark, N. J.
Filed October 6, 1931. Serial No. 319,791. PUBLISHED JULY 19, 1932. Class 38.

297,875. SALVE FOR ECZEMA, ITCH, RINGWORM, BARBER'S ITCH, SKIN ERUPTIONS, SCALES ON BODY AND HEAD, TETTER, AND DISEASES OF THE SKIN. MRS. JOHN A. MAGNER, doing business as John A. Magner, New Orleans, La.
Filed February 12, 1932. Serial No. 324,106. PUBLISHED JULY 12, 1932. Class 6.

297,876. CHEMICAL COMPOUND FOR REMOVING SCALE AND SOOT FROM BOILERS. STAFFORD CHEMICAL COMPANY, INC., Amherst, Mass.
Filed November 5, 1931. Serial No. 320,837. PUBLISHED JULY 12, 1932. Class 6.

297,877. AN HERB LAXATIVE. PAUL C. BRAGG, doing business as O. K.-Lax Mfg. Co., Los Angeles, Calif., assignor to Live Food Products, Inc., Los Angeles, Calif.
Filed August 10, 1931. Serial No. 317,838. PUBLISHED OCTOBER 20, 1931. Class 6.

297,878. MEDICINES IN THE FORM OF PILLS FOR THE TREATMENT OF GOUT, ARTHRITIS, NEURITIS, AND ALLIED COMPLAINTS. GEORGE EADE, LIMITED, London, England.
Filed January 6, 1932. Serial No. 322,770. PUBLISHED JULY 5, 1932. Class 6.

297,879. LAXATIVE PREPARATION FOR INTERNAL USE. THE RENTON COMPANY, LTD., Pasadena, Calif.
Filed December 28, 1931. Serial No. 322,487. PUBLISHED JULY 5, 1932. Class 6.

297,880. JUTE AND SHODDY PIECE GOODS AND WIPING CLOTH IN THE PIECE USED BY MECHANICS FOR CLEANING MACHINERY PARTS. TWIN CITY TEXTILE MILLS, INCORPORATED, St. Paul, Minn.
Filed February 2, 1932. Serial No. 323,771. PUBLISHED JULY 5, 1932. Class 42.

297,881. COTTON DRAPERY FABRICS USED FOR HANGINGS, UPHOLSTERY AND THE LIKE. ATKINSON, FENLON CO. INC., New York, N. Y.
Filed January 25, 1932. Serial No. 323,387. PUBLISHED JULY 19, 1932. Class 42.

297,882. WOOLEN, SILK, COTTON, RAYON, AND/OR COMBINATIONS THEREOF, IN THE PIECE, WOVEN, KNITTED, OR NETTED. N. FLUEGELMAN & CO., INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,507. PUBLISHED FEBRUARY 2, 1932. Class 42.

297,883. MAGAZINE PUBLISHED MONTHLY AND AT OTHER INTERVALS. DELL PUBLISHING CO. INC., New York, N. Y.
Filed October 27, 1931. Serial No. 320,494. PUBLISHED DECEMBER 15, 1931. Class 38.

297,884. PIECE GOODS OF COTTON, SILK, LINEN, AND/OR RAYON OR COMBINATIONS THEREOF; DISH CLOTHS, HAIR NETS, HANDKERCHIEFS, RIBBONS, SCARFS FOR FURNITURE, DOILIES, CENTERPIECES, TABLECLOTHS, NAPKINS, TEXTILE DIAPERS, WASH CLOTHS; BLANKETS, RUGS, CARPETS, FLOOR CLOTHS, AND TOWELS, ALL MADE OF KNITTED, NETTED AND/OR TEXTILE FABRICS. ALFRED S. EISEMAN, New York, N. Y.
Filed May 18, 1932. Serial No. 327,219. PUBLISHED JULY 12, 1932. Class 42.

297,885. PIECE GOODS OF COTTON, SILK, LINEN, AND/OR RAYON OR COMBINATIONS THEREOF; DISH CLOTHS, HAIR NETS, HANDKERCHIEFS, RIBBONS, SCARFS FOR FURNITURE, DOILIES, CENTERPIECES, TABLECLOTHS, NAPKINS, TEXTILE DIAPERS, WASH CLOTHS; BLANKETS, RUGS, CARPETS, FLOOR CLOTHS, AND TOWELS, ALL MADE OF KNITTED, NETTED AND/OR TEXTILE FABRICS. ALFRED S. EISEMAN, New York, N. Y.
Filed May 18, 1932. Serial No. 327,218. PUBLISHED JULY 12, 1932. Class 42.

297,886. TEXTILE DIAPERS. DAVID WEISS, doing business as Stork Infant Wear, New York, N. Y.
Filed May 7, 1932. Serial No. 326,878. PUBLISHED JULY 5, 1932. Class 42.

297,887. WOOLENS IN THE PIECE. HOWSE, MEAD & SONS, INC., New York, N. Y.
Filed May 20, 1932. Serial No. 327,280. PUBLISHED JULY 12, 1932. Class 42.

297,888. TEXTILE RUGS AND CARPETS. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa.
Filed May 19, 1932. Serial No. 327,256. PUBLISHED JUNE 28, 1932. Class 42.

297,889. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed May 27, 1932. Serial No. 327,497. PUBLISHED JULY 5, 1932. Class 42.

297,890. TEXTILE MATERIAL FOR CURTAINS AND DRAPERIES—NAMELY, FINISHED RAYON CURTAINS AND RAYON DRAPERY PIECE GOODS. WILKES-BARRE LACE MANUFACTURING COMPANY, Wilkes-Barre, Pa.
Filed May 25, 1932. Serial No. 327,458. PUBLISHED JULY 5, 1932. Class 42.

297,891. TEXTILE RUGS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed June 3, 1932. Serial No. 327,692. PUBLISHED JULY 12, 1932. Class 42.

297,892. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. U. S. MANUFACTURING CORPORATION, Decatur, Ill.
Filed May 28, 1932. Serial No. 327,617. PUBLISHED JULY 19, 1932. Class 42.

297,893. ARTICLES OF SPECIAL WEAVE OF THE NATURE OF FACE CLOTHS FOR APPLYING AND REMOVING COSMETICS IN FACIAL TREATMENTS. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed May 28, 1932. Serial No. 327,552. PUBLISHED JULY 12, 1932. Class 42.

297,894. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed June 8, 1932. Serial No. 327,834. PUBLISHED JULY 19, 1932. Class 42.

297,895. TEXTILE RUGS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed June 3, 1932. Serial No. 327,693. PUBLISHED JULY 12, 1932. Class 42.

297,896. COTTON CORDUROY PIECE GOODS. HOCKMEYER BROS. INC., New York, N. Y.
Filed October 6, 1931. Serial No. 319,779. PUBLISHED JULY 19, 1932. Class 42.

297,897. SPECIALLY PREPARED CEREAL FOOD CONSISTING OF A MIXTURE OF WHEAT MEAL, OATMEAL, AND YELLOW CORNMEAL, ETC. MEAD JOHNSON & COMPANY, Evansville, Ind.
Filed June 13, 1932. Serial No. 327,942. PUBLISHED JULY 19, 1932. Class 46.

297,898. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed June 10, 1932. Serial No. 327,864. PUBLISHED JULY 19, 1932. Class 42.

297,899. FRESH, CURED, PICKLED, SMOKED, COOKED AND CANNED MEATS—NAMELY, BACON, BACON BACKS, ETC. JOHN MORRELL & CO., Ottumwa, Iowa.
Filed May 29, 1931. Serial No. 315,208. PUBLISHED AUGUST 4, 1931. Class 46.

297,900. DRAPERY FABRICS IN THE PIECE, COMPOSED OF COTTON, RAYON, SILK, AND WOOL, OR COMBINATIONS THEREOF. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed December 7, 1931. Serial No. 321,846. PUBLISHED JUNE 28, 1932. Class 42.

297,901. CANNED PEAS, CANNED TOMATOES, AND CANNED TUNA FISH, SALAME, AND CHEESE. B. FILIPPONE & CO., Passaic, N. J.
Filed July 15, 1931. Serial No. 316,961. PUBLISHED JULY 12, 1932. Class 46.

297,902. DISINFECTANT. ADOLPH J. MARSCHALL, doing business as Marschall Dairy Laboratory, Madison, Wis.
Filed July 14, 1931. Serial No. 316,933. PUBLISHED SEPTEMBER 29, 1931. Class 6.

297,903. SHELLED POPCORN. THE CRACKER JACK CO., Chicago, Ill.
Filed June 1, 1931. Serial No. 315,250. PUBLISHED JULY 12, 1932. Class 46.

297,904. APPLE CANDY CONFECTION. H. P. HANSON & COMPANY, Chicago, Ill.
Filed April 7, 1932. Serial No. 325,929. PUBLISHED JULY 12, 1932. Class 46.

297,905. VEGETABLE FOOD COMPOSED PRINCIPALLY OF SOY BEANS, SIMULATING MEAT IN APPEARANCE, TASTE, AND NUTRITIVE PROPERTIES. THE BATTLE CREEK FOOD COMPANY, Battle Creek, Mich.
Filed April 18, 1932. Serial No. 326,203. PUBLISHED JULY 12, 1932. Class 46.

297,906. NUTS. LEONARD V. A. BURTON, JR., doing business as Munchee Nuts Company, Minneapolis, Minn.
Filed April 7, 1932. Serial No. 325,869. PUBLISHED JULY 12, 1932. Class 46.

297,907. ICE CREAM, WATER ICE, SHERBET, AND SIMILAR FROZEN CONFECTIONS. VOGT INSTANT FREEZERS INCORPORATED, Louisville, Ky.
Filed April 1, 1932. Serial No. 325,733. PUBLISHED JULY 12, 1932. Class 46.

297,908. SUGAR AND CONFECTIONERY SYRUP. SUCREST CORPORATION, New York, N. Y.
Filed April 1, 1932. Serial No. 325,729. PUBLISHED JULY 12, 1932. Class 46.

297,909. MARKING PAPER USED IN THE MANUFACTURE OF VARIOUS ARTICLES OF CLOTHING. JOHN BONANNO, New York, N. Y.
Filed June 9, 1932. Serial No. 327,842. PUBLISHED JULY 19, 1932. Class 37.

297,910. MAGAZINE SECTION. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa.
Filed June 6, 1932. Serial No. 327,762. PUBLISHED JULY 12, 1932. Class 38.

297,911. PERIODICAL. EVERETT ELLIS, New York, N. Y.
Filed June 2, 1932. Serial No. 327,647. PUBLISHED JULY 12, 1932. Class 38.

297,912. CARTOON PUBLICATION. EDDIE SOTTO, Erie, Pa.
Filed May 24, 1932. Serial No. 327,612. PUBLISHED JULY 19, 1932. Class 38.

297,913. FOUNTAIN PENS. THE WAHL COMPANY, Chicago, Ill.
Filed May 31, 1932. Serial No. 327,611. PUBLISHED JULY 12, 1932. Class 37.

297,914. PAPER ROLLS FOR USE IN CONNECTION WITH INSTRUMENTS FOR COMBINED RECORDING OF TIME AND PRODUCTION. THE NATIONAL ACME CO., Cleveland, Ohio.
Filed May 31, 1932. Serial No. 327,595. PUBLISHED JULY 12, 1932. Class 37.

297,915. NEWSPAPER PUBLISHED PERIODICALLY. ABNEEN NEWSPRINT PUBLISHERS CORPORATION, Brooklyn, N. Y.
Filed May 31, 1932. Serial No. 327,573. PUBLISHED JULY 12, 1932. Class 38.

297,916. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, West Springfield, Mass.
Filed May 27, 1932. Serial No. 327,532. PUBLISHED JULY 12, 1932. Class 37.

297,917. FOUNTAIN PENS. THE GREGG PUBLISHING COMPANY, New York, N. Y.
Filed May 26, 1932. Serial No. 327,465. PUBLISHED JULY 19, 1932. Class 37.

297,918. MAGAZINES. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed May 25, 1932. Serial No. 327,426. PUBLISHED JULY 12, 1932. Class 38.

297,919. PAPETERIES, CORRESPONDENCE CARDS, WRITING TABLETS, CORRESPONDENCE AND MAILING ENVELOPES, AND WRITING PAPER, INCLUDING REAM AND POUND GOODS. EATON PAPER COMPANY, Pittsfield, Mass.
Filed May 23, 1932. Serial No. 327,385. PUBLISHED JULY 12, 1932. Class 37.

297,920. BOXES CONTAINING LEAD PENCILS, COPYING PENCILS, COLORING PENCILS, PENCIL HOLDERS, PENCIL SHARPENERS, RUBBER ERASERS, AND RULERS. EBERHARD FABER PENCIL COMPANY, Brooklyn, N. Y.
Filed May 23, 1932. Serial No. 327,347. PUBLISHED JULY 12, 1932. Class 37.

297,921. MONTHLY PUBLICATION. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill.
Filed May 21, 1932. Serial No. 327,306. PUBLISHED JULY 12, 1932. Class 38.

297,922. COVER PAPER. HAMMERMILL PAPER COMPANY, Erie, Pa.
Filed May 20, 1932. Serial No. 327,277. PUBLISHED JULY 19, 1932. Class 37.

297,923. LEDGER AND BOND PAPER. BYRON WESTON COMPANY, Dalton, Mass.
Filed May 19, 1932. Serial No. 327,264. PUBLISHED JULY 12, 1932. Class 37.

297,924. PREPARATION FOR THE TREATMENT OF COUGHS, COLDS, WHEEZING AND BRONCHIAL IRRITATIONS IN POULTRY AND SWINE. GEO. H. LEE CO., Omaha, Nebr.
Filed December 17, 1931. Serial No. 322,217. PUBLISHED MARCH 22, 1932. Class 6.

297,925. PREPARATION FOR INTERNAL USE FOR THE PURPOSE OF FACILITATING THE TAKING OF X-RAY PICTURES OF INTERNAL ORGANS. SCHERING CORPORATION, New York, N. Y.
Filed November 9, 1931. Serial No. 320,942. PUBLISHED JUNE 28, 1932. Class 6.

297,926. FATTY ACIDS FROM TALLOW, FISH OIL, WHALE OIL, AND FATTY ACIDS FROM VEGETABLE OILS—NAMELY, OIL OF PEANUT, CORN, COCOANUT, CASTOR, PALM AND WOOD OIL. WECOLINE PRODUCTS INC., New York, N. Y.
Filed October 6, 1931. Serial No. 319,793. PUBLISHED JUNE 28, 1932. Class 6.

297,927. HERB TEAS BENEFICIAL FOR ALL STOMACH DISORDERS AND AS A GENERAL TONIC. ARKO HERBS INCORPORATED, Buffalo, N. Y.
Filed December 28, 1931. Serial No. 322,478. PUBLISHED JULY 12, 1932. Class 6.

297,928. CONFECTIONERY BASE, CONSISTING OF BUTTER, FAT, SOLIDS NOT FATS, AND SUGAR. WHITE-STOKES COMPANY, INC., Chicago, Ill.
Filed January 14, 1932. Serial No. 323,017. PUBLISHED JULY 12, 1932. Class 46.

297,929. PERFUME, TOILET WATER, TOILET POWDER AND TOILET CREAM. BOURJOIS, INC., New York, N. Y.
Filed January 5, 1932. Serial No. 322,781. PUBLISHED JULY 12, 1932. Class 6.

297,930. COD LIVER OIL. WIEBOLDT STORES, INC., Chicago, Ill.
Filed January 2, 1932. Serial No. 322,667. PUBLISHED JUNE 28, 1932. Class 6.

297,931. HYDROSULFITE COMPOUND USED FOR DECOLORIZING AND DISCHARGE PRINTING OF TEXTILE FIBRES. ARKANSAS COMPANY INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,855. PUBLISHED APRIL 5, 1932. Class 6.

297,932. PREPARATION FOR THE TREATMENT OF PYORRHEA. WILLIE M. HUNTER, Gold Beach, Oreg.
Filed February 1, 1932. Serial No. 323,663. PUBLISHED JUNE 28, 1932. Class 6.

297,933. COMPLEXION POWDER, TOILET POWDER, NAIL POLISH, CLEANSING CREAM, TISSUE CREAM, ASTRINGENT LOTION, TOILET WATER, LIP STICK, ROUGE, HEALING OINTMENT, MUSCLE OIL, OIL FOR PREVENTING AND REMOVING WRINKLES, PREPARATION FOR REMOVING WARTS, PERFUME, SACHETS, DEODORANT, AND BATH SALTS. HAPPY DREAM BEAUTY PREPARATIONS CO., New York, N. Y.
Filed January 27, 1932. Serial No. 323,493. PUBLISHED JUNE 28, 1932. Class 6.

297,934. BAKING SODA. R. B. DAVIS COMPANY, Hoboken, N. J.
Filed February 15, 1932. Serial No. 324,154. PUBLISHED JULY 12, 1932. Class 6.

297,935. FLY SPRAY AND OTHER INSECTICIDAL SPRAYS. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed February 15, 1932. Serial No. 324,201. PUBLISHED JULY 12, 1932. Class 6.

297,936. MEDICINAL PREPARATION FOR ATHLETE'S FOOT OR RINGWORM OF THE FEET. CLAUDE S. ALLEN, doing business as Enzer Remedy Company, Coral Gables, Fla.
Filed March 5, 1932. Serial No. 324,815. PUBLISHED JUNE 28, 1932. Class 6.

297,937. MEDICINAL PETROLEUM OIL, INSECTICIDAL OILS, OILS FOR OILING PAPER, COSMETIC OILS, RADIATOR GLYCERINE, RADIATOR CLEANER, AND ANTI-CORROSION MATERIAL. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif.
Filed March 8, 1932. Serial No. 324,915. PUBLISHED JULY 12, 1932. Class 6.

297,938. PENS, FOUNTAIN PENS, AND PENCIL CASES, NONE BEING OF PRECIOUS METAL OR OF IMITATION PRECIOUS METAL, AND LEADS FOR PENCILS. MENTMORE MANUFACTURING COMPANY LIMITED, London, England.
Filed April 30, 1932. Serial No. 326,642. PUBLISHED JULY 12, 1932. Class 37.

297,939. NEWSPAPER COMIC SECTION. CHICAGO TIMES COMPANY, Chicago, Ill.
Filed March 30, 1932. Serial No. 325,640. PUBLISHED JULY 12, 1932. Class 38.

297,940. ANTIMITE, A COMPOSITION FOR PREVENTION OF TERMITES, WHITE ANTS OR INSECT ATTACK ON WOOD OR WOOD STRUCTURES, OR THEIR CONTENTS. THE ANTIMITE COMPANY, Wilmington, Del., and St. Louis, Mo.
Filed March 4, 1932. Serial No. 324,923. PUBLISHED JULY 12, 1932. Class 6.

297,941. ACCOUNTING FORMS, BLANKS, SHEETS, LEAVES, ETC. THE REYNOLDS & REYNOLDS COMPANY, Dayton, Ohio.
Filed May 9, 1932. Serial No. 326,912. PUBLISHED JULY 12, 1932. Class 37.

297,942. BOUND BLANK BOOKS, LOOSE LEAF BINDERS AND FILLER SHEETS FOR SAME. WILSON-JONES COMPANY, Chicago, Ill.
Filed May 13, 1932. Serial No. 327,078. PUBLISHED JULY 12, 1932. Class 37.

297,943. WEEKLY PUBLICATION OR PUBLICATION FROM TIME TO TIME. NATIONAL ADVISORY COUNCIL ON RADIO IN EDUCATION, INC., New York, N. Y.
Filed May 11, 1932. Serial No. 326,984. PUBLISHED JULY 19, 1932. Class 38.

297,944. SHAVING CREAM. FOUR SQUARE PRODUCTS, INC., Dover, Del.
Filed May 25, 1932. Serial No. 327,430. PUBLISHED JULY 12, 1932. Class 4.

297,945. CHEMICALLY TREATED CLEANING AND POLISHING CLOTHS. ELECTRIC CITY BOX CO., INC., Buffalo, N. Y.
Filed May 27, 1932. Serial No. 327,503. PUBLISHED JULY 19, 1932. Class 4.

297,946. LAXATIVE PREPARATION. HALE FOOD COMPANY, Dayton, Ohio.
Filed October 1, 1931. Serial No. 319,752. PUBLISHED JULY 5, 1932. Class 6.

297,947. PAINTS, ENAMELS, AND VARNISHES. LECO MANUFACTURING CO. INC., College Point, N. Y.
Filed May 25, 1932. Serial No. 327,444. PUBLISHED JULY 19, 1932. Class 16.

297,948. MEDICINAL CIGARETTES FOR THE RELIEF OF HAY FEVER AND ASTHMA. ELPIDIA TISCARENO CARIO, El Paso, Tex.
Filed September 9, 1931. Serial No. 318,866. PUBLISHED JULY 12, 1932. Class 6.

297,949. CANNED FISH. F. A. GOSSE COMPANY, Seattle, Wash.
Filed September 18, 1931. Serial No. 319,174. PUBLISHED JULY 12, 1932. Class 46.

297,950. TEA, MAYONNAISE, AND VANILLA USED FOR FOOD FLAVORING PURPOSES. THEODORE W. FINCH, doing business as T. W. Finch & Company, Rochester, N. Y.
Filed December 8, 1931. Serial No. 321,936. PUBLISHED JULY 12, 1932. Class 46.

297,951. BREADS, CAKES, BUNS, MUFFINS, DOUGHNUTS, AND CRULLERS. FREIHOFER BAKING COMPANY, Philadelphia, Pa.
Filed December 1, 1931. Serial No. 321,641. PUBLISHED JULY 19, 1932. Class 46.

297,952. MIXED FEEDS FOR POULTRY, HORSES AND MULES, AND COWS. PURITAN MILLS, INCORPORATED, Atlanta, Ga.
Filed December 9, 1931. Serial No. 321,969. PUBLISHED JULY 19, 1932. Class 46.

297,953. CANNED OLIVE OIL AND CANNED TOMATOES. VINCENZO SABELLA & CO., New York, N. Y.
Filed September 12, 1931. Serial No. 319,048. PUBLISHED JULY 12, 1932. Class 46.

297,954. HANDBAGS AND POCKETBOOKS. SAKS & COMPANY, New York, N. Y.
Filed May 31, 1932. Serial No. 327,605. PUBLISHED JULY 12, 1932. Class 3.

297,955. LADIES' HANDBAGS. SAKS & COMPANY, New York, N. Y.
Filed May 26, 1932. Serial No. 327,480. PUBLISHED JULY 12, 1932. Class 3.

297,956. POCKET BOOKS AND HAND BAGS AND SUIT CASES OF LEATHER AND FABRIC. WM. C. RATH CO. INC., New York, N. Y.
Filed May 25, 1932. Serial No. 327,449. PUBLISHED JULY 12, 1932. Class 3.

297,957. LEATHER GOODS—NAMELY, HANDBAGS AND POCKETBOOKS, COIN PURSES, BILLFOLDS, LUGGAGE IDENTIFICATION TAGS, CARD CASES, COMBINATION KEY CASE AND CARD HOLDER, WALLETS, PASS CASES, COMBINATION KEY CASE AND LICENSE HOLDER, AND TOILET CASES. FELDER BROS., New York, N. Y.
Filed May 23, 1932. Serial No. 327,351. PUBLISHED JULY 19, 1932. Class 3.

297,958. VEGETABLE OIL SHORTENING. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed May 21, 1932. Serial No. 327,318. PUBLISHED JULY 12, 1932. Class 46.

297,959. CANNED CRAB MEAT, CRAB MEAT IN THE BULK AND STEAMED CRABS. ALASKAN PRODUCTS INCORPORATED, Baltimore, Md.
Filed May 13, 1932. Serial No. 327,036. PUBLISHED JULY 12, 1932. Class 46.

297,960. GENERAL MEDICINAL TONIC. DISTILLERS PREPARATIONS, INC., Weehawken, N. J.
Filed May 17, 1932. Serial No. 327,187. PUBLISHED JULY 12, 1932. Class 6.

297,961. SHORTENING MADE FROM VEGETABLE OILS OR FROM A MIXTURE OF VEGETABLE OILS AND ANIMAL FATS. HUMKO LARD CO., Memphis, Tenn.
Filed May 16, 1932. Serial No. 327,152. PUBLISHED JULY 12, 1932. Class 46.

297,962. COFFEE. PETER G. CANELLOS, doing business as Quality Tea & Coffee Company, Boston, Mass.
Filed May 10, 1932. Serial No. 326,934. PUBLISHED JULY 12, 1932. Class 46.

297,963. MEDICINAL PREPARATIONS FOR THE TREATMENT OF COLITIS. KOLAC COMPANY, New York, N. Y.
Filed May 4, 1932. Serial No. 326,771. PUBLISHED JULY 12, 1932. Class 6.

297,964. SYRUP FOR MAKING CAKE AND CONFECTIONERY. E. BISTROW, doing business as Spysup Manufacturing Company, St. Louis, Mo.
Filed April 29, 1932. Serial No. 326,603. PUBLISHED JULY 12, 1932. Class 46.

297,965. FOOD FOR STOCK AND POULTRY. ASSOCIATED FARMERS' EXCHANGES, INC., Worcester, Mass.
Filed May 7, 1932. Serial No. 326,847. PUBLISHED JULY 12, 1932. Class 46.

297,966. CEREAL BREAKFAST FOODS. THE AMERICAN BARLEY CORPORATION, John D. Nunan, receiver, Minneapolis, Minn.
Filed May 11, 1932. Serial No. 326,987. PUBLISHED JULY 19, 1932. Class 46.

297,967. RADIATOR CEMENT, ADHESIVE PATCHES FOR MENDING ARTICLES, TIRE CEMENTS, ADHESIVE TAPES, GASKET PASTES AND CEMENTS FOR USE IN REPAIRING MOTORS AND AUTO BODIES. HICKOK OIL CORPORATION, Toledo, Ohio.
Filed May 9, 1932. Serial No. 326,898. PUBLISHED JULY 12, 1932. Class 5.

297,968. CHEESE. ROETHLISBERGER & CO. INC., New York, N. Y.
Filed May 13, 1932. Serial No. 327,069. PUBLISHED JULY 12, 1932. Class 46.

297,969. MALT EXTRACT. STERLING PRODUCTS COMPANY, Evansville, Ind.
Filed May 13, 1932. Serial No. 327,071. PUBLISHED JULY 12, 1932. Class 46.

297,970. EGGS AND CHEESE. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed May 21, 1932. Serial No. 327,300. PUBLISHED JULY 12, 1932. Class 46.

297,971. LADIES' POCKET BOOKS. ROBERT APPEL, Brooklyn, N. Y.
Filed May 23, 1932. Serial No. 327,332. PUBLISHED JULY 19, 1932. Class 3.

297,972. BREAD, ROLLS, SWEET YEAST ROLLS, BUNS, CAKES, SWEET YEAST CAKES, COOKIES, SHORTCAKES, DOUGHNUTS, FRIED CAKES, TARTS, AND PIES. FARM CREST BAKERIES, INCORPORATED, Wilmington, Del., and Detroit, Mich.
Filed May 23, 1932. Serial No. 327,350. PUBLISHED JULY 12, 1932. Class 46.

297,973. FOOD FOR CARNIVOROUS ANIMALS, SWIFT AND COMPANY, Chicago, Ill.
Filed May 23, 1932. Serial No. 327,379. PUBLISHED JULY 12, 1932. Class 46.

297,974. COOKIES AND CRACKERS. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass.
Filed May 31, 1932. Serial No. 327,590. PUBLISHED JULY 12, 1932. Class 46.

297,975. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed June 3, 1932. Serial No. 327,686. PUBLISHED JULY 12, 1932. Class 46.

297,976. SANDWICHES MADE OF PORK AND BEEF. JOEL R. BIDWELL, doing business as Mother's Drumstick Sandwich Company, Dallas, Tex.
Filed April 20, 1932. Serial No. 326,280. PUBLISHED JULY 19, 1932. Class 46.

297,977. WHEAT FLOUR, BISCUIT FLOUR, PANCAKE FLOUR, MUFFIN FLOUR, AND DOUGHNUT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed June 3, 1932. Serial No. 327,687. PUBLISHED JULY 12, 1932. Class 46.

297,978. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed June 3, 1932. Serial No. 327,688. PUBLISHED JULY 12, 1932. Class 46.

297,979. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed June 3, 1932. Serial No. 327,689. PUBLISHED JULY 12, 1932. Class 46.

297,980. BISCUIT FLOUR. NEBRASKA CONSOLIDATED MILLS CO., Omaha, Nebr.
Filed June 3, 1932. Serial No. 327,702. PUBLISHED JULY 12, 1932. Class 46.

297,981. WHOLE GRAIN HEALTH FLOUR, INCLUDING WHOLE WHEAT AND OTHER GRAINS. GUY E. BRIGNALL, doing business as Sta-Wel Company (Not Incorporated), Aurora, Ill.
Filed June 6, 1932. Serial No. 327,751. PUBLISHED JULY 12, 1932. Class 46.

297,982. ASSORTED CANDY, INCLUDING HARD CANDIES, GLACÉ FRUITS, BON BONS, CHOCOLATES. YORKMAN CANDIES, INC., New Orleans, La.
Filed March 7, 1932. Serial No. 324,865. PUBLISHED MAY 31, 1932. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

39,183. PREPARED TAPIOCA. Registered November 4, 1902. WHITMAN GROCERY COMPANY, Orange, Mass. Renewed November 4, 1932, to Minute Tapioca Company, Inc., New York, N. Y., a Corporation of Massachusetts, assignee by mesne assignments.

86,979. HAIR-WATER. Registered June 18, 1912. GEORG DRALLE, Hamburg, Germany. Renewed June 18, 1932.

88,224. FERTILIZERS. Registered September 10, 1912. AMERICAN AGRICULTURAL CHEMICAL COMPANY. Renewed September 10, 1932, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Delaware, assignee.

88,377. COAL-TAR COLORS. Registered September 10, 1912. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland, a Corporation of Switzerland. Renewed September 10, 1932.

89,092. TALCUM POWDER, SACHET-POWDERS, COLD-CREAMS, AND PERFUMES. Registered November 12, 1912. WILLIAM H. BROWN & BRO. CO., Baltimore, Md., a Corporation of Maryland. Renewed November 12, 1932.

89,379. ELASTIC WEBBING. Registered December 10, 1912. KOPS BROS. Renewed December 10, 1932, to Kops Bros. Inc., New York, N. Y., a Corporation of New York, successor.

90,325. COTTON PIECE GOODS. Registered February 18, 1913. GRIBBON, LANGE & STEVEN, New York, N. Y. Renewed February 18, 1933, to The Erwin Cotton Mills Co., West Durham, N. C., a Corporation of North Carolina, assignee.

90,451. WATCHES. Registered February 25, 1913. LOUIS K. LIGGETT COMPANY, Boston, Mass. Renewed February 25, 1933, to Louis K. Liggett Company, New York, N. Y., a Corporation of Massachusetts.

LABELS

REGISTERED OCTOBER 4, 1932

41,229.—*Title:* FIRST CALL FOR LUNCHEON—B/G EATING INN. For Sandwiches, Pastries, and Ice Cream. B/G SANDWICH SHOPS, INC., Chicago, Ill. Published July 19, 1932.

41,230.—*Title:* HI-BALL. For Lime Rickey. CALIFORNIA BOTTLING WKS., doing business as the Hi-Ball Products Co., Los Angeles, Calif. Published October 1, 1931.

41,231.—*Title:* CINDERELLA. For Slippers. DYER & HALL, INC., Auburn, Me. Published July 19, 1932.

41,232.—*Title:* EASY-WASH. For a Scientific Combination of Chemical Agents That Bleaches, Cleans, Disinfects Clothes Without Boiling. EASY WASH CHEMICAL COMPANY, Slovan, Pa. Published July 26, 1932.

41,233.—*Title:* CHEW-ETS. For Candy. D. GOLDENBERG, INC., Philadelphia, Pa. Published July 18, 1932.

41,234.—*Title:* DROMEDARY GOLDEN DATES PITTED. For Dates. THE HILLS BROTHERS COMPANY, New York, N. Y. Published August 15, 1932.

41,235.—*Title:* STYLE MAID. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 6, 1932.

41,236.—*Title:* STYLE SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 18, 1932.

41,237.—*Title:* FEMININE FOOTWEAR EXCELLENCE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 12, 1932.

41,238.—*Title:* SQUARE DEEL CLEANSER. For a Preparation for Cleaning and Scouring. KEYSTONE CHEMICAL CORPORATION, Detroit, Mich. Published April 1, 1932.

41,239.—*Title:* KLEIN'S. For Milk Chocolate. KLEIN CHOCOLATE COMPANY, Elizabethtown, Pa. Published August 1, 1932.

41,240.—*Title:* TRICK-A-CHIEF QUALITY HANDKERCHIEFS. For Handkerchiefs. VICTOR W. KNIGHT, doing business as Victor W. Knight Trick-A-Chief Company, Chicago, Ill. Published May 15, 1932.

41,241.—*Title:* LEVINSON'S ANCESTORS HERB TEA. For Herb Tea. JOSEPH LEVINSON, Los Angeles, Calif. Published September 3, 1932.

41,242.—*Title:* LADY NEWBERRY. For Hair Nets. H. A. LOEB & COMPANY, Chicago, Ill. Published January 25, 1932.

41,243.—*Title:* OLIO RAMELLA. For Olive Oil. GIUSEPPE L. MEZZETTA, San Francisco, Calif. Published June 29, 1932.

41,244.—*Title:* RED-TONE. For Astringent and Deodorant Mouth Wash and Gargle. NASSOUR BROS., INC., LTD., Los Angeles, Calif. Published July 14, 1932.

41,245.—*Title:* DENTONE. For Astringent and Deodorant Mouth Wash and Gargle. NASSOUR BROS., INC., LTD., Los Angeles, Calif. Published July 14, 1932.

41,246.—*Title:* HOME WASHING FLUID. For Washing Fluid. PALUMBOS LITHOGRAPHY & PRINTERY, Rochester, N. Y. Published December 20, 1931.

41,247.—*Title:* SCHMIDT'S MONTROSE. For German Wieners. GEO. L. SCHMIDT, doing business as J. Fred Schmidt Packing Company, Columbus, Ohio. Published June 1, 1932.

41,248.—*Title:* TASTY TREAT APPLES. For Apples. SELECT APPLES, INC., New York, N. Y. Published August 3, 1932.

41,249.—*Title:* TESORO EFFERVESCENT PREPARATION. For Effervescent Preparation. SAM TESORO, doing business as Chicago Spice & Flavor Co., and Tesoro Brand Products, and Chicago Spice & Flavoring Ext. Co., Chicago, Ill. Published September 1, 1932.

41,250.—*Title:* WRIGLEY'S DOUBLE MINT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 18, 1932.

41,251.—*Title:* WRIGLEY'S JUICY FRUIT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 9, 1932.

41,252.—*Title:* WRIGLEY'S JUICY FRUIT CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 16, 1932.

PRINTS

REGISTERED OCTOBER 4, 1932

13,924.—*Title:* LITTLE FARM CHILDREN ARE RICH THESE DAYS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published September 5, 1932.

13,925.—*Title:* WE HAVE JUST DELIVERED A LOAD OF BLUE COAL. For Coal. H. R. ELLIOT & CO. INC., New York, N. Y. Published April 20, 1932.

13,926.—*Title:* MINNEHAHA. For Beverage. THE MINNEHAHA WATER COMPANY, Cleveland, Ohio. Published July 15, 1932.

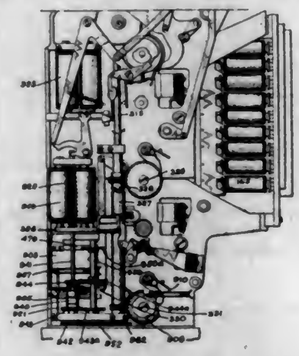
13,927.—*Title:* WRIGLEY'S DOUBLE MINT. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 18, 1932.

13,928.—*Title:* WRIGLEY'S JUICY FRUIT. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published August 16, 1932.

REISSUES

OCTOBER 4, 1932

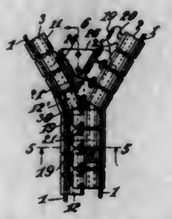
18,611. TOTAL TAKING DEVICE. CHARLES CAMPBELL, London, England, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original No. 1,681,152, dated Aug. 14, 1928, Serial No. 82,933, filed Jan. 22, 1926, and in Great Britain Feb. 4, 1925. Application for reissue filed Mar. 27, 1929. Serial No. 350,419. 41 Claims. (Cl. 235—92.)



10. An accounting machine including, in combination, electric means for analyzing perforated records, a plurality of counters to set up totals derived from the records, means for automatically taking totals successively from more than one of said counters, and electric devices controlled by the records for selecting the counter from which a total is to be taken.

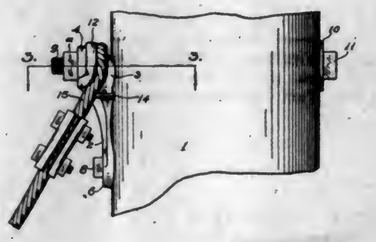
23. A record controlled accounting machine, comprising, in combination, means to accumulate totals of amounts derived from cards arranged in groups and having several group control designations on each card, total taking means controlled by the group designations for determining which totals are to be taken and for automatically effecting a plurality of total taking operations sequentially when simultaneous changes in the group control designations call for a plurality of totals and means controlled by the accumulating means during such sequential total taking operations to print totals of the groups.

18,612. FASTENING DEVICE. JOHN A. H. SIEBS, Jersey City, N. J. Original No. 1,859,751, dated May 24, 1932, Serial No. 552,314, filed July 22, 1931. Application for reissue filed June 30, 1932. Serial No. 620,211. 14 Claims. (Cl. 24—205.)



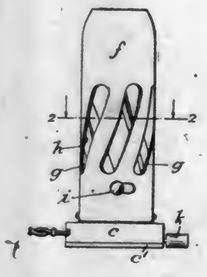
14. A separable fastener comprising two flexible tapes, two series of cooperable fastener elements attached respectively to opposing side faces of said tapes and projecting at an angle therefrom, and an operating member positioned between said tapes having means slidably cooperating with each series of fastener elements to connect the same with each other upon movement of said member in one direction.

18,613. GUY FIXTURE FOR POLES. BOLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Original No. 1,855,564, dated Apr. 26, 1932, Serial No. 556,703, filed Aug. 12, 1931. Application for reissue filed July 7, 1932. Serial No. 621,294. 2 Claims. (Cl. 24—115.)



2. A guy fixture for a pole comprising a base portion having a pierced hub to accommodate a bolt for securement to the pole and a downward extension which closely conforms to the pole, said hub having an interiorly grooved rib extending along its upper and side portions, and the fixture at the point where said extension merges into said hub having laterally extending lugs whereby when the line of draft of said cable approaches the pole it will contact said lugs.

18,614. APPARATUS FOR PERMANENTLY WAVING THE HAIR. HUBERT SPEETJENS, London, England, assignor to Arthur Harold Stevens, London, England. Original No. 1,504,988, dated Aug. 12, 1924, Serial No. 555,720, filed Apr. 20, 1922. Application for reissue filed Aug. 18, 1932. Serial No. 629,390. 10 Claims. (Cl. 219—24.)



1. A tubular electric heater for hair waving formed with venting apertures or slots capable of being regulated by an adjustable sleeve or shutter.

PLANT PATENTS

GRANTED OCTOBER 4, 1932

28. ROSE. WALTER D. BROWNELL and JOSEPHINE D. BROWNELL, Providence, R. I. Filed Jan. 19, 1932. Serial No. 587,594. 1 Claim. (Cl. 47—1.)

The rose as shown and described, characterized by the golden yellow color of its petals, the form and size of its bloom, its stiff long stem, the intense fragrance, and its remontant and everblooming habit.

29. CHERRY. LEVI R. TAFT, East Jordan, Mich., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed Mar. 16, 1932. Serial No. 599,298. 1 Claim. (Cl. 47—1.)

The cherry tree herein described, characterized by the lateness of ripening period of its fruit, as shown.

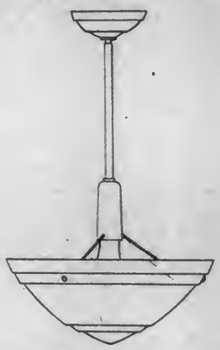
30. CHERRY. LEVI R. TAFT, East Jordan, Mich., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed Mar. 16, 1932. Serial No. 599,299. 1 Claim. (Cl. 47—1.)

The cherry tree herein described, characterized by earliness of the ripening period of its fruit, as shown.

DESIGNS

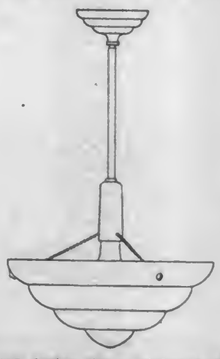
OCTOBER 4, 1932

87,861. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,089. Term of patent 7 years.



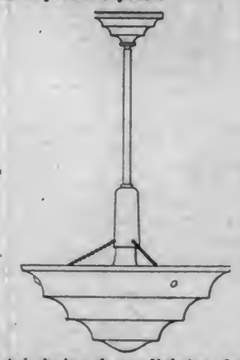
The ornamental design for a lighting fixture substantially as shown and described.

87,862. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,090. Term of patent 7 years.



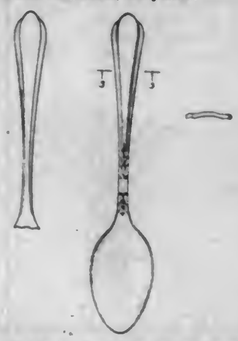
The ornamental design for a lighting fixture substantially as shown and described.

87,863. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,093. Term of patent 7 years.



The ornamental design for a lighting fixture substantially as shown and described.

87,864. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN and ELMER H. KREPS, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Aug. 12, 1932. Serial No. 44,592. Term of patent 14 years.



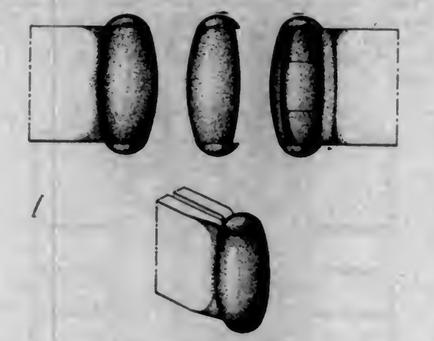
The ornamental design for a spoon or similar article as shown and described.

87,865. OUTER MEMBER OF A COVERED JOINT HINGE. JAMES T. ATWOOD, Rockford, Ill. Filed Nov. 2, 1931. Serial No. 41,595. Term of patent 14 years.



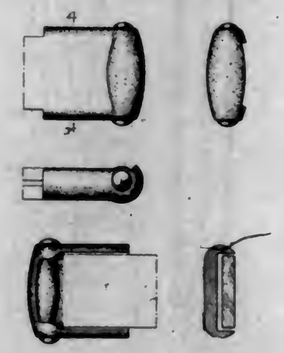
The ornamental design for the outer member of a covered joint hinge as shown.

87,866. HINGE. JAMES T. ATWOOD, Rockford, Ill. Filed Nov. 2, 1931. Serial No. 41,596. Term of patent 14 years.



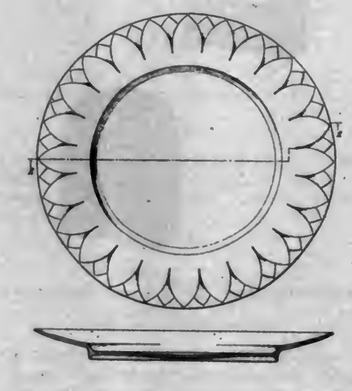
The ornamental design for a hinge as shown.

87,867. HINGE. JAMES T. ATWOOD, Rockford, Ill. Filed July 11, 1932. Serial No. 44,306. Term of patent 14 years.



The ornamental design for a hinge as shown.

87,868. DISH OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida, Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,285. Term of patent 7 years.



The ornamental design for a dish or similar article as shown and described.

87,869. DISH OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida, Community, Limited, Oneida, N. Y., a Corporation of New York. Filed July 8, 1932. Serial No. 44,286. Term of patent 7 years.



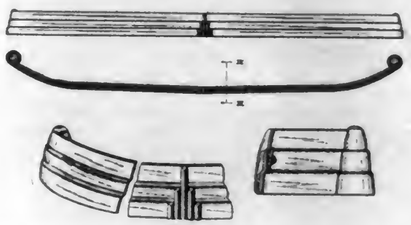
The ornamental design for a dish or similar article as shown and described.

87,870. HEATER CASING. EARL C. BOOTH, Columbus, Ind. Filed July 29, 1932. Serial No. 44,476. Term of patent 7 years.



The ornamental design for a heater casing, as shown.

87,871. AUTOMOBILE BUMPER. JOSEPH G. BRAY, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 24, 1932. Serial No. 44,679. Term of patent 7 years.



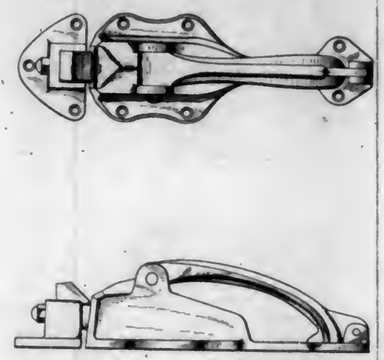
The ornamental design for an automobile bumper, as shown.

87,872. CUP. NORMAN W. CUMMINS, Louisville, Ky. Filed July 14, 1932. Serial No. 44,323. Term of patent 7 years.



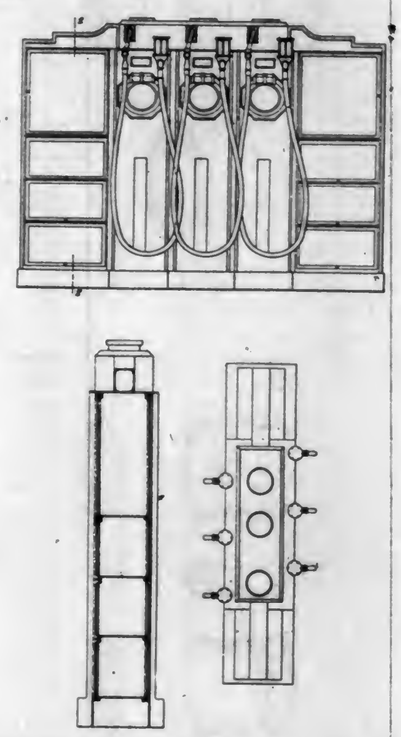
The ornamental design for a cup as shown.

87,873. LATCH FOR REFRIGERATORS. HARRY DUBINSKY, Brooklyn, IRVING GOLDENBERG, Brooklyn, and MAX SCHACHTER, New York, N. Y. Filed June 22, 1932. Serial No. 44,159. Term of patent 3½ years.



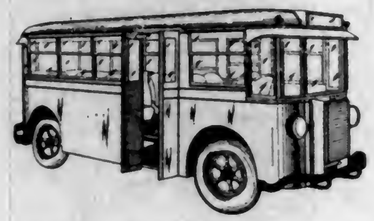
The ornamental design for a latch for refrigerators as shown.

87,874. GASOLINE OR OTHER ARTICLE DISPENSING PUMP. EARL E. EICKMEYER and GEORGE W. EICHHOFF, Dayton, Ohio, assignors to The Dayton Pump & Mfg. Company, Dayton, Ohio, a Corporation of Ohio. Filed July 30, 1932. Serial No. 44,490. Term of patent 3½ years.



The ornamental design for a gasoline or other article dispensing pump as shown.

87,875. MOTOR VEHICLE. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Nov. 3, 1931. Serial No. 41,605. Term of patent 14 years.



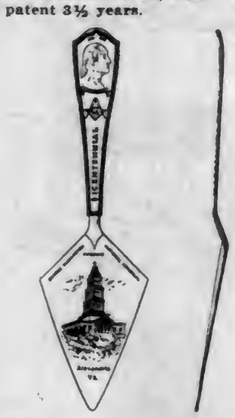
The ornamental design of a motor vehicle substantially as shown and described.

87,876. ORNAMENT FOR A RADIATOR CAP OR THE LIKE. IRVING FLORMAN, New York, N. Y. Filed July 2, 1932. Serial No. 44,253. Term of patent 3½ years.



The ornamental design for an ornament for a radiator cap or the like substantially as shown.

87,877. EMBLEMATIC TROWEL OR SIMILAR ARTICLE. KARL HATCH, Oneida, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Dec. 31, 1931. Serial No. 42,335. Term of patent 3½ years.



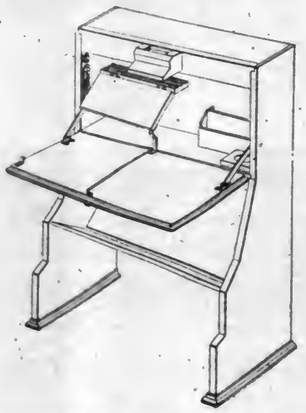
The ornamental design for an emblematic trowel or similar article as shown and described.

87,878. EYEGLASS AND SPECTACLE CASE. GEORGE L. HOMMEL, Irondequoit, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed June 25, 1932. Serial No. 44,193. Term of patent 3½ years.



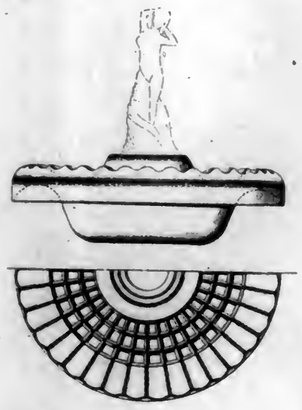
The ornamental design for an eyeglass and spectacle case substantially as shown and described.

87,879. COMBINED TELEPHONE STAND AND TELEPHONE DIRECTORY SECRETARY. JOHN G. HUNTER, Columbus, Ohio. Filed July 21, 1932. Serial No. 44,398. Term of patent 14 years.



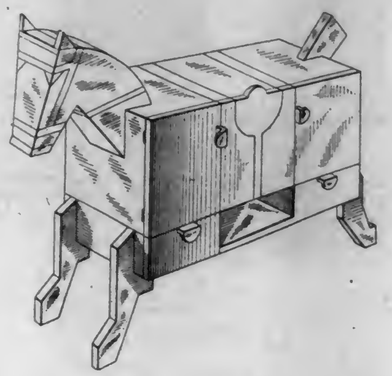
The ornamental design for a combined telephone stand and telephone directory secretary, substantially as shown.

87,880. ASH RECEIVER. ROBERT F. JONES, Washington, D. C. Filed July 19, 1932. Serial No. 44,375. Term of patent 14 years.



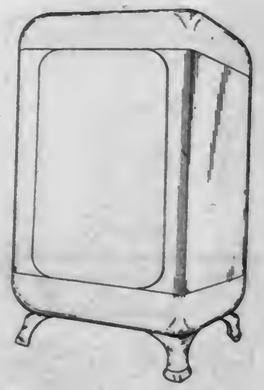
The ornamental design for an ash receiver, as shown and described.

87,881. TOY CABINET. JOSEPH LOTTO, Astoria, N. Y. Filed July 19, 1932. Serial No. 44,377. Term of patent 7 years.



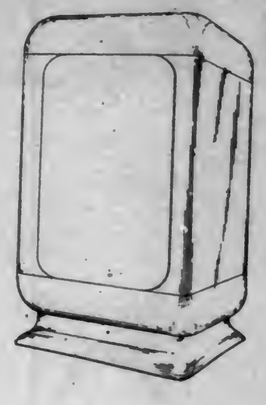
The ornamental design for a toy cabinet, as shown.

87,882. REFRIGERATOR CASING. JOHN K. OLSEN, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Aug. 10, 1932. Serial No. 44,569. Term of patent 7 years.



The ornamental design for a refrigerator casing, substantially as shown.

87,883. REFRIGERATOR CASING. JOHN K. OLSEN, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Aug. 10, 1932. Serial No. 44,570. Term of patent 7 years.



The ornamental design for a refrigerator casing, substantially as shown.

87,884. COOK STOVE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Aug. 15, 1932. Serial No. 44,603. Term of patent 7 years.



The ornamental design for a cook stove, substantially as shown.

87,885. COOK STOVE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Aug. 15, 1932. Serial No. 44,604. Term of patent 7 years.



The ornamental design for a cook stove, substantially as shown.

87,886. AGITATOR. CLARENCE RINGWALD, North Hampton, Ohio. Filed July 30, 1932. Serial No. 44,497. Term of patent 7 years.



The ornamental design for an agitator as shown.

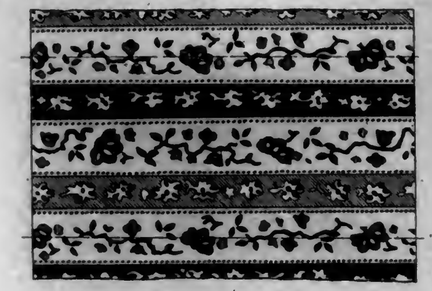
87,887. WEBBING. FREDERICK J. ZIMMERER, Jr., Middletown, Conn., assignor to The Russell Manufacturing Company, Middletown, Conn., a Corporation of Connecticut. Filed Mar. 4, 1932. Serial No. 43,068. Term of patent 7 years.





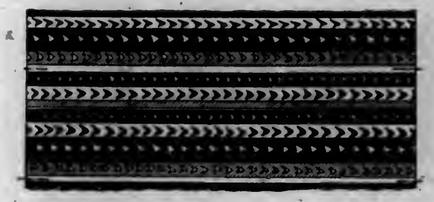
The ornamental design for webbing as shown.

87,888. TEXTILE FABRIC. AARON ROSENSTEIN, New York, N. Y. Filed Aug. 20, 1932. Serial No. 44,654. Term of patent 7 years.



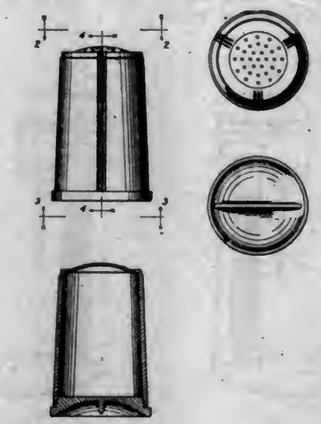
The ornamental design for a textile fabric substantially as shown and described.

87,889. TEXTILE FABRIC. AARON ROSENSTEIN, New York, N. Y. Filed Aug. 20, 1932. Serial No. 44,655. Term of patent 7 years.



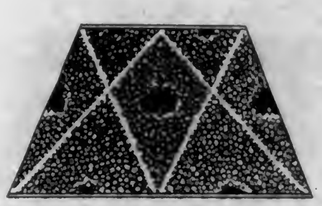
The ornamental design for a textile fabric substantially as shown and described.

87,890. CONDIMENT DISPENSER. JOHN G. ROSSITER, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed Aug. 8, 1932. Serial No. 44,542. Term of patent 7 years.



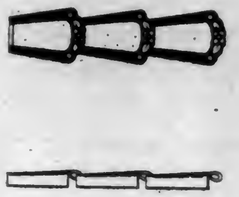
The ornamental design for a condiment dispenser as shown.

87,891. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Aug. 3, 1932. Serial No. 44,514. Term of patent 3½ years.



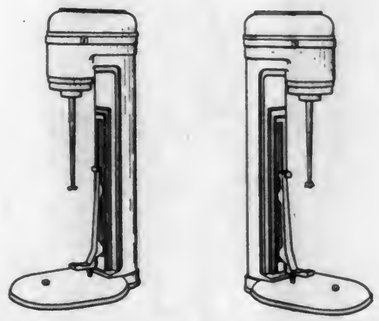
The ornamental design for a lamp shade, substantially as shown and described.

87,892. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed July 28, 1932. Serial No. 44,471. Term of patent 3½ years.



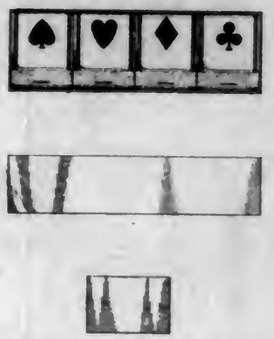
The ornamental design for a bracelet chain, substantially as shown.

87,893. DRINK MIXER. WILLIAM A. STROUD, Wilkesboro, N. C. Filed Aug. 5, 1932. Serial No. 44,529. Term of patent 14 years.



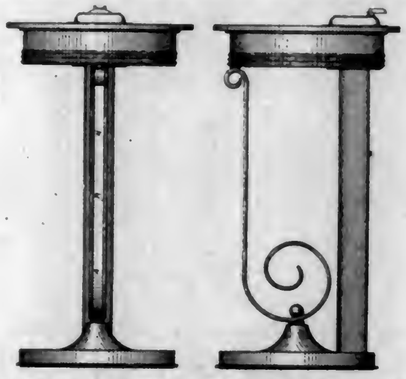
The ornamental design for a drink mixer, as shown.

87,894. COMBINED SET OF BOOK MATCHES AND CONTAINER THEREFOR. MERRELL HERMAN SWARTZ, Wadsworth, Ohio. Filed Mar. 11, 1932. Serial No. 43,160. Term of patent 7 years.



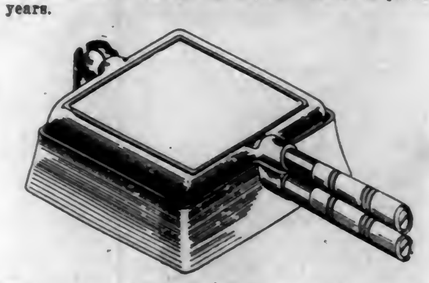
The ornamental design for a combined set of book matches and container therefor, substantially as shown and described.

87,895. SMOKER'S STAND. WALTER VON NESSEN, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed July 25, 1932. Serial No. 44,440. Term of patent 7 years.



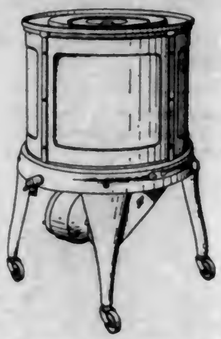
The ornamental design for a smoker's stand as shown.

87,896. SANDWICH TOASTER. JEROME A. WAGNER, Sidney, Ohio, assignor to The Wagner Manufacturing Company, Sidney, Ohio, a Corporation of Ohio. Filed July 15, 1932. Serial No. 44,347. Term of patent 7 years.



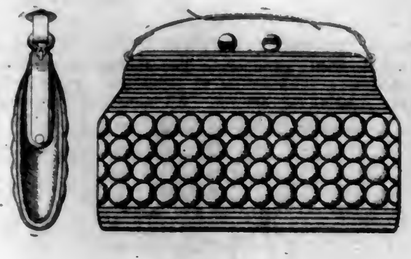
The ornamental design for a sandwich toaster, as shown.

87,897. WASHING MACHINE CASING. JOHN J. MCCABE, Cleveland, Ohio. Filed July 13, 1931. Serial No. 40,513. Term of patent 14 years.



The ornamental design for a washing machine casing, as shown.

87,898. HANDBAG. MORRIS WHITE, New York, N. Y., assignor to Morris White Mfg. Co. Inc., a Corporation of New York. Filed Aug. 29, 1932. Serial No. 44,712. Term of patent 7 years.

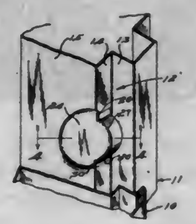


The ornamental design for a handbag as shown.

PATENTS

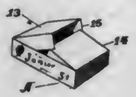
GRANTED OCTOBER 4, 1932

1,880,190. RUBBER DOOR BUMPER. ROY F. ANDERSON, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Mar. 4, 1932. Serial No. 596,735. 7 Claims. (Cl. 16—86.)



7. In combination, a door post having a jamb face and angularly disposed rabbeted face contiguous thereto, said post having a substantially circular walled socket behind such faces, said rabbeted face having an opening communicating with said socket, at least one edge of the opening extending toward the opposite edge thereof a distance to provide a lip at the adjacent extremity of the circular wall of the socket and a bumper block formed for endwise insertion in the socket through the opening in the rabbeted face and having a shoulder adapted to engage the lip, said block being so formed that it can be turned after such endwise insertion, and the shoulder brought into engagement with the lip.

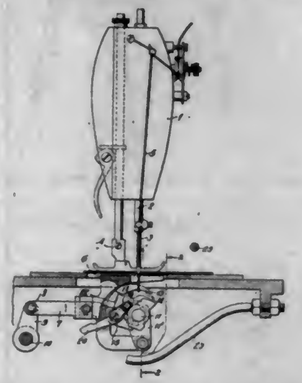
1,880,191. BOX. LEON G. BIGELOW, St. Paul, Minn., assignor to Quality Park Box Company, St. Paul, Minn., a Corporation of Minnesota. Filed Aug. 24, 1927. Serial No. 215,150. 1 Claim. (Cl. 229—33.)



A container for candy bars formed from a single sheet of material, a bottom side and cover overlapping portions, rectangular in shape and integrally connected together, means for securing the corners together, rectangular flaps extending from its transverse edges of said cover portion, display indicia around the outside surface of said side, and display indicia on the inside of said cover and said flaps, whereby when said box is open, the contents of said box is displayed and said cover portions are turned inside out with the indicia on the inside of said cover and said flaps spread out in open position to provide a display at the head and foot of said box wider than the width thereof to provide an extended display and easel at either end of said container.

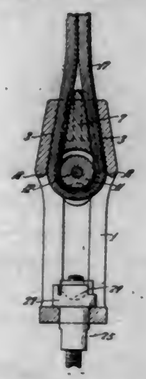
1,880,192. SEWING MACHINE. ERSKINE E. BOYCE, Gastonia, N. C. Filed Sept. 4, 1930. Serial No. 479,735. 8 Claims. (Cl. 112—79.)

1. In a sewing machine of the class described, having a needlebar carrying a needle, a feed dog for advancing the fabric, and means for guiding the thread to the needle, a shaft mounted below the dog for oscillating movement, a sickle shaped hook secured to the shaft and adapted to pass through a loop carried downward by the needle, and a blade pivoted to the shank of the hook, said blade having



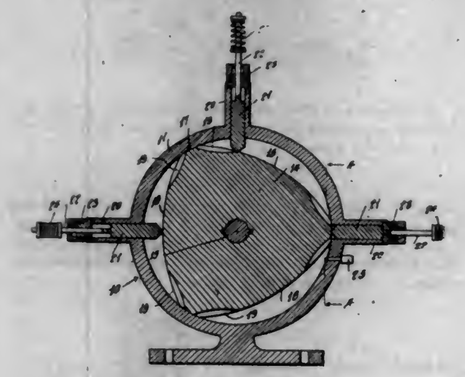
a tail, and the feed dog an abutment for engagement by the tail to operate the blade when the hook is at the limit of its forward movement.

1,880,193. GUY WIRE CLAMP AND CONNECTION. JASPER BLACKBURN, Webster Groves, Mo. Filed Feb. 17, 1932. Serial No. 593,517. 8 Claims. (Cl. 24—126.)



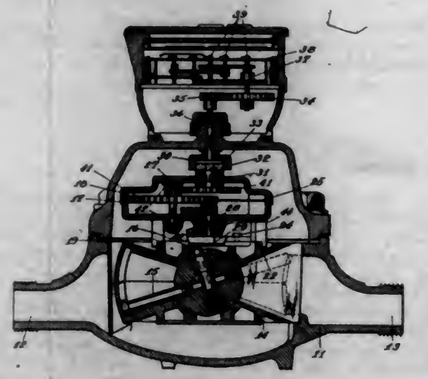
2. In a device of the kind described, a frame embodying at one end a sheave socket tapering to and opening out through the end, a shoulder formed upon one side wall of the socket, a complemental wedge-shaped sheave block fitted to the said socket and adapted for some degree of lateral movement therein, a shoulder formed upon one side of the sheave block adapted to engage the said shoulder of the socket wall for releasably holding the sheave block in a retracted position relative to its seat, means for releasably holding the two said shoulders in such interlocked relation, a pulley journaled at the larger end of the sheave block, the same being so dimensioned and positioned as to constitute a symmetrically enlarged continuation of the block, and means at the opposite end of the said frame for adjustably engaging an anchor rod.

1,880,194. HYDRAULIC BRAKE. GEORGE R. BRENT, Orange, Tex., assignor of thirty-seven and one-half one-hundredths to Edgar W. Brown, jr., eleven one-hundredths to W. E. Lea, ten one-hundredths to Charles R. Steele, and four one-hundredths to C. C. Leedy, Chicago, Ill. Filed Sept. 19, 1929. Serial No. 393,765. 2 Claims. (Cl. 188—90.)



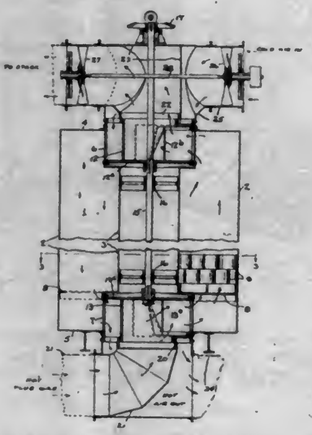
1. An hydraulic brake device of the class described comprising a casing, a piston operable therein, a plurality of valves radially movable in the casing to coact with the piston and fluid contained in the casing, said piston having portions adapted to wipe the wall of the casing, and said piston having a pressure-release groove extending in a direction away from the wall and in the portion thereof engageable by the valves.

1,880,195. LIQUID METER. HORACE CHRISMAN, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Oct. 15, 1931. Serial No. 569,041. 10 Claims. (Cl. 73—98.)



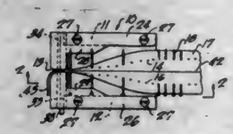
1. In a liquid meter having a casing with a liquid inlet and outlet; a measuring chamber mounted in said casing; a register; a gear train in said casing and having parts exposed to the liquid being metered, said gear train being characterized by the fact that said exposed parts are die-forged of brass to provide dense texture surfaces which are substantially non-corrodible by acid and alkaline liquids; means operably connecting said gear train to said register, and means operated by the flow of liquid through said measuring chamber and operably coupled to said gear train.

1,880,196. AIR PREHEATER. HERBERT H. DOW and GUY H. CANNON, Midland, Mich., assignors, by mesne assignments, to The Air Preheater Corporation, New York, N. Y., a Corporation of New York. Filed July 6, 1925. Serial No. 41,565. 12 Claims. (Cl. 257—6.)



6. In a heat exchange apparatus, an annular chamber containing regenerative material having passages extending therethrough, a supply channel and a discharge channel for a fluid to be heated, a supply channel and a discharge channel for a fluid to be cooled, and valve mechanism for controlling flow of one fluid through selected passages and flow of the other fluid through other passages, for rotating and valve mechanism.

1,880,197. PIN STRIP. CARL A. FLOOD, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed Dec. 9, 1930. Serial No. 501,053. 3 Claims. (Cl. 93—1.)

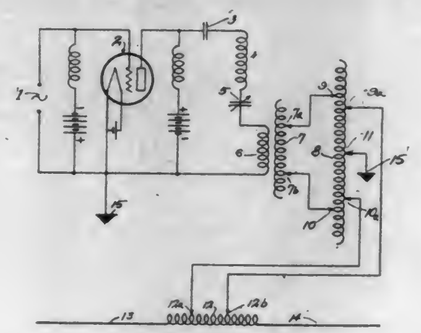


1. A pin strip comprising a sheet of material having longitudinal rows of pin-receiving perforations and a weakened portion extending longitudinally between the rows of perforations to facilitate folding of the strip along a line extending longitudinally and spaced substantially midway between the rows of perforations.

1,880,198. COUPLING CIRCUIT ARRANGEMENT. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,985. 3 Claims. (Cl. 178—44.)

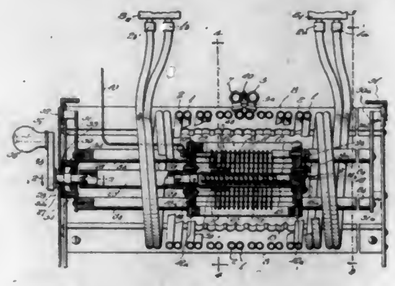
1. In a signaling system, a symmetrical antenna circuit, an inductance connected in series with said antenna circuit, an unsymmetrical circuit, an inductance in said unsymmetrical circuit, signaling apparatus connected with said unsymmetrical circuit, a coupling circuit disposed between said inductances, said coupling circuit including a pair of parallel connected inductances, one of said par-

allel connected inductances being coupled with the inductance in said antenna circuit and the other of said parallel connected inductances being conductively con-



nected through adjustable taps with the inductance in said unsymmetrical circuit, and a path to ground from the electrical center of the inductance in said antenna circuit.

1,880,199. INDUCTANCE AND COUPLING SYSTEM. LOUIS A. GEBHARD and CORRIE F. RUDOLPH, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,425. 9 Claims. (Cl. 171—119.)

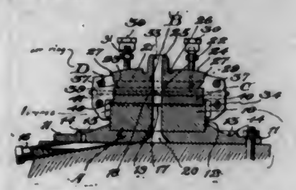


1. An inductance system comprising a frame structure, a multiplicity of insulated members extending across said frame structure, a fluid cooled conductor comprising an inductance supported by said insulated members, insulated pedestals extending between opposite ends of said frame structure, an inductance frame centrally mounted with respect to said fluid cooled inductance by said pedestal insulators, an inductance having the turns thereof supported upon said inductance frame, and remote control means extending axially through said inductances for controlling the effective number of turns of said last mentioned inductance with respect to the fluid cooled turns of said first mentioned inductance.

1,880,200. LOW EXPANDING ALLOY. PETER HIDNERT, New York, N. Y., assignor to The Government of the United States, as represented by the Secretary of Commerce. Filed Oct. 18, 1929. Serial No. 400,721. 5 Claims. (Cl. 75—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

2. An alloy suitable for use as a low expanding metal, containing chromium from 95 to 99%, iron from 0.1 to 3%, silicon from 0.1 to 2%, and a substantial amount of carbon up to 1%.

1,880,201. TURNTABLE CENTER. MEIER GEORGE HILPERT, Bethlehem, Pa. Filed May 29, 1930. Serial No. 457,314. 20 Claims. (Cl. 104—35.)



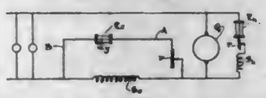
1. A turntable center mounting comprising a base and a cap and an alining ring surrounding the joint between the cap and the base.

1,880,202. ADVERTISING DEVICE AND METHOD OF MAKING THE SAME. DURBIN C. HODGKIN, Washington, D. C., assignor of one-half to Tom B. Owens, Fort Worth, Tex. Filed Oct. 5, 1928. Serial No. 310,582. 14 Claims. (Cl. 40—132.)



1. The method of making advertising matter including illustrating an object on a side of a display surface to be viewed by reflected light, rendering said object invisible by transmitted light by coloring with transparent colors over the portion of the display surface corresponding to the object and behind the display surface, and superimposing a second object behind the display surface to be viewed by transmitted light.

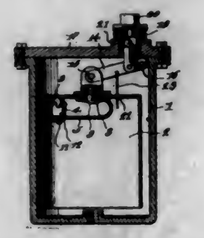
1,880,203. ELECTRICAL APPARATUS. CHARLES A. JACKSON, Ridgewood, N. J. Filed May 28, 1927. Serial No. 195,028. 13 Claims. (Cl. 290—7.)



1. The combination in a power generating apparatus including a prime mover having means which is invariable during operation for conducting flow of power medium thereto, a generator driven by said prime mover, means for creating a total effective field flux including a field circuit adapted upon variations of current therein to vary, in the same direction, the total effective field flux, and thermal means arranged with respect to said field circuit so as to control current therethrough automatically in accordance with the generator load which is coordinated in a predetermined manner with turbine speed which increases with decreased load and vice versa.

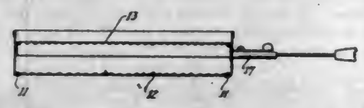
1,880,204. AUTOMATIC WATER LOGGING FLOAT FOR STEAM TRAPS. JAMES W. KAYE, West Orange, N. J., assignor to Kaye & MacDonald, Inc., West Orange, N. J., a Corporation of New Jersey. Filed Aug. 16, 1930. Serial No. 475,805. 5 Claims. (Cl. 236—62.)

1. A steam trap of the class described comprising a casing, valve means carried thereby, a float of an inverted bucket type mounted within said casing, means for connecting said valve means with said float, said float provided with an aperture in the top thereof, a substantially U-shaped thermostatic member carried by the under face of said float, a valve carried by the free end of said thermostatic member and normally held in alignment with said



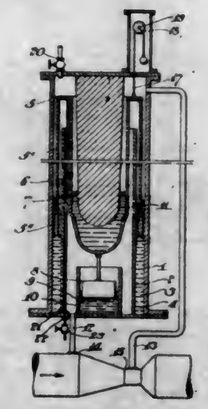
aperture whereby said valve will close said aperture as the valve is raised and open said aperture as the said last mentioned valve is lowered, said float provided with a normal vent means, and means for preventing the accumulation of foreign matter in said venting means.

1,880,205. BROILING APPARATUS. GRACE MANN KRAG, Chicago, Ill. Filed May 17, 1930. Serial No. 453,128. 3 Claims. (Cl. 53—5.)



1. Broiling apparatus comprising an enclosing frame, a grill plate supported in the frame, a second grill plate mounted in the frame above the first plate, means for supporting the second grill plate in adjusted positions in said frame, said supporting means comprising a series of corrugations formed in one end of said frame, and a corresponding series of corrugations formed in one end of said second grill plate and adapted to coact in adjusted positions with said first series of corrugations.

1,880,206. METER. JOHN W. LEDOUX, Swarthmore, Pa. Filed Dec. 22, 1928. Serial No. 327,848. 5 Claims. (Cl. 73—167.)



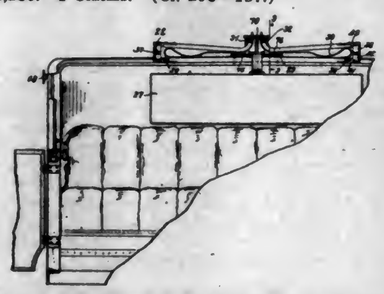
1. Apparatus of the character described comprising a casing containing a liquid heavier than that to be measured, mechanism movable in said casing and comprising an inverted bell sealed by said liquid and a cup supported by said bell and containing liquid heavier than that to be measured, a device fixed to the casing and for displacing liquid contained in said cup, and means for communicating differential pressures to said casing within and without said bell.

1,880,207. POROUS COVERING FOR AIRCRAFT. VICTOR LOUGHEED, Washington, D. C. Filed Feb. 26, 1931. Serial No. 518,554. 9 Claims. (Cl. 244—31.)



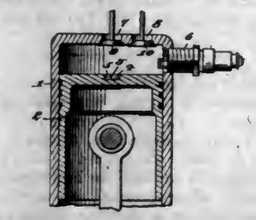
1. A porous covering for aircraft structures comprising a freely-pervious surfacing, and means secured to said surfacing for controlling the airflow through said surfacing.

1,880,208. VEHICLE BODY. JOSEPH B. MCMULLEN, Washington, D. C. Filed Apr. 6, 1929. Serial No. 353,236. 4 Claims. (Cl. 296—137.)



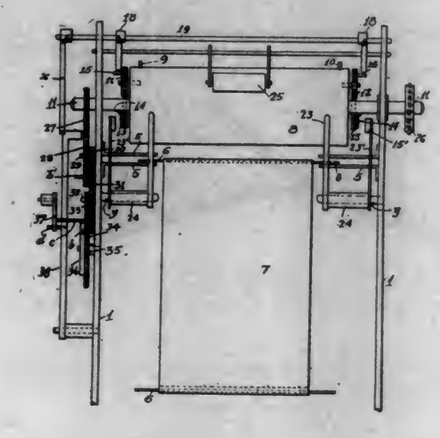
1. A passenger vehicle body comprising, in combination, front and rear standing portions, each having a channel adjacent its inner edge and a raised portion adjacent said channel, a longitudinal stationary portion permanently secured to said front and rear portions, a longitudinally pivoted portion hinged to said stationary portion and having members seating in said channels when in unfolded position, top material covering said stationary and longitudinal portions in common adapted to engage said raised portions and a beaded edge adapted to overlap said raised portions to form a weather-tight joint therewith.

1,880,209. ENGINE AND THE LIKE AND METHOD OF OPERATION. HERBERT B. MOSES, Washington, D. C., assignor to Irma H. Moses. Filed Mar. 31, 1928. Serial No. 266,279. 16 Claims. (Cl. 123—191.)



1. An engine comprising a cylinder and a piston therewithin, a substantially tight expansion chamber between them, and highly adsorbent material in active adsorbing relation to said chamber.

1,880,210. ADVERTISING DEVICE. ROUVINE POLIAKOFF, New York, N. Y., and WILLIAM C. ROE, Dormont, Pa.; said Roe assignor to said Poliakoff. Filed July 9, 1927. Serial No. 204,548. 11 Claims. (Cl. 40—36.)



1. In an advertising device, the combination of a frame having a view opening therein, a roller mounted in said frame, a series of display sheets suspended beneath said roller and adjacent to the view opening, guides on which said sheets are successively arranged, means to actuate said roller, means actuated y said roller to successively withdraw said sheets from said view opening, and means adjacent to the rear of said roller to engage and remove each sheet from the roller at predetermined intervals and cause said sheets to pass to the rear of the series of sheets on said guides and in a reverse position.

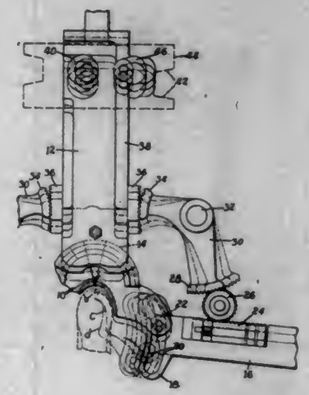
1,880,211. PROCESS FOR THE SOLIDIFICATION OF LIQUID HYDROCARBONS. ADOLPH A. PRUSSIN, New York, N. Y., assignor to Petro-Sol Corporation, a Corporation of Delaware. Filed Nov. 20, 1930. Serial No. 497,056. 2 Claims. (Cl. 44—7.)

1. A process of solidification of liquid hydrocarbons consisting in mixing by volume 96½ parts of liquid hydrocarbon with 1½ parts of albumin, heating said mixture to a moderate temperature, cooling, adding to the mixture 2 parts of acetone, removing the precipitated albumin and solidifying the liquid hydrocarbon by moderate heat.

2. A process of solidification of liquid hydrocarbons consisting in the mixing by volume 96½ parts of liquid hydrocarbon with 1½ parts of albumin, heating said mixture to a temperature of about 104 degrees, Fahrenheit, cooling, adding to the mixture 2 parts of acetone, removing the precipitated albumin and solidifying the liquid hydrocarbon by heating to about 140 degrees, Fahrenheit.

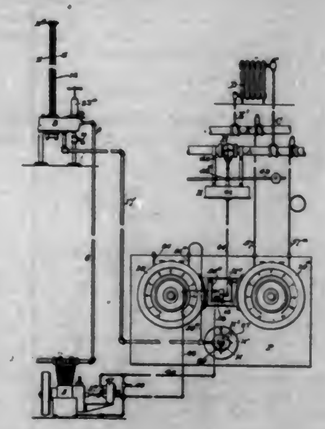
1,880,212. LASTING MACHINE. FRED RICKS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 10, 1931, Serial No. 562,083, and in Great Britain Oct. 3, 1930. 22 Claims. (Cl. 12—4.)

1. In a machine for lasting the heel ends of shoes, the combination with wipers formed to embrace an upper around the heel end of a shoe, of operating means for advancing said wipers bodily lengthwise of the shoe and for closing them toward each other laterally of the shoe, said operating means being so constructed as to impart to the wipers simultaneous advancing and closing movements to wipe the margin of the upper inwardly around the rear portion of the heel seat while only beginning to wipe it inwardly at the forward end of the heel seat and



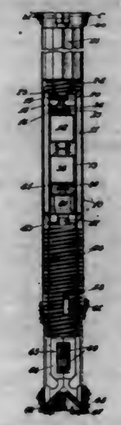
then to continue the closing of the wipers without any substantial advancing movement to complete the overwiping operation at the forward end of the heel seat.

1,880,213. FLUID CONTROLLING MEANS. KARL W. ROHLIN, Merchantville, N. J., assignor to Warren Webster & Company, Camden, N. J., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,352. 24 Claims. (Cl. 236—92.)



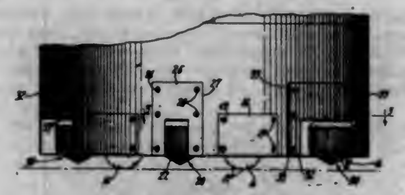
1. In a primary fluid controlling device, means for circulating a second fluid independently of the primary fluid, thermostatic means unaffected by the primary fluid or any product thereof for producing in said second fluid pressures having a definite relation to the temperature of the medium surrounding said thermostatic means, and a pressure sensitive device responsive to the pressure of said second fluid and the pressure of said primary fluid for controlling the flow of the latter.

1,880,214. WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Nov. 11, 1927. Serial No. 232,663. 10 Claims. (Cl. 255—4.)



10. A well casing, a débris-receiving receptacle movable vertically in said casing and means for preventing relative rotative movement between said casing and said receptacle and elevating means for filling said receptacle, a rotary drill, spiral elevating means above said drill for lifting débris into said receptacle.

1,880,215. DRILL HEAD FOR CORE BARRELS. RICHARD P. SIMMONS, New York, N. Y. Filed June 8, 1928. Serial No. 283,847. 20 Claims. (Cl. 255—72.)



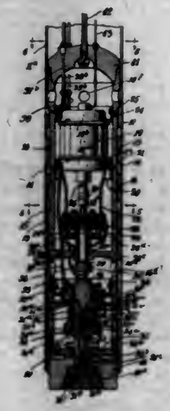
1. A drill head attachment for the core barrel of a well drilling apparatus comprising an annular body, rotary cutter disks journalled in said body and having a cutting edge projecting from the underface thereof, and rotary cylindrical bits also journalled in the body with their under ends projecting from the underface of said body and tapered to cutting points, the rotary cutting disks having their cutting edges cross-sectionally V-shaped with the angle of the V less than the angle of the tapered ends of the cylindrical bits.

1,880,216. UNDERREAMER FOR WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed June 8, 1928. Serial No. 283,848. 2 Claims. (Cl. 255—74.)



1. An underreamer having a body provided with cam slots, each of said slots having a portion disposed more inwardly of the outer face of the body than another portion of said slot, and a reaming tool having a shaft mounted in one of said slots with the body of the tool shiftable outwardly of the face of the body and inwardly of the face of the body.

1,880,217. MOTOR DRIVEN WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,445. 15 Claims. (Cl. 255—4.)



6. The combination with a well casing having internal interlocking means, of a housing having corresponding external locking means coupled thereto against relative rotative movement and to permit of relative vertical movement in an upward direction only, means for coupling a drilling unit to said housing to rotate thereunder, means for rotating said coupling means, and means for supplying compressed air to said drilling unit through said coupling means.

1,880,218. METHOD OF LINING OIL WELLS AND MEANS THEREFOR. RICHARD P. SIMMONS, New York, N. Y. Filed Oct. 1, 1930. Serial No. 485,641. 21 Claims. (Cl. 166—4.)



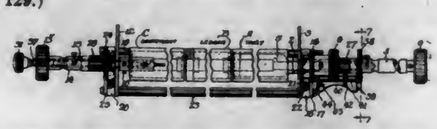
1. Means for placing an oil well lining consisting of a series of radially shiftable jaws having corrugated outer faces, means for moving said jaws inwardly and outwardly, a series of rollers mounted to move in the gaps between the jaws, and means for moving said rollers inwardly and outwardly simultaneously with the movement of the jaws but at a different rate of motion thereto.

1,880,219. PIN OR NEEDLE. EDITH SPARKE, Berkeley, Calif. Filed Oct. 31, 1931. Serial No. 572,304. 3 Claims. (Cl. 24—155.)



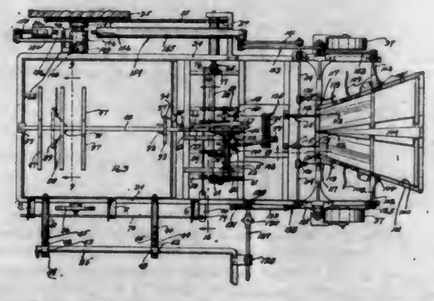
3. A pin bent at a plurality of points equidistant from the end of the pin and from one another, to form straight shanks at the ends of the pin aligned on the longitudinal center line of the pin, and intermediate shanks of equal length disposed on alternate sides of the said center line and being convergent thereto oblique portions, of decreasing length from the head toward the point portion of the pin formed at each bend, at an acute angle to said center line and alternately in opposite directions, said convergent shank portions being formed between the adjacent ends of the respective oblique portions, said oblique portions being shorter than the said straight shanks.

1,880,220. PAPER CARRIAGE. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,646. 14 Claims. (Cl. 197—129.)



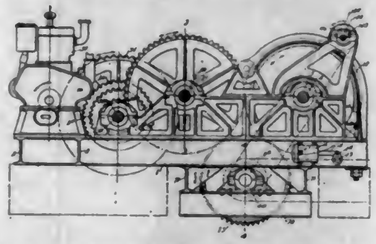
10. The combination of a platen comprising a series of three alined sections, all held against endwise movement relatively to each other, means operable from one end of the series for releasably locking the middle section to one of the end sections and means operable from the other end of the series for independently rotating the middle section and the other end section.

1,880,221. GRAIN SHOCKER. WILLIAM F. THORNE, Minneapolis, Minn., assignor to Carl G. Strandlund, Minneapolis, Minn. Filed July 21, 1928. Serial No. 294,517. 26 Claims. (Cl. 56—408.)



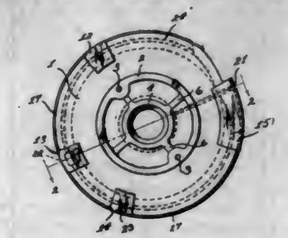
1. In a shocker, a shock-forming receptacle mounted for movement by gravity from a bundle-receiving position to a shock-setting position, a lock for positively holding the receptacle in its bundle-receiving position, operating connections for releasing the lock, and automatic means independent of said operating connections set into action by a movement of the receptacle to its shock-setting position for imparting the initial return movement to the receptacle.

1,880,222. DRAW WORK. HARRY L. TURNEY, Portland, Oreg., assignor to Patents & Royalties Corporation, a Corporation of California. Filed Jan. 19, 1931. Serial No. 509,818. 15 Claims. (Cl. 255—19.)



1. In a draw works, the combination of a frame; a drum mounted on the frame; a speed changing shaft mounted on the frame; a driving connection between the speed changing shaft and the drum; a driver shaft; a plurality of gear connections between the driver shaft and the speed changing shaft of different gear ratios; means setting and releasing the connections at will; a reversing shaft; direct and reversing gear connections between the speed changing shaft and the reversing shaft; means setting and releasing the last-mentioned connections at will; and a drill table driver on the reversing shaft.

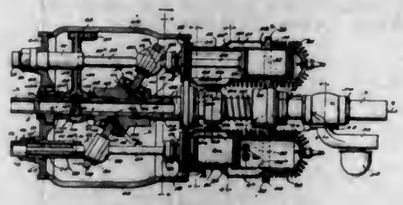
1,880,223. METER CHAMBER. HARRY G. WEYMOUTH and HORACE CHRISMAN, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 13, 1930. Serial No. 460,975. 12 Claims. (Cl. 73—98.)



10. A die forged, non-porous, smooth, brass measuring chamber for fluid meters.

1,880,224. ROTARY ENGINE. HARRY E. WILSEY, Miami, Ariz. Filed Mar. 3, 1930. Serial No. 432,919. 7 Claims. (Cl. 123—43.)

4. In an internal combustion engine, the combination of a fixed rectilinear bearing shaft, a pair of spaced annular support plates journaled on said shaft for rotation thereabout as an axis in planes at right angles to the shaft axis, a plurality of cylinders carried by and conjointly rotatable with said support plates with their longitudinal axes in parallel with each other and with said shaft, a bearing hub fixed to said shaft in outwardly spaced relation from said support plates and cylinders having a circular guide channel in a plane inclined to the right angular plane of rotation of said support plates and cylinders, an annular stroke plate having a continuous circular bearing in said guide channel and extending in a similarly inclined plane, a drive plate revolubly mounted on said shaft outwardly of and spaced from said stroke plate and rigidly connected with said cylinder support plates for conjoint rotation therewith, tubular guides offset inwardly from said drive plate in axial alinement with the longitudinal axes of said cylinders, pistons mounted in said cylinder for reciprocation, connecting rods extend-



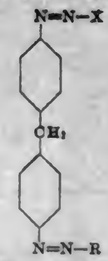
ing from said pistons in the line of the longitudinal axes of their cylinders through said stroke plate with their outer ends extending into said tubular guides and maintained by said guides in the longitudinal axes of their cylinders, said connecting rods having universal bearings in said stroke plate in said longitudinal axes.

1,880,225. AZO DYESTUFF AND A PROCESS OF PREPARATION. DANIEL ZINNER, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 2, 1928. Serial No. 290,044. 10 Claims. (Cl. 260—77.)

1. The process of preparing azo dyestuffs, which comprises coupling a 1-(2'-5'-dichloro-p'-sulfo-)-phenyl-5-pyrazolone body with a tetrazotized 4-4'-diamino-diphenylmethane body.

1,880,226. AZO DYESTUFF AND PROCESS OF MAKING THE SAME. DANIEL ZINNER, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Dec. 11, 1930. Serial No. 501,672. 18 Claims. (Cl. 260—77.)

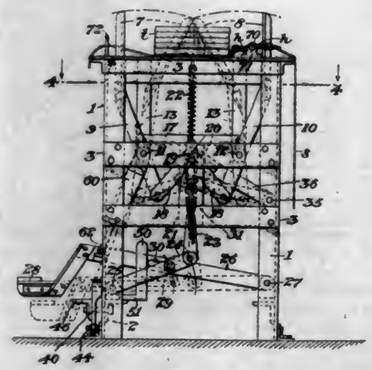
1. The process of preparing azo dyestuffs which comprises coupling a pyrasolone body to a compound having the following probable general formula:



in which X is an inorganic acid residue, and R is an organic acid residue or the residue of an organic coupling component, and in which the phenylene nuclei contain no further substituents.

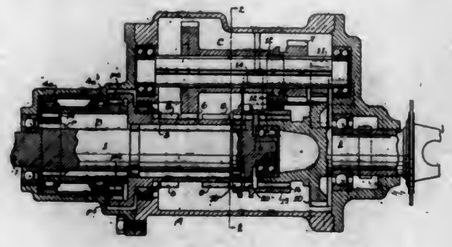
1,880,227. TOWEL BUNDLING MACHINE. JOSEPH H. ADDLER, Brooklyn, N. Y., assignor to Pulidean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed Nov. 27, 1929. Serial No. 410,132. 2 Claims. (Cl. 100—31.)

1. A towel bundling machine, comprising a table having a transversely slotted top, longitudinal bars fixed in the ends of the table below the top, compressor members pivoted intermediate their ends on said bars with their upper ends projecting above the table top, an intermediate longitudinal rod, slotted guides on the table ends engaging the ends of said rod, links connecting said rod with the lower ends of said compressor members, links pivoted to the table and engaging the ends of the



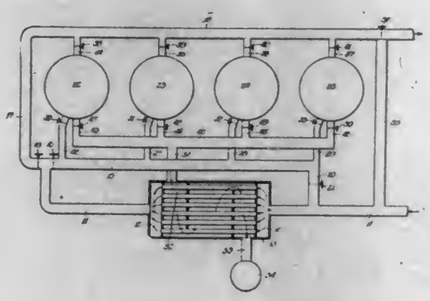
rod to retain said rod in substantial parallelism with the table top, foot operated means for depressing said rod, and springs connected to the rod and the table for elevating the rod.

1,880,228. TRANSMISSION GEARING. CHARLES E. F. AHLM, East Cleveland, Ohio, assignor, by mesne assignments, to Automotive Research Corporation, Warren, Ohio, a Corporation of Delaware. Filed Dec. 9, 1926. Serial No. 153,544. 20 Claims. (Cl. 74—57.)



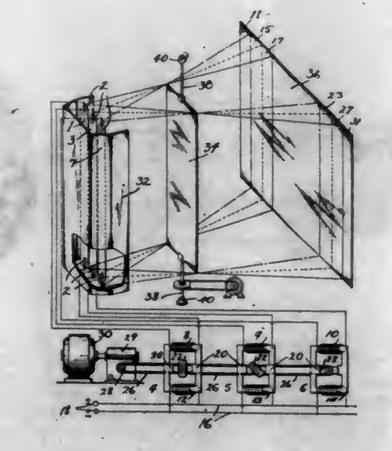
1. In a gearing a pair of axially aligned shafts, a casing therefor, a gear train for connecting the shafts, comprising two gears in axial alignment with the shafts, one being drivingly rigid with one of the shafts, and a hollow geared interponent connecting said gears and supported by the casing in eccentric relation to the shafts and surrounding one of them, means for connecting the shafts directly together or through the intermediacy of the gear train, another train comprising two external gears and a common counter shaft therefor in parallel relation to the first named shafts, and two respectively cooperating external gears one for each of the first mentioned shafts, means for establishing and interrupting the connection between the shafts through the intermediacy of said second named gear train, and a common control means for selectively controlling said last named means and said first named means.

1,880,229. AIR HEATING. CHARLES W. ANDREWS and ALBERT J. HULSE, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1928. Serial No. 263,947. 6 Claims. (Cl. 263—19.)



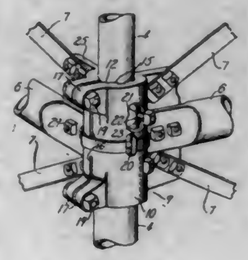
1. The method of providing hot blast air for furnaces which comprises heating a portion of the required air to a high temperature, heating another portion of air to a lower temperature, and mixing said heated portions in controlled amounts to provide a hot blast of the desired temperature.

1,880,230. LUMINESCENT TUBE LIGHTING. LEO L. BECK, Westfield, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 26, 1930. Serial No. 477,971. 2 Claims. (Cl. 240—1.)



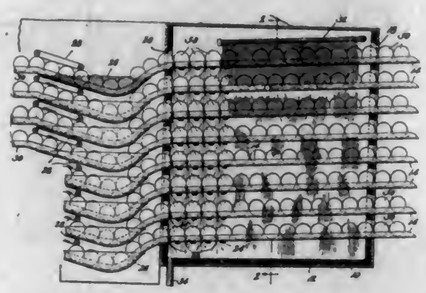
1. An apparatus for producing multi color effects comprising in combination a plurality of gas discharge tubes adapted to emit light of different colors and connected in series with respective sources of discharge current, means to change the magnitude of the discharge current, a stationary screen, means to direct the light from the tubes upon said screen, a second screen positioned between the tubes and the first mentioned screen the said second screen having edges substantially parallel to the axes of the tubes, and means to rotate the said second screen about an axis substantially parallel to the axes of the tubes.

1,880,231. DERRICK LEG COUPLING. FRED D. BEARLY, Tulsa, Okla. Filed Mar. 27, 1929. Serial No. 350,231. 3 Claims. (Cl. 189—19.)



1. A derrick leg fitting including a tubular body member having a sight opening, an annular flange in the body member, extending across the sight opening, clamping ears on the body member, and means on the body member for the attachment of brace members thereto.

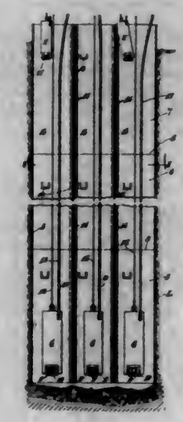
1,880,232. REFRIGERATING APPARATUS. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 354,103. 19 Claims. (Cl. 62—104.)



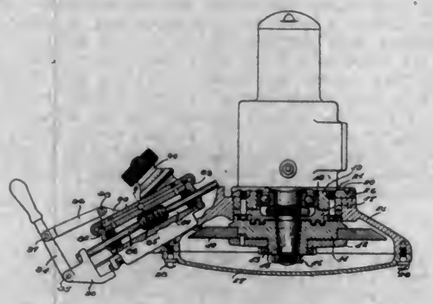
1. Refrigerating apparatus including an inclined runway for holding a series of circular containers arranged in contact with each other, power operated means for controlling the rate of movement of said containers along the runway, said means being arranged to engage the containers while resting on and traveling along the runway, and means for flowing liquid cooling medium over the containers.

1,880,233. CAISSON AND MEANS AND METHOD OF SINKING THE SAME. MAURICE BLUMENTHAL, Brooklyn, N. Y. Filed Oct. 3, 1928. Serial No. 309,916. 18 Claims. (Cl. 61—73.)

1. A caisson adapted to be sunk into the earth, said caisson comprising the usual confining wall members, and a cross bar arranged within the caisson adjacent the lower end thereof having its opposite ends in engagement with opposite walls of the caisson, said bar being of a character to support a power hammer within the caisson and to receive and transmit to the walls of the caisson the blows of said hammer to thereby sink the caisson.



1,880,234. DRESSING MECHANISM. EDWARD W. BULLOCK and HERBERT J. WHITE, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Jan. 2, 1931. Serial No. 506,214. 5 Claims. (Cl. 125—11.)



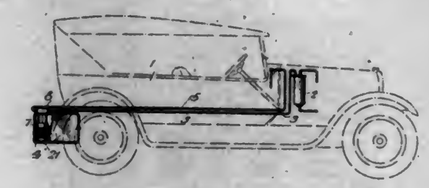
1. In a dressing mechanism, a support for the dressing tool, manually operable means for moving said tool to effect the dressing operation, and hydraulically operated mechanism adjustable to control the rate of said movement.

1,880,235. PRIMING MIXTURE. JAMES E. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 28, 1928. Serial No. 309,129. 1 Claim. (Cl. 52—3.)

A noncorrosive priming mixture for wet loading into rim fire cartridges having substantially the following composition:

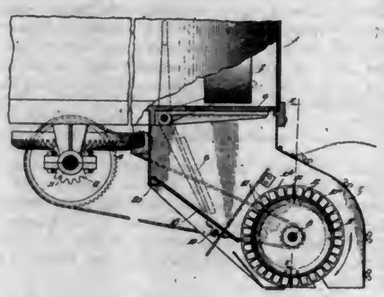
	Approximate per cent
Mercury fulminate	30
Lead trinitoresorcinate	10
Barium nitrate	29
Lead sulphocyanate	10
Abrasive	20
Binder	1

1,880,236. GAUGE. REED M. CHAMBERS, San Francisco, Calif., assignor, by mesne assignments, to Bendix Stromberg Carburetor Company, South Bend, Ind., a Corporation of Illinois. Filed June 5, 1925. Serial No. 35,064. 28 Claims. (Cl. 73—54.)



1. In a device for indicating the quantity of liquid in a container, a casing disposed at a level between the uppermost and lowermost possible levels of the liquid of the container, a condnit connecting the casing to the container to receive a portion of the latter's contents and opening into the container at the minimum liquid level to be indicated, suction means having a connection opening into said casing at a predetermined level therein and having provision whereby the connection is sealed against the flow of air therethrough to the casing thus insuring an elevation of the level of the liquid in said casing to approximately said predetermined level, another conduit connected to said casing above the said predetermined level, and a gauge responsive to both vacuum and pressure connected to said last named conduit, whereby said gauge will indicate liquid levels in response to variable pressures when the level of the liquid in the container is above said predetermined level in the casing, and indicate liquid levels in response to variable extents of vacuum when the level of the liquid in the container falls below said predetermined level in the casing.

1,880,237. FOUNDRY SAND AERATING MACHINE. ALFRED C. CHRISTENSEN, Chicago, Ill., assignor to National Engineering Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,199. 1 Claim. (Cl. 259—9.)

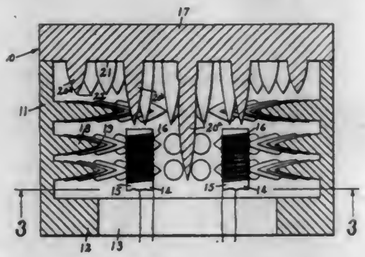


The combination with a mulling pan having a discharge gate, a casing connected to the mulling pan beneath said discharge gate, an aerating device in said casing, and a door in the bottom of said casing, said door being swingable upwardly adjacent said aerating device to cause the sand to pass thru the door way and not contact said aerating device.

1,880,238. HEATER. LILLIS H. COLLIGAN, New Haven, Conn. Filed Oct. 18, 1929. Serial No. 400,679. 3 Claims. (Cl. 219—38.)

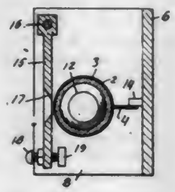
1. In a heating unit, a hollow body of heat conducting material having imperforate side walls, an imperforate

upper end, and an open lower end, an electric resistance heating element extending into the body through the open lower end thereof, and means in the interior of the body for accelerating the transfer of heat thereto from said



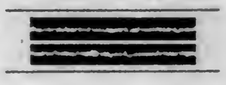
element, said last-named means comprising a plurality of studs depending from the interior surfaces of the body and surrounding the element on all sides except at the lower end of the body.

1,880,239. RESISTOR. GEORGE B. CROUSE, Newark, N. J., assignor to Hardwick, Hindle, Inc., Newark, N. J., a Corporation of New Jersey. Filed July 24, 1930. Serial No. 470,380. 5 Claims. (Cl. 201—64.)



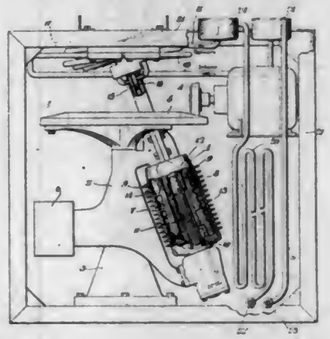
4. The method of producing a resistor which consists in winding a wire upon a refractory form, completely coating the wire and form with vitreous enamel slip, brushing off the slip from the outer portions of the turns of wire over an area to expose the wire while leaving some of the slip between the turns and subjecting the slip to high temperature to fire the same.

1,880,240. SOUND RECORD BAND WITH A PLURALITY OF RECORDS. OSKAR CZEIJA and HANS THIRRING, Vienna, Austria, assignors to Selenophon Licht und Tonbild-Gesellschaft m. b. H., Vienna, Austria, a Company of Austria. Filed Nov. 21, 1930, Serial No. 497,279, and in Austria Nov. 30, 1929. 1 Claim. (Cl. 274—43.)



A sound film band comprising a plurality of different records running in parallel lines along the said film band, each of the said records comprising a light zone and a dark zone, the said dark zone having a straight base line parallel to the longitudinal axis of the said film band and a zigzag outline running along the said film band and representing the sound curve, adjacent records running in opposite directions and adapted to be played in succession, the alternate records having their said zigzag outlines directed to the same edge of the said film band, the said zigzag outlines of the remaining records being directed to the opposite edge of the said film band.

1,880,241. LIQUID-PISTON TYPE COMPRESSOR SYSTEM. JAY G. DE REMER, Greenwich, Conn., assignor, by mesne assignments, to J. G. Deremer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 12, 1927. Serial No. 174,900. 1 Claim. (Cl. 230—75.)



In a system including fixed piping for gas and an intermittently operated gyratory compressor containing a mass of mercury to form gas-compressing pistons moving in a closed circuit within said compressor and having a counterweight to balance the weight of said compressor and the mercury therein, means tending to preserve said balance in the operation of the system comprising a chamber interposed between said mercury circuit and said fixed piping adapted to intercept and collect mercury entrained with the compressed gas or otherwise displaced from said mercury circuit, and having a capacity suited to hold the whole displacement of mercury from said circuit, the passage connecting said chamber to said fixed piping having its orifice located therein to avoid receiving mercury particles and the passage connecting said chamber to the mercury circuit having its orifice suitably located in the lower part of said chamber for returning mercury therein through said passage back to the mercury circuit.

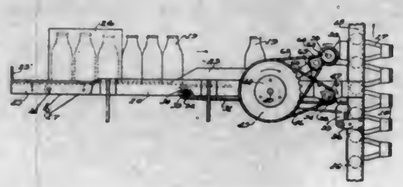
1,880,242. PLUGGING MEANS FOR CRUCIBLES OR THE LIKE. DONALD C. DICKSON, Montclair, N. J. Filed Sept. 24, 1931. Serial No. 564,774. 6 Claims. (Cl. 266—42.)



6. Means for closing the discharge opening of a container of molten metal, comprising a body of caked alumino-thermic mixture fashioned to close said opening.

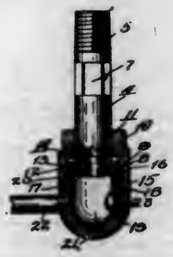
1,880,243. BOTTLE FEEDING MEANS. OTTO DREHER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed June 9, 1930. Serial No. 460,045. 4 Claims. (Cl. 198—33.)

2. The combination of means for supporting and advancing bottles in upright position, tilting means for tilting successive bottles from an upright position to a recumbent position, means for impelling the recumbent bottles away from said tilting means, a traveling bottle



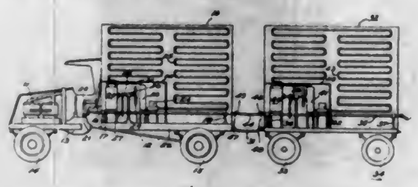
conveyor having bottle-holding means receiving the recumbent bottles, and means actuated by said bottle conveyor for operating said tilting means.

1,880,244. SPRAYING DEVICE FOR POWDERED MATERIAL. LODIAS J. DUGAS, Chicago, Ill., assignor to Du-Gas Fire Extinguisher Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 8, 1928. Serial No. 311,172. 5 Claims. (Cl. 169—5.)



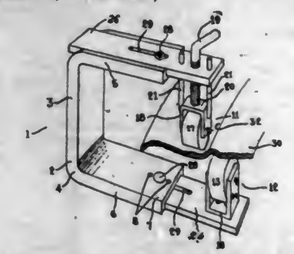
1. A device for spraying powdered material, comprising a hollow tubular member having an enlarged cylindrical portion forming an annular shoulder, a recessed bushing adapted to be swivelly mounted upon said tubular member with said shoulder spaced from the bottom of said recess, anti-friction bearings positioned in said space, a flat disc washer positioned upon the end of said tubular member extending beyond the periphery of said cylindrical portion and a hollow apertured head secured to said bushing and abutting said washer.

1,880,245. REFRIGERATOR VEHICLE AND TRAILER. WILFRED FOURNESS, Oakland, and EDWARD G. BURGHARD, Los Angeles, Calif., assignors to Fourness Development Corporation Ltd., New York, N. Y., a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,048. 16 Claims. (Cl. 62—117.)



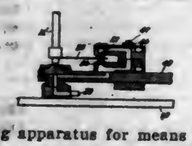
2. In combination with a motor driven vehicle, a circulatory refrigerating system within the body thereof operated by said motor, and one or more vehicle bodies secured thereto, each of said bodies having circulatory refrigerating systems therein.

1,880,246. FENDER TOOL. CHARLES F. GREINER, Walla Walla, Wash. Filed Sept. 17, 1930. Serial No. 482,499. 3 Claims. (Cl. 81—15.)



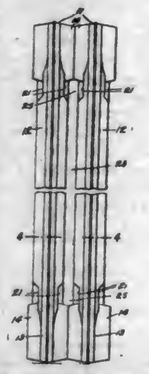
1. In a fender tool, a rigid U shaped frame having side arms, an arm expansibly attached to each side arm of said frame and adapted for slidable movement, independent of each other, and rollers mounted in said arms, and adapted for absolute, partial or offset register with each other by the adjustment of each arm.

1,880,247. DOUBLE-JET CONTROLLER DEVICE. HENRY L. GRIGGS and ARTHUR R. MABEY, Waterbury, Conn., assignors to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 6, 1930. Serial No. 500,565. 8 Claims. (Cl. 236—82.)



1. In controlling apparatus for means utilizing a fluid, and a pilot valve to control the supply of fluid to be utilized: means to operate the pilot valve and embodying two opposed nozzles permanently in communication with a source of fluid supply and with the pilot valve, an oscillatable controlling element freely movable between said nozzles to receive upon its opposite faces fluid jets from the nozzles whereby the forces of said jets upon the element are substantially balanced, and a responsive device oscillating said controlling element between the nozzles to cut off simultaneously thereby the jets of fluid normally discharged therefrom and actuate the pilot valve.

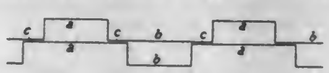
1,880,248. RADIATOR. JOSEPH WILLIAM GUIMONT, Lachine, Quebec, Canada. Filed Mar. 23, 1931, Serial No. 524,654, and in Canada Mar. 25, 1931. 3 Claims. (Cl. 257—151.)



2. A radiator comprising a plurality of similar sections, including a riser and upper and lower headers connecting the upper and lower ends respectively of said riser, said

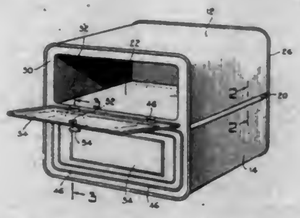
riser having grooves in opposite sides thereof extending between the upper and lower headers, the grooves of adjoining sections combining to form flues through which hair may flow upwardly, the inner walls of each of said grooves extending longitudinally from one end to the other end of said section, said liner wall being located closer to the inner or rear edge of the riser than to the outer edge thereof, said wall serving to divide the riser into an inner column and a larger outer column, and a rear longitudinal flat wall extending from the lower portion of said section to its upper portion constituting a back portion of uniform size throughout the whole length of said section.

1,880,249. METHOD OF PRODUCING ELECTRODES FOR STORAGE BATTERIES. PAUL HAOSPIHL, Hagen, Germany, assignor to The Electric Storage Battery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 25, 1927, Serial No. 163,434, and in Germany Feb. 13, 1926. 2 Claims. (Cl. 136—43.)



1. A method of producing pocketed supports for storage battery plates which consists in offsetting a strip to provide ridges narrower than the recesses between them, arranging two such strips in opposed relation with the center lines of the recesses and of the ridges in substantial alignment to provide overlapping flat portions, and flat folding the overlapping portions of the two strips to provide substantially contiguous side walls for the pockets.

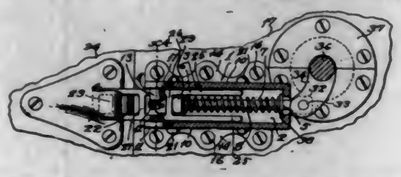
1,880,250. SHEET METAL CONTAINER. ARTHUR G. HOPKINS, Maspeth, N. Y., assignor to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1931. Serial No. 511,479. 11 Claims. (Cl. 220—20.)



1. A container comprising a plurality of sheets of metal having longitudinal and transverse edges, the longitudinal edges of the sheets being joined in edge to edge relation by longitudinal seams to form the closed continuous sides of the container, a longitudinal partition in said container of the side or longitudinal edges of which are held within said longitudinal seams, said partition forming two compartments extending longitudinally in side by side relation, and end walls for said container, one of said end walls closing the two compartments at one end of the container, and the other of said end walls being arranged to provide access to the two compartments at the other end of the container.

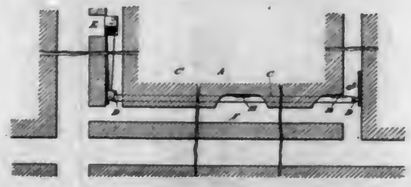
1,880,251. LATCH ASSEMBLY FOR REFRIGERATOR DOORS. ANTON N. HORNUNG, Los Angeles, Calif. Filed Oct. 9, 1929. Serial No. 398,399. 2 Claims. (Cl. 292—173.)

1. In a latch, a housing having a latchway open forwardly and rearwardly and having side walls spaced apart and provided in their faces with panel seats and threaded sockets for panel securing screws provided with bearing extensions having holes for anchor screws; a latch arranged with its body slidable in the latchway and its latching end extended forwardly beyond the housing; a spring in the housing to yieldingly hold the latching end of the latch fully extended; latch retracting means connected to the latch and extending through the



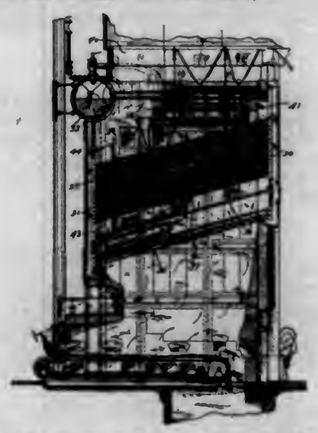
rearward opening; a roller mounted in the bearings and extending peripherally into the slide way to form an anti-friction support for the latching end of the latch; a panel in the panel seats and screws in the sockets to hold the panels in the panel seats.

1,880,252. MINING TOOL. PERCY W. HURLEY, Sharon Hill, Pa. Filed Oct. 30, 1931. Serial No. 572,023. 7 Claims. (Cl. 262—31.)



4. A device of the class described comprising a frame having movable jaws carried thereby, cutter bits carried by the frame, a draw bar, means carried thereby tending to spread said jaws, and teeth secured to said jaws and inclined at such an angle that movement of the frame urges said cutter bits into engagement with the work.

1,880,253. SUPERHEATER BOILER. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 20, 1922, Serial No. 576,183. Renewed July 5, 1929. 32 Claims. (Cl. 122—480.)



1. In combination, a water-tube boiler having rows of horizontally inclined water tubes connected at either end by water chambers, a main gas outlet, a superheater located between some of the rows of said tubes, a longitudinal baffle arranged to compel all of the gases to flow from the furnace toward the high ends of the water tubes and a set of baffles to direct some of the gases from the furnace back and forth across the tubes to the main gas outlet, some of the baffles of said set being also arranged to direct the remainder of the gases over the superheater in a direction longitudinal of the water tubes and then to a main gas outlet.

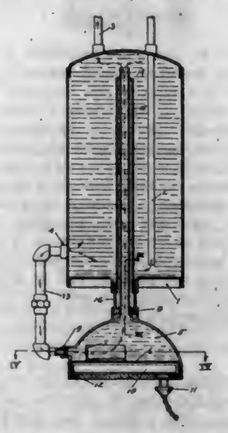
6. A water-tube boiler having a primary and a secondary superheater connected together and to the boiler, means to direct a portion of the furnace gases over the primary superheater and another portion over the secondary superheater, and means whereby the ratio of the two portions may be regulated.

1,880,254. SEALING STRIP CONSTRUCTION. CLARENCE G. JOHNSON, Hartford City, Ind. Filed July 23, 1928. Serial No. 294,885. 4 Claims. (Cl. 20—12.)



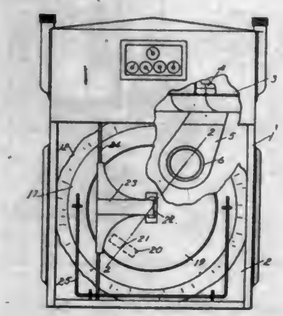
1. A window construction comprising a frame, a sash slidably mounted therein, and a sealing strip pivotally attached intermediate its ends to said frame and having a free swinging movement at both sides of the pivotal attachment, and a spring connecting one end of said strip to said frame whereby to project the other end into the path of said sash.

1,880,255. ELECTRIC WATER HEATER. PETER A. JOHNSON, Portland, Oreg. Filed Apr. 3, 1930. Serial No. 441,223. 4 Claims. (Cl. 219—38.)



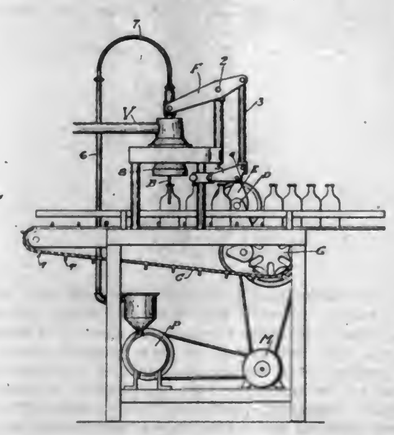
1. A water heater consisting of a dome shaped shell having an outlet connection at the top thereof, an inlet connection near the bottom thereof, a bottom for said shell, a curved deflector mounted on said bottom in front of said inlet connection, a riser forming an outlet at the top of said shell, and a pipe surrounding said riser and spaced therefrom for the purpose of retarding the flow of heat through the walls of said riser.

1,880,256. GAS METER. WILLIAM H. KAISER, Erie, Pa., assignor to American Meter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,528. 2 Claims. (Cl. 73—1.)



1. In a gas meter, the combination of a case; a gas conduit leading into the case and having an opening in its side; a seat surrounding the opening; a nipple extending from the seat; a metering chamber comprising a fixed plate having an opening eccentrically placed with relation to the fixed plate and extending over the nipple, the eccentric location of the opening permitting the swinging of the fixed plate to adjust it relatively to the case; means clamping the fixed plate on the seat; a diaphragm secured on the periphery of the fixed plate; a movable plate; and means securing the diaphragm on the periphery of the movable plate.

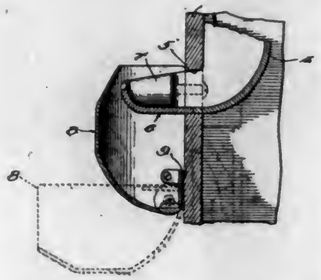
1,880,257. METHOD OF CLEANING BOTTLES. KARL KIEFER, Cincinnati, Ohio; James A. Rheinstrom and Hugo Goldsmith executors of said Karl Kiefer, deceased. Filed July 21, 1930. Serial No. 469,315. 3 Claims. (Cl. 15—269.)



1. The method of freeing a dry container, having a substantially restricted neck opening, from impurities on the inside thereof solely by the use of a dry gaseous medium, while said container is in substantially upright

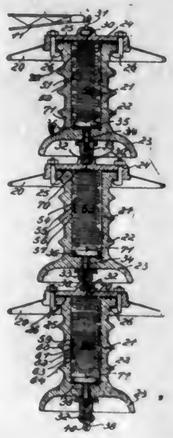
position, which comprises releasing a jet of said medium under pressure within said container below the shoulders thereof, whereby impurities within said container are driven upwardly and out through said opening.

1,880,258. ENTRAPMENT DEVICE. WILLIAM N. KINDEL, San Francisco, Calif., assignor to John F. Meyer, Pasadena, Calif. Filed Mar. 10, 1932. Serial No. 597,930. 4 Claims. (Cl. 221—146.)



1. In a vending machine, a tray adapted to receive the articles to be vended, and a cup surrounding said tray and having an open side affording access to said tray to permit removal of the articles therefrom, said cup serving as an entrapment device to collect articles spilled from said tray.

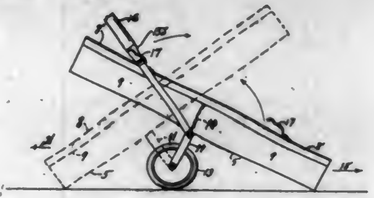
1,880,259. INSULATING DEVICE FOR HIGH VOLTAGE LINES. WOLDEMAR HUGO KNAPP, Charlottenburg, Germany. Filed Nov. 28, 1925, Serial No. 71,909, and in Germany June 2, 1925. 3 Claims. (Cl. 173—318.)



1. In combination, a tension-load casing unit including a tubular dielectric side wall and a metal end cap of substantially cup-shape secured over one end of the tubular side wall and having an outer element constituting one element of a flexible connector, a multi-layer condenser in the casing, and an opposite-end connector including a transverse portion within the longitudinal and lateral limits of the corresponding end of said wall and a portion projecting outwardly therefrom and constituting an element of a flexible connector.

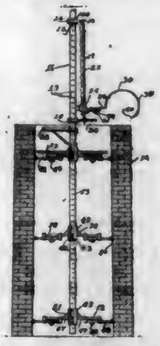
3. In combination, a tension-load casing including a substantially tubular dielectric side wall having an annular outer surface creepage flange, and a metal end wall of substantially less thickness than the side wall and of less diameter than said flange having an outer portion constituting one element of a flexible connector, and a multi-layer condenser in the casing.

1,880,260. SNOW SHOVEL. HENRY C. LANGER, St. Paul, Minn. Filed Nov. 18, 1931. Serial No. 575,803. 6 Claims. (Cl. 37—53.)



1. A snow-clearing device comprising an elongated wheel supported scoop member, a transverse scraper blade at each end of said scoop, a wheel truck fixed under the central part of the scoop and the wheels thereof positioned to permit the scoop to be moved longitudinally with either of said scraper blades in contact with a surface to be cleared of snow, side flanges fixed on said scoop member, and a central transverse partition connecting said side flanges.

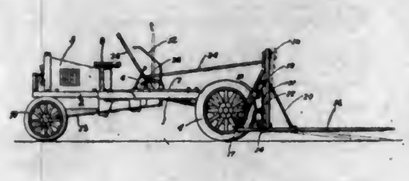
1,880,261. MEANS FOR GAUGING ROUND CHIMNEYS. ELVER LARSEN, Brooklyn, N. Y. Filed July 14, 1930. Serial No. 467,750. 9 Claims. (Cl. 33—85.)



1. In a device of the class described, a gauging apparatus for use in building round masonry, comprising a pole adapted to be vertically and centrally arranged relative to the position of the masonry under construction in order to gage the portion to be built, a plurality of extensible members mounted upon the said pole and engaging the inner wall of said masonry whereby to support the pole in position, a slide formed with an annular recess and being adjustably mounted upon the said pole, a collar rotatably arranged upon the slide in the said recess, a ganging rod pivotally connected to the said collar, a second slide arranged upon the said pole and having means for securing the gauging rod in adjusted position, and means arranged upon the said rod for gauging the work under construction.

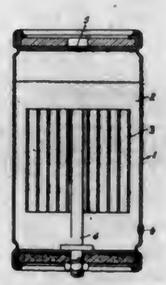
1,880,262. POWER OPERATED BUCKRAKE. LORRIS R. LAUPPE and RAYMOND E. LAUPPE, Sacramento, Calif. Filed Jan. 17, 1931. Serial No. 509,420. 2 Claims. (Cl. 56—27.)

1. In combination, a self-propelled vehicle including side frame-beams, drive wheels adjacent the front end of the beams and an axle housing associated with the wheels below the beams; and a buckrake structure extending ahead of the vehicle and including rake teeth, a transverse beam secured across the teeth and disposed ahead of the wheels below the front end of the vehicle beams, and a frame upstanding from the transverse beam; vertical suspension elements extending between and flexibly



connected to the side beams and transverse beam, horizontal compression arms turnably mounted on the axle housing and extending thence forwardly to and pivotally connected to the frame, and means applied to the buckrake structure to tilt the teeth vertically in either direction and to normally hold the same in a predetermined position.

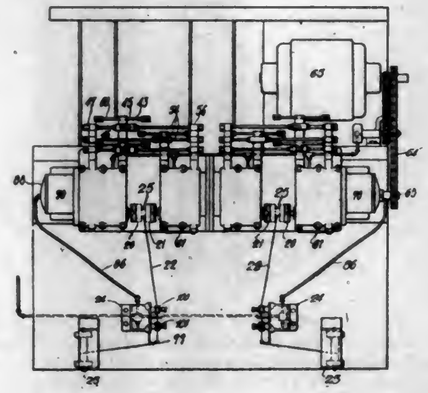
1,880,263. CATHODE FOR ELECTROLYTIC CONDENSERS. JULIUS EDGAR LILIENFELD, Winchester, Mass. Filed June 19, 1930. Serial No. 462,254. 6 Claims. (Cl. 175—315.)



1. In an electrolytic condenser comprising a metallic container for electrolyte and an anodic electrode therein, the container being of the same metal as the anodic electrode and constituting the cathodic electrode therefor: a sounder of a non-filming metal short-circuiting the electrolyte to the cathodic electrode.

1,880,264. GOLF BALL WINDING MACHINE. CUTLER S. MCCHESNEY, Kenmore, N. Y., assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 23, 1930. Serial No. 469,996. 10 Claims. (Cl. 242—3.)

1. A winding machine of the type described comprising a plurality of pairs of discs, the discs of each pair having complementary annular grooves to receive a ball being wound with thread, a common driving means for rotating said discs about their axes, means for resiliently pressing the discs of each pair towards each other, means individually controlled by the separation of the discs of each pair to disconnect said pair of discs from said driving means, means for supplying thread to said ball being

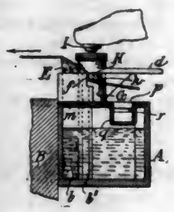


wound between said discs, and means for automatically severing said thread when the discs become separated to a predetermined distance.

1,880,265. PROCESS OF MAKING SOLUBLE FERRIC SULPHATE. HENRY S. MARSH and CARL W. WEESNER, Youngstown, Ohio, assignors to Sharon Steel Hoop Company, Sharon, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,115. 3 Claims. (Cl. 23—126.)

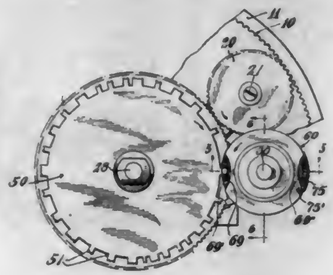
1. The process of making soluble ferric sulphate from material containing anhydrous ferric sulphate and ferric oxide, which comprises treating such material with sulphuric acid in a moisture saturated atmosphere at a temperature of about 125° F.

1,880,266. TAPE MOISTENER. RALPH I. MEADER, Lynbrook, N. Y. Filed Dec. 13, 1929. Serial No. 413,722. 8 Claims. (Cl. 91—14.5.)



1. A tape moistener comprising a stationary water vessel and wick holder, and movable means for holding a tape against the wick while being drawn over the wick to moisten it, said means comprising a swinging arm movable toward and from the wick, and a rotary member having an operating member, and connected to the arm for so moving it.

1,880,267. NEEDLE SELECTING MECHANISM FOR KNITTING MACHINES AND THE LIKE. EMIL MILNER, Germantown, Pa., assignor to Continental Mills, Inc., Philadelphia, Pa., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,546. 4 Claims. (Cl. 66—50.)



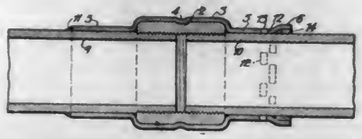
1. Variable needle selecting means, comprising supporting means provided with a plurality of radially disposed races, and needle selectors positioned in certain of said races and radially movable therein, in combination with a main invariable pattern wheel having selecting and setting portions in the form of notched extensions adapted to selectively operate upon certain of said needle selectors.

1,880,268. LEER. WILLIAM A. MORTON, Pittsburgh, and ELISHA W. PAXTON, Washington, Pa.; said Paxton assignor to Highland Western Glass Company, Washington, Pa., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,896. 3 Claims. (Cl. 49—47.)



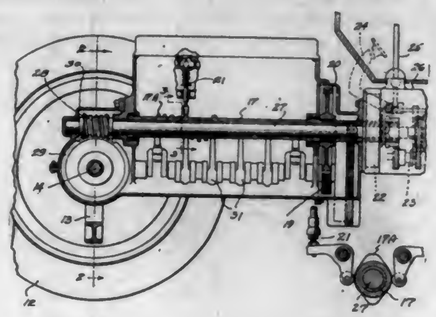
1. A glass annealing leer comprising in combination an annealing chamber, a plurality of banks of tubes disposed centrally of and longitudinally underneath the said annealing chamber, feed lines connecting said banks leading to a source of temperature controlling medium, and return lines connected to said banks of tubes for the said medium and means for connecting said banks in parallel or series with the said feed line.

1,880,269. HOLLOW FITTING. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed July 6, 1928. Serial No. 290,851. 3 Claims. (Cl. 285—146.)



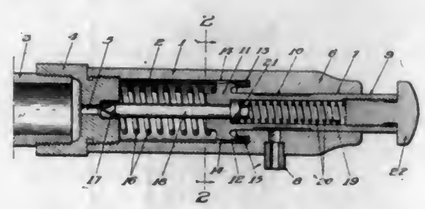
1. In a pipe joint comprising a coupling and pipe ends threaded therein, means to seal the joint comprising a sleeve member disposed around the coupling and extending beyond the ends thereof about the pipe, the ends of the sleeve being welded to the pipe at a point remote from the coupling.

1,880,270. INTERNAL COMBUSTION ENGINE. WARREN NOBLE, Detroit, Mich. Filed Aug. 7, 1930. Serial No. 473,541. 11 Claims. (Cl. 180—42.)



1. In a vehicle of the character described the combination of a chassis and engine supported thereby, front vehicle wheels adapted to be driven by said engine, power transmission means positioned rearwardly of said engine, and driving means extending from said power transmission means and operatively connected to drive said front vehicle wheels, said driving means including a power shaft positioned above the axis of rotation of the crank pins of the engine crankshaft.

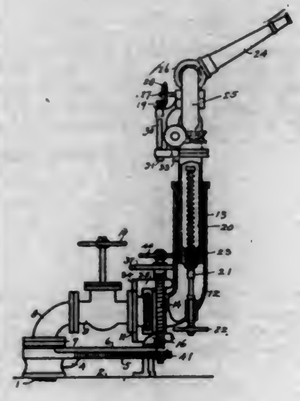
1,880,271. LIQUID DISPENSING FAUCET. JOHN FREDERICK PALMER, Milwaukee, Wis., assignor to Bobrick Chemical Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,646. 10 Claims. (Cl. 221—102.)



1. A dispensing faucet, comprising a casing containing a receiving chamber and having an inlet thereto and an outlet therefrom, a plunger arranged in said casing and reciprocable therein, a normally open valve carried by said plunger to control said inlet port and having its stem slidable in said plunger, a spring to press said inlet valve inwardly and close said inlet as said plunger is moved inwardly, a yieldable valve seat arranged in a groove formed in one end of said casing concentric to said plunger and having inner and outer peripheral walls to prevent lateral distortion of said valve seat, and a displacement valve carried by said plunger and normally engaging said valve seat to control said outlet port.

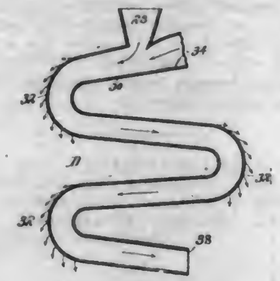
1,880,272. FIRE FIGHTING APPARATUS. JOSEPH PANTHER, Jr., Tacoma, Wash. Filed May 20, 1930. Serial No. 453,939. 5 Claims. (Cl. 299—73.)

1. In fire-fighting apparatus, the combination with a supporting pipe having a bend at its supported end; a pipe telescoping into the inside of said supporting pipe; an axially fixed rotatable screw-threaded rod axially mounted in said supporting pipe and having a nonscrew-threaded portion mounted in a watertight bushing passing through the bend in the end thereof; means outside said supporting pipe for rotating said rod; a spider secured in said telescoping pipe and provided with axial screw-threads therein, adapted to be engaged by the threads of said rod, whereby



the position of said telescoping pipe in said supporting pipe is adjusted by the rotation of said rod; and a nozzle mounted on the end of said telescoping pipe.

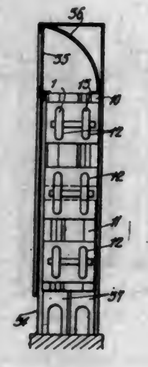
1,880,273. COAL DRIER. FRANK PARDEE and FRANK PARDEE, Jr., Hazleton, Pa., assignors to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Original application filed Nov. 30, 1926, Serial No. 151,656. Divided and this application filed May 6, 1929. Serial No. 360,858. 3 Claims. (Cl. 34—35.)



1. An apparatus of the class described including rotary means for simultaneously heating and wetting lump coal stock, a zigzag chute having foraminous portions restricted to the area at the bends thereof against which, the coal stock is adapted to be separated from part of its adherent water by impact and means for directing an air blast against the coal stock.

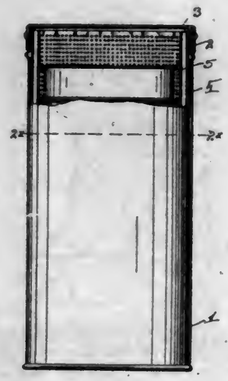
1,880,274. RADIATOR. GEORGE H. PHELPS, Warehouse Point, Conn., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Oct. 19, 1929. Serial No. 400,786. 6 Claims. (Cl. 257—136.)

5. A radiator having an upper and a lower horizontal heating element, vertical, spaced heat distributing vanes on said heating elements, said vanes forming alternately enclosed and open flues, the vanes on the upper element being thinner than and longitudinally displaced relatively



to those of the lower element and the thickness of said vanes decreasing at increasing distances from the heating element.

1,880,275. HUMIDOR. LELAND A. PHILLIPS, Rochester, N. Y. Filed May 18, 1928. Serial No. 278,675. 4 Claims. (Cl. 206—1.)

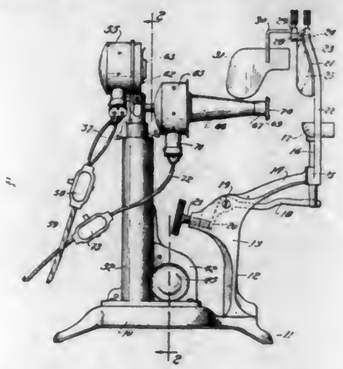


1. A humidor adapted to keep typewriter ribbons from drying out comprising a can, a cylindrical layer of absorbent material impregnated with moist hygroscopic material, a corrugated cylindrical layer placed inside the layer of absorbent material, the central part of the can being left open as a receptacle for typewriter ribbons.

1,880,276. OPTICAL INSTRUMENT. HARRY E. PINE, Chicago, Ill., assignor to William J. Cameron, Chicago, Ill. Filed Aug. 11, 1928. Serial No. 299,047. 8 Claims. (Cl. 128—25.)

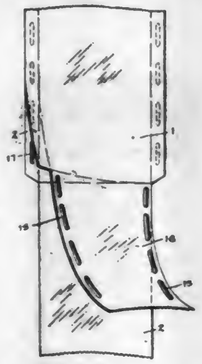
3. An optical exerciser comprising a standard, a crossbar mounted thereon, lamp houses carried by said bar and having apertures facing the patient, translucent colored target plates covering said apertures, a bracket in front

of said lamp houses, complementary colored scopes on said brackets through which the targets are viewed by the patient, an opaque septum intermediate said scopes



and in a plane intersecting the planes of said scopes, electric conductors leading to said lamp houses, and a make-and-break device interposed in said conductors.

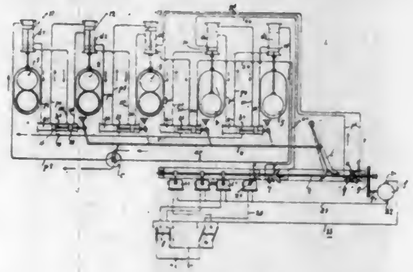
1,880,277. MULTIPLEX BAG AND METHOD OF FORMING THE SAME. SHERWOOD M. PINKERTON, JR., Toledo, Ohio, assignor to The Pinkerton Tobacco Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1930. Serial No. 460,492. 5 Claims. (Cl. 229—55.)



1. In a bag, a plurality of sheets folded transversely and forming the sides of the bag, the portions of the sheets that form one side of the bag having flaps extending inwardly with respect to the center line of the sheets, the flaps of the outer sheet of one side of the bag having perforations, the edges of the other sheet of the other side of the bag having perforations, the edges of the sides cementitiously secured together through the openings and the portions of the sheets adjoining the openings, the portions between the openings of the flaps and of the side of the bag other than the one that has the flaps being located substantially in alignment and in overlapping relation to each other.

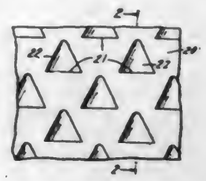
1,880,278. SYSTEM FOR CONTROLLING VALVES OR GATES. HERMANN RAPPOLD, Duren-on-the-Rhine, Germany. Filed Sept. 16, 1930, Serial No. 482,234, and in Germany Sept. 28, 1929. 12 Claims. (Cl. 137—144.)

1. In a system for controlling valves or gates for commercial plants, the combination, with the valves or gates, of fluid operated actuating devices one for each of said valves or gates, means one for each of said actuating devices for controlling the supply of the motive fluid there-



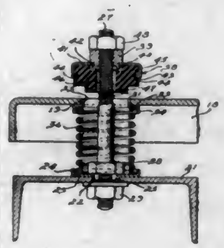
to, and electric operating mechanism common to said controlling means, said electric operating mechanism serving to operate the controlling means to selectively operate all or a lesser number of said actuating devices.

1,880,279. MOTION PICTURE SCREEN. ALBERT L. RAVEN, Mount Vernon, N. Y. Filed Aug. 9, 1930. Serial No. 474,124. 14 Claims. (Cl. 88—24.)



1. A screen for the projection of pictures accompanied by sound comprising sheet material having horizontal slits therein, each slit forming a downwardly and an upwardly facing edge offset from one another, and a projection on one of said edges to cause them to overlap and form an oblique sound passage passing upwardly from the rear to the front face of the screen.

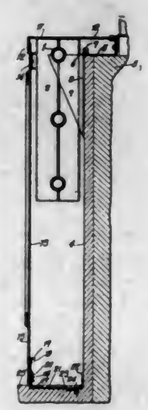
1,880,280. RESILIENT SUPPORT. JOHN R. REPLOGLE, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Sept. 3, 1931. Serial No. 560,925. 7 Claims. (Cl. 248—16.)



1. The combination with a refrigerator cabinet, having a unit compartment and a refrigerating unit disposed therein, of a mounting for securing the unit in the cabinet, comprising a bar member rigidly secured to the cabinet, means including a threaded member secured to said bar member and extending beyond the unit base, for

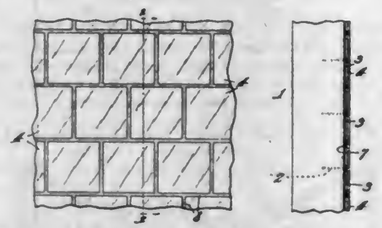
yieldingly supporting the unit, the means including a rubber member fixed to an inverted cup shaped member, the cup shaped member being rigidly mounted on a member co-acting with the threaded member, for securing the unit against movement in the cabinet.

1,880,281. RADIATOR INCLOSURE. FRANK C. REYNOLDS, New York, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed July 11, 1929. Serial No. 377,892. 5 Claims. (Cl. 237—79.)



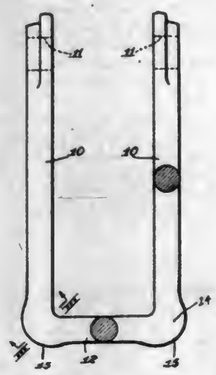
1. A radiator inclosure adapted for a radiator mounted adjacent to the wall of a room, said inclosure comprising a front plate and end portions adapted to overlie the front and ends of the radiator respectively, a longitudinal member with which the lower portion of the front plate is engaged and holding means supported fixedly on the floor of the room engaging said member and holding it in position at a certain distance from said wall.

1,880,282. TILED WALL CONSTRUCTION. HENRY RITHNER, Wellsburg, W. Va. Filed July 9, 1931. Serial No. 549,592. 4 Claims. (Cl. 72—19.)



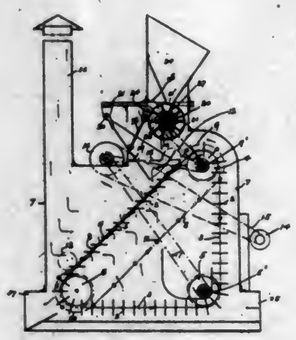
1. In a tiled construction, the combination with a supporting structure, of a backing carried by said structure, said backing consisting of a plurality of independent channel-like strips of resilient sheet metal arranged in parallel relation, each strip including longitudinal edge flanges normally occupying convergently inclined relation the flanges of adjacent strips being engaged with each other and a plurality of molded tiles seated in the channel of each strip with opposite edges thereof yieldingly gripped by said flanges, each tile having its said edges disposed substantially at right angles to its face and holding the therewith engaged flanges outwardly sprung into approximately parallel planes.

1,880,283. BRAKE HANGER. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Aug. 30, 1930. Serial No. 479,070. 4 Claims. (Cl. 188—209.)



1. A U-shaped brake hanger having legs and a transverse yoke integrally formed from a rod of uniform cross sectional area, said hanger being formed with a strengthening rib extending outwardly therefrom around each of the corners and merging at their ends into said legs and yoke, and said ribs being materially narrower than the body of the yoke.

1,880,284. CONVEYER. FRANZ EMIL MAX SCHENK, Altona, Germany, assignor to F. W. Buse, Pittsburgh, Pa. Filed Aug. 16, 1929, Serial No. 886,324, and in Germany Oct. 30, 1928. 13 Claims. (Cl. 259—4.)

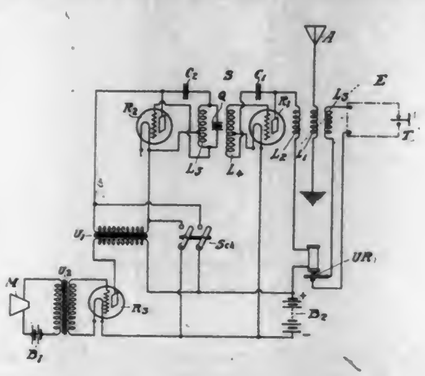


1. In a conveyer, an endless chain, a plurality of supports pivoted thereto, and variable speed traveling means for dumping one support into another at such a rate that the material being conveyed may be caused to move generally in a selected direction in a series of alternate backward and forward steps.

1,880,285. WIRELESS SYSTEM. WILHELM SCHEPPMANN, Berlin-Tempelhof, Germany, assignor, by mesne assignments, to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 22, 1929, Serial No. 401,451, and in Germany Nov. 28, 1928. 1 Claim. (Cl. 250—13.)

In combination with a radiophone station for duplex operation, an antenna circuit, a space discharge power amplifier supplying said antenna circuit, a crystal controlled three-electrode vacuum tube master oscillator controlling said power amplifier, a microphone device pro-

ducing modulating currents in accordance with the speech variations to be transmitted by said transmitter, a vacuum tube amplifier for amplifying said modulating currents, a step up transformer having its primary inserted in the output circuit of said amplifier, the secondary of said transformer serving as the sole anode voltage source

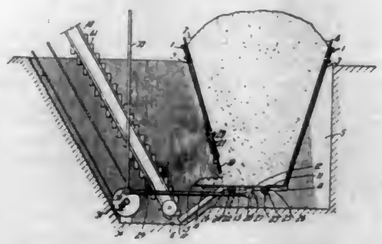


of said master oscillator, a receiver associated with said antenna circuit and a switch over relay having an operating winding included in the space current supply circuit of said power amplifier and being adapted to disconnect said receiver in response to a change of space current in said power amplifier when speech modulated waves are impressed thereon.

1,880,286. METHOD OF TREATING PAPER ARTICLES WITH VISCOSE. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 7, 1930. Serial No. 494,207. 8 Claims. (Cl. 92—40.)

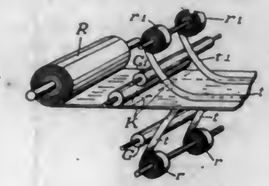
1. A process which comprises treating an article with a viscose solution capable of yielding regenerated cellulose upon drying alone, and drying the treated article to associate regenerated cellulose therewith.

1,880,287. ASPHALT MIXER. CLIFFORD SIPTON, Los Angeles, Calif., assignor to Carl Pleasant, Tulsa, Okla. Filed Oct. 6, 1928. Serial No. 310,800. 2 Claims. (Cl. 221—118.)



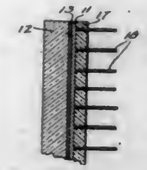
1. An apparatus of the character described including a plurality of chambers for supporting separate materials and each having a side port, individual slides for each chamber to move material through the ports, pitmen connected to the slides, an operating shaft, and cranks on the operating shaft for connecting the pitmen arranged to operate the slides in progressive order, whereby measured quantities of material are delivered in successive order to effect a substantially stratified mixture.

1,880,288. WRAPPING AND FORMING BOXES. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1929. Serial No. 396,626. 25 Claims. (Cl. 93—43.)



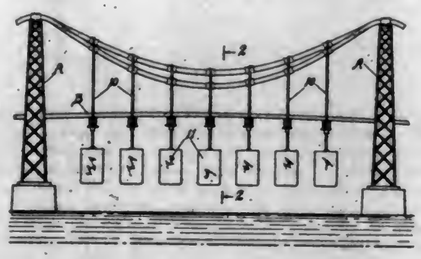
1. In the making of a box from separate components, the steps of scoring a continuous strip of box material lengthwise thereof, applying tab structure to said strip over or opposite said scoring, cutting the strip crosswise to form rectangular blank components, and assembling said components with unattached components to form boxes.

1,880,289. LIGHT SENSITIVE DEVICE. THOMAS W. SUKUMLYN, Los Angeles, Calif. Filed July 21, 1928. Serial No. 294,559. 4 Claims. (Cl. 201—63.)



4. In a device of the character described, means forming a transparent conductor, a layer of light sensitive material disposed over the conductor, a layer of insulation disposed over the material, and a series of independent contacts extending through the insulation, said contacts forming a closely spaced arrangement so that each contact cooperates with an elemental portion of the whole layer of light sensitive material.

1,880,290. METHOD OF TRANSFERRING LOAD IN MAKING BRIDGES AND THE LIKE. CHARLES C. SUNDERLAND, New Brunswick, N. J., assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Jan. 9, 1931. Serial No. 507,744. 2 Claims. (Cl. 14—19.)



2. The method of transferring a bridge load from some to all of the bridge supporting cables, which consists in first supporting the bridge structure by a lower cable or

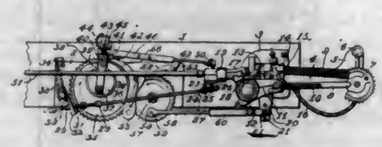
cables, then loading the upper cable or cables with weights consisting of tanks and liquid equivalent to the bridge load or a desired part thereof, and then connecting the weight loaded cable or cables to the bridge structure for supporting the latter, and drawing off the liquid from the tanks.

1,880,291. HEATING DEVICE. BENJAMIN SKLOVSKY, Chicago, Ill. Filed Feb. 11, 1931. Serial No. 515,056. 7 Claims. (Cl. 257—241.)



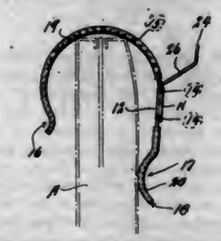
1. A heat interchanger consisting of a unitary housing, an integral inlet and outlet near the ends of said housing, an integral partition wall extending longitudinally of said housing and a series of transverse passages through said housing, and said integral partition wall, said passages having a cross section varying in area at different points.

1,880,292. AUTOMATIC TARGET TRAP. WILLIS J. SUTCLIFFE, Cedar Heights, Iowa. Filed Mar. 2, 1931. Serial No. 519,602. 2 Claims. (Cl. 24—6.)



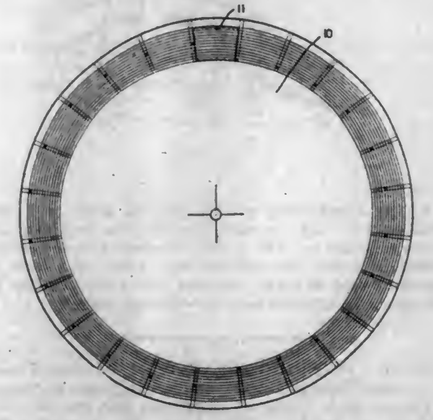
1. An apparatus of the character described, comprising a target trap having a movable frame mounted on a relatively fixed base, a releasably locked resiliently controlled target throwing arm mounted swingingly on said frame, and mechanism associated with said trap operable to release the throwing arm while relatively moving said frame, said mechanism including intermeshed gears, an eccentric on one gear, a strap thereon and a pawl operably connected to said strap, said pawl movably mounted to engage and rotate the eccentric-carrying gear partially, a deflector member positioned to lift said pawl out of engagement with said gear at the end of its stroke, operating means for said trap connected to said eccentric strap, and pawl means for releasably engaging the eccentric carrying gear linked movably to said trap operating means for locking said gear at times when the first pawl is idly returning to its engaging relation to the gear, the other gear having a linking connection to said movable frame to move the latter when said throwing member is released.

1,880,293. PORTABLE SUPPORT FOR EXHAUST DEVICES. JOSEPH SUNNEN, Kirkwood, Mo. Filed Jan. 15, 1931. Serial No. 508,914. 1 Claim. (Cl. 248—20.)



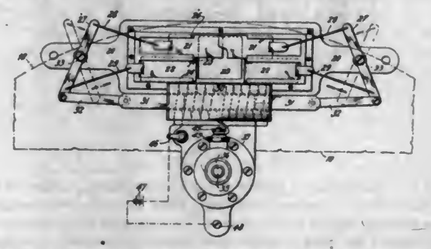
A portable support for suction apparatus for automobile grit removers and vacuum cleaners comprising in combination a pair of vertically disposed spaced members, the upper end portion of each of which is curved rearwardly and downwardly to form a hook by means of which said support can be suspended from an automobile door and the like, the lower end of each of said members being slightly curved to present a convex surface to the outer face of said door and hold said support in spaced relation therewith, a horizontally disposed apertured plate secured at its ends to said vertical members intermediate the ends thereof, a suction apparatus, bolts engaging said apertured plate for securing said apparatus to said horizontal plate, said suction apparatus extending outwardly therefrom in a direction opposite to the curved upper end portions of said vertical members, and a handle attached to said horizontal member and extending upwardly and laterally therefrom to effect proper balancing of the combined weight of said suction apparatus and said support when carried by hand.

1,880,294. SYSTEM OF SCANNING. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed Nov. 22, 1929. Serial No. 408,057. 7 Claims. (Cl. 178—6.)



1. A method of scanning an image which comprises causing the scanning path to traverse and retraverse a portion of said image with an undulating motion and then causing a sudden shift of said scanning path to another portion of said image and causing said path to traverse said other portion with an undulating movement whereby to successively and completely scan the different portions of said image.

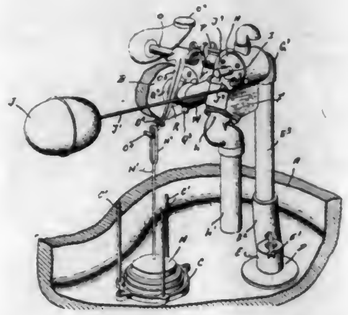
1,880,295. SCANNING DISK. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed July 17, 1930. Serial No. 468,521. 2 Claims. (Cl. 178—6.)



2. In a scanning system, a scanning member having a plurality of apertures therein adapted to successively reveal an object, a shutter mounted independent of said member and in register with said apertures and adapted to reveal said object in sections, said shutter comprising slidable members, pivoted levers associated therewith,

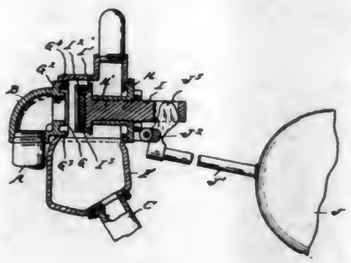
electrical means for operating said levers, and means for controlling said electrical means whereby different sections of said image are revealed in successive revolutions of said scanning member.

1,880,296. FLUSHING APPARATUS. WILLIAM TAYLOR, Robinson, Ill., assignor to James M. Teahan, Detroit, Mich. Filed Mar. 20, 1929. Serial No. 348,642. 10 Claims. (Cl. 4—13.)



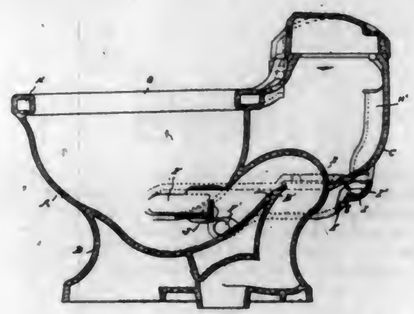
1. The combination with a flushing tank, of a float actuated ball cock, conduits leading from said ball cock to the tank and to a rim flush, a flushing valve and manual operating means for tripping said valve, of means actuated by said manually operated means for directing water from said ball cock into the rim flush conduit.

1,880,297. FLUSHING APPARATUS. WILLIAM TAYLOR, Windsor, Ontario, Canada, assignor to James M. Teahan, Detroit, Mich. Original application filed Mar. 18, 1929, Serial No. 348,642. Divided and this application filed Mar. 22, 1930. Serial No. 438,228. 5 Claims. (Cl. 137—104.)



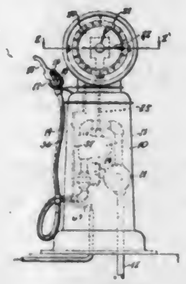
1. A ball cock for filling a tank comprising a valve seat, a valve for engaging said seat, float actuated mechanism for closing said valve against the hydrostatic pressure of the water in said conduit and means operating at a predetermined point in the closing movement of said valve for increasing the effective hydrostatic pressure thereon to a predetermined extent to momentarily delay further closing of the valve and rise of the float, whereby the increased lifting power on the float will effect a quick final closing movement of the valve.

1,880,298. WATER CLOSET. JAMES M. TEAHAN, Detroit, Mich., and WILLIAM TAYLOR, Windsor, Ontario, Canada; said Taylor assignor to said Teahan. Filed Mar. 9, 1931. Serial No. 521,257. 8 Claims. (Cl. 4—13.)



1. The method of flushing siphonic bowl closets consisting in establishing a gravity water head not greatly above the normal water seal, discharging water from said head and dividing the water so discharged to direct a portion thereof into the bowl and another portion to form a jet for establishing the siphon.

1,880,299. DISPENSING DEVICE FOR GASOLINE. ALFRED G. TEBAULT, Portland, Oreg. Filed Mar. 5, 1929. Serial No. 344,292. 5 Claims. (Cl. 221—95.)

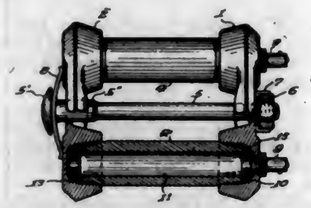


1. In a gasoline dispensing apparatus the combination of a metered pumping unit including a motor, a hose line having a control valve on the end thereof, said pumping unit having visible indicators showing the amount of a single drawing of gasoline, a plurality of counters normally disconnected from said metering mechanism but selectively connectable thereto, a cover plate for said counters having a plurality of openings therein through which the total on the respective counters can be seen when in an unlocked position, locking means for said counters whereby the totals can be concealed and the flow of current to the motor interrupted, and a remote control switch for said motor in series with said locking device actuated by the valve of the hose line.

1,880,300. REACTION PRODUCT OF AN AMINE SALT OF AN ALKYL-DITHIO-CARBONIC ACID WITH BENZOTHIAZYL CHLOROTHIOCARBONATE AND PROCESS OF PRODUCING THE SAME. WILLIAM P. TER HORST, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Original application filed Aug. 4, 1927, Serial No. 210,712. Divided and this application filed June 23, 1928. Serial No. 287,897. 8 Claims. (Cl. 260—43.)

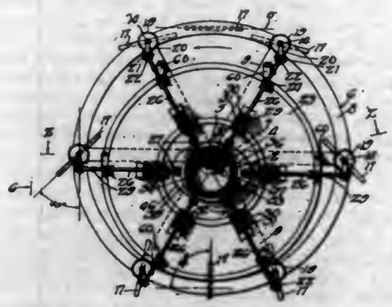
1. The process of preparing a mercapto thiazole derivative comprising treating the amine salt of an alkyl-dithiocarbamic acid with benzo thiazyl chlorothiocarbonate.

1,880,301. BEARING LUBRICATING MEANS. WILLIAM A. TRYON, Elmira, N. Y., assignor to Patent Purchasing Company, Elmira, N. Y., a Corporation of Rhode Island. Filed Oct. 8, 1930. Serial No. 487,098. 7 Claims. (Cl. 267—54.)



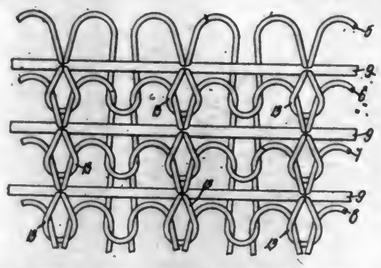
1. The combination with a shackle comprising opposed side links and hollow conical ended pins extending therebetween, said links having conical bearing pockets adapted to receive the ends of the pins, yieldable means operative to maintain the links in assembled relation on the pins, and means for introducing oil to the interior thereof, of resilient means disposed between the ends of the pins and the bottoms of the pockets operative to alternately absorb oil from the interior of the pins and to discharge it adjacent the coacting bearing surfaces of the pins and of the pockets upon the occurrence of relative endwise movement between the side links and the pins.

1,880,302. PROPELLER FOR HELICOPTERS. WILLEM PETRUS VAN LAMMEREN, Voorschoten, Netherlands. Filed Nov. 27, 1930, Serial No. 498,518, and in Great Britain Dec. 3, 1929. 12 Claims. (Cl. 170—149.)



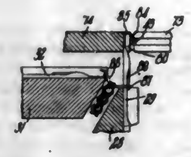
1. In a rotary propeller, the combination with a rotary supporting member, blades rotatable on said member, means for rotating each blade about its own axis through substantially 90° as said member rotates about its axis through substantially 180°, means for rotating said blades about their own axes another substantially 90° while said member rotates through substantially another 180°, and mechanism for varying the rate of rotation of said blades about their own axes.

1,880,303. ELASTIC KNITTED FABRIC. OLIVER H. WALTON, Needham Heights, Mass. Filed Dec. 7, 1931. Serial No. 579,591. 4 Claims. (Cl. 66—190.)



1. An elastic knitted fabric emodying therein a plurality of elastic strands extending transversely of the fabric, and loops of said fabric projecting through said strands, whereby the strands are locked in said fabric.

1,880,304. MACHINE FOR KNITTING ELASTIC FABRIC. OLIVER H. WALTON, Needham, Mass. Filed Feb. 16, 1932. Serial No. 593,264. 21 Claims. (Cl. 66—9.)



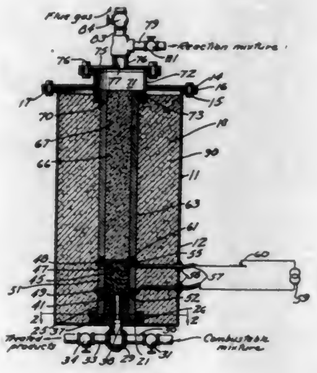
21. A machine for knitting elastic fabric having, in combination, a needle cylinder, knitting needles mounted thereon, means to impart a reciprocatory motion to the knitting needles, means to guide yarn to the needles, means to feed an elastic strand with a covering thereon to said needles beneath the points of the hooks thereof when in their advanced position, whereby said covering may be pierced by the hooks on the return movement of the needles, and a rotary guide roll positioned adjacent the tops of said needles and adapted to guide said strand over the tops and to the rear of said hooks while the pierced portion of said covering and the knitted loops of the last course of said fabric are within said hooks and whereby, upon a subsequent reciprocatory motion of said needles, loops of another course may be carried through the pierced portion of said covering and the knitted loops of the last course and the elastic strand thereby locked to the knitted fabric.

1,880,305. AXLE HOUSING. HERBERT H. WILLIAMS, Brooklyn, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Corporation, Brooklyn, N. Y., a Corporation of New York. Original application filed Jan. 23, 1926, Serial No. 83,331. Divided and this application filed Dec. 31, 1927. Serial No. 243,793. 3 Claims. (Cl. 74—56.)



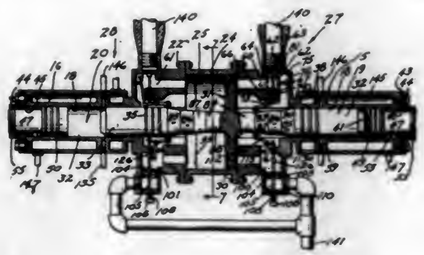
1. An axle housing made of segments of sheet metal and having tubular end portions at an intermediate point in the length of which the segments are bent out to form integral enlargements of substantially the same thickness as the adjacent parts and constituting bearing points for spring seats.

1,880,306. METHOD OF PRODUCING HIGH TEMPERATURES. ROBERT G. WULFF, Los Angeles, Calif. Filed Dec. 27, 1927. Serial No. 242,832. 9 Claims. (Cl. 260—170.)



1. An intermittent endothermic process which comprises burning a gas mixture containing oxygen and an oxidizable gas within the interstices of a porous refractory material, then after the porous material has been heated to a high temperature, electrically heating said porous material until a further materially higher temperature is reached, then discontinuing the flow of said mixture and electricity, and then passing a gas or vapor which reacts endothermically through said porous material.

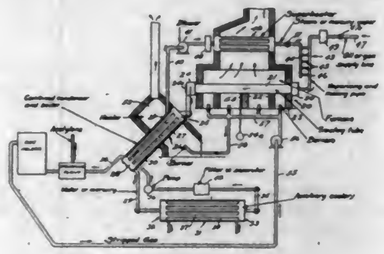
1,880,307. METHOD OF PRODUCING ACETYLENE BY COMPRESSION. ROBERT G. WULFF, Los Angeles, Calif. Filed Dec. 27, 1927. Serial No. 242,833. 6 Claims. (Cl. 260—170.)



1. A method of producing acetylene from a hydrocarbon vapor which comprises: compressing said vapor sufficiently to raise its temperature t at least 2500° F. so the acetylene is formed; and quickly reducing the temperature to a point at which acetylene is stable.

1,880,308. PROCESS OF MAKING ACETYLENE AND OTHER PRODUCTS. ROBERT G. WULFF, Los Angeles, Calif. Filed May 29, 1928. Serial No. 281,406. 12 Claims. (Cl. 260—170.)

1. The process of making acetylene and other products which comprises rapidly passing at least one non-acetylene hydrocarbon in vapor form at a pressure between and including 2 mm. of mercury and atmospheric pressure over refractory material heated to a temperature of at least 1700° F. so that the vapors are heated for a period



of between and including 2/1000 second and three seconds, then cooling the reaction products to a temperature at which acetylene is stable, and separating the acetylene from the other products.

1,880,309. PARTIAL PRESSURE PROCESS OF MAKING ACETYLENE AND OTHER PRODUCTS. ROBERT G. WULFF, Los Angeles, Calif. Filed Oct. 2, 1928. Serial No. 309,749. 12 Claims. (Cl. 260—170.)

1. A process of producing a gaseous mixture containing a recoverable percentage of acetylene which comprises: heating a gaseous mixture containing gaseous raw material suitable for the production of acetylene, said suitable gaseous raw material being mixed with an inert diluent, said heating being conducted at a temperature preferably considerably in excess of 1500° F. and for a period of less than five seconds and the gaseous mixture being maintained at about atmospheric pressure during said heating; thereafter cooling the heated mixture as rapidly as possible to a temperature at which acetylene is stable; and separating the acetylene from the gaseous mixture containing it.

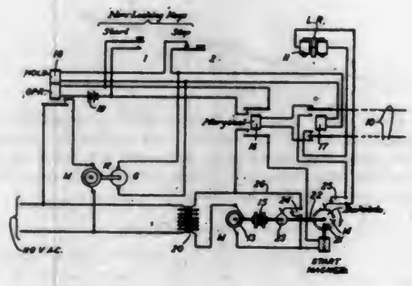
1,880,310. HALOGENATION PROCESS OF MAKING ACETYLENE AND OTHER PRODUCTS. ROBERT G. WULFF, Los Angeles, Calif. Filed Mar. 27, 1929. Serial No. 350,197. 12 Claims. (Cl. 260—170.)

1. A process of producing a mixed gas containing acetylene which comprises: forming a vaporous mixture of hydrocarbon material (selected from the group consisting of paraffins, olefines (naphthenes, benzene, and toluene hydrocarbons) and an active diluent (selected from the group consisting of chlorine, bromine, and sulphur); heating said mixture to a temperature preferably considerably in excess of 750° F. and for a period of less than five seconds; and thereafter rapidly cooling said mixture to a temperature at which acetylene is stable.

1,880,311. PRINTING TELEGRAPH SYSTEM. HARRY B. BOOSE, Pittsburgh, Pa., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 2, 1931. Serial No. 560,815. 6 Claims. (Cl. 178—4.1.)

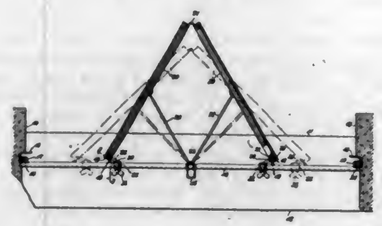
1. In a telegraph system, a calling station, a called station, a circuit interconnecting said stations, a motor at said called station, a signal transmitting device at said calling station for starting said motor, an answer-back signal arrangement at said called station comprising a disc driven by said motor, the periphery of said disc being irregular in form to correspond to a signal code combination representing the call number of the called station, contact elements resting on the periphery of said disc and arranged to open and close in accordance with

the irregularities on the periphery of said disc as said disc revolves, an electrically operated element at said called station responsive to a signal from said transmit-



ting device for automatically causing said disc to rotate through one revolution to thereby transmit to the calling station the signal code combination of the called station.

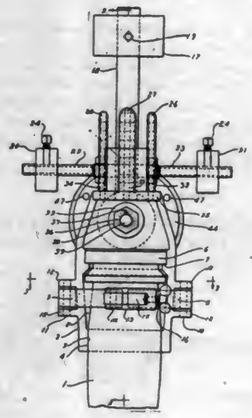
1,880,312. CASEMENT WINDOW LOCK. CLARENCE W. BREWER, Decatur, Ill. Filed Mar. 25, 1931. Serial No. 525,212. 13 Claims. (Cl. 189—66.)



13. The combination of a movable closure member, closure supporting means comprising a supporting front plate adjacent the path of movement of said closure member, a clamp carrying rail at one edge of said plate and extending laterally toward said closure member, a sealing surface at the other edge of said plate, an enclosing plate carried by said closure member and opposed to said front enclosing plate, an end plate having an edge engaging the sealing surface on said front enclosing plate, a clamp movable on said rail and projecting between said front enclosing plate and said closure member, and a linkage member pivotally connecting said clamp and closure and disposed below said clamp and between said plate and closure member.

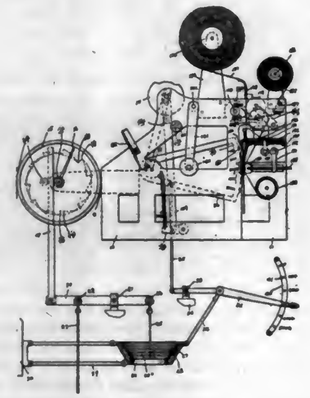
1,880,313. PROPELLER BALANCING MECHANISM. FREDERICK CHARAVAY, Piqua, Ohio, assignor of one-half to Hartzell Industries, Inc., Piqua, Ohio, a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,209. 15 Claims. (Cl. 73—51.)

1. In combination, in a balancing mechanism for propellers, a freely rotatable balancing support, counterbalancing standard weights and a quick detachable connection for supporting the propeller blade to be balanced, and means for aligning said propeller blade to be balanced at a predetermined distance from the center of the pivoted



support of the balancing mechanism, and means for supporting a plurality of detachable weights in columns on said balancing mechanism.

1,880,314. WEIGHT PRINTING ATTACHMENT FOR SCALES. HUGO COOK, Southport, Ind. Filed May 7, 1925. Serial No. 28,629. 250 Claims. (Cl. 265—5.)

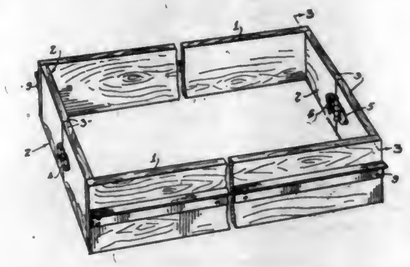


1. In the method of operating non-sensitive means proportionate to a function of means too sensitive to operate the same without impairment of its sensitivity, the steps of associating said means in co-operative relation actuating said sensitive means by a medium a characteristic of which is determinable thereby, then operating said non-sensitive means with the required force, and during said last stated operation controlling the extent of operation of said non-sensitive means by a physical momentary contact with a portion of said sensitive means and which contact is of such delicacy as to not practically impair the sensitiveness of said sensitive means.

1,880,315. PRODUCTION OF FRITTED MAGNESIA CONTAINING IRON. FRITZ CROTOGINO, Neustassfurt, near Stassfurt, Germany, assignor to the Firm Kali-Chemie Aktiengesellschaft, Berlin, Germany, a Joint-Stock Company of Germany. Filed Aug. 11, 1930, Serial No. 474,666, and in Germany Aug. 12, 1929. 2 Claims. (Cl. 23—201.)

1. A process for the production of fritted magnesia containing iron, comprising heating calcined dolomite with sufficient ammonium chloride solution to convert almost the whole of its calcium oxide into calcium chloride, adding iron compounds that are insoluble in water, separating the undissolved magnesium oxide from the solution containing the calcium chloride, and sintering the magnesium oxide thus separated with iron.

1,880,316. WALL SUPPORT FOR EXCAVATIONS. BEN DANCER, Houston, Tex. Filed May 13, 1930. Serial No. 452,106. 4 Claims. (Cl. 61—40.)



1. A wall support for excavation comprising side members, and end members, each end member including two parts adapted to abut end to end, hinge means associating the abutting end parts, interlocking means associating the abutting ends of the end parts and means for removably and hingedly associating the outer ends of the end parts to the side members.

1,880,317. SLIDE FASTENER. JOSEPH W. DEWS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 23, 1930. Serial No. 470,178. 5 Claims. (Cl. 24—77.)



1. A slide fastener, comprising a single transversely slotted slide member of relative thinness, and having a central opening through which the aftermentioned fastener socket is applied thereto, and a socket comprising an open-ended eyelet-like part with one end reduced and passed through said central opening and rolled down on top of the slide member and the other end beaded and a ring spring yieldingly supported in said beaded end, said beaded end having a shoulder which shoulder comes into face to face contact with the slide element and serves to locate the relation of the socket to the slide and the spring to the beaded end.

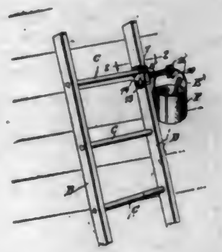
1,880,318. ROOFING FASTENER. JESSE FULENWIDER and HARRY FULENWIDER, Savannah, Ga., assignors to The Southern States Iron Roofing Company, Inc., Savannah, Ga. Filed July 29, 1929. Serial No. 381,855. 1 Claim. (Cl. 108—33.)

A roofing comprising metal sheets which have their edges disposed in lapping relation, a plate arranged transversely of and adjacent to the end of each metal sheet, nailed to the sheets and to the roofing, the said plate having its outer edge formed with bendable cleats designed to receive therein and to be bent over the edge of the overlapping plate and to be hammered theresgainst, and



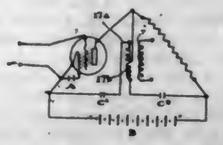
said plate being centrally formed with a longitudinally extending outwardly projecting cross sectionally rounded rib for contacting engagement with and for crimping the edge of the plate arranged thereover, and said plate having an inner compressible facing.

1,880,319. SUPPORTING BRACKET ATTACHMENT FOR LADDERS. CASPER IASILLO, Port Chester, N. Y., assignor of one-half to Morris Miller, Port Chester, N. Y. Filed Oct. 30, 1931. Serial No. 572,193. 3 Claims. (Cl. 248—22.)



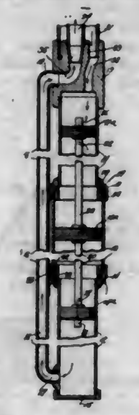
3. A device of the character described comprising a base defining portion of generally channel shape having spaced flanges joined by a connecting web and adapted to embrace one of the stiles of a ladder, independent article supporting means carried by one flange and adapted to be selectively used when the device is reversely arranged on a ladder, the other of said flanges being fashioned to provide independent portions to selectively embracingly engage a rung of the ladder when the device is reversely arranged thereon.

1,880,320. RADIO SYSTEM. BENJAMIN HUGHES, Montreal, Quebec, Canada. Filed Aug. 14, 1929, Serial No. 385,923, and in Canada Aug. 15, 1928. 4 Claims. (Cl. 179—171.)



2. The combination with an electronic valve of a circuit including a source of current connected to the anode and cathode elements of the valve, a resistance member in series with said source and one of said elements, a shunt connection across the terminals of the anode and cathode elements including a first inductive member in series with a first capacity member, a shunt connection across the terminals of the resistance member including a second inductive member in series with a second capacity member, and output terminals inductively coupled to both of said inductive members.

1,880,321. WELL PUMPING APPARATUS. FRANCIS B. JACKSON, Tulsa, Okla. Filed Jan. 28, 1932. Serial No. 589,459. 11 Claims. (Cl. 103—44.)

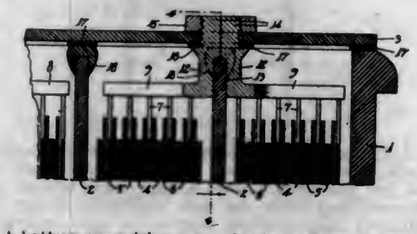


1. In well pumping apparatus, a cylinder, three spaced connected pistons reciprocating therein, valve controlled inlets to the cylinder at opposite ends and outwardly of the extreme movements of the intermediate piston and valved passages through the end pistons, a head at the upper end of the cylinder, a pump casing and pipe attached to the head, the casing being in communication with the upper end of the cylinder and a by-pass flow pipe forming communication between the pump pipe and lower end of the cylinder.

1,880,322. PRODUCTION OF NON-ACIDIC CARBONYL COMPOUNDS. ALPHONS O. JAEGER, Crafton, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 23, 1928. Serial No. 301,693. 9 Claims. (Cl. 260—57.)

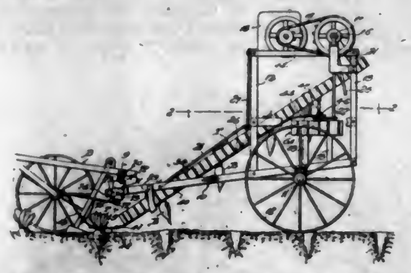
1. A method of oxidizing organic compounds to non-acidic carbonyl compounds, which comprises vaporizing the organic compounds, admixing with an oxygen containing gas, and passing them at reaction temperature over an alkaline contact mass which favors the oxidation of organic compounds to intermediate products and which contact mass contains at least one metal element selected from the fifth and sixth groups of the periodic system.

1,880,323. STORAGE BATTERY. IRMA L. LINDLEY, Laurel, Miss. Filed Sept. 20, 1929. Serial No. 394,039. 1 Claim. (Cl. 136—134.)



A battery comprising a case having cells and a partition between them, a cover for the case, groups of electrode plates in said cells, yoke members secured to the groups of said plates on opposite sides of said partition, said members having post sections complementing one another to form a longitudinally split screw threaded shank and extending upwardly through said cover, said post sections having recesses forming a slot receiving said partition and having shoulders under the cover, and a nut screw-threaded on said post sections above the cover to clamp said post sections together and to clamp the cover between said nut and shoulders.

1,880,324. BEET HARVESTER. HENRY L. MALCOM and HYRUM S. HARKER, Shelley, Idaho, assignors of forty per cent to said Malcom, twenty per cent to said Harker, twenty per cent to Edgar Duke, Idaho Falls, Idaho, and twenty per cent to Walker Stull Wright, Shelley, Idaho. Filed Aug. 25, 1931. Serial No. 559,318. 14 Claims. (Cl. 55—108.)



1. In a beet harvester, a portable frame, two endless beet top grippers and conveyors mounted longitudinally on said frame and declining forwardly, two stationary beet-positioning tracks extending longitudinally under the rear portions of said top grippers and conveyors and diverging rearwardly from the lower edges thereof, said tracks serving to abut the upper ends of the beets to dispose the latter to a uniform elevation preparatory to cutting the tops therefrom, two short endless yieldable beet grippers and conveyors under and in overlapped relation with said tracks and adapted to rearwardly slide the beets along said tracks after the beets abut the tracks, and means for driving said endless beet top grippers and conveyors, and said endless beet grippers and conveyors.

1,880,325. MOTHPROOF RECEPTACLE. LAWRENCE K. LOFTIN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia. Filed Aug. 1, 1930. Serial No. 472,441. 2 Claims. (Cl. 206—10.)

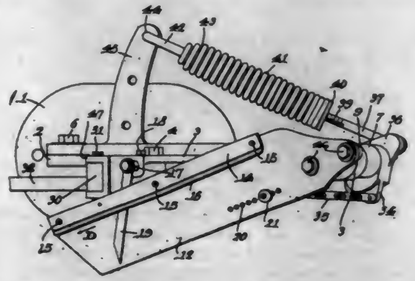


1. In a container of the character described, the combination with a casing, and a closure for said casing, of a channeled female sealing member on the casing having a short side and a long side, the long side of said member being provided with a flange secured to the casing, a co-acting channeled male sealing member on the closure adapted to partially extend into said female member in the closed condition of the closure and having its side facing the short side of the female member provided with a flange secured to the closure, a packing disposed within the female member, and a packing carried by the short side of the female member and adapted to seat against the flange of the male member.

1,880,326. TRAP. ARTHUR M. MCCREA, Lamar, Mo. Filed Sept. 3, 1931. Serial No. 561,035. 1 Claim. (Cl. 124—6.)

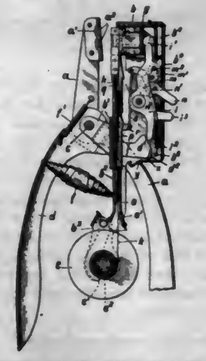
A trap for throwing targets, comprising a support, a shaft journaled in the support, a carrier mounted on the

shaft, a rib extended longitudinally of the carrier, first and second stops on the carrier and spaced longitudinally of the rib, the first stop being so located with respect to the length of the rib that when a target is placed against the first stop and against the rib, the time occupied by the target in rolling along the rib from the first stop to the outer end of the rib will enable the carrier to swing to a first position, in which a right-quartering target will be thrown, the second stop being so located with respect to the length of the rib that when a target is placed against the second stop and against the rib, the time occupied by the target in rolling along the rib from the second stop to the outer end of the rib will enable the carrier to swing to a second position, in which a left-quartering target will be thrown, an arm on the shaft and projecting therefrom



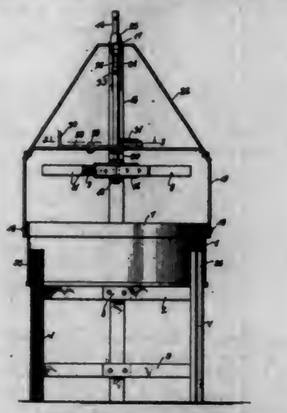
in a direction opposite to the carrier, an actuating pull spring connected at one end to the arm, and means for anchoring the opposite end of the spring in such laterally offset relation to the axis of the shaft that when the carrier has arrived at said first position, the spring, the arm and the carrier will be in a straight line and cause the spring to cease pulling, the spring thereafter elongating under the action of the carrier, as the carrier moves to said second position, the mass of the carrier being such that the momentum of the carrier will offset the pull due to the elongation of the spring, and give to the outer end of the rib, when the carrier is in said second position, a speed in arc which is practically and substantially the same as that when the carrier is in said first position, and in a third position intermediate the positions stated.

1,880,327. MACHINE FOR FASTENING WITH WIRE STAPLES. FRITZ MERZ, and ADOLF FRITZ SCHAUSS, Frankfort-on-the-Main-Rodelheim, Germany. Filed Feb. 27, 1930, Serial No. 431,861, and in Germany June 4, 1928. 11 Claims. (Cl. 1—48.)



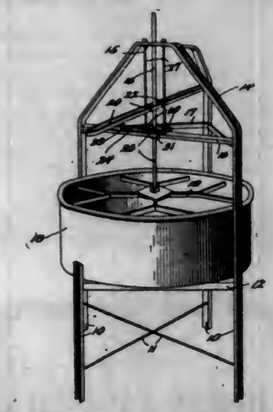
1. A hand stapler of the plier type in which staples are automatically detached and formed, when the jaws of the pliers are closed, a casing pivotally mounted on the pivot of the jaw members and carrying staple forming and setting members, said casing carrying a wire reel, one of the jaws being forked at its free end to form operating cams, and levers operated by the said cams for actuating the staple forming and setting members.

1,880,328. TIRE TUBE TESTER. DANIEL H. MILLER, Kearney, Nebr. Filed Sept. 5, 1928, Serial No. 304,041. Renewed Feb. 3, 1932. 4 Claims. (Cl. 73—51.)



1. A tire tube tester comprising a support composed of structural elements, a tank detachably mounted upon said support, a bracket detachably connected to said tank, a spider-shaped tube submerger supported by said bracket, a lever pivotally connected to said bracket and means for operatively connecting said lever with said tube submerger whereby the latter may be manually raised or lowered.

1,880,329. TIRE TUBE TESTER. DANIEL H. MILLER, Kearney, Nebr. Filed July 29, 1930. Serial No. 471,561. 4 Claims. (Cl. 73—51.)



1. A testing device for inner tubes comprising, in combination, a structural frame having channel-shaped uprights and presenting a table portion; some of said uprights extending above the table portion to provide an overhanging superstructure portion; a tank removably mounted in the table portion below the superstructure portion; a submerger including a spider having a plunger rod slidably mounted in the superstructure portions; a hand lever pivoted to the superstructure portion; means connecting the lever to said plunger rod; and spring urged latch means cooperating with the plunger rod to lock the submerger in either raised or lowered position.

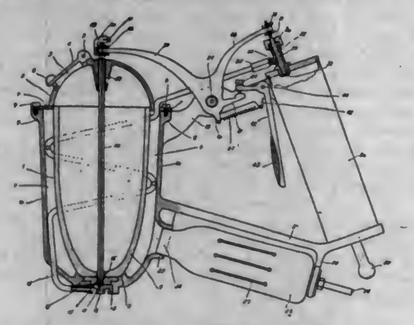
4. A testing device of the character described comprising, in combination, a frame having channel-shaped uprights and presenting a tank supporting portion; some of said uprights extending above the tank supporting portion to provide a superstructure; a tank mounted on the tank supporting portion below the superstructure; a diagonal brace on said superstructure connected to two of said uprights and having a guide opening; a submerger having an operating stem slidably mounted in the superstructure and in said guide opening in said diagonal brace; an operating lever pivotally mounted on the superstructure and connected to said stem; a pair of tie-rods arranged vertically on opposite sides of the stem and connected to said diagonal brace member; a plate carried by the tie-rods and also having a guide opening for said stem; spacer means on the tie rods between sid plate and said diagonal brace member; said stem having circumferential grooves; a latch lever between said diagonal brace member and said plate, said latch lever being pivotally connected to one of said tie-rods and having a V-shaped notch engageable with said circumferential grooves in the stem; a spring connected to one of said tie-rods and engageable with the latch lever normally to urge the latch lever toward its locking position; the free end of the lever being forked and arranged to engage the spacer means about the other tie-rod to limit the unlocking movement of said latch lever.

1,880,330. PROJECTILE FOR TOY FIREARMS. AUGUST NERLICH, Beyenburg on the Wupper, Germany. Filed Jan. 21, 1931, Serial No. 510,251, and in Germany Jan. 27, 1930. 3 Claims. (Cl. 102—21.)



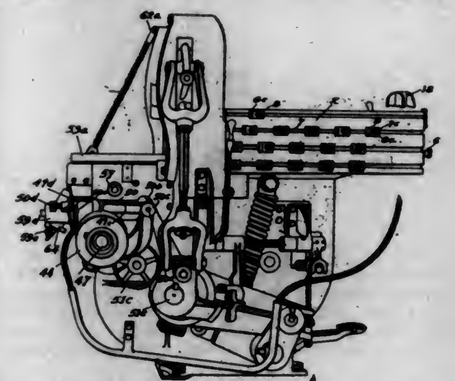
1. A projectile of the class described comprising a case having a closed end, said closed end being provided with an opening for the passage of an impact ignition element, a member of priming composition fitted in the case, a priming plate between the member and closed end of the case and normally closing said opening, a pyrotechnical member engaged with the priming member, the priming member and pyrotechnical member being successively ignited after ignition of the priming composition.

1,880,331. PORTABLE SPRAYING APPARATUS. PIERRE FRÉDÉRIC JULES RAPP, Fontenay Sous Bois, France. Filed Jan. 16, 1932. Serial No. 587,059. 7 Claims. (Cl. 91—45.)



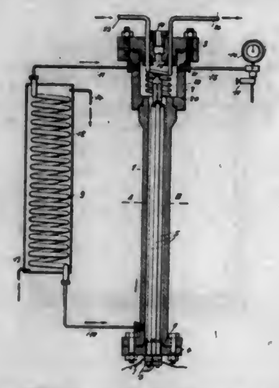
1. A portable spraying apparatus comprising, in combination, a crucible for the substance to be sprayed, said crucible having an outlet bore and a filling opening, a jacket providing an annular clearance around the crucible and fitted with an annularly grooved nozzle having a central bore coincident with the crucible outlet bore, a fluid pipe connected to the nozzle groove and passing through said clearance, a needle valve seated in the crucible outlet bore, a hollow handle having an inlet connectable to a source of pressure fluid and an outlet controlled by a valve and connected to said pipe, a heater connected with said clearance, the jacketed crucible, handle and heater forming a trapezoidal structure providing a central free space, a controlling lever located in said space adjacent the handle, and a connection between said lever and said valves for permitting a simultaneous control of the ejection of fluid and sprayable substance.

1,880,332. PAPER CUTTING MACHINE. FREDERICK W. SEYBOLD, Dayton, Ohio, assignor to The Harris-Seybold-Potter Company, Dayton, Ohio, a Corporation of Delaware. Filed May 20, 1929. Serial No. 364,382. 29 Claims. (Cl. 164—59.)



1. In a paper cutting machine the combination with a cutting mechanism of means for advancing a stack of paper to be cut, stopping means to be applied to the advancing means, at a plurality of stages of its movement and a recurring program device synchronized with the machine for operating said stopping means, said stopping means being electrically operated and said program device comprising an electrical rotary contactor driven continuously in one direction with the cutting mechanism one revolution for each recurrence of the program.

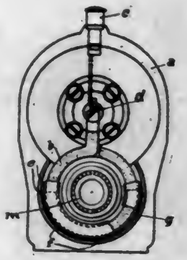
1,880,333. PROCESS AND APPARATUS FOR PRODUCING PHOTOCHEMICAL RADIATIONS. HENRY SPINDLER, Paris, France. Filed Apr. 5, 1929, Serial No. 352,888, and in France Apr. 11, 1928. 6 Claims. (Cl. 250—35.)



1. Apparatus for the production of photo-chemical radiations of high activity comprising a high pressure inclosure, mercury filled electrode tubes having their upper extremi-

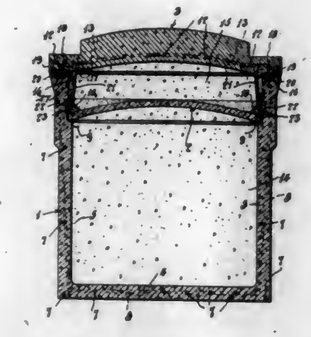
ties open, hollow tubes dipping in the mercury of said electrode tubes, the upper ends of said hollow tubes being connected together to form a chamber constituting a burner, and means for circulating a cooling fluid at high pressure around said hollow tubes, the mercury intermediate the high pressure inclosure and said burner forming a seal whereby all variations in internal pressure of the mercury vapor are transmitted to the cooling fluid and autoequilibration is established.

1,880,334. LUBRICATING DEVICE. GOTTLIEB STEINER, Solothurn, Switzerland, assignor to Scintilla, Aktiengesellschaft, Solothurn, Switzerland. Filed July 6, 1927, Serial No. 203,854, and in Switzerland May 6, 1927. 1 Claim. (Cl. 123—149.)



In a magneto-electric ignition apparatus, an end plate for said apparatus supporting a stub shaft for a distributor gear, a lubricating device for the stub shaft comprising a felt strip impregnated with lubricant, the upper part of said strip being arranged in said stub shaft for lubricating its bearing surface and the lower part of said strip being in the lower part of said housing where excess oil collects, and a slotted retaining plate for holding said felt strip within the end plate.

1,880,335. INDIVIDUAL MAUSOLEUM. LE ROY C. STEPHENS, Cheyenne, Wyo. Filed Sept. 5, 1931. Serial No. 561,440. 1 Claim. (Cl. 72—7.)

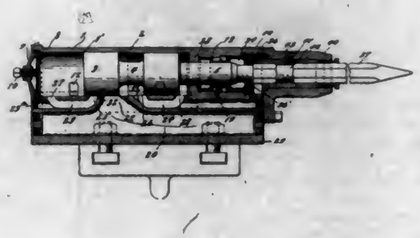


An individual mausoleum comprising a box having the inner surfaces of its upright walls provided with recesses and shoulders immediately below the recesses, a lid resting upon the shoulders, sealing material contacting with the lid and inserted in said recesses, a ledger plate resting upon said walls, and anchoring rods embedded in the ledger plate and extending downwardly therefrom, the lower ends of the anchoring rods being provided with hooks embedded in said sealing material within said recesses.

1,880,336. METHOD FOR REDUCING THE PERCENTAGE OF NICOTINE CONTAINED IN RAW TOBACCOS, INTERMEDIARY PRODUCTS, AND TOBACCO PRODUCTS READY FOR USE. ADOLF WENUSCH, Vienna, Austria, assignor to General-Direktion Der Osterr. Tabakregie, an Austrian Government Department at Vienna. Filed Dec. 26, 1930, Serial No. 504,882, and in Austria Dec. 27, 1929. 1 Claim. (Cl. 131—6.)

A process for reducing the percentage of nicotine contained in raw tobacco, intermediary products and tobacco products ready for use, which comprises passing heated air through tobacco until it has reached a temperature of approximately 100° C., and then passing superheated steam through the tobacco.

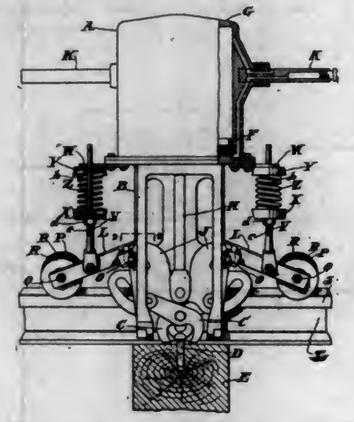
1,880,337. PRESSURE FLUID OPERATED IMPLEMENT. OLIVER O. APP, New York, N. Y. Filed July 31, 1926. Serial No. 126,170. 4 Claims. (Cl. 121—11.)



1. A fluid pressure operated implement comprising a cylinder, a piston operably mounted in the cylinder, a valve housing in front of the cylinder having a valve chamber coaxial with the cylinder and air ports communicating therewith, said valve chamber having sections of different diameters, air ducts having passages leading from a source of fluid under pressure to a port in the valve chamber and from a port in the valve chamber to the cylinder, a valve slidably mounted in the valve chamber having sections corresponding in diameter to the sections of the valve chamber and a reduced central portion uniting the sections, the reduced portion of the valve being adapted to overlie the port in the valve chamber communicating with the passage leading from the source of fluid under pressure to the valve chamber and the port in the valve chamber communicating with the passage leading from the valve chamber to the cylinder, and a tool extending into the valve chamber and adapted when a force is exerted thereon to move the valve against the unbalanced force acting on the sections thereof.

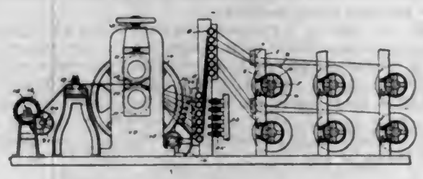
1,880,338. CARRIAGE FOR SPIKE DRIVERS. IRVING NELSON BENSON, Melrose, Mass., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 12, 1929. Serial No. 413,637. 5 Claims. (Cl. 254—18.)

1. In combination with a spike extractor having a frame, of a pair of wheels for the extractor, arms pivoted to the frame and forming mountings for the wheels, rods secured at one end to the arms and being guided at



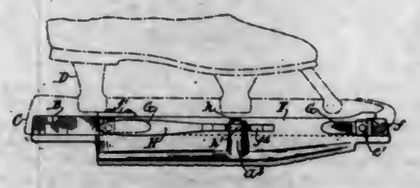
their other ends by the frame, and springs on the rods acting against the frame to lift the extractor relatively to the wheels.

1,880,339. MANUFACTURE OF PAPER BOARD. LAWRENCE W. CASE, Highland Park, and HAROLD E. CUDE, South Manchester, Conn., assignors to Case Brothers, Inc., Manchester, Conn., and Case & Marshall, Inc., East Hartford, Conn. Filed Apr. 24, 1931. Serial No. 532,428. 7 Claims. (Cl. 154—37.)



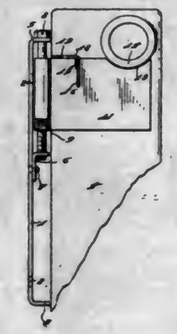
1. The combination in a machine for forming board of a plurality of plies of adhesive coated fibrous material, of friction bars, pressure cylinders for pressing the plies together, said bars and cylinders being so related that the sheets travel upwardly from the former to the latter, means for showering the upwardly traveling plies between the bars and cylinders, with water and rolls adjustably mounted between said bars and cylinders for limiting the amount of free water carried upward by the traveling sheets.

1,880,340. ICE SKATE WALKER. PHILIP G. COLE, Irvington-on-the-Hudson, N. Y. Filed Mar. 19, 1932. Serial No. 599,895. 8 Claims. (Cl. 208—184.)



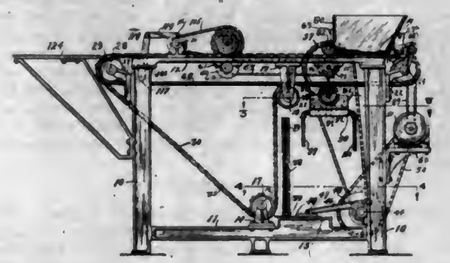
1. A skate walker or the like, comprising a sole or tread portion, a longitudinally extending abutment supported on the upper side of the tread portion and in proximity to the longitudinal center line thereof, and clamping means mounted on the tread portion and extending longitudinally of the abutment for lateral movement with relation thereto for clamping therebetween the blade of an ice skate.

1,880,341. LOCKING MECHANISM FOR RADIATORS. ANTHONY E. DAVIS, Philadelphia, Pa. Filed Mar. 20, 1931. Serial No. 523,969. 3 Claims. (Cl. 248—17.)



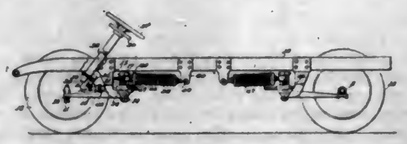
3. A radiator support adapted to pass between tubes of a radiator, and provided with a seat, a radiator adapted to engage said seat, and a locking member adapted to move down between juxtaposed tubes into locking engagement with said support, and to lock with the walls of juxtaposed tubes to prevent removal of the radiator.

1,880,342. MATCH MAKING MACHINE. PERRY T. DENMEAD, Akron, Ohio. Filed May 19, 1930. Serial No. 453,817. 11 Claims. (Cl. 93—2.)



1. In a device of the character described, means to hold a cover blank, means to select stick matches in a parallelly arranged row and present the same to said cover blank and means to adhesively secure the matches to the blank.

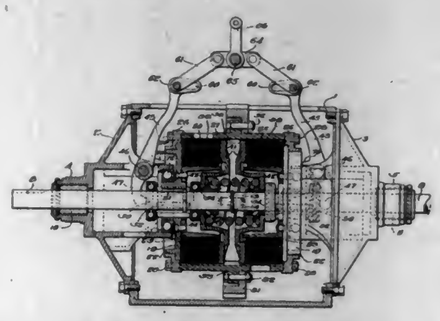
1,880,343. MEANS FOR ADJUSTING VEHICLE SPRINGS. WILLIAM C. DUNN, Chicago, Ill. Filed May 31, 1929. Serial No. 367,261. 5 Claims. (Cl. 267—20.)



2. In combination a vehicle frame, spring suspension therefor disposed below said frame, said suspension embodying a lever, a spring connected with the lever and

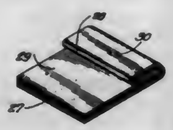
the vehicle, and means for varying the stress of said spring from a point remote therefrom, the said means embodying gear mechanism for varying at will the point of connection of the spring with said lever.

1,880,344. DRIVING CLUTCH FOR TRACKLAYING TRACTORS. JOHN S. FRANCO, Milwaukee, Wis. Filed Oct. 12, 1929. Serial No. 399,215. 3 Claims. (Cl. 180—9.2.)



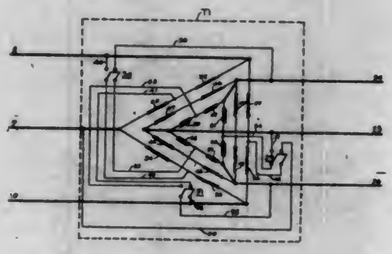
2. A clutch mechanism comprising, in combination, a housing including end members having bearing means thereon, a pair of shafts respectively journaled in said bearing means, said end members having inwardly directed portions co-axially arranged with respect to said shafts, bearings on said inwardly directed portions, a cylindrical clutch driving member journaled in the housing, clutch driven members, one secured to each of said shafts and each having a flange extending within said bearings whereby the inner ends of said shafts are supported, sets of driving and driven clutch discs operatively connecting the driven clutch members with said driving member, clutch plates loosely mounted on adjacent ends of said shafts and bearing against said discs, and means including a plurality of pins extending through apertures in said clutch driven members from outside said cylindrical clutch driving member to the inside thereof for controlling said clutch plates.

1,880,345. PAPER NAPKIN. GEORGE H. GARDNER, Chicago, Ill., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Feb. 3, 1930. Serial No. 425,435. 3 Claims. (Cl. 206—57.)



1. A folded paper napkin for dispensing from a dispensing machine, said napkin comprising a multi-ply body portion and a single shorter tab portion folded thereagainst, said napkin being formed from a rectangular sheet initially folded along parallel lines in zig-zag fashion, the resulting fan-fold sheet being then folded along a medial line transversely of the initial lines of fold and the folded end thus formed being then folded along a non-medial line to lie against the body portion.

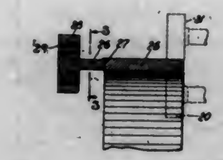
1,880,346. METHOD OF VARYING ELECTRICAL CAPACITY. FRAZER W. GAY, Newark, N. J. Filed Sept. 14, 1931. Serial No. 562,645. 12 Claims. (Cl. 172—246.)



1. In combination, a three phase power transmission system having primary and secondary circuits, transformer means connected in said transmission system, said transformer means having a primary winding with two winding sections connected in series across one phase of the primary circuit of said three phase system, a secondary winding having two winding sections connected in series across the secondary circuit of said phase of said three phase system and a capacity consisting of two condensers connected in series across the secondary circuit of said phase of said three phase system, and switching means connected to said transformer means for simultaneously switching each of said winding sections and each of said condensers to a different phase position.

10. In a system of the character described, a three phase power circuit, a plurality of similar condensers, respective pairs of said condensers being connected in series across respective phases of said circuit, and switch means connected to said circuit and arranged on closing to change the phase position of each condenser and to connect respective pairs of said condensers in parallel across respective phases of said circuit.

1,880,347. METHOD OF GRINDING BEARING RACES. KARL L. HERRMANN, South Bend, Ind., assignor to The Bantam Ball Bearing Company, South Bend, Ind., a Corporation of Indiana. Filed Sept. 8, 1931. Serial No. 561,599. 8 Claims. (Cl. 51—278.)



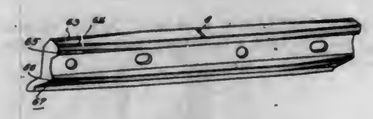
1. In a grinding machine for finishing a bearing ring, supporting means for a ring to be ground on one of its cylindrical faces comprising, a plurality of lugs attached to one side face of said ring whereby the inner and outer cylindrical faces of said ring are spaced from the head plate of said machine and are entirely exposed during the grinding operation.

1,880,348. FISHING ROD. LEAVITT J. LANE, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, a Corporation of Maryland. Filed June 13, 1930. Serial No. 460,941. 2 Claims. (Cl. 43—18.)



1. A one-piece metal fishing rod having a portion of uniform diameter extending for a substantial distance from the butt, the remainder of the rod tapering toward the tip.

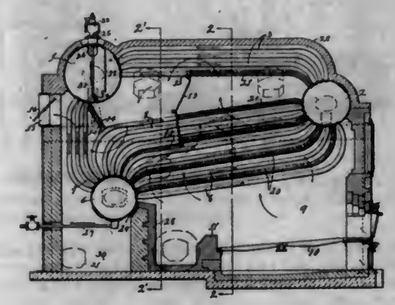
1,880,349. METHOD OF REPAIRING RAIL JOINT BARS IN TRACK. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Aug. 14, 1930. Serial No. 475,173. 1 Claim. (Cl. 29—169.)



The method of repairing a worn rail joint in track, consisting in cutting off substantial amounts of metal, including part of a fishing surface, from the end portions only and lengthwise of at least one of the top and bottom members of the bars and thereby substantially reducing in width fishing contact between the bars and the rail ends at the end portions at least of the joint.

1,880,350. WATERTUBE BOILER. IVAR L. LANGVAND, Barberton, Ohio, and HOWARD J. KERR, Westfield, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 30, 1929. Serial No. 396,041. 4 Claims. (Cl. 122—302.)

1. In a low head water tube steam boiler, a furnace, a steam offtake drum, a submerged intermediate drum located below the water level of the offtake drum and at the opposite side of the furnace, horizontally arranged steam circulators leading from the top of the intermediate drum to the steam space of the offtake drum and constituting the only direct connection between those two drums, a lower drum positioned at the offtake drum end of the furnace, a main bank of inclined steam generating tubes forming the roof of the furnace and directly connecting the lower and intermediate drums, and a bank of water circulator tubes directly connecting the offtake drum and the lower drum so that the horizontal distance between the drum centers of the main bank of tubes is much greater than the vertical distance, the steam circulators constituting a steam pass in which the steam generated in the main bank of tubes is subjected to drying action on its way to the



offtake drum, the tubes of the water circulator bank being bent away from a line connecting the centers of the offtake and lower drums to provide a lower drum tube seat portion extended at the top of that drum for the securement of the bent ends of the tubes of the main bank therein.

1,880,351. GOLF BAG SUPPORTING ATTACHMENT. LAWRENCE S. MCDONALD, Tacoma, Wash. Filed July 23, 1930. Serial No. 470,043. 1 Claim. (Cl. 150—1.5.)

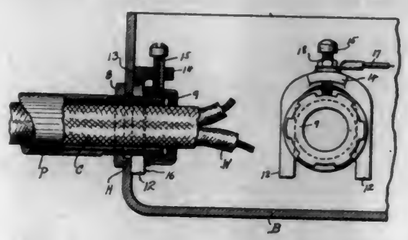


In combination, a golf bag having a sling strap, and supporting means for the bag comprising a pair of legs pivotally attached to the upper end of the bag at opposite sides thereof to swing outwardly at one side to support the bag in an upwardly inclined position, a cable guide loop attached to the bag a substantial distance below its upper end and on the table opposite that to which the legs open, cables attached to the legs and extended about opposite sides of the bag and through said loop and attached to the sling strap whereby the legs will be drawn against the bag incident to supporting the bag by the sling.

1,880,352. GROUNDING CONNECTER. ADNAH MCMURTRIE, New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed May 5, 1928. Serial No. 275,270. 7 Claims. (Cl. 247—1.)

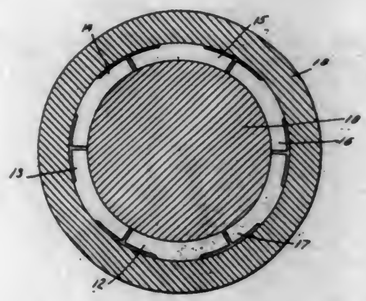
1. In combination with a conduit and box assembly including lock and anchorage nuts to fasten the pipe in an opening in the box wall, of a grounding connecter comprising a U-shaped member including legs spaced apart and straddling the pipe, and placed inside the box between one nut and the box wall, the legs being wedge-

shaped and reduced in thickness away from their ends, a screw which is threaded through the member and disposed substantially parallel to the legs and which is located at



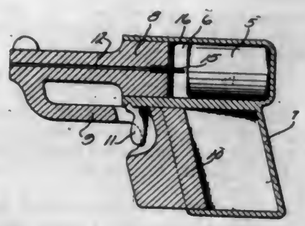
the thinnest ends of the legs, and the screw bearing against the last named nut and reacting therefrom to enforce sliding movement of the wedge legs against the box and nut.

1,880,353. JOURNAL BEARING. ANTHONY G. M. MICHELL, Melbourne, Australia. Filed Sept. 9, 1929, Serial No. 391,310. Renewed July 8, 1932. 11 Claims. (Cl. 308—73.)



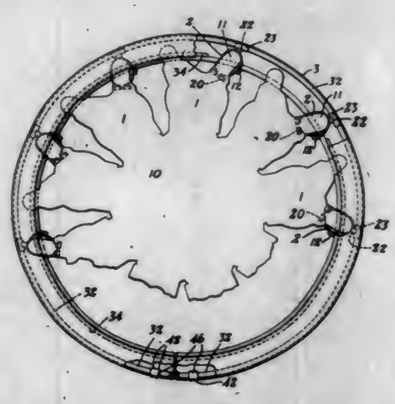
1. A hollow bearing pad unit of generally triangular configuration, for use in journal bearing housings, comprising a curved section adapted to engage the journal and form a sector of a cylindrical bearing, and an outer section spaced from and fixedly connected to said curved section, said outer section having a surface adapted to seat against the housing.

1,880,354. FLUID GUN. HERMAN C. MUELLER, Milwaukee, Wis. Filed July 30, 1931. Serial No. 553,950. 12 Claims. (Cl. 42—56.)



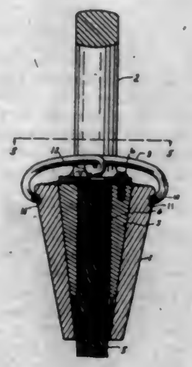
12. In a device of the character described the combination with a pair of cartridge compressing members, of a deformable tubular needle carried by one of said members and a cartridge positioned between said members and provided with a penetrable wall in the path of said needle.

1,880,355. ONE PIECE RING COWL. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Feb 24, 1931 Serial No 517,823 13 Claims (Cl. 244—31.)



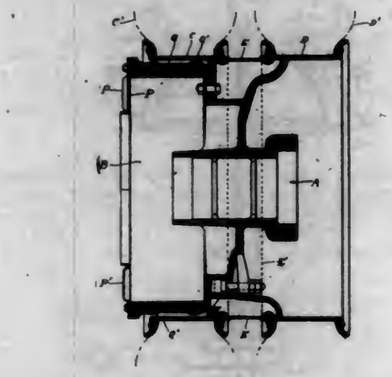
1. In combination with a split ring cowl adapted to be disposed about the radially projecting cylinders of an airplane motor, brackets adapted for securement to the cylinders, and each including an outwardly directed channel disposed in a circle common to the other channels, a split hoop secured to the inner side of the cowl, and received in said channels, and means to contract said hoop throughout its circumference, to grip the brackets and to retain the hoop in their channels.

1,880,356. COUPLING. EDWARD C. NOBLE, Houston, Tex. Filed Mar. 2, 1931. Serial No. 519,367. 1 Claim. (Cl. 24—126.)



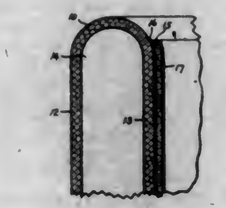
A coupling having an internally tapered sleeve; a plurality of internally serrated, externally tapered, and arcuate gripping wedges movable longitudinally and rotatable in said sleeve, each of said wedges having a pin; a connecting and guiding ring having radial slots in which said pins are slidable; and a removable resilient device engaging said sleeve and ring to hold said wedges in their active positions.

1,880,357. AUTOMOBILE WHEEL. ORREL A. PARKER, Cleveland, Ohio, assignor to The Parker Wheel Company, Cleveland, Ohio, a Corporation of Ohio. Continuation of application Serial No. 110,090, filed May 19, 1926. This application filed Oct. 28, 1930. Serial No. 491,676. 9 Claims. (Cl. 301—6.)



1. The combination with a wheel body and a pair of tire carrying rims arranged upon said wheel body, said body adapted by its rotation to deliver air radially between said rims, said rims being spaced laterally apart upon said wheel body, and means interposed between said rims to arrest the radial passage of air current therebetween.

1,880,358. DOUBLE-WALLED VACUUM RECEPTACLE. AURIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Filed July 24, 1929. Serial No. 380,542. 7 Claims. (Cl. 215—13.)



1. A double-walled vacum jar of breakable material provided inside with a lining of textile fabric which is covered with a hard outer shell composed of material applied to the fabric in plastic condition.

4. The method of treating a double-walled vacuum jar which comprises covering the inner wall with a textile fabric, and spraying the fabric with molten metal which adheres to the fabric and hardens to form a one-piece metallic shell.

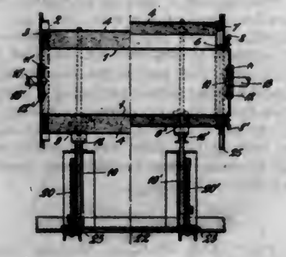
1,880,359. REFRIGERATING APPARATUS. DONALD E. RUTISHAUSER, St. Louis, Mo., assignor to Hussmann-Ligonier Company, St. Louis, Mo., a Corporation of Delaware. Filed Aug. 6, 1931. Serial No. 555,495. 10 Claims. (Cl. 62—89.6.)

1. In combination with a casing of a refrigerating apparatus, a brine-spraying system arranged within said casing, said brine-spraying system comprising an independent unit with relation to said casing and including housings at opposite ends of the casing and a housing in the lower portion of said casing through which air is circulated, means for placing said housings in communica-



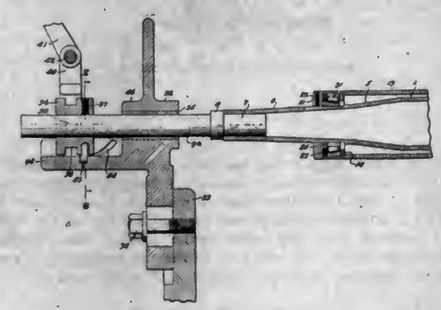
tion with each other, and brine-spraying devices for spraying chilled brine into said housings whereby the air circulated therethrough is refrigerated.

1,880,360. MACHINE FOR MAKING CONCRETE PIPES. ANTOINE SAPIN, Unieux, France. Filed Dec. 9, 1930, Serial No. 501,011, and in France Mar. 3, 1930. 10 Claims. (Cl. 25—30.)



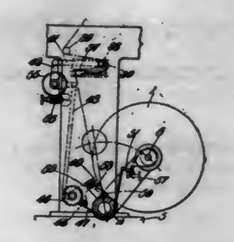
1. In apparatus for making moulded pipes, the combination of an outer mould cylinder, a full length core within said cylinder, means for rotating said core and means for relatively radially displacing said core and cylinder with their axes parallel.

1,880,361. INKING ROLLER. HANS C. SCHROEDER, La Grange, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Original application filed Mar. 12, 1928, Serial No. 260,979. Divided and this application filed Jan. 24, 1930. Serial No. 423,065. 4 Claims. (Cl. 101—348.)



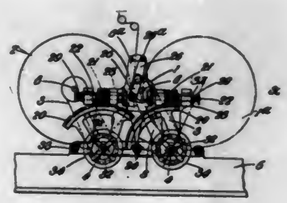
1. An inking roller or the like including in combination an inner tubular supporting member, a tubular roller medianly enclosing said supporting member, thrust bearings therebetween, and means acting on the supporting member for longitudinally reciprocating the roller.

1,880,362. PRINTING PRESS. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1928, Serial No. 290,906, and in Great Britain Jan. 13, 1928. 4 Claims. (Cl. 242—75.)



1. Web roll supporting and controlling mechanism including in combination a pair of angularly movable supporting arms for supporting a web roll, a pilot roller movable in accordance with the tension of the web fed from the web roll, a brake for the web roll mounted on one angularly movable arm and means for connecting the brake with the movable pilot roller including a cable connected at one end to the brake and at its other end to a support movable by the pilot roller and a take up member intermediate the ends of the cable and movable by movement of the arms to compensate for different positions of the arms to keep the cable taut.

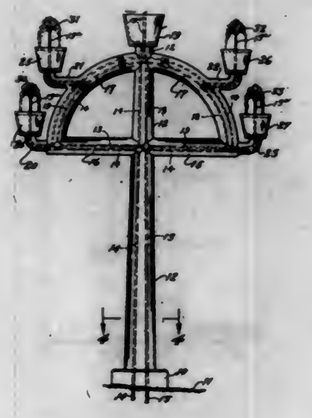
1,880,363. PRINTING PRESS. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1928, Serial No. 290,907, and in Great Britain Jan. 13, 1928. Renewed Mar. 3, 1932. 8 Claims. (Cl. 242—58.)



4. Web roll supporting mechanism including in combination relatively movable means for rotatably supporting a pair of web rolls from one of which a running web is fed to a printing press, means for moving one of the rolls into contact with the other while joining the running web to the other web roll and means for resiliently pressing the expiring web roll against said other web roll.

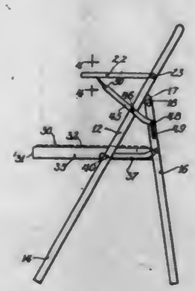
1,880,364. ORNAMENTAL MARKER. NATALE V. SESTITO, Cincinnati, Ohio. Filed Mar. 10, 1932. Serial No. 597,939. 8 Claims. (Cl. 47—38.)

1. An ornamental marker composed of concrete reenforced with a system of supply pipes and a system of drain pipes, means on the marker for supporting a plurality of flower holders, a spray head disposed above each
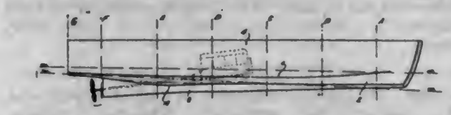


flower holder and being connected to the system of supply pipes and a connection between the bottom of the flower holder and the system of drain pipes.

1,880,365. FOLDING CHAIR. JOSEPH SILVERMAN, Chicago, Ill. Filed May 14, 1930. Serial No. 452,235. 11 Claims. (Cl. 155—145.)



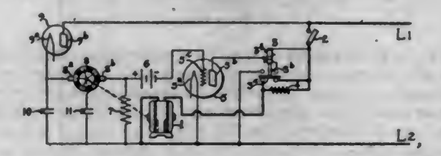
11. In combination, a chair frame, arm rest means pivoted to said frame and swingable into position extending from the front of the frame and into folded position with respect to the frame, leg means pivoted to the frame and swingable into position extending from the rear of the frame and into folded position with respect to the frame, and means having fixed pivotal connection with said frame and connected at opposite ends to said arm rest means and said leg means for swinging the leg means and arm rest means into extended and folded positions.

1,880,366. BOAT CONSTRUCTION. JOHN H. SMEDLEY, Babylon, N. Y. Filed Dec. 17, 1931. Serial No. 581,551. 4 Claims. (Cl. 114—66.5.)



1. A boat having a bottom formed without a bulge forward of the center of gravity, and having a bulge aft of the center of gravity, the leading and trailing surfaces of which blend with the adjacent surfaces of the bottom of the boat.

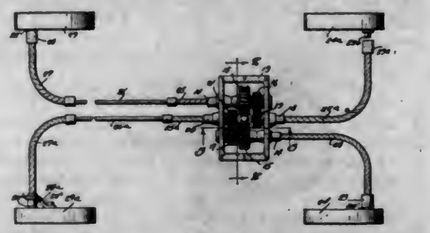
1,880,367. CIRCUIT CONTROLLER. CARROLL STANSBURY, Wauwatosa, Wis., and PRESCOTT CROUT, Schenectady, N. Y., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,636. 20 Claims. (Cl. 172—179.)



16. In a system for locking a part of a motor driven machine when said machine is in motion, in combination, a driving motor, an electromagnetically operated lock, an electron tube in circuit with a winding of said lock for controlling the latter and having a grid, an energy storage circuit, means for impressing a biasing voltage upon said grid and a commutator actuated by said motor and adapted when so actuated to supply periodic potential to said energy storage circuit, to effect discharge of said circuit and to impress the resultant transient potential upon said grid to thereby vary its voltage bias.

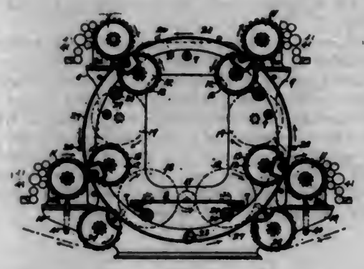
19. In a system of control for a device having a rotatable element, the combination with the rotatable element of such device, of an electro-magnetic winding and control means therefor including an electron tube connected in circuit with said winding, said control means further including an energy storage circuit and means dependent upon rotation of said element to supply a transient potential to said energy storage circuit, to effect discharge of said circuit and to impress the resultant transient potential upon an element of said tube.

1,880,368. MOTOR VEHICLE BRAKE ADJUSTING MECHANISM. HILDING G. SUNDQUIST, Springfield, Mass., assignor of one-fourth to JAN P. Clary, Hartford, Conn. Filed May 28, 1931. Serial No. 540,714. 8 Claims. (Cl. 188—196.)



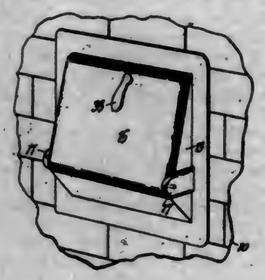
1. In vehicle brake adjusting mechanism, a gear box supported on a motor vehicle and flexible shaft connections between the gear box and the vehicle brake adjusting devices.

1,880,369. MULTICOLOR PRINTING PRESS. ALLAN F. TURCK, South Orange, N. J. Filed Aug. 6, 1931. Serial No. 555,451. 13 Claims. (Cl. 101—183.)



1. In a printing press, a plurality of printing couples disposed to present a circular printing path, and a rotatably mounted cylindrical sheet-carrier movable between the members of said couples and having its outer surface alined in said printing path.

1,880,370. FEED HOPPER FOR INCINERATOR FLUES. EDWARD BREITWIESER, Buffalo, N. Y., assignor to Buffalo Co-Operative Stove Co., Buffalo, N. Y., a Corporation of New York. Filed Nov. 22, 1930. Serial No. 497,461. 8 Claims. (Cl. 198—34.)



3. A feed hopper for incinerator flues comprising a frame adapted to be mounted on the flue and having a feed opening, a door pivoted on the front side of said frame to cover and uncover said feed opening, and a baffle arranged in the upper part of said feed opening and pivoted on the frame and having a lower wing projecting downwardly from its axis and an upper wing projecting upwardly from its axis and adapted to engage the top of said frame to limit the outward movement of said lower wing.

1,880,371. BOAT. ALANSON P. BRUSH, Detroit, Mich. Filed Mar. 31, 1930. Serial No. 440,211. 14 Claims. (Cl. 114—66.5.)

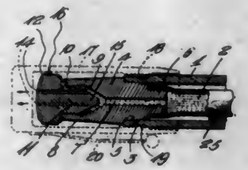


1. A hydroplane hull construction having a continuous generally forwardly and upwardly inclined planing surface on the bottom thereof constituting the sole support for the hull and arranged in two branches which are disposed transversely of each other.

1,880,372. PROCESS OF RECLAIMING VULCANIZED RUBBER FIBER PRODUCTS. ARTHUR W. BULL, Naugatuck, Conn., assignor to Rubber Regenerating Company, New Haven, Conn., a Corporation of Indiana. Filed Oct. 2, 1929. Serial No. 396,934. 8 Claims. (Cl. 18—52.)

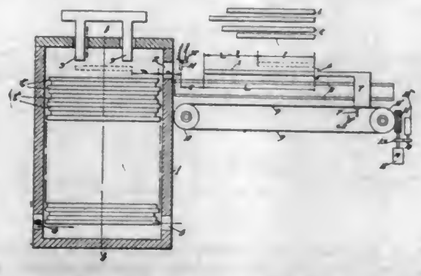
1. That process of separating the vulcanized rubber and the fiber from vulcanized rubber fiber products which consists in breaking the product into small pieces, separating the smaller particles of free rubber from the broken down product, mechanically destroying the adhesion between the fiber and the remaining vulcanized rubber in the presence of water, segregating and removing free pieces of rubber by settling of the rubber in the water, drying the residue of mixed fiber and rubber, and separating the remaining vulcanized rubber from the fiber.

1,880,373. FLUID SPRINKLING DEVICE. VINCENT J. CHRISTIE, Rapid City, S. Dak. Filed Jan. 20, 1931. Serial No. 510,003. 1 Claim. (Cl. 299—103.)



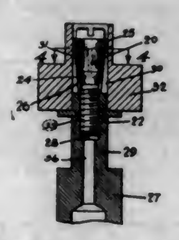
A fluid sprinkling device comprising a cylindrical member having a fluid reservoir connected with one end thereof, an axially extending bore in said cylindrical member, a bore of enlarged diameter in the other end of said member, a conical wall interconnecting said last mentioned bore with said axially extending bore, a sprinkler head comprising a cylindrical portion, a central projecting portion connected with said cylindrical portion and extending into said bore of enlarged diameter, said projecting portion having screw threads thereon engaging screw threads on the interior of said bore of enlarged diameter, a frusto conical shaped end portion on said central projecting portion for defining a passageway for fluid along said conical wall, and a plurality of passages extending from positions in the diverging wall of the frusto conical portion of said projecting end through the cylindrical portion of said sprinkler head for distributing fluid supplied from the reservoir connected with said cylindrical member.

1,880,374. AUTOMATIC POSITIONING MECHANISMS FOR BILLETS AND THE LIKE. FRANK P. DAHLSTROM, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 4, 1930. Serial No. 473,099. 27 Claims. (Cl. 214—18.)



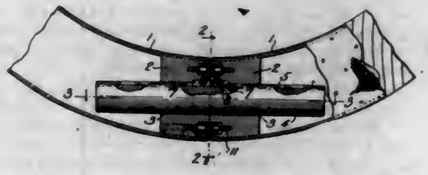
1. In mechanism of the class described, a charging member, means for reciprocating said member to produce, by its travel in one direction, the endwise charging movements of successively-presented pieces of different lengths, and automatic means for reversing said charging member in response to its arrival, on each charging movement, at a point whose distance from a predetermined point is substantially one-half the length of the piece being charged.

1,880,375. CLAMPING DEVICE. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 522,562. 9 Claims. (Cl. 85—1.)



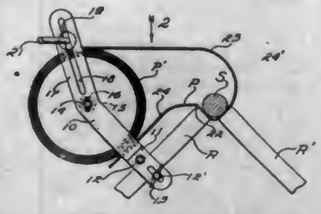
2. In an adjusting device, the combination comprising; a bolt having a conical circumferential groove between its ends; a sleeve telescopically engaging the bolt; and means extending into the groove of the bolt preventing removal of the sleeve from the bolt.

1,880,376. MANDREL JOINT. PERCY C. DUTTON, Nutley, N. J., and EARDLEY HAZELL, New York, N. Y., assignors to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Nov. 22, 1929. Serial No. 409,091. 6 Claims. (Cl. 18—41.)



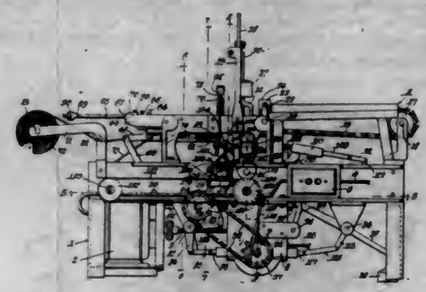
1. A joint for a toroidal mandrel having at least two curved sections comprising apertured members in the adjacent ends of two sections, a pin upon which the members are slidable, and means carried by the members and the pin for maintaining the sections in the same plane when juxtaposed and for permitting relative rotation of the sections when separated.

1,880,377. VALVE GRINDING MEANS. HAROLD I. DYER, Detroit, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed Mar. 14, 1930. Serial No. 435,892. 2 Claims. (Cl. 51—103.)



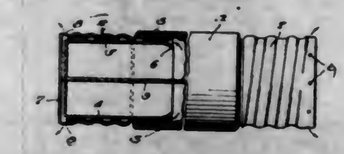
1. A valve grinding mechanism comprising means for supporting a valve in position for grinding, a pair of brackets secured to said means, a shaft secured to said brackets for rotatably supporting a continuous strip of low-friction web material and means including a roll, having a plurality of engaging elements for moving said strip between the supporting means and the stem of the valve.

1,880,378. BUTTER WRAPPING MACHINE. EVERETT E. EPLING, Arkansas City, Kans. Filed Dec. 16, 1929. Serial No. 414,488. 9 Claims. (Cl. 93—7.)



1. In a wrapping device, a movable carrier for the article to be wrapped, a movably mounted ram, means for moving the ram toward and away from the carrier, an endless conveyor constituting means for moving the article to be wrapped toward the ram and into position between the ram and the carrier, a shaft mounted for rotary oscillation, means for imparting rotary oscillation to the shaft, an automatically releasable clutch connection between the shaft and the conveyor and imparting step by step advancement to the conveyor, a grip mounted on the shaft and releasably engaging the article to be wrapped whilst the conveyor is moving the article into position between the ram and the carrier, the clutch and the grip embodying interengaging parts which advance and retract the grip as the shaft is oscillated, and means for interposing a wrapper between the article to be wrapped and the carrier.

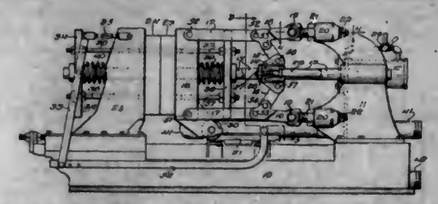
1,880,379. FUSE. JAY R. FOGAL, San Francisco, Calif. Filed Mar. 4, 1931. Serial No. 520,131. 5 Claims. (Cl. 200—131.)



1. A fuse of the character set forth comprising a body portion having internally and externally threaded end portions, a member positioned in each end in engagement with the internal threads to define a spiral passage, a cap engaging the external thread at each end of said body portion and having a plurality of vent ports establishing communication between said passage and the atmosphere, and a fuse link positioned within said body portion.

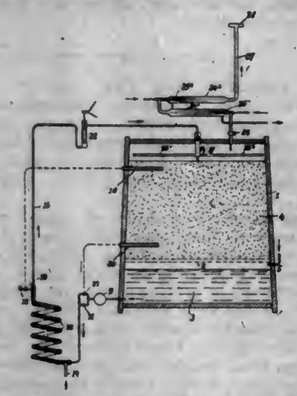
1,880,380. MOLD-SEPARATING DEVICE. CLAIR E. FRANTZ, Detroit, Mich., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1930. Serial No. 431,723. 2 Claims. (Cl. 22—92.)

2. A molding machine comprising a stationary mold, a moving mold, an air cylinder, a frame supporting said molds and cylinder, linkage connecting the moving mold with said air cylinder comprising a piston within said cylinder, a cross head connected with said piston and moved thereby, four links pivoted symmetrically to the moving mold, four similar links pivoted to the frame and to the first four links, a third set of four links pivoted to the second set intermediate their ends whereby a double



toggle is formed when the molds are in the closed position, and the molds are opened faster than the cross head moves when in the open position.

1,880,381. MANUFACTURE ON VINEGAR. HEINRICH FRINGS, Bonn-on-the-Rhine, Germany. Filed July 16, 1930, Serial No. 468,413, and in Germany May 6, 1930. 9 Claims. (Cl. 99—17.)



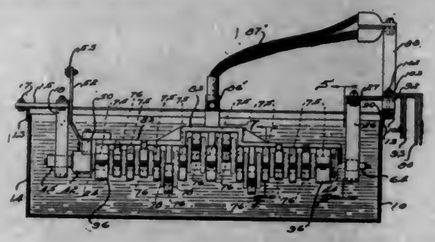
2. The process of manufacturing vinegar in a generator, comprising circulating and recirculating an infusion liquid through the generator filling, regulating the temperature of the liquid thus circulated, and independently controlling the rate of temperature regulation and the rate of circulation of the liquid in accordance with the temperatures in the vicinity of the inflow and outflow zones respectively of the filling.

8. Apparatus for manufacturing vinegar by the recirculation process, comprising the combination with a generator, of a fluid passage for withdrawing the mash from the lower portion of the generator and reintroducing the mash in the upper portion of the generator, a device operable for controlling the rate of flow of the mash, a heat exchange device for varying the temperature of the mash independently of the operation of said first named device, and a rotary distributing device in the upper portion of the generator connected with said fluid passage, said distributing device comprising a plurality of arms having delivering openings therein, whereby discharge of mash from said distributing device effects rotation thereof, and means for delivering mash from said passage to an increased number of said arms as the rate of flow of mash is increased.

1,880,382. METHOD AND APPARATUS FOR ELECTROPLATING. ROSNER A. GARLING, Lansing, and JOHN T. OTT, Detroit, Mich., assignors to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Apr. 20, 1931. Serial No. 531,811. 18 Claims. (Cl. 204—5.)

1. The method of electroplating a metal crank shaft constituting the cathode, which comprises extending the

anode around the bearing portions of the shaft, and moving the anode through the electrolyte while maintaining it in spaced relation to the shaft in the electrolyte.

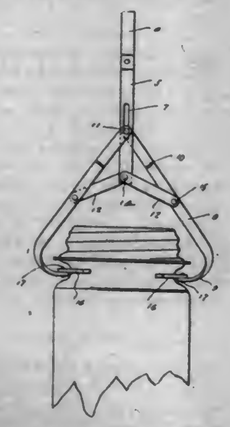


3. An appartus for electroplating a metal crank shaft constituting the cathode, which comprises a tank containing an electrolyte, a pivotal support for the shaft so positioned that the latter may be moved in the electrolye, an anode comprising a member exending about a portion of the shaft, means for maintaining the anode and shaft in predetermined relation and means for moving them through the electrolyte.

1,880,383. PROCESS FOR THE PURIFICATION OF FATS AND OILS. WILHELM GENSECKE, Gonzenheim, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 20, 1931, Serial No. 531,609, and in Germany May 2, 1930. 4 Claims. (Cl. 87—12.)

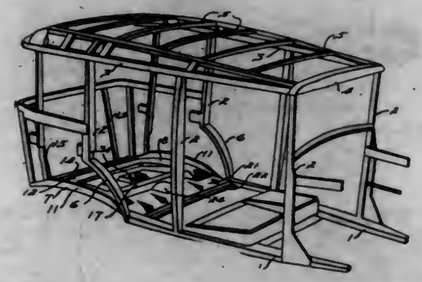
1. Process for the purification of animal or vegetable oil or fat material containing besides neutral oil or fat free fatty acid and coloring matter which comprises treating the material with concentrated alkali solution in quantity sufficient to neutralize the free fatty acid conent thereof but not more than about 5% in excess of the amount theoretically required and drying in vacuuo the fatty acid soap thereby formed, separating the dried fatty acid soap from the mixture, and thereafter treating, the soap-free mixture with dilute alkali solution whereby to separate coloring matter therefrom.

1,880,384. JAR LIFTER. ROBERT E. GRACE, Barberton, Ohio. Filed Apr. 16, 1932. Serial No. 605,695. 1 Claim. (Cl. 294—28.)



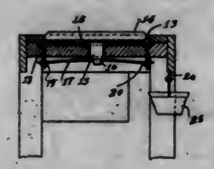
A jar lifter of the class described including an elongated bar having a longitudinally extending slot formed in an intermediate portion thereof, a pair of rods connected at one end by a pin which extends through the slot, the other ends of the rods being curved inwardly, arcuate jaws on the extremities of said other ends, and a pair of links pivoted to intermediate portions of the rods and pivoted to the end of the bar, said rods being offset at their ends adjacent the pin and having their other ends twisted, said rods, said link and said bar being formed of flat material.

1,880,385. PIECE KICK-UP AND SEAT PAN. OTTO F. GRAEBNER and JAMES VEHKO, Detroit, Mich., assignors to The Murray Corporation of America, a Corporation of Delaware. Filed Feb. 12, 1931. Serial No. 515,293. 15 Claims. (Cl. 296—28.)



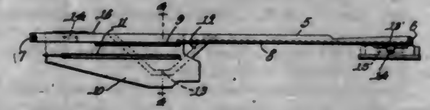
1. In automobile body construction the combination with body side sills extending rearwardly to a point in front of the rear wheels and axle, of an underframe member for supporting the body over the rear axle and wheels comprising a single metal stamping including upwardly offset extensions for said sills, a floor supporting portion and a rear seat supporting portion.

1,880,386. BAKER'S BENCH. JOSEPH GRAY, Brooklyn, N. Y. Filed Aug. 29, 1931. Serial No. 560,065. 4 Claims. (Cl. 45—26.)



1. A baker's bench comprising a table having a central opening, a platform forming a support for a dough receptacle rotatably arranged in said opening, yielding means supporting said platform, means for compensating differences in the load placed on said platform, means for bringing flour within convenient reach of the baker, and a water container suspended from the bench.

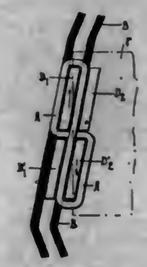
1,880,387. GRAIN PAN AND GRAIN SHOE. PERRY F. GRUVER, Gruver, Tex. Filed Aug. 25, 1930. Serial No. 477,707. 1 Claim. (Cl. 209—342.)



In a device of the class described, a frame, a grain pan supported by the frame, stub shafts extending laterally from the frame, roller bearing housings disposed at oppo-

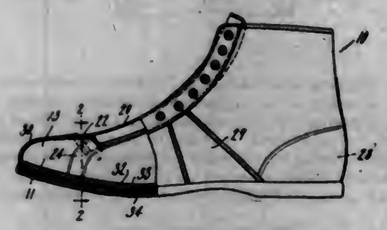
site sides of the frame near one end thereof, each of said roller bearing housings including a lower section and an upper section, there being lateral elongated openings formed in the sides of the housings to receive the stub shafts, roller bearing cages having roller bearings, mounted within the housings, shoes mounted on the roller bearings and engaging the upper sections of the housings to hold the shoes in proper alignment, and said shoes having openings to receive the stub shafts to connect the stub shafts and shoes.

1,880,388. ELECTRICAL COMMUTATOR MACHINE. GÉRARD GUÉRIN, Paris, France. Filed Apr. 7, 1930, Serial No. 442,354, and in France Apr. 13, 1929. 3 Claims. (Cl. 171—228.)



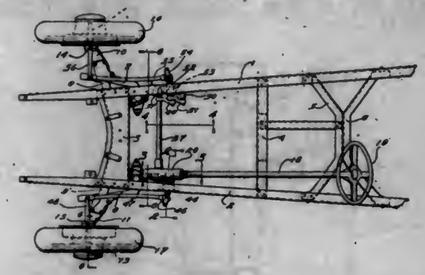
1. An electrical commutator machine, comprising a field magnet, an armature, teeth provided at the periphery of said armature and divided in equal parts by transverse channels, main windings arranged in the slots of the armature in combination with auxiliary short circuited windings arranged in said slots and said transverse channels, each of said auxiliary windings having the shape of a figure 8, the half loop of the 8 surrounding different parts of equal sections of the teeth, the parts of the main winding conductors located in the slot being adjacent to the opposite sides of each of the two half loops of the auxiliary winding, so that the halves of each loop of the auxiliary winding are subjected to identical field conditions when they pass under the pole pieces, and that the electromotive forces hereby induced in the two half loops are of opposite senses and compensate each other, while the E. M. F. induced in the said half loops by the reversed flux during the commutation in the main winding, are of the same sense and are added together.

1,880,389. FOOTWEAR. EUGENE C. HEILHECKER, Bristol, R. I., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Nov. 12, 1930. Serial No. 495,058. 3 Claims. (Cl. 36—45.)



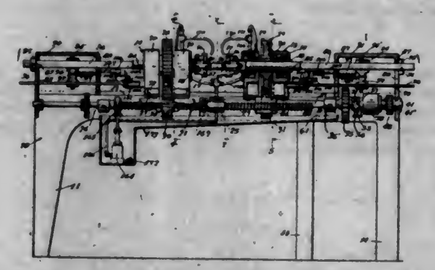
1. A shoe having a fabric upper wherein the quarters are extended forwardly to form a toe portion, said upper having a foot opening and oppositely disposed notches at the sides of said opening rearward of the toe covering portion, a tongue having its lower portion extended through said notches and connected to the rear of said toe covering portion, the lower edges of said tongue terminating substantially above the areas of the upper normally engaging the wearer's toes, and reinforcing stays at the margins of said opening, said stays being extended downward over the outside of the shoe adjacent the toe portion to the sole and being secured to the tongue and the upper adjacent the lower portion of said tongue.

1,880,390. STEERING GEAR. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Apr. 8, 1930. Serial No. 442,648. 4 Claims. (Cl. 280—93.)



1. In a vehicle, steering apparatus having a pair of individually operable steering arms, each pivotally connected with one of the front wheels of said vehicle, a rotatable steering column and a cam type actuating member constituting the sole gearing between said steering column and said front wheel for oscillating both of said steering arms simultaneously having a low pitch at its intermediate part and a higher pitch at its extremities, one of said arms being driven by the low pitch portion of said cam when the other arm is driven by the high pitch portion thereof and the latter arm being driven by the low pitch portion when the other arm is driven by a high pitch portion of said cam.

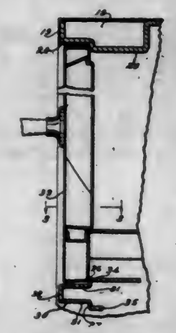
1,880,391. AUTOMATIC NIPPLE THREADING MACHINE. WILLIAM A. JENKINS, Wilmington, Calif. Filed Feb. 13, 1928. Serial No. 253,959. 7 Claims. (Cl. 10—92.)



1. In a nipple threading machine, a pair of nonrotating aligned coaxial plungers mounted for sliding movement toward and away from each other, pins removably seated in the inner ends of said plungers, the outer ends of which pins are diamond shaped and provided with sharp inclined edges that are adapted to engage the inner edges within the ends of an interposed nipple, sleeves loosely mounted on the inner portions of said coaxial plungers, thread cutting dies removably mounted on the inner ends of said sleeves, gear wheels carried by said sleeves, a shaft, pinions carried by said shaft and engaging said gear wheels, means including a pair of clutches for reversing the rotary motion of said shaft, bearings in which the sleeves are journaled, a shaft having right and left hand screw threads that respectively engage said bearings,

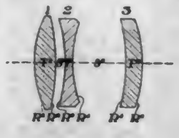
means for rotating said shaft first in one direction and then in the other direction and automatically acting means cooperating with the last mentioned shaft rotating means for simultaneously moving the non-rotating plungers toward and away from each other and in proper time relation to the reverse rotary movements imparted to the die carrying sleeves.

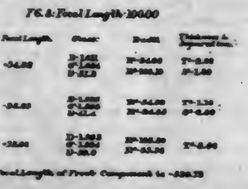
1,880,392. METAL CABINET. EMIL J. JONES, Jamestown, N. Y., assignor to Jamestown Metal Desk Company, Jamestown, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,789. 1 Claim. (Cl. 312—141.)



In a metal cabinet, walls defining an opening therein, inturned flanges forming pockets and terminating the walls of said opening, a plate attached to each of said opening walls, a flange on said plate engaged with and adapted to strengthen the walls of said pocket, an inwardly projecting shoulder on each of said plates, a further flange on said plate attached to said cabinet, one or more horizontal rails mounted transversely of said cabinet opening, said rails dividing said opening into a number of lesser openings, vertically opposed shoulders formed on said rails, said shoulders being correspondingly positioned to form with said plate shoulders a stop extending entirely around each of said lesser openings for the purpose of limiting the inward travel of a closure for each of the openings as well as constituting a dust protection for the interior of said cabinet.

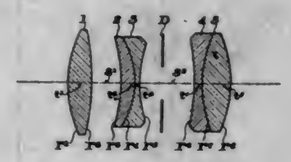
1,880,393. PHOTOGRAPHIC OBJECTIVE. FRED E. ALTMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 29, 1930. Serial No. 499,006. 2 Claims. (Cl. 88—57.)





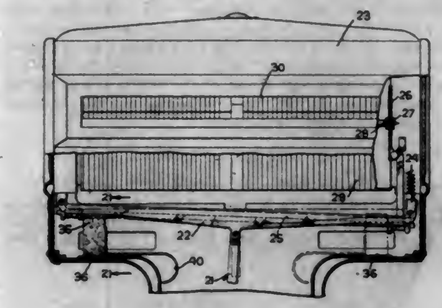
1. A photographic objective of the type having a dispersive component consisting of an outer positive lens and an inner negative lens spaced apart and a second component comprising a single positive meniscus lens, the front positive lens being of barium crown glass and the negative lens being of flint glass having a refractive index less than 1.60 characterized by the single positive meniscus lens being of glass having a refractive index less than 1.53 and having a focal length approximately three-quarters of the focal length of the objective.

1,880,394. PHOTOGRAPHIC OBJECTIVE. FRED E. ALTMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 11, 1930. Serial No. 501,529. 5 Claims. (Cl. 88—57.)



1. A photographic objective of the type comprising three air spaced components of which the two outer are positive and the inner is a negative doublet, and characterized by one of the positive components being a doublet comprising a negative element of glass having a refractive index for the D-line of less than 1.55 and a positive element of glass having a refractive index for the D-line greater than 1.60.

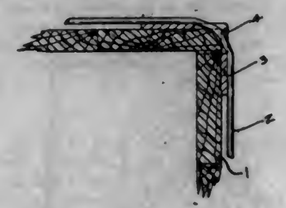
1,880,395. SHIPPING BRACKET. HARRY B. BARNETT, Cleveland, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 27, 1928. Serial No. 265,202. 7 Claims. (Cl. 265—27.)



1. A shipping attachment for weighing scales provided with a plurality of interconnected commonly movable elements, comprising members adapted to engage one of said elements to move said element to inoperative position, said element being connected to the other movable elements to move all of said elements to inoperative position, and a handle permanently provided on each of said members.

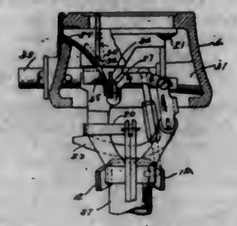
1,880,396. WIRE BOUND PACKING BOX. LEONIDAS H. BAUGHMAN, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 12, 1930. Serial No. 443,872. 2 Claims. (Cl. 217—69.)

1. A corner angle for wire bound boxes having portions lying along intersecting planes and an opening extending across the line of intersection of said planes, the surfaces of said corner angle at the ends of said opening being



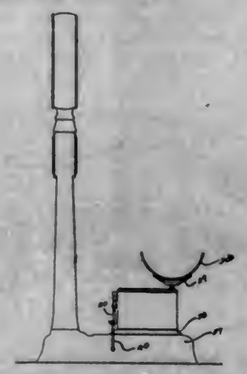
adapted for engagement by a wire lying within said opening, and preventing excessive penetration of said wire into said box.

1,880,397. WEIGHING SCALE. JOSEPH H. BEARD and HALVOR O. HEM, Toledo, Ohio, assignors to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Mar. 20, 1928. Serial No. 263,106. 10 Claims. (Cl. 194—56.)



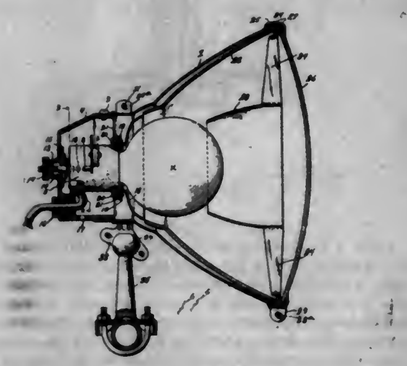
1. In a device of the class described, in combination, a member having a chamber with a stationary vertical front wall having a coin slot therein, a slanting floor and a back wall consisting of a hanging baffle directly back of the coin slot having its lower end in juxtaposition to said floor.

1,880,398. WEIGHING SCALE. HUBERT D. BENNETT, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,410. 7 Claims. (Cl. 265—1.)



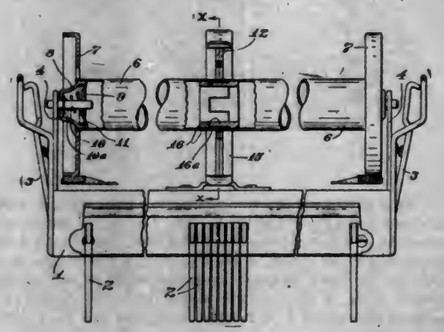
1. In a person weighing scale, in combination, load-receiving means and load-counterbalancing and indicating mechanism adapted for automatically weighing adults, said indicating mechanism including a chart bearing indicia corresponding both to weights of adults and weights of infants, an attachment for connection to said weighing and indicating mechanism, said attachment having a load-receiver adapted to support infants, and means whereby said load-counterbalancing and indicating mechanism is automatically placed in condition for infant weighing by the attaching of said attachment.

1,880,399. FLOODLIGHT. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Mfg. Co., Des Plaines, Ill., a Corporation of Illinois. Filed Mar. 17, 1930. Serial No. 436,338. 3 Claims. (Cl. 240—44.2.)



1. A lighting fixture comprising a casing having a main reflector therein, a hood removably secured to said casing, a lamp socket having ear portions extending outwardly therefrom, a collar member fitting over said socket and secured to said ear portions having rods extending rearwardly and through the back of said hood, registering guides in the back of said hood for slidably receiving said rods and maintaining said socket in said hood, and an inner reflector attached to the forward end of said socket and movable therewith.

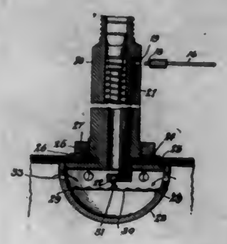
1,880,400. TUBE FRAME SPOOL. WALTER BIXBY, Boston, Mass. Filed April 10, 1931. Serial No. 529,126. 7 Claims. (Cl. 139—10.)



1. In a tube frame for axminster looms, the combination of a longitudinal carrier bar, spool bearing brackets secured thereto at opposite ends of the bar for rotatably supporting the outer end journales of a sectional spool, and spool bearing means secured to the bar intermediate of their bearings, said intermediate bearing means being formed to partly encircle adjacent end heads of the spool

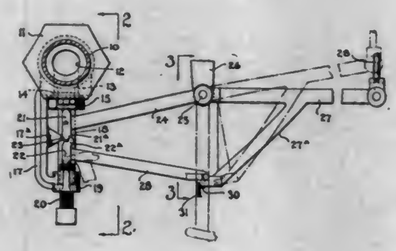
sections to form peripheral bearings permitting adjacent end heads of the spool sections to lie in lateral contact with each other without requiring a spacing interval between.

1,880,401. PRESSURE OPERATED SWITCH. EARL D. BONHAM, Renton, Wash. Filed July 28, 1930. Serial No. 471,302. 11 Claims. (Cl. 200—58.)



9. In a pressure-operated switch, a valve stem having a cup member with a plate for engaging the inner side of a tube, a resilient disc supported in the cup member with a side normally exposed to the air pressure in a tube with which the valve stem is connected, the other side of the resilient disc being acted on solely by fluid pressure between the resilient disc and the cup member, and a contact member at the first mentioned side of the resilient disc for engagement thereby.

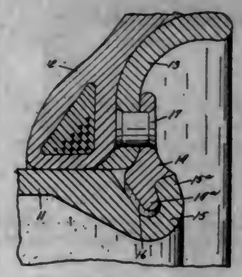
1,880,402. SAFETY VALVE. ROBERT H. BOWMAN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 8, 1930. Serial No. 494,274. 4 Claims. (Cl. 137—139.)



1. In a safety valve, the combination with a valve structure and a toggle normally holding the valve closed, of a lever arm extending from one member of the toggle, a support for said lever-arm normally holding the toggle in its operative position adapted to be displaced by the application of force of determinate magnitude, and a breakable member interposed between the lever-arm and its supporting member.

1,880,403. RIM. WINFIELD S. BRINK, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 444,018. 6 Claims. (Cl. 152—21.)

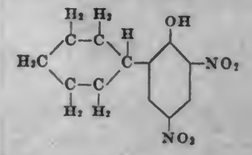
4. In combination, a pneumatic tire rim having an annular gutter at one edge thereof, an endless, tire-retaining side ring adapted to pass over said gutter and be carried on said rim, a split spring locking ring adapted to seat



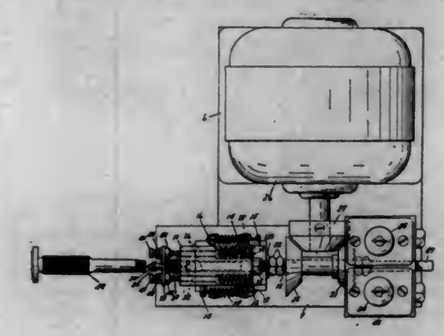
in said rim gutter, and means fixedly securing a portion of said locking ring to said side ring.

1,880,404. DINITRO - ORTHO - CYCLOHEXYLPHENOL. EDGAR C. BRITTON and LINDLEY E. MILLS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 29, 1930. Serial No. 485,295. 5 Claims. (Cl. 260—143.)

1. As a new compound, dinitro-ortho-cyclo-hexylphenol, a substituted cyclohexylphenol characterized by the formula



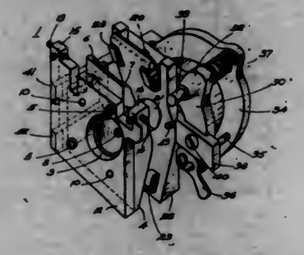
1,880,405. MACHINE FOR TESTING INTERNAL THREAD IN VALVE STEMS. LEWIS C. BROECKER, Bridgeport, Conn., assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed May 14, 1930. Serial No. 452,837. 9 Claims. (Cl. 33—199.)



1. Apparatus for testing the depth of the threads of internally threaded articles, comprising a guide, a slide yieldably positioned on said guide, a shaft journaled in said slide and movable axially with movement of the slide, a pair of spaced oppositely positioned cones on said shaft, a driving cone adapted to cooperate with

either of said cones upon movement of the slide, a chuck at one end of said shaft, a threaded spindle in said chuck, a plate resiliently positioned in relation to said slide, said spindle extending through said plate, a pair of contact screws carried by, but insulated from, said plate, a pair of contact pins yieldably positioned in said slide and cooperating with said contact screws, and signalling means connected to said contact screws and pins.

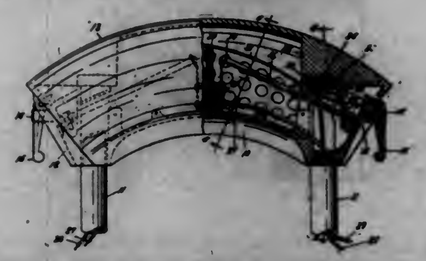
1,880,406. MOTION PICTURE APPARATUS. FREEMAN LEE BROWN, Wilmerding, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 28, 1928. Serial No. 322,368. 3 Claims. (Cl. 88—17.)



2. In apparatus for use in connection with a photographic film, a front gate-member having a face, the central portion of which has the surface of a cylinder and the end portions of which have the surfaces of planes tangent to and coextensive with said cylindrical surface at its extremities, a rear gate-member having a plurality of shoes to engage said front gate member on said end portions, and means for resiliently urging said rear gate-member toward said front gate-member.

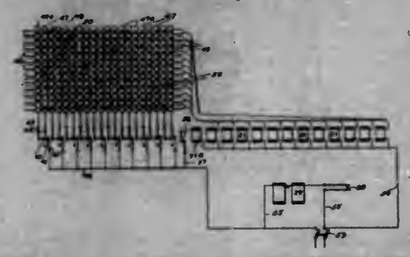
3. In film-handling apparatus, an aperture-plate, a shoe-carrying plate, means for slidably supporting said shoe-carrying-plate, spring means for urging said shoe-carrying-plate toward said aperture-plate, means for guiding said shoe-carrying-plate in its motion relative to said aperture-plate, means for limiting the distance between said shoe-carrying-plate and said aperture-plate to a predetermined value, means for locking said shoe-carrying-plate in a position away from said aperture-plate, means for laterally guiding the film in its passage over said aperture-plate, and means for resiliently clamping said film against said aperture-plate.

1,880,407. REPAIR VULCANIZER. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 30, 1929. Serial No. 336,076. 6 Claims. (Cl. 18—18.)



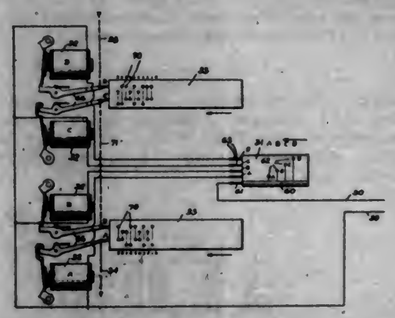
1. An electrically heated inside core or repair arm for vulcanizing tire repairs, comprising a heating unit frame, a pair of resistance bars mounted within said frame and a segmental core supported by said frame and enclosing said resistance bars whereby said core may be heated by radiation from said bars, electrical connections for transmitting power from an outside source to said resistance bars, a thermostatic heat controlling device interposed in the circuit of each of said resistance bars for independently controlling the power supplied to each bar, a pair of internal projections formed within the segmental core, each of said projections being formed with a recess and said heat controlling devices being housed within said recesses so as to be operated by the heat in the adjacent portion of said core.

1,880,408. ALPHABETICAL CODE PUNCHING DEVICE. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 28, 1925. Serial No. 17,685. 5 Claims. (Cl. 164—113.)



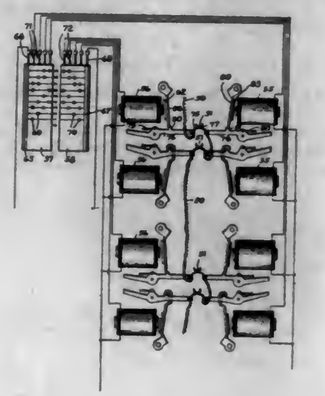
1. In an apparatus of the class described, the combination of a series of keys, a series of punches, a set of bus bars, a plurality of which are connected in pairs with each of a few of said keys, and means comprising another set of bus bars intersecting the first mentioned set of bars and connected to said punches so that different desired combinations of punches may be placed under control of any of the keys.

1,880,409. TRANSLATING DEVICE FOR ACCOUNTING MACHINES. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1927. Serial No. 222,464. 22 Claims. (Cl. 235—92.)



21. An accounting machine including data entering means operating in accordance with one type of character designation and entry receiving means operating in accordance with another type of character designation in combination with translating mechanism comprising reading-in mechanism for receiving designations of the one type from the data entering means and reading-out mechanism comprising a rotatable commutator with brushes shiftable thereon to different positions and controlled by the reading-in mechanism to translate the received designations into designations of the other type and enter them into the entry receiving means.

1,880,410. AUTOMATIC CONTROL SYSTEM FOR TABULATORS. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1927. Serial No. 222,466. 15 Claims. (Cl. 235—92.)

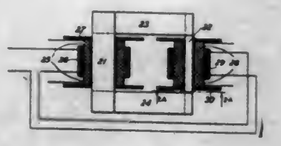


2. An automatic control system for record controlled machines including a first analyzing means and a second analyzing means for analyzing successive records, devices settable under control of one of the analyzing means according to the first record of a group, and devices settable under control of the other analyzing means for each subsequent record, and means conjointly controlled by said devices for modifying machine operation on a change of record group.

1,880,411. ULTRA-VIOLET SENSITIVE PHOTOGRAPHIC ELEMENT. ROBERT E. BURROUGHS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 6, 1931. Serial No. 535,576. 2 Claims. (Cl. 95—7.)

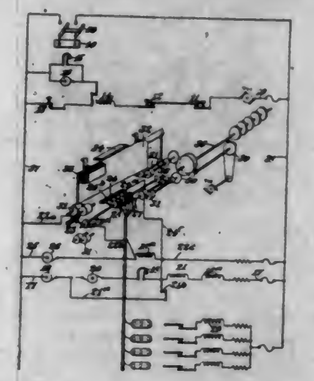
1. A photo-sensitive gelatino silver halide layer comprising ethyl-dihydro-collidine-dicarboxylate.

1,880,412. TRANSFORMER. EVERETT T. BURTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,546. 7 Claims. (Cl. 175—356.)



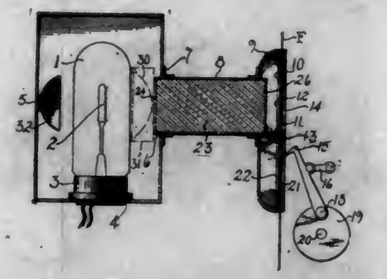
1. A transformer for impulse transmission systems having a core at least partly composed of highly permeable material, a primary winding, a source of signaling current of slowly varying intensity connected to the primary winding, a rigid element movably mounted on said core for supporting said winding on said core and adapted to protect said core from physical strain whereby the high permeability characteristic of the core material is preserved and a secondary winding mounted on said element arranged to receive from said source, a voltage wave constituted of short, sharp voltage impulses separated by relatively long intervals of zero voltage.

1,880,413. CONTROLLING MECHANISM FOR RECORD-CARD-CONTROLLED STATISTICAL MACHINES. CHARLES CAMPBELL, London, England, assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 17, 1926, Serial No. 155,538, and in Great Britain Jan. 9, 1926. 7 Claims. (Cl. 235—92.)



5. In a record card controlled statistical machine comprising means for successively feeding record and stop cards to analyzing brushes, a control circuit adapted to control said means, and a controlling device for said control circuit comprising a pair of electrical contacts adapted to cooperate with said successively fed cards whereby said contacts are separated by the record cards to break the control circuit, and to make contact to complete the control circuit when a suitably shaped stop card is present and contacts in the circuit which controls said feeding means opened and closed in accordance with the opening and closing of the control circuit, respectively.

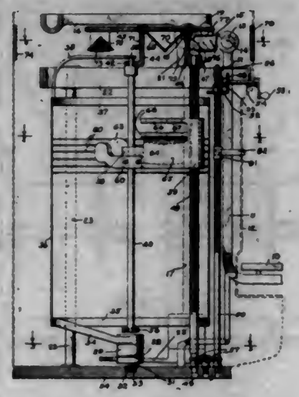
1,880,414. ILLUMINATING SYSTEM FOR PHOTOGRAPHIC APPARATUS. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 3, 1930. Serial No. 418,247. 2 Claims. (Cl. 88—24.)



1. In an optical apparatus, an exposure window, a source of light, an internally reflecting prism longitudinally placed between the source and the window with one end close to each, and a diffusing surface at each end of the prism.

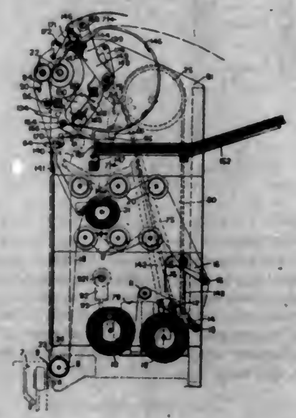
CARNEGIE LIBRARY OF ATLANTA

1,880,415. COMPUTING SCALE. FRED M. CARROLL, Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Oct. 22, 1927. Serial No. 227,988. 24 Claims. (Cl. 88—24.)



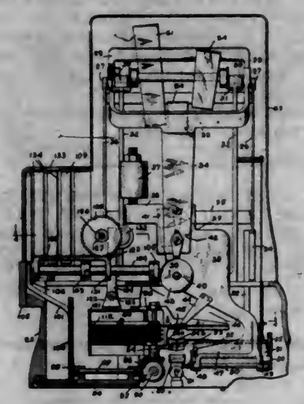
1. In a weighing scale, in combination, weighing mechanism, a hollow rotatable chart, and a selectively adjustable reflector positioned within said chart for reflecting an indication placed on said chart, said chart and reflector being relatively movable under the control of the weighing mechanism.

1,880,416. PRINTING MECHANISM FOR ACCOUNTING MACHINES. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 17, 1928. Serial No. 254,936. 23 Claims. (Cl. 101—96.)



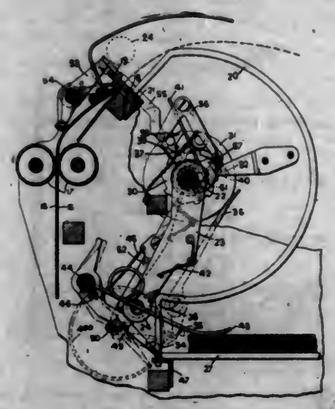
1. In a machine of the class described comprising in combination, item entering means for listing data upon a work sheet comprising a series of connected blank forms, means for automatically spacing said work sheet when a predetermined number of listings have been effected upon a form, and means for predetermining the number of forms to be printed.

1,880,417. COMPUTING SCALE. FRED M. CARROLL, Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Original application filed Oct. 31, 1927, Serial No. 229,895. Divided and this application filed Nov. 23, 1928. Serial No. 321,316. 18 Claims. (Cl. 235—85.)



1. In a weighing scale wherein a chart reading device is provided for movement in a certain path, a chart, means for moving said chart to a position alined with and at the side of the path of movement of said device, means for thereafter moving said chart substantially into the path of movement of said reading device to enable the latter to read the chart and a single manually manipulative member to actuate both means, said member being movable in one direction to operate said first-mentioned means and movable in another direction to operate said second-mentioned means.

1,880,418. STACKING MECHANISM FOR PRINTING MACHINES. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed Feb. 17, 1928, Serial No. 254,936. Divided and this application filed June 29, 1929. Serial No. 374,661. 12 Claims. (Cl. 164—49.)



1. In a machine of the class described comprising in combination with means for feeding a paper strip, a stationary arcuate-shaped frame, a frame carrying a roller

adapted to roll a portion of said strip over the stationary arcuate-shaped frame, and means for subsequently severing said strip whereby the sheet thus formed assumes a substantially horizontal stacked position.

1,880,419. CRYSTALLIZING LACQUER COMPRISING TRIBROMO. ANISOLE. ROBERT L. CHURCHILL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 13, 1932. Serial No. 586,461. 4 Claims. (Cl. 134—79.)

2. A crystallizing lacquer comprising cellulose acetate and 2:4:6-tribromo anisole.

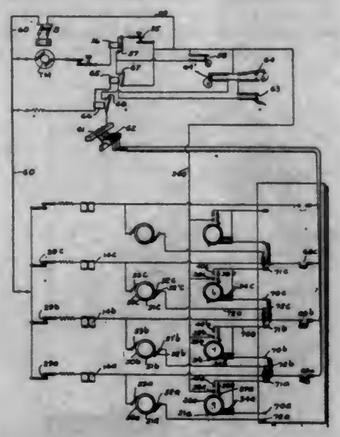
1,880,420. ACETONE SOLUBLE FORMYL ESTERS OF CELLULOSE AND PROCESS OF MAKING THE SAME. HANS T. CLARKE, New York, and CARL J. MALM, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 9, 1929, Serial No. 346,883, and in Great Britain and Germany Mar. 27, 1928. 10 Claims. (Cl. 260—101.)

4. An acetone-soluble cellulose formate directly prepared from substantially undegraded cellulose.

1,880,421. PROCESS OF MAKING DISULPHIDES OF MERCAPTOTHIAZOLES. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 19, 1930. Serial No. 496,820. 9 Claims. (Cl. 260—16.)

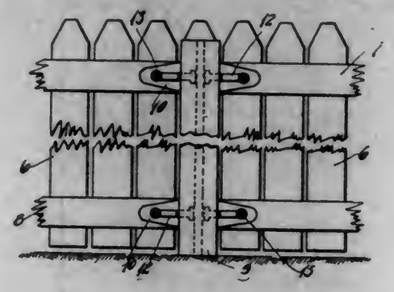
1. A method of manufacturing benzenoid thiazyl disulphides which comprises subjecting a mercaptothiazole to the action of dilute nitric acid.

1,880,422. ELECTRIC TRANSFER MECHANISM. GEORGE F. DALY, Johnson City, and RALPH E. PAGE, Binghamton, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Sept. 2, 1927. Serial No. 217,076. 5 Claims. (Cl. 235—133.)



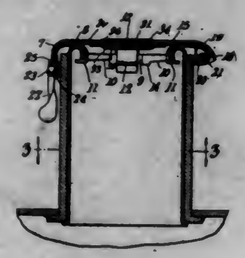
5. An electric transfer system for an accounting machine provided with accumulating wheels, comprising a commutator device driven by each accumulator wheel, a transfer control circuit, brushes normally in contact with said commutator devices and adapted to close breaks in the transfer control circuit while the related wheels are in the "9" position, means for closing the circuit, and additional means under control of said circuit for adding units simultaneously on the wheels in the "9" position and the next higher order wheel.

1,880,423. RAIL CONNECTION. NEWELL A. EDDY, Bay City, Mich. Filed May 18, 1931. Serial No. 538,112. 2 Claims. (Cl. 256—67.)



1. A stamped plate for connecting a wood fence to a metal post, opposed T-shaped strap sections stamped from said plate and adapted when bent to expose slotted openings to accommodate bolts for securing the plate to the fence, said straps embracing the post with the ends in interlocking engagement for rigidly securing the fence thereto.

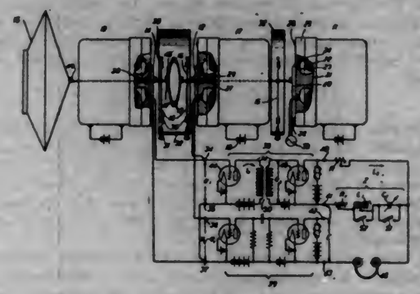
1,880,424. TANK CLOSURE. ALAN R. FERGUSSON, New York, N. Y. Filed Apr. 25, 1931. Serial No. 532,738. 23 Claims. (Cl. 220—32.)



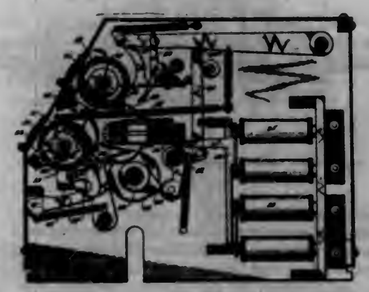
1. A tank closure, comprising a base ring provided with means for securing the same on the neck of a tank filling spout, and a cap pivoted at one side to said base ring and having dependent spring fingers arranged as a series extending about the periphery of the cap from said pivotal point and engageable with the base ring to peripherally yieldingly secure said cap in cooperating closed engagement with the base ring.

1,880,425. MEASUREMENT OF MECHANICAL IMPEDANCE. PAUL B. FLANDERS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1931. Serial No. 577,679. 5 Claims. (Cl. 73—51.)

1. A device for measuring mechanical impedance comprising a source of vibratory motion, a deformable member connected to said source, means for connecting to said deformable member a device to be measured, said member being adapted to act as a deformable coupling between said source and the device to be tested, and means for comparing the velocity of the device under test with the difference between this velocity and the velocity of said source.



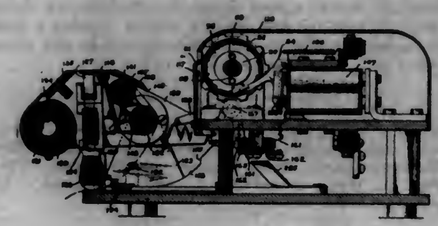
1,880,426. COUNTER FOR TABULATING MACHINES. EUGENE A. FORD, West Newton, Mass., and FREDERICK A. STORY, Endicott, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Apr. 17, 1923. Serial No. 632,611. 1 Claim. (Cl. 235—144.)



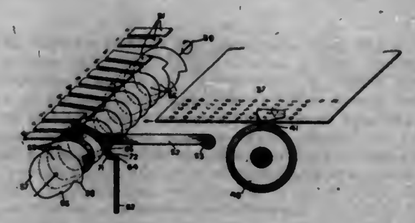
An accumulator for accumulating amounts from perforated record cards, said accumulator comprising a double set of register wheels, a single set of actuators for said wheels for operating both sets in an additive direction to enter the same amount simultaneously, driving means for said actuators, a single set of magnets adapted to be controlled from perforations in record cards, means controlled by said magnets for effecting driving connection between said actuators and said driving means and similar releasable connecting mechanisms intermediate each set of registering wheels and the actuators to permit resetting of one set with retention of the reading on the other set of wheels.

1,880,427. COUNTING DEVICE. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 22, 1927. Serial No. 241,791. 11 Claims. (Cl. 235—92.)

1. In a counting device including counter elements and driving mechanism therefor, an escapement mechanism comprising an escape wheel associated with the counter elements and a detent coacting therewith for normally holding said elements against movement, means for releasing said detent to permit a predetermined movement of said counting elements, and an escapement element opposite said escape wheel coacting with the same detent for limiting the movement of said counter element to said predetermined amount.

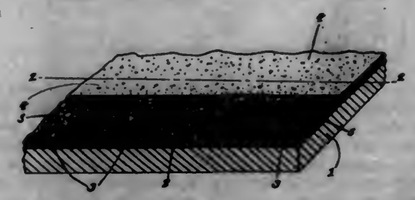


1,880,428. SORTING MACHINE FOR RECORD CARDS. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 20, 1929. Serial No. 348,395. 19 Claims. (Cl. 209—110.)



1. In a record card sorting machine comprising in combination with a plurality of card receiving pockets, a plurality of overlapping card sorting blades adapted to guide record cards to the desired card pocket, means for initially elevating the terminations of said blades and then separating the blades seriatim, and means under control of said record card for retaining the separation between the adjacent blades.

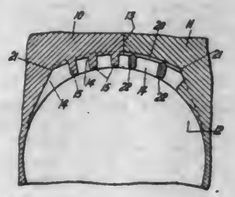
1,880,429. PROCESS OF PREPARING ROOF COVERINGS. FRANK H. FORD, Hattiesburg, Miss. Filed July 13, 1929. Serial No. 378,187. 2 Claims. (Cl. 108—6.)



1. A method of reclaiming old roofs comprising, the application of a combined cementitious and waterproof coating directly to and throughout the surface of the old

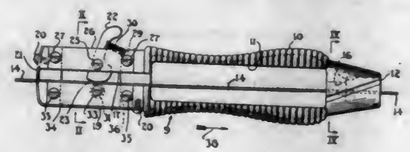
roof, firmly pressing unsaturated porous sheets of asbestos directly into said coating to secure the sheets with the roof, and then covering the sheets throughout with a combined cementitious and waterproofing coating of a fluidity to completely fill the interstices between, to thoroughly impregnate and to extend completely through the sheets to combine with the first coating thereby forming a rigid bond between the coatings to lock the coatings and sheets together in a solid mass to the roof.

1,880,430. TIRE MOLD. AUBREY R. FURNAS, Uniontown, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 14, 1931. Serial No. 515,780. 9 Claims. (Cl. 18—44.)



7. A tire mold comprising mating mold sections formed interiorly with a molding cavity, including isolated recesses defined by intervening ribs at the tread-molding region thereof, said recesses being interconnected for venting purposes by kerfs which transect said ribs and extend below the bottoms of the recesses, and fillers mounted in the kerfs in said ribs defining through passages below the bottoms of the ribs.

1,880,431. TOOL FOR FORCING AND DRAWING AN ELEMENT THROUGH CONDUITS. JOHN W. GOODALL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 15, 1930. Serial No. 475,514. 2 Claims. (Cl. 175—376.)



2. A tool adapted to grip a flexible element, said tool comprising a hollow handle having a slot extending along one side, portions of said slot being in different planes so that the wire can be inserted and removed laterally of the tool and yet is normally held in the tool by the different angles of the slot, a clamping device mounted within the handle including means for gripping an element extending therethrough when the handle is moved in one direction, means for releasing the element when the handle is moved in the opposite direction, and means for manually releasing the element without movement of the handle.

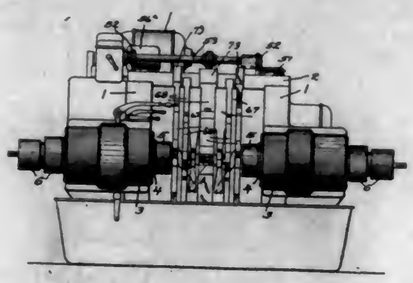
1,880,432. AZO DYESTUFF AND METHODS OF MAKING SAME. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,699. 19 Claims. (Cl. 260—97.)

1. The method of making an azo dye which comprises coupling a mono-hydroxydiphenyl with a diazotized aromatic amino compound of the benzene series, which diazotized aromatic amino compound contains a sulfonic acid group.

1,880,433. AZO DYE AND METHOD OF MAKING SAME. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Original application filed July 5, 1928, Serial No. 290,699. Divided and this application filed Oct. 4, 1929. Serial No. 397,449. 20 Claims. 260—97.)

1. The method of making an azo dye, which comprises coupling a mono-hydroxy-diphenyl with a diazotized aromatic amino compound and alkylating the hydroxyl group of the resulting azo compound.

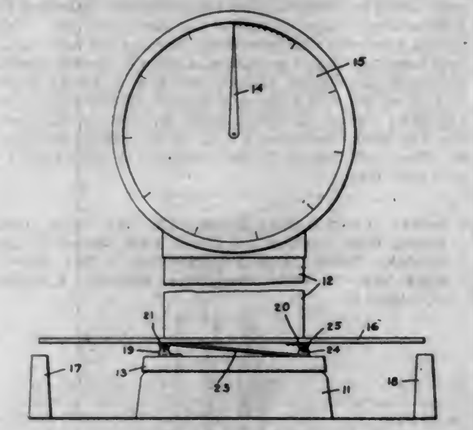
1,880,434. CRANKSHAFT LATHE. WILLIAM F. GROENE, Cincinnati, Ohio, assignor to The R. K. Le Blond Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 4, 1930. Serial No. 486,432. 17 Claims. (Cl. 82—9.)



5. In a crank shaft lathe, a series of moving tool carrying frames, a support for the work in front of said frames, spacing bars between said frames, and enclosing the spaces between frames and means for maintaining closed the spaces not occupied by the frames, between said spacing bars, said tool carrying frames arranged in pairs approaching the work from above and below, the means for closing the spaces between spacing bars comprising plates slidably held in the spacing bars, there being a plurality for each pair of tool carrying frames, one engaging each frame, and having an opening engaging about the other frame sufficient to allow for its feeding movement with relation to the other frame, and a third plate for each pair, fixed in position, and having openings to engage both frames of the pair with sufficient space to permit of the total feeding movement of each.

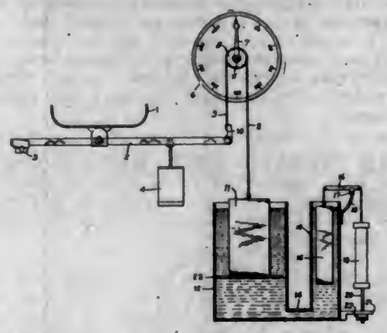
16. In a lathe of the character described, a rotary work holder, master shafts to the rear of and above and below the work holder, a third master shaft to the rear of the aforesaid master shafts, each master shaft having an eccentric surface, means for rotating said shafts in synchronism with each other and with said work holder, tool holders fulcrumed on the third master shaft eccentric surface and having rotary slidable bearings on the eccentric surfaces of the respective first mentioned master shafts and having extensions forward into proximity with the work holder, with means for holding tools to opposite sides of work held in said work holder, and means having oppositely directed threads connected with the respective tool holders to feed said tools toward and away from the respective sides of the work.

1,880,435. WEIGHING SCALE. CLIFFORD B. HASKINS, Maplewood, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 1, 1929. Serial No. 343,603. 18 Claims. (Cl. 265—27.)



1. In a weighing mechanism, a platform operatively connected thereto, an auxiliary load support attached to said platform and mounted thereon so as to tilt relatively thereto on different fulcrums under the influence and depending upon an unequal distribution of a load upon said auxiliary support.

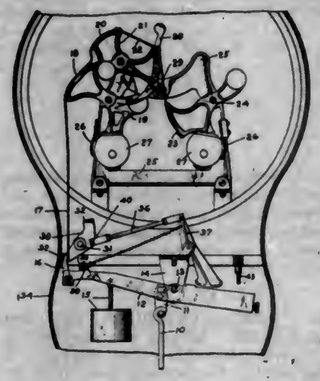
1,880,436. SCALE. CLIFFORD B. HASKINS, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed June 30, 1931. Serial No. 547,861. 3 Claims. (Cl. 265—43.)



1. In a force measuring machine, a force sustaining member, hydraulic counterbalancing means therefor including a vessel containing fluid and a weight buoyed up thereby, and means for compensating for variation in level of the fluid with variations in temperature, said means comprising a second vessel connected with the first vessel, a float immersed in the fluid in the second vessel, and a thermostat for varying the degree of immersion of said float to adjust the level of the fluid in both vessels.

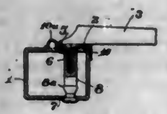
1,880,437. SCALE LOCK. CLIFFORD B. HASKINS, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed July 23, 1930. Serial No. 470,067. 7 Claims. (Cl. 265—62.)

1. In a scale, a scale lever and locking means therefor comprising a bell lever, a link connected thereto, and a pivoted element connected to the link, the link being in a line to exert a force for holding the bell lever in



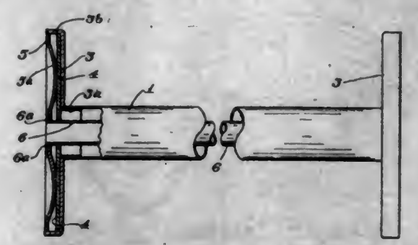
locking position when the pivoted element has been positioned in engagement with the scale lever to lock the latter.

1,880,438. TUBE FRAME. EDGAR F. HATHAWAY, Wellesley, and WALTER BIXBY, Boston, Mass. Filed Oct. 4, 1930. Serial No. 486,361. 9 Claims. (Cl. 139—10.)



1. In a tube frame the combination with a hollow carrier bar provided with aligned apertures in its front and rear walls, a tube carrying strip to which are securely united in parallelism a plurality of tuft tubes, said strip being provided with a rearwardly projecting non-rotatable screw integrally united with the strip arranged to pass through the aperture in the front wall, and means projecting through the aperture in the rear wall of the bar having threaded anchoring engagement with said screw to anchor the tube carrying strip in place.

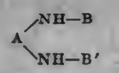
1,880,439. SPOOL. EDGAR F. HATHAWAY, Wellesley, and WALTER BIXBY, Boston, Mass. Filed Apr. 10, 1931. Serial No. 529,146. 5 Claims. (Cl. 242—123.)



4. A spool head embracing in its construction, a soft sheet metal disc provided with integral means for securing it firmly to the end of a spool barrel, and a hard sheet metal disc pressed against the face of said soft metal disc and integrally united therewith whereby the head is provided with integral attaching means and is prevented from deformation under the impacts and stresses of service.

1,880,440. NEW VAT DYESTUFFS OF THE ANTHANTHRONE SERIES. RUDOLPH HEIDENREICH, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1928, Serial No. 254,620, and in Germany Mar. 8, 1927. 14 Claims. (Cl. 260—61.)

12. As new compounds, the products of the probable formula:



wherein A represents an anthanthrone nucleus and B and B_1 represent anthraquinone nuclei which may be substituted by aroyl amino groups, said compounds being strongly colored powders, soluble in strong sulfuric acid and dyeing cotton from the hydrosulfite vat strong, clear dyeings.

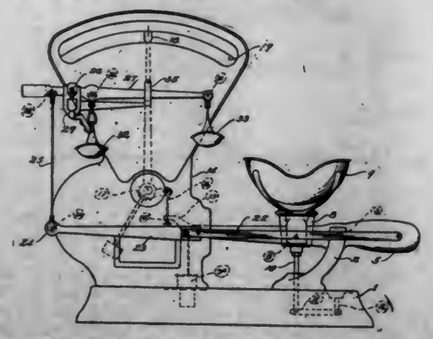
1,880,441. PHENANTHRIDONE AND PROCESS OF MAKING SAME. RUDOLF M. HEIDENREICH and PAUL TUST, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1930, Serial No. 431,331, and in Germany Mar. 1, 1929. 4 Claims. (Cl. 260—40.)

1. Process which comprises reacting upon a fluorenone with hydrazoic acid in the presence of a compound of the group consisting of strong sulfuric acid, sulfuric acid monohydrate and weak fuming sulfuric acid at a temperature below that at which thermal decomposition of the hydrazoic acid occurs.

1,880,442. PURIFICATION OF R-ACID. BERTRAM M. HELFAER, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 12, 1929. Serial No. 413,683. 15 Claims. (Cl. 260—155.)

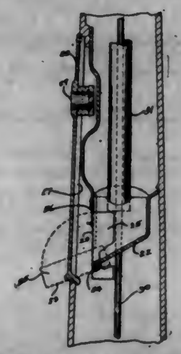
1. In the production of R-acid by a process comprising sulfonating beta-naphthol, diluting the sulfonation mixture with water, and saturating the dilute sulfonation mixture with a sodium salt while maintaining the dilute sulfonation mixture at a sufficiently elevated temperature to keep the sulfonic acids in solution, the improvement which comprises cooling the saturated sulfonation mixture to precipitate R-acid therefrom, and separating the precipitated R-acid from the mother liquor prior to the precipitation of a substantial amount of Schaeffer acid.

1,880,443. COUNTING SCALE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Oct. 31, 1928. Serial No. 316,135. 8 Claims. (Cl. 265—36.)



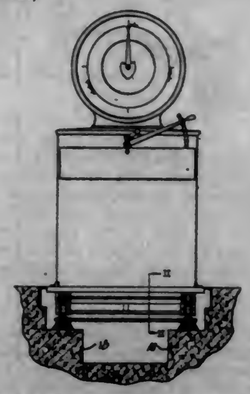
1. In a device of the class described, in combination, a base adapted to stand on a table, a main lever fulcrumed on one end thereof, a commodity receiver, means whereby said commodity receiver is supported on said lever, a housing mounted on said base, a projecting bracket secured to said housing, a ratio lever fulcrumed on said bracket, a plurality of ratio pans, said ratio pans being supported on said ratio lever, the leverage of the ratio pans having a fixed ratio to, and acting in opposition to said commodity receiver, an index pivotally mounted in said housing, a nose portion of said main lever projecting into said housing and operatively connected to said index, said index including a pendulum, a chart co-operating with said index and having a single indicium, said chart being located within said housing, a portion of said main lever extending beyond the nose portion, exteriorly of the housing and means including a link having pivotal bearings on either end thereof for connecting said ratio lever to said main lever.

1,880,444. COIN OPERATED SCALE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Nov. 26, 1929. Serial No. 409,955. 1 Claim. (Cl. 194—1.)



In a coin released weighing scale, in combination, an upwardly extending hollow standard and partitioning means within said standard forming a receptacle for coins, said partition means including an inclined chute positioned interiorly of said standard, said chute having an opening, and means for closing said opening, said closing means forming an extension of said interiorly disposed chute and extending through an aperture in said standard, when opened.

1,880,445. WEIGHING SCALE. HALVOR W. HEM, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Sept. 24, 1930. Serial No. 484,081. 4 Claims. (Cl. 265—71.)



1. In a weighing scale of the type described, in combination, a load supporting lever mechanism comprising a

plurality of levers, a plurality of brackets adapted to stand on a support and an adjustable member having a bearing for a pivot associated with each of said brackets, said adjustable members having threaded stems which are adapted to be screwed into said brackets and means for locking said members in adjusted position.

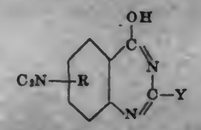
1,880,446. WEIGHING MACHINE. HALVOR W. HEM, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Feb. 16, 1931. Serial No. 515,989. 4 Claims. (Cl. 308—2.)



1. A weighing scale pivot adapted to be fixed in a cylindrical bore in a scale element comprising a knife edge, a body portion adapted to enter such cylindrical bore and having a thrust point coincident with the apex of the knife edge of said pivot and the axis of such circular bore.

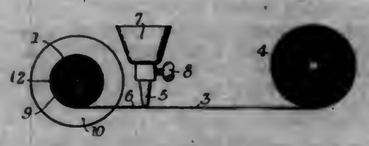
1,880,447. NITRO-HALOGENQUINAZOLINE AND THE PROCESS OF PRODUCING SAME. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 30, 1929, Serial No. 410,870, and in Germany Dec. 3, 1928. 9 Claims. (Cl. 260—32.)

1. The process which comprises causing a phosphorus halogen compound and a compound of the probable general formula:



wherein Y represents hydrogen or a radical of the benzene series, the NO_2 group stands in one of the positions 6 and 7, and wherein the benzene nucleus R may be further substituted by alkyl, to react upon each other in about equimolecular proportions at a temperature between about 80 and 140° C.

1,880,448. CORE FOR MOTION PICTURE FILMS. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 8, 1929, Serial No. 338,580, and in Great Britain Oct. 9, 1928. 1 Claim. (Cl. 206—59.)

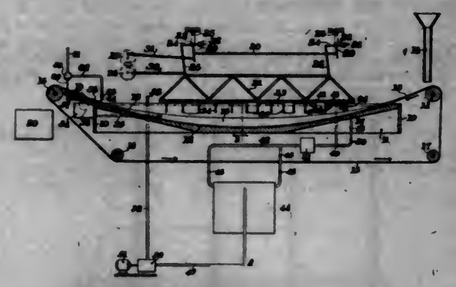


As an article of manufacture and sale, a roll film package including in combination a core comprising an uncoated strip of a composition including a cellulose derivative wound upon itself and the successive convolutions thereof integrally united together and a strip of motion picture film wound thereon in convolutions, the motion picture film comprising a support of the same cellulose derivative as the core and carrying a photographic emulsion layer.

1,880,449. TROPOCHROMIC COATING. KENNETH C. D. HICKMAN and LUDWIG A. STAIB, Jr., Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,784. 8 Claims. (Cl. 95—7.)

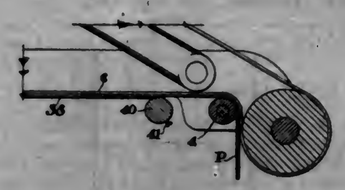
3. A tropochromic coating comprising a salt of thio-acetic acid and a metal salt which in the presence of free sulphur ions yields a colored sulphide, the first named salt being present in amount sufficient to furnish a quantity of sulphur ions adequate with the metal salt to produce a clearly visible image consisting of a colored sulphide.

1,880,450. PROCESSING APPARATUS FOR FIXING PHOTOGRAPHIC SHEET MATERIAL. KENNETH C. D. HICKMAN, CARLETON R. SANFORD, and WALTER J. WEYERTS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 4, 1931. Serial No. 542,054. 19 Claims. (Cl. 95—94.)



1. In a device of the character described, the combination with a trough and a conveying means adapted to move pieces of sheet material through a solution in said trough, of a bridge means having a cyclic movement with respect to said trough, and a ducking means, an agitating means, and a paddle means, all mounted on said bridge means.

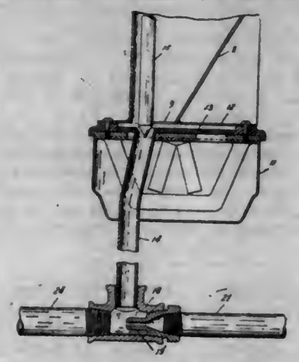
1,880,451. METHOD FOR FLATTENING PRINTS. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Original application filed Feb. 15, 1930, Serial No. 428,639. Divided and this application filed Apr. 22, 1931. Serial No. 531,956. 9 Claims. (Cl. 92—70.)



1. A method of flattening photographic prints including steaming one side of the print and protecting the other side of the print from steam.

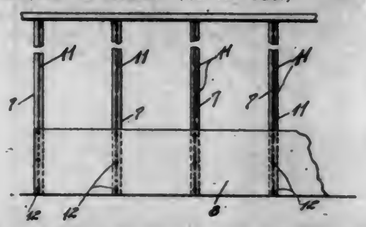
7. A method of flattening photographic prints including steaming one side of the print and protecting the other side of the print from steam and flexing the print about a roller while in a steamed condition.

1,880,452. APPARATUS FOR FEEDING POWDERED MATERIAL. RAY D. HULSLANDER, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 31, 1930. Serial No. 472,018. 9 Claims. (Cl. 221—118.)



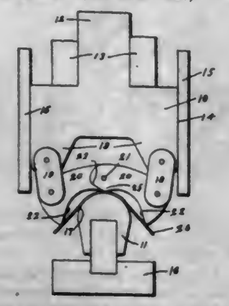
6. In combination, a hopper having a funnel-like discharge opening, a diaphragm closing said opening, a discharge tube piercing said diaphragm, and means for vibrating said diaphragm.

1,880,453. BUILDING CONSTRUCTION. LEOPOLD J. KANTZLER, Bay City, Mich. Filed Feb. 2, 1931. Serial No. 512,872. 3 Claims. (Cl. 72—115.)



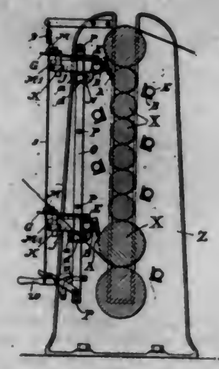
1. A metallic studding comprising a pair of formed sheet metal members welded together in spaced apart relation at the center and edges, and shaped to receive two individual wood filler members, the edges of said filler members being tapered and spaced inwardly from the edge of the sheet metal members, the spacing of said members at their edges being sufficient to permit nails to be driven into said filler members.

1,880,454. APPARATUS FOR MAKING BEARINGS. WILLIAM H. KLOCKE, Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1929. Serial No. 342,511. 3 Claims. (Cl. 153—49.)



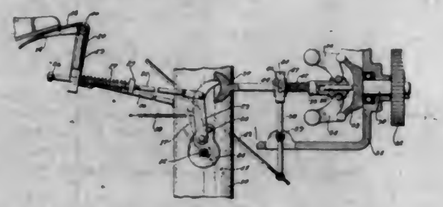
1. In apparatus of the class described, a core, formers for coacting with such core, a fixed pivotal connection between such formers, and cam means associated with such connection, said means being adapted to engage and hold a blank positioned between said connection and said core.

1,880,455. DOCTOR FOR CALENDERING MACHINES. HERBERT WARREN MASON, Wilmington, Del. Filed Sept. 29, 1930. Serial No. 485,244. 15 Claims. (Cl. 92—74.)



1. A doctor mounting for calendering machines including a support adjacent the rolls, a doctor blade adapted to engage a roll, a blade carrying member pivotally mounted in said support for swinging said blade toward or away from said roll, said blade carrying member comprising an angle bar and a blade retainer bar, and spring clamps yieldably holding said blade retainer bar to said angle bar.

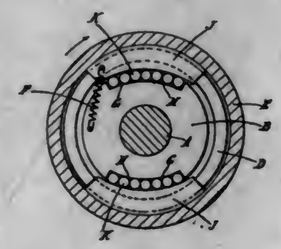
1,880,456. INTERNAL COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 19, 1929. Serial No. 387,020. 10 Claims. (Cl. 137—140.)



9. In an engine throttle control, a fuel feed pipe, a valve controlling the passage of fuel through said pipe, a pair of independently operating mechanisms for said valve, and adjustable means for limiting the movement of one of said mechanisms in a valve opening direction, the other of said mechanisms being freely operable at all times to open the valve any desired extent.

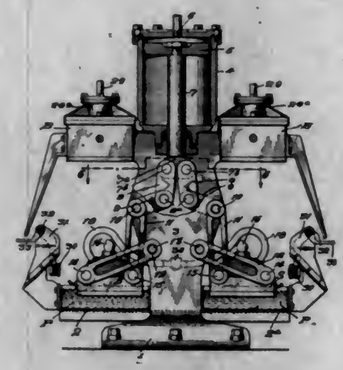
1,880,457. FREE-WHEEL MECHANISM FOR AUTOMOBILE USE AND FOR LIKE PURPOSES. DENYS WARWICK MORLEY and FRANK CLARK WELLER, Hong Kong, China. Filed Jan. 23, 1932, Serial No. 588,282, and in Great Britain Aug. 29, 1930. 1 Claim. (Cl. 192—44.)

A free wheel mechanism for automobile use and for like purposes, comprising a driving member, a driven member, and cam and wedge means located between them and adapted to operate by inertia on both sides of a central position, said means including a cam having symmetrical cam surfaces and mounted on said driving member, a plurality of wedge members located between said driving member and said driven member, a floating cage adapted to position said wedge members with regard to each other, spring means connecting one of said wedge members with



said cam to give a bias in one direction, and a plurality of roller members located between said cam surfaces and said wedge members.

1,880,458. MECHANISM FOR AND METHOD OF MANUFACTURING PULP ARTICLES. ALBERT W. MORRIS, Philadelphia, Pa., assignor to George E. Coblens, New York, N. Y. Filed Feb. 5, 1929, Serial No. 337,633. Renewed Feb. 13, 1932. 22 Claims. (Cl. 92—56.)



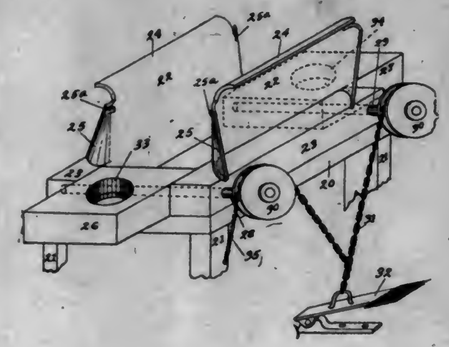
1. In the art of forming a pulp article, those steps which consist in forcing air through a moist mass of pulp while simultaneously heating the pulp by a source of heat independent of the air current, the temperature of said source of heat being higher than the temperature of the air current.

1,880,459. SUGARED DOUGHNUTS AND THEIR MANUFACTURE. FRANK ELLIS MORRIS, Philadelphia, Pa., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 338,039. 4 Claims. (Cl. 99—10.)

1. As an article of manufacture, a cake doughnut having its skin substantially hermetically sealed with sugar all over the doughnut, against outward passage of grease, as well as against drying out.

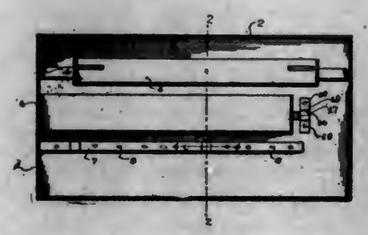
3. The method of sugaring a hot cake doughnut which comprises momentarily immersing it all over in a sugar solution, a short time after its withdrawal from the cooking grease, but while it is still hot, thus causing the solution to be drawn into the pores of the doughnut as the latter cools.

1,880,460. MACHINE FOR FORMING CARTONS. WARREN A. MORRIS, Wyoming, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Sept. 13, 1929. Serial No. 392,451. 14 Claims. (Cl. 93—2.)



1. In a machine for setting up platform cartons, means for holding the body of a carton in set up form comprising parallel forms, and means for positioning platforms recessed therein by an inward and downward motion.

1,880,461. RECEPTACLE WITH TRAY. WILLIAM R. MOYES, Rochester, N. Y., assignor to Union Tool Chest Company, Inc., Rochester, N. Y. Filed Sept. 17, 1928. Serial No. 306,894. 3 Claims. (Cl. 220—1.)

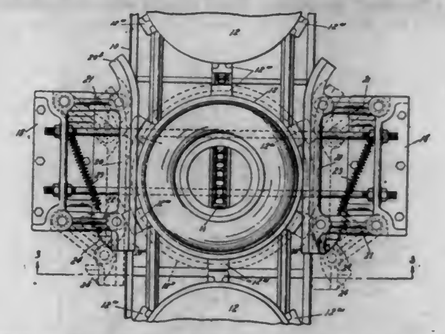


1. The combination with a supporting wall having a strip secured thereto and provided with a portion spaced from said wall, of a support having an anchoring portion depending therefrom and positioned behind such spaced portion of the strip, an intermediate tray supporting portion and a portion projecting above said tray supporting portion to engage the outer face of a tray supported on said supporting portion.

1,880,462. MOLD SEPARATOR. ANDREW B. MULLIN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 444,033. 6 Claims. (Cl. 18—2.)

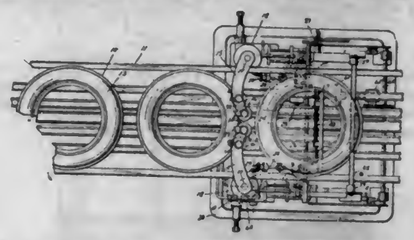
6. In combination, a continuously movable conveyor, molds removably carried thereon and comprising upper and lower portions, laterally extending lugs on said mold portions, means for lifting said upper mold portions from the lower mold portions, a pair of brackets at opposite sides of the conveyor, a pair of arms pivotally supported on each bracket, holders pivotally attached at the ends

of each pair of said arms, yieldable means normally urging said holders toward their innermost position and in a direction opposite to the travel of the conveyor, and



means on said holders engageable with said lower mold portion to retain it on the conveyor during the operation of the upper mold portion lifting means.

1,880,463. TIRE REMOVER. ANDREW B. MULLIN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 10, 1930. Serial No. 480,941. 16 Claims. (Cl. 18—2.)



6. In apparatus of the class described, means for continuously moving lower tire mold sections with the tires therein to and from a tire-removing station, means at said station for loosening the forward portion of the tire in its mold section, said means including a pair of swinging arms and fluid pressure means for controlling the swinging movement of said arms, additional means spaced from said loosening means for peeling the tire from the mold section, said means including a longitudinally ribbed shaft, means for continuously rotating said shaft, and means for simultaneously controlling the operative height of said tire loosening means and said tire peeling means.

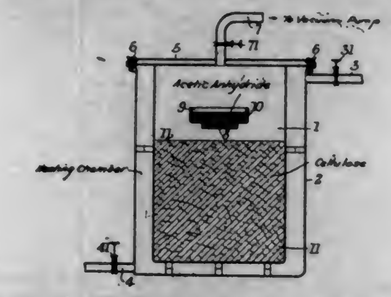
1,880,464. CELLULOSIC COMPOSITION OF MATTER CONTAINING ETHYL CYCLOPENTANONE CARBOXYLATE. THOMAS F. MURRAY, Jr., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,584. 4 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and ethyl cyclopentanone carboxylate.

1,880,465. CELLULOSIC COMPOSITION OF MATTER CONTAINING BENZYL ANILINE. THOMAS F. MURRAY, Jr., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,585. 4 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and benzyl aniline.

1,880,466. PROCESS OF MAKING CELLULOSE ACETATE WITH VAPORIZED ACETYLATING AGENTS. CARL R. NOLLER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 2, 1928. Serial No. 251,297. 5 Claims. (Cl. 260—101.)

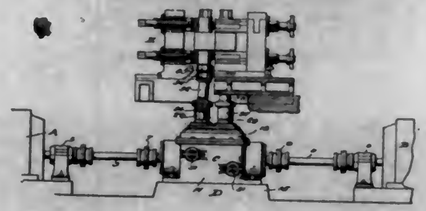


2. The process of producing cellulose acetate which comprises introducing cellulosic material, liquid acetic anhydride and a catalyst into an enclosed vessel and maintaining said vessel at least partially evacuated until the cellulose has become acetylated.

1,880,467. LIGHT METAL ALLOY. RAYMOND J. NORTON, Washington, D. C., assignor to American Magnesium Metals Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 28, 1930, Serial No. 498,912. Renewed Apr. 23, 1932. 3 Claims. (Cl. 75—1.)

1. The method of making an alloy of magnesium and beryllium which comprises heating substantially pure magesium and beryllium out of contact with air and above the melting point of magnesium for a prolonged period of time.

1,880,468. ROLLING MILL. RALPH D. NYE, Wheeling, W. Va., assignor to Wheeling Mold & Foundry Division of The Continental Roll & Steel Foundry Company, Wheeling, W. Va., a Corporation of Delaware. Filed Oct. 1, 1930. Serial No. 485,745. 7 Claims. (Cl. 80—54.)



3. In combination with a vertical rolling mill, an improved drive unit for the rolls thereof, comprising a gear housing positioned beneath said mill, a pair of vertically disposed shafts in said housing in separated parallel relation, each of said shafts having a drive connection with a mill roll, a pair of independent drive motors, each of said motors having an elongated shaft extending into said housing and carrying therein a drive gear, the drive gear of one motor meshing with a gear carried intermediate the length of one of said vertically disposed shafts and the drive gear of the other motor having driving connection with a gear carried by one end of the other vertically disposed shaft, and said vertically disposed shafts having positive driving connection with one another, whereby the speed of said vertical shafts are positively synchronized, for the purpose described.

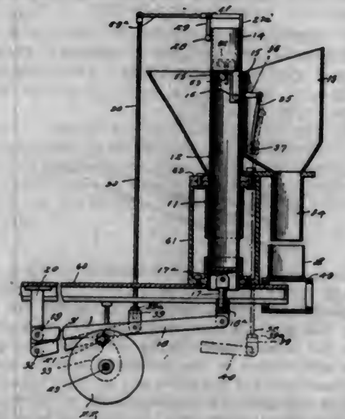
1,880,469. AMMONIATION OF PHOSPHATE FERTILIZER. BEVERLY OBER and EDWARD H. WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 8, 1928. Serial No. 298,392. 10 Claims. (Cl. 71—7.)

8. A method of treating acid phosphate fertilizer to incorporate nitrogen values therein comprising subjecting a mass of the acid phosphate fertilizer to a reduced pressure in a confined space to render the material more receptive to the action of ammonia, and introducing aqueous ammonia into said confined space while under reduced pressure.

1,880,470. PROCESS FOR THE PRODUCTION OF PHOSPHATIC FERTILIZERS. BEVERLY OBER and EDWARD HYATT WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 20, 1929. Serial No. 394,181. 11 Claims. (Cl. 71—7.)

1. A process of preparing phosphatic fertilizers comprising instituting streams of acid and finely divided phosphatic material, mutually impinging the streams, charging the mixed stream to a receiving stage and varying the concentration of the acid stream inversely with the time of charging to minimize the loss of volatile material in transit and to maintain the mass in a mixable condition.

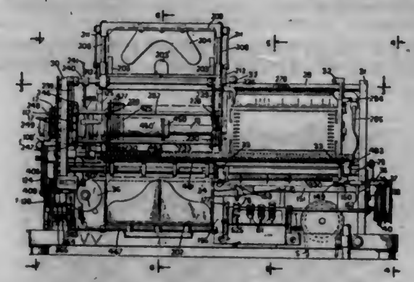
1,880,471. CAN FILLING MACHINE. JARL PEARSON, Ontario, Calif., assignor of one-half to Hubert F. Lucas, Ontario, Calif. Filed Aug. 13, 1929. Serial No. 385,607. 12 Claims. (Cl. 226—104.)



1. A filling machine of the character described including a hopper, a lifter movable upward through the hopper, a measuring cup open only at its upper end pivotally connected to the upper end of the lifter and movable therewith through the hopper the cup normally resting upon the upper end of the lifter, means for reciprocating the lifter, means exterior to the lifter and disposed above the hopper for tilting the measuring cup to discharge its contents when the lifter has reached its fully elevated position, and means exterior to the lifter for returning the measuring cup to an upright position on the top of the lifter when the contents of the measuring cup has been discharged.

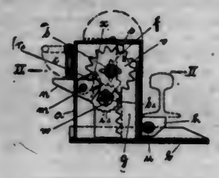
1,880,472. PERFORATING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 3, 1927. Serial No. 237,499. 24 Claims. (Cl. 164—112.)

1. In a perforating machine, a plurality of rows of punches, means for selectively setting a punch in each row for operation, means for latching the set punches in set position, means for causing said latching means to release the punches after a predetermined operation of the



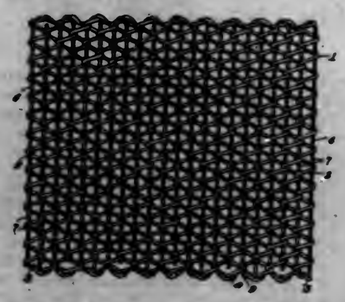
machine and additional latching means for latching the punches in set position independently of said first named latching means.

1,880,473. TRACK WINCH. WILHELM PIELHAU, Kraghammer, Germany. Filed Sept. 17, 1928, Serial No. 306,553, and in Germany May 1, 1928. 1 Claim. (Cl. 254—97.)



A track winch, comprising in combination a housing, a rack slidable in said housing, a jack on said rack projecting from said housing, driving shafts mounted in said housing, a pair of gear wheels connecting said shafts, a gear wheel on the upper of said shafts adapted to operate said rack, a ratchet wheel secured to the lower of said shafts for retaining said rack in raised position, a pawl engaging with said ratchet wheel for locking the same, and a pedal lever directly operating said pawl for disengaging the same from said ratchet wheel.

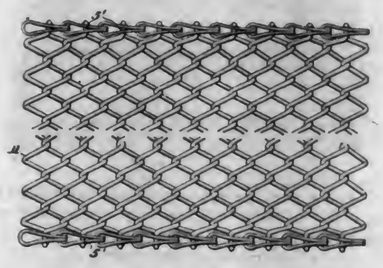
1,880,474. WIRE FABRIC. CLARENCE E. PINK, Cambridge, Md. Filed July 31, 1931. Serial No. 554,371. 2 Claims. (Cl. 198—193.)



1. A woven wire fabric for conveyor belts, comprising coiled wires one woven within the other to form a continuous flexible fabric and having the ends of pairs of said wires pivotally connected, hinge rods for the fabric and each including connected parallel portions extending through the coil of one wire of each pair, and with one parallel portion extending through the coil of the wire of the adjacent pair of wires, whereby hinges are provid-

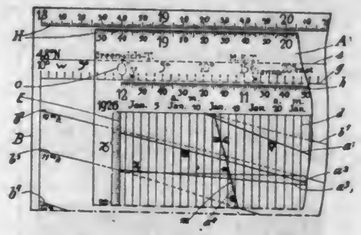
ed throughout the length of the fabric with the coiled wires held from hinging on each other and with every other wire of the fabric hinging on a parallel portion of a rod.

1,880,475. WIRE FABRIC. EDWARD F. PINK, Cambridge, Md. Filed Nov. 14, 1928. Serial No. 319,379. 3 Claims. (Cl. 245—10.)



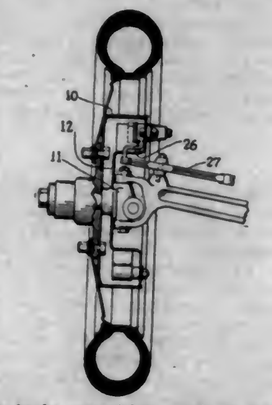
1. A wire fabric for belting comprising transversely arranged coiled interwoven strands for forming a flexible fabric, said strands arranged in pairs with their end portions extending beyond the side edges of the fabric in parallel and contacting relation, chains including links arranged at the side edges of the fabric with the end portions of each pair of strands extending through opposite links of the chains, said end portions after extending through the respective links being bent at right angles to each other and in opposite directions to form attaching portions engaging faces of the links, and means rigidly fixing the attaching portions to the faces of the links.

1,880,476. APPARATUS FOR CASTING HOROSCOPES. FRIEDRICH PLONER, Innsbruck, Austria. Filed Aug. 1, 1927, Serial No. 209,873, and in Austria Sept. 12, 1926. 6 Claims. (Cl. 35—3.)



1. An apparatus for casting horoscopes, comprising in combination a table containing the longitudes of the planets represented from the known ephemeris graphically as curve, in a right angular coordinate system, said system comprising as abscissa an hour-division for the sidereal time and as ordinate an ecliptic division with the zodiacal signs each of 30 degrees, and a scale division for the days of the month, the moon curve with a division dividing the day scale into hour sections according to Greenwich, a scale with hour division for adjusting the given hour of the day, a second table comprising the cusps of the houses from the commonly used table of houses represented graphically in curves in the same coordinate system as the first mentioned table and bearing further a zero mark, the said first mentioned table being, in use, adjusted upon said mark with the given hour of the day of its hour division, the ordinate to the hour of the given day converted into Greenwich time showing the horoscope together with the planet curves and curves of the cusps of the houses, one of said tables being of transparent material and adapted to be placed on the other of said tables.

1,880,477. VEHICLE BRAKE. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 1, 1929. Serial No. 359,472. 6 Claims. (Cl. 188—78.)



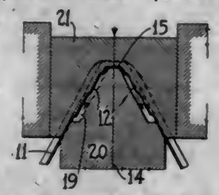
1. A vehicle brake comprising a pair of oppositely acting brake shoes pivoted at one pair of adjacent ends, and freely movable at the other pair, together with an actuating device interposed between the free ends of the shoes and rotatable to simultaneously and oppositely actuate the brake, but adjustable as a unit radially to adjust the brakes.

1,880,478. AIRPLANE STRUCTURE. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 3, 1929. Serial No. 360,140. 6 Claims. (Cl. 189—37.)



6. A truss structure in the form of an airplane rib the members of which are of open hollow cross section and the peripheral and cross members of which are respectively in the main of continuous pieces, the continuous pieces of the cross member being reversely bent to form points of attachment to the peripheral member and both of which members are flattened out at their points of attachment in the plane of the main body of the peripheral member and joined together in the flattened portions, and are further provided in the flattened portions with complemental inwardly extending beads nested together.

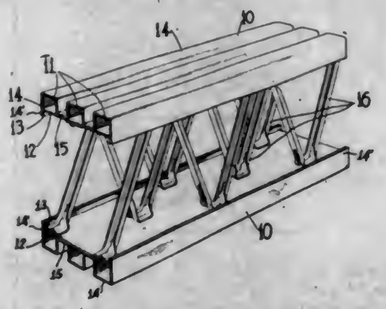
1,880,479. AIRPLANE TRUSS JOINT CONSTRUCTION. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 16, 1929. Serial No. 378,614. 6 Claims. (Cl. 153—21.)



1. The method of forming truss joints which consists in bending continuous stock to form two integrally joined

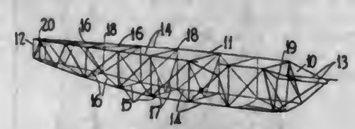
members and the angle between them and thereafter forming a bead in the stock extending around the bend and internally of the angle.

1,880,480. AIRPLANE STRUCTURE AND METHOD OF MAKING SAME. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1929. Serial No. 392,318. 7 Claims. (Cl. 189—37.)



1. A truss comprising chord members and a plurality of sets of continuous Warren trussing connecting said chord members, the trussing consisting of hollow sectioned stock flattened in regions of connection with the chords and secured to the chord through the flattened regions and having a beaded reinforcement interconnecting the channel sections and the flattened regions and extending through the flattened regions.

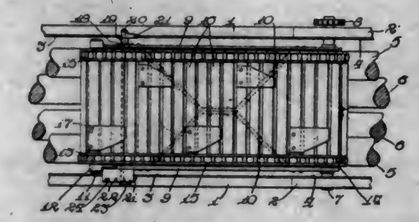
1,880,481. AIRCRAFT CONSTRUCTION AND METHOD OF MAKING SAME. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1929. Serial No. 392,319. 19 Claims. (Cl. 244—31.)



1. A sheet metal aircraft truss structure comprising a chord member of closed cross section composed of inner and outer complemental parts of open cross section, the inner part having relatively wide substantially flat faces and transverse members abutting said faces at substantially right angles and secured to the flat faces of said inner parts from the inside of said hollow cross section, the outer faces of said transverse members being in substantially the plane of the adjacent face of the outer chord part.

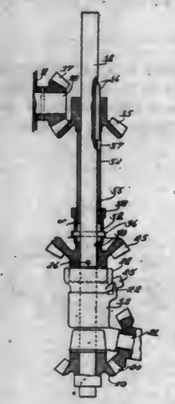
1,880,482. EAR CONVEYER FOR HUSKING ROLLS. CLEMMA R. RANEY, Riverside, and REX B. HITCHCOCK, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Apr. 19, 1930. Serial No. 445,747. 2 Claims. (Cl. 130—5.)

1. In a corn picker having two adjacent frame members and a series of downwardly inclined husking rolls mounted for operation between said frame members, an ear conveying means comprising a driving shaft mounted for rotation on said frame members transversely of the husking rolls at the upper end thereof, a frame structure pivotally attached at one end to said shaft, said structure consisting of a pair of spaced bars and braces rigidly connected to said bars, a shaft mounted for rotation at the lower end of the frame structure, spaced chain sprockets mounted on said shaft, spaced chain sprockets rigidly attached to the driving shaft, an endless conveyer extending around the frame structure and operatively engaging said sprockets, resilient pressure elements carried



by said conveyer, means for adjustably supporting the lower end of the frame structure thereby regulating the height at which the conveyer operates above the husking rolls, said means including brackets projecting laterally beyond the conveyer at each side of the frame structure, and means to simultaneously alter the vertical position of said brackets relative to the frame members.

1,880,483. GRAIN BINDER. CLEMMA R. RANEY, Riverside, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Sept. 20, 1930. Serial No. 483,146. 5 Claims. (Cl. 74—7.)

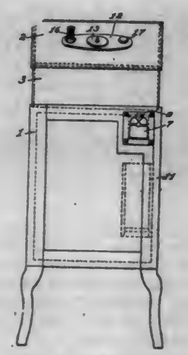


1. In a grain binder, a drive shaft carrying a drive gear, an accessory driven shaft carrying a driven gear mounted for axial sliding movement on the shaft and in mesh with the drive gear, a stop member spaced from the driven gear and having a fixed location on the accessory shaft, and a spacer sleeve between the stop and sliding gear compressing two telescopic parts threadedly interfitted and adapted to slide said sliding gear on its shaft to take up wear between the driving and driven gears.

1,880,484. COIN-CONTROLLED EXHIBITION APPARATUS. LOUIS C. RATHBUN, Oelwein, Iowa. Filed Mar. 27, 1931. Serial No. 525,699. 5 Claims. (Cl. 194—12.)

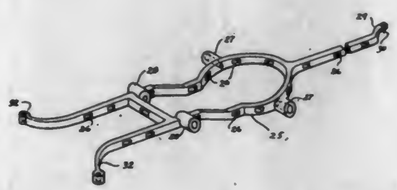
1. In apparatus of the character described, embodying a rotatable carrier for a plurality of objects displayed upon

it concentrically, a magnifier fixedly positioned for observation of selected ones of said objects, manually operable mechanism for rotating the carrier to selectively place any of said objects for observation by use of the magnifier, an electric lamp, a coin controlled timer, an electrical circuit containing said lamp and timer in series, the timer being adapted to make and break the circuit at



determined time intervals, and means for initiating actuation of the timer, consisting of the combination with the timer and the carrier rotating mechanism, of means electrically controlled by said timer, including coacting resiliently controlled elements, adapted to lock said carrier during the said predetermined period of observation of an object and to unlock the carrier at the termination of said period.

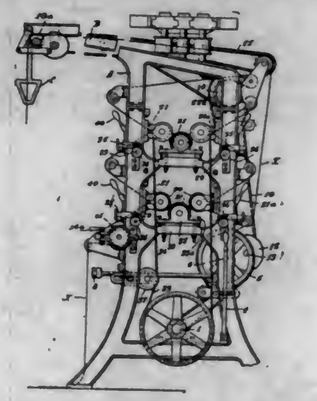
1,880,485. WEIGHING SCALE. ORWELL C. REEVES, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Nov. 22, 1930. Serial No. 497,464. 7 Claims. (Cl. 265—49.)



1. In a device of the class described, in combination, a scale lever moulded of material having low mechanical strength and a reinforcing member for said lever, said reinforcing member being formed of material having substantially greater mechanical strength, said reinforcing member being adapted to receive and retain a plurality of pivots.

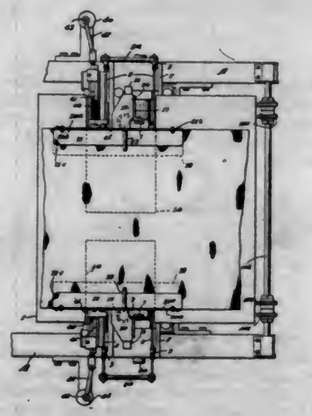
1,880,486. TIGERING MACHINE. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed May 10, 1930. Serial No. 451,316. 8 Claims. (Cl. 26—29.)

1. In a tigering machine, the combination of a pair of spaced opposed cloth rests, means for feeding the cloth around the edges of said cloth rests, a pair of spaced rotary power driven tigering cylinders mounted between said cloth rests to rotate in peripheral contact with portions of the cloth passing over said cloth rests, a rotary cleaner drum mounted in position to form cleaning con-



tact with the peripheries of both said cylinders, and means for positioning the cleaner drum to maintain proper operative relation simultaneously with both said cylinders.

1,880,487. EDGE SHEARING DEVICE. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Mar. 4, 1931. Serial No. 520,012. 15 Claims. (Cl. 26—7.)

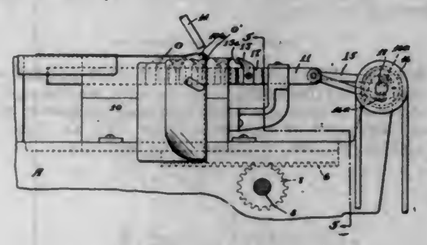


1. In an edge shearing machine, the combination of a shearing couple embracing thread shearing elements mounted to position their shearing line adjacent the edge of the cloth travelling by, and a protective guide adapted to engage the edge of the cloth and thereby prevent lateral movement of the cloth outside of said shearing line, and means for shifting the shearing elements and the guide in unison to follow the lateral swerving movements of the adjacent cloth edge.

1,880,488. LOOP CUTTER. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Mar. 9, 1931. Serial No. 521,200. 16 Claims. (Cl. 26—7.)

1. A machine for cutting selvage loops of cloth embracing in combination, means for supporting and guiding

the edge of the cloth, a pair of side by side vibratory cutters, means for imparting vibratory movements to said cutters in predetermined sequence to maintain one of said



cutters in motion when the other pauses at the end of its stroke, and means for directing selvage loops into the path of said cutters.

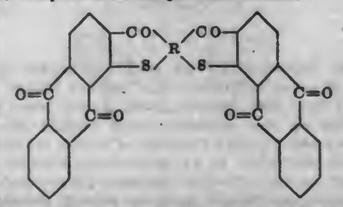
1,880,489. PNEUMATIC TIRE CONSTRUCTION. EUGENE A. ROBERTS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 24, 1931. Serial No. 552,825. 5 Claims. (Cl. 152—13.)



1. A pneumatic tire casing having flexible rubber tips on the toes of its beads, and reinforcing means embedded in said rubber tip and extending along the bottom of the bead to the tip and then partially up the inner side of the tire casing, said reinforcing consisting of obliquely disposed, parallel cord strands.

1,880,490. VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. GEORG RÖSCH, Cologne-Mulheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 28, 1930, Serial No. 471,424, and in Germany July 30, 1929. 3 Claims. (Cl. 260—53.)

1. The compounds of the probable formula:

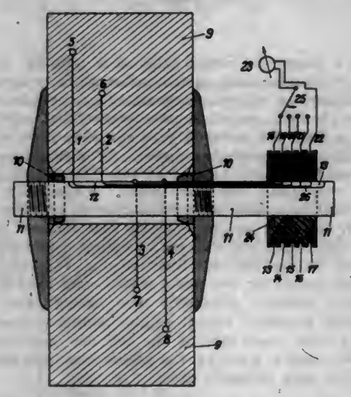


wherein R means a benzene or naphthalene nucleus which may be substituted by halogen atoms, said compounds forming golden-yellow to red-orange powders, soluble in strong sulfuric acid with orange to red colorations, dyeing cotton from a violet to green hydrosulfite vat orange to brownish-red shades of good fastness properties.

1,880,491. PRODUCING CALCINED PHOSPHATES. FRITZ ROTHE and HANS BRENEK, Berlin, Germany, assignors to the Firm Kali-Chemie Aktiengesellschaft, Berlin, Germany. Filed Nov. 19, 1928, Serial No. 320,528, and in Germany Nov. 23, 1927. 1 Claim. (Cl. 71—7.)

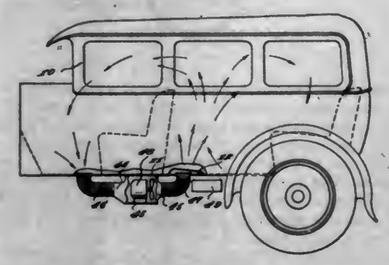
The process of producing calcined phosphates from phosphorites rich in fluorine, which comprises the steps of mixing the phosphorite with suitable fluxes, heating the mixtures to a temperature of between 800° C. and 1000° C. for a period of substantially two hours in order to reduce the fluorine content of the mixture to 1% or below, during this step of the process melting or sintering of the phosphorite being avoided, and then heating the mixture to a temperature of between 1000° C. and 1200° C. in order to complete the breaking up of the mixture.

1,880,492. GRINDING STONE OF CONCRETE FOR WOOD SHAVINGS. FRITZ RÖHLEMANN, Wolfsgrun, Germany. Filed June 29, 1929, Serial No. 374,921, and in Germany July 11, 1928. 4 Claims. (Cl. 51—206.)



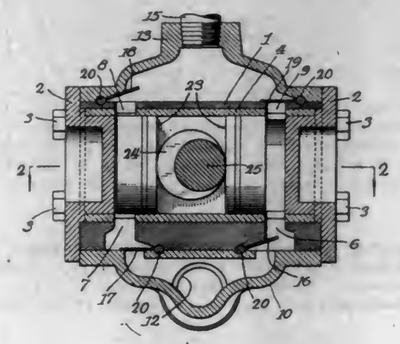
1. A grinding stone for grinding wood pulp, comprising in combination a concrete body having recesses in its interior and temperature measuring instruments embedded in these recesses.

1,880,493. AUTOMOBILE HEATING APPARATUS. CARL W. RUNDLETT, Jackson Heights, N. Y., assignor to Mot-Acs, Inc., New York, N. Y., a Corporation of Delaware. Filed May 16, 1928. Serial No. 278,196. 3 Claims. (Cl. 237—12.3.)



1. In combination with an automobile having a normally closed body, a heating system comprising a housing in communication with the interior of said body, a casing within said body with which said housing communicates, a heating unit in said casing having openings to permit a natural circulation of air therethrough, and means in said housing for creating a forced circulation of air through said casing.

1,880,494. PUMP. JACOB R. SANDAGE, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,557. 5 Claims. (Cl. 103—171.)



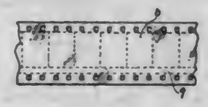
1. In a pump, the combination of a cylinder, a double-headed or double-acting piston arranged to reciprocate in said cylinder, an eccentric cam engaging said piston, with its axis at right angles to the longitudinal axis of the piston, a shaft for rotating said eccentric cam, a removable inlet casing entirely outside of the diameter of the bore of said cylinder, fastened on one side of said cylinder, a fluid connection for said casing, a removable outlet, casing entirely outside of the diameter of the core of said cylinder, fastened on the opposite side of said cylinder, a fluid connection for said outlet casing, two alternately-operating valves for the inlet casing, two alternately-operating valves for the outlet casing, and cylinder heads detachable without disturbing said casings and valves, said piston having a lateral spline holding it against rotation, on the inner side of the cylinder, and externally accessible means whereby the spline has provisions for lubricating said eccentric cam.

1,880,495. SPEED INDICATOR. FELIX C. SANDSTROM, Milwaukee, Wis., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 8, 1931. Serial No. 549,394. 9 Claims. (Cl. 116—74.)



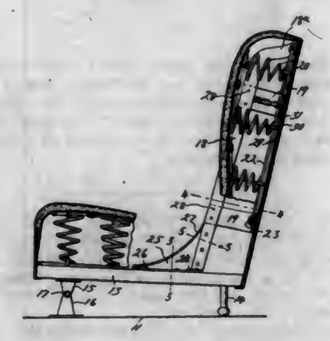
1. The combination with a rotating device including a crank having a handle shaft, of an audible speed indicator therefor comprising a circular plate mounted on an end of said shaft, the center of said plate being coaxially aligned with the axis of said shaft, a member thereon providing a curved passageway crossing the center of said plate, a free clapper slidably arranged in said passage-way, and a bell surrounding the member and adapted to be struck by the clapper.

1,880,496. PHOTOGRAPHIC FILM FOR SOUND AND PICTURE PURPOSES. OTTO SANDVIK, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 14, 1929. Serial No. 370,952. 7 Claims. (Cl. 88—16.2.)



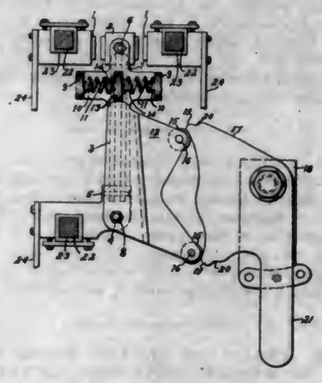
2. A photographic film comprising a support and a sensitized layer on said support constituting picture exposure areas and a sound record area, the picture exposure areas of said layer having gamma controlling material incorporated therein, and the sound record area of said layer having other gamma controlling material incorporating therein whereby the gammas of said areas may be differentially regulated.

1,880,497. SEAT BACK CONSTRUCTION. WALTER S. SAUNDERS and ROBERT MARTINDELL, Pontiac, Mich., assignors to American Forging & Socket Co., Pontiac, Mich. Filed July 15, 1927. Serial No. 206,012. 2 Claims. (Cl. 155—184.)



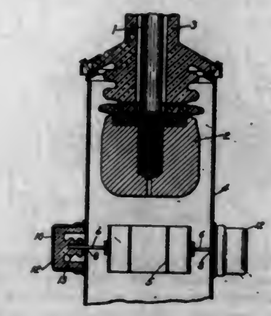
1. The combination with the back frame of a seat formed of an arched strap metal support having substantially vertical side portions, strap metal brace members connecting the side portions of said support, one of said brace members having a plurality of hooked tongues struck forwardly therefrom, of an upholstering member for said seat back having a portion engaged behind said tongues to be supported thereby upon one side of the frame, the tongues being bent down upon the engaged portion of the upholstery member, a stiffening cardboard support carried by and covering the other side of said frame, and a covering of limp material enclosing both sides of said frame and the cardboard, being supported by said cardboard on its side of the frame.

1,880,498. CAM-ACTUATED DOUBLE-THROW SWITCH. WALTER SCHAELCHLIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 23, 1930. Serial No. 477,337. 12 Claims. (Cl. 200—6.)



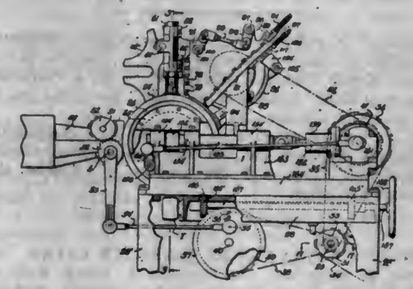
1. A switch comprising a plurality of stationary contact members, a cooperative movable contact member, said movable contact member being supported by pivotally mounted contact-support arms, a work arm resiliently connected thereto and means for shifting the movable contact member to a plurality of operating positions.

1,880,499. INSULATING MOUNTING FOR ANODE GRIDS. MORITZ SCHENKEL, Berlin-Charlottenberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 26, 1931, Serial No. 559,446, and in Germany Aug. 29, 1930. 5 Claims. (Cl. 250—27.5.)



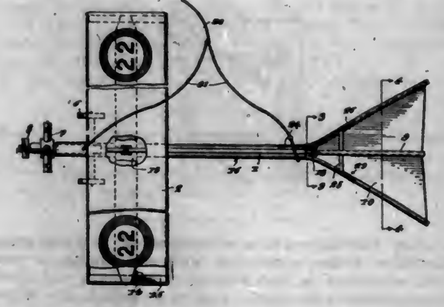
1. In a vapor electric device, an anode shield, a plurality of substantially tubular projections on the exterior of the shield, the shield having openings communicating with the interior of the projections, a grid in said shield, supporting members for said grid extending through said openings into said projections and insulators in said projection for receiving the ends of the supporting members.

1,880,500. APPARATUS FOR TREATING SOAP. JULIUS A. SCHWANTES, Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 18, 1931. Serial No. 522,319. 15 Claims. (Cl. 25—9.)



1. In an apparatus of the character described, the combination of a movable carrier, means for forming a cavity or cavities of the desired configuration in a body of soap on said carrier in one position of said carrier, and means for filling said cavity or cavities with a filler substance in another position of said carrier.

1,880,501. TOY AIRPLANE. THOMAS F. SCOTT, Patterson, La. Filed Nov. 23, 1931. Serial No. 576,901. 2 Claims. (Cl. 46—50.)



1. A toy airplane of the class described comprising a body, having a longitudinally extending plate, said body supporting a wing structure, said wing structure comprising a transversely extending member projecting across the top of said body, end strips secured to said transversely extending member of said wing, a light covering extending over and forming said wing structure and also extending over and forming said body structure, said body structure provided with a pair of longitudinally extending bendable strips, said strips being bent and flared outwardly near the rear end of said body, bracing means interposed between said strips for holding the same in extended flared position, a web extending between said flared strips and around the same for holding the strips in a taut and braced position, rudder means associated with said tail piece, and a tail skid carried by and extending between the flared ends of said bendable strips.

2. A toy airplane of the class described comprising a longitudinally extending elongated body, a plurality of

bendable strips extending upon opposite sides of said body and flared outwardly near the rear end thereof, bracing means interposed between said flared ends, web means extending between said flared ends and over the same for constituting a tail piece, a tail skid having a bifurcated end fitting over said body and between said flared ends, and means for securing said tail piece to said body.

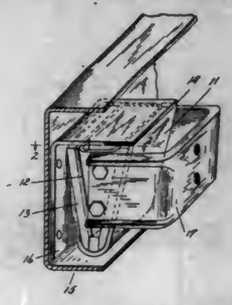
1,880,502. PRINTING INK FOR PHOTOGRAPHIC FILM. ALBERT A. SHANNON, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 22, 1931. Serial No. 564,467. 2 Claims. (Cl. 134—28.)

1. An ink for printing on cellulose ester compositions, consisting of an azo dye, cellulose acetate, ethylene glycol monomethyl ether, and the acetate of ethylene glycol monomethyl ether.

1,880,503. ULTRA-VIOLET SENSITIVE LAYER. SAMUEL E. SHEPPARD and HERBERT J. DIETZ, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 12, 1931. Serial No. 536,988. 5 Claims. (Cl. 85—7.)

1. A photo-sensitive layer sensitive primarily to the ultra-violet comprising thallic oxalate.

1,880,504. VIBRATION INSULATOR. JESSE W. SHIELDS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 15, 1930. Serial No. 475,510. 7 Claims. (Cl. 248—14.2.)



1. A vibration insulator comprising a wedge-shaped cradle, a wedge cooperating with said cradle, a rubber pad vulcanized to and between said wedge and cradle, means whereby the cradle may be secured to one member to be insulated, and means whereby the wedge may be secured to the other member to be insulated, the axis of the wedge extending substantially in the direction of the thrust to which the insulator is subjected.

1,880,505. METHOD OF PREPARING MAGNESIUM CHLORIDE FROM A BASIC CHLORIDE THEREOF. ALBERT KELVIN SMITH, Shaker Heights, Ohio, assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 361,014. 6 Claims. (Cl. 23—91.)

1. The method of increasing the magnesium chloride content of air-dried magnesium chloride containing a component of basic chloride which comprises heating such air-dried chloride in the form of small particles in an atmosphere of hydrochloric acid at a temperature not greatly exceeding 290° C.

4. The method of making anhydrous magnesium chloride which comprises heating air-dried magnesium chloride containing a component of basic chloride in the form of small particles in an atmosphere of hydrochloric acid at a temperature not greatly exceeding 290° C. while maintaining the molecular ratio of HCl/H_2O in such atmosphere at a value greater than 2.34.

1,880,506. CELLULOSIC COMPOSITION OF MATTER CONTAINING DIBENZYL SUCCINATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 23, 1930. Serial No. 477,478. 6 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and dibenzyl succinate.

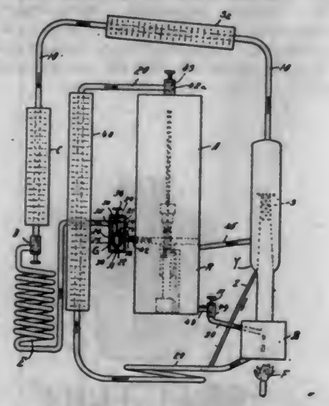
1,880,507. CELLULOSIC COMPOSITION OF MATTER CONTAINING A LOWER ALKYL ESTER OF MALONIC ACID. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,384. 10 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and a lower alkyl ester of malonic acid.

1,880,508. CELLULOSE ORGANIC ESTER COMPOSITION OF MATTER CONTAINING AN ESTER OF A BROMINATED MALONIC ACID. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 4, 1931. Serial No. 573,035. 7 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic ester of cellulose and an alkyl ester of a brominated malonic acid.

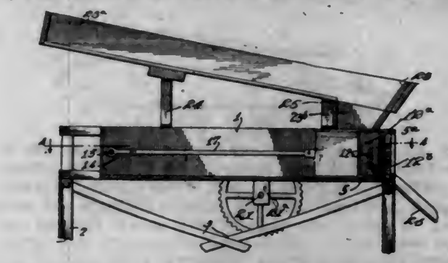
1,880,509. REFRIGERATING APPARATUS. JESSE C. SMITH, New York, N. Y. Filed Dec. 24, 1928. Serial No. 328,084. 18 Claims. (Cl. 62—5.)



1. In refrigerating apparatus, an absorber, a reservoir adapted to receive liquor from the absorber, and a gravity opened valve controlling the communication between the absorber and reservoir, said valve being constructed and arranged to open when the force of gravity on the valve and the pressure in the absorber overcome the pressure in the reservoir.

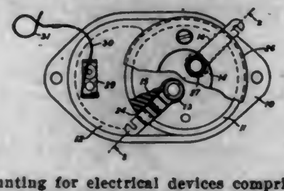
1,880,510. POTATO CUTTER. WILLIAM O. SMITH, Kimball, Nebr. Filed Sept. 17, 1929. Serial No. 393,280. 1 Claim. (Cl. 146—169.)

In a potato cutting machine, a potato cutting chamber having knives there-across, reciprocable plungers within said potato cutting chamber adapted to force said potato against said knives, said plunger having potatoes centering means comprising leaf springs extending forwardly of



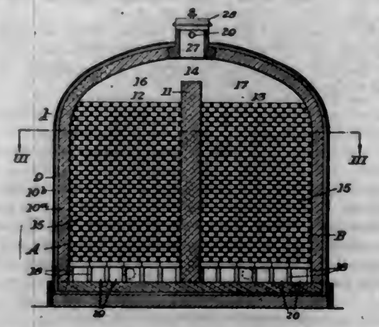
said plungers and bent rearwardly intermediate their lengths forming a resilient pocket for reception of potatoes to be cut.

1,880,511. MOUNTING FOR ELECTRICAL DEVICES. ERNEST SORENY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1930. Serial No. 491,191. 8 Claims. (Cl. 173—328.)



1. A mounting for electrical devices comprising an insulating base having a portion arising therefrom, said portion having a solid central hub, a plurality of contact members abutting said hub, terminals attached to said contact members extending radially beyond said portion, a perforated cover plate engaging said terminals, and a separate terminal attached to said insulating base.

1,880,512. MANUFACTURE OF CARBON BLACK. ELLWOOD B. SPEAR, Pittsburgh, Pa., assignor to Thermatomic Carbon Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 9, 1929, Serial No. 384,650, and in Canada Sept. 7, 1928. 21 Claims. (Cl. 134—60.)



1. The process of producing carbon black, which comprises burning a fuel to produce hot combustion gases, forming a mixture containing the hot combustion gases and a hydrocarbon gas to be decomposed, passing the mixture over extensive heat exchanging surfaces so as to decompose the hydrocarbon gas and yield solid carbon particles, and separating the carbon particles from the gaseous decomposition products.

1,880,513. CELLULOSE ACETATE SOLVENT AND COMPOSITION. CYRIL J. STAUD and CHARLES S. WEBBER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,578. 7 Claims. (Cl. 106—40.)

3. A composition of matter having a relatively low vapor pressure comprising a cellulose acetate having an acetyl content from substantially 31% to 45%, dissolved in a mixture of ethylene chloride and an alkyl ester of an alpha hydroxy acid selected from the group consisting of ethyl lacetate, ethyl tartrate and ethyl glycolate.

1,880,514. CELLULOSE DERIVATIVE PRODUCTS. CYRIL J. STAUD and CHARLES S. WEBBER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 17, 1929. Serial No. 371,713. 6 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose ester, triethanolamine and a common solvent.

1,880,515. PREPARATION OF LOWER MIXED ORGANIC ESTERS OF CELLULOSE FROM PARTIALLY HYDROLYZED CELLULOSE ACETATE. CYRIL J. STAUD and ERICK MCLEAN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 3, 1931. Serial No. 566,794. 5 Claims. (Cl. 260—101.)

1. A process of making a mixed ester of cellulose which comprises esterifying a partially hydrolyzed cellulose acetate with a reaction bath containing an acid and the corresponding anhydride each of which contains an acyl group selected from the group consisting of propionyl and butyryl.

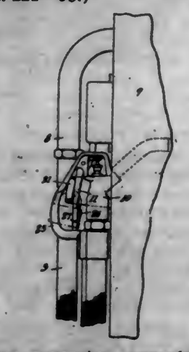
1,880,516. ORGANIC CUPRIC CYANOGEN COMPOUNDS. FRIEDRICH WILHELM STAUF, Cologne-Deutz, and HERMANN HAGENEST, Wiesdorf-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 10, 1929, Serial No. 391,695, and in Germany Oct. 31, 1928. 3 Claims. (Cl. 260—12.)

1. The complex compounds of the probable formula:

$$Cu(CN)_2.A$$

wherein A designates an organic, basic reacting, nitrogen containing compound, being in the dry state blue to green colored water-insoluble powders, and being suitable dusting materials for combating insect pests.

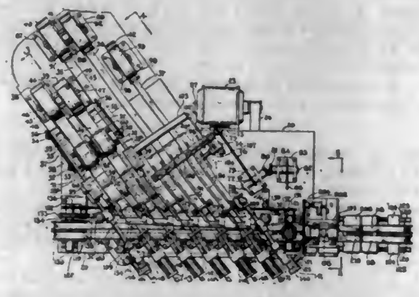
1,880,517. LIQUID DELIVERY APPARATUS. GEORGE W. STEDWELL, Brooklyn, N. Y., assignor to Sherwell Controls, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 22, 1930. Serial No. 430,462. 37 Claims. (Cl. 221—95.)



1. Liquid flow apparatus, comprising in combination with a flow conduit, a mechanical operating connection

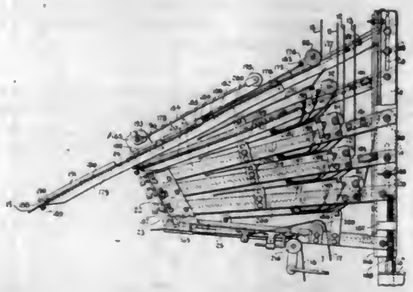
on the outside of said flow conduit and coextensive therewith, means connected to be operated by said mechanical connection, means to actuate said connection and a pickup clutch having a one way drive relation to said mechanical connection.

1,880,518. APPARATUS FOR MAKING LAMINATED ARTICLES. WILLIAM C. STEVENS, Uniontown, and HORACE D. STEVENS, Akron, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1930. Serial No. 493,786. 14 Claims. (Cl. 154—1.)



1. In apparatus for making laminated articles, the combination of a pair of spaced-apart carriers, means for intermittently advancing the same in unison, means for constructing a succession of articles upon the carriers spanning the space between them, and a punch operating through the space between the carriers for perforating successive articles during pauses in the movement of the carriers.

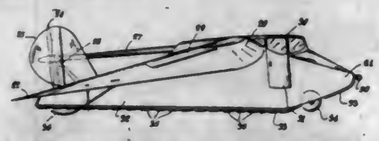
1,880,519. TIRE BUILDING APPARATUS. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 24, 1931. Serial No. 570,851. 10 Claims. (Cl. 154—10.)



1. Tire building apparatus comprising fixed and floating rollers supporting a plurality of strips of tire building material in festoons, and screens of non-adhesive material between respective reaches of the tire building material preventing adhesion of said reaches to each other.

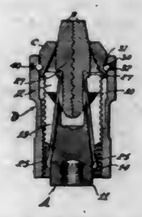
7. Tire building apparatus comprising means for feeding a continuous length of tire building material to a delivery station, delivery mechanism thereat comprising a pair of lateral supports, a tray movable longitudinally thereof, a flexible apron connecting said supports and said tray so as to limit the movement of the latter in one direction, and means for guiding the length of material beneath said apron.

1,880,520. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich. Filed July 16, 1930. Serial No. 468,281. 3 Claims. (Cl. 244—14.)



1. An airplane comprising a wing, a body portion in the front of said wing, elevator control surfaces forming a portion of the rear of said wing, a pair of rudder control surfaces supported above the rear of said wing, a power plant between said control surfaces and said body portion, and a propeller between said rudder control surfaces driven by said power plant.

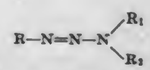
1,880,521. BIT OR DRILL HOLDER. AUSTIN L. STOWELL, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 13, 1929. Serial No. 392,344. 8 Claims. (Cl. 279—56.)



4. In a chuck of the character described, a chuck body having a threaded portion, jaws on the forward end of said body, a shell threaded on said body, and means for urging said jaws apart and having a semi-circular connecting portion extending partially around and slidable longitudinally of said body and forwardly extending arms associated with said jaws.

1,880,522. PREPARATION OF DIAZO BATHS SUITABLE FOR THE PRODUCTION OF AZO DYESTUFFS ON THE FIBER. CARL TAUBE, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929, Serial No. 341,837, and in Germany Feb. 25, 1928. 11 Claims. (Cl. 8—6.)

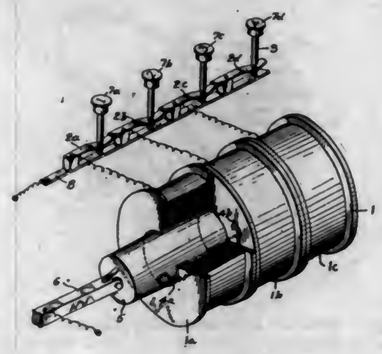
1. The process of preparing diazo baths suitable for use in the art of producing azo dyestuffs on the fiber which process comprises acidifying a compound of the general formula:



wherein R stands for a radical of the benzene series containing no sulfonic acid and no carboxylic acid groups, and R_1 and R_2 stand for alkyl, cyclohexyl, or R_1 and R_2 jointly stand for a penta-methylene chain, with hydrochloric acid, diluting the mixture with water and neutralizing the same with sodium acetate.

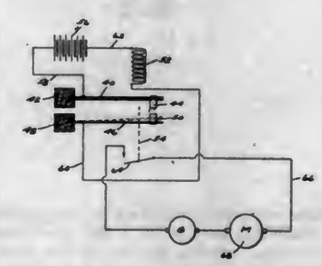
1,880,523. SETTING DEVICE FOR CALCULATING MACHINES AND THE LIKE. GUSTAV TAUSCHEK, Vienna, Austria, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Oct. 18, 1929, Serial No. 400,517, and in Austria Oct. 22, 1928. 18 Claims. (Cl. 175—337.)

1. In a machine of the class described, a movable element for registering a value or indication by the adjustment of said movable element for one or more unit displacements corresponding to such value or indication, a movable core for adjusting said element, and devices for creating for said movable core an electromagnetic field



corresponding in its dimensions to the number of units of said value or indication, whereby said core is caused to move for a distance which is proportional to said number of units.

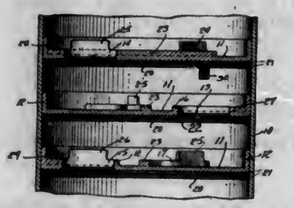
1,880,524. CIRCUIT CONTROL MEANS. DANIEL G. TAYLOR, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed July 15, 1931. Serial No. 550,932. 9 Claims. (Cl. 175—320.)



4. The combination with a relay having a movable armature and an energizing circuit, of a single pair of contacts controlling said circuit, a bi-metallic strip movable in response to temperature changes carrying the first of said contacts, a resilient metal strip fixed at one end and being deformable from a position assumed when unrestrained, a block carried at the other end of the deformable strip, a second strip fixed at one of its ends to one end of the block and carrying the second contact on its other end at a point opposite the first contact, a third strip fixed at one of its ends to the other end of said block, and means associated with the armature of the relay for exerting a force on said third strip when the relay is energized.

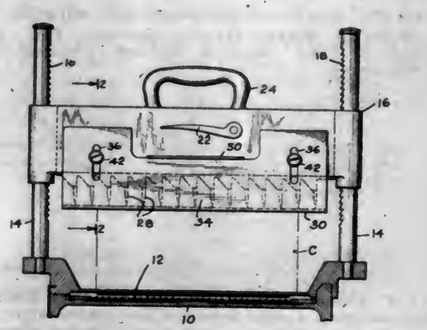
9. In combination, a relay having a movable armature, an energizing circuit for the relay, a first member movable in response to temperature changes, a second member similarly movable in response to temperature changes, means for heating the first said member thereby to move the same relatively to the second, a pair of contacts carried by said movable members and cooperating to open and close the aforesaid energizing circuit upon movement of the first said member due to changes in its temperature set up by said heating means, and means associated with the relay armature for actuating said second member in the direction of the first upon energization of the relay.

1,880,525. ABSORBER FOR REFRIGERATORS. ROBERT S. TAYLOR, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 7, 1930. Serial No. 450,415. 13 Claims. (Cl. 261—114.)



1. In a refrigerator, an absorber comprising an outer shell, a plurality of spaced plates within said absorber for producing contact between gas and liquid, said plates having apertures therein, an obstruction about each of said apertures, an obstruction disposed between a pair of the apertures for causing liquid deposited on one side of the obstruction to travel in a tortuous path to the other side, and an extension at the side of one of the apertures for directing the flow of gas passing through the plate.

1,880,526. CLAMPING DEVICE. SAMUEL M. TEMPLETON, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Sept. 17, 1929. Serial No. 393,202. 4 Claims. (Cl. 146—217.)



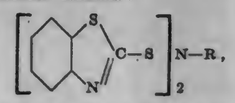
1. A clamp comprising a fixed member and a movable carrying member between which an article may be disposed, a clamping element movably mounted on the carrying member for adjustment thereon from inoperative to operative clamping position and vice versa, a device for securing the element in inoperative position on the carrying member, said element being normally urged by pressure of the clamped article to move from operative towards inoperative position, and means for preventing the pressure of the clamped article from effecting return of the element from operative towards inoperative position, said means comprising another clamping element operative when the first-named element is in inoperative position.

1,880,527. ACCELERATOR OF VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 13, 1927. Serial No. 226,052. 9 Claims. (Cl. 18—53.)

1. A rubber product resulting from rubber vulcanized in the presence of an accelerator composed of a reaction product of beta hydroxy naphthyl aldehyde and aniline.

1,880,528. ACCELERATOR OF RUBBER VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 10, 1928. Serial No. 245,808. 12 Claims. (Cl. 18—53.)

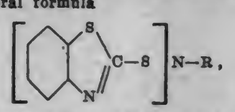
1. A method of treating rubber which comprises vulcanizing it in the presence of a material having the following structural formula:



in which R represents a basic nitrogen substituted benzene radical.

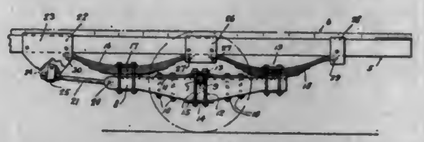
1,880,529. ACCELERATOR OF RUBBER VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Jan. 10, 1928, Serial No. 245,808. Divided and this application filed Jan. 10, 1930. Serial No. 420,012. 5 Claims. (Cl. 18—53.)

1. A method of treating rubber which comprises vulcanizing it in the presence of a material having the following structural formula



in which R represents a naphthalene nucleus.

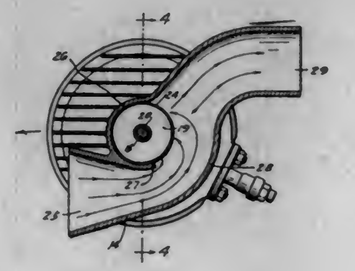
1,880,530. SPRING SUSPENSION AND BOLSTER ENSEMBLE. ROBERT TEVAULT, Galveston, Tex. Filed Mar. 24, 1931. Serial No. 524,980. 2 Claims. (Cl. 280—124.)



1. In a structural arrangement of the class described, in combination, a wheel supported axle, a horizontally disposed longitudinally elongated bolster having a central notch in its upper edge constituting a seat, said axle being disposed in said seat, a bridge plate bolted to the bolster on opposite sides of the axle and having its central portion overlying said axle, a clamp connected to the central portion of the bridge plate and corresponding portion of the bolster to bond the axle in said seat, a chassis supported above the axle and bolster, a pair of semi-elliptic leaf springs having their central portions seated on the ends of the bolster, clips securing the central portions of said springs to the end portions of the bolster, and a plurality of longitudinally arranged hangers on the chassis provided with restraining pins, said pins holding the free end portions of the springs between themselves and portions of the chassis.

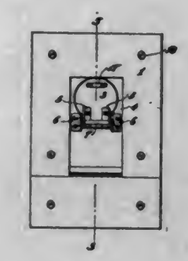
1,880,531. AIR INTAKE AND EXHAUST MECHANISM OF DIESEL TYPE OF ENGINES. FERI A. THAHELD, Dallas, Tex., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del., a Corporation of Delaware. Filed Oct. 4, 1930. Serial No. 486,345. 10 Claims. (Cl. 123—79.)

1. A manifold for an oil engine including a sinuous body having an air inlet at one end and an exhaust outlet at the opposite end, said body also having an offset pocket intermediate its ends open at its bottom, with an



upright deflector wall separating the air inlet portion from the pocket.

1,880,532. FOLDABLE SEAT FOR SMALL ROOMS. PETER THIBODEAU, Williamsett, Mass. Filed Dec. 17, 1928. Serial No. 326,461. 1 Claim. (Cl. 155—83.)

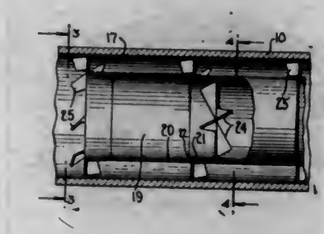


A foldable wall seat comprising, in combination, a panel member removably secured to a wall and having a vertically extending opening therein, a seat located within said opening and pivotally secured intermediate the ends thereof to the panel, between the upper and lower ends of said opening, a rear depending part at the upper end of said opening having a straight lower edge providing a horizontal abutment for the lower end of said seat in extended position, latch means to hold the seat in extended position comprising a depending spring on the rear side of the depending part and having a curved lower end and a straight portion adjacent the lower seat abutment edge of the depending part, an upwardly extending part at the lower end of the opening at the front side of the opening, and providing a ledge surface along the lower edge of said opening and adjacent the upwardly extending part, and means for latching the seat in folded position comprising a V-shaped spring secured on said ledge with one branch of the V, projecting upwardly and rearwardly to contact the lower end of the seat and be compressed thereby in folded position of the seat.

1,880,533. HEAT EXCHANGER. ALBERT R. THOMAS, New York, N. Y., assignor to Servel Sales, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 8, 1932. Serial No. 590,551. 6 Claims. (Cl. 257—246.)

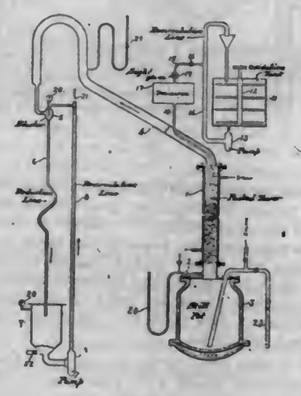
1. A gas heat exchanger comprising an outer tubular shell having an opening adjacent each end thereof for

the circulation of gas therethrough, and an inner tubular shell within said outer shell and forming therewith an outer annular passage closed at each end and an inner tubular passage, said inner shell being formed of a plu-



rality of nested metal cups, each cup formed with integral vanes extending outwardly around its rim into the said annular passage and having its bottom cut and bent to form vanes extending into said tubular passage.

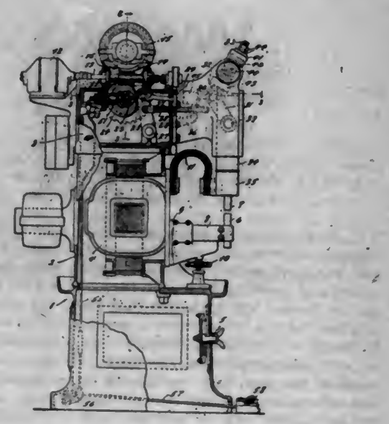
1,880,534. PRODUCTION OF HYDROQUINONE. HAROLD VON BRAMER and JOHN W. ZABRISKIE, Passaic Junction, N. J., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 17, 1929. Serial No. 363,808. 15 Claims. (Cl. 260—154.)



1. The process of producing hydroquinone which comprises vaporizing quinone from a solution containing it and intermingling the quinone vapors with a stream of water having iron dust suspended therein.

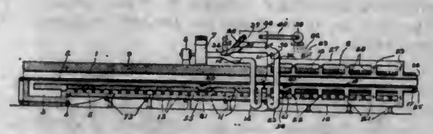
1,880,535. WELDING MACHINE. EDMUND J. VON HENKE, Chicago, Ill., assignor to American Electric Fusion Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 24, 1929. Serial No. 365,602. 14 Claims (Cl. 219—4.)

1 In a welding machine, an electrode reciprocable towards and away from the work, a toggle adapted to actuate said electrode and comprising two arms jointed together, a pivoted connection between one of said arms and



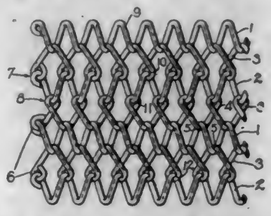
said electrode, means to operate said toggle, means to yieldingly urge one of said arms towards said joint, and means to regulate the force exerted by said yielding means.

1,880 536. APPARATUS FOR ANNEALING GLASSWARE. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,634. 18 Claims. (Cl. 49—47.)



1. Apparatus for annealing glassware comprising an elongate tunnel, means for moving articles of glassware therethrough, a longitudinally extending temperature controlling flue associated therewith, means for supplying a hot medium to said flue adjacent to the entrance end of said tunnel, the opposite end of said flue being in communication with a source of cooling medium, means for causing a flow of both media and withdrawing them from said flue, two passages communicating between said flue causing means on the one hand and said flue at points spaced apart longitudinally thereof on the other hand, and a damper in said flue adjacent to and toward the cool end of said tunnel from each of said points of communication between said flue and each of said passages, whereby when said dampers are respectively opened and closed, the portion of said flue between said points will be connected to conduct hot media therethrough for supplying heat to adjacent portions of said tunnel, and conversely when said dampers are respectively closed and opened, said portion of said flue will be connected to conduct the cooling medium to withdraw heat from the adjacent portions of said tunnel.

1,880,537. WOVEN WIRE CONVEYER BELT. HAROLD A. WADMAN, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 3, 1932. Serial No. 608,964. 2 Claims. (Cl. 198—193.)

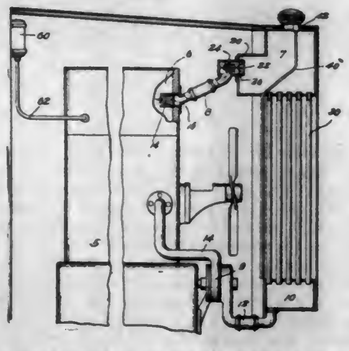


1. A woven wire conveyer, comprising alternately arranged transversely disposed substantially helical right and left hand wound wires, connecting wires interposed between and meshing with each turn of the first named wires and so formed and arranged that when the conveyer is assembled for use, it presents a supporting surface for ware made up of portions of the turns of all of said wires and of such character that the lines of the ware-supporting surface for any four contiguous wires includes at least one substantial change in direction, whereby articles having relatively narrow bottoms may be supported on the conveyer without toppling.

1,880,538. PROTECTION OF PHOSPHORUS. WILLIAM H. WAGGAMAN, Lakeland, STAPLETON D. GOOCH, Lake Wales, and FRIEDRICH P. KERSCHBAUM, Winter Haven, Fla., assignors to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1931. Serial No. 518,888. 16 Claims. (Cl. 23—242.)

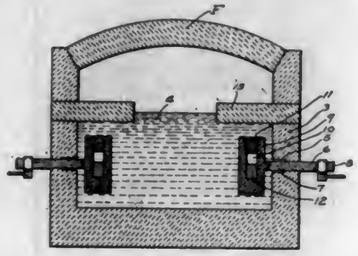
1. A process for protecting phosphorus against oxidation comprising treating said phosphorus with a solution of a readily reducible compound and precipitating thereon a protective surface of a non-inflammable substance.

1,880,539. COOLING SYSTEM FOR INTERNAL COMBUSTION ENGINES. FRANK A. WALD, Lemoyne, Pa. Filed Nov. 18, 1929. Serial No. 408,100. 8 Claims. (Cl. 123—178.)



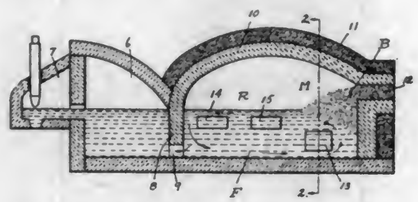
1. The combination of an engine having a jacket for a cooling fluid, a radiator having connection with said jacket, a thermostat having a valve controlling the flow of fluid between the jcket and the radiator, there being a constantly open-by-pass allowing the flow of fluid between the jacket and the radiator, and a second thermostat between the first named thermostat and jacket responsive to a lower temperature than that at which the first thermostat operates, there being a valve associated with and operated by said second thermostat for controlling the entire circulation of cooling fluid.

1,880,540. ELECTRODE FOR GLASS MELTING FURNACES. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,371. 10 Claims. (Cl. 13—6.)



1. The combination with an electric glass melting furnace of an electrode having an outer glass contacting portion of a material which is lighter than the glass and an inner portion having specific gravity higher than the glass.

1,880,541. PROCESS AND APPARATUS FOR MAKING GLASS. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 21, 1930. Serial No. 490,213. 10 Claims. (Cl. 13—6.)

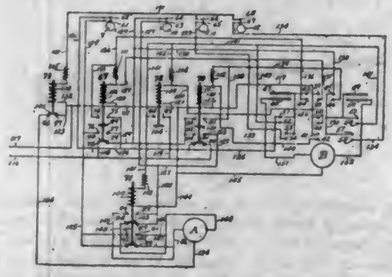


1. An electric glass melting furnace comprising a glass container, means for supplying glass-making batch to one end of said container, means for passing a current of electricity through the glass beneath the batch to bring into contact with said batch highly heated molten glass to melt said batch into glass, and means to pass a current of electricity through the upper layer of said glass to maintain a portion of said layer in a condition of fluidity as great as that therebelow.

1,880,542. CONTROL SYSTEM. HAROLD A. WADMAN, Hartford, and HAROLD W. MCINTOSH, Windsor, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 17, 1930. Serial No. 503,004. 30 Claims. (Cl. 236—15.)

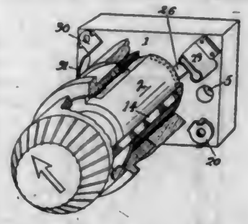
1. A control system, comprising an operating member, means for moving said member in one direction or the other in response to changes in the magnitude of a condition, adjustable means operable to maintain or change the magnitude of said condition, automatic means responsive to a variation of the position of said operating member from a predetermined position for adjusting said adjustable means, and means independent of the position of said member after the initiation of their operation for automatically controlling the operation of said automatic adjusting means to cause an automatic variation of the setting of said adjustable means in a corrective direction by a relatively large amount, then an automatic variation

of said setting in the reverse direction by a predetermined amount, whereby to cause a quick corrective change in the magnitude of said condition to counteract the effect



of the change obtained prior to the initiation of the operation of the means for correcting the magnitude of said condition.

1,880,543. SAFETY FUSE BLOCK. GEORGE E. WADSWORTH, Erlanger, Ky., assignor to The George B. Wadsworth Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 8, 1930. Serial No. 480,386. 18 Claims. (Cl. 200—50.)

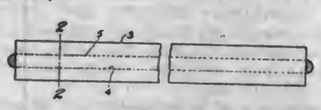


1. In a fusible double break switch mechanism a base of insulating material and an upstanding column thereon, said column bearing a fuse receptacle, a collar surrounding said column and forming the operating portion of a switch, and a cover for said fuse receptacle, means on said cover to operate said collar and means on said base to control the movement of said first mentioned means.

1,880,544. PREPARATION OF FERTILIZER. WILLIAM H. WAGGAMAN, Alexandria, Va., assignor, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Mar. 30, 1928. Serial No. 266,119. 2 Claims. (Cl. 71—7.)

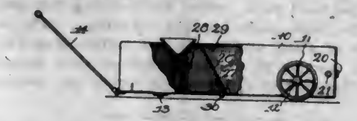
1. A process of producing available phosphates comprising introducing a stream of an aqueous slurry of phosphatic material into a body of a liquid acidifying agent in such a manner that the larger particles in the slurry are first contacted with the acid.

1,880,545. ELECTRODE AND METHOD FOR WELDING CAST IRON. ERWIN H. WALDMAN, Fort Mitchell, Ky. Filed Sept. 2, 1930. Serial No. 479,204. 4 Claims. (Cl. 219—8.)



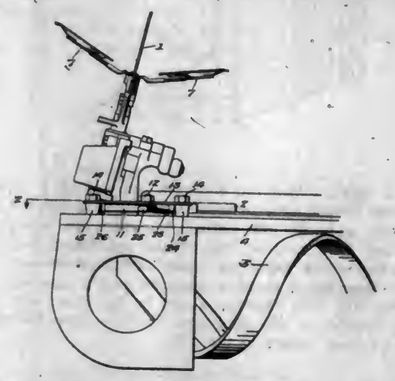
1. A welding rod having in combination a steel body and a mixture of carbon and calcium oxide in approximately the proportions 5.25 pounds carbon, one pound calcium oxide, and 100 pounds steel.

1,880,546. OIL DRAINAGE COLLECTING APPARATUS. ERNEST WANAMAKER, Chicago, Ill., assignor to U. S. Oil and Service Co., New York, N. Y., a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,329. 5 Claims. (Cl. 184—1.5.)



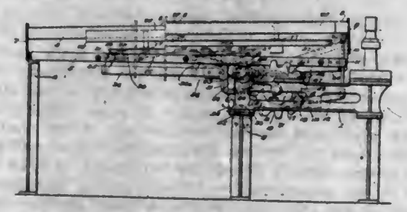
1. A portable liquid receptacle having a partition therein dividing the receptacle into two compartments, one of said compartments having an inlet port and the other an outlet port, and a valved passage between said compartments whereby the flow of the liquid from the inlet compartment to the other compartment can be effected for confining all the liquid in the latter upon the tilting of said receptacle to elevate the inlet compartment end thereof.

1,880,547. AUTOMATIC HOSIERY DRIER CLAMP CLOSER. HARRY F. WANAMAKER, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 10, 1932. Serial No. 598,057. 14 Claims. (Cl. 223—17.)



1. The combination of a stocking form, a carrier for said form, a support for said carrier, means for advancing the carrier in a predetermined path on said support, a clamp on the carrier arranged to hold the open end of a stocking to the form, and means for closing the clamp relative to the form including a cam movable coordinately with the carrier as the carrier is advanced.

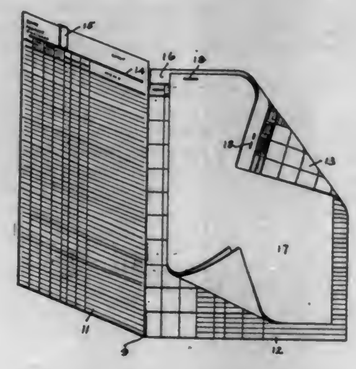
1,880,548. AUTOMATIC HOSIERY DRIER TABLE LEVELING MECHANISM. HARRY F. WANAMAKER, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1932. Serial No. 599,840. 14 Claims. (Cl. 198—219.)



1. A table for receiving flaccid articles transversely of and at one end thereof, said table comprising a series

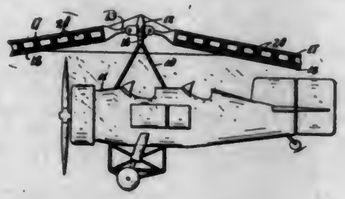
of longitudinally fixed slats, a series of longitudinally movable slats alternating respectively with the fixed slats with the upper edges of the movable slats at the receiving end of the table in a plane substantially coinciding transversely of the table with the plane of the upper edges of the fixed slats, means for lowering the receiving end of the table including the coinciding ends of the two series of slats, and means for maintaining the said coinciding relation of the two series of slats during the said lowering thereof for smoothly supporting the article.

1,880,549. FILING FOLDER. CRAWFORD J. WALKER, Indianapolis, Ind. Filed Jan. 8, 1932. Serial No. 585,527. 6 Claims. (Cl. 129—16.7.)



5. A filing folder for accounts comprising a sheet of material folded once to form four pages, a printed form on each page of like nature in which an account in analyzed form may be entered and continued from page to page, and a follow-up signal attached to the front page comprising a member engaging over a marginal edge thereof, and also through a slit in the page, said form being located on the third page to leave room thereabove for attaching papers to the page.

1,880,550. HELICO-LIFT AUTOROTOR FOR AIRCRAFT AND THE LIKE. FREDERICK WANDER, Jr., New York, N. Y. Filed Feb. 4, 1932. Serial No. 590,791. 12 Claims. (Cl. 244—19.)



4. An autorotor for airplanes, gliders, boats and the like comprising a support bracket for attachment upon the top of the vehicle, a member rotative on the top of said support bracket, a plurality of arms hingedly connected upon said member for moving in the vertical, flexible braces for limiting downward motion of said arms to positions slightly below the horizontal, each of said arms being streamlined in shape, and a plurality of rotors in end alignment with each other mounted upon said arms, said braces being connected by the said members and said arms.

1,880,551. ENDOSCOPE. REINHOLD H. WAPPLER, Yonkers, N. Y. Filed Oct. 5, 1929. Serial No. 397,496. 19 Claims. (Cl. 128—7.)



1. In combination with an endoscopic tube member, a complementary longitudinally insertable member, one of said members having a slotted attachment portion and the other having a pin adapted to enter said slot, and barrel-cam means carried by said slotted member for engaging and locking said pin in said slot so as to hold the members in mutually associated relationship.

1,880,552. DUST FILTER FOR RADIATOR COVERS. RICHARD H. WARD, Queens Village, N. Y., assignor to Edward C. Bowers and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Massachusetts. Filed Nov. 8, 1929. Serial No. 405,595. 1 Claim. (Cl. 183—71.)

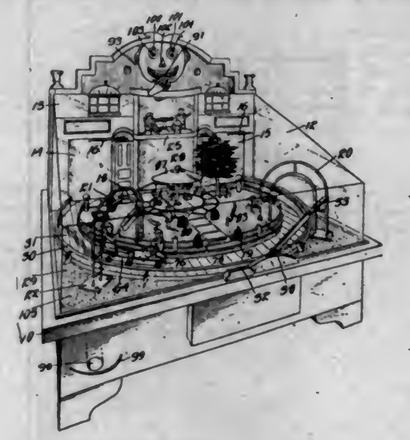


In combination with a radiator cover having an aperture through which heated air passes, a dust screen formed with corrugations to filter dust particles from the heated air, supporting means carried by the cover upon opposite sides of the aperture and forming grooves into which the sides of the screen transverse to the corrugations are extensibly received, and a grating mounted in the grooves of the supporting means and positioned against the dust screen.

1,880,553. COMBINED VENDING AND AMUSEMENT DEVICE. HENRY E. WARMOTH, Stilesville, Ind., assignor of one-half to Paul Daugherty, Indianapolis, Ind. Filed Feb. 20, 1931. Serial No. 517,333. 1 Claim. (Cl. 46—40.)

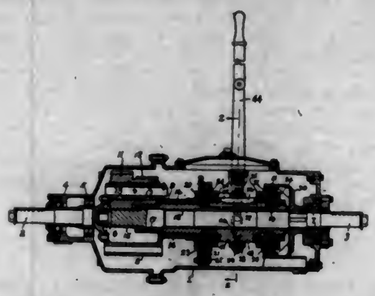
The combination of a dispensing and amusement device of the class described comprising a vertical power driven shaft, an arm extending horizontally from said shaft, a platform above said arm, a figurine normally resting on said platform, a crinkled bar having one end

secured to the underside of said platform and having the waves of its crinkled portion in the path of movement of said horizontal arm with its free end extending upward



through said platform and connected to said figurine to impart a jigging motion thereto, substantially as set forth.

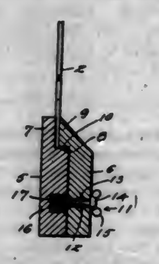
1,880,554. REVERSING MECHANISM. JOHN C. WATTLEWORTH, Cleveland, Ohio, assignor to Lee Whitright, Lodi, Ohio. Filed May 4, 1931. Serial No. 534,838. 6 Claims. (Cl. 74—84.)



1. In actuating mechanism for a pair of disc clutches each having a pressure ring, the combination of a rack member mounted against longitudinal movement, a gear segment in mesh therewith and capable of rocking movement in both directions to bear against said pressure rings, and operating means for rocking said segment in either direction and for holding the segment in locked position.

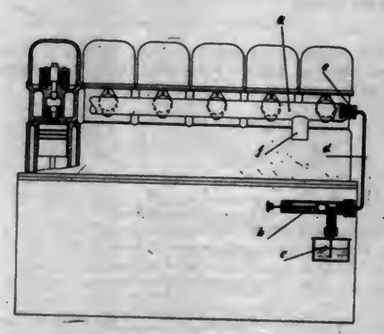
1,880,555. INSTRUMENT FOR OUTLINING INSCRIPTIONS ON MONUMENTS OR THE LIKE. WILLIAM H. WATTS and ELMER J. CURRIE, Houlton, Me. Filed June 20, 1929. Serial No. 372,353. 1 Claim. (Cl. 40—140.)

A clamp for blank letters and figures, comprising a rear bar provided at its upper longitudinal edge with a jaw and provided below and forwardly of the body with a shoulder, a front bar resting against the rear bar and provided at its upper longitudinal edge with a rearwardly offset jaw overlying the shoulder and arranged in opposed relation to said first jaw, the jaws being adapted to receive portions of the letters and figures between them and the shoulder being equal in length to the jaws and adapted to support the letters and figures, the rear bar being provided below its shoulder and in its front side with screw threaded sockets, and bolts having shanks rotatably mounted in the front bar and having inner and outer heads



contacting with the inner and outer sides of said bar, the inner heads being screw threaded and engaged with said sockets, and the outer heads being provided with finger grips.

1,880,556. INTERNAL COMBUSTION ENGINE. OTTO HERMANN WEBER, Esslingen-on-the-Neckar, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Feb. 19, 1930, Serial No. 429,659, and in Germany Jan. 13, 1927. 8 Claims. (Cl. 123—180.)



1. In combination with a plurality of internal combustion engine cylinders, a suction pipe having fluid communication with each cylinder, said pipe having an air inlet intermediate its ends, injecting devices in communication with the combustion chambers of the cylinders for injecting directly into said cylinders a difficultly ignitible fuel, an atomizer mounted in one end closure of the suction pipe, a priming fuel reservoir, a pump connected with the reservoir, and a pipe connecting the pump and said end closure atomizer for injecting priming fuel into the suction pipe.

1,880,557. SOLVENT FOR MIXED CELLULOSE ESTERS. CHARLES S. WEBBER and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 18, 1929. Serial No. 348,128. 10 Claims. (Cl. 134—79.)

1. A flowable composition of matter, comprising a mixed cellulose acyl ester dissolved in a mixture of ethylene chloride and a lower monohydroxy aliphatic alcohol, said mixed ester being soluble in either acetone or 50–75% aqueous alcohol and having an acyl radical of an organic acid selected from the group consisting of alpha hydroxy, alpha ketonic and gamma ketonic acids.

1,880,558. PROCESS FOR THE MANUFACTURE OF ETHER LACTATES OF CELLULOSE AND THE PRODUCT THEREOF. CHARELS S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,213. 3 Claims. (Cl. 260—101.)

2. A lactic acid ester of cellulose ethyl ether containing approximately 4.7% lactyl.

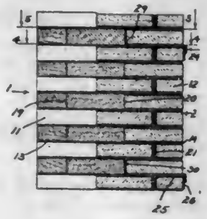
1,880,559. PROCESS FOR THE BENZOYLATION OF CELLULOSE. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,204. 5 Claims. (Cl. 260—101.)

1. A process for the manufacture of cellulose benzoate which comprises benzoylating the cellulose in the presence of the ethylene chloride.

1,880,560. PROCESS FOR THE HYDROLYSIS OF CELLULOSE ACETATE. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,210. 5 Claims. (Cl. 260—102.)

4. In the process for the manufacture of acetone-soluble cellulose acetate the step which comprises hydrolyzing the ester in the presence of an acid selected from the group consisting of the unsaturated aliphatic mono and dibasic carboxylic acids.

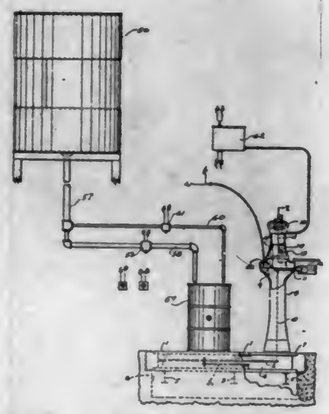
1,880,561. WALL CONSTRUCTION. MAURY L. WEBSTER, Santa Monica, Calif. Filed Mar. 19, 1930. Serial No. 437,041. 22 Claims. (Cl. 72—101.)



12. A furnace wall having refractory blocks on the inside and common blocks on the outside, the common blocks being bedded in mortar beds, means to support the refractory blocks with the contiguous blocks spaced apart, forming open joints on the inside of the wall, said open joints affording a space for the expansion of the inside portion of the refractory blocks due to the temperature of the inside of the furnace.

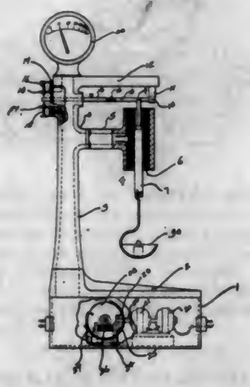
1,880,562. WEIGHING SCALE. MARK A. WECKERLY, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Mar. 18, 1931. Serial No. 523,460. 7 Claims. (Cl. 249—64.)

1. In a weighing device, in combination, automatic load counterbalancing mechanism, material feeding means cooperating therewith, means for controlling said material feeding means controlled by said load counterbalancing mechanism, means for emitting an emanation cooperating with said load counterbalancing means, said material feed control means comprising a mechanically operated



contact switch and a switch operated by the cooperation of said emitting means and said load counterbalancing mechanism.

1,880,563. WEIGHING SCALE. MARK A. WECKERLY, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 3, 1930. Serial No. 441,884. 13 Claims. (Cl. 265—70.)

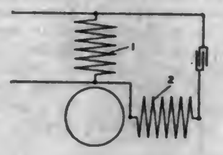


1. In a device of the type described, in combination, a load receiver, electro-magnetic means for offsetting loads operatively connected to said load receiver, a current supply means for said electro-magnetic means and means for varying the amount of current supplied, said means for varying said amount of current comprising a rheostat, and automatic means for operating said rheostat, said automatic means comprising a pair of electro-motors and a plurality of contacts adapted to selectively close the operating circuits of said motors.

1,880,564. MANUFACTURE OF DITHIOCARBAMATES. THEODOR WEIGEL, Cologne-Mulheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 2, 1930, Serial No. 472,765, and in Germany Aug. 8, 1929. 4 Claims. (Cl. 260—112.)

1. Process which comprises emulsifying a compound of the group consisting of sparingly water soluble aliphatic, hydroaromatic and aralkyl-amines with water with the aid of a water soluble emulsifying agent which is chemically indifferent to the starting materials; and causing carbon bisulfide to enter this emulsion slowly.

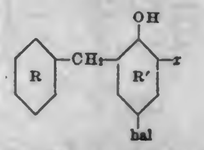
1,880,565. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,453. 1 Claim. (Cl. 172—233.)



In an alternating current motor, an induced member, an inducing member provided with two distributed inducing windings for producing magnetization in two axes displaced from each other, and means for impressing on one of said windings an E. M. F. of phase differing from the E. M. F. impressed on the other winding, one of said inducing windings comprising an even number of coil groups and the other winding comprising twice said number of coil groups, each winding having its groups so positioned as to be capable, by suitable interconnection, of producing N-pole or 2 N-pole magnetization and each of the groups of the winding having the larger number of coils being positioned to overlap another group of that winding 45 electrical degrees (measured with reference to N-pole connection), whereby so interconnecting said groups of the last mentioned winding as to produce a 2 N-pole magnetization shifts the magnetization axis of the winding 45 electrical degrees (measured with reference to N-pole connection) from the position occupied under N-pole connection.

1,880,566. CONDENSATION PRODUCT FROM A NON-HYDROXYLATED BENZYL ALCOHOL. MAX WEILER, Wiesdorf-Leverkusen, and KARL BERRES, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 3, 1930, Serial No. 465,784, and in Germany July 5, 1929. 8 Claims. (Cl. 260—64.)

5. As new products compounds of the probable general formula:

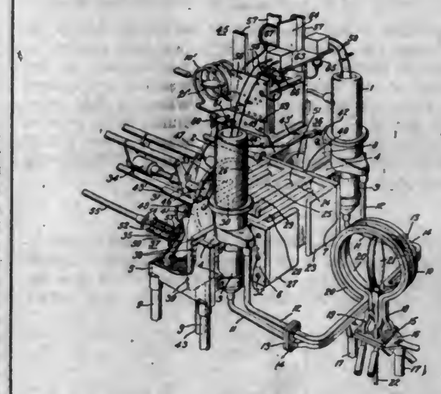


wherein x stands for hydrogen, halogen, alkyl or benzyl radical, "hal" stands for a halogen atom, wherein the benzene nucleus R may be substituted by halogen, alkyl or a sulfo group, and wherein the benzene nucleus R' may be further substituted by halogen or alkyl being generally colorless or nearly colorless powders, which are soluble in alkalies, difficultly soluble in water excepting those which contain a sulfo group and are highly efficacious in protecting wool, hair and the like against moths and similar insect pests and in preventing and combating the growing of micro-organisms.

1,880,567. CHROMIUM COATED ARTICLES AND METHOD OF PREPARING SAME. LOUIS WEISBERG and WILLARD F. GREENWALD, New York, N. Y., assignors to Weisberg & Greenwald, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 1, 1930. Serial No. 472,487. 3 Claims. (Cl. 204—1.)

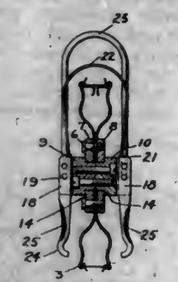
1. The method of preparing a surface of lead-containing metal for chromium plating which comprises forming on the surface a layer of lead amalgam and electrolytically depositing brass thereon.

1,880,568. SIGNALING SYSTEM. IRVIN R. WEIR, Schenectady, and LYCURGUS W. RICHARDSON, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,134. 14 Claims. (Cl. 179—171.)



1. The combination, in a high frequency transmitting system, of a pair of electron discharge devices spaced apart, means connecting said discharge devices in push pull relation, said means comprising a pair of substantially parallel conducting plates, one of said discharge devices being mounted upon and conductively connected with each of said plates, and additional plates extending from each of said plates toward the other plate to form a condenser connected between said discharge devices.

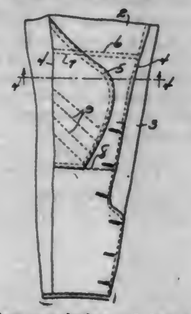
1,880,569. SURGICAL CLIP APPLYING INSTRUMENT. JOHN P. WEIS, Nyack, N. Y. Filed Sept. 27, 1930. Serial No. 484,767. 22 Claims. (Cl. 1—49.)



1. A surgical instrument for applying wound clips comprising spaced means for engaging and holding the oppo-

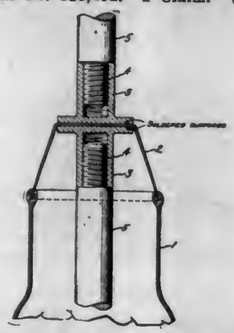
site ends of a series of clips spaced one from another, each in readiness to be compressed, and means for compressing and thereby bowing the series of clips successively.

1,880,570. BREECHES. AARON M. WEITZENHOFFER, McAlester, Okla. Filed Aug. 31, 1931. Serial No. 560,424. 1 Claim. (Cl. 2—228.)



In breeches a leg consisting of leg pieces sewed together along the longitudinal edges, a patch applied to the exterior surface of one piece and disposed at the knee joint of the wearer when the breeches are donned and a lining applied to the inner surface of said piece opposite said patch, the edges of the lining being secured at the seams connecting the pieces and transverse stitching connecting the upper and lower edges of the lining to the leg piece.

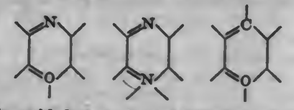
1,880,571. GLASS TO METAL SEAL. BERTRAM WELLMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 28, 1929. Serial No. 335,492. 1 Claim. (Cl. 250—27.5.)



A seal between a glass envelope and a conductor comprising a metallic cup-shaped sealing member having a closed base, a plurality of metallic members positioned on opposite sides of said base, said members being bored and threaded to receive the threaded portion of a conductor and means for securing together said members and the base, said means comprising a solder material positioned between said metallic members and said base.

1,880,572. COLOR PHOTOGRAPHY. BRUNO WENDT, Dessau in Anhalt, and HANS BINCER, Dessau-Ziebigk in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed July 29, 1930, Serial No. 471,590, and in Germany Sept. 9, 1929. 6 Claims. (Cl. 95—2.)

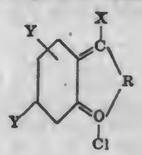
1. Process for the production of layers of bleaching-out dyes, having a bleaching-out velocity as equal as possible, for the purpose of color photography comprising adjusting the bleaching-out velocity of the aromatically substituted dyestuffs containing a chromophor of the group consisting of nuclei of the formulæ



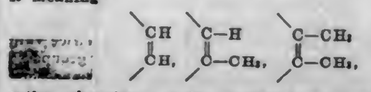
contained in said layers, by substituting at least one of the dyestuffs having an unsatisfactory bleaching-out velocity by a dyestuff having the same basic formula, wherein, however, the aromatic residue linked to the chromogen is hydrogenated or substituted by halogen, —CN, —CNS, $-NO_2$, —CO.H, —CO.R, —CO.OR, —OH, —alkyl, —aryl, —alkyloxy, or aryloxy.

1,880,573. LIGHT-SENSITIVE MATERIAL FOR THE BLEACHING OUT PROCESS. BRUNO WENDT, Dessau in Anhalt, and HANS BINCER, Dessau-Ziebigk in Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed June 30, 1930, Serial No. 465,059, and in Germany July 30, 1929. 9 Claims. (Cl. 95—7.)

1. Light-sensitive materials for the bleaching-out process containing an oxonium salt of generally yellow color corresponding to the general formula:

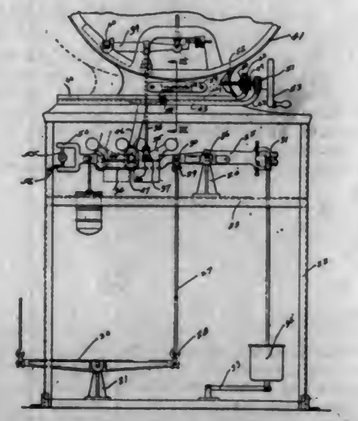


R meaning



ortho phenylene, ortho naphthylene, and substitution products of these aromatic radicles bearing an alkyl, a hydroxy or methoxy group, X meaning H, methyl, benzyl, phenyl, chlorophenyl, phenylcarboxylic acid methyl ester radicle, Y meaning H, OH, methoxy.

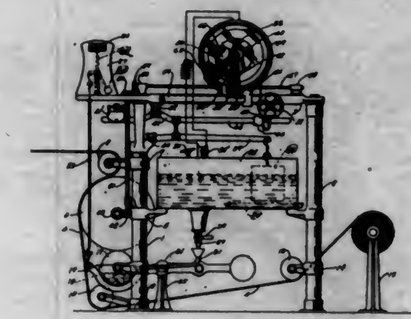
1,880,574. VARIABLE RATIO COMPOUNDING SCALE. EDWARD G. THOMAS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 21, 1930. Serial No. 445,925. 8 Claims. (Cl. 265—29.)



1. In a device of the class described, in combination, means for supporting a load containing a plurality of

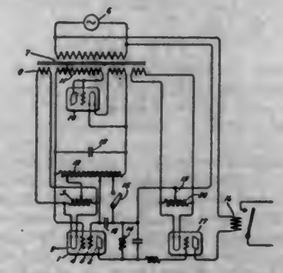
constituents in predetermined ratio, automatic counterbalancing mechanism, variable lever mechanism for transmitting force exerted by such load to said counterbalancing mechanism, means for adjusting said lever mechanism in accordance with such predetermined ratio to cause said indicating mechanism to indicate the weight of one only of the constituents of such load and indicating means for showing the ratio in accordance with which said lever mechanism is adjusted.

1,880,575. WEIGHING SCALE. EDWARD G. THOMAS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Original application filed Jan. 5, 1928, Serial No. 244,593. Divided and this application filed June 29, 1931. Serial No. 547,488. 12 Claims. (Cl. 249—22.)



1. In mechanism for continuously producing a product consisting of a plurality of components, in combination, a revolving member, means for causing said member to revolve at a rate proportional to the rate of supply by measure of one of said components, a second revolving member, means for causing said second revolving member to revolve at a rate proportional to the change of weight of another of said components, and means responsive to variations in the relative rates of revolution of said revolving members for controlling the change of weight of the last mentioned component.

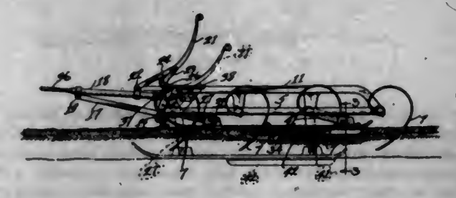
1,880,576. TIME DELAY APPARATUS. HENRY P. THOMAS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 3, 1930. Serial No. 486,275. 7 Claims. (Cl. 175—320.)



2. In combination, an electron discharge device, having an anode, a cathode, and an additional electrode, energy storage means connected between said additional electrode and anode, means for supplying electromotive forces of different values to said anode and additional electrode whereby said energy storage means is charged, means for interrupting the supply of electromotive force from said means to said anode whereby said storage means tends to discharge and means operable responsively to the discharge of said condenser.

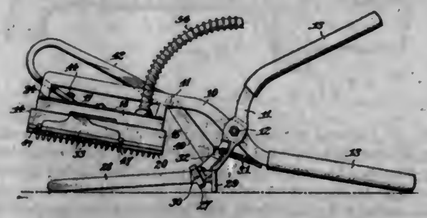
6. In combination, an electron discharge device, having an anode, a cathode, a control electrode and a screening electrode interposed between the control electrode and anode, energy storage means connected between the screening electrode and anode, means for supplying negative electromotive force to said control electrode, means for supplying positive electromotive forces of unequal values to said screening electrode and anode whereby said energy storage means is charged, means for interrupting said supply electromotive force to said anode whereby said energy storage means tends to discharge and a vapor electric device connected to respond to discharge of said energy storage means.

1,880,577. CULTIVATOR. ERNEST S. THOMPSON and JAMES R. ULERY, Strathmore, Calif. Filed Dec. 4, 1931. Serial No. 579,010. 2 Claims. (Cl. 55—38.)



1. In a device of the character described, a frame having cross members secured thereto, teeth secured to said cross members, a pair of runners positioned beneath said frame, links pivotally connecting the rear end of said runners to said frame, a yoke pivoted to said frame and to the forward portion of said runners, a lever secured to said yoke, a pull rod secured to said lever, a strip lever pivoted above said frame, a link connecting said lever and said trip lever, the pivotal points between said link and said trip lever forming a toggle connection when said frame is at its upper limit of movement above said runners.

1,880,578. HAIR WAVING DEVICE. MARTHA A. TIENKEN, New York, and CHARLES A. MEYER, Brooklyn, N. Y. Filed June 2, 1931. Serial No. 541,633. 8 Claims. (Cl. 132—32.)



1. In a hair waving device, a closed shell constructed to provide waving members in side by side relation, hair engaging members respectively associated with and projecting through said waving members for relative longitudinal movement; said shell having additional waving members on the outsides thereof respectively which co-operate with the other waving members in the hair waving operations, and additional hair engaging members respectively associated with said outside waving members which co-operate with the other hair engaging members in the hair waving operations.

1,880,579. METHOD OF PRODUCING ROCKETS, ESPECIALLY FOR AERONAUTIC PURPOSES. REINHOLD TILING, Osnabruck, Germany. Filed June 18, 1931. Serial No. 544,143. 4 Claims. (Cl. 102—23.)



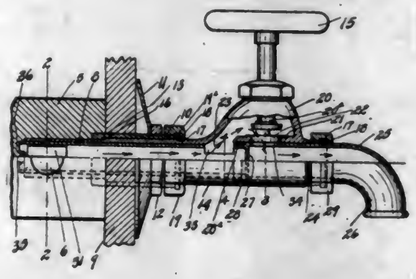
1. A method of producing rockets, especially for aeronautic purposes, consisting in pressing the powder of the charge proper under high pressure into the casing so that a central channel called "core" is formed in the charge, and in simultaneously filling the core with powder at a lower uniform pressure.

1,880,580. RAKE. GEORGE T. TOKUNAGA, San Francisco, Calif. Filed July 8, 1931. Serial No. 549,526. 2 Claims. (Cl. 55—114.)



1. In a device of the character described, a handle, a frame work secured to said handle, said frame work including a pair of diverging members and arcuate cross-pieces extending between said diverging members, a resilient teeth engaging member and clamping member secured to each of said arcuate cross-pieces whereby teeth positioned between said arcuate cross-pieces and said resilient members will be engaged and retained thereby..

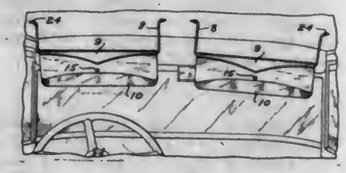
1,880,581. VALVE. FRANK R. TOMLINSON, Bay City, Mich. Filed Nov. 4, 1927. Serial No. 231,004. 7 Claims. (Cl. 277—31.)



1. In a device of the character described, a mixing chamber having hot and cold water ports, a stationary member mounted in said chamber, a rotatable member mounted on said stationary member and controlling the area of said ports, a by-pass from said stationary member to said movable member, means for controlling the discharge of water from the stationary member, and stops for limiting the rotation of said rotatable member.

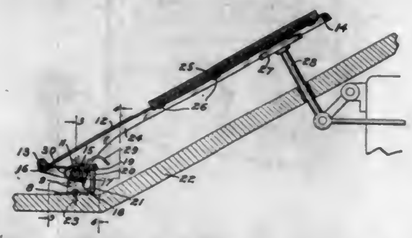
1,880,582. VISOR. JOEL R. THORP, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed Apr. 27, 1931. Serial No. 533,088. 2 Claims. (Cl. 296—97.)

1. In combination, a U-shaped supporting member having alined laterally spaced pivots and an intermediate pivot portion swingable about the axis of alinement of said end portions, a carrier element pivotally associated with said intermediate pivot portion, means within said element and coacting only with the medial portion of said



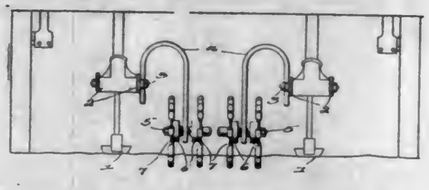
intermediate pivot portion to frictionally retain said element in various positions of adjustment, and a transparent shield secured to said element remote from said intermediate pivot portion.

1,880,583. PEDAL. JOEL R. THORP, West Allis, Wis., assignor to The Fulton Company, West Allis, Wis., a Corporation of Wisconsin. Filed June 18, 1931. Serial No. 545,236. 10 Claims. (Cl. 74—81.)



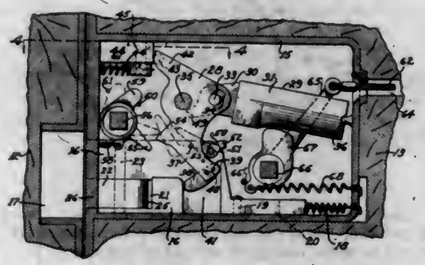
1. In combination, a bracket having rearwardly open notches and a wall provided with a downwardly exposed edge disposed in substantial alinement with said notches, a pin coacting with said notches, a pedal swingable about said pin above said bracket, a spring for urging said pedal in one direction, and a holder coacting with said spring and cooperable upwardly with said edge to retain said pin within said notches.

1,880,584. CULTIVATOR SHIELD. JOHN W. TIBBITTS, North Bend, Wis. Filed June 21, 1930. Serial No. 462,837. 7 Claims. (Cl. 97—188.)



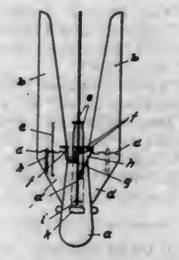
1. The combination with a cultivator having a plow, and a frame for supporting said plow, of a bar extending inwardly and downwardly from said frame, a journal carried by the lower end of said bar and extending in opposite directions therefrom, hubs arranged on said journal on opposite sides of the bar, and disks carried by the outer ends of the hubs in spaced relation and having soil working fingers formed at the peripheries of said disks for working the soil between the cultivator plow and a row and to protect the row from the action of the plow.

1,880,585. MOTOR VEHICLE LATCH. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1930. Serial No. 498,614. 3 Claims. (Cl. 292—335.)



1. In a door mechanism, a door, a door post, lock means associated with the door for holding it in closed position against the post, manually operated means associated with the lock means to control disengagement thereof, spring means associated with the lock means to control engagement thereof, and door limit means connecting the door post and said spring means, said door limit means being operated by initial opening of the door to load the spring means.

1,880,586. FLYING ROCKET. REINHOLD TILING, Osnabruck, Germany. Filed June 18, 1931. Serial No. 544,144. 3 Claims. (Cl. 244—18.)

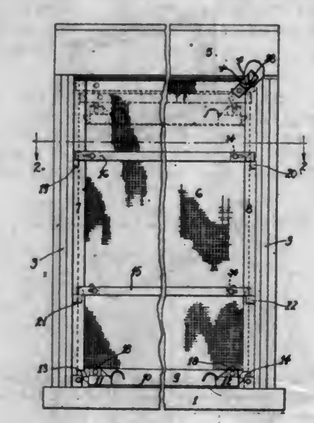


1. A flying rocket, comprising in combination with the body, lateral extension planes on said body, axles one on the rear end of each of said planes extending transversely to the longitudinal plane of said body, tail fins hingedly mounted one on each of said axles adapted to assume a position in substantially horizontal plane and to act like supporting planes when the rocket is falling.

1,880,587. PAPER MANUFACTURE. JOHN TRAQUAIR and FRANCIS G. RAWLING, Chillicothe, Ohio, assignors to The Mead Research Engineering Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 29, 1928. Serial No. 329,082. 9 Claims. (Cl. 92—7.)

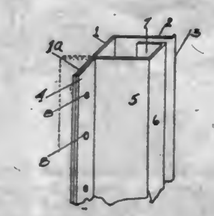
1. In the manufacture of pulp from fibrous material, the method which comprises subjecting the fibrous material to digestion with substantially non-acid chemical under such conditions of treatment that the fibrous material is only partially defibered, then extracting the digested material with alkaline liquor to effect partial removal of the chlorine consuming constituents while leaving a substantial proportion of the non-fibrous constituents in the mass and without effecting complete pulping thereof, and further disintegrating the extracted material to pulp by treatment with a chlorinating agent.

1,880,588. PROTECTIVE AND CONTROLLING DEVICE FOR ROLLING WINDOW SCREENS. CLIFFORD TRAUT, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky,. a Corporation of West Virginia. Filed Sept. 11, 1931. Serial No. 562,316. 11 Claims. (Cl. 156—39.)



1. In a protective device for a rolling closure, spaced side guides having channels, a bar movable along said guides, and having means entering said channels, said bar being unattached to said rolling closure, said means entering said channels having a portion within said guides to prevent the withdrawal thereof through said channels.

1,880,589. GUIDE FOR ROLL SCREENS. CLIFFORD TRAUT, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed May 10, 1929. Serial No. 362,095. 3 Claims. (Cl. 156—39.)

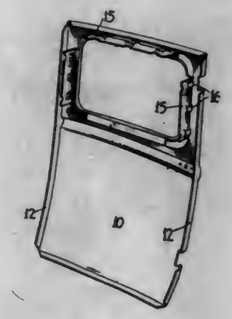


1. In a guide of sheet metal for roll closures, a portion bent to form a part of an attachment tongue, the back of a channel and one side thereof, a second portion bent to form the other part of said attachment tongue, the other side of said channel, the front of said channel and a reentrant tongue in the order named, said two portions disposed so as to be parallel and contiguous in the attachment tongue part of each and the front of said channel being semi-resilient.

1,880,590. PRESSED METAL DOOR. GEORGE TRAUTVETTER, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1930. Serial No. 421,374. 4 Claims. (Cl. 296—44.)

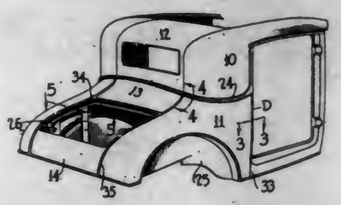
1. An outer panel for vehicle doors comprising a unitary stamping having a window opening formed therein,

said panel being extended inwardly at the window opening to form moulding, and then flanged in the plane of the panel and transversely to form the outer side and



bottom of a glass run channel, the transversely flanged portion being formed with spaced offsets for securing it to the door rail.

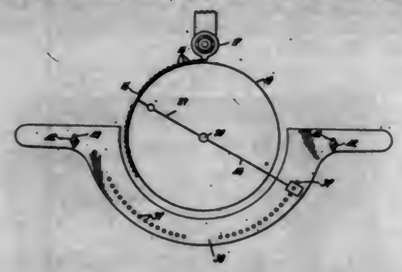
1,880,591. PRESSED METAL VEHICLE BODY CONSTRUCTION. GEORGE TRAUTVETTER, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1930. Serial No. 421,373. 3 Claims. (Cl. 296—28.)



3. In a vehicle body construction having a rear deck and an opening therein, a side wall comprising a forward unitary stamping extending around a doorway opening and flanged inwardly around said opening to frame the same, and having a rearward curved extension to form the rear quarter in its upper portion, the lower edge of said extension being flanged inwardly, and a rear deck side stamping extending from the bottom of the body to the deck opening and conforming in its upper forward portion to the lower edge of the rearward extension of the forward stamping and secured to said flange, its forward edge being extended forwardly to overlap said inwardly flanged portion at the rear of the doorway opening and secured thereto.

1,880,592. TYPE INDEXING MEANS. FRANK H. TREGO, New York, N. Y., assignor to Varityper Incorporated, New York, N. Y., a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,677. 15 Claims. (Cl. 197—51.)

2. In a typewriting machine, the combination of printing means including a rotatable type carrier, key operated means to actuate said type carrier and locate the selected type at the printing point, and adjustable means



to vary the angular movements of the type carrier to the printing point to compensate for variation in the spacing between the types of various segments.

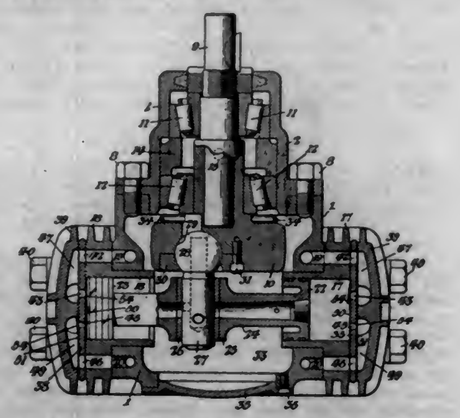
1,880,593. AMINOCARBAZOLE-SULPHONIC ACID. EDUARD TSCHUNKUR and ERNST KRACHT, Cologne-Mulheim, and ERNST HERDIECKERHOFF, Opladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 15, 1931, Serial No. 551,044, and in Germany July 18, 1930. 2 Claims. (Cl. 260—46.)

2. As a new product the 2-aminocarbazole-7-sulphonic acid, being a white substance, insoluble in water, soluble in alkalies and being a valuable intermediate product for the manufacture of dyestuffs.

1,880,594. PROCESS OF PREPARING 2.2'-DIAMINO-DIPHENYL-4.4'-DISULPHONIC ACID. EDUARD TSCHUNKUR and ERNST KRACHT, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 16, 1931, Serial No. 551,300, and in Germany July 21, 1930. 2 Claims. (Cl. 260—129.)

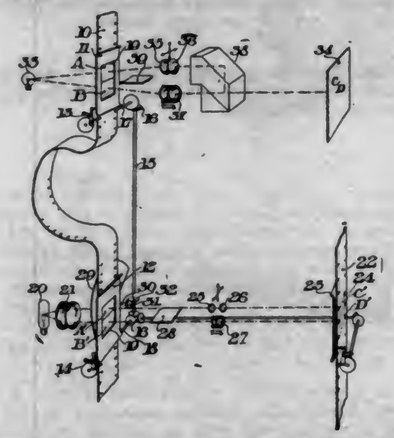
2. The process which comprises heating diphenyl in sulphuric acid monohydrate to 90° C., keeping the reaction mixture at this temperature for several hours, allowing the reaction mixture to cool down to 40° C., introducing nitrating acid, stirring for several hours at 80° C. isolating the 2.2'-dinitro-diphenyl-4.4'-disulphonic acid and reducing the same with iron and hydrochloric acid.

1,880,595. FLUID COMPRESSOR. CHARLES M. TURSKY, Philadelphia, Pa. Filed Sept. 4, 1931. Serial No. 561,193. 16 Claims. (Cl. 230—185.)



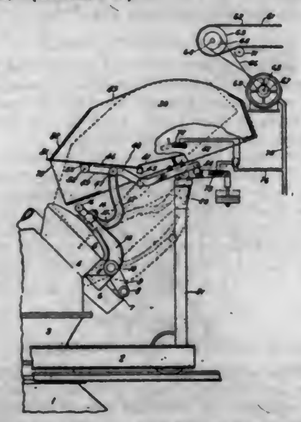
1. A fluid compressor valve consisting of a plane resilient metal plate having a port therethrough remote from the edge thereof; said port defining a flexible flap; said flap being flexible for permitting the passage of fluid through said port, in one direction, and preventing the passage of fluid through said port, in the opposite direction; said plate having another port therethrough remote from the edge thereof and from said first port for permitting fluid to freely pass through said plate in the opposite direction, and uncontrolled.

1,880,596. PHOTOGRAPHIC PRINTING APPARATUS. FORDYCE TUTTLE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 10, 1931. Serial No. 562,084. 6 Claims. (Cl. 88—24.)



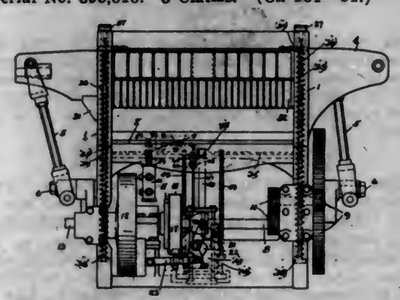
1. In a photographic apparatus the combination of a first projection window and a first optical system, a screen positioned to receive rays from the first optical system, a second projection window and a second optical system, a printing gate positioned to receive rays from the second optical system, means for adjusting the first optical system to properly register the rays on the screen and connecting means for simultaneously and correspondingly adjusting the second optical system.

1,880,597. SCALE FOR CHARGING MACHINES. OLAV TWEIT, Orange, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1928. Serial No. 296,799. 9 Claims. (Cl. 249—2.)



1. In a balance, a support, a lever of the first kind with unequal arms pivotally mounted in said support so that said support serves as the fulcrum for said lever, a weight platform connected to the end of the long arm, a container arranged to receive material and connected to the end of the short arm, said container having a moving part arranged to support some of the material in said container, a second support, a second lever pivoted on said second support so as to provide arms of unequal length, said second lever having one arm connected to said moving part and the other arm connected to the long arm of said first mentioned lever.

1,880,598. PAPER CUTTING MACHINE. RALPH S. TYLER and HERBERT MCGEORGE, Cleveland Heights, Ohio, assignors to The Chandler and Price Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 27, 1929. Serial No. 395,515. 3 Claims. (Cl. 164—51.)



1. In a paper cutting machine, a mechanically operated knife, a hydraulically operated binder, control means for actuating said binder manually independently of said knife, means operating said binder when said knife is operated, means for stopping the knife at the top of its stroke and adjustable means for stopping the binder in its upward stroke at any desired point.

1,880,599. CONCRETE PIPE JOINT. BOZIDAR J. UKROPINA, Los Angeles, Calif. Filed Jan. 17, 1931. Serial No. 509,373. 3 Claims. (Cl. 72—53.)

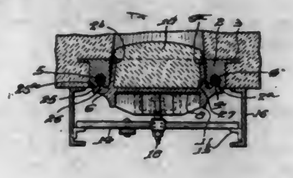


1. A concrete pipe, said pipe including a metal tube embedded between an outer layer of concrete and an inner layer of concrete, a reinforcing cage, said cage including a plurality of spaced metal rings having tongues thereon, some of said tongues being inclined away from the adjacent surface of said tube, and other of said tongues being inclined towards said tube and a plurality of circumferentially spaced longitudinal rods, said rods being associated with said rings.

1,880,600. COKE OVEN DOOR. ROY E. UMBEL, Struthers, Ohio. Filed Jan. 11, 1930. Serial No. 420,030. 2 Claims. (Cl. 202—248.)

2. Closure means for a coke oven comprising a substantially continuous door frame defining a port, said frame having an endless recess of substantially circular cross section disposed internally thereof and an outwardly divergent groove extending from said recess to an adjacent surface of the frame, packing disposed in said recess, the diameter of said packing being substantially greater than the width of said groove adjacent the recess, the said

frame having a convex continuous curved surface spaced from said groove and adjacent said port, and a door cooperative with said frame and comprising an integral body having a continuous marginal flange provided with a projecting rib having convergent side walls adapted to engage the divergent walls of said groove and simulta-

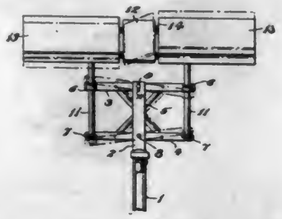


neously to compress said packing when the door is in position in the port, and another flange adapted to extend into said oven and separated from the first-mentioned flange by a concave curved surface adapted to contact the curved surface on the frame when the door is in said position.

1,880,601. GYPSUM-RUBBER COMPOSITION. FREDERICK H. UNTIEDT, Chevy Chase, Md. Filed May 26, 1931. Serial No. 540,217. 8 Claims. (Cl. 106—23.)

1. A cellular or porous composition containing an intimate admixture of gypsum and the rubber solids of an aqueous rubber dispersion which contains a stabilizing agent to restrain coagulation of the rubber in said dispersion when the latter is mixed with calcined gypsum, said composition being non-rigid and flexible, and distended by the presence therein of air-filled cells or pores so as to be cellular or porous, the gypsum therein amounting to at least fifty percent of the total solids and the quantity of rubber being at least sufficient to impart flexibility and non-rigidity to the composition .

1,880,602. BOOKSTAND. WILLIAM UTRECHT, Tampa, Fla. Filed Oct. 23, 1930. Serial No. 490,709. 4 Claims. (Cl. 45—86.)



1. A bookstand comprising an upright, upper and lower bars pivotally connected intermediate their ends to the upright, crossed links pivotally connected to the upper and lower bars, a book rest comprising side leaves, stems depending from the side leaves, and connecting means between the stems and upper and lower bars, said stems having pivotal and sliding connection with the upper bar and pivotal connection with the lower bar.

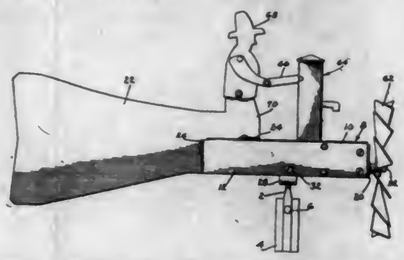
1,880,603. CAGE FOR SAVING FATS. JAMES VAGLIO, Passaic, N. J. Filed Jan. 22, 1931. Serial No. 510,572. 3 Claims. (Cl. 53—7.)

1. A cage for saving fats comprising a side wall foraminous from the top edge to the bottom edge and a solid bottom connected to the bottom edge of said wall, said bottom having an annular portion offset toward the top edge of said wall and a supporting frame for said wall, said frame including an annular ring at the top and depending bars fitting against but positioned exteriorly of said wall, each of said bars having a laterally extending



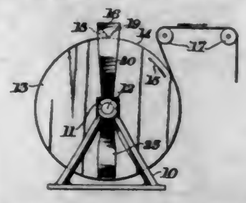
portion fitting beneath and in contact with the under surface of said offset portion and depending foot projecting beneath said laterally extending portion.

1,880,604. TOY WINDMILL. ARTHUR D. VANDEROON, Delano, Minn. Filed June 6, 1931. Serial No. 542,605. 4 Claims. (Cl. 46—40.)



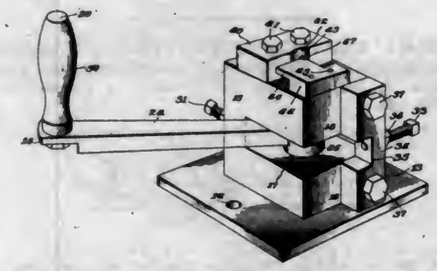
1. In a windmill toy, a supporting spindle, a main housing mounted for rotation upon said spindle and having a top provided with an opening therein, sides, and front and back ends, a vane mounted upon the housing and extended rearwardly therefrom in a plane substantially at right angles to the top, a jointed toy figure mounted above the said housing at a point removed from the opening therein, a drive shaft journalled in the housing and projecting through its front end, a propeller secured to the projecting portion of the drive shaft, a pinion rotatably mounted in the housing below said opening in the top, means for driving the pinion from said drive shaft, a secondary housing arranged over the aforesaid opening in the main housing, a lever pivoted in said secondary housing having one arm inside and the other projecting outside the secondary housing, the outside arm being pivoted to the jointed figure, and a link pivotally connected to the inside arm of said lever at one end and eccentrically connected to the pinion at its other end, said secondary housing enclosing said link.

1,880,605. HOPPER MOUNT FOR ROLL COATING MACHINES. HENRY E. VAN DERHOEF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 5, 1930. Serial No. 493,566. 3 Claims. (Cl. 18—15.)



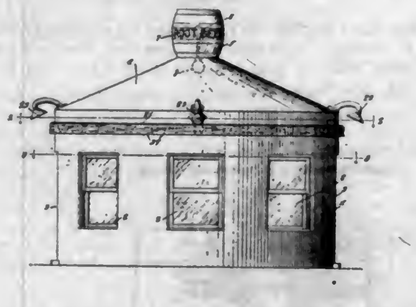
3. In a film making machine, the combination with a rotary drum mounted on a shaft of a frame pivoted on said shaft and weighted to hold the frame stationary and a hopper mounted on said frame in dope spreading relation with said drum.

1,880,606. HOOK FORMING TOOL. HENRY VANDERPLOEG, Chicago, Ill., assignor to Haggard & Marcusson Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1929. Serial No. 379,150. 9 Claims. (Cl. 140—103.)



1. In a machine of the class described, a frame, an oscillatory part carried by the frame and adapted to receive the end of a helical spring thereover, two cooperating bending members on said oscillatory part, one of said bending members projecting beyond the other to engage the terminal of the end convolution of the spring for bending said terminal around the other member upon partial rotation of said oscillatory part, and a third bending member on said frame disposed to abut the end convolution of the spring to cause the hook to be bent off center with respect to the axis of the spring.

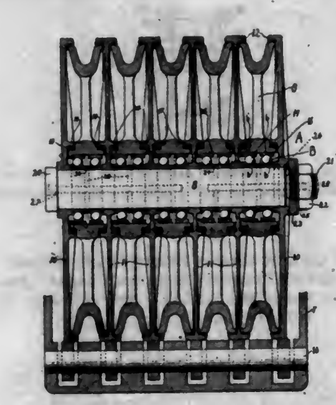
1,880,607. ADVERTISING MEANS FOR STORES AND THE LIKE. JOSEPH R. VAN WINKLE, Quitaque, Tex. Filed Feb. 7, 1930. Serial No. 426,642. 1 Claim. (Cl. 40—33.)



The combination of a supporting structure, a track mounted upon said structure and circumscribing the same, illuminators mounted upon the structure and arranged to cast rays of light toward the track, a band surrounding the track and interposed between the track and the illuminators, wheels mounted at the inner side of the band and engaging the track and means for moving the band around the track.

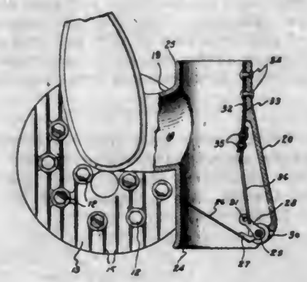
1,880,608. SHEAVE BLOCK. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 20, 1930. Serial No. 437,316. 17 Claims. (Cl. 254—192.)

1. In sheave construction, a sheave block, and a sheave assembly or unit comprising a sheave pin, a plurality of sheaves on said pin, and means intermediate the sheaves for supporting the sheave pin, said means being supported



from the sheave block for removal of the sheave assembly as a unit.

1,880,609. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1930. Serial No. 439,782. 10 Claims. (Cl. 123—79.)



1. In a compression-ignition internal combustion engine, comprising in combination, a cylinder, a piston therein, said parts enclosing a combustion space, means for injecting fuel into the combustion space, conduit means through which air and exhaust pass to and from the combustion chamber, a valve in the conduit means for throttling the admission of combustion air into the combustion space, and means responsive to temperature for actuating said valve, any reduction in the air volume being supplemented by exhaust irrespective of the fuel volume.

1,880,610. SHIPPING BASKET. ALEXANDER VIRAG, Townsend, Del. Filed Feb. 8, 1932. Serial No. 591,469. 6 Claims. (Cl. 217—122.)

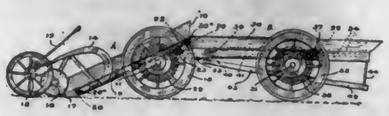
1. A shipping wire basket, comprising a plurality of staves and a bottom disc forming a basket, hoops along the tops, the bottoms and intermediate portions of the staves, wires and straps extended transversely between

the loops and across the bottom of the disc, staples at certain intersections for holding the hoops against moving down, and staples serving to attach the wires or



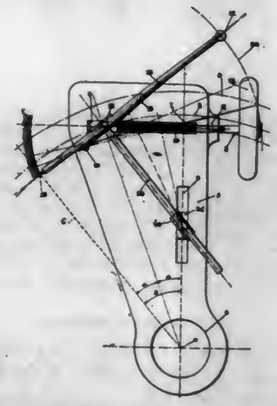
straps upon the staves, certain of said staples comprising a shank portion and a bent portion constituting its head.

1,880,611. QUACK GRASS DESTROYER. ERNEST HENRY VODON, Grande Clairiere, Manitoba, Canada. Filed Mar. 18, 1931, Serial No. 523,545. Renewed July 26, 1932. 1 Claim. (Cl. 97—10.)



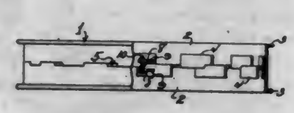
In a machine of the type described, an inclined wheeled frame, a front truck supporting the forward end of said frame, a share shovel secured to the front lower end of said frame, an endless conveyor mounted in said frame, means for driving said conveyor, a rear wheeled frame connected to said inclined frame at its upper end, a pair of spaced crank shafts mounted in said rear frame, spaced longitudinal shaker bars connected to the cranks of said crank shafts, secondary shaker bars disposed on an inclined plane beneath said main shaker bars, the upper ends of said secondary shaker bars being operatively connected to said main shaker bars, swinging hangers depending from said rear wheeled frame, supporting the lower end of said secondary shaker bars and means for driving said crank shafts whereby a reciprocating movement is imparted to said main and secondary shaker bars.

1,880,612. APPARATUS FOR SHAPING THE MILLSTONES FOR RECTIFYING GEAR TEETH. GUSTAVE ERNEST VOIGNIER, Paris, France. Filed June 28, 1929, Serial No. 374,503, and in France July 27, 1928. 3 Claims. (Cl. 125—11.)



1. Apparatus for outlining millstones for the rectification of gear teeth, comprising in combination, a stationary base, a tool holder, a guide on said base slidably supporting said tool holder, said guide being rotatable, means for moving said guide linearly, whereby the curve described by the end of a tool fixed to said holder may be controlled, and a rod pivotally connected to said tool holder at a point spaced from the tool-carrying end thereof, the other end of said rod being fixed, whereby upon linear movement of said guide it is simultaneously rotated.

1,880,613. DEMOUNTABLE TWO PIECE AUTOMOBILE RIM. JOHN A. WESTBROOK, Powder Springs, Ga. Filed Nov. 9, 1931. Serial No. 573,992. 1 Claim. (Cl. 301—35.)

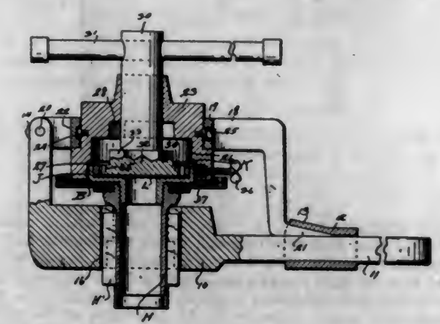


A rim comprising companion annular sections adapted to be arranged in abutting engagement to support a tire, a plurality of relatively spaced flat tongues having offset portions formed integrally with the abutting edges of the sections to position said tongues inwardly of the sections, the tongues of one section fitting between the tongues of the other section, said offset portions having notches to permit the tongues to interlock with each other by the movement of one section circumferentially of the other section, an ear formed on one tongue of each section and having notches to receive a lug bolt of the wheel, and a fastener detachably connecting the ears.

1,880,614. MAGNESIUM ALLOY. JOHN P. WETHERILL 3d, Washington, D. C., assignor to American Magnesium Metals Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed May 8, 1931. Serial No. 536,075. 2 Claims. (Cl. 75—1.)

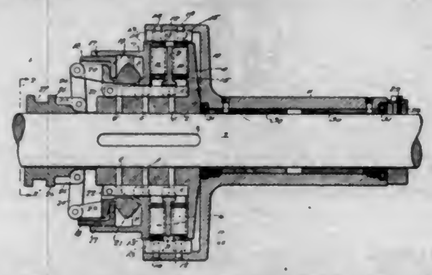
1. A light weight alloy comprising from 90 to 99% of magnesium and the remainder cobalt.

1,880,615. FLUSH VALVE REPAIRING TOOL. JAMES B. WHITE and MAURICE T. GOSSETT, Nashville, Tenn. Filed June 4, 1931. Serial No. 542,172. 13 Claims. (Cl. 29—84.)



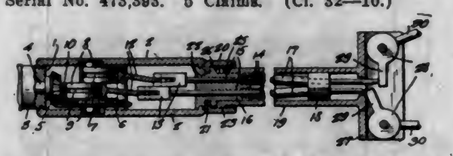
1. An implement of the character described, including a jaw having a bore to receive a valve guide, the bore having means for preventing the rotation of the valve guide, a second jaw movable into confronting relation to the first named jaw and having a central recessed portion, a freely rotatable element mounted entirely within the recess of the second named jaw, means exterior to the second-named jaw for rotating said second-named element, the element having means on its periphery to receive and engage with the lugs on a valve ring.

1,880,616. FRICTION CLUTCH. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1930. Serial No. 485,710. 3 Claims. (Cl. 192—69.)



1. The combination in a friction clutch, of a shaft; a hub secured to the shaft and having an abutment; a pressure ring and an intermediate pressure disk arranged to slide longitudinally on the hub and to turn therewith; a shell; friction members arranged to turn with the shell but to slide longitudinally therein, said friction members located between the pressure disk and the pressure ring and the abutment on the hub; a ring adjustably mounted in the pressure ring and having an inturned flange; a series of operating levers, each lever having two controlling members, one on one side of the inturned flange of the adjustable ring and the other on the opposite side thereof, so as to positively move the adjustable ring and the pressure ring towards and from the friction members; and means for operating the levers in unison.

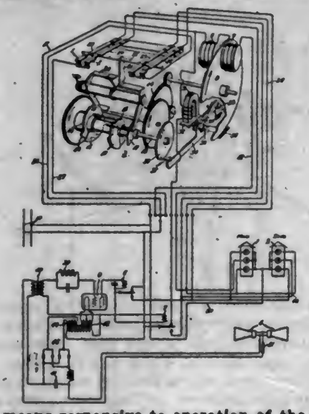
1,880,617. DENTAL PROPHYLACTIC OSCILLATOR. WILLIAM D. WHITE, Fort Sill, Okla. Filed Aug. 6, 1930. Serial No. 473,393. 5 Claims. (Cl. 32—10.)



1. An attachment for a dental machine, comprising a body, means for detachably connecting the body to the machine, a shaft journaled in the body and driven from the machine, eccentrics on the shaft, a pair of stems guided in the body and reciprocated by the eccentrics, a pair of cam members pivoted in the outer end of the body and rocked by the stems, arms carried by the cam members and a blade detachably connected with the arms whereby the blade will be reciprocated by the rocking movements of the cams.

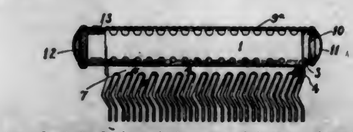
1,880,618. TRAFFIC SIGNAL SYSTEM. CHANCY F. WHITNEY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 19, 1928. Serial No. 320,247. 4 Claims. (Cl. 177—339.)

1. In a signal system for intersections of main and side streets, comprising a danger signal on the main street and safe and danger signals on the side street, a controller arranged for rotation, means tending to rotate said controller, means for restraining said controller against rotation including a normally energized brake magnet, an electron discharge device having an anode circuit including a relay, means responsive to sound produced on the side street for supplying impulses to said discharge device thereby to operate said relay, connections controlled by said relay when operated for deenergizing said brake magnet thereby to release said controller and for interrupting said anode circuit, connections between said controller and said signals, whereby after said controller is released the signals on the side street are changed from danger to safe and then to danger, and said danger signal on the main street is operated simultaneously with the safe signal on the side



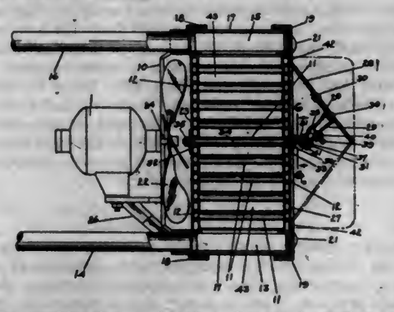
street and means responsive to operation of the controller to a predetermined position for completing said anode circuit thereby to restore said relay and brake magnet to the normal condition.

1,880,619. HAIR COMB. EDWARD MILTON WILDEY, London, England. Filed Apr. 23, 1930, Serial No. 446,470, and in Great Britain Mar. 5, 1930. 12 Claims. (Cl. 219—21.)



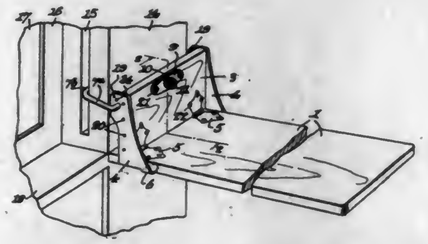
1. An electric hair comb comprising a chambered supporting member, comb members in the form of interpenetrating clips sprung on opposite sides round such member and insulated from one another, a removable battery in said chambered supporting member, and means to connect said comb members in circuit with said battery, the circuit being closed by said comb members being passed over the scalp.

1,880,620. AUTOMOBILE HEATER AND DEFLECTOR THEREFOR. CARL H. WILL, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,265. 5 Claims. (Cl. 257—137.)



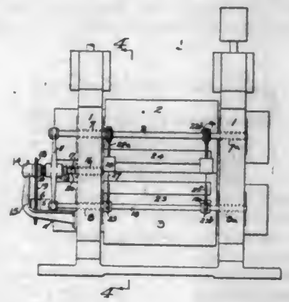
1. In combination, a heating element including spaced apart tubes, a shank fixed in one of said tubes, a joint member carried by said shank, a heat deflector, and a complemental joint member upon said heat deflector.

1,880,621. TOURIST TABLE AND SUPPORT THEREFOR. GEORGE H. WILLETTS, Beaver Falls, Pa. Filed Aug. 18, 1930. Serial No. 476,047. 7 Claims. (Cl. 45—51.)



1. In combination, a table comprising a part adapted to lie against a vertical wall between adjacent windows, and a support attached to said part, said support comprising two arms each of which has an angled extension, one to the right and one to the left and adapted to enter the curtain-guide-grooves of adjacent railway-car-windows.

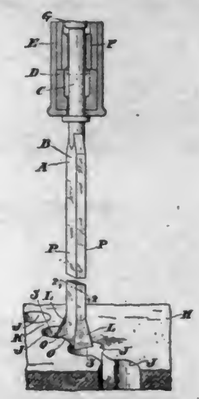
1,880,622. POLISHING DEVICE FOR ROLLS. JESSE WILLIAMS, Monroe, Mich. Filed Mar. 27, 1931. Serial No. 525,745. 8 Claims. (Cl. 80—1.)



2. In an arrangement of the character described, the combination of spaced uprights, upper and lower rolls extending between said uprights and rotatably mounted in the latter, transverse members supported by said uprights movable parallel with the axes of said rods, a spindle rotatably supported by one of said uprights, means for driving said spindle by the rotation of one of said rolls, said spindle intermediately of its length being provided with right and left hand threads, a nut having right and left hand threads cooperating with the threaded portion of said spindle, a yoke integral with said nut, the extremities of said yoke being secured to the extremities of said transverse members, and means for insuring that the right and left hand threads of the spindle and nut cooperate alternately so that reciprocating motion is imparted to said yoke and members, and polishing elements carried by said members.

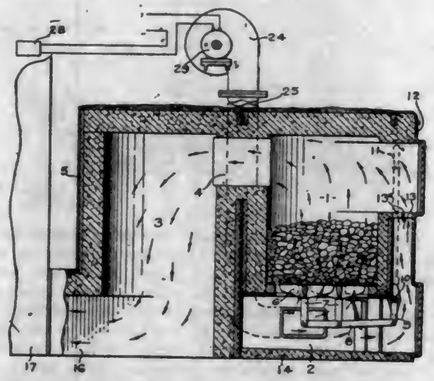
1,880,623. BROACHING TOOL. PETER A. WILLIAMS, White Plains, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 15, 1930. Serial No. 436,083. 1 Claim. (Cl. 255—62.)

A broaching tool, comprising a body portion of rectangular cross section having a cutting bit formed at its lower end, said bit being bounded by two outwardly flared flat end surfaces and by two concave side surfaces, the concave surfaces at their centers being tangent respective to the side faces of the body portion and a



cylindrical lower surface extending from end to end of the bit and forming two cutting edges where the lower surface intersects the side surfaces.

1,880,624. FURNACE. JASPER B. WILLSEA and THOMAS A. KENNEDY, Rochester, N. Y., assignors to Willsea Works, Rochester, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,120. 2 Claims. (Cl. 34—18.)



1. A furnace for a core oven comprising a pair of cylindrical shells vertically arranged and tangential to each other, insulating and refractory linings in said shells, a flue connecting said shells at a point adjacent their top, a fire box in one of said shells, a grate in said fire box, an ash pit under said grate, a passageway at the front of said grate between the ash pit and the fire box, a combustion chamber in the other of said shells, a flue connecting the bottom of said combustion chamber with the oven to be heated, side walls arranged tangentially to said shells and secured thereto, means arranged in one of the spaces formed between said side walls and the shells for directing an air blast to the ash pit, and refractory material filling said spaces and around said directing means.

1,880,625. ROADWAY CRACK AND JOINT FILLER. ESTEL E. WILMETH, San Benito, Tex. Filed Aug. 1, 1929. Serial No. 382,677. 1 Claim. (Cl. 94—39.)

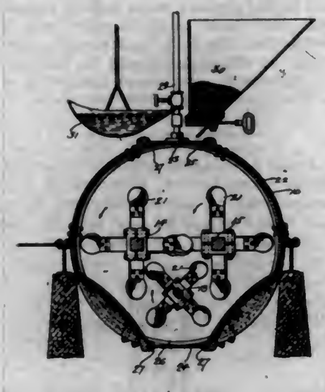
In a device of the class described, a funnel shaped body portion oval in cross section defining substantially

straight sides and curved ends, a bar secured to one end of the body portion to be gripped by the operator in supporting the device, the substantially straight sides of the



body portion being parallel to the path of travel of the body portion when the device is in use, and a valve for controlling the passage of material from the body portion.

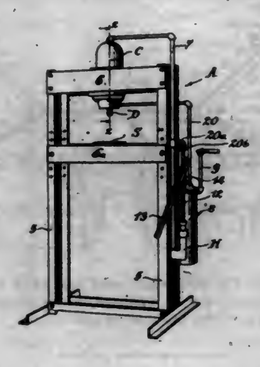
1,880,626. PUG MILL FOR PREPARING ASPHALT PAVING MIXTURES. WILLIAM F. WILMOTH, Philadelphia, Pa. Filed Mar. 24, 1930. Serial No. 438,608. 4 Claims. (Cl. 259—41.)



1. In a pug mill, a casing three horizontally disposed parallel shafts extending between and having bearing in the ends of the casing, two of said shafts being horizontally aligned, the third shaft being arranged below and between the first-named shafts, impeller means on said shafts, the impeller means of one of the first-named shafts causing the material to move oppositely to the impeller means of the other of the first-named shafts, the impeller means of the last shaft causing material to move from the ends of the casing toward the center thereof.

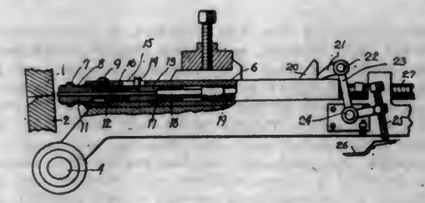
1,880,627. SAFETY DEVICE FOR HYDRAULIC MECHANISMS. FRANK C. WILSON, Arcade, N. Y. Filed Nov. 22, 1929. Serial No. 409,175. 1 Claim. (Cl. 138—10.)

A hydraulic mechanism including a cylinder having a piston adapted to operate the movable member of the mechanism and being in communication with a fluid reservoir, means for supplying fluid from said reservoir to said cylinder under pressure to operate said piston and the movable member connected thereto, said member having a duct in communication with said reservoir and opening into said cylinder on the opposite side of said piston, said duct being normally closed by a ball valve, a stem movable longitudinally in said duct for operating said valve, a cross pin positioned in a bore in said movable member and co-operating with said stem, the lower head of said cylinder having an inwardly projecting annular shoulder which provides an annular drain chamber, said cross pin being adapted to engage said shoulder when said movable member approaches the safe limit of its range of movement to open said valve and permit the operating fluid to escape through said duct to said drain chamber, a pipe for returning the fluid from said chamber



to said fluid reservoir and a spring in said chamber arranged about said annular shoulder which is compressed during the working stroke of said piston and which is adapted to return the latter to its normal position after said working stroke.

1,880,628. MEANS FOR HEADING NAILS AND TACKS. HARRY W. WILSON, Stoughton, Mass. Filed Feb. 17, 1932. Serial No. 593,603. 3 Claims. (Cl. 10—26.)



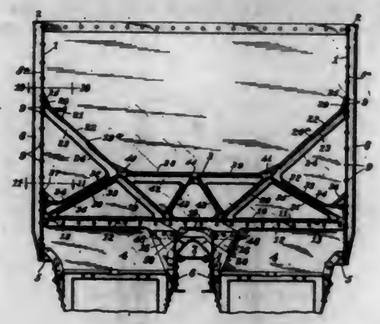
1. In a heading tool, having a longitudinally bored die carrier and a longitudinally bored heading die mounted in said die carrier; a heading pin mounted to work within the bore of the said die, a longitudinally bored member within the die carrier and spaced from said die and having a rear enlargement of its bore, the heading pin having engagement with the bore of said member and being provided with a rear enlargement engaging the rear enlargement of the bore of said member, a coiled spring located between the heading die and said member, a plunger working in the die carrier and engaging said rear enlargement of the heading pin for moving the heading pin forwardly against the resistance of said spring, the latter serving to retract the heading pin on reverse movement of said plunger.

1,880,629. CROSS BEARER FOR FREIGHT CARS. WILLIAM E. WINE, Toledo, Ohio. Filed Mar. 21, 1929. Serial No. 348,862. 15 Claims. (Cl. 105—406.)

1. A cross bearer for freight cars substantially in the form of a trapezoid and provided with upwardly and outwardly extending legs, said legs each having a foot formed at an angle to its longitudinal axis.

2. A cross bearer for freight cars having substantially the form of a trapezoid and provided with upwardly and

outwardly extending legs, said legs respectively merging with the non-parallel members and with one of the paral-



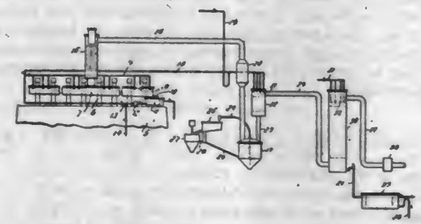
lel members of the trapezoid, said legs each having an angularly disposed portion adapted to be secured to a side stake mounted on the outside of the car.

1,880,630. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. FRED B. WINES, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed May 7, 1930. Serial No. 450,442. 1 Claim. (Cl. 257—137.)



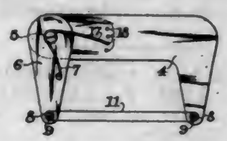
In a heater of the class described, a liquid-receiving chamber, said chamber comprising compartments spaced apart, a series of tubes connecting said compartments and through which liquid passes from one compartment to the other, a series of transverse plates arranged between said compartments through which said tubes pass, said plates being spaced apart and forming, with said compartments and tubes, air heating passageways through said chamber, a casing enclosing said chamber and providing an air passage along one side of said chamber, and exit openings at the other side, and an electric motor driven fan, and a fan casing having an air discharge into the air passage that extends along one side of said chamber.

1,880,631. DIRECT RECOVERY OF AMMONIUM SULPHATE FROM HOT GAS. WILLIAM B. WINGERT, Detroit, Mich., assignor to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,753. 4 Claims. (Cl. 23—196.)



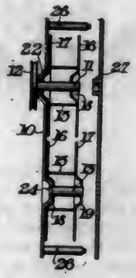
1. The process of recovering ammonium sulphate from coal distillation gases, which comprises passing the gases through a saturator having ammonium sulphate in solution containing sulphuric acid, whereby the ammonia content of the gases is converted into ammonium sulphate and the gas is superheated with respect to its water vapor content, contacting the gas leaving the saturator with acidified ammonia liquor passing to the saturator, thus concentrating the acidified ammonia liquor by effecting a partial evaporation of its water content, and passing the concentrated ammonia liquor into the saturator.

1,880,632. APPARATUS FOR LAPPING COLOR FILM EMBOSSING ROLLERS. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 3, 1930. Serial No. 479,520. 5 Claims. (Cl. 51—205.)



1. A lapping tool comprising a support, wire-holding posts carried by the support, wires held in spaced relation on the posts, said posts being threaded and the wires being wound around the posts and lying in the threads, and individual wire-fastening means for holding parts of the wires to the posts, said means comprising a varnish applied to portions of the wires and posts.

1,880,633. FILM SPOOLING APPARATUS AND REELS THEREFOR. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 18, 1931. Serial No. 575,836. 8 Claims. (Cl. 242—70.)

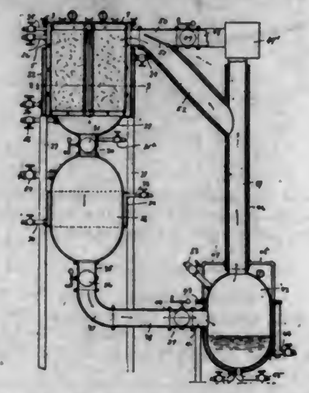


2. A spooling system for motion picture apparatus comprising a base plate provided with a pocket and a raised portion, two spindles mounted on the plate, one of the spindles being located in the pocket and the other spindle being located on the raised portion of the plate, a double flanged reel having an aperture in each flange for removable mounting on each of said spindles, one of the flanges being provided with a depression adapted to receive said raised portion of the plate and the other of the flanges having a protuberance adapted to enter said pocket, said depression and said protuberance surrounding the said apertures in the respective flanges.

1,880,634. APPARATUS FOR THE EXTRACTION OF RESINOUS SUBSTANCES FROM WOOD. WILL F. WOLF, Centralia, Wash. Filed Aug. 6, 1929. Serial No. 383,955. 3 Claims. (Cl. 202—168.)

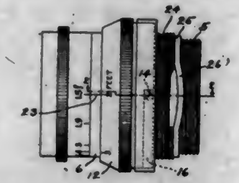
1. An apparatus for extracting resinous substances of wood comprising a container for the wood, a vacuum chamber connected with the container, a distillation chamber connected with the vacuum chamber, means for introducing a solvent into the distillation chamber, means

for heating the solvent and conducting the resultant vapors into the container, means for exhausting the air from the entire system before the solvent is heated, means for closing communication between the container and the vacuum chamber while the vapors are being introduced into the container, means for forcing the vapors from the distillation chamber into the container after the natural flow of the vapors from the distillation chamber into the container ceases to create a pressure in the container, after which communication between the container and vacuum chamber is again established to per-



mit the fluid in the container to pass into the vacuum chamber, means for controlling communication between the vacuum chamber and the distillation chamber to control the flow of fluid from the vacuum chamber into the distillation chamber and to permit vapors to collect in the vacuum chamber, after the same has been placed out of communication with the container, and means for condensing the vapors in the vacuum chamber to create a vacuum therein to draw fluid from the container when said container is again placed in communication with the vacuum chamber.

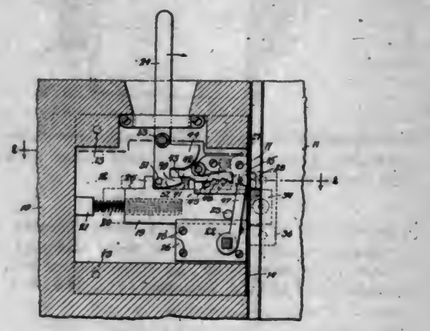
1,880,635. MICROMETER MOUNT. ANDREW WOLLENSAK, Rochester, N. Y., assignor to Wollensak Optical Company, Rochester, N. Y., a Corporation of New York. Original application filed Oct. 14, 1929, Serial No. 399,582. Divided and this application filed Feb. 8, 1932. Serial No. 591,525. 4 Claims. (Cl. 95—45.)



1. A micrometer mount comprising a body member, an adjustable device carried thereby, means for adjusting said device comprising a manually operable ring surrounding the body member and partially rotatable thereon, and a screw-threaded mounting ring for attaching the mount to a camera; the mounting ring and the body member having interengaging portions permitting relative rotation but not relative axial movement and being provided with frictional means for yieldingly resisting such relative rotation.

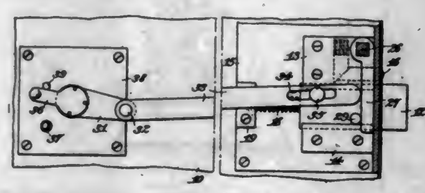
1,880,636. DOOR LATCH. DAVID W. WOOD, Brazil, Ind. Filed May 26, 1931. Serial No. 540,112. 6 Claims. (Cl. 292—164.)

1. The combination with a door latch including a slidable latch bolt; of a device for releasably retaining said bolt in its retracted position, said device comprising a bearing in fixed relation to said bolt, a dog slidable in said bearing, a spring between the bearing and dog to move the latter to a retaining position in engagement with the bolt when the bolt is in its retracted position to retain it therein, an actuator slidable in said bearing,



said dog and actuator having contacting mitered ends whereby the dog will be disengaged from the bolt when the actuator is moved inwardly, to release the bolt for movement to its latching position, and said actuator being moved outwardly to an actuable position by the movement of the dog to its bolt engaging and retaining position.

1,880,637. DOOR LATCH. DAVID WILSON WOOD, Brazil, Ind. Filed Sept. 14, 1931. Serial No. 562,774. 3 Claims. (Cl. 292—169.)

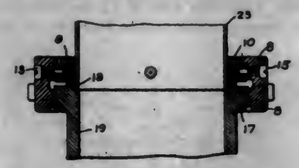


1. In a device of the class described, the combination of a slidable latch bolt, means to retract the bolt from the outside of the door or the like to which the device is attached, a rigid link, a pivotal and slidable connection between the link and said bolt, means to move said link in opposite directions from the inside of the door, whereby the bolt may be retracted when the link is moved in one direction, and said link being engageable with said first means when the link is moved in the other direction, and means to retain said link engaged with said first means to prevent the latter from being operated to retract said bolt.

1,880,638. FASTENING DEVICE FOR CHOPPER BOWLS. FOSTER L. WOOD, Dayton, Ohio, and BAILEY TOWNSHEND, Jackson Heights, Long Island, N. Y., assignors to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Aug. 4, 1928. Serial No. 297,517. 6 Claims. (Cl. 285—120.)

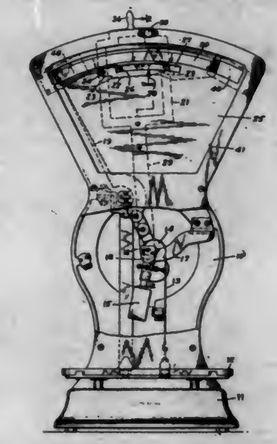
1. A clamping device for securing a feed pan having a hollow stem portion to a chopper also having a hollow stem portion comprising an outwardly extending and externally screw threaded collar formed on the stem of said chopper, an outwardly extending grooved flange on the end of the stem of the pan, an annulus comprising a plurality of detached arcuate portions located around said flange and having lower configurations conforming

to the groove formed by the flange, clamping means provided with screws projecting into a groove of said annulus and on its lower part with internal screw threads



corresponding to those of said collar for clamping said outwardly extending flange to said collar by means of said annulus.

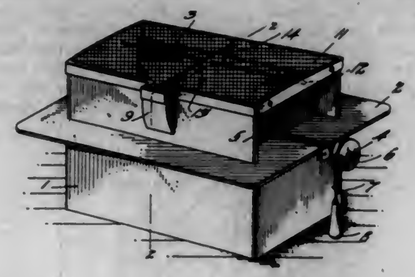
1,880,639. SCALE. GEORGE R. WOOD, Toronto, Ontario, Canada, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Feb. 3, 1931. Serial No. 513,117. 9 Claims. (Cl. 265—61.)



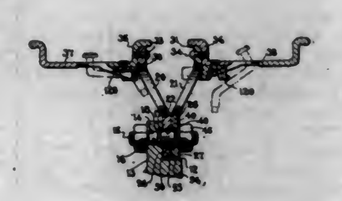
1. A scale having a load support, weighing mechanism actuated thereby, a pointer displaceable by the weighing mechanism proportionately to the weight of the load, a dial having two series of graduations proportional to weight, one of said series cooperating with the pointer and adapted to indicate the weight of the contents of a container, the other series representing the tares of various containers, an index cooperating with the last named series, and a support for said dial having an element for manually shifting the dial and its support to bring any desired one of the gradnations representing tares into register with the index.

1,880,640. MOUSE AND RAT TRAP. MARVIN E. WOOD, Stone Mountain, Va. Filed June 24, 1931. Serial No. 546,623. 1 Claim. (Cl. 43—74.)

An animal trap comprising a container adapted to receive a quantity of water, a platform surrounding said container adjacent the top thereof, a rotatable paddle wheel mounted in said container longitudinally thereof, means for rotating said paddle wheel, alined openings in the opposite ends of said container opposite a horizontal vane of said paddle wheel, a shaft mounted in said container and extending parallel with the paddle wheel, a trigger mounted upon said shaft formed with a vane engaging notch at one end and with a hook support at its opposite end, a bait container guide channel formed in said container body adjacent said hook support, an enclosed bait container removably supported upon said book support and movable in said guide channel, and resiliently tensioned means carried by the shaft and engageable with the container for normally forcing the trigger notch into engagement with the next adjacent vane of the paddle wheel after the trap is sprung.

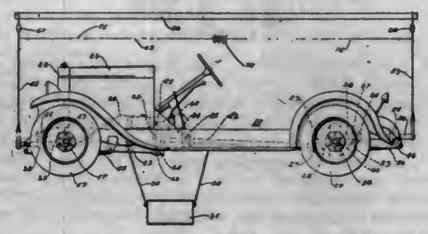


1,880,641. VEHICLE WHEEL. ALVA W. WOODWARD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 20, 1929. Serial No. 348,478. 6 Claims. (Cl. 301—63.)



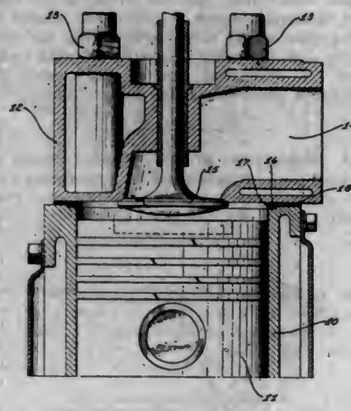
1. The combination of a wheel having an outer rim supporting portion, a rim comprising a transversely split base member and an endless side ring interlocked with the base, the rim supporting portion of the wheel being rigidly secured to the endless side ring of the rim.

1,880,642. MOTOR VEHICLE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 360,750. 18 Claims. (Cl. 211—1.6.)



1. A motor vehicle display comprising a fixed support, a motor vehicle including an engine and a starting motor positioned on the support for axial rotation on the support and means reacting against the fixed support for bodily rotating the vehicle through the starting motor.

1,880,643. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 2, 1930. Serial No. 417,967. 5 Claims. (Cl. 220—46.)



1. In an engine, a cylinder having a recess in its end, a metal gasket seated in the recess and projecting beyond the cylinder end, another gasket closely encircling the metal gasket and seated against the end of the cylinder, and a head secured to the cylinder in a compression relation with the gaskets.

1,880,644. CAP. TRUMAN W. WOODWARD, Hutchinson, Kans. Filed Sept. 23, 1929. Serial No. 394,603. 1 Claim. (Cl. 220—57.)



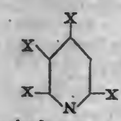
A closure cap for containers having an opening therein, comprising a substantially ring-shaped member having a seat on its upper face, members for clamping the member to the container around the opening thereon, a cover member having a flange for engaging the seat, an elongated loop member connected at its center with the center of the cover member, with its ends projecting beyond the cover member, a projection on the ring member having an opening therein for receiving one end of the loop member, a U-shaped member having its ends pivotally connected with the other end of the loop member, a cross piece slidably mounted on the U-shaped member and adapted to hold the limbs thereof together, and a keeper projection formed on the ring at a point diametrically opposite the first-mentioned projection and over which the U-shaped member fits with the cross piece of the U-shaped member snugly engaging under the keeper projection of the ring member.

1,880,645. β-HYDROXY-DERIVATIVES OF ALKYL-PYRIDINES AND PROCESS OF PREPARING THEM. OTTO WULFF, Hofheim-in-Taunus, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 6, 1929, Serial No. 405,289, and in Germany Nov. 26, 1928. 11 Claims. (Cl. 260—42.)

1. The process of preparing β-hydroxy-derivatives of alkyl-pyridines, which consists in heating for 10–30 minutes to about 180° C.–250° C. the alkali metal salts of the corresponding sulfonic acids with an excess of caustic alkalies while slowly beginning the heating, taking up the product after cooling in a small quantity of water, neutralizing and isolating the resultant β-hydroxy-derivative by filtering, by suction and extracting with solvents.

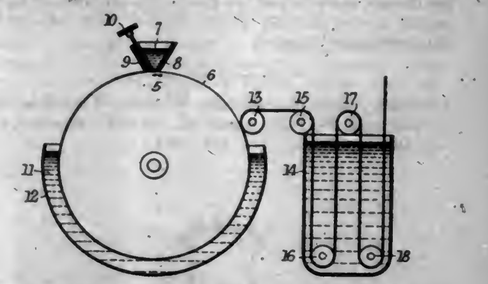
1,880,646. PROCESS FOR SULPHONATING PYRIDINE AND ITS HOMOLOGUES. OTTO WULFF, Hofheim-in-Taunus, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 6, 1929, Serial No. 405,288, and in Germany Nov. 26, 1928. 14 Claims. (Cl. 260—42.)

1. The sulphonation process which consists in heating to 190° C.–270° C. a compound of the following general formula:



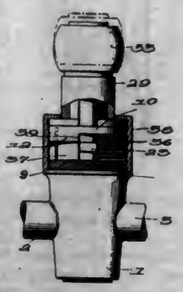
wherein X stands for hydrogen or at most two X's stand for alkyl, with a multiple quantity of concentrated sulphuric acid containing SO_3 in the presence of a small quantity of a mercury salt, and then working up the product in the usual manner.

1,880,647. MANUFACTURE OF FILM. CLARENCE L. A. WYND and WILLIAM H. GROTH, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 15, 1929. Serial No. 340,238. 1 Claim. (Cl. 18—57.)



The method of preparing cellulose acetate film which comprises forming a film of cellulose acetate "dope" on a supporting surface and immersing the film thus supported in a coagulating bath which comprises acetone, glycerine and methyl alcohol.

1,880,648. GAS COCK. MAX YABLICK, Newark, N. J. Filed Feb. 21, 1930. Serial No. 430,845. 4 Claims. (Cl. 251—165.)



1. A gas cock comprising a tubular casing, a valve plug journaled in the casing and having an inner axial bore and an outward notch extending from said bore, a washer

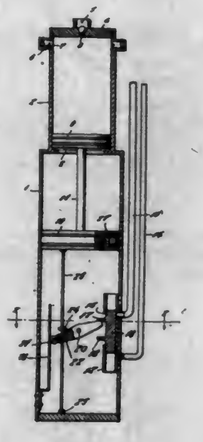
surrounding the valve plug and having a vertical projection, said projection forming walls of a slotted passage having a longitudinal leg and a circumferential leg, a slidable plunger positioned in the bore of said valve plug and having a nib projecting therefrom through the notch of the valve plug into the slotted passage and constrained to move therein and a resilient member acting upon said plunger, said nib locking the valve plug against turning while said nib is held at the tip of the longitudinal leg of the passage and said nib being adapted to move in the circumferential leg by pressing said plunger against the action of the resilient member and thereby releasing said valve plug for turning in said casing.

1,880,649. SOLDERING IRON. LLOYD W. YOUNG, Buffalo, N. Y., assignor to The Prest-O-Lite Company, Inc., a Corporation of New York. Filed July 7, 1930. Serial No. 466,219. 6 Claims. (Cl. 158—26.)



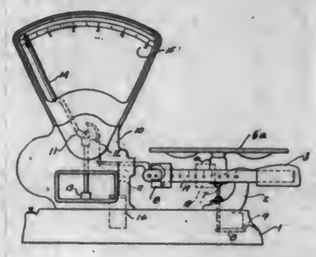
1. A soldering iron comprising a metal tube serving as a gas passage, means in one end of said tube for introducing therein a combustible gas mixture, a soldering bit on the other end of said tube having a combustion chamber therein spaced about the tube, and a plurality of burner orifices spaced radially in the wall of said tube within the combustion chamber.

1,880,650. MOTOR. EDWARD V. ZAGST, Longview, Tex. Filed Sept. 28, 1928, Serial No. 308,938. Renewed Feb. 1, 1932. 1 Claim. (Cl. 121—164.)



In a device of the class described, a motor comprising a cylinder having inlet and outlet ports, a pressure operated piston in said cylinder, a slide valve controlling the inlet and outlet ports, a slotted guide for said valve, said valve having spaced lugs extending through the slot of the guide, a rocker arm pivotally supported within the said pressure receiving cylinder, said rocker arm being slotted at one end and having its other end apertured to engage between the lugs of the slide valve for actuating the same, a wheel located in the said slot of the rocker arm, a leaf spring secured in the pressure receiving chambers and bearing against the said wheel of the said rocker arm for shifting the latter past the said center point, and a rod depending from the piston and extending through the slot of the said rocker arm, said rod having upper and lower abutment elements adapted to respectively engage the corresponding side of the rocker arm during the reciprocation of the said piston for actuating the said rocker arm and valve for alternately opening and closing the said inlet and outlet ports of the cylinder.

1,880,651. WEIGHING SCALE. CARL J. ZINKE, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Feb. 13, 1931. Serial No. 515,543. 11 Claims. (Cl. 265—49.)



1. In a device of the class described, in combination, automatic weighing and indicating mechanism and manipulative load counterbalancing mechanism cooperating therewith, a graduated member, said manipulative load counterbalancing mechanism cooperating with said graduated member and a flexible member attached to said manipulative load-counterbalancing mechanism to indicate its position on said graduated member.

1,880,652. METHOD OF REPRESENTING DESIGNS. CARL G. ZIENKILTON, Philadelphia, Pa. Filed June 18, 1931. Serial No. 545,332. 8 Claims. (Cl. 41—24.)



2. The herein described method of representing articles of jewelry consisting of sketching the design thereof on sheets of relatively thin celluloid, embossing the said design from the reverse side of the celluloid sheet on a soft resilient support by means of variously sized embossing tools, cutting the embossed depiction from the celluloid sheet and subjecting said depiction to a thorough sand blasting over the entire surface thereof, mounting the celluloid representation on a suitable backing element convexly with respect thereto, and subsequently coloring the depiction to represent the article as desired.

1,880,653. REFRIGERATING APPARATUS. ERNST S. H. BAARS, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 4, 1931. Serial No. 561,148. 8 Claims. (Cl. 62—3.)



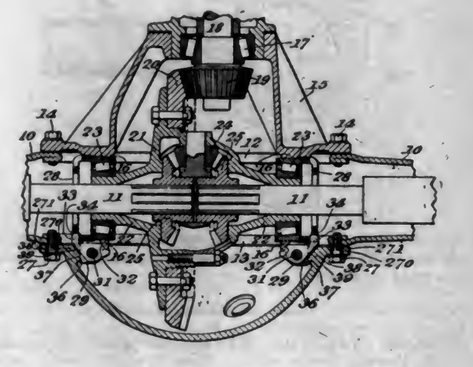
1. In a refrigerating system, an evaporator, a valve operable by gas pressure in the system to control the delivery of liquid refrigerant to said evaporator, and a valve operable by a liquid level in the system to control the operation of said gas operable valve.

1,880,654. FOOTWEAR CUSHION. EDWARD BAIRD, Los Angeles, Calif. Filed Mar. 14, 1929. Serial No. 346,856. 1 Claim. (Cl. 36—71.)

As an article of manufacture, a footwear cushion comprising upper and lower layers of soft flexible material shaped so as to overlie the heel seat, shank and arch portions of footwear, the edges of both upper and lower layers being skived and secured to each other by an adhesive, a continuous one-piece cushioning member of elastic compressible material arranged between said upper and lower layers, that portion of the cushioning member that is disposed between those portions of the upper and lower layers of material that overlie the heel seat and the shank of the footwear being of uniform thickness, that portion of the cushioning material that overlies the inner longitudinal arch of the footwear being increased in thickness at an intermediate transverse point with the side edges of the portion of increased thickness gradually decreasing in thickness toward the side edges of the cushion and there being an opening formed between the front edges of those portions of the upper and lower layers that overlie the shank of the footwear, which opening is for the reception of a metatarsal button.

1,880,655. REAR AXLE ASSEMBLY. STUART G. BAITS, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1931. Serial No. 523,432. 3 Claims. (Cl. 74—99.)

1. A rear axle assembly for motor vehicles comprising an axle housing having an opening therein, a differential carrier seated in said housing and having a pair of separated arms, a differential spider journalled in said arms,



and a cover for said opening having means to engage and rigidly embrace the outer free ends of said arms and thereby hold the latter against spreading.

1,880,656. BROACH. HARRY A. BAKER, Hudson, Mass., assignor to The Lapointe Machine Tool Company, Hudson, Mass., a Corporation of Maine. Filed Mar. 16, 1932. Serial No. 599,206. 5 Claims. (Cl. 90—33.)

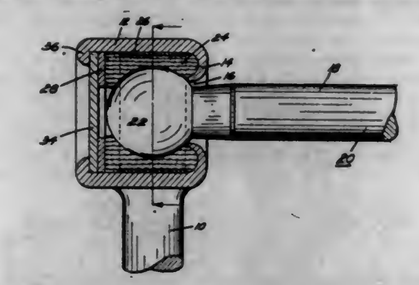


1. A broach for an opening having an extended curved surface, comprising a plurality of successive cutting sections substantially polyangular in outline and having narrow cutting portions at the angles of said sections and circumferentially spaced apart, the cutting portions of each section being positioned out of axial alignment with the cutting portions of adjacent sections and the cutting portions of alternate sections being positioned in opposed helical series.

1,880,657. UNIVERSAL JOINT. JOHN A. BAKER, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 5, 1931. Serial No. 579,198. 3 Claims. (Cl. 287—90.)

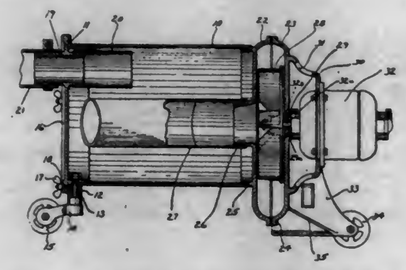
1. In a swivel joint between two power transmitting rods the combination of, a ball shaped end on the one rod; a hollow head on the other rod adapted to receive said ball shaped end; a porous lining in the hollow head of metal fabric; lubricant intermixed with said lining fabric; a take-up spring in the hollow head enclosing the periphery of the lining, adapted to compress the lining so as to

firmly engage with the ball shaped end of the one shaft; a spring washer in the hollow head exerting pressure against the exposed portion of the lining thereby increas-



ing the pressure in the lining and means retained in the hollow head for maintaining the spring washer in pressure exerting condition.

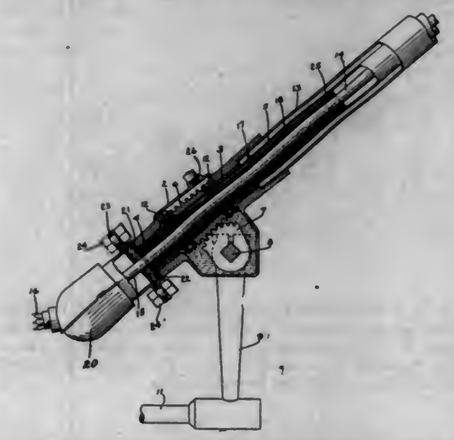
1,880,658. VACUUM CLEANING APPARATUS. ROBERT M. BAKER, Toledo, Ohio. Filed June 23, 1931. Serial No. 546,328. 1 Claim. (Cl. 183—87.)



A device of the class described comprising a horizontally disposed open ended barrel, a rim member secured to the outer end of said barrel, an anti-friction supporting element on said rim member, a disc closing said rim member, means for detachably securing said disc to said rim member, a tube carried by the upper portion of said disc opening into said barrel and adapted to receive a hose in the outer end thereof, a disc member closing the opposite end of said barrel, an open ended pipe projecting outwardly from said last disc member and having its outer end disposed beneath said tube in lapping relation thereto, an outwardly projecting portion on said last disc member, a member cooperating with said outwardly projecting portion providing a fan casing therebetween, a fan in said casing, means detachably connecting said member and outwardly projecting portion, an integral motor supporting frame projecting outwardly trom said casing member, a horizontally disposed motor on said frame, means operatively connecting said motor to said fan, said fan casing having a lateral outlet to which the mouth of a bag may be attached, a pair of laterally spaced rearwardly and downwardly inclined legs integral with said motor frame and casing member, and anti-friction members on said legs.

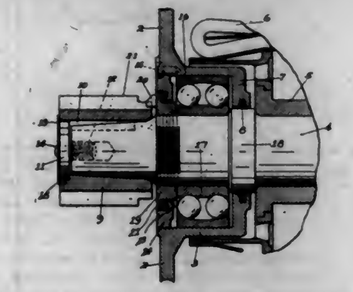
1,880,659. OIL RETAINER FOR STEERING GEARS. JACOB J. BAUMLER, Minneapolis, Minn. Filed Oct. 19, 1931. Serial No. 569,825. 4 Claims. (Cl. 74—79.)

1. The combination with a steering gear comprising a casing having bearings therein, a hollow steering shaft mounted in said bearings, a closure for the lower end of one of said bearings concealing the end of said shaft, an oil chamber within the casing, and a rod mounted within said hollow shaft and protruding from one end of the housing, of a tubular member adapted to be inserted into the lower end of said hollow shaft and fitting over the rod supported therein, said tubular member having an enlarged head at one end adapted to be seated against



said housing, means for securing said head to the housing in leak-proof relation, and the upper end of said member being disposed above the normal oil level in said housing, to prevent oil leakage from the housing at the point where said rod protrudes therefrom.

1,880,660. JOURNAL BEARING. WALTER J. BAUROTH, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 19, 1927. Serial No. 234,532. 4 Claims. (Cl. 308—178.)

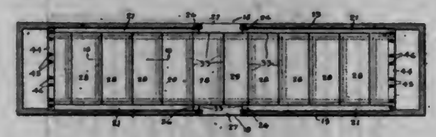


1. In a journal bearing, the combination with a shaft having a circumferential shoulder, an anti-friction bearing, the inner race of which fits upon said shaft and abuts against said shoulder, a ring screw-threaded to said shaft to hold said inner race in forced contact with said shoulder, a pinion fixed to said shaft outside of said bearing, and a lug on the ring projecting between and engaging the teeth of said pinion as and for the purpose set forth.

1,880,661. WATERPROOF FLOOR COVERING AND METHOD OF LAYING SAME. JAMES DALZIEL BAKER, Berkeley, Calif., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1928. Serial No. 328,723. 9 Claims. (Cl. 94—3.)

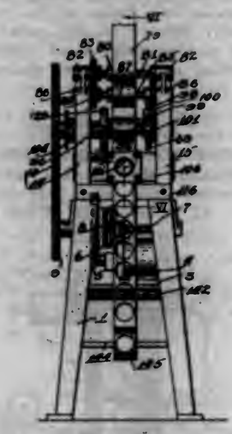
1. A water-proof covering for the flooring and lower portion of preformed side-walls adjacent thereto of railroad refrigerator cars and the like which comprises a plurality of side-wall and floor sections interfitted at their

contiguous edges, said individual sections comprising a plurality of superimposed layers of fibrous material impregnated with bituminous material and formed into a unitary structure, the side portions of the individual layers along the edge of the section contiguous to an edge of an



adjacent section being in a lapped relation so as to interfit with corresponding lapped portions of adjacent sections so as to produce a covering having a flush surface and of uniform thickness, the side sections being curved, thereby adapting them to cover adjacent bottom and side portions of the car.

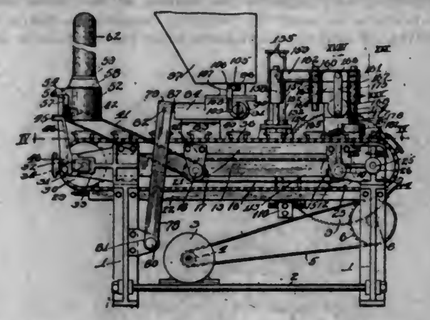
1,880,662. PRINTING AND CAP FORMING MACHINE. CESARE BARBIERI, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed July 20, 1928. Serial No. 294,180. 2 Claims. (Cl. 93—51.)



1. In a cap printing and forming machine, means for intermittently advancing a strip of material past printing and punching stations, means at the printing station for printing a portion of the strip at said station, means at the punching station for punching a blank forming a portion of the strip previously printed by said printing means, and means actuated by the printing means for causing said punch means to be operated in timed relationship with the printing means, said punching means including forming means operative on the printed blank punched from the strip to form it into a flanged cap and to force the flanged cap clear of the punch means.

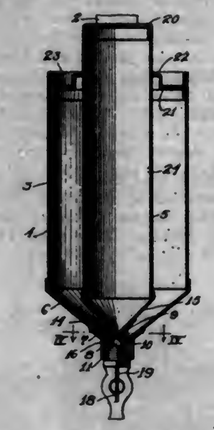
1,880,663. FILLING AND CAPPING MACHINE FOR CONTAINERS. CESARE BARBIERI, New York, N. Y., assignor, by mesne assignments, to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,022. 29 Claims. (Cl. 93—6.)

1. A container capping machine comprising a traveling endless conveyor mechanism having container receiving sockets thereon for carrying filled containers, means for intermittently operating the conveyor mechanism to consecutively carry the filled containers into a cap receiving position, a cap feed mechanism, means for intermittently operating the same to cause a cap to be delivered into a filled container carried by the conveyor mechanism, a container rim deflecting device, a reciprocating support therefor, eccentric means for operating the same to cause the margins of the container to be partially deflected by



the deflecting device over the cap delivered into said container, and a crimping mechanism carried on said support and operable thereby to cause the deflected margin of the container to be crimped over the flange of the cap.

1,880,664. MIXER AND DISPENSER. CESARE BARBIERI, New York, N. Y. Filed Mar. 15, 1930. Serial No. 435,997. 3 Claims. (Cl. 225—21.)

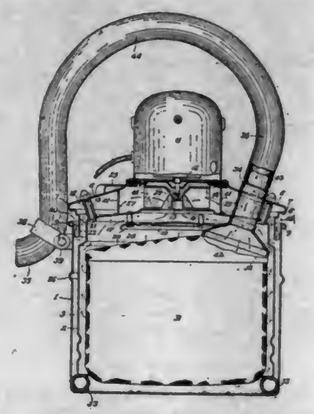


2. A mixer and dispenser comprising an outer housing adapted to hold a quantity of skimmed milk, an inner casing within said housing and projecting upwardly above the upper end thereof, said inner casing adapted to hold a quantity of cream, a cap for removably closing said inner casing, a closure cap for said outer housing, a sight opening in said outer housing, a seat member connecting the lower ends of said outer housing and said inner casing and having a common mixing chamber therein communicating with outlet apertures in said housing and casing, and a petcock connected with said seat member for controlling the discharge of milk and cream in predetermined proportions from the mixer and dispenser.

1,880,665. COMBINATION WASHING MACHINE AND DUST COLLECTOR. PERCY E. BARKER, Shaker Heights, Ohio, assignor to The Cinderella Washing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,833. 28 Claims. (Cl. 183—37.)

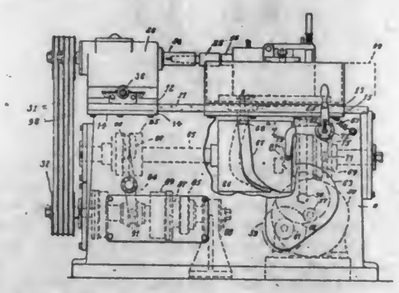
1. A combination washing machine and dust collector comprising outer and inner spaced receptacles, the outer

receptacle being open to the atmosphere adjacent the top thereof when the machine is used for washing, fluid communication being provided between the space between said receptacles and a chamber in the interior of said inner receptacle adjacent the bottom of the latter when the machine is used for washing, removable means for shutting off said communication when the machine is used



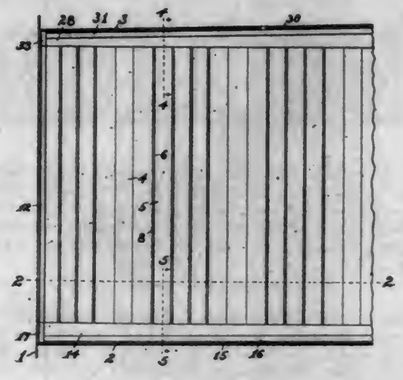
as a dust collector, means for withdrawing air from a portion of said chamber, means forming an air outlet to the atmosphere from the air withdrawing means, means forming an air conduit from the exterior of said inner receptacle to the interior thereof and adapted for attachment to a dust filtering bag and an air hose, respectively, at its inner and outer ends, and means for releasably closing said conduit.

1,880,666. BORING MACHINE. JOHN S. BARNES and RALPH B. BILLINGHAM, Rockford, Ill., assignors to W. F. and John Barnes Company, Rockford, Ill., a Corporation of Illinois. Filed May 11, 1927. Serial No. 190,409. 6 Claims. (Cl. 77—3.)



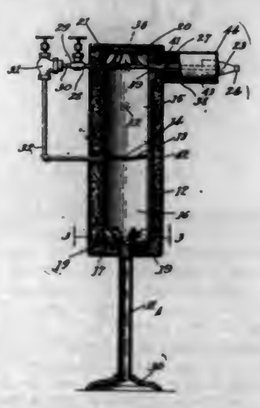
1. A diamond-tool boring machine comprising a spindle carriage in a fixed position equipped with a rotary spindle, a fixture carriage mounted to travel toward and from the spindle carriage, a boring bar connected to said spindle and equipped with a high-speed cutter, a sleeve bearing on the fixture carriage for said boring bar, a work holder on the fixture carriage for holding a workpiece in a position to be bored, a cam drum connected with the fixture carriage for moving it in feed and return movements, a driving train for rotating the spindle including a driving clutch and a brake, and means operated in timed relation with the cam drum for controlling said clutch and brake in synchronism with the operation of the fixture carriage whereby to stop rotation of the spindle at the end of the feed movement for holding it in such condition during the return movement.

1,880,667. CHANNEL CONSTRUCTION FOR BULKHEADS. WILFORD G. BARTENFELD, Lorain, Ohio. Filed Mar. 27, 1929. Serial No. 350,240. 10 Claims. (Cl. 114—116.)



7. In a construction for bulk heads, the combination of vertical channels, the flanges of the channels extending longitudinally relative to the vessel, the channels being arranged in transverse spaced relation relative to the vessel, vertical plates, and the channels being connected to said plates.

1,880,668. APPARATUS FOR TREATING AND CLEANING PILE FABRIC MATERIALS. RUDOLPH A. BASSETT, Los Angeles, Calif. Filed Sept. 19, 1931. Serial No. 563,876. 12 Claims. (Cl. 26—48.)

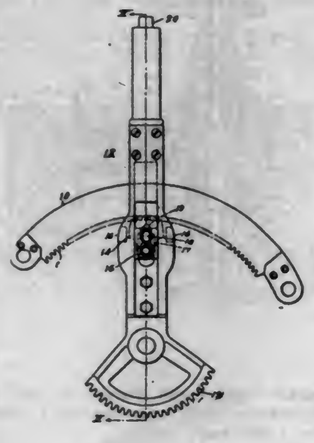


1. In an apparatus for treating and cleaning pile fabric materials, a reservoir having a portion adapted to contain wet steam and a portion adapted to contain dry steam, a nozzle, and valved means for opening one or the other of said portions to said nozzle.

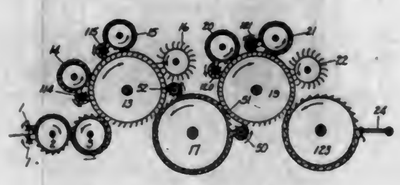
1,880,669. CONTROL APPARATUS. CYRIL E. BASTON and RUEL C. JONES, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1930. Serial No. 486,092. 6 Claims. (Cl. 74—88.)

1. In a controller, in combination, a handle for operating the controller in both the forward and the reverse directions, a notched guide member, means co-

operating with the guide member for normally preventing the handle from being moved more than one notch at a time in either the forward or the reverse direction, depressible means for rendering the notching device ineffective to permit the handle to be moved a plurality of notches in either direction if desired, and means for returning the notching device to its normal position when said depressible means is released.

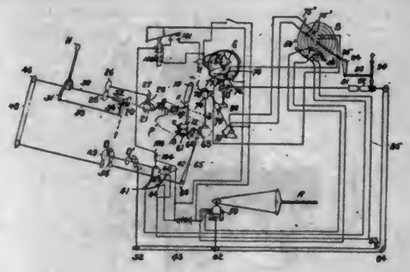


1,880,670. SET OF CARDS WITH FLAT WIRE TUMMER. EDDO V. BATES, Lowell, Mass., assignor to E. V. Bates Machine Company, Lowell, Mass., a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,231. 5 Claims. (Cl. 19—99.)



1. The combination in a coupled up set of cards having a plurality of main cylinders; of feeding mechanism for the first main cylinder; with said main cylinder which is covered with card clothing and travels forward; a plurality of sets of stock working rolls engaging said first main cylinder each set including a flat wire covered worker and a flat wire covered stripper; a fancy covered with fancy wire; a flat wire covered tummer adapted to clear the first main cylinder and engaging a second main cylinder; a flat wire covered angle stripper which engages the tummer and a main cylinder; said second main cylinder which is covered with card clothing and travels forward; a plurality of sets of stock working rolls engaging said second main cylinder each set including a flat wire covered worker and a flat wire covered stripper; a fancy covered with fancy wire; and a doffer adapted to clear the second main cylinder, said doffer being covered with card clothing and adapted to deliver stock to a tape condenser; together with said tape condenser.

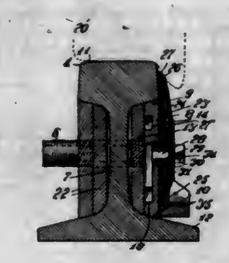
1,880,671. BOMB SIGHT ALIGNMENT AND RUDDER CONTROL. MORTIMER F. BATES, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 18, 1929, Serial No. 400,499. Renewed July 16, 1931. 28 Claims. (Cl. 244—1.)



1. In combination with a craft, a bomb sighting and aligning mechanism on said craft, automatic means for steering the craft, and means for automatically controlling said steering means from said mechanism.

13. In combination with a craft, a sighting and aligning mechanism on said craft, means for steering the craft, means in approaching a straight ground track toward the target whereby said mechanism may control said steering means, and automatic means for causing said steering means to maintain a straight course when said straight ground track is reached.

1,880,672. WHEEL FLANGE OILER. SIDNEY E. BATES and EMMONS OVERMIER, Chicago, Ill., assignors to Maintenance Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,160. 17 Claims. (Cl. 184—3.)

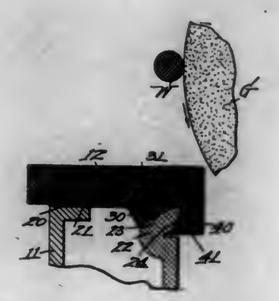


1. In wheel flange lubricating mechanism, a lubricant-holding pocket adapted to be positioned at the side of the rail-head in the path of a car wheel flange, said pocket having an inlet through which lubricant is supplied thereto and an upper outlet directed between the rail-head and wheel-flange, the walls of the pocket being compressible toward one another when engaged by the wheel-flange to decrease the capacity of the pocket and eject lubricant through the outlet.

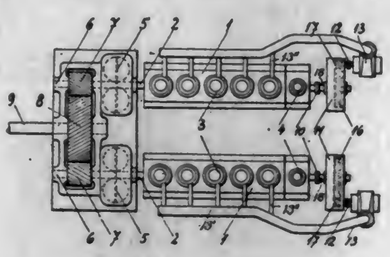
1,880,673. WORKTABLE FOR GRINDING MACHINES. JOHN BATH, Worcester, Mass. Original application filed Dec. 29, 1924, Serial No. 758,559. Divided and this application filed Feb. 27, 1930. Serial No. 431,949. 2 Claims. (Cl. 308—3.)

1. In a machine tool, a sliding table and a support therefor, said support having a front bearing surface adapted to resist downward pressure thereon, and having a rear

guiding member adapted to resist upward and forward pressure thereon, said rear guiding member having front upper and rear lower guiding surfaces, with the front upper bearing surface inclined upwardly and rearwardly and with the rear lower bearing surface undercut and inclined upwardly and rearwardly, said front upper and rear lower bearing surfaces also converging upwardly and rearwardly. and said table having three rigid guiding portions maintained in fixed relation and directly engaging the three defined bearing surfaces of said support.



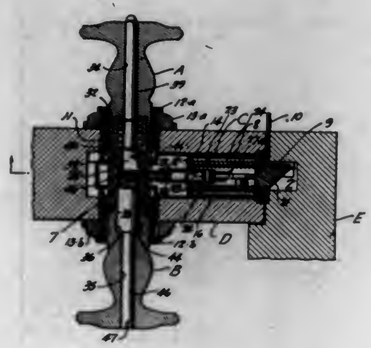
1,880,674. SCAVENGING MECHANISM FOR TWO-CYCLE ENGINES. GUSTAV BAUER, Hamburg, Germany. Filed Nov. 5, 1926, Serial No. 146,549, and in Germany Mar. 4, 1926. 5 Claims. (Cl. 123—1.)



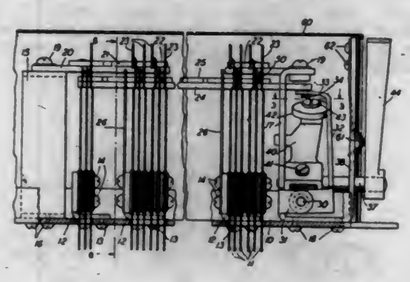
1. In combination, a two-cycle internal combustion engine, a scavenging air pump for delivering scavenging air to said engine, and connnections between said engine and said pump for driving the latter, and including a speed increasing gearing and a liquid coupling in series.

1,880,675. LOCK. EDWALL JAMES BAUMÉ, Santa Monica, Calif. Filed Feb. 9, 1931. Serial No. 514,537. 14 Claims. (Cl. 292—169.)

1. A door latch comprising a divided oscillatable knob shaft having independently turnable shanks nested within one another with door knobs on the shanks, said shanks having registerable cut-outs in their walls and a roll-out, a latch operator stem mounted to be reciprocable to and from said knob shaft and operable by said roll-out, said operator stem having a head extending into said cut-outs and locking said shanks in assembled relation, resilient means yieldably holding said stem with its head in said cut-outs, said head having a keeper slot located to be within said shanks when in retracted position, a lock dog non-rotatable mounted in one of said shanks for axial movement and projectable into said slot to hold the shank against turning and thereby to hold said stem against protraction, said lock dog being manually operable from a door knob.



1,880,676. CIRCUIT CONTROLLING DEVICE. WILLIAM O. BECK, Ridgefield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 22, 1931. Serial No. 510,397. 6 Claims. (Cl. 200—1.)



1. In a circuit controlling device, a plurality of active and passive contacts, a longitudinally movable draw-bar operatively associated with said active contacts, a manually operated lever, and means intermediate to said draw-bar and said lever and responsive to a single actuation of said lever for reciprocally moving said draw-bar and effecting a wiping engagement of said active and passive contacts.

1,880,677. RECOVERY OF ORGANIC ACIDS. CHRISTOPH BECK and FRANZ KREMP, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 19, 1929, Serial No. 393,831, and in Germany Sept. 28, 1928. 6 Claims. (Cl. 260—116.)

1. The process for the recovery of organic acids from oxidation products of aliphatic hydrocarbons of high molecular weight, which comprises treating such oxidation product with concentrated acetic acid and removing the insoluble unsaponifiable matter.

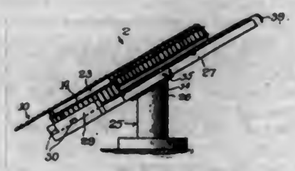
1,880,678. CATALYTIC CONTACT MASS. ALLING P. BEARDSLEY and MAURICE L. DOLT, Plainfield, N. J., assignors to The Calco Chemical Company, Inc., Bound Brook, N. J., a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,417. 25 Claims. (Cl. 23—234.)

7. A catalytic mass, comprising silicious material, a vanadium compound and an alkali metal compound, and substantially free from vanadium-silicon compounds and from soluble silicates.

11. A catalytic mass, comprising silicious material and a vanadium compound and an alkali metal compound in the proportion of one atom of vanadium to three atoms of the alkali metal.

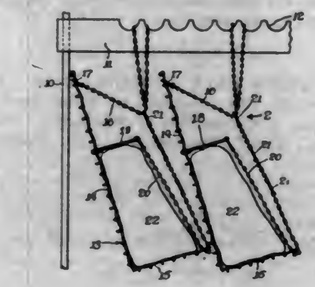
23. A method of making a catalytic mass, which comprises passing sulphur dioxide gas into a suspension of vanadium oxide in a solution of an alkali metal salt until the vanadium oxide is dissolved, and applying the resulting solution to a carrier of porous massive particles of silica.

1,880,679. METHOD AND APPARATUS FOR SHAPING MEAT. ALONZO N. BENN, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,869. 8 Claims. (Cl. 99—2.)



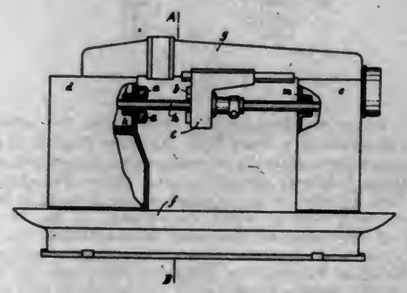
4. An apparatus for shaping meat for smoking comprising a pair of cooperating, relatively movable cage members arranged to receive the meat therebetween, and means for suspending the assembly of meat and members for exposure to the smoke and hot gases, said means being adapted to employ a shaping pressure to said meat through said members under the action of gravity.

1,880,680. MEAT FORMING CARRIER. ALONZO N. BENN, Chicago, Ill. Filed Feb. 9, 1931. Serial No. 514,358. 16 Claims. (Cl. 99—2.)



1. A meat forming carrier for holding substantially boned meat during the smoking operation comprising a foraminous base and side defining a meat-receiving member, a presser member connectible to said side, a flexible device connected to said presser member and looped through said base, and means on said side for applying a pull to the free end of said device whereby the meat piece is compressed between said presser member and base.

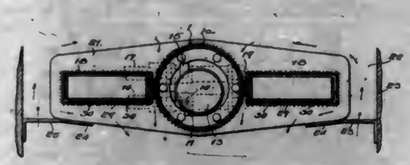
1,880,681. MULTIPLE-SPINDLE AUTOMATIC LATHE. WILHELM BERG, Bielefeld, Germany. Filed Sept. 4, 1929, Serial No. 390,289, and in Germany Dec. 14, 1928. 12 Claims. (Cl. 29—37.)



1. A multiple-spindle automatic lathe having a base plate, two uprights of box-like pattern mounted on said base plate and a top beam connecting the said two uprights together, a tool holder located between said uprights, said uprights adapted to have mounted thereon the members for the rotational movement of the work and for the forward movement of the tool holder.

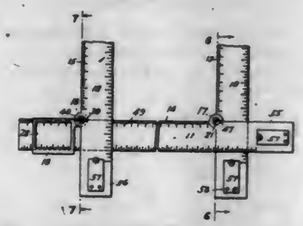
10. An automatic multiple-spindle machine having a frame comprising a supporting bed provided adjacent to its opposite sides with a pair of spaced upright columns unconnected at their sides and beam connected at their tops, a sliding tool carrier above and free of the bed, a guide carried by said columns and located nearer the tops than the bottoms of said columns for supporting said sliding tool carrier, means carried by one of said columns for reciprocating said tool carrier, and work spindles carried by the other column nearer the top than the bottom thereof.

1,880,682. EVAPORATOR. WILLIAM E. BIHL and AXEL RAMCLAW, Chicago, Ill., assignors to Zero-Zone, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,916. 8 Claims. (Cl. 62—95.)



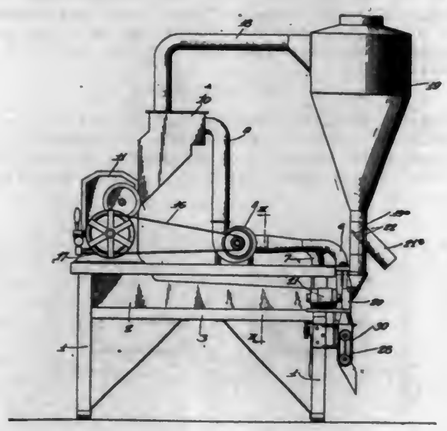
2. In a refrigerating unit, a container for a refrigerant, said container being a good conductor of heat, and a plurality of substantially rectangular heat conducting fins secured upon the container in thermal connection therewith, the fins being disposed transversely of the container, and means carried by said fins for directing descending air around said container.

1,880,683. STRESS DETERMINING SCALE. MORRIS BERMAN, Brooklyn, N. Y. Filed May 27, 1930. Serial No. 456,022. 2 Claims. (Cl. 33—98.)



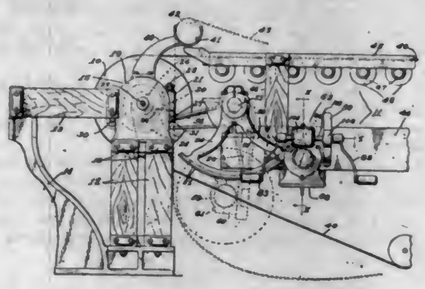
1. A device for mechanically determining the stresses in the members of a truss from the truss diagram therefor, comprising a plurality of scale-carrying members each of uniform thickness throughout and having flat opposed faces, and adapted to be arranged in the form of a force polygon, each side of which corresponds to one of the forces at the joint of the truss in magnitude, line of application, and direction, pivots for swingably securing said members together in pairs, at least one of said pivots being slidable along one of the members, into coincidence with the other pivot to permit the rotation of said members into coincidence with lines radiating from a joint of a truss diagram, means for maintaining said pivots in predetermined relation to the edges of the members, aligned extensions on the members extending beyond the pivots, and stop means for the movable pivot to determine the position of coincidence of said pivots.

1,880,684. COFFEE MILL. EUGENE G. BERRY and HORACE G. WOODHEAD, Chicago, Ill., assignors to B. F. Gump Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1929. Serial No. 349,121. 7 Claims. (Cl. 83—18.)



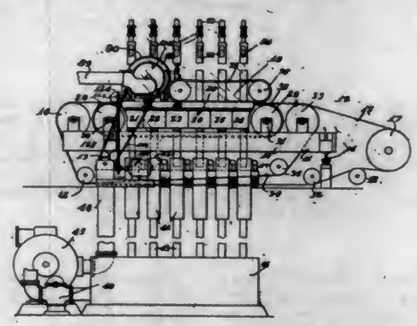
1. In a coffee cutting machine, cutting rolls, screening means for receiving the cut coffee from said rolls, aspirating means for removing the chaff and tailings from said screening means, a separator for receiving the chaff and tailings, a chaff collector, means for conveying the chaff to said collector and means for conveying the tailings to said cutting rolls.

1,880,685. PAPER MACHINE. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Oct. 20, 1930. Serial No. 489,767. 28 Claims. (Cl. 92—44.)



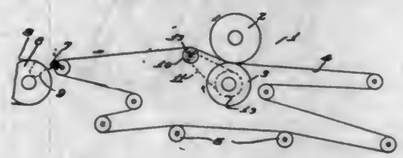
1. In a Fourdrinier paper machine, a breast roll, means releasably supporting the ends thereof, pivotal means independent of said first means for engaging said breast roll ends and means for actuating said pivotal means to swing said breast roll out of its normal position when its supporting means are released.

1,880,686. PAPER MAKING MACHINE AND METHOD OF MAKING WEB MATERIAL. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Nov. 17, 1930. Serial No. 496,146. 39 Claims. (Cl. 92—39.)



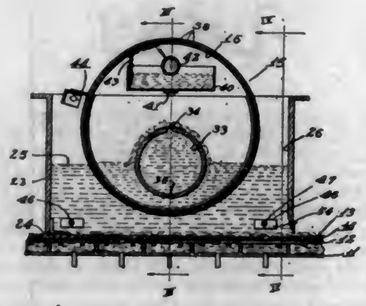
1. In a paper machine, a forming wire, a suction device associated therewith and a revolving reticular drum mounted over the wire and suction device through which the stock flows onto said wire.

1,880,687. PRESS FELT SUCTION ROLL. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Dec. 29, 1930. Serial No. 505,354. 12 Claims. (Cl. 92—47.)



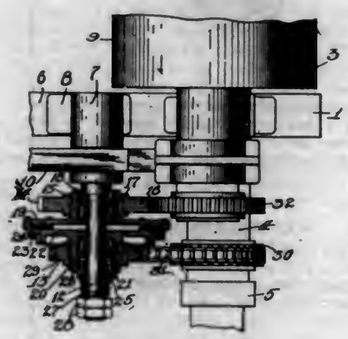
1. In combination with a traveling felt, a rotatably mounted suction roll in contact with said felt and means for driving said suction roll at a peripheral speed different from the rate of travel of said felt.

1,880,688. PAPER MAKING MACHINE. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Dec. 29, 1930. Serial No. 505,355. 10 Claims. (Cl. 92—44.)



1. In combination with means creating a pond of stock over the forming portion of a paper machine, fiber crossing means submerged in said pond comprising a bar having spaced transverse blades secured thereto and means for reciprocating said bar in close proximity to said forming portion.

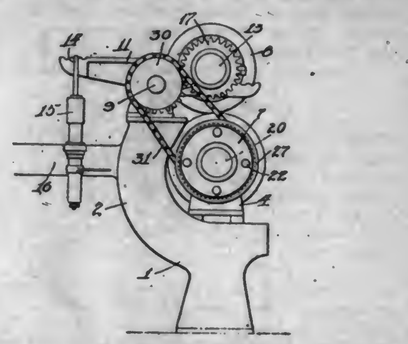
1,880,689. PRESS ROLL GEARING. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Jan. 19, 1931. Serial No. 509,686. 10 Claims. (Cl. 92—49.)



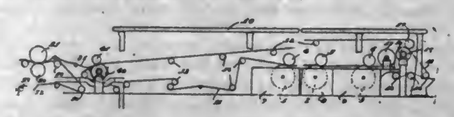
1. A set of press rolls comprising a lower positively driven roll, an upper roll, a stub shaft, frictionally connected gears rotatably mounted on said stub shaft and means forming positive driving connections between one of said gears and the lower press roll and between the other of said gears and said upper press roll.

1,880,690. PRESS ROLL GEARING DIFFERENTIAL. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Jan. 26, 1931. Serial No. 511,168. 12 Claims. (Cl. 92—49.)

1. In a press roll assembly, a lower power driven press roll, an upper roll, a gear secured on said upper roll, a stub shaft, a differential gear assembly carried by said lower press roll including a sprocket gear associated therewith, a sprocket gear on said stub shaft, a chain connecting said sprocket gears and a gear rigidly associated with said sprocket gear on said stub shaft and meshing with said gear on said upper press roll.

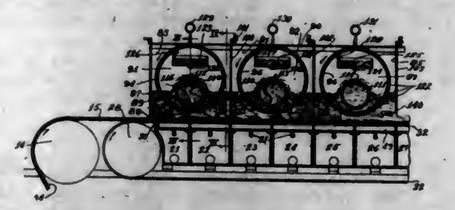


1,880,691. PAPER MAKING MACHINE AND METHOD OF MAKING PAPER. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Oct. 23, 1931. Serial No. 570,574. 11 Claims. (Cl. 92—88.)



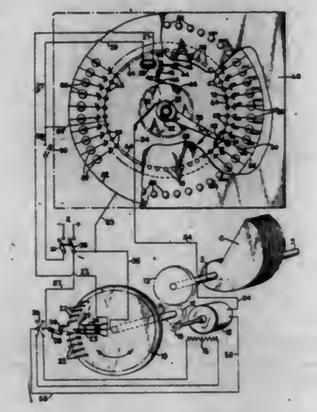
1. In a cylinder type of paper machine including a fibrous web forming part, a pick-up felt for receiving said web on the under side thereof while traveling towards the rear of the machine and a strain roll around which the felt is entrained to reverse its direction of travel after the last cylinder mold so that the web is on the top of the felt, a foraminous carrier located after the last cylinder mold for cooperative association with the wet felt and fibrous web therefrom, a suction roll acting through said foraminous carrier for removing water from said felt and fibrous web while allowing the web to follow the pickup felt and a suction press roll for receiving said felt and web from said suction roll to remove further quantities of water from the web so that it may be separted from the pickup felt without damage to its structure.

1,880,692. METHOD OF AND APPARATUS FOR MAKING PAPER. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed June 27, 1931. Serial No. 547,214. 17 Claims. (Cl. 92—39.)



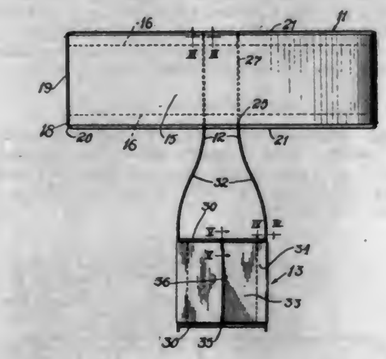
1. In a paper machine, a forming wire, a suction device associated therewith and a plurality of revolving reticular drums mounted over the wire and suction device and cooperating with each other to feed the stock onto said wire.

1,880,693. REMOTE CONTROL. SALVADOR BERTOMEU, New York, N. Y. Filed July 10, 1931. Serial No. 549,883. 19 Claims. (Cl. 250—40.)



1. A remote control for a radio receiver comprising an impulse generator operatively connected to the variable condenser shaft of the receiver, the generator producing an electrical impulse for each tuning position of the condensers, a motor connected to and continuously driving the impulse generator and condensers in complete cycles, a movable switch actuator, means actuated by each impulse generated by the impulse generator to advance the switch actuator one position for each impulse, switch means normally closed by the switch actuator at all positions thereof and controlling the continuous drive of the motor for the impulse generator and condensers, and manual means rendering the switch means inoperative at any position of the switch actuator thereby stopping the continuous drive between the motor and the condensers to stop the latter in desired position.

1,880,694. KITE. TOM W. BESLEY, Council Bluffs, Iowa. Filed Sept. 25, 1929. Serial No. 394,996. 11 Claims. (Cl. 244—22.)



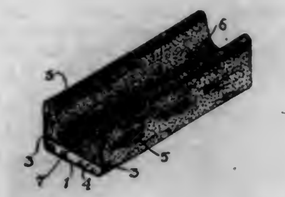
10. As an article of manufacture, a kite including a wing, body sticks extending rearwardly therefrom, and a cruciform rudder comprising a pair of transverse sticks resiliently held by said body sticks, a flexible sheet between said transverse sticks, a pair of vertical sticks bisecting said transverse sticks and passing therethrough, and flexible sheets connectible to said vertical sticks above and below said transverse sticks.

1,880,695. LIQUID FUEL BURNER. CHARLES E. BEYER, Rosamond, Calif. Filed Dec. 4, 1929. Serial No. 411,632. 2 Claims. (Cl. 158—91.)



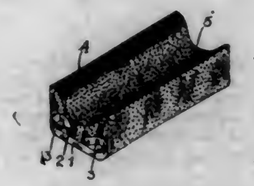
1. An oil burner comprising means providing an open topped receptacle having front, back and side walls, said receptacle having a bottom with a raised central portion in the form of a square pyramid, a baffle plate extending downwardly and rearwardly from the front wall to a point over the forward side of the square pyramid, means for discharging liquid fuel on the upper side of the baffle plate so as to trickle down over it and fall onto the forward side of the square pyramid, there being provision for admitting air to the receptacle beneath the baffle plate so as to be directed downwardly thereby against the forward side of the pyramid to pick up the vaporized fuel and then sweep rearwardly along the sides of the pyramid.

1,880,696. HEADER STRIP. REES BEYNON, Chicago, Ill., assignor to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1929. Serial No. 358,022. 6 Claims. (Cl. 296—44.5.)



1. As an article of manufacture, a cushioning device including a hard rubber back member, a stiff covering for the rear part of said member, and a sponge rubber front portion of equal width and overlying said back member.

1,880,697. CHANNEL STRIP AND METHOD OF MAKING THE SAME. REES BEYNON, Chicago, Ill., assignor to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1929. Serial No. 358,023. 4 Claims. (Cl. 154—2.)



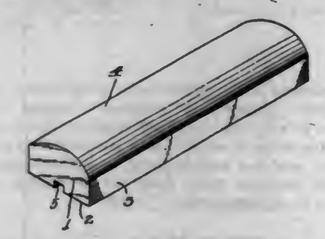
1. The method of forming a cushioning member, said method including the provision of a relatively stiff rubber base, attaching reinforcing means to said base, attaching a front portion of sponge rubber to said base and simultaneously molding said front portion to form a cushioning element.

1,880,698. CHANNEL STRIP. REES BEYNON, Chicago, Ill., assignor to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 25, 1929, Serial No. 358,023. Divided and this application filed Aug. 13, 1930. Serial No. 475,022. 5 Claims. (Cl. 296—44.5.)



1. In a device of the character described, a base of elastic material, stiffening means associated with said base and extending longitudinally along a side margin thereof leaving the central portion of said base free for the passage of securing means therethrough, and a front portion of greater elasticity secured to said base.

1,880,699. CHANNEL STRIP. REES BEYNON, Chicago, and GEORGE C. REEVES, Glen Ellyn, Ill., assignors to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1930. Serial No. 481,420. 1 Claim. (Cl. 296—44.5.)



A channel strip for buffing and sealing the upper edge of a window panel against its frame comprising a molded strip of sponge rubber having a back surface adapted to be secured in said frame, said back surface having a longitudinal groove in the mid-part thereof, said strip having a dome-shaped front surface with its highest point opposite said slot whereby when said window is elevated against said front surface it compresses the mid-part of the same over said groove thereby causing a tension to be exerted on the outer part of said front surface which draws the same into sealing engagement with the upper side edges of said panel.

1,880,700. CHANNEL STRIP. REES BEYNON, Chicago, Ill., assignor to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1930. Serial No. 481,421. 2 Claims. (Cl. 296—44.5.)

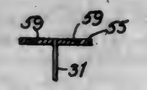


1. A channel strip for sealing and buffing the upper edge of a slidable vehicle window against its frame comprising an elongated molded strip of sponge rubber having a surface skin, said strip having a plane back surface and a rounded front surface, a thin fibrous layer secured to said back surface, a layer of hard rubber vulcanized thereto, said strip having a longitudinal slot therein of such configuration as to provide said front surface with a thin wall portion over said channel adapted to be depressed into said channel by said panel whereby when said panel is elevated against said strip it depresses and compresses said thin front wall portion in said channel thereby causing a tension to be exerted on the surface skin of one strip which draws the front of said strip into sealing engagement with the side edges of said panel.

1,880,701. METHOD FOR EFFECTING BISULPHITE REACTIONS WITH SULPHUR DIOXIDE IN SUBSTANTIALLY NEUTRAL SOLUTIONS. FREDERICK W. BINNS, Wollaston, and JOSEPH M. LURIE, Jamaica Plain, Mass., assignors to Virginia Smelting Company, Portland, Me., a Corporation of Maine. Filed Dec. 15, 1926. Serial No. 155,102. 7 Claims. (Cl. 260—155.)

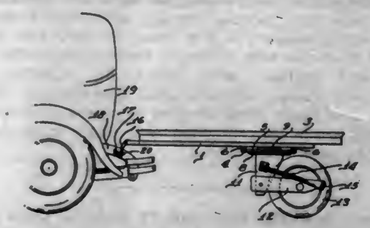
1. A method for the preparation of Neville-Winthers acid (1—4 naphthol sulphonic acid) which comprises the steps of subjecting an aqueous solution of a soluble naphthionate to a stream of sulphur dioxide, in an amount approximately equal to its reaction equivalent and in the presence of approximately 25% or less of a buffer salt.

1,880,702. FUSE LINK HEAD. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 17, 1930. Serial No. 421,393. 12 Claims. (Cl. 200—135.)



2. A fuse comprising a link of fusible material, a non-fusible head thereon, said head being held to the link by squeezing the same around the link.

1,880,703. AUTOMOBILE TRAILER. THEODORE C. BISCHOFF, GEORGE W. CHUBB, and ADAM RETTIG, Detroit, Mich. Filed Mar. 11, 1931. Serial No. 521,685. 2 Claims. (Cl. 280—33.1.)



1. A trailer comprising a frame having means for attaching the same to a motor vehicle, a post rotatably supported in said frame and projecting downwardly therefrom, a fork member pivotally mounted adjacent one of its ends on said post, a wheel supported intermediate the ends of said fork member, and leaf springs mounted on each side of said post and having their outer ends secured to the outer ends of said fork member.

1,880,704. PROCESS OF MAKING VALVES. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 2, 1926, Serial No. 126,355, Patent No. 1,775,845. Divided and this application filed Jan. 26, 1929. Serial No. 335,198. 6 Claims. (Cl. 29—156.7.)

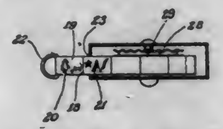
1. The process of making an article of manufacture comprising a headed member from a stem having an en-

larged end which consists in providing said enlarged end with an insert having characteristics different from that



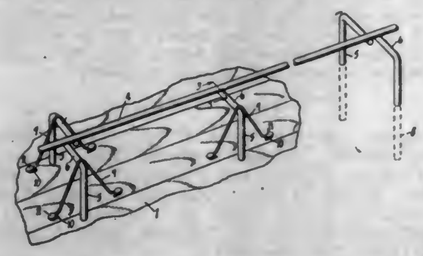
of said end and contemporaneously forming said end into a head and interlocking said insert with said head in such a manner as to dispose it wholly within the head.

1,880,705. PICTURE TAPE. MARY BITNER, New York, N. Y. Filed Apr. 17, 1930. Serial No. 444,927. 1 Claim. (Cl. 242—84.9.)



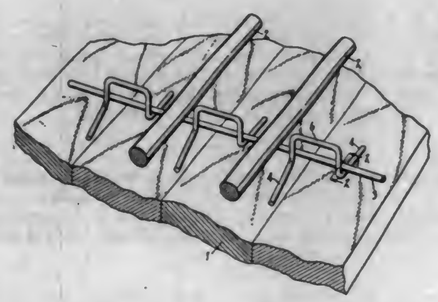
In a device of the class described, a casing, a king pin anchored stationary in said casing, a drum rotatable about said king pin, a tape secured to said drum and wound thereabout, said casing having a slot therein, one end of said tape passing through said slot, a spirally wound spring secured to said drum and said king pin, a resilient finger in said casing, a flange surmounting said drum, said resilient finger frictionally engaging said flange, said flange having curved corrugations formed thereon, said finger being adapted to engage said corrugations and means for releasing said finger from engagement with said corrugations.

1,880,706. SCREED FOR USE IN LAYING CONCRETE AND THE LIKE. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich., a Corporation of Michigan. Filed Jan. 4, 1930. Serial No. 418,451. 6 Claims. (Cl. 72—122.)



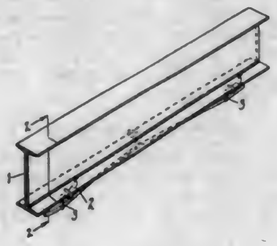
1. A screed comprising a longitudinal rod, and a plurality of angled legs disposed in spaced relation transversely of the rod with their horizontal arms fixedly secured to the under side thereof, the adjacent legs being disposed oppositely, said legs being adapted to rest upon a supporting surface without penetration.

1,880,707. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Feb. 5, 1930. Serial No. 426,027. 3 Claims. (Cl. 72—122.)



1. A structural unit comprising a longitudinal supporting rod, and a plurality of inverted U-shaped leg members welded to said rod in spaced relation, the lower ends of both of the arms of each of said members being directly connected to said rod and disposed in opposite downwardly diverging relation from said rod, providing inclined legs for the supporting rod.

1,880,708. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Feb. 5, 1930. Serial No. 426,028. 3 Claims. (Cl. 72—118.)

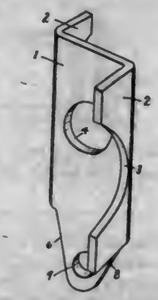


3. A structural unit comprising a horizontal supporting member, and a plurality of vertical attaching and supporting members disposed in spaced relation thereon and having horizontal laterally offset hooks at their upper ends engageable with opposite edges of a structural element directly above said supporting members.

1,880,709. INSERT ANCHOR. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed July 28, 1930. Serial No. 471,187. 1 Claim. (Cl. 72—101.)

An anchor for concrete comprising a plate-like body portion adapted to be embedded in concrete, and flanges

on its longitudinal edge, and a tang-like extension at one end adapted to be driven into a form, the ends of said flanges constituting form engaging stops, said plate having an opening therein, said tang being exposed when the form is removed and having an opening therein to facilitate attachment of an anchored part thereto.

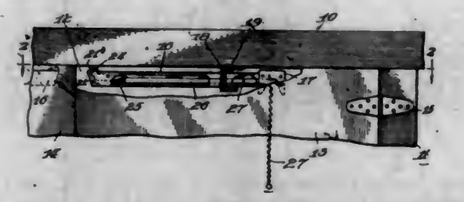


1,880,710. REENFORCE SUPPORT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Aug. 8, 1930. Serial No. 473,844. 4 Claims. (Cl. 94—8.)



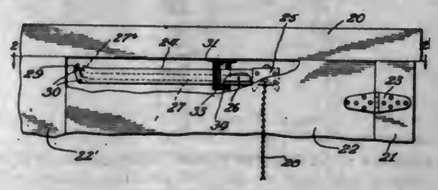
1. A reenforce support unit comprising a looped standard element, one arm of the standard element being straight and the other angled and disposed with its terminal portion transversely of the straight arm and welded thereto providing a base member, the portion of the straight arm below the base member constituting a prong, and a cross piece disposed transversely of and welded to the arms of said standard element and having an upwardly facing loop adapted to receive a reenforce bar, one end of said cross piece being extended to constitute a form spacing member.

1,880,711. DOOR HOLDING DEVICE. LOUIS A. BITTORF, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a Corporation of Illinois. Filed Oct. 20, 1930. Serial No. 489,757. 15 Claims. (Cl. 292—262.)



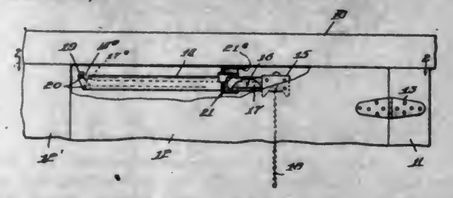
15. A door holder which comprises a keeper adapted to be mounted in the doorway, an arm member adapted to be swingably connected to the door at one end with its other end free, said keeper member having an opening which guidingly receives and supports said arm for movement to and from door-open and door-closed positions, an abutment element at the free end of said arm projecting thereabove to engage said keeper above its opening in the door-open position of said arm, a latch element supported by and pivoted to one of said members and arranged for movement into slightly spaced relation to said abutment element with the keeper surface above the keeper opening confined therebetween and means carried by and movable relative to said arm member for moving said latch element away from said abutment element to an unlatching position to permit movement of said arm member to its door-closed position.

1,880,712. DOOR HOLDING DEVICE. LOUIS A. BITTORF, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a Corporation of Illinois. Filed Dec. 18, 1930. Serial No. 503,166. 10 Claims. (Cl. 292—266.)



1. A door holder which comprises a keeper having an opening and adapted to be supported by the door frame, an arm slidably mounted in said keeper opening and adapted to be swingably secured to the door, a gravity operated latch member adjustably supported by said keeper and having a part movable back and forth over said opening, the end of said arm having a square-faced notch in which said part is received and positively retained when the door is opened, and a member supported by said arm and independently operable to engage said part to move the latter out of said notch to permit said arm to slide through said keeper opening to close the door.

1,880,713. DOOR HOLDING DEVICE. LOUIS A. BITTORF, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a Corporation of Illinois. Filed Dec. 18, 1931. Serial No. 581,796. 7 Claims. (Cl. 292—266.)

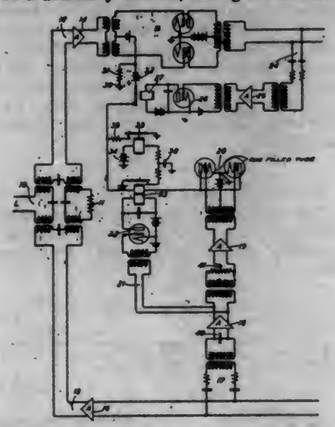


1. Door holder structure which comprises a keeper member adapted to be secured to a frame member forming a doorway, a door holding arm adapted to be swingably mounted at one end to a door, said keeper having an opening in which said arm is slidably received, a gravity latch member pivotally secured at one end to said keeper and adapted to fall down over said keeper opening, said arm having in the upper part of its free end portion a notch in which said latch member is received in the door open position of said arm, and means carried by said arm and gravity-operated in one direction for moving said latch member from said notch to release said arm.

1,880,714. GAS-FILLED TUBE CIRCUITS. BJÖRN G. BJÖRNSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1930. Serial No. 462,500. 11 Claims. (Cl. 179—170.)

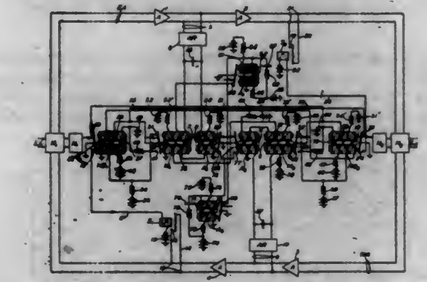
1. The combination with a load circuit to be operated of a gas-filled electric discharge device and an auxiliary

control, an input circuit common to both, means for operating said load circuit under control of either said device or said auxiliary control, said gas-filled device acting



in response to an impulse in said input circuit to initially operate said load circuit, said auxiliary control acting to maintain the load circuit in operated condition under control of said input circuit.

1,880,715. TRANSMISSION CONTROL CIRCUITS. BJÖRN G. BJÖRNSON, New York, N. Y., and ARTHUR W. HORTON, Jr., East Orange, and ANDREW C. NORWINE, Passaic, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,940. 11 Claims. (Cl. 179—170.)



1. In a two-way signal transmission system, two one-way signal transmission paths for transmitting the signals in opposite directions in said system, means connected to each path and responsive to signal transmission therein effectively to disable the other path, and means for varying the sensitivity of both of said disabling means to operation in accordance with the amount of noise in the particular one of said paths in which the noise is a maximum so as to maintain at all times said disabling means in the most sensitive condition possible as regards operation by signals while preventing false operation by noise.

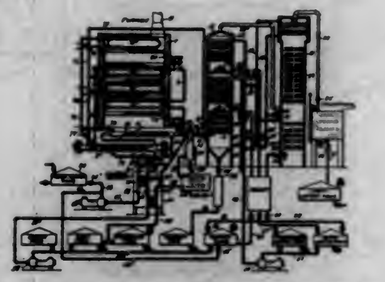
1,880,716. HEATING COIL FOR CRACKING HYDROCARBON OILS. JOHN C. BLACK, Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Original application filed Nov. 6, 1922. Serial No. 599,403. Divided and this application filed Sept. 14, 1927. Serial No. 219,538. 7 Claims. (Cl. 196—110.)

6. A heating coil for cracking hydrocarbons comprising a plurality of layers of tubes, a plurality of blocks connecting the tube ends of a layer each to the tube ends of another layer so that the tubes and blocks form a coil having a continuous single passage therethrough, each



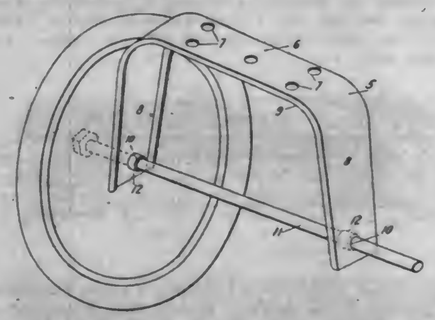
block having a bore extending from one end to near the other end and a plug in the end of the block screw-threaded into the bore.

1,880,717. METHOD OF CRACKING AND PROCESSING PETROLEUM. JOHN C. BLACK, Beverly Hills, Calif., assignor to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Original application filed May 17, 1924, Serial No. 714,070, now Patent No. 1,782,676. Divided and this application filed Mar. 4, 1930. Serial No. 433,120. 6 Claims. (Cl. 196—51.)



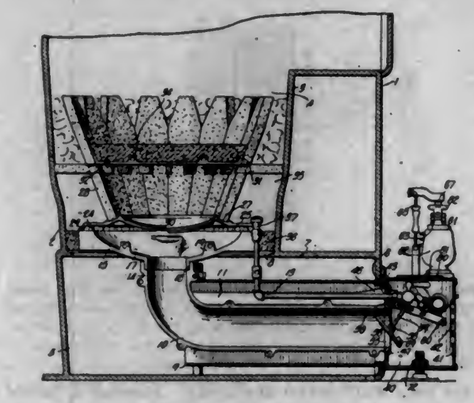
1. A method of converting hydrocarbon oil of high boiling point into hydrocarbons having lower boiler point comprising subjecting one supply of hydrocarbon oil to cracking conditions of temperature and pressure, subjecting a second supply of hydrocarbon oil to heat from the same source as used for the first supply, introducing the second supply to the first supply after their respective heatings, cooling the resulting mixture to a degree sufficient to prevent substantial vaporization when stored under atmospheric pressure conditions, and passing the cooled mixed hydrocarbons to storage.

1,880,718. BOLSTER FOR TOY VEHICLES. CHARLES C. BLACKMORE, Dayton, Ohio, assignor to The Dayton Toy & Specialty Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,446. 1 Claim. (Cl. 280—87.5.)



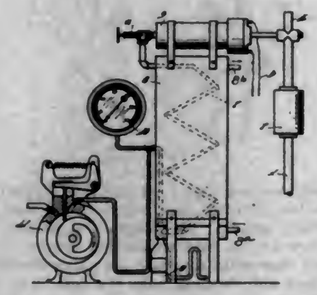
In a toy vehicle, an axle supporting member formed of sheet metal, having an axle receiving opening and having the metal extruded about said opening to provide a relatively wide supporting surface for the axle.

1,880,719. GAS BURNER. GEORGE W. BLAKESLEY, Kansas City, Mo. Filed Aug. 16, 1929. Serial No. 386,470. 6 Claims. (Cl. 158—119.)



1. In apparatus of the character described, including a fuel mixture conduit, a secondary air supply conduit, and valves controlling flow of fuel mixture and air through said conduits, a housing including an apertured plate engaging the outer ends of said conduits, said housing enclosing the valves and including removable side walls and a perforate end wall.

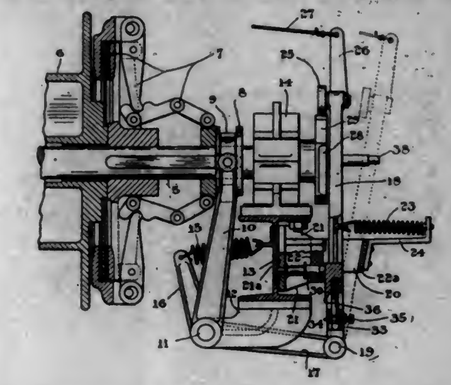
1,880,720. METHOD OF AND APPARATUS FOR MEASURING VAPOR. OSWALD H. BLACKWOOD and PAUL G. EXLINE, Pittsburgh, Pa., assignors to The Koppers Company of Delaware, a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,379. 12 Claims. (Cl. 73—51.)



1. Apparatus for use in measuring the condensible vapor in a warm gas, comprising a pump, means for conducting gas from a source to said pump, means for controlling the flow of the warm gas to the pump to maintain the rate of flow uniform, and a condenser in said conducting means between the controlling means and the pump.

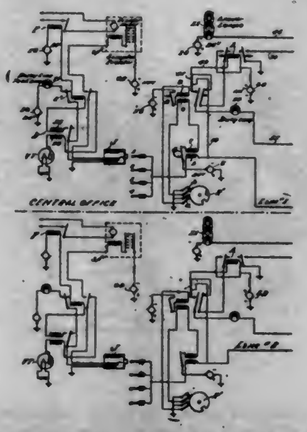
1,880,721. CLUTCH CONTROL MECHANISM. FREDERICK W. BLANCHARD, Montreal, Quebec, Canada, assignor to John S. Metcalf Company Limited, Montreal, Canada. Filed Apr. 5, 1930. Serial No. 441,992. 4 Claims. (Cl. 192—93.)

1. A clutch control mechanism including a clutch shifter having a movable part, a power driven cam, manually controlled means for shifting said movable part to a cam engaging position whereby said clutch shifter is automatically operated to a clutch engaging position, means



co-operating with said movable part to retain the clutch in engaged position, said means being releasable by releasement of said manually controlled means.

1,880,722. CALL DISTRIBUTING SYSTEM FOR CONCENTRATION CIRCUITS. WILLIAM B. BLANTON, Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 540,125. 10 Claims. (Cl. 178—2.)

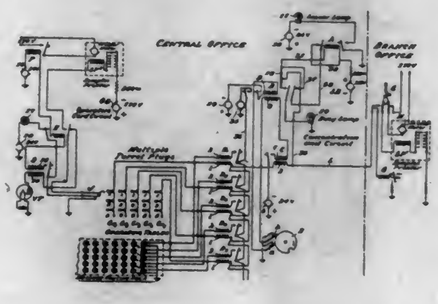


1. In an intercommunicating system of the character described, a central station and a plurality of sub-stations, a plurality of indicators at the central station, one co-operating with each sub-station to display a continuous signal upon receipt of a call, and call storage means actuated by the first or oldest incoming call to cause its signal to be of a different character than the signals associated with later incoming calls.

1,880,723. MESSAGE DISTRIBUTING SYSTEM FOR SIMPLEX PRINTER CONCENTRATION UNITS. WILLIAM B. BLANTON, Westfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. a Corporation of New York. Filed July 20, 1931. Serial No. 552,025. 4 Claims. (Cl. 178—2.)

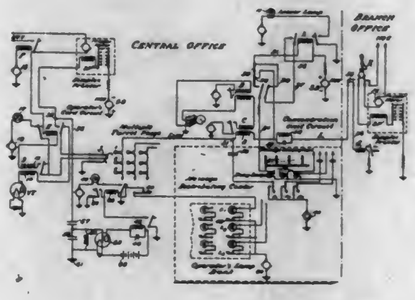
1. In an intercommunication system embodying a central office and a plurality of branch offices, a line from each

branch office terminating in multipled jacks or plugs at a number of turrets or operators' positions, said turrets being arranged in groups, means operated by the line cur-



rent for indicating in which group the answering operator is located, and means for maintaining the operation of said indicating means while the line is held.

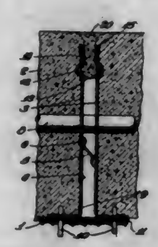
1,880,724. METHOD OF LOCATING AN OPERATOR WORKING ANY LINE. WILLIAM B. BLANTON, Westfield, N. J., assignor to Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 21, 1931. Serial No. 564,212. 9 Claims. (Cl. 178—2.)



1. In a telegraph system including lines extending from a plurality of branch stations and terminating in multipled jacks or plugs at a central station, a message distributing center at said central station adapted to receive messages for transmission over said lines, a receiving equipment at the central station for each line comprising a busy signal operated upon the seizure of the line, a plurality of printers at the central station each provided with a cord circuit adapted to be connected with any of said jacks or plugs, a signaling device operatively connected to each cord circuit and manually controlled means located at the distributing center for causing the operation of the signaling device in any cord circuit connected to a busy line.

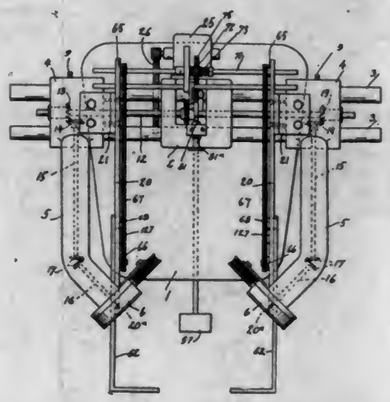
1,880,725. AIR CELL EXPANSION JOINT. HENRY B. BLECK, Waukegan, Ill. Filed Feb. 10, 1930. Serial No. 427,161. 14 Claims. (Cl. 94—18.)

1. An expansion joint for concrete roads and the like comprising a pair of walls, having openings therein for the reception of dowel bars, means for joining the upper edges of said walls, spacers connected between the lower portions of said walls to hold the walls in spaced relation,



and apertured flanges integrally formed on the lower edges of said walls to afford supports therefor and adapted to receive stakes for rigidly securing the walls in position.

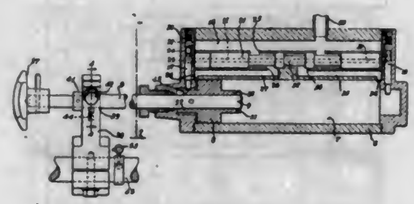
1,880,726. STITCHING MACHINE. HERBERT R. BLISS and HOWARD G. ALLEN, Niagara Falls, N. Y., assignors to H. R. Bliss Co., Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,515. 10 Claims. (Cl. 1—11.)



1. A stitching machine comprising, a supporting pedestal or the like, stitcher head supporting means projecting from opposite sides of the pedestal, a stitcher head carried by each of the said supporting means, a gear rack on the said supporting means, a pinion associated with the stitcher head and meshing with the gear rack, means operable to rotate the pinion to adjust the stitcher heads with respect to the supporting means, a drive shaft substantially paralleling the supporting means, mechanism for supporting the stitcher heads, and slidable connections between the drive shaft and stitcher head operating mechanism.

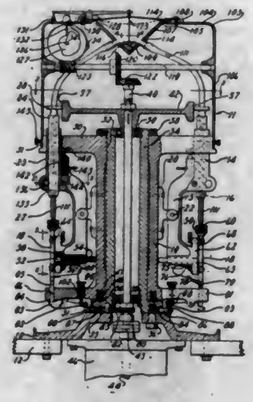
1,880,727. FLUID ACTUATED DEVICE. HAROLD LANGLEY BLOOD, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1926. Serial No. 144,941. 1 Claim. (Cl. 121—157.)

In a fluid actuated motor, a piston having integral helicoidal cam faces in each end thereof, a slide valve for causing oscillation of the piston, a pair of tappet valves for engaging the helicoidal faces of the piston at each end of its stroke to control the slide valve, a piston rod connected to said piston, an adjusting arm clamped to the piston rod, and a hand wheel secured to the piston rod for turning the piston rod in the arm and adjusting



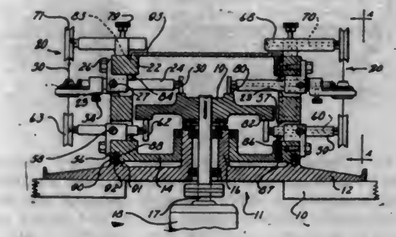
the engagement between the afore-mentioned tappet valves and the helicoidal piston cams to vary the length of stroke of the piston in each direction.

1,880,728. DRILLING MECHANISM. HARRY BLOUNT, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 11, 1930. Serial No. 443,316. 4 Claims. (Cl. 77—55.)



1. In a drilling mechanism, a member for holding the object to be worked and formed to hold cutting fluid about the object, means for performing work upon the object, means for actuating the working means, a reservoir containing a supply of cutting fluid, means fastened to the reservoir for directing fluid therebetween and the object holder, a diaphragm affixed to the reservoir, a plunger connected with the diaphragm for regulating the height of fluid in the reservoir, and means connected with the actuating means and operable in response thereto for controlling the movements of the plunger and the actuations of the diaphragm to cause predetermined quantities of fluid to be transmitted to the object holder at predetermined intervals and after use therein portions thereof to be returned to the reservoir over the same path at predetermined intervals.

1,880,729. LAPPING MECHANISM. HARRY BLOUNT, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1930. Serial No. 447,884. 11 Claims. (Cl. 51—145.)



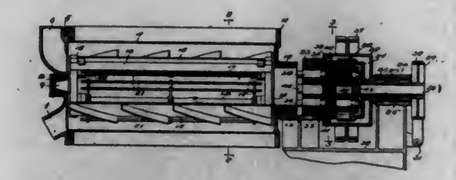
1. In a die lapping macine, a rotatable ring gear having a slot and a die holder carried rotatably thereby having a slot, the gear and the holder being relatively adjustable to permit the slots to assume a predetermined relative juxtaposition.

1,880,730. LAMP. GEORGE A. BOGUE, Pine City, Minn. Filed Aug. 15, 1930. Serial No. 475,546. 2 Claims. (Cl. 240—8.18.)



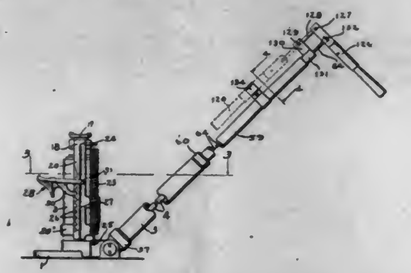
1. An auxiliary automobile lamp, comprising a tubular standard, mounting means to rigidly connect said standard to an automobile, a cylindrical handle member telescopically insertible within said standard, adjustable clamp means on said standard to engage said handle portion, a lamp, a connection between said lamp and handle portion, consisting of a member pivotally connected to said handle portion, a member rigidly connected to said lamp, a hollow bolt connecting the member connected to said lamp and the member pivotally connected to said handle portion, and flexible conductor means connected to said lamp and passing through said hollow bolt and handle portion and standard to a source of electricity.

1,880,731. BATCH FREEZER MECHANISM. ARTHUR H. BOILEAU, Cedar Rapids, Iowa, assignor to Cherry-Burrell Corporation, Cedar Rapids, Iowa, a Corporation of Delaware. Filed Nov. 1, 1930. Serial No. 492,641. 10 Claims. (Cl. 259—102.)



1. In a batch freezer mechanism, a freezer housing, a dasher in said housing and comprising fixed and movable dasher members, a driving means disposed out of said housing and connected to said dasher, and means in said driving means for controlling the operation of said driving means whereby said dasher may be operated as a unit or with the movable dasher members operating additionally to the unit movement.

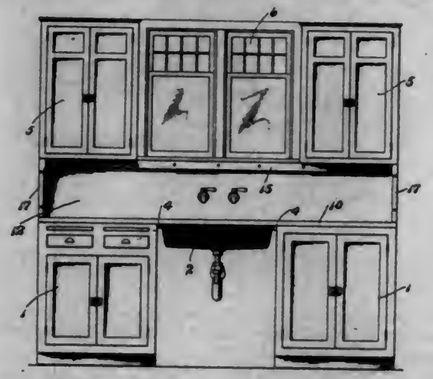
1,880,732. HYDRAULIC JACK. HARRY W. BOLENS, Port Washington, Wis. Filed Apr. 2, 1928. Serial No. 266,495. 4 Claims. (Cl. 138—9.)



1. A hydraulic jack comprising hydraulically operable lift mechanism, a mounting member connected thereto, a pump carried by the mounting member, there being passages in the mounting member leading from the pump to the hydraulically operable lift mechanism, valve means in said passages constraining the pump, when operated, to elevate the hydraulically operable lift mechanism, a trip cooperable with said valve means to permit the hydraulically operable lift mechanism to lower, a casing for the trip and pump, said mounting member having an opening through which the trip extends, said trip completely obstructing said opening when positioned to trip the valves, said trip having a drain groove bridging the wall of said opening when the trip is in inoperative position and blocked by the wall of the opening when the trip is in operative position.

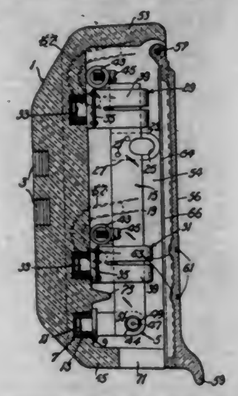
1,880,733. CUPBOARD UNIT CONSTRUCTION. FRANK BOLHUIS, Holland, Mich. Filed May 5, 1930. Serial No. 449,893. 2 Claims. (Cl. 312—169.)

1. In a construction of the class described, two spaced apart lower cabinet sections, a sink having outturned flanges around its upper edges supported on and extending between the upper ends of said sections, a cabinet structure located above said lower cabinet sections and sink and spaced therefrom, an intermediate table section comprising a horizontal table, a vertical back and vertical ends attached to said back and table, said table having an opening over the sink and being recessed at its underside around said opening to receive the flanges of the sink, a rail disposed at the underside and rear portion of the upper cabinet structure substantially the full length of the table, end rails attached to the upper cabinet structure extending forward at right angles from the ends of the first rail, said rails at their underside and said back and ends of the intermediate table section at their upper



edges being provided with overlapping tongue portions permitting an elevation of the intermediate table section a short distance greater than the thickness of the flanges of the sink, and covering strips detachably secured at the inner sides of said rails and extending over the joints between the same and the back and ends of said intermediate table section.

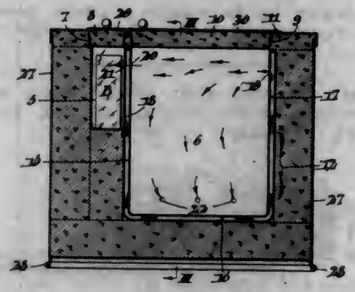
1,880,734. DISCONNECTING SWITCH. LESTER PIERCE BOLL, University City, and THEODORE BIRKENMAIER, St. Louis, Mo., assignors to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 20, 1929. Serial No. 415,532. 6 Claims. (Cl. 200—162.)



1. A switch comprising line terminals, an enclosing base therefor, a cover, a switch blade beneath said cover and adapted to engage said terminals, an eye associated with the blade, the opening of the eye being matched by an opening in the blade whereby extension of the eye is decreased so that said cover may be lowered, the cross section of the eye augmenting the cross section of said blade.

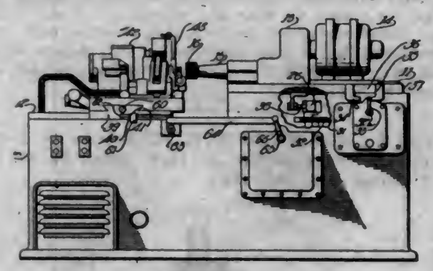
1,880,735. REFRIGERATOR. CHARLES E. BONINE, Melrose Park, Pa., assignor to James H. Bell, Philadelphia, Pa. Filed July 17, 1929. Serial No. 378,842. 2 Claims. (Cl. 62—91.5.)

1. In a refrigerator of the character described, a thermo insulated casing affording a chamber for solid carbon dioxide; a chamber for the articles being refrigerated; passages determining flow of the cold gas liberated incident to sublimation of the solid carbon dioxide, down along one end of the refrigerating chamber, across the bottom of the same and up along the opposite end previous to



entering said refrigerating chamber at the top for descent about the articles in said refrigerating chamber; and passages to conduct the gas from the bottom of said refrigerating chamber upward along the outer faces of its opposite side walls before being permitted to escape from the refrigerator.

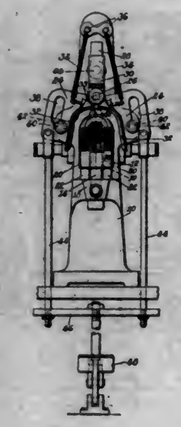
1,880,736. GRINDING MACHINE. CLEMENT BOOTH and FREDERICK S. HAAS, Cincinnati, Ohio, assignors, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,212. 18 Claims. (Cl. 51—50.)



1. In a grinding machine the combination of a bed or support, a grinding wheel carriage carried thereby and reciprocable longitudinally thereof, a grinding wheel rotatably carried by the carriage, means supporting a work piece and reciprocable longitudinally of the bed toward and from the grinding wheel to present a work piece carried thereby in operative position relative to the grinding wheel, means for reciprocating the said carriage and work supporting means, means operable by the said work supporting means and grinding wheel carriage for stopping the movement of the grinding wheel carriage and changing the rate of movement of the work supporting means, and means carried by the work supporting means for trueing the active surface of the grinding wheel.

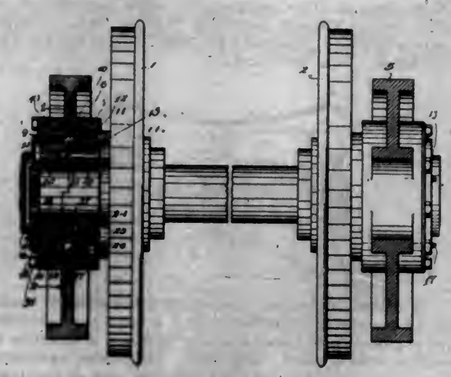
1,880,737. MACHINE FOR FLANGING SHOE UPPERS. HUBERT BOOTHROYD, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 11, 1930, Serial No. 481,234, and in Great Britain Sept. 30, 1929. 24 Claims. (Cl. 12—97.)

1. In a machine for forming outturned flanges on shoe uppers, the combination of a movable form to receive the end portion of an upper with its marginal portion projecting beyond the bottom of the form, means for pressing the upper in engagement with the form and for moving



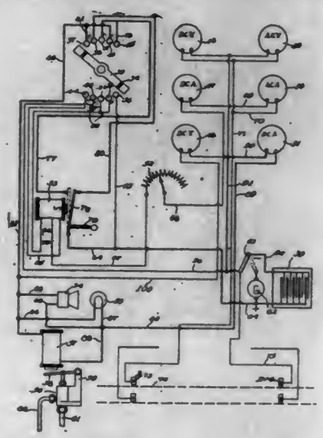
the form, and means effective upon movement of the form to turn outwardly the projecting margin of a portion of the upper.

1,880,738. ROLLER BEARING. JOHN A. BORLAND, St. Paul, Minn., assignor to Borland Transportation and Manufacturing Company, a Corporation of Arizona. Filed Apr. 16, 1931. Serial No. 530,471. 5 Claims. (Cl. 308—180.)



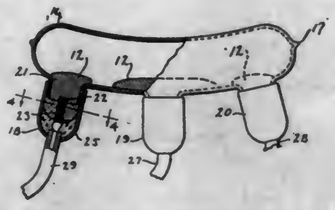
1. A railway car roller bearing, comprising an annular bearing housing having an annular groove in the inner side thereof, a ball race mounted in said groove, an annular sleeve mounted interiorly of said housing member, and having a groove in the outer periphery thereof to receive said ball race thereon, said annular sleeve having a pair of annular grooves in the inner surface thereof, a second annular sleeve mounted interiorly of said outer annular member and having a pair of annular grooves in the outer surface thereof radially opposite to the grooves in the inner surface of said outer annular member, and a plurality of rollers mounted in the space between said inner and outer annular members, each of said rollers having a flange thereon, said flanges being positioned to lie in the grooves in said inner and outer annular members.

1,880,739. BLOCK SIGNAL CHECKING DEVICE FOR RAILROADS. JOHN A. BORLAND, St. Paul, Minn., assignor to Borland Transportation and Manufacturing Company, a Corporation of Arizona. Filed July 6, 1931. Serial No. 548,742. 2 Claims. (Cl. 246—167.)



1. A railway rail circuit tester, comprising a wheeled carriage, a pair of contact members longitudinally spaced apart and adapted to engage a rail upon which the carriage is supported, and an electrical circuit interconnecting said rail contact members and adapted to be energized by a flow of electricity through said circuit, said rail normally constituting a shunt across said contact members to prevent a flow of electrical current through said circuit.

1,880,740. CIRCUIT INTERRUPTER. GISBERT L. BOSSARD, Dayton, Ohio, assignor, by mesne assignments, to The Leland Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,515. 2 Claims. (Cl. 200—152.)



1. A circuit interrupter comprising a hermetically sealed tube of insulating material having a body part provided with a plurality of depending cup portions, a quantity of mercury within said body part, electrodes extending through and sealed in said cup portions, and an insulated terminal wire electrically connected to each of said electrodes, and a metal sleeve fixed to each cup portion the lower ends of the metal sleeves gripping the ends of the insulation of said insulated wires.

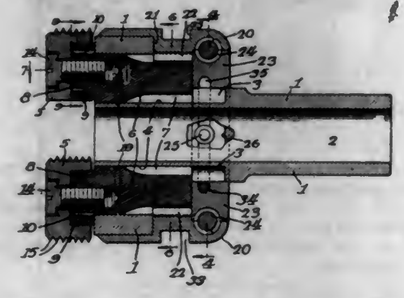
1,880,741. REDUCTION OF SULPHUR DIOXIDE. MAITLAND C. BOSWELL, Toronto, Ontario, Canada. Filed May 12, 1928. Serial No. 277,398. 13 Claims. (Cl. 23—226.)

1. A process of producing a catalyst for the reduction of sulphur dioxide which consists in acting on an oxide of a metal of the iron group with sulphur dioxide and hydrogen.

3. A process of reducing sulphur dioxide which consists in preparing a catalyst by acting on an oxide of a metal of the iron group with sulphur dioxide and hydrogen for a length of time and at a temperature sufficient to cause the oxide to take up sulphur, forming a porous mass of said catalyst and thereafter passing sulphur dioxide and hydrogen through the mass in substantially the proportions of 1 to 2 and at a temperature sufficiently high for effective reaction.

9. A catalyst for the reduction of sulphur dioxide having the constitution of a partly reduced iron disulphide.

1,880,742. CUTTING TOOL HEAD. CYRUS M. BOSWORTH, Riverside, Ill. Filed Jan. 25, 1929. Serial No. 334,911. 17 Claims. (Cl. 10—100.)



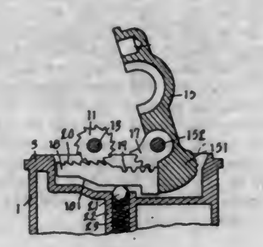
1. A cutter head provided with revolving chasers for cutting cylindrical metal stock in the desired manner, having eccentric trunnion mountings the axes of which are parallel with the axis of relative rotation between the cutter head and the metal stock to be cut, said chasers being carried eccentrically on said mountings, forming rotatively adjustable caps on the outer ends of said mountings, for taking up wear and sharpening of any cutter, and instrumentalities for rotatively moving said trunnion mountings to cause movement of said chasers toward and away from said axis of relative rotation, to open and close the head.

1,880,743. AUTOMATIC SWITCH. EDWARD W. BOTTS, Chicago, Ill. Filed Nov. 13, 1929. Serial No. 406,775. 7 Claims. (Cl. 200—122.)



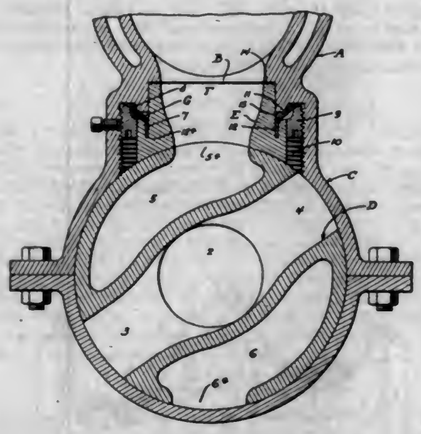
1. An automatic make and break switch comprising a permanently closed generally elongated housing, conductor wires extending into the housing through the opposed ends thereof, a supporting frame contained within the housing and supported on the ends of said wires, the make and break switch comprising a pair of opposed bi-metallic heat responsive arms with contact points in opposition.

1,880,744. CIGAR LIGHTER. HOMER J. BOUCHARD, Chicago, Ill.; Alice M. Bouchard administratrix of said Homer J. Bouchard, deceased. Filed Jan. 28, 1929. Serial No. 335,535. 7 Claims. (Cl. 67—7.1.)



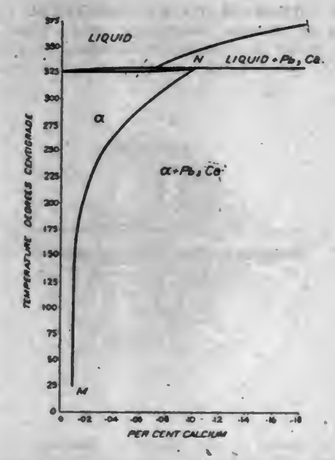
7. In a cigar lighter, the combination of a casing, an integral burner tube on said casing, spark producing means comprising a friction wheel and a flint, a ratchet wheel secured to said friction wheel, an actuating lever carrying a snuffer cap to cover the burner tube, a gear segment carried by said lever, a slidably mounted element having rack teeth for engaging said gear segment, and ratchet teeth for engaging said ratchet wheel, said element having a cam surface and a yielding plunger in engagement therewith adapted to hold the cover open by friction and closed under spring pressure.

1,880,745. SEALING PLUG. SAMUEL L. BOUKARD, San Francisco, Calif., assignor to Alfred Whittell, San Francisco, Calif. Filed May 18, 1931. Serial No. 538,372. 8 Claims. (Cl. 123—190.)



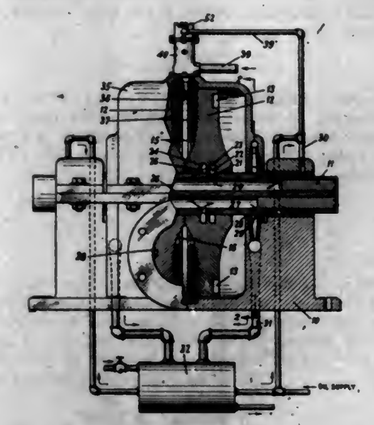
1. The combination with a housing having a rotary valve mounted therein and a port in the housing adapted to be opened and closed during rotation of the valve, of a sealing plug interposed between the port and the valve, said plug having a central passage formed therein in communication with the first named passage, a sealing diaphragm surrounding the plug, means securing the outer peripheral edge of the diaphragm and preventing leakage around said edge, and means whereby a sliding engagement is maintained between the inner edge of the diaphragm and the plug to prevent leakage around the inner edge of the diaphragm.

1,880,746. LEAD ALLOY. GEORGE M. BOUTON, Lynbrook, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1929. Serial No. 403,541. 4 Claims. (Cl. 148—21.4.)



1. The method of treating an alloy composed of commercially pure lead alloyed with .02 to .1% calcium which comprises melting the alloy, cooling it to between slightly and several tens of degrees below the solid-solubility curve for the particular composition, maintaining it within such temperature range for at least a short time and then causing it to cool rapidly and age at a much lower temperature.

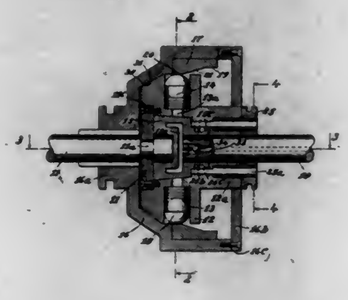
1,880,747. COOLING SYSTEM FOR FLUID-ACTUATED TURBINES. WILLIAM SPENCER BOWEN, Westfield, N. J. Filed Oct. 27, 1927. Serial No. 229,065. 3 Claims. (60—41.)



1. The combination with a gaseous reaction turbine including a rotor element and rotatable shaft on which the same is mounted, and a casing surrounding and sealing the rotor element; of means for providing a cooling fluid, said means comprising a portion of the casing through which the shaft passes and adapted to seal said casing thereat and also mechanism cooperating with the casing portion for producing pressure on the cooling fluid and

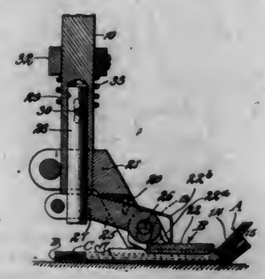
driven by said shaft; and connections between the rotor and the means for providing a cooling fluid adapted to circulate said fluid through the said rotor under the pressure developed by the said fluid-providing means.

1,880,748. HYDRAULICALLY OPERATED CLUTCH. JOSEPH E. BOWER, Milwaukee, Wis. Filed May 28, 1930. Serial No. 456,491. 4 Claims. (Cl. 192—60.)



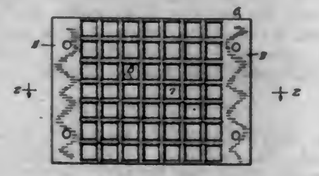
1. In a device of the character described, the combination of a driving shaft, an aligned shaft driven therefrom, a body member fixed upon one of said shafts, a hollow casing splined for axial movement on the other of said shafts, and enclosing the said body member, the body member being provided with a plurality of spaced cylinders extending radially to the axis of rotation thereof, a ring within the said casing having an elliptical track, a concentric track, and a third track intermediate the other two and substantially blending into such other two tracks, a piston carried by and movable in each of said cylinders and supporting a member adapted to contact with either of said tracks, a valve centrally arranged in the said body member and containing a valve chamber in communication with the said cylinders, means for opening and closing the said valve to control the passage of liquid to the cylinders, and means for axially moving the said casing with respect to the body member, to effect coupling of the shafts.

1,880,749. PRESSER FOOT MECHANISM. LOUIS G. BOWMAN, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Dec. 22, 1930. Serial No. 504,194. 8 Claims. (Cl. 112—235.)



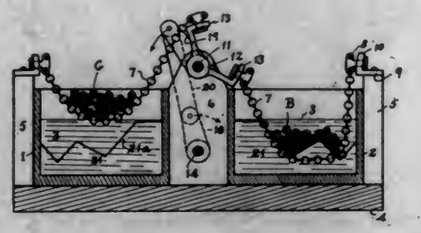
1. In a presser foot mechanism for sewing machines, the combination with a main presser bar, of a presser foot including a main section provided with an opening and an auxiliary section located in the opening, the lower end of the main presser bar being provided with an upwardly extending bore and with diametrically opposite openings communicating with the bore, a forwardly extending arm clamped to the bar, a pivotal connection between the arm and the main foot section, an auxiliary presser bar slidably mounted in the bore of the main presser bar and having its lower end projecting therebelow, a forwardly extending arm clamped to the projecting end of the auxiliary presser bar below the main presser bar, a pivotal connection between the last mentioned arm and the auxiliary foot section, the pivotal connections between the arms and the foot sections being normally in axial alinement, a collar fixed to the main presser bar, a pin fixed to the auxiliary presser bar and projecting outwardly through the openings in the main bar, and a spring weaker than the main presser bar spring surrounding the main bar between the collar and the pins.

1,880,750. FRICTION BRAKE. TRACY F. BRACKETT, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 4, 1929. Serial No. 337,201. 3 Claims. (Cl. 188—251.)



1. A friction block comprising a composition body and a metal back therefor, said back having a plurality of channel cross bars forming substantially rectangular openings filled with body material, said cross bars being substantially arcuate in cross section.

1,880,751. PICKLING APPARATUS. WILLIAM J. BRADDOCK, GEORGE BRUHN, and CHARLES W. HALLER, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company, a Corporation of West Virginia. Filed Sept. 18, 1931. Serial No. 563,576. 6 Claims. (Cl. 266—7.)



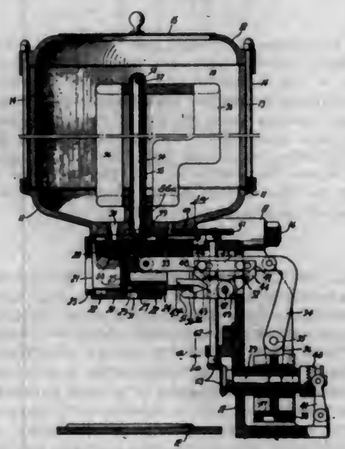
1. In pickling apparatus, the combination of a tank including a bath of pickling fluid, a series of flexible chains hanging in catenary loops for supporting in said tank a group of material to be pickled, a series of stationary supports in said bath, and means for alternately lowering and raising the loops in said chains, whereby said group of material is alternately deposited upon said stationary supports and lifted therefrom.

1,880,752. ASH TRAY AND CIGAR REST. ALBRECHT BRANDT, Ensley, Ala. Filed Oct. 7, 1931. Serial No. 567,491. 5 Claims. (Cl. 206—37.)



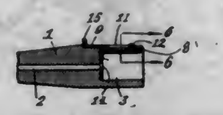
1. A device of the character described comprising hingedly connected casing members, and a cigar rest hingedly connected to one of said members and having a sliding connection with the other of said members.

1,880,753. DISPENSING MECHANISM. HARRY RUSSELL BRAND, New York, N. Y. Filed Nov. 30, 1928. Serial No. 322,874. 15 Claims. (Cl. 107—29.)



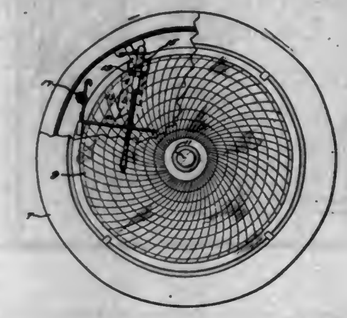
8. A dispensing mechanism comprising a fluid reservoir, a measuring valve alternately movable between an in-take position in communication with the reservoir and a discharge position, a piston reciprocable in the valve to draw fluid from the reservoir when the valve is in in-take position and to displace fluid from the valve when the valve is in discharge position, and latch mechanism for holding the valve stationary in each of said positions, and means for releasing the latch mechanism in timed relation to movements of the piston.

1,880,754. HOLDER AND EJECTOR FOR CIGARETTES AND CIGARS. WILFRID BRIÈRE, Montreal, Quebec, Canada. Filed Sept. 10, 1931. Serial No. 562,128. 2 Claims. (Cl. 131—10.)



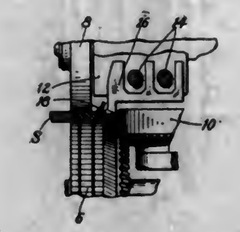
1. A holder and ejector for cigarettes or cigars comprising a mouthpiece having a passage and a cavity, a metal strip bent upon itself and slidably mounted on the wall of said cavity in engagement with the inner and outer surfaces thereof, the outer portion of said strip having a slot, a headed stud passed through said slot and into said holder, said strip having a portion lying transversely in said cavity.

1,880,755. RECORDER. EDGAR H. BRISTOL, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed June 18, 1927. Serial No. 198,815. 4 Claims. (Cl. 120—43.)



1. In a recording instrument a depending pen arm, a channeled pen having an open back, a channeled holder receiving the pen, said arm suspending said holder by connection to a side thereof leaving the space above the channel of the pen unobstructed for a substantial distance above the same to provide for ready access of a cleaning instrument to pass the edge of such through the pen.

1,880,756. METHOD OF AND DEVICE FOR STOCK FITTING. MICHAEL F. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 10, 1926. Serial No. 128,400. 14 Claims. (Cl. 12—27.)

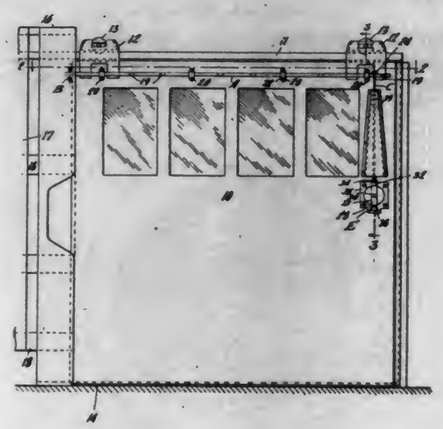


1. In a sole fitting machine, in combination, a channel knife constructed and arranged to form a channel having one side defined by a plane surface in the body of the sole, and a grooving member shaped to operate upon said plane surface to make a stitch-receiving groove therein without removing material from the sole.

1,880,757. COMBINED DOORSTOP AND LOCKING MEANS. JOHN A. BROSSART, BENJAMIN F. ORR, and WILLIAM H. SPENCE, Indianapolis, Ind. Filed July 23, 1931. Serial No. 552,672. 15 Claims. (Cl. 292—214.)

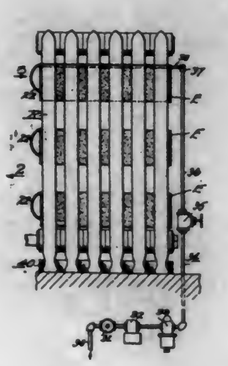
1. In a combined stop and locking means for sliding doors for vehicles, the combination with an oscillatory hand grip member fixed to the door; of a lock bar extending lengthwise of the door and movable therewith, said bar being rotatably supported on said door; a fixed locking

member cooperating with said bar and adapted to be interlocked therewith in various positions of the door; means operatively connecting said hand grip and lock bar



to effect oscillation of the latter; and yielding means for forcing said lock bar into interlocking relation with said fixed locking member.

1,880,758. HUMIDIFYING APPARATUS. GEORGE C. BROWN, Worcester, Mass. Filed May 28, 1931. Serial No. 540,701. 1 Claim. (Cl. 237—78.)

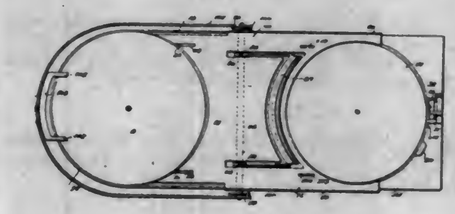


A humidifying apparatus for a radiator having openings extending vertically and longitudinally between spaced portions of said radiator and arranged in a plurality of superposed series, said apparatus comprising a plurality of evaporating units positioned in corresponding superposed series in said openings, a spray pipe through which water is fed continuously and at a predetermined rate to the upper evaporating unit of each series, means to provide a continuous supply of water to said spray pipe from a separate source outside of and disassociated from said radiator, and manual means to regulate the flow of water to said spray pipe, each lower evaporating unit in said series being positioned to receive the unevaporated moisture of the next higher unit and to further the evaporation thereof, and each evaporating unit being separately insertable and removable from operative position in its radiator opening.

1,880,759. HEAVY METAL KETO-BENZOATES. HERMAN ALEXANDER BRUSON, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 13, 1929. Serial No. 378,184. 7 Claims. (Cl. 260—11.)

5. A polyvalent heavy metal salt of para-cymoyl-o-benzoic acid.

1,880,760. AUTOMATIC PHONOGRAPH. ROY B. BRYANT, Dallas, Tex. Filed Feb. 2, 1929. Serial No. 336,975. 17 Claims. (Cl. 274—10.)

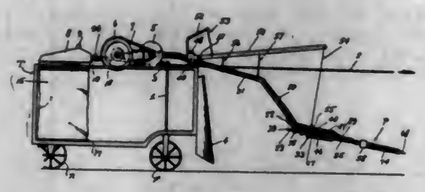


1. In an automatic phonograph including a supply of double faced records arranged in stacked formation at one side of the turntable and reproducer mechanism of the phonograph, means for transferring the records singly and successively from the top of the stack to the said turntable and operating to reverse the faces of the same from the position in stacked formation during such transfer, and means for returning the records from the said turntable to the bottom of the stack with the played faces thereof uppermost.

1,880,761. COLOR LAKE. REINHARD BUCHWALD, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1931, Serial No. 559,495, and in Germany Sept. 5, 1930. 1 Claim. (Cl. 260—11.)

A process of producing color lakes which comprises precipitating a leuco compound of a basic dyestuff of the triarylmethane series with a solution of a complex inorganic acid selected from the group consisting of phosphomolybdic acid, phosphotungstic acid and phosphotungsticmolybdic acid, in the absence of agents capable of oxidizing leuco compounds of basic dyestuffs to the corresponding dyestuffs, while keeping the reaction mixture acid to an extent to dissolve at least a substantial amount of the leuco compound, and then oxidizing the color lake of the leuco compound to the color lake of the corresponding dyestuff.

1,880,762. COTTON PICKING MACHINE. ROBERT E. BUCKNER, Iraan, Tex. Filed Dec. 13, 1930. Serial No. 502,211. 7 Claims. (Cl. 56—37.)



1. A cotton picking machine including in combination a picker assembly comprising a casing, a pair of spaced parallel coextensive extensions projecting from the casing, a substantially conical member connecting the ends of said extensions remote from the casing, a pair of parallel endless gathering belts mounted between said extensions, said casing provided wtih a suction chamber for receiving the picked cotton from said endless belts.

1,880,763. MAGAZINE OR CATALOGUE BINDER. EDWARD BUENGER, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed May 2, 1931. Serial No. 534,578. 3 Claims. (Cl. 129—24.)



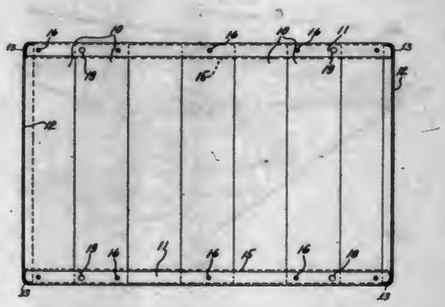
3. In a binder, a casing comprising a lower bowed base plate having marginal inturned lips, metal member secured to said base plate and cooperating with one of said inturned lips for forming a bearing recess, a rod mounted in said bearing recess and having prongs thereon, said casing having apertures for receiving the free ends of said prongs and means for latching said prongs in said apertures.

1,880,764. SUBMARINE SIGNALING CABLE. OLIVER E. BUCKLEY, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1931, Serial No. 547,690, and in Great Britain Aug. 13, 1930. 9 Claims. (Cl. 178—45.)



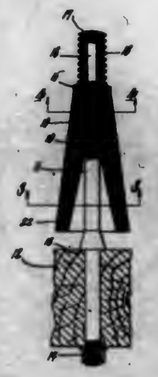
1. A submarine cable comprising a continuously loaded central conductor and a return conductor continuously surrounded by magnetic material, wherein at least part of the return conductor is insulated to shield this part from low frequency electrical disturbances.

1,880,765. PORTABLE PLATFORM OR SKID. ARTHUR A. BUREAU, Chicago, and EARL P. BURK, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 1, 1930. Serial No. 417,842. 5 Claims. (Cl. 248—41.)



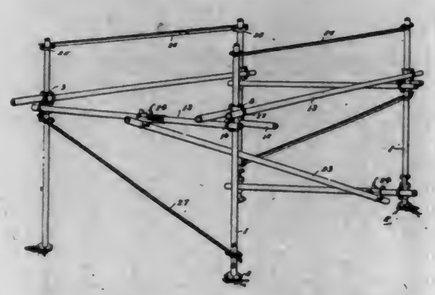
1. In a portable platform, a floor, a pair of metallic members for securing the lateral edges of the floor with ends rounded at their outer corners, and a pair of metallic members for securing the end edges of the floor likewise with ends rounded at their outer corners, said ends of both pairs of metallic members being interwelded to provide a unitary frame with rounded corners.

1,880,766. SUPPORT FOR INSULATOR. EDMUND BURKE, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 11, 1929. Serial No. 362,207. 1 Claim. (Cl. 173—321.)



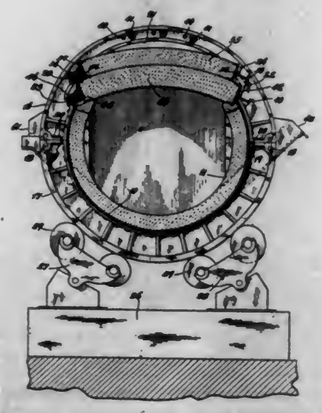
A support for an electric insulator, comprising a metal pin having a reduced upper portion and a threaded portion immediately below said reduced portion, and a molded waterproofed fibrous skirt fitting on said reduced and threaded portions of the pin and diverging downwardly from the portion of the pin below said threaded portion, said skirt having an external thread opposite the reduced portion of the pin therein and a thicker wall below said external thread surrounding the threaded portion of the pin.

1,880,767. SCAFFOLD. ALEXANDER T. BURT, Los Angeles, Calif., assignor to Alfred H. Jepson, Glens Falls, N. Y. Filed Oct. 9, 1930. Serial No. 487,577. 4 Claims. (Cl. 304—2.)



4. A scaffold comprising columns and braces arranged in intersecting planes, couplings consisting of mating members secured around a column, each member being provided on its outer side with a seat receiving a brace, a clamping plate extending over the brace and interlockingly engaged with the coupling member at one side of the seat, and a detachable fastening securing the opposite end of the clamping plate to the coupling member at the opposite side of the seat.

1,880,768. TILTING FURNACE. CARL C. BURT and IVAN L. ANDERSON, Salt Lake City, Utah, assignors to American Smelting & Refining Company, New York, N. Y., a Corporation of New Jersey. Filed July 17, 1930. Serial No. 468,517. 11 Claims. (Cl. 263—33.)



7. In a tilting furnace, a framework, curved side walls, a primary roof, a secondary roof above said primary roof, and means for supporting said roofs by said framework independently of each other and of said side walls.

1,880,769. ENGINE STARTER. HENRY BURTON, Gardena, Calif. Filed July 24, 1931. Serial No. 552,931. 8 Claims. (Cl. 74—7.)



1. Transmission mechanism comprising in combination driving and driven elements rotatable about separate axes in fixed relative positions means for distending and collapsing one of said elements so as to bring it into and out of cooperation with the other of said elements and means for maintaining symmetry of the flexible element.

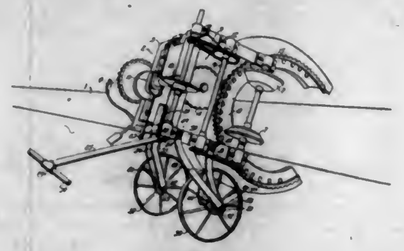
1,880,770. WIPING APRON FOR PIPE WRAPPING MACHINES. KELLIS H. BURTON and HERMAN KRAMER, Tulsa, Okla., assignors, by direct and mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Sept. 8, 1930. Serial No. 480,509. 10 Claims. (Cl. 242—11.)



1. In combination with a machine for wrapping conduits including a carrier rotatably mounted on the conduit, means for supporting wrapping material on the carrier, means for following the wrapping material on its rotation around the conduit to urge said material into intimate relation with the conduit, means for supporting one end of said following means on the carrier, and means for attaching the opposite end of said following means to the material-supporting means.

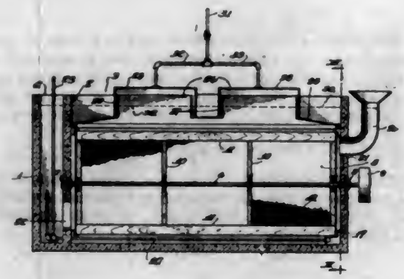
1,880,771. TRUCK ATTACHMENT FOR PIPE WRAPPING MACHINES. KELLIS H. BURTON and HERMAN KRAMER, Tulsa, Okla., assignors, by direct and mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Sept. 8, 1930. Serial No. 480,508. 4 Claims. (Cl. 242—11.)

1. In combination with a pipe wrapping machine including a frame, brackets extending laterally from the frame, means for securing the brackets to the frame, wheels rotatably mounted on said brackets, and means



on the machine for rotating the frame on the pipe to engage said wheels with the ground and for effecting transportation of the machine.

1,880,772. APPARATUS FOR PRODUCING METHANE. ARTHUR M. BUSWELL, Urbana, and CLAIR S. BORUFF, Monmouth, Ill. Filed Sept. 11, 1930. Serial No. 481,142. 6 Claims. (Cl. 92—5.)



1. Apparatus of the type described, comprising a receptacle forming a fermentation compartment, reticular means therein defining a confined zone having an adit and exit for material to be fermented and means for drawing off gas from said compartment with substantial exclusion of air.

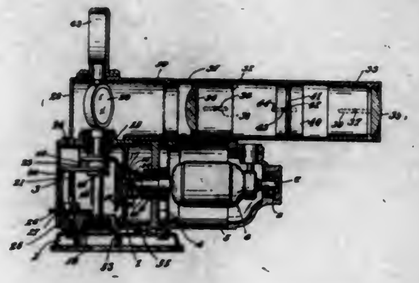
1,880,773. CELLULOSE DIGESTION. ARTHUR M. BUSWELL, Urbana, and CLAIR S. BORUFF, Monmouth, Ill., assignors to Board of Trustees of the University of Illinois, Urbana, Ill., a Corporation of Illinois. Filed Aug. 15, 1929. Serial No. 386,080. 12 Claims. (Cl. 92—5.)

1. The method of producing methane which comprises cooking cellulose containing material to render it readily susceptible to bacteriological action, then subjecting the cooked material to the action of anaerobic bacteria in the absence of oxygen, and collecting the gas produced, said bacteria being such as may be obtained from sewage sludge which is in an active state of fermentation.

1,880,774. APPARATUS FOR OBSERVING RAPIDLY MOVING OBJECTS. EDWARD A. BUTLER, Buffalo, N. Y., assignor, by mesne assignments, to Robert Donner, Buffalo, N. Y. Filed Oct. 9, 1928. Serial No. 311,363. 16 Claims. (Cl. 88—14.)

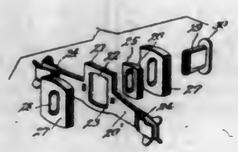
1. A stroboscopic apparatus for examining rapidly moving objects comprising a movable reflecting member,

means for directing a beam of light against said member, means for focusing and directing the beam reflected by said member against the object to be observed, means



for moving said member to cause periodic interruptions in the beam reflected thereby, and means for varying the frequency of movement of said member to correspond to the cyclic frequency of said object.

1,880,775. ELECTRICAL SWITCH. WILLIAM L. BUTLER and WILLIAM H. FABREY, Schenectady, N. Y., assignors to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,669. 5 Claims. (Cl. 200—67.)

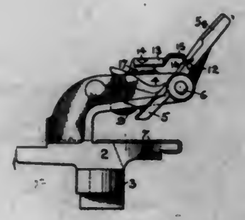


5. In a snap switch construction, an oscillatory member, a switch arm mounted thereon and insulated therefrom, said switch arm having an opening larger than the cross section of said oscillatory member, insulating members on opposite sides of said switch arm, and a tubular rivet extending through said insulating members and the enlarged opening in said switch arm for mounting said switch arm on the oscillatory member and for clamping the insulating members upon said blade.

1,880,776. CLOTH CLAMP. HARRY W. BUTTERWORTH, Jr., Philadelphia, Pa., and ALBERT H. MOLT, Gloucester, N. J., assignors to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Apr. 11, 1930. Serial No. 443,260. 2 Claims. (Cl. 26—62.)

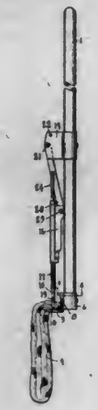
1. A cloth clamp for textile machines having a fixed jaw, a pivoted jaw loosely hinged thereto so as to be normally free to move automatically into gripping relation with the fixed jaw under the action of gravity, and controlling means operable by the cloth for holding the pivoted jaw out of gripping action with the fixed jaw but which releases the pivoted jaw whereby it may grip the cloth adjacent to its selvage, in combination with a spring actuated retaining member secured to one of the jaws for temporarily engaging the other jaw when it is temporarily out of gripping relation, and holding it tem-

porarily out of gripping relation, the retaining member normally free from an engaging contact with the other jaw when it is in gripping action, but arranged to tem-



porarily hold said engaged jaw out of gripping action when given a movement in excess of the normal gripping movement required.

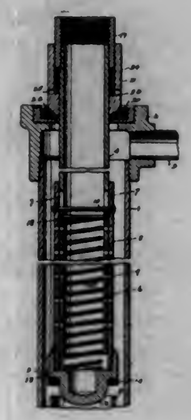
1,880,777. WRINGER MOP. EDGAR W. BYARS, Goshen, Ind. Filed July 18, 1930. Serial No. 468,766. 12 Claims. (Cl. 15—120.)



4. In a mop, the combination with a handle, of a head member mounted on said handle, a bracket mounted on said handle in spaced relation to said head member, a holder support, a link pivotally connected to said support and bracket, and a holder rotatively mounted on said support and adapted to engage said head when the parts are adjusted to mopping position, resilient means urging said holder toward said head member, the link pivots being arranged so that the parts constitute a locking toggle when in such position.

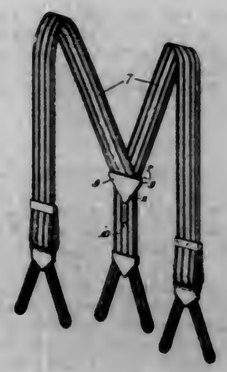
10. In a mop, the combination with a handle, of a wringer mounted on said handle intermediate the ends thereof, a stationary head carried by said handle at one end thereof coacting with said wringer, said head and wringer comprising opposed mop supporting loops, a mop supported by and between said loops, and cross members dividing said loops for limiting the movement of said mop on said loops when said mop is twisted by the operation of said wringer.

1,880,778. FLOW CONTROLLING APPARATUS. HARRY J. BYERS, Beaumont, Tex. Filed Nov. 20, 1931. Serial No. 576,339. 7 Claims. (Cl. 166—15.)



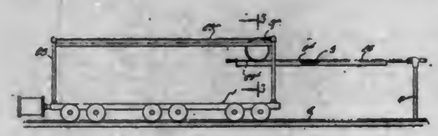
1. The combination with a flow tube in a well, of means for suspending the tube including a fusible support, said tube being movable downwardly, when said support is removed, and means for closing said tube upon such downward movement to prevent the inflow of fluid into said tube.

1,880,779. SUSPENDER. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspenders Company, a Corporation of Pennsylvania. Filed Jan. 6, 1932. Serial No. 584,952. 2 Claims. (Cl. 241—19.)



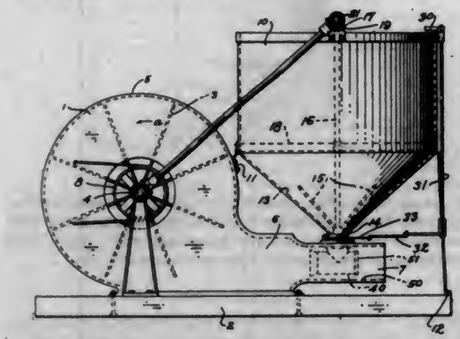
1. A suspender having shoulder straps, comprising a continuous strip of flexible material folded approximately midway its two ends at an angle of approximately sixty degrees, a pair of triangular flexible pieces embracing said folded part and stitched together through said folded part, and a vertical back strap having one end overlying a portion of the fold of said continuous strip and also embraced by and stitched to said triangular pieces.

1,880,780. TRANSMITTER FOR FLUID PRESSURE AND ELECTRIC CURRENT. WILLIAM F. CAHOON, Birmingham, Ala., assignor to The Filer & Stowell Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 17, 1931. Serial No. 557,513. 13 Claims. (Cl. 143—105.)



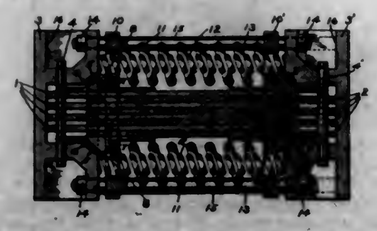
1. In combination with a reciprocable carriage having air driven instrumentalities thereon and a stationary source of air pressure adjacent to said carriage, a flexible supply conduit connected at one end to said carriage and its other end to said source, a floating wheel having looping engagement with said conduit and a flexible line anchored at one end and connected at its other end to said carriage and reversely looped about said wheel whereby upon movement of said carriage in either direction the hose is maintained in the proper position and appropriately taut.

1,880,781. ORCHARD DUSTER. THEODORE L. CAIRNS, Lindsay, Calif. Filed Mar. 1, 1932. Serial No. 596,032. 11 Claims. (Cl. 43—148.)
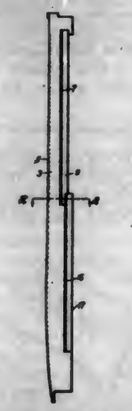


11. In a dusting machine, a combination of a hopper, means to supply an air stream thereunder, a primary mixing chamber positioned in the center of said air stream and directly beneath said hopper and a secondary mixing chamber to receive the mixture as it emerges from said primary mixing chamber.

1,880,782. FRICTION DRAFT GEAR. MORTIMER B. CAMERON, Edgewood, Pa., assignor, by mesne assignments, to Universal Draft Gear Attachment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1923, Serial No. 624,789. Renewed May 27, 1932. 1 Claim. (Cl. 213—36.)



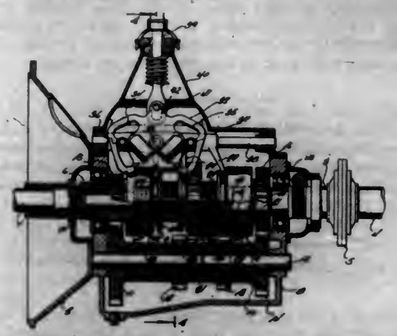
In a friction draft gear, the combination with a group of alternated longitudinally movable friction plates, of a housing anchored to and enclosing the ends of alternate plates of said group of friction plates at one end of the draft gear, a housing anchored to and enclosing the ends of the other plates of said group of friction plates at the other end of the draft gear, a spring resistance, a lateral pressure creating means operating against the outer sides of said friction plates, and longitudinally disposed rods associated with said housings and adapted to engage said housings upon a predetermined longitudinal movement of one housing, to thereby prevent further longitudinal movement of said friction plates.

1,880,783. VEHICLE DOOR. ALPHONSO S. CAMPBELL, Winchester, Mass., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1928. Serial No. 307,594. 4 Claims. (Cl. 296—44.)



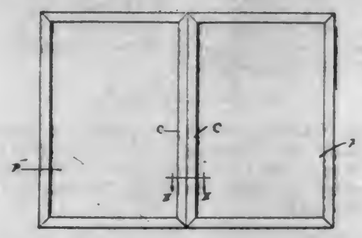
1. A metal door pillar for the door of a closed vehicle comprising a main web-like body to lie adjacent the jamb of the door and a reinforcing angle iron having a flange secured directly to the inner face of said body with its extremity substantially flush with the interior boundary thereof, its other flange extending inwardly from the angle and defining a wall of a glass run.

1,880,784. SYNCHRONIZING CLUTCH FOR TRANSMISSION MECHANISMS. LEON J. CAMPBELL, Chicago, Ill., assignor to Hand's Constant Mesh Transmission Co., Chicago, Ill., a Corporation of Illinois. Filed May 8, 1931. Serial No. 535,821. 9 Claims. (Cl. 192—53.)



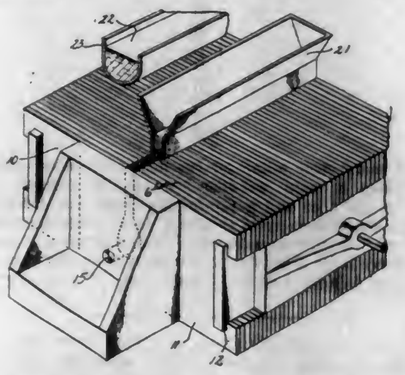
1. The combination with alined normally disconnected splined driving and driven shafts, of a combined friction and positive clutch for said shafts, the positive clutch consisting of a member movable into bridging relation with the adjacent ends of said shafts and engaging the splines thereof when connecting the shafts together, and also serving as a part of the friction clutch.

1,880,785. EDGE PROTECTION FOR FIBER BOARDS. JEROME T. CARD, Cincinnati, Ohio, assignor to Masonite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1930. Serial No. 479,154. 7 Claims. (Cl. 154—45.9.)



7. A sheet formed of disintegrated wood fibers having its edges bound by a thin pliable coating of metal foil intimately held thereto by an asphalt cementing compound.

1,880,786. METHOD OF RADIATOR MANUFACTURE. EDWARD S. CAREY, Milwaukee, Wis., assignor, by mesne assignments, to Arthur K. Reading, Mayville, Wis. Filed Apr. 24, 1930. Serial No. 446,965. 7 Claims. (Cl. 22—203.)



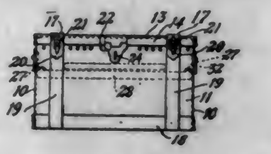
1. The method of casting which consists in assembling a stack of laminations having communicating apertures corresponding at each point to the cross section of the desired casting and pouring laterally into said apertures the material to be cast, whereby edges of certain of the laminations are fused and united with the casting.

1,880,787. LOOP-FORMING NEEDLE. GUSTAV A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 3, 1930. Serial No. 486,252. 1 Claim. (Cl. 112—80.)



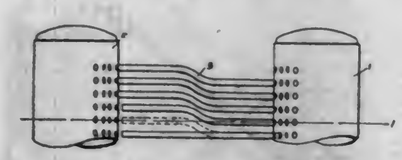
A device of the character described comprising a handle having one end provided with a bore and equipped with a ferrule embracing the end of the handle and having a threaded metallic socket integral with said ferrule and received by said bore; a fitting comprising a part provided with a bore and having a reduced threaded shank received by said socket; and a needle comprising a sheet-metal member having a tubular shank-portion fitted within said second-mentioned bore.

1,880,788. CONTAINER. CHARLES B. CARLSON, West Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Sept. 24, 1928. Serial No. 307,897. 9 Claims. (Cl. 220—1.)



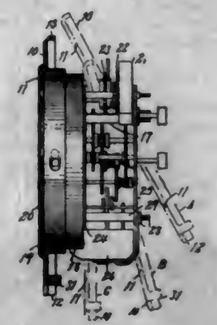
1. A container adapted to house a heavy load such as a machine and comprising in combination, a hollow protective shell, a lifting device secured to the shell, load-supporting means, and load-transmitting connections for transmitting the weight of a load upon the load-supporting means directly to the lifting device whereby substantially no part of the weight of the contents of the container is borne by the shell when the container is raised by the lifting device.

1,880,789. BOILER. CARL T. CARLSON, Erie, Pa., assignor to Erie City Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1931. Serial No. 513,588. 3 Claims. (Cl. 122—302.)



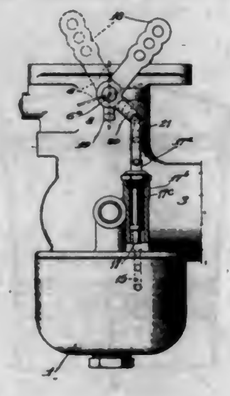
1. In a boiler, the combination of two drums having their axes in approximately the same plane; and tubes connecting the drums in approximately said plane, said tubes being off-set laterally intermediate their ends.

1,880,790. CLOCK. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Mar. 4, 1930. Serial No. 433,051. 1 Claim. (Cl. 58—53.)



In a clock of the class described, the combination with an assembling-member having a centering-portion adapted to enter an opening in a panel and to center a movement relative to said opening; of an uncased movement secured to and rearwardly projecting from the said assembling-member and having its running parts exposed and projecting radially beyond the centering-portion of the assembling-member; a unitary panel having an opening therein substantially corresponding in size to the centering-portion of the said assembling-member but smaller than the running parts of the movement projecting radially beyond the said centering-portion; and a dust-cap fitted over the said movement to which it is secured and bearing against the rear face of the said panel.

1,880,791. CARBURETOR. WILLIAM S. CARLSTON, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed July 2, 1928. Serial No. 289,645. 2 Claims. (Cl. 261—47.)



1. In a carburetor, a source of fuel supply, a main air inlet, a mixture outlet, a throttle comprising a butterfly valve and a shaft therefor, a fuel nozzle, an accelerating well communicating with the nozzle, an air inlet to said accelerating well and means of controlling said inlet, said means comprising a boss integrally formed on the body of said carburetor, a well in said boss, a passage connecting said well and said accelerating well, an opening connecting said well with the atmosphere, a valve in said well, a stem on said valve, a spring on said stem normally seating said valve to close said passage, a loosely mounted crank arm on said throttle shaft, connecting links between said valve stem and said arm, and a boss on said shaft to engage said crank arm to open said valve after the throttle has been opened a predetermined amount.

1,880,792. FORM LETTER FOR INCORPORATION IN A MOLDED BASE. LOUIS H. CARGILL, Denver, Colo., assignor of one-half to Michael Dentino, Denver, Colo. Filed Nov. 27, 1931. Serial No. 577,633. 1 Claim. (Cl. 40—125.)



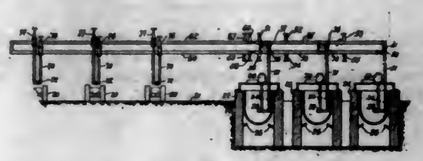
A sign comprising a molded base, and a letter formed from sheet metal bent to a cross-sectionally angular form, said letter being provided at its edges with anchoring tabs embedded in the base, the longitudinal edges of the letter being in the plane of the face of the base but the remainder of the letter being depressed from the plane of the face of the base, the letter throughout its extent being backed up with the material of the base.

1,880,793. COUPLING AND ASSOCIATED MEANS FOR LUBRICATING APPARATUS. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 8, 1927. Serial No. 238,531. 2 Claims. (Cl. 284—18.)



2. Coupling means for lubricating apparatus comprising a lubricant receiving nipple, a wedge-shaped portion having notches therein extending around the periphery of said lubricant-receiving nipple, a cooperating nozzle part having a nipple-receiving opening in its outer end, pin-like projections extending from said nozzle part inwardly into said nipple-receiving opening, said pin-like projections and said wedge-shaped portions cooperating to secure said nozzle to said nipple when the nozzle is presented to the nipple and rotated until said pin-like projections seat in said notches, a valve in said nozzle, said valve being opened by said nipple when said nozzle is presented to said nipple, spring means for restraining the movement of said valve, said spring means also serving to retain said pin-like projections in said notches.

1,880,794. APPARATUS FOR PREPARING AND DISTRIBUTING MATERIAL. HERBERT F. CARTER, Roselle Park, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,976. 8 Claims. (Cl. 219—39.)

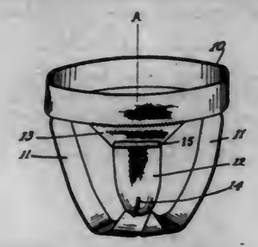


1. In an apparatus for preparing and supplying material, a plurality of receptacles, pipe lines interconnecting the receptacles comprising individual auxiliary supply and return branches located parallel with each other associated with each of said receptacles and a main supply branch and a main return branch located parallel with each other, and means including valves in the pipe lines and a pump associated with each receptacle whereby the receptacles may be used interchangeably for preparing the material and for receiving and storing a supply thereof.

1,880,795. ATHLETIC SUPPORTER. JOHN J. CARTLEDGE, Guelph, Ontario, Canada. Filed Aug. 10, 1931, Serial No. 556,204, and in Canada Aug. 14, 1930. 2 Claims. (Cl. 128—160.)

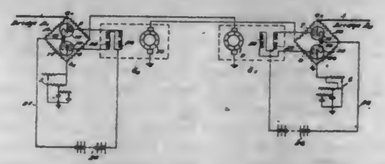
2. An athletic supporter comprising a longitudinally elastic waist-band, leg straps secured to said waist-band,

a depending abdominal elastic portion joined elastically to said waist-band and stretchable in the same direction



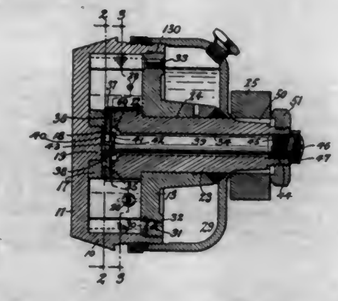
as the waist-band, and a pouch secured to the abdominal portion to form an unstretchable union, the lower part of the pouch being joined to the leg straps.

1,880,796. VACUUM TUBE TELEGRAPH REPEATER. HARLOW M. CASE, Chicago, Ill., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,492. 11 Claims. (Cl. 178—71.)



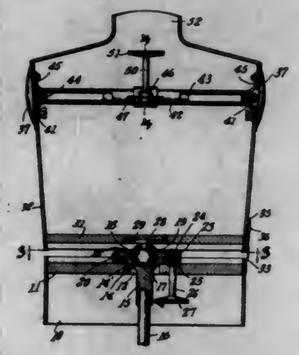
1. A vacuum tube repeater comprising an incoming line, a balanced bridge connected thereto including a pair of vacuum tube relays having normally balanced input circuits and opposed balanced output circuits, a dynamo electric generator, means for applying incoming signals of different polarities to said pair of relays and means under control of said opposed output circuits for controlling the polarity of the current produced in the armature of said generator in accordance with the polarity of the signal incoming from said line.

1,880,797. SHOCK ABSORBER. ANTHONY B. CASPER, Buffalo, N. Y., assignor to Honde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial N. 386,591. 13 Claims. (Cl. 188—89.)



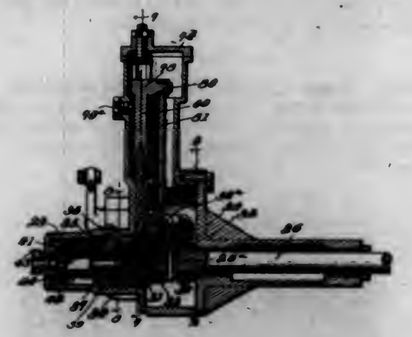
1. A shock absorber comprising a hollow cylindrical casing, partition sections extending across the interior of said casing and dividing the same into two working chambers and provided centrally with a circular collar having an axial opening and radial grooves on its inner side which extend from said opening to said working chambers on opposite sides of said partition sections, pistons movable back and forth in said working chambers and provided centrally with a circular hub which is arranged opposite the collar of said partition sections and is provided centrally with an opening and on its inner side with radial grooves extending from the central opening in the hub to the periphery thereof on opposite sides of the pistons, and a valve disk arranged between the opposing inner sides of said collar and hub and extending over the grooves thereof and provided centrally with a port which communicates with the central openings of said collar and hub.

1,880,798. ADJUSTABLE BUST FORM. LUIGI CELLA, Newark, N. J. Filed Sept. 29, 1930. Serial No. 484,971. 4 Claims. (Cl. 223—18.)



1. A bust form having a body and a shoulder section, a tube fixed at its ends in said body section in register with the shoulders, a second tube carried at its ends by said shoulder section to extend through the first tube, said tubes constituting a hinge on which the shoulder element may tilt, and means for clamping the tubes firmly together when the sections are in adjustment.

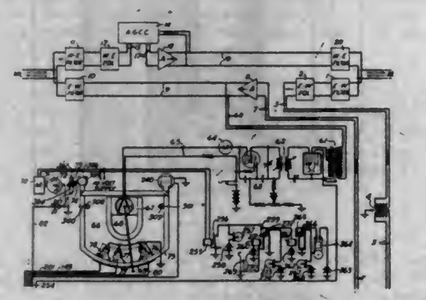
1,880,799. FUEL FEEDING MEANS FOR INTERNAL COMBUSTION ENGINES. MILFORD G. CHANDLER, Flint, Mich. Filed July 5, 1928. Serial No. 290,491. 28 Claims. (Cl. 123—139.)



6. The combination with a multiple cylinder internal combustion engine, of a plunger pump driven in timed relation to said engine for feeding fuel thereto, a bell crank having a connection with the plunger of said pump, a cam cooperating with said bell crank, means for adjusting said bell crank to vary the stroke of the piston, a distributor through which fuel from said pump passes

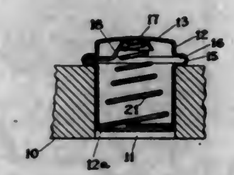
to provide in succession passages for the fuel to the individual ducts provided with orifices located at the delivery end and adapted to deliver fuel into the intake of said engine as the intakes of the cylinder are opened.

1,880,800. REGULATING CIRCUITS. ROY W. CHESNUT, Upper Montclair, N. J., DONALD M. TERRY, Elmhurst, N. Y., and WALTER F. KANNENBERG, Lyndhurst, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 26, 1929. Serial No. 373,762. 18 Claims. (Cl. 178—44.)



1. The method of regulating a characteristic of an electrical circuit which consists in setting up electrical paths in accordance with the condition of said characteristic and periodically and only at times intermediate and differing by an appreciable interval from, the times of the successive setting up operations transmitting currents through said paths to effect the desired adjustment of said electrical circuit.

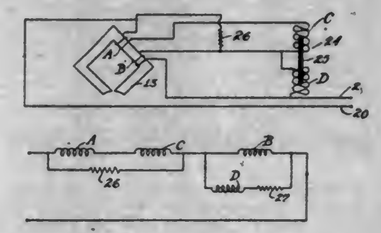
1,880,801. OIL VALVE. STERRY H. CHILDS, Litchfield, Conn. Filed June 30, 1930. Serial No. 465,053. 4 Claims. (Cl. 184—89.)



1. An oil valve comprising a shell or case having a lateral, horizontally extending, substantially U-shaped annular flange formed integral therewith, a passage through said shell or case, a member, pivotally secured within said U-shaped flange, by which said passage is closed, means for retaining said member and passage in a normally closed position.

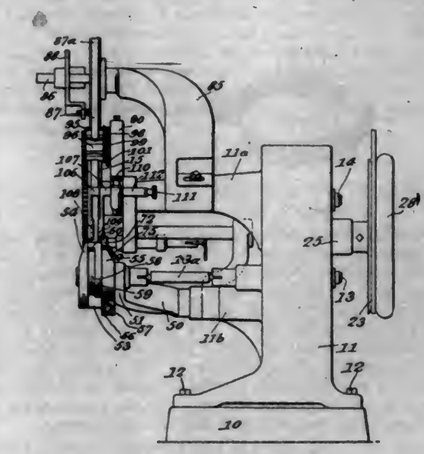
1,880,802. ELECTRICAL MICROMETER FOR CONTINUOUSLY GAUGING THE THICKNESS OF MOVING NONMAGNETIC MATERIAL. WARREN A. CHILSON, Wausau, Wis. Filed July 24, 1930. Serial No. 470,499. 8 Claims. (Cl. 177—351.)

3. Means for gauging the thickness of a piece of material, said means comprising a magnetic structure having opposed separable members adapted to receive the piece of material between them, a pair of coils on said magnetic structure, another pair of coils in opposed magnetic relation to each other, one of said another pair of coils being connected in series with one of said first named coils, an impedance connected shunting the group of two coils so formed, the other of said another pair of coils being connected in parallel with the other coil of said first named pair of coils to form a second group of coils,



said second group of coils being connected in series with said first named group for connection to an alternating current supply system, and an indicator comprising a member movable by said another pair of coils to balance the impedances of said groups responsive to variations in the thickness of the material being gauged.

1,880,803. WORK FEED MECHANISM. CHRISTIAN CHRISTIANSEN, Swampscott, Mass., assignor to Rotary Machine Company, Lynn, Mass., a Corporation of Massachusetts. Filed July 11, 1930. Serial No. 467,324. 9 Claims. (Cl. 271—2.4.)

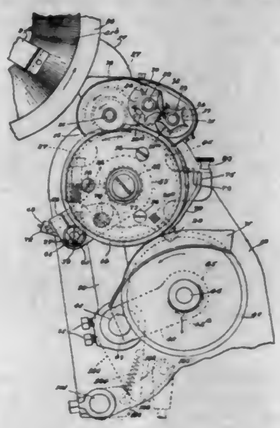


1. Work feed mechanism comprising a rotatable feed roll, a plurality of feed feet mounted for movement in a plane common to said roll, and means for actuating said feet successively to cause the same to cooperate with said roll to move work therebetween.

1,880,804. SIDE TAPING MACHINE. CHRISTIAN CHRISTIANSEN, Lynn, Mass., assignor to Rotary Machine Company, Lynn, Mass., a Corporation of Massachusetts. Filed June 28, 1928. Serial No. 289,016. 18 Claims. (Cl. 154—42.)

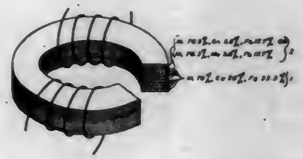
1. In a machine for applying adhesive tape to a piece of work, the combination of means for applying the tape

to the work, means for rotatably supporting a roll of adhesive tape, and a pair of rotatable devices having pro-



jecting members alternately engaging opposite sides of the tape at spaced points for pulling off the tape from the roll.

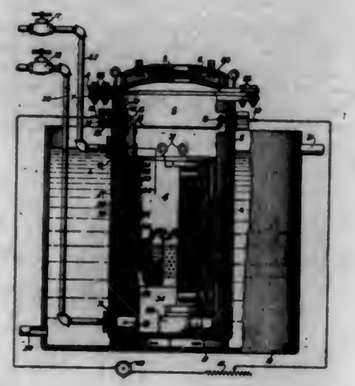
1,880,805. INDUCTIVE DEVICE. ARTHUR J. CHRISTOPHER, Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1932. Serial No. 599,089. 9 Claims. (Cl. 175—21.)



1. An inductive device capable of passing both voice and carrier frequency currents covering a frequency range of 100 to 50,000 cycles, with high efficiency, comprising a core with windings thereon, said core comprising a plurality of materials differing in their electric and magnetic characteristics, one of said materials having a low modulation coefficient at carrier frequencies and relatively low permeability characteristics at low frequencies, and another of said materials having a higher modulation coefficient at carrier frequencies and a higher permeability at low frequencies than the said first stated material.

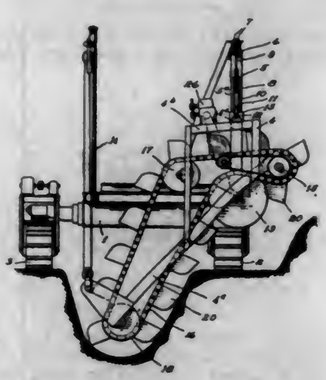
1,880,806. HEAT TREATING FURNACE. PAUL P. CIOFFI, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,021. 1 Claim. (Cl. 266—5.)

A furnace for heat treating magnetic materials adapted to be operated when containing hydrogenous atmospheres at pressures ranging from a vacuum up to several atmospheres and at temperatures around the melting point of iron, said furnace comprising a pressure resisting metallic shell having a removable hermetically sealing cover, a transparent pressure resisting window in said cover for visual and pyrometric observation of the furnace interior, a hollow heating element for receiving the charge removably arranged in said shell and carrying electric resistor wires, insulating and hermetically sealing electrical inlets in said metallic shell for admitting electrode wires into the furnace chamber, said inlets being gas-tight and pro-



vided with means to insulate said wires from said shell, said means being of material resistant to temperatures stated at the pressures stated.

1,880,807. EXCAVATOR. ABY C. CLARK and ARTHUR L. GRAVES, Imperial, Calif.; said Graves assignor to Imperial Irrigation District, a Corporation of California. Original application filed Sept. 12, 1928, Serial No. 305,450. Divided and this application filed Nov. 29, 1929. Serial No. 410,458. 1 Claim. (Cl. 37—85.)



In an excavator of the class described, an excavator frame, a plurality of conveyer belt supporting wheels revolubly mounted on said frame, one wheel being mounted at the lower excavating end of the frame, a second wheel being mounted at the upper and opposite end of said frame, and a dumping wheel mounted between the two first mentioned wheels and adjacent the second wheel, a conveyer belt extending around the outer portions of the first wheel and around the inner portion of the dumping wheel, the portion of the belt extending between the second and the dumping wheels extending substantially outwardly, and a plurality of digging buckets mounted in spaced relation on said belt, said buckets being directly pivotally and slidably mounted on said belt and adapted

to discharge the contents thereof when passing over said dumping wheel, said dumping wheel comprising a pair of axially spaced wheel members mounted on a shaft, said buckets passing between the wheel members and around and over the shaft when passing over the dumping wheel.

1,880,808. PROCESS OF MAKING CELLULOSE ESTERS OF CARBOXYLIC ACIDS. HANS T. CLARKE and CARL J. MALM, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 28, 1927. Serial No. 179,177. 21 Claims. (Cl. 260—101.)

6. The process of making fatty acid esters of cellulose which comprises treating cellulosic material with an esterifying bath containing a halogen-substituted fatty acid anhydrid and an unsubstituted fatty acid.

1,880,809. SPOOL FOR ELECTRICAL DEVICES. HARRY R. CLARKE, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,479. 2 Claims. (Cl. 175—21.)



1. A spool for magnet cores in electrical devices comprising a single sheet of insulating material scored to form portions one of which has a slot therein and forms a spoolhead, others of which have slots therein in alignment with said first mentioned slot and overlap to form another spoolhead, and still others of which connect said spoolhead portions and have shanks defining walls, the inner side of which are in alignment with edges of the slots in said spoolheads.

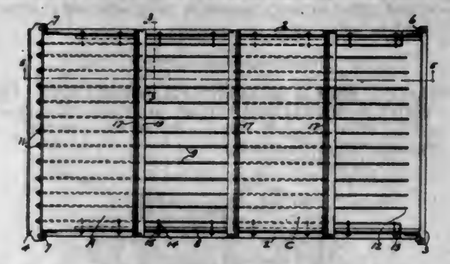
1,880,810. TENSION DEVICE. HARRY D. CLINTON, Johnson City, N. Y. Filed Nov. 11, 1930. Serial No. 494,990. 4 Claims. (Cl. 242—150.)



1. A yarn tensioning device, comprising a post and a pair of cup-like frusto-conically shaped discs centered thereon between which the yarn is drawn; one of said discs being adapted to fit within the other and having an axial tubular extension through said other at a substantial spacing from the surrounding edge thereof in sliding fit upon said post.

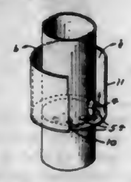
1,880,811. METHOD OF MAKING COLLECTING ELECTRODES FOR ELECTRICAL PRECIPITATORS. CECIL B. CLYNE, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Original application filed Dec. 11, 1926, Serial No. 154,228. Divided and this application filed May 8, 1930. Serial No. 450,861. 1 Claim. (Cl. 25—154.)

The method of making a collecting electrode for electrical precipitators which comprises first casting a plurality of plate sections of cementitious material in substantially horizontal position in a common horizontal plane, about common reenforcing means and spaced apart longitudinally of said reenforcing means, allowing such sections to acquire an initial set such as to prevent bonding therewith of fresh cementitious material, then casting additional plate sections of cementitious material about the portions of said reenforcing means between said first-named sections and abutting the edges of said first-named sections, so as to form a substantially continuous re-



enforced plate of cementitious material, allowing said material to set, and then raising one end of said plate upwardly to move the same bodily to vertical position.

1,880,812. VENTILATOR. LOUIS COCHARD, Veterans Home, Calif. Filed Sept. 17, 1930. Serial No. 482,475. 3 Claims. (Cl. 98—37.)

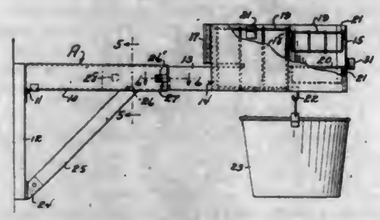


1. In a ventilator of the character described a ventilator pipe, means for directing air downwardly through the pipe, said pipe having an air outlet opening formed therein, and a duct connected with said outlet and extending upwardly therefrom to prevent water and other heavy substances entering with the air from escaping through the outlet, said duct being of larger area than the air outlet opening to reduce the velocity of the air passing through the dust.

1,880,813. PROCESS OF PRESERVING OIL BEARING COMMODITIES. MAYNE R. COE, Washington, D. C., dedicated to the free use of the Government and the Public. Filed Dec. 4, 1930. Serial No. 500,133. 7 Claims. (Cl. 99—11.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

8. The process of preserving foods, feedstuffs, and other commodities subject to rancidity comprising enclosing such foods, feedstuffs, and other commodities, in containers which admit only those wave lengths of light lying between 4900 and 5600 Ångströms of the spectrum.

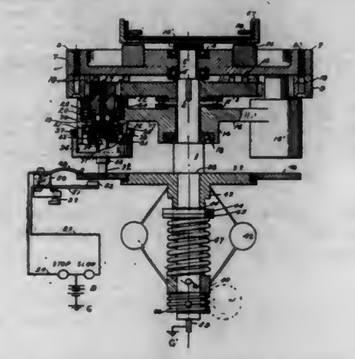
1,880,814. BRACKETED CONTAINER. JOHN COLAIZZI, Pittsburgh, Pa. Filed Mar. 4, 1932. Serial No. 596,885. 2 Claims. (Cl. 248—20.)



1. A device of the character described, comprising a bracket formed with a sleeve-like section, an extensible section telescoped in said sleeve-like section, a cross piece

at the outer end of the extensible section, hangers on the extensible section and cross piece and adapted to support holders, cleats on the extensible sections and cross piece, and side sections engaged in the cleats and confining the holders when upon the hangers.

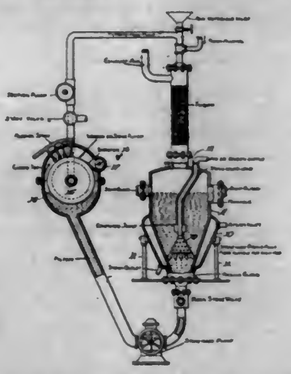
1,880,815. SPEED RESPONSIVE MECHANISM AND VEHICLE SIGNALING. JOHN M. COLE, New York, N. Y. Filed Aug. 3, 1921. Serial No. 489,566. 20 Claims. (Cl. 177—311.5.)



13. In a speed responsive mechanism, in combination, a shaft, a planet gear, means to revolve the planet gear about the shaft at the speed of the shaft during acceleration or at substantially constant speed, and means to rotate the planet gear about its own axis on deceleration of the shaft.

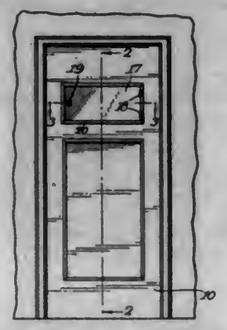
19. A mechanism for indicating deceleration having in combination, a shaft, and speed responsive mechanisms driven thereby, one comprising a contact member and means responsive to deceleration for moving the contact member toward a second contact member on the other, the other speed responsive mechanism comprising a second contact member and a governor mechanism to increase the distance between the second contact member and the first speed responsive mechanism as a function of the speed.

1,880,816. APPARATUS FOR MAKING DYES OR THE LIKE. ROBERT M. COLE, Sandusky, Ohio. Original application filed Nov. 24, 1926, Serial No. 150,556, Patent No. 1,694,057, dated Dec. 4, 1928. Divided and this application filed Nov. 1, 1928. Serial No. 316,526. 7 Claims. (Cl. 23—263.)



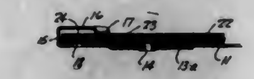
1. Apparatus for preparation of dyes comprising in combination a still including liquid phase reaction zone chamber, means for heating said still adjacent said chamber and means to conduct a gaseous agent comprising an oxidizing agent to said zone, a filter for separating the reaction products, and means to return liquid ingredients to said chamber free from solid reaction products.

1,880,817. SERVICE COMPARTMENT FOR DOORS. DAVID COLEMAN, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,771. 2 Claims. (Cl. 232—1.)



1. The combination with a door having an opening therein of a holding or transfer compartment having side and top walls provided with forwardly projecting portions defining a passage providing access to the interior thereof, a closure member for said passage, and a stop member secured to said portions, said top wall of said cabinet being curved to permit said cabinet to be passed through the opening in said door until said stop member engages the outer surface thereof and said forwardly projecting portions are disposed in said opening for supporting said cabinet adjacent the inside of said door.

1,880,818. CHECK BOOK COVER FOLD AND FILLER. STEPHEN R. COLEMAN, Los Angeles, Calif. Filed July 6, 1931. Serial No. 548,805. 4 Claims. (Cl. 281—19.)



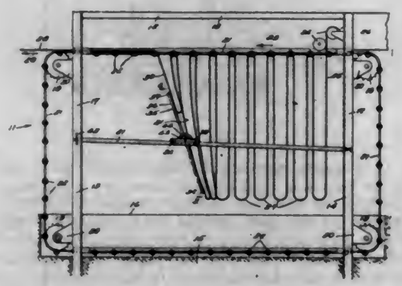
1. The combination of a cover fold, a retainer for pads comprising a channel with a flange adapted to be secured to a leaf of the cover fold, said channel having an opposing outer wall with an end lip inset toward said inner wall to provide a clearance space between said outer and inner walls, a detent tongue upset from the inner wall with its tip facing the web of said channel; and a pad of sheets having a hole to receive said detent tongue.

1,880,819. HAT PROTECTOR. GEORGE J. COLLINS, New York, N. Y. Filed May 13, 1931. Serial No. 537,122. 2 Claims. (Cl. 2—187.)



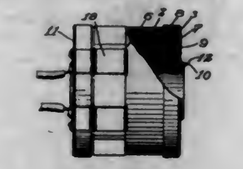
1. A device for the purpose indicated comprising a protector stamped from sheet material and arranged into concavo-convex form to cover the crown and brim of a hat, attaching tapes secured to the protector at spaced points therearound and adapted to pass under the brim and into the crown of the hat, and members attached to the tapes and engageable with the sweatband, said members lying flat against the inner face of the crown of the hat and tensioning the tapes to secure the protector to the hat and permit the latter's removal from the head without disarrangement of the tapes.

1,880,820. LOOPER. RAY W. CONANT, Los Angeles, Calif., assignor to Harold D. Brown, Los Angeles, Calif. Filed Aug. 26, 1929. Serial No. 388,412. 18 Claims. (Cl. 271—2.1.)



1. A device of the character described, including: a structure having means for supporting a loop of sheet material; and means engaging said loop in a mannenr to preserve practical alignment thereof, said means being rendered effective by the weight of said loop.

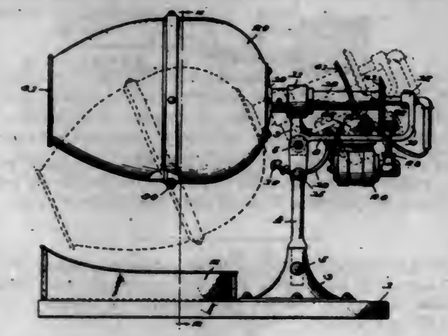
1,880,821. COIL. ROBERT A. CONNOR and GEORGE A. JACOBS, Fort Wayne, Ind., assignors to Inca Manufacturing Corporation, Fort Wayne, Ind., a Corporation of Indiana. Filed June 23, 1930. Serial No. 462,960. 10 Claims. (Cl. 175—21.)



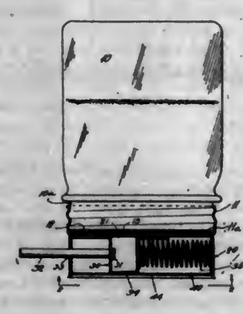
10. A coil structure comprising a tubular core, a cap over each end of the coil, each of said caps having a central aperture in registration with an open end of said core, and a deflected peripheral margin forming a flange extending inwardly over the coil, means for retaining said caps against axial movement relative to said core, a fibrous member circumferentially surrounding said coil, the lateral edges of said member overlapping the flanges of said caps, a strip of insulating member extending circumferentially around said coil, and metallic pads connected to said strip, said pads being connected to the coil leads to form coil terminals.

1,880,822. ELECTRIC OVEN. FRANK J. COOK and WILLIAM WILLARD KELLY, Cleveland, Ohio, assignors, by mesne assignments, to The Nut Products Company. Filed Sept. 26, 1930. Serial No. 484,636. 4 Claims. (Cl. 219—35.)

2. A device of the character set forth comprising a base, a standard rising from said base, a bracket carried by said standard, a tubular shaft journalled in said bracket, an oven carried by said shaft, a prime mover carried by said bracket and operatively connected to said shaft, a conduit disposed within said shaft and projecting within said oven, and an electric heater carried by said conduit and disposed within said oven.



1,880,823. DISPENSING DEVICE. EDWIN H. COOPER, Los Angeles, Calif., assignor to Los Angeles Soap Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 15, 1930. Serial No. 481,971. 8 Claims. (Cl. 221—104.)

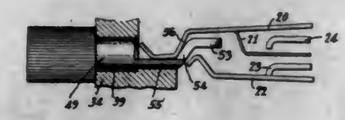


1. A dispensing device of the character described comprising, in combination with a metal container having an outlet; a body comprising an inverted cup-shaped member and a trough-shaped member having vertical side walls; an inlet in the top of the inverted cup member communicating with the container outlet, and an outlet opening in the bottom of the trough; a U-shaped measuring element, having open sides, slidably mounted in the trough and normally communicating at its open upper side with the inlet opening to receive a measured charge of material, the vertical side walls of said trough forming side closures for the measuring element; an outlet in the bottom of said measuring element adapted to register with and to discharge material through the outlet in the bottom of the trough when moved to register therewith, and means to move said measuring element to and from discharging position.

1,880,824. SWITCHBOARD JACK. PRESTON S. COPENHAVER, Bayonne, N. J., and EUGENE A. DEMONET and WILLIAM F. CALLAHAN, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 19, 1930. Serial No. 469,112. 14 Claims. (Cl. 178—75.)

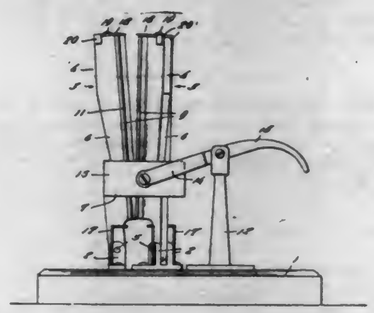
1. A switch comprising a pair of spring contacts normally biased towards each other, a key insertible between

said contacts and rotatable about its longitudinal axis, said key in one angular position electrically connecting



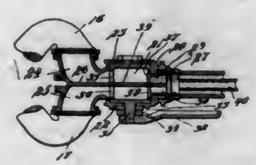
said contacts and forcing them away from each other, and in another angular position electrically disconnecting said contacts and allowing them to move towards each other.

1,880,825. CIGAR MOLD. RAMIRO CORCES, Tampa, Fla., assignor of one-half to J. A. Prieto, Miami, Fla. Filed Apr. 14, 1931. Serial No. 530,067. 5 Claims. (Cl. 131—9.)



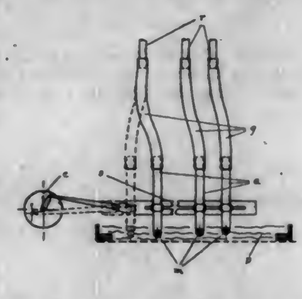
1. A cigar mold comprising a base, a plurality of complementary mold sections mounted for swinging movement toward and away from each other on the base, said mold sections having their inner walls recessed in a manner to define a chamber for the reception of a cigar bunch when the mold sections are in closed position, and means for opening and closing the mold sections, said means including a ring slidably encircling the sections and operatively engaged therewith for simultaneously swinging said sections toward each other.

1,880,826. VALVE CONTROLLED STANDPIPE. JOHN T. CORLEY, Providence, R. I., assignor to J. M. Baker Pattern Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed May 23, 1930. Serial No. 454,843. 9 Claims. (Cl. 299—73.)



1. In a turret pipe, a head section, a swivel section communicating therewith comprising two inwardly extending arms, a base section swivelled to said arms, a valve in said base section, and a nozzle communicating with said base section.

1,880,827. MANUFACTURE OF EFFECT PAPERS AND APPARATUS THEREFOR. BERTHOLD CORNELY, Mannheim, and RUDOLF RICHTER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 25, 1929, Serial No. 402,462, and in Germany Oct. 26, 1928. 20 Claims. (Cl. 92—40.)



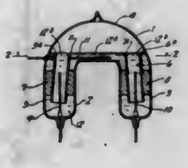
1. In a paper machine in combination with the wire table, at least one feed pipe arranged at a distance from the support of the pulp, which distance is smaller than the height of the pulp, means for supplying a liquid to said feed pipe and means for establishing a relative motion of said feed pipe and the paper pulp against each other in a direction at an angle to the flow of the pulp.

1,880,828. SIGN. FREDERIC D. COURTENAY, Short Hills, N. J., assignor to Embosograf Corporation of America, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1930. Serial No. 496,852. 4 Claims. (Cl. 40—148.)



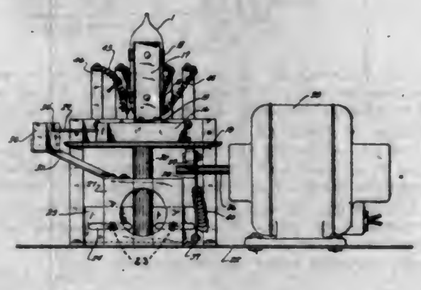
1. A sign structure comprising a substantially U-shaped frame open at both faces and inwardly channeled along its inner sides around the U to the free ends thereof; a frame bar extending crosswise of the frame, channeled along its upper and lower sides and having its ends extending into the channel of the frame and mounting the bar for shifting up and down in the frame and for removal through the top of the frame, the frame and bar channels being engageable by the edges of sign panels to hold the latter one above the other in substantially the same plane within the frame; a top frame bar closing the frame, channeled along its under side for receiving the upper edge of a sign panel in the frame; and locking projections upon the upper ends of the U-shaped frame, the top frame bar having sockets in releasable, snap locking engagement with said projections and having its ends extending outward beyond the opposite sides of the frame for grasping to detach the bar.

1,880,829. MERCURY SWITCH. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,027. 2 Claims. (Cl. 200—152.)



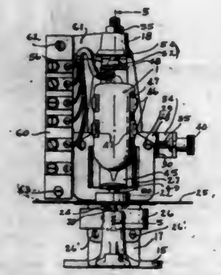
1. A mercury switch comprising an outer envelope of soft glass provided with spaced wells and a connecting portion between said wells, tubes disposed in the wells in spaced relation to the walls thereof and constituted of a substance capable of withstanding high temperatures and rapid temperature fluctuations, cement impregnated ring-like partitions of asbestos interposed between the tubes and the wells for supporting the tubes on the wells and blocking the space between the outer periphery of the tubes and the inner walls of the wells to make the openings of the tubes the only means of communication between the wells and the connecting portion of the outer envelope, a body of mercury having portions filling the wells and the tubes, and a shiftable portion located in the connecting portion of the envelope and alternately making and breaking contact with the portions of the mercury in the tubes, and electrodes sealed in the outer soft glass envelope and immersed in the mercury.

1,880,830. MERCURY SWITCH. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Aug. 20, 1927. Serial No. 214,373. 3 Claims. (Cl. 200—32.)



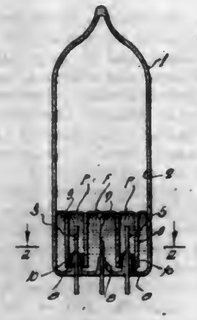
1. A mercury switch comprising an outer envelope of soft glass, a plurality of electrodes sealed in through the glass of the outer envelope, sleeves of hard glass supported within the outer envelope, surrounding said electrodes and defining wells in which the electrodes within the sleeves are contained, a body of mercury having portions filling the wells and also having a free portion which successively unites with the portions filling the wells, one of said electrodes being constantly immersed in the free portion, and means for bodily and eccentrically moving the switch to give the desired motion to the free portion of the mercury.

1,880,831. MERCURY SWITCH AND OPERATING MECHANISM THEREFOR. PAUL K. CRAMBLET, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,566. 5 Claims. (Cl. 200—32.)



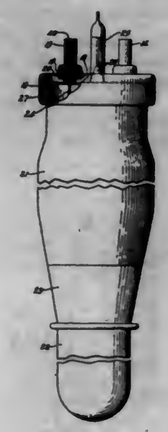
1. In a sign flasher, operating mechanism for a mercury switch of the type having its mercury successively cooperable with a series of electrodes when subjected to the action of centrifugal force comprising a motor driven disk, a holder upon which the switch is intermediately positioned and supported, said holder having one end constrained to rock about a point aligned with the axis of rotation of the disk and having its other end eccentrically connected to the disk.

1,880,832. MERCURY SWITCH. PAUL K. CRAMBLET, Weslaco, Tex., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed Aug. 20, 1927, Serial No. 214,373. Divided and this application filed July 30, 1930. Serial No. 471,651. 3 Claims. (Cl. 200—152.)



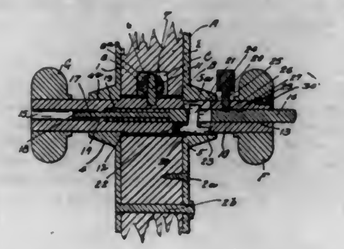
1. A mercury switch comprising an outer envelope, an inwardly extending boss carried by the outer envelope, an electrode extending in through the boss, and a sleeve surrounding the electrode and the boss, and yieldable means supporting the sleeve on the boss.

1,880,833. ELECTRON DISCHARGE DEVICE. ALLEN I. CRAWFORD, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1928. Serial No. 272,902. 9 Claims. (Cl. 250—27.5.)



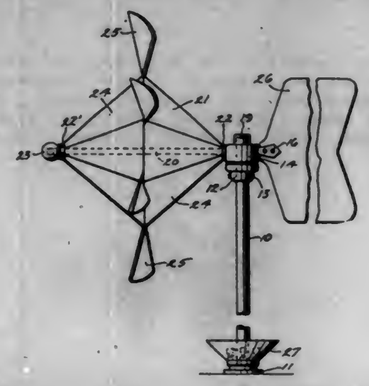
1. A base for electron discharge devices comprising a shell having openings at either end, said shell having an integral bridging portion extending across one of said openings with air insulating passages on either side thereof, and terminals carried by said bridging portion.

1,880,834. LOCK. COLMAN A. CRENSHAW, Salt Lake City, Utah. Filed Jan. 10, 1930. Serial No. 419,807. 2 Claims. (Cl. 70—91.)



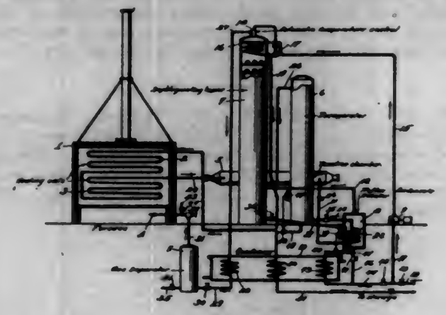
1. In a lock the combination of an outer shaft having three different sized holes therethrough in open communication with each other and in axial alignment with a transverse hole through said shaft; a smaller shaft carried in said outer shaft having a transverse hole therethrough adapted to be brought into alignment with the hole in the outer shaft; a dog pivoted in the outer hole having a right angled portion extending up into both holes, said dog to be actuated by the movement of the inner shaft; door plates secured to opposite sides of the door through which said shaft is passed; a slot in the inside plate in which said dog is normally positioned; a spring to hold the inner shaft in such a position as to normally hold the dog in position in the slot and the inner shaft projecting from the inner end of the outer shaft; means to engage the end of the inner shaft to draw it longitudinally and raise the dog from the slot to unlock the door; a locking member to be screwed into holes in the inner shaft to hold it locked in either of two positions; a lug secured on the outer perimeter of the larger shaft to actuate a latch, and a latch passed through the edge of the door and engaged with the lug to be actuated thereby.

1,880,835. DISPLAY DEVICE. CHARLES S. CRICKMER, Dallas, Tex. Filed Oct. 30, 1931. Serial No. 572,036. 4 Claims. (Cl. 40—39.)



1. In a display device, a rotatable support, means for mounting said support, a diamond shaped body having reflecting panels diverging from its medial circumference, curved wind impelled elements mounted on the body at its medial circumference, and a rudder blade attached to said rotating support for directing the body into the wind.

1,880,836. PROCESS AND APPARATUS FOR CONVERTING PETROLEUM HYDROCARBONS. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1925. Serial No. 14,641. 6 Claims. (Cl. 196—49.)

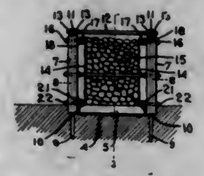


1. An improvement in the art of oil conversion, which comprises the steps of heating and cracking the oil without distillation, releasing the pressure to cause the lighter fractions to distill off by reason of the contained heat of the oil, subjecting the evolved vapors to a refluxing action in a tower and passing the refluxed condensate to a separate stage of distillation wherein it is subjected to a reheating by contained heat of all of the treated oil sufficient to drive off a considerable portion of the lighter fractions, passing this distilled off portion back to the refluxing tower for retreatment.

1,880,837. MEAT PRODUCT AND PROCESS OF PRODUCING THE SAME. MICHAEL CUDAHY, Milwaukee, Wis., assignor to Cudahy Brothers Co., Cudahy, Wis., a Corporation of Wisconsin. Filed Mar. 18, 1929. Serial No. 348,134. 4 Claims. (Cl. 99—11.)

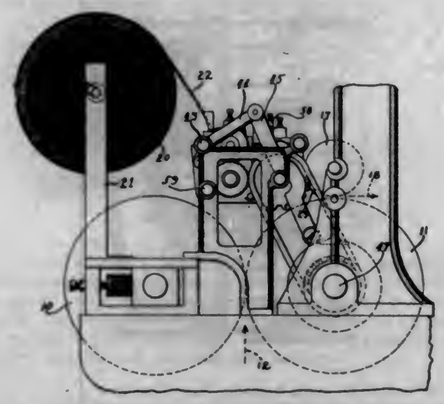
1. The method of preserving meat which consists in preparing the meat for insertion into a can of about the same cubical content of the meat, cooling the meat and while in a cool condition applying a congealable coating thereto including a liquid flavoring medium, inserting the meat with the congealed coating thereon into the can provided with a vent, exhausting the air from the can through the vent, hermetically sealing the vent and subsequently processing the can to cook, sterilize and flavor the meat while hermetically inclosed within the can.

1,880,838. SAND TRAP FOR PROTECTION OF SHORES, BEACHES, ETC. DAVID J. CURNEY, Vineyard Haven, Mass. Filed Apr. 9, 1931. Serial No. 528,741. 2 Claims. (Cl. 61—3.)



1. A sand trap for protecting shore property comprising a wire mesh matting laid on the beach, sill members overlying said wire matting at spaced intervals, each sill member having an eye at its end, posts rising from the ends of the sill members, each post having at its lower end a projection extending through the corresponding eye, tie rods adjustable as to their length connecting at their upper ends the posts at opposite ends of each sill, wire mesh walls located on the inside of the posts, and ballast supported on the wire mesh mat and confined between said walls, the adjustable tie rods providing for adjusting the oppositely situated posts at different angles relative to each other.

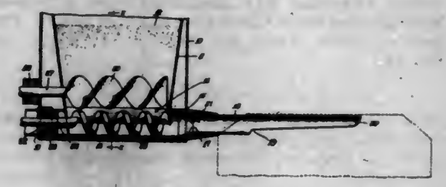
1,880,839. METHOD OF AND APPARATUS FOR ADDING SUPPLEMENTAL MEMBERS TO BAG ENDS. ANDREW ELLISON CURRIER, Leominster, Mass., assignor to Cornell Bag Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1930. Serial No. 478,328. 12 Claims. (Cl. 93—35.)



1. The method of applying a supplemental member to the corner of a bag during bottoming, which consists in moving a bag tube longitudinally and, while it is so moving, spreading apart the side flaps at the end of the tube, folding the end flaps towards each other and over the side flaps, and moving a supplemental member at the same speed as the tube and applying it to the outside of an inwardly-turned end flap.

5. In apparatus of the character described, means for spreading apart the side flaps at the end of a bag tube and folding the end flaps towards each other and over said side flaps, means for attaching a supplemental member to the outside of an inwardly turned end flap while the side flaps are thus spread apart, and means for operating the spreading means and the attaching means in timed relation.

1,880,840. SCREW FEEDING DEVICE. ARTHUR L. CURRIER, Ashburnham, Mass., assignor, by mesne assignments, to Cornell Bag Corporation, a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,785. 11 Claims. (Cl. 226—48.)



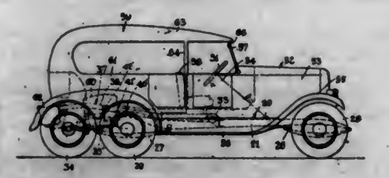
1. The method of discharging material which comprises introducing material into a tube, exerting inward and forward pressure on the material adjacent the tube wall and thereby forcing forward a compacted column within the tube and discharging this compacted column from the end of the tube.

4. In a device of the character described, the combination of a hopper having a tube in side communication therewith, and an extension for said tube of smaller diameter, constituting a filling nozzle, a spiral, hollow cored screw in the large portion of said tube adapted for rotation to feed material out through said filling nozzle, the conveying surface of said screw being constructed to exert an inward component on material being conveyed.

1,880,841. VESSEL FOR OPERATIONS WITH AMMONIA CARRIED OUT AT ELEVATED TEMPERATURES. ALFRED CORS, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 27, 1929, Serial No. 350,455, and in Germany Apr. 28, 1928. 10 Claims. (Cl. 23—1.)

1. In operations carried out with gases comprising ammonia at high temperatures, the step of allowing the ammonia, while at a high temperature, to come into contact only with such surfaces of the apparatus as consist of a material comprising elementary silicon.

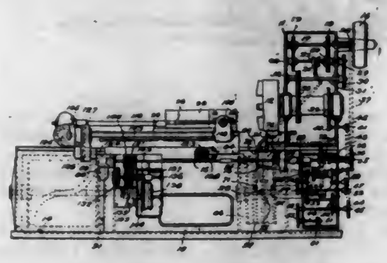
1,880,842. AUTOMOTIVE VEHICLE. GLENN H. CURTISS, Hialeah, Fla., assignor to The Aerocar Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Aug. 8, 1925, Serial No. 48,922. Divided and this application filed Sept. 7, 1926. Serial No. 133,944. 6 Claims. (Cl. 280—1.)



1. The combination, in a road vehicle, of a four-wheel primary chassis having mounted thereon a forward body portion comprising an engine hood and a wind shield; a rear body portion yieldingly supported at its forward end upon said primary chassis at a point well forward of the rear wheels thereof and including a seat and a

body top which at its forward end is carried to a point in the vicinity of said wind shield, said rear body portion and said forward body portion being relatively movable, and said rear body portion being extended at its rear end well beyond the corresponding end of said primary chassis; yielding means for connecting said top to said wind shield and for aiding in giving a unitary appearance to such structure; and yieldingly suspended non-driving wheels mounted beneath that part of the overhanging rear end body portion trailing said primary chassis.

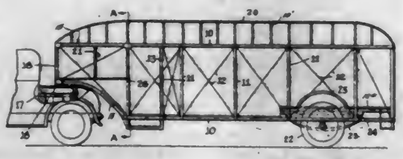
1,880,843. METAL WORKING MACHINE. MYRON S. CURTIS, Pawtucket, R. I., assignor to Potter & Johnston Machine Company, a Corporation of Rhode Island. Filed Sept. 10, 1926. Serial No. 134,718. 14 Claims. (Cl. 29—27.)



1. A machine comprising a work-holder, a tool support, means for moving them relative to one another, one or more tool-holders; tool-holder feed means, acting independently of the means for relatively moving said support and work-holder, and means for securing the tool-holder or holders in various places on the support comprising a replaceable table on which the holder or holders are mounted.

13. A machine comprising a work-revolving spindle, a tool support, means for moving the tool support towards and from the spindle, a plurality of tool-holders, tool-holder feed means acting independently of the means for moving said support, means for securing the tool-holders in various places on the support, a feed shaft, a driving connection between the feed shaft and the tool-holder and between the feed shaft and the tool-holder feed means, automatic means to vary the spindle speed, means operatively tying together the spindle and the feed shaft, and means for driving the feed shaft at a constant speed independently of the spindle.

1,880,844. ROAD VEHICLE BODY STRUCTURE. GLENN H. CURTISS, Country Club Estates, Fla., assignor to The Aerocar Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,880. 3 Claims. (Cl. 296—28.)



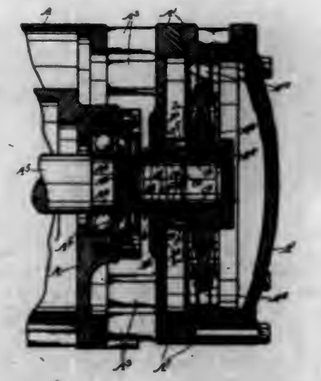
1. For use in combination with a power vehicle; a trailer vehicle comprising a body structure having its sides constructed in the form of light trusses, said trusses being connected at top and bottom by transverse members forming with the trusses a box girder of substantially the full length, depth and width of the body, wheels secured to the girder adjacent the rear end, the forward ends of the lower chords of the trusses being extended upwardly and forwardly and converge to form a point of attachment to the power vehicle, said girder being entirely self supported between said point of attachment and said wheels.

1,880,845. DETACHABLE BUTTON. ANDY CZOP, Allentown, Pa. Filed Apr. 23, 1930. Serial No. 446,581. 1 Claim. (Cl. 24—208.)



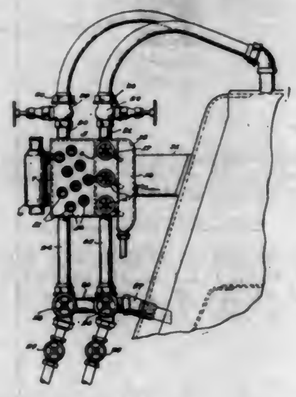
A separable button consisting of two separable members, one of which comprises a ring of L-shape in cross-section formed with a single inwardly directed flange, a tubular member of approximately U-shape in cross section, embracing the flange of said L-shaped ring, said ring and tubular member being constructed and arranged to be inserted in a button hole and to engage with and compress the cloth between them, a second tubular member journalled in the aforesaid tubular member and having an end flange abutting one end of the first named tubular member and a cap engaged with the other end of the second tubular member and abutting the first named tubular member to confine the two tubular members in assembled relation.

1,880,846. PACKING FOR STEAM TURBINES AND THE LIKE. CHARLES W. DAKE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 16, 1930. Serial No. 475,668. 1 Claim. (Cl. 286—7.)



A packing for shafts and the like comprising an apertured housing through which the shaft extends, a carbon packing ring socketed in the housing concentric with the aperture, flexible means for holding the ring seated in its socket comprising a flexible holding ring socketed in the housing, screws adjacent the outer periphery of the holding ring adapted to seat it, the inner periphery of the flexible ring engaging the carbon ring adjacent its outer periphery, the carbon ring having an annular bearing surface adjacent its inner periphery, a rotor associated with the shaft, a floating ring adapted to travel with the rotor to engage the annular seat on the carbon ring, a cylinder enclosing the floating ring, spring packing rings interposed between the floating ring and the cylinder, means for preventing relative rotation of the cylinder and the floating ring and a plurality of arcuate fingers each centrally anchored and having each two contact members adjacent each end whereby yielding pressure is permitted from the rotor to the floating ring adjacent each end of each finger tending to seat the floating ring on the carbon ring.

1,880,847. WATER GAUGE. JOHN J. DALY, Virginville, Pa. Filed June 27, 1931. Serial No. 547,373. 2 Claims. (Cl. 73—54.)



1. In a water gauge for boilers, a housing, said housing including a pair of compartments each independent of the other, water level determining means for each compartment, and a pair of pipes for each compartment, each pair of said pipes communicate respectively with the upper and lower ends of said compartments.

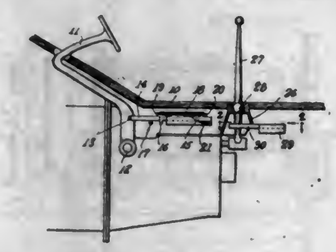
1,880,848. HOLDER FOR BLADE PROCESSING. GODFREY DALKOWITZ, New York, N. Y., assignor to The American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia. Filed Aug. 20, 1926. Serial No. 130,431. 13 Claims. (Cl. 51—215.)



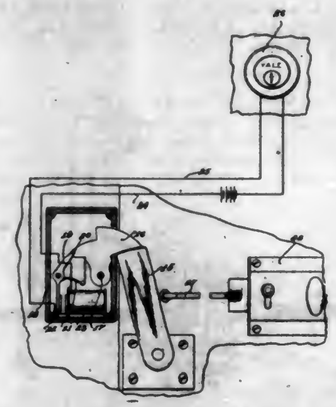
1. In a blade conducting device, a holder comprising complementary sections having configurations to provide a guideway and a strip-receiving passage therebetween, and means constrained to move in said guideway and adapted to engage a strip, said means comprising a plurality of rollers free to roll through said guideway.

1,880,849. SIGNAL DEVICE. ARMAND DAMICO, Woodside, N. Y. Filed Feb. 1, 1927. Serial No. 165,083. 2 Claims. (Cl. 200—16.)

1. A switch for operating an electric vehicle signal comprising an insulator block, the top face of the block being cut out to form a pair of independent angular channels, and a T-shaped wall between said channels, said channels extending from one end of the block to a point adjacent the opposite end thereof, a pair of members of the same cross sectional shape as the angular channels slidably arranged in the respective channels, retractile coil springs connecting the closed ends of the channels with the respective ends of the slidable members, contacts arranged in said channels, cooperating contacts carried by the respective slidable members adapted to selectively engage the respective stationary contacts when said slidable members are actuated, and means for operating the slidable members.



1,880,850. GARAGE DOORLOCK. OWEN L. DAUTRICK, Detroit, Mich. Filed Mar. 21, 1928. Serial No. 263,376. 2 Claims. (Cl. 70—52.)

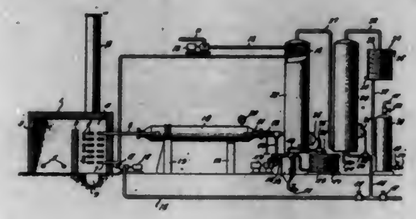


1. Locking means comprising in combination, a key controlled lock having a slidable member, a latch arm pivoted at one end, a rod extending connecting said slidable member and said latch arm, a detent member, means normally urging said detent member into the path of said latch arm to prevent movement thereof in one direction, a pawl normally engaging said detent to prevent movement thereof, and electrically operated means cooperable with said pawl to release said detent.

1,880,851. METHOD AND APPARATUS FOR TREATING HYDROCARBONS. ALBERT G. DAVIS, Elizabeth, N. J., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,322. 4 Claims. (Cl. 196—47.)

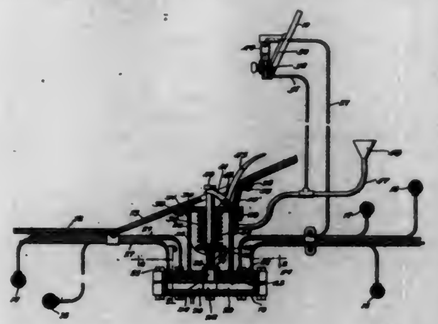
1. A process of converting hydrocarbon oil comprising subjecting the oil to cracking conditions of temperature and pressure in separate heating and digesting stages, passing the products of conversion to an evaporating stage maintained at a pressure materially lower than that in the digesting stage, distilling off the lighter fractions of the products of conversion, withdrawing unvaporized products from the evaporating stage, cooling and removing solid carbonaceous material from the unvaporized prod-

ucts and cooling the products of conversion before passing them to the evaporating stage by mixing the cooled carbon free unvaporized products with the products of conversion from the digestion stage before introducing the same into the evaporating stage.



2. An evaporating apparatus for treating petroleum products comprising a tower, a liquid inlet to the tower, a pressure reduction valve in the inlet line, a discharge line for the tower, a cooling device and carbon separating chamber interposed in the discharge line and a fluid conduit directly connected to said chamber and the low pressure side of the inlet line.

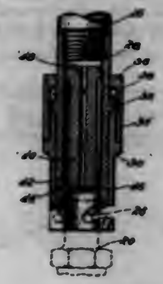
1,880,852. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1924. Serial No. 733,765. 5 Claims. (Cl. 184—7.)



1. A lubricating system comprising a plurality of bearings, a pump, a chamber for each bearing having a wall comprising a stationary leather permeable septum, said septum having a resistance several times as great as the resistance of the bearing, means for conducting oil under pressure to the outer face of each septum, and a conduit leading from each chamber to its bearing.

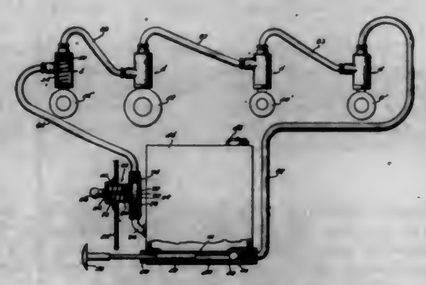
1,880,853. LUBRICATING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 22, 1927. Serial No. 185,812. 4 Claims. (Cl. 285—176.)

1. Lubricating apparatus comprising a lubricant receiving fitting, a tube connected to a source of lubricant the pressure of which may be varied to be greater or less than atmospheric pressure, a coupling sleeve carried thereby and adapted for quick detachable connection to said fitting, an element reciprocable freely in both directions within said tube and having means for making a sealed connection with the walls of said tube and the end of said fitting, said element having a long constricted passageway and flat end surface offering high resistance to the flow of lubricant whereby when lubricant pressure is applied said element will move longitudinally from its normal position to bring said member in sealing engagement with the end of said fitting before the lubricant flows through said passage-way and when the pressure in the



tube is less than atmospheric said element will be returned to normal position and withdraw said member from engagement with the ends of said fitting.

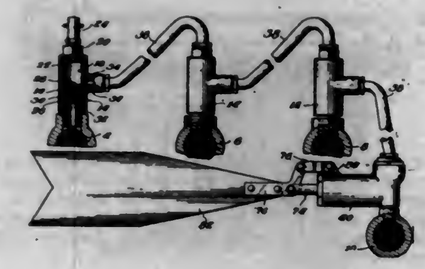
1,880,854. LUBRICATING SYSTEM AND APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1927. Serial No. 219,837. 13 Claims. (Cl. 184—7.)



1. In a system of the combination described, the combination of a plurality of bearings to be lubricated, a lubricant measuring device secured adjacent each of said bearings and having a passage communicating therewith, conduits connecting said devices in series, and means connected to the last device on the series for visually indicating that it has been operated, said means comprising a cylinder having inlet and outlet ports, check valves normally closing said ports, a spring pressed plunger in said cylinder, and a visual indicator connected to said plunger.

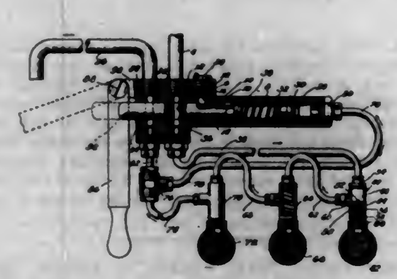
1,880,855. LUBRICATING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,548. 9 Claims. (Cl. 184—7.)

1. A system of lubrication comprising a plurality of bearings to be lubricated, a lubricant charge measuring device associated with each of said bearings and adapted to deliver a measured charge to its bearing and thereafter uncover an outlet passage, conduits connecting the outlet passages of each of said devices to the inlet passage of the next adjacent device, and a terminal lubricant charge measuring device connected to the last of said devices, said terminal device comprising a valve chamber, a storage cylinder adjacent thereto, a plunger in said storage cylinder, an indicator adapted to be actuated by said



plunger through the use of a bell crank lever, and a valve in said valve chamber for controlling the admission and discharge of lubricant from said storage cylinder.

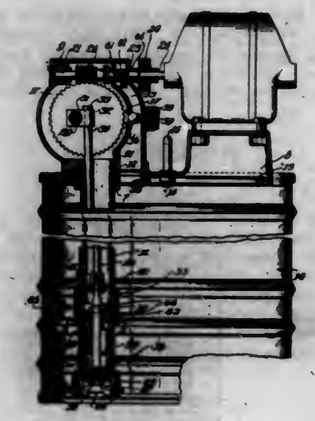
1,880,856. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 16, 1928. Serial No. 285,956. 16 Claims. (Cl. 184—7.)



1. In a lubricating system of the class described, the combination of a plurality of bearings to be lubricated, a group of progressively operated charge determining devices connected in series, one of said devices being associated with each of said bearings, a source of lubricant under pressure, a valve manually operable to connect said source to the first device of the series, a conduit connecting the outlet of the last device of the series with said valve, and means operable upon flow of lubricant under pressure in said conduit to close said valve and vent said conduit.

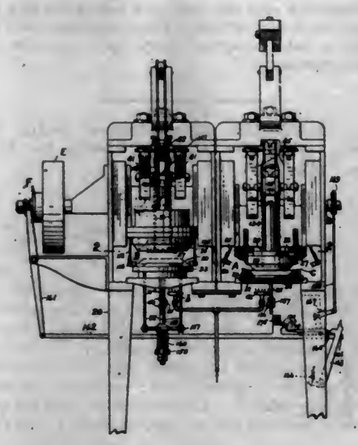
1,880,857. LUBRICANT DISPENSING DEVICE. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,446. 6 Claims. (Cl. 221—83.)

1. In a lubricating apparatus of the class described, a supporting base including a circular bearing portion adapted to be placed concentrically over a large opening in the upper end of a lubricant container, a motor mounted on said base, a pump cylinder on said base eccentrically of the axis of the base, depending therefrom and having a lubricant inlet adjacent the bottom of the container eccentrically of the axis of the container, a piston in said cylinder, a piston rod for said piston, a connecting rod for reciprocating said piston rod having one end extending through said base, a crank disc mounted above said



base, operably connected to both said motor and said connecting rod for actuating said piston upon operation of the motor.

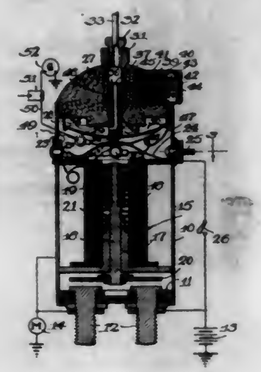
1,880,858. METHOD AND APPARATUS FOR FORMING ARTICLES. HARRY G. DAVIS, Philadelphia, Pa., assignor, by mesne assignments, to Purity Fibre Products Corp., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1927. Serial No. 221,260. 21 Claims. (Cl. 18—19.)



1. A press for forming articles having two sets of dies side by side, means for feeding strip material to one set of dies, means for removing the article from said dies in the direction of the feed of the strip material, means for transferring the article in a lateral direction to a position in front of the second set of dies, means for transferring the article from the position in front of the second set of dies to the second set of dies, said last mentioned means also being arranged to remove a finished article from the second set of dies and move it toward the back of said

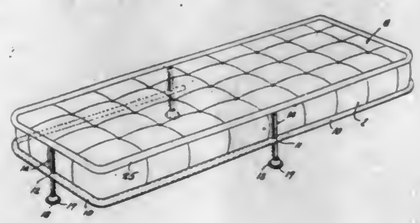
dies, means for actuating the removing means and the two sets of transfer means, and means for actuating the dies in timed relation to the feeding, removing, and transfer means.

1,880,859. AUTOMATIC STARTING MEANS FOR INTERNAL COMBUSTION ENGINES. HERBERT A. DAVIS, La Grange, Ill., assignor, by mesne assignments, to John C. Kernchen, Chicago, Ill. Filed Sept. 11, 1929. Serial No. 391,951. 5 Claims. (Cl. 200—83.)



1. Circuit establishing means comprising a housing, a pair of spaced terminals supported thereby, a bridging member for closing a circuit through said terminals, a solenoid in said housing having a longitudinal apertured stationary core, a spring resisted solenoid plunger adjacent one end of said core, a member operated by said plunger and extending through said aperture into engagement with said bridging member for moving the same into and out of contacting relation with said terminals, and means for closing the circuit of the solenoid windings, said means comprising a sub-atmospheric pressure responsive device within said housing.

1,880,860. MATTRESS. RALPH BERNARD DAVIS, Okmulgee, Okla. Filed Nov. 11, 1931. Serial No. 574,405. 1 Claim. (Cl. 5—91.)



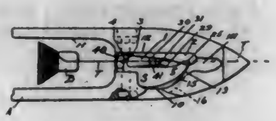
A device for use in adjusting the position of a mattress, comprising a U-shaped frame having side arms and an end piece connecting the side arms, the side arms having openings near to their ends, and the end piece having an opening located intermediate the arms, supports vertically adjustable in the openings, latch bars pivoted to the supports, spring means for moving the latch bars outwardly to cause them to engage the end piece and the side arms, within the openings, feet, and ball and socket joints connecting the lower ends of the supports with the feet.

1,880,861. SPRING. ROBERT W. DAVIS, Ozone Park, N. Y. Filed Oct. 24, 1929. Serial No. 402,071. 19 Claims. (Cl. 267—47.)



1. A multi-leaf spring supported at its ends and center, upper and lower leaves being arranged as spaced tension members, and intermediate leaves being arranged as a compression member, the compression member extending generally diagonally between the tension members from the center to each end.

1,880,862. SHUTTLE. HARRY ALTON DAVOL, Methuen, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 11, 1932. Serial No. 585,876. 10 Claims. (Cl. 139—212.)



10. A metal threading block for shuttles formed with a longitudinal threading chamber, a web at the front of which is a thread pin socket, a secondary passage between the web and a wing, and a nose which extends from the eye side forward, the front face of the nose extending down and back, a side eye in the block which extends through the wing into the secondary passage; and an eye slot which extends from the bottom of the front face up and back through the wing into the bottom of said side eye.

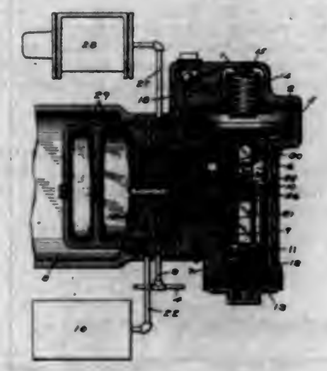
1,880,863. CARD TRAY. GEORGE H. DAWSON, Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Apr. 12, 1930. Serial No. 443,683. 8 Claims. (Cl. 129—16.)



1. A card index tray comprising means for removably supporting card holders therein, a shift bar connected to each side of said tray for vertical movement relative thereto, said bars normally locking card holders within said tray, and means for moving said bars from normal position to release said card holders.

1,880,864. FLUID PRESSURE BRAKE. WILLIAM E. DEAN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,520. 5 Claims. (Cl. 303—64.)

1. In a fluid pressure brake, the combination with a brake pipe auxiliary reservoir and an additional reservoir, of a triple valve device comprising a piston subject to the opposing pressures of the brake pipe and auxiliary reservoir, a slide valve included in said triple valve device operative by said piston for controlling the supply of



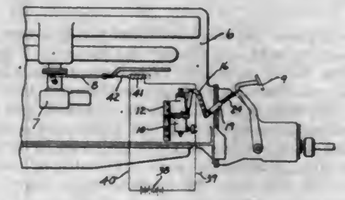
fluid under pressure from the brake pipe to said reservoirs, and means for preventing the back flow of fluid from said reservoirs to said brake pipe.

1,880,865. MULTIPLE BAKING PAN. LOUIS H. DEBS, Chicago, Ill. Filed Dec. 1, 1930. Serial No. 499,387. 7 Claims. (Cl. 53—6.)



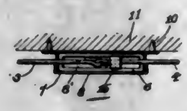
1. A device of the kind described comprising a series of pans having rims, end straps secured to the ends of the pans, re-enforcing members extending between the end straps intermediate the pans and having flanges rolled in the rims of said pans, and strut members intermediate the pans, said strut members having their ends rolled in the rims of the pans.

1,880,866. CLUTCH CONTROL. GROVER H. DECKER and HOMER A. DECKER, Toledo, Ohio. Filed July 9, 1931. Serial No. 549,724. 8 Claims. (Cl. 192—.01.)



1. In a clutch control, the combination with the clutch pedal and the throttle, of a cylinder adapted to contain liquid, a piston reciprocable in said cylinder and operatively connected with the clutch pedal, means affording free transference of liquid past the piston as it is moved in one direction, means affording a restricted transference of liquid past the piston as it moves in the opposite direction, and means controlled by movement of the piston in the last mentioned direction to automatically open the throttle.

1,880,867. THERMOELECTRIC SWITCH. RENO DE FRANCESCHI, Washington, D. C. Filed Dec. 23, 1929. Serial No. 416,163. 5 Claims. (Cl. 200—142.)



1. In a thermoelectric switch, a combined support and protector element, a pair of flexible, non-resilient conductors extending into said element and having end portions thereof coated with a fusible substance, said end portions being bent into the form of interengaging hooks and held out of contact with each other by said fusible substance, and means connected with one of said conductors for drawing said end portions into positive contact upon the melting of said fusible substance.

1,880,868. LIQUID SAMPLING DEVICE. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 19, 1931. Serial No. 563,801. 2 Claims. (Cl. 137—18.)

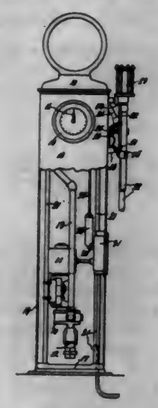


1. A device for withdrawing a sample of liquid from a tank, comprising, an elongated container having an opening in its lower end, a flexible tubular member attached at one end to the upper end of the container by means of which the latter may be lowered into or withdrawn from the tank, a valve to open and close said opening, and means for turning said valve including a flexible shaft extending through said tubular member to the free end thereof.

1,880,869. LIQUID DISPENSING APPARATUS. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 28, 1932. Serial No. 589,396. 7 Claims. (Cl. 221—95.)

1. In a dispensing system, a discharge conduit, a flexible hose attached thereto, an element movable to control the flow through said pipe and hose, a rigid member mounted alongside the hose in substantially parallel relation and supported near one end and near the point of attachment

of the hose to said conduit for swinging movement in all directions, a member fixed to the hose and connected to said rigid member for sliding movement in the direction



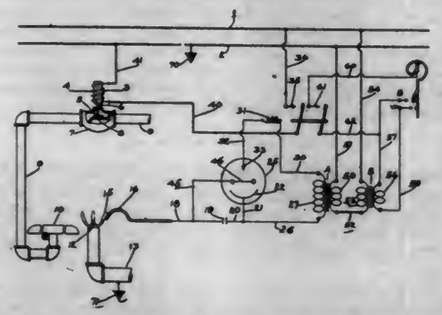
of the axis of the hose, a flexible element connected to said rigid member, and means connecting the flexible element to said first named element.

1,880,870. DOOR CLOSER. GUST DEMO, Detroit, Mich. Filed Apr. 9, 1932. Serial No. 604,329. 3 Claims. (Cl. 16—78.)



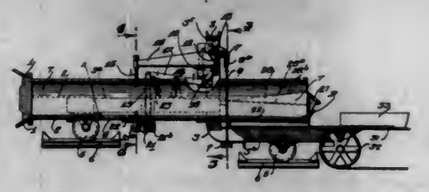
1. A device for the purpose set forth and in combination with a door and a jamb for said door, a casing fixed on the jamb, pulley blocks in the casing, sheave wheels journaled in the blocks, a flexible element fixed to one of the blocks and trained over the sheave wheels of the respective blocks and being guided through the casing and fixed to the door, a block affording a check for the pulleys having its opposite edges grooved to receive the longitudinal leads of the cable therein, coiled springs fixed to the pulley blocks and to the respective ends of the casing, and one of said springs being of a materially greater strength than the other spring.

1,880,871. FLAME CONTROLLED SYSTEM. FREDERICK S. DENISON, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 499,993. 2 Claims. (Cl. 158—117.1.)



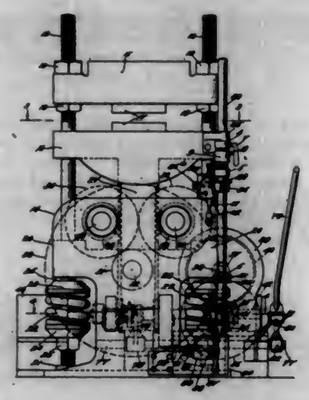
1. A control system for a burner including a low voltage circuit, a room thermostat controlling the low voltage circuit, an electrically operated burner control device, a medium voltage circuit for energizing the control device, a grid-glow-tube, a high voltage circuit including therein the anode and cathode of the grid-glow-tube, a grid circuit including an element adapted to be impinged by flame to complete the same, means associated with the room thermostat and low voltage circuit for controlling the current flow through said high voltage circuit, and means associated with said high voltage circuit for controlling the flow of current through said medium voltage circuit thereby to control the operation of said burner control device.

1,880,872. MEANS AND METHOD OF FORMING ROOFING TILE. DANIEL M. DENTON, San Diego, Calif. Filed Oct. 13, 1931. Serial No. 568,539. 19 Claims. (Cl. 25—1.)



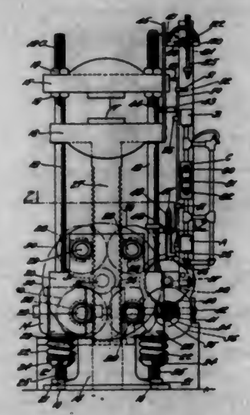
1. In a means for shaping roofing tile, a former including a pair of converging wall members arranged to engage opposite sides of a plastic tube.

1,880,873. PRESS. JASPER DERBY, Medford, Mass., assignor to Andrew Terkelsen, Newton, Mass. Filed Oct. 4, 1928. Serial No. 310,340. 19 Claims. (Cl. 18—16.)



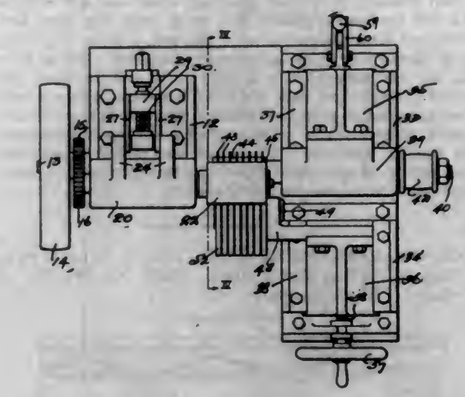
19. In a press, the combination of a bed, a ram, springs for supporting said bed against the pressure of said ram, mechanism for moving said ram toward and away from said bed, comprising a rack carried by said ram, a train of speed reducing gearing, a source of power, and variable speed-transmission mechanism for transmitting said power through said gearing to move said ram, a shipper rod for manually controlling said transmission mechanism movable into high and low forward speed positions, neutral, and reverse speed position, a hand lever for moving said shipper rod into said positions, a controller rod for automatically moving said shipper rod into said respective positions and having operative connections with said bed for moving said controller rod from high to low speed position, and for moving the same into neutral position when said springs yield, and having operative connections with said ram for moving the controller rod from reverse to neutral position.

1,880,874. PRESS. JASPER DERBY, Medford, Mass., assignor to Andrew Terkelsen, Newton, Mass. Filed Apr. 11, 1930. Serial No. 443,390. 18 Claims. (Cl. 18—17.)



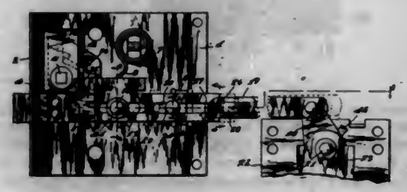
10. In a press, in combination, a frame, a bed resiliently supported on said frame, a ram carried on a rack movable in said frame, pinions engaging said rack for moving said ram toward and from said bed, a train of gears connected with said pinions, an electric motor for driving said gears, limit switches carried on a member secured to said frame and having trip arms engaged by engaging means carried by both said ram and said bed for opening the circuit to said motor and stopping the movement of said ram upon a predetermined movement of said ram toward and away from said bed, and manually operable means for closing the circuit to said motor and starting the movement of said ram in the opposite direction upon operation of said automatic means.

1,880,875. RING SPLITTING MACHINE. FRITZ DEUTSCH, Memphis, Tenn., assignor, by mesne assignments, to Sparta Foundry Company, Sparta, Mich., a Corporation of Michigan. Filed Mar. 11, 1929. Serial No. 346,227. 17 Claims. (Cl. 29—70.)



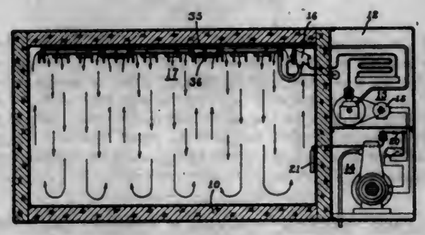
1. In a ring splitting machine, a pair of elastic faced cylindrical rollers spaced apart and having parallel axes, means for adjusting the spacing of said rollers, means for driving said rollers at equal rates of speed, a cylindrically grooved anvil rotatably mounted and having its axis disposed parallel to and equidistant from said elastic faced rollers, a saw mandrel disposed with its axis parallel with said axes, means for driving said mandrel, a plurality of saws disposed on said mandrel each opposite the center of a groove on said anvil, means for moving said anvil toward said elastic faced rollers, and means for moving said saw mandrel toward said anvil.

1,880,876. REMOTE CONTROL MECHANISM FOR DOOR LATCHES. WILLIAM C. DEVEREAUX, Detroit, Mich., assignor to Ferro Stamping & Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 23, 1928. Serial No. 248,752. 10 Claims. (Cl. 292—164.)



1. In a latch, the combination with a case plate having a key hole slot therein, and a latch bolt carried by said case plate, of a yoke connected to the latch bolt and slidable over one face of said case plate, and connections between said yoke and case plate including an element projecting from said yoke and engaging said key hole slot, the arrangement being such that the said member is in the narrow elongated portion of said slot.

1,880,877. REFRIGERATING APPARATUS. HERMAN J. DICK, Dayton, Ohio, assignor to Frigidaire Corporation, of Dayton, Ohio, a Corporation of Delaware. Filed Mar. 31, 1928. Serial No. 266,295. 10 Claims. (Cl. 62—99.)

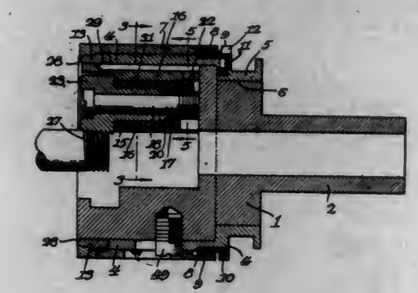


3. A refrigerating element for cooling circulating air comprising a plate formed of heat conducting material and adapted to be exposed to air currents and integral fins formed from the body of the plate projecting therefrom so as to be exposed to air currents circulating thereover, and a conduit for circulating refrigerant interspersed between the fins and secured in intimate thermal contact with the plate.

1,880,878. CUTTING TOOL HEAD. HENRY A. DICKINSON, Riverside, Ill., assignor to Cyrus M. Bosworth, Riverside, Ill. Filed Sept. 17, 1928. Serial No. 306,536. 23 Claims. (Cl. 20—95.)

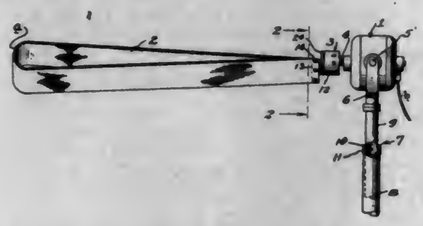
1. In a device of the class described, the combination of cutters suitably mounted on a relatively rotary body, forming chasers to follow each other around a pipe or rod, each chaser having an axis disposed in a plane parallel with the axis of said body, but each chaser axis being skewed or angularly disposed in its allotted plane, and

means encircling said chasers and movable axially of said body to cause said chasers to move radially toward and away from each other, said encircling means having flexible



means susceptible of distortion to vary the range of said radial movement of the chasers, and being axially and rotatively adjustable to cause said distortion.

1,880,879. MECHANICAL EXERCISER AND MASSAGING DEVICE. HUGH E. DIEKER, Ocean Park, Calif., assignor to Edgar F. Hughes, Brentwood Park, Calif. Filed Jan. 21, 1929. Serial No. 333,803. 12 Claims. (Cl. 128—63.)



5. A mechanical exerciser comprising a motor having a shaft; a standard; means for turnably mounting said motor on a vertical and horizontal axis; a massage belt; and means for swivelly connecting the free ends of said belt eccentrically to the motor shaft, the free ends of said belt being connected together in fixed relation to each other and positioned to pull in an endwise manner upon said shaft.

1,880,880. NOZZLE. CHARLES G. DIETSCH, Toledo, Ohio. Filed June 4, 1930. Serial No. 459,247. 4 Claims. (Cl. 299—120.)



2. A liquid spraying nozzle having a discharge orifice provided with an annular graduated series of axially pitched teeth extending thereinto.

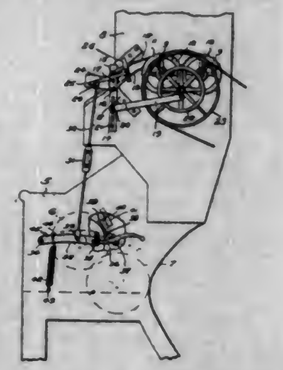
1,880,881. ATTACHMENT FOR SAFETY RAZORS. HARRY W. DILDINE, New York, N. Y. Filed Dec. 12, 1930. Serial No. 501,968. 8 Claims. (Cl. 30—12.)

1. In combination with a safety razor having a guard plate and a clamping plate for embracing a razor blade and a handle with a shoulder, a member mounted on the handle at the shoulder and having resilient, diverging, non-compressible arms for detachably engaging the guard



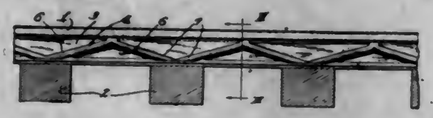
plate for holding the guard plate in normal position when the clamping plate has been moved therefrom to permit of a close shave.

1,880,882. COTTON GIN FEEDER. BENJAMIN P. DILLARD, Greer, S. C. Filed Feb. 19, 1932. Serial No. 594,076. 4 Claims. (Cl. 19—69.)



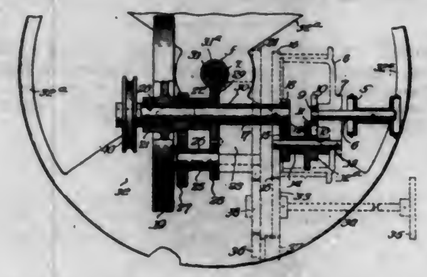
1. The combination with a gin embodying a roll box, a roll therein, of a float disposed upon one side of the roll for movement toward and away from the same and to engage with the cotton upon the roll, a lever connected with the float to be moved thereby, a tension element having one end supported by a fixed pivot and its other end pivotally connected with the lever, a spring having means for engagement with the tension element and to be adjusted longitudinally of the tension element, mechanism for feeding cotton to the roll box, and means to regulate the action of said mechanism, including a part having connection with the tension element.

1,880,883. REENFORCED RAIL. PAUL W. DILLON, Sterling, Ill. Filed May 2, 1931. Serial No. 534,587. 5 Claims. (Cl. 238—149.)



1. A track structure comprising a plurality of spaced ties, a rail carried by said ties, and reenforcing means carried by said rail where said rail bridges the space between said ties, said means having an inverted V-shaped truss-like formation.

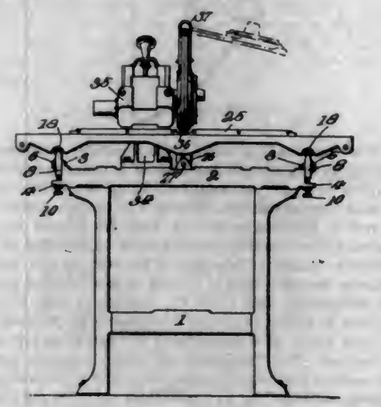
1,880,884. METHOD OF AND APPARATUS FOR PROJECTION OF MOTION PICTURES. AUGUSTO DINA, Jersey City, N. J., assignor to The Precision Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 10, 1924. Serial No. 755,079. 8 Claims. (Cl. 88—18.)



3. In a device of the character described, in combination, a supporting frame having a recess therein open on one side and having an inner wall provided with an axial bearing, a housing removably axially disposed for rotation within said recess and having an inner hub portion lying in said bearing, a driving shaft projecting into said hub portion and having a bearing therein, an intermittent couple in said housing having a part driven by said shaft, and an element to be driven connected to said driven part.

7. In a device of the character described, the combination of a framing device and a shutter, a film driving sprocket, and means for synchronizing said shutter with said framing device which includes two differential gear trains, and means including sliding gearing so connected as to permit independent adjustment of said shutter or joint adjustment of the latter and said sprocket.

1,880,885. SAWING MACHINE. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Original application filed Feb. 21, 1927, Serial No. 169,993. Patent No. 1,794,758, dated Mar. 3, 1931. Divided and this application filed Apr. 2, 1930. Serial No. 441,112. 1 Claim. (Cl. 143—52.)



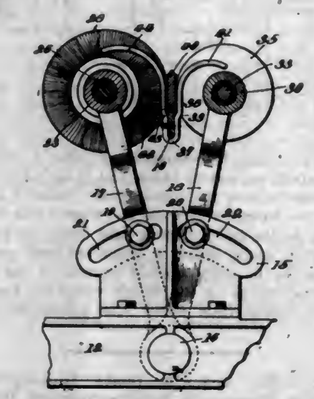
A sawing machine of the kind described comprising a frame a pair of inclined V-shaped tracks adjustably mounted at each end of said frame, a table having depending inverted U-shaped portions, the legs thereof being provided with oppositely disposed openings, cone members adjustably mounted in said openings, means for locking said members in adjusted position, rollers mounted on said cone members having substantially V-shaped grooves adapted to travel on the V-shaped tracks, a circular saw mounted on said frame, said rollers being mounted to move laterally for adjusting said rollers to true said table in respect to said saw.

1,880,886. BRUSH. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,408. 4 Claims. (Cl. 15—171.)



1. A brush formed of a pair of box-like double bottom telescoping back sections secured around one end of a bunch of bristles, a ferrule arranged within said back and extending into said bristles, said back being provided with oppositely disposed inwardly projecting reinforcing members extending into said bristles to each side of said ferrule.

1,880,887. STRIP FINISHING MACHINE. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,347. 7 Claims. (Cl. 15—21.)

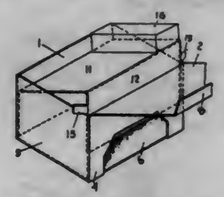


1. The combination with the guide rail of a strip finishing machine, of feeding and brushing means for the strips, comprising brushing rollers on one side of the guide rail above the same, backing rollers on the opposite side of the guide rail above the same, said brushing rollers and backing rollers being rotated in a direction to move the strip towards said guide rail, means for moving the strip longitudinally over said guide rail, and guide members carried by the guide rail for guiding the strips between the brushing rollers and backing rollers onto the guide rail.

1,880,888. COMBINATION SHIPPING AND DISPLAY BOX. RAMON V. DIXN, Plymouth, Mich., assignor, by mesne assignments, to Roy G. Michell, Detroit, Mich. Filed Oct. 20, 1930. Serial No. 489,861. 5 Claims. (Cl. 206—44.)

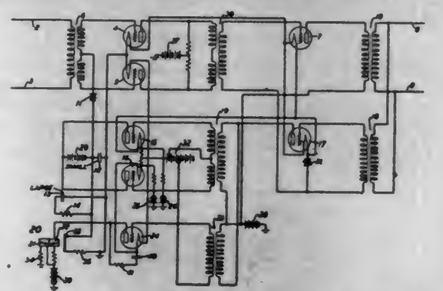
1. A combined shipping and display box for merchandise and the like comprising in combination a container having an opening in a wall thereof, an insert for the said con-

tainer having a shelf portion and a flap portion, the flap portion being arranged to slidably engage within the said container and in one position serving as a closure for the said opening and arranged to be slid to open the said



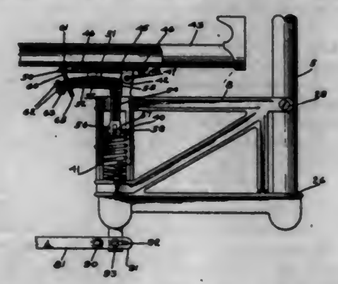
opening and to tilt the shelf portion to better display the merchandise and permit removal of the merchandise from within the container through the said opening to replenish merchandise removed from the tilted shelf.

1,880,889. SIGNAL TRANSMISSION SYSTEM. STEPHEN DOBA, Jr., New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1931. Serial No. 539,830. 15 Claims. (Cl. 178—44.)



15. In a signal transmission system, a transmission line, an impedance device connected in said line for limiting the amplitude of the signal waves, control means governed by the energy waves on the signal line beyond the impedance device for operating said device to prevent the signal waves going above a predetermined upper limit, and means for insuring against control of the amplitude of the signal waves by the device when the amplitude of the signal waves falls below the predetermined upper limit.

1,880,890. BED. LOYLE D. DOBBS, Minneapolis, Minn., assignor to Minneapolis Bedding Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 11, 1929. Serial No. 413,272. 3 Claims. (Cl. 5—164.)



1. A head frame having a spring, a bed frame, means pivoting said bed frame above said spring, means adapted to compress the spring when the bed frame is lowered, a lever pivoted to the bed frame adjacent the housing, means pivoting one end of the lever to the spring compressing means and means adjustably connecting the opposite end of the lever with the bed frame, said means including a screw and means detachably securing its head to the bed frame, and means on the lever for clamping the screw after adjustment.

1,880,891. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1931. Serial No. 570,300. 6 Claims. (Cl. 248—16.5.)



1. A clamp comprising an oblong socket or anchor plate formed by a transversely-raised flat portion, two bottom flat end portions, two offsets or shoulders joining these three portions together and an upturned lug at one end, a longitudinal keyhole-shaped slot having its narrow part cut in said raised portion and its large part cut through one of these shoulders, and in one of said bottom end portions, a locking-lever acting as the movable jaw of the clamp in co-operation with the other shoulder acting as the fixed jaw of the clamp, and means on said socket acting as a wedge under said lever to hold it fast in its locking position, the angular displacement of said lever being limited on one side by said lug and on the opposite side by one of the lateral edges of the slotted shoulder.

1,880,892. LIGHT PROJECTION APPARATUS. ADIEL Y. DODGE, South Bend, Ind. Filed July 19, 1930. Serial No. 469,022. 4 Claims. (Cl. 240—48.6.)

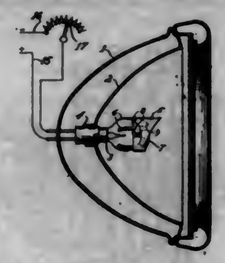


1. The combination with a horizontally disposed electric lamp having a bulb portion, of a concavo-convex lens formation in front of and embracing a portion of said bulb, said lens formation having a generally convex front face and a generally concave rear face, said rear face comprising two coaxial substantially cylindrical surfaces, the circular edges of which are tangent to the bulb portion along circular arcs, the radii of said arcs of tangency being materially less than the radius of the bulb, said arcs lying in different planes transverse to the axis of the bulb, said front face comprising a central spherical portion coaxial with the bulb, an outer annular spherical zonal surface coaxial with the bulb, and a conical surface extending between the two spherical surfaces coaxial with the bulb.

1,880,893. LIGHT PROJECTING APPARATUS. ADIEL Y. DODGE, South Bend, Ind. Filed Mar. 23, 1931. Serial No. 524,525. 5 Claims. (Cl. 240—48.6.)

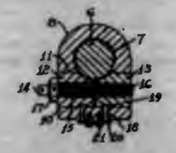
1. A shield and lens in combination, said shield being provided with a plurality of opposing tension fingers for

detachably affixing the same to an electric bulb and to retain said lens, said fingers having sufficient tension to



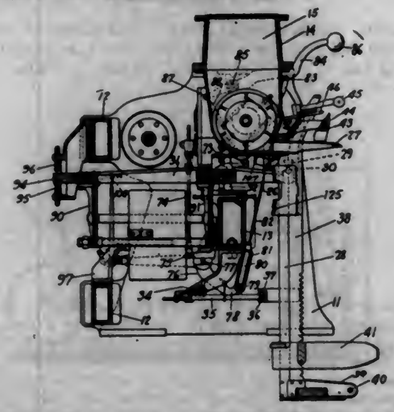
retain the shield and lens in their affixed position with the lens in contact with the bulb, said shield extending forwardly beyond the top of said lens.

1,880,894. CONNECTION. NEAL W. DORMAN, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 29, 1931. Serial No. 512,074. 8 Claims. (Cl. 287—125.)



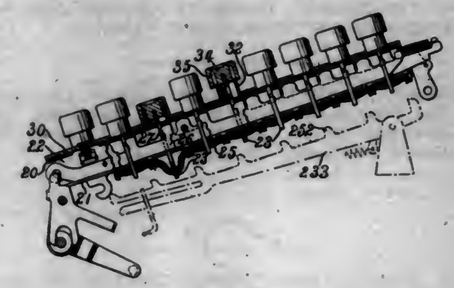
1. The combination with a rod having a threaded end, of a member having a threaded socket receiving the threaded socket receiving the threaded end of said rod and formed with a transverse bore intersecting the socket, plugs adjustable inwardly from the ends of said bore into wedging relation to said rod, the surfaces of the plugs which engage said rod having threads to match the threads of the socket, a screw having successive portions of its shank differentially threaded in the same direction, the respective plugs having alined bores threaded to match said differentially threaded portions of the screw shank and stops disposed in the socket member in position to limit the individual outward movement of each plug.

1,880,895. BAG FILLING MACHINE. NEILL E. DORRINGTON and WILLIAM R. PETERSON, Oswego, N. Y., assignors to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Apr. 16, 1931. Serial No. 530,560. 10 Claims. (Cl. 226—48.)



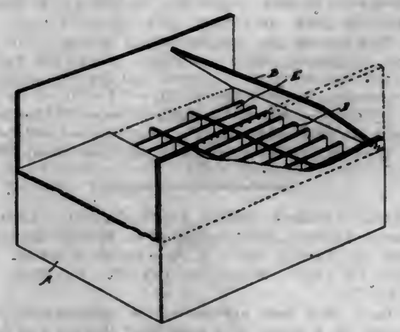
4. In packaging apparatus, a vertically movable filling tube, a stationary casing having a discharge opening in approximate alinement horizontally with said tube, and a propeller within the casing adapted to discharge material through said opening into said tube, the casing having passages in its wall leading away from the vicinity of said joint and around the path of said propeller adjacent said opening, whereby dust may be moved away from said joint by air entering and passing through said passages and cooling said casing adjacent said propeller.

1,880,896. KEYBOARD FOR CALCULATING MACHINES. ALFRED J. DOUGHTY, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Continuation of application Serial No. 158,444, filed Jan. 3, 1927. This application filed Aug. 18, 1930. Serial No. 476,081. 4 Claims. (Cl. 235—145.)



1. A calculating machine having a keyboard provided with openings to receive key stems, depressible amount keys having stems mounted loosely in said openings to reciprocate freely therein, and tubular projections extending upward from said keyboard around each key stem, said keys having portions in loose telescoping relation with said projections to permit free depression of the keys, the telescoping portions being constructed so that the telescoping relation is preserved both when the keys are depressed and when they are undepressed to thereby prevent moisture from getting into the interior of the machine through the openings in the keyboard.

1,880,897. PAPER BOARD SHIPPING CONTAINER OR CARTON. PIERRE DREWSEN, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 432,976. 4 Claims. (Cl. 206—46.)



1. A package comprising a content of tile or the like subject to discoloration when allowed to stand in colored water and a paper board shipping container for said tile free from accessible coloring matter soluble on immersion in water.

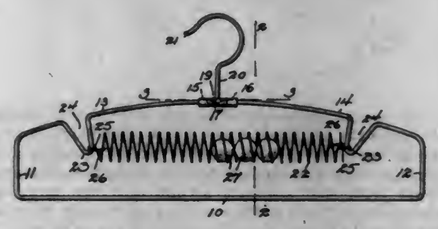
1,880,898. PROCESS OF PREPARING STRAW PULP. PIERRE DREWSEN, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed Oct. 20, 1930. Serial No. 490,102. 3 Claims. (Cl. 92—9.)

1. The method of preparing straw pulp for paper which consists in cooking the straw with water and less than ten per cent of lime, based on the dry weight of the straw, and a relatively small amount of chemical agent containing sulphur.

1,880,899. PROCESS OF MANUFACTURING STRAW PAPER. PIERRE DREWSEN, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed Oct. 13, 1930. Serial No. 488,493. 11 Claims. (Cl. 92—6.)

1. In the process of manufacturing straw paper, the step of simultaneously treating the straw with alkali and beating to separate the same into fibre bundles.

1,880,900. GARMENT HANGER. JOSEPH DREYFUSS, New York, N. Y., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed July 25, 1930. Serial No. 470,634. 3 Claims. (Cl. 223—62.)



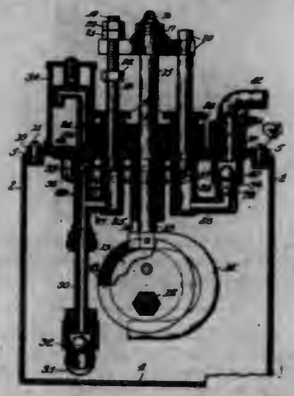
2. A garment hanger comprising a curved wire supported at the centre, a coiled spring, the wire having depressed inwardly inclined open loops on both sides of the centre, the spring being supported at its ends by the loops and which loops also form depressions for receiving the straps of garments.

1,880,901. PRODUCTION OF MALEIC ACID AND ITS ANHYDRIDE. OTTO DROSSBACH, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 12, 1931, Serial No. 562,605, and in Germany Sept. 24, 1930. 16 Claims. (Cl. 260—112.)

1. The process for the production of maleic acid and maleic anhydride which comprises contacting vaporous non-explosive mixtures of oxygen and crotonic substances corresponding to the formula $CH_3-CH=CH-X$, wherein X is -COOH or -COH, with a catalyst essentially comprising at least one oxide of the metals vanadium and molybdenum at a temperature between about 200° and about 500° C.

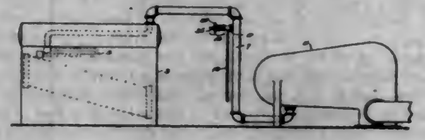
1,880,902. FORCE FEED LUBRICATOR. LOUIS W. DROTT, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Sept. 14, 1926. Serial No. 135,352. 5 Claims. (Cl. 184—27.)

1. In a force feed lubricator, the combination with a reservoir, of a pump unit suspended therein and having pumping elements, stuffing boxes in two of the opposed walls of said reservoir, shaft sections journaled in said boxes and extending into said reservoir, a separate actuating shaft between and supported by the inner ends of said shaft sections, means whereby the actuating shaft may be turned by either of said shaft sections, a cam slidable on said actuating shaft but rotatable therewith, and means affording a driving connection from the cam to said pumping elements, said actuating shaft being slidable



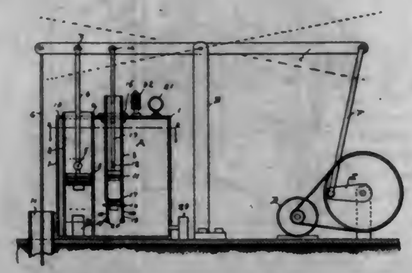
through the opening afforded in the reservoir on removing one of said boxes so that said actuating shaft may be inserted in and removed from said reservoir.

1,880,903. HUMIDIFYING. WILLIAM POOLE DRYER, Newton, Mass. Filed May 7, 1930. Serial No. 450,405. 8 Claims. (Cl. 122—459.)



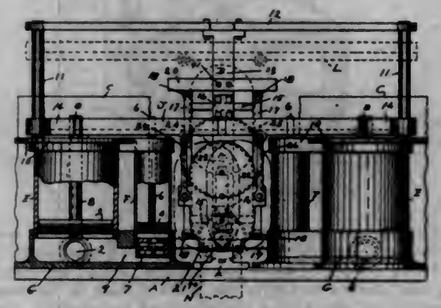
1. Mechanism for humidifying to a desired degree a stream of gas which comprises, in combination with a conduit for the stream, a liquid injection tube having a multiplicity of small perforations in the side thereof for the exit of liquid, means for gradually projecting said tube into the stream, and means closing the perforations of the unprojected portion of the tube.

1,880,904. COUNTERBALANCE. THEOPHIUS O. DUCKWORTH and FRANCIS L. HORSPOOL, Salt Lake City, Utah. Filed Jan. 9, 1931. Serial No. 507,636. 1 Claim. (Cl. 74—71.)



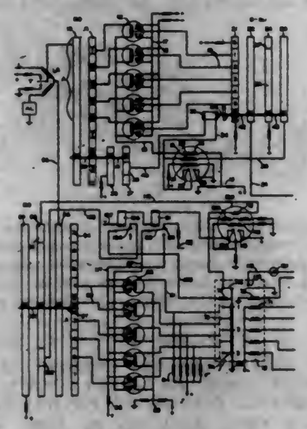
An air counter balance for a pump rod comprising a base, a Samson post fixed to said base, a walking beam pivoted to said Samson post and attached to said pump rod, a storage tank on said base, a counterbalancing cylinder in said tank, a supply cylinder in said tank, the ends of said cylinders being in communication with the interior of said tank, pistons in said cylinders and means connecting the pistons with the walking beam.

1,880,905. COUNTERBALANCE. THEOPHIUS O. DUCKWORTH and FRANCIS L. HORSPOOL, Salt Lake City, Utah. Filed Oct. 17, 1930. Serial No. 489,282. 1 Claim. (Cl. 74—71.)



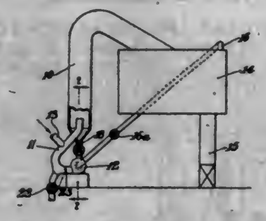
An air counterbalance for a pump rod comprising a crosshead secured to said pump rod, means for reciprocating said crosshead, a counterbalancing unit on each end of said crosshead, each counterbalancing unit comprising a reservoir, a main cylinder in combination with said reservoir, an auxiliary supply cylinder having a one-way valve at the end thereof in communication with said main cylinder, pistons in said cylinders and means connecting said pistons to said crosshead.

1,880,906. MULTIPLEX EXTENDED CHANNEL SYSTEM. KARL B. DUERR, Brooklyn, and HARMON E. BROYLES, New York, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 9, 1931. Serial No. 549,762. 19 Claims. (Cl. 178—2.)



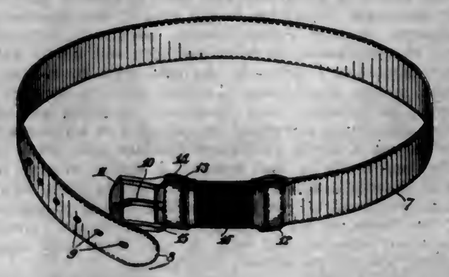
1. In a telegraph system, a multiplex system terminating at a main station, a simplex system also terminating at said main station, means for transmitting corresponding marking and spacing conditions over said simplex system when marking and spacing conditions are received over said multiplex system, and means for applying marking conditions only to the simplex system when spacing conditions only are received over the multiplex system.

1,880,907. PNEUMATIC SEPARATOR. WINSLOW A. DUERR, Breckenridge, Tex., assignor to Cabot Co., Boston, Mass., a Corporation of Massachusetts. Filed May 7, 1929. Serial No. 361,046. 4 Claims. (Cl. 209—143.)



1. In a closed cyclic system for the continuous separation of solid particles which includes a gravity separating tower, the combination of a propelling and pulverizing device, means to transmit particles separating downwardly in said tower to said device, a discharge conduit leading from said device to said tower, a sharp bend in said conduit and a trap associated therewith and adapted to catch and eliminate from the system particles of relatively greater mass contained in the suspended mixture passing through said conduit, and means for the introduction into said system of fresh supplies of solid particles to be separated.

1,880,908. APPAREL BELT. JAMES T. DUFFY, Jr., Wynnewood, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Dec. 31, 1931. Serial No. 584,055. 2 Claims. (Cl. 241—8.)



1. In an apparel belt, the combination of a buckle, a flexible band, an elastic section secured between one end of the said band and the buckle, and a retaining loop for receiving the free end of the belt, secured to the said band adjacent its point of connection with the elastic section, and moving with the band and in direction opposite to that of said free end, as the elastic section stretches and contracts.

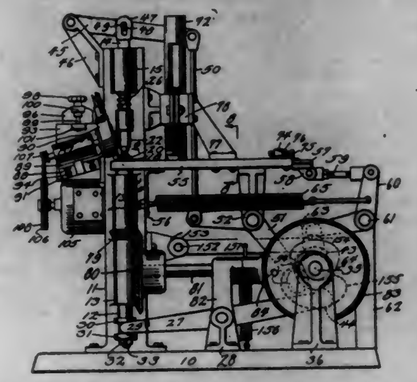
1,880,909. HAMMOCK STAND. CHARLES M. DUNLAP, South Pasadena, Calif. Filed Feb. 19, 1929. Serial No. 341,246. 2 Claims. (Cl. 5—130.)



2. In a hammock stand, a top member, leg-members, and diagonal braces, all interconnected pivotally, the top and leg members being of angle iron, the top member

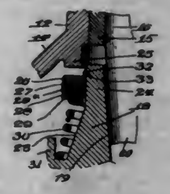
having slots in both flanges at both ends, and the leg-members having each a hook portion to engage with and having a flange portion to slip over the slotted flanges of the top member.

1,880,910. PROCESS AND APPARATUS FOR BEVELING TIRE PATCHES. CLARENCE E. DUNLAP, Sioux City, Iowa. Filed Mar. 16, 1931. Serial No. 523,053. 14 Claims. (Cl. 51—106.)



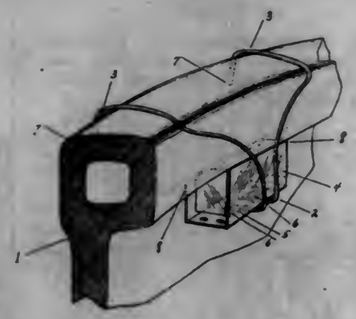
1. In a machine for beveling rubber blanks, a grinding wheel, a pair of spindles adapted to carry between them a blank to be beveled, to and from the wheel, a feed plate, guides in which said feed plate is slidably mounted for movement transverse to the axes of the spindles, a magazine to hold rubber blanks, positioned vertically over the feed plate, its lower end open and closely adjacent the plate, a recess in the feed plate to receive a blank, a bed plate under the feed plate to support a blank, the spindles being positioned vertically and the lower one having a working face adapted to register with the bed plate, means to advance the feed plate while the lower spindle is in that position, a spring to urge the upper spindle against the blank, means to check downward movement of the upper spindle during positioning of the blank on the working face, and means to raise the lower spindle, and with it, the blank and upper spindle, against the action of the spring.

1,880,911. SEAL FOR SHAFT BEARINGS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill. Filed Nov. 3, 1928. Serial No. 316,939. 12 Claims. (Cl. 286—7.)



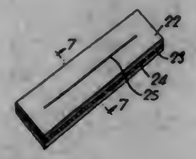
1. In a seal for shaft bearings, the combination with an impeller having a hub portion, a shaft for said impeller and a member in which said shaft is journaled, of a sealing member surrounding the hub and rotating therewith, said sealing member being spring pressed against the member in which the shaft is journaled, and a shoulder on said hub located beyond the effective position of the sealing member and arranged to retain said sealing member on the hub against the outward thrust of the spring when the impeller is disconnected from the shaft.

1,880,912. DEODORANT CONTAINER FOR TOILET BOWLS. WALTER S. DUWELIUS, Cincinnati, Ohio, assignor to Mary E. Forchheimer, Cincinnati, Ohio. Filed May 29, 1931. Serial No. 541,005. 1 Claim. (Cl. 4—229.)



A deodorant container for use in a toilet bowl comprising a receptacle having a bottom and side walls for receiving a block of deodorant material, means for mounting said receptacle within the space formed by the inner overhang of the rim of a toilet bowl comprising a pair of spring wires secured to the receptacle, said wires extending upwardly along the outer side of the receptacle and then outwardly and upwardly in arcs converging in opposite directions, said wires being then bent to extend parallel and then having downwardly bent ends also extending parallel whereby clamping arms are formed by the bent ends, which, when the first noted parallel portions are pressed together, release the clamping engagement of the downwardly bent ends from engagement with the outer surface of the bowl rim, whereby the container may then be removed and replaced on the bowl rim for the replacement of the material within the receptacle.

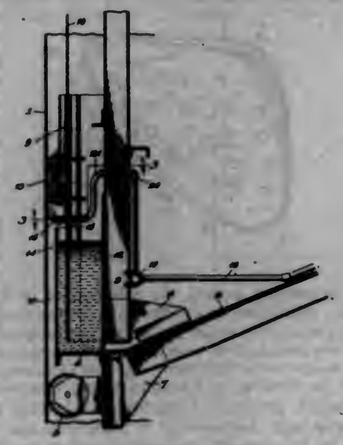
1,880,913. SCALP PROTECTOR. JAMES EDWARD DWYER, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,476. 15 Claims. (Cl. 132—36.1.)



1. A laminated scalp protector, comprising layers of cloth-like absorbent material, and a layer of flexible heat-insulating material secured to and between said first-named layers, said protector being formed with an internal slit providing an opening for receiving the tresses of hair.

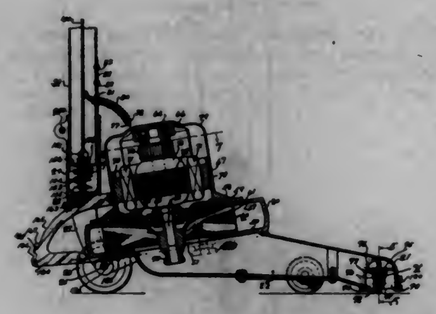
1,880,914. WATERLESS GAS HOLDER. ADOLPH H. DYCKERHOFF, Chicago, Ill., assignor to The Stacey Bros. Gas Construction Company, St. Bernard, Ohio, a Corporation of Ohio. Filed Oct. 25, 1929. Serial No. 402,498. 2 Claims. (Cl. 48—176.)

2. In a waterless gas holder a tank, a floating piston closure in said tank, a sealing instrumentality carried by said piston closure and comprising a liquid trap, a dilatable ring projecting into the liquid trap and a physical sealing packing carried by the dilatable ring and contacting the inner surface of the tank above the liquid trap, and an anti-freezing spraying system mounted upon and movable with the piston structure comprising a supply tank, a manifold, conduits connecting the supply tank and manifold, wall spraying devices positioned in the space between the liquid trap and the physical sealing packing



and flexible conduit connections between said spraying devices and the manifold, said conduits extending through the dilatable ring.

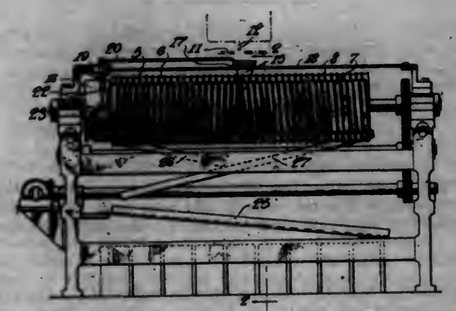
1,880,915. SUCTION CLEANER. JOHN B. DYER, Pendleton, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 17, 1930. Serial No. 445,112. 5 Claims. (Cl. 15—10.)



5. In a suction cleaner, a suction chamber and suction producing means therein, a nozzle communicating with the chamber and having a relatively long, narrow mouth, a stationary brush located in the nozzle, means for removably retaining the brush in the nozzle, and means providing different selective positions of vertical adjustment of the brush in the nozzle comprising cooperating portions on the brush and nozzle to limit insertion of the brush into the nozzle to different extents dependent upon the end for end position of the brush when inserted.

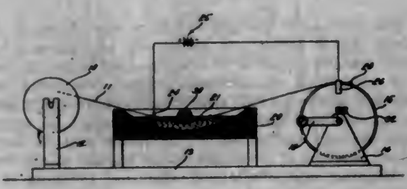
1,880,916. MACHINE FOR MANUFACTURING SPHERICAL BODIES. JOHN F. EARLY, Clarksburg, W. Va., assignor to The Akro Agate Company, Akron, Ohio, a Corporation of Ohio. Filed May 25, 1928. Serial No. 280,429. 6 Claims. (Cl. 49—5.)

6. In a machine for forming spherical bodies, the combination with a plurality of pairs of rolls arranged end to end, each pair of rolls having cooperating peripheral grooves adapted to form and advance the bodies axially of the rolls, of means for feeding successive charges of molten material, a guide for directing said charges al-



ternately into the grooves of each pair of rolls, and means for shifting said guide to maintain it in substantial registration with the grooves of either pair of rolls alternately.

1,880,917. METHOD OF AND APPARATUS FOR TESTING COATING MATERIALS. WILLIAM H. EASTLAKE, Mount Royal, Quebec, Canada, assignor to Western Electric Company, Incorporated, a Corporation of New York. Filed Oct. 17, 1929. Serial No. 400,364. 6 Claims. (Cl. 177—311.)



1. The method of testing an insulating coating on a core, which consists in immersing a single strand of the insulated core in an ionizable liquid, subjecting the core and the liquid to a small electrical potential difference, and observing the gas evolution at the core to determine the discontinuity of the insulating coating.

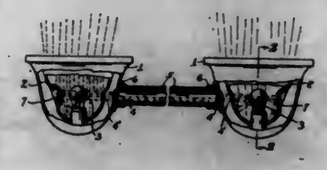
1,880,918. POLYMERIZATION OF DIOLEFINES. GEORG EBERT, FRIEDRICH AUGUST FRIES, and PAUL GARBSCH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 21, 1930, Serial No. 454,508, and in Germany June 22, 1929. 8 Claims. (Cl. 260—6.)

1. A process for the production of a polymerization product of a diolefine, which comprises contacting said olefine with a metallic polymerizing agent selected from the group consisting of alkali metals, alkaline earth metals and their alloys with each other in the form of particles of a uniform size.

1,880,919. HEADLIGHT SET. MARK ECKERT, Gettysburg, Pa. Filed Oct. 7, 1930. Serial No. 487,071. 1 Claim. (Cl. 240—7.1.)

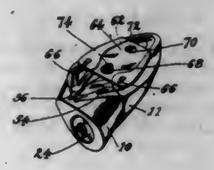
In combination, two headlights each comprising: a casing, a reflector and a source of light, a straight tubular

member connecting said casings and communicating through suitable orifices in said casings and reflectors with the axis of the tube in alignment with the sources



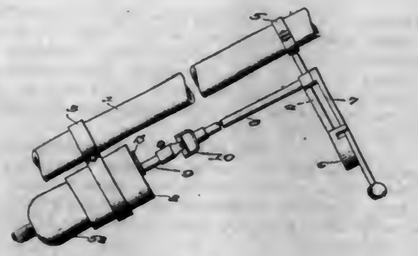
of light, each of said reflectors having a sharply convex protuberance directed toward said tube and on the side opposed to said tube and forming an auxiliary reflector.

1,880,920. MAKING HOLLOW SHOE FORMS. SEXTUS A. EDDINS and GERALD M. HANNIGAN, Quincy, Mass., assignors to Cordo-Hyde Company, Brockton, Mass., a Firm composed of Francis Hannigan and Sextus A. Eddins. Filed June 1, 1928. Serial No. 282,075. 17 Claims. (Cl. 18—56.)



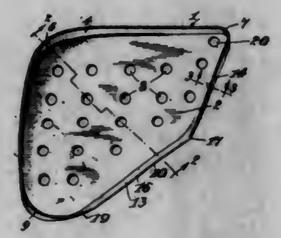
1. The method of making a hollow shoe form of sheet material, which consists in chemically tempering a blank of sheet material capable of being molded while in temper and of shrinking and setting as the tempering agent evaporates, wrapping said tempered blank around a model, applying resilient pressure to the blank to force it against the top and sides of the model and to overlap marginal portions of the blank on the bottom of the model, and clamping said overlapped marginal portions of the blank against the model, said pressure and said clamping being continued until the blank shrinks and sets.

1,880,921. SWITCHING MECHANISM. CHARLES F. A. EDDY, New London, Conn. Filed May 24, 1929. Serial No. 365,669. 24 Claims. (Cl. 200—8.)



1. A switching mechanism including a contact segment, a longitudinally movable contact member adapted to engage said contact segment, means for sliding said contace member out of the path of the contact segment, and means for holding the contact member out of said path.

1,880,922. CULINARY ARTICLE. ALFRED B. EDWARDS, Jr., Plandome, Long Island, N. Y. Filed Feb. 24, 1930. Serial No. 430,582. 5 Claims. (Cl. 15—236.)



1. In a culinary article, the combination of a substantially flat bottom and a substantially perpendicular flange extending about the major portion of the periphery of said bottom, the periphery of said bottom intermediate the ends of said flange being bent upwardly and obliquely from the plane of the bottom, said bottom having a series of apertures therein, portions of the bottom adjacent the apertures being bent downwardly to form channels generally parallel to the edge of the oblique portion on the upper side of the bottom leading to said apertures.

1,880,923. COMPENSATED TUNING FORK. BERT E. EISENHOUR, Aurora, Ill., assignor of one-half to George Fabyan, Geneva, Ill. Filed Sept. 4, 1930. Serial No. 479,698. 10 Claims. (Cl. 84—457.)



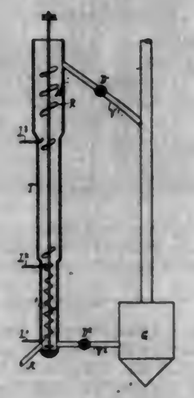
1. A tuning fork composed of laminations of metals having opposite values for the temperature coefficients of elasticity of said metals for maintaining the vibration frequency of the fork constant under changes of temperature of the fork.

1,880,924. PRODUCTION OF CARBON BLACK, ACETYLENE, AND HYDROGEN. OTTO EISENHUT, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 10, 1930, Serial No. 420,006, and in Germany Mar. 9, 1929. 3 Claims. (Cl. 204—31.)

1. A process for the production of carbon black, acetylene and hydrogen, which comprises passing a gas comprising methane through an electric arc at a temperature of at least 2500° C. under such conditions that the ratio of the amount of gas measured in cubic meters, which is passed hourly through the electric arc to the power of the arc measured in kilowatts lies below 0.6.

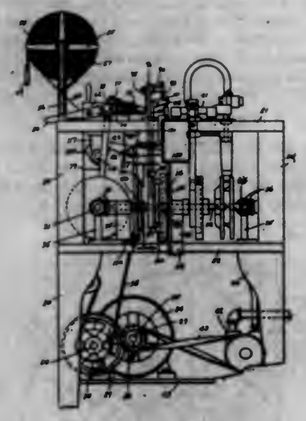
CARNEGIE LIBRARY OF ATLANTA

1,880,925. PRODUCTION OF COARSE CRYSTALS. WILLY EISSNER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 23, 1928, Serial No. 301,661, and in Germany Aug. 25, 1927. 10 Claims. (Cl. 23—1)



1. A process of producing coarsely crystalline salts which consists in cooling a body of a hot saturated solution of a salt and keeping the solution in an upward movement by passing a current of gas through the solution at such a rate that only the coarse crystals can fall to the bottom, so much of a hot saturated solution of the salt being supplied to the lower part of the body of the solution as is carried upward by the gas.

1,880,926. WRAPPING AND SEALING APPARATUS. GEORGE J. EGENOLF, Indianapolis, Ind., assignor to The J. L. MacDaniel Printing Company, Inc., Indianapolis, Ind., a Corporation. Filed June 11, 1931. Serial No. 543,539. 5 Claims. (Cl. 93—1.)

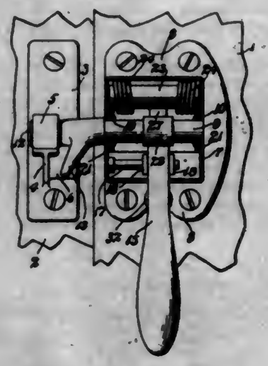


1. In a machine of the class described, the combination of apparatus for supplying a strip of wrapping material, a reciprocable knife blade adapted to cut a piece of material from said strip, a hold-down member adapted to engage one surface of said piece of material, a yielding grip member adapted to engage the other surface thereof, and apparatus for moving the said members in timed relation with the movement of said knife blade to grasp said piece when cut and to move the same into position to receive an article to be wrapped therein.

1,880,927. ELECTROLYTIC PRODUCTION OF SODIUM PERCHLORATE. UDO EHRHARDT, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 24, 1930, Serial No. 491,089, and in Germany Oct. 29, 1929. 2 Claims. (Cl. 204—9.)

1. In the production of sodium perchlorate the steps which consist in electrolyzing a solution containing at the start at least 800 grs. sodium chlorate per litre at a temperature between about 40 and 50° C., introducing more sodium chlorate into said solution in a measure sufficient to maintain the concentration of the sodium chlorate in said solution at a point not far below saturation, with respect to said salt, pending electrolysis, until the solution contains about 1000 grs. $NaClO_4$ and 150 grs. $NaClO_3$ per litre, and finally pursuing electrolysis of said solution, until the chlorate content of the electrolyte amounts to nor more than about 1.5 percent of the perchlorate present.

1,880,928. REFRIGERATOR LATCH. ANDREW EKMAN, Grand Rapids, Mich., assignor to Winters & Crampton Mfg. Co., Grandville, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,387. 5 Claims. (Cl. 292—228.)

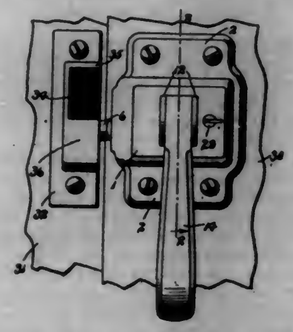


1. A latch structure comprising, a housing, a shaft mounted therein for rocking movement, said shaft at one end having a crank portion adapted to engage with a keeper, a metal band located around and secured to the rock shaft having spaced apart teeth extending radially therefrom, a handle pivotally mounted on the housing having spaced openings at its inner end in which said teeth are received on pivotal movement of the handle thereby rocking the rock shaft, said band at one end being formed into a curved section projecting away from the rock shaft, a link seated at one end in the socket made by said curved portion of the band, and spring means bearing against the opposite end of the link and with which said opposite end of the link has a pivotal connection, substantially as and for the purpose described.

1,880,929. LOCKING REFRIGERATOR LATCH. ANDREW EKMAN, Grand Rapids, Mich., assignor to Winters & Crampton Manufacturing Company, Grandville, Mich., a Corporation of Michigan. Filed May 19, 1930. Serial No. 453,554. 6 Claims. (Cl. 70—29.)

2. A latch construction comprising, a housing, a lever pivotally mounted between its ends on and within said

housing, a part of said lever extending through one side of the housing outside thereof, said outer portion of the latch lever being movable to an upper or a lower position, a base plate closing the inner side of the housing, and a lock bolt

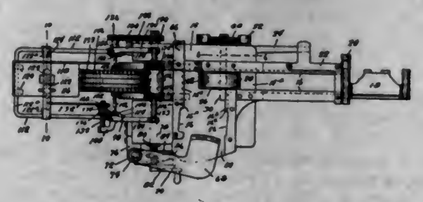


slidably mounted thereon and movable to a position to interpose in the path of movement of the inner end of the lever when the outer end of the lever is in lower position, to hold the lever against pivotal movement.

1,880,930. METHOD OF LACQUERING AND IMPREGNATING WITH ARTIFICIAL RESINS. ERNST ELBEL and FRITZ SEEBACH, Erkner, near Berlin, Germany, assignors to Bakelite Gesellschaft mit beschrankter Haftung, Berlin, Germany. Filed July 25, 1928, Serial No. 295,343, and in Germany Aug. 15, 1927. 9 Claims. (Cl. 154—2.)

1. A method of lacquering and impregnating porous and fibrous sheets with solid hardenable artificial resins, which comprises applying to such sheets said resins in a finely comminuted condition and drying oils.

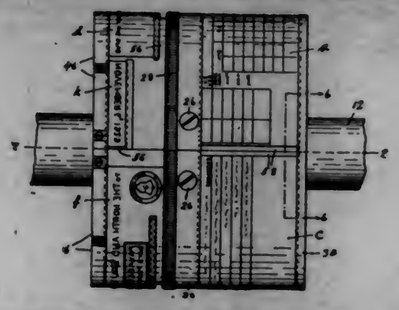
1,880,931. ADDRESSING MACHINE. HARMON P. ELLIOTT, Watertown, Mass. Filed Dec. 21, 1927. Serial No. 241,654. 29 Claims. (Cl. 101—49.)



1. In a stencil printing machine, means to move successive envelopes in a straight line into and out of printing position, means to move the stencils in one direction into printng position and other means to move the stencils out of printing position in another direction which is in line with the movement of the envelopes.

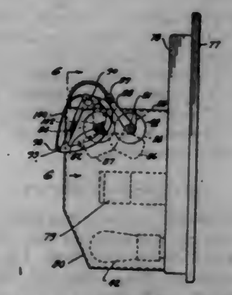
1,880,932. ELECTROTYPE PRINTING ROLL FOR ADDRESSING MACHINES. HARMON P. ELLIOTT, Watertown, Mass. Filed May 9, 1930. Serial No. 451,019. 5 Claims. (Cl. 101—378.)

1. A printing roll for addressing machines comprising a cylindrical hub, drum sections separately carried by said hub, cylindrically curved electrotype plates arranged on the drum sections, and occupying substantially the entire circumferential extent of the drum, and plate securing means carried by the drum sections which engage the opposite side edges of said plates and secure them to the drum against displacement, there being spaces of sufficiently long circumferential extent between the confronting ends of said plates so that the material of said plates can expand freely circumferentially without opposition and



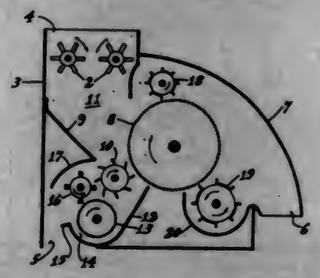
without abutting against each other in said spaces whereby to maintain the original configuration of said plates and prevent warping thereof under extended use.

1,880,933. HIGH FREQUENCY TUNING SYSTEM. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 28, 1926. Serial No. 119,114. 17 Claims. (Cl. 175—41.5.)



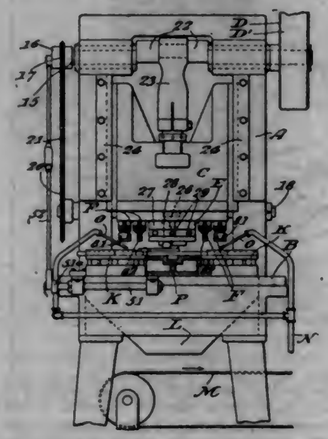
17. In a radio apparatus, the combination of a variable tuner, a cam having an adjustable surface for controlling said tuner, and means for adjusting the surface of said cam at a plurality of points, said cam surface being fixed at one point against movement and being free to move longitudinally therefrom to assume a substantially smooth and continuous curvature through and between the adjusting points.

1,880,934. HULL EXTRACTOR. THOMAS ELLIOTT, Birmington, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed Apr. 8, 1930. Serial No. 442,642. 11 Claims. (Cl. 19—37.)



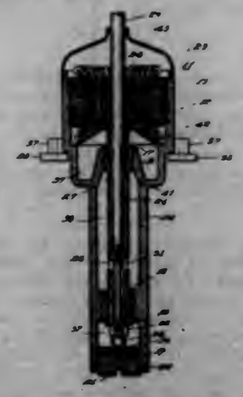
1. A cotton cleaning machine, comprising a main saw cylinder, guide means to direct the material to be treated into contact with said cylinder, stripping and doffing means coacting with said cylinder, a cotton reclaiming rotatable member with which hulls and cotton are engaged that escape between the said cylinder and guide means, a hull guide so disposed that hulls are driven upwardly over same to the discharge by the action of said reclaiming member, and agencies to doff from said reclaiming member the cotton reclaimed thereby from among the hulls.

1,880,935. BLANK CUTTING MACHINE. WILLIAM S. ELLIOT, Northampton, Mass., and FREDERIC A. PARKHURST, Bethesda, Md., assignors, by mesne assignments, to Pro-Phy-Lac-Tic Brush Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 2, 1929. Serial No. 383,068. 12 Claims. (Cl. 164—21.)



1. In a blank cutting machine, in combination, a longitudinal feed for feeding a sheet of material, three pairs of cooperating tools arranged transversely of the line of feed of said feeding mechanism and operating at right angles thereto, and transverse feeding mechanism operating to feed the blank formed by the middle pair of said tools alternately to the side pairs of said tools.

1,880,936. HIGH SPEED MOTOR. HARRY D. ELSE, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 518,985. 10 Claims. (Cl. 172—36.)



1. In a vertical-shaft motor having a stator and a rotor, a tubular rotor shaft having a portion of its interior of conical shape, and an upwardly extending solid shaft within the tubular rotor shaft and having its lower end of conical shape to fit tightly within the tubular shaft portion of conical shape.

1,880,937. PROCESS OF CARBONIZING NICKEL OR OTHER METALS. HOWARD M. ELSEY, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 252,047. 8 Claims. (Cl. 148—17.)

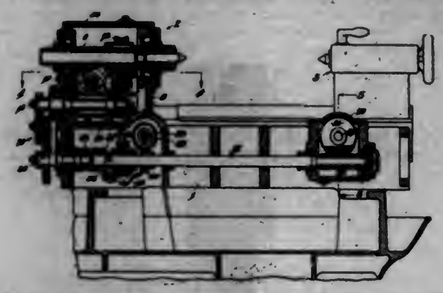
7. A process of producing a uniformly carbonized metal free from oxides for electron discharge devices which comprises uniformly oxidizing the surface of metal selected from a group consisting of nickel, tungsten, and alloys of nickel containing a major proportion of nickel, and then heating the metal in a reducing atmosphere containing normally gaseous hydrocarbon to reduce the oxide and carbonize the metal.

1,880,938. APPARATUS FOR UTILIZING SOLAR HEAT. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to Charles G. Abbot, Washington, D. C. Filed Aug. 19, 1929. Serial No. 386,899. 3 Claims. (Cl. 126—271.)



1. A solar heating element comprising an elongated evacuated glass container, an elongated converging mirror within said container, a boiler tube located in front of and at the linear focus of the mirror, and a second mirror mounted on the tube and in front thereof.

1,880,939. LATHE. ARTHUR N. EMMONS, Syracuse, N. Y., assignor to The Porter-Cable Machine Company, Syracuse, N. Y., a Corporation of New York. Filed July 14, 1930. Serial No. 467,729. 6 Claims. (Cl. 82—2.)



1. In a lathe, a frame, a movable tool carriage, a head stock, the head stock comprising a housing, a head stock spindle journalled in the housing, a drive shaft journalled in the housing, tool carriage feed mechanism comprising a shaft mounted in the head stock housing, gearings between the drive shaft and the head stock spindle and between the drive shaft and the tool carriage mechanism shaft including an element common to both of the said gearings, and a pair of intermeshing gears, one being mounted on the drive shaft outside the housing, and the other on said element outside of the housing.

4. In a lathe, the combination of a frame, a tool carriage and head stock, the head stock comprising a hous-

ing, a head stock spindle journalled in the housing, a drive shaft journalled in the housing and extending transversely of the spindle below the same, a second shaft journalled in the housing and extending parallel to the drive shaft below the spindle, said shafts extending outside of the housing, intermeshing gears mounted on said shafts outside of the housing, intermeshing worm and worm gear mounted respectively on the second shaft and the spindle, mechanism for feeding the tool carriage including a shaft extending into the head stock housing parallel to the spindle and below the driving shaft and the second shaft, the tool carriage feed shaft and the second shaft having intermeshing worm gearing located in the head stock housing, a driving member mounted on the drive shaft outside of the housing, and a clutch for connecting and disconnecting the driving member and the drive shaft.

1,880,940. TOOL. DIRK ENNINGA, Glenvil, Nebr. Filed Apr. 21, 1931. Serial No. 531,761. 1 Claim. (Cl. 219—26.)



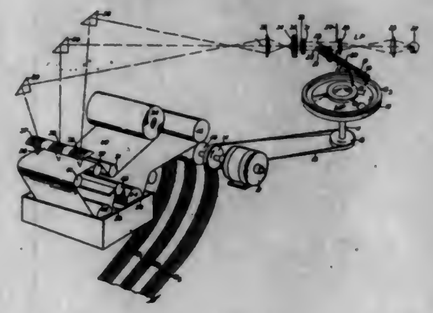
In a device of the class described, a heating tool comprising a shank, a grip on the shank, a tubular head of appreciably greater length than the diameter of the shank and disposed transversely of the shank, the head having a smooth, straight, and continuous bore of greater length than the diameter of the head, and a tip longitudinally adjustable in the head, one end of the shank being threaded into one side of the head, intermediate the ends of the head, and engaging the tip to bind the tip in the bore, at the opposite side of the head, the tip engaging the head throughout the entire length of the head, the tip being of materially less diameter than the bore.

1,880,941. APPARATUS FOR DETECTING AND ESTIMATING INFLAMMABLE GASES IN AIR. ALBERT N. ERICKSON, Elmhurst, N. Y., assignor to Union Carbide Company, New York, N. Y., a Corporation of Virginia. Filed Apr. 5, 1927. Serial No. 181,227. 3 Claims. (Cl. 23—255.)



1. In a testing system for determining the presence of combustible gas in gaseous mixtures by noting the change in temperature of a surface heated to a temperature such that the combustible gases will oxidize without catalytic action, a testing element comprising a non-conducting skeleton holder having conducting end pieces provided with recesses in the ends thereof, a metallic filament between said end pieces, a supporting post engaging one of said recesses, and another supporting post movably mounted to engage the other recess and resilient means for urging said other supporting post against said other recess.

1,880,942. PHOTOGRAPHIC RECORDER. ELMER C. ERICKSON, Woodridge, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 466,085. 5 Claims. (Cl. 234—1.)



1. The method of measuring the flatness of a surface of a machine part which method consists in actuating a hair line member according to the irregularities in such surface and projecting the image of the hair line onto a moving photographic film.

1,880,943. MEANS FOR FIXING THE BLADES OF SCYTHES TO THE SNATHS. ERIK EMANUEL ERICSSON, Orebro, Sweden. Filed Dec. 4, 1929, Serial No. 411,639, and in Sweden July 23, 1929. 5 Claims. (Cl. 56—326.3.)



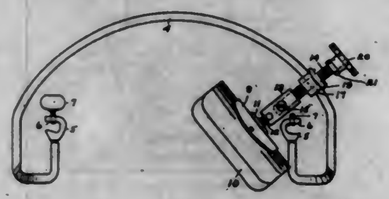
1. Means for fixing to the snath the blade of a scythe or the like having a tapering tongue, characterized by a member provided on the snath and shaped in accordance with the said tongue and having engaging means carried thereby, which is adapted after the insertion of the tongue into the said member and at turning the blade into its operative position to engage corresponding engaging means on the tongue and to effect a sliding movement of the tongue, so that the latter is jammed in the member, and a catching device, which locks the blade in the said position.

1,880,944. DISPLAY DEVICE. J. EDMUND ESTES, Barrington, R. I. Filed Dec. 11, 1930. Serial No. 501,585. 2 Claims. (Cl. 206—82.)



1. A sample display yarn mop head made up in such form and size as to correspond in form and size with the mop head it is intended to advertise, comprising groups of strands of different types of mop yarn with both the groups and each strand in each group arranged in side by side relationship and doubled over near the center thereof and means binding said strands together substantially centrally thereof.

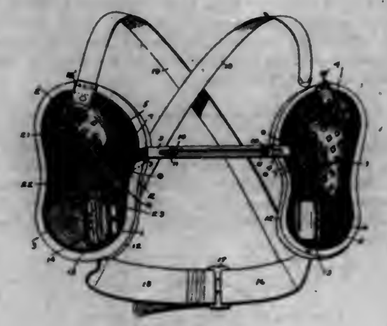
1,880,945. SURGICAL SPLINT. JOE J. ETTINGER, Warsaw, Ind., assignor to Zimmer Manufacturing Company, Warsaw, Ind., a Corporation. Filed May 31, 1930. Serial No. 458,031. 2 Claims. (Cl. 128—87.)



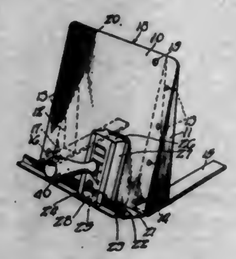
1. A surgical splint comprising an arcuate frame having its opposite ends turned laterally, inwardly and upwardly, attachment members at the upper ends of the upstanding portions of the frame respectively and a pressure producing member adjustably mounted on the frame, the mounting being adjustable to any point of the frame including points thereon below the attachment members.

1,880,946. CLAVICLE SPLINT. JOE J. ETTINGER, Warsaw, Ind., assignor to The Zimmer Manufacturing Company, Warsaw, Ind. Filed Sept. 19, 1931. Serial No. 563,846. 7 Claims. (Cl. 128—78.)

1. A clavicle splint comprising two members shaped to engage on the front side of the human shoulders respectively, means to space the members transversely, lateral draft members adjustably connected directly to the lower ends of the members and to each other and adapted to be drawn about the rear of the trunk of the human body, and shoulder engaging draft members secured to the lateral draft members adjacent the connection of the latter to the splint members and adjustably connected directly to the upper ends of the members respectively, to pass over the shoulders, the several draft members cooperating to cause the members to push the shoulders rearwardly.

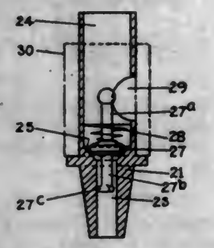


1,880,947. STAMP RACK. RICHARD EVANS, Highland Park, Ill. Filed Oct. 20, 1930. Serial No. 490,068. 2 Claims. (Cl. 211—39.)



1. A stamp rack comprising a supporting frame, a shelf extending substantially horisontally from said frame, and an upstanding member on said shelf, said shelf being adapted to support a stamp having a recess in the body portion thereof to receive said upstanding member, said stamp when so supported having one of its faces resting on said substantially horizontal shelf.

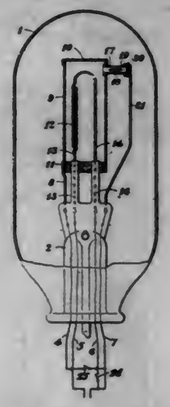
1,880,948. VALVE. FREDERICK CHARLES FELIX EVENNETT, Lee, England. Filed Jan. 10, 1931, Serial No. 507,988, and in Great Britain Jan. 11, 1930. 6 Claims. (Cl. 251—115.)



1. A fluid control device, comprising a casing having a passage therethrough, a distortable enclosing medium for said casing, a valve member mounted in said casing, a valve

seat, spring means normally forcing said valve member to seated position, said casing formed with an aperture therethrough removed from said spring means and adjacent said valve member, said valve member in normal seated position out of contact with said enclosing medium, and said valve member displaceable laterally from said valve seat by distortion of said enclosing medium inwardly through the aperture in said casing to directly engage and unseat said valve member.

1,880,949. GASEOUS ELECTRIC DISCHARGE DEVICE. HANS EWEST, Berlin, and GEORG GAIDIES, Berlin-Pankow, Germany, assignors to General Electric Company, a Corporation of New York. Filed Oct. 8, 1930, Serial No. 486,229, and in Germany Nov. 30, 1929. 4 Claims. (Cl. 176—122.)



1. In an electric discharge device, a container, electrodes sealed therein, a gaseous filling therein, a chamber in said container and a tube of small diameter in the walls of said chamber surrounding the discharge path between said electrodes, one of said electrodes being arranged in said chamber and off-set from the axis extending through said tube, another of said electrodes being adapted to close the exterior end of said tube, said tube having a slit in the walls thereof.

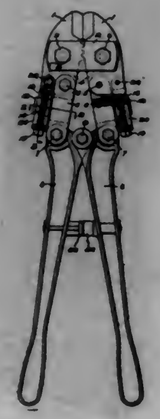
1,880,950. CUTTER FOR ADHESIVE TAPES. FRANK E. EWING and FRED J. CLUNK, Brentwood Heights, and NEIL M. COATS, Santa Monica, Calif., assignors, by direct and mesne assignments, to Kuts-Keen Mfg. Co., Ltd., a Corporation of California. Filed Sept. 22, 1930. Serial No. 483,462. 8 Claims. (Cl. 242—56.)



1. In combination with a roll of tape; a tapered, pointed cutter; and means for holding said cutter so that the point thereof is substantially in engagement with the periphery of said roll.

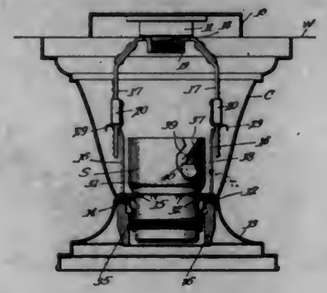
1,880,951. CUTTING TOOL. JOHN J. EYRE, Saugus, Mass., assignor to H. K. Porter, Inc., a Corporation of Massachusetts. Filed Jan. 19, 1931. Serial No. 509,768. 8 Claims. (Cl. 81—190.)

1. In a cutting tool, a cutting jaw having a relatively short rear end, a pivoted handle lever for said jaw, an adjusting section interposed between said cutting jaw and handle lever, said adjusting section having a laterally disposed lug, an adjusting screw engaging said lug and



the rear end of said cutting jaw, and a yoke cooperating with the rear end of said cutting jaw and said screw to swing said adjusting section relatively to said cutting jaw.

1,880,952. LAMP SOCKET AND ADJUSTABLE SUPPORT THEREFOR. WILLIAM H. FARREY, Schenectady, N. Y., assignor to The Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed May 14, 1928. Serial No. 277,518. 9 Claims. (Cl. 240—85.)



1. A device of the class described comprising an annulus, means for supporting said annulus, a socket shell projecting partially said annulus and having a reduced neck portion merging with a larger body portion at a circumferentially extending shoulder which limits movement of the shell in one direction through the annulus, a shoulder struck out from the shell body at the opposite side of the annulus from said first mentioned shoulder and opposing movement of the shell in the opposite direction, said annulus having a projecting means cooperable with said shoulders to limit rotative movement of the shell within the annulus.

1,880,953. RAIL CAR CONSTRUCTION. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Feb. 13, 1929. Serial No. 339,720. 29 Claims. (Cl. 105—4.)

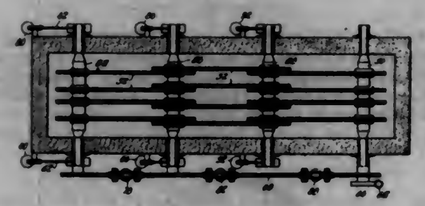
1. A rail car comprising a pair of truck assemblies; each of said truck assemblies comprising only one pair of

dirigibly mounted wheels; a base frame construction supported on said truck assemblies; a body supported on said base frame construction; power mechanism supported by



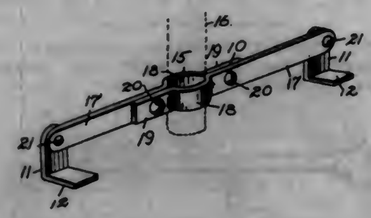
said base frame construction; and flexible drive connections between said power mechanism and certain of said wheels.

1,880,954. FURNACE. FRANK A. FAHRENWALD, Chicago, Ill. Filed June 28, 1929. Serial No. 374,311. 15 Claims. (Cl. 263—8.)



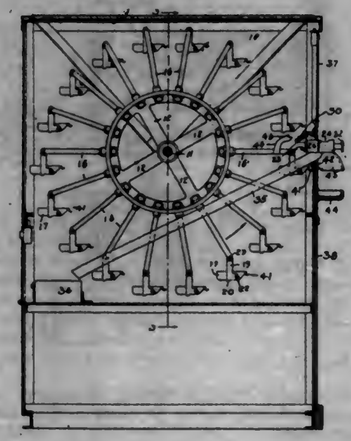
10. High temperature conveying equipment comprising a catenary conveyor strand, a weight, and connections between said weight and strand for automatically maintaining the tension in all parts of said strand substantially the same when loaded as when unloaded.

1,880,955. HOLDER FOR ORNAMENTS. HENRY W. FALSTROM, Bloomfield, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed July 28, 1930. Serial No. 470,104. 8 Claims. (Cl. 248—37.)



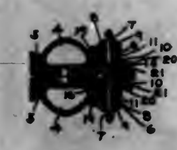
8. A flag holder including a staff-holding member and supporting means therefor, said supporting means comprising a pair of feet arranged in spaced relation and pivotally secured to said staff-holding member, said feet being adapted to lie on either side of an automobile-hood hinge pin for engagement by the hood sections whereby either section may be raised and the staff-holding member will be supported by the foot engaged by the other hood section and the staff-holding member may be pivoted upon the said engaged foot.

1,880,956. DISPENSING MACHINE. JOHN F. FARMER, Indianapolis, Ind. Filed Apr. 1, 1931. Serial No. 526,800. 8 Claims. (Cl. 312—97.1.)



1. In a coin controlled merchandise vending device, a rotatable reel, means for separately and automatically rotating the reel in one direction, an annular series of merchandise containing buckets supported by the reel, a push bar arresting the automatic movement of the reel in the outer position of the bar and releasing it at the inner position of the bar, said bar having an inner end with a passage having pin-arresting offsets through which the pins successively pass, said end being jointed to swing in one direction only for the manual reverse movement of the reel in the operation of filling the buckets.

1,880,957. ELECTRIC TRAIN WIRE COUPLING. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,699. 6 Claims. (Cl. 173—338.)

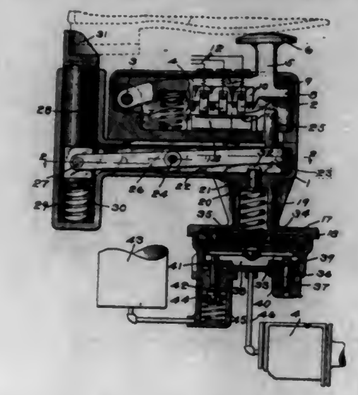


6. The combination with a hose coupling head, of a contact member carried by said head, a movable arm having a contact adapted, upon operation of said arm to connect the contact members of counterpart coupling heads when the heads are in coupled position, a lug carried by the coupling head, and flanges carried by said arm for engaging the lugs of counterpart coupling heads, upon movement of the arm to connect said contact members, to thereby hold said coupling heads together.

1,880,958. SAFETY CAR CONTROL DEVICE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 7, 1929. Serial No. 384,115. 10 Claims. (Cl. 303—3.)

1. In a vehicle braking apparatus, the combination with a device for controlling the operation of a fluid pressure

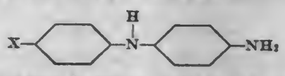
brake, of a manually operable member movable to mechanically set up circuits for producing a dynamic braking



action and adapted upon a further movement to mechanically operate said device to cause a fluid pressure brake application.

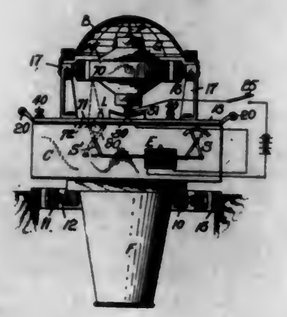
1,880,959. PROCESS FOR PRODUCING NITROSO DIAZO SOLUTIONS. RUDOLPH JUNG, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,598, and in Germany Mar. 15, 1928. 5 Claims. (Cl. 260—69.)

1. The process of preparing nitroso-diazo solutions to be used for dyeing purposes which comprises dissolving in water a solid diazo preparation of an amino-diphenylamine compound of the general formula:



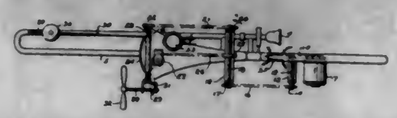
wherein X means hydrogen, halogen, an alkoxy or an alkyl group, and adding to this solution substances capable of producing nitrous acid.

1,880,960. AERIAL CAMERA. CHARLES F. KEALE, Jr., Stewart Manor, Long Island, N. Y. Filed June 3, 1929. Serial No. 367,987. 11 Claims. (Cl. 95—12.5.)



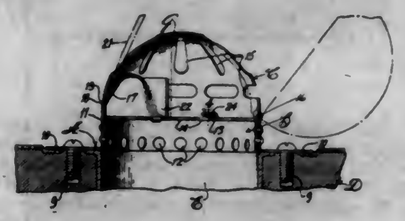
1. In combination, a camera, a support in which said camera is movably mounted, means for operating said camera, means whereby the position of the optical axis of said camera may be varied, and means for preventing operation of said camera until said axis is in a predetermined position, said last-named means including locking means for said operating means, means responsive to the position of said axis, contacts between said camera and said last-named means, and means whereby said contacts control said locking means.

1,880,961. MUSICAL INSTRUMENT. HAROLD T. KINGSLEY, Detroit, Mich. Filed Jan. 16, 1931. Serial No. 509,151. 4 Claims. (Cl. 84—395.)



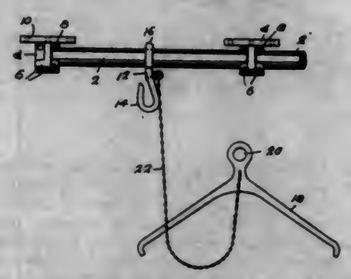
4. A portable, musical "instrument having a mouth piece to which air is supplied from the lungs of the operator, a bell like discharge opening for the instrument," butterfly valve disposed in the opening but only partially closing it, a screw propeller disposed transversely of the opening and slightly in advance thereof and motor means disposed upon the instrument for simultaneously rotating the valve and the propeller.

1,880,962. DEODORANT CONTAINER. HAROLD I. KOPPELMAN, Chicago, Ill., assignor to U. S. Sanitary Specialties Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 15, 1930. Serial No. 502,305. 4 Claims. (Cl. 4—109.)



1. In combination with a urinal having a drain opening, a base having a raised platform to support deodorant material, the platform having drain openings to permit passage of flush water, a perforated closure hinged to the platform to enclose the deodorant material, means on the platform to center a cake of deodorant material, and means to secure the closure in closed position.

1,880,963. GARMENT HANGER. CHARLES H. KRAFT, Kansas City, Mo. Filed Oct. 20, 1930. Serial No. 489,946. 2 Claims. (Cl. 223—61.)



1. A garment hanger comprising a suspension member having a hook at its lower end and an eye at its upper end which latter is adapted to be shifted along a suitable

support, a garment-holder having an eye at its upper end for detachably engaging said hook, and a chain permanently connecting the suspension member and said garment-holder.

1,880,964. DUODENAL OR STOMACHAL TUBE. MÓR KÜNSZTLER, Budapest, Hungary. Filed May 31, 1930, Serial No. 458,096, and in Hungary June 15, 1929. 5 Claims. (Cl. 128—356.)

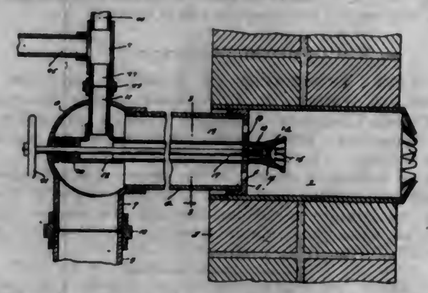


3. A flexible stomach tube comprising a plurality of separate sections, means on said sections for detachably connecting them together, a mandrin adapted to be inserted into the first tube section for stiffening the same, a guiding weight, and a thread freely suspending said guiding weight from the forward end of the first tube section.

1,880,965. FIBER PRODUCT PRESERVATION. ELBERT C. LATHROP and FERGUS A. IRVINE, Chicago, Ill., assignors to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed June 19, 1931. Serial No. 545,490. 14 Claims. (Cl. 92—21.)

1. A fibrous product having integrally distributed therethrough an insect and fungi toxic substance initially formed as a slurry and subsequently distributed throughout the product in its process of manufacture, the slurry comprising a metalloid of the arsenic family thrown down as a complex with a metallic element producing gelatinous hydroxide or basic gelatinous salts and precipitated by an alkali which in water produces free hydroxyl ions.

1,880,966. FUEL OIL TORCH. ARTHUR MANNING, Rutherford, N. J. Filed Dec. 26, 1930. Serial No. 504,921. 1 Claim. (Cl. 158—74.)



A torch or hydrocarbon burner comprising a mixing cylinder having at its forward end an annular series of inwardly directed or deflected fingers, the said forward end of the cylinder being open and said fingers being grouped about the open end, and an oil and steam conducting pipe extending into said cylinder toward the forward end thereof and disposed in the longitudinal center of the cylinder and spaced in rear of the forward open end thereof and equipped with a forward end portion of bell mouth form and also equipped with radially disposed baffles in said forward portion.

1,880,967. AEROFOIL. FRANK R. MAXWELL, Jr., Boston, Mass. Filed Oct. 16, 1928. Serial No. 312,862. 6 Claims. (Cl. 244—12.)

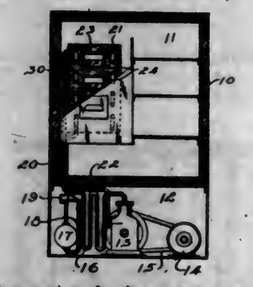


1. An aerofoil comprising a forward spar forming a leading edge and a rearward part rigidly interconnected as a unitary wing, the two parts being spaced in approximate parallelism to provide therebetween a slot extending obliquely through the aerofoil, and a cover for the slot hinged at one edge thereof on said forward spar beneath the leading edge of said spar and curving forwardly, upwardly and thence rearwardly over said spar and the slot.

1,880,968. PROCESS OF PURIFYING BODIES INSOLUBLE IN WATER. JOHN KEARSLEY MITCHELL, Villanova, Pa., assignor to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,954. 3 Claims. (Cl. 18—50.)

3. A process of purifying wild rubber and like substances associated with impurities occurring in the crude product, which comprises manipulating the rubber in the presence of water and a water-soluble soap until it disperses as fine solid particles in the aqueous medium in which the impurities are then suspended, screening the dispersion to remove impurities, spraying the dispersion into a body of heated water under agitation to coagulate the rubber and remove soap therefrom, removing the rubber coagulum, and drying.

1,880,969. REFRIGERATING SYSTEM. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Dec. 9, 1929. Serial No. 412,626. 1 Claim. (Cl. 62—95.)

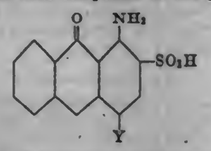


A refrigerator system having a brine tank filled with a liquid selected from a class comprising turpentine, rapeseed oil and aniline, the brine being capable of freezing without substantial expansion, in the normal operating range of the system.

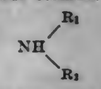
1,880,970. NEW ACID WOOL DYESTUFFS OF THE ANTHRAQUINONE SERIES AND PROCESS OF MAKING SAME. RUDOLF MÜLLER and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1929, Serial No. 347,164, and in Germany Mar. 17, 1928. 8 Claims. (Cl. 260—60.)

6. As new products, the acid wool dyestuffs obtainable by causing the diazo compound on an 1-amino-anthra-

quinone-2-sulfonic acid compound of the general formula:



wherein Y means halogen, to react with an excess of a compound of the general formula:



wherein R_1 means hydrogen or an alkyl group and R_2 an alkyl, cycloalkyl, aralkyl or an aryl group, in the presence of a metal-containing catalyst and of an indifferent diluent, which products are dark-colored powders, easily soluble in water, soluble in sulfuric acid to feebly colored solutions, dyeing wool from an acid bath bluish to grey black shades of a very good fastness and levelling property.

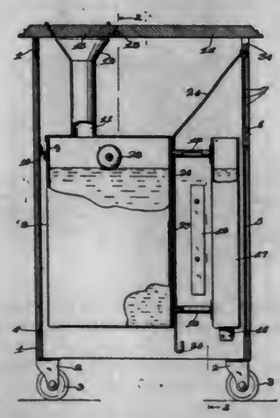
1,880,971. PROTECTIVE TREATMENT OF FIBER PRODUCTS. TREADWAY B. MUNROE and ELBERT C. LATHROP, Chicago, Ill., assignors to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,540. 7 Claims. (Cl. 92—21.)

1. The method of integrally treating a fibrous product wherein the fiber from which the product is formed has added thereto while in water suspension emulsified chloro-naphthalene with the subsequent addition of a demulsifying agent, whereby the chloro-naphthalene is precipitated upon the fibers.

1,880,972. TREATMENT OF FIBER PRODUCTS. TREADWAY B. MUNROE and ELBERT C. LATHROP, Chicago, Ill., assignors to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,203. 30 Claims. (Cl. 92—21.)

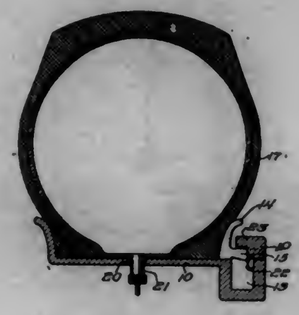
1. Fiber which is water, insect and fungi proofed with a complex colloid comprising, in part, iron, arsenic and rosin.

1,880,973. HUMIDIFIER AND HEATER. JAMES E. MYERS, Whitefish Bay, Wis. Filed Mar. 16, 1931. Serial No. 522,978. 3 Claims. (Cl. 219—38.)



1. A device of the character described including a housing, a water supply tank removably mounted therein, traction means for supporting said housing, a heating tank within the housing, a heater removably mounted within the housing and supported adjacent the heating tank, a baffle plate at one side of the supply tank having an inclined upper end portion, a receiving trough at the lower end of said plate, said housing having an opening adjacent the heating tank whereby the heat from the heater and the vapor from the heating tank will be guided through the opening by the inclined upper portion of the baffle plate, a switch for controlling the heater, and means actuated by the movement of the fluid in the supply tank for actuating said switch.

1,880,974. RIM CONSTRUCTION. EMIL A. NELSON, Detroit, Mich. Filed Oct. 29, 1928. Serial No. 315,848. 2 Claims. (Cl. 152—21.)



1. A vehicle wheel assembly comprising a rim base portion, a gutter formed about the outer periphery of said rim base portion adjacent to one edge thereof, a segment of the axially outer wall of the gutter being shaped into a radially outwardly and axially inwardly directed hook-like portion, a trans-split ring having a tire bead retaining flange and an approximately cylindrical ring base portion completely bridging the gutter and having a radially inwardly projecting portion engaging the outer wall of the gutter to prevent axially outward displacement of the ring but being so proportioned as to permit a considerable degree of movement in the axially inward direction, the marginal portions of the ring base portion being adapted to slide upon the rim base portion, the axially outer edge of the ends of the ring base portion being notched to engage the ends of the hook-like portion to prevent circumferential creeping of the ring, the ring base portion further having portions adapted to underlie the hook portion normally to prevent radial displacement of the ring while a tire upon the rim is inflated.

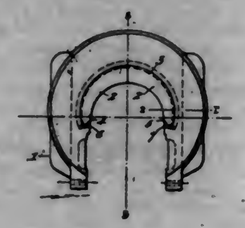
1,880,975. TREATMENT OF LATEX. ALEXANDER A. NIKITIN, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Apr. 16, 1929. Serial No. 355,676. 4 Claims. (Cl. 18—50.)

1. A method of controlling the creaming of latex which comprises treating latex with ammonium alginate, allowing the mixture to cream, removing the watery serum portion, and adding an anti-creaming agent to the creamed latex.

1,880,976. JOURNAL BEARING. WILLIAM J. O'NEILL, Denver, Colo., and WILLIAM E. IRVINE, Salt Lake City, Utah. Filed Apr. 3, 1930. Serial No. 441,240. 3 Claims. (Cl. 308—43.)

1. A journal box having, in combination, an arcuate bearing-receiving recess, and an arcuate bearing brass in said bearing-receiving recess, said bearing brass being

in full contact along its outer surface with said arcuate bearing-receiving recess, the circumferential length of the bearing brass being substantially less than the con-



tacting surface of the arcuate bearing-receiving recess to provide a space at each end of the bearing brass to permit expansion of the bearing brass, due to heat.

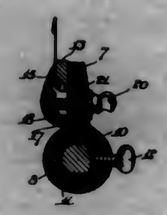
1,880,977. ANTIRICKETIC SUBSTANCES AND THE PRODUCTION THEREOF. AUGUST J. PACINI, Chicago, Ill., assignor to Sun-A-Sured, Inc., a Corporation of Delaware. Filed Feb. 4, 1928. Serial No. 252,050. 4 Claims. (Cl. 99—11.)

4. The method of producing vitamins which comprises refluxing an inert-solvent solution of cholesterol with uranium acetate as a catalyzer, subsequently filtering off the uranium acetate and allowing the inert solvent to evaporate.

1,880,978. MEANS FOR SYNTHESIZING AND TRANSMUTING ANTIRICKETIC SUBSTANCES AND THE LIKE. AUGUST J. PACINI, Chicago, Ill., assignor to Sun-A-Sured, Inc., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 255,193. 2 Claims. (Cl. 99—11.)

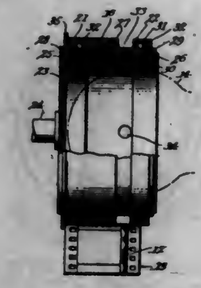
1. The method of producing anti-ricketic products comprising refluxing lipoidal material with an extractant in the presence of a photo-catalyst adapted to effect a conversion to vitamin D, at substantially the boiling temperature of the extractant and for a period of the order of one to three hours.

1,880,979. NEEDLE STRAIGHTENING CLAMP. ALBERT E. PARKER, Philadelphia, Pa. Filed Feb. 3, 1930. Serial No. 425,646. 2 Claims. (Cl. 153—32.)



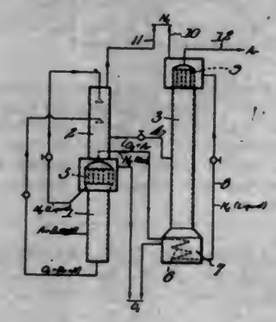
1. The method of straightening needles, which consists in providing a clamp adapted to grip and to hold a plurality of needles in a coplanar position, said clamp being adapted alternately to be held in a fixed position and to be rotated about an axis, at the will of the operator; and gripping a plurality of needles in a coplanar position in said clamp, fixating said clamp, inspecting and adjusting said needles while in said plane; rotating the clamp so as to change the plane of said needles, and inspecting and adjusting said needles while in the new plane.

1,880,980. SOUND REPRODUCING DEVICE. MILTON HARRISON PAGE, Cohoes, N. Y. Filed Nov. 19, 1929. Serial No. 408,394. Renewed Feb. 19, 1932. 10 Claims. (Cl. 179—100.3.)



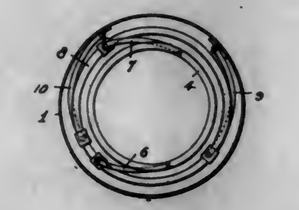
5. In combination with a sound reproducer of the class described, an optical system, a hollow member having an aperture in the wall thereof in alignment with said optical system, a light sensitive element associated with said hollow member, the periphery of said hollow member being externally threaded, a pair of collars threadedly connected to the end portions of said hollow member, a sleeve encircling said collars, the opposed surfaces of said sleeve and said collars having annular grooves therein, and ball bearings mounted in said grooves for permitting free movement of the sleeve relative to the hollow member.

1,880,981. SEPARATION OF OXYGEN, NITROGEN, AND ARGON FROM AIR. FRANZ POLLITZER, Grosshesselohe, near Munich, and STEPHAN STARK, Grunwald, near Munich, Germany. Filed July 3, 1930, Serial No. 465,772, and in Germany Feb. 8, 1930. 1 Claim. (Cl. 183—115.)



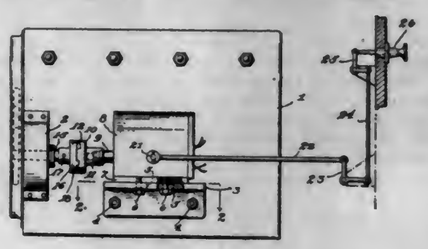
A process for the production of argon, oxygen and nitrogen by the low temperature rectification of air which comprises subjecting liquid air to two stages of rectification, operating the first stage to produce a fraction containing a high percentage of nitrogen, withdrawing only a portion of the oxygen-argon mixture in liquid form from the second rectification stage at a point where the oxygen content of the liquid is about 90 to 98%, introducing said oxygen-argon mixture into the middle portion of a further rectification column, and subjecting said oxygen-argon mixture to further rectification, the mixture being heated by the liquefaction of a portion of the gaseous nitrogen fraction from the first stage and being cooled by the evaporation of the nitrogen thus liquefied, high percentage oxygen being obtained at the bottom of said further rectification column.

1,880,982. MOUNTING FOR COMPASSES. ARTHUR L. RAWLINGS, London, England, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 12, 1930, Serial No. 451,539, and in Great Britain May 24, 1929. 5 Claims. (Cl. 248—30.)



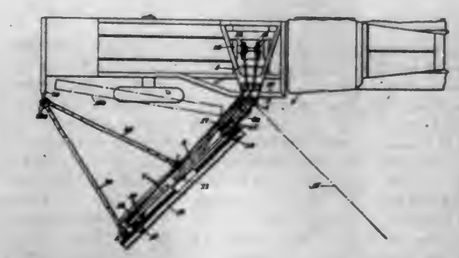
1. A support for gyroscopic compasses having a binnacle ring, including a binnacle, a resilient connection for supporting said binnacel ring from said binnacle, and means for connecting said ring to said binnacle which, while permitting freedom of translatory movement in any direction, prevents angular displacement of said ring with respect to said binnacle.

1,880,983. MAGNETO MOUNTING AND CONNECTION. CURT FREDERICK REIS, Chicago, Ill., assignor to Excel Magneto Company, Chicago, Ill. Filed July 2, 1930. Serial No. 465,430. 4 Claims. (Cl. 123—149.)



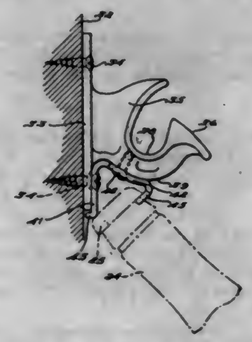
1. In an internal combustion engine, a movably mounted magneto, a coupling between the magneto shaft and the engine gearing, said coupling being constructed and arranged to cause said shaft to assume the same angular relation to the engine gearing when coupled thereto, and means for moving said magneto to coupling and uncoupling positions.

1,880,984. SNOW SCRAPING MACHINE. JOSEPH REMINGTON, Gaylord, Mich. Filed Feb. 13, 1931. Serial No. 515,446. 6 Claims. (Cl. 37—42.)



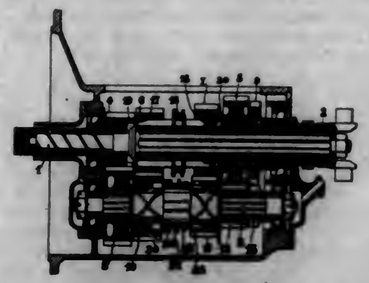
5. A snow scraper comprising a vehicle, a jib carried by the vehicle and positioned above the chassis thereof to project laterally therefrom, a scraper blade suspended from the jib, means adapted to raise the blade toward the jib and lower it therefrom, diagonally disposed brace members swivel-connected at one end to the blade and at the other end to the chassis rearward of the blade, and a stand-off fender hinge-connecting the central portion of the blade and the chassis in a manner to permit free movement of adjustment of the blade vertically and horizontally, and also to permit relative angular movement of rotation of the blade with respect to the stand off fender for the purposes set forth.

1,880,985. BOTTLE OPENER FOR REFRIGERATORS. JOHN B. SAUNDERS, Bloomfield Hills, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed May 4, 1931. Serial No. 534,877. 7 Claims. (Cl. 65—46.)



1. In combination with a member having a pair of fixed surfaces disposed in angular relation with respect to each other, a bottle opener including a pair of angularly disposed portions having surfaces complementary to the first mentioned surfaces and fixed thereto, whereby said opener is reinforced by said member.

1,880,986. CHANGE SPEED GEAR BOX. CHARLES SCHAEFFER, Paris, France, assignor to Societe Anonyme des Anciens Etablissements Panhard & Levassor, Paris, France. Filed Feb. 26, 1931, Serial No. 518,548, and in France Mar. 22, 1930. 2 Claims. (Cl. 74—59.)



1. Change speed gear box for four speeds, comprising two shafts in alignment, one a driving shaft, the other a driven shaft, a counter shaft parallel to the preceding shafts, a pinion secured on the driving shaft, a pinion secured on the counter-shaft and gearing with the preceding pinion, two pinions loosely mounted on the counter-shaft, a sleeve sliding on a key on the said counter-shaft between the two said loose pinions and having claws in order to be alternatively coupled with these two pinions, two other pinions keyed on the driven shaft, these pinions respectively gearing with the said loose pinions on the counter-shaft and having transverse slots, a sleeve sliding between the said keyed pinions and having side pins sliding through the slots of the said keyed pinions, another pinion secured on the counter-shaft, a pinion loosely mounted on the driven shaft, this latter loose pinion and the said pinion secured on the driving shaft being respectively arranged near the two pinions keyed on the driven shaft and adapted to be alternatively engaged by the respective ends of the pins of the sleeve sliding on the driven shaft.

1,880,987. LUBRICANT FOR BEARINGS OPERATING IN HEATED ATMOSPHERE. JOHN F. SILHAVY, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Aug. 5, 1929. Serial No. 383,789. 2 Claims. (Cl. 87—9.)

1. A lubricant for bake oven parts comprising a mixture of finely divided graphite and petroleum oil having a specific gravity of approximately forty-six degrees Baumé, an initial boiling point above three hundred twenty-five degrees Fahrenheit and an end boiling point below five hundred degrees Fahrenheit.

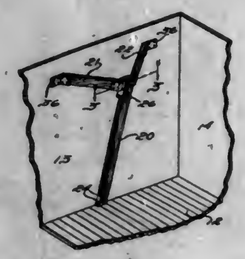
1,880,988. SCREEN FLYTRAP. CHRISTINA J. SMITH, Sonoma, Calif. Filed Mar. 17, 1932. Serial No. 599,570. 1 Claim. (Cl. 43—119.)



A screen trap of the class described including a rectangular frame having side portions with V-shaped notches therein, sheets of foraminous material stretched across the frame and fastened to the edges of the frame and extended into the notches to provide crotches across the sheets, strips for holding the sheets on the frame, triangular blocks extending into the notches to hold portions of the sheets therein, the crotch of the sheet being provided with openings, one of the sheets terminating a distance above the bottom of the frame, a rail to which the bottom of said last mentioned sheet may be secured, a tray slidable in the bottom of the frame under the rail, and detachable means for securing the tray to the rail.

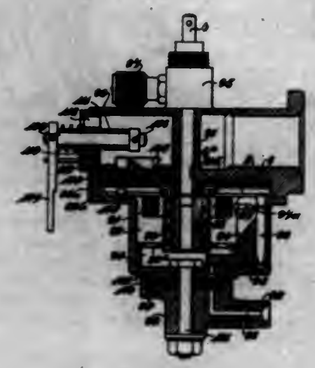
1,880,989. SHIPPING DECK. CLIFFORD L. SNYDER, Detroit, Mich., assignor to The Evans Auto Loading Company, Inc., a Corporation of Delaware. Filed Jan. 21, 1931. Serial No. 510,124. 20 Claims. (Cl. 105—368.)

1. In combination with a freight car, an upwardly extending supporting element maintained at its lower end against relative movement longitudinally of said freight car, a pair of brace members extending angularly with respect to the side walls of said freight car and secured at one end thereto, the opposite ends of said brace members extending into proximity to said supporting element, and connecting means between said brace members and



said supporting element permitting a limited amount of relatively free movement of said supporting element between said brace members.

1,880,990. CARBURETOR. FREDERICK HUGH SMITH, Nottingham, England. Filed Apr. 16, 1930, Serial No. 445,404, and in Canada Apr. 29, 1929. 18 Claims. (Cl. 261—91.)

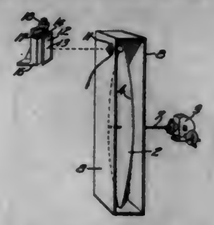


1. In a carburetor, a rotary disc incorporating perforated material, an air inlet through which air is drawn to penetrate the film on said disc, fuel mixture withdrawal apertures connecting with a mixing chamber, a displaceable throttle valve interiorly of said mixing chamber for controlling the amount of fuel withdrawn from said disc and means for feeding liquid fuel to said disc by capillary and by centrifugal action.

1,880,991. SCANNING SCREEN. HAROLD E. SOBO, San Carlos, Calif., assignor to Charles S. Evans, Oakland, Calif. Filed Aug. 24, 1931. Serial No. 558,953. 3 Claims. (Cl. 178—6.)

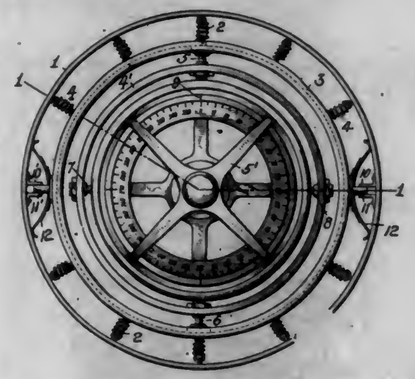
1. The method of making a Nipkow type of scanning disk, which comprises forming a circular transparent sheet, applying a light sensitive coating on the sheet, exposing a portion of the sensitized sheet to impress thereon the image of a spot, rotating the sheet thru a predetermined angle, moving the spot a predetermined distance, again exposing a portion of the sensitized sheet so that another

image of the spot is impressed thereon, repeating the steps of rotating the sheet, moving the spot and exposing portion of the sensitized sheet so that a spiral of the



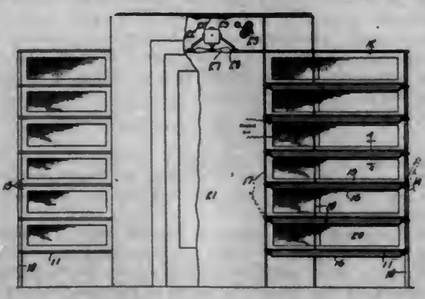
images is impressed on the sheet, and developing the sheet to render the coating opaque with the images appearing therein as transparent spots.

1,880,992. SUPPORT FOR GYROCOMPASSES. ERIC C. SPARLING, Garden City, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 9, 1929. Serial No. 405,887. 2 Claims. (Cl. 248—30.)



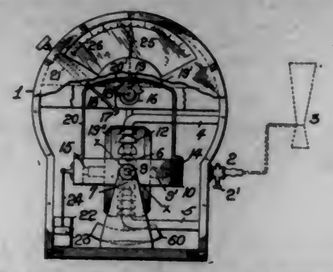
1. A supporting means for ship's gyro compasses and the like including an exterior support, radially extending springs for supporting the compass around the inner periphery of the support, and a vertical guide between said support and the compass for maintaining the compass in a fixed position with respect to the fore and aft center line of the ship.

1,880,993. STORAGE BROODER. GEORGE A. SPENCER, Tipton, Ind., assignor to The Oakes Manufacturing Co., Tipton, Ind., a Corporation of Indiana. Filed July 2, 1929. Serial No. 375,495. 1 Claim. (Cl. 119—34.)



A storage brooder comprising groups of superposed tiers divided into a plurality of sections, each section being provided with a flexible transverse partition dividing it into inner and outer compartments, a central chamber located between said groups of tiers, the sides and top of said chamber completely enclosing the sides and tops of said inner compartments and further forming a heating chamber above said groups of tiers, a wire cloth floor removably positioned in each section, a removable metal tray secured beneath said floor, a heating unit mounted in said heating chamber, and means for circulating and forcing the warmed air through said brooder, substantially as set forth.

1,880,994. INDICATOR FOR AIRCRAFT. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 11, 1918. Serial No. 257,776. 8 Claims. (Cl. 33—204.)



1. In a flying indicator adapted to be mounted on an aeroplane, a gyroscope, means for mounting the same on the aircraft for precession about an axis at an angle to the vertical, a pendulum yieldingly connected to said gyroscope to exert a force thereon upon turning of the aircraft, and an index for indicating the apparent movements of the gyroscope.

1,880,995. AIRPLANE PROPELLER. JOHN SQUIRES, Detroit, Mich. Filed Nov. 17, 1928. Serial No. 320,011. 9 Claims. (Cl. 170—159.)



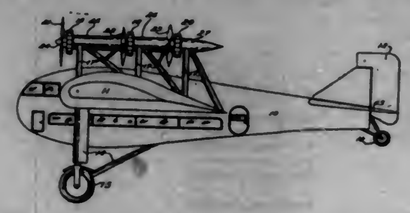
1. A propeller comprising a hub having blades radiating therefrom and bracing struts for said blades, said struts comprising tubular pieces, encased in a pitched sheathing to form working surfaces.

1,880,996. PROCESS FOR THE MANUFACTURE OF LEUCO THIOINDIGO ACYL DERIVATIVES. ROBERT STOCKER, Basel, and JAKOB MÜLLER, Munchenstein, near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 1, 1928, Serial No. 282,271, and in Switzerland June 8, 1927. 6 Claims. (Cl. 260—53.)

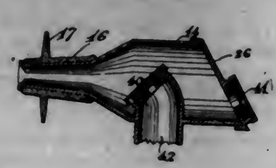
1. Process for the manufacture of leuco thioindigo acyl derivatives, consisting in treating leuco thioindigo derivatives of the benzene series with such aliphatic carboxylic acids which contain a mobile atom of halogen attached to a CH_2-group.

1,880,997. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich. Filed Mar. 28, 1930. Serial No. 439,591. 1 Claim. (Cl. 244—14.)

In an airplane engine nacelle structure three or more engines disposed in tandem, a propeller driven by each engine, the propellers being in alternating relation with the engines and each propeller being disposed in advance of its driving engine, the diameter of the rear propellers being such that the tips thereof will revolve in the slip stream of the preceding propellers and the pitch of the rearward propellers being greater than that of the forward propellers, the axial distance between any two propellers being at least equal to the diameter of the foremost of the pair.

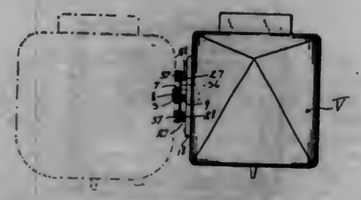


1,880,998. BREATHING APPARATUS. HAROLD V. STURTEVANT, Scranton, Pa. Filed Aug. 1, 1928. Serial No. 296,681. 1 Claim. (Cl. 128—147.)



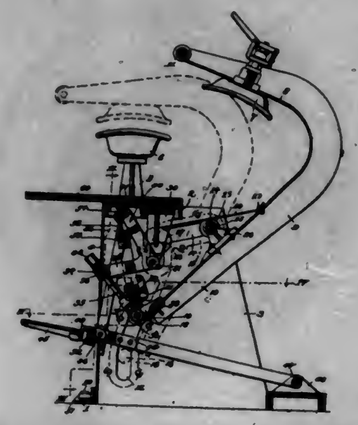
A mouth piece for breathing apparatus comprising, in combination, a cylindrical casing providing a horizontal chamber; a reduced tubular extension formed on one end of the casing above the bottom of the chamber for insertion in the mouth of the user; a removable closure having a flange engaging the casing at the opposite end; an exhaling outlet in said removable closure, the lowest level of which is below the lowest level of the reduced tubular extension; an outwardly opening disk valve on the outside of said outlet; a vertical tubular inhaling conduit extending through the bottom of the casing and terminating above the lowest level of the exhaling outlet whereby saliva and water of condensation may collect in the lower portion of the chamber and discharge by gravity through the exhaling outlet without overflowing into the inhaling conduit or the reduced tubular extension; and an upwardly opening disk valve at the upper end of the inhaling conduit.

1,880,999. SUBMARINE RESCUE APPARATUS. WALTER A. SUSSMAN, Brooklyn, N. Y. Filed Aug. 15, 1931. Serial No. 557,362. 13 Claims. (Cl. 114—16.4.)



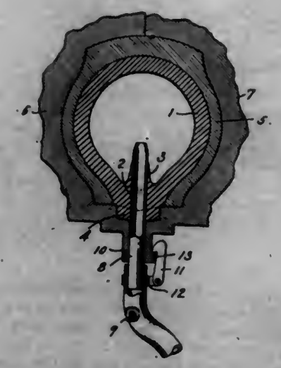
1. A submarine rescue apparatus comprising in combination with a submarine having an escape hatch, a rescue vessel, a conduit slidably carried by the vessel, a coupling member swivelly engaging the conduit, and means for rotating said coupling member whereby to attach said member to the hatch.

1,881,000. PRESS. HARRY GEORGE SUTTON, Syracuse, N. Y., assignor, by mesne assignments, to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 23, 1926. Serial No. 137,291. 12 Claims. (Cl. 68—9.)



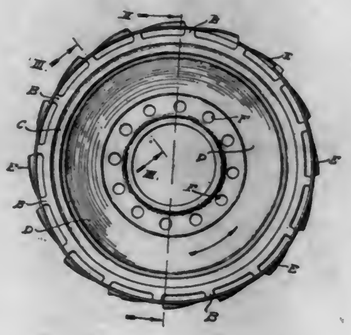
1. In a garment press the combination of a fixed pressing element; a movable pressing element adapted to cooperate therewith; a frame for supporting said fixed element; a supporting element for the movable pressing element mounted for movement with reference to the frame; positive guiding means independent of any press actuating means, interposed between said frame and the supporting element acting to constrain motion of the supporting element to a substantially right line separation of said movable pressing element from the fixed element and then a lateral swinging movement; spring means acting at all times to elevate said frame and to normally hold it in such position; and operator operated means for drawing said frame downwardly in opposition to said spring means.

1,881,001. VULCANIZING APPARATUS. RAYMOND F. TERNES, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 447,862. 6 Claims. (Cl. 18—2.)



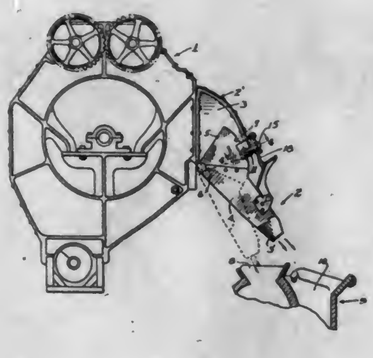
1. A vulcanizing device comprising a mold, a curing bag disposed therein, said bag and mold having alined unobstructed openings, and a member insertable into said openings from the exterior of the mold for supplying fluid under pressure to the interior of the bag.

1,881,002. BRAKE DRUM. STANLEY M. UDALE, Detroit, Mich., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 29, 1930. Serial No. 478,655. 3 Claims. (Cl. 188—264.)



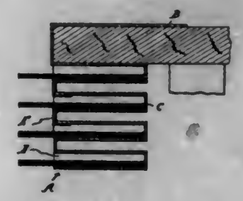
1. A two piece brake drum comprising a stamped steel shell having a web portion and a cylindrical portion integral therewith, a cast iron brake drum positively held at its outer edge only by the cylindrical portion and the inner edge being in contact with the web portion.

1,881,003. LATCH FOR COTTON FEEDER CHUTES. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed Feb. 10, 1931. Serial No. 514,887. 9 Claims. (Cl. 193—17.)



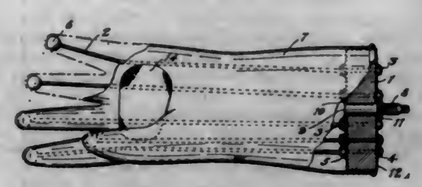
1. A cotton feeder having a hood extending horizontally from and over the discharge end thereof, a lug extending inwardly toward the feeder from each end of said hood, a chute pivoted to said hood at the intersection of said hood with the lower edge of the discharge aperture of said feeder and adapted to swing toward and from said hood, said chute having an arcuate end plate provided with notches in the edge thereof, and means slidably mounted on said hood adapted to engage any of said notches to hold the chute in adjusted position relative to the discharge end of said hood.

1,881,004. CARD RACK FOR BRIDGE TABLES. WILLIS C. WARD, Orchard Lake, Mich. Filed Dec. 17, 1928. Serial No. 326,613. 2 Claims. (Cl. 273—150.)



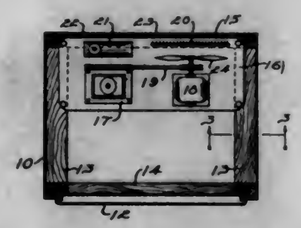
1. The combination with a card table, of a rack having means detachably engaging the edge portion of the table for suspending the rack therefrom, said rack being provided with a series of forwardly opening compartments for receiving cards.

1,881,005. PNEUMATIC FORM FOR GLOVE DIPPING. PARKE H. WATKINS, Leonia, N. J., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Oct. 11, 1927. Serial No. 225,463. 2 Claims. (Cl. 18—41.)



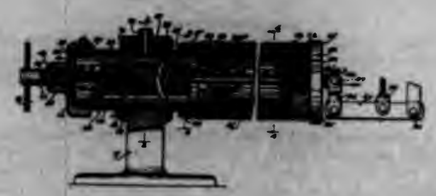
1. A form for repeatedly making dipped rubber articles comprising a flexible frame, an expansible covering for the frame and means for expanding the covering.

1,881,006. REFRIGERATING MECHANISM. FRANK R. WEST, Highland Park, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Dec. 4, 1929. Serial No. 411,402. 7 Claims. (Cl. 62—116.)



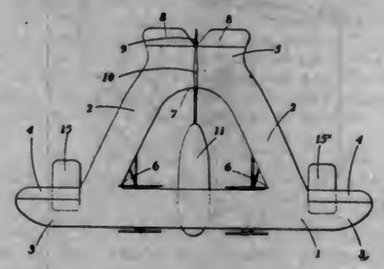
1. In a cabinet for a mechanical refrigerating mechanism, in combination, means for supporting said cabinet from a floor for the flow of air below the same, a compartment in the lower portion of said cabinet, one of the vertical walls of said cabinet having an opening therein for the passage of air therethrough and the remaining vertical walls of said cabinet being imperforate, the bottom of said compartment being open, a unit base supported within said compartment and forming a baffle for closing the portion of said open bottom adjacent the perforated vertical wall, a condenser supported by said base in proximity to said opening in said side walls, a motor supported on said base, and a fan, positioned to suck air through said bottom and force it out through said opening, in driving relation with respect to said motor.

1,881,007. AUTOMATIC REGULATOR. THOMAS M. WILKINS, Garland, Pa., assignor to Jenny D. Falconer, Jamestown, N. Y. Filed Apr. 8, 1930. Serial No. 442,712. 7 Claims. (Cl. 236—26.)



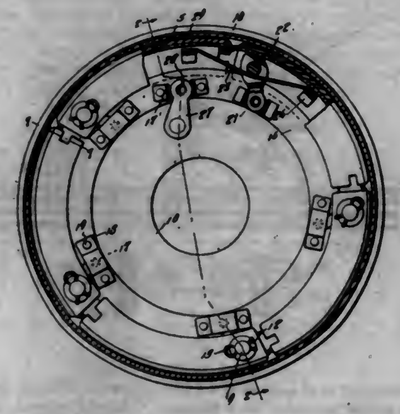
1. In a horizontal gravity pressure regulator for systems, a supported tube, a collar closing one end of said tube, a pressure connection entering said tube, a collar attached to the other end of said tube, a flexible element joined to said collar, and means connecting the remote ends of said tube and said flexible element, said means being adapted to variably control the flexibility of said flexible element.

1,881,008. FLYING MACHINE. PERCIVAL NESBIT WILLOUGHBY, Broadstone, Dorset, England. Filed Oct. 29, 1931, Serial No. 571,802, and in Great Britain Nov. 3, 1930. 14 Claims. (Cl. 244—12.)



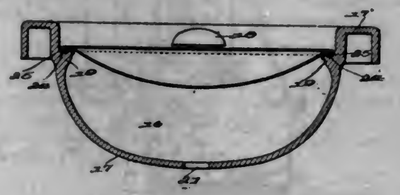
2. A flying machine comprising a body having an engine mounted therein, main and tail planes, rudders and elevators for supporting said body, ailerons hinged to said main planes, a control wheel in said body, means connecting said wheel with said ailerons in combination with fixed supporting surfaces of small aspect ratio connecting the main planes with the tail planes, so that the total fixed supporting surfaces approximate a triangle, supplementary means of aerodynamical lateral control comprising aerofoils of small aspect ratio, located at a distance from the longitudinal axis of the machine towards the wing tips and means connecting said aerofoils with the control wheel so that the control of the machine may be effected by ordinary ailerons alone, by ailerons and small aspect ratio aerofoils combined and by small aspect ratio aerofoils alone.

1,881,009. VEHICLE BRAKE. F. EARL WINCHESTER and EDGAR B. THOMAS, Connersville, Ind. Filed Oct. 9, 1930. Serial No. 487,580. 3 Claims. (Cl. 188—78.)



1. A brake including in combination a circular arrangement of brake shoes each of which is provided at one end with a tongue, and at its other end with a clip for receiving the tongue on the proximate end of an adjacent brake shoe, each of said shoes being also pivoted adjacent that end thereof provided with the tongue, a ring concentric to said circular series of brake shoes, cam means connecting the pivots of said brake shoes with said ring, and means for actuating said ring for moving said brake shoes radially into and out of braking position.

1,881,010. SANITARY BASIN. CHARLES H. WINDSOR, Palmyra, N. J. Filed Apr. 2, 1930. Serial No. 441,078. 17 Claims. (Cl. 229—1.5.)

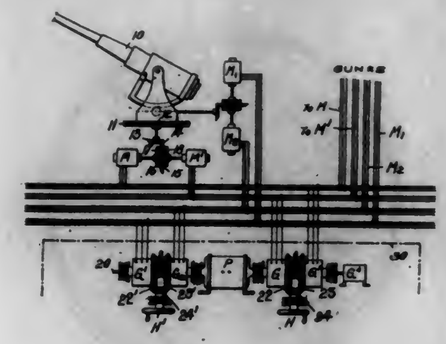


1. As an article of manufacture, a blank for a paper receptacle having a continuous pleat extending entirely thereacross, the ends of the pleat being adapted to be held folded and substantially its remainder being adapted to be opened to depress the blank inwardly of its margin, and means permanently fastening the ends of the pleat and extending around the blank sufficiently to provide a stiffened margin, thereby forming a marginal support for the blank.

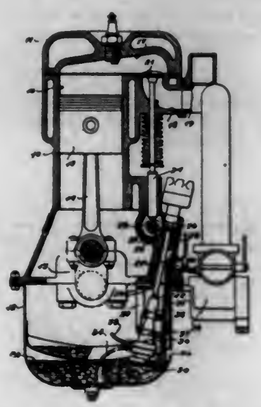
1,881,011. SYNCHRONOUS TRANSMISSION AND TORQUE-AMPLIFYING SYSTEM. BRUNO A. WITTKUHNS, Chatham, N. J., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,687. 9 Claims. (Cl. 172—239.)

1. In a synchronous electric transmission and torque-amplifying system, said system comprising a plurality of substantially equal A. C. generators and a plurality of synchronous motors operated by said generators, said gen-

erators having rotors and rotatable stators, means for operating said rotors at equal speeds, means for turning said stators relative to each other for varying the frequencies of said generators and the speeds of said motors, and means operated in response to the differential speeds of said motors.

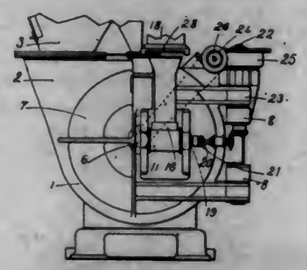


1,881,012. PUMP MECHANISM. SUMNER WILTSE, Detroit, Mich., assignor, by mesne assignments, to Evans Appliance Company, a Corporation of Michigan. Filed June 9, 1927. Serial No. 197,753. 5 Claims. (Cl. 103—6.)



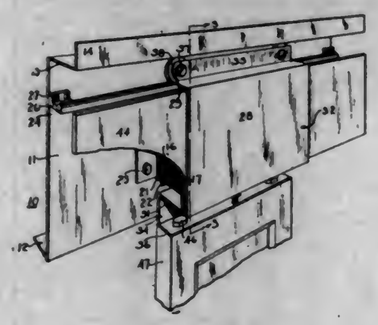
1. A fuel and oil pump having, in combination, an oil pump casing, said casing having a pump chamber extending to an end thereof, said casing having an oil inlet and an oil outlet communicating with the chamber, an oil pump rotor bearing in the casing, said oil pump rotor having a bore, and having an end in substantially the same plane as the corresponding end of said casing, a drive shaft in the bore non-rotatably connected to the oil pump rotor, a fuel pump casing so formed and attached to the oil pump casing as to close the mentioned chamber, the fuel pump casing having an inlet opening, a pump chamber extending to the corresponding end thereof, and an outlet opening, a fuel pump rotor terminating substantially in the plane of said corresponding end and bearing in the fuel pump casing, said fuel pump rotor having a bore, and a driven shaft non-rotatably connected at one end to the fuel pump rotor and extending at the other end into the oil pump chamber and non-rotatably connected to the drive shaft, and a substantially flat cover for the fuel pump chamber.

1,881,013. PULVERIZING APPARATUS. WILLIAM ARMSTRONG WOODESON, Gateshead-on-Tyne, England, assignor to Societe Anonyme: Fours & Apparells Stein, Paris, France, a Corporation of France. Filed Mar. 19, 1931, Serial No. 523,840, and in Great Britain Nov. 1, 1930. 1 Claim. (Cl. 83—11.)



A supplying device for coal pulverisers, comprising a hinged inspection door, a moving conveyor for introducing the fuel directly into the pulverizer through said hinged inspection door by which said conveyor is carried, and a gear for driving said conveyor, said gear including toothed wheels one whereof is coaxial with the hinge axis of the door.

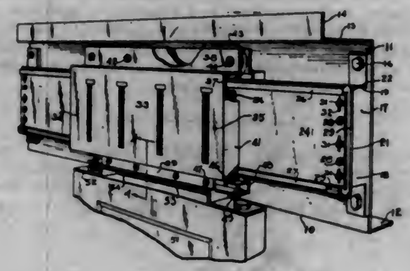
1,881,014. SUPPORTING AND OPERATING MEANS FOR DOORS. GERALD B. AYERS, Jamestown, N. Y., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed May 27 1931. Serial No. 540,367. 9 Claims. (Cl. 268—53.)



1. In an entrance enclosure structure having a door, a rectilinear motor for operating said door, the field structure of said motor being fastened to said enclosure a track, a pendant plate, and antifriction means interposed between said track and said pendant plate, said pendant plate constituting the armature or movable element of said motor.

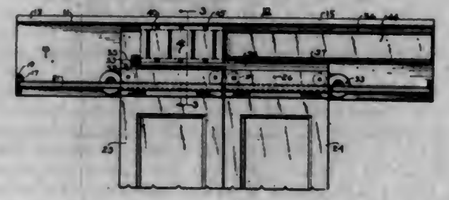
1,881,015. SUPPORTING AND OPERATING MEANS FOR DOORS. GERALD B. AYERS, Jamestown, N. Y., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed May 27, 1931. Serial No. 540,368. 12 Claims. (Cl. 268—53.)

3. In an entrance enclosure structure having a door, a self-contained door supporting and operating unit comprising a header, an electric motor for operating said door, a combined armature and track fastened to said header, a door supporting pendant plate, the field structure of said motor being secured to said pendant plate,



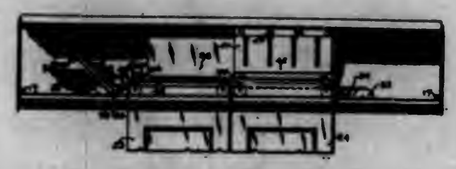
and anti-friction means mounting said pendant plate on said track whereby to properly locate said field structure with respect to said armature.

1,881,016. DOOR OPERATING MECHANISM. EDWIN L. ROSE, Cambridge, Mass., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed May 27, 1931. Serial No. 540,363. 8 Claims. (Cl. 268—49.)



1. In an entrance enclosure having track supported biparting doors, a rectilinear motor for operating said doors, said motor comprising a field structure and armature having electro-magnetic association, said armature being attached to one of said doors and said field structure to the other of said doors whereby, when said field structure is energized from a suitable source of current supply, said doors will move from one position to another.

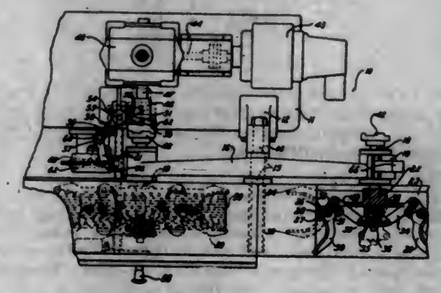
1,881,017. ENTRANCE INCLOSURE OPERATING AND CONTROL MEANS. LUDWIG G. JACOBSON, Jamestown, N. Y., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed May 27, 1931. Serial No. 540,366. 26 Claims. (Cl. 268—49.)



1. In an entrance inclosure, a self-contained door supporting and operating unit comprising a header having a track mounted thereon, a pendent plate mounted on and adapted to travel over said track, to which pendent plate a door is secured, a motor mounted on said header and operatively connected with and adapted to move said pendent plate along said track.

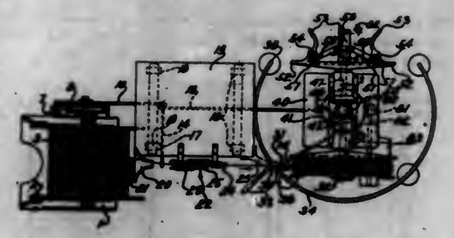
21. A factory assembled door supporting and operating unit, insertable into and adapted to form part of an entrance inclosure, comprising a header provided with the requisite track and door supporting pendant plates, an electric motor mounted on said header, said motor being operatively connected with said pendant plate for moving a door suspended from said pendant plate.

1,881,018. COILING APPARATUS. MALCOLM C. CARY, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,052. 2 Claims. (Cl. 242—80.)



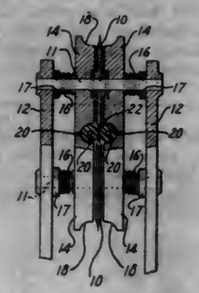
1. In a wire coiling apparatus, a centrally pivoted arm on one side of the apparatus, the arm being provided at each end with a rotatable coiling head and a recess, a spring pressed latch member for engaging in the recess to render the arm stationary, a driving shaft extending to the other side of the apparatus and having a clutch member secured thereto, a clutch portion on one of the coiling heads and adapted when the arm is stationary to be engaged with the clutch member of the driving shaft, means comprising a pair of bell crank levers for simultaneously disengaging the latch member and the clutch member and a shielding member enclosing the driven coiling head.

1,881,019. WINDING APPARATUS. ROBERT ERNEST MCFARLAND, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 10, 1929. Serial No. 369,736. 1 Claim. (Cl. 242—80.)



In a wire coiling apparatus, a rotatable support, a pair of aligned shafts rotatably mounted therein, means for rotating the support, a stationary guard member having an opening, a rotatable coiling head mounted on each of said shafts and comprising a plurality of radially extending arms, wire receiving members on the ends of said arms, part of said wire receiving members being movable to permit removal of a coil of wire therefrom, and means for stopping the rotation of said support to cause the coil to be removed to be positioned at the opening of said guard member.

1,881,020. MATERIAL SLITTING DEVICE. ROBERT E. MCFARLAND, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,839. 8 Claims. (Cl. 164—60.)



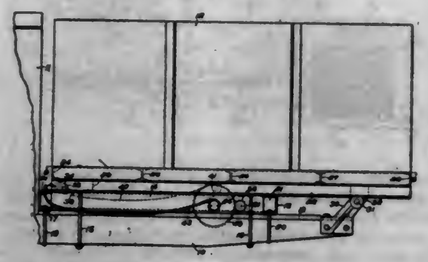
1. In a material slitting device, material slitting means, and a plurality of cooperating guide rollers co-axial therewith for yieldably engaging the material to center it with respect to the slitting means.

1,881,021. FORM FOR THE MANUFACTURE OF RUBBER ARTICLES. EARDLEY HAZELL, New York, N. Y., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1928. Serial No. 261,269. 3 Claims. (Cl. 18—41.)



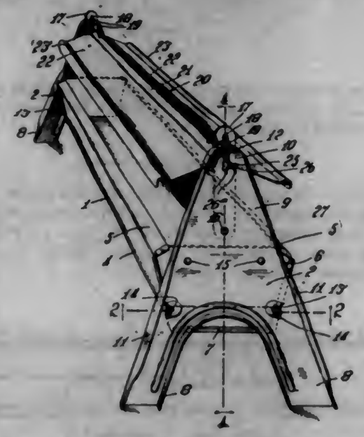
1. A device for use in the manufacture of rubber articles from a rubber dispersion which comprises in combination a support having apertures therethrough and provided with a knurled surface, said support having substantially the shape of the article to be formed, a layer of fabric over the knurled surface, a layer of filtering composition on the fabric capable of effecting the separation of the solid constituents of the dispersion, and means for reducing the fluid pressure on the side of the support distant from the filtering composition.

1,881,022. DUMPING LAND VEHICLE. CLARK F. HIGGINS, Melrose Highlands, Mass. Filed Oct. 23, 1929. Serial No. 401,907. 6 Claims. (Cl. 298—19.)



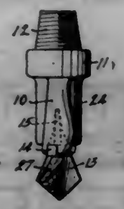
1. In a dumping vehicle, the combination of a load-receptacle, a frame to which said load-receptacle is pivoted to turn about a horizontal, transverse axis adjacent its rear end, said frame presenting a substantially horizontal, longitudinal track, a longitudinally disposed body-tilting arm pivotally connected at its rear end to said load-receptacle above said axis and having its front end supported and guided by said track in a plane above said axis, said arm having a downwardly directed, convexly curved surface below said axis, a longitudinally disposed, wrapping connector having its front end attached to said arm adjacent the front end of the latter and extending from its point of attachment along and in engagement with said surface, and means attached to the rear end of said connector to exert a rearward pull on the latter.

1,881,023. POULTRY FEEDER. ADOLPH R. HOEFT, Evanston, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill., a Corporation of Illinois. Filed Sept. 3, 1929. Serial No. 390,077. 5 Claims. (Cl. 119—61.)



2. A feeder of the kind described embodying therein a feed trough, a supporting member at each end thereof, links each having a connection at one end with an associated supporting member for a pivotal movement only so as to be capable of a swinging movement in the plane of said supporting members and each having a longitudinal slot in its other end and a tiltable cover member having end portions extending through the slots in said links and having a pivotal engagement in said supporting members, said end portions of the cover when the same is lifted upwardly in said slots, clearing the top ends of said supporting member so that said cover and links may be swung to one side or the other of said supporting members.

1,881,024. DRILL BIT. CHARLES EUGENE LANG, Corsicana, Tex., assignor of one-half to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Nov. 21, 1929. Serial No. 408,787. 7 Claims. (Cl. 255—61.)



1. In a drill bit, a head having greater width than thickness and provided with a transverse twist extending through its width, said twist being less than ninety degrees, a socket in the bottom of the head conforming to the twist of the head, a wedge-shaped seat extending up into the head from the top of the socket, a twisted blade having a transverse shoulder fitting in the socket, a flat wedge tongue extending from the shoulder of the blade and fitting in the seat, and a fastening passing through the head and the tongue of the blade.

1,881,025. CONTROL SYSTEM FOR MOTOR VEHICLES. HENRY E. LIPPERT, Pittsburgh, Pa. Filed Feb. 5, 1929. Serial No. 337,711. 1 Claim. (Cl. 192—85.)



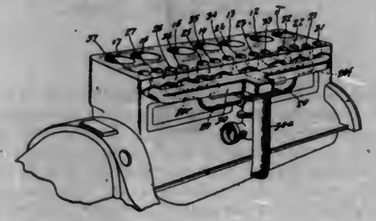
In a control system for motor driven vehicles, a pedal for disengaging the clutch of the vehicle by manual effort, a vacuum operated motor for disengaging the clutch by power, a source of suction, means connecting the vacuum operated motor with the source of suction including a conduit providing communication therebetween and also providing a valve interposed in the conduit, separate and apart from the vacuum operated motor, for controlling communication therebetween, said means having an atmosphere inlet therein intermediate the vacuum operated motor and the source of suction for admitting atmosphere to the vacuum operated motor, means arranged at the atmosphere inlet to vary the rate at which atmosphere is admitted to the vacuum operated motor and thereby vary the speed of engagement of the clutch, common manually operable means for actuating the valve and thereby control the vacuum operated motor and for actuating a second element of the vehicle in controlling the latter, means operatively connecting the common manually operable means with the valve whereby movement of the common manually operable means will directly actuate the valve, and means for rendering both the valve inoperative to place the vacuum operated motor in communication with the source of suction and the common manually operable means inoperative to control the vacuum operated motor whereby the common manually operable means can be used to actuate said second element of the vehicle only.

1,881,026. PNEUMATIC TIRE. JOHN E. LORENTZ, Akron, Ohio, assignor to India Tire & Rubber Company, Mogadore, Ohio, a Corporation of Ohio. Filed Feb. 20, 1929. Serial No. 341,348. 4 Claims. (Cl. 154—14.)



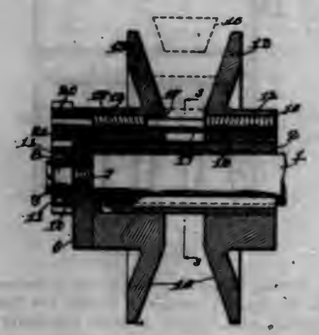
1. In constructing a pneumatic tire casing the step which comprises roughening the surface of a body of unvulcanized rubber composition, and compressing the body and a second body of unvulcanized rubber composition together with the roughened surface therebetween whereby the area of contact of the bodies is increased.

1,881,027. RECIPROCATING ENGINE. WILLIAM H. MANNING, Pontiac, Mich. Filed Aug. 2, 1929. Serial No. 382,968. 6 Claims. (Cl. 123—52.)



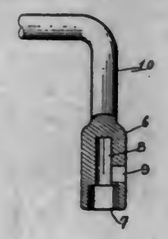
3. A four stroke cycle internal combustion engine having seven cylinders arranged in tandem and suitable inlet and outlet ports, a piston in each cylinder and suitable connecting rods, an engine shaft having seven throws angularly disposed from one end to the other in such order that if the shaft be rotated the throws will pass through a radial plane including the shaft axis in the order 1, 7, 3, 5, 2, 6, 4, or the reverse, according to the sense of rotation, reaching firing position in the order 1, 3, 2, 4, 7, 5, 6, or the reverse; rods connecting the several pistons with the several throws; an intake manifold having four delivery ports, three pairs of adjacent cylinders having their inlet ports twinned, and communicating each with a single delivery port of the manifold, and one cylinder having an individual inlet communicating solely with the remaining delivery port in the manifold; the arrangement providing that no two cylinders firing in succession draw mixture from the same delivery port of the manifold.

1,881,028. ADJUSTABLE PULLEY. GEORGE J. MEYER, Cudahy, Wis. Filed Aug. 25, 1930. Serial No. 477,736. 1 Claim. (Cl. 64—8.)



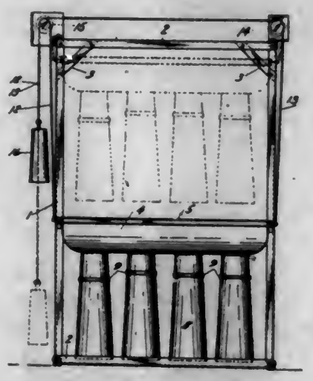
An adjustable pulley, comprising a sleeve provided with a flanged end, a pair of cooperating conical pulley flanges slidably mounted upon said sleeve, a shaft threaded into said flanges for relatively adjusting the same and having its end passing through the flange of said sleeve, a gear secured on the end of said shaft, a second gear secured to the face of said sleeve flange and meshing with the first mentioned gear for actuating the same, and means for resiliently latching the actuating gear against undesired movement.

1,881,029. SOCKET WRENCH. EDWARD M. PFAUSER, Milwaukee, Wis., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Filed May 29, 1930. Serial No. 456,966. 1 Claim. (Cl. 7—1.)



A tool comprising a shank having an enlargement at one end provided with a longitudinal bore having a reduced inner portion and a transverse opening communicating with the reduced portion of the bore intermediate the ends thereof and of a greater size than the diameter of said reduced portion and of a less size than the diameter of the other portion of the bore, the major portion of the shank extending at right angles to the enlargement forming a manipulating crank handle.

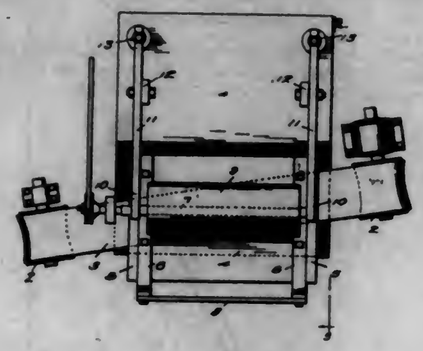
1,881,030. POTATO SACKER. DAVID E. RATH, Dubuque, Iowa. Filed Sept. 27, 1930. Serial No. 484,760. 7 Claims. (Cl. 226—58.)



1. In a potato sacker, a rigid frame, a hopper suspended therein for motion vertically within the frame, means for suspending said hopper to slide vertically in and be guided by said frame, said hopper having openings in the bottom thereof and having filling tubes of definite predetermined size secured in said openings to receive and sub-divide equally a definite quantity of potatoes put into the hopper.

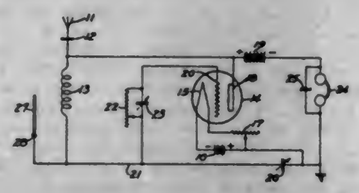
1,881,031. SANDING MACHINE. PHILLIP ROUNSEVELLE, Hazel Crest, Ill. Filed Oct. 22, 1930. Serial No. 490,490. 4 Claims. (Cl. 51—135.)

1. In a sanding machine, the combination with a bed of a sanding belt passing above said bed, a work-holder slidably mounted upon said bed above the sanding belt and adapted to slide cross-wise to said moving belt, an opening in said work-holder for loosely holding the work to be



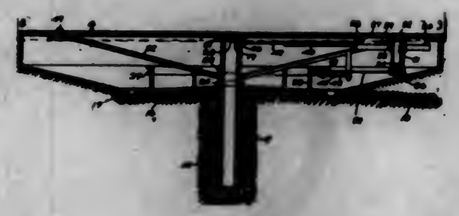
sanded and a rotatable drum mounted above said work-holder and in peripheral contact with the work to rotate the latter.

1,881,032. RADIO RECEIVING SYSTEM. HENRY D. STALEY, Oakland, Calif. Filed May 11, 1926. Serial No. 108,210. 6 Claims. (Cl. 250—27.)



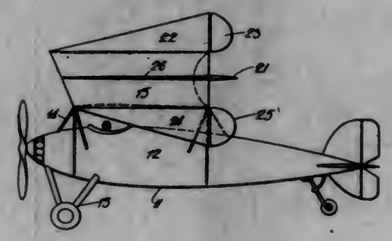
4. In a radio receiving system, an absorbing circuit including a coil and a condenser; an electronic emission device having an electron emitting electrode; a control electrode and an output electrode; the output electrode being directly connected to the first terminal of the coil; the electron emitting electrode being connected to the second terminal of the coil through the condenser, a connection between the control electrode and the second terminal of the coil consisting essentially of a condenser and a resistance in parallel; and a circuit including a source of electric energy and a translating device for connecting the output electrode to the electron emitting electrode.

1,881,033. VEHICLE TURNTABLE. GEORGE A. SMITH, Lynwood, Calif., assignor, by direct and mesne assignments, to George A. Smith Turntable Corporation, Ltd. Filed Mar. 5, 1930. Serial No. 433,397. 16 Claims. (Cl. 104—41.)



1. In a vehicle turning device, a turntable mounted for rotary movement about a vertical axis and adapted to support a vehicle, driving means journalled upon said turntable and arranged thereon in position to support a wheel of said vehicle, means associated with said driving means for turning said turntable when the driving means is rotated, and resilient means interposed into said turning means.

1,881,034. SAFETY DEVICE FOR AEROPLANES. PAUL SMITH and FRED H. MANN, Brooklyn, N. Y. Filed Apr. 2, 1930, Serial No. 441,020. Renewed June 10, 1932. 13 Claims. (Cl. 244—12.)



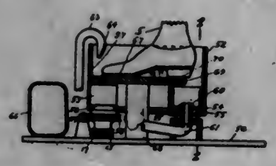
1. In air craft having a fuselage, a pair of safety appliances respectively disposed parallel to and on opposite sides of the longitudinal axis of said fuselage clear of the air stream of the propeller of the craft, each of said appliances including casing open throughout its chord and span, radially disposed stabilizer area within said casing and extending approximately the length thereof, and means for producing a pressure and flow with said combination area.

1,881,035. WELL REAMER. JAMES B. TRIPLETT, deceased, Whittier, Calif., by William H. Campbell, Los Angeles, Calif., and William H. Maxwell, Beverly Hills, Calif., co-executors, assignors to John Grant, Los Angeles, Calif. Filed Dec. 5, 1928. Serial No. 323,907. 14 Claims. (Cl. 255—75.)



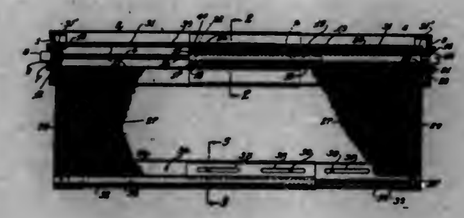
1. A well reamer including, a cutter unit, and means carrying the cutter unit for tilting movement to expanded position, the unit including a cutter carrying pin, a cutter on the pin, and relatively movable blocks carrying the ends of the pin, one of the blocks having a part engaging the pin at a point intermediate its ends.

1,881,036. SHOE SHINING MACHINE. JACOB T. UDEN, New York, N. Y. Filed Mar. 29, 1932. Serial No. 601,775. 2 Claims. (Cl. 15—30.)



1. In a shoe shining machine, the combination with an endless belt for polishing a shoe, vertical rollers supporting the lower edge of said belt, said rollers being provided with circumferential grooves, a flexible rib on the inside surface of said belt adapted to fit in said grooves, a support for said shoe above the upper ends of said rollers and inside of said belt, a polishing material attached to the inside surface of said belt above said rollers, and means to rotate said rollers thereby moving said belt.

1,881,037. WINDOW SCREEN. FRANK VUCHETICH, Detroit, Mich. Filed May 25, 1931. Serial No. 539,727. 8 Claims. (Cl. 156—39.)



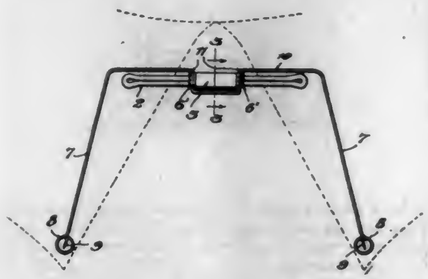
7. An expansible screen roller comprising a pair of tubes telescoped one within the other and adapted to have a screen rolled around the same, and internally threaded stem secured in one of said tubes, a screen rotatably mounted in the other of said tubes and having its inner end received in said stem, and means for preventing rotation of said tubes relative to each other.

1,881,038. METHOD OF PRODUCING A COMPOSITE BUTTON. JOHN N. WHITEHOUSE, New York, N. Y. Filed June 9, 1928. Serial No. 284,185. 1 Claim. (Cl. 18—59.)



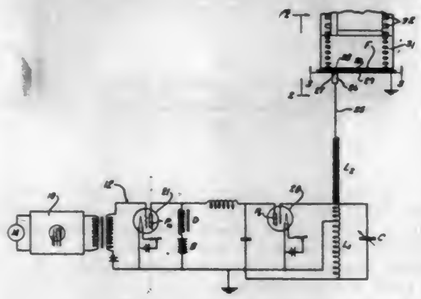
The method which consists in placing in a mold a charge of a phenol condensation product, said charge being brought to a temperature of from 200° to 275° F., applying a facing of celluloid to the charge, and substantially simultaneously subjecting the charge to a short period of compression to raise the temperature of the charge to the "curing" temperature and to cause the charge to adhere to the celluloid facing while maintaining the celluloid facing in contact with a support, thereby preventing the celluloid from reaching its decomposing temperature.

1,881,039. HOLDER FOR THE POINTS OF SOFT COLLARS. LAWRENCE E. BAER, Attleboro, Mass., assignor to Baer & Wilde Company, Attleboro, Mass. Filed Sept. 10, 1930. Serial No. 480,832. 11 Claims. (Cl. 24—87.)



10. In combination with a collar holder having front and rear spring bars and means to connect said bars whereby the same will grip and hold the ends of the collar therebetween at the upper portion of the collar, means carried by said connecting means and depending therefrom and formed to engage each of the collar points.

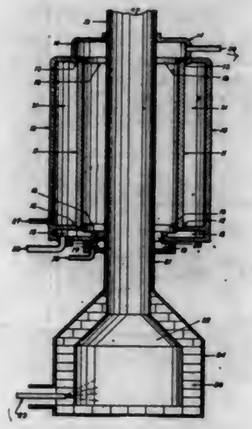
1,881,040. SOUND RECORDING SYSTEM. JAMES R. BALSLEY, Beverly Hills, Calif., assignor to Fox Film Corporation, Hollywood, Calif., a Corporation of New York. Filed Nov. 18, 1929. Serial No. 407,924. 2 Claims. (Cl. 179—100.3.)



1. In a sound recording system, the combination of an electrical vacuum tube oscillator having an oscillation circuit including an inductance and a capacitance, means for modulating the oscillating current in said circuit in accordance with an audio-frequency input current, a high-tension secondary circuit coupled to said oscillating circuit, a razor edge electrode energized by high tension current induced in said secondary circuit, an electrically conductive means forming a light slit before and parallel to said razor edge electrode, said light slit means being included in said high tension secondary circuit, and the spacing between the razor edge of the electrode and the light slit means being such that a corona discharge takes place therebetween and illuminates the light slit, and means for moving an actinic film before and transversely to said light slit.

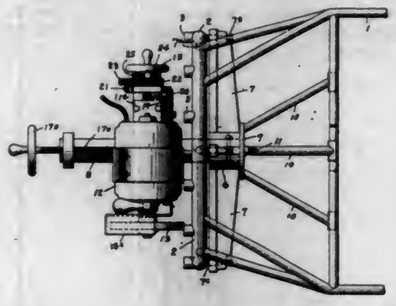
1,881,041. DEVICE FOR PRODUCING AND TREATING THIN LIQUID FILMS. VICTOR C. BENJAMIN, Los Angeles, Calif. Filed Mar. 30, 1929. Serial No. 351,317. 10 Claims. (Cl. 202—236.)

1. Apparatus for producing and treating flowing films of liquid, comprising: a sheet of substantially rigid material uniformly permeable to a liquid but offering substantial resistance to its passage therethrough; means for applying said liquid under pressure to one side of said sheet to cause said liquid to pass slowly therethrough, said sheet being fixed in a substantially vertical position so that said



liquid as it permeates said sheet will flow thereover in a film of substantially uniform thickness, means for continuously contacting a fluid with said flowing film and means for heating said fluid and said film during the contact.

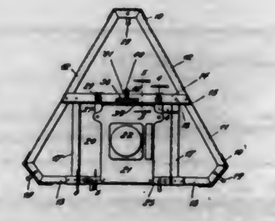
1,881,042. GRINDING TOOL. LEO M. BUTLER, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Sept. 19, 1929. Serial No. 393,616. 11 Claims. (Cl. 51—241.)



1. In a tool for performing a grinding operation of the type described, the combination of a frame, a platform swingably mounted with respect to said frame, a motor driven grinding wheel mounted for traversing movement on the platform, a screw for moving said grinding wheel with respect to the platform, a gear train interconnecting the screw with the frame whereby oscillatory movement of the platform will cause the grinding wheel to feed toward the work to be dealt with.

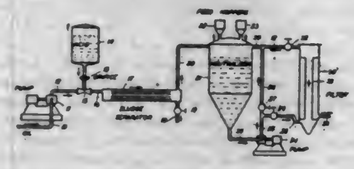
1,881,043. ENGINE FRAME. ABRAHAM G. BUWALDA, Pella, Iowa, assignor to Woodrow Washing Machine Company, Pella, Iowa, a Corporation of Iowa. Filed Apr. 13, 1931. Serial No. 529,880. 7 Claims. (Cl. 248—16.)

1. In a device of the class described, the combination of a supporting frame having one side formed with a recess, an engine base within said recess, casters supporting the outer end of said engine base, means carried by said frame for yieldably supporting the inner end of said en-



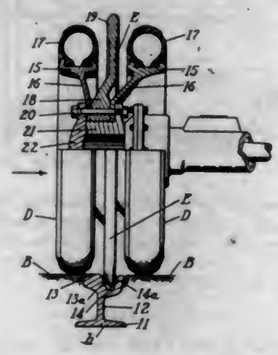
gine base against upward and downward movement, and means carried by the frame for yieldably applying downward pressure to the outer end of said engine base.

1,881,044. METHOD OF NEUTRALIZING ACID TREATED OILS. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 8, 1929. Serial No. 376,517. 8 Claims. (Cl. 196—147.)



1. The method of neutralizing an acidified oil which comprises: treating said oil simultaneously with dry powdered sodium carbonate and dry powdered diatomaceous earth; circulating said materials with said oil out of and into a body of said oil until reaction is complete, and separating said materials from said oil by mechanical means.

1,881,045. ROLLING STOCK. ALBERT J. CHAPIN, Los Angeles, and GEORGE W. SHAVER, San Diego, Calif, assignors to Albert J. Chapin and George W. Shaver. Filed Jan. 20, 1930. Serial No. 422,165. 10 Claims. (Cl. 295—34.)



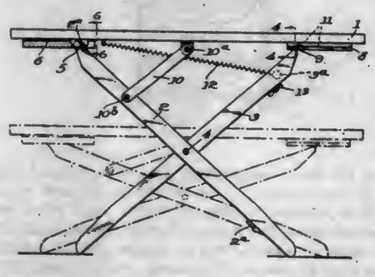
1. In means of the character disclosed, a load-supporting wheel, and separate means fixedly assembled with the hub thereof for directing motion of same.

1,881,046. MEANS FOR FRAMING PICTURES. PAUL DIETERLE, Binghamton, N. Y. Filed Oct. 27, 1931. Serial No. 571,421. 5 Claims. (Cl. 40—152.)



1. A framing device comprising a front member having an opening, a transparent covering member overlying said opening on the rear side of said front member, an element to be framed overlying said covering member, adhesive strips engaging said element, covering member and front member around their edges whereby all of said members are sealed together, said cover member being of less dimensions than the front members and said element being of less dimensions than said cover member whereby said tape engages directly all of said members.

1,881,047. FOLDING BOARD. JOHN P. DOMAN, Los Angeles, Calif. Filed July 17, 1931. Serial No. 551,449. 7 Claims. (Cl. 45—11.)



1. In combination, a board, pairs of legs medially pivoted to one another with board engaging ends of the respective pairs of legs adapted to swing and slide lengthwise of the board at the underside of its respective ends, and means for dependently and uniformly sliding the board engaging ends of the pairs of legs lengthwise of the board so as to fold the legs against the underside of the board medially of its length or unfold the pairs of legs to angularly cross position supporting the board medially of its length.

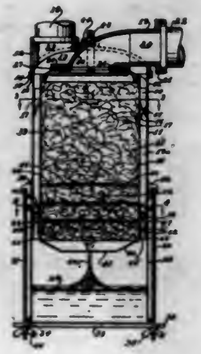
1,881,048. INFLATABLE HOLLOW RUBBER ARTICLE AND PROCESS FOR ITS PRODUCTION. ISTVÁN DOROGI and LAJOS DOROGI, Budapest, Hungary, assignors of one-half to Dr. Dorogi & Co. Rubber Goods Factory Ltd., Budapest-Albertfalva, Hungary. Filed Jan. 7, 1931, Serial No. 507,153, and in Hungary Oct. 20, 1930. 6 Claims. (Cl. 154—42.)



1. A method of producing a hollow and inflatable rubber article from a pair of outer sheets and a pair of intermediate rubber members, which consists in connecting

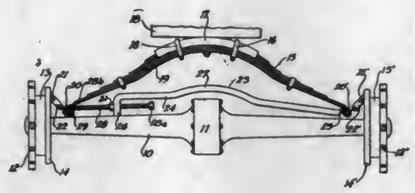
the edges of the outer sheets to each other and also connecting said intermediate members to the corresponding edge portions of the outer sheets, and also connecting a part of each intermediate member to the corresponding outer sheet, so that the internal space of the article is divided into a plurality of interconnected spaces.

1,881,049. AIR CLEANER. HERMAN H. GARNER and FRED R. NOHAVEC, Claremont, and GEORGE HAROLD HOPKINS, Pasadena, Calif., assignors to Vortox Manufacturing Company, Claremont, Calif., a Corporation of California. Filed Aug. 5, 1929. Serial No. 383,630. 9 Claims. (Cl. 183—10.)



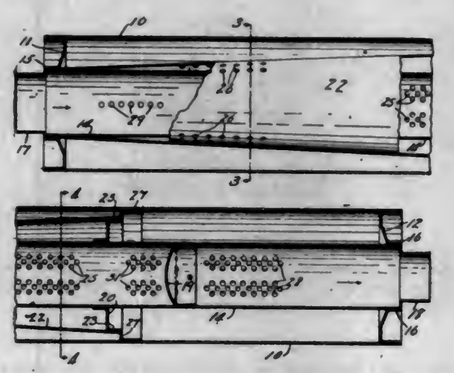
1. An air filter comprising: a casing; a filter unit connected to said casing; a cup connected to said casing and adapted to contain a body of liquid, said filter unit being spaced from the walls of said casing and forming an air passage therebetween; means for circulating air through said casing to draw said body of liquid into said filter; and baffles disposed in the lower end of the space between said casing and said filter unit and extending into said air passage, said baffles being adapted to cause the air to whirl in the space between the liquid and said filter unit, so that the dust particles are thrown outwardly against the wet walls of said cup.

1,881,050. SPRING SPREADING TOOL. IRA O. GRANT, Canton, Ohio, assignor of one-half to William R. Seese, Canton, Ohio. Filed Mar. 17, 1931. Serial No. 523,267. 3 Claims. (Cl. 29—87.1.)



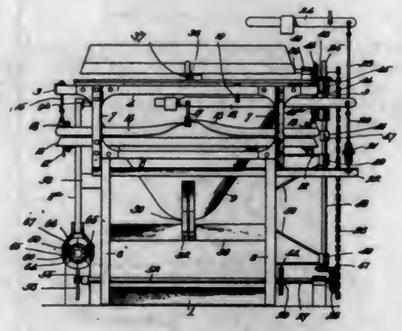
1. A spring spreading tool including a bar having one end adapted for engaging behind an eye of a transversely located automobile spring overlying an axle, a downwardly depending leg at the other end of the bar for resting upon the axle to space the bar above the axle, detachable means for slidably engirdling the other eye of the spring, and extension means mounted for longitudinal movement on the depending leg and adapted to engage said engirdling means.

1,881,051. MUFFLER. LUCIEN L. HAAS, Buffalo, N. Y., assignor to Buffalo Pressed Steel Co., Buffalo, N. Y. Filed Jan. 16, 1929. Serial No. 332,948. 12 Claims. (Cl. 137—160.)



1. In a muffler, the combination of an outer shell, a transverse partition dividing said shell into two compartments, said partition having passages therethrough through which gases may flow from one compartment to the other, an inner shell extending through said muffler and said partition, a transverse dividing wall in said inner shell and arranged out of alignment with said partition, the portion of said inner shell at one side of said dividing wall receiving gases and the other portion of said inner shell discharging gases from the muffler, said first mentioned portion of said inner shell being provided with apertures communicating with the compartments at both sides of said partition and said other portion of the inner shell being provided with apertures communicating with only one of said compartments, whereby the flow of incoming gases is distributed to both of said compartments.

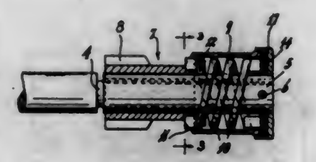
1,881,052. AGITATED WEIGHING HOPPER. WALTER L. HART, Milwaukee, Wis. Filed Apr. 6, 1929. Serial No. 353,180. 19 Claims. (Cl. 265—17.)



1. The combination with a supporting frame, of a weighing cradle carried by said frame, a hopper adapted to be supported by said cradle, and means carried by said frame for raising the hopper from the cradle and effecting the agitation thereof.

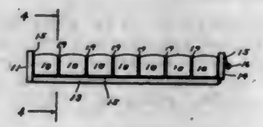
1,881,053. MOTOR STARTER DRIVE. GEORGE H. HOWARD, Alhambra, Calif. Filed Nov. 30, 1931. Serial No. 578,090. 7 Claims. (Cl. 74—7.)

1. In combination with an engine fly-wheel, a gear on the fly-wheel, a starting motor, an armature shaft on the motor of a starter drive comprising a housing slidably mounted on the armature shaft, a pinion on the housing, a pair of spirally wound springs in said housing, means removably securing said springs to the housing at one



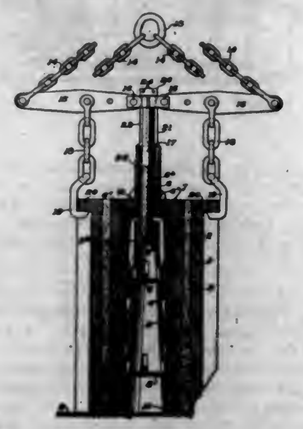
end thereof, pins rising from the shaft, said pins being adapted to extend between the springs, which springs form a spiral track-way, and a plate secured to the other end of said springs.

1,881,054. BREAD MOLDING DEVICE. AARON GOLDSCHLAGER and ISIDORE RAZE, Brooklyn, N. Y. Filed Apr. 1, 1932. Serial No. 602,438. 2 Claims. (Cl. 107—19.)



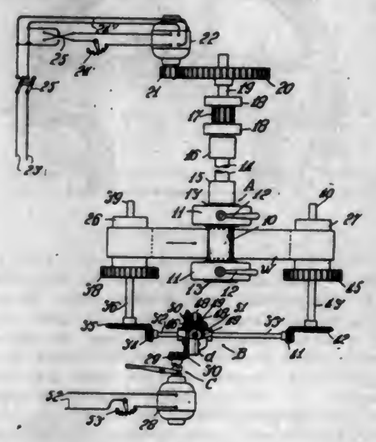
1. A bread mold comprising; a bottom plate; an end plate rigidly secured to the bottom plate; side plates hinged to the bottom plate; another end plate which is hinged to the bottom plate; and a fabric strip, of a length greater than that of the mold and a width substantially the same as the width of the mold, secured to the rigid end plate and adapted to be folded between the individual pieces of dough to be molded.

1,881,055. MOLDING APPARATUS. FRANK J. LEUTHNER, Sharpsville, Pa. Original application filed Aug. 2, 1929, Serial No. 382,941, and in Canada June 2, 1930. Divided and this application filed Sept. 16, 1930. Serial No. 482,170. 2 Claims. (Cl. 22—93.)



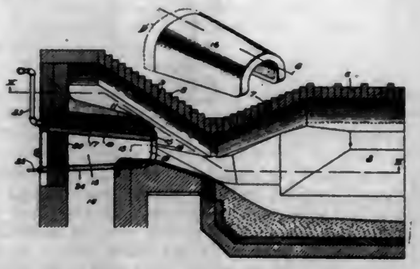
1. An extractor comprising a centering device for centering the extractor with respect to a core, means for exerting downward pressure on the core associated with and vertically movable with respect to said centering device, means operatively connected with said first mentioned means for exerting upward pressure on a flask surrounding the core, and operating mechanism connected with said second mentioned means for simultaneously operating said first mentioned means to exert downward pressure on the core and said second mentioned means to exert upward pressure on the flask, the bottom of said centering device, when in operative position, lying substantially in the plane of the top of the flask.

1,881,056. TENSION DEVICE. WILLIAM C. MCBAIN, Youngstown, Ohio. Filed July 5, 1928. Serial No. 290,534. 25 Claims. (Cl. 80—32.)



14. The combination of work-holding means, work-manipulating means and additional work-holding means arranged in tandem to handle and work upon elongated pieces of work, means for actuating both work-holding means to move the piece at one time in one direction and at another time in the opposite direction, in the first case said first mentioned work-holding means pulling on the piece and said additional work-holding means holding back on the piece and in the second case the former holding back and the latter pulling, and differential gearing between said work holding means operative to transmit energy between them from the one at the time holding back to the one pulling.

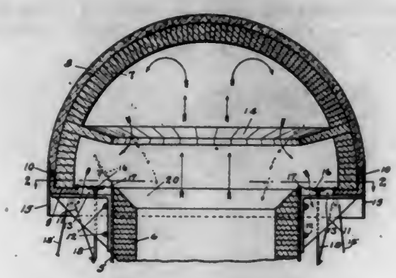
1,881,057. PORT COOLER. EDWARD J. MCDONNELL, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 23, 1931. Serial No. 546,212. 17 Claims. (Cl. 263—44.)



1. A furnace port cooler comprising hollow sides connected by a hollow top portion, the hollow sides and top

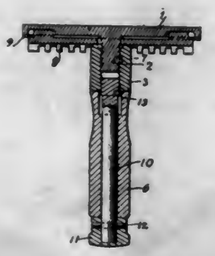
providing a continuous water space, and adapted to extend from a point above the uptake of the furnace to a port thereof, the sides tapering toward one another as the port end is approached.

1,881,058. SMOKE CLEANING DEVICE. JOSEPH MITCHELL, Seattle, Wash. Filed Oct. 1, 1930. Serial No. 485,665. 7 Claims. (Cl. 183—93.)



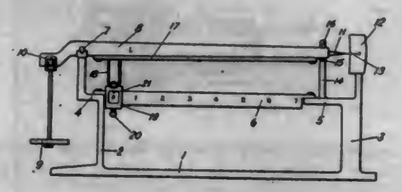
1. In a smoke cleaning device of the class described, for use in connection with a smoke stack, an inverted bowl shaped dome supported above said smoke stack and having a bottom diameter greater than the diameter of the smoke stack to afford an opening around the top of the smoke stack through which the smoke may discharge downwardly, an annular guard member extending inwardly and downwardly from the walls of said dome at a distance above said smoke discharge opening and forming a shelf above said smoke discharge opening, the inner edge of said guard member being substantially flush with the outer edge of the top of said smoke stack whereby solid matter will be deflected toward the top end of said smoke stack and screens mounted for dumping movement and covering said smoke discharge opening.

1,881,059. SAFETY RAZOR. WILFRED I. OHMER, Dayton, Ohio. Filed Jan. 26, 1931. Serial No. 511,185. 4 Claims. (Cl. 30—12.)



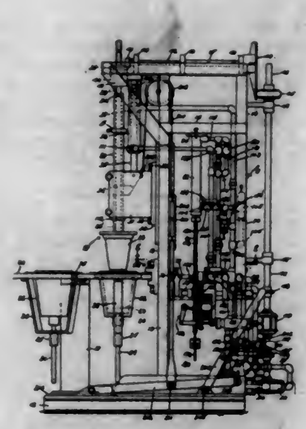
1. In a razor, the combination with a head, a threaded stud integral therewith, a threaded collar adapted to be screwed on said stud, a clamping plate adapted to be urged to clamping position by the collar, a shank on the collar, a handle pivoted on the shank, and a fastening device comprising a pin having a threaded end extending through the handle and adapted to be threaded into and out of the collar, to fasten and unfasten the handle.

1,881,060. WEIGHING SCALE STRUCTURE. PERRY OKEY, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed June 29, 1928. Serial No. 289,161. 12 Claims. (Cl. 265—60.)



1. In a weighing scale, a beam, an iron bar attached longitudinally to the beam, and a permanent magnet slidably mounted in adjacent relation to said iron bar to develop varying off-center forces on said beam.

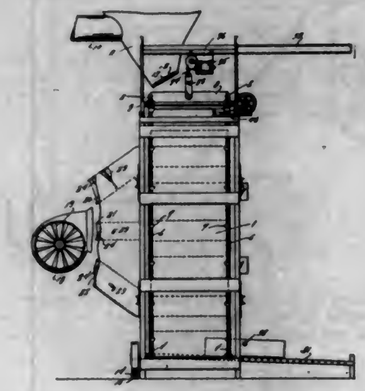
1,881,061. HYDRAULIC CLAY MOLDING MACHINE. FRANK Y. PEARNE, Alhambra, and WILLIAM MCCLINTOCK, Los Angeles, Calif., assignors of one-third to Frank R. Galbreath, Los Angeles, Calif. Filed Feb. 6, 1931. Serial No. 513,879. 33 Claims. (Cl. 25—27.)



1. An automatic molding machine embodying: a rotary table; a plurality of molds in said table; a core member mounted above said table for intermittent movement into said molds; hydraulic means for reciprocating said core member; and hydraulic means for intermittently rotating said table.

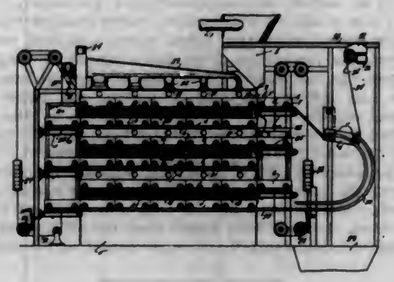
1,881,062. DESCENDING TRAY DRIER. OLIVER W. RANDOLPH, Toledo, Ohio. Filed Feb. 18, 1929. Serial No. 341,000. 6 Claims. (Cl. 34—11.)

1. Apparatus for treating material comprising a column, trays spaced apart in said column, a plurality of draft entrance ways along said column between successive independent pairs of trays, each intermediate draft entrance way having upward and downward draft communication therefrom through two trays in said column, draft discharge ways from the column from between pairs of trays and alternating with said draft entrance ways, and tray actuating means for shifting the trays along the column relatively to said draft ways, said column and ways coacting for draft control flow transversely into the column



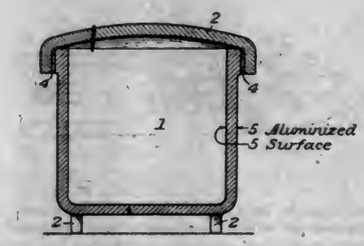
at one side of a tray and out of the column at the other side of such tray, and reversing said control at a succeeding position of said tray.

1,881,063. MULTIPLE TRAY DRIER. OLIVER W. RANDOLPH, Toledo, Ohio. Filed Feb. 18, 1929. Serial No. 341,001. 3 Claims. (Cl. 34—12.)



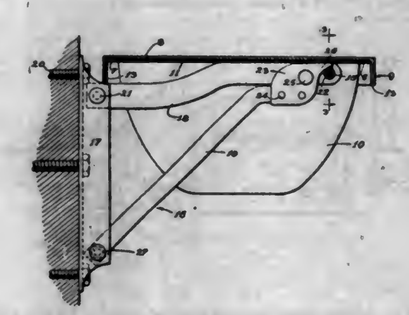
1. Apparatus for subjecting material to contact with a gas, said apparatus comprising a housing forming a chamber provided with transverse ways, trays for the ways, draft control and directing means having communication into the housing about the trays and above alternate transverse ways, tray shifting transfer means exterior of and at opposite ends of the housing and away from the draft control and directing means, partitions between the housing and transfer means, and valve means in the partition at the respective ways independently of the draft control and directing means, said valve means coacting with the trays to confine a draft in the chamber away from the transfer means, said ways providing a back and forth descending course for the trays during the exposure to a gas of material on the trays and away from the tray shifting transfer means.

1,881,064. CARBURIZING BOX. BERTRAM J. SAYLES and HARRY SCHULTZ, Pittsburgh, Pa., assignors to The Calorizing Company, Wilkinsburg, Pa., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,748. 7 Claims. (Cl. 263—49.)



1. A carburizing box having an aluminum alloyed interior surface resistant to carburization at high temperatures.

1,881,065. FEED MANGER. ROSWELL R. SHIRLEY, Rockford, Ill. Filed May 19, 1928. Serial No. 278,943. 16 Claims. (Cl. 119—61.)

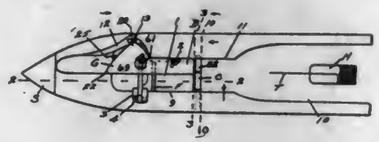


1. A feed manger or the like comprising a bucket, the same having pivot studs on opposite sides thereof, supporting brackets therefor arranged to be disposed on opposite sides of said bucket and mounted on a wall, said brackets having recesses therein to receive said studs for pivotally supporting said bucket, and a part on at least one of said brackets movable from one position in which the studs may be entered in or removed from said recesses to a position in which the studs are held in place in said recesses.

1,881,066. LATERAL TAKE UP DEVICE FOR SHUTTLES. ISAAC SNOW, Lawrence, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 5, 1931. Serial No. 513,636. 4 Claims. (Cl. 139—215.)

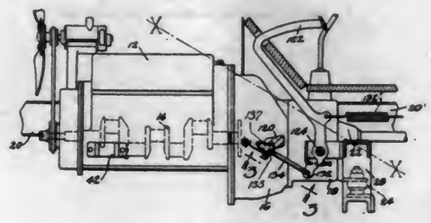
1. The combination in a shuttle for automatic looms having a bobbin chamber from which a threading chamber extends forward and an eye slot which extends diagonally back from the threading chamber to an eye in the side of the shuttle; of a thread directing guide plate which extends from the top of the shuttle on the eye side over and down into the threading chamber and which terminates at the front in a nose from which a horn slopes down and

back, said horn having behind its bottom end a lateral eye passage; a thread guide pin proximate said thread passage behind the horn on the side away from the shuttle eye; a lateral guide fin the top edge of which slopes from near the top of the shuttle down towards the eye side and has at the bottom a fin thread passage; and a take up member pivoted to the shuttle between the lateral



eye passage and the fin thread passage on that side of the threading chamber which is opposite the eye, said take up member including an arm of such size and in such position that its free end which curves upward can swing down laterally of the shuttle proximate a line passage through the top of the lateral eye passage and the top of the fin thread passage and spring means to keep the arm normally raised.

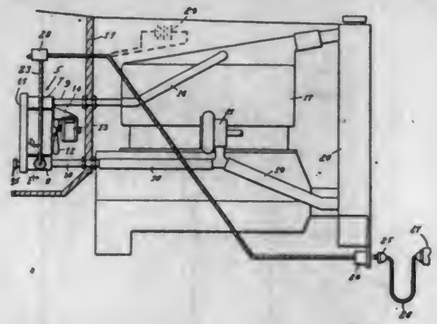
1,881,067. CONTROL MOUNTING. CALEB E. SUMMERS, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Oct. 22, 1928, Serial No. 314,203. Divided and this application filed Dec. 26, 1931. Serial No. 583,231. 7 Claims. (Cl. 180—64.)



1. The combination of a frame, a unitary power plant comprising a drive shaft and a control device, said power plant being of the type that is subject to oscillation about an axis extending at an angle to the drive shaft under the action of forces inherent in its operation, means for mounting the power plant on the frame arranged to permit the power plant to have oscillatory movement about said axis in response to said forces, driver operated means for operating the control device mounted on said frame, said last named means being arranged to permit substantially free oscillation of the control device about the axis of oscillation of the power plant.

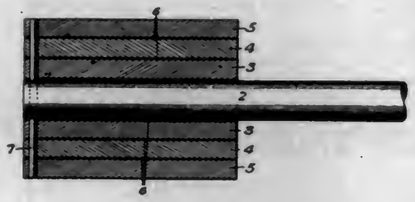
1,881,068. AUTOMOTIVE HEATING SYSTEM. ALBERT H. BATES, Rockford, Ill., assignor to Burd High Compression Ring Company, Rockford, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,343. 4 Claims. (Cl. 123—174.)

1. In an automotive heating system, the combination with an engine in an engine compartment having a liquid circulating cooling system, and a heater in a passenger compartment arranged to have water or other liquid circulated therethrough for heating purposes, said heater having connection with the liquid circulating system of the engine whereby liquid from the cooling system is normally circulated through the heater from the engine when the same is running for heating the passenger compartment, of an independent means for heating the liquid in the heater while the engine is idle primarily for the purpose of heating the passenger compartment by means of the heater



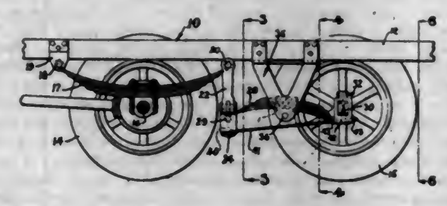
but incidentally to heat the engine by a circulation of the heated liquid in the opposite direction from its normal flow from the heater to the engine cooling system.

1,881,069. MANUFACTURE OF TUBES. FREDERICK R. BONTE, Beaver Falls, Pa. Filed July 20, 1929. Serial No. 379,720. 7 Claims. (Cl. 80—62.)



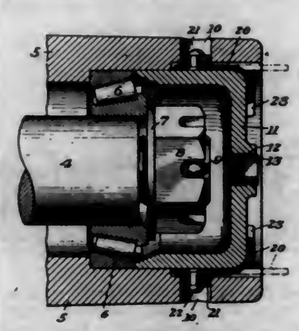
5. The method of manufacturing a plurality of seamless tubes of different diameters, which comprises nesting a plurality of concentric billets about a central core, introducing a lubricating loose flaky nonmetallic material between the concentric billets and between the innermost billet and and the core for preventing the billets from welding together and preventing the innermost billet from welding to the core, securing the billets and the core together against relative longitudinal movement at one end of the assembly by a connector passing therethrough, heating the assembly, and then rolling the assembly and thereby reducing the billets to form a plurality of concentric tubes, the core being longer than the billets and being elongated to substantially the same extent as the billets.

1,881,070. VEHICLE. CLINTON L. FALK, Los Angeles, Calif. Filed Dec. 3, 1929. Serial No. 411,285. 15 Claims. (Cl. 280—104.)



1. In a vehicle, a frame, a pair of wheels, means to mount said wheels on said frame, an equalizing cross member resiliently associated with said frame, a pair of auxiliary wheels, said wheels being mounted on an axle, an auxiliary spring, means to support said auxiliary spring intermediate its length, said auxiliary axle including a seat portion, one end of said auxiliary spring engaging said cross member and the opposite end of said auxiliary spring engaging said seat portion and means to prevent bodily rearward movement of said auxiliary axle.

1,881,071. HUB CLOSURE FOR MINE CAR WHEELS. BENJAMIN F. FAUNCE, Johnstown, Pa., assignor to The Brown-Fayro Company, Johnstown, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,539. 6 Claims. (Cl. 295—43.)



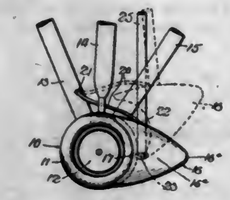
1. In combination with a journal assembly comprising a shaft, a bearing member and a closure member, a securing device locked in a recess by the closure member so that it cannot be removed therefrom, said device having a deformable portion of metal capable of bending without failure of the metal for engaging the closure member to hold the same in operative position.

1,881,072. READING MACHINE. BRADLEY A. FISKE, New York, N. Y. Filed July 24, 1930. Serial No. 470,384. 11 Claims. (Cl. 88—39.)



1. In a reading machine, the combination with a main support and means thereon for carrying the printed matter in the form of a card or strip, of a lens support and lens, connections between the lens support and main support permitting the movement of the lens support from a reading position parallel to the main support and spaced therefrom to a folded position adjacent the main support and resilient means for holding the lens in both its reading position and its folded position.

1,881,073. FAIRING DEVICE. IRA M. FREEMAN, Chicago, Ill. Filed June 22, 1931. Serial No. 545,927. 4 Claims. (Cl. 244—2.)

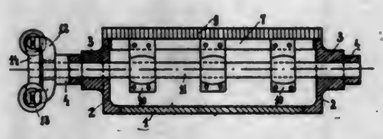


2. The combination with an aircraft landing wheel having a rim, of a fairing body substantially closely fitting upon the posterior portion of the rim from near the top to near the bottom thereof, extending rearward therefrom, and tapering rearward with stream-line characteristics, a pivoted member extending to a place a substantially great distance from the axis of the wheel for holding said body in operative position, and means under the control of the operator for swinging said body out of said position on said pivoted member.

1,881,074. 4-AMINO-2-HALO-DIPHENYLETHERS AND PROCESS OF PREPARING SAME. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 13, 1931. Serial No. 515,645. 10 Claims. (Cl. 260—130.5.)

7. A process of making a 4-amino-2-halo-diphenylether which comprises reacting 1.2-dihalo-4-nitrobenzene with an alkali-metal phenate to form 2-halo-4-nitro-diphenylether and reducing the latter to the corresponding amino compound.

1,881,075. PRINTING CYLINDER FOR INTAGLIO PRINTING MACHINES. ARMANDO GUTMANN, Turin, Italy. Filed Apr. 11, 1931. Serial No. 529,477. 4 Claims. (Cl. 101—415.1.)

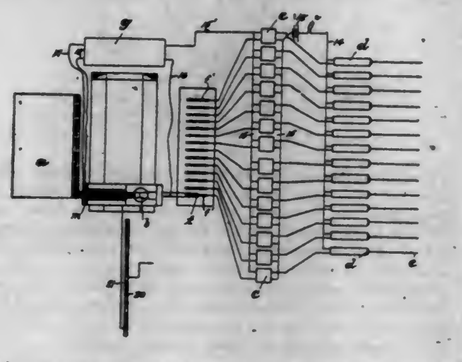


1. A means for attaching and tensioning a design plate to the printing cylinder of a printing machine, comprising a movable comb, and inner shaft and means for operating said shaft for the purpose of displacing said movable comb, of hub members at the opposite ends of the cylinder forming supporting journals therefor and supporting said inner shaft, two longitudinal diametrically opposed gaps in the peripheral surface of the cylinder, one gap serving to facilitate the mounting of the inner parts, a fixed comb in the second gap arranged to guide and adjust said movable comb, suitable brackets on the inner shaft for supporting said movable comb, a double link on said shaft, and two screw spindles adapted to act on said double link for rotating the inner shaft and thereby displacing the movable comb, substantially as and for the purpose set forth.

1,881,076. SHEDDING MECHANISM FOR JACQUARD LOOMS. GERHARD HAEBLER, Breslau, Germany, assignor of one-half to Theodore Haebler, New York, N. Y. Filed Sept. 9, 1929, Serial No. 391,361, and in Germany Sept. 13, 1928. 4 Claims. (Cl. 139—317.)

1. In a jacquard operating device, a series of jacquard cords, a separate electric magnet for operating each cord,

a relay connected to each electromagnet and having an electric contact, a contact member, means for placing the said contact member in electric engagement with all the contacts of the relays one after another in regular order between each pick of the loom, an electric circuit connecting all the electromagnets and relays with the



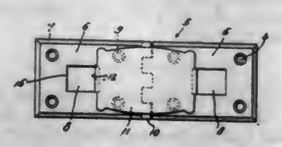
said contact member, and means for varying the current in the said circuit according to a predetermined pattern as each relay is placed in regular order in electric engagement with the said contact member, the electro-magnets being thereby energized more or less, and in regular order, and the cords being operated according to the pattern.

1,881,077. ELECTROMAGNET. NORMAN HALL, Lyndhurst Grove, Low Fell, England. Filed Oct. 16, 1931, Serial No. 569,313, and in Great Britain Oct. 17, 1930. 7 Claims. (Cl. 175—21.)



1. A "horse shoe" electro-magnet and a single outer covering on said magnet adapted to cover the magnet coils on each tine of the "horse shoe", the said covering comprising a sheath of material which may be made to expand or contract at will, so that by placing over the magnet such a sheath while in its expanded condition and then subsequently causing it to contract, the sheath will conform closely to the shape of the magnet, holding the parts tightly together.

1,881,078. HINGE. CHARLES HALWEY, Santa Ana, Calif. Filed Aug. 20, 1930. Serial No. 476,645. 1 Claim. (Cl. 16—138.)



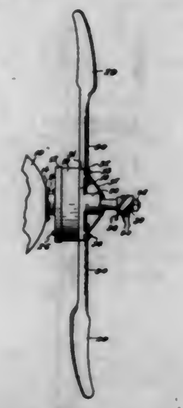
A stop hinge of the type described, comprising a pair of flat hinge plates, a flange formed on three edges of each plate, a journal formed on the remaining fourth edge of each plate, the journals extending on the same side of the plates as the flange, a pin through the journals hinging the plates together, a flat stop plate having at each end an angularly directed tab with lateral projections, a rectangular opening in each of said plates adapted to slidably receive said tabs from the side of the plates opposite the journals in such manner that the projections thereon prevent their coming out of the openings, the length of the tabs and the positioning of the projections thereon being so regulated that in the fully closed position of the hinge in which the hinge plates are in longitudinal alined with each other, the stop plate will bridge the joint between the hinge plates and be engaged substantially throughout its length with the adjacent surfaces of the hinge plates.

1,881,079. SHIP REFRIGERATION. PAUL WINANS HILLER, Wilmington, Calif. Filed Sept. 20, 1930. Serial No. 483,155. 8 Claims. (Cl. 62—14.)



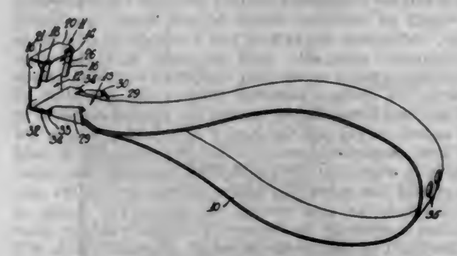
1. In a ship having a deck which slopes downwardly to the sides, a cold storage room bounded on the top by a deck wall having the approximate camber of the deck, a plurality of athwart-wise extending coils constituting part of an expansion cycle of a refrigerating system and disposed in close proximity to said wall, said coils being in the form of grids with headers extending lengthwise of the ship and at different elevations, and parallel connecting pipes between said headers extending transversely of the ship and substantially following the transverse camber of the deck.

1,881,080. AIRCRAFT PROPELLER. WILLIAM D. HUBERT, Joliet, Ill. Filed Dec. 4, 1930. Serial No. 500,088. 6 Claims. (Cl. 170—165.)



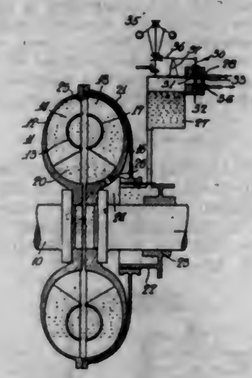
1. An aircraft propeller assembly comprising a front propeller, a rear propeller, the rear propeller having blades set to a predetermined pitch, and having a central hub engaging portion of skeleton structure, the front propeller being of the same length as said skeleton structure, the pitch of the front propeller being substantially one-half that of the pitch of the rear propeller, and a reduction gear train for rotating the rear propeller oppositely to the front propeller at substantially one-half the speed of the front propeller.

1,881,081. SEAL. FRANK KEIDEL, Elmhurst, N. Y., assignor to The International Seal and Knot Protector Co., New York, N. Y., a Corporation of New York. Filed May 16, 1931. Serial No. 537,763. 4 Claims. (Cl. 292—317.)



1. A seal including a strap having at one end thereof a transversely extending head, and at the other end thereof a seal body including two interconnected sections bendable along a transverse line therebetween, said sections having means integral therewith along the side edges thereof and spaced from said transverse line for automatically locking them together when said two sections are brought together by bending along said bendable line, said head being adapted to be placed between said transverse line and said locking means, and held therein against movement endwise of said strap, whereby said head may be automatically locked between said sections, and between said bendable line and said locking means when the two sections are snapped together by bending along said line.

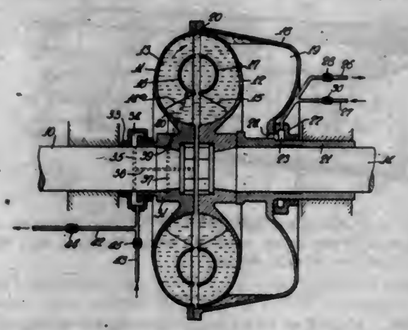
1,881,082. HYDRAULIC COUPLING. JOHANN NIKOLAUS KIEP, Altona-Hochkamp, Germany. Filed July 11, 1931. Serial No. 550,107, and in Germany Nov. 14, 1930. 2 Claims. (Cl. 60—54.)



1. A hydraulic coupling, including a driving member, a driven member, said members including a liquid operating chamber therebetween, a stationary liquid tank having communication with the interior of said operating chamber, and means actuated in accordance with the speed of one of said members for varying the pressure in said liquid tank, whereby the pressure of the liquid in the operating chamber is correspondingly varied.

1,881,083. HYDRAULIC COUPLING. JOHANN NIKOLAUS KIEP, Altona-Hochkamp, Germany. Filed July 11, 1931, Serial No. 550,108, and in Germany Nov. 29, 1930. 12 Claims. (Cl. 60—54.)

1. A hydraulic coupling of the Föttinger type, including a driving member and a driven member coacting to form a liquid working chamber, a reservoir chamber mounted for rotation with one of said members and communicating with said working chamber, and means for selectively



controlling the gas pressure in said reservoir chamber, whereby the flow of liquid between said working chamber and said reservoir chamber is correspondingly controlled.

1,881,084. MANUFACTURE OF CARBON BLACK. GEORGE CHARLES LEWIS, New Dorp, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed July 7, 1930. Serial No. 466,066. 2 Claims. (Cl. 134—60.)



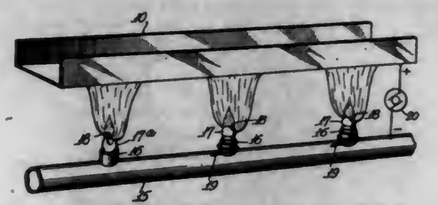
1. The process of manufacturing carbon black, which includes impinging a hydrocarbon flame on a metallic plate, and retarding the radiation of heat from the plate by enclosing the plate and flame in an enclosure having heat insulated walls.

2. An apparatus for manufacturing carbon black, including a metal plate, a burner for producing a hydrocarbon flame impinging on said plate, and an enclosure for said plate and burner, said enclosure having the walls thereof insulated against heat radiation.

1,881,085. MANUFACTURE OF CARBON BLACK. GEORGE CHARLES LEWIS, New Dorp, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1930. Serial No. 485,582. 8 Claims. (Cl. 134—60.)

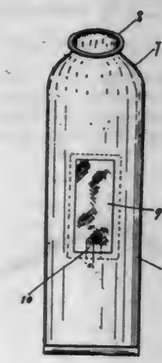
1. An apparatus for producing carbonaceous deposits from a flame, including means for passing an electric current through the flame, said means including a depositing

surface connected to one pole of a source of electrical current, and a wire connected to the opposite pole of said source and having the current-discharging end thereof ex-



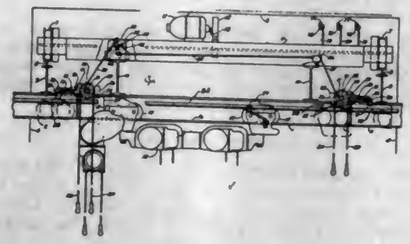
tending in a direction substantially in the direction of propagation of the flame, said end being disposed near the source of origin of said flame.

1,881,086. VACUUM CLEANER. MARGARET MARSHALL, Vancouver, British Columbia, Canada. Filed Jan. 17, 1931. Serial No. 509,465. 3 Claims. (Cl. 183—51.)



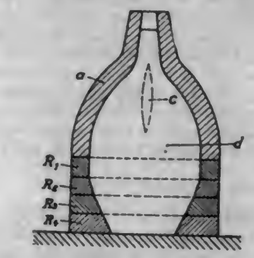
1. In a vacuum cleaner having the usual fabric dust bag attached, the combination comprising an auxiliary container fitting inside said fabric dust bag, said container having means by which it may be secured in said fabric dust bag, and having a screened window opening for permitting the air to escape therefrom, and means within the auxiliary container adjacent the window opening thereof for disinfecting the room in which the vacuum cleaner is used.

1,881,087. TRANSFER CRANE LOCKING AND SAFETY DEVICE. HENRY F. MARTIN, Detroit, Mich., assignor to Detroit Hoist and Machine Co., Detroit, Mich. Filed July 7, 1930. Serial No. 465,971. 23 Claims. (Cl. 212—21.)



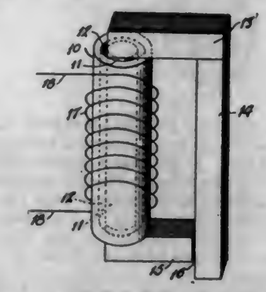
1. In a transfer mechanism, the combination of a crane movably mounted, means for electrically operating said crane, a monorail suitably mounted on said crane, hoisting and trolleying mechanism movably mounted on said monorail, means for electrically operating said hoisting and trolleying mechanism, a fixed monorail, a switch comprising contact members for controlling the supply of electrical energy for said first mentioned means, said switch further comprising contact members for controlling the supply of electrical energy to said second mentioned means, and means for locking the monorail on said crane in alignment with said fixed monorail, said last mentioned means being operatively connected with said switch to move the contact members thereof, the operation of said last mentioned means moving the contact members of said switch, to cut out the supply of electrical energy for said first mentioned means when the monorail of said crane is in alignment with said fixed monorail, the operation of said last mentioned means further moving the contact members, of said switch, to cut out the supply of electrical energy for said second mentioned means when the monorail of said crane is out of alignment with said fixed monorail.

1,881,088. MOLD FOR INGOTS. BERNHARD MATUSCHKA, Ternitz, Austria. Filed Sept. 9, 1931, Serial No. 561,954, and in Austria July 22, 1929. 3 Claims. (Cl. 22—139.)



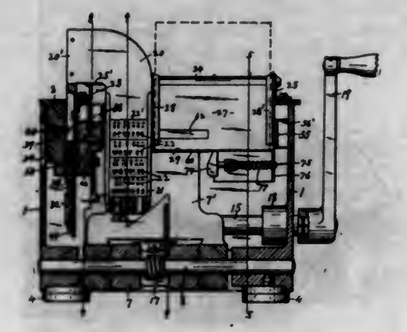
1. An ingot mold for casting metal blanks for railway wheels, tyres, and the like, comprising a mold member having an internal cavity of a cross-sectional area gradually tapered upwardly from below a point substantially midway of the upper and lower portions of the member and merging at its upper end with a relatively constricted neck portion, whereby the shrinkage cavity is narrowed and elongated.

1,881,089. METAL COATING APPARATUS. WILLIAM E. MOORE, Pittsburgh, Pa., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Original application filed Oct. 11, 1929, Serial No. 398,089. Divided and this application filed Feb. 7, 1931. Serial No. 514,251. 6 Claims. (Cl. 22—121.)



1. Apparatus for coating a billet of corrosive metal with a non-corrosive metal comprising a mold member open at both ends and adapted to receive a billet, a laminated magnetic core member adapted to contact with both ends of the billet, and an alternating current coil associated with one of said members to excite a magnetic flux longitudinally of the billet to heat the same.

1,881,090. PRINTING MACHINE. LLOYD W. MOULTON, Syracuse, N. Y., assignor to Gaylord Bros., Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,531. 16 Claims. (Cl. 101—19.)



1. In a library card printing machine, opposed platens, a type carrier slidable at will to and from a position between the platens, means for guiding a card to be printed between the type of said carrier and one of the platens, a second type carrier slidable at will to and from a position between said card and platens, and means for bringing the platens into printing co-action with the type of both carriers for impressing said type upon the card.

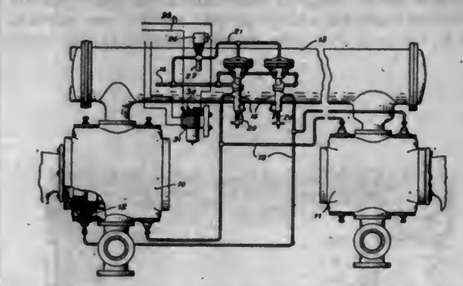
1,881,091. LOCKING ARRANGEMENT FOR ELECTRIC LIGHT BULBS. ARCHIBALD CHARLES TRACEY MYERS, Purley, England, assignor to J. Stone & Company Limited, Deptford, England, a Corporation of Great Britain. Filed June 25, 1930, Serial No. 463,747, and in Great Britain July 2, 1929. 5 Claims. (Cl. 176—31.)



1. A locking arrangement for preventing snatch-theft of screw-in lamps having ratchet-like formations in the screw-plugs, comprising a holder, a lamp screw socket removably mounted in said holder, spring-catch means accommodated inaccessibly between said holder and socket and arranged to project within the socket for engaging in the ratchet-like formations in the lamp plugs screwed into said socket, and a releasable connection for securing said socket in said holder, and adapted to release a locked lamp plug from its socket by removing the socket from said holder.

1,881,092. MAGNETICALLY OPERATED COMPRESSOR REGULATOR. WILLIAM H. NOBLE, Easton, Pa., assignor to Pennsylvania Pump & Compressor Company, Easton, Pa., a Corporation of Pennsylvania. Filed July 31, 1930, Serial No. 471,980. Renewed Nov. 4, 1931. 11 Claims. (Cl. 230—4.)

1. A compressor regulator comprising in combination, a compressor cylinder, unloading means therefor, a motor driving said compressor, a pilot valve controlling operation of said unloading means, magnetic means to operate

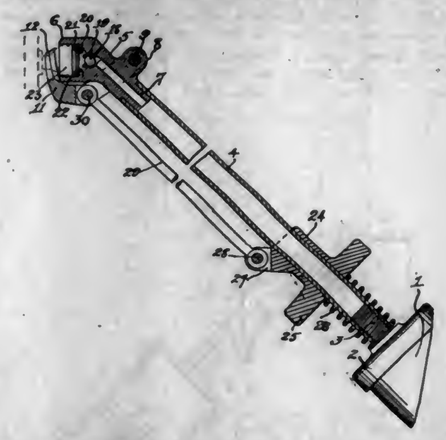


said pilot valve, and a circuit for energizing said magnetic means, said circuit including a switch controlled by a field circuit of said motor.

1,881,093. PROMOTION OF FERMENTATION. WILLIAM L. OWEN, Baton Rouge, La., and EDWARD W. HERR, Freeport, N. Y., assignors to Darco Sales Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 29, 1929. Serial No. 359,170. 13 Claims. (Cl. 195—20.)

1. The process of producing alcohol which includes fermenting a molasses solution of at least 27 Brix density in the presence of yeast and an activated carbon.

1,881,094. LUBRICATING APPARATUS. CLARK W. PARKER, New York, N. Y., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind., a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 257,880. 13 Claims. (Cl. 285—170.)

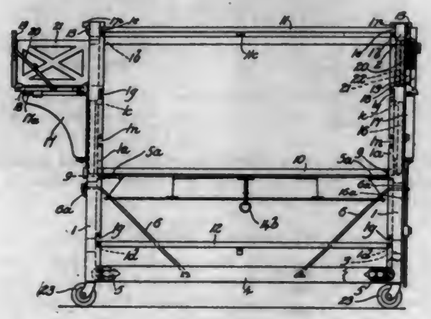


1. A lubrication coupler comprising, a nozzle, a coupling lever pivotally mounted on the nozzle for cooperation therewith to clamp a fitting therebetween, and means associated with the lever and slidably mounted on said nozzle for manipulating the lever.

1,881,095. CONVERTIBLE FURNITURE. CLARA AMELIA PENROSE, London, England, assignor of one-half to Philip Owen Penrose, London, England. Filed Mar. 2, 1931, Serial No. 519,557, and in Great Britain Mar. 3, 1930. 2 Claims. (Cl. 5—332.)

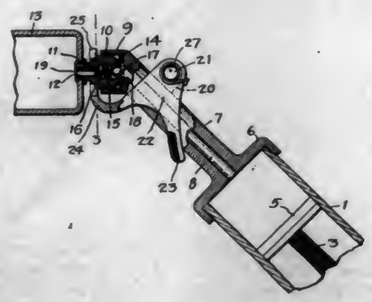
1. An article of furniture comprising a supporting frame, a seat member hinged at one edge to the frame

to swing upward against the frame or extend horizontally therefrom, a back rest hinged to the free edge of the seat member to fold over thereonto or extend upwardly therefrom, foldable braces pivoted to the seat member and to the back rest, side members hinged to the frame



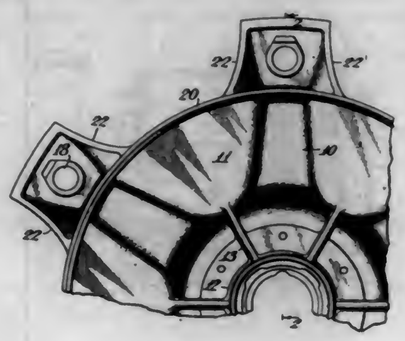
above the seat member to extend in vertical planes over the seat member against the inner sides of the braces, and brackets hinged to the frame below the seat member to extend out under the seat member and constitute supports therefor and handles for moving the frame.

1,881,096. HIGH PRESSURE LUBRICATING APPARATUS. AZOR D. ROBBINS, New York, N. Y., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind., a Corporation of Delaware. Filed Oct. 25, 1927, Serial No. 228,556. Renewed Nov. 30, 1931. 9 Claims. (Cl. 285—170.)



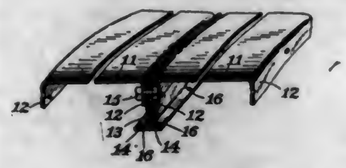
1. Lubricating apparatus having coupling means comprising a cylindrical socket and a bifurcated jaw cooperating therewith to embrace a fitting, said jaw being carried by a bell-crank lever pivotally mounted upon the coupling, and a spring surrounding the pivot and yieldingly holding the lever to its work.

1,881,097. VEHICLE WHEEL. WILLIAM D. SARGENT, West Orange, N. J. Filed Oct. 15, 1928. Serial No. 312,565. 6 Claims. (Cl. 301—6.)



5. A vehicle wheel having a plurality of hollow spokes, and a brake flange extending axially from said spokes intermediate of their ends, the side walls of each spoke beyond the brake flange being spaced to a greater distance than the corresponding walls between the brake flange and wheel axis.

1,881,098. TUNNEL LINER. HARRY M. SCHAAB, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Aug. 28, 1930. Serial No. 478,492. 5 Claims. (Cl. 61—45.)

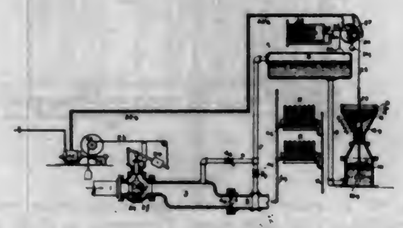


1. A lining structure of the character set forth, comprising a reinforcing bar having a web provided with an unflanged outer side, liner plates on opposite sides of the bar having integral side flanges of less width than the width of the bar and lying against the opposite faces of the outer unflanged portion of the web of said bar, and fasteners securing the said integral flanges of the plates to the unflanged portions of the bar, the inner portion of said bar projecting inwardly beyond the inner edges of the integral side flanges of the plates.

1,881,099. MEANS FOR CONTROLLING INTERIOR TEMPERATURES. JOHN A. SERRELL, Passagrille, Fla. Filed Dec. 11, 1926. Serial No. 154,163. 36 Claims. (Cl. 237—9.)

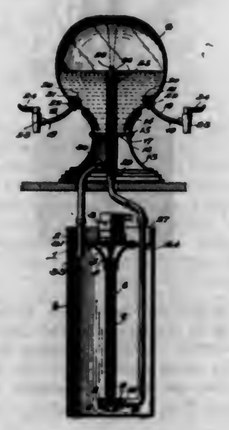
1. In a heating system, the combination of a structure to be heated, a relatively high pressure main for supplying steam, a relatively low pressure steam supply main for supplying steam at a lower pressure to the radiators of the structure to be heated, adjustable valve means

in the supply main between the high pressure main and the lower pressure supply main normally remaining in the various open positions of its adjustment, motor means for positively readjusting the valve means to different positions of open adjustment for supplying steam in greater or less quantity and pressure to the low pressure supply main, thermostatically operated means actuated by temperature changes exterior to the structure to be heated for causing through said motor means adjust-



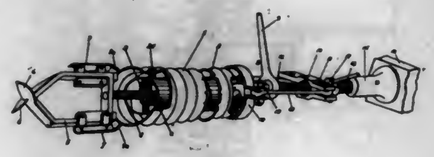
ments of the valve means whereby the steam in the supply main is varied inversely with the variations in temperature exterior to the structure and a substantially variable pressure differential is maintained within the structure, and means actuated by pressure variations within the steam supply main on the delivery side of the valve means for arresting the action of the thermostatic means upon the motor means when the required variable pressure changes within the supply main have been produced.

1,881,100. DISPLAY AND DISPENSING APPARATUS. HARRY CLEVELAND SMITH, New York, N. Y., assignor, by mesne assignments, to Autodrink Corporation, Dover, Del., a Corporation of Delaware. Filed May 21, 1927. Serial No. 193,329. 5 Claims. (Cl. 225—21.)



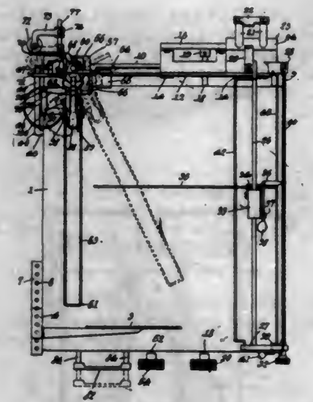
1. A beverage dispensing apparatus comprising a transparent bowl-like dispensing container, overflow means therein for maintaining a predetermined beverage level, and means adapted to continuously supply beverage under pressure to said container thereby to keep the beverage remaining in the container in a constant state of agitation.

1,881,101. EARTH AUGER. ARCH W. SPAULDING, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed June 20, 1929. Serial No. 372,428. 9 Claims. (Cl. 255—20.)



1. In an earth auger, a pipe, a boring shaft passing through said pipe and journaled in bearings therein, an auger bit on the end of said boring shaft, said auger bit provided with expansible reamer blades, said shaft within said pipe bearing a spiral conveyor to convey the earth loosened by said auger bit through said pipe, and means for supporting the pipe in a conduit to be installed eccentrically of the latter.

1,881,102. COPYHOLDER. FRANK M. SPERLING, Bristol, Pa. Filed Mar. 8, 1932. Serial No. 597,530. 14 Claims. (Cl. 120—28.)

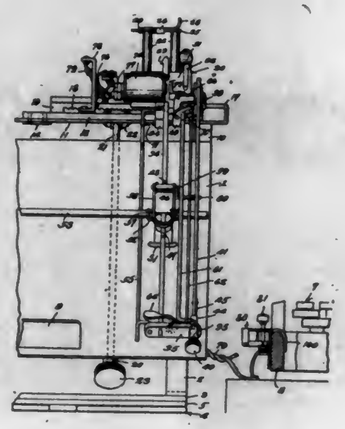


1. A device of the class described, comprising a table, a carriage movable transversely of the upper edge of the table, means for moving the carriage transversely of the table, a frame including a paper holder cooperating with the table, and means for mounting the frame on the carriage for movement in a substantially vertical direction, substantially at right angles to the table.

1,881,103. COPYHOLDER. FRANK M. SPERLING, Bristol, Pa. Filed June 16, 1932. Serial No. 617,657. 13 Claims. (Cl. 120—34.)

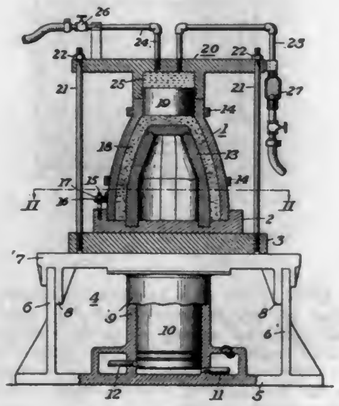
1. In a device of the class described, a paper-holding table, a gravity-actuated slide, means for mounting the slide for movement downwardly along the table, a line-finder carried by the slide, mechanism for limiting the

downward movement of the slide and the line-finder to a step-by-step progression, said mechanism including a movable actuating part for said mechanism, electro-mechani-



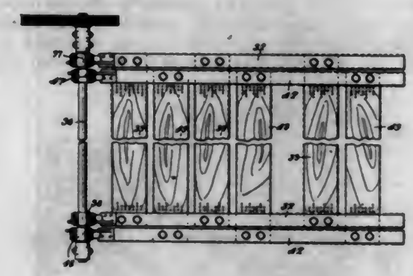
cal means for operating said actuating part, and a device for controlling the electro-mechanical means from a remote point.

1,881,104. REFRACTORY ARTICLE. FRANK J. TONE, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed May 6, 1930. Serial No. 450,160. 7 Claims. (Cl. 263—48.)



4. A crucible formed from a refractory mix containing flaky particles which are oriented in the side walls of the crucible in a direction generally normal to the vertical axis of the crucible, whereby the side walls have a greater thermal conductivity in a horizontal direction than in a vertical direction.

1,881,105. SUCTION BOX OSCILLATING MEANS. JOHN WARREN VEDDER, Worcester, Mass. Filed Mar. 16, 1931. Serial No. 523,008. 8 Claims. (Cl. 92—51.)



1. In a paper machine, the combination with a Fourdrinier wire, and means for operating it, of a pair of supports, a set of suction boxes rigidly carried by said supports and means for reciprocating said supports in opposite directions transverse to the length of the suction boxes at their ends.

1,881,106. CAN FILLER. CLARENCE W. VOGT and GILBERT O. WYMOND, Louisville, Ky., assignors to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Oct. 25, 1929. Serial No. 402,362. 18 Claims. (Cl. 226—125.)



1. A filling device for receptacles, including a delivery conduit adapted to project into the open top of the receptacle, a pressure applying member at the lower end thereof with its edges spaced from the walls of said receptacle to form an annular passage, and means for guiding material from the upper side of said member to said passage.

1,881,107. SOUNDING CONDENSER. HANS VOOT, Berlin-Wilmersdorf, Germany. Filed Sept. 15, 1928, Serial No. 306,158, and in Germany May 16, 1928. 5 Claims. (Cl. 179—111.)

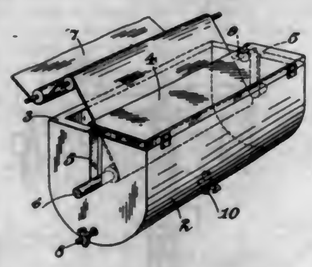
1. A sounding condenser consisting in a diaphragm arranged between two perforated rigid electrodes, said diaphragm having a diameter of more than six inches and consisting of a light metal foil having a thickness of

0.025 and 0.050 mm. of considerable durability of more than 20 kilos per sq. mm., said durability being suitable to sustain a very high radial tension, and the perforated



rigid electrodes consisting of an insulating material, the surfaces of the rigid electrodes facing the diaphragm being coated with an electrically conducting layer.

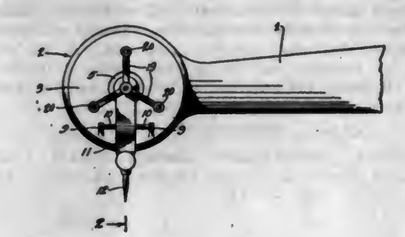
1,881,108. MANUFACTURE OF SHEETS OR FILMS OF COMPOSITIONS CONTAINING CELLULOSE ESTERS OR ETHERS. ALFRED ROBERT WICKHAM, Sawston, England, assignor to Spicers Limited, London, England, a British Company. Filed Nov. 18, 1931, Serial No. 575,938, and in Great Britain Dec. 22, 1930. 2 Claims. (Cl. 18—57.)



1. A method for the manufacture of films of compositions containing an organic derivative of cellulose which comprises in combination the steps of applying to a travelling surface a solution of the aforesaid composition, effecting evaporation of the solvent from said solution, stripping from the surface the film of composition left thereon by the evaporation of said solvent, maturing the film by leading it through a space maintained charged with water vapour at a temperature considerably above room temperature, and immediately thereafter winding the film in a space which is maintained at a temperature considerably below that of the space in which the aforesaid maturing treatment is carried out.

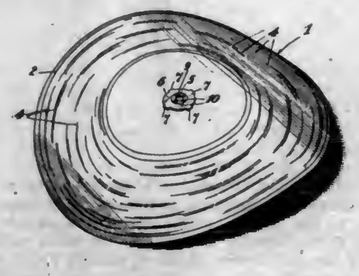
1,881,109. ELECTRIC PICK-UP FOR PHONOGRAPHS. HUGO WIENER, Bisbee, Ariz. Filed Apr. 18, 1930. Serial No. 445,399. 1 Claim. (Cl. 179—100.41.)

A device of the character described comprising a hollow electromagnet having an annular airgap therein and a stationary magnetic pin centrally disposed in said airgap, a moving coil member disposed in said airgap and surrounding said pin, two rubber lugs attached to said magnet and having aligned openings therein, a circular rod having one end loosely mounted in each of said openings, a needle supporting strap-supported shaft operatively connected to said coil member mounted loosely on said rod at a substantially central portion of said shaft and said rod, said movable coil member comprising a tubular insu-



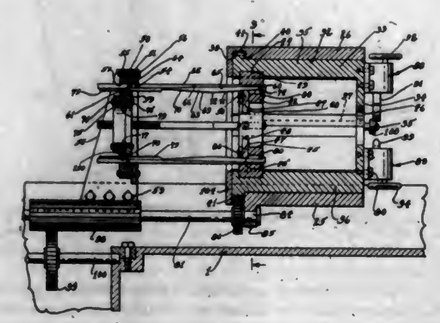
lating body disposed in said airgap, and a helical coil rigidly attached to the cylindrical insulating member, said rubber lugs resiliently and loosely supporting said rod.

1,881,110. PHONOGRAPH RECORD. ARTHUR M. ACHESON, Dobbs Ferry, and GEORGE RAMSEY, Brooklyn, N. Y., assignors to Durium Products Corporation, New York, N. Y., a Corporation of Delaware. Filed July 24, 1930. Serial No. 470,385. 9 Claims. (Cl. 274—42.)



1. In a flexible phonograph record a body portion, and a resilient center member of material different from the body portion and located at the center of said body portion and being provided with a record table pin opening therein.

1,881,111. PIPE THREADING MACHINE. EDMUND L. AHERN, Battle Creek, Mich. Filed Dec. 4, 1930. Serial No. 500,067. 7 Claims. (Cl. 10—90.)



2. A device of the type described comprising a supporting frame, a pair of vise members movably mounted on the supporting frame and disposed in spaced-apart po-

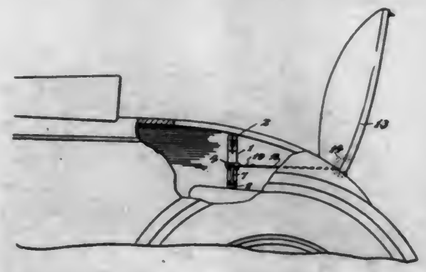
sitions, said vise members being adapted for gripping a cylindrical member, a housing movably mounted on the supporting frame and positioned between the vise members, a drum rotatably mounted in the housing, a cutting element mounted on the drum and adapted for cutting the cylindrical member for providing a pair of cylindrical sections, said vise members being admitted for supporting the sections, and die members mounted in the drum for threading the adjacent ends of the sections when the drum is rotated.

1,881,112. DANDELION DIGGER. DAVID ALLENSON, Riley, Kans. Filed July 10, 1931. Serial No. 549,988. 1 Claim. (Cl. 55—148.)



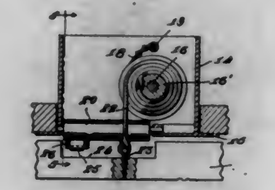
A plant digger comprising a shaft having a handle, a blade carried at the lower end thereof and disposed at an angle to the handle, guide members mounted upon the shaft, a rod slidably mounted in the guide members and having an end portion disposed toward the forward surface of the blade and spring means interposed between the rod and one of the guides, said rod adapted to slide at an angle to the blade.

1,881,113. RUMBLE SEAT STEP. EARLE S. ANDERSON, Boston, Mass. Filed July 20, 1929. Serial No. 379,767. Renewed May 23, 1932. 6 Claims. (Cl. 280—166.)



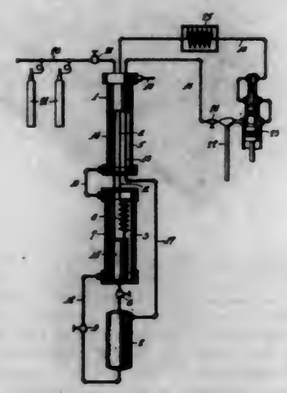
1. The combination with the hingedly connected seat back of a motor vehicle, of a bracket attached to the vehicle, a step hingedly connected to the bracket, a rod carried by the bracket and having a hook thereon for engaging the step to hold the same folded, and means carried by the back seat for actuating the rod to disengage the hook from the step to permit the same to unfold.

1,881,114. DOOR CLOSER. IVAN E. BEELER, San Francisco, Calif. Filed May 18, 1931. Serial No. 538,310. 1 Claim. (Cl. 16—78.)



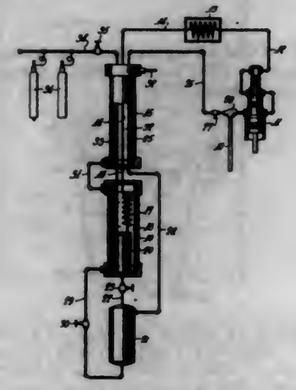
A door closing apparatus comprising a housing located within the upper portion of a door frame, a drum member journaled within the housing having a spiraled spring connected therewith, an attaching element upon the upper rail of the door, roller members journally supported within the housing and spaced apart to provide a guide passage therebetween, a flexible connecting element fixed to and wound upon said drum member and projecting through the passageway for connection with the attaching element, and disk members journaled upon the housing in rightangularly disposed relation to the roller members for engagement with that portion of said flexible connecting element projecting through the passageway.

1,881,115. PROCESS FOR EXTRACTING HELIUM. ROBERT ROGER BOTTOMS, Louisville, Ky., assignor to The Helium Company, Louisville, Ky., a Corporation of Kentucky. Filed May 13, 1930. Serial No. 452,020. 3 Claims. (Cl. 183—115.)



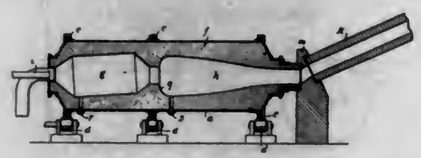
2. The method of separating helium from a gaseous mixture, including circulating crude helium mixture in a continuous cycle having two pressure stages, the upper pressure stage being approximately 2000 pounds per square inch and the lower pressure stage being substantially below that of the higher pressure stage, cooling said mixture and thereby separating substantially pure helium from liquid containing helium in said higher pressure stage, withdrawing said pure helium from the cycle under said pressure of approximately 2000 pounds, separating substantially helium-free liquid from crude helium gas in the lower pressure stage and withdrawing said liquid from the cycle, and replenishing said cycle by adding said gaseous mixture containing helium to said crude helium gas at approximately the point in the cycle where said crude helium gas is raised from said lower to said higher pressure.

1,881,116. APPARATUS FOR THE EXTRACTION OF HELIUM FROM GASEOUS MIXTURES. ROBERT ROGER BOTTOMS, Louisville, Ky., assignor to The Helium Company, Louisville, Ky., a Corporation of Kentucky. Filed June 23, 1931. Serial No. 546,244. 11 Claims. (Cl. 62—122.)



1. An apparatus for separating helium from gaseous mixtures, including a compressor for delivering the gaseous mixture at high pressure, means for cooling the gaseous mixture under said high pressure to effect liquefaction of the non-helium constituents, means for delivering the separated pure helium, a receiver for the liquid constituents, means for delivering liquid constituents thereto under lower pressure, means for delivering to said compressor the crude helium separated from solution in said liquid, and means for delivering the residual liquid to effect said liquefaction in said cooling means.

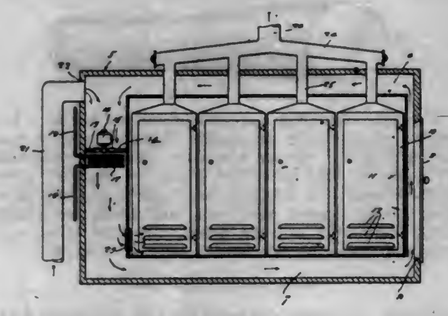
1,881,117. ROTARY DRUM FURNACE FOR MELTING METALS. CARL BRACKELSBERG, Milspe, Germany. Filed Mar. 14, 1930, Serial No. 435,712, and in Germany Oct. 29, 1929. 7 Claims. (Cl. 263—32.)



6. A rotary furnace for melting metals, including a drum having end walls and an inwardly extending flange intermediate the ends forming two chambers in tandem, one serving as a premelting chamber and the other as a final melting chamber, a burner for delivering a flame into said furnace at the outer end of the last mentioned chamber, and an inclined conduit at the outer end of the first mentioned chamber, said conduit serving for the delivery of the metal to be melted and the delivery of the combustion gases from the furnace, whereby the metal in entering is preheated before entering the furnace.

1,881,118. INCUBATOR. CLAIR R. BRATTON and CECIL S. MINER, Burlingame, Kans. Filed Mar. 1, 1930. Serial No. 432,433. 1 Claim. (Cl. 119—35.)

In an incubator, an outer casing having walls, an inner casing within the outer casing, and having all sides thereof spaced from the walls of said outer casing thereby defining a chamber completely surrounding the inner casing, a plurality of separate egg receiving compartments within the inner casing, an air inlet means connected to the upper portion of the outer casing and communicating with said chamber, a fan arranged adjacent said air inlet means and having a blowing element to induce a circulation of air through said chamber and about all the sides of said inner casing, said inner casing being provided

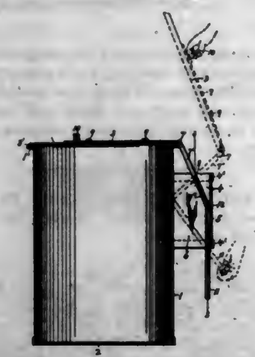


with means establishing communication between said inner casing and said chamber, and an exhaust manifold having branches separately connected to said egg receiving compartments, said egg receiving compartments being provided with inlet means for the admission of the air admitted to the inner casing.

1,881,119. ELECTRODE. BARTLEY E. BROADWELL, Lewiston, and ARTHUR T. HINCKLEY, Niagara Falls, N. Y., assignors to The Republic Carbon Company, Niagara Falls, N. Y., a Corporation of Delaware. Filed Jan. 4, 1930. Serial No. 418,649. 18 Claims. (Cl. 13—19.)

1. An electrode containing a material proportion of natural graphite.

1,881,120. ASH CAN. MARCUS J. FESSLER, Yonkers, and SAM FASSMAN, Brooklyn, N. Y. Filed Mar. 2, 1932. Serial No. 596,262. 3 Claims. (Cl. 220—36.)



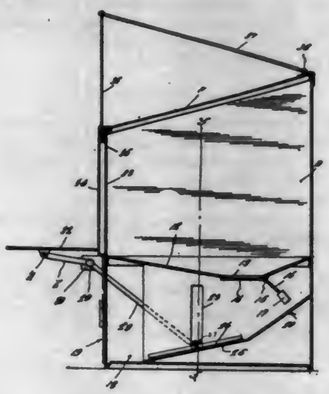
1. The combination with a refuse receptacle, of a housing secured to one side of the receptacle to project outwardly therefrom, a pair of angle braces pivoted to opposite sides of the housing to swing about a horizontal axis and extended upwardly and downwardly from said axis, a lid for the receptacle rigidly secured to the upper arms of said braces to move therewith to and from its closed position, and a handle bail hinged to the lower arms of the braces to swing about an axis parallel with the pivotal axis of the braces and extended downwardly within and below the lower end of the housing.

1,881,121. METHOD OF AND DIE MANDREL FOR SHAPING CURVED TUBES. PAUL H. FORD and NELSON YOUNG, Louisville, Ky., assignors to The Girdler Corporation, Louisville, Ky., a Corporation of Delaware. Filed June 10, 1930. Serial No. 460,125. 9 Claims. (Cl. 78—81.)



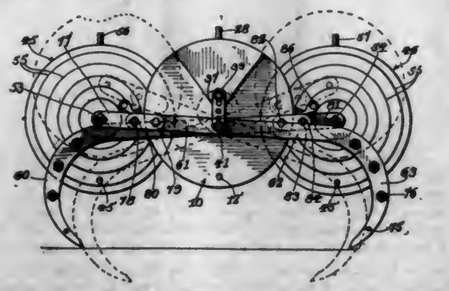
2. A tube-expanding and curving mandrel having a body portion of gradually increasing diameter and laterally curved, a keyway thereon adapted to forge a corresponding rib inside the tube being forced over the mandrel, whereby the elements of said tube are confined to plane movement during shaping operations, and means for substantially eliminating said rib before said tube is advanced outside of engaging relationship with said mandrel.

1,881,122. EGG TRANSFERRING AND SORTING TRAP NEST. CHRISTOPHER C. FORNEY, Downs, Kans. Filed Apr. 13, 1931. Serial No. 529,872. 7 Claims. (Cl. 119—49.)



1. A trap nest comprising a housing including nesting means, having a front opening, guides associated with said opening, a gravity lowered trap door including guide rods extending into said guides, a decoy egg arranged in said nest, and an operating connection between the decoy egg and trap door.

1,881,123. SALVAGE UNIT. LOUIS FRANCIS, Miami, Fla. Filed Oct. 31, 1929. Serial No. 403,833. 16 Claims. (Cl. 114—53.)



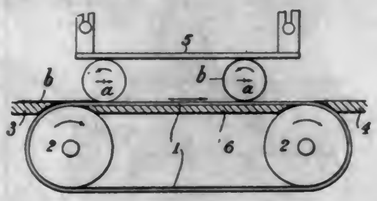
13. A salvaging unit of the submergible type comprising normally inactive grabbing elements for lifting the object to be salvaged, pneumatically operated means for shifting said elements to lifting position with respect to the object to be salvaged and for elevating the unit after the grabbing elements have been shifted to lifting position, and weighted means for retarding the elevation of the unit and having said grabbing elements pivotally supported therefrom, said grabbing elements further connected with said pneumatically operated means.

1,881,124. COLLAR ATTACHMENT. HERMAN BELSON, Chicago, Ill. Filed May 18, 1931. Serial No. 538,285. 9 Claims. (Cl. 24—87.)



4. A device for holding the wings of a turndown collar in place, comprising clamping jaws for engaging said wings, each of said jaws including resilient arms urged toward each other to bind the collar wing therebetween, means on said arms for preventing the interlocking or crossing thereof and consequent creasing of the collar wing, said device including other arms attached to said jaws, piercing points or tongues on said second named arms for detachable engagement with said wings, and means on said second named arms for preventing the fabric of said wings from "creeping" or "crawling" up said tongues onto said second named arms when said tongues are engaged with said wings.

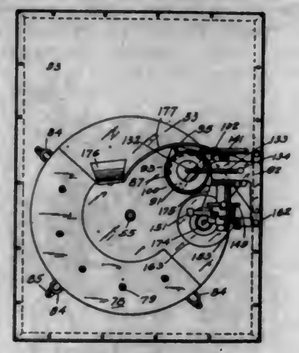
1,881,125. MACHINE OR DEVICE FOR APPLYING LABELS TO CYLINDRICAL ARTICLES. ALFRED PARR, Lewisham, London, England. Filed Mar. 14, 1930, Serial No. 435,832, and in Great Britain Mar. 15, 1929. 1 Claim. (Cl. 216—39.)



Apparatus for applying adhesive labels to cylindrical articles, comprising an endless conveyor mounted to travel longitudinally and arranged and adapted to receive and convey unapplied labels, an adjustable plate located at a spaced distance above said conveyer and arranged and adapted to contact with the articles and, conjointly with the conveyer, to rotate said articles and to move the same in parallel relation to the conveyer, said apparatus being provided with a feed table in close proximity to the conveyer whereby unattached labels may be fed therefrom to the conveyer at selected and varied intervals.

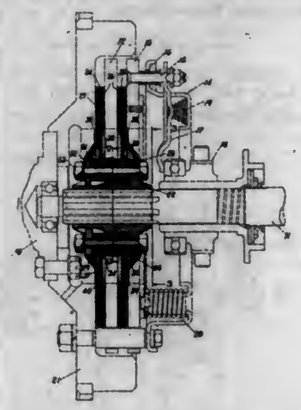
1,881,126. AUTOMATIC HAMBURGER FORMING AND FRYING MACHINE. WEBSTER A. PARR, Alameda, Calif., assignor to Webster A. Parr, Alameda, Calif., Dexter C. Baker, Oakland, Calif., Charles G. Johnson, Alameda, Calif., and Jay Erwin Baker, Oakland, Calif., a Copartnership. Filed Sept. 16, 1930. Serial No. 482,278. 19 Claims. (Cl. 107—4.)

11. A hamburger forming and frying machine comprising in combination with apportioning and forming means, said apportioning means having an angularly reciprocating knife mounted on a vertical shaft, a rotary hot plate intermittently advanced and a scraper having an arm



secured to said vertical shaft for coincident reciprocation, said scraper being backwardly inclined and cooperating with the surface of said hot plate.

1,881,127. CLUTCH. CLYDE R. PATON and WILLIAM S. JAMES, South Bend, Ind., assignors to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Feb. 21, 1930. Serial No. 430,300. 7 Claims. (Cl. 192—69.)



1. In a clutch, a plurality of clutch plates, a hub therefor having movement relative thereto, a circumferential flange on said hub, a retaining member, elastic disks positioned between said flange, retaining member, and clutch plates respectively, means holding said disks in frictional contact with said flange and retaining member to cushion the movement between said hub and plates, means for limiting the movement between said hub and plates, and friction members for resisting the relative movement between said hub and plates.

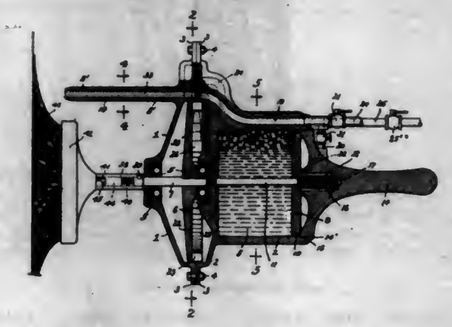
1,881,128. PROJECTION SCREEN. ARTHUR C. PAYNE, Kew Gardens, and DAVID F. NEWMAN, Freeport, N. Y., assignors to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1925, Serial No. 72,029. Renewed May 24, 1930. 13 Claims. (Cl. 88—24.)

1. A projection screen containing gelatinous material, glycerine and a liquid principally, a light diffusing agent, a curing agent, a germicide, and having a fiberous strengthening material incorporated therein, said light diffusing agent being substantially uniformly incorporated in the other screen-forming materials.



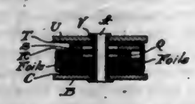
4. A projection screen resistant to atmospheric and climatic conditions comprising a fibrous base incorporated in a composition comprising a gelatinous material and casein.

1,881,129. WASHING AND SANDING MACHINE. WILLIAM TOMAS PEEK and LOVELACE PRESTON EUBANKS, Atlanta, Ga. Filed May 4, 1931. Serial No. 535,040. 2 Claims. (Cl. 15—29.)



1. In a portable cleaning device, a housing, a brush carried by the housing, a cylinder and piston in the housing, a conduit leading from one end of the cylinder and discharging adjacent the brush, and means for applying a fluid under pressure to the other end of the cylinder whereby the piston is advanced in the cylinder to supply a detergent to the brush from the cylinder.

1,881,130. ELECTRICAL CONDENSER. JOHN ALBERT PROCTOR, Lexington, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Sept. 3, 1925. Serial No. 54,190. 23 Claims. (Cl. 175—41.)

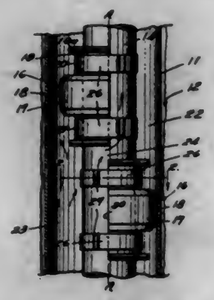


1. An electrical condenser of the sheet type, comprising a stack of mica dielectrics and two sets of foils of opposite polarity extending substantially from opposite sides of the stack; two metal clamping plates over the ends of the stack but insulated therefrom; two substantially stiff metal connection plates both located at one end of the stack near one clamping plate and insulated from one another and from said clamping plate and having terminal portions of desired shape extending in opposite directions laterally beyond the stack between the two foil-sets; the micas, clamping plates and connection plates being centrally perforated; and a metal compression stud extending through said perforations, spaced from the connection plates at their perforations, and contacting with the clamping plates, holding them at the desired mechanical compression; and foil portions in the condenser stack and portions projecting therefrom each having perforations substantially larger than the stud; and the two

projecting portions of the foil-sets respectively being folded into contact with the respective connection plates, the edges of all said foil perforations surrounding but spaced from the stud; and the central holes thru the micas being smaller than the foil holes

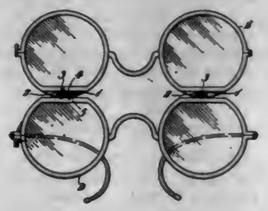
---

1,881,131. TWO-PIECE WEAR-PREVENTER. DOUGLAS R. RADFORD and CHARLES LAMB, Los Angeles, Calif. Filed Jan. 23, 1929. Serial No. 334,405. 1 Claim. (Cl. 308—4.)



A wear-preventer adapted to be placed on a drill-pipe comprising: a section having a relatively extensive engaging surface adapted to engage said drill pipe; and annular securing means surrounding said section and engaging said drill-pipe for securing said section in place.

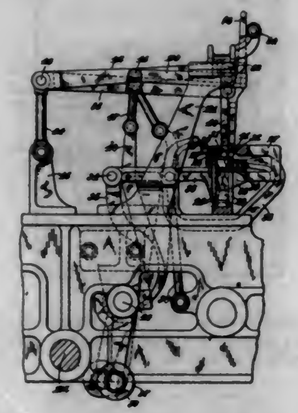
1,881,132. SPECTACLES. JULIUS RHEINBERG, London, England. Filed July 7, 1930, Serial No. 466,225, and in Great Britain July 24, 1929. 14 Claims. (Cl. 88—41.)



1. Spectacles comprising a main frame with eye rims and a nose bridge, a rigid auxiliary frame consisting of eye rims and a nose bridge, such auxiliary eye rims and nose bridge being of the same shape and substantially the same size as the main eye rims and nose bridge, independent hinge members secured to the registering pairs of eye rims, respectively, and serving to connect the main frame and the auxiliary frame, a catch pin on said auxiliary frame, a helical spring arranged around the pin part of one of the hinge members of an eye rim and a spring controlled catch lever adapted to engage said catch pin and pivotally mounted on a side joint of the main frame and independent of the hinges for retaining the auxiliary frame in register with the main frame.

1,881,133. APPARATUS FOR CLOSING THE ENDS OF CARTONS OR LIKE RECEPTACLES. ALFRED GERMAN ROSE, Gainsborough, England, assignor of one-half to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed Oct. 24, 1929, Serial No. 402,270, and in Great Britain Oct. 26, 1928. 7 Claims. (Cl. 93—7.)

1. A carton closing machine, operable on cartons of the kind having a closure flap contiguous with one side of the carton for covering the open mouth, and a strip along the free edge of this flap to be bent over in the form of a tab and inserted between the opposing side of the carton and the contents, comprising the combination of an oscillatable pressure element and means to move it into contact with that carton side which is opposed to the flap to slightly compress the contents, oscillating grippers for



exerting pressure on the two sides of the carton which flank the side opposed to the flap to bulge it away from the contents, folding means for folding the flap down upon the open mouth, a tucking finger, and means to move it in synchronism with the folding means to guide the tab into the previously formed bulge.

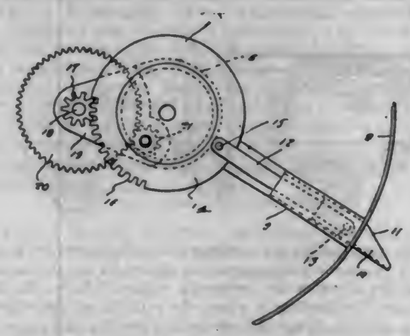
1,881,134. FRUIT PICKER. MAX SCHLING, Scardsdale, N. Y. Filed Dec. 20, 1930. Serial No. 503,655. 1 Claim. (Cl. 56—340.)



1. In a fruit picker, a ring having a receptacle secured thereto and extending therefrom, said receptacle comprising a bag structure having an enlarged opening at the end secured to said ring and gradually narrowing down to a relatively narrow-like funnel, the bag opening being shaped to break the fall of fruit picked and feeding it to a funnel-like opening of cross-sectional area just sufficient to permit a slow gravitational movement of the fruit; a handle comprising a plurality of sections telescoping each other for varying the length of the handle; a bracket for securing said handle to said ring at the enlarged open end of the bag; a plurality of flexible metallic prongs; braces for securing said prongs to said handle at its upper end; and a plurality of spacers comprising cross bars,

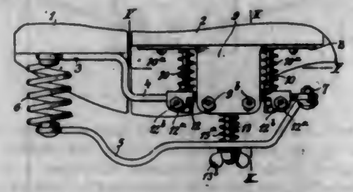
each provided with spaced perforations through which said prongs extend for maintaining said prongs in spaced relation with each other, said bars being movable longitudinally along said prongs for varying the spacing thereof.

1,881,135. TRACTOR WHEEL. EDWIN SCHMIDT, Catoosa, Okla. Filed Mar. 27, 1931. Serial No. 525,767. 1 Claim. (Cl. 301—46.)



A lug equipped traction wheel including in combination, a hub, a lug adjusting ring rotatably mounted on the hub, said hub being provided with a radial notch, a rotatable shaft extending axially through the hub and provided with a pinion arranged in said notch, a sleeve extending about said hub and fixed thereto, said sleeve having a bifurcated radial projection, a shaft rotatably supported by said projection and provided with a gear arranged between the arms of said bifurcations meshing with said pinion, and means for transmitting movement of the second-named shaft to said adjusting ring.

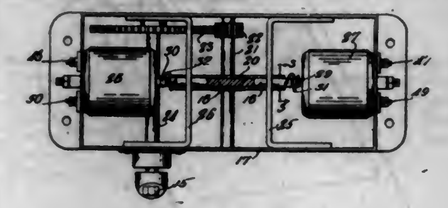
1,881,136. CYCLE SADDLE. WILHELM SCHMIDT, Breslau, Germany. Filed Mar. 20, 1931, Serial No. 526,380, and in Germany Apr. 9, 1930. 2 Claims. (Cl. 208—15.)



1. A two part cycle saddle, comprising in combination a front seat, a rear seat, supporting springs for the front seat, and means for regulating the tension of said supporting springs according to the load independently of the rear seat by vertical shifting of said front seat.

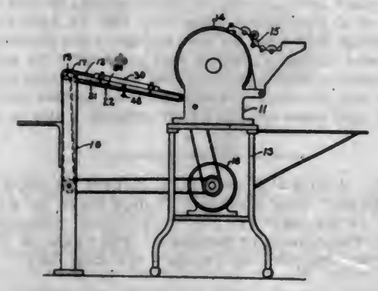
1,881,137. BALANCING APPARATUS FOR AIRCRAFT. HAROLD G. SCHNEIDER, Wollaston, Mass., assignor to Schneider Stabilizer, Incorporated, Boston, Mass. Filed Feb. 13, 1931. Serial No. 515,584. 1 Claim. (Cl. 244—29.)

Stabilizing apparatus for aircraft having angularly movable wing portions for maintaining its balance, comprising control elements connected to said wing portions and adapted upon longitudinal movement to cause angular movement of said portions, a crank for moving said elements, and mechanism automatically actuable in response to tilting of the aircraft for operating the crank in alternative directions, thereby to move the wing portions in opposite directions tending to restore the equilibrium of the aircraft, said mechanism comprising a shaft geared to the crank, electric motors located adjacent the opposite ends of the shaft and having their armatures flexibly connected to the respective shaft ends for alternatively rotating the shaft in opposite directions, a mercury switch lo-



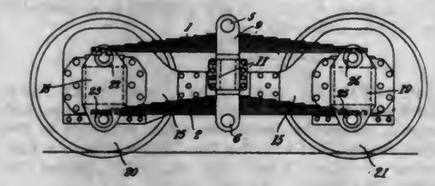
cated in the circuits of said motors and disposed in upright position at the axis of the aircraft, said switch being open when the craft is level and automatically actuable upon tilting of the craft to close the circuit of one of the motors.

1,881,138. PAPER GUIDE. FERDINAND J. SCHOTT, Jr., Cincinnati, Ohio. Filed Oct. 29, 1930. Serial No. 491,967. 2 Claims. (Cl. 271—49.)



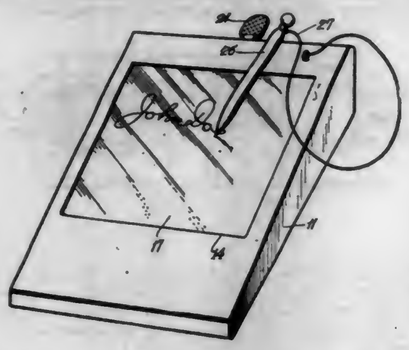
1. In a paper feeding device comprising a frame, a pair of rods extending across said frame, a screw rod central of said rods and parallel thereto, a paper guide slidable on said rods and having operative connection with said screw rod, and a scale adjustably attached to said paper guide registering with said frame.

1,881,139. SPRUNG BOGIE FOR RAILWAY AND TRAMWAY CARS. ARNOLD SEIDEL, Berlin-Charlottenburg, Germany. Filed Dec. 16, 1930, Serial No. 502,832, and in Germany Dec. 17, 1929. 2 Claims. (Cl. 105—197.)



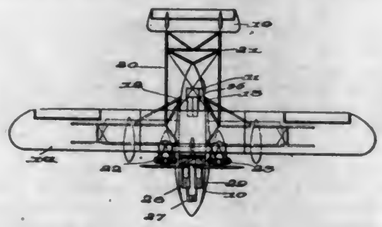
1. A relieved bogie for railway and tramway cars, comprising in combination with the two one-piece wheel axles, axle boxes one for each end of each axle, a single king pin for the bogie, a bridge rigidly connected to the car on said king pin, a vertical arm on each end of said bridge, horizontal supporting pins, one on each end of each of said arms, and a spring oscillatable around each of said horizontal pins bearing at each end on one of said axle boxes without coming into contact with the bogie.

1,881,140. MEMORANDUM PAD. BENJAMIN SETTEL, New York, N. Y. Filed Nov. 23, 1929. Serial No. 409,809. 1 Claim. (Cl. 35—10.)



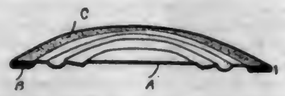
A memorandum pad comprising a rectangular shaped casing provided with an inclined top wall having a window opening therein, a glossy transparent sheet fitting against the inside of the top of said casing and closing the opening therein, a soft tissue sheet behind said glossy transparent sheet, a plate provided with a waxed coating on one side thereof, of a color contrasting with that of said tissue sheet, springs interposed between said plate and the bottom wall of said casing for urging said plate with its waxed coating against said tissue sheet, the top end of said casing having a slot therein and a manipulating member extending from said plate and outwardly through a slot in said casing.

1,881,141. AIRCRAFT AND CONCEALED STANCHION FOR SAME. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,553. 15 Claims. (Cl. 244—30.)



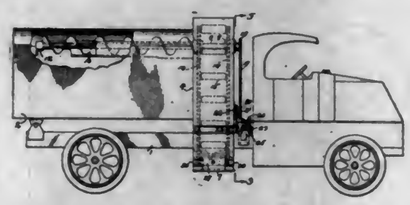
1. In aircraft construction a stanchion slidable in a guideway, said stanchion being slidable from an extended operative position outside of said aircraft to a concealed position within said aircraft.

1,881,142. SEALING COMPOUND FOR CANS AND OTHER CONTAINERS. ARNOLD H. SMITH, Akron, and CLAUDE L. SHREINER, Barberton, Ohio, assignors to The Rubber Service Laboratories Co., Akron, Ohio., a Corporation of Ohio. Filed July 19, 1928. Serial No. 393,859. 8 Claims. (Cl. 18—50.)



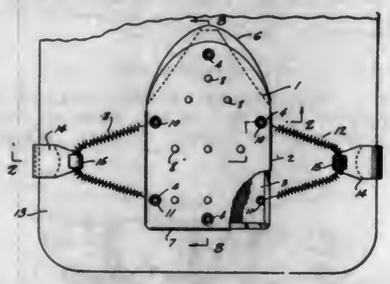
1. The process for the preparation of a rubber sealing compound comprising the heating of rubber in the presence of a small proportion of the reaction product of substantially three molecular proportions of an aliphatic aldehyde and substantially two molecular proportions of a primary aromatic amine, and adding vulcanization ingredients and a small proportion of an ultra vulcanization accelerator thereto.

1,881,143. ATTACHMENT FOR VEHICLES AND THE LIKE. LEONARD C. SMITH, New York, N. Y. Filed Jan. 16, 1931. Serial No. 509,191. 8 Claims. (Cl. 214—67.)



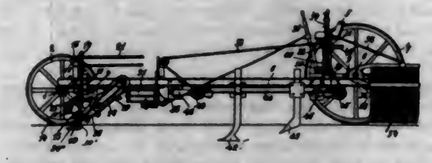
1. In combination an elevator for attachment to a vehicle, a conveyor communicating therewith at the upper end of the elevator for receiving material from the elevator and distributing it along the interior of the vehicle body, a drive shaft for the conveyor, a driving and supporting sprocket for the elevator fixed to said shaft, a conveyor tube, and an idler sprocket rotatably mounted on said tube for supporting one side of the upper end of said elevator.

1,881,144. ATTACHMENT FOR IRONING BOARDS. ROSE STEIN, Los Angeles, Calif. Filed Apr. 16, 1930. Serial No. 444,754. 1 Claim. (Cl. 68—27.)



A sad iron holder, and a pair of spring clamps, one on each side of the holder, for attaching the holder to an ironing board, each of said clamps including a yielding coiled spring having its ends connected at spaced points to the corresponding edges of the holder, and a hook carried by the spring at an intermediate place of the spring.

1,881,145. BEET-ROOT GATHERING MACHINE. HEINRICH STOLZE, Schwanebeck, Germany. Filed Nov. 18, 1929, Serial No. 408,097, and in Germany Nov. 23, 1928. 2 Claims. (Cl. 55—9.)



1. A beet-root gathering machine, comprising in combination with the machine frame having a transverse beam, knives for cutting the beet-root tops guided on said transverse beam independently of each other, slidable

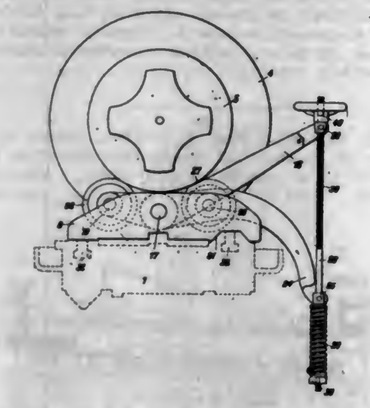
shoes controlling said cutting knives, guide rods to which said cutting knives and said shoes are connected, racks forming the ends of said guide rods, a sprocket wheel drive adapted to be operated from the driver's seat for raising and lowering said shoes and knives, conveying bands behind said shoes for conveying the cut off beet-root tops, conveying bands transversely arranged to the machine frame designed to receive the beet-root tops from said first mentioned conveying bands and for depositing at their ends the beet-root tops in heaps, shares for loosening the beet-roots, forkshaped lifters, longitudinal members on the machine frame on which said shares and lifters are fixed the one behind the other, transverse shafts to which said longitudinal members are connected, crank pins on which said transverse shafts are mounted, two winding drums for raising and lowering said crank pins, wire ropes connecting said winding drums to said transverse shafts, a rake at the end of the machine oblique to said machine, and means for connecting said rake oscillatably to the rear wheel axle.

1,881,146. SOUND STUDIO. SOLOMON S. SUGAR, New York, N. Y., assignor of nine-twentieths to Phil Sugar, Jessie Sugar, and Gertrude Sugar, New York, N. Y. Filed Nov. 28, 1931. Serial No. 577,766. 14 Claims. (Cl. 181—30.)



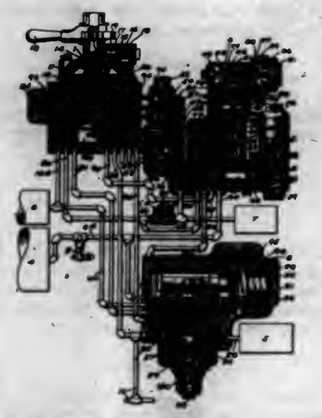
1. A sound studio for picking up and converting sound impulses for recording and radio broadcasting purposes, a compartment, the floor, walls and ceiling of which are damped against sound reflection, and a recess in said compartment, the floor, walls and ceiling of which have sound reflecting surfaces.

1,881,147. WORK REST FOR MATERIAL REDUCING MACHINES. FRANZ THOMA, Kaan-Marienborn, Germany. Filed Feb. 11, 1931, Serial No. 515,087, and in Germany Jan. 18, 1930. 1 Claim. (Cl. 82—38.)



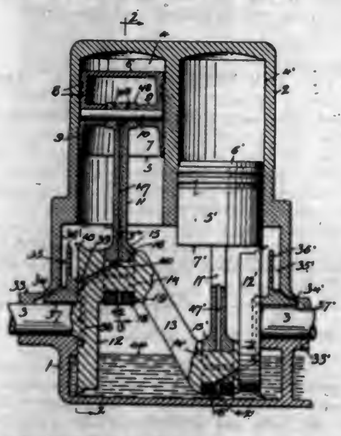
Means for supporting heavy pieces of work in material reducing machines comprising in combination with centering devices two work supporting rollers located one on either side of the vertical plane through the axis of rotation of the work and mounted on pairs of levers fulcrumed substantially in the said plane, the longer arms of the levers projecting towards the same side of the machine, one pair obliquely upwards and the other pair obliquely downwards, and a tension rod with a nut bearing on a distance piece connecting the ends of the arms of one lever pair and a nut bearing in the opposite direction through a spring on a distance piece connecting the ends of the arms of the other lever pair, giving a scissors movement of the levers.

1,881,148. TRAIN CONTROL DEVICE. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., and John N. Good, Wilmerding, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 7, 1929. Serial No. 384,074. 7 Claims. (Cl. 303—18.)



1. In a train control equipment, the combination with a brake pipe, of a valve device operative to effect a reduction in brake pipe pressure to apply the brakes on a train, means operative upon a change in the signal indication for effecting the operation of said valve device, and a brake valve device operative in one position to prevent the operation of said signal controlled valve device and to effect a predetermined reduction in brake pipe pressure.

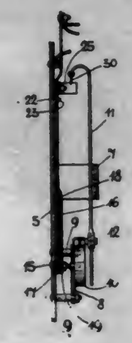
1,881,149. HYDROCARBON ENGINE. ELLINGWOOD H. TOWLE, Larchmont, N. Y. Filed Jan. 6, 1931. Serial No. 506,908. 6 Claims. (Cl. 184—11.)



1. In a hydrocarbon engine the combination of a cylinder, a piston reciprocating therein, a shaft having a crank throw, a connecting rod connected between said crank

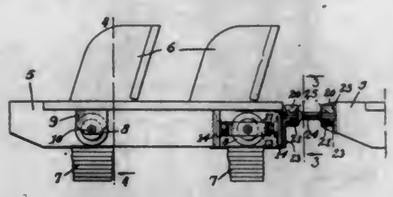
throw and said piston and having a longitudinal bore therethrough for the passage of oil and having an outlet for the oil at the upper end of the connecting rod to cause the oil flowing through said bore to be projected against the under side of the piston head, said connecting rod having a head provided with a groove extending around the crank pin of said crank throw and communicating with said bore, means for dividing said groove into upper and lower compartments, said head having a discharge aperture for discharging oil from one of said compartments, said crank throw having a port extending into the crank pin thereof and communicating alternately with the compartments of said groove whereby said port is in communication with the bore of said connecting rod during the upper half of the piston stroke and in communication with said discharge aperture during the lower half of the piston stroke, and means for supplying oil to said second mentioned port.

1,881,150. THERMOSTATIC CIRCUIT CONTROLLER. MARTIN TRAPP, Belzoni, Miss. Filed Mar. 9, 1928. Serial No. 260,522. 1 Claim. (Cl. 200—56.)



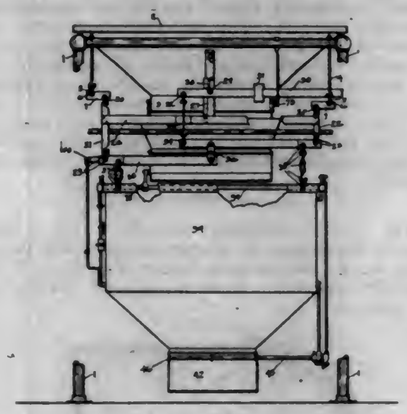
In a device of the class described a metal face plate, an electric terminal thereon, a bimetal spring supported by said plate, a thermometer hand fastened to said spring, a plurality of metal hands adjustably supported by said plate and insulated therefrom and in relation to each other, an electric terminal on each of said hands, a contact plate on each of said hands the thermometer hand being provided with an eye, and a metal spring hanging in said eye, and adapted to contact with the contact plates while sliding over the same.

1,881,151. CAR FOR AMUSEMENT RIDES. HARRY G. TRAVER, Beaver Falls, Pa. Filed Dec. 15, 1927, Serial No. 240,099. Renewed Feb. 27, 1932. 5 Claims. (Cl. 104—53.)



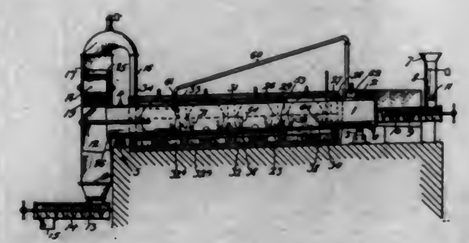
1. In a passenger car for amusement rides, a body supporting frame, traction wheels, wheel supports fixed at the front of the body, and a wheel carrying truck mounted on the rear of the body comprising a rectangular frame pivotally supported by and on the longitudinal axis of the body frame with the truck frame extending in the plane of the body frame and wheels rotatably mounted on the frame to permit of the body and truck with the wheels to have movement relative to each other on the longitudinal axis of the body.

1,881,152. AUTOMATIC WEIGHING MACHINE. JAMES B. VAN DEREN, Kingfisher County, Okla. Filed Nov. 26, 1928. Serial No. 321,869. 1 Claim. (Cl. 249—32.)



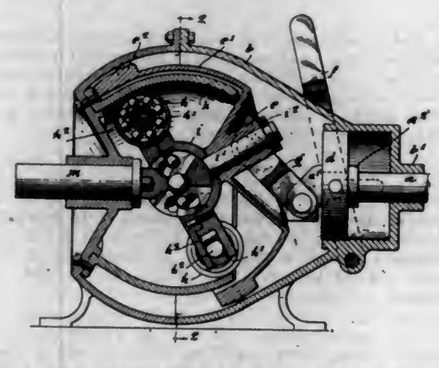
In an automatic weighing machine, a receptacle, a choker adapted to control the flow of grain from said receptacle, a choker scale and connections between said choker and choker scale whereby as a predetermined weight is imposed upon said choker scale the choker is imposed upon said choker scale the choker is closed to the point of reducing the flow of grain to a dribble and when said choker scale is relieved of said weight the choker is immediately opened to full capacity, a weighing scale suspended from said choker scale, a two compartment container suspended from said weighing scale having a door for each compartment and means whereby as either door is opened the other door is closed, a valve for discharging grain alternately into said compartments as they are closed, means for operating said valve and means for locking and unlocking said doors alternately; the relation of all the elements and parts being such that grain is discharged from said receptacle through the choker and into the two compartment container under the control of said valve.

1,881,153. RETORT. JOHN H. VICKERS, Hudson, N. Y., assignor to International Bitumenoil Corporation, New York, N. Y., a Corporation of Delaware. Filed May 18, 1926. Serial No. 109,834. 12 Claims. (Cl. 202—105.)



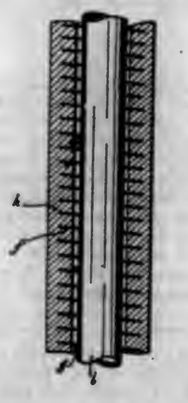
1. An apparatus of the class described, comprising a revolvable cylinder through which carbonaceous material is adapted to travel, means enclosing said cylinder to form separate heating chambers for heating the said cylinder in a plurality of heat zones lengthwise thereof, separate heating means in said chambers for heating different portions of said cylinder to relatively different temperatures, a plurality of stills and means connecting them in series whereby liquid will travel successively through said stills, means for reducing the product evolved in said cylinder to the liquid phase and for delivering the same to the first of said series of stills and means forming separate heating chambers under said separate stills and arranged to receive the products of combustion from said heating means in said first mentioned chambers.

1,881,154. POWER TRANSMISSION DEVICE. CARL W. WEISS, Brooklyn, N. Y. Filed May 22, 1931. Serial No. 539,251. 6 Claims. (Cl. 74—14.)



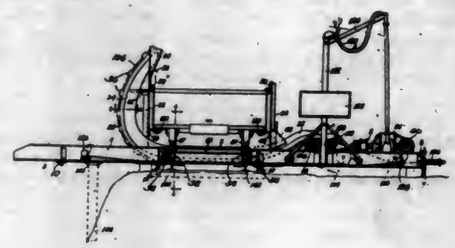
1. A power transmission device comprising a rotatable mutor, a cooperating body concentric with the mutor, one of said parts having a spherical bearing surface and the other of said parts having gripping elements to cooperate with the spherical bearing surface, a balancing body relatively rotatable with respect to the mutor, means to vary the relative angular position of the mutor and of the cooperating body and of the balancing body, and driving means for one of said first named parts and for said balancing body.

1,881,155. SHOCK AND VIBRATION ABSORBING AND DAMPING DEVICE. HUBERT JULES WEYDERT, Levallois Perret, France. Filed Dec. 6, 1928, Serial No. 324,266, and in France Dec. 31, 1927. 1 Claim. (Cl. 267—33.)



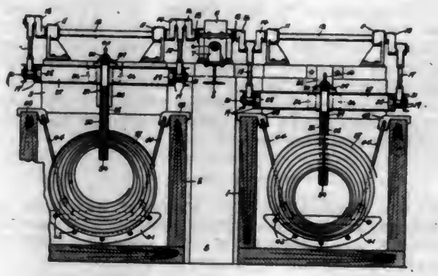
A shock absorber comprising a guide element and a continuous tubular element of elastic compressible material such as rubber and a continuous helicoidal reinforcing member in said compressible tubular element, the convolutions of said helicoidal member being appropriately spaced apart and each partly embedded in the material of the tubular element and partly projecting therefrom toward the guide element and presenting edge surfaces for contact with the guide element.

1,881,156. CAR DUMPING APPARATUS. ROBERT E. WHITTEKER, Charleston, W. Va., assignor to Kanawha Manufacturing Company, Charleston, W. Va., a Corporation of West Virginia. Filed Sept. 27, 1929. Serial No. 395,683. 32 Claims. (Cl. 214—51.)



1. In a car dumping apparatus, a supporting frame, a rocker frame for receiving a car carried by said supporting frame and having side members curved at one end thereof, and horizontally shiftable means for engaging the side members to rock the rocker frame on said supporting frame.

1,881,157. PICKLING APPARATUS. STEPHEN L. WILLIAMS, Bridgeport, Ohio, assignor to Extruded Metal Products Company, Bridgeport, Ohio, a Corporation of Ohio. Filed May 13, 1932. Serial No. 611,092. 10 Claims. (Cl. 266—7.)



1. A pickling apparatus of the character described comprising a pair of spaced pickling tanks, a stationary cradle mounted in each of said tanks, a vertically reciprocating frame permanently disposed above each of said tanks and comprising a pair of longitudinal members spaced apart by a pair of transverse members suitably to the reception of an article carrier, a removable article carrier supported by each of said frames, and power means connected to said frames whereby to alternately reciprocate the frames and thereby the articles carried by the latter into and out of engagement with said cradle.

1,881,158. GRAPE JUICE COMPOSITION AND PROCESS OF PREPARING THE SAME. LEONIDAS ALEXANDROU, New York, N. Y. Filed Nov. 27, 1929. Serial No. 410,252. 4 Claims. (Cl. 99—11.)

3. Process of making an improved composition consisting essentially of grape juice, which comprises sweetening with sugar freshly extracted juice of fresh grapes in

amount sufficient to raise the specific gravity thereof to from 14° to 16° Baumé and heating the sweetened juice to about 160° F., separately soaking gelatin in a small amount of grape juice, incorporating the resulting softened gelatin together with orange and lemon juices and vanilla extract into the previously sweetened and heated grape juice, and sterilizing the resulting product by heating the same in a closed container for about five minutes at at least 185° F.

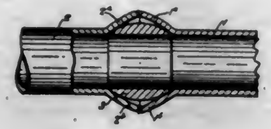
4. A composition comprising normal grape juice, cane sugar, gelatin, orange and lemon juices, and vanilla extract, being further characterized in that the content of sugar is equivalent to the amount necessary to raise the specific gravity of normal grape juice to from 14° to 16° Baumé and in that the contents of the other named components are, with respect to one gallon of the sugar in grape juice solution, 0.5 ounce of the gelatin, juice of one orange, juice of at least one-half lemon, and about two teaspoonfuls of the vanilla extract.

1,881,159. SAFETY AIRCRAFT. PETER APOLLONIOU and STEVEN L. CHICK, New York, N. Y. Filed Dec. 22, 1931. Serial No. 582,635. 3 Claims. (Cl. 244—12.)



1. In an aircraft having a fuselage, and a fixed wing, a safety wing pivoted to said fixed wing, control means operable from within said fuselage for raising and lowering said safety wing, air collectors mounted on said safety wing, and air pipes leading from said air collectors to a point adjacent the bottom of said fuselage at the tail or rear end thereof, and to a point beneath the fuselage at the nose or front end thereof.

1,881,160. JOINING PIPES. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Apr. 17, 1929. Serial No. 355,799. 2 Claims. (Cl. 78—94.)



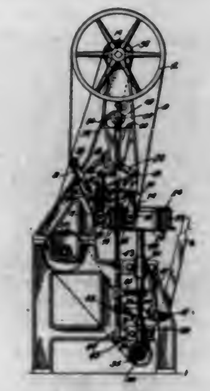
1. An article of the class described comprising two pipe lengths, an annular anvil being at its thickest portion at least as thick as the pipes and having a cylindrical bore the diameter of which is substantially that of the internal diameter of the pipes, the ends of said pipes extending over said anvil and being joined by a forged weld but separate from the anvil.

1,881,161. BOILER AND SUPPORTING MEANS FOR USE THEREWITH. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed July 13, 1931. Serial No. 550,496. 4 Claims. (Cl. 122—478.)



3. The combination with a bank of generating boiler tubes having the tubes staggered in the vertical direction, of a plurality of supporting members each supported on a different horizontal row of tubes in said bank, and suspension members adapted to connect an object below said bank to said supporting members.

1,881,162. SANDPAPERING MACHINE. FRANK F. AURORI, Jackson Heights, and CHARLES G. G. SCHMIDT, Lynbrook, N. Y., assignors to Charles G. G. Schmidt & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1931. Serial No. 513,794. 7 Claims. (Cl. 51—145.)

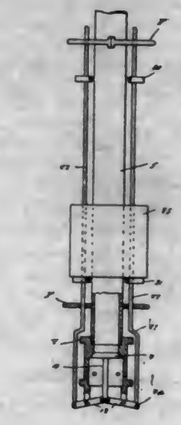


1. A machine of the character described comprising, a vertically arranged rotatable shaft having an annulus-like support on its upper end, an endless belt of abrasive material traveling in a vertical plane, means for supporting and guiding the belt including two lever arms, a guide wheel on each lever arm and over which the lower section of the belt passes, means for yieldingly holding the guide wheels toward each other, one guide wheel lying in a vertical plane without the support and the other guide wheel lying in a vertical plane within the support, and means for raising the support to bring it into contact with the belt section between the guide wheels.

1,881,163. AUTOMATIC PRODUCING VALVE. BERNARD H. AYERS, Grantsville, W. Va. Filed Jan. 26, 1932. Serial No. 588,985. 1 Claim. (Cl. 166—2.)

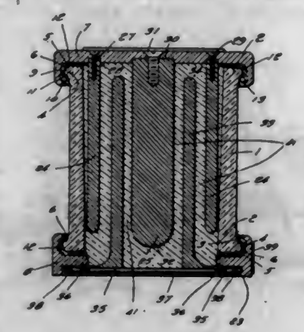
In a structure of the class described, a pipe, a valve casing attached to the lower end of the pipe, the bore of the casing being formed with a reduced upper part

to provide a valve seat, and said casing having holes in its side walls in communication with the interior thereof, a valve for engaging the seat with the stem of the valve extending downwardly through the lower end of the casing, depending lugs on the bottom of the casing, levers pivoted intermediate their ends to said lugs and having their inner ends pivoted to the lower end of the stem, a rod having its lower end connected with the outer end of each lever, a float slidably arranged on the rods and



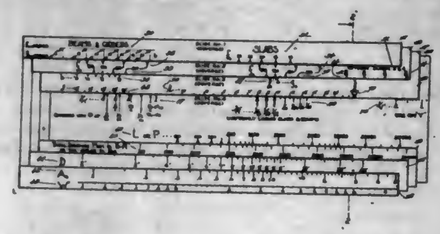
having an opening therein for receiving the pipe, upper and lower stops for the float adjustably connected to each rod, frames attached to the pipes for guiding the rods, each frame being formed of two sections detachably connected together and each frame consisting of inner and outer rings, the inner ring encircling the pipe, spokes connecting the inner and outer rings together, said spokes having openings therein through which the rods pass.

1,881,164. IMPROVED CAPACITOR. WILLIAM M. BAILEY, Lynn, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Jan. 10, 1930. Serial No. 419,805. 1 Claim. (Cl. 175—41.)



A high voltage high current capacitor comprising a casing of structural insulating material, rigid metal end-plates secured to a casing at opposite ends, a rigid metal armature member mechanically and thermally rigidly secured to each end-plate, and a plastic dielectric between said armatures, the separation of said armatures through said dielectric being much smaller than the separation of the end-plates by the casing, and each armature being separated from its opposite potential end-plate by said plastic dielectric.

1,881,165. CALCULATING INSTRUMENT. FRANK V. BECKER, Malden, Mass. Filed June 9, 1928. Serial No. 284,089. 13 Claims. (Cl. 235—70.)



1. A calculating instrument for use in making computations for the design of reinforced concrete beams having, in combination, four nested slides comprising slide No. 1 provided with a scale of graduations of permissible reinforcement stresses and assumed breadths, slide No. 2 provided with a co-operating scale of graduations of permissible concrete compressive stresses co-operating with the reinforcement scales of slide No. 1, and with a second set of concrete compressive stresses, slide No. 3 provided with a scale of concrete breadths co-operating with the second concrete compressive scale of slide No. 2 and with a span scale and slide No. 4 provided with a scale of bending moment coefficients, co-operating with the span scale of slide No. 3, said slide No. 4 being also provided with a scale of superimposed loads, said slide No. 3 being also provided with a scale of total bending moments, said slide No. 2 being also provided with a scale of depths of concrete, and said slide No. 1 being also provided with a scale of reinforcement sectional areas and with a scale of reinforcement weights in pounds per lineal foot, said additional scales of loads, bending moments, depths of concrete, cross-section of reinforcement and weights of reinforcement per lineal foot all co-operating together, the arrangement being such that when the slides are set so that the given breadth on slide No. 1 corresponds with the given permissible concrete compressive stress on slide No. 2, and slide No. 3 is set with the assumed breadth of concrete opposite the assumed concrete compressive stress of slide No. 2, and slide No. 4 is set with the assumed bending moment coefficient opposite the assumed length of span on the scale of slide No. 3, then the last five-named scales are thereby so set that with any assumed load, the total bending moment, the depth of concrete, the cross-sectional area of the reinforcement, and the weight per lineal foot of such reinforcement read directly across all five scales.

1,881,166. PROCESS OF VULCANIZING RUBBER AND PRODUCTS OBTAINED THEREBY. OSWALD BEHREND, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Dec. 18, 1929. Serial No. 415,129. 16 Claims. (Cl. 18—53.)

1. A process of vulcanizing rubber comprising heating rubber and sulfur in the presence of a vulcanization accelerator comprising a reaction product of a mercaptobenzothiazole and a chlorinated aldehydeamine product, said amine comprising an aromatic hydrocarbon wherein one or more hydrogen atoms are substituted by amino groups only.

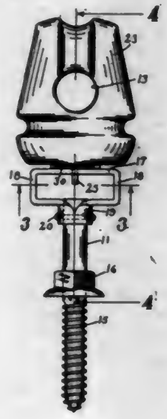
1,881,167. SHUTTLE. EDWARD BLOOM, Paterson, N. J. Filed Mar. 19, 1932. Serial No. 599,901. 6 Claims. (Cl. 139—208.)



1. In combination, the fixed shuttle structure having an open-top cavity, a spindle having a butt arranged between

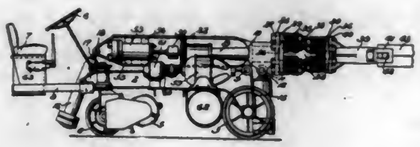
sides of the cavity and pivoted in the fixed structure on an axis penetrating said sides, said butt having a bore substantially parallel with the pivot and open laterally of the butt, and a spring-pressed plunger in the bore held in contact with one side of the cavity.

1,881,168. DETACHABLE INSULATOR FOR LAMP LEADS. EDMUND W. BRADY, New Britain, Conn., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Filed July 14, 1928. Serial No. 292,709. 2 Claims. (Cl. 173—321.)



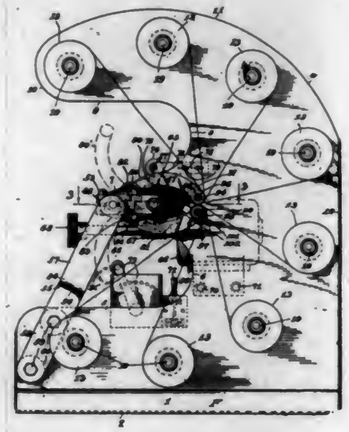
1. A lag screw having wood piercing threads thereon, an insulator support secured thereto, and an insulator detachably secured to said support, said support comprising a relatively broad flat supporting surface, legs projecting rearwardly from said surface, and said legs being brought together to embrace the end of said screw and being permanently secured thereto.

1,881,169. MANIPULATOR. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed June 23, 1931. Serial No. 546,284. 19 Claims. (Cl. 214—32.)



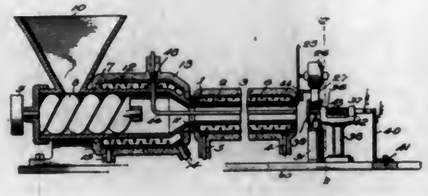
1. In a manipulator, a floor supported vehicle, a sectional articulated material handling peel mounted thereon, and yielding means normally maintaining the sections of said peel in substantially axial alinement.

1,881,170. PAPER CONDENSER WINDING MACHINE. BENJAMIN J. BUTLER, Somerville, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed July 5, 1928. Serial No. 290,415. 7 Claims. (Cl. 242—55.)



1. A winding machine comprising a vertical frame member and a support therefor; a winding head and mandrel, operating mechanism centrally disposed on the frame and connected to drive said mandrel; a plurality of material roll supporting means mounted on the frame, and opposed tensioning sheet-holding means for material strips comprising two intermeshed arms and rolls carried by said arms between the mandrel and the material roll supporting means.

1,881,171. METHOD OF PREPARING FISH AND OTHER MEATS. EDWARD H. COOLEY, Belmont, Mass. Filed Apr. 23, 1930. Serial No. 446,719. 3 Claims. (Cl. 99—14.)



3. A method of reducing discrete fragments of soft meat material to a solid hard cake differing in shape and dimensions from its component fragments which consists in forming a column of the fragments to provide a body having uniformly throughout the length of the column the cross-sectional shape of the desired cake, continuously supplying material to the originating end of the column, moving the column along a rectilinear path by substantially continuously applying pressure axially to said end of the column, and simultaneously lowering the temperature of the shaped column progressively during its movement sufficiently to fix its shape and compact and freeze the fragments into a hard, rigid mass, and then severing from the other end of the column a section equal in thickness to the thickness of the desired cake.

1,881,172. ESTER-LIKE CONSTITUTED WETTING AGENTS, FOAMING AGENTS, AND DISPERSING AGENTS AND PROCESS OF PREPARING THEM. KARL DAIMLER and KARL PLATZ, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 24, 1930, Serial No. 491,082, and in Germany Oct. 31, 1929. 9 Claims. (Cl. 260—106.)

2. The process which comprises causing a compound of the general formula:

$$X.CH_2.CH_2.SO_3H$$

wherein X stands for OH or a halogen atom to react with a fatty acid compound of the general formula:

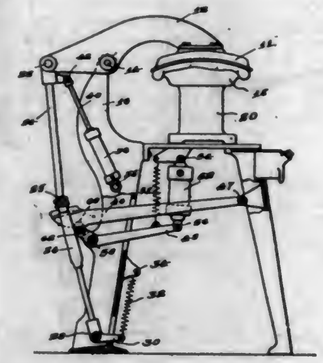
$$R.CO.Z$$

wherein Z stands for OH, O.metal, O.alkyl or a halogen atom and R represents an aliphatic hydrocarbon radicle, the molecule of which contains more than 3 carbon atoms.

1,881,173. CUTTING COMPOUND OR LUBRICANT. ALFRED E. DAHLBERG, Chicago, Ill. Filed Dec. 9, 1931. Serial No. 579,986. 3 Claims. (Cl. 87—9.)

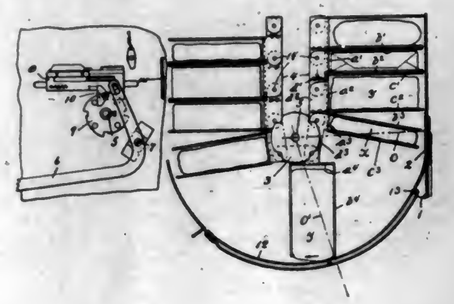
1. A cutting compound consisting of a mixture of oil and ammonium oleate.

1,881,174. ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,052. 4 Claims. (Cl. 68—9.)



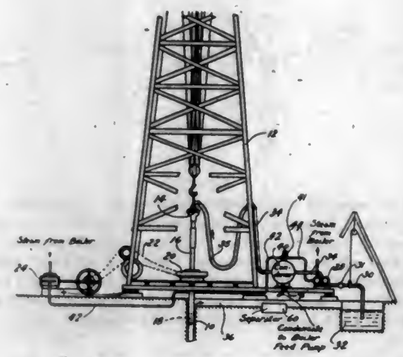
1. In a pressing machine, cooperating pressing elements, one of which is movable toward and from the other; mechanism for effecting the applying of pressure to the pressing elements including a pry bar having a bearing surface extending lengthwise thereof; and motion transmitting means between the pry bar and the movable element including a member, connections between it and the movable element, said member being arranged at an angle to the pry bar, and a shoe pivotally connected to said member and slidable along the bearing surface on the pry bar upon preliminary closing of the press and making and maintaining surface contact with said pry bar during operation of the pry bar.

1,881,175. DISPENSING MECHANISM. ARTHUR H. DU GRENIER, Haverhill, Mass. Filed Feb. 10, 1932. Serial No. 592,027. 4 Claims. (Cl. 312—97.)



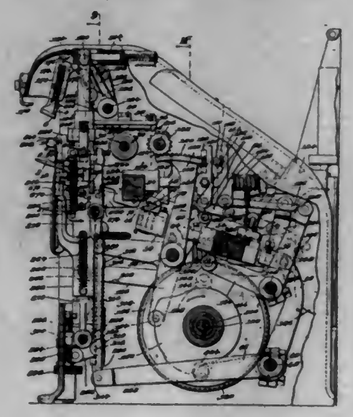
1. In a dispensing carrier of the type described, a series of pivotally connected links, of equal length, a series of pairs of article holding compartments each mounted on two adjacent links, each compartment of a pair being of different width, and the combined widths of each pair of compartments corresponding to the combined lengths of two of the links.

1,881,176. ROTARY DRILLING. FREDERIC I. EPLEY, North Pelham, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Apr. 16, 1931. Serial No. 530,738. 8 Claims. (Cl. 255—24.)



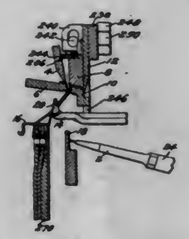
1. The combination with a rotary drill shaft of a steam pump connected therewith in such a manner as to permit forcing muddy fluid into said shaft, a condenser through which said muddy fluid passes on its way to said shaft and which is adapted to utilize said fluid as a cooling medium, and connections for leading the exhaust steam from said pump to said condenser.

1,881,177. MACHINE FOR LACING SHOE UPPERS. HERBERT E. ENSLIN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 5, 1925. Serial No. 13,299. 63 Claims. (Cl. 112—5.)



1. A lacing machine having, in combination, means for passing separate unconnected lacing cords through a plurality of pairs of eyelets and for securing the cords to form a plurality of individual lacings, and adjustable means for controlling the length of the lacings.

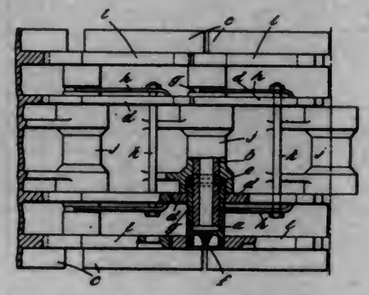
1,881,178. METHOD OF LACING SHOE UPPERS. HERBERT E. ENSLIN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Mar. 5, 1925, Serial No. 13,299. Divided and this application filed May 15, 1930. Serial No. 452,629. 5 Claims. (Cl. 112—262.)



5. The method of lacing shoe uppers preparatory to lasting which consists in passing a series of cords through a series of pairs of eyelets, relatively manipulating the cords and upper to cause the cords to vary in length progressively from one end of the series to the other, and tying together the ends of the cords to form a series of lacing loops of progressively varying lengths.

1,881,179. CONTINUOUS TRACK FOR VEHICLES. EDWARD HAMMOND WHALLEY FOOT, Beaconsfield, England. Filed Apr. 11, 1930, Serial No. 443,479, and in Great Britain Nov. 5, 1929. 1 Claim. (Cl. 74—32.)

An endless chain track comprising a plurality of mutually hinged plates, a central lug having a chamber at each end thereof, packing in said chambers, a hinge pin for said plates having its ends sealed by said chambers and packing, a bush cap for each chamber and springs for pressing and holding the bush caps in place, whereby owing to the spring pressure, the lubricant in the oil chamber at the back of the bush cap is put under pressure as the gland packing gradually wears down and this pressure

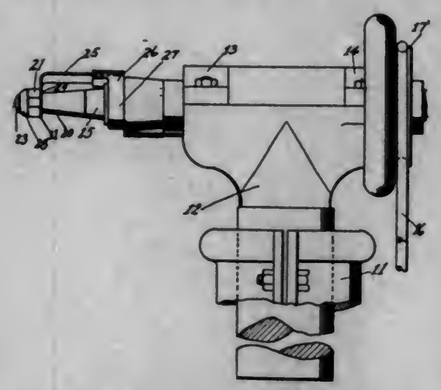


automatically forces the lubricant to work out, and so prevents any tendency for grit and moisture to work in and destroy the bush and pin.

1,881,180. ACID PROOF MATERIAL AND PROCESS OF PREPARING IT. KARL FRANCK and KARL DIETZ, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 6, 1928, Serial No. 245,036, and in Germany Jan. 8, 1927. Renewed July 28, 1932. 6 Claims. (Cl. 106—8.)

1. The process of preparing an acid-proof cementing composition which comprises mixing with a water-glass solution a finely powdered mass containing powdered tungsten oxide.

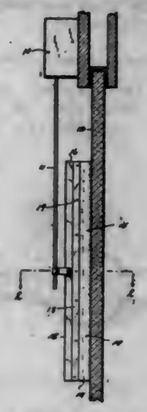
1,881,181. SHANK BEATING AND STITCH RUBBING MACHINE. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Filed Oct. 11, 1927. Serial No. 225,536. 19 Claims. (Cl. 12—17.)



1. In a shoe shank beating and stitch rubbing machin. a rotatable shaft having a beating tool mounted adjacent its end and an independent adjustable guide for work mounted adjacent the inner edge of said tool, said guide having an edge adapted to be guided along the angular shoulder of a channel flap at its juncture with the sole of a shoe.

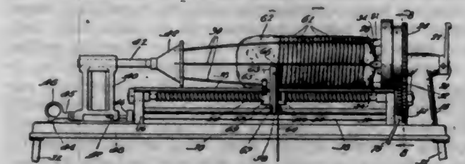
1,881,182. WINDSHIELD WIPER. OLIVER P. GREENSTREET, Owensville, Mo. Filed Oct. 18, 1930. Serial No. 489,676. 1 Claim. (Cl. 15—255.)

A windshield wiping element comprising a U-shaped resilient clamping member for clamping therein a windshield wiper blade, an absorbent wiping member engaging about the outer surface of said clamping member, and reverted



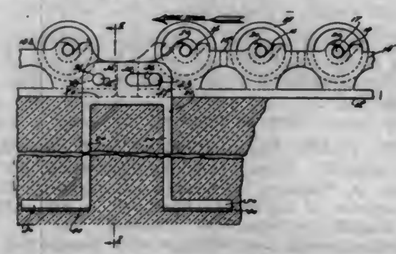
securing means formed with each leg of said clamping member for securing said wiping member on said clamping member.

1,881,183. WINDING MACHINE. ENOCH L. GRIFFITH, Chicago, Ill., assignor to The Griffith Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1931. Serial No. 569,247. 7 Claims. (Cl. 242—7.)



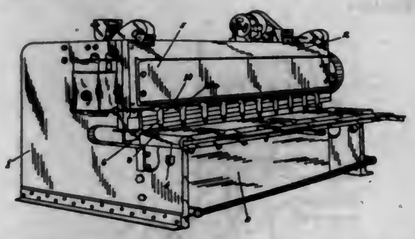
1. A winder for articles such as hams and sausage, comprising in combination, a base plate, a head stock therein, a removable tail stock on said base, a rotatable holder consisting of free ended spikes mounted at the other ends as elements of a cylinder in the head stock, means to adjust the diameter of the cylinder of spikes, and a cord feeding device operatively associated with the holder for spirally winding the holder, said tail stock including spaced means to engage the free ends of the spikes individually in a fixed spaced relation for rotation therewith.

1,881,184. ROLLER RAIL FOR INDUSTRIAL HEATING FURNACES. HENRY H. HARRIS, Detroit, Mich., and GEORGE C. MCCORMICK, Needham, Mass., assignors to General Alloys Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1930. Serial No. 483,430. 22 Claims. (Cl. 193—35.)



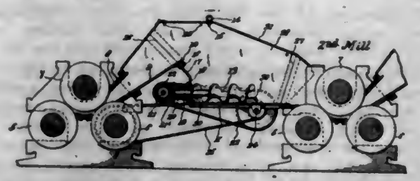
1. Roller rails for heat treating furnaces, said rails being made in a plurality of sections, means for anchoring the sections in the furnace floor and combustible temporary supports for the anchoring means.

1,881,185. HYDRAULIC HOLD-DOWN. ROBERT T. HAZELTON, Cincinnati, Ohio, assignor to The Cincinnati Shaper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 23, 1929. Serial No. 409,881. 9 Claims. (Cl. 164—52.)



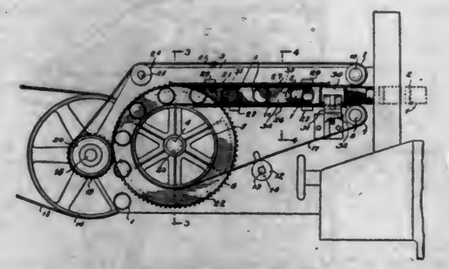
1. In a machine tool the combination with a bed of means to hold work down on the bed comprising a series of interspaced hydraulic cylinders with pistons, members operated by the pistons for engaging the work on the bed, and a pump for placing the fluid in said cylinders under pressure, and means operated in timed relation with the machine tool mechanism for operating said pump.

1,881,186. INTERMEDIATE CARRIER FOR SUGAR CANE MILLS. FRANCIS HEGENBARTH, New Orleans, La. Filed Sept. 22, 1930. Serial No. 483,669. 4 Claims. (Cl. 100—47.)



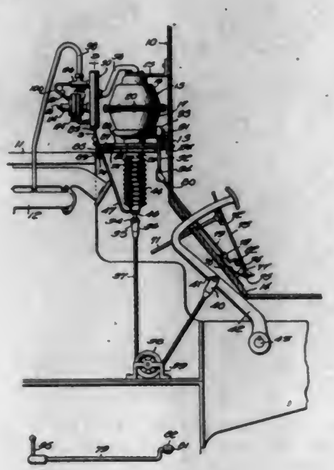
1. In a sugar cane mill, a wide intermediate carrier section between two mills, having a bottom plate, a number of screw flights having stub shafts at one end only mounted across the bottom plate in an intermediate portion of the carrier, and means for rotating said screw flights.

1,881,187. CAN TURNING MECHANISM. HENRY HERMANI, Baltimore, Md., assignor to The Tin Decorating Company of Baltimore, Baltimore, Md., a Corporation of New Jersey. Filed Apr. 4, 1928. Serial No. 267,384. 13 Claims. (Cl. 198—33.)



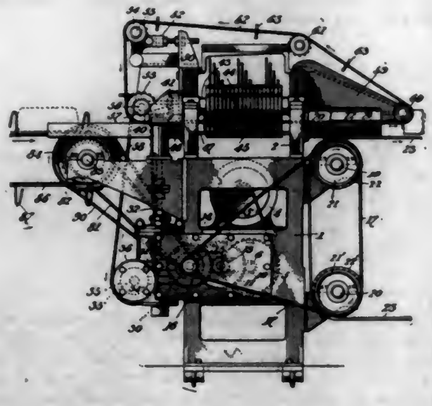
1. Mechanism of the class described, including belts having opposed runs to grasp and move a succession of axially alined can bodies, and means at one side of said belts for successively engaging the forward ends of the can bodies to shift said bodies a quarter turn, said last named means comprising a plate arranged with its plane substantially parallel with the direction of movement of the belts, and having one end positioned to engage the forward ends of the cans at one side of the belts.

1,881,188. CLUTCH OPERATING DEVICE FOR MOTOR VEHICLES. EDWARD G. HILL and HENRY W. HEY, Richmond, Va., assignors to Hill Engineering Corporation, Richmond, Va., a Corporation of Virginia. Filed Dec. 1, 1931. Serial No. 578,394. 30 Claims. (Cl. 192—.01.)



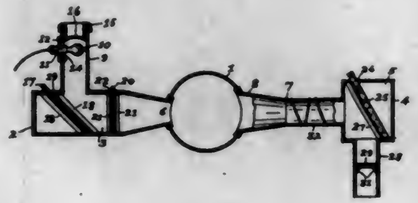
1. Apparatus of the character described comprising a power device connected to an operating member of a motor vehicle clutch, control means operable for rendering said power device operative to move the clutch to inoperative position and for releasing the clutch elements for movement toward operated position, means operative as the clutch elements approach operative position for retarding the movement of such elements, and means for controlling the rate of movement of the clutch elements into engagement with each other in accordance with the rate of operation of the throttle of the motor vehicle engine in proportion to the engine speed.

1,881,189. SLICING MACHINE. MARSHALL C. HJELTE, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii, a Corporation of Hawaii. Filed Aug. 6, 1931. Serial No. 555,585. 4 Claims. (Cl. 146—6.)



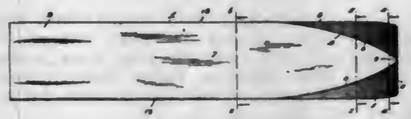
1. A slicing machine including a slotted tubular head, a rotary cutter having knives traversing the slots in the head, a feed chain having lateral arms adapted to traverse said head longitudinally, and a resilient outwardly tapering tubular discharge member in alignment with said head traversed by said arms and adapted to deliver the slices in facially abutting series.

1,881,190. SMOKE INDICATOR. HAROLD A. HORNER, Wilkinsburg, Pa. Filed Mar. 16, 1931. Serial No. 523,009. 1 Claim. (Cl. 88—14.)



In combination, a smoke indicator comprising a light casing having a reduced inner end communicably joined with the flue bridge of a combustion apparatus, a vision casing, a supporting tube carrying said vision casing at the outer end thereof and having an enlarged inner end communicably joined with the flue bridge, said light casing and said vision casing being horizontally aligned relatively to each other on respective sides of the flue bridge, a light tube mounted on the top of said light casing and having its lower end opening into the latter, an illuminating element removably supported in said light tube, a top cover for said light tube having a reflecting surface on its under side, an inclined mirror reflector having its upper end disposed outwardly mounted in said light casing outwardly of said light tube, a vertically extending transparent lens mounted in said light casing and being disposed inwardly of said light tube, an inclined mirror reflector having its upper end disposed inwardly mounted in said vision casing, a vision tube depending from the bottom of said vision casing and having its upper end opening into the latter, and a horizontally extending translucent lens mounted in said vision tube, substantially as described and for the purpose set forth.

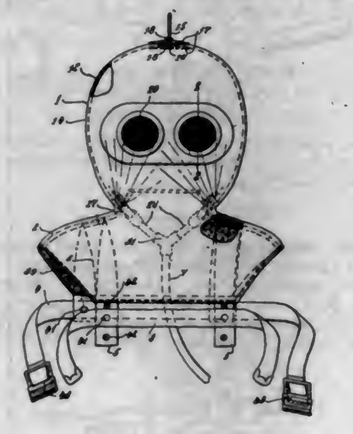
1,881,191. VESSEL CONSTRUCTION. JAMES E. HOWARD, Jeffersonville, Ind. Filed Sept. 20, 1930. Serial No. 483,216. 7 Claims. (Cl. 114—63.)



1. A vessel having a bow construction combining a bow portion of the model boat type and a bow portion of the scow type terminating in a transversely extending bow end plate.

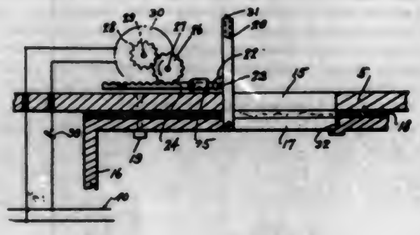
1,881,192. SAND BLAST HELMET AND VENTILATING MEANS. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Oct. 7, 1927. Serial No. 224,587. 1 Claim. (Cl. 128—143.)

A helmet having eye openings with transparent closures and means for supplying air thereto comprising an air hose and nozzle, means for supplying an air draft through the hose and nozzle, the nozzle being connected to the neck portion of the helmet at the sides and directed upwardly and forwardly toward the eye openings supplying breathing air and preventing condensation on the transparent members, the helmet being adapted to



release quantities of air corresponding to the quantities introduced to prevent the building up of pressure within the helmet.

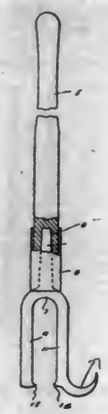
1,881,193. CLOSING MEANS FOR SAFE DOORS. CECIL K. JACKSON, Washington, Mo. Filed Aug. 30, 1930. Serial No. 478,915. 1 Claim. (Cl. 268—75.)



In combination with a safe having a hinged door on its top, a curved hood on the door, a slidably supported rack bar having a bent end engaging the hook, motor operated means including a gear meshing with the teeth of the rack for moving the rack bar whereby the hook on the door will disengage itself from the bent end of the rack to permit the door to drop into closed position, a circuit for the motor and a spring latch for locking the door in closed position.

1,881,194. HOG FEEDING TROUGH HANDLING DEVICE. HAROLD O. JENKINS, Platteville, Wis. Filed Oct. 23, 1931. Serial No. 570,740. 1 Claim. (Cl. 294—16.)

A device of the class described including a U-shaped body formed with a bight and a pair of parallel tines, the tines terminating in inwardly directed pointed nibs, and one of the tines being formed at its end with an



outwardly curved hook sharpened at its outer end, a shank projecting from the bight in opposite direction to the tines, a handle connected to said shank.

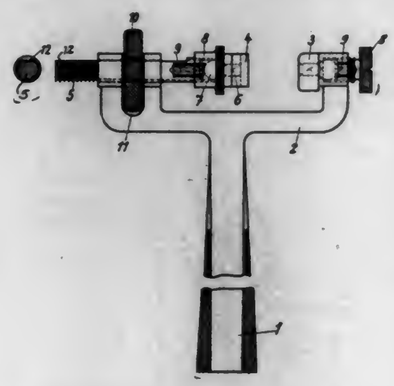
1,881,195. PROCESS OF PRODUCING MAGNESIUM AMMONIUM PHOSPHATE. OSCAR KASELITZ, Berlin, Germany. Filed June 17, 1929, Serial No. 371,719, and in Germany Dec. 6, 1928. 2 Claims. (Cl. 71—7.)

1. The process of making magnesium ammonium phosphate comprising mixing waste liquors containing magnesium chloride and resulting in the recovery of potash salts from minerals containing same with a dilute solution resulting in the manufacture of phosphoric acid and containing a phosphorus compound, so as to produce a mixture containing more magnesium than corresponds to the proportion 2 Mg : 1 P_2O_5, adding to the mixture a sufficient quantity of ammonia to precipitate substantially all the phosphorus in the form of ammonium-magnesium phosphate, separating the precipitate from the mother liquor, adding lime to the mother liquor heating same to expel ammonia, and reusing the ammonia thus recovered for the production of another quantity of ammonium-magnesium phosphate.

1,881,196. INSTRUMENT FOR ADJUSTING THE TEETH. ROBERT KAWRETZKE, Kloster, Wennigsen in Deister, Germany. Filed Nov. 4, 1930, Serial No. 493,477, and in Germany Nov. 8, 1929. 3 Claims. (Cl. 32—19.)

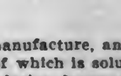
2. An instrument for adjusting the teeth comprising a bifurcated yoke having a handle, one end of the yoke being formed with a socket, a pin having a ball insertible into the socket, a jaw detachably carried by the pin, the ball and socket permitting the jaw to be adjusted into various angular relations to the yoke, means for holding the jaw in any adjusted position, a spindle extending through the opposite end of the yoke and having screw-threads, the spindle being held in the yoke from rotating movement, a nut engaging the screw-threads of the spindle and held from longitudinal movement by the yoke

whereby the spindle may be adjusted toward or from the opposite end of the yoke, the spindle being formed with a socket, a pin having a ball insertible within the socket,



a jaw detachably mounted upon the pin, and means for holding the pin in any angularly adjusted position with relation to the spindle.

1,881,197. MEDICAL TABLET. WILLIAM J. KIRK, Wellsburg, W. Va. Filed Dec. 6, 1929. Serial No. 412,094. 1 Claim. (Cl. 167—82.)



As an article of manufacture, an enteric-covered tablet, the enteric coating of which is soluble only in an alkaline medium, and an enclosing layer external to the enteric coating comprising a stomachic adapted to stimulate the secretion of hydrochloric acid in the stomach.

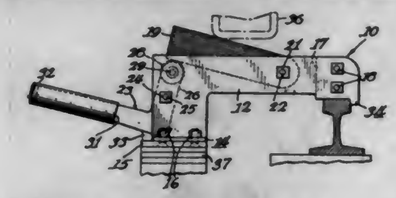
1,881,198. HEATED CUSHION. WILLIAM J. KIRK, Wellsburg, W. Va. Filed Jan. 28, 1930. Serial No. 423,962. 2 Claims. (Cl. 219—46.)



1. As a new article of manufacture, a cushion adapted for use as a chair pad comprising a fabric envelope, a mass of wadding within the envelope, and a heating unit at one side of the cushion adjacent the envelope entirely enclosed within the envelope, the thickness and character of the wadding being comparable to that of an ordinary cushion.

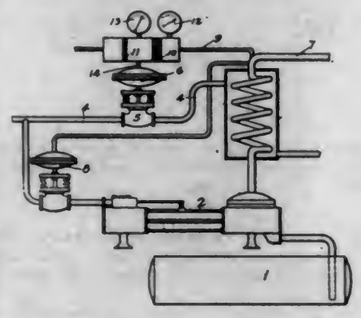
1,881,199. JACK FOR RAISING TRUCK FRAMES. FREDERICH KOEHLER, Chicago, Ill. Filed May 25, 1931. Serial No. 539,815. 5 Claims. (Cl. 254—33.)

1. A jack for raising car truck frames comprising a base, a lever pivoted to the base adapted to be raised therefrom to engage and lift a car truck frame, a foot portion provided on the base near the pivot of the lever formed to be received over a rail and prevent lateral movement between the jack and the rail, and another foot portion provided on the base spaced from the first foot and positioned in a horizontal plane lower than that of the



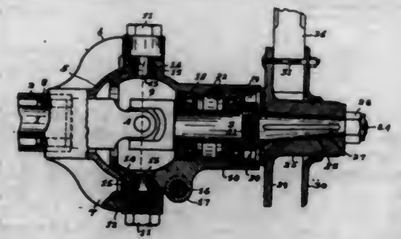
first foot adapted to receive an adjustable support placed on the roadway, in combination with means for rotating said lever about its pivot.

1,881,200. METHOD OF AND APPARATUS FOR THE REGULATION OF VISCOSITY OF LIQUIDS. JOHN P. LEASK, Glenbrook, Conn., and SAMUEL T. WARNER, New York, N. Y., assignors to Peabody Engineering Corporation, a Corporation of New York. Filed Sept. 10, 1928. Serial No. 305,068. 10 Claims. (Cl. 137—78.)



6. The method of regulating the viscosity of a liquid which consists in passing it through a heater, then passing part of the liquid through a restricted passage, then causing the bypassed liquid to act against a balancing resistance to effect changes in the supply of heat to the heater to bring the viscosity back to normal.

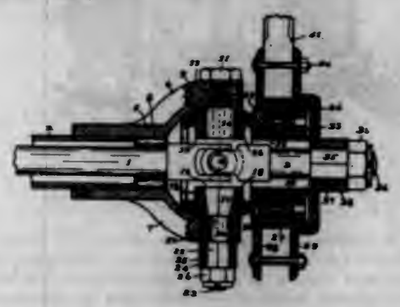
1,881,201. WHEEL ATTACHMENT FOR FRONT WHEEL DRIVE MECHANISM. JESSE F. LIVINGOOD, West Finley, Pa. Filed Feb. 17, 1930. Serial No. 428,919. 1 Claim. (Cl. 180—43.)



In a front wheel drive mechanism for motor vehicles, the combination of an axle tube, a driving shaft extending through said tube and journaled for rotation in the latter, an integrally formed socket member including a pair of apertured bearing ribs and being fixed to the outer end of said tube member, a ball member including a pair of apertured bosses and being mounted in said socket member, a bushing mounted in each of said apertured bosses, a connecting bolt threadedly fixed in each of said bearing ribs and pivotally engaging in respective bushings, a bearing

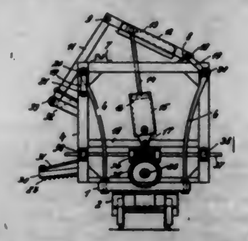
housing formed integral with said ball member and projecting outwardly from the latter, an axle extension connecting for universal movement with the outer end of said driving shaft and extending through said bearing housing, means for fixedly connecting the front wheel to the outer end of said axle extension, and bearing elements mounted within said bearing housing and on said shaft extension and providing a bearing for the latter.

1,881,202. FRONT WHEEL DRIVE MECHANISM FOR MOTOR VEHICLES. JESSE F. LIVINGOOD, West Finley, Pa. Filed Feb. 17, 1930. Serial No. 428,920. 1 Claim. (Cl. 180—43.)



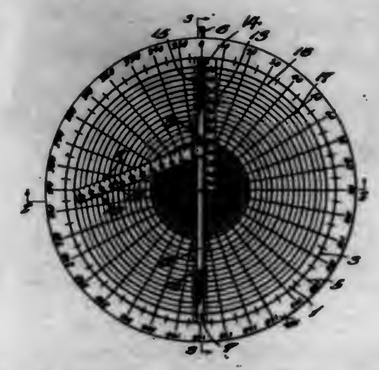
In a front wheel drive mechanism for motor vehicles, the combination of an axle tube, a driving axle extending through said tube and journaled for rotation in the latter, a socket member including an upper and a lower bearing rib and being fixed to the outer end of said tube, a ball member provided with a pair of vertically aligned apertures, a connecting bolt being fixed in the upper of said bearing ribs and pivotally engaging in the upper of said pair of apertures, a connecting bolt being fixed in the lower of said pair of apertures and pivotally engaging the lower of said bearing ribs, a squared shank formed integral with said last mentioned connecting bolt and projecting below said lower rib for fixedly connecting the steering arm of the motor vehicle therewith, a tubular extension formed integral with said ball member and projecting outwardly from the latter, an axle extension connecting for universal movement with the outer end of said driving axle and extending through said tubular extension, means connecting the front wheel to said axle extension, a ball bearing element for the front wheel being mounted in the hub of the latter and on the periphery of said tubular extension, an internally threaded collar threadedly engaging on said tubular extension for securing said ball bearing element on the latter, and an exteriorly threaded collar threadedly engaging the hub of the front wheel for securing said ball bearing element in said hub.

1,881,203. SELF-DISCHARGING WAGON. WILHELM LUDOWICI, Jockgrim, Pfalz, Germany. Filed Mar. 3, 1932, Serial No. 596,468, and in Germany Oct. 7, 1930. 11 Claims. (Cl. 105—273.)



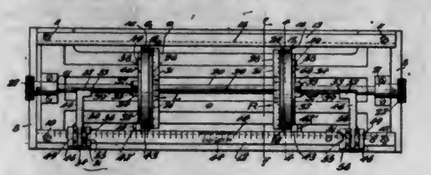
1. A self-discharging wagon comprising a frame, a bottom plate mounted to rock on and to be displaced transversely with respect to said frame, an inverted car body mounted to be tilted about an axis on said frame, and means for tilting said car body about said axis and for rocking and transversely displacing said bottom plate.

1,881,204. DEVICE FOR CALCULATING RADIAL FORCES. JACOB LUNDGREN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1927. Serial No. 237,826. 3 Claims. (Cl. 73—51.)



1. An angle computing instrument for computing the angle of unbalance in a rotative body, comprising a body portion having indicated thereon radial lines indicative of degrees and circular lines indicative of ounce inches, an indicator in the form of a graduated scale adapted to move in a diametrical path across the body portion, a stationary scale along said path, and an angle dial rotatably adjustable on said body portion.

1,881,205. APPARATUS FOR DETERMINING BALANCES. JACOB LUNDGREN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,235. 14 Claims. (Cl. 235—61.)

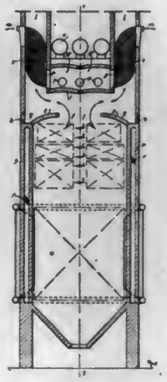


14. In a transfer instrument, a base, a shaft rotatably mounted on said base, bars carried by said base, one of said bars having graduations, transfer slides on said graduated bars, graduated transfer members adjustable on said transfer slides, supports slidable on said bars, an angle indicator rotatably carried by its support, an unbalance carrier rotatably carried by its support, means to prevent relative rotation of an angle indicator and its unbalance carrier, a shoe radially adjustable on each unbalance carrier and having an aperture therethrough, the walls of which form an anti-friction bearing, an indicator rod passing through said apertures, and a spring pressed plunger carried by each shoe and engaging said indicator rod.

1,881,206. BOILER. AUGUSTE MAGIS and ANDRÉ HUET, Paris, France, assignors to The Superheater Company, New York, N. Y. Filed Jan. 5, 1929, Serial No. 330,468, and in France Jan. 11, 1928. 5 Claims. (Cl. 122—235.)

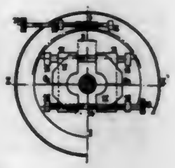
1. A boiler comprising in combination a high setting, a furnace in the lower part of the setting, a steam genera-

tor and a steam superheater arranged in said setting above the furnace and so that the gas flow though them is in a generally vertical direction, a chamber for receiving hot air directly above a portion of the generator and superheater, means cooperating with the lower and side walls of said chamber to give the gases a short horizontal travel followed by a sharp reversal back to a vertical path and



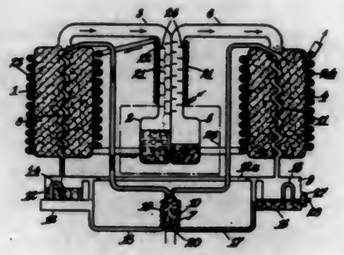
adapted to form a pocket at the angle in the path of the gases whereby solids carried by the gases are dropped at this point, said means adapted also to direct the gases vertically along the side of said chamber; and air heating means arranged to contact with the gases in their vertical flow at the side of said chamber and connected to deliver air into it.

1,881,207. MAGNETIC COMPASS COMPENSATING DEVICE. GEORGES LOUIS JULES MARTIN, Courbevoie, France, assignor to Etablissements Aera, Paris, France. Filed July 9, 1928, Serial No. 291,393, and in France July 12, 1927. 2 Claims. (Cl. 33—225.)



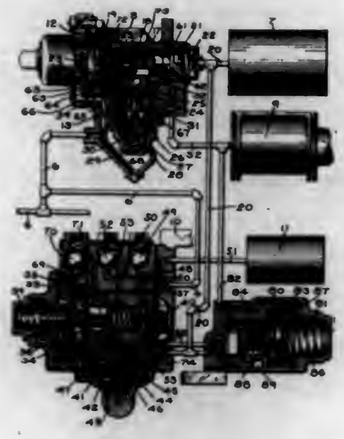
1. A magnetic compass compensating device, comprising, in combination with the card of the compass, means for effecting suppression of the usual compensating effect, such means comprising compensating iron bodies of substantially semi-annular form mounted at opposite sides of the axis of the compass, and means operable to adjust said bodies around said compass axis in a plane parallel to the card of the compass.

1,881,208. REFRIGERATING SYSTEM. CYRIL AUBYN MASTERMAN, Surrey, England, assignor to The Gas Light & Coke Company, Westminster, London, England. Filed Aug. 21, 1929, Serial No. 387,377, and in Great Britain Sept. 1, 1928. 9 Claims. (Cl. 62—5.)



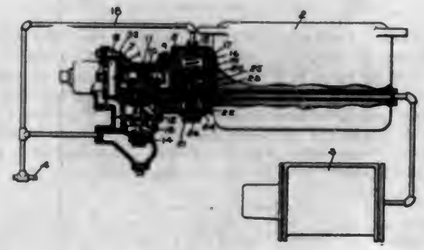
8. In refrigerating apparatus, a plurality of generators, means for heating said generators, and stationary means within said heating means for discontinuing the heating of one of said generators and starting the heating of a second of said generators.

1,881,209. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1930. Serial No. 477,077. 5 Claims. (Cl. 303—81.)



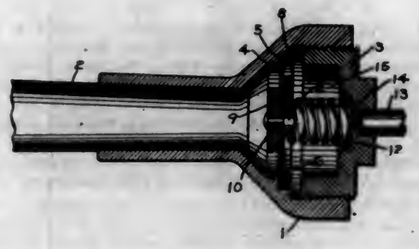
1. In a fluid pressure brake, the combination with a brake pipe and a valve device operated upon a reduction in brake pipe pressure for effecting an application of the brakes, of a valve device operated upon effecting an application of the brakes for venting fluid from the brake pipe to the atmosphere and means operated upon effecting an emergency application of the brakes for cutting off communication through which said valve device vents fluid from the brake pipe.

1,881,210. HOLD BACK VALVE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 20, 1930. Serial No. 483,203. 5 Claims. (Cl. 303—84.)



1. In a fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, brake cylinder, and an equalizing valve device operated upon a reduction in brake pipe pressure for supplying fluid under pressure from the auxiliary reservoir to the brake cylinder, of means operated upon an emergency rate of reduction in brake pipe pressure exceeding a predetermined rate for restricting the flow of fluid from the auxiliary reservoir to said brake cylinder.

1,881,211. SIGNAL HORN. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 8, 1931. Serial No. 535,897. 2 Claims. (Cl. 116—142.)



1. A sound producing device comprising a casing having a chamber, a sound generating disk mounted in said chamber and adapted to engage a seat provided in the casing, said disk being caused to vibrate by variations in fluid pressure in the chamber at one side of the disk, a rigid guide member secured to said disk and engaging an annular guide surface in the casing, and a spring disposed axially of said disk for opposing the unseating of the disk.

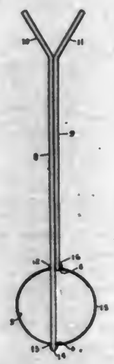
1,881,212. DISPLAY RACK. LOUIS F. MCKELVEY, Indianapolis, Ind. Filed Sept. 20, 1930. Serial No. 483,202. 2 Claims. (Cl. 211—71.)

1. A display stand, comprising end walls, a plurality of forwardly and downwardly inclined shelves extending between said end walls, a front flange on each of said shelves, some of said shelves being provided respectively with back flanges, each of said back flanges extending generally upwardly from the rear edge of its associated shelf and abutting the bottom of the shelf next above on a line intermediate the longitudinal edges thereof, said



shelves being successively set-back from the bottom of the stand toward the top, whereby the front edge of each shelf projects forwardly beyond the shelf immediately above it.

1,881,213. FLUID PRESSURE METER. FREDERICK W. MEDAUGH, Baltimore, Md. Filed Aug. 14, 1928. Serial No. 299,488. 1 Claim. (Cl. 73—167.)

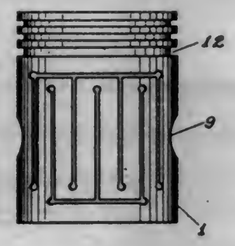


In a fluid pressure meter of the class described, an expansible member having an opening in its wall, said member being also provided with a pair of diametrically opposed openings at right angles to the first named opening, a tube having dual passages secured in said second named openings of the member for supporting the latter thereto, one of said passages of the tube communicating with the interior thereof and the opposite passage arranged beyond the exterior surface of said member, said member being collapsible so as to be positioned in a conduit or pipe with the first named opening facing in the direction of the travel of the inflow fluid.

1,881,214. RESILIENT PISTON. CONSTANTINE MELIDONI, New York, N. Y. Filed Dec. 21, 1927. Serial No. 241,637. 6 Claims. (Cl. 74—108.)

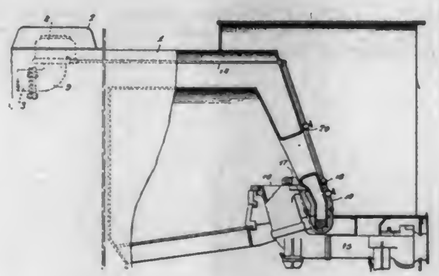
1. A resilient single piece piston comprising a head having piston ring grooves upon its periphery and a

skirt provided with wrist pin bosses and being integrally connected with the head between said bosses, the skirt be-



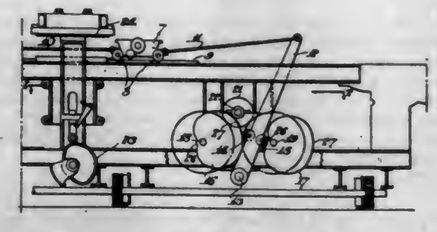
ing provided with two oppositely disposed series of parallel through slots longitudinally placed and terminated within the piston by two lateral through slots.

1,881,215. STEAM SEPARATOR. LOREN P. MICHAEL, Elmhurst, Ill., assignor to The Superheater Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 18, 1929. Serial No. 400,592. 6 Claims. (Cl. 122—491.)



1. In apparatus of the class described the combination of a boiler having a steam space and a water space, a pipe to conduct steam from the steam space, a steam separator through which the steam flows and in which water is separated out from the steam, a steam operated device transforming heat energy of steam into mechanical energy and capable of using relatively very wet steam, and means to conduct said water from the separator mingled with steam to said device.

1,881,216. BLOCK PRINTING MACHINE. HAROLD H. MIRKIL, Philadelphia, Pa. Filed Jan. 17, 1930. Serial No. 421,357. 1 Claim. (Cl. 101—199.)

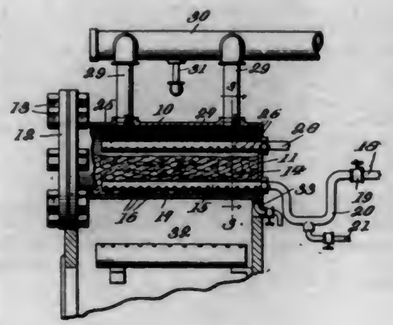


In a block printing machine using reciprocating paint wagons, means for operating said wagons, comprising a pair of oppositely disposed cams rotating on axes on the same horizontal plane, a reciprocating lever having its axis parallel with the axes of the cams but below the the said horizontal plane thereof, a pair of rollers journaled on opposite sides of the lever between its axis of movement and its free end, said rollers adapted to cooperate with said cams, and means for establishing operative relationship between the free end of the lever and the wagons.

1,881,217. COMPOUND FOR TREATMENT OF OILS. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,243. 3 Claims. (Cl. 252—1.)

1. A compound for purifying oils comprising a mixture of clay compounded with a mixture consisting of 1 gallon of sulphuric acid in 100 pounds of silica.

1,881,218. APPARATUS FOR DEHYDRATING OILS. HENRY H. MORETON, Santa Monica, Calif. Filed May 29, 1930. Serial No. 457,388. 3 Claims. (Cl. 196—104.)
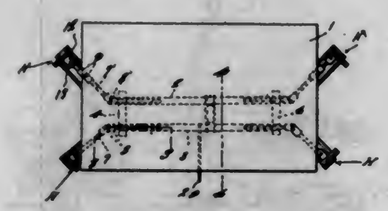


1. An oil dehydrating apparatus comprising a horizontally disposed elongated chamber having a bed of granular material partially filling the same, means for heating said bed, a perforated oil supply pipe extended longitudinally into the lower portion of said bed from one end of said chamber, and a perforated oil discharge pipe also extended longitudinally into said chamber from the same end thereof and located above the surface of said bed, and vapor outlet leading from said chamber at a level above said outlet pipe.

1,881,219. PLASTIFIER FOR CELLULOSE DERIVATIVES AND RESIN COMPOSITIONS. WILLIAM HENRY MOSS and BLANCHE BABETTE WHITE, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 16, 1928. Serial No. 300,152. 4 Claims. (Cl. 134—26.)

1. A coating composition containing cellulose acetate, a toluene sulphonamide-aldehyde resin, and a plastifier selected from the group consisting of triacetin, diphenylol propane, monomethyl xylene sulphonamide and ethyl toluene sulphonamide.

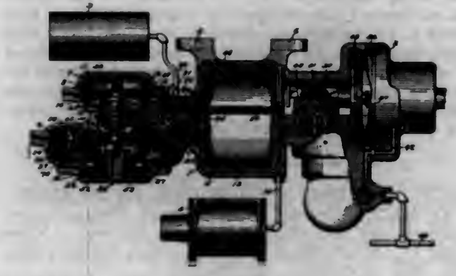
1,881,220. GLASS CUTTING MACHINE. OCTAVE C. NATLIS, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 9, 1930. Serial No. 480,788. 18 Claims. (Cl. 33—32.)

1. In a glass cutting apparatus, a glass supporting table, a member rockably supported thereon adjacent a corner of the table, a cutter element carried by said member and movable therewith for scoring an adjacent corner portion of said glass, and a hammer member car-



ried by said first mentioned member and movable relative thereto for subsequently breaking the scored corner portion of the glass.

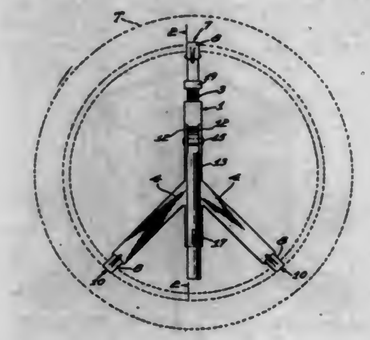
1,881,221. FLUID PRESSURE BRAKE. ANSELME NEVEU, Livry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1930, Serial No. 482,782, and in Great Britain Nov. 25, 1929. 14 Claims. (Cl. 303—74.)



1. The combination with a brake cylinder and an auxiliary reservoir, of a graduated release valve device comprising valve means for controlling the supply of fluid under pressure to the auxiliary reservoir and the release of fluid under pressure from the brake cylinder and for permitting flow of fluid under pressure from the auxiliary reservoir to the brake cylinder, and movable abutments subject to variations in pressure in the brake cylinder and the auxiliary reservoir, and to a constant pressure for operating said valve means.

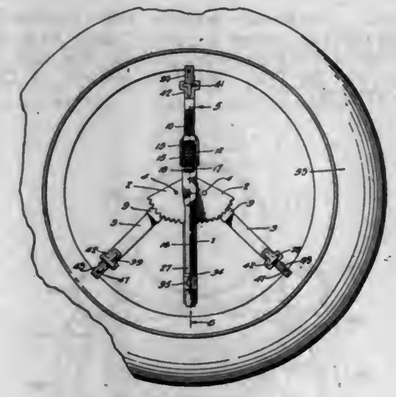
1,881,222. TIRE CARRIER. HENRY CHESTER NICHOLS, PERCY EARNEST NICHOLS, and FRANK TENNIS NICHOLS, Chickasha, Okla. Filed July 1, 1929. Serial No. 375,276. 1 Claim. (Cl. 224—29.)

In a tire carrier the combination of a tubular body portion provided with a pair of diverging leg portions, a rack member movably extending within the body portion and provided with teeth, a lever member pivotally connected with the body portion and provided with a pinion portion, said pinion portion extending through an opening in the body portion and having teeth in engagement with the teeth of said rack member whereby the rack member may be moved when the lever is actuated, gripping arms connected with said rack member and leg portions, a collar adjustably connected with the rack member for limiting the movement of said rack member with respect to the body portion when the lever is actuated, said collar also being adapted for limiting the movement of



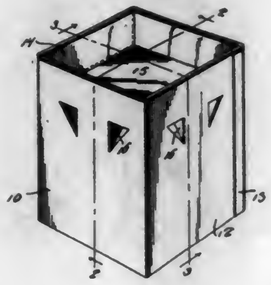
the lever, and a lug portion connected with the body portion and extending through an opening in the lever whereby said lever may be retained in a fixed position.

1,881,223. TIRE CARRIER. HENRY CHESTER NICHOLS, PERCY EARNEST NICHOLS, and FRANK TENNIS NICHOLS, Chickasha, Okla. Filed May 22, 1930. Serial No. 454,700. 5 Claims. (Cl. 224—29.)



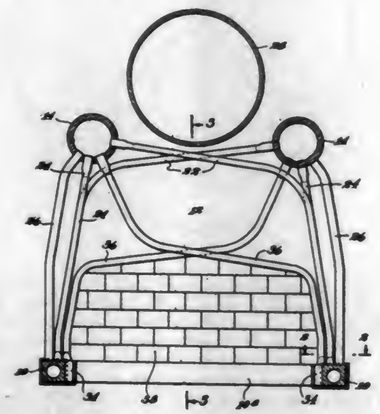
1. A tire carrier comprising a body portion, a toothed plate member mounted on the body portion, a pair of leg members movably connected with said plate member, said leg members having toothed flange portions adapted for engaging the teeth of said plate member, a movable rack carried by the body portion, a pinion carried by the body portion and in engagement with the rack, a movable lever arm carried by the body portion and provided with a pinion engaging member movable with respect to the lever arm, locking means associated with the body portion and the lever arm for fixedly positioning said lever arm with respect to the body portion, said pinion engaging member being operatively associated with the locking means whereby the same may be held in fixed engagement with said pinion, cross arm portions connected with said leg members and rack, jaw members movably mounted on the cross arm portions, and locking members movably connected with the jaw members and adapted for engaging the cross arm portions whereby said jaw members may be fixedly connected with said cross arm portions.

1,881,224. DISPLAY STAND. CLAUDE C. NUCKOLS, Menands, Albany, N. Y., assignor to Albany Corrugated Container Corp., Albany, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,233. 3 Claims. (Cl. 211—157.)



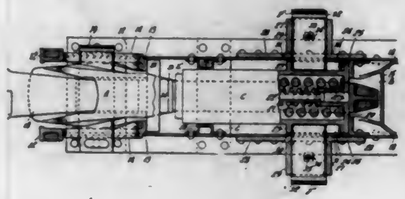
1. A collapsible display stand open at both ends and comprising spaced walls connected by fold lines, a tray bottom removably positioned within the stand an appreciable distance from the upper end thereof, means carried by the said walls upon which the bottom reposes, and flaps extending from the upper edges of said walls and adapted to be folded inwardly against said walls and upon said bottom to hold the latter against its supporting means.

1,881,225. BAFFLING MEANS FOR LOCOMOTIVE FIRE-BOXES. HENRY B. OATLEY, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Apr. 14, 1930. Serial No. 444,212. 3 Claims. (Cl. 122—94.)



1. A fire-box having a hollow foundation ring, means forming longitudinal water cooled walls for the fire-box, transverse tubes arranged longitudinally of said fire box having their upper ends connected into said means at the diagonally opposite corners thereof from their lower ends, and a refractory baffle at the front of the fire-box resting on said ring and held in place by said tubes, said foundation ring having inwardly projecting shoulders near the forward end of said fire-box into which the diagonally extending tubes are connected.

1,881,226. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 16, 1931. Serial No. 516,041. 3 Claims. (Cl. 213—50.)

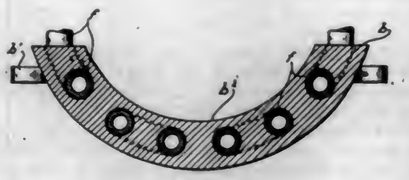


1. In a railway draft rigging, the combination with a friction shock absorbing mechanism including a friction shell and cooperating friction elements slidable within the shell, said shell having laterally outwardly projecting stop means at the rear end thereof; of a front follower, said shell and follower being relatively movable toward and away from each other, relative approach of the shell and follower being relatively movable toward and away from each other, relative approach of the shell and follower being limited in buff by engagement of the former with the latter; and transversely aligned stationary keys secured to the underframe structure of the car, said keys having their inner ends projecting laterally inwardly of the stop means on the shell and having shouldered engagement with said stop means of the shell to restrict the draft movement of the shell to less than the relative movement of the follower and said shell in buff.

1,881,227. METHOD OF IMPROVING SOUTH AMERICAN MATÉ. EDUARD ORNO-ORNFELDT, Berlin-Charlottenburg, and MAKOTO LOEW, Berlin, Germany. Filed June 16, 1930, Serial No. 461,622, and in Germany Dec. 19, 1928. 6 Claims. (Cl. 99—11.)

1. The method of improving the taste and smell of maté, comprising treating the maté leaves with a chemical substance containing a primary oxidation product of an alcohol.

1,881,228. POURING SPOUT. CHESTER H. PAPÉ, Portland, Oreg. Filed Apr. 20, 1929. Serial No. 356,767. 4 Claims. (Cl. 263—44.)



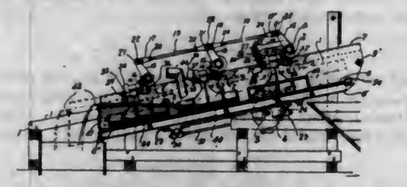
1. In a pouring spout comprising a cast body defining a trough-like surface adapted to direct hot liquid substances and a cooling conduit loosely housed within said body at a point immediately below said surface.

1,881,229. MUSICAL INSTRUMENT AND METHOD OF MANUFACTURING THE SAME. ARTHUR PRIMROSE YOUNG, Kenilworth, England. Filed Aug. 15, 1928, Serial No. 299,768, and in Great Britain Aug. 18, 1927. 8 Claims. (Cl. 84—291.)



1. A stringed instrument having a frame comprising a synthetic resin.

1,881,230. MILLING MACHINE. THEODORE EARLE, Denver, Colo. Filed Apr. 20, 1928. Serial No. 271,504. 8 Claims. (Cl. 209—6.)



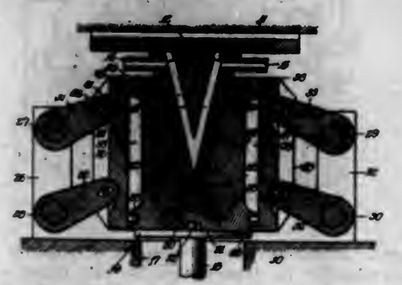
1. In a device for the disassociation of the separable constituents of a substance, support means, a rubbing surface mounted to reciprocate thereon, a second rubbing surface adapted to rest upon the first rubbing surface, lifting means mounted on said support means and connected to the second rubbing surface to normally hold it from reciprocation with the first surface, means connected to the first surface and adapted to reciprocate same upon an outward and a return stroke, and means connected to said lifting means and adapted to operate same to lift the second rubbing surface completely from the first rubbing surface during one of said strokes.

1,881,231. BUMPER GUARD. WALTER C. JACKSON, Rahway, N. J., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J., a Corporation of New Jersey. Filed May 2, 1932. Serial No. 608,589. 7 Claims. (Cl. 293—55.)



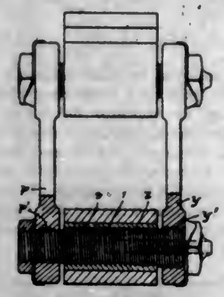
1. A mass of rubber formed as a continuous open ended band constructed and adapted to be passed about a thin bar, and formed at its ends with cooperative members capable of interlocking one with the other when the ends are brought closely together.

1,881,232. MOLD. FRANZ KURATH, Chicago, Ill., assignor to Economy Fuse and Manufacturing Co., Chicago, Ill., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 356,936. 4 Claims. (Cl. 18—17.)



3. Apparatus for performing molding operations comprising a plurality of relatively separable mold blocks, a fixed frame, pivoted members supporting said mold blocks on said frame and permitting gravital movement of said mold blocks into closed relation, means for guiding the movement of said mold blocks in parallel relation, means for applying pressure in a downward direction to said mold blocks to force said mold blocks into tightly closed relation, and means to move said mold blocks in an upward direction to produce separation thereof and permit removal of a molded article.

1,881,233. END CONNECTION FOR VEHICLE SPRINGS AND METHOD OF MAKING SAME. JOHN WYCLIFFE LEIGHTON, Port Huron, Mich. Filed May 2, 1932. Serial No. 608,635. 4 Claims. (Cl. 267—54.)

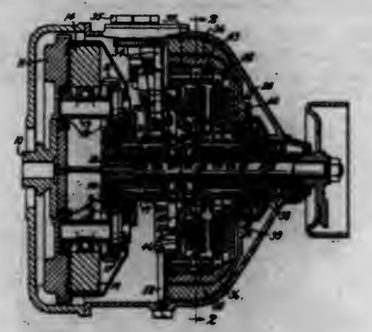


1. A vehicle spring suspension, comprising spaced bracket arms or shackle bars and a support arranged between and spaced from said arms or bars, said arms or bars and said support being threaded with their threaded walls formed in spiral continuity, and a threaded bolt extending between each of said shackle bars or arms and said centre support and holding the centre support in rotative spaced relation between said arms or shackles.

1,881,234. VARIABLE SPEED POWER TRANSMISSION. FREDRIK LJUNGSTROM, Lidingo, Sweden, assignor, by mesne assignments, to Ped, Incorporated, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 218,293, filed Sept. 8, 1927, and in Sweden Feb. 16, 1927. This application filed Nov. 18, 1931. Serial No. 575,801. 4 Claims. (Cl. 74—14.)

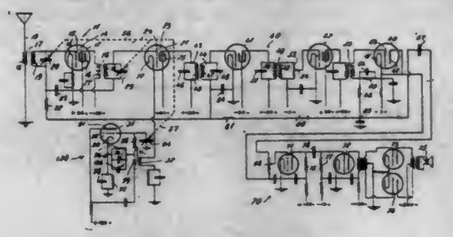
1. A variable-speed power transmission comprising a driving member, a driven member, an abutment, inertia

mass resiliently connected to the abutment, said mass comprising a plurality of parts resiliently connected to each other, mechanism actuated by the driving member for al-



ternately producing turning moments of opposite sense, and mechanism for transmitting the said opposite turning moments to the driven member and to one of said parts respectively.

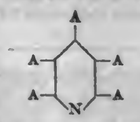
1,881,235. SUPERHETERODYNE RECEIVER. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Feb. 13, 1931. Serial No. 515,528. 4 Claims. (Cl. 250—20.)



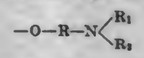
1. In a radio receiver, in combination, a radio-frequency amplifier characterized by a response which rises with increased frequency, an oscillator having a response which decreases with increased frequency, a modulator for modulating the radio frequency signal and the oscillator output voltage, the response characteristic of said oscillator being complementary to the response characteristic of said radio-frequency amplifier whereby the modulated response of said modulator is substantially uniform over the frequency range of operation.

1,881,236. BASIC ETHERS OF THE PYRIDINE SERIES. KARL MIESCHER and ERNEST URECH, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 28, 1930, Serial No. 471,415, and in Switzerland Aug. 10, 1929. 8 Claims. (Cl. 260—42.)

1. Basic ethers of the general formula



wherein one of the A's means a group of the formula



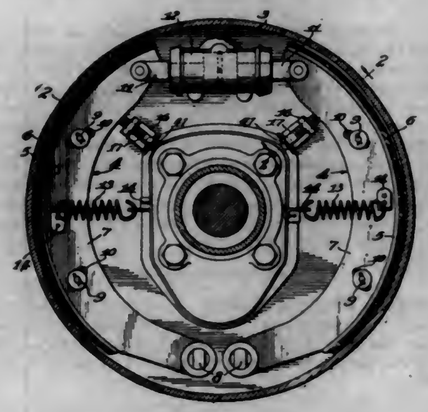
R meaning an alkylene radical containing at least two carbon atoms, and R_1 and R_2 hydrogen or alkyl, R_1 or R_2 also hydroxyalkyl, and the other A's means hydrogen or a carboxylic amide group substituted by phenyl, alkyl or diethylaminoethyl, which products form with acids water-soluble salts, and are useful in therapeutics.

1,881,237. PISTON. ADOLPH L. NELSON, Indianapolis, Ind., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Filed Feb. 7, 1923, Serial No. 617,586. Renewed Feb. 18, 1926. 28 Claims. (Cl. 74—108.)



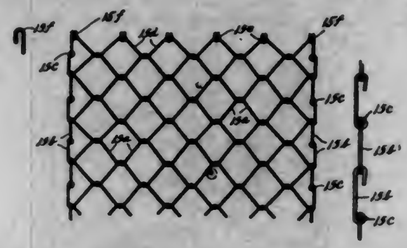
1. A piston comprising a head, a skirt split at the lower end to provide spaced tongues, a strut loosely engaging the tongues, paired projections on each tongue between which the ends of the strut are adapted to engage one of said pairs having openings registering with an opening near the corresponding end of the strut, and a holding device passing through said openings to maintain the parts in position, substantially as set forth.

1,881,238. BRAKE MECHANISM. WALLACE F. OLIVER, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Nov. 26, 1930. Serial No. 498,211. 3 Claims. (Cl. 188—79.5.)



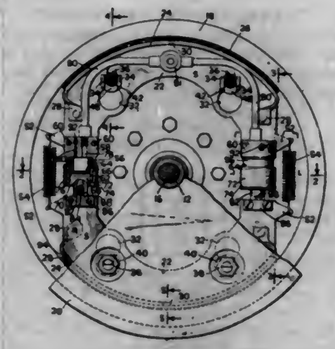
1. In a brake mechanism, a brake drum, a stationary support forming a housing with said drum, a brake shoe carried by said support and adapted to be moved into contact with said drum, an adjustable screw stop for said brake, a bracket supporting said stop rigidly secured to said support, a rigid laterally extending arm on said bracket and means integral therewith having tapped openings therein for the reception of said stop, and connecting means between said arm and said first means to place the same under tension to frictionally hold said stop in adjusted position in said openings, and means on said stop for engagement by a tool to adjust said stop from the outside of the housing.

1,881,239. POTATO AND ONION GRADER. MARTIN A. PAULSON, Rice Lake, Wis., assignor to New Idea Potato Machinery Co., Rice Lake, Wis., a Corporation of Wisconsin. Filed Oct. 14, 1929. Serial No. 399,510. 1 Claim. (Cl. 209—401.)



A sorting belt comprising a series of elongated wire members each bent to zigzag form, said members being inter-twined and hinged together to form a continuous belt with polygonal shaped openings therein arranged in staggered relation, said members extending transversely of the belt, the end portions of pairs of said members being bent toward each other and extending longitudinally of the belt with the corresponding extremities pivotally connected together by inter-engaging integrally formed eyes and forming unbroken longitudinal edges for the belt which extend substantially in straight lines.

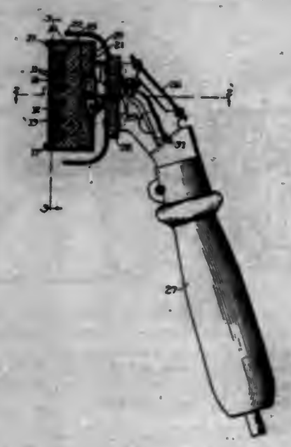
1,881,240. HYDRAULIC BRAKE. ALBERT D. PENTZ, New York, N. Y., assignor to Pentz Motor Brake Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 21, 1928. Serial No. 271,673. 4 Claims. (Cl. 187—156.)



1. In a brake mechanism for vehicles, a hydraulic actuating device comprising in combination, an outer cylinder, a lining sleeve within said cylinder and projecting from the open end of said cylinder, a piston in said sleeve and projecting from the open end thereof, a radial flange on the projecting end of said piston, the diameter of said flange being the same as the diameter of said outer cylinder, and a boot attached to said flange and surrounding said cylinder whereby a space for lubricant is provided between said boot and said sleeve substantially as described.
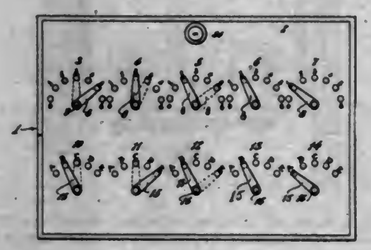
1,881,241. ELECTRIC PAINT SOFTENER. FRANKLIN D. POTENSA, Park Ridge, Ill., assignor to Floyd Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1930. Serial No. 435,702. 5 Claims. (Cl. 219—29.)

1. In an electric paint-softener, the combination of an element adapted to be heated by the passage of an electric current therethrough, porous means in which said element is completely embedded, means filling the pores of that



surface of said embedding means designed to be positioned next to the layer of paint to be treated, and a handle for the softener by means of which it may be manipulated.

1,881,242. ELECTRICALLY OPERATED AMUSEMENT AND EDUCATIONAL DEVICE. JAMES MASON PRENTICE, Holyoke, Mass. Filed Oct. 22, 1929. Serial No. 401,477. 4 Claims. (Cl. 35—12.)

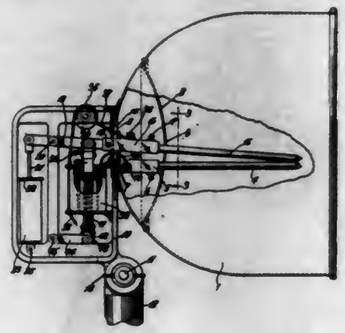


4. In a device of the kind described, a plurality of series of groups of numbered electrical contacts, a reference chart having numbers, a separate manually operated contact lever for each group of each series, a source of electrical energy, connections from the source to one of the series, cross connections from the contacts of one series to the contacts of the other, a signal device in the completed connections made by the said contact lever, whereby, when the contact levers of each series are on the numbered contacts corresponding to the numbers on the chart, the circuit will be complete and the signal device will be operated.

1,881,243. ARC LAMP. GEORGE C. RAUCH and JAMES W. PLUNKETT, St. Louis, Mo.; said Plunkett assignor to said Rauch. Filed July 15, 1929. Serial No. 378,204. 2 Claims. (Cl. 176—109.)

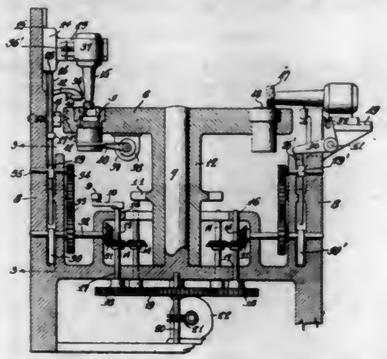
1. A device of the character described comprising a frame, a carbon holder attached to said frame, a pivot supported by said frame, a lever mounted on said pivot, a carbon holder attached to said lever, an actuator pivoted

to said lever between said pivot and said second carbon holder, a link pivotally connecting said actuator with said frame, means for moving said actuator to move said second



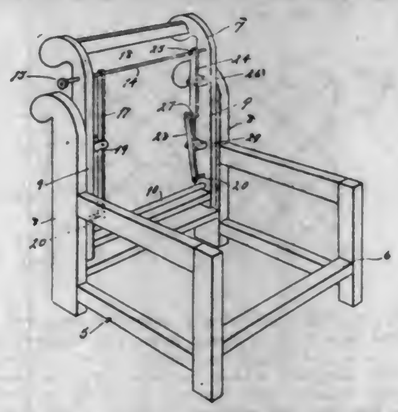
carbon holder toward and away from said first carbon holder, and a device connected with and controlling movement of said lever by said actuator.

1,881,244. MULTIPLE GRINDER. CLIFFORD T. RAULE, Brookline, Pa. Filed Mar. 1, 1929. Serial No. 343,609. 3 Claims. (Cl. 51—53.)



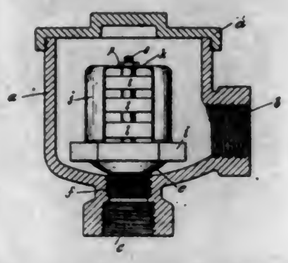
1. In a multiple internal grinding machine, stationary supporting structure, a turn-table pivotally mounted thereon, work-holders mounted at uniformly spaced intervals around the table, said work-holders each presenting an abutment to the inner end of the work-piece and circumferentially engaging the work-piece, and the abutment faces presented to the inner ends of the work-pieces all moving in the same orbital plane, mechanism adapted to give the table an intermittent forward rotary movement such that the work-holders come to rest one after another at the same positions, and a plurality of internal grinding units being mounted upon the stationary structure at each one of a succession of the positions of rest and each adapted to operate during successive rest periods of the turn-table upon work pieces in the successive work-holders, the facing grinding unit in cooperation with the abutments grinding the work-piece to the same definite length, the said facing grinding unit including a stationary guideway perpendicular to the axis of rotation of the turn-table, a grinding wheel unit slidably supported in the guideway and adapted to operate during each rest period of the table and cam means synchronized with the operation of the turn-table for moving the wheel unit into operating position after the turn-table comes to rest to traverse the unit during the rest period and to remove the unit from its operating position preparatory to each forward movement of the table.

1,881,245. ADJUSTABLE ARTICLE OF FURNITURE. STEFAN SCHNEIDER, Philadelphia, Pa. Filed Feb. 15, 1932. Serial No. 592,981. 4 Claims. (Cl. 155—156.)



2. In a device of the kind described, a body frame including a pair of uprights in spaced relation, a rod disposed across the space between and having its ends mounted in said uprights, a frame including a pair of sides swingingly mounted adjacent its lower end on said rod, spring actuated bolts passing through said sides for selective registration with keeper holes in the uprights, and mechanism operable manually from a point at the top of the adjustable frame above the upper ends of the uprights for simultaneously actuating the bolts against the actions of the springs to withdraw said bolts from the keeper holes.

1,881,246. THERMOSTATIC VALVE UNIT. WILLIAM K. SIMPSON, Waterbury, Conn., assignor to Hoffman Specialty Company, Waterbury, Conn., a Corporation of Illinois. Filed Sept. 19, 1928. Serial No. 306,912. 9 Claims. (Cl. 236—58.)

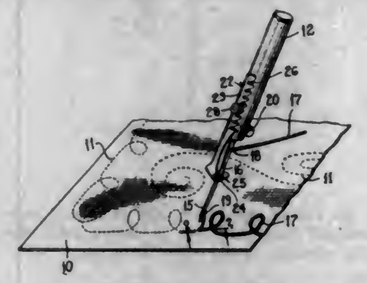


1. A thermostatic valve unit comprising a base having a screw-threaded nipple adapted to be screwed into the outlet of a trap casing and having also a passageway with a surrounding valve seat, a thermostat holder secured to said base and having an abutment portion, an expansible thermostat secured to said abutment portion within said holder, and a valve carried by said thermostat adjacent to said valve seat and adapted to be moved against and away from the same by expansion and contraction, respectively, of the thermostat.

1,881,247. EMBROIDERING DEVICE. JOSEPH SPERLING, New York, N. Y. Filed June 23, 1930. Serial No. 463,060. 1 Claim. (Cl. 112—80.)

An embroidering device comprising a handle, a needle adjustably positioned at one end thereof, means for locking said needle in position, a guiding means disposed on

the peripheral surface of said handle, said guiding means comprising a stamped element having a long and short arm, the short arm being formed integral with and angularly disposed with respect to said long arm, and having an aperture through which said needle passes, the short arm serving to limit the penetration of said needle, a



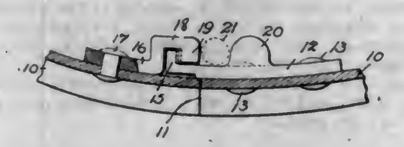
series of serrations formed on one side of said guiding means, means passing through said handle and adapted to rest in one of said serrations, said last-named means being adapted to be locked to said guiding means at any predetermined serration, thereby to adjustably position said guiding means with respect to said handle and said needle.

1,881,248. MOLD FOR MANUFACTURING BOOTS, SHOES, AND SIMILAR ARTICLES OF RUBBER OR OTHER PLASTIC MATERIAL. HECTOR STEPPÉ, ALPHONSE STEPPÉ, and GUSTAVE STEPPÉ, Berchem-Ste.-Agathe, Brussels, Belgium. Filed Jan. 22, 1931, Serial No. 510,482, and in Belgium Aug. 4, 1930. 1 Claim. (Cl. 18—35.)



A mold for rubber or composite rubber boots and the like comprising a core, a base element for shaping the sole and the heel, a crescent-shaped side element for shaping a narrow strip of the upper adjacent the heel, and a cup-shaped cover engaging the core and shaping the rest of the upper, said crescent-shaped element being wedged between the base and the cover, and bevelled projections and slots being provided respectively on the base, the cover and the side element for interengaging and centering said core, base element, side element and cover with one another.

1,881,249. JOINT FOR SPLIT RIMS. THOMAS J. STOCKTON, Belleville, N. J. Filed July 31, 1931. Serial No. 554,189. 1 Claim. (Cl. 301—30.)



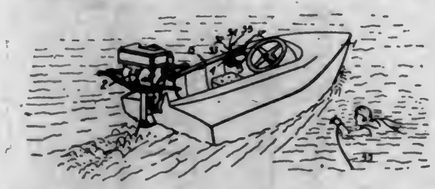
A joint for split rims comprising a member having a projecting end with an arcuate upturned flange, and a second member designed for lateral pivoting at one end and having a claw-like free end to engage the arcuate flange, and a projection on the first member and spaced from the said free end to form a passage between them for a transverse bolt of the wheel.

1,881,250. ELECTROSURGICAL INSTRUMENT. GEORGE MILTON TOMLINSON, Philadelphia, Pa. Filed June 20, 1929. Serial No. 372,370. 1 Claim. (Cl. 174—89.)



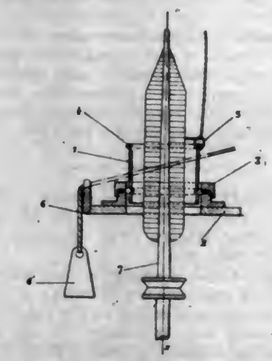
A surgical instrument including a clamp for holding and compressing tissue, a handle supporting the instrument and including relatively pivoted members adapted to close upon one another by compression of the hand to close the clamp, and a ratchet adapted to hold the clamp in any closed position in combination with an electrosurgical knife adapted to be moved to tissue held in the clamp, a spring pressing the knife away from the clamp and a thumb engagement member to be engaged by the thumb and fastened to the knife adapted to be pressed by the thumb to bring the knife to the tissue.

1,881,251. THROTTLE IGNITION SWITCH. ROBERT H. TOBENER, Jr., Kansas City, Mo. Filed Oct. 6, 1930. Serial No. 486,702. 17 Claims. (Cl. 123—146.5.)



1. In apparatus of the character described including a motor having an ignition circuit, and a throttle lever, a casing supporting said lever, a contact in said circuit mounted in the casing, a bar conductively connected with the casing and movable into and out of conductive relation with said contact, and bar latching means including a spring-pressed plunger controlled by said throttle lever and a pivoted latch controlling said plunger.

1,881,252. RING TYPE SPINNING MACHINE. ALBERT NAU-TOURON, Le Vesinet, France. Filed Jan. 23, 1928, Serial No. 248,847, and in France Jan. 22, 1927. 1 Claim. (Cl. 118—55.)



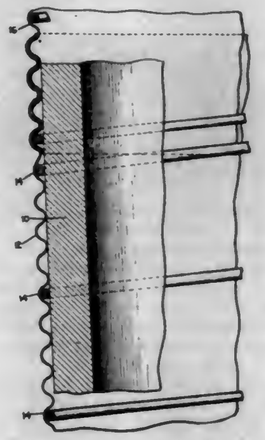
In a device of the type described having a rotatable thread spindle, a spindle shifting plate concentric there-

with, a ball race carried by said plate, a rotatable ring concentric to said spindle and said plate, a second ball race formed on said ring adjacent one end thereof, a plurality of balls disposed in said ball races, a displaceable thread guide carried by the other extremity of said ring and means for increasing and decreasing the rolling between said plate and said ring at will for the purpose set forth.

1,881,253. METHOD OF MANUFACTURING RUBBER ARTICLES. GEOFFREY WILLIAM TROBRIDGE, Sutton Coldfield, England, assignor to Dunlop Rubber Company Limited, Birmingham, England, a British Corporation. Filed Aug. 3, 1929, Serial No. 383,423, and in Great Britain Oct. 11, 1928. 2 Claims. (Cl. 18—58.)

2. A method of forming ornamented articles of rubber which comprises depositing in the grooves of an embossed former a deposit of dispersed material of one color from an aqueous dispersion of rubber, drying said deposit, depositing a backing of rubber of different color from an aqueous dispersion thereof, drying said deposits, turning the formed deposit inside out, and vulcanizing the latter.

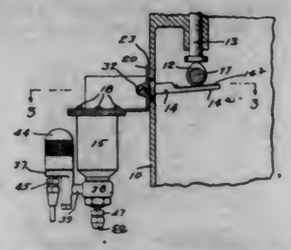
1,881,254. SHELL FOR CONCRETE PILES. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1931. Serial No. 551,100. 4 Claims. (Cl. 61—56.)



1. In combination, a tapered corrugated shell, reinforcing elements in certain of said corrugations, unreinforced corrugations between said elements, said reinforcing elements serving to protect the intermediate unreinforced corrugations, and a plane tapered core engaging said reinforcing elements during the driving operation.

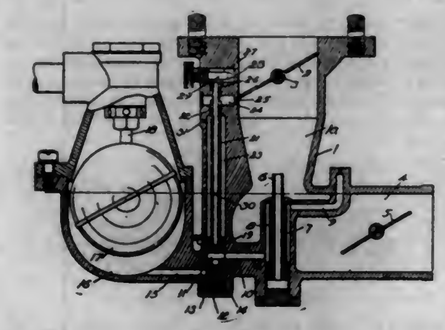
1,881,255. GASOLINE PUMP. CLARENCE J. WHITACRE, Detroit, Mich., assignor to Chester H. Braselton, New York, N. Y. Filed Mar. 8, 1927. Serial No. 173,631. 6 Claims. (Cl. 103—38.)

1. In a pumping device, a casing; a cover plate attached to the open end of said casing and having a hollow portion extending beyond said casing at one side thereof and by which the casing may be attached to the side of an internal combustion engine; a pump within said casing comprising a stationary part and a movable part; a lever pivoted within the hollow portion of said cover plate and having one end connected to said movable part and the other end extending through an opening in the side of the engine; and a cam rotated by said engine and



adjacent the end of said lever, said pump and lever being so constructed that the lever is moved away from the cam as the pressure in the pump increases.

1,881,256. CARBURETOR. FREDERICK O. BALL and THOMAS M. BALL, Detroit, Mich., assignors to Ball & Ball Carburetor Company, Detroit, Mich., a Partnership composed of Frederick O. Ball and Cornelia M. Ball. Filed Sept. 20, 1927. Serial No. 220,775. 9 Claims. (Cl. 261—41.)



1. In a carburetor, the combination of a suction passage; a throttle in the suction passage; a fuel delivery passage leading to the suction passage; an idling device comprising a discharge opening above the throttle; a by-pass opening below the upper surface of the throttle when closed; a tube opening between the discharge and bypass openings; and a fuel tube extending through the tube opening and forming a metering restriction between the walls of the tube opening and the tube, the bypass opening delivering air through the connecting passage to the discharge opening independently of the fuel tube.

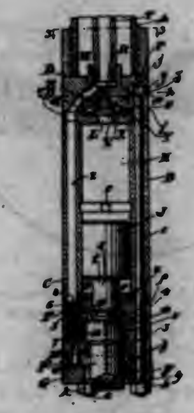
1,881,257. WROUGHT METAL ARTICLE. WILLIAM H. BASSETT, Jr., Scarsdale, N. Y., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 16, 1932. Serial No. 628,985. 6 Claims. (Cl. 75—1.)

1. An alloy composed of approximately 91% to 99% copper, 0.25% to 3.0% tin, 0.5% to 4.0% aluminum, and 0.25% to 2.0% silicon.

1,881,258. PERCUSSIVE TOOL. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 16, 1930. Serial No. 489,081. 1 Claim. (Cl. 121—13.)

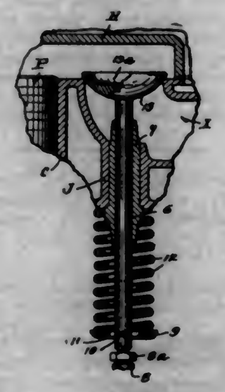
In a percussive tool, the combination of a casing having a piston chamber and a hammer piston reciprocable there-

in, said casing having a bore in one end, a drill steel extending with its rear end into the bore and having a passage for conveying fluid under pressure from the bore to a hole being drilled, an anvil block for transmitting the blows of the hammer piston to the drill steel, a supply passage in the casing opening into the bore for conveying fluid under pressure thereto for supplying the first men-



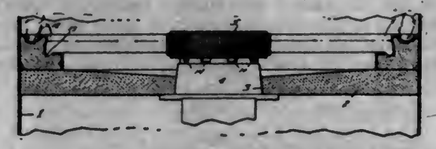
tioned passage and for maintaining the anvil block and the drill steel apart and in opposite ends of the bore in the absence of external pressure against the cutting bit of the drill steel thereby cushioning the strokes of the hammer piston against the anvil block, and a check valve to control the supply passage for preventing the flow of foreign matter from the bore into the supply passage.

1,881,259. VALVE FOR INTERNAL COMBUSTION ENGINES. GUSTAF BECK, Minneapolis, Minn., assignor of forty-nine one-hundredths to George O. Darrow, Mission San Jose, Calif. Filed Dec. 16, 1929. Serial No. 414,425. 2 Claims. (Cl. 123—188.)



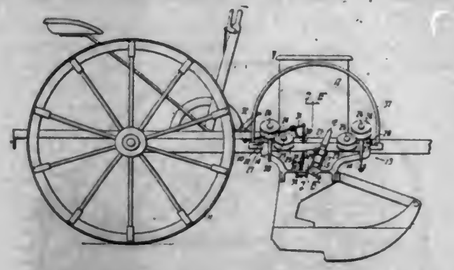
1. In valve structure, a reciprocable valve comprising a true segment of a sphere having a smooth spherical contacting surface and an annular valve seat having an internal circular contact edge making substantially line or edge contact with said spherical surface when the valve is in closed position.

1,881,260. FIREBOX CONSTRUCTION FOR FURNACES. HERMAN F. BRAUN, Lakewood, SAMUEL L. LAUGHLIN, Cleveland, and WILLIAM J. SMITH, Lakewood, Ohio, assignors to The Cleveland Steel Products Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed May 3, 1928. Serial No. 274,930. 32 Claims. (Cl. 158—4.)



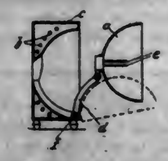
1. A firebox construction for furnaces adapted for burning fuel oil and comprising a bottom member having an opening therein adapted to receive a rotary oil distributing member therethrough, a plurality of hearth segments disposed about the periphery of the fire box and constituting a continuous surface against which the oil from the distributing member is discharged, the upper surface or said segments having an annular depression therein disposed below the plane of discharge of the fuel whereby to give a swirling motion to the flame when the distributing member is set in motion and the oil ignited.

1,881,261. CHECK HEAD. OTTO COIL, near Washington Courthouse, Ohio. Filed Apr. 4, 1931. Serial No. 527,696. 19 Claims. (Cl. 111—47.)



1. In a check head for a planter, a device to actuate the planting mechanism, a pair of cooperating guide members to maintain a check wire in operative relation to said actuating device, one of said guide members having an upwardly facing wire engaging surface and the other of said guide members being movable into and out of a position to confine said check wire between said guide members, an upright guide arranged alongside of said actuating device and said guide members and extending above the same in all positions thereof to engage said check wire, when the latter is slack, and guide the same into its operative position with relation to said actuating device and said guide members, and means for actuating said movable guide member.

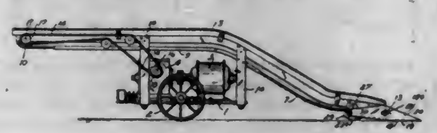
1,881,262. ARC LAMP. OTTMAR CONRADTY, Nuremberg, Germany. Filed Nov. 18, 1930, Serial No. 496,414, and in Germany Nov. 18, 1929. 2 Claims. (Cl. 174—177.)



1. A therapeutical lamp, comprising supporting-means, arc-electrodes therein, a reflector therefor, and a variable resistance mounted on said supporting-means, rearwardly

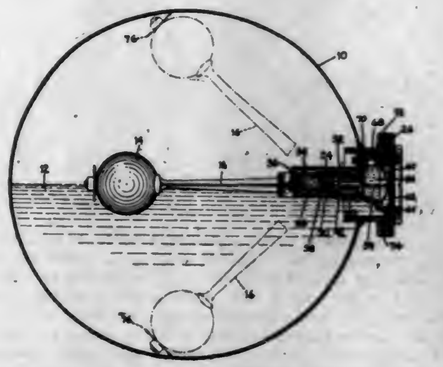
of the reflector for heating the reflector, said reflector being movably mounted upon and connected to said support for swinging movement toward and away from the same and the resistance to vary the heating effect thereby.

1,881,263. LOADING MACHINE. DOUGLAS C. CORNER, Webster Groves, Mo., assignor to St. Louis Power Shovel Company, St. Louis, Mo., a Corporation of Missouri. Filed June 29, 1929. Serial No. 374,842. 11 Claims. (Cl. 198—10.)



1. In a loading machine of the portable endless conveyor type, legs for supporting the receiving end of said conveyor, means for driving the conveyor, and means operated by said conveyor for actuating said legs for imparting a step by step forward movement to said machine.

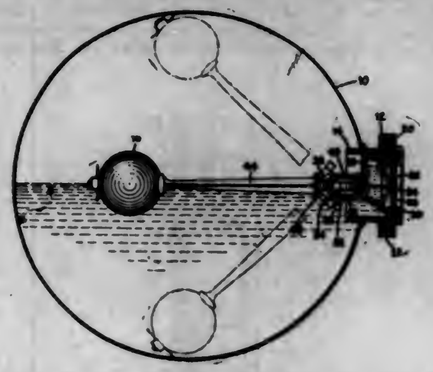
1,881,264. LIQUID LEVEL INDICATOR. CLARENCE A. DE GIERS, Forest Hills, N. Y., assignor to Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,086. 1 Claim. (Cl. 73—82.)



In apparatus of the class described, in combination with a tank adapted to contain liquid, a float adapted for movement by said liquid, a yoke, a syphon adapted to support said yoke, means operatively interconnecting said float and said yoke whereby longitudinal movement of said yoke occurs when the float is moved by the liquid, a chart, a pointer adapted for movement relatively to said chart, and means interconnecting said yoke and said pointer whereby said pointer indicates on said chart the position of said float in the tank, said interconnecting means comprising a rod and a crank, said pointer being attached to said crank and said rod operating to move said crank whereby said pointer is moved relatively to said chart.

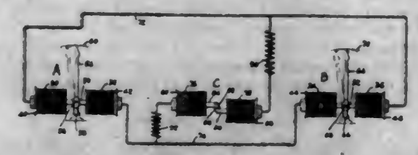
1,881,265. LIQUID LEVEL INDICATOR. CLARENCE A. DE GIERS, Forest Hills, N. Y., assignor to Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,087. 7 Claims. (Cl. 73—82.)

3. In a liquid level indicating apparatus adapted for attaching to a tank containing liquid, a body member, a movable member pivoted on said body member, means responsive to change of level of the liquid for swinging said movable member about its pivot, and a flexible sleeve in-



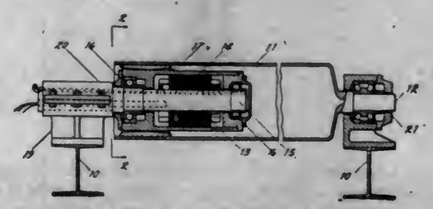
terconnecting said body and said movable member whereby the pivoted-portion of said member is sealed from contact with contents of the tank.

1,881,266. REMOTE CONTROL APPARATUS. CLARENCE A. DE GIERS, Forest Hills, N. Y., assignor to Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Oct. 1, 1930. Serial No. 485,808. 24 Claims. (Cl. 116—21.)



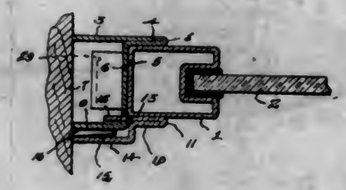
1. A movement transmitting apparatus comprising, in combination, a pair of movable devices remote from each other, hydraulic means for interconnecting said devices whereby either device will move in synchronism with the other of said devices when movement is imparted to the latter, temperature compensating means associated with said hydraulic interconnecting means whereby the correct functioning of the apparatus is independent of temperature changes, and flow retarding means for rendering said temperature compensating means responsive to comparatively slow temperature changes but unresponsive to comparatively rapid movements of said movable devices.

1,881,267. CONVEYER ROLLER. ERNEST DREXLER, Pittsburgh, Pa., assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany, a Corporation of Germany. Filed Apr. 18, 1930. Serial No. 445,450. 9 Claims. (Cl. 198—127.)



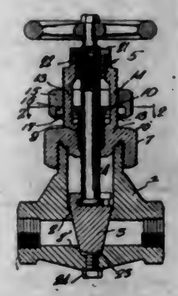
1. A conveyer roller, a motor inclusive of a stator and a rotor disposed within said roller, and a pivotal connection between said roller and said rotor.

1,881,268. WINDOW GUIDE AND SASH CONSTRUCTION. OLIVER M. EDWARDS, Syracuse, N. Y., and JOHN F. LEVAN, Elkhart, Ind., assignors to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial No. 442,645. 19 Claims. (Cl. 189—75.)



1. In a window guide and sash construction, the combination of a guide in the form of a channel, the sash extending into the channel, the guide consisting of a body formed with one side and the bottom of the channel and a detachable member forming the other side of the channel, the detachable member being fulcrumed on the body between the inner and outer edges of said member forming a lever of the first class, and means for moving it on its fulcrum against the sash the detachable member having a portion extending beyond the plane of the bottom of the channel and overlapping the adjacent side of the body, said means being located between the overlapping portion and the body, whereby said means is housed within the detachable member.

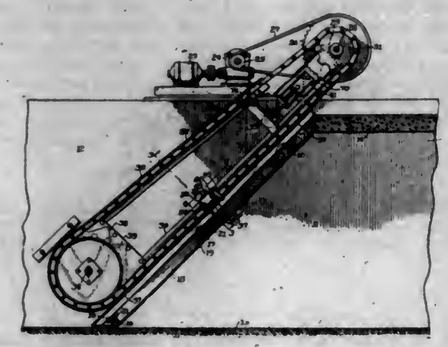
1,881,269. VALVE. HARRISON E. EVANS, Belmont, Mass., and CHAUNCEY D. ALLEN, Philadelphia, Pa., assignors to Consolidated Ashcroft Hancock Company, New York, N. Y., a Corporation of Delaware. Filed July 30, 1931. Serial No. 553,928. 10 Claims. (Cl. 251—50.)



1. A valve having an actuating stem and means for packing the stem including a gland, a one-piece nut for advancing and retracting the gland, the nut and gland being capable of assembly and separation by relative movement comprising a lateral component, the stem when assembled with the gland preventing such lateral component of movement.

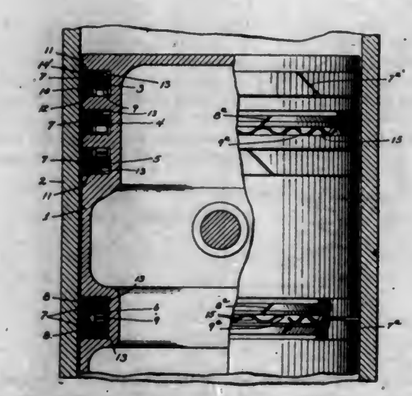
1,881,270. STRAINER. ARTHUR J. EVERS and HERBERT J. SAUVAGE, Wilmette, Ill. Filed Nov. 15, 1930. Serial No. 495,821. 11 Claims. (Cl. 210—176.)

1. In a strainer, the combination of a grating having a series of substantially-parallel bars spaced apart, cleaning wiping-fingers extended down between said bars, said bars being spaced apart a greater distance than the thickness of said fingers, each finger being in sliding engagement



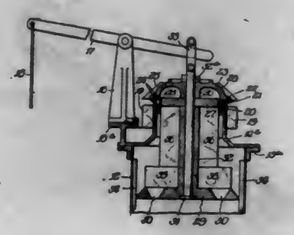
with one side only of one of said bars and means to move said fingers along said bars while maintaining their contact therewith to remove material therefrom.

1,881,271. SEALING DEVICE. ALBERT GOODHEIM, North Bergen, and ERNEST WAGNER, Union City, N. J. Filed May 27, 1931. Serial No. 540,258. 3 Claims. (Cl. 74—109.)



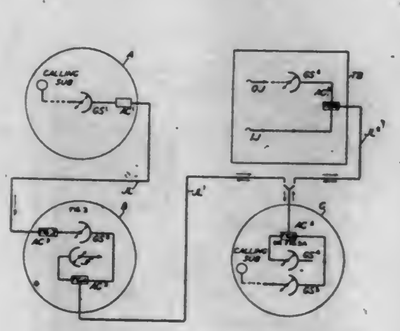
1. A sealing device for pistons comprising in combination with a ring groove formed in the piston, two split rings having interengaging beveled surfaces, one of said rings constituting the outer ring and being of a width substantially equal to the width of the ring groove and adapted to engage the wall of the cylinder in which the piston is mounted, and the other or inner ring being of substantially one-half the width of the outer ring and adapted to engage the bottom wall of the ring groove of said piston, and tensional means supported in the ring groove between one side wall of the groove and one side wall of said inner ring to move said inner ring into engagement with substantially the entire circumference of the bottom wall of the ring groove and to move the outer ring into engagement with the cylinder wall.

1,881,272. BLEEDER VALVE. JOHN PHILLIP GRILLI, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1929. Serial No. 362,559. 9 Claims. (Cl. 137—53.)



1. A bleeder valve comprising in combination a casing a valve member, and a disc member extending substantially across the area of the casing, the said disc member having a serrated outer edge.

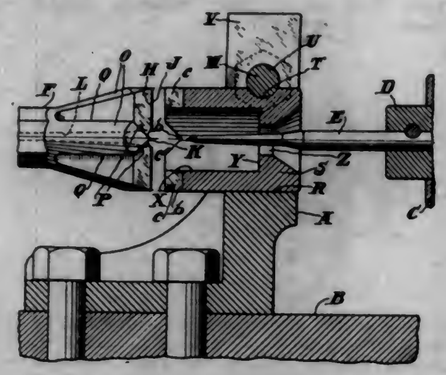
1,881,273. TELEPHONE SYSTEM. LESLIE B. HAIGH and HENRI E. A. BORZER, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1932, Serial No. 592,490, and in Switzerland Jan. 7, 1931. 8 Claims. (Cl. 179—16.)



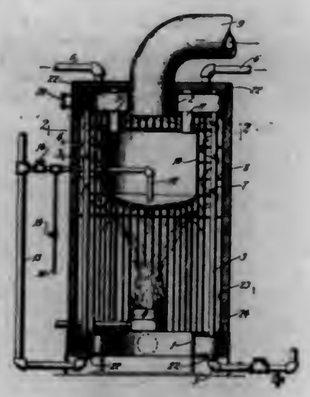
1. In a telephone system, a line, means at one end of said line responsive to direct current signals for conversion into and transmission of alternating current signals over said line and means at the other end of said line responsive to said alternating current signals for conversion into and transmission of direct current signals beyond, said last mentioned means being responsive to a preliminary short alternating current signal to prepare it for the reception of succeeding alternating current signals for conversion into direct current signals.

1,881,274. LOCATING DEVICE. DUDLEY W. HART, Denver, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 4, 1930. Serial No. 499,961. 3 Claims. (Cl. 76—5.)

1. A locating device for working implements comprising a member having a bore therein adapted to receive and centralize the shank of a working implement, said member having a face surrounding the opening of said bore adapted to receive and centralize the working end of a working implement, and means in said member to admit a tool to operate on said working implement.



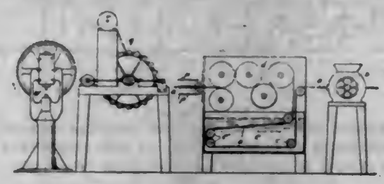
1,881,275. HEATER. LYMAN C. HUFF, Chicago, Ill. Filed Aug. 22, 1928. Serial No. 301,371. 3 Claims. (Cl. 122—338.)



1. A heater comprising a heat source and a plurality of tubes disposed around said heat source, a heat absorbing drum surrounded by said tubes and disposed above the said heat source and a separating baffle associated with said tubes between the heat source and the bottom of the drum to substantially prevent the heating gases from contacting that portion of the tubes subjected to radiation from the heat source.

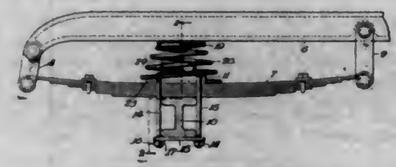
1,881,276. METHOD OF FABRICATING BEADS FOR PNEUMATIC TIRES. WALTER E. HUMPHREY, Kent, Ohio, assignor to The Mason Tire & Rubber Corporation, Kent, Ohio, a Corporation of Delaware. Filed Aug. 7, 1926. Serial No. 127,960. 6 Claims. (Cl. 154—14.)

2. The method of fabricating beads for tire building, which consists in cutting the freshly coated bead-forming wires into predetermined lengths, rolling the material into annular cohering piles by applying regulated pressure radially thereto at short intervals throughout the periphery, and securing the outer end to the annulus thus formed.



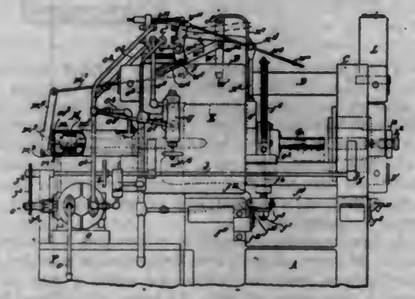
6. The method of making tire beads which comprises constantly feeding a core composed of interstitially grouped wires, embedding the core in rubber by forcing the rubber in and about the interstitially grouped wires, severing successive lengths from the leading end of the bead forming material thus produced, and then winding each of said lengths into an annulus.

1,881,277. SPRING DEVICE. ROBERT JACKSON, Chicago, Ill. Filed July 25, 1931. Serial No. 553,084. 5 Claims. (Cl. 267—28.)



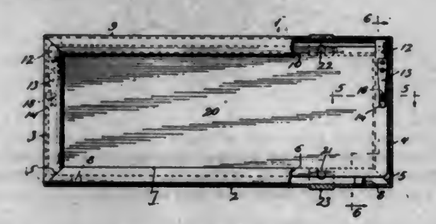
1. In a spring construction for use with the frame of an automotive vehicle or the like including an axle, a flat leaf spring having the ends thereof connected to said frame, a spiral helical spring having the smaller end thereof connected to the frame and having a limb at the larger end thereof extending diametrically across the greatest diameter thereof, a clamp block having a groove in one face thereof and arranged on said flat leaf spring with said limb disposed in said groove, and means acting on said clamp block for attaching the spring to the axle of the vehicle.

1,881,278. SOLDER WIRE EXTRUSION PRESS. CONRAD C. JACOBSON, Glen Ridge, N. J., and JAMES SCHWEDER, Brooklyn, N. Y., assignors to John Robertson Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 7, 1930. Serial No. 459,755. 8 Claims. (Cl. 207—2.)



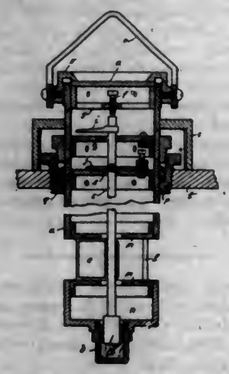
8. A solder wire extrusion press or the like, comprising a hydraulic pressure operable ram, a differential pressure system for operating said ram consisting of a main cylinder, a backing cylinder, a piston movable in each cylinder, means connecting said piston whereby they are simultaneously movable, a pump, a fluid reservoir, a fluid pressure circuit leading from said pump to said cylinders, a main cylinder valve, a backing cylinder valve and a quick return valve having ports connecting with the main cylinder, the pressure line and the reservoir, said valves being so related that when both the backing cylinder valve and the main cylinder valve are closed, the fluid pressure will act on the backing cylinder piston to move the ram backward, and upon the quick return valve to open the same to permit the quick discharge of the fluid from the main cylinder to the reservoir, whereby the backward movement of the ram is expedited.

1,881,279. LICENSE PLATE HOLDER FOR AUTOMOBILES. GEORGE M. KESSLER, Jersey City, N. J. Filed July 5, 1932. Serial No. 620,802. 9 Claims. (Cl. 40—125.)



1. In a frame for holding license or similar plates, a stationary frame member having an opening therein to expose the major portion of the plate and having slots to receive the edges of the plate therein, said frame extending around a substantial portion of the plate, and a removable frame member for engaging an edge of the license plate to hold the same in locked position within said stationary frame member, said removable frame member having locking means for locking the same to said stationary frame member, said locking means being enclosed within the frame when said removable member is in locking position, said locking means being held in locked position by the plate held within said frame, whereby the license plate must be divided into separate parts to disengage the same from said frame locking means.

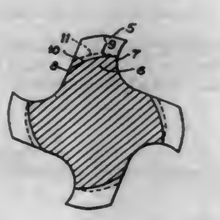
1,881,280. METER FOR GAS FLOW. GOMPEI KUWADA, Komedani-Mura, Kawabe-Gun, Japan. Filed Oct. 24, 1930, Serial No. 490,962, and in Japan Sept. 13, 1930. 1 Claim. (Cl. 73—167.)



Apparatus for indicating the rate of flow of gas passing through a gas pipe, comprising a casing, a mercury cup therein, a float in said cup, a rod extending upward-

ly from said float, a vane of predetermined size attached to said rod, said casing having openings whereby the flow of gas may deflect said vane, a spring member of predetermined torsional strength arranged to resist said deflection, and means co-operating with said rod for indicating the quantity of gas flowing through said pipe in a given period of time.

1,881,281. THREADING TOOL. JOHN LAMOND, Allison Park, Pa. Filed Oct. 6, 1931. Serial No. 567,205. 5 Claims. (Cl. 10—141.)



1. A threading tool having cutting teeth relieved at their tops and sides and having the roots thereof relieved to a greater degree than said tops and sides.

1,881,282. PROCESS OF POLYMERIZING VINYL DERIVATIVES. WALTER E. LAWSON and LLOYD T. SANDBORN, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,775. 2 Claims. (Cl. 260—2.)

1. The process of producing a polymer of styrene that is not subject to cobwebbing when admixed with a lacquer solvent and used for spraying which comprises polymerizing styrene in the presence of a polymerization catalyst and an aromatic hydrocarbon solvent.

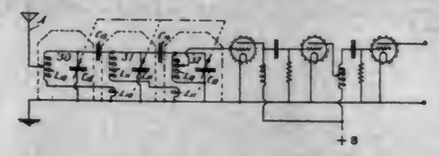
1,881,283. MAGNESIUM OXIDE MIXTURES AND METHOD OF MAKING THE SAME. HIRAM S. LUKENS, Philadelphia, Pa., assignor to Solidon Products, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,536. 18 Claims. (Cl. 106—29.)

7. In the method of preparing mixtures of different forms of magnesium oxides for plastic magnesium materials, the steps consisting of partially hydrating magnesium oxide produced by calcining a magnesium compound at a higher temperature, and then calcining the mixture of magnesium oxide and magnesium hydroxide at a lower temperature than the temperature at which the magnesium oxide was formed by calcination of a magnesium compound.

12. In the preparation of plastic magnesia materials, the steps consisting of hydrating magnesia obtained by calcining magnesite at a normal calcining temperature, and then calcining the hydrated magnesia at a temperature below 800° C.

1,881,284. WAVE SIGNALING SYSTEM. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 1, 1930. Serial No. 499,220. 8 Claims. (Cl. 250—20.)

1. In a radio receiving system, in combination, an untunable radio-frequency amplifier and a frequency-selecting arrangement comprising a plurality of coupled tunable circuits, said amplifier comprising a thermionic repeater having an output load which is capacitive over the receiving frequency range whereby said amplifier



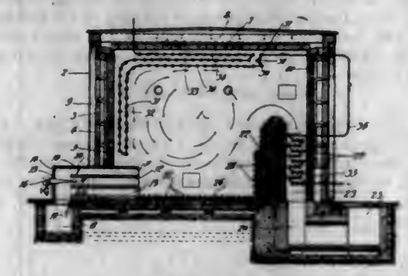
operates in a stable condition, said selecting arrangement being connected in tandem, ahead of said amplifier whereby said system is selective and free from cross-talk.

1,881,285. FLOATING FISHING LURE AND METHOD OF MAKING SAME. NORMAN E. L. MEANS, Missoula, Mont. Filed Sept. 24, 1929. Serial No. 394,889. 5 Claims. (Cl. 43—48.)



1. A floating fish lure comprising a bullet-shaped body member of cork or the like, a hook cooperating therewith, and wings formed of relatively stiff hair secured to and extending laterally outwardly from the sides of the body in an outwardly diverging fan-like relation and in substantially a single plane extending transversely through the body parallel to the longitudinal axis thereof.

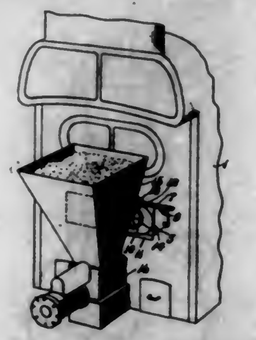
1,881,286. RADIANT AND CONVECTION HEAT FURNACE. LEV A. MEKLER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 29, 1929. Serial No. 358,999. 7 Claims. (Cl. 122—356.)



4. A method of heating a fluid by radiant heat in a series of rows of tubes disposed adjacent the roof and one wall of the combustion chamber of a furnace, comprising first passing the fluid through a first row of roof tubes exposed to the most intense radiant heat, then passing the fluid through a row of wall tubes less exposed to radiant heat than said first row, and subsequently passing the fluid through a second row of roof tubes still less exposed to radiant heat.

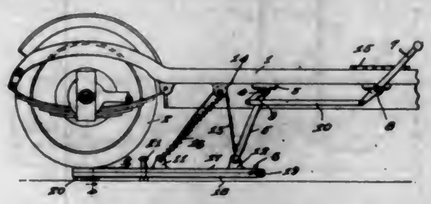
6. A heat transfer apparatus comprising a furnace, a plurality of rows of roof tubes disposed along the roof of the furnace, wall tubes disposed along a wall of the furnace, a connection between the lower row of roof tubes and one end of the wall tubes, and a connection between the other end of the wall tubes and the second row of roof tubes, all the tubes being adapted to carry a fluid to be heated.

1,881,287. FURNACE DOOR. DALE O. MILLER, Detroit, Mich. Filed Mar. 5, 1929. Serial No. 344,154. 1 Claim. (Cl. 110—173.)



In combination with a coal burning furnace of the underfeed type, said furnace being of relatively narrow width and having a substantially vertical front with an opening through said front, of a coal stoking appliance permanently located in front of the furnace, said appliance including a relatively large hopper adapted to receive large coal, said hopper being located very closely adjacent the front of the furnace and a short distance in front of the opening therein whereby an outwardly swinging door cannot be operatively mounted upon said opening, and a stoking unit, and a sliding door mounted on said front of the furnace for lateral movement in a substantially vertical plane between the front of the furnace and said hopper to cover or uncover said opening whereby access to the coal interiorly of the furnace may be freely had at the point where it leaves the stoking unit.

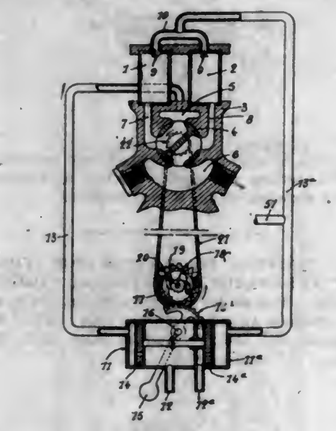
1,881,288. AUTOMOBILE BRAKE. HARUKICHI NISHIHARA, Waimanalo, Oahu, Territory of Hawaii. Filed May, 21, 1931. Serial No. 539,073. 2 Claims. (Cl. 188—4.)



1. A brake for motor vehicles comprising elongated brake shoes arranged in advance of the drive wheels of a vehicle, journals on the shoes adjacent the forward ends thereof, an operating shaft journalled to the vehicle and having cranks received by the journals for raising and lowering the shoes, pulleys secured to the vehicle adjacent the operating shaft, ears on the shoes and located intermediate the ends thereof, and flexible elements trained over the pulleys and secured to said ears and journals for maintaining the shoes in substantially horizontal position when raised or lowered by said shaft.

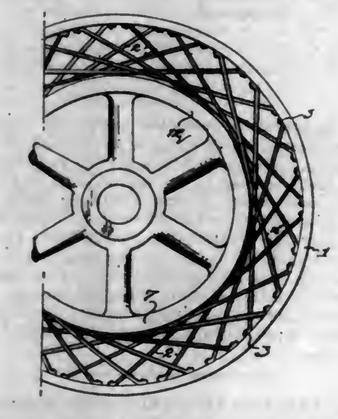
1,881,289. AUTOMATIC LIQUID MEASURING AND DELIVERING APPARATUS. ANTOINE ERNEST PANIER, Paris, France, assignor to Societe Anonyme de Machines-Outils et Appareils Divers "La Samoa," Paris, France. Filed Oct. 21, 1929, Serial No. 401,185, and in France June 14, 1929. 5 Claims. (Cl. 221—101.)

1. In a liquid measuring and delivering apparatus, the combination of two measuring vessels, a pump adapted to force a liquid into either of said vessels, a delivery chamber for the liquid, a valve adapted to simultaneously connect either vessel with the pump and the other vessel with the said delivery chamber, a movable member responsive



to the pressure of the liquid in the vessel in communication with the pump, and mechanical coupling means co-operating with the said movable member and adapted to operatively connect the pump with the valve.

1,881,290. FLEXIBLE TIRES FOR VEHICLES. MANUEL PEREDA, Buenos Aires, Argentina. Filed Sept. 30, 1931. Serial No. 566,142. 3 Claims. (Cl. 152—8.)



2. A resilient tire for wheels comprising an inner and an outer ring, a plurality of resilient rods disposed crosswise between the rings and having their ends fixed to the outer ring, the center parts of the rods corresponding to the vertex of a paraboloid as revolved about an axis parallel to its directrix, and means carried by the rods for securing the middle portions thereof to the inner ring.

1,881,291. ARTICLE OF JEWELRY. HENRY W. PETERS, Boston, Mass. Filed Apr. 6, 1929. Serial No. 353,173. 2 Claims. (Cl. 63—15.)

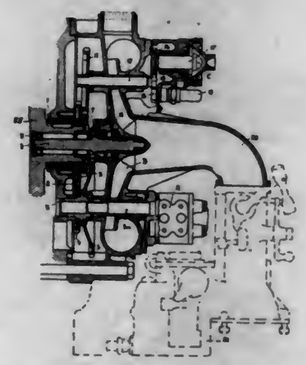
1. An article of jewelry including a bezel having open faces disposed at an angle to each other, a member insertible into the bezel through one of the open faces for exposure through the other open face, and means integral

with the bezel and extending out of the plane of the open face through which the member is exposed, said means adapted to be upset for displacement without bending



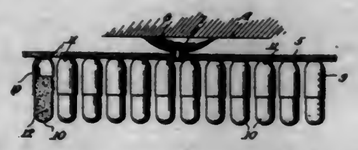
into the plane of said open face and into position to lap the inserted member and hold it against withdrawal from the opening through which it was inserted.

1,881,292. DRIVING MECHANISM FOR THE AUXILIARY APPARATUS OF INTERNAL COMBUSTION ENGINES. GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Mar. 25, 1931, Serial No. 525,278, and in Italy Mar. 29, 1930. 4 Claims. (Cl. 123—195.)



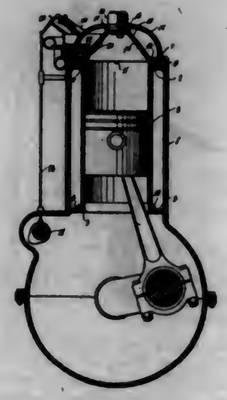
1. In an internal combustion engine, in combination with a compressor, an oil pump, a pressure air distributor to the engine and a fuel pump, a driving mechanism comprising a shaft co-axial to the engine shaft and carrying the compressor wheel, a first auxiliary shaft passing through the casing of said compressor and driving the oil pump, a gear for transmitting motion from the engine shaft to said auxiliary shaft, a multiplying gear for transmitting motion from said auxiliary shaft to the compressor shaft, a second auxiliary shaft extending through the casing of said compressor and a pinion on said second auxiliary shaft which drives simultaneously said distributor and said fuel pump.

1,881,293. BLUEING HOLDER. LIONEL POIRIER and VICTOR VARIN, Chicopee Falls, Mass. Filed Feb. 9, 1932. Serial No. 591,877. 3 Claims. (Cl. 68—11.)



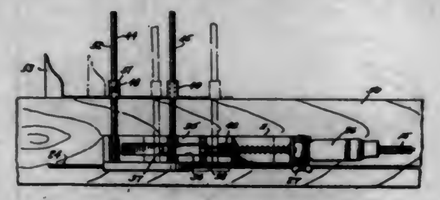
1. A holder of the character described comprising a backing having a plurality of capsules anchored thereon and containing blueing substance, the outermost part of each capsule being separable for the dispensing of the blueing substance held therein, and means for detachably fastening the backing to a support.

1,881,294. INTERNAL COMBUSTION ENGINE. MARDELL D. POLSTON, Oviedo, Fla. Filed Aug. 21, 1930. Serial No. 476,916. 1 Claim. (Cl. 123—173.)



An engine casing, comprising an engine block having spaced top and bottom walls provided with alined openings, the wall of the opening in the top wall having a circumferential groove communicating with the opening, the wall of the opening in the bottom wall being threaded, a tubular member removably mounted in said openings and provided with an outwardly directed circumferential flange on its upper end seating in said groove, and its lower end threaded and engaging the threaded wall of the opening in the bottom wall.

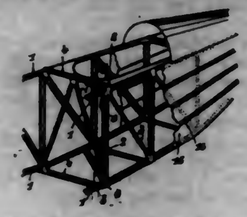
1,881,295. PORTABLE ELECTRIC HAND SAW. RAPHAEL PORCELLO, Richmond Hill, N. Y. Filed June 15, 1932. Serial No. 617,440. 4 Claims. (Cl. 143—43.)



1. A portable electric handsaw comprising a chassis, a handle adjustably secured to one end of said chassis above the plane of the bottom of said chassis, an electric motor within said chassis, a rotatable shaft at the other end of said chassis, means connecting said rotatable shaft for operation by said electric motor, a circular saw on said shaft, lateral guide means projecting from said chassis for directing the operation of said saw and providing an abutting end, and means yieldably and detachably securing said guide means to said chassis permitting said saw to operate beyond said guide means.

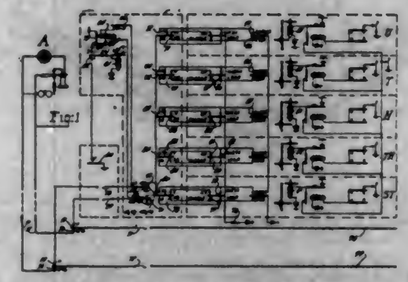
1,881,296. METAL BUILT AIRCRAFT. HENRY CHARLES ALEXANDER POTEZ, Meaulte, Somme, France. Filed Jan. 6, 1931, Serial No. 506,952, and in France Jan. 27, 1930. 9 Claims. (Cl. 244—31.)

1. Aircraft fuselage frame comprising longitudinals, and vertical and diagonal side members for connecting said longitudinals together, all these elements consisting of U-shaped sectional irons having their open sides outwardly disposed with respect to the frame, lateral flanges on said irons parallel to the bottom part of the U, the flanges of adjoining irons being disposed in the same vertical plane, gussets applied against the lateral flanges of adjoining



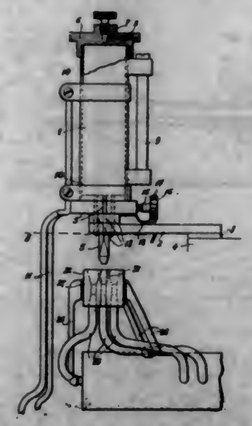
irons, and gussets applied against the bottom part of the U of adjoining irons for assembling and securing them together.

1,881,297. MULTIOFFICE TELEPHONE SYSTEM. ARTHUR J. RAY, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1922, Serial No. 589,985. Renewed Nov. 21, 1931. 56 Claims. (Cl. 179—27.)



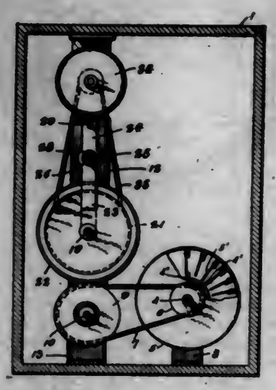
1. In a telephone system comprising a machine switching office, a manual call indicator office, and a step by step office, code sending apparatus in the machine switching office for setting the call indicators in the manual office, and translating equipment responsive to said sending equipment for operating the switches in the step by step office.

1,881,298. ADJUSTABLE LUBRICATION DEVICE FOR THE MOLDS OF MONOTYPE CASTING MACHINES. FRANCESCO SANDRINELLI, Bern, Switzerland. Filed Sept. 23, 1930, Serial No. 483,842, and in Germany Oct. 7, 1929. 3 Claims. (Cl. 199—1.)



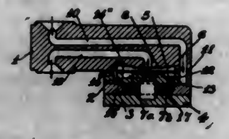
1. In a monotype casting machine a lubricating device for the molds and in combination a reheating arrangement comprising an oil container made of good heat conducting metal and heat conducting members immerged with one of their ends into the molten metal of the melting pot and with the other attached to the container and clips embracing said container and clamped to said heat conducting members.

1,881,299. TOY MUSICAL INSTRUMENT. RAY W. SAVIDGE, Sunbury, Pa. Filed June 29, 1931. Serial No. 547,714. 4 Claims. (Cl. 84—95.)



1. A musical toy including a plurality of musical elements designed to be sounded on the rotation of a part thereof, a corresponding series of grooved rollers, and belts carried by the rollers and trained over the sound imparting part of the musical elements for rotating the same when the rollers are turned, a friction wheel, motor operated means for turning the friction wheel, means for moving the rollers to bring any one or any adjacent two thereof to engage with the friction wheel, and means for imparting a longitudinal movement to the friction wheel and to cause the same to engage with a desired roller.

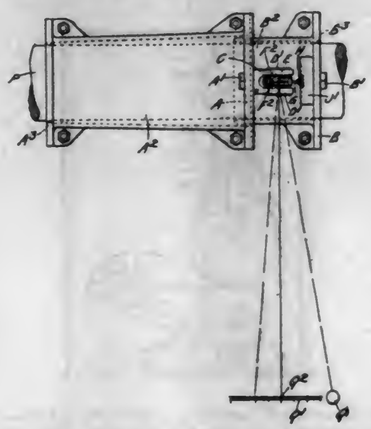
1,881,300. SPINNING PUMP. FRITZ SIEPER, Barmen-Langerfeld, Germany, assignor to Barmer Maschinenfabrik Aktiengesellschaft, Barmen, Germany. Filed Sept. 28, 1929, Serial No. 395,934, and in Germany Oct. 1, 1928. 5 Claims. (Cl. 103—11.)



1. Apparatus for regulating the pressure in gear wheel pumps having a pump casing, a supply duct, a supply chamber, a discharge chamber and a discharge duct for pumping artificial silk, comprising the combination with the pump casing and a clamping piece secured to said pump casing, of a regulating chamber situated between the pump casing and the clamping piece, said regulating chamber being interposed between said supply duct and supply chamber, a second regulating chamber situated between the pump casing and the clamping piece adjacent to said first-mentioned regulating chamber and interposed between the discharge chamber and the discharge duct and a resilient diaphragm interposed between said regulating chambers so as to separate the chambers, said discharge duct having the end thereof connected to the second regulating chamber positioned with respect to said diaphragm so as to enable the diaphragm to obstruct the flow of fluid to the discharge duct on the pressure in the first men-

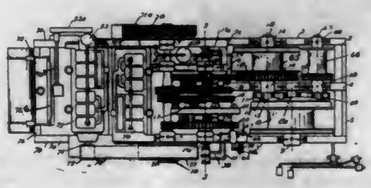
tioned regulating chamber exceeding that in the second regulating chamber for keeping the pressure in the supply chamber at the same level as the pressure in the discharge chamber, as and for the purposes set forth.

1,881,301. TORSION METER. LEONARD GODFREY PINNEY THRING, Cambridge, England. Filed Aug. 27, 1931, Serial No. 559,783, and in Great Britain Sept. 5, 1930. 15 Claims. (Cl. 265—25.)



1. For use with a torsion meter of the kind referred to comprising two relatively movable rotatable body parts, a mirror mounting including in combination a zero mirror support adapted to be rigidly connected to one of the two relatively movable body parts, two zero mirrors so mounted back to back on the support as both to lie truly at right angles to a single plane, and means whereby the support can be adjusted relatively to the body part on which it is mounted so as to enable the said plane to be caused to lie truly at right angles to the axis of rotation of the body parts.

1,881,302. HOISTING ENGINE. HARRY L. TURNEY, Portland, Oreg., assignor to Patents & Royalties Corporation, a Corporation of California. Filed Sept. 22, 1930. Serial No. 483,441. 13 Claims. (Cl. 254—185.)

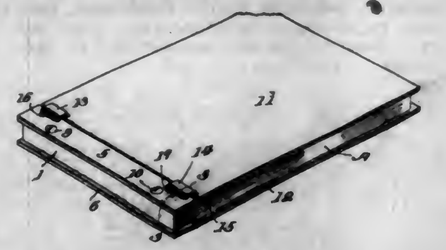


1. In a hoisting engine, the combination of a frame; a drum mounted on the frame with its axis crosswise of the frame; a transmission shaft extending crosswise of the frame; gear connections between the drum and the transmission shaft; a series of not less than three speed changing gears on the transmission shaft between the frame sides; a power shaft parallel with the transmission shaft; a series of speed changing gears on the power shaft continuously meshing with the speed changing gears on the transmission shaft; means selectively locking and releasing one of each speed changing gears with its shaft; and a power unit driving the power shaft, said power unit having its power producing member mounted between the frame sides, and the drum, transmission and power unit being in tandem relation.

1,881,303. PROCESS FOR THE MANUFACTURE OF OPACIFIERS. LUDWIG WEISS, Frankfort-on-the-Main, Germany. Filed Dec. 25, 1928, Serial No. 328,825, and in Germany Dec. 27, 1927. 2 Claims. (Cl. 23—21.)

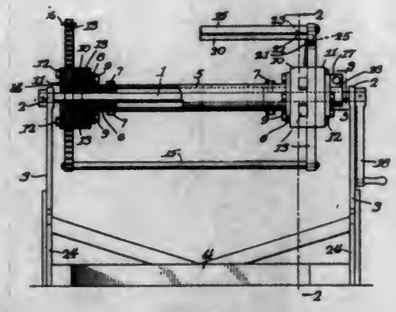
1. A process for the manufacture of a zirconium oxide enamel opacifier in which the opacifying effect of the oxide is increased, comprising the steps of heating an oxygen containing salt of zirconium and decomposing it into the oxde at a relatively low temperature, then heating the resulting oxide to temperatures exceeding 1000° C. but below the melting point of zirconium oxide, in order to increase the opacifying effect of the zirconium oxide obtained as a result of the first heating.

1,881,304. BOOK COVER. OTTO WIESENDANGER, Hempstead, N. Y.; Elsie Veronica Wiesendanger administratrix of said Otto Wiesendanger, deceased. Filed May 1, 1929. Serial No. 359,669. 1 Claim. (Cl. 281—29.)



A book comprising a box-shaped back member, leaves permanently secured therein, plates arranged against the upper and lower faces of said box-shaped back member and having portions extending forwardly therefrom provided with slots, separable pins extending through said plates and box-shaped member, cover members, rigid loop-shaped hinge members passing through said slots and constructed to have an initial limited free movement therein and to finally lock therewith and swing the plates and box-shaped back member, the free ends of said loops embracing said cover members and having their free edges embedded in said cover members to rigidly connect said cover members to said loops.

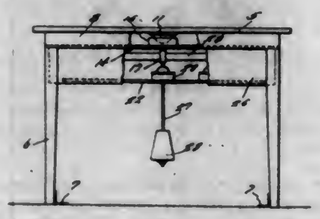
1,881,305. WINDING DEVICE. FRED WILLIAMS, St. Joseph, Mich. Filed Nov. 16, 1928. Serial No. 319,753. 4 Claims. (Cl. 242—113.)



2. In a reel, the combination of a rotary shaft forming the supporting axis of the reel, sectional hubs on said shaft, means connecting said hubs together, means whereby said hubs and shaft are secured together to rotate in unison, right angle rack bars in said hubs, pinions on said shaft engaging said rack bars, supporting elements

connecting the rack bars of one hub with the rack bars of the other hub, and power imparting means engaging said shaft to rotate the entire reel, operative to merely rotate said shaft and pinions when said hubs are released from the shaft and held against rotation, thereby in effect to expand or contract the size of the reel, by means of said power imparting means.

1,881,306. TABLE. HARRY P. BALLIET, Slatedale, Pa. Filed Feb. 25, 1932. Serial No. 595,166. 5 Claims. (Cl. 114—195.)

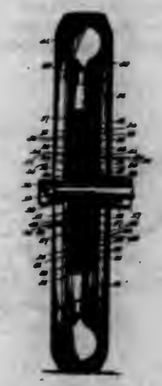


1. A table comprising in combination a fixed plate, a plurality of disks, ball and socket means connecting said disks with said plate, a floating member beneath said plate, and suspension means connecting the ball of each of said ball and socket means with said floating member.

1,881,307. LOW DENSITY EXPLOSIVE. RAYMOND I. BASHFORD, Philadelphia, Pa., assignor, by mesne assignments, to Atlas Powder Company, a Corporation of Delaware. Filed Jan. 23, 1932. Serial No. 588,503. 13 Claims. (Cl. 52—11.)

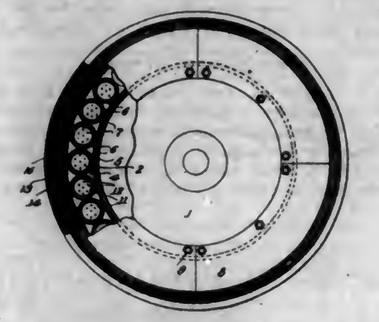
1. An ammonium nitrate low density explosive having therein a relatively bulky inert material, the pores of which are substantially filled with a salt.

1,881,308. RESILIENT CENTERING DEVICE. FRANK H. BEAMER, Buffalo, N. Y. Filed Sept. 5, 1931. Serial No. 561,403. 13 Claims. (Cl. 152—39.)



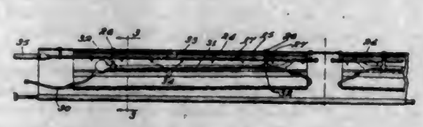
1. A resilient centering device, comprising an inner member having a laterally projecting portion providing an inner peripheral contact face, an outer member marginally surrounding said inner member and having a portion furnishing an inner peripheral contact face to coact with the inner peripheral contact face of the laterally projecting portion of said inner member, and a spring expanding outwardly and bearing against said peripheral faces.

1,881,309. TIRE. GREGOR CAMPU, Detroit, Mich. Filed May 24, 1932. Serial No. 613,256. 5 Claims. (Cl. 152—22.)



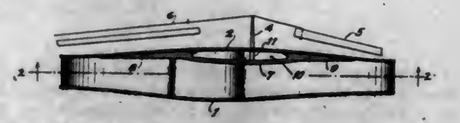
1. In a vehicle wheel, a rim, a flange formed with said rim, a tube carrying member adapted to be positioned on the rim, pneumatic tubes arranged transversely of the rim and disposed in the tube carrying member, a treaded means surrounding said tube carrying member and means detachably secured to said wheel and arranged in parallelism with the flange to hold the tubes and remaining tire parts in operative position.

1,881,310. APPARATUS AND METHOD FOR TREATING FABRICS. FRANK E. COATSWORTH, Chicago, Ill. Filed May 15, 1931. Serial No. 537,717. 2 Claims. (Cl. 250—34.)



1. Apparatus of the character described including; an elongated hood; means for attaching said hood to a fabric handling appliance; an elongated reflector supported by said hood inside of the same and spaced therefrom; an elongated ultra-violet light generator supported inside of said reflector; a discharge pipe, adapted to conduct a cooling gas, supported inside of the reflector in the vicinity of the ultra-violet light generator; and nozzles in said pipe adapted to direct a cooling gas issuing therefrom substantially in the same direction as ultra-violet rays issuing from said reflector.

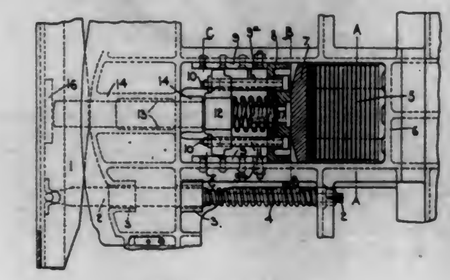
1,881,311. STRINGED MUSICAL INSTRUMENT. RICHARD DOE CURRIER, Reading, Mass.; Walter B. Grant executor of the estate of said Richard D. Currier, deceased. Filed Feb. 11, 1930. Serial No. 427,588. 1 Claim. (Cl. 84—275.)



A string musical instrument, including a body having a belly and back and sound opening in the belly, a bass bar of inverted arch shape intermediate its ends and

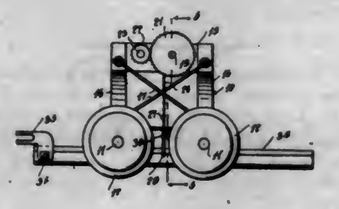
attached only at its ends to the inner side of the belly laterally of the longitudinal axis of the instrument, said arch shape providing a space adjacent the belly of approximately the length of the sound opening in the belly, and a post interposed between and connecting the inner face of the belly and the arch portion of the bass bar.

1,881,312. BUFFING AND DRAW GEAR FOR RAILWAY VEHICLES. RICHARD THOMSON GLASCODINE, London, England, assignor of one-half to George Spencer, Moulton & Company, Limited, London, England. Filed Apr. 8, 1929, Serial No. 353,563, and in Great Britain Mar. 6, 1929. 1 Claim. (Cl. 213—222.)



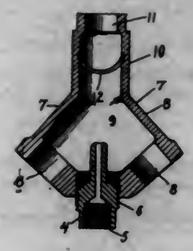
In a railway passenger vehicle a collapsible end platform, an india-rubber buffing spring, a compression plate for said buffing spring, a thrust-transmitting member projecting forwardly from said compression plate, a push bar in line with said thrust-transmitting member and arranged to be moved inwardly by inward movement of said end platform, an abutment member through which said thrust-transmitting member extends, stops comprising removable portions against which said abutment member abuts, a helical steel spring mounted on the said thrust-transmitting member and bearing at its front end against said push bar and at its rear end against said abutment, and means for limiting the outward movement of said push bar.

1,881,313. RAIL HANDLING TRUCK. STEWART F. HETTIG, Warrior Run, Peely, Pa. Filed Aug. 20, 1931. Serial No. 558,354. 4 Claims. (Cl. 104—7.)



1. A railroad truck comprising a frame, wheels on the frame, means on the frame to elevate the rail and maintain it substantially parallel to the wheels and above the ground line, whereby the rail may serve as a draft means, and means to prevent twisting movement of said elevating means and accordingly of the rail, said means connecting the elevating means and frame to provide traction means therebetween.

1,881,314. BURNER DEVICE. FREDERICK C. HOHENSTEIN, Dunkirk, N. Y. Filed Sept. 15, 1930. Serial No. 482,113. 1 Claim. (Cl. 158—118.)

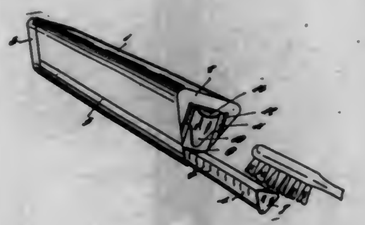


A burner of the class described comprising a hollow body formed with a vertical tubular portion and downwardly diverging tubular laterals with lower open ends, said body being further formed with an internally threaded center opening between the laterals in confronting relation to the vertical tubular portion, and a nozzle adjustably engaged in the opening and having a contracted tip for extension into the body.

1,881,315. METALLIC ALLOY. KOTARO HONDA and TSUTOMU KASE, Sendai, Japan, assignors to Research Institute for Iron, Steel & Other Metals, Sendai, Japan. Filed Jan. 6, 1931, Serial No. 506,969, and in Japan Aug. 20, 1930. 4 Claims. (Cl. 75—1.)

1. A metallic alloy having a very high hardness containing as the main ingredients 30 to 50% of tungsten, 20 to 50% of molybdenum and 30 to 50% of chromium and subingredients comprising carbon in an appreciable amount less than 2%, nickel in an appreciable amount less than 5% and manganese in an appreciable amount less than 4%.

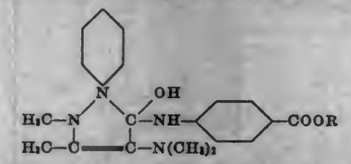
1,881,316. CONTAINER FOR TOOTH POWDER, OR SIMILAR MEDICAL PRODUCTS. GUIDO HORVÁTH, Buenos Aires, Argentina. Filed Oct. 14, 1930. Serial No. 488,685. 2 Claims. (Cl. 221—104.)



1. A container, comprising an angular box, said box being apertured at one of its ends, a sliding drawer adapted to be housed within the box and to pass through the opening in the end of the box, and an abutment intermediate the ends of the sliding drawer for limiting the extent of the issue of the drawer from the box, the portion of the drawer in the rear of the abutment serving as a support for the portion of the drawer which projects from the box, said abutment also sealing the opening of the box when the drawer has been pulled out.

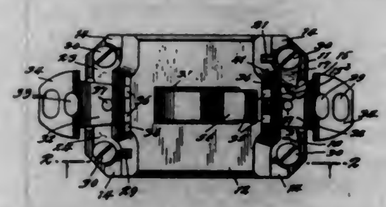
1,881,317. PROCESS OF COMBINING 4-DIMETHYL AMINO-1-PHENYL-2.3-DIMETHYL-5-PYRAZOLONE WITH ONE OF THE ESTERS OF P. AMINOBENZOIC-ACID AND THE PRODUCTS. BAPTIST REUTER and MATHILDE REUTER, Krailling-Planegg, Germany. Filed Apr. 12, 1930, Serial No. 443,910, and in Germany July 30, 1928. 4 Claims. (Cl. 260—45.)

1. The process of making new compounds, of 4-dimethyl-amino-1-phenyl-2.3-dimethyl-5-pyrazolone with p. aminobenzoic acid esters of the general formula:



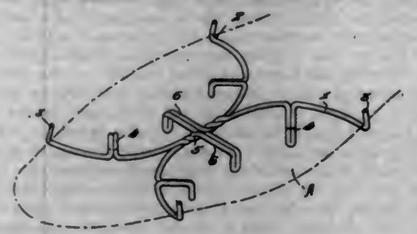
wherein R stands for an alkyl radical, which process comprises condensing one molecule of 4-dimethyl amino-1-phenyl-2.3-dimethyl-5-pyrazolone with one molecule of a p. aminobenzoic acid ester, mixing the said two compounds finest in any way preferably in portion of one molecule to one molecule and heating up the mixture until the reaction is ended.

1,881,318. ELECTRICAL FITTING. GEORGE A. JOHNSON, Fairfield, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Original application filed May 17, 1928, Serial No. 278,447. Divided and this application filed Jan. 8, 1930. Serial No. 419,351. 6 Claims. (Cl. 200—168.)



1. An electrical fitting comprising a base, a cover of molded insulating material resting on the base, and an ear at each end of the base and secured thereto, each ear having a portion engaging the cover to hold the latter on the base and another portion for attaching the fitting to a support.

1,881,319. SPIKE ATTACHMENT FOR SHOES. JOHN LAW KERR, Albany, Ga. Filed Apr. 30, 1931. Serial No. 534,071. 2 Claims. (Cl. 36—62.)

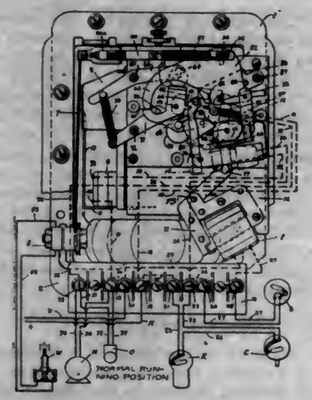


1. A spike attachment for shoes comprising strands of resilient wire bent in substantially semi-circular formation, and coiled about each other midway their ends, jaws formed with the ends of said strands and being engageable with the sole of a shoe for detachably securing the attachment to said sole, spike means formed with said strands and being substantially L-shaped, and said spike means having their long arms engageable with the sole and their short arms extending at right angles with respect to the long arms to provide ground penetrating means.

1,881,320. METHOD OF HARDENING AND TEMPERING METAL. JESSE LANDON, Lima, Ohio, assignor of one-sixth to William L. Crumrine, Lima, Ohio. Filed Apr. 7, 1932. Serial No. 603,901. 1 Claim. (Cl. 148—29.)

The herein-described method for tempering and hardening metal, which consists in heating linseed oil substantially to its boiling point, adding resin in substantially the proportion of one-eighth of a pound of resin to each gallon of oil, immersing the metal in the solution of resin and oil until the metal acquires the temperature of the solution, subsequently removing the metal and covering the same with powdered resin, and plunging the metal into cold coal-oil, permitting the metal to remain in the bath until the temperature of the metal is equalized with that of the coal-oil.

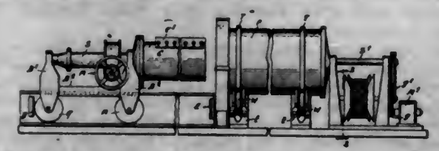
1,881,321. CONSTANT CURRENT TRANSFORMER ACTUATED CONTROL SYSTEM. IRA E. MCCABE, Chicago, Ill. Filed Apr. 23, 1930. Serial No. 446,573. 18 Claims. (Cl. 158—28.)



1. A control for an electrically operated fluid fuel burner mechanism including a constant current transformer having a coil that will float when the transformer is energized, and means controlled by the movement of the floating transformer coil to permit the operation of the burner mechanism.

3. A control for an electrically operated fluid fuel burner mechanism having a burner motor including a constant current transformer, a switch in the motor circuit normally open, and means operable upon energization of the transformer to close said switch to operate the burner mechanism, thereafter break the circuit through the transformer and means operable upon establishment of combustion to maintain the circuit through the motor.

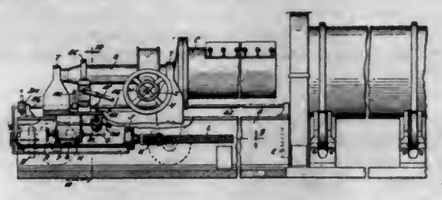
1,881,322. CARRYING MECHANISM FOR CENTRIFUGAL CONCRETE PIPE MACHINES. ALBERT R. MCMULLIN, New York, N. Y. Filed Dec. 23, 1931. Serial No. 582,797. 3 Claims. (Cl. 25—30.)



1. Bucket-carrying mechanism for centrifugal concrete pipe-machines embodying, in combination, a pair of rail

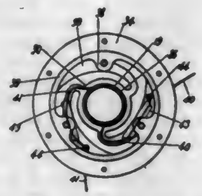
members, each having extending outwardly therefrom wheel channels composed of a vertical web portion, an outwardly extending track portion, and an outwardly-extending top-member, a carriage traversable along said rails and having a body portion extending laterally across said rail members and provided with wheels mounted thereon to extend inwardly into said outwardly-disposed wheel channels, and a concrete bucket mounted on said carriage between said rails.

1,881,323. POWER MECHANISM FOR OPERATING BUCKETS OF CENTRIFUGAL MOLDING APPARATUS. ALBERT R. MCMULLIN, New York, N. Y. Filed Dec. 31, 1931. Serial No. 584,183. 7 Claims. (Cl. 25—30.)



2. Centrifugal molding apparatus for concrete pipes and the like embodying, in combination, a mold and means for spinning the same, a bucket and a carriage on which said bucket is rotatably mounted, means for traversing said bucket into and out of the mold comprising a power actuated element, means for supplying power for said element to cause the same to be moved in opposite directions, means for providing an operative connection between said carriage and power element to traverse the carriage in opposite directions, double-acting bumper mechanism and stops at opposite ends of the traversing movement of the carriage cooperating with said bumper mechanism, the parts being arranged upon contact and bumping against one stop to be automatically set for bumping against the opposite stop.

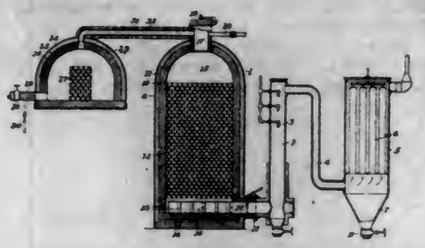
1,881,324. SIGNAL REPRODUCER. HERBERT E. METCALF, San Leandro, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed Oct. 26, 1927. Serial No. 228,872. 25 Claims. (Cl. 178—115.5.)



3. In a dynamic reproducer, a movable coil structure, and a flexible support for the structure, including a washer of flexible material, said washer having an inner annular portion fastened to the coil structure, an outer annular portion spaced from the inner portion, said outer portion being adapted to be supported on a stationary support, and flexible arms connecting the inner and outer portions, said arms departing from radial direction in order to increase their effective length.

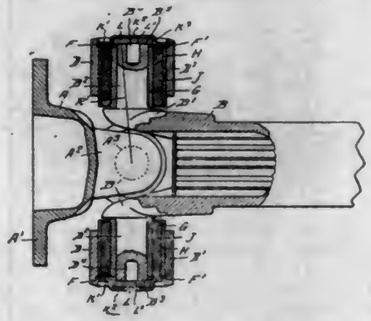
20. In a signal transmitting device, means forming a magnetic air gap, a current-carrying coil adapted to move in said air gap, and a yielding support for said coil comprising flat strips of flexible material extending outwardly from said coil to fixed points, said strips being positioned with respect to the coil and fixed points so that a twisting strain will be imposed upon said strips as the coil moves axially in said gap.

1,881,325. COMBUSTION CHAMBER. CARROLL MILLER, Pittsburgh, Pa., assignor to Thermatomic Carbon Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 511,709. 4 Claims. (Cl. 134—60.)



1. Apparatus for the production of carbon black comprising a chamber containing checkerwork adapted to be heated, means for burning a fuel, means for mixing a hydrocarbon gas with the hot combustion gases produced thereby at substantially the maximum temperature reached by said combustion gases and passing the mixture over the heated checkerwork, thereby decomposing the hydrocarbon gas to yield solid carbon particles, and means for separating the carbon particles from the gaseous decomposition products.

1,881,326. UNIVERSAL JOINT. FREDERICK W. PETERS, Cleveland, Ohio. Filed Sept. 17, 1931. Serial No. 563,307. 5 Claims. (Cl. 64—102.)

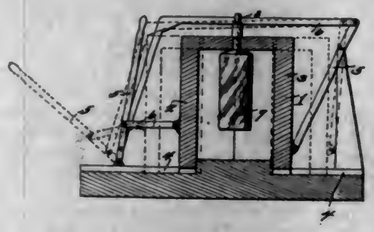


1. A universal joint comprising driving and driven members each having trunnions, a connecting ring comprising sections each having partial seats therein adapted, when the said sections are assembled, to form complete seats, a bushing on each trunnion comprising an external sleeve mounted in a seat of such ring, an internal sleeve fitting tightly on the trunnion, and a member of deformable resilient material interposed between the said sleeves and gripped thereby under longitudinal tension whereby the inner and outer surfaces of the deformable member are held against rotation with respect to said sleeves, a plate extending across each seat beyond the bushing and the trunnion therein, each trunnion having a spherical outer surface concentric with the center of said joint, and a thrust block interposed between the said plate and the spherical outer surface of such trunnion, each thrust box having a spherical surface concentric with the spherical surface of the trunnion and engageable thereby.

1,881,327. APPARATUS AND PROCESS FOR MAKING WINDOW SHEET OR FLAT GLASS. WILLIAM H. POWELL, Mullica Hill, N. J. Filed Oct. 2, 1929. Serial No. 396,787. 1 Claim. (Cl. 49—79.)

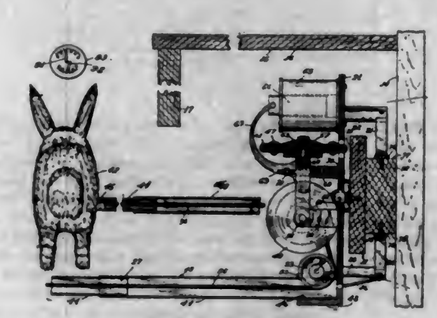
In a process for molding flat window glass sheets, the steps consisting in subjecting a hollow glass body to

furnish heat, suspending said body within a mold whose interior surface consists of a plurality of flat faces, previously applying a solution to the flat faces to give a high polish to the glass when made to conform to the shape of the interior of the mold, thereby giving the glass a clear vision and transparency, expanding the



wall of the glass body against the walls of the mold, whereby the wall of the body may take the shape of the walls of the mold, opening the mold and removing the glass body, annealing the glass body, cutting the opposite ends of the glass body, and finally cutting the corners of the reshaped glass body, whereby the side facets of the body may constitute flat window glass sheets.

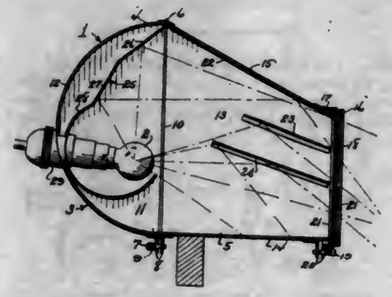
1,881,328. DECOY UNIT. RUPERT D. READ, Kenmore, Ohio, assignor to Harry B. Staver, Chicago, Ill. Filed Sept. 7, 1926. Serial No. 133,840. 14 Claims. (Cl. 272—4.)



1. A decoy unit, particularly for greyhound racing, comprising: a track; a car mounted to travel along said track, and provided with wheels engaging opposite sides of said track and rotating in the plane of said track; motor means mounted on said car for operating said car along said track; and a decoy carried by said car, normally extended therefrom but retractable by electromagnetic means.

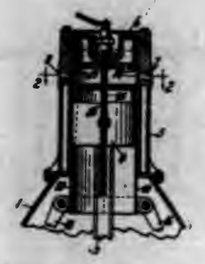
1,881,329. AUTOMOBILE LIGHT. ELMER A. SEABERG, Pueblo, Colo. Filed July 1, 1931. Serial No. 548,233. 1 Claim. (Cl. 240—41.35.)

A headlight comprising a casing having a rectangular shaped opened front end, a lens closing said end of the casing, a portion of the top wall of said casing inclining upwardly and rearwardly from the lens, a reflector carried by the casing and covering said portion of the top wall, spaced reflectors in the casing and located below the first reflector and extending upwardly and rearwardly from the lens, an illuminating means in the casing, and a



reflector in the casing and including an upwardly and forwardly inclined portion and an arcuately curved portion having the illuminating means located therein.

1,881,330. INTERNAL COMBUSTION ENGINE. SAMUEL B. SMITH, Rocky River, Ohio. Filed Sept. 9, 1930. Serial No. 480,698. 14 Claims. (Cl. 123—75.)



1. In an internal combustion engine, the combination with a ported cylinder and piston, of a pair of sliding arcuate valves, adapted to control the ports, the valves having edge portions in sliding contact, and expansible formations on said edge portions of the valves to seal the space between said valves.

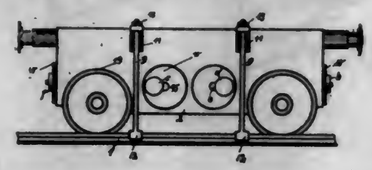
1,881,331. APPARATUS FOR THE CONTINUOUS HEAT TREATMENT OF METALS OR ALLOYS. WILLOUGHBY STATHAM SMITH, Newton Poppleford, and CUTHBERT VICTOR HENRY GARNETT, Sevenoaks, England. Filed Dec. 22, 1931, Serial No. 582,612, and in Great Britain Dec. 24, 1930. 7 Claims. (Cl. 263—3.)



1. In apparatus for the continuous heat treatment of signalling conductors the combination with a furnace, of a metal conveyor tape for supporting the conductor in its

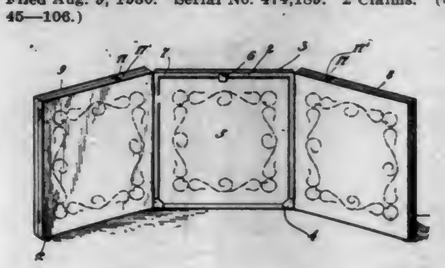
passage through the furnace, shaping means for shaping the tape to conform substantially to the shape of the conductor prior to its entering into engagement therewith, means for separating the tape from the conductor on exit from the furnace and means for drawing both the conductor and the tape through the furnace at the same rate.

1,881,332. GYRATIC TESTING INSTRUMENT. ALFRED SONNTAG, Dusseldorf, Germany, assignor to Lasenhausenwerke, Dusseldorfer Maschinenbau A. G., Dusseldorf, Germany. Filed Aug. 1, 1930. Serial No. 472,273, and in Germany Aug. 5, 1929. 4 Claims. (Cl. 73—51.)



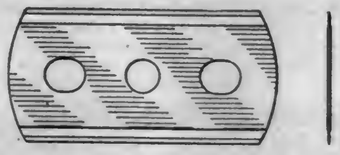
1. Gyratic testing instrument comprising a plurality of gyrating weights which are arranged to be adjusted so as to transmit onto the part under test periodical forces and momenta in three directions and at right angles to each other.

1,881,333. COMBINED FIRE SCREEN AND FURNITURE HOLDER. BERNHARD STEINER, New York, N. Y., Filed Aug. 9, 1930. Serial No. 474,189. 2 Claims. (Cl. 45—106.)



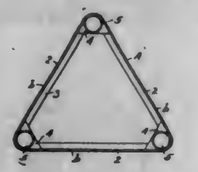
1. The combination with a plurality of ornamental screen panels recessed at their rear faces, end wings hinged to the end screen panels and also recessed in their rear faces for the reception of callapsible chairs, adjustable retaining devices for holding the chairs in the screen recesses, and securing devices whereby the end wings may be folded over the end screen wings containing the chairs and secured in position to completely conceal the chairs and present an unbroken outward ornamental appearance.

1,881,334. PROCESS OF MAKING RAZOR BLADES. JULIUS TREIBER, Solingen, Germany. Filed Aug. 23, 1929, Serial No. 387,830, and in Germany Dec. 15, 1928. 5 Claims. (Cl. 76—104.)



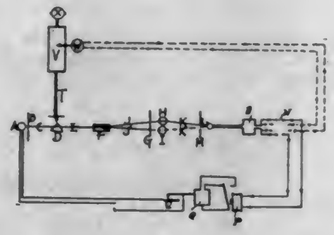
1. A process for manufacturing a razor blade, consisting in manufacturing a blank of uniform thickness, reducing its thickness in the marginal range of its future cutting edges by an etching operation, and grinding cutting edges thereon.

1,881,335. PORTABLE SUPPORTS FOR WASHING MACHINES. DONALD L. ULMER, Binghamton, N. Y. Filed Sept. 18, 1930. Serial No. 482,703. 1 Claim. (Cl. 280—61.)



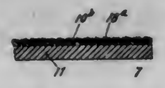
In a support for washing machines and the like, an open angular frame formed of angle iron with the horizontal part forming an inwardly directed ledge and the vertical part forming a rim for the frame extending above the horizontal part, brace pieces connecting the horizontal flanges of the sides of the frame at the corners and resting on the horizontal flanges, saucer shaped rests supported by the brace pieces at the corner, supporting plates beneath and secured to said brace pieces and casters carried by the supporting plates.

1,881,336. METHOD OF COLOR DETERMINATION OF ANY OBJECT. GEORGE QUENTIN VOIGT, Medford, Mass. Filed Jan. 22, 1930. Serial No. 422,688. 10 Claims. (Cl. 234—1.5.)



1. The method of recording color comprising, separating light into its constituent wavelengths, separating one constituent wavelength into separate beams, projecting one beam upon a test surface, projecting another beam upon a known tested surface, setting up an electric current having its intensity proportional to the intensity of the light from the test surface, and controlling the intensity of the beam projected upon the test surface, and recording the color effect by the action of the set-up electric current.

1,881,337. SHEET MATERIAL AND METHOD OF MAKING SAME. GLENN H. WILLIS, Akron, Ohio., assignor to The Tanseib Company, Barberton, Ohio, a Corporation of Ohio. Filed Jan. 13, 1931. Serial No. 508,411. 12 Claims. (Cl. 154—2.)

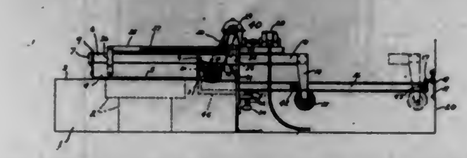


1. The herein-described method which comprises embossing the surface of a fiberized rubber sheet, and raising a fiber nap thereon by removal of rubber from the elevated portions to a greater extent than from the depressed portions.

2. The herein-described method which comprises mixing a suitable rubber composition with fibers, sheeting the mixture, vulcanizing the sheeted mixture substantially without compacting pressure, causing it to swell during vulcanization, and removing a portion of the surface rubber to produce a fibrous nap.

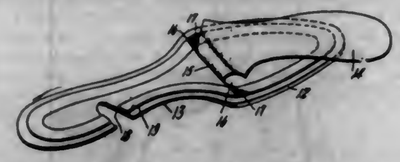
4. The method of producing color-patterned sheet material for floor-coverings and the like which comprises mixing and sheeting differently colored body and inlay materials of plastic binder and fiber composition, laying a relatively small piece of the inlay material on a sheet of the body material, heating the two, and embedded the inlay material substantially without edge distortion in the body material during the heating process.

1,881,338. POWER OPERATED FURNACE COVER. CARL WRIGHT, Geneva, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1930. Serial No. 459,977. 6 Claims. (Cl. 268—10.)



1. In an apparatus of the class described, a substantially horizontally disposed track rail, a truck adapted to travel rearwardly and forwardly on the rail, the truck comprising a frame, a truck-supporting wheel on the frame adapted to roll on the rail, a load-supporting portion on the frame disposed forwardly of the wheel, a frame extension disposed rearwardly of the wheel, a second wheel on the extension engaging the underside of the rail and adapted to roll thereon, a motor supported on the frame and adapted to rotate the first said wheel to propel the truck on the rail.

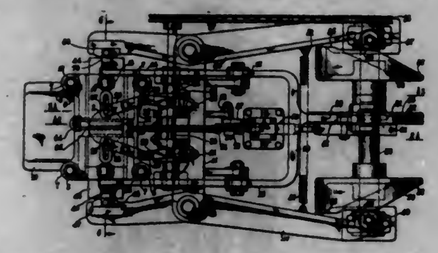
1,881,339. SOLE FOR TURNED SHOES. CLAUDE E. ADAMS, Seabrook, N. H. Filed June 20, 1930. Serial No. 462,553. 2 Claims. (Cl. 36—18.)



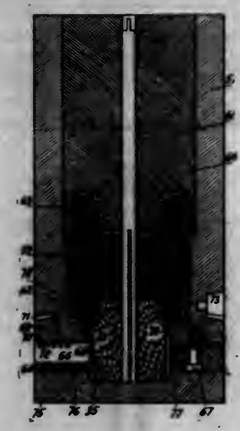
2. A turn shoe having a tongue split from the inner side of the sole, said tongue being extended from the heel end thereof to a point in the ball portion in front of the shank part and entirely across the sole throughout the heel and shank part and having its edges diverged from the corresponding adjacent edge portion of the sole at the front end of the shank part to the connected end of the tongue, thereby forming correspondingly diverging shoulders, and the shoe upper being connected to the sole by stitches laid in a channel which opens to the surface from which said tongue was split and to the inner surface of the forepart and extends through said shoulders, and a stiffener corresponding in shape to that of the heel and shank part of the sole and secured to the sole on said surface from which the tongue was split, said tongue being adhesively connected to the top surface of said stiffener and to the sole surface in front thereof from which the tongue was split.

1,881,340. APPARATUS FOR SEALING PAPER CONTAINERS. EDWARD C. ANGELL, New York, N. Y., assignor to George Berger, New York, N. Y. Filed Dec. 11, 1930. Serial No. 501,888. 18 Claims. (Cl. 226—56.)

3. In a machine for sealing containers, the combination with a table and a conveyer intermittently advanced to present the containers successively at a station, means at the station to collapse the top of the container, means for applying an angle strip to the top of the collapsed container, means for closing the strips on the collapsed container top, a guide for engaging the side of the container, means for advancing the guide to position the container properly relative to the strip sealing means, and a magnetic stop arranged to engage the advanced end of the strip as fed onto the container to retain the strip in proper sealing position.



1,881,341. ARMATURE. VINCENT G. APPLE and FREDERICK W. COTTERMAN, Dayton, Ohio, assignors to Vincent G. Apple Laboratories, Dayton, Ohio. Filed June 13, 1929. Serial No. 370,702. 4 Claims. (Cl. 171—206.)

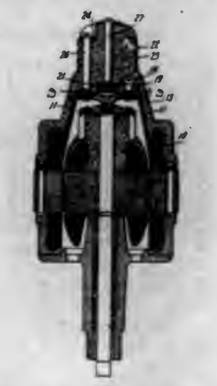


1. The method of making a wire wound armature, which consists of winding coils of insulated conducting wire into the slots of a core, forming relatively short leads of the coil ends, providing commutator segments having long curved risers and a groove crosswise of the risers at their outer ends, electrically joining a segment to each lead, arranging the segments in cylindrical formation with the risers closely overlying the winding head, winding cord circumferentially about the winding head into the riser grooves to bind the risers to the winding head, placing the structure in a mold, and molding insulation within, between and about the segments to compose a commutator and to form a cover about the winding head and risers.

1,881,342. LAMP SOCKET MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 4, 1930. Serial No. 441,667. 4 Claims. (Cl. 172—36.)

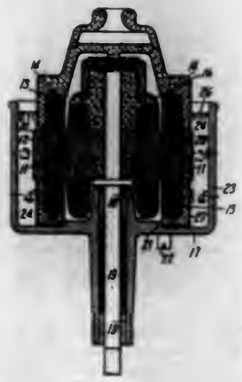
1. In combination with an electric motor having a winding, terminals for said winding, a mass of insulation covering said winding and said terminals and forming a housing for said motor, and rigid connecting ends on said terminals at the surface of said housing, lamp socket

adapting means comprising a lamp base ferrule, a core of insulation within said ferrule, a screw extending through the center of said core into one of said connecting ends, and another screw offset from the center of



said core, extending through said core into the other said connecting end, the first said screw having its head exposed to make contact with the center terminal of the lamp socket and the second said screw making electrical connection between said ferrule and said terminal.

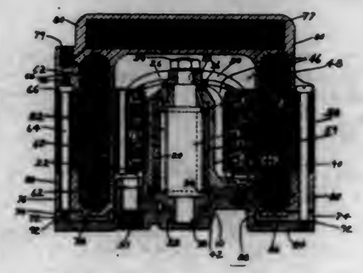
1,881,343. DYNAMO ELECTRIC MACHINE WITH IMPROVED COOLING MEANS. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 11, 1930. Serial No. 443,367. 1 Claim. (Cl. 172—36.)



The combination in a dynamo electric machine of a magnetizable core, coils on said core, a mass of cementitious insulation of high thermal conductivity penetrating and filling the interstices of said coils surrounding them, cementing them to said core and forming a hollow housing open at one end, a head secured to said open end to form a liquid tight seal for said hollow housing, said head being somewhat larger than said housing, and integral sides extending upwardly from the periphery of said head leaving a space around said housing adapted to contain a liquid coolant.

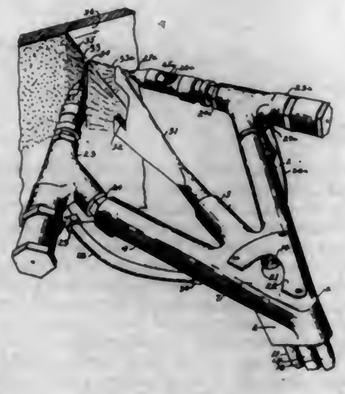
1,881,344. MOTOR COMPRESSOR. VINCENT G. APPLE, Dayton, Ohio. Filed Jan. 16, 1931. Serial No. 509,112. 2 Claims. (Cl. 230—139.)

2. A motor compressor comprising a hollow stator body open at the bottom end, a bearing head secured to said open end forming a vacuum tight motor chamber and having an opening adapted for connecting said motor chamber to the suction line, a hollow compressor casing open at the bottom end secured to the inner wall of said bearing head forming a pressure tight compressor chamber, said bearing head having a second opening adapted to connect said compressor chamber to the discharge line, a bearing on the inner surface of said bearing head within said compressor chamber, a second bearing in the closed end of said compressor casing, a compressor rotor within



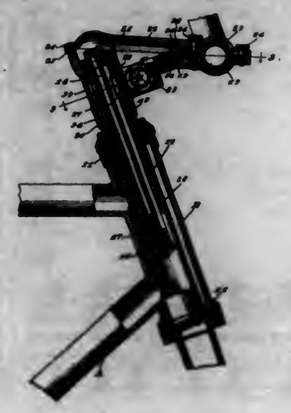
the compressor chamber having rotative support in said bearings and having a stub end extending through the bearing at the closed end into the said motor chamber, a driving spider secured to said stub end for rotation therewith, and a hollow electric motor rotor depending from the under face of said spider into the space within said motor chamber surrounding said compressor casing, there being a suction opening in the wall of said compressor casing connecting the compressor and the motor chambers.

1,881,345. COATING DEVICE. JAMES BEATTY, LEO P. UPHOFF, and FLOYD A. SIMS, San Jose, Calif. Filed Jan. 27, 1931. Serial No. 511,564. 5 Claims. (Cl. 91—45.)



1. A device of the character described comprising, supporting means, a plurality of liquid spraying nozzles mounted thereon and disposed in a common plane with their longer axes converging in the direction of discharge whereby the liquids discharged will merge in a single stream, and having discharge orifices adapted to form fan-like sprays at right angles to the plane of the nozzles, and a nozzle mounted on said supporting means between the first mentioned nozzles and adapted to discharge a fan-like spray of particles of mineral matter into the liquids discharged by the first mentioned nozzles at their line of merging.

1,881,346. BICYCLE LOCK. FRANK W. BELL and EUGENE C. BELL, Sacramento, Calif. Filed Sept. 9, 1931. Serial No. 561,068. 3 Claims. (Cl. 70—90.)



1. In a bicycle, a steering post, a handle bar connected with the post, a locking mechanism associated with the handle bar for rendering the connection thereof with the post loose or fast therewith, and a cover section associated with the handle bar and also locked by said locking mechanism when the connection of the handle bar with the post is loose.

1,881,347. METHOD OF RENDERING HIGHER ALCOHOLS SOLUBLE. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Bohme A. G., Chemnitz, Germany, a Company of Germany. Filed June 11, 1927, Serial No. 198,308, and in Germany June 15, 1926. Renewed June 8, 1932. 5 Claims. (Cl. 252—1.)

1. Method of imparting solubility to a higher alcohol of not less than 4 carbon atoms and not readily soluble by itself, comprising the addition to such alcohol of a sulphonate obtained by sulphonating a fatty substance in the presence of a substance selected from the herein described group consisting of substantially anhydrous lower fatty acids of the saturated series, and their anhydrides and halides.

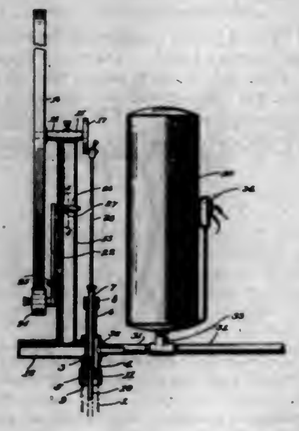
1,881,348. TEXTILE TREATMENT LIQUID. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Bohme Aktiengesellschaft, Chemnitz, Germany, a Corporation of Germany. Filed Aug. 18, 1928, Serial No. 300,613, and in Germany Sept. 20, 1927. 5 Claims. (Cl. 8—20.)

1. Method of enhancing the effect of liquids for the treatment of textiles, characterized by the addition to such liquids of a mixture of phenols with very intensely sulfonated oils stable towards concentrated solutions of acids, alkalies and salts and showing a higher degree of sulfonation than Monopole soap and the like.

4. A liquid preparation for the treatment of fibrous materials comprising a caustic soda solution with an addition of tri-cresol and very intensely sulfonated oleic acid stable towards concentrated alkali solution.

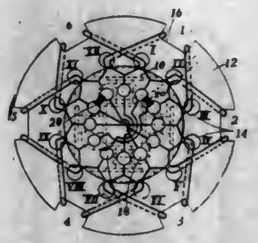
1,881,349. COMBINED PUMP JACK AND HEAD. ALDRICH M. BROWN, Mobile, Ala. Filed May 22, 1930. Serial No. 454,801. 1 Claim. (Cl. 103—205.)

A pump jack including a tubular member adapted for attachment to the upper end of a well casing, a transversely arranged tubular supporting bracket secured to and in communication with said tubular member, a tubular standard mounted on and in communication with said supporting bracket, a driving wheel mounted on said standard, a motor, a driving belt connected to the motor



shaft and driving wheel, a tubular bearing member extending transversely through said tubular standard and welded therein, and a belt tightener pivotally mounted in said bearing.

1,881,350. DYNAMO ELECTRIC MACHINE. SIDNEY GEORGE BROWN, North Acton, London, England. Filed June 30, 1930, Serial No. 464,965, and in Great Britain Aug. 9, 1929. 7 Claims. (Cl. 171—208.)



1. In a dynamo-electric machine, in combination, an internal field magnet, an external annular core and a Gramme-ring winding carried thereby whereof the external laps are grouped in pairs in the members of which current flows in opposite directions.

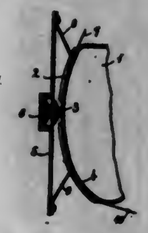
1,881,351. ELECTRIC FUSE AND A METHOD OF ASSEMBLING SAME. HENRY T. BUSSMANN, St. Louis, Mo. Filed Nov. 9, 1923. Serial No. 673,755. 32 Claims. (Cl. 200—132.)



1. In a renewable knife blade fuse, a fibre casing, a terminal, a washer abutting on said terminal, a member having a slot within which slot the terminal is positioned,

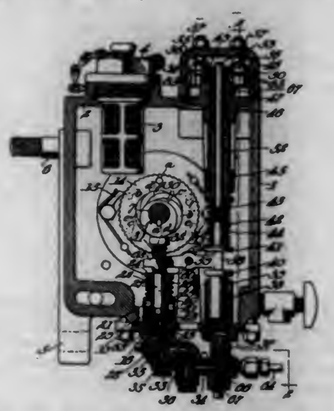
said member coacting with said washer to substantially close one end of the casing, and threads on said member for engagement with threads on the inner end of the casing to hold said member to the casing.

1,881,352. DOOR AND PASSAGE OF CINEMATOGRAPHIC APPARATUS. MAURICE COUADE, Paris, France. Filed Oct. 9, 1929, Serial No. 398,484, and in France Oct. 17, 1928. 1 Claim. (Cl. 88—17.)



Apparatus of the class described, comprising a gate presenting a convex face for the passage of a film thereover and having a projection opening and also a claw opening, a closure having a condenser and a pair of spring blades attached to the inner side of the closure extending in opposite directions and having curved outer ends arranged, when the closure is in closed position, to bear on the film at points spaced from opposite sides of the projection opening and serving to press the film against said convex face of the gate.

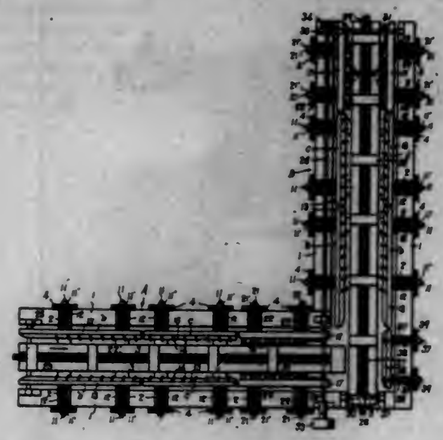
1,881,353. LUBRICATOR. FRANK WILLIAM EDWARDS, Chicago, Ill., and FORDYCE B. FARNSWORTH, Wadsworth, Ohio. Filed Aug. 15, 1930. Serial No. 475,528. 12 Claims. (Cl. 184—27.)



1. In a lubricator, of the mechanical force feed type, having a lubricant forcing device including a forcing piston, and a control device including a control piston for determining the stroke and hence the forcing effect of said forcing piston, the combination of means operated upon by said control piston for determining the stroke of the forcing piston including a lever pivoted intermediate its ends and having one end resiliently maintained in cooperation with the control piston and its other end extending into the path of movement of said forcing piston.

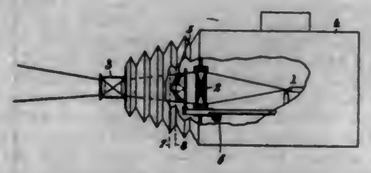
1,881,354. HONEY FRAME CLEANING MACHINE. CHARLES I. EVERETT, Wellington, Nev. Filed Dec. 3, 1930. Serial No. 499,814. 11 Claims. (Cl. 15—93.)

1. In a honey frame cleaning machine, means for cleaning the four sides of the frames, including scrapers arranged in spaced relation and between which the frames are moved to clean two of their sides, and other scrapers arranged



at an angle to said first-mentioned scrapers also in spaced relation and between which the frames are moved to clean their other two sides.

1,881,355. DEVICE FOR PROJECTING BACKGROUNDS. REMIGIUS GEYLING and PAUL PLANER, Vienna, Austria; said Geyling assignor to said Planer. Filed Jan. 26, 1928, Serial No. 249,760, and in Austria Jan. 13, 1927. 2 Claims. (Cl. 88—24.)



1. In an arrangement for producing particular effects during the projections of backgrounds and the like for theatres, exhibitions, advertisements and so forth, consisting in a projecting apparatus, a projecting object and a projection screen, the use of a light-permeable, bodylike projecting object of such extent in the direction of the light rays of the projecting apparatus, that according to the position of the projecting object only one layer of the same will be sharply projected while the other parts of the projecting object, further away from the said layer, will be indistinctly projected, and means for moving the projecting object in the direction of the light rays of the projecting apparatus.

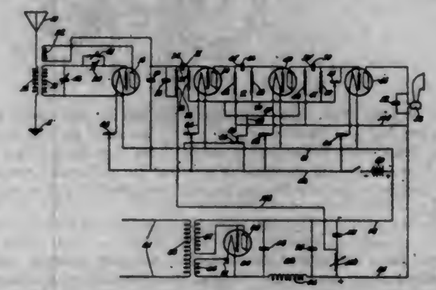
1,881,356. FOLDING PLAYHOUSE. ABE GOLD, Shreveport, La. Filed May 31, 1930. Serial No. 458,156. 1 Claim. (Cl. 20—2.)



A child's play house made up of pasteboard panels which have their confronting edges slotted, strips of tough flexible material let in the slots and secured to the panels and

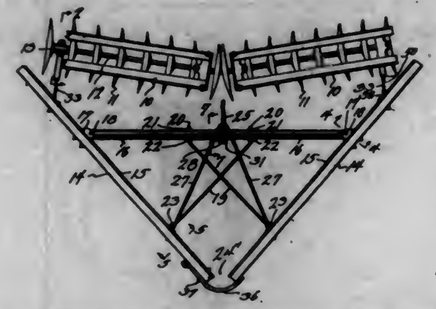
providing hinges to permit the panels being arranged at different desired angles with respect to each other and cross sectionally U-shaped spring bendable clips to engage with the edges of the panels when disposed in angular relation, said clips having their sides provided with spring sockets and rods having bent ends to be received in the sockets for holding the panels when arranged angularly with respect to each other and the said clips when in straight condition also designed for holding the panels in longitudinal alinement.

1,881,357. ELECTRICAL SIGNALING SYSTEM. HAROLD R. HAYDEN, Brooklyn, N. Y. Filed Aug. 15, 1928. Serial No. 299,680. 32 Claims. (Cl. 250—27.)



2. A multi-stage resistance coupled vacuum tube signal repeating system having the electrical quantities of its various parts so proportioned that its circuits may be supplied by a source of current of varying voltage and the current variations in the plate circuit of the last tube maintained at less than a disturbing value through the opposing effects of variations in grid potential and variations of said voltage applied directly to the tube circuits.

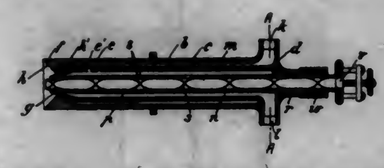
1,881,358. DISK HARROW. HENRY HYMANS, Hull, Iowa. Filed June 27, 1930. Serial No. 464,193. 10 Claims. (Cl. 37—145.)



1. In combination with a disk harrow, a drag hitched thereto comprising a pair of blades positioned in substantially vertical planes converging rearwardly, a beam positioned horizontally and transversely to the direction of travel of the harrow and hinged at its ends to the inner sides of the blades, a lever fulcrumed on said beam and a pair of rods connecting the lever to the blades whereby movement of the lever will vary the vertical tilt of the blades.

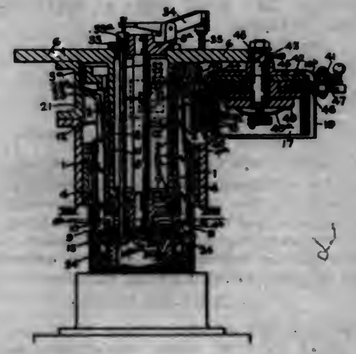
1,881,359. OIL FUEL BURNER. JAMES WILLIAM JONES, Poplar, London, England. Filed Sept. 29, 1930, Serial No. 485,261, and in Great Britain Oct. 5, 1929. 8 Claims. (Cl. 158—74.)

1. In an oil fuel burner comprising a burner body and a burner nozzle, the combination of an annular duct in said body for the supply of fuel oil to said nozzle, another angular duct surrounding and concentric with the oil duct for the passage of fluid under pressure to said nozzle, an inner duct concentric with the oil and fluid pressure ducts for the passage of atmospheric air to the burner nozzle, right-hand and left-hand intersecting helical grooves in the bore of the atmospheric air duct, a valve at the end



of the atmospheric air duct remote from the burner nozzle for regulating the admission of atmospheric air to said duct, a coned inner nozzle member adjustable longitudinally of the burner, and an outer nozzle member also adjustable longitudinally of the burner and having a double conical face, the outer of which faces is disposed at an angle of approximately 45° to the longitudinal axis of the burner.

1,881,360. KNITTING MACHINE. ALFRED WOODWARD KENT, Leicester, England, assignor to William Spiers Limited, Leicester, England, a British Company. Filed Oct. 26, 1931, Serial No. 571,240, and in Great Britain Nov. 26, 1930. 19 Claims. (Cl. 66—14.)

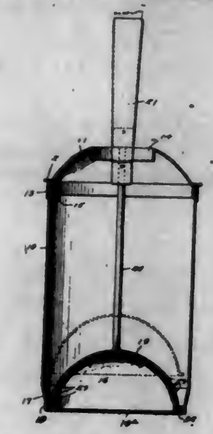


1. In a circular knitting machine, double axially opposed needle cylinders, independent needles in said cylinders, means for feeding yarns to the needles in plating relation, yarn engaging jacks arranged to extend in an axial direction with respect to the needle cylinders alternately with the associated needles, said jacks being movable radially with respect to the axes of the cylinders, means operative selectively upon the jacks whereby selected jacks are moved radially into a yarn engaging position, and means operative upon the selected jacks to move same in the opposite direction whereby said jacks are caused to engage one of said yarns and to move the other positively in relation to the other yarn thereby changing the relative positions of the yarns and reversing the plating.

1,881,361. EGG BEATER. THOMAS A. KILLMAN, Nashville, Tenn. Filed Dec. 9, 1930. Serial No. 501,092. 2 Claims. (Cl. 259—113.)

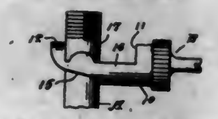
1. A beater of the character described, comprising a receptacle having a uniform cross sectional area except at its lower portion, the lower end of the receptacle being tapered downward and centrally and the bottom of the receptacle having an upwardly projecting semispherical portion, a concavo-convex dasher disposed within the receptacle and having its under face concave and adapted to fit entirely over the semispherical portion of the re-

ceptacle when the dasher is lowered, the dasher having perforations adjacent its lower end, the central portion of the dasher being imperforate, the diameter of the dasher



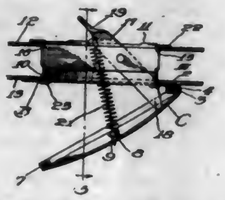
being substantially the same as the diameter of the extreme lower end of the receptacle but slightly less than the diameter of the body of the receptacle.

1,881,362. CLOSURE MOUNTING. JOHN A. KIMBALL, Taylorville, Ill. Filed Sept. 4, 1931. Serial No. 561,299. 2 Claims. (Cl. 152—12.)



1. A device of the kind described comprising a closure adapted for engagement with a part, resilient arcuate arms embracing the part for sliding movement axially thereof and carrying the closure, said arms being shaped to allow lateral swinging movement of the closure, and means on the arms for latching the same in alignment with the part or when swung laterally therefrom.

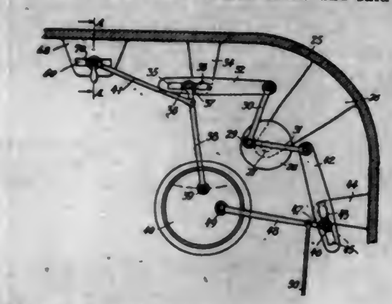
1,881,363. VENTILATOR. GEORGE H. KOONS, Chicago, Ill. Filed Oct. 10, 1930. Serial No. 487,838. 6 Claims. (Cl. 98—2.)



1. In a device of the character set forth, a casing member adapted to extend through an opening in a vehicle, a cross piece supported therein, a hinged door member adapted to close said opening, and a lever member pivotally secured to said cross member and having an end slidably contacting said door.

1,881,364. APPARATUS FOR THE MECHANICAL KNEADING OF DOUGH. OTTO KREMMLING, Hamersleben, District Oschersleben, Germany, assignor to Lieselotte Kremmling, Hamersleben, near Oschersleben, Germany. Filed Dec. 30, 1930, Serial No. 505,617, and in Germany Oct. 26, 1926. 9 Claims. (Cl. 107—20.)

4. A machine for working dough comprising a frame, a working head, a driven disk having a pin thereon offset from the center, a pair of double armed levers each having a longitudinal slot in one of its arms and each pivoted at the inner end of said slots on brackets extending from the frame, a pair of rods connecting the ends of the non-slotted arms of the double armed levers and said pin on



the driven disk, rods slidably engaged in the slots and connecting the double armed levers to stud on the working head, said studs being offset from the center thereof and means for independently moving the rods with respect to the slots to vary the movement imparted to the working head.

1,881,365. PROPELLER. EMIL P. MARTIN, Detroit, Mich. Filed Nov. 10, 1930. Serial No. 494,713. 2 Claims. (Cl. 170—156.)



1. In a screw propeller, a hub, a pair of spiral blades carried by the hub with the opposite end portions of one blade overlapping the end portions of the other blade, and a bead extending around the outer edge of each blade, said bead tapering toward the ends of the blades and having its greatest diameter central of said ends.

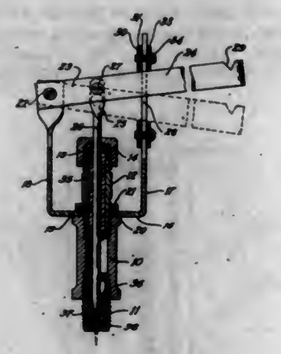
1,881,366. AWNING. ALBERT T. MCCANLIS, Brooklyn, N. Y. Filed Oct. 19, 1931. Serial No. 569,756. 7 Claims. (Cl. 156—42.)



1. An awning comprising a sheet of fabric, means for suspending said sheet at its upper end, an awning frame engaged with the lower end portion of the sheet of fabric, means for pivotally mounting the awning frame at the sides of an opening to be shaded, and an auxiliary frame rockingly mounted on the awning frame to engage the underside of the sheet of fabric and fold the same as the awning is raised.

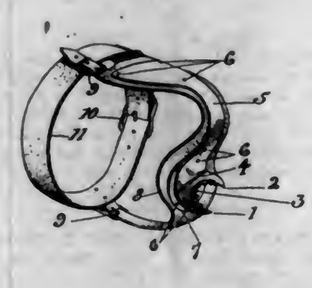
CARNEGIE LIBRARY OF ATLANTA

1,881,367. VALVE STRUCTURE AND CONTROL MECHANISM THEREFOR. WILLIAM C. MCKESSON, Chicago, Ill. Filed May 27, 1930. Serial No. 456,245. 3 Claims. (Cl. 251—41.)



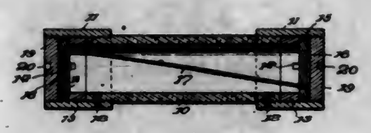
2. A valve structure comprising a substantially T-shaped structure having a passage extending therethrough, the lower end of which provides an inlet and having an outlet passage branched therefrom, means in said inlet passage providing a valve seat, a valve stem in said passage and including a head adapted to be disposed on said seat to close said inlet, a substantially U-shaped bracket including spaced apart arms and a bight portion mounted on said structure, an operating member connected to said valve stem and having one end thereof connected to one of said arms, the other of said arms having a slot therein through which said member is extended, means slidably mounted on said last named arm above and below said member for limiting pivotal movement thereof, and means for securing said slidable means in predetermined positions on said last mentioned arm.

1,881,368. HAND CORN HUSKING DEVICE. JOHN FRED KRIEGE and EDWARD AUGUST WILKINS, South Sioux City, Nebr. Filed Apr. 3, 1928. Serial No. 266,966. 1 Claim. (Cl. 130—4.)



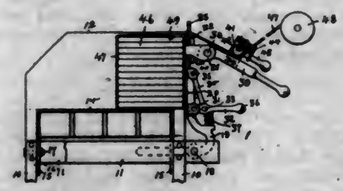
In a hand corn husking device, the combination of a wrist band, a flexible strap connected at both ends to said wrist band, a flat curved supporting plate mounted on said strap, a corn grasping means mounted on the supporting plate, comprising a shank portion on said plate and a forked portion extending at substantially right angles from the shank, the prongs of said forked portion being sharpened at the extremities and portions between the prongs being serrated, whereby the strap and supporting plate when mounted on the hand of the operator will pass between the thumb and index finger and the shank portion will rest against the ball of the thumb, and the prongs will extend towards the flexed fingers.

1,881,369. REFILLABLE FERRULE FUSE. DANIEL E. CARNEY, Pittsburgh, Pa., assignor of one-third to James M. Magee and one-third to Harry I. Neaman, Pittsburgh, Pa. Filed July 23, 1930, Serial No. 470,168, and in Canada Sept. 18, 1929. 4 Claims. (Cl. 200—131.)



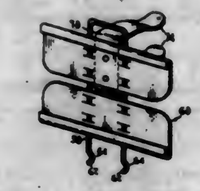
1. In a ferrule fuse, the combination of a cylindrical insulating shell, a ferrule rigidly secured on an end thereof and extending therefrom, an annular follower threaded into said ferrule in tight bearing engagement against the adjacent end of the shell and having a bore equal in diameter to the shell bore, a fusible element, a contact disk insertable in said ferrule to seat on the follower and slotted to receive part of the fusible element therethrough, and a closure plug threaded into said ferrule to clamp a portion of the fusible element between said plug and contact disk.

1,881,370. PARQUETRY BALING MACHINE. LEWEY C. CARROLL, Bristol, Va. Filed Aug. 2, 1929. Serial No. 383,038. 11 Claims. (Cl. 140—93.)



1. A baling machine comprising a stand, a stretcher bar pivoted thereon, a tape cutter slidable upon the bar, a lever pivoted upon the bar and connected with the cutter, a spring for returning said lever, a second lever pivoted upon the bar and a tape gripping means pivoted upon the last mentioned lever.

1,881,371. SIGN. DAVID GILBERT, West New York, N. J., assignor of one-half to B. H. Gilbert, West New York, N. J. Filed Mar. 2, 1932. Serial No. 596,175. 14 Claims. (Cl. 40—146.)



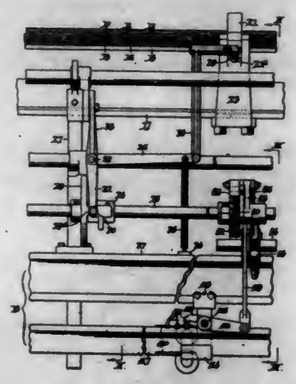
3. An integral removable-card-retaining and self-supporting sign consisting of a plurality of elements comprising a single wire twisted to provide a plurality of substantially parallel tracks, and a pair of flat plates slidably engaging the tracks; and means integral with one of the elements for making the device stably and non-vibrationally self-sustaining.

1,881,372. DISPLAY STAND AND CARD. TEX O'ROURKE, New York, N. Y., assignor, by mesne assignments, to Card Display, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 18, 1931. Serial No. 581,857. 4 Claims. (Cl. 40—64.)



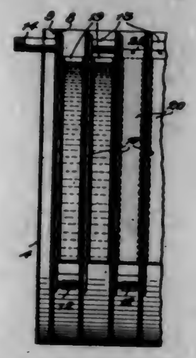
1. A display apparatus of the class described including a skeleton framing structure having a plurality of card framing openings therein and affording means to support and protect the edges of cards in said openings, the framing structure being such as to provide for introduction of a card through one side of each framing opening and into the top framing opening through the top side of the frame, indicia bearing cards completely filling said openings, the uppermost card including an indicia bearing capper portion projecting above the frame.

1,881,373. YARN CARRIER STOP BLOCK CONTROL MECHANISM FOR FLAT KNITTING MACHINES. HAROLD F. PAGET, Philadelphia, Pa., assignor to Haines Hosiery Mills, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 4, 1930. Serial No. 418,469. 2 Claims. (Cl. 66—129.)



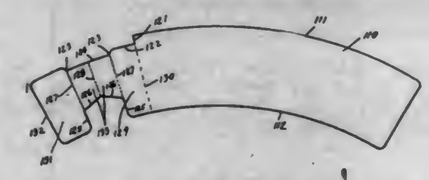
2. In a flat knitting machine including a measuring chain, a main cam shaft, and a multiplicity of sliding main and reinforcing yarn carrier rods, the combination of a pivotally-supported stationarily-positioned stop block swingable crosswise of and adapted to restrict traverse of the reinforcing yarn carrier rods, a control attachment for the stop block including an auxiliary cam shaft with a rotary cam thereon and co-ordinated instrumentalities to swing said stop block into and out of active position relative to the reinforcing yarn carrier rods while the machine is in operation, and pawling means actuated from the main cam shaft aforesaid under governance of the measuring chain to intermittently rotate the auxiliary cam shaft.

1,881,374. AIR COOLING AND CIRCULATING DEVICE. WILLIAM B. PLYMPTON, DONALD PLYMPTON, and RALPH A. PLYMPTON, Ellwood City, Pa. Filed Jan. 21, 1928. Serial No. 248,539. 21 Claims. (Cl. 62—95.)



1. The combination of an air cooling and circulating device comprising a pair of upright, substantially parallel refrigerant containing members, spaced to form an air duct, and a hold-over within the air duct.

1,881,375. CONTAINER. CARL RISTOW, Berlin, Germany, assignor to Beach and Arthur, Incorporated, Indianapolis, Ind., a Corporation. Filed Feb. 15, 1932. Serial No. 592,957. 3 Claims. (Cl. 229—52.)



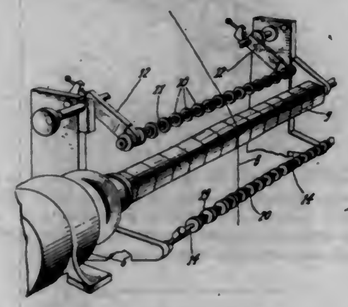
1. A continuous container wall having one end of the wall secured in overlapping relation with respect to the outer surface of the other end, said first-mentioned end having an extension, an intermediate portion of the extension folded upon itself and projecting outwardly for forming a handle of double thickness, the free portion of the extension being secured to the wall.

1,881,376. TRAFFIC GUARD. PERCY E. HUNTER, Pittsburgh, Pa. Filed Sept. 4, 1930. Serial No. 479,658. 7 Claims. (Cl. 94—31.)



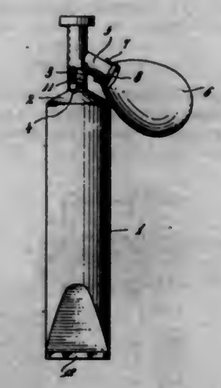
1. A traffic guard structure comprising a hollow metal beam, anchor plates adapted to be secured to a roadway, downwardly-extending tongue portions carried by said beam, and means for connecting said tongue portions to the anchor plates, those portions of the beam intermediate the tongue portions being spaced above the plane of the roadway.

1,881,377. WINDING MACHINE. GEORGE W. KIERSPE, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Mar. 26, 1931. Serial No. 525,418. 5 Claims. (Cl. 242—25.)



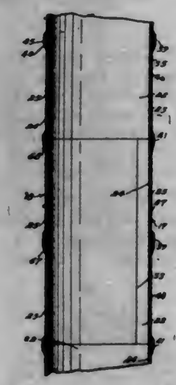
1. A coil winding machine having in combination a winding spindle, a wire guide for directing wire to said spindle and wire engaging means for holding the wire in position across said spindle to permit said wire being connected thereto.

1,881,378. COLLAPSIBLE TUBE. FREDERICK W. SCHOONMAKER, Jr., Caldwell, N. J., assignor to Schoonmaker Laboratories, Inc., Caldwell, N. J., a Corporation of New Jersey. Filed Apr. 15, 1931. Serial No. 530,182. 1 Claim. (Cl. 128—250.)



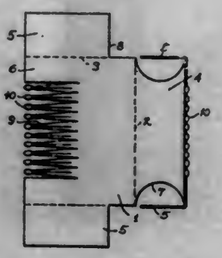
A collapsible tube having a straight longitudinally extending discharge nozzle projecting therefrom, said nozzle having a coupling neck extending diagonally from one side between its outer end and said top, the neck being inclined toward the top, a pressure bulb attached to said neck to expel a portion of the contents of the tube through the nozzle, the latter having screw threads therein between the neck and the top of the tube, and a stopper having a threaded shank to enter the nozzle and engage said threads to close the nozzle between the tube and the neck.

1,881,379. STOVEPIPE CASING. MARION R. SHIPLEY, Hermosa Beach, and WILLIAM A. TROUT and OLIVER C. TROUT, Los Angeles, Calif.; said Trouts assignors, by mesne assignments, to Los Angeles Manufacturing Company, Inc., Los Angeles, Calif., a Corporation of California. Original application filed Apr. 5, 1927, Serial No. 181,101. Divided and this application filed Feb. 29, 1928. Serial No. 257,934. 2 Claims. (Cl. 137—75.)



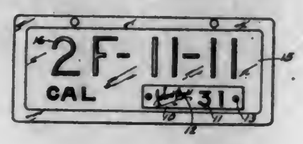
2. In a sheet metal stovepipe well casing, the combination of: a tubular lining formed of a plurality of sections placed end to end; a tubular shell formed of a plurality of sections placed end to end and sheathing and tightly gripping said lining, the shell sections being disposed in break-joint relation with the lining sections; means formed upon adjacent ends of said shell sections adapted to interlock when brought into contacting relation to connect the shell sections whereby said shell constitutes a continuous sheet metal tube; and an annular reinforcing fold formed in the metal of each shell section intermediate the ends thereof.

1,881,380. COMBINED PACKAGE AND MATCH CONTAINER. JOSEPH A. SICO, Pittsburgh, Pa. Filed Dec. 3, 1929. Serial No. 411,249. 2 Claims. (Cl. 206—48.)



1. A combined cigarette and match container comprising a folded sheet of fibrous material having opposite sides slitted and crimped to form a plurality of stems of structural cross-section and provided with combustible heads to form matches integrally therewith.

1,881,381. LICENSE PLATE. WILLIAM W. SYLVESTER, Oakland, Calif., assignor of one-half to William N. Nelson, Berkeley, Calif. Filed Apr. 14, 1931. Serial No. 529,932. 4 Claims. (Cl. 40—63.)



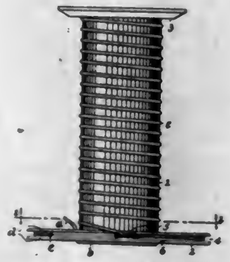
1. A license plate having a pocket formed therein by slitting to form flanges on the sides and bottom and a slot at the top, the pocket being formed by depression of the material between the slits and being arcuately formed adjacent the slot for partially closing said slot.

1,881,382. METHOD OF AND MEANS FOR PERFECTING GEARS AND GEAR SHAPED ARTICLES. ERNEST WILDHABER, Rochester, N. Y. Filed Feb. 11, 1929. Serial No. 339,018. 6 Claims. (Cl. 51—278.)



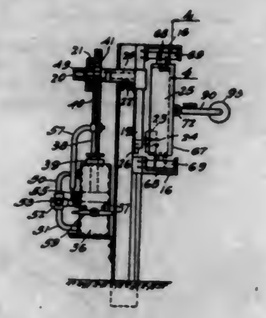
1. In a device for perfecting gears by abrading, a carrier for mounting a gear blank, a member suited to engage the teeth of said blank, means for reciprocating the blank in the direction of its axis, a roller having an axis inclined to a plane perpendicular to the axis of said blank, and a spring for pressing said roller towards said carrier.

1,881,383. WOUND PACKAGE. ANDREW WYLIE, Totowa Borough, N. J., assignor to Harris Bros. Silk Company, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 4, 1929. Serial No. 390,271. 6 Claims. (Cl. 242—161.)



1. A wound package comprising, with a core having a circumferential recess a flexible strand having the major portion thereof wound around said core and its inner end forming a reserve and wound around the core independently of said major portion and occupying the recess, said recess having approximately parallel sides and the windings of said inner end of the strand being releasably gripped by the sides of the recess.

1,881,384. BASEBALL GAME. ANGELO N. ALBERA, Concord, Calif. Filed Dec. 5, 1930. Serial No. 500,214. 18 Claims. (Cl. 273—26.)



1. A base ball game, in combination with a base ball fixed to the end of an arm, said arm being pivotally jointed to a carrier, a carrier, a guide for said carrier, means for catapulting said carrier along said guide and means for automatically returning said carrier.

1,881,385. CAMBERED SPRING. GEORGE M. EATON, Pittsburgh, Pa. Filed Mar. 13, 1929. Serial No. 346,721. 4 Claims. (Cl. 267—47.)



2. A leaf spring having a cross camber, the radius of which is a variable and being so proportioned that when subjected to stress, there is on the tension side a stress peak at the edge, the stress dropping rapidly to a minimum and rising gradually to another peak at the midwidth.

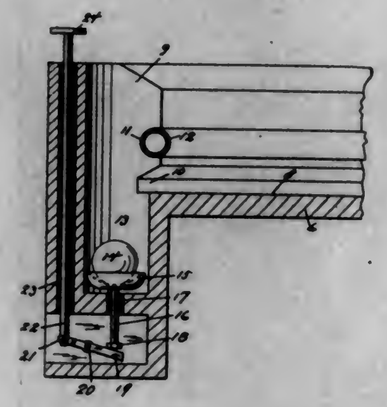
1,881,386. CHAIN-POISE VARIABLE-WEIGHT BALANCE. WILFRID HEUSSER, Salt Lake City, Utah. Filed Apr. 16, 1931. Serial No. 530,631. 8 Claims. (Cl. 265—60.)



1. A chain-poise variable weight balance, including in combination, a swinging member, a weight chain having one end thereof carried by said swinging member, a

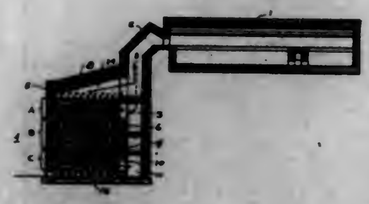
weight-scale in operative proximity to said chain, a weight indicator movable along said weight scale, the other end of said weight chain being carried by the weight indicator, a rod extending from said weight indicator, and a friction wheel in operative engagement with said rod.

1,881,387. POOL AND BILLIARD COURT. FREDERICK W. JOHNSON, Santa Cruz, Calif. Filed July 19, 1930. Serial No. 469,035. 1 Claim. (Cl. 273—34.)



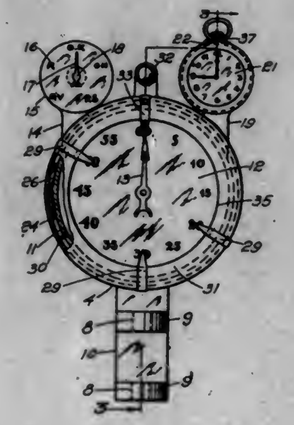
In combination with a pool court pocket; a cup element in said pocket provided with a ball ejector comprising a downwardly extending integral rod, slidable in a bearing, a centrally pivoted lever having one end pivotally cooperating with said rod, an upwardly extending rod pivotally connected to the other end of said lever and a bearing for said second rod.

1,881,388. RECUPERATOR FOR INDUSTRIAL FURNACES. WILLIAM A. MORTON, Pittsburgh, Pa., assignor to Amco, Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1928. Serial No. 296,808. 2 Claims. (Cl. 263—20.)



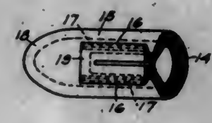
2. A recuperator structure for high temperature melting furnaces in which corrosive waste gases are generated, comprising in combination a series of air and gas flues constructed of refractory tile forming continuous air and waste gas passages in heat exchange relation, the tile forming the initial passages for the hot waste gases comprising flux resisting material composed of aluminum silicate and the tile forming the subsequent passages comprising refractory clay.

1,881,389. OPERATION TIMING INDICATOR FOR TRIPLE VALVES. JAMES R. RICKETTS, Richmond, Calif. Filed Oct. 13, 1930. Serial No. 488,874. 2 Claims. (Cl. 58—57.)



1. A timing indicator comprising a cylindrical housing, a ring rotatably mounted on one end of said housing and having an inwardly extending flange, an annular groove formed interiorly of the ring, and, an arcuately formed leaf spring in said annular groove and cooperating with said housing.

1,881,390. BUMPER FOR AUTOMOTIVE VEHICLES. ADOLPH C. SCHMIDT, Oakland, Calif. Filed Jan. 28, 1931. Serial No. 510,719. 3 Claims. (Cl. 293—55.)

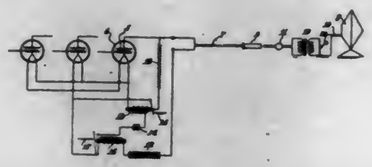


1. A bumper, in combination with a rigid supporting element having means adapted to cooperate with clincher beads on a casing, a resilient casing of elongated form and having closed ends, a slot extending longitudinally substantially throughout the length thereof, a bead formed about said slot and provided with longitudinal reinforcing means, the transverse bead being without reinforcement, an elongated tubular elastic element having closed ends and provided with a tire valve and disposed within said casing.

1,881,391. REMOTE CONTROL FOR RADIORECEIVERS. BOWDEN WASHINGTON, New York, and WILSON AULL, Jr., Astoria, N. Y., assignors to Remotrole Corporation, a Corporation of New York. Filed June 13, 1927. Serial No. 198,470. 3 Claims. (Cl. 250—20.)

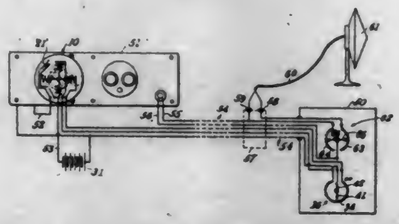
2. A vacuum tube radio receiver having an A battery, a B battery and a loud speaker, a relay connected to the A battery, a switch and volume control of substantially constant impedance located at the loud speaker, said

switch, volume control and loud speaker being connected to the radio receiver by a single pair of conductors and circuit connections for closing the B battery circuit and



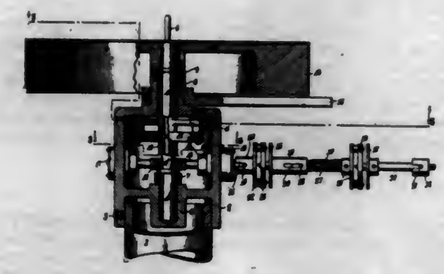
automatically operating the relay and lighting the filaments when said switch is closed including a switch and an operating coil in the filament circuit.

1,881,392. RADIORECEIVER CONTROL. BOWDEN WASHINGTON, New York, and WILSON AULL, Jr., Astoria, N. Y.; Dorothy Clinton Washington, administratrix of Bowden Washington, deceased, assignor to Remotrole Corporation, a Corporation of New York. Filed Sept. 14, 1927. Serial No. 219,443. 6 Claims. (Cl. 250—20.)



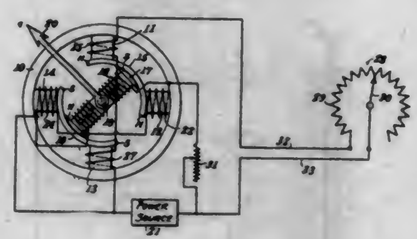
1. Radio receiving apparatus comprising electro-magnetic motor means for turning the tuning elements, a manually variable resistance in circuit therewith having an adjusting element, indicators connected respectively with the resistance and the motor and movable in synchronism and a switch operated by the motor for opening the power circuit of the receiver and connected to the resistance.

1,881,393. TURNTABLE DRIVE. CLARENCE P. WOOD, New York, N. Y., assignor, by mesne assignments, to Robert B. Killgore, Short Hills, N. J. Filed Dec. 28, 1929. Serial No. 417,075. 1 Claim. (Cl. 274—9.)



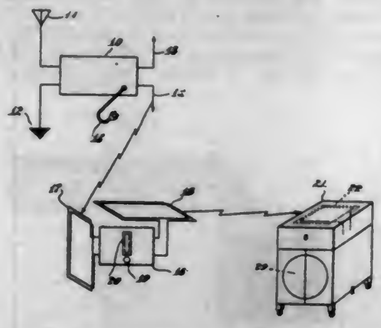
A phonograph comprising a housing, a divided turntable shaft therein, a heavy turntable on the upper section of said shaft, a yoke on the lower end of the upper shaft section, a second yoke on the upper end of the lower shaft section, an elastic connection engaging both of said yokes, a worm gear on the lower shaft section, a driving worm engaging said worm gear and adapted to be connected to the main shaft of a moving pivture projector, whereby on the sudden stoppage of said turntable the rotary movement thereof is converted into a vertical movement for stopping said turntable without shock or jar.

1,881,394. REMOTE CONTROL APPARATUS. WILSON AULL, Jr., Astoria, N. Y. Filed Sept. 9, 1927. Serial No. 218,445. 3 Claims. (Cl. 172—230.)



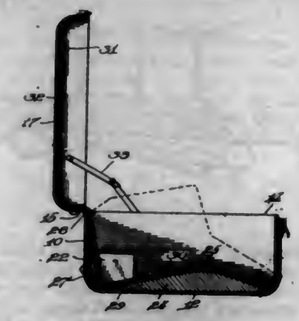
1. Apparatus for quantitatively controlling motion from a distance which consists of at least one pair of potential operated poles and an equal number of pairs of current operated poles, a power source, an armature and a variable resistor, said potential operated poles being directly connected to said power source, said current operated poles being connected to said power source in series with said variable resistor, the direction of the resultant field being independent of variations in said source of voltage but inversely proportional to the resistance in circuit and energizing coils upon said armature to cause it to place itself in accordance with said field, the space between the ends of the armature and the poles affording a substantially constant air gap of uniform length.

1,881,395. RADIORECEPTION. WILSON AULL, Jr., Astoria, N. Y. Filed Dec. 30, 1927. Serial No. 243,661. 5 Claims. (Cl. 250—15.)



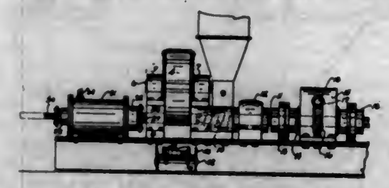
1. A system of household broadcast reception which comprises means for receiving and simultaneously amplifying with substantial uniformity various frequencies within a predetermined band of frequencies, separately portable means for selecting signals of the desired frequency and amplifying the same to a controlled extent, means for transmitting the amplified and selected signal at its original frequency and an aperiodic receiver including means for picking up and demodulating the transmitted signal and further amplifying the same at audio frequencies, and means for reproducing the further amplified signals.

1,881,396. ACCORDION CASE. MAURICE H. BERLIN, CHARLES E. BARBER, and COLIN D. WILT, Chicago, Ill.; said Barber and said Wilt assignors to said Berlin. Filed Aug. 30, 1930. Serial No. 479,002. 8 Claims. (Cl. 206—13.)



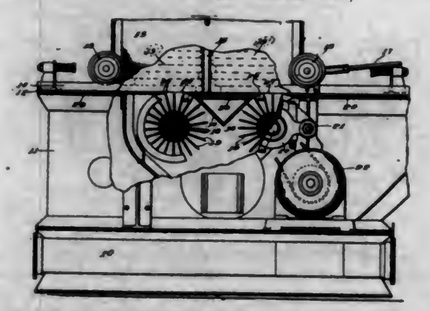
1. An accordion case consisting of a main section and a cover hingedly secured together, opposite walls of the case when closed being substantially parallel to each other, spacer blocks in the main section adjacent the end walls, and a bridge, having oppositely inclined surfaces, located between the blocks and adjacent the side wall of the main section.

1,881,397. BRIQUETTING MACHINE. ROBERT T. BOWLING, Lewiston, Idaho, assignor, by mesne assignments, to Potlatch Forests, Inc., Lewiston, Idaho. Filed May 31, 1930. Serial No. 458,580. 7 Claims. (Cl. 25—66.)



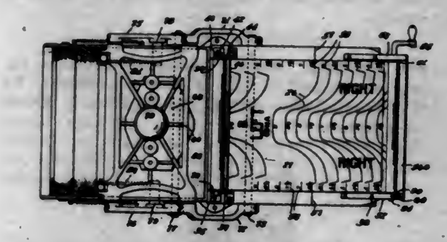
1. In a briquette machine, the combination with a tapered feed screw and a stationary die through which the material is fed, of a mold carrier and a plurality of molds therein, a movable die and means for reciprocating said die through the mold, and means for affording the movable die a yielding resistance against the feed of the tapered screw as the briquette is formed.

1,881,398. DEFIBERIZING MACHINE. EDWARD P. CORCORAN and WALTER B. HADLEY, Chicago, Ill., assignors to John L. Kellogg, Chicago, Ill. Filed Jan. 20, 1931. Serial No. 510,050. 7 Claims. (Cl. 83—75.)



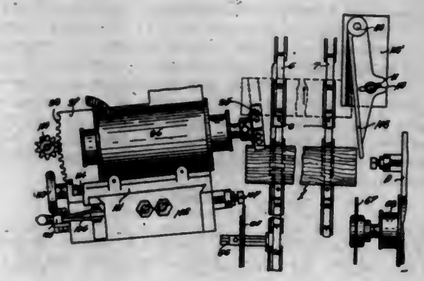
1. In a defiberizing machine comprising a table having a recessed planate surface, a hopper adapted to be reciprocated thereon, and a plurality of brushes rotatably mounted beneath the surface of the table, a stationary center plate of substantial thickness and extent mounted in the table recess in the plane of the surface and provided with lower bevelled marginal edges in proximity to the tips of the brush needles.

1,881,399. MARKING DEVICE FOR REGULAR GRADED SHOE UPPER BLANKS. HERBERT E. EDWARDS, Brookline, Mass., assignor to T. J. Edwards Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1931. Serial No. 514,366. 20 Claims. (Cl. 101—407.)



20. A marking device having, in combination, a marking member, a work supporting surface having a definite area forming, in effect, a target for the marking member, a sheet of flexible material having a plurality of gages thereon movable over the target, and means for registering at least one of the gages on the sheet with the target.

1,881,400. WOODWORKING MACHINE. OSCAR G. EDMOND, Spokane, Wash., assignor of one-half to White Pine Sash Company, Spokane, Wash. Filed Sept. 16, 1929. Serial No. 392,902. 2 Claims. (Cl. 144—145.)



1. In a wood working machine including a rotary grooving cutter, the combination with a pair of spaced, endless, continuously moving parallel chains having carrier lugs thereon, and complementary presser mechanism for coaction with said chains, of a pivoted guide plate located opposite the cutter and adapted to be adjustably swung to position oblique to the line of travel of the chains, and means for retaining said plate in adjusted position in the path of movement of one end of the work whereby the work is shifted longitudinally while the cutter is operating thereon, the cutter being likewise adjustable to cause its cutting plane to intersect the surface of the work in a line parallel to the adjusted position of the pivoted guide plate.

1,881,401. STOP FOR CAR DOORS. EUGENE J. FEHR, Hammond, Ind., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1931. Serial No. 528,830. 5 Claims. (Cl. 16—76.)

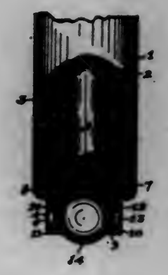
1. A stop for car doors comprising an integral casting provided with a pocket and opposed inwardly directed

flanges, an abutment member of substantially I shape in transverse section and resilient means, said abutment member having interlocking engagement with flanges on



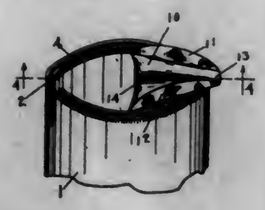
said casting and said resilient means being interposed between and in engagement with said casting and said abutment member.

1,881,402. CASTER. JOHN T. GRAHAM, Creighton, Pa., assignor of one-half to John F. Kowk, Creighton, Pa. Filed Feb. 19, 1932. Serial No. 593,992. 2 Claims. (Cl. 16—24.)



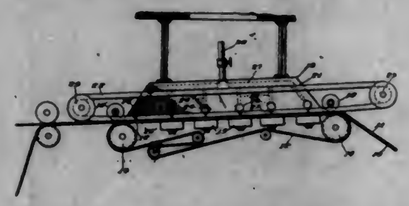
1. A caster for the purpose set forth comprising a body portion including a hollow cylindrical casing, said casing having a curvilinear top provided with a flat outer marginal edge, a duplex race member mounted in said casing and formed with a circumferentially extending groove at its lower end and with a circumferentially extending seat at its upper end, said seat being substantially L-shaped in transverse cross section and forming a groove when combined with said flat marginal edge of said casing top, bearing balls carried in said seat and in said groove, a supporting ball positioned in said race member and being engaged by said bearing balls, said body portion including an attaching element.

1,881,403. POURING CAN. WALTER E. GUYER, Spokane, Wash. Filed Nov. 25, 1930. Serial No. 498,005. 2 Claims. (Cl. 220—85.)



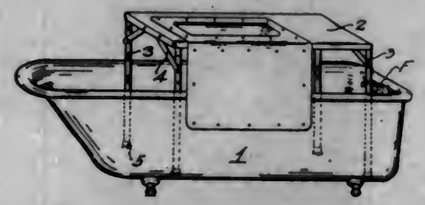
1. A closure for a can consisting of a sealed lid having a cut-out line extending partially around its periphery and adjacent the top edge of the can, a transversely extending folding-groove in the lid joining the ends of the cut-out line, and a pair of oppositely extending bending-grooves terminating at the ends of the transverse groove, converging toward the cut-out line, and also terminating at said line.

1,881,404. BOX BOARD MACHINE. WALTER B. HADLEY, Chicago, Ill., assignor, by direct and mesne assignments, to Kellogg-Hadley Corporation, a Corporation of Delaware. Filed Mar. 16, 1931. Serial No. 522,859. 6 Claims. (Cl. 92—38.)



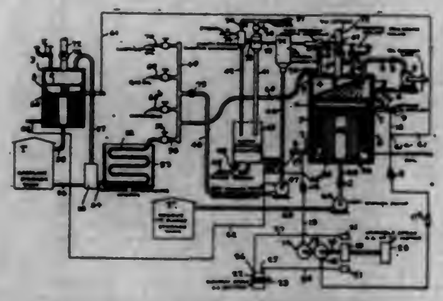
1. The method of making paper board which comprises depositing slush pulp on a carrier, moving the carrier through a substantially fully enclosed heat conserving zone, and subjecting the pulp successively a plurality of times to the combined action of suction and heated air directed thereagainst for drying the same as the carrier passes through the zone.

1,881,405. PORTABLE BATHTUB EQUIPMENT. ELIZABETH JANE HARING, Spokane, Wash. Filed Aug. 7, 1931. Serial No. 555,708. 2 Claims. (Cl. 4—177.)



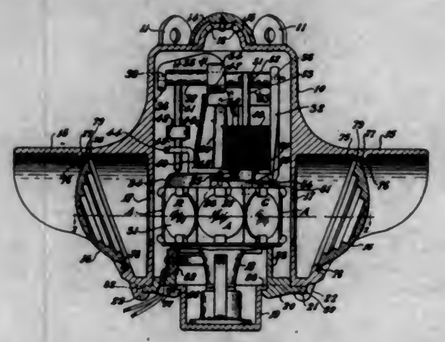
1. In a portable bathing apparatus the combination with a table having a top and an opening therein, of a flexible bathtub having stiffened edges, means for fastening said edges to the table top, an apron having an opening therein, and means on the apron for co-operation with said fastening means for attaching the apron about the opening of the bath tub.

1,881,406. METHOD AND APPARATUS FOR TREATMENT OF HYDROCARBONS. IRA WALTON HENRY, Greenwich, Conn., assignor to Ionizing Corporation of America, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1929. Serial No. 386,182. 22 Claims. (Cl. 204—31.)



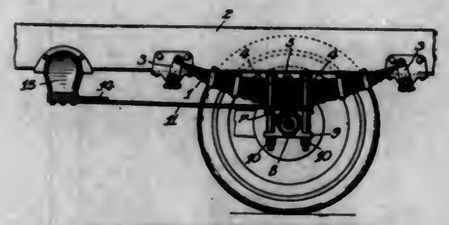
1. The combination with a chambered converter and alternating, electric current conducting coil effective to establish through the coil and within the converter chamber, a high frequency, oscillating, non-discharging and non-sparking electromagnetic field of an alternating current generator with which the coil is in circuit; the converter and coil being each made of any appropriate material and the coil being located either outside or inside the converter chamber; a vapor condensing apparatus in conduit connection with the converter chamber; a receiver in conduit connection with the vapor condensing apparatus; for reception of a condensed distillate; a storage tank in conduit connection with the receiver; a light weight, fugitive gas converter in conduit connection with the receiver and having a chamber in conduit connection with the tank.

1,881,407. TRAFFIC SIGNAL LIGHT. JEREMIAH KELLER, Canton, Ohio. Filed Mar. 7, 1929. Serial No. 345,053. 2 Claims. (Cl. 177—327.)



1. A signal light comprising a housing having four sides facing in four directions, a lens in each side of the housing, a lamp in the housing registering with all of said lenses, an oscillating frame within the housing and disposed between the lamp and the lenses, colored panels carried by said frame, a pair of solenoids fixed within the housing, a rocker shaft adjacent to the solenoids, an armature for each solenoid operatively connected to the rocker shaft, an operative connecting means between the rocker shaft and oscillating frame for oscillating the frame to move different panels into register with the lenses, lower armatures for each solenoid, a radial pin upon each of the last named armatures and an arcuate track on the oscillating frame upon which each pin is arranged to ride, said track having abrupt ends which the pins are adapted to abut when the solenoids are deenergized whereby the frame is held in fixed position.

1,881,408. VEHICLE DRIVE WHEEL AXLE UNIT MOUNTING. AXEL R. LEMOON, Chicago, Ill. Filed Apr. 9, 1928. Serial No. 268,578. 2 Claims. (Cl. 180—85.)



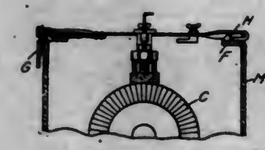
1. In combination with a vehicle frame, a pair of spring shackles pivoted to the frame and spaced apart longitudinally thereof, a semi-elliptical leaf spring with its ends pivoted to said shackles, a drive wheel axle unit, said axle unit extending crosswise beneath the center of said spring, a second normally straight horizontal leaf spring with one end thereof located between said semi-elliptical spring and said axle unit, means for rigidly clamping both of said springs and axle unit together, a bracket extending from said frame, and means for rigidly securing the opposite end of said straight horizontal spring to said bracket.

1,881,409. SEGMENTAL SPRINKLER NOZZLE. AXEL R. LEMOON, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,969. 3 Claims. (Cl. 299—18.)



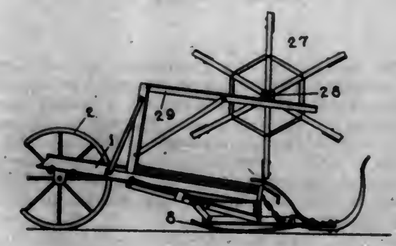
1. A nozzle comprising a frame having a conoidal discharge aperture, a correspondingly shaped core fixed therein and an arcuate filler interposed between said frame and core, said filler having variantly formed passageways extending lengthwise thereof.

1,881,410. COMMUTATOR TRUING TOOL. GEORGE M. LINTELMANN, Spokane, Wash., assignor of one-half to Lola M. Lintelmann, Spokane, Wash. Filed June 12, 1928. Serial No. 284,718. 1 Claim. (Cl. 51—244.)



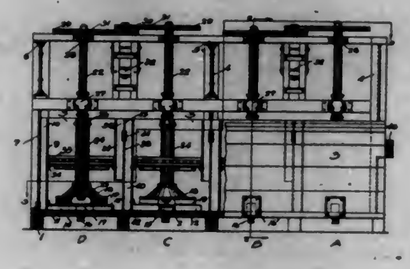
The combination with a bar adapted to be supported above a commutator and having fastening means at its ends for attachment to a motor casing, of a slotted carrier-casing suspended from and slidable on the bar and fastening means therefor, a tool holder fitted in the casing and tie bolts securing said casing and holder, a tool loosely supported in the holder, and springs mounted in the holder for engagement with said tool for holding the latter in operative position on the work.

1,881,411. PEA HARVESTER. JAMES E. LOVE and HORACE D. HUME, Garfield, Wash. Filed July 13, 1931. Serial No. 550,320. 6 Claims. (Cl. 56—181.)



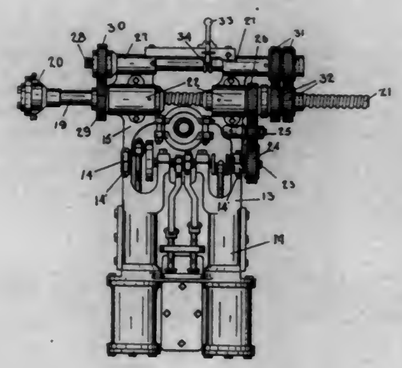
1. The combination in a harvester machine with a draper frame and a cutter frame, of pivotal means for suspending the cutter frame from the draper frame to permit independent movement of the cutter frame, and means for adjusting the cutter frame to bring the cutter nearer to or farther from the ground surface.

1,881,412. ORE SEPARATOR. HARRY J. MACCAMY, Spokane, Wash., assignor to Union Iron Works, Spokane, Wash. Filed Nov. 4, 1929. Serial No. 404,578. 3 Claims. (Cl. 261—93.)



1. In an ore separator the combination with a ported base plate having bottom flanges forming an inlet channel, of a rotary shaft, a hollow agitator-head forming a space above the ported base plate and having a spider frame and bushing for the shaft, radial blades on the head projecting from said space and having their free lower edges above the base plate, a tubular housing for the shaft and means for securing the housing to the head, and spacing lugs for holding the housing at its upper end.

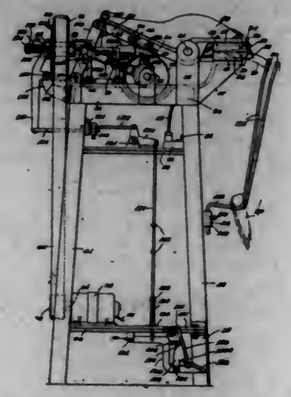
1,881,413. DRILLING RIG. WILLIAM J. MITCHELL, San Francisco, Calif. Filed June 5, 1931. Serial No. 542,237. 3 Claims. (Cl. 255—53.)



1. The combination with a swivel bar and its support, of an adjustable swivel-head on the bar and means for securing said head in adjusted position, a drilling machine unit having its longitudinal axis disposed in diametrical relation to said head, a bearing member rigid with the unit and mounted on the swivel head to support the unit, a detachable bearing member, and means for clamping the latter on the head and in rigid relation to the first bearing member.

1,881,414. SEAM PRESSING MACHINE. WALTER P. OSGOOD, Malden, Mass., assignor to Boston Machine Works Company, Lynn, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1930. Serial No. 446,502. 25 Claims. (Cl. 12—51.)

1. In a seam reducing machine, the combination with a jaw for directly supporting similar articulated parts of a shoe upper in different planes, respectively, and a cooperating jaw acting directly on the opposite side of



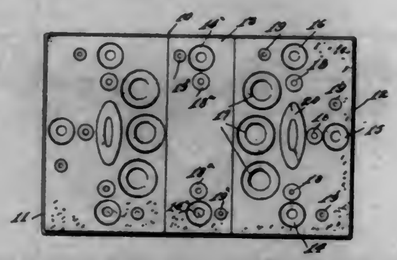
said articulated parts, of automatic means for closing said jaws with heavy pressure to cause said articulated parts to be consolidated into a single plane.

1,881,415. LIQUID SAMPLING INSTRUMENT. MARINUS TINOLEFF, Sandpoint, Idaho. Filed June 15, 1931. Serial No. 544,504. 2 Claims. (Cl. 128—276.)



1. The combination of a bottle holder adapted to receive a bottle and having a head at one end, a removable, tubular needle mounted in the head and projecting into the holder, means for retaining an open-mouth bottle against the inner face of said head, and said inner face having vent grooves therein for venting the interior of the bottle.

1,881,416. MEAL SERVING MAT. MARY ANN LEVY UHALT, Cleveland, Ohio. Filed Sept. 22, 1930. Serial No. 483,626. 3 Claims. (Cl. 65—53.)



3. A serving mat for dining tables and the like, comprising a base having a continuous flat surface and integral portions of said base projecting upwardly from said flat surface to constitute dishes permanently set in place on a table.

1,881,417. ADVERTISING DEVICE AND METHOD OF MAKING THE SAME. DURBIN C. HODGKIN, Washington, D. C., assignor of one-fourth to Tom B. Owens, Fort Worth, Tex. Filed Oct. 5, 1928. Serial No. 310,581. 11 Claims. (Cl. 40—132.)



7. An advertising device comprising translucent material having a display applied to a surface thereof and represented by neutral and white colors, to be viewed by reflected light, said neutral colors merging with the white and disappearing when subjected to transmitted light.

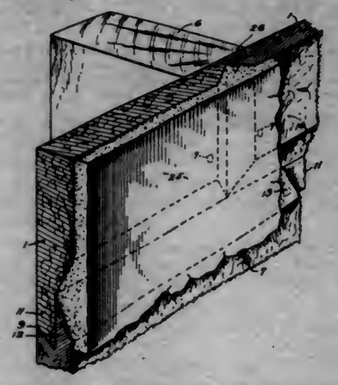
1,881,418. PROCESS OF MAKING PANEL BOARD. ELBERT C. LATHROP and FERGUS A. IRVINE, Chicago, Ill., assignors to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,824. 15 Claims. (Cl. 92—40.)

1. The process of producing a hard, dense, homogeneous, and strong board-like material from wood, straw, sugar cane bagasse, and the like, comprising the steps of the separation of the raw material into fiber bundles and fibers with subsequent washing, sheeting, and compacting of the previously separated matter, the compacting accomplished by the application of high pressure to the sheeted material with simultaneous subjection of the interior of the sheet to high pressure steam, the step of compacting initiated, through the addition of a buffer salt, under highly buffered alkaline conditions.

1,881,419. FIBER DERIVATIVE. TREADWAY B. MUNROE and FERGUS A. IRVINE, Chicago, Ill., assignors to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,944. 14 Claims. (Cl. 92—1.)

1. A product derived from wood fibers, the major portion of the fibers mechanically disintegrated into their fibrillæ constituents.

1,881,420. WALLBOARD AND JOINT MADE THEREWITH. TREADWAY B. MUNROE, Chicago, Ill., assignor to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,725. 13 Claims. (Cl. 72—31.)



1. A heat insulating wallboard plaster base of yielding fibrous and moisture absorbable character comprising a plurality of boards set edge to edge, the adjacent edges of the boards being bevelled to form a substantially V-shaped groove adapted to receive plaster, the edge of one board being provided with a recess and the edge of the other board being provided with a tongue fitting within the recess the outer end of the tongue and base of the recess complementally relieved to interlock and form a self-sealed heat insulating joint.

Patents Nos. 1,881,421 to 1,882,653

CARNEGIE LIBRARY OF ATLANTA

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 423—No. 2 TUESDAY, OCTOBER 11, 1932 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $16.00 per annum; including annual index, $18.25; single numbers, 35 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of October 11, 1932	297
Adjudicated Patents	297
Disclaimer	297
Applications Under Examination	298
Decisions of the U. S. Courts—	
American Cyanamid Company v. Synthetic Nitrogen Products Corp.	299
Jones v. Robinson	300
In re Weingartner	301
Blackwood Coal & Coke Company v. The Philadelphia and Reading Coal and Iron Company	302
Patent Suits	304
Adverse Decisions in Interference	304
Trade-Marks Published (142 Applications)	305
Trade-Mark Registrations Granted	325
Trade-Mark Registrations Renewed	334
Labels	335
Prints	336
Reissues	337
Plant Patents	338
Designs	339
Patents Granted	350

Issue of October 11, 1932

Trade-Marks	201—No.	297,983 to No.	298,183, inclusive.
T. M. Renewals	47		
Labels	29—No.	41,253 to No.	41,281, inclusive.
Prints	11—No.	13,929 to No.	13,939, inclusive.
Plant Patent	4—No.	31 to No.	34, inclusive.
Reissues	7—No.	18,615 to No.	18,621, inclusive.
Designs	52—No.	87,899 to No.	87,950, inclusive.
Patents	1233—No.	1,881,421 to No.	1,882,653, inclusive.
Total	1,584		

Adjudicated Patents

(C. C. A. Mich.) Ottinger patent, No. 1,436,050, for latch, claim 16 *Held* not infringed. *Ottinger* v. *Ferro Stamping & Mfg. Co.*, 59 F.(2d) 640.

(C. C. A. Mich.) Bradley patent, No. 1,468,954, for latch for vehicle doors, claims 1 and 8 *Held* not infringed. *Id.*

(C. C. A. Ill.) Hill patent, No. 1,526,982, for stencil sheet, claims 2 and 18 *Held* valid and infringed. *Heyer Duplicator Co.* v. *A. B. Dick Co.*, 59 F.(2d) 787.

(D. C. N. Y.) Hill patent, No. 1,526,982, for stencil sheet, claim 18 *Held* infringed. *A. B. Dick Co.* v. *Shallcross Co.*, 59 F.(2d) 780.

(D. C. N. Y.) Hill patent, No. 1,526,982, for stencil sheet, claim 18 *Held* infringed. *A. B. Dick Co.* v. *Marr*, 59 F.(2d) 781.

(D. C. Pa.) Hill patent, No. 1,526,982 for stencil sheet claims 2–4, 6–9, 11–14, 16, 18, 21, 22 *Held* valid and infringed. *A. B. Dick Co.* v. *Arlac Dry Stencil Corporation*, 59 F.(2d) 782.

(D. C. and C. C. A. Pa.) Stevens patent, No. 1,557,376, for hanger structure for meters, *Held* infringed. *Lattimer-Stevens Co.* v. *Kitson Co.*, 59 F.(2d) 826 and 827.

(C. C. A. Ill.) Helfrich patent, No. 1,655,369, for cosmetic, claims 1, 2, 5, 8, and 9 *Held* invalid. *Helfrich* v. *Solo*, 59 F.(2d) 525.

(C. C. A. Md.) Lewis patent, No. 1,673,082, for refrigerating system, *Held* not infringed. *Motorfrigerator Co.* v. *Frigidaire Sales Corporation*, 59 F.(2d) 622.

(D. C Wash.) Laucks and Davidson patent, No. 1,689,782, for vegetable glue and method of making same, claims 2, 4, 6, and 8 *Held* valid and infringed. *I. F. Laucks, Inc.*, v. *Kaseno Products Co.*, 59 F.(2d) 811.

(D. C. Wash.) Laucks and Davidson patent, No. 1,691,661, for vegetable glue and method of making same, claims 13 and 14 *Held* valid and infringed. *Id.*

(C. C. A. Mich.) Ottinger reissue patent, No. 15,569, for latch, claims 1, 2, and 4 *Held* invalid. *Ottinger* v. *Ferro Stamping & Mfg. Co.* 59 F.(2d) 640.

(D. C. N. Y.) Schecker reissue patent, No. 17,605, for electrical condenser and method for making same, *Held* invalid. *Aerovox Wireless Corporation* v. *Polymet Mfg. Corporation*, 59 F.(2d) 741.

(D. C. Wash.) Johnson reissue patent, No. 16,422, for adhesive, claims 3 and 7 *Held* valid and infringed. *I. F. Laucks, Inc.*, v. *Kaseno Products Co.*, 59 F.(2d) 811.

Disclaimer

1,758,871.—*George Watts*, Buffalo, N. Y. Parachute Rip Cord. Patent dated May 13, 1930. Disclaimer filed September 15, 1932, by the assignee, *Irving Air Chute Company, Inc.*

Hereby enters this disclaimer to that part of said specification which is in the following words; to wit:

"Figure 4 is a fragmentary view of a modified form of the invention". (p. 1, lines 45 and 46.)

"For such types of packs, a modified form of handle C shown in Figure 4 of the drawings, may also be used". (p. 1, lines 69–72.)

"C". (p. 2, line 54.)

"In the modified form of invention shown in Figure 4, the handle B has its eye threaded on the bar portion 41^a of the rip cord handle C, which is of the same formation as the handle A above described. On the bar 41^a, in spaced relation, are provided obstructions or bulges 80 and 81, between which the eye 27 of the rip cord B is disposed, in such relation that the eye may be moved between the bulges 80 and 81, but not thereover, due to the size of the eye". (p. 3, lines 1–11.)

Your petitioner also disclaims from the scope of claims 1, 2, 7, 12, 14, 15, and 16 any parachute rip-cord handle except one in which the means for limiting the sliding movement of the rip-cord body connection along the rip-cord handle consists of a retaining member secured at its ends to the handle on opposite sides of the rip-cord connection.

Condition of Applications Under Examination at Close of Business September 24, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 69,756; Trade-Mark Division, 919. Oldest new case, Mar. 19, 1932; oldest amended, Mar. 19, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	June 29	July 6	380
5708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	May 28	May 31	844
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	June 2	June 13	727
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	June 28	July 15	309
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	May 24	May 31	358
4898 C	6. LEWERS, A. M., Carbon Chemistry	Mar. 24	Mar. 26	2,064
5725	7. JARBOE, C. G., Optics; Photography	Apr. 29	Apr. 29	1,398
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	May 4	May 23	966
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	June 24	June 30	687
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Apr. 25	Apr. 27	864
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus	May 25	June 2	611
7701	12. HENRY, C. C., Machine Elements	June 11	June 11	516
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	May 13	May 13	1,051
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes	May 28	June 6	742
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Apr. 25	Apr. 25	1,772
5612	16. SPENCER, C. J., Telegraphy; Telephony	June 4	June 4	534
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting	Apr. 4	Apr. 4	1,405
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	May 28	May 25	635
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Mar. 25	Mar. 28	1,789
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	May 27	June 7	569
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	May 10	May 25	829
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	June 17	July 5	532
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Mar. 30	Apr. 4	850
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	June 16	June 16	588
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors	Apr. 4	Apr. 4	1,378
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Mar. 25	Mar. 25	1,007
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	May 28	May 28	886
4628	28. BENSON, A. R., Internal-Combustion Engines	Mar. 28	Mar. 28	1,352
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Mar. 31	Apr. 6	859
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats	May 24	Mar. 25	801
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Apr. 9	Apr. 9	1,545
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	June 6	June 7	715
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings	Mar. 24	Mar. 24	2,282
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders	Apr. 25	Apr. 25	842
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	July 25	July 26	369
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Mar. 26	Mar. 28	1,581
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Apr. 14	Apr. 21	1,100
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells	July 11	June 16	159
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 1	Apr. 1	1,405
7880	40. OBERLIN, J. J., Receptacles	Apr. 25	Apr. 30	2,243
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices	June 24	July 21	611
5882	42. CUTTING, H. O., Electric Signaling	Apr. 4	Apr. 5	1,266
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members	May 2	May 2	1,484
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Mar. 25	Mar. 24	1,734
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	June 1	June 1	945
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	May 26	May 31	585
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Apr. 27	Apr. 27	1,999
6896 C	48. ROEPKE, O. B., Electricity, General Applications	Apr. 30	Apr. 30	705
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification	Apr. 7	Mar. 28	1,513
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Mar. 24	Mar. 28	2,170
5625	51. BACKUS, C. D., Radiant Energy	May 10	May 10	1,142
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	June 27	June 29	717
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens	July 14	July 16	489
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits	Apr. 5	Apr. 5	1,095
6883	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	July 13	July 13	332
	{Designs	Sept. 8	Sept. 14	178
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Apr. 9	Apr. 12	1,429
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks	May 24	May 25	643
5605	58. DOWELL, E. F., Abrading; Typewriting	Mar. 24	Mar. 24	1,276
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Mar. 19	Mar. 19	1,758
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants	Apr. 6	Apr. 6	1,397
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus	Apr. 12	Apr. 13	1,292
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles	Apr. 18	Apr. 18	1,657
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates	Apr. 6	Apr. 6	1,423
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	May 31	June 15	502
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission	Mar. 30	Mar. 30	1,548
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	Aug. 26	Sept. 10	843
	{Labels and Prints	Sept. 10	Sept. 9	76

DECISIONS IN PATENT AND TRADE-MARK CASES.

U. S. Court of Customs and Patent Appeals

AMERICAN CYANAMID COMPANY *v.* SYNTHETIC NITROGEN PRODUCTS CORP.

No. 2,986. Decided May 31, 1932

1. TRADE-MARKS — SIMILARITY — "AMMO-PHOS-KO" AND "NITROPHOSKA".

The term "Ammo-Phos-Ko" as applied to a fertilizer *Held* confusingly similar to the term "Nitrophoska" which had been previously used and registered.

2. SAME—CANCELLATION PROCEEDING—WHAT CAN BE CONSIDERED.

In determining whether registration of the mark "Ammo-Phos-Ko" should be cancelled because of the prior use and registration of the term "Nitrophoska" by another *Held* that the fact that the later registrant had used "Ammo-Phos" prior to the use by the petitioner of the term "Nitrophoska" is immaterial since the validity of the registration of the petitioner must be assumed.

3. SAME—SAME—SHOWING.

Held that no greater burden is placed upon a petitioner for cancellation of a registered trade-mark than is placed upon the opposer to the registration of a mark.

4. SAME—SAME—DAMAGE.

Where the owner of a registered trade-mark was using that mark in interstate commerce at the time it filed its petition for cancellation *Held* that the use and registration by another of a mark confusingly similar thereto warrants the assumption that damage resulted.

APPEAL from the Patent Office. Affirmed.

GARRETT, *J.*, specially concurring.

Mr. H. C. Bierman for American Cyanamid Co.

Mr. Charles H. Potter and *Mr. James F. Pierce* for Synthetic Nitrogen Products Corp.

GRAHAM, *P. J.:*

The appellant, American Cyanamid Company, on May 29, 1928, procured the registration of a trade-mark in the United States Patent Office, on an application filed January 6, 1928. This trade-mark consisted of the word "Ammo-Phos-Ko," arranged in a curve, with a representation of a human hand grasping "flashes of lightning" immediately thereunder, and was used on mixed fertilizer.

The appellee filed petition for cancellation, claiming use of the trade-mark "Nitrophoska" at the time of filing the petition and for a period long prior to December 7, 1927, on mixed fertilizer. The appellee also set up and relies upon the registration of this mark by its predecessor in business, I. G. Farbenindustrie Aktiengesellschaft, on June 28, 1927, on its application filed December 18, 1926.

Both parties took testimony and it clearly appears that the goods marketed by the appellant and appellee are of the same descriptive properties, and that the business conducted by the said parties is competitive. It further appears that on October 20, 1914, appellant procured registration of the mark "Ammo-Phos," on its application filed June 22, 1914, which mark was used by it on a two element fertilizer, containing nitrogen and phosphorus, from that time until the present.

There is a considerable amount of testimony in the record, and discussion relative to actual confusion, but, in view of our conclusions herein, this matter need not be further discussed.

The Examiner of Interferences dismissed the petition. On appeal to the Commissioner, this decision was reversed and an order entered canceling the registration.

Several points are presented for our consideration. It is first argued that there is no such similarity between the words "Ammo-Phos-Ko" and "Nitrophoska," as to be likely to cause confusion. The Patent Office tribunals differed in their conclusion on this point.

[1] We are clearly of opinion that the Commissioner was correct in his conclusion that confusion would result from the use of those two marks in competitive trade. The same impression would doubtless be created upon the mind of the ordinary purchaser of fertilizer by these marks. The last two syllables have precisely the same sound. The words convey the same meaning, namely, a combination of nitrogen, phosphorus and potash. It is a matter of common knowledge that the words "ammonia" and "nitrogen" indicate the same plant food. Practically every farmer, in these days, knows this. The purchaser of a three element fertilizer would, therefore, almost certainly be confused by the similarity of sound, appearance, and meaning of these marks. All these factors should be considered. *Federal Mill & Elev. Co.* v. *Pillsbury, etc.*, 18 C. C. P. A. (Patents) 1353, 49 F.(2d) 1042, 412 O. G. 4. The law does not require that the purchaser should carefully dissect and analyze the marks. *The Apex Elec. Mfg. Co.* v. *Landers et al.*, 17 C. C. P. A. (Patents) 1184, 41 F.(2d) 99, 398 O. G. 708; *Celotex Co.* v. *Millington*, 18 C. C. P. A. (Patents) 1484, 49 F.(2d) 1053, 413 O. G. 279.

[2] It is argued that the petitioner should not be given the relief it seeks here because of the fact that the appellant entered the field long prior to the appellee with its mark "Ammo-Phos"; that appellee, in adopting the mark "Nitrophoska", adopted a mark which was deceptively similar to that of appellant.

We are unable to discern wherein this constitutes a proper subject of rebuttal on the part of appellant. The validity of appellee's registration of its mark "Nitrophoska" will be assumed for the purposes of this proceeding. We have so held in opposition proceedings, and no reason appears why the same rule should not be applied to cancellation proceedings, where the registered mark in question is not sought to be canceled. *Celanese Corp.* v. *Vanity Fair, etc.*, 18 C. C. P. A. (Patents) 958, 47 F.(2d) 373, 407 O. G. 579; *Walgreen Co.* v. *Godefroy Mfg. Co.*, 19 C. C. P. A. (Patents) ——, 58 F.(2d) 457, and cases therein cited.

It is quite earnestly contended that the burden rested upon the petitioner in this case to establish by facts appearing in the record that it was damaged by the registration of appellant's mark; that

such proof must be proof of actual, not possible or theoretical damage; that no such proof appears in the record, and that, hence, the petitioner has failed to establish its case. In this connection, appellant's counsel calls attention to the difference in language between the statutory provisions for opposition to, and cancellation of, registration of trade-marks. Sections 6 and 13, Trade Mark Act of February 20, 1905, as amended. In the first of said sections, providing for opposition, one may oppose "who believes he would be damaged." In the second, providing for cancellation, a petition may be filed by one who shall "deem himself injured." This latter language, it is argued, requires a different degree of proof, namely, proof of actual damage, than is required by the first.

Shoemaker, in his work on Trade Marks, Vol. II, p. 936, makes the following statement, which fairly states the apparent intent of the various provisions of this trade-mark act:

> Cancellation proceedings are similar in a great many respects, to interferences and to oppositions. The same issues of priority, similarity of marks, character of the goods to which the marks are applied, etc., may arise in each of these proceedings. In an interference one party must be an applicant for registration and the other parties either applicants for registration or owners of registrations; in an opposition proceeding one party must be an applicant for registration while the position of the other party with respect to his claiming a trade-mark is not essential; in a cancellation proceeding one party must be the owner of a registered trade-mark. The purpose of an interference is to decide a conflict between rival claimants, of an opposition to prevent the registering of a trade-mark, and of cancellation to remove a registration already effected.

[3] This court, in considering such cancellation proceedings as have come before it, has applied similar rules of construction as are applied in opposition proceedings. Cases in point are *Model Brassiere Co.* v. *Bromley-Shepard Co.*, 18 C. C. P. A. (Patents) 1294, 49 F.(2d) 482, 411 O. G. 538; *Armstrong C. & I. Co.* v. *Banner Rock Prod. Co.*, 18 C. C. P. A. (Patents) 1367, 49 F.(2d) 971, 412 O. G. 273; *United Shoe M. Corp.* v. *Compo S. M. Corp.*, 19 C. C. P. A. (Patents) ——, 56 F.(2d) 292, 421 O. G. 4; *Buckeye Soda Co.* v. *Oakite Prod.* 19 C. C. P. A. (Patents) ——, 56 F.(2d) 462, 419 O. G. 829.

So similar in character is the nature of the proceedings, that we have held that an issue which was or might have been raised and determined in an opposition proceeding constitutes res adjudicata in a subsequent cancellation proceeding. *Am. Fruit Growers* v. *Braadland*, 18 C. C. P. A. (Patents) 790, 45 F.(2d) 443, 403 O. G. 249; *Williams Oil-O-Matic H. Corp.* v. *The Butler Co.*, 17 C. C. P. A. (Patents) 934, 39 F.(2d) 693, 396 O. G. 519.

[4] It is true, as announced in some of these cases, that damage must be shown in cancellation proceedings. But there can be no doubt that damage is established by the proof in this case. The appellee was using its registered mark in interstate commerce at the time its petition for cancellation was filed. These are sufficient facts from which damage will be assumed.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

GARRETT, *J.* (specially concurring).

From the facts shown in the record in this case I agree that cancellation of appellant's mark is proper. It seems to me, however, that the trend of the opinion of the honored Presiding Judge is to the effect that one seeking cancellation of a trade-mark is under no greater burden than an opposer to a registration. I am not prepared at this time definitely to hold that such is the law. The differences in language of the respective sections of the statutes, dealing with oppositions and cancellations, while slight, is possibly significant, particularly when it is remembered that valuable trade may have been built up under a registered mark, which may be seriously affected by the cancellation of that mark.

So far as I am concerned, the particular subject matter herein pointed out remains an open question to be considered when occasion arises.

U. S. Court of Customs and Patent Appeals

JONES *v.* ROBINSON

No. 2,852. Decided May 31, 1932

INTERFERENCE—PRIORITY.

Record reviewed and *Held* to establish that R. was the first to reduce the invention to practice and priority was properly awarded to him on the ground that even if J. was the first to conceive the invention he was lacking in diligence in reducing it to practice.

APPEAL from the Patent Office. Affirmed.

Mr. Irving U. Townsend and *Messrs. Emery, Booth, Varney & Townsend* for Jones.

Messrs. Howson and Howson, Mr. W. C. Stewart, Mr. W. A. Smith, jr., Mr. H. A. Howson, and *Mr. Hubert Howson* for Robinson.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner of Interferences, awarding priority of invention to the appellee in the three counts, which relate to a "high splice" attachment for stocking knitting machines.

Originally there were five related interferences based on slightly varying issues due to the difference in construction of the machines by the different applicants. Three of these interferences were decided by the tribunals below and with them we have not been and are not now concerned. Interference No. 47,930, which was appealed to this court and was decided by us on February 8, 1932, *Stewart* v. *Robinson*, 19 C. C. P. A. (Patents) ——, 55 F.(2d) 998, 419 O. G. 291, related to the same attachment, but the counts therein broadly covered the whole attachment, while the present interference relates to a subordinate feature thereof, being confined to the feature of the "rotating cam drum" and "means for relatively moving said drum and arm", etc.

Count 2 is illustrative and reads:

> 2. In combination with a circular knitting machine comprising a movable extra-thread guide finger, a rocker arm controlling the movement of said finger during each of a series of rotations of the needle cylinder, a rotating cam drum actuating said rocker arm, and means for relatively moving said drum and arm at each rotation to determinedly vary the needle-engaging positioning of said finger.

The senior party, Robinson, filed his application May 16, 1921, while Jones filed on June 6, 1922.

The Patent Office tribunals gave Robinson not later than November, 1920, as the date of conception, and February, 1921, as the date of reduction to practice. See opinion in *Stewart* v. *Robinson*, supra. The Examiner of Interferences held that Jones was "limited by his preliminary statement to February or March, 1922, for actual reduction to practice", and stated—

> assuming that he is entitled to this date, Robinson must prevail on his filing date of May 16, 1921, [even if it be assumed that Jones was the first to conceive] because Jones has not proved diligence during the nine or ten month interval.

Jones, on March 11, 1927, after he had taken his testimony in chief, offered to amend his preliminary statement. The object of the amendment was to fix a date for reduction to practice earlier than that of Robinson. The Examiner of Interferences refused to permit the amendment, which action, on appeal, was approved by the Board of Appeals for the same reasons as were assigned by the Examiner of Interferences. There was, in our judgment, no sufficient reason shown for permitting the amendment asked for, and the action of the Board of Appeals in this respect was proper.

Appellant challenges the correctness of the conclusion of the Patent Office tribunals as to the dates of conception and reduction to practice by Robinson. This was gone into thoroughly in *Stewart* v. *Robinson*, supra, and it will not be necessary to repeat here what we said there.

In awarding priority to Robinson, the Board of Appeals said:

> In companion interference No. 47,930 the Examiner of Interferences gave Robinson a date of conception not later than November, 1920 and an actual reduction to practice in February, 1921. In our opinion these dates are warranted by Robinson's evidence. In the view we take of the case, however, it is immaterial whether Robinson is given an actual reduction to practice in February, 1921, or is limited to a constructive reduction to practice based on the filing of his application on May 16, 1921. Since Jones is limited by his preliminary statement to about March 1, 1922, he can prevail only by showing that he was the first to conceive and that he was diligent in reducing to practice at and subsequently to the entry of Robinson into the field.
>
> Jones and his corroborating witnesses testify to a conception of the invention in the fall of 1920. Jones attempts to fix the date as of about October 15, 1920 because he states it was prior to the time he saw the letter of Paquette dated October 13, 1920. (Exhibit 24.) The testimony of Jones that he discussed the invention with Lawson prior to this date is not corroborated by Lawson. Moreover the alleged earlier disclosure is not sufficient to constitute a disclosure of the complete invention. Robinson has documentary evidence in support of the date given him by the Examiner of Interferences and we are unable to find that Jones has established a prior conception.
>
> The holding of the Examiner of Interferences that Jones was lacking in the necessary diligence is also believed to be warranted, for in the nine or ten months between Robinson's filing date and Jones' alleged reduction to practice during which the Examiner of Interferences found there was no "effort to show such connected activity as to amount to diligence," Jones testifies that he and Hutton constructed two machines but it does not appear how much time was necessary for their construction or whether they were continually diligent in this work.

We think the Board's reasoning and conclusion were correct and that priority of the invention defined in the three counts here involved was properly awarded to Robinson. The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WEINGARTNER

No. 2,875. Decided May 23, 1932

PATENTABILITY—GEARING.

Claims for a gearing *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. William A. Smith, jr., and *Mr. Charles H. Howson* for Weingartner.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The claims involved in this appeal are combination claims and the usual difficulty is presented of determining whether the combination is inventive in view of prior art cited, in which prior art are found combined elements analogous in principle to the combined elements of the claims, but requiring modification in order to meet the claims. As to certain of the claims there is also the question of direct anticipation, and as to others the question of aggregation.

A number of claims were allowed by the Primary Examiner, those on appeal being rejected, of course, both by the Examiner and the Board of Appeals.

The application, by the designation in its title, relates to gearing for stokers, and fourteen claims are before us for review. In the oral argument before us appellant selected claim 21 as representative and same is herewith quoted:

> 21. A stoker-drive power-box comprising a spur gear train, the elements of which are permanently in mesh, said train including detachable relatively low and high-speed sections, the latter having a pair of orbit gears; and means positioned between said orbit gears for selectively locking the same.

Also we quote claims 7, 9, and 26, so as to cover all elements:

> 7. A power box for stoker control comprising a supporting frame; a driving shaft; a driven crank shaft adapted to operate stoker mechanism; a gear on said crank shaft intermediate successive cranks; a train of low-speed balanced gearing operatively associated with said gear; a train of high-speed gearing actuated by said driving shaft; and safety means for mechanically connecting said trains of gears; said high speed gearing including selective means for varying the speed thereof.
>
> 9. Power-transmission apparatus comprising a pair of orbit gears having adjacent shoulders; and a locking member movable into engagement with one or the other of said shoulders, respectively.
>
> 26. A compact power transmission unit adapted for stoker operation comprising a spur gear system including as component parts thereof a slow-running heavy-duty gear system and a high-speed planetary gear system, said high-speed planetary system including means for selectively controlling the output speed of the unit.

Numerous references were cited as follows: Fergusson, 704,699, July 15, 1902; Riley, 1,090,651, March 17, 1914; Morse, 1,160,811, November 16, 1915; Alquist, 1,220,811, March 27, 1917; Ogawa, 1,253,710, January 15, 1918; Alpern, 1,271,649, July 9, 1918; Wyatt (Brit.), 3128, February 10, 1903; Hemingway et al. (Brit.), 140,565, of 1920.

Of these references Fergusson, Wyatt, and Hemingway were primarily relied upon, being, indeed, the only ones referred to by the Board of Appeals.

The title of Fergusson's patent is "Transmission-Gear," its stated object being:

> • • • to provide a simple, strong, and noiseless transmission-gear which is composed of few parts and in which the wear is reduced to a minimum.

Fergusson's transmission shaft carries a driving pinion meshing with planet pinions that cooperate with a wheel. The power is transmitted by the driven pinion to the gear wheel on the driving axle. It, apparently, was designed primarily for use on a motor vehicle.

The Wyatt patent recited as its title "Improved variable speed gear applicable for motor cycles."

An axle of the motor carries a high driving gear and a low driving gear which respectively cooperate with two pinions, the respective gears being toothed internally and each having a brake or friction band. There is a central lever which operates rods that respectively control these brakes or friction bands. A frame having two discs carries the chain wheel.

Hemingway's patent is entitled "Improvements in change speed gears," and recites that it is:

• • • especially applicable to self-propelled vehicles of any kind or size.

It seems to have a three speed forward and one speed reverse gear box. A lever has a part which may be rocked so as to engage parts that will bring one or the other of two different gear ratios into effect.

The Wyatt and Hemingway patents are British.

Appellant's principal argument is based on the remoteness of the art in which the patents were utilized from that of the mechanical stokers art. Also it is claimed that by compactness much space is saved.

Emphasis is placed upon the fact that for stoker operation the mechanism must undergo exceedingly heavy strains and hence requires a strength and ruggedness in all its parts much greater than is required in the parts of the devices of the references.

The brief of the solicitor, however, directs attention to the fact that seven of the fourteen claims, viz., 9, 14, 17, 18, 19, 20, and 24, make no mention of the art in which the mechanism defined by them is employed and contain nothing which limits them to stoker gears. They relate simply to power transmission apparatus, different designations being used in the different claims for naming the units or system.

There is nothing in these claims to show any necessity for strength or ruggedness, and nothing to indicate that those elements of the references which correspond to elements of the claims would have to undergo modification in order to be of use in the system at issue. Nor is compactness recited as a feature of the claims.

It is also argued by the Solicitor for the Patent Office that it is only in the preamble or introductory phrases of the other seven claims that there is any limitation of them to stokers, and that the principle stated in *In re Dawe*, 19 C. C. P. A. (Patents)——, 58 F.(2d) 543, 414 O. G. 301, following *Braren* v. *Horner*, 18 C. C. P. A. (Patents) 971, 47 F. (2d) 358, 408 O. G. 825, and cases therein cited, is here applicable.

It seems to us that there is some confusion in this case upon the question of remote art. The actual art involved is, after all, that of gearing. That likewise was the specific art dealt with in the patent of reference. Therefore, while the fields of use of the respective devices differ, the art itself is the same.

Insofar as the claims on appeal are concerned, we are unable to discern wherein appellant has exercised anything more than mechanical skill in modifying the elements involved in the prior gearing art cited, so as to fit them for use in the field to which he desired to adapt them.

With the allowed claims we are not concerned, but it is to be presumed that such features of novelty in modification of elements and arrangements of combination as were inventive in their nature received recognition by their allowance.

Not being convinced that there was error in the decision of the Board of Appeals the same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BLACKWOOD COAL & COKE COMPANY *v.* THE PHILADELPHIA AND READING COAL AND IRON COMPANY

No. 2,998. Decided May 23, 1932

TRADE-MARKS—SIMILARITY—COLORED SPOTS ON COAL.

Assuming that a mark described as consisting of a plurality of red specks of irregular size on the surface of a lump of coal constitutes a valid trade-mark for coal, *Held* that it is not registrable because confusingly similar to a mark previously used by another, described as consisting of a coating of red color applied indiscriminately over all or a part of the surface of pieces of coal.

GRAHAM, *P. J.*, specially concurring.

APPEAL from the Patent Office. Affirmed.

Messrs. Fraley & Paul, Mr. Frank B. Fox, and *Mr. Henry N. Paul, jr.*, for Blackwood Coal & Coke Co.

Mr. L. G. Miller, Mr. Merrell E. Clark, and *Messrs. Emery, Booth, Varney & Townsend* for The Philadelphia and Reading Coal and Iron Company.

LENROOT, *J.*:

This is an appeal in a trade-mark opposition proceeding, in which appellant appeals from a decision of the Commissioner of Patents which reversed a decision of the Examiner of Interferences, the Commissioner holding that the opposition of appellee should be sustained and that appellant was not entitled to the registration of the mark applied for by it.

On September 7, 1929, appellant filed in the Patent Office its application for the registration of a mark for coal which, quoting from said application,

consists in a plurality of red specks of irregular size on the surface of the lumps, no claim being made to the lump of coal per se.

The application further states that the mark is affixed to the goods by spraying the same thereon.

On December 24, 1929, appellee filed notice of opposition to said application, alleging that, prior to the first date of use claimed by appellant of its mark, opposer adopted as a trade-mark for solid fuel—

a coating of red color applied indiscriminately over all or a part of the surface of all or a part of the pieces of coal, • • • and ordinarily being irregular and discontinuous whereby portions of the natural surface of the piece of fuel are exposed and give a variegated appearance to the piece.

The notice of opposition also contained the usual allegations of use of said mark in commerce, confusing similarity of the marks, damage, etc. On May 7, 1930, said notice of opposition was amended in particulars not material to the issues here involved.

On January 29, 1930, appellant filed its answer to said notice of opposition, denying confusing similarity of the marks, and alleging priority of use by it of the color red on coal for trade-mark purposes.

Appellant took no testimony, but testimony was taken on behalf of appellee.

The Examiner of Interferences found that appellee, prior to the first date of use claimed by appellant, used upon coal a mark of a color which he defined as "purple applied indiscriminately thereover;" that subsequent to September 7, 1929, the date given appellant for first use of its mark, appellee used a specifically different mark, and he held accordingly that appellee here was unable to qualify under the language "owned and used by another" of the confusion-in-trade clause of section 5 of the Trade-Mark Act of February 20, 1905, upon which it relied to negative the right of registration of appellant, and that the opposition should be dismissed and that appellant was entitled to register its mark.

The Commissioner of Patents, upon appeal, reversing the decision of the Examiner, said:

• • • The evidence establishes the fact beyond any reasonable doubt that it was not only the intention of the opposer to mark its coal with the color red, but that coal sold prior to July 11, 1929, the date relied upon by the applicant, was in fact so marked.

It appears from the testimony that, early in 1928, appellee decided to identify its anthracite Reading coal to the purchaser by the application of the color red thereto; that it employed the Stone & Webster Corporation, and through it a practicing chemist, to develop a material and a means of application to mark the coal; that such material was developed and applied to coal which was sold in commerce in June, 1928. A sample of the coal so colored was offered in evidence and is before us. It further appears from the testimony that, in a publication issued in September, 1928, appellee's mark was described as "purple" in color, but that appellee did not furnish such description and had no part in the publication; that the coloring matter so applied was unsatisfactory because it was not durable, whereupon other experts were employed to develop a durable material, which was accomplished, this second material, the color of which is conceded to be a shade of red, being first applied to coal by appellee in December, 1929. A sample of said coal so colored was also offered in evidence and is before us.

It is well established that, in an opposition proceeding, the Patent Office tribunals may dispose of any question relating to the proposed registration that might properly be considered in an ex parte case. *California Cyanide Company* v. *American Cyanamid Company*, 17 C. C. P. A. (Patents) 1198, 40 F.(2d) 1003, 399 O. G. 212.

Upon the oral argument before us, while it was conceded that, should we find that appellant's mark was not a valid trade-mark irrespective of the confusion-in-trade clause, we might properly so hold and affirm the decision of the Commissioner upon that ground, counsel for both parties urged that this question be not here determined, for the reason that they were not prepared to argue before us the question of whether or not the marking of coal with color, without forming a distinctive and uniform design, is an exception to the rule that color alone cannot be the subject of a valid trade-mark.

It appears to us that neither party hereto has any distinctive design applied to its coal, because it seems clear that by the method of spraying which both parties use there is no uniformity of design whatever, and the spots appearing upon one body of coal will not be the same as the spots appearing upon another, applied by the same party, and therefore it would seem that, under the general rule that color alone may not be relied upon for validity, neither of the parties has a valid trade-mark.

However, for the purposes of this case alone, assuming, without deciding, that colored spots applied to coal may be a valid trade-mark, we have no hesitation in finding that the mark of appellant so nearly resembles the mark used by appellee, prior to the first use by appellant of its mark, both being applied to identical goods, as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

If such a mark is subject to ownership, then it is owned by appellee, and for the reason stated appellant's mark should not be registered. If appellee does not own its mark, then neither does appellant own its mark, and neither could be legally registered.

Much has been said in the briefs of the parties, and upon oral argument, as to the technical definitions of purple and red. Appellant contends that, because red is found at one end of the spectrum and purple at the other, there is no similarity between them. As heretofore indicated, the Examiner found that the color used by appellee, prior to appellant's use of its red mark, was purple; the Commissioner found that it was red. We have carefully examined the color which was first used by appellee, as shown by the sample in evidence, and find it unnecessary to determine whether the color so shown should be denominated a shade of red or a shade of purple. It is sufficient to say that, in our opinion, whatever the correct name of the color may be, it is, when applied to coal, confusingly similar to the color red.

That appellee for a time discontinued the use of its mark while experimenting for a more durable color material, and resumed its color marking of coal subsequent to appellant's first use, we think is immaterial. This did not constitute abandonment of its mark. *Saxlehner* v. *Eisner & Mendelson Company*, 179 U. S. 19, 93 O. G. 940. Neither do we think the fact that there was some difference between the color of appellee's later and earlier marks is material, because the color last used by appellee is within the range of color for which it would be entitled to protection if the color first used was a valid trade-mark.

We might have contented ourselves with holding, without further discussion, that our recent decision in the case of *Leschen & Sons Rope Co.* v. *American Steel & Wire Co.*, 19 C. C. P. A. (Patents) ——, 55 F.(2d) 455, 418 O. G. 3, governs the case at bar, be-

cause it was there held by a majority of the court that a mark consisting of a silver strand in wire rope was likely to cause confusion with a red strand in wire rope. We think there is greater similarity between the marks in the case at bar than existed in the marks involved in the case above cited.

For the reasons stated, the decision of the Commissioner of Patents is affirmed.

Affirmed.

GRAHAM, *P. J.*, (specially concurring):

I concur in the conclusion on the ground that the mark of applicant is not such a mark as is entitled to registration under the law. My views on this subject are set forth quite fully in the special concurring opinion in *Leschen & Sons Rope Co. v. American Steel & Wire Co.*, 19 C. C. P. A. (Patents) ——, 55 F.(2d) 455, 418 O. G. 3.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,082,405, C. E. Cleveland, Lumber trimmer; 1,267,130, Skeith & Burrows, Power lifting mechanism for saw trimmers, D. C. Oreg. (Portland), Doc. E 9165, *Allis-Chalmers Mfg. Co. et al. v. Clark & Wilson Lumber Co. et al.* Patent held infringed Aug. 22, 1932.

1,218,458. (See Re. 17,891.)

1,219,881. (See Re. 17,891.)

1,243,458. (See Re. 17,891.) 1,267,130. (See 1,082,405.)

1,304,166, R. Douglas, Food products and the method of manufacture, D. C., S. D. N. Y., Doc. E 38/323, *General Food Corp. v. Seeman Brothers, Inc.* Dismissed (notice Aug. 27, 1932).

1,344,922, L. J. Mildren, Oil well appliance; 1,729,940, F. J. Hinderliter, Combination casing ring and elevator, C. C. A., 10th Cir., Doc. 644, *Larkin Packer Co. v. Hinderliter Tool Co.* Dismissed Aug. 22, 1932.

1,423,956, Mitchell & White, Tipless incandescent lamp, filed Aug. 26, 1932, D. C., W. D. N. Y., Doc. E 1513, *General Electric Co. v. Samson United Corp.* Same, filed Aug. 30, 1932, D. C., S. D. N. Y., Doc. E 70/398, *General Electric Co. v. Stantest Lamp Corp. et al.*

1,433,018, 1,774,182, L. J. Millin, Vehicle dumping apparatus, filed Aug. 26, 1932, D. C., S. D. Ohio, W. Div., Doc. E 334 *L. J. McMillin v. The Sidney Grain Machinery Co. et al.*

1,470,524, H. B. Burt, Process of making frozen confections; 1,505,592, F. W. Epperson, Frozen confectionery; 1,718,997, H. B. Burt, same, filed Aug. 23, 1932, D. C., N. D. Calif. (Sacramento), Doc. 995–S, *National Popsicle Corp. et al. v. E. L. Murphy et al.*

1,471,403, J. W. Madigan, Cement batch box carrier and dump, filed Aug. 30, 1932, D. C., N. D. Ohio, E. Div., Doc. 4394, *Blaw-Knox Co. v. The Stevens Metal Products Co.*

1,505,592. (See 1,470,524.)

1,564,149, T. Thomas, Safety device for tanks, D. C., M. D. Pa., Doc. 524, *T. Craven v. T. Thomas.* Dismissed Aug. 26, 1932.

1,567,406, G. A. Wilke, Card package; 1,868,864, same, Art of manufacturing cards with rounded corners, filed Aug. 26, 1932, D. C., E. D. Mich., S. Div., Doc. 5525, *Leader Card Works v. E. Otten et al.*

1,584,788, A. H. Maynard, Stapling machine; 1,591,986, same, Staple supporter for stapling machines, filed Aug. 26, 1932, D. C., S. D. N. Y., Doc. E 70/370, *Boston Wire Stitcher Co. v. Bell Stationery Co., Inc.*

1,591,986. (See 1,584,788.)

1,643,159, S. Greenberg, Child's overcoat, filed Aug. 29, 1932, D. C., S. D. N. Y., Doc. E 70/383, *L. Greenberg & Bro., Inc., v. Little Sister Coats, Inc.* Doc. E 70/384, *L. Greenberg & Bro., Inc., v. A. F. Kneale, Inc.*

1,715,523, W. S. Turner, Floor covering for automobiles; 1,715,525, W. S. Vrooman, same, filed Aug. 26, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4392, *The Paine & Williams Co. v. The Ohio Rubber Co.*

1,715,525. (See 1,715,523.) 1,718,997. (See 1,470,524.)

1,725,500, V. P. Writer, Tam pressing machine, filed Aug. 25, 1932, D. C., S. D. N. Y., Doc. E 70/362, *Writer Headwear Corp. v. Mursol Novelty Co., Inc., et al.*

1,729,940. (See 1,344,922.) 1,774,182. (See 1,433,018.)

1,784,466, O. Rensonnet, Steering sight adapted to be fitted to the wings of the mudguards of motor vehicles, filed Aug. 25, 1932, D. C., E. D. N. Y., Doc. E 6546, *Casco Products Corp. et al. v. Ideal Clamp Mfg. Co., Inc.*

1,785,770, Faber & Driggs, jr., Aerial toy, appeal filed July 11, 1932, C. C. A., 3d Cor., Doc. 4947, *Tipp Fireworks Co. et al. v. Victory Sparkler & Specialty Co.*

1,787,235, F. A. Donaldson, Air cleaner and coupling, filed Aug. 25, 1932, D. C. Minn. (Minneapolis), Doc. 2493, *Donaldson Co., Inc., v. The Maytag Co. et al.*

1,813,434. (See Re. 17,891.)
1,830,077. (See Re. 17,891.)

1,863,123, F. Pertot, Hat form, D. C., S. D. N. Y., Doc. E 70/196, *F. Pertot v. E. Alexander (Alexander Rubber Co.) et al.* Consent decree for plaintiff (notice Aug. 31, 1932).

1,865,821, W. L. Blayney, Scarfs and the method of making same, filed Aug. 31, 1932, D. C., S. D. N. Y., Doc. E 70/401, *Marshall Field & Co. v. I. S. Bierman et al.*

1,868,864. (See 1,567,406.)

Re. 17,891, G. Sundback, Fastener; 1,219,881, 1,243,458, same, Separable fastener; 1,813,434, J. P. Bennett, same; 1,830,077, E. O. Seaver, same, filed Aug. 30, 1932, D. C., E. D. N. Y., Doc. E 6554, *Hookless Fastener Co. v. Waldes-Koh-I-Noor, Inc.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,762,764, William Costello, jr., Feeding mechanism, decided September 16, 1932, claims 4, 7, and 8.

Pat. 1,791,041, A. F. Sawyer, Combined refrigerator and ice cream freezer, decided September 16, 1932, claims 1, 2, and 3.

Pat. 1,818,565, H. E. Maynard, Brake shoe, decided September 12, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 11, 1932

[VOL. 423. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 325,235. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Mar. 17, 1932.

NORDMARK

For Ice.
Claims use since Dec. 18, 1927.

Ser. No. 329,479. MORRIS RUN COAL MINING COMPANY, Wilkes-Barre, Pa. Filed Aug. 11, 1932. Under 10-year proviso.

MORRIS RUN COAL

No claim is made to the exclusive use of the word "Coal" apart from the mark as shown in the drawing.
For Coal.
Claims use since 1864.

Ser. No. 329,804. MICHIGAN ALKALI COMPANY, Wyandotte, Mich. Filed Aug. 24, 1932.

Wyandotte

For Coke.
Claims use since August, 1905.

CLASS 2

Receptacles

Ser. No. 302,081. JOHN STEPHENS, Chicago, Ill. Filed May 31, 1930.

HANDY COVERTEX BOX

No claim is made to the word "Box" apart from the mark shown on the drawing.
For Paper Cartons and Wrappers.
Claims use since May 15, 1930.

Ser. No. 327,845. COHN & ROSENBERGER, INC., New York, N. Y. Filed June 9, 1932.

SESAME

For Empty Vanity Cases.
Claims use since June 2, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 327,208. DIETRICH DAMMANN, Chicago, Ill. Filed May 13, 1932.



The representation of the goods and the words "Scouring Pad" are disclaimed apart from the mark.

For Scouring and Polishing Household Utensils—Namely, Scouring Pads Made of Steel Wool Combined with Soap.

Claims use since Jan. 1, 1932.

Ser. No. 328,022. WILLIAM WARREN TAYLOR, Los Angeles, Calif. Filed June 15, 1932.



The drawing is lined to represent the colors red and blue. The words "Soap" and "America" which appear on the drawing are disclaimed apart from the mark shown.

For Soap.

Claims use since May 3, 1932.

Ser. No. 329,510. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Aug. 13, 1932.



For Abrasives for Grinding Lenses.

Claims use since Apr. 22, 1932.

Ser. No. 329,948. INTERNATIONAL SISAL CO., Minneapolis, Minn. Filed Aug. 29, 1932.

SITOX

For Sweeping Compound.

Claims use since July 15, 1931.

CLASS 5

Adhesives

Ser. No. 328,267. CLARENCE DOBE, doing business as Soldax Company, Hoosick Falls, N. Y. Filed June 24, 1932.

SOLDAX

For Liquid Adhesive Cements.

Claims use since June, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 321,687. CLEMENS LAGEMAN, doing business as H. Trommsdorff Chemische Fabrik, Aachen, Germany. Filed Dec. 2, 1931.

Dijozol

For an Iodine Preparation in Any One of the Following Forms: a Powder, in Solution, as a Plaster, or Contained in Medicated Surgical Plasters, and Used in Human and Veterinary Medicine; in the Treatment of Eye, Nose, and Throat Ailments; in Children's Medicines, in Dental Surgery and Irradiation, and for the Disinfection of the Hands.

Claims use since 1907.

Ser. No. 322,465. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y. Filed Dec. 26, 1931.



No claim is made to the words "Toilettries" apart from the mark shown on the drawing.

For Face Powder, Lip Stick, Face Rouge, Cleansing Cream, Cold Cream, Foundation Cream, Astringent Lotion, Nail Polish, Liquid Nail Polish Remover, Tissue Cream, Mascara, Eye Shadow Preparation, Hand Lotion, Cucumber Face Cream and Muscle Oil, Benzoin and Almond Skin Lotion, Lemon Skin Lotion, Cucumber Skin Lotion, and Brilliantine.

Claims use since Dec. 21, 1931.

Ser. No. 322,926. ASBRON, INCORPORATED, Cleveland, Ohio. Filed Jan. 12, 1932.

ASBRON

For Medicine for Use in the Relief of Asthma, Bronchitis, and Hay Fever.

Claims use since December, 1931.

Ser. No. 323,841. MERVIN V. ARNOLD, doing business as Radialene Properties, Cicero, N. Y. Filed Feb. 5, 1932.



The words "The Perfect Radiator Fluid" and "Trade Mark" are disclaimed apart from the mark as shown.

For Preparations for Circulatory Transfer of Heat, Particularly Liquid Preparations for the Cooling Systems of Internal Combustion Engines.

Claims use since Aug. 1, 1931.

Ser. No. 329,261. HACHMEISTER-LIND COMPANY, McKees Rocks, Pa. Filed Aug. 1, 1932.

Jermēne

For Antiseptic and Germicide.

Claims use since July 12, 1932.

Ser. No. 329,559. FELIX MORGENSTERN, doing business as Morganstern Chemical Company, New York, N. Y. Filed Aug. 15, 1932.

NERVINAL

For Preparation Used as a Sedative and Nervine and as a Tonic in Nervous Diseases and Disorders.

Claims use since Feb. 5, 1932.

Ser. No. 329,582. HOOD-HALL CHEMICAL CO., INC., Montgomery, Ala. Filed Aug. 16, 1932.

Adhez OFF

For Antiseptic for Removing Adhesive Tape and Plaster from Open Wounds and Sores.

Claims use since July 8, 1932.

CLASS 12

Construction Materials

Ser. No. 310,023. JOSEPH MILLER, doing business as Asphalt Laboratories Company, Milwaukee, Wis. Filed Jan. 16, 1931.

ALCO

For Lumber, Flooring, Piles, Railroad Ties, Paving Blocks, Asphalt Lumber, Waterproofing Compounds Other Than Paints, Intended for Construction Purposes.
Claims use since May 9, 1929.

Ser. No. 318,204. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Caulking and Packing Materials, Prepared Building Stones, Artificial Building Stones, Lime, Plaster, Pipe Insulating Coverings, Asphalt Roofing, Portable Houses, and Asbestos Building Materials—Namely, Shingles, Wrappings, Wall Boards and the Like, Building and Portland Cement, Porous Building Stones in All Forms.
Claims use since Sept. 24, 1930.

Ser. No. 324,742. HUMPTY DUMPTY ROOT BEER KEGS, INC., Denver, Colo. Filed Mar. 3, 1932.



No claim is made to the words "Root Beer Kegs" nor to the representation of the receptacle.
For Dispensing Booths Simulating a Keg.
Claims use since April, 1928.

Ser. No. 329,211. THE WYODAK CHEMICAL COMPANY, Cuyahoga Heights Village, Cleveland, Ohio. Filed July 27, 1932.

Wo-Lite

For Plaster and Thermal Insulating Materials.
Claims use since May 1, 1932.

Ser. No. 329,317. SMOOTH-ON MANUFACTURING COMPANY, Jersey City, N. J. Filed Aug. 3, 1932.

Do it with
SMOOTH-ON

Applicant is the owner of Reg. No. 84,262 registered Nov. 21, 1911.
For Iron Compound in the Form of a Dry Powder Used to Repair Defects and Breaks in and Make Patches on Iron and Other Metallic Substances, to Make Metallic Joints, and to Cover Metallic Surfaces.
Claims use since August, 1930.

Ser. No. 329,963. UVALDE ROCK ASPHALT COMPANY, San Antonio, Tex. Filed Aug. 29, 1932.

AZROCK

For Asphalt Plank, Floor Tile, Industrial Tile, and Expansion Joints.
Claims use since Jan. 15, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 329,996. LEHIGH STEEL COMPANY, New York, N. Y. Filed Aug. 30, 1932.

LECO
NON-TEMPERING
TOOL STEEL

The words "Non-Tempering" and "Tool Steel" are disclaimed apart from the mark as shown.
For Tool Steel.
Claims use since June, 1930.

CLASS 15

Oils and Greases

Ser. No. 327,761. KENDALL REFINING COMPANY, Bradford, Pa. Filed June 6, 1932.



In the drawing the background representing the state of Pennsylvania is in red. All wording appearing in connection with the trade-mark is disclaimed except the word "Penzbest".
For Lubricating Oils and Petroleum Greases.
Claims use since May 14, 1932.

Ser. No. 328,711. PETROLEUM MARKETERS CO. INC., Long Island City, N. Y. Filed July 6, 1932.

PET-MARK

The word "Mark" is disclaimed apart from the mark shown in the drawing.
For Gasoline, Motor Fuel Oils, Lubricating Oils, Furnace Oils, Illuminating Oils, and Lubricating Greases.
Claims use since Nov. 3, 1930.

Ser. No. 329,219. ROSWELL J. BUMP, Binghamton, N. Y. Filed July 30, 1932.



For Motor Fuel Oil and Lubricating Oil.
Claims use since July 10, 1932.

Ser. No. 329,380. LUBRAA OIL CORPORATION, Brooklyn, N. Y. Filed Aug. 6, 1932.

IVOHL

For Upper Motor Lubricants.
Claims use since Feb. 27, 1932.

Ser. No. 329,686. RADBILL OIL CO., INC., Philadelphia, Pa. Filed Aug. 10, 1932.

KNICKERBOCKER
100% PURE
PENNSYLVANIA
MOTOR OIL

No claim is made to the words "100% Pure Pennsylvania Motor Oil" apart from the mark shown.
For Lubricating Oil.
Claims use since Aug. 6, 1931.

Ser. No. 329,687. RADBILL OIL CO., INC., Philadelphia, Pa. Filed Aug. 19, 1932.

AJAX
100% PURE
PENNSYLVANIA
MOTOR OIL

No claim is made to the words "100% Pure Pennsylvania Motor Oil" apart from the mark shown.
For Lubricating Oil.
Claims use since Aug. 4, 1931.

Ser. No. 329 688. RADBILL OIL CO., INC., Philadelphia, Pa. Filed Aug. 19, 1932.

Penn-Thrift
100% PURE
PENNSYLVANIA
MOTOR OIL

No claim is made to the descriptive wording shown apart from the trade-mark "Penn-Thrift."
For Lubricating Oil.
Claims use since Sept. 16, 1930.

Ser. No. 329,783. CAMPBELL'S LU-BRI-CANT CO., Newark, N. J. Filed Aug. 24, 1932.

HOT-SPOT



No claim is made to the exclusive use of the representation of a portion of an internal combustion engine, apart from the mark shown in the drawing.

For Lubricant to be Added to Gasoline and Other Fuels for Use in Internal Combustion Engines.

Claims use since June 11, 1931.

Ser. No. 329,872. STERNE-JAY CORPORATION, New York, N. Y. Filed Aug. 26, 1932.

Cavalier

For Lubricating Oil.

Claims use since Aug. 23, 1932.

Ser. No. 329,873. STERNE-JAY CORPORATION, New York, N. Y. Filed Aug. 26, 1932.

Jubilee

For Lubricating Oil.

Claims use since Aug. 23, 1932.

Ser. No. 329,909. STEPHEN OIL CO., Morris, Ill. Filed Aug. 27, 1932.



The words "The Perfect Motor Oil 100% Pure Pennsylvania Oil Morris, Ill." are disclaimed apart from the mark shown on the drawing.

For Lubricating Oil.

Claims use since June 15, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 327,014. JOSEPH L. HOLDEMAN, Elkhart, Ind. Filed May 12, 1932.

Tex-Finish

The word "Finish" appearing on the drawing is hereby disclaimed apart from the mark shown.

For Fluid Refinish in the Nature of a Paint for Masonry for Resurfacing and Waterproofing the Same.

Claims use since Oct. 22, 1931.

Ser. No. 328,120. W. P. FULLER & CO., San Francisco, Calif. Filed June 20, 1932.

FULTEC

For Enamels.

Claims use since April, 1932.

Ser. No. 328,766. C. A. WOOLSEY PAINT & COLOR CO., Jersey City, N. J. Filed July 13, 1932.

TALI-COP

For Ready Mixed Paint.

Claims use since July 2, 1932.

Ser. No. 329,292. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio. Filed Aug. 2, 1932.

SILVER-GLO

For Dry and Ready Mixed Paints, Paint Enamels, Stains, Lacquers, and Varnishes.

Claims use since July 22, 1932.

Ser. No. 329,469. THEODORE H. HARTMANN, doing business as Vitro Shine Mfg. Co., St. Louis, Mo. Filed Aug. 11, 1932.



The word "Shine" is disclaimed apart from the other features of the mark shown on the drawing.

For Automobile and Furniture Polish.

Claims use since June 21, 1932.

Ser. No. 329,516. WILLIAM A. DE VRIES, Spokane, Wash. Filed Aug. 12, 1932.



For Compound for Cleaning and Polishing Automobiles, Furniture, and Other Finished Surfaces.

Claims use since Jan. 2, 1932.

Ser. No. 329,976. ATWATER PAINT CO., Los Angeles, Calif. Filed Aug. 30, 1932.



For Ready Mixed Paints, Dry Paint Colors, Paint Thinners, White Lead, Zinc Oxide Paint Pigments, Lacquers, Lacquer Thinners, Prepared Shellac Ready for Use, Floor Wax, Putty, Varnish, Paint Enamels, Linseed Oil, Turpentine, Calcimine, Oil and Japan Colors.

Claims use since Oct. 2, 1931.

CLASS 17

Tobacco Products

Ser. No. 329,416. ALHAMBRA CIGAR & CIGARETTE MFG. CO., Manila, P. I. Filed Aug. 9, 1932.



The drawing is lined for shading.

For Cigars and Cigarettes.

Claims use since June 1, 1932.

Ser. No. 329,417. ALHAMBRA CIGAR & CIGARETTE MFG. CO., Manila, P. I. Filed Aug. 9, 1932.



No exclusive right is claimed to the representation of cigars apart from the mark as shown in the drawing. The drawing is lined for shading only.

For Cigars and Cigarettes.

Claims use since June 1, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 318,233. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Airplanes, Motor Boats, Sail Boats, Row Boats, and Canoes; Automobiles, Bicycles, and Their Structural Parts.
Claims use since Sept. 24, 1930.

Ser. No. 327,271. DAUNTLESS SHIPYARD, INC., Essex, Conn. Filed May 20, 1932.

PUDDLE DUCK

DAUNTLESS

For Sail Boats and Row Boats.
Claims use since Jan. 22, 1932.

Ser. No. 328,955. J. W. HUBBARD CO., Chicago, Ill. Filed July 21, 1932.

VELVET DRIVE

No claim is made to the word "Drive" apart from the mark shown in the drawing.
For Packing House Equipment Consisting of Meat Trucks.
Claims use since June 25, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 323,847. METEOR ELECTRIC CORPORATION, New York and Brooklyn, N. Y. Filed Jan. 23, 1932.

METEOR

For Electric Plugs, Electric Receptacles, Electric Cutouts, Electric Sockets, Electric Switches, Electric Transformers, and Electric Switch Plates.
Claims use since July 1, 1924.

Ser. No. 328,118. FIRESTONE BATTERY COMPANY, Akron, Ohio. Filed June 20, 1932.



For Battery Clamps, Terminals, and Connectors; Electrical Cables; and Storage Battery Parts Consisting of Positive and Negative Plates, Wood Separators, Rubber Separators, Battery Cases, Connecting Bars, Cell Covers, Vent Plugs, Terminal Posts, and Battery Handles.
Claims use since May 18, 1929, on storage battery parts; and since Feb. 1, 1930, on remaining goods.

Ser. No. 329,320. WATERBURY CLOCK COMPANY, Waterbury, Conn. Filed Aug. 8, 1932.

FROSTOFF

For Clockwork Operated Electric Switches for Controlling the Operating and Non-Operating Periods of Electric Refrigerators.
Claims use since June 27, 1932.

Ser. No. 329,891. ELECTRIC VACUUM CLEANER COMPANY, INC., Cleveland, Ohio. Filed Aug. 27, 1932.

PREMIER GRAND

For Electric Vacuum Cleaners and Parts Thereof.
Claims use since Aug. 10, 1932.

Ser. No. 329,959. NATIONAL PALLADIUM COMPANY, Chicago, Ill. Filed Aug. 29, 1932.

PALAMITE

For Spark Plugs.
Claims use since June 15, 1932.

Ser. No. 329,990. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind. Filed Aug. 30, 1932.

FLOATING POWER

For Electric Motors.
Claims use since June 20, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 327,148. IDEAL STEEL PRODUCTS CORPORATION, Chicago, Ill. Filed May 16, 1932.

PROSPERITY

For Ball-Projecting Table Board Game.
Claims use since Apr. 20, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 318,760. AKTIEN-GESELLSCHAFT FÜR FEINMECHANIK, VORMALS JETTER & SCHEERER, Tuttlingen, Germany. Filed Sept. 5, 1931.

AESCULAP

For Shears, Pliers, Tweezers, Forks, Razors, Safety Razors, Safety Razor Blades, and Hair Clippers.
Claims use since Aug. 2, 1915.

Ser. No. 323,559. S. H. KRESS & CO., New York, N. Y. Filed Jan. 27, 1932.

Spra-all

For Hand Sprayer for Liquid and Powder Insecticides.
Claims use since Dec. 2, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 329,097. PATRICK A. POWERS, New York, N. Y. Filed July 26, 1932.



FLIP THE FROG

The drawing is lined for the colors red, yellow, and green, but color is not claimed as a feature of the trade-mark.
For Silent and/or Sound or Talking Motion-Picture Films.
Claims use since Aug. 22, 1930.

CLASS 27

Horological Instruments

Ser. No. 329,523. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Aug. 13, 1932.

ENGINEER

For Bracelet Watches and Their Attached Bracelets.
Claims use since Mar. 27, 1931.

Ser. No. 329,524. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Aug. 13, 1932.

OVERLAND LIMITED

For Bracelet Watches and Their Attached Bracelets.
Claims use since May 5, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 329,884. BARKER BROTHERS SILVER CO. INC., New York, N. Y. Filed Aug. 27, 1932.



For Silver Plated Hollowware.
Claims use since Aug. 12, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 326,549. S. H. KRESS & Co., New York, N. Y. Filed Apr. 27, 1932.

Betty Ann

For Powder Puffs, Dusting Mittens, Dish Mops, Floor Mops, Whisk Brooms, Wall Brushes, Scrub Brushes, Dusting Brushes, Floor Brushes, Clothes Brushes, Hair Brushes, Nail Brushes, Tooth Brushes, Complexion Brushes, Shaving Brushes, Bath Brushes, Paint Brushes, and Artists' Brushes.
Claims use since Mar. 15, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 328,562. NORGE CORPORATION, Detroit, Mich. Filed July 5, 1932.

ALASKA

Applicant is owner of Reg. No. 93,583, under the 10-year proviso of act of 1905, and Reg. No. 261,222.
For Refrigerators and Parts Thereof.
Claims use since Apr. 2, 1878.

Ser. No. 329,480. KENNETH W. NEVERS, Irvington, N. Y. Filed Aug. 11, 1932.

COOLATOR

For Water-Coolers.
Claims use since July 30, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 329,964. WEST BRANCH NOVELTY COMPANY, Milton, Pa. Filed Aug. 29, 1932.

CEDARETTE

For Cedar Chests and Cedar Cabinets.
Claims use since June 18, 1932.

CLASS 33

Glassware

Ser. No. 328,559. THE MANTLE LAMP COMPANY OF AMERICA, Chicago, Ill. Filed July 5, 1932.

Aladdin

For Lamp Bowls, Lamp Shades, Lamp Chimneys, and Vases Made of Glass.
Claims use since Sept. 25, 1908.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 324,549. DETROIT VAPOR STOVE COMPANY, Detroit, Mich. Filed Feb. 27, 1932.

E-Z KLEEN

The word "Kleen" is disclaimed apart from the mark as shown.
For Burner Box Linings.
Claims use since October, 1929.

Ser. No. 328,424. HESS WARMING AND VENTILATING COMPANY, Chicago, Ill. Filed June 30, 1932. Under 10-year proviso.

HESS

For Coal, Wood, Coke, Oil, and Gas Warm Air Furnaces.
Claims use since 1887.

Ser. No. 329,271. THE YOST COMPANY, St. Louis, Mo. Filed Aug. 1, 1932.

SPRING-O-DAWN
An Oasis in Your Home

For Humidifiers Characterized by an Individual Unit or Units Fed by Hot Water from a Heating Source, for Use in Homes, Offices, and the Like.
Claims use since July 8, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 328,731. INDIA TIRE AND RUBBER COMPANY, Akron and Mogadore, Ohio. Filed July 12, 1932.



For Resilient Tires for Vehicles, Composed of Rubber or Rubber and Fabric; Inner Tubes and Tire-Repair Materials and Accessories—Namely, Rubber-Impregnated Tire Building and Rebuilding Fabrics, Hook-On Boots, Lace-On Boots, Flaps, and Tire-Repair Air-Bags; Fabric and Rubber Repair-Patches, Tube-Patches in Sheet and Patch Form, and Reliners; Tire-Repair Gum Materials in Sheet Form—Namely, Tread-Gums, Cushion-Gums, Tube-Gums, Camel-Back Tread-Gums, and Combination-Gums.
Claims use since Sept. 2, 1927.

CLASS 37

Paper and Stationery

Ser. No. 322,965. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill. Filed Jan. 13, 1932.

ULTRA-VIOLET

For Paper Towels.
Claims use since Dec. 1, 1931.

Ser. No. 322,966. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill. Filed Jan. 13, 1932.

SUN-RAY

For Paper Towels.
Claims use since Dec. 1, 1931.

Ser. No. 324,690. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill. Filed Mar. 1, 1932.

OZONE-RAYS

For Paper Towels.
Claims use since Dec. 1, 1931.

Ser. No. 329,356. RITZ COSMETIC & PERFUME SHOPPE, Elizabeth, N. J. Filed Aug. 5, 1932.



The portrait appearing upon the Patent Office drawing is fanciful.
For Facial Tissues.
Claims use since Dec. 8, 1931.

CLASS 38

Prints and Publications

Ser. No. 318,207. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Printed Sign Boards, Printed Advertising Signs, and Reproductions Such as Are Used in Schools and Factories as Instruction Material, and Printed Sign Boards Containing Statistical Statements.
Claims use since Sept. 24, 1930.

Ser. No. 327,652. FIRST NATIONAL BANK OF ARIZONA AT PHOENIX, Phoenix, Ariz. Filed June 2, 1932.



For Folders Issued from Time to Time Containing Information of General Interest.
Claims use since Jan. 1, 1927.

Ser. No. 329,423. CORNELIUS PUBLICATIONS, INC., Indianapolis, Ind. Filed Aug. 9, 1932.

TOURIST TRADE

For Periodical Publication.
Claims use since July 14, 1932.

CLASS 39

Clothing

Ser. No. 314,796. GARDINER-WARRING CO., INC., Florence, Ala. Filed May 20, 1931.

ATHKNIT

The descriptive word "Knit" is disclaimed apart from the mark as shown on the drawing.
For Sweaters, Bathing Suits, and Underwear for Men, Women, and Children.
Claims use since Apr. 11, 1931.

Ser. No. 314,797. GARDINER-WARRING CO., INC., Florence, Ala. Filed May 20, 1931.

Athtex

For Sweaters, Bathing Suits, and Underwear for Men, Women, and Children.
Claims use since Apr. 11, 1931.

Ser. No. 325,203. CHARLES MILBURN FOSTER, Dayton, Ohio. Filed Mar. 15, 1932.

Dorothy May
Beautiful Footwear

Applicant disclaims the right to the exclusive use of the expression "Beautiful Footwear."
For Ladies' Shoes Made of Leather.
Claims use since Feb. 1, 1927.

Ser. No. 328,311. SHAWMUT WOOLEN MILLS, Stoughton, Mass. Filed June 25, 1932.

SHAWMUT
'SHRINKPRUF'

The descriptive term "Shrinkpruf" is disclaimed apart from the mark as shown. Applicant is the owner of registration No. 282,688 of Apr. 28, 1931.
For Jersey Garments—Namely, Jersey Suits for Boys; Jersey Dresses for Girls, Misses, and Women; and for Jersey Sweaters.
Claims use since May 18, 1932.

Ser. No. 328,647. MAX RUCH, Berlin, Germany. Filed July 8, 1932.

Monos

For Collars and Cuffs.
Claims use since Apr. 26, 1932.

Ser. No. 329,128. AMERICAN LADY CORSET CO., INC., Detroit, Mich. Filed July 28, 1932.

Frolaset

For Ladies' Wearing Apparel—Namely, Corsets, Brassières, Bandeaux, Girdles, Corset-Waists, Camisoles, Garter-Belts, Combinations of Brassières and Girdles, Brassières and Corsets, Brassières and Girdle Step-Ins, Brassières and Petticoats, Brassières and Panties, Bandeaux and Panties; Combinations of Brassières, Girdle and Pantie; Brassière, Girdle, Vest, and Girdle Step-In; Bandeaux, Girdle, and Panties; Brassière, Girdle, and Bloomers; Brassière, Girdle, and Drawers; Ladies' Vests, Chemises, Step-Ins; Women's, Misses', and Children's Knitted and Woven Underwear in One, Two, and Three Piece Garments; Ladies' Wearing Apparel—Namely, Negligees, Pyjamas, Slips, Kimonos, and Petticoats.
Claims use since Mar. 1, 1912.

Ser. No. 329,216. AMERICAN NEW FASHION HEEL CORPORATION, Brooklyn, N. Y. Filed July 30, 1932.

AMERINU

For Shoe Heels.
Claims use since July 28, 1932.

Ser. No. 329,224. J. EDWARDS & CO., INC., Philadelphia, Pa. Filed July 30, 1932.

SENORITA

For Children's, Misses', and Ladies' Shoes Made from Leather, Fabric, and/or Combinations of Leather and Fabric.
Claims use since July 19, 1932.

Ser. No. 329,506. OSGOOD & SONS, INC., Decatur, Ill. Filed Aug. 12, 1932.

Bonnéfrox

For Ladies' and Misses' Dresses, Pajamas, Aprons, Smocks, Beach Suits, Jackets, Waists, Skirts, and Uniforms for Nurses, Waitresses, and Hair Dressers.
Claims use since July 30, 1932.

Ser. No. 329,606. NIRENBERG & SALZMAN, INC., New York, N. Y. Filed Aug. 17, 1932.

LONDON CLUB

For Men's and Boys' Negligee, Dress, Sport, and Work Shirts; and Athletic Goods—Namely, Athletic Shirts.
Claims use since October, 1931.

Ser. No. 329,703. CLUETT, PEABODY & CO., INC., Troy, N. Y. Filed Aug. 20, 1932.

MITOGA

For Negligee and Dress Shirts.
Claims use since Aug. 13, 1932.

Ser. No. 329,707. FERRY HATS, INC., Newark, N. J. Filed Aug. 20, 1932.

Colby
fifth Ave.
N.Y.
fine F H felts

Applicant disclaims the right to the exclusive use of the expression "Fine Felts" and "Fifth Ave., N. Y."
For Men's Felt Hats.
Claims use since July 1, 1932.

Ser. No. 329,717. R. H. MACY & CO., INC., New York, N. Y. Filed Aug. 20, 1932.

manhatter

For Women's Hats.
Claims use since June 25, 1932.

Ser. No. 329,799. KEARNS BROTHERS, INC., Pinckneyville, Ill. Filed Aug. 24, 1932.

KAYBRO

For Women's Dresses.
Claims use since Aug. 1, 1932.

Ser. No. 329,815. WORCESTER KNITTING COMPANY, Worcester, Mass. Filed Aug. 24, 1932.

Kozyfit

For Sweaters and Bathing Suits.
Claims use since June 28, 1932.

Ser. No. 329,855. GILES & HIRSCH, INC., New York, N. Y. Filed Aug. 26, 1932.

SUNNY-ALLS

For Boys' and Girls' Play Suits and Overalls.
Claims use since Mar. 1, 1932.

Ser. No. 329,857. I. JANOV-ABELES SHIRT CO., New York, N. Y. Filed Aug. 26, 1932.

CHAMPCLOTH

The word "Cloth" is claimed only in connection with the other features of the mark.
For Men's Dress Shirts, Negligee Shirts, Collars.
Claims use since Jan. 1, 1932.

Ser. No. 330,062. HARRIS CLOTHING COMPANY, Baltimore, Md. Filed Sept. 2, 1932.

FRATERNITY HOUSE

For Young Men's and Students' Three and Four Piece Suits, Overcoats, and Top Coats.
Claims use since Feb. 1, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 329,122. RIEGEL TEXTILE CORPORATION, New York, N. Y. Filed July 27, 1932.



No claim being made to the exclusive use of the words "Bolt" and "Prints" nor to the representation of the bolt of cloth, apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since June 30, 1932.

Ser. No. 329,690. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed Aug. 19, 1932.

SCARPA

For Silk Piece Goods in the Piece.
Claims use since May 16, 1932.

Ser. No. 329,912. ZEKARIA BROTHERS, New York, N. Y. Filed Aug. 27, 1932.

Panette

For Laces and Embroideries.
Claims use since Aug. 20, 1932.

Ser. No. 330,101. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed Sept. 3, 1932.

ROMANTIC

For Silk Goods in the Piece.
Claims use since Jan. 19, 1932.

CLASS 43

Thread and Yarn

Ser. No. 329,646. THE NATIONAL SILK CO., INC., South Coventry, Conn. Filed Aug. 18, 1932.

CREVENNA

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon, or a Combination of Such Textures.
Claims use since June, 1931.

Ser. No. 329,647. THE NATIONAL SILK CO., INC., South Coventry, Conn. Filed Aug. 18, 1932.

LAMBALE'

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon, or a Combination of Such Textures.
Claims use since June, 1931.

Ser. No. 329,648. THE NATIONAL SILK CO., INC., South Coventry, Conn. Filed Aug. 18, 1932.

SILVENNA

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon, or a Combination of Such Textures.
Claims use since June, 1931.

Ser. No. 329,650. THE NATIONAL SILK CO., INC., South Coventry, Conn. Filed Aug. 18, 1932.

TOLLANDO

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon, or a Combination of such Textures.
Claims use since June, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 328,271. CHARLES H. GRAHAM, doing business as Magnator Company, Syracuse, N. Y. Filed June 24, 1932.



For Electro-Therapeutical Apparatus—Namely, Electric Belts.
Claims use since Apr. 1, 1931.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 328,662. AAGOT S. COCKS, doing business as Cocks Manufacturing Company, New York, N. Y. Filed July 9, 1932.

PORT-COL-THER

For Portable Colonic Irrigator Used for Therapeutic Purposes, Consisting of a Collapsible Table, Sidearms, Rubber Bag, Tubes, Valves, Rubber Sheeting, Bottles of Liquid Used in the Irrigator.
Claims use since Feb. 1, 1932.

Ser. No. 329,445. GRO-FLEX CORPORATION, Indianapolis, Ind. Filed Aug. 10, 1932.

GRO-FLEX

For Massage Devices.
Claims use since June 22, 1932.

Ser. No. 329,551. DETROIT DENTAL MANUFACTURING CO., Detroit, Mich. Filed Aug. 15, 1932.



The applicant disclaims the word "Investment" apart from the mark as shown on the drawing.
For Dental Investment Compounds.
Claims use since Aug. 5, 1932.

Ser. No. 329,633. FOOT FORM SHOE SHOPS, INC., New York, N. Y. Filed Aug. 18, 1932.

INDIAN WALK



No claim being made to the representation of a shoe apart from the mark as shown in the drawing.
For Arch Supports, Foot Pads, and Cushions to be Used in Shoes; said Goods Being in the Nature of Foot Corrective Appliances.
Claims use since Jan. 15, 1920.

Ser. No. 329,869. SAN-NAP-PAK MFG. CO. INC., New York, N. Y. Filed Aug. 26, 1932.

San-nap-pak

For Sanitary Napkins and Sanitary Belts.
Claims use since Dec. 1, 1925.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 319,344. SMITH-JUNIOR COMPANY, INC., Rochester, N. Y. Filed Sept. 23, 1931.

SMITH-JUNIOR'S

Acidulant

No claim is made to the word "Acidulant" apart from the mark shown in the drawing.
For Acidulous Compound for Flavoring Soft Drinks.
Claims use since Dec. 16, 1927.

Ser. No. 320,380. KOTARO TAKAHASHI, Tokyo Fu, Japan. Filed Oct. 23, 1931.

DRINKALL
ドリンコール

The Japanese characters appearing on the drawing are merely a fanciful coined word and have no dictionary meaning.
For Nonalcholic, Maltless Syrup Used in the Preparation of Soft Drinks.
Claims use since January, 1931.

Ser. No. 327,599. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed May 31, 1932.



For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks and Water.
Claims use since Feb. 29, 1932.

Ser. No. 328,765. MORRIS WERNIK, Metuchen, N. J. Filed July 18, 1932.

SYRUPIN

M. Wernik

The name "M. Wernik" appearing on the drawing is the facsimile signature of the applicant.

For Syrup Concentrates Used in the Preparation of Nonalcoholic, Maltless Soft Drinks.

Claims use since September, 1917.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 283,412. THE MILSON COMPANY, Cincinnati, Ohio. Filed May 2, 1929.

HEALTH-O

Applicant is the owner of registrations 146,817, 164,485, 174,475, and 197,734. No claim is made to the descriptive word "Health" apart from the mark shown in the drawing.

For Allspice, Cake Icings, Celery Salt, Celery Seed, Chewing Gum, Chocolate, Cinnamon, Cocoa, Shredded Cocoanut, Cocoa Pudding, Coffee, Egg Substitute, Flavoring Extracts for Food Purposes, Fruit Syrups for Food Purposes, Ginger, Maple Syrup Flavor, Marshmallow Crème, Prepared Mustard, Ground Mustard, Ground Nutmeg, Paprika, Peanut Butter, Black Pepper, Pickling Spices Mixed, Pie Filling, Spices, Tapioca Pudding, and Teas.

Claims use since 1921.

Ser. No. 299,287. THE STERLING PRODUCTS COMPANY, Evansville, Ind. Filed Apr. 22, 1930.

£ Sterling £

For Malt Extract for Food Purposes.

Claims use since Jan. 1, 1919.

Ser. No. 311,340. RANDOLPH MARKETING COMPANY, San Bernardino, Calif. Filed Feb. 21, 1931.

BULL DOG



For Fresh Citrus Fruits, Fresh Vegetables, Fresh Deciduous Fruits, Fresh Cantaloupes.

Claims use since Nov. 12, 1929.

Ser. No. 316,603. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill., assignor to Elle Sheets Candies Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1931.



The portraits shown are those of Martha Washington, deceased, and George Washington, deceased, and the names appearing on the drawing are facsimiles of the signatures of Martha Washington and George Washington.

For Chocolate.

Claims use since May 26, 1931.

Ser. No. 318,034. DAVID KATZ, doing business as Peekskill Products Co., Peekskill, N. Y. Filed Aug. 15, 1931.

King of Kings

MALT SYRUP

No claim is made to the words "Malt Syrup" apart from the mark shown in the drawing.

For Malt Syrup for Food Purposes.

Claims use since Aug. 1, 1931.

Ser. No. 324,454. BLACK BROS. FLOUR MILLS, Beatrice, Nebr. Filed Feb. 25, 1932.

GOLDEN HARVEST

For Wheat Flour.

Claims use since December, 1925.

Ser. No. 325,519. FREMONT FRUIT ASSOCIATION, doing business as Exeter Emperor Association, Exeter, Calif. Filed Mar. 26, 1932.

EXCEPTIONAL

For Fresh Grapes.

Claims use since Sept. 6, 1930.

Ser. No. 325,898. ATLANTIC PACKING CO. INC., New York, N. Y. Filed Apr. 8, 1932.

Rhinelandt

For Yeast.

Claims use since Mar. 19, 1932.

Ser. No. 326,832. BAYARD S. SCOTLAND, doing business as Economy Macaroni Co., Joliet, Ill. Filed May 6, 1932.

BIG DIME

For Macaroni, Spaghetti, and Noodles.

Claims use since Oct. 31, 1931.

Ser. No. 327,561. NATIONAL PECTIN PRODUCTS COMPANY, Chicago, Ill. Filed May 28, 1932.

KOLTAMALE

For Ice Cream Confection.

Claims use since May 23, 1932.

Ser. No. 327,974. FRUIT INDUSTRIES, LTD., San Francisco, Calif. Filed June 14, 1932.

Old Monticello

For Compound Containing Pure California Brandy and Cane Sugar for Use as a Food Flavoring and in the Preparation of Sauces, Puddings, and Pastries.

Claims use since May 12, 1932.

Ser. No. 328,239. JOSÉ LEITE DE OLIVEIRA, Lisbon, Portugal. Filed June 28, 1932.

LA CHANCE

For Canned, Pickled, Salted, Smoked, and Preserved Fish; Canned Shellfish, Canned Fruits and Vegetables; Jams, Jellies, and Marmalades; Canned Beef, Veal, Mutton, Lamb, Pork, Poultry, Game, and Sausage; Pickles, Olives, and Olive Oil.

Claims use since Apr. 25, 1912.

Ser. No. 328,317. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed June 25, 1932.



No claim is made to the representation of the goods apart from the mark as shown in the drawing.
For Canned Salmon.
Claims use since July 1, 1931.

Ser. No. 328,393. EMPRESA MATE LARANGEIRA SOCIEDAD ANONIMA, Buenos Aires, Argentina. Filed June 29, 1932.



All the notations except "Exposicion Continental", "T. L.", and "1882" are disclaimed apart from the mark shown on the drawing.
For Yerba Mate (Paraguayan Tea).
Claims use since Dec. 18, 1928.

Ser. No. 328,395. FRANCISCO MENDES & COMPAÑIA LIMITADA, Buenos Aires, Argentina. Filed June 29, 1932.



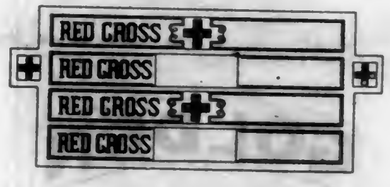
For Yerba Mate (Paraguayan Tea).
Claims use since Aug. 15, 1928.

Ser. No. 328,628. SUNICAL PACKING COMPANY, San Francisco, Calif. Filed July 6, 1932.

SUPPLY

For Canned Fruits.
Claims use since June 3, 1932.

Ser. No. 328,683. THE JOHN B. CANEPA COMPANY, Chicago, Ill. Filed July 11, 1932.



In the drawing the crosses are lined to indicate the color red. Applicant is the owner of registrations No. 50,060, Feb. 27, 1906, renewed; No. 50,396, Mar. 13, 1906, renewed; No. 238,201, Jan. 31, 1928; and No. 260,296, Aug. 20, 1929.
For Macaroni, Spaghetti, Vermicelli, and Noodles, and Varieties Thereof.
Claims use as to the words "Red Cross" and the representation of a red cross have been continuously applied by applicant and its predecessors in business, from whom it has derived title, to said goods since on or about April, 1872, and the design including the words "Red Cross" and the representation of red crosses shown in the accompanying drawing has been applied by applicant to said goods since May 16, 1932.

Ser. No. 328,730. ALFRED C. HILL, doing business as Hill Baking Co., Vernon, Tex. Filed July 12, 1932.



The words "Bread" and "Pure Fresh Butter" are disclaimed apart from the mark as shown on the drawing.
For Bread.
Claims use since Feb. 2, 1932.

Ser. No. 328,924. E. & A. OPLER, INC., Chicago, Ill. Filed July 20, 1932.



The representation of the woman shown in the drawing filed herein is fanciful. This corporation is the owner of Trade-Mark Registration No. 214,649.
For Cocoa Malted Milk.
Claims use since May 26, 1932.

Ser. No. 329,098. RED STAR CEREAL CO., Phoenix, Ariz. Filed July 26, 1932.



The drawing is lined to indicate the color red.
For Cereal Toasted Wheat.
Claims use since Dec. 7, 1931.

Ser. No. 329,144. THE HUBINGER COMPANY, Keokuk, Iowa. Filed July 28, 1932.

SWANK

For Dessert Powder.
Claims use since July 23, 1932.

Ser. No. 329,296. C. J. VAN HOUTEN & ZOON, Weesp, Netherlands. Filed Aug. 2, 1932.

RONA

For Cocoa, Chocolate, and Cocoa-Butter for Food Purposes.
Claims use since January, 1911.

Ser. No. 329,391. NICHOLAS WAPLER COMPANY, New York, N. Y. Filed Aug. 6, 1932.



For Feed for Fish.
Claims use since November, 1904.

Ser. No. 329,435. STEPHEN F. WHITMAN & SON, INC., Philadelphia, Pa. Filed Aug. 9, 1932.

FAIRHILL

For Candy.
Claims use since July 13, 1932.

Ser. No. 329,538. KARL SEILER & SONS, Philadelphia, Pa. Filed Aug. 13, 1932.



For Liverwurst.
Claims use since Aug. 11, 1932.

Ser. No. 329,626. MESSRS. DANIELS & CO., Coscob, Conn. Filed Aug. 18, 1932.

Huntsman

For Sauce for Meats, Fish, Game, and Hot or Cold Dressing for Salads.
Claims use since May 16, 1932.

Ser. No. 330,098. THE MIDLAND FLOUR MILLING COMPANY, Kansas City, Mo. Filed Sept. 8, 1932.

TOL-A-RITE

For Wheat Flour.
Claims use since Aug. 29, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 317,917. O. W. JACKSON & CO., INC., New York, N. Y. Filed Aug. 12, 1931.

JACO - T - MATS

Applicant disclaims the word "Mats."
For Rubber Mats and Matting.
Claims use since May, 1930.

Ser. No. 325,074. OSWEGO FALLS CORPORATION, Fulton, N. Y. Filed Mar. 12, 1932.

+ SEALRIGHT +
SANITARY SERVICE

Applicant does not herein claim "Sanitary Service," under the act of 1905 as amended, apart from the mark shown.

For Bottle Caps or So-Called Milk Bottle Caps.
Claims use since Jan. 8, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 11, 1932

297,983. TOGGLES AND FRAMES FOR USE IN STRETCHING HIDES AND LEATHER. LEATHER EQUIPMENT COMPANY, INC., Chicago, Ill.
Filed June 7, 1932. Serial No. 327,800. PUBLISHED AUGUST 2, 1932. Class 23.

297,984. CHARTS FOR RECORDING INSTRUMENTS. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed June 16, 1932. Serial No. 328,082. PUBLISHED AUGUST 2, 1932. Class 26.

297,985. BRAKE TESTING MACHINES AND BRAKE LINING TESTING MACHINES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed June 18, 1932. Serial No. 328,091. PUBLISHED AUGUST 2, 1932. Class 26.

297,986. BRAKE TESTING MACHINES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed June 18, 1932. Serial No. 328,093. PUBLISHED AUGUST 2, 1932. Class 26.

297,987. LADIES' AND CHILDREN'S BLOOMERS, PANTIES, BRASSIÈRES, AND COMBINATIONS THEREOF; STEPINS IN THE NATURE OF UNDERDRAWERS, CHEMISES, SLIPS, AND GIRDLES; AND FOR MEN'S AND BOYS' TRUNKS, UNDERSHIRTS, AND UNION SUITS. KOENIGSBERG BROS., New York, N. Y.
Filed March 23, 1932. Serial No. 325,404. PUBLISHED JULY 12, 1932. Class 39.

297,988. PNEUMATIC RUBBER TIRES, RUBBER INNER TUBES, PORTABLE TUBE REPAIR KITS, CEMENTED TIRE FABRIC PATCHES, AND RUBBER DROP CENTER RIM FLAPS. THE LOWENTHAL COMPANY, Akron, Ohio.
Filed April 9, 1932. Serial No. 325,952. PUBLISHED JULY 26, 1932. Class 35.

297,989. PUMPS AND PARTS THEREOF, PARTICULARLY CENTRIFUGAL PUMPS. THE ALLEN-SHERMAN-HOFF COMPANY, Philadelphia, Pa.
Filed June 4, 1932. Serial No. 327,722. PUBLISHED JULY 26, 1932. Class 23.

297,990. CHAINS FOR SPROCKET WHEELS. BOSTON GEAR WORKS, INC., North Quincy, Mass.
Filed June 4, 1932. Serial No. 327,726. PUBLISHED AUGUST 2, 1932. Class 13.

297,991. TWISTED WIRE FENCE STAYS. KEYSTONE STEEL & WIRE COMPANY, Peoria (South Bartonville), Illinois.
Filed June 3, 1932. Serial No. 327,695. PUBLISHED AUGUST 2, 1932. Class 13.

297,992. METAL PIPE FITTINGS. PROVIDENCE FITTINGS COMPANY, INC., Lockport, N. Y.
Filed June 3, 1932. Serial No. 327,706. PUBLISHED AUGUST 2, 1932. Class 13.

297,993. RAZOR BLADES. ALEX RAFSKY, New York, N. Y.
Filed June 2, 1932. Serial No. 327,663. PUBLISHED AUGUST 2, 1932. Class 23.

297,994. MECHANICAL ADVERTISING DISPLAYS. CHARLES P. GRAY, West Chester, Pa.
Filed June 3, 1932. Serial No. 327,691. PUBLISHED JULY 26, 1932. Class 23.

297,995. AIRCRAFT ENGINES. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England.
Filed May 31, 1932. Serial No. 327,618. PUBLISHED JULY 26, 1932. Class 23.

297,996. SLIDE FASTENERS. WALDES KOH-I-NOOR, INC., Long Island City, N. Y.
Filed May 21, 1932. Serial No. 327,327. PUBLISHED AUGUST 2, 1932. Class 13.

297,997. MACHINERY FOR TAMPING, VIBRATING, PLACING, AND PACKING WET CONCRETE MIXTURE IN MOLDS AND FORMS. GRAHAM M. GORDON, Los Angeles, Calif., assignor to Viber Company, Limited, of Los Angeles, Calif., a Corporation.
Filed May 7, 1932. Serial No. 326,853. PUBLISHED JULY 26, 1932. Class 23.

297,998. AUTOMOBILES, VEHICLE BODIES, BICYCLES AND TRICYCLES, MOTOR CYCLES, AND CONSTRUCTIVE PARTS THEREOF; AIRPLANES, FLYING BOATS, AND CONSTRUCTIVE PARTS THEREOF; ROW-BOATS, SAIL BOATS, MOTOR BOATS, YACHTS, AND CONSTRUCTIVE PARTS THEREOF. SOCIÉTÉ GÉNÉRALE AÉRONAUTIQUE, Paris, France.
Filed May 12, 1932. Serial No. 327,032. PUBLISHED AUGUST 2, 1932. Class 19.

297,999. CAMERAS, SENSITIZED PHOTOGRAPHIC PLATES AND FILMS, PHOTOGRAPHIC CAMERA TRIPODS, AND CAMERA PLATE-HOLDERS. MAKINA CORPORATION, New York, N. Y.
Filed May 14, 1932. Serial No. 327,099. PUBLISHED JULY 26, 1932. Class 26.

298,000. MEAT AND BREAD SLICING MACHINES AND PARTS THEREOF. U. S. SLICING MACHINE COMPANY, La Porte, Ind.
Filed March 21, 1932. Serial No. 325,351. PUBLISHED AUGUST 2, 1932. Class 23.

298,001. CERTAIN NAMED BELTINGS AND PACKINGS. KIRCHBACH'SCHE WERKE KIRCHBACH & CO., Coswig, Germany.
Filed March 24, 1932. Serial No. 325,481. PUBLISHED AUGUST 2, 1932. Class 35.

298,002. CLUTCH PLATES AND DISCS. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio.
Filed April 29, 1932. Serial No. 326,602. PUBLISHED AUGUST 2, 1932. Class 23.

298,003. CLEANER FOR EYE-GLASS LENSES. OTTAWA PRODUCTS COMPANY, Toledo, Ohio.
Filed April 25, 1932. Serial No. 326,492. PUBLISHED AUGUST 2, 1932. Class 4.

298,004. RADIO RECEIVING SETS, TELEVISION RECEIVING SETS, ETC. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed April 23, 1932. Serial No. 326,431. PUBLISHED JULY 26, 1932. Class 21.

298,005. PREPARED LIQUID WAX. JACK FELDMAN, doing business as Felco Products & Mfg. Co., New York, N. Y.
Filed April 19, 1932. Serial No. 326,313. PUBLISHED AUGUST 2, 1932. Class 16.

298,006. ABRADANTS CONSISTING OF A METALLIC WIRE. JOHN W. GOTTSCHALK MFG. CO., doing business as Metal Sponge Sales Corporation, Philadelphia, Pa.
Filed April 12, 1931. Serial No. 326,012. PUBLISHED AUGUST 2, 1932. Class 4.

298,007. LUBRICATION OILS AND GREASES. JOHN P. PAULSON, Chicago, Ill.
Filed March 31, 1932. Serial No. 325,694. PUBLISHED JULY 26, 1932. Class 15.

298,008. FILTERED GASOLINE. AITKEN AND MCDONALD COMPANY, Beaumont, Tex.
Filed March 18, 1932. Serial No. 325,382. PUBLISHED AUGUST 2, 1932. Class 15.

298,009. LACQUER ENAMELS. BERRY BROTHERS (INCORPORATED), Detroit, Mich.
Filed May 31, 1932. Serial No. 327,575. PUBLISHED JULY 26, 1932. Class 16.

298,010. AUTOMOBILE BODY POLISH. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed May 24, 1932. Serial No. 327,394. PUBLISHED JULY 26, 1932. Class 16.

298,011. STORAGE BATTERIES. A. RUSSELL NICOLAY, doing business as Nik-O-Life Battery Company, Indianapolis, Ind.
Filed May 28, 1932. Serial No. 327,562. PUBLISHED JULY 26, 1932. Class 21.

298,012. GASOLINE. PANHANDLE REFINING COMPANY, Wichita Falls, Tex.
Filed May 27, 1932. Serial No. 327,523. PUBLISHED JULY 26, 1932. Class 15.

298,013. STORAGE BATTERIES. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed May 27, 1932. Serial No. 327,495. PUBLISHED JULY 26, 1932. Class 21.

298,014. PINS, BADGES, AND KEYS, ALL MADE OR PLATED WITH PRECIOUS METAL. ALPHA CHI SIGMA FRATERNITY, Indianapolis, Ind.
Filed May 18, 1932. Serial No. 327,211. PUBLISHED JULY 26, 1932. Class 28.

298,015. BATTERIES, CABLES FOR ELECTRIC CIRCUITS, AND PARTS THEREOF. HICKOK OIL CORPORATION, Toledo, Ohio.
Filed May 9, 1932. Serial No. 326,899. PUBLISHED AUGUST 2, 1932. Class 21.

298,016. SHOE DRESSING. CLARK-DUNN MANUFACTURING COMPANY, St. Louis, Mo.
Filed April 30, 1932. Serial No. 326,634. PUBLISHED JULY 26, 1932. Class 4.

298,017. BOXES OR CONTAINERS FOR STORAGE BATTERIES. AMERICAN CONTAINER CORPORATION, St. Paul, Minn.
Filed June 3, 1932. Serial No. 327,671. PUBLISHED JULY 26, 1932. Class 21.

298,018. CLEANSER FOR GENERAL HOUSEHOLD AND LAUNDRY USES. OSBORNE F. HATCH, doing business as Lee Products Co., Lee, Mass.
Filed June 2, 1932. Serial No. 327,657. PUBLISHED AUGUST 2, 1932. Class 4.

298,019. INSULATED ELECTRICAL WIRES AND CABLES. GENERAL CABLE CORPORATION, New York, N. Y.
Filed May 28, 1932. Serial No. 327,614. PUBLISHED JULY 26, 1932. Class 21.

298,020. ELECTRIC INCANDESCENT LAMPS. HYGRADE SYLVANIA CORPORATION, Salem, Mass.
Filed May 31, 1932. Serial No. 327,589. PUBLISHED JULY 26, 1932. Class 21.

298,021. OILS, GREASES, AND GASOLINE. THE AMERICAN OIL COMPANY, Baltimore, Md.
Filed June 14, 1932. Serial No. 327,964. PUBLISHED AUGUST 2, 1932. Class 15.

298,022. RUBBER PAINT. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,881. PUBLISHED JULY 26, 1932. Class 16.

298,023. CANNED PEELED TOMATOES. DOMENICO D'ANGIOLA, New York, N. Y.
Filed June 11, 1932. Serial No. 327,905. PUBLISHED JULY 19, 1932. Class 46.

298,024. FRESH CITRUS FRUIT. NORTH WHITTIER HEIGHTS CITRUS ASSOCIATION, Puente, Calif.
Filed June 13, 1932. Serial No. 327,948. PUBLISHED JULY 19, 1932. Class 46.

298,025. RUBBER HEELS. THE I. T. S. COMPANY, Elyria, Ohio.
Filed May 27, 1932. Serial No. 327,508. PUBLISHED JULY 12, 1932. Class 39.

298,026. FRESH DECIDUOUS FRUIT. SANTA CLARA PEAR ASSOCIATION, San Jose, Calif.
Filed June 13, 1932. Serial No. 327,948. PUBLISHED JULY 19, 1932. Class 46.

298,027. ICE CREAM CONFECTIONS. THE ICE CREAM SANDWICH CORPORATION, Long Island City, N. Y.
Filed May 27, 1932. Serial No. 327,509. PUBLISHED JULY 19, 1932. Class 46.

298,028. SALTED PEANUTS AND PEANUT BARS. PLANTERS NUT & CHOCOLATE COMPANY, Suffolk, Va., and Wilkes-Barre, Pa.
Filed June 6, 1932. Serial No. 327,766. PUBLISHED JULY 19, 1932. Class 46.

298,029. WOMEN'S AND MISSES' HATS. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed May 23, 1932. Serial No. 327,335. PUBLISHED JULY 19, 1932. Class 39.

298,030. DRIED PEA BEANS, DRIED LIMA BEANS, DRIED MARROW BEANS, DRIED GREEN SPLIT PEAS, DRIED YELLOW SPLIT PEAS, DRIED LENTILS, AND RICE. SUPERIOR PACKING CORP., New York, N. Y.
Filed May 26, 1932. Serial No. 327,487. PUBLISHED JULY 19, 1932. Class 46.

298,031. CAVIAR, MAYONNAISE, COOKING WINE, CANNED CRUSHED FRUITS IN SYRUP, CANNED TABLE SYRUPS FOR FOOD PURPOSES, OLIVES, AND TOMATO JUICE. COOPER SUPPLY COMPANY, Philadelphia, Pa.
Filed May 19, 1932. Serial No. 327,245. PUBLISHED JULY 19, 1932. Class 46.

298,032. WOMEN'S LEATHER SHOES. BANCROFT-WALKER COMPANY, Boston, Mass.
Filed May 28, 1932. Serial No. 327,333. PUBLISHED JULY 12, 1932. Class 39.

298,033. MISSES' AND CHILDREN'S SHOES, MADE OF LEATHER AND FABRIC AND COMBINATIONS OF THE SAME. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed May 17, 1932. Serial No. 327,202. PUBLISHED JULY 19, 1932. Class 39.

298,034. RECLAIMED RUBBER. THE XYLOS RUBBER COMPANY, Akron, Ohio.
Filed June 18, 1932. Serial No. 328,110. PUBLISHED JULY 26, 1932. Class 1.

298,035. WOMEN'S SHOES MADE OF LEATHER, FABRIC, AND COMBINATIONS THEREOF. PEIRCE SHOE CO., Richmond, Va.
Filed May 17, 1932. Serial No. 327,198. PUBLISHED JULY 12, 1932. Class 39.

298,036. TREATED FIBER BOARDS HAVING DISTRIBUTED THERETHROUGH SUBSTANCES TOXIC TO INSECTS AND FUNGI. THE CELOTEX COMPANY, Chicago, Ill.
Filed May 23, 1932. Serial No. 327,339. PUBLISHED JULY 19, 1932. Class 12.

298,037. IRON ALLOY CASTINGS. CAMPBELL, WYANT & CANNON FOUNDRY COMPANY, Muskegon Heights, Mich.
Filed May 31, 1932. Serial No. 327,579. PUBLISHED JULY 26, 1932. Class 14.

298,038. PAPER FLONGS FOR MAKING PRINTING PLATES. PABAMAT LIMITED, London, England.
Filed June 1, 1932. Serial No. 327,636. PUBLISHED JULY 26, 1932. Class 50.

298,039. WOMEN'S SCARFS AND JACKETS. NUSBAUM, KNITTERS, INC., Ozone Park, Long Island, N. Y.
Filed June 2, 1932. Serial No. 327,662. PUBLISHED JULY 12, 1932. Class 39.

298,040. CHARCOAL. RAY FUEL COMPANY, Detroit, Mich.
Filed June 13, 1932. Serial No. 327,945. PUBLISHED AUGUST 2, 1932. Class 1.

298,041. COAL. BLACK DIAMOND COAL MINING COMPANY, Birmingham, Ala.
Filed May 20, 1932. Serial No. 327,260. PUBLISHED JULY 26, 1932. Class 1.

298,042. RUBBER SPONGES. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn.
Filed June 17, 1932. Serial No. 328,078. PUBLISHED JULY 26, 1932. Class 1.

298,043. SUSPENDERS, GARTERS, AND APPAREL BELTS. LEONARD D. GREENHALL, doing business as Greenhall Bros., Brooklyn, and New York, N. Y.
Filed May 14, 1932. Serial No. 327,095. PUBLISHED JULY 19, 1932. Class 39.

298,044. FRESH APPLES. HAGOP TAKVORIAN, doing business as James H. Takvorian, Modesto, Calif.
Filed May 16, 1932. Serial No. 327,173. PUBLISHED JULY 19, 1932. Class 46.

298,045. SAUCE OR CONDIMENT—NAMELY, A LIQUID, SPICY TABLE SAUCE, USED FOR SEASONING SOUPS, GRAVIES, MEATS, GAME, FISH, AND VEGETABLES. BLUE PLATE FOODS, INC., New Orleans, La.
Filed May 12, 1932. Serial No. 327,082. PUBLISHED JULY 19, 1932. Class 46.

298,046. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BROWN SHOE COMPANY, INC., St. Louis, Mo.
Filed May 16, 1932. Serial No. 327,129. PUBLISHED JULY 12, 1932. Class 39.

298,047. CHILDREN'S LEATHER SHOES. EPHRATA SHOE COMPANY, Ephrata, Pa.
Filed May 12, 1932. Serial No. 327,007. PUBLISHED JULY 12, 1932. Class 39.

298,048. FOUNDATION GARMENTS, CORSETS, BRASSIÈRES, AND COMBINATIONS OF THE SAME. POIRETTE CORSETS, INC., New York, N. Y.
Filed May 12, 1932. Serial No. 327,024. PUBLISHED JULY 12, 1932. Class 39.

298,049. CANNED CITRUS FRUITS. FLORIDA CITRUS EXCHANGE, Tampa, Fla.
Filed May 6, 1932. Serial No. 326,812. PUBLISHED JULY 19, 1932. Class 46.

298,050. FOUNDATION GARMENTS. ARTFORM INCORPORATED, Philadelphia, Pa.
Filed May 11, 1932. Serial No. 326,972. PUBLISHED JULY 12, 1932. Class 39.

298,051. CANNED FISH. ANTONIO ALONSO, HIJOS, Vigo, Spain.
Filed May 5, 1932. Serial No. 326,773. PUBLISHED JULY 19, 1932. Class 46.

298,052. MEN'S AND BOYS' BOOTS AND SHOES WITH LEATHER UPPERS AND WITH EITHER LEATHER OR COMPOSITION SOLES, WITH OR WITHOUT FABRIC LINING. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed April 23 1932. Serial No. 326,447. PUBLISHED JULY 12, 1932. Class 39.

298,053. CERTAIN NAMED WEARING APPAREL. THE P. GOLDSMITH SONS CO., Cincinnati, Ohio.
Filed April 15, 1932. Serial No. 326,142. PUBLISHED JULY 12, 1932. Class 39.

298,054. ICE CREAM AND FROZEN CONFECTIONS. LUCKY BREAK CO., San Diego, Calif.
Filed April 12, 1932. Serial No. 326,016. PUBLISHED JULY 19, 1932. Class 46.

298,055. LUBRICATING OILS SOLD IN SEALED CANS. STRAUSS STORES CORPORATION, Brooklyn, N. Y.
Filed June 20, 1932. Serial No. 328,140. PUBLISHED AUGUST 2, 1932. Class 15.

298,056. ELECTRIC HAIR DRYERS. THE ELECTRIC MFG. CO., San Francisco, Calif.
Filed June 24, 1932. Serial No. 328,270. PUBLISHED AUGUST 2, 1932. Class 44.

298,057. SOAP. LEON R. MACKENZIE, Des Moines, Iowa, assignor to L. R. Mackenzie Incorporated, Tulsa, Okla, a Corporation of Oklahoma.
Filed June 20, 1932. Serial No. 328,131. PUBLISHED AUGUST 2, 1932. Class 4.

298,058. HAIR WAVING PADS. ZOTOS CORPORATION, New York, N. Y.
Filed June 18, 1932. Serial No. 328,111. PUBLISHED AUGUST 2, 1932. Class 44.

298,059. SOAP. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio.
Filed June 16, 1932. Serial No. 328,038. PUBLISHED JULY 26, 1932. Class 4.

298,060. VARNISH. GREAT LAKES VARNISH WORKS INC., Chicago, Ill.
Filed June 15, 1932. Serial No. 328,003. PUBLISHED JULY 26, 1932. Class 16.

298,061. CORUNDUM AND ROUGE FOR GRINDING AND POLISHING LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed June 14, 1932. Serial No. 327,967. PUBLISHED JULY 26, 1932. Class 4.

298,062. LIQUID WAX. THE SELIG COMPANY, Atlanta, Ga.
Filed June 14, 1932. Serial No. 327,990. PUBLISHED AUGUST 2, 1932. Class 16.

298,063. GASKETS AND FINISHED SHEET MATERIALS FOR GASKETS. COOPER MANUFACTURING COMPANY, Marshalltown, Iowa.
Filed May 13, 1932. Serial No. 327,046. PUBLISHED JULY 12, 1932. Class 35.

298,064. TILES AND CONDUITS OTHER THAN THOSE OF METAL. THE CLAY CITY PIPE COMPANY, Uhrichsville, Ohio.
Filed May 16, 1932. Serial No. 327,132. PUBLISHED JULY 12, 1932. Class 12.

298,065. BUILDING TILE. UNITED STATES QUARRY TILE COMPANY, Parkersburg, W. Va.
Filed May 21, 1932. Serial No. 327,326. PUBLISHED JULY 19, 1932. Class 12.

298,066. LEATHER BELTING. PFEIFF BROTHERS, Brooklyn, N. Y.
Filed April 25, 1932. Serial No. 326,494. PUBLISHED JULY 26, 1932. Class 35.

298,067. CEMENTITIOUS SURFACE COATING FOR FLOORS, WALLS, AND OTHER STRUCTURES. SUPER CONCRETE EMULSIONS, LTD., Los Angeles, Calif.
Filed April 26, 1932. Serial No. 326,530. PUBLISHED JULY 19, 1932. Class 12.

298,068. GENERAL TONIC. REED & CARNRICK, Jersey City, N. J.
Filed March 16, 1932. Serial No. 325,185. PUBLISHED JULY 12, 1932. Class 6.

298,069. ASPHALT COMPOUND, USED AS A JOINT FILLER, ROOFING COMPOUND, ROOF COATING, SEALING COATING, SEALING COMPOUND FOR BATTERY CELLS, COLD ROLLED SHEET TOP, AND ASPHALT. BAYLUS E. EARLE, Colfax, La.
Filed May 2, 1932. Serial No. 326,675. PUBLISHED JULY 12, 1932. Class 12.

298,070. CONCRETE BUILDING BLOCKS. FRANCIS J. STRAUB, New Kensington, Pa.
Filed April 19, 1932. Serial No. 326,271. PUBLISHED JULY 19, 1932. Class 12.

298,071. GRASS AND FIELD SEED. SEABOARD SEED COMPANY, Philadelphia, Pa.
Filed April 18, 1932. Serial No. 326,234. PUBLISHED JULY 26, 1932. Class 1.

298,072. AUTOMOBILE TIRES AND INNER TUBES. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed March 19, 1932. Serial No. 325,302. PUBLISHED JULY 12, 1932. Class 35.

298,073. PLANT RATION. DIXIE MILLS COMPANY, East St. Louis, Ill.
Filed April 25, 1932. Serial No. 326,462. PUBLISHED JULY 26, 1932. Class 10.

298,074. PISTON AND PACKING RINGS. MICRO MACHINE COMPANY, Bettendorf, Iowa.
Filed April 12, 1932. Serial No. 326,019. PUBLISHED AUGUST 2, 1932. Class 35.

298,075. MEAT AND BREAD SLICING MACHINES AND PARTS THEREOF. U. S. SLICING MACHINE COMPANY, La Porte, Ind.
Filed March 21, 1932. Serial No. 325,355. PUBLISHED AUGUST 2, 1932. Class 23.

298,076. MEAT AND BREAD SLICING MACHINES AND PARTS THEREOF. U. S. SLICING MACHINE COMPANY, La Porte, Ind.
Filed March 21, 1932. Serial No. 325,352. PUBLISHED AUGUST 2, 1932. Class 23.

298,077. CLUTCH PLATES AND DISCS. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio.
Filed April 29, 1932. Serial No. 326,601. PUBLISHED AUGUST 2, 1932. Class 23.

298,078. READY MIXED PAINTS. CANTOR BROS., doing business as Grand Shellac Works, Brooklyn, N. Y.
Filed March 10, 1932. Serial No. 324,984. PUBLISHED JULY 26, 1932. Class 16.

298,079. PORTABLE PATCHING REPAIR KITS FOR REPAIRING RUBBER TUBING (INCLUDING AUTO TIRE TUBES) AND AUTOMOBILE TOPS AND THE LIKE. PENN-JERSEY AUTO STORES, INC., Easton, Pa.
Filed May 20, 1932. Serial No. 327,284. PUBLISHED JULY 26, 1932. Class 35.

298,080. PUMPS, WATER-MOTORS, AND MECHANISMS FOR PROPORTIONING REAGENTS FED TO A WATER-PURIFYING SYSTEM. NATIONAL ALUMINATE CORPORATION, Chicago, Ill.
Filed April 1, 1932. Serial No. 325,718. PUBLISHED JULY 26, 1932. Class 23.

298,081. SEEDS—NAMELY, FLOWER, GARDEN, VEGETABLE, FIELD, AND LAWN; BULBS AND PLANTS. HERMAN C. LOCKE, doing business as Locke Nursery and Floral Co., New Braunfels, Tex.
Filed February 26, 1932. Serial No. 324,536. PUBLISHED JULY 26, 1932. Class 1.

298,082. LEATHER GLOVES. CROCETTA BROS. & COMPANY, Gloversville, N. Y.
Filed March 3, 1932. Serial No. 324,733. PUBLISHED JULY 12, 1932. Class 39.

298,083. RESTAURANT FOODS. HORMANN-KAESS CO. INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,538. PUBLISHED JULY 19, 1932. Class 46.

298,084. FOOD RELISHES, SALAD SPREADS, SALAD DRESSING, PICKLES, BARBECUE SAUCE, AND PREPARED MUSTARD. THE OLDS PRODUCTS CO., Chicago, Ill.
Filed February 27, 1932. Serial No. 324,568. PUBLISHED JULY 19, 1932. Class 46.

298,085. FROZEN CONFECTIONS COMPRISING A BODY COMPOSED OF A FROZEN MILK PRODUCT AND A COATING OF EDIBLE SUBSTANCE. SOUTHERN DAIRIES, INC., Washington, D. C.
Filed January 8, 1932. Serial No. 322,837. PUBLISHED JULY 19, 1932. Class 46.

298,086. CURRY SAUCE. JEAN SUARIS GINTOTAHEVAGE, Marseille, France.
Filed January 27, 1932. Serial No. 323,504. PUBLISHED JULY 19, 1932. Class 46.

298,087. FROZEN CONFECTIONS COMPRISING A BODY COMPOSED OF A FROZEN MILK PRODUCT AND A COATING OF EDIBLE SUBSTANCE. SOUTHERN DAIRIES, INC., Washington, D. C.
Filed January 8, 1932. Serial No. 322,836. PUBLISHED JULY 19, 1932. Class 46.

298,088. MALT BEVERAGE PACKED IN CARTONS AND CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. GOLDEN WEST BREWING COMPANY, Oakland, Calif.
Filed December 17, 1931. Serial No. 322,213. PUBLISHED AUGUST 2, 1932. Class 48.

298,089. CACAO, CHOCOLATE, SUGAR-WARES, CONFECTIONERY ARTICLES AND BAKE-WARES—NAMELY, CHOCOLATE SLABS, CHOCOLATE CAKES, COCOA, CACAOBUTTER, CARAMELS, HARD CANDY, DRAGEES, FONDANTS, ALMOND PASTE, GOODS, HONEY CAKES, WAFERS, BISCUITS, GINGERBREAD, PASTRY, DESSERTS, FRUIT PASTES. HARTWIG & VOGEL AKTIENGESELLSCHAFT, Dresden, Germany.
Filed December 19, 1931. Serial No. 322,287. PUBLISHED JULY 19, 1932. Class 46.

298,090. FOOD CONCENTRATE USED IN THE PREPARATION AND MANUFACTURE OF ICE CREAM, CONSISTING PRINCIPALLY OF POWDERED ALGAROBA BEANS. EMMA FRITSCH, doing business as Duval's Food Products Co., Hawthorne, N. J.
Filed December 31, 1931. Serial No. 322,584. PUBLISHED MARCH 8, 1932. Class 46.

298,091. FRUIT PRESERVES AND PEANUT-BUTTER. THE BAMA COMPANY, doing business as Ancco Preserving Co., Birmingham, Ala.
Filed November 7, 1931. Serial No. 320,885. PUBLISHED JULY 19, 1932. Class 46.

298,092. NONALCOHOLIC, MALTLESS FRUIT BEVERAGE SOLD AS A SOFT DRINK. ALBERT L. WIDDIS, Long Beach, Calif.
Filed October 28, 1931. Serial No. 320,562. PUBLISHED JULY 26, 1932. Class 45.

298,093. ALL KINDS OF HATS, PARTICULARLY LADIES' HATS. AGNES RITTENER, doing business as Agnes, Paris, France.
Filed October 27, 1931. Serial No. 320,510. PUBLISHED JULY 12, 1932. Class 39.

298,094. POTATO SALAD. TRIPOLI FOODS, INCORPORATED, Baltimore, Md.
Filed September 21, 1931. Serial No. 319,267. PUBLISHED JULY 19, 1932. Class 46.

298,095. CAKE FLOUR. THE COLORADO MILLING & ELEVATOR CO., Denver, Colo., and Twin Falls, Idaho.
Filed October 13, 1931. Serial No. 320,022. PUBLISHED NOVEMBER 17, 1931. Class 46.

298,096. FISHING LINES. THE HORTON MANUFACTURING COMPANY, Bristol, Conn.
Filed June 24, 1932. Serial No. 328,278. PUBLISHED AUGUST 2, 1932. Class 22.

298,097. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed June 20, 1932. Serial No. 328,122. PUBLISHED JULY 26, 1932. Class 22.

298,098. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed June 20, 1932. Serial No. 328,121. PUBLISHED JULY 26, 1932. Class 22.

298,099. FISHING LINES. JOHN H. DAVIS COMPANY, doing business as Sunset Line & Twine Company, San Francisco, Calif.
Filed June 13, 1932. Serial No. 327,936. PUBLISHED JULY 26, 1932. Class 22.

298,100. POCKET BILLIARD TABLES. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed June 11, 1932. Serial No. 327,902. PUBLISHED JULY 26, 1932. Class 22.

298,101. CHECKER GAME. JACK GEISS, Cleveland, Ohio.
Filed June 10, 1932. Serial No. 327,871. PUBLISHED JULY 26, 1932. Class 22.

298,102. WHISKEY. LEM MOTLOW, doing business as Jack Daniel, Lynchburg, Tenn.
Filed June 8, 1932. Serial No. 327,826. PUBLISHED JULY 26, 1932. Class 49.

298,103. TENNIS AND BADMINTON RACKETS. DUNLOP RUBBER COMPANY, LIMITED, Birmingham, England.
Filed June 8, 1932. Serial No. 327,818. PUBLISHED JULY 26, 1932. Class 22.

298,104. REFRIGERATOR DISPLAY CASES, COMMERCIAL REFRIGERATORS, AND STORE AND RESTAURANT EQUIPMENT. YORK REFRIGERATOR COMPANY, York, Pa.
Filed June 1, 1932. Serial No. 327,642. PUBLISHED AUGUST 2, 1932. Class 31.

298,105. COIN-CONTROLLED, MARBLE-PROJECTING BOARD GAME. GANS COMPANY, Los Angeles, Calif.
Filed June 1, 1932. Serial No. 327,630. PUBLISHED JULY 26, 1932. Class 22.

298,106. BOWS, ARROWS, QUIVERS, AND ARM GUARDS. THE ARCHERS COMPANY, Pinehurst, N. C.
Filed June 1, 1932. Serial No. 327,628. PUBLISHED AUGUST 2, 1932. Class 22.

298,107. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed May 27, 1932. Serial No. 327,537. PUBLISHED JULY 26, 1932. Class 22.

298,108. HAND OPERATED TOY, CONSISTING OF A SPINNING MEMBER AND A CORD TO SUPPORT THE SAME HAVING HANDLES AT EACH END. ALTON E. WHITNEY, North Kansas City, Mo.
Filed May 26, 1932. Serial No. 327,492. PUBLISHED JULY 26, 1932. Class 22.

298,109. COIN-CONTROLLED BALL-PROJECTING AMUSEMENT DEVICES. HARRINGTON E. DRAKE, Newark, N. J.
Filed May 18, 1932. Serial No. 327,215. PUBLISHED AUGUST 2, 1932. Class 22.

298,110. REFRIGERATOR UNITS—NAMELY, CHILL TRAYS. NORGE CORPORATION, Detroit, Mich.
Filed May 4, 1932. Serial No. 326,757. PUBLISHED AUGUST 2, 1932. Class 31.

298,111. NONALCOHOLIC, MALTLESS BEVERAGES AND SYRUPS FOR MAKING SAME. THE VER-VAC PRODUCTS CO., INC., Baltimore, Md.
Filed May 2, 1932. Serial No. 326,695. PUBLISHED JULY 26, 1932. Class 45.

298,112. ICE BOXES AND REFRIGERATORS. MCKEE REFRIGERATOR COMPANY, Cobleskill, N. Y.
Filed April 22, 1932. Serial No. 326,383. PUBLISHED JULY 26, 1932. Class 31.

298,113. JAR RINGS. JENKINS BROS., New York, N. Y.
Filed January 15, 1932. Serial No. 323,050. PUBLISHED MARCH 8, 1932. Class 35.

298,114. CANNED MUSHROOMS, ANCHOVIES, FILETS OF ANCHOVIES, DRIED CURRANTS, TEA, SAFFRON FOR FLAVORING AND COLORING, HERBS FOR FOOD PURPOSES, CANNED RED PEPPERS, AND COFFEE. SOLO PRODUCTS CO., Chicago, Ill.
Filed March 3, 1932. Serial No. 324,764. PUBLISHED JULY 19, 1932. Class 46.

298,115. WARM AIR HEATING AND AIR CONDITIONING SYSTEMS. L. J. MUELLER FURNACE COMPANY, Milwaukee, Wis.
Filed August 24, 1931. Serial No. 318,429. PUBLISHED OCTOBER 13, 1931. Class 34.

298,116. WEIGHING MACHINES AND PARTS THEREOF. E. AND T. FAIRBANKS AND COMPANY, St. Johnsbury, Vt.
Filed January 18, 1932. Serial No. 323,214. PUBLISHED AUGUST 2, 1932. Class 26.

298,117. PLASTIC BLOCKS FOR MAKING DECORATIVE FLOORS. WILLIAM F. MULVEY, Los Angeles, Calif.
Filed September 16, 1931. Serial No. 319,120. PUBLISHED JULY 12, 1932. Class 12.

298,118. HEATING APPARATUS OR APPLIANCES—NAMELY, HEATING OVENS, STOVES, FURNACES, AND HEATERS USING GAS, COAL, AND LIKE FUELS. THE ESTATE STOVE COMPANY, Hamilton, Ohio.
Filed June 20, 1931. Serial No. 316,089. PUBLISHED AUGUST 2, 1932. Class 34.

298,119. POLISH FOR ALL "DUCO", LACQUER, PAINT, AND ENAMEL FINISHES. CELOLAC PRODUCTS COMPANY, Minneapolis, Minn.
Filed January 26, 1931. Serial No. 310,432. PUBLISHED JUNE 21, 1932. Class 16.

298,120. BRAKE LINING. S. B. G. HOLDING CORPORATION, doing business as Gouldbestos Corporation, New York, N. Y.
Filed April 7, 1931. Serial No. 313,055. PUBLISHED JULY 12, 1932. Class 35.

298,121. PNEUMATIC RUBBER TIRES FOR VEHICLES. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio.
Filed May 23, 1931. Serial No. 314,961. PUBLISHED JULY 26, 1932. Class 35.

298,122. ATTACHMENTS FOR SEWING MACHINES AND THE LIKE FOR FORMING PIPING AND THE LIKE. GARMENT ATTACHMENT CORPORATION, New York, N. Y.
Filed June 2, 1931. Serial No. 315,309. PUBLISHED JULY 26, 1932. Class 23.

298,123. ELECTRICALLY OPERATED SADIRONS FOR DOMESTIC USE. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio.
Filed June 10, 1931. Serial No. 315,633. PUBLISHED AUGUST 2, 1932. Class 21.

298,124. MEN'S HATS. LEVEL HAT CO., INC., South Norwalk, Conn.
Filed May 11, 1931. Serial No. 314,413. PUBLISHED JULY 26, 1932. Class 39.

298,125. TENNIS RACKETS AND BALLS; GOLF CLUBS, BALLS, TEES, AND BAGS; PLAYING CARDS, BRIDGE CARD SETS, TABLE BOARD GAMES PLAYED WITH PIECES, CARD GAMES, SKATES, SKIS, TOBOGGANS, AND HOCKEY STICKS. STERN BROTHERS, New York, N. Y.
Filed June 11, 1931. Serial No. 315,706. PUBLISHED JULY 26, 1932. Class 22.

298,126. GRAPEFRUIT JUICE, GRAPEFRUIT EXTRACT, AND GRAPEFRUIT CONCENTRATE USED FOR SOFT DRINK PURPOSES. WILLIAM HENRY YOUNGBLOOD, Santa Rosa, Tex.
Filed June 19, 1931. Serial No. 316,065. PUBLISHED AUGUST 2, 1932. Class 45.

298,127. MEDICINE FOR THE TREATMENT OF ASTHMA, CONSTIPATION, RHEUMATISM, PARALYSIS, SUGAR DIABETES, BLOOD POISON, HEMORRHOIDS, CATARACTS, AND STOMACH DISORDERS. A. L. FENNIMORE & SONS, Trenton, N. J.
Filed April 12, 1929. Serial No. 282,289. PUBLISHED JULY 12, 1932. Class 6.

298,128. CARBURETORS, CATALYZING APPARATUS, AND PARTS. SOCIÉTÉ INTERNATIONALE DU CATALEX, Paris, France.
Filed November 14, 1929. Serial No. 292,895. PUBLISHED JULY 26, 1932. Class 23.

298,129. INCENSE, PERFUMES, AND TOOTH PASTE. MORTON G. NEUMANN, doing business as Lucky Mo-Jo Products Co., Chicago, Ill.
Filed December 14, 1929. Serial No. 293,678. PUBLISHED MARCH 17, 1931. Class 6.

298,130. MINERAL OIL AND PSYLLIUM PREPARATION USED AS A NATURAL BOWEL REGULATOR. J. W. DART, doing business as Petro-Syllium Company, Chicago, Ill., assignor to Petro-Syllium Company, a Corporation of Illinois.
Filed May 26, 1930. Serial No. 301,250. PUBLISHED SEPTEMBER 9, 1930. Class 6.

298,131. STORAGE BATTERIES. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 29, 1930. Serial No. 299,653. PUBLISHED AUGUST 2, 1932. Class 21.

298,132. CANNED FRUITS, VEGETABLES, TOMATO PUREE, ETC. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed October 28, 1930. Serial No. 307,255. PUBLISHED JULY 19, 1932. Class 46.

298,133. NONALCOHOLIC, MALTLESS CONCENTRATES USED IN THE PREPARATION OF SOFT DRINKS. FLORASYNTH LABORATORIES, INC., New York, N. Y.
Filed September 8, 1930. Serial No. 305,434. PUBLISHED JULY 26, 1932. Class 45.

298,134. CANVAS, LEATHER AND SATIN SHOES, SLIPPERS, OXFORDS, AND PUMPS. LANSBURGH & BRO., Washington, D. C.
Filed October 4, 1930. Serial No. 306,403. PUBLISHED JULY 12, 1932. Class 39.

298,135. ELECTRIC INCANDESCENT LAMP BULBS AND BATTERIES. DALTON W. RIGGS, doing business as Duo-Tint Bulb & Battery Co., Chicago, Ill.
Filed February 12, 1932. Serial No. 324,115. PUBLISHED JULY 26, 1932. Class 21.

298,136. HYDRAULIC CEMENT CONCRETE PAVING MATERIAL. SUPER CONCRETE EMULSIONS, LTD., Los Angeles, Calif.
Filed February 15, 1932. Serial No. 324,197. PUBLISHED JULY 19, 1932. Class 12.

298,137. WHOLE EGGS. MARS, INCORPORATED, Chicago, Ill.
Filed February 20, 1932. Serial No. 324,350. PUBLISHED MAY 31, 1932. Class 46.

298,138. EGG WHITES. MARS, INCORPORATED, Chicago, Ill.
Filed February 20, 1932. Serial No. 324,351. PUBLISHED MAY 31, 1932. Class 46.

298,139. EGG YOLKS. MARS, INCORPORATED, Chicago, Ill.
Filed February 20, 1932. Serial No. 324,352. PUBLISHED MAY 31, 1932. Class 46.

298,140. SANITARY NAPKINS. THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa.
Filed January 4, 1932. Serial No. 322,687. PUBLISHED JULY 26, 1932. Class 44.

298,141. FERTILIZERS. NEMICIDE COMPANY, LIMITED, Honolulu, Territory of Hawaii.
Filed January 19, 1932. Serial No. 323,172. PUBLISHED JULY 26, 1932. Class 10.

298,142. FLOOR AND LINOLEUM FINISH. HOWE & FRENCH, INC., Boston, Mass.
Filed January 25, 1932. Serial No. 323,407. PUBLISHED JULY 26, 1932. Class 16.

298,143. REFRACTORY BRICKS FOR USE IN THE CONSTRUCTION OF FURNACES AND OVENS. DYNAMIDON-WERK ENGELHORN & CO. G. M. B. H., FABRIK FÜR KERAMISCHE PRODUKTE, FEUERFESTE MASSEN UND SCHLEIFMATERIALIEN, Mannheim-Waldhof, Germany.
Filed January 28, 1932. Serial No. 323,528. PUBLISHED JULY 12, 1932. Class 12.

298,144. SHOES CONSTRUCTED OF LEATHER. THE H. C. GODMAN COMPANY, Columbus, Ohio.
Filed December 7, 1931. Serial No. 321,871. PUBLISHED JULY 12, 1932. Class 39.

298,145. BUCKLES MADE OF NON-PRECIOUS METAL. THE RIKER COMPANY, Newark, N. J.
Filed December 8, 1931. Serial No. 321,919. PUBLISHED JULY 12, 1932. Class 40.

298,146. SHOES MADE WHOLLY OR IN PART OF LEATHER. JAMES A. BANISTER COMPANY, INC., Newark, N. J.
Filed March 2, 1932. Serial No. 324,692. PUBLISHED JULY 12, 1932. Class 39.

298,147. BRAKE LINING AND TRANSMISSION LINING. RATBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn.
Filed February 23, 1932. Serial No. 324,898. PUBLISHED JULY 26, 1932. Class 85.

298,148. PERIODICAL PUBLISHED WEEKLY. THE UNITED STATES SOCIETY, Washington, D. C.
Filed November 11, 1931. Serial No. 321,044. PUBLISHED JULY 12, 1932. Class 38.

298,149. ELECTRICAL COOKING DEVICES. JOHN L. BIGGS, Chicago, Ill.
Filed January 18, 1932. Serial No. 323,120. PUBLISHED AUGUST 2, 1932. Class 21.

298,150. SHOES MADE OF LEATHER AND FABRIC. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo.
Filed October 24, 1931. Serial No. 320,439. PUBLISHED JULY 19, 1932. Class 39.

298,151. LADIES' AND MISSES' SHOES, SLIPPERS, PUMPS, AND LOW QUARTERS OF LEATHER, FABRIC, AND COMBINATIONS THEREOF. CARMO SHOE MFG. CO., Carthage, Mo.
Filed November 30, 1931. Serial No. 321,586. PUBLISHED JULY 12, 1932. Class 39.

298,152. SOAP, GRINDSTONES, PUMICE-STONES, ETC. M. E. MAYER, Vienna, Austria.
Filed June 30, 1931. Serial No. 316,496. PUBLISHED JULY 26, 1932. Class 4.

298,153. CERTAIN PAINT PRODUCTS. STANDARD-BRONZEFARBEN-WERKE CARL ECKART, Furth, Germany.
Filed September 24, 1931. Serial No. 319,374. PUBLISHED JULY 12, 1932. Class 16.

298,154. LAXATIVES. VITA-LAX CORPORATION, New York and Long Beach, N. Y.
Filed December 5, 1931. Serial No. 321,835. PUBLISHED MAY 31, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

298,155. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANKLIN MILLS COMPANY, Batavia, N. Y. Filed June 27, 1932. Serial No. 328,327.

Stetson

For Whole Wheat Flour.
Claims use since Nov. 20, 1929.

298,156. (CLASS 12. CONSTRUCTION MATERIALS.) INTERNATIONAL NON-STAINING CEMENT COMPANY, Brooklyn, N. Y. Filed Feb. 12, 1932. Serial No. 324,105.

CIMENT FONDU

For Building Cement.
Claims use since February, 1923.

298,157. (CLASS 39. CLOTHING.) SOCIÉTÉ ANONYME LUCIEN LELONG, Paris, France. Filed Jan. 30, 1932. Serial No. 323,636.

Modes et Manteaux LUCIEN LELONG MARQUE DÉPOSÉE
16, AVENUE MATIGNON. PARIS

For Articles of Clothing for Women, Misses and Children Comprising Dresses, Jackets, Cloaks, Capes, Boleros, Bonnets, Tippets, Scarfs and Muffs of Fabric and of Fur and Undergarments for Women, Misses and Children.
Claims use since Sept. 25, 1919.

298,158. (CLASS 39. CLOTHING.) OLIVER BROS., Philadelphia, Pa. Filed Oct. 29, 1931. Serial No. 320,603.

Realace

For Hosiery.
Claims use since Aug. 20, 1931.

298,159. (CLASS 39. CLOTHING.) JERSILD KNITTING COMPANY, Neenah, Wis. Filed Aug. 17, 1931. Serial No. 318,062.

Swagger JACQUETTE

For Men's, Women's and Children's Outer Coats and Jackets.
Claims use since Aug. 12, 1931.

298,160. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) NEW YORK BOAT OAR CO., INC., New York, N. Y. Filed June 24, 1930. Serial No. 302,790.

SELECT

For Boat Oars and Paddles.
Claims use since Jan. 1, 1910.

298,161. (CLASS 39. CLOTHING.) RITA BARBER, doing business as Southland Garment Company, Stamford, Tex. Filed Mar. 30, 1931. Serial No. 312,735.

Rita Barber

For Dresses for Misses, Women, and Children, Men's Suits; Slips, Brassières, Misses', Women's, Children's and Men's Underwear and Hosiery.
Claims use since February, 1929.

298,162. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) PRICE BATTERY CORPORATION, Philadelphia, Pa. Filed July 12, 1932. Serial No. 328,828.

LYONS

For Storage Batteries.
Claims use since Jan. 1, 1920.

298,163. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) BURGESS BATTERY COMPANY, Madison, Wis. Filed Aug. 16, 1932. Serial No. 329,573.

UNI-CEL

For Electric Batteries.
Claims use since Mar. 6, 1920.

298,164. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE DUBOREL CORPORATION, Jersey City, N. J. Filed July 20, 1932. Serial No. 328,930.

COMPOUND DUNLOP VAPOR

For Compound Oxygen Vapor.
Claims use since Mar. 1, 1931.

298,165. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) CLEO P. MOSELEY, doing business as Sumatra Jewelry Co., Upper Darby, Pa. Filed July 18, 1932. Serial No. 328,873.

SUMATRA

For Finger Rings.
Claims use since May 28, 1927.

298,166. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MEAD JOHNSON & COMPANY, Evansville, Ind. Filed July 1, 1932. Serial No. 328,497.

NEWFOUNDLAND

For Cod Liver Oil.
Claims use since Dec. 1, 1926.

298,167. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) AMERICAN CYSTOSCOPE MAKERS, INC., New York, N. Y. Filed June 28, 1932. Serial No. 328,344.

MAY OPHTHALMOSCOPE

For Ophthalmoscopes.
Claims use since 1917.

298,168. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PEOPLES DRUG STORES, INC., doing business as The Barnard Company, Washington, D. C. Filed June 4, 1932. Serial No. 327,736.

Odor Sweet

For Deodorant in Liquid and Cream Form.
Claims use since Mar. 14, 1916.

298,169. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOODYEAR YELLOW PINE COMPANY, Picayune, Miss. Filed May 4, 1932. Serial No. 326,747.

PEARL RIVER BRAND
Crosbys
CERTIFIED PRODUCTS

The drawing is lined for blue and yellow.
For Fresh Fruit and Vegetables, Namely, Strawberries, Satsuma Oranges, Peaches, Cabbage, Radishes, Peas and Turnips.
Claims use since May, 1930.

298,170. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) GAME O'GOLF, INC., Atlanta, Ga. Filed Oct. 31, 1931. Serial No. 320,671.

GAME O' GOLF

For Game—Namely, a Table Board Game Played with Player Pieces.
Claims use since June 27, 1931.

298,171. (CLASS 37. PAPER AND STATIONERY.) MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Nov. 11, 1931. Serial No. 321,016.

Engrave-Pack

For Writing Paper and Envelopes.
Claims use since Aug. 20, 1931.

298,172. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAM B. GILLETT AND IDUS T. GILLETT, El Paso, Tex. Filed Oct. 13, 1931. Serial No. 320,028.

Gillett's Sik O Chicken Gillett's

For a Food Product Composed of Meat and Other Ingredients and Mounted on a Stick.
Claims use since Sept. 1, 1931.

298,173. (CLASS 37. PAPER AND STATIONERY.) IRELAND & TAUB PAPER CO., INC., New York, N. Y. Filed Sept. 18, 1931. Serial No. 319,178.

FOLDRITE ENAMEL

For Coated Printing Paper.
Claims use since Sept. 1, 1931.

298,174. (CLASS 31. FILTERS AND REFRIGERATORS.) MINNEAPOLIS SHOW CASE & FIXTURE CO., Minneapolis, Minn. Filed Sept. 17, 1931. Serial No. 319,148.

"STERLING"

For Refrigerators, Ice Boxes, and Refrigerator Display Cases for Stores and Markets.
Claims use since Aug. 17, 1931.

298,175. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELIZABETH ARDEN, INC., New York, N. Y. Filed Sept. 11, 1931. Serial No. 318,933.

RUSSIAN PINE

For Bath Salts.
Claims use since Feb. 20, 1931.

298,176. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) MCCORD RADIATOR & MFG. CO., Detroit, Mich. Filed Aug. 31, 1931. Serial No. 318,639.

STEELPAK

For Gaskets.
Claims use since Aug. 14, 1931.

298,177. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HAROLD SKELTON, doing business as Dijon Laboratories, Fairfield, Conn. Filed Sept. 1, 1931. Serial No. 318,629.

DIJON

For Face Cream and Face Powder.
Claims use since Aug. 20, 1931.

298,178. (CLASS 15. OILS AND GREASES.) RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y. Filed Aug. 25, 1931. Serial No. 318,412.

RICHFIELD Golden

The drawing is lined for gold color.
For Gasoline.
Claims use since July 23, 1931.

298,179. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Aug. 24, 1931. Serial No. 318,343.

Fleetwood

For Electrical Suction Cleaners and Parts and Accessories Thereof—Namely, Attachment Suction Tools for Cleaning Walls, Upholstery and Radiators, Dust Collectors, Floor Brushes, for Attachment to Electrical Suction Cleaner Nozzles, and Extension Tubing for Attachment of Accessory Suction Devices.
Claims use since Aug. 15, 1931.

298,180. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, Cleveland, Ohio. Filed Aug. 8, 1931. Serial No. 317,817.

GYDE-RITE

For Rolling Mill Castings.
Claims use since Apr. 30, 1931.

298,181. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) HYGRADE SYLVANIA CORPORATION, Emporium, Pa. Filed Aug. 3, 1931. Serial No. 317,604.

EMURGENTCY

For Radio Tubes and Kits of Radio Tubes.
Claims use since July 3, 1931.

298,182. (CLASS 2. RECEPTACLES.) FRANK HARDY, Cheyenne, Wyo. Filed July 25, 1931. Serial No. 317,310.

"Cheyenne"

For Shopping Bags.
Claims use since July 11, 1931.

298,183. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) FEINSTEIN & COMPANY, INC., Philadelphia, Pa. Filed May 1, 1931. Serial No. 314,047.

Hygrade

For Gas Ranges.
Claims use since Jan. 3, 1919.

TRADE-MARK REGISTRATIONS RENEWED

38,564. CLOTHS AND STUFFS OF WOOL, WORSTED, OR HAIR. Registered July 8, 1902. WILLIAM FULTON & SONS LIMITED, Paisley, Scotland, a Corporation of Great Britain. Renewed July 8, 1932.

39,517. PREPARATIONS FOR THE HAIR. Registered December 23, 1902. Frank Parker. Renewed December 23, 1932, to PARKER-HERBEX CORPORATION, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,562. SARDINES. Registered December 30, 1902. FRANCIS H. LEGGETT & COMPANY, New York, N. Y., a Corporation of New York. Renewed December 30, 1932.

39,837. PAPER BAGS. Registered February 24, 1903. THE UNION BAG & PAPER CO., New York, N. Y. Renewed February 24, 1933, to Union Bag & Paper Corporation, Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey, by consolidation.

79,340. OINTMENT. Registered August 30, 1910. THOMAS HOLLOWAY. Renewed August 30, 1930, to Holloway's Pills Limited, London, England, a Corporation of Great Britain, successor.

79,341. OINTMENT. Registered August 30, 1910. THOMAS HOLLOWAY. Renewed August 30, 1930, to Holloway's Pills Limited, London, England, a Corporation of Great Britain, successor.

79,342. PILLS. Registered August 30, 1910. THOMAS HOLLOWAY. Renewed August 30, 1930, to Holloway's Pills Limited, London, England, a Corporation of Great Britain, successor.

79,976. OINTMENT. Registered October 25, 1910. THOMAS HOLLOWAY. Renewed October 25, 1930, to Holloway's Pills Limited, London, England, a Corporation of Great Britain, successor.

88,180. POPCORN. Registered September 3, 1912. HART & HOWELL. Renewed September 3, 1932, to The Hart & Howell Company, Inc., Brooklyn, Mich., a Corporation of Michigan, assignee by mesne assignments.

88,228. CORSETS. Registered September 10, 1912. AMERICAN LADY CORSET CO., Detroit, Mich., a Corporation of Michigan. Renewed September 10, 1932.

88,229. SUGAR. Registered September 10, 1912. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J. Renewed September 10, 1932, to The American Sugar Refining Company, New York, N. Y., a Corporation of New Jersey.

88,298. BUILDING, SHEATHING, ROOFING, INSULATING, AND CASE-LINING PAPERS. Registered September 10, 1912. THE HYDREX FELT & ENGINEERING COMPANY, Portland, Me., New York, N. Y., and Rahway, N. J. Renewed September 10, 1932, to Hydrex Asphalt Products Corporation, New York, N. Y., a Corporation of Delaware, successor.

88,357. WHEAT-FLOUR. Registered September 10, 1912. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed September 10, 1932, to Otis, McAllister & Co., San Francisco, Calif., a Firm, assignee by mesne assignments.

88,358. WHEAT-FLOUR. Registered September 10, 1912. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed September 10, 1932, to Otis, McAllister & Co., San Francisco, Calif., a Firm, assignee by mesne assignments.

88,359. WHEAT-FLOUR. Registered September 10, 1912. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed September 10, 1932, to Otis, McAllister & Co., San Francisco, Calif., a Firm, assignee by mesne assignments.

88,376. A CERTAIN NAMED PHARMACEUTICAL PRODUCT. Registered September 10, 1912. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland, a Corporation of Switzerland. Renewed September 10, 1932.

88,381. BLENDED COFFEE. Registered September 10, 1912. ST. LOUIS COFFEE & SPICE MILLS, St. Louis, Mo., a Corporation of Missouri. Renewed September 10, 1932.

88,382. BLENDED COFFEE. Registered September 10, 1912. ST. LOUIS COFFEE & SPICE MILLS, St. Louis, Mo., a Corporation of Missouri. Renewed September 10, 1932.

88,421. WHEAT-FLOUR. Registered September 17, 1912. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn., a Corporation of Minnesota. Renewed September 17, 1932.

88,432. CERTAIN NAMED MACHINES. Registered September 17, 1912. UNITED SHOE MACHINERY COMPANY. Renewed September 17, 1932, to United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass., a Corporation of New Jersey, assignee.

88,442. VACUUM CLEANING APPARATUS. Registered September 24, 1912. AMERICAN RADIATOR COMPANY, Chicago, Ill. Renewed September 24, 1932, to Arco Vacuum Corporation, New York, N. Y., a Corporation of Delaware, assignee.

88,509. CERTAIN NAMED FURNITURE. Registered September 24, 1912. MICHIGAN SEATING CO., Jackson, Mich., a Corporation of Michigan. Renewed September 24, 1932.

88,520. WHEAT-FLOUR. Registered September 24, 1912. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed September 24, 1932, to Otis, McAllister & Co., San Francisco, Calif., a Firm, assignee, by mesne assignments.

88,717. A GERMICIDE, A BACTERICIDE, AND AN INSECTICIDE. Registered October 15, 1912. WEST DISINFECTING COMPANY, New York, N. Y. Renewed October 15, 1932, to West Disinfecting Company, Long Island City, N. Y., a Corporation of New York.

88,874. WHEAT-FLOUR. Registered October 29, 1912. THE HARTER MILLING CO., Toledo and Fostoria, Ohio. Renewed October 29, 1932, to The Mennel Milling Company, Toledo, Ohio, a Corporation of Ohio, by change of name.

88,948. WHEAT-FLOUR. Registered October 29, 1912. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed October 29, 1932, to Otis, McAllister & Co., San Francisco, Calif., a Firm, assignee, by mesne assignments.

89,036. WHEEL-SCRAPERS, DRAG-SCRAPERS, AND GRADING-PLOWS. Registered November 5, 1912. THE KILBOURNE & JACOBS MANUFACTURING COMPANY. Renewed November 5, 1932, to The Case Crane & Kilbourne Jacobs Company, Columbus, Ohio, a Corporation of Ohio, assignee by mesne assignments.

89,086. LITHOGRAPHING-STONES. Registered November 12, 1912. LEWIS BECHTOLD. Renewed November 12, 1932, to The Senefelder Company, Inc., New York, N. Y., a Corporation of New York, assignee.

89,189. CERTAIN NAMED CARS, CARTS, AND WHEELBARROWS. Registered November 19, 1912. THE KILBOURNE & JACOBS MFG. CO. Renewed November 19, 1932, to The Case Crane & Kilbourne Jacobs Company, Columbus, Ohio, a Corporation of Ohio, assignee by mesne assignments.

89,373. MATCHES. Registered December 10, 1912. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jönköping, Sweden, a Corporation of Sweden. Renewed December 10, 1932.

89,394. LAXATIVE MEDICINES. Registered December 10, 1912. THE TARRANT COMPANY, New York, N. Y., a Corporation of New York. Renewed December 10, 1932.

89,445. RUBBER MACHINERY-BELTS AND COMPOSITION PACKING FOR STEAM-JOINTS. Registered December 17, 1912. THE CONTINENTAL SUPPLY COMPANY. Renewed December 17, 1932, to The Continental Supply Co., St. Louis, Mo., a Corporation of Delaware, assignee.

89,447. SHOW-CASES. Registered December 17, 1912. DETROIT SHOW CASE CO., Detroit, Mich., a Corporation of Michigan. Renewed December 17, 1932.

89,623. ELECTRIC FLAT-IRONS. Registered December 31, 1912. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed December 31, 1932.

89,903. GLOVES. Registered January 21, 1913. B. ALTMAN & Co., New York, N. Y., a Corporation of New York. Renewed January 21, 1933.

90,103. SUSPENDERS. Registered February 4, 1913. THE C. A. EDGARTON MANUFACTURING COMPANY. Renewed February 4, 1933, to President Suspender Company, Shirley, Mass., a Corporation of Massachusetts, assignee.

90,106. CERTAIN NAMED BRUSHES. Registered February 4, 1913, to PHILIP FOGARTY & CO., New York and Brooklyn, N. Y. Renewed February 4, 1933, to Charles Arthur Fogarty, doing business as Philip Fogarty Co., Brooklyn, N. Y., successor.

90,229. SAUCE AND PICKLES. Registered February 11, 1913. THE MIDLAND VINEGAR COMPANY LIMITED. Renewed February 11, 1933, to H. P. Sauce Limited, Birmingham, England, a Corporation of Great Britain, assignee.

90,290. LUBRICATING-OILS AND LUBRICATING-GREASES. Registered February 18, 1913. CAPSTONE MANUFACTURING CO., Newark, N. J., a Corporation of New Jersey. Renewed February 18, 1933.

90,352. BAKING-POWDER AND BAKING-SODA. Registered February 18, 1913. LAYTON PURE FOOD COMPANY, East St. Louis, Ill. Renewed February 18, 1933, to Rumford Chemical Works, Rumford, R. I., a Corporation of Rhode Island, assignee.

90,396. HOSIERY AND KNIT UNDERWEAR. Registered February 18, 1913. VERMONT HOSIERY AND MACHINERY COMPANY, Northfield and Bennington, Vt. Renewed February 18, 1933, to Vermont Hosiery and Machinery Company, New York, N. Y., and Northfield, Vt., a Corporation of Vermont.

90,400. BITUMINOUS COAL. Registered February 18, 1913. PEALE, PEACOCK & KERR, INC., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed February 18, 1933.

90,469. COTTON PIECE AND COTTON DRESS GOODS. Registered February 25, 1913. PACIFIC MILLS, Lawrence and Boston, Mass. Renewed February 25, 1933, to Pacific Mills, Boston, Mass., a Corporation of Massachusetts.

90,515. A LINIMENT FOR HUMAN USE. Registered March 4, 1913. DAVIS & LAWRENCE CO., New York, N. Y., a Corporation of New York. Renewed March 4, 1933.

90,535. A CULTURE OF LACTIC BACILLI FOR MEDICINAL USE. Registered March 4, 1913. EDWIN I. HARRINGTON. Renewed March 4, 1933, to B. B. Culture Laboratory, Inc., Yonkers, N. Y., a Corporation of New York, assignee by mesne assignments.

90,540. ENVELOPS, WRITING-PAPER, AND BLOTTERS. Registered March 4, 1913. ANNA JARVIS, Philadelphia, Pa. Renewed March 4, 1933.

90,612. FLUID EXTRACT OF BUCHU, CHILL-TONICS, AND MANDRAKE PILLS. Registered March 4, 1913. WINTERSMITH CHEMICAL CO., Louisville, Ky., a Corporation of Kentucky. Renewed March 4, 1933.

LABELS

REGISTERED OCTOBER 11, 1932

41,253.—*Title:* DESIGN #511. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published August 1, 1932.

41,254.—*Title:* 514. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published August 5, 1932.

41,255.—*Title:* 515. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published August 3, 1932.

41,256.—*Title:* WHITE LILY GRANULATED SOAP. For Granulated Soap. ABRAHAM BLUMBERG, doing business as Miller Soap Products, Los Angeles, Calif. Published May 1, 1932.

41,257.—*Title:* FOR GREATER SAFETY IN COAL MINING. For Explosives. BURTON EXPLOSIVES, INC., Cleveland, Ohio. Published January 15, 1932.

41,258.—*Title:* TERRITORIAL DESIGN NO. 330. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published April 30, 1931.

41,259.—*Title:* GOLD SEAL CERTIFIED. For Footwear. M. B. CLAFF & SONS, INC., Randolph, Mass. Published August 9, 1932.

41,260.—*Title:* SMART SHOES. For Shoes. M. B. CLAFF & SONS, INC., Randolph, Mass. Published August 9, 1932.

41,261.—*Title:* COLLEGE INN. For Tomato Juice. COLLEGE INN FOOD PRODUCTS CO., Chicago, Ill. Published August 1, 1932.

41,262.—*Title:* JENNY WREN—THE WHISTLING TEA KETTLE. For Tea Kettles. AMY DREVENSTEDT, New York, N. Y. Published June 1, 1932.

41,263.—*Title:* SMART SET SALMON. For Salmon. G. P. HALFERTY & Co., Seattle, Wash. Published June 10, 1932.

41,264.—*Title:* TOKETA. For Soap. HOLMAN SOAP CO., Chicago, Ill. Published December 22, 1931.

41,265.—*Title:* COLLEGE INN. For Beverages—Namely, Soft Drinks. HOTEL SHERMAN CO., Chicago, Ill. Published August 1, 1932.

41,266.—*Title:* BLUE JEWEL BEVERAGE SYRUP. For Beverage Syrup. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published June 30, 1932.

41,267.—*Title:* BLUE JEWEL EVAPORATED MILK. For Evaporated Milk. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published June 15, 1932.

41,268.—*Title:* BLUE JEWEL EVAPORATED MILK. For Evaporated Milk. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published June 15, 1932.

41,269.—*Title:* MAPLE LEAF. For Butter. KRENRICH-BRITTEN COMPANY, New York, N. Y. Published January 15, 1932.

41,270.—*Title:* SUL-FO-SALTS (FOR POULTRY). For a Preparation in Powdered Form for the Treatment of Ailments in Poultry. H. B. LANSDEN, Lubbock, Tex. Published June 24, 1932.

41,271.—*Title:* LIPTON'S TEA (BLUE LABEL). For Tea. THOMAS J. LIPTON, INC., Hoboken, N. J., Chicago, Ill., and San Francisco, Calif. Published May 1, 1932.

41,272.—*Title:* HUSKY. For Frozen Custard. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Published August 29, 1932.

41,273.—*Title:* MUENCHNER SUPER FIVE DOUBLE-HOPPED MALT SYRUP. For Malt Syrup. FRED. MUENCH, Brooklyn, N. Y. Published May 14, 1932.

41,274.—*Title:* SUPER-VALUE SHOES FOR ACTIVE FEET 100% LEATHER. For Shoes. MUNICIPAL SHOE CO. INC., Brooklyn, N. Y. Published July 25, 1932.

41,275.—*Title:* KLORO WASHING FLUID. For Washing Fluid. VINCENT PALUMBOS, doing business as Palumbos Lithography & Printery, Rochester, N. Y. Published August 6, 1932.

41,276.—*Title:* REEFER'S CONTINUOUS SPRAYER. For Spray Gun for Ejecting a Spray for the Purposes of Killing Moths, Flies, Mosquitoes, Etc. REEFER'S NO-MOTH, INC., New York, N. Y. Published April 5, 1932.

41,277.—*Title:* THE ALL AMERICAN. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published August 1, 1932.

41,278.—*Title:* MOUNTAIN MIST QUILTING COTTON. For Quilting Cotton. THE STEARNS & FOSTER CO., Lockland, Ohio. Published November 6, 1931.

41,279.—*Title:* RAZOR HONING COMPOUND. For Razor Honing Compound. FREMONT DEAN STEMEN, Lakeville, Ind. Published August 18, 1932.

41,280.—*Title:* AUNTIE MARY'S OLD ENGLISH TOFFEE. For English Toffee. LOUISE C. THOMPSON, Cleveland, Ohio. Published August 19, 1932.

41,281.—*Title:* MITEY VEST POCKET MEMO. For Vest Pocket Memos. WHITE & WYCKOFF MFG. CO., Holyoke, Mass. Published August 15, 1932.

PRINTS

REGISTERED OCTOBER 11, 1932

13,929.—*Title:* DYED IN THE LIVELY WOOL. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published August 1, 1932.

13,930.—*Title:* CARRYING THE STORY OF LIVELY WOOL. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published September 1, 1932.

13,931.—*Title:* WHAT IF HE DOESN'T GAIN WHEN YOU START HIM ON SOLID FOOD? For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published September 5, 1932.

13,932.—*Title:* PAS-TEE. For Food Product Which Product Is Known and Designated by the Name Pas-Tee. JOHN ENGLUND, Chicago, Ill. Published June 10, 1932.

13,933.—*Title:* JACK O'LANTERN SMILES. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published September 1, 1932.

13,934.—*Title:* CHUKKER. For Socks. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published July 1, 1932.

13,935.—*Title:* FOULARD—A HOLEPROOF HOSIERY STYLE. For Socks. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published August 25, 1932.

13,936.—*Title:* KIDDIPAK TOYS. For Assorted Pieces of Wood for Toy-Building Purposes. BERTRAM F. KEHRER, doing business as Kiddipak Mfg. Co., Seattle, Wash. Published July 22, 1932.

13,937.—*Title:* REDUCÉE. For Reducing Cream. R. F. ROWE, Milwaukee, Wis. Published August 9, 1932.

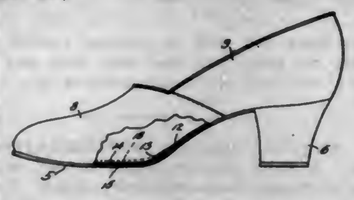
13,938.—*Title:* IT'S A TWO FISTED KNOCKOUT. For Motor Fuel. SUN OIL COMPANY, Philadelphia, Pa. Published June 27, 1932.

13,939.—*Title:* CHAMPIONS OF THE WORLD KEEP FIT WITH WELCH'S. For Grape Juice. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y. Published August 9, 1932.

REISSUES

OCTOBER 11, 1932

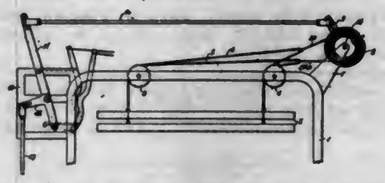
18,615. SHOE. LUIGI FIGNANELLI, Tacoma, Wash. Original No. 1,737,679, dated Dec. 3, 1929, Serial No. 285,386, filed June 14, 1928. Application for reissue filed June 15, 1931. Serial No. 544,648. 4 Claims. (Cl. 36—19.)



1. In a shoe, the combination of an outsole provided with a channel in its underside, an upper having its lower edge extending inwardly above said outsole, fabric located above and below said lower edge for coupling the same at opposite sides of the shoe and cooperating with the upper to encircle the foot at the fore part of the shoe, and an insole located above said inturned edge at the rear part of the shoe, the front end of said insole being located at or about the ball of the foot, said outsole being sewed by a seam extending upwardly from said channel throughout the length of the shoe to the inturned edge of the upper and also to the insole and to said fabric at the rear and fore parts respectively of the shoe.

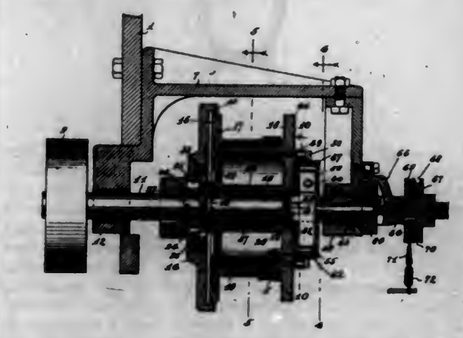
4. In a shoe, in combination with an outsole, and an upper the lower inturned edges of which are secured to the outsole, an insole for the heel and shank only of the shoe secured to the outsole, and a flexible layer of fabric for the fore part of the shoe having its forward and lateral edges secured to the inturned edges of the upper across the toe and the ball portions of the shoe to serve as an inextensible binder for securely connecting the opposite inturned edges of the upper across said ball and toe portions together.

18,616. HARNESS MOTION FOR LOOMS. RICHARD J. KUNATH, Ridgefield Park, N. J. Original No. 1,714,791, dated May 28, 1929, Serial No. 186,537, filed Apr. 25, 1927. Application for reissue filed May 27, 1931. Serial No. 540,482. 7 Claims. (Cl. 139—84.)



1. In a harness motion for looms, the combination with a loom frame, of a plurality of harness frames, a plurality of idler rolls journaled on said loom frame, a plurality of flexible cables each having its ends secured to one of said harness frames and passing over said rolls, and a cone having flexible connections with said harness frame for actuating the latter, said cone comprising a circumferentially grooved conical element, a perforated securing bar mounted in a longitudinal opening in the circumference of said cone, a disk secured to an end wall of said cone, a lever journaled on said disk, and a spring-pressed locking pin carried by said lever for engagement with said cone for clutching the latter to said lever and thereby effecting the oscillation thereof.

18,617. SEMIAUTOMATIC DIPPER TRIP AND MONKEY-LINE WINDER. GEORGE GEDEON MORIN, Holyoke, Mass. Original No. 1,765,089, dated June 17, 1930, Serial No. 211,698, filed Aug. 9, 1927. Application for reissue filed May 13, 1932. Serial No. 611,193. 6 Claims. (Cl. 214—146.)



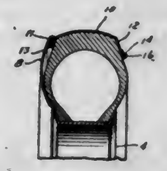
6. In convertible material handling apparatus of the crane shovel type having interchangeable boom and bucket instrumentalities, the combination of a constantly rotating shaft, a drum adapted to receive a cable leading to the latch of the dipper when the apparatus is used as a shovel and to the bucket when the apparatus is used as a crane, means for providing a frictional coupling relationship between the shaft and the drum to produce a steady torque on the drum, mechanism for varying the degree of frictional coupling whereby a heavier constant torque may be produced when the cable is connected to a bucket than when the cable is connected to a dipper latch, and optionally operable means for augmenting the frictional coupling between the shaft and the drum to cause a substantially heavier temporary torque upon the drum and thus to exert a pull on the cable great enough to trip the dipper latch when the apparatus is used as a shovel or to swing the bucket when the apparatus is used as a crane.

18,618. PNEUMATIC TIRE. FREDERICK A. KRUSEMARK, Chicago, Ill., assignor, by mesne assignments, to The Lambert Tire and Rubber Company, a Corporation of Ohio. Original No. 1,594,102, dated July 27, 1926, Serial No. 99,516, filed Apr. 3, 1926. Application for reissue filed Dec. 18, 1931. Serial No. 581,982. 1 Claim. (Cl. 152—10.)



A pneumatic tire having a thickened tread provided with transverse openings from the sides of the tread and having alternately disposed notches and lugs, the openings extending inwardly from the notches, and ring-like beads surrounding the openings within the notches.

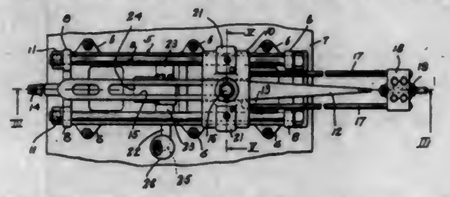
18,619. COVER FOR SPARE AUTOMOBILE TIRES. GEORGE ALBERT LYON, Allenhurst, N. J., assignor to Lyon, Incorporated, Asbury Park, N. J., a Corporation of Delaware. Original No. 1,846,266, dated Feb. 23, 1932, Serial No. 325,993, filed Dec. 14, 1928. Application for reissue filed Aug. 16, 1932. Serial No. 629,085. 4 Claims. (Cl. 150—54.)



1. A spare tire cover designed to be flexed into tire protecting position including a metallic side plate for protecting and abutting against the side of the tire and arcuate rim-like means of flexible material associated with said side plate so as to prevent collapsing of said rim-like means and formed to be stretched over the outer periphery of the tire to cover the same, said means being so shaped and proportioned that when in tire protecting position a portion of said means will be spaced inwardly from the outer periphery of the tire such a distance as to hold the cover in position and yet permit of the moving of the tire cover into said position, said side plate having a circumferentially extending inwardly curved convex portion adjacent the tread.

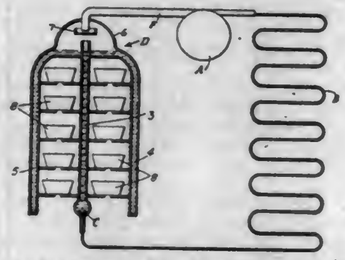
18,620. SAFETY THROW-OFF IRON. EDWARD TIMBS and LESTER E. PECK, Los Angeles, Calif., assignors to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,800,367, dated Apr. 14, 1931, Serial No. 295,016, filed July 24, 1928. Application for reissue filed Feb. 17, 1932. Serial No. 593,644. 6 Claims. (Cl. 74—17.)

6. In a device of the kind described, the combination of a bed plate, a block guided to slide on said plate, a slide with means for connecting the same to a power mechanism, a pin and a slot connection between the block and the slide, means for connecting the block with pump rods so that the weight imposed on said block normally



holds the block and slide in extended relation and so that when the pump rods part said block may remain stationary with said pin reciprocating in said slot.

18,621. EVAPORATOR FOR REFRIGERATING SYSTEMS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Original No. 1,769,116, dated July 1, 1930, Serial No. 181,076, filed Apr. 5, 1927. Application for reissue filed June 30, 1932. Serial No. 620,214. 18 Claims. (Cl. 62—126.)



18. In a refrigerating system the combination with a compressor and a condenser of an evaporator for liquid, means to feed refrigerant from said condenser into said evaporator, a second evaporator partly surrounding said first evaporator, a header to which said evaporators are connected, and means connecting said header and said compressor.

PLANT PATENTS

GRANTED OCTOBER 11, 1932

31. PEACH. MAURICE A. BLAKE, New Brunswick, N. J., assignor to New Jersey State Agricultural Experiment Station, New Brunswick, N. J. Filed Dec. 31, 1931. Serial No. 584,206. 1 Claim. (Cl. 47—1.)

The peach tree herein described, characterized by the self fertile peculiarity of its flower, and the white fleshed characteristic, the color and ripening season of its fruit, as shown.

32. FREESIA. GERALD HEW DALRYMPLE, Bartley, near Southampton, England, assignor to C. J. Van Bourgondein, Babylon, N. Y. Filed Jan. 13, 1932. Serial No. 586,435. 1 Claim. (Cl. 47—1.)

The freesia as shown and described, characterized particularly by the "lavender-mauve" color and large size of its blossoms, the large number of blossoms per spike, four blossoms open at a time, and ample foliage of a light green color.

33. HYBRID TEA ROSE. PAUL M. PIERSON, Ossining, N. Y. Filed Jan. 28, 1932. Serial No. 588,460. 1 Claim. (Cl. 47—1.)

A hybrid tea rose substantially as shown and described, characterized particularly by its rose to rose red color as distinguished from the rose pink to deep rose pink color of the somewhat similar variety known as Briarcliff.

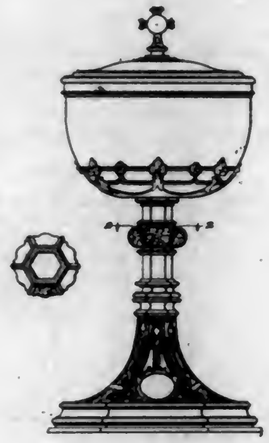
34. CARNATION. ABNER B. SHAW, North Dartmouth, Mass., assignor to Stephen E. Shaw, North Dartmouth, Mass. Filed Mar. 19, 1932. Serial No. 599,954. 1 Claim. (Cl. 47—1.)

The variety of carnation herein shown and described characterized particularly by its deep pink or red color tones, its large size and almost perfect form, its strong stem and calyx cup which prevents bursting, its vigorous growth and freedom from disease.

DESIGNS

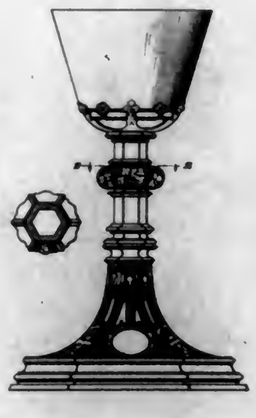
OCTOBER 11, 1932

87,899. CIBORIUM. WILLIAM H. ACHURCH, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I. Filed July 16, 1932. Serial No. 44,355. Term of patent 14 years.



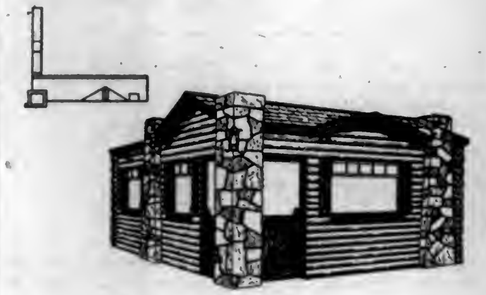
The ornamental design for a ciborium as shown.

87,900. CHALICE. WILLIAM H. ACHURCH, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I. Filed July 16, 1932. Serial No. 44,356. Term of patent 14 years.



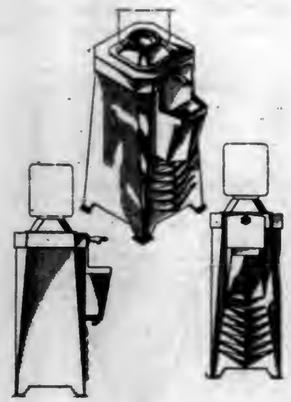
The ornamental design for a chalice, as shown.

87,901. STORE FRONT. KENNETH E. BEMIS, Glendale, Calif. Filed June 20, 1932. Serial No. 44,145. Term of patent 14 years.



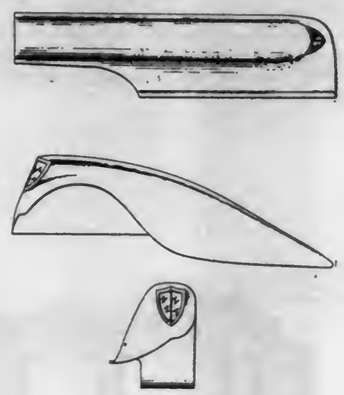
The ornamental design for a store front as shown.

87,902. BOTTLE-TYPE WATER COOLER. STEPHEN J. BENN, Philadelphia, Pa., assignor to Merchant & Evans Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1932. Serial No. 44,408. Term of patent 3½ years.



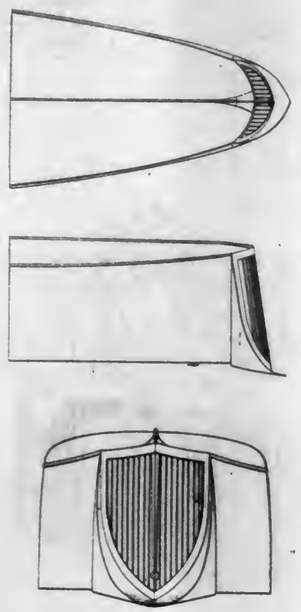
The ornamental design for a bottle-type water cooler as shown and described.

87,903. COMBINED MUD GUARD AND LIGHT FOR A VEHICLE OR SIMILAR ARTICLE. RAYMOND L. CARR, Boston, Mass. Filed Aug. 10, 1932. Serial No. 44,572. Term of patent 14 years.



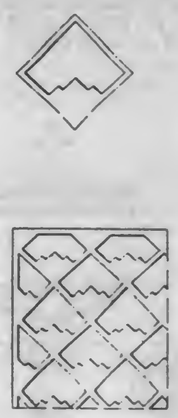
The ornamental design for a combined mud guard and light for a vehicle or similar article substantially as shown.

87,904. COMBINED VEHICLE HOOD AND RADIATOR SHELL OR SIMILAR ARTICLE. RAYMOND L. CARR, Boston, Mass. Filed Aug. 10, 1932. Serial No. 44,573. Term of patent 14 years.



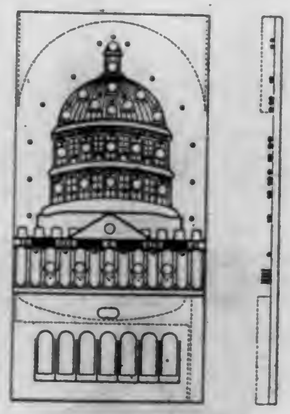
The ornamental design for a combined vehicle hood and radiator shell or similar article substantially as shown.

87,905. GRILLE PANEL UNIT. FREDERICK DAVE CHAPMAN, Evanston, Ill., assignor to The Harrington & King Perforating Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1931. Serial No. 39,865. Term of patent 14 years.



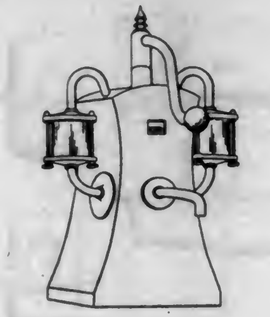
The ornamental design for a grille panel unit substantially as shown and described.

87,906. GAME BOARD. JULIUS CUCHRAN and HENRY HINTERKOPF, Chicago, Ill. Filed Aug. 4, 1932. Serial No. 44,520. Term of patent 3½ years.



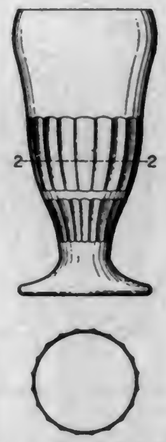
The ornamental design for a game board as shown.

87,907. DRINK DISPENSER. SAMUEL TILDEN DARE, New Westminster, British Columbia, Canada. Filed July 18, 1932. Serial No. 44,872. Term of patent 7 years.



The ornamental design for a drink dispenser, as shown and described.

87,908. GOBLET OR SIMILAR ARTICLE. RICHARD C. DIEBENKORN, San Francisco, Calif., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif., a Corporation of Nevada. Filed July 1, 1932. Serial No. 44,238. Term of patent 14 years.



The ornamental design for a goblet or similar article substantially as shown.

87,909. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills Inc., New York, N. Y. Filed June 29, 1932. Serial No. 44,218. Term of patent 3½ years.



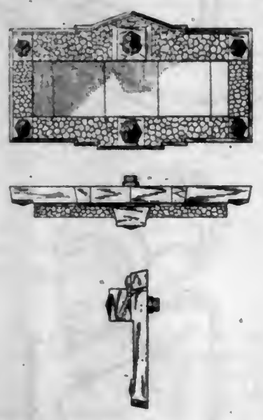
The ornamental design for lace substantially as shown.

87,910. CHAIN FOR PERSONAL ADORNMENT. KARL FASSNACHT, Providence, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed Aug. 24, 1932. Serial No. 44,680. Term of patent 8½ years.



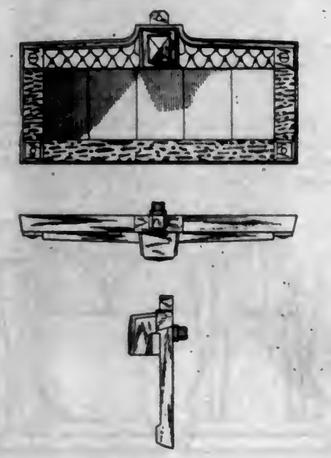
The ornamental design for a chain for personal adornment, substantially as shown.

87,911. ILLUMINATED HOUSE NUMBER PLATE. ANTON FAZEKAS, San Francisco, Calif. Filed Feb. 24, 1932. Serial No. 42,981. Term of patent 14 years.



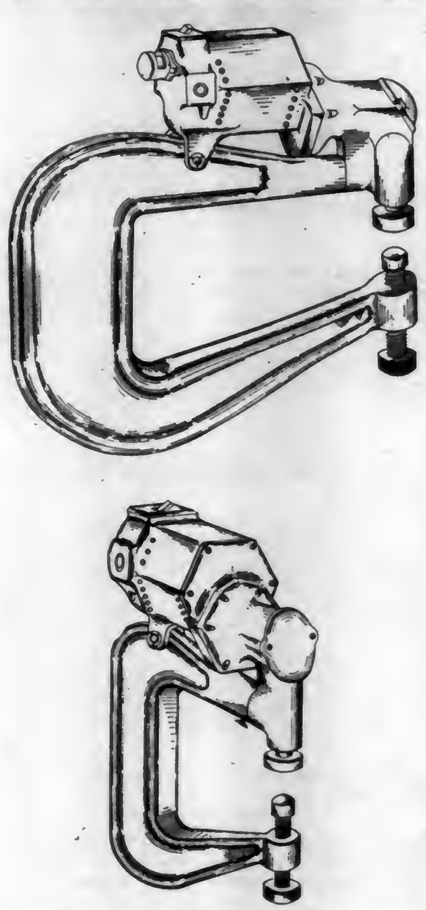
The ornamental design for an illuminated house number plate as shown.

87,912. ILLUMINATED HOUSE NUMBER PLATE. ANTON FAZEKAS, San Francisco, Calif. Filed Feb. 24, 1932. Serial No. 42,982. Term of patent 14 years.



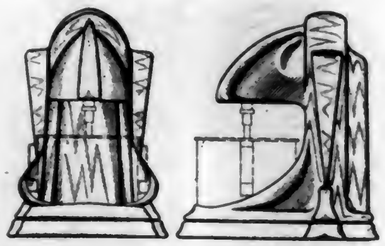
The ornamental design for an illuminated house number plate as shown.

87,913. PORTABLE FENDER STRAIGHTENING TOOL FRAME. JARED BARTON FLEMING, Towson, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed May 1, 1931. Serial No. 39,682. Term of patent 7 years.



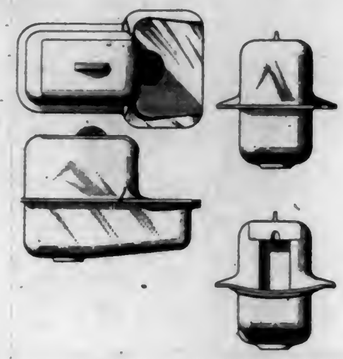
The ornamental design for a portable fender straightening tool frame as shown.

87,914. FOOD MIXER. GIL N. FAYER, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed July 26, 1932. Serial No. 44,445. Term of patent 7 years.



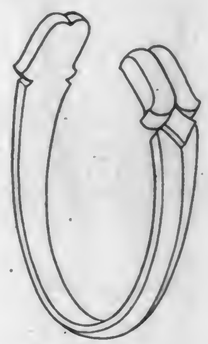
The ornamental design for a food mixer as shown.

87,915. COLONIC EXCRETA RECEPTACLE. FREDERICK H. GAUTSCHI, Van Nuys, Calif. Filed Mar. 7, 1932. Serial No. 43,110. Term of patent 14 years.



The ornamental design for a colonic excreta receptacle substantially as shown.

87,916. RING SHANK. JOSEPH GRANAT, San Francisco, Calif. Filed Apr. 12, 1932. Serial No. 43,467. Term of patent 7 years.



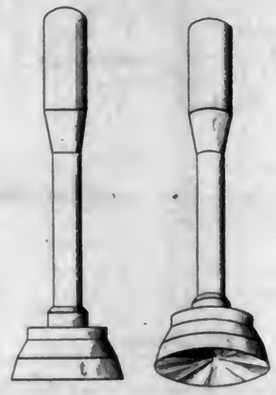
The ornamental design for a ring shank substantially as shown and described.

87,917. EMBLEM OR SIMILAR ARTICLE. GEORGE WILLIAM GRAVES, Detroit, Mich., assignor to American Olympic Association, New York, N. Y., a Nonprofit Association. Filed June 21, 1932. Serial No. 44,158. Term of patent 14 years.



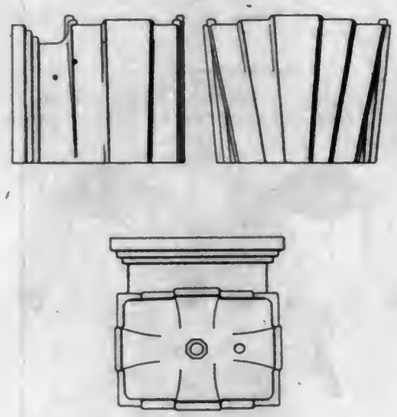
The ornamental design for an emblem or similar article, as shown and described.

87,918. POTATO MASHER OR SIMILAR ARTICLE. MARTIN O. HANEY, Iola, Kans. Filed July 9, 1932. Serial No. 44,292. Term of patent 7 years.



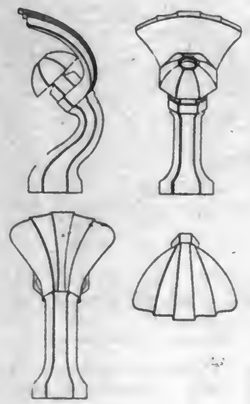
The ornamental design for a potato masher or similar article as shown.

87,919. DRINKING FOUNTAIN BOWL. ALPHEUS G. HAWS, Berkeley, Calif. Filed Aug. 15, 1932. Serial No. 44,605. Term of patent 7 years.



The ornamental design for a drinking fountain bowl substantially as shown.

87,920. DRINKING FOUNTAIN BUBBLER HEAD. ALPHEUS G. HAWS, Berkeley, Calif. Filed Aug. 15, 1932. Serial No. 44,606. Term of patent 7 years.



The ornamental design for a drinking fountain bubbler head substantially as shown.

87,921. LACE OR ARTICLE OF ANALOGOUS NATURE. JOSEPH HAZELDINE, Zion, Ill., assignor to Richmond Lace Works, Inc., Alton, R. I., a Corporation of Massachusetts. Filed Sept. 2, 1932. Serial No. 44,747. Term of patent 7 years.



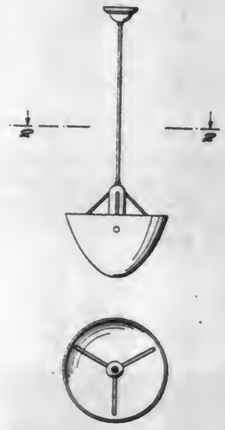
The ornamental design for lace or article of analogous nature, substantially as shown.

87,922. DISPLAY CASE. GROVER C. HILTON, Hutchinson, Kans. Filed July 22, 1932. Serial No. 44,409. Term of patent 7 years.



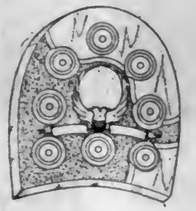
The ornamental design for a display case as shown.

87,923. LAMP. WOLFGANG HOFFMANN, New York, N. Y. Filed Oct. 19, 1931. Serial No. 41,435. Term of patent 14 years.



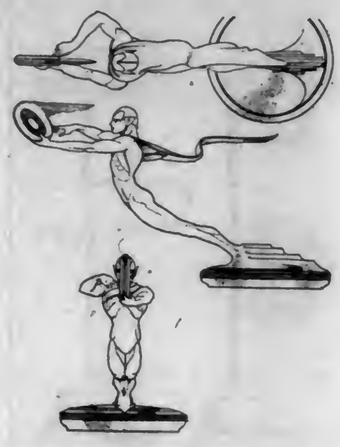
The ornamental design for a lamp, as shown.

87,924. SHOE HEEL OR SIMILAR ARTICLE. CARL H. INGWER, Elyria, Ohio. Filed May 21, 1932. Serial No. 43,864. Term of patent 14 years.



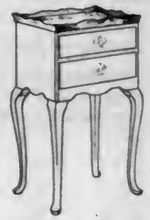
The ornamental design shown for a shoe heel or similar article.

87,925. RADIATOR CAP. GLEN A. JOHNSON, Connersville, Ind., assignor to Stant Manufacturing Company, Connersville, Ind., a Corporation of Indiana. Filed Jan. 6, 1932. Serial No. 42,397. Term of patent 7 years.



The ornamental design for a radiator cap as shown.

87,926. RADIO TABLE OR SIMILAR ARTICLE. WILLIAM K. KLEAVER, Grand Rapids, Mich. Filed Mar. 12, 1932. Serial No. 43,169. Term of patent 3½ years.



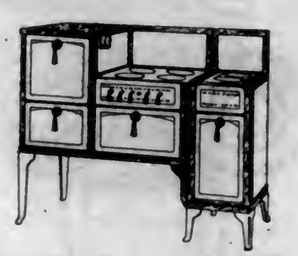
The ornamental design for a radio table or similar article as shown.

87,927. DRESS. JOSEPH KOHN, St. Louis, Mo. Filed Aug. 29, 1932. Serial No. 44,718. Term of patent 3½ years.



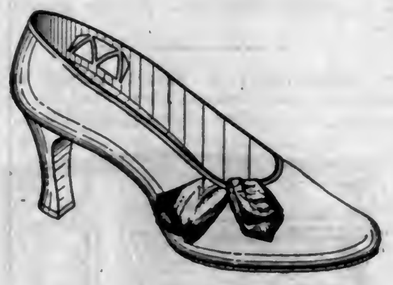
The ornamental design for a dress, as shown.

87,928. GAS RANGE. JOSEPH E. LEONARD, Berkeley, Calif. Filed Aug. 20, 1932. Serial No. 44,657. Term of patent 7 years.



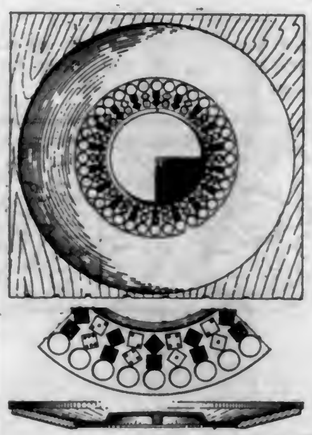
The ornamental design for a gas range substantially as shown.

87,929. SHOE. HERMAN LIEBER, Jackson Heights, N. Y. Filed Aug. 17, 1932. Serial No. 44,624. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

87,930. GAME BOARD. JACOB E. MARKLE, Nashville, Tenn. Filed June 17, 1932. Serial No. 44,107. Term of patent 14 years.



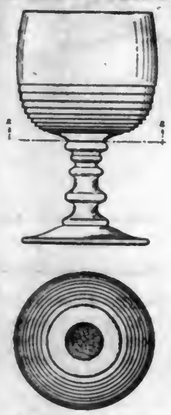
The ornamental design for a game board, as shown and described.

87,931. AUTOMOBILE RADIATOR CAP. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y. Filed July 2, 1932. Serial No. 44,254. Term of patent 14 years.



The ornamental design for an automobile radiator cap, as shown.

87,932. GOBLET OR SIMILAR ARTICLE. WILL CAMERON MCCARTNEY, Cambridge, Ohio. Filed Aug. 12, 1932. Serial No. 44,589. Term of patent 3½ years.



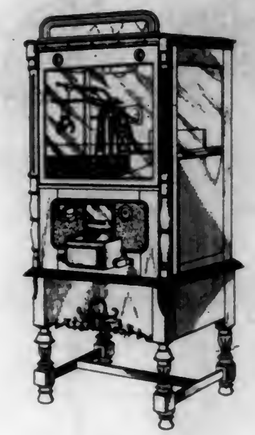
The ornamental design for a goblet or similar article, substantially as shown.

87,933. PLATE OR SIMILAR ARTICLE. GEORGE A. MEELL, Bywood, Pa., assignor to The Bailey, Banks & Biddle Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 11, 1932. Serial No. 44,299. Term of patent 7 years.



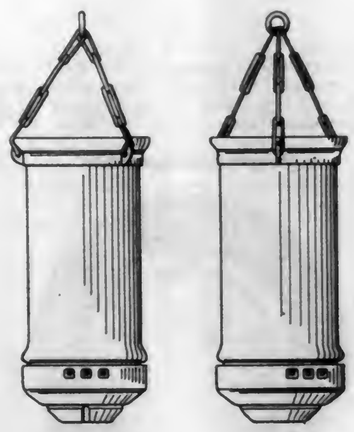
The ornamental design for a plate or similar article, as shown.

87,934. AMUSEMENT MACHINE CABINET. JOHN F. MEYER, Pasadena, Calif. Filed Aug. 26, 1932. Serial No. 44,698. Term of patent 7 years.



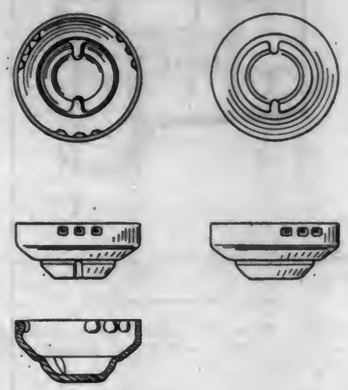
The ornamental design for an amusement machine cabinet as shown.

87,935. HANGING LAMP. NORBERT C. H. MUENCH, Syracuse, N. Y., assignor to Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 3, 1932. Serial No. 44,511. Term of patent 14 years.



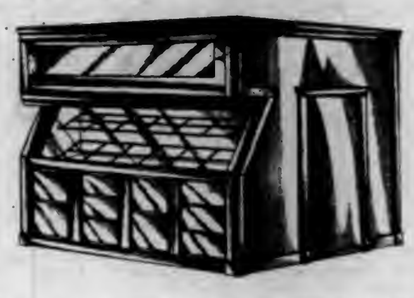
The ornamental design for a hanging lamp as shown.

87,936. BASE FOR HANGING LAMPS. NORBERT C. H. MUENCH, Syracuse, N. Y., assignor to Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 3, 1932. Serial No. 44,512. Term of patent 14 years.



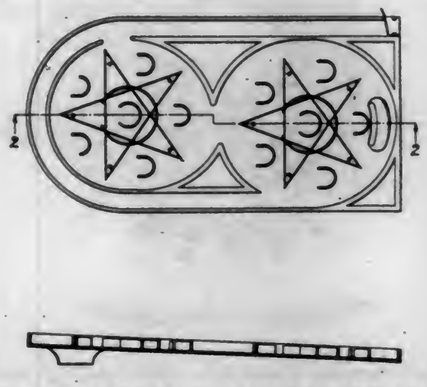
The ornamental design for a base for hanging lamps as shown.

87,937. REFRIGERATOR. FRED L. NORTHEY and SEVERIN B. NORDSKOG, Waterloo, Iowa. Filed Feb. 17, 1932. Serial No. 42,915. Term of patent 14 years.



The ornamental design for a refrigerator, as shown and described.

87,938. GAME BOARD. RAYMOND H. OSBRINK, Los Angeles, Calif. Filed Aug. 16, 1932. Serial No. 44,621. Term of patent 3½ years.



The ornamental design for a game board as shown.

87,939. COFFEE MAKER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed July 29, 1932. Serial No. 44,477. Term of patent 14 years.



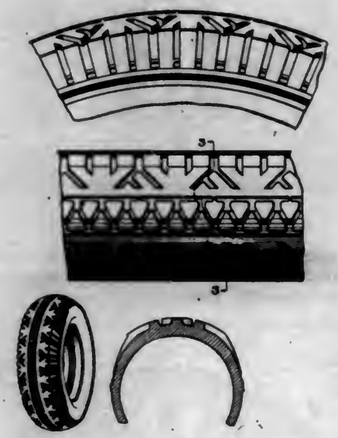
The ornamental design for a coffee maker or similar article substantially as shown and described.

87,940. COFFEE MAKER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed July 29, 1932. Serial No. 44,478. Term of patent 14 years.



The ornamental design for a coffee maker or similar article substantially as shown and described.

87,941. TIRE. HAROLD D. REICHARD, Newark, Ohio, assignor to The Pharis Tire & Rubber Company, Newark, Ohio, a Corporation of Ohio. Filed Apr. 6, 1931. Serial No. 39,378. Term of patent 14 years.



The ornamental design for a tire, as shown.

87,942. WEIGHING MACHINE CASING. BARNETT B. ROCHESTIE, Trenton, N. J. Filed June 7, 1932. Serial No. 44,010. Term of patent 3½ years.



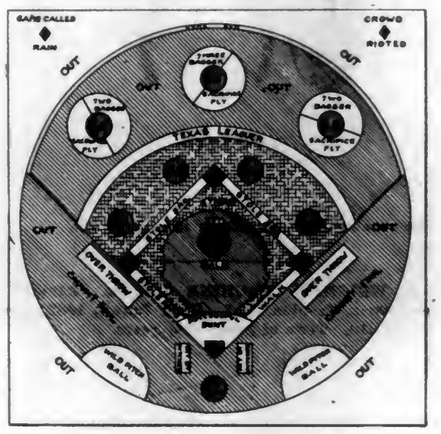
The ornamental design for a weighing machine casing as shown.

87,943. CONDIMENT DISPENSER. JOHN G. ROSSITER, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed Aug. 20, 1932. Serial No. 44,651. Term of patent 7 years.



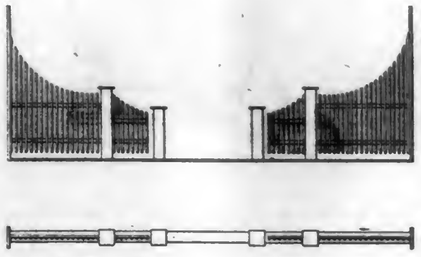
The ornamental design for a condiment dispenser as shown.

87,944. BASEBALL TARGET. CHESTER R. STACKHOUSE, Cadillac, Mich. Filed Aug. 15, 1932. Serial No. 44,608. Term of patent 3½ years.



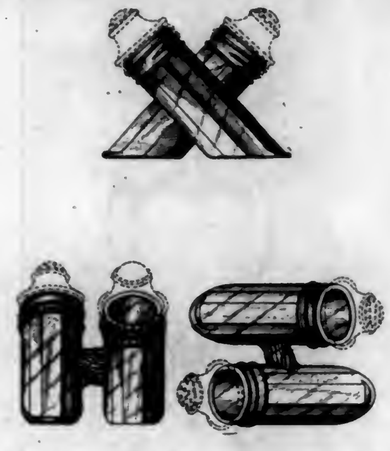
The ornamental design for a baseball target, as shown.

87,945. STORE PARTITION. RAYMOND TLAPEK, Elvins, Mo. Filed May 31, 1932. Serial No. 43,935. Term of patent 14 years.



The ornamental design for a store partition as shown.

87,946. SALT AND PEPPER SHAKER. PETER VIGGIANO, Shinnston, W. Va. Filed July 20, 1932. Serial No. 44,382. Term of patent 3½ years.



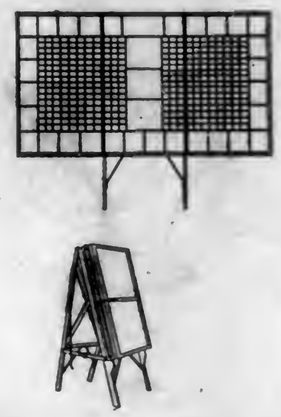
The ornamental design for a salt and pepper shaker, as shown.

87,947. SHOE BUCKLE. HERBERT G. WHITEHOUSE, Newark, N. J., assignor to The Riker Company, a Corporation of New Jersey. Filed Sept. 1, 1931. Serial No. 40,972. Term of patent 7 years.



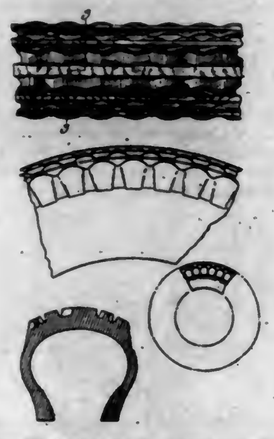
The ornamental design for a shoe buckle, as shown.

87,948. MEMBERSHIP ROSTER OR SIMILAR ARTICLE. CARL A. WINTER, Inglewood, Calif. Filed July 18, 1932. Serial No. 44,364. Term of patent 14 years.



The ornamental design for a membership roster or similar article as shown and described.

87,949. AUTOMOBILE TIRE OR SIMILAR ARTICLE. EDWARD J. MORIN, Wilbraham, Mass. Filed July 15, 1932. Serial No. 44,340. Term of patent 7 years.



The ornamental design for an automobile tire or similar article as shown.

87,950. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y. Filed June 15, 1932. Serial No. 44,088. Term of patent 14 years.

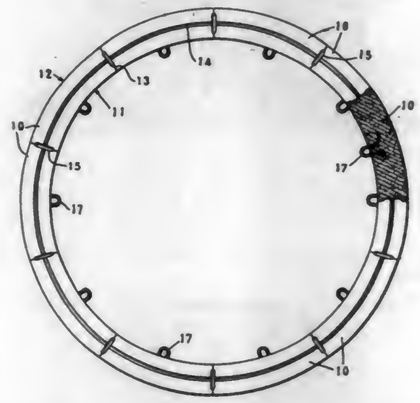


The ornamental design for a clock case, as shown and described.

PATENTS

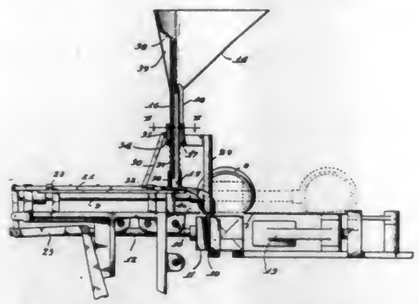
GRANTED OCTOBER 11, 1932

1,881,421. TUNNEL CONSTRUCTION. ANDREW M. COYLE, Mount Vernon, N. Y. Filed Apr. 4, 1930. Serial No. 441,550. 7 Claims. (Cl. 61—43.)



1. A tunnel comprising blocks having curved interlocking means on the lateral faces, and end faces contacting along their inner and outer portions and recessed between said contacting portions, and an enclosed cementitious bond between the block end faces and between said inner and outer contacting portions.

1,881,422. ARTICLE INSERTING MACHINE. DANIEL A. FARRELL and JOHN E. JOHNSON, Chicago, Ill., assignors to John F. Jelke Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1931. Serial No. 568,974. 4 Claims. (Cl. 93—2.)



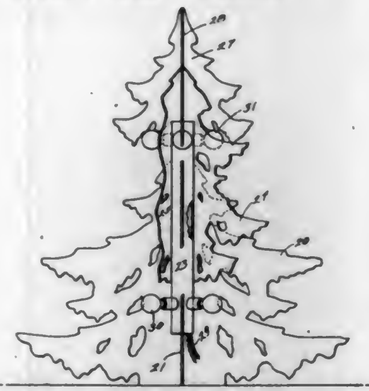
1. In a packaging machine of the type wherein a carton is folded about its contents and wherein an end flap is tucked in position to complete the package, of means for delivering an article interiorly of said package, said means including a hopper, a duct leading therefrom, and means at the delivery end of said duct for receiving an article therefrom and discharging it into a package, and agitating means in said hopper for agitating the articles therein whereby the same may enter said duct properly positioned.

1,881,423. DISPLAY TREE. WALTER FAVREAU, Tompkinsville, N. Y., assignor, by mesne assignments, to Design Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 5, 1931. Serial No. 506,614. 6 Claims. (Cl. 41—15.)



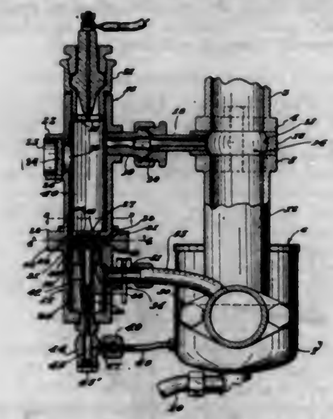
1. An artificial tree comprising a plurality of sections one above the other each section comprising a plurality of intersecting profile members and means for connecting said sections one with the other.

1,881,424. ORNAMENTAL OBJECT. WALTER FAVREAU, Tompkinsville, N. Y., assignor, by mesne assignments, to Design Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1931. Serial No. 558,983. 6 Claims. (Cl. 41—15.)



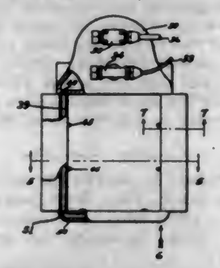
6. An artificial Christmas tree comprising a first set of mutually intersecting profile members having an upwardly extending pocket at the point of intersection thereof, a tubular member positioned in said pocket, a second set of mutually intersecting profile members having a downwardly extending pocket therein, said second set being disposed at an angle to said first set and arranged to rest on the upper end of said tubular member, said tubular member fitting within said pocket.

1,881,425. LIQUID FUEL GASIFIER. HERBERT V. A. FERGUSON, Buffalo, N. Y. Filed Aug. 26, 1927. Serial No. 215,603. 6 Claims. (Cl. 48—107.)



1. A liquid fuel gasifier, comprising a mixing chamber having a liquid fuel inlet and air inlet on one side and an atomized liquid fuel and air mixture outlet on another side, a divider in said mixing chamber including a perforated transverse wall and a screen secured to opposite sides of said chamber, a liquid fuel vaporizing and gasifying chamber at one side of said mixing chamber, said mixture outlet communicating with one end thereof, and a sparking device and a gas outlet at the opposite end of said vaporizing and gasifying chamber.

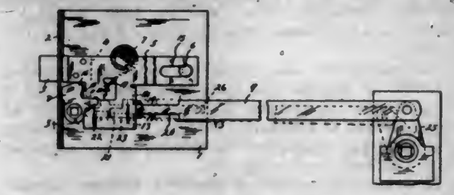
1,881,426. REFRIGERATING APPARATUS. JOHN RALPH FEHR, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 31, 1927. Serial No. 216,750. 7 Claims. (Cl. 62—95.)



6. Refrigerating apparatus comprising, in combination, a refrigerant supply device; refrigerant ducts communicating with said supply device, each duct comprising a recessed wall portion and a cover plate for said recesses hermetically sealed to the wall portion; separate means for hermetically sealing the open ends of the ducts from the atmosphere and an individual fin extending from the wall portion parallel to and adjacent each recess.

1,881,427. DOOR LATCH MECHANISM. GEORG R. FEUERLEIN, Detroit, Mich., assignor to Ferro Stamping and Mfg. Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 4, 1929. Serial No. 337,450. 10 Claims. (Cl. 292—164.)

6. In a door latch, a latch bolt, a yoke connected to said bolt and having two portions disposed at substantially right angles to each other, one of said portions being in alignment with and constituting a rearward extension of the bolt, the other of said portions being provided at its forward and rear edges with lateral flanges, and means for retracting the bolt including a rollback engageable with one of said flanges and having a shoulder, and a link operable from a point remote to the yoke



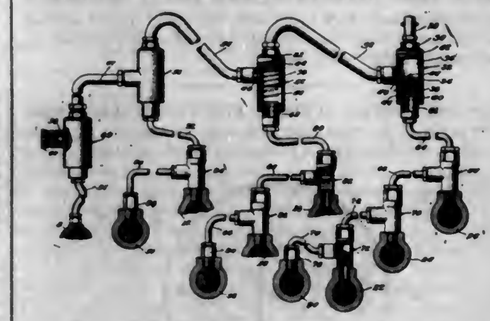
and having a substantially L-shaped portion movable between said flanges, the upright portion of the L being engageable with one of said flanges to retract the bolt, and the base of the L being engageable with the shoulder of the rollback to dog the latter.

1,881,428. STAND FOR SUPPORTING COFFEEPOTS. ARNOLD R. FINCH, West Bend, Wis., assignor to West Bend Aluminum Company, West Bend, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1929. Serial No. 417,760. 1 Claim. (Cl. 65—61.)



As an article of manufacture, a coffee pot stand composed of insulating material, such stand having an approximately vertical circular wall with an inwardly extending annular shelf near the top thereof provided with a central opening therein, and having spaced embossments upon its upper surface for supporting a coffee pot, with clear spaces between such embossments to provide air-insulation, and a ring surmounting the wall and rising above the said embossments, to position the coffee pot axially with respect to the stand.

1,881,429. LUBRICATING APPARATUS. CHARLES A. FINE, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,561. 13 Claims. (Cl. 184—7.)



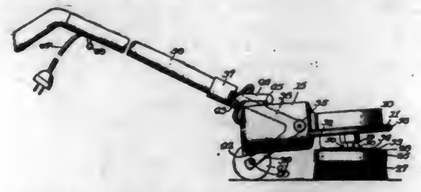
1. In a system of the class described, a plurality of groups of bearings to be lubricated, a source of lubricant under pressure, means for successively apportioning the lubricant supplied from said source among said groups, and means for successively apportioning the lubricant supplied to said groups among said bearings, both of said means operating at all times at greater than atmospheric pressure.

1,881,430. PROCESS FOR THE MANUFACTURE OF SOLUTIONS CONTAINING A COMPOUND OF FLUORINE AND ALUMINUM. HANS FINKELSTEIN and FRIEDRICH ACHTERBERG, Uerdingen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 17, 1930, Serial No. 453,405, and in Germany May 15, 1929. 6 Claims. (Cl. 23—88.)

1. Process for the manufacture of solutions containing a compound of fluorine and aluminium which consists in treating a sparingly soluble fluorine compound with an aqueous solution of aluminium chloride in quantities such that at least two equivalents of aluminium are employed for each one equivalent of fluorine.

6. As a new composition of matter a solution containing aluminium, fluorine, and chlorine in the ratio of at least two equivalents of aluminium and one equivalent of chlorine for each one equivalent of fluorine, corresponding to the formula $AlF_3.AlCl_3$.

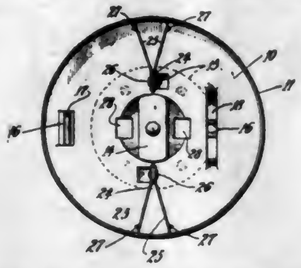
1,881,431. FLOOR MACHINE. WALTER S. FINNELL, Elkhart, Ind. Filed Dec. 15, 1927. Serial No. 240,110. 15 Claims. (Cl. 15—49.)



4. In a machine of the character described, a housing, driving mechanism supported by said housing, brush means connected to said driving mechanism at the forward part of said housing, wheel means at the rear of said housing for transporting the machine, a handle, a yoke member connected to said handle and pivotally connected to the opposite sides of said housing, a latch pivoted on said yoke member, a keeper on said housing and adapted to be engaged by said yoke latch element when said handle is lowered for tilting movement of said housing upon said wheels.

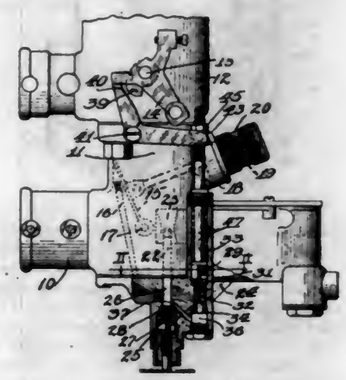
13. In a floor machine, a brush device including a brush head having a central opening, driving mechanism including a drive shaft, a flat-sided drive member on said shaft and having its end tapered and rounded, a pocket-forming member carried by and extending down into said head opening to form a flat-sided and rounded bottom pocket for receiving said member, said pocket having greater length and width than said member whereby said brush device may rock in all directions, and means carried by said brush head for normally preventing withdrawal of said member from said pocket.

1,881,432. BRUSH SUPPORT FOR FLOOR MACHINES. WALTER S. FINNELL, Elkhart, Ind. Filed Oct. 18, 1928. Serial No. 313,302. 6 Claims. (Cl. 15—180.)



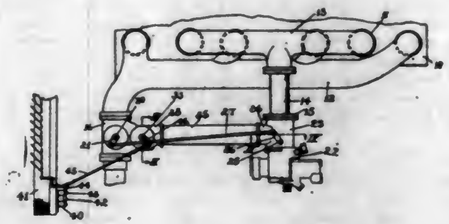
1. A brush support for floor treating machines adapted to support a plurality of brushes and having a circular base part, a peripheral flange on said base part extending downwardly therefrom to engage the outer edge of said brushes, and a yieldable means carried by said base part and extending along the opposite edges of two of said brushes, said means including elements detachably gripping the opposite edges of said two brushes.

1,881,433. CARBURETOR. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Co., Flint, Mich, a Corporation of Illinois. Filed Aug. 12, 1929. Serial No. 385,384. 5 Claims. (Cl. 261—41.)



1. In a carburetor, a mixing chamber, an air inlet leading thereto, an air valve interposed between said air inlet and said mixing chamber, a high speed nozzle positioned between said air inlet and said air valve, a low speed nozzle, a fuel reservoir, a conduit connected to said fuel reservoir and said low speed nozzle to supply fuel to the low speed nozzle sufficient for idling requirements, another conduit connecting said fuel reservoir with said high speed and said low speed nozzle, to supply a relatively unlimited amount of fuel to said low speed nozzle, a member in said another conduit having an orifice, a needle valve adapted to open and close the orifice whereby to control flow of fuel in said low speed nozzle and to simultaneously meter the fuel supply to said high speed nozzle.

1,881,434. EXPLOSIVE MIXTURE HEATING CONTROL. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Co., Flint, Mich., a Corporation of Illinois. Filed Nov. 15, 1929. Serial No. 407,337. 13 Claims. (Cl. 123—122.)



1. In combination, an intake system including a throttle and a heating jacket, means for conducting a heating fluid through said jacket, control means for directing heating fluid into said conducting means, means interconnecting the throttle with said control means for inversely proportioning the flow of heating fluid to the degree of throttle opening, and thermostatically operated means in said fluid conducting means for controlling the amount of heating fluid flowing therepast.

1,881,435. ADHERING FABRICS. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Sept. 6, 1921. Serial No. 498,861. 10 Claims. (Cl. 87—17.)

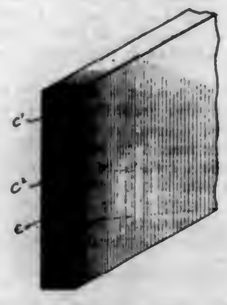
1. The herein described method of adhering sheet material to a surface, which consists in providing upon the sheet material or surface an asphalt absorbent substance and upon the other a substance containing an ingredient adapted to be transfused into the asphalt absorbent substance, with reaction upon the latter that converts it into an adhesive, and bringing said sheet material and surface together with their said substances in contact.

1,881,436. BITUMINOUS MIXTURES FOR EXPANSION JOINTS AND GENERAL CONSTRUCTION WORK. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 16, 1925. Serial No. 62,912. 10 Claims. (Cl. 106—31.)

1. The herein described method of producing an expansion joint which consists in first melting bituminous material to a liquid consistency, incorporating therein a flow retarding medium, adding vegetable fibrous material after the flow of the liquid bituminous material has been retarded, mixing the composition into a flowable, plastic mass by continuing the mixing operation for a predetermined period after the materials have been added to the bituminous material, and thereafter forming the mass to shape.

8. An expansion joint composed principally of asphalt having incorporated therein cellular fibrous material, and means preventing the saturation of the fibrous material by the asphalt.

1,881,437. EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed May 25, 1921, Serial No. 472,319, now Patent No. 1,662,567, dated Mar. 13, 1928. Divided and this application filed Apr. 14, 1926. Serial No. 101,940. 4 Claims. (Cl. 94—18.)



1. An expansion joint comprising a flexible, board-like strip, embodying in its structure interrupted and substantially parallel, compressible and elastic felted mats of fibrous material, coated but unsaturated with a waterproofing material and irregularly overlapping one another, said strip being enveloped in a substantial thickness of bituminous material.

1,881,438. ROOFING MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed June 30, 1920, Serial No. 393,016. Divided and this application filed May 9, 1927. Serial No. 190,082. 5 Claims. (Cl. 108—7.)



1. As an article of manufacture a composition roofing element having applied upon a seaming or jointing area thereof, a joining strip comprising a vehicle saturated with a normally, tacky adhesive of substantially lasting adhesivness to bond with an overlapping element without interposition of additional cementing material.

1,881,439. PACKING. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed June 4, 1920, Serial No. 386,609. Divided and this application filed July 23, 1927. Serial No. 207,954. 7 Claims. (Cl. 154—45.5.)



1. A preformed packing consisting of a bituminous base of lasting adhesiveness and a filler, the base and filler being of such proportions as to render the preformed strip readily deformable while preserving its shape and its quality of lasting adhesiveness.

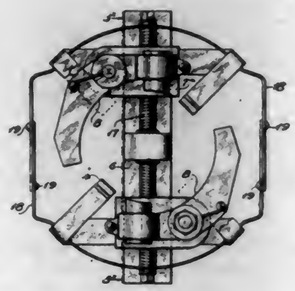
1,881,440. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed Dec. 26, 1925, Serial No. 77,684. Divided and this application filed Sept. 10, 1927. Serial No. 218,864. 5 Claims. (Cl. 94—18.)

1. Constructional material comprising an extruded, non-laminated ductile mass of plastic waterproofing binder, having linear fibers intermixed therein, said linear fibers being arranged in intertwined, interlaced, criss-cross formation uniformly throughout the binder to reinforce the constructional material vertically and horizontally.

1,881,441. TUBE END CLEANER. FRANK F. FISHER, Detroit, Mich. Filed May 2, 1929. Serial No. 359,788. 7 Claims. (Cl. 51—73.)

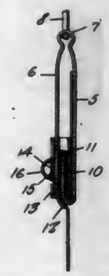
2. In a tube end polishing device, rotatable polishing members pivotally mounted on an arm to loosely receive a

tube therebetween, means for urging said members toward said tube during rotation, a hood for said members, tube guides on said hood, means for varying the position of said



members on said arm to vary the radius of rotation of said members, said means also acting to vary the opening between said guides to accommodate different size tubes.

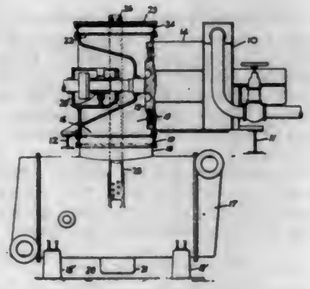
1,881,442. CLASP. GENEVIEVE H. FISHER and FRANK S. FISHER, Waltham, Mass. Filed Jan. 4, 1932. Serial No. 584,678. 3 Claims. (Cl. 24—260.)



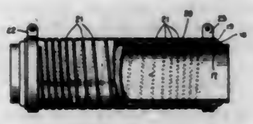
1. A clasp of the character described comprising a resilient back and front formed from a single piece of springy material, a bight offsetting the back and front from each other and forming a sleeve adapted to accommodate a bail, a forwardly and upwardly directed hook on the back to lie between the front and said back, and a fastening slide carried by the front and movable to telescoping position over the hook.

1,881,443. TURBINE AND CONDENSER CONSTRUCTION. WARREN B. FLANDERS, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,225. 7 Claims. (Cl. 60—95.)

1. The combination of a turbine casing having an exhaust chamber, a condenser disposed below the exhaust chamber, an expansion joint connecting the condenser to the exhaust chamber, a pressure balancing member disposed above the exhaust chamber, an expansion joint connecting the pressure balancing member to the exhaust chamber, and means for connecting the condenser to the pressure-balancing member for balancing the atmospheric pressures on the condenser and the pressure-balancing member.



1,881,444. MANUFACTURE OF RESISTANCE UNITS. JOSEPH A. FLANZER, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed July 5, 1928. Serial No. 290,514. 3 Claims. (Cl. 201—76.)



1. A resistance element for heating purposes comprising a cylindrical insulation base provided with a painted resistance film having a relatively high specific resistivity and provided with a second resistance film having a relatively low specific resistivity and consisting of a metallic deposit electro-plated over the full resistance portion of said painted resistance film, the said second resistance film being spirally cut to produce a predetermined value of resistance for the element, the pitch of the spiral being smaller near the ends than at the middle of said resistance element.

3. The method of making a resistance unit, which includes mixing colloidal graphite, water, and phosphoric acid in proportions equivalent to 10 cc of the graphite, 20 cc of water, and from 3 to 10 cc of 85% syrupy phosphoric acid to make a resistance paint, coating an insulation base with a thin film of the paint, and baking the painted unit at a temperature of about 650° C. for a period of from approximately one-half to two hours according as 3 to 10 cc of the phosphoric acid has been used.

1,881,445. RESISTANCE. JOSEPH A. FLANZER and EMIL REISMAN, Brooklyn, N. Y., assignors to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1929. Serial No. 393,573. 18 Claims. (Cl. 201—76.)

3. A resistance paint comprising finely divided carbon suspended in a vehicle including nickel phosphate and phosphoric acid.

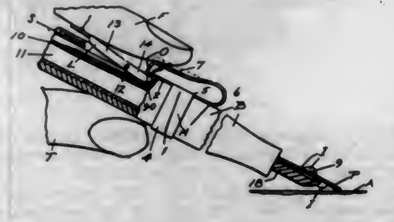
15. In the manufacture of resistance units, the method which includes mixing phosphoric acid with water and adding nickel carbonate in small quantities to the mixture of phosphoric acid in water and stirring until complete solution takes place in order to form a binding vehicle, and thereafter mixing the aforesaid vehicle with an aqueous solution of colloidal graphite in order to form a resistance paint.

1,881,446. RESISTOR. JOSEPH A. FLANZER, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 5, 1929. Serial No. 411,736. 16 Claims. (Cl. 201—55.)



9. In a resistor, the combination with a resistance film including colloidal graphite held in a binding vehicle comprising aluminum phosphate in an excess of phosphoric acid, of a fixed contact terminal film arranged directly in contact with said resistance film and including silver particles held in a binding vehicle comprising a saturated solution of metallic phosphate in dilute phosphoric acid.

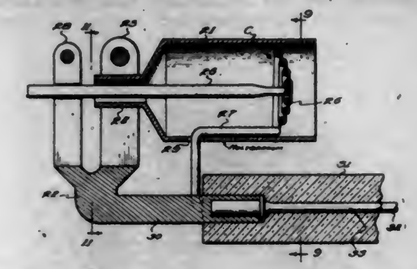
1,881,447. FOUNTAIN PEN. WILLIAM C. FORD, Andover, Mass. Filed Feb. 24, 1932. Serial No. 594,791. 8 Claims. (Cl. 120—46.)



1. The combination with a fountain pen having a barrel and a filling lever which is so pivoted, formed and located in a slot in the barrel that its outer surface is substantially flush with the barrel and which has a long and a short arm; of a lever operating member formed with a body having two legs at one end, elastic jaws which elastically grip the barrel and are slidable and turnable thereon and an elastic pressure arm which extends from the body opposite the legs and is bent back over the body and terminates in a triangular shaped contact member which is curved on the outside and extends down and proximate to the legs and to the short arm of the filling lever.

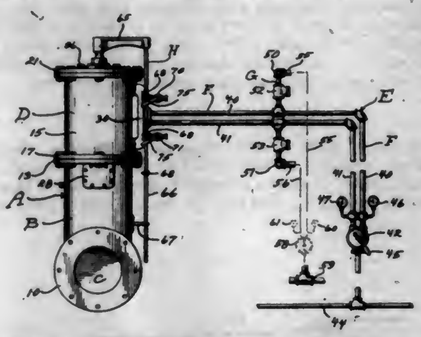
1,881,448. X-RAY METHOD AND MEANS. THOMAS HINTON FORDE and NEWTON WILLIAM MELLARS, San Francisco, Calif., assignors to Formell Corporation, Ltd., San Francisco, Calif., a Corporation of California. Filed Aug. 15, 1928. Serial No. 299,650. 2 Claims. (Cl. 250—35.)

2. A hot filament X-ray tube comprising an envelope having an anode mounted therein and a combination cup and hot filament cathode, together with supporting means for the latter, said means having a shank part and a forked part integral therewith, said envelope having an inwardly disposed glass support for said shank part and



the forked part being split and provided with clamps whereby said cup and one of the filament terminals are adjustably supported.

1,881,449. MEANS FOR OPERATING VALVES. EDWIN C. FORSYTHE, Bartlesville, Okla. Filed Nov. 1, 1926. Serial No. 145,562. 3 Claims. (Cl. 121—38.)

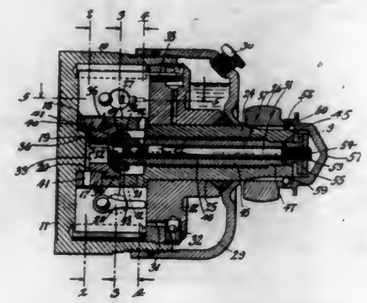


1. The combination with a valve body having a movable valve head provided with a stem, of fluid pressure operating means for the valve head comprising a cylinder, a piston movable in the cylinder and connected with the valve stem, a manifold having independent ports opening into the cylinder at opposite sides of the piston, a pressure feed pipe connected with each port of the manifold, a control valve connected in the pressure feed pipes at a remote location from the valve for selectively admitting fluid under pressure to either side of the piston through said feed pipes, pressure gauges connected one in each feed pipe at the remote control valve, relief valves connected with each port of the manifold, and governor means operatively connected for movement with said piston for alternate opening and closing of said relief valves for relief of the head pressure acting upon the piston at the completion of movement of the valve head to an open or closed position and allowing for a drop in pressure as recorded in the pressure gauges at the remote control valve.

1,881,450. SHOCK ABSORBER. MERRITT L. FOX, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 24, 1931. Serial No. 524,803. 9 Claims. (Cl. 188—89.)

1. A hydraulic shock absorber comprising a working chamber, a piston movable back and forth in said chamber, a conduit member having a relief passage communicating with said working chamber on opposite sides of said piston and provided with a relief valve seat, a hollow relief valve movable toward and from said relief valve seat and containing a regulating passage communicating with said relief passage and having a regulating valve seat, a main

supporting member which is connected with said conduit member and expands and contracts in response to temperature changes, an auxiliary supporting member which is connected with said main supporting member and with said relief valve and expands and contracts in response



to temperature changes at a different rate from said main supporting member, a valve movable toward and from said regulating valve seat, and a stem of material practically insensible to temperature changes connecting said regulating valve with said auxiliary supporting member.

1,881,451. CAR ROOF. EDWIN G. FRANCK, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed May 25, 1931. Serial No. 539,943. 5 Claims. (Cl. 105—377.)

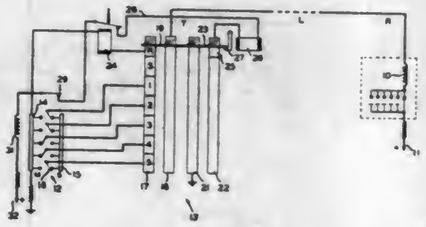


1. The combination with an open car of the gondola type having outwardly extending reinforcing flanges at the top of its sides, of a temporary roof therefor comprising a plurality of sections arranged end to end and together covering the car, said sections having downturned flanges at the eaves and at the ends of the car, weatherproofing means between adjacent sections and clamping means secured to the downturned eaves flanges hooking under and engageable with the under side of the flanged edges of the car.

2. A roof for open cars of the gondola type comprising a plurality of sections arranged end to end and together covering the car, each of said sections extending from eaves to eaves and having downturned weatherproofing flanges at the eaves and means mounted on said downturned flanges for hooking under and clamping said section to the flanged upper end of the car.

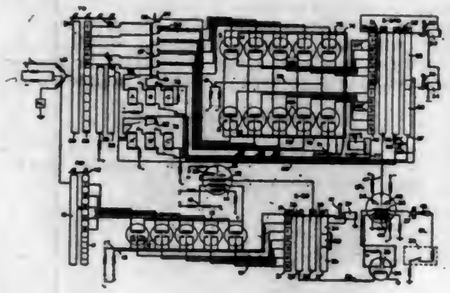
1,881,452. AUTOMATIC STOP FOR TELEGRAPH TRANSMITTERS. LAURENCE W. FRANKLIN, Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No 554,551 8 Claims. (Cl. 178—2.)

3. In a telegraph system, a line circuit, a transmitting apparatus associated with said line circuit and a relay having its winding in said line circuit and serving when an interruption in the continuity of the line circuit occurs, other than that occasioned by the normal operation



of the transmitting apparatus, to lock up said transmitting apparatus so as to preclude further operations thereof.

1,881,453. TELEGRAPH PRINTER EXCHANGE SYSTEM. LAURENCE W. FRANKLIN, Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No. 554,552. 25 Claims. (Cl. 178—52.)

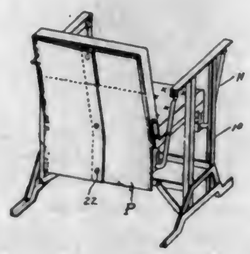


1. In a telegraph system, a multiplex system terminating at a main station, a simplex system extending from said main station to a distant station, means at the main station for storing each code combination of impulses received over a channel of the multiplex system, and means for starting the repeating of such stored code combination of impulses over the simplex system, upon reception of the first marking impulse of the combination.

1,881,454. PROTECTIVE COVERING FOR ARTICLES OF FURNITURE. CHARLES E. FRIESNER, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 550,293. 1 Claim. (Cl. 155—182.)

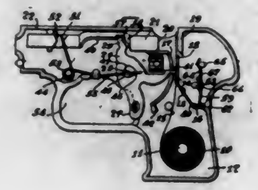
A covering for furniture having a seat and back portion which latter is movable to lie upon the seat portion, composed of a fabric body of an area adapted to cover the top and sides of the seat and back portions of the furniture when the latter is in its folded position, a pair of spaced reinforcing members for said body spaced inwardly from the top and bottom and sides of the latter and having vertically alined ends, means to secure said reinforcing members and thereby the fabric body to the top and bottom portions of the back on the rear face of the latter, the upper of said reinforcing members defining lines of fold about which the top of the fabric body may be folded downwardly and the alined ends of the reinforcing members forming lines of fold about which the sides of the

fabric body may be folded inwardly to have the edges of the latter overlap, and means to removably secure the said overlapping edges together, the bottom of the body below the lower reinforcing member being of a width so as to project below the seat in all positions and the top



and sides of the body when open projecting over the top and sides of the back and front of the seat whereby all of the corners of the seat and back of the furniture when in folded position are completely covered by downwardly extending portions of the fabric body.

1,881,455. TOY PISTOL. RUSSELL A. FRISBIE, Middletown, Conn., assignor to The J. & E. Stevens Company, Cromwell, Conn., a Corporation. Filed Aug. 7, 1929. Serial No. 384,021. 7 Claims. (Cl. 42—57.)

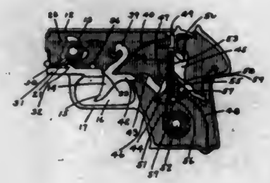


1. In a toy tape pistol, a casing part having a tape holding lug, a tape guide spring having a free tip end opposed to said lug for pinching the tape, a trigger member supported from said casing part for rotative movement and provided with a tape engaging arm that is located generally below said lug, said spring having a portion adjacent said arm and opposed thereto, and the parts being constructed and arranged so that said arm will swing along said portion for feeding tape therealong and upward, will push said free end tip away from said lug, and will push the tape into the space between said tip and lug, and, rseponsive to return movement, will release said pistol part, a holding spring secured to said main part spring for effecting the pinching of the tape.
and having arms upstanding that are shaped to provide

6. In a toy pistol, a main pistol casing part and a cover opposed generally V-shaped parts, and said cover part being provided with an opening that has opposed border walls that are individually V-shaped and adapted to cooperate with said arms for holding the parts together.

1,881,456. MACHINE GUN TOY PISTOL. RUSSELL A. FRISBIE, Middletown, Conn., assignor to The J. & E. Stevens Company, Cromwell, Conn., a Corporation. Filed Aug. 15, 1930. Serial No. 475,480. 2 Claims. (Cl. 42—57.)

1. In a machine gun toy pistol, a pistol structure comprising a casing and mechanism housed therein that is operative to fire paper caps in strip form repeatedly by successive pulling of the trigger, a star-cam housed for rotative movement in said casing, and an intermediate member housed in said casing for reciprocating movement



serving to operatively connect said star-cam and some part of said mechanism so as to effect such firing responsive to rotation of said star-cam in substantially the same manner as by such pulling of the trigger.

1,881,457. CIRCUIT AND POLARITY TESTER. WILLIAM A. FROECKMAN, St. Louis, Mo. Filed Jan. 27, 1930. Serial No. 423 673. 6 Claims. (Cl. 175—183.)

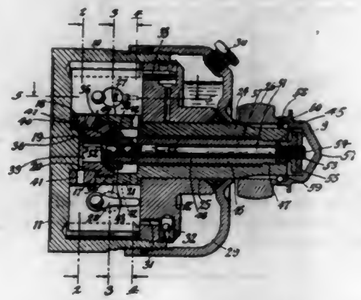


1. In an electric testing device, a contacting head for sockets to be tested, into which said head may be inserted, a flash light bulb, a permanent magnet, an iron armature core rotatable between the poles of said magnet, said armature having a winding thereon connected with said bulb and with said contacting head.

1,881,458. TELEGRAPH RECEIVING OR REPEATING CIRCUIT. ALBERT E. FROST, Brooklyn, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,212. 7 Claims. (Cl. 178—70.)

1. In a telegraph system, an incoming line, an outgoing line, means for normally transmitting negative current over said outgoing line, a thermionic relay device responsive to positive impulses from said incoming line to transmit positive impulses over the outgoing line, said

supporting member which is connected with said conduit member and expands and contracts in response to temperature changes, an auxiliary supporting member which is connected with said main supporting member and with said relief valve and expands and contracts in response



to temperature changes at a different rate from said main supporting member, a valve movable toward and from said regulating valve seat, and a stem of material practically insensible to temperature changes connecting said regulating valve with said auxiliary supporting member.

1,881,451. CAR ROOF. EDWIN G. FRANCK, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed May 25, 1931. Serial No. 539,943. 5 Claims. (Cl. 105—377.)

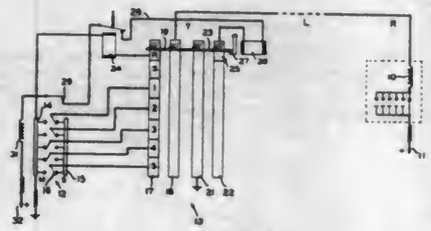


1. The combination with an open car of the gondola type having outwardly extending reinforcing flanges at the top of its sides, of a temporary roof therefor comprising a plurality of sections arranged end to end and together covering the car, said sections having downturned flanges at the eaves and at the ends of the car, weatherproofing means between adjacent sections and clamping means secured to the downturned eaves flanges hooking under and engageable with the under side of the flanged edges of the car.

2. A roof for open cars of the gondola type comprising a plurality of sections arranged end to end and together covering the car, each of said sections extending from eaves to eaves and having downturned weatherproofing flanges at the eaves and means mounted on said downturned flanges for hooking under and clamping said section to the flanged upper end of the car.

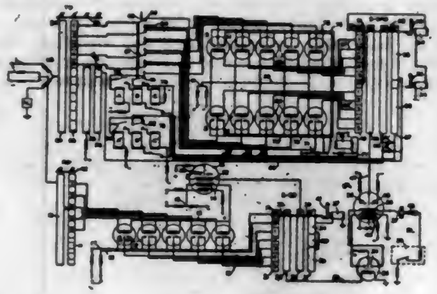
1,881,452. AUTOMATIC STOP FOR TELEGRAPH TRANSMITTERS. LAURENCE W. FRANKLIN, Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No 554,551 8 Claims. (Cl. 178—2.)

3. In a telegraph system, a line circuit, a transmitting apparatus associated with said line circuit and a relay having its winding in said line circuit and serving when an interruption in the continuity of the line circuit occurs, other than that occasioned by the normal operation



of the transmitting apparatus, to lock up said transmitting apparatus so as to preclude further operations thereof.

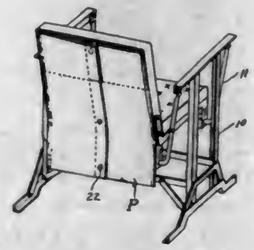
1,881,453. TELEGRAPH PRINTER EXCHANGE SYSTEM. LAURENCE W. FRANKLIN, Delawanna, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No. 554,552. 25 Claims. (Cl. 178—52.)



1. In a telegraph system, a multiplex system terminating at a main station, a simplex system extending from said main station to a distant station, means at the main station for storing each code combination of impulses received over a channel of the multiplex system, and means for starting the repeating of such stored code combination of impulses over the simplex system, upon reception of the first marking impulse of the combination.

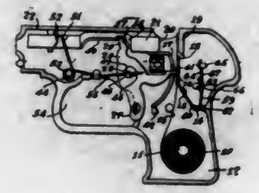
1,881,454. PROTECTIVE COVERING FOR ARTICLES OF FURNITURE. CHARLES E. FRIESNER, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed July 13, 1931. Serial No. 550,293. 1 Claim. (Cl. 155—182.)

A covering for furniture having a seat and back portion which latter is movable to lie upon the seat portion, composed of a fabric body of an area adapted to cover the top and sides of the seat and back portions of the furniture when the latter is in its folded position, a pair of spaced reinforcing members for said body spaced inwardly from the top and bottom and sides of the latter and having vertically alined ends, means to secure said reinforcing members and thereby the fabric body to the top and bottom portions of the back on the rear face of the latter, the upper of said reinforcing members defining lines of fold about which the top of the fabric body may be folded downwardly and the alined ends of the reinforcing members forming lines of fold about which the sides of the fabric body may be folded inwardly to have the edges of the latter overlap, and means to removably secure the said overlapping edges together, the bottom of the body below the lower reinforcing member being of a width so as to project below the seat in all positions and the top



and sides of the body when open projecting over the top and sides of the back and front of the seat whereby all of the corners of the seat and back of the furniture when in folded position are completely covered by downwardly extending portions of the fabric body.

1,881,455. TOY PISTOL. RUSSELL A. FRISBIE, Middletown, Conn., assignor to The J. & E. Stevens Company, Cromwell, Conn., a Corporation. Filed Aug. 7, 1929. Serial No. 384,021. 7 Claims. (Cl. 42—57.)



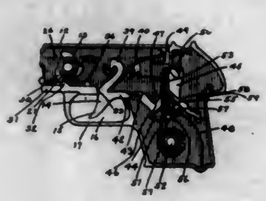
1. In a toy tape pistol, a casing part having a tape holding lug, a tape guide spring having a free tip end opposed to said lug for pinching the tape, a trigger member supported from said casing part for rotative movement and provided with a tape engaging arm that is located generally below said lug, said spring having a portion adjacent said arm and opposed thereto, and the parts being constructed and arranged so that said arm will swing along said portion for feeding tape therealong and upward, will push said free end tip away from said lug, and will push the tape into the space between said tip and lug, and, rseponsive to return movement, will release said pistol part, a holding spring secured to said main part spring for effecting the pinching of the tape.

and having arms upstanding that are shaped to provide

6. In a toy pistol, a main pistol casing part and a cover opposed generally V-shaped parts, and said cover part being provided with an opening that has opposed border walls that are individually V-shaped and adapted to cooperate with said arms for holding the parts together.

1,881,456. MACHINE GUN TOY PISTOL. RUSSELL A. FRISBIE, Middletown, Conn., assignor to The J. & E. Stevens Company, Cromwell, Conn., a Corporation. Filed Aug. 15, 1930. Serial No. 475,489. 2 Claims. (Cl. 42—57.)

1. In a machine gun toy pistol, a pistol structure comprising a casing and mechanism housed therein that is operative to fire paper caps in strip form repeatedly by successive pulling of the trigger, a star-cam housed for rotative movement in said casing, and an intermediate member housed in said casing for reciprocating movement



serving to operatively connect said star-cam and some part of said mechanism so as to effect such firing responsive to rotation of said star-cam in substantially the same manner as by such pulling of the trigger.

1,881,457. CIRCUIT AND POLARITY TESTER. WILLIAM A. FROECKMAN, St. Louis, Mo. Filed Jan. 27, 1930. Serial No. 423 673. 6 Claims. (Cl. 175—183.)

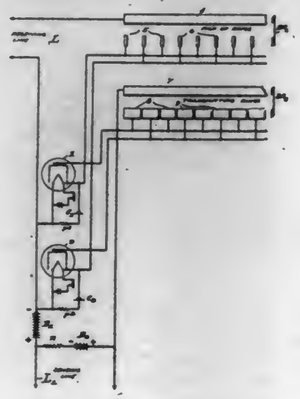


1. In an electric testing device, a contacting head for sockets to be tested, into which said head may be inserted, a flash light bulb, a permanent magnet, an iron armature core rotatable between the poles of said magnet, said armature having a winding thereon connected with said bulb and with said contacting head.

1,881,458. TELEGRAPH RECEIVING OR REPEATING CIRCUIT. ALBERT E. FROST, Brooklyn, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,212. 7 Claims. (Cl. 178—70.)

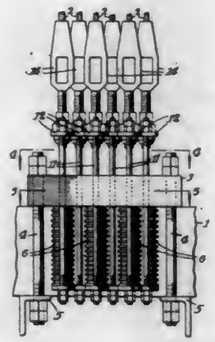
1. In a telegraph system, an incoming line, an outgoing line, means for normally transmitting negative current over said outgoing line, a thermionic relay device responsive to positive impulses from said incoming line to transmit positive impulses over the outgoing line, said

thermionic device being characterized by anode, cathode and starting electrode elements so constructed and arranged that current continues to flow in the anode-



cathode circuit unaffected by the potential of the starting electrode after being started by a critical starting potential applied to the starting electrode.

1,881,459. STRAIN EQUALIZING DEVICE. WILLIAM P. FROST, Jackson Heights, N. Y., assignor to Evans Elevator Equalizer Company, Bedford, Ind., a Corporation of Indiana. Filed Sept. 18, 1931. Serial No. 563,481. 2 Claims. (Cl. 187—1.)



1. In an equalizing device for connecting a load and a plurality of stress-sustaining parts, a head plate connected to said load, said head plate being formed with a liquid flow canal, a plurality of liquid-filled bellows members secured at one end to said head plate and communicating with said canal, and connecting members severally connecting the other end of said bellows and said stress-sustaining parts.

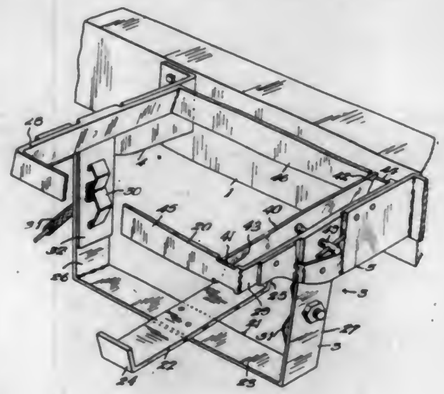
1,881,460. RELAY. JACOB R. FRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 21, 1927. Serial No. 241,580. 7 Claims. (Cl. 175—320.)

1. A relay having two cores magnetically connected at each end, an armature, a separate magnetic connecting link between the cores and the armature, an operating winding on one core, a polarizing winding with a portion of its turns on each of the cores, and means whereby if the windings are energized to set up flux in the magnetic



connection through the cores only the armature is not attracted and if energized also to set up flux in the separate magnetic connecting link the armature is attracted.

1,881,461. BATTERY CARRIER TERMINAL ASSEMBLY. JOHN E. FURTNEY, Detroit, Mich. Filed Mar. 5, 1929. Serial No. 344,405. 3 Claims. (Cl. 173—324.)

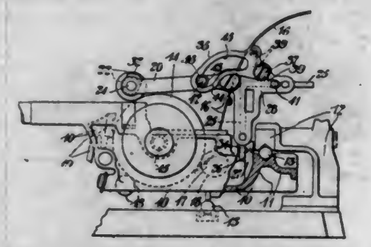


1. A terminal for a battery carrier comprising an upright supporting arm, a headed electrical conductor element projecting laterally from said arm, and a spring metal contact member anchored on said element and including a laminated strip having opposed return bent portions intermediate its ends receiving opposite sides of the head of said element, said contact member having portions inclining outwardly from said return bent portions for contacting relation with battery contact plates and having return bent end portions.

1,881,462. TYPEWRITING MACHINE. CARL GABRIELSON and CHARLES WAUCQUEZ, Syracuse, N. Y., assignors to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,413. 6 Claims. (Cl. 197—138.)

1. In a front strike typewriting machine, the combination of a paper carriage, a platen on the carriage, a paper bail having rearwardly extending side arms pivotally held to the carriage for swinging of the bail about an axis in rear of the vertical plane of the platen, a pair of fore and aft extending controller arms pivotally held at their rear ends to the carriage to swing about an axis parallel with the bail axis, a pair of springs connected with the carriage and said arms to urge the arms downwardly, said arms each having a cam edge having two active portions and an intermediate dwell portion, and laterally projecting means carried by the bail side arms and engaged under the cam edges of said controller

arms, the two active portions of each cam edge being arranged to swing the bail in opposite directions, and the dwell portions of the cam edges being curved so as



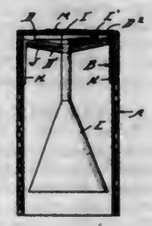
to lie in an arc conforming with the path of movement of the laterally projecting means when engaged therewith.

1,881,463. AIRFOIL. EDMUND P. GAINES, Columbia, S. C. Filed Mar. 7, 1930. Serial No. 433,864. 6 Claims. (Cl. 244—29.)



1. An airfoil having its mean camber line extended at the trailing edge by a thin substantially rigid member having its opposite surfaces substantially parallel.

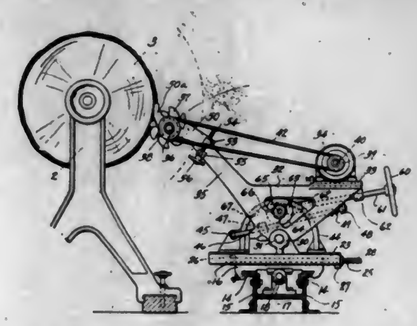
1,881,464. CARTON. THOMAS H. GAGEN, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed Sept. 2, 1930. Serial No. 479,838. 4 Claims. (Cl. 229—37.)



1. A carton for holding fragile articles, each having a base and a stem of reduced diameter extending therefrom comprising an outer polygonal container for receiving the inverted article, said container having foldable flaps at its upper end, certain of said flaps being folded under the base of the article and certain of the flaps being folded over the same to form a resilient suspensory support and means for holding said base in engagement with said flaps.

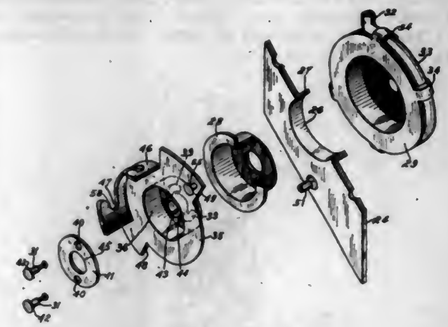
1,881,465. ROSSING MACHINE. HAKON ADOLPH GANES and WILLIAM KILDE, Tacoma, Wash. Filed Feb. 10, 1930. Serial No. 427,122. 2 Claims. (Cl. 144—208.)

1. In a device for removing bark from logs, the combination with log supporting and rotating means of a barking head comprising a revolubly driven shaft parallel with the log supporting means, a series of hammers arranged in close relation radially of and fixed on the shaft, each successive hammer being angularly advanced with



respect to the one next adjacent, and said hammers at the opposite ends of the series being gradually decreased in length.

1,881,466. SWITCH MECHANISM. HARLAN S. GANO, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1931. Serial No. 515,700. 4 Claims. Cl. 200—67.)

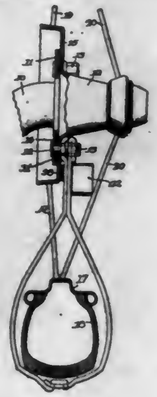


1. Switch mechanism comprising a housing having side walls, one of which is provided with a flanged bearing opening, a pair of cupped discs of larger diameter than the opening disposed on opposite sides of the said side wall and secured together by a pair of shoulder rivets, the inner disc extending into, and journalled for rotation in, the said bearing opening, an operating handle attached to the outer disc, a movable switch within the housing, an operating member therefor, a cupped actuating disc having its cupped portion extending into the cupped portion of the inner disc and journalled for rotation therein and having a flanged bearing opening in which the operating member is rotatably journalled, the said actuating member having a lost-motion connection to the operating member and to the outer disc, and a spring for moving the actuating member in response to a predetermined movement of the operating handle.

1,881,467. LOCK DEVICE. WILLIAM GANZ, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Dec. 28, 1927. Serial No. 242,131. 1 Claim. (Cl. 70—90.)

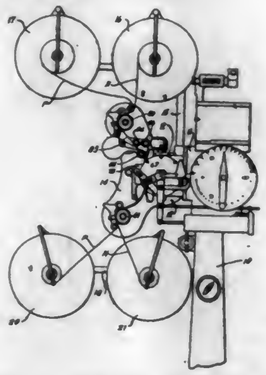
As an article of manufacture for the purposes described, a metal loop-shaped member adapted to straddle a tire

and having two ends one over the other, one of said ends being provided with means for receiving a wheel-retaining



nut, the other of said ends being provided with means for engaging the wheel retaining nut to prevent rotation of the nut relatively to the loop-shaped member.

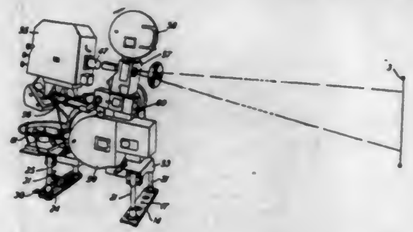
1,881,468. SOUND PICTURE PRINTER. FRANK E. GARBUTT and THOMAS M. INGMAN, Los Angeles, Calif., assignors, by direct and mesne assignments, to Paramount Publix Corporation, Los Angeles, Calif., a Corporation of New York. Filed May 20, 1929. Serial No. 364,514. 14 Claims. (Cl. 95—75.)



1. In a motion picture printing machine having a printing aperture of the width of the total printing area on a given film, and means for moving the film longitudinally past the printing aperture, the combination of a pair of independently movable sound track masks, each adapted to be moved to cover an area at the respective side edges of the aperture, the width of each of said areas being equal to the width of a sound track, and another independently movable mask adapted to be moved to cover the entire area of said aperture between said side edge areas.

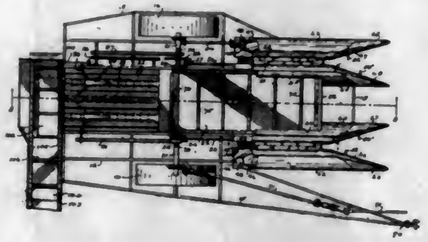
1,881,469. MOTION PICTURE PROJECTOR. ANTONIO GASTONGUAY, New York, and GEORGE PULLER, Port Washington, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 384,923. 6 Claims. (Cl. 88—24.)

1. The method of adapting a motion picture projector to show sound pictures which comprises masking the sound picture to have the same relative proportions as a silent motion picture, projecting the masked sound picture en-



larged to the same area as the projected silent picture and rotating the direction of projection to center the sound picture on the screen.

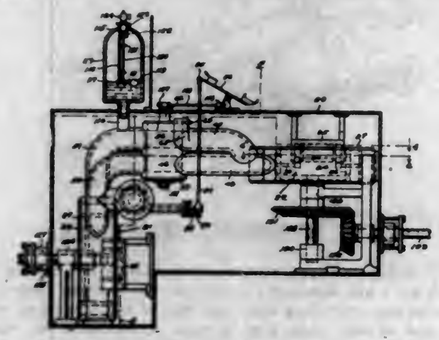
1,881,470. TWO ROW CORN PICKER. JOHN H. GENTRY, near Greentown, Ind. Filed Feb. 18, 1929. Serial No. 340,673. 9 Claims. (Cl. 56—105.)



1. In a corn picker, a central upwardly and rearwardly inclined corn conveyor, a pair of snapping rolls on each side of said conveyor, the outer roll in each of said pairs being mounted somewhat higher than the inner roll of that pair, a wall extending concavely upwardly on each side of each pair of snapping rolls whereby the top edges of the walls in each pair are directed toward each other, and an apron extending outwardly and around downwardly from each of the top edges of said walls presenting convex surfaces thereby.

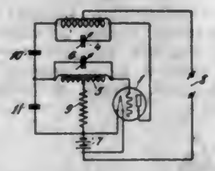
1,881,471. HYDRAULIC VARIABLE SPEED GEARING. FRED A. GERLING, Boise, Idaho. Filed Feb. 2, 1931. Serial No. 513,024. 4 Claims. (Cl. 60—53.)

1. In hydraulic transmission, a rotary pump, means to drive the pump, a rotary motor, means driven by the rotary motor, a pressure supply pipe connected with the outlet side of the pump, an inlet pipe connected with the intake side of the pump, said pipes having their ends disposed at different elevations, a pair of inlet pipes leading into the motor at different points for driving the same in opposite directions and having their ends disposed in substantially the elevation of the pressure supply pipe of the rotary pump, a pair of outlet pipes leading into the inlet pipes to receive exhaust fluid when the motor is operated in opposite directions and having their ends disposed at substantially the elevation of the end of the inlet pipe of the rotary pump, a common valve casing connecting the pressure supply pipe of the rotary pump with the inlet pipes of the rotary motor, and the inlet pipe of the rotary pump with the outlet pipes of the rotary motor, a single valve body mounted to turn within the common valve casing and provided in its upper portion with a plurality of intersecting ports disposed generally at a right angle to each other and so arranged that the pressure supply pipe from the rotary pump may be alternately placed into communication with the inlet pipes from the rotary motor, said valve body being provided at an elevation beneath the intersecting ports, with a transversely tapered port adapted to alternately place the inlet pipe of the rotary pump into communication with the outlet pipes of the rotary motor, and means engaging the top of the valve body to turn the same.



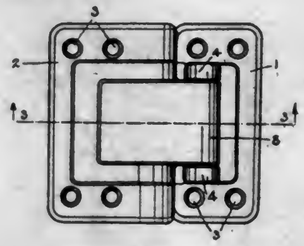
2. In hydraulic transmission, a rotary pump, inlet and outlet pipes leading into the rotary pump at different points, a rotary motor, inlet pipes leading into the motor at different points, outlet pipes leading into the motor at different points, valve means to alternately place the outlet pipe of the pump into communication with the inlet pipes of the motor, and the inlet pipe of the pump into communication with the outlet pipes of the motor, a by-pass device connected across the outlet and inlet pipes of the rotary pump, said by-pass device including a tubular casing having one end open and provided near its opposite end with an internally arranged annular flange constituting a valve seat, a spider mounted within the central portion of the tubular valve casing and provided with an apertured hub, a valve arranged within the tubular casing disposed to engage the valve seat, a valve rod connected with the valve and slidable within the apertured hub, a compressible coil spring surrounding the valve rod and disposed between the apertured hub and valve, a longitudinally slotted head arranged upon the opposite side of the spider with relation to the spring and secured to the valve rod, a rock shaft extending into the tubular valve casing, a crank mounted within the valve casing and secured to the rock shaft and carrying a pin operating within the elongated slot of the head, a second crank secured to the rock shaft exteriorly of the tubular valve casing, a pivoted pedal, and a rod pivotally connecting the pedal and the last named crank.

1,881,472. OSCILLATION SYSTEM. FELIX GERTH, Berlin-Tempelhof, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Templehof, Germany. Filed Apr. 14, 1927, Serial No. 183,810, and in Germany Apr. 16, 1926. 6 Claims. (Cl. 250—36.)



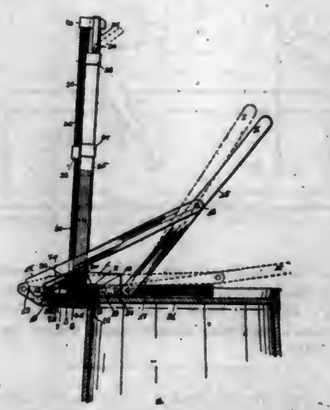
1. In a vacuum tube oscillation circuit, comprising a single vacuum tube, having cathode, anode and control electrodes, an oscillatory circuit connected between said cathode and said anode, a control circuit connected between said control electrode and said cathode, a grid leak resistance placed between a symmetry point of said control circuit and said cathode and high tension supply leads for said tube connected to said cathode and a symmetry point of said oscillatory circuit.

1,881,473. CONCEALED PIN HINGE. CARL GESKE and ANDREW EKMAN, Grand Rapids, Mich., assignors to Winters & Crampton Mfg. Co., Grandville, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,602. 4 Claims. (Cl. 16—128.)



1. In a hinge, a hinge plate having spaced apart ears, each ear having a hinge pin receiving opening, a second hinge plate having an extension between said ears, two hinge pins mounted for longitudinal movement in said extension and extendible into the openings of the respective ears and a flexible tongue forming a part of the said extension structure bendable into a position between the inner ends of said hinge pins to retain them in extended position.

1,881,474. STAPLING MACHINE. OSCAR D. GIBBS, Rochester, N. Y., assignor of one-third to Eric Ischinger, East Rochester, N. Y. Filed Jan. 14, 1929. Serial No. 332,468. 17 Claims. (Cl. 1—48.)

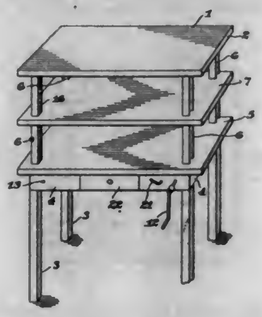


1. A stapling machine comprising a head having a throat opening extending into the bottom of it, a driver in said head on one side of said throat opening and below it, means for positioning a staple in said head in front of said driver to have said driver force a staple into a pair of elements, one of which projects into said throat opening and the other of which is located below said opening while at the same time drawing the opposite side of the throat opening against the back of the element projecting thereinto, and a supporting member projecting rearwardly from said head above said driver to rest on one of the elements to be stapled and support said head with its driver in line with this element on which the head is supported.

1,881,475. MULTITOP TABLE. MARSHALL D. GIBSON, Webster Groves, Mo. Filed Dec. 17, 1930. Serial No. 502,926. 5 Claims. (Cl. 45—111.)

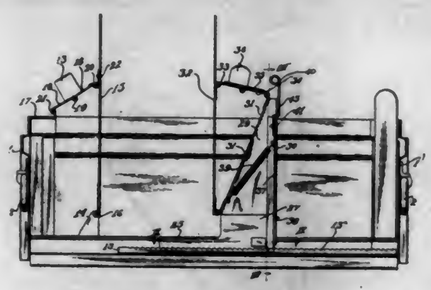
1. A device of the class described having a frame including legs, a horizontal member having a top surface se-

cured to the legs, vertical members telescoping with the legs, a horizontal top member secured to and supported by said vertical members, means operable manually to simul-



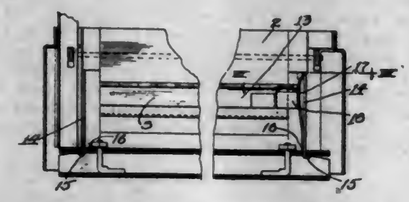
taneously elevate said vertical members, an intermediate horizontal member, and engaging elements secured to said vertical members and spaced from said horizontal top member adapted to elevate said intermediate member.

1,881,476. POSTING TRAY. VICTOR W. GIDEON, Chicago, Ill., assignor to Wilson Jones Company, a Corporation of Massachusetts. Filed Dec. 14, 1927. Serial No. 239,882. 10 Claims. (Cl. 129—16.)



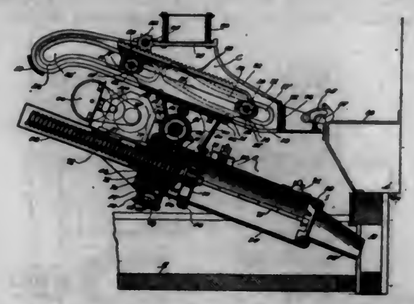
2. A posting tray having a runway in the bottom thereof with ledges extending over said runway, in combination with a follower having members in said runway and having rollers engaging beneath said ledges for the purpose set forth.

1,881,477. POSTING TRAY. VICTOR W. GIDEON, Chicago, Ill., assignor to Wilson-Jones Company, a Corporation of Massachusetts. Original application filed Dec. 14, 1927, Serial No. 239,882. Divided and this application filed Oct. 22, 1928. Serial No. 314,021. 4 Claims. (Cl. 129—16.)



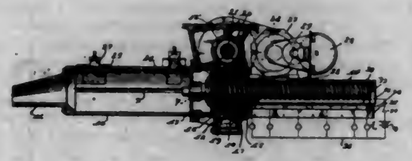
2. In a posting tray having a drop side, a swingable abutment upon the drop side, and cooperating yielding means between said drop side and swingable abutment for controlling the movement of said abutment.

1,881,478. CLAY GUN STRUCTURE. AUGUST F. GIESE, Jr., Gary, Ind. Filed Sept. 10, 1931. Serial No. 562,034. 9 Claims. (Cl. 266—42.)



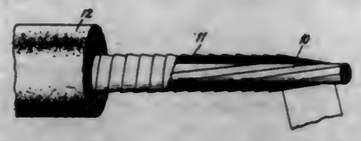
9. In clay gun apparatus, the combination of a supporting post, a hub mounted on said post for rotation thereon, a boom arm extending from said hub, a carriage frame at the end of said boom arm, a truck reciprocable on said carriage, a gun suspended from said truck, means for rotating said hub to swing said boom to move said gun in alignment with a furnace tapping hole, and driving means for said truck for controlling the reciprocation thereof for shift of said gun into or out of discharging position, said driving means including a shaft at one side of said boom arm having driving connection with said truck, a motor mounted on said hub at the other side of said arm, and a transmission train mounted on said hub at the end of said arm and connecting said motor with the shaft.

1,881,479. CLAY GUN PISTON POSITION INDICATING MEANS. AUGUST F. GIESE, Jr., Gary, Ind. Filed Sept. 24, 1931. Serial No. 564,788. 5 Claims. (Cl. 266—42.)



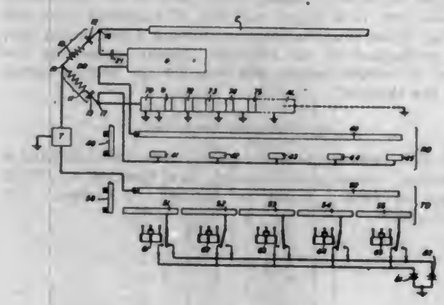
4. The combination with a clay gun comprising a cylinder and a piston shiftable therein for ejecting clay therefrom, of electrical indicating devices and electrical circuits therefor, and switch mechanisms for said circuits operated in synchronism with the travel of the piston in the cylinder to control said circuits for indication by said indicating devices of the travel and position of the piston in the cylinder.

1,881,480. CONTINUOUSLY LOADED COMMUNICATION CONDUCTOR. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 353,994. 8 Claims. (Cl. 178—45.)



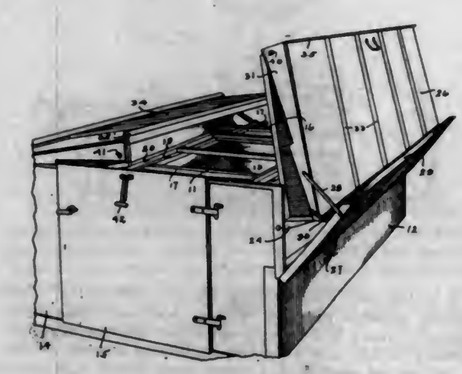
1. In a continuously loaded communication conductor, a magnetic material surrounding the conductor and comprising a layer of helical turns of tape with not less than about 50% overlap of adjacent turns.

1,881,481. DUPLEX TELEGRAPH SYSTEM. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 3, 1932. Serial No. 590,563. 5 Claims. (Cl. 178—68.)



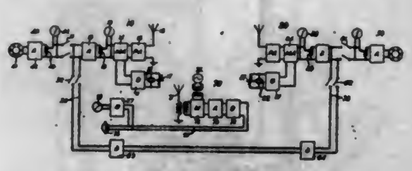
1. A duplex signaling system, including a magnetically loaded submarine cable and a duplex bridge circuit connected to said cable, which comprises a transmitting circuit including a sending distributor, a receiving branch including a receiving distributor for synchronous operation with said sending distributor and oriented with respect thereto for proper timing with respect to outgoing impulses, a balancing network for simulation of the characteristics of said cable having inductance, capacitance and resistance elements adapted for adjustment of said network throughout its length for a fair overall balance and having a plurality of sections spaced as to time of signal propagation by one half of a signal period, each of said sections having its resistance elements adapted for close adjustment to such values that the unbalance effects upon said receiving branch due to propagation of impulses through said section and the corresponding cable section will substantially compensate for each other during the receiving time of incoming impulses.

1,881,482. TRAILER BODY. WARREN L. GILKISON, Terre Haute, Ind., assignor to E. P. Gilkison & Sons Company, Terre Haute, Ind., a Corporation of Indiana. Filed Jan. 28, 1931. Serial No. 511,840. 1 Claim. (Cl. 296—23.)



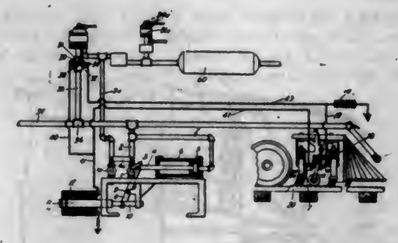
In a trailer body, having a side and ends higher than the side, a cover plate pivotally carried between the ends adapted to be swung around to form a closure over the body or to project laterally from the side and form a horizontal sleeping bed support, and spring means aiding the swinging of the plate from either of said positions, and an apron hinged to said side and linked to said plate to serve as a closure between said side and said plate when the plate is in the closed position said plate and apron having cooperative gutter-forming and rain-excluding flanges.

1,881,483. RADIO TRANSMISSION SYSTEMS. GLENN D. GILLETT, Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 10, 1930. Serial No. 460,246. 10 Claims. (Cl. 250—2.)



1. The method of operating a plurality of radio transmitters at a common carrier frequency which comprises detecting the resultant signals at a point where the field strengths of the waves from the several transmitters are approximately equal, transmitting the detected signals to one transmitter and adjusting the frequency of the carrier wave of that transmitter to substantially eliminate the beats from the detected signals.

1,881,484. AUTOMATIC TRAIN CONTROLLING APPARATUS. JAMES P. GILLIGAN and GEORGE W. EDWARDS, Toledo, Ohio. Filed Jan. 18, 1927. Serial No. 161,908. 9 Claims. (Cl. 246—180.)

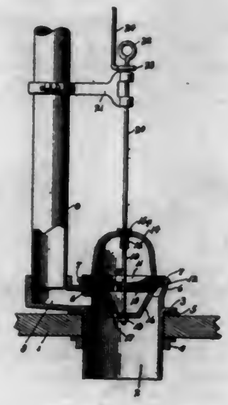


1. Automatic train control apparatus comprising a third rail and electrical means for controlling the application of the train brakes embodying a trolley, a source of electrical current carried by the train, spaced contact plates in an electrical circuit normally adapted to prevent application of the train brakes and a contact member carried on said trolley having a short arm extending to one contact plate and a long arm extending to the other contact plate, the said contact member being effective to maintain connection between the contact plates when the trolley passes over a third rail in one direction and to break connection between the contact plates when the trolley passes over a third rail in the opposite direction.

1,881,485. FLUSH VALVE CONSTRUCTION. ALLEN R. GILMORE, St. Louis, Mo. Filed May 26, 1930. Serial No. 455,643. 4 Claims. (Cl. 4—57.)

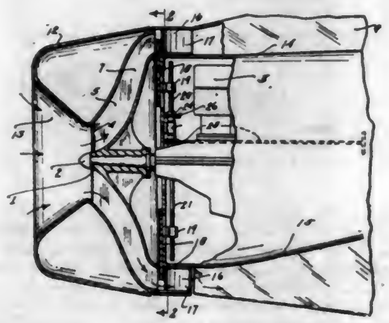
2. A float valve comprising, a disc of relatively soft rubber having horizontal upper and lower sides and having a downwardly and inwardly curved annular surface around it, an inverted cup-like member of hard rubber over and bearing against the upper side of the intermedi-

ate member, a lower cup-like member of hard rubber under and bearing against the underside of the intermediate member, means for connecting the parts together, and



means to drain the space between the intermediate and upper member through the intermediate and lower members.

1,881,486. PROPELLER. OWEN G. GILSTRAP, Portland, Oreg., assignor of one-third to Chester D. Ries, Portland, Oreg. Filed Jan. 29, 1931. Serial No. 511,963. 4 Claims. (Cl. 244—18.)

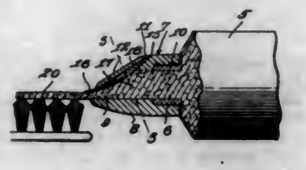


1. In a device adapted for being rotatably secured to the power shaft of an aeroplane engine, comprising a plurality of curved blades extending outwardly from the power shaft, said blades disposed in spaced relationship to each other and forming curved channelways therebetween, fins secured to the peripheries of each of the blades, means disposed immediately in front of the blade assembly adapted for inducing air currents to contact and pass through the blade assembly, means disposed upon the aeroplane fuselage for diverting the air currents emanating from the channelways in order to have them contact the fuselage, and means for regulating the volume of air currents emanating from the channelways.

1,881,487. RECOVERY OF IODINE. CHARLES W. GIRVIN, Long Beach, Calif., assignor, by mesne assignments, to General Salt Company, Long Beach, Calif., a Corporation of California. Filed Feb. 21, 1927. Serial No. 170,055. 4 Claims. (Cl. 23—217.)

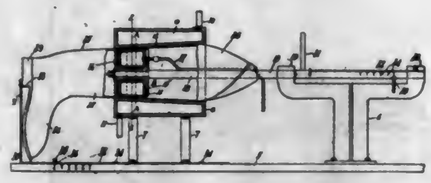
1. The process of recovering iodides from adsorptive charcoal containing iodine which consists of submerging the charcoal in a dilute solution of sulphuric acid and blowing steam into the solution through a perforated iron pipe submerged in the solution, thereby converting the iodine to ferrous iodide, and washing the ferrous iodide from the charcoal.

1,881,488. SELF-CLOSING CAP FOR COLLAPSIBLE TUBES. GEORGE A. GLEASON, New York, N. Y. Filed July 10, 1931. Serial No. 549,983. 2 Claims. (Cl. 221—60.)



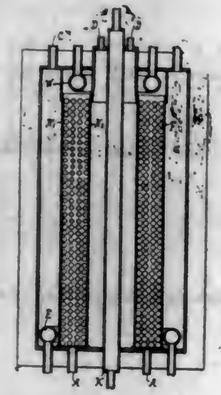
1. A device of the character indicated comprising a tubular member beveled on one end, a cover slidably mounted but having an interlocking connection with said beveled face, and a resilient valve disposed on the beveled face between said tubular member and said cover and normally closing the opening through said tubular member, the valve being frictionally engaged with the beveled face of the tubular member and with the cover.

1,881,489. TOP BOOT VULCANIZER, EXTERNAL TYPE. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,560. 5 Claims. (Cl. 18—18.)



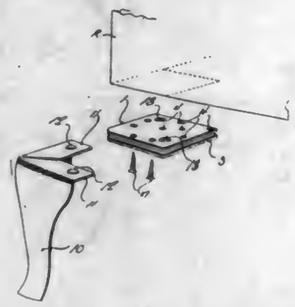
3. A top boot vulcanizer having, in combination, a vulcanizer member provided with a bore extending therethrough, means to heat said vulcanizer member, a presser member within said bore and embodying therein a head, a rod fast to said head, a frame upon which said rod is slidably supported and a ring of elastic material with an annular chamber therein mounted on said head, and means to convey air under pressure to said chamber to distend said ring, whereby sheet material interposed between said ring and vulcanizer member may be pressed against the latter and vulcanized.

1,881,490. PROCESS AND APPARATUS FOR THE SEPARATION OF GAS MIXTURES. PAUL GMELIN, Mannheim, and ADOLF KNOEBEL, Wolfen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 27, 1929, Serial No. 416,810, and in Germany Dec. 31, 1928. 6 Claims. (Cl. 183—115.)



1. A process for the separation of gas mixtures which comprises passing a gas mixture along one side of a layer of a trickling and vaporizing liquid and removing the vapor and the components of said gas mixture diffused therein from the other side of said layer, and separately withdrawing the remaining components of the gas mixture.

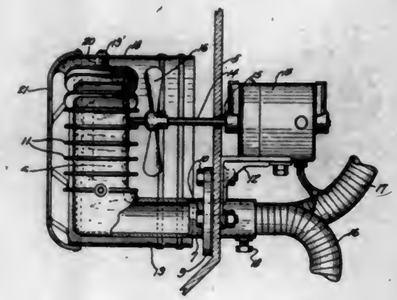
1,881,491. DETACHABLE LEG. JULIUS J. GOETZ, Milwaukee, Wis., assignor to Western Metal Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 20, 1931. Serial No. 538,686. 6 Claims. (Cl. 45—48.)



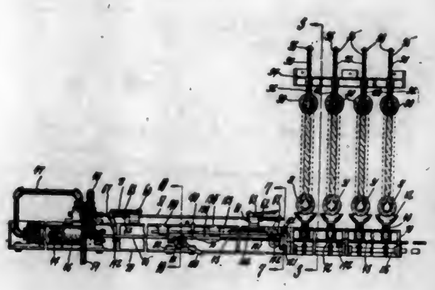
1. In combination, a keeper adapted to be attached to the article to be supported and comprising a pair of keeper plates, means for spacing the plates slightly and securing them to each other, one of the plates being adapted to be fastened to the articles to be supported, one of said plates having socket openings, and a leg provided with attaching flanges adapted to be fitted in between the plates, said flanges having bosses engageable in the sockets.

1,881,492. VEHICLE HEATER. WILMER F. GOETZ and JULIUS F. GOETZ, Hartford, Wis. Filed Aug. 29, 1930. Serial No. 478,628. 5 Claims. (Cl. 257—137.)

3. In a vehicle having a dashboard provided with openings therein, a heater comprising a tubular radiator portion within the passenger space of the vehicle, tubular inlet and outlet extensions in connection with said radiator portion, a fixed collar surrounding said extensions and spaced from the ends thereof, said ends passing through one of the openings in the dashboard to a position outside of the passenger space, an electric motor outside of the passenger space, a support for said motor, a fan within the passenger space of the vehicle adjacent said radiator portion, a driving connection extending from the motor through the dashboard to said fan, and means extending through the collar, dashboard, and motor support for securing all of said parts in position.

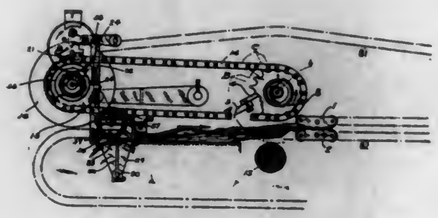


1,881,493. APPARATUS FOR TWISTING SKEINS OF YARN. CHESTER H. GOLDSMITH, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 2, 1930. Serial No. 499,495. 3 Claims. (Cl. 117—9.)



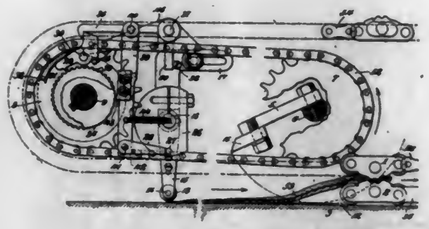
1. Apparatus for twisting a closed flexible loop, which comprises a pair of elements mounted to receive said loop and to stretch it taut, means for rotating one of said elements relatively to the other to twist the loop alternately in opposite directions, means for automatically stopping the rotation after a predetermined number of reversals in the direction of twist.

1,881,494. STEM CUTTING MECHANISM FOR TOBACCO STEMMING MACHINES. CLAIBORNE W. GOOCH, Jr., Lynchburg, Va., assignor to United Cigarette Machine Company, Inc., Lynchburg, Va., a Corporation of Virginia. Filed Dec. 19, 1931. Serial No. 582,151. 20 Claims. (Cl. 131—57.)



1. In a tobacco stemming machine, a knife driving mechanism; and means for placing the leaves under tension and adapted to cause actuation of said mechanism to transversely weaken the stems of the leaves when such tension is relieved.

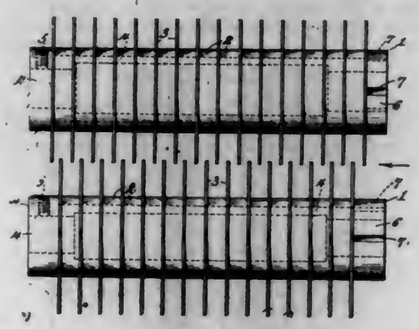
1,881,495. STEM CUTTING MECHANISM FOR TOBACCO MACHINES. CLAIBORNE W. GOOCH, Jr., Lynchburg, Va., assignor to Tobacco Stemming Machine Company, Lynchburg, Va., a Corporation of Delaware. Filed Aug. 6, 1930. Serial No. 473,426. 20 Claims. (Cl. 131—57.)



1. In a tobacco stemming machine, a knife for transversely weakening the leaf stems; a feeler cooperating with the leaves; and an intermittent driving mechanism cooperating with the feeler adapted to set the knife in motion when the tip ends of the leaves reach the feeler to weaken the stems at a predetermined distance from the tip ends of the leaves.

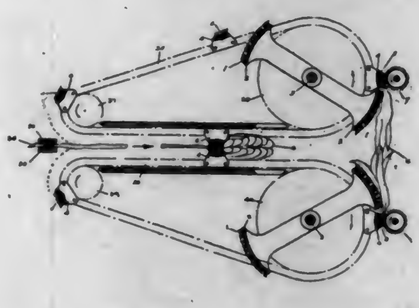
20. In a tobacco stemming machine; a knife and driving mechanism therefor to transversely weaken the stem before the final stemming of the blade portions of the leaves from the stem.

1,881,496. BUTTING BLADES FOR TOBACCO STEMMING MACHINES. CLAIBORNE W. GOOCH, Jr., and ALCIDAS J. MARCOTTE, Lynchburg, Va., assignors to United Cigarette Machine Company, Inc., Lynchburg, Va., a Corporation of Virginia. Filed Apr. 23, 1931. Serial No. 532,302. 2 Claims. (Cl. 131—57.)



1. A leaf-stripping assembly for tobacco stemming and butting machines, comprising a plurality of stemming devices, each device having a plurality of rigid blades.

1,881,497. TOBACCO STEMMING MACHINE. CLAIBORNE W. GOOCH, Jr., Lynchburg, Va., assignor to United Cigarette Machine Company, Inc., Lynchburg, Va., a Corporation of Virginia. Filed Oct. 28, 1931. Serial No. 571,598. 17 Claims. (Cl. 131—57.)

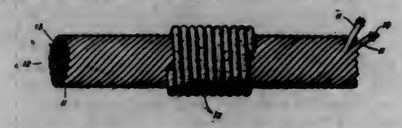


1. In a tobacco stemming machine having stripping and cleaning means, an auxiliary surface in cooperation with the stripping means movable against the stripped tobacco leaves to prevent the tobacco leaves from moving beyond the range of the cleaning means.

1,881,498. ISOLATION OF PURE ALPHA-ANTHRAQUINONE-MONOSULPHONIC ACID. ROBERT J. GOODRICH and IVAN GUBELMANN, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,879. 9 Claims. (Cl. 260—57.)

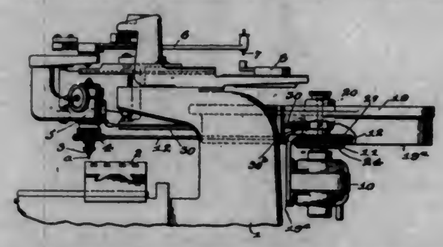
1. The process of isolating anthraquinone-alpha-monosulphonic acid from a reaction mass obtained by sulphonating anthraquinone in the presence of mercury compounds and freed from any unchanged anthraquinone which comprises diluting the reaction mass with water to decrease the concentration of the total anthraquinone-monosulphonic acids therein below 10%, and forming in the diluted mass a concentration of sodium ions just sufficient to precipitate substantially all of the anthraquinone-alpha-monosulphonic acid in the form of its sodium salt, without precipitating any of the beta-isomer.

1,881,499. SUBMARINE CABLE LOADING COIL. WILLIAM S. GORTON, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 21, 1930. Serial No. 469,370. 5 Claims. (Cl. 178—46.)



1. In a coil loaded deep sea cable, a loading coil core comprising a number of fine wires of strain-sensitive magnetic material, characterized in this that the wires are helically laid, whereby the effects of stresses upon the desired properties of said material during and after the laying of said cable are reduced.

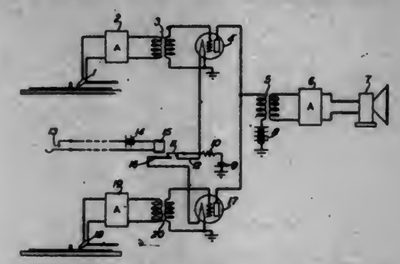
1,881,500. ENGRAVING AND OTHER MACHINE. GEORGE GORTON and GEORGE GORTON, 3d, Racine, Wis. Original application filed Dec. 24, 1926, Serial No. 156,818. Divided and this application filed Jan. 24, 1931. Serial No. 511,068. 9 Claims. (Cl. 90—13.1.)



1. An engraving machine embodying a rotary cutter spindle having a driving belt pulley, a cutter head carrying said spindle, and pantograph mechanism for shifting said cutter head laterally over the work during the cutting operation, in combination with a compensating arm horizontally swingable about a substantially vertical axis and connected with the cutter head to swing therewith and maintain the relative positioning of the arm and head during the operative lateral movements of the head over the work, alined parallel driven and driving belt pulleys at the free end of said arm, a motor carried by said arm adjacent the axis on which the arm swings, and a belt transmission for driving said spindle from the motor, embodying a driving belt from said motor extending outwardly longitudinally of said arm to and driving the driven pulley at the free end of the arm, and a driving belt from the driven pulley to and driving said spindle pulley.

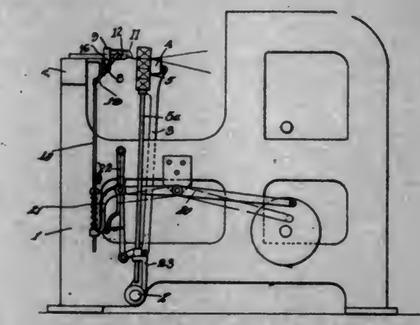
1,881,501. SOUND REPRODUCING SYSTEM. ENART GOSMANN, Elmwood Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,063. 2 Claims. (Cl. 179—100.4.)

1. In combination, a plurality of originating communication channels individually connected to the inputs of a plurality of thermionic devices, said devices each having an anode, a cathode and a control electrode, a terminating communication channel connected to the outputs of all of said thermionic devices, and switching means



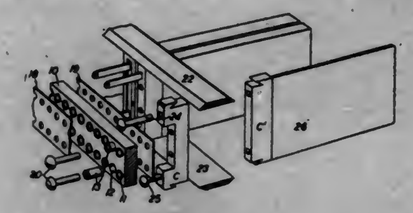
for energizing the cathode of one of said thermionic devices and, at will, deenergizing the cathode of said thermionic device and energizing the cathode of another of said thermionic devices.

1,881,502. FILLING RETAINING DEVICE FOR LOOMS. ABRAHAM GOUSELIN, Fisherville, Mass. Filed Sept. 19, 1930. Serial No. 483,048. 8 Claims. (Cl. 139—195.)



1. In a filling retainer for looms, the combination with a breastbeam carrying a rotatably mounted rod and a lay having an oscillatory movement with respect to the breastbeam, of a pair of filling retainers adjustable longitudinally of the rod so as to engage the filling at different distances from the edges of the fabric being woven, said retainers being moved out of engagement with the filling by the movement of the lay toward the breastbeam.

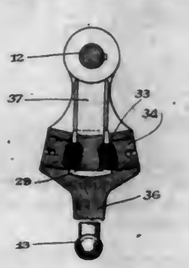
1,881,503. MOUNTING FRAME FOR ELECTRICAL APPARATUS. FRANK H. GRAHAM, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1931. Serial No. 578,981. 5 Claims. (Cl. 179—91.)



1. A mounting for electrical apparatus comprising a supporting frame, a bar having a plurality of holes along its length, a pair of reenforcing bars, clamping devices

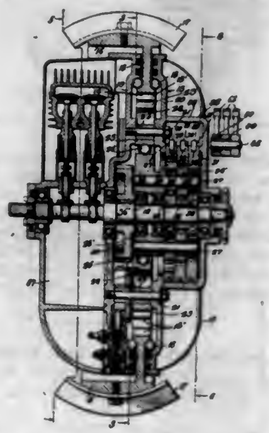
engaging said reenforcing bars, means extending through said holes for securing the clamping devices on the first mentioned bar, and means for securing said mounting on said supporting frame.

1,881,504. VIBRATION DAMPER. MATTHEW P. GRAHAM and GEORGE H. HUFFESD, Detroit, Mich., assignors to Thompson Products, Inc., a Corporation of Ohio. Filed June 13, 1928. Serial No. 284,939. 3 Claims. (Cl. 74—38.)



1. In a steering connection between a gear shaft and a drag link, a lever fixedly secured at one end to said gear shaft, a bifurcated lever pivotally connected at its ends to said gear shaft and to said drag link, the free end of said first lever extending into the bifurcation of said second lever and resilient means held under adjustable compression between the free end of said first lever and said bifurcated lever to permit relative angular displacement of the axis of the first lever with respect to the axis of the second lever.

1,881,505. TRACTOR. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed Aug. 13, 1930, Serial No. 475,114. Renewed May 7, 1932. 3 Claims. (Cl. 180—10.)

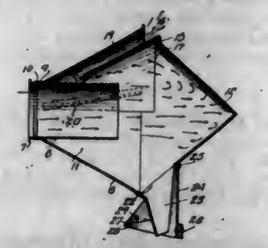


2. A driving unit comprising a casing, a rotatable element in the casing having its periphery projecting from the casing into ground engaging position, a motor in the casing, said rotatable element having a web portion in said casing provided with a toothed opening, and an eccentrically actuated gear driven by said motor engaged with the teeth of said web portion.

1,881,506. DETERGENT. HIRAM LIGGETT GRAY, Larchmont, N. Y. Filed Jan. 3, 1929. Serial No. 330,148. 1 Claim. (Cl. 87—5.)

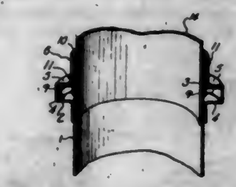
A composition of matter suitable for use as a detergent when admixed with water, consisting of 53 parts of volcanic ash, 27 parts of soapstone, 4 parts of soda ash and 16 parts of trisodium phosphate.

1,881,507. GRAIN CLEANER AND LOADER. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed May 29, 1930. Serial No. 456,896. 9 Claims. (Cl. 209—142.)



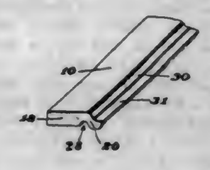
1. In a grain cleaner and loader including a goose neck discharge pipe having a laterally directed outlet, a cleaner head including a flaring conical portion having a smaller end sealingly engaging the pipe rearwardly from the outlet end thereof and a larger end located beyond the outlet end thereof and an oppositely concave baffle portion for receiving material discharged from said outlet, and a deflector extending rearwardly and downwardly over said discharge pipe.

1,881,508. PIPE COUPLING. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed Oct. 26, 1931. Serial No. 571,001. 9 Claims. (Cl. 285—186.)



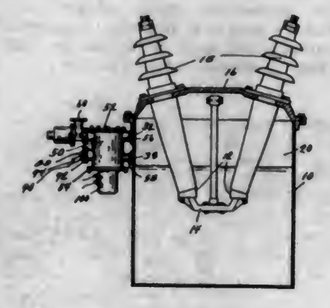
1. A pipe coupling for connecting adjoining pipe sections comprising a contractile coupling band sleeved on one of the pipe sections, a gasket carried by said band and adapted to be seated on the end of the other pipe section, and means for detachably securing said band to said sections.

1,881,509. WELTING AND METHOD OF ITS MANUFACTURE. PERCY W. GREENE, Whitman, Mass., assignor to Perley E. Barbour, doing business as Barbour Welting Company, Brockton, Mass. Filed June 1, 1931. Serial No. 542,320. 12 Claims. (Cl. 36—78.)



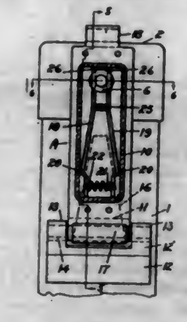
1. The method of manufacturing shoe welting which comprises removing a flesh strip centrally from a double fillet of grain leather and severing the fillet through the stock left by the removal of said flesh strip to produce two welt strips each having an inner margin or extending grain flap of reduced thickness terminating in a flesh shoulder, and then shaping said flap to complete a stitch-receiving groove along said shoulder and form a grain covered sewing edge deflected from the grain face on the extension of the welt.

1,881,510. METHOD AND APPARATUS FOR PROVIDING THE CASINGS OF ELECTRICAL APPARATUS WITH INERT ATMOSPHERES. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1926. Serial No. 152,047. 14 Claims. (Cl. 200—150.)



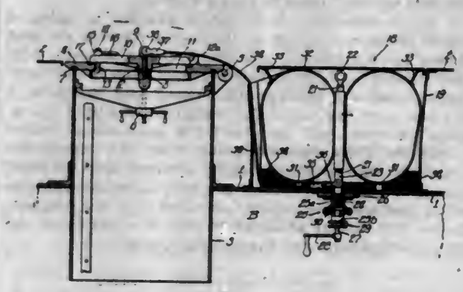
1. The method of providing an inert atmosphere for the casing of an electrical apparatus which consists in placing barium oxide in communication with the interior of the casing and activating the barium oxide to cause it to combine with the oxygen in the casing and subsequently isolating the barium oxide from circulatory communication with the atmosphere of the casing, subjecting the barium oxide to such conditions as to cause it to liberate the combined oxygen free from mixture with the inert atmosphere in the casing, an subsequently restoring the barium oxide in communication with the interior of the casing.

1,881,511. LOCK CONSTRUCTION. PAUL S. GRIERSON, Millburn, N. J., and GRAHAM BRIGHT, Wilkinsburg, Pa., assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed July 22, 1931. Serial No. 552,312. 14 Claims. (Cl. 70—50.)



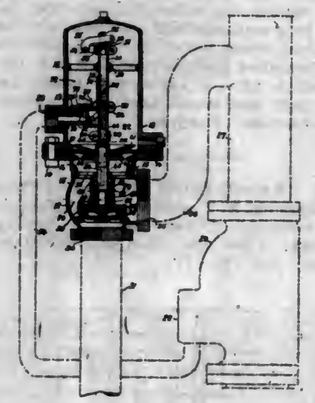
1. Locking mechanism comprising relatively movable cooperative devices, one of said devices comprising a pair of relatively movable magnetic locking elements which when said devices are in cooperative relation, are biased toward each other and to operative locking position in respect to the other of said devices, said devices each including means which when such devices are in cooperative relation, are adapted to coact so as to positively prevent movement of said elements away from each other to inoperative or unlocking position.

1,881,512. SUBMARINE RESCUE MEANS. HUGO E. GRIESHABER, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Original application filed Aug. 28, 1930, Serial No. 478,323. Divided and this application filed June 6, 1931. Serial No. 542,554. 9 Claims. (Cl. 114—16.5.)



1. In combination, a submarine boat having an access hatch trunk and a main cover therefor, said main cover being provided with a manhole, a cover for said manhole removable exteriorly of the trunk, an upwardly flaring buoy compartment exterior of the hull of the boat at the top thereof, a buoy mounted in said compartment and freely movable through the upper end thereof, means operable from within the hull for releasably securing the buoy in the compartment, said compartment being provided with an offset element, and a cable releasably secured at one end to the buoy and coiled in the lower portion of the compartment, said cable passing through the offset element of said compartment and having its other end secured to the manhole cover.

1,881,513. EXHAUSTER FOR SPRINKLER FIRE EXTINGUISHING SYSTEMS. WILLIAM B. GRIFFITH, Audubon, N. J., assignor to Star Sprinkler Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Sept. 25, 1930. Serial No. 484,861. 13 Claims. (Cl. 169—17.)

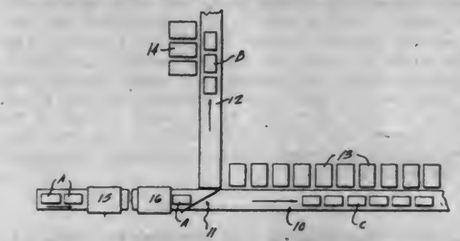


3. An exhauster comprising a casing, a member movably mounted in the casing forming an inlet chamber and a retaining chamber located on opposite sides of said member, means forming a restricted passageway between said chambers through which the pressure in said chambers may slowly equalize, said casing having inlet and drain outlet connections associated with said inlet chamber, a valve for closing the drain connection, an exhaust valve associated with the retaining chamber, a shaft operatively as-

sociated with said member, means associated with said shaft for opening the exhaust valve when said member is moved by a preponderance of pressure in the retaining chamber, and means associated with said shaft for opening the drain valve when said member is moved by a preponderance of pressure remaining in said inlet chamber after said exhaust valve has been opened.

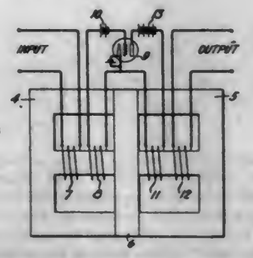
11. In an exhauster for sprinkler systems, a casing, a movable member mounted in the casing forming an inlet chamber and a retaining chamber located on opposite sides of said member, a hollow shaft mounted upon the movable member forming a passageway between said chambers, a valve seat upon the end of the shaft located within the retaining chamber, said seat having a passageway formed through the same communicating with the passageway through the shaft, a bearing rigidly mounted upon the shaft adjacent to said seat, an arm pivotally mounted upon the bearing, and a part adjustably mounted upon the arm having one face thereof arranged to rest upon said seat and restrict said passageway through the latter.

1,881,514. CONVEYER MECHANISM. HENRY C. KELLER, Syracuse, N. Y., and MAYNARD VAN BILLIARD, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Oct. 15, 1930. Serial No. 488,792. 7 Claims. (Cl. 198—21.)



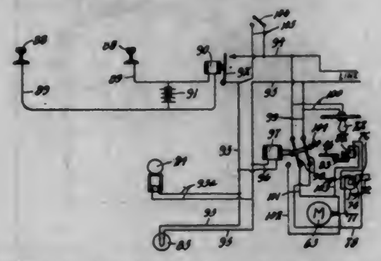
1. In a conveyer system including a guideway along which articles travel, a deflector mechanism by which articles may be deflected from the guideway, said mechanism including a deflector arm, electrical means which, when energized, shift said arm into operating position, and means actuated by each article passing along the guideway toward the deflector arm, which means after actuation by a predetermined number of articles energizes said electrical means, which thereupon shifts the deflector arm into operative position to deflect from the guideway articles which have actuated such means and holds it energized until said means have been actuated by a predetermined number of articles.

1,881,515. TRANSMISSION CIRCUIT. DONALD G. GRIMLEY, Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 31, 1926. Serial No. 132,671. 6 Claims. (Cl. 179—171.)



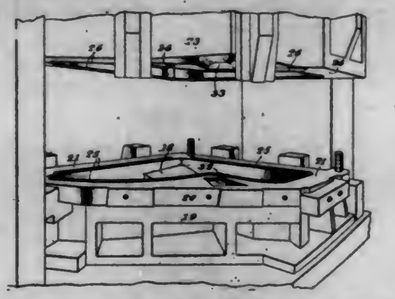
1. In combination, an electron discharge amplifier, input and output transformer windings therefor, a shell type core structure for each of said windings, and means to control the transmission characteristic of said combination to give substantially uniform amplification of impressed waves over a wide range of frequencies, said means comprising a portion common to the core structures for said windings having a magnetic reluctance which is high compared to that of the other portions of said core structures.

1,881,516. RAILROAD CROSSING SIGNAL. FRANK W. GRISWOLD, Minneapolis, Minn., assignor to Griswold Safety Signal Company of Delaware, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 30, 1927. Serial No. 179,492. 30 Claims. (Cl. 246—128.)



30. A signal adapted to be disposed at the crossing of a railway and a highway, having in combination, a sign movable to stop position and to safety position of the highway, electrical control means including a motor for moving said sign to stop position when a train enters the vicinity of said signal and for moving said sign to safety position when said train departs from the vicinity of said signal, and means for maintaining said sign in stop position whenever said electrical control means becomes incapable of operation.

1,881,517. METHOD AND APPARATUS FOR FORMING BODY PANELS. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 27, 1930. Serial No. 464,272. 5 Claims. (Cl. 113—49.)

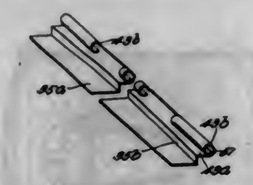


1. In an apparatus for drawing from a single blank a panel, such as the rear quarter panel of a coupé body, in combination, a lower die for supporting the blank, a draw die movable relatively thereto and having means for drawing the blank with angular sides along a reverse curve forming a neck, blank holding means for holding the blank around the line of draw, said blank holding means having a relief area opposite said neck within which movement of the blank is permitted during the draw operation.

5. The method of drawing from a single metal blank the rear quarter panel of a coupé body, which comprises holding the blank and drawing it along a reverse curve forming a neck, relieving an area of the blank opposite said neck outside the line of draw so as to be free to contract and stretch, and gripping the blank between the line of draw and said relieved area while permitting a portion of the metal in said area to move into the draw.

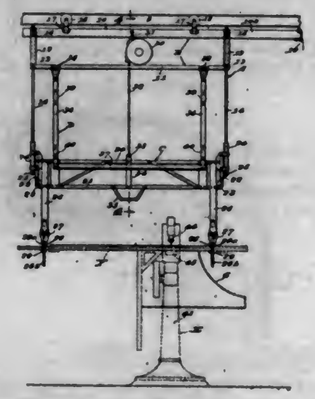
CARNEGIE LIBRARY OF ATLANTA

1,881,518. METHOD OF MAKING HINGES. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,725. 7 Claims. (Cl. 29—11.)



1. The method of making a piano hinge member for an automobile door, comprising forming at one side of a blank a series of projecting fingers separated by slots, partially curling the free edges of the fingers and the bottom edges of the slots, applying pressure in one direction to further curl the fingers into pintle pin bearings, and applying pressure in a direction at right angles to the direction of the first pressure applied to curl said bottom edges to form cover portions.

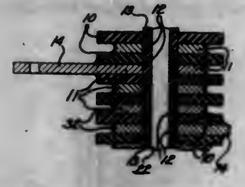
1,881,519. BODY ASSEMBLING APPARATUS. OTTO J. GROEHN, Grosse Pointe Park, LESLIE L. MITCHELL, Detroit, and CHARLES MCCURLEY, Halfway, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1928. Serial No. 246,891. 7 Claims. (Cl. 78—96.)



1. An apparatus for handling body parts during the assembling thereof, comprising a traveling carrier including a main frame having at opposite ends depending guide rods, a secondary frame slidable up and down on said guide rods, a spring connected to the main frame and to the secondary frame for shifting the latter upwardly on the guide rods, a pair of spaced depending arms carried by the secondary frame, a finger pivoted to each arm for supporting the work, and a frame hinged to the main frame above said secondary frame and having spaced abutments for locking the secondary frame in a plurality of positions.

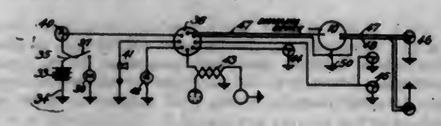
1,881,520. COMPOSITE ARTICLE. GUSTAVE ADOLPH GROS, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,626. 3 Claims. (Cl. 175—306.)

1. A composite article comprising a plurality of alternately superimposed accurately formed, completely cured phenol fibre sheets with a surface coating of a phenolic condensation product and electrical conducting sheets having perforations open to adjacent coated surfaces of the fibre sheets, the whole superimposed structure formed into an article of an infusible and insoluble character, the first mentioned sheets being greater in extent than the latter sheets, and dowels and beads of cured condensation



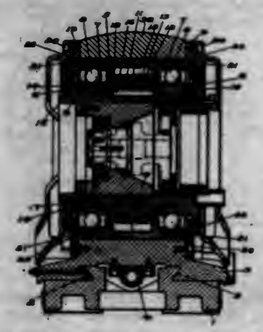
product extending into the perforations from the fibre sheets and over the edges of the conducting sheets respectively to interlock and interconnect the strips.

1,881,521. AUTOMATIC DIMMING DEVICE. JOSEPH GETTE, Rochester, and ERNEST WILDHABER, Brooklyn, N. Y. Filed Aug. 28, 1928. Serial No. 302,522. 9 Claims. (Cl. 250—41.5.)



1. An automatic dimming device for car lights, comprising a light sensitive element disposed to receive front light, a shutter for protecting said element, means for opening said shutter, said means being operatively connected with said car lights, means for dimming said car lights, and an operative connection between said elements and said dimming means.

1,881,522. WORKHEAD. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 1, 1929. Serial No. 359,608. 7 Claims. (Cl. 308—178.)

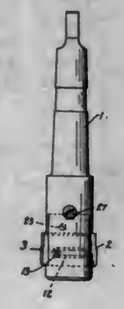


1. A workhead adapted for the rotatable holding of a chuck comprising a sleeve, a pair of ball bearings mounted on said sleeve, an annular member holding the outer races of said ball bearings, and a plurality of screws generally parallel to the axis of said sleeve adapted to be urged into engagement with the outer races of said ball bearings to correct deformities therein.

1,881,523. ADJUSTABLE BORING TOOL. WALTER E. GULDAGER, Detroit, Mich., assignor of one-half to Lawrence C. Oak, Detroit, Mich. Filed Dec. 26, 1928. Serial No. 328,364. 4 Claims. (Cl. 77—58.)

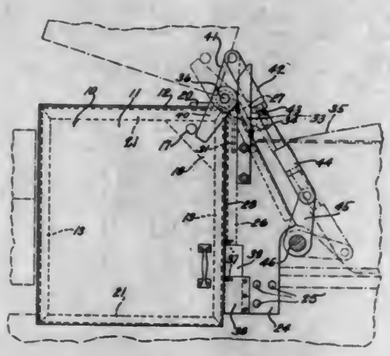
1. In an adjustable boring tool, a pair of complemental cutting devices, a gear rack on each device which are dis-

posed in opposed relation, a channel in each cutting device back of the gear rack, a plate in the channel, a holding block, one or more screws in the holding block associated with the plate for holding the cutting devices and block together, a worm gear member embedded rotatively in



the block having a gear portion which protrudes therefrom and engages with the racks of the cutting devices, and a screw member rotatively embedded in the block which meshes with a worm gear member and which is operable to effect rotation of the gear member to effect adjustment of the cutting devices.

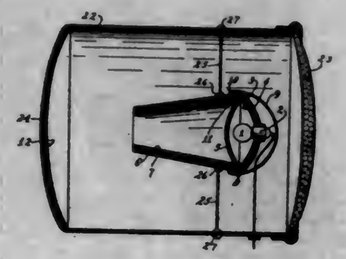
1,881,524. GUARDING DEVICE. HANS G. GUSTAFSSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1930. Serial No. 446,949. 8 Claims. (Cl. 22—69.)



1. In a guarding device, supporting means secured to a machine to be guarded, means for covering parts of the machine to be guarded while the parts are in an operative position, means for horizontally hinging the covering means to the supporting means, rocker means attached to each side of the covering means, means common to the rocker means for swinging the covering means, rocker means attached to a shaft of the machine, and means connecting the last mentioned rocker means with the means common to the first mentioned rocker means to actuate the first mentioned rocker means.

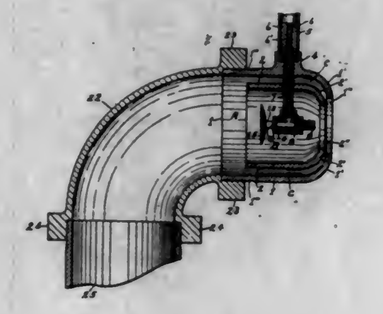
1,881,525. NONGLARE LIGHT PROJECTOR. MENDEL S. HALPERN, Oakland, Calif. Filed Nov. 3, 1930. Serial No. 493,172 2 Claims (Cl 240—41.1.)

1. A light projector of the class described, comprising a light source, a concave reflector for said light source, a conical shaped light directing tube having its larger end adjacent the periphery of said reflector, a filtering lens in the large end of said tube and a second reflector having



its central portion opposite and spaced from the smaller end of said tube for directing the light rays past said light source.

1,881,526. INDUSTRIAL OIL BURNER. JOHN HALTERMAN, Portland, Ind. Filed Dec. 8, 1930. Serial No. 500,758. 4 Claims. (Cl. 158—77.)

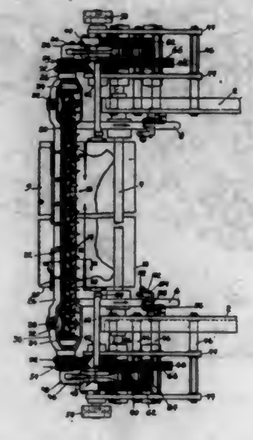


1. A liquid fuel burner comprising two chambers arranged coaxial with relation to each other and having discharge apertures therein which are coaxial with each other, a single air inlet for both of said chambers, an oil inlet leading into the inner chamber having a rearwardly directed outlet, a baffle plate which the oil strikes as it is discharged rearwardly into the inner chamber and is thereby atomized and deflected radially to be taken up and mixed with the incoming air and finally forced out forwardly through said discharge openings in the form of a mixture of air and atomized oil and delivered into a furnace where it is consumed.

1,881,527. MACHINE FOR OPERATING UPON HIDES, SKINS, AND LEATHER. EJGIL J. S. HALVORSEN, Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Nov. 15, 1929. Serial No. 407,523. 30 Claims. (Cl. 149—16.)

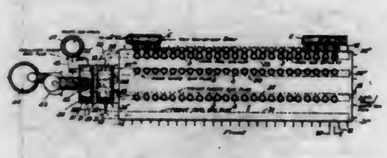
30. In a machine of the character described, in combination, a traveling table having a curved end, a working member arranged to co-operate with said curved end

in operating upon a piece of work, said curved end being arranged to follow a prescribed curved path, said working member being arranged simultaneously to oscillate



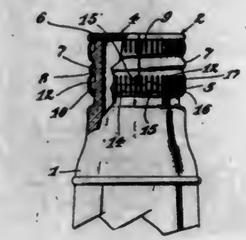
about said curved end and about its own longitudinal axis, and means for accomplishing the recited movements of the table and working member.

1,881,528. COKING GAS OVEN. LAZENBY C. HAMLINE, Cleveland Heights, Ohio, assignor to The Gas Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 28, 1927. Serial No. 187,243. 8 Claims. (Cl. 202—144.)



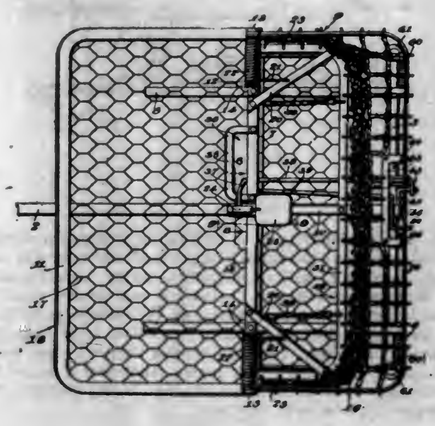
1. In a coke oven battery, a series of alternate coking chambers and combustion chambers for heating the same arranged side by side in a row, a regenerator unit below each of said combustion chambers, each of the regenerator units comprising two regenerators and each of the regenerators of each of said units communicating with the combustion chamber above the unit, two fuel-gas flues extending along said battery and communicating with each of said combustion chambers and an air inlet for each of said regenerators and means for controlling same; a single reversing valve for controlling all of the fuel-gas flow into both of said fuel-gas flues; two waste-gas flues extending along said battery, the one communicating with one of the regenerators of each of said units and the other waste-gas flue with the other regenerator of the same unit; and means for controlling the out-flow from said waste-gas flues.

1,881,529. SEALED PACKAGE. CHARLES HAMMER, New York, N. Y., assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 14, 1929. Serial No. 392,535. 12 Claims. (Cl. 215—46.)



1. As an article of manufacture, a closure cap comprising a cover portion, a depending skirt, said skirt being weakened to provide a tear-off strip, and corrugations spaced slightly apart from said weakened portion to facilitate removal of said strip.

1,881,530. TRAP. CHARLES LEON HANCOCK, Tuthill, S. Dak., assignor to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania. Filed July 23, 1930. Serial No. 470,174. 11 Claims. (Cl. 43—68.)

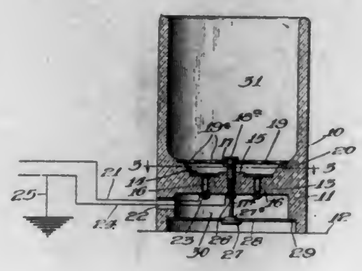


1. In a trap, a sub-base having a stake to be thrust into a support and means spaced from the stake to engage the support and stabilize the trap.

1,881,531. LIQUID CONDUCTOR HEATER. MARSHALL W. HANKS, Madison, Wis. Filed Feb. 27, 1930. Serial No. 431,712. 5 Claims. (Cl. 219—40.)

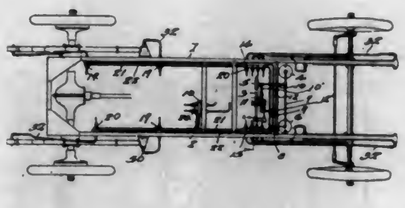
1. A liquid conductor heater comprising a vessel adapted to contain a liquid conductor, a pair of spaced electrodes mounted in said vessel to be connected by said liquid con-

ductor, an electric circuit having one side thereof grounded and having its terminals connected to said spaced electrodes, and means for causing the current passing over



the damp surface of said vessel from one electrode to be intercepted by the other electrode connected to the grounded side of the line.

1,881,532. LUBRICATING SYSTEM. GUSTAF W. HANSON, Wichita, Kans. Filed Oct. 9, 1926. Serial No. 140,505. 2 Claims. (Cl. 184—7.)



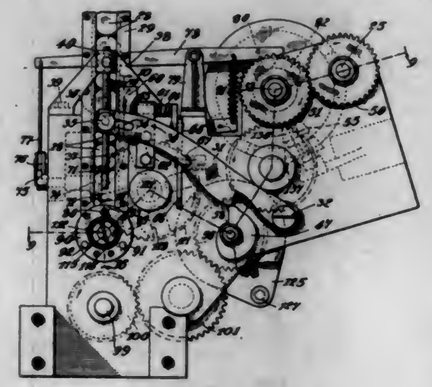
1. The combination in a lubricating system for vehicle chassis bearings including a compressed air reservoir and a grease supply tank connected therewith, of a plurality of distributing supports having air and grease conduits therein located at various places on the chassis, a plurality of pneumatic injector pumps supported from said distributing supports, conduits leading from the air reservoir and grease tank to the pumps, and control means for said pumps whereby they are alternately charged, and discharged to grease said bearings.

---

1 881,533. MACHINE AND METHOD FOR ASSEMBLING ARTICLES. JAMES S. HARDIMAN, Ridgewood, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 8, 1930. Serial No. 426,987. 38 Claims. (Cl. 113—1.)

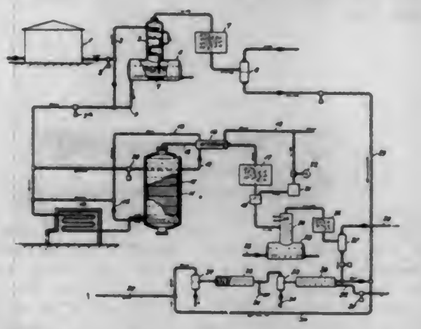
1. The method of assembling the parts of a closure cap, which method comprises positioning the body portion of the cap, aligning the button or end of the cap with the body portion, rotating the button while thus aligned to bring it into a definite position with respect to the body portion, and assembling the button and body portion.

38. In a device of the class described, the combination of devices for holding a button for assembly with a seamed body part, said button having a projection thereon to govern the position of the button, means for supporting the seamed body part, mechanism for engaging said button



and rotating the button an amount depending upon the position of said projection on said button with respect to the seam of the body part.

1,881,534. PROCESS OF REFINING HYDROCARBON OILS. CLARKE TURNER HARDING, Baton Rouge, La., assignor to Standard-I. G. Company. Filed Aug. 31, 1929. Serial No. 389,686. 11 Claims. (Cl. 196—24.)



1. An improved process for the purification of hydrocarbon distillates which comprises separating the oil into a distillate and a residue consisting of fractions normally requiring acid treatment, subjecting the residue to treatment with hydrogen at a temperature above 500° F. and at a pressure above 20 atmospheres, blending the distillate with such hydrogen treated residue.

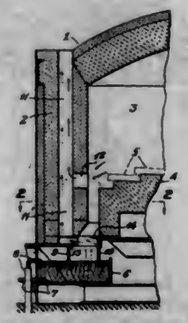
11. An improved process for obtaining large yields of motor fuels from oil distillates, comprising subjecting a wide cut distillate containing fractions boiling below 300° F. and about 500° F. to distillation whereby low boiling liquid fractions capable of meeting sulphur specifications are segregated, destructively hydrogenating the higher boiling fractions under conditions of temperature and pressure and for a time whereby the oil is substantially completely reduced to a boiling range within the range of motor fuels and rendered capable of passing sulphur specifications, and blending the treated and untreated oils in suitable proportions for a balanced motor fuel.

1,881,535. DRILL. JOHN M. HARGRAVE, Cincinnati, Ohio. Filed Nov. 23, 1931. Serial No. 576,751. 2 Claims. (Cl. 255—63.)



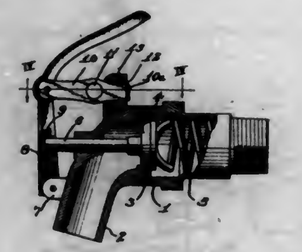
1. A rock drill having its operating end defined by radial flutes, the ends of certain of said flutes terminating in a diametrically arranged line cutting edge, and the remaining flutes being disposed at right angles to the flutes defining said line cutting edge, the ends of said remaining flutes ground away clear of the line cutting edge and presenting cutting edges at their outer ends in parallelism with said line cutting edge.

1,881,536. INDUSTRIAL FURNACE. BENJAMIN G. HARMON, Evanston, Ill., assignor to The Gas Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 25, 1931. Serial No. 577,317. 9 Claims. (Cl. 263—7.)



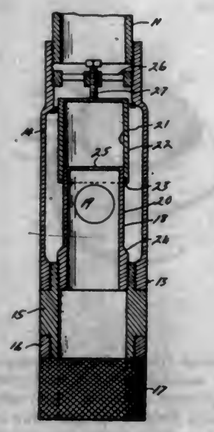
1. An industrial furnace having an enclosing wall and a hearth spaced from said wall, said furnace being formed with a combustion chamber communicating with the space between the wall and hearth, a conduit formed in the lower part of the furnace wall and opening into said space, and means for creating a suction in said conduit for the withdrawal of air and vapor from said space.

1,881,537. VALVE. GEORGE A. HARPER, Burlington, Wis., assignor to Burlington Brass Works, Burlington, Wis., a Corporation of Wisconsin. Filed Nov. 14, 1930. Serial No. 495,568. 7 Claims. (Cl. 251—163.)



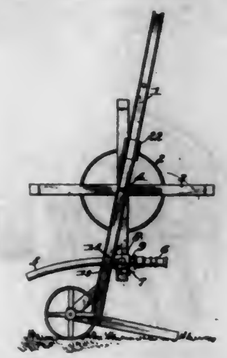
1. In a faucet having a housing, a spring impelled valve with its stem projecting beyond said housing, a lever pivoted on said housing and having engagement with said valve stem, a member pivotally connected to said lever, said housing having a lug for receiving and guiding said member and means for locking said member against movement in two directions.

1,881,538. VALVE DEVICE. CLAUDE L. HARRINGTON, Detroit, Mich., assignor to White Star Refining Company, Detroit, Mich., a Corporation of Delaware. Filed May 11, 1928. Serial No. 276,874. 1 Claim. (Cl. 251—127.)



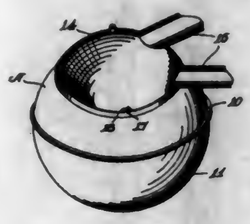
In a device of the class described, a casing provided with an open end, a member arranged within said casing and provided with a port, a second member telescopically engaging said first-mentioned member and operable to control the flow of fluid through said port, and means arranged entirely within said casing for limiting the opening of the valve including a member threadedly engaging the inner wall of said casing and an adjustable stop carried by said member and engageable with said second member.

1,881,539. COMBINATION HOSE REEL AND SPRINKLER. ALEXANDER B. B. HARRIS, Richmond, Va. Filed Oct. 21, 1930. Serial No. 490,309. 6 Claims. (Cl. 299—58.)



1. In a hose reel having a base and a freely movable member for storing the hose when not in use, a clamping device for attaching a hose nozzle to the movable member in a sprinkling position, and means engageable with the base and movable member to stop the movement of said member and hold the latter at relative adjustments.

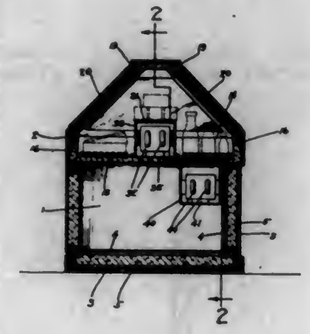
1,881,540. ASH RECEIVER. BLAINE H. HARRIS and EARL F. CRAFT, St. Paul, Minn., assignors to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed Mar. 5, 1929. Serial No. 344,350. 3 Claims. (Cl. 131—51.)



1. An ash receiver comprising a semispherical base portion, a weighted member in said base portion, a frustrospherical upper portion having a large opening in the top thereof, eyelet ears formed in the edge of said opening, and a flexible ash receiver cover tray pivotally and removably secured in said opening.

1,881,541. REFRIGERATING GOODS-DISPLAY DEVICE. THOMAS G. HARRISON, Minneapolis, Minn., assignor to Winston and Newell Company, Minneapolis, Minn., a Corporation of Delware. Filed Aug. 21, 1929. Serial No. 387,581. 9 Claims. (Cl. 62—89.5.)

1. A device of the class described having a goods-display chamber, having transparent sides and having a floor, different portions of which are at different levels, a refrigerating unit supported by that floor portion which is at the lowest level, said unit being of substantially less

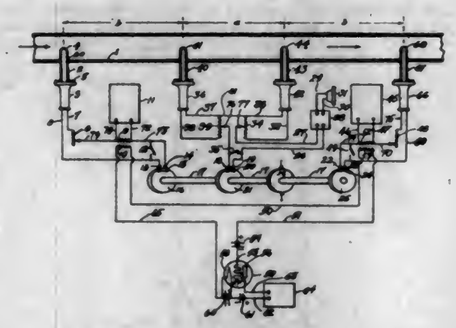


area than the floor portion on which it rests, and a goods-display support arranged above the unit and at a higher level than any of the floor portions.

1,881,542. LUBRICATING COMPOSITION FOR MACHINING OPERATIONS. PHILIP E. HARTH, St. Louis, Mo., assignor to National Pigments & Chemical Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 29, 1929. Serial No. 359,177. 3 Claims. (Cl. 87—9.)

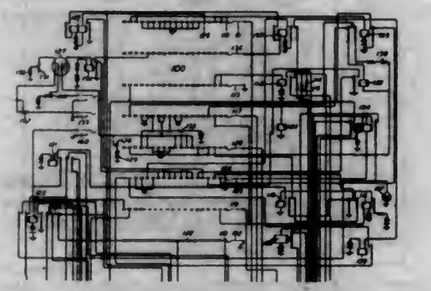
1. A lubricating composition base for machining operations, consisting of 80% barium sulphate and 20% colloidal clay.

1,881,543. FLUID METER. HENRY E. HARTIG, Crystal Village, and HUGH B. WILCOX, Minneapolis, Minn. Filed Feb. 27, 1929. Serial No. 343,115. 24 Claims. (Cl. 73—167.)



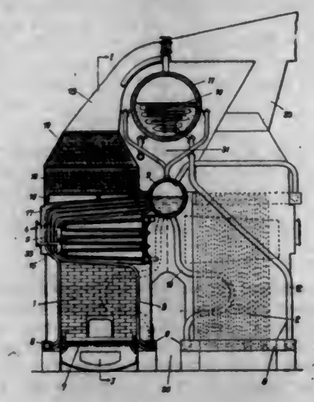
14. The method of determining the rate of flow of fluids which method consists in setting up mechanical vibrations in the moving fluid adapted to be propagated in the direction of travel of the fluid and in a direction opposite thereto and of comparable wave lengths, in measuring the difference in effect of the fluid flow upon the rates of propagation of the vibrations in both such directions and at places where the rate of flow is the same and in ascertaining the rate of flow of the fluid.

1,881,544. TESTING DEVICE FOR TELEPHONE EXCHANGE SYSTEMS. GEORGE CLIFFORD HARTLEY, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 8, 1931, Serial No. 549,338, and in Great Britain Oct. 23, 1930. 18 Claims. (Cl. 179—175.11.)



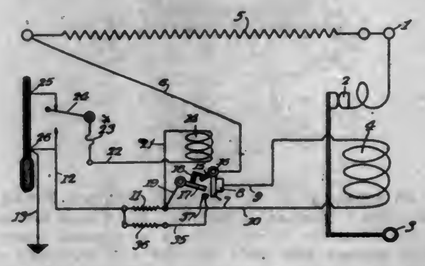
1. In a telephone exchange system, a plurality of subscribers' lines, a testing device, a selector switch associated with said testing device to select a desired one of said lines, testing means in said testing device to determine the busy or idle condition of said line, means operative by said testing means if said line is found to be idle to progressively apply a series of tests to said line, and means operated by said testing means if said line is found to be busy to cause said testing device to wait until said line becomes idle before permitting the application of said tests.

1,881,545. STEAM BOILER, ESPECIALLY MARINE BOILER WITH INDIRECT GENERATION OF THE WORKING STEAM. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany. Filed Feb. 24, 1930, Serial No. 431,027, and in Germany Mar. 2, 1929. 5 Claims. (Cl. 122—33.)



1. Boiler for indirectly generating steam which is provided with a closed tube system for a circulating heat carrier having parts receiving heat from the boiler furnace and its combustion gases, and parts giving up heat in the boiler drum, wherein the heat receiving parts of said tube system comprise a series of tubes connected to an intermediate drum with which the parts of the tube system giving up heat also communicate, said tubes being bent and arranged whereby portions thereof form walls of the combustion chamber and continuations of said portions define the roof of the combustion chamber and walls of a flue above the combustion chamber having a side free of any portion of the closed tube system to enable insertion and removal of a heat exchange element within said flue without disturbing said tube system.

1,881,546. HEATING SYSTEM FOR RAILWAY CARS AND THE LIKE. WILLIAM G. HARTWIG, Chicago, Ill., assignor to Railway Utility Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1932. Serial No. 588,293. 9 Claims. (Cl. 236—78.)



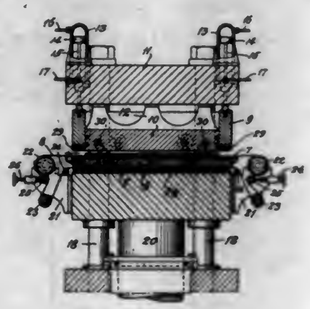
1. In a system for controlling the flow of heating medium to a heater, an automatic, electromagnetic switch comprising an operating coil, a shunt circuit about said coil, a source of electric energy, connections therefrom to said coil and shunt circuit, a pair of contacts in the coil circuit, a pair of contacts in the shunt circuit, connections between movable members of said pairs of contacts whereby one pair is open when the other is closed, a relay coil in series with both the operating coil and the shunt circuit for opening and closing said pairs of contacts, and a thermostat in series with said relay coil for controlling current flow therethrough.

1,881,547. THERMOSTAT. WILLIAM G. HARTWIG, Chicago, Ill., assignor to Railway Utility Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 351,020. 15 Claims. (Cl. 200—141.)



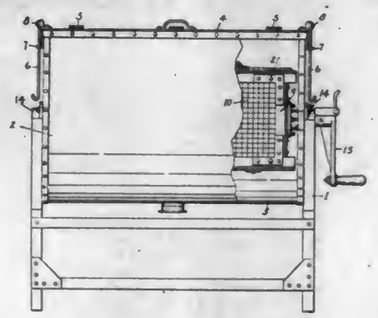
1. In a device of the class described, a thermometer-thermostat, a casing therefor comprising a cover and a back, a base adapted for attachment to a support, means for securing the cover and back together independently of the base, connector sockets on the base adapted for connection to the wires of the system to be controlled, connectors mounted on the back of the casing to engage the sockets on the base and wires connecting said connectors respectively with the contacts of the thermometer-thermostat.

1,881,548. APPARATUS FOR MAKING PULP BOARD. HAROLD C. HARVEY, Trenton, N. J., assignor to The Agasote Millboard Company, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 26, 1931. Serial No. 559,361. 3 Claims. (Cl. 92—61.)



1. An apparatus of the character described, having in combination a crosshead, a mold top, and a mold bed, each movable relatively to the other, a foraminous conveyor located between said mold top and said crosshead and having its sections separated by said mold bed and in contact with the upper surface thereof, and a deckle surrounding said mold top.

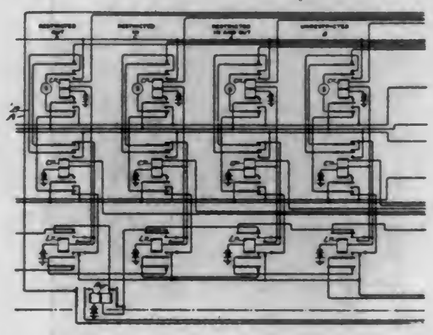
1,881,549. POWDERING MACHINE. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed May 26, 1930. Serial No. 455,920. 8 Claims. (Cl. 91—7.)



1. In a powdering machine, the combination with a frame, of a stationary trough-like receptacle having a transversely curved bottom mounted on said frame, a rectangular frame-like container holder within said receptacle, journals for said holder projecting through the ends of said receptacle and rotatably supported on said frame, one of said journals being provided with a crank, projecting blades at the angles of said container adapted to sweep across the curved bottom portion of said receptacle as the holder is rotated, a dog on said crank for holding said holder in upright position, and a foraminate container removably mounted in said holder.

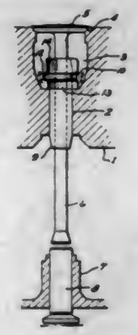
1,881,550. TELEPHONE SYSTEM. WILLIAM HATTON, RANSOM D. SPANN, ERNEST J. ROUSSEAU, and FRIDTHIOF O. V. LARSEN, Paris, France, assignors to Western Electric Company, Incorporated, New York. N. Y., a Corporation of New York. Filed Mar. 28, 1931, Serial No. 524,544, and in Great Britain June 6, 1930. 16 Claims. (Cl. 179—27.)

1. In a telephone system, a local exchange, a distant exchange, subscribers' lines in said local exchange, means for interconnecting any two subscribers' lines, means for extending connections to and receiving connections from the distant exchange, means associated with said subscribers' lines operable on the receiving of a connection from the distant exchange intended for any one of certain



subscribers' lines for preventing said connection from being completed, and means for preventing said last-mentioned means from interfering with connections to any one of said certain subscribers' lines from any other subscribers' lines.

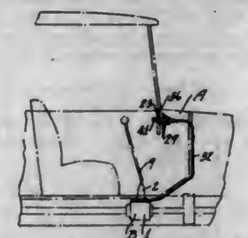
1,881,551. BUSHING ATTACHMENT FOR VALVE GRINDING. BERT H. HAWKINS, Royal Oak, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Aug. 15, 1930. Serial No. 475,462. 5 Claims. (Cl. 51—262.)



1. An attachment for use with the longitudinally divided flange provided guide bushing of a poppet valve of an internal combustion engine while grinding the valve, comprising a U-shape clip to fit about the exterior of the bushing for holding its parts together on the stem of the valve, said clip having means to accommodate the flanges on the bushing.

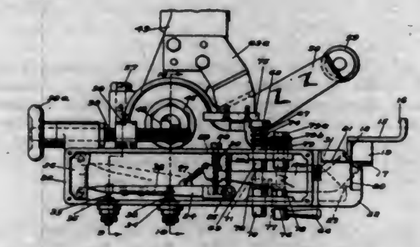
1,881,552. AUTOMOBILE LOCK. WALTER L. HAWKINS, St. Louis, Mo., assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Filed Aug. 20, 1928. Serial No. 300,799. 3 Claims. (Cl. 70—127.)

1. In an automobile lock, in combination, transmission gear shifting members, dogs normally having seated engagement with said members for releasably retaining the same against movement, a fixed sleeve having a diametrically disposed aperture, a plunger shiftable in the sleeve and normally having spring-pressed engagement at an end with the dogs for releasably retaining the same in seated engagement with said members, and means including a



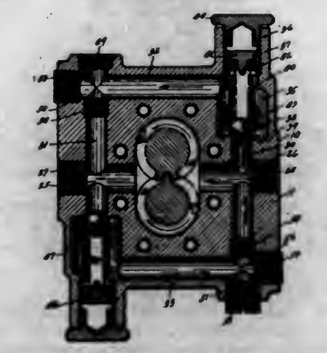
shiftable pin adapted for projection into said aperture for engagement with the plunger for retaining the same against movement in engagement with the dogs.

1,881,553. GRINDING MACHINE. ROGER N. HEALD, WALDO J. GUILD, ALFRED P. BURNS, and GEORGE E. GARNO, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Original application filed Jan. 24, 1925, Serial No. 4,466. Divided and this application filed Apr. 13, 1927. Serial No. 183,504. 13 Claims. (Cl. 33—172.)



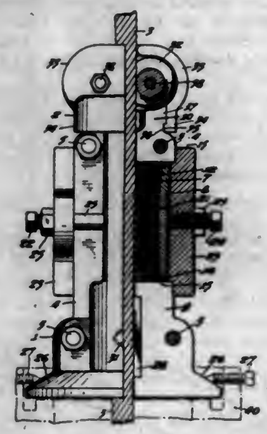
1. In an internal grinding machine, a work calipering device, a support for said device, said support being mounted on a pivot, a work calipering arm associated with said device, means for swinging said support so as to move said arm into the hole in a workpiece, and a stop cooperating with said support to limit the movement of said arm into said hole.

1,881,554. FLUID PUMP. FREDERICK W. HECKERT, Dayton, Ohio. Filed Jan. 2, 1930. Serial No. 417,982. 8 Claims. (Cl. 103—3.)



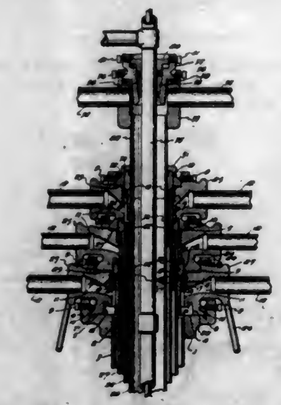
1. A fluid pump comprising a body member having inlet and outlet openings, rotatable impelling means therein adapted to be driven in either direction and in direct and substantially unobstructed communication with said inlet opening, said body member having valved passages therein between the inlet and outlet sides of the impelling means functioning as by-pass and relief passages around the impelling means regardless of the direction of rotation of the impelling means.

1,881,555. OIL SAVER. ALFRED G. HEGGEM, Tulsa, Okla. Filed May 22, 1930. Serial No. 454,789. 12 Claims. (Cl. 286—16.)



1. An oil saver involving a stuffing box formed of separable sections divided from each other by a joint extending lengthwise of the box, said sections being provided intermediate of their ends with spaced portions forming an open-ended slot extending transversely of the stuffing box in the division joint of the latter, means for connecting said sections, a plurality of packing elements disposed in said slot, and means respectively associated with said packing elements for forcing them toward the longitudinal axis of the box.

1,881,556. PACKING CASING HEAD. ALFRED G. HEGGEM, Tulsa, Okla. Filed Mar. 12, 1930. Serial No. 435,078. 8 Claims. (Cl. 285—22.)



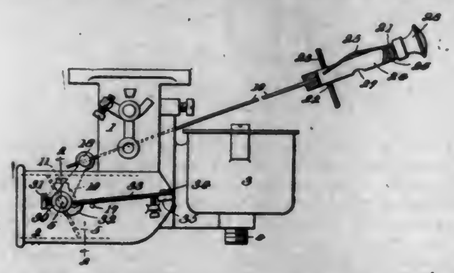
1. A casing head for oil wells embodying a head member having an opening therethrough and a fluid escape outlet communicating with said opening, means adapted to be mounted upon an outer string of casing for supporting said head member, a casing collar projecting into said opening and threaded for connection with an inner string of casing, means extending over the upper end of said collar for

normally preventing upward movement of the latter with respect to said head member, means for retaining said last named means in assembled relation to the head member, and a plurality of packing means one of which is interposed between the casing collar and said head member and one of which is interposed between the casing collar and said means for preventing upward movement of the latter.

1,881,557. METHOD OF MANUFACTURING YEAST. GUSTAF OLOF WOLFGANG HELJKENSKJÖLD, Stockholm, Sweden, assignor to Aktiebolaget Bästa, Stockholm, Sweden, a Corporation. Filed Nov. 3, 1925, Serial No. 66,599, and in Sweden Mar. 28, 1925. 15 Claims. (Cl. 195—20.)

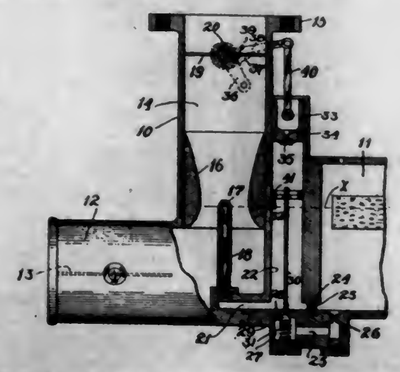
15. The method of cultivating yeast which comprises starting yeast propagation in a wort of high sugar concentration, and continuing propagation by adding a wort comprising acid liquor derived from wood and toxic to yeast and containing sugar.

1,881,558. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Original application filed Jan. 24, 1928, Serial No. 249,054. Divided and this application filed Apr. 17, 1929. Serial No. 355,955. 3 Claims. (Cl. 123—124.)



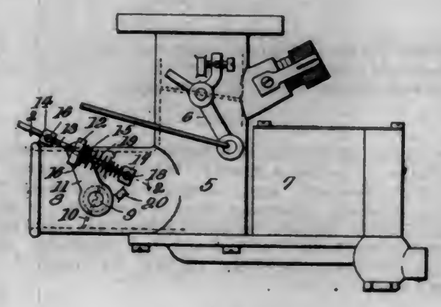
1. In a carburetor having a single air inlet, a choke valve pivotally mounted on the shaft extending transversely through the wall of said inlet, dash controlled means having a loose connection with said valve for moving said valve into open position, a member adjustably mounted on said shaft and a thermostatic spring arranged in the path of travel of said member for normally holding said valve in closed position.

1,881,559. ACCELERATOR PUMP. FRANK H. HEITGER, Flint, Mich. Filed Aug. 12, 1929. Serial No. 385,342. 5 Claims. (Cl. 261—34.)



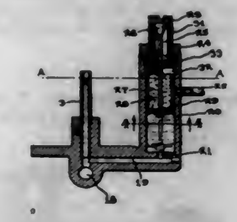
1. In a carbureter for internal combustion engines a combustible mixture passage, a throttle valve therein, means for feeding fuel directly to said passage including a fuel well, an air vent for said fuel well to feed air into said fuel feeding means when said well is emptied, a bypass fuel passage also feeding fuel to said mixture passage, a valve controlling said bypass passage, means cooperating with said well and valve to form a superatmospheric pressure on the fuel in said well and to open the bypass valve upon an opening movement of the throttle.

1,881,560. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed July 21, 1927. Serial No. 207,488. 6 Claims. (Cl. 137—139.)



1. In a carburetor, an air inlet, a choke valve in said inlet opened in response to incoming air, a manually operable choke valve rod, stop collars arranged in spaced relation on said rod, an arm on said valve movable between said stop collars, and spring means interposed between the rod and arm, normally tending to move the valve to closed position.

1,881,561. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed July 23, 1928. Serial No. 294,917. 5 Claims. (Cl. 261—41.)

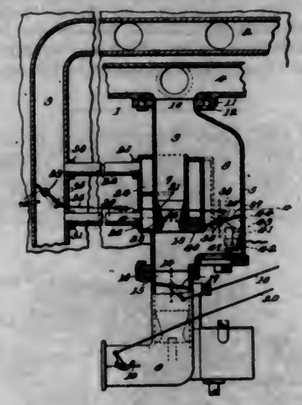


1. In a carburetor having an air conduit, means for feeding fuel thereto including a constant level fuel reservoir, an auxiliary variable level fuel well supplied by the reservoir, said well having air inlet means and fuel outlet means, the fuel outlet means communicating with the air conduit, and means functioning upon a drop in level of the fuel in the well for closing said air inlet means.

1,881,562. AUTOMATIC CHARGE HEATING CONTROL FOR INTERNAL COMBUSTION ENGINES. FRANK H. HEITGER, Flint, Mich. Filed Aug. 15, 1929. Serial No. 386,175. 18 Claims. (Cl. 123—122.)

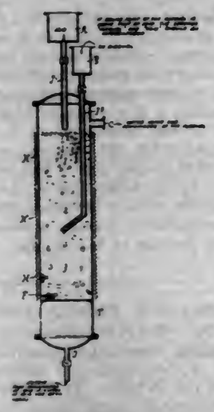
1. The combination with an internal combustion engine, of a manifold having passages of different sizes, a

charge forming device having an outlet in alignment with the small passage, a heating chamber surrounding said



passage, and a suction operated valve in one of said passages for controlling the passage of the heating medium to said heating chamber.

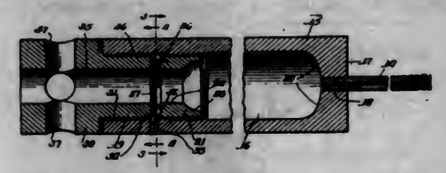
1,881,563. PRODUCTION OF ESTERS. ROBERT HELD, Oppau, and MARTIN LUTHER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 30, 1929, Serial No. 410,773, and in Germany Dec. 15, 1928. 18 Claims. (Cl. 260—106.)



1. The process for the production of esters of fatty acids and polyhydric alcohols which comprises causing the acid and the alcohol to be esterified to flow in the liquid state over solid inert bodies possessing a large superficial area, while heating.

1,881,564. BLASTING APPARATUS. ARTHUR W. HELMHOLTZ and DENT FERRELL, Harrisburg, Ill. Filed July 16, 1931. Serial No. 551,084. 2 Claims. (Cl. 102—6.)

1. In a blasting cartridge of the type adapted to receive an expansible gas under high pressure, a rigid substantially indestructible container having a chamber therein to receive the blasting medium, a rupturable venting disk member normally forming a sealing wall of said chamber, a circular knife edge rigid with respect to said container on the inner side of said disk member, a cap member having a discharge passage for the escape of the blasting medium and removably secured to said container in position to force said disk member into sealing engagement with said knife edge and a pin fixed with respect

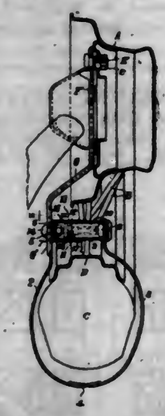


to said container adapted to engage said disk member before engagement of said knife edge with said disk member to prevent relative rotation between said disk member and said knife edge while said cap member is being secured in place.

1,881,565. PROCESS OF PREPARING RETENE. CLYDE O. HENKE and GASTAO ETZEL, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Industries, Inc., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,431. 9 Claims. (Cl. 260—168.)

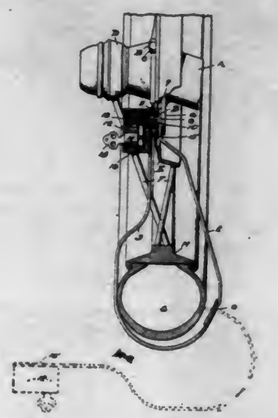
1. In a process of preparing retene from one of a group consisting of gum rosin, wood rosin, abietic acid, abietic acid esters, abietine, abietene and abietane by treatment with sulfur, the step of distilling the sulfur containing reaction mass under reduced pressure and at an elevated temperature in the presence of a stream of a readily condensible vapor.

1,881,566. SPARE TIRE AND WHEEL LOCK. FREDERICK W. HENKE, Jr., Philadelphia, Pa., assignor to Fox Automotive Products Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 1, 1932. Serial No. 596,099. 5 Claims. (Cl. 70—90.)



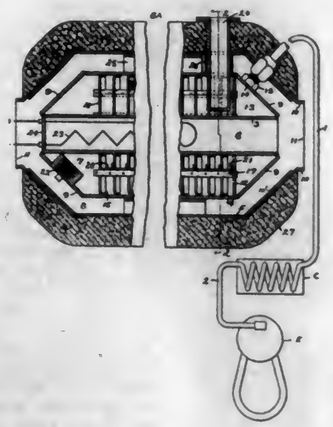
1. The combination with a spare wheel support and carrier which comprises a central attachment plate to which the wheel may be secured at its hub, and an extension from the said wheel support and carrier, of a band for encircling the tire and rim of the wheel, a socket piece, a screw-threaded bolt and its nut serving to unite one end of the band to the extension and also the socket piece to the face of the band, the nut being located within the socket piece whereby it is housed thereby, a manually operated lock carried by the free end of the band having a portion arranged to enter the socket and engage therewith to lock together the ends of the band in position encircling the wheel tire and rim, and the lock closing the open end of the socket and preventing access to the nut of the securing bolt.

1,881,567. SPARE WHEEL AND TIRE LOCK. FREDERICK W. HENKE, Jr., Philadelphia, Pa., assignor to Fox Automotive Products Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,079. 4 Claims. (Cl. 70—90.)



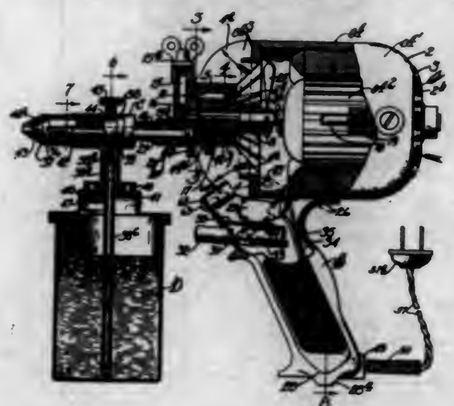
1. The combination of a spare wheel carrier having a plate of a size to be covered by the skirt that surrounds the hub of a spare wheel, from which plate outwardly extends a stud adapted to project through an aperture in the skirt of the spare wheel when supported against the said plate of the carrier; a band member separable from the wheel carrier and adapted to encircle the tire of the wheel, having one end located between the said plate of the carrier and the skirt of the wheel hub, means independent of the wheel for securing said end of the band to the carrier, the other end of the band being provided with an aperture for receiving said stud; a wheel securing means mounted on said stud, and means for preventing unauthorized removal of said wheel securing means.

1,881,568. REFRIGERATING APPARATUS. CHARLES F. HENNEY, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 424,933. 3 Claims. (Cl. 62—118.)



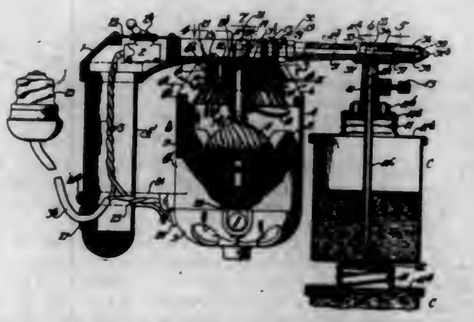
1. In refrigerating apparatus a generator-absorber comprising a container, a plurality of spaced apart discs within said container, each of the discs having a portion cut out of the body of the disc to form openings, said portion being bent to form a spacer section for the next succeeding disc, a plurality of bleeder tubes passing through said openings, a header at one end of said container communicating with all of said bleeder tubes, and a connection to said header adapted to be connected to a condenser.

1,881,569. SPRAYING DEVICE FOR PAINTS, VARNISHES, ETC. WOLFGANG HERMANN, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1928. Serial No. 265,867. 4 Claims. (Cl. 91—45.)



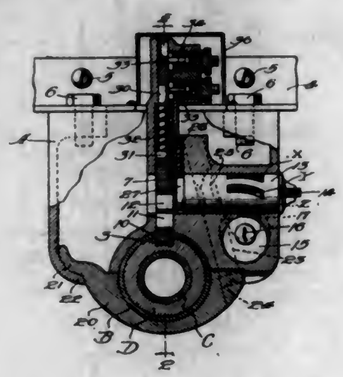
1. A hand-carried spraying-device comprising a motor having its front end provided with a removable cap-plate having a compressor-cylinder formed integrally therewith and having air outlet-passages around the cylinder, a rotor mounted in said cylinder and actuated by the armature of the motor, a fan disposed back of said cap-plate and actuated by the armature of the motor, a nozzle rigidly connected with the compressor, a container depending from said nozzle, and a handle having its upper portion secured to the lower side of the motor-compressor unit and equipped with a switch-device controlling the motor, said switch-device having a finger-piece located at the upper front portion of the handle.

1,881,570. SPRAYING DEVICE FOR PAINTS, VARNISHES, ETC. WOLFGANG HERMANN, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1927. Serial No. 228,336. 12 Claims. (Cl. 91—45.)



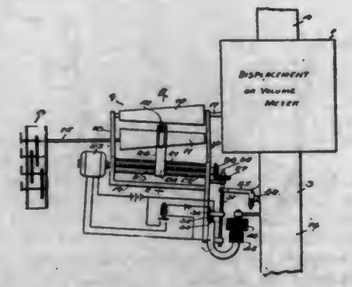
1. A hand-carried spraying-device comprising a frame provided with an air-passage, said frame being equipped at one end with a rigid depending handle and at the other end with a rigid projecting nozzle equipped with a depending container-attaching device, and a motor-compressor unit depending from said frame and disposed between the handle and container-attaching device, the compressor-chamber communicating through said frame with said nozzle.

1,881,571. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Jan. 12, 1927. Serial No. 160,613. 5 Claims. (Cl. 70—127.)
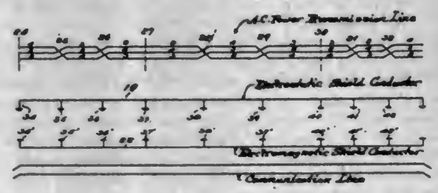


1. A coincidental lock in which is combined a locking bolt, a switch having a part movable with the bolt to open or close an electrical circuit, tension means urging the movable switch part against the bolt whereby the one may transmit motion to the other, and means for operating the bolt, substantially as described.

1,881,572. COMPENSATING DRIVE MECHANISM FOR GAS METERS. ALFRED HERZ, Chicago, Ill. Filed Nov. 11, 1927. Serial No. 232,572. 16 Claims. (Cl. 73—167.)



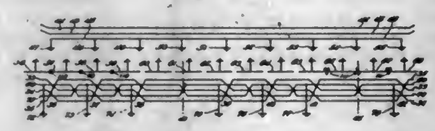
14. In a fluid meter for integrating three characteristics of passing fluid, a pair of members, means controlled by one of the characteristics to be integrated for moving one of the members, means controlled by the other characteristic for moving the other member, operating means for bringing the members into a predetermined relation to one another, a member movable at a speed which is a function of the third characteristic, a variable ratio transmission driven by said last mentioned member, and means controlled by the extent of movement of said operating means for varying the driving ratio.

1,881,573. ANTIINDUCTION SHIELDING SYSTEM. ALFRED HERZ, Chicago, Ill. Filed July 29, 1929. Serial No. 382,025. 9 Claims. (Cl. 171—97.)



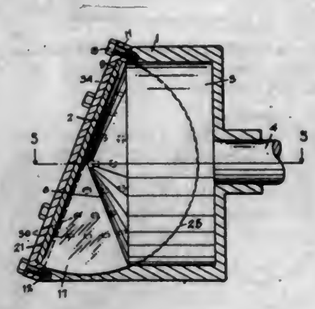
1. In an electric system wherein an alternating current power line and a communication line parallel one another, the conductors of the power line being transposed at a number of points, means for preventing the induction of excessive voltages in the communication line due to current flowing in the power line, said means comprising a conductor parallel to the power line and grounded at the transposition points.

1,881,574. SYSTEM FOR PREVENTING INTERFERENCE BETWEEN POWER WIRES AND COMMUNICATION WIRES. ALFRED HERZ, Chicago, Ill. Filed Sept. 4, 1931. Serial No. 561,170. 10 Claims. (Cl. 171—97.)



1. In an electric system wherein a power transmission system and a communication system parallel one another, means for preventing the induction of excessive voltages in the communication lines due to current flowing in the power line, said means comprising shielding conductors disposed substantially parallel to and in the vicinity of the power line, said shielding conductors being intermittently grounded and transposed intermediate of the grounding points thereof.

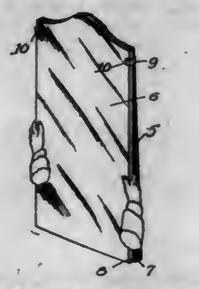
1,881,575. ROTARY PUMP. CARL W. HERZOG, Toledo, Ohio. Filed Jan. 5, 1931. Serial No. 506,594. 1 Claim. (Cl. 103—142.)



In a pump, a cylindrical shell, a cylindrical member having a conical end part located in the cylindrical shell, the axis of the cylindrical member and the conical part

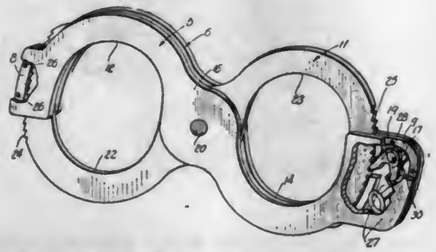
coinciding with the axis of the cylindrical shell, a circular plate located tangentially to the conical part of the cylindrical member and having a groove, the groove having a substantially semi-cylindrical surface, a semicircular partitioning member extending diametrically across the shell, its diametrical edge portion having substantially a semi-cylindrical surface and adapted to fit the groove of the plate and move angularly within the groove of the said plate, the cylindrical member having a slot extending through the apex of the conical part of the cylindrical member and for receiving the semi-circular partitioning member in the channel, the said plate and shell having an outlet port and means for admitting entrance of air into the interior of the shell at any one of a plurality of points extending substantially over 180 degrees beginning at the point of intersection of the said tangential line with the base of the conical part of the cylindrical member, means for rotating the cylindrical member, and a closure plate for closing the cylindrical shell, the bottom of the slot of the cylindrical member operating to hold the circular plate against the closure plate, and means for rotating the cylindrical member.

1,881,576. MIRROR-EQUIPPED CABINET DOOR. BRYCE M. HESS, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 490,059. 3 Claims. (Cl. 45—18.)



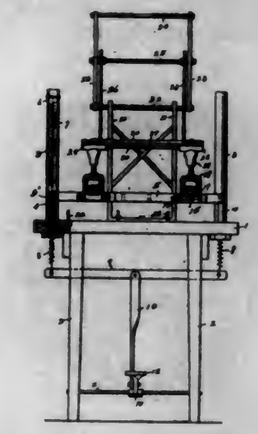
1. A device of the class described comprising a backing member adapted for vertical disposition, mirror-supporting means on the backing member engageable by the lower end of the mirror, lug means on the backing-member spaced above said supporting means and overlapping the front of the mirror, the mirror-overlapping part of the lug means being spaced from the backing a greater distance than the thickness of the mirror, the construction thus permitting the mirror while inclined to be inserted beneath the lug means from below and moved upwardly above the supporting means and thence inwardly at the bottom and on to said supporting means whereby the mirror is applied to the backing-member through minimum movement to avoid injury to the silvering of the mirror.

1,881,577. MANACLE. NEWTON S. HILLYARD, St. Joseph, Mo. Filed Dec. 29, 1930. Serial No. 505,369. 5 Claims. (Cl. 70—24.)



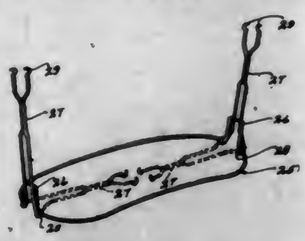
1. In a device of the character described, a body comprising spaced plates having oppositely facing arcuate portions on opposite ends thereof forming wrist-receiving seats, and a rigid lever having wrist-clamping portions cooperating with said oppositely facing arcuate portions and having pivotal mounting between said plates at a point between said seats.

1,881,578. APPARATUS FOR OPERATING STAMPING MACHINES. JACKSON C. HINDS, Houston, Tex. Filed Sept. 29, 1931. Serial No. 565,777. 7 Claims. (Cl. 101—316.)



6. Apparatus of the character described comprising a work support, a holder adapted to maintain a plurality of stamping machines in assembled relation, means for yieldingly supporting the assembly above the work, means for lowering the assembly onto, and for yieldingly holding the same in cooperating relation with, said work and means for simultaneously operating said machines.

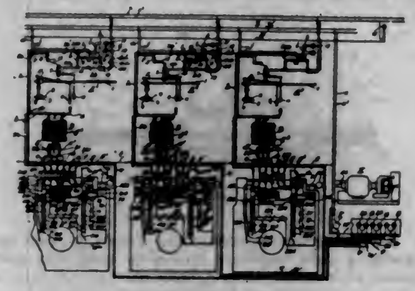
1,881,579. BABY BASKET AND SUPPORT. EDWARD G. HOCH and JOHN A. LEVERING, Minneapolis, Minn., assignors to Kozekar, Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 15, 1929. Serial No. 347,289. 7 Claims. (Cl. 5—98.)



7. A support for baby baskets comprising an oblong base formed at its opposite end portions with upstanding abutments and standards pivoted to said base and movable from an inoperative position approximately in the plane of said base to an upstanding position against said abutments.

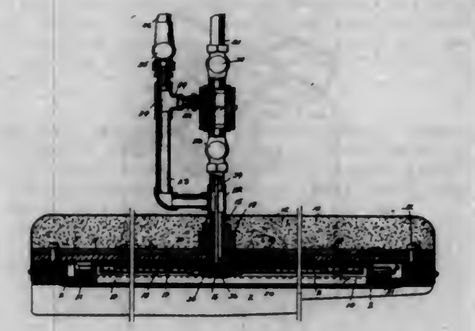
1,881,580. APPARATUS FOR MEASURING PRODUCTION. EDWARD A. HODGE, Rye, N. Y., assignor to Electrecorder Corporation, Dover, Del., a Corporation of Delaware. Filed Dec. 1, 1928. Serial No. 323,087. 25 Claims. (Cl. 234—1.5.)

1. In apparatus of the character described, the combination of a control device including an electric circuit adapted to be controlled by a shop machine and means including other electric circuits controlled in turn by said control device and operative under such control to effect



the shutting down of the shop machine whenever its rate of production varies more than a fixed limit from a predetermined standard rate.

1,881,581. GARMENT PRESSING MACHINE. ADON J. HOFFMAN, Syracuse, N. Y., assignor to William H. Hoffman, Oneonta, N. Y. Filed Mar. 15, 1928, Serial No. 261,987. Renewed Mar. 4, 1932. 10 Claims. (Cl. 68—9.)

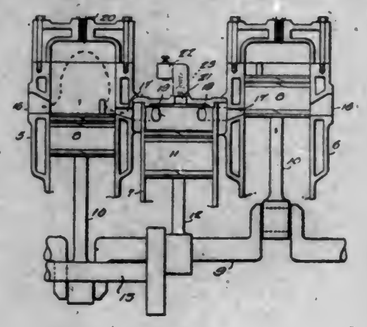


1. In a garment pressing machine the combination of cooperative pressing elements, one of which at least as provided with a chamber having an opening terminating directly at the outer pressing face of such element substantially coextensive with the length thereof; means for heating the walls of said chamber; and means for spraying a liquid into the chamber.

6. In a garment pressing machine, the combination of cooperative pressing elements one of which at least is provided with a chamber having an opening terminating at the pressing face thereof; means for heating said chamber; a perforate pipe located in said chamber; means for introducing air under pressure into said pipe; means for supplying water in measured quantities to said pipe; and means for admitting air under pressure to the water for forcing the same outwardly of the pipe.

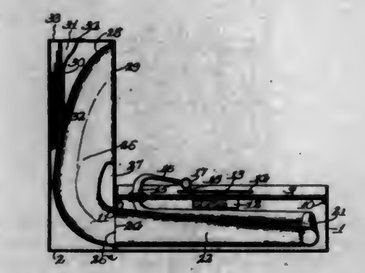
1,881,582. TWO-CYCLE GAS ENGINE. MACK T. HOLLOWAY, Graymont, Ga. Filed May 7, 1930. Serial No. 450,472. 1 Claim. (Cl. 123—59.)

An engine of the type set forth embodying a pair of two-cycle power cylinders having their pistons connected to a crank shaft and each being provided with a spark plug and also with an inlet port and an outlet port, a pump cylinder having two exhaust ports in constant connection respectively to the inlet ports of said power cylinders, this pump cylinder being provided with an inlet for the charge mixture, this inlet being provided with a valve adapted to open only on the suction stroke, a piston working in said pump cylinder, and means connecting said piston with the aforesaid crank shaft adapted to impart to the pump piston two reciprocations for each revolution of the crank shaft, the ports being so positioned



and the movement of the pistons being so timed that on each suction stroke of the pump piston the power pistons will close their companion inlet ports and on each expelling stroke of the pump piston one or the other of said inlet ports will be opened and the other closed so that on each propelling stroke one or the other power cylinder will be successively scavenged and charged without compressing the charge.

1,881,583. PHONOGRAPH. GEORGE SAMUEL HOLLY, St. Charles, Ill., assignor to United Reproducers Corporation, Rochester, N. Y., a Corporation of New Jersey. Filed Apr. 10, 1929. Serial No. 354,114. 7 Claims. (Cl. 274—2.)

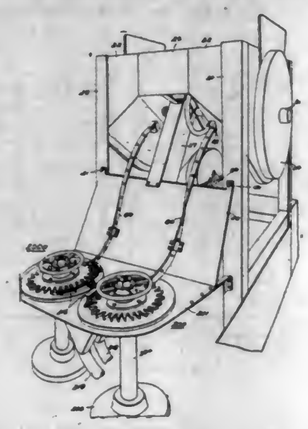


1. A phonograph comprising a body, a cover, means carried by the body for operating a record, a sound amplifier comprising a segment carried by the body and a segment carried by the cover, said segments joining when the cover is open to form a continuous amplifier, and links connected to said body and said cover for flexibly connecting the same.

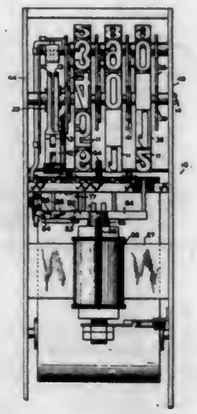
1,881,584. APPARATUS FOR SORTING COMMUTATOR SEGMENTS. JOHN Q. HOLMES, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,453. 1 Claim. (Cl. 209—85.)

Apparatus for handling and assorting commutator segments which are wedge-shape in cross section, said appa-

ratus comprising, in combination, a hopper for receiving the segments, a support upon which the segments are sorted said support having an aperture varying in width, a chute for delivering segments to the support and arranged to cause the segments to rest upon their backs upon the support, means in the hopper for feeding segments in orderly relation to the chute, a notched disc receiving the segments in its notches as the segments issue from the lower end of the chute and rest upon the support, and means for rotating the disc to cause the segments to pass above the aperture in the support in order to sort the segments approximately according to length.

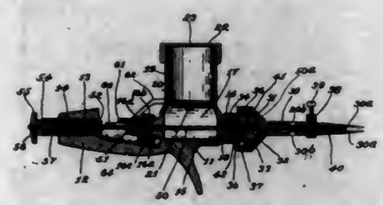


1,881,585. QUOTATION BOARD PRINTING UNIT. RAY HOOVER and EVAN R. WHEELER, North Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 4, 1931. Serial No. 535,065. 26 Claims. (Cl. 178—24.)



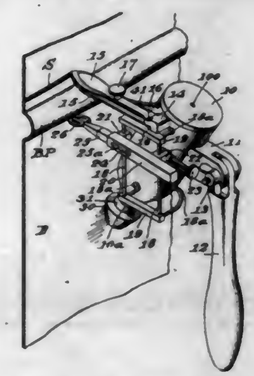
1. In an indicator system, the combination of a set of character carriers, including one or more carriers carrying numerical characters and at least one special character carrier, independent means to operate each character carrier in response to electric signal impulses, means to selectively operate the numerical character carriers alone to form an indication or to operate both a numerical character carrier and a special character carrier to form an indication in conjunction with each other.

1,881,586. STRIPING DEVICE. RALPH Z. HOPKINS and EARL SEGER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 4, 1928. Serial No. 252,002. 18 Claims. (Cl. 91—62.6.)



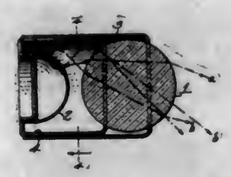
1. A striping device, comprising a body portion having a handle, a fluid reservoir carried by said body portion, a nozzle at one end of said body portion rotatable relatively to said body portion and reservoir, and means also carried by the body portion for controlling the flow of fluid from the reservoir to said nozzle.

1,881,587. STRIPING DEVICE FOR AUTOMOBILE BODIES. RALPH Z. HOPKINS and EARL FENTON SEGER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 23, 1928. Serial No. 272,071. 9 Claims. (Cl. 91—62.6.)



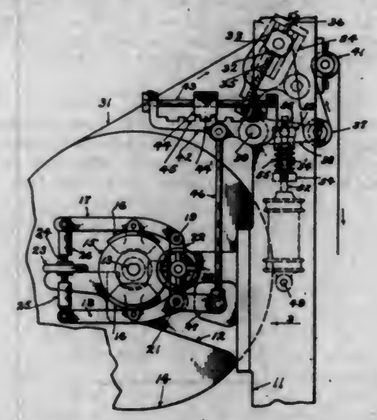
1. In a striping device, the combination of a reservoir for striping fluid, an applicator, a tube leading from said reservoir to the applicator, a screw extending through said tube for feeding the fluid from the reservoir to the applicator, and a roller adapted to travel on the surface to be striped for operating said screw.

1,881,588. LIGHT REFLECTING UNIT. PAUL P. HORNI, Newark, N. J. Filed Oct. 8, 1930. Serial No. 487,171. 7 Claims. (Cl. 88—1.)



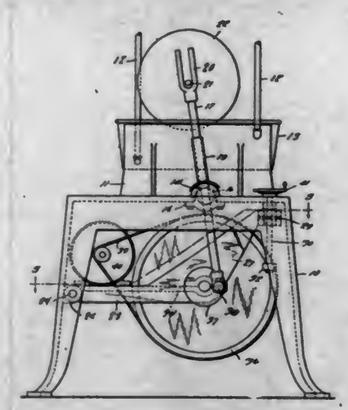
1. A light reflecting unit comprising in combination, a spherical refracting objective and a convex reflector, the two having a common optical axis and the crown of the reflector approximating the principal focus of the objective.

1,881,589. WEB ROLL CONTROLLING DEVICE FOR PRINTING MACHINES. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,481. 13 Claims. (Cl. 242—75.)



1. In a web roll controlling device, a floating roller moving transversely to its axis in response to variations in the slack of the unwinding web, a braking mechanism connected thereto, which acts to restrain the rotation of the roll when the web slackens and to reduce the restraint when the web tightens, and a retarding device arranged to permit free movement of the floating roller when the web tightens, and to restrict such movement when the web slackens.

1,881,590. ABRASIVE APPLYING MACHINE. FRANK J. HORTON and RICHARD W. LEWIS, Detroit, Mich., assignors to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 9, 1930. Serial No. 466,720. 16 Claims. (Cl. 91—18.)

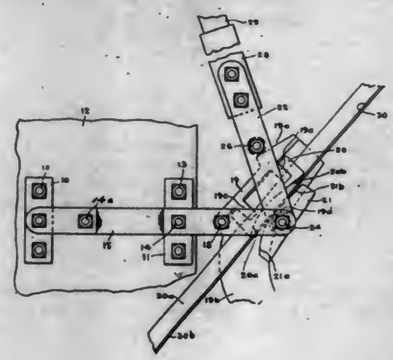


1. A machine for applying abrasive to a grinding wheel, said machine including means for supporting a mass of abrasive material, and means for supporting said wheel with respect to said mass and imparting thereto such a motion that the periphery of said wheel is pounded into such mass, said last means including a shaft normally fixed with respect to said mass, a crank arm on said shaft, a bar for carrying said wheel and being pivoted on said crank arm, guide means through which said bar passes, and means for rotating said shaft.

1,881,591. BASES FOR USE IN THE MANUFACTURE OF GREASES. ALEXANDER HORWITZ, New York, N. Y. Filed Oct. 30, 1928. Serial No. 316,114. 5 Claims. (Cl. 87—9.)

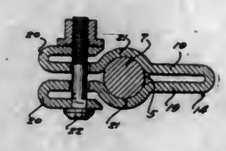
1. A base of the class described consisting of aluminum stearate, Japan wax and bean castor oil.

1,881,592. ANGLE-BAR BENDING DIE. ALBERT HOSSFELD, Winona, Minn. Filed Mar. 30, 1931. Serial No. 526,251. 10 Claims. (Cl. 153—39.)



1. A device for bending angle irons having in combination, relatively movable die members having respectively convex and concave surfaces adapted to approach and recede, and having flat surfaces disposed respectively substantially at right angles to said convex and concave surfaces, and means for effecting relative movement of said dies to cause said convex and concave surfaces to approach, and means actuated by said movement for causing said flat surfaces to approach.

1,881,593. FRICTION GRIP FOR DRILLING MACHINES. ALBERT HOSSFELD, Winona, Minn. Filed Jan. 25, 1932. Serial No. 588,711. 7 Claims. (Cl. 24—248.)



1. A friction grip comprising a U-shaped resilient member, a pair of auxiliary spring members on the main leaves of said member and overlapping the same, said main leaves having a pair of half seats in their opposing faces and intermediate of their ends, and means operative on the auxiliary spring member to press the main leaves toward each other.

1,881,594. ILLUMINATING DEVICE. PAUL M. HOTCHKIN, Chicago, Ill., assignor to Curtis Lighting, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 13, 1930. Serial No. 452,078. 1 Claim. (Cl. 240—81.)

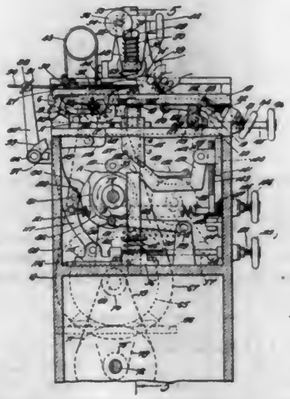
A combined direct and indirect lighting fixture comprising a vertical standard, an opaque support arranged substantially horizontally at the upper end of said standard, a translucent shade open at its top and bottom mounted on the rim of said support to close its bottom opening and prevent passage of light rays therethrough, an extension projecting from said standard into said shade, an electric socket on the upper end of said extension, a

light bulb in said socket, a translucent light-diffusing bowl supported from said extension and providing the sole means for transmitting light rays from the bulb to the



shade, and an inverted opaque reflector above said bowl and surrounding the bulb and adapted to reflect light rays from the latter upwardly out of the fixture.

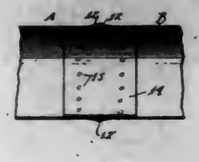
1,881,595. WOOD HEEL MACHINE. MERTON W. HOWARD, Lynn, Mass., assignor to Pope Machinery Corporation, Haverhill, Mass., a Corporation of Massachusetts. Filed Aug. 11, 1931. Serial No. 556,381. 11 Claims. (Cl. 12—46.)



4. In combination, a work support, a rotatable cutter the axis of which is movable laterally to bring the cutter in engagement with the work, means for clamping the work on the support, means for positioning the work on the support including a slide, and means actuated by said slide for rendering the clamping means and cutter moving means operative.

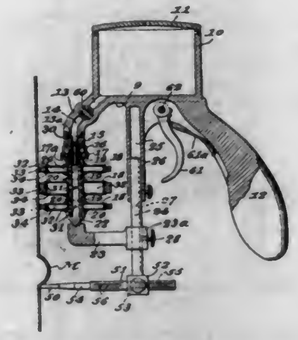
10. In combination, a support adapted to receive work, a rotatable cutter movable toward and away from the work, a stamping die movable toward and away from the work, means for successively moving said cutter and die into and out of engagement with the work, and clamping means adapted to engage the work with a resilient pressure when the cutter engages the work and with a rigid pressure when the work is engaged by the die.

1,881,596. SPOOL OR REEL. HILYARD C. HOWSAM, Chicago, Ill., assignor to Hubbard Spool Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1931. Serial No. 571,070. 2 Claims. (Cl. 113—116.)



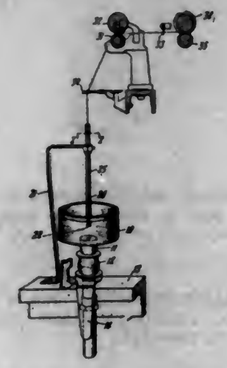
1. The method of forming a sheet metal spool which consists in forming from sheet metal two cup-shaped halves each comprising a cylindrical body part and a head at its outer end, then removing the bottoms of the cup-shaped halves and flaring the resulting edges outwardly, then securing an aligning member to the halves to hold the flared ends thereof with their edges abutting, and then deflecting the flared ends against the aligning member.

1,881,597. STRIPING DEVICE FOR AUTOMOBILE BODIES. ERNESTO J. HOYOS, Boston, Mass., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1928. Serial No. 269,122. 7 Claims. (Cl. 91—62.6.)



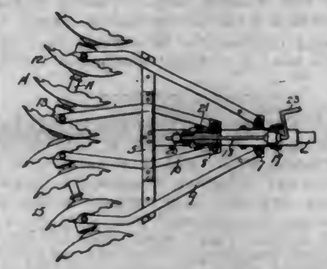
1. In a striping device, the combination of a support, a reservoir, a plurality of striping applicators, said support having a conduit communicating with the reservoir and having means for attachment to each of said applicators, and said applicators having means for interchangeably attaching one to the other.

1,881,598. YARN GUIDE FOR UPSTROKE TWISTERS. BARTON D. HUBBARD, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 7, 1930. Serial No. 486,992. 1 Claim. (Cl. 117—23.)



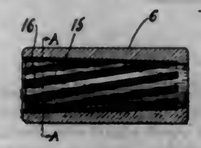
In an upstroke twister, a rotatable pot, and a tubular yarn guide having its lower end in the axis of rotation of said pot, said tubular guide having a lateral slot through its wall at an angle to the radius of the tube and extending from one end of the tube to the other.

1,881,599. HARROW. ELMER S. HUBBARD, Higganum, Conn. Filed Apr. 8, 1932. Serial No. 603,994. 11 Claims. (Cl. 55—81.)



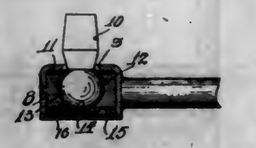
1. A supporting frame for a harrow, said frame comprising a cross bar and a draft bar secured thereto and extending therefrom, pairs of angling bars attached to said draft bar on opposite sides thereof, a disk gang supported by each of said pairs of angling bars, and means whereby each of said gangs may be placed in the same position on either pair of angling bars.

1,881,600. SOUND RECORD TABLET. CHARLES HUENLICH, Bloomfield, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 4, 1930. Serial No. 418,447. 5 Claims. (Cl. 274—44.)



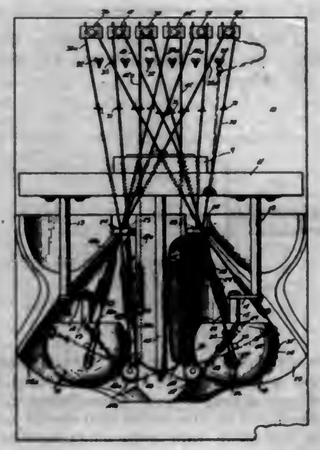
1. A hollow cylindrical record tablet having riffing on its internal surface, said riffing being so formed as to make less than one complete turn while progressing substantially the entire length of the tablet.

1,881,601. BALL JOINT. GEORGE H. HUFFARD and MATTHEW P. GRAHAM, Detroit, Mich., assignors to Thompson Products, Incorporated, Detroit, Mich., a Corporation of Ohio. Filed June 5, 1929. Serial No. 368,540. 4 Claims. (Cl. 287—90.)



4. A ball joint comprising a housing, a socket member formed of a poured bearing composition filling said housing, a ball of a ball stud mounted in said socket and a lubricant carrying washer in said housing and in contact with a portion of the surface of said ball.

1,881,602. OPHTHALMOTROPE. WENDELL L. HUGHES, New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,210. 25 Claims. (Cl. 35—16.)

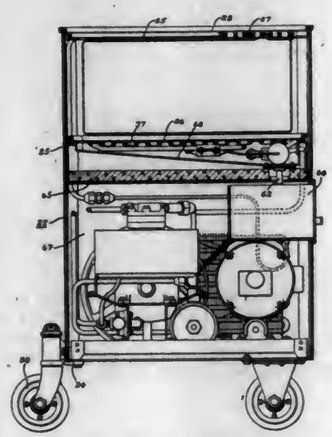


1. An ophthalmotrope comprising a body member having an aperture representing the optic foramen, a spherical member representing the eyeball mounted on said body member, and muscle elements attached to said spherical member, said muscle elements comprising cord portions and longitudinally expansible springs connected to said cord portions.

1,881,603. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 30, 1930. Serial No. 505,578. 4 Claims. (Cl. 62—116.)

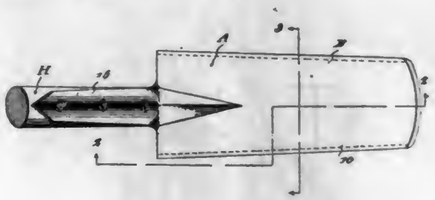
2. A refrigerating apparatus comprising in combination a serving cabinet, a heating element in said cabinet

adapted for applying heat to food articles, a cooling element within said cabinet adapted for cooling food articles, and a closed refrigerating system arranged for utilizing



the heat of compression therein for supplying heat to said heating element and being arranged for supplying refrigeration to said cooling element.

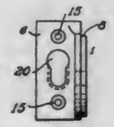
1,881,604. FARM TOOL. HIRAM HULL, Brooksville, Fla. Filed Nov. 10, 1930. Serial No. 494,747. 1 Claim. (Cl. 97—68.)



As a new article of manufacture, a hand tool comprising a narrow elongated blade tapering toward the front end thereof and provided with a gradually curved forward end curving from the center rearwardly toward the side edges of the blade, said blade being beveled upon its underface near the side edges to provide a sharp cutting edge along the top side edge of the blade and being beveled upon its top front edge to provide a sharp cutting edge along the bottom front edge of the blade, the blade being curved transversely from its longitudinal center toward the side edges for elevating the side edges of the blade and said blade curved longitudinally from the front edge to the rear edge thereof.

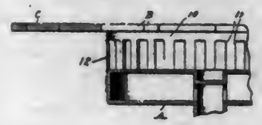
1,881,605. COMBINATION CURTAIN, DUST GUARD, AND DRAPERY HOLDING BRACKET. ROBERT H. HUMMERT, Dayton, Ohio, assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 27, 1930. Serial No. 491,351. 1 Claim. (Cl. 156—24.)

A bracket for supporting a curtain roller, a dust guard and a drapery rod, consisting of a member having a flat rectangular part adapted to be attached to a vertical support, a semi-circular second part at right angles to the first part, the second part formed with an opening to receive one end of the curtain roller, the first part formed with a T-slot to receive one end of the drapery



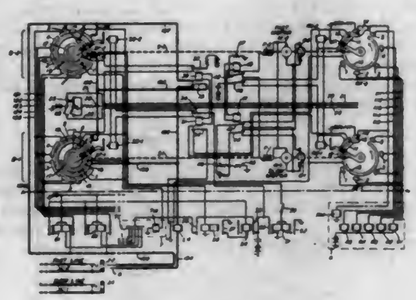
rod, and an annular shoulder formed on the inner face of the second part to support the dust guard between the curtain roller and the drapery rod.

1,881,606. HEAT CONSERVER. EDWIN HUMPHREVILLE, Lancaster, Pa. Filed Oct. 27, 1930. Serial No. 491,467. 7 Claims. (Cl. 126—214.)



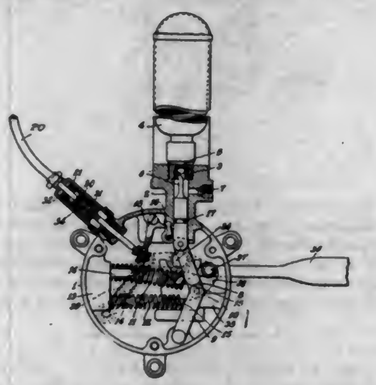
1. The combination with a burner of a band having transverse slits forming louvres therein, and means at its opposite ends for interconnection to form a hoop, said louvres being compressible for seating upon the burner to hold the hoop at a height determined thereby.

1,881,607. PRINTING TELEGRAPH SYSTEM. ARTHUR E. HUNT, Brooklyn, N. Y., and WILMARTH Y. LANG, Towaco, N. J.; said Hunt assignor to American Telephone and Telegraph Company, a Corporation of New York, and said Lang assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1931. Serial No. 544,056. 10 Claims. (Cl. 178—53.1.)



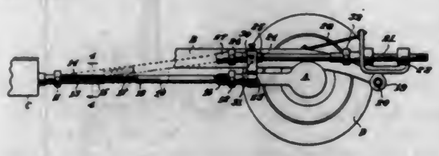
1. In a signaling system having lines for high and low speed signaling, a telegraph station comprising a line circuit, a high speed signal distributing device, a low speed signal distributing device, a common telegraphing system connected to both of said devices, and a switching system for operatively associating said telegraphing system with said line circuit through either one of said distributing devices.

1,881,608. CONTAINER-PIERCING MECHANISM. JOHN NORMAN HUNTER, Norbury, England, assignor to Pyrene Manufacturing Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 6, 1932, Serial No. 585,142, and in Great Britain Jan. 7, 1931. 8 Claims. (Cl. 160—26.)



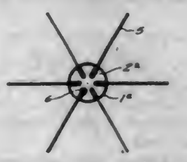
1. A piercing mechanism for sealed containers of liquid or highly compressed gas comprising a piercer, and tension means operable to forcibly drive said piercer through the wall of the container and to thereafter positively retract said piercer.

1,881,609. POWER TAKE-OFF FOR MOTOR DRIVEN VEHICLES. EDGAR W. HUWE, Noonan, N. Dak. Filed June 27, 1931. Serial No. 547,400. 2 Claims. (Cl. 180—53.)



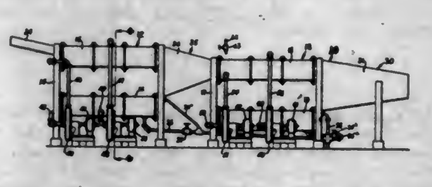
1. In a motor vehicle, the combination with an engine, differential gearing and a driving transmission shaft connected with the differential gearing, of a bracket adapted to be secured upon a chassis at its rear end of the motor vehicle, a supporting yoke forwardly of said bracket, a driven shaft journaled in said yoke and bracket and projected rearwardly beyond the vehicle, a slidable connection between the engine and said transmission shaft, means for tensioning said slidable connection, and universal joints associated with the transmission shaft and driven shaft for alternate separate connection of the transmission shaft with the driven shaft and said differential gearing.

1,881,610. TUBING. ROLLIN M. HYDE, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed July 11, 1930. Serial No. 467,823. 4 Claims. (Cl. 257—262.)



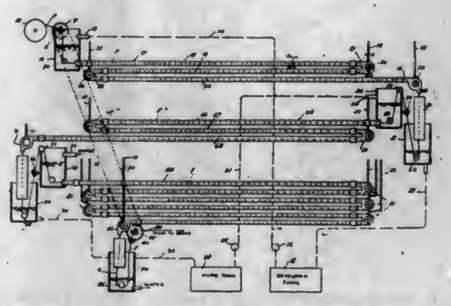
1. A tube of the character described having an outer wall, said outer wall having portions at a number of places about the axis of the tube extended inward to provide internal fins for the tube, and external fins applied to the outer wall and extending around about the same.

1,881,611. FRUIT WASHER. SYLVANUS HYNES, Canon City, Colo. Filed Jan. 19, 1931. Serial No. 509,752. 3 Claims. (Cl. 146—195.)



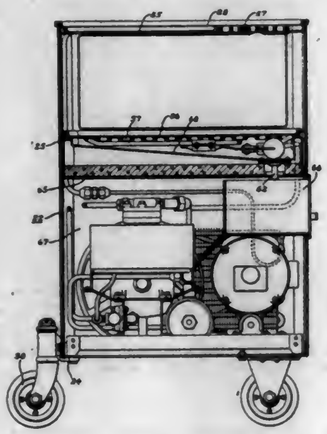
1. In a fruit washer, an acid solution section and a rinsing section, said acid solution section including a supporting frame having a fluid tank thereon and a fluid reservoir below said fluid tank, means to direct articles into said tank, means to draw fluid from said reservoir and discharge it into said tank, said fluid being discharged into said tank adjacent the article entering end thereof and being directed towards the opposite end of said tank to create a flow of fluid in said tank, spray pipes adjacent the entrance end of said tank and spaced above the fluid level therein, means to draw liquid from said reservoir and discharge it through said spray pipes, said rinsing section including a supporting frame having a fluid tank thereon and a fluid reservoir below said tank, the fluid level in said rinsing tank being below the fluid level in said acid tank, a connecting chute between said acid solution section and said rinsing section, said chute including side members and a bottom, a screen member in said chute, said screen member extending from the discharge end of said acid tank and being inclined downward to said rinsing tank, said chute bottom being inclined downward from said rinsing tank to said acid reservoir and draining thereinto.

1,881,612. FILM DEVELOPING SYSTEM. THOMAS M. INGMAN and FRANK E. GARBUTT, Los Angeles, and JAMES T. BARKELEW, Pasadena, Calif., assignors to Paramount Publix Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,600. 24 Claims. (Cl. 95—94.)



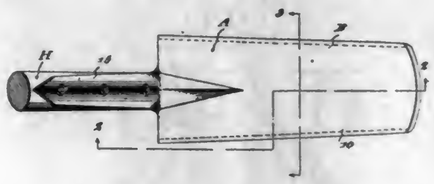
1. The method of treating a film strip, that comprises causing the film to be moved through a first conduit by virtue of skin friction on its surface of a first treating liquid continuously flowed through said conduit, and continuously taking the film as it leaves said first conduit and causing it thence to be moved through a second conduit by virtue of skin friction on its surface of a second treating liquid continuously flowed through said second conduit.

adapted for applying heat to food articles, a cooling element within said cabinet adapted for cooling food articles, and a closed refrigerating system arranged for utilizing



the heat of compression therein for supplying heat to said heating element and being arranged for supplying refrigeration to said cooling element.

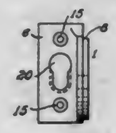
1,881,604. FARM TOOL. HIRAM HULL, Brooksville, Fla. Filed Nov. 10, 1930. Serial No. 494,747. 1 Claim. (Cl. 97—68.)



As a new article of manufacture, a hand tool comprising a narrow elongated blade tapering toward the front end thereof and provided with a gradually curved forward end curving from the center rearwardly toward the side edges of the blade, said blade being beveled upon its underface near the side edges to provide a sharp cutting edge along the top side edge of the blade and being beveled upon its top front edge to provide a sharp cutting edge along the bottom front edge of the blade, the blade being curved transversely from its longitudinal center toward the side edges for elevating the side edges of the blade and said blade curved longitudinally from the front edge to the rear edge thereof.

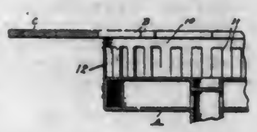
1,881,605. COMBINATION CURTAIN, DUST GUARD, AND DRAPERY HOLDING BRACKET. ROBERT H. HUMMERT, Dayton, Ohio, assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 27, 1930. Serial No. 491,351. 1 Claim. (Cl. 156—24.)

A bracket for supporting a curtain roller, a dust guard and a drapery rod, consisting of a member having a flat rectangular part adapted to be attached to a vertical support, a semi-circular second part at right angles to the first part, the second part formed with an opening to receive one end of the curtain roller, the first part formed with a T-slot to receive one end of the drapery



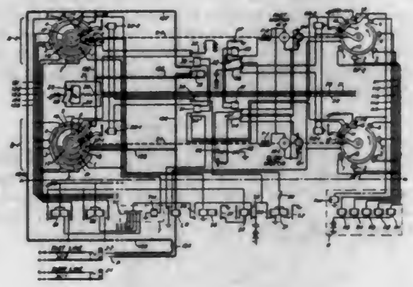
rod, and an annular shoulder formed on the inner face of the second part to support the dust guard between the curtain roller and the drapery rod.

1,881,606. HEAT CONSERVER. EDWIN HUMPHREVILLE, Lancaster, Pa. Filed Oct. 27, 1930. Serial No. 491,467. 7 Claims. (Cl. 126—214.)



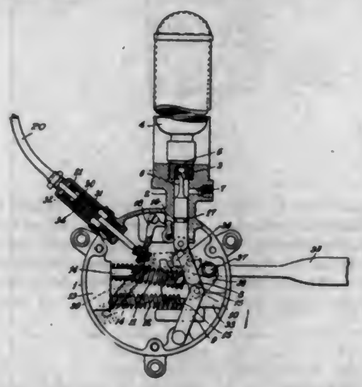
1. The combination with a burner of a band having transverse slits forming louvres therein, and means at its opposite ends for interconnection to form a hoop, said louvres being compressible for seating upon the burner to hold the hoop at a height determined thereby.

1,881,607. PRINTING TELEGRAPH SYSTEM. ARTHUR E. HUNT, Brooklyn, N. Y., and WILMARTH Y. LANG, Towaco, N. J.; said Hunt assignor to American Telephone and Telegraph Company, a Corporation of New York, and said Lang assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1931. Serial No. 544,056. 10 Claims. (Cl. 178—53.1.)



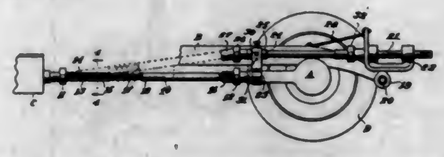
1. In a signaling system having lines for high and low speed signaling, a telegraph station comprising a line circuit, a high speed signal distributing device, a low speed signal distributing device, a common telegraphing system connected to both of said devices, and a switching system for operatively associating said telegraphing system with said line circuit through either one of said distributing devices.

1,881,608. CONTAINER-PIERCING MECHANISM. JOHN NORMAN HUNTER, Norbury, England, assignor to Pyrene Manufacturing Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 6, 1932, Serial No. 585,142, and in Great Britain Jan. 7, 1931. 8 Claims. (Cl. 169—26.)



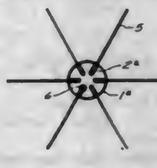
1. A piercing mechanism for sealed containers of liquid or highly compressed gas comprising a piercer, and tension means operable to forcibly drive said piercer through the wall of the container and to thereafter positively retract said piercer.

1,881,609. POWER TAKE-OFF FOR MOTOR DRIVEN VEHICLES. EDGAR W. HUWE, Noonan, N. Dak. Filed June 27, 1931. Serial No. 547,400. 2 Claims. (Cl. 180—53.)



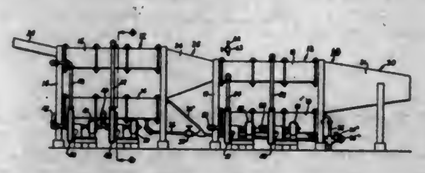
1. In a motor vehicle, the combination with an engine, differential gearing and a driving transmission shaft connected with the differential gearing, of a bracket adapted to be secured upon a chassis at its rear end of the motor vehicle, a supporting yoke forwardly of said bracket, a driven shaft journaled in said yoke and bracket and projected rearwardly beyond the vehicle, a slidable connection between the engine and said transmission shaft, means for tensioning said slidable connection, and universal joints associated with the transmission shaft and driven shaft for alternate separate connection of the transmission shaft with the driven shaft and said differential gearing.

1,881,610. TUBING. ROLLIN M. HYDE, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed July 11, 1930. Serial No. 467,328. 4 Claims. (Cl. 257—262.)



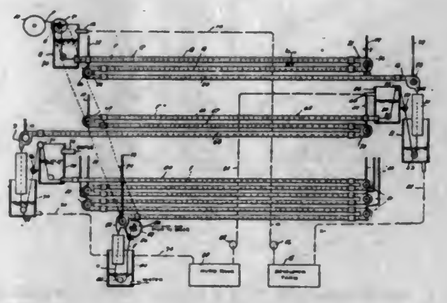
1. A tube of the character described having an outer wall, said outer wall having portions at a number of places about the axis of the tube extended inward to provide internal fins for the tube, and external fins applied to the outer wall and extending around about the same.

1,881,611. FRUIT WASHER. SYLVANUS HYNES, Canon City, Colo. Filed Jan. 19, 1931. Serial No. 509,752. 3 Claims. (Cl. 146—195.)



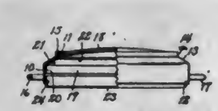
1. In a fruit washer, an acid solution section and a rinsing section, said acid solution section including a supporting frame having a fluid tank thereon and a fluid reservoir below said fluid tank, means to direct articles into said tank, means to draw fluid from said reservoir and discharge it into said tank, said fluid being discharged into said tank adjacent the article entering end thereof and being directed towards the opposite end of said tank to create a flow of fluid in said tank, spray pipes adjacent the entrance end of said tank and spaced above the fluid level therein, means to draw liquid from said reservoir and discharge it through said spray pipes, said rinsing section including a supporting frame having a fluid tank thereon and a fluid reservoir below said tank, the fluid level in said rinsing tank being below the fluid level in said acid tank, a connecting chute between said acid solution section and said rinsing section, said chute including side members and a bottom, a screen member in said chute, said screen member extending from the discharge end of said acid tank and being inclined downward to said rinsing tank, said chute bottom being inclined downward from said rinsing tank to said acid reservoir and draining thereinto.

1,881,612. FILM DEVELOPING SYSTEM. THOMAS M. INGMAN and FRANK E. GARBUTT, Los Angeles, and JAMES T. BARKELEW, Pasadena, Calif., assignors to Paramount Publix Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,600. 24 Claims. (Cl. 95—94.)



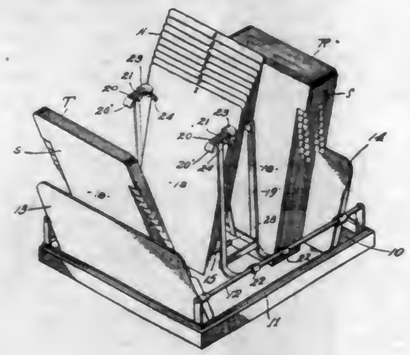
1. The method of treating a film strip, that comprises causing the film to be moved through a first conduit by virtue of skin friction on its surface of a first treating liquid continuously flowed through said conduit, and continuously taking the film as it leaves said first conduit and causing it thence to be moved through a second conduit by virtue of skin friction on its surface of a second treating liquid continuously flowed through said second conduit.

1,881,613. WATCHCASE. DUDLEY S. INGRAHAM, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Apr. 28, 1930. Serial No. 447,933. 1 Claim. (Cl. 58—91.)



As a new article of manufacture, a watchcase including a sheet-metal case-shell open at its front and rear faces and formed at its front face with an upstanding collar, the interior surface of which forms a crystal-seat, and which terminates in an inwardly-turned crystal-retaining flange, the said collar being smaller size than the size of the case-shell from which it outwardly projects; a crystal installed in the upstanding collar of the said case-shell, with its peripheral edge seated against the inner surface thereof and having that portion of its outer surface adjacent said peripheral edge seated against the inwardly-turned crystal-retaining flange of the said case-shell; and a crystal-retaining ring installed within the said case-shell and provided with an inwardly-projecting crystal-retaining flange positioned to engage the inner surface of the said crystal adjacent the peripheral edge thereof and complementing the flange upon the said case-shell to form a two-part crystal-retaining groove, the major portion of which lies within the upwardly-offset collar of the said case-shell.

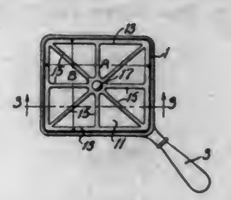
1,881,614. RECORD POSTING DEVICE. CLARENCE B. IRVING, Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Dec. 21, 1928. Serial No. 327,536. 15 Claims. (Cl. 129—16.1.)



1. The combination with a posting device comprising a body member, parallel side members carried by said body member, and a front and a rear wing adjustably carried by said side members, of a record sheet supporting rack adjustably carried by said side members intermediate said front and rear wings.

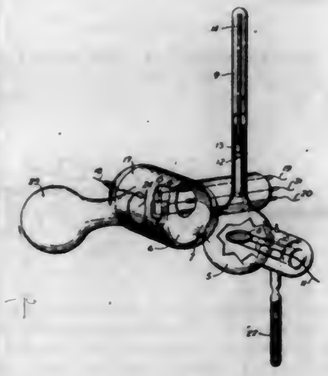
2. The combination with a record sheet posting device having a body portion and means for supporting record sheets at different heights, of a series of progressively shouldered record sheets adapted to be carried by said supporting means.

1,881,615. COOKING UTENSIL. WILLIAM O. ISAACSON, Chicago, Ill. Filed Apr. 17, 1930. Serial No. 444,807. 1 Claim. (Cl. 53—7.)



In combination, a frying pan having a raised bottom, heat conducting ridges on the under side of said bottom, and a removable lid for said frying pan, said lid having therein radiating vapor conducting beads, said lid being adapted to fit into said frying pan in one position and to rest on the top of said frying pan in a second position.

1,881,616. ELECTROOPTICAL DEVICE. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1929. Serial No. 345,170. 14 Claims. (Cl. 250—27.5.)



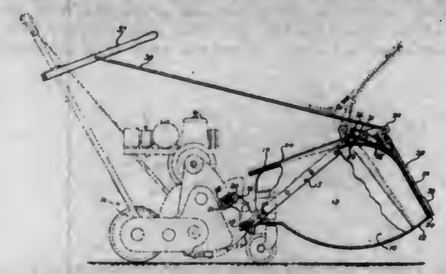
10. A photoelectric tube having an anode and a cathode, said cathode comprising a nickel platinum alloy and a light sensitive element comprising lithium deposited on said alloy.

1,881,617. IMPREGNATION OF WOOD AND OTHER VEGETABLE SUBSTANCES. WACLAW IWANOWSKI and JOZEF TURSKI, Warsaw, Poland. Filed June 6, 1927, Serial No. 196,998, and in Poland Aug. 13, 1926. 3 Claims. (Cl. 99—12.)

1. Process of preserving wood which comprises impregnating the wood with a chlorinated phenol compound containing at least two and not more than three chlorine atoms.

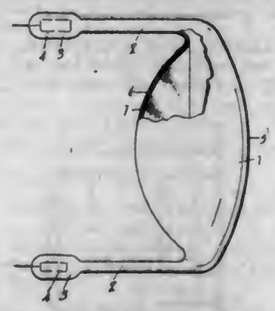
1,881,618. GRASS CATCHER FOR LAWN MOWERS. KNUD F. JACOBSEN, Racine, Wis., assignor to Jacobsen Mfg. Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 8, 1929. Serial No. 384,350. 9 Claims. (Cl. 56—200.)

1. A grass catcher for lawn mowers including a container, a transversely extending shaft mounted for rotation on the container, and a cover secured to said shaft and normally closing the container except for an entrance at one end, the bottom of said container having a portion curved about the axis of said shaft as a center and said



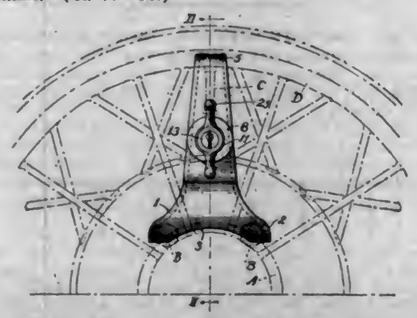
cover having a portion so disposed as to sweep across said curved portion of the bottom as the cover is swung about said shaft.

1,881,619. GASEOUS CONDUCTION LAMP. GEORGE S. JAMES, Long Island, N. Y., assignor, by mesne assignments, to James Neon Double Electrode Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 17, 1928. Serial No. 300,332. 3 Claims. (Cl. 176—122.)



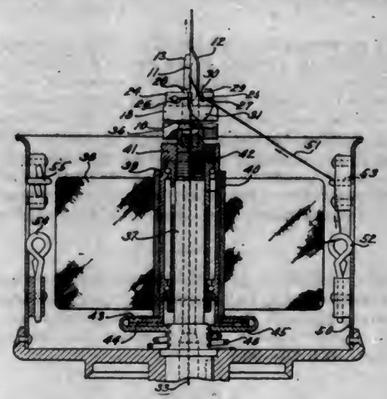
1. A gaseous conduction lamp comprising a container having tubular end portions terminating in electrode chambers, and an intermediate circular enlargement with which said tubular end portions are connected, said enlargement having a concave rear wall provided with a reflector.

1,881,620. LOCK FOR SPARE WHEELS AND TIRES. HERBERT S. JANDUS, Detroit, Mich., and FREDERICK A. SMITH, Chicago, Ill., assignors to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Sept. 27, 1930. Serial No. 484,764. 7 Claims. (Cl. 70—90.)



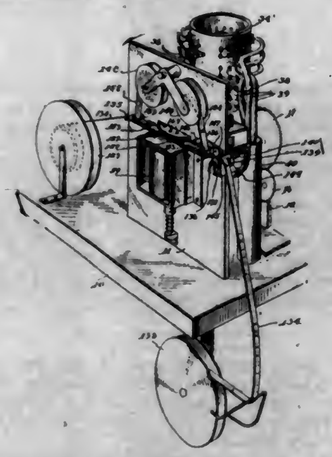
1. In a device for rendering theft proof a spare wheel and tire mounted on a carrier, a pair of jaws engageable with opposite sides of the wheel for gripping the latter, one of said jaws comprising a housing for receiving the wheel mounting means and the tire valve, whereby to prevent access to said means and valve, instrumentalities for adjusting said jaws relative to each other, and means for limiting separative movement of said jaws, whereby a unitary device is provided.

1,881,621. STRAND COVERING APPARATUS. JOHN JANICKI, Chicago, Ill., assignor to Western Electric Company Incorporated, New York, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 466,082. 5 Claims. (Cl. 117—42.)



1. In an apparatus for serving material upon a core, a guide comprising a pair of parallel blades extending axially of the core for winding the material around the core and spaced apart a distance less than the diameter of the core, one of said blades extending beyond the outer end of the other blade to facilitate the threading of the serving material between the blades.

1,881,622. SYSTEM FOR TESTING AND RECORDING THE CONDITION OF CLOCK SETTING CIRCUITS. GEORGE W. JANSON, Nutley, N. J., and WILLIAM F. CALLAHAN, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 426,169. 18 Claims. (Cl. 234—1.5.)



1. In apparatus for testing and recording conductive conditions in a series of electrical circuits, an electromagnetically operated printing mechanism, a normally

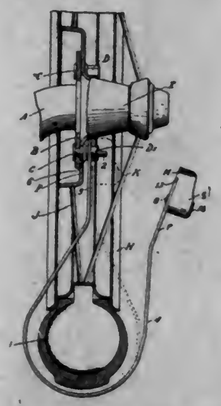
open circuit for said printing mechanism and means responsive to defective circuits operating to close said open circuit.

1,881,623. CHEESE SLICER. OTTO JASSOY, Buffalo, N. Y., assignor to Einar C. Christensen, Buffalo, N. Y. Filed Feb. 27, 1931. Serial No. 518,830. 9 Claims. (Cl. 31—27.)



1. In a cheese slicer, a handle, a shaft, a cutting member substantially parallel to the shaft, a member for securing said cutting member adjacent one end of said shaft, and means for attaching said cutting member adjacent the other end of said shaft, said member for securing said cutting member having a plurality of means about its periphery for engaging said cutting member and being adapted to be positioned in such various positions relative to said shaft as to bring any one of said plurality of means into alignment with said first mentioned means.

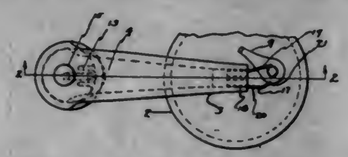
1,881,624. DEMOUNTABLE WHEEL LOCK. CLARENCE E. JEFFERS, York, Pa., assignor, by mesne assignments, to Oakes Products Corporation, a Corporation of Michigan. Filed June 1, 1928. Serial No. 282,166. 5 Claims. (Cl. 70—90.)



1. In a device of the class described, a metal loop-shaped member adapted to straddle a tire and having two ends, one over the other, one of said ends being provided with means for receiving a wheel retaining nut having an aperture, the other of said ends being provided with means for engaging the wheel retaining nut to prevent rotation of the nut relatively to the loop-shaped member, and a lock structure secured to said other end to receive the apertured end of the retaining nut, said lock structure comprising a locking bolt adapted to be engaged in the retaining nut aperture to thereby lock the loop-shaped member against removal from said nut.

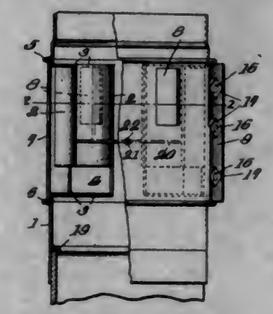
1,881,625. SPRAY GUN. HOWARD W. JELLIFFE and WALTER H. ABBOTT, Cleveland, Ohio, assignors to Utility Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,772. 19 Claims. (Cl. 299—89.)

2. A spray gun comprising a cover member adapted to be secured on the top of a container for the material to be sprayed, an air nozzle attached to said cover member, a tube for delivering material from the container to the air stream issuing from the nozzle and extending through the cover and having an outlet in advance of the discharge opening of the nozzle, and a spray flattening air deflector secured to the nozzle and projecting from the end of the nozzle toward said tube, said deflector being adjustable on said nozzle toward and away from said tube.



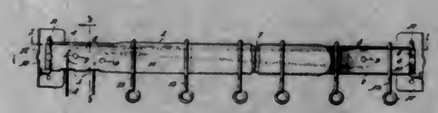
10. A spray gun comprising a cover member adapted to be secured on the top of a container for the material to be sprayed, an air nozzle attached to said cover member, a tube for delivering material from the container to the air stream issuing from the nozzle extending through the cover and rotatably mounted in the cover, said tube having a lateral outlet adapted to be positioned to open laterally into the air stream issuing from the nozzle, and spray flattening means comprising a deflector plate projecting forwardly from one side of the nozzle and having its forward end alongside and spaced from said tube.

1,881,626. SMOKE PIPE AIR CHECK. RAYMOND J. JENKINS, Baltimore, Md. Filed Mar. 19, 1931. Serial No. 523,847. 5 Claims. (Cl. 126—312.)



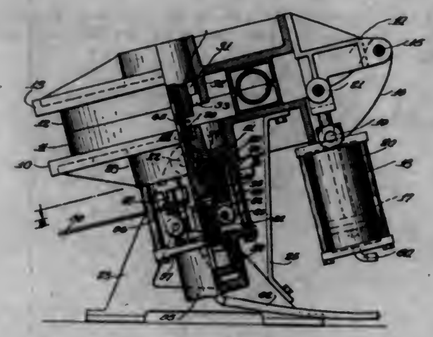
1. A smoke pipe air check of the kind described formed of a sheet of metal rolled into cylindrical form and having pockets expanded inwardly therefrom provided with lateral outlet openings at one end, said pockets being closed by a band, said band being provided with air inlet openings for feeding air into said pockets.

1,881,627. CURTAIN FIXTURE. GEORGE B. JENKINSON, Prescott, Ontario, Canada, assignor to The Newell Mfg. Co., Inc., Ogdensburg, N. Y., a Corporation of Maine. Filed July 15, 1931. Serial No. 551,038. 19 Claims. (Cl. 156—20.)



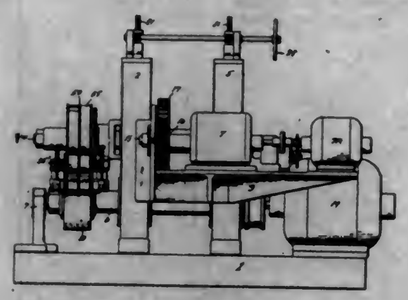
1. In a curtain fixture having a rod, end pieces telescopical within the rod, and having bracket holding socket portions at their outer ends, means in said end pieces to guide a pull cord, and means on said end pieces to space the outer ends and their holding sockets away from the rod ends.

1,881,628. VULCANIZER WITH WEDGE LOCK. JOHN JENNEJOHN, Cudahy, Wis., assignor to Utility Manufacturing Co., Cudahy, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1930. Serial No. 426,248. 10 Claims. (Cl. 18—17.)



8. In a vulcanizer, a pair of cooperable and relatively movable mold members, and fluid operated clamping means for holding them in cooperation, comprising a centrally disposed rotary clamping member for engagement with one of said mold members, lever means cooperable with said clamping member, and fluid operated wedge means for actuating said lever means to draw said clamping member into tight cooperation with the associated mold member, said wedging means comprising a frusto-conical element arranged to be engaged by said lever means.

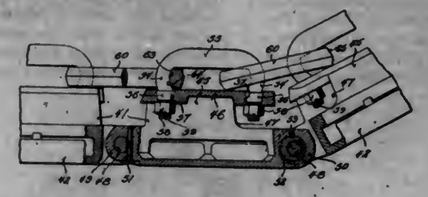
1,881,629. BUMPER GRINDING MACHINE. CLAYTON H. HOMAN, Cleveland, Ohio, assignor, by mesne assignments, to General Spring Bumper Corporation, a Corporation of Michigan. Filed Jan. 18, 1926. Serial No. 81,931. 4 Claims. (Cl. 51—78.)



2. A grinding machine including a grinding element, a feed wheel adapted to bear upon the work to be ground as it passes across the grinding element, a rotatable shaft supporting said feeding wheel, means for regulating the distance between said shaft and the grinding element, and auxiliary feed wheels supported from said shaft and driven therefrom.

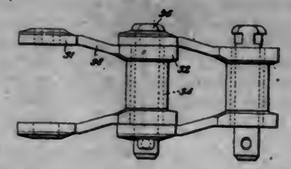
1,881,630. CRAWLER TREAD MECHANISM. GEORGE C. JETT, Milwaukee, Wis., assignor of two-fifths to Walter H. Stiemke, Milwaukee, Wis. Filed Dec. 15, 1927. Serial No. 240,141. 15 Claims. (Cl. 305—10.)

7. In a truss-type tread belt for crawler mechanisms, the combination of a series of shoes, hinge connections between said shoes, an inwardly disposed hollow projection on each shoe, openings in said hollow projection, a U-shaped anchor link, the ends of said anchor link being seated in said openings, means within said hollow projection for releasably fixing said ends in said openings, and connector



links interchanged with and between the anchor links of successive shoes to limit the hinge action between said shoes.

1,881,631. HIGH SPEED CHAIN AND METHOD OF MAKING SAME. MAURICE G. JEWETT, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1930. Serial No. 442,936. 7 Claims. (Cl. 59—35.)



5. The method of forming side bars for high speed power transmission chains, which consists in subjecting a bar of metal stock of substantially uniform cross sectional area to rolling die action to cause a redistribution of the metal to produce a side bar the end portions of which are thicker than its mid portion, the fibers of the metal of which are disposed longitudinally thereof.

1,881,632. DIRECTION INDICATOR. RALPH A. JOHANNESSEN, Los Angeles, Calif. Filed Sept. 25, 1930. Serial No. 484,801. 4 Claims. (Cl. 177—329.)

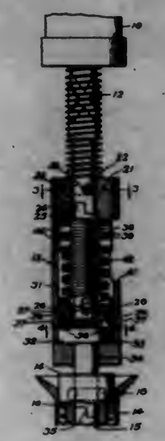


1. A signalling element adapted for mounting on the outstretched hand and comprising a shell, a shank projecting from one face of the shell, a laterally projecting head at the outer end of the shank, the shank being adapted for engagement between the outstretched fingers with the fingers received under and abutting against the laterally projecting head and the shell abutting against the opposite side of the fingers, transparent signalling means at the outer face of the head and at the face of the shell which is remote from the fingers, and means in the shell for illuminating the transparent signalling means.

1,881,633. OVERLOAD CLUTCH. EARL VICTOR JOHNSON, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 3, 1926. Serial No. 133,319. 2 Claims. (Cl. 64—106.)

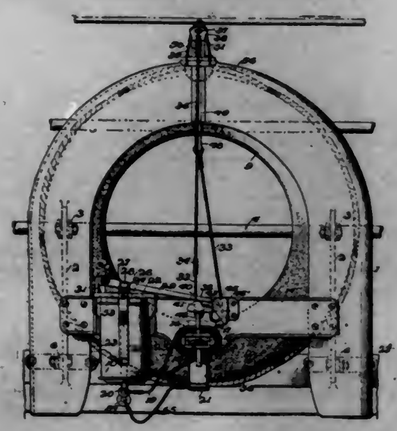
1. In an overload clutch, a housing having an inner wall, a rotatable driving member movably disposed in said housing and having an outer wall disposed in engagement with the inner wall of said housing, a driven

member rotatably disposed in said housing, said driving and driven members each having oppositely disposed integral faces formed with a series of similarly arranged clutch depressions, a plurality of balls interposed therebetween, a member for maintaining the balls in predetermined spaced relation as a unitary assemblage, the assemblage being freely rotatable between the driving and driven members, means adjustably mounted for longitudinal move-



ment upon the driving member, and a coiled compression spring substantially equal in circular contour to the unitary assemblage for urging said driving member toward said driven member and causing an equal pressure upon each of the balls in the assemblage, said driving member being guided by its engagement with the inner wall of said housing to aid in causing an equal pressure upon each of the balls of the assemblage.

1,881,634. LAUNCHING DEVICE FOR LIFE PRESERVERS. ELDRIDGE R. FERRIMORE JOHNSON, Moorestown, N. J., assignor to Mechanical Improvements Corporation, Camden, N. J., a Corporation of New Jersey. Filed Mar. 23, 1932. Serial No. 600,765. 23 Claims. (Cl. 114—190.)



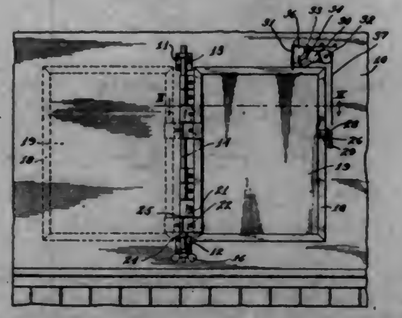
3. In apparatus of the class described, the combination of a holder, a life ring, releasable means for holding said life rings in said holder, means for positively ejecting said life ring from said holder, an operating element, and operative connections between said element and said releasing and ejecting means whereby said life ring is released and ejected from said holder on actuation of said element.

1,881,635. DOORSTOP. ELVIN H. JOHNSON, Winnetka, Ill. Filed May 31, 1930. Serial No. 458,349. 5 Claims. (Cl. 292—338.)



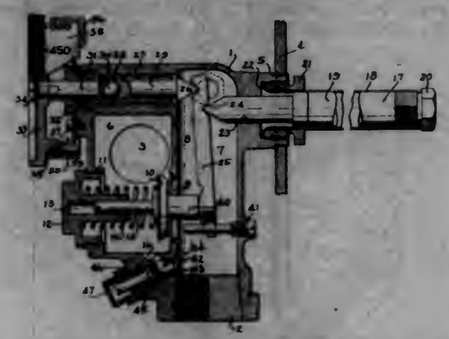
3. A door holder comprising a pintle, a support for said pintle, and a rod pivoted on said pintle, one end of said rod being bent to partially encircle said pintle and then extending out away from said pintle, to engage said support spaced from said pintle and limit the downward movement of said rod proper to an inclined position.

1,881,636. PORTABLE BLACKBOARD. JOHN F. JOHNSON and ROBERT B. LAWTON, Chicago Heights, Ill., assignors to Weber Costello Co., Chicago Heights, Ill., a Corporation of Illinois. Filed July 22, 1931. Serial No. 552,302. 4 Claims. (Cl. 35—15.)



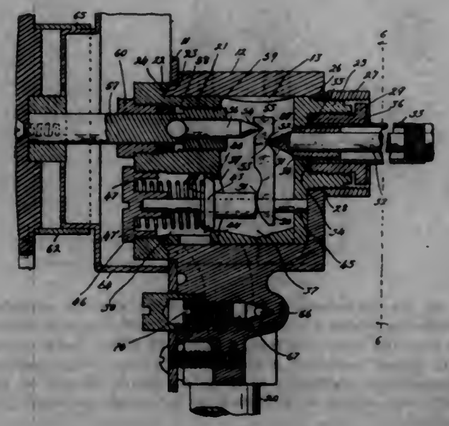
1. A blackboard structure comprising a pair of spaced opposed brackets, a rod journaled in said brackets and longitudinally slidable therein, means on said brackets to limit its sliding movement in one direction in the brackets, and hinges on said rod supporting a plurality of blackboard panels for swinging movement to parallel juxtaposed relation, said hinges being disposed relative to said brackets in such a manner as to enable movement of the rod, hinges and panels as a unit in the other direction until one end of the rod is free of its associated bracket, whereupon said unit may be removed to another location by moving it in the opposite direction until the other end of the rod is free of its associated bracket.

1,881,637. FUEL REGULATING DEVICE FOR GAS OVENS. ROY W. JOHNSON, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 29, 1928. Serial No. 315,658. 5 Claims. (Cl. 236—15.)



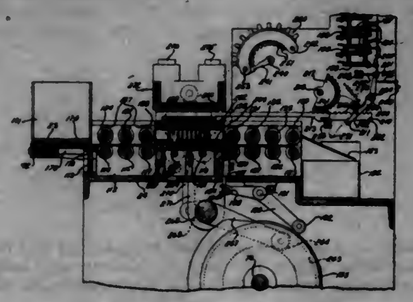
1. A regulator for gas ovens or the like including a housing having a valve therein and mechanism for operating the valve, adjustable means for varying the operation of said mechanism including a manually adjustable operating element having a laterally extending annular flange, a dial element in the form of a ring fitted on said flange for indicating a temperature range and co-operating means on the flange and ring for adjustably securing the dial to the operating element so as to permit proper calibration of the regulator to cause movement of the valve upon the temperature in the oven reaching that indicated on the dial.

1,881,638. THERMOSTAT ASSEMBLY. ROY W. JOHNSON, Elkhart, Ind., assignor to Roberts Brass Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 2, 1930. Serial No. 479,301. 10 Claims. (Cl. 236—15.)



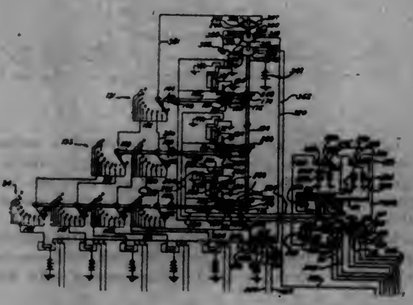
1. A temperature regulating device comprising a housing having spaced openings therein communicating with a fluid supply and distributing line, a casing removably positioned within the housing having portions communicating with the openings aforesaid in the housing and with each other, valve means carried by the casing and controlling communication between the portions aforesaid thereof, and means also carried by said casing for automatically and manually controlling the operation of said valve means.

1,881,639. PERFORATING APPARATUS. HAROLD G. JOHNSTONE, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1929. Serial No. 398,725. 8 Claims. (Cl. 164—115.)



1. In a perforating apparatus, a plurality of perforating members, selecting elements associated therewith for controlling their operation, means for conditioning said selecting elements for operation, means responsive to the allocations of perforations in a record sheet for controlling said last mentioned means, means for actuating the conditioned ones of said selecting elements, and means for causing the actuated selecting elements to actuate the perforating members.

1,881,640. TABULATING SYSTEM. HAROLD GLENN JOHNSTONE, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,464. 21 Claims. (Cl. 235—92.)



1. In a tabulating system, a plurality of electrical operating circuits, a circuit selecting mechanism including a plurality of banks of selector switches each selector switch comprising a plurality of passive contacts and a cooperating contact element movable with respect thereto, means for moving the contact elements of each of the banks of selector switches independently to engage simultaneously predetermined passive contacts, and means thereafter effective at a predetermined time during said movement for energising certain of the electrical operating circuits in accordance with the positions of the contact elements at that time.

1,881,641. CIGARETTE HOLDER. FRANK C. JONES, Parma, Ohio. Filed Sept. 28, 1931. Serial No. 565,627. 5 Claims. (Cl. 131—51.)

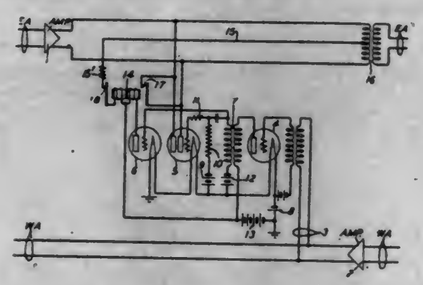
2. A cigarette holder comprising a tubular body having a tapered end, a split clamp held in said end and having a cigarette receiving portion located outside the body, a

member within said body mounted for movement along the axis of the body only, means for anchoring said clamp to said member, means carried by the body and including a



rotatable member and a movement transmitting and translating device within the body for moving said member along the axis of the body to open and close the clamp.

1,881,642. TRANSMISSION CONTROL CIRCUITS. HERBERT L. JONES, Morristown, N. J., and EDMUND A. VEAZIE, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 15, 1931. Serial No. 551,014. 7 Claims. (Cl. 179—170.)



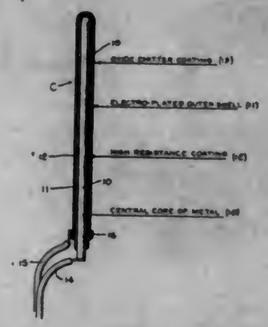
1. In combination, a transmission circuit, a source of alternating current waves, a gaseous electric space discharge device having a pair of anodes and normally having a high anode to anode impedance, said anode to anode impedance being connected effectively in shunt with said transmission circuit, and means automatically responsive to alternating current waves received from said source for decreasing the anode to anode impedance of said device.

1,881,643. DEWAXING OF PETROLEUM OILS. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 9, 1926. Serial No. 147,383. 26 Claims. (Cl. 196—19.)

17. In a method for producing dewaxed mineral oil which involves separation of precipitated wax from oil by difference of specific gravity, the steps comprising forming a mixture of a suitable solvent, a distillate containing crystalline wax in such proportion as to impair or prevent continuous centrifugal dewaxing thereof, and a petroleum oil containing wax which is as a whole markedly amorphous, said amorphous-wax-containing oil being present in such proportion that wax precipitated from the resulting mixture by chilling is capable of being separated therefrom by continuous centrifugal separation; chilling the resulting mixture; and separating precipitated wax therefrom by continuous centrifugal separation.

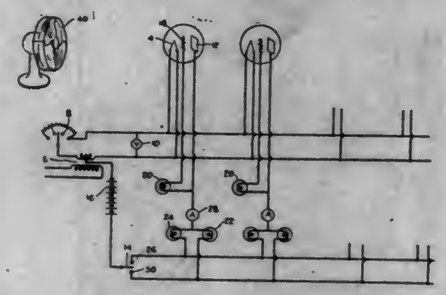
24. The method of removing slop wax from hydrocarbon oils containing same which consists in diluting such oil with a relatively low boiling hydrocarbon oil, adding a small quantity of petrolatum thereto, chilling and separating the wax from the oil.

1,881,644. ELECTRON DISCHARGE CATHODE. LESTER L. JONES, Oradell, N. J. Filed Feb. 28, 1929. Serial No. 343,255. 10 Claims. (Cl. 50—27.5.)



1. A heater comprising a conductive core, a conductive shell having one closed end and surrounding said core, a resistor element disposed between and forming the sole conductive path between said core and shell, and lead-in wires connected to the core and the shell at one end only of the said heater.

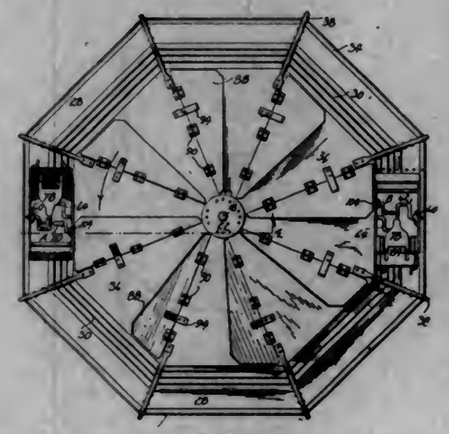
1,881,645. ACTIVATION AND REACTIVATION OF ELECTRON EMISSION TUBES. LESTER L. JONES, Oradell, N. J., and JOSEPH A. FLANZER and EMIL REISMAN, Brooklyn, N. Y., assignors to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,218. 18 Claims. (Cl. 250—27.)



13. An arrangement for reactivating electron emission tubes comprising a source of cathode heater current, means to vary the heater current, a source of direct anode potential, means including a resistance having a high positive temperature coefficient to limit the space current of the tube, and means to momentarily interrupt the anode potential.

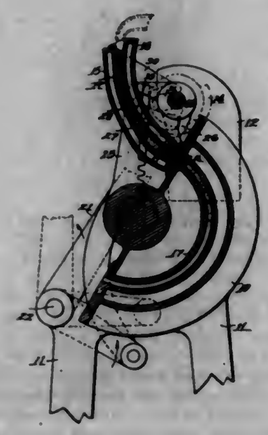
1,881,646. MERRY-GO-ROUND. R T JONES, Perry, Iowa. Filed Jan. 15, 1930. Serial No. 420,894. 4 Claims. (Cl. 272—33.)

1. In a merry-go-round, a support including a step bearing and a track concentric therewith, a center post having its lower end engaging in said step bearing, a frame including arms radiating from said post, a substantially annular passenger support carried by said arms, driving wheels carried by said fame and adapted to travel on said track, means carried by the frame for causing rotation of said wheels, and wind vanes arranged in substantially horizontal positions on top of the frame, said vanes



being hinged at their leading edges whereby they may be raised by wind currents to provide propelling means for the device.

1,881,647. APPARATUS FOR SEPARATING THE RISER FROM A STEREOTYPE PLATE. HANS C. JORDHOY, North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation. New York, N. Y., a Corporation of Virginia. Filed May 12, 1926, Serial No. 108,632. Renewed Sept. 11, 1930. 34 Claims. (Cl. 22—3.)



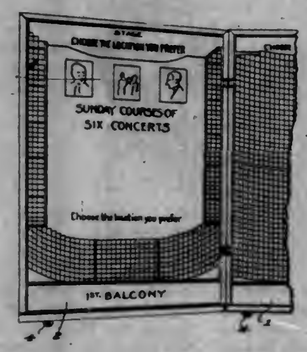
1. In a device for casting stereotype printing plates, the combination with a mold having a matrix therein, of a gate having a projecting portion extending over the mold cavity in a transverse direction at the edge of the core thereby providing a thin section of metal at the bottom of the riser to facilitate the breaking off of the riser at the edge of the plate.

1,881,648. METHOD OF SEPARATING THE RISER FROM A STEREOTYPE PRINTING PLATE. HANS C. JORDHOY, North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 12, 1926, Serial No. 108,632. Divided and this application filed Dec. 9, 1929. Serial No. 412,623. Renewed May 9, 1932. 10 Claims. (Cl. 22—2.)



1. The method of preparing a stereotype printing plate which consists in casting it in a mold provided with a movable gate and breaking the riser off the plate at the edge of the plate by movement of the gate.

1,881,649. TICKET AND TICKET CABINET. GEORGE E. JUDD, Boston, Mass. Filed Aug. 22, 1929. Serial No. 387,718. 5 Claims. (Cl. 40—124.)

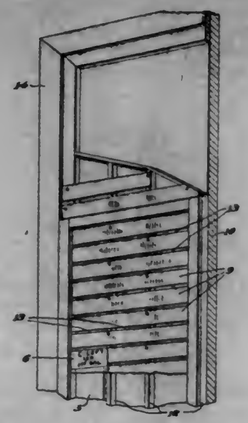


1. The combination of a ticket case having a multiplicity of pockets therein corresponding in number and arrangement to the number and arrangement of the seats to be sold, each pocket being adapted to receive the shank of a ticket leaving the end of the ticket exposed at the front of the case, and tickets in said pockets, said pockets and tickets having parts cooperating to permit only a partial withdrawal of each ticket from its respective pocket merely by a longitudinal pull on the ticket.

1,881,650. TICKET HANDLING APPARATUS. GEORGE E. JUDD, Boston, Mass. Filed Aug. 22, 1929. Serial No. 387,719. 4 Claims. (Cl. 40—124.)

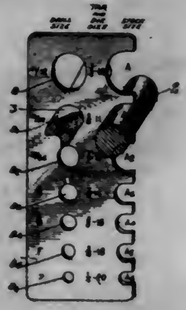
1. A ticket case adapted to occupy an upright position and having front and rear walls spaced apart, said front wall having slots therein corresponding in number and arrangement to the number and arrangement of the seats

to be sold, and spacing members connecting said front and rear walls and dividing the space between them into vertically disposed channels, each slot being adapted to



receive a ticket with the lower part of the ticket extending into one of said channels and the upper end portion thereof exposed at the front of the case.

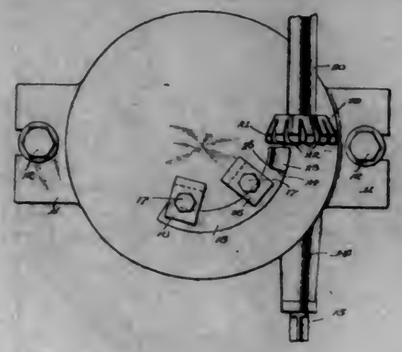
1,881,651. GAUGE. FRANKLIN JUDGE, Greenfield, Mass., assignor to Greenfield Tap and Die Corporation, a Corporation of Massachusetts. Filed June 18, 1930. Serial No. 461,866. 1 Claim. (Cl. 33—168.)



A gauge device in the form of a plate comprising a series of fixed gauge jaws having graduated spaces between them along one edge of the plate dimensioned and designated to measure thicknesses or diameters of stocks of material for threading by a die correspondingly designated on said plate, and a cooperating series of graduated circular holes within the body of the plate dimensioned and designated to correspond to the diameters of the holes to be drilled for threading to mate with said threaded stocks, each hole being immediately adjacent to and paired with its corresponding stock gauge jaw space so as to be similarly designated and to permit either the stock gauge or the drill gauge to determine the properly cooperating tap, die and drill or stock.

1,881,652. METHOD OF MAKING A RING JOINT. WILLIAM N. JUSTICE, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed May 7, 1931. Serial No. 535,780. 1 Claim. (Cl. 90—20.)

The method of making a ring joint composed of complementary concave and convex sections which consists in bringing one end of a ring blank into contact with an end milling cutter to form a filleted concave joint section, milling away the free end of the section to produce a rounded portion, milling the other end of the blank to convex form by means of a milling cutter complementary



to the first milling cutter, and then milling the convex section at its free end to produce a portion capable of interfitting with the filleted portion of the concave joint section.

1,881,653. CLIP. ERNEST C. KASTNER, Newark, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed June 12, 1931. Serial No. 543,881. 2 Claims. (Cl. 24—265.)



1. A clip for garment slides comprising a sheet metal plate bent to form a loop and forming opposed walls, one wall having a return bend to form an inner wall, all the walls being flat when compressed and receiving the turned over end of a strap.

1,881,654. CLIP. ERNEST C. KASTNER, Newark, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed June 12, 1931. Serial No. 543,880. 3 Claims. (Cl. 24—265.)

1. A clip for garment slides and the like comprising a sheet of metal bent to form opposed walls to receive a strap between them, one of said walls having an integral portion projecting toward the other wall, said portion



extending laterally relative to the inserted strap, and disposed to force the strap within said portion into a sharply bent portion when the clip is compressed.

1,881,655. TIRE. BENJAMIN S. KATZ, Brooklyn, N. Y. Filed Jan. 22, 1931. Serial No. 510,368. 4 Claims. (Cl. 152—22.)

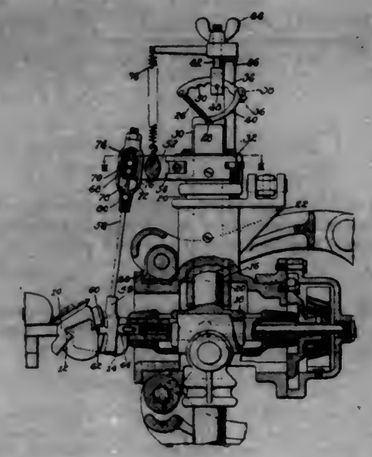


1. In a tire having removable inner tube sections, means to inflate said tube sections from a common point, said means comprising pipes corresponding in number to the number of tube sections adapted to be connected thereto, and all terminating in a common chamber, a one way valve in each pipe at its terminal in the said common chamber, a closure member for said chamber having an inlet to the latter and plunger means slidably mounted in said closure member, the former adapted when moved inwardly to simultaneously open all of said valves.

1,881,656. FINISHING MACHINE. FRANK BYCROFT KEALL, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 2, 1930, Serial No. 486,000, and in Great Britain Oct. 14, 1929. 14 Claims. (Cl. 12—78.)

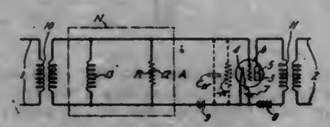
1. In a finishing machine wherein an edge finishing tool is arranged to rotate about an axis spaced from the work engaging face of the tool to accommodate itself

to changes in the inclination of a sole edge as the point of operation of the tool on the work is transferred thereabout, means operated by the rotation of the tool for



moving the tool in another direction, thereby to cause the tool to be rotated about a virtual axis in proximity to the work engaging face of the tool.

1,881,657. CIRCUIT FOR ELECTRICAL DISCHARGE APPARATUS. CLYDE R. KEITH, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1928. Serial No. 264,496. 4 Claims. (Cl. 179—171.)

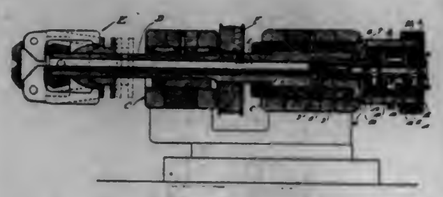


1. In combination, a gas-filled electric space discharge device having an input circuit, a cathode and a control electrode, and operating through the effect of gas ionization to produce an effective negative resistance between said cathode and said control electrode for impressed waves of alternating current, and means for making the net input resistance of said device substantially infinite for impressed waves of a wide range of frequencies comprising means having an electrical resistance substantially equal in value to said negative resistance, connected in said input circuit between said cathode and said control electrode.

1,881,658. CHUCK. DANIEL KELLNER and WILLIAM D. BARTLETT, Cleveland, Ohio, assignors to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 17, 1930. Serial No. 489,260. 14 Claims. (Cl. 279—1.)

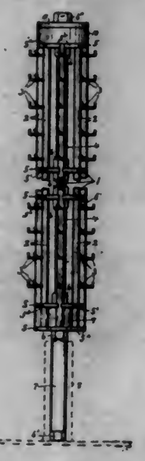
1. In a chuck, a member having a cylindrical inner face, a plurality of disc-like members having aligned cen-

tral openings and slits extending radially therefrom, peripheral flanges on said disc-like member contacting the inner wall of said cylindrical member, split hub flanges
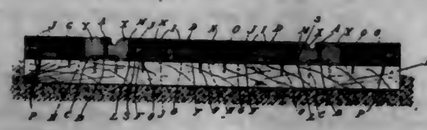


defining said openings and formed integral with said disc-like members and means for flexing said disc-like members to cause said hub flanges to grip a work piece.

1,881,659. CABLE GRIP FORM. EDGAR EUGENE KELLEMS, Long Island City, N. Y. Filed Mar. 9, 1929. Serial No. 345,682. 6 Claims. (Cl. 140—92.1.)



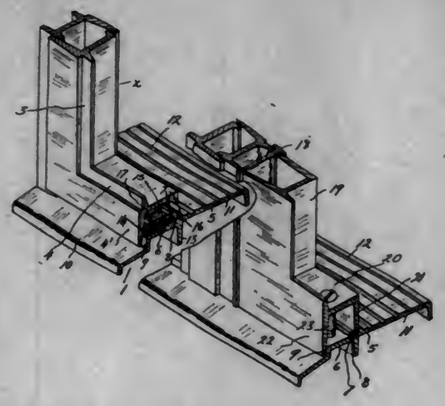
1. A form for making expansible and contractile woven wire cable grips thereon, comprising a mandrel, and supporting bars upon which the cable grip is woven arranged around the axis of the mandrel during the weaving operation and displaceable endwise from the mandrel with the woven grip thereon, said bars being collapsible inwardly from the woven grip when removed from the mandrel.

1,881,660. PAVEMENT AND PAVEMENT MAT. EUGENE KELLER, Jr., Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed July 5, 1929. Serial No. 375,912. 13 Claims. (Cl. 238—8.)



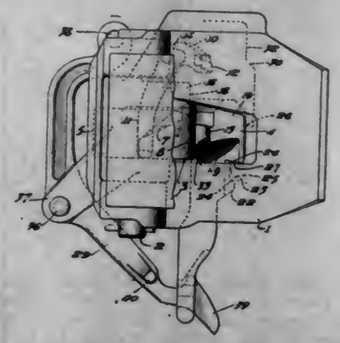
13. In a railway construction, a rail, ties supporting said rail, a rail filler in said rail, an angle iron engaging and supporting a corner of said rail filler.

1,881,661. THRESHOLD CONSTRUCTION. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 29, 1930. Serial No. 485,222. 7 Claims. (Cl. 20—64.)



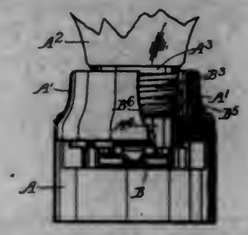
1. A threshold construction for a swinging closure provided with a depending flange, which comprises a threshold element having a shoulder adjacent which the depending flange extends in the closed position of the closure, and a weatherstrip element secured to said threshold element and extending beyond said shoulder and forming an abutment for the depending flange.

1,881,662. CAR COUPLER. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1929. Serial No. 401,855. 5 Claims. (Cl. 213—126.)



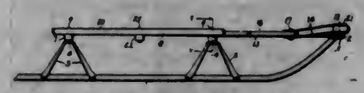
5. A car coupler having a head provided with a locking pin chamber closed at its upper end, a knuckle pivotally mounted upon the head, a locking pin for the knuckle slidably mounted in said chamber and movable to locked position under the influence of gravity, a knuckle opener device pivotally mounted on the head and extending downwardly behind said knuckle, said knuckle and locking pin being provided with cooperating means whereby said pin is moved from locked position to an unlocked position during the closing movement of the knuckle, and a lever pivotally mounted on the side of the coupler head and extending under the latter so as to engage and actuate said locking pin, said locking pin being adapted to engage and actuate said knuckle opener device and being formed with a leg and a relatively short body portion rigidly united to said leg and being provided on the side away from said knuckle with a shoulder for cooperating with said head to prevent accidental unlocking movement of said locking pin, said lever being adapted to cooperate with said leg to cause the body portion of the locking pin to assume unlocked position, said locking pin and coupler head being provided with cooperating means for supporting said pin in lockset position, and said knuckle opener device being adapted to limit the extent of unlocking movement of said locking pin induced by the closing movement of said knuckle.

1,881,663. LAMP CLAMP. JOHN J. KENNEDY, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 7, 1930. Serial No. 442,077. 3 Claims. (Cl. 173—356.)



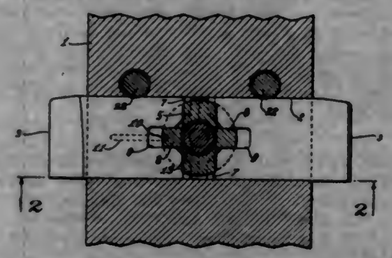
1. In combination, a threaded socket for electric lights and the like, a locking spring adapted to penetrate the socket and engage the threaded lamp base, the spring having an elongated bent arm disposed where it engages the base in line with the line of advance of the thread, the spring comprising a U-shaped structure, the two arms of the U being fixed in position, the central bent portion being the part which engages the lamp base.

1,881,664. SLED. WILLIAM E. KIDDER, Kalamazoo, Mich., assignor to Kalamazoo Sled Company, Kalamazoo, Mich. Filed June 23, 1930. Serial No. 462,998. 4 Claims. (Cl. 280—22.)



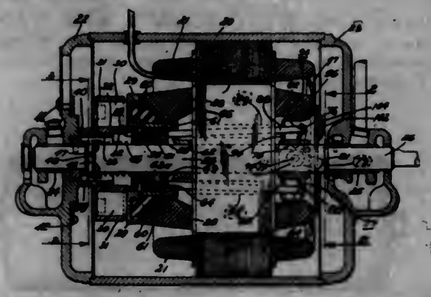
4. The combination with a top, of flexible runners, pairs of knees secured to said runners and each having longitudinally spaced inner and outer transverse slots therein, pivots engaging said slots whereby said knees are connected to said top for pivotal and limited sliding movement on said pivots, and a steering lever fulcrumed on said top and operatively connected to the forward ends of said runners.

1,881,665. EXPANSION BORING TOOL. JAMES B. KILLER, St. Louis, Mo., assignor, by mesne assignments, to Davis Boring Tool Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 18, 1928. Serial No. 253,874. 3 Claims. (Cl. 77—58.1.)



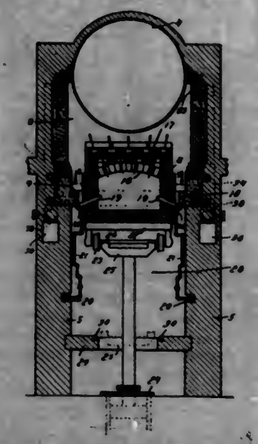
1. An expansion boring tool, comprising, a boring bar having a transverse slot therein and a transverse bore intersecting said slot, a cutter movable in said slot, a wedge block guided in said bore and having a guiding fin, said cutter having a slot adapted to receive said fin, and means for moving said block, whereby to move said cutter.

1,881,666. CENTRIFUGAL DEVICE FOR ELECTRIC MOTORS. CARL H. KINDL, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 13, 1932. Serial No. 592,673. 3 Claims. (Cl. 172—279.)



1. A centrifugal device for electric motors comprising, in combination, an armature shaft, a collar attached to the shaft, diametrically opposite pivots provided by the collar, bell crank levers pivoted upon said pivots, and located upon opposite sides of said collar, each bell crank lever having a yoke and another arm extending from the yoke and pivoted upon the collar, rods operated by the yokes, a member to be controlled operated by the rods, a cup-shaped member having an internal flange attached to the collar and having an external flange providing a plane annular surface, flat weights each pivoted upon said plane flange, and each providing a part receiving an arm of a bell crank lever, and spring means resisting outward movement of said weights.

1,881,667. FURNACE FOR STILLS, ETC. GEORGE W. KING, Coffeyville, Kans., assignor of five-eighths to Roy T. Osborn, Bronxville, N. Y., and one-fourth to Wallace E. Beckner, Coffeyville, Kans. Filed Aug. 4, 1928. Serial No. 297,506. 9 Claims. (Cl. 196—116.)



7. In a still of the class described, a boiler, a setting on which the boiler is mounted, independently movable fireboxes beneath the boiler and independent means for raising and lowering the respective fireboxes.

9. A battery of stills of the class described, each still having a boiler, a setting on which the boiler is mounted,

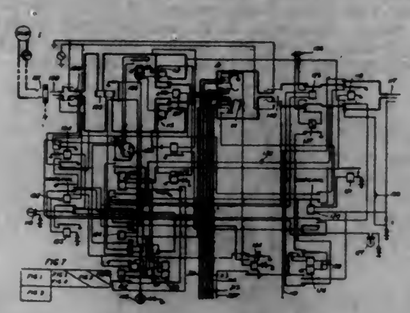
there being a heating chamber in the setting beneath the boiler, the floor of the chamber having an opening therein, a firebox, a wheeled carrier on which the firebox is mounted, means beneath said opening for raising and lowering said carrier with the firebox, tracks beneath the still adapted to receive the wheels of said carrier, a track extending along the battery of stills and a car on said track adapted to receive a carrier from the tracks of one still of the battery and to transport it to a position to engage the tracks of another still of the battery.

1,881,668. OIL STILL. GEORGE W. KING, Coffeyville, Kans., assignor of three-fourths to Roy T. Osborn, Bronxville, N. Y. Filed Oct. 1, 1928. Serial No. 309,599. 3 Claims. (Cl. 196—137.)



1. In an apparatus of the class described, a still shell, a charging and suction line extending into the shell, a flange on the lower end of said line having a lug thereon, a movable line section having a flange and lugs on the upper end thereof, a pin extending through the lugs and removable bolts extending through the flanges and holding them in fixed relation.

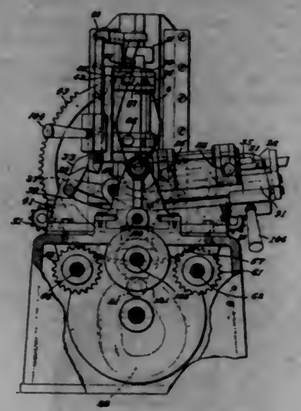
1,881,669. TELEPHONE SYSTEM. GERALD V. KING and FELIX A. BONOMI, St. Albans, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 517,688. 12 Claims. (Cl. 179—27.)



1. In a telephone system, a line, a cord circuit, means for establishing a connection between said line and cord circuit, a signal in said line, an interrupting device in said line, and means operative after the establishing of said connection for actuating said signal under control of said interrupting device.

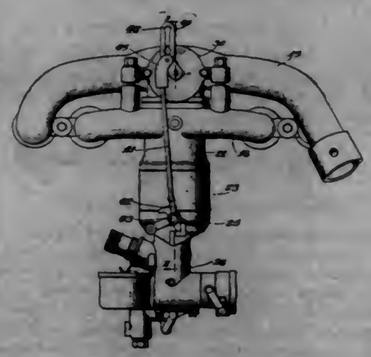
1,881,670. MACHINE FOR USE IN MAKING RUBBER SHOES. FAY D. KINNEY, Southbridge, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,313. 17 Claims. (Cl. 12—51.)

1. A machine of the class described having, in combination, means for holding a form the surfaces of the sides of which are generated by a right line moving parallel to itself, and means for supporting a shoe part, said means



being adapted to be operated to lay the shoe part directly against the said surfaces of the form.

1,881,671. HEAT CONTROL MECHANISM. CHARLES H. KIRBY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Apr. 3, 1929. Serial No. 352,176. 2 Claims. (Cl. 123—122.)

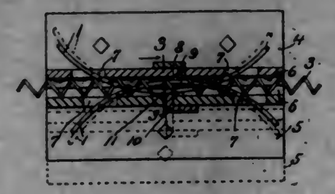


1. In combination with the intake and exhaust manifolds of an internal combustion engine, a valve in said exhaust manifold, a jacket associated with said intake manifold, a pair of ducts connecting said jacket to said exhaust manifold on either side of said valve, a throttle valve for said intake manifold, a curved lever connected to said exhaust valve, said curved lever having a median slot, a lever connected to said throttle valve, and a rod connected to said last named lever at one end and having a variable pivotal connection with said curved lever, in the slot thereof, at its other end, whereby a selective opening of said exhaust valve is obtainable relative to opening of said throttle valve.

1,881,672. METHOD OF MAKING SPRING STRUCTURES. CARL KIRCHNER, Carthage, Mo., assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo., a Corporation of Missouri. Filed July 11, 1931. Serial No. 550,176. 4 Claims. (Cl. 140—3.)

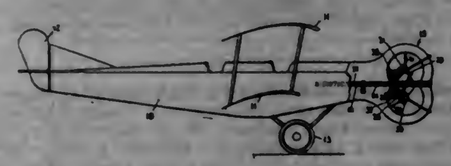
1. The method consisting in crossing and expanding two portions respectively of two coils of two springs and,

while holding said portions expanded, screwing into encircling engagement therewith, between their crossing



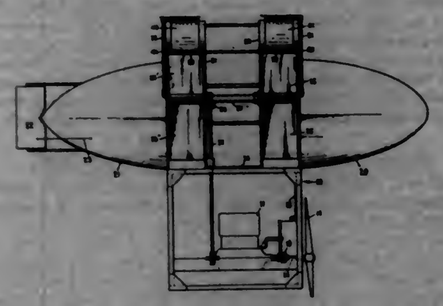
points, a helical the same coils of which encircle both of said portions, and then permitting said portions to contract into binding engagement with said helical.

1,881,673. PROPULSION MEANS FOR AIRCRAFT. EMIL KLAHN, New Vernon, N. J. Filed Aug. 19, 1931. Serial No. 557,980. 9 Claims. (Cl. 244—18.)



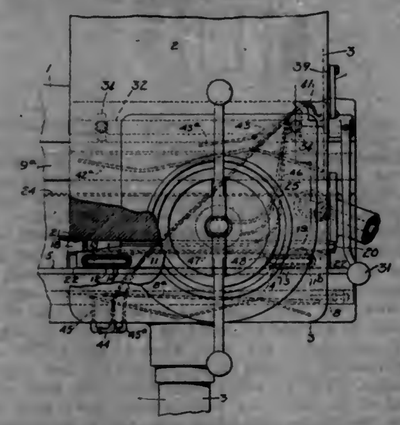
1. In an aircraft: a supporting structure, a motor carried thereby, means connected with the motor for exerting a horizontal thrust upon the plane and comprising a pair of fans rotatable about horisontal axes parallel to each other and disposed in vertical plane at right angles to the longitudinal axis of the craft, the blades of the fans being in overlapping relationship, and a casing about the fans open at one of the ends and partly open at the sides.

1,881,674. AIRCRAFT. EMIL KLAHN, New Vernon, N. J. Filed July 28, 1931. Serial No. 553,538. 3 Claims. (Cl. 244—18.)



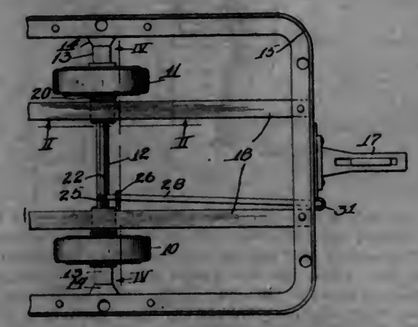
1. In an aircraft: a supporting structure, a motor carried thereby, means connected to the motor for effecting movements in a vertical plane of the craft, said means embodying a pair of shafts synchronously rotatable about horizontal axes, respective fans driven thereby having blades in overlapping relationship, a casing about the fans open at the bottom and partly open at the ends, the top of the casing being provided with normally closed ports positioned over the respective fans, a pair of shutters movable over the respective ports; an arm connected to one of the shutters and oscillatable about the drive shaft of one of the pair of fans, a lever having one arm connected to the other of the shutters and oscillatable about the drive shaft of the other of the pair of fans, and a link connecting the first-named arm and the opposite arm of the said lever, said opposite arm having a hand-engaging portion for operation.

1,881,675. HEAD MOUNT WITH ROLLER BEARING GIB. DAVID C. KLAUSMEYER, deceased, Hyde Park, Cincinnati, Ohio, by H. Henry Sundermann, executor, Cincinnati, Ohio, and Augustus M. Sosa, Cincinnati, Ohio, assignors to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 11, 1930. Serial No. 420,255. 7 Claims. (Cl. 77—28.)



1. In a radial drill, the combination of an arm affording a drill-head supporting surface extending lengthwise of said arm; a drill-head fitted to and translatably mounted on said arm; an adjustable gib intervening between said drill-head supporting surface and said drill-head; two individual series of roller bearings carried by said gib adjacent each of its ends, and engaging said drill-head supporting surface, the two series of roller bearings adjacent either end of said gib being arranged at opposite sides of the center line of said gib, said four series roller bearings comprising the sole means for transmitting to said arm the weight of said drill-head.

1,881,676. TRAILER OR TRUCK LOCK MECHANISM. LAWRENCE J. KLINE, Chicago, Ill., assignor to Mercury Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1930. Serial No. 420,054. 3 Claims. (Cl. 188—31.)



1. In an industrial vehicle including a plurality of wheels, a frame carried by said wheels, a plurality of movable members for locking said wheels for preventing

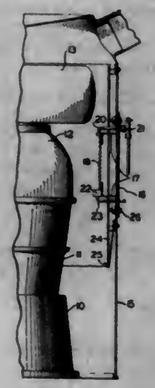
rotational movement thereof, means secured to said frame for supporting said members, detent means on said last mentioned means for latching said members in locked position and means operable from the front of said vehicle for actuating said members.

1,881,677. CLAMP AND HOLDING DEVICE WITH HOOK. DALBYS B. KLINETOB, Milton, Pa. Filed Sept. 14, 1931. Serial No. 562,770. 7 Claims. (Cl. 24—50.)



3. Fasteners for the confronting ends of a split neck strap for a necktie or the like, each comprising a flat plate which has one of its ends punched to provide conical teats having saw teeth and its second end formed with an extension, said plate, inward of the extension being slitted longitudinally and transversely and the part bounded by the slit being punched at the slitted end thereof to provide conical projections which are provided with saw teeth, said part being being bent on the body plate to provide an overlying part which is adapted to be forced against the plate when an end of the neck band is received on said plate to cause the saw teeth of the conical teats to pierce said strap, the body plate, outward of the overlying part thereon being bent upon itself to provide an underlying jaw, and a lip extending from said jaw.

1,881,678. FURNACE HUMIDIFIER. ROY KLOMPARENS, Providence, R. I. Filed Dec. 8, 1930. Serial No. 500,795. 6 Claims. (Cl. 126—113.)



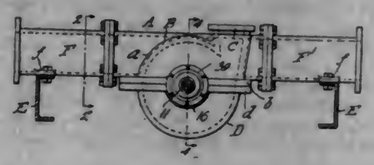
1. A device of the character described comprising a vertical heating unit, an outer vertical shell spaced therefrom and surrounding said heating unit, an inner shell parallel to the outer shell, said inner shell being spaced from and terminating short of the ends of the outer shell whereby air may freely circulate around the inner shell, said inner and outer shells each having an opening, a closure for the opening in the outer shell and a humidifier fastened to said closure and adapted to extend inwardly of the inner shell.

1,881,679. ADJUSTABLE BOOT. ROY KLOMPARENS, Providence, R. I. Filed Dec. 8, 1930, Serial No. 500,793. 6 Claims. (Cl. 187—75.)



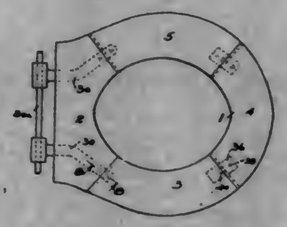
5. A furnace boot comprising, two main boot members and a pair of filler strips, said filler strips being located between said main members at their edges to adjust the size of said boot, said edges of the boot members and said filler strips being formed with complementary engaging means.

1,881,680. DOUBLE SUCTION CENTRIFUGAL PUMP. MICHAEL M. KLOSSON, Kenmore, N. Y., assignor to Buffalo Steam Pump Company, North Tonawanda, N. Y. Filed Jan. 3, 1930. Serial No. 418,224. 1 Claim. (Cl. 103—104.)



The combination of a substantially straight duct having openings at opposite ends thereof to receive liquid at either or both of said ends of said dust, a centrifugal pump having a portion of its housing arranged within said duct intermediate the ends thereof, to receive liquid from said duct at both sides of said housing, the other portion of said pump housing being secured to said duct at a peripheral portion thereof and extending toward one side thereof and including passages for liquid from said duct to said other portion of the housing, and a discharge passage from said housing extending to the opposite side of said duct.

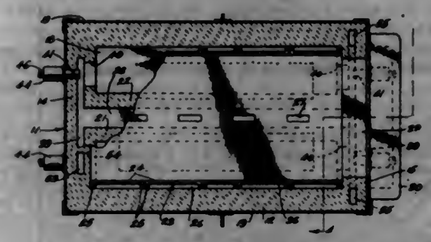
1,881,681. TOILET SEAT. EMIL KLUMPP, Detroit, Mich. Filed Feb. 25, 1932. Serial No. 595,099. 7 Claims. (Cl. 4—237.)



1. A toilet seat consisting of a plurality of sections in the contiguous faces of which slots are formed, members secured in said slots each opopsed pair of which have

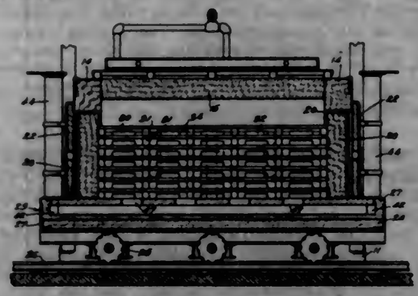
cooperating dovetail portions formed on their outer faces, the outer faces of said portions having opposed recesses therein, a leaf spring mounted in one of each pair of recesses one extremity of which is secured in its recess, and an outwardly projecting head or lock on the opposite extremity of each spring which tends to engage the opposed recess formed in the outer face of the opposite and adjacent member.

1,881,682. DRAWING FURNACE. JAMES H. KNAPP, Beverly Hills, Calif., assignor to James H. Knapp Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 15, 1930. Serial No. 502,347. 7 Claims. (Cl. 263—43.)



1. In a furnace of the class described, the combination of: walls defining a treating chamber, a combustion chamber, and passages for discharging gas from said combustion chamber into said treating chamber; walls defining a return passage, said walls having openings therein; and burner means for injecting combustible and combustion-supporting gases through said openings into said combustion chamber.

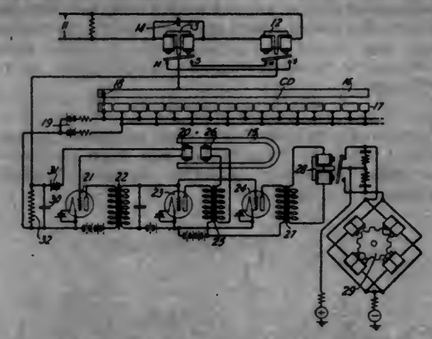
1,881,683. CAR TYPE FURNACE. JAMES H. KNAPP, Beverly Hills, Calif., assignor to James H. Knapp Co., Los Angeles, Calif., a Corporation of California. Filed July 30, 1930. Serial No. 471,783. 5 Claims. (Cl. 25—132.)



1. In a furnace of the class described, the combination of: walls forming a treating chamber and an entrance therefor; means for heating said treating chamber; and a car adapted to be placed in said treating chamber, one end of said car being adapted to extend through said entrance, said car having a flue through which the gas passes from said treating chamber, the exhaust end of said flue being in the end of said car which projects through said entrance.

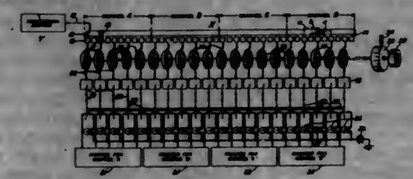
1,881,684. SYNCHRONIZING SYSTEM. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,406. 14 Claims. (Cl. 178—53.)

1. A method of causing a synchronous device to remain closely in phase with incoming current impulses which consists in generating a pair of impulses of opposite polarities in response to an incoming impulse, superimposing said pair of impulses of opposite polarities in rapid succession on an alternating current of substantially constant frequency for driving said device, and utilizing the pre-



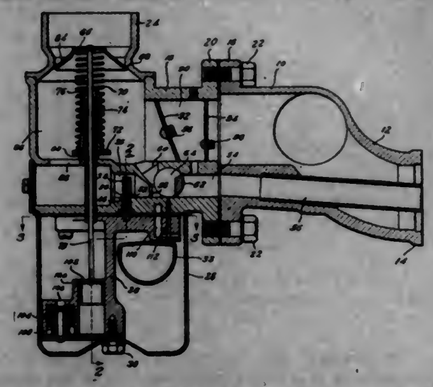
ponderance of one polarity in each of said pairs of impulses to alter the frequency of said alternating current to thereby effect continuous correction for synchronism and phase relation.

1,881,685. PHASE SHIFTING DEVICE. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1931. Serial No. 531,107. 5 Claims. (Cl. 178—53.)



1. In an impulse transmission system, a phase shifting device comprising individual means for receiving individual impulses, elements for indicating individual impulses, and manually operated means electrically connected intermediate said individual means and said elements, arranged to change the connection of each of the individual means from one of said elements to another.

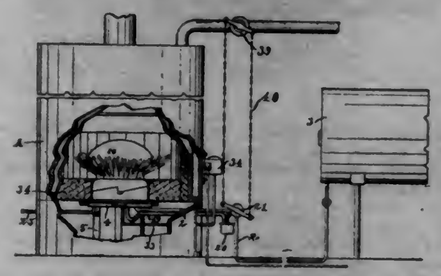
1,881,686. CHARGE FORMING DEVICE. PAUL KOEHLY and GLEN I. DELAPLANE, Dayton, Ohio, assignors to Delco Products Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 23, 1930. Serial No. 454,918. 13 Claims. (Cl. 261—34.)



1. A charge forming device for internal combustion engines comprising a mixture passage, a throttle controlling the flow of mixture therethrough, an air valve controlling

admission of air to said mixture, a fuel supply passage of fixed area for supplying fuel to the mixture passage during normal operation, a dashpot for retarding the opening movement of the air valve and a second normally ineffective fuel passage for supplying fuel to the mixture passage, said second fuel passage being normally closed and adapted to be opened by the dashpot piston as the valve is opened.

1,881,687. OIL BURNER. SELMER A. KRAFT and MATHIAS J. MAIS, St. Paul, Minn.; said Kraft assignor to said Mais. Filed Aug. 16, 1929. Serial No. 386,251. 8 Claims. (Cl. 158—56.)



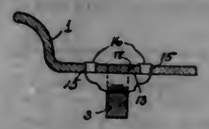
1. An oil burner comprising a base supported in raised position above a surface upon which the device is mounted, a tubular member extending upwardly from said base and in open communication at its lower end with the space beneath said base, a hood mounted over said tubular member and spaced upwardly from the upper end thereof, the lower edge of said hood terminating short of said base, and the lower end of said hood being of larger diameter than the exterior diameter of said tube, an annular, non-metallic ring supported on said base and of larger diameter than the base of said hood and having an aperture therein directed inwardly, an oil chamber in communication with said aperture, and an annular wall spaced outwardly from said non-metallic ring and having the upper portion thereof curved inwardly above said non-metallic ring and spaced upwardly therefrom, the space between said non-metallic ring and said annular wall being in open communication with the space beneath said base.

1,881,688. TIRE CARRYING RIM. HARRY W. KRANZ, CHARLES S. HOLDEN, and HARRY H. BOUND, Lakewood, Ohio, assignors to The Cleveland Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 282,900. 10 Claims. (Cl. 301—33.)



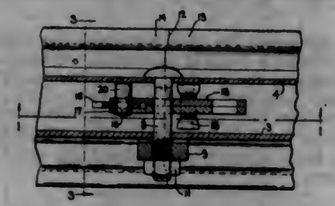
1. A transversely split tire rim having part of its circumference bent to a normal unstrained curvature greater than the tie tire bead curvature, and part of its circumference bent to a normal unstrained curvature smaller than the tire bead curvature.

1,881,689. METHOD OF MAKING LATCH PIVOTS. HARRY W. KRANZ, Lakewood, Ohio, assignor to The Cleveland Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 4, 1929. Serial No. 404,539. 5 Claims. (Cl. 25—159.1.)



1. In a method of forming latch pivot members, the steps of inserting a previously cut-off portion of cylindrical stock into an opening in the latch, flattening the projecting portions of said stock, bending said flattened portions, and forming a shoulder and tenon on said bent ends.

1,881,690. VEHICLE WHEEL RIM. HARRY W. KRANZ, Lakewood, Ohio, assignor to The Cleveland Welding Co., Cleveland, Ohio, a Corporation of Ohio. Filed June 16, 1930. Serial No. 461,400. 3 Claims. (Cl. 301—30.)



2. A vehicle wheel having a channel-section felloe, a transversely split tire-carrying rim demountably securable on said felloe, latch-means extending from one to the other contiguous end of the split rim, transversely-drawing means for clamping said rim to said felloe, and means for preventing said last-named means from causing separation of the contiguous ends of said rim, said means comprising a stop in general alignment laterally with the latch-means to engage the unbroken wall surface of said channel-section felloe.

1,881,691. SEPARATION OF OILS FROM MIXTURES THEREOF WITH SOLID SUBSTANCES. CARL KRAUCH, Ludwigshafen-on-the-Rhine, MATHIAS PIER, Heidelberg, and ERNST HOCHSCHWENDER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 22, 1928, Serial No. 263,957, and in Germany Mar. 26, 1927. 3 Claims. (Cl. 196—13.)

1. The process for the separation of oil from the residues from the destructive hydrogenation of coal which comprises stirring the mixture with water with an addition of a nuclear alkylated naphthalene sulphonate and centrifuging.

1,881,692. UNSATURATED ALIPHATIC HYDROCARBON. CARL KRAUCH and MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 18, 1927, Serial No. 206,782, and in Germany July 28, 1926. 8 Claims. (Cl. 260—176.)

2. In the production of olefines by heat treatment of normally liquid hydrocarbons containing substantially no constituents boiling above about 300° C. and consisting of hydrocarbons containing a greater number of hydrogen atoms in the molecule than the reaction products, the step

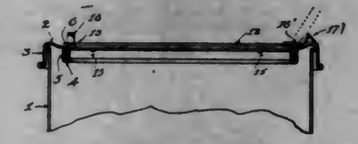
of treating the said initial materials at temperatures ranging from 450° to 500° C. with an active, porous substance selected from the group consisting of active charcoals and active silica.

1,881,693. PILLAR CONSTRUCTION FOR CLOSED VEHICLES. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1928. Serial No. 261,533. 5 Claims. (Cl. 296—28.)



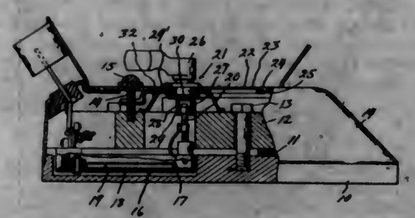
1. In a vehicle body of the closed type having a sliding windshield, top-supporting posts, each comprising a metallic body portion having a transversely disposed web portion, a header at the upper ends thereof comprising front and rear walls defining between them a space into which a portion of the windshield may slide and opening forwardly of said web portions, the windshield adapted to overlie the said web portions from the front, said posts also comprising separable sections at the front thereof completing the contour thereof and having portions overlying the edges of the windshield to confine it rearwardly toward said webs and in alignment with the space in said header.

1,881,694. COVERS FOR RECEPTACLES. HENRY G. KUCK and THEODORE J. ABELE, Peoria, Ill., assignors to Stuber & Kuck Co., Peoria, Ill., a Corporation of Illinois. Filed Dec. 29, 1930. Serial No. 505,347. 5 Claims. (Cl. 220—82.)



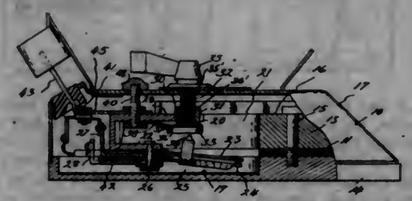
1. A cover for a receptacle including a pair of rings of formed sheet metal having cylindrically curved walls and identical form and size arranged to nest one within the other, each including a flange, and a cover-plate held in position between said flanges, said walls adapted to be held in connected relation by their frictional engagement.

1,881,695. ELECTRIC IRON. FRANK KUHN and LAURENCE H. THOMAS, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1929. Serial No. 348,065. 12 Claims. (Cl. 219—25.)



3. An electric heater having in combination, a heating element, a cover for the heating element and having an opening therein, a switch for controlling the operation of the heating element, control means for the switch including a plate disposed within the opening aforesaid in the cover and having a portion normally restrained in engagement with the cover, and a control arm mounted upon the exposed portion of the plate and operatively connected to the switch.

1,881,696. ELECTRIC IRON. FRANK KUHN, Detroit, and LAURENCE H. THOMAS, Birmingham, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 448,099. 6 Claims. (Cl. 219—25.)

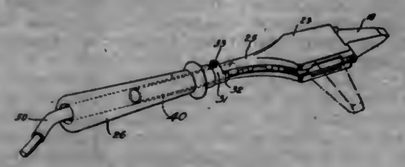


1. A switch assembly for an electric iron having a base plate, a pressure plate and a heating element, said assembly comprising thermostatic members for controlling the operation of the heating element, a bracket having a portion supporting the members aforesaid in close proximity to the base plate of the iron so as to receive heat mainly therefrom and having another portion extending upwardly through an opening in the pressure plate of the iron, a member supported on the pressure plate and secured to said bracket for supporting the latter in position within the iron, and terminal members carried by said latter member and extending upwardly therefrom for electrically connecting said heating element and switch to a source of electric energy.

1,881,697. MANUFACTURE OF VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. MAX ALBERT KUNZ, Mannheim, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1926, Serial No. 87,173, and in Germany Feb. 16, 1925. 5 Claims. (Cl. 260—60.)

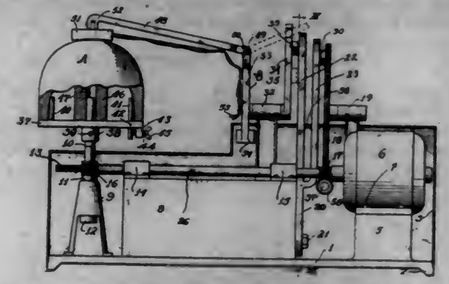
1. Azo-methines of the type $A_1—CH=N—A_2$ in which A_1 and A_2 are radicles of an anthraquinone.

1,881,698. ELECTRIC SOLDERING IRON. ZENSUKE KURIYAMA, Higashichofucho, Tokyo-Fu, Japan, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,583, and in Japan May 28, 1928. 2 Claims. (Cl. 219—26.)



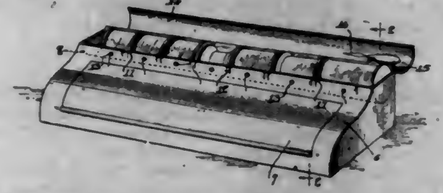
2. In a soldering iron, a copper head having a tip extending therefrom, a frame comprising interlocking plates, each of said plates having a reduced end, a tubing having one end secured to the reduced end of one of said plates, a handle mounted on the other end of said tubing, and a collar mounted on said tubing and having a lug portion adapted to engage the reduced end of the other plate upon a rotary movement of the collar for securing the head between said plates.

1,881,699. HAT IRONER. CHARLES LA CAVERA, Chicago, Ill., assignor of one-half to George Colovos. Filed June 16, 1930. Serial No. 461,381. 7 Claims. (Cl. 223—28.)



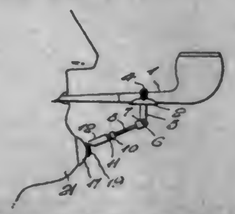
1. A hat ironer, in combination, a rotatably mounted hat form, an iron engageable against said form and movable about the surface thereof in a curved path, a crank pivoted at one end to an immovable pivot for moving the iron in the manner stated, a motor, a gear driven by said motor, a crank pivoted at one end and operatively connected to said gear, connecting blocks engaging said gear and said last mentioned crank for oscillating the crank as said gear is rotated, and connections between said last mentioned crank and said first mentioned crank for varying the degree of throw therebetween whereby the travel of the iron may be varied.

1,881,700. SEWING KIT. BERTHA V. LAING, Dearborn, Mich., assignor to Laing and Company, a Corporation of Michigan. Filed Feb. 26, 1930. Serial No. 431,514. 1 Claim. (Cl. 223—56.)



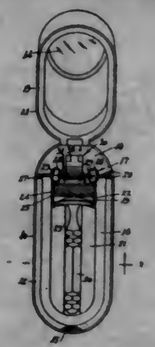
A sewing cabinet comprising a body portion, said body portion having its front wall cut away providing an opening, a curved partitioning member forming a continuation of the rear wall of the cabinet and extending downwardly and upwardly, the front edge of the partitioning member extending downwardly and being secured to the front wall of the cabinet, a portion of the partitioning member extending beyond the upper edge of the opening, providing a rest, a closure for closing the opening of the cabinet, and one edge of the closure engaging the rest to support the closure.

1,881,701. COMBINED CHIN REST AND PIPE SUPPORT. WILLIAM C. LAMBERT, Ironton, Ohio. Filed Feb. 24, 1931. Serial No. 517,937. 4 Claims. (Cl. 131—12.)



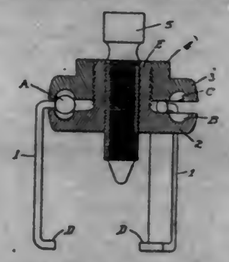
1. In combination, an article holder, a bar pivoted to said holder, a sleeve threaded on the free end of the bar, a bifurcated angle member threaded on the sleeve and a supporting block carried by said bifurcated angle member.

1,881,702. RAZOR BLADE SHARPENER. JESSE D. LANGDON, Los Angeles, Calif. Filed July 14, 1928. Serial No. 292,787. 2 Claims. (Cl. 51—158.)



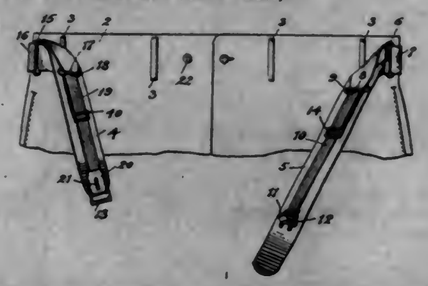
1. A razor blade sharpener embodying two plates disposed side by side and having pairs of spaced offsets, and abrasive members seated in said offsets for the longitudinal movement therebetween of the opposite edges of a razor blade, at least one of said plates having an offset between the first named offsets for the guiding movement of a blade holder.

1,881,703. WHEEL AND GEAR PULLER. JESSE D. LANGDON, Los Angeles County, Calif. Filed Apr. 14, 1930. Serial No. 444,176. 7 Claims. (Cl. 29—85.)



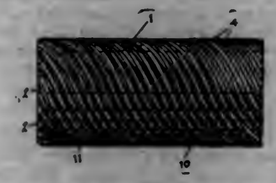
1. A gear and wheel puller comprising traction arms, held in operative position by and between the opposed faces of two discs, a jack screw through the center of said discs without the use of slots, said traction arms movable in a circumferential direction around the periphery of said discs, said discs adapted to move to and fro and rigidly clamp the pivotal ends of said traction arms.

1,881,704. TROUSERS SUPPORT. JOSEPH H. LANGROCK, New Haven, Conn. Filed Jan. 21, 1932. Serial No. 587,852. 6 Claims. (Cl. 2—237.)



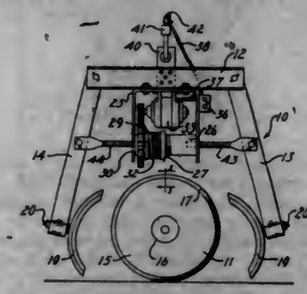
1. A trousers support having an inelastic strap portion adapted to overlie a garment waist band and doubled upon itself adjacent one of its ends, a loop member secured to the garment waist band on the outside of the garment for receiving the doubled end of the strap portion and through which said strap portion is adjustable, an elastic strap having one of its ends secured to the doubled end of the inelastic strap and having its other end attached near the free end of the inelastic strap, the elastic strap being located between the inelastic strap and the face of the garment and concealed from external view, means for adjusting the effective length of the elastic strap and means for detachably securing the free end of the inelastic strap to the face of the garment waist band.

1,881,705. BROACH. FRANCIS J. LAPOINTE, Ann Arbor, Mich. Filed Apr. 2, 1930. Serial No. 441,106. 5 Claims. (Cl. 90—33.)



1. A broach having a tapered portion and having spirulated flutes, the flutes having cutting edges, the cutting edges extending from one end of the tapered portion of the broach to near the other end of the tapered portion and terminating at said other end of the tapered portion of the broach in lands that gradually increase in width to produce a constant cutting resistance in all points of the surface of the hole in the work being enlarged by the broach.

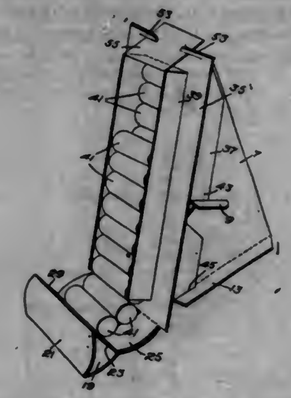
1,881,706. APPARATUS FOR HANDLING ARTICLES. ELMER J. LARSEN, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1931. Serial No. 513,483. 11 Claims. (Cl. 294—106.)



1. In a grapple for handling reels, an arm, another arm movable toward and away from the first arm, and a segmental plate pivotally mounted on each arm for closely engaging a reel along a substantial portion of the periphery and the inner surfaces of the heads thereof when the reel is between the arm and the second arm moved toward the first arm, and motor driven means including a clutch for moving said segmental plates into and out of engagement with the reel.

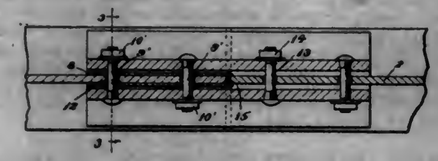
1,881,707. DISPLAY STAND. JAMES L. LARKIN, Lynn, Mass., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 13, 1930. Serial No. 495,857. 8 Claims. (Cl. 211—73.)

1. A knock-down display stand of sheet material comprising a folding easel presenting when erected a front face extending in display position, an extension from an end thereof having a plurality of fold lines and terminating in a frame having foldable flanges, said extension adapted to be folded up to provide a prismatic structure



at one end of the easel and to dispose said frame before said face, said flanges then fitting about the easel to provide a receptacle.

1,881,708. INSULATED RAIL JOINT. TONY LASKA, Cle-Elum, Wash. Filed July 28, 1930. Serial No. 471,329. 1 Claim. (Cl. 238—157.)

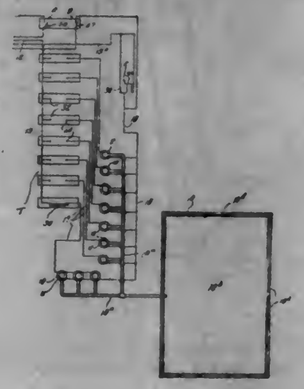


An insulated rail joint comprising mating rail ends having bolt-receiving openings formed in the webs thereof, a separator of insulating material interposed between said rail ends for the entire height thereof, oppositely disposed angle bars connecting the rail ends and provided with bolt-receiving openings of less diameter than the openings in the rail webs and registering therewith, securing bolts extending through said registering openings, channel shaped shims independent of the separator and formed of insulating material interposed between the angle bars and webs of the rail ends and overlapping and bearing against the adjacent side edges of the insulated separator at the webs of said rail ends, and insulating sleeves of a length equal to the distance between the inner faces of the angle bars surrounding certain of the securing bolts and extending through the adjacent openings in the webs of the rail ends and through said insulating shims with their ends projecting beyond the shims and bearing snugly against the inner faces of the angle bars around the adjacent securing bolts.

1,881,709. CONTROL FOR FIRE EXTINGUISHING APPARATUS. MAYNARD A. LASWELL, Los Angeles, Calif. Filed Apr. 16, 1929. Serial No. 355,492. 5 Claims. (Cl. 169—11.)

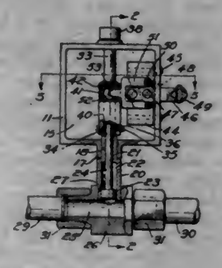
1. In combination, an enclosure to be protected and from which gas has limited egress, a supply of fire-extinguishing gas, means responsive to a temperature cor-

responding to fire conditions in the enclosure for initially discharging a portion of the gas into the enclosure to establish a fire-extinguishing atmosphere therein, and means acting following operation of the first mentioned means to subsequently discharge other portions of the gas into the enclosure at predetermined intervals of time so that a fire-extinguishing atmosphere is maintained in the enclosure.



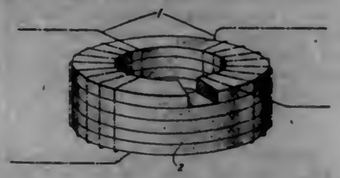
4. In combination, an enclosure to be protected and from which gas has limited egress, a plurality of containers of fire-extinguishing gas, electrically controlled means in connection with the containers controlling the discharge of gas from the containers to the enclosure, and an electrical control for said means whereby an initial charge of gas is discharged into the enclosure to establish a fire-extinguishing atmosphere and a subsequent charge is discharged into the enclosure at a predetermined time after the initial charge to maintain a fire-extinguishing atmosphere in the enclosure.

1,881,710. GAS OPERATED SWITCH. MAYNARD A. LASWELL, Los Angeles, Calif., assignor to Swingspout Measure Company, Los Angeles, Calif., a Corporation of California. Filed May 20, 1929. Serial No. 364,676. 2 Claims. (Cl. 200—82.)



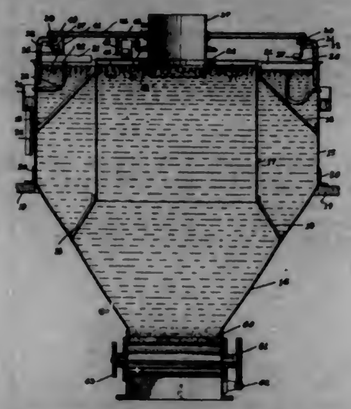
1. In a switch of the character described, a fitting for connection in a fluid conduit, a cylinder in communication with the fitting, a piston operable in the cylinder, a housing supported by the cylinder and having a sight opening at one side, a stem on the piston extending through the housing and projecting from the housing for manual operation, a stationary contact in the housing, and a contact on the stem to cooperate with the stationary contact, the contact being visible through the sight opening.

1,881,711. MAGNETIC STRUCTURE. HUBBEL LATHROP, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1931. Serial No. 556,951. 19 Claims. (Cl. 175—21.)



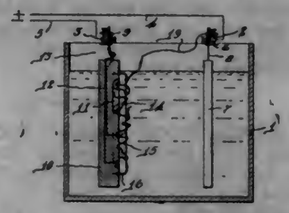
1. As a new article of manufacture, a substance composed of particles of a magnetic material and an insulating material therebetween, said insulating material being made up of sodium silicate and a peptizing agent having a metallic and an organic component.

1,881,712. AUTOMATIC CLEANING DEVICE FOR CLARIFIERS. WILLIAM C. LAUGHLIN, Glendale, Calif., assignor to The L. A. B. Company, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,320. 16 Claims. (Cl. 210—45.)



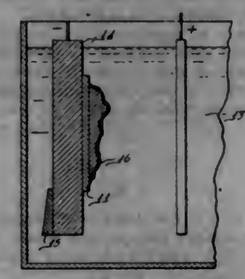
1. In a clarifier tank, a plurality of clarifier baskets mounted therein in the path of the liquid flow, each basket having associated therewith a member carrying a horizontal flange having upturned ends to provide a cam surface and means associated with said tank and co-operating with said surface for selectively elevating said baskets out of said liquid flow.

1,881,713. FLEXIBLE AND ADJUSTABLE ANODE. ARTHUR K. LAUKEL, Detroit, Mich. Filed Dec. 3, 1928. Serial No. 323,390. 9 Claims. (Cl. 204—4.)



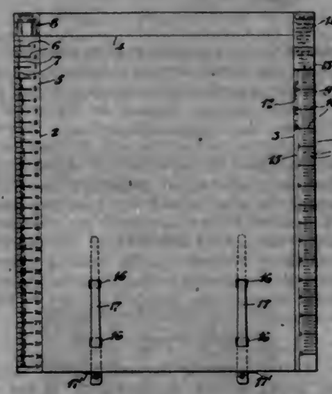
1. An anode consisting of a plurality of interconnected conductive flexible wires presenting free ends or points adapted for insertion in cavities to be plated.

1,881,714. METHOD OF ELECTROLYTIC REPRODUCTION. ARTHUR K. LAUKEL, Detroit, Mich. Filed Aug. 8, 1929. Serial No. 384,285. 8 Claims. (Cl. 204—8.)



1. The method of metallizing an object consisting in baring the surface of the object, applying thereto a solution of a metal, and brushing, while the solution persists, with a mixture of graphite and a metallic dust electropositive to the first named metal.

1,881,715. COPYHOLDER FOR TYPEWRITERS. GORDON LAURENCE, Kew Gardens, N. Y., assignor to L C Smith & Corona Typewriters Inc., New York, N. Y., a Corporation of New York. Filed Sept. 26, 1931. Serial No. 565,271. 5 Claims. (Cl. 197—143.)



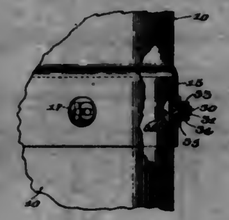
5. A copyholder for a typewriter, adapted to form an extension of the paper table of the typewriter and comprising a card having apertures for receiving extension arms of the paper table to detachably support the card; and an indicating mark upon one of the side margins of the card and vertically positioned thereon to register with the upper edge of a sheet being typed to indicate that the bottom margin of the sheet has been reached.

1,881,716. CLIP. SAMUEL J. LAVIZZI, Chicago, Ill. Filed Oct. 16, 1929. Serial No. 399,995. 8 Claims. (Cl. 5—259.)



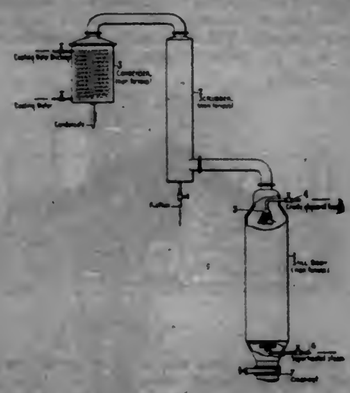
1. The combination with two separate parts, of a clip for connecting said parts together comprising a body portion having an extension and a short tab encircling one of the parts with the free end of the extension located in substantially contiguous relation with said body portion and said body portion and free end encircling the other part as a unit.

1,881,717. WELL CASING JOINT. HAROLD E. LAWRENCE and OLIVER H. CRONE, Beatrice, Nebr., assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr., a Corporation of Nebraska. Filed Mar. 7, 1929. Serial No. 345,152. 1 Claim. (Cl. 285—186.)



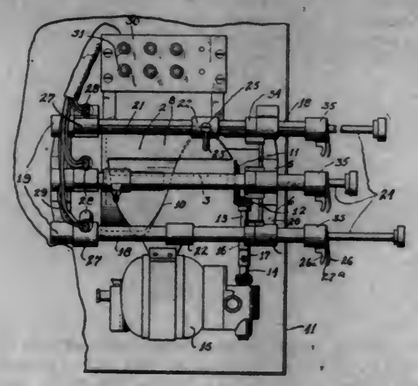
Connecting means between well casing sections of relatively large diameter having the end of one of said sections receiving and fitting over the end of the adjacent section to provide a seal therebetween, the overlapped end portions of the sections having alined slots therethrough at intervals therearound, and fastening members comprising bolts having flat sided heads insertable through said alined slots, respectively, from the exterior of the casing and rotatable to positions therein held against outward displacement therethrough, means for sealing said slots, and means for securing said members and sealing means in position clamping the overlapped casing ends together to form a joint between and connecting the sections.

1,881,718. DISTILLATION OF FERMENTATION GLYCERINE. JAMES W. LAWRIE, Wilmington, Del., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,711. 14 Claims. (Cl. 202—46.)



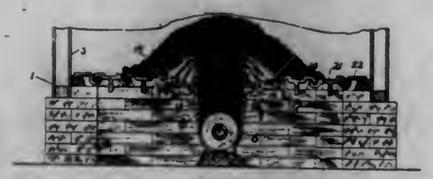
1. In a process for the distillation of glycerine from slop in which the slop is atomized in the presence of a hot gaseous medium to quickly vaporize the glycerine from the slop, and the evolved glycerine vapors condensed, the improvement characterized by conducting the said vaporization in the absence of glycerine decomposing catalysts which are more active for the decomposition of glycerine than are the solids normally present in glycerine slop.

1,881,719. ELECTRICAL CONTROL DEVICE. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1930. Serial No. 498,306. 6 Claims. (Cl. 200—32.)



1. A control device for an electric circuit comprising a rotatable drum having a portion of its periphery cut away to define a solid cam surface, oscillatable means adjacent said cam surface, a shoe carried by said oscillatable means and adapted to bear against the cam surface in one position of rotation of said drum and project into said cut out portion in another position of rotation of said drum, means for adjusting said shoe on said oscillatable means so that said shoe may be traversed by different paths around said periphery, a tiltable mercury switch on said oscillatable means and weighted means on said oscillatable means for oscillating said oscillatable means when said shoe moves into a cut-out portion of said drum surface to thereby tilt said mercury switch and open said electric circuit.

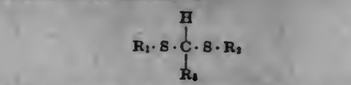
1,881,720. MECHANICAL UNDERFEED STOKER. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,065. 5 Claims. (Cl. 110—47.)



1. A tuyère block for a single-retort stoker having parallel spaced walls, said block being a substantially quadrantal member having a web with a lower edge adapted to rest on a wall of the stoker, a vertical inner face including a spacing flange extending from the lower edge of the web to a point more than half way up the inner edge of said web, a curved flanged edge defining the convex edge of the block and extending from the top of the inner edge of the web to the lower edge of the web, and spaced inwardly converging curved ribs on the web between the flange on the inner edge of the web and the said curved flanged edge and having ends terminating at the inner edge of the web in spaced apart relation to said flanges.

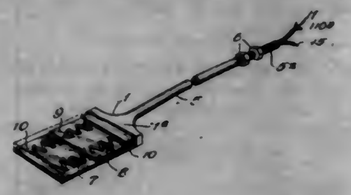
1,881,721. INHIBITOR AND THE USE THEREOF. JOSEPH M. LEAPER, Philadelphia, Pa., assignor to E. F. Houghton and Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 9, 1931. Serial No. 536,317. 20 Claims. (Cl. 148—8.)

1. The process of pickling iron and steel which comprises subjecting said material to the action of a relatively dilute pickling acid solution to which has been added a small quantity of a compound selected from that group of compounds whose formula is



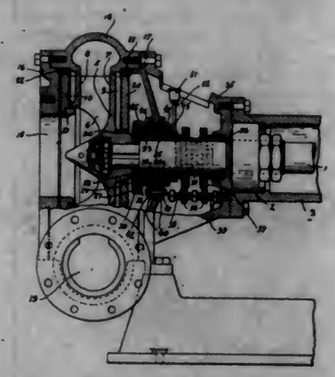
where R_1 and R_2 are the same or different unsubstituted alkyl, aryl, or aralkyl groups, and where R_3 is hydrogen or an unsubstituted alkyl, aryl, or an aralkyl group.

1,881,722. HEATING DEVICE. EARLE E. LEE, Zion, Ill. Filed Oct. 23, 1929. Serial No. 401,717. 1 Claim. (Cl. 219—38.)



In combination with an internal combustion motor; a crank case for the motor having a hole in one side wall, said hole being spaced above the bottom of the crank case; an electric heating element in the crank case arranged adjacent the bottom thereof and provided with a tubular member extending through the hole in the wall, said tubular member having sufficient length to space the heating element a substantial distance from the side wall with the hole therein; means for retaining the tubular member in position including a lock nut thereon adapted to be screwed against the side wall of the crank case; an electric resistance element in the heating element; and conducting wires connected to the resistance element, said wires passing through the tubular member to the outside of the crank case.

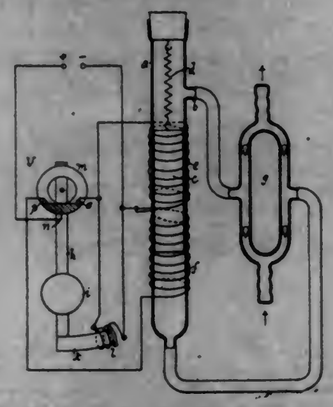
1,881,723. PUMP. HARRY S. LEE, Detroit, Mich. Filed July 15, 1929. Serial No. 378,287. 2 Claims. (Cl. 103—103.)



1. In a pump, a housing, an impeller, a shaft upon which the impeller is mounted, a stuffing box comprising a collar, packing material confined within the collar and engaging

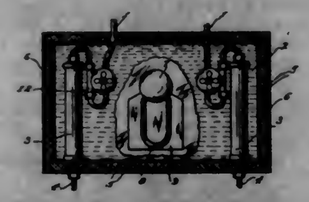
the shaft, flexible means connecting the collar and housing, and a sealing disc mounted to rotate with the shaft and having frictional engagement with the collar inside the pump housing.

1,881,724. MAGNETIC PISTON PUMP. ERWIN LEHRER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 25, 1931, Serial No. 532,748, and in Germany Apr. 28, 1930. 5 Claims. (Cl. 103—53.)



1. In a fluid pump, in combination a vertical cylinder, a ferromagnetic piston in said cylinder, at least one coil on said cylinder adapted to periodically act on said piston, and a pendulum provided with current leads and contacts, thereby periodically connecting said coil to a source of current.

1,881,725. COOLING SYSTEM FOR BEVERAGE DISPENSING APPARATUS. WILLIAM E. LEIBING, Sausalito, Calif., assignor to Lyon-Magnus Incorporated, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,686. 14 Claims. (Cl. 62—141.)



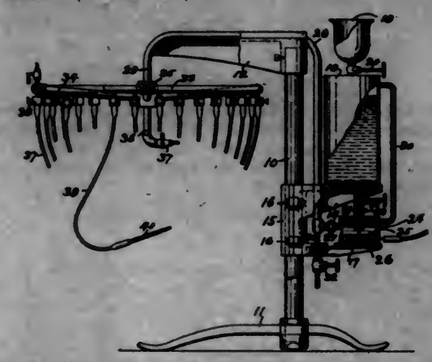
1. In a liquid dispensing apparatus, a cooling bath, means conducting liquid to be dispensed, and means operable in response to flow of liquid through said first named means for agitating said bath.

1,881,726. HAIRBRUSH. ARTHUR W. LENFESTEY, Detroit, Mich. Filed Oct. 7, 1931. Serial No. 567,388. 3 Claims. (Cl. 15—203.)



1. A hair brush of the class described, comprising: a frame having oppositely disposed end rails and oppositely disposed resilient side rails; a plurality of spaced bristle supporting bars extending between and rockably mounted at their opposite ends on said end rails; a pair of actuating bars, each mounted on one of said side rails and projecting inwardly therefrom, said actuating bars being in alignment; means for connecting each of said actuating bars to said bristle supporting bars, for effecting a rocking of said bristle supporting bars upon inwardly flexing of said side rails.

1,881,727. METHOD AND APPARATUS FOR TREATING WOMEN'S HAIR. HECTOR LE PAGE, Milwaukee, Wis. Filed June 28, 1930. Serial No. 464,569. 5 Claims. (Cl. 132—36.)



1. In an apparatus for producing ornamental effects in the arrangement of human hair, a tubular curler the walls of which are perforated for the passage of vapor to effect permeation of strands of hair wound about the said curler, means for generating vapor, and a connection leading from the generating means to the tubular curler, with a tubular sleeve in which the curler may be adjusted longitudinally to close some of the perforations therein, and a sealing gasket or dam at the end of the sleeve.

1,881,728. CLUTCH DEVICE. AXEL LEVEDAHL, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Original application filed Oct. 6, 1927, Serial No. 224,372. Divided and this application filed Oct. 28, 1929. Serial No. 402,913. 7 Claims. (Cl. 64—99.)



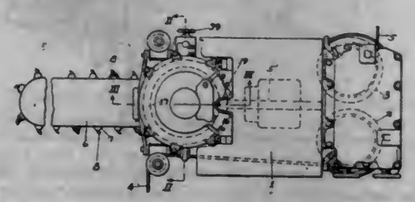
1. In a clutch, a pair of axially alined clutch members having interengageable clutch teeth on their opposed faces, said members having opposed grooves and projections adapted, when the projections are in the grooves, to permit the teeth of the clutch members to engage and

when the projections ride out of the grooves, to separate said teeth, said grooves and projections being arranged in two concentric tracks of different radii and each track preferably having but one groove or projection therein.

1,881,729. AQUEOUS DISPERSION AND PROCESS OF PRODUCING SAME. HAROLD L. LEVIN, Nutley, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 2, 1927. Serial No. 237,335. 2 Claims. (Cl. 134—1.)

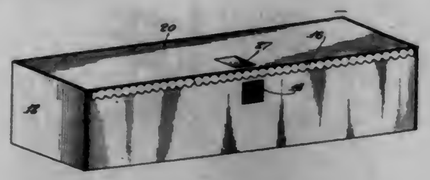
1. A stable, suspensible aqueous dispersion containing a bitumen-pitch type base consisting by weight, 35% to 40% of water, 55% to 60% of said base, and 2% to 5% of a starchy colloid in chemically unaltered state.

1,881,730. COAL CUTTING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,887. 6 Claims. (Cl. 262—30.)



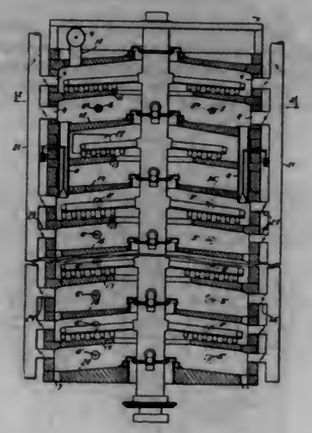
3. In a mining machine, a frame, a vertical shaft having its upper end disposed in a bearing formed in said frame, and a gear having a hub journaled in said bearing about the upper end of the shaft, and rotatable relative to the latter, the hub projecting above the end of the shaft to form a lubricant-receiving cavity.

1,881,731. CUTTER BOX. EDWARD H. LEWANDOWSKI, Neenah, Wis., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Oct. 21, 1929. Serial No. 401,810. 2 Claims. (Cl. 206—58.)



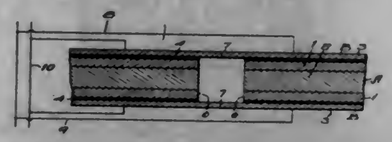
1. A two part container for rolled paper including an outer box-like part and an inner box-like part, each having closed ends and an open side and arranged for telescopic association to provide a closed package, the ends of the inner part being of substantially the same height as the ends of the outer part, one of the sides of the inner part being shorter than the opposite side of said part, said shorter side of the inner part and the corresponding side of the outer part defining a passage, and a tear off edge on said outer part adjacent said passage substantially even with the edge of the passage, each of said parts having an opening therein, said openings being so made as to be in panels adjacent said passage when said parts are together in box form whereby fingers may be inserted through said openings to grasp the free end of the paper web for withdrawing said web.

1,881,732. FURNACE. GEORGE R. LEWERS, Elizabeth, N. J. Filed Jan. 16, 1931. Serial No. 509,101. 4 Claims. (Cl. 263—26.)



1. Apparatus for burning or roasting solids containing vaporizable combustible material comprising a tiered multiple hearth furnace, said furnace being divided into an upper section and a lower section, means for limiting air available for combustion in said upper section, said sections being separated from each other so that the gases from the lower section do not come in contact with material in the upper section, means for supplying the solids to the upper section, means for taking off vapors from said upper section, means for conveying the solids from said upper section to said lower section, means for taking off gases from said lower section, means for admitting air for combustion to said lower section, and means for discharging the burned or roasted solids from said lower section.

1,881,733. METHOD OF JOINING COMPOSITE PANELS. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1930. Serial No. 475,742. 7 Claims. (Cl. 20—91.)



1. The method of joining, in edgewise abutting relation, composite panels having metal sheathing, consisting in removing the core of said panels contiguous to the edges to be joined, welding the edges of the metal sheathing together and forcing the panels edgewise while welding to bring the edges of the core in close relation.

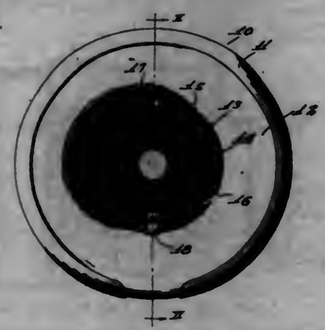
1,881,734. CORNER BEND IN COMPOSITE PANELS AND METHOD OF FORMING SAME. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 16, 1930. Serial No. 475,743. 8 Claims. (Cl. 20—91.)

1. The method of forming bends in composite laminated panels having metal sheathing on both sides, consisting in cutting away a portion of one of the metal sheathings and the contiguous core portions, turning outwardly the edges of said sheathing formed by the cut-



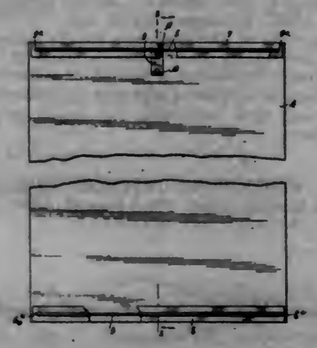
away portion, bending the panel on the opposite metal sheathing until the turned edges are brought together, and joining said turned edges.

1,881,735. TIRE COVER WITH WIRE MESH CENTER SHIELD. RICHARD W. LEWIS, Detroit, Mich., assignor to Lyon Cover Company, Detroit, Mich., a Corporation of Michigan. Filed June 17, 1931. Serial No. 544,988. 3 Claims. (Cl. 150—54.)



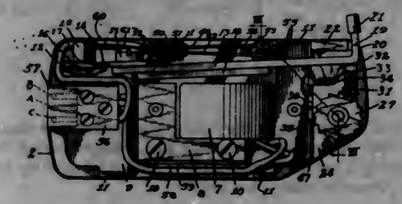
3. In a spare tire cover including a ring-like portion for covering a side of the tire, a central disc disposed over a ring-like opening at the center of the tire and movable away from said opening without requiring removal of said side covering portion from the tire.

1,881,736. DISPLAY SHEET. MALVIN LICHTER, New York, N. Y., assignor to The Stickless Corporation, a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,888. 3 Claims. (Cl. 40—128.)



1. A display sheet having upper and lower edges, a reinforcing strip pasted along the upper edge of the sheet, a re-inforcing rod also extending along the upper edge of the sheet interposed between the sheet and strip and held thereby against displacement, an eye strap also interposed between the sheet and the strip and held thereby against displacement, a portion of the eye strap extending below the strip and being free of the sheet and strip and having a hole through its lower end part for use in suspending the sheet upon a wall hook, and said sheet, strip and strap having a through hole therethrough close beneath the re-inforcing rod also for use in suspending the sheet upon the wall hook.

1,881,737. POWER MANICURING DEVICE. GUSTAVE LIDBERG, Chicago, Ill. Filed May 26, 1930. Serial No. 455,529. 14 Claims. (Cl. 132—74.)



1. An electrical manicuring device comprising a casing, a coil in said casing, an armature supported at one end and responsive to said coil, a pair of spring pawls carried by said armature, a ratchet wheel alternately rotated by each of said pawls, and a tool connected to said ratchet wheel and rotatable therewith, said tool extending to the exterior of said casing.

1,881,738. WINDOW CONSTRUCTION. ERNEST J. LIEBETRAU, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed July 14, 1930. Serial No. 467,772. 6 Claims. (Cl. 114—177.)

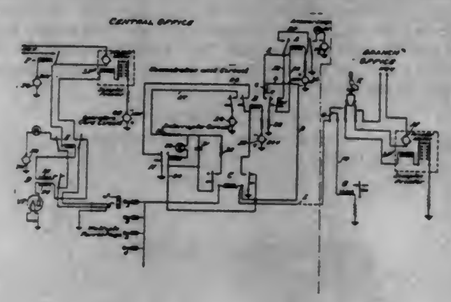


1. A unitary metallic window construction for a ship adapted to be bodily mounted in an opening in a side thereof, comprising a frame including a head jamb, stiles and sill, a trim connected to said head jamb, stiles and sill and to the exterior of the ship, a well provided in the lower portion of the frame, and a slidable sash adapted to be lowered into the well for opening the window.

1,881,739. CONCENTRATION CIRCUIT FOR SIMPLEX PRINTERS. GEORGE G. LIGHT, Kew Gardens, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed June 19, 1931. Serial No. 545,556. 6 Claims. (Cl. 178—2.)

1. In an intercommunicating system of the character described wherein a plurality of branch stations are connected to a central station, a receiving equipment at the

central station for each line, comprising a line signaling device and a source of signaling current, means actuated by the seizure of the line for disconnecting said signaling device and said current source, and means directly effec-



tive upon the release of the line for restoring said signaling device and current-source to the line, said restoring means embodying a source of potential, a potential storing device, and a potential-controlled gap.

1,881,740. ARTIFICIAL MATERIAL AND PROCESS FOR MAKING SAME. LEON LILIENFELD, Vienna, Austria. Original application filed June 3, 1926, Serial No. 113,582, and in Austria Jan. 5, 1926. Divided and this application filed Sept. 19, 1929. Serial No. 393,829. 11 Claims. (Cl. 18—54.)

5. The process of manufacturing artificial material which comprises bringing a viscose into the form of an artificial material, acting upon it with a liquid which contains at least about 25 to 40 per cent. hydrochloric acid to coagulate the viscose and washing the coagulated viscose.

1,881,741. MANUFACTURE OF NEW CELLULOSE COMPOUNDS. LEON LILIENFELD, Vienna, Austria. Filed May 22, 1926, Serial No. 111,036, and in Austria May 30, 1925. 27 Claims. (Cl. 260—100.)

1. A process for the manufacture of new cellulose compounds, which comprises acting on a cellulose compound which contains the group



except a cellulose-xantho-fatty acid or a compound thereof with a base derived from ammonia in which at least one hydrogen atom of the ammonia is replaced by an organic radical, and at least one hydrogen atom of the ammonia can still be replaced.

1,881,742. PROCESS FOR THE MANUFACTURE OF ARTIFICIAL THREADS. LEON LILIENFELD, Vienna, Austria. Filed May 29, 1929, Serial No. 367,149, and in Austria Aug. 1, 1928. 9 Claims. (Cl. 18—54.)

1. The process for the manufacture of artificial threads of high dry tenacity exceeding two grams per denier which comprises coagulating a thread of viscose by means of a gaseous mineral acid.

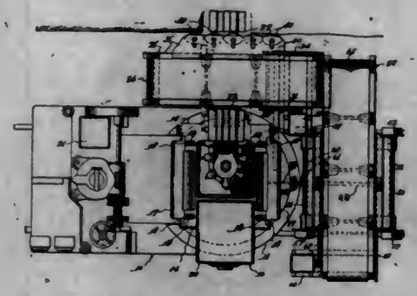
1,881,743. EXCAVATING SYSTEM. GWYNN L. LILLARD, Memphis, Tenn., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 11, 1929. Serial No. 398,837. 11 Claims. (Cl. 37—115.)

1. A system for building levees of the type including an excavator for taking earth from a borrow pit and comprising a plurality of mobile carriers, means for hauling the mobile carriers in from the borrow pit to the levee site and consisting of a haul-in line for each mobile carrier, an excavator crane having high speed drums to which the haul-in lines are connected and having a boom over which the haul-in lines are guided, a leg supporting the



upper and outer end of the boom from the ground and imparting stability to the crane, an operator's cab carried by the upper and outer boom and having control levers connected to the various instrumentalities of the crane, and means for hauling the mobile carriers back from the levee site to the borrow pit.

1,881,744. CUTTING AND LOADING MACHINE. FRANK A. LINDGREN, Western Springs, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 11, 1928, Serial No. 298,920. Renewed July 29, 1931. 20 Claims. (Cl. 262—30.)



5. In combination with a kerf cutting mining machine, a cutting element including a cutter bar having a cutter chain movable thereabout, a conveyor beneath said cutting element, and a cuttings gathering device pivotally mounted to said conveyor having a plurality of yieldably mounted rotatable discs thereon engageable with a mine wall.

1,881,745. PROCESS OF BLEACHING, DYEING, AND PRINTING VEGETABLE AND ANIMAL FIBER MATERIAL, FABRICS, OR FELT. KURT LINDNER, Oranienburg, near Berlin, Germany, assignor to Chemische Fabrik Milch Aktien-Gesellschaft, Berlin, Germany. Filed Jan. 14, 1926, Serial No. 81,311, and in Germany Jan. 14, 1925. 4 Claims. (Cl. 8—2.)

1. The process of bleaching raw fibrous material which comprises introducing the raw fibrous material into a cold bleaching liquor containing a salt of an aliphatically substituted aromatic sulphonic acid and an unstable chlorine compound and then completing the bleaching process in known manner.

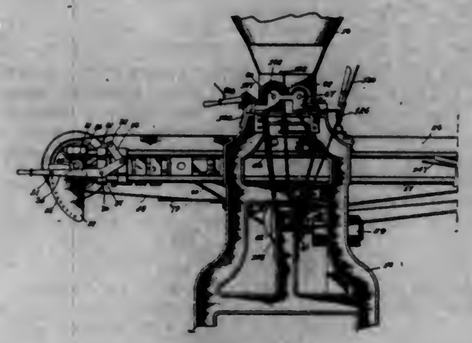
1,881,746. FENCE WIRE GRAPPLE. CHARLES P. LITTLEPAGE, Ramona, Calif. Filed June 26, 1930. Serial No. 464,076. 1 Claim. (Cl. 254—77.)



A fence wire grapple comprising a loop-shaped member having one end reduced in width to receive the barb carrying part of a wire, the rest of the member of sufficient

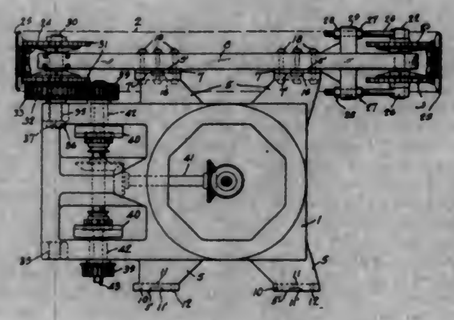
width to permit the barbs to pass thru the same, the wide part being substantially straight and the small part being curved at its point of junction with the wide part, whereby the device can have the curved portion straddle a wire, the barb carrying part engaged by the small portion.

1,881,747. CAKE ICING MACHINE. JOHN R. LITTY and TRUED B. LUNDIN, Philadelphia, Pa.; said Lundin assignor to Elizabeth H. Litty, Philadelphia, Pa. Filed Apr. 14, 1930. Serial No. 443,982. 13 Claims. (Cl. 91—8.)



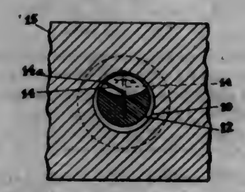
1. A cake icing machine comprising a movable support for cakes, an icing receptacle having means therein for feeding into icing from the bottom thereof directly onto said cakes, a main shaft for driving said support and said means, and means for regulating the relative speed between said moving support and said icing feed.

1,881,748. EXCAVATING MACHINERY. ROLF LJUNGKULL, Wauwatosa, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 18, 1929. Serial No. 393,562. 5 Claims. (Cl. 180—9.1.)



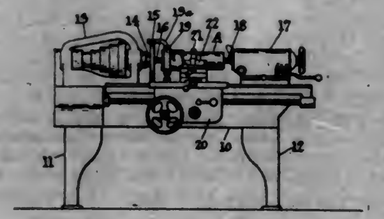
1. In a machine of the character described, a main frame having outwardly extending lugs at its sides, traction devices at the sides of the main frame and having traction frames provided with brackets adapted to have supporting engagement with the lugs of the main frame, fastening means for securing the lugs and brackets engaged, said traction frames having their ends projecting beyond the lugs and brackets and carrying driving sprockets and idler sprockets, an endless flexible belt trained about said driving sprockets and idler sprockets of each traction frame, a shaft mounted on each traction frame and fixed to the driving sprockets thereof, a driven gear fixed to each of said shafts, driving gears on the main frame adapted to mesh with said driven gear, when the traction devices are assembled with the main frame, each of said shafts projecting inwardly beyond its driven gear, said main frame having bearings adapted to receive said shafts and removable set collars for securing said shafts against outward displacement from said bearings.

1,881,749. SCREW THREAD LOCK. ERNEST R. LLEWELLYN, Arlington, Mass. Filed Dec. 6, 1930. Serial No. 500,538. 4 Claims. (Cl. 151—9.)



4. The combination with a member having an internally threaded bore, of an externally threaded member similarly threaded to engage the threads in said bore, said externally threaded member having a cut away portion adjacent the periphery thereof, a resilient element carried by said externally threaded member, said element being disposed transversely of the axis of said externally threaded member and extending through said cut away portion a sufficient distance to project beyond the radius of said internally threaded bore, said element being capable of bending on engagement with said bore to provide for free rotation of said externally threaded member in one direction but being adapted to bind against said internally threaded bore and thereby oppose rotation of the latter member in the opposite direction, whereby said element serves to retain said externally threaded member in said bore.

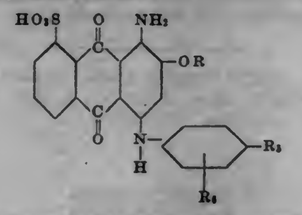
1,881,750. ANTIFRICTION BEARING MOUNTING. ERNEST R. LLEWELLYN, Arlington, Mass., assignor to The Hendey Machine Company, Torrington, Conn., a Corporation of Connecticut. Filed Mar. 16, 1931. Serial No. 523,011. 7 Claims. (Cl. 308—197.)



1. An anti-friction bearing mounting comprising an outer sleeve adapted to retain the outer races of anti-friction members, the inner races of said members supporting therein a spindle, resilient means interposed between said anti-friction members, said means engaging the inner race of one bearing and the outer race of the oppositely disposed bearing.

1,881,751. MANUFACTURE OF ANTHRAQUINONE DERIVATIVES. FRANK LODGE and WILLIAM WYNDHAM TATUM, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Original application filed Aug. 29, 1929, Serial No. 384,796, and in Great Britain Sept. 18, 1928. Divided and this application filed Aug. 9, 1929. Serial No. 384,795. 8 Claims. (Cl. 260—59.)

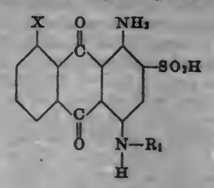
3. As new dyes, the 1:4-diaminoanthraquinone body having the probable formula



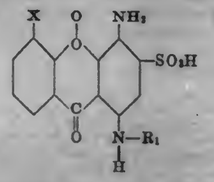
wherein R represents an alkyl group, R_2 represents hydrogen or an alkyl group and R_1 represents hydrogen or a sulphonic acid group, said dyes being powders soluble in water and dyeing wool in bluish to violet shades.

1,881,752. MANUFACTURE OF ANTHRAQUINONE DERIVATIVES. FRANK LODGE and WILLIAM WYNDHAM TATUM, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Aug. 9, 1929, Serial No. 384,796, and in Great Britain Sept. 18, 1928. 17 Claims. (Cl. 260—59.)

6. In the manufacture of 2-alkoxy derivative of 1:4-diaminoanthraquinone having the probable formula



wherein R represents an alkyl group, R_1 represents hydrogen, methyl or a benzene residue which may be further substituted with alkyl groups or a sulphonic acid group or both, and X represents hydrogen or a sulphonic acid group, the process which comprises reacting 1:4-diaminoanthraquinone having in the form of the free acid the probable general formula



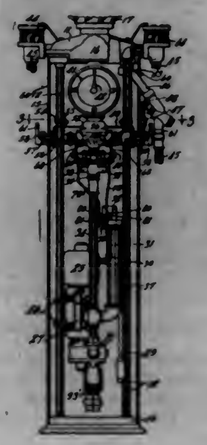
wherein R_1 represents hydrogen, a methyl group or a benzene residue which may be further substituted with alkyl groups or a sulphonic acid group or both and X represents hydrogen or a sulphonic acid group, with a solution comprising an aliphatic alcohol and an alkali metal hydroxide.

1,881,753. PROCESS FOR THE MANUFACTURE OF ASPHALT. ALBERT LOEBEL, Amsterdam, Netherlands, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Feb. 14, 1929, Serial No. 340,006, and in the Netherlands Dec. 9, 1927. 4 Claims. (Cl. 196—74.)

1. A process of manufacturing asphalt from crude oil, petroleum fractions, or petroleum residues, comprising the steps of adding to the initial material at least 20% of a hydrocarbon oil consisting of hydrocarbons soluble in liquid sulphur dioxide and having an initial boiling point of at least 250° C., and thereafter distilling the mixture in the presence of air to obtain an asphalt having a penetration curve flatter than that of an asphalt obtained without the addition of the hydrocarbon oil.

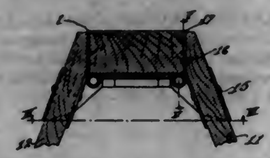
3. A process of manufacturing asphalt from crude asphaltic oil or asphaltic petroleum residues, comprising the steps of adding to the initial material at least 20% of extracted hydrocarbons soluble in liquid sulphur dioxide and having an initial boiling point of at least 250° C., and thereafter distilling the mixture with steam to obtain an asphalt which is more ductile and which has a penetration curve steeper than that of an asphalt obtained without the addition of the hydrocarbons.

1,881,754. LIQUID DISPENSING APPARATUS. JOSEPH A. LOGAN and WARREN H. DE LANCEY, Springfield, Mass., assignors to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1929. Serial No. 407,532. 4 Claims. (Cl. 221—25.)



1. Liquid dispensing apparatus, comprising, a motor operated pump, a switch for stopping and starting the motor, two discharge pipes from said pump, a meter interposed in each pipe, a casing enclosing the aforesaid elements, except for openings through which the indications of said meters may be seen, a delivery hose connected to the delivery end of each discharge pipe and extending outside the housing, a nozzle on the delivery end of each hose, supports outside the casing, one for each nozzle, a lever adjacent each support, each lever mounted to swing from an inactive position to an active position in a path closely adjacent the outer end of its support, each nozzle interengaging with its support so that a part of the nozzle extends into the path of the adjacent lever and holds it in its inactive position, a shaft for each lever extending into said housing, an arm on each shaft, a lever on said switch tending to move to "off" position, a pair of heads one on each side of the switch lever and swivelled thereto, and a link connection between each arm and head, each link having a shoulder to engage its head and move the switch lever to "on" position and freely slidable in its head in the general direction in which the switch lever moves to reach "off" position, either lever when moved from inactive to active position effective to move the switch lever to "on" position unless it has previously been so moved by the other lever, and movement of both levers into inactive position being necessary before said switch lever can move to "off" position.

1,881,755. COLLAPSIBLE HORSE. MARTIN C. LOGAN and JOHN E. PHILPOTT, Elgin, Ill.; said Logan assignor to said Philpott. Filed May 24, 1928. Serial No. 280,151. 5 Claims. (Cl. 304—5.)



3. A collapsible horse comprising a body, a pair of spreadable legs arranged near each end of said body, hinges connecting each pair of legs to said body, said hinges including a plurality of hinge plates, certain of said plates being connected to said body with the pintles thereof arranged transversely of the body and others of said plates being secured to said legs and longitudinally hinged to certain of the plates connected to the transverse pintles, said leg plates having projections thereon to enter said body when said legs are spread to prevent hinging action of the legs about said transverse pintles.

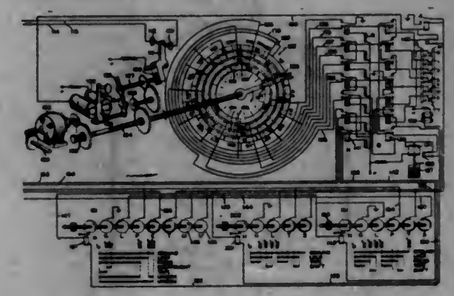
1,881,756. MAIN SPRING TESTER. EDWARD FRANKLIN LONG, Spartanburg, S. C. Filed Mar. 17, 1930. Serial No. 436,561. 7 Claims. (Cl. 265—19.)



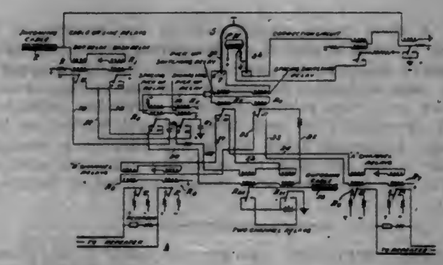
6. In a device of the character described, a casing having a graduated scale thereon, a bell crank lever pivotally supported therein and having one leg projecting therefrom and adapted to be engaged with one of the gears of a spring motor, a spring connected with the other leg and urging the lever in a direction opposite to the direction of rotation of such gear, a rack bar carried by the last mentioned leg of the lever, a pinion rotatably supported within said casing to one side of the rack bar and engaged by the latter, an indicating hand rotatably mounted in the casing, a pin projecting from the pinion and disposed in the path of the indicator and operable to move the same over the scale when the bell crank lever is moved in one direction, and a manually releasable latch in the casing and engageable with the rack bar to hold the same against movement when the bell crank lever has been moved in one direction.

1,881,757. TELEGRAPH TRANSMITTING APPARATUS. JAMES W. LONG, Plainfield, N. J., and ROBERT STEENECK, New York, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1931. Serial No. 570,728. 22 Claims. (Cl. 178—17.)

8. An automatic telegraph system comprising a tape controlled transmitting apparatus arranged to transmit variable numbers of current alternations followed by sustained impulses and mechanically operated circuit controlled means for determining the period of said sustained impulses and for advancing the tape through the transmitter in timed relation to said sustained impulse.



1,881,758. TWO-CHANNEL FORK-CONTROLLED RECEIVING AND REPEATING APPARATUS FOR TELEGRAPH SYSTEMS. HERBERT A. LONGLAND, Valentia, Ireland, assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1931. Serial No. 556,879. 5 Claims. (Cl. 178—70.)

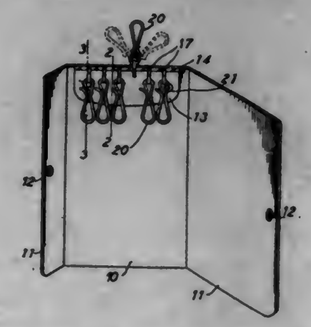


1. In a telegraph system, receiving means responsive to combinations comprised of interwoven selecting impulses of code characters from a plurality of channels, separate repeaters for the characters of the respective channels, means for segregating the impulses of the respective characters and transmitting them in regenerated form to said repeaters and a vibratory timing member controlling said segregation.

1,881,759. KEY CASE. CHARLES LORBER, Louisville, Ky. Filed May 14, 1930. Serial No. 452,398. 4 Claims. (Cl. 150—40.)

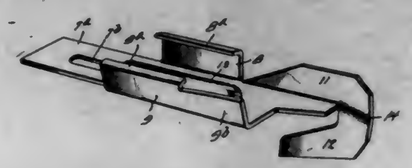
1. The combination with a key case having a body of flexible material; of a key plate having a flat body portion secured to the upper part of the case body, the lower part of said plate resting flat on said body, said plate having slots for attachment of key hooks in its upper part, and a rearwardly extending flange on the upper part of the flat plate body lying wholly behind the body and having its rear edge engaging the case body and forc-

ing the same rearwardly away from the slotted portion of the plate, and key hook eyes having shanks extending



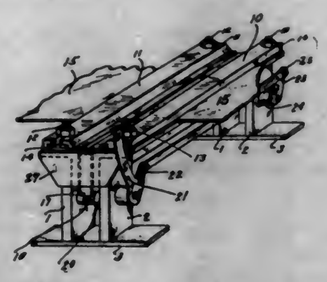
through said slots and provided with heads in the space between the body and plate, said shanks being slidable in said slots.

1,881,760. CLAMPING DEVICE FOR BUILDING FOUNDATIONS. JAMES F. LOUCKS, Cleveland, Ohio, assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 11, 1930. Serial No. 474,498. 14 Claims. (Cl. 189—35.)



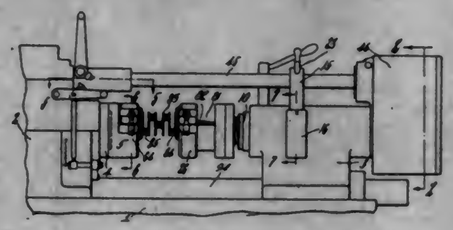
1. A sheet metal clamping device for securing to a beam a sheet having a rib projecting therefrom, said clamping device having means whereby it may be applied to a beam and being provided with a base having an upwardly projecting portion and with upwardly projecting sides extending from such base and each having an inwardly projecting flange at its top adapted to engage a side of the rib when the upwardly projecting portion of the base shall have been straightened out or flattened down.

1,881,761. WELDING CLAMP. OVEREND J. W. LOUGHEED, Portland, Oreg. Filed Nov. 6, 1929. Serial No. 405,268. 2 Claims. (Cl. 78—82.)



1. In a device of the class described, the combination of base plates, leg supports superposed thereon and welded thereto, angle bars disposed parallelly and in spaced relationship upon the legs to form a table of the horizontal portion of the angles, clamping bars adjustably and removably secured to the angle bars, shafts journaled within the legs and a camming surface disposed centrally of the shafts and within that portion of the shafts lying between the leg elements, an anvil disposed upon the camming surfaces and means for actuating each of the shafts to raise and lower the anvil into and out of working position.

1,881,762. LATHE HAVING DOUBLE END DRIVE. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Apr. 16, 1930. Serial No. 444,740. 8 Claims. (Cl. 82—2.)

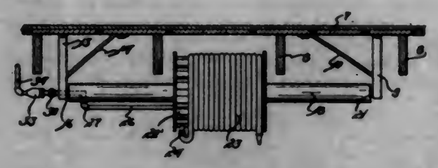


1. In combination, a bed, head and tail-stocks carried by said bed, a rotary work spindle each of said stocks, a sleeve in which said tailstock spindle is journaled, means for adjusting said sleeve axially in said tailstock toward and from said headstock, work holders carried by said spindles for supporting work therebetween, means for rotating said headstock spindle, and rotary connections for said tailstock spindle including a rotary shaft extending between said stocks and in driven relation to said rotating means, a long gear fixed to said shaft at said tailstock, and a gear carried by said tailstock spindle meshing with said long gear throughout the range of adjustment of said sleeve.

1,881,763. PROCESS FOR THE COLD DRESSING AND DRYING OF LEATHER. ERNST LUCKHAUS, Duisburg, Germany, assignor to Röhm & Haas Company, Philadelphia, Pa. Filed July 24, 1929, Serial No. 380,485, and in Germany Nov. 16, 1928. 4 Claims. (Cl. 149—6.)

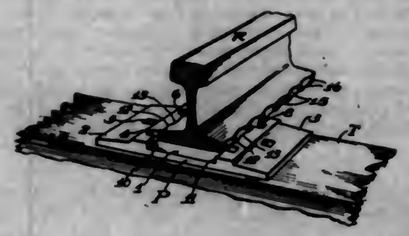
4. Method of treating skins in the production of leather which comprises coating said skins with a fatty dressing material and subjecting said coated skins to the action of a gas at a temperature of substantially 30 to 40° C. and a pressure of substantially 600 to 700 millimeters.

1,881,764. HOSE REEL. ABRAHAM LUDWIG, Detroit, Mich. Filed Feb. 18, 1931. Serial No. 516,665. 1 Claim. (Cl. 299—78.)



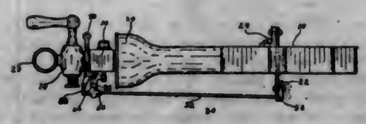
A device of the class described, comprising: a pair of spaced brackets: a tube; a cylindrical, reel-forming, solid drum fixedly mounted on said tube and having a radially directed passage extended inwardly from its periphery and communicating with an axially directed passage positioned outwardly of the periphery of said tube and opening through an end face of said drum; a block fixedly mounted in one end of said tube; a trunnion projecting outwardly from said block and journaled in one of said brackets, said block having a radially directed passage extending inwardly from its periphery and communicating with a central passage extending through said trunnion; a conduit for connecting the passages in said block with the passages in said drum; a nipple secured in the outer end of the radially directed passage in said drum; a pipe secured in the outer end of the passage directed through said trunnion; leak proof swivel means for connecting said pipe to a water delivery pipe; a block rotatable in the opposite end of said tube; a trunnion on said block fixed in the other of said brackets; and a spring loosely positioned in said tube and attached at one end to one of said blocks and at its opposite end to the other of said blocks.

1,881,765. TIE-PLATE, RAIL, AND RAIL ANCHOR. ANTHONY LUISA-VISSAT, Bridgeville, Pa. Filed Sept. 4, 1931. Serial No. 561,123. 2 Claims. (Cl. 238—304.)



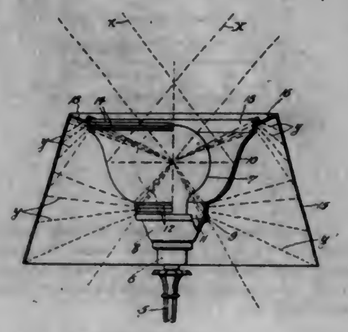
1. In railroad track construction, the combination of a tie plate having a rail-receiving recess across the face thereof, the bottom of the recess being divided into alternate ribs and recesses, and a rail adapted to seat upon the said plate in said rail-receiving recess and having recesses and ribs adapted to cooperate and interlock with the said ribs and recesses of the tie plate, whereby to form a positive interlock between the rail and tie plate.

1,881,766. SAFETY CUT-OFF DEVICE FOR GAS BURNERS. ALTON LUNDIUS, Jersey City, and OTTO DIETRICHSON, South Orange, N. J. Filed May 31, 1930. Serial No. 458,015. 3 Claims. (Cl. 158—117.1.)



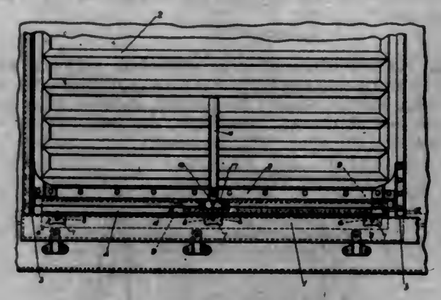
1. A safety cut-off device for gas burners, comprising a gas cut-off valve, a thermostat, and connections between said thermostat and cut-off valve, wherein said connections comprise a rod attached to said thermostat and a sleeve having a limited to and fro movement, said rod being slidable in said sleeve and said sleeve having a spring-pressed part therein adapted to bear on said rod and impositively grip the rod, whereby said rod may slide in said sleeve against the action of said spring-pressed part under the action of said thermostat after said sleeve reaches a limit of its movement, substantially as and for the purpose described.

1,881,767. ILLUMINATING DEVICE. EDWIN K. LUNDY, Hubbard Woods, Ill., assignor to Curtis Lighting, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 13, 1930. Serial No. 452,075. 4 Claims. (Cl. 40—93.)



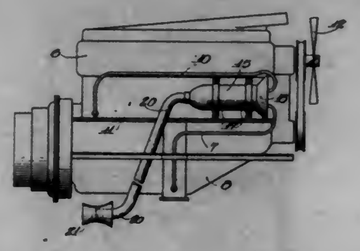
1. An illuminating device comprising a light bulb, an inverted opaque reflector surrounding the same and arranged to direct light rays solely in an upward direction outwardly therefrom, a shade surrounding said reflector, and means for illuminating said shade consisting of light transmitting prismatic members at upper and lower portions of said reflector, the facets of said prismatic members being disposed so as to direct light rays radially therefrom onto said shade.

1,881,768. CAR DOOR ELEVATING MEANS. CARL LUTZ, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930. Serial No. 425,128. 15 Claims. (Cl. 16—99.)



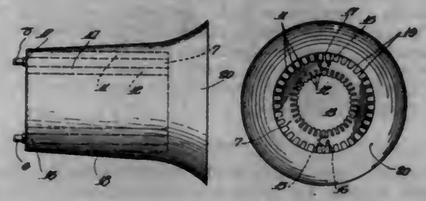
1. The combination with a track, of a door having means for frictionally engaging said track, a V-shaped ball runway carried by said door for relative longitudinal movement with respect thereto, and means between said door and runway responsive to said longitudinal movement for elevating said door and rolling means in said runway for supporting said door upon said track in its elevated position.

1,881,769. OIL COOLING MEANS. KENNETH E. LYMAN, Chicago, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 504,053. 3 Claims. (Cl. 257—242.)



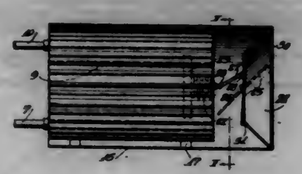
1. In combination, an oil cooler having external heat dissipating fins thereon, tubular means disposed around said cooler, and means connected to said tubular means adjacent an end thereof for aspirating air therethrough and between said fins.

1,881,770. OIL COOLING MEANS. KENNETH E. LYMAN, Chicago, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 504,054. 5 Claims. (Cl. 257—250.)



1. In combination, an oil container having external fins thereon, and a tubular member of gradually increasing size from one end to the other disposed around said container with the small end thereof of substantially the outer fin diameter of said container and adjacent an end of said container.

1,881,771. THERMOSTATIC CONTROL DEVICE FOR OIL COOLERS. KENNETH E. LYMAN, Chicago, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1930. Serial No. 504,052. 5 Claims. (Cl. 257—242.)



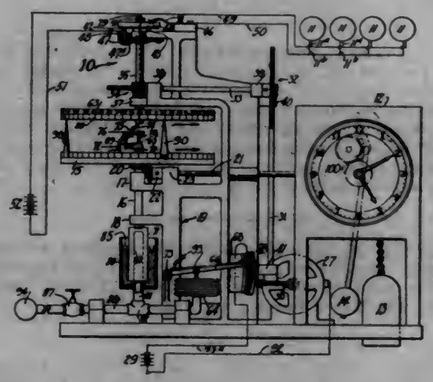
1. As an article of manufacture, a control device for a cooler having a heat dissipating surface, including an open-ended casing for disposition around said cooler, a closure movable to vary the opening in an end of said casing, and a thermostatic element in said casing and connected to said closure for moving the same in accordance with temperature variations.

1,881,772. DOSE MEASURING DEVICE FOR LIQUID DISPENSING CONTAINERS. GEORGE H. MAAS, Milwaukee, Wis., assignor of one-half to Michael J. Gallogly, Milwaukee, Wis. Filed Jan. 23, 1931. Serial No. 510,710. 7 Claims. (Cl. 215—57.)



1. A dose measuring device comprising a perforated cover plate adapted to be positioned at the mouth of a bottle and a dose measuring tube engaged at its lower end with the said cover plate to form a closed valve in the line of such engagement, combined with means for yieldingly holding the dose measuring tube in position upon the bottle, whereby the said tube may be turned from its axial alignment and the valve opened to permit the flow of liquid from the bottle to the dose measuring tube.

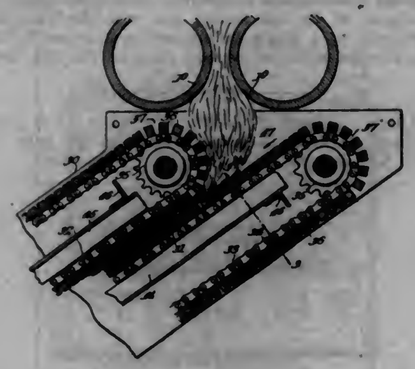
1,881,773. SYNCHRONIZING DEVICE. GEORGE F. MACHLET, Elizabeth, N. J. Filed Feb. 9, 1929. Serial No. 338,692. 20 Claims. (Cl. 172—293.)



1. The combination with a pair of separately-driven coaxially-mounted members to be rotated in synchronism relatively to one another, of a manometric air-pressure-device having a constantly open leak device through which the fluid continually wastes, said pressure device being controlled by the relative rotary displacement of said members as they get out of or into synchronous speed relatively to one another, and means whereby variations in the rate of wastage from said manometric pressure-device, thus controlled, substantially maintain said synchronous speed.

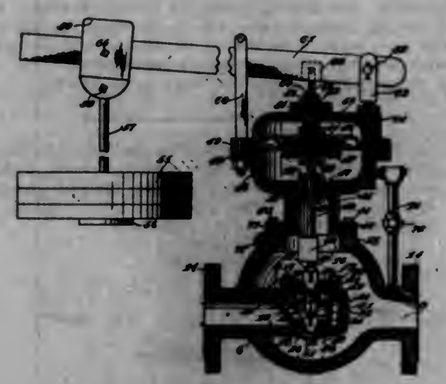
1,881,774. APPARATUS FOR BALING MATERIAL. ALEXANDER S. MACKENZIE, Houston, Tex., assignor to Clayton Gin Compress Company, Houston, Tex., a Corporation of Texas. Filed Apr. 10, 1928. Serial No. 268,884. 6 Claims. (Cl. 100—1.)

1. A compressing instrumentality comprising a pair of superposed aprons having their adjacent runs arranged in parallelism for compressing action therebetween, sprockets at the ends of said aprons, one of said aprons including a plurality of relatively movable bars adapted to close together when passing away from its said sprocket to grip and compress material therebetween as the aprons move



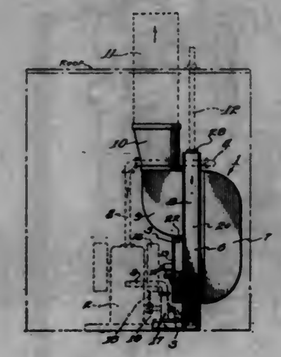
the material longitudinally therewith, and means to feed material up against and in between said bars as they change their direction in moving about said sprocket.

1,881,775. AUTOMATIC REGULATOR. ALLEN D. MACLEAN, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 18, 1928. Serial No. 286,448. 7 Claims. (Cl. 50—27.)



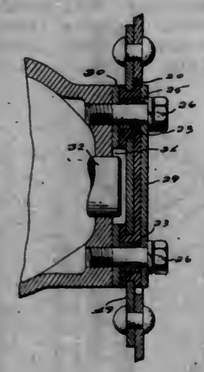
1. In combination with a regulator valve comprising a valve chamber, a diaphragm chamber detachably supported on said valve chamber and forming therewith a closed passageway, valves detachably supported in said valve chamber, a diaphragm supported in said diaphragm chamber, a valve stem carried by said valve, an actuating rod carried by said diaphragm and completely enclosed in said passageway, and means accessible without separating said casing and body for detachably and adjustably coupling said valve stem and actuating rod, said means comprising a block provided with a threaded bore for engagement with a threaded end of said valve stem; a second bore for detachable engagement with one end of said valve actuating rod; and means movable into said first named bore in said block for engagement with said valve actuating rod for retaining same in said second bore said last named means being so disposed as to maintain substantial registry with said bore when in inoperative position.

1,881,776. COOLING SYSTEM. DANIEL T. MACLEOD, Milwaukee, Wis., assignor to Perfex Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 7, 1928. Serial No. 291,087. 3 Claims. (Cl. 257—125.)



1. A radiator of the class described comprising a frame including top and bottom headers, a core element disposed between and connecting said headers, a front casing providing a passageway connecting the lower and upper parts of said core element for multiple passage of air through said element, and an upwardly facing air discharge casing secured to the back side of the upper part of said frame whereby a natural draft is induced by reason of convection.

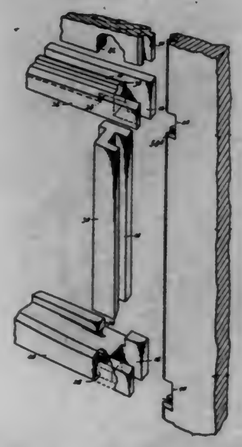
1,881,777. ENGINE MOUNTING. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 2, 1929. Serial No. 411,167. 5 Claims. (Cl. 248—14.2.)



1. Means for mounting a power unit upon a vehicle chassis frame having laterally spaced sill members, comprising a crossbrace for the frame having the opposite ends rigidly secured to the sills and having an annular portion intermediate the ends for receiving a part of the power unit, a pair of laterally spaced plates rigidly secured to the power unit, a resilient material disposed between the said plates under tension and a member embedded within the resilient material free from metallic connection with the plates and power unit, and means for rigidly securing said member to the crossbrace.

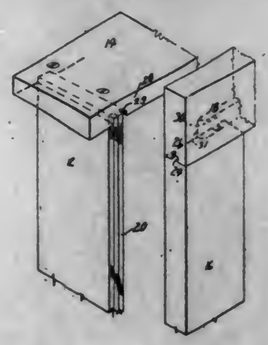
CARNEGIE LIBRARY OF ATLANTA

1,881,778. DOOR PANEL CONSTRUCTION. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Filed Apr. 14, 1930. Serial No. 444,190. 6 Claims. (Cl. 20—15.)



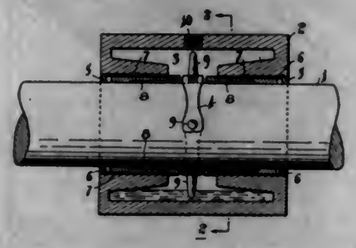
1. In a device of the class described, a panel, a frame therefor including a bottom rail and side stiles having their lower ends coacting with the upper edge of the bottom rail, said panel and side stiles having grooves in their bottom ends and said bottom rail having a tongue and a groove inward of the tongue, said tongue coacting with the grooves in said panel and side stiles and the groove of the rail coacting with tongues of the panel and side stiles formed of the material of the panel and side stiles alongside the grooves therein, the tongue of the bottom rail and the grooves of the panel and side stiles having downwardly and outwardly sloping outer faces.

1,881,779. WINDOW JAMB, CASING, AND BLIND STOP CONSTRUCTION. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa, a Corporation of Iowa. Filed Apr. 24, 1930. Serial No. 446,940. 2 Claims. (Cl. 20—11.)



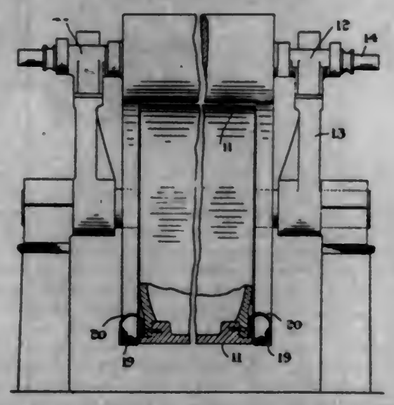
1. A window frame construction comprising side and head jamb members and side and head casings, joints between said jamb members and said casings for weather proofing purposes, said joints being arranged as follows for convenience in assembly; each of said side jamb members having a formed tongue and each of said side casings having a groove aligned and coacting therewith, said head casing being provided with a downwardly opening rabbet to coact with said head jamb member, the upper end of each of said side casings being provided with a tongue, the lower edge of said head casing being provided with a groove for coaction therewith, the alignment of said last mentioned groove and of said rabbet being such as to permit simultaneous assembly of said head casing with the tongue of the side casing and with the head jamb respectively by a single sliding motion downwardly in a plane parallel with the vertical plane of the side casing.

1,881,780. LOOSE PULLEY. GEORGE Y. MALCOLM, Toronto, Ontario, Canada. Filed Mar. 25, 1930. Serial No. 438,839. 3 Claims. (Cl. 308—117.)



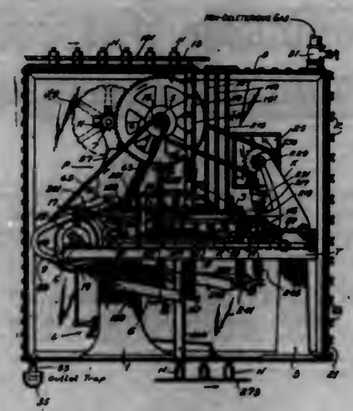
1. The combination with a shaft of an integral pulley rotatable relative to the shaft, said pulley having an annular oil reservoir in its inner surface; sleeves fitted on said shaft within the pulley one at each side of the oil reservoir, the inner ends of said sleeves being spaced from one another, each of said sleeves having an annular collecting groove on its inner surface adjacent its outer end; a longitudinal groove in its inner face leading from the space between the sleeves; a longitudinal groove in its outer face leading from the collecting groove back to the oil reservoir; and an oil distributor mounted on said shaft between the sleeves, the sides of said distributor being serrated to permit oil to enter between the edge of the ring and the adjacent edge of the sleeve.

1,881,781. REEL STARTER FOR PAPER MACHINES. BERNARD A. MALKIN, Lachine, Quebec, Canada, assignor to Dominion Engineering Works Limited, Lachine, Quebec, Canada. Filed Oct. 9, 1931. Serial No. 567,815. 7 Claims. (Cl. 242—65.)



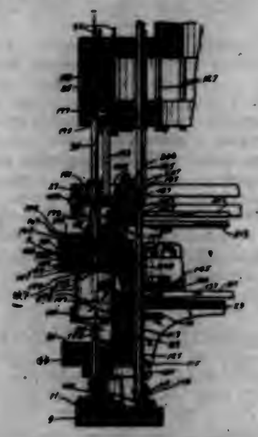
7. Sheet winding apparatus of the class described including engageable winding drum and winding shaft elements and depressible traction members carried by one element and adapted to engage the remaining element preparatory to direct bodily engagement between said elements.

1,881,782. METHOD OF AND APPARATUS FOR PACKAGING. EDWARD MALLINCKRODT, Jr., St. Louis, Mo., assignor to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed June 25, 1926, Serial No. 118,440. Renewed June 3, 1932. 28 Claims. (Cl. 226—68.)



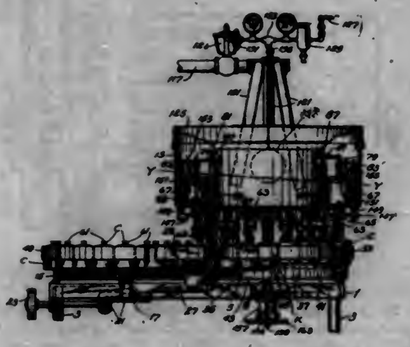
25. The method of packaging chemicals in an atmosphere of gas which is non-deleterious to the chemical to be packaged and in the absence of air, which comprises subjecting a progressively advance line of containers to the following treatment, each step being carried out simultaneously upon one of the containers in the line; exhausting the open container, introducing the open exhausted container into an atmosphere of said gas without substantial admission of air, filling the container with the chemical to be packaged in said gaseous atmosphere, and capping each container in said gaseous atmosphere.

1,881,783. METHOD OF AND APPARATUS FOR PACKAGING. EDWARD MALLINCKRODT, Jr., St. Louis, and HENRY V. FARR, Ferguson, Mo., assignors to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 14, 1927, Serial No. 175,098. Renewed Feb. 29, 1932. 22 Claims. (Cl. 226—68.)



1. The method of packaging a substance comprising removing a deleterious fluid from a plurality of packages by causing a counter diffusion between said deleterious fluid and a non-deleterious fluid, said non-deleterious fluid having been weighted with a quantity of the said substance being packaged so as to be heavier than said deleterious fluid.

1,881,784. FILLER. EDWARD MALLINCKRODT, Jr., St. Louis, Mo., assignor to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 5, 1928, Serial No. 244,571. Renewed Feb. 29, 1932. 12 Claims. (Cl. 226—97.)



1. In a filler including compensating means, the combination of a substantially upright rotatable spindle, a container at the upper end of said spindle, liquid measuring and delivery cups within said container, a spider located externally of the container, movable compensators within said cups adapted to be moved by said spider and adjustable means located on and within said spindle for moving said spider.

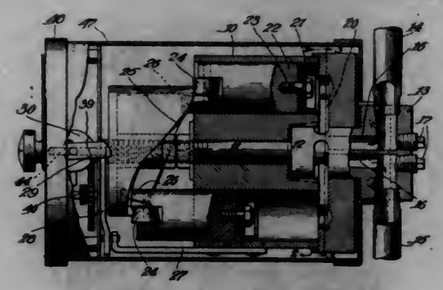
1,881,785. METHOD OF CLEANING AND VULCANIZING MATERIALS. FRANK SIGFRID MALM, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,336. 11 Claims. (Cl. 173—268.)



1. The method of treating materials which includes the steps of heating a surface thereof and cleaning and simultaneously vulcanizing the surface.

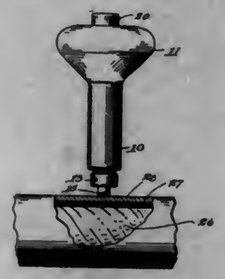
6. The method of treating cable which consists in removing a portion of the insulation thereof, heating the remaining insulation, cleaning and simultaneously vulcanizing an exposed surface of the remaining hot insulation, and rebuilding the cable to substantially normal contour by vulcanizing new insulating material to the vulcanized surfaces.

1,881,786. MEANS FOR MEASURING GREASE. JOHN F. MALM, Chicago, Ill. Filed July 19, 1930. Serial No. 469,050. 5 Claims. (Cl. 73—30.)



5. In a grease meter, a central stationary shaft, a block rotatable about said shaft and having cylindrical chambers therein, pistons slidable in said chambers in a direction parallel to the axis of rotation, a cylindrical fixed cam mounted on said shaft, a roller associated with each piston, a guide flange associated with each piston and projecting into said cylindrical cam to maintain said rollers thereon, and means for conducting grease to said chambers whereby said pistons may be moved thereby.

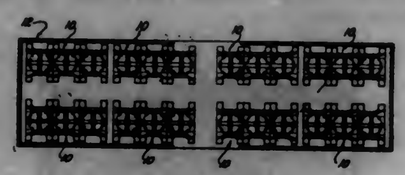
1,881,787. METHOD OF PERFORATING THE LEAD SHEATHING OF CONDUCTOR CABLES. ADOLPH Z. MAMPLE, Glen Rock, N. J., and EDWARD J. HOBERT, Hempstead, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1930. Serial No. 501,634. 3 Claims. (Cl. 164—125.)



1. The method of forming a hole in the sheathing of a lead sheathed cable, which consists in forcing the metal from a circular peripheral area of the sheath, causing the metal displaced from the resulting hollow cylinder to flow toward the center of said area and to merge with the metal within said hollow cylinder, forming a circular core, applying a torsional stress to the core and thereby shearing said core from the metal at the inner wall of the sheath and withdrawing the core.

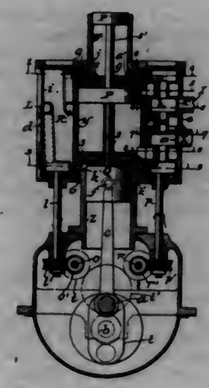
1,881,788. APPARATUS FOR SECURING AND BRACING ARTICLES FOR TRANSPORTATION. ARTHUR LIONEL MANNING, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1928. Serial No. 295,093. 6 Claims. (Cl. 217—36.)

2. In an apparatus for securing for transportation a cylindrical assemblage having a flexible portion extending from the upper end surface of the main body of the assemblage, a removable member extending around and supporting the flexible portion, the member having bifurcated



ends which are attached to the adjacent end face of the main body of the assemblage, the member at all portions disposed within the circumference of the assemblage.

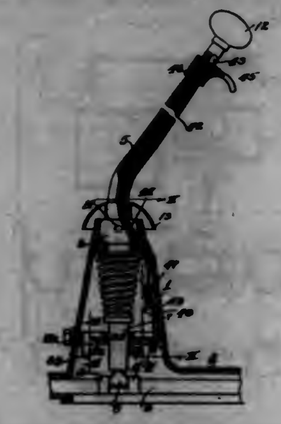
1,881,789. INTERNAL COMBUSTION ENGINE. JOSEPH G. C. MANTLE, Leonia, N. J. Original application filed June 30, 1923, Serial No. 648,783. Divided and this application filed July 9, 1926. Serial No. 121,320. 12 Claims. (Cl. 60—15.)



1. In a combustion engine a plurality of cylinders, a plurality of pistons rigidly connected in tandem having a reciprocating motion in said cylinders; the said plurality of cylinders forming a set of chambers wherein both the compression and the working cycles of the working fluid are effected in a plurality of stages; a plurality of charge-chambers each communicating with the last stage compression chamber and the first stage working chamber; means for compressing into, confining and isolating a charge of compressed working fluid in each of the charge-chambers, and means for releasing to the first stage working chamber one of said charges during each stroke in the same direction of the set of pistons.

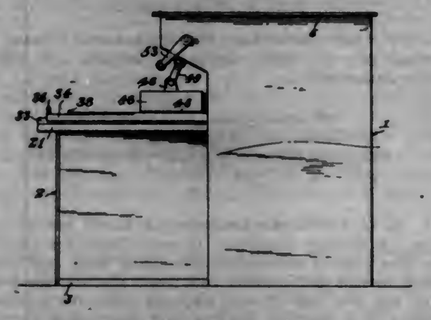
1,881,790. GEAR SHIFT LATCH MECHANISM. ROBERT LESLIE MAPSON, Detroit, Mich., assignor to Detroit Gear & Machine Company, a Corporation of Michigan. Filed Nov. 8, 1928. Serial No. 318,011. 12 Claims. (Cl. 74—39.)

1. A gear shift latch mechanism including in combination, a gear set having a gear shift lever, said gear set having a plurality of shiftable elements arranged to be selectively engaged by said lever, certain of said elements being rendered normally ineffective from actuation by said lever, releasable latching means associated with said lever, a pair of swinging stops movable by said latching means, one of said stops being normally arranged to prevent engagement of said lever with said one element and the other of said stops arranged to be moved by said latching means for moving said lever into position to engage said



one element, said latter stop being effective when in said unlatching position to prevent engagement of the lever with the remainder of said elements.

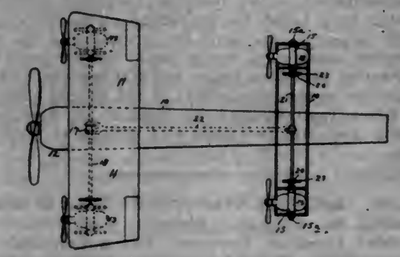
1,881,791. PHOTOGRAPHIC PRINTING MACHINE. JOSEPH J. MARESH, Terrell, Tex. Filed Mar. 5, 1931. Serial No. 520,397. 6 Claims. (Cl. 95—73.),



1. In a photographic printing machine, a source of light, a slidable element adapted to support a sensitized object to be photographically printed and including a negative retaining means and a border applying means, said element providing for respectively positioning the negative and border applying means relative to said source, a movable printing head for retaining the object in position relative to the negative when the latter is positioned relative to said source, suction means cooperating with said head for securing the object to the latter during the shifting of said element to position the border applying means relative to said source, and means operatively connected with said head to prevent the light rays from said source from passing to said element during the shifting of the latter.

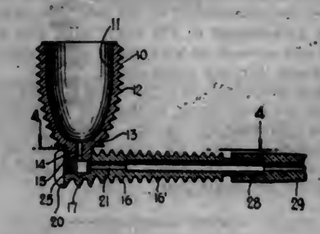
1,881,792. AIRPLANE. ALFONSO MARIANI, Erie, Pa. Filed May 23, 1931. Serial No. 539,601. 2 Claims. (Cl. 244—14.)

1. An airplane having a main motor and a fuselage and a plurality of supplemental motors mounted for changing the direction of the axes of their propellers and means to shift the direction of such axes common to all of the supplemental motors and a bridge transverse of the fuselage and supported at midlength thereby on which said supplemental motors are carrried in balanced relation, said shifting means including a shaft crosswise of the bridge oper-



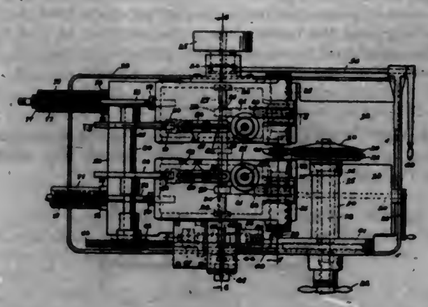
atively connected with the bridge motors and a central shaft connected with and reaching from said transverse shaft to the pilot's cabin.

1,881,793. FEATHERWEIGHT PIPE. FRANK N. MARIANI, New York, N. Y. Filed May 22, 1931. Serial No. 539,325. 7 Claims. (Cl. 131—12.)



1. As an article of manufacture, a bowl having an outside corrugated surface, a stem having an outside corrugated surface, a seat provided on said stem for said bowl and in alinement therewith operative to radiate and widely distribute the heat transmitted from said bowl and away from said stem.

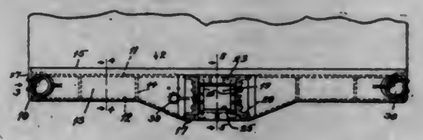
1,881,794. CAM MILLING MACHINE. NEWMAN M. MARSILIUS, Bridgeport, Conn., assignor to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 5, 1929. Serial No. 368,496. 5 Claims. (Cl. 90—13.4.)



1. In a milling machine, the combination with a bed, a driving shaft mounted thereon, a pair of cutter slides mounted for reciprocatory movement on said bed, short shafts mounted in the bed one for each slide, gear con-

nections between the driving shaft and said short shafts, a cutter spindle carried by each slide and geared to be driven by said short shafts, the said spindles of the respective slides being normally in axial alignment, adjacently positioned cutters mounted upon said spindles, a rotatable work holder for supporting pieces to be milled by said cutters, a cam shaft for reciprocating the slides in opposed relation, a driven shaft having connections for operating said work holder and said cam shaft, change gear driven means intermediate of the driving shaft and said driven shaft whereby the speed of the work holder and cam shaft may be varied with relation to the cutter shafts.

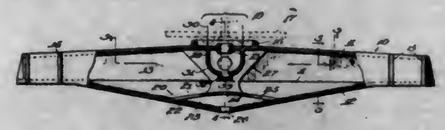
1,881,795. END SILL STRUCTURE. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Dec. 29, 1928. Serial No. 329,101. 10 Claims. (Cl. 105—421.)



1. An end sill structure comprising an end sill, integral end flanges for attachment to the side sills, integral cheek plates for attachment to the draft sills, and a flange on the inner end of each of said cheek plates adapted to act as front stops for the draft gear.

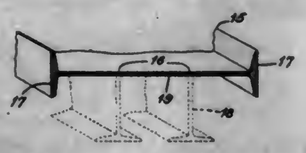
2. An end sill structure comprising an end sill, integral end flanges for attachment to the side sills, integral cheek plates for attachment to the draft sills, said cheek plates including slots for the reception of the draft key, and means on said cheek plates adapted to act as a front stop for the draft gear.

1,881,796. TRUCK BOLSTER. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1930. Serial No. 440,936. 32 Claims. (Cl. 105—230.)



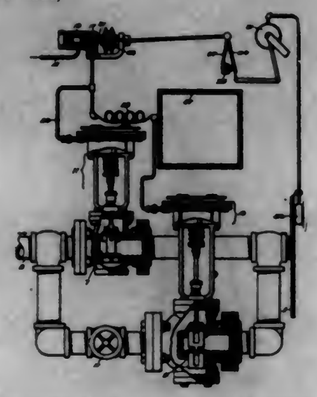
1. A truck bolster of hollow section having an internal truss structure disposed wholly beneath the center plate for receiving and distributing a portion of the load through the length of the bolster, the upper member of said truss being subjected to compressive stresses exclusively and spaced from the upper web of the bolster.

1,881,797. CENTER SILL. MARK H. MARTIN, Reading, Pa. Filed Apr. 16, 1930. Serial No. 444,711. 8 Claims. (Cl. 105—418.)



1. A center sill comprising a section of substantially I-shape bent in two locations intermediate its flanged sides to form a U-section.

1,881,798. CONTROL MECHANISM. CLESSON E. MASON, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed May 12, 1930. Serial No. 451,592. 6 Claims. (Cl. 236—82.)



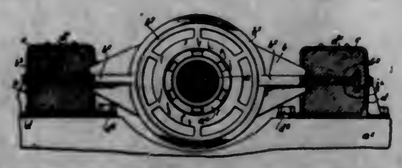
1. A mechanism of the class described comprising a pair of passages for fluid, valve means controlling the same, motors for operating the valve means to control the passages respectively, a control mechanism of the supply and waste type responsive to the fluctuations of a variable for governing the supply of pressure fluid to said motors and comprising in the one instance a substantially unobstructed passage and in the other a restricted passage having in communication therewith on the side of the motor a chamber of relatively great capacity.

1,881,799. BUCKLE. FRANK MASHEK, Chicago, Ill. Filed Dec. 15, 1930. Serial No. 502,312. 15 Claims. (Cl. 24—179.)



1. As an article of manufacture a buckle comprising a frame, a member connected to said frame for engaging the free end of a material associated with said frame, means to urge said member to a position of disengagement with the free end of said material upon the movement thereof to a position wherein said material is to be removed from said buckle, and means to render said first means ineffective when said member is in a position disengaged from the material.

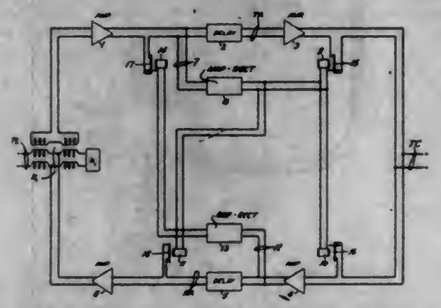
1,881,800. PROPELLER SHAFT BEARING. ALFRED F. MASURY, New York, N. Y., assignor to The Rubber Shock Insulator Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed July 15, 1926, Serial No. 122,528. Divided and this application filed Jan. 6, 1928. Serial No. 244,788. 1 Claim. (Cl. 308—26.)



In combination with a propeller shaft for a boat, a self-aligning bearing mounting the shaft, a mounting for the bearing comprising a cage, a removable side for securing

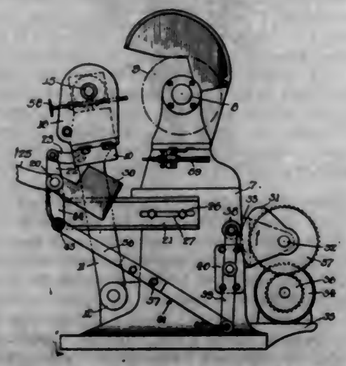
the bearing therein, diametrically opposed rigid arms integral with the cage and diverging therefrom, housings supported in the hull into which the arms extend, respectively, and yielding non-metallic material within said housings, surrounding said arms and secured in fixed relation thereto under predetermined compression.

1,881,801. TWO-WAY SIGNALING SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,423. 6 Claims. (Cl. 179—170.)



1. A terminal circuit for a two-way transmission line, said circuit comprising a source of waves to be transmitted over said line, a transmitting circuit and a receiving circuit each including amplifying means, coupling means connecting said transmitting circuit and said receiving circuit to said line, means normally disabling said transmitting circuit for transmitting waves from the output of the amplifying means therein to said coupling means, means under control of the waves received from said source for rendering said transmitting circuit operative to transmit said received waves to said line, and for substantially simultaneously disabling said receiving circuit for transmitting waves between said coupling means and the amplifying means in said receiving circuit, and means under control of the waves received by said receiving circuit from said line for effectively disabling said transmitting circuit in the input of the amplifying means therein.

1,881,802. CONTROL MECHANISM FOR TURNING MACHINES. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed June 21, 1929, Serial No. 372,622. Renewed Jan. 27, 1932. 5 Claims. (Cl. 142—40.)



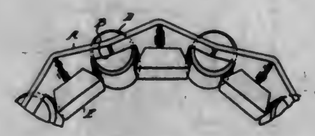
1. A turning machine comprising, in combination, a first frame having a cutter mounted thereon, a second frame for rotatably supporting a work piece, one of said frames being movable to and from an operating position adjacent the other frame, means for moving said movable frame to and from its operating position comprising a rock shaft mounted on the stationary frame transversely of the path traversed by said movable frame and adjustable substantially along said path, a pair of toggles interposed between said rock shaft and said movable frame adjacent opposite ends of said frames, each toggle comprising an arm fixed on said shaft and a link pivotally connecting said arm with said movable frame, means tending to move said movable frame toward its operating position, means for rocking said shaft to move said movable frame from said operating position, said last means including a rotatable cam mounted on said stationary frame, a follower for said cam, and adjustable means connecting said follower and said shaft eccentrically of said shaft.

1,881,803. ORNAMENTAL PRODUCT AND METHOD OF PRODUCING SAME. RICHARD V. MATTISON, Ambler, Pa., assignor, by mesne assignments, to Ambler Asbestos Shingle & Sheathing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1928. Serial No. 254,474. 14 Claims. (Cl. 18—61.)



1. An ornamental product comprising an article having a thermo-plastic coating grooved and with its surface between the grooves characterized by highly polished irregularities, the edges of the thermo-plastic material terminating at the grooves and being slightly rounded.

1,881,804. ROLLER BEARING CAGE. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 23, 1931. Serial No. 524,715. 5 Claims. (Cl. 308—217.)

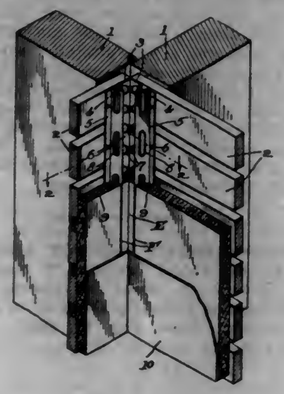


1. A roller bearing cage comprising a conical member having spaced apertures therein for receiving the rolls, the edges of each aperture being spaced apart by less than the diameter of the roll, a second annulus insertable through the small end of said conical member, and having a shouldered engagement, and tongues on said second annulus adapted to be bent intermediate adjacent rolls into proximity thereto.

1,881,805. CORNER REENFORCEMENT. GEORGE D. MATHERS and HORACE C. MATHERS, Los Angeles, Calif. Filed May 5, 1930. Serial No. 449,830. 3 Claims. (Cl. 72—121.)

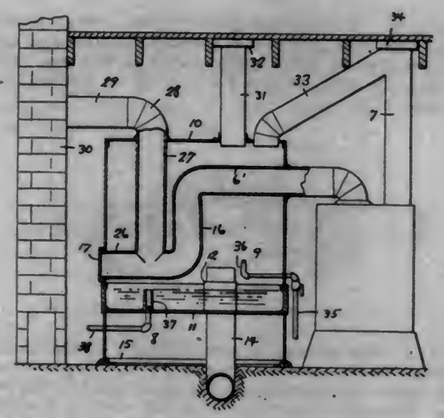
1. An angle bead adapted for embedding in a plastic material at a corner thereof and having an abutment bent therefrom with the sides of said abutment convergingly tapering to form a projecting acute angular apex, said apex of the abutment being adapted for engagement by a surfacing tool and said abutment extending into the plastic

material from one side of the angle bead to a distance equal to the desired thickness of the plastic material, and said abutment having apertures opening through its



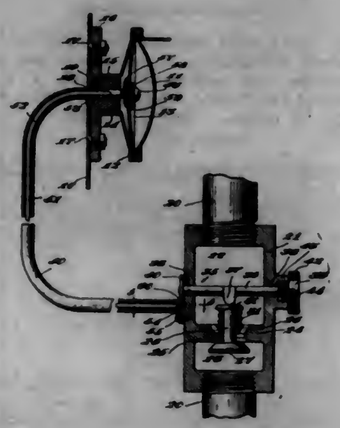
respective sides in spaced relation from its apex, whereby the plastic material is adapted to fill the apertures and the space in back of the convergently tapering abutment.

1,881,806. AIR HEATING AND HUMIDIFYING APPARATUS. CHARLES J. MATSCH, Lake City, Minn. Filed May 18, 1931. Serial No. 538,276. 3 Claims. (Cl. 237—168.)



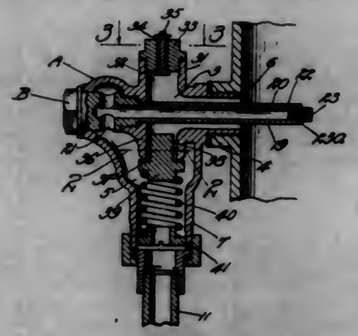
2. In combination with a stack and a furnace, a drum separable from and arranged between the furnace and stack, a pipe extending through the drum and connecting the stack and furnace and consisting of a plurality of angularly arranged sections forming a tortuous passage for the products of combustion, an open top water pan arranged in the drum in proximity to one of said pipe sections, a cold air pipe extending into the drum and having an upwardly directed inner end extending through and terminating above the bottom of said water pan, a water pipe leading into said drum above the water pan, means on the inner end of said water pipe for producing a spray of water, and a pipe extending upwardly from the drum for conveying hot air to a hot air register.

1,881,807. REMOTE HEAT CONTROL MECHANISM. RUFUS H. MAURER, Brookline, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 25, 1927. Serial No. 235,487. 9 Claims. (Cl. 137—161.)



4. A thermostatically controlled valve comprising a cupped bimetallic disk adapted to snap back and forth in response to heat strains, a valve, means tending to keep said valve normally in one position, means for forcing the valve into another position and a Bowden wire control operatively connecting said disk to said last named means, said Bowden wire control being adapted to keep said last named means operative in one position of the disk and being adapted to release and render said means inoperative in another position of the disk.

1,881,808. RELIEF DEVICE. JOSEPH A. MAYNARD, Boston, Mass. Filed Dec. 26, 1931. Serial No. 583,327. 5 Claims. (Cl. 277—61.)



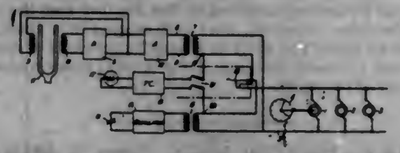
4. A relief device comprising a hollow casing having an exteriorly threaded extension forming an inlet branch and adapted to be secured to a boiler, said casing having an outlet branch at right angles to said extension, said inlet and outlet branches being separated by a partition providing an inlet chamber and an outlet chamber, said casing and partition each having an opening opposite said inlet branch, a one piece removable member insertable axially through said openings and inlet branch and secured in one of said openings, said member having means for closing the other of said openings and having communicating ducts at right angles to each other connecting the inlet end of said removable member with the outlet chamber, a fusible plug closing one of said ducts, said casing having an opening communicating with said inlet chamber, a valve normally closing said last mentioned opening and adapted to open when the pressure in said inlet chamber is less than atmospheric, said partition having an opening providing communication between said inlet and outlet chambers, and a valve normally closing said opening and adapted to open in said outlet chamber when the pressure in said inlet chamber reaches a predetermined amount.

1,881,809. PADLOCK. MAXWELL C. MAXWELL, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed May 4, 1929. Serial No. 360,498. 6 Claims. (Cl. 70—108.)



1. In a padlock, a sheet metal casing having a configuration comprising a series of graduated internal steps, a series of plates carried by said internal steps, and tubes maintained in position by said plates for supporting the shackle and the key controlled mechanism of said padlock.

1,881,810. FREQUENCY CONTROL METHOD AND SYSTEM. WARREN A. MARRISON, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1928, Serial No. 256,783. Renewed June 11, 1930. 6 Claims. (Cl. 172—274.)

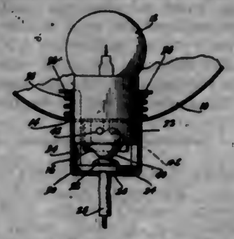


1. In a frequency control circuit, a source of alternating current of fixed frequency, a source of alternating current of adjustable frequency, a beat frequency indicator connected to both sources for indicating when said sources are in frequency and phase agreement, a load circuit, and means for connecting said load circuit at will to either of said sources of current.

3. In a system comprising a source of alternating current whose frequency is held to fixed predetermined adjustments, and a load supplied therefrom, the method of varying the frequency control of said load comprising substituting for said source a second source of waves of substantially the same frequency as said first mentioned source, varying at will the frequency of the second mentioned source, restoring after such variation the frequency of said second source to substantially that of the first source and again shifting the load to said first source from said second source.

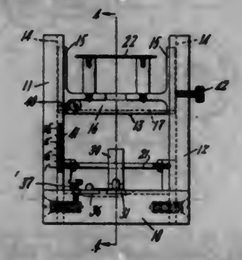
1,881,811. LAMP SOCKET. HOWARD C. MEAD, Anderson, Ind., assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Sept. 17, 1930. Serial No. 482,431. 3 Claims. (Cl. 173—328.)

1. The combination of a support in the form of a sheet of metal having an aperture therein, portions of the metal normally within the confines of the aperture being bent at substantially right angles to the plane of the sheet to form spaced guides, said guides having bayonet slots formed therein, and a U-shaped strap in said aperture, said guides being angularly spaced from the legs of the strap, said strap having outturned ends, and a spring interposed between said support and the outturned ends of said strap and urging the base of said strap



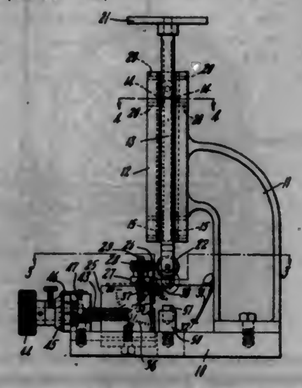
toward said guides, and an electrical contact carried in said base, said strap being adapted to receive a lamp bulb with its pins in said bayonet slots and the contact yieldingly pressed against its base by said spring.

1,881,812. APPARATUS FOR TESTING SHEET MATERIAL. WILLIAM B. MEGLITZ, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 11, 1930. Serial No. 474,890. 3 Claims. (Cl. 265—12.)



1. A device of the class described comprising a platform, a pair of vertical rails rising therefrom, a carriage slidable up and down between said rails, said platform and carriage having a pair of opposing grooves, one over the other, to receive opposite edges of a piece of sheet material to be tested, and an upstanding feeler horizontally slidable on said platform toward and from the plane of said grooves.

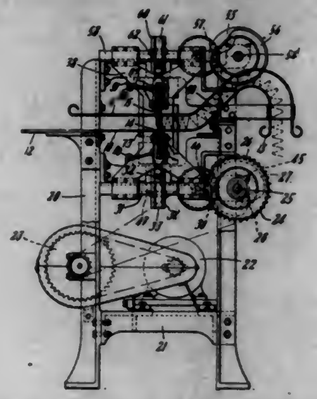
1,881,813. APPARATUS FOR BENDING SHEET MATERIAL. WILLIAM B. MEGLITZ, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 11, 1930. Serial No. 474,891. 5 Claims. (Cl. 73—51.)



5. Apparatus for testing artificial leather and the like, comprising a base, a standard on said base, a vertical guide

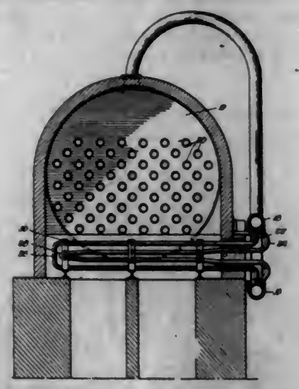
supported by said standard above said base, a plunger vertically movable in said guide, an elongated roll horizontally supported on the lower end of said plunger, a platform to receive weights carried by said plunger, a work-supporting anvil mounted on said base and adjustable toward and from the path of said plunger, means for clamping the work on said anvil, a stop to facilitate positioning of the work on the anvil with a portion projecting into the vertical path of said plunger, and means for indicating the angle of bend of the projecting portion of the work.

1,881,814. SHEET FOLDING MECHANISM. WILLIAM B. MEGLITZ and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 2, 1931. Serial No. 560,772. 7 Claims. (Cl. 270—79.)



1. Mechanism of the class described comprising a pair of blades having overlapping portions, and means for moving said blades alternately to move the leading blade clear of the other blade and to bring it against the rear face of said other blade.

1,881,815. WASTE GAS SUPERHEATER. LEO A. MEHLER, East Chicago, Ind., and ELLSWORTH J. WESTCOTT, Chicago, Ill., assignors to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Oct. 9, 1930. Serial No. 487,475. 1 Claim. (Cl. 122—7.)



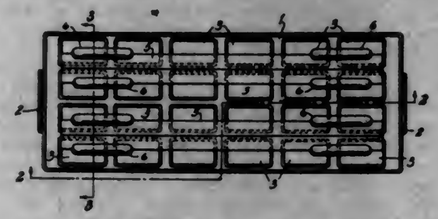
The combination of a waste gas boiler having tubes extending longitudinally therethrough, being adapted to have said tubes blown from the front end, and having an inlet flue at the front end; with a waste gas superheater in said flue comprising headers located at the side of said boiler and pairs of horizontally extending pipes in front of said boiler, the two pipes of each pair being U-shaped and connected in a single radial plane to each header, said headers being sufficiently separated so that the U-shaped pipes may be withdrawn between said headers while retained in their original planes.

1,881,816. GRIPPER OPERATING MECHANISM. JOSEPH MEYER, Jackson Heights, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1930. Serial No. 425,245. 13 Claims. (Cl. 270—78.)



1. In a gripper jaw mechanism for a printing machine, a rotatable member having a jaw, a connecting rod adapted to rotate the member, said connecting rod having one end pivotally connected to the member and the other end pivotally connected to an arm secured to a shaft, and means to rotate the shaft to a position in which a straight line will intersect the axes of the pivotal connections and the axis of the shaft.

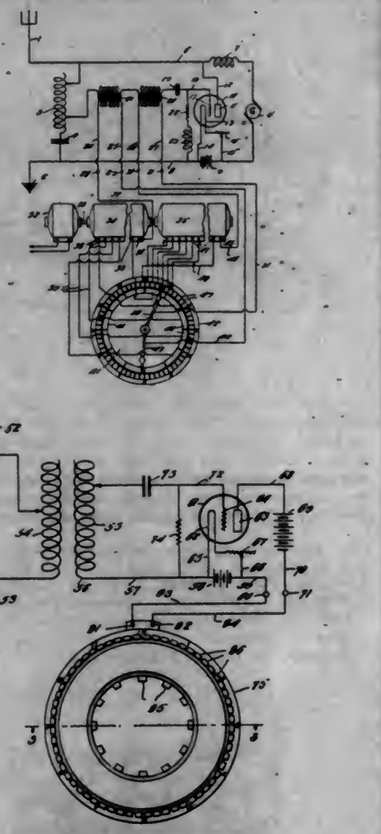
1,881,817. FREEZING MOLD. EDWIN R. MEYER, St. Louis, Mo., assignor to Meyer-Blanke Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 14, 1931. Serial No. 557,029. 2 Claims. (Cl. 107—19.)



1. A freezing mold construction comprising a plurality of pairs of mold compartments, removable rubber panels engaging adjacent faces of the pairs of compartments, the surfaces of said panels in contact with the frozen article having a design therein and a rubber mounting strip to which all of said panels are secured.

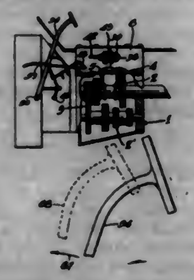
1,881,818. RADIO CLOCK SYSTEM. CLYDE F. MCCANN, San Francisco, Calif. Filed May 29, 1926. Serial No. 112,595. 31 Claims. (Cl. 58—24.)

1. A radio clock system comprising a time controlling instrument having a series of electrical transmitting units, each unit adapted to transmit a wave of a certain frequency, and a reception device comprising a plurality of fixedly arranged receiving units in responsive relation to the transmission units.



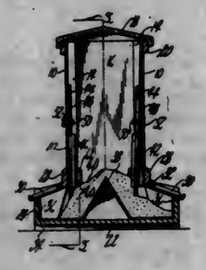
5. A radio clock system comprising, a receiving clock comprising an electro-magnet adapted to be actuated by different electrical frequencies, a plurality of vibrators mounted upon the periphery and the inner circumference of the electro-magnet, and each vibrator tuned to a different frequency to indicate time.

1,881,819. GEAR SHIFTING MECHANISM. JOHN H. MCCARTHY, Chicago, Ill. Filed Mar. 18, 1931. Serial No. 522,355. 3 Claims. (Cl. 74—58.)



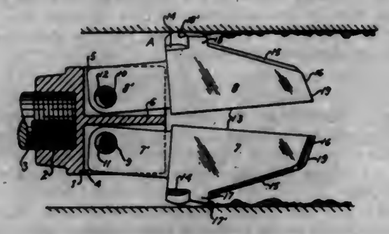
1. In a transmission mechanism, the combination with a shiftable element, of a pair of reciprocatory members, one of said reciprocatory members being connected with the shiftable element, an actuating element, catch means connected with the reciprocatory members for engaging the actuating element, means for moving the catch means into engagement with the actuating element, means operatively associated with the reciprocatory members for moving the same in opposite directions when the actuating element is moved, an actuating arm fixedly connected with the actuating element, an actuating lever, an auxiliary arm pivotally connected with the actuating arm and operatively connected with the actuating lever for moving the actuating arm in a given direction when the lever is moved a certain distance in one direction, counter arms pivotally connected with the lever and the actuating arms, and means for operatively disconnecting the auxiliary arm from the lever whereby continued movement of the lever in the same direction will cause a counter movement of the actuating arm.

1,881,820. HOG FEEDER. GEORGE WILLIAM MCCOLLOUGH and MCKINLEY MCCOLLOUGH, Webster City, Iowa. Filed May 18, 1931. Serial No. 538,034. 5 Claims. (Cl. 119—53.)



1. In a hog feeder having a hopper formed with a feed opening, a gate arranged in a plane parallel with and at the inner side of a wall of the hopper for partially covering said feed opening, an attaching strip of less width than the gate and extending upwardly therefrom a material distance in contact with the central portion of said wall, means for securing said strip to the hopper wall, the means for mounting said strip permitting its lower end to move inwardly away from the plane of the hopper wall, and such movement being amplified toward the lower portion of said gate, whereby the gate may yield materially due to thrust on its outer face, for constituting an agitating means to prevent clogging of feed in the hopper.

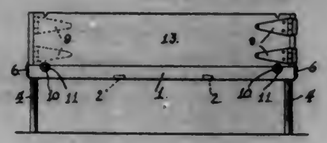
1,881,821. TUBE CLEANER. ROBERT C. MCCRACKEN, St. Louis, Mo., assignor of forty per cent to Charles M. Clarke, St. Louis, Mo. Filed June 1, 1931. Serial No. 541,319. 6 Claims. (Cl. 15—104.14.)



1. A tube cleaner comprising a head, a plurality of members associated with said head, means for pivoting said members at an end of each thereof to said head whereby

the opposite end portions of said members are free to move outwardly in response to centrifugal force generated by rotation of the tube cleaner, and scraping elements associated with said members, said scraping elements being located inwardly a substantial distance from the outer free ends of the pivoted members so as to locate a greater portion of the weight of said pivoted members outwardly beyond the scraping elements.

1,881,822. SHIPPING PLATFORM AND COLLAPSIBLE TRAY FOR HANDLING MATERIAL WITH LIFT TRUCKS. ALVIN S. MCKELLIGON, Berkeley, Calif. Filed Dec. 23, 1931. Serial No. 582,780. 3 Claims. (Cl. 248—41.)



3. In a shipping platform for handling material with lift trucks, having a deck adapted to be supported at an elevation; a plurality of independent tray frames with hinged corners adapting said frames to be collapsed and expanded, and means for locking said hinged corners when the frames are expanded, and holding them against horizontal movement when stacked upon said platform, consisting of tie-rods connecting the frame members at their hinged corners, said rods being removably seated in complemental notches in contiguous edges and having spaced side stops at each end.

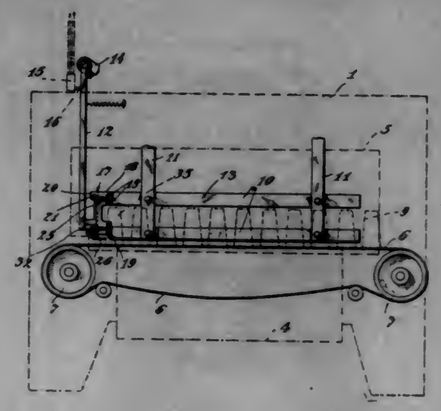
1,881,823. ARTIFICIAL FISH BAIT. AUSTIN V. MCKENZIE, Providence, R. I. Filed Dec. 17, 1931. Serial No. 581,676. 2 Claims. (Cl. 43—46.)



1. An artificial bait comprising a hollow elongated metal body formed in halves with the meeting edges of the halves forming a water tight seal along their length, and a diving lip having a securing surface conforming to the shape of the body and a diving surface at an angle to the securing surface, the body having two coatings, the inner coating having a silvery appearance, and the outer coating having an iridescent appearance.

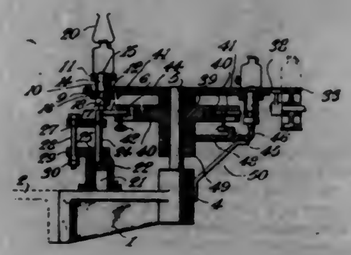
1,881,824. TRIPPING DEVICE. WILLIAM L. MCNAMARA, Connellsville, Pa., assignor to Capstan Glass Company, Connellsville, Pa., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,479. 9 Claims. (Cl. 198—24.)

1. In a trip mechanism, the combination of a transferring device for moving a row of vessels from a conveyor, a valve adapted to effect the operation of said device, a lever for operating said valve, a bracket secured to said vessel transferring device, and a pivoted member adapted to oscillate laterally with respect to the movement of the transferring device, said pivoted member comprising an extending portion at the lower end thereof adapted to be engaged by one of the vessels moving along the conveyor, and



a second extending portion above said first portion adapted to engage said lever, whereby the transferring device is operated to move the vessels from the conveyor.

1,881,825. TRANSFERRING AND FORMING MACHINE. WILLIAM L. MCNAMARA, Connellsville, Pa., assignor to Capstan Glass Company, Connellsville, Pa., a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,649. 16 Claims. (Cl. 49—14.)



5. In a device of the class described, the combination of a table, a plurality of molds for forming the base of glassware placed thereon, a member adapted to raise said molds into operative position, devices for raising said member, a longitudinal plunger adapted to maintain said molds in an elevated position, a spring member for holding said plunger in effective position, and a cam member for moving said plunger out of effective position to facilitate the lowering of said molds.

1,881,826. APPARATUS FOR CARBONIZATION OF COAL. JAMES DORSEY MCQUADE, Moundsville, W. Va., assignor to Coal Carbonization Company, a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,850. 2 Claims. (Cl. 202—118.)

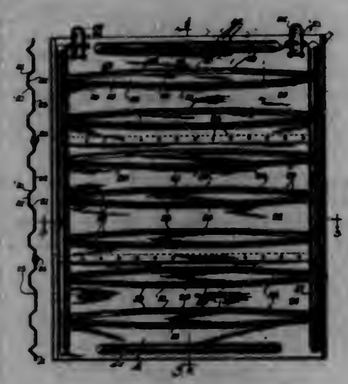
1. The combination of a tubular retort having a discharge opening at one end, an inner tube arranged within the retort extending longitudinally thereof, and rotatable therein and having a discharge opening leading to the

retort at a distance from the discharge end of the retort and having an inlet opening at a distance from its discharge opening, means for supplying material to be treated to the inlet end of the inner tube, means for moving the material so discharged into the inner tube to its dis-



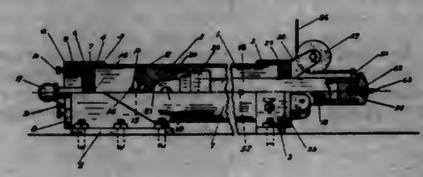
charge end, means for rotating the inner tube intermittingly, means carried by the inner tube for moving the material so discharged into the retort from the discharge opening of the inner tube from the point of discharge to the discharge end of the retort and means for heating the retort.

1,881,827. CAR DOOR. JOHN P. MCWILLIAMS and FRANK DITCHFIELD, Cleveland, Ohio, assignors to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 23, 1928. Serial No. 279,877. 2 Claims. (Cl. 189—46.)



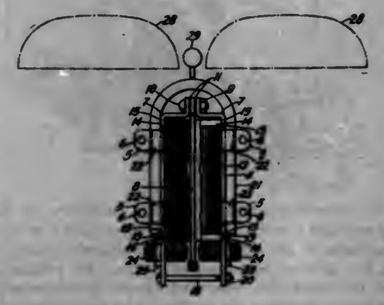
1. As an article of manufacture, a horizontally slidable car door, said door including sheet metal having incorporated therein a pair of vertically extending, outwardly disposed corrugations adjacent the front and rear vertical edges of the door and also a series of transversely extending, outwardly disposed corrugations, each of said transversely extending corrugations being of uniform depth throughout and having an intermediate portion of uniform cross section and end portions each of appreciable length tapering in width from said intermediate portion to the corresponding vertical corrugation with which it merges, whereby the tensile stresses at the junctions of the transverse and vertical corrugations are maintained within practical manufacturing limits and, for a horizontally and vertically corrugated door of desired strength and gauge of sheet metal, the required number of transverse corrugations and amount of material are reduced as compared with a similar door wherein the horizontal corrugations are of uniform cross section from end to end.

1,881,828. CAR PROPELLER FOR TUNNEL KILNS. FLOYD O. MILLAR and WILLIAM C. DENISON, Jr., Columbus, Ohio; said Millar assignor to said Denison. Filed Mar. 3, 1930. Serial No. 432,905. 16 Claims. (Cl. 104—162.)



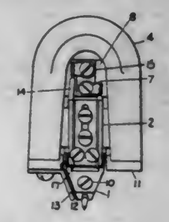
1. A car propeller for kilns comprising a ram of such construction that it may be converted into either a vestibule type or an under-car type of propeller.

1,881,829. ELECTROMAGNETIC SIGNALING DEVICE. DANIEL D. MILLER, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,824. 2 Claims. (Cl. 177—7.)



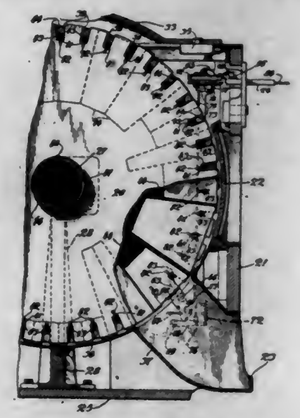
1. An electromagnetic device comprising an operating coil, an armature, a U-shaped permanent magnet and a two element support provided with integral clamping means for securing said permanent magnet in contiguous relation with each element of said support, with apertures in each element thereof which accommodate the spoolheads of said coil and maintain said coil in fixed relation with said permanent magnet and with flanges between which said armature is supported as a cantilever beam within said coil, said support constituting a magnetic path for the flux set up by said device and carrying adjustable pole pieces in operative association with the free end of said armature.

1,881,830. ELECTRICAL SOUND REPRODUCTION OF GRAMOPHONE AND LIKE RECORDS. REGINALD JAMES MILLER, London, England, assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Jan. 23, 1928, Serial No. 248,953, and in Great Britain Jan. 24, 1927. 12 Claims. (Cl. 179—100.4.)



1. In an electrical phonograph reproducer a variable inductive energy translator, a movable element comprised in said translator, a condenser comprised partly by said movable element, and means for transmitting mechanical vibrations to said movable element.

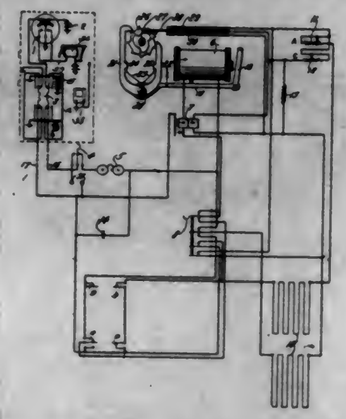
1,881,831. COMMODITY VENDING MACHINE. FRED L. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 20, 1930. Serial No. 421,880. 14 Claims. (Cl. 194—93.)



12. In a coin-controlled vending machine, a movable carrier equipped with commodity containers which vary in dimension in the direction of movement of the carrier, means for moving said carrier, means for releasing said carrier to cause the same to successively present said containers to a discharge station, and means for stopping the movement of the carrier so that in each instance the movement shall be proportional to the size of the container next to be discharged.

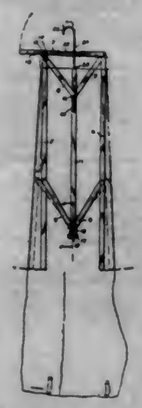
1,881,832. ALARM SYSTEM. MARTIN A. MIRANDA, Middle Village, N. Y., assignor to Holmes Electric Protective Company, New York, N. Y., a Corporation of New York. Filed July 30, 1925. Serial No. 46,942. 5 Claims. (Cl. 177—314.)

2. An alarm system comprising a central station, a substation, and a normally closed circuit connecting said stations, a current measuring device, protective contacts and networks in said normally closed circuit, said circuit measuring device and alarm devices operated thereby located at said central station, a low voltage source of current normally included in said normally closed circuit, a high voltage source of current and means for connecting said high voltage source into said normally closed circuit in place of said low voltage source, a magnet included in said circuit, means operated by said magnet to change the resistance of said circuit whenever the current in said circuit is increased by including the high



voltage source in the circuit, a sensitive relay means including a coil included in said circuit, said relay means including contacts which are closed when the high voltage source is connected to said circuit and circuit means associated with said contacts and network to insure the operation of said magnet by short circuiting from said system said protective contacts and network when the contacts are closed.

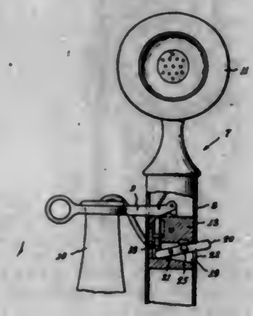
1,881,833. PANTS-LEG STRETCHER. MARION F. MITAS, Oakland, Calif. Filed May 31, 1930. Serial No. 457,732. 2 Claims. (Cl. 223—19.)



1. A pants-leg stretcher of the character described comprising a pair of spaced flat stretcher bars for coplanar disposal within a pants-leg for engagement within the creases thereof, a strut pivotally connected to the end of one bar, ratchet teeth formed along one edge of the other end of the strut, a pawl extending transversely from the end of the other bar adjacent said ratchet teeth for engagement therewith whereby the bars may be adjustably spaced through the medium of said strut and pawl, angularly related links pivoted to said bar ends and to each other, angularly related toggle links pivoted to said bars at corresponding points thereof and spaced

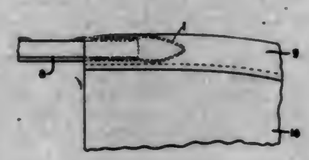
from said bar ends, a pivot pin connecting said toggle links, a pull rod extending from said pivot pin in the plane of said bars for displacing said pin to effect angular adjustment of said bars to an operative engagement with the pants-leg, and means coactive between said pull rod and said strut to releasably secure the rod for retaining the toggle links in fully operative position.

1,881,834. TRANSMITTER CUT OUT SWITCH. JOHN F. MITCHELL, New York, N. Y. Filed Mar. 24, 1931. Serial No. 524,956. 2 Claims. (Cl. 179—164.)



1. A cut out switch for the purpose indicated comprising, in combination with a desk telephone and the receiver hook therefor having means for elevating it when the receiver is removed, a pair of members disposed in the telephone standard below the receiver hook and carrying contacts included in the transmitter circuit, a lever disposed between said members and having a pivotal mounting in the same and a contact bridging the first said contacts in one position of the lever, the latter having a finger actuating extremity protruding from the standard to shift its contact out of bridging relation with the first said contacts, and operative connections between the receiver hook and said lever for bringing the latter into contact bridging relation when the receiver is disposed on its hook.

1,881,835. CURTAIN ROD THREADING DEVICE. MAXIM MITCHELL, Wilton, N. H., assignor to Geoffrey D. Baker, Wilton, N. H. Filed Dec. 30, 1929, Serial No. 417,411. Renewed Oct. 16, 1931. 4 Claims. (Cl. 223—38.)



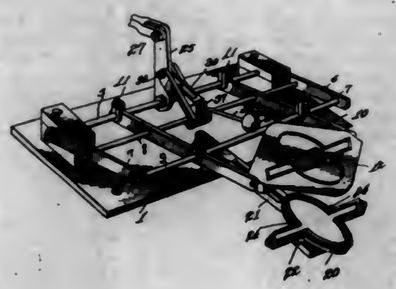
1. A curtain rod threading device comprising a one piece wire loop having its closed end pointed to readily enter the hem of a curtain and diverging rearwardly to a point where its width is equal to or exceeds the greatest lateral dimension of the curtain rod, and is bent inwardly at this point to form a stop shoulder, the two free ends of the loop extending rearwardly from said shoulder to form an expanding tongue to be received by the curtain rod substantially as described.

1,881,836. CLINCH-ON NUT. ROBERT MITCHELL, Detroit, Mich. Filed Feb. 15, 1926. Serial No. 88,314. 8 Claims. (Cl. 85—32.)



2. A device for securing a member having an opening therein, to a sheet metal member having an opening of greater area than the corresponding opening in the other member; said device comprising a sheet metal strip having an opening intermediate its ends with said strip bent to form a spring loop at each side of said opening and with the free end portions of said loops outturned and extended well beyond the margin of said opening of large area in the sheet metal member when inserted therethrough, said end portions being of a length to permit movment of the device relative to said large opening in the sheet metal member without becoming disengaged therefrom, and a securing member having a hardened screw-thread for insertion through the openings in said members into engagement with the opening in said device with its hardened thread cutting into the metal surrounding said opening.

1,881,837. STENCILING MACHINE. DE WITT TALMADGE MOATS, Columbus, Ohio, assignor to The D. L. Auld Company, Columbus, Ohio. Filed Apr. 12, 1930. Serial No. 443,848. 5 Claims. (Cl. 101—126.)

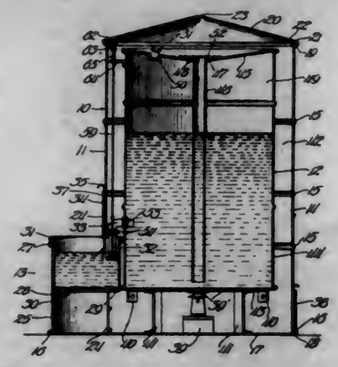


1. The combination with a rest for supporting a plate having recesses therein for receiving enamel, of a stencil, means for swinging the stencil for engagement on the plate for placing the slots thereof in registration with the recesses of the plate to permit passage of enamel through the slots of the stencil into the recesses of the plate, means for swinging the frame upwardly, and means operable for swinging the stencil away from the plate to subject the frame to vibration previous to disengagement of the stencil from the plate.

1,881,838. HOG WATERING DEVICE. EDWARD C. MOHR, Preston, Iowa. Filed July 18, 1929. Serial No. 379,082. 9 Claims. (Cl. 119—73.)

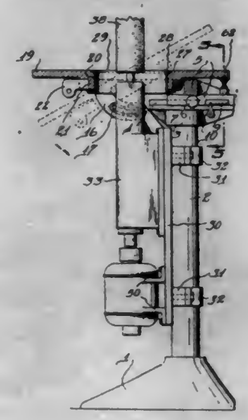
1. In a hog watering device, the combination of a substantially cylindrical shell with a substantially cylindrical casing member carried by the side of said shell, said

shell and casing having a communicating opening, a substantially cylindrical drinking pan, slidably mounted in said casing and supported thereby, said opening being



extended in said shell above said pan to facilitate its removal, and a slidable closure for the upper part of said opening.

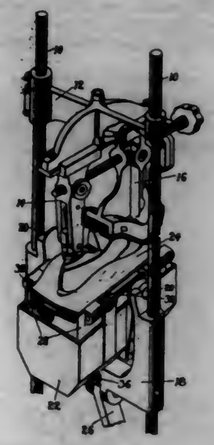
1,881,839. OSCILLATING SANDER. JOHN P. MONSON, Ann Arbor, Mich. Filed July 7, 1930. Serial No. 466,156. 10 Claims. (Cl. 51—34.)



1. The combination with a sanding drum, of means for rotating and oscillating said drum, and a rotatable work supporting table mounted upon a tiltable and slidable support in a manner whereby said sanding drum extends through an opening in said table.

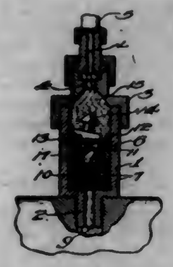
1,881,840. SHOE PRESSING MACHINE. FRED L. MOONEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,987. 28 Claims. (Cl. 12—33.)

1. In a machine for applying pressure to soles on the bottoms of shoes, the combination with means for supporting a shoe against pressure on its bottom face, of sole-pressing means constructed to apply its pressure at one time to substantially all the portions of the sole that are treated by said means and comprising parts arranged to act respectively on opposite side portions of the shoe bottom to apply their pressure in directions heightwise of the shoe over the greater portion of the width of the sole and mounted to tip relatively to each other in the



sole-pressing operation in such directions as to effect an increase of pressure on the shoe bottom in the vicinity of the opposite side edges of the sole.

1,881,841. MEASURING UNIT FOR LUBRICATING SYSTEMS. GEORGE L. MOORE, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 22, 1925. Serial No. 64,272. 7 Claims. (Cl. 184—7.)

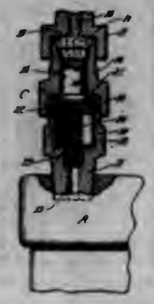


1. A metering device for a centralized lubricating system, comprising a chamber having an inlet at the top and an outlet at the bottom, said inlet adapted for connection to a conduit forming part of said system, a member, having an opening therethrough, fitting slidably into said chamber for up and down movements, means maintaining said opening closed while said member is moving downwardly, additional means for uncovering said opening when said member starts on its upward movement, and separate means tending constantly to raise said member.

1,881,842. MEASURING UNIT FOR LUBRICATING SYSTEMS. GEORGE L. MOORE, Chicago, Ill., assignor to Alemite Corporation, a Corporation of Delaware. Filed Oct. 8, 1925. Serial No. 61,268. 17 Claims. (Cl. 184—7.)

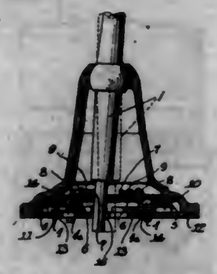
1. A measuring and discharge unit comprising a member containing two aligned cylindrical chambers arranged end to end one above the other, the upper chamber being smaller in diameter than the lower, there being an inlet at the top of the upper chamber and an outlet at the bottom of the

lower chamber, a plunger slidable in the upper chamber and having a head arranged in and smaller in diameter than the lower chamber, a downwardly-facing cup packing on the head to prevent liquid from flowing up past the same and permit a down flow of such liquid, there being a port so located in the upper end of the plunger as to open communication between the two chambers only after



the plunger has descended far enough, partially to compress the cup packing against the bottom of the lower chamber, the bottom wall of the lower chamber being in the form of a frustum of a cone surrounding the outlet and projecting up into the cup packing when the plunger is in or near its lowermost position, and a spring tending constantly to force said plunger up.

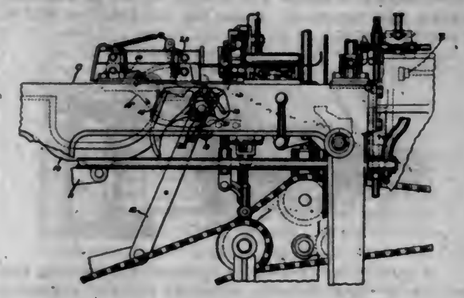
1,881,843. ANTIRATTLE SPRING ASSEMBLY. HERBERT MORLEY, JOHN C. BUCHANAN, and DAVID T. SICKLESTEEL, Detroit, Mich., assignors to Detroit Gear & Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 29, 1929. Serial No. 410,294. 2 Claims. (Cl. 74—89.)



1. A gear shifting mechanism comprising a control lever, a stationary plate having a guide slot for receiving the operated end of said lever, a second plate slidably associated with said stationary plate and responsive to the movement of said lever through said slot, a bracket carried by said second plate having an upturned apertured end, a plunger spaced from said plates extending through said aperture and movable longitudinally therein, the axis of said plunger being disposed substantially parallel to the surfaces of said plates, a spring for maintaining an end of said plunger in engagement with said lever, said lever when operated being forced against an edge of the guide slot and held against vibration.

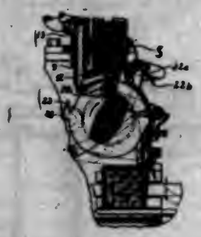
1,881,844. ARTICLE STACKING MECHANISM. HOWARD A. MORRIS, Toledo, Ohio, assignor to The Automat Molding & Folding Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 23, 1929. Serial No. 401,892. 11 Claims. (Cl. 93—2.)

1. In a machine for packing articles of substantially the same size, means to form a row of articles, means to elevate a predetermined number of the foremost articles in the row a distance substantially equal to the thickness



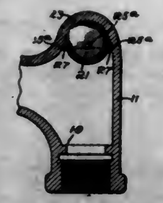
thereof, and means to impart relative movement between the remaining articles and those elevated to form a stack.

1,881,845. MACHINE FOR INSERTING SLIPS INTO PACKAGES. HOWARD A. MORRIS, Toledo, Ohio, assignor to The Automat Molding & Folding Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 18, 1930. Serial No. 475,953. 9 Claims. (Cl. 226—2.)



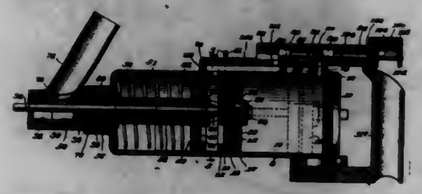
1. In a machine of the class described, a guide along which packaged articles are advanced, such articles being completely enclosed within a carton, a slip container, mechanism for removing a predetermined number of slips from said container, and additional mechanism for inserting such slip or slips within a packaged article, said additional mechanism including means for opening a portion of said carton to receive one or more slips.

1,881,846. GAS VALVE. LYNN H. MORSE and LEWIS A. LOCKHART, Natick, Mass., assignors to Ernest L. Chase, Trustee, Dorchester, Mass. Filed May 8, 1931. Serial No. 535,878. 6 Claims. (Cl. 137—162.)



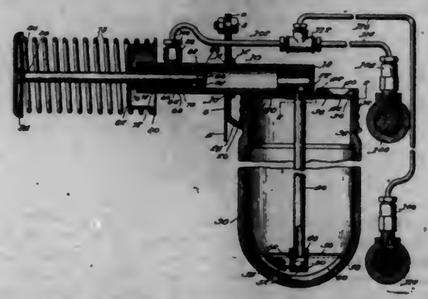
3. In a valve of the type wherein a ball valve is supported by fusible material laterally of a fluid passage for release under excessive heat to a cooperating seat in the passage, a part receiving the ball having an upwardly facing annular shoulder of greater diameter than the ball and in a plane below the center thereof and a circular body of fusible metal having its peripheral portion seated on said shoulder and its inner portion extending inward past the diameter of the ball and providing an underriding support therefor.

1,881,847. PNEUMATIC LUBRICANT COMPRESSOR. NORMAND W. MORSE, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,515. 13 Claims. (Cl. 221—47.3.)



1. A pneumatically-operated compressor comprising high and low pressure plungers connected in axial alignment, pistons secured thereto, intercommunicating cylinders for said plungers, a cylinder for said pistons, and means for alternately admitting an operating fluid between said pistons and at one end of said piston cylinder thereby first to cause operation of said plungers in opposite directions, and then reverse movement of one of said plungers.

1,881,848. LUBRICATING APPARATUS. NORMAND W. MORSE, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,513. 10 Claims. (Cl. 184—7.)



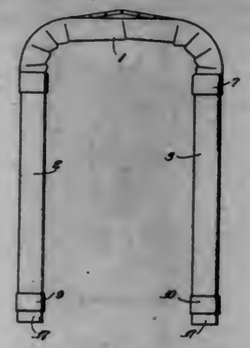
1. A combination pump and reservoir installation for automotive chassis lubricating systems, comprising a cylinder, a flanged mounting welded thereto, a fitting at the forward end of said cylinder, a receptacle cover and support secured to said fitting and welded to said mounting, a receptacle secured to said cover and depending therefrom, a head at the forward end of said cylinder, a piston in said cylinder, a rod secured to said piston and guided in said head, an outlet conduit connected to said head, and a spring to hold said rod and piston adjacent said head.

1,881,849. PISTON RING. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 27, 1930. Serial No. 505,139. 8 Claims. (Cl. 74—109.)



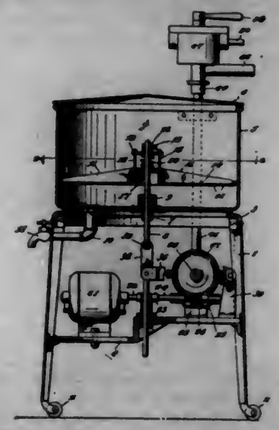
1. A piston ring formed of two annular members shiftable about a common axis relatively to each other and each provided with a plurality of spaced lugs, the lugs of one member projecting toward and contacting the adjacent face of the opposite member intermediate the lugs of the other member.

1,881,850. CAR VESTIBULE DIAPHRAGM. HARRY U. MORTON, Chicago, Ill., assignor to Morton Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 9, 1930. Serial No. 450,902. 8 Claims. (Cl. 105—18.)



7. In a railway car vestibule diaphragm of the accordion type, vertically extending legs made of heavy fabric, and feet of sheet material attached to the lower ends of the legs as downward continuations of the latter, said feet being more flexible than the legs, whereby to yield readily to deformation and thereby prevent transmission of the major deforming stresses to the legs.

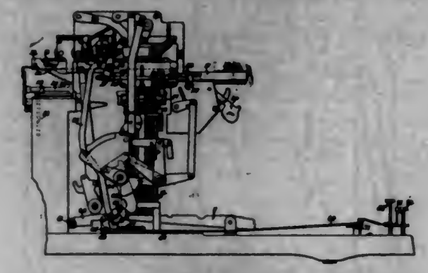
1,881,851. WASHING MACHINE. OLIVER J. MOUSSETTE, Sr., Richmond Hill, N. Y. Filed Aug. 17, 1931. Serial No. 557,616. 2 Claims. (Cl. 68—19.)



1. A washing machine comprising a tank, a dolly shaft mounted therein, means for vertically reciprocating the dolly shaft, a head secured on the shaft, a plunger fitted slidably around the shaft, suspending rods secured to the plunger and fitted slidably through the head, and an expansion spring disposed about the shaft between the head and the plunger and normally holding the plunger in its relatively lowest position.

1,881,852. CALCULATING MACHINE. FREDERICK OTTO MUELLER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed June 13, 1928. Serial No. 284,919. 11 Claims. (Cl. 235—60.)

1. The combination in a machine of the class described having a counter and a total taking means including manipulative devices adapted to condition the machine to take a total, of a locking means conditioned automatically by the counter when a negative total occurs therein for locking the manipulative devices against operation, means for releasing said locking means, and a signal device normally hidden by said releasing means and normally preventing operation thereof, said locking means having connections to said signal device which operate it to release the releasing means and display the signal when the locking means is operated to lock the manipulative devices.

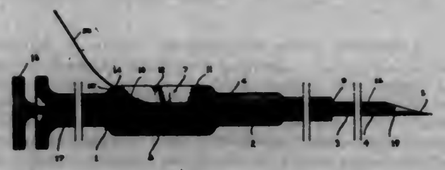


2. The combination in a machine of the class described having a counter and a total-taking means including a balance key adapted to be depressed to condition the machine to take a total, of a locking means conditioned automatically by the counter when a negative total occurs therein for locking the balance key against depression, a depressible release key for releasing said locking means, and a signal device normally hidden beneath said release key and acting to prevent depression of said key, said locking means being connected to said signal device to move it to a visible position and to a position to release the release key when the locking means is operated to lock the balance key.

1,881,853. PROCESS FOR THE PRODUCTION OF ALDOL. MARTIN MUELLER-CUNRADI and KURT PIEROH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 9, 1928, Serial No. 284,270, and in Germany June 27, 1927. 6 Claims. (Cl. 260—140.)

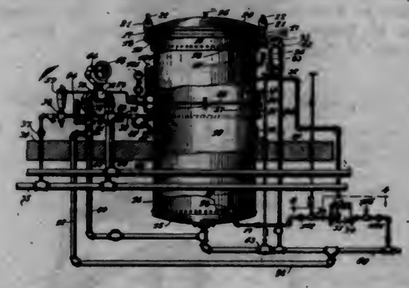
1. A process for the production of aldol from acetaldehyde which comprises continuously passing a mixture comprising acetaldehyde and a condensing agent through a cooled reaction chamber.

1,881,854. INSTRUMENT FOR THE IMPLANTATION OF RADON SEEDS. JOSEPH MUIR, New York, N. Y., assignor to The Radium Emanation Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,352. 2 Claims. (Cl. 128—217.)



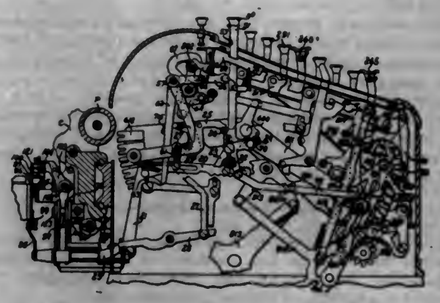
1. An instrument for the implantation in tissue of radon seeds provided with a removal or withdrawal member comprising a tubular receiving member provided at one of its ends with a needle point and having intermediate its ends a lateral seed opening leading into said tubular member, a recess in the end wall of said lateral seed opening adapted to hold and guide the removal member of the seed during the loading step, and an obturator movable through the passage of the tubular member for discharging seeds therefrom, said obturator having a lower body portion of a diameter substantially smaller than the internal diameter of the bore of the tubular receiving member to allow sufficient room for the removal member of the seed to slide along the bore, and an enlarged upper body portion extending from the upper end wall of the lateral seed opening to the proximal end of the tubular bore, and tightly fitting in the bore to provide sufficient frictional resistance to prevent the obturator from sliding along the tubular member on inversion of the instrument.

1,881,855. METHOD FOR PRESERVING. GEORGE W. MULLEN, Flushing, Long Island, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed May 12, 1926, Serial No. 108,497. Divided and this application filed Nov. 5, 1927. Serial No. 231,196. 16 Claims. (Cl. 99—8.)



2. The method of preserving food, which comprises packing food in a container, substantially removing the air from the container and sealing it, subjecting the sealed container to sterilizing heat in a retort by bringing a heating fluid into contact with the container, and entrapping a predetermined quantity of air in said retort and maintaining the quantity of air substantially constant to permit the air pressure within the retort to increase as the temperature increases, thereby to provide an external fluid pressure upon the container that is in excess of the pressure within the container at all temperatures during the sterilizing operation, cooling the containers and maintaining during the cooling operation of an external pressure greater than the internal pressure of the containers.

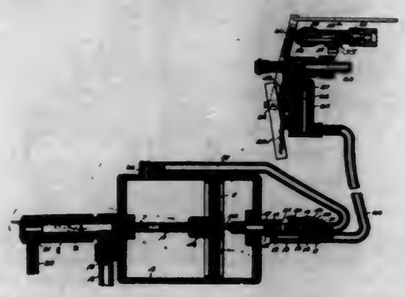
1,881,856. ACCOUNTING MACHINE. ROBERT L. MULLER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 17, 1928. Serial No. 312,967. 6 Claims. (Cl. 235—60.)



3. The combination in an accounting machine adapted to perform "stock record" posting having banks of amount keys, latching mechanism therefor, releasing means for the

latching mechanism, a counter having a transfer mechanism, a non-add mechanism for the counter, a printing mechanism, and a paper carriage with connections for conditioning the printing mechanism to print in a predetermined manner in certain columnar positions of the carriage; of means for readily converting the machine into one capable of performing "commercial" posting comprising a key and connections to said releasing means, said transfer mechanism, said non-add mechanism and said printing mechanism, such that, when said key is depressed, the non-add mechanism is disabled, the amount key releasing means and the transfer mechanism are disabled in certain banks of the machine, and the printing mechanism is conditioned to print in a different manner than normal in predetermined columnar positions of the carriage.

1,881,857. LUBRICATING APPARATUS. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1926. Serial No. 80,245. 4 Claims. (Cl. 184—7.)



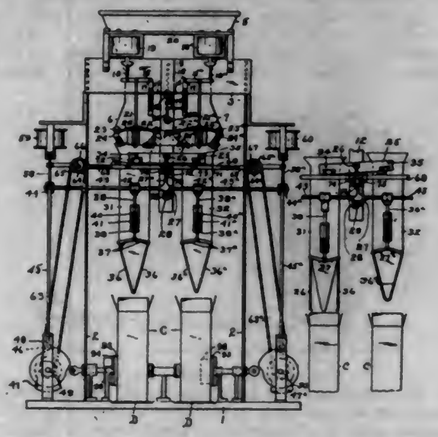
1. A central lubricating system comprising, in combination, a plurality of lubricant supply cups having means therein to prevent direct passage of lubricant therethrough, a suction operated lubricant pump for forcing lubricant through a pipe system to said cups from any suitable lubricant supply, a conduit connecting said pump with suitable suction means, a valve in said conduit normally closed to prevent operation of said pump, means for opening said valve and lubricant operated means for automatically closing said valve when the lubricant in said pipe system reaches a predetermined pressure.

1,881,858. PROCESS FOR MAKING SODIUM RESINATE. ROBERT C. MURRAY, St. Paul, Minn., assignor to Economics Laboratory, Inc., St. Paul, Minn., a Corporation of Delaware. Filed Aug. 3, 1929. Serial No. 383,426. 1 Claim. (Cl. 87—5.)

The method of producing a dry detergent containing sodium resinate which comprises melting a quantity of rosin, of adding to said melted rosin an amount of caustic alkali less than that necessary to completely neutralize the rosin, of thereafter adding to the mixture a quantity of dry sodium phosphate crystals slightly in excess of the amount necessary to complete the saponification of said rosin, and of stirring the mass during the addition of said alkali and said dry sodium phosphate.

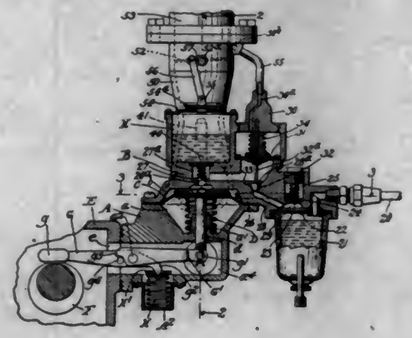
1,881,859. PACKAGING MACHINE. HARVEY MULLENDORE, Fort Wayne, Ind., assignor to Perfection Biscuit Company, Fort Wayne, Ind. Filed Sept. 16, 1929. Serial No. 392,800. 6 Claims. (Cl. 249—18.)

1. In a packaging machine the combination of a rocking member, measuring receptacles supported on the opposite ends of the rocking member and adapted to rock said member, means to feed materials to be packed in weighed quantities to the receptacles alternately, means to support containers beneath the receptacles, means to cause the contents of the receptacles to discharge alternately into



the containers and electrically controlled means responsive to the rocking movement of the rocking member to actuate the feed means and the discharge means.

1,881,860. FUEL PUMP. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 24, 1930. Serial No. 423,013. 13 Claims. (Cl. 123—139.)

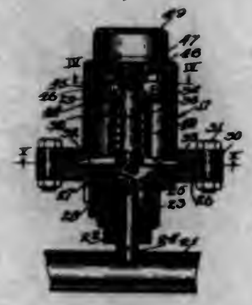


1. A pumping device for supplying fuel to an internal combustion engine comprising a pumping chamber having fuel inflow and outflow connections valve-controlled for flow from a fuel source toward the engine, intake and discharge valves seating against reverse flow, a pumping element reciprocably arranged in said pumping chamber; engine-actuated means for giving the pumping member its intake stroke; resilient means for giving it its feeding stroke; a conduit leading from a point in the discharge line beyond the discharge valve back to a point in the fuel supply line antecedent to the intake valve, and means for regulating the flow through said conduit, the regulating means consisting of a valve with means holding it normally seated, and means for opening it connected for operation by pressure derived from the intake of the engine served; whereby the return flow of fuel, reducing the fuel supply delivered to the engine, is varied in accordance with the variation of said engine pressure.

1,881,861. PRODUCTION OF HIGHLY CONCENTRATED PARAFFIN WAX. MARTIN MUELLER-CUNRADI, Ludwigshafen-on-the-Rhine, and BERTHOLD OTTENS, Neuroessen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 19, 1929, Serial No. 379,566, and in Germany Sept. 5, 1928. 7 Claims. (Cl. 196—21.)

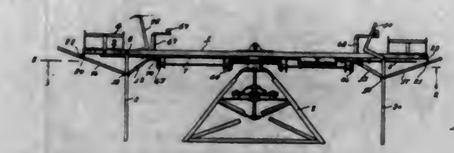
6. A process for the production of highly concentrated paraffin wax which comprises acting on hard crude paraffin wax with water containing a wetting agent selected from the class consisting of aromatic sulfonic acids and saponified oxidation products of paraffin wax.

1,881,862. FLOW AND PRESSURE INDICATING MEANS. HARRY M. NACKY, Chicago, Ill. Filed Jan. 2, 1929. Serial No. 329,909. 1 Claim. (Cl. 200—83.)



In a flow signal device, a casing having an open ended passage therein and connectable with means containing a fluid under pressure whereby said fluid may enter said passage, a diaphragm blocking said passage and responsive to pressure changes in said fluid, the walls of said casing extending inwardly farther on one side of said diaphragm than on the opposite side thereof, a nozzle in said passage extending into said casing and having a passage therethrough varying in size, said nozzle establishing the connection between said casing and fluid containing means and and directing the fluid from said means firstly against the central portion of said diaphragm, spaced contacts associated with said casing, and means responsive to movements of said diaphragm for opening and closing a circuit through said contacts.

1,881,863. AMUSEMENT DEVICE. JOHN S. NAIRN, Detroit, Mich. Filed June 18, 1930. Serial No. 461,887. 7 Claims. (Cl. 272—30.)



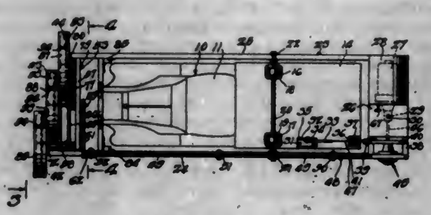
1. An amusement device comprising in combination of a support, a pulley and rotatable beam pivotally supported thereby, a shaft projecting through the said beam and pulley which shaft is arranged to be optionally keyed to the said beam and to rotatably engage the said pulley, a pair of elliptical gears rotatably supported by the said support, a pinion on the end of the said shaft arranged to mesh with said elliptical gears, and manually operable means operatively connected to the pulley and supported by the said beam whereby the manually operable means can be operated to effect an ocean wave movement on the part of the beam when the shaft is keyed to the beam and to effect a simple rotary movement on the part of the beam when the shaft is not keyed to the said beam.

1,881,864. HANDLE SECURING MEANS FOR BASKETS AND THE LIKE. WALTER H. NASH, Arlington, Calif. Filed May 22, 1931. Serial No. 539,243. 10 Claims. (Cl. 217—125.)



1. In a means of the class described, the combination with a receptacle and a handle, of a leaf spring secured with respect to the receptacle and provided at its opposite ends with holes adapted to be aligned when the spring is bowed for receiving the end of the handle.

1,881,865. ROTARY SNOWPLOW. THOMAS J. NEAL, Joliet, Ill. Filed Mar. 24, 1931. Serial No. 524,951. 2 Claims. (Cl. 37—43.)



1. In rotary snow plows, a plurality of rotatable blowers arranged in offset, parallel and overlapping relation with respect to each other, a deflector plate extending over and above each blower and the top portions of said plates being in the same horizontal plane, and a wing plate hingedly connected to each of said deflector plates and adjustable in a vertical arc so as to control the angle at which the snow will leave the deflector plates when driven thereagainst by said blowers.

1,881,866. BOLT LOCK. CHARLES H. NEHLS, North Chicago, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Feb. 16, 1931. Serial No. 516,008. 3 Claims. (Cl. 70—90.)

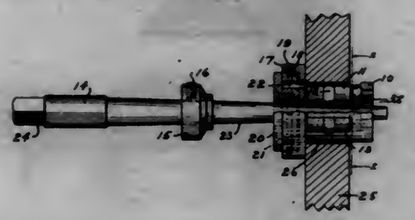
1. A lock structure for association with a bolt having a head, said structure comprising a body having a passageway therethrough for receiving the shank of a bolt and the outer face of said body forming an abutment for a head on said shank, said body having an annular pocket concentric with and surrounding said passageway, a cap

fitting in said annular pocket for enclosing the head of the bolt, said cap having a circumferential locking channel located within said pocket when said cap is applied therein,



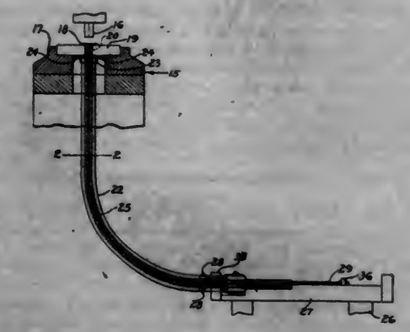
a locking cylinder supported by said body and a locking bolt extending from said lock cylinder into said pocket and said locking channel to lock said cap against removal.

1,881,867. METHOD OF ATTACHING ANNULAR ELEMENTS TO SUPPORTING STRUCTURES. ALFRED M. NELSON, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 22, 1930. Serial No. 483,740. 3 Claims. (Cl. 29—157.5.)



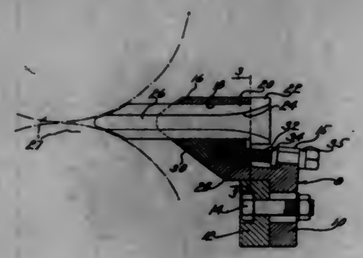
1. The method of attaching a tube to a sheet, which comprises forming in the sheet a hole having a diameter approximating that of the exterior of the tube, enlarging the diameter of part of the hole to form a groove and compressing the bounding wall of the hole and groove, inserting the tube end within the hole, and expanding the tube end into intimate contact with said compressed wall of the hole and groove.

1,881,868. MAGAZINING DEVICE. CHARLES EDWIN NELSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 325,113. 1 Claim. (Cl. 164—19.)



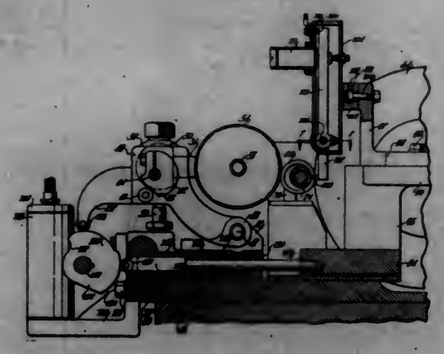
A device for stacking recessed and apertured parts successively formed by a machine, comprising a chute for receiving the parts from the machine having its receiving end extending vertically and its discharge end extending horizontally, a horizontally disposed supporting member positioned in general alignment with the discharge end of the chute and having its upper surface receivable in the recesses of the parts when passing from the chute for maintaining the parts in stacked formation, and a headed stringing member supported parallel to said upper surface by its head and by said parts.

1,881,869. ROLLING MILL GUIDE. IRA S. NELSON, Chicago, Ill., assignor to Western Electric Company Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1930. Serial No. 501,212. 4 Claims. (Cl. 80—51.)



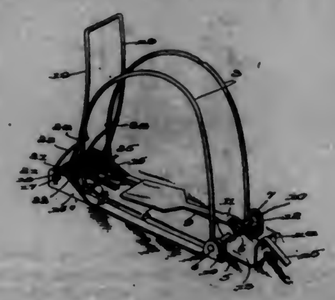
1. A rolling mill guide comprising a frame, a pair of channeled guide plates positioned within and mounted for vertical movement upon said frame and cooperating to form a guide channel, said frame being provided with an inclined surface spaced from the guide plates, a wedge member interposed between the guide plates and said surface to retain the guide plates in operative position, and means for moving the wedge member longitudinally of the guide plates and permit a downward movement thereof by the action of gravity to release the guide plates.

1,881,870. GRINDING MACHINE. LESTER F. NENNINGER, Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 25, 1932. Serial No. 588,627. 14 Claims. (Cl. 51—103.)



1. In a grinding machine of the class described the combination of a bed, a work support on the bed, a grinding wheel on the bed, means for effecting a relative feed between the grinding wheel and work, a sizing device for engagement with the wheel for automatically stopping the relative feed between the work and wheel when the work is reduced to the desired size, and means for automatically adjusting the position of the sizing device relative to the work and wheel in accordance with the size of the work being ground.

1,881,871. ANIMAL TRAP. EDGAR A. NERBY, Wauwatosa, Wis. Filed Sept. 1, 1928. Serial No. 303,485. 10 Claims. (Cl. 43—85.)

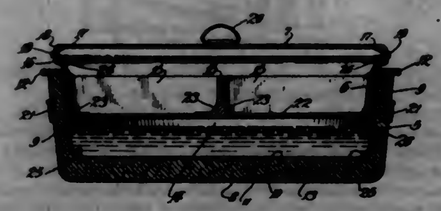


1. A trap including a base, a pair of fixed jaws mounted thereon, a pair of cooperating jaws pivotally mounted on the base, a resilient means terminating in forwardly extending hooks extending in position to hook around and engage the corresponding jaws of both pairs, and a trigger for the jaws.

1,881,872. METHOD OF PRODUCING ALUMINUM AND ALUMINUM ALLOYS. WILHELM NEUMANN, Lautawerk, Germany. Filed Feb. 20, 1930, Serial No. 430,144, and in Germany Mar. 22, 1929. 3 Claims. (Cl. 75—22.15.)

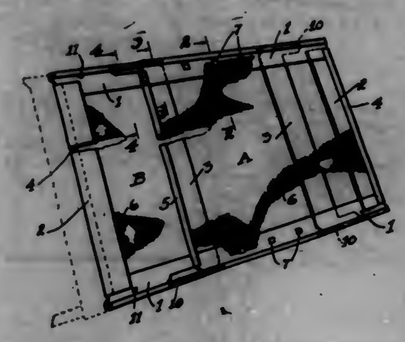
1. The method of producing aluminum or its alloys from substances containing aluminum oxide consisting in subjecting said substances to a reducing smelting operation in presence of silicon, which by formation of an aluminum-silicon-alloy lowers the vapor-pressure of the aluminum, separating mechanically from this aluminum silicon alloy a rich aluminum alloy, which contains not less than about 70% Al and a poor aluminum alloy, recovering from this rich alloy pure aluminum by distillation in a vacuum, returning the residue from the distillation to the separating stage and producing from the poor aluminum alloy silicon.

1,881,873. FOOD SERVER. LOUISE Z. NEWCOMB, Walworth, Wis., assignor of one-half to Herman U. Krebser, Elgin, Ill. Filed Dec. 13, 1929. Serial No. 413,721. 2 Claims. (Cl. 65—15.)



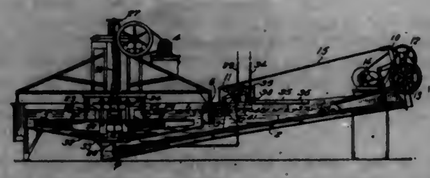
1. A food server comprising a double wall insulated receptacle adapted to contain a thermal agent, said receptacle having an outwardly and upwardly flaring side wall portion, a food container having a correspondingly tapering side wall portion whereby said food container may be detachably inserted into said receptacle and supported therein by engagement between the faces of the adjacent wall portions of the receptacle and container, a circumferentially tapered marginal portion on the upper end of said container, and a cover member having a correspondingly flared marginal portion whereby said cover may be supported upon said container in closed position by means of the engagement between the faces of the adjacent marginal portions.

1,881,874. WINDOW SCREEN. HAROLD R. NEWELL and WILFOAD L. MILLAR, Lambton, Ontario, Canada, assignors to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 21, 1931, Serial No. 570,165, and in Canada Mar. 19, 1931. 5 Claims. (Cl. 156—38.)



1. An adjustable screen comprising a pair of similar frame members each having channels formed along opposite longitudinal sides, cross strips connecting the adjacent ends of the said sides, slides formed on the opposite ends of one of said cross strips of each frame for engagement with the channels of the other frame and a projection integral with one of said frame members for engagement with a slide on the other frame to limit the relative movement of the frames in one direction.

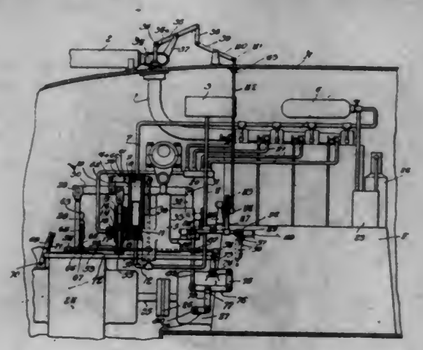
1,881,875. BOWL CLASSIFIER. HARRY W. NEWTON, Milwaukee, Wis., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 29, 1931. Serial No. 540,893. 15 Claims. (Cl. 209—18.)



1. A classifier comprising a primary chamber adapted to receive fluid supply at its top and middle part and contain the fluid to a substantially predetermined level, a

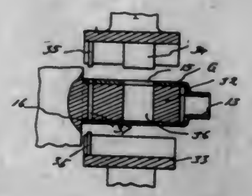
secondary compartment, said primary chamber and secondary compartment being interconnected for passage of settled material in the chamber to the compartment, means for independently passing fluid from the secondary compartment to and discharging the same substantially at the fluid level in the primary chamber, and means for protecting the fluid thus discharging into said chamber from the fluid supply to said chamber.

1,881,876. DISCONNECTING GEAR. ERNEST NIBBS, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,152. 11 Claims. (Cl. 192—.01.)



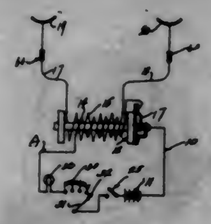
1. In combination in a submarine boat, an internal combustion engine within the hull, an exhaust pipe for the engine opening exteriorly of the hull, a shaft driven by the engine, means for supplying fuel to the engine, a valve controlling said pipe, clutch means for clutching the engine to and declutching it from said shaft, and control means for simultaneously closing said valve, cutting off the supply of fuel to the engine and declutching the engine from said shaft.

1,881,877. METHOD OF MANUFACTURING CONNECTERS. JOHN M. NICKELSEN, Monroe, Mich., assignor to Monroe Auto Equipment Company, Monroe, Mich., a Corporation of Michigan. Filed July 14, 1930. Serial No. 467,937. 2 Claims. (Cl. 29—152.)



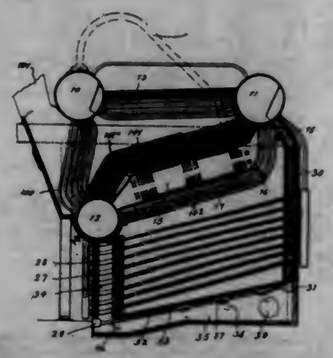
1. In the method of forming connecters, those steps which consist in shaping a flat circular blank by a series of progressively different stamping operations to produce a tubular cup-shaped member closed at one end, subjecting the blank thus formed to a combined stamping and punching operation to pierce the closed end and shape the material adjacent thereto to produce a surrounding flange of reduced diameter, subjecting the blank thus produced to the action of punching dies wherein there is simultaneously produced a pair of opposed aligned apertures adjacent the open end of the blank and an aperture in the wall of the blank intermediate the ends thereof, and inserting the rod in the flanged end of said blank and upsetting the end of said rod.

1,881,878. SAFETY DEVICE FOR AIRPLANE PILOTS. RALPH E. NIDY, Greentown, Ohio. Filed Feb. 5, 1929. Serial No. 337,656. 5 Claims. (Cl. 177—311.)



5. In a device for insuring the proper operation of an instrumentality which includes a manually engageable control member for its operation, the combination of an electric circuit if a nature to impart an appreciable shock to an operator sufficient to arouse the operator from sleep, means for connecting the body of an operator in said circuit, a switch placed on the control member in position to be grasped by the operator during manual operation of the control member of said instrumentality of a nature to be opened by such manual operation of the control member, and means normally urging said switch to a circuit closing position.

1,881,879. STEAM BOILER. ERNEST EDWARD NOBLE, Fulwell, Sunderland, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 21, 1928, Serial No. 320,838, and in Great Britain Dec. 12, 1927. 8 Claims. (Cl. 122—302.)



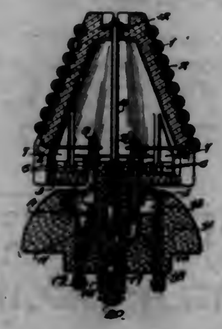
1. In a low head bent tube boiler and its furnace, an upper drum, a lower drum, a first bank of tubes freely exposed throughout practically all of their lengths to radiant heat from the furnace and bent in different degrees at their ends so that they enter both drums radially, the tubes being bent intermediate their terminal bends to provide horizontally inclined sections extending from the lower drum transversely of the furnace to upright tube sections located between vertical planes bounding the upper drum and extending to the upper bent ends to utilize a density differential which induces in the horizontally inclined sections a flow sufficient to prevent excessive heat damage, a superheater located immediately above the horizontally inclined tube sections, and a second bank of tubes joining the drums and shielded from radiant heat from the furnace only by the first bank of tubes and the superheater.

1,881,880. RANGE. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed May 15, 1929. Serial No. 363,352. 15 Claims. (Cl. 219—37.)



2. In a cooking range, a base having posts rising upwardly from the rear thereof, a back plate mounted on said posts, said posts and said back plate forming a supporting structure, and an oven suspended solely from and forwardly of said structure.

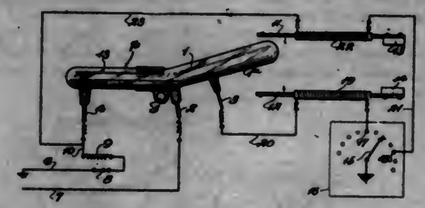
1,881,881. HEATING ELEMENT. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed May 21, 1929. Serial No. 364,910. 17 Claims. (Cl. 219—19.)



1. In an electric burner, a refractory hollow cone having a spiral groove in the exterior surface thereof for the reception of a heating element, a support for said cone, a lug on the interior of said cone for supporting said cone on said support, and means on said support for snaring said lug to restrain said cone against rotation with respect to said support.
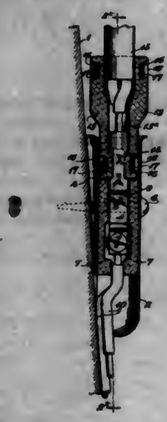
1,881,882. ELECTRIC CONTROL. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed June 10, 1929. Serial No. 369,836. 10 Claims. (Cl. 219—20.)

4. In combination with a plurality of electric circuits, a pivotally mounted mercury switch having three terminals for controlling the circuits, said switch comprising a bent tube having a terminal at its bend and a terminal at each end thereof and containing sufficient mercury to electrically connect either end terminal with the center terminal, a line leading from a source of electric energy constantly connected to said center terminal, means for closing a circuit through another terminal, means for automatically tilting said switch to break the closed circuit, said switch upon tilting connecting the center terminal with the other terminal to close a circuit therethrough and a shunt including a thermostat operatively placed with respect to said switch connected into said last named



circuit, and means for automatically grounding said shunt in accordance with a predetermined setting, said thermostat being energized by the grounding of said shunt to tilt said mercury switch whereby the last named circuit and the shunt circuit is broken and whereby said mercury switch is returned to an operative proximity with respect to said first named means.

1,881,883. WALL PLUG AND RECEPTACLE. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed June 27, 1929. Serial No. 374,129. 7 Claims. (Cl. 173—338.)



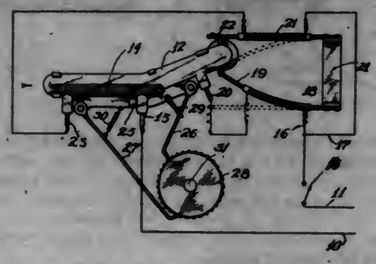
1. In a device of the class described, a substantially flat receptacle having openings in one of its faces for receiving the contact members of a plug, means in said openings for making electrical connection with said members, a housing for said receptacle having side walls extending beyond said receptacle, and a base plate insertable between the extended portions of said side walls, said side walls being shaped to receive and hold said base plate.

5. In an electrical wall-fitting adapted to have inserted therein an electrical plug, wedge means insertable between the fitting and a wall to which the fitting may be attached for causing said fitting to be inclined outwardly with its plug receiving end outermost to facilitate insertion of the plug therein.

1,881,884. THERMOSTATIC MOTOR. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed Mar. 26, 1930. Serial No. 439,251. 8 Claims. (Cl. 172—126.)

1. In combination with two electric circuits having one common line, a tiltable triterminal mercury switch com-

prising a tube containing two end terminals and a center terminal connected to said common line, and a globule of mercury of sufficient size to connect either of said end terminals with the center terminal, one of said end terminals being connected to a return line including a thermostatic element operative under the influence of a current flow therethrough, the other of said end terminals being connected to a further return line including a second thermostatic element, said return lines converging into a common line after passage through their respective thermostatic elements, a switch in said common return



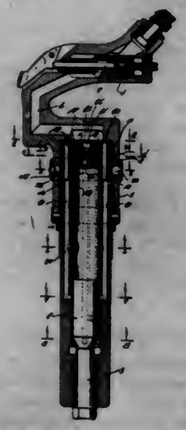
line for completing a circuit through one end terminal and the center terminal of said mercury switch, the thermostatic element in the completed circuit operating to tilt the mercury switch soon after subjection to the current flow thereby breaking said completed circuit and establishing a circuit past the other of said thermostatic elements whereby said last named thermostatic element may tilt the mercury switch to its first position, and means for utilizing the tilting motion of said mercury switch to perform work exteriorly of the electrical circuits.

1,881,885. CHROMIUM PLATING PROCESS. WARREN NOBLE and CARL J. WELCOME, Detroit, Mich., assignors to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed Mar. 16, 1931. Serial No. 523,185. 12 Claims. (Cl. 204—1.)

1. An electrolyte for use in chromium plating which contains small quantities of a lanthanum salt.

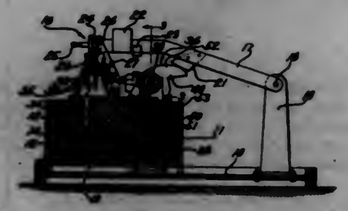
2. An electrolyte for use in chromium plating which contains small quantities of a neodymium salt.

1,881,886. VALVE CONSTRUCTION FOR PNEUMATIC TOOLS. REINHOLD A. NORLING, Aurora, Ill., assignor to Independent Pneumatic Tool Co., Chicago, Ill., a Corporation of Delaware. Filed Apr. 6, 1931. Serial No. 528,044. 1 Claim. (Cl. 121—19.)



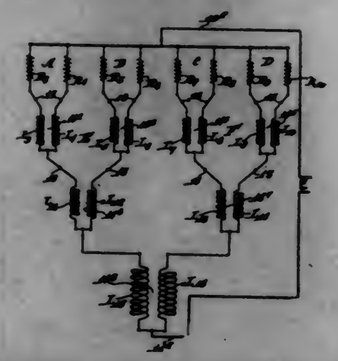
In a fluid actuated hammer, the combination of a cylinder having a free exhaust, a hammer piston in the cylinder controlling said exhaust, a valve device for controlling the admission of pressure fluid to the opposite ends of the same, said valve device having a valve chamber, inlet and outlet ports opening into the chamber on opposite sides thereof, there being a single centrally disposed inlet port and a plurality of outlet ports on each side of the chamber, and a plate valve member laterally shiftable in said chamber for alternately opening and closing said outlet ports, said valve member having central recesses on opposite sides opposite the inlet ports and surrounding the same to prevent closing of the inlet ports by the valve member and to provide enlarged pressure areas for shifting the valve member, said outlet ports being disposed exterior of the recesses and located between the same and the periphery of the valve member.

1,881,887. APPARATUS FOR REMOVING MATERIAL FROM ARTICLES. LARS NORMANN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1930. Serial No. 442,436. 10 Claims. (Cl. 263—11.)



6. In an apparatus for removing material from an article, a support for the article, a bath for liquefying the material upon the article, and means for thereafter subjecting the support to a sudden impact for jarring the material free of the article.

1,881,888. INDUCTION ELECTRIC FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed June 29, 1929. Serial No. 374,673. 7 Claims. (Cl. 13—26.)



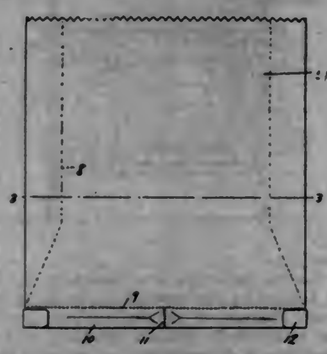
1. In an alternating current circuit, a main inductive load and a plurality of resistance loads in series therewith but in parallel with each other, including an equaliser for each pair of loads and for each pair of pairs, etc. of loads, each equalizer comprising induction coils having opposed inductive effects, one in each auxiliary load circuit, adapted to neutralise each other's inductance when the ampere turns of the coils in the equalizer are equal, condensers in series with the load circuit, a source of alternating current and a discharge gap across the source of current.

1,881,889. TRANSMISSION LOCK FOR MOTOR VEHICLES. EMIL V. NOSER, St. Louis County, Mo., assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Filed June 4, 1928. Serial No. 282,539. 14 Claims. (Cl. 70—128.)



1. In a transmission lock, a housing, a shaft-shifting lever including a first member and a second member, the first member being disposed for the most part in the housing and having an end portion projecting therefrom and provided longitudinally with a surface groove and the second member being sleeved for shiftable movement upon said end portion of the first member, a projection on the second member fitting in said groove and engageable with the walls thereof for normally rigidly interconnecting said members for shaft-shifting actuations, and a coiled spring interposed between the housing and said second lever-member for yieldingly retaining said second member in normal position relatively to the first member.

1,881,890. SACK. WILLIAM L. OFFENBACHER, Miami, Fla. Filed July 9, 1931. Serial No. 549,759. 1 Claim. (Cl. 229—56.)



A collapsible sack open at its top and closed at its bottom and comprising front, rear and side walls, the side walls being of the bellows type and terminating at their lower ends upwardly from the bottom of the sack; the front and rear walls of the sack adjacent the lower ends of said side walls having corresponding portions thereof removed from the bottom permanently united transversely and also having said united portions formed with a transverse line of fracture; other corresponding portions of the front and rear walls at the longitudinal median of the sack being permanently united between said bottom and said line of fracture, the last named portions of said front and rear wall being also formed with a line of fracture extending between said bottom and the first named line of fracture, and sealing flaps on said rear wall at opposite longitudinal edges thereof folded over the front wall and united thereto below the first named line of fracture, said bag thus presenting a relatively deep compartment and a pair of relatively narrow pockets, the pockets being capable of separation without unsealing or mutilating either pocket.

1,881,891. ELECTRIC DISCHARGE DEVICE. ALBERT R. OLPIN, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,510. 14 Claims. (Cl. 250—27.5.)



1. An electric discharge device including an enclosing vessel comprising two portions connected by a smaller tubular portion, an anode in each of said two portions, and a cathode movable from within one of said two portions to within the other, while the vessel remains intact.

7. A photoelectric tube including an enclosing vessel comprising two tubular portions and a third tubular portion of smaller diameter, said portions being joined end to end with said third portion in the middle, a reentrant stem at the outer end of each of said two tubular portions, said stems extending toward one another and leaving a small gap between their inner ends, a photoelectrically active cathode surrounding and movable along said stems from one chamber to another, and an anode in each of said two chambers.

1,881,892. CORD RUNNER. HENRY E. OLESON, Dubuque, Iowa. Filed Oct. 9, 1931. Serial No. 567,899. 1 Claim. (Cl. 12—103.)

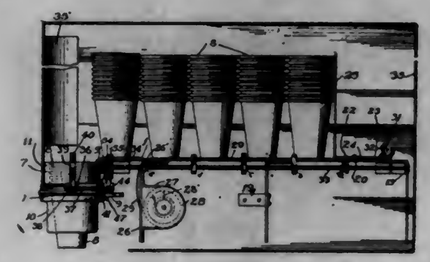


A tool for applying a cord to a shoe comprising a handle having a head, said head having an opening disposed at an acute angle to the axis, the handle and the head being provided at its end and at one side of the opening with an edge and at the opposite side of the opening with a groove, said edge and groove having their median longitudinal dimensions lying in the same plane and in alignment, and with the edge and the groove disposed on opposite sides of the head.

1,881,893. PROCESS OF PURIFYING RESINS. ANTHONY F. OLIVER and ROBERT C. PALMER, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Incorporated, a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,601. 13 Claims. (Cl. 87—2.)

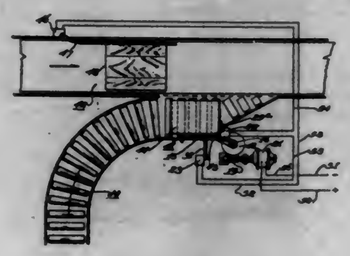
1. The process of decolorizing a resin contaminated with iron impurities, which comprises treating such resin in liquid phase with oxalic acid.

1,881,894. MAGAZINE CUP DISPENSER. HENRY H. OLSEN, Detroit, Mich., assignor to The Autofont Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 8, 1930. Serial No. 434,212. 8 Claims. (Cl. 312—44.)



4. A replenishing magazine for cup dispensers comprising a guideway for a row of cup stacks, a pusher structure movable on said guideway and engaging the outer end of said row, a spring roller mounted adjacent to said guideway, a ribbon extending from said roller along said guideway and secured to said pusher structure to propel said structure, said stacks being seated on to be supported in upright position by said ribbon, and escapement means for controlling the movement of said pusher structure by said spring roller and ribbon.

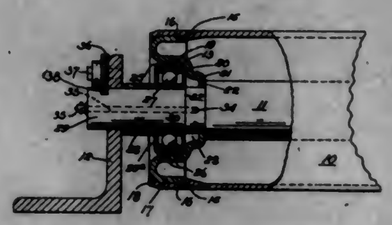
1,881,895. CONVEYER SWITCHING SYSTEM. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1929. Serial No. 355,709. 9 Claims. (Cl. 198—21.)



1. In a conveyer system, a main conveyer, a feeding conveyer having a transfer terminal adjacent the main conveyer, loads on said conveyers, load ejecting means adjacent the transfer terminal, means adapted to be operated by a load on the feeding conveyer for actuating said ejecting means for forcibly moving said load onto the main conveyer, and means extending into the path of travel of loads on the main conveyer forwardly of the terminal, adapted when engaged by a load thereon for rendering said ejecting means temporarily inoperative.

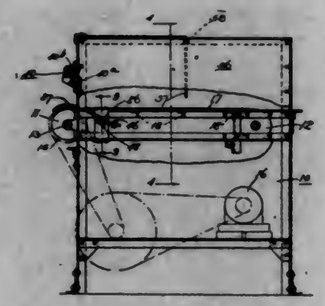
1,881,896. CONVEYER ROLL. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1930. Serial No. 441,752. 2 Claims. (Cl. 308—20.)

2. In a conveyer roll structure, in combination with supporting brackets, a tubular body, a shaft disposed concentrically therein and having its ends supported in said brackets, heads firmly secured in the ends of said tubular body, said heads being formed as pressed metal stampings dished to form an exteriorly open cavity, and including a central transverse wall fitted snugly around said shaft, and an anti-friction bearing secured in the



outer end of each cavity and arranged for journaling the tubular body on the shaft, the inner portion of the cavity serving as a lubricant chamber for the bearing, said central transverse wall of the heads being positioned in close proximity to transverse shoulders on the shaft serving to seal the lubricant chambers.

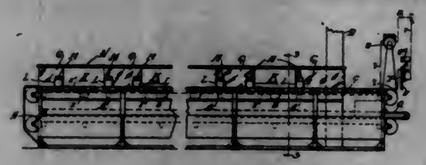
1,881,897. COUNTING CONVEYER. SAMUEL OLSON, Oak Park, Ill. Filed July 7, 1930. Serial No. 466,105. 6 Claims. (Cl. 198—40.)



1. The combination with a horizontally traveling conveyer and load units carried thereon in spaced apart relation to the direction of travel, said conveyer including a series of transversely spaced tapes and head and foot wheels therefor, of a counting device, of a transverse rock shaft mounted below the up-run of tapes adjacent the head wheel, a plurality of fingers rigidly connected to the rock shaft and having portions normally adapted to extend upwardly between adjacent tapes, overlying and shaped to conform to the contour of said head wheel, in the path of travel of the loads, said fingers being adapted to be depressed below the tapes each time they are engaged by a load thereby rocking said shaft, said head wheel being formed with circumferential grooves to accommodate said fingers when they are depressed by a load, and means responsive to such rocking of the shaft for actuating the counting device.

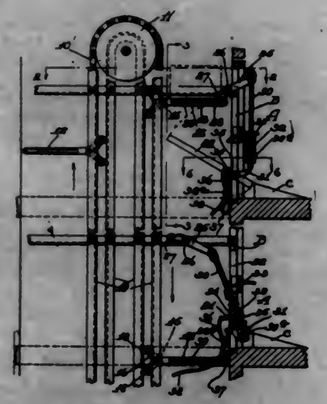
1,881,898. RESTAURANT SERVICE CONVEYER SYSTEM. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1931. Serial No. 516,854. 10 Claims. (Cl. 186—1.)

1. In combination, a service counter including a series of stations, a power-driven conveyer mounted to travel parallel and adjacent thereto, trays adapted to ride on said conveyer, a motor for driving said conveyer and a controller for the motor adjustable for encounter and



actuation by a tray carried by the conveyer for cutting off the power from the motor upon arrival of a tray at a chosen station.

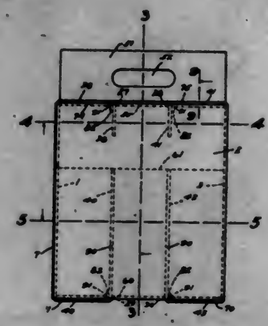
1,881,899. SELECTIVE UNLOADER MECHANISM FOR ELEVATORS. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 11, 1930, Serial No. 443,305. Divided and this application filed June 2, 1931. Serial No. 541,595. 4 Claims. (Cl. 198—38.)



1. In combination with a vertically traveling conveyor having a continuous belt and driving means therefor, a load carrier extending laterally and substantially horizontally from said belt and provided with a plurality of transversely spaced load supporting members, mechanically operated load discharging mechanism located adjacent each of a plurality of stations arranged along the down-run of the belt, and selectively adjustable means on the carrier for mechanically actuating the load-discharging mechanism at any predetermined station for effecting discharge of the load thereat, each of said mechanisms including a load-intercepting platform mounted for swinging about a horizontal axis and means holding it normally out of load-intercepting position, said platform being adapted to be tilted into the path of travel of a carrier for receiving and discharging the load, and automatically operating means independent of the platform tilting means for releasably locking the platform in load-intercepting position.

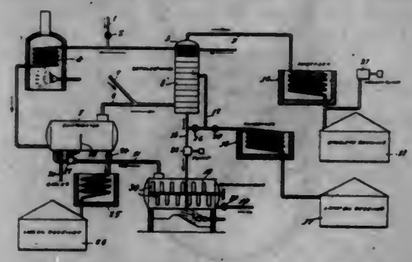
1,881,900. RECEPTACLE. JOSEPH P. OMAN, St. Paul, and SAMUEL BRIGHT, Minneapolis, Minn. Filed July 20, 1931. Serial No. 551 950. 2 Claims. (Cl. 229—27.)

1. A device of the class described comprising a blank adapted to be folded to form a container, and having elements at one end, having portions adapted to cooperate to form a closure for that end and having other portions adapted to partition the container when the closure portions are in closure position, said closure portions having slots, and said end having other elements one for each slot adapted to traverse the corresponding slot, and additionally partition the container, the opposite end of the container also having elements having portions adapted to cooperate to form a closure for the container and having other portions which are adapted to be folded



outwardly to cooperate to form a two-ply handle for the container when the closure portions are in closure position, said closure portions having slots, and said end having other elements one for each slot adapted to traverse the corresponding slot, and assume a coplanar relation with corresponding slot-traversing elements of the opposite end to define a series of compartments.

1,881,901. PROCESS FOR THE TREATMENT OF HYDROCARBON OILS WITH ALUMINUM CHLORIDE. JAMES HAROLD OSMER, El Segundo, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 28, 1926. Serial No. 157,458. 8 Claims. (Cl. 196—54.)

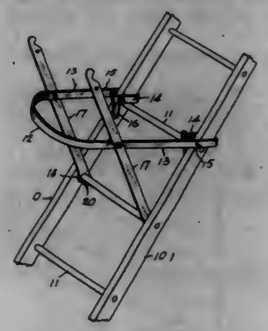


4. In a continuous method of treating petroleum oils with metallic halide, the steps of: contacting a crude petroleum oil containing low boiling point fractions with vapors from a metallic halide conversion zone in a purification zone under pressure and temperature conditions adapted to vaporize low boiling point fractions of said oil but insufficient to convert high boiling point fractions of said oil; discharging a relatively high boiling point fraction in liquid form from said purification zone, and separately discharging a low boiling point fraction in vapor form from said purification zone.

1,881,902. SCAFFOLD ATTACHMENT AND SAFETY DEVICE FOR LADDERS. MARTIN OSTERDAHL, Chicago, Ill., assignor of one-half to Gunnard Hultman, Fond du Lac, Wis. Filed Sept. 30, 1929. Serial No. 396,357. 1 Claim. (Cl. 304—34.)

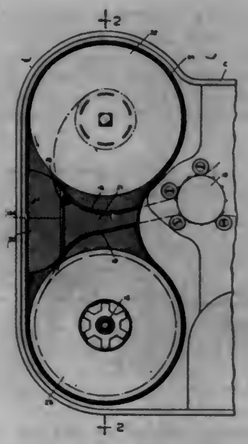
In an attachment of the class described, a metal strip bent to U-shape the arms of which have hooks or loops at their free ends for engagement with the stiles of a

ladder, struts or braces pivotally connected with the said metal strip and adapted to engage a rung of the ladder to support the said metal strip in horizontal position upon the ladder, the said struts or braces being pro-



vided with a plurality of perforations whereby the pivoting connection with the said metal strip may be adjusted and means for anchoring the said struts or braces to the ladder.

1,881,903. MOTION PICTURE CAMERA AND FILM MAGAZINE. FREEMAN H. OWENS, New York, N. Y. Filed Oct. 18, 1928. Serial No. 313,311. 8 Claims. (Cl. 88—16.)



1. A motion picture film magazine comprising a housing for holding a reel of film, the said housing being removably attachable to a camera, film take-up reeling means on said magazine housing, the said film being adapted to be fed from said reel out of the housing and back to said film take-up reeling means in the operation of the camera, a window in a wall of said housing, and a footage counter mechanism carried by said housing and including an indicator movable past said window, and means connecting said indicator with said film take-up reeling means.

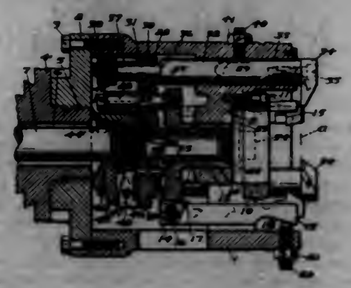
4. A motion picture film magazine comprising a housing for holding a reel of film, the said housing being removably attachable to a camera and the said film being adapted to be fed from and returned to said housing in the operation of the camera, and means in said housing continuously cooperating with the film returning to the housing for engaging the same to prevent withdrawal of the exposed portion of the film.

1,881,904. LAP DISSOLVER FOR MOTION PICTURE CAMERAS. FREEMAN H. OWENS, New York, N. Y. Filed Dec. 4, 1928. Serial No. 323,634. 5 Claims. (Cl. 88—16.)



1. In combination; a motion picture camera having a pair of spaced lens openings, a slidable plate mounted on said camera and having an opening in registry with said lens openings, a shutter associated with each lens opening, and mounted adjacent thereto, and interengaging means between said plate and said shutters for operating said shutters by a sliding movement of said plate.

1,881,905. CHUCK. DWIGHT C. PAGE and GERALD D. SCOTT, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 5, 1931. Serial No. 542,290. 10 Claims. (Cl. 279—106.)



1. In a chuck, an operating rod, a set of pivotally mounted work-centering fingers, said fingers being urged together when said rod is being drawn inwardly of the chuck, and means responsive to further inward movement of said rod to procure separation of said fingers.

1,881,906. TILE. ROBERT W. PAGE, Glen Ridge, and FREDERIC W. HILL, South Orange, N. J. Filed May 27, 1929. Serial No. 366,298. 7 Claims. (Cl. 94—12.)

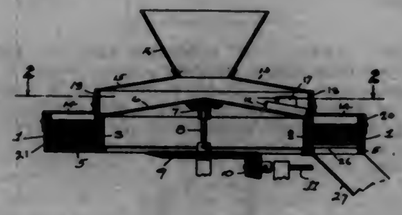


1. A tile consisting of a body of hardened cementitious material, and a thin protecting frame surrounding the edge of the upper part of the body to provide it with a smooth vertical edge surface to fit against the corresponding upper portions of the edges of adjacent tiles, the lower portion of the body having an exposed edge lying within the perimeter of the frame to bond with a bed coat in which the tile is laid.

1,881,907. HIGH MELTING-POINT ROSIN AND PROCESS OF PREPARING THE SAME. ROBERT C. PALMER and ANTHONY F. OLIVER, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,296. 18 Claims. (Cl. 87—2.)

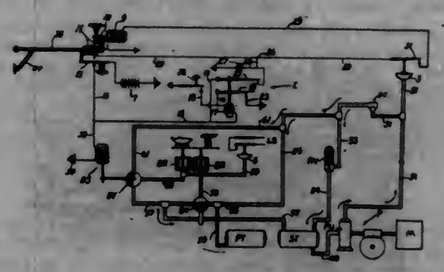
1. The process of increasing the melting point of rosin, which comprises solrosing the rosin and thereafter partially distilling the solrosed rosin to remove therefrom some of the more highly volatile constituents.

1,881,908. APPLE SLICING MACHINE. NICHOLAS G. PAPAC, Watsonville, Calif. Filed Jan. 7, 1931. Serial No. 507,143. 7 Claims. (Cl. 146—165.)



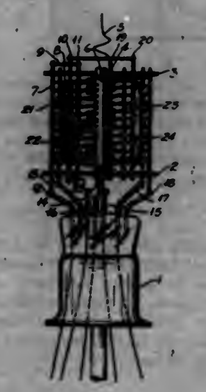
1. In an apple slicing machine, a pair of circular frames disposed in concentric relation, the inner periphery of the outer frame and the outer periphery of the inner frame having annular guides thereon; a set of knives, each having a common end thereof held in stepped relation on one frame and a plurality of sets of blade sweeps arranged in circumferentially spaced relation around the other frame, the free ends of each of the knives and sweeps being confined to move in the guides in the frame opposite to that on which said knives and blades are mounted; and means to rotate one frame relative to the other frame to pass the sweeps between the knives.

1,881,909. CONTROL SYSTEM. HARVEY S. PARDEE, Ravinia, Ill., assignor to John Robert Blackhall, Highwood, Ill. Filed Apr. 2, 1931. Serial No. 527,315. 22 Claims. (Cl. 180—82.)



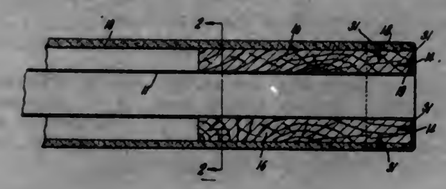
1. A vehicle control system comprising a door adapted to be manually opened, a lock therefor, means operable to maintain said lock in locking position while the vehicle is in motion and to effect unlocking only when said vehicle is substantially at rest, and manually operable control means adapted to be set while the vehicle is in motion to effect unlocking of said lock at a subsequent stop.

1,881,910. THERMIONIC TUBE. HENRY W. PARKER. Toronto, Ontario, Canada, assignor to Rogers Radio Tubes, Limited, Toronto, Canada, a Corporation of Ontario. Filed Aug. 22, 1931. Serial No. 558,675. 2 Claims. (Cl. 250—27.5.)



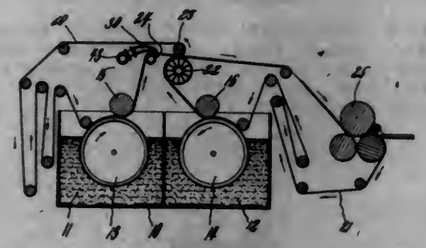
1. An electron discharge device comprising an envelope housing a cathode, a control grid, an anode, a screening electrode closely adjacent to said anode, means for distilling from said screening electrode and depositing by distillation on the surface of said anode, a metal of low atomic number and large atomic volume, and an additional screening electrode located between said first mentioned screening electrode and said control grid.

1,881,911. CORE FOR TEXTILES. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 28, 1930. Serial No. 439,681. 2 Claims. (Cl. 242—68.)



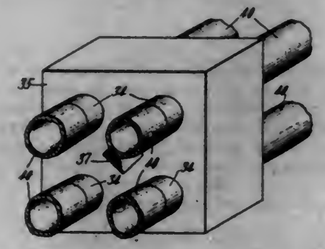
1. A core for textiles or the like, comprising a fibrous tube having a relatively thin wall, a tubular sheet metal central member with a substantially square cross-section within said tube and extending from one end to the other thereof, a pair of spacing blocks fitted within the ends of said tube and engaging the inner surface of the tube and an outer surface of the central member, a pair of metal caps on the ends of said tube, each of said caps having a square opening therein registering with the central member, and ears on the ends of the central member passing through said openings and folded outwardly against the outer face of said caps.

1,881,912. METHOD OF AND APPARATUS FOR MAKING MULTIPLY PAPER. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 28, 1930. Serial No. 491,731. 9 Claims. (Cl. 92—39.)



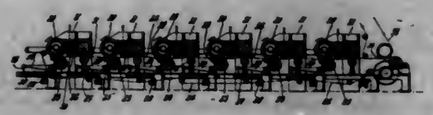
1. Apparatus of the class described comprising a pair of endless felts, means for depositing continuous webs of pulp on said felts, a suction roll, a press roll on said suction roll, and means for guiding said felts to the nip of said rolls so that the felts with their webs meet at said nip.

1,881,913. METHOD OF LAYING MULTIPLE CONDUIT AND COUPLING FOR SAME. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed Mar. 9, 1928, Serial No. 260,452, and in Canada Mar. 4, 1929. Divided and this application filed June 19, 1930. Serial No. 462,389. 4 Claims. (Cl. 247—34.)



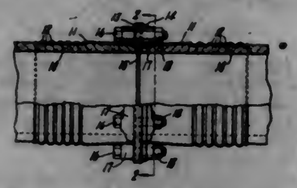
3. As a separate article of manufacture, a multiple coupling for fiber conduit, comprising a plurality of individual fiber couplings, each coupling having a portion of its exterior surface projecting further from its axis than other portions of the surface, a cement block engaging all said couplings and interlocking with said projecting portions whereby the individual couplings are securely anchored in predetermined relative positions.

1,881,914. MULTIPLE CYLINDER PAPER MAKING MACHINE. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 4, 1930. Serial No. 425,777. 14 Claims. (Cl. 92—43.)



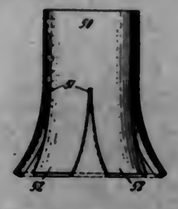
1. A method of making paper, which comprises forming a sheet of wet pulp, bringing said sheet into engagement with the upper face of another sheet of wet pulp whereby the moisture in the first sheet tends to pass into the second sheet by gravity, applying suction to the under face of said second sheet along the line of juncture of the sheets, and immediately thereafter pressing the sheets together.

1,881,915. COUPLING FOR FIBER PIPE. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 21, 1930. Serial No. 437,693. 2 Claims. (Cl. 285—137.)



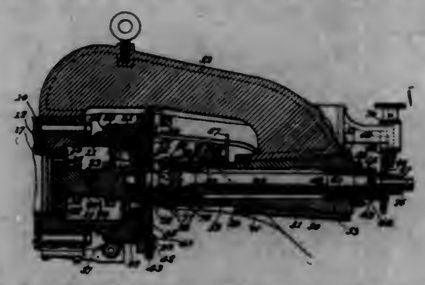
1. A coupling for fiber tubing, comprising a pair of sheet metal sleeves fitted on abutting end portions of a pair of fiber tubes and pressed into intimate engagement therewith, said sleeves having portions indenting the walls of the tubes, mating flanges on the abutting ends of said sleeves and substantially flush with the respective ends of said tubes, said flanges having their rims bent to fit one within the other, and means for clamping the flanges together, said clamping means comprising a plurality of bolts passing through said flanges, and nuts on said bolts.

1,881,916. METHOD OF FORMING FIBROUS BELL-MOUTH TUBE ENDS. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed Mar. 21, 1930, Serial No. 437,692. Divided and this application filed Feb. 28, 1931. Serial No. 519,094. 4 Claims. (Cl. 18—56.)



1. A method of joining together edge to edge two articles each composed of a piece of wet fiber tubing material, which comprises bending the marginal portions at the abutting edges upwardly, pressing the abutting edges together so that the upwardly bent portions form a slight ridge, and pressing said ridge approximately flush with the adjacent surfaces of said articles.

1,881,917. APPARATUS FOR FORMING SHEET MATERIAL. FREDERIC A. PARKHURST, Bethesda, Md., assignor to The Fiberloid Corporation, Indian Orchard, Mass., a Corporation of Massachusetts. Filed Oct. 15, 1930. Serial No. 488,787. 10 Claims. (Cl. 18—12.)



1. An extrusion die for producing sheets from plastic material comprising a head having a central opening, a mandrel projecting into said opening, a support for said mandrel outside said head, a disc mounted on said head having an opening surrounding said mandrel, and an annular disc mounted on said mandrel, said discs being spaced to provide an orifice therebetween, and means for relatively adjusting said discs.

1,881,918. FOLDABLE BRACELET BUCKLE. CHARLES H. PATTEN, Cranston, R. I., assignor to General Chain Company, a Corporation of Massachusetts. Filed Feb. 26, 1932. Serial No. 595,267. 11 Claims. (Cl. 24—71.)



1. A bracelet buckle comprising a plurality of sections hinged together to fold one on the other, a member slidable in one of said sections, cooperating means between said member and the section in which it is slidable for holding the parts in different positions of adjustment, said means consisting of a series of catches on one part and a separate latch pivoted on the other part, said latch and catches being relatively resiliently mounted and constructed and arranged in such a manner that said latch may be moved from one catch to another by pressure on the end of said member so as to contract the buckle, and manually operable means to control the functioning of said latch.

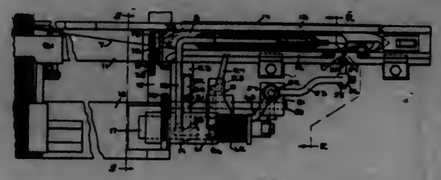
1,881,919. THERMOSTAT. ARTHUR L. PATTON, Denver, Colo. Filed May 29, 1930. Serial No. 456,946. 8 Claims. (Cl. 200—138.)



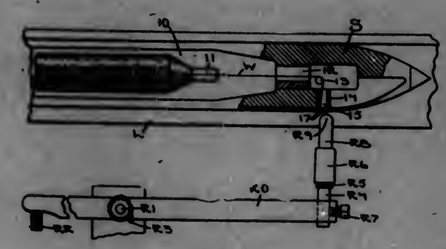
1. A contact construction for automatic switches having an actuating member, comprising: a bridging member operatively connected to said actuating member; a first pair of interconnected contacts on said bridging member; a second pair of contacts spaced from, and parallel to said first pair; and tilting means hinged between said two pairs of contacts so as to transmit the pressure of one pair to the opposite pair.

1,881,920. THREAD PARTER FOR WEFT REPLENISHING LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1931. Serial No. 517,559. 32 Claims. (Cl. 139—263.)

1. In thread controlling mechanism for a weft replenishing loom having a shuttle from the delivery eye of which extends a weft thread, an anvil carried on the front wall of the shuttle positioned to extend on opposite sides of the weft extending from the shuttle eye toward the cloth selvage, and a parter movable toward the shuttle on transferring beats of the loom to force the filling against the anvil and part the filling.

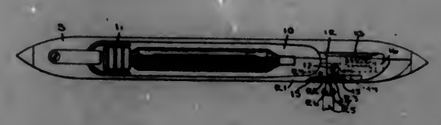


1,881,921. THREAD CUTTER FOR SHUTTLES. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1931. Serial No. 517,562. 15 Claims. (Cl. 139—263.)



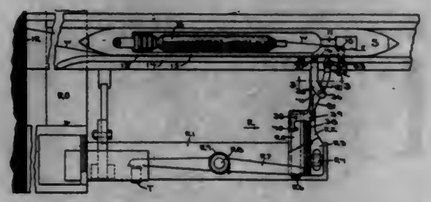
1. In weft parting mechanism for a weft replenishing loom, a shuttle having a weft delivery eye, and means to coact with the eye to part the weft.

1,881,922. SHUTTLE FOR THREAD CUTTERS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1931. Serial No. 517,560. 1 Claim. (Cl. 139—263.)



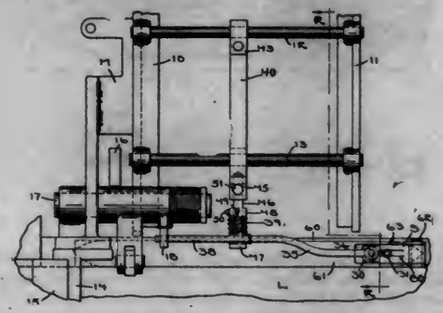
In a weft parting shuttle having a shuttle eye block and a delivery eye in fixed relation with the block and aligning with a longitudinal thread groove, means presenting a relatively hard surface set in an exterior portion of the shuttle and having said surface extending across the groove, and securing means carried by the shuttle and holding the first named means and the block securely to the shuttle, the first named means being positioned to coact with a thread parter to sever a thread extending across said surface.

1,881,923. THREAD CUTTER AND CLAMP FOR SHUTTLES. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1931. Serial No. 520,044. 19 Claims. (Cl. 139—263.)



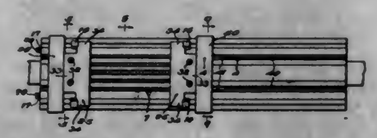
1. The weft parting mechanism for a loom operating with a shuttle movable forwardly and from which a weft thread extends, a pair of clamping elements one of which is carried by the shuttle, a pair of thread parting members one of which is carried by the shuttle, and means to render the clamping elements operative prior to the operation of the parting members during the forward movement of the shuttle.

1,881,924. MOUNTING FOR WEFT PARTERS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,819. 10 Claims. (Cl. 139—263.)



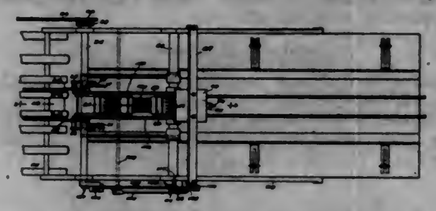
1. In a weft replenishing loom having a lay and a shuttle with a weft parter element, a magazine, a fixed supporting member extending substantially parallel to the lay and forming part of the magazine, a cutter element to cooperate with the element carried by the shuttle as the latter is moved by the lay, and a support for the second named element mounted on said member and movable therealong to assume any one of a plurality of positions relatively to the element on the shuttle.

1,881,925. TYPE ROLL. CLAUDE L. POST, Chicago, Ill. Filed Aug. 29, 1928. Serial No. 302,831. 15 Claims. (Cl. 101—378.)



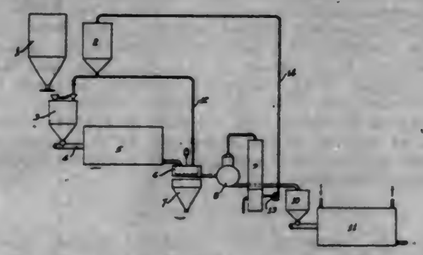
1. A type roll having a longitudinal groove therein and having a longitudinal slot at each side of said groove, a clamping member slidable in said groove and extending over said slots, and means slidable in said slots for locking said clamping member in adjusted position.

1,881,926. SHEET FEEDING MECHANISM. CLAUDE L. POST, Chicago, Ill. Filed Aug. 29, 1928. Serial No. 302,832. 13 Claims. (Cl. 271—62.)



1. In a feeding device, a table for carrying a plurality of articles, non-reciprocating means disposed above the articles and movable relative thereto, article-advancing means mounted on said means and rotatable relative thereto, and means adjacent one end of said non-reciprocating means for limiting the rotary movement of said article-advancing means at this point.

1,881,927. PROCESS FOR HYDROGENATING SOLID CARBONACEOUS MATERIAL, PARTICULARLY SOLID FUELS SUCH AS COAL. ALFRED POTT and HANS BROCHE, Essen-Ruhr, Germany. Filed July 9, 1928, Serial No. 291,475, and in Germany July 12, 1927. 8 Claims. (Cl. 196—53.)

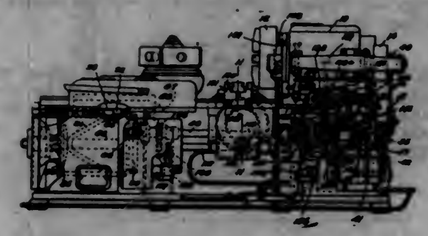


1. A process for the hydrogenation of solid bituminous material, comprising a first stage in which said material, in the absence of any substantial amount of free hydrogen, is subjected to the action of solvent media capable of dissolving hydrocarbons and having a boiling point above 100° C., whereby an extract is obtained, the extraction being effected successively at temperatures which increase gradually, the increasing temperature being chosen as high as is possible without decomposing the constituents of the material being treated, the pressure during the first stage being substantially the same as the vapor pressures of the solvent media at the respective temperatures, this treatment being continued until at least 50% of the material is extracted, there being left an undissolved carbonaceous residue, whereupon, in a subsequent stage, the extract is hydrogenated by subjecting the same to a pressure above 20 atmospheres and a temperature above approximately 300° C. in the presence of hydrogen.

1,881,928. AUTOMATIC METAL TURNING LATHE. WILLIAM WALLACE POTTER, Pawtucket, R. I. Filed Apr. 7, 1927. Serial No. 181,837. 18 Claims. (Cl. 29—44.)

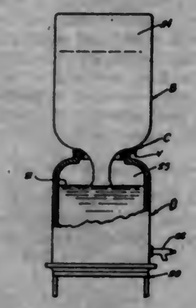
1. A machine tool having multiple tools which act at different times, a member or members whose motions are to be controlled and a control mechanism comprising a shiftable member, constantly moving means for moving said member, a part movable by said member when the latter is moved directly acting on said member whose motions are to be controlled, and a moving member of the machine that causes such means to act.

16. In a machine tool the combination of a spindle, a constant speed driving wheel, means to revolve the spindle from the wheel, hand means to change the ratio between the revolutions of the driving wheel and the spindle, power operated means for automatically and instantaneously changing such ratio, tool carriers, a tool feed shaft operating said carriers, means to revolve the feed shaft from the spindle, hand means to change the ratio between the revolutions of the spindle and the revolutions of the feed shaft, power operated means for automatically and



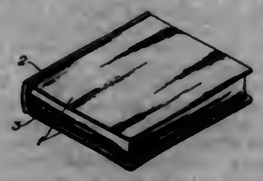
instantaneously changing the last named ratio, a high and constant speed revolving member drivingly connected with the constant speed drive, means to drive said feed shaft from said high speed member at a higher speed than its tool feed revolution, means for automatically connecting and disconnecting said high speed member and said feed shaft, and means to connect and disconnect said constant speed drive wheel and said spindle.

1,881,929. COMBINED VALVE AND AIR-TIGHT CUSHION FOR BOTTLED WATER DISPENSERS. FRANCIS M. POTTENGER, Jr., Monrovia, Calif. Filed Dec. 9, 1930. Serial No. 501,012. 9 Claims. (Cl. 62—143.)



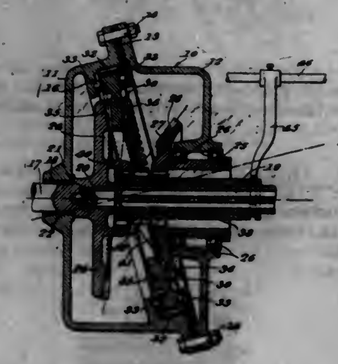
1. A cushion adapted to form a substantially air-tight joint between an inverted bottle and a water dispenser, comprising: a continuous rubber member having a lateral passage extending therethrough; and a valve normally sealing said passage.

1,881,930. LOOSE LEAF BINDER. JOHN POTTS, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 2, 1930. Serial No. 417,878. 3 Claims. (Cl. 129—24.)



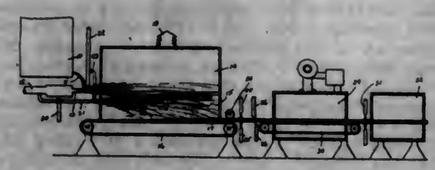
3. In a loose leaf binder, a cover member including a plate having a curled margin notched for receiving impaling posts, a latching member mounted upon said cover alongside of said curled margin and having offset pintles, said curled margin having slots thru which said pintles extend, said member and curled margin having coacting parts for limiting the movement of said member for preventing the withdrawal of said pintles from said curled margin.

1,881,931. OVERDRIVE TRANSMISSION. CLARENCE H. POWELL, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1931. Serial No. 545,862. 3 Claims. (Cl. 74—59.)



1. In a transmission, drive and driven shafts, two pairs of bevel gears, the gears of one of said pairs being operatively connected at all times and adapted to connect the gears of the other pair, one of the gears of said other pair being connected to one of said shafts, and means adapted to connect said shafts either directly or through said gears.

1,881,932. PROCESS OF FORMING SELF BAKING INSULATION BLOCKS. EDWARD R. POWELL, Alexandria, Ind., assignor to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,849. 10 Claims. (Cl. 49—77.5.)



1. A method of manufacturing self-sustaining units such as blocks and the like of mineral fibers which comprises mixing the fibers with an inorganic binding material and a combustible material, shaping the mixture, and then subjecting the shaped mass to a temperature sufficient to ignite the combustible material.

1,881,933. APPARATUS FOR DISTRIBUTING COMMINUTED MATERIAL. LAURENCE POWELL, Columbus, Ohio, assignor to The Salem Tool Company, Salem, Ohio, a Corporation of Ohio. Filed Jan. 26, 1931. Serial No. 511,274. 6 Claims. (Cl. 275—2.)

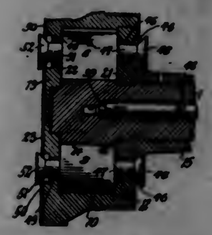
1. Apparatus for distributing comminuted material including walls forming a hopper, one of the walls having perforations formed therein for discharging material from the hopper, means rotatively mounted within the hopper

for agitating the material and feeding the same out through the perforations, means for rotating the last said means, and a damming member on the hopper adjacent the



perforations, the damming member including an upstanding flange for preventing discharge of material when the means for agitating and feeding material is stationary.

1,881,934. PROCESS OF WELDING. RICHARD POWIS, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Sept. 15, 1930. Serial No. 481,920. 1 Claim. (Cl. 219—2.)



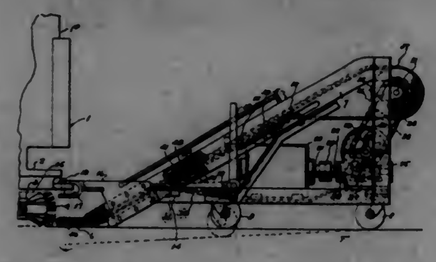
The herein described method of connecting a wall of a working chamber for a hydraulic shock absorber and a partition therein, which method consists in providing said wall with an opening in line with said partition, said opening having a reduced cylindrical inner part and an enlarged cylindrical outer part to provide inner and outer corners, placing a conical headed rivet in said opening with its ends against said partition but with all its other surfaces disconnected from the wall surrounding said opening and said corners, and then applying an electrical welding terminal to the head of said plug under pressure to cause all of the welding current to primarily flow through said plug for intimate welding thereof to said partition and fusion of the plug shank for intimate welding thereof to said wall at the inner part of the opening therein and then to cause the plug head to successively engage said corners for the generation of welding heat thereat and eventual fusion of the head and the metal of said corners for intimate welding of the head to said wall at the enlarged section of said opening.

1,881,935. LOCKING KEY. RICHARD POWIS, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,669. 7 Claims. (Cl. 151—3.)



2. A locking key adapted to be applied to a tube having openings on diametrically opposite sides thereof and having a circumferentially notched plug threaded into said end, comprising a ring-shaped body having an inwardly offset lug and an outwardly offset inwardly curled lug, said lugs being adapted to enter the openings in said tube when said key is placed within said tube against said plug, the inwardly projecting lug being so proportioned as to enter the opening through a notch in said plug from the inside of said tube, and the outwardly projecting lug being adapted to be curled over the end of said tube and through the opposite opening into one of the notches in said plug.

1,881,936. MINING MACHINE. THOMAS E. PRAY, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1930. Serial No. 459,459. 9 Claims. (Cl. 262—28.)



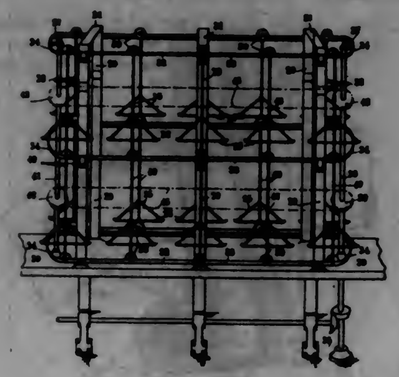
1. In combination with a mining machine having a depending cutter head, a cutter bar projecting forwardly from said depending cutter head having a cutter chain movable thereabout adapted to cut an arcuate kerf adjacent the mine floor, and cuttings conveying mechanism detachably connectible with said mining machine on the retreating side thereof for clearing the cuttings discharged by said cutter chain from the path of said cutter chain comprising a wire mesh conveyor extending from a point adjacent the mine floor adjacent the path of said cutter chain and upwardly beyond said cutter chain.

1,881,937. TIE PLATE. FREDERICK A. PRESTON, Lake Forest, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1931. Serial No. 537,038. 3 Claims. (Cl. 238—305.)



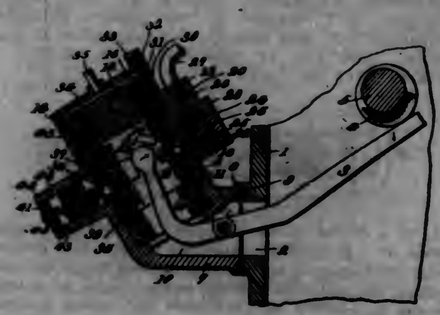
1. Supporting and retaining means for a railroad rail comprising a plate member interposed between the base of the rail and the rail supporting means of the roadbed, and having spaced abutments thereon adapted to engage the full edge thickness of the base flange to hold the rail against substantial lateral movement, the plate being so arranged that the abutments, respectively, stand adjacent opposite flanges of the rail base, and inwardly projecting means formed on the abutments and projecting over the adjacent flange of the rail base at opposite edges of the plate but spaced from said rail base to retain the rail in position with capacity for limited vertical movement relative to the said plates.

1,881,938. AUTOMATIC APPARATUS FOR SHOP WINDOWS. FELIX JOSEPH MARIE PRODHOMME, Paris, France. Filed Sept. 16, 1930, Serial No. 482,301, and in France Sept. 21, 1929. 3 Claims. (Cl. 211—15.)



1. An automatic apparatus for shop windows for displaying articles to the public including a supporting frame, endless horizontal rails thereon, rollers on the rails, vertical rods connected in a detachable manner to the rollers, article carrying supports suspended so that they project laterally from the rods, means mounted on the frame and connected to the rods causing the rods to move around the frame, and means for operating said moving means.

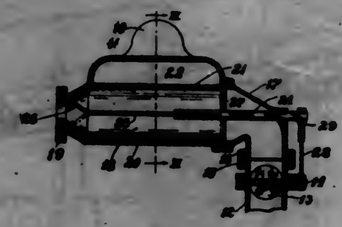
1,881,939. PUMPING MECHANISM. FREDERICK PURDY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Aug. 8, 1928. Serial No. 298,370. 9 Claims. (Cl. 103—23.)



1. In pumping mechanism, a pump having a diaphragm, resilient means for moving the diaphragm in one direction, an engine operated member for moving the diaphragm in the opposite direction, a chamber having a distortable wall, and means to permit the fluid forced by the pump to enter said chamber and move the distortable wall into engagement with said engine operated member to hold the engine operated member in an inoperative position.

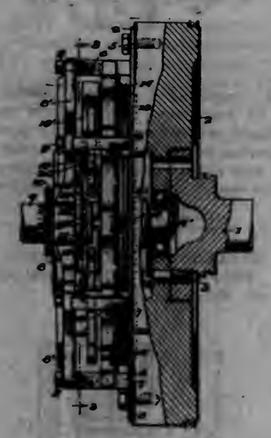
1,881,940. CARBURETOR HEAT CONTROL. FREDERICK PURDY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed June 24, 1929. Serial No. 373,220. 10 Claims. (Cl. 123—122.)

1. A carburetting system for internal combustion engines including a carburetting device, a tube forming a mixture passage connected to said carburetting device, heating means associated with said tube to heat the same, and means disposed within said tube for causing the mixture flowing therethrough to be moved into and out of contact with the heated portion of the circumference of



said tube, said latter means including a pivotal element for bodily moving the path of the mixture flow into and out of a position where said mixture may be acted upon by said heating means.

1,881,941. AUTOMATIC CLUTCH. CHARLES L. PUTNEY, Philadelphia, Pa., assignor to Investors Industries, Inc., Baltimore, Md., a Corporation of Maryland. Filed Feb. 9, 1932. Serial No. 591,584. 20 Claims. (Cl. 192—105.)

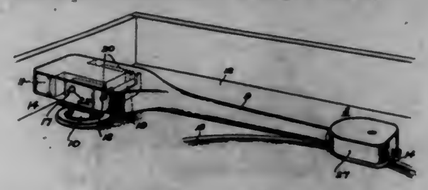


1. In a clutch mechanism, the combination of a driving shaft and a driven shaft coaxial therewith, a flywheel on the driving shaft, a friction disk coaxial with the driven shaft and movable longitudinally thereof, a pressure disk coaxial with the driven shaft and mounted on the flywheel to move toward and from the friction disk, a screw mounted on the flywheel and coaxial with the driven shaft and a nut engaging said screw and bearing upon said pressure disk, and centrifugally actuated means carried by the flywheel for turning said nut on said screw, whereby upon operation of the driving shaft said nut automatically brings the pressure plate, friction disk and flywheel into clutching engagement.

1,881,942. PICKUP ARM. JOSEPH RABER, Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,310. 16 Claims. (Cl. 179—100.41.)

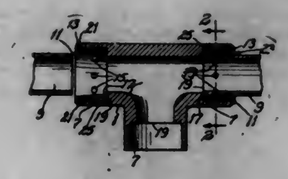
2. In an apparatus of the character described, a fixed supporting pedestal, a sound translating device, an arm

for supporting said device, and means providing spaced parallel axes of rotation for said arm with respect to said



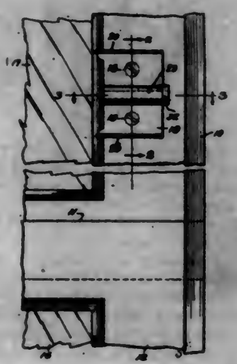
pedestal, one of said axes being arranged to rotate about the other.

1,881,943. JOINT. HAROLD K. RADER, Port Huron, Mich., assignor to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed May 14, 1930. Serial No. 452,451. 3 Claims. (Cl. 285—115.)



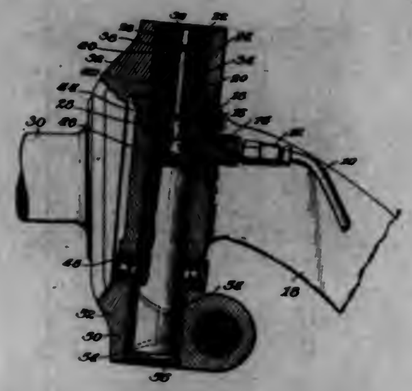
1. A joint comprising a receiving portion, an element adapted to be introduced therein from the outside, a sleeve positioned between said receiving portion and said elements tapering inwardly from the outside of the joint, openings on said sleeve inwardly of the joint and a flange on said sleeve spaced from the end of said receiving portion.

1,881,944. WINDOW LOCK. STANLEY F. RAGAN, Chicago, Ill. Filed May 18, 1931. Serial No. 538,127. 7 Claims. (Cl. 292—210.)



1. A window lock comprising a plate, another plate hingedly connected to said first mentioned plate, a projection upon said last mentioned plate angularly disposed with relation thereto, said first named plate having an opening made therein, defining a strip at one edge of said first named plate, and a hook at said second named plate and in a shifting relation therewith, said hook being adapted to enter said opening for engaging said strip for the purpose of interlocking the two plates.

1,881,945. CENTRALIZED LUBRICATING SYSTEM. CHARLES F. RAISCH, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 388,333. 7 Claims. (Cl. 184—7.)



1. In a centralized lubricating system for the chassis bearings of an automotive vehicle, the combination of a king pin having upper and lower bearings and a longitudinally drilled hole in the upper end thereof, a tube having end portions of enlarged diameter engaging in and sealing against the walls of said hole, means for supplying lubricant to the lower end of said hole, and a lubricant passageway connecting the upper and lower king pin bearings, said passageway including a duct formed by the space between a portion of said tube and the walls of said hole.

1,881,946. IDENTIFICATION PIN HOLDER FOR WASHING MACHINES. SILAS M. RATZKOFF, Jackson Heights, N. Y., assignor to Troy Laundry Machinery Company, Inc., East Moline, Ill., a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,914. 7 Claims. (Cl. 40—19.5.)



1. In a device of the character described, the combination of a pin and tag attached thereto, of a holding device for releasably holding said pin and tag in extended position, one end of said device having means for holding the tag in position and the other end having uprights resiliently engaging the pin.

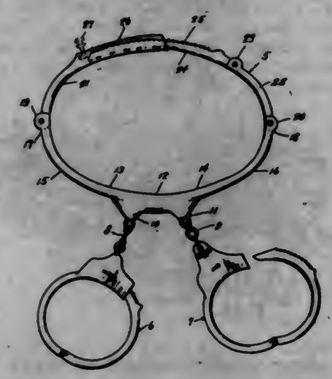
1,881,947. FISH LURE. EDWARD W. RAWDON, Akron, Ohio. Filed May 20, 1931. Serial No. 538,797. 10 Claims. (Cl. 43—42.)



1. An artificial bait comprising a body having rearwardly extending legs terminating in feet, cords extending longitudinally in said legs, the legs being reduced in

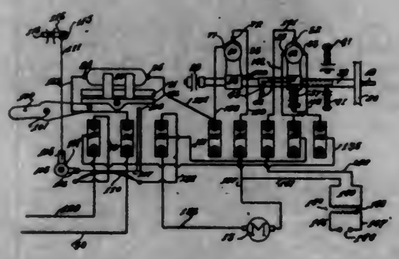
thickness intermediate their ends whereby rear portions of the legs may be swung transversely with the cords serving as means to pivotally connect the front and rear portions of the legs, and a hook carried by the body.

1,881,948. SHACKLE FOR PRISONERS. DANIEL B. RAYBURN, Pendleton, Ind. Filed Mar. 13, 1931. Serial No. 522,346. 4 Claims. (Cl. 70—24.)



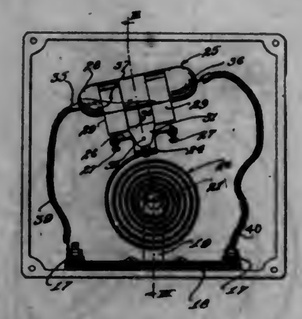
1. A shackle for prisoners as described comprising a metallic waist belt having self locking girth adjusting means in its rear portion, a radially enlarged hand cuff mounting at the center of its front portion, and a pair of spaced hand cuffs swivelly connected to said mounting and having self locking, girth adjusting means therein, said waist belt being made up of a plurality of hingedly connected sections.

1,881,949. CONTROL FOR OIL BURNERS. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Rayfield Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 29, 1927, Serial No. 243,361. Renewed Jan. 18, 1932. 1 Claim. (Cl. 158—28.)



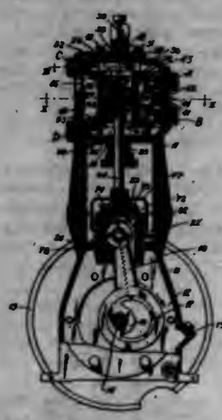
In combination, an oil burner, a motor for operating the same having a power circuit, an electrically operated time limit cut-off in said power circuit to deenergize the motor on ignition or combustion failure, an electric igniter; a thermostat positioned to be heated by the burner, a switch device operable thereby electrically connected to said igniter and said time limit cut off to operatively deenergize the same when said thermostat is heated, an eccentrically pivoted switch in said power circuit mechanically connected to said first switch to be held in closed position thereby when said thermostat is cold and to be released for opening movement when said thermostat is hot, and a device operable by the pressure of air fed to the burner during burner operation to maintain said pivoted switch in closed position.

1,881,950. THERMOSTATICALLY CONTROLLED SWITCH. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Rayfield Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed July 26, 1928, Serial No. 295,388. Renewed Jan. 18, 1932. 7 Claims. (Cl. 200—138.)



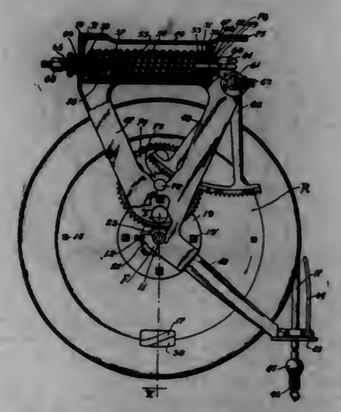
1. In combination, an electrical switch, a thermostat for operating the same, a mounting for the switch disposed wholly on the extreme outer and free end of said thermostat so as to enable the switch to be tilted by gravity upon a predetermined movement of the thermostat and an adjustable connection between the switch and the mounting for varying the action of the thermostat on the switch.

1,881,951. PUMP. FREDERICK J. RAYFIELD, Chicago, Ill., assignor to Champion Pneumatic Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 15, 1929. Serial No. 407,388. 2 Claims. (Cl. 184—13.)



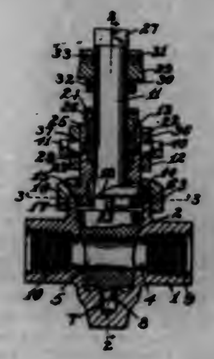
1. The combination of a supporting frame providing an oil well at its lower end, a drive shaft extending through said well, an eccentric on said shaft, a cross head guide above said shaft, a cross head reciprocal in said guide, a plunger above said guide connected with said cross head, a connecting rod receiving said eccentric at its lower end, a wrist pin connecting the upper end of said connecting rod with said cross head, said connecting rod having an oil duct extending the entire length thereof, there being oil grooves in the bearing space of said eccentric extending circumferentially along said surface from the sides of the eccentric and terminating intermediate the sides, oil being scooped up by said groove during operation of the shaft and forced therefrom into and through the duct in the connecting rod, said wrist pin having passageways communicating with said duct to convey oil therefrom to the bearing surface of the cross head, and means for returning oil working past the cross-head to the interior thereof.

1,881,952. HOSE REEL. FREDERICK J. RAYFIELD, Chicago, Ill., assignor to Champion Pneumatic Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 12, 1930. Serial No. 443,677. 4 Claims. (Cl. 242—108.)



1. In a reel structure, the combination of a supporting frame, a reel rotatably mounted on said frame, a spring, a connection between said spring and reel whereby longitudinal movement of said spring will be accompanied by rotational movement of said reel, said spring being normally compressed to hold said connection and reel in normal position and to resist by further compression the unwinding rotation of said reel, said spring by its expansion acting through said connection to return the reel and connection to normal position when said reel is released after an unwinding movement thereof, and means whereby said spring will act by compression to absorb the impact of the returning movement of the reel and connection to normal position.

1,881,953. VALVE. HARRY B. REDDING, Cleveland, Ohio, assignor, by direct and mesne assignments, to The Columbus Valve Manufacturing Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 16, 1928. Serial No. 300,014. 2 Claims. (Cl. 251—97.)



1. In a valve, the combination of a body, the body having a seat, a rotatable plug adapted to engage the seat, a bonnet, the bonnet being fixed to the body, the body having a cutout, a pin fixed in the plug adapted to engage the end of the cutout of the bonnet, said plug having a stem projecting beyond said bonnet, a member, the member being rotatably mounted upon the stem beyond said bonnet and the outer side thereof, means for preventing longitudinal movement of said member relative to the stem, stud bolts carried by the bonnet, the stud bolts being round in cross section, said member having oppositely inclined slots, the slots having upper and lower straight edges, and the edges of said slots being adapted to engage said stud bolts upon rotation of said member for forcing the plug in either direction.

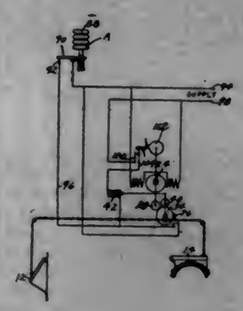
1,881,954. LUMBER TRIMMING MACHINE. HENRY H. PAYZANT, Everett, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a Corporation of Washington. Filed Sept. 5, 1929. Serial No. 390,525. 25 Claims. (Cl. 143—33.)



3. A lumber trimming machine comprising, a lumber receiving table adapted to receive a plurality of boards to be trimmed, said boards being of substantially equal width and being laid face to face one upon another, an end stop for said boards near an end of said table, means for severally engaging the opposite ends of said boards to advance them against said stop, means for trimming the ends of said boards and means for gripping said boards on the table during the trimming operation.

20. A lumber trimming machine comprising, a receiving table, a pair of saws adapted to be fed across said table for cutting lumber thereon, a motor for feeding said saws across said table, one of said saws being movable longitudinally on said table, a second motor for traversing said saw longitudinally of said table, means for rendering said saw feed motor inoperative when said traverse motor is operative and means for rendering said traverse motor inoperative when said feed motor is operative.

1,881,955. MOTOR ACTUATED FURNACE CONTROL. ALBERT PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed June 17, 1929. Serial No. 371,537. 10 Claims. (Cl. 236—73.)



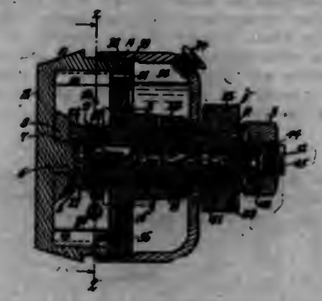
1. In a motor actuated furnace control, a motor, means for connecting said motor with a furnace controlling device and for cyclically operating said device by said motor through different positions of the device, means for rendering said furnace controlling device inoperative a predetermined length of time, said means being cooperatively associated with the motor and actuated thereby to render the furnace control again operative at a predetermined time.

1,881,956. SHOCK ABSORBER. RALPH F. PEO, Kenmore, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Feb. 10, 1930. Serial No. 427,107. 6 Claims. (Cl. 188—89.)



1. A hydraulic shock absorber having a working chamber which is provided in one of its walls with a permanently open but restricted vent passage, and a filter between said chamber and said passage.

1,881,957. SHOCK ABSORBER. RALPH F. PEO, Kenmore, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,641. 8 Claims. (Cl. 188—89.)



1. In a thermostatically controlled valve mechanism for use in hydraulic shock absorbers comprising a valve chamber connected by ports with the high and low pressure chambers at opposite sides of the piston of a hydraulic shock absorber, a valve slidable lengthwise in a part of said valve chamber and having a tapering section cooperating with said ports for the variable flow of fluid from one to the other, and a thermostat element secured at one end and engaging at its other end against said valve but unattached thereto.

1,881,958. JOINT. RALPH F. PEO, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Jan. 21, 1931. Serial No. 510,147. 2 Claims. (Cl. 287—87.)

1. In a joint of the character described for connecting two members, and including a spherical two part socket member rigidly connected to one of said members, a pressed metal attaching plate adapted to be rigidly connected to the other of said members, the outer end of said attaching plate being bent to form a substantially tubular stem and a ball at the end of said stem, said ball adapted



to be fitted in said socket and a hollow rubber sphere interposed between said ball and socket and forming the sole connecting means between said ball and socket.

1,881,959. COUPLING FOR RELATIVELY MOVABLE MEMBERS. RALPH F. PEO, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed May 7, 1931. Serial No. 535,679. 7 Claims. (Cl. 74—48.)

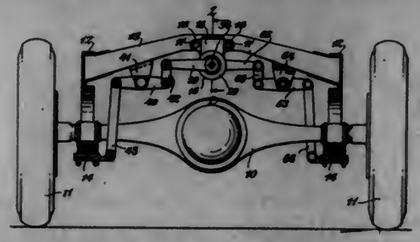


1. A coupling for connecting relatively movable members comprising hooks each having a shank, a beak projecting forwardly from the shank and two ears projecting laterally from the shank at the base of said beak, said hooks having their backs arranged on the inner sides thereof and opposing each other and having their mouths opening outwardly, and the back side of the beak and ears of each hook forming a three point bearing; a tie provided at its opposite ends with eyes engaging with said hooks, respectively; washers mounted on said tie and each engaging with the three bearing points on the back side of one of said hooks; and spring means interposed between said washers.

1,881,960. SWAY PREVENTING DEVICE. RALPH F. PEO, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 21, 1931. Serial No. 552,148. 7 Claims. (Cl. 267—11.)

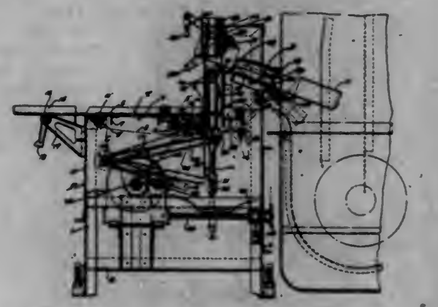
1. A sway preventing device for an automobile having an axle member and a frame member mounted by spring means on said axle member, comprising two cylindrical bodies mounted on one of said members and each adapted to contain a resistance liquid, partition means dividing each of said cylindrical bodies into two semi-cylindrical working chambers, a pair of connected pistons oscillating respectively in the working chambers of each of said bodies and each piston dividing the respective working chamber into a high pressure end and a low pressure end, conduit

means connecting the high pressure end of a working chamber of one of said bodies with a low pressure end of a working chamber of the other body, and motion trans-



mitting means connecting said pairs of pistons of the respective bodies with said other member on opposite sides of the longitudinal center of the frame.

1,881,961. LOADER FOR BOTTLE CLEANING MACHINERY. FRANK P. PERKINS, Waukesha, Wis., assignor to Michael Yundt Company, Waukesha, Wis., a Corporation of Wisconsin. Filed June 13, 1930. Serial No. 460,824. 22 Claims. (Cl. 198—27.)



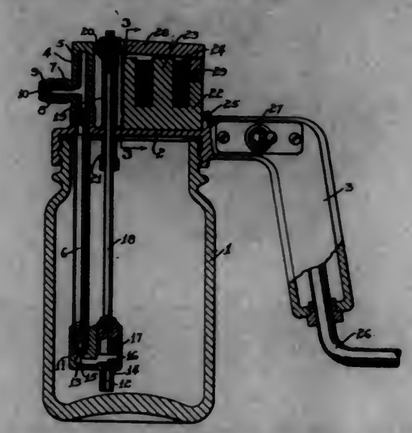
1. A loader for bottle cleaning machinery including a table on which the bottles are loaded, cooperating conveyors and guides for carrying the bottles along the table and effecting a predetermined transverse spacing of the bottle, a bottle lifting shelf arranged at the discharge end of the table and receiving the bottles from the conveyors, means for raising and lowering the shelf, tiltable bottle pockets receiving the bottles in the elevated position of the shelf, means for tilting the bottle pockets, delivery chutes receiving the bottles from the bottle pockets when the latter are tilted, a combined gate and slide at the lower end of the delivery chutes and operable in discharging position to deliver the bottles to the holders of the bottle cleaning machinery.

1,881,962. TUFTING BUTTON. JOSEPH J. PERLMAN and NATHAN H. PERLMAN, Chicago, Ill., assignors to Handy Button Machine Co., Chicago, Ill., a Corporation of Illinois. Filed July 13, 1931. Serial No. 550,572. 3 Claims. (Cl. 24—90.)



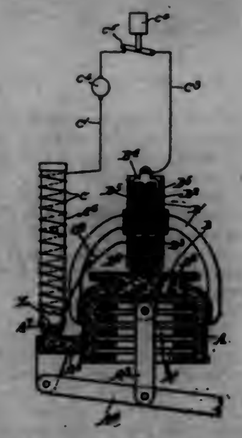
3. A tufting button adapted for use with mattresses and the like equipped with loop tie elements, said button comprising a wide circular flange having a downwardly curved peripheral edge, a depressed inner portion slightly below the plane of said flange and having an upwardly cupped portion the top of which is in substantial alignment with the edge of said flange, said button being provided with diametrically opposed slots constricted at their peripheral edge but widened near the central portion of said button.

1,881,963. SPRAY-GUN. JAMES E. PERRIN, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 8, 1930. Serial No. 500,687. 2 Claims. (Cl. 299—97.)



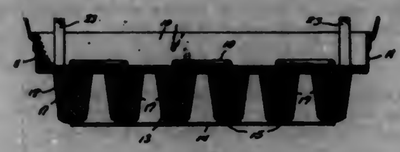
2. In a device of the class described, a liquid receptacle, a cover mounted thereon, a spray head, a plunger-type of pump and a solenoid carried by the cover, the pump being projected into the receptacle and having its outlet and its inlet respectively in communication with the spray head and interior of the receptacle, and means yieldingly retaining the pump plunger in one position of its movement, said solenoid having its armature connected to the pump plunger whereby an energizing of the solenoid actuates the armature to move the pump plunger in opposition to said means.

1,881,964. VAPOR MOTOR. LAURENCE M. PERSONS, Chicago, Ill. Filed Nov. 23, 1928. Serial No. 321,441. 1 Claim. (Cl. 60—25.)



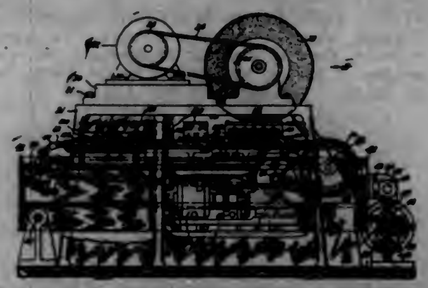
In a vapor motor, a closed and gas-tight liquid filled system including a working chamber having wall portions movable in response to pressure changes within the system, a heating chamber in connection with the working chamber and externally positioned resistance means for continuously heating the heating chamber and thereby effecting changes in the pressure within the system, a work performing member and an operative connection between it and one movable wall portion of the working chamber, an actuating circuit for the resistance heating means and means, responsive to movement of the other movable wall portion of the working chamber, for varying the flow of current through said circuit.

1,881,965. APPARATUS FOR MAKING FROZEN CONFECTIONS. EZRA MORONI PETERSON, Ogden, Utah. Filed Aug. 8, 1931. Serial No. 555,989. 5 Claims. (Cl. 107—19.)



1. An apparatus of the character described comprising a receptacle-like member including a plurality of molds depending from the bottom thereof and adapted to be filled with a liquid substance to be frozen therein, a finger adapted to be inserted in each mold to provide the article frozen therein with a centrally located stick-receiving bore, and a heating unit arranged within said receptacle-like member and connected with said fingers to support the latter, and to heat said fingers to facilitate their removal from the frozen articles.

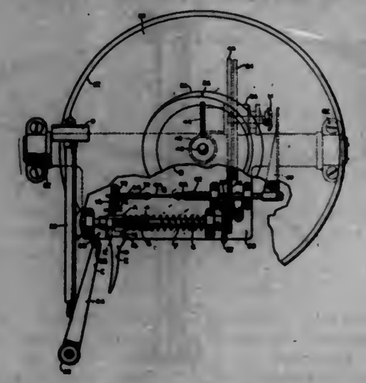
1,881,966. GRINDING APPARATUS. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 26, 1929. Serial No. 381,312. 6 Claims. (Cl. 51—74.)



1. Apparatus for grinding tubular work pieces comprising, in combination, a rotary grinding wheel, means for conveying work pieces into position to be engaged by the wheel, stop plates one on each side of the wheel, said plates having work engaging surfaces located adjacent the wheel where it engages the work pieces, said surfaces extending transversely to the grinding wheel axis, and means for resiliently urging the work pieces against the work engaging surfaces of said stop plates while being conveyed, said work pieces being held in such position during the grinding operation that the axis of the work piece is transverse to that of the grinding wheel.

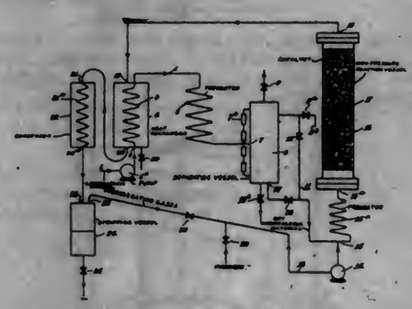
1,881,967. PHONOGRAPH. THOMAS E. PIAZZE, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,247. 30 Claims. (Cl. 274—1.)

10. An automatic phonograph trip comprising driven means actuated by rotation of the turn table for trip impulse energy, follower means moved in response to the travel of the reproducer across the record, and means for



disengaging the driven means in order to release the trip impulse energy when the speed of the driven means exceeds that of the follower means.

1,881,968. PROCESS OF DEHYDRATING MOIST FUEL. MATHIAS PIER, Heidelberg, and KURT WISSEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 21, 1927, Serial No. 207,561, and in Germany July 21, 1926. 7 Claims. (Cl. 196—53.)



1. The process of dehydrating non-gaseous moist fuels insoluble in water which comprises heating brown coal together with a liquid fuel to temperatures above 200° C. and under such a high water vapor pressure that the water separates from the fuel practically completely in the liquid form, allowing the water to form an aqueous layer and removing the water thus separated.

1,881,969. RECOVERY OF REFINED PRODUCTS FROM DISTILLABLE CARBONACEOUS MATERIALS. MATHIAS PIER, Heidelberg, and KURT WISSEL, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed July 27, 1929, Serial No. 381,457, and in Germany Aug. 15, 1928. 5 Claims. (Cl. 196—62.)

1. In a process for destructively hydrogenating distillable hydrocarbon materials, the steps of discharging the reaction products of the destructive hydrogenation into a fractionating zone under substantially the pressure of the destructive hydrogenation process, introducing a cooler oil at the upper end of said zone to condense a part of the vaporized products of said reaction products under rec-

tifying conditions, and introducing a hydrogenating gas at the opposite end of said zone to assist in a vaporization of part of said oil and prevent carbonization, withdrawing

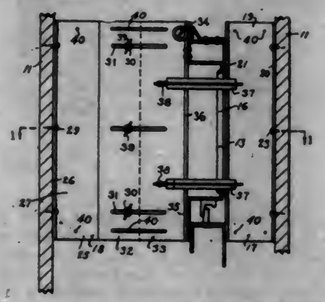


vaporized low boiling products and hydrogen at the upper end of said zone and heavy hydrocarbons at the lower end of said zone.

1,881,970. METHOD OF PREPARING CHAINS FOR SOLDERING AND A COMPOSITION OF MATTER USED IN SUCH PREPARATION. JOHN E. PILLING, Providence, R. I. Filed May 7, 1929. Serial No. 361,249. 1 Claim. (Cl. 148—24.)

A composition of matter for use in the preparation of chains for soldering consisting of two parts of powdered tin, one part of powdered copper and one part of red phosphorus.

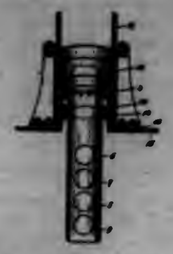
1,881,971. ADJUSTABLE FORM FOR SETTING METAL WINDOWS IN CONCRETE. ANTHONY ROEDIG, Cheviot, Ohio. Filed Dec. 12, 1930. Serial No. 501,896. 3 Claims. (Cl. 25—131.)



1. In a concrete wall construction comprising forms for said wall, pairs of U-shaped members secured to said forms, one of said pairs of U-shaped members being adjustable and provided with an offset, a window and a frame positioned between said U-shaped members, said offset fitting said window and frame, means for clamping said frame between said U-shaped members, and said frame extending beyond said U-shaped members whereby the formed concrete will anchor said frame.

1,881,972. A CARRYING DEVICE FOR SUBAQUEOUS SOUND APPARATUS. WILHELM RUDOLPH, Kiel, Germany, assignor to Electroacustic Gesellschaft mit beschrankter Haftung, Kiel, Germany, a Firm. Filed June 13, 1931, Serial No. 544,268, and in Germany June 23, 1930. 1 Claim. (Cl. 181—0.5.)

In a submarine sound signalling device for vessels, a sound device carrier protrudable through the vessel's hull and consisting of a socket supported in the vessel and a protrudable carrier element composed of an integral forg-



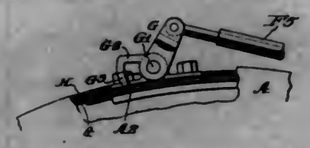
ing of non-corrosive material, having recesses for receiving the sound devices and having a cone-shaped stud at its upper end firmly seated in said socket.

1,881,973. SCREW PLUG FOR PLASTIC WALLS. ALFRED SCHMITT, Cincinnati, Ohio. Filed Dec. 31, 1930. Serial No. 505,843. 3 Claims. (Cl. 85—40.)



1. In a device of the character described, comprising a tubular member, flanges bent crosswise thereof at one end and having spurs at their outer ends, said tubular member being spirally cut and bent inwardly to form a thread at the other end, a series of slots lengthwise said tubular member forming strips therebetween and means for bulging said strips outwardly.

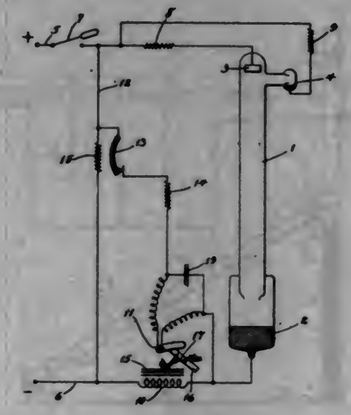
1,881,974. SAFETY APPLIANCE FOR WASHING MACHINES. JAMES H. SKITT, Philadelphia, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 1, 1929. Serial No. 359,455. 4 Claims. (Cl. 192—135.)



1. In a washing machine consisting of a casing having a sliding door, a container rotatably secured in said casing and a motor for actuating said container, the combination therewith of a lock operative to directly interengage with and lock the door of the casing when it is in closed position, and so interengageable with the body of the door when the lock is in retracted position that it is held in retracted position when the door is wholly or partly open, means for opening and closing the lock and a switch for opening and closing the motor circuit connected to the means for actuating the lock so as to open the circuit before the lock is retracted and prevent the closing of the circuit while the sliding door is open.

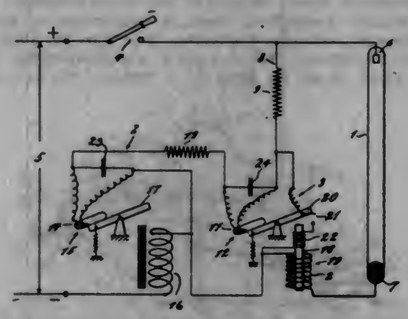
1,881,975. LAMP STARTING DEVICE. CHARLES SPAETH, Flushing, N. Y., assignor to Ne-Arga Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,681. 3 Claims. (Cl. 176—45.)

1. In a lighting system, a source of energizing current, an illuminating tube requiring a high starting potential, starting means for creating said potential and an auxiliary means for rendering said starting means in-



operative until the main supply current is cut off after the expiration of a certain interval of time from the application of the energized current.

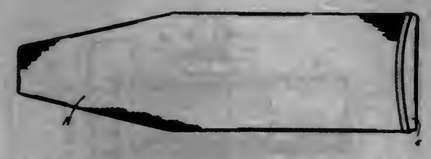
1,881,976. LAMP STARTING DEVICE. CHARLES SPAETH, Flushing, N. Y., assignor to Ne-Arga Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,682. 2 Claims. (Cl. 176—45.)



1. In a current supply system, an electric lamp, a source of power and a control switch therefor, a starting device having a circuit in shunt to said lamp, a switch therefor, and means responsive to the starting of operation by said lamp, for opening and holding open said switch second mentioned, said means comprising an armature, an associated magnetizing coil connected between said lamp and said circuit, said magnetizing coil having a winding in series with said lamp, and a separate holding winding, and contact means responsive to the opening of said switch second mentioned for energizing said holding winding.

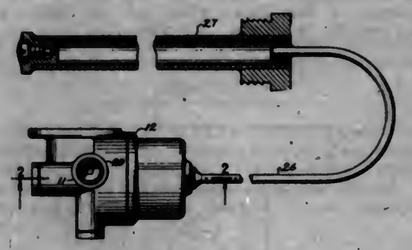
1,881,977. IRONING BOARD COVER. NELLIE NELSON SUNDBY, Minneapolis, Minn. Filed Sept. 10, 1931. Serial No. 562,059. 2 Claims. (Cl. 68—10.)

1. An ironing board cover comprising a piece of knit material adapted to be placed over an ironing board with the ribs or lines of knitting of said piece extending generally longitudinally of the board and securing means at spaced points longitudinally of the edges of said piece for stretching said piece tightly over the top of the board and for securing the edges of the piece together beneath



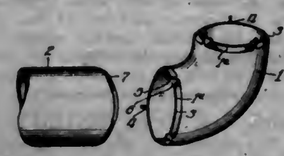
the board whereby by reason of the resiliency of the knit material crosswise of the ribs, the cover is bound to lie smoothly on the board.

1,881,978. TEMPERATURE CONTROL APPARATUS. JOHN GUDBRAND TANDBERG, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1931, Serial No. 516,303, and in Germany Aug. 20, 1930. 7 Claims. (Cl. 297—3.)



7. A fusing type thermostat containing water as the working substance and a radio-active material located in the water.

1,881,979. PIPE FITTING FOR WELDING. JAMES HALL TAYLOR, Oak Park, Ill. Filed June 8, 1931. Serial No. 542,841. 3 Claims. (Cl. 285—111.)

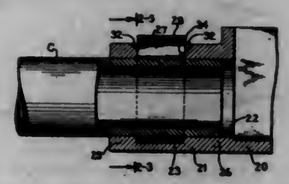


1. As a new article of manufacture, a pipe fitting adapted to be welded to a pipe beveled end, said fitting having the wall at one end thereof beveled from its outer surface inwardly toward said end and being provided with guide lugs projecting from the beveled surface of said end and having their outer ends beveled oppositely to the beveled end of the fitting, said lugs being disposed to contact the end of the pipe and center the fitting relative to the pipe end.

1,881,980. PIPE COUPLER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 17, 1930. Serial No. 502,932. 9 Claims. (Cl. 247—25.)

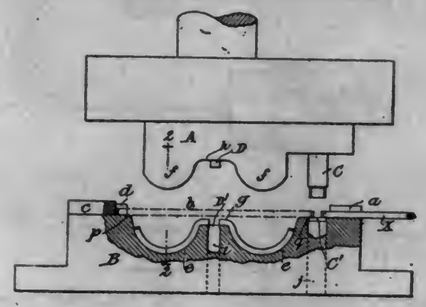
1. A pipe coupler comprising a coupler member having a bore to receive the end of a pipe, a curved groove within said bore having a pair of spaced passages leading

to the outer circumference of the member, and a U-shaped and bendable wedging means having legs spaced apart equal to the spacing of the passages and approximately



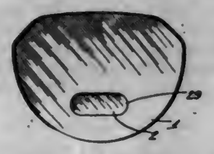
in thickness the depth of the groove, the wedging means being driven into the groove through the passages to anchor a pipe within the coupler.

1,881,981. METHOD AND APPARATUS FOR MAKING PRONGS FOR LOOSE-LEAF BINDERS. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Nov. 11, 1930. Serial No. 494,866. 8 Claims. (Cl. 140—71.)



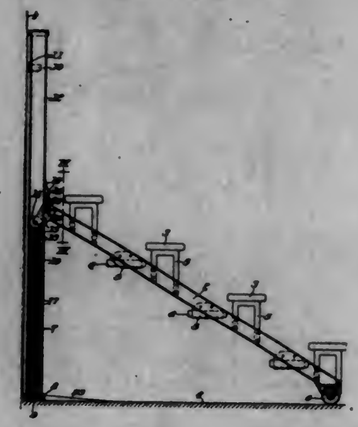
1. A method of making prongs for binders consisting in cutting off a length of wire suitable for two prongs, then bending the wire on both sides of its middle portion to form the curved portions of the prongs, and finally severing the middle portion whereby two separate prongs are simultaneously formed.

1,881,982. EYEGLASS LENS. WILLIAM R. UHLEMANN, Evanston, Ill., assignor, by mesne assignments, to Richard H. Uhlemann, Winnetka, Ill., and said William R. Uhlemann. Filed June 27, 1928. Serial No. 288,545. 12 Claims. (Cl. 88—54.)



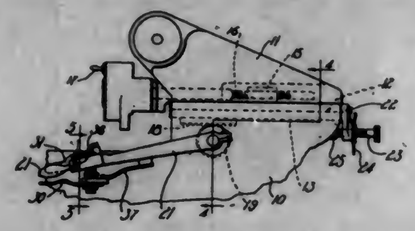
1. An eyeglass lens comprising a main body portion formed with an elongated cavity in one surface thereof, the bottom surface of said cavity being spherical and forming the envelope of the circular edge of the end of a right circular cylinder, the axis of which is shifted about a fixed center.

1,881,983. ADJUSTABLE AUDIENCE SEAT. WALTER C. UALING, Baden, Pa. Filed Sept. 4, 1931. Serial No. 561,195. 7 Claims. (Cl. 189—2.)



1. An adjustable audience seat comprising a supporting frame having a lower inwardly and outwardly movable roller-supported portion and upper guiding terminals, a plurality of tubular slotted columns, and a spring in one of said columns resiliently engaging one of the upper terminals under continuous variable pressure proportioned to the gravitating pressure of the upper terminal thereon.

1,881,984. SLIDE MECHANISM FOR PRECISION GRINDING MACHINES. CHARLES E. VAN NORMAN, Springfield, Mass., assignor to Van Norman Machine Tool Company, Springfield, Mass., a Corporation of Massachusetts. Original application filed Apr. 29, 1926, Serial No. 105,458. Divided and this application filed Apr. 9, 1928. Serial No. 268,712. 8 Claims. (Cl. 51—165.)

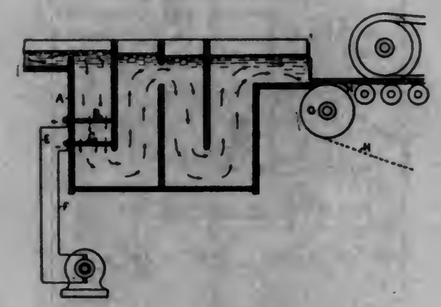


1. In a machine of the class described having work and tool supporting members, a bed, a slide movable on the bed and upon which one of said supporting members is carried, means for actuating said slide, a member for operating said actuating means, a slide stop on said slide for abutting said bed to limit the movement of said slide, a stop for limiting the movement of said operating member which is adjustable so as to abut against the operating member simultaneously with the abutting of the slide stop with the bed, and resilient means associated with said operating member arranged to cushion the movement thereof as it approaches the stop therefor.

1,881,985. METHOD AND MEANS FOR MANUFACTURE OF PAPER. ROMULUS S. VON HAZMBURG, Chester, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Apr. 6, 1931. Serial No. 530,875. 5 Claims. (Cl. 92—44.)

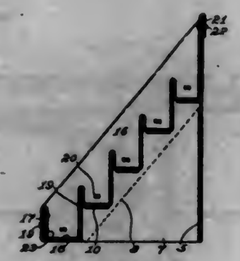
1. The herein described step in the manufacture of paper in web form which consists in forming a paper pulp and

neutralizing the normal electric charge thereon by passing the said paper pulp over electric charging means



in communication with a source of electric energy and thereafter transforming the paper pulp into web form.

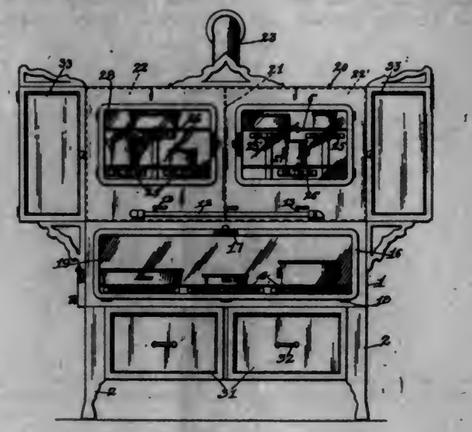
1,881,986. DISPLAY CASE. MELVIN L. WEBSTER, Independence, Iowa. Filed Mar. 2, 1931. Serial No. 519,623. 1 Claim. (Cl. 211—72.)



A display case of the character described, composed of strips of suitable material shaped, cut and secured together, one strip being rectangular bent, folded at places upon itself to provide a series of relatively inclined compartments, the other strip being cut transversely in places, bent in other places and having projecting end tabs to be secured to the compartments, said other strip also providing certain walls for the compartments and a part thereof between said transverse cuts serving as an easel support for the case hinged thereon to collapse thereagainst for shipping or storage purposes.

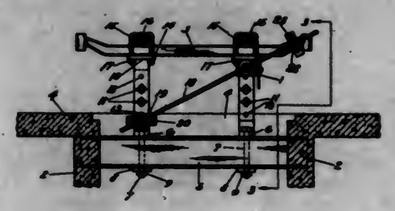
1,881,987. STOVE. SIGMOND G. WEILER, Milwaukee, Wis. Filed Oct. 30, 1929. Serial No. 403,585. 1 Claim. (Cl. 126—37.)

A stove of the class described including a body having supporting legs, said body being provided with superposed chambers, removable drawers arranged in the lowermost chambers, spaced burners arranged in the same general plane in the intermediate chamber, superposed burners arranged in each of the upper chambers, the partition wall between the intermediate and upper chambers having openings adjacent the vertical partition of the uppermost chambers, said vertical partition having a transverse opening to provide for a thorough circulation of air through the intermediate chambers and the upper chambers and



a warming oven at each side of the uppermost portion of the stove body and arranged adjacent the upper chambers.

1,881,988. AUTOMOBILE AXLE PRESS. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill., a Corporation. Original application filed Dec. 21, 1928, Serial No. 327,643. Divided and this application filed Feb. 7, 1930. Serial No. 426,549. 1 Claim. (Cl. 153—32.)



A press for automobile axles, comprising a fixed beam, a pair of frames rigidly connected with said beam and provided with axle supports, axle engaging devices on said supports, a loop connected with the lower end of one of said frames, a bar held at one end in said loop and extending diagonally to an intersection with an axle supported on said frames, means for connecting said bar with such axle, and means for exerting a pressure against said bar to bend said axle.

1,881,989. CHEWING GUM. VAN LEAR WOODWARD, Stone Ridge, N. Y. Filed Feb. 17, 1930. Serial No. 429,215. 11 Claims. (Cl. 99—11.)

1. A chewing gum comprising Euphorbia coagulum.

1,881,990. TILTING DEVICE FOR UMBRELLAS. GUSTAVE ZITZER, Philadelphia, Pa., assignor to Fretz-Gross & Co., Philadelphia, Pa., a Firm composed of Samuel S. Fretz, jr., and Isaiah W. Gross. Filed July 21, 1931. Serial No. 552,177. 2 Claims. (Cl. 287—98.)

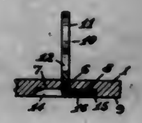
1. In a beach or lawn umbrella a coupling comprising a lower socket the top of which is provided with an

annular shoulder terminating in an exteriory screw-threaded upright bifurcated extension, an upper socket having a pendant integral lug pivoted to said bifurcated extension so as to have tiltable connection with said first mentioned socket, the lower part of said upper socket having an annular shoulder, and an internally screw-threaded



lock-nut arranged to co-operatively engage said extensions to vertically align said sockets in vertical position or permit inclination of one socket with respect to the other as limited by the shoulder upon said upper socket, said lock-nut being limited as to downward movement by the shoulder of said lower socket.

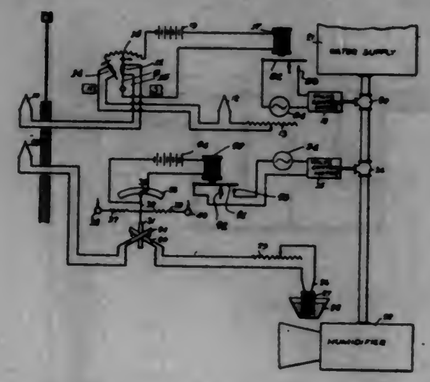
1,881,991. DEVICE FOR PRACTICING GOLF STROKES. LAWRENCE E. YAGGI, East Cleveland, Ohio. Filed Mar. 18, 1930. Serial No. 436,719. 2 Claims. (Cl. 273—35.)



1. In a device for practicing golf strokes, the combination of a base, the base having an upper and a lower side, the center of the base being raised at its upper side, the raised portion of the base being of a diamond shape and having forward and rear points, strips extending longitudinally upon the upper side of the base, the raised diamond portion of the base being provided with a transversely extending slot, the base having recesses in its lower side extending from said slot in opposite directions and lateral of each other, a target of resilient rubber, the target having a neck, the neck extending through said slot, the free end of the neck being split in halves, strips of tin embedded in said halves, and said halves being bent in opposite directions and forced into said recesses for holding said target in position.

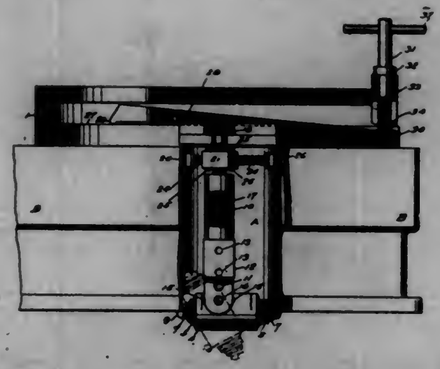
1,881,992. AIR CONDITIONING CONTROL. SAMUEL M. ANDERSON, Sharon, Mass., and ROBERT T. PALMER, New York, N. Y., assignors to B. F. Sturtevant Company, Boston, Mass. Filed May 9, 1931. Serial No. 536,144. 12 Claims. (Cl. 236—44.)

2. Humidity control apparatus comprising means for supplying moisture to the air of a heated room, an observation surface within said room having a portion exposed to outdoor temperature, means responsive to the dry bulb temperature of the air within said room and to the temperature of said observation surface, for decreasing



the supply of moisture to the room, when for a given temperature of said observation surface, the dry bulb temperature falls below a predetermined level.

1,881,993. TOOL ATTACHMENT DEVICE. EWALD A. ARP, Minneapolis, Minn., assignor to Van Norman Machine Tool Company, Springfield, Mass., a Corporation. Filed Oct. 15, 1930. Serial No. 489,004. 3 Claims. (Cl. 77—2.)

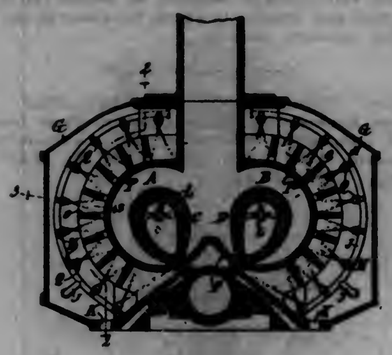


1. A device for securing a tool to a multi-cylinder engine block, comprising a base adapted to rest upon the engine block and having a mounting for a tool, an anchor securable within a cylinder other than the one being worked upon, a pressure member having pivotal engagement intermediate its length with the anchor and having two-point engagement at one end with the base adjacent the tool mounting, a bridge straddling the pressure member at its other end and resting with a two-point contact upon the base, and means to draw the second end of the pressure member towards the bridge to press the bridge and the opposite end of the pressure member simultaneously against the base.

1,881,994. RUBBER WORKING MACHINE. FERNLEY H. BANBURY, Ansonia, Conn., assignor to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a Corporation of Connecticut. Filed Nov. 28, 1927. Serial No. 236,137. 7 Claims. (Cl. 18—2.)

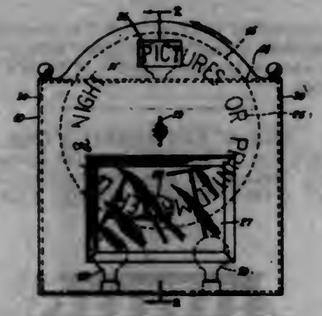
5. A rubber mixer having a cylinder and rotor adapted to knead or smear the composition between them and the

cylinder having spraying means located around it, with means for supplying a cooling fluid to said spraying means, the parts being constructed to permit the free escape of the cooling fluid so that continuous spraying without in-



terference of an accumulated body of cooling fluid is secured, and said spraying means acting to deliver the spray against the surface to be cooled at substantially a right angle to the latter.

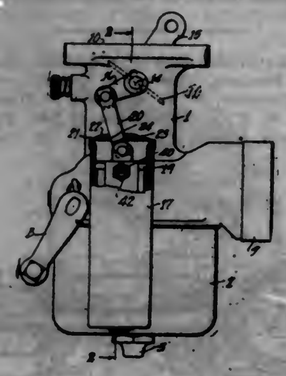
1,881,995. ADVERTISING DISPLAY APPARATUS. EDWARD A. BERNSTEIN, Brooklyn, N. Y. Filed Oct. 23, 1931. Serial No. 570,576. 13 Claims. (Cl. 40—77.)



1. In an advertising display, a rotating display member containing advertising, and a plurality of orifices of different sizes through which different portions of said advertising may be simultaneously viewed, one portion of said advertising on said rotating member being enlarged when viewed.

1,881,996. CARBURETOR. GEORGE M. BICKNELL, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,731. 17 Claims. (Cl. 261—34.)

1. In a carburetor, a fuel chamber, a mixture conduit, means for normally supplying fuel from said fuel chamber to said mixture conduit, a valve for controlling the passage of mixture through said conduit, a fuel pump for supplying additional quantities of fuel to said fuel conduit, said pump comprising a chamber in which fuel is segregated from the fuel in said first named chamber, a connection between said pump and said valve for operating the pump to discharge fuel upon a movement of said valve, an air chamber associated with said pump to receive a portion of said segregated fuel during said movement and to discharge said portion after said move-



ment has terminated, said pump being constructed and arranged to be substantially inoperative at high temperatures.

1,881,997. METHOD OF MAKING NONCORRODIBLE SPRINGS. VERE B. BROWNE, Brackenridge, Pa. Original application filed Jan. 2, 1930, Serial No. 417,924. Divided and this application filed July 31, 1931. Serial No. 554,200. 4 Claims. (Cl. 29—173.)



2. A method of making non-corrodible springs including the steps of preparing a core of suitable steel, preparing a tube of non-corrodible alloy steel, of predetermined diameter, assembling said tube over said core so that close cohesion exists between the cooperating surfaces, in effect forming a unitary element, rolling said element by reducing steps to an eventual "flat", forming a spring therefrom and tempering the whole at any suitable stage.

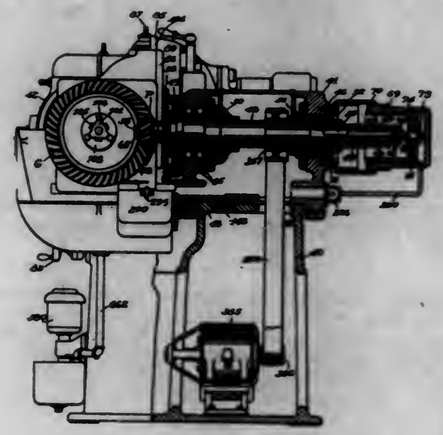
1,881,998. FIXTURE SUPPORT. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 9, 1929. Serial No. 384,585. 10 Claims. (Cl. 240—85.)



8. An outlet box assembly comprising an outlet box having a box hole therein, a fixture support for insertion in the box hole, including a member split longitudinally from one end forming a flexible end therefor, a groove

at the flexible end to receive the edge of the box hole, means to expand the flexible end of the member to anchor the edge of the box hole in the groove, and means to attach a lighting fixture to the member.

1,881,999. MACHINE FOR FINISHING GEARS. EDWARD W. BULLOCK, ROBERT S. CONDON, and EYVIND FINSEN, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Oct. 16, 1930. Serial No. 489,082. 37 Claims. (Cl. 29—90.)

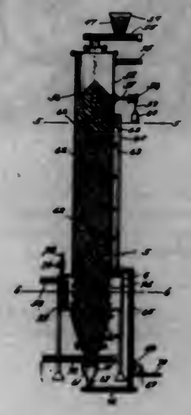


2. In a machine for finishing gears, a pair of spindles, means for detachably securing a gear to each of said spindles, means for adjusting the spindles relative to one another to bring the gears into mesh, means for rotating the spindles in opposite directions, means for imparting an added relative movement between the gears while they are rotating in mesh to effect the finishing operation, separate means governing said movement during the finishing of opposite sides of the teeth of the gear, means movable to bring the last named means successively into operative position, and means actuated on said movement to reverse the direction of rotation of said spindles.

8. In a machine for finishing gears, a frame, a carrier oscillatably mounted in the frame, a pair of spindles, one of which is journaled in said carrier with its axis offset from but parallel to the axis of said carrier, means for detachably securing a gear to each of said spindles, means for adjusting the spindles relative to one another to bring said gears into mesh, a pair of cams having different effective contours rotatably and slidably mounted in the frame, a follower engageable with either of said cams and adapted when in engagement with either to effect oscillation of said carrier on rotation of said cams, means for rotating the gears in mesh, means for rotating said cams, and means operative, after the machine has been in operation a predetermined length of time, to first disengage the follower from the cam with which it has been in engagement and immediately thereafter move the other cam axially to bring it into engagement with said follower.

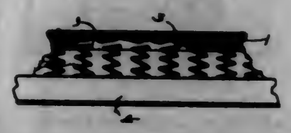
26. In a machine of the class described, a pair of heads, a spindle journaled in each head, chucking mechanism for detachably securing a gear to each of said spindles, fluid pressure operated means for controlling the chucking mechanism of one spindle, fluid pressure operated means for moving one of said heads into position comprising a cylinder and a piston reciprocable therein and ducts through which pressure fluid may be admitted to one end of the cylinder and exhausted from the other, one duct being so located that when it is on exhaust, the exhaust is shut off and the head stopped before the head has moved fully into operative position, a valve controlling the operation of the chucking mechanism and movement of the head, said valve being rotatable to first actuate the chucking mechanism and then to move the head into position short of full operative position, and a second valve operable manually to control further exhaust from said cylinder to enable movement of the head into full operative position.

1,882,000. PROCESS FOR TREATING OILS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 1, 1925. Serial No. 19,856. 10 Claims. (Cl. 196—44.)



8. The method of treating cracked hydrocarbon vapors which comprises contacting the same with a basic iron compound and an intimate mixture of fuller's earth and copper oxide.

1,882,001. SPRING PAD CONSTRUCTION. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 2, 1930. Serial No. 417,902. 5 Claims. (Cl. 68—9.)

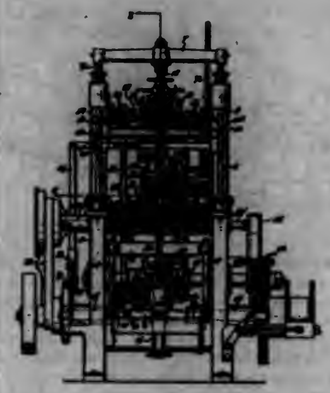


1. A spring pad for pressing machines comprising a base sheet of padding material and a spring backing for said base sheet consisting of a plurality of springs having their ends interlocked in the base sheet and terminating short of a face of the base sheet.

1,882,002. PROCESS FOR REFINING MINERAL OIL. MELVIN A. DIETRICH, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 474,061. 2 Claims. (Cl. 196—16.)

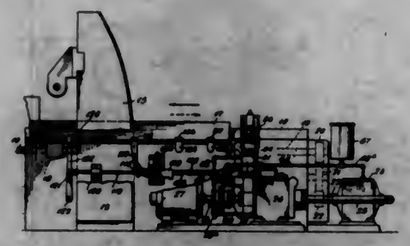
1. The process of treating used mineral lubricating oil containing suspended and dissolved impurities produced by oxidation and cracking in order to effect the removal of such impurities which comprises adding to the oil not less than one-tenth of one percent of tritehanolamine to effect coagulation of said impurities and separating the reaction products from the oil.

1,882,003. HAT MAKING MACHINERY. PHILIP C. DONNER, Summit, N. J., assignor to The Chapal Donner Corporation, Newark, N. J., a Corporation of New Jersey. Filed Aug. 22, 1930. Serial No. 477,055. 5 Claims. (Cl. 223—33.)



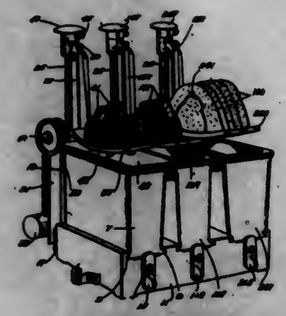
1. In a machine of the kind described, vertically reciprocable stretching fingers, a supporting cage to hold a hat body subject to the action of said stretching fingers, a female clamp means, means to rotate said female clamp means about the vertical axis of the supported hat body engaged therewith to turn the latter on such axis, means to simultaneously rock said female clamp means on a transverse horizontal axis at right angles to the axis of rotation to oscillatorially shift the supported hat body during rotation thereof, a male clamp means cooperative with said female clamp means to grip the hat body in operative connection therewith, means to mount said male clamp means for rotation about the vertical axis of said supported hat body, and a universal connection between said latter means and said male clamp means.

1,882,004. DRIVING MECHANISM. ARTHUR L. ELLIS, New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 29, 1930. Serial No. 491,911. 6 Claims. (Cl. 60—52.)



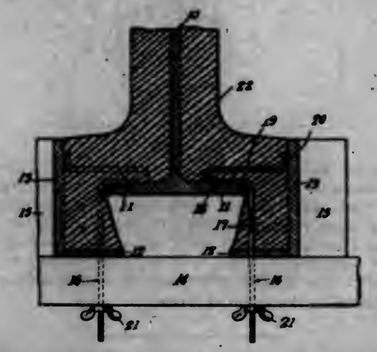
1. The combination of a reciprocable machine element, hydraulic driving mechanism of variable speed for reciprocating said element, a servo-motor for adjusting said driving mechanism to vary the speed thereof, a pilot valve in said servo-motor, a cam slide provided with controlling faces at different horizontal levels for actuating said pilot valve to determine the operation of said servo-motor, adjustable means whereby the horizontal plane of one of said faces is changed to vary the operative effect of said face upon said pilot valve, means for adjusting said cam slide, and means carried by said machine element for controlling said adjusting means whereby the servo-motor is caused to adjust said driving mechanism to automatically vary the speed of travel of said element at predetermined stages in a given direction of movement thereof.

1,882,005. SHOE STIFFENER CONDITIONING MACHINE. CHARLES S. EMERSON, Manchester, N. H., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 5, 1928. Serial No. 267,692. 1 Claim. (Cl. 91—46.)



A device for treating toe stiffeners and like articles with a liquid having, in combination, a receptacle for liquid having a depth greater than the length of a stiffener from toe end to rear edge, a carrier for the stiffeners, means adapted for manual manipulation to move the carrier into the liquid sufficiently to immerse the stiffeners, a vertical guideway positioned outside of said receptacle, said carrier being slidably mounted on said guideway, and gravity actuated means for normally holding the carrier above the level of the liquid in the receptacle and for gradually returning the carrier to its normal position above the level of the liquid in the receptacle upon release of said immersing means.

1,882,006. COMBINED FORM SUPPORT AND SPACER. WILLIAM J. FERRY, Allentown, Pa., assignor to Cement-Gun Contracting Company, a Company of Delaware. Filed Aug. 10, 1931. Serial No. 556,225. 4 Claims. (Cl. 25—131.5.)

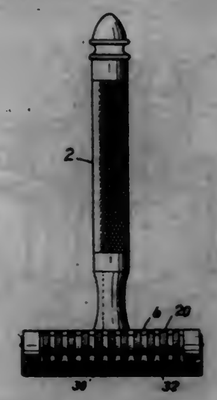


2. A combined form support and spacer of the character described, comprising a single piece of wire or the like having a straight portion provided with a screw-thread at one end, a portion bent off from said straight portion and substantially perpendicular thereto, and a portion bent back from the second mentioned portion and extending beyond said straight portion, the third mentioned portion having its free end bent to one side to provide a head.

1,882,007. RAZOR. PERCE R. GALT, Merchantville, N. J. Filed Apr. 16, 1932. Serial No. 605,585. 5 Claims. (Cl. 30—12.)

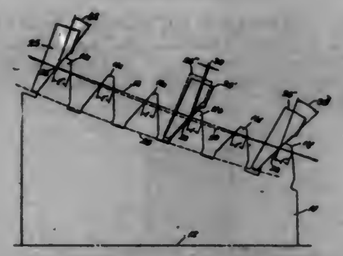
1. A razor comprising a holder adapted to mount a double-edged blade for sliding movements in the direction of

its cutting edges, and means for imparting oscillatory movements of this character to the blade during shaving, said means including a slide mounted in the holder and



having connection with the blade, a lever fulcrumed on the slide, rotary members arranged to engage the face, and cams carried by the rotary members and engaging the ends of the lever.

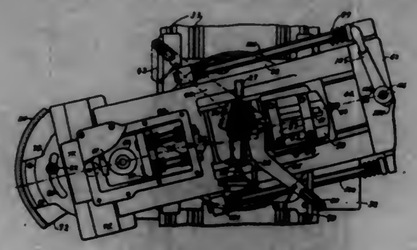
1,882,008. HOB. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,498. 26 Claims. (Cl. 29—103.)



1. A hob having a plurality of finishing teeth arranged in a thread of a single pitch, said pitch conforming to a definite law, each of said teeth having two finishing side cutting edges for cutting opposite sides of the teeth of a gear, and certain of said teeth, when measured on a surface of revolution coaxial with the hob, varying in thickness from the normal thickness of corresponding teeth of a thread of the selected pitch.

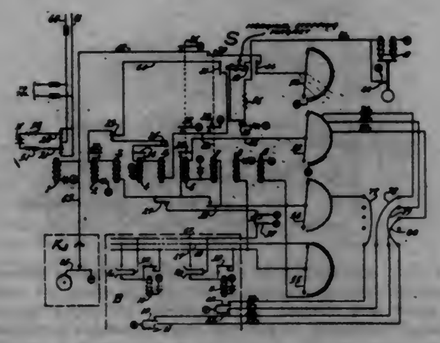
1,882,009. METHOD AND APPARATUS FOR RELIEVING HOBS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Original application filed Nov. 28, 1928, Serial No. 322,498. Divided and this application filed May 27, 1930. Serial No. 456,215. 24 Claims. (Cl. 82—19.)

1. The method of forming a hob which comprises effecting a relative relieving movement between the hob blank and a relieving tool for each tooth of the hob while rotating the hob blank on its axis and moving the relieving tool and blank relative to one another to cause the relieving tool to follow the hob thread, and producing an additional relative movement between the tool and blank, separate from the relieving movement, of advance and recession relative to the axis of the hob as the tool moves relatively lengthwise of the blank, to cause the tool to follow a line other than the pitch line of the hob as its moves relatively from one end of the hob to the other.



24. In apparatus for relieving taper hobs, a bed, a reciprocable tool slide, a rotatable work spindle, a carriage movable longitudinally of the work, a tool-support rotatably mounted on the slide and adapted to carry a relieving tool, a carrier upon which the slide is reciprocable, a plate upon which the carrier is movable, said plate being mounted on said carrier for angular adjustment thereon to position the tool slide and carriage for movement in a direction perpendicular to the cone surface of the work, an angularly adjustable guide member mounted on the bed and having an arcuate guide surface, a follower secured to said carrier adapted to engage said guide surface, means for rotating the work spindle on its axis, means for imparting movement to the carriage, means for reciprocating the tool slide, a second guide member mounted on said carriage, and a follower secured to the tool support adapted to engage said second guide member whereby movement of the tool carriage acts to move the tool support continuously during movement of the carriage to change the inclination of the side cutting edge of the tool continuously relative to the axis of the work as the tool moves from one end of the work to the other.

1,882,010. SELECTIVE SIGNALING SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,301. 8 Claims. (Cl. 177—380.)



1. In an impulse transmitter, a relay, means for generating impulses, a stepping switch, means for operating said stepping switch by said impulses and for simultaneously alternately energising and deenergising said relay, means controlled by said relay for transmitting an impulse when it energises and another impulse when it deenergizes, means controlled through said switch for arranging said transmitted impulses into codes separated by pause periods, and for maintaining said relay energised or deenergised during said pause periods dependent upon the code being transmitted, and means for maintaining said last means effective while said stepping switch takes two steps.

1,882,011. REFRIGERATOR CONSTRUCTION. PAUL R. HEYGEL, Ridgefield, N. J. Filed May 22, 1930. Serial No. 454,560. 7 Claims. (Cl. 62—51.)



1. In a refrigerator, an ice compartment separate from the remainder of the refrigerator, said ice compartment comprising a plurality of side-by-side aligned component parts, and means for removably positioning said parts in the refrigerator, whereby said parts may be readily replaced without disturbing other structural parts of the box.

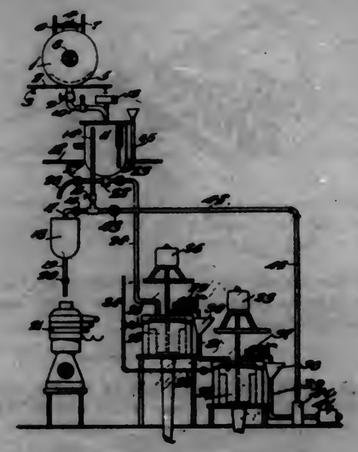
1,882,012. PAPER ROLL. JOHN EDGAR HIBBS, Ardmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Dec. 6, 1929. Serial No. 412,142. 1 Claim. (Cl. 206—59.)



An improved roll of paper in web form which consists of a core of corrugated cross section comprised of a plurality of convolutions of a continuous web of paper firmly glued together into a yielding multiply structure of corrugated form and about which the continuous web of paper is wound in separable cylindrical convolutions, said core integral with the cylindrical convolutions and providing cellular spaces about the axis thereof and between it and the cylindrical convolutions of said web of paper.

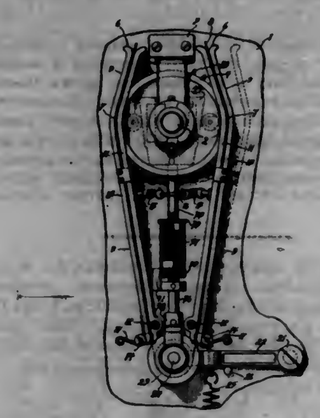
1,882,013. METHOD OF EXTRACTION OF COCOA BUTTER. IVAN S. HOCKER, Philadelphia, Pa., assignor to The Hocker Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,279. 4 Claims. (Cl. 87—6.)

1. The herein described method of extracting cocoa butter, which consists in mixing cocoa or mascerated cacao beans with water to form an aqueous mixture, adding a protein coagulating reagent, subjecting the mixture to a temperature sufficient to melt the fatty constituents and to gelatinize the starchy constituents, horizontally stirring the mixture slowly and continuously, next subjecting



the mixture to slow vertical stirring, to liberate the free fat, and finally withdrawing the fat thus liberated from the top of the said mixture.

1,882,014. PERFORATED STRIP SPROCKET FEED MECHANISM. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1930. Serial No. 466,469. 9 Claims. (Cl. 271—2.3.)

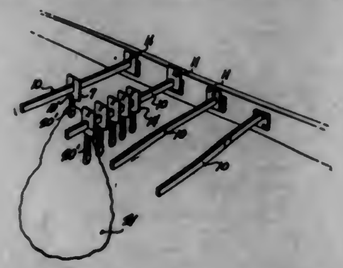


1. The combination with a revoluble feed sprocket, of a guide movable radially of said sprocket and adapted in its said movement for variably positioning a perforated strip engaged on said sprocket, and automatic means responsive to lineal variation of the strip for adjustably positioning said guide whereby to correspond the position of the strip radially on said sprocket with lineal variation of the strip.

1,882,015. LAUNDRY IDENTIFICATION APPARATUS. MONTE F. HUEBSCH, Milwaukee, Wis., assignor to Huebsch Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 6, 1930. Serial No. 493,753. 4 Claims. (Cl. 40—195.)

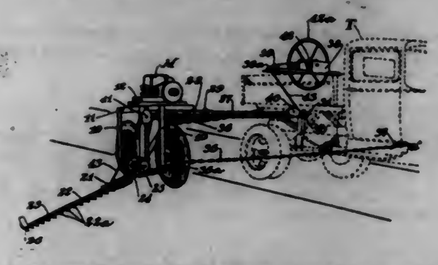
1. In a checking device, the combination with fixed keys, of plural series of check members having external

outlines independent of said fixed keys, certain series being distinguished from other series by differences in external outline, and check members of similar outline be-



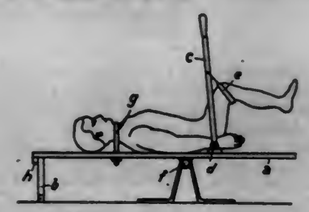
ing further divided in individual series by varying the relative location of those parts of the checks cooperating with the fixed keys.

1,882,016. MOWER FOR HIGHWAY SIDES. GEORGE W. HUNTINGTON, Glencoe, Minn. Filed May 22, 1931. Serial No. 539,298. 16 Claims. (Cl. 56—25.)



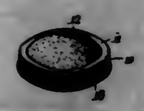
1. In combination with a vehicle adapted to travel over a highway, a mowing machine comprising a supporting frame connected with said vehicle and drawn thereby in a path extending parallel to the travel of said vehicle, means for holding said frame in widely spaced relation to one of the sides of said vehicle, said frame having ground engaging supporting means, a mower device mounted on said frame and angularly adjustable relatively thereto and a motor mounted on said frame for driving said mower device.

1,882,017. LIFE RESTORING APPARATUS. WILHELM KAISER, Berlin-Schmargendorf, Germany, assignor to Deutsche Gasglühlicht-Auer-Gesellschaft m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 17, 1931, Serial No. 509,348, and in Germany Jan. 23, 1930. 10 Claims. (Cl. 128—28.)



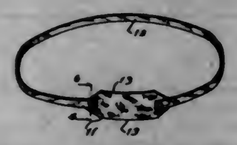
5. Apparatus adapted for resuscitation of the character described comprising in combination a couch dimensioned to support the patient completely in a reclining position, two levers pivotally secured to said couch, a support carrying an axis about which the said couch and the patient thereon may be swung to different positions, and rigid attaching means provided on said levers adapted for attachment to the legs of the person to be resuscitated whereby pivotal operation of the levers will develop an unrestricted bending of the knees of the patient to press the thighs of said patient into engagement with the abdomen and out of contact therewith to stimulate abdominal breathing.

1,882,018. DEVICE FOR TREATING AND PREVENTING INSECT BITES. JOSEPH F. KASNICKA, Cicero, Ill. Filed Feb. 6, 1930. Serial No. 426,268. 5 Claims. (Cl. 128—269.)



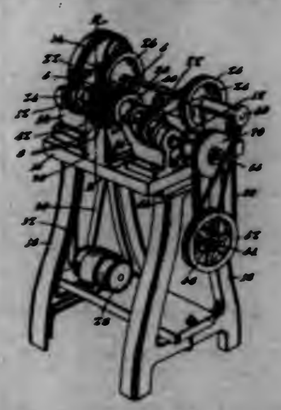
3. A device of the character described comprising, in combination, a body of substantially rigid porous material impregnated with a liquid composed of an insectifuge and a substance which acts to sooth insect bites, a pad having one side bearing against said body whereby to absorb the liquid gradually therefrom, and means holding said pad in position on said body.

1,882,019. LIP GUARD. IDA KAUFMANN, New York, N. Y. Filed Mar. 21, 1932. Serial No. 600,253. 2 Claims. (Cl. 2—46.)



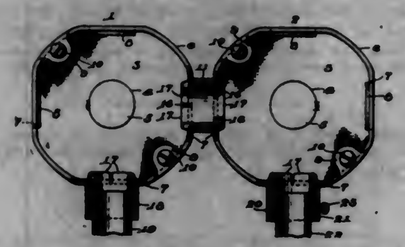
1. A device of the kind described, comprising a shield consisting of a single piece of fabric adapted to assume the shape of the mouth of the wearer, said shield having stiffened longitudinal edges and being overlapped at its end portions, an elastic strap adapted to surround the head of a person and a single fastening means holding said overlapped portions together and adapted to engage means on said strap for quickly joining said shield to said strap.

1,882,020. ART OF MANUFACTURING SHANK PIECES. EVERSLEIGH R. LAIRD, Brockton, Mass., assignor to United Shank & Findings Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1926. Serial No. 81,765. 7 Claims. (Cl. 51—74.)



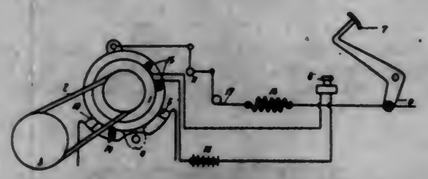
1. In a machine of the class described, a finishing roll, a yielding work support comprising a pair of spaced fingers, means extending between said fingers and co-operating with the roll to feed a piece of work along the support at a different speed from that of the periphery of the roll, and means on the roll for performing a finishing operation on the work as the work is fed.

1,882,021. CONDUIT CONNECTER. RUDOLPH L. LAUER, Philadelphia, Pa. Filed Jan. 29, 1931. Serial No. 512,071. 2 Claims. (Cl. 247—25.)



1. In combination, an outlet box or the like having an aperture, a connecter having a tapered end portion insertible through said aperture and provided with circumferentially spaced longitudinally extending severances providing interposed inherently expansible fingers, said fingers having an external circumferential groove about the same in spaced relation to the free ends thereof and having shoulders defining the sides of the groove, said groove and shoulders being rigidly engageable with the portion of the box surrounding said aperture through the expansive action of said fingers following contraction by passage through the aperture, the connecter thus being attachable solely of itself and automatically through its application in said aperture.

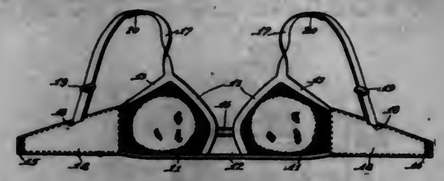
1,882,022. STARTING MECHANISM FOR MOTOR VEHICLES. FERDINAND LEYVASTRE, Lyon, France, assignor to Societe de Paris et du Rhone, Lyon, France, a Corporation of France. Filed May 31, 1930, Serial No. 457,687, and in France June 28, 1929. 12 Claims. (Cl. 290—31.)



9. Apparatus for starting an internal combustion engine having a crank shaft, which comprises in combination a combined electrical generator and motor having a spindle, a belt normally under a predetermined tension arranged to transmit rotational movement of the spindle of said motor to the crank shaft of the engine, mechanism operatively connected to said motor an initial operation of which is adapted to move said motor relatively to said crank shaft so as to subject the said belt to a supplementary tension and a further operation of which is arranged to operate a contact device so as to close a circuit for the said motor.

1,882,023. BRASSIÈRE. HELENE MALNICK, Chicago, Ill. Filed Jan. 30, 1930. Serial No. 424,593. 4 Claims. (Cl. 2—42.)

1. A garment of the kind described, comprising two breast-receiving portions, or pockets of yieldable fabric having inner and upper edges diverging upwardly and outwardly from the middle front portion of the garment, elastic strips bordering said portions on the inner and top edges thereof, a single elastic strip bordering the bottom edges of both of said portions and bridging the



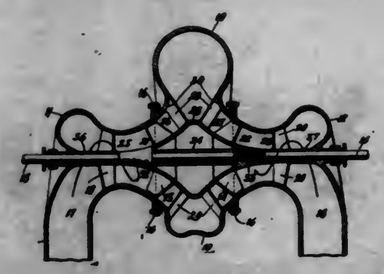
space between said two portions, and a non-elastic band connecting said portions substantially at the point of nearest approach of said inner edges to each other.

1,882,024. VEHICLE SPRINGS. GEORGE MENGER, Oak Park, Ill. Filed Apr. 27, 1929. Serial No. 358,516. 7 Claims. (Cl. 267—17.)



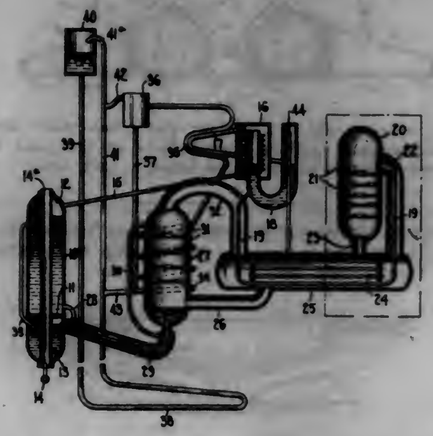
7. The combination with the frame and axle of a vehicle, of a plurality of springs adapted to carry the load, means for communicating weight of the load to one of said springs to flex the same, means for communicating flexing movement of said one of said springs to two others of said springs only after said one of said springs has been flexed a predetermined amount, said last-mentioned means being adapted to render inoperative said two other springs during the rebound of said one of said springs from a fully flexed position to a less-flexed position thereof.

1,882,025. HYDRAULIC PUMP. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed Aug. 21, 1920, Serial No. 405,185, and in Canada Apr. 8, 1923. Divided and this application filed June 15, 1923. Serial No. 645,537. 12 Claims. (Cl. 103—88.)



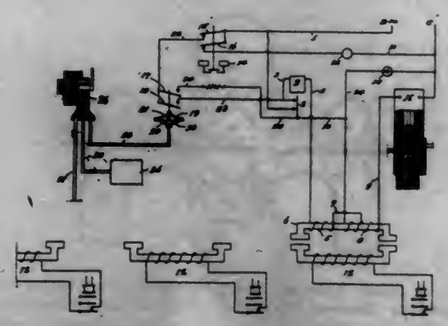
1. A rotary hydraulic pump having in combination two oppositely disposed unshrouded impellers of approximately axial flow type and a single volute discharge casing receiving the discharge from both of said impellers, said impellers operating within chambers bounded by surfaces of revolution generated by lines of gradual curvature smoothly merging into the surface of said volute discharge casing, said chambers being so disposed that their center lines diagonally cross each other when extended, the chambers comprising vane-free annular spaces adapted to receive water directly from said impellers while the remainder of each of said chambers have therein a plurality of guide vanes.

1,882,026. **FLUID HEAT TRANSFER SYSTEM.** CARL GEORG MUNTERS, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1932, Serial No. 590,946, and in Germany June 20, 1931. 15 Claims. (Cl. 62—119.5.)



12. In a fluid heat transfer system, a heated portion, a cooled portion below said heated portion, means utilizing vapor formed in said heated portion to circulate liquid through said cooled portion by gravity, means for returning unvaporized liquid directly to said heated portion, means for supplying liquid from said cooled portion to replace liquid vaporized in said heated portion, and means whereby liquid from said cooled portion condenses vapor from said heated portion.

1,882,027. **TRAIN CONTROL SYSTEM.** FRANK H. NICHOLSON, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1932. Serial No. 593,726. 2 Claims. (Cl. 246—63.)



1. A train-carried control system including: a normally energized control relay; a normally energized brake-setting device; two circuits controlled by a front contact of the control relay, one circuit including said control relay and brake-setting device in series, and the other circuit including the brake-setting device; and manually controlled means to maintain said circuits closed independently of the front contact of the control relay provided the train is running below a given speed.

1,882,028. **MILK PRODUCT.** HERBERT E. OTTING, Westerville, Ohio, assignor to M and R Dietetic Laboratories, Inc., Columbus, Ohio, a Corporation of Ohio. Filed May 21, 1930. Serial No. 454,520. 2 Claims. (Cl. 99—11.)

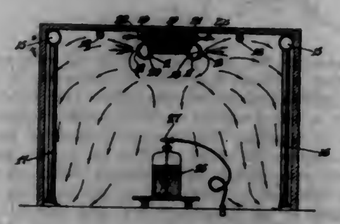
1. The method of producing milk chocolate which comprises incorporating with finely divided cocoa solids, finely divided powdered milk solids, the latter comprising separately spray-dried portions, one of a milk product not higher in butter fat than whole milk and the other of a liquid milk product containing at least 7.50% butter fat, the fat particles of the milk solids being sufficiently free from fat impervious coatings to permit coalescence thereof on trituration, and triturating the mixture.

1,882,029. **BOX CAR DOOR.** MATTHEW H. OWEN, Detroit, Mich. Filed Sept. 2, 1930. Serial No. 479,213. 1 Claim. (Cl. 20—22.)



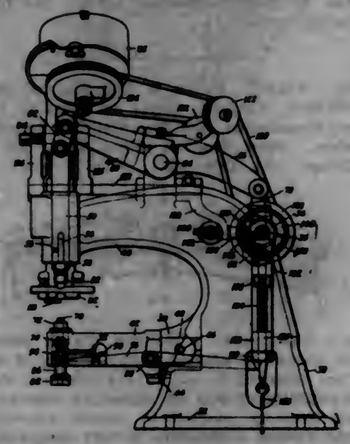
In combination with a box car and sliding door therefor, means for holding the door in position spaced from the outer wall of the car, a lock for the door comprising an angle extending substantially the entire height of the door pivoted along a vertical axis and adapted when in the inoperative position to be enclosed between the door and the car, the angle being pivoted to the car immediately behind the door, a lock link pivoted on the car adapted to be enclosed behind the door, the relation between the angle and the link being such that when the door is closed and the angle is rotated into engagement with the rear edge of the door, it overlies the outer wall thereof, and the link being adapted to abut on the angle, means for locking the link and angle in fixed relation to hold the angle against rotation and form a permanent lock for the door.

1,882,030. **CONDITIONING SYSTEM FOR COLD STORAGE ROOMS.** MARY E. PENNINGTON, New York, N. Y. Filed Oct. 18, 1929. Serial No. 400,510. 12 Claims. (Cl. 257—8.)



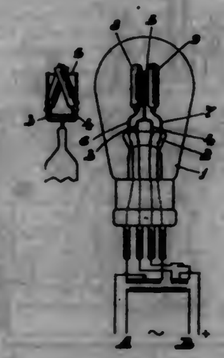
1. In a system for increasing the humidity of the air in a cold storage chamber maintained at freezing temperature or lower, the combination of refrigeration pipes, means for uniformly circulating air through all parts of the chamber, a water supply pipe provided with atomizers for introducing water into the circulating air in the form of a very fine spray thereby forming minute ice particles floating in the air and effecting increase in the degree of humidity by change into vaporous condition by sublimation, and means for maintaining the water in said pipe above freezing temperature.

1,882,031. **FASTENER-INSERTING MACHINE.** MERTON D. PHELAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 30, 1931. Serial No. 512,384. 19 Claims. (Cl. 218—2.)



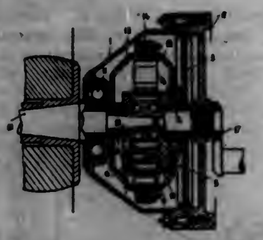
1. A fastener-inserting machine comprising a spindle, a raceway arranged to present thereto the open end of a tubular fastener having a flange and a crown at its other end, mechanism for relatively moving said raceway and the spindle to place the fastener on the spindle, and mechanism arranged to insert and clench the fastener thus lodged on the spindle.

1,882,032. **DISCHARGE TUBE.** EKKO OOSTERHUIS and JOHANNES GIJSBERTUS WILHELM MULDER, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited-Liability Company. Filed July 11, 1927, Serial No. 204,968, and in the Netherlands Oct. 9, 1926. 2 Claims. (Cl. 250—27.5.)



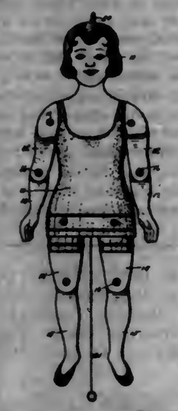
2. A gasfilled discharge tube for rectifying both half waves of an alternating current ranging in voltage between 80 and 400 volts, having a filling of rare gas at a pressure lying between 0.5 and 5 mm. of mercury, a substantially centrally located electron-emitting-oxide cathode, and provided with cylindrical anodes consisting at least superficially of carbon and located respectively at each side of the plane through the center of the cathode, the active surfaces of which anodes are of relatively great radius of curvature as compared with that of the cathode, and which anodes have ends at a point remote from the emitting surface of the cathode, and conductors for the anodes connected at said remote ends whereby the conductors are substantially protected from being struck by positive ions.

1,882,033. **REDUCING GEAR FOR CO-AXIAL SHAFTS.** GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Societa Anonima, Turin, Italy. Filed Sept. 28, 1931. Serial No. 564,651, and in Italy May 15, 1931. 2 Claims. (Cl. 74—7.)



1. In a reducing gear, the combination with a box, a driven shaft and a driving shaft in alignment with each other and a pinion on the driving shaft, of an internally toothed rim, cup-shaped flanges fixed peripherally on each side of said toothed rim, one of said flanges being keyed on the driven shaft, supports in said box for said flanges, an intermediate eccentric toothed rim with internal and external teeth meshing with said pinion and said first-mentioned rim, respectively, and a support for said eccentric toothed rim fixed to said box on one side and supported by the driven shaft on the other side.

1,882,034. **JOINTED FIGURE TOY.** JOHN K. RAUGSTAD, Chicago, Ill. Filed Dec. 10, 1931. Serial No. 580,134. 1 Claim. (Cl. 46—40.)



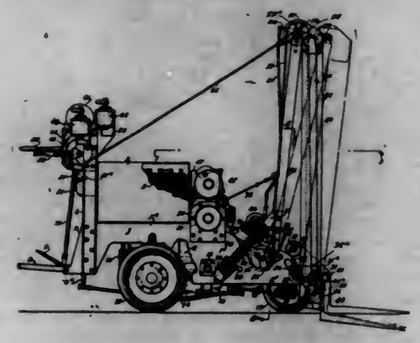
A toy of the character described in the form of an animal, the toy comprising a body, a head and neck pivoted upon the body, a tail pivoted upon the body, a fore leg pivoted upon the body and hind legs pivoted upon the body and joined to each other, an elastic band connecting the neck on one side of the pivot thereof to the tail on one side of the pivot thereof, an elastic band connecting the fore leg to the hind leg on one side of the pivots thereof, a pull cord attached to said rubber bands, elastic bands engaged with the fore legs and hind legs and with the neck and the tail and acting to retract them to a normal position.

1,882,035. **RUBBER PRODUCT AND PROCESS OF PREPARING SAME.** DONALD H. POWERS, Penns Grove, N. J., assignor to E. L. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1926. Serial No. 132,896. 21 Claims. (Cl. 18—53.)

6. The process of treating rubber which comprises incorporating with the rubber, prior to vulcanization, the

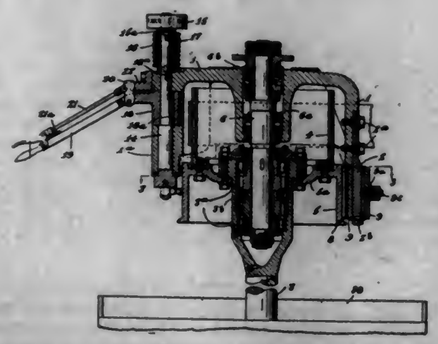
product obtained by causing carbon bisulfide to react on the condensation product of a primary aromatic amine and an aliphatic aldehyde containing a plurality of carbon atoms.

1,882,036. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 25, 1930. Serial No. 477,571. 9 Claims. (Cl. 187—11.)



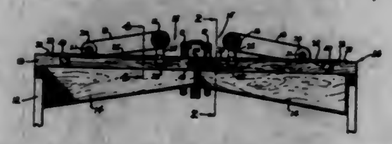
1. In an industrial truck, the combination of a wheel mounted frame, an upwardly extending guide frame thereon, an elevating member movably mounted on said guide frame, a hoist mechanism comprising a power driven drum mounted on said wheel mounted frame above the lower portion of said guide frame and a flexible member arranged to wind on and off said drum at its inner end and connected at its outer end to said elevating member, a sheave at the upper end of said guide frame around which said member runs, a separate sheave around which said member runs, a device supporting said separate sheave at its upper end and pivoted on said wheel mounted frame below the run of said flexible member from said drum to said separate sheave, and means normally acting on said device to move said separate sheave in a direction opposite to the pull thereon by said flexible member.

1,882,037. BRAKE FOR CENTRIFUGAL MACHINES. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed Apr. 23, 1929. Serial No. 357,502. 9 Claims. (Cl. 188—77.)



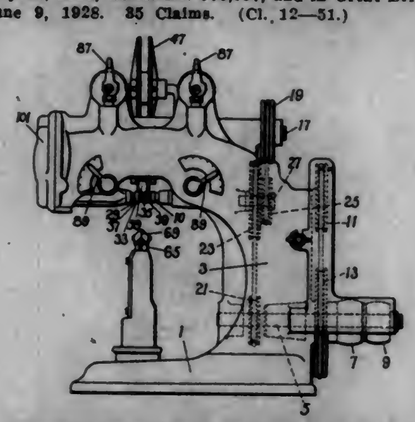
1. A brake for a gyratory suspended centrifugal embracing in combination with a brake pulley secured to the centrifugal shaft, a surrounding brake band whose fulcral portion is loosely supported to permit inward movement toward the brake against opposed spring resistance, a spring-actuated vertical revoluble spindle having link connection with the free ends of the brake band to contract the brake band upon the pulley, means for unsetting the brake and at the same time increasing the tension of said spring, and releasable means for holding the brake at inactive position against the tension of its actuating spring.

1,882,038. SIZER. FRANK B. ROBERTS and WILLIS G. HUNTINGTON, Anaheim, Calif., assignors to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Sept. 6, 1928. Serial No. 304,250. 18 Claims. (Cl. 209—103.)



7. In a fruit grader, a multiple runway comprising a plurality of rows of grading rollers in each of which the rollers are arranged in end to end relation, whereby to form a plurality of sets of oppositely disposed rollers, traveling members adapted to convey pieces of fruit along the rollers, a separate unitary means associated with each roller for bodily shifting said roller independently of the others, and a separate unitary means associated with each set of rollers for bodily shifting said set of rollers with respect to the traveling members simultaneously and independently of the other sets.

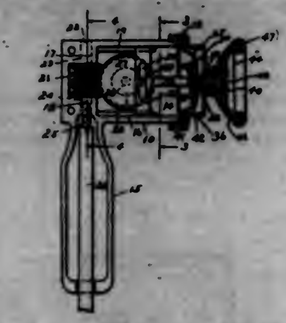
1,882,039. MACHINE FOR APPLYING TAPE TO SHEET MATERIAL. WILLIAM THOMAS BUCKINGHAM ROBERTS and HARRY HARDY JACKSON, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 25, 1929, Serial No. 366,057, and in Great Britain June 9, 1928. 35 Claims. (Cl. 12—51.)



1. A machine for applying adhesive tape upon a seam, comprising means for flattening a portion of the seam ridge, and other means operable subsequently to the operation of said flattening means for applying adhesive tape upon said portion of the seam ridge.

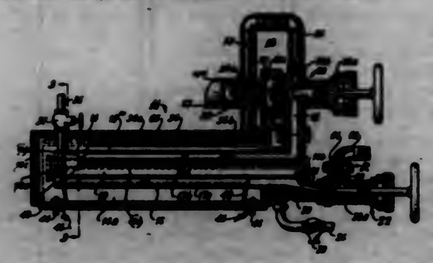
1,882,040. SUCTION-MASSAGE APPARATUS. WILLIAM A. ROEHM, Lynbrook, N. Y. Filed Mar. 8, 1930. Serial No. 434,373. 4 Claims. (Cl. 128—300.)

1. In a device of the class described, a body member consisting of a housing and an operating handle, a shaft passing axially through said handle and rotatingly mounted therein, a diaphragm secured in said housing transversely thereof, a worm secured on the end of the shaft, a worm gear mounted in the housing and engaging with said worm, a connecting rod secured to said diaphragm



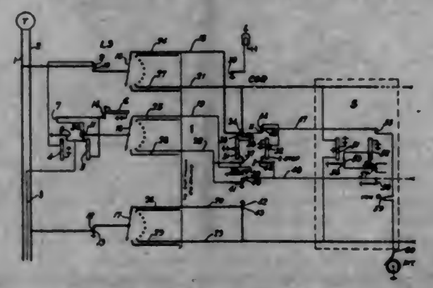
and actuated by a stud on the worm gear, and a cap provided with a suction cup massage applicator closing the open end of the housing.

1,882,041. APPARATUS FOR PRODUCING GASEOUS FUELS. CHARLES A. ROSIER, New York, N. Y. Original application filed May 26, 1926, Serial No. 111,675. Divided and this application filed June 23, 1927. Serial No. 200,855. 4 Claims. (Cl. 48—103.)



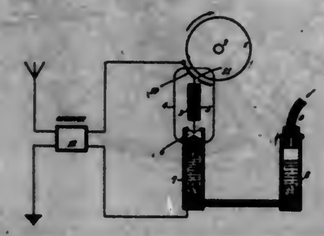
1. In an apparatus of the character described adapted to supply a fuel formed with a liquid constituent, a gasifying device comprising inner and outer tubular walls and a pair of apertured walls interconnecting said tubular walls to form communicating compartments, means for heating said compartments, said apertured walls being effective to catalyze the constituent in said compartments during gasification, and means for feeding the liquid constituent into one of said compartments.

1,882,042. TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 30, 1931. Serial No. 566,063. 20 Claims. (Cl. 179—18.)



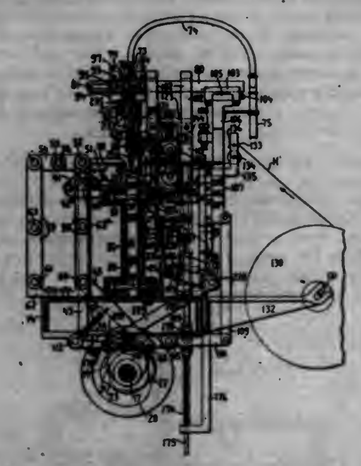
1. In a telephone system, a line, a first switch terminating said line, a second switch terminating a trunk accessible to said first switch, means controlled over the line for operating said first switch to connect the line with said second switch via said trunk, and means revertively controlled from said second switch over said trunk for disconnecting the line from said second switch without releasing said first switch.

1,882,043. SIGNAL RECORDING. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 12, 1929, Serial No. 391,996, and in Germany Oct. 20, 1928. 23 Claims. (Cl. 178—88.)



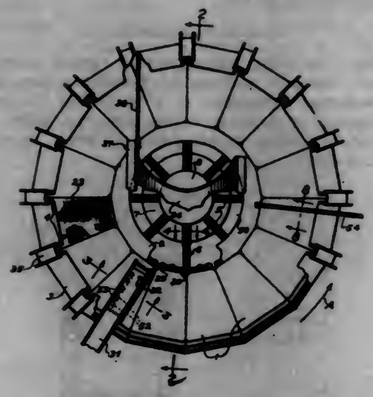
1. The method of recording electrical energy which comprises projecting a stream of marking fluid toward a recording surface and influencing the stream directly by electromagnetic force to control the amount of fluid reaching the surface.

1,882,044. BOOKBINDING MACHINE. EUGENE R. SEITER, Ridgefield Park, N. J., assignor to T. W. & C. B. Sheridan Company, a Corporation of New York. Filed Sept. 11, 1931. Serial No. 562,234. 20 Claims. (Cl. 11—1.)



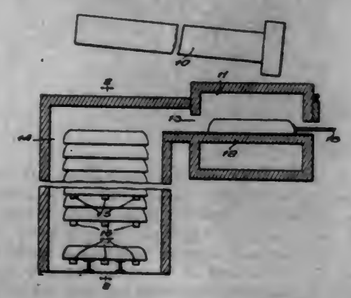
1. In a bookbinding machine mechanism for automatically applying backlining components to the glued backs of books, comprising opposite guide walls between which the book may advance edgewise to and from applying position with its back exposed and having means to adjust them for variations of book thickness, a book compressor or bar movable relatively to said walls to press upon and release the exposed part of the book, spring means to engage the compressor with the book during application of a component, and timed means to retract the compressor during advance of the book.

1,882,045. FILTERING APPARATUS. JAMES L. STEVENS, Hayden, Ariz., assignor to Raconite Chemical Company, Hayden, Ariz., a Corporation of Arizona. Filed July 28, 1930. Serial No. 471,204. 11 Claims. (Cl. 210—196.)



1. An apparatus for separating liquids from solids comprising a plurality of filtering compartments disposed at different angular positions about a common axis and inclined inwardly toward a common apex at one end of said axis, each of said compartments having a solid wall at the outside thereof and a filtering medium at the inside thereof, means securing said filtering compartments together to form a filter, means supporting said filter in position with said common axis inclined downwardly toward said apex end thereof and in such manner as to permit rotation of said filter about said axis, means for rotating said filter, means for applying suction to the respective filtering compartments when at the lower part of the filter and for applying pressure thereto when at the upper part of the filter, and means for maintaining a supply of material to be filtered in contact with the filtering medium of the respective compartments when said compartments are in position for application of suction thereto, said filtering compartments terminating at their inner ends a sufficient distance from said common apex to provide a central opening therebetween for discharge of solids from the filtering medium.

1,882,046. METHOD OF BLOATING AND ANNEALING BLOCKS OF EARTHY MATERIAL. OLIVER W. STOREY, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,995. 4 Claims. (Cl. 25—156.)



1. The method of bloating and annealing blocks of earthy material, which consists in subjecting a charge of granular material to a bloating temperature maintained in an elevated bloating zone to form a unit slab of bloated material, laterally moving the bloated slab away from the bloating zone to an annealing zone, and lowering the slab through the annealing zone, and in superposing successive slabs in column form for movement through the annealing zone.

1,882,047. TOKEN DEPOSITARY AND ACCOUNT DEVICE. ERNEST H. THOMPSON, Winnetka, Ill., assignor to Johnson Fare Box Company, Chicago, Ill., a Corporation of New York. Filed Nov. 14, 1930. Serial No. 495,573. 20 Claims. (Cl. 194—1.)



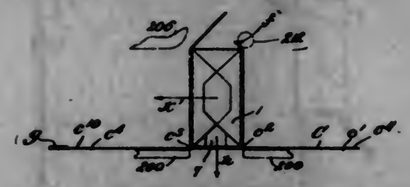
1. In a depositary for collecting tokens comprising a housing having a service opening, a plurality of token receiving units within said housing, means for selectively positioning any one of said units into service position for receiving tokens deposited through said service opening, means within each unit for receiving and discharging deposited tokens, a common actuating means within said housing, and means controlled by the positioning of a unit into service position for automatically operatively connecting said actuating means with the token receiving and discharging mechanism within the unit.

1,882,048. FOLDING CRATE. FRANK H. WARREN, Paris, Tex., assignor to Cummer Manufacturing Company, Paris, Tex. Filed Oct. 4, 1929. Serial No. 397,239. 2 Claims. (Cl. 217—48.)



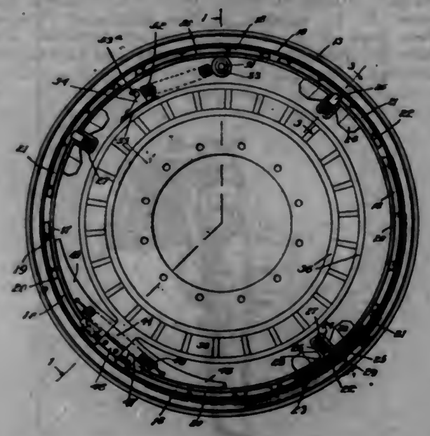
1. In a crate having its opposite side and end walls formed of parallel slats arranged with their opposite ends disposed in overlapped superimposed relation, the uppermost pairs of said slats being parallel and disposed in the same plane, the lowermost pair of slats being parallel with each other and with said uppermost pair, one of said parallel pairs having longitudinally extending grooves formed in the outer horizontal face thereof, the other of said parallel pairs having longitudinally extending tongues formed with the outer horizontal face thereof, whereby the tongues of one crate will engage in the grooves of a next adjacent crate when two or more of the crates are stacked one upon the other, and a securing member engaged through the overlapping ends of said slats at each corner of the crate.

1,882,049. LINED RECEPTACLES. CHARLES P. WELLMAN, Medford, Mass., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Original application filed July 7, 1919, Serial No. 309,115. Divided and this application filed Apr. 28, 1926. Serial No. 105,108. 11 Claims. (Cl. 93—49.)



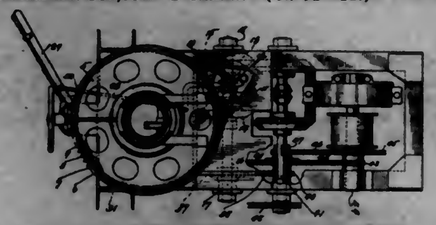
1. Art of making lined receptacles comprising wrapping and fastening together about a mandrel or form a blank for a lining of suitable material to make a bag; making a box to support and protect the bag in use by bending and sealing a flat blank of suitable stiff material on and about the bag and mandrel; and thereafter removing the bag and box from the mandrel.

1,882,050. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Nov. 17, 1928. Serial No. 320,129. 11 Claims. (Cl. 188—140.)



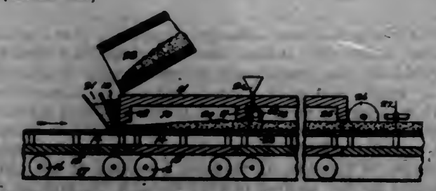
1. A brake comprising, in combination, a rotatable drum, a band extending circumferentially around substantially the entire surface of the drum and having a plurality of annularly spaced friction surfaces, a plurality of devices arranged between said band and said drum and providing auxiliary surfaces alternating with said first mentioned surfaces, said devices being individually held against circumferential movement, the number of devices being less than the number of said surfaces, and operating means for said band.

1,882,051. HOISTING APPARATUS. CHARLES G. WRIGHT, Richmond Hill, N. Y., assignor, by mesne assignments, to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,734. 2 Claims. (Cl. 74—31.)



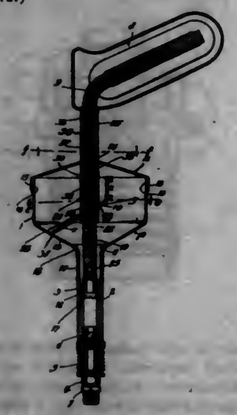
1. Hoisting mechanism comprising, in combination: a standard; a mast, rotatable thereon; driving mechanism for the mast, including a toothed segment carried by the mast, and a sprocket-chain engaging the teeth of the segment; and pins; the mast being provided with orifices for the manual insertion of the pins, to drive the mast should the toothed segment move to an inoperative position.

1,882,052. KILN FOR THE MANUFACTURE OF BLOATED CLAY PRODUCTS. EDWIN M. WYATT, Cleveland, Ohio, assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Oct. 26, 1929. Serial No. 402,601. 19 Claims. (Cl. 18—1.)



1. In a kiln of the class described, the combination of a bloating chamber, a chute for delivering granular earthy material at one end of the bloating chamber, a movable conveyor for receiving said material in the form of a continuous layer and transporting the same through the bloating chamber, and roller means for acting upon the surface of the material after bloating.

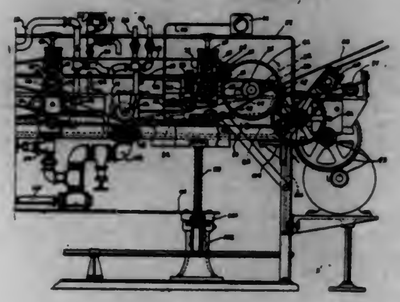
1,882,053. LUBRICATING MEANS AND METHOD. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,280. 12 Claims. (Cl. 221—47.4.)



1. In a grease gun, the combination with a compression cylinder, a piston reciprocable therein, a reservoir for

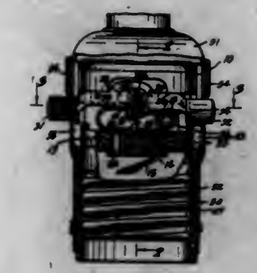
supplying lubricant thereto, a rotary impeller movable in the reservoir directly compacting the body of grease therein, a dispensing nozzle for the gun, a handle for the gun, and means responsive to relative longitudinal movements of said handle and nozzle to move said impeller.

1,882,054. SIZING MACHINE. PETER AITCHISON, New Rochelle, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1928. Serial No. 264,312. 19 Claims. (Cl. 91—54.)



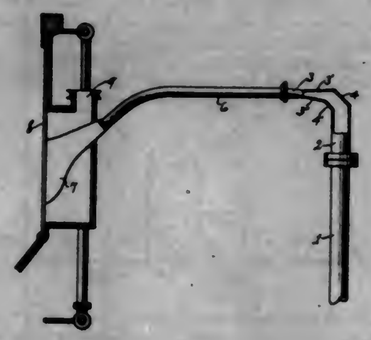
1. A sizing machine embodying therein a tank for containing liquid size, endless absorbent travelling blankets, a guide for the lower reach of one of said blankets located within said tank, guiding and presser rollers operative respectively upon different portions of said blankets, whereby the adjacent reaches of said blankets are brought into parallel relation to each other and simultaneously subjected to pressure, to transfer a portion of the sizing absorbed by the blanket passing through the tank to the other blanket, and applying sizing to both sides of a sheet of paper between said parallel reaches and means delivering printed sheets in spaced relation to each other between said blankets.

1,882,055. PUSH THROUGH SOCKET. CHARLES E. AVERY, Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 2, 1928. Serial No. 316,717. 11 Claims. (Cl. 177—355.)



1. In a device of the character described, a body member of insulating material, a switch operating member mounted for transverse reciprocating movement on the body member and having a cam lug, a pivoted switch contact, and a lamp contact, said lamp contact being curved back upon itself to form a yieldable support for said pivoted contact to hold the pivoted contact against said cam in a position to permit the cam to pass from one side of the pivot for the contact to the other as the operating member is reciprocated and by this action oscillate the switch on its pivot.

1,882,056. DISTRIBUTOR FOR GASES CARRYING SOLIDS IN SUSPENSION. EAVIN G. BAILEY, Easton, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed July 27, 1929. Serial No. 381,667. 7 Claims. (Cl. 302—28.)



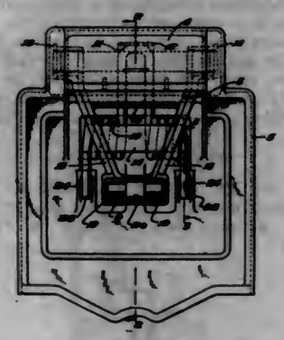
1. In a device of the character described, a conduit for gases carrying solids in suspension, a flat surface against which said gases strike, a receptacle having an increasing dimension in one direction and a decreasing dimension in a direction at right angles to said first mentioned direction into which the gases enter after striking said surface, and a plurality of outlets from said receptacle.

1,882,057. JOURNAL BOX. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Mar. 28, 1925. Serial No. 18,993. 15 Claims. (Cl. 308—47.)



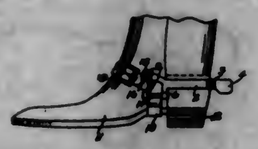
1. In combination, a journal box having a hinge lug, a lid pivotally connected thereto, a spring retainer articulated with respect to said lid, a spring positioned between said lid and retainer, engaging the lug and lid respectively at its upper and lower portions, means on said retainer engaging an intermediate portion of said spring for gradually tensioning and holding said spring stressed in position upon movement of said retainer toward the lid, and a portion of said retainer formed to overlie the top edge of the lid.

1,882,058. JOURNAL BOX. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed May 13, 1929. Serial No. 362,833. 13 Claims. (Cl. 308—47.)



6. A journal box lid assembly comprising a lid proper formed with a hood adapted to receive the hinge lug of an associated box, resilient means normally disposed adjacent the outer face of said lid, and means formed with hinging ears and pivoted to said lid adjacent the center thereof for stressing said resilient means.

1,882,059. SPUR. FRANCIS H. BOOS, Schofield Barracks, Territory of Hawaii. Filed Oct. 27, 1931. Serial No. 571,302. 3 Claims. (Cl. 54—83.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



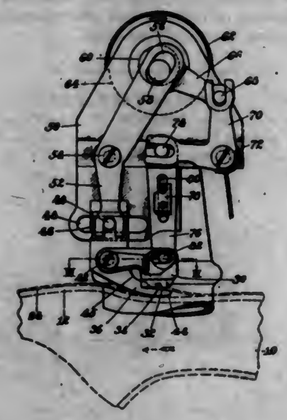
1. A spur comprising a yoke terminating in strap receiving means at the forward ends, said strap receiving means comprising portions extending directly down at right angles to said yoke thence extending forward again at right angles to said last mentioned portions and then extending a short distance at an acute angle to the last named portions to form short projections, and second portions extending from said yoke at an obtuse angle thereto and thence downwardly at right angles to a point adjacent but spaced from the ends of said short projections.

1,882,060. AUTOMATIC WELL FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed Nov. 11, 1927. Serial No. 232,656. 11 Claims. (Cl. 137—111.)



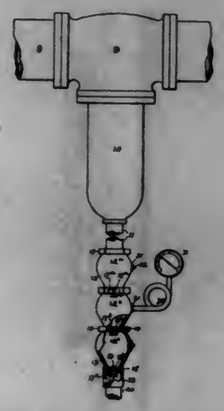
4. A valve comprising a body, a chamber having annuli at separated points, and a plunger operable in the chamber and annuli for throttling a fluid flow having heads initially stationed at varying distance from the respective annuli when the plunger is quiescent.

1,882,061. TRIMMING MACHINE. MICHAEL F. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 12, 1929. Serial No. 370,193. 31 Claims. (Cl. 12—83.5.)



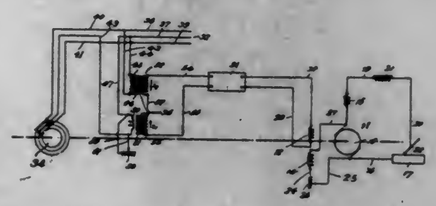
1. That improvement in methods of making shoes which consists in forming a channel between opposite overdrawn margins of upper material confronting the bottom of the insole of a lasted shoe by simultaneously trimming said margins in two planes intersecting the insole.

1,882,062. LIQUID RELIEF APPARATUS. GRANT CAMPBELL, Short Hills, N. J. Original application filed Jan. 5, 1925, Serial No. 670, and June 13, 1925, Serial No. 36,928. Divided and this application filed Aug. 25, 1928. Serial No. 302,025. 1 Claim. (Cl. 137—103.)



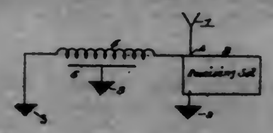
Relief apparatus for removing hot condensate water from a vessel carrying water and steam under pressure, comprising a passage connecting the pressure vessel to an orifice system and adapted to conduct the hot water downwardly to the orifice system and to communicate the steam pressure thereto, and an orifice system arranged to receive such hot water and steam pressure and having walls enclosing vaporization chambers having constantly open inlet orifices of scientifically predetermined constant restrictive character; whereby at times when water is received by the orifice system it traverses the same at a relatively high rate by weight due to the steam pressure, whereas when steam only is received it traverses the orifice system and is discharged at a relatively negligible rate by weight due to the natural restriction of orifice flow of gases; and the successive orifices being of progressively increasing predetermined effective areas, whereby when hot liquid is received by the orifice system it passes through the successive orifices into chambers of progressively decreasing pressures and reevaporates partly or wholly following each such passage.

1,882,063. WELDING APPARATUS. ALEXANDER CHURCHWARD, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,921. 6 Claims. (Cl. 219—8.)



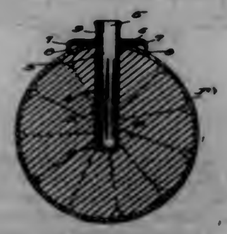
1. A welding apparatus comprising a welding generator having a separately excited field winding, a source of current, a motor for driving said generator connected to said source, means for supplying a unidirectional current from said source to said separately excited field winding, and means cooperating with the current supplied to said motor from said source for continuously decreasing said unidirectional current from open circuit to welding conditions.

1,882,064. RADIO SIGNALING. LOUIS COHEN, Washington, D. C. Filed Aug. 30, 1928. Serial No. 303,087. 6 Claims. (Cl. 250—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



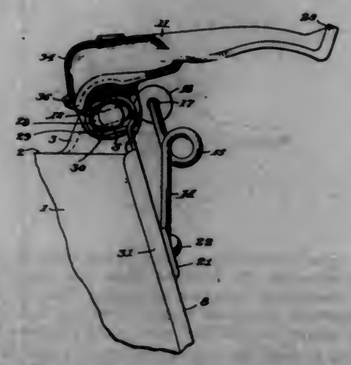
1. In a system for the reception of radio signals, comprising an antenna, a receiving circuit system connected thereto, and a wave conductor, said wave conductor being adjustable to the frequency of an interfering signal, said wave conductor comprising a solenoidal coil placed in proximity to a grounded metal plate, one end of said wave conductor being connected to the junction point of connection of said antenna to said receiving circuit system, and the other end being grounded, the adjustment of said wave conductor being effected by varying the distance separation of said solenoidal coil from said grounded metal plate.

1,882,065. FRUIT JUICE EXTRACTOR. MARIE D. CODY, Frostproof, Fla. Filed May 26, 1928, Serial No. 280,769. Renewed Jan. 7, 1932. 8 Claims. (Cl. 100—49.)



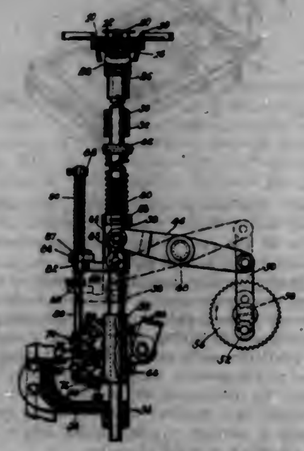
2. A fruit juice extractor including a stem adapted to be inserted into the fruit for withdrawal of the juice, said stem having a groove therein for receiving the edges of the fruit.

1,882,066. JOURNAL BOX. GLENN F. COUCH, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed May 12, 1926. Serial No. 108,511. 5 Claims. (Cl. 308—47.)



5. In combination, a journal box having an apertured hinge lug, a lid with retainer loops, a spring retainer with cooperating loops, a hinge pin extending through the journal box lug and the loops on the lid and retainer for pivotally connecting said members, one of said retainer loops and that part of the pin therein being laterally extended so that rotation therebetween is prevented, the adjacent lid loop having a corresponding extension normally disposed at an angle to the pin and retainer extension so that passage of the pin through said loop is prevented when the parts are in normal position, but permitted when said pin and lid loop are disposed in abnormal angular relationship.

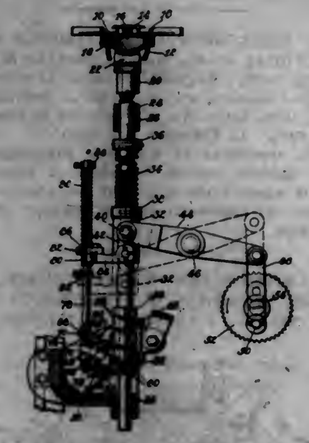
1,882,067. MACHINE FOR USE IN THE MANUFACTURE OF SHOES. FRED C. EASTMAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 20, 1930. Serial No. 430,048. 18 Claims. (Cl. 12—14.)



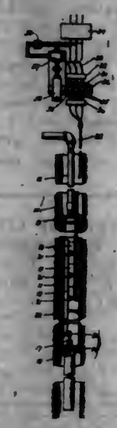
1. In a shoe machine, the combination with means for operating on a shoe with pressure thereon, of a shoe rest movable into position to support the shoe against said pressure, and means for holding the shoe rest against movement from that position in response to the pressure applied to the shoe, said holding means comprising a member having a series of teeth thereon, a cooperating member arranged to act as a detent in abutting relation to some one of said teeth to hold the shoe rest, one of said members being movable with the shoe rest relatively to the other member, and means for effecting relative movement of said members in a direction lengthwise of the series of teeth after the shoe rest has arrived substantially in its supporting position to insure a cooperative relation between the detent member and one of said teeth.

1,882,068. RETAINING MECHANISM. FRED C. EASTMAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Feb. 20, 1930, Serial No. 430,048. Divided and this application filed July 27, 1931. Serial No. 553,328. 16 Claims. (Cl. 12—128.)

1. In mechanism of the class described, the combination with a device movable from one position to another position, of means for holding said device in the position to which it is moved, said holding means comprising a member having a series of teeth thereon, a cooperating member arranged to act as a detent in abutting relation to some one of said teeth to hold the device, one of said members being movable with said device relatively to the other member, and means for effecting relative movement of said members in a direction lengthwise of said series of teeth after the movement of said device has been substantially completed to insure a cooperative relation between the detent member and one of said teeth.



1,882,069. OIL WELL PUMPING EQUIPMENT AND SYSTEM. EDWARD C. EKSTROMER, San Francisco, Calif., assignor, by direct and mesne assignments, of one-half to James F. Gallagher, Boston, Mass., and one-half to The Edward C. Ekstromer Corporation, Reno, Nev., a Corporation of Nevada. Filed Jan. 3, 1928. Serial No. 244,208. 10 Claims. (Cl. 103—46.)



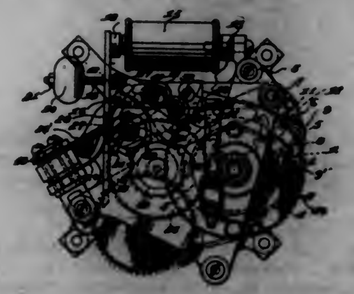
1. In a control system for electro-mechanically driven reciprocating pumps of the character described, the combination of a sucker rod, a rack connected to said sucker rod, an electro-mechanical means for driving said rack, a source of polyphase alternating current power for supplying current to said electro-mechanical means, and a reversing switch between said electro-mechanical means and said source of polyphase current for periodically reversing the phase rotation of said current and thereby cause said rack and sucker rod to be driven with a re-

ciprocating motion, characterized by the fact that the periodicity of phase reversals may be varied to determine the stroke of the sucker rod without resort to other circuit interrupting means.

1,882,070. TREATMENT OF MATERIALS CONTAINING NATURAL SILK. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed June 24, 1929, Serial No. 373,490, and in Great Britain July 9, 1928. 12 Claims. (Cl. 8—5.)

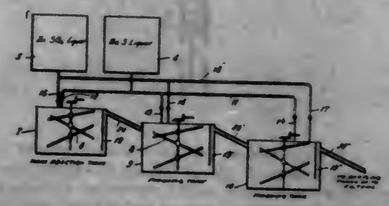
1. In the treatment of materials comprising natural silk with alkaline liquors, the step of protecting the natural silk against the action of the alkaline reagents by effecting the treatment in the presence of cellulose ester material.

1,882,071. FIRE ALARM SUCCESSION BOX. ERNEST A. FALLER, Brooklyn, N. Y. Filed July 29, 1927. Serial No. 209,370. 2 Claims. (Cl. 177—361.)



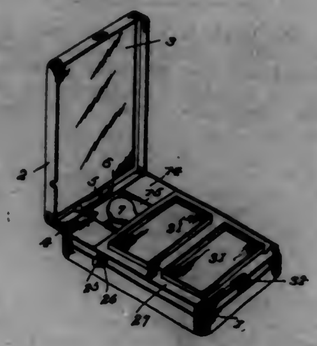
1. A fire alarm succession box comprising contact carrying means; actuating mechanism for said contact carrying means operable in cycles; control means for said actuating mechanism; a non-interfering magnet; a lever actuated by said non-interfering magnet and controlled by said actuating mechanism and said control means to maintain said actuating mechanism in operation until the completion of a cycle with the lever in fully attracted position with relation to said magnet near the end of said cycle; and means actuated by said actuating mechanism in any event after a predetermined number of cycles to move said lever mechanically to its fully attracted position near the end of the last cycle and thereby arrest the operation of said actuating mechanism.

1,882,072. MANUFACTURE OF LITHOPONE. EDMUND J. FLYNN, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 7, 1928. Serial No. 297,949. 15 Claims. (Cl. 134—78.)



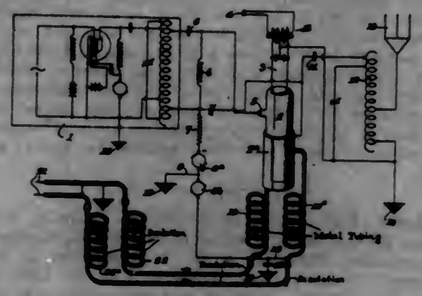
1. In the manufacture of lithopone the method of producing crude lithopone of high quality which consists in continuously running aqueous solutions of zinc sulphate and of barium sulphide in reactive proportions into a precipitating and mixing tank, energetically stirring the contents of said tank, continuously drawing off the contents of said tank in such manner as to maintain ah approximately constant level therein and approximately constant concentration of the liquid contents thereof and settling out a lithopone pulp from the mixture drawn from the tank.

1,882,073. TOILET ARTICLE. OSCAR E. FREED, Seattle, Wash. Filed July 25, 1931. Serial No. 553,174. 2 Claims. (Cl. 240—6.45.)



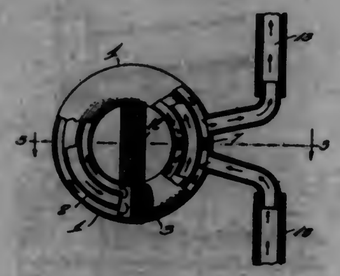
2. A vanity case comprising a casing including a main body portion and a hinged cover, a partition in the main body portion at one end thereof, said partition having a central depression, a second partition in the body portion extending from the first mentioned partition to the forward end of the casing and in the same horizontal plane as the first mentioned partition, lips extending from the second mentioned partition and fitting under the first mentioned partition, both said partitions having depending side flanges to frictionally hold the partitions in place, a lamp support in the casing below the partitions, a lamp extending from said support and extending into the depression, and a battery in the casing below the second mentioned partition to light the lamp.

1,882,074. TRANSMITTING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,983. 13 Claims. (Cl. 250—17.)



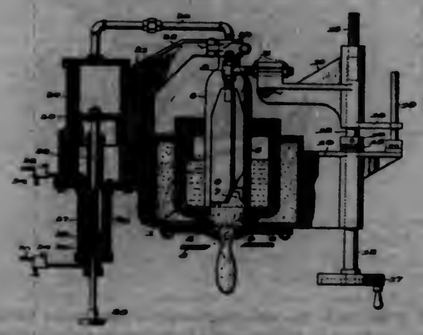
1. A transmitting system employing thermionic tubes having the anode electrode cooled by a circulating liquid, a coil of metallic tubing connected with the anode electrode of said thermionic tube for conducting the cooling liquid to the anode of said tube while excluding high frequency energy from the source of said liquid and separate means connected with said tubing for dissipating heat from the cooling liquid.

1,882,075. FLUID COOLED INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,628. 6 Claims. (Cl. 175—359.)



1. A high frequency inductance coil comprising a tubular member, means closing each end of the tubular member, a partition member disposed intermediate the ends of said tubular member, a port extending through said partition member, an inlet and outlet port on said tubular member on either side of said partition member for introducing a circulating fluid through said member, said member being coiled in the form of an electrical inductance.

1,882,076. PNEUMATIC GLASS FEEDER. ROBERT GOOD, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 1, 1927. Serial No. 180,281. 10 Claims. (Cl. 49—55.)



1. A glass feeder including a flow spout having a flow orifice, an impulse bell mounted on the floor of the flow spout over the flow orifice, the lower portion of said bell provided with an inlet, a gate for regulating the effective size of said inlet, and means for alternately compressing and rarefying the air in the upper portion of said impulse bell.

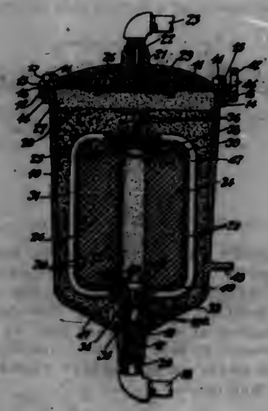
1,882,077. HEEL BREAST FLAP LAYING AND FLAP TRIMMING MACHINE. JOSEPH GOULDBOURN, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 25, 1928, Serial No. 295,219, and in Great Britain July 28, 1927. 16 Claims. (Cl. 12—17.)

1. The method of covering the breast of a heel which consists in laying against the breast of the heel a flap split from the sole of a shoe to which the heel is attached, the flap being long enough to extend beyond the top lift attaching face of the heel, splitting the end portion of the



flap which projects beyond the heel to form a divided tab, and laying the divided tab against the top lift attaching face of the heel.

1,882,078. FILTER. OSCAR HENNINGS, Montclair, N. J. Filed Nov. 20, 1930. Serial No. 496,883. 14 Claims. (Cl. 210—112.)

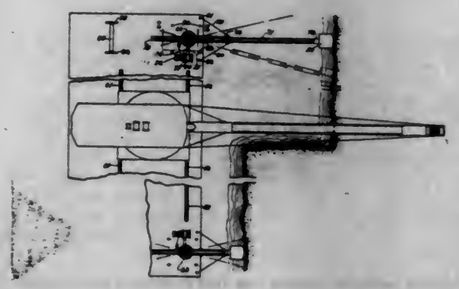


1. A filter comprising a casing having a fluid inlet and a fluid outlet, and provided with an opening for affording access to the interior of the casing and a cover for said opening, a block of permeable filtering material within the casing having a bore extending entirely therethrough, and block supporting means located wholly within the casing and insertable in and removable from the casing through said opening with the block supported thereby, said block supporting means being detachably held to the casing and connecting one end of the block bore with the fluid outlet of the casing and sealing it from the interior of the casing and also closing the opposite end of the block bore without extending through the block bore.

1,882,079. BANK GRADER. WERNER LEHMAN, South Milwaukee, Wis., assignor to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed May 9, 1930. Serial No. 450,987. 9 Claims. (Cl. 37—74.)

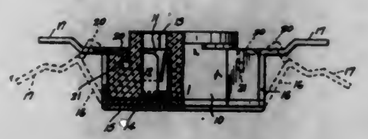
1. In a spud for a grader, the combination of: a support, swivelable about a vertical axis; means to secure

the support against such swiveling; a carriage, supported by the support, and tiltable about a horizontal axis; a



handle, reciprocable in the carriage; means to reciprocate the handle; and a bank-engaging head, carried by the handle.

1,882,080. ELECTRICAL RECEPTACLE. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Aug. 17, 1928. Serial No. 300,366. 8 Claims. (Cl. 247—20.)



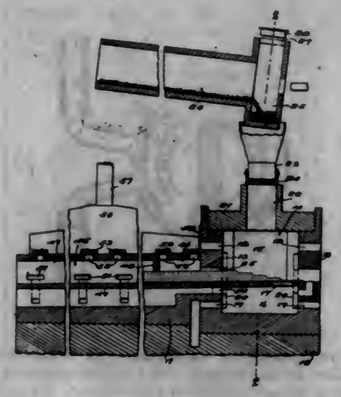
1. In an electric wall outlet device, an insulating body member, a support for said body extending across the back thereof and forwardly at the opposite sides of said body, cooperating shoulders on the body and said forwardly extending portions at the forward part of the body to prevent movement of said portions laterally away from the body, and means on the support whereby it may be mounted in a wall box.

1,882,081. INSULATING ADHESIVE. ARCHIE R. KEMP, Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,518. 6 Claims. (Cl. 87—17.)

1. An adhesive composition especially adapted for application between layers of plastic insulation upon subaqueous electrical conductors, characterized in this, that the composition consists of a polymerized cyclic terpene hydrocarbon, more especially a dipolymer, mixed with a gum (including natural gum and synthetic substitutes therefor) composed largely of hydrocarbon of composition $(C_5H_8)_n$.

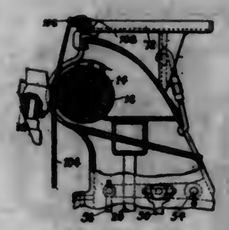
1,882,082. METHOD OF PRODUCING A CONTINUOUS SLAB OF EARTHY MATERIAL. SHERMAN Q. LEE, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,993. 11 Claims. (Cl. 25—156.)

1. The method of producing a continuous slab or column of earthy material, which consists in depositing a layer of granular earthy material upon the obliquely disposed terminal surface of the previously completed portion of the slab or column, subjecting the newly deposited layer to a heat treatment to cause fusion and adhesion of the layer to the obliquely disposed surface of the



previously completed portion of the column, and thereafter advancing the column with the newly fused accretion.

1,882,083. LAST-PULLING MACHINE. GEORGE A. MINER, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 24, 1931. Serial No. 559,020. 12 Claims. (Cl. 12—15.1.)

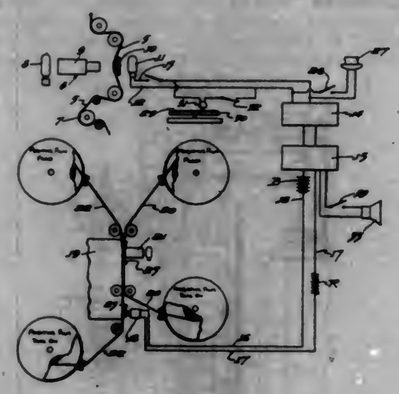


1. A machine for effecting relative movement between a shoe and a last, comprising an operating member, means for moving said operating member, and a normally stationary piece of flexible sheet material positioned adjacent to said operating member and constructed and arranged when pressed between said operating member and a shoe on a last, to partake of the movement of said operating member and by frictional engagement with the shoe to move the shoe relatively to the last.

1,882,084. ELECTRICAL SOUND TRACK RECORDER FOR MOVING PICTURE PRINTING MACHINES. DAVID PELTON MOORE, Avon Park, Fla., assignor to Max A. Schlesinger, New York, N. Y. Filed Dec. 17, 1929. Serial No. 414,718. 9 Claims. (Cl. 179—100.3.)

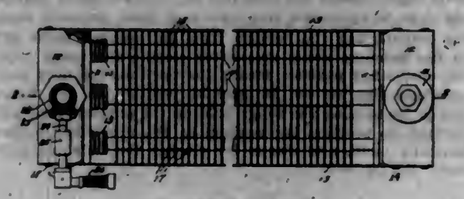
1. An attachment for moving picture photographic printing machines including a sound track light exposure point disposed to affect only the moving positive film, variable light furnishing means adjacent said point, an amplifying

system the output of which is connected to said light furnishing means, and means for impressing electrical fluctuations upon the input of the amplifying system by



and in accordance with the sound to be impressed photographically through the light to form a sound track on a positive film.

1,882,085. RADIATOR. RICHARD H. NELSON, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Apr. 4, 1931. Serial No. 527,773. 4 Claims. (Cl. 257—124.)



2. In a radiator, the combination of a pair of spaced headers, rigid reinforcing bars rigidly connected with the headers, a plurality of relatively thin and fragile radiator tubes having their ends rigidly secured within the headers, and a plurality of closely spaced radiating fins mounted upon the tubes, each of the tubes being provided with a bellows-folded section integrally formed with the tubes and adapted to provide for thermal expansion and contraction.

1,882,086. BACK PACK. ERWIN H. NICHOLS, San Antonio, Tex., assignor to Irving Air Chute Company, Inc., Buffalo, N. Y., a Corporation. Filed Apr. 16, 1929. Serial No. 355,550. 21 Claims. (Cl. 244—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

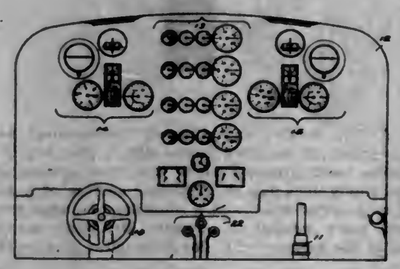
1. In a parachute pack, a container, supporting harness straps extending from said container, a parachute packed in said container having shroud lines connected to said straps, and frame means for said container shaped to approximately fit the contour of the wearer's back.

18. In a parachute pack the combination of a parachute, a container for housing the parachute therein including a wall shaped to fit the contour of that part of the wearer's body against which the pack is to abut and of material having an inherent ability to maintain the wall in such shape when the parachute is packed in the container, flex-



ible closure means as a part of said container, and fastening means for the closure means to releasably maintain the container shut with the parachute packed therein.

1,882,087. FOG TRAINING DEVICE FOR AIRPLANES. WILLIAM C. OCKER, San Antonio, Tex. Filed July 22, 1930. Serial No. 469,722. 7 Claims. (Cl. 244—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

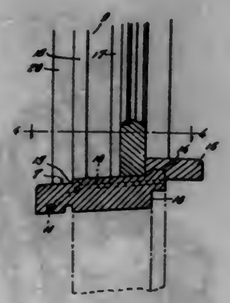


1. In aircraft dual control for instrument flying, a jointed control stick adapted to respond to movement longitudinally of the axis of the aircraft to control only the elevators, and means for establishing rigidity throughout the length of said control stick whereby the stick may be responsive to movement laterally of said axis to control the ailerons.

1,882,088. WINDOW CONSTRUCTION. JOSEPH V. O'CONNOR, Cuyahoga Falls, Ohio, assignor to Richard J. O'Connor, Cuyahoga Falls, Ohio. Filed June 14, 1930. Serial No. 461,155. 2 Claims. (Cl. 20—11.)

2. A window structure of the class described comprising a sill having transverse grooves therein, and a reduced outer part forming a shoulder on the upper face of the sill at the junction of the reduced part with the main part of the sill, side members having their lower ends seated in the grooves, the outer edges of the side members having ribs thereon, vertical strips having grooves therein for receiving the ribs, and exterior cas-

ing members having their lower ends abutting the shoulder and portions of the inner faces abutting the strips, the transverse grooves terminating short of the shoulder



with the lower ends of the strip resting on those portions of the sill between the outer ends of the grooves and the shoulder.

1,882,089. LOCK WASHER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1930. Serial No. 479,174. 6 Claims. (Cl. 151—32.)



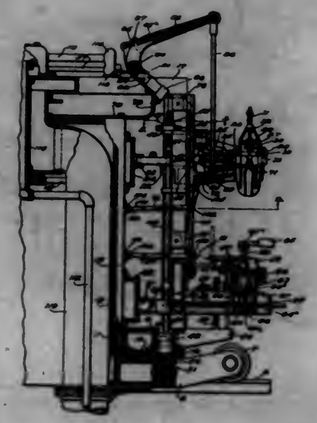
2. A lock washer including an intermediate annular body portion of unbroken continuity, a plurality of work engaging teeth provided along the inner margin thereof for lockingly engaging the clamping surface of a member such as a screw head, and a plurality of sharp work engaging teeth warped in opposite directions out of the plane of the washer body along the outer margin thereof.

1,882,090. PATTERN ROLLS FOR APPLYING COLORED DESIGNS ON PAPER, BOARD, OR THE LIKE WEBS. HERMANN PALM, Neukochen, near Unterkochen, Germany. Filed Sept. 20, 1929, Serial No. 393,868, and in Germany May 9, 1927. 5 Claims. (Cl. 92—40.)



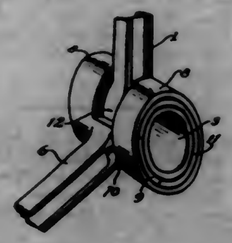
1. A pattern roll for applying colored designs to a paper or paper board web while in the wet state including separate design forming parts having an appreciable elevation from the peripheral surface of the roll to prevent contact of the said surface with the web and composed of an absorbent material.

1,882,091. TRANSFER MECHANISM FOR ROTARY GLASSWARE FORMING MACHINES. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,749. 9 Claims. (Cl. 49—14.)



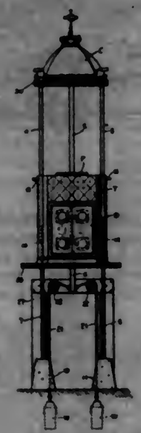
4. Apparatus for fabricating glassware, comprising a parison mold unit and a finishing mold, means for carrying said mold unit and said finishing mold at different levels, said parison mold unit including a neck mold and a parison mold, means for forming a parison in said mold unit, means for opening the parison mold leaving the parison suspended from the neck mold, transfer tongs for transferring the parison from the parison mold unit to the finishing mold, means for closing the tongs about the suspended parison, means for opening the neck mold releasing the parison in upright position in the tongs, means for moving the tongs holding the parison vertically upright, to position the parison in the previously opened finishing mold, and means for closing the finishing mold about the parison.

1,882,092. CONNECTING ROD ASSEMBLY. GUY R. POYER, Wichita, Kans. Filed July 18, 1930. Serial No. 468,756. 2 Claims. (Cl. 74—17.)



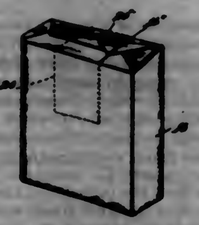
1. A connecting rod assembly comprising a connecting rod having an arbor at one end projecting from opposite sides thereof, complementary connecting rods having slip straps received on the ends of the arbor, each complementary connecting rod having a crow-foot resting on the arbor and positioned in the space between the arbor and the slip strap of its complementary connecting rod and slip rings in the space between the slip straps and the arbor not occupied by a crow foot.

1,882,093. TABERNACLE. HAROLD W. RAMBUSCH, Brooklyn, N. Y., assignor to Rambusch Decorating Company, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1930. Serial No. 503,483. 8 Claims. (Cl. 312—33.)



6. In a tabernacle, a body portion forming a safe adapted to receive sacred vessels and the like, a vertically movable canopy above said body portion, supporting means for said canopy engaging said canopy near the outer edge thereof so that, when said canopy is raised, it will form in cooperation with the top of said body portion a throne and throne space.

1,882,094. CONTAINER WITH OPENING EQUIPMENT. MARGARET E. RAUBER and CLYDE L. ROGERS, Washington, D. C. Filed Aug. 17, 1931. Serial No. 557,680. 7 Claims. (Cl. 229—51.)



1. A plain rectangular blank of flexible material folded to produce a container of generally rectangular form, said blank having a severance line extending from the locality of intersection of lines defining lateral and top corners of the container diagonally upward and away from such lateral corner-defining line in a direction so that upon folding of the top end fold bounded at one side by such severance line and the pressing down of the top side folds, a projecting tab is produced for the purpose stated.

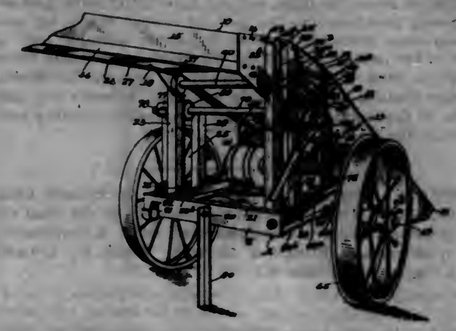
1,882,095. TOOL FOR FASTENING SASH WEIGHT CORDS. JOHN REGGITTS, Boonton, N. J. Filed Oct. 22, 1931. Serial No. 570,459. 5 Claims. (Cl. 81—5.1.)

1. In a tool of the character described the combination of work receiving jaws having overlapping ends; the end of each jaw tapered to provide a sharp work engaging edge; a groove in the working face of each jaw meeting a



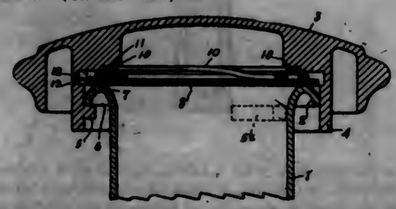
work manipulating edge; and work penetrating members within said jaws.

1,882,096. PORTABLE CONVEYER. ARTHUR L. SHAW, deceased, Cicero, Ill., by Bertha S. Shaw, executrix, Cicero, Ill., assignor to Chicago Automatic Conveyor Co., Cicero, Ill., a Corporation of Illinois. Filed Jan. 20, 1930. Serial No. 421,910. 9 Claims. (Cl. 198—11.)



1. In a portable conveyer, the combination of an elongated frame having one end thereof adapted to rest upon the ground, an endless conveyer means carried by and operable in said frame, a structure for sustaining the other end of the frame pivotally connected at one end thereof to the frame and embodying a pair of wheels, an upstanding beam having the lower end thereof connected pivotally to the other end of the structure, and means for raising and lowering the said other end of the frame comprising a pinion rotatably mounted at the upper end of the beam and a rack connected fixedly to the frame.

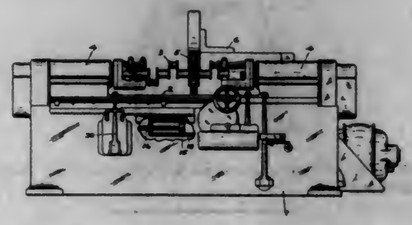
1,882,097. RADIATOR CAP. KYLE E. STANT, Connersville, Ind. Filed May 1, 1929. Serial No. 359,515. 8 Claims. (Cl. 220—24.)



1. In combination, a filler spout having a turned-over cam edge, a radiator cap having locking lugs engaging cams on said edge, a depending boss from said radiator cap cen-

trally from said filler spout, a sealing washer carried thereby, a reenforcing plate carried thereby, a helical spring pressing on said reenforcing plate and positioned thereby at its lower end while the upper end is positioned by said radiator cap boss.

1,882,098. TABLE TRAVERSE MECHANISM FOR GRINDING MACHINES. HERBERT A. SILVEN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 11, 1929. Serial No. 362,347. 10 Claims. (Cl. 51—233.)



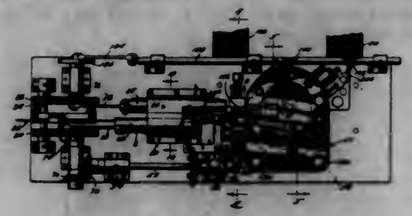
1. A grinding machine having a work table and a grinding wheel which are relatively traversable to position the wheel for grinding the work, power actuated driving mechanism to move the table, several dogs individually and adjustably positioned on the table, a control device for said mechanism including a contact member movable into or out of the path of any dog for selectively cooperating therewith to stop the table movement at any one of several predetermined but adjustable positions, whereby any portion of the work may be located in accurate grinding relation to the wheel.

1,882,099. CEMENTING HEAD. JOHN E. TROUTH, Oklahoma City, Okla., assignor to Independent Oil Well Cementing Company, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Nov. 22, 1930. Serial No. 497,490. 8 Claims. (Cl. 166—1.)
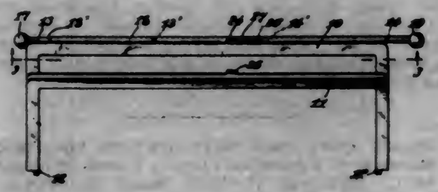


1. In combination with a casing, and a plug adapted to move through the casing, a head on the casing adapted to support the plug, a plurality of independent fluid inlets in the head above said plug, common means for by-passing liquid from any of said inlets around the plug, and a valve in said by-pass means.

1,882,100. MEANS FOR AND METHOD OF MAKING LOCK WASHERS. GEORGE C. TROTTER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 7, 1931. Serial No. 507,064. 18 Claims. (Cl. 10—73.)



1. The method of producing lock washers which consists in flatwise coiling a section of serrated flat stock, and flattening said coiled section of stock so as to present a flat type washer with the serrations thereof projecting out of the plane of the stock for lockingly engaging a work piece.

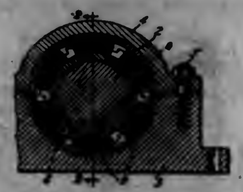
1,882,101. FASTENING DEVICE FOR BAG FRAMES. ADAM WAECHTER, Maplewood, N. J., assignor to Groove Lock Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 21, 1931. Serial No. 531,712. 5 Claims. (Cl. 292—145.)



1. The combination of a pair of parallel frame members movable from and to a position in which they are in closed relation, a hollow elongated latch slide parallel with the frame members, mounted upon one of the frame members for shifting movement longitudinally thereof, said slide operatively occupying a position in which one side thereof overhangs so as to come over the other frame member when the frame members are closed, said overhanging side having therein an elongated bottom opening in communication with the interior of the slide, an upstanding catch lug fixed in the other frame member adapted, when the frame members are closed and on shifting of the slide to latching position, to be received in the hollow interior and in the elongated bottom opening to allow said front part to be brought in front of the lug to interlock therewith and thereby secure the frame members against separation.

1,882,102. SHAFT BEARING. AUGUST GUNNAR FERDINAND WALLGREN, Stockholm, Sweden, assignor to Aktiebolaget Nomy, Stockholm, Sweden, a Corporation of Sweden. Filed Aug. 23, 1929, Serial No. 388,027, and in Sweden Apr. 27, 1929. 14 Claims. (Cl. 308—73.)

1. A shaft bearing of the radial type comprising a rotationally stationary bearing housing, a ring member mounted in said bearing housing having projections providing abutments and recesses providing tilting edges, and a plurality of bearing blocks having operative positions adjacent to and inside said ring, said blocks having projections cooperating with said recesses and tilting edges to tilt the blocks one way on shaft rotation in one direc-



tion and the other way on rotation in the other direction and said blocks having peripheral movement limited by said abutments.

1,882,103. SHAFT BEARING. AUGUST GUNNAR FERDINAND WALLGREN, Stockholm, Sweden, assignor to Aktiebolaget Nomy, Stockholm, Sweden, a Corporation of Sweden. Filed Apr. 23, 1930, Serial No. 446,468, and in Sweden Apr. 27, 1929. 15 Claims. (Cl. 308—73.)



1. A connecting rod bearing comprising a bearing housing, a ring member mounted in said bearing housing comprising an annular cylindrical portion and a symmetrical projecting portion extending inwardly from the middle of the cylindrical portion, said projecting portion having central extensions and said cylindrical portion having recesses on the inside thereof between said projecting portions, a plurality of bearing blocks having operative positions adjacent to and inside said ring member, said blocks having surfaces cooperating with said projecting portion and said recesses to tilt the blocks one way on shaft rotation in one direction and the other way on shaft rotation in the other direction.

1,882,104. TRAY CONSTRUCTION FOR BUBBLE TOWERS. JOHN S. WALLIS, New York, N. Y., assignor to Alco Products, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1931. Serial No. 523,996. 5 Claims. (Cl. 261—114.)



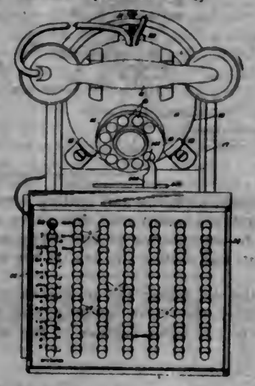
1. A bubble tray for effecting intimate contact of liquid and vapor comprising a plurality of spaced apart uninterrupted liquid troughs, the openings between the troughs forming the vapor passages, hoods over the vapor passages having their skirts extending into the troughs, means for introducing liquid uniformly into the troughs from one end thereof and means at the opposite end of the troughs for maintaining a predetermined liquid level therein.

1,882,105. MOVABLE CLAMP FOR METALLIC ROOF COVERINGS. EUGEN WENDER, Frankfort-on-the-Main, Germany. Filed Sept. 6, 1930, Serial No. 480,123, and in Germany Aug. 2, 1929. 1 Claim. (Cl. 108—20.)



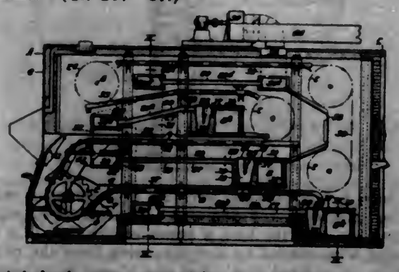
A clinger consisting of two principal parts for erect grooves in a flexible metallic roof covering of which the one principal part is firmly connected to the base of the roof, and the other principal part to the roof covering, characterized by an elastic joint existing between the principal parts which secures freedom of motion between the principal parts and thus also between the base of the roof and the covering of the roof along and vertical to the slope of the roof as described.

1,882,106. TELEPHONE APPARATUS. NATHAN WISE, deceased, Mount Vernon, N. Y., by Aaron W. Levy, executor, Brooklyn, N. Y., and Pearl L. Wise, executrix, Mount Vernon, N. Y. Filed May 1, 1931. Serial No. 534,303. 21 Claims. (Cl. 170—90.)



1. In a telephone apparatus, an impulse transmitter adapted for successive operation in the transmittal of impulses corresponding to successive characters of a telephone number and including a rotatable finger wheel having a finger-receiving opening, actuating means for said transmitter including an arm having a finger cooperating with the finger-receiving opening of said finger wheel, character-selecting switch means, and automatically actuated means responsive to the operation of said switch means for successively controlling the operation of said impulse transmitter actuating means according to the successive characters of a telephone number.

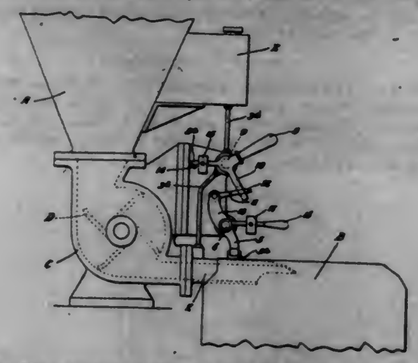
1,882,107. BAKER'S OVEN. OTTO WUNDRACK, Pittsburgh, Pa. Filed July 15, 1930. Serial No. 468,186. 7 Claims. (Cl. 107—57.)



6. A baker's oven, comprising in combination, a baking chamber, a conveyor operable within the baking chamber,

means for effecting a plurality of horizontal flights of the conveyor, a plurality of independent fire-boxes disposed transversely within the oven at different levels and having a plurality of openings at the sides thereof, an equalizing chamber parallel with and adjacent to each of said fire-boxes on the side where said openings are located, baffles extending throughout the length of said equalizing chambers and terminating short of the bottom thereof, and heat conveyor flues connected to each of said equalizing chambers and extending partially longitudinally of the oven.

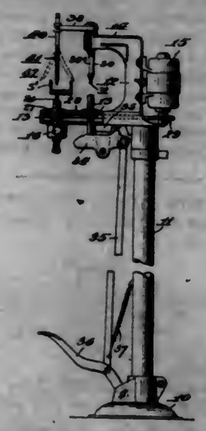
1,882,108. METHOD OF AND APPARATUS FOR SEALING BAG VALVES. ARNO ANDREAS, Munster, Germany. Filed Oct. 22, 1931, Serial No. 570,332, and in Germany Oct. 20, 1930. 16 Claims. (Cl. 226—48.)



1. That method of filling and sealing a valve bag which includes inserting a spout into the valve opening applying adhesive to the interior of the valve, while the latter is on the spout, and sliding the bag off the spout to spread the adhesive.

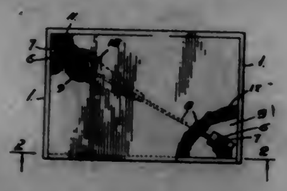
3. In a device for filling and sealing valve bags, a spout adapted to enter the valve opening, and means to convey adhesive to the outer surface of the spout.

1,882,109. BRAKE RELINING MACHINE. HARRY B. BARRETT, Los Angeles, Calif. Filed June 19, 1930. Serial No. 462,269. 2 Claims. (Cl. 77—5.)



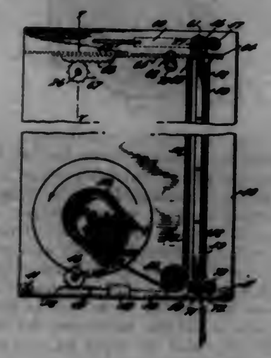
2. In a brake relining machine, a combination with a drilling tool, of a rod disposed in spaced axial aligning registration with the tool, a finger constructed of a tightly coiled wire carried by and depending from the rod, and a pointer tip carried at the free end of said finger and normally disposed in spaced axial alignment with the tool.

1,882,110. LIGHTER. HENRY JOHN BEECROFT, San Francisco, Calif. Filed Oct. 30, 1930. Serial No. 492,227. 3 Claims. (Cl. 219—32.)



2. A lighter comprising a housing; a pair of terminals mounted within said housing; a source of electrical energy connected to said terminals; a lighting element flexibly connected to one terminal and extending to a point adjacent the other terminal whereby said element may be moved by gravity to contact said second terminal when said housing is in one position whereby said element may be heated from the electrical energy; and means for preventing contact of said element with said second contact when said housing is in another position.

1,882,111. PHOTOGRAPHING APPARATUS FOR DUPLEX FILM. GEORGE C. BEIDLER, Rochester, N. Y. Filed Feb. 6, 1928. Serial No. 252,402. 12 Claims. (Cl. 95—34.)

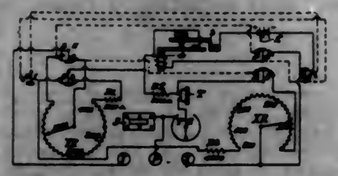


1. In a photographing apparatus, a light projecting means, an exposing chamber, means for drawing film into the exposing chamber and holding it in the focal plane, means for moving the film endwise and reversing the film to present its opposite side to the light projecting means, and means for creating relative movement of the exposing chamber and light projecting means longitudinally of a ray of light issuing from the light projecting means whereby the film is positioned within the focal plane of the light projecting means.

1,882,112. MANUFACTURE OF PROTEOLYTIC ENZYMES BY MEANS OF MICROORGANISMS. ALBERT RENÉ BOIDIN, Seclin, and IVAN AUGUSTE EFFRONT, Marcq en Baroeul, France. Filed June 7, 1929, Serial No. 369,257, and in France June 18, 1928. 2 Claims. (Cl. 149—3.)

1. The process for manufacturing proteolytic enzymes by means of microorganisms, consisting in preparing a sterile nutritive medium containing a weak quantity of nitrogenous matter and proportionally a larger quantity of carbohydrates, about 20 parts of carbohydrates for 1 part of organic nitrogen, adding to from 5 to 10 grams per liter of alkaline or earth-alkaline salts so as to keep the pH of the medium between 5.5 to 7, inoculating said medium with a pure culture of microorganisms of the bacillus subtilis family, and allowing said culture to grow in said medium under an active aeration and subjecting said medium to sudden and alternative variations of pressure, high pressure being followed by partial vacuum in order to facilitate the secretion of enzymes.

1,882,113. EARTH ELECTRODE METER. STEPHEN W. BORDEN, Summit, N. J. Filed June 21, 1930. Serial No. 462,878. 6 Claims. (Cl. 175—183.)



2. A meter for measuring the resistance of an earth electrode which includes two variable resistances as XR and YR and a fixed resistance as R2 and a switch for combining the elements in two alternative relationships such that in the first relationship a portion of XR is contained in one arm of a Wheatstone bridge arrangement of which bridge R2 constitutes a second arm and a portion of YR constitutes a third arm; and in the second relationship the remaining portion of YR is included in one arm of a Wheatstone bridge arrangement in which bridge R2 constitutes a second arm and the remaining portion of XR constitutes a third arm; the total resistances of YR and XR being equal to each other and to R2.

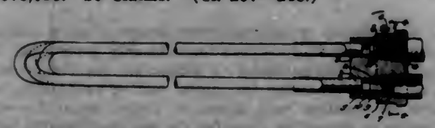
1,882,114. METAL ALLOY FOR ELECTRIC CONTACT TERMINALS. GEORGE H. BRADY, Baltimore, Md., assignor to Improved Fire Detector Corporation, Baltimore, Md. Filed Dec. 19, 1930. Serial No. 503,609. 1 Claim. (Cl. 200—166.)

A contact terminal for electrical instruments having the properties described, the same being formed of an alloy of gold, 30%, and silver, 70%.

1,882,115. HEAT TREATMENT OF STEEL RAILS AND SHAPES. JOHN BRUNNER, Chicago, Ill. Filed June 17, 1931. Serial No. 545,150. 12 Claims. (Cl. 148—12.)

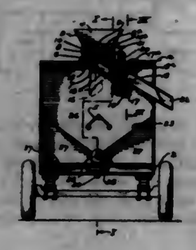
5. The method of forming steel rails and shapes which comprises heating the rail billet to temperatures above the thermal critical range, rolling to a size larger than the desired finished rail size, cooling to a temperature below the thermal critical range but above about 300° C., reheating to a temperature approximating but above the thermal critical range, rolling to the desired finished size, cooling to a temperature below the thermal critical range but above about 300° C., reheating to a temperature approximating but above the thermal critical range, quenching until the surface temperature of the rail lies within the blue-heat range but above about 250° C., reheating to temperature above 300° C. but below the thermal critical range and thereafter cooling slowly to room temperatures.

1,882,116. WATER HEATER. GEORGE A. BRYAN, Peru, Ind., assignor to Bryan Steam Corporation, a Corporation of New Mexico. Filed July 16, 1929. Serial No. 378,628. 10 Claims. (Cl. 257—248.)



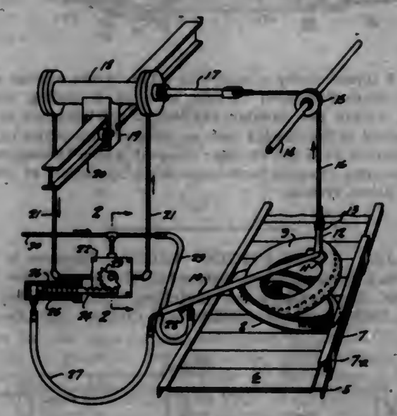
1. A water heater comprising a header connectable to a boiler and having two openings therethrough, a cluster of U-shape tubes, two feeder ends from each of which all of such tubes branch at their respective opposite ends, the two feeder ends entering the two header openings at the inner face and being secured therein, and inlet and outlet water pipes connected with the header openings at the outer face and being secured to the header.

1,882,117. PORTABLE FRUIT PRESS. JOHN BUTTICCI, San Francisco, Calif. Filed Mar. 10, 1931. Serial No. 521,481. 3 Claims. (Cl. 100—47.)



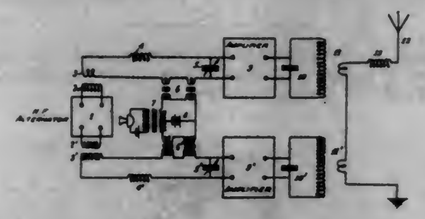
1. An apparatus of the character described comprising a tank having an inlet opening, a crusher apparatus adapted to discharge crushed products into said tank, a downwardly inclined strainer member terminating at its lower portion in an imperforate trough and dividing said tank into upper and lower chambers, each of said chambers being provided with an outlet opening having a cutoff valve, a spiral conveyor disposed in the trough and adapted to discharge contents of said upper chamber through the outlet opening thereof, means whereby said crusher and said conveyor may be driven, and clutch means whereby the crusher and conveyor may selectively be driven in unison or independently of each other.

1,882,118. TIRE CASING REMOVER. HOMER A. CHENAY, Montebello, Calif. Filed Feb. 1, 1932. Serial No. 590,060. 10 Claims. (Cl. 18—2.)



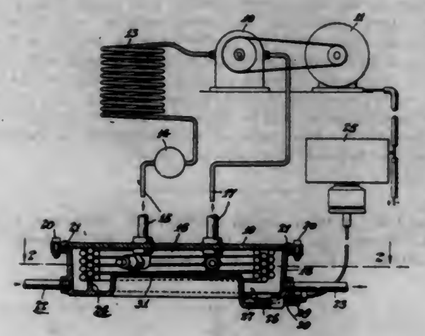
1. A device for separating a tire from a tire molt section comprising a band manipulated tire engager having a handle, a channel hook at one end of the handle extending transversely thereof for engagement with the bead of a tire; a line secured to said engager and extending laterally therefrom, power actuated means to which said line is attached for selectively moving said line and thereby moving said tire engager laterally; and a manually operable control for said power actuated means, said control being located on said handle.

1,882,119. MEANS FOR RADIO COMMUNICATION. HENRI CHRÉTIEN, Paris, France. Filed May 6, 1927, Serial No. 189,206, and in France May 10, 1926. 11 Claims. (Cl. 250—6.)



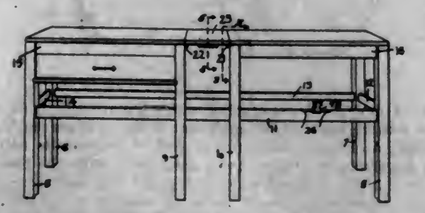
1. In a system of radio telephony, a utilization circuit energized by two independent sources of the same frequency but presenting a predetermined phase difference between themselves of substantially 150 degrees, and means, including saturated self-inductance coils, for varying the phase difference, said means being controlled by sound waves.

1,882,120. MECHANICAL WATER COOLER. EDWARD C. CLIFFORD, New York, N. Y. Filed Dec. 22, 1931. Serial No. 582,515. 4 Claims. (Cl. 62—141.)



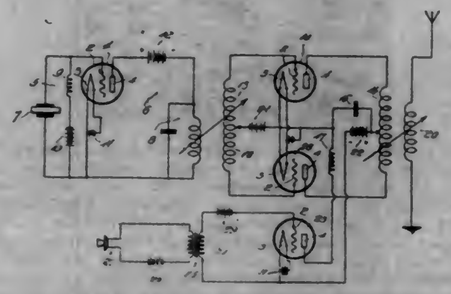
1. A liquid cooler comprising a flat casing having a circular channel formed therein, a cover, a cooling coil located within the circular channel, a refrigeration system connected to the cooling coil, an inlet and an outlet in communication with the circular channel, and a thermostat in the circular channel and controlling operation of the refrigeration system.

1,882,121. TRUSS FITTING TABLE. THOMAS L. COLLINS, Columbus, Ohio, assignor to The Akron Truss Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 333,820. 4 Claims. (Cl. 45—50.)



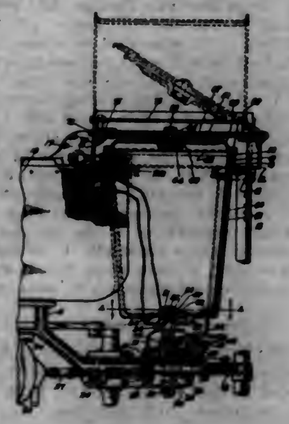
1. In a truss fitting table, an elongated table structure, a flat top on said structure, said top comprising end sections fixedly secured to said structure and a transversely disposed middle section removably supported between said fixed sections in the same plane therewith, said middle section when in its coplanar position having its ends in alignment with the sides of the end sections.

1,882,122. MODULATION SYSTEM. CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 3, 1928. Serial No. 297,200. 8 Claims. (Cl. 179—171.)



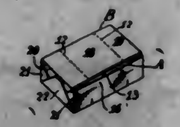
1. In a modulation system the combination of thermionic tubes having cathode, control electrode and anode electrodes, said thermionic tubes connected in an electrically balanced circuit arrangement, common potential supply for said anodes, a thermionic tube having cathode, control electrode and anode electrode, the anode-cathode resistance of said last mentioned thermionic tube connected in series with the common anode potential supply to said first mentioned thermionic tubes.

1,882,123. WASHING MACHINE. MARK A. DEFIBAUGH, Schenectady, N. Y., assignor to Altorfer Bros. Company, East Peoria, Ill., a Corporation of Illinois. Original application filed Dec. 22, 1926, Serial No. 156,300. Divided and this application filed June 20, 1928. Serial No. 286,769. 2 Claims. (Cl. 192—136.)



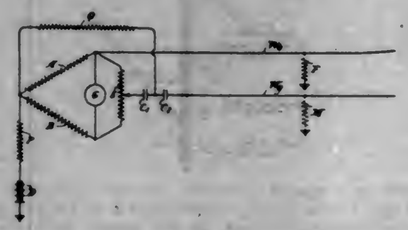
1. In a device of the character described, a centrifugal extractor, a bearing member for rotatably supporting the lower end of the extractor, a releasable bearing member for rotatably centering the upper end of said extractor, means for rotating said extractor, brake means for said extractor, a protective cover for the upper releasable bearing member, and means connecting said brake means and cover and operable to prevent movement of the extractor when the cover is moved to its open position.

1,882,124. WRAPPER FOR SUGAR UNITS AND LIKE ARTICLES. ALEXANDER DIENST, Hollis and JACOB J. NEUMAN, Jamaica, N. Y. Filed July 7, 1931. Serial No. 551,660. 2 Claims. (Cl. 229—51.)



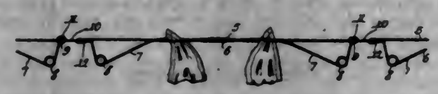
1. A wrapper of the kind herein described for enclosing and supporting an article including a body portion having an intermediate portion provided with lines of perforations extending from end to end thereof to form three parts of the body portion, the lines of perforation extending from one end of the body portion in a straight line and then flaring out toward the corners at the other end of the body portion to form a substantially triangular tongue end on the intermediate portion, one end of the body portion including the tongue end of said intermediate portion being overlapped and concealed to form box-like sections at opposite ends of the enclosed object connected to the intermediate portion by said lines of perforations, said intermediate portion having a free end covering the overlapped end of the body portion to permit grasping of the same and tearing of the same from the box sections for the relinquishment of the enclosed article.

1,882,125. TESTING SYSTEM. PAUL G. EDWARDS, Bloomfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 21, 1930. Serial No. 430,359. 9 Claims. (Cl. 175—183.)



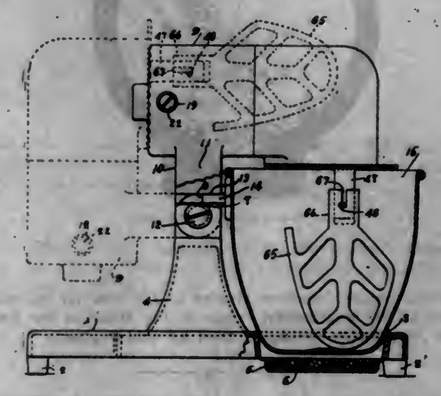
1. The method of determining the insulation resistance of a conductor to ground with apparatus including a measuring device which consists in comparing the insulation resistance to ground of the conductor with that of a standard resistance which is grounded while neutralizing the effects of ground potentials on the measuring device of said apparatus.

1,882,126. PINLESS CLOTHES LINE. DOCK ELDRIDGE, Newfoundland, Ky. Filed July 16, 1931. Serial No. 551,239. 1 Claim. (Cl. 68—3.)



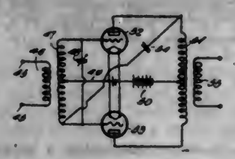
A pinless clothes line comprising a plurality of connected sections, each section including a length of wire formed into leg members, the leg members being twisted upon each other to grip an article therebetween, one of the leg members being extended downwardly near the ends thereof, spring loops formed near the ends of one of the leg members to urge the leg members into close engagement with each other to clamp an article therebetween, and eyes formed at the ends of the sections.

1,882,127. CULINARY APPARATUS. NELSON EMMONS, 3d, Dayton, Ohio, assignor, by mesne assignments, to Nelson Emmons, jr., and Joseph W. Green, Dayton, Ohio. Filed Dec. 31, 1930. Serial No. 505,829. 5 Claims. (Cl. 259—102.)



1. In a mixing apparatus, in combination with a bowl, a support for a stirrer consisting of pivoted members having thereon cooperating gripping parts, and means on the bowl gripped by said parts for holding the bowl.

1,882,128. RADIOFREQUENCY AMPLIFICATION SYSTEM. EDWARD W. FEARING, East Orange, N. J. Filed June 1, 1927. Serial No. 195,829. 17 Claims. (Cl. 179—171.)

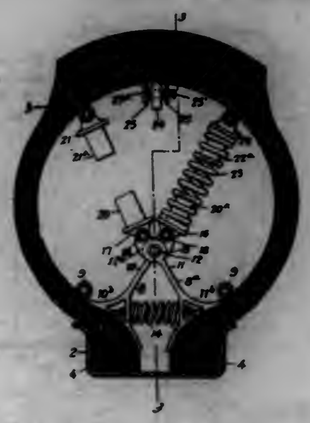


18. The method of preventing the output circuits of a push-pull amplifying stage from affecting the input circuit of said stage, which comprises balancing the retroactive effects in one tube by impressing on its grid a voltage opposite in phase to its alternating plate voltage, and balancing the retroactive effects in the other tube by transferring a voltage from its plate to a point in its grid circuit of opposite alternating voltage to its grid, through a single coupling common to the two tubes.

1,882,129. INNER LINER FOR TIRE CASINGS. STEPHEN R. FEITNER, Jacksonville, Fla. Filed Aug. 19, 1931. Serial No. 558,188. 5 Claims. (Cl. 152—8.)

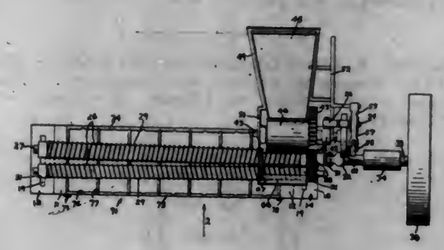
2. An automobile tire comprising an outer elastic tire casing, and a resilient core, inner lining or frame therein consisting of an annular series of linked units, each composed of jointed tread, rim and side sections, the rim

sections having crossed and pivotally connected end portions, supports independently pivoted to the said crossed end portions of the rim sections beyond the pivotal con-



nection thereof, supports pivoted to the core on opposite sides of the longitudinal center of the tread of the tire, and compression springs carried by said supports.

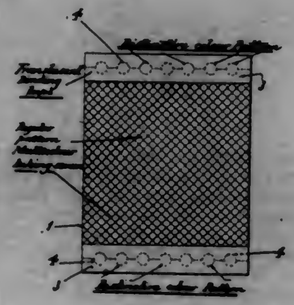
1,882,130. AUTOMATIC SCREW SORTING MACHINE. NONIE E. FIELDER, Los Angeles, Calif. Filed July 15, 1929. Serial No. 378,534. 3 Claims. (Cl. 209—107.)



1. A sorting machine comprising a pair of slightly divergent rotatable members, means for rotating said members in opposite directions, a drum rotatable about an axis approximately parallel to said rotatable members, said drum having a longitudinally extending groove formed thereon constituting a pocket adapted to receive and discharge articles to be sorted between the proximal ends of said rotatable members, means for rotating said drum, a hopper adapted to receive articles to be sorted and feed them against the side of the drum, and means for periodically tilting the hopper.

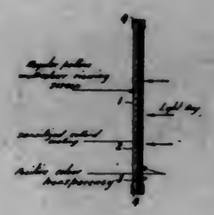
1,882,131. COLOR PHOTOGRAPHY. CLARE LIVINGSTONE FINLAY, Slough, England. Filed Jan. 10, 1930, Serial No. 420,016, and in Great Britain Feb. 9, 1929. 5 Claims. (Cl. 95—2.)

1. A method of producing, for use in color photography, a combined regular pattern multicolor taking screen having at opposite edge portions thereof, distinctive color patterns, and a panchromatic plate having color records of the color patterns held in accurate register therewith, said method consisting in first firmly binding the screen and plate together and afterwards effecting a preliminary exposure to light of the opposite marginal edge portions



of the taking screen bearing the distinctive color patterns and the corresponding marginal edge portions of the panchromatic plate while the remaining portions of the screen and plate are covered.

1,882,132. COLOR PHOTOGRAPHY. CLARE LIVINGSTONE FINLAY, Slough, England. Filed Jan. 10, 1930, Serial No. 420,017, and in Great Britain Feb. 9, 1929. 6 Claims. (Cl. 95—2.)



1. A method of producing a combined regular pattern multicolor viewing screen and black and white positive color image or transparency in intimate optical contact therewith, said method consisting in exposing a viewing screen having thereon a colloid film or coating sensitized by a bichromate to light through a positive color transparency, removing the said transparency from the combined viewing screen and exposed film or coating and subjecting the latter, in a moistened condition, to the action of a solution of a dye material that will have no effect on those portions of the exposed film or coating where the printing light has had full effect thereon but will produce on the film or coating where the light has had less or no effect thereon, a neutral black image constituting a positive color transparency corresponding to the originating positive color transparency and washing and drying the said viewing screen and positive color transparency thereon.

1,882,133. NAPKIN AND METHOD OF MAKING IT. PHILIP A. FISCHER, New York, N. Y. Filed May 27, 1930. Serial No. 456,252. 7 Claims. (Cl. 93—1.)

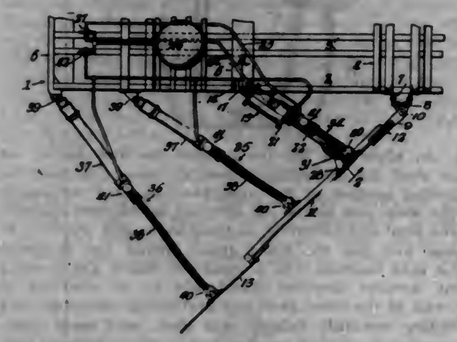
1. A method of making paper napkins, comprising cutting a strip of paper transversely on a broken line, where-

by a projecting portion is formed along an edge of one napkin and an indentation of corresponding shape is formed in the adjacent edge of the adjoining napkin,



and folding the napkin so that either the tab or the indentation provide exposed gripping points which may be used for opening the napkin.

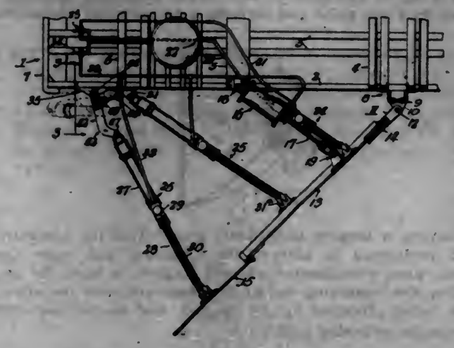
1,882,134. RAILROAD SPREADER. JAMES C. FORBES and ALBERT W. BANTON, East Chicago, Ind., assignors to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Apr. 6, 1931. Serial No. 527,872. 5 Claims. (Cl. 37—105.)



1. A railroad spreader embodying therein a car including a side sill, a spreader wing pivoted at one end with respect to the side of the car for a swinging movement toward and away from the same, fluid pressure means for imparting swinging movement to said wing and including a power cylinder and piston rod disposed in a plane above said side sill, a knuckle pivotally connected to one end of the cylinder in one plane, means extending upwardly from said sill providing a pivotal connection for said knuckle to the car and which connection is arranged in a different plane and means pivotally connecting an end of the piston rod to the wing for swinging movement in more than one plane said connections disposing the cylinder above and substantially parallel with said sill after said cylinder and piston rod operate to swing the wing in toward the side of the car.

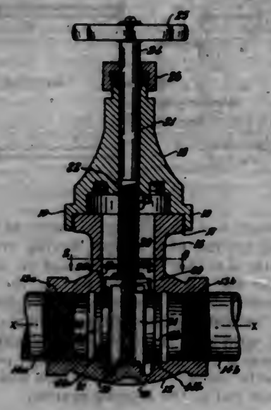
1,882,135. WING BRACE ARRANGEMENT FOR RAILROAD SPREADERS. JAMES C. FORBES and ALBERT W. BANTON, East Chicago, Ind., assignors to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Apr. 6, 1931. Serial No. 527,873. 19 Claims. (Cl. 37—105.)

1. A spreader embodying therein a car member and a wing member pivoted at one end thereto for a swinging movement into and away from its angular operating position with respect to the car member, a brace comprising a plurality of parts disposed between said car and wing members for holding the wing member in its operative position and means between one end of said brace



and one of said members for increasing the effective length of the brace beyond that of the combined length of the parts comprising said brace.

1,882,136. GATE VALVE. JOHN H. FREEZE, Canton, Ohio. Filed June 11, 1929. Serial No. 370,040. 6 Claims. (Cl. 251—71.)

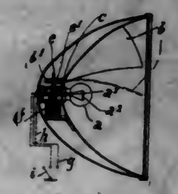


1. A gate valve including a body casing, walls of the casing forming a flow chamber and a gate chamber intersecting the flow chamber, a valve stem movable in the gate chamber towards and away from the flow axis of the flow chamber, a mounting member carried by the valve stem within the gate chamber and movable longitudinally of the valve stem, gate means carried on the mounting member and movable towards and away from the valve stem, means operable by movement of the valve stem in the mounting member for moving the gate means away from the valve stem for closing an adjacent end of a flow chamber portion, a latch rotatably mounted on the valve stem for normally holding the mounting member against movement on the valve stem, and means actuated by bodily movement of the valve stem and mounting member for rotating the latch to permit movement of the valve stem in the mounting member.

1,882,137. SCREEN FOR DUAL-INTENSITY HEADLIGHTS. HEINRICH FRÜCHTENICHT, Bremen, Germany. Filed July 17, 1931, Serial No. 551,544, and in Germany Mar. 2, 1931. 3 Claims. (Cl. 240—45.)

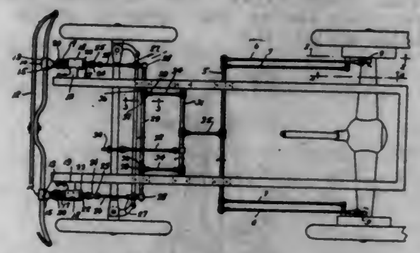
1. In a head-light, a reflector, an electric lamp at the focus of the reflector and having a dual intensity filament

arrangement, a shade pivoted for vertical swinging movement to the reflector and above the lamp and movable to drop in front of the upper part of the light rays from the lamp, an extension on said shade extending rearwardly of its pivot point and forming a transversely elongated



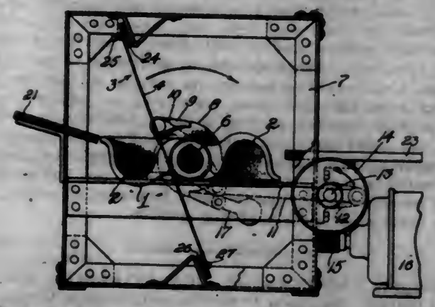
armature, a magnet underneath one end of the armature and positioned to attract the armature and raise the shade upon energization of said magnet, a latch for engaging the remaining end of the armature upon the armature being attracted by the magnet, and electro-magnetic means for releasing said latch.

1,882,138. SAFETY AND EMERGENCY BUMPER BRAKE AND LOCKING MECHANISM. JOSEPH GENTILE, East Boston, Mass. Filed May 20, 1931. Serial No. 538,851. 1 Claim. (Cl. 180—83.)



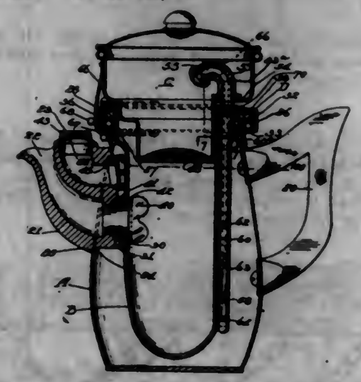
The combination with a motor vehicle having a frame and a braking system, of a bumper having inner and outer leaves, endwise movable bars connected to the inner leaf of the bumper leaving the outer leaf of the bumper free to absorb minor shocks, brackets carried by said frame and slidably supporting said bars, springs on said bars and engaged with said brackets, links connected to said bars, a transverse rod having the terminal portions thereof provided with cranks connected to said links, and means connecting said rod to the braking system.

1,882,139. DOUGH CUTTING MECHANISM. LETTERIO GIUFFRE, East Boston, Mass. Filed June 26, 1930. Serial No. 463,878. 2 Claims. (Cl. 107—20.)



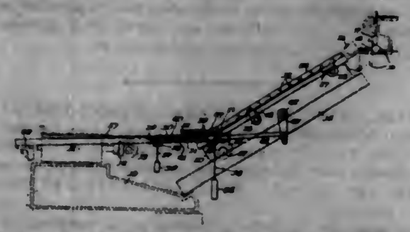
2. A dough cutting mechanism comprising a rotatably supported trough-shaped holder for a body of dough, said holder having end walls and being formed between said end walls with a plurality of parallel slots that are disposed at right angles with respect to the axis of said holder; a stationarily supported group of cutting devices, comprising a row of tangentially disposed cutting members, one for each slot of said holder; a stationarily supported loading shelf alongside of the path of said holder; a continuously driven shaft, and mechanism through which said shaft acts to continually rotate said holder step-by-step so that said trough is caused to dwell alternately in receiving position at one side of its axis alongside of said shelf and in an inverted delivering position at the opposite side of its axis thereby to cause said cutting members to traverse the slots of said holder and divide the body of dough into a plurality of independent abutting slices.

1,882,140. COFFEE MAKER. STACEY A. HAINES, Kansas City, Mo. Filed Feb. 20, 1931. Serial No. 517,167. 5 Claims. (Cl. 53—3.)



1. An apparatus for the purpose specified having an outer shell for containing water, an inner container for collecting product of the apparatus mounted removably in the shell and means for effecting liquid-tight junction of the shell and container at their upper end portions to enclose and seal the water space around the container below said junction, and a combined filling and pouring spout member mounted liquid-tight at an aperture in the wall of the outer shell and protruding outwardly and extending upwardly outside said shell, said spout member having a pouring passage and a filling passage, the latter located above and inwardly with respect to the shell from the former, said spout member being terminated at the lower end of said spout member and inner end of the pouring passage by means making a liquid-tight junction with the pouring passage and with the inner container, for connecting the cavity of the latter with the pouring passage and sealing said pouring passage from the water space of the shell.

1,882,141. APPARATUS FOR ANNEALING BARS. RANDOLPH B. HANCOCK, Gary, Ind. Filed May 13, 1927. Serial No. 191,110. 16 Claims. (Cl. 80—42.)



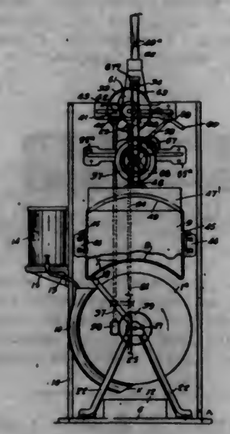
16. Bar packing mechanism comprising in combination, a table, a slide mounted in said table, a bell crank lever pivoted to said slide, said lever including an arm adapted to project above the surface of said table during the major part of the movement of said slide, means for packing bars on said table against the projecting arm of said lever whereby a pack of bars is formed and the slide is rearwardly moved, said table having a slotted opening to permit the bell crank lever to pivot and depress the upwardly projecting arm beneath the table surface.

1,882,142. CAGE. CHARLES H. HENNINGS, Chicago, Ill., assignor to Hennings Manufacturing Co., a Corporation of Illinois. Filed Feb. 28, 1929. Serial No. 343,258. 1 Claim. (Cl. 119—17.)



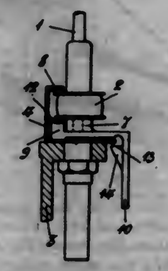
In a bird cage, spaced wires shaped to define the cage body, means including reinforcing bands for holding said wires in their proper positions, and a decorative band for each of said reinforcing bands and having a slot in one end thereof and an offset tongue on the other end thereof extending in the same direction as said last said end and engagable in said slot, and an inwardly extending flange on each of said decorative bands for engagement over an edge of the respective reinforcing band to aid said tongue and slot connection in holding said decorative band on said reinforcing band.

1,882,143. MACHINE FOR MOLDING BUTTER AND THE LIKE. WALTON HENRY, Bloomfield, Belfast, Northern Ireland. Filed July 27, 1931, Serial No. 553,427, and in Great Britain Sept. 11, 1930. 3 Claims. (Cl. 31—9.)



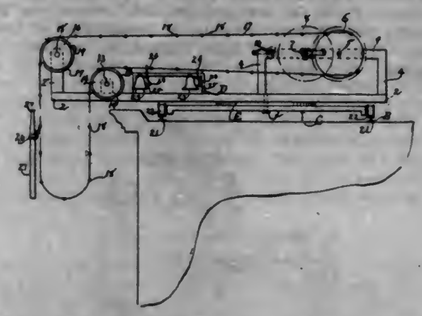
3. Apparatus for molding butter or the like comprising a power driven shaft, a nut driven thereby, a feed screw fed axially by said nut, a plunger carried by said feed screw, a receptacle accommodating said plunger and adapted to accommodate butter, an arcuate base to said receptacle, apertures in said base through which the butter is extruded, a drum rotating beneath said base and a cutter reciprocated in an arcuate path contiguously to said base, said drum comprising a butter shaping device, means gearing said shaft to said drum and said cutter, and an arcuate channel section molding member partially encircling said drum.

1,882,144. MEANS FOR BRAKING SPINDLES EMPLOYED IN RING SPINNING FRAMES, OR IN OTHER FRAMES IN WHICH SIMILARLY BRAKED SPINDLES ARE USED. JOSEPH HINDLE, Accrington, England. Filed May 2, 1932, Serial No. 608,730, and in Great Britain Aug. 28, 1931. 4 Claims. (Cl. 118—8.)



1. Means for braking spindles employed in ring spinning frames, or in other frames in which similarly braked spindles are used, comprising a spindle, a holding-down device for said spindle, slidably mounted about the axis thereof, for being laterally moved in and out of action in directions across the position of the axis of said spindle, a braking member loosely mounted about the axis of said spindle, and adjacent to said holding-down device, for being tilted in order to brake the spindle aforesaid, said holding-down device and said braking member cooperating in the braking operation, as herein set forth.

1,882,145. ROTARY FIRE ESCAPE. SEYMOUR S. HIRSCHMAN, Binghamton, N. Y. Filed June 15, 1928. Serial No. 285,717. 5 Claims. (Cl. 227—10.)

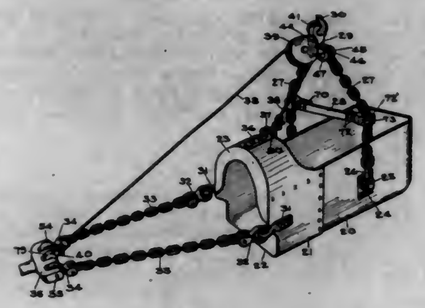


2. In a fire escape, the combination with an endless ladder, of supporting pulleys therefor, a frame for supporting the ladder and pulleys, a carriage for supporting the frame, a turntable interposed between the frame and the carriage whereby the ladder may be swung relative to the carriage, and rails on which the carriage is movably mounted.

1,882,146. REMOVAL OF SULPHUR FROM GASOLINE OR THE LIKE. HARRY N. HOLMES, Oberlin, Ohio. Filed July 31, 1930. Serial No. 472,195. 7 Claims. (Cl. 196—24.)

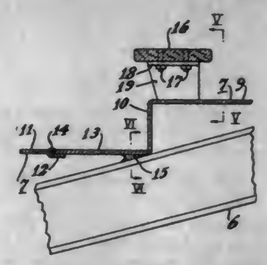
3. The process of removing thiophene type compounds from mixtures of hydrocarbons, consisting in subjecting the mixture to the adsorbing effect of a gel containing a metallic sulphide thoroughly disseminated through its porous structure.

1,882,147. DRAG-LINE EXCAVATING BUCKET. OMAR R. HUMPHREYS and WALTER G. HUMPHREYS, Omaha, Nebr. Filed Sept. 5, 1928. Serial No. 304,128. 1 Claim. (Cl. 37—135.)



A spreader bar for a drag line excavating bucket with ears on opposite sides and bail chains pivotally mounted in said ears and extending upwardly at the sides of the bucket for supporting the same, comprising a bar adapted to extend between said chains in spaced relation above the bucket, end members for the bar, each of said end members having a shank adapted to lie against the side of the bar, rivets securing the shanks to the bar, each end member having a forked portion extending beyond the bar to receive a chain link in edgewise relation therethrough and having inwardly facing recesses in the upper and lower edges of the forked portion to accommodate the rounded ends of the adjacent links of the chain, each forked portion also having an intermediate transverse opening for receiving a pin therethrough for passage through the edgewise disposed link to hold the spreader bar to the chains.

1,882,148. FABRICATED METAL GRAND STAND. RUSSELL E. JONES, Birmingham, Ala., assignor to The Ingalls Iron Works Company, a Corporation of Delaware. Filed Sept. 19, 1931. Serial No. 563,878. 12 Claims. (Cl. 189—1.)



1. In a fabricated metal seating structure, a supporting frame work comprising inclined spaced beams, and an imperforate metal decking formed of steel plates shaped to provide tread and riser portions with the riser portions supported on the beams, which plates are welded to each other and to the beams.

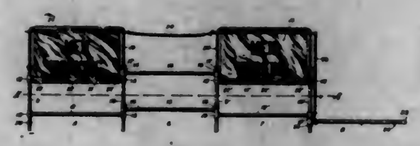
1,882,149. DRILL JAR. JOHN N. KAUMANS and ELISHA BRIDGES, Montrose, Mo. Filed July 11, 1931. Serial No. 550,242. 1 Claim. (Cl. 255—27.)

A drill jar comprising a bit, a lower jar member threadedly connected with the upper end of the bit and including a threaded intermediate portion and further including a slotted upper portion, an upper jar member including a depending slotted portion slidably interlooped with the slotted portion of the lower jar member for operatively connecting said jar members together, the upper jar member further including a head and a threaded shank extending upwardly from the head, a socket member threadedly engaged with the shank and constituting means for connecting the drill cable to the upper jar member and having an elongated tapered upper portion, an elongated



barrel enclosing the socket member and the jar members, said barrel having its lower end portion internally threaded and threadedly engaged with the threaded portion of the lower jar member, and an elongated reduced neck formed integrally with the upper end of the barrel through the cable passes, said neck being engageable by the tapered upper portion of said socket member for connecting the barrel to the cable should the socket member separate from the upper jar member or should the upper and lower jar members become separated.

1,882,150. MANHOLE GUARD. ROBERT J. KENT, Jamaica, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,089. 10 Claims. (Cl. 94—38.)



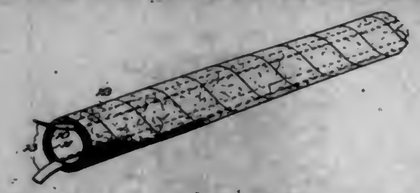
1. A manhole guard comprising a plurality of rigid sections hingedly connected to each other, and legend bearing extensible members telescopically mounted in certain of said sections, and means for supporting said members in extended position above said sections.

1,882,151. METHOD OF MAKING A GOLF SHAFT. HERBERT C. LAGERBLADE, Bristol, Conn., assignor to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Nov. 3, 1930. Serial No. 493,088. 3 Claims. (Cl. 113—33.)

1. A method of making plain surfaced, thin walled, multi-ply steel tubular articles which consists in placing a tubular form of sheet steel with the edges of said sheet abutting within a second like form with the abutting edges of one form offset circumferentially from the edges

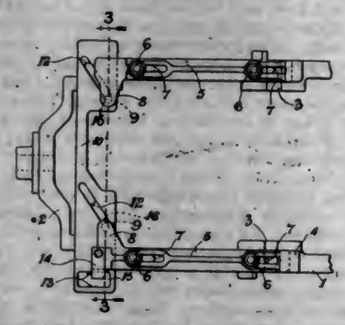
CARNEGIE LIBRARY OF ATLANTA

of the other; placing strips of brazing material between said forms with a strip in registry with the abutting edges of each form; and subjecting the assembled forms and



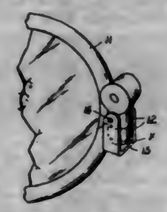
strips to heat in an atmosphere of hydrogen sufficient to melt and cause the brazing material to completely cover the contiguous surfaces of the two forms.

1,882,152. WINDING, STRANDING, COILING, LAPPING OR THE LIKE MACHINE. JOHN HAMILTON LARMUTH, Upper Colwyn Bay, Wales. Filed Feb. 25, 1931, Serial No. 518,153, and in Great Britain Mar. 15, 1930. 5 Claims. (Cl. 242—180.)



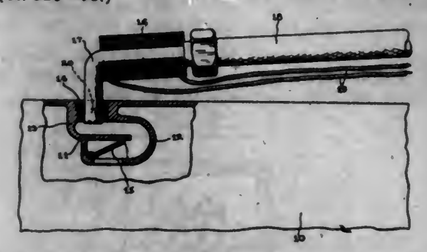
1. In a winding, stranding, coiling, lapping or the like machine, a bobbin carrying member, a bobbin spindle supported therein, locking slides mounted on the bobbin carrying member to slide at right angles to the axis of the bobbin spindle, an operating slide mounted on the bobbin carrying member to slide parallel with the said axis, slanting surfaces on the operating slide, and projections on the locking slides and acted on by the slanting surfaces which thereby slide the locking slides into bobbin spindle locking and unlocking positions on actuation of operating slide in the requisite direction.

1,882,153. SCREW RETAINING DEVICE FOR EYEGLASS RIMS. WALTER LOBENSTEIN, Brooklyn, N. Y., assignor to J. Gaspari & Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 17, 1930. Serial No. 502,901. 2 Claims. (Cl. 88—53.)



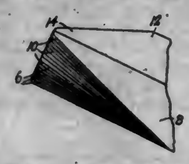
1. In combination, a split lens rim for eyeglasses having a tangential projection divided along the line of the split, a screw adjustable in the projection to clamp the rim closed, and a strap pivotally mounted at one end on one section of the projection to longitudinally embrace the latter along its full length and to engage over the screw head to prevent accidental removal thereof.

1,882,154. STORING AND DISPENSING APPARATUS. WILLIAM B. W. MANN and FRANK A. TALBOT, Baltimore, Md. Filed Feb. 4, 1930. Serial No. 425,860. 7 Claims. (Cl. 226—93.)



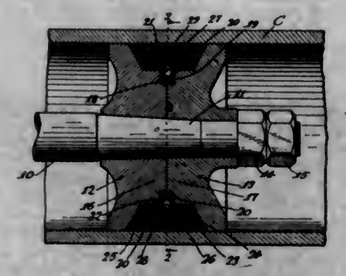
1. In combination, a closed vessel having a tubular conduit provided with an inwardly closing valve, means in the conduit to render the valve inaccessible from the outer end of the conduit, a nozzle for use in filling the vessel through said conduit, and magnetic means cooperating with the nozzle for holding the valve off its seat during the filling of the vessel.

1,882,155. TAPERED TOOTH CLIPPER. MARRETT F. MA REAN, Kansas City, Mo., assignor of one-half to Elbert A. Taylor, Kansas City, Mo. Filed May 24, 1930. Serial No. 455,252. 5 Claims. (Cl. 30—1.)



1. In a hair clipper, a reciprocable cutting plate including a plurality of spaced teeth, and a stationary ledger plate having a plurality of spaced teeth to coact with the cutting plate teeth, and adjacent sides of each set of teeth being in frictional engagement when the cutting plate is reciprocated with respect to said ledger plate, the remote sides of each set of teeth being inclined with respect to the adjacent sides, the said inclination extending from each tooth point to the connection thereof with the respective plate, the inclined sides of said teeth meeting at an acute angle at the points thereof, said ledger plate teeth progressively increasing in angularity as one side of said plate is approached from the other, the bases of all of said ledger plate teeth being on a common line equidistant from and parallel to the front edge of said plate.

1,882,156. EXPANSIBLE PACKING FOR PLUNGERS. ERWIN E. MILLER, Fullerton, Calif. Filed Mar. 13, 1929. Serial No. 346,621. 12 Claims. (Cl. 74—109.)



1. In a plunger for mud pumps and the like, a plunger rod, a pair of heads on the plunger rod having abutting hubs, there being a groove formed by the hubs at the

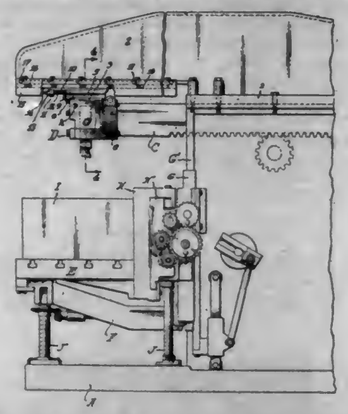
abutment, a packing ring fitting in said groove having a groove formed in its periphery defining spaced flanges, and means for supplying the groove in the ring with fluid to expand the flanges against the hubs.

1,882,157. BOX-EASEL PICTURE FRAME. GUSTAVE M. MINTON, New York, N. Y. Filed Apr. 16, 1931. Serial No. 530,502. 1 Claim. (Cl. 40—148.)



A box-easel picture frame, comprising a box-like member, a hinged cover therefor adapted to support and expose a picture so that the same may be viewed from the exterior of the box, and a rectangular frame-like member rigidly secured to the box and extending laterally beyond the cover at all sides in combination with an easel member to support the box in elevated position and to normally conceal the same from view, the easel member being set into the rear wall of the box so as to lie flush with the outer surface of said wall, said rectangular frame-like member surrounding and abutting the marginal edges of the hinged cover, said frame member having its outer face flush with the outer face of the cover member when the latter is closed.

1,882,158. BRACING MEANS FOR SHAPER RAMS. HENRY E. MORTON, Muskegon Heights, Mich. Filed Mar. 18, 1930. Serial No. 435,621. 6 Claims. (Cl. 90—38.)



1. The combination with a metal working machine having a longitudinally reciprocable ram supported adjacent one end with its cutting tool carrying end in overhanging relation to work, of a rigid member extending throughout the length of the stroke of said ram longitudinally thereof and in spaced relation thereto and at the side thereof in the direction of the lateral thrust thereon of a tool carried by said ram and having a longitudinal guide, and a tool carrying head carried by the unsupported end portion of said ram to move therewith and guided by said guide in contact with said member to prevent said ram from yielding laterally in the direction of the lateral thrust of the tool thereon carried by said head.

1,882,159. STOVE. WALTER NAGLE, Belleville, Ill., assignor to Baker Nagle Company, Belleville, Ill., a Corporation of Delaware. Filed Jan. 8, 1930. Serial No. 419,285. 6 Claims. (Cl. 126—67.)



1. A portable heater comprising in combination a base provided with an upwardly presented marginal seat having upwardly extending inner and outer marginal flanges, a horizontally disposed bottom frame having its outer edge formed with a downwardly presented marginal flange resting in said seat in overlapping relation with the inner flange of said base, said bottom frame being provided with an upwardly presented flange spaced from its outer edge, an outer casing having its bottom edge resting in said seat in juxtaposed relation with the outer flange of said base and the downwardly presented flange of said bottom frame, said casing having a perforate top, an inner unit engaging the inner flange of said bottom frame and supported by the latter in spaced relation with said outer casing to provide a vertically disposed air chamber, the upper end of said inner unit being formed dome-shaped, said bottom frame being provided intermediate its flanges with a plurality of vertically disposed openings for admitting air into said chamber, the heated air being discharged through the perforate top of said outer casing, a fire box supported within said inner unit at a point a substantial distance from the upper dome-shaped end of said inner unit so as to provide a comparatively large combustion chamber therein, and a flue outlet leading from said combustion chamber at a point intermediate of said fire box and the upper end of said combustion chamber.

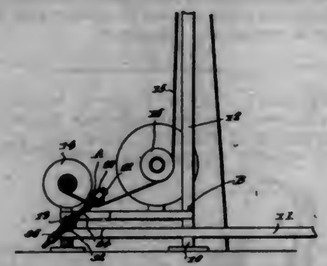
1,882,160. DOUGH MOLDING MACHINE. JEAN PARIS, Cincinnati, Ohio. Filed Apr. 9, 1931. Serial No. 528,769. 1 Claim. (Cl. 107—23.)



In a dough molding machine the combination of means for rolling dough, a pair of cooperating rollers provided with a plurality of staggered indentations having parallel cutting edges lengthwise said rollers, creasing edges transverse said rollers alternating with transverse cutting edges and means for releasing the cut dough from said rollers.

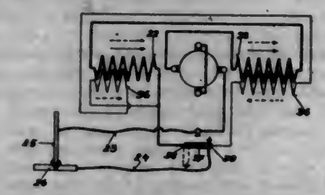
1,882,161. WIRE LINE SHOCK ABSORBER. LEROY R. PIERCE, Keystone, Okla. Filed Feb. 25, 1930. Serial No. 431,208. 2 Claims. (Cl. 255—5.)

1. A shock absorbing device for use in connection with well rigs comprising an angle iron protecting strip adapted to fit over the under and outer side of a bracing beam of a rig, a slide bolt slidably mounted through said protecting strip and extending through said bracing beam at an angle of approximately forty-five degrees to the transverse axis of said bracing beam, a tension frame secured to the outer end of said slide bolt, a plurality of guide rods carried by said protecting strip and extending in parallel relation with respect to said slide bolt and slidably mounted through said tension frame, coil springs interposed between said tension frame and said protecting strip and mounted upon said slide bolt and guide rods for normally urging said tension frame outwardly with respect to said



protecting strip, said guide rods constituting means for resisting lateral strain upon said slide bolt, and means carried by the inner end of said slide bolt for engaging the wire line cable of a well rig.

1,882,162. DEVICE FOR CONNECTING AND SWITCHING THE WINDINGS OF DYNAMOS. EMANUEL ROSENBERG, Weiz, Austria. Filed May 17, 1929, Serial No. 364,009, and in Austria May 25, 1928. 6 Claims. (Cl. 171—223.)



1. In a series wound dynamo, a field structure including plural field windings, an armature provided with a commutator and two sets of brushes, one set of brushes short circuiting the armature on a line displaced 90 electric degrees from the line of field magnetization and the second set of brushes displaced 90 electric degrees from the first set and connected to an external circuit, and means for selectively connecting one of the brushes of the second set to one of the field windings to produce simultaneously a relatively high internal resistance of the dynamo and a relatively low number of effective magnetizing turns or to produce simultaneously a relatively low internal resistance of the dynamo and a relatively high number of effective magnetizing turns.

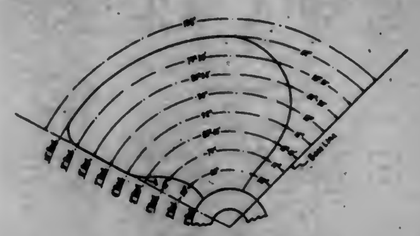
1,882,163. FLUID REACTIVE SURFACE. CHARLES H. A. F. L. ROSS, Washington, D. C. Filed Apr. 21, 1931. Serial No. 531,784. 7 Claims. (Cl. 170—156.)



1. A propeller in which the drunkenness of the helical surface is substantially eliminated.

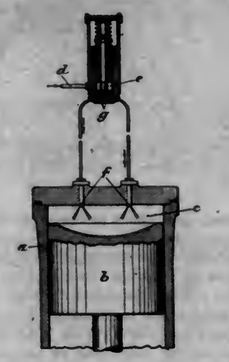
1,882,164. FLUID REACTIVE SURFACE. CHARLES H. A. F. L. ROSS, Washington, D. C. Filed May 8, 1931. Serial No. 536,006. 6 Claims. (Cl. 170—159.)

1. The method of determining the shape of an arcuate section of any desired radius of a propeller blade which comprises constructing a developed section thereof correlated to a vertical axis indicating degrees of arc and distance parallel to the axis of rotation, and to a horizontal axis indicating length of radius and distance measured arcuately about the axis of rotation, determining the pushing face of said section by connecting a point distant three radii from the vertical axis and distant an amount



equal to the lead of the propeller divided by a π from the horizontal axis with a point in the horizontal axis distant one radius from the vertical axis, locating the points of such section at the leading and trailing edges of the propeller in said pushing face, and constructing the pulling face of the propeller in any desired manner.

1,882,165. INTERNAL COMBUSTION ENGINE WITH SOLID FUEL INJECTION. OSCAR SIMMEN, Erlach, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Mar. 27, 1931, Serial No. 525,763, and in Switzerland Apr. 7, 1930. 1 Claim. (Cl. 123—32.)

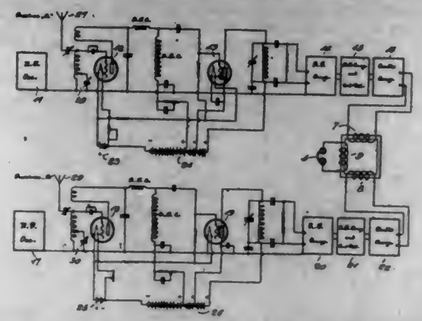


A device for supplying solid fuel to an internal combustion engine comprising a plurality of nozzles for simultaneously injecting the fuel into the engine, a supply pipe for each nozzle, a main fuel supply pipe, a valve connecting said main fuel supply pipe to the supply pipes of the nozzles, said valve normally tending to close and separate each supply pipe from every other one and from the main fuel supply pipe, and opening only under the influence of pressure from the main fuel supply pipe.

1,882,166. REDUCTION OF FADING EFFECTS IN RADIO COMMUNICATION. ALBERT H. TAYLOR and LEO C. YOUNG, Washington, D. C., assignors, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 28, 1928. Serial No. 295,968. 7 Claims. (Cl. 250—2.)

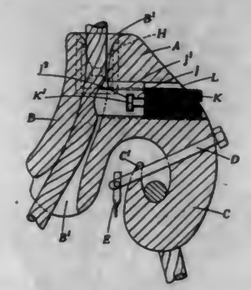
2. The method of receiving wireless signals with geographically separated antennæ which consists in receiving the same signal upon each of a pair of said antennæ to produce a pair of signal effects, independently heterodyning each of said signal effects to produce an intermediate frequency differing from that of the other, fixing the frequencies with which said signal effects are heterodyned so that

the propagation of an audible beat frequency therebetween is avoided, independently amplifying and detecting each of said intermediate frequencies to produce an audio fre-



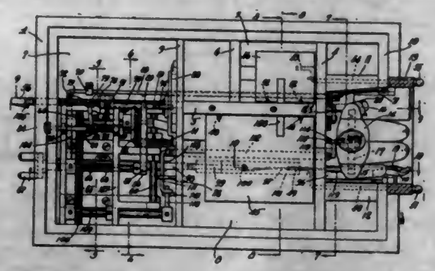
quency differing from that of the other and combining said audio frequencies, whereby the effects of fading are substantially reduced.

1,882,167. SLING-LOCK. ROBERT THIRLWELL, Newcastle-upon-Tyne, England. Filed Apr. 28, 1932, Serial No. 608,088, and in Great Britain May 4, 1931. 7 Claims. (Cl. 24—123.)



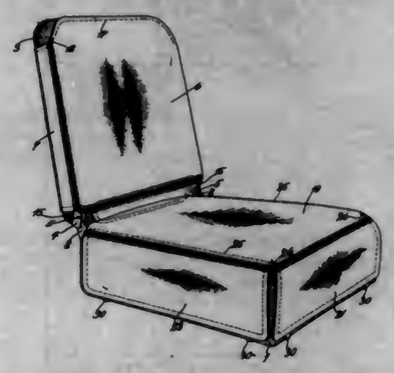
7. A sling-lock according to claim 1, having a threaded bore in the upper portion of the bifurcated member, said bore opening into the longitudinal passage, a member adapted to slide in said bore and having its ends adapted to abut against a rope threaded through said longitudinal passage, a locking screw in threaded engagement with said bore and adapted to abut against said slidable member, a mushroom end on the inner end of the locking screw, and a transverse T-slot in the end of the slidable member adjacent the locking screw, said slot being adapted to receive the mush room end on the locking screw.

1,882,168. DISPENSING CABINET FOR CIGARS, ETC. ALEXANDER B. VALAS, Medford, Mass. Filed June 30, 1931. Serial No. 547,849. 17 Claims. (Cl. 312—78.)



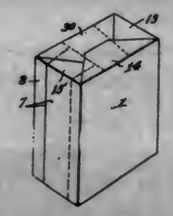
3. In a dispensing cabinet, a magazine, a mechanical figure having a swinging arm and a gripper on the end of said arm, a pusher for transferring articles from a magazine to said gripper, a rock shaft to which said arm is secured, mechanism connected with said rock shaft for turning it, a main actuator and driven members arranged for operation successively by said main actuator, one of said driven members being coupled to actuate said pusher, and the other to actuate the rock shaft.

1,882,169. SEAT COVER. HARRY G. WEDLER, St. Louis, Mo., assignor to The Wedler-Shuford Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 15, 1929. Serial No. 355,311. 2 Claims. (Cl. 155—182.)



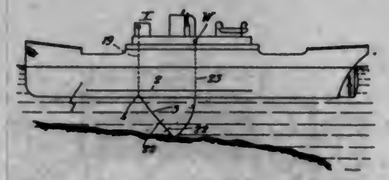
1. A cover for a seat back that has downwardly extended supports near its side edges and an uninterrupted space between said supports comprising a body extending entirely around said back and enclosing the front, rear and sides and having its ends at the rear of said back and having notches in its lower edge receiving said supports, the lower edge of said body between said notches at the front and beyond said notches at the rear being approximately even with the lower end of said back, and detachable means connecting the ends of said body.

1,882,170. LINED RECEPTACLE. CHARLES P. WELLMAN, Medford, Mass., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Original application filed July 7, 1919, Serial No. 309,115, now Patent No. 1,584,964, dated May 7, 1926. Divided and application filed Apr. 28, 1926, Serial No. 105,108. Divided and this application filed May 1, 1931. Serial No. 534,193. 10 Claims. (Cl. 229—14.)



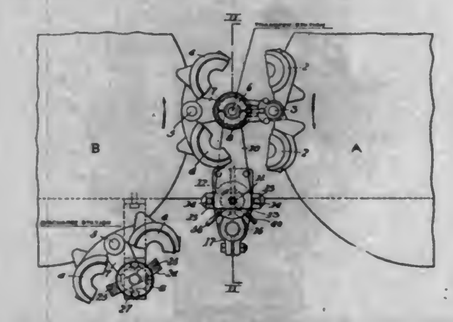
1. A set-up container ready for filling comprising nested receptacles each having a longitudinal overlapped seam, said seams being staggered relative to one another, each receptacle having a complete and independently formed closure at one end, the end closure for the inner receptacle at least being sealed, the opposite ends of the two receptacles being open for filling, and means for closing said open ends, the outer receptacle being formed around the inner receptacle and being of such size and shape as substantially to contact with the walls and closed end of the inner receptacle at substantially every point whereby the latter is supported against internal pressure.

1,882,171. WARNING AND SOUNDING DEVICE FOR SHIPS. CARL WOLFF, Bremen, Germany. Filed Sept. 7, 1928, Serial No. 304,568, and in Germany Mar. 9, 1928. 5 Claims. (Cl. 33—126.)



3. Warning and sounding device for ships, comprising in combination, a ship, a sounding rod, means for universally connecting one end of the sounding rod in proximity to the side of the ship and near the bottom thereof, an indicating device on board the ship, an organ having one end operably connected with the indicating device and slidably mounted through the universal connecting means, a member slidably mounted on the head and fixed to the organ and slidably connected to the sounding rod, a protective structure in front of the head, and a hauling organ at the extreme end of the sounding rod.

1,882,172. BOTTLE MAKING MACHINE. JOB L. BACON and FRANK H. LOBB, Millville, N. J., assignors to Whitall Tatum Company, Millville, N. J., a Corporation of New Jersey. Filed Sept. 28, 1926. Serial No. 138,164. 32 Claims. (Cl. 49—9.)



1. In a glass working apparatus, a rotatable blank mold table, a rotatable blow mold table, said tables being rotatable about laterally offset axes, means for effecting transfer of a parison from the blank mold on one table to a blow mold on the other table, and means for centering the parison during the transfer operation, said means being engaged by the blow mold and effective for holding the parison against swinging movement upon rotation of the blow mold from the position of transfer, said means including a vertically movable mold bottom and means at the transfer station for moving said bottom upwardly into engagement with the parison while the molds are stationary.

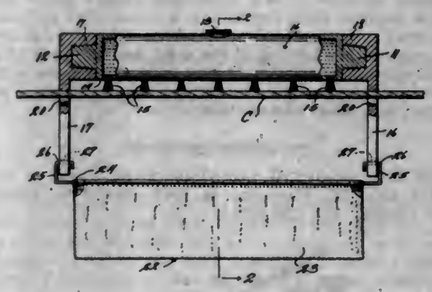
1,882,173. FRICTION BRAKE. EARL L. BLAKE, Tacoma, Wash. Filed June 11, 1931. Serial No. 543,715. 1 Claim. (Cl. 188—71.)

A brake for vehicles including an axle housing, an axle therein, a wheel mounted on the axle, a braking drum carried by the wheel and having a braking surface inclined to the axis of the drum, a supporting drum carried by the axle housing, a spider keyed on the supporting drum for axial movement with respect thereto, the spider having a braking surface for cooperation with the braking surface of the drum, a pair of rods projecting from the spider and through the housing, bell crank levers pivoted on the outside of the housing, one arm of each of the bell crank levers engaging the outer ends of the rods, a yoke pivoted



to the free ends of the other arms of the bell crank levers, an operating rod pivoted to the yoke to actuate the bell crank levers and force the braking surfaces into contact, and a spring interposed between the spider and the braking wheel to normally disengage the braking surfaces.

1,882,174. CLOTHES LINE CLEANER AND PIN CARRIER. JOHN E. BOLAND and MERREL C. VIVIAN, Arnold, Pa., assignors of one-third to William W. Null, Springdale, Pa. Filed Jan. 9, 1932. Serial No. 585,786. 4 Claims. (Cl. 15—246.)

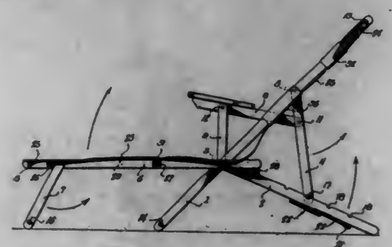


1. A clothes line cleaner as set forth, comprising a cleaning member including brush elements, end members having one end portion thereof engaged with the cleaning member and extending in parallel relation to each other and at right angles to said cleaning member, said members being formed to loosely engage about a clothes line and means secured to and extending between the opposite ends of said end members to gravitatingly maintain said end members in vertical position.

1,882,175. PROCESS FOR THE PREPARATION OF A CELLULAR RAW MATERIAL SUITABLE FOR ARTIFICIAL MATERIALS, PARTICULARLY ARTIFICIAL SILK. AUGUST BOSSE, Herford, Germany. Filed Aug. 10, 1929, Serial No. 385,086, and in Germany Feb. 2, 1929. 1 Claim. (Cl. 92—13.)

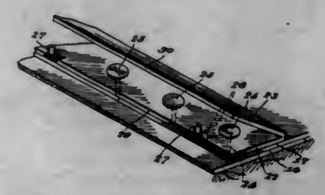
The process of obtaining cellular material suitable for the production of artificial silk, consisting in freeing peat from impurities by boiling the same under pressure in a solution of ammonia, thereafter washing the same in water until clear, thereafter acidifying the same, and thereafter rewashing the same with water.

1,882,176. RECLINING CHAIR. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Folding Furniture Company, Racine, Wis., a Corporation of Wisconsin. Filed May 4, 1929. Serial No. 360,333. 3 Claims. (Cl. 155—117.)



1. A reclining chair comprising a back including side bars, and supporting means between the side bars positioned to confine the upper portion of the body of an occupant of the chair substantially within the plane defined by said side bars; rearwardly extending legs secured to said bars, a unitary seat and foot rest pivoted intermediate its ends to said side bars, the inner end of said unitary element extending rearwardly and free of support beyond the plane of the back as defined by said side bars, said unitary seat and foot rest providing a broad and substantially rigid supporting surface for the occupant of the chair, means for maintaining the seat and foot rest in operative position with respect to the back, and a flexible cover secured to said bars at a point a substantial distance above the point of connection between the seat and foot rest unit and said side bars, said cover extending downwardly onto said seat and thence outwardly in superposed relation to the seat, said seat serving to support the juxtaposed portions of said cover, said flexible cover being slack whereby when the chair is occupied that portion of the seat extending rearwardly of the side bars functions to support that portion of the cover and the body of the occupant which due to said slackness of the cover extend rearwardly beyond the plane of said side bars between said supporting means and the seat.

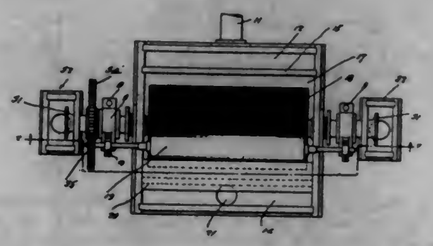
1,882,177. ROOFING CONSTRUCTION. LEE W. BUBARS, Erie, Ill. Filed Apr. 14, 1931. Serial No. 530,070. 2 Claims. (Cl. 108—33.)



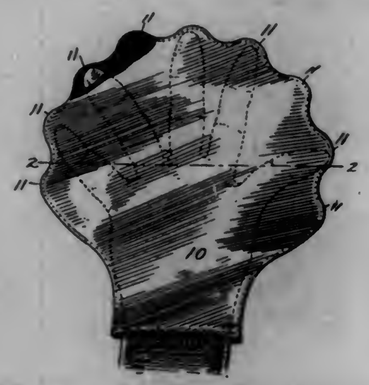
1. A binding strip for sheet roofing comprising a strip of roofing paper formed of two sections folded upon each other, tacks penetrating one of the sections and having their heads located between the sections, a cement binder located between the sections for securing the same together, and metal clips penetrating an edge of one of the sections and bent over the other section for retaining the sections in flat engagement.

1,882,178. PAPER PULP SEPARATOR. GEORGE A. CUMBERLAND, Wisconsin Rapids, Wis., assignor of one-fourth to Marvin S. King, Wisconsin Rapids, Wis. Filed Jan. 6, 1931, Serial No. 507,004. Renewed Aug. 29, 1932. 2 Claims. (Cl. 92—36.)

1. In a structural assembly of the class described, in combination, an open-top vat, means for delivering the pulp-laden fluid to said vat, a rotary cylinder in said vat, said cylinder having a reticular peripheral surface and closed end, a supporting shaft for said cylinder journalled for rotation in suitable bearings, said shaft being perforated and of hollow form, whereby to discharge the separated water through the ends of the shaft uprights at the ends of the vat, bearings therein for the ends of the shafts, and receptacles located to the outer sides of the uprights into which the ends of the shaft extend whereby said receptacles will receive the discharge from the shaft.



1,882,179. CLEANING AND POLISHING CLOTH. FRANK A. DALY, Pawtucket, R. I., assignor to William Wallace Potter, Pawtucket, R. I. Filed Feb. 5, 1932. Serial No. 591,192. 2 Claims. (Cl. 15—227.)



1. A cleaning or polishing mitten comprising a flat bag having a scalloped contour that provides finger tip engaging pockets more in number than the fingers and thumb of the hand of the user, such pockets reaching to and constituting the exterior edge of the mitten as a complete article.

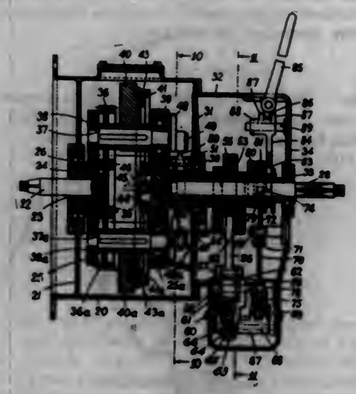
1,882,180. CAP OR CLOSURE FOR RECEPTACLES. LAWRENCE DAVIDSON, JAMES EDWARD DAVIDSON, and WILLIAM HERBERT DAVIDSON, Willoughby, Ohio. Filed Jan. 28 1932. Serial No. 589,482. 1 Claim. (Cl. 221—60.)

A valve cap for flexible tubes and analogous receptacles comprising a body portion and a neck integral therewith and of a diameter materially less than the diameter of said body portion, said body portion having a substantially semi-spherical recess provided therein in substantial alinement with said neck, and also having in the top thereof an opening concentric to said recess; a ball valve revolubly arranged in the recess and having a portion thereof projecting through said opening, said ball valve being also provided with a passage extending diametrically therethrough, and also having on the projecting portion thereof a manipulating pin extending at an acute angle to the longitudinal axis of said passage;



and said neck also having an internal diameter substantially equal to the largest internal diameter of said recess, and provided with internal screw threads terminating inwardly of said recess at the largest diameter of the latter.

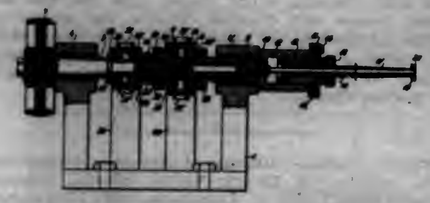
1,882,181. MEANS FOR CONVERTING AND TRANSMITTING TORQUES. ACHILLE DEMOCRATIS, London, England. Filed Oct. 16, 1930, Serial No. 489,162, and in Great Britain Oct. 28, 1929. 11 Claims. (Cl. 74—34.)



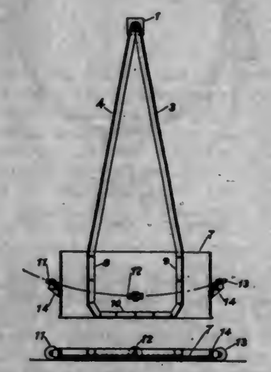
1. Means for converting and transmitting torque comprising a rotating driving shaft, a rotatable driven shaft in alignment with said driving shaft, a rotor member secured on said driven shaft to rotate co-axially therewith, short shafts mounted rotatably in said rotor member symmetrically to and parallel with the axis of rotation thereof, an unbalanced inertia mass fixedly secured on each of said short shafts to rotate therewith, a driven gear wheel keyed on each of said short shafts in intermeshing relation with a driving gear wheel secured on the driving shaft, a crank arm secured on each of said short shafts, a crank pin on said crank arm, and a connecting rod pivoted by its one end on said crank pin and pivotally connected by its other end with a rocking member which is free to move in one direction but meets with resistance when it tends to move in the opposite direction.

1,882,182. MACHINE FOR MAKING HIGHLY ELASTIC RESILIENT TUBES. ALBERT DREYER, Lucerne, Switzerland. Filed Feb. 19, 1931, Serial No. 517,129, and in Germany Dec. 20, 1930. 7 Claims. (Cl. 153—73.)

1. In a machine for making highly elastic resilient tubes having annular corrugations, the combination of pressure rollers working inside the tube to be furnished with corrugations, a roller working outside said tube, a cam-like rib arrangement at the periphery of said roller and provided with a transverse recess in its peripheral surface for cooperating with the tube and the rollers at the initial starting of the machine.

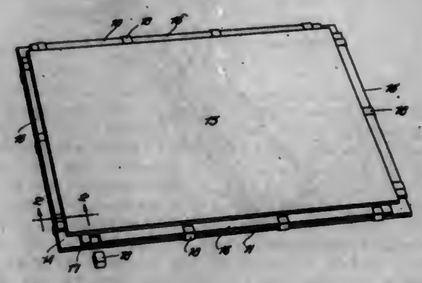


1,882,183. MEANS FOR PARKING CARS. REGINALD A. FESSENDEN, Chestnut Hill, and HOLMAN K. WHEELER, Newton, Mass. Filed Nov. 1, 1929. Serial No. 404,082. 3 Claims. (Cl. 104—44.)



1. A device to aid in the parking of cars, comprising a frame having a fixed pivot, rolling means attached to said frame for allowing said device to wheel in an arc and means provided on said frame, only large enough to receive the front or rear wheels of a motor vehicle.

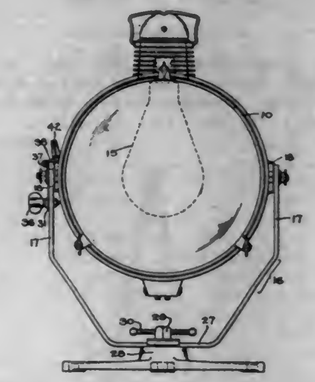
1,882,184. STRETCHBOARD FOR DRAWING PAPER. JULIAN N. GIMENEZ, Brooklyn, N. Y. Filed Aug. 20, 1930. Serial No. 476,692. 6 Claims. (Cl. 45—131.)



1. A stretcher board comprising a flat straight sided body, flanges extending from the sides of said body below the top surface thereof, flanges extending from the sides

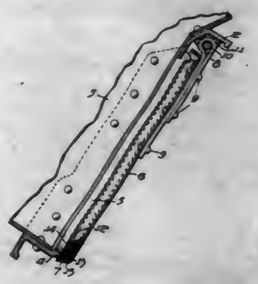
of said body and overhanging the first mentioned flanges, the top surface of said flat body adapted to receive a sheet of drawing paper to be stretched and held with its side edges extending beyond the sides of the top of said body, clamping strips seated upon the first mentioned flanges and disposed beneath the overhanging flanges for securing the edges of the paper therebetween, and clamping means for securing said clamping strips to said first mentioned flanges, substantially as and for the purpose specified.

1,882,185. LAMP. HERBERT J. GRAHAM, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1929. Serial No. 355,182. 9 Claims. (Cl. 240—52.)



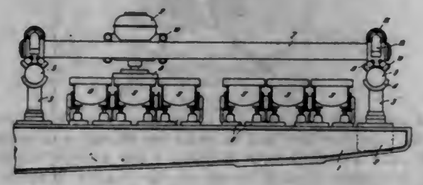
1. In a lighting device, in combination, a lamp body, a support for said body arranged to permit angular movement of said body about an axis extending transversely thereof, an indexing member shiftable with respect to said lamp body and said support about said axis as a center, and a swingable detent carried by said shiftable means for quick-detachable engagement directly with said lamp body.

1,882,186. RAILWAY CAR. CYRUS HANKINS, Washington, D. C., assignor to Wine Railway Appliance Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 27, 1931. Serial No. 511,583. 20 Claims. (Cl. 105—280.)



1. A railway car having a hopper provided with a lading discharge opening, a hinged door for closing the opening, and flexible plates respectively secured to the door adjacent the side edges thereof and adjacent the edge thereof remote from its hinge axis, said plates being engageable with adjacent portions of the hopper when the door is in closed position to prevent the escape of fine lading from the hopper.

1,882,187. PAPER-MAKING MACHINE. JAKOB LANGENBACHER, Reutlingen, Germany. Filed Sept. 8, 1931, Serial No. 561,731, and in Germany Mar. 14, 1931. 4 Claims. (Cl. 92—51.)



1. A device for surfacing suction boxes for paper-making machines in which the suction boxes belonging to one set of sieves can be removed as a whole laterally, comprising a cutter disk, a slidable carrier for the disk, and means whereby the carrier can be traversed crosswise over the place where the suction boxes are removed from the machine, so that it can travel over the whole of the surface of the group of suction boxes in a single continuous operation, as set forth.

1,882,188. VEHICLE LAMP. SERGEI MAKAROFF, Grefsen, near Oslo, Norway. Filed Apr. 10, 1930. Serial No. 443,181, and in Norway Oct. 2, 1929. 1 Claim. (Cl. 240—8.2.)

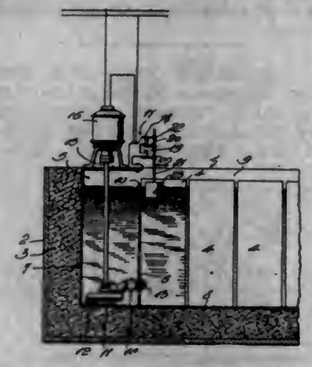


An arrangement on vehicles for preventing dazzling in which the head lights are combined with additional lamps placed on the front mud guards, each of said additional lamps including a pyramidal reflector arranged transversely of the mud guard and tilted downwardly at a substantial angle and having the inner and upper end closed and the lower and outer end open, a source of light situated near the inner end of the reflector so that a single beam of light is projected downwardly and laterally of the vehicle by the reflector, and two horizontally disposed transparent plates arranged in a V-shaped manner for closing the outer end of the reflector and acting to increase the angle of divergency of the projected light beam.

1,882,189. ICE PLANT. GEORGE W. MILLER, Washington, D. C. Filed Aug. 19, 1931. Serial No. 558,112. 5 Claims. (Cl. 62—160.)

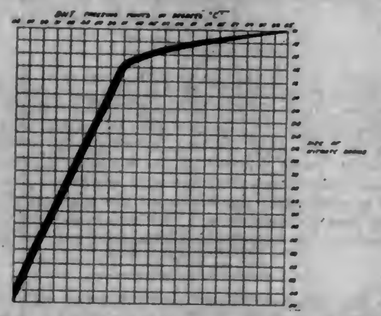
1. In an ice plant, the combination with a main brine tank and ice cans removable therefrom; of an auxiliary brine tank, means whereby the brine may be caused to flow from the auxiliary tank into the main tank when cans

are removed from the latter, and from said main tank to said auxiliary tank when cans are inserted into said main tank, said means embodying brine-forcing means, a float



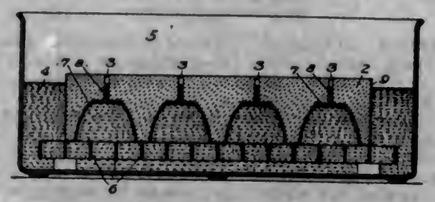
controlled by the liquid level in said main tank, and means actuated by said float for controlling said brine-forcing means.

1,882,190. EXPLOSIVE. GLENN ALBERT PRITCHETT, Reno, Nev. Filed Jan. 29, 1932. Serial No. 589,704. 6 Claims. (Cl. 52—21.)



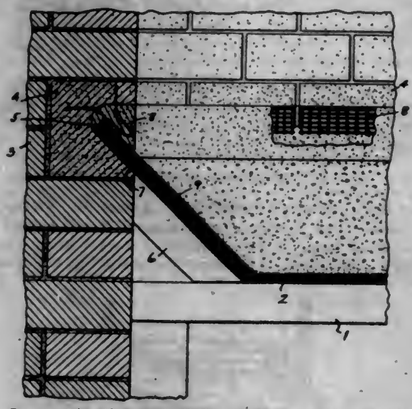
6. The method of compounding an explosive containing DNT and sodium nitrate including the step of admixing DNT and sodium nitrate having the following relation: for nitrate grain sizes above 50 mesh to approximately 14 mesh the freezing point of the DNT varies directly with the grain size between substantially 25° C. and substantially 41° C., and for nitrate grain sizes above 14 mesh to approximately 8 mesh the freezing point of the DNT varies directly with the grain size between substantially 41° C. and substantially 65° C.

1,882,191. PROCESS AND APPARATUS FOR CASTING CERAMIC ARTICLES. BERNARD S. PURINTON, East Liverpool, Ohio. Filed July 27, 1931. Serial No. 553,286. 5 Claims. (Cl. 25—29.)



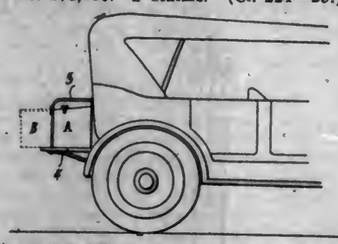
1. The process of casting ceramic articles, which comprises dipping into a bath of fluid ceramic slip a water absorbent mold which is open at its bottom, venting the air trapped in the mold and causing the slip to rise into and fill the mold cavity and remain therein until a semi-solid coherent layer of ceramic material is deposited against the absorbent mold surfaces, and then removing the mold from the bath.

1,882,192. FLASHING BLOCK. HENRY ALBERT SANDERS, Beaumont, Tex. Filed Nov. 13, 1928. Serial No. 319,042. 2 Claims. (Cl. 108—26.)



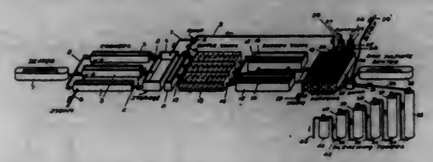
1. In combination, a building roof, an abutting vertical wall, a tier of raggle blocks incorporated into the wall, said tier having an inside horizontal groove approximately triangular in cross sectional contour, said groove being spaced above the roof, the lower side of the groove declining toward the roof, the margins of the roofing material being extended up into said groove and lying on said declining side thereof, metal tie members embedded in the material of the respective raggle blocks and whose free ends project out into the groove above said roofing margins, a filler of cementitious material in said groove above said roofing margins in which the outer ends of said tie members are embedded, said filler forming a water tight joint with said margins, said tie members being effective to sustain the weight of the filler and to hold said filler in position above the roofing margins against the upper side of and closely seated in said groove.

1,882,193. TRUNK. JACOB FREDERICK SCHOELLKOPF and HOARD LEE, Dallas, Tex. Filed Aug. 11, 1930. Serial No. 474,380. 2 Claims. (Cl. 224—29.)



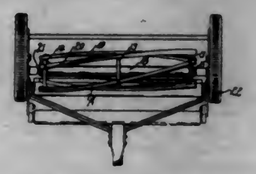
1. An automobile trunk comprising a stationary trunk member with a lid and a shiftable trunk member, said members being pivoted together by links, one of said links having one end connected to the lower edge of the side wall of the shiftable trunk member; a vertically-disposed bar secured to the inner side wall of the stationary trunk member, the opposite end of said link being pivoted to the lower end of said bar, an upper and similarly disposed and similarly connected link at the upper portion of the trunk, the two links constituting a pair, one pair of links for each side of the trunk; the forward edges of the side walls of the stationary member carrying inwardly directed flanges wherein the outer ends of the upper links seat when the members are in extended position.

1,882,194. PROCESS OF PAPER MANUFACTURE. HERBERT W. SERVER, Dayton, Ohio. Filed Jan. 22, 1930. Serial No. 422,502. 13 Claims. (Cl. 92—3.)



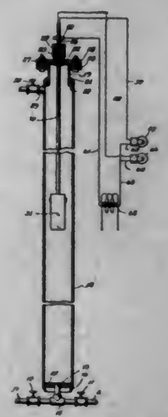
1. In a process of making paper, disintegrating the stock, introducing raw sulphite therein and bleaching the stock by adding bleach and passing the stock through a succession of bleaching towers.

1,882,195. REEL ASSEMBLY. ALLEN W. SHARP, Ottumwa, Iowa, assignor to Johnston Pressed Gear Co., Ottumwa, Iowa, a Corporation of Iowa. Filed Feb. 13, 1930. Serial No. 428,096. 5 Claims. (Cl. 56—284.)



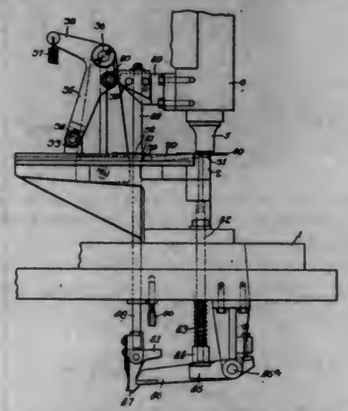
1. In a mower reel assembly, an intermediate and spaced end spiders, each having peripheral flange portions in the shape of parts of the surface of a common cylinder, each end spider having an inwardly opening cup-shaped center, angle bar blades, spiral-shaped, each having a blade flange and an attaching flange, the attaching flange having portions in the shape of the surface of such cylinder, secured against corresponding peripheral portions of the spiders, and a tubular means for preventing relative rotation of the spiders fixed to the spiders and having its ends received in said cup-shaped centers.

1,882,196. DEVICE FOR MEASURING LIQUIDS. HERMAN B. SIEMS, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1930. Serial No. 461,936. 10 Claims. (Cl. 221—95.)



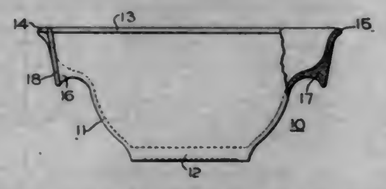
1. A device for measuring liquids under pressure, comprising in combination, a sealed container adapted to hold liquid under pressure, valved inlet and outlet means at the bottom of said container, and means within said container adapted for actuation by liquid in predetermined relationship thereto, and means outside of said container responsive to the actuation of said last named means.

1,882,197. AUTOMATIC FEED FOR ASSEMBLING PRESSES. RUDOLPH A. SKRIBA and FREDERICK J. LITTELL, Chicago, Ill., assignors to F. J. Littell Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1928. Serial No. 300,240. 2 Claims. (Cl. 218—2.)



1. In an assembling press, an anvil upon which work pieces are supported during assembly, a vertically reciprocating plunger, a charger for advancing said work pieces to said anvil, means automatically moving the charger in timed relation to the working strokes of the plunger, and means automatically displacing the structural member after completion of the assembly; the last named means comprising a displacing rod with lifting connections between the displacing rod and the plunger.

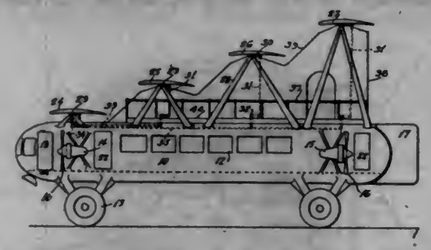
1,882,198. LIFTING LUG AND POURING SPOUT. EDWIN E. SLICK, Pittsburgh, Pa. Filed Jan. 25, 1930. Serial No. 423,344. 3 Claims. (Cl. 65—15.)



1. In a vessel, the combination with two lifting lugs adjacent the rim of the bowl and diametrically opposite each other, of a pouring spout integral with each of said lugs.

1,882,199. AIRPLANE. CHARLES E. SPARHAWK, Auburn, Wash., assignor to Ada Young, Ketchikan, Alaska. Filed Aug. 16, 1930. Serial No. 475,734. 1 Claim. (Cl. 244—12.)

An airplane having in combination a longitudinal fuselage having a pair of wheels under the front and rear ends thereof, four transverse lifting wings hingedly mounted above said fuselage and transverse with relation thereto, each of said wings having means for varying its angularity with relation to the length of the fuselage, each succeeding wing after the first occupying a higher position than does its preceding wing, control means for operating the two rearmost wings in unison, control means for operating the two foremost wings in unison, and rudder means located at the center of the rear of the fuselage and at the sides of the front of the fuselage, together with



a pair of tractor propellers at the front end of the fuselage and a pair of pusher propellers at the rear end of the fuselage.

1,882,200. PRODUCTION OF PERFUMES. GERHARD STEIMMIG, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1928. Serial No. 290,265, and in Germany Apr. 24, 1925. 4 Claims. (Cl. 167—94.)

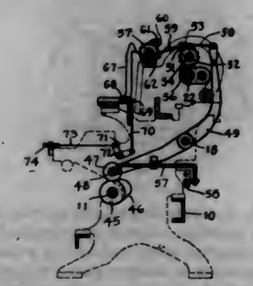
1. A perfume composition comprising essentially a perfume and, as a fixative, a compound consisting of a mono-cyclic aromatic radicle connected by means of oxygen with a radicle of a glycol.

1,882,201. CHOKE COIL. PAUL TAETZ, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 31, 1930, Serial No. 472,013, and in Germany July 18, 1929. 3 Claims. (Cl. 175—359.)



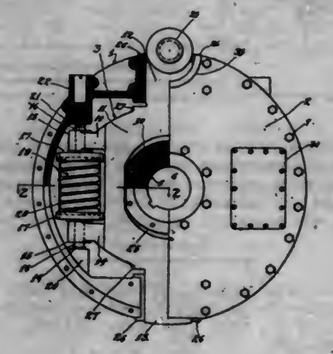
1. A high frequency coil comprising a helically wound conductor of large cross-sectional area, a tape-like cooling fin thermally and electrically associated with the conductor substantially throughout its length and extending radially outward from the coil, the width of the tape increasing from the ends toward the mid section of the coil.

1,882,202. KNITTING MACHINERY. FRITZ VEITEL, Weehawken, N. J., assignor, by mesne assignments, to Universal Patents Holding Co., Weehawken, N. J., a Corporation of New Jersey. Filed Sept. 10, 1930. Serial No. 480,986. 4 Claims. (Cl. 66—89.)



1. A knitting machine in which the complete web for a full-fashioned hose may be knitted, said machine having in combination, thread carrier bars, thread carriers on said bars, narrowing fingers, a cam shaft, narrowing cams on said shaft, a shaft having oppositely threaded portions, stops mounted on said portions and cooperating with said thread carrier bars, operable connections between said narrowing cams and said shaft having oppositely threaded portions whereby said stops may be moved toward each other for narrowing, another shaft having oppositely threaded portions, threaded members carried by said second mentioned shaft and cooperating with said narrowing fingers, operable connections between said narrowing cams and said second metnioned shaft having oppositely threaded portions whereby said narrowing fingers may be moved toward one another, a widening cam on said cam shaft, operable connections between said widening cam and said first mentioned shaft having oppositely threaded portions, whereby said stops may be moved away from each other for widening, and operable connections between said widening cam and said second mentioned shaft having oppositely threaded portions, whereby said narrowing fingers may be moved away from each other.

1,882,203. CRANK. CHARLES McC. WELLONS, Bellevue, Pa. Filed July 20, 1928. Serial No. 294,117. 5 Claims. (Cl. 74—38.)



1. In a crank, the combination of a housing; a cover therefor; a crank-pin support positioned therein; a pair of spaced lugs positioned on said support symmetrically on each side of the radial axis thereof; spring means positioned between said pairs of lugs and restrained thereby to an initial compression the total magnitude of which corresponds to the normal driving force which the crank-pin is intended to carry; spring-cups having extensions at each end of each spring means passing through said lugs and bearing against suitable parts of the housing, and means for guiding the support for linear motion in a line parallel to the radial axis of the crank; the combination being arranged so that when a force in excess of the initial compressive load in the springs is applied in a line parallel to the axis of the crank the springs will be compressed and the crank-pin support moved in the axial line and so that a force applied in a line perpendicular to the axis of this crank does not compress the springs and produce movement of the crank-pin support.

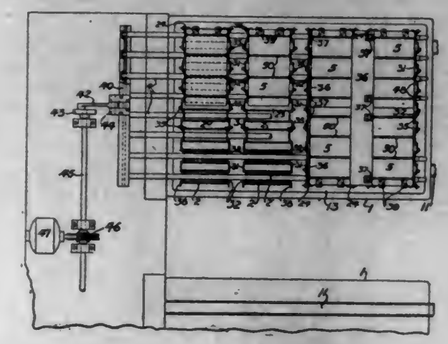
1,882,204. TOOTH CLEANER. JOHN ZENA, Chicago, Ill. Filed Sept. 30, 1931. Serial No. 565,981. 12 Claims. (Cl. 132—91.)



1. A tooth cleaning device comprising a U-shaped member having a portion of one arm projecting at an obtuse angle with the remainder of said arm and having a trans-

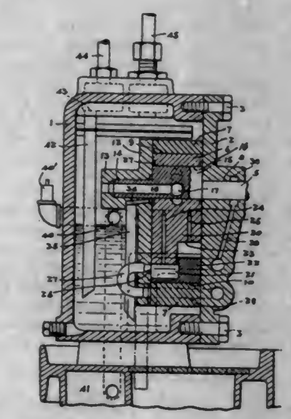
versely projecting abutment at the juncture of said portions; an angular projection formed integral with the other arm of said member and substantially parallel with said first mentioned arm, said arm and said projection having side slots and said longer arm of said member having an abutment projecting transversely and in a direction opposite to said first mentioned abutment.

1,882,205. MACHINE FOR MOLDING BLOCKS. SIMON BERRY, Seattle, Wash. Filed Sept. 30, 1929. Serial No. 396,090. 13 Claims. (Cl. 25—41.)



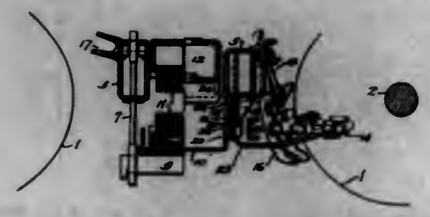
1. A block molding machine including a table and a plurality of longitudinal walls and freely removable transverse end walls supported thereon, hinged connections between said longitudinal walls and the table, and means for securing said transverse end walls upon the longitudinal walls.

1,882,206. AIR AND OIL FEEDING PUMP. WILLIAM HENRY DAVENPORT BROUSE, Toronto, Ontario, Canada. Filed July 21, 1928. Serial No. 294,531. 11 Claims. (Cl. 261—28.)



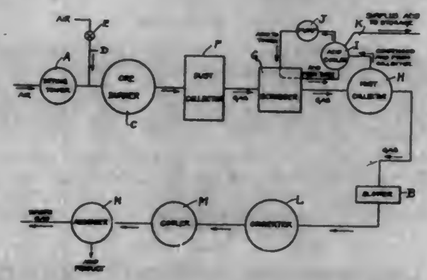
10. A pump having a cylinder, a rotor eccentrically operating in said cylinder, a valve movable relative to said rotor and operated by direct connection with the rotor and by its movements relative thereto controlling the intake of oil and air to said cylinder, a drive shaft, an eccentric on said drive shaft within the rotor and by its rotation effecting the eccentric operation of said rotor, said eccentric controlling the discharge of oil and air from the cylinder, and means receiving the discharged oil and air.

1,822,207. RAILWAY TRUCK STRUCTURE. EDWIN G. BUSSE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1930. Serial No. 485,206. 24 Claims. (Cl. 188—213.)



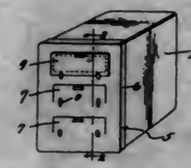
1. A bracket for mounting a brake beam guard, guide, or support member on a railway truck transom and comprising spaced legs for receiving such a member between them, and a leg connecting element for supporting said member, said legs including seats for a member securing pin.

1,822,208. SULPHURIC ACID. CYRIL B. CLARK, Scarsdale, N. Y., assignor to Catalytic Process Corporation, New York, N. Y., a Corporation of Delaware. Filed July 9, 1929. Serial No. 376,930. 6 Claims. (Cl. 23—178.)



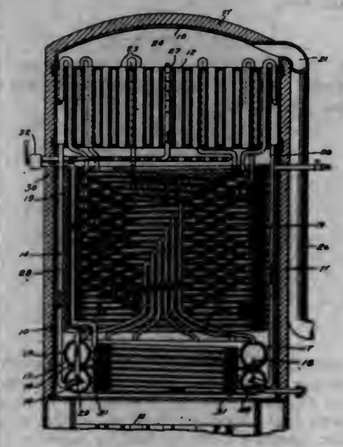
1. In processes for the manufacture of sulphuric acid by the contact process when burning sulphur-containing ores the step which consists in producing gases by the oxidation of sulphur with a mixture of partly dried air and atmospheric air.

1,882,209. SHARP FREEZING STRUCTURE. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Sept. 30, 1929. Serial No. 396,190. 9 Claims. (Cl. 62—126.)



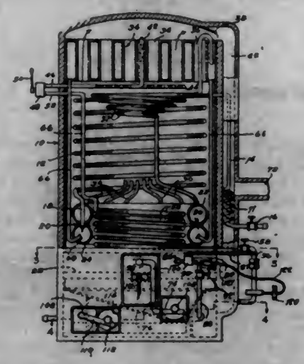
2. A sharp freezing unit comprising a main body having a sharp freezing chamber, a front member for the unit, an opening in said front member registering with said sharp freezing chamber, and a closure plate, for said opening, contacting with and carried by said front member to seal the sharp freezing chamber, one of said contacting surfaces being formed of a non-metallic material to which ice does not readily adhere.

1,882,210. BOILER CONSTRUCTION. FRANK J. CURRAN, New York, N. Y., assignor, by mesne assignments, to Steam Power, Inc., a Corporation of Delaware. Filed Mar. 15, 1927, Serial No. 175,474. Renewed Oct. 10, 1930. 20 Claims. (Cl. 122—252.)



1. In a flash boiler, the combination of a water drum consisting of an annular endless tube disposed adjacent a burner; a steam disengaging drum above the water drum; return water pipes interposed between the water drum and the lower perimetrical portion of the steam drum; a check valve in each of said water pipes; steam generating coils above the burner interconnecting the water drum and the steam drum, the convolutions of the individual coils being of greater diameter as they approach the steam drum; and feed water heating coils interposed between the return water pipes and the steam generating coils.

1,882,211. STEAM BOILER. FRANK J. CURRAN and WILLIAM MCCLELLAN, New York, N. Y., assignors, by mesne assignments, to Steam Power, Inc., a Corporation of Delaware. Filed Oct. 5, 1927, Serial No. 224,040. Renewed June 14, 1932. 9 Claims. (Cl. 122—479.)

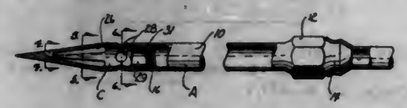


1. In a steam boiler of the semiflash type, a main heating fluid container; means for heating said fluid container; means for automatically operating said heating means to supply the desired amount of heat within minimum and maximum predetermined limits; an auxiliary heating fluid container; and means independent of the heating means for said main heating fluid container for heating the said auxiliary heating fluid container.

1,882,212. FIBROUS MATERIAL AND METHOD OF MAKING SAME. JUDSON A. DE CEW, Mount Vernon, N. Y., assignor to Process Engineers, Inc., New York, N. Y., a Corporation of New York. Filed June 23, 1928. Serial No. 287,893. 3 Claims. (Cl. 92—40.)

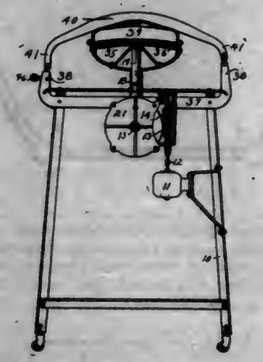
1. A method of making waterproof fibrous material including the steps of forming the material in a wet-press machine to build it up in laminations to the desired thickness, drying it, impregnating it by immersion in a melted composition of rosin containing wax, and pressing it under heat to a specific gravity of over one and two-tenths.

1,882,213. TROCAR. EDWARD B. DONOVAN, Spirit Lake, Iowa. Filed Dec. 9, 1929. Serial No. 412,763. 3 Claims. (Cl. 128—347.)



3. A trocar comprising a tubular shank having one end adapted for insertion in a hose and its opposite end interiorly screw threaded and a point element having a reduced exteriorly threaded portion to coact with the interiorly screw threaded end of the shank, the exterior diameter of said point being substantially the same as the exterior diameter of said shank.

1,882,214. IRONING MACHINE. NICHOLAS L. ETTEN, Waterloo, Iowa, assignor, by mesne assignments, to Chamberlain Machine Works, a Corporation. Filed May 20, 1929. Serial No. 364,504. 3 Claims. (Cl. 68—9.)

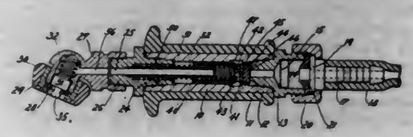


2. In an ironing machine, the combination of a buck, means for bodily raising and lowering it, a head mounted to be moved toward and from the buck, a latch device for the head designed to lock the head only in a predetermined working position which is spaced above the lowered position of the buck, and whereby when the buck is in an elevated position or there is an obstruction between the buck and head, the head cannot be latched against upward movement.

1,882,215. PRESSURE-REGULATING TIRE-INFLATING NOZZLE. ARNO A. EWALD, Oakfield, Wis., assignor to Romort Manufacturing Company, Oakfield, Wis. Filed Feb. 23, 1929. Serial No. 342,211. 10 Claims. (Cl. 251—144.)

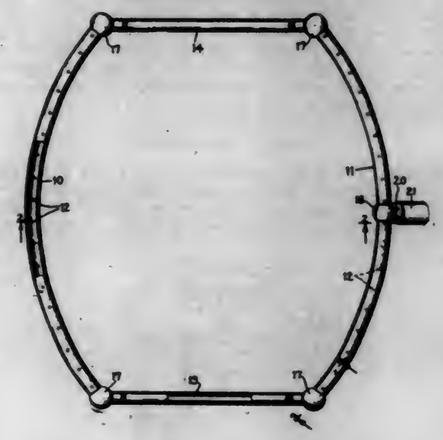
1. A pumping nozzle for air delivery, comprising the combination of a ported nozzle chamber provided with a cylindrical plunger in slide valve relation to the walls of the chamber, and check valve relation to the inlet port, in combination with a spring arranged to urge the valve toward its seat with less pressure than that of the air

at the inlet, said nozzle chamber having a recessed enlargement at a sufficient distance from the inlet port to allow an air compressing traverse in the direction of the



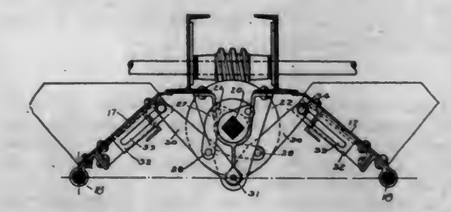
outlet, said enlargement being adapted to allow substantial equalization of air pressure upon both sides of a piston in registry therewith.

1,882,216. BATH SPRAY. ROBERT FINDLAY, Jamaica, N. Y. Filed Sept. 5, 1931. Serial No. 561,408. 4 Claims. (Cl. 4—157.)



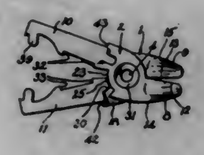
1. A device of the character described comprising a pair of oppositely curved spray tubes, unperforated tubes connecting the ends of the spray tubes and formed to engage the shoulders of a person, and connections for supplying water to the interiors of the spray tubes and connecting tubes.

1,882,217. CONTROL MECHANISM FOR HOPPER CAR DOORS. HARRY S. HART, Chicago, Ill., assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed Nov. 7, 1931. Serial No. 573,573. 14 Claims. (Cl. 105—299.)



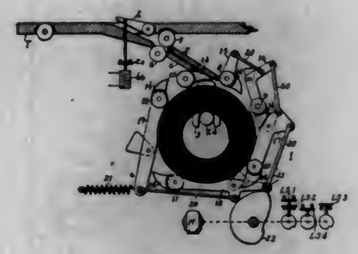
1. In combination with a hopper car having a longitudinal V-shaped hopper on one side of the center sill and an inner door therefor pivoted at its bottom edge at the apex of the hopper, control means therefor comprising a link mounted for pivotal movement at substantially the center line of said car and in substantially the horizontal plane of the hinge of said door, said link having a sliding connection at its outer end with said door and means for oscillating said link for opening and closing said door.

1,882,218. FRUIT CLIPPER. LEO M. HARVEY, Los Angeles, Calif. Filed May 26, 1930. Serial No. 455,811. 2 Claims. (Cl. 30—24.)



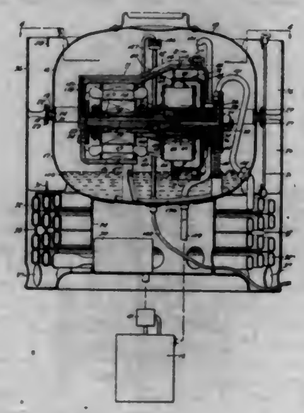
1. A fruit clipper comprising a pair of reversely formed complementary sheet metal levers hingedly connected together and provided with flat overlapping axial portions, cutting jaws bent therefrom into opposition on one side of the axis, handle extensions bent in opposite directions from said axial portions into a common plane, said levers formed at the junctions between said handle extensions and said axial portions and on opposite sides with shoulders radially disposed relative to the axis of the levers, said shoulders positioned substantially inwardly of the outer margins of said levers, the outer margins of the axial portions being eccentrically formed and terminating in shoulders inwardly of the axis for engagement with said first mentioned shoulders to limit the spreading of said levers, said axial portions being cut away from said last mentioned shoulders in the direction of the handle extensions to permit the pivotal movement of said levers.

1,882,219. CONTROLLER FOR MOTOR DRIVEN MACHINES. PAISLEY B. HARWOOD, Milwaukee, and CARROLL STANSBURY, Wauwatosa, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,165. 4 Claims. (Cl. 242—78.)



1. The combination with a machine for coiling metal strips including a plurality of adjustable coil forming elements, of a driving motor for operating said elements, control means for said motor including an electromagnetic relay responsive after a given delay to effect starting of said motor, and control means for said relay including a part adapted to be engaged by the strip material to establish an energizing circuit for said relay.

1,882,220. REFRIGERATOR SYSTEM AND APPARATUS. ARTHUR J. KERCHER, Berkeley, Calif. Filed Jan. 28, 1929. Serial No. 334,571. 18 Claims. (Cl. 230—29.)



1. In a compressor, relatively rotatable parts, one of which is a cylinder structure, said structure having a cylinder bore and a fluid port communicating with the same, a piston disposed within said cylinder bore, and means mounted on said piston and movable relative thereto for controlling the effective area of said port according to the relative speed of rotation between said parts.

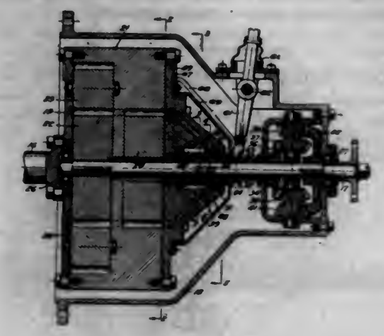
1,882,221. SHAKER BAG CAP AND FASTENER. EDWARD J. KUNKELY, Bronx, N. Y. Filed Apr. 14, 1931. Serial No. 529,998. 4 Claims. (Cl. 183—51.)



1. A shaker bag, comprising a bag having a closed head, rigid members on opposite sides of said head, means for clamping the rigid members together, and means for supporting the rigid members upon some support comprising a fastener consisting of a vertical portion having a head portion, a base portion projecting from the bottom of the vertical portion and attached upon the top of the rigid members, a peg projecting from the vertical portion for engaging in an aperture of a gridiron and located below said head portion so that the top edge of the gridiron may engage the head portion to hold the shaker bag against swinging, and a spring attached upon the base portion and extending over the peg and the head portion.

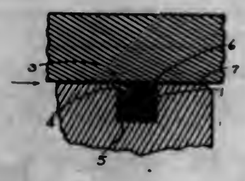
1,882,222. TRANSMISSION. HOWARD W. LEWIS, San Francisco, Calif. Filed Sept. 9, 1930. Serial No. 480,708. 9 Claims. (Cl. 74——59.)

1. A transmission comprising a driving element including a housing, a driven element, a pair of hydraulic displacement gear trains interposed between said elements, and located in and driven by said housing, each of said gear trains affording a different speed ratio between the elements, a unit in one of said gear trains positively



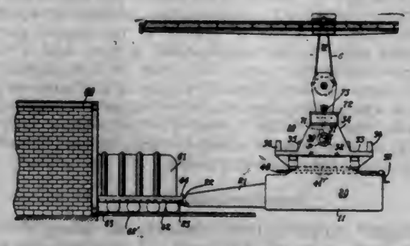
coupled to said driven element, and a hydraulically retarded unit in each of said gear trains serving to control the combined coupling effect of both gear trains.

1,882,223. METALLIC PACKING. EDMOND L. LOREHN, Houston, Tex. Filed Nov. 5, 1929. Serial No. 405,007. 7 Claims. (Cl. 288—1.)



1. A packing including an elongated body of metal shaped to lie within a groove in a metallic wall and to project slightly therefrom against an adjacent member, and a single strip of relatively harder metal imbedded in said body having a lip thereon presented in the direction of the fluid pressure.

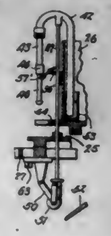
1,882,224. FURNACE CHARGING DEVICE. SANFORD E. MCQUIGG, Brackenridge, Pa., assignor to Allegheny Steel Company, Brackenridge, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1930. Serial No. 422,530. 17 Claims. (Cl. 214—23.)



1. The combination in a charging device having an upper supporting portion and a lower portion suspended therefrom, of means for varying the position of said upper portion with respect to said lower portion, said

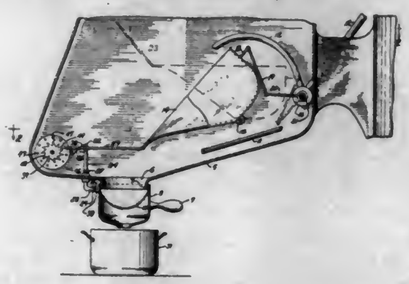
means including a post and a screw axle positioned to extend therethrough, brackets extending from one of said portions, said axle co-operating with said brackets, so that the moment of inertia of said lower portion can be changed, said lower portion having an extending arm for pushing and pulling a furnace charge.

1,882,225. FILLING MACHINE. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 7, 1927. Serial No. 189,548. 2 Claims. (Cl. 226—26.)



1. The combination of a bottle carrier adapted to receive bottles thereon in upright position, bottle filling means including a bottle entering member and a valve member engageable with the bottle necks to permit filling, and a downwardly yieldable member laterally engageable with the neck portion of the bottles for locating them in operative position and adapted to be depressed by said valve member in the absence of a bottle below to prevent operation of said valve member.

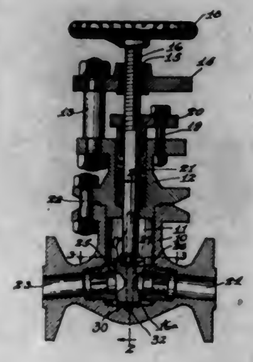
1,882,226. COFFEE MAKING MACHINE. STEPHEN MEZZAPESA, New York, N. Y. Filed Sept. 15, 1930. Serial No. 481,818. 13 Claims. (Cl. 53—3.)



1. A coffee brewing machine comprising a casing, a hopper pivotally mounted in said casing, said hopper when empty having its center of gravity to one side of its pivotal axis and with a predetermined amount of water in it the combined center of gravity of the hopper and its contents being on the opposite side of said axis, a valve for controlling the supply of steam to said casing, another valve for controlling the supply of hot water to said hopper, and means connecting said hopper with said valves whereby the latter are actuated in accordance with the tilting of said hopper about its axis as determined by the shifting of the center of gravity.

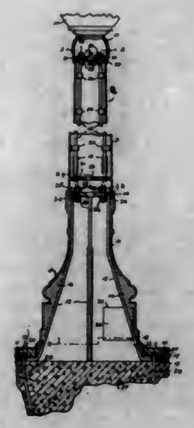
1,882,227. GATE VALVE. WALTER W. MOHR, Chicago, Ill., assignor to The Edward Valve and Manufacturing Company, East Chicago, Ind., a Corporation of Illinois. Filed Dec. 5, 1930. Serial No. 500,205. 2 Claims. (Cl. 251—59.)

1. Guiding means for gate valve members of steel valves for high pressures having forged steel bodies and bonnets for closing them, said bodies carrying opposed valve seats, and gate valve members movable to engage and clear said seats, said guiding means for valves of the kind described comprising the combination with a body and bonnet of such a valve of guide rods substantially parallel with the path of travel of the valve member of the valve, the valve member of the valve having edge grooves for



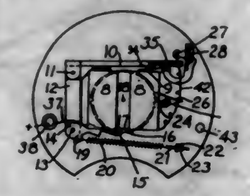
receiving said rods, said body having a shallow hole in its inner surface for one end of each of said rods, and said bonnet having in its inner surface a shallow hole for the other end of each of said rods, said shallow holes extending but part way through said body and said bonnet, whereby said body and said bonnet are imperforate and integral around the ends of said rods.

1,882,228. METAL LAMP POST. JUSTUS F. NE PAGE, Seattle, Wash., assignor to Ne Page McKenny Co., Seattle, Wash., a Corporation of Washington. Filed Sept. 29, 1928. Serial No. 309,242. 15 Claims. (Cl. 189—26.)



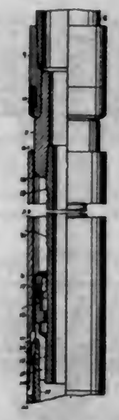
1. In a sectional metal lamp post, a hollow base section of cast metal, ribs extending lengthwise of said base section and projecting inwardly from the inner wall thereof, and reinforcing rods extending lengthwise within said base section from bottom to top thereof, said rods being imbedded in the inner edges of said ribs and means for anchoring the ends of said rods by casting the same integral with the top and bottom portions respectively of said base.

1,882,229. ELECTRICAL SWITCH MECHANISM. ANDREW H. NEUREUTHER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Sept. 22, 1927. Serial No. 221,226. 2 Claims. (Cl. 200—67.)



1. In combination, a pivotally mounted actuating element, a contacting part mounted on said element and insulated therefrom, a frame adjacent to said element, a co-operating contacting member comprising two projecting parts adjacent thereto and positioned one on each side of said element, said member being mounted in said frame by means of a pivot in a position substantially away from the center of said member and resilient means so mounted and attached to said frame and said contacting member such that said resilient means will continue the motion of and position said member when same has been moved beyond its centrally disposed position by means of said actuating element.

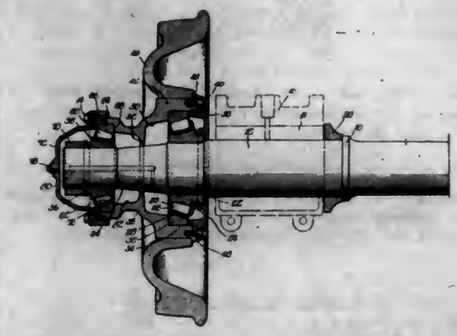
1,882,230. PACKING ANCHOR. JEDDY D. NIXON, Houston, Tex., assignor to Texas Iron Works Sales Corporation, Houston, Tex., a Corporation of Texas. Filed Mar. 21, 1930. Serial No. 437,703. 7 Claims. (Cl. 166—10.)



1. The combination with a pipe adapted to be set in a well bore and having a screening surface, of a tubular anchor at the upper end thereof, a packing device including an expansible packer, said anchor and the lower end of said packing device being shaped to be telescoped upon their relative longitudinal movement in the bore, an annular seal between said telescoping parts, abutments confining said seal and effective to expand the same, to form a substantially fluid tight joint between said telescoped parts, when said parts are fully telescoped together.

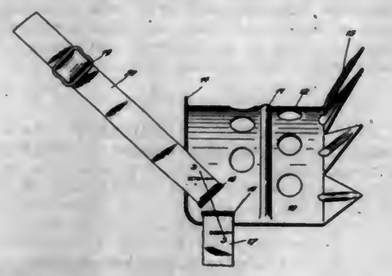
1,882,231. ROLLER BEARING ASSEMBLY. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 11, 1929. Serial No. 338,930. 21 Claims. (Cl. 295—44.)

1. In a wheel and axle assembly, the combination of a relatively fixed axle having bearing portions adapted to have cooperative relation with journal bearings, thrust collars mounted on said axle spaced from said journal box bearings to provide clearance whereby said axle may shift laterally, housings mounted on said axle outside of said journal boxes, said housings each having an inwardly extending apertured wall forming lubricant recesses in said housings, said alxe extending thru said apertured walls and being provided with a lubricant channel communicating with one of said recesses for filling said re-



cess from the end of said axle, said recesses having oppositely faced race ring receiving portions, cover plates for said housings, race rings disposed on said fixed axle substantially in the planes of said first named race rings and antifriction rollers disposed between and co-operating with said race rings, and a wheel receiving portion disposed on said housings of a size whereby said wheels may be assembled or disassembled with respect to said housings without disturbing the housings and associated parts.

1,882,232. CALF WEANER. CHARLES C. QUINN, Boone, Iowa, assignor to Quinn Wire & Iron Works, Boone, Iowa, a Corporation of Iowa. Filed Apr. 22, 1931. Serial No. 531,983. 3 Claims. (Cl. 119—131.)

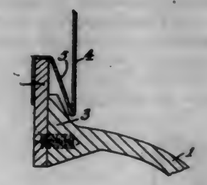


1. A calf weaner comprising a body portion formed of sheet metal and of substantially semi-cylindrical formation, one end of said body being provided with forwardly and radially projecting teeth, and its back and lower edges provided with an outwardly projecting flange, the lower ends of said body each having a pair of webbing receiving slots, one of said slots being inclined relative to the other, a single webbing threaded through said slots to form throat and head portions, and a buckle for securing the free ends of said webbing.

1,882,233. WALL JOINT FOR PLUMBING FIXTURES. HENRY M. REED, Jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, a Corporation of New Jersey. Filed Aug. 1, 1931. Serial No. 554,589. 6 Claims. (Cl. 72—0.5.)

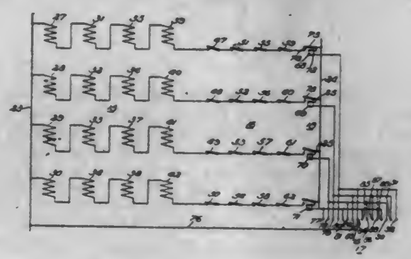
1. In combination, a wall, a sheathing for said wall formed of sheet metal panels having a crimped lower edge,

a plumbing fixture having a splash strip abutting said wall and extending beneath the lower end of said sheet



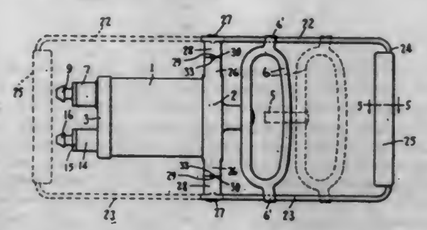
metal panels, and means secured to said splash strip and engaging the crimped lower ends of said sheets for forming a joint therebetween.

1,882,234. AUTOMATIC CONTROL SYSTEM. ANDREW C. SINGER, McKees Rocks, Pa. Filed Sept. 1, 1931. Serial No. 560,531. 2 Claims. (Cl. 172—239.)



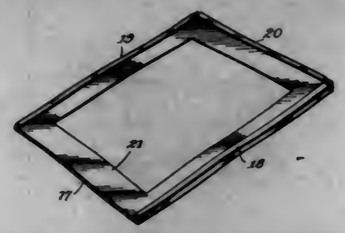
1. A motor having an armature, a plurality of magnets equal to some multiple of the number of poles on the armature, a switch for each magnet, said magnets and switches being connected in series in groups each having magnets and switches equal to the number of armature poles, the magnets of each group being positioned to cooperate simultaneously with said armature, said switches of each group being positioned correspondingly in the same order as the magnets, and means actuated by said armature for operating said switches.

1,882,235. EMBALMING INSTRUMENT. ARTHUR O. SPRIGGS, Springfield, Ohio, assignor to The Champion Company, Springfield, Ohio, a Corporation of Ohio. Filed May 4, 1931. Serial No. 534,775. 5 Claims. (Cl. 27—24.)



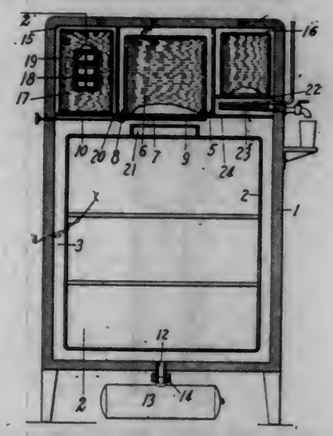
5. In an instrument of the character described, a cylinder, a spring operated piston therein, a piston rod extending through the head of the cylinder, a finger piece connected with the outer end of the rod, a yoke-shaped member the intermediate portion of which forms a palm rest, and transversely arranged pivots for pivotally connecting the free ends of the arms of said yoke-shaped member with the head of said cylinder whereby said yoke-shaped member may be swung to a position to embrace the cylinder.

1,882,236. PICTURE FRAME. WILLIAM M. STOCKMAN, Chicago, Ill. Filed Mar. 15, 1932. Serial No. 598,991. 1 Claim. (Cl. 40—154.)



A picture frame having a framing section provided with a picture opening centrally disposed therein, the side, top and bottom edges of said framing section being drawn up to form marginal upstanding flanges integral with each other and with said framing section, one of said flanges being of a height substantially equal to one-half of the remaining of said flanges, the two upper corner portions of said upstanding flanges being cut away to a point substantially half-way to the bottom of said flanges, the free edges of the top and side flanges being bent inwardly to form inwardly extending flanges to provide guide rails for the insertion of a back for holding a picture and glass in assembled position within the frame.

1,882,237. REFRIGERATING APPARATUS. BURT H. WESTON, Wood River, Ill. Filed Apr. 9, 1928. Serial No. 268,745. 7 Claims. (Cl. 62—91.5.)

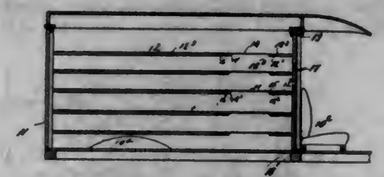


1. A refrigerator comprising a chamber adapted to receive a cake of solidified carbon dioxid, a food receptacle arranged beneath said chamber, passageways leading from said chamber about said food receptacle, a second chamber, a block of solidified carbon dioxid arranged within said second chamber and having a cavity to receive a substance which is to be frozen.

1,882,238. DELIVERY AND LOADING MEANS FOR BAKERY PRODUCTS OR THE LIKE. CHARLES BATKCZYNSKI, Brooklyn, and JULIUS CHMURZYNSKI, Astoria, N. Y. Filed Sept. 11, 1931. Serial No. 562,298. 5 Claims. (Cl. 296—24.)

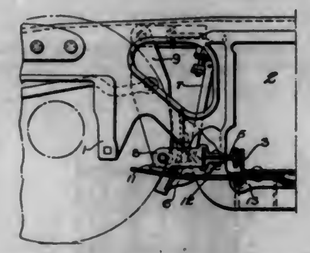
1. In a delivery vehicle, a plurality of horizontal pairs of parallelly extending runways, the individual runways of each pair being respectively mounted on opposite walls of the vehicle body for supporting collectors therebetween,

each of said runways being provided with a removable section which when removed will leave a gap in the respective runway of sufficient dimensions to permit transfer of col-



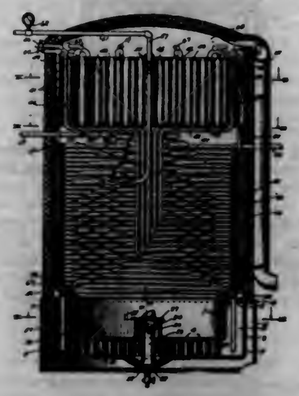
lectors from a pair of runways at one level to another pair of runways at a different level without removal of said collectors from said vehicle.

1,882,239. BRAKE BEAM SUPPORT. EDWIN G. BUSSE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1931. Serial No. 517,068. 7 Claims. (Cl. 188—210.)



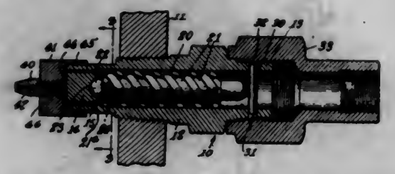
1. A fulcrum arm for a brake beam having an end portion arranged for pivotal connection with a brake lever and having a supporting chair depending from said portion.

1,882,240. BOILER CONSTRUCTION. FRANK J. CURRAN, San Francisco, Calif., assignor, by mesne assignments, to Steam Power, Inc., a Corporation of Delaware. Filed July 30, 1923, Serial No. 654,751. Renewed June 14, 1932. 1 Claim. (Cl. 122—52.)



In a device of the character described, a vertical casing, a fire box at the bottom of said casing, a steam drum extending across said casing in the upper part thereof and having flues passing therethrough to discharge the heating gases, a water drum and steam tubes connecting said water drum with said steam drum, said steam tubes passing upwardly through said flues and then turning downwardly into the steam drum at its periphery and discharging steam substantially tangentially of the wall of the drum, means for cutting out individual tubes from the boiler including for each tube a valve connected therewith above the steam drum and having a stem extending to the outside of said casing, and means for blowing out said tubes when cut out including pipes connected with said tubes back of said valves and extending to the outside of said casing.

1,882,241. SELF CLEANING ATOMIZING NOZZLE. FRANK J. CURRAN, New York, N. Y., assignor, by mesne assignments, to Steam Power, Inc., a Corporation of Delaware. Filed Jan. 6, 1926. Serial No. 79,581. 19 Claims. (Cl. 299—26.)



15. In a burner nozzle, the combination of means for supplying a fluid under pressure, a member having at least one aperture through which the compressed fluid is caused to discharge, and an element adapted to be rotated including means in close relation with the apertured member and on the pressure side thereof and adapted to intermittently obstruct said aperture, and said rotatable element also including means for causing rotation of the element when fluid under pressure passes through an aperture in said member.

1,882,242. METHOD OF MAKING COLLAR SNUBBERS. WILLIAM OEL DAILEY, Portland, Oreg. Filed June 29, 1931. Serial No. 547,648. 6 Claims. (Cl. 140—71.)



1. A method of manufacturing collar snubbers consisting in pointing each end of a bar of spring material, plating the pointed bar, then forming upturned loops that are spaced apart midway from the central section to leave a horizontal portion between said loops, then forming hand engaging loops in each of the legs thus formed, then forming offsets in the central horizontal portion and finally forming a loop immediately adjacent each pointed end so that the last mentioned loops will limit the penetration of a point within the collar fabric.

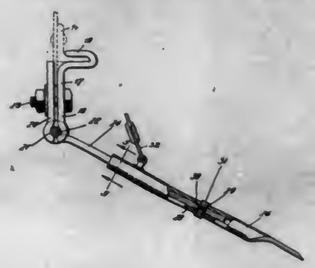
1,882,243. APPARATUS FOR FORMING AND BENDING FLEXIBLE MATERIALS. WILLIAM O. DAILEY, Portland, Oreg. Filed Apr. 16, 1932. Serial No. 605,768. 40 Claims. (Cl. 140—71.)



1. The combination of a frame, a pair of assemblies disposed therein, one of the assemblies containing means for forming loops within a strand of flexible material,

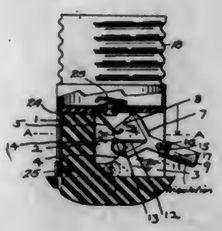
means for forming crimps therein, and means for forming bends therein, and the other of the assemblies containing means for forming loops in the strand of flexible material adjacent its ends.

1,882,244. SCRAPER ATTACHMENT FOR TRACTORS. JOHN A. DE NOOY, Pella, Iowa. Filed Feb. 29, 1932. Serial No. 595,806. 4 Claims. (Cl. 280—158.)



1. A scraper attachment for tractor wheels, comprising a pair of clamp members, a scraper bar pivotally mounted between the clamp members, a scraper blade slidably mounted longitudinally of the scraper bar, a brake pin for securing the scraper blade at its operative position on said bar, and a chain for supporting said scraper blade in operative relation with the rim of a tractor wheel.

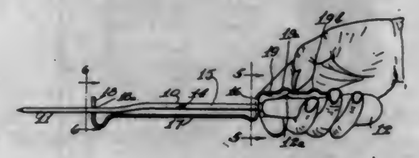
1,882,245. ELECTRIC SWITCH. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,195. 4 Claims. (Cl. 173—346.)



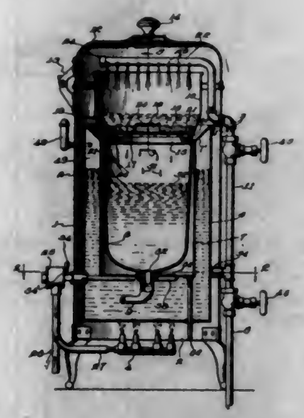
4. An electric switch comprising a supporting base of insulation having a cavity providing a pair of spaced abutments; fixed spaced contacts within the cavity and providing a pair of abutments relatively convergent to the insulation base abutments; an oscillatory operating switch element mounted upon the supporting base and having a peaked switch-throwing cam movable within the cavity and between both pairs of abutments; and a spring switch carried by the operating switch element, the spring switch having a part adapted to ride upon the peaked cam upon the movement of the operating switch element in either direction and the alternate arresting engagement of the spring switch part with a pair of abutments to tension the spring switch for a throwing movement against the other pair of abutments upon the passing of the peak by the spring switch part to alternately bridge the contacts to close the circuit.

1,882,246. EJECTOR FORK. THOMAS S. HUTCHISON, Chicago, Ill. Filed Nov. 12, 1931. Serial No. 574,593. 3 Claims. (Cl. 30—5.)

1. In an ejector fork, the combination of a fork member having tines and a shank portion, a handle on said shank portion, said handle having a lug extending laterally therefrom, and an ejector member comprising an ejector plate having edge notches in sliding engagement with said tines, a slotted guiding portion freely movable on said shank portion, a strip portion connecting said ejector plate and said guiding portion, and an extension portion projecting from said guiding portion over said lug, said extension portion having spaced off-set portions for engagement selectively with said lug for different positions of said ejector plate on said tines.



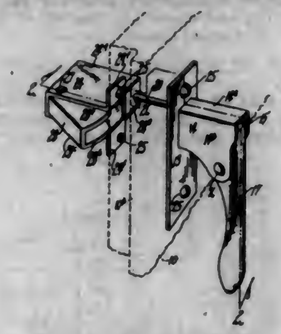
1,882,247. COFFEE URN. SHERBURNE DAVIS LEVINGS, Winnetka, Ill. Filed Mar. 23, 1931. Serial No. 524,617. 1 Claim. (Cl. 53—3.)



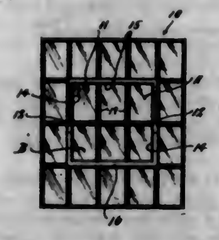
A system of apparatus for making coffee comprising a water heating receptacle, a coffee jar communicatively related to said receptacle, means for heating the water in said receptacle and means to control the generation of heat for a variable range of temperatures, said control means including a thermostat comprising means for cutting out the operation of the thermostat to control the higher temperatures and for cutting in the thermostat for controlling the lower range of temperatures, which thermostat is responsive to the contents of said receptacle.

1,882,248. DOOR LATCH. SEBN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa, a Corporation of Iowa. Filed June 10, 1931. Serial No. 543,306. 7 Claims. (Cl. 292—221.)

6. The combination of a door, a jamb, inside and outside members and a connecting operating pin, the inside member having a swinging retractable bolt which has a portion which engages said jamb and an operating portion engaging the inner end of said operating pin, a spring arranged to normally extend said bolt to locking position with relation to said jamb, said outside member having a stop and a fulcrumed handle normally held against said stop by said spring and provided with a finger which moves toward the door when the handle is pulled away from the door, whereby inward motion is transmitted through the operating pin to the swinging bolt of the inside member.



1,882,249. VENTILATOR CONSTRUCTION. FRANCIS A. MESKER, St. Louis, Mo., assignor to Mesker Brothers Iron Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 20, 1931. Serial No. 517,152. 4 Claims. (Cl. 189—69.)



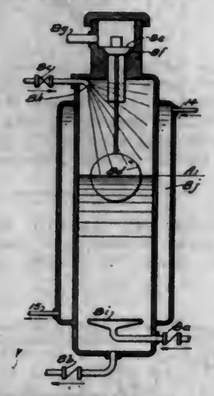
1. In a cup pivot construction of the class described, the combination with a pair of flanged jambs, and a ventilator frame arranged between said jambs and including flanged stiles, of pivots for supporting said ventilator between said jambs for swinging movement on horizontal axis, each of said pivots comprising a stationary disk fixed to each jamb and provided with an annular flange, a cup member fixed to each stile and having an annular flange enclosing and resting upon the peripheral face of the annular flange of the fixed disk of the corresponding jamb, and outwardly projecting peripherally spaced extensions formed integral with the peripheral face of each cup member for overlapping the adjacent surfaces of the flanges of the corresponding jambs and stiles to form weathering joints therewith.

1,882,250. GARTER. JOSÉ MIERES, Buenos Aires, Argentina. Filed July 25, 1931, Serial No. 553,117, and in Germany May 18, 1931. 6 Claims. (Cl. 241—6.)



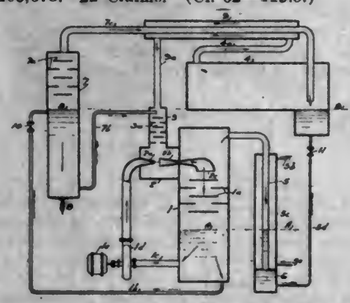
1. A garter comprising a band of elastic material having a pocket formed integrally thereon, said pocket being open at the top and provided with an aperture in its outer wall, in combination with a fastener comprising a substantially flat plate fitting within said pocket, a headed stud formed on said plate and projecting through the aperture in said pocket, a rigid link hingedly connected to the upper end of said plate, and a clasp hingedly connected to said link and having a keyhole aperture to cooperate with said stud for securing a garment thereto.

1,882,251. REFRIGERATING APPARATUS. BO FOLKE RANDEL, San Diego, Calif. Filed June 19, 1929. Serial No. 372,081. 7 Claims. (Cl. 62—5.)



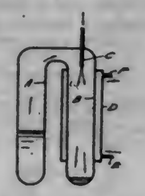
1. In a refrigerating apparatus, a circulating system containing a solution of a refrigerating medium in an absorption medium, means for causing said refrigerating medium to vaporize out of the said absorption medium, means for condensing said vapor to liquid form, means for expanding said liquid to vapor form with resulting refrigeration effect, means for reabsorbing said expanded vapor into first mentioned absorption medium, thereby creating a low pressure on the refrigerating medium, communication means between said absorption means and said vaporizing means to allow liquid to flow from the latter to the former, other similar means to allow vapor to flow from the latter to the former, and a valve in said means to open by a float at the moment the pressures in said absorption means and said vaporizing means are substantially equalized.

1,882,252. METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Nov. 8, 1929. Serial No. 405,673. 22 Claims. (Cl. 62—119.5.)



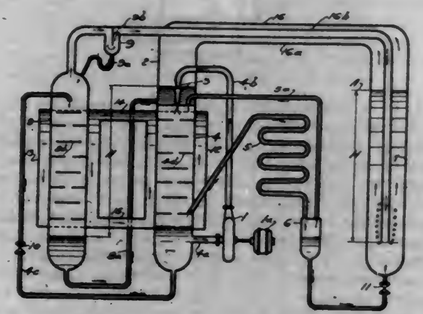
18. A method of refrigeration which consists in producing a general circulation of a combination of mediums by the kinetic energy of a moving body of liquid, generating the motion of said body of liquid by an external force, and bringing a liquid refrigerating medium into the pressure of a supplementary gaseous medium in pressure proportions as to cause evaporation of the said liquid refrigerating medium.

1,882,253. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Apr. 29, 1930. Serial No. 448,276. 7 Claims. (Cl. 62—119.)



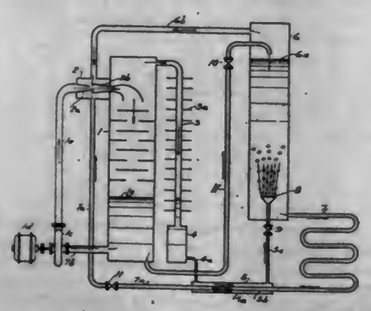
6. A method of refrigeration, forming a maximum concentrated solution of a gas in a liquid by condensing vapors of the liquid in the presence of the said gas in predetermined volume proportions, then separating said absorbed gas from said solutions by bringing same in contact with a similar but less concentrated solution.

1,882,254. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Feb. 5, 1931. Serial No. 513,583. 12 Claims. (Cl. 62—119.5.)



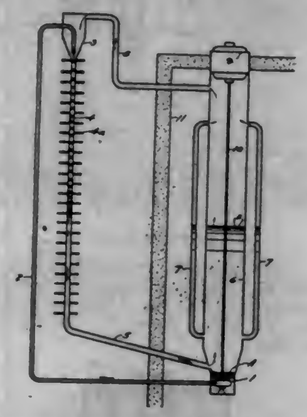
9. In a refrigerating apparatus employing a cooling agent, a supplementary gaseous agent inert towards said cooling agent, and a liquid agent inert towards said cooling agent but capable of absorbing said supplementary gaseous agent, a generator, an evaporator, an absorber, a condenser, communication means between said generator, evaporator, absorber and condenser and mechanical means to cause circulation of said agents through said apparatus.

1,882,255. METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Nov. 20, 1929. Serial No. 408,467. 8 Claims. (Cl. 62—179.)



7. That improvement in the art of refrigeration wherein a liquefied inert gas is forced through a liquid refrigerating agent to evaporate same forming a mixture of vapors; completely separating said inert gas from vapor of said refrigerating agent by condensing both to liquid state, said formed liquids being immiscible and of different specific gravities and wherein circulation of the mediums is caused by mechanical action.

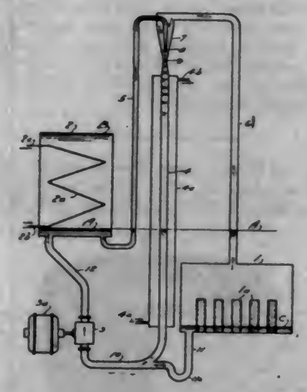
1,882,256. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Apr. 21, 1931. Serial No. 531,658. 10 Claims. (Cl. 62—169.)



1. A method of refrigeration, the employment of a liquid column to compress a refrigerating medium and condensing said medium during compression, both compression and condensation taking place in a common chamber.

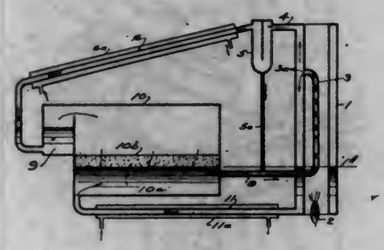
3. A method of refrigeration comprising raising a liquid motive medium to an elevated position, allowing the said liquid to fall to a lower position and to utilize the energy of the fall of the said liquid to cause circulation of a refrigerating medium from a lower to a higher pressure and condensing the said refrigerating medium during its compression.

1,882,257. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed May 18, 1931. Serial No. 538,090. 7 Claims. (Cl. 62—169.)



1. A method of refrigeration comprising the removal of part of a liquid contained in a vessel, thus creating a space of lowered pressure in said vessel, evaporating part of the liquid remaining in said vessel into said space of lowered pressure with resultant absorption of heat, passing said produced vapor to a condensing space, liquefying said vapors and returning liquid to said vessel to make up for the evaporation in said vessel.

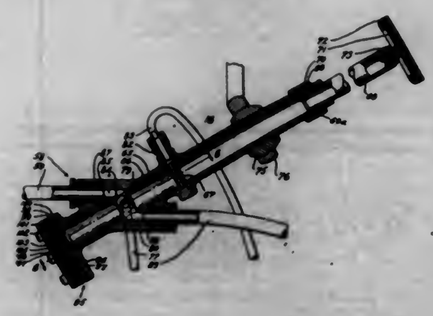
1,882,258. MEANS AND METHOD OF REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif. Filed Sept. 10, 1930. Serial No. 480,916. 9 Claims. (Cl. 62—119.5.)



2. A method of refrigeration comprising evaporating a refrigerant, passing the vapors produced through a space filled with an inert supplementary gas and thence through a permeable membrane, then absorbing said vapors in an absorption medium.

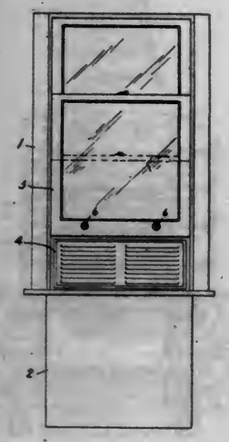
6. In a refrigerating apparatus of the absorption type, employing an inert pressure equalizing medium, an evaporator and an absorber, and a permeable division wall between said evaporator and said absorber, said permeable wall serving as a heat insulation, but permitting flow of refrigerant vapor from said evaporator to said absorber.

1,882,259. STOP LIGHT SWITCH AND BRAKE SYSTEM FOR VEHICLES. HUGH M. ROCKWELL, New York, N. Y. Filed May 28, 1927. Serial No. 195,107. 6 Claims. (Cl. 200—83.)



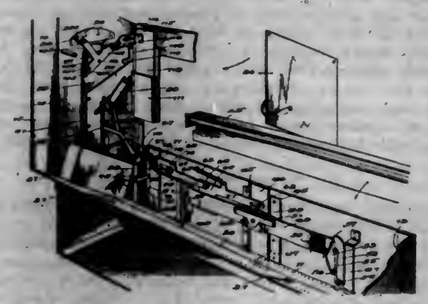
1. A switch of the class described, comprising a casing having a fluid chamber for connection to a source of fluid pressure, a yieldable diaphragm forming one wall of said chamber, resilient switch contacts normally separated from each other, arranged on the opposite side of the diaphragm from the fluid chamber, and adapted for mutual engagement by movement of the diaphragm against one of them, and a plate member attached to the casing, said plate being characterized by a concavity on its inner surface to provide a seat for the diaphragm in its limit of movement, and said diaphragm and contacts being clamped in position between said plate and the casing.

1,882,260. WINDOW FRAME. JACOB W. ROLLE and FREDERICK M. PLATH, Philadelphia, Pa. Filed Oct. 21, 1930. Serial No. 490,121. 5 Claims. (Cl. 20—52.1.)



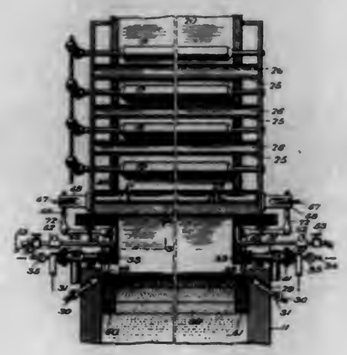
1. In a window frame having a well beneath a sliding sash frame and having a sliding ventilator frame and a sliding screen frame both adapted to occupy the well in side by side relation, the combination of single means manually operatable at the sash frame and adapted to selectively connect the sash frame with the other sliding frames.

1,882,261. VENDING MACHINE. JOHN G. SCHOFIELD, Washington, D. C., assignor to C. A. M. Wells, Washington, D. C., and Thomas H. Welsh, Hyattsville, Md. Filed July 25, 1929. Serial No. 380,970. 8 Claims. (Cl. 312—56.)



1. In a vending machine of the class described, a magazine arranged to hold a series of newspapers in a vertical position side by side, said magazine having a delivery slot below the foremost paper, a vertically reciprocating operating bar in the front of said magazine, a handle carried by the lower end of the operating bar and adapted to be manually grasped for effecting depression of said bar, prong arms hinged to said bar and extending laterally therefrom, prongs on said arms inclined downwardly and extending towards the foremost paper, and cam means engaging said arms to swing them toward the paper upon downward movement of the bar whereby to cause the prongs to engage the paper and feed the same downwardly as the bar is moved downward.

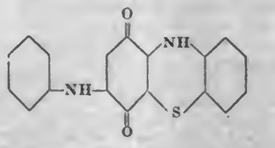
1,882,262. APPARATUS AND METHOD FOR DRAWING GLASS. ARTHUR E. SPINASSE, Mount Vernon, Ohio. Filed July 6, 1927. Serial No. 203,838. 11 Claims. (Cl. 49—17.)



11. In apparatus for drawing sheet glass, the combination with a glass melting tank, of a glass drawing receptacle adapted to receive molten glass from said melting tank and connected therewith, wall members disposed above the glass to form a glass drawing area in said glass drawing receptacle, a vertical annealing leer above said glass drawing area, means within said vertical annealing leer for drawing the sheet from the free surface of said glass drawing area continuously upwardly through said vertical annealing leer, cooler members between said wall members and the base of the sheet glass being drawn from said area, a refractory anchoring body of substantially the same length as that of the width of the sheet being drawn, means for holding said anchoring body bodily submerged within the glass bath beneath the drawing area, pairs of internally cooled edging rolls above the bath engaging and rolling down the border portions of the meniscus which forms the sheet, and means above said rolls for heating the rolled portions of the sheet.

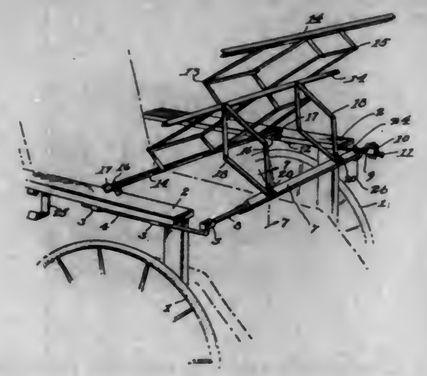
1,882,263. SULPHUR CONTAINING VAT DYESTUFFS AND PROCESS OF MAKING THEM. KARL THIESS, Frankfort-on-the-Main-Sindlingen, and FRITZ MÄNNCHEN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1930, Serial No. 419,450, and in Germany Jan. 31, 1929. 6 Claims. (Cl. 260—27.)

1. As a new product the dyestuff of the following formula:



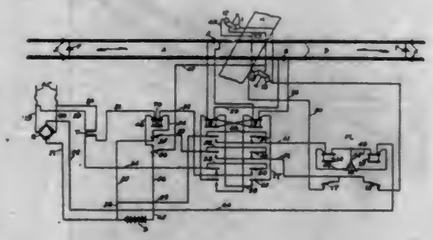
the said dyestuff forming in the dry state brown crystals which dissolve in concentrated sulphuric acid to a bluish red solution dyeing wool from a light yellow vat intense brown shades.

1,882,264. CHAIR ATTACHMENT. CHARLES F. THOMPSON, Relay, Md. Filed Mar. 17, 1930. Serial No. 436,585. 6 Claims. (Cl. 155—127.)



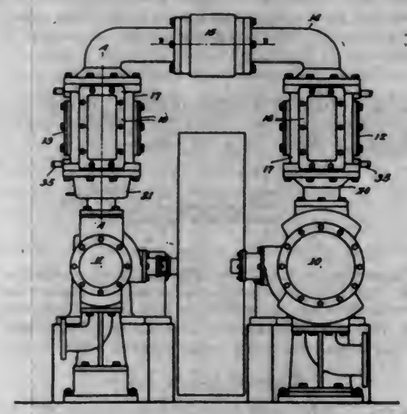
1. In combination, a chair, a rod slidably and rotatably mounted at one side of the chair, a bar pivoted at one end to the outer end of said rod, means for supporting the opposite end of said bar, and a collapsible rest mounted on said bar.

1,882,265. HIGHWAY CROSSING SIGNAL SYSTEM. ARMAND J. VALLÉE, Albany, N. Y., assignor to General Railway Signal Company, a Corporation of New York. Filed May 12, 1931. Serial No. 536,814. 13 Claims. (Cl. 246—130.)



1. In combination, a crossing signal, a traffic controlled relay, a source of alternating current and a source of direct current, a power-off relay, an energizing circuit for said signal including a back point of the traffic controlled relay and either a front or a back point of the power-off relay, and an energizing circuit for the power-off relay including a back point of the traffic controlled relay and one of the sources of energy.

1,882,266. UNIT INTERCOOLER. CHARLES WAINWRIGHT, Erie, Pa. Filed Feb. 18, 1931. Serial No. 516,711. 1 Claim. (Cl. 230—182.)



In combination, a compressor including high and low pressure cylinders, a separate intercooler unit connected with each cylinder, means providing communication between the intercooler units, and a mixing chamber included in the last mentioned means.

1,882,267. LABYRINTH PACKING. OSCAR ANTON WIBERG, Finspong, Sweden. Filed Apr. 7, 1930, Serial No. 442,302, and in Sweden Apr. 8, 1929. 4 Claims. (Cl. 286—10.)



1. A labyrinth packing, comprising annular disks which form axial spaces between themselves and are movable axially toward and from each other, sleeve-shaped projections on said disks extending axially into said spaces so as to overlap alternately from opposite sides, annular ribs at the base portion of the projections on one side thereof, annular sealing flanges at the free ends of the projections so located as to provide sealing constrictions on the same side of the projections as the respective ribs, the radial thickness of the base portion of the projections including said rib being equal to the radial space between adjacent projections of the same disk at the bases of the projections.

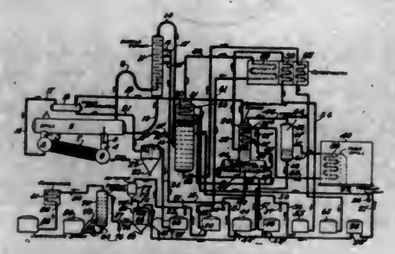
1,882,268. DRILL PIT. BOYD K. APPLEMAN, Beaumont, Tex. Filed Mar. 30, 1928. Serial No. 265,978. 6 Claims. (Cl. 255—61.)

6. A fish tail well drilling bit comprising a driving shank and a relatively thick body member, the lower end of said body member being reduced in thickness to form a plurality of shoulders and oppositely disposed cutting members terminating in cutting edges, said cutting members being deeply curved and extended forward an appreciable distance so as to bring their cutting edges underneath and raise their chips upward as they are being cut, separate internal liquid passages running longitudinally the entire length of said shank and bit body on lines lying rectilinearly an appreciable distance to the rear of the cutting edges of said cutting members and tangential to the



forward curvature thereof, by means of which said liquid is caused to impinge against the curved face of said cutting members behind said chips.

1,882,269. TREATMENT OF HYDROCARBON DEPHLEGMATION PRODUCTS. KENT W. BARTLETT, Chicago, Ill., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed Nov. 1, 1929. Serial No. 404,139. 15 Claims. (Cl. 196—49.)

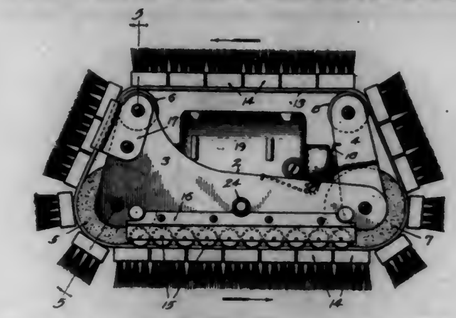


1. A process for clarifying residual hydrocarbon oils which have been subjected to a cracking reaction in the presence of hydrated lime and which still contain suspended and colloidal hydrated lime associated with carbon from the cracking reaction, which comprises settling and removing from said residual hydrocarbon oils a portion of the suspended hydrated lime associated with carbon, distilling and separating additional hydrocarbon oils into a vapor portion and a residual portion containing substantially no suspended sediment, mixing said residual portion containing substantially no suspended sediment with said residual hydrocarbon oils to coagulate said colloidal hydrated lime, settling and removing from the mixture of hydrocarbon oils suspended and coagulated hydrated lime associated with carbon whereby a composite residual fuel oil is produced having a negligible sediment content.

1,882,270. FLOOR POLISHING MACHINE. CHESTER H. BEACH, Racine, Wis., assignor, by mesne assignments, to S. C. Johnson & Son, Racine, Wis., a Firm. Filed Feb. 8, 1928. Serial No. 252,803. 11 Claims. (Cl. 15—49.)

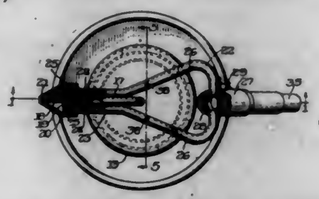
6. A floor polishing machine, comprising a frame, a lower roller arranged at each end of said frame, an upper roller arranged at each end of said frame above a lower roller, an endless belt brush carried by said rollers

and solely supporting the machine from the floor, a motor carried by said frame within said belt brush and having its



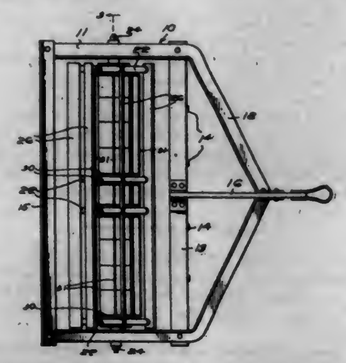
shaft arranged transverse to a lower roller and geared thereto to drive said belt brush, and a handle connected to said frame.

1,882,271. SPRAY GUN. ERIC N. BERGGREN, Chicago, Ill., assignor, by mesne assignments, to Chicago Cutting Die Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1930. Serial No. 477,217. 9 Claims. (Cl. 91—45.)



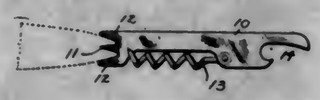
1. A spray gun, comprising a container, a closure for the container, a feed pipe carried by said closure and communicating with the interior of the container, a spray nozzle into which said feed pipe discharges, a pipe for feeding compressed fluid to said spray nozzle and including parallel members arranged to discharge the compressed fluid into said nozzle at opposite sides of said feed pipe, means for supplying compressed fluid to said feeding pipe and a valve for controlling the flow of the compressed fluid from the supplying means to said feeding pipe.

1,882,272. STALK CUTTER. EDWARD L. CALDWELL, Corpus Christi, Tex., assignor to Caldwell Cypress Cistern Co., Inc., Corpus Christi, Tex., a Corporation of Texas. Filed July 30, 1931. Serial No. 554,094. 4 Claims. (Cl. 55—61.)



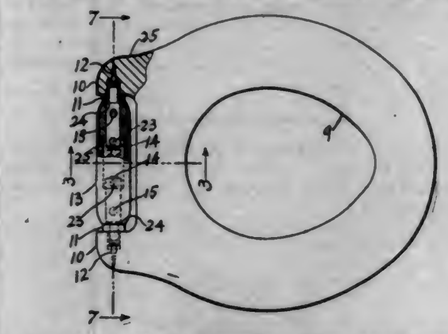
1. In a stalk cutter, a frame, a rotatable cutting element mounted upon the frame and projecting downwardly below the same, said cutting implement including blades, an element secured to the frame in advance of the rotatable cutting element and serving to knock down the stalks, and blades secured to said element and serving to gather the knocked-down stalks to the center of the row or rows, and means for discharging material from between the blades, said means being loosely mounted upon the cutting element inwardly of the blades to be gravity operated.

1,882,273. CIGAR TIP PERFORATOR. ROBERT T. CAMERON, Memphis, Tenn. Filed Feb. 17, 1930. Serial No. 429,115. 1 Claim. (Cl. 131—20.)



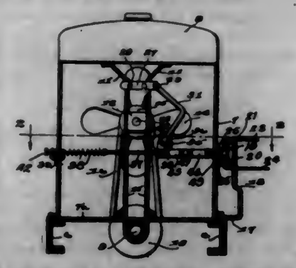
A cigar tip perforator comprising a handle member, and a point spur lying between rigid opposite edges that are spaced sufficiently to receive between them the inserted tip of the cigar and support the inserted cigar tip, said spur and supporting edges being parts of a flat plate.

1,882,274. CONCEALED HINGE TOILET SEAT. CESARE C. CAMPUS, Santa Monica, Calif. Filed Oct. 24, 1931. Serial No. 570,888. 10 Claims. (Cl. 4—236.)



1. A seat provided at its rear end with a pair of spaced hinge projections having aligned hinge sockets in their inner faces, and stationary hinge means having oppositely projecting pintles extending into the sockets of the hinge projections on the seat, each of said seat projections lying close to the stationary hinge means and each hinge pintle being concealed within the stationary hinge means and the seat projections.

1,882,275. AUTOMATIC CUT-OUT. JOHN J. COUGHLIN, Jr., Hachita. N. Mex. Filed May 20, 1929. Serial No. 364,561. 1 Claim. (Cl. 200—52.)



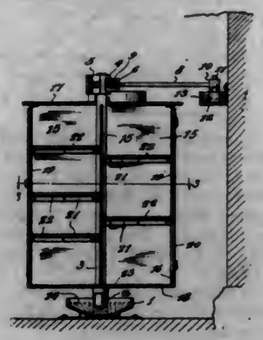
A circuit breaker for energizing electric circuits comprising spaced outwardly yielding contact members included in an energizing electric circuit a movable switch blade insertible between said contacts and normally closing the circuit therethrough, said blade having a circuit closing abutment engageable with said contacts to close the circuit therethrough and normally restraining said switch blade from withdrawal from between said contacts to break the circuit, a pivotally suspended carrier mounting a belt engaging roller, pivoted links connecting said roller suspension with said switch blade, a spring attached to said roller suspension and normally holding the roller tensioned against the belt with the switch blade abutment in circuit closing contact with said spaced contacts, but effective through breakage or displacement of the belt by slippage, to swing the suspended roll, links and switch blade in a direction to withdraw the blade from between the links and break the energizing circuit therethrough, said contacts yielding outwardly in response to the spring pull on the switch blade abutment there against.

1,882,276. FIRE PREVENTION DEVICE FOR CINEMATOGRAPH FILM APPARATUS. FLORENCE COWIE, Ealing, London, England. Filed Sept. 17, 1930, Serial No. 482,629, and in Great Britain Sept. 23, 1929. 6 Claims. (Cl. 88—17.)



6. Fire prevention device for a film spool casing comprising a mouthpiece with a grooved surface, a tumbler pivoted to said mouthpiece and provided near its pivot with a wedge designed to enter said mouthpiece and cooperate with the groove in said surface to grip and hold the film, an antifriction feeler device on said tumbler spaced from the pivot thereof, said feeler being normally engaged by the tensioned film to maintain said tumbler upright and the parts being so disposed that wedge-tightness is increased by the pull of the film when the tumbler is permitted by film release of tension to fall and bring about wedge engagement.

1,882,277. CUPBOARD. EVER EVERSON, Hattiesburg, Miss. Filed Aug. 14. 1931. Serial No. 557,177. 1 Claim. (Cl. 312—157.)



A cupboard comprising a cylindrical casing, shelves within the casing, a shaft concentric to the casing and carrying the casing and the shelves, a pan below the casing, a bearing cup rising centrally from the pan and receiving the lower end of the shaft, a split collar encircling the upper end of the shaft, means for effecting frictional engagement between the collar and the shaft, lugs on opposite sides of the collar, cups, means for supporting said cups in angular spaced relation to each other and the upper end of the shaft, pins rising from said cups, braces each secured at one end in a lug on the split collar and having its opposite end provided with an eye engaged over the respective pin.

1,882,278. LID. GEORGE FRANCYK, Akron, Ohio. Filed Feb. 23, 1932. Serial No. 594,706. 1 Claim. (Cl. 215—43.)

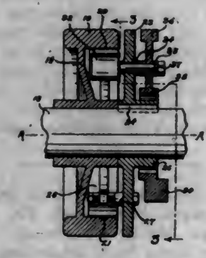


In combination with a jar having a neck surrounded by a flange and provided with a spiral thread, a closure for the neck and having a spiral rib, a yieldable separator and gasket mounted on the neck with seating engagement with the flange and having a rightangle portion engaging the edge of the neck to be forced tightly against the neck on the threading of the closure to the neck to hermetically seal the jar, said closure having an annular groove to receive the rightangle portion and one end of the gasket and separator, said closure having its edge rounded to bear against the separator and gasket and cause the lower edge thereof to flare outwardly and tightly against the flange.

1,882,279. PROCESS OF MAKING A SOAP COMPOUND. GEORGE G. FRELINGHUYSEN, Morris Township, Morris County, N. J., assignor to P. Ballantine & Sons, Newark, N. J., a Corporation of New Jersey. Filed Mar. 24, 1928. Serial No. 264,573. 1 Claim. (Cl. 87—16.)

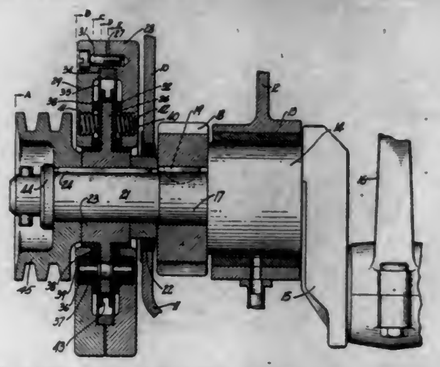
A process of making a soap composition which consists first in saponifying soap forming materials and subsequently mixing diastase therewith at a lower temperature than the saponifying temperature.

1,882,280. DAMPING DEVICE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 27, 1925. Serial No. 39,896. 18 Claims. (Cl. 74—6.)



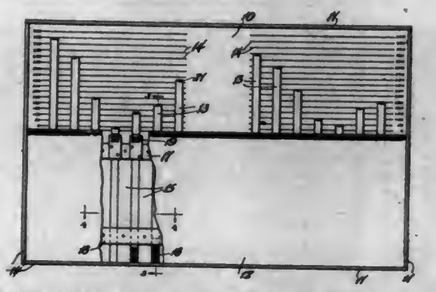
13. A device for damping vibratory disturbances in a body comprising motion resisting means adjacent the body and engageable therewith, and inertia means carried by the body and operatively associated with the motion resisting means adapted to connect the body to said motion resisting means upon acceleration and deceleration of the body.

1,882,281. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 23, 1930. Serial No. 483,881. 9 Claims. (Cl. 74—6.)



6. A vibration damper for a shaft having an inertia member movable relatively to the shaft, friction means associated with the shaft and inertia member to resist relative movement of the latter, elastic means deformable in response to said relative movement comprising a cover for said friction means, and spring means co-acting with said friction means to increase the friction developed thereby.

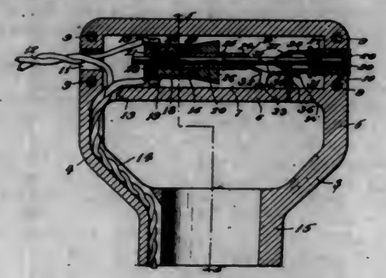
1,882,282. GRAPHIC DEVICE. REX C. HAIGHT, Grass Range, Mont. Filed June 2, 1932. Serial No. 614,978. 3 Claims. (Cl. 116—135.)



1. A mechanical graph comprising, in combination, an upright backboard having a plane surface and a marginal front flange; a front wall spaced from the backboard and extending from the bottom to substantially midway the height thereof; the backboard having a scale thereon above the front wall; vertical slide members mounted behind the front wall and adapted to be raised to indicate vertical distances on the scale; guide means behind the front wall for the slide members; means to retain the slide members in the guide means; and means to hold the slide members in adjusted positions.

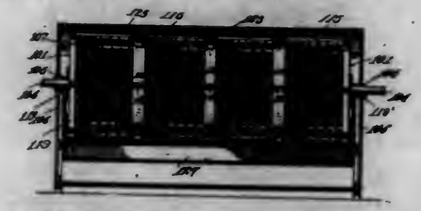
1,882,283. ELECTRIC SWITCH FOR POWER TOOLS. WALTER L. HODEAUX, Palm Beach, Fla. Filed Dec. 22, 1930. Serial No. 504,125. 5 Claims. (Cl. 200—78.)

1. A switch for power tools comprising contacts insulated from each other, a rod slidable longitudinally between said contacts, a sleeve carried by the rod, a collar on the sleeve adapted to bridge the contacts when the rod is moved to circuit-closing position, means yieldably holding the rod in extended position, an actuating member for the rod movable relative thereto, a cushion between the rod and actuating member, and a spring-pressed latch pivoted intermediate its ends and having one end thereof disposed in the path of and adapted to be engaged by said actuating member for moving the



other end of the latch in engagement with the sleeve thereby to hold the rod in circuit-closing position when said actuating member is pressed inwardly.

1,882,284. LAUNDRY MACHINE. OTIS H. HULLINGS, Alexandria, Va. Filed Mar. 14, 1928. Serial No. 261,468. 6 Claims. (Cl. 68—18.)



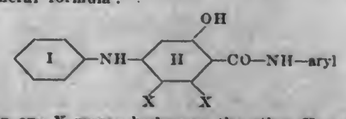
1. In combination, a rotatable drum for laundry machines and the like, formed to provide a plurality of groups of sector-shaped compartments in circular series about the same, sector-shaped containers for individual groups of fabrics to be laundered adapted to be removably seated within the said compartments, and means encircling said drum between each series of compartments and having movable sections common to companion containers in adjacent compartments for securing the containers in seated position therein.

1,882,285. BROMINATION PRODUCT OF THE DIBENZANTHRONE SERIES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929, Serial No. 345,880, and in Germany Mar. 13, 1928. 5 Claims. (Cl. 260—61.)

2. As new articles of manufacture dibenzanthrones containing at least one atomic proportion of chlorine and bromine.

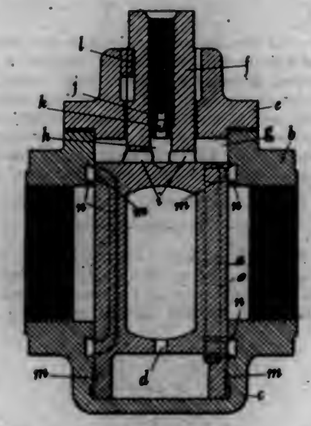
1,882,286. ARYLAMIDES OF META-HYDROXY-DIARYLAMINE-CARBOXYLIC ACIDS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 3, 1930, Serial No. 465,780, and in Germany July 17, 1929. 9 Claims. (Cl. 260—124.)

4. As new compounds the arylamides of 3-hydroxy-diarylamine-4-carboxylic acids corresponding to the probable general formula:



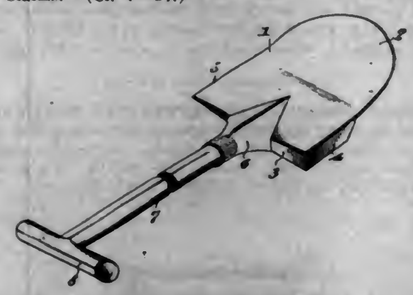
(wherein one X means hydrogen, the other X methyl and benzene nucleus signified by I may contain alkyl or halogen) which compounds are amorphous or crystallized substances, having a definite melting point, difficultly soluble in organic solvents, easily soluble in alkalies, distinguished by a great affinity to the vegetable fiber.

1,882,287. VALVE OR COCK. ROBERT WILLIAM LEACH, Newport, England, assignor to Audley Engineering Company Limited, Newport, England. Filed Sept. 6, 1927, Serial No. 217,805, and in Great Britain Nov. 8, 1926. 15 Claims. (Cl. 251—93.)



9. In a valve, a casing, an unbalanced plug mounted for rotation in the casing adapted to be moved by the internal pressure in the valve, a lubricant chamber at one end only, and means to distribute lubricant from said lubricant chamber between the plug and the casing.

1,882,288. COMBINATION TOOL. JOHN ALBERT LEE, Ogden, Utah. Filed May 11, 1929. Serial No. 362,244. 2 Claims. (Cl. 7—17.)

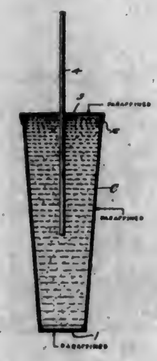


1. A combination tool comprising a head having a sharpened side edge and having an enlargement at the opposite edge thereof from the sharpened side edge, said enlargement being uniformly tapered from one side edge to the sharpened side edge, a spading blade extending forwardly a substantial distance from the forward edge of the head and formed thereon, and a handle attachment applied to the head on the opposite side thereof from the spading blade and approximately midway between the enlarged edge and the sharpened edge.

1,882,289. PURIFICATION OF GASES. ERNEST JOSEPH LUSH, London, England. Filed Oct. 20, 1930, Serial No. 490,097, and in Great Britain Oct. 31, 1929. 8 Claims. (Cl. 23—3.)

1. A process of freeing industrial gases of sulphur compounds and carbon sulphides which consists in subjecting the gas to be purified to the action of piperidine.

1,882,290. FROZEN CONFECTION. MATTHEW C. MEAGHER, Bethlehem, Pa. Filed Feb. 28, 1929. Serial No. 343,381. 6 Claims. (Cl. 99—16.)



1. As a new article of manufacture, a frozen confection comprising a core of carbonated normally liquid material, a paper container in which said core is engaged, one end of the container being open, an elongated stick extending within an end portion of the core through the open end of the container, a cap carried by the stick and sealing the open end of the container, and a cap closing the opposite end of the container, and adapted to be forced inwardly thereof to remove the core from the container.

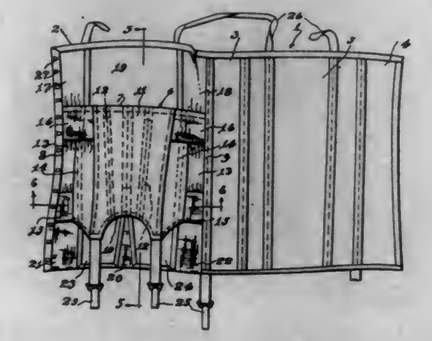
3. That process of preparing and dispensing a frozen confection in sanitary condition which consists in providing a container of paper-like material, placing in the container in a liquid form a quantity of the confection to be dispensed, capping the container with a cap having a stick extending therethrough and projecting into the liquid in the container, placing the whole in a freezer and retaining it therein until the liquid is completely frozen and adherent to the stick, withdrawing the entire package thus formed, and dispensing the package in its entirety with the container in position on the frozen liquid and the stick in position relative to the confection and container.

1,882,291. FLY SWATTER. STANLEY G. MONROE and FRANK SHEPHERD, Akron, Ohio. Filed Dec. 7, 1931. Serial No. 579,532. 3 Claims. (Cl. 43—137.)



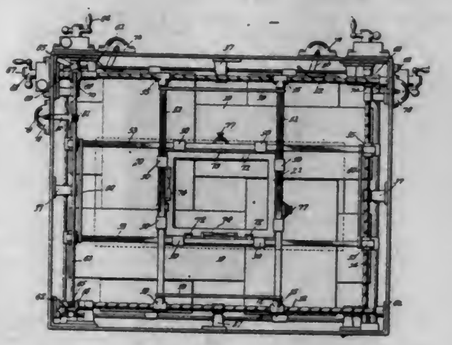
1. A fly swatter comprising a plurality of spaced parallel fingers, formed of a material of the character of soft rubber and webs connecting certain adjacent fingers at intermediate points.

1,882,292. CORSELETTE. PATRICK J. MORAN, Newark, N. J., assignor to Irving Rosner, New York, N. Y. Filed June 15, 1931, Serial No. 544,573. Renewed Apr. 12, 1932. 9 Claims. (Cl. 2—30.)



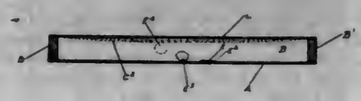
1. In a garment of the class described; the combination of a body portion consisting of a front, back and side sections; of a belt attached to the front section, said belt comprising a stiff central portion and pliable end portions, elastic inserts at the top and bottom of said end portions, said belt stitched to the front section at the top and sides while the bottom is free, said front section comprising non-elastic side panels, elastic inserts at the end of said side panels, and a triangular elastic insert at the bottom of said front section, said elastic inserts at the top and bottom of said belt stitched to said elastic inserts at the end of said side panels.

1,882,293. CAMERA BACK AND NEGATIVE FRAME. ALBERT B. MUELLER, Chicago, Ill., assignor, by mesne assignments, to Gardner Abboth, as trustee. Filed Feb. 6, 1930. Serial No. 426,421. 18 Claims. (Cl. 88—24.)



1. A camera back comprising a main frame, mask plates mounted in pairs for simultaneous movement in opposite directions, the plates of each pair being parallel to each other and movable at right angles to the plates of the other pair, a rigid mask frame secured to said main frame on the front side of said mask plates, and a rigid negative frame movably secured to said main frame on the rear side of said mask plates.

1,882,294. GAME. LESTER WALLACE MULVEY, Lynn, Mass. Filed July 9, 1930. Serial No. 466,668. 1 Claim. (Cl. 273—161.)



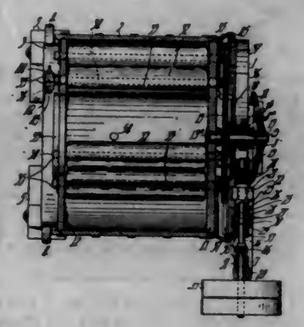
In a device of the character described, the combination with a substantially square container comprising a bottom and sides rising therefrom of electrically nonconductable material, a cover secured to said sides of transparent celluloid material, and a plurality of disks within said container, a portion of the edges of which are treated with a metallic substance to properly weight said disks so that they will depend from said cover when said cover is electrostatically charged.

1,882,295. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 13, 1931. Serial No. 536,979. 11 Claims. (Cl. 30—12.)



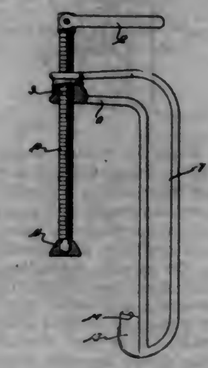
1. An adapter for a safety razor having oppositely disposed downturned edges to locate it in operative position on a member of a safety razor, said adapter having means to cooperate with a different member of the razor to locate said member in shaving relation to a blade in the razor.

1,882,296. DRIVING AND ACTUATING MECHANISM OF BUTTER CHURNS. JOSEPH O'CONNELL and HAROLD HAMILTON KERR, Kensington, Victoria, Australia. Filed Jan. 7, 1931, Serial No. 507,164, and in Australia Jan. 25, 1930. 7 Claims. (Cl. 31—33.)



1. In a butter churn having a rotary barrel with revolvable butter workers therein, a driving member, gearing for rotating the butter workers, a clutch for connecting the gearing with the driving member, releasable locking means engageable with the butter workers to prevent their rotation by the gearing, and an adjustable gear train operatively connecting the barrel with the driving member, whereby when the clutch connects the gearing with the driving member and the releasable locking means engages the butter workers said driving member rotates the barrel and stationary butter workers at a speed required for churning and when the gear train operatively connects the barrel with the driving member and the releasable locking means is disengaged from the butter workers the driving member through the gear train revolves the barrel and rotating butter workers at a lower speed for butter working, and when the clutch releases the gearing from the driving member and said locking means engages the butter workers said driving member through the gear train rotates the barrel and stationary butter workers at a slow speed for emptying.

1,882,297. CLAMP. NORVAL C. PAYNE, Detroit, Mich. Filed June 8, 1931. Serial No. 542,817. 2 Claims. (Cl. 144—304.)



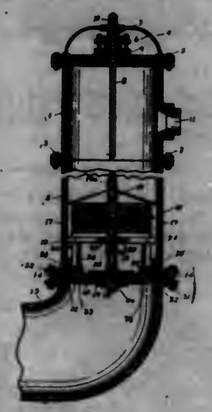
1. A clamp of the class described, comprising: a body; an angularly turned end on said body; a screw threaded through said end; and an engagement member on the opposite end of said body out of alignment with said screw, said engagement member having an engagement face inclined toward the longitudinal axis of said body and directed inwardly of, and downwardly toward said opposite end of, said body.

1,882,298. SAFETY GLASS. GARRETT H. PETERS, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 25, 1931. Serial No. 565,198. 6 Claims. (Cl. 49—92.)

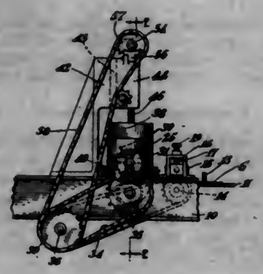
1. A safety glass including a resilient sheet of transparent material adhered to a sheet of glass through the medium of terpinenemaleic anhydride.

1,882,299. FIRE HYDRANT. ARTHUR C. PILCHER, Pittsburgh, Pa. Filed Nov. 29, 1929. Serial No. 410,293. 6 Claims. (Cl. 137—13.)

1. In a hydrant including a valve seat and a valve, the combination of a stem fixed to said valve and free to rotate relatively thereto, a threaded flange integral with said stem, ports passing transversely through said flange, threads adjacent the inner-wall of the hydrant, said threaded flange being in threaded engagement with said threads, a drip valve adjacent said valve seat, a yoke in threaded engagement with said stem below said flange, a connection from said yoke to said drip valve, whereby by rotating said flange and stem the valve is caused to rise from its seat and the connection from the yoke to the drip valve is caused to move and close said drip valve.



1,882,300. BATTERY PLATE FILLING MACHINE. WILLIAM F. PRICE, Bala, and RUDOLPH H. BECK, Upper Darby, Pa. Filed July 17, 1930. Serial No. 468,650. 9 Claims. (Cl. 226—39.)



1. A battery grid pasting machine for double grids, comprising a horizontal platen, a pair of feed rolls to advance a grid therebetween over said platen, an adjustable bar to prevent the passage of an abnormally thick grid, a plate set in said platen having two narrow openings corresponding in length to the length of the apertured portions of the double grid, two independent paste hoppers, means associated with one of said hoppers for feeding paste upwardly through the openings in said plate, and adjustable means combined with the other hopper to smooth the paste entered therefrom on the upper side of said grid.

1,882,301. BUILDING STAVE. GEORGE E. PRIEST, Syracuse, N. Y. Filed Jan. 7, 1930. Serial No. 419,036. 3 Claims. (Cl. 72—6.)

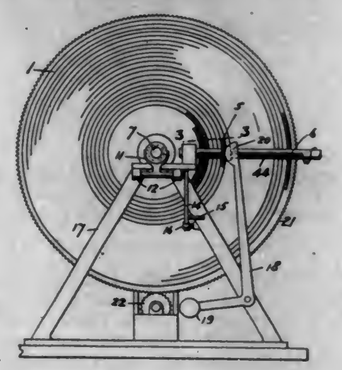
1. A building stave comprising a body and integral projections on one side thereof along opposite sides of the median line of the body, between said median line and the side edges of the body, said projections on each side of said line being paired with, and arranged in horizontal alinement with, those on the other side of the line and

being tapered from their bases toward their outer ends and having hoop receiving seats at their outer ends, the base of each projection merging in the body and into



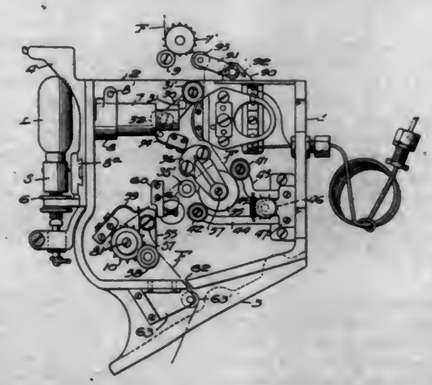
the base of the adjacent projections, whereby the force applied to the said projections by the hoop in distributed throughout the body.

1,882,302. SPIRAL GEAR. SYDNEY J. SANFORD, Alden Park Manor, Pa., assignor of one-half to Chester W. Larner, Philadelphia, Pa. Filed Mar. 13, 1929. Serial No. 346,545. 14 Claims. (Cl. 74—7.)



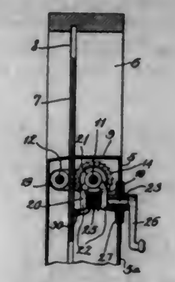
1. A gear comprising a disk having an element protruding from one surface thereof which divides the surface into a spiral path or track and another element arranged in the spiral path or track to provide gear teeth therein.

1,882,303. TALKING MOTION PICTURE APPARATUS. CHARLES HUGO SEAHOLM, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 8, 1929, Serial No. 405,743. Divided and this application filed Nov. 18, 1930. Serial No. 496,511. 2 Claims. (Cl. 271—2.3.)



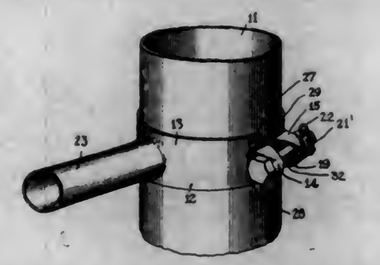
1. In a mechanism of the type described employing a motion picture film, the combination of a sprocket over which the film passes and by means of which the film is moved, said sprocket being adapted to be driven by an electric motor, a roller over which the film passes, a pair of spaced pivotally mounted arms having their free ends disposed at diametrically opposed points relative to the roller, a roller mounted in the free end of each arm for holding the film against the first roller, a spring connected to both arms for holding the arms toward each other, a cam journalled between said arms and a manually operated shaft carrying the cam, whereby the arms are simultaneously moved outwardly against the action of the spring to move the rollers, carried by the arms, away from the first roller.

1,882,304. WINDOW OPERATING DEVICE. HARRY E. SIPE, New York, N. Y., assignor of one-half to Nathaniel L. Foster, Montclair, N. J. Filed June 2, 1928. Serial No. 282,289. 4 Claims. (Cl. 268—122.)



1. An operating device for window panels comprising a driven roller mounted to engage one side face of said panel, the periphery of said roller having projecting bodies adapted to be placed under compression in engaging the panel to be operated and for supporting said panel against movement in its different positions of adjustment, a backing element disposed on the opposite side of said panel and in alinement with said roller, means involving a worm and worm wheel for actuating said roller, and for preventing the rotation of said roller and shifting of said panel when said last named means is at rest, a crank for rotating said worm, and other means operated through said worm and worm wheel and adapted to cooperate with said panel to aid in supporting the panel in closed position.

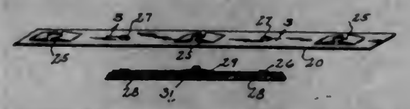
1,882,305. CLAMP. MAX STUPAR, Buffalo, and GEORGE A. PAGE, Jr., Freeport, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed May 1, 1931. Serial No. 534,432. 3 Claims. (Cl. 24—19.)



3. A clamp for aircraft use including a flat bearing strip initially of equal width throughout its length, having formed on and from said strip toward the ends thereof projections, each said projection comprising a perforate portion substantially at right angles to said strip, bracket portions substantially normal to said perforate portion, extending toward and merging into the end of said strip, the junctures of said bracket portions with said strip of

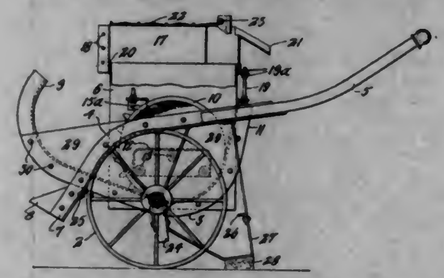
the two projections being substantially adjacent when said clamp is curved about a member of said aircraft, and means engaging said perforate portions for drawing the ends of said strip together, the overall width of said bracket portions being less than the width of said flat strip at the ends thereof.

1,882,306. FASTENING DEVICE. ALBERT H. TINNERMAN, Cleveland, Ohio. Filed Feb. 11, 1932. Serial No. 592,377. 8 Claims. (Cl. 189—88.)



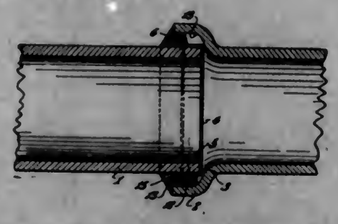
2. A fastening device adapted to be used as a lock nut in fastening two plates comprising a relatively thin metallic strip having pairs of yieldable bolt receiving tongues arranged thereon at spaced intervals.

1,882,307. MATERIAL HANDLING APPARATUS. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 8, 1926. Serial No. 153,303. 2 Claims. (Cl. 298—5.)



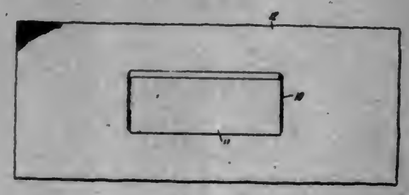
1. A material handling and transporting apparatus including in combination a two-wheeled buggy having a frame adapted to be tilted about the axis of the wheels, said frame having a handle portion at one side of the axis of the wheels and a trackway projecting beyond said axis on the opposite side thereof, and a dumping container having curved supporting means adapted to rest upon the inner end of said track way during normal or transporting position of the frame, said container, upon raising of the frame by said handle means, traveling outwardly on said trackway and simultaneously rotating or tipping on its supports to dump the contents thereof and, upon lowering of the frame, returning to its normal position.

1,882,308. GASKET DEVICE. LEROY A. WESTON, Adams, Mass. Filed May 22, 1929. Serial No. 365,079. 8 Claims. (Cl. 288—1.)



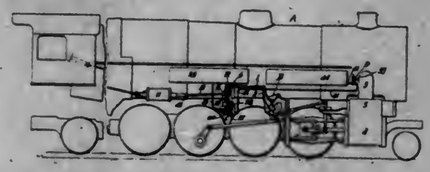
1. As an article of manufacture, a gasket having a series of radially extending resilient finger elements, a band portion at an angle to the finger elements, brackets pivotally connected to the band portion and formed with openings, a bolt in the openings for drawing the band ends togther, and an inwardly extending flange parallel with the finger elements, for engaging the outer end of a spigot part of a tile pipe, the brackets being pivotally secured to the band and the bent portions of the brackets being substantially equal in length to the flexible fingers.

1,882,309. SANITARY NAPKIN. HARRISON R. WILLIAMS, Glens Falls, N. Y. Filed July 17, 1928. Serial No. 293,451. 1 Claim. (Cl. 128—290.)



A sanitary napkin or the like composed of a core of soft, substantially finely divided, loosely coherent, digested wood pulp, an enclosing jacket formed of readily disintegrable sheeted, digested wood pulp, said jacket extending longitudinally of the core and of the same length and leaving the ends of the core exposed, and being folded once around the core so as to provide a single overlap of one longitudinal edge of the jacket material beyond the other for a subetantial portion of the width of one face only of the napkin, and a gauze wrapper exterior to said jacket.

1,882,310. LIMITED CUT-OFF LOCOMOTIVE AND METHOD OF OPERATION. WILLIAM E. WOODARD, Forest Hills, N. Y. Filed Jan. 7, 1927. Serial No. 159,618. 14 Claims. (Cl. 121—142.)



1. In a locomotive having a cylinder and steam admission means therefor, valve-actuating mechanism, valve-reversing gear having connection thereto constructed to effect less than maximum valve cut-off when in full-gear position, and shiftable means for altering said connection to extend the cut-off for starting.

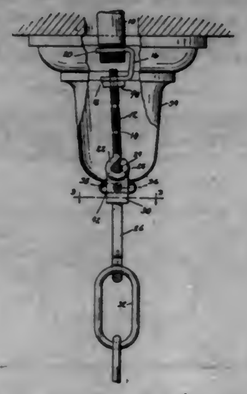
1,882,311. HIGH SPEED WELDING ELECTRODE. JOHN B. AUSTIN, East Cleveland, Ohio. Filed Jan. 12, 1928, Serial No. 246,172. Renewed Feb. 23, 1932. 11 Claims. (Cl. 219—8.)

1. A welding electrode particularly adapted for high speed welding, comprising a steel rod having associated therewith in the form of a coating ferro-titanium sufficient to provide a titanium content from 0.05 to 2% and talc in effective amount appreciably greater than a trace, said ferro-titanium being the only metallic ingredient present in said coating in appreciable amount.

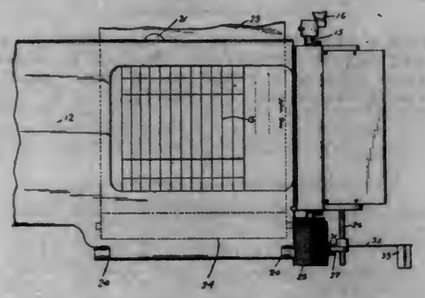
1,882,312. CANOPY STEM. ROBERT SAYER ASPINWALL, Detroit, Mich. Filed Mar. 29, 1930. Serial No. 439,930. 5 Claims. (Cl. 240—85.)

4. In a chandelier support, a stem having an eyelet at one extremity, and a hanger member having a loop por-

tion extending therethrough and frictionally engaging the same, said loop portion including opposed segmental portions extending along a portion of the length of said hanger.



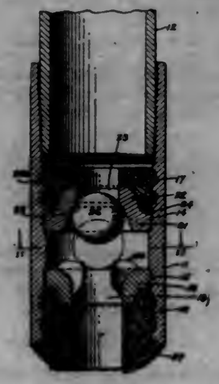
1,882,313. INDICATOR. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed July 10, 1930. Serial No. 467,037. 20 Claims. (Cl. 282—1.)



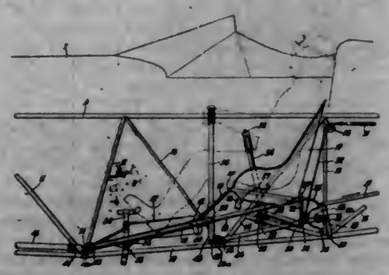
1. An inscribing machine including a feeding mechanism to shift a record, an indicator, and indicator actuating means responsive only to a predetermined plurality of actuating cycles of said feeding mechanism to indicate a predetermined condition with respect to said machine.

1,882,314. FLOATING AND CEMENTING SHOE. CLARENCE E. BURT, Los Angeles, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Apr. 18, 1932. Serial No. 605,935. 2 Claims. (Cl. 166—9.)

1. A device of the character described comprising a tubular member, a valve seat member arranged interiorly of the tubular member and and threadedly connected thereto, a valve stop member arranged interiorly of the tubular member at a spaced distance below the valve seat member, and threadedly connected to said tubular member, a valve member disposed intermediate said valve seat member and valve stop member, said valve seat member and stop member having an opening formed centrally therethrough, said valve seat member having a valve seat for cooperation with the valve member whereby the latter when seated on the seat will prevent passage of the fluid upwardly through the tubular member, cementitious sections cast in said tubular member and anchored thereto, one section being disposed at the upper end of the valve member in intimate contact therewith, the other section being disposed below the valve stop member in intimate contact therewith, said cementitious sections having openings formed therethrough in register with openings through the valve seat and valve stop member.



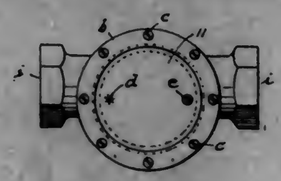
1,882,315. AIRCRAFT. WALTER C. CLAYTON, Jenkintown, Pa., assignor to Pitcairn Aircraft, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1931. Serial No. 560,105. 13 Claims. (Cl. 244—30.)



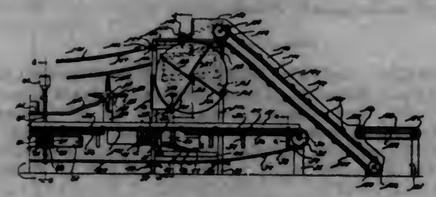
1. For an aircraft, the combination of flight control mechanism, and a support for an occupant, means for adjusting said support to different heights, and a manually operable control member for said mechanism mounted for movement with said support, there being a connection between said mechanism and said member constructed and arranged to maintain substantially the same relative positions between said member and said occupant's support, for a given setting of said mechanism, in different positions of said support.

1,882,316. MOISTURE DETECTOR. WALTER D. CLEARY, Nutley, N. J., assignor to the De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 3, 1927. Serial No. 230,913. 4 Claims. (Cl. 200—52.)

1. Means for detecting the presence of electrically conductive impurities in liquid that are not electrically conductive which comprises a container for the liquid, a plurality of spaced-apart plates of electrically conductive material within said container and immersible in said liquid, rods extending through all of the plates, one rod being in electrical connection with alternate plates and insulated from the remaining plate or plates and the other rod being in electrical connection with said remaining plate or plates and insulated from said alternate plates, and an electric circuit with opposite poles of which said rods are respectively electrically connected.

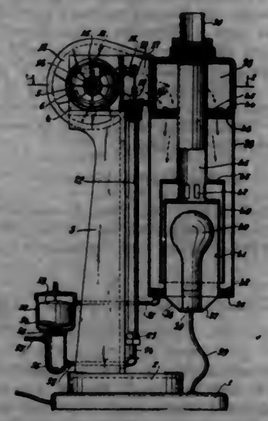


1,882,317. PACKING MACHINE. FRED A. CORNELL, Windsor, Ontario, Canada, assignor to John Carson Cornell. Filed Oct. 17, 1929. Serial No. 400,365. 7 Claims. (Cl. 198—87.)



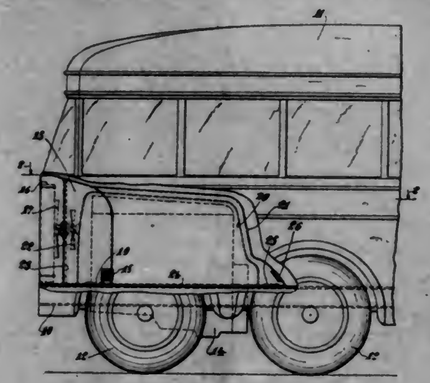
1. In a packing machine of the class described, an endless conveyor; means for driving said conveyor to effect travel; movable means in the path of the travel of said conveyor movable into one position for preventing travel of said conveyor; means for controlling travel of said conveyor; and means for operating said controlling means upon movement of said movable means into said preventing position.

1,882,318. VAPORIZING APPARATUS. ALDO CURIONI, Larchmont, N. Y., assignor to Curioni Bros. Inc., a Corporation of New York. Filed Aug. 1, 1930. Serial No. 472,302. 9 Claims. (Cl. 261—15.)



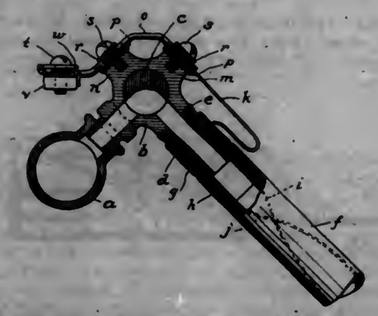
1. A vaporizing device comprising a vaporizing chamber having a gas outlet, means to introduce a current of air into the chamber, whereby the flow thereof is directed out the outlet, a source of liquid, means to direct liquid from the source into the chamber to be vaporized, means to collect liquid from the chamber and maintain the same separate from the source, and means to supply the collecting liquid to the fluid directing means in place of the liquid from the source to return the collected liquid to the chamber.

1,882,319. ENGINE HOOD CONSTRUCTION. ERVING R. GURNEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1931. Serial No. 546,930. 3 Claims. (Cl. 180—54.)



1. A vehicle having an engine, fluid cooling means including a radiator, means to circulate air through the radiator, a double walled housing for the engine, the space between the walls being completely closed from the engine, and means independent of the circulating means to circulate air between the walls of the housing without passing through the radiator.

1,882,320. PNEUMATIC AND ELECTRIC CONNECTER FOR MILKING MACHINES. CYRUS HOWARD HAPGOOD, Nutley, N. J., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 5, 1929. Serial No. 344,419. 13 Claims. (Cl. 178—326.)



2. The combination with an air pipe, of a connecter secured thereto and having an air conduit, a tube connectible with the connecter, a contact finger having a flexible and elastic end adapted to be engaged with the tube when the latter is applied to the connecter, the contact finger being provided with a bend beyond its flexible end, and means to secure the contact finger to the connecter on opposite sides of said bend.

9. Means for establishing pneumatic and electric connections in milking machines consisting of a connecter comprising two arms in angular relationship containing an air conduit, an electric conductor secured between its

ends to the exterior of the connecter at two spaced apart points, leaving an intermediate part of the conductor and both its ends free, and a binding post carried on one free end of the conductor, the other free end of the conductor comprising a flexible and elastic contact finger.

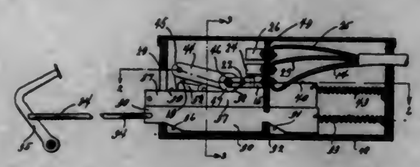
1,882,321. HYDROMETER. DAVID HIERGESELL, Richmond Hill, N. Y., assignor to Valentine Hiergesell and David Hiergesell Copartners, doing business as Wm. Hiergesell & Sons, New York, N. Y. Filed May 1, 1931. Serial No. 534,254. 4 Claims. (Cl. 265—45.)



1. A hydrometer comprising a closed glass tube, the ballast chamber of which is provided through a portion of its interior surface with a metallic lining adhering thereto to form a surface to which the ballast may be joined.

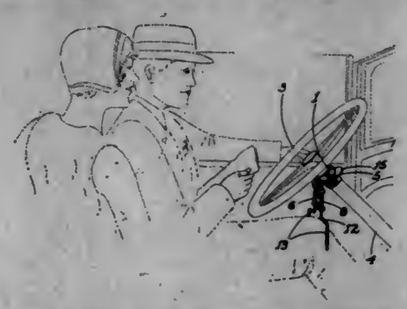
4. A hydrometer comprising a closed glass tube having a stem, a scale mounted therein, and a ballast chamber the lower portion of which is of tapered configuration, a portion, at least, of the inner surface of said tapered lower portion having deposited thereon a thin coating of a highly reflective metallic composition to furnish a surface to which the ballast may be joined.

1,882,322. VEHICLE SIGNAL. ARLAND L. HODGSON, Detroit, Mich. Filed May 29, 1930. Serial No. 457,249. 5 Claims. (Cl. 200—15.)



1. In a device of the class described: a plurality of circuits; a plurality of stationary contacts each connected to one of said circuits; a movable contact adapted for engaging said stationary contacts severally, the engagement of said movable contacts with either of said stationary contacts closing its circuit; a supporting member for said movable contact; a slidable member having a cut-away portion for engaging at said cut away portion, said contact supporting member and adapted upon slidable movement in one direction for moving said contact supporting member to bring said movable contact into engagement with a stationary contact normally non-engaged by said movable contact.

1,882,323. KNEE CONTROL STEERING ATTACHMENT. WEBB JAY, Miami Beach, Fla. Filed Oct. 5, 1931. Serial No. 566,984. 5 Claims. (Cl. 74—81.)



1. A knee control attachment for a motor vehicle steering wheel comprising a clamp adapted to be secured about the hub of the wheel, a unit secured to and depending from the clamp, said unit including spaced elements to receive a knee therebetween, and means to alter the spacing between said elements at will.

1,882,324. SIGNAL DEVICE FOR AUTOMOBILES. HOSAKU KAGEYAMA, Los Angeles, Calif.; Frank Bryson, Public Administrator, administrator of said Hosaku Kageyama, deceased. Original application filed Apr. 3, 1923, Serial No. 629,652. Divided and this application filed Sept. 29, 1927. Serial No. 222,823. 3 Claims. (Cl. 177—327.)



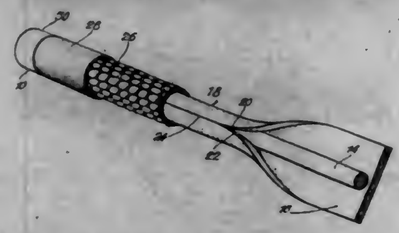
1. A signaling device comprising a casing having a transparent front the area of which consists of indicating halves, an indicating sign in form of a word "STOP" placed on said transparent front extending over both halves, an area surrounding said sign rendered opaque to give a contrast to said letter through which light ray may pass, said opaque area forming in turn a direction indicating sign in form of an arrow-head placed in each half of said front, said opaque area being in turn surrounded by a transparent border portion of said front and adapted to reveal its outline when said front is illuminated and means inside of the casing for illuminating either half or whole of said front to give various indications.

1,882,325. TRAVELING CRANE. DAVID KENDALL and EDGAR HOMER KENDALL, Alliance, Ohio. Filed Dec. 31, 1930. Serial No. 505,782. 14 Claims. (Cl. 105—163.)



1. The combination with a bridge girder for cranes, of end trucks each including track wheels, a gear box adjacent each of said end trucks and operatively connected to a wheel thereof, and means for transmitting power to said gear box, said last mentioned means including a motor adjacent the central portion of said girder, and a bridge line shaft directly secured to the armature of said motor and extending into each gear box.

1,882,326. CHOKE-WIRE CONDUIT. JOSEPH A. KENNEDY, Pawtucket, R. I., assignor to Anaconda Wire & Cable Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1931. Serial No. 582,761. 7 Claims. (Cl. 74—39.)

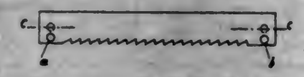


1. A choke-wire assembly comprising a carburetor having an air choke valve carrying an operating arm, a wire connected thereto adapted to be shifted in opposite directions to actuate the choke valve, and a guide for the choke-wire comprising a relatively thick walled paper tube within which the wire is slidably mounted and relatively thin fibrous woven sheath having an oil resistant coating.

1,882,327. METHOD OF MANUFACTURING STRONG BLACK HEART MALLEABLE CAST IRON. TARIO KIKUTA, Tobata, Fukuoka Ken, Japan, assignor to Tobata Imono Kabushiki Kaisha, Tokyo, Japan, a Corporation of Japan. Filed Nov. 27, 1929, Serial No. 410,255, and in Japan Sept. 10, 1929. 2 Claims. (Cl. 148—21.8.)

1. Method of manufacturing strong black heart malleable cast iron consisting in charging an annealing pot with white iron castings and with 4 to 15% by weight of iron oxide, maintaining the same at a temperature between 900° C. and 980° C. for a period of time varying from twenty to fifty hours so as to graphitize the free cementite contained therein, then lowering the temperature to between 730° C. and 650° C. and maintaining that temperature for a period of time varying from ten to fifty hours thus graphitizing pearlitic cementite and effecting decarbonization of the white cast iron.

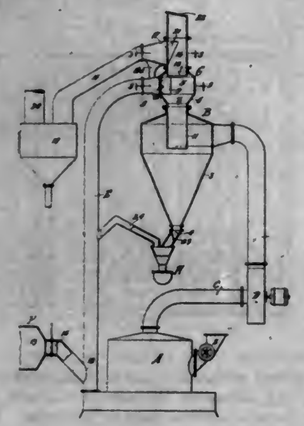
1,882,328. BLADE FOR HACK SAWS. HEINRICH KINKEL, Remscheid-Vieringhausen, Germany. Filed Sept. 4, 1931, Serial No. 561,274, and in Germany Sept. 9, 1930. 2 Claims. (Cl. 143—133.)



1. In a blade for hack saws, apertures for tensioning said blade located at each end of the blade and out of the longitudinal center line thereof, in the one third part of the blade width toward the teeth, so that the teeth receive the maximum tension, the blade width being measured from the back edge of the blade to the footline of the teeth.

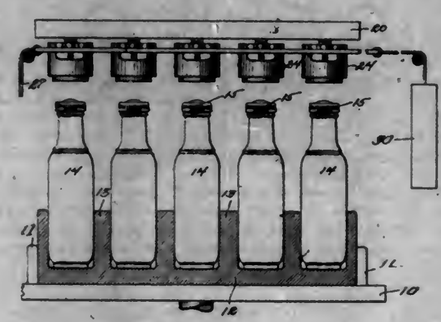
1,882,329. FUEL PULVERIZING SYSTEM. HENRY KREISINGER, Piermont, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1929. Serial No. 334,591. 5 Claims. (Cl. 209—143.)

1. In a separating system, a main separator having a tangential inlet for a mixture of material and gas and an axial outlet for the discharge of unseparated gas and dust; a skimmer having an axial inlet for receiving said discharge from the main separator, a tangential outlet, and an axial outlet; and an adjustable damper controlling the flow through the tangential outlet of the skimmer, said damper being hinged to open with its free edge against



the rotating mixture in the skimmer whereby that portion of the mixture having the greatest concentration of dust will be deflected through said tangential outlet.

1,882,330. CAPPING MACHINE. JOHN H. LEAHY, St. Louis, Mo. Filed Dec. 28, 1925, Serial No. 77,918. Renewed Mar. 5, 1932. 3 Claims. (Cl. 226—88.)

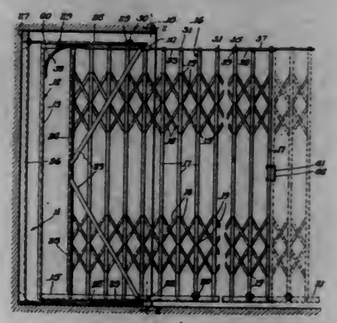


1. In a machine for fastening caps upon containers, a support having rotatively mounted thereon a plurality of grippers each comprising a cupped member having an elastic friction surface, means connecting said plurality of grippers for conjoint rotative movement on said support, and means for presenting a plurality of loosely capped containers respectively to said grippers and holding the caps thereof in substantially unvarying vertical relation thereto and frictional engagement therewith while the grippers are conjointly operated.

1,882,331. FOLDING GATE. MICHAEL MARTINEK, Lyons, Ill., assignor to Western Wire & Iron Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 3, 1931. Serial No. 548,625. 5 Claims. (Cl. 39—86.)

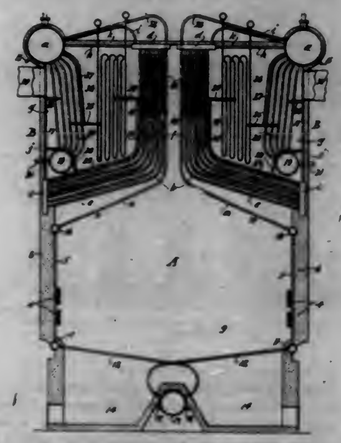
5. A foldable gate comprising a plurality of vertical bars, diagonal lattice bars pivoted to the vertical bars, said vertical bars being provided with horizontal slots at their upper ends, a continuous single flat flexible hori-

zontally positioned steel member arranged in said slots and fixed to one of said bars and acting as a reinforcing member for said gate to prevent side-sway thereof, a



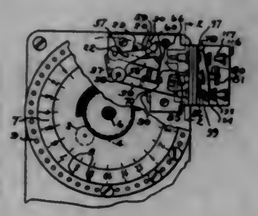
floor track, and rollers running on said track and carrying the gate, and means at one side of the gate for guiding the steel member during folding movement of the gate.

1,882,332. STEAM GENERATING INSTALLATION. JOHN D. MATTIMORE, Brooklyn, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delawsre. Filed Oct. 11, 1929. Serial No. 398,861. 7 Claims. (Cl. 122—235.)



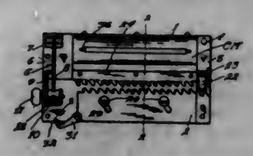
1. A boiler including an upper cross drum, substantially vertical header means located below the level of said drum, substantially horizontal upper header means located to one side of and in the same horizontal plane as said drum, a bank of bent boiler tubes the tubes of which extend substantially horizontally for a portion of their length and upright for the remainder of their length, said tubes being connected at one end into the lower header means and at their other ends into the upper header means, tubes connecting the lower header means with the upper cross drum, substantially horizontal tubes connecting the upper header means with the upper cross drum, and an economizer located within the confines of the aforesaid boiler parts, said economizer including a water drum and water tubes connecting the water drum with the aforesaid cross drum.

1,882,333. MEANS FOR TIMING AND CONTROLLING ELECTRICAL CIRCUITS. JOSEF METTLER, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Limited Joint-Stock Company of Switzerland. Filed Aug. 30, 1927, Serial No. 216,390, and in Switzerland Sept. 8, 1926. 9 Claims. (Cl. 200—38.)



1. In combination in a circuit controlling mechanism, a plurality of circuit terminals, means for selectively actuating said terminals including a device variably positionable to bring it into operative relation with one or another of said terminals, means for variably positioning said device and means for causing it to selectively open or close the selected terminal.

1,882,334. HAIR WAVING APPARATUS. GEORGE W. MILLER, Glen Ellyn, Ill. Filed Aug. 7, 1931. Serial No. 555,721. 15 Claims. (Cl. 132—36.1.)



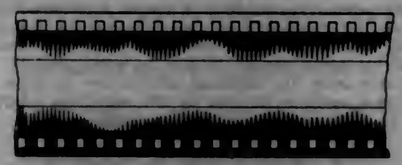
1. A hair waving apparatus of the character described, including a clamp comprising a pair of jaw members pivoted at one end, means for fastening the other ends of said members together, a comb secured to one of said jaws and a movable comb located on the other of said jaws.

1,882,335. METHOD OF SEPARATING HALO-BENZOIC ACIDS. LINDLEY E. MILLS, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 17, 1929. Serial No. 414,829. 12 Claims. (Cl. 260—108.)

1. In a method of separating ortho- and para-chlorobenzoic acids, the step which consists in treating a mixture of such acids, with an ammonia base of the formula, NH_2R, wherein R may represent hydrogen or an alkyl group, in the presence of a copper-containing catalyst, and at a temperature between 75° and 150° C., whereby only the ortho-chloro-benzoic acid substantially reacts with the base, the para-chloro-benzoic acid remaining practically unreacted.

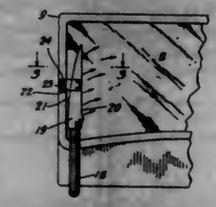
1,882,336. PICK-UP APPARATUS FOR MAGNETIC FILMS. THEODORUS H. NAKKEN, Brooklyn, N. Y., assignor to Nakken Patents Corporation, a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,874. 1 Claim. (Cl. 179—100.2.)

A motion picture film having marginal sprocket perforations comprising centrally positioned photographic images for purposes of picture projection but leaving a narrow margin between one row of perforations and said images free from picture projection image; a multiple layer metallic sound record having a sound modulated portion localized within said margin and an integral continuity band extending between and outside of said perforations, all of



which sound record consists of an under layer of non-magnetic conducting material and a superposed deposit of magnetic metal.

1,882,337. GLASS HEATER. JOHN M. NEILL, Newburgh, N. Y. Filed Mar. 11, 1930. Serial No. 434,860. 3 Claims. (Cl. 299—54.)



1. A nozzle unit for discharging heated air upon the inner surface of the window panel of a motor vehicle windshield, said unit comprising an elongated nozzle having an air admission opening at one end and a discharge opening arranged longitudinally of one side thereof, the other side of said nozzle being curved longitudinally in the direction of the discharge to direct the current of air to said discharge, and means for detachably supporting said nozzle at one side of the windshield frame with the opening of said nozzle directed toward the window panel.

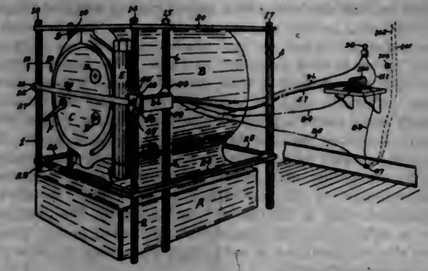
1,882,338. AIRPLANE. RALPH A. REED, Dearborn, and HAROLD A. HICKS, Detroit, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Jan. 8, 1931. Serial No. 507,314. 8 Claims. (Cl. 244—31.)



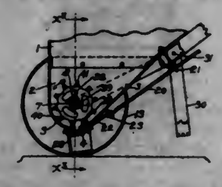
1. An airplane wing having an opening in the covering forming the undersurface thereof, a door hinged to the wing at one edge of said opening to form a removable closure therefor, and an article-carrying container secured to the inside of said door, the vertical walls of said container being of such height that the container substantially fills the space between the upper and lower surfaces of the wing.

1,882,339. AUXILIARY TIME LOCK. WILLIAM F. RICHARDS, Brownstown, Ind. Filed Nov. 2, 1931. Serial No. 572,707. 6 Claims. (Cl. 109—3.)

1. An auxiliary time-lock comprising a case, a head integral with the front end of the case with a slot formed therein, a train of speed reduction gears located in said case, a plunger located in the case and adapted to enter said slot in the head, a latch adapted to enter said slot in the head and to be secured therein by said plunger, means for operating said train of gears electrically whereby they will withdraw the plunger from said slot in the head, means for retaining the plunger in withdrawn position, and means for manually releasing the plunger and for permitting it to move into engaging position with relation to said latch.

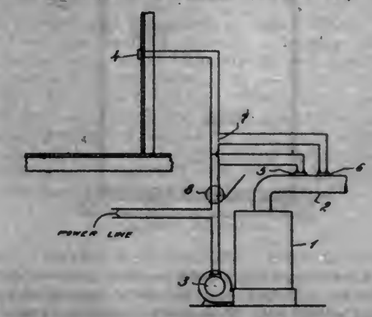


1,882,340. ATHLETIC FIELD LINE MARKER. HERL J. RYAN, Los Angeles, Calif. Filed Oct. 12, 1931. Serial No. 568,254. 4 Claims. (Cl. 275—2.)



1. A device of the character set forth comprising a hopper and a mixing chamber having a vertical front; a feed rotor revolvably mounted in said chamber and provided with a plurality of arms equally spaced having V-shaped grooves on their outer sides that extend the full length of the arms and semi-circular spaces between said arms; a revolvable shaft carried by the chamber and upon which said feed rotor is mounted; wheels mounted on said shaft; a handle fixed to the chamber and provided at its upper end with a slot in which rocks an operating lever on a pivot; retaining strips; guide strips; said chamber having a slot-like opening in its bottom extending the full width of the mixing chamber and a shut-off plate held up against the bottom by said retaining strips and lever means to operate said shut-off plate between the guide strips to open or close said opening to any degree desired.

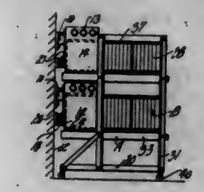
1,882,341. HEATING FURNACE CONTROL. RUSSELL W. STEM, Bethlehem, Pa., assignor to Penn Electric Switch Co., Des Moines, Iowa. Filed Sept. 6, 1930. Serial No. 480,045. 5 Claims. (Cl. 236—9.)



1. In combination, a heating furnace comprising a firebox in which fuel is burned, heat transferring surfaces over which the hot products of combustion from the fire-

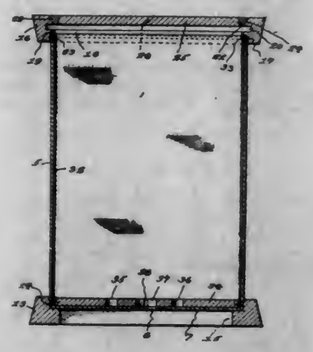
box pass and a stack flue through which the hot gases from the fire-box escape after passing over the heat transferring surfaces, and motor driven means for effecting combustion of fuel in said fire-box, and a power circuit adapted to supply operating power to said motor driven means, and a thermostat actuated by the temperature in an enclosed space to be heated adapted to close said power circuit when the temperature in said space falls below a predetermined minimum and to open it when the temperature therein rises above a predetermined maximum, and a thermostat actuated by the temperature in said stack flue adapted to close said power circuit when the temperature in said stack flue falls below a predetermined minimum independently of the operation of said first mentioned thermostat, and a thermostat actuated by the temperature in said stack flue adapted to open said power circuit when the temperature in said stack flue rises above a predetermined maximum.

1,882,342. APPARATUS FOR HEATING BROODERS. OSCAR W. SWANSON, Ottumwa, Iowa. Filed Aug. 25, 1930. Serial No. 477,654. 6 Claims. (Cl. 119—34.)



1. In a structure of the class described, the combination of a fixed heating unit, a portable brooder case, said unit and cage having coacting parts for cooperating to form a brooder compartment at one end of the cage, when the cage and unit are moved together, said heating unit having spaced end members for forming side members, a flexible member for forming the front wall of such a brooder compartment and having a hinged member to form a rear wall of the brooder compartment.

1,882,343. BALING RECEPTACLE. WALTER A. TROTH, Brooklyn, N. Y. Filed Sept. 8, 1930. Serial No. 480,589. 2 Claims. (Cl. 100—19.)

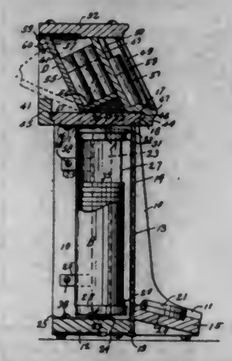


1. A baler comprising a body portion, a closure member supported by said body portion and a flexible receptacle positioned within said body portion, said receptacle having a rigid hoop-like upper portion adapted to seat between the upper edges of said body portion and the lower face of said closure member.

1,882,344. PRODUCTION OF PORCELAIN ENAMELS. KARL TURK, Baltimore, Md., assignor to The Porcelain Enamel and Manufacturing Company of Baltimore, Baltimore, Md., a Corporation of Maryland. Filed Apr. 3, 1931. Serial No. 527,607. 9 Claims. (Cl. 49—77.)

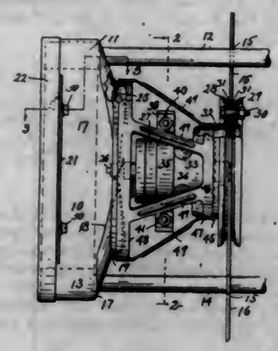
1. In the production of porcelain enamels, the steps of allowing a completely smeltered enamel having an opacifying agent present to cool to a temperature substantially below the smelting temperature to allow the opacifying agent to develop its full opacifying qualities, and thereafter solidifying the so-called enamel.

1,882,345. DISPLAY CABINET. FRANKLIN S. UPHAM, Des Moines, Iowa. Filed Aug. 3, 1931. Serial No. 554,695. 4 Claims. (Cl. 312—125.)



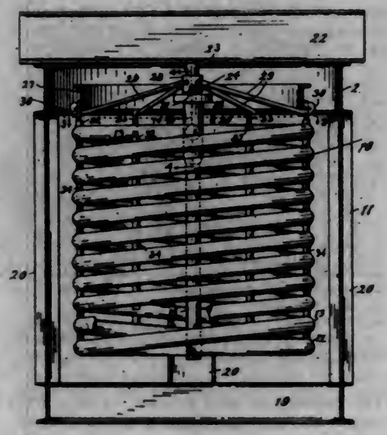
3. In a structure of the class described, the combination of a cabinet with a supporting frame therein, a plurality of tubular containers rotatably supported in said frame, said containers being provided with vertical slots.

1,882,346. AUTOMOBILE HEATER. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 478,392. 11 Claims. (Cl. 257—137.)



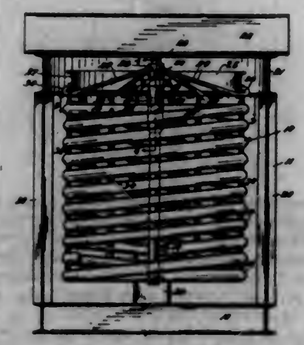
9. In an automobile heater, in combination, a radiator core, inlet and outlet pipes associated with said core, a casing adapted to surround and support said core, a shell associated with said casing and adapted to secure said core in said casing, an annular flange on said casing, an attaching member adapted to be bolted to a dash, an annular projection on said attaching member, a spider mounted on said annular projection and secured to said annular flange, and means carried by said attaching member adapted to support a motor.

1,882,347. APPARATUS FOR MAKING GLASS-COATED PIPE COILS. GUSTAV VON DEN STEINEN, Cleveland Heights, Ohio, assignor to The Glascote Company, Euclid, Ohio, a Corporation of Ohio. Filed Dec. 14, 1928. Serial No. 326,027. 9 Claims. (Cl. 91—60.)



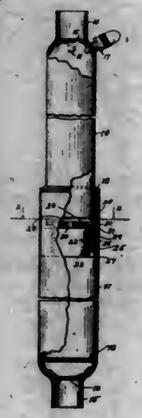
1. In apparatus for glass-coating a pipe coil of the type having a plurality of convolutions, the combination of, a frame, and means for supporting the coil in said frame while it is being treated, said means comprising a substantially rigid carrier having supporting connection with said coil at a plurality of points in alignment with the convolutions of the coil, and means for supporting the carrier substantially centrally thereof on the frame.

1,882,348. METHOD OF MAKING GLASS-COATED PIPE COILS. GUSTAV VON DEN STEINEN, Cleveland Heights, Ohio, assignor to The Glascote Company, Euclid, Ohio, a Corporation of Ohio. Original application filed Dec. 14, 1928, Serial No. 326,027. Divided and this application filed Nov. 10, 1930. Serial No. 494,511. 6 Claims. (Cl. 91—73.)



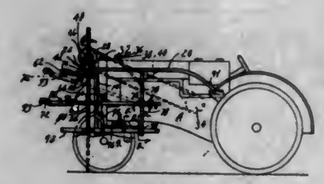
1. The method of making glass-coated pipe coils which comprises suspending a coil within a supporting frame so as to retain its normal shape, applying coating material to the external surface of the said coil, and then heating said coil and supporting frame to the temperature required to fuse said material.

1,882,349. AIRPLANE STRUT. JOHN F. WALLACE, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 10, 1930. Serial No. 451,249. 6 Claims. (Cl. 267—64.)



1. In a fluid strut, a pair of telescoping cylinders, a piston head structure threaded upon the inner end of the inner cylinder and protruding therebeyond, said structure having an inturned portion spaced from the end of the inner cylinder, an inwardly facing valve seat on said inturned portion, and a valve piece adapted to co-operate with said seat, the inner end of the inner cylinder constituting means for limiting the opening movement of the valve piece.

1,882,350. POWER POSTHOLE AUGER. ARNOLD F. WEISS, Humboldt, Iowa. Filed Apr. 20, 1931. Serial No. 531,272. 7 Claims. (Cl. 255—19.)

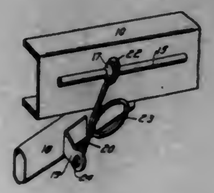


1. In a power post hole auger, an auger shaft, a sleeve slidable and non-rotatable thereon, a bearing for said sleeve, auger drive means rotatable on said sleeve, said means and said sleeve having lugs to coact with each other when the sleeve is slid to a predetermined position, a clutch lever for sliding said sleeve, a feed lever for imparting longitudinal movement to said auger shaft and means on said feed lever to engage said clutch lever and move it to disengaged position when the feed lever assumes a predetermined position.

1,882,351. BRAKE ROD SUPPORT. CHARLES E. WELLMAN, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 30, 1931. Serial No. 566,056. 3 Claims. (Cl. 188—205.)

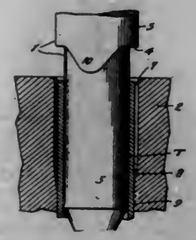
1. In a device of the character described, a resilient wire having one end bent back upon itself to form an eye,

said eye being suitable to coact with an upset ring formed on a brake rod, said wire having a second eye formed on the opposite end thereof whereby it may be secured in



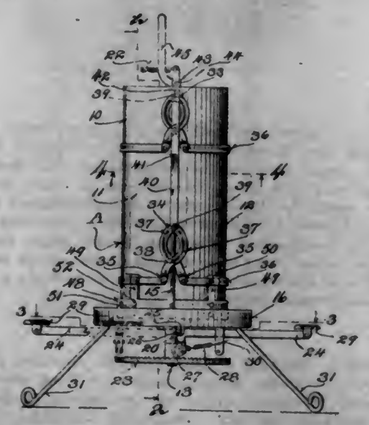
position, and the center portion of said wire being bent through a relatively large convolution for the purpose described.

1,882,352. PROCESS OF FORMING HOLLOW BRACING UNITS. HARRY WOODHEAD and CLINTON W. STOVER, Cleveland, Ohio. Filed July 28, 1926. Serial No. 125,396. 2 Claims. (Cl. 29—150.)



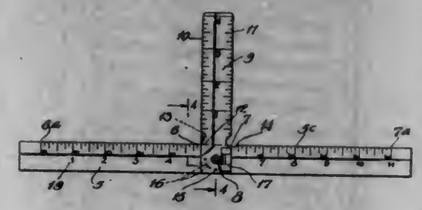
1. The process of forming a hollow flanged unit from tubing comprising heating the end of a section of such tubing, supporting the tubing, upsetting the heated end to thicken and compress it, simultaneously depressing a portion of the heated stock in an axial direction beyond the adjacent portions to form flange stock, and thereafter forming laterally extending flanges from such stock.

1,882,353. CHICKEN FEEDER. GEORGE F. ALWIN, Ripon, Wis. Filed Mar. 23, 1932. Serial No. 600,638. 8 Claims. (Cl. 119—55.)



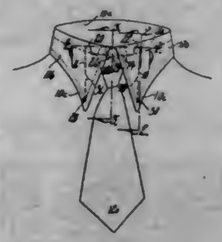
1. A chicken feeding device comprising a hopper, a feed pan arranged below the hopper for receiving the feed therefrom, a feed screw rotatably mounted within the hopper, pivoted perches carried by the pan, and means operatively connecting the pivoted perches with the feed screw, whereby upon movement of the perches by the weight of the chickens the feed screw will be operated.

1,882,354. COMBINATION SQUARE AND RULER. DOMENICO CELENZA, Brooklyn, N. Y. Filed Sept. 7, 1929. Serial No. 390,894. 5 Claims. (Cl. 33—75.)



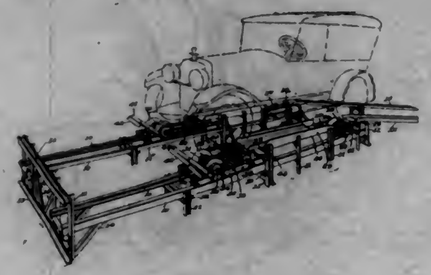
1. The combination with a ruler having a beveled side edge upon which scale markings are arranged, of a member, one end of which is pivoted centrally of said ruler to permit its movement from a position lying within the limits of the longitudinal edges of the ruler into angular positions with reference thereto, said member comprising a relatively thin strip, one side edge of which is angularly disposed to lie snugly upon the beveled edge of the ruler when said member is arranged in alinement therewith.

1,882,355. SOFT-COLLAR CLIP. JOHN H. MCCORMICK, Creston, Iowa. Filed Nov. 17. 1930. Serial No. 496,181. 2 Claims. (Cl. 2—132.)



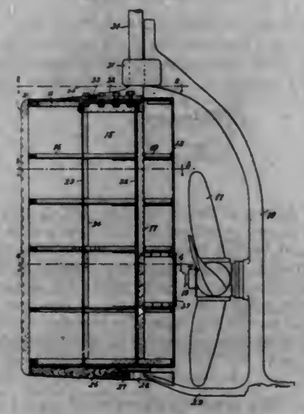
1. A collar clip adapted for use with a folded collar having spaced points, comprising a length of wire bent to substantially inverted U-shape to produce a cross bar and a pair of spaced depending arms, each arm being rebent upwardly at its lower end and then bent forwardly and sharpened to form a prong, each prong being adapted to penetrate the fabric at the rear side of one of the collar points when the cross bar is arranged transversely between the folds at the front of the collar, for holding said points in place, the rebent portions at the lower ends of the arms serving as stops to limit the penetration of said prongs whereby the clip may be placed under tension, said cross bar being formed at its center with a concaved upwardly opening seat adapted to engage a securing means at the front of the collar, for preventing lateral movement of the clip.

1,882,356. BRAKE TESTING DEVICE. CHARLES F. COWDREY, Fitchburg, Mass., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., Fitchburg, Mass., a Corporation of Delaware. Filed Feb. 8, 1926. Serial No. 86,742. 30 Claims. (Cl. 265—25.)



30. In a brake testing machine, the combination of relatively movable carriage means, rotating rollers on each carriage means for rotating a motor vehicle wheel frictionally contacting therewith, and means for individually measuring resistance offered by each wheel to rotation.

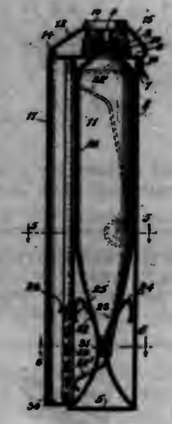
1,882,357. RUDDER. ALBERT W. CROSS, Lakewood, Ohio, assignor to The American Ship Building Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Dec. 27, 1930. Serial No. 505,119. 4 Claims. (Cl. 114—162.)



1. A balanced rudder comprising a water-tight hollow structure of substantially stream-line shape having a tail-shaft clearance opening through the leading wall thereof, and removable means normally forming a water tight closure for said opening.

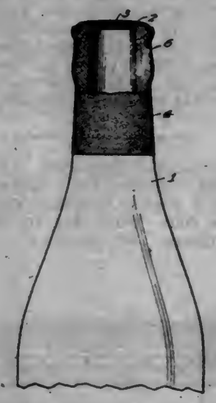
1,882,358. PASTE DISPENSER. HERBERT GLASER, New York, N. Y., assignor of one-fourth to Harry Radzinsky, New York, N. Y. Filed Apr. 4, 1931. Serial No. 527,677. 7 Claims. (Cl. 221—60.)

1. A device of the class described comprising a tube container, a movable member forming a part of said container and disposed longitudinally of a tube within the container, tube-compressing means within the container and adapted to maintain yielding contact with the flattened lower end of a collapsible tube in said container, said tube-compressing means being caused to compress the tube by manual inwardly-exerted pressure on the movable member,



and means for causing the tube-compressing means to be elevated as the contents of the tube are emptied therefrom.

1,882,359. METAL FOIL AND METHOD OF ATTACHING SAME. SAMUEL GREENHOUSE, Brooklyn, N. Y. Filed May 8, 1930. Serial No. 450,697. 1 Claim. (Cl. 215—83.)

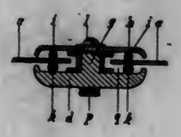


In combination, a bottle, a metal foil coated on one side with a wax substance which will melt in hot water, a water-soluble glue interposed between said substance and said bottle for securing said foil to the bottle.

1,882,360. TOP FOR VEHICLES. LUDWIG ROBERT HILGENBERG, Leipzig-Marienhohe, Germany. Filed Oct. 10, 1930, Serial No. 487,741, and in Germany Oct. 12, 1929. 3 Claims. (Cl. 296—137.)

1. A top for vehicles comprising a plurality of transparent strips extending in the same direction over the

vehicle body, supports disposed between every two of the said transparent strips, the said supports being firmly secured to the vehicle body, and elastic holding members



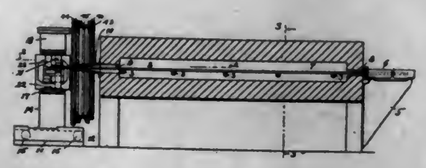
arranged on the said supports for yieldingly holding between them the longitudinal edges of the said transparent strips.

1,882,361. DEVICE FOR AUTOMATICALLY MAINTAINING ELECTROLYTE LEVEL IN A BATTERY. HOWARD B. HERDEG, Buffalo, N. Y. Filed Nov. 17, 1930. Serial No. 496,213. 3 Claims. (Cl. 137—68.)



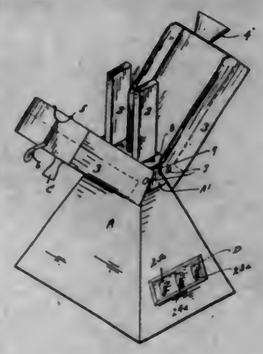
1. In a device for automatically supplying liquid to the cell of a battery to maintain the electrolyte therein at a predetermined height, the combination of a receptacle for containing a supply of the liquid and a feed tube in communication with the receptacle and extending into the cell of the battery to a point substantially at the level at which the electrolyte is to be maintained, said tube being formed to supply liquid to the cell only after the level of the electrolyte has receded below the end of said tube and then only during vibratory movements of said battery.

1,882,362. AUTOMATIC FORGING MACHINE. HOWARD F. JOHNSON, Cleveland, Ohio, assignor to The Champion Machine & Forging Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 10, 1928. Serial No. 260,630. 11 Claims. (Cl. 78—60.)



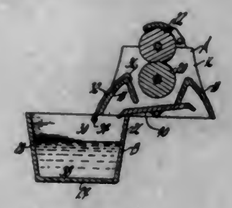
1. An automatic forging machine adapted to be arranged adjacent to a furnace to receive the stock directly therefrom comprising a support adapted to move toward and away from the furnace, a head carried by said support and adapted to have vertical movement relative thereto, a plurality of sets of opposed dies operably carried by said head, a cam wheel, and means connecting said support, said head, and each of said sets of opposed dies with said cam wheel, whereby they may be moved or operated in predetermined sequence.

1,882,363. CONFECTION BAKING DEVICE. WALTER SCOTT KEYTING, Salt Lake City, Utah. Filed May 4, 1932. Serial No. 609,208. 2 Claims. (Cl. 107—66.)



1. In a device of the class described the combination of complementary molds pivotally secured to a common base; heat elements in said molds; a centrally disposed sharpened end heat element within the interior space between said molds; and spaced apart heat elements on each side of said central heat element.

1,882,364. STARCH PAN FOR WRINGERS. WARREN C. LAIRD, Algona, Iowa. Filed Apr. 6, 1931. Serial No. 527,979. 3 Claims. (Cl. 68—28.)



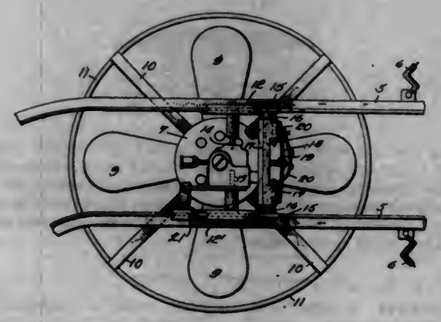
3. In a device of the class described, a pan and a pair of hanger arms constituting the sole means of support therefor and having lower ends pivoted thereto closer to one side than to the other thereof said hanger arms having upper ends provided with hooks for attachment with the frame of a wringer, and being of such length whereby when the lesser portion thereof is engaged with said wringer the pan is rigidly supported in level position.

1,882,365. HEATING CARTRIDGE. BEN L. LUBELSKY, Pittsburgh, Pa., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed May 16, 1929. Serial No. 363,545. 2 Claims. (Cl. 102—7.)



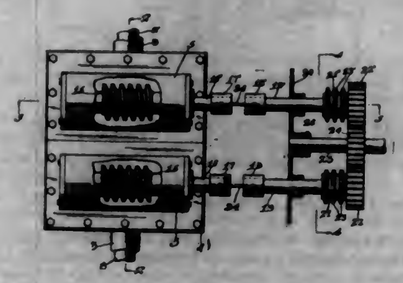
1. A heater for carbon dioxide blasting cartridges comprising a tubular paper container, closures for the ends of said container, an electric igniting device within said container and having leads extending to the exterior thereof, and a chemical mixture within said container to be ignited by said igniting device and rapidly produce high heat, said mixture comprising potassium perchlorate, approximately 80% aluminum approximately 14% and carbon approximately 6%.

1,882,366. TRAVELING FAN. CULLEN L. LYTTON, East Gastonia, N. C., assignor to Parks-Cramer Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Nov. 17, 1930. Serial No. 496,301. 2 Claims. (Cl. 230—258.)



1. An apparatus of the class set forth, with a pair of conductor rails, a combined fan and motor mounted on said rails through the medium of a pair of wheels one of which is driven from the motor and the other of which rotates freely, a pair of contact wheels having contact with said wheels and insulated from the motor frame, and lead-in wires for the motor connected to said contact wheels.

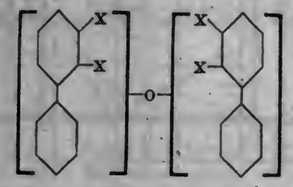
1,882,367. STEERING APPARATUS. JASON H. MACDONALD, Milwaukee, Wis., assignor to C. H. & E. Manufacturing Company, Inc., Milwaukee, Wis. Filed Feb. 14, 1930. Serial No. 428,423. 5 Claims. (Cl. 180—17.)



1. A device of the class described including aligned traction axles, spaced shafts traversing the traction axles, means forming operative connection between the spaced shafts and the traction axles, sleeves on the inner ends of said spaced shafts, pinions on said sleeves, a power shaft extending between the first shafts, a pinion on the power shaft cooperating with the pinions on the first shafts, annular ribs on said sleeves and manually controlled means cooperating with said ribs whereby to move the pinions on the spaced shafts longitudinally thereof for simultaneously engaging said pinions with the pinion on the power shaft or independently engaging either one of the first pinions with the pinion on the power shaft.

1,882,368. DI-DIPHENYL OXIDE. ROBERT F. MARSCHNER and WESLEY C. STOESSER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 22, 1930. Serial No. 438,239. 4 Claims. (Cl. 260—150.)

3. As a new compound, a di-diphenyl oxide having the general formula



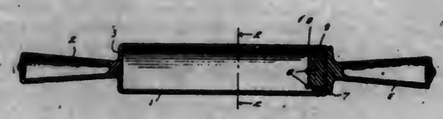
wherein one X, in each diphenyl radical, represents the oxygen linkage and the other X represents a hydrogen, such compound being insoluble in water, soluble in an organic solvent of the nature of chlorobenzene or acetic acid and having a boiling point higher than approximately 400° C. at atmospheric pressure.

1,882,369. TONGUE BUCKLE AND PROCESS FOR MAKING SAME. THEODORE RUSSELL, Naugatuck, Conn. Filed June 10, 1930. Serial No. 460,166. 9 Claims. (Cl. 29—3.)



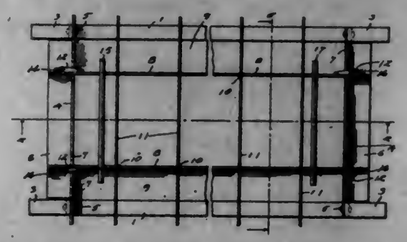
5. The process of making a hinged-tongue buckle from a single metal blank, which comprises stamping end pieces out of said blank leaving a pair of transverse cross-bar sections and a longitudinal tongue integral therewith, severing said tongue from said cross-bar sections, forcing the inner extremities of said cross-bar sections into abutment, and looping one end of said tongue around the abutted ends of said cross-bar sections.

1,882,370. FACE MASSAGING INSTRUMENT. NETTIE N. SCHROEDER, Los Angeles, Calif. Filed Nov. 8, 1930. Serial No. 494,370. 4 Claims. (Cl. 128—57.)



3. A massaging instrument comprising a cylindrical roller of hollow construction closed at one end, the roller being provided at its other end with an opening having a diameter equal to the inner diameter of the roller to facilitate the placing of a cooling medium within the roller, a handle extending longitudinally from the closed end of the roller, a stopper removably positioned in the open end of the roller, and a handle extending longitudinally and axially from the stopper, the cylindrical wall of the roller, the closed end and the stopper being imperforate to prevent the escape of the cooling medium from the roller.

1,882,371. MOLDING APPARATUS. ISAAC STEES, Harrisburg, Pa. Filed Oct. 22, 1929. Serial No. 401,452. 4 Claims. (Cl. 25—121.)



1. A molding apparatus comprising a pair of spaced side members, end plates carried by said side members and maintaining the same in spaced relation, said end plates extending above the side members, said end plates having a series of open slots spaced apart lengthwise thereof, side plates having their end portions engageable within the slots of the end plates, said side plates having longitudinally spaced open slots, the slots in one of said side plates being in substantially transverse alignment with the slots in the second side plate, plates engageable within the slots of the side plates and bridging the space therebetween, a collecting pan, and means for supporting said pan within the spaces between the end plates and the adjacent applied third plate.

1,882,372. VALVE. ARTHUR CHARLES STEVENS, Shinfield, near Reading, England. Filed Sept. 13, 1928, Serial No. 306,101, and in Great Britain Oct. 18, 1927. 1 Claim. (Cl. 251—6.)



A lock valve comprising a valve body having a chamber therein, a cover plate seated on the valve body above said chamber and having an opening therein communicating with the chamber, a lock cylinder having a plurality of spring pressed tumblers and having its inner end extending through said plate and into said chamber and also having a recess therein, a plug mounted in said valve body and having a projection adapted to be received in the recess in the lock cylinder, the inner end of said lock cylinder having a smaller diameter than the interior diameter of the chamber, a spring surrounding the inner end of the lock cylinder and adapted to bear against the upper portion of the plug and against the lower face of the cover plate.

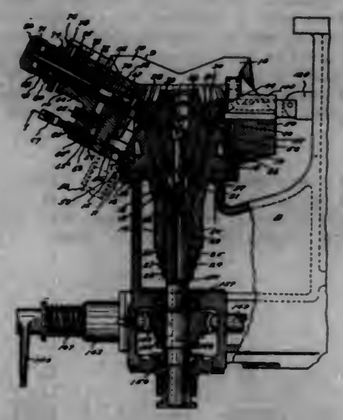
1,882,373. TRACTOR WHEEL ATTACHMENT. MILLER D. STORM, Bouton, Iowa. Filed Apr. 28, 1931. Serial No. 533,554. 2 Claims. (Cl. 301—39.)

1. An attachment for a tractor wheel having circumferentially spaced peripheral cleats, comprising a plurality of articulated sections of arcuate form adapted to be arranged about the tractor wheel and being provided with radially inwardly projecting side members, one of the sections being provided on the inner side thereof with a plate underlying the adjacent portion of the contiguous section, bearing members attached to the inner surface of said plate and being provided with alined openings extending transversely of the plate, a shaft extending through said alined openings and having the intermediate portion thereof offset to define a crank, a plurality of rods connected to said crank, a second plate secured to the inner side of the contiguous section and having openings slidably receiving said rods, spring means on said rods to tension the same, said second named plate having an offset terminal portion cooperating with the contiguous section in the formation of a recess slidably receiv-



ing the said underlying portion of said first named plate, said first and second named plates being arranged between said inwardly projecting side members and adapted to be disposed between a pair of the cleats on the tractor wheel for preventing shifting of the attachment circumferentially on the tractor wheel.

1,882,374. GAUGING MACHINE. SILAS A. STRICKLAND, Detroit, Mich., assignor to Bower Roller Bearing Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 15, 1931. Serial No. 530,884. 17 Claims. (Cl. 209—90.)

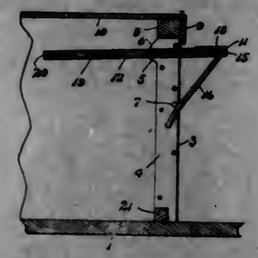


13. In a roller gauging machine, a gauge support comprising a plurality of longitudinal extending arms, radial bores in each of said arms, gauging means positioned in each of said bores, certain of said gauging means comprising a threaded adjusting member fitted in the outer end of said bore and provided with a central opening, a gauging element on said bore provided with an extension of reduced diameter adapted to extend through the opening in said threaded member, means on said gauging element extension for locking the same to said adjusting member, and an adjustable positioning means for said certain of said gauging elements comprising a pin in said radial arm perpendicular to said gauging element and seated in a groove formed therein, and screw means carried by said arm for adjusting the position of said pin.

1,882,375. DISAPPEARING DOOR STRUCTURE. ANTHONY VANDERVELD, Grand Rapids, Mich., assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Mar. 24, 1930. Serial No. 438,269. 5 Claims. (Cl. 312—138.)

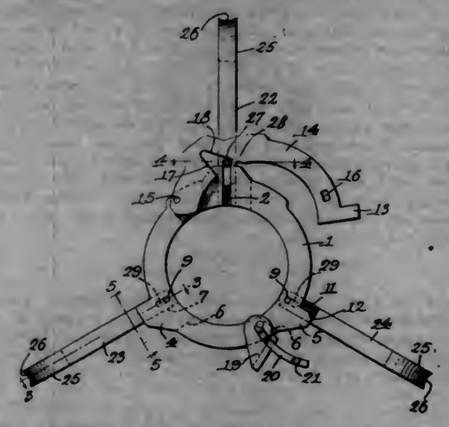
3. In combination with a show case having an open front, a post at each end of said open front, a door to close the front of the case and extending between said

posts, arms, one at each end of the door, pivotally connected at one end to the adjacent posts and at their other ends to the door near its lower edge, and stop means on



the posts in the path of movement of said arms to limit the opening movement of the door, said stop means abutting the door when the door is in its closed position.

1,882,376. ANTISLIPPING ATTACHMENT FOR WHEELS. FRED C. WEBER, East Aurora, N. Y. Filed Aug. 17, 1931. Serial No. 557,711. 5 Claims. (Cl. 152—14.)



1. A device of the class described including a central member, radially disposed hooped tread-engaging arms separately slidable radially of and detachably connected to said member, and cooperating means on one of the arms and the member for drawing said arm inwardly relative to the member and tighten all of the arms upon an engaged tread.

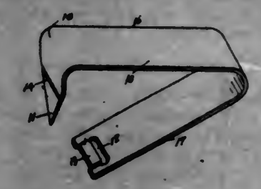
1,882,377. METHOD AND MEANS FOR REGULATING THE GROWTH OF PLANTS. THEODORE WHITTELSEY, Ringoes, N. J. Filed Sept. 28, 1928. Serial No. 309,125. 31 Claims. (Cl. 47—9.)

1. The method of preparing a mulch, which comprises applying to the ground fibrous materials and waterproofing materials and thereby forming a mulch from such materials in situ on the ground, the fibrous materials and waterproofing materials being admixed with each other before being applied.

21. A mulch comprising fibrous materials and rubber.

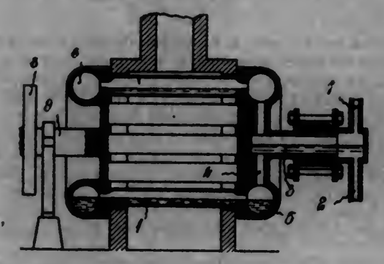
1,882,378. ANIMAL TAG. WARD ASHTON, Ottawa, Ontario, Canada, assignor to John Ormond Ker, Ottawa, Canada. Filed June 4, 1930. Serial No. 459,237. 3 Claims. (Cl. 40—3.)

1. An identification tag for the ears of animals, the wings of birds and such like, comprising a pliable metallic strip having an opening associated with one end and an indentation in said end extending inwardly from the free edge thereof and terminating at said opening, said in-



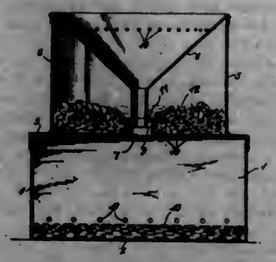
dentation being of such depth and width as to receive the opposite end of the tag and permit the same to be flush with the outer surface of the folded tag.

1,882,379. ROTATING BOILER. JOHAN VIKTOR BLOMQUIST, Stockholm, Sweden, assignor to Aktiebolaget Atmos, Stockholm, Sweden, a Corporation of Sweden. Filed Feb. 6, 1928, Serial No. 252,332, and in Sweden Feb. 16, 1927. 5 Claims. (Cl. 122—11.)



1. A slowly rotating rotary steam generator comprising a feed water chamber, a steam extracting chamber, a plurality of steam generating tubes positioned in substantially equally distant spaced relation around a common axis of rotation, means for imparting external heat to said tubes, pipes for introducing feed water from said feed water chamber into said tubes and another series of pipes connected with said tubes for withdrawing the generated steam therefrom and leading it to the steam extracting chamber.

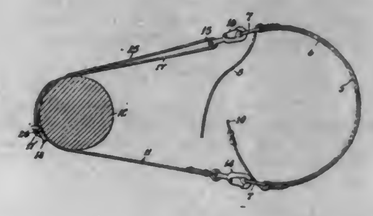
1,882,380. BEETLE TRAP. FREDRICK A. BRAUN, Jenkintown, Pa., assignor to Frank Sharp, Glenside, Pa. Filed Sept. 4, 1928, Serial No. 303,756. Renewed May 11, 1932. 2 Claims. (Cl. 43—107.)



1. An apparatus of the kind described comprising a receptacle consisting of a top, a bottom and an enclosing wall, said top having an aperture therein, a compartment for retaining bait mounted above said top and surrounding said aperture, and a hopper supported on said com-

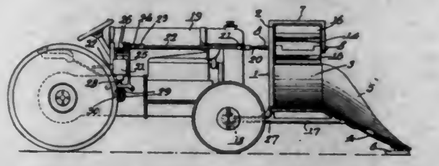
partment and leading through said compartment and said aperture into said receptacle, perforations being provided in the wall of said receptacle, in the top of said receptacle within said compartment, and in the hopper, whereby a draft will pass through said receptacle, compartment and hopper.

1,882,381. SAFETY BELT. FRANK RUTLEDGE DAVIS, Scarsdale, N. Y., assignor to Davis Emergency Equipment Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 2, 1931. Serial No. 541,724. 2 Claims. (Cl. 227—8.)



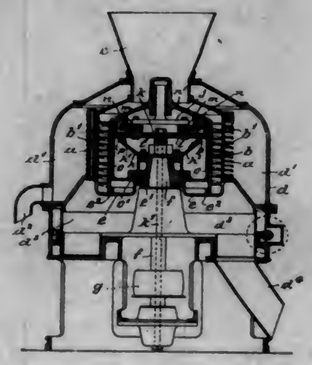
1. In a safety belt, a rectangularly shaped member, a cross-bar slidingly connected to said member, and a strap having an end portion secured permanently around said cross-bar and extending in a loop and then under one side of said member and over said strap-surrounded cross-bar and under the other side of said member, whereby the effective length of said strap may be adjusted and whereby such strap may be maintained in a given condition of adjustment by the jamming force on the strap at the point where it passes between the sliding strap-covered cross-bar and the first mentioned side of said member.

1,882,382. SNOWPLOW. GEORGE L. GERLACH, Harrison, Nebr. Filed July 6, 1931. Serial No. 549,006. 2 Claims. (Cl. 37—45.)



1. In a snow plow, the combination with a vehicle having a front axle, and ground wheels journaled on said axle, of a bracket and means for mounting the bracket on said axle for vertical swinging movement in a direction parallel to the line of advance of the vehicle, a substantially vertical back plate disposed transversely of the vehicle and carried by the bracket, a V-shaped shelf projecting forwardly from the back plate and mounted on the bracket, a downwardly and forwardly inclined scoop at the forward edge of the shelf and mounted on the bracket, a ground-engaging shoe at the forward end of the scoop and supporting the scoop for vertical swinging movement on the said axle, sprocket wheels supported for rotation on the back plate, two of the sprocket wheels being located adjacent to the outer ends of the shelf and symmetrically with respect to a vertical plane passing through the lowermost portion of the shelf, a third of the sprocket wheels being located directly above said lowermost portion of the shelf, a belt conveyor engaged around the sprocket wheels and having elements movable along the shelf, to remove snow therefrom, and mechanism for operating one of the sprocket wheels.

1,882,383. CONTINUOUS DISCHARGE CENTRIFUGAL MACHINE. WILLIAM HALLITT, Huddersfield, England. Filed Aug. 10, 1931, Serial No. 556,248, and in Great Britain Aug. 11, 1930. 1 Claim. (Cl. 210—69.)



A continuous-discharge centrifugal machine comprising in combination an outer perforated rotary drum, an inner rotary drum having an external helix and disposed within said outer drum, an annular member carried by said outer drum and revolvable within the inner drum, an internal spur gear on said annular member meshing with spur pinions carried by spindles depending from a member journalled in a part fast with the inner drum, said spur pinions also meshing with a central spur pinion fast on a fixed central spindle, and said spur pinions having rotatable therewith other spur pinions which mesh with an internal spur gear carried by the part fast with the inner drum.

1,882,384. MANIFOLDING SALES BOOK. LOUIS HUFFMAN, Toronto, Ontario, Canada, assignor to Toronto Type Foundry Company, Limited, Toronto, Canada. Filed Nov. 2, 1931. Serial No. 572,517. 11 Claims. (Cl. 282—22.)

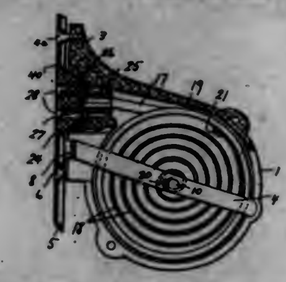


1. A sales book comprising a cover; a plurality of manifolding units each comprising a record sheet of translucent paper provided with a stub bound to the cover at one end, a record sheet adhesively secured at one end to the outer end of the said translucent sheet, and an original record sheet connected to the other end of the said second record sheet, the three sheets normally lying in superimposed relationship; and a pair of transfer sheets bound to the other end of the cover and carbonized on their adjacent faces.

1,882,385. ELECTRICAL APPLIANCE. ROBERT C. JOHNSON, Seattle, Wash. Filed Aug. 26, 1930. Serial No. 477,915. 2 Claims. (Cl. 173—367.)

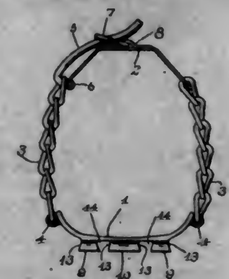
2. An electrical wall outlet including in combination an apertured outlet plate, a cylindrical casing secured thereto, and provided in its periphery with an aperture registering with the aperture of said outlet plate, said outlet plate extending tangential to said casing, an electrical plug received in the alined apertures, a reel rotatably mounted

in the casing, contact bars on opposite sides of the reel and projecting at one end outwardly through the periphery of the casing, contacts on opposite sides of the reel,



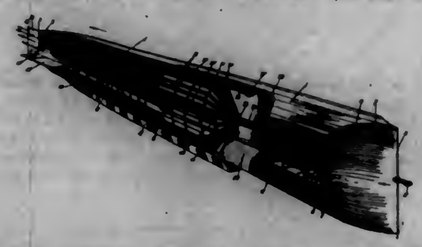
and an electrical cord windable on the reel and electrically connected at one end with said plug and at the other end with said contacts.

1,882,386. TREAD ATTACHMENT FOR VEHICLE TIRES. JOHN KOZMA, Rochester, N. Y. Filed June 8, 1932. Serial No. 616,056. 1 Claim. (Cl. 152—14.)



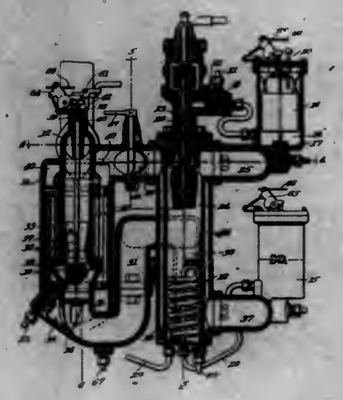
In a tread attachment for vehicle tires, the combination with a rim attaching means, of an arcuate tread plate adapted to extend across the tire tread and to hug the sides thereof being secured to the rim attaching means at its ends, the intermediate portion of said plate being occupied by a group of projecting teeth in longitudinal and transverse rows, the opposite sides of which teeth that are intersected by the plane of rotation of the wheel being respectively undercut and backed off and the other sides being undercut for the purposes set forth.

1,882,387. FLYING CRAFT. JESSE E. LESH, North Canton, and JOSEPH W. HOHL, Newark, Ohio. Filed July 5, 1929. Serial No. 375,916. 8 Claims. (Cl. 244—10.)



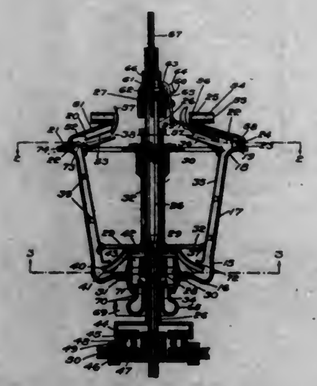
1. In a rigid aircraft, a plurality of propelling elements disposed in corridors extending longitudinally of said craft, each corridor having side openings extending longitudinally the length thereof, said propelling elements operating to first create a column of air in said corridors traveling in one direction, that will be first whirled in one direction, then in another.

1,882,388. LIQUID FUEL VAPORIZER. ROBERT F. LONABERGER and CHARLES F. SANDS, Reading, Pa., assignors to Lloyd A. Unger, Trustee. Original application filed Oct. 27, 1922, Serial No. 597,420. Divided and this application filed Apr. 12, 1929. Serial No. 354,599. 17 Claims. (Cl. 123—122.)



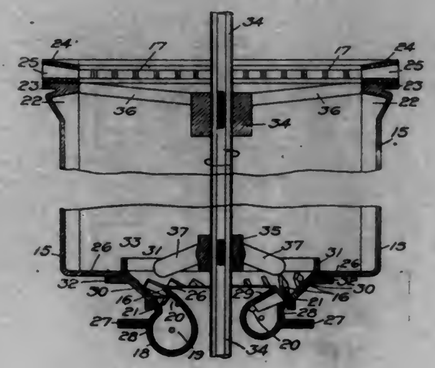
1. A vaporizer comprising a liquid fuel feed nozzle, means for vaporizing the fuel discharging therefrom, an inner air passage surrounding said nozzle, a system of small air pipes surrounding said inner air passage and leading thereto, in combination with means for preheating a portion of the gaseous mixture supply to a high temperature and conducting it through said small air pipes to cool it, and means for conducting additional air around said small air pipes to cool them and then mingling it with said preheated gaseous mixture supply and passing the mixture through said inner passage.

1,882,389. CENTRIFUGAL SEPARATOR. VERNON WESLEY MACISAAC, Montreal, Quebec, Canada. Filed Mar. 21, 1930. Serial No. 437,754. 25 Claims. (Cl. 233—24.)



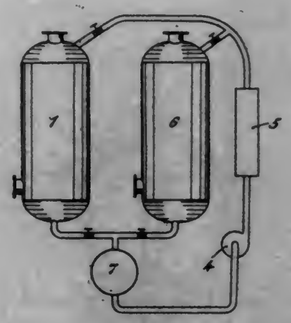
1. In a centrifugal separator, a rotary bowl and shaft mounting therefor, an inner shell having upper and lower inwardly extending flanges and a tubular shaft mounting journalled on said shaft and supporting the shell and a spiral flexible strip attached to said shell and rotating therewith and adapted to engage the heavier material thrown to the inner wall of the bowl and facilitate the progression thereof from one end to the other.

1,882,390. CENTRIFUGAL MACHINE. VERNON WESLEY MACISAAC, Montreal, Quebec, Canada. Filed Mar. 21, 1930. Serial No. 437,755. 17 Claims. (Cl. 232—24.)



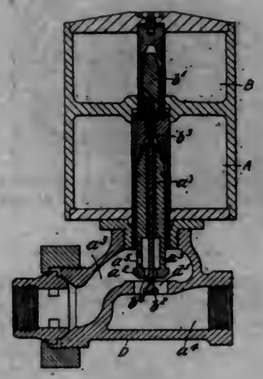
1. In a centrifugal machine, frusto-conical bowl suitably mounted for rotation and having a feed inlet at one end and discharge at the other end, a frusto-conical inner shell commonly mounted with said outer bowl having an inner deflecting end in the way of the feed inlet, and means for driving said outer bowl.

1,882,391. APPARATUS FOR DIGESTING WOOD PULP. EINAR MORTERUD, Torderod, near Moss, Norway. Filed Sept. 4, 1929, Serial No. 390,389, and in Norway Sept. 10, 1928. 2 Claims. (Cl. 92—7.)



1. In a digesting plant for wood pulp the combination with two or more percolating vessels adapted to hold the material to be digested of a collecting vessel for the digesting liquor situated below and separated from said percolating vessels conduits for connecting the several percolating vessels with the said collecting vessel, a pump for removing the liquor from said collecting vessel, a heating device for heating the liquor removed from the collecting vessel and valve controlled conduits for returning the reheated liquor to the percolating vessels.

1,882,392. ELECTROMAGNETIC DOUBLE CONTROL VALVE. JOSEPH LESLIE MUSGRAVE, London, England. Filed Feb. 18, 1931, Serial No. 516,807, and in Great Britain Mar. 7, 1930. 4 Claims. (Cl. 137—139.)



1. An electro-magnetically operated valve having a main valve proper actuated through the medium of an electro-magnet and a smaller valve proper located in the main valve proper actuated through the medium of another electro-magnet.

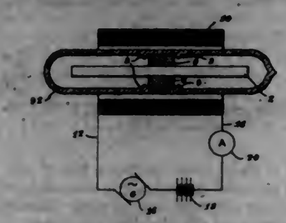
1,882,393. MAGNETOSTRICTIVE VIBRATOR. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Original application filed Mar. 23, 1928, Serial No. 264,222. Divided and this application filed Aug. 9, 1932. Serial No. 628,043. 3 Claims. (Cl. 175—338.)



3. A magnetostrictive vibrator comprising a magnetostrictive core, and a coil coperatively related to the vibrator, the relation between the coil and the vibrator being such that the current flowing through the coil is subjected to the reaction of the vibrator due to magnetostrictive effects, a weight attached to the vibrator, and means for adjusting the weight.

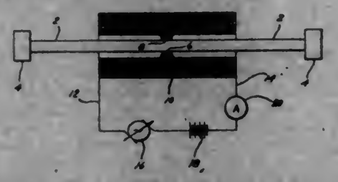
1,882,394. MAGNETOSTRICTIVE VIBRATOR. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Original application filed Mar. 23, 1928, Serial No. 264,222. Divided and this application filed Aug. 22, 1932. Serial No. 629,840. 3 Claims. (Cl. 175—338.)

1. Apparatus of the character described comprising a vessel, a support within the vessel, a magnetostrictive vibrator freely supported on the support in the vessel, and a coil cooperatively related to the vibrator, the relation



between the coil and the vibrator being such that the current flowing through the coil is subjected to the reaction of the vibrator due to magnetostrictive effects.

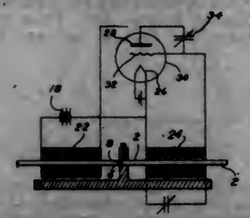
1,882,395. FREQUENCY INDICATOR. GEORGE W. PIERCE, Cambridge, Mass. Filed Apr. 23, 1928, Serial No. 272,033, and in Canada Dec. 31, 1927. 16 Claims. (Cl. 175—368.)



2. A frequency-indicating body having magnetostrictive activity, in combination with an exciting circuit therefor, the relation between the body and the circuit being such that the current flowing through the circuit is subjected to the reaction of the body due to magnetostrictive effects, and means for indicating the said reaction in the said circuit.

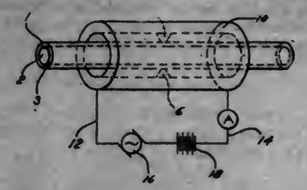
10. An electric system comprising an electric circuit having a winding for the flow of alternating current and a tuned magnetostrictive vibrator core so associated with the electromagnetic field of the winding that it freely vibrates mechanically by magnetostriction when stimulated magnetically by the said field, and means in the circuit for utilizing the power when the core, freely vibrating mechanically, responds magnetostrictively, rendering the power in the said circuit critical as to frequency for frequencies near the free frequency of the core.

1,882,396. MAGNETOSTRICTIVE TRANSFORMER. GEORGE W. PIERCE, Cambridge, Mass. Filed Mar. 23, 1928, Serial No. 264,222, and in Canada Dec. 31, 1927. 5 Claims. (Cl. 175—356.)



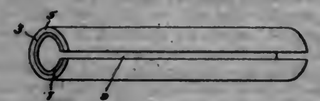
1. A transformer having coils for the flow of alternating current, and a magnetostrictive core inductively connected with the coils, the core being substantially tuned to the frequency of the alternating current in one of the coils, whereby energy which is transferred from one coil to the other is transferred substantially entirely by magnetostrictive action of the core at the tuned frequency thereof.

1,882,397. MAGNETOSTRICTIVE VIBRATOR. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Filed Aug. 17, 1928. Serial No. 300,249. 18 Claims. (Cl. 175—368.)



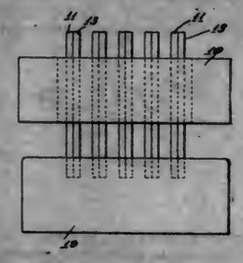
1. A magnetostrictive vibrator having a substantially constant frequency with variations of temperature.

1,882,398. MAGNETOSTRICTIVE VIBRATOR. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Original application filed Aug. 17, 1928, Serial No. 300,249. Divided and this application filed May 9, 1930. Serial No. 451,050. 4 Claims. (Cl. 175—368.)



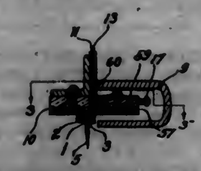
1. A composite magnetostrictive vibrator constituted of mechanically connected members of different magnetostrictive material, one of the members being constituted of an outer shell in which other portions of the vibrator are disposed.

1,882,399. MAGNETOSTRICTIVE VIBRATOR. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Original application filed Aug. 17, 1928, Serial No. 300,249. Divided and this application filed May 9, 1930. Serial No. 451,051. 4 Claims. (Cl. 175—368.)



1. Apparatus of the kind described comprising a case, and a plurality of magnetostrictive vibrators of different vibration frequency attached to the base.

1,882,400. VIBRATORY DEVICE. GEORGE WASHINGTON PIERCE, Cambridge, Mass., and STEPHEN ALVORD BUCKINGHAM, Chevy Chase, Md.; said Buckingham assignor to said Pierce. Filed Mar. 4, 1931. Serial No. 519,970. 14 Claims. (Cl. 179—100.41.)

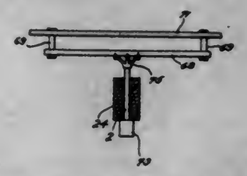


1. A phonographic device comprising a magnetostrictive core constituted of mechanically connected members hav-

ing different magnetostrictive properties integrally secured together so as to vibrate as a unitary vibrator, and a phonograph needle connected with the core.

5. A phonographic device comprising a composite core constituted of mechanically connected nickel and phosphor-bronze strips, and a phonograph needle connected with the core.

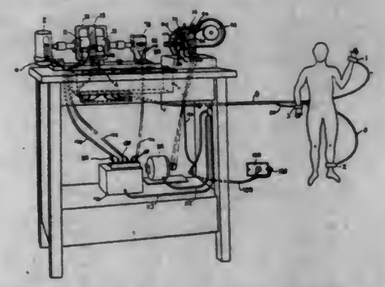
1,882,401. LOUD SPEAKER. GEORGE WASHINGTON PIERCE, Cambridge, Mass. Filed Aug. 17, 1928. Serial No. 300,248. 18 Claims. (Cl. 179—110.)



3. A loud speaker comprising a magnetostrictive core weighted at one end and secured at its other end to a sound radiating member through the intermediation of a transition mechanical impedance designed to suppress acoustic reflections.

10. A loud speaker comprising a magnetostrictive driving element and a sound-radiating member coupled together through a resonance-suppressive junction.

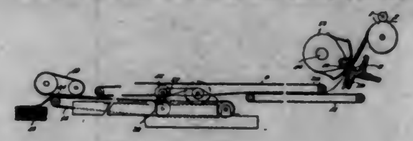
1,882,402. ELECTROCARDIOGRAPH. RALPH HENRY KRUSE, Pelham Manor, N. Y., assignor to The Cambridge Instrument Company, Inc., Ossining, N. Y., a Corporation of New York. Filed Dec. 15, 1931. Serial No. 581,154. 6 Claims. (Cl. 234—1.5.)



1. In an electrocardiograph having a source of light, a galvanometer having an energizing winding and a sensitive element controlled thereby, a recording camera, a motor for feeding sensitized material in the camera, and means for directing light from the source past the sensitive element to the sensitized material, a rectifier connected with the galvanometer winding, a power circuit connected with a source of alternating current and with which the light source, the motor and the rectifier are connected, a sensitive circuit independent of the power circuit and with which the sensitive element is connected, means for connecting a patient with the sensitive circuit, and means for shielding the sensitive circuit from the power circuit.

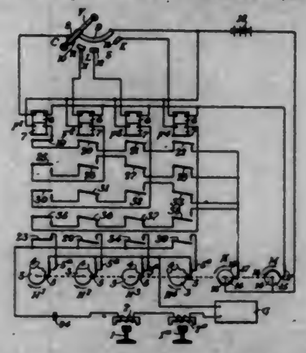
1,882,403. METHOD OF AND MACHINE FOR CUTTING, FEEDING, AND STACKING SHEET MATERIAL. CHARLES BENJAMIN MAXSON, Westerly, R. I., assignor of one-half to Julian W. Maxson, Westerly, R. I. Filed May 27, 1930. Serial No. 456,189. 5 Claims. (Cl. 164—68.)

2. A machine for cutting and feeding sheet material having, in combination, a stationary knife, a cooperating movable knife, substantially horizontally disposed tapes, means for feeding the sheet material at a downward incline between the knives and towards the tapes, whereby the material becomes cut by the knives into sheets and the for-



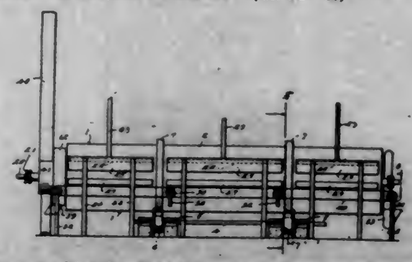
ward portion of each sheet becomes bowed out with the convex side of the bow facing in the direction of feed, and means for bending the bow out of each sheet in preparation for the feeding of the sheet by the tapes.

1,882,404. APPARATUS FOR ELECTRICAL CONTROL SYSTEMS. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1931. Serial No. 526,874. 7 Claims. (Cl. 246—63.)



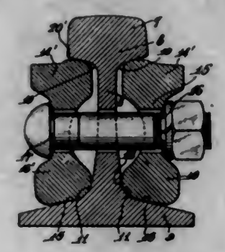
1. Apparatus for a control system including, a source of current, coding means adapted to code at recurrent intervals the current supplied by the source into a predetermined group of current impulses, a relay for controlling the supply of said coded current to a sending circuit, a pick-up circuit and a holding circuit for said relay, manually operated means to control the pick-up circuit, and contact mechanism operated in timed relation with the coding means arranged to close the pick-up circuit only during the time interval between two code groups of impulses and to close the holding circuit only during the time interval of a code group and thereby automatically establishing the continuous repeating of the code group of impulses and preventing the manually operated means from energizing or deenergizing the relay during a code group of impulses.

1,882,405. FOUR-IN-ONE STEAM CYLINDER DRIER. CLAUD H. BURRIS, Rogers, Ark. Filed June 11, 1931. Serial No. 543,716. 6 Claims. (Cl. 34—5.)



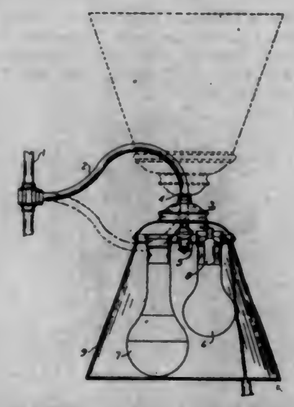
6. A machine for drying comminuted material comprising a rotatable drum, means through the medium of which the inner and outer surfaces of the drum may be heated, means for applying the material to the outer surface of the drum, means for removing the material from said surface, means directing the removed material to the interior of the drum, and a spiral conveyor located within the drum for moving the material longitudinally therethrough.

1,882,406. RAIL JOINT. EUGENE W. CARUTHERS, Secane, Pa. Filed Aug. 14, 1929. Serial No. 385,793. 4 Claims. (Cl. 238—243.)



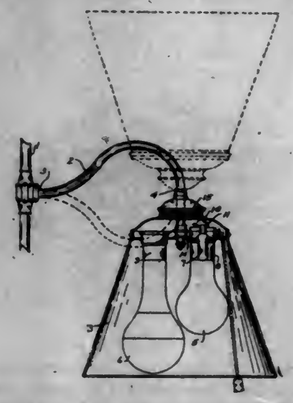
1. In a rail joint, a rail having a head, a base flange and a web, a splice bar engaging with the rail at the lower portion of the web pivoting about said engagement and initially engaging the under surface of the head of the rail over a narrow transverse range of under head surface and free from engagement with the head throughout the rest of the transverse area of the under part of the head and a fastening device pivotally engaging with the splice bar, adapted to tighten the splice bar against the rail and to take up wear by inward movement of the upper part of the splice bar beneath the rail head.

1,882,407. DIRECT AND INDIRECT LIGHTING FIXTURE. GEORGE W. CASSIDY, Flushing, N. Y. Filed Feb. 9, 1932. Serial No. 591,778. 6 Claims. (Cl. 240—73.)



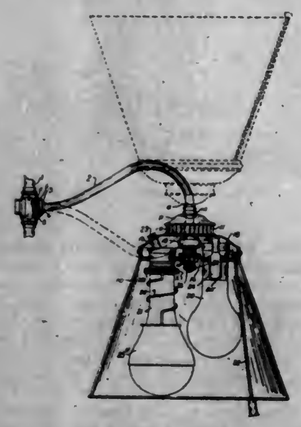
1. The combination with a support, of a holder, a depending lamp shade secured to said holder which shade is capable of being shifted to provide either indirect or direct illumination, means on said support to permit said shade to be raised or lowered to a predetermined position, a plurality of electric lamps of different powers mounted in said shade holder, means carried by said holder to automatically turn current on to one of the lamps when the shade is shifted to the indirect position and to turn it off when it is shifted to direct position.

1,882,408. LIGHTING FIXTURE CONTROL. GEORGE W. CASSIDY, Flushing, N. Y. Filed Feb. 9, 1932. Serial No. 591,779. 4 Claims. (Cl. 240—81.)



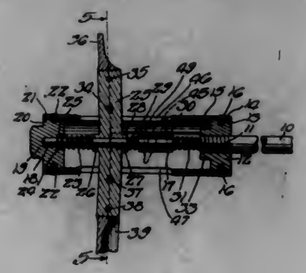
1. In a bridge lamp having a standard, an arm adapted to be rotated on its horizontal axis for direct or indirect lighting positions, said arm being slidable on the standard for vertical adjustment, a shade holder carried by said arm, a shade supported by said holder, two electric lamp sockets secured to the holder within the shade, electric lamps of different powers in said sockets, a container secured to said socket support, said container being formed of suitable heat resisting insulating material, the major portion of said container extending below said support, electric conductors which lead from said sockets to said container and a sliding contact in said container adapted to make and break contact between said conductors when the shade is rotated longitudinally of its axis.

1,882,409. BRIDGE LAMP. GEORGE W. CASSIDY, Flushing, N. Y. Filed Feb. 9, 1932. Serial No. 591,780. 10 Claims. (Cl. 240—81.)



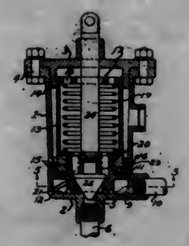
1. In a bridge lamp, a standard, an arm adapted to be rotated on its horizontal axis for direct and indirect lighting positions, said arm being slidable on the standard for vertical adjustment, a shade holder carried by said arm, a shade supported by the holder, two electric lamp sockets secured to the holder within the shade, switches for said sockets, electric lamps of different powers in said sockets, and a supplemental reflector for the higher powered lamp.

1,882,410. CUSHIONED AIRPLANE PROPELLER. SYLVESTER F. CRUMBACK, Aurora, Ill. Filed Sept. 3, 1930. Serial No. 479,566. 1 Claim. (Cl. 170—165.)



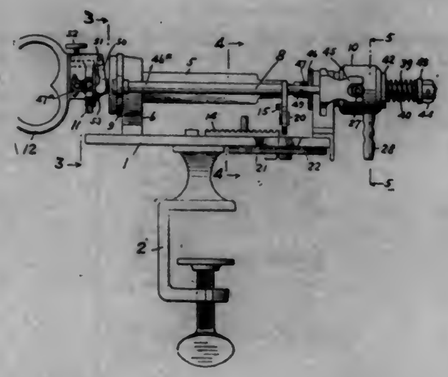
An aircraft propeller structure comprising a power driven shaft, propellers mounted on said shaft for axial movement therealong and away from the fuselage as the speed of rotation of said shaft and propellers increase, said propellers being arranged at substantially a right angle to each other, and springs on said shaft including a spring between said propellers, compressed as the propellers move forwardly, and urging the propellers rearwardly, with respect to the fuselage, as the speed of rotation of the shafts and propellers decrease.

1,882,411. VACUUM CONTROLLING BRAKE VALVE. WADE DOTY, Jamestown, N. Y., assignor to International Air Brake Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 13, 1930. Serial No. 420,565. 2 Claims. (Cl. 303—54.)



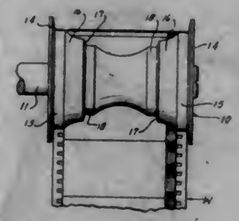
1. A control valve for a fluid braking system, comprising a casing provided at one end with a detachable head having an annular flange fitting into said casing, and further comprising a ported piston reciprocatory in said casing, said casing having an opening to the atmosphere at one side of the piston and having openings at the other side of the piston for connection respectively with a brake line and an evacuation line, one of the last named openings being substantially aligned axially of the casing with said piston port, a valve member carried by the piston controlling the piston port and also the aligned casing port, an extension from said piston at its side adjacent to the opening of the casing to the atmosphere slidable within said annular flange and, formed remote from the piston with a spring abutment, an actuating member for the piston slidable in said detachable head of the casing and extending toward the piston beyond said abutment and formed adjacent to the piston with another spring abutment, and a spring compressed between said abutments.

1,882,412. APPARATUS FOR TRANSFUSION OF BLOOD. LOUIS E. DRUMMOND, Upper Darby, Pa. Filed Apr. 9, 1931. Serial No. 528,785. 5 Claims. (Cl. 128—214.)



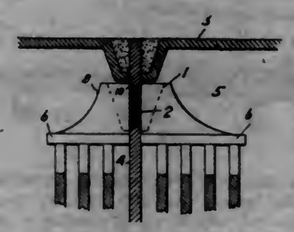
1. Apparatus for transfusion of blood comprising, in combination, a pump having a single cylinder and having a piston and piston handle, a pump valve connected with and operated by rotary movement of the piston and adapted to be positioned for intake from the donor and for outlet to the patient and to cut out both patient and donor and to connect a supply of cleaning fluid locking and unlocking devices which compel the piston to be operated through full length strokes when the pump valve is in proper position for intake from the donor and for outlet to the patient and which permit the piston to be operated for strokes of any length when the valve is in position to cut out both donor and patient and to connect a supply of cleaning fluid, and an integrating mechanism responsive to full piston delivery strokes to the patient.

1,882,413. FILM SPOOL. ALEXANDER FARCIOT EDOUART, Los Angeles, Calif., assignor to Paramount Publix Corporation, Los Angeles, Calif., a Corporation of New York. Filed July 12, 1930. Serial No. 467,493. 3 Claims. (Cl. 74—51.)



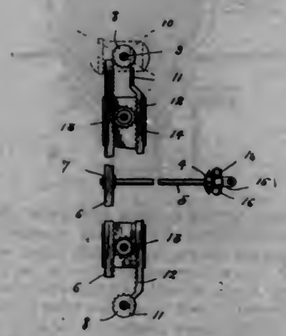
1. A film spool or the like having outside flanges, shoulders of relatively steep pitch on the inside of the flanges, cylindric film treads immediately inside said shoulders and spaced for a relatively wide film, curvilinear recessed surfaces immediately inside said film treads, shoulders of relatively steep pitch immediately inside said curvilinear surfaces, cylindric film treads immediately inside the second mentioned shoulders and of a diameter less than the smallest diameter of said curvilinear surfaces, the second mentioned film treads being spaced for a relatively narrow film, and a curvilinear recessed surface immediately inside and between the second-mentioned film treads.

1,882,414. STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed Nov. 26, 1927. Serial No. 235,801. 2 Claims. (Cl. 136—134.)



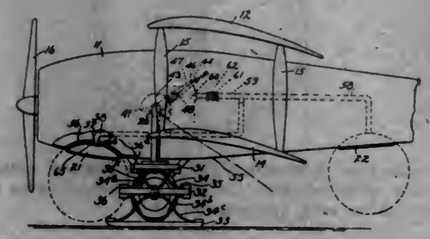
1. An intercell connector for storage batteries including in combination an intercell vertical wall, a metallic button located below the upper edge of the wall in an opening in said wall, plate structures on either side of said wall, terminals in said plate structures having cavities therein open at the top and at the side confronting said button, and metal in said cavities clamping said terminals against said wall on either side thereof due to the contraction of said metal upon cooling.

1,882,415. DIRIGIBLE HEADLIGHT. THEODORE C. FREEBERG, Two Harbors, Minn. Filed Oct. 24, 1931. Serial No. 570,886. 3 Claims. (Cl. 240—62.51.)



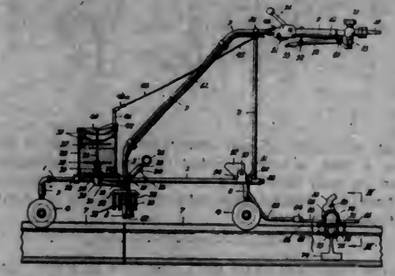
1. The combination with an automobile having headlights and steering post, of mechanism for dirigibly operating the headlights, comprising a shaft operable directly from and in the same direction as the post and means including a horizontal reciprocable rack bar and a gear having an opening therein connected with each headlight for alternate engagement with the rack bar, and means engageable with said openings whereby when one light is being operated the other is held stationary.

1,882,416. AEROPLANE CONSTRUCTION. LOUIS GASTWIRTH, Bronx, N. Y. Filed Oct. 30, 1929. Serial No. 403,377. 7 Claims. (Cl. 244—2.)



1. An aeroplane comprising a body, a wheeled undercarriage for said body, a member rotatably mounted on said body and extending from the sides thereof, and a pair of spring shock absorbers adapted to contact the earth, attached to the extending portions of said members.

1,882,417. APPARATUS FOR HEAT TREATING RAILS. FREDERICK M. GRAHAM, Hollidaysburg, Pa. Filed Nov. 30, 1931. Serial No. 577,995. 17 Claims. (Cl. 266—4.)

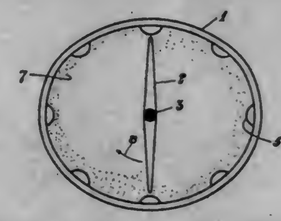


1. Apparatus for heat-treating rails comprising a frame, a nozzle on said frame for applying a heating medium to a rail surface, and means including a rail clamping device whereby longitudinal movement of said nozzle with respect to the rail may be limited to a predetermined distance.

1,882,418. CENTRIFUGAL CLUTCH. JOHAN ANSHELM GRANSTEDT, Sjalevad, Sweden, assignor of one-half to Gunnar Per Olof Fogelqvist, Sundsvall, Sweden. Filed June 30, 1930, Serial No. 464,826, and in Sweden Apr. 1, 1930. 1 Claim. (Cl. 192—103.)

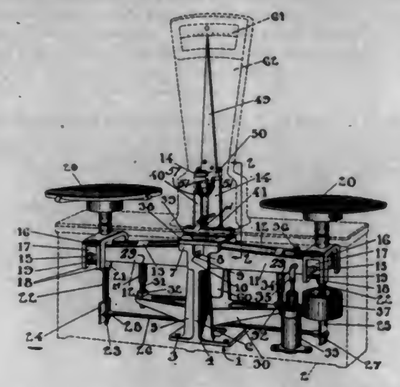
In a centrifugal clutch adapted for use between two rotatable members, a number of radially extending wings affixed to one of said members and adapted to take a non-variable position in relation thereto, a casing affixed to

the other of said members in a position so as to surround but not to contact with the said wings, such casing having an oval interior cross sectional shape, and a pulver-



ous substance positioned in the said casing and adapted to form an intermediate transmission means between the same and the wings surrounded thereby.

1,882,419. EVEN-BALANCE SCALE. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed May 31, 1928. Serial No. 281,895. 21 Claims. (Cl. 265—59.)



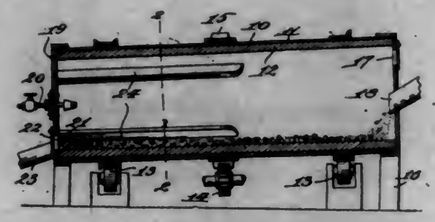
1. In a device of the character described in combination, a base, a lever pivoted thereon, an indicator fulcrumed on said lever, and means adjustably mounted on said base for restraining said indicator to a predetermined path.

1,882,420. MIXER FOR WELDING TORCHES. GEORGE L. HAMMON, San Francisco, Calif. Filed July 2, 1929. Serial No. 375,523. 2 Claims. (Cl. 158—27.4.)



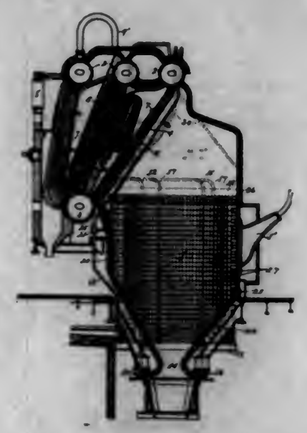
1. A mixer for welding torches comprising a handle having a central tapered opening therein, a mixer body having a mixing chamber therein and having a tapered end adapted to fit into the opening in said handle, said mixer body having a recess in its tapered end communicating with the mixing chamber, a cap having a plurality of perforations in its circumference and fixed in the recess in the end of said mixed body, means to deliver gas to said perforated cap, means to deliver another gas to the mixing chamber, and means to seat the tapered end of said mixer body in the opening in said handle.

1,882,421. APPARATUS FOR PRODUCING AGGREGATES. RICHARD HEDRICK, Los Angeles, Calif. Filed May 14, 1930. Serial No. 452,256. 4 Claims. (Cl. 263—33.)



1. In an apparatus for producing aggregates, a rotary kiln provided at one end with an inlet opening and at the opposite end with an outlet opening, a burner at the end of the kiln having the outlet opening and a plurality of ribs projecting inwardly from the wall of the kiln and extending longitudinally thereof and which ribs extend from the end of the kiln having the outlet opening to points adjacent to the longitudinal center of the kiln.

1,882,422. BOILER WITH WATER WALL TUBES. LEWIS W. HELLER, Oak Harbor, Ohio, assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,165. 9 Claims. (Cl. 122—235.)



1. In a boiler having a steam and water chamber and steam generating tubes below said chamber connected thereto, a furnace having water wall tubes connected to some of said steam generating tubes in such a manner that rupturing of one of said wall tubes will not cause the water to drain out of said boiler to a level below the lower ends of any of the steam generating tubes of said boiler.

1,882,423. LAWN WEEDER. GEORGE A. HOLZ, Detroit, Mich. Filed Oct. 27, 1931. Serial No. 571,370. 3 Claims. (Cl. 55—148.)

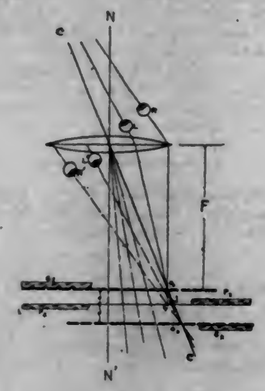
1. In a lawn weeder, a handle, a spade secured to the lower end of the handle, a pair of lugs extending from the spade, a pivot pin supported by the lugs, a coiled spring about the pivot pin, a gripping jaw pivotally mounted on the coiled spring, one end of the spring engaging the spade and the other end engaging the gripping jaw to normally urge the gripping jaw into engagement with the spade, a hand hold for raising the gripping jaw, a wire rod extending through the hand hold and having

two parallel portions, a bracket secured to the handle, the parallel portions of the wire rod being slidably mounted in the bracket and the lower ends of the wire rod being



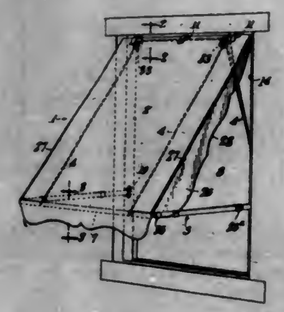
connected with the gripping jaw whereby upward movement of the wire rod will raise the gripping jaw against the tension of the spring.

1,882,424. METHOD OF MAKING RELIEF PICTURES AND MANNER OF VIEWING SAME. HERBERT E. IVES, Montclair, N. J. Filed May 31, 1930. Serial No. 458,303. 17 Claims. (Cl. 95—18.)



1. The combination, with a light source, of a stereoscopic picture, comprising a positive made from a negative consisting of a multiplicity of strip images, made by a single exposure on a stationary photographic plate, in a stationary camera having a wide lens and with a diaphragm having a horizontal rectangular opening which extends the width of said lens, said exposure being made through a stationary grating spaced from said plate, said grating consisting of alternate opaque and transparent vertical lines, and a viewing grating mounted intermediate said picture and said light, the spacing between the vertical lines in the viewing grating being greater than in the taking grating, said picture being mounted, for viewing, with the emulsion side of said plate toward the eye of the observer.

1,882,425. AWNING. LOUIS KASAN, New York, N. Y. Filed Nov. 24, 1931. Serial No. 577,027. 20 Claims. (Cl. 156—42.)

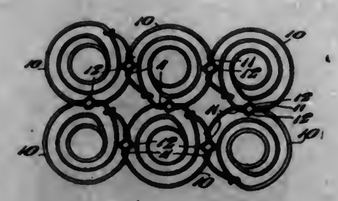


1. An awning having a lifting frame, a top cloth having its lower end secured to said frame, a rod secured to the upper extremity of said cloth, and said cloth being adapted to fold around said rod a varying plurality of times and to be secured to said rod in said folded state to adjust the length of the cloth to windows of various heights.

1,882,426. INTENSIFIER FOR PHOTOGRAPHY. JOHANNES ALFRED KALIX, Brussels, Belgium, assignor to Union Chimique Belge Societe Anonyme, Brussels, Belgium. Filed Feb. 11, 1931, Serial No. 515,143, and in France Dec. 31, 1930. 2 Claims. (Cl. 95—88.)

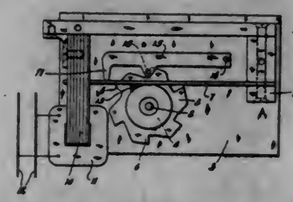
2. In a method of preparing a solid photographic intensifier containing a uranium salt, a ferricyanide and other ingredients, intimately mixing the uranium salt with a sulfate of an alkali metal, solidifying and pulverizing the mixture, and mixing the latter with the potassium ferricyanide.

1,882,427. SPRING CONSTRUCTION. WALTER KIWI, Andalusia, Pa., assignor to Peerless Springs, Incorporated, West Chester, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1930. Serial No. 419,528. 1 Claim. (Cl. 5—271.)



A self supporting spring cushion or mat of the character stated comprising aligned, spiral springs the upper and lower adjacent coils of which overlap longitudinally and laterally considered, the end of the upper last coil of one spring being twisted both right and left hand serpentine-fashion completely around the end of the upper last coil of a companion spring both longitudinally and laterally considered, and the end of the lower last coil being similarly secured with respect to the end of its companion spring by the juncture of said twisted portions, each twisted portion forming a substantially diamond-shaped connection.

1,882,428. FREQUENCY CONTROLLED MECHANISM. WERNER KOENIG, Zug, Switzerland, assignor to Landis & Gyr, A. G., Zug, Switzerland, a Corporation of Switzerland. Filed Jan. 10, 1931, Serial No. 507,912, and in Switzerland Jan. 15, 1930. 10 Claims. (Cl. 175—338.)



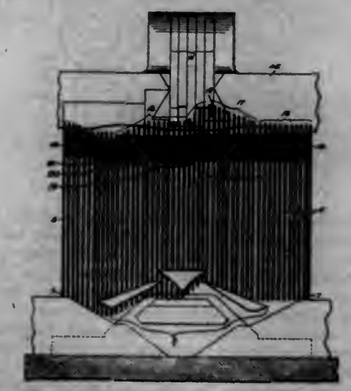
1. Frequency controlled mechanism including in combination a rotatable member, resonant means for rotating the member and resonant means for preventing rotation of the member except when the second resonant means is operating at its resonant frequency.

1,882,429. TENSIONING MEANS FOR PLATING KNITTING MACHINES. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Aug. 12, 1927. Serial No. 212,468. 4 Claims. (Cl. 66—146.)



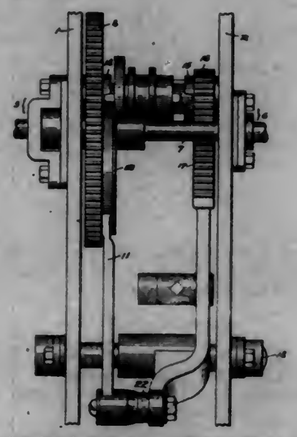
1. In a knitting machine, a binder and a cutter, an operating member therefor which may be moved to cause the binder and the cutter to open, a pair of tensioned disks, means to maintain said disks in a non-yarn-tensioning relation, means to operate said last mentioned means so as to cause the disks to tension the yarn passing therebetween, and a connection between the binder and the cutter operating means and the yarn tension controlling means for causing the disks to function in a tensioning relation.

1,882,430. KNITTING STITCH MEASURING MECHANISM AND PROCESS. ROBERT H. LAWSON, Pawtucket, R. I., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Dec. 26, 1928. Serial No. 328,357. 6 Claims. (Cl. 66—8.)



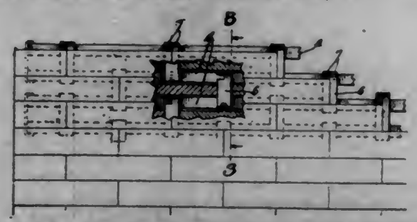
1. In a knitting machine, a series of independent needles and a series of elements individually co-acting with said needles respectively in measuring the stitches, and means simultaneously to impart stitch measuring movements both to the needles and to said elements, thereby to measure the stitches while preserving the same from rupture, the means for imparting the stitch measuring movements to said elements being located closely adjacent the forward or inner ends of said elements.

1,882,431. KNITTING MACHINE OPERATING MECHANISM. ROBERT H. LAWSON, Pawtucket, and AUGUSTIN GAGNÉ, Central Falls, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Jan. 8, 1929. Serial No. 331,098. 3 Claims. (Cl. 66—56.)



1. In a circular knitting machine of the so-called Banner type, the 104 gear, a shaft for supporting the same, spaced upright members of the framing at opposite sides of said 104 gear, bearings for said shaft mounted in the said members of the framing of the machine, an eccentric fast with said 104 gear between said framing members, a connecting rod for said eccentric, the quadrant and pivotal operating connections between said connecting rod and said quadrant.

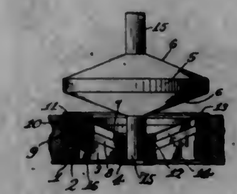
1,882,432. WALL CONSTRUCTION. JOSEPH L. LEMBROND, Green Bay, Wis. Filed Dec. 12, 1930. Serial No. 501,843. 3 Claims. (Cl. 72—44.)



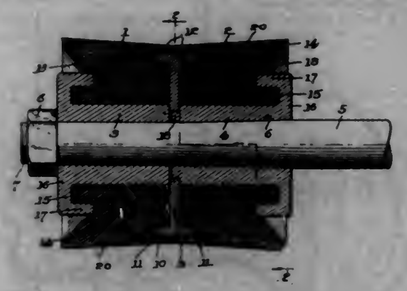
1. In a wall construction, a plurality of superposed blocks, each of said blocks having a longitudinal groove encircling its top, bottom and end faces, longitudinal strips positioned in the groove of the top and bottom faces, and clips positioned in the grooves of the end faces for connecting the adjacent strips.

1,882,433. VALVE SEAT. JOHN W. MACCLATCHIE, Compton, Calif. Filed July 22, 1929. Serial No. 379,934. 12 Claims. (Cl. 251—167.)

12. A valve seat comprising a support, yieldable cushioning means on the support, a wear element on the yieldable cushioning means forming a contacting surface adapted for engagement by a cooperating valve, said cushioning means including a flange laterally beyond the wear element and forming a cushioning contacting surface in substantial alinement with the contacting surface of the wear element.



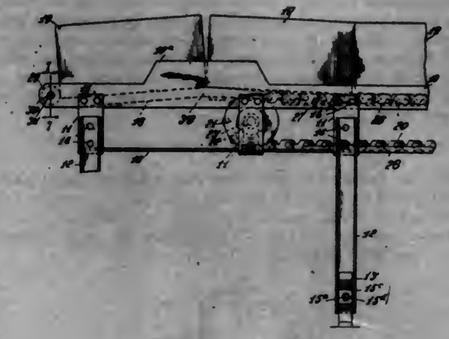
1,882,434. PISTON. JOHN W. MACCLATCHIE, Compton, Calif. Filed Mar. 31, 1930. Serial No. 440,886. 6 Claims. (Cl. 74—108.)



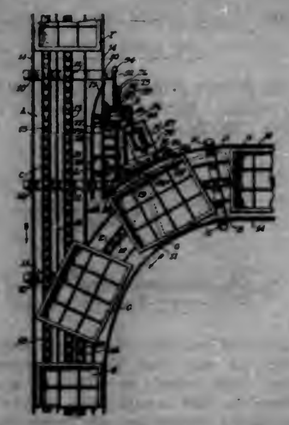
1. In a piston, a piston rod, supporting collars adapted for mounting on the piston rod, annular packing elements on the respective supporting collars, a neck of restricted diameter at the inner end of at least one of the collars, and an annular reinforcement adapted for mounting on said neck between the adjacent ends of the packing elements and terminating at its outer periphery in a flange extending longitudinally of the piston, the packing elements having peripheral longitudinal lips overlying said flange, the supporting collars having flanged outer ends adapted for clamping engagement with the outer ends of the packing elements, said outer ends of the packing elements forming longitudinally projecting undercut tapering lips at the outer peripheries of the packing elements, and said outer peripheries of the packing elements tapering to normally increased diameter toward their lipped outer ends.

1,882,435. CONVEYER STOP MECHANISM. JULIUS J. MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Jan. 9, 1931. Serial No. 507,653. 7 Claims. (Cl. 198—34.)

1. A conveyer stop mechanism comprising in combination with a conveyer chain for advancing articles carried thereby, a stop roller against which the foremost of said articles is pressed through the action of said chain upon following articles, and guides for engaging said articles from beneath as they are acted upon by said chain, said guides being elevated at a point a short distance from said roller and terminating adjacent to said roller at a level low enough to allow said roller to act as a stop for articles advanced along said guides.



1,882,436. CASE CONVEYER AND ASSOCIATED CONTROL MECHANISM. JULIUS J. MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Apr. 18, 1932. Serial No. 604,941. 3 Claims. (Cl. 198—21.)

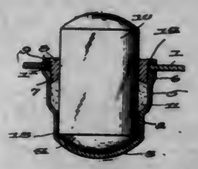


1. A case conveyer and associated control mechanism comprising a plurality of conveyer channels meeting at a junction point, a frictional drag chain for carrying cases along said channels, a stop in one of said channels near said junction point for engaging cases to hold them against travel, a pneumatic cylinder, a piston actuated by compressed air in said cylinder to operate said stop, a source of compressed air, a valve and connections for controlling the supply of air from said source to said cylinder to operate said piston, and means in the path of travel of the cases in another of said channels near said junction point for actuating said valve to admit compressed air to said cylinder and exhaust it therefrom.

1,882,437. MANUFACTURE OF MONOMETHYL-PARA-AMINO-PHENOL AND ITS SULPHATE. WILLIAM T. MACLEESTER, Philadelphia, Pa. Filed Mar. 25, 1925. Serial No. 18,168. 13 Claims. (Cl. 260—128.)

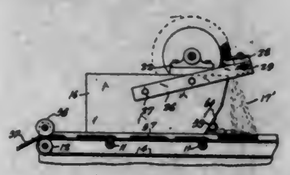
1. In the process of manufacturing monomethyl-para-amino-phenol the steps which comprise lowering the melting point of parahydroxyphenylglycine by a medium preventing oxidation of monomethyl-para-amino-phenol base, and decomposing such parahydroxyphenylglycine by heat into monomethyl-para-amino-phenol base and forming a salt from such base while excluding oxygen therefrom by means of the solvent.

1,882,438. HOLDING DEVICE FOR REFLECTING ELEMENTS. GUSTAVE E. MUNCH, Chicago, Ill., assignor to Welsbach Traffic Signal Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 20, 1929. Serial No. 364,677. 2 Claims. (Cl. 88—1.)



1. A holding device for reflecting elements, comprising a cap having a concavo-convexed rear portion, a reflector in said portion, a glass element in said cap, said cap being internally threaded, a bushing having an externally threaded portion adapted for engagement with the threads of the cap, said bushing being provided with a flange adapted for engagement with the front surface of a plate, whereby, when said bushing is threaded into the cap, the upper edge of the cap and bushing flange will be drawn together for clamping action upon the plate, said cap having the bushing receiving end enlarged to form a packing groove, and a packing in said groove closely engaging the glass element.

1,882,439. MACHINE FOR TREATING FURS. FRANK J. MURPHY, Danbury, Conn. Filed June 12, 1929. Serial No. 370,241. 16 Claims. (Cl. 8—21.)

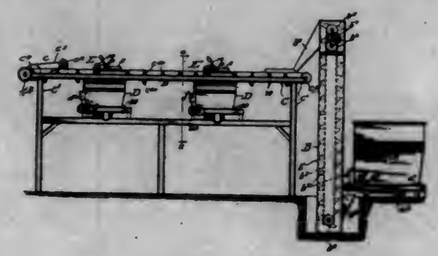


1. A fur treating machine comprising a base, an endless conveying belt on said base, a tank supported by said base, a rotary brush dipping in said tank, a toothed rack mounted across the face of said brush, means for rotating said brush and for oscillating said brush and said rack relative to each other to spray the liquid from said brush to said belt.

15. A method of treating fur comprising blowing air alone against the fur nap to raise the same, and spraying a liquid against said fur independently of the blowing air after the nap has been raised by the air and while it is so raised.

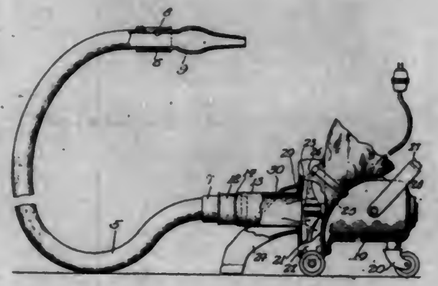
1,882,440. APPARATUS FOR HANDLING SAND AND SIMILAR MATERIAL. WALTER E. NAYLOR, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1929. Serial No. 382,659. 6 Claims. (Cl. 214—16.)

1. In a system of the character described, the combination of an endless conveyor for continuously supplying material, a receptacle for receiving the material from the conveyor, a deflector for discharging the material from the conveyor into the receptacle, positioned above the conveyor and pivoted to swing upwardly into and out of its



operative position, means for swinging the deflector upwardly out of operative position with respect to the conveyor comprising an electric motor, and switch-means, controlled by the material in the receptacle, for controlling the operation of the motor.

1,882,441. SUCTION CLEANER AND ATTACHMENT THEREFOR. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Filed Mar. 14, 1929. Serial No. 346,844. 1 Claim. (Cl. 15—9.)

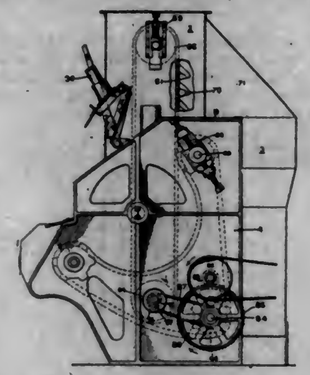


An attachment for a suction cleaner, comprising a flexible hose having one end thereof adapted for connection to a nozzle, and means for effecting couplement of the other end of the hose and the cleaner, consisting of a coupling member and a sheet metal sleeve, the coupling member having cylindrical end portions of different diameters connected together by an annular shoulder-forming wall, the sleeve being secured fixedly to the said other end of the hose and mounted rotatably in the end portion of the coupling member of smaller diameter and having outwardly deflected end flanges cooperating with the end edge of the smaller end portion and the shoulder-forming wall respectively to prevent axial displacement of the sleeve relatively to said coupling member.

1,882,442. TUMBLING MILL. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 8, 1928. Serial No. 298,194. 10 Claims. (Cl. 51—14.)

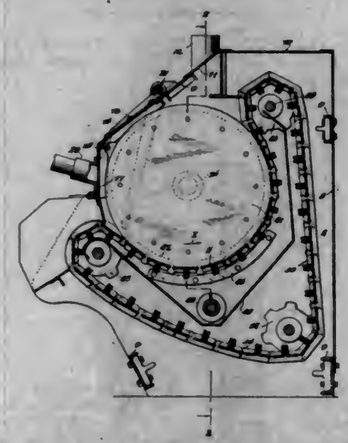
1. A tumbling machine comprising a stationary casing having a stationary charge opening, barrel heads secured in said casing, an endless conveyor extending around said heads to form a shallow receptacle for the articles to be treated, said conveyor extending up higher on the side opposite the charge opening than at said opening, means for

moving said conveyor to carry the articles up the high side to tumble them, and means for reversing the conveyor to discharge the articles over the low side out said open-



ing, supporting wheels for supporting said endless conveyor at the high and low sides, and means for mounting said wheels in fixed positions.

1,882,443. TUMBLING MILL. LOUIS D. PEIK, Mishawaka, Ind., assignor to The American Foundry Equipment Company, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929, Serial No. 366,574. Renewed Mar. 10, 1932. 7 Claims. (Cl. 51—163.)

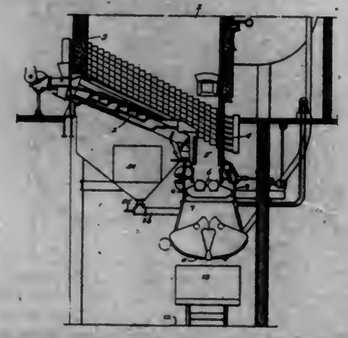


1. In apparatus of the character described, a pair of spaced chains, a connecting member connecting each link of one chain to a corresponding link of the other chain, thereby forming a conveyor, a flange carried by each link and overlapping the flange of adjoining links, side walls having grooves for said flanges and forming with said conveyor a chamber to hold articles, whereby said grooves and overlapping flanges provide an effective seal for said chamber.

1,882,444. PROCESS AND REAGENT FOR TREATING EMULSIONS. JOSEPH OTIS PEIRCE and LATIMER D. MYERS, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex., a Corporation of Texas. Filed June 9, 1930. Serial No. 460,091. 6 Claims. (Cl. 196—4.)

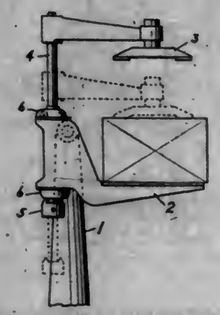
4. A process of breaking petroleum and water emulsions, comprising, treating said emulsions with relatively small quantities of a reagent, comprising, sludge layer petroleum sulphonic bodies, oil soluble petroleum sulphonic bodies, and high boiling tar acids of the type specified at a temperature approximating 150° F. and then separating the components of the emulsion.

1,882,445. ASH HOPPER. HERBERT E. PRESTON, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 4, 1928. Serial No. 282,776. 20 Claims. (Cl. 110—171.)



1. A hopper comprising a bottom wall provided with a permanently fixed substantially centrally positioned drain trough and comprising at least one movable gate section adapted in its closed position to overlie the trough at its lower edge.

1,882,446. STRAIGHT LINE GUIDE FOR MOLDING AND OTHER MACHINES. JOHN T. RAMSDEN, Philadelphia, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1929. Serial No. 396,995. 3 Claims. (Cl. 22—9.)

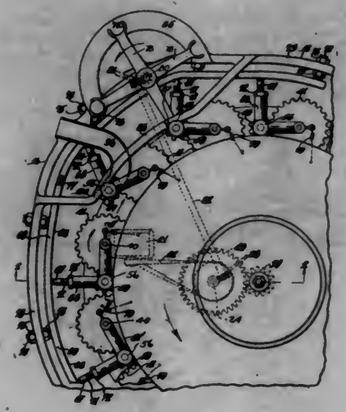


1. A molding machine including an arm adapted to carry a load, a shaft slidable through said arm, an upper bearing located in a diametric axis of said shaft opposite said load, and a lower bearing located in a diametric axis of said shaft nearest said load.

1,882,447. MULTIPLE GRINDER. CLIFFORD T. RAULE, Brookline, Pa. Original application filed Sept. 21, 1926, Serial No. 136,771. Divided and this application filed July 31, 1930. Serial No. 471,936. 3 Claims. (Cl. 51—53.)

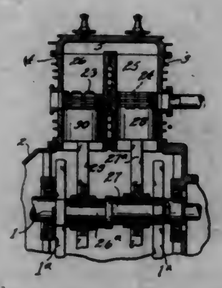
1. In an external grinder, a grinding wheel, centered chucks spaced along an adjustable common orbit around the wheel, means for supporting and moving the chucks along the orbit and other means for successively closing

the chucks at a loading point of the orbit and for successively opening the chucks at a portion of the orbit subsequent to the grinding and before the loading point, in combination with a rotary loading device adapted to



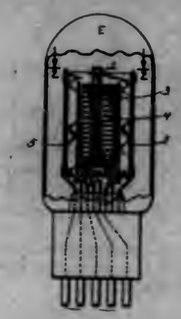
loosely hold a work piece and carry it into position to be taken hold of by an open chuck at the loading position and mechanism synchronizing the rotation of the loading device to bring it successively into registry with the axes of the successive chucks at the loading position of the orbit.

1,882,448. AVIATION MOTOR. CLIFTON R. ROCHE, Los Angeles, Calif., assignor of one-half to H. A. Brunell, Los Angeles, Calif. Filed Feb. 21, 1928, Serial No. 255,923. Renewed Mar. 2, 1932. 5 Claims. (Cl. 123—54.)



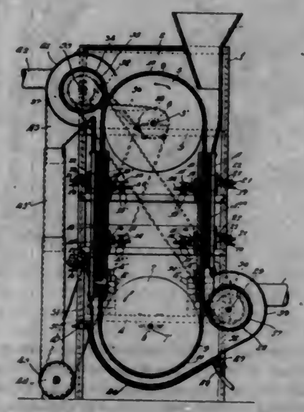
3. In an internal combustion engine, the combination of a crank-shaft, a plurality of power cylinders disposed in pairs located circumferentially in a plane transverse to the axis of the shaft, each pair of cylinders consisting of an inlet cylinder with an inlet port, and an outlet cylinder with an exhaust port for the spent gases, a common combustion chamber for each pair of cylinders, a piston corresponding to each inlet cylinder and to each outlet cylinder, a crank-shaft with a crank-pin common to all the cylinders, a pair of connecting-rods corresponding to each pair of pistons and having heads respectively connected directly to the said common crank-pin so that both the pistons of a pair move in in unison and out in unison, the exhaust cylinder of each pair being disposed slightly in advance of its corresponding inlet cylinder with respect to the direction of rotation of the crank-shaft, said exhaust ports and inlet ports being so located that they cooperate with the pistons to open the exhaust ports before the inlet ports on the stroke of the pistons toward the shaft, and to close the exhaust ports on the other stroke of the pistons before the inlet ports.

1,882,449. ELECTRON DISCHARGE DEVICE. SAMUEL RUBEN, New York, N. Y., assignor, by mesne assignments, to Ruben Tube Company, Englewood, N. J., a Corporation of Delaware. Filed Jan. 22, 1929. Serial No. 334,346. 4 Claims. (Cl. 250—27.5.)



1. An electron device comprising, in combination, an evacuated envelope, a cathode, a grid, an electrically shielded anode and magnetic armatures, the armatures being located in a plane between the cathode and anode and spaced apart by a gap between the cathode and anode.

1,882,450. LINTING MACHINE. WILLIAM S. SHAW, Boyne City, Mich. Filed Sept. 21, 1929. Serial No. 394,148. 16 Claims. (Cl. 19—41.)

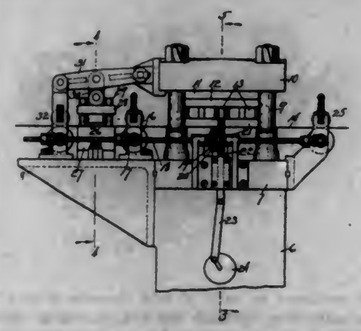


1. In a machine of the character described, the combination of a vertically disposed endless carder belt, means for driving said belt and a plurality of carder breasts fixed against movement in a direction longitudinally of the belt arranged in cooperative relation to said belt.

1,882,451. PUNCH PRESS. CURTIS F. SHERMAN, Hartford, Conn. Filed Oct. 2, 1929. Serial No. 396,718. 11 Claims. (Cl. 164—15.)

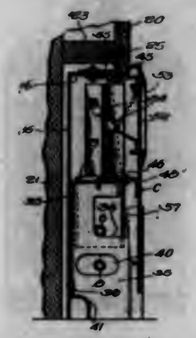
1. A punch press including a frame with a reciprocating plunger mounted therein, punches carried by said plunger to operate upon a strip for substantially the full width

thereof and thereby materially weaken the same, a set of feed rolls mounted in rear of said plunger and operating to draw a strip of stock underneath and past said plunger, a set of feed rolls located in front of said plunger for ad-



vancing said strip of stock from a supply roll, means for varying the distance between said sets of feed rolls and between the plunger and one of said sets, and means for operating said sets of feed rolls.

1,882,452. CONCEALED HEATING UNIT. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Feb. 3, 1930. Serial No. 425,441. 28 Claims. (Cl. 257—136.)



5. In a heating unit of the class described, the combination of a housing set within the recess of a wall with its front edges substantially in the plane of the surface of the wall, a panel covering the front of said housing and extended beyond the walls of the housing to overlap the wall adjacent the margins of the recess therein, said panel having its edge portions bearing against said wall surface, heating means within the housing for heating and circulating air through the housing, means around the marginal edge of the front of said housing forming a channel, a tongue member mounted on said panel and projecting into the channel in overlapping relation to the walls of said channel, and means for holding said panel in position.

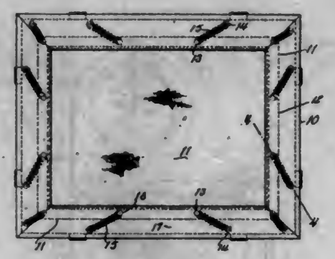
1,882,453. VISIBLE LIQUID FUSE SWITCH. LEO JAMES SJOBERG, Los Angeles, Calif., assignor to Leo J. Sjoberg and Walter B. De Nure, trustees, Los Angeles, Calif. Filed Jan. 22, 1930. Serial No. 422,600. 8 Claims. (Cl. 200—120.)

1. A switch having a vertically mounted container with vertical conducting contact strips on its inner surface and electrical connections through the walls of the container to said strips, an insulating core depending vertically in the container and having pins mounted for transverse movement, said pins having second conducting contact



strips vertically mounted thereon with an electrical connection between the said latter strips, and means extending outside of the container to rotate the core into closed or open circuit position.

1,882,454. SCREEN FOR PROJECTED PICTURES. JOHN E. SPALDINO, New Haven, Conn. Filed July 14, 1930. Serial No. 467,693. 2 Claims. (Cl. 88—24.)

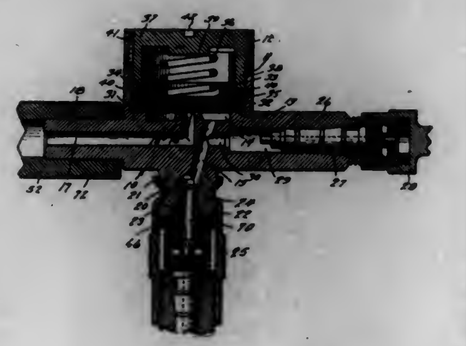


1. A screen for projected pictures consisting of a frame and a screen, and springs connected with the frame and with the edge of the screen, the springs on each side of the screen being arranged at different inclinations so as to oppose each other.

1,882,455. DUAL TIRE PRESSURE EQUALIZER. DELPHIN H. SPICER, Lakewood, Ohio, assignor to Spicer Airflater, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1930. Serial No. 486,354. 4 Claims. (Cl. 152—12.)

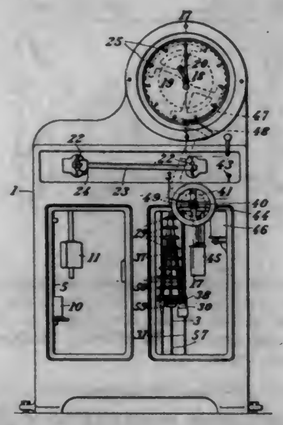
3. In a tire pressure equalizer, a valve body, a depression formed in one portion of said body, a flexible diaphragm covering said depression, means securing said diaphragm in sealing relation over said depression, a valve seat in said depression against which said diaphragm may bear in seating relation, there being a passage in said body through said valve seat adapted to be closed by engagement of said diaphragm against said seat, means for connecting said passage in communicating with the interior of a tire, a second passage communicating with said depression, means for connecting said second passage in

communication with the interior of another tire, said first and second passages being in communication except when said diaphragm seats against said valve seat, means re-



siliently urging said seat and diaphragm into seating relation, and a valved inflation passage communicating with one of said passages.

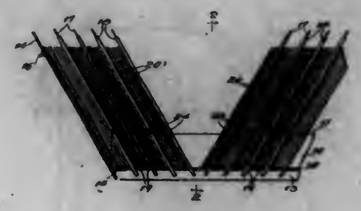
1,882,456. MEANS FOR INCREASING THE CAPACITY OF DIAL SCALES. MORTON H. STARR, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Apr. 24, 1926. Serial No. 104,255. 29 Claims. (Cl. 265—48.)



1. The combination with a weigh beam having detachable counterweights, of means for suspending the weights from the beam whereby said weights will be supported at three points.

1,882,457. FILING DEVICE. FREDERICK L. G. STRAUBEL, Green Bay, Wis. Filed Oct. 15, 1930. Serial No. 488,799. 3 Claims. (Cl. 129—16.)

1. A filing drawer having spaced apart vertical sides and a bottom having a row of apertures adjacent each side, a plurality of spacing plates located in the drawer extending between the sides, U-shaped reenforcing strips mounted on the vertical edges of each plate, said strips extending down into said apertures, the folded edge portions of said strips each having a slot and the plates each having a recess in each vertical edge adjacent a slot, and a



member mounted in each of said recesses with a tongue portion projecting through the slot to engage the upper edge of the adjacent side to form a stop when the plate is inclined at an angle to the vertical.

1,882,458. SHORE. ARTHUR H. SYMONS, Chicago, Ill., assignor to Symons Clamp & Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1929. Serial No. 338,562. 10 Claims. (Cl. 254—104.)

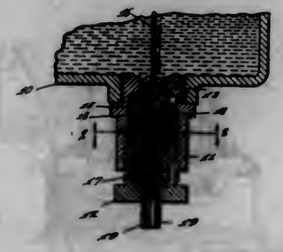


1. An extensible shore comprising an elongated strut adapted to be positioned vertically and having a longitudinal series of abutments, a housing mounted on and movable longitudinally relatively to the strut and adapted to support thereabove a shore-member, and mechanism for locking the housing and strut together in adjusted relation, embodying an element loosely confined in the housing and slidable on the strut, said element being provided with an upwardly tapered cam and having a tooth for cooperation with the abutments, and a member carried by the housing and operable responsively to the weight of said housing and the shore-member to engage the cam and cooperate therewith to shift and hold the element in a position wherein the tooth is lodged against one of the abutments.

1,882,459. WAX STRIPPER. WILLIAM A. TYNER, Indianapolis, Ind. Filed Dec. 8, 1930. Serial No. 500,694. 8 Claims. (Cl. 91—53.)

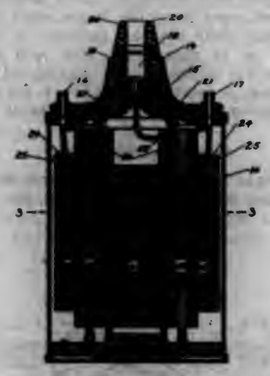
1. A wax stripper for stripping wax from a moving thread, comprising a hollow body provided interiorly with

a shoulder, a pair of complementary stripping members having alined grooves in their mating recesses to receive a thread, said members also having conical surfaces adapt-



ed to engage said shoulder, and yielding means for forcing said members into engagement with said shoulder in a direction opposite to that in which the thread moves.

1,882,460. IGNITION COIL. BERNARD H. A. WALLENTA, Western Springs, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1931. Serial No. 513,380. 3 Claims. (Cl. 175—361.)

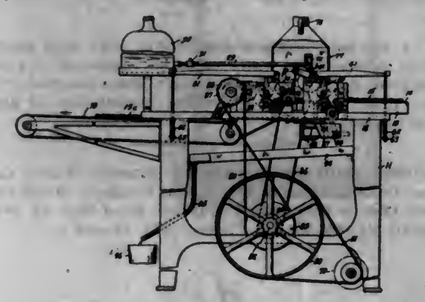


1. An ignition coil of the character described including a core, an inner and an outer winding, a container, and a substantially cone-shaped insulating cap, said cap having a spiral shoulder on the outer surface thereof between the base and the apex.

1,882,461. HATTER'S FUR CARROTING MACHINE. JOSEPH WEBER and JULIAN F. TOMAINO, Danbury, Conn. Filed June 17, 1931. Serial No. 544,957. 11 Claims. (Cl. 8—21.)

1. In a machine for carroting fur on the skin, a support for the pelt, means for advancing the pelt over the support, means above the support for spraying carroting liquid into the fur under pressure, feed rolls for gripping and holding the pelt after passing the spray, and a rubber covered roll having spaced flexible rubber nubs to engage the fur and rub the carroting liquid into it, and means for rotating the latter roll at a greater surface speed than that of the feed rolls and in a direction opposite to the natural lay of the fur on the skin.

2. In a machine for carroting fur on the skin, a support for the pelt, a transverse tube over the support adapted to contain carroting liquid, a plurality of nozzles projecting laterally through a side of the tube, said nozzles including tubes within the transverse tube having downwardly directed portions provided with inlets below the level of the liquid, means for maintaining carroting liquid at a given level in the first tube below the outlets of the nozzles, means for projecting air blasts downwardly across the nozzles toward the pelt on the support, and means for advancing the pelt through the spray.



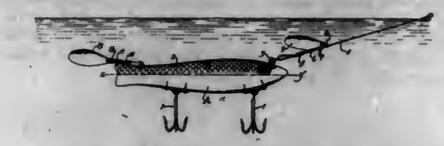
10. In a machine for carroting fur on the skin, a substantially horizontal support for the pelt comprising a series of rods round at their upper sides so as to provide substantially line contact with the skin and whereby wetting of the skin is prevented, means above the support comprising a series of nozzles for spraying carroting liquid into the fur under pressure, and means for advancing the pelt over the support past the spray.

1,882,462. SPANNER WRENCH. STANLEY WEBER, Long Island City, N. Y. Filed July 31, 1931. Serial No. 554,249. 9 Claims. (Cl. 81—90.)



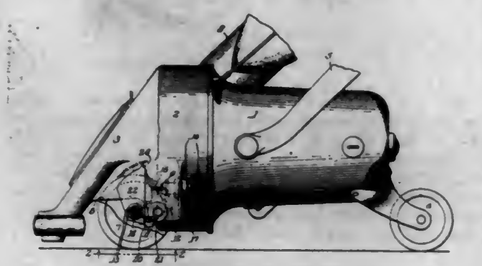
1. A spanner wrench including a turning lever having a free end portion and opposite thereto a pair of rigid arms spanning a space, separate cross bars on the arms having portions projecting into the space and shaped for engaging an article to be turned, and means between the arms and bars to afford and maintain a rigid engagement therebetween, to effect thereby a rigid wrench tool which does not yield loss of turning force between its free end portions and the projecting article engaging portions.

1,882,463. ARTIFICIAL BAIT. JACK T. WELCH, Dowagiac, Mich., assignor to James Heddon's Sons, Dowagiac, Mich., a Corporation of Michigan. Filed Dec. 2, 1929. Serial No. 410,996. 5 Claims. (Cl. 43—46.)



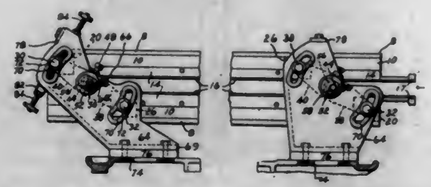
1. A fish bait having a minnow-like body with specific gravity greater than water, a leader connected to a forward upper portion of the bait, and a spoon mounted to revolve about the leader above the central line of gravity of the bait.

1,882,464. SUCTION CLEANER. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Mar. 17, 1930. Serial No. 436,365. 2 Claims. (Cl. 15—16.)



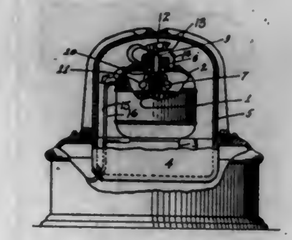
2. In a suction cleaner height adjusting construction, spaced supporting wheels, a common shaft rotatably supporting said wheels, spaced brackets extended perpendicularly to said shaft and pivoted to a casing, each bracket being provided with a seat formed of spaced-folded-deformed sections extending parallel to and closely enclosing said shaft, and means to pivot one of said brackets to effect the adjustment of said wheels, said brackets being unconnected except by said shaft.

1,882,465. CENTERLESS GRINDING MACHINE. JAMES F. WILLIAMS, Lyndhurst, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 14, 1928. Serial No. 305,915. 17 Claims. (Cl. 51—103.)



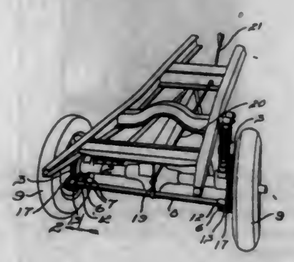
1. In a machine of the character described, a grinding wheel and a regulating wheel, one of said wheels being tilted to feed the work, a work guide for conducting workpieces between the wheels with the point of work and wheel contact at a definite distance away from the line of wheel centers, and a dressing tool located at a point remote from the work path and at the same distance from the line of wheel centers for dressing the tilted wheel; substantially as described.

1,882,466. ELECTRICALLY OPERATED MOTOR AND CONTROLLING MEANS THEREFOR. WALTER W. WILLIAMS, Bloomington, Ill. Filed Dec. 23, 1929. Serial No. 415,880. 1 Claim. (Cl. 172—279.)



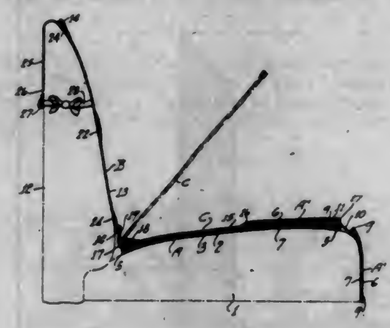
In an electrically operated motor and controlling means therefor including a casing about said motor, a bearing for the free end of the motor shaft thereon, a tiltable mercury tube switch connected in series with the starting circuit of the motor mounted adjacent the free end of the motor shaft, means mounted on the motor shaft to tilt the switch to close the starting switch when the motor is idle, said means actuated by the rotation of said shaft when the motor is operating to open said switch and maintain it open during the operation of the motor, said means including a reciprocating plunger mounted within the free end of the motor shaft normally engaging and tilting the mercury tube switch to closed position, and pivotally mounted arms upon the motor shaft having ends passing through slots provided therefor in the walls of the shaft to be in engagement with said plunger and adapted upon the application of centrifugal force when the motor shaft is rotating to withdraw the plunger and allow the mercury tube switch to tilt to break the starting circuit.

1,882,467. TRACTION DEVICE. CLINTON WILT, Detroit, Mich. Filed Nov. 10, 1930. Serial No. 494,464. 1 Claim. (Cl. 180—75.)



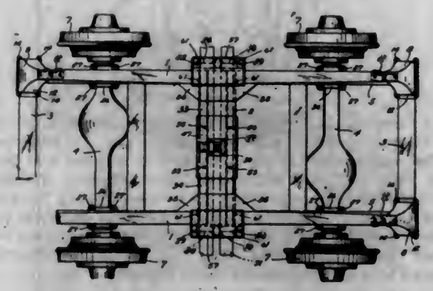
In a traction device for vehicles having an axle housing provided with a flange at each end, a pair of axles rotatably mounted in the axle housing, a differential connecting the two axles within the housing, a driving wheel secured to the outer end of each axle, a brake drum secured to each driving wheel and rotatable therewith, a gear secured to the exterior of each brake drum, a bracket secured to each flange of the axle housing and extending outwardly therefrom, a tubular member, a bracket secured to each end of the tubular member, the brackets on the tubular member being pivotally mounted in the outer ends of the brackets on the housing flanges, a shaft rotatably mounted in the tubular member, a gear secured to each end of the shaft and means for turning the tubular member on its pivot to move the gears on the shaft into or out of mesh with the gears on the brake drums.

1,882,468. SEAT COVER. EDWARD WITTCOFF, University City, Mo., assignor to Evr Klean Seat Pad Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 10, 1931. Serial No. 556,212. 5 Claims. (Cl. 155—182.)



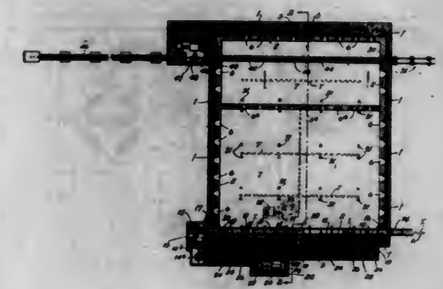
3. A removable cover for a seat and its back comprising, in combination, a seat-member, a back-member, an intermediate-member, and flexible strips connecting the seat, back, and intermediate members for swingable and endwise movement of the intermediate member relatively to the seat and back members, each of said members having a body portion of matting, the seat and back members having wear surfaces of different material, and the intermediate member having on its opposite sides wear surfaces of material corresponding to the exposed wear surfaces of the adjacent seat and back members, the intermediate member being selectively shiftable for overlying the seat or back member for presenting a wear surface in matching relation to the then exposed wear surface of the seat or back member.

1,882,469. CAR TRUCK. HERBERT W. ALDEN and NELSON R. BROWNYER, Detroit, Mich., assignors to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Nov. 18, 1927. Serial No. 234,094. 11 Claims. (Cl. 105—182.)



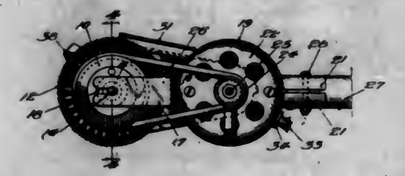
1. A street car construction comprising a truck, a body bolster, a center bearing comprising a center pin detachably secured to said truck and to said body bolster, a bearing sleeve loosely surrounding said center pin and supported on said truck for rotary and tilting movement, top and bottom center bearing plates supported on said bearing sleeve and provided with openings loosely surrounding said center pin, a block of rubber or the like located between said top and bottom bearing plates and fasteners extending through registering openings in said bolster, rubber block and the top and bottom bearing plates for securing the rubber block and bearing plates to the bolster.

1,882,470. FURNACE. WALTER J. ASSEL, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 2, 1931. Serial No. 513,007. 15 Claims. (Cl. 263—6.)



1. A furnace for heating articles comprising a hearth along which articles travel and movable blocking devices located at different points across said hearth, said blocking devices being selectively operable jointly and individually whereby the blocking devices may be adapted to effectively control the movement of a single article or to control the movement of a plurality of shorter articles separately.

1,882,471. FLOOR POLISHING MACHINE. CHESTER H. BEACH, Racine, Wis., assignor, by mesne assignments, to S. C. Johnson & Son, Racine, Wis., a Firm. Filed Feb. 8, 1928. Serial No. 252,804. 11 Claims. (Cl. 15—49.)

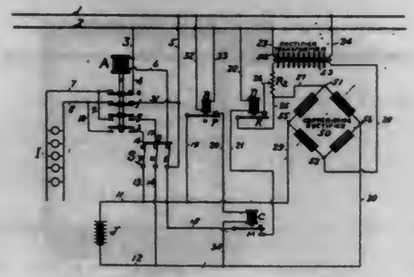


1. A floor polishing machine, comprising a frame having a slot extending rearwardly from the front end thereof, an axle carried by said frame and arranged in said slot, a flat surface upon said axle engaging the side of said slot to prevent said axle from rotating therein, means to restrain said axle from axial movement within said frame, a cylindrical brush rotating upon said axle and solely supporting said frame at its front end from the floor, a motor carried by said frame and arranged behind said brush with its shaft parallel to said axle, an elastic belt connecting said motor to said brush to drive the same and to retain said axle in said slot, and a handle to guide said machine and to support said frame at the rear end thereof.

1,882,472. EMERGENCY LIGHTING SYSTEM. FRANK G. BEETEM, Philadelphia, Pa. Filed Apr. 20, 1931. Serial No. 531,502. 2 Claims. (Cl. 171—97.)

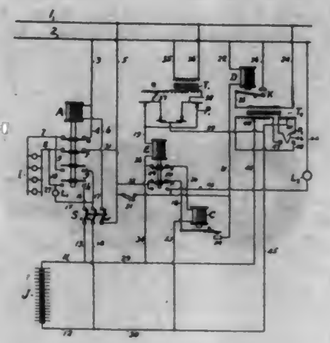
1. In an emergency lighting system, in combination a load circuit, a normal source of current, a storage battery, means responsive to the voltage of the normal source

for selectively connecting the load circuit either to the said source or to the battery, means for charging the battery selectively at either a higher or a lower rate, means responsive to the voltage of the battery for reducing the



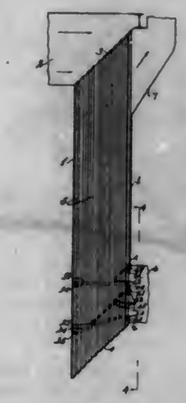
charging rate from the higher to the lower, and means responsive to the voltage of the normal source for resetting the battery voltage responsive means for the higher rate.

1,882,473. EMERGENCY LIGHTING SYSTEM. FRANK G. BEETEM, Philadelphia, Pa. Filed June 19, 1931. Serial No. 545,612. 2 Claims. (Cl. 171—97.)



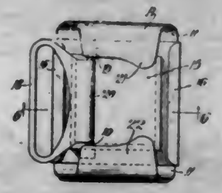
1. In an emergency lighting system, the combination of a normal supply circuit, a storage battery, a consumption circuit, a transfer switch for transferring the consumption circuit from the normal supply circuit to the battery and vice versa, two charging circuits for transmitting charging current from the normal supply circuit to the battery, whereof one is adapted to furnish a comparatively low current continuously and the other is adapted to furnish a higher rate intermittently, a voltage responsive relay having an exciting coil connected across the battery and adapted to interrupt the higher rate charging circuit at a predetermined battery voltage, a signal circuit, and a relay having its exciting coil connected in series with the low rate charging circuit, said relay being adapted to open the exciting circuit of the voltage responsive relay and simultaneously connect the signal circuit to a source of current when the current in its exciting coil drops to a predetermined value.

1,882,474. HEAT EXCHANGE DEVICE. JOHN E. BLACK, Rumson, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 7, 1928, Serial No. 283,473. Renewed Sept. 22, 1931. 13 Claims. (Cl. 257—224.)



1. In a heat exchanger, a casing, tubes extending through said casing, a fluid inlet on one side of said casing near one end, and a baffle in said casing composed of strips between said tubes.

1,882,475. BELT BUCKLE. GEORGE R. BLICKHAHN, Chicago, Ill. Original application filed Feb. 16, 1929, Serial No. 340,456. Divided and this application filed Jan. 30, 1930. Serial No. 424,475. 1 Claim. (Cl. 40—152.)



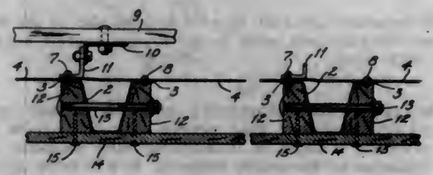
A belt buckle comprising an outer body plate having a window opening, a backing plate, and an interposed panel member held in place marginally between said backing plate and said outer body plate, opposite marginal portions of said outer body plate being rebent inwardly and clamped retentively upon the adjacent marginal portions of said backing plate, and transverse marginal portions of said body plate being bent inwardly to provide spaced belt guiding and retaining flanges.

1,882,476. DRY COATING FOR ALIMENTARY PRODUCTS. HARRY M. BLINN, Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed July 26, 1930. Serial No. 471,092. 4 Claims. (Cl. 99—11.)

2. Dusting sugar for doughnuts and the like, consisting of discrete, separate sugar particle individually coated with solid substantially homogeneous hydrogenated cocoanut oil, and thus rendered non-absorbent of moisture and oil from the articles dusted with the particles.

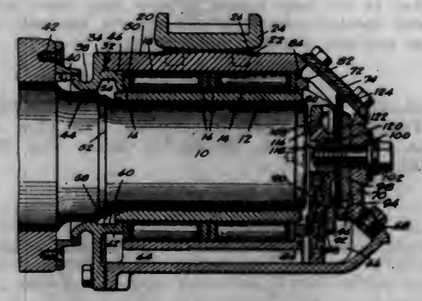
4. A process of treating dusting sugar to render it non-absorbent of moisture and oil from the articles dusted therewith, which process comprises agitating the discrete, separate sugar particles with a small percentage of hydrogenated cocoanut oil at a temperature sufficient to keep the fat freely fluid, but not to fuse the sugar, and suddenly chilling them while continuing the agitation, thus coating the individual sugar particles with the solid fat while yet leaving them separate and discrete.

1,882,477. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 382,034. 4 Claims. (Cl. 108—5.)



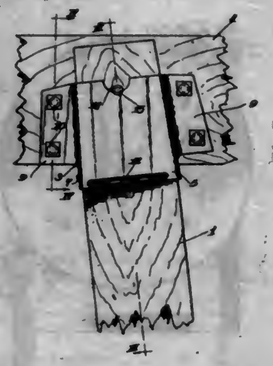
1. A car roof comprising side plates connected by channel-shaped carlines, roof sheets arranged with their side margins overlapped, said sheets being secured to the respective carlines by two rows of rivets along opposite sides of the channel, the rivets of one row extending through both sheets, wooden reinforcing strips extending substantially from end to end of said carlines on opposite sides thereof, bolts extending through registering holes provided therefor in said strips and said carlines at the neutral axis of the latter for clamping said strips to the sides of said carlines, and an insulating lining located beneath said carlines and secured to said reinforcing strips.

1,882,478. JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Bloomfield, and OTTO W. YOUNG, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 5, 1930. Serial No. 493,487. 18 Claims. (Cl. 308—41.)



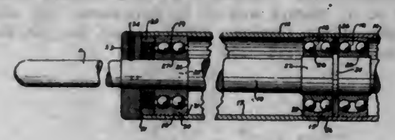
1. In a device of the character described, a housing, a shaft extending into the housing, the housing having an end wall spaced from the end of the shaft and provided with an opening, a thrust block opposing the end of the shaft, a retaining member in the housing and having a recess for the thrust block, and the recess being open towards and in alignment with the opening in the end wall to form a transverse passage for removal of the thrust block from the retaining member and the housing; substantially as described.

1,882,479. BRACKET. EDWARD B. BRITTIN, Chicago, Ill. Filed Aug. 31, 1928. Serial No. 303,159. 8 Claims. (Cl. 304—5.)



1. In a device of the character described, a metallic member bent to form a socket, said member being provided with a transverse groove-like detent adjacent an edge of said socket and extending into said socket.

1,882,480. INKING ROLLER. MARTIN W. BRUESHABER, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Nov. 8, 1929. Serial No. 405,704. 11 Claims. (Cl. 91—67.8.)

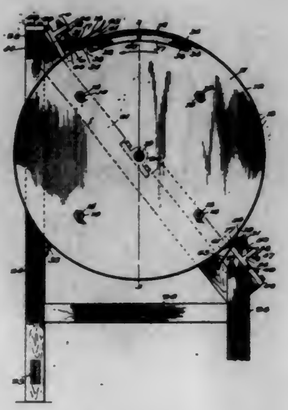


1. An ink roller for printing presses including in combination a shaft, a plurality of alined hollow members rotatably mounted on the shaft, bearings near the ends of each tubular member, a shoulder centrally of the shaft for limiting the movement of the hollow members towards the center of the shaft, and means limiting the outward movement of the hollow members.

1,882,481. BEAN NIPPING MACHINE. BENJAMIN I. BUCK, Lineboro, Md. Filed June 2, 1931. Serial No. 541,655. 10 Claims. (Cl. 146—86.)

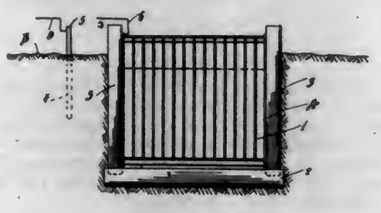
1. A machine for trimming the ends of bean pods which comprises a hollow rotary drum within which a charge of bean pods is contained, said drum having its peripheral wall provided with a multiplicity of perforations of such size as to permit the tapered ends of bean pods within said drum to extend endwise into said perforations and protrude beyond the periphery of said drum, means for rotating said drum, means for actively stirring up and tumbling the bean pods within said drum so as to cause large numbers thereof to be directed endwise against said perforate peripheral wall and be projected into and protrude through said perforations, said stirring means comprising a plurality of rods extending across the inner face of said peripheral wall transversely thereof and

spaced therefrom a distance such as to permit bean pods to pass through the space between said rods and said wall when said drum is rotated, and a knife having an edge



extending transversely across the outer face of said peripheral wall in close proximity thereto, which edge engages and severs the protruding ends of the bean pods.

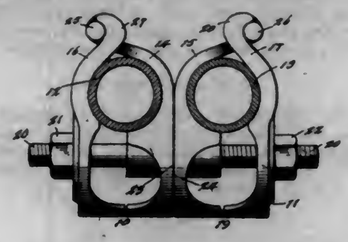
1,882,482. FISH DIVERTER FOR IRRIGATION DITCHES, FLUMES, NATURAL WATERWAYS, AND THE LIKE. HENRY THEODORE BURKEY, South Pasadena, Calif., assignor, by mesne assignments, to Burkey Manufacturing Company, a Copartnership composed of H. T. Burkey and O. Q. Beckworth, Los Angeles, Calif. Filed July 12, 1928. Serial No. 292,136. 5 Claims. (Cl. 175—265.)



2. In a fish diverter for ditches, streams and other courses or bodies of water, either natural or artificial, means for electrifying a portion thereof so that the electric currents will travel in a general direction parallel with the flow of the water therethrough.

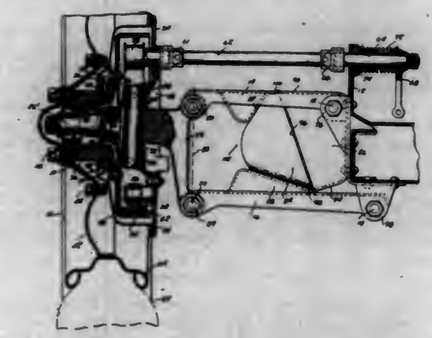
1,882,483. CLAMPING MEANS. PATRICK J. CANNON, New York, N. Y. Filed Sept. 19, 1929. Serial No. 393,751. 7 Claims. (Cl. 189—56.)

5. Clamping means for fastening two members together at any desired angle to each other, comprising two similar elements having similar connecting portions and two other similar elements having connecting portions dissimilar to those of the first two, said elements being grouped into two units each unit comprising two dissimilar elements adapted to be connected together, each unit being adapted to clamp a member firmly between its two elements, in combination with nut and bolt means



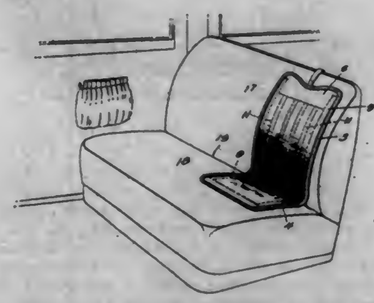
for clamping each unit about a member and at the same time clamping said units in any desired angular relation to each other.

1,882,484. INDEPENDENTLY SPRUNG WHEEL CONSTRUCTION FOR THE FRONT END OF MOTOR VEHICLES. MILES H. CARPENTER, New Rochelle, and CHARLES B. KIRKHAM, Freeport, N. Y. Filed Apr. 6, 1929. Serial No. 353,007. 4 Claims. (Cl. 280—124.)



1. Independent front wheel construction for motor vehicles comprising a body portion, substantially parallel links connecting the wheel to the body portion and having abutment portions thereon, a retaining member attached to the body portion between said links, and a rubber member interposed between said abutment portions and said retaining member.

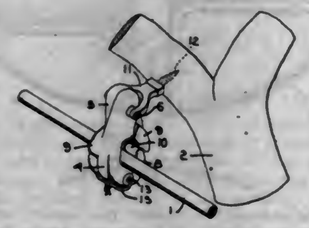
1,882,485. AUXILIARY SEAT AND BACK REST. WELLINGTON I. CLEMENTS, Norfolk, Va. Filed Apr. 28, 1931. Serial No. 533,525. 8 Claims. (Cl. 155—182.)



1. A seat and back rest constructed of fabric and formed to provide an offset anchorage section, and spring

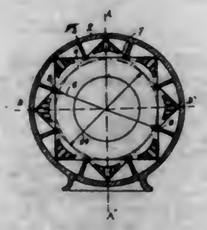
strips extending lengthwise the seat and back, certain of the springs extending into and normally positioning the anchorage section.

1,882,486. INSULATOR. WILLIAM H. COLE, Abington, Mass. Filed Apr. 20, 1928. Serial No. 271,567. 1 Claim. (Cl. 173—314.)



An insulator comprising a pair of sister hooks of insulating material and arranged side by side, a supporting bracket on which the hooks are coaxially pivoted, each hook having on the side thereof which faces the other hook a projection extending from the hook body a sufficient extent to be flush with the outer face of the other hook member, the projection of each hook member being so disposed and of such dimension as to extend from the tip of the other hook member to the shank thereof at a point opposite the hook when the hooks are in closed relation, whereby there is formed a closed eye having a dimension in a direction parallel to the axis of the hooks equal to the combined transverse dimension of both hooks in said direction, with the top of the eye spaced from the pivot of the hooks a distance at least equal to the length of the eye.

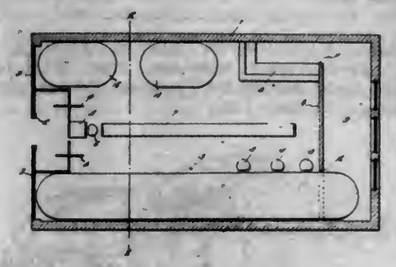
1,882,487. AXIAL VENTILATING DEVICE FOR THE STATORS OF ELECTRIC MACHINES. JOSEPH DUPONT, Liege, Belgium. Filed Oct. 15, 1930, Serial No. 488,925, and in Belgium Oct. 19, 1929. 4 Claims. (Cl. 171—252.)



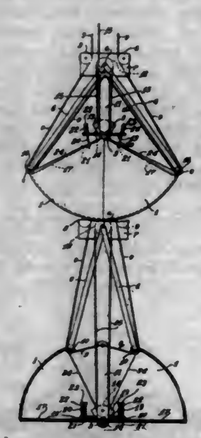
1. In a stator for electric machines, a magnetic core comprising a plurality of superposed polygonal plates angularly offset relatively to each other, and having ventilating passages in each projecting corner, which passages are located in the spaces limited by the external contour of said projecting corners and by a curve passing through the intersection points of the edges of the succeeding plates and exteriorly with respect to the circle passing through said intersection points.

1,882,488. STORE. WARREN C. ELLIS, Flint, Mich. Filed Aug. 4, 1931. Serial No. 555,112. 2 Claims. (Cl. 186—1.)

1. In combination, a store comprising a show window in one end and a stock room in its other end portion, and an endless merchandise conveyor in the store having one end disposed adjacent the show window for displaying the merchandise therethrough, and its other end extending into the stock room to facilitate placing the merchandise thereon from said stock room.



1,882,489. CLAM BUCKET. JOHN W. EMERICK, Detroit, and WILLIAM E. EMERICK, Mount Clemens, Mich. Filed May 28, 1931. Serial No. 540,590. 5 Claims. (Cl. 37—184.)



1. The combination with a clam bucket comprising a pair of scoops pivotally secured together by a transversely extending shaft, of a pair of plates pivotally mounted upon said shaft and extending outwardly to scrape the inner wall of said scoops, and resilient means for maintaining said plates at the top of said scoops in a manner to cover the same.

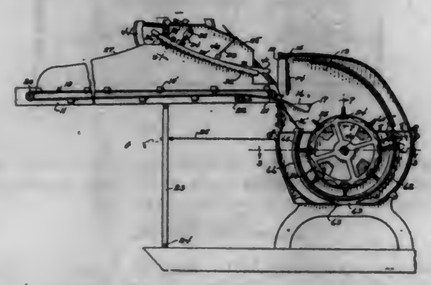
1,882,490. MASSAGE ROLLER. SIRI FALCK, Stockholm, Sweden. Filed July 15, 1930. Serial No. 468,000. 2 Claims. (Cl. 128—57.)



1. In combination, an elongated massage roller, composed of continuous material that is capable of flexure, said roller having a central bore, a flexible shaft loosely

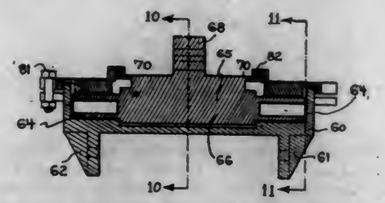
placed within said bore and having projecting ends, handles secured to said projecting ends, and relatively short bushings fitted within said bore to form bearings for said shaft.

1,882,491. MACHINE FOR GRINDING FORAGE. MARTIN HENRY GATELY, Henderson, Nebr. Filed Dec. 3, 1927, Serial No. 237,530. Renewed Feb. 25, 1932. 1 Claim. (Cl. 146—119.)



In a machine for grinding forage, a grinding element, a housing within which the element is mounted, a travelling feeding device, alternate oscillating and stationary feeding devices, of channel type, positioned above the travelling element and means for moving the oscillating devices in a curved path for engaging material on the travelling element, these means including crank hangers movable about a common axis near corresponding ends of the channel devices; and devices comprising relatively movable members supporting the opposite end portions of the movable channel elements, permitting variable oscillating movement thereof.

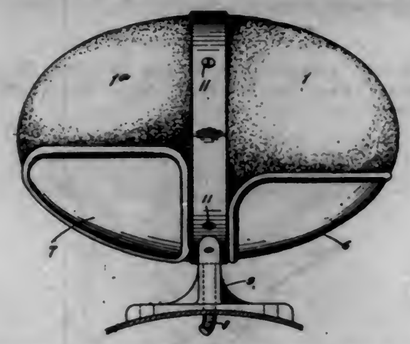
1,882,492. OIL BATH BEARING WITH A ROOF. BERT G. GOBLE, Tulsa, Okla., assignor to W. A. Quigley. Filed Aug. 7, 1929. Serial No. 384,061. 8 Claims. (Cl. 308—21.)



1. A bearing consisting of a hollowed out bearing member, means for holding the bearing member in place, a journal member revolubly mounted in the hollowed out bearing member and means, having a downwardly extending portion fitting over and contacting with the journal member, fastened to the bearing member whereby said means contacts with said journal member below the top of the hollowed out bearing member.

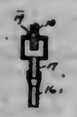
1,882,493. LAMP FOR MOTOR CARS. JOHN JOEL JOHANNES GÖRANSSON, Linkoping, and AXEL THEODOR KOCH, Motala, Sweden. Filed Sept. 6, 1930, Serial No. 480,162, and in Sweden Feb. 26, 1929. 2 Claims. (Cl. 240—74.)

1. A lamp for motor cars comprising a light source, a reflector and a stream line formed casing surrounding the light source, the casing being divided transversely into front and rear halves, the front half being provided with an opening taking in the under portion from side to side and through which the light projects forwardly and downwardly in front of the car, said rear half having



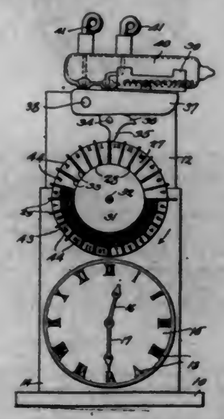
an opening taking in one-half the under portion from the bottom to one side and through which the light is transmitted rearwardly, downwardly and laterally.

1,882,494. WINDOW CLEANER. KARL HERMAN, Morrisville, Pa. Filed Mar. 2, 1928. Serial No. 258,700. 1 Claim. (Cl. 20—40.5.)



The combination with a window frame having its top, bottom and sides formed of communicating tubes provided with perforations, said parts being also provided with longitudinal slots communicating with each other, and also having nipples communicating with the interiors of said tubes, and a glass having its edges extended through said slots into said tubes a substantial distance, so that outgoing air will be directed into the space between the surface of the glass and an adjacent wall of the tube, said perforations being inclined in a direction leading toward the surface of the glass with the outlets thereof close to said surface, and means for introducing air under pressure into said tubes.

1,882,495. ELECTRIC TIME SWITCH. ANDREW HIPP, Baltimore, Md. Filed Sept. 11, 1931. Serial No. 562,373. 7 Claims. (Cl. 200—38.)



1. In a time switch, a clock work rotated drum having a series of radial slots, blades each mounted slidably

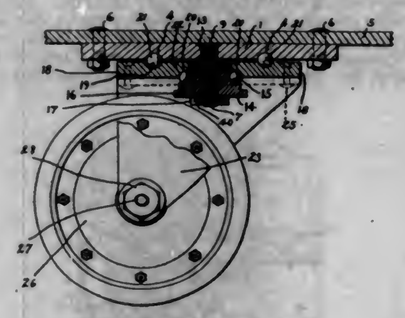
in a respective slot to project from and be housed in the drum, a tilting switch arranged to close a circuit when tilted, and means to tilt said switch actuated by said blades when projected from the drum.

1,882,496. FASTENER. BAREND P. HOLZBERG, Washington, D. C. Filed Nov. 8, 1930. Serial No. 494,416. 3 Claims. (Cl. 24—265.)



1. The combination with a piece of upholstery webbing or the like, of a fastener comprising a bendable metal plate through which tacks or the like may be driven, said plate having a tongue at one edge folded down upon and across the webbing, the end of the webbing being folded down over the tongue, forming a loop within which the tongue extends to sustain pull on the webbing and the plate having a rear portion bent down upon the end of the webbing and clamping the same around the tongue.

1,882,497. BEARING CONSTRUCTION. FRANK J. JARVIS, Palmer, Mass., assignor to Jarvis & Jarvis, Inc., Palmer, Mass., a Corporation of Massachusetts. Filed Jan. 2, 1929. Serial No. 329,699. 1 Claim. (Cl. 16—21.)



In a device of the character described, a support plate having an opening therein, a retaining pin having a collar of larger diameter than the pin and positioned intermediate the ends of the pin, one end of the pin extending into the opening of the support plate and one side of the collar abutting the surface of said support plate adjacent the opening therein, the portion of the pin extending into said opening being welded to said support plate to integrally secure it thereto, a bushing on the portion of the pin exterior of the support plate, said bushing having a recessed portion receiving the said collar on the pin, a wheel support having depending side plates and a connecting section, said section having an opening through which the bushing extends, ball bearings between the bushing and connecting section of the wheel support, ball bearings between said section and the support plate, and a wheel rotatably mounted between the depending plates of the wheel support.

1,882,498. TIRE TREAD. FRANK J. JARVIS, Palmer, Mass., assignor to Jarvis & Jarvis, Inc., Palmer, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1929. Serial No. 330,015. 1 Claim. (Cl. 152—1.)

In a device of a character described, a relatively hard wheel center having a peripheral tire supporting portion and tire interengaging means thereon, a tire on said tire supporting portion having a hard annular tire base of a lower degree of hardness than said wheel center and surrounding said wheel center, said tire base having a V shaped inner surface in direct engagement with the tire supporting portion substantially throughout its surface area, said tire base also having substantially flat parallel side walls with diametrically opposed circular grooves therein interengaging with the tire interengaging means on the wheel center and preventing displacement



of the V shaped inner surface from the tire supporting portion and having a substantially flat peripheral surface lying substantially parallel with the axis of the wheel center, and a separate relatively soft and resilient annular tire tread of substantially rectangular shape cross section having its inner broad surface secured to the substantially flat peripheral surface of the tire base and having its side walls lying substantially in the plane of the side walls of said tire base, the cross sectional area of the soft tire tread being less than the cross sectional area of the tire base.

1,882,499. PLASTER BASE. HENRY STINSON JOHNS, Hamilton, Ontario, Canada, assignor to Bancroft Holdings Limited, Hamilton, Ontario, Canada, a Corporation of Ontario. Filed Mar. 18, 1930. Serial No. 436,876. 5 Claims. (Cl. 73—116.)

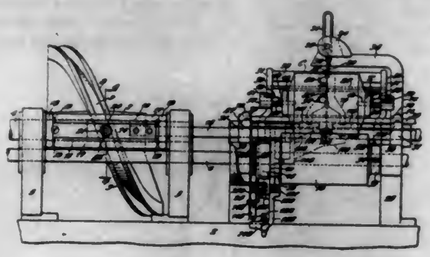


1. In a plaster base backing sheet of the character described incorporating a backing sheet presenting an entirely flat unbroken surface across its plaster receiving face, the combination with the wire fabric positioned in front of the sheet and a plurality of ribs positioned upon the back of the sheet, of lugs extending from the ribs through the sheet and supporting the fabric entirely out of contact with the sheet.

1,882,500. WINDING MACHINE. CHARLES H. JONES. Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 29, 1929. Serial No. 389,283. 17 Claims. (Cl. 242—43.)

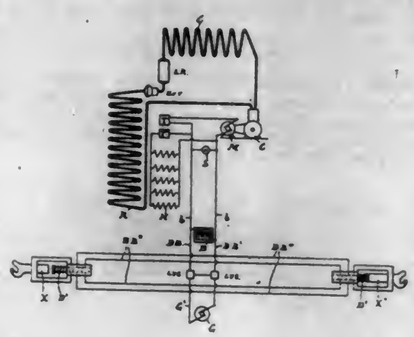
1. In a winding machine, the combination of means for rotating a cop or package, means for traversing strand material on the package, reciprocating means therefor, means for coupling the traversing means to the recipro-

cating means, means for releasing the coupling means, and means acting to prevent release of the coupling means, said means being provided with a gap to allow the coupling means to be released when the traversing means is at a point intermediate the ends of traverse.



5. In a winding machine, the combination of means for rotatively supporting a cop or package, means for rotating the package, a thread-guide for traversing strand material on the package, said guide formed with a slot, a pivoted rocker-arm extending through said slot, a reciprocating traverse-bar, coupling-means on the rocker-arm adapted to be connected with the traverse-bar to cause the arm to oscillate to reciprocate the guide, and means for disconnecting the coupling-means from the traverse-bar to arrest the reciprocation of the guide.

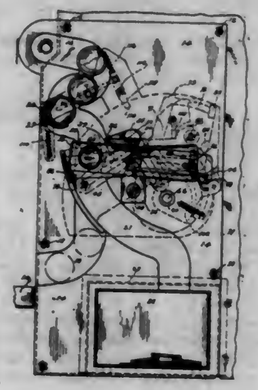
1,882,501. POWER PLANT FOR TRANSPORT VEHICLES. WILLIAM PLATTS KELLETT, New York, N. Y. Filed Jan. 25, 1930. Serial No. 423,493. 10 Claims. (Cl. 171—313.)



1. A power plant for transport vehicles, comprising the combination with an electric generator operatively connected with the running gear of the vehicle, a storage unit, and a generator circuit interposed between said generator and storage unit of draft-controlled means adapted to close the generator circuit to utilize the kinetic energy of the load moving down grade and to open the generator circuit when the load is being pulled.

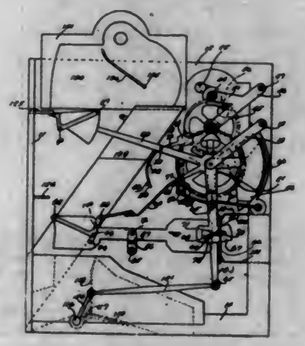
1,882,502. FRAUD PREVENTING MEANS FOR COIN CONTROLLED MECHANISM. AARON A. KNEE, Charlotte, N. C., assignor, by direct and mesne assignments, to Vanak Corporation, Charlotte, N. C., a Corporation of North Carolina. Filed Apr. 1, 1929. Serial No. 351,566. 25 Claims. (Cl. 194—103.)

5. In a coin selector for coin controlled mechanism, a balanced member pivoted intermediate its ends to assume a swinging position, means for directing a coin to said balanced member, means for holding the coin in said balanced member, means separated from but controlled by



said balanced member to deflect coins of a given weight in one direction and to deflect coins below or above a given weight in another direction.

1,882,503. AUTOMATIC FRAUD PREVENTIVE MEANS FOR CHECK CONTROLLED APPARATUS. AARON A. KNEE, Charlotte, N. C., assignor, by direct and mesne assignments, to Vanak Corporation, Charlotte, N. C., a Corporation of North Carolina. Filed June 5, 1929. Serial No. 368,562. 19 Claims. (Cl. 194—103.)

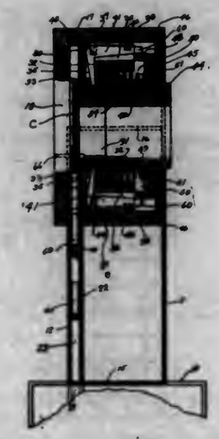


1. In a fraud preventive device for coin controlled apparatus, a balancing mechanism, a pivoted coin receiving member, means for releasing the coin from the pivoted coin receiving member and delivering the same to the balancing mechanism, means controlled by the balancing mechanism for directing the coin into the coin controlled apparatus, if genuine, and for returning the coin to the operator in case the same is defective.

1,882,504. CHECK ENTRANCE FOR CHECK CONTROL APPARATUS. AARON A. KNEE, Charlotte, N. C., assignor, by direct and mesne assignments, to Vanak Corporation, Charlotte, N. C., a Corporation of North Carolina. Filed July 27, 1929. Serial No. 381,442. 24 Claims. (Cl. 194—97.)

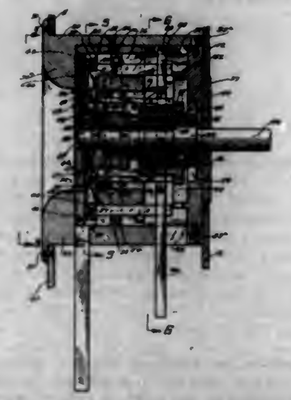
24. In a check testing device for check controlled apparatus having a check entrance and means for normally

closing said entrance, means for locking said closing means in closed position, depressible members penetrating said closing means and being movable by pressure on an in-



serted check, and means operable by said depressible members for moving said locking means to unlocking position.

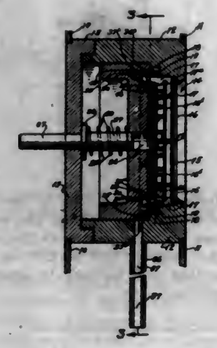
1,882,505. CHECK OPERATED FRAUD PREVENTIVE MEANS. AARON A. KNEE, Charlotte, N. C., assignor, by direct and mesne assignments, to Vanak Corporation, Charlotte, N. C., a Corporation of North Carolina. Filed Nov. 29, 1929. Serial No. 410,451. 24 Claims. (Cl. 194—97.)



7. In a check testing device for check controlled apparatus having a check entrance and means for closing the entrance, a plurality of movable means penetrating said closing means and being adapted to engage the side of a check inserted sidewise, and means operable by said movable means for controlling the direction of the check thru the testing device.

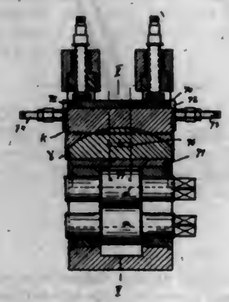
1,882,506. FRAUD PREVENTIVE CHECK ENTRANCE. AARON A. KNEE, Charlotte, N. C., assignor, by direct and mesne assignments, to Vanak Corporation, Charlotte, N. C., a Corporation of North Carolina. Filed May 16, 1930. Serial No. 453,050. 5 Claims. (Cl. 194—102.)

1. In a check entrance for check controlled apparatus, means for normally closing said check entrance, means for moving the closing means to closed position, means for locking said closing means in closed position, said locking means being operable by the thickness and circumference of an inserted check for unlocking the closing means and allowing the same to assume an opened posi-



tion when pressure is applied to the check, means for holding the closing means in opened position and means controlled by said check for releasing the closing means to allow the same to assume a normal position of closing the check entrance.

1,882,507. CONSTRUCTIONAL FORM OF ROLLING MILL. RUDOLF KRONENBERG, Haus Kronenberg, Post Immigrath, Germany. Original application filed Aug. 28, 1929, Serial No. 389,077, and in Germany Apr. 17, 1929. Divided and this application filed Sept. 24, 1930. Serial No. 484,185. 5 Claims. (Cl. 80—56.)



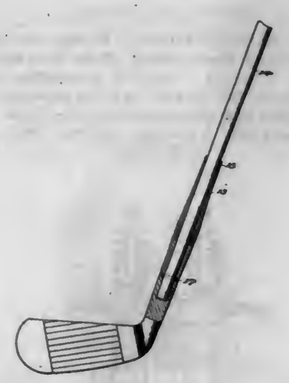
4. A rolling mill, comprising, in combination with the rollers and their trunnion bearings, a member bearing upon the braces of the upper roller and having upwardly directed parallel ledges on its top; a body having a convex top face, and another member having a concave bottom face and receiving said convex member in it; a member overlapping and enclosing the part having the concave surface and another member located below, and enclosing the part having the convex surface; said latter two members being stationary and the said concave and the said convex part being shiftable between them; screws extending through the lower member which supports and encloses the convex part into slots in this part, said screws serving to move said parts jointly substantially and for the purpose set forth.

1,882,508. HAIR DRESSING DEVICE. JOSEPH N. LA GASSÉ, Upper Darby, Pa. Filed June 18, 1931. Serial No. 545,169. 25 Claims. (Cl. 132—33.)



1. In a device for preforming hair to be curled, a forming rod, a flexible loop, a tie within the rod connecting with the loop at one end, accessible at the other end and a clutch within the forming rod permitting the tie to be moved in one direction and holding it against movement in the opposite direction.

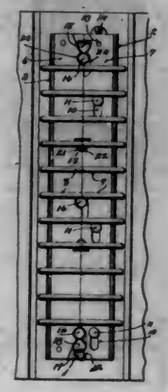
1,882,509. GOLF CLUB. HERBERT C. LAGERBLADE, Bristol, Conn., assignor to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Oct. 17, 1930. Serial No. 489,402. 3 Claims. (Cl. 273—80.)



1. In a construction of the character described, a metallic golf club head provided with a hosel having an axial bore, said bore having a smooth interior surface and a major and a minor diameter, a shaft conforming in diameter to and received in the portion of said bore of minor diameter, an adapter conforming in diameter to and received in the portion of the bore of major diameter and projecting beyond said hosel, means located beyond the inner end of the adapter for securing said shaft in the hosel and separate means engaging the outer end of the adapter for securing said adapter in the hosel.

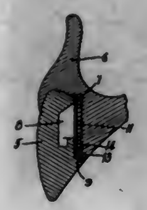
1,882,510. RING BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to H. C. Miller Co., Milwaukee, Wis. Filed Nov. 18, 1927. Serial No. 234,107. 11 Claims. (Cl. 129—24.)

9. In a visible record removable leaf holder, the combination of a back having tilting sections therein, arranged to tilt about parallel axes disposed at the outer longitudinal edges of the back, ring halves on each section, and in-



strumentalities whereby the ring halves on one section are movable in unison out of alignment with the ring halves of the other section.

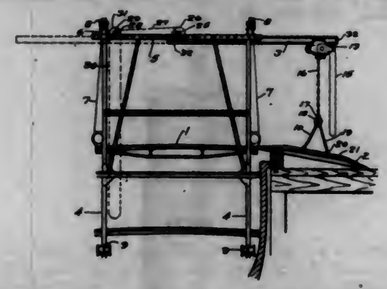
1,882,511. ARTIFICIAL TOOTH AND SUPPORTING MEANS THEREFOR. NICHOLAS R. LOUIE, Gloucester, Mass. Filed Nov. 15, 1929. Serial No. 407,405. 1 Claim. (Cl. 32—9.)



In combination an artificial tooth, a plate positioned against the back of said tooth, a member fastened to said plate and imbedded in the tooth, a pair of oppositely disposed flanges projecting rearwardly from the plate and inclined toward each other, whereby a dove-tail shaped groove is formed across the plate and another inclined flange projecting rearwardly from the plate and intersecting both of the other flanges and closing an end of said groove, all of the flanges being adapted to be imbedded in the material of a dental plate.

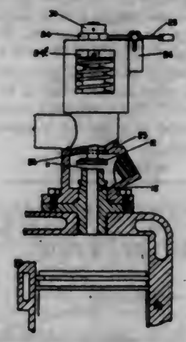
1,882,512. MARINE ELEVATOR. FRANK EDWARD LOVEJOY, Seattle, Wash. Filed Feb. 24, 1930. Serial No. 430,913. 5 Claims. (Cl. 14—72.)

1. In a marine elevator of the type having a frame positioned over and extending into the hold of a ship, with a raising and lowering platform, and having a transfer board in combination therewith, a telescoping beam in the top and at the center of said frame and a hoisting apparatus on said beam adapted to pick up said transfer board, convey it to the side of the ship and position same with



one end at a point conveniently reached by said elevator platform and the other end resting on a dock to which the ship may be moored.

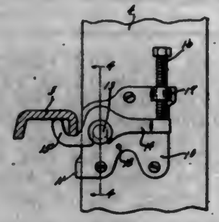
1,882,513. INTERNAL COMBUSTION ENGINE. JAMES JOHNSTONE MCELHINNEY, Surrey Hills, Victoria, Australia. Filed June 9, 1930, Serial No. 460,060, and in Australia June 11, 1929. 3 Claims. (Cl. 123—143.)



3. In a four-stroke cycle internal combustion engine, the combination of an engine cylinder for the combustion of heavy oil mixture, an ignition chamber, means connecting said ignition chamber to said cylinder for spark plug ignition, a first valve seat on said connecting means, a double valve member adapted to engage said first valve seat on the induction stroke of the engine, a second valve seat normally engaged by said valve member and cutting off the supply of petrol mixture except during the induction stroke of the engine, a valve stem connected to said valve member, a spring associated with said valve stem and adapted to hold said valve member against said second valve seat, by-pass means connecting said ignition chamber to said cylinder even when said valve member is closed against said first valve seat on the induction stroke of the engine, and means adapted to engage said valve stem and prevent said valve member from closing on said first valve seat during starting-up and idling.

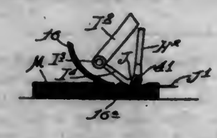
1,882,514. BATHTUB SUPPORT. JOHN B. MARTENS, Cleveland, Ohio, assignor of one-half to Andrew Main, Cleveland, Ohio, and one-half to Evelyn G. Bradley, Cuyahoga Falls, Ohio. Filed Dec. 18, 1931. Serial No. 581,938. 4 Claims. (Cl. 4—173.)

2. A tub support of the character described, comprising a plate like body portion adapted for attachment to the side of a stud and provided with a lateral offset to engage its front surface, a pivot pin on said body portion, a lever mounted on said pivot pin and having a forwardly extending arm adapted to extend beneath and support the tub and a rearwardly extending arm, and an adjusting screw carried by the body portion and engaging said rear-



wardly extending lever arm, said lever having an open recess at the pivot pin, whereby it may be detached therefrom.

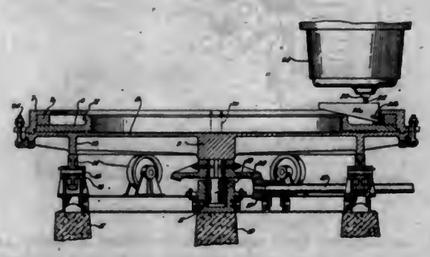
1,882,515. STUFFING-RELIEVING PROCESS AND APPARATUS. ALLISTER S. MITCHELL, Oakland, Calif., assignor to National Automotive Fibres, Inc., Detroit, Mich., a Corporation of Delaware. Filed Nov. 10, 1930. Serial No. 494,817. 33 Claims. (Cl. 45—138.)



1. A method of withdrawing stuffing material from the pleats of upholstery which comprises: thrusting needles through the fabric casing of the pleats and outwardly through open ends of the pleats, thereby plucking the desired amount from the pleats, and gathering and removing the plucked material.

30. In apparatus of the character set forth, plucking mechanism adapted to pluck a portion of the filling material from a stuffed upholstery casing, means for withholding the remainder of the filling material from the plucking means; and means for removing the plucked material from the plucking mechanism.

1,882,516. MAKING BLOOMS, SLABS AND BILLETS. HARRY M. NAUGLE and ARTHUR J. TOWNSEND, Canton, Ohio, assignors to Naugle & Townsend, Inc., a Corporation of Delaware. Filed July 2, 1930, Serial No. 465,803, and in Canada June 4, 1930. 10 Claims. (Cl. 22—200.)



1. The method of making a massive ring bloom, slab, billet and the like having a cross sectional area of sixteen square inches and upwards with a minimum dimension of three inches and a circumferential length of twenty-five feet and upwards directly from molten metal, which includes flowing and compressing the molten metal by centrifugal force into a rotating annular mold to form

a ring, maintaining fluidity of the molten metal during the flowing and compressing operation, maintaining the centrifugal pressure at a maximum until the metal has cooled to a self sustaining plastic condition, and then reducing the centrifugal pressure.

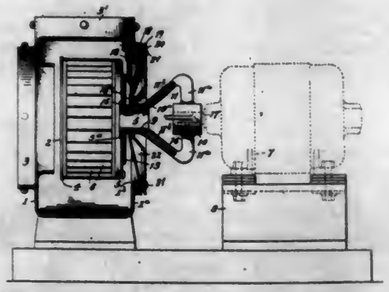
1,882,517. PROCESS FOR THE PRODUCTION OF FERRO-PHOSPHORUS LOW IN OR PRACTICALLY FREE FROM SILICON. MORITZ NEUMARK, Herrenwyk in Lubeckschen, and HANS WEIDMANN and GERHARD ROESNER, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 521,002, and in Germany Mar. 13, 1930. 4 Claims. (Cl. 75—17.)

1. A process for the production of ferro-phosphorus low in to free from silicon, which comprising heating to a reducing temperature not exceeding 1050° C. a furnace charge containing in addition to a calcium phosphate, siliceous and ferruginous substances and a carbonaceous material in an amount sufficient to convert both the phosphorus and the iron present in the combined form into elementary phosphorus and metallic iron, but containing no substantial amounts of alumina and the composition of which charge is so controlled that it contains on the whole not more total free and combined SiO_2 than is equivalent to the total quantity of free and combined bases.

1,882,518. THE PROCESS OF PREPARING ORGANIC BASES. OTTO NICODEMUS, Hochst-on-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 4, 1928, Serial No. 244,560, and in Germany Jan. 5, 1927. 26 Claims. (Cl. 260—38.)

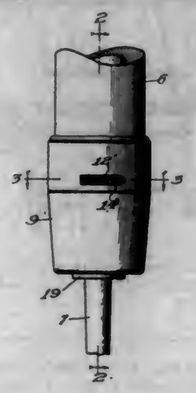
1. The process which comprises passing vapors comprising acetylene and ammonia at a temperature between 280° C. and 450° C., over such inorganic salts, as are known by their property of forming additive compounds with ammonia.

1,882,519. INDUCED DRAFT APPARATUS. HENRY W. PFEFFER, Narberth, Pa., assignor, by mesne assignments, to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 21, 1927. Serial No. 185,617. 21 Claims. (Cl. 230—209.)



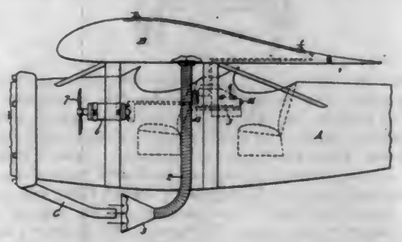
1. An induced draft apparatus including a casing having an inlet and an outlet adapted to be connected with an exhaust conduit for hot gases and the like, a fan wheel within the casing; a motor outside the casing for rotating the fan wheel, and a coupling between the motor and fan wheel comprising aligned spaced coupling portions and a plurality of portions bridging the space between and connecting said coupling portions together at different points thereabout.

1,882,520. POWER OPERATED RECIPROCATING TOOL DEVICE. HUGH E. POLLARD, Chicago, Ill., assignor to Arrow Tools, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 19, 1930. Serial No. 453,789. 2 Claims. (Cl. 121—32.)



1. In combination, a pneumatic-riveter barrel containing a peripheral groove in its outer surface, a holder for a chisel adapted to be slipped over said barrel and containing a groove in its inner surface, said grooves registering in the assembled position of said barrel and holder, said holder containing an opening in its side registering with the groove in said holder, and a key member in the form of a wire wound into a spiral and insertable through said opening into said grooves for releasably securing said holder to said barrel.

1,882,521. SKY WRITING APPARATUS. JOHN POPOFF, New York, N. Y. Filed Aug. 5, 1930, Serial No. 473,171. Renewed June 15, 1932. 4 Claims. (Cl. 244—1.)



3. The combination with an airplane having a hollow wing provided with outwardly directed orifices, means for introducing the engine exhaust into the wing, a valve for each orifice, selective means for operating the valves and means intermediate the selective means and the different groups of valves actuable to operate any group of orifices to permit the emission of exhaust only from that group of orifices.

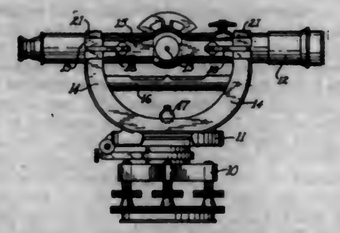
1,882,522. METHOD OF JOINING PREFORMED METALLIC ARTICLES WITH A GALVANOPLASTIC BODY. GUNNAR ROSENQVIST, Pittsburgh, Pa. Filed Nov. 15, 1928. Serial No. 319,534. 1 Claim. (Cl. 204—6.)

The method of joining preformed metallic inserts with a body of galvanoplastic metal which comprises providing a cathode with a recess and placing the insert in the recess of the cathode, exposing a portion of said insert as a part of the cathode to an electrolytic solution to deposit a body of galvanoplastic metal on the cathode and insert, and filling the crevices formed by the crystalline structure of the galvanoplastic metal at the joints



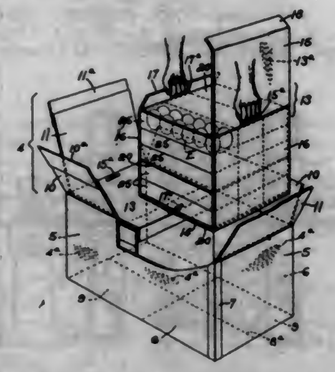
of the insert with a reenforcing metal to interlock said crystals and extending said reenforcing metal over a relatively large surface area of the galvanoplastic body.

1,882,523. COMBINATION LEVEL TRANSIT. CHARLES O. ROTHWEILER, Milwaukee, Wis., assignor to David White Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 17, 1927. Serial No. 233,924. 3 Claims. (Cl. 33—73.)



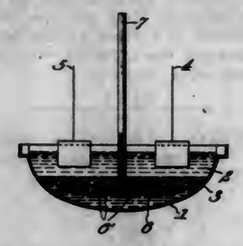
1. A leveling instrument comprising a standard, a telescope pivotally mounted thereon to swing in a vertical plane, a collar secured to said telescope at a distance from its pivotal axis, a pair of blocks adjustably mounted on the collar to move transversely of the telescope to form a slot between them, and locking means on the standard for engaging said slot when the telescope is in predetermined position with respect to the standard.

1,882,524. EGG CASE. FRANCIS H. SHERMAN, Palmer, Mass. Filed May 24, 1930. Serial No. 455,247. 2 Claims. (Cl. 206—46.)



1. An egg shipping and distributing case formed substantially wholly of fibrous sheet material of a weight and strength corresponding to that of commercial corrugated paper-board, said case comprising; a rectangular outer container, collapsible flatwise, and including four vertical walls and completely-enclosing top and bottom members; and two inner lifter casing members, each positionable and removable independently of said outer container, each as a unit including one-half the egg contents of said case, said contents comprising independent laterally slidable egg-container units stacked within said lifter members, each lifter member occupying approximately a one-half portion of the case and each having a substantially rectangular bottom section and two opposite side sections integrally foldably connected with said bottom section, said lifter members being openly constructed at their other two sides for independent lateral sliding of their received container units when said lifter members are partly or wholly outside the case, each said lifter member constructed to receive and support its portion of said independent container units, whereby said lifter members and the container units stacked in them may be unitarily lifted and manipulated for inspection and rapid handling purposes.

1,882,525. PROCESS FOR THE ELECTROLYTIC PRODUCTION OF METALS OF THE ALKALIS OR ALKALINE EARTHS. WOLFHART SIECKE, Frankfort-on-the-Main, Germany. Filed Nov. 13, 1929, Serial No. 407,003, and in Austria Nov. 16, 1928. 17 Claims. (Cl. 204—19.)



1. Process of preparing alloys of alkaline earth metals which comprises electrolyzing a molten salt mixture containing at least one halide of the alkaline earth metal to be deposited and at least one other halide of a metal other than an alkaline earth metal in contact with a cathode of a molten metal adapted to take up the deposited metal, said cathode having a temperature above 600° C. while continually stirring the molten cathode.

1,882,526. STENCIL. CHARLES D. SMITH, Sharon Hill, Pa., assignor to The Dallett Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1930. Serial No. 504,316. 3 Claims. (Cl. 101—127.)



1. A stencil material for abrasive blasting comprising a laminated sheet including an upper sheet composed of abrasive resistant material, a lower sheet adhered to the upper sheet and composed of a material capable of being rendered tacky by the application of water and an intermediate sheet adhered to both the upper and lower sheets.

1,882,527. DRAPERY BRACKET DEVICE. ZACH A. STANLEY, Muncie, Ind. Filed June 5, 1931. Serial No. 542,357. 5 Claims. (Cl. 156—33.)



4. A drapery bracket device comprising opposed resilient leaves retained in closely spaced relation, and resilient leaves retained in position spaced closely adjacent to the outer faces of the first named leaves, there being inwardly disposed humps on the inner leaves, and inwardly disposed humps on the outer leaves substantially as described.

1,882,528. METHOD FOR RECLAIMING SCRAP METAL. HARRY W. THOMAS, Jr., Birmingham, Mich. Filed Mar. 5, 1931. Serial No. 520,483. 2 Claims. (Cl. 209—207.)

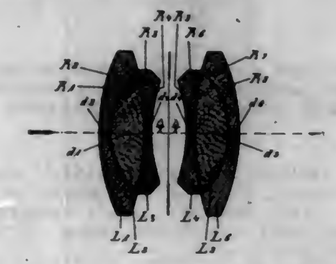
1. A process of separating scrap material comprising particles of antimony alloy and particles of non-antimony alloy, consisting of treating said material with a substance to form a protective oxidization resistant, coating on the particles of antimony alloy, then subjecting said material to an oxidizing agent to form an oxidized coating on the non-antimony alloy particles and finally subjecting said material to a water surface tension flotation treatment to separate the antimony alloy particles from the non-antimony alloy particles.

1,882,529. COVERING FOR WALLS. EMIL F. THULIN, Chicago, Ill. Filed Mar. 2, 1931. Serial No. 519,512. 2 Claims. (Cl. 72—19.)



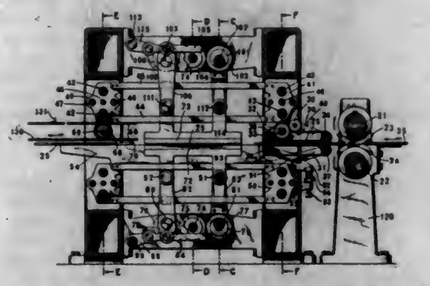
1. A covering for walls comprising an assembly of rectangular sheet metal panels, each panel having two adjacent edges shaped into a channel-way extending therealong including a straight or flat bottom wall portion with an aperture through which the panel is screwed to the wall and an outer side wall slanting upwardly and outwardly, the edges of the panels opposite said adjacent edges being shaped with a flange portion extending over the channel-way of an adjacent panel so as to form a chamber therewith, a pliable sealing material filling said chamber, and each panel having a hook flange formation set back from said opposite edges and extending rearwardly into hooking engagement with the outer side wall of the adjacent panel and so formed that when drawing the panels together in an edgewise manner in assembling them said hook flange and the outer wall cooperate in camming the flange portion down over the channel-way so that the sealing material placed in the channel-way is pressed into the chamber in filling same.

1,882,530. SPHERICALLY CHROMATICALLY AND ASTIGMATICALLY CORRECTED WIDE-ANGLE LENS WITH HIGH APERTURE. ALBRECHT WILHELM TRONNIER, Kreuznach, Germany. Filed Oct. 1, 1930, Serial No. 485,596, and in Germany July 2, 1930. 4 Claims. (Cl. 88—57.)



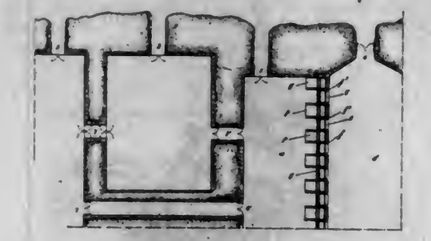
1. In a spherically, chromatically and astigmatically corrected wide-angle lens with high aperture which comprises, in combination with the diaphragm, two individual components consisting each of three lenses cemented together and having three radii of curvature that are concave towards said diaphragm, the two concave surfaces adjacent the diaphragm being adapted to disperse and the third concave surface, as well as that cemented radius which is convex towards the said diaphragm, being adapted to collect, and the glasses being such that their indices of refraction increase in the direction away from the diaphragm, the difference in the indices of refraction of the glasses of the lenses bounding said collecting cemented surface being greater than 0.08, the difference in the refractive indices at the dispersing cemented surface being greater than one fourth of the difference at that cemented surface which is convex towards the diaphragm and the difference of the indices of refraction of the two outer dispersing lenses being smaller than 0.150: individual components, as above stated, in which the collecting cemented radius amounts at least to one third and at the highest to one half of the total focal length of the objective, and the dispersing cemented radius amounts at least to 7.5% and at the highest to 15% of the equivalent focal length of the same.

1,882,531. CREASING AND FOLDING MACHINE. GUSTAVE A. UNGAR, Pelham Manor, N. Y. Filed Dec. 29, 1930. Serial No. 505,275. 11 Claims. (Cl. 93—58.)



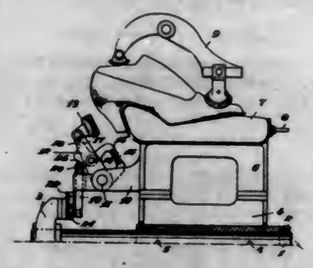
1. In a creasing machine, creasing bars, a number of crank shafts, arms connecting said crank shafts with said bars, a link connecting said arms and means for oscillating said link.

1,882,532. HYDROELECTRIC PLANT. GASTON HENRI VACQUIER, Armentières, and VICTOR LEON ENTRAYGUE, Malo-les-Bains, France. Filed Jan. 25, 1929, Serial No. 335,026, and in France Feb. 4, 1928. 3 Claims. (Cl. 61—20.)



1. A tidal power plant, comprising in combination, a high level basin, a low level basin, a passage between said two basins, a sill in said passage provided with a vertical groove, a gate adapted to slide vertically in said groove and provided with an aperture, a vertically slidable caisson mounted in the low level basin and rigidly connected to said gate, a conduit connecting said aperture in said gate to the inside of said caisson whereby water is allowed to flow from the high level basin into said caisson, a spout on said caisson for allowing water to flow therefrom into said low level basin, a turbine mounted in said caisson, and two floats located in the high level basin on either side of said caisson respectively and adapted to support said caisson.

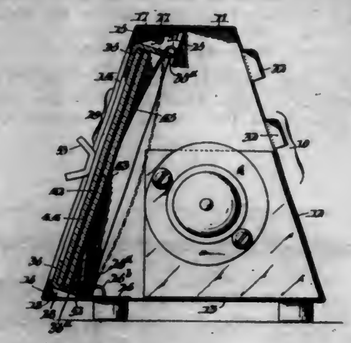
1,882,533. MACHINE FOR CEMENTING LEATHER SOLES TO SHOES. HEINRICH WALTHER, Frankfort-on-the-Main-Oberrad, Germany. Filed May 28, 1931, Serial No. 540,698, and in Germany May 15, 1930. 5 Claims. (Cl. 12—37.)



5. In a machine for cementing leather soles to shoes, the combination with means for pressing the sole to the shoe and the heel flap to the breast of the heel and a hold down for the shoe, of movable means for holding the heel against the pressure exerted upon the flap and automatic means for moving the holding means into operative position.

1,882,534. ADVERTISING DISPLAY DEVICE. HOWARD T. WALTON, Collingswood, N. J., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1931. Serial No. 540,053. 5 Claims. (Cl. 40—132.)

1. An advertising display device comprising a housing adapted to accommodate illuminating means, and having an opening in its front closed by a withdrawable frame; a glass backed transparency fitting the frame; and means to removably retain the glass against displacement and rattle in the frame, the said means being in the form of a bow spring pivotally connected at one end to a bar of



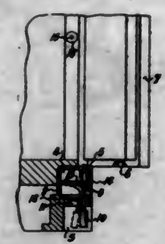
the frame and having shouldered projections at their opposite ends adapted to engage in apertures of corresponding size in the opposite bar of the frame.

1,882,535. APPARATUS FOR PAINTING LINES. AUGUST WEBER, Coswig, Germany. Filed Nov. 22, 1930, Serial No. 497,484, and in Germany Oct. 21, 1929. 4 Claims. (Cl. 15—166.)



1. An apparatus for painting lines, comprising in combination with the handle and the brush, a downwardly extending supporting plate on said handle, two lateral plates shiftable relative to said supporting plate arranged one on each side of said brush adapted to restrict the lateral spreading of the brush and to form a rest during the painting of a line, and a spring-loaded arm detachably connected to said lateral plates adapted to regulate the height of said side plates.

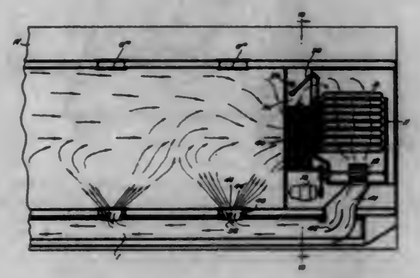
1,882,536. REFRIGERATOR. CARL MEYER WEINHEIMER, Buffalo, N. Y. Filed Nov. 5, 1930. Serial No. 493,499. 1 Claim. (Cl. 292—255.)



A door lock mechanism for cabinets having a toe receiving recess under the door, comprising a vertical reciprocable latch contained within the door frame and adapted

to protrude into and retract from an orifice in the lower edge of the door, and a pivotally supported dependent latch actuating member extending into the toe receiving recess and swingable rearwardly towards the back of the recess to retract the latch from the orifice in the door.

1,882,537. AIR CONDITIONING APPARATUS FOR PASSENGER CARS. WILLIAM B. WHITSITT, Baltimore, Md. Filed May 4, 1931. Serial No. 534,995. 4 Claims. (Cl. 62—117.)



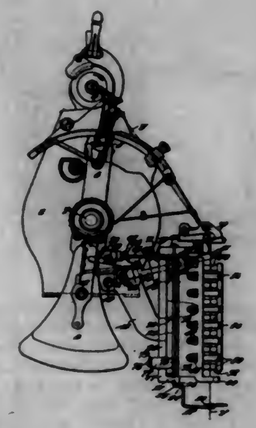
1. Apparatus for conditioning the air in a passenger vehicle comprising means for circulating refrigerant, a cooling compartment in the vehicle located above the level of the space occupied by the passengers, a surface cooler in the compartment receiving refrigerant from said means, said compartment having a recirculated air inlet in its bottom in direct open communication with the upper portion of the passenger space and having an air outlet, the said inlet and outlet being arranged for the horizontal flow of air in the compartment from said inlet and over the surface cooler to the outlet, and means located in said compartment between the cooler and the outlet for drawing air through the inlet and over the surface cooler and then forcing the air through the outlet over the space occupied by the passengers in said vehicle.

1,882,538. MATTRESS. WILLIAM E. WUNDERLICH, Muncie, Ind. Filed May 1, 1931. Serial No. 534,277. 2 Claims. (Cl. 5—193.)



1. In a mattress, a plurality of rows of vertically disposed interconnected coil springs, the springs at the edges having closed end coils with straight portions at the outer sides, a helical wire rail threaded on to said straight portions, upstanding wire loops having vertical portions in the sides of the loops connected to said rail and inwardly projecting end portions attached to the end coil of the adjacent spring, and a helical wire rail threaded on to the upper portions of the loops.

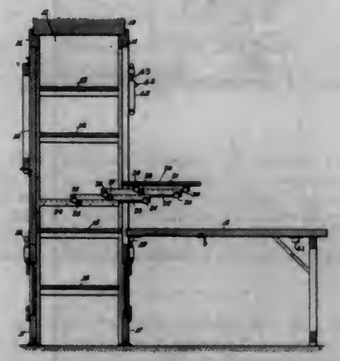
1,882,539. TENSION DEVICE. JOHAN A. ANDERSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1929. Serial No. 348,898. 11 Claims. (Cl. 242—153.)



1. In a tension-device, a tension member having a series of bearings spaced at a distance apart, spindles rotatably mounted in said bearings, rolls on said spindles disposed outwardly beyond the bearings, and helical springs coiled around the spindles and compressed longitudinally between the spaced bearings to force their coils out of alignment whereby to cause the springs to bear frictionally against the spindles to resist their turning movement under the draft of a yarn drawing across the rolls.

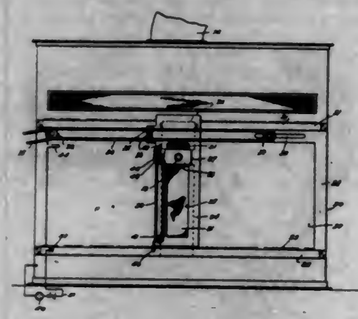
5. In a tension-device, the combination of a tension-member, a tubular tension element of vitreous material, and means for mounting said elements on the tension-member comprising opposite divergent spring-prongs inserted into the bores of the tubular elements.

1,882,540. CUPBOARD FOR KITCHENETTES. CHARLES F. BERRY, Boston, Mass. Filed Jan. 27, 1931. Serial No. 511,568. 10 Claims. (Cl. 312—113.)



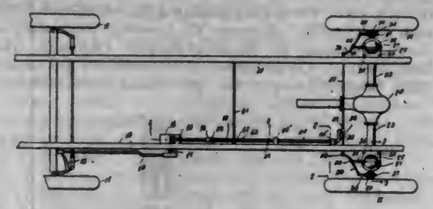
1. A cupboard adapted to be inserted in a wall separating two rooms of a building and having oppositely disposed wall openings; upper and lower closures for the openings on opposite sides of the cupboard; means connecting the upper closures to the cupboard whereby the said closures may be moved about vertical axes or downwardly to form alined tables; and horizontal shelves within said cupboard between the inner faces of said closures when in closed position.

1,882,541. SAND BLAST APPARATUS. CARL H. BILLMAN, Logansport, Ind., assignor of one-half to James William Ball, Logansport, Ind. Filed Dec. 23, 1929. Serial No. 416,047. 14 Claims. (Cl. 51—8.)



6. In combination, a blast nozzle, supporting means therefor mounted for rectilinear movement in each of two angularly related directions, means for continuously moving the supporting means in one of such directions, and means for intermittently moving the supporting means in the other of such directions.

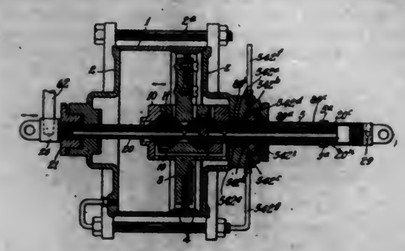
1,882,542. FOUR-WHEEL STEERING CONSTRUCTION. WILLIAM A. BOLZ, Sr., Trenton, N. J. Filed May 29, 1930. Serial No. 457,140. 3 Claims. (Cl. 280—91.)



1. In combination with a steering member having a gear thereon, and a gear meshing therewith for steering the front wheels of a motor vehicle, means to dirigibly steer rear wheels from said gear on the steering member through the movement of said member, means operable to move the said means into and out of operative position, means to permit such movement only when the rear wheels are in straight position, comprising a disk on the steering member having a slot and a lug on said means adapted for passage through the slot or to be intercepted by the disk, and means to hold said rear wheels in straight position when the dirigible means is in inoperative position.

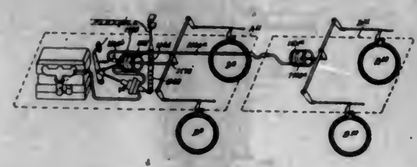
1,882,543. POWER ACTUATOR FOR BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Mar. 5, 1925, Serial No. 13,183. Renewed Mar. 4, 1932. 5 Claims. (Cl. 121—41.)

1. In a vacuum brake mechanism for automotive vehicles provided with an internal combustion engine having a throttle controlled suction passage, the combination with a power actuator comprising a cylinder and a piston movable therein, passages for the admission and withdrawal of motive fluid to and from said cylinder connections from the suction passage to certain of said passages in the actuator, a high pressure inlet connected to other of said passages in the actuator, valves for controlling said passages arranged in pairs each pair embodying suction and high pressure valves, means normally acting to hold all of said valves in closed position when the piston is in retracted position, an operating member



for said valves, means movable with said member for actuating one valve of each pair when the member is moved in one direction to disconnect the suction from the rear of the piston and admit high pressure thereto and to open the suction connection to the forward side of the piston, and means operating when the member is moved in the reverse direction to successively close the high pressure valve and open the suction valve controlling the passages to the rear of the cylinder.

1,882,544. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,850. 14 Claims. (Cl. 188—152.)

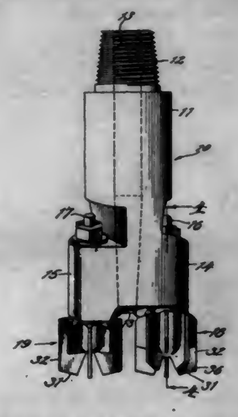


11. In a brake system for automotive vehicles, the combination with brake mechanisms, a power actuator operated by differentials of fluid pressures, and controlling valve mechanism for the actuator movable with respect thereto and comprising relatively movable parts and means for limiting their relative movement, of a floating lever operatively connected at a pivotal point with the actuator and with said brake mechanisms, and a physically operable lever connected with said floating lever at a point removed from the pivotal point thereof and connected with said floating lever at another point therein further removed from said pivotal point, through the relatively movable parts of said valve mechanism.

1,882,545. ROTARY DRILL BIT. LAWRENCE MADISON BRIGHAM, Los Angeles, Calif., assignor of one-half to Fay Oliver, Whittier, Calif., and one-half to Dorothea C. Brigham, Los Angeles, Calif. Filed Dec. 27, 1929. Serial No. 416,807. 2 Claims. (Cl. 255—71.)

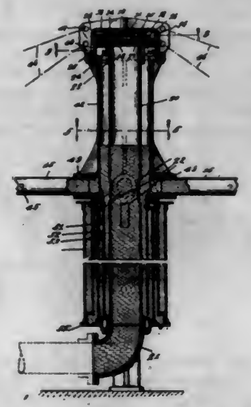
1. A rotary drill bit comprising: a body, shoulders on the body each having a lower face inclined to the horizontal but in opposed angularity to the other, a stem on each shoulder and having a conical lower end, a rotary cutter detachably held on each conical end to fit the same,

and spaced blades on the cutters having bottom and side cutting edges; the said bottom cutting edges being in planes parallel to elements of said conical end, and



planes through the longitudinal axes of the cutters being inclined at an angle to a plane through the longitudinal axis of the body.

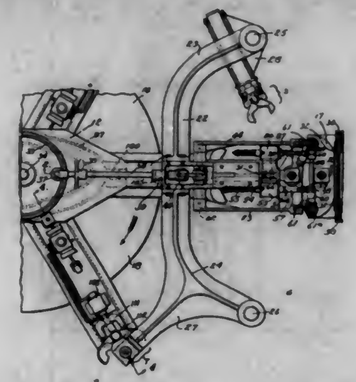
1,882,546. SEWAGE DISTRIBUTOR. CHARLES BROSSMAN, Indianapolis, Ind. Filed Dec. 10, 1930. Serial No. 501,184. 15 Claims. (Cl. 299—69.)



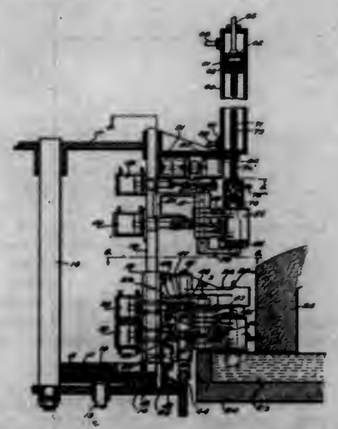
1. A sewage distributor, comprising a central hollow standard, a bearing-supporting plate mounted on the upper end thereof for manual adjustment with respect thereto, and a rotary member supported for rotation on said adjustable bearing-plate, said rotary member including projecting arms which are supplied with sewage from said central supporting standard.

1,882,547. METHOD OF AND APPARATUS FOR FORMING GLASSWARE. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 8, 1929. Serial No. 398,166. 19 Claims. (Cl. 49—5.)

18. Apparatus for forming glassware comprising a blank forming unit including a blank mold and a neck mold, a carrier for said unit, means for intermittently actuating said carrier to move said unit from a charging station to a parison blowing station, a parison mold, a support for the parison mold, means for opening the blank mold to leave a blank suspended from the neck mold at the parison blowing station, means for moving the support horizontally to align the axial center lines of the parison mold and suspended blank, means for closing the parison mold about the blank, means for blowing the blank into a parison in the parison mold, a finishing mold, means for actuating the support to move the parison mold horizontally away from the blank forming unit and into a position to align the axial center line thereof with the axial center line of the finishing mold, stationary transfer tongs, means for effecting engagement of the tongs with the neck of the parison in the parison mold, means for opening the parison mold to leave the parison suspended from the tongs, means for closing the finishing mold about the suspended parison, means for opening the tongs, and means for applying blowing air to the parison in the finishing mold for a substantial period of time and sufficient to initially form a finished article from the parison and to set the glass in said article.



1,882,548. SUCTION GATHERING GLASSWARE FORMING MACHINE. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,043. 11 Claims. (Cl. 49—5.)



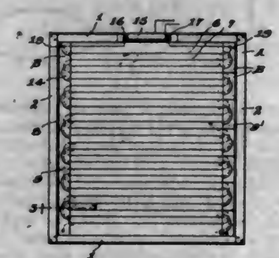
1. Apparatus for forming glassware comprising a parison mold, a neck mold, a movable suction head for engaging said neck mold, a finishing mold located above the suction head, parison mold and neck mold, means for vertically transferring a parison from the parison mold to the finishing mold, said suction head normally being in the path of movement of said transfer means, and means for moving the suction head out of the path of movement of the transfer means.

1,882,549. CURTAIN PLAITING AND HANGING DEVICE. BROADUS WILSON, Raleigh, N. C. Filed Aug. 8, 1927. Serial No. 210,437. 4 Claims. (Cl. 156—21.)



4. A drapery supporting means comprising in combination a member adapted to be enclosed in a plait, a second member, raised portions on said first member engageable thru perforations in the second member, supporting means on the outside of said plait coacting with said second member to support a drapery secured between the two said members.

1,882,550. INSECT ELECTROCUTOR. WILLIAM M. FROST, Spokane, Wash. Filed Jan. 13, 1928. Serial No. 246,475. 39 Claims. (Cl. 43—112.)

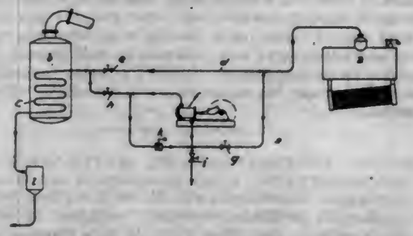


1. In an electric insect destroyer, a frame including oppositely disposed insulating strips, each strip having projections upon opposite faces thereof, and conducting wires of opposite polarity supported upon the projections on the respective sides of said strips.

1,882,551. PROCESS OF MANUFACTURE OF CELLULOSE ESTERS. HENRY GAULT and BERNARD MARIUS ROBERT ANGLA, Lyon, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Filed Dec. 4, 1929, Serial No. 411,672, and in Great Britain Dec. 31, 1928. 11 Claims. (Cl. 260—101.)

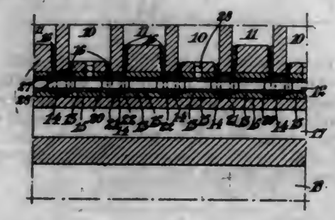
1. A process of manufacture of cellulose esters consisting in treating the cellulose with crotonic anhydride, in the presence of acetic acid and of a catalyst.

1,882,552. METHOD AND APPARATUS FOR HEATING STILLS. WILHELM GENSECKE, Homburg, near Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed May 18, 1928, Serial No. 278,818, and in Germany May 27, 1927. 3 Claims. (Cl. 202—75.)



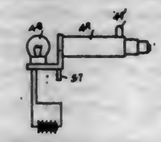
1. Process of distilling a high boiling mixture comprising components having different boiling temperatures by indirectly heating said mixture with steam which comprises taking steam from a supply thereof at a substantially constant temperature and pressure, said temperature being below the distillation temperature of said mixture, compressing the steam whereby it is brought to a temperature suitable for the distillation and bringing the compressed steam into indirect heat transfer relation to said mixture.

1,882,553. CHAMBER OVEN FOR THE PRODUCTION OF GAS AND COKE. FRIEDRICH TOTZEK, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 16, 1931, Serial No. 509,083, and in Germany Jan. 25, 1929. 5 Claims. (Cl. 202—142.)



1. In a regenerative chamber oven, the combination of vertical heating flues therefor, a strong gas conduit lying below the flues and having communication with the flues, and comprising a plurality of pipe sections arranged in a series longitudinally of the conduit, and a sheath surrounding said pipe sections and comprising a plurality of pipe sections arranged with the joints of the pipe sections of the gas conduit staggered in relation to the joints of the sheath in the longitudinal direction of the conduit, annular channels around the conduit sections between the conduit sections and the sheath conduit, and filling conduits extending through the bottoms of the flues into said annular channels.

1,882,554. RECORDING AND REPRODUCING SOUND. CLYDE ORANGE GALBRAITH, Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,795. 3 Claims. (Cl. 179—100.3.)

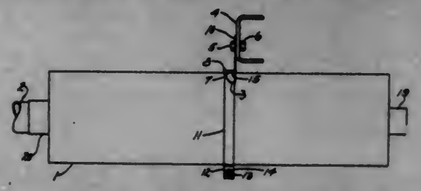


1. A sound reproducing device including a movable photographic sound record film, a plurality of sound records on said film, some of which are arranged in reverse order to others, winding reels for said film means for rotating said reels, film moving sprockets, means for rotating said sprockets, means for controlling the operation of said sprocket rotating means including an electric reversing switch and an electric control switch actuated by said film, said film normally between and separating the arm and shoe of said control switch to render said control switch inoperable, apertures in said film disposed to permit the arm of switch to pass through one of said apertures and contact the shoe of said switch thus completing an electric circuit, said reversing switch made operable and controlled by said control switch, a lamp and a lens assembly and means for selectively bringing the lens assembly into operable relation to any one of the sound records on said sound record film.

1,882,555. MUFFLER SUPPORTING DEVICE. EMMET P. GRAY, Detroit, Mich. Filed Feb. 27, 1929. Serial No. 343,205. 2 Claims. (Cl. 248—20.)

1. In a supporting device, the combination of a bracket provided with a circular wall portion adapted to contact

a circular member to be supported by said bracket, said bracket being provided with a pair of flanges oppositely disposed about the circular wall portion of said bracket, one only of said flanges of said bracket being provided with openings for attaching purposes, the other flange of said bracket having a lesser length than said flange pro-



vided with openings for attaching purposes, and a clamping member surrounding the circular wall portion of said bracket together with the circular member to be supported, said clamping member being adapted to be moved only over said flange of lesser length when said bracket is in its attached position, the assembly of said clamping member being thereby facilitated.

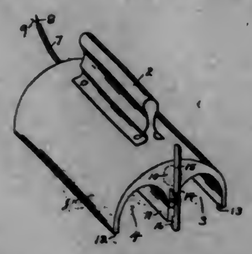
1,882,556. PROCESS OF PREPARING AZO DYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and CARL TAUBE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1929, Serial No. 377,337, and in Germany July 16, 1928. Renewed Aug. 19, 1932. 6 Claims. (Cl. 8—5.)

1. The process which comprises printing cellulosic fibers with a printing paste containing about molecular quantities of a diazo amino compound of the general formula:

$$R\text{—}\left[N{=}N{-}NH{-}R_1\right]_n$$

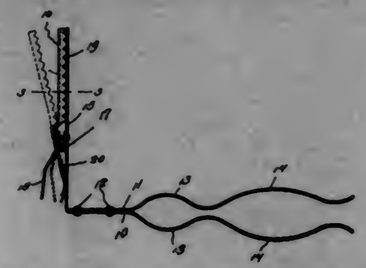
wherein R stands for an aromatic nucleus which may be substituted by any substituents, R_1 stands for a substituent of the group consisting of alkyl, aralkyl and aryl, being at least once substituted by a group inducing solubility in water selected from the group consisting of acid groups and residues of quaternary ammonium bases, and n stands for one of the numbers one and two, and of any coupling component, treating the print for a short time in an aqueous acid solution containing about 3–10% of an acid of the group consisting of formic acid, acetic acid and oxalic acid, at a temperature between about 50 and 90° C., rinsing, soaping at the boil, rinsing and drying the fibers.

1,882,557. HAIR WAVING DEVICE. HARRY R. HOKIN, Los Angeles, Calif. Filed Aug. 17, 1931. Serial No. 557,454. 2 Claims. (Cl. 132—36.)



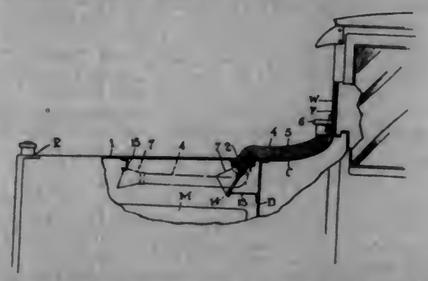
1. A hair waving device of the character described, including in combination, a base having a channel along each of two edges, two clamping bars, one on either side of said base and each adapted to clamp a lock of hair between said bar and the channeled edge of said base, two spools each adapted to receive and hold a lock of hair, means for attaching said spools to said base parallel to said clamping bars, and a heater having two spaced and parallel channels each adapted to receive one of said spools, and means for securing said heater to said base including a fixed arm having a notched edge and a movable lever having a notched edge, plates on said base having projecting edges adapted to engage said arm and said lever.

1,882,558. COW-TAIL HOLDER. ALFRED W. KURTZ, Flaxville, Mont., assignor of one-half to Arthur Martin Hagan, Redstone, Mont. Filed Jan. 15, 1932. Serial No. 586,771. 1 Claim. (Cl. 119—105.)



In a cow tail holder, a pair of substantially flat resilient members connected together adjacent one end and spaced apart for the major portion of their length, said members being formed with spaced pairs of opposed semicircular portions to yieldably engage the gambrel and leg of the cow, a right angularly disposed extension projecting from the connected end of one of said members and constituting a fixed jaw, and a spring influenced normally closed movable jaw pivoted on the fixed jaw for clamping the tail of the cow therebetween.

1,882,559. WINDSHIELD HEATER. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed May 15, 1930. Serial No. 452,769. 9 Claims. (Cl. 20—40.5.)



1. In combination with a motor vehicle having a windshield, a cowl, and a motor hood, a windshield heater comprising a conduit adapted when in operative position to extend from beneath said hood to a position above said cowl and adjacent to said windshield, said conduit being movable to an inoperative concealed position beneath said hood, and means for supporting the conduit in concealed position.

1,882,560. MANUFACTURE OF WATER-INSOLUBLE AZO DYESTUFFS. EUGEN GLIETENBERG and WILHELM NEELMEIER, Leverkusen-on-the-Rhine, and JOSEF HALLER, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1929, Serial No. 358,152, and in Germany May 7, 1928. 3 Claims. (Cl. 260—69.)

1. The process of preparing water-insoluble azo dyestuffs comprising reacting with an acid reacting compound of the group consisting of mineral acids, water-soluble acid mineral acid salts and strong organic acids, upon a mixture of any coupling component suitable for producing azodyestuffs containing no sulfonic acid and no carboxylic acid group, and a compound of the following formula:

$$R\text{—}\left[N{=}N{-}N\begin{matrix}R_1\\R_2\end{matrix}\right]_n$$

wherein R stands for the residue of a diazotization component suitable for producing azodyestuffs containing no sulfonic acid and no carboxylic acid group and which may contain an azo group, R_1 and R_2 stand for substituents of the group consisting of alkyl, the phenyl and benzyl series, at least one of which is substituted by a substituent of the group consisting of the -COOH-, $-SO_3H$- and $-O.SO_3H$-groups, and n stands for one of the numbers one and two.

1,882,561. DYEING PREPARATION. JOSEF HALLER, Wiesdorf-on-the-Rhine, EUGEN GLIETENBERG, Leverkusen-on-the-Rhine, and WINFRID HENTRICH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1930, Serial No. 427,938, and in Germany Feb. 25, 1929. 18 Claims. (Cl. 8—6.)

1. As a new composition of matter a mixture consisting of about equivalent quantities of a coupling component free from sulfonic or carboxylic acid groups suitable for preparing azodyestuffs and a diazo amino compound prepared from a diazotized aromatic amine of the benzene or naphthalene series free from sulfonic and carboxylic acid groups and an organic base of the group consisting of primary aromatic and secondary aliphatic and aromatic amines of the benzene or naphthalene series containing at least one sulfonic or carboxylic acid group, being suitable for dyeing and printing.

1,882,562. WATER SOLUBLE DIAZO-AMINO COMPOUND. EUGEN GLIETENBERG and WILHELM NEELMEIER, Leverkusen-on-the-Rhine, and JOSEF HALLER, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1929, Serial No. 358,153, and in Germany Apr. 30, 1928. 12 Claims. (Cl. 260—69.)

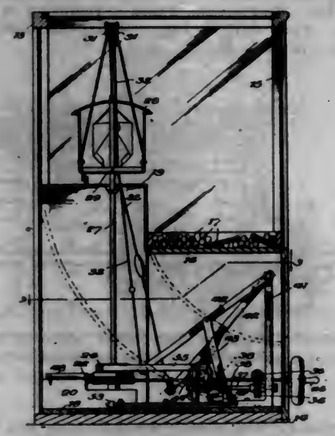
1. The compounds of the probable general formula:

$$R\text{—}\left[N{=}N{-}N\begin{matrix}R_1\\R_2\end{matrix}\right]_n$$

wherein R stands for the nucleus of an aromatic amine capable of producing azodyestuffs which may be substituted by substituents of the group consisting of alkyl, alkoxy, halogen, the nitro group and a substituted amino group, R_1 and R_2 stand for substituents of the group consisting of alkyl-, benzyl-, phenyl- and cyclohexyl-groups, at least one of which containing a substituent of the group consisting of the COOH, SO_3H and $O.SO_3H$ groups, and n stands for one of the numbers one and two, being generally colorless to yellowish colored crystals, being very stable in their dry state and in aqueous and alkaline solution, and being valuable substances in the manufacture of dyestuffs and for combating insect pests.

1,882,563. COIN CONTROLLED VENDING MACHINE. WILLIAM D. BARTLETT, Cincinnati, Ohio. Filed May 20, 1932. Serial No. 612,614. 6 Claims. (Cl. 221—146.)

1. A vending machine in combination with a motor operated digging and hoisting mechanism, an electric circuit including said motor, a coin chute associated with said mechanism and embodying a switch in said circuit operable to close the latter when a coin is deposited in the chute, and manually controlled means in connection



with the digging and hoisting mechanism to permit optional positioning of the latter only after the circuit has been closed by the coin.

1,882,564. PRODUCTION OF MONO ALKYL ETHERS OF GLYCOL. STANLEY FRANCIS BIRCH and WILLIAM DALLAS SCOTT, Sunbury-on-Thames, England, assignors to Anglo-Persian Oil Company, Limited, London, England. Filed Oct. 24, 1931, Serial No. 570,971, and in Great Britain Oct. 17, 1930. 5 Claims. (Cl. 260—151.)

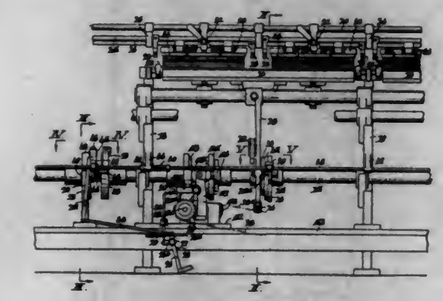
1. The process of making mono alkyl ethers of glycol and their homologues, which consists in causing a reaction between ethylene oxide and an alcohol in the presence of heat and pressure and a small quantity of a di-alkyl sulphate.

1,882,565. CONTAINER FOR BATTERIES OR THE LIKE. PAUL F. BOEYE, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed Aug. 27, 1930. Serial No. 478,152. 5 Claims. (Cl. 279—23.)



1. In a container for a rectangular body, such as a battery, having on one side a projecting member to be protected, a single, long and relatively narrow, rectangular sheet of corrugated board folded to cover four sides of said body and interlocking flanges on the free ends of said sheet respectively, positioned adjacent to said projection to form a space within the container for said projection and to retain said sheet in contact with the sides of said body, the flange on one end of said sheet being confined in overlapping relation to a pair of flanges on the opposite end of the sheet and having its free edge abutting against the fold line between said pair of flanges.

1,882,566. WELT CLOSING MECHANISM FOR FULL FASHIONED KNITTING MACHINES. HAROLD F. PAOET, Philadelphia, Pa., assignor to Haines Hosiery Mills Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 5, 1931. Serial No. 566,833. 11 Claims. (Cl. 66—96.)

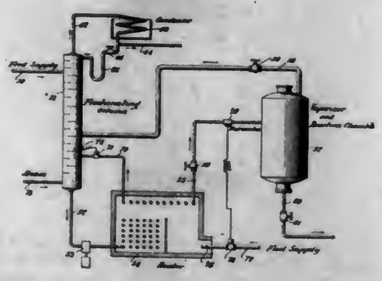


1. Automatic welt closing mechanism for full fashioned knitting machines comprising a welt bar and means whereby it may be detachably secured to the dipping frame of the fashioning mechanism of the machine; and means auxiliary to the usual needle press cams of the machine to determine contact of the needles with the welt bar hooks incident to but one of the two usual dips of the narrowing frame as the fashioning mechanism is caused to perform a narrowing cycle for the purposes of automatic welt closure.

1,882,567. SOLDERING FLUX. ALBERT J. SAUKAITIS, Philadelphia, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Dec. 17, 1930. Serial No. 502,991. 7 Claims. (Cl. 148—25.)

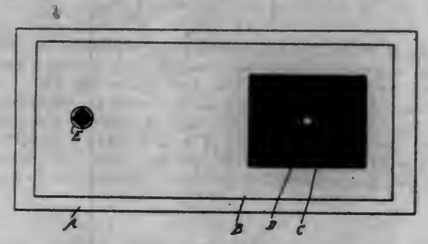
2. A soldering flux paste being an admixture of a continuous phase comprising lanum and a dispersed phase comprising a metal etching acid and a fluxing agent.

1,882,568. METHOD OF DISTILLING. WALTER T. HALL, Glencoe, Ill., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed June 18, 1928. Serial No. 286,221. 1 Claim. (Cl. 196—73.)



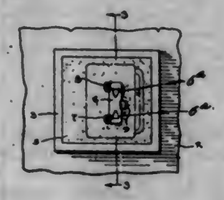
The method of controlling the amount of vapor formed in a distillation unit from water-containing hydrocarbon oil which comprises introducing such oil into a distillation unit without first exposing it to any highly-heated metallic surface, separating said oil into a plurality of fractions, withdrawing and heating a substantially water-free liquid fraction, returning a regulable portion of said heated fraction to said distillation unit, further heating the remainder of said fraction, and introducing said remainder into a second distillation unit, said returned portion being of the same character as the remainder of said heated fraction.

1,882,569. PARLOR GOLF GAME. HARRY H. HALLATT, Windsor, Ontario, Canada. Filed Feb. 11, 1929. Serial No. 339,241. 7 Claims. (Cl. 273—Sub. 87.)



1. In a golf game, the combination with a spinning top and a golf stick for lifting and projecting said top, of a landing surface and an open mesh yieldable fabric overlying said surface.

1,882,570. BUCKLE HOLDER. HARRY A. HAMILTON, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed July 24, 1931. Serial No. 552,993. 2 Claims. (Cl. 24—259.)



2. A holder for retaining buckles in display which holder is made from and provided by a single piece of sheet metal and has a longitudinally extending rectangularly shaped body constructed whereby it may be secured in place by means extending downwardly from within the space defined by the marginal edge portions of the body, spaced upright longitudinally extending arms bent upwardly from the end sections of one longitudinal edge portion of the body member and a centrally located upright longitudinally extending arm bent upwardly from the central section of the other longitudinal edge portion of the body, each of said upright longitudinally extending arms having a transverse inward curvature in the section of the arm near the body and a transverse outward curvature in the free upper end section of the arm, the arms being yieldable whereby they can receive in holding engagement certain portions of articles slipped in place between them and whereby the articles can be readily removed by an outward pull.

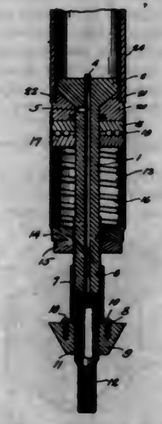
1,882,571. PROCESS OF MELTING METALS IN CUPOLA FURNACES. MARSTON L. HAMLIN, Lynbrook, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1930. Serial No. 468,329. 2 Claims. (Cl. 75—17.)

1. The process of melting and refining metals in a cupola furnace which comprises forming a bed of refractory material in the furnace, placing the metal to be melted upon the refractory material, heating the refractory material to incandescence, admixing exteriorly of the refractory material in the cupola gaseous fuel and combustion-supporting gas in substantially theoretical proportions for complete combustion of the gaseous fuel, introducing the resultant mixture of gaseous fuel and combustion-supporting



gas into contact with the incandescent surface of the refractory material whereby surface combustion of the gaseous fuel takes place with concentration of the resultant heat in the neighborhood of the metal.

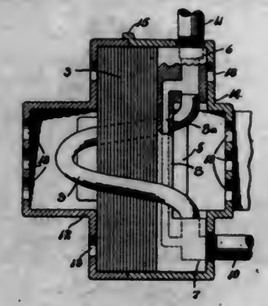
1,882,572. WELL TESTING APPARATUS. HUGH JOHN HAMM, Beaumont, Tex., assignor of one-third to Gordon Durr Baten, Beaumont, Tex. Filed Mar. 26, 1930, Serial No. 439,159. Renewed June 10, 1932. 2 Claims. (Cl. 166—1.)



1. A testing apparatus including a stem, a head thereon, a longitudinal passage in the stem opening beneath the head, a screen connected to the stem, a plug between the screen and stem and separable therefrom by the lifting of the stem relative thereto, a casing adjustably but rigidly mounted on the stem, a seat ring, yielding means in the casing for holding the seat ring normally pressed against the head to close the passage, and a drill pipe detachably engaging the seat ring to produce relative movement of the seat ring and head to control communication between the passage and the drill pipe.

1,882,573. ELECTRIC WATER HEATER. WILLIAM J. HAMMERS and ARTHUR F. WINTERHALTER, Grand Rapids, Mich. Filed Dec. 29, 1930. Serial No. 505,233. 11 Claims. (Cl. 219—47.)

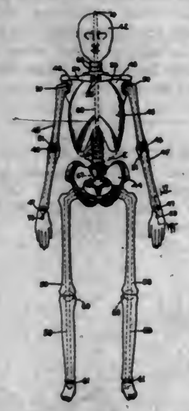
1. A heater comprising, a core, a primary coil through which electric current is passed wound around said core, blocks having passages therethrough located against the core in spaced relation, a secondary coil comprising a tube of thin metal disposed around the core and having its ends connected with said blocks at the ends of the passages therethrough, liquid carrying pipes connected with the blocks at the other ends of said passages and a short circuiting connection between said blocks.



1,882,574. METHOD OF COATING ARTICLES WITH PYROXYLIN OR THE LIKE. WILLIAM C. HAMPTON and CHARLES N. GARBER, Dayton, Ohio, assignors to The Crawford, McGregor and Canby Company, Dayton, Ohio, a Corporation of Ohio. Filed June 12, 1930. Serial No. 460,786. 11 Claims. (Cl. 91—68.)

1. The herein described method of coating articles with pyroxylin or the like, consisting in dipping the portion of the article to be coated in a viscous solution of the coating material at approximately 70 degrees Fahrenheit, chilling the deposited coating to effect quick setting and preventing distortion of the deposit, extracting from the deposited material a portion of the coating material solvent and evaporating the remaining solvent in an atmosphere of sub-zero temperature Fahrenheit and of low humidity characteristic.

1,882,575. EDUCATIONAL DEVICE. EMILY GRACE HANKS, Brooklyn, N. Y. Filed Jan. 30, 1930. Serial No. 424,491. 8 Claims. (Cl. 35—16.)



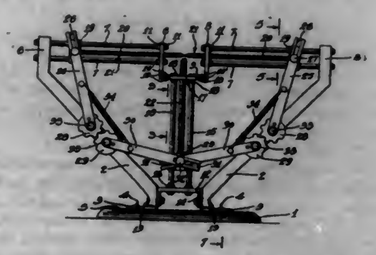
1. An anatomical device for modeling, which comprises a plurality of main structural parts having the principal apparent constructional features of the corresponding anatomical portions of the human body and having detailed constructional features omitted, the said structural parts being associated in true proper proportion to each other and members flexibly connecting said structural parts to permit movement of the said parts of the device into various different postures and retain the device in each posture.

1,882,576. BOTTLE BRUSH. ALFRED HANNAFORD, Chicago, Ill. Filed Feb. 20, 1930. Serial No. 429,845. 8 Claims. (Cl. 15—128.)



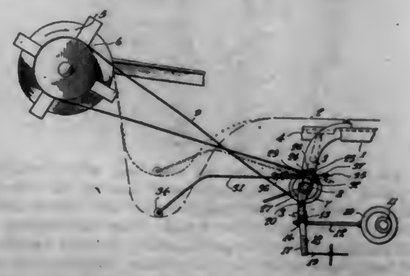
1. In a brush, the combination of a base member, bristle holding members, and a shouldered member pivotally securing said base member and said bristle holding members.

1,882,577. ARC LAMP CONSTRUCTION. VICTOR A. HANSON, Chicago, Ill. Filed Dec. 3, 1930. Serial No. 499,828. 8 Claims. (Cl. 176—103.)



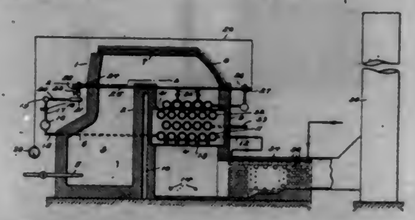
1. An arc lamp comprising a supporting structure, a pair of complementary carbon elements slidably carried by the supporting structure and disposed in abutting relationship, an auxiliary carbon element slidably carried by the supporting structure and transversely positioned with respect to the complementary carbon elements, actuating arms pivotally mounted on the supporting structure and operatively connected with the complementary carbon elements, and auxiliary arms pivotally mounted on the supporting structure and operatively connected with the auxiliary carbon element, said auxiliary arms being operatively connected with the actuating arms whereby the auxiliary carbon element may be moved when the complementary carbon elements are moved.

1,882,578. AUTOMATIC FEED DEVICE. JAMES S. HARDIMAN, Ridgewood, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 30, 1929. Serial No. 367,167. 8 Claims. (Cl. 242—75.)



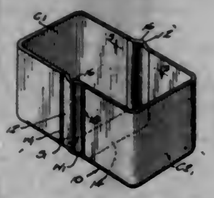
1. In a device of the class described, the combination of means for feeding a roll of sheet material, pawl operated means for rotating the roll, a counterbalanced arm responsive to the slack in the material between the roll and said feeding means, and a member for rendering said pawl ineffective for a portion of its stroke, said arm being mounted on said member to act as a lever for directly operating said member in response to the slack in the material.

1,882,579. OIL HEATING STILL. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 27, 1929. Serial No. 416,793. 5 Claims. (Cl. 196—110.)



1. A converter for cracking oil vapor comprising a setting divided internally by a bridge wall into combustion and tube chambers, a plurality of small parallel tubes arranged in the upper portion of said converter and extending openly across the upper portions of the combustion and tube chambers, a manifold to which oil vapor is supplied, pipe connections between said manifold and the inlet ends of said tubes, valve means provided in conjunction with said connections for regulating selectively the quantity of oil vapor admitted into said tubes for passage therethrough, a manifold connected with the outlet ends of said tubes, a bank of tubes disposed in said tube chamber communicating with said last mentioned manifold, the tubes of said last named bank being of greater cross-sectional area than said first named tubes, and heat generating means arranged within said setting for heating oil vapors passing through said tubes to converting temperatures.

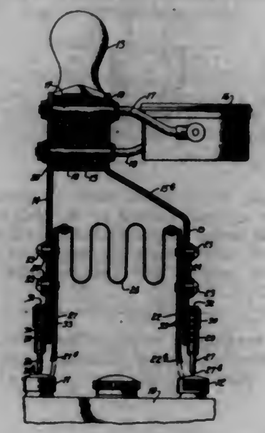
1,882,580. HEAT TREATING RECEPTACLE. HENRY H. HARRIS, Detroit, Mich. Filed Dec. 15, 1930. Serial No. 502,359. 14 Claims. (Cl. 263—49.)



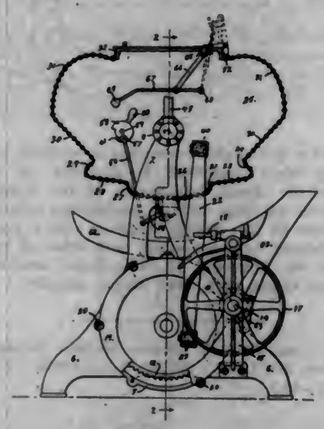
12. A metallic receptacle for use in heat treating furnaces comprising integrally formed outer and intermediate members complementing each other to form the vertical and bottom walls of the receptacle and welded together at the contiguous edges thereof, each outer member including one vertical wall of the receptacle and angularly disposed portions of the other vertical walls and bottom wall of the receptacle, and other of said members including the remaining portions of the bottom and vertical walls of the receptacle.

1,882,581. BATTERY TESTER. BUTLER J. HASKINS, Chicago, Ill., assignor to Joseph Weidenhoff, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 23, 1929. Serial No. 365,471. 15 Claims. (Cl. 175—183.)

1. A battery tester of the character described including; a pair of meter terminals; a meter connected across said meter terminals; a pair of load terminals; a resistance element connected across said load terminals; and means permitting the terminal posts of a cell to be engaged first by the meter terminals alone and then by the meter terminals with the load terminals, said means including retractable extensions on the meter terminals adapted to be forced back to permit the load terminals to make contact with the posts.

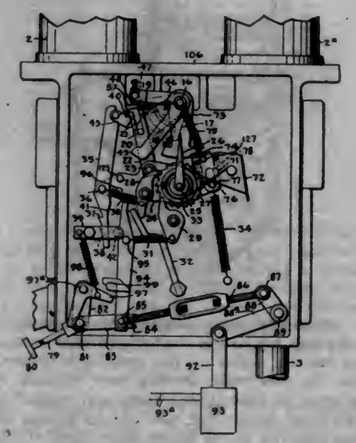


1,882,582. WASHING MACHINE. HENRY HAUBENS and LAMBERT H. HOLCOMB, Omaha, Nebr. Filed Sept. 15, 1930. Serial No. 481,911. 5 Claims. (Cl. 68—21.)



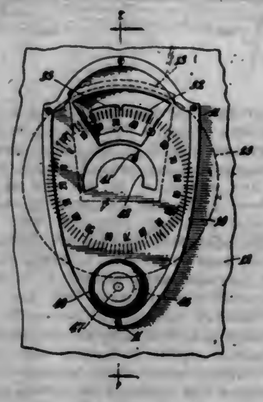
1. In a washing machine, a tub-body having vertical end-plates and shaped to inclose a prismoid chamber symmetrical to a vertical longitudinal plane, trunnions affixed to said end-plates and alined axially in said plane of symmetry intermediate the upper and lower portions of the tub-body, a frame having bearings supporting said trunnions, means for oscillating the tub-body about the trunnion-axis, the oscillating tub-body having at the bottom thereof a longitudinally extending sediment-chamber, a perforate plate covering said sediment-chamber and affording communication with the main tub-chamber throughout the length thereof, said sediment-chamber having a drain-opening, a valve controlling said drain-opening, and an actuating-member connected with said valve and mounted upon an end-plate of the tub-body adjacent to the trunnion-axis and movable in the plane of oscillation to open and close the valve.

1,882,583. MEASURING DISPENSER. WALTER H. HAUPT, Ludlow, Ky., assignor to Augustine Davis, jr., Cincinnati, Ohio. Filed Feb. 21, 1931. Serial No. 517,444. 43 Claims. (Cl. 221—100.)



1. In a liquid dispenser having twin measuring chambers, supply and discharge passages, and automatic reversing mechanism whereby each chamber in turn is connected with the supply passage while the other is connected with the discharge passage, the combination of a counter mechanism, mechanical connections whereby said counter mechanism is preliminarily operated by each operation of said reversing mechanism, and means for delaying the registering action of said counter mechanism beyond each corresponding operation of said reversing mechanism.

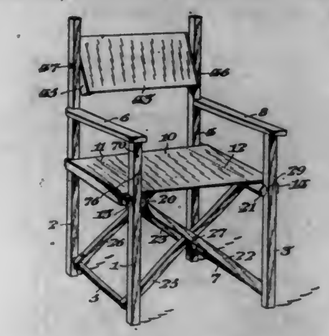
1,882,584. RADIO DIAL CONSTRUCTION. HAROLD R. HAYDEN, Brooklyn, N. Y. Filed Aug. 8, 1929. Serial No. 384,395. 9 Claims. (Cl. 116—124.3.)



1. A dial control comprising a face plate formed with a window and an arcuate slot, a dial rotatably mounted

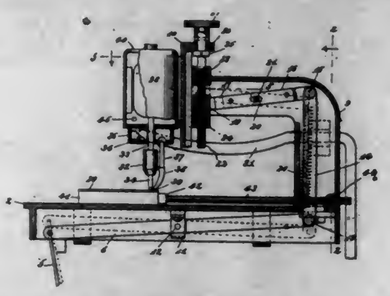
behind said face plate, graduations on said dial, visible through said window, and an arrow on said dial visible through said slot.

1,882,585. CHAIR. THOMAS R. HAYES, Monrovia, Calif. Filed Mar. 23, 1929. Serial No. 349,838. 6 Claims. (Cl. 155—140.)



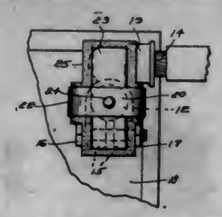
1. A collapsible chair comprising relatively movable frames having leg stiles, seat supporting rails slidably engaging the leg stiles of the respective frames, a seat supported by said rails, locking bars slidably engaging said leg stiles in opposition to said seat supporting rails, means pivotally connecting each of said locking bars with the frame opposite to the frame upon which it slides, and flexible means connecting said rails with said bars.

1,882,586. ENGRAVING AND ROUTING MACHINE. MERRITT W. HAYNES, Cranford, N. J. Filed July 15, 1930. Serial No. 468,088. 4 Claims. (Cl. 90—14.)



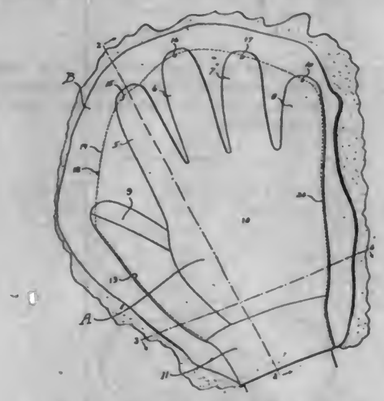
1. An engraving machine comprising a bed, a hollow arm extending upwardly from said bed, a pivotally mounted lever positioned on the under side of said bed, foot operating means for swinging said lever in one direction, a link connected to one end of said lever, a spring for moving the link and lever in one direction, an actuating lever pivotally connected with said link, an internally threaded block carried by said actuating lever, a screw fitted into said block, bearings for guiding said screw, said bearings being carried by said arm, a base slidably mounted on said arm, said base carrying said screw in a manner whereby the screw is free to rotate but cannot move longitudinally independently of the base, an electric motor rigidly secured to said base, means for securing a cutting tool to the armature shaft of said motor, a suction fan operated by said motor, and means for applying suction from said fan to a point adjacent said cutting tool whereby the chips from the cutting tool will be drawn away.

1,882,587. MEANS TO IMPROVE CONDUCTIVITY. FLOYD E. HEATWOLE, Ballston, Va. Filed Jan. 22, 1931. Serial No. 510,545. 8 Claims. (Cl. 136—163.)



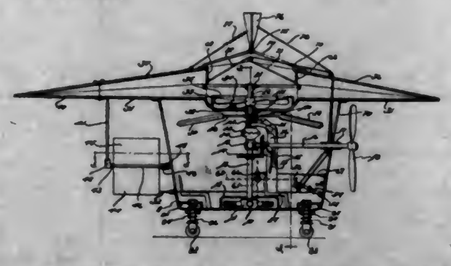
8. A cap for the terminal posts of storage batteries, an absorbent material carried by the cap and extending therefrom and means carried by the cap for simultaneously securing it to the terminal posts and pressing the extended area of the absorbent material against the posts.

1,882,588. WASHING, CLEANING, AND POLISHING GLOVE. HOWARD HEATH, Rexburg, Idaho. Filed Jan. 17, 1930. Serial No. 421,487. 2 Claims. (Cl. 15—227.)



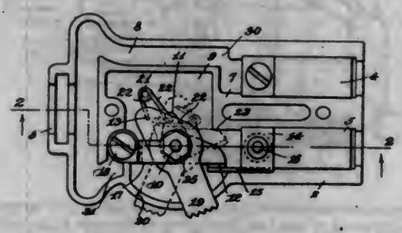
1. A device of the class described comprising a cleaner member, a glove including a plurality of separate sheaths for the thumb and fingers of the human hand disposed with its palm side in confronting relation over the rear side of the cleaner member, and a continuous row of stitching extended along both sides of the glove and across the tips only of those finger sheaths intermediate the thumb and little finger sheaths.

1,882,589. AEROPLANE. SIMON HEIDEN, Detroit, Mich. Filed Feb. 27, 1930. Serial No. 431,684. 6 Claims. (Cl. 244—15.)



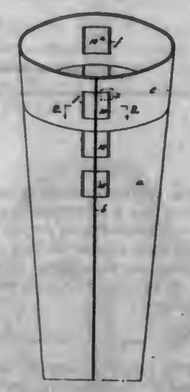
1. An aeroplane wing of kite shape having a top; a bottom spaced therefrom, the distance between said top and said bottom being greater toward the center and narrowing until said bottom and said top engage each other at the outer edges, said top having at its center a circular opening, and a circular opening in said bottom registering with the opening in said top; and hinged extensions at the corners of said wing.

1,882,590. CONNECTER PLUG. GUSTAVE HEIN, Astoria, N. Y., assignor, by mesne assignments, to Leviton Manufacturing Company, a Corporation of New York. Filed Sept. 8, 1927. Serial No. 217,483. 11 Claims. (Cl. 200—51.)



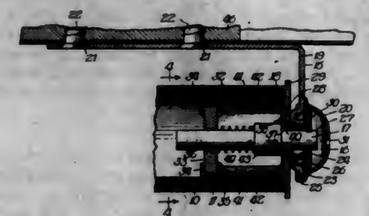
1. A connecter plug comprising a casing open at one end for the reception of a conductor cord, a partition in said casing forming two conductor channels extending from said opening to the opposite end of said plug, one of said channels being formed intermediate its ends with an enlarged portion forming a switch compartment, conducting clamps in said channels at said opposite end, a switch in said compartment comprising a movable contact, and a fixed contact connected to the inner end of one of the clamps.

1,882,591. FULL FASHIONED STOCKING. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1931. Serial No. 531,700. 8 Claims. (Cl. 66—173.)



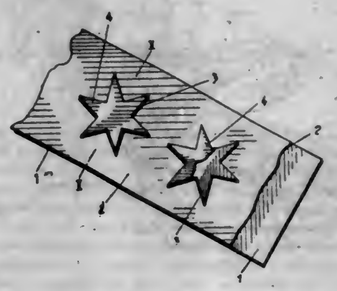
1. A full fashioned stocking having an integrally knitted separate-thread insert in the body portion thereof which is joined to the latter by insert-enclosing split-seam sutures; said insert comprising separated portions knitted adjacent the edges of the flat fabric and united by longitudinal seaming of said edges.

1,882,592. CURTAIN ROLLER. HUGH H. HENDRICKSON, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 2, 1931. Serial No. 572,516. 11 Claims. (Cl. 156—29.)



1. In a curtain roller assembly, the combination, with a roller having an axially spring-projected trunnion at one end of the same, of an end bracket having a hollow head formation into which said trunnion projects, said head having an aperture in one wall thereof for the reception of the trunnion and having another aperture in the opposite wall thereof for the reception of a dislodging tool.

1,882,593. TRANSFER PICTURE AND PROCESS FOR ITS MANUFACTURE. ERICH HENTSCHEL, Leipzig, Germany. Filed Oct. 2, 1929, Serial No. 396,834, and in Germany Oct. 18, 1928. 2 Claims. (Cl. 41—33.)



1. An article for the transfer of a design comprising a paper backing, a thin layer of meltable wax thereupon, a printed design comprising a cellulose base upon said layer of wax, and a layer of heat responsive adhesive material upon said design.

1,882,594. STARTING CRANK FOR INTERNAL COMBUSTION ENGINES. CARL HEUNER, Berlin, Germany. Filed Jan. 3, 1930, Serial No. 418,271, and in Germany May 25, 1928. 6 Claims. (Cl. 123—185.)

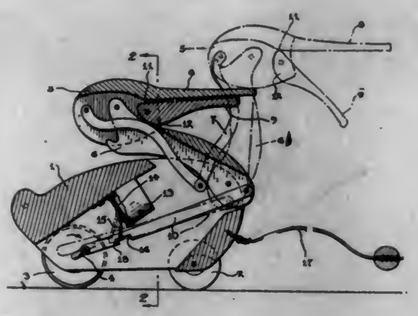
1. A crank for starting internal combustion engines, comprising a portion rotatable with the engine shaft, a hub in which said portion is rotatable, a crank arm pivotally mounted on said hub eccentrically of the axis thereof, a coupling member slidable on said hub and adapted for coupling engagement with said portion and normally out of coupling engagement therewith, said portion and member being formed with coupling faces

adapted upon rotation of the portion relatively to the hub to shift said member out of coupling position, and means on said crank arm and member operative when



rocking the crank arm in a direction for starting the engine for moving said member into coupling engagement with said portion.

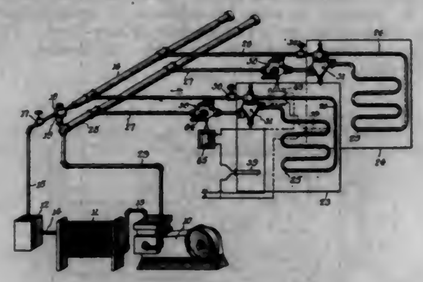
1,882,595. TOY. ELMER L. HEWITT, Churchville, N. Y., assignor to All Fair Incorporated, Churchville, N. Y., a Corporation of New York. Filed July 30, 1931. Serial No. 554,113. 10 Claims. (Cl. 46—45.)



1. In a toy of the character specified, a body, a movable head, a link pivotally connecting the head to the body, a second link forming pivotal connecting means between the head and body to maintain the head approximately parallel to a predetermined position during its various movements, means actuated by propulsion of the toy to impart a vibratory movement to one of the aforementioned links to effect a raising and a lowering of the head, a fixed jaw projecting from the head, a movable jaw pivoted to said head and adapted to be simultaneously actuated as the head is raised and lowered, a stop to limit the opening of the movable jaw, and stop means between the movable jaw and one of the links to effect a closing of the movable jaw and the holding of the same in closed position.

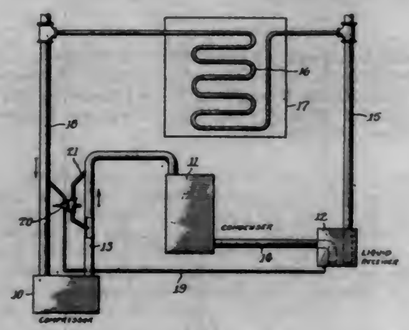
1,882,596. REFRIGERATING SYSTEM. GEORGE HILGER, Chicago, Ill. Filed Jan. 9, 1928. Serial No. 245,318. 7 Claims. (Cl. 62—3.)

1. A refrigerating system comprising, in combination, a source of refrigerant, a plurality of refrigerating units, each comprising a refrigerating element, connected in parallel to said source, a back pressure reducing valve interposed in the discharge line from said source, said valve being automatically operable to make available a supply of refrigerant at a substantially constant pressure to all of said elements, a plurality of additional valve means one interposed in the inlet of each element and responsive to the temperature of the refrigerant passing therethrough



so as to automatically cut off the supply of refrigerant to said element when the temperature thereof falls below a predetermined point, and a plurality of additional valve means one interposed in the outlet of each element and automatically operable to close said outlet when the temperature of the space about said element falls below a predetermined point regardless of the temperature of the refrigerant.

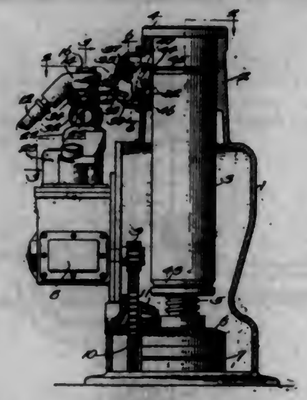
1,882,597. REFRIGERATING SYSTEM. GEORGE HILGER, Chicago, Ill. Filed Jan. 21, 1928. Serial No. 248,283. 10 Claims. (Cl. 62—3.)



1. A refrigerating system having, in combination, a circulatory system including a compressor, a condenser, and a refrigerating element connected in series, the outlet of said element being connected to the suction side of said compressor, and temperature responsive means for supplying liquid refrigerant to the gas in the system at the suction side of said compressor.

1,882,598. LIFTING JACK. JOHN W. HOBBS, Moline, Ill., assignor, by mesne assignments, to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1928. Serial No. 265,291. 13 Claims. (Cl. 254—103.)

1. In a lifting jack, the combination with a vertically movable jack member, of an air operated motor in operating relation to said member; a valve for establishing and cutting off flow of operating air to said motor; a rocker arm connected with said valve to close it; a dog upon the rocker arm; and spring means pressing said dog upon said member, the member having a recess which is positioned to receive the nose of said dog when the member has been



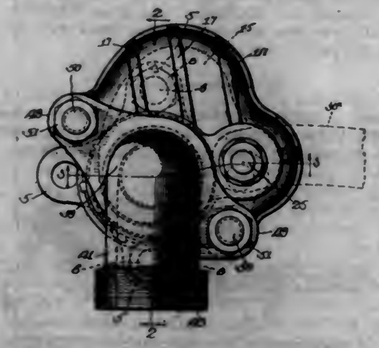
brought to a predetermined position whereby the member acts through said dog to turn the rocker arm to close the valve.

1,882,599. APERTURED HAT AND METHOD OF MAKING THE SAME. ALFRED E. HODSHON, Bethel, Conn., assignor, by mesne assignments, to Hat Corporation of America, Norwalk, Conn., a Corporation of Delaware. Filed Apr. 28, 1931. Serial No. 533,434. 5 Claims. (Cl. 19—148.)



1. A felted body provided with an aperture defined by portions felted so as to present a selvage to such aperture.

1,882,600. BLOW-OFF VALVE. ARTHUR G. HOLLINGSHEAD and CURTIS W. PLOEN, Chicago, Ill., assignors to The Okadee Company, Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 367,953. 2 Claims. (Cl. 251—18.)



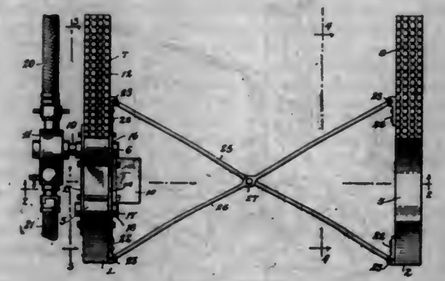
1. In a valve, a casing having an inlet and an outlet axially alined therewith, a valve member adapted to control flow of fluid through said casing and mounted so as to swing across said inlet, said casing having a laterally disposed portion for receiving the valve, a bearing member upon which said valve is adapted to swing, said bearing member being disposed to one side of the axis of said inlet and outlet, a projecting part of said bearing member lying externally of said casing, an outlet fitting having a portion projecting into the casing to form a valve seat and having an external laterally disposed elbow, said fitting having a pair of lugs thereon diametrically oppositely disposed on a transverse axis oblique with respect to said elbow so as to permit of securing said fitting to the casing with said lugs disposed so as to lie to one side of the externally projecting part of said valve bearing member.

CARNEGIE LIBRARY OF ATLANTA

1,882,601. ELECTRODE COATING AND METHOD OF WELDING. CHARLES H. HOLLUP, Chicago, Ill., assignor to Hollup Corporation, a Corporation of Illinois. Filed Feb. 7, 1930. Serial No. 426,781. 2 Claims. (Cl. 219—8.)

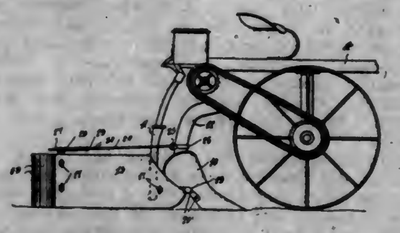
1. An electric welding rod coating having the essential properties of a composition comprising essentially 60% alkaline earth salt, 20% alkaline halide flux, and 20% combustible carbonaceous material.

1,882,602. POWER TAKE-OFF FOR MOTOR VEHICLES. NÜLO O. HOLMSTEN, New York, N. Y. Filed Dec. 23, 1931. Serial No. 582,898. 3 Claims. (Cl. 74—106.)



1. A device of the character described including a pair of supports, each support having an inclined roughened section over which the rear wheels of an automobile are adapted to roll, one of said supports having an arc-shaped depression for receiving one of the wheels of said automobile, and the other of said supports having a pair of spaced rollers for receiving the other rear wheel of said automobile, and a substantially X-shaped structure removably connected with said supports for holding the supports in certain set positions in respect to each other.

1,882,603. CORN DRILL COVERER. MICHAEL O. HONER, Weeping Water, Nebr. Filed Feb. 26, 1931. Serial No. 518,574. 4 Claims. (Cl. 111—85.)



1. An attachment for a lister and coacting planter spout comprising a presser, shields about said presser to prevent plowed soil from returning to the furrow, a

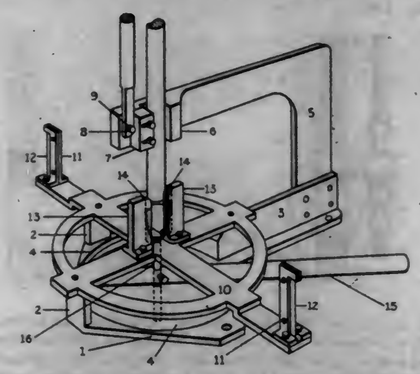
frame mounting the shields, means mounting said presser from the frame, blades in advance of the presser for moving adjacent soil into the furrow after planting, and spring pressed means yieldably mounting the plates.

1,882,604. FASTENING OR HOLDING DEVICE. BORIS B. HOPPE, Kew Gardens, N. Y. Filed Aug. 17, 1929. Serial No. 386,627. 4 Claims. (Cl. 24—170.)



1. A fastening device comprising a member having upstanding portions, and a member having offset plate members with free ends one of which is pivoted at its free end to the ends of said upstanding portions and the other of which bears at its free end against the body portion of said first named member.

1,882,605. PRESS FOR MAKING MOPS. ROBERT L. HORSLEY, Memphis, Tenn. Filed Sept. 21, 1929. Serial No. 394,246. 4 Claims. (Cl. 300—16.)



1. A press of the class described, comprising standards spaced apart and secured on a base, said standards having longitudinal grooves in the inner faces thereof for receiving the sides of a wire loop placed between the standards, means for holding a handle in rigid vertical suspension over said wire loop, and means for forcing the wire loop upward between the standards to a position where it may be attached to said handle.

1,882,606. APPARATUS FOR DISTILLING HYDROCARBON OILS. FRANK A. HOWARD, Elizabeth, N. J., WARREN K. LEWIS, Newton, Mass., and HENRY M. NOEL, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Original application filed Apr. 10, 1922, Serial No. 551,300. Divided and this application filed Oct. 23, 1928. Serial No. 314,496. 10 Claims. (Cl. 196—119.)

1. In an apparatus for distilling hydrocarbon oil by heat supplied from the vapor of a distilling medium having a temperature of condensation of from 500° to 1,000° F. at a pressure not exceeding 200 lbs. per square inch and not substantially corrosive nor subject to objectionable decomposition at the operating temperature, the combination of a boiler for said medium, a still, means for supplying a flowing stream of hydrocarbon oil to said still, tubes in the still for distributing the oil therein over a large area, means for conveying vapors of said distilling medium from said boiler to said still, means for passing said vapors into indirect heat exchange re-



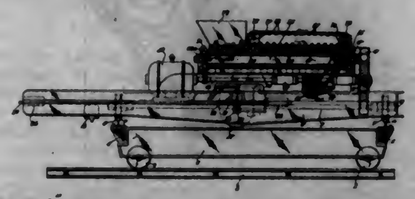
lation wth the oil in said tubes, means for taking off and separating the heavier oil vapors, means for dephlegmating residual oil vapors and means for returning distilling medium to the boiler.

1,882,607. TOY BUILDING BLOCK. THOMAS HOWARD, San Antonio, Tex. Filed Mar. 12, 1931. Serial No. 522,029. 4 Claims. (Cl. 46—35.)



1. The combination with companion blocks each having plain unbroken upper and lower faces and provided with spaced circumferential grooves defining connecting necks and flat horizontally disposed tie blocks having recesses opening in opposite directions through the inner and outer edges of the tie blocks, one of said recesses being adapted to receive the neck of one block and the other recess the neck of an adjacent block.

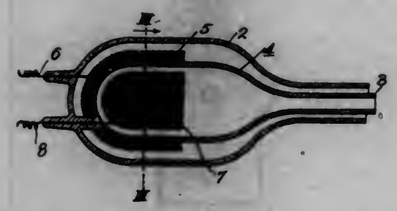
1,882,608. SAND RAMMING MACHINE. ANDREW F. HOWE, University City, Mo. Filed Aug. 22, 1929. Serial No. 387,581. 67 Claims. (Cl. 22—36.)



1. A ramming machine comprising a rotary projector, mechanism for rotating said projector to project compact-

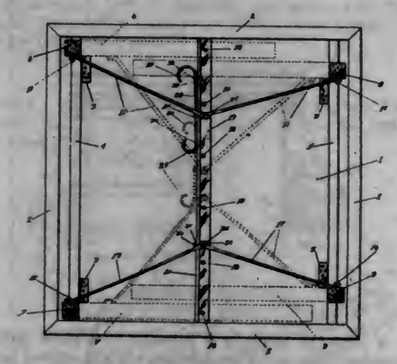
ed sand centrifugally therefrom, and mechanism for compacting sand and delivering approximately uniform blocks of said compacted sand to said projector at successive revolutions of said projector.

1,882,609. ELECTROLUMINOUS DISPLAY. CHARLES S. HOWE, Los Angeles, Calif., assignor to Los Angeles Testing Laboratory, Los Angeles, Calif., a Corporation of California. Filed June 8, 1928. Serial No. 283,883. 2 Claims. (Cl. 176—122.)



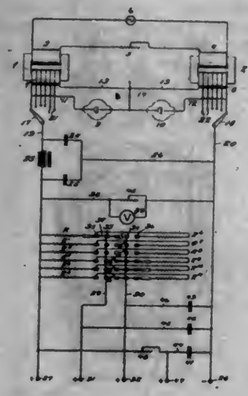
1. An illuminated display comprising inner and outer concentric transparent tubes containing conductive gases and having bulbular ends, and cup-shaped electrodes arranged within the bulbular ends of the tubes and having portions concentric with the tubes.

1,882,610. FOLDING MECHANISM. HAROLD HOWE, New York, N. Y., assignor to Howe Folding Furniture Inc., New York, N. Y. Filed Nov. 12, 1931. Serial No. 574,510. 4 Claims. (Cl. 45—11.)



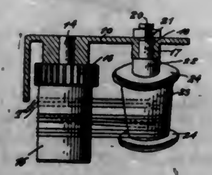
1. Folding mechanism comprising a supporting surface, two pairs of legs pivoted thereto, the legs of each pair being connected for common movement and said pairs being foldable toward and away from each other, a guide member on said surface positioned between said pairs and at substantially right angles to the direction of movement of said legs, two pivot members slidably mounted on said guide member, links pivoted at one end to one leg of one pair and the adjacent leg of the other pair, said links being pivoted at their opposite ends to one of said pivot members, other links pivoted at one end to the other leg of one pair and the adjacent leg of the other pair, and said other links being pivoted at their opposite ends to the other of said pivot members, said pivot members being so arranged on said guide member as to move away from each other when said legs are moved to unfolded position and towards each other when said legs are moved to folded position.

1,882,611. VOLTAGE CONTROL SYSTEM. ALBERT S. HUBBARD, Bethel, Conn., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,774. 5 Claims. (Cl. 201—48.)



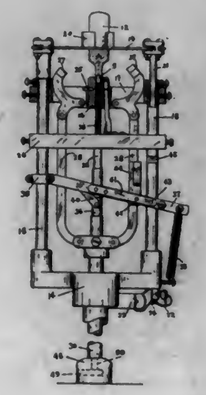
1. In an electrical system of distribution, a main circuit of predetermined voltage including feed and return leads, a feed conductor for supplying an intermediate voltage, and a resistor bank comprising a set of contacts connected in series with said intermediate feed conductor, another set of contacts spaced from said first set, a set of resistances corresponding in number to the number of contacts in said sets and permanently connected at one end to said main circuit feed lead and connected at their other ends to the respective contacts of the second set, a plurality of movable switch members adapted individually to bridge corresponding contacts of the first and second named sets, a second intermediate feed conductor, a third set of contacts connected in series with said second named intermediate feed conductor, a fourth set of contacts, and resistances connected at one end with the respective contacts of the last named set and at the other end with the respective corresponding contacts of the second named set, said movable switch members being individually disposable to bridge the corresponding contacts of the third and last named sets.

1,882,612. THREAD FEEDING AND SPACING MEANS. HARRY J. HUFFORD, Scranton, Pa. Filed June 20, 1931. Serial No. 545,739. 4 Claims. (Cl. 117—21.)



1. In thread feeding and spacing means, a support, and two rollers mounted in laterally spaced relation on said support and adapted for reception in loops of the threads, the ends of one roller axis being disposed on lines which radiate from the other roller axis, said lines being in planes which contain said other roller axis and are at a sharply acute angle to each other, and means whereby said one roller axis may be rotatively adjusted upon an axis substantially parallel with said other roller axis, at least one of said rollers having driving means.

1,882,613. MANUFACTURE OF ELECTRIC MERCURY BULB SWITCHES. KARL HUNCIKER, Chicago, Ill., assignor to Ira E. McCabe, Chicago, Ill. Filed Sept. 18, 1929. Serial No. 393,389. 3 Claims. (Cl. 49—78.)



3. The method of producing electric bulb mercury switches which includes positioning of the open end of the bulb about the electrodes and a filling stem containing a removable solid core supporting thereunder, applying heat to the open end of the bulb until it becomes plastic, passing air through the filling stem during the heating of the wall of the bulb to prevent heat therefrom causing the filling stem adhering to the core therein, compressing the plastic wall to embrace, embed and seal the electrodes and filling stem therein and form a sealed closure, and thereafter removing the core while the bulb is still plastic and blowing through the sealing stem and thereby shaping the bulb.

1,882,614. INCLOSED MERCURY SWITCH. KARL HUNCIKER, Chicago, Ill., assignor to Ira E. McCabe, Chicago, Ill. Filed July 31, 1931. Serial No. 554,182. 7 Claims. (Cl. 200—112.)



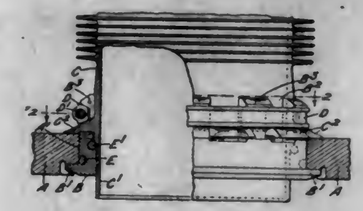
1. A fluid switch including a sealed container having two spaced apart electrodes supported in the walls thereof and containing a body of conductive fluid normally out of contact therewith, and means pivoted within the container adapted to be actuated by external magnetic means to bodily move said fluid to contact said electrodes to close the circuit through the switch.

1,882,615. ARMORED ELECTRICAL PLUG. WILLIAM HUPPERT, New York, N. Y. Filed Apr. 7, 1927. Serial No. 181,644. 6 Claims. (Cl. 173—332.)

3. In an electrical plug or like attachment device, the combination of a set of sections of insulation material, a set of elements formed of metal disposed exteriorly of said set of insulation sections, said metal sections being provided with projecting portions extending toward said insulation sections respectively and adjustable means for connecting said metal sections to one another and therewith disposing said projecting portions in resilient pressure against said insulation sections to retain said insulation sections in position.



1,882,616. SOCKET JOINT. ROBERT HALLER HUTCHINSON, London, England, assignor to D. Napier & Son Limited, London, England, a Company of Great Britain. Filed Dec. 15, 1930, Serial No. 502,511, and in Great Britain Mar. 4, 1930. 8 Claims. (Cl. 285—25.)



1. A joint for securing a cylinder to a plate including in combination a series of circumferentially spaced radially projecting parts on the cylinder, a series of similarly spaced axially extending tension bars passing through said projecting parts, a part formed integral with the lower end of each tension bar and engaging the lower face of the plate, radial projections on the upper ends of said tension bars, the opposed inner surfaces respectively of the radially projecting parts on the cylinder and the radial projections on the tension bars being relatively inclined, and an annular strap wedge-shaped in cross section engaging the said opposed surfaces to force them axially apart and thus hold the cylinder to the plate.

1,882,617. EXPLODING WEDGE. ROBERT B. HUTCHISON, Wilkinsburg, Pa. Filed Oct. 16, 1929. Serial No. 400,087. 2 Claims. (Cl. 102—11.)

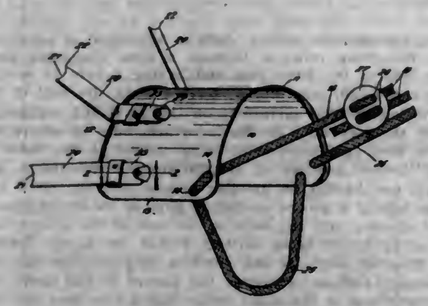
1. In a device of the character described, a barrel closed at one end and open at its opposite end, a neck of a smaller diameter than the barrel fitted in said barrel at its open end providing a restricted outlet for the barrel and also reinforcing the latter, and a wedge on said neck having means communicated through said outlet with the barrel and adapted to direct the force of the explosion from the restricted outlet through opposite sides of the wedge.



1,882,618. COMPOSITION OF MATTER. ELMER H. HYDE, Pittsburgh, Pa., assignor to American Tar Products Company, Inc., a Corporation of Delaware. Filed May 27, 1930. Serial No. 456,293. 1 Claim. (Cl. 167—29.)

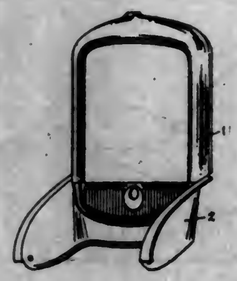
A disinfectant emulsion consisting of tar acid oil, water gas tar distillate which is comparatively free from naphthalene and which is obtained as a distillate from water gas tar between 100° C. and 355° C., water, and "liquid resinate" containing rosin acids, fatty acids, lignin, caustic materials, and water.

1,882,619. CALF MUZZLE. FLOYD M. INGRAM, Sioux Rapids, Iowa. Filed Aug. 24, 1931. Serial No. 559,014. 4 Claims. (Cl. 119—130.)



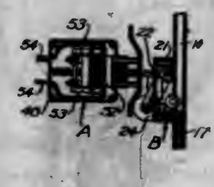
1. A calf muzzle comprising a substantially rectangular plate having front and back edges, rope receiving openings in each corner of its back edge, a series of anchor straps adjacent to the front edge of the outer surface of said body, a slot opposite each anchor strap to form an upwardly bent lug, a tine for each anchor strap formed of thin resilient metal, one end of said tine having a curved notch to form points and the other end having a bent portion having an opening, said bent portion being adapted to be placed beneath said anchor strap and beneath said lug with the downwardly extending parts of said lug extended into said opening, and an adjustable rope for the first said opening.

1,882,620. COMBINED RADIATOR SHELL AND MUDGUARD. GEORGE E. IRELAND, Toledo, Ohio, assignor to The City Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930, Serial No. 447,381. Renewed May 11, 1931. 14 Claims. (Cl. 180—68.)



1. In a combined radiator shell and apron structure, a substantially U-shaped shell member having a depressed portion, and an apron having a depressed portion corresponding to the depressed portion of the shell, the said depressed portions located in the same plane, a trim member simulating a continuance of the surface of the shell extending across the lower end of the shell and in forwardly projecting relation with a part of the apron and substantially in registry with the face of the U-shaped shell member.

1,882,621. AUTOMATIC LOCK FOR ELEVATOR DOORS. CLIFFORD E. IVES, Chicago, Ill. Filed Aug. 10, 1927. Serial No. 212,002. 8 Claims. (Cl. 187—31.)

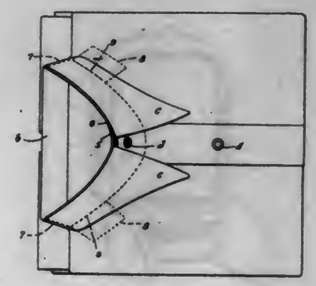


1. In an electrically controlled elevator, a circuit interrupter carried by the elevator car, a door lock at each floor associated with the elevator shaft doors, an actuating cam on the elevator car for releasing a lock when the elevator car is in alignment with the floor, a spring for retaining said cam in position while the shaft door is closed, means forming a part of the lock for engaging the cam to depress the same against the action of said spring when the shaft door is opened and a connection from the cam to said interrupter for actuating the interrupter when the door is opened and preventing starting the car until the door is closed.

1,882,622. COLLAR FORM PRESERVER. JACOB KASHMAN, New York, N. Y. Filed Feb. 2, 1931. Serial No. 512,907. 3 Claims. (Cl. 223—18.6.)

1. A form preserver of the character described comprising a normally flat flexible strip to be bowed and

inserted within the collar element of a folded shirt to support the collar element in a raised position, the inner edge of said strip being convexly curved on a radius such that when the strip is bowed and the inner edge thereof is disposed in the plane of and against the back of a shirt within the collar element thereof the medial and end portions of the strip extend outwardly in convergent relationship corresponding to the natural inclination of the collar element, the ends of the strip being straight and being disposed convergently from the inner to the outer



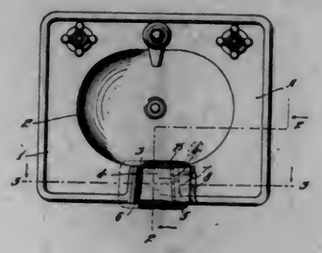
edge of the strip in such angular relationship to each other and to the convex curvature of the inner edge of the strip as to have substantially the same angular disposition relative to the back of the shirt as the medial portion of the strip when the strip is bowed and disposed within the collar element, whereby the ends of the strip contact throughout their respective lengths with the rearwardly inclined rear portions of the collar element thus to assist in holding the sides of the collar element taut and in a natural upright position relative to the shirt.

1,882,623. AUTOMATIC SPRING ROLLER CURTAIN CONTROL. CHRISTIAN JOSEPH KASPER, Rochester, N. Y. Filed Oct. 28, 1931. Serial No. 571,627. 10 Claims. (Cl. 156—34.)



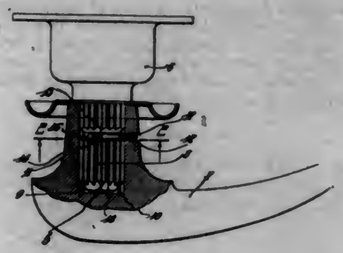
7. An automatic spring roller curtain control comprising a pair of control devices designed to be located adjacent the end portions of a spring shade roller and including a plurality of shade engaging rollers arranged to engage a window shade at spaced points, means for pivotally mounting the rollers to permit the same to swing inwardly and outwardly with respect to the shade independently of one another, and means for yieldably maintaining the rollers normally in engagement with the window shade, whereby the rollers will automatically adjust themselves to the varying diameter of the rolled up portion of a window shade and maintain constant contact with the same.

1,882,624. SHAMPOO CHIN REST. HENRY R. JACKSON, Newark, N. J. Filed May 21, 1931. Serial No. 538,804. 4 Claims. (Cl. 4—159.)



1. The combination of a lavatory basin having a rim, a resilient chin pad, means for securing said chin pad on said rim with a portion of said pad in close and resiliently movable relation to said rim, and a cover for said pad having portions clamped between said pad and said rim to secure said cover in position on said pad.

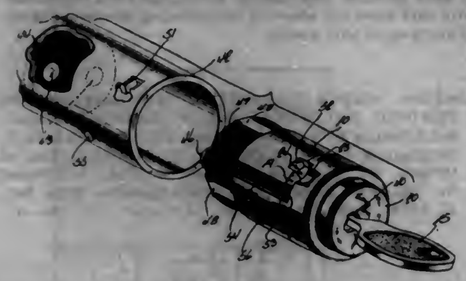
1,882,625. HANDLE ASSEMBLY. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs and Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed July 16, 1928. Serial No. 292,961. 1 Claim. (Cl. 292—253.)



In combination with a shaft to be turned, a lever arm for imparting rotation thereto, a boss projecting from one side of the lever arm and having a bore to receive the shaft end, longitudinal serrations in the wall of the bore, longitudinal serrations on the shaft end engageable with the serrations in the lever arm bore to secure the lever arm against rotation with respect to the shaft in any desired position of circumferential adjustment, the shaft end having an annular groove, and the lever arm boss having a groove encircling part of its circumference and opening into the bore at the ends of the groove, and a spring detent lying entirely within the groove formed in the boss with its end portions projected through the openings therein to engage the groove in the shaft, the extreme end of the shaft being tapered so that the end portions of the spring detent are automatically engageable with the shaft groove upon engagement of the lever arm with the shaft end.

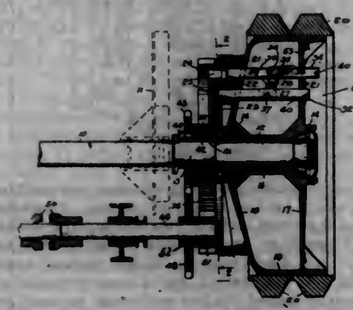
1,882,626. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1931. Serial No. 528,823. 19 Claims. (Cl. 70—46.)

1. In a lock structure including a mounting head, a lock cylinder and a supporting element in which the assembled mounting head and cylinder is received, single means for removably securing the cylinder in the mounting



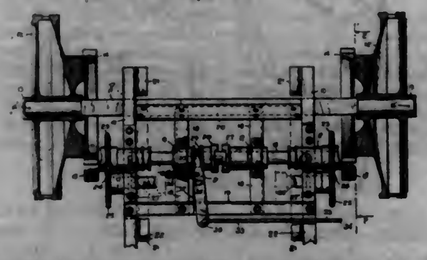
head and for positively preventing disassembly of the mounting head from the supporting element when the lock cylinder is in locked position.

1,882,627. CHANGE SPEED WHEEL. FREDERIC W. JAMES, Belleville, N. J., assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J., a Corporation of New Jersey. Filed Feb. 27, 1930. Serial No. 431,843. 7 Claims. (Cl. 74—59.)



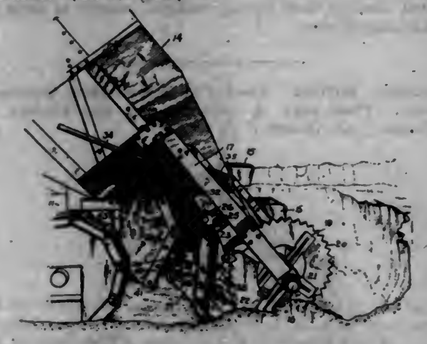
1. In a change speed for motor vehicles, the combination with an axle, of traction wheels mounted to turn on said axle, a driving disc mounted to turn around said axle adjacent each wheel, a traction gear turning on the hub of said disc, axially projecting means for engaging the driving disc or traction gear with the wheel, and means for driving said driving disc and traction gear at relative speeds.

1,882,628. LOCK SHAFT. FREDERIC W. JAMES, Belleville, N. J., assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J., a Corporation of New Jersey. Filed Feb. 27, 1930. Serial No. 431,844. 2 Claims. (Cl. 74—100.)



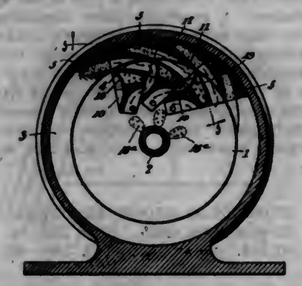
1. In a motor driven vehicle having a pair of traction wheels driven through a differential, the combination with a pair of differential shafts separately driven through the differential, a pair of coaxially alined abutting jack shafts, each thereof having a gear and sprocket at one end, a chain for each sprocket being driven by a differential shaft, a gear on each wheel in mesh with a gear of the jack shaft, and a clutch between the jack shafts to operate the latter together and at the same speed and to form a bearing for the end of the driving jack shaft.

1,882,629. POWER DRIVEN LOADER. FREDERIC W. JAMES, Belleville, N. J., assignor to N. P. Nelson Iron Works, Inc., Passaic, N. J., a Corporation of New Jersey. Filed Feb. 27, 1932. Serial No. 595,470. 11 Claims. (Cl. 37—190.)



9. A loading device of the character described having a chassis, a conveyor boom pivoted on said chassis, and a transversely disposed scraper pivotally supported from the feed end of said boom and abutting against said chassis but not attached thereto.

1,882,630. TURBINE. CHRISTOPHER JARVIS, Montevideo, Minn. Filed Sept. 30, 1929. Serial No. 396,251. 10 Claims. (Cl. 253—50.)

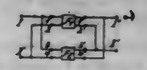


1. A turbine comprising an inner cylindrical member having at least one recess or trough extending non-radially from the peripheral surface thereof and closed at its radially inner end, an annular member concentric with said cylindrical member having at least one corresponding recess or trough extending non-radially from the inner peripheral surface thereof and closed at its radially outer end and means for supplying high velocity fluid to the periphery of said recesses or troughs, the troughs of one of said members having an opening adjacent the centre thereof for escape of the fluid therefrom.

1,882,631. ELECTRIC FILTER ARRANGEMENT. ANDREAS JAUMANN, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Sept. 2, 1930, Serial No. 479,285, and in Germany Aug. 31, 1929. 21 Claims. (Cl. 178—44.)

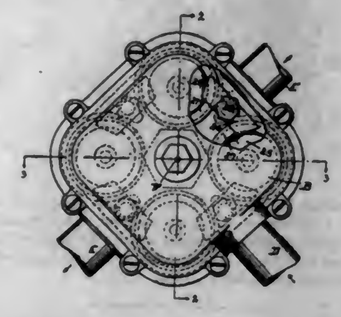
1. An electric filter arrangement including a separating filter constructed of several wave filters joined at one side

and several additional wave filters joined to said separating filter at its other side, said wave filters comprising a plurality of partial filters, the partial filters combined in one wave filter, being so proportioned as to have the same



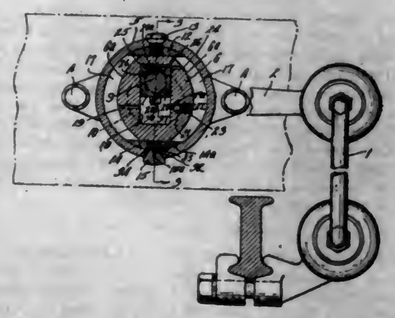
or nearly the same center of transmission range, multiresonant resonance-curves and equal or analogous composition, the input and output of said partial filters being connected, some of them having changed polarity at their input or output sides.

1,882,632. METER. JOSEPH F. JAWOROWSKI, Cleveland, Ohio. Filed Sept. 3, 1930. Serial No. 479,483. 7 Claims. (Cl. 73—30.)



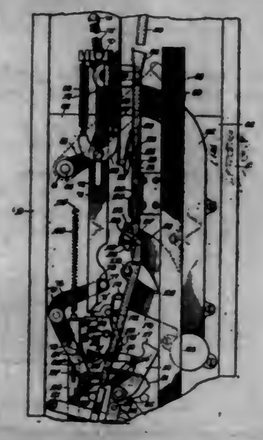
1. In a meter, a main body containing a plurality of measuring chambers parallel to and radially disposed about a common axis, there being a port in the wall of each of said cylinders, a rotatable shaft extending through said body on said axis having separate intake and discharge passages extending longitudinally through said shaft and adapted to register successively with said ports in the wall of said chambers, a cam wheel fixed to said shaft opposite corresponding ends of said measuring chambers, and reciprocable pistons within said chambers and having operating connections with said cam wheel.

1,882,633. HYDRAULIC SHOCK ABSORBER. STEPHEN JENCICK, Chagrin Falls, Ohio. Filed Jan. 14, 1929. Serial No. 332,414. 20 Claims. (Cl. 188—88.)



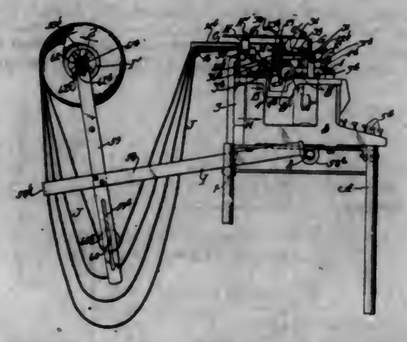
1. A shock absorber comprising a fluid-containing cylindrical chamber, a reciprocatable piston therein, a valve mounted to slide in a transverse bore in the piston, means for controlling the flow of fluid from one side of the piston to the other, and an oscillating shaft disposed axially of said chamber and having direct operative connection with said valve for effecting reciprocating movement thereof and also of said piston.

1,882,634. CHECK-CONTROLLED APPARATUS FOR VENDING MACHINES. ODD D. JENNINGS, Palatine, and CHARLES B. GILMORE, Chicago, Ill., assignors to O. D. Jennings & Company, Chicago, Ill., a Corporation of Illinois. Original application filed June 16, 1928, Serial No. 285,982. Divided and this application filed Jan. 12, 1931. Serial No. 508,188. 11 Clams. (Cl. 194—1.)



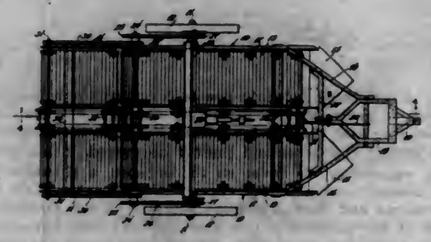
1. In a coin-controlled vending machine, the combination of a coin chute having a pivoted section, coin-arresting means in said pivoted section, coin-discharging mechanism operating through an arrested coin to swing said pivoted section to coin-discharging position, means normally locking said coin-discharging mechanism inoperative, and means normally locked against movement by said pivoted chute section serving to release said coin-discharging mechanism from said locking means when said chute section is swung to coin-discharging position.

1,882,635. TYPEWRITING DUPLICATOR. LOUIS JENSEN, Chicago, Ill., assignor to United Automatic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1928. Serial No. 253,379. 17 Claims. (Cl. 197—133.)



17. In combination: a strip-supporting and guiding frame; and mechanism mounted on said frame for simultaneously tapping the opposite edges of strips supported by said frame to effect alignment of said strips.

1,882,636. DOUBLE-ROW POTATO DIGGER. ELMO W. JOHNSON, Hicksville, N. Y. Filed Sept. 10, 1931. Serial No. 562,163. 7 Claims. (Cl. 55—51.)



1. A double-row potato digger comprising a pair of spaced digger units each having an elevating conveyor; and a single intermediate elevating conveyor between the units arranged to prevent débris from clogging the machine, and driven synchronously therewith.

1,882,637. POWDERED PROTEIN MILK AND PROCESS OF PREPARING SAME. LAMBERT D. JOHNSON and NATHAN F. TRUE, Evansville, Ind., assignors to Mead Johnson & Company, Evansville, Ind., a Corporation of Indiana. Filed Apr. 14, 1928. Serial No. 270,145. 12 Claims. (Cl. 99—5.)

1. An improvement in processes of preparing powdered protein milk for infant feeding purposes, which when reliquefied may be boiled without curdling which consists in treating whole milk with calcium chloride to form whey and curd, removing and draining the curd, treating skim milk with lactic acid, mixing the curd and said acidified milk together increasing the temperature of the mixture to substantially the boiling point thereof, agitating the same during said heat treatment, and spray drying the mixture.

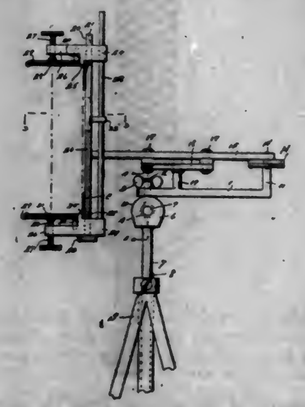
12. As a new article of manufacture, a powdered protein milk product made from curd and acidified milk and in which the coagulable property of the casein has been largely destroyed, the curd being derived from two parts of whole milk and the acidified milk from one part of skim milk, the curd being in a finely divided state, said powdered product being suitable when reliquefied for infant feeding purposes, and capable of being boiled without curdling and without changing color.

1,882,638. POWDERED ACID MILK AND PROCESS OF PREPARING SAME. LAMBERT D. JOHNSON and NATHAN F. TRUE, Evansville, Ind., assignors to Mead Johnson & Company, Evansville, Ind., a Corporation of Indiana. Filed Apr. 14, 1928. Serial No. 270,146. 6 Claims. (Cl. 99—5.)

1. An improvement in processes of preparing powdered acid milk for infant feeding purposes, which when reliquefied may be boiled without curdling, which consists in increasing the temperature of acid milk in which precipitation of curd has taken place, to substantially the boiling point of the milk, until the coagulable properties thereof have been destroyed, agitating the same during said heat treatment, and then spray drying the product in its dilute form.

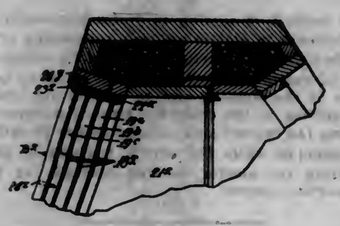
1,882,639. BOOKHOLDER. WILLIAM V. JOHNSON, Washington, D. C. Filed May 29, 1930. Serial No. 457,481. 5 Claims. (Cl. 45—86.)

1. A book holder comprising two members provided with means for engaging the covers of a book with the back of the book positioned between the members, substantially parallel bars carried by said members and having slots extending lengthwise thereof, a supporting element, a pair of crossed arms pivotally connected to each other and to the supporting element, the extremities of said



arms being slidably engaged within the slots of the bars and toggle means carried by said bars coacting with said arms in maintaining said bars in parallel relation.

1,882,640. REFRIGERATING AND DISPLAY APPARATUS AND METHOD. CHARLES L. JONES, Pelham, N. Y., and HOWARD S. MCILVAIN, Belleville, N. J., assignors to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,499. 8 Claims. (Cl. 62—91.5.)



1. In a refrigerating apparatus the method of preventing moisture deposits, by means of the refrigerant, on refrigerator windows consisting of parallel plates with interspaces, which method includes sublimating solid carbon dioxide and discharging dry gas therefrom into the inner, coldest interspace and conducting the same serially through the successive interspaces, to the exterior atmosphere.

1,882,641. METHOD OF PRODUCING STOCKINGS AND SOCKS. THOMAS HENRY JONES, Woodthorpe, England. Filed Mar. 28, 1930, Serial No. 439,739, and in Great Britain Mar. 28, 1929. 2 Claims. (Cl. 66—185.)

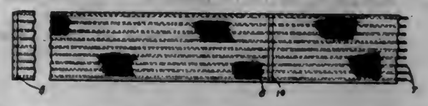
1. The method of producing a stocking or sock on a circular knitting machine which consists in first knitting by rotary motion a tubular leg portion, then moving approximately one half of the circular row of needles to an inoperative position with the previously formed stitch loops retained thereon and proceeding by reciprocation to knit on the remaining needles a selvedged foot upper portion, a pocket toe, a selvedged foot sole and a pocket heel,

subsequently returning the said inoperative needles to the operative position and producing by rotary motion a number of full circular ravelling courses, and finally



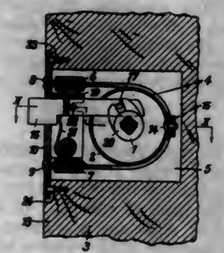
after removal of the garment from the machine seaming together the foot upper and sole along the foot sides and the rear lower end of the leg to the heel.

1,882,642. METHOD OF PREPARING ELASTIC WEBBING FOR CUTTING. GEORGE H. JUNG, Jr., Cincinnati, Ohio, assignor to The Jung Arch Brace Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 30, 1930. Serial No. 457,593. 5 Claims. (Cl. 18—59.)



2. The method of cutting to preclude recession of the elastic elements in elastic webbing comprising stretching the elastic webbing, applying to the elastic webbing along the line of cutting a fluid cement adapted to penetrate the fibres of the webbing and to contact the elastic elements, applying to the cement a strip of uncured rubber, vulcanizing the cement and uncured rubber to each of the elastic elements while the elastic webbing is stretched, then cutting the elastic webbing centrally of the vulcanized portion thereof.

1,882,643. DOORLOCK. HUGO JUNKERS, Dessau, Germany. Filed Jan. 29, 1931, Serial No. 512,015, and in Germany Mar. 11, 1930. 7 Claims. (Cl. 70—16.)



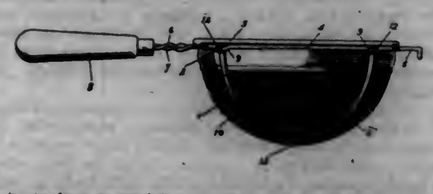
1. A door lock comprising a casing adapted to be inserted in a recess of a door, a band surrounding said casing, and means adapted to be anchored at the edge of said door for exerting tension on said band so as to hold said casing in said recess.

1,882,644. FEED FOR FOUNTAIN PENS. LOUIS H. JUSTER, St. Lambert, Quebec, Canada, assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,696. 3 Claims. (Cl. 120—50.)



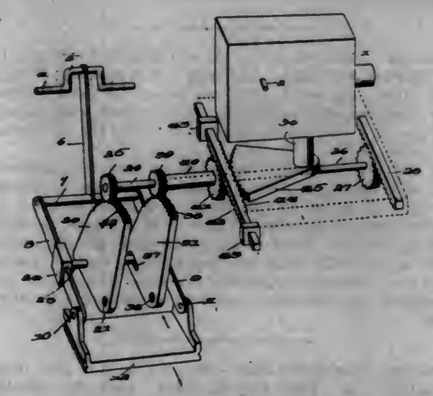
1. A self-filling fountain pen feed comprising a member having a longitudinally extending channel, a cover disposed over said channel for substantially its entire length but leaving the lower end thereof uncovered, means slidably supporting the cover on the member, a shoulder on the member engaging the edge of the cover to limit its movement and thus determine the size of the uncovered part of the channel, a pen disposed over said uncovered part of the channel, a sack communicating with the other end of the channel, and means forming a plurality of longitudinally extending ducts in said channel extending from said sack to said lower end of the channel.

1,882,645. STRAINER. CHARLES E. KAIL, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 22, 1930. Serial No. 497,399. 1 Claim. (Cl. 210—162.)



A strainer comprising a wire mesh bowl having a rim, a bail having a handle, said bail tightly embracing said rim, reenforcement ribs extending transversely under said bowl, and a plurality of bent out portions being provided at spaced intervals on said bail, the free ends of said reenforcement ribs being secured to said bent out portions.

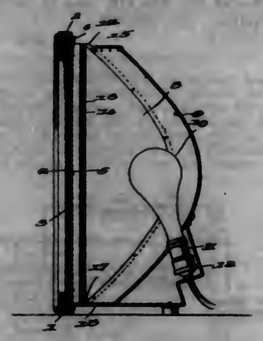
1,882,646. PRODUCTION OF STEREOSCOPIC MOTION PICTURES. CLARENCE W. KANOLT, New York, N. Y. Filed July 26, 1929. Serial No. 381,210. 17 Claims. (Cl. 88—16.6.)



1. In mechanism for producing stereoscopic motion pictures, the combination with a motion picture camera, of supporting means therefor mounted for sliding movement and permitting relative turning movement of the camera,

means for causing said sliding movement, separate means for causing said turning movement, a carriage slidably mounted and connected with both of said last-mentioned means, and means for adjusting said carriage for adjusting the amplitude of the motion of the camera.

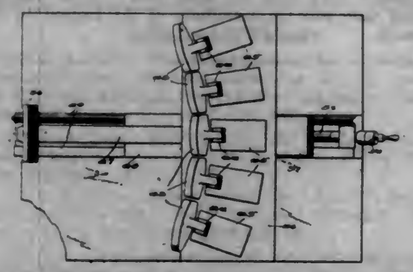
1,882,647. ILLUMINATED DISPLAY CASE. CLARENCE W. KANOLT, New York, N. Y. Filed Apr. 18, 1930. Serial No. 445,437. 13 Claims. (Cl. 40—132.)



4. A display case for transparencies or the like comprising means for supporting a transparency, means for supporting a light diffusing screen spaced behind the transparency, a casing having openings in different sides thereof, each of said openings extending beyond the opposite edges of the screen to effect ventilation of the spaces on both sides of the screen, and illuminating means for the transparency disposed behind the screen.

9. In a display case, a frame having a groove for receiving a transparency, and one or more clips having the main portion pivoted to the frame and having a spring arm extending at an angle from the main portion thereof to engage and hold the transparency in position in the frame.

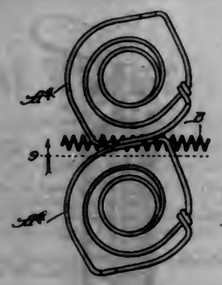
1,882,648. PRODUCTION OF STEREOSCOPIC PICTURES. CLARENCE W. KANOLT, New York, N. Y. Filed June 18, 1930. Serial No. 462,006. 22 Claims. (Cl. 95—18.)



1. In an apparatus for the production of stereoscopic pictures, the combination of means for reproducing an image, a ridged element for diverting light rays to said means, and focusing means associated with the ridged element.

1,882,649. SPRING STRUCTURE. SOLOMON KARPEN and CHARLES LOFMAN, Chicago, Ill., assignors to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed June 22, 1931. Serial No. 546,078. 1 Claim. (Cl. 5—269.)

A spring structure, comprising parallel rows of upholstery springs having end-rings disposed substantially in contact at lines between said rows, said end-rings having depressions at their adjacent portions, and helical connectors arranged between said rows below the plane of the end-rings and having threaded engagement with



said depressions, said depressions bearing a staggered relation transversely with respect to the connectors, each connector adapted to tie together two rows of said springs and to hold the members of each row against shifting longitudinally with relation to the connector.

1,882,650. SPEAR. WALTER L. CHURCH, Houston, Tex. Filed Feb. 9, 1931. Serial No. 514,397. 6 Claims. (Cl. 294—96.)



1. A spear including a mandrel, a slip support thereon having an inside shoulder and a keyway extending entirely through said support, a key on the mandrel in said keyway, expansible pipe engaging slips on said support and formed integrally therewith, said mandrel having a flared portion movable into active position into engagement with said slips to expand the same and to maintain the key in said keyway and movable into inactive position out of such engagement, said key and shoulder forming means adapted to interlock upon the turning of the mandrel relative to said support, to hold said mandrel in said inactive position.

1,882,651. LUBRICATING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,054. 15 Claims. (Cl. 221—47.4.)

1. A grease gun including a cylindrical container having a reduced portion at one end, a high pressure discharge cylinder mounted in said end, said high pressure

cylinder being provided with a discharge nozzle, a plunger reciprocable in said cylinder, a plunger rod extending therefrom through the opposite end of said container, a handle on said rod, a guide sleeve surrounding said rod in said cylinder container, a spiral conveyor blade rigidly



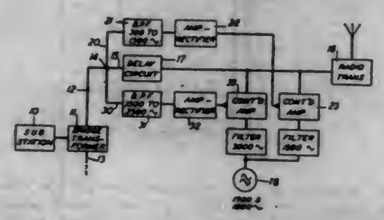
secured to said sleeve and extending to the lower end of said barrel, and pawl and ratchet means associated with said rod and said container for rotating said container relative to said conveyor thereby to feed lubricant to said cylinder.

1,882,652. MOLDING HOLLOW-WARE ARTICLES. VICTOR E. SCHMIEDEKNECHT, Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Filed Dec. 7, 1931. Serial No. 579,535. 18 Claims. (Cl. 22—9.)



1. In a device for hollow molding, a temporary former having side walls, and cheek patterns removably fitted within said former along said side walls and having their inner faces conforming in shape and size to the inner surfaces of the sides of the article to be cast, said cheek patterns being separable from each other upon removal of the temporary former from around the patterns.

1,882,653. SIGNAL TRANSMISSION SYSTEM. JOSEF SEDLMAYER, Berlin-Charlottenburg, Germany, assignor to Siemens and Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a German Company. Filed Nov. 10, 1931, Serial No. 574,119, and in Germany Nov. 6, 1930. 2 Claims. (Cl. 250—2.)



1. In a radio signaling system, the method of reducing the effects of fading which comprises allotting to each of a plurality of portions of the signal band a control tone of signal frequency located substantially at a limit of the corresponding portion of the signal band and having an amplitude which bears a definite relation to the amplitude of the waves in the respective portions of the signal band, separating the received waves into sub-bands, each corresponding to one of said portions of the signal band, separately amplifying each sub-band and controlling the amplification of each sub-band in accordance with both the amplitude of the respective control tone and the amplitude of the current in said sub-band.

Patents Nos. 1,882,654 to 1,883,859

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office

Vol. 423—No. 3 TUESDAY, OCTOBER 18, 1932 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $10.00 per annum; including annual index, $13.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Pat nts, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
ISSUE OF OCTOBER 18, 1932	613
ADJUDICATED PATENTS	613
ADVERSE DECISIONS IN INTERFERENCE	613
NOTICE REGARDING PAYMENT OF FEES	613
IMPORTANT INFORMATION	613
APPLICATIONS UNDER EXAMINATION	614
DECISIONS OF THE U. S. COURTS—	
Shaw and Gillespie v. Levy	615
Fawcett Publications, Inc., v. Popular Mechanics Co.	617
Breakstone Bros., Inc., v. Gerber & Co., Inc.	618
PATENT SUITS	619
DISCLAIMERS	619
TRADE-MARKS PUBLISHED (173 APPLICATIONS)	621
TRADE-MARK REGISTRATIONS GRANTED	643
TRADE-MARK REGISTRATIONS RENEWED	649
LABELS	649
PRINTS	650
REISSUES	651
PLANT PATENTS	654
DESIGNS	654
PATENTS GRANTED	679

Issue of October 18, 1932

Trade-Marks	129—No.	296,184 to No.	296,312, inclusive.
T. M. Renewals	18		
Labels	31—No.	41,282 to No.	41,312, inclusive.
Prints	8—No.	13,940 to No.	13,947, inclusive.
Reissues	12—No.	18,622 to No.	18,634, inclusive.
Plant Patents	2—No.	35 to No.	36, inclusive.
Designs	112—No.	87,951 to No.	88,063, inclusive.
Patents	1206—No.	1,882,654 to No.	1,883,859, inclusive.
Total	1,520		

Adjudicated Patents

(C. C. A. Ohio.) Wentworth patent, No. 1,307,284, for heel-seat-forming machine, claims 44, 51, 53, 54, and 61 *Held* not infringed. *United Shoe Machinery Corporation* v. *H. Gordon Co.*, 59 F.(2d) 903.

(C. C. A. Ohio.) Bowie patent, No. 1,432,524, for heel-seat-forming machine, claims 1, 3, 4, 5, 6, 9, and 14 *Held* not infringed. *Id.*

(C. C. A. Conn.) Peters patent, No. 1,570,776, for finger ring, claims 1 and 2 *Held* valid and infringed. *H. W. Peters Co.* v. *MacDonald*, 59 F.(2d) 974.

(C. C. A. Mich.) Mahon patent, No. 1,641,181, for pneumatic conveyor, claims 11 and 12 *Held* invalid. *Newcomb, David Co.* v. *R. C. Mahon Co.*, 59 F.(2d) 899.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,738,575, F. E. Greswold, Radio speaker diaphragm, decided September 19, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13.

Pat. 1,782,323, Georg Spiess, Cross-folding machine, decided September 9, 1932, claim 1.

Pat. 1,789,434, E. G. Gunn, Brake, decided September 29, 1932, claims 1 and 8.

Notice Regarding Payment of Fees

All fees must be paid in advance. Payment of money required for Office fees *must* be made in specie, Treasury notes, national-bank notes, post-office money orders, or certified checks. Money orders and checks must be made payable to the "Commissioner of Patents." Money sent by mail to the Patent Office will be at the risk of the sender. (See Rule 194.)

Certified checks, bank drafts, express and foreign money orders must be immediately negotiable in this country and for the full amount of the fee required by the Patent Office. No allowance can be made by this Office for any charge for their collection or exchange. Postage stamps will not be accepted. Failure to comply with the above instructions will cause delay.

Important Information

In ordering manuscript copies much time will be saved if the order states specifically what is desired, viz:

Application as originally filed. (Petition, specification, oath, and drawings as received.) Application as amended. (Petition, specification, oath, and drawings with amendments entered.)

Application as allowed. (Petition, specification, oath, and drawings as passed by the examiner for issue.)

Original application. (Facsimile petition, specification, oath, and drawings at present time.)

Specification as originally filed. (As received in Office.)

Specification as amended. (With amendments entered.)

Specification as allowed. (As passed by the Examiner for issue.)

Original specification. (Facsimile at present time.)

File-wrapper. (File-wrapper only.)

File-wrapper and contents. (File-wrapper, contents of record, including photoprints of any tracings or of prints within file-wrapper. In patented-cases, printed copy of the specification and drawings of the patent is furnished.)

File-wrapper, contents, and drawings. (File-wrapper and all of the contents of record, including photoprints of any tracings, exhibits, or prints within the file-wrapper. In pending cases, photoprints of the pending drawings only, omitting any canceled. If patented, copy of the specification and drawings of the patent being furnished, photoprints are not made of the original drawings unless specially ordered. If canceled drawings are wanted, they must also be specially ordered.)

Assignment. (Give the liber and page of the record as well as the name of the inventor.)

Printed publications in possession of the Office. (Give title and date of publication, also page and exact portion to be copied.)

Orders for copies of any other records not mentioned above must state specifically the exact paper to be copied.

Condition of Applications Under Examination at Close of Business September 30, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 68,262; Trade-Mark Division, 846. Oldest new case, Mar. 28, 1932; oldest amended, Mar. 31, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	July 8	July 15	342
6706	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	June 6	June 7	838
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	June 7	June 24	732
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	July 1	July 1	368
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	June 2	June 6	330
4898 C	6. LEWERS, A. M., Carbon Chemistry	Apr. 5	Apr. 5	2,025
5725	7. JARBOE, C. G., Optics; Photography	May 9	May 9	1,369
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	May 31	June 2	927
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	July 2	July 11	653
5612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	May 2	May 3	682
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	June 1	June 4	110
7701	12. HENRY, C. C., Machine Elements	June 19	June 19	482
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	May 20	May 24	1,050
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	June 6	June 15	744
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Apr. 30	May 2	1,752
5612	16. SPENCER, C. J., Telegraphy; Telephony	June 15	June 10	802
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Apr. 13	Apr. 13	1,387
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	June 4	June 4	617
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Mar. 31	Apr. 1	1,776
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	June 14	June 7	544
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	May 17	June 1	824
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	June 24	July 14	496
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Apr. 21	Apr. 4	850
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 1	July 1	568
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Apr. 11	Apr. 7	1,358
5803	26. HODGES, J. S., Electricity, Generation; Motive Power	Apr. 4	Apr. 5	978
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	June 5	June 5	845
4628	28. BENSON, A. R., Internal-Combustion Engines	Apr. 5	Apr. 5	1,336
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Apr. 1	Apr. 5	845
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	June 3	June 2	768
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Apr. 19	Apr. 20	1,525
4085	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	June 10	June 21	603
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Mar. 31	Mar. 31	2,257
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	May 2	May 2	830
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 2	Aug. 3	308
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Apr. 5	Apr. 12	1,561
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Apr. 28	May 4	1,050
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 3	June 16	147
4574	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 6	Apr. 7	1,385
7880	40. OBERLIN, J. J., Receptacles	May 2	May 7	2,188
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	July 1	July 30	472
5882	42. CUTTING, H. O., Electric Signaling	Apr. 8	Apr. 8	1,277
4586 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	May 9	May 9	1,455
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Apr. 1	Apr. 5	1,729
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	June 13	June 13	936
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	June 5	June 10	560
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	May 4	May 5	1,977
5806 C	48. ROEPKE, O. B., Electricity, General Applications	May 6	May 5	695
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 15	Apr. 6	1,467
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Apr. 4	Apr. 4	2,133
5628	51. BACKUS, C. D., Radiant Energy	May 18	May 18	1,120
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	July 5	July 6	677
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	July 18	July 25	463
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Apr. 13	Apr. 13	1,100
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	July 15	July 15	340
	Designs	Sept. 14	Sept. 20	187
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Apr. 16	Apr. 16	1,414
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	June 1	June 1	626
5605	58. DOWELL, E. F., Abrading; Typewriting	Apr. 2	Apr. 4	1,267
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Mar. 28	Mar. 31	1,731
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Apr. 13	Apr. 13	1,378
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Apr. 15	Apr. 20	1,269
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Apr. 30	Apr. 30	1,617
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Apr. 13	Apr. 13	1,400
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	June 11	June 30	486
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Apr. 7	Apr. 8	1,535
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	Aug. 30	Sept. 15	830
	Labels and Prints	Sept. 22	Sept. 17	16

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

SHAW AND GILLESPIE *v.* LEVY

Nos. 2,835, 2,836, and 2,837. Decided June 6, 1932

INTERFERENCE—PRIORITY.

Evidence reviewed, and *Held* to establish that L. was the first to conceive the invention and the first to reduce it to practice, and that he did not lose his rights by concealment or suppression, and that priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Mr. Munson H. Lane for Shaw.

Mr. Edwin S. Clarkson for Gillespie.

Messrs. Johnston & Jennings for Levy. *Mr. Robert D. Johnston* and *Mr. Henry L. Jennings* of counsel.

HATFIELD, *J.*:

These are appeals in three interference proceedings from decisions of the Board of Appeals of the United States Patent Office, awarding priority of invention in each interference to appellee.

Interference No. 52,585 is involved in appeal No. 2,835, interference No. 53,724 in appeal No. 2,836, and interference No. 55,857 in appeal No. 2,837. For the purposes of the hearing before us, the records in all of the interferences were consolidated.

Inasmuch as the issues requiring our determination are substantially the same in each of these appeals, we shall dispose of them in one opinion.

In its decision in interference No. 52,585, the Board of Appeals described the involved invention as follows:

> The invention relates to artificial teeth of the bridge-work type. The bridge, or metal backing, is provided on its outer side with a flat surface against which the back of a porcelain facing seats. That portion of the bridge which faces the gums is provided with another flat surface which meets the first flat surface at an obtuse angle. Stated in another way the second flat surface is inclined inwardly and toward the gums. The metal portion provides the chewing surface and is also referred to as a cusp plate.
>
> The porcelain tooth comprises a facing, a crown portion and a root extension formed as an integral structure. The back of the facing and the end of the crown are formed as flat surfaces and are so arranged that they seat on the flat surfaces of the metal backing. The root extension extends a short distance into the root socket on the freshly drawn natural tooth which is being replaced. The cooperating inclined surfaces on the metal backing and the tooth crown are provided with a transversely arranged tongue and undercut groove connection. In the preferred form the tongue is a post united by a thinner web to the metal backing and the cooperating groove or mortise is formed in the tooth.
>
> The mortise extends through the inner face of the tooth. The connection permits the tooth to be removed from the bridge while the latter is attached in position within the mount, since the tooth in moving outwardly also moves away from the gums sufficiently to permit withdrawal of the root extension from the root socket.

In interference No. 52,585, the issue is stated in two counts, in interference No. 53,724, in one count, and in interference No. 55,857 there are three counts. In view of the conclusion which we have reached, it is sufficient for illustrative purposes to set out the count in interference No. 53,724. It reads:

> A divisible tooth including a tooth body and a cusp plate, the tooth body being formed with an integral root extension, a backing seat formed on said tooth body, said seat being disposed so as to be out of contact with the gum, a bore in the tooth body extending from the lingual face toward the labial face, a slot of less diameter opening said bore for a part of its length to the surface of said seat, the remaining portion of the bore being closed to said seat, and divergent to the part of the surface beyond the end of the slot, said cusp plate having a post connected to it by a plate of less diameter than the post whereby the post and plate are adapted to slide and fit in said bore and slot and thereby connect the cusp plate to the tooth body, the labial end portion of the post extending into the tooth body beyond the labial end of the slot.

The issues involve an application by appellant Shaw, filed October 1, 1921, an application filed by appellee on August 28, 1922, and an application filed by appellant Gillespie on July 1, 1924. There is also involved an application filed by appellant Shaw on June 7, 1927, which was given the benefit of an earlier filing date of a joint application of Shaw and Robinson filed August 8, 1922. It appears that the applications of appellants Shaw and Gillespie are owned by a common assignee, the Columbus Dental Manufacturing Company, and the petitions for appeal to this court on behalf of both appellants are signed by the same attorney.

In their preliminary statements the parties alleged conception and reduction to practice of the invention as follows: Appellant Shaw, conception on or about December 20, 1920, reduction to practice on or about January 6, 1921; appellant Gillespie, conception on or about November 1, 1920, reduction to practice on May 1, 1921; appellee Levy, conception on or about March 15, 1917, reduction to practice during the latter part of March, 1917.

Each of the parties submitted testimony.

The Examiner of Interferences held that, although appellee was the first to conceive the invention, his purported reduction to practice in 1917 was nothing more than an abandoned experiment; that he did not reduce the invention to practice until after the reduction to practice of the invention by appellant Gillespie, and was not diligent in reducing it to practice; that appellant Shaw derived the invention from appellee Levy; and, accordingly, awarded priority of invention to appellant Gillespie.

Although the Board of Appeals concurred in the finding of the Examiner that appellant Shaw derived the invention from appellee, it held that appellee conceived and reduced the invention to practice in March, 1917, long before either of the appellants entered the field; that appellee did not suppress nor conceal the invention; and that, as he was the first to conceive and the first to reduce the invention to practice, appellee was entitled to an award of priority. The decision of the Examiner of Interferences was, accordingly, reversed.

With respect to the testimony concerning appellee's reduction to practice, the Board, in its decision in interference No. 52,585, said:

> In the year 1917, Levy was a practicing dentist in the city of Birmingham, Alabama. He was then living with his father-in-law Levi, one of the witnesses who has testified in his behalf. He shared offices with Dr. Fox, another of his witnesses, in the Brown Marx Building. Dr. Fox was an eye, ear, nose and throat specialist, and Levy

impressed with the fact that the artificial eyes used by Fox did not irritate the surrounding tissues of his patients, conceived the idea of providing a porcelain root extension to fit the root socket of a freshly drawn tooth and thereby prevent the gums from receding away from the facing due to shrinkage of the bony process. With the facings then in use objectionable food gathering spaces developed between the ends of the facings and the gums.

The prior detachable facings had been attached to the metal backing by a mounting known in the trade as a Steele's backing and comprising a metal plate provided with a post or pin and connecting web adapted to engage a mortise in the facing, the plate being rigidly attached to the bridge. Levy thought artificial teeth having integrally formed facings and root extensions might in like manner be detachably mounted on a permanent bridge provided the connecting means were positioned along inclined seating surfaces on the bridge and tooth crown to permit the root extension being withdrawn from the root socket.

Dr. Fox, having an abscessed tooth which needed extraction, consented to let Levy make and place in his mouth a tooth of this construction. Levy made by hand an artificial tooth which he attached by a Steele's mounting to a bridge spanning the space provided by the extracted tooth. The color of the artificial tooth was bad and Levy removed it while the bridge was in place and replaced it with another. The color of the second tooth was also unsuitable. The hand manufacture was slow and tedious and Levy constructed a mold to facilitate the operation. This mold is in evidence as Levy's Exhibit No. 13. Several teeth were made and tried in succession but a satisfactory color had not been obtained when several days after the initial installation it became necessary to remove the bridge because one of the teeth to which it was anchored had also become abscessed, which necessitated extraction of the abutment tooth. The artificial teeth were not cemented to the bridge, but the connection employed held them firmly in place.

We think the foregoing is a correct statement of the facts. In addition thereto the testimony shows that, although, between the dates of appellee's conception and his reduction to practice in March, 1917, appellee made drawings of the invention and exhibited them to the witness Fox, neither they nor the tooth placed in the mouth of the witness Fox were preserved. However, a mold for the formation of that tooth, prepared by appellee, was introduced in evidence and identified by both appellee and the witness Fox, the latter stating that he recognized it by the fact that in March, 1917, he, by means of a screw driver, scratched his initials, together with the figure 17, upon it. The letters and figures referred to clearly appear upon the exhibit.

We have carefully considered the evidence of record, having in mind especially the arguments made by counsel for appellants that appellee's alleged reduction to practice in March, 1917, was merely an abandoned experiment. We are impressed, and undoubtedly was the Board, with the clear, positive, and intelligent testimony of Dr. Fox, whose testimony corroborates that of appellee.

Dr. Fox was not only in a position to know the facts, but, from all the circumstances of the case, was not likely to forget them. Any extended discussion is unnecessary, in view of the detailed discussion of the facts by the Board of Appeals. We content ourselves, therefore, with the statement that we are in harmony with the views expressed by the Board, and that, in our opinion, the invention involved in the counts of these interferences was actually reduced to practice by appellee in March, 1917.

It is contended, however, by counsel for appellants that, even if it be conceded that he reduced the invention to practice in March, 1917, appellee is not entitled to prevail in these interferences because he suppressed and concealed the invention. With respect to appellee's conduct subsequent to his reduction of the invention to practice in March, 1917, the Board of Appeals, in its decision in interference No. 52,585, said:

> • • • After securing his reduction to practice Levy did nothing with the invention until 1920. His interest was then stimulated by an article by Dr. Tinker in the March number of The Dental Summary (Levy's Exhibit No. 2). This article disclosed artificial teeth somewhat similar to Levy's but not constructed in such manner as to be removable from the bridge in the manner contemplated by Levy. He then disclosed the invention to his attorney Johnston who prepared an application, Serial No. 424,546, which was filed in the Patent Office on November 16, 1920. This application was inadvertently allowed to abandon in August, 1922, and was followed by the Levy application involved in this proceeding, which application was filed on August 28, 1922. The abandoned application, a copy of which constitutes Levy's Exhibit No. 3, discloses in Fig. 1 a form of the invention in which the pin or post is attached to the tooth and the mortise is in the metal backing. Fig. 4 shows the reverse form with the mortise in the tooth. Although neither figure shows the conventional form of Steele's backing used by Levy in the Fox tooth, it is clear Levy intended to secure broad protection regardless of whether the bridge or the backing is provided with the mortise. Count 1 is readable on both forms and count 2 is readable on the Figure 4 form. Were it not for the few days intervening between the abandonment of the earlier application and the filing of the later application, Levy would be entitled to the date of November 16, 1920, for constructive reduction to practice.
>
> Shortly before the filing of the first application, Levy disclosed the invention to a great many dentists and representatives of dental manufacturers at a dental manufacturers' convention held in Birmingham, Alabama, early in November, 1920. This was prior to any date to which either of the other parties is entitled. The Levy record shows continued efforts by Levy to interest manufacturers leading up to the manufacture of teeth in large quantities by the Dixie Dental Mfg. Co. of Birmingham. We fail to see where *that* [there] was anything in Levy's conduct which would warrant the inference of intention to abandon the invention, or that there was suppression or concealment resulting in forfeiture.

With respect to the quoted count, the Board, in interference No. 53,724, said:

> The instant count is more specific to the connecting means between the tooth body and cusp plate than are the counts in the companion case. While not readable on any one form of the invention illustrated in Levy's abandoned application Serial No. 424,546, filed November 16, 1920, it is supported by the disclosure in the Levy application involved in this proceeding and is also readable on the tooth structure which Levy successfully tested in the year 1917.
>
> The element in this count which chiefly distinguishes it from the counts in the other interferences is—
>
> the labial end portion of the post extending into the tooth body beyond the labial end of the slot.

As stated by the Board, this element was not disclosed in appellee's abandoned application, but is readable upon his tooth structure of 1917, heretofore discussed.

Appellants contend, with reference especially to the quoted count, that appellee did not disclose a tooth, embodying the elements of that count, at the dental manufacturers' convention, held in November, 1920, in Birmingham, Ala., nor at any other time or place.

We have carefully examined the testimony upon this point and find that a tooth embodying all of the elements of that count, as well as the elements defined in the other counts of these interferences, was freely disclosed by him at the dental convention. This was before either of the appellants entered the field.

It is true that appellee was inactive from shortly after he reduced the invention to practice until 1920. However, there is, in our opinion, no evidence whatsoever to indicate any suppression or concealment of the invention, nor inactivity on the part of appellee after either of the appellants entered the field. On the contrary, it has been established by the evidence that, at and prior to the time either of the appellants entered the field, appellee was active in attempting to commercialize the invention, and freely disclosed the invention to any and all whom he thought might assist him.

We are of opinion that the Board of Appeals reached the right conclusion. Its decisions are, accordingly, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

FAWCETT PUBLICATIONS, INC., *v.* POPULAR MECHANICS CO.

Nos. 2,893 and 2,894. Decided May 31, 1932

1. TRADE-MARKS—SIMILARITY—"MODERN MECHANICS" AND "POPULAR MECHANICS."

   The notation "Modern Mechanics" used as a trade-mark for a publication *Held* confusingly similar to the notation "Popular Mechanics" previously used as a title for a magazine.

2. SAME—SAME—"MODERN MECHANICS AND INVENTIONS" AND "POPULAR MECHANICS."

   The notation "Modern Mechanics and Inventions" used as a trade-mark for a magazine *Held* confusingly similar to the term "Popular Mechanics" previously used as a title for a magazine.

APPEAL from the Patent Office. Affirmed.

Mr. Chester W. Johnson, Mr. Dan J. O'Connell, Mr. Carl Miller, and *Mr. Gustave Miller* for Fawcett Publications, Inc.

Mr. Edward S. Rogers, Mr. Allen M. Reed, and *Mr. Thomas L. Mead, jr.*, for Popular Mechanics Co.

HATFIELD, *J.:*

These are appeals in trade-mark opposition proceedings from decisions by the Commissioner of Patents, sustaining the oppositions of appellee and adjudging that appellant is not entitled to the registrations for which it has applied. These decisions of the Commissioner reversed decisions by the Examiner of Interferences, who dismissed the oppositions and held that appellant was entitled to register the marks for which it had applied.

As both appeals involve substantially the same questions, they will be considered in one opinion.

By stipulation of the parties, both appeals were merged in a single record.

Appeal No. 2,893

In this appeal, appellant seeks registration, under the Trade-Mark Act of February 20, 1905, of the notation "Modern Mechanics," the first word being placed above the second, and both being inclosed within an elliptical border or line, used as a title for magazines. Appellee sets up prior adoption and use of the notation "Popular Mechanics" as a title for a monthly magazine, and claims prior ownership of said mark and registration of the same on November 17, 1914, registration No. 101,201.

The Commissioner in his opinion correctly states that:

> Both parties have taken testimony and it satisfactorily appears that the opposer was long prior by many years—over a quarter of a century—in the field in the adoption and use of its mark, that it has used it widely, and has established a circulation of its magazines which at the present time is substantially half a million copies, that it has spent considerable sums in advertising and promoting the sale of its magazine, and the opposer is, in consequence, in possession of a valuable good will. Damage is further predicated by opposer upon the similarity of the applicant's mark to opposer's corporate name. There is evidence of actual confusion of the goods of the applicant with those of the opposer. • • •

Without passing upon the descriptiveness of appellant's mark, the Commissioner held that confusion will result from the use of the two marks upon the respective magazines, and therefore sustained the opposition of appellee.

Appellant in its brief, and upon oral argument, contends that the word "Mechanics" is descriptive and cannot be exclusively appropriated as a trade-mark. In its brief it states:

> • • • The applicant contends that the opposer has no exclusive trade-mark in the word "Mechanics" at common law or by statute for the reason that "Mechanics" is a descriptive name and not a proper subject for an exclusive trade-mark, but rather a word "*publici juris*," incapable of exclusive preemption by any individual or corporation. • • •

If this contention be correct, it would seem clear that the addition of the word "Modern" would not render appellant's mark nondescriptive, but, if anything, would make appellant's mark more descriptive than the single word "Mechanics", and therefore it would not be registrable.

[1] If, on the other hand, the word "Mechanics" be not descriptive, as applied to the title of a magazine, then we are clear that there would be confusing similarity between the title "Modern Mechanics" upon one magazine and the title "Popular Mechanics" upon another.

In such case, since appellee is the owner of a trade-mark registration of the notation "Popular Mechanics", it must prevail, pursuant to the provisions of section 5 of said Trade-Mark Act of February 20, 1905.

We find no error in the decision of the Commissioner, sustaining the opposition of appellee and adjudging that appellant is not entitled to the registration which it seeks.

Appeal No. 2,894

The facts in this appeal are similar to those involved in appeal No. 2,893, with the exception that the mark here sought to be registered by appellant consists of the words "Modern Mechanics and Inventions," the word "Modern" being placed over the word "Mechanics," and the words "and Inventions" under the latter.

[2] In our opinion, the addition of the words "and Inventions" to the words "Modern Mechanics" does not render the mark less descriptive than the words "Modern Mechanics" alone, and we believe there is confusing similarity between the words "Popular

Mechanics" and the words "Modern Mechanics and Inventions," when applied to magazines.

For the reasons stated in considering appeal No. 2,893, the decision of the Commissioner in this appeal must be affirmed.

The decisions of the Commissioner of Patents in appeals Nos. 2,893 and 2,894 are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BREAKSTONE BROS., INC., *v.* GERBER & CO., INC.

No. 2,997. Decided May 23, 1932

TRADE-MARKS—SIMILARITY—TWO MARKS ESSENTIAL FEATURE OF WHICH IS A LARGE TRIANGLE HAVING SMALLER TRIANGLES WITHIN IT.

A trade-mark for cheese and butter consisting of a large triangle having a small triangle in each apex thereof and written across the same the word "Breakstone's" *Held* confusingly similar to a mark previously used by another for cheese consisting of a similar arrangement of triangles having printed thereacross the words "Swiss Knight Cheese."

APPEAL from the Patent Office. Affirmed.

Mr. O. Ellery Edwards and *Mr. James Atkins* for Breakstone Bros., Inc.

Mr. W. Lee Helms for Gerber & Co., Inc.

LENROOT, *J.*:

This is a trade-mark opposition proceeding in which appellant appeals from a decision of the Commissioner of Patents, reversing a decision of the Examiner of Interferences which dismissed the notice of opposition and adjudged that appellant is entitled to the registration for which it has made application.

The Examiner found that confusion in trade by the use of the respective marks of the parties would not be likely. The Commissioner found to the contrary, and from his decision this appeal is taken.

Appellant on October 9, 1929, filed its application for the registration of its mark, applied to cheese and butter. The mark, as shown in the drawing filed with the application, consists of a triangular figure, having a border of solid color. Within the inner triangle formed by said border a horizontal line is drawn near the apex thereof, thus forming a small isosceles triangle. At the lower corners of said large inner triangle, lines are drawn so as to form, with said corners, two small isosceles triangles of the same dimensions as the one positioned at the apex of said large inner triangle. All of the area of the large inner triangle, except those portions appropriated to the formation of the three small triangles hereinbefore described, is of a solid color, except that, written across said area at an oblique angle is the word "Breakstone's," in script and ending with a paraph beneath the same. Immediately under the right hand portion of said word is another small triangle, having its apex between the letters "n" and "e", and within said small triangle is the figure "3", beneath which is the word "point."

The application states that appellant first used its mark on October 1, 1929.

On December 26, 1929, appellee filed notice of opposition to said application, alleging registration by it, in December, 1928, of its mark, applied to cheese; that it first used its mark on July 1, 1928; that appellant's mark is confusingly similar to that of appellee, and that it, appellee, would be damaged should the mark applied for by appellant be registered and used.

A specimen of appellee's mark, as claimed to be used by it, accompanied the notice of opposition and appears in the record. Appellee's mark, as registered, consists of a triangular figure of the same form as that of appellant, with a similar outer border. A horizontal band connects the upstanding sides of the triangle. In the specimen filed with appellee's notice of opposition, in addition to the figure above described, there are found printed upon the said connecting band the words "Swiss Knight Cheese," and below said band are other descriptive words. Within said triangle there is also a representation of a Swiss knight.

Appellant's answer to the notice of opposition denies prior use by appellee of its (appellee's) mark, denies similarity of its mark to that of appellee, and alleges that a triangle in combination with a crossbar is in common use as a trade-mark for cheese, and that opposer therefore is not entitled to broadly claim the use of a triangle. In support of this allegation, appellant sets up a number of such trade-marks of triangular form, which it alleges have been registered, some of which marks appear in the record.

Neither party took testimony.

With respect to the registrations set up by appellant, this court has repeatedly held that, in cases of this character, prior registrations by third parties cannot be considered in determining the question of confusing similarity between the mark of an applicant and that of an opposer. *Weyenberg Shoe Manufacturing Co.* v. *Hood Rubber Co.*, 18 C. C. P. A. (Patents) 1449, 49 F.(2d) 1046, 412 O. G. 834; *The Celotex Co.* v. *Millington*, 18 C. C. P. A. (Patents) 1484, 49 F.(2d) 1053, 413 O. G. 279.

In our opinion, the outer triangle formed by the border of the marks of both parties hereto is the dominant part of each, and this, together with the fact that each mark has a small triangle within the apex of the large triangle, leads us to the conclusion that appellant's mark, viewed as an entirety, so nearly resembles the trade-mark of appellee as owned and used by it, also viewed as an entirety, as to be likely to cause confusion or mistake in the mind of the public. We think the essential features of appellee's mark, as shown in the specimen filed with the notice of opposition, are the features shown in its registered mark; therefore the additional matter shown in the specimen may be ignored, and appellant is entitled to the date of registration of its mark for priority of use. We think the large triangle, and the small triangle at its apex, as shown in each of the marks, are the features that would attract the attention of the purchaser of so common and inexpensive an article as cheese, and that such purchaser would be likely to ascribe common origin to cheese bearing either of the marks in question.

For the reasons stated the decision of the Commissioner of Patents is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,104,589, Ward & Taylor, Gear grinding machine; 1,155,532, F. A. Ward, Machine for grinding splined shafts; 1,271,495, same, Method of grinding splined shafts and other interrupted cylindrical bodies; 1,273,016, same, Splined shaft, D. C., S. D. Ind. (Indianapolis), Doc. 1302, *The Gear Grinding Machine Co.* v. *Warner Gear Co.* Claims 3, 7, and 8 of 1,104,589, claim 10 of 1,155,532, claims 3 and 5 of 1,271,495 held valid and not infringed; Patent 1,273,016 held invalid Sept. 8, 1932.

1,155,532. (See 1,104,589.)

1,191,414, G. W. Gerlach, Safety block signal; 1,303,192, same, Locomotive equipment for block signal system, appeal filed Sept. 3, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9597, *G. W. Gerlach* v. *Chicago, Rock Island & Pacific Ruy. Co.*

1,212,840, F. J. Straub, Building block and method of making same, D. C., N. D. Ohio, E. Div., Doc. E 3260, *Crozier-Straub, Inc., et al.* v. *The Trumbull Cement Products Co.* Patent held valid Aug. 31, 1932.

1,271,495. (See 1,104,589.) 1,273,016. (See 1,104,589.)

1,274,032, J. D. Gibbs, Railway passes, appeal filed Aug. 31, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9595, *Gibbs Inman Co.* v. *G. D. Barnard Stationery Co.*

1,303,192. (See 1,191,414.)

1,321,750, R. D. Johnson, Valve; 1,723,359, C. W. Larner, same, filed Aug. 5, 1932, D. C. Md., Doc. E 2081, *I. P. Morris et al.* v. *The Mayor and City Council of Baltimore, Md.*

1,359,124, A. M. Springer, Ironing board, filed Sept. 8, 1932, D. C. Minn. (Minneapolis), Doc. E 2498, *Rid-Jid Products, Inc., et al.* v. *H. V. Keller Mfg. Co. et al.*

1,470,524, H. B. Burt, Process of making frozen confection; 1,718,997, same, Frozen confection, filed Sept. 3, 1932, D. C., W. D. N. Y., Doc. 1516, *Good Humor Corp. of America* v. *J. Matheos et al.* (*Matheos Bros.*). Same, appeal filed Aug. 19, 1932, C. C. A., 3d Cir., Doc. 4973, *Good Humor Corp. of America* v. *Popsicle Corp. of U. S. et al.*

1,570,776, H. W. Peters, Finger ring, filed Sept. 6, 1932, D. C., S. D. N. Y., Doc. E 71/30, *Peters Patent Corp.* v. *Simson Bros., Inc.*

1,670,656. (See Re. 16,611.)

1,684,653, B. E. Willett, Foldable table, filed Sept. 9, 1932, D. C., S. D. N. Y., Doc. E 71/59, *Ferguson Bros. Mfg. Co.* v. *Larraine Metal Mfg. Co., Inc.*

1,715,000, 1,728,955, A. Cheney, Interlocking metal flashing; Re. 18,492, E. H. Friedrich, Metal flashing, filed Aug. 3, 1932, D. C. Md., Doc. E 2080, *The Cheney Co.* v. *W. A. Fingles, Inc.*

1,718,997. (See 1,470,524.) 1,723,359. (See 1,321,750.)

1,725,500, V. P. Writer, Tam pressing machine, D. C., S. D. N. Y., Doc. E 70/362, *Writer Headwear Corp.* v. *Mursol Novelty Co., Inc., et al.* Consent decree for plaintiff Sept. 8, 1932.

1,728,955. (See 1,715,000.) 1,764,794. (See Re. 18,464.)

1,785,011, N. Felizianetti, Fruit pitting machine; Re. 17,726, A. L. Duncan, Peach pitting apparatus, filed Aug. 26, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3340–S, *Pacific Machinery Co.* v. *Tri-Valley Packing Ass'n et al.*

1,792,663, O. Strack, Heat exchanging stone for air-heaters, filed Sept. 7, 1932, D. C., N. D. Ohio, E. Div., Doc. 4399, *Freyn Engineering Co. et al.* v. *A. G. McKee & Co.*

1,829,141, J. F. Hixon, Cigar and cigarette holder, filed Sept. 2, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–94–M, *A. A. Peters* v. *S. H. Kress & Co. et al.*

1,858,757, R. Wolfe, Oils, filed Aug. 30, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–92–J, *California Consolidated Water Co.* v. *R. R. Meads* (*Sierra Mountain Water Co.*).

1,858,809, O. C. Ritz Woller, Brake and clutch pedal pad, filed Sept. 6, 1932, D. C., S. D. N. Y., Doc. E 71/27, *O. C. Ritz Woller et al.* v. *Kastar Specialty Mfg. Co.*

Re. 16,611, L. L. Lewis, Method of and apparatus for cooling and ventilating; 1,670,656, W. L. Fleisher, Ventilating system, filed Sept. 1, 1932, D. C., E. D. N. Y., Doc. E 6556, *Auditorium Conditioning Corp.* v. *St. George Holding Co. et al.*

Re. 17,726. (See 1,785,011.)

Re. 18,464, Johnson & Leach, Fuel oil burner, filed Sept. 5, 1932, D. C. Conn. (New Haven), Doc. E 2246, *Lynn Products Co.* v. *Bunsen Oil Burner Corp. et al.*

Re. 18,492. (See 1,715,000.)

Des. 85,117, E. Schultz, Tobacco ash receptacle, filed Sept. 1, 1932, D. C., E. D. N. Y., Doc. E 6555, *The Nagel Chase Mfg. Co.* v. *Frederick Loeser & Co., Inc.*

Disclaimers

1,641,181.—*Russell C. Mahon*, Detroit, Mich. PNEUMATIC CONVEYER. Patent dated September 6, 1927. Disclaimer filed September 19, 1932, by the assignee, *The R. C. Mahon Company.*

Hereby disclaims claims 11 and 12 of said patent.

1,705,219.—*Ross E. Jenkinson*, Akron, Ohio. TIRE-BUILDING MACHINE. Patent dated March 12, 1929. Disclaimer filed September 24, 1932, by the trustee, *The Union Trust Company*, and the assignee, *The Goodyear Tire & Rubber Company.*

Hereby enter this disclaimer to said claims 1 and 6 which are in the following words, to wit:

"1. A tire building machine having a drum, means for adjusting the width thereof and means for providing the drum with a substantially smooth continuous surface regardless of the relative adjustment of its width."

"6. The combination with a tire building machine having a rotatable driven shaft and a chuck secured to the shaft, of a cylindrical drum mounted upon the chuck, said drum being composed of axially adjustable sections whereby to permit variations in width of the drum, and means to provide the drum with a substantially smooth cylindrical surface when the sections are in their various positions of adjustments."

1,779,195.—*Abram P. Steckel*, Youngstown, Ohio. METHOD AND APPARATUS FOR ROLLING THIN SHEETLIKE MATERIAL. Patent dated October 21, 1930. Disclaimer filed September 23, 1932, by the assignee, *The Cold Metal Process Company.*

Hereby disclaims from the scope of claims 1, 2, 5, 9, and 10, limiting the rise in temperature of the backing roll necks by limiting the mill speeds to those employed prior to my invention for rolling such material.

Hereby disclaims from the scope of claims 6, 11, 12, 14, and 16 any mill having backing roll bearings of a character to limit the mill speeds to those employed prior to my invention for rolling such material.

1,834,807.—*Wilfred F. Skeats*, Scotia, N. Y. SYSTEM OF ELECTRICAL DISTRIBUTION. Patent dated December 1, 1931. Disclaimer filed September 29, 1932, by the assignee, *General Electric Company.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"1. In a system of distribution, a distribution circuit, a synchronous alternating current generating source connected thereto for operation in synchronism therewith, an auxiliary power consuming device normally disconnected from said generating source, and means operative in accordance with faults on said distribution circuit for connecting said auxiliary power consuming device to said generating source between the point of said fault and the terminals of said generating source to maintain conditions for synchronous operation between said source and said distribution circuit.

"2. In a system of distribution, a distribution circuit, a synchronous alternating current generating source connected thereto for operation in synchronism therewith, an auxiliary power consuming device normally disconnected from said generating source, and means operative in accordance with ground faults on said distribution circuit for connecting said auxiliary power consuming device to the terminals of said generating source to maintain conditions for synchronous operation between said source and said distribution circuit.

"3. In a system of distribution, a synchronous dynamo-electric machine, a transmission line connected to said dynamo-electric machine, an auxiliary substantially non-reactive load normally disconnected from said generator, and means operative in accordance with a function of symmetrical phase sequence components of an electrical characteristic of said transmission line for controlling the connection of said non-reactive load across the terminals of said dynamo-electric machine when said transmission line is subjected to short-circuit conditions.

"4. In a system of distribution, a synchronous dynamo-electric machine, a transmission line connected to said dynamo-electric machine, an auxiliary substantially non-reactive load normally disconnected from said generator, and means responsive to a symmetrical phase sequence component of an electrical characteristic of said transmission line for controlling the connection of said non-reactive load across the terminals of said dynamo-electric machine when said transmission line is subjected to short-circuit conditions."

"8. In a system of distribution, an alternating current generator, a transmission line connected to said generator, a plurality of resistor units normally disconnected from said generator, and fault responsive means operative when the load on said generator is suddenly changed for connecting resistor units across the terminals of said generator in accordance with the magnitude of the load change."

"10. In a system of distribution, a distribution circuit, an alternating current generating source connected thereto, an auxiliary power consuming device normally disconnected from said generating source, and means responsive to a function of a symmetrical phase sequence component of an electrical condition of said transmission line for connecting said auxiliary power consuming device to said generating source during said fault and disconnecting sai dauxiliary power consuming device from said generating source when normal operating conditions are restored.

"11. In a system of distribution, a distribution circuit, a synchronous alternating current generating source connected thereto, an auxiliary power consuming device normally disconnected from said generating source, means responsive to faults which decrease the load on said generating source for connecting said auxiliary power consuming device to said generating source when said distribution circuit is subjected to a fault, and means for disconnecting said auxiliary power consuming device from said generating source when normal operating conditions are restored in said distribution circuit.

"12. In a system of distribution, an alternating current generator, a distribution circuit connected thereto, an auxiliary non-reactive load device normally disconnected from said generator, means responsive to a sudden drop in load over said distribution circuit for connecting said auxiliary load device to said generator, and means operative after a predetermined time interval for disconnecting said auxiliary load device from said generator."

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 18, 1932

[VOL. 423. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 2

Receptacles

Ser. No. 329,198. THE OTTAWA RIVER PAPER COMPANY, Toledo, Ohio. Filed July 29, 1932.

ORPCO

For Containers, Shipping Cases, Display Cases, Display Stands in the Form of Containers and Parts Thereof, Including Pads, Liners, Partitions, Shelves, and Die-Cut Parts Made from Paper Board.

Claims use since December, 1925.

Ser. No. 329,801. MARTIN DENNIS COMPANY, Newark, N. J. Filed Aug. 24, 1932.

PAR-KIT

No exclusive claim is made to the word "Kit" apart from the mark as shown.

For Portable Receptacles for Attachment to the User's Wearing Apparel and Adapted for Carrying Cigarette Packages, Matches, Golf Tees, and Small Articles for Personal Use.

Claims use since July 15, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 317,918. ATLANTIC PRODUCTS CORPORATION, Trenton, N. J. Filed Aug. 12, 1931.

Par-Pak

For Hand Bags.

Claims use since June 9, 1931.

Ser. No. 329,545. PRINCE A. GARDNER, Jr., doing business as Gardner Pocket Book Mfg. Co., St. Louis, Mo. Filed Aug. 12, 1932.

ZIPKEE

For Pocket Receptacles, Including Key Cases, Billfolds, and for Portfolios and Ladies' Handbags and Purses, Made of Leather, Fabric, or Leather and Fabric, or Flexible Materials, Including Any of Said Substances or Materials.

Claims use since Aug. 1, 1932.

Ser. No. 329,798. K. KAUFMANN & CO., INC., Newark, N. J. Filed Aug. 24, 1932.

DUALID

For Traveling Bags, Suit Cases, Portable Wardrobe Cases and Fitting Carriers Therefor.

Claims use since June 22, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 323,943. S. C. JOHNSON & SON, Racine, Wis. Filed Feb. 8, 1932.

SHI-NUP

For Polish for Cleaning and Polishing Silver, Gold, Nickel, Chromium, Brass, Copper, Glass, Enameled Ware, Plated Ware, and the Like.
Claims use since July, 1915.

Ser. No. 328,108. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y. Filed June 18, 1932.



For Brake Dressing, Chromium Cleaner, Auto Top Dressing, Clear Top Dressing, and Chemically Treated Polishing Cloths.
Claims use since May 9, 1932.

Ser. No. 328,479. DETERGENT PRODUCTS CORPORATION, Atlanta, Ga. Filed July 1, 1932.

DIRTKILLER

For Cleaning Compound in Powdered Form Particularly Useful for Cleaning Grease and Dirt from Concrete Floors and Pavements.
Claims use since May, 1931.

Ser. No. 329,325. DEAUVILLE-PALATINE CORPORATION, New York, N. Y. Filed Aug. 4, 1932.

MARCELLE

For Shoe Polish and Cleaner.
Claims use since July 7, 1932.

Ser. No. 329,401. GRACE-LEE PRODUCTS, INC., Minneapolis, Minn. Filed Aug. 8, 1932.

GL

For Cleansing and Scouring Compound for General Use; a Cleansing Compound for Removing Milk Stone, Particularly for Use in Dairies and Creameries; Soaps and Metal Polishes for General Use.
Claims use since Apr. 1, 1932.

Ser. No. 329,607. PYREOLE PRODUCTS CORPORATION, Portsmouth, Ohio. Filed Aug. 17, 1932.



For Liquid and/or Its Concentrated Form to be Used on White Leather, White Fabric, and White Rubber Shoes and Footwear for Men, Women, and Children.
Claims use since Mar. 1, 1931.

Ser. No. 330,243. BEHR-MANNING CORPORATION, Troy, N. Y. Filed Sept. 12, 1932.

LIGHTNING

For Flexible Abrasives.
Claims use since Aug. 17, 1932.

CLASS 5

Adhesives

Ser. No. 299,154. PAUL OMER ALEXIS REAU, Glenay (Deux-Sevres), France. Filed Apr. 19, 1930.

"LE LIDO"

For Glue, Paste, Anhydrous Cement, and Anhydrous Paste.
Claims use since May 14, 1929.

Ser. No. 328,021. ALBERT SPLETTER, Washington, D. C. Filed June 15, 1932.

FUZIT

For Adhesive Cement for Watch Glasses.
Claims use since Mar. 1, 1932.

Ser. No. 329,657. THE STARK METAL PRODUCTS COMPANY, Massillon, Ohio. Filed Aug. 18, 1932.



For Plastic Cement.
Claims use since Mar. 21, 1932.

Ser. No. 329,845. THE AMERICAN DIAMALT COMPANY, Cincinnati, Ohio. Filed Aug. 26, 1932.

CORAID

For Composition Suitable for Use as a Binder with Sand or the Like in Forming Cores and Molds for Use in Metal Founding or Similar Articles.
Claims use since July 25, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 315,654. URE DRUGGIST, INC., Cleveland, Ohio. Filed June 10, 1931.

"URE" DRUGGIST

No claim is made for the word "Druggist."
For Beef, Iron, and Wine; Cocoanut Oil Shampoo, Citrate of Magnesia Solution, Emulsion C. L. O. and Hypophosphites, Glycerine Suppositories, Laxative Salts, Liquid Antiseptic, a General Alterative Tonic Known as McDade's Prescription, Rubbing Alcohol, Sodium Phosphate, a Nutritive, Stimulating and Restorative Tonic Known as Tasteless Tonic Preparation; Baby Cough Syrup, Blood Tonic, Aromatic Cascara, Cod Liver Oil; a Preparation for Removing Corns, Digestive Tonic, Mineral Oil and Agar Emulsion, Larkspur Lotion, Nerve and Bone Liniment, Syr. Cocillana Comp., Syr. Hypophosphites Comp., Syr. Tar and Menthol Comp., Syr. White Pine Tar and Menthol Comp., Throat Gargle, Toothache Drops, Toothache Wax, Worm Syrup, White Oil Liniment, Analgesic Balm, Antiseptic Tablets, Aspirin Tablets, Blaud's Pills, Boric Acid Ointment, Mentholated Bronchial Lozenges, Brown's Mixture Ammonium Chloride Lozenges, Buchu and Juniper Comp., Cascara Comp. Tablets, Cascara Extract Tablets, Cathartic Comp. Pills, Compound Carbolic Salve, Digestade Tablets, Headache Tablets, Laxative Cold Tablets, Laxative Pills, Menthol Comp. Ointment, Mecurial Ointment, Migraine Tablets, Mustard Comp. Ointment, Phenolphthalein Laxative Wafers, Potassium Chlorate Tablets, Quinine Hydrobromate Laxative Tablets, Quinine Capsules, Quinine Pills, Red Blood Pills, Rhinitis Tablets, Soda Mint Tablets, Soda Mint and Pepsin Tablets, Slippery Elm Lozenges, Sulphur and Cream of Tartar Lozenges, Mentholated Throat Lozenges, Zinc Oxide Ointment, Medicinal Mineral Oil, Bay Rum, Camphorated Oil, Aromatic Castor Oil, Cold Pressed Castor Oil, Glycerine, Glycerine and Rose Water, Aromatic Spirits of Ammonia, Spirits of Camphor, Spirits of Peppermint, Sweet Spirits of Nitre, Tincture of Arnica, Tincture of Benzoin Comp., Tincture of Green Soap, Tincture of Iodine, and Witch Hazel.
Claims use since Jan. 11, 1929.

Ser. No. 316,505. GEO. RASMUSSEN CO., Chicago, Ill. Filed June 30, 1931.

NATIONAL

The drawing is lined for shading.
For Cream Tartar.
Claims use since November, 1929.

Ser. No. 324,659. COPEMAN PROTEX COMPANY, Flint, Mich. Filed Mar. 1, 1932.

PRO-TEX

For Prepared Liquid Latex and the Like Used as a Temporary Covering for Articles During Shipping, Handling, and Storage.
Claims use since Feb. 11, 1932.

Ser. No. 325,561. J. WARREN BULLEN, doing business as The Bullen Chemical Company, Folcroft, Pa. Filed Mar. 28, 1932.

CRE-TO-LA

For Disinfectant and Insecticide.
Claims use since Jan. 1, 1907.

Ser. No. 326,432. FRANK C. REILLY, New York, N. Y. Filed Apr. 23, 1932.



For Astringents, Astringent Cerates, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Hand Lotions, Skin Lotions, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, After-Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Jan. 5, 1931.

Ser. No. 326,523. JOHN F. GARDNER, doing business as Gardner's Remedies Incorporated, Walla Walla, Wash. Filed Apr. 26, 1932.



For Medicinal Compound Recommended for Acidity, Rheumatism, and Neuritis.
Claims use since Feb. 1, 1932.

Ser. No. 326,676. F. AND W. Co., San Francisco, Calif. Filed May 2, 1932.



For Ointment Used in the Treatment of Charley Horse, Strained Ligaments, Sore Muscles, Inflammation, and Fatigue.
Claims use since Apr. 22, 1932.

Ser. No. 326,713. W. HILL HORNE, doing business as Hill Horne Drug Company, Greenville, N. C. Filed May 3, 1932.



For Medicines—Namely, for the Treatment of Colds, Rheumatism, Itch, Gonorrhœa, Headache, Malaria, Constipation, Hay Fever, Earache, Indigestion, Kidneys, Coughs, Sore Throat, Burns and Bruises, Tonic for General Ailment, Ear Drops for Earache, Eye Water, and Antiseptic Powder for Douches.
Claims use since Mar. 28, 1932.

Ser. No. 327,598. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed May 31, 1932.

Hepatrat

For Medicinal Preparation for Use in the Treatment of Pernicious Anæmia.
Claims use since Jan. 16, 1928.

Ser. No. 327,960. GRACE G. ORR, San Pedro, Calif. Filed June 11, 1932.



The representation of the female figure forming a feature of the trade-mark is fanciful.
For Antiseptic and Germicide.
Claims use since July 1, 1931.

Ser. No. 328,141. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y. Filed June 20, 1932.



For Motor Vehicle Radiator Cleaning Compound and a Liquid Preparation Adapted to be Mixed with System Circulation Water and Functioning to Stop Leaks.
Claims use since May 9, 1932.

Ser. No. 328,249. NOURSE OIL COMPANY, Kansas City, Kans. Filed June 28, 1932.

KNOK-EM-KOLD

For Insecticides.
Claims use since Sept. 1, 1931.

Ser. No. 328 646. RITZ COSMETIC & PERFUME SHOPPE, Elizabeth, N. J. Filed July 8, 1932.



The portrait appearing on the drawing is fanciful.
For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches; Skin Whitener in Liquid, Cream, and Solid Form; Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After-Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Obesity Creams, Refreshing Creams, Perfumes, and Toilet Waters.
Claims use since Oct. 22, 1931.

Ser. No. 328,684. CHAPPEL BROS. INC., Rockford, Ill. Filed July 11, 1932.

HEMO-S

For Hemic Solution of Liver and Iron.
Claims use since Mar. 5, 1932.

Ser. No. 328,826. WOLL-WISCHEREI UND KÄMMEREI IN DÖHREN BEI HANNOVER, Dohren, near Hannover, Germany. Filed July 15, 1932.

GOLDEN FLEECE

For Hydrous and Anhydrous Adeps Lanæ or Lanolin for Toilet Preparations and Adeps Lanæ or Lanolin Creams, Pomades, Face Powders, and Hair-Washes.
Claims use since 1907.

Ser. No. 328,864. CHAMPION CHEMICAL WORKS, INC., Chicago, Ill. Filed July 18, 1932.

QUAKER BRAND

No claim is made to the word "Brand" except in connection with the mark shown.
For Lye.
Claims use since Jan. 1, 1906.

Ser. No. 329,093. THE PHOENIX OIL COMPANY, Cleveland, Ohio. Filed July 26, 1932.

MURPHYS GOLD-FLO SHAMPOO

The term "Shampoo" is disclaimed apart from the other features of the mark shown in the drawing.
For Shampoo.
Claims use since May 25, 1932.

Ser. No. 329,094. THE PHOENIX OIL COMPANY, Cleveland, Ohio. Filed July 26, 1932.

MURPHYS SILVER-FLO SHAMPOO

The term "Shampoo" is disclaimed apart from the other features of the mark shown in the drawing.
For Shampoo.
Claims use since May 25, 1932.

Ser. No. 329,110. G. W. CARNRICK CO., Newark, N. J. Filed July 27, 1932.

THELESTRIN

For Standardized Ovarian Hormone Preparation.
Claims use since July 18, 1932.

Ser. No. 329,117. FERD. MÜLHENS, INC., New York, N. Y. Filed July 27, 1932.

BLAUGOLD

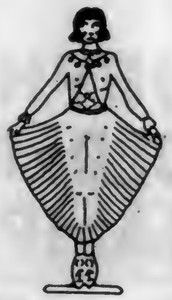
For Eau de Cologne, Perfumery, Hair Tonics, Shampoo, Pomade, Brilliantine, Cold Cream, Vanishing Cream, Rouge, Face Powder, Baby Powder, After-Shaving Lotion, Tooth Paste, Mouth Wash, Preparation for the Treatment of the Scalp, and Ethereal Oils.
Claims use since September, 1930.

Ser. No. 329,131. P. O. BUGGE, Bisbee, N. Dak. Filed July 28, 1932.

TREO-FEEN

For Medicinal Preparation for the Relief of Distress and Pain Due to Simple Headaches, Neuralgia, Rheumatism, Head Colds, and After Tooth Extractions.
Claims use since Mar. 29, 1932.

Ser. No. 329,167. ROSA-LEE JONES, New York, N. Y. Filed July 26,1932.



The portrait or picture shown in the drawing is fanciful.
For Preparation for Stimulating the Growth of Hair.
Claims use since July 3, 1932.

Ser. No. 329,341. ANDREW WILSON, INC., Springfield, N. J. Filed Aug. 4, 1932.

TRI-TOX-CIDE

For Agricultural Insecticides.
Claims use since June 11, 1932.

Ser. No. 329,354. PETROLAGAR LABORATORIES, INC., Chicago, Ill. Filed Aug. 5, 1932.

Maguin

For Live Surgical Maggots for Use in the Treatment of Chronic Osteomyelitis, Infected Wounds, and Compound Fractures.
Claims use since May 27, 1932.

Ser. No. 329,408. R. F. R. CHEMICAL CO., doing business as Fownide Laboratories, Los Angeles, Calif. Filed Aug. 8, 1932.

fow nide

For Antiseptic for Athlete's Foot, Sunburn, Cuts, Bruises, Burns, Blisters, and All Local Skin Infections.
Claims use since July 29, 1932.

Ser. No. 329,446. HOUBIGANT, INC., New York, N. Y. Filed Aug. 10, 1932.

DEMI-JOUR

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Nov. 7, 1929.

Ser. No. 329,462. WILSON PRODUCTS CO., New York, N. Y. Filed Aug. 10, 1932.

Sta-Nice

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, and Hair Elixirs, Hair Wave Preparations, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Bleach Pencil, Nail Polish Remover, Cuticle Remover, Cuticle Oils, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Sept. 9, 1929.

Ser. No. 329,484. TULON, INC., New York, N. Y. Filed Aug. 11, 1932.

MAY MORN

For Beauty Cream.
Claims use since Aug. 4, 1932.

Ser. No. 329,493. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Herial

For Chemical Substances for Use as Thread and Fibre Moistening, Protecting, Penetrating, Smoothing, and Finishing Preparations.
Claims use since May 13, 1932.

Ser. No. 329,494. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Zitturol

For Chemical Substances for Use as Thread and Fiber Moistening, Protecting, Penetrating, Smoothing, and Finishing Preparations.
Claims use since May 13, 1932.

Ser. No. 329,496. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Hystabol

For Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Finishing Preparations for Use in the Treatment of Textile Fabrics and Leather in the Course of Their Manufacture.
Claims use since May 27, 1932.

Ser. No. 329,497. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Breviol

For Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Finishing Preparations for Use in the Treatment of Textile Fabrics and Leather in the Course of Their Manufacture.
Claims use since May 27, 1932.

Ser. No. 329,498. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Aug. 12, 1932.

Verusol

For Moistening Preparations, Thread and Fibre Protecting Preparations, Thread and Fibre Penetrating Preparations, Smoothing Preparations, and Finishing Preparations for Use in the Treatment of Textile Fabrics and Leather in the Course of Their Manufacture.
Claims use since May 27, 1932.

Ser. No. 329,547. THE BATTLE CREEK FOOD COMPANY, Battle Creek, Mich. Filed Aug. 15, 1932.

FERCOLYST

For Soluble Iron with Copper and Chlorophyl for Use in Secondary Anemia.
Claims use since June 20, 1932.

Ser. No. 329,555. HARRY HARUTUNIAN, doing business as Middlesex Laboratories, Watertown, Mass. Filed Aug. 15, 1932.

TOE-SAN

For Foot Ointment for Treatment of Ringworm, Epidermophytosis, and Like Infections Caused by Fungi and Parasites.
Claims use since Aug. 3, 1932.

Ser. No. 329,562. THE PEPSODENT CO., Chicago, Ill. Filed Aug. 15, 1932.

Duosal

For Medicinal Tablets for the Treatment of Headaches, Neuralgia, Colds, Grippe, Sore Throat, Toothache, Earache, Rheumatism, Lumbago, Sciatica, and the Like.
Claims use since July 21, 1932.

Ser. No. 329,571. ALLEN-SANDLIN LABORATORIES, Louisville, Ky. Filed Aug. 16, 1932.

PHAGOID

For Bacteriophages.
Claims use since Sept. 1, 1931.

Ser. No. 329,575. ECONOMY MILLS, Lubbock, Tex. Filed Aug. 16, 1932.

SUL-FO-SALTS

The word "Salts" is disclaimed except in the association shown.
For Medicinal Preparation Used in the Treatment of Diseases of Poultry.
Claims use since Mar. 1, 1932.

Ser. No. 329,588. MRS. JOSEPH R. SEGALL, doing business as Mrs. J. R. Segall, El Paso, Tex. Filed Aug. 16, 1932.



The words "Wrinkle Remover" are disclaimed apart from the other features of the mark shown on the drawing. The notation "Mrs. J. R. Segall" appearing on the drawing is a facsimile of applicant's signature.
For Preparation for Removing Wrinkles.
Claims use since Feb. 16, 1932.

Ser. No. 329,728. SAMUEL ALBERT, New York, N. Y. Filed Aug. 18, 1932.



For Dental Powder, Dental Cream, Face Powder in Cake Form, Nail-Powder, Nail-Paste, and Antiseptic Powders.
Claims use since June 12, 1910.

Ser. No. 329,947. THE HENEPH CORPORATION, Kingston, N. Y. Filed Aug. 29, 1932.

HEPPS

For Medicinal Tablets or Lozenges for Relief of Stomach Distress, Due to Gas, Sour Stomach, and Acid Condition.
Claims use since July 8, 1932.

Ser. No. 330,258. HEXIN, INC., Chicago, Ill. Filed Sept. 12, 1932.

HEXIN

For Tablets for Relief of Headache, Neuralgia, Head Colds, Etc.
Claims use since Sept. 7, 1932.

CLASS 10

Fertilizers

Ser. No. 318,327. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Concentrated Fertilizer" apart from the distinctive display of the mark as shown.
For Concentrated Fertilizer.
Claims use since July 28, 1931.

Ser. No. 318,328. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Drillable Fertilizer" apart from the distinctive display of the mark as shown.
For Drillable Fertilizer.
Claims use since July 28, 1931.

Ser. No. 318,329. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Drillable Concentrated Fertilizer" apart from the distinctive display of the mark as shown.
For Drillable Concentrated Fertilizer.
Claims use since July 28, 1931.

Ser. No. 318,330. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals" and "Fertilizer" apart from the distinctive display of the mark as shown.
For High Potash Accurately Sized Drillable Fertilizer.
Claims use since July 28, 1931.

Ser. No. 318,333. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Uniform Fertilizer" apart from the distinctive display of the mark as shown.
For High Potash Fertilizer of Uniform Diameter Hard Non-Segregable Sections.
Claims use since July 28, 1931.

Ser. No. 318,334. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Soluble Fertilizer" apart from the distinctive display of the mark as shown.
For Fertilizer in the Form of Small Hard Granular Particles.
Claims use since July 28, 1931.

Ser. No. 318,335. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 22, 1931.



No claim is made to the words "Muscle Shoals Complete Fertilizer" apart from the distinctive display of the mark as shown.
For Fertilizer of Mixed Spray Dried Granules.
Claims use since July 28, 1931.

Ser. No. 318,418. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Aug. 25, 1931.



No claim is made to the words "Muscle Shoals Plant Food" apart from the distinctive display of the mark as shown.
For Fertilizer in the Form of Crushed Lumps of Hard Non-Segregable Aggregate.
Claims use since July 28, 1931.

Ser. No. 319,787. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Oct. 6, 1931.



No claim is made to the words "Muscle Shoals Drillable Plant Food" apart from the distinctive display of the mark as shown.

For Drillable Fertilizer.

Claims use since July 28, 1931.

CLASS 15

Oils and Greases

Ser. No. 330,234. ROBERT TOLAND, doing business as Robert Toland & Co., Philadelphia, Pa. Filed Sept. 10, 1932.

FALCON

For Motor Lubricating Oils.

Claims use since May 9, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,847. LEWIS I. FOX, doing business as Fox Poultry Farm, Metuchen, N. J., assignor to Irvin Kreielsheimer, Perth Amboy, N. J. Filed Apr. 6, 1932.



FOX'S
CANNIBALISM CONTROL

No claim is made to the words "Fox's" and "Cannibalism Control" apart from the mark as shown.

For Light Modifying Lacquer for the Windows of Poultry Houses.

Claims use since Feb. 1, 1932.

Ser. No. 328,148. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y. Filed June 20, 1932.



For Automobile Body Polish, Rubber Paint Enamel, Touch-Up Enamel, and Black Tire Enamel and Paint.

Claims use since May 9, 1932.

Ser. No. 329,014. THE CROMAR COMPANY, Williamsport, Pa. Filed July 23, 1932.

Tone=Phlex

For Ready Mixed Paints, Floor and Prepared Waxes and Varnishes.

Claims use since July 19, 1932.

Ser. No. 329,768. CONGOLEUM-NAIRN, INC., Kearny, N. J. Filed Aug. 23, 1932.



The drawing is cross-lined to indicate black and vertically lined to indicate red.

For Wax Preparations for Floors.

Claims use since June 30, 1932.

Ser. No. 330,033. WILLIAM N. ANDERSON, doing business as Keep Bright Products Company, Kansas City, Mo. Filed Sept. 1, 1932.

77

For Automobile Cleaner and Polish.

Claims use since May 1, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,963. STANT MANUFACTURING COMPANY, Connorsville, Ind. Filed May 7, 1932.



The trade-mark consists of a red circle, all other subject matter in the drawing being specifically disclaimed for trade-mark purposes.

For Vehicle Radiator and Gasoline Filler Caps.

Claims use since Apr. 21, 1932.

Ser. No. 329,452. NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, Cleveland, Ohio. Filed Aug. 10, 1932.

NATIONAL

For Railway Trucks and Side Frames.

Claims use since May, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 300,316. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo Ohio. Filed May 12, 1930.

AERIET

For Blower and Electric Heating Element Unit Space Heaters, Radiator Reflector Electric Space Heaters, and Electric Heating Elements Therefor.

Claims use since Mar. 1, 1929.

Ser. No. 327,125. ATLAS SUPPLY COMPANY, Newark, N. J. Filed May 16, 1932.



No claim is made to the representation of a spark plug. The trade-mark consists of the word "Atlas" arranged upon a red colored porcelain sleeve of the spark plug. The drawing is lined for red.

For Spark Plugs.

Claims use since May 6, 1931.

Ser. No. 328,090. FIRESTONE BATTERY COMPANY, Akron, Ohio. Filed June 18, 1932.

Firestone

Applicant is the owner of registration No. 140,804.

For Battery Clamps, Terminals and Connectors, Electrical Cables, and Storage Battery Parts, Consisting of Positive and Negative Plates, Wood Separators, Rubber Separators, Battery Cases, Connecting Bars, Cell Covers, Vent Plugs, Terminal Posts, and Battery Handles.

Claims use since May 18, 1929, on storage battery parts; since Feb. 1, 1930, on remaining goods.

Ser. No. 329,187. HARRISON WHOLESALE COMPANY, Chicago, Ill. Filed July 29, 1932.

DUCHESS

For Radio Receiving Sets, Storage Batteries, Electric Vacuum Cleaners, Electric Fans, Unitary Electric Light Fixtures.

Claims use since Jan. 1, 1932.

Ser. No. 330,006. AMERICAN AUTO ACCESSORIES STORES, INC., Wilkes-Barre, Pa. Filed Aug. 31, 1932.

the ALL American

For Spark Plugs.
Claims use since November, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 328,597. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed July 7, 1932.

HANDE-PAK

Applicant hereby disclaims the word "Pak" apart from the mark shown in the drawings.
For Fishhooks.
Claims use since June 30, 1932.

Ser. No. 328,918. THE GREIST MANUFACTURING COMPANY, New Haven, Conn. Filed July 20, 1932.

SPEED-DEE-QUAD

For Toy Outboard Motors.
Claims use since June 25, 1932.

Ser. No. 329,426. OTTINGER, CAREW AND MCLAUGHLIN, New York, N. Y. Filed Aug. 9, 1932.

BOOP-BOOP-A-DOOP

For Dolls.
Claims use since Aug. 3, 1932.

Ser. No. 329,427. OTTINGER, CAREW AND MCLAUGHLIN, New York, N. Y. Filed Aug. 9, 1932.

Helen Kane

The trade-mark is the signature of a person.
For Dolls.
Claims use since Aug. 3, 1932.

Ser. No. 330,038. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Sept. 3, 1932.

"Champ"

For Rowing Machines.
Claims use since July 14, 1932.

Ser. No. 330,089. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Sept. 3, 1932.

Ro-Way

For Rowing Machines.
Claims use since July 14, 1932.

Ser. No. 330,126. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Sept. 6, 1932.

DARSMAN
(HI-BOY)

For Rowing Machines.
Claims use since July 14, 1932.

Ser. No. 330,127. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Sept. 6, 1932.

Trainer

For Rowing Machines.
Claims use since July 14, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 323,151. VICTOR SAW WORKS, INC., Middletown, N. Y. Filed Jan. 18, 1932.



The rectangular broken line shading is used to indicate yellow, the rectangular full line shading to indicate solid black, the diagonal broken line shading to indicate orange, and the dotted shading to indicate gray. No claim is made in this registration to trade-mark rights in the representation of a hack saw nor in the words, "Molybdenum," "Heavy Duty," "Extra Value," "Merit," "Hack Saws," or "Middletown, N. Y.," except as distinctively displayed in connection with other features of the mark. Applicant is owner of registered Trade-Mark No. 123,956 issued Dec. 24, 1918.
For Saws and Saw Blades.
Claims use since Oct. 19, 1931.

Ser. No. 329,839. PHYBRANDS, INC., Long Island City, N. Y. Filed Aug. 25, 1932.

GOOD HUMOR

For Razors and Razor Blades.
Claims use since Aug. 23, 1932.

Ser. No. 330,045. MASS PRODUCTION CORPORATION, New York, N. Y. Filed Sept. 1, 1932.

MASSPRO

TRADE-MARK

No claim being made to the word "Trade-Mark."
For Typewriters and Typewriter Parts.
Claims use since Aug. 1, 1932.

Ser. No. 330,208. ROYAL TYPEWRITER COMPANY, INC., New York, N. Y. Filed Sept. 9, 1932.

SIGNET

For Typewriting Machines and Parts Thereof and Therefor.
Claims use since July 14, 1932.

CLASS 27

Horological Instruments

Ser. No. 325,356. THE WALLENSTEIN MAYER COMPANY, Cincinnati, Ohio. Filed Mar. 21, 1932.

WALMAY

For Watches and Clocks.
Claims use since Jan. 1, 1912.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 323,339. S. H. KRESS & CO., New York, N. Y. Filed Jan. 23, 1932.

Siren

For Brooches, Bracelets, Finger Rings, Necklaces, Pendants, Earrings, Glass and Pearl Beads for Neckwear, Sautoirs, Compact Cases Made of Precious-Metal Ware, Watch Straps and Bands Including Fixtures, Neck and Watch Chains, Cuff Links, Scarf Pins, Belt Buckles, and Hair Ornaments, All Made of or Plated with Silver, Gold, or Platinum.
Claims use since Jan. 2, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 329,988. GRAND RAPIDS STORE EQUIPMENT CORPORATION, Grand Rapids, Mich. Filed Aug. 30, 1932.

DRICE-OMATIC

For Ice Cream Freezing Machinery.
Claims use since June 3, 1932.

Ser. No. 330,214. TRICOLD REFRIGERATOR CORPORATION, Buffalo, N. Y. Filed Sept. 9, 1932.

TRICOLD

For Mechanical Refrigerators.
Claims use since Mar. 29, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 318,225. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For House, Office, Store, Shop, Porch, and Lawn Furniture—Namely, Cabinets, Davenports, Book Cases, Desks, Dressers, Chests, Benches, Chairs, Beds, Mirrors, Picture Frames; and Upholstery Stuffing and Filling Materials, Cushions, Pillows, and Mattresses.
Claims use since Sept. 24, 1930.

Ser. No. 326,451. AMERICAN FEATHER PRODUCTS CORPORATION, Chicago, Ill. Filed Apr. 25, 1932.

MOONCREST

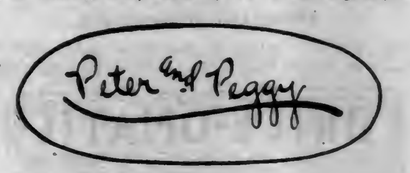
For Feather and Down Bed Pillows and Cushions.
Claims use since Aug. 15, 1931.

Ser. No. 329,584. IAN MACDONALD, Modesto, Calif. Filed Aug. 16, 1932.

GOZINTA

For Combination Folding or Collapsible Table and Seats for Lawn and General Outdoor Use.
Claims use since July 15, 1932.

Ser. No. 329,737. EDWARD A. CLORE, doing business as E. A. Clore & Sons, Madison, Va. Filed Aug. 22, 1932.



For Household Chairs and Tables.
Claims use since Aug. 10, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 328,856. WHITEHEAD METAL PRODUCTS COMPANY OF NEW YORK, INC., New York, N. Y. Filed July 16, 1932.



The word "Whitehead" is disclaimed apart from other features of the mark, as shown in the drawing.
For Gas Automatic Hot Water Storage Systems.
Claims use since Apr. 6, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 328,801. RAYBESTOS-MANHATTAN, INC., Passaic, N. J. Filed July 14, 1932.

Grey-Rock Flex-Balanced

For Power Transmission Belts.
Claims use since June 1, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 318,285. NEW YORK MERCHANDISE CO. INC., New York, N. Y. Filed Aug. 21, 1931.



For Jew's Harp.
Claims use since March, 1929.

CLASS 37

Paper and Stationery

Ser. No. 304,754. DISTRICT OF COLUMBIA PAPER MANUFACTURING COMPANY, Washington, D. C. Filed Aug. 19, 1930.

ECONOMY

For Blotting Paper.
Claims use since July 1924.

Ser. No. 329,419. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Filed Aug. 9, 1932.

~~SPEEDIBILLER~~

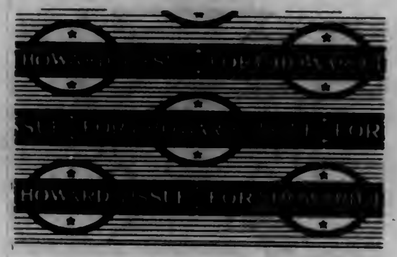
For Autographic Registers.
Claims use since Dec. 19, 1931.

Ser. No. 329,859. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia. Filed Aug. 26, 1932.

MONA LISA

For Crayons of All Kinds.
Claims use since November, 1911.

Ser. No. 329,893. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Aug. 27, 1932.



No claim is made to the word "Tissue," per se, nor to the mere representation of paper core section. Applicant is the owner of registration No. 235,462.
For Paper Towels, Paper Napkins, Toilet Paper, Crepe Paper, Facial Tissue, and Tissue Paper.
Claims use since June 7, 1932.

Ser. No. 330,047. MCCRORY STORES CORPORATION, New York, N. Y. Filed Sept. 1, 1932.

Schooldays

For Blank Books and Loose Leaf Binders.
Claims use since July 14, 1932.

Ser. No. 330,196. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Sept. 9, 1932.

ROMAL

For Wrapping Paper, Bond Paper, and Paper Towels.
Claims use since August, 1904, on wrapping paper; since Aug. 14, 1930, on bond paper; and since Mar. 29, 1932, on towels.

Ser. No. 330,221. CAPITAL PAPER COMPANY, Indianapolis, Ind. Filed Sept. 10, 1932.

CREMELIN

For Toilet Paper.
Claims use since Sept. 1, 1927.

Ser. No. 330,223. CAPITAL PAPER COMPANY, Indianapolis, Ind. Filed Sept. 10, 1932.



For Toilet Paper.
Claims use since Sept. 1, 1927.

CLASS 38

Prints and Publications

Ser. No. 328,181. PARENTS' PUBLISHING ASSOCIATION, INC., New York, N. Y. Filed June 21, 1932.

MOTHERS' GUIDE

For Weekly Publication.
Claims use since May 16, 1932.

Ser. No. 329,780. TOPICS PUBLISHING COMPANY, INC., New York, N. Y. Filed Aug. 23, 1932.

FOOD TRADE NEWS

For A Publication.
Claims use since July 11, 1932.

Ser. No. 329,982. DELL PUBLISHING CO. INC., New York, N. Y. Filed Aug. 30, 1932.

RADIO STARS

For Magazine Published Monthly and at Other Intervals.
Claims use since Aug. 18, 1932.

Ser. No. 330,372. LOUIS KAPLAN, Baltimore, Md. Filed Sept. 15, 1932.

Billy Barton

The mark shown on the drawing is the nom de plume of the applicant and is in his handwriting.
For Racing Cards and Newspaper Columns Published from Time to Time.
Claims use since Sept. 15, 1932.

CLASS 39

Clothing

Ser. No. 287,849. HOMER L. STORK, doing business Hope Hosiery Mills, Adamstown, Pa. Filed July 29, 1929.



No claim is made to the exclusive use of the word "Size" apart from the mark as shown on the drawing.
For Hosiery.
Claims use since July, 1909.

Ser. No. 327,997. BALLARD KNITTING COMPANY, Norristown, Pa. Filed June 15, 1932.

Don
UNDERWEAR

Applicant disclaims the exclusive right to the word "Underwear," except as it appears on said trade-mark.
For Men's Underwear.
Claims use since June 1, 1930.

Ser. No. 328,544. GEORGE BURKMAN, Omaha, Nebr. Filed July 5, 1932.

BURKMANS
SSS

No claim is made to the words "Shoe Service Shop" apart from the mark as shown.
For Repaired and Rebuilt Shoes for Men, Women, and Children, of Leather, Fabric, Rubber Composition, or Combinations of Those Materials.
Claims use since August, 1928.

Ser. No. 328,756. LEECH & RAPPORT INC., New York, N. Y. Filed July 13, 1932.

Letty Lynton

The trade-mark consists of the fictitious name "Letty Lynton", the principal character in the widely known moving picture by that name.
For Ladies' and Misses' Hats.
Claims use since May 31, 1932.

Ser. No. 329,300. VANITY FAIR SILK MILLS, Reading, Pa. Filed Aug. 6, 1932.

HEIGH-LITE

For Hosiery and Knitted and Textile Underwear for Women and Children—Drawers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeaux Chemises; and Knitted and Textile Underwear for Men—Namely, Union Suits, Shirts, and Drawers.
Claims use since July 14, 1932.

Ser. No. 329,415. THE P. SULLIVAN SHOE CO., Cincinnati, Ohio. Filed Aug. 8, 1932.

Hi-JEAN-iC

No claim is made to the descriptive word "Hi-Jean-ic" apart from its use in the mark as shown.
For Men's, Women's, and Children's Shoes, Made of Leather, Fabric, Rubber, and Combinations of Said Materials.
Claims use since Oct. 10, 1931.

Ser. No. 329,440. BOONTON FULL FASHIONED HOSIERY MILLS, Boonton, N. J. Filed Aug. 10, 1932.

paste/
peeks

For Hosiery.
Claims use since July 29, 1932.

Ser. No. 329,785. H. DAROFF & SONS, INC., Philadelphia, Pa. Filed Aug. 24, 1932.

KENMONT
FLANNEL

No claim is made to the word "Flannel" except in the combination shown.
For Outer Clothing for Men and Boys, Particularly Overcoats, Suits, and Golf Trousers.
Claims use since June, 1930.

Ser. No. 330,018. MEYERS PANTS CO. INC., New York, N. Y. Filed Aug. 31, 1932.

LUCKY-BREAK

For Lumberjackets, Men's and Boys' Pants, Coats, Suits, and Overcoats.
Claims use since May 3, 1932.

Ser. No. 330,067. HERMAN M. MCDONALD, Chicago, Ill. Filed Sept. 2, 1932.

MAC DEE

For Underwear for Men, Women, and Children.
Claims use since Apr. 27, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 329,125. STERLING BUTTON CO. INC., New York, N. Y. Filed July 26, 1932.

"STERLITE"

For Buttons, Buckles, and Pins Made from Ivory, Bone, Metal, or Imitations Thereof, But Not of Any Precious Metal.
Claims use since July 1, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 324,127. J. ROSEN & SONS, Paterson, N. J., and New York, N. Y. Filed Feb. 9, 1932.

Venetian
Satin

No claim is made to the use of the words "Venetian Satin" apart from the mark as shown or to the outline of the label.
For Ribbons Manufactured in a Combination of Silk and Rayon in the Bolt.
Claims use since Jan. 2, 1928.

Ser. No. 327,453. ROSSIE VELVET COMPANY, Mystic, Conn. Filed May 25, 1932.

Lattiss

For Velvets in the Piece.
Claims use since Apr. 29, 1932.

Ser. No. 327,454. ROSSIE VELVET COMPANY, Mystic, Conn. Filed May 25, 1932.

PARAVEL

The drawing being lined to indicate shading only.
For Velvets in the Piece.
Claims use since Apr. 29, 1932.

Ser. No. 328,665. THE FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 9, 1932.

Mystra

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 329,338. RELIANCE PIECE DYE WORKS, Paterson, N. J. Filed Aug. 4, 1932.

RELIANCE
"DULGLO"
FINISH

No claim is made to the word "Finish."
For Piece Goods—Namely, Silk, Cotton, and Rayon Fabric.
Claims use since Sept. 1, 1931.

Ser. No. 329,366. JOSEPH BANCROFT & SONS CO., Rockford, Wilmington, Del. Filed Aug. 6, 1932.

"BANCO-SHRUNK"

No claim is made to the word "Shrunk" apart from the mark shown on the drawing.
For Cotton Piece Goods.
Claims use since Sept. 29, 1930.

Ser. No. 329,375. GRAEMIGER BROS. INC., New York, N. Y. Filed Aug. 6, 1932.



Applicant disclaims the exclusive right to the use of the words, "Swiss Loom Finest Opal Swiss Embroidery," apart from the mark as shown in the drawing. The drawing is lined for shading only.
For Handkerchiefs.
Claims use since Apr. 3, 1931.

Ser. No. 329,638. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England. Filed Aug. 18, 1932.

ROYALIST

For Silk Piece Goods.
Claims use since 1916.

Ser. No. 329,827. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Aug. 25, 1932.

Vel-Oxford

No claim is made to the word "Oxford" except in association with the word "Vel."
For Pile Fabrics in the Piece.
Claims use since Aug. 4, 1932.

Ser. No. 329,828. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Aug. 25, 1932.

Vel-Tweed

No claim is made to the word "Tweed" except in association with the word "Vel."
For Pile Fabrics in the Piece.
Claims use since Aug. 4, 1932.

Ser. No. 330,156. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Sept. 7, 1932.

Vel-Crystale

For Pile Fabrics in the Piece.
Claims use since Aug. 31, 1932.

CLASS 43

Thread and Yarn

Ser. No. 327,006. COTONIFICIO VALLE DI SUSA, Turin, Italy. Filed May 12, 1932.



For Thread and Yarn.
Claims use since Apr. 15, 1931.

Ser. No. 329,636. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England. Filed Aug. 18, 1932.



For Yarns of Wool, Worsted, or Hair.
Claims use since Feb. 27, 1932.

Ser. No. 330,086. HANES HOSIERY MILLS CO., Winston-Salem, N. C. Filed Sept. 3, 1932.

SENAH-SPUN

No claim is made to the word "Spun" apart from the mark shown on the drawing.
For Yarns of Wool, Cotton, Silk, Rayon, or Combinations Thereof.
Claims use since Aug. 26, 1932.

Ser. No. 330,317. TEXTILES, INCORPORATED, Gastonia, N. C. Filed Sept. 13, 1932.

TEXCELL

For Yarns Made of Wool, Cotton, Silk, Rayon, and Mixtures Thereof.
Claims use since Sept. 8, 1932.

Ser. No. 330,318. TEXTILES, INCORPORATED, Gastonia, N. C. Filed Sept. 13, 1932.

TEXTILLA

For Yarns Made of Wool, Cotton, Silk, Rayon, and Mixtures Thereof.
Claims use since Sept. 8, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 302,218. HAROLD C. DESBECKER, doing business as Tic Toc Toy Company, Buffalo, N. Y. Filed June 6, 1930.

TIC TOC TOYS

Applicant hereby disclaims the exclusive right to the use of the word "Toys" except as the same is used in connection with the other features of the mark shown in the drawing.
For Teething Rings or Infant Pacifiers Which Partake of the Nature of Toys.
Claims use since June 3, 1930.

Ser. No. 324,410. UNITED LABORATORIES, Omaha, Nebr. Filed Feb. 23, 1932.

MODELAC

For a Semi-Liquid Lining Preparation Derived by Dissolving Powdered Cellulose and Chloroform and Used as a Separating Media Between a Porous Object and a Hecolite or a Vulcanite Covering Therefor, so That the Said Materials May Be Subsequently More Readily Separated from Each Other, Said Preparation Being for Dental and Other Uses.
Claims use since July 1, 1931.

Ser. No. 325,229. THE KENDALL COMPANY, Walpole, Mass. Filed Mar. 17, 1932.

HANDEE

For Absorbent Cotton.
Claims use since Feb. 15, 1932.

Ser. No. 329,461. FRANCESCO VEGLIA, Turin, Italy. Filed Aug. 10, 1932.

BURDIZZO

For Forceps for Castration of Animals.
Claims use since Aug. 12, 1927.

Ser. No. 329,808. NORTHAM WARREN CORPORATION, New York, N. Y. Filed Aug. 24, 1932.

PEDICARE

For Combination Sets of Preparations and Implements Used for the Care of the Feet.
Claims use since Aug. 11, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 326,211. GLUEK BREWING COMPANY, Minneapolis, Minn. Filed Apr. 18, 1932.

House of Bourbon

For Non-Alcoholic Maltless Beverages Sold as Soft Drinks, and Ginger Ale.
Claims use since Jan. 1, 1932.

Ser. No. 328,903. NATURAL PRODUCTS COMPANY, Eugene, Oreg. Filed July 19, 1932.

Cal·Spa
MINERAL WATER

The drawing is lined for blue. No claim is made to the words "Mineral Water" except in the association shown on the drawing.
For Natural Mineral Water.
Claims use since May 1, 1932.

Ser. No. 329,865. D. NICOLA PAPAROZZI, Newark, N. J. Filed Aug. 26, 1932.



For Non-Alcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since June 2, 1932.

Ser. No. 330,329. ASHEVILLE BOTTLING CO., Asheville, N. C. Filed Sept. 14, 1932.

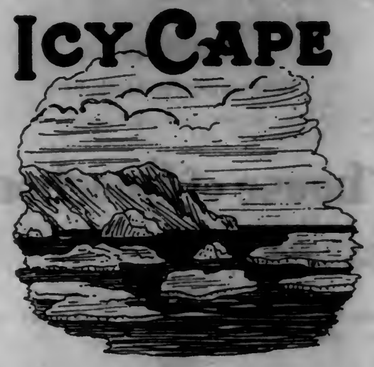
Biltmore Club

For Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Aug. 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 299,136. KADIAK FISHERIES COMPANY, Seattle, Wash. Filed Apr. 19, 1930.



No claim is made to the words "Icy Cape" apart from the mark as shown.
For Canned Salmon.
Claims use since Mar. 24, 1930.

Ser. No. 302,930. CHICAGO BISCUIT & CONE CO., Chicago, Ill. Filed June 28, 1930.



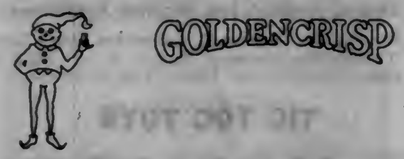
The representation of the goods is disclaimed apart from the mark as shown. Applicant disclaims the words "Ice Cream Sandwich" and "Waffle."
For Wafers for Use in Making Ice Cream Sandwiches and for Ice Cream Sandwiches.
Claims use since Mar. 27, 1929.

Ser. No. 303,891. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed July 11, 1930.



The lining of the drawing indicates the color blue which is particularly claimed.
For Coffee.
Claims use since June 30, 1930.

Ser. No. 315,292. H. C. FUTCH, Montgomery, Ala., assignor to Goldencrisp Products Company, Inc., Montgomery, Ala. Filed June 1, 1931.



For Peanut Butter Sandwiches, Peanut Candies, Cocoanut Candy, and Candies Containing Both Peanuts and Cocoanut.
Claims use since Jan. 1, 1930.

Ser. No. 318,193. DEHOFF & GAYLORD, Sodus, N. Y. Filed Aug. 20, 1931.



The box head on which the mark appears is colored orange, no claim being made to the exclusive use of this color.
For Evaporated, Dehydrated, or Sun Dried Apples and Fruits.
Claims use since July 31, 1931.

Ser. No. 323,891. DELRAY CORPORATION, San Francisco, Calif. Filed Feb. 6, 1932.



For Ravioli and Food Flavoring Sauce for Use on Spaghetti, Meats, Fish, Etc.
Claims use since Nov. 1, 1931.

Ser. No. 325,244. TRANIN EGG PRODUCTS CO., Kansas City, Mo. Filed Mar. 17, 1932.

TEPCO

For Broken Eggs in Liquid and Dried Form.
Claims use since Dec. 15, 1931.

Ser. No. 325,979. BAKER ICE MACHINE CO. INC., Omaha, Nebr. Filed Apr. 11, 1932.

Skweezit

For Frozen Confections.
Claims use since Feb. 2, 1932.

Ser. No. 327,417. SCARAMELLI & COMPANY, INC., doing business as Paesana Packing Co., New York, N. Y., and Boston, Mass. Filed May 24, 1932.

PAESANA

For Canned Vegetables, and Canned Tomato Sauce Commonly Known as Tomato Paste.
Claims use since July, 1926.

Ser. No. 327,808. FRANK CHASE RUSSELL, doing business as Russell & Co., New York, N. Y. Filed June 7, 1932.

PORCUPINE

For Tea (Orange Pekoe Black).
Claims use since 1896.

Ser. No. 328,039. SCHWENDERMANS, Algoma, Wis. Filed June 16, 1932.

BADENZER CHEESE

The word "Cheese" is disclaimed apart from the mark as shown on the drawing.
For Cheese.
Claims use since Sept. 1, 1913.

Ser. No. 328,867. ESKIMO PIE CORPORATION, New York and Brooklyn, N. Y. Filed July 18, 1932.

ESKIMO

For Frozen Confections.
Claims use since May 1, 1932.

Ser. No. 328,920. THE HANLEY MILLING COMPANY, doing business as Wheat Division of The Wheat Krinkler Corp., Mansfield, Ohio. Filed July 20, 1932.

KRINKO

For Specially Prepared Whole Wheat for Cooking Purposes and Bread Made Therefrom.
Claims use since Dec. 22, 1931.

Ser. No. 329,077. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed July 26, 1932.



For Malt Syrup.
Claims use since Mar. 26, 1932.

Ser. No. 329,100. SKAGIT COUNTY DAIRYMEN'S ASSOCIATION, doing business as Consolidated Dairy Products Co., Burlington and Seattle, Wash. Filed July 26, 1932.



For Powdered Preparation Used in Making Malted Milk Beverages.
Claims use since Sept. 1, 1931.

Ser. No. 329,155. SANKA COFFEE CORPORATION, New York, N. Y. Filed July 28, 1932.

SANKA



SANKA COFFEE CORPORATION

For Coffees.
Claims use since August, 1925.

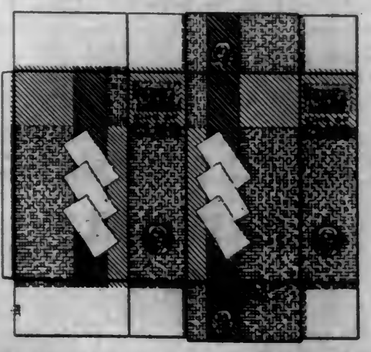
Ser. No. 329,347. FISHER FLOURING MILLS COMPANY, doing business as Gallatin Valley Milling Co., West Waterway, Harbor Island, Seattle, Wash. Filed Aug. 5, 1932.

FLAGSTAFF



The lining in the drawing indicates shading only.
For Wheat Flour.
Claims use since Jan. 18, 1912.

Ser. No. 329,378. J. S. IVINS' SON, INC., Philadelphia, Pa. Filed Aug. 6, 1932.



The representations of a baker forming a feature of the mark are fanciful.
For Crackers.
Claims use since June 15, 1932.

Ser. No. 329,511. TAPO CITRUS ASSOCIATION, Simi, Calif. Filed Aug. 12, 1932.

Native Daughter

For Fresh Citrus Fruits.
Claims use since Feb. 28, 1918.

Ser. No. 329,656. JAMES SAVARESE, New York, N. Y. Filed Aug. 18, 1932.

The signature forming a part of the mark is the signature of James Savarese, the applicant. No claim is made to the words "Tomato Sauce." The drawing is lined for red, yellow, gold, and green.
For Tomato Sauce.
Claims use since November, 1931.

Ser. No. 329,834. HARRY G. MUSTARD, Dallas, Tex. Filed Aug. 25, 1932.

"Stic-O-Chic"

For Meat—Namely, Pork, Veal, and Beef Cooked on a Stick.
Claims use since July 15, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 328,929. WILLIAM STEIN, doing business as Knickerbocker Import Co., New York, N. Y. Filed July 19, 1932.



No claim is made to the words "Hamburg," "New York," nor "Bouquet."
For Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume and Extracts Therefor.
Claims use since Jan. 1, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 18, 1932

298,184. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed May 11, 1932. Serial No. 326,989. PUBLISHED JULY 12, 1932. Class 6.

298,185. WASHING SODAS. MAGNUSON PRODUCTS CORPORATION, Brooklyn, N. Y.
Filed May 13, 1932. Serial No. 327,064. PUBLISHED JULY 12, 1932. Class 6.

298,186. PINE TAR. NORTHWESTERN PINE TAR CO., Chicago, Ill.
Filed May 20, 1932. Serial No. 327,283. PUBLISHED JULY 19, 1932. Class 6.

298,187. BLOOD TONIC. MILAM, INC., Winston-Salem, N. C.
Filed May 24, 1932. Serial No. 327,402. PUBLISHED JULY 26, 1932. Class 6.

298,188. COSMETICS, TOOTH PASTE, FOOT POWDERS, ETC. FRANK C. REILLY, New York, N. Y.
Filed May 24, 1932. Serial No. 327,415. PUBLISHED JULY 26, 1932. Class 6.

298,189. GERMICIDE. MCKINLEY GASSETT, Washington, D. C.
Filed May 25, 1932. Serial No. 327,432. PUBLISHED JULY 26, 1932. Class 6.

298,190. SCALP AND HAIR TONIC. LOUVENIA L. KUNDTZ, doing business as Grozaire Laboratories, Lakewood, Ohio.
Filed May 27, 1932. Serial No. 327,517. PUBLISHED JULY 26, 1932. Class 6.

298,191. MEDICINAL PREPARATION FOR REDUCING WEIGHT. MILTON H. KLEIN, doing business as Tipona Company, Cleveland, Ohio.
Filed May 31, 1932. Serial No. 327,591. PUBLISHED AUGUST 2, 1932. Class 6.

298,192. ANTISEPTIC, DEODORANT, AND PROPHYLACTIC. D C A DRUG STORES INC., Portland, Oreg.
Filed June 1, 1932. Serial No. 327,626. PUBLISHED AUGUST 2, 1932. Class 6.

298,193. A MEDICINAL COMPOUND. LAMBERT PHARMACAL COMPANY, Wilmington, Del.
Filed June 4, 1932. Serial No. 327,780. PUBLISHED JULY 26, 1932. Class 6.

298,194. PREPARATION FOR THE TREATMENT OF ACIDOSIS. PARKE, DAVIS & CO., Detroit, Mich.
Filed June 6, 1932. Serial No. 327,764. PUBLISHED JULY 26, 1932. Class 6.

298,195. SALT. TEXACO SALT PRODUCTS COMPANY, New York, N. Y.
Filed June 9, 1932. Serial No. 327,858. PUBLISHED JULY 26, 1932. Class 6.

298,196. INSECTICIDES. DIAMOND BRAND PRODUCTS, INC., Philadelphia, Pa.
Filed June 11, 1932. Serial No. 327,906. PUBLISHED JULY 26, 1932. Class 6.

298,197. MEDICAL COMPOUND FOR THE ALLEVIATION OF PAIN AND COUGH. E. BILHUBER, INC., Jersey City, N. J.
Filed June 14, 1932. Serial No. 327,970. PUBLISHED JULY 26, 1932. Class 6.

298,198. A MEDICINAL PREPARATION. FERRO RESEARCH LABORATORIES, INC., Miami, Fla., and New York, N. Y.
Filed June 17, 1932. Serial No. 328,059. PUBLISHED JULY 26, 1932. Class 6.

298,199. MEDICINAL PREPARATION HAVING ANTISEPTIC PROPERTIES. WALDEMAR LARSEN & SIGURD J. HOFF, Brooklyn, N. Y.
Filed June 18, 1932. Serial No. 328,102. PUBLISHED JULY 26, 1932. Class 6.

298,200. A MEDICAL PREPARATION FOR TOXINS. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed June 20, 1932. Serial No. 328,184. PUBLISHED JULY 26, 1932. Class 6.

298,201. HOUSE ORGAN WHICH IS PUBLISHED MONTHLY. THE PENNZOIL COMPANY, Oil City, Pa.
Filed June 28, 1932. Serial No. 328,869. PUBLISHED AUGUST 2, 1932. Class 38.

298,202. SWIM SUITS OR BATHING SUITS FOR MEN, WOMEN, AND CHILDREN. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn.
Filed June 28, 1932. Serial No. 328,366. PUBLISHED AUGUST 2, 1932. Class 39.

298,203. BALM FOR TREATMENT OF FEET AND FOOT LOTIONS. FOOTSOL MFG. CO., New York, N. Y.
Filed May 11, 1932. Serial No. 326,980. PUBLISHED JULY 12, 1932. Class 6.

298,204. BATH TABLET. JAMES F. BALLARD, INC., St. Louis, Mo.
Filed April 28, 1932. Serial No. 326,573. PUBLISHED JULY 12, 1932. Class 6.

298,205. ANTISEPTIC JELLY. ALLAN A. POLAKOFF, doing business as Veritas Products Co., New York, N. Y.
Filed April 27, 1932. Serial No. 326,564. PUBLISHED JULY 12, 1932. Class 6.

298,206. MOTOR FLUID, BEING A VOLATILE HYDROCARBON FOR THE IMPROVEMENT OF MOTOR FUEL. CURTIS C. MEIGS, doing business as Octane Research Laboratory, Bala, Pa.
Filed May 16, 1932. Serial No. 327,161. PUBLISHED JULY 19, 1932. Class 6.

298,207. POWDER TO BE MIXED WITH GASOLINE TO INCREASE THE EFFICIENCY OF THE SAME. ALPHONSE M. DOYON, Montreal, Quebec, Canada.
Filed May 13, 1932. Serial No. 327,048. PUBLISHED JULY 19, 1932. Class 6.

298,208. PERFUME, TOILET WATER ASTRINGENT LOTION, ETC. MAISON JEURELLE, INC., Jersey City, N. J.
Filed May 10, 1932. Serial No. 326,946. PUBLISHED JULY 12, 1932. Class 6.

298,209. BATH TABLET. JAMES F. BALLARD, INC., St. Louis, Mo.
Filed April 28, 1932. Serial No. 326,574. PUBLISHED JULY 12, 1932. Class 6.

298,210. MEDICATED PASTILLES FOR USE IN AFFECTIONS OF THE VOICE, THROAT AND CHEST. TEARDALE & CO. LIMITED, Carlisle, England.
Filed March 18, 1932. Serial No. 325,273. PUBLISHED JULY 19, 1932. Class 6.

298,211. DEPILATORY. JEANNOT I. BERNITZ, doing business as Lu Laboratories, New York, N. Y.
Filed April 19, 1932. Serial No. 326,250. PUBLISHED JULY 26, 1932. Class 6.

298,212. ANTISEPTIC MOUTH WASH. STEPHEN MOLCHANOFF, doing business as Halitest Company, San Diego, Calif.
Filed March 17, 1932. Serial No. 325,238. PUBLISHED JULY 19, 1932. Class 6.

298,218. SALVE OR UNGUENTUM FOR HEALING INFECTIONS, CUTS, BRUISES, RASH, BURNS, IMPETIGO, ECZEMA, RINGWORM, CHAFING, INSECT BITES, ABRASIONS, PIMPLES, ITCH, SCALDS, PRUNITIS ANI AND VULVÆ. JOSEPH MONTAGNA, Roxbury, Mass.
Filed May 18, 1932. Serial No. 327,229. PUBLISHED JULY 19, 1932. Class 6.

298,214. EYE DROPS. CHARLTON AND MATZEN, doing business as Arzen Laboratories, Inc., Clinton, Iowa.
Filed May 3, 1932. Serial No. 326,706. PUBLISHED JULY 12, 1932. Class 6.

298,215. A MEDICATED SALVE. THE AYER COMPANY, Lowell, Mass.
Filed April 28, 1932. Serial No. 326,572. PUBLISHED AUGUST 2, 1932. Class 6.

298,216. SCALP OINTMENT, HAIR GLOSS, HAIR RINSES, HAIR TONICS, TISSUE CREAM, CLEANSING CREAM, HAND CREAM, LOTIONS FOR CLEANSING THE SKIN, TOILET POWDERS, ROUGES, AND LIP STICKS. GERONIMO ANDREALLO, doing business as Jerome, New York, N. Y.
Filed April 6, 1932. Serial No. 325,844. PUBLISHED JULY 12, 1932. Class 6.

298,217. FACE POWDER. HARRY SPANIER, Brooklyn, N. Y.
Filed May 5, 1932. Serial No. 326,839. PUBLISHED JULY 12, 1932. Class 6.

298,218. OINTMENT PREPARED ESPECIALLY FOR THE RELIEF OF BURNS, SCALDS, SUNBURN, WINDBURN, INSECT BITES, CHAPPED SKIN, AND SIMILAR IRRITATIONS. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill.
Filed May 6, 1932. Serial No. 326,821. PUBLISHED JULY 12, 1932. Class 6.

298,219. BITTERS. FRED D. RAMM, doing business as Siegfried Gessler, New York, N. Y.
Filed May 5, 1932. Serial No. 326,791. PUBLISHED JULY 12, 1932. Class 6.

298,220. CREAM FOR STIMULATING THE GROWTH OF EYELASHES AND EYEBROWS. MILLE FLEURS, Inc., New York, N. Y.
Filed May 11, 1932. Serial No. 326,979. PUBLISHED JULY 12, 1932. Class 6.

298,221. GERMICIDE. PHENOCHROME GERMICIDAL CORPORATION, Oxford, N. Y.
Filed May 10, 1932. Serial No. 326,952. PUBLISHED JULY 12, 1932. Class 6.

298,222. ANTISEPTIC PREPARATION FOR FEMININE HYGIENE. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed May 10, 1932. Serial No. 326,942. PUBLISHED JULY 12, 1932. Class 6.

298,223. PERFUME. HARZFELD'S, INC., Kansas City, Mo.
Filed May 7, 1932. Serial No. 326,856. PUBLISHED JULY 12, 1932. Class 6.

298,224. VAGINAL SUPPOSITORIES. S. M. LABORATORIES, INC., Seattle, Wash.
Filed April 18, 1932. Serial No. 326,232. PUBLISHED JULY 12, 1932. Class 6.

298,225. PICKLE LIQUORS USED FOR THE REMOVAL OF DIRT, RUST, SCALE, ETC., FROM METAL SURFACES, AND CONSTITUENTS OF PICKLE LIQUORS. METAL PROCESS CORPORATION, Fair Lawn, N. J.
Filed April 21, 1932. Serial No. 326,355. PUBLISHED JULY 12, 1932. Class 6.

298,226. BATH SALTS, BATH SALTS TABLETS, PERFUMES, TOOTH WASH, BRILLIANTINE, DENTIFRICE, HAIR TONIC, MOUTH WASH, DENTAL CREAM. YARDLEY & CO., LIMITED, London, England.
Filed April 22, 1932. Serial No. 326,409. PUBLISHED JULY 12, 1932. Class 6.

298,227. DENTIFRICE, MOUTH WASH, TOILET ROUGE, LIP STICK, FACE AND TOILET POWDER, FACE AND TOILET CREAMS, PERFUME, HAIR TONIC, HAIR POMADE, BRILLIANTINE, BATH SALTS, TOILET WATER, EAU DE COLOGNE, TOILET AND HAIR VINEGAR, ALUM. JACQUES SORSMAN, doing business as Souplex Company, Brussels, Belgium.
Filed April 4, 1932. Serial No. 325,807. PUBLISHED JULY 12, 1932. Class 6.

298,228. PERMANENT WAVING LOTION. GABRIELSEN CO., INC., New York, N. Y.
Filed March 9, 1932. Serial No. 324,959. PUBLISHED JULY 26, 1932. Class 6.

298,229. CHEMICAL SUBSTANCES FOR USE AS THREAD AND FIBER MOISTENING, PROTECTING, PENETRATING, SMOOTHING, AND FINISHING PREPARATIONS. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed March 8, 1932. Serial No. 324,873. PUBLISHED JULY 19, 1932. Class 6.

298,230. NAIL POLISH AND ENAMEL, ETC. THE GLAZO COMPANY, INC., New York, N. Y.
Filed February 18, 1932. Serial No. 324,285. PUBLISHED AUGUST 2, 1932. Class 6.

298,231. SKIN TONIC, POWDER BASE, HAIR TONIC, SHAMPOO, AND A TONIC DERIVED FROM SEA KELP, CONTAINING IODINE AND OTHER SALTS. JOSEPH E. WARD, Long Beach, Calif.
Filed February 23, 1932. Serial No. 324,411. PUBLISHED JULY 12, 1932. Class 6.

298,232. EMULSION FOR THE PRESERVATION OF FRUITS AND VEGETABLES. THE WILBUR WHITE CHEMICAL COMPANY, Owego, N. Y.
Filed January 26, 1932. Serial No. 323,470. PUBLISHED JULY 19, 1932. Class 6.

298,233. SALTED PEANUTS AND CANDY CONTAINING CHOCOLATE COCOANUT, AND PEANUTS IN VARIOUS COMBINATIONS. BIG CHIEF CANDY CO., INC., Wilkes-Barre, Pa.
Filed January 18, 1932. Serial No. 323,119. PUBLISHED JULY 26, 1932. Class 46.

298,234. CEREAL BREAKFAST FOODS. KELLOGG COMPANY, Battle Creek, Mich.
Filed January 11, 1932. Serial No. 322,920. PUBLISHED JULY 26, 1932. Class 46.

298,235. PREPARATIONS FOR THE EXTERMINATION OF RATS, VERMIN, ETC. B. & B. EXTERMINATORS, INC., Baltimore, Md.
Filed January 5, 1932. Serial No. 322,784. PUBLISHED APRIL 19, 1932. Class 6.

298,236. PASTEURIZED CHEESE. PURE CHEESE CORPORATION, Chicago, Ill.
Filed January 4, 1932. Serial No. 322,710. PUBLISHED AUGUST 2, 1932. Class 46.

298,237. PREPARATIONS FOR EXTERMINATING INSECTS. GETZ EXTERMINATORS, INC., St. Louis, Mo.
Filed January 2, 1932. Serial No. 322,634. PUBLISHED JULY 19, 1932. Class 6.

298,238. PHOTOGRAPHIC FILMS. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed November 10, 1931. Serial No. 320,969. PUBLISHED JANUARY 12, 1932. Class 26.

298,239. CERTAIN MEDICINAL PREPARATIONS. SUPERIOR LABORATORIES, INC., Cleveland, Ohio.
Filed December 18, 1931. Serial No. 322,277. PUBLISHED JULY 26, 1932. Class 6.

298,240. CHARTS. HISTOMAP, INC., Chicago, Ill.
Filed February 18, 1931. Serial No. 311,189. PUBLISHED AUGUST 2, 1932. Class 38.

298,241. PREPARATION TO LESSEN TOBACCO IRRITATION. HARRY C. FOWLER, doing business as Weber Pharmacal Company, Salt Lake City, Utah.
Filed May 18, 1931. Serial No. 314,690. PUBLISHED JULY 26, 1932. Class 6.

298,242. SADDLERY. JABEZ CLIFF & CO. LTD., Walsall, England.
Filed April 24, 1930. Serial No. 299,391. PUBLISHED JULY 26, 1932. Class 3.

298,243. SOLUBLE IODINE FOR EXTERNAL, INTERNAL, ORAL AND TOPICAL USE, AND HYPODERMIC INTRAMUSCULAR AND INTRAVENOUS USE. BURNHAM SOLUBLE IODINE CO., Auburndale, Newton, Mass.
Filed October 5, 1929. Serial No. 290,685. PUBLISHED JULY 19, 1932. Class 6.

298,244. HOSIERY. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind.
Filed May 17, 1930. Serial No. 300,765. PUBLISHED JULY 26, 1932. Class 39.

298,245. RADIO CABINETS. STETTNER CORPORATION, New York and Brooklyn, N. Y.
Filed May 28, 1930. Serial No. 301,524. PUBLISHED AUGUST 2, 1932. Class 32.

298,246. ICE CREAM CONES. THE MARYLAND BAKING COMPANY, INC., Baltimore, Md., assignor to Western Dairy Product Co., Inc., of Seattle, Wash., a Corporation of Delaware.
Filed May 29, 1930. Serial No. 301,674. PUBLISHED JULY 14, 1931. Class 46.

298,247. MEDICINE FOR THE TREATMENT OF RHEUMATISM, NEURITIS, ARTHRITIS, LUMBAGO, SCIATICA, GOUT, BACKACHE, KIDNEY AND BLADDER TROUBLES. ALBERT S. REID, Vancouver, British Columbia, Canada.
Filed September 3, 1930. Serial No. 305,287. PUBLISHED JULY 19, 1932. Class 6.

298,248. SANTONIN. AMTORG TRADING CORPORATION, New York, N. Y.
Filed October 1, 1930. Serial No. 306,255. PUBLISHED JULY 26, 1932. Class 6.

298,249. TOOTHPASTE. HARRY E. MONTERO, doing business as Tastie Tooth Paste Co., Bloomfield, N. J.
Filed July 21, 1931. Serial No. 317,178. PUBLISHED JULY 12, 1932. Class 6.

298,250. PETROLEUM PITCH, A RESIDUE FROM THE DISTILLATION OF CRUDE PETROLEUM OILS. SHELL OIL COMPANY, San Francisco, Calif.
Filed July 27, 1931. Serial No. 317,382. PUBLISHED AUGUST 9, 1932. Class 1.

298,251. HOSIERY. VERTEX HOSIERY MILLS, INC., Weissport, Pa.
Filed October 3, 1931. Serial No. 319,711. PUBLISHED AUGUST 2, 1932. Class 39.

298,252. MACHINE BOLT EXPANSION SHIELDS, EXPANSION BOLTS, EXPANSION SHIELDS, AND EXPANSION ANCHORS. DIAMOND EXPANSION BOLT CO., Garwood, N. J.
Filed January 21, 1932. Serial No. 323,227. PUBLISHED MARCH 22, 1932. Class 13.

298,253. DAIRY FEEDS. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio.
Filed October 5, 1931. Serial No. 319,729. PUBLISHED AUGUST 2, 1932. Class 46.

298,254. FRUIT JUICES FOR FOOD PURPOSES, COCOA AND CHOCOLATE AND MALT EXTRACTS FOR FOOD PURPOSES. MYRO PATERMANN, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany.
Filed October 23, 1931. Serial No. 320,869. PUBLISHED JULY 26, 1932. Class 46.

298,255. PRECIOUS STONES, RINGS, LOCKETS, ETC. THE VIRGIN DIAMOND SYNDICATE, Kansas City, Mo.
Filed July 7, 1931. Serial No. 316,709. PUBLISHED JULY 26, 1932. Class 28.

298,256. MEN'S AND BOYS' SUMMER SUITS. HASPEL BROTHERS, INC., New Orleans, La.
Filed June 21, 1932. Serial No. 328,169. PUBLISHED JULY 26, 1932. Class 39.

298,257. FRESH VEGETABLES. F. V. BIRDSEYE, Watsonville, Calif.
Filed June 20, 1932. Serial No. 328,115. PUBLISHED JULY 26, 1932. Class 46.

298,258. LADIES' SPORT COATS. IRVING FRIEDRICKS, doing business as Irving Friedricks Co., New York, N. Y.
Filed June 18, 1932. Serial No. 328,094. PUBLISHED JULY 26, 1932. Class 39.

298,259. LADIES' HOSIERY. GREENSBORO FULL FASHIONED HOSIERY MILLS, Greensboro, N. C.
Filed June 17, 1932. Serial No. 328,062. PUBLISHED JULY 26, 1932. Class 39.

298,260. SHEET PAPER FOR PRINTING AND WRITING. MONTROSS & CLARKE COMPANY, INC., New York, N. Y.
Filed June 10, 1932. Serial No. 327,880. PUBLISHED JULY 26, 1932. Class 37.

298,261. MEN'S SUITS, COATS, AND OVERCOATS. ROGER KENT, INC., New York, N. Y.
Filed June 10, 1932. Serial No. 327,878. PUBLISHED JULY 26, 1932. Class 39.

298,262. MONTHLY PUBLICATION. GEORGE J. HECHT, New York, N. Y.
Filed June 10, 1932. Serial No. 327,873. PUBLISHED AUGUST 2, 1932. Class 38.

298,263. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed June 10, 1932. Serial No. 327,867. PUBLISHED JULY 26, 1932. Class 38.

298,264. BOND PAPER. GEORGE A. WHITING PAPER COMPANY, Menasha, Wis.
Filed June 9, 1932. Serial No. 327,860. PUBLISHED JULY 26, 1932. Class 37.

298,265. WRITING PENS OF ALL KINDS, PENHOLDERS, PAPER CLIPS, AND FOUNTAIN PENS AND PARTS THEREOF. THE SPENCERIAN PEN COMPANY, New York, N. Y.
Filed June 8, 1932. Serial No. 327,838. PUBLISHED JULY 26, 1932. Class 37.

298,266. COTTON WADDING AND COTTON BATTING. NATIONAL AUTOMOTIVE FIBRES, INC., Oakland, Calif.
Filed June 7, 1932. Serial No. 327,804. PUBLISHED AUGUST 9, 1932. Class 1.

298,267. HOSIERY AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. WARREN H. FAKE, Ephrata Borough, Pa.
Filed June 6, 1932. Serial No. 327,760. PUBLISHED AUGUST 2, 1932. Class 39.

298,268. PILLOWS OR CUSHIONS FOR BEDS, COUCHES, AND THE LIKE. BARCALO MANUFACTURING COMPANY, Buffalo, N. Y.
Filed June 1, 1932. Serial No. 327,624. PUBLISHED JULY 26, 1932. Class 32.

298,269. DRESSED BABY BROILING CHICKENS. FRANK A. BARSANTI, Tulsa, Okla.
Filed May 28, 1932. Serial No. 327,547. PUBLISHED JULY 26, 1932. Class 46.

298,270. DRESS AND NEGLIGEE SHIRTS. WACHUSETT SHIRT COMPANY, Leominster, Mass.
Filed May 26, 1932. Serial No. 327,490. PUBLISHED AUGUST 2, 1932. Class 39.

298,271. ACCOUNT AND BLANK BOOKS, TOILET PAPER, PAPER NAPKINS, ETC. KRESGE DEPARTMENT STORE CORP., Newark, N. J.
Filed May 25, 1932. Serial No. 327,441. PUBLISHED JULY 26, 1932. Class 37.

298,272. FLAVORING MATERIAL IN GRANULAR FORM FOR ICE CREAM. PECAN KRISP COMPANY, INC., Dallas, Tex.
Filed June 9, 1932. Serial No. 327,421. PUBLISHED AUGUST 9, 1932. Class 46.

298,273. NEWSPAPER COLUMN IN ITS DAILY NEWSPAPER—TO WIT, THE NEW YORK EVENING GRAPHIC. DAILY GRAPHIC, INC., New York, N. Y.
Filed May 24, 1932. Serial No. 327,389. PUBLISHED AUGUST 2, 1932. Class 38.

298,274. TINNED, BOTTLED, OR PACKAGED FOODSTUFFS—NAMELY, PRESERVED FRUITS, BRANDIED FRUITS, FRUITS PACKED IN WINE, TOMATO JUICE, CATSUP, CHILI SAUCE, CANNED SHRIMP, MAYONNAISE AND SALAD DRESSING, PICKLES, OLIVES, JELLIES, PEANUT BUTTER, DESSERT SAUCE, COFFEE AND POPCORN IN ITS NATURAL STATE. THE KINNEY & LEVAN COMPANY, Cleveland, Ohio.
Filed April 12, 1932. Serial No. 326,042. PUBLISHED JULY 26, 1932. Class 46.

298,275. QUARRIED SLATE. THE BRUNSWICK-BALKE-COLLENDER COMPANY, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill.
Filed May 13, 1932. Serial No. 327,041. PUBLISHED AUGUST 9, 1932. Class 1.

298,276. BRIDGE TABLE COVER MADE OF PARCHMENT PAPER. WILLIAM J. V. MORRISSEY, doing business as The Vizabid Co., San Francisco, Calif.
Filed May 9, 1932. Serial No. 326,904. PUBLISHED JULY 26, 1932. Class 37.

298,277. VEGETABLE OIL MADE FROM HEMP-SEED FOR FRYING PURPOSES. TULLY & KOLIS CO., Newark, N. J.
Filed April 2, 1932. Serial No. 325,812. PUBLISHED JULY 26, 1932. Class 46.

298,278. ATHLETIC UNION SUITS, ATHLETIC SHIRTS, AND ATHLETIC SHORTS OF KNITTED FABRIC. SHOREWOOD MILLS, Milwaukee, Wis.
Filed April 1, 1932. Serial No. 325,728. PUBLISHED JULY 26, 1932. Class 39.

298,279. EGG SYRUP FOR COOKING AND CONFECTIONERY PURPOSES. WASHINGTON CO-OPERATIVE EGG & POULTRY ASSOCIATION, Seattle, Wash.
Filed March 15, 1932. Serial No. 325,158. PUBLISHED JULY 26, 1932. Class 46.

298,280. MEDICINES—NAMELY, A TABLET OR MEDICINE IN THE FORM OF TABLETS FOR USE IN FERMENT DEFICIENCY AND DIABETES. VITA-MINN COMPANY, Minneapolis, Minn.
Filed March 19, 1932. Serial No. 325,306. PUBLISHED JULY 12, 1932. Class 6.

298,281. DOG FOOD. B. W. DOYLE, doing business as Doyle Packing Co., Los Angeles, Calif.
Filed April 22, 1932. Serial No. 326,365. PUBLISHED JULY 26, 1932. Class 46.

298,282. HAIR WAVING LOTION. GEORGE L. KREMER, New York, N. Y.
Filed April 23, 1932. Serial No. 326,507. PUBLISHED JULY 19, 1932. Class 6.

298,283. OLIVE OIL SHAMPOO, ESSENCE OF PEPPERMINT, ETC. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed May 2, 1932. Serial No. 326,665. PUBLISHED JULY 19, 1932. Class 6.

298,284. MEDICINE COMPRISING A NUTRITIOUS MALT COMBINATION CONTAINING COPPER, IRON, AND RED BONE MARROW FOR USE AS A GENERAL TONIC. BORCHERDT MALT EXTRACT COMPANY, Chicago, Ill.
Filed May 2, 1932. Serial No. 326,666. PUBLISHED JULY 19, 1932. Class 6.

298,285. PREPARATION FOR REMOVING CORNS. HOWARD GOULD, Camden, N. J.
Filed May 5, 1932. Serial No. 326,782. PUBLISHED JULY 19, 1932. Class 6.

298,286. LAXATIVE CANDY. W. MAPLE PINNIX, doing business as The Smacks Co., New Bern, N. C.
Filed May 10, 1932. Serial No. 327,001. PUBLISHED JULY 19, 1932. Class 6.

298,287. PREPARATION FOR CONSUMPTION BY MILCH COWS FOR PREVENTING OBJECTIONABLE ODORS OF MILK YIELDED. LEWIS R. BRANTLEY, doing business as Claritone Dairy Products Co., Marietta, Ga.
Filed May 6, 1932. Serial No. 326,841. PUBLISHED JULY 19, 1932. Class 6.

298,288. LIQUID CORN REMOVER. NOXACORN COMPANY, INC., New York, N. Y.
Filed May 14, 1932. Serial No. 327,106. PUBLISHED JULY 19, 1932. Class 6.

298,289. INSECT EXTERMINATOR OF A TYPE ADAPTED TO KILL MOTH EGGS, LARVÆ AND MOTHS THEMSELVES BY THE VAPORIZING OF A COMPOSITION BY HEATING PROCESS. AUTOMATIC WASHER COMPANY, Newton, Iowa.
Filed May 16, 1932. Serial No. 327,126. PUBLISHED JULY 19, 1932. Class 6.

298,290. STEAM PRESSING IRONS. STEAM PRESSING IRON COMPANY, Chicago, Ill.
Filed June 7, 1932. Serial No. 327,809. PUBLISHED AUGUST 2, 1932. Class 24.

298,291. BUTTER. THE UNITED STORES COMPANY, Abilene, Kans.
Filed June 1, 1932. Serial No. 327,641. PUBLISHED JULY 26, 1932. Class 46.

298,292. RUBBER ADHESIVE. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,883. PUBLISHED AUGUST 2, 1932. Class 5.

298,293. CAKE FLOUR AND WHEAT FLOUR. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed June 16, 1932. Serial No. 328,036. PUBLISHED JULY 26, 1932. Class 46.

298,294. PANCAKE FLOUR. MAYFLOWER MILLS, Fort Wayne, Ind.
Filed June 27, 1932. Serial No. 328,336. PUBLISHED AUGUST 2, 1932. Class 46.

298,295. PAPER HANGER'S SIZE. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis.
Filed July 1, 1932. Serial No. 328,493. PUBLISHED AUGUST 9, 1932. Class 5.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

298,296. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FORREST DELBERT HOCH, Duluth, Minn. Filed May 16, 1932. Serial No. 327,149.

BUTTER-SCOTCH CORN

For Candied Popcorn.
Claims use since Apr. 1, 1931.

298,297. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE CAPEHART CORPORATION, Fort Wayne, Ind. Filed July 13, 1932. Serial No. 328,752.

Capehart

For Radio Receiving Sets, Separate or Adapted for Combination with Phonographs, All Electrically Operated.
Claims use since March, 1928.

298,298. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAMUEL BONAT & BRO., New York, N. Y. Filed July 20, 1932. Serial No. 328,908.

THE BONAT METHOD

For Electric Permanent Hair Waving Machines and Permanent Waving Pads.
Claims use since Apr. 19, 1929.

298,299. (CLASS 37. PAPER AND STATIONERY.) WHITAKER PAPER COMPANY, Cincinnati, Ohio. Filed Aug. 2, 1932. Serial No. 329,297.

PRINTCRAFT BOND
MADE IN U.S.A.

For Bond Writing Paper.
Claims use since Dec. 15, 1920.

298,300. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) MUELLER ELECTRIC COMPANY, Cleveland, Ohio. Filed Aug. 15, 1932. Serial No. 329,560.

CLAMPIPE

For Ground Clamp.
Claims use since August, 1929.

298,301. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) L. F. NOONAN, doing business as L. F. Noonan & Co., Sacramento, Calif. Filed Mar. 28, 1932. Serial No. 325,595.

Yolo's Best

For Fresh Vegetables.
Claims use since Aug. 15, 1931.

298,302. (CLASS 39. CLOTHING.) SUFFOLK KNITTING COMPANY, Lowell, Mass. Filed Apr. 12, 1932. Serial No. 326,033.

NON-RUB

For Men's, Women's, Boys', Girls', and Children's Sweaters.
Claims use since August, 1931.

298,303. (CLASS 45. BEVERAGES, NONALCOHOLIC.) CAMMARANO BROS., INC., Tacoma, Wash. Filed Sept. 2, 1931. Serial No. 318,642.

Monterey

For Carbonates, Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Aug. 10, 1931.

298,304. (CLASS 37. PAPER AND STATIONERY.) UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Sept. 4, 1931. Serial No. 318,752.

BI - FOLD

For Toilet Paper.
Claims use since June 15, 1927.

298,305. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio. Filed Sept. 14, 1931. Serial No. 319,033.

Lombardy

For Prepared Mustard.
Claims use since Aug. 25, 1931.

298,306. (CLASS 39. CLOTHING.) HAMPSHIRE SHIRT CO. INC., New York, N. Y. Filed Sept. 15, 1931. Serial No. 319,065.

HAMPSHIRE

For Men's and Boys' Dress and Negligee Shirts, and Pajamas.
Claims use since Aug. 13, 1931.

298,307. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) A. F. GALLUN & SONS CORPORATION, Milwaukee, Wis. Filed Oct. 1, 1931. Serial No. 319,617.

CRETAN

For Leather.
Claims use since July 10, 1931.

298,308. (CLASS 39. CLOTHING.) PIERRE J. TRACY, doing business as Cohn & Tracy, Chicago, Ill. Filed Feb. 13, 1932. Serial No. 324,135.

"Portorican"

For Men's Suits, Trousers, and Slacks.
Claims use since August, 1931.

298,309. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) SAMUEL W. VAN DYNE, doing business as Arabian Treatment Co., St. Louis, Mo. Filed Feb. 17, 1932. Serial No. 324,270.

Arabian Treatment

For a Preparation in Paste Form for Restoring the Luster and Finish of Automobile Bodies.
Claims use since May 2, 1931.

298,310. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BARRON-GRAY PACKING CO., San Jose, Calif. Filed Jan. 30, 1931. Serial No. 310,549.

EVEREADY
FRUIT COCKTAIL

For Canned Cut Fruits.
Claims use since Dec. 19, 1930.

298,311. (CLASS 37. PAPER AND STATIONERY.) S. H. KRESS & CO., New York, N. Y. Filed May 22, 1931. Serial No. 314,916.

CREAMWIPE

For Cleansing Tissues.
Claims use since Apr. 9, 1931.

298,312. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOLDBLATT BROS., INC., Chicago, Ill. Filed July 9, 1931. Serial No. 316,777.

NA ZDROWIE

The Polish words forming the mark are translated to mean "For Health."
For Malt Syrup for Food Purposes.
Claims use since Mar. 20, 1931.

TRADE-MARK REGISTRATIONS RENEWED

86,961. HORSE-COLLARS. Registered June 11, 1912. STRAUS, BODENHEIMER SADDLERY CO. Renewed June 11, 1932, to Straus-Bodenheimer Company, Houston, Tex., a Corporation of Texas, by change of name.

88,481. TOOL-STEEL, STEEL IN CERTAIN FORMS, AND CASTINGS AND FORGINGS. Registered September 24, 1912. W. T. FLATHER LIMITED, Sheffield, England, a Corporation of Great Britain. Renewed September 24, 1932.

88,482. CAST-STEEL. Registered September 24, 1912. W. T. FLATHER LIMITED, Sheffield, England, a Corporation of Great Britain. Renewed September 24, 1932.

88,492. INKS COMMONLY KNOWN AS INK SOLIDS, IN GRANULAR FORM. Registered September 24, 1912. HOWARD CHEMICAL AND MANUFACTURING COMPANY, Minneapolis, Minn., a Corporation of Minnesota. Renewed September 24, 1932.

89,341. RUBBER BOOTS AND SHOES. Registered December 10, 1912. THE L. CANDEE & COMPANY, New Haven, Conn. Renewed December 10, 1932, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

89,342. RUBBER BOOTS AND SHOES. Registered December 10, 1912. THE L. CANDEE & COMPANY, New Haven, Conn. Renewed December 10, 1932, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

89,620. CANNED SALMON. Registered December 31, 1912. CARLISLE PACKING CO., Seattle, Wash. Renewed December 31, 1932, to Carlisle Packing Company, Beach, Wash., a Corporation of Washington.

89,621. CANNED SALMON. Registered December 31, 1912. CARLISLE PACKING CO., Seattle, Wash. Renewed December 31, 1932, to Carlisle Packing Company, Beach, Wash., a Corporation of Washington.

89,622. CANNED SALMON. Registered December 10, 1912. CARLISLE PACKING CO., Seattle, Wash. Renewed December 10, 1932, to Carlisle Packing Company, Beach, Wash., a Corporation of Washington.

89,635. OVERALLS. Registered December 31, 1912. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed December 31, 1932.

89,847. WRITING AND WRAPPING PAPER. Registered January 14, 1913. HOLLINGSWORTH & WHITNEY COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed January 14, 1933.

89,848. WRITING AND WRAPPING PAPER. Registered January 14, 1913. HOLLINGSWORTH & WHITNEY COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed January 14, 1933.

89,943. AN ANTIPRURITIC AND ANTISEPTIC HEALING LOTION FOR CERTAIN NAMED DISEASES. Registered January 21, 1913. OHIO VALLEY DRUG CO., Wheeling, W. Va., a Corporation of West Virginia. Renewed January 21, 1933.

90,183. WHEAT-FLOUR. Registered February 11, 1913. FISHER FLOURING MILLS CO., Harbor Island, Seattle, Wash., a Corporation of Washington. Renewed February 11, 1933.

90,184. WHEAT-FLOUR. Registered February 11, 1913. FISHER FLOURING MILLS CO., Harbor Island, Seattle, Wash., a Corporation of Washington. Renewed February 11, 1933.

90,186. WHEAT-FLOUR. Registered February 11, 1913. FISHER FLOURING MILLS CO., Harbor Island, Seattle, Wash., a Corporation of Washington. Renewed February 11, 1933.

90,316. WHEAT-FLOUR. Registered February 18, 1913. FISHER FLOURING MILLS CO., Harbor Island, Seattle, Wash., a Corporation of Washington. Renewed February 18, 1933.

90,317. WHEAT-FLOUR. Registered February 18, 1913. FISHER FLOURING MILLS CO., Harbor Island, Seattle, Wash., a Corporation of Washington. Renewed February 18, 1933.

LABELS

REGISTERED OCTOBER 18, 1932

41,282.—*Title:* ALADDIN MAGIC HOUSEHOLD CLEANER. For Household Cleaner. ALADDIN PRODUCTS Corporation, Detroit, Mich. Published May 25, 1932.

41,283.—*Title:* SUN KIST. For Orangeade. FRANK P. ANGELIER, New York, N. Y. Published March 9, 1920.

41,284.—*Title:* BOTLE O' KISS. For Orangeade. FRANK P. ANGELIER, New York, N. Y. Published March 9, 1920.

41,285.—*Title:* KING PHILLIP BERKSHIRE. For Broadcloth Apparel. BERKSHIRE FINE SPINNING ASSOCIATES, INC., New York, N. Y. Published December 7, 1931.

41,286.—*Title:* CRYSTAL BEAD WATER. For A Natural Alkaline Carbonate Lithic Water. CRYSTAL BEAD MINERAL SPRINGS CO., San Diego, Calif. Published June 10, 1932.

41,287.—*Title:* DAIRYLEA SALT BUTTER. For Butter. DAIRYMEN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica, N. Y. Published August 29, 1932.

41,288.—*Title:* DAITYLEA EGGS. For Eggs. DAIRYMEN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica, N. Y. Published August 26, 1932.

41,289.—*Title:* ALL-CRISP SODA CRACKERS. For Soda Crackers. DAVIDSON BISCUIT COMPANY, Mount Vernon, Ill. Published September 2, 1932.

41,290.—*Title:* SMART SET SALMON. For Salmon. G. P. HALFERTY & Co., Seattle, Wash. Published June 10, 1932.

41,291.—*Title:* HAMMETT'S PRACTICAL PASTE. For Paste. J. L. HAMMETT COMPANY, Newark, N. J. Published August 26, 1932.

41,292.—*Title:* MOUNTAIN CRYSTAL SPRING WATER. For Bottled Spring Water. AVALON D. HERON, Crystal Springs, Redland, Calif. Published August 11, 1932.

41,293.—*Title:* SPORT SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 11, 1932.

41,294.—*Title:* TOMMY TUCKER SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 2, 1932.

41,295.—*Title:* THE SERVICE ARCH HEALTH SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 10, 1932.

41,296.—*Title:* BETTA ARCH. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 18, 1932.

41,297.—*Title:* FAST STEPPERS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 9, 1932.

41,298.—*Title:* THEY SEE THE BOX FIRST. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 2, 1932.

41,299.—*Title:* BLUE JEWEL FLOUR. For Flour. JEWEL FOOD STORES, INC., Woodbury, N. Y., and Chicago, Ill. Published July 5, 1932.

41,300.—*Title:* JEWEL CHOCOLATE FLAVORED MALTED MILK MIXTURE. For Chocolate Flavored Malted Milk Mixture. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published June 20, 1932.

41,301.—*Title:* JEWEL T GRAHAM CRACKERS. For Graham Crackers. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published June 1, 1932.

41,302.—*Title:* AVONDALE EXTRA SIFTED PEAS. For Canned Peas. THE KROGER GROCERY & BAKING COMPANY, Cincinnati, Ohio. Published August 15, 1932.

41,303.—*Title:* PRIDE OF INDIA. For Tea. MCCORMICK & CO., INC., Baltimore, Md. Published September 10, 1932.

41,304.—*Title:* MILES SHOES. For Shoes. MILES SHOES, INC., New York, N. Y. Published January 1, 1932.

41,305.—*Title:* F. C. N. For Cigars. NILES & MOSER CIGAR COMPANY, Kansas City, Mo. Published September 1, 1932.

41,306.—*Title:* SAUNDERS PRODUCTS. For Fabric and Leather Cleaner. SAUNDERS PRODUCTS CO., Philadelphia, Pa. Published August 1, 1932.

41,307.—*Title:* GOLDEN ROSE. For Medicine for the Relief of Hay Fever, Rose Fever, and Kindred Ailments. WALTER SCOTT, doing business as Golden Rose Company, Cincinnati, Ohio. Published September 13, 1932.

41,308.—*Title:* LUSTER SHEEN. For Liquid Polish. GEORGE L. SECORD, Chicago, Ill. Published August 16, 1932.

41,309.—*Title:* FLEISCHMANN'S. For Yeast. STANDARD BRANDS INCORPORATED, New York, N. Y. Published July 8, 1932.

41,310.—*Title:* ARKADY. For a Dough Improver. STANDARD BRANDS INCORPORATED, New York, N. Y. Published August 23, 1932.

41,311.—*Title:* PERFECT PENMANSHIP TABLET. For Penmanship Tablets. OTTO ULBRICH CO., Buffalo, N. Y. Published August 24, 1932.

41,312.—*Title:* DELTA DIXIE POTATOES FROM THE GOLDEN WEST—SACKS FROM DIXIE LAND. For Potatoes. WEYL-ZUCKERMAN & CO., Stockton, Calif. Published August 1, 1932.

PRINTS

REGISTERED OCTOBER 18, 1932

13,940.—*Title:* BRINGING CALIFORNIA TO YOU. For Orange Products. FRANK P. ANGELIER, New York, N. Y. Published June 16, 1932.

13,941.—*Title:* THE NATIONAL HOME SHOPPING PLAN. For Wearing Apparel, Hosiery, Cosmetics, Jewelry, and Novelties. M. A. HEMMINGS, Los Angeles, Calif. Published August 16, 1932.

13,942.—*Title:* NO. 1119. For Dental Cream. THE KOLYNOS COMPANY, New Haven, Conn. Published July 12, 1932.

13,943.—*Title:* LET'S SWITCH TO KRESGE'S. For Clothing and Department Store Merchandise. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Published June 27, 1932.

13,944.—*Title:* ORANGACE. For Orange Sherbets. PANOBURN COMPANY, Fort Worth, Tex. Published June 17, 1932.

13,945.—*Title:* STEIN SONG. For Badges. RELIANCE MFG. CO., Providence, R. I. Published September 1, 1932.

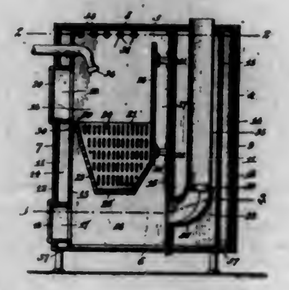
13,946.—*Title:* DAYLONG COMFORT SHOE. For Shoes. J. & J. SLATER, New York, N. Y. Published September 7, 1932.

13,947.—*Title:* BE READY WHEN THE GREAT DAYS COME. For Firearms and Ammunition. WINCHESTER REPEATING ARMS COMPANY, New Haven, Conn. Published August 1, 1932.

REISSUES

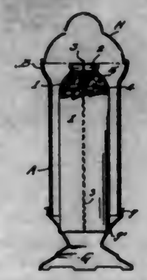
OCTOBER 18, 1932

18,622. GARBAGE AND REFUSE INCINERATOR. FREDERICK R. JONES, Chicago, Ill. Original No. 1,692,448, dated Nov. 20, 1928, Serial No. 74,153, filed Dec. 8, 1925. Application for reissue filed Oct. 10, 1930. Serial No. 487,881. 17 Claims. (Cl. 110—8.)



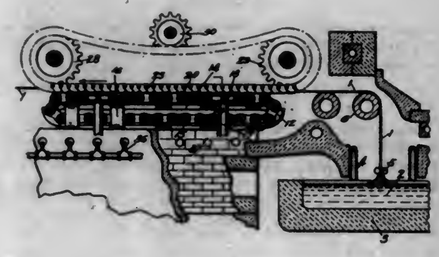
10. A garbage and refuse incinerator, comprising an incinerating chamber having a charging opening for garbage or refuse in one of its walls, a garbage or refuse receptacle provided with a grate at the bottom and a perforated rear wall spaced from the rear wall of said incinerating chamber to form a down-draft flue, air inlets in at least one of the walls of said incinerating chamber for the admission of air to the upper end of said garbage receptacle, and an opening for the escape of the products of combustion in the rear wall of said incinerating chamber in a plane beneath said garbage or refuse receptacle.

18,623. CANDLE AND METHOD RELATING THERETO. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Original No. 1,867,420, dated July 12, 1932, Serial No. 494,459, filed Nov. 10, 1930. Application for reissue filed Aug. 8, 1932. Serial No. 627,997. 18 Claims. (Cl. 67—21.)



2. A candle comprising a fusible fuel body, a wick contained thereby, and a relatively non-fusible translucent container of fixed length having a restricted mouth, the container, including the restricted portion thereof, substantially uniformly and intimately embracing said fuel body.

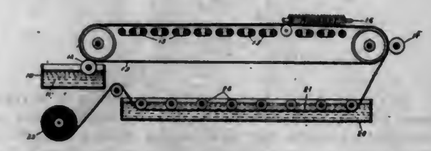
18,624. METHOD AND APPARATUS FOR DRAWING AND FLATTENING SHEET GLASS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,092,548, dated Nov. 20, 1928, Serial No. 703,031, filed Mar. 31, 1924. Application for reissue filed Oct. 15, 1930. Serial No. 488,952. 37 Claims. (Cl. 49—17.)



1. In the art of continuously drawing sheet glass, the process of supporting the moving sheet during the flattening period along a plurality of straight parallel lines which are constantly shifting with respect to the sheet to prevent sagging of the sheet between the lines of support.

4. A drawing and flattening mechanism for continuously drawn sheet glass, comprising drawing means moving with the sheet, and bodily moving means supporting the sheet at a series of constantly shifting adjacent points.

18,625. METHOD AND APPARATUS FOR MAKING THREAD RUBBER. JOHN R. GAMMETER, Akron, Ohio. Original No. 1,846,253, dated Feb. 23, 1932, Serial No. 274,230, filed May 1, 1928. Application for reissue filed July 15, 1932. Serial No. 622,777. 23 Claims. (Cl. 18—54.)

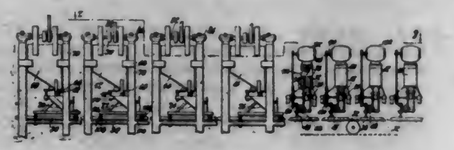


13. The method of making rubber thread, which comprises continuously forming rubber in a liquid condition into a strip of substantially solid rubber containing material, and transforming the strip into a thread.

18,626. METHOD OF AND APPARATUS FOR MANUFACTURING CEMENTITIOUS ARTICLES. EDWIN H. WHITE, Newark, N. J., assignor to Decorative Tile Corporation, Essex County, N. J., a Corporation of New York. Original application filed May 20, 1926, Serial No. 110,343. Renewed Nov. 30, 1928. Original No. 1,727,580, dated Sept. 10, 1929. Application for reissue filed Sept. 9, 1931. Serial No. 561,971. 28 Claims. (Cl. 25—42.)

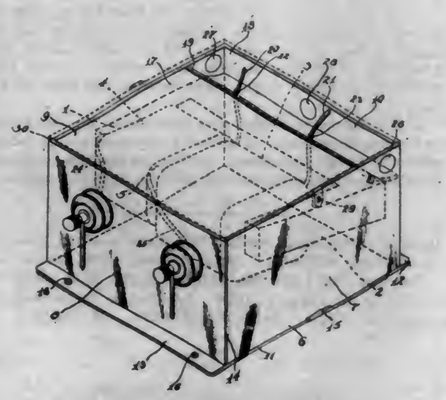
1. A method of forming tiles having decorative surface designs, comprising arranging a series of layers of plastic

cements of different colors in a form and forcing portions of the cements from the different layers to penetrate



through one another to the bottom of the tile while in a soft plastic condition by imparting rapid vibration to the form carrying the cements.

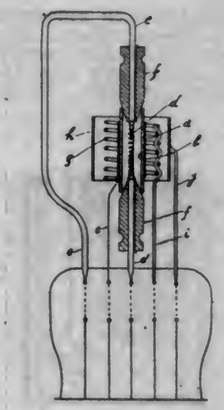
18,627. CASING FOR ELECTRICAL APPARATUS. ARTHUR C. KLECKNER, Racine, Wis., assignor to Webster Electric Company, Racine, Wis. Original No. 1,677,350, dated July 17, 1928, Serial No. 131,562, filed Aug. 26, 1926. Application for reissue filed Nov. 27, 1929. Serial No. 410,271. 9 Claims. (Cl. 247—9.)



5. In an electrical device, the combination of a transformer with a casing having a primary chamber for enclosing said transformer, said casing having a partition cutting across a corner of said primary chamber to form a secondary chamber for a junction box, said casing having apertures to pass conductors from said transformer to said junction box and from said junction box to the exterior, and short leads carried by said transformer.

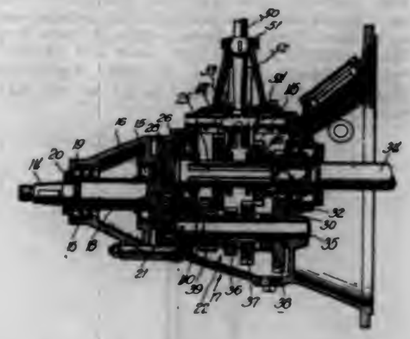
18,628. VALVE FOR WIRELESS TELEGRAPHY OR TELEPHONY. JACQUES ANTOINE MARIE HAWADIER, Paris, France, assignor, by mesne assignments, to Old Colony Trust Company, a Corporation of Massachusetts. Original No. 1,666,010, dated Apr. 10, 1928, Serial No. 43,259, filed July 13, 1925, and in France Aug. 2, 1924. Application for reissue filed Oct. 15, 1928. Serial No. 312,710. 11 Claims. (Cl. 250—27.5.)

11. In a thermionic tube having a hermetically sealed evacuated envelope, a cathode and cooperating electrodes entirely enclosed in said envelope, said cathode comprising a single hollow member adapted to emit electrons upon suitable thermal energization, a heating member within said electron-emitting member, and a pair of plugs



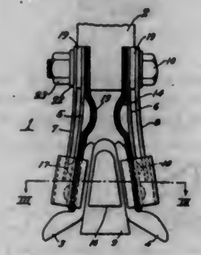
engaging the opposite ends of said hollow member, said heating member being supported between said plugs and held thereby spaced from said electron-emitting member.

18,629. TRANSMISSION. THOMAS L. FAWICK, Racine, Wis., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Original No. 1,524,476, dated Jan. 27, 1925, Serial No. 621,455, filed Feb. 26, 1923. Application for reissue filed Dec. 3, 1926. Serial No. 152,509. 30 Claims. (Cl. 74—57.)



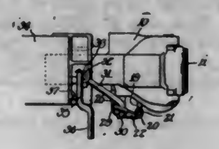
1. In a transmission the combination of a drive shaft, a counter-shaft, an intermediate shaft and a driven shaft, said shafts being journaled to lie parallel to each other, changeable driving connections comprising selective pairs of meshing external gears between said first three shafts for changing the driving ratio, means for clutching the first and third shafts together for direct drive, a pinion on said third shaft and an internal gear on said driven shaft embracing and driven by said pinion to secure a gear reduction from the intermediate shaft to the driven shaft.

18,630. CIRCUIT INTERRUPTER. ROSWELL C. VAN SICKLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,764,369, dated June 17, 1930, Serial No. 278,938, filed May 19, 1928. Application for reissue filed May 12, 1932. Serial No. 610,963. 17 Claims. (Cl. 200—87.)



1. A parallel-path contact member, a cooperating member therefor and a loop of iron about the contact member and the cooperating member forming a magnetic path about the point of contact between the said members for drawing them into more intimate current-carrying relation.

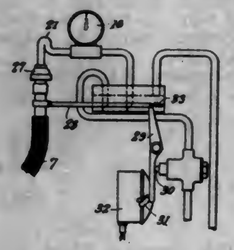
18,631. COUPLER MECHANISM. EDMUND P. KINNE, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Original No. 1,639,301, dated Aug. 16, 1927, Serial No. 139,964, filed Oct. 7, 1926. Application for reissue filed Apr. 25, 1929. Serial No. 358,129. 12 Claims. (Cl. 213—167.)



5. In a railway car, an operating means for use with a coupler mounted upon the car so as to move longitudinally and laterally thereof in service and having a member mounted upon the coupler to move therewith and arranged to operate the coupler upon rotation thereof; comprising, an uncoupling rod, means upon said car supporting the outer end of said rod for rotatable and endwise movement, said rod being connected at its inner end directly to said member, an abutment upon said car positioned to engage said rod for holding said rod in normal position and said rod having a portion offset from a vertical plane passing through the axis of rotation of said rod, said offset portion in normal position of said rod serving to produce an unbalanced condition of said rod tending to rotate said rod in a direction to engage said abutment and in a direction to resist swinging movement thereof in a direction for release of said coupler.

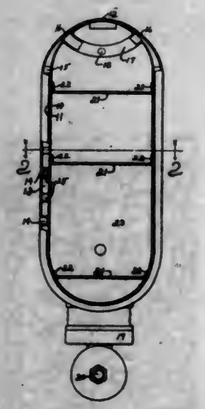
18,632. LIQUID DISPENSING APPARATUS. GEORGE W. STEDWELL, Brooklyn, N. Y. Original No. 1,775,441, dated Sept. 9, 1930, Serial No. 461,422, filed June 16, 1930. Application for reissue filed Sept. 3, 1932. Serial No. 631,741. 7 Claims. (Cl. 221—67.)

1. A liquid metering and delivery system comprising a liquid delivery line terminating in a flexible hose, suspended for pulling movement and having a manually operable nozzle valve by which discharge of liquid from the hose may be accurately determined, an electric pump for supplying liquid under pressure through said delivery line and hose, a meter in the delivery line for showing the amounts of liquid delivered by the hose under control of said nozzle valve, a switch for starting and stopping the electric pump and flexible mechanical connections from said suspended pull portion of the hose to said switch



for operating the latter to start and stop the pump by pulling movements on the hose, and whereby various desired quantities of liquid may be measured and delivered by control exercised at the nozzle end of the hose and the hose be drained by operation of the nozzle valve after shutting off the pump and the hose be left free of pressure after each delivery.

18,633. EXPANSION CHAMBER FOR REFRIGERATING MECHANISMS. GLENN MUFFLY, Scarsdale, N. Y., assignor to Copeland Products, Inc., a Corporation of Michigan. Original No. 1,817,202, dated Aug. 4, 1931, Serial No. 206,438, filed July 18, 1927. Application for reissue filed June 6, 1932. Serial No. 615,738. 13 Claims. (Cl. 62—126.)



10. The method of making a refrigerant expansion element which comprises welding together the edges of two sheets of metal to form the ends of a chamber for the expansion of refrigerant liquid, welding said sheets together at intervals intermediate such edges for reinforcing said sheets against the pressure of said refrigerant employed, bending intermediate portions of said sheets to bring the remaining edges thereof together to provide an enclosure suitable for the reception of ice trays

internally thereof and for cooling the interior of a refrigerator exteriorly thereof, and welding together the meeting edges of said sheet to complete the continuous formation of said element.

18,634. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Original No. 1,789,915, dated Jan. 20, 1931, Serial No. 306,238, filed Sept. 15, 1928. Application for reissue filed July 14, 1932. Serial No. 622,555. 17 Claims. (Cl. 247—25.)

1. In a cable connecter, a connecter member and means to anchor it in a box hole, a cable clamp and operating means therefor carried with the member and comprising a yoke having parallel clamp legs, the legs being formed of flat portions disposed angularly to the axis of a cable



which is adapted to be secured to the box hole, and the ends of the legs gripping the cable along lines on each side of and parallel to the axis of the cable.

PLANT PATENTS

GRANTED OCTOBER 18, 1932

35. CARNATION. RUSSELL ENGLE, Kokomo, Ind., assignor to Thomas L. Knipe, Kokomo, Ind. Filed Jan. 29, 1932. Serial No. 589,702. 1 Claim. (Cl. 47—1.)

The carnation as shown and described characterized in unusually large flowers, the petals of which are generally a rich cream in color and streaked and tinged with flame and with pink.

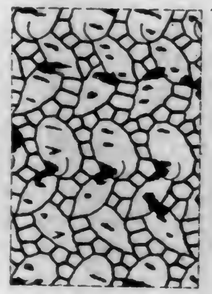
36. DAHLIA. JESSE J. BROOMALL, Eagle Rock, Calif., assignor to Charles G. Reed, Lawrence, Mass. Filed June 3, 1932. Serial No. 615,215. 1 Claim. (Cl. 47—1.)

A dahlia as shown and described characterized by its white bloom having distinctive greater dimensions diametrically and axially and all parts of the bloom having relatively proportionate dimensions.

DESIGNS

OCTOBER 18, 1932

87,951. TEXTILE FABRIC. JEAN AEMISEGGER, Bergenfield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 7, 1932. Serial No. 43,750. Term of patent 3½ years.



The ornamental design for a textile fabric substantially as shown.

87,952. WALL PAPER OR SIMILAR ARTICLE. MAX ARNOLD, Glens Falls, N. Y., assignor to Imperial Paper and Color Corporation, Glens Falls, N. Y., a Corporation of New York. Filed Aug. 31, 1932. Serial No. 44,724. Term of patent 7 years.



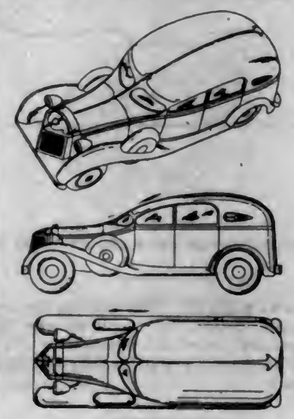
The ornamental design for wall paper or similar article as shown.

87,953. DESK PEN RECEPTACLE. ROBERT BACK, Chicago, Ill., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 19, 1931. Serial No. 40,887. Term of patent 14 years.



The ornamental design for a desk pen receptacle substantially as shown.

87,954. AUTOMOBILE. JOHN THOMAS BATTS, Pasadena, Calif. Filed Aug. 8, 1932. Serial No. 44,544. Term of patent 3½ years.



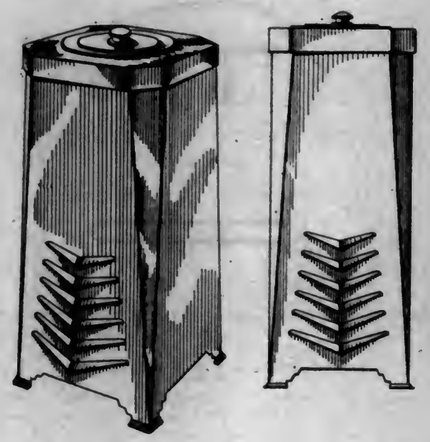
The ornamental design for an automobile as shown.

87,955. MULTIPLE-OPENING ICE-CREAM CONTAINER. STEPHEN J. BENN, Philadelphia, Pa., assignor to Merchant & Evans Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1932. Serial No. 44,404. Term of patent 3½ years.



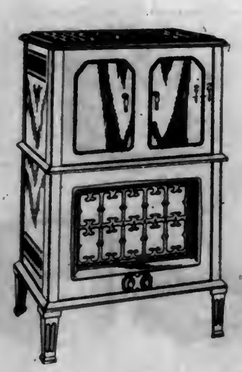
The ornamental design for an ice-cream container or the like, as shown.

87,956. ICE CREAM CONTAINER. STEPHEN J. BENN, Philadelphia, Pa., assignor to Merchant & Evans Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1932. Serial No. 44,406. Term of patent 3½ years.



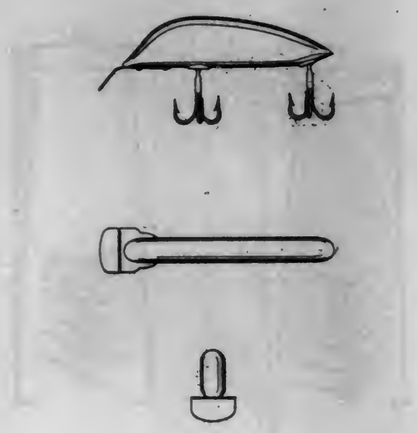
The ornamental design for an ice-cream container or the like, as shown.

87,957. HEATING STOVE. WILLIAM T. BRADBURY, Kankakee, Ill., assignor to Florence Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1932. Serial No. 44,583. Term of patent 14 years.



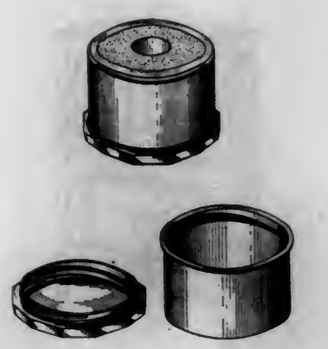
The ornamental design for a heating stove, substantially as shown.

87,958. FISHING LURE. LOUIS A. CHAPLEAU, South Bend, Ind., assignor to South Bend Bait Company, South Bend, Ind. Filed Aug. 15, 1932. Serial No. 44,612. Term of patent 7 years.



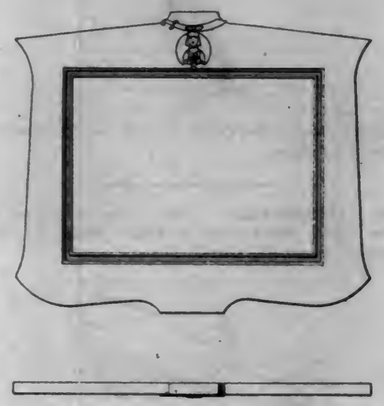
The ornamental design for a fishing lure as shown.

87,959. COMBINED SHAVING SOAP CONTAINER AND SHAVING CUP. ALEXANDER TOM CUSSONS, Kersal, Manchester, England. Filed Oct. 1, 1931, Serial No. 41,278, and in Great Britain June 4, 1931. Term of patent 14 years.



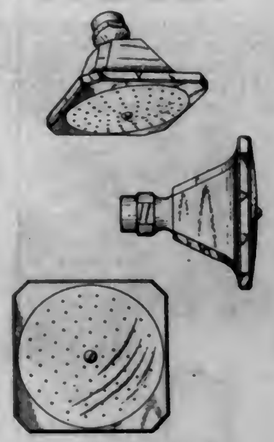
The ornamental design for a combined shaving soap container and shaving cup, as shown.

87,960. PICTURE FRAME. PAUL E. DEAL, Coconut Grove, Fla. Filed July 11, 1932. Serial No. 44,807. Term of patent 8½ years.



The ornamental design for a picture frame as shown.

87,961. SHOWER HEAD. WILLIAM P. FERGUSON, Middlebury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 16, 1932. Serial No. 44,617. Term of patent 8½ years.



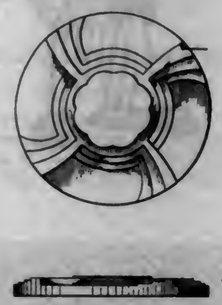
The ornamental design for a shower head as shown.

87,962. BADGE FOR SPANISH WAR VETERANS. WILLIAM A. GARDNER, New York, N. Y. Filed June 17, 1932. Serial No. 44,119. Term of patent 14 years.



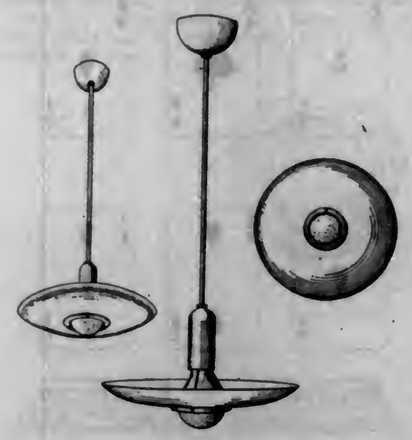
The ornamental design for a badge for Spanish War veterans, as shown and described.

87,963. CONTAINER LID. MYRL HARRISON, Cincinnati, Ohio, assignor to The Kurs-Kasch Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 6, 1932. Serial No. 42,762. Term of patent 7 years.



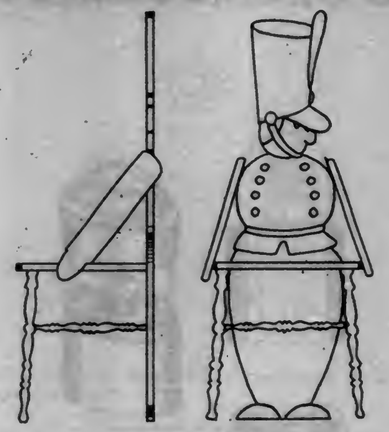
The ornamental design for a container lid substantially as shown and described.

87,964. LIGHTING FIXTURE. THEODORE L. HOWELL, New York, N. Y., assignor to Kurt Versen, New York, N. Y. Filed July 25, 1932. Serial No. 44,438. Term of patent 7 years.



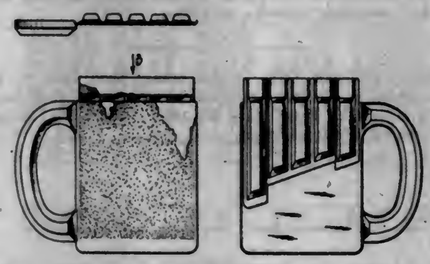
The ornamental design for a lighting fixture substantially as disclosed.

87,965. CHILDREN'S CHAIR OR SIMILAR ARTICLE. OSCAR LEBECK, New York, N. Y. Filed Aug. 31, 1932. Serial No. 44,723. Term of patent 7 years.



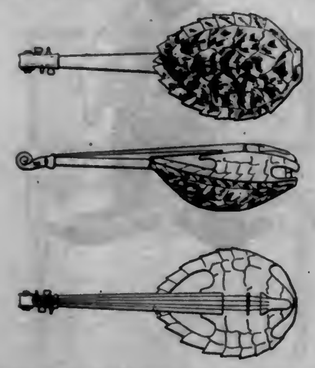
The ornamental design for a children's chair or similar article, as shown.

87,966. WHISTLE. JOHN H. LEHENEY, Leominster, Mass., assignor to Dupont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 18, 1932. Serial No. 44,602. Term of patent 8½ years.



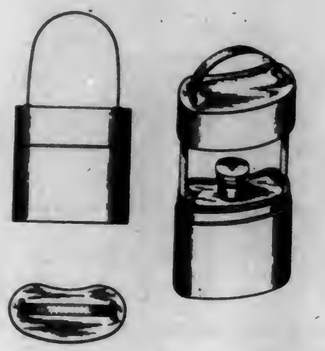
The ornamental design for a whistle as shown.

87,967. STRINGED INSTRUMENT. PHILEMON LEVASSEUR, Three Rivers, Quebec, Canada. Filed July 9, 1932. Serial No. 44,293. Term of patent 7 years.



The ornamental design for a stringed instrument as shown.

87,968. COMBINATION PERFUME BOTTLE AND CONTAINER THEREFOR. FLORENCE N. LEWIS, New York, N. Y. Filed Nov. 5, 1931, Serial No. 41,629, and in France Aug. 20, 1931. Term of patent 7 years.



The ornamental design for a combination perfume bottle and container therefor, as shown.

87,969. FIGURE TOY. LOUIS MARX, New York, N. Y., assignor to Charles J. Correll and Freeman F. Gosden, Chicago, Ill. Filed Mar. 12, 1931. Serial No. 39,040. Term of patent 14 years.



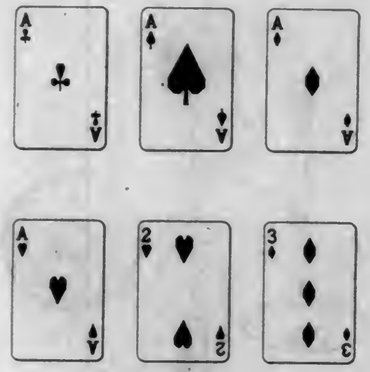
The ornamental design for a figure toy, substantially as shown.

87,970. FIGURE TOY. LOUIS MARX, New York, N. Y., assignor to Charles J. Correll and Freeman F. Gosden, Chicago, Ill. Filed Mar. 12, 1931. Serial No. 39,041. Term of patent 14 years.



The ornamental design for a figure toy, substantially as shown.

87,971. SET OF PLAYING CARDS. ANNE D. MILLER, Bridgeport, Conn. Filed Aug. 31, 1932. Serial No. 44,728. Term of patent 14 years.



The ornamental design for a set of playing cards substantially as shown and described.

87,972. SHOE. CHARLES MORALI, New York, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed July 20, 1932. Serial No. 44,884. Term of patent 3½ years.



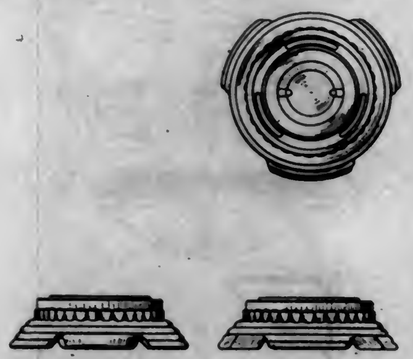
The ornamental design for a shoe as shown.

87,973. TEXTILE FABRIC. PAUL MOUTON, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 2, 1932. Serial No. 44,742. Term of patent 3½ years.



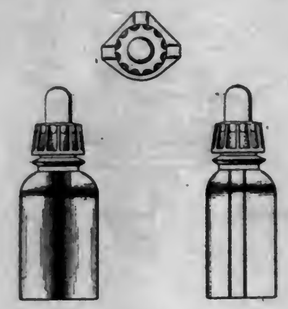
The ornamental design for a textile fabric, substantially as shown and described.

87,974. BASE FOR CANDLE LAMPS. NORBERT C. H. MUENCH, Syracuse, N. Y., assignor to Muench-Kreuzer Candle Co., Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 8, 1932. Serial No. 44,510. Term of patent 14 years.



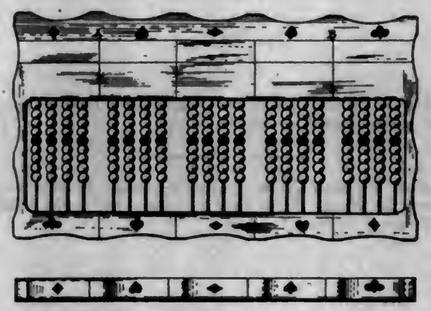
The ornamental design for a base for candle lamps as shown.

87,975. PRESCRIPTION BOTTLE. WILLIAM A. NESTER, East St. Louis, Ill., assignor to Obear-Nester Glass Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 26, 1932. Serial No. 44,697. Term of patent 14 years.



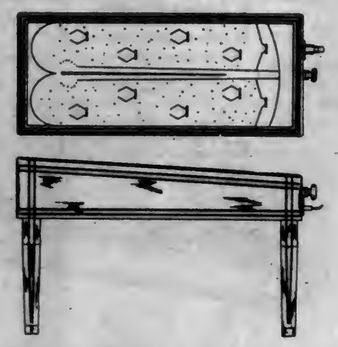
The ornamental design for a prescription bottle substantially as shown.

87,976. CARD GAME SCORING BOARD. WILLIAM ANDREW O'BRIEN, Los Angeles, Calif. Filed Feb. 26, 1932. Serial No. 43,009. Term of patent 14 years.



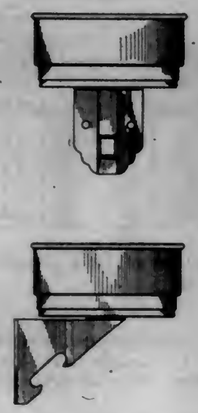
The ornamental design for a card game scoring board substantially as shown and described.

87,977. GAME TABLE. JAMES P. PARTLOW, Columbiana, and HOY L. POWELL, Canfield, Ohio. Filed Feb. 4, 1932. Serial No. 42,726. Term of patent 3½ years.



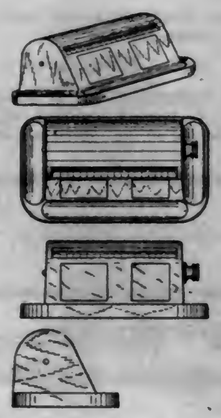
The ornamental design for a game table, as shown.

87,978. COMBINATION TUMBLER HOLDER AND BOTTLE OPENER. KURT RETTICH, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Aug. 20, 1932. Serial No. 44,656. Term of patent 7 years.



The ornamental design for a combination tumbler holder and bottle opener as shown.

87,979. CALCULATOR CASING. GALE S. ROBINSON, Seattle, Wash. Filed June 13, 1932. Serial No. 44,065. Term of patent 7 years.



The ornamental design for a calculator casing, as shown.

87,980. PILLOW COVER OR THE LIKE. AARON ROSENSTEIN, New York, N. Y. Filed Aug. 29, 1932. Serial No. 44,715. Term of patent 7 years.



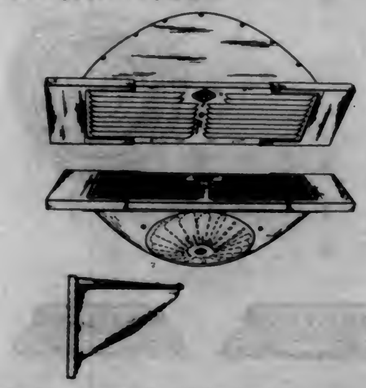
The ornamental design for a pillow cover or the like substantially as shown.

87,981. PLATE. EMIL L. SCHNEFF, Trenton, N. J., assignor to Scammell China Co., Trenton, N. J. Filed July 1, 1932. Serial No. 44,239. Term of patent 7 years.



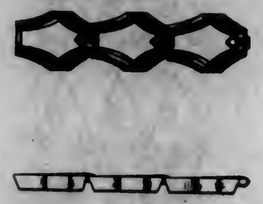
The ornamental design for a plate, as shown.

87,982. WINDOW VENTILATOR. ARTHUR W. SEYFRIED, Cleveland, Ohio. Filed Aug. 13, 1932. Serial No. 44,599. Term of patent 14 years.



The ornamental design for a window ventilator substantially as shown.

87,983. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed July 23, 1932. Serial No. 44,430. Term of patent 3½ years.



The ornamental design for a bracelet chain, substantially as shown.

87,984. CLOCK CASE. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 26, 1932. Serial No. 44,700. Term of patent 14 years.



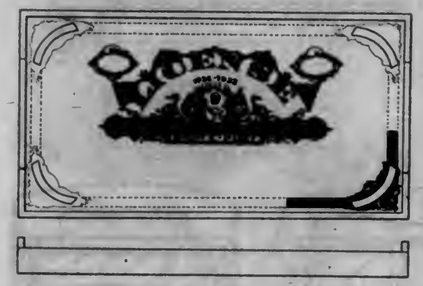
The ornamental design for a clock case, as shown.

87,985. SCALE HOUSING. WILLIAM TIMSON, Soho Foundry, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England. Filed July 5, 1932, Serial No. 44,256, and in Great Britain Apr. 16, 1932. Term of patent 7 years.



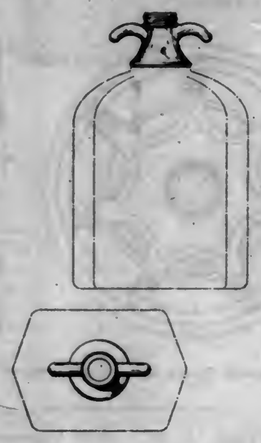
The ornamental design for a scale housing, as shown and described.

87,986. SERVING TRAY OR SIMILAR ARTICLE. PAUL B. VALLÉ, New Haven, Conn., assignor to The Connecticut Hard Rubber Company, New Haven, Conn., a Corporation of Connecticut. Filed July 14, 1932. Serial No. 44,321. Term of patent 7 years.



The ornamental design for a serving tray, or similar article substantially as shown and described.

87,987. JUG OR SIMILAR ARTICLE. HENRY S. WADE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 20, 1932. Serial No. 44,643. Term of patent 14 years.



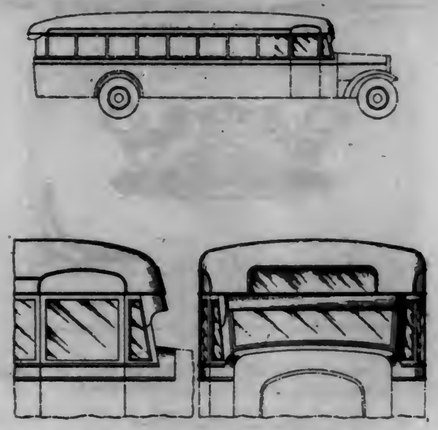
The ornamental design for a jug substantially as shown and described.

87,988. CORD TESTING MACHINE. ALPHONSE D. WEIGOLT, Cleveland, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 6, 1932. Serial No. 44,271. Term of patent 14 years.



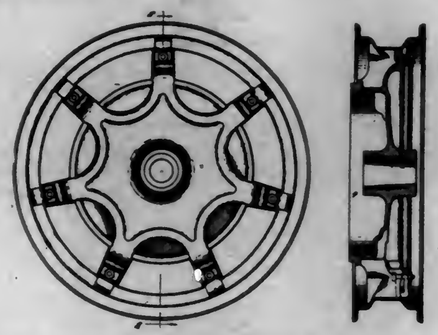
The ornamental design for a cord testing machine, as shown.

87,989. AUTOMOBILE. MAX L. WIENER, Newark, N. J. Filed Aug. 31, 1932. Serial No. 44,730. Term of patent 7 years.



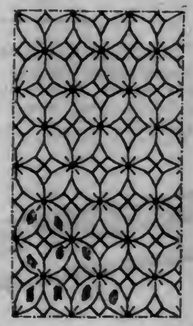
The ornamental design for an automobile, as shown.

87,990. VEHICLE WHEEL. DONALD E. WILLARD, Danville, Ill. Filed Aug. 8, 1932. Serial No. 44,555. Term of patent 14 years.



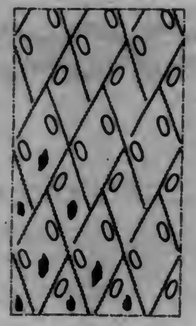
The ornamental design for a vehicle wheel as shown.

87,991. TEXTILE FABRIC. JEAN AEMISEGGER, Bergenfield, N. J. Filed Sept. 15, 1932. Serial No. 44,842. Term of patent 3½ years.



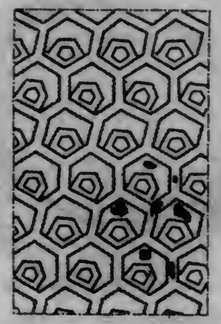
The ornamental design for textile fabric substantially as shown.

87,992. TEXTILE FABRIC. JEAN AEMISEGGER, Bergenfield, N. J. Filed Sept. 15, 1932. Serial No. 44,843. Term of patent 3½ years.



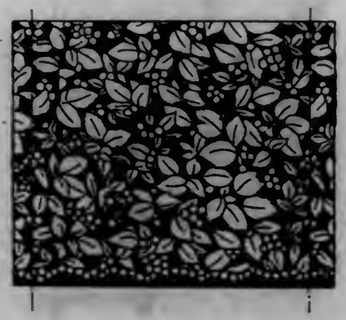
The ornamental design for textile fabric substantially as shown.

87,993. TEXTILE FABRIC. JEAN AEMISEGGER, Bergenfield, N. J. Filed Sept. 15, 1932. Serial No. 44,844. Term of patent 3½ years.



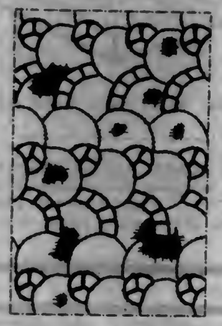
The ornamental design for textile fabric substantially as shown.

87,994. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,861. Term of patent 3½ years.



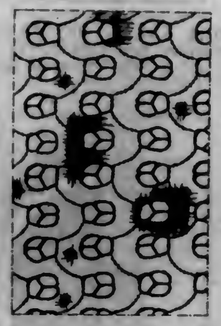
The ornamental design for a textile fabric, substantially as shown and described.

87,995. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,853. Term of patent 3½ years.



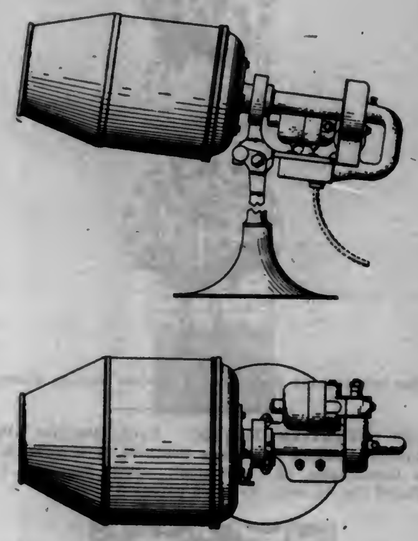
The ornamental design for textile fabric substantially as shown.

87,996. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,856. Term of patent 3½ years.



The ornamental design for textile fabric substantially as shown.

87,997. NUT TOASTER. WILLIAM W. KELLY, Cleveland, Ohio, assignor to The Nut Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 16, 1932. Serial No. 44,622. Term of patent 7 years.



The ornamental design for a nut toaster substantially as shown.

87,998. METALLIC PATTERN STRIP FOR SPECTACLE FRAMES OR SIMILAR ARTICLES. HENRY J. LANGKNECHT, Rochester, N. Y., assignor to Shuron Optical Company, Inc., Geneva, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 43,332. Term of patent 14 years.



The ornamental design for a metallic pattern strip for spectacle frames or similar articles substantially as shown and described.

87,999. GARDEN HAT. EDNA HELLER MARSHALL, Jerseyville, Ill. Filed May 16, 1932. Serial No. 43,820. Term of patent 3½ years.



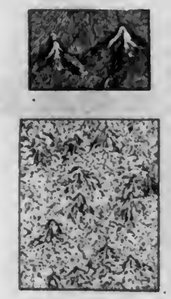
The ornamental design for a garden hat, as shown.

88,000. TEXTILE FABRIC. PAUL MOUTON, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,864. Term of patent 3½ years.



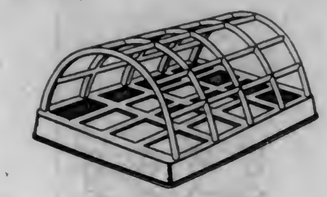
The ornamental design for a textile fabric, substantially as shown and described.

88,001. PANEL. FRANK BRIAN ROOT, East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 16, 1929. Serial No. 30,501. Term of patent 14 years.



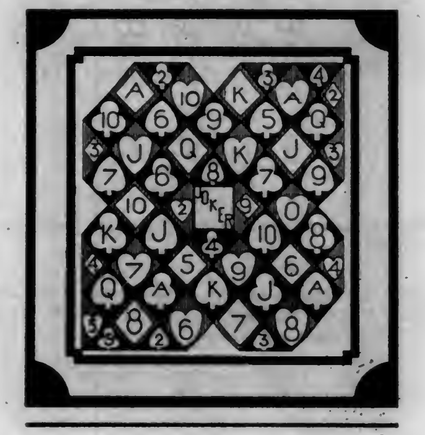
The ornamental design for a panel substantially as shown.

88,002. FLOWER HOLDER. WILLIAM R. STUCK, Los Angeles, Calif. Filed Feb. 20, 1932. Serial No. 42,945. Term of patent 14 years.



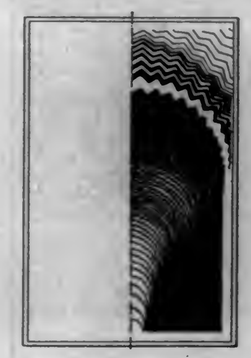
The ornamental design for a flower holder, as shown.

88,003. GAME BOARD. JAMES L. SWINDERMAN, Philadelphia, Pa., assignor of one-half to Louis F. Vogt, Philadelphia, Pa. Filed July 22, 1932. Serial No. 44,414. Term of patent 7 years.



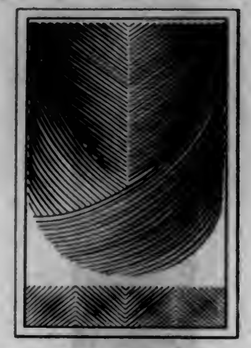
The ornamental design for a game board as shown.

88,004. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,875. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,005. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,876. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,006. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,879. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,007. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,880. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,008. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,881. Term of patent 3½ years.



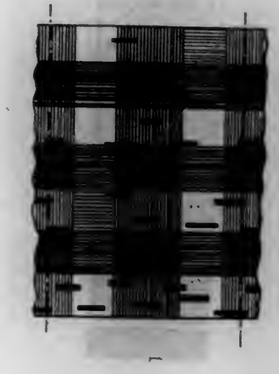
The ornamental design for a textile fabric or similar article as shown and described.

88,009. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,882. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,010. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,885. Term of patent 3½ years.



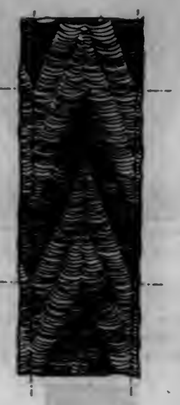
The ornamental design for a textile fabric or similar article as shown and described.

88,011. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,886. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,012. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,887. Term of patent 3½ years.



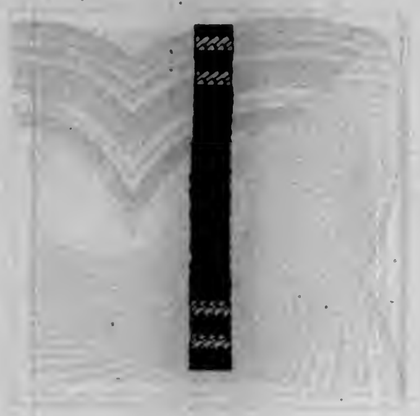
The ornamental design for a textile fabric or similar article as shown and described.

88,013. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,888. Term of patent 3½ years.



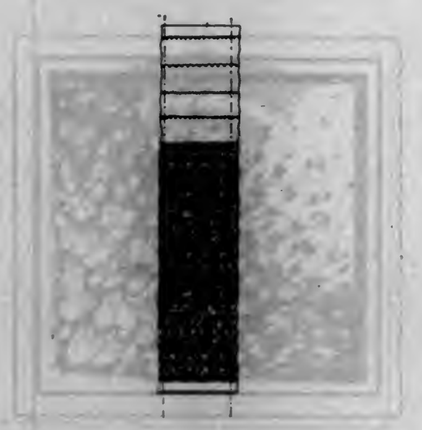
The ornamental design for a textile fabric or similar article as shown and described.

88,014. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,890. Term of patent 3½ years.



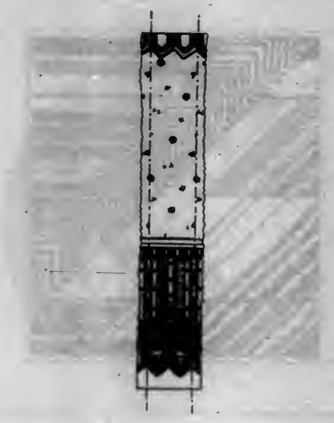
The ornamental design for a textile fabric or similar article as shown.

88,015. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,891. Term of patent 3½ years.



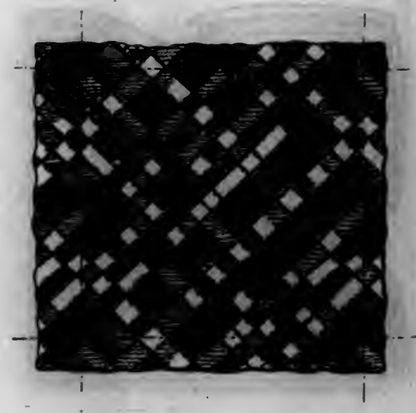
The ornamental design for a textile fabric or similar article as shown and described.

88,016. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,892. Term of patent 3½ years.



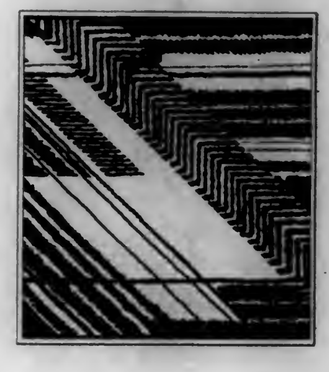
The ornamental design for a textile fabric or similar article as shown and described.

88,017. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,896. Term of patent 3½ years.



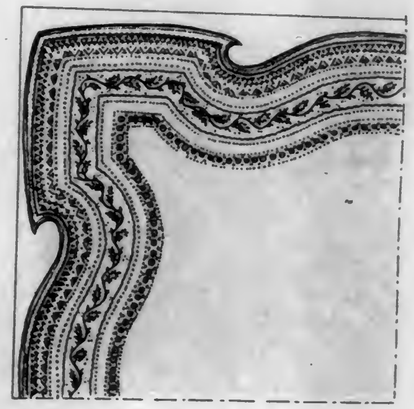
The ornamental design for a textile fabric or similar article as shown and described.

88,018. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,897. Term of patent 3½ years.



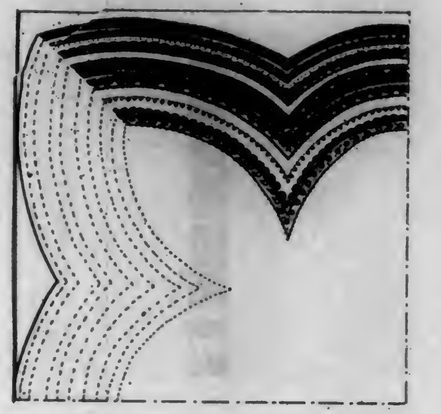
The ornamental design for a textile fabric or similar article as shown.

88,019. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,898. Term of patent 3½ years.



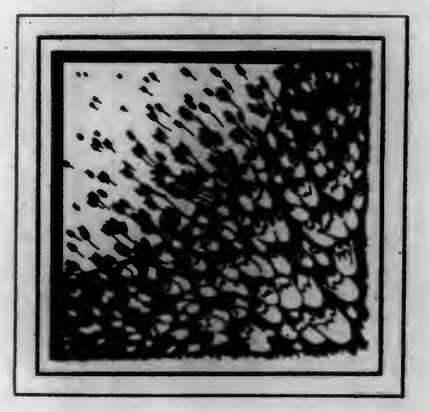
The ornamental design for a textile fabric or similar article as shown and described.

88,020. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,899. Term of patent 3½ years.



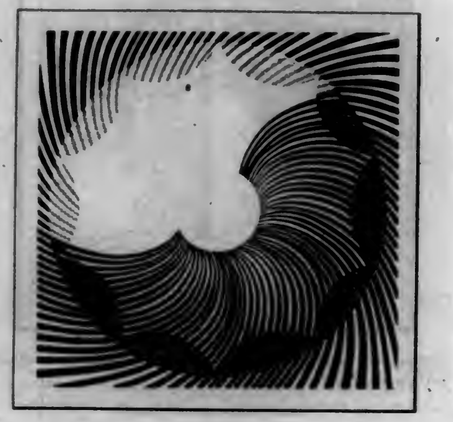
The ornamental design for a textile fabric or similar article as shown and described.

88,021. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,900. Term of patent 3½ years.



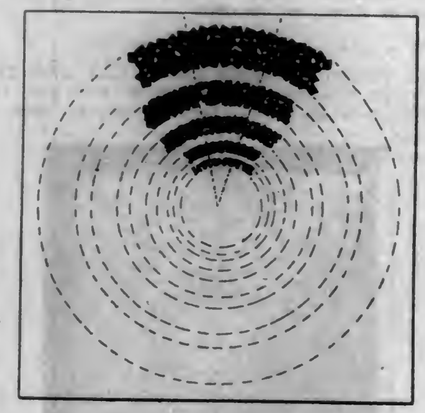
The ornamental design for a textile fabric or similar article as shown.

88,022. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,901. Term of patent 3½ years.



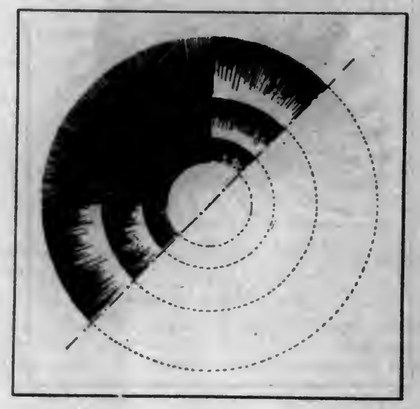
The ornamental design for a textile fabric or similar article as shown and described.

88,023. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,903. Term of patent 3½ years.



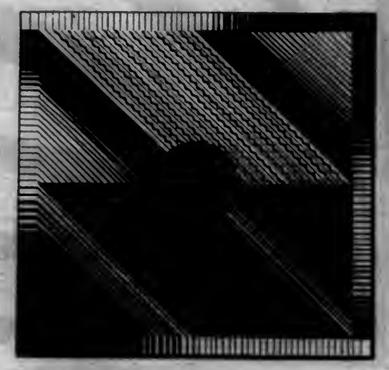
The ornamental design for a textile fabric or similar article as shown and described.

88,024. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,904. Term of patent 3½ years.



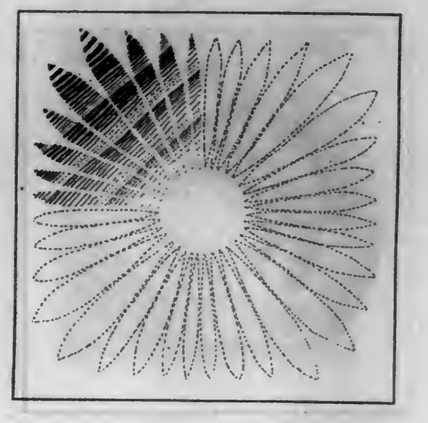
The ornamental design for a textile fabric or similar article as shown and described.

88,025. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,905. Term of patent 3½ years.



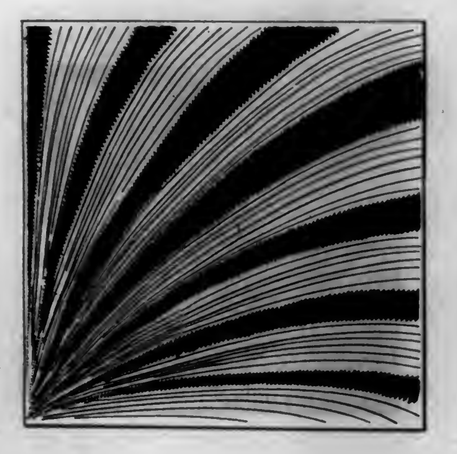
The ornamental design for a textile fabric or similar article as shown.

88,026. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,906. Term of patent 3½ years.



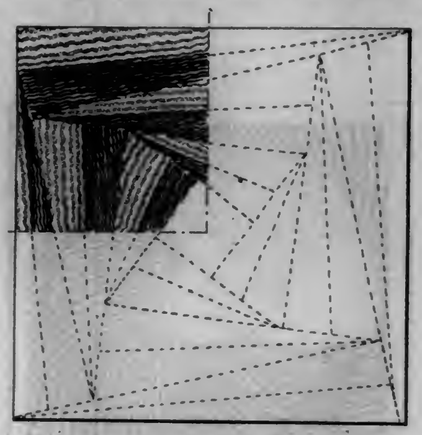
The ornamental design for a textile fabric or similar article as shown and described.

88,027. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,907. Term of patent 3½ years.



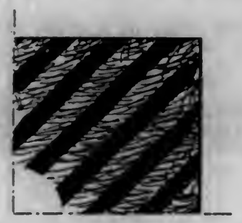
The ornamental design for a textile fabric or similar article as shown.

88,028. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,908. Term of patent 3½ years.



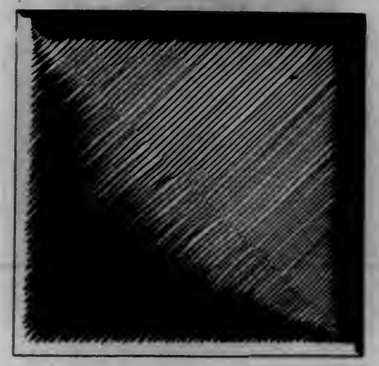
The ornamental design for a textile fabric or similar article as shown and described.

88,029. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,909. Term of patent 3½ years.



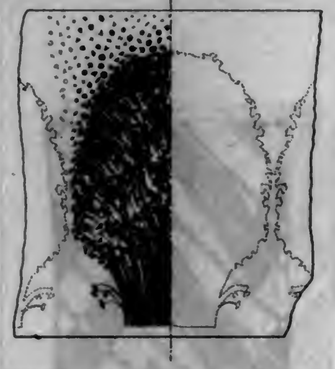
The ornamental design for a textile fabric or similar article as shown and described.

88,030. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,910. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,031. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,913. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,032. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,915. Term of patent 3½ years.



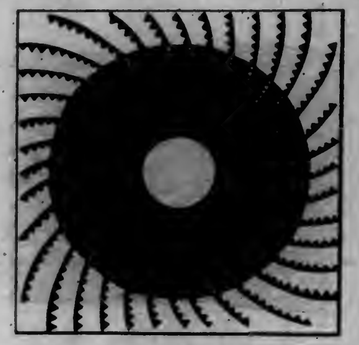
The ornamental design for a textile fabric or similar article as shown and described.

88,033. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,916. Term of patent 3½ years.



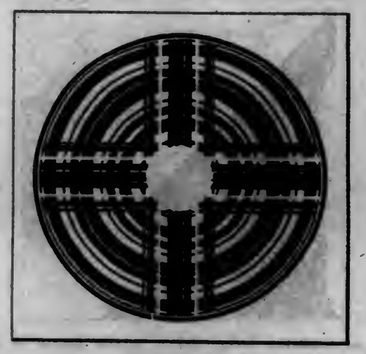
The ornamental design for a textile fabric or similar article as shown and described.

88,034. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,917. Term of patent 3½ years.



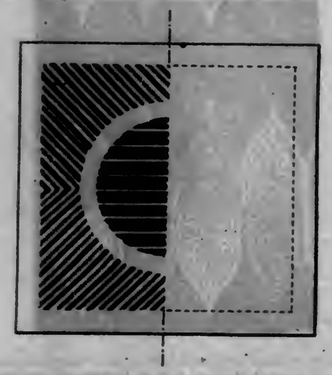
The ornamental design for a textile fabric or similar article as shown.

88,035. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,918. Term of patent 3½ years.



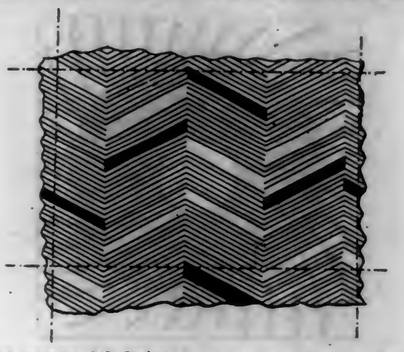
The ornamental design for a textile fabric or similar article as shown.

88,036. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,919. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,037. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,921. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,038. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,922. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,039. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,923. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,040. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,924. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,041. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,925. Term of patent 3½ years.



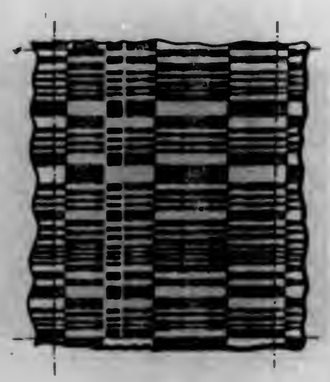
The ornamental design for a textile fabric or similar article as shown and described.

88,042. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,926. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,043. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,928. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,044. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,929. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,045. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,930. Term of patent 3½ years.



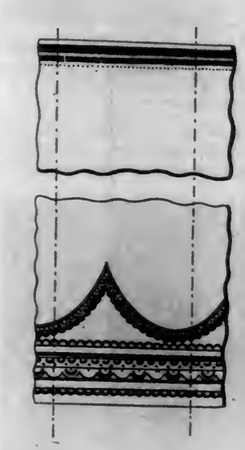
The ornamental design for a textile fabric or similar article as shown and described.

88,046. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,932. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,047. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,934. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,048. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,935. Term of patent 3½ years.



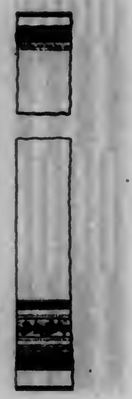
The ornamental design for a textile fabric or similar article as shown and described.

88,049. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,936. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,050. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,939. Term of patent 3½ years.



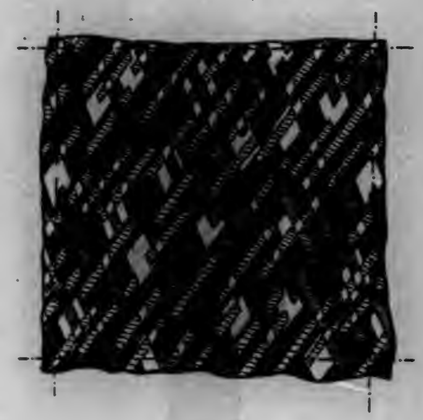
The ornamental design for a textile fabric or similar article as shown and described.

88,051. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,941. Term of patent 3½ years.



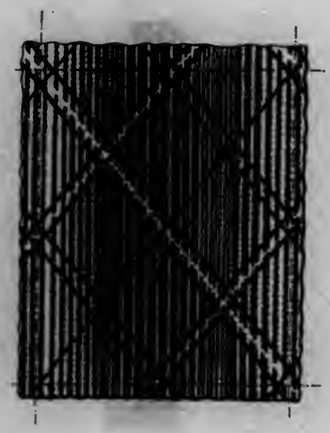
The ornamental design for a textile fabric or similar article as shown and described.

88,052. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932, Serial No. 44,942. Term of patent 3½ years.



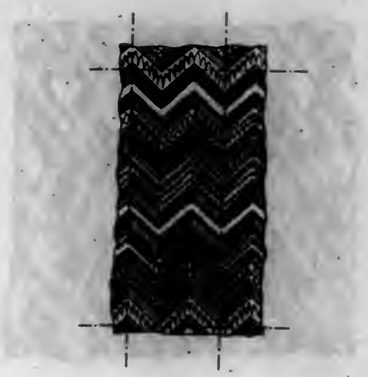
The ornamental design for a textile fabric or similar article as shown and described.

88,053. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,948. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,054. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,948. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,055. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,949. Term of patent 3½ years.



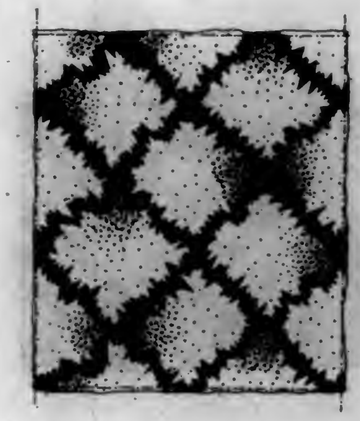
The ornamental design for a textile fabric or similar article as shown.

88,056. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,950. Term of patent 3½ years.



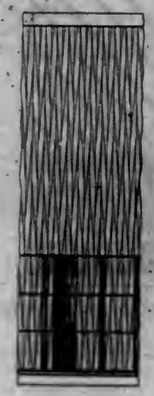
The ornamental design for a textile fabric or similar article as shown.

88,057. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,953. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,058. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,954. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,059. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,955. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,060. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,956. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,061. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,957. Term of patent 3½ years.



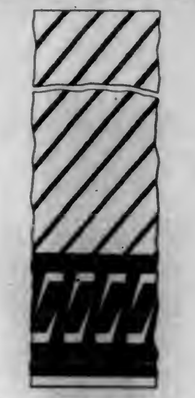
The ornamental design for a textile fabric or similar article as shown and described.

88,062. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,958. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,063. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,959. Term of patent 3½ years.

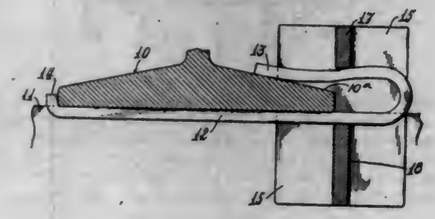


The ornamental design for a textile fabric or similar article as shown.

PATENTS

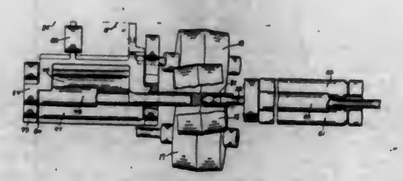
GRANTED OCTOBER 18, 1932

1,882,654. RAIL ANCHOR. ROLANDIS A. BLAIR, Columbia City, Ind. Filed Sept. 28, 1929, Serial No. 395,903. Renewed Jan. 21, 1932. 12 Claims. (Cl. 238—329.)



1. In a rail anchor, the combination of a member comprising two jaws in spaced relation to each other for receiving the flange of a rail therebetween, means for holding said jaws from backing transversely of the rail out of engagement therewith, and an abutment member comprising a plate having an opening therein through which said jaws extend for holding the jaws in gripping relationship on said rail flange, and a second plate connected with said first named plate and extending in opposite directions therefrom opposite the edges of said jaws.

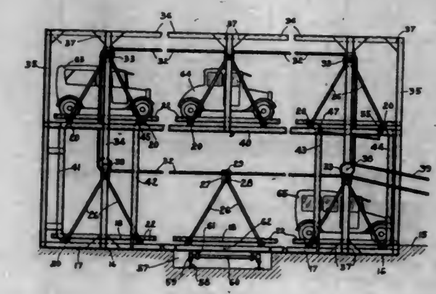
1,882,655. MACHINE FOR ROLLING OR PIERCING BILLETS. WALTER R. CLARK, Bridgeport, Conn. Filed Sept. 27, 1928. Serial No. 308,737. 9 Claims. (Cl. 80—13.)



9. In a cross rolling mill for reducing or piercing round, rod-like billets, three or more power-driven working rolls equally spaced radially and circumferentially with respect to the billet and arranged to form a working pass, said rolls rotating said billets about their axes, and freely rotatable guiding means for maintaining the billets in alignment with said pass, the rotary movement of said billets producing rotary movement of the guiding means upon contact of the billets therewith, said guiding means comprising a plurality of freely rotatable rolls between which the billets pass, the axes of said rolls being subetantially parallel to the billet axes.

1,882,656. AUTOMOBILE STORAGE DEVICE. JOSEPH F. CREEDON, Omaha, Nebr. Filed Feb. 10, 1930. Serial No. 427,410. 7 Claims. (Cl. 214—16.1.)

1. In an automobile storing device, a plurality of cradles for receiving the vehicles, said cradles having wheels thereon, upper and lower tracks for receiving said wheels, inner and outer vertical channel guides connecting the upper and lower tracks for also receiving said wheels, said guides having upper and lower curved portions and mov-

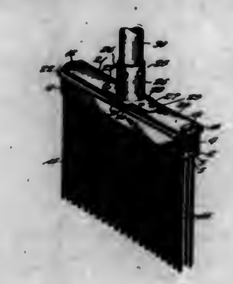


able rail plates forming part of the upper rails at the portion of the inner guide, and means for moving said cradles.

1,882,657. PROCESS FOR THE RECOVERY OF COCOS FIBERS. EGON ELÖD, Karlsruhe, Germany. Filed Mar. 25, 1929, Serial No. 349,909, and in Germany Mar. 27, 1928. 7 Claims. (Cl. 92—14.)

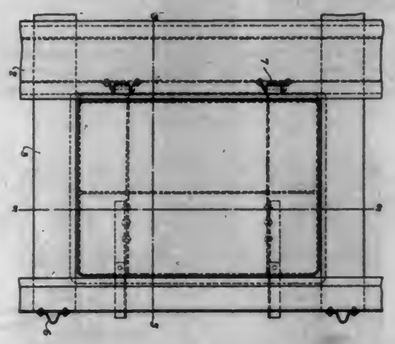
1. The process of preparing soft, supple, spinnable cocoanut fibers which includes subjecting hard, raw fibers freed from bedding substances to the action of a weak alkaline solution maintained at a temperature above 100° C. in a closed container, for a period of less than one hour.

1,882,658. METAL BROOM OR BRUSH. CHARLES HECTOR FELTHAM. Providence, R. I. Filed June 3, 1930. Serial No. 459,039. 9 Claims. (Cl. 15—200.)



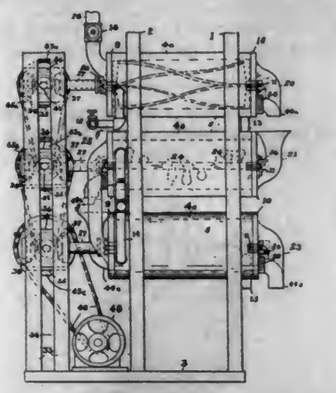
1. An implement of the type specified comprising a head having a top-plate and bottom-plate disposed in opposite spaced relationship and provided with alining apertures, hairpin-shaped splints arranged with their legs extending through the apertures in both plates and projecting from the head in the form of bristles, a member overlying the top-plate and engaging against the looped ends of the splints to secure them in place in the head, and means on said member and the head slidably engageable to secure the parts in permanent connection.

1,882,659. RAILWAY CAR CONSTRUCTION. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 2, 1929. Serial No. 336,939. 18 Claims. (Cl. 105—280.)



1. In a railway car comprising frame members surrounding a door opening, a cast metal door having a flat main upper surface extending between and flush with the upper surfaces of the frame members, and a substantially horizontal shelf partially surrounding the door having an upper surface positioned below the first mentioned surface and a flange adjacent the margin of the main upper surface extending below the shelf.

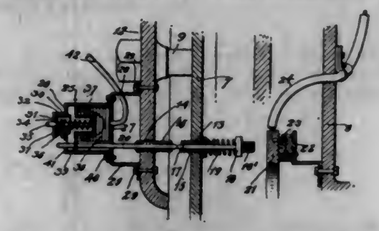
1,882,660. PROCESS FOR THE CONTINUOUS MANUFACTURE OF ICE CREAM AND SIMILAR FROZEN PRODUCTS. JOHN J. GLAUSER, Pittsburgh, Pa. Filed Feb. 13, 1929. Serial No. 339,573. 4 Claims. (Cl. 62—174.)



1. The process of manufacturing ice cream and the like which consists in causing a continuous flow of the mass of material, agitating the mass during the first portion of said flow at a predetermined rate while subjecting the same to refrigeration, and agitating said material thereafter at a higher rate but below the butter forming rate while still subjecting it to refrigeration.

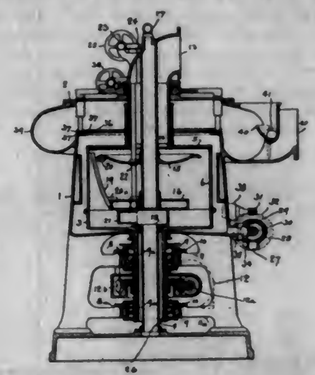
1,882,661. TIRE PRESSURE ALARM OPERATING MEANS. GEORGE G. GUTHRIE, Tulsa, Okla. Filed Aug. 6, 1930. Serial No. 473,471. 4 Claims. (Cl. 200—58.)

4. In a device of the class described, a casing having a screw-receiving opening in one end and alined pin-guiding openings in its opposite ends, a screw threaded in said screw-receiving opening, said screw having a recess in its inner end and an opening from its outer end to said recess, a tubular metal bellows secured at one end within said casing and having a free end presented toward said screw, said free bellows end having a recess opposed to the recess



of said screw, a coiled compression spring received in said recesses, a bellows guiding pin within said spring secured to the bellows and passing slidably through said opening of the screw, a pin passing slidably through the aforesaid alined pin-guiding openings, and a connection between this pin and said free end of the bellows.

1,882,662. CENTRIFUGAL PAPERSTOCK SCREEN. ANTON J. HAUG, Nashua, N. H. Filed June 10, 1929. Serial No. 369,618. 10 Claims. (Cl. 92—34.)



1. In a separating machine for paperstock and similar material, the combination with a container, of means to introduce liquid stock thereinto, means to remove the relatively coarse material from said stock, means to separate the relatively heavy impurities from the fine, or screened, stock, and means to withdraw the relatively light, screened fine stock separately from the container.

1,882,663. ROTATING FAN. EARL S. HEMMERLY, Allentown, Pa. Filed June 30, 1930. Serial No. 464,776. 4 Claims. (Cl. 230—254.)

1. In a device of the character described, a base, an insulating block secured within said base, a second insulating block secured upon the upper end of said base, a hollow support adapted to revolve upon the base, an insulating block secured within said support, a bolt secured in the first named insulating block and passing through the second and third named insulating blocks, a tubular bracket secured upon the top of the third named insulating block, nuts run upon the both ends of said bolt to hold the base and support together and form an electric conductor from the bracket to a return conductor, a rotary contactor secured upon the top of the first named insulating block, a spring pressed brush carried by the third named insulating block, said brush adapted to contact with and travel upon the upper surface of the rotary contactor for

permitting the passage of a current from a feed wire to the motor, a ball bearing mounted on the second and the third insulating blocks around the bolt, a frame carried

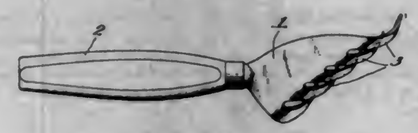


by the support, an electric fan carried by said frame, a deflector hinged to the frame opposite the fan, and means for holding said deflector in various adjustments.

1,882,664. COMPOUND AND BASE FOR USE IN THE MANUFACTURE OF GREASES. ALEXANDER HORWITZ, New York, N. Y. Filed Mar. 27, 1929. Serial No. 350,444. 4 Claims. (Cl. 87—9.)

1. A grease base of the class described consisting of approximately five parts of lead oleate, fifteen parts of castor oil, five parts of sperm oil and seventy-five parts of aluminum sterate.

1,882,665. PINEAPPLE SHREDDER. EDITH K. INNES, Zion, Ill. Filed Feb. 11, 1929. Serial No. 338,903. 3 Claims. (Cl. 146—203.)



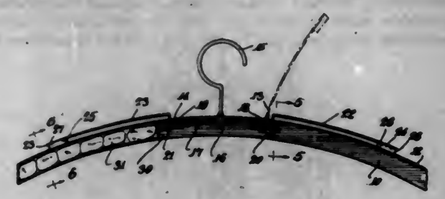
1. A pineapple shredder, comprising a handle, a shank connected to said handle, the forwardly extending portion of said shank being bent at an oblique angle to the longitudinal center thereof, said forwardly extending portion being provided with a plurality of downwardly and inwardly extending tines, said tines being adapted to separate the fibres and to extract the pulp from the pineapple.

1,882,666. METAL BAND OR LINKAGE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Aug. 4, 1931. Serial No. 555,002. 6 Claims. (Cl. 59—80.)



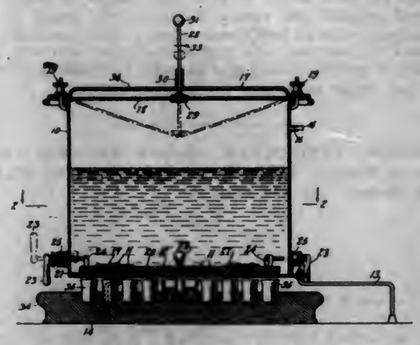
1. A linkage of the type specified comprising substantially box-like link-elements having upstanding sides and lugs at their ends, and connecting-links in looped engagement with the lugs on adjacent box-links and held in connection therewith by the sides of the box-links bent inwardly to form arched portions meeting in a medial plane with their ends abutting the top of the lugs.

1,882,667. GARMENT HANGER. VICTOR J. MAREK, Elmhurst, N. Y. Filed Nov. 28, 1930. Serial No. 498,525. 1 Claim. (Cl. 223—64.)



In a garment hanger, having a curved body bar substantially U-shaped in cross-section and provided with openings in its upper bar, a hanger entering at its lower end between the shanks of the U-bar, a head formed at the lower end of said hanger, a leaf-spring held to said hanger intermediate its ends by said head, plates on said spring near its ends, a pair of clamp members, angularly bent inner ends for said members passing through the openings in said upper bar, pins between the shanks of the U-member to which said angularly bent ends of the clamp members are pivoted for swinging either member into a position angular to the body during the placing of a garment thereon, cushions at the outer ends of said members, teeth for holding said cushions to the underside of said members and tongues on said members engaging said cushions.

1,882,668. FILLING DEVICE. JUNIUS D. MCCABE, Coraopolis, Pa. Filed Aug. 13, 1930. Serial No. 475,054. 4 Claims. (Cl. 226—125.)

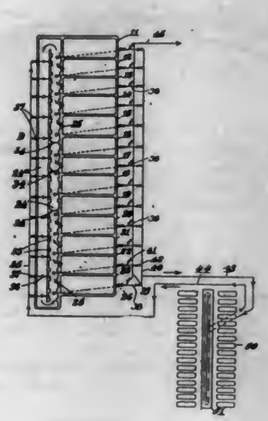


1. A filling device comprising a liquid tank having discharge apertures in the bottom, a seal element for closing said apertures to prevent the discharge of liquid therefrom, means to releasably hold said element in aperture closing position, means to move said element to the aperture opening position when released, means including an elastic diaphragm for excluding air from the tank above the liquid therein, said diaphragm also being operable to force liquid from the tank through said apertures when said element is in the opened position, and means to vary the movement of the diaphragm to regulate the outflow of liquid from the tank through said apertures.

1,882,669. LIQUID CIRCULATING PLANT. ALEXANDER GRANT MCGREGOR, London, England. Original application filed May 4, 1928, Serial No. 275,081. Divided and this application filed Feb. 21, 1930. Serial No. 430,388. 5 Claims. (Cl. 204—5.)

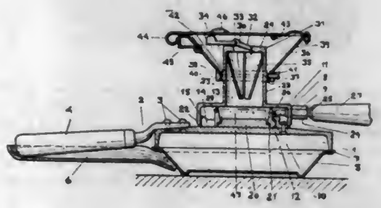
1. In an electrolytic plant, the combination of a battery of electrolytic cells, a ring-manifold having inlet connections and outlet connections to the said cells in parallel,

means to induce circulation between the cells and the manifold through said connections, means to interrupt the manifold at will at any one of a plurality of points situated respectively between adjacent cells, a second ring-conduit alongside said manifold, an inlet thereto and an outlet therefrom close together in the conduit but separated by



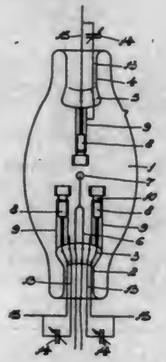
a break in the continuity of the conduit, a plurality of passages for fluid and control means therefor between the second conduit and various points in the length of the manifold to act as inlets and outlets to said manifold, and means to interrupt said second conduit at will at a plurality of points between said passages to divide it into inlet and outlet sections.

1,882,670. FRYING PAN. MAGNUS MELLGREN, Gottenborg, Sweden. Filed Aug. 25, 1930. Serial No. 477,735. 7 Claims. (Cl. 126—43.)



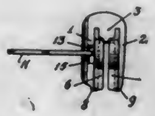
1. In a frying pan, in combination, a pan of rolled metal, a housing for a heat evolving cartridge, said housing comprising a sleeve provided with a loosely fitted copper disk in direct contact with the bottom of the pan proper so as to make a protecting partition bottom between the pan and the heat evolving cartridge, said housing and said pan provided with cooperating easy detachable joints so that said housing with sufficient play can be removably attached to the pan, said joints also concealing said copper disk with requisite play within said housing, a casing provided with means to be easily attached to said pan covering said cartridge housing, said means designed so as to allow a sufficient play when the parts are heated, and means to reach the cartridge within said housing with an ignition means, whereby provisions are present to prevent glowing substances to be thrown out from said casing.

1,882,671. ELECTRIC DISCHARGE TUBE. JOHANNES GIJSBERTUS WILHELM MULDER, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampen-Fabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Dec. 11, 1928, Serial No. 325,220, and in the Netherlands Feb. 11, 1928. 5 Claims. (Cl. 250—27.5.)



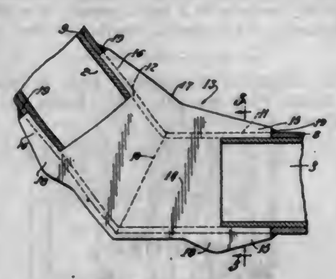
1. An electric discharge tube comprising only two stems, an incandescible cathode and at least three anodes, all said electrodes being mounted on said two stems, and screens between the anodes, each of said screens consisting of a cylindrical metal hood surrounding each of the anodes.

1,882,672. SLIDING CLASP FASTENING. VOJTĚCH PUC, Prague-Vinohrady, Czechoslovakia. Filed Apr. 11, 1931, Serial No. 529,399, and in Czechoslovakia Apr. 12, 1930. 7 Claims. (Cl. 24—205.)



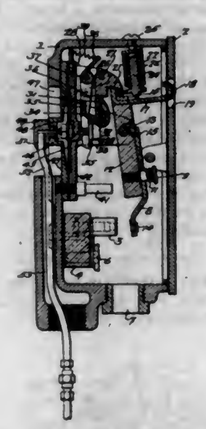
1. In a sliding clasp fastening having inter-locking elements along the edges of material to be fastened, a slider clasp for opening and closing the inter-locking elements, comprising a stiffening element constituting the body part of the clasp, cam means separate from said stiffening element, comprising a rigid inner cam plate and an outer plate separate from each other, the latter being of a material of low tensile strength and in appearance harmonious with the fastened material, connecting means comprising elongated limbs integral with the body part and extending along the entire length of the cam plates, whereby said cam plates are secured to said stiffening element, and a draw member for sliding said clasp bodily.

1,882,673. TUBE END CONNECTION. KENNETH M. RONAN, Wayne, Mich., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1930. Serial No. 481,636. 5 Claims. (Cl. 287—54.)



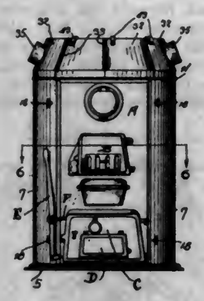
1. A connection of the kind described embodying therein coacting tubes abutting and welded in end to end engagement and having a plurality of longitudinally extending aligned slots therein and a member in said tube ends having portions engaged and welded in the aligned slots in both tube ends.

1,882,674. ELECTRIC SWITCH. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 24, 1930. Serial No. 470,480. 1 Claim. (Cl. 200—83.)



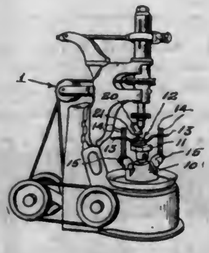
In a fluid-actuated electric switch, the combination with a fluid-actuated member, of switch elements relatively movable into alternative relative positions in which an electric circuit is closed and opened respectively, a system of latch levers in series arrangement operatively connecting said fluid-actuated member with the switch elements for normally retaining the elements in one of said alternative positions, and a spring tending to bring said elements into the other of said alternative positions, said latch system comprising a pivotally mounted bell crank lever one arm of which is adapted to releasably interlock with one of said switch elements, a second pivoted lever having a recess for reception of another arm of said first-named lever, and a third pivoted lever constituting a detent for said recessed lever and retractible from an operative position by movement of said fluid-actuated member under a relatively light fluid pressure.

1,882,675. SECTIONAL HOT AIR FURNACE CASING. WILLIAM M. SMITH, Wilkinsburg, Pa. Filed Sept. 5, 1930. Serial No. 479,999. 4 Claims. (Cl. 126—114.)



1. A sectional furnace casing comprising a dome and side sections, a vertical T-iron between adjacent edges of the side sections, the edges of the side sections being reversely bent for engagement with the T-iron, alternate edges of the side sections carrying clamping flanges on the reversely bent portion thereof for interlocking engagement with the T-irons and removable fastening devices connecting the other edges of the side sections to the T-irons.

1,882,676. DRIVING FINGER FOR SURFACING MACHINES. HAROLD C. ST. DENNIS, Syracuse, N. Y. Filed May 30, 1930. Serial No. 457,648. 4 Claims. (Cl. 51—131.)



1. A torque attachment driving finger for a lens grinding machine including a body portion with a cut-out section in a face thereof; a replaceable bearing member inserted in said cut-out section to provide a wearing face for the driving finger; and a sleeve formed to fit over a part of the driving finger and bearing member for securing the bearing member to the body portion; said bearing member being constructed of soft material so that the grinding machine will operate with less noise than when operating with an unsurfaced driving finger.

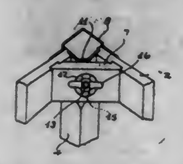
1,882,677. BANDAGE. ALEXANDER H. STRAUS, Woodmere, N. Y. Filed Dec. 19, 1929. Serial No. 415,216. 1 Claim. (Cl. 128—268.)



A combination bandage and dressing comprising an elongated absorbent paper strip, a strip of open-mesh textile gauze overlaying one face of the absorbent strip and

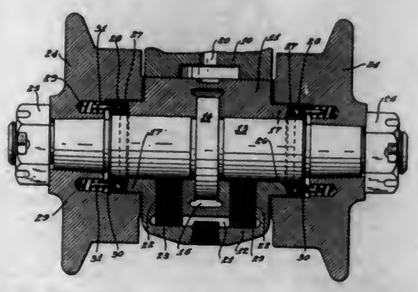
extending co-extensively therewith for the full length of said absorbent strip, a water-repellant paper covering of less length than the absorbent strip extending over the other face of said absorbent strip and terminating short of one end thereof whereby the absorbent strip is provided at one of its ends with a fully absorbent dressing portion over which the water-repellant covering extends only when the bandage is in use, a flexible tying member and an anchorage for said tying member, said anchorage being located adjacent one end of the bandage.

1,882,678. TABLE. MARTIN THUM, Rochester, N. Y. Filed Feb. 20, 1930. Serial No. 430,055. 1 Claim. (Cl. 45—48.)



In a table, a top, a pair of side rails carried by the top and arranged at an angle to each other and having adjacent end faces spaced apart and converging upwardly at a corner of the table, a leg having inner side faces converging upwardly and fitted against the converging end faces of the rails, horizontally operating means for drawing said leg inwardly to clamp the converging faces thereof against the converging end faces of the rails whereby the top of the table will be prevented from creeping downwardly, and a strap connecting the outer faces of the side rails and arranged exteriorly of said leg.

1,882,679. SEAL. ROLLIN H. WHITE, Cleveland Heights, Ohio. Filed May 29, 1930. Serial No. 457,320. 2 Claims. (Cl. 286—7.)

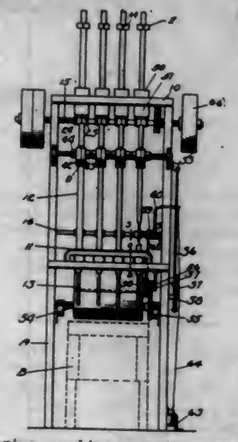


2. In a tractor supporting structure having a fixed shaft carrying bearing and a roller on an end of the shaft and telescoping the adjacent end of the bearing, a sealing device at the end of the bearing and between the roller and the shaft comprising a triangular metal disc surrounding the shaft within the roller and having one side engaging the end of the bearing, said disc being formed of wear resisting material, a gasket telescoping the apex of the disc, a retainer engaging the gasket, and a plurality of coil springs under compression engaging the retainer and spreading the gasket to seal the space between the roller and the shaft.

1,882,680. SIZING FIBROUS MATERIALS. BRUNO WIEGER, Brunswick, Germany, assignor to Becker & Co. (1924) Limited, London, England. Filed Aug. 24, 1929, Serial No. 388,275, and in Germany May 15, 1929. 7 Claims. (Cl. 134—21.)

1. The improvement in the production of a resin size, free from any substantial quantity of saponified matter and from which the resin may be precipitated by the addition of a small amount of alum, consisting in heating the resin to a temperature in the region of its melting point and subjecting the resin while in the region of its melting point to a short intensive uniform mechanical agitation in the presence of a small amount of a dispersing agent consisting of an aqueous alkaline solution of casein.

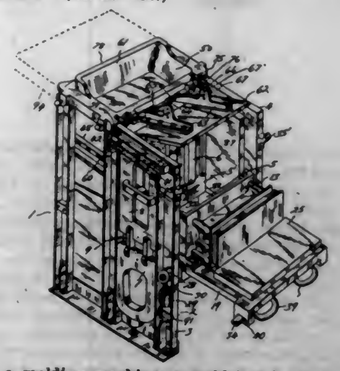
1,882,681. TAMPING MACHINE. JOHN D. ABRAM, Detroit, Mich. Filed Mar. 21, 1927. Serial No. 177,135. 12 Claims. (Cl. 25—41.)



1. In a tamping machine, a reciprocable tamping member, a lever engageable therewith, a shaft, a housing mounted thereon and spaced resilient members carried by said housing for selectively exerting pressure upon opposite faces of said lever for yieldably urging said lever into or out of engagement with said tamping member.

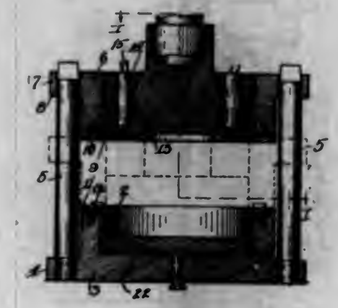
12. In a tamping machine, the combination with a frame, a vertically reciprocable tamping member, means for effecting a reciprocation of said tamping member, and cooperating stops on said frame and tamping member for limiting movement of said tamping member in one direction, of a rubber snubber interposed between said stops for absorbing the shocks incident to limiting the said movement of the tamping member.

1,882,682. MOLDING MACHINE. JOHN D. ABRAM, Detroit, Mich. Filed Nov. 10, 1927. Serial No. 232,347. 22 Claims. (Cl. 25—41.)



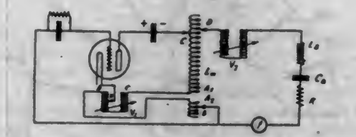
6. In a molding machine, a mold box having back and bottom plates, and means for effecting a slight initial forward and vertical movement of said bottom plate relative to said back plate, said means also effecting a forward and vertical movement of the molded material.

1,882,683. METHOD OF DIE FORMING ARTICLES FROM SULPHURIZED PAPER BOARD. ALLEN ABRAMS, Wausau, Wis., assignor to Marathon Paper Mills Company, Rothschild, Wis., a Corporation of Wisconsin. Filed June 3, 1929. Serial No. 368,001. 5 Claims. (Cl. 18—56.)



5. A method of die forming articles from sulphurized board and the like, which comprises moistening the board and then forming and drawing the same between heated male and female die members to produce a relatively steep marginal flange on the article being formed, maintaining the surfaces of said die members at substantially the melting point of sulphur, and completing said forming and drawing operation before the sulphur of said sulphurized board has completely melted.

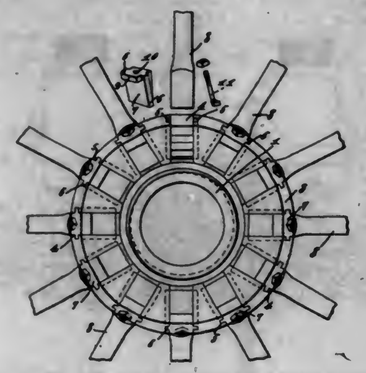
1,882,684. OSCILLATION GENERATOR. JOSEPH PAUL EDOUARD ACHARD, Paris, France, assignor to Societe Francaise Radio Electrique, Paris, France, a Joint-Stock Company of France. Filed Nov. 19, 1927, Serial No. 234,342, and in France Nov. 23, 1926. 7 Claims. (Cl. 250—36.)



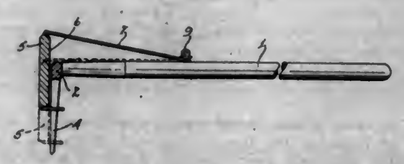
1. An oscillation generator circuit comprising a vacuum tube, inductively coupled inductances inserted in the input and output circuits of said vacuum tube, a variometer connected between said inductances, the filament of said vacuum tube being connected to an intermediate point of the stator winding of said variometer, a utilization circuit including a second variometer connected to each of said first mentioned inductances, and means for simultaneously adjusting both variometers in a predetermined manner to vary the generating wave-length.

1,882,685. VEHICLE WHEEL. MATHIAS J. ADAMS, Turkey River, Iowa. Filed Oct. 19, 1931. Serial No. 569,783. 1 Claim. (Cl. 301—81.)

In a vehicle wheel, a hub, means included in said hub and being provided with sockets having recesses in the sides thereof, spokes having square inner ends received in the sockets, wedges having bores and received in the sockets with their side edges disposed in the recesses, said wedges being engageable with the square inner ends for securing the spokes in the sockets, bolts having right angle bent ends and passing through the bores, said right angle bent ends adapted to be detachably anchored in said means, nuts for the bolts and cooperating therewith for securing the wedge members in operative position, and means formed with the wedges to facilitate the insertion and removal thereof with respect to the sockets.



1,882,686. RAKE CLEANER. MAX J. AHLGRIM, Shelby, Ind. Filed Apr. 12, 1929. Serial No. 354,658. 1 Claim. (Cl. 55—146.)

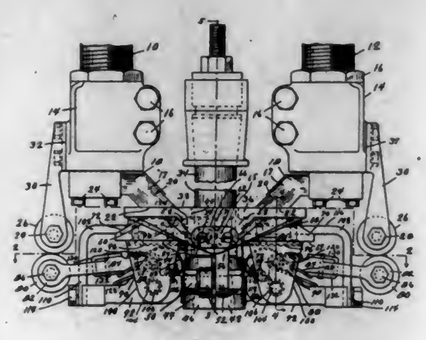


The combination of a rake having a handle and tines, of a cleaner bar consisting of a rectangular strip of wood disposed at the end of the rake in parallelism with the tines, U-shaped guide members secured to the bottom portion of the cleaner bar and arranged to receive certain of the tines for guiding the bar in its movement, a rigid V-shaped connecting member having its extended arms secured to said cleaner bar, said rigid connection having an eye in its apex, and means arranged to pass through the eye and into the handle for securing the rigid connecting member to the handle so as to prevent longitudinal movement but providing for free movement of the cleaner bar in a direction parallel to the tines of the rake.

1,882,687. ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,874. 19 Claims. (Cl. 200—87.)

1. A movable switch member for an electric switch including a vertical lifting rod, a transverse bridging member pivotally supported at the lower end of said rod, a transverse conducting member carried by said rod beneath said bridging member, a conducting bar fixed to and extended beyond the end of said conducting member having an angularly related depending leg, a bracket fixed at one end to said leg and having its free end disposed beneath said conducting member, insulated supporting means rigidly

connecting the free end of said bracket with said conducting member, an arm overlying said bracket and having a pivotal support on the free end of said bracket, said arm



arranged to extend outwardly beyond the vertical leg of said bar, and an arcing member carried by the extended end of said arm.

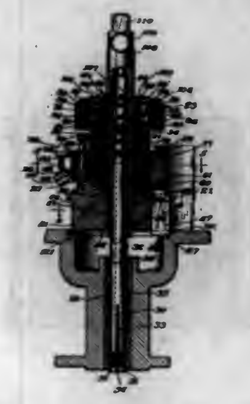
1,882,688. RAZOR HOLDER. SAMUEL T. ALABISO, New York, N. Y. Filed Mar. 24, 1932. Serial No. 600,875. 8 Claims. (Cl. 30—12.)



1. A razor holder, comprising a guard element with a pair of rivets or the like on the back thereof, a handle mounted upon said guard element, a pair of hooks on the edges of the guard element and projecting to the front for engaging side cutouts in a blade so that the blade is pivotally supported, a clamp element hinged on the sides of said hooks and having lugs engaging behind a blade supported upon said hooks, and a spring member mounted on the rear of the guard element and having a finger portion passing through a slot in the guard element and acting as a stop when the blade is raised so as to nearly be removed from said hooks.

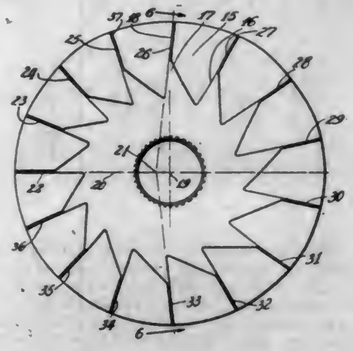
1,882,689. VALVE SEAT BORING TOOL. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Feb. 18, 1929. Serial No. 340,770. 3 Claims. (Cl. 77—2.)

1. In a valve construction tool, the combination of a pilot member adapted to be fixedly secured in a valve stem guide in centered position, with a tool holder rotatably and slidably mounted on the upper end of said pilot, a valve seat tool carried by said holder and having a cutting edge for engagement with a valve seat, a reinforcing fixture having a body adapted to be fixedly secured to the engine block, said fixture being formed with a threaded bore adapted to be brought into substantial alignment with the axis of said pilot, a feeding sleeve having an external threaded surface adapted to be received in said bore, a guide sleeve having a cylindrical bore adapted to rotatably and slidably receive the upper end of the tool holder said guide sleeve having its lower end in engagement with the upper surface of said tool and a universal bearing interposed between said feed sleeve and said guide sleeve whereby said tool holder and cutter may rotate freely with respect to said feed sleeve



and said tool holder and cutter are free to align themselves with respect to the pilot during the rotation of the cutter.

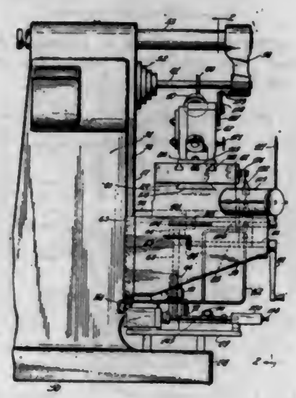
1,882,690. VALVE SEAT REAMER. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Nov. 18, 1929. Serial No. 407,877. 8 Claims. (Cl. 29—103.)



1. A reamer of predetermined degree of angularity, having a multiplicity of teeth lying substantially in a conical surface of said degree, one of said teeth having a primary cutting edge and the other of said teeth having cutting edges increasing by increments in divergence of angularity from said primary cutting edge.

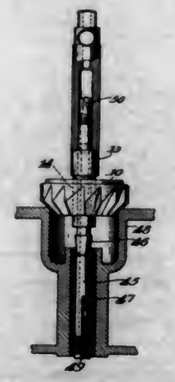
4. A valve seat reamer, comprising a metal body formed with a plurality of grooves extending substantially in the direction of the angularity of the valve seat with respect to the axis of the valve, the walls of said grooves forming teeth, all of which have cutting edges which are all located along lines drawn to a single point which is eccentric with respect to the axis of said reamer.

1,882,691. REAMER CUTTING MACHINE. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Dec. 16, 1929. Serial No. 414,392. 8 Claims. (Cl. 90—21.)



8. In a cutting machine, the combination of a supporting base having a column with a table movably supported on said column and having a dividing head with a work supporting shaft, said shaft having an eccentrically located work holding arbor, a cutter carried by said column, means for moving said work holding arbor on said table into the path of said cutter to cut teeth converging toward a point eccentric with respect to the axis of the work, means for rotating the work upon an eccentric axis into position for cutting other teeth, and means for raising and lowering said table a predetermined amount to regulate the depth of cut between the teeth of the work, comprising a plate having a plurality of surfaces of predetermined elevation and means carried by said table for engaging said surfaces and raising or lowering said table on movement of said plate, and means for automatically moving said plate step by step to place the table at proper elevation before each cut.

1,882,692. METHOD OF MAKING VALVE SEAT FINISHING TOOLS. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Original application filed Nov. 18, 1929, Serial No. 407,877. Divided and this application filed Sept. 4, 1930. Serial No. 479,590. 5 Claims. (Cl. 76—101.)



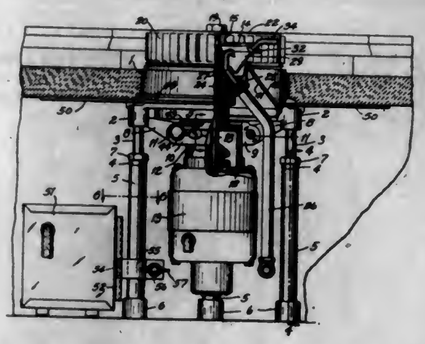
1. The method of constructing cutting tools, comprising, forming a blank body, rotating said body upon an eccentric axis, making cuts in said body to form cutting edges, rotating said body upon its true axis and grinding said edges.

1,882,693. ABRASIVE DEVICE. FRANS O. ALBERTSON and GUSTAV A. OLSEN, Sioux City, Iowa, assignors to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Jan. 16, 1931. Serial No. 509,160. 7 Claims. (Cl. 51—197.)



1. In an abrasive device of the class described, a hub, a support on said hub, a flexible disc secured to said support, said flexible disc having a central aperture, an abrasive facing element on said flexible disc including a depressed portion seated in the aperture of said flexible disc, a stud slidably fitted in said hub, said stud including a flanged head seated on the depressed portion of said abrasive member, and a threaded portion on said stud adapted to be secured to the end of a mandrel, a reinforced friction disc fixed to said support and interposed between said support and the depressed portion of said abrasive element to frictionally restrain relative rotary movement of said abrasive element and said support.

1,882,694. OIL BURNER. HERBERT W. ALDEN and MILTON A. POWERS, Detroit, Mich., assignors to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed June 19, 1931. Serial No. 545,486. 11 Claims. (Cl. 158—77.)

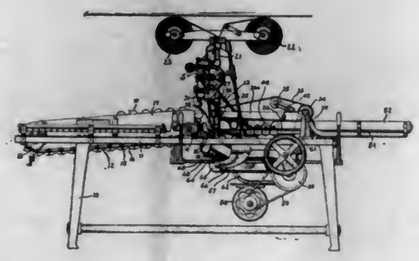


10. In an oil burner having a motor and hearth carrying members, a supporting frame therefor comprising an annular wall member, motor supporting means attached thereto, said wall member having an annular groove around its outer periphefy for supporting the hearth carrying members.

11. An oil burner comprising an annular wall, adjustable supporting legs therefor, an annular supporting mem-

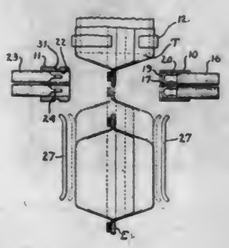
ber suspended from said wall member with its axis vertical, and a motor driven burner assembly adjustably supported by said supporting member for distributing oil and air for combustion.

1,882,695. ROLL WRAPPING MACHINE. JOHN P. ALDRICH and HOWARD A. MORRIS, Toledo, Ohio, assignors to The Automat Molding & Folding Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 12, 1930. Serial No. 501,857. 1 Claim. (Cl. 93—2.)



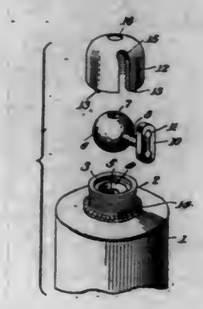
In a roll wrapping machine, a horizontally disposed table along which rolls are advanced, means for feeding a sheet of relatively thin flexible material in position to be engaged by a roll, a feeder arm having a curved roll-engaging face for advancing an article into engagement with the sheet, an endless belt disposed above said table having the lower run thereof substantially parallel thereto, a pair of plates resting upon the upper surface of the lower run of said belt to establish frictional contact with the rolls on said table, a finger adjacent the delivery end of said table for holding a sheet against a roll when the latter is delivered to said table, spring means normally holding said finger in upright position, a curved arm in advance of said finger adapted to engage a wrapped roll to prevent upfolding of the sheet, spring means for normally holding said arm in position to be engaged by a roll, and two series of longitudinally spaced folding shoes arranged one on each side of said table for engaging the projecting ends of a sheet progressively as the roll is advanced along said table, said shoes increasing in size from the delivery to the discharge end of said table, and each shoe having a forwardly curved cam folding surface.

1,882,696. METHOD OF AND APPARATUS FOR FORMING CLOSURES IN BAG TUBES. JOHN P. ALDRICH, Toledo, Ohio. Filed May 15, 1931. Serial No. 537,660. 8 Claims. (Cl. 226—56.)



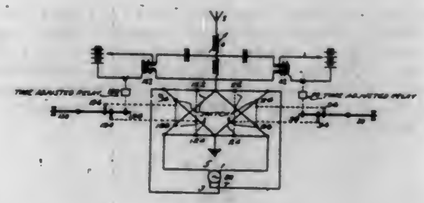
1. The method of closing bag tubes which comprises applying strips to opposite sides of a bag tube, partially severing portions from the strips and adjacent walls of the bag tube to provide retaining tabs arranged in series spaced laterally of the strips, pressing the tabs against the juxtaposed strip for retaining same in place, and severing the strips and bag tube along a line of severance extending longitudinally of the strips between said series of tabs.

1,882,697. TUBE CAP. GEORGE E. ALDRIDGE, Fort Worth, Tex. Filed Sept. 19, 1931. Serial No. 563,854. 1 Claim. (Cl. 221—60.)



A closure for collapsible tubes including the neck of a tube having screw threads, a seat in the neck, a ball valve having a passage therethrough mounted in the seat, a dome shaped cap having a slot threaded on the neck with the valve confined therein, a handle on the valve and extending through the slot, said cap having an opening in its closed end, a series of teeth at the base of the neck, and teeth on the edge of the cap to engage the series of teeth after threading of the cap on the neck for locking the cap against removal from the neck.

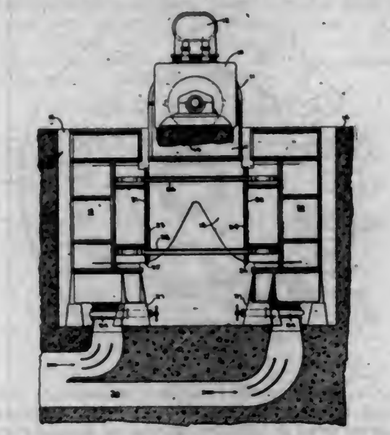
1,882,698. SIGNALING BY PHASE DISPLACEMENT. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 9, 1927. Serial No. 238,820. 9 Claims. (Cl. 250—8.)



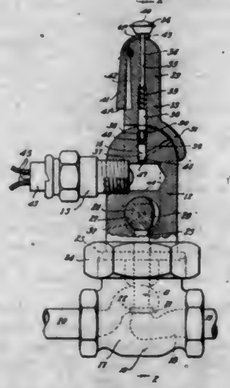
3. In phase reversal signaling method of reversing the phase of the energy transmitted through an antenna circuit which includes momentarily interrupting the energy supply to the antenna, meanwhile slightly detuning the antenna a predetermined amount for the appropriate time necessary to produce phase reversal of the energy therein, and thereafter supplying energy of reversed phase to the antenna.

1,882,699. TURBINE AND CONDENSER UNIT. ROBERT C. ALLEN, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,080. 11 Claims. (Cl. 60—95.)

1. The combination of a turbine casing having an exhaust chamber, a condenser, a flexible joint connecting the condenser to the exhaust chamber, a pressure-equalizing member disposed on the side of the exhaust chamber opposite the condenser, a flexible joint connecting the pressure-equalizing member to the exhaust chamber, the cross-sectional areas of the openings defined by the flexible joints being substantially equal, and means for transmitting the atmospheric pressure on the pressure-equalizing member to the condenser to neutralize the atmospheric pressure on the latter.



1,882,700. VALVE. SCOTT E. ALLEN and OZRO N. WISWELL, Los Angeles, Calif. Filed Nov. 6, 1930. Serial No. 493,760. 18 Claims. (Cl. 137—139.)



1. In combination, a valve having an operating stem, means for releasably holding the stem in position where the valve is closed, including a part engaging the stem and a manual operating member for said part, and means independent of the fluid handled by the valve for directing fluid under pressure against said member to operate it to a position where the stem is free to move to permit the passage of fluid through the valve.

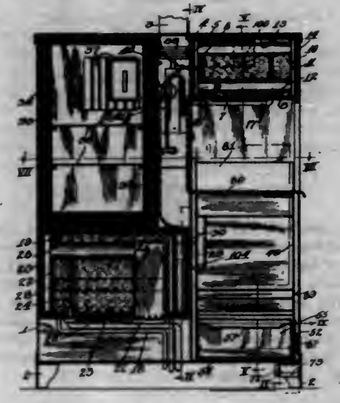
1,882,701. REFRACTORY COMPOSITION FOR BRAKE SHOE MOLDS. JOHN D. ALLEY, Pittsburgh, Pa., assignor to The American Brake Shoe and Foundry Company, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,817. 2 Claims. (Cl. 106—10.)

1. A thermo shock resisting composition consisting of substantially 60% fused silica and 40% refractory binder, said refractory binder consisting of substantially 50% Kentucky ball clay and 50% Georgia kaolin.

1,882,702. COMPOSITION FRICTION ELEMENT. JOHN D. ALLEY, Pittsburgh, Pa., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,818. 2 Claims. (Cl. 106—7.5.)

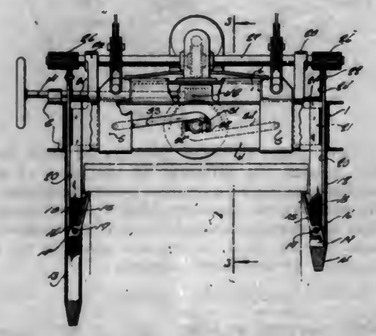
1. A flexible friction element for brakes and clutches consisting of the product formed by the chemical reaction of sulfur and a drying vegetable oil combined with asbestos and natural pyrobituminous material.

1,882,703. COMBINATION GAS FIXTURE. JAMES GERALD AMES, Aurora, Ill. Filed July 5, 1929. Serial No. 375,919. 15 Claims. (Cl. 126—37.)



1. A combination gas fixture formed as a unitary piece of furniture comprising in combination a gas controlled refrigerator and a gas controlled hot water heater disposed in one side of the fixture, a gas range, a gas controlled incinerator and a waste heat water heater mounted in the opposite side of the fixture, and a common flue device arranged in an intermediate section of the fixture adapted to conduct exhaust gases through the waste heat water heater to cause heating of the water therein.

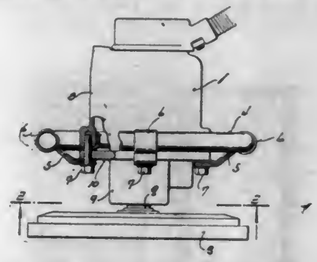
1,882,704. GRAPPLE. NILS PETER ERIK ANDERSEN, Elm Grove, Wis., and MAURICE B. BRADLEY, Cleveland, Ohio, assignors to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 10, 1931. Serial No. 562,008. 9 Claims. (Cl. 294—67.)



1. A grapple of the character described comprising a frame having spaced side members, a plurality of grapple arms carried by and depending from said side members, each of said grapple arms having an inwardly and upwardly directed gripping element, said arms being adapt-

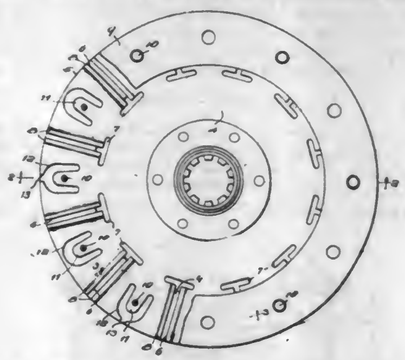
ed to straddle the article to be handled and to position the gripping elements for engagement beneath the ledge-like structure on the outside of the article, means for yieldably biasing the gripping elements to gripping position and a common release for said gripping elements.

1,882,705. MANUAL SUPPORT FOR PORTABLE TOOLS. ADOLPH ANDERSON, La Grange, Ill., assignor to Independent Pneumatic Tool Co., Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,209. 2 Claims. (Cl. 51—170.)



1. In a portable motor operated tool of the class described having an outer casing containing the motor of the tool, a handle member surrounding the outer casing, and brackets connecting the handle member with the outer casing and maintaining the handle member in outward spaced relation therefrom, said brackets each comprising a strip secured at its inner end to the casing and having a bent portion at its outer end to surround and engage the handle member.

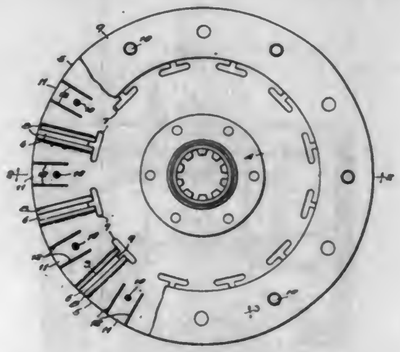
1,882,706. DRIVEN PLATE. ARTHUR W. ANDERSON, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1930. Serial No. 487,127. 9 Claims. (Cl. 192—107.)



1. A clutch plate having a plurality of slots therein extending through the periphery of the plate to define radially disposed tongues spaced apart annularly and from the periphery of the plate, said tongues being laterally bent alternately on opposite sides of the plate, and continuous friction rings on opposite sides of the plate and connected to alternate tongues.

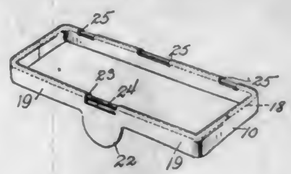
1,882,707. DRIVEN PLATE. ARTHUR W. ANDERSON, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1930. Serial No. 487,128. 3 Claims. (Cl. 192—107.)

1. A clutch plate having a plurality of pairs of slots extending through the periphery of the plate and forming substantially flat spaced tongues, said tongues being bent to alternately lie on opposite sides of the plate, continuous friction rings on opposite sides of the plate, and



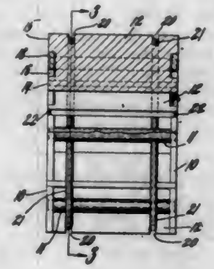
means fastening the friction rings to alternate tongues, the slots forming each tongue being located adjacent to and spaced apart on opposite sides of the fastening means.

1,882,708. CIGARETTE CASE. CARL E. ANDERSON, East Orange, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed July 23, 1930. Serial No. 470,109. 3 Claims. (Cl. 206—41.)



1. In a case, a frame consisting of a wire looped to form a support, a metal flange folded over the wire and having openings to expose the wire, and a lid having a knuckle to engage the wire at an exposed place and a latch to engage the wire at another exposed place.

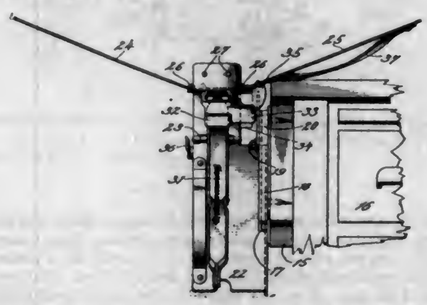
1,882,709. EXPANDING MANDREL. GUSTAVE ANDERSON, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 30, 1930. Serial No. 448,588. 2 Claims. (Cl. 82—44.)



1. An expanding mandrel comprising a pair of annular end plates, each said end plate having a series of radial slots extending outwardly from the inner edge thereof,

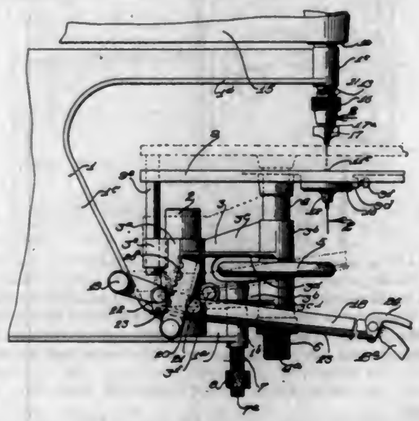
there being a corresponding series of radial slots extending inwardly from the outer edge thereof, means for holding said end plates rigidly in a parallel coaxial relation with corresponding slots in alignment, a plurality of expanding pieces having outer edges normally flush with the outer edges of the end plates and having a pair of lugs on each end thereof projecting into a pair of slots in said end plates, and means for resiliently holding the expanding pieces in their inner position.

1,882,710. BOOKHOLDER. HARRISON ANDERSON, Los Angeles, Calif. Filed June 15, 1929. Serial No. 371,276. 6 Claims. (Cl. 45—85.)



1. A book holder, comprising a book holding frame capable of occupying open and closed positions, means connected to the frame for supporting the latter for swinging movement about a horizontal axis to occupy lowered and elevated position, a collapsible bracket for supporting the frame in elevated position, means acting to collapse the bracket, and means operatively connected to the frame for rendering the collapsing means inactive when the frame is in open position.

1,882,711. SHAPING MACHINE. ROBERT H. ANDERSON, San Diego, Calif., assignor of one-half to A. B. Bowman, San Diego, Calif. Filed Dec. 29, 1930. Serial No. 505,216. 7 Claims. (Cl. 144—150.)



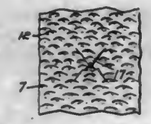
1. In a shaping machine, a table, a fixed arm extending thereover, a cutting tool revolubly supported by said fixed arm and depending therefrom, a guide stop means shiftable radially and revolubly relative to said cutting tool in said table arranged to be engaged by work undergoing shaping, and locking means for said stop means arranged to fix said stop means in axial alinement with said cutting tool or in offset relation therewith.

1,882,712. PRODUCTION OF CATALYSTS COMPRISING PHOSPHATES. LEONID ANDRUSSOW and FELIX DÜERR, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 28, 1931, Serial No. 519,248, and in Germany Mar. 13, 1930. 5 Claims. (Cl. 23—234.)

1. A process for the preparation of a catalyst suitable for the production of an organic compound containing oxygen, which comprises dissolving a substance comprising a metal the phosphate of which is insoluble in water and soluble in concentrated phosphoric acid, in an excess of concentrated phosphoric acid and mixing the solution of said substance in phosphoric acid thus obtained with a large excess of water.

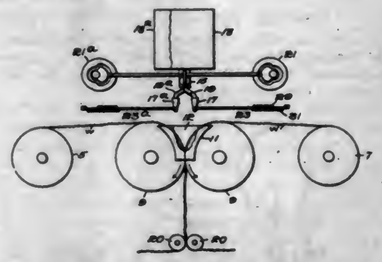
5. A process for the preparation of a catalyst suitable for the production of organic compounds containing oxygen, which comprises treating with an excess of concentrated phosphoric acid a finely divided mixture of a substance comprising a metal the phosphate of which is insoluble in water and soluble in concentrated phosphoric acid, with another substance comprising a metal the phosphate of which is insoluble in concentrated phosphoric acid, a suspension of the second substance in the solution of the first substance thus being obtained and mixing the said suspension with a large excess of water.

1,882,713. MULCHING. EDWARD H. ANGIER, Framingham, Mass. Filed Oct. 4, 1928. Serial No. 310,409. 5 Claims. (Cl. 47—9.)



3. A mulch comprising a web of expansible weather-resistant craped paper cut to provide plant-receiving openings and covers for said openings, said covers being stretchable due to the expansibility of the paper to permit them to lap margins of the openings.

1,882,714. COLORING SHEET MATERIAL. EDWARD H. ANGIER, Framingham, and ERNEST R. DEARBORN, Ashland, Mass.; said Dearborn assignor to said Angier. Filed Apr. 3, 1929. Serial No. 352,132. 8 Claims. (Cl. 41—26.)

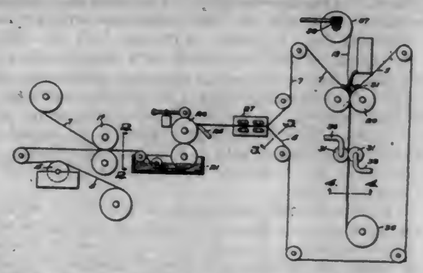


1. The method of coloring craped paper comprising applying a coloring medium thereto, and temporarily and locally flattening the craping thereof.

1,882,715. WATERPROOF SHEET MATERIAL AND ITS PRODUCTION. EDWARD H. ANGIER, Framingham, Mass. Filed Nov. 29, 1930. Serial No. 499,065. 2 Claims. (Cl. 154—40.)

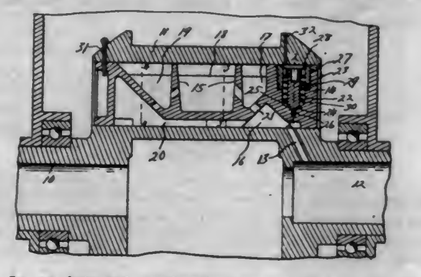
1. A method of preparing water-resisting paper which comprises assembling two sheets with a regulated layer of fusible waterproofing material between, heating the assembly to absorb the waterproofing material into the

sheets to leave a substantially nontacky surface, such absorbing material only partly penetrating the sheets, separating the sheets and reassembling the same with



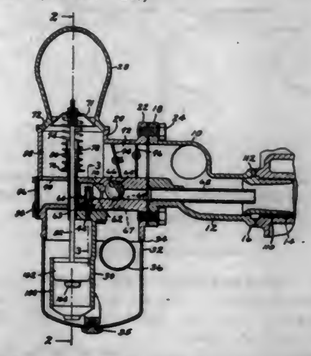
the faces formerly outermost opposed and joining them with water-resisting material penetrating substantially the rest of the sheets and forming an intervening film.

1,882,716. OIL SPRAY VALVE FOR LUBRICATION AND COOLING. GLENN D. ANGLE, Cincinnati, Ohio, assignor to The Le Blond Aircraft Engine Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed July 9, 1928. Serial No. 291,408. 14 Claims. (Cl. 184—6.)



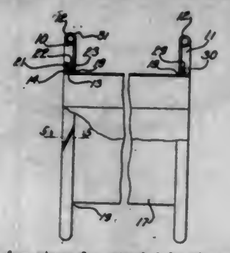
1. In an internal combustion engine, the combination with a crank chamber, of a crank shaft within said chamber, and means communicating with a lubricant supply operable only at a predetermined speed of the shaft to spray lubricant within said chamber.

1,882,717. CHARGE FORMING DEVICE. JEROME I. ANSON, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,837. 22 Claims. (Cl. 261—47.)



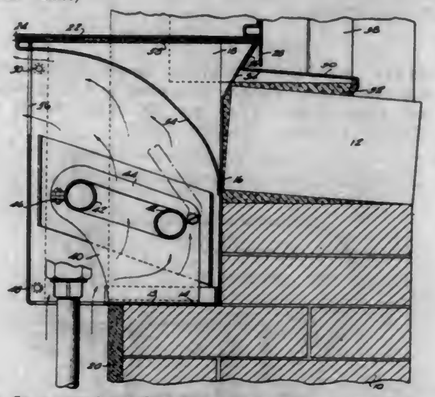
1. A charge forming device for internal combustion engines having in combination a plurality of mixture passages, means admitting fuel and air to each of said mixture passages, means admitting additional air to each mixture passage, and means for simultaneously varying the flow through all of said mixture passages and said means for admitting additional air so that the supply of additional air is reduced as the flow through said mixture passages is increased.

1,882,718. REEL. HAROLD PETER ARKEMA, Chicago, and BRUNO MAX ALFRED TREBES, Berwyn, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 31, 1929. Serial No. 367,271. 7 Claims. (Cl. 242—123.)



6. In a reel for strand material having a drum and two heads delimiting a principal strand receiving space, means on the outer side of one head to delimit an auxiliary strand receiving space, this head being slotted to allow a strand to pass from one space to the other, and means to compensate for rotary unbalance of the head due to the slot.

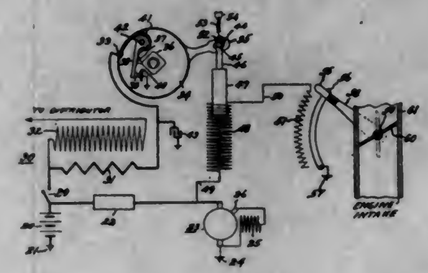
1,882,719. WINDOW CONSTRUCTION COMPRISING RADIATOR HOUSING. ADDISON C. ARMSTRONG, Baltimore, Md., and AMSON G. ILLCH, New York, N. Y. Filed Feb. 7, 1929. Serial No. 338,150. 4 Claims. (Cl. 257—136.)



4. In a metal window-frame construction, two horizontal sill members rigidly connected together with a substantial space between them, whereby a rigid base is obtained for the window-frame and a space is provided in which a radiator can be housed, a removable cover-plate for the front of such space, a lower inlet at the bottom of such space for admitting air from the room and an upper outlet for heated air to escape from such space into the room.

1,882,720. IGNITION APPARATUS. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 30, 1931. Serial No. 583,910. 4 Claims. (Cl. 123—117.)

1. An ignition apparatus for an internal combustion engine comprising in combination, a circuit interrupter, a cam driven by the engine for operating the interrupter, causing relative movement between the interrupter and cam in order to control the timing of the ignition, and

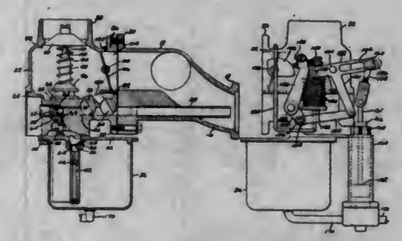


means responsive to engine load conditions for modifying the action of said electrical means in order to retard the ignition as the engine load increases.

1,882,721. MILL GREASE. MAURICE H. ARVESON, Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Apr. 28, 1930. Serial No. 448,178. 8 Claims. (Cl. 87—9.)

1. A method of making grease which comprises saponifying a fatty acid with an excess of alkali and subsequently adding a rosin-acid to neutralize the resulting alkalinity.

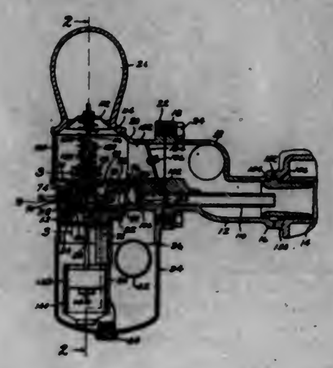
1,882,722. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,628. 33 Claims. (Cl. 261—47.)



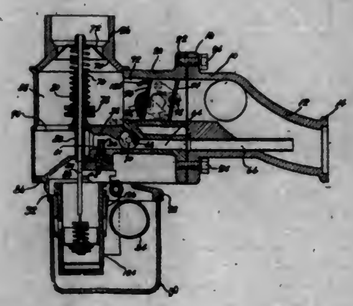
1. A charge forming device for internal combustion engines comprising a primary mixture passage, means for supplying fuel and air thereto, a manually operated throttle, a secondary mixing chamber into which said mixture passage delivers, an automatically operated throttle for controlling said mixture passage and manually operable means for determining the limit of movement of said automatically operated throttle under certain operating conditions.

1,882,723. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 7, 1928. Serial No. 324,359. 7 Claims. (Cl. 261—41.)

1. A charge forming device for internal combustion engines comprising a mixture passage, a mixing chamber adapted to supply a mixture of fuel and air to said passage, means for supplying fuel and air to said mixing chamber, and a restricted connection between the mixing chamber and the mixture passage, said connection comprising a tube of smaller cross sectional area than the mixing chamber and projecting into said mixture passage spaced from the wall thereof and having its axis substantially parallel with the axis thereof.



1,882,724. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,694. 14 Claims. (Cl. 123—119.)

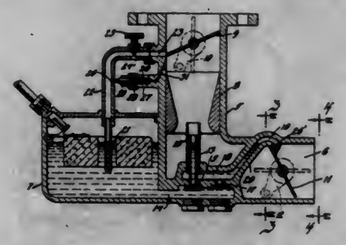


1. A charge forming device for internal combustion engines comprising a primary mixture passage, means for supplying fuel and air thereto, a secondary mixing chamber into which said mixture passage delivers a primary mixture of fuel and air, a secondary air passage supplying air thereto, and means controlled by the flow of air through the secondary air passage for increasing the quantity of primary mixture flowing through the primary mixture passage as the flow of secondary air increases.

1,882,725. CARBURETOR. HORACE W. ASIRE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,120. 13 Claims. (Cl. 261—41.)

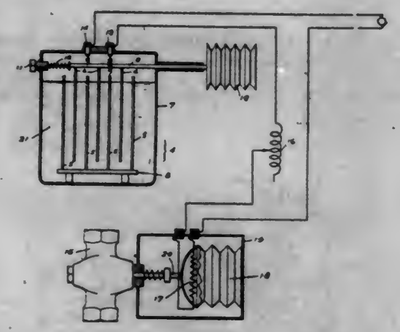
1. In carbureting apparatus, a main fuel reservoir, a main air passage, a fuel nozzle projecting into the main air passage, and adapted to receive fuel from said main reservoir, a second nozzle projecting into the main air passage, an auxiliary fuel reservoir adapted to be supplied with fuel from the main fuel reservoir and from

which the second nozzle is adapted to withdraw fuel, a passage through which air may be admitted to the auxiliary fuel reservoir, means to control the admission of air into



the main air passage, and means operable upon movement of the first mentioned means to control the admission of air into the auxiliary fuel reservoir.

1,882,726. CONTROL SYSTEM. THOMAS JEFFERSON ATKINS, North Arlington, N. J., assignor to Carrier Research Corporation, Newark, N. J., a Corporation of New Jersey. Filed Jan. 9, 1930. Serial No. 419,538. 5 Claims. (Cl. 236—68.)



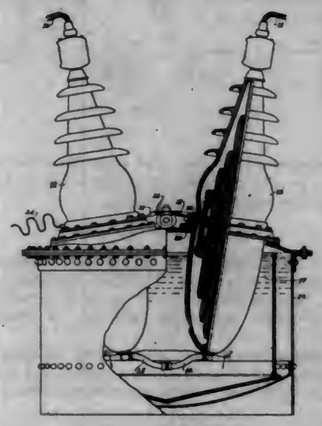
2. In a system of the character described, a valve, means for controlling said valve, including a condenser, means responsive to changes in temperature for varying the capacity of the condenser, an electrical circuit including said condenser, a heater element in the circuit, a second means adapted to respond to changes in temperature, said second means being connected to said valve and operative responsive to changes in the capacity of the condenser to control said valve.

1,882,727. GARMENT SUPPORT. WILLIAM F. AUGUSTIN, Chicago, Ill. Filed July 7, 1930. Serial No. 466,006. 2 Claims. (Cl. 223—64.)



1. A coat and hat hanger, comprising a loop of wire forming a body portion of a pair of parallel wires having oppositely bent portions providing eyelets to receive screws, said body portion being upwardly and forwardly bent and having a terminal loop to form a seat to receive a pad, a pad secured on said terminal portion, said body portion also being outwardly and downwardly bent and having a terminal portion providing a pair of oppositely directed loops to support a coat.

1,882,728. ELECTRIC SWITCH. ARTHUR O. AUSTIN, Near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 1, 1928. Serial No. 282,214. 16 Claims. (Cl. 200—250.)



1. An oil break switch comprising an oil-containing housing, a pair of bushing insulators having their longitudinal axes extending through the wall of said housing, switch contacts secured to said insulators within said housing, conductor leads extending through said insulators and electrically connected to said switch contacts respectively, and means for rotating said insulators about their said longitudinal axes respectively to make and break connection between said switch contacts.

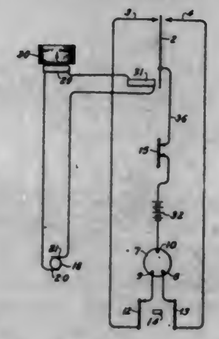
1,882,729. TOOL FOR LAYING SHOE FILLER. ALFRED H. AVERY, Malden, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1931. Serial No. 520,007. 3 Claims. (Cl. 219—21.)



1. A tool for laying shoe filler in shoe bottom cavities, comprising a hollow handle, a blade carrier movable lengthwise within the hollow handle and a blade of greater width than the hollow of the handle, secured to the blade carrier and projecting beyond the end of the handle, the handle having slots in its end to receive the blade when the blade is retracted into the handle.

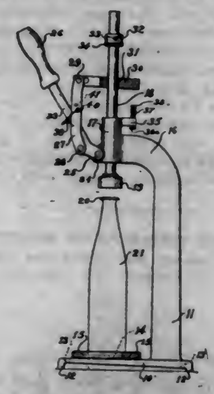
1,882,730. AUTOMATIC STEERING DEVICE. HAROLD T. AVERY, San Luis Obispo, Calif. Filed June 22, 1927. Serial No. 200,630. 41 Claims. (Cl. 244—29.)

1. In automatic steering mechanism, the combination of a directional element, and adjustable member capable of unlimited angular displacement and adapted to determine the course to be steered by virtue of its relative relation to the directional element, an indicator adapted to register said course, and means adapted to displace the



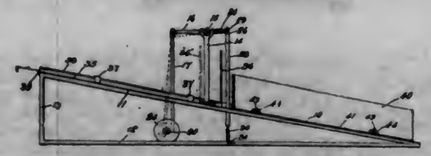
adjustable member with respect to the indicator so as to introduce course corrections without changing the course indication.

1,882,731. BOTTLE CAPPER. JOHN J. BALAUN, Canton, Ohio. Filed Oct. 9, 1930. Serial No. 487,482. 7 Claims. (Cl. 226—84.)



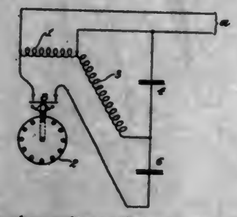
1. A bottle capper including a bearing portion, a plunger slidably mounted through said bearing portion, a clamping head through which the plunger is located, means for raising and lowering the clamping head, and means for releasing the plunger from the clamping head at a predetermined point, and for instantly reclamping the plunger in the head.

1,882,732. SLICING MACHINE. HENRY J. BALLEM, Bywood, Pa., assignor of one-half to Philip W. Moninger, Philadelphia, Pa. Filed Feb. 25, 1931. Serial No. 518,212. 6 Claims. (Cl. 146—153.)



1. A slicing machine comprising a supported deck having a series of spaced slits, a plate mounted above the deck having a tubular edge provided with slits registering with the slits of the deck, knives pivoted in said last mentioned slits by means within the tube and extending downwardly through the slits of the deck, means beneath the deck to tension the knives, and means to oscillate the plate.

1,882,733. SINGLE PHASE CONDENSER MOTOR. EDWIN C. BALLMAN, St. Louis, Mo. Filed Mar. 5, 1930. Serial No. 433,226. 9 Claims. (Cl. 172—283.)



1. In a single-phase alternating-current motor having a stator and a rotor, a main primary winding adapted for connection to a supply line, an auxiliary primary winding wound so as to have a voltage induced therein by the field set up by said main winding, a running condenser connected so as to have impressed thereon a voltage derived from that induced in said auxiliary winding, and a starting condenser connected so as to have impressed thereon a voltage derived from the vector sum of the voltages of said main and auxiliary windings.

1,882,734. SOLDERING FLUX. CLIFFORD L. BARBER, Chicago, Ill., assignor to Kester Solder Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1929. Serial No. 414,593. 11 Claims. (Cl. 148—23.)

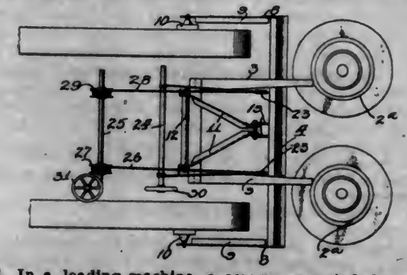
9. A soldering flux comprising aniline hydrochloride.

11. A soldering flux comprising a mixture of an organic amide and an amide hydrochloride, the ingredients of said mixture being normally solid and melting below soldering temperature.

1,882,735. SOLDERING FLUX. CLIFFORD L. BARBER, Chicago, Ill., assignor to Kester Solder Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 17, 1930. Serial No. 436,645. 8 Claims. (Cl. 148—25.)

7. The process of forming an anhydrous composition useful as a soldering flux which comprises reacting about 8 to 20 parts of zinc chloride with not less than 88 parts of a fatty acid selected from the group consisting of oleic, palmitic and stearic acids to chemically convert all of the zinc chloride.

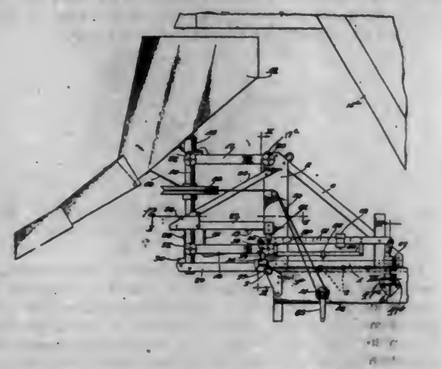
1,882,736. SCRAPER CONTROL. HARRY H. BARBER, Aurora, Ill., assignor to Barber Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 397,910. 4 Claims. (Cl. 198—7.)



1. In a loading machine, a scraper mounted for vertical movement, a winding shaft, cables reversely wound on said winding shaft, pulleys on said scraper around which said cables pass, and a second winding mechanism connected to the free ends of said cables.

CARNEGIE LIBRARY OF ATLANTA

1,882,737. WEIGHING HOPPER. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Oct. 11, 1929. Serial No. 398,896. 9 Claims. (Cl. 265—27.)

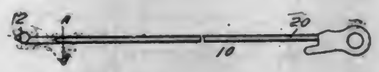


1. In an apparatus of the class described, a main frame, an auxiliary frame rigid with said main frame, a pair of parallel motion arms having anti-frictional connection with said main frame, a hopper post secured to said parallel motion arms, a weighing apparatus upon said main frame, a lever having one end connected to said weighing apparatus and the other end connected to said hopper post, and means for suspending said lever from said auxiliary frame.

1,882,738. PROCESS OF SEPARATING EXTRACTS FROM GRAIN. ALBERT E. BECKER, Ogden, Utah. Filed Aug. 1, 1930. Serial No. 472,503. 2 Claims. (Cl. 195—32.)

1. In a process of extracting and recovering extracts from malt or cereals in which the grain is first cooked and the fluids separated from the solid matter by vacuum filtering, effecting the cooking by introducing steam into the mass of malt or cereal and spraying water onto its surface with such regulation of the steam and water supplied that the liquid extracts will be of a density above that desired in the final product, and supplying water to the material which does not pass through the filter to dilute the extracts to the density desired.

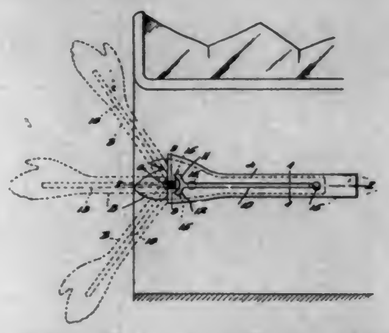
1,882,739. PILE WIRE. MARCUS B. BEHRMAN, Brooklyn, N. Y., assignor to Lox Seal Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 8, 1930. Serial No. 500,704. 8 Claims. (Cl. 139—34.)



1. A pile wire bar having spaced warp section engaging portions defining a side wall thereof and a groove therebetween.

1,882,740. AUTOMOBILE SIGNAL. JAMES ARCHIE BELL, Shelbyville, Ky. Filed Oct. 20, 1931. Serial No. 570,017. 9 Claims. (Cl. 116—50.)

1. An automobile signal including a body member and an arm slidably engaged with said body member and having a longitudinal slot extending through the sides thereof, said body member provided at its forward end with a post which extends into said slot and about which the rear end of the arm has pivotal movement when the arm has been adjusted to its outward position

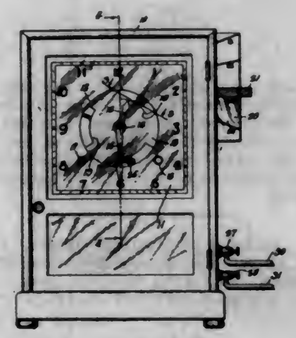


relatively to the body member, to thereby enable the arm to occupy an inclined position relatively to the body member.

1,882,741. PRODUCTION OF EMULSIFYING AGENTS. HANS BELLER, Ludwigshafen-on-the-Rhine, and MARTIN LUTHER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 5, 1929, Serial No. 352,900, and in Germany Apr. 27, 1928. 6 Claims. (Cl. 252—16.)

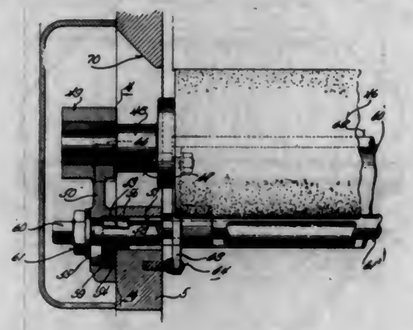
1. The process for the production of emulsifying agents which comprises treating a product of the destructive oxidation of a wax with from 20 to 30 per cent its weight of chlorine at a temperature below 100° centigrade and treating the resulting product with a basic agent.

1,882,742. TIME CONTROLLED SWITCH. JOSEPH W. BELT, West Chester, Pa. Filed Jan. 18, 1930. Serial No. 421,861. 2 Claims. (Cl. 200—37.)



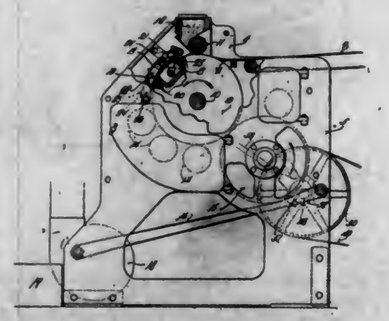
2. The combination with a clock having a dial provided with a central opening, an insulating plate behind the dial and having openings therein, an insulated disk rotatable behind said insulating plate, contact members on the disk exposed through said plate openings, said disk being arranged to be moved to dispose the contacts thereof at different points with relation to the plate openings, and circuit closing means for successively engaging said contacts.

1,882,743. BRONZING MACHINE. FRANK R. BELLUCHE, Racine, Wis. Filed June 13, 1928. Serial No. 285,030. 3 Claims. (Cl. 91—59.)



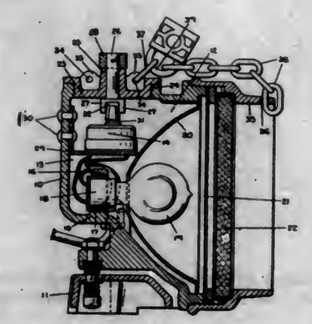
1. In a bronzing machine having a work receiving surface, a cleaning roll adapted to clean the work passed over the surface, a cleaning bar cooperating with the cleaning roll to remove excess bronze from the roll, means independent of the cleaning roll for maintaining the cleaning bar in operative relation thereto, and means for simultaneously adjusting the cleaning roll and the cleaning bar.

1,882,744. BRONZING MACHINE. FRANK R. BELLUCHE, Racine, Wis. Filed June 13, 1928. Serial No. 285,032. 7 Claims. (Cl. 91—59.)



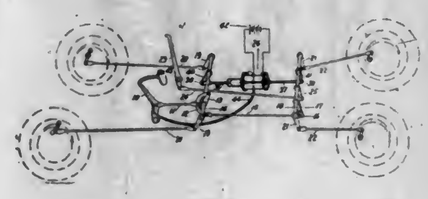
1. In a bronzing machine having a work carrying cylinder and means for depositing bronzing material on work as it is carried through the machine by the cylinder, a pad of flexible material for rubbing the bronzing material into the work, means mounting the pad with its working face against the cylinder whereby the curvature of the cylinder surface maintains the pad taut, and means for adjusting the tension of the pad on the cylinder surface.

1,882,745. HEADLIGHT AND SWITCH. JOHN S. BELTZ, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed July 1, 1930. Serial No. 465,210. 8 Claims. (Cl. 240—11.2.)



1. The combination with a housing, of a switch disposed within the housing, and an exteriorly and interiorly projecting switch operator mounted in a removable portion of the housing and removable therewith without disturbing the switch.

1,882,746. ELECTROMAGNETIC EQUALIZING BRAKE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 7, 1928. Serial No. 291,047. 5 Claims. (Cl. 188—156.)

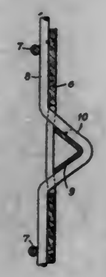


1. Electro-magnetic equalizing brakes comprising, front wheel brakes, rear wheel brakes, a front brake shaft, a rear brake shaft, arms extending radially from the ends of the brake shafts, operative rods from said arms to said brakes, other arms extending radially from said shafts intermediate the first said arms, an electro-magnet suspended between said shafts with both of its elements free to move and rods connecting the two elements of the electro-magnet, one element to each said intermediate arm.

1,882,747. REENFORCING FABRIC. EDWARD L. BENEDICT, Pittsburgh, Pa., assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 24, 1930. Serial No. 455,325. 2 Claims. (Cl. 72—120.)

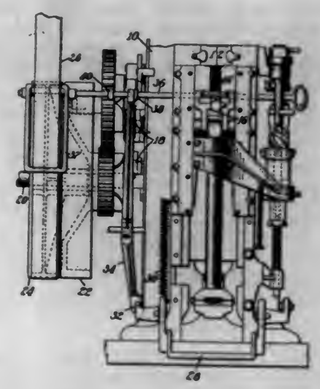
1. Fabric structure comprising mesh formed of wire-like members secured together at their points of intersection and having rearwardly-extending bends, a backing

sheet having elongated openings through which said bends extend, and a retaining bar of U-form in cross-section, disposed to the rear of said sheet and lying within said



bends, the edges of the said bar abutting the rear side of the sheet, and the sides of the bar snugly fitting the said bends.

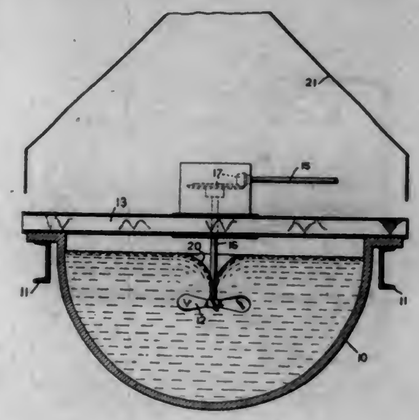
1,882,748. CONTROLLING MECHANISM. JOHN M. BENJAMIN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Aug. 1, 1923, Serial No. 655,097. Divided and this application filed Dec. 21, 1929. Serial No. 415,862. 5 Claims. (Cl. 74—88.)



1. The combination with a machine to be driven, of driving means therefor, means for rendering said driving means effective or ineffective for the operation of the machine, a member movable by the operator to control the operation of the machine while the driving means continues in operation, and means for locking the controlling member against movement when the driving means is ineffective.

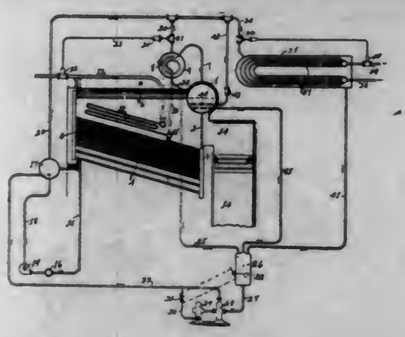
1,882,749. PROCESS FOR FORMING METAL ALLOYS. JESSE OATMAN BETTERTON, Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 16, 1929. Serial No. 347,508. 3 Claims. (Cl. 75—1.)

1. The process of introducing arsenic into antimonial lead, which comprises heating a bath of antimonial lead to a temperature above 850° F. rapidly stirring said bath to produce a vortex therein, periodically applying arsenic oxide together with finely divided reducing material, to said vortex until the arsenic oxide forms a pasty slag,



skimming the slag and continuing the addition of said oxide and reducing agent until the required amount of arsenic has been incorporated in the lead.

1,882,750. STEAM GENERATOR AND PROCESS. JOHN E. BLACK, Rumson, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 18, 1929, Serial No. 379,145. Renewed June 3, 1932. 9 Claims. (Cl. 122—479.)

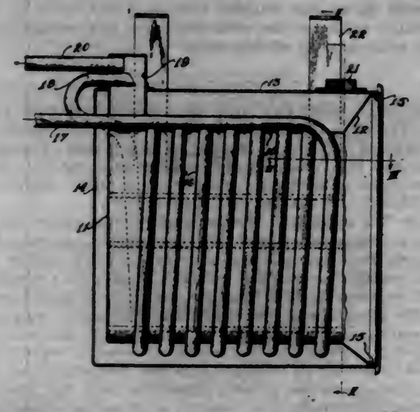


1. A vapor generator including a furnace, independent fluid circulating systems receiving heat from said furnace, one having heat absorbing surface containing a saturated vapor at a higher temperature and lower pressure than the other, the two systems being in thermal transfer relation in at least one location, and a control actuated by the fluid in one system for regulating the heat transfer between systems irrespective of the furnace temperature.

1,882,751. FREEZER. HOWARD E. BLOOD, Detroit, Mich., assignor to Norge Corporation, a Corporation of Michigan. Filed Feb. 27, 1928. Serial No. 257,168. 4 Claims. (Cl. 62—95.)

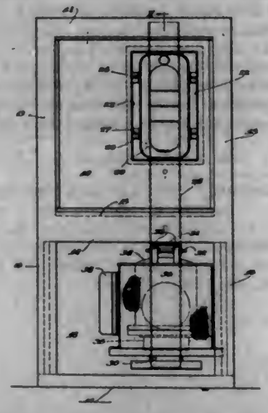
3. A device of the class described comprising spaced receptacles in telescopic relation to afford a brine com-

partment therebetween and an evaporator coil in said compartment in contact with the outside of the inner re-



ceptacle, and a liquid trap inserted in said compartment and connected to the discharge end of said evaporator coil.

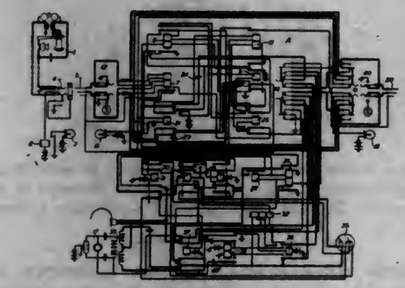
1,882,752. ELECTRIC REFRIGERATOR ASSEMBLY. HOWARD E. BLOOD, Detroit, Mich., assignor to Norge Corporation, a Corporation of Michigan. Filed May 16, 1928. Serial No. 278,250. 9 Claims. (Cl. 62—116.)



1. A domestic refrigerating unit comprising a refrigerator casing having a compartment therebeneath with rear openings into both the casing and the compartment, a closure for said opening into the casing, a freezer unit mounted thereon, a channeled connecting member secured to said closure and extending downwardly behind said compartment, a compressor and condenser unit in said compartment, and supporting means attached to said connecting member for mounting said compressor and condenser unit in fixed relationship with the closure and freezer unit.

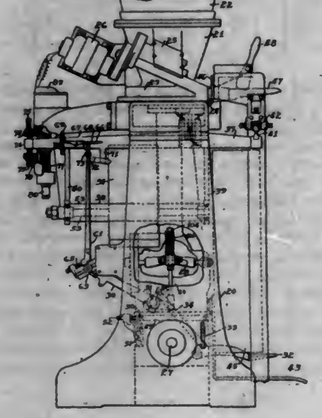
1,882,753. TELEPHONE SYSTEM. LANGFORD J. BOWNE, Howard Beach, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1931. Serial No. 540,839. 21 Claims. (Cl. 179—27.)

1. In a telephone system, subscribers' lines, a cord circuit, a relay for controlling the continuity of said cord circuit, means responsive to the establishing of a connection between two lines through said cord circuit for operating said relay to establish continuity in the cord circuit,



and means responsive to the hanging up of the receiver of the telephone set of one line for releasing said relay to break the continuity of said cord circuit.

1,882,754. WEIGHING DEVICE. FREDERICK G. L. BOYER, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1929. Serial No. 344,934. 24 Claims. (Cl. 249—60.)

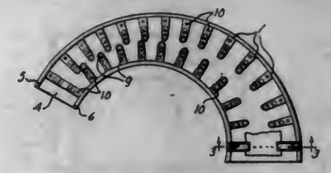


1. In combination, a weighing device of the pendulum type adapted to support and weigh a receptacle, and in which the pendulum weight is the only large counterbalancing weight, means to feed material into the receptacles supported on the weighing device, and means dependent upon the motion of the weighing device for stopping the feeding of material.

1,882,755. METHOD OF PRODUCING ASSEMBLING FIXTURES. STANLEY E. BOYNTON, Elizabeth, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Mar. 6, 1929, Serial No. 344,882. Divided and this application filed Mar. 1, 1930. Serial No. 432,385. 4 Claims. (Cl. 22—190.)

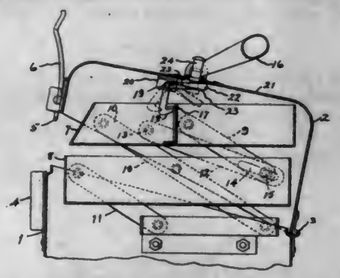
1. A method of forming a fixture for positioning articles to be assembled, which consists in shaping a base member

approximately to the conformation of a master form, individually securing in said member a plurality of spaced recessed members, positioning the master form in spaced



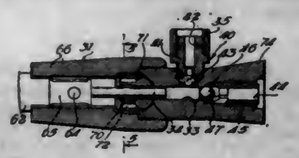
relation to the base member, and molding to each of said recessed members a positioning element recessed in predetermined alignment with adjacent positioning elements.

1,882,756. TACKLE BOX. CHARLES T. BOYNTON, Elkhart, Ind., assignor to Outing Manufacturing Company, Inc., Elkhart, Ind., a Corporation of Indiana. Filed Mar. 20, 1930. Serial No. 437,541. 3 Claims. (Cl. 206—16.)



1. The combination with a box provided with a hinged cover, of a plurality of superimposed trays arranged within the box, pivotally mounted linkage means connecting the opposite ends of said trays with the box for supporting said trays within the box and for moving them from and into the box, tray actuating linkage pivotally and operatively connecting said box cover with said tray linkage and operative upon and by the opening movement of said box cover to actuate said trays from and to the box interior, and disengageable latch means for latching said box cover to one of said trays when the latter are positioned within the box, whereby, when said box cover is partially opened, and said trays are outwardly moved thereby, one of said trays is caused to engage and bind against said box cover, thereby preventing further outward movement of either said box cover or said trays.

1,882,757. METHOD OF SEALING JOINTS. JOHN EDSON BOYNTON, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed June 9, 1928, Serial No. 284,178. Divided and this application filed Dec. 4, 1928. Serial No. 323,604. 5 Claims. (Cl. 207—10.)



1. A method of packing a reciprocating pump for fused metal, which consists in causing the pumping pressure to force a mass of the metal being pumped into a recess formed in one of the relatively reciprocable parts of the pump, solidifying said mass to form a packing having a surface slidable relative to the other of the relatively reciprocable parts, and causing additional quantities of the metal to adhere to the slidable surface to compensate for the wearing away of said mass.

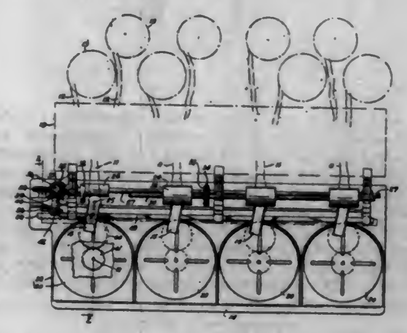
1,882,758. PREPARATION OF AMINO-PHENOLS AND PRIMARY ARYL AMINES CONJOINTLY. EDGAR C. BRITTON and RAY D. HOLMES, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 19, 1929. Serial No. 348,356. 15 Claims. (Cl. 260—130.5.)

14. The method for the preparation of an amino-phenol and a primary arylamine conjointly which comprises dissolving the corresponding hydroxy-azo compound in an aqueous alkaline sulphide solution, heating to a temperature between about 60° and the atmospheric boiling point of the mixture while gradually adding in acidic compound in amount equivalent to about one-half that theoretically required to react with the sulphide present to convert the same completely to hydrogen sulphide, then separating the relatively insoluble primary arylamine from the aqueous solution, acidifying the residual solution and separating the amino-phenol precipitated thereby.

1,882,759. PREPARATION OF SECONDARY ARYL- AND ARALKYLAMINES. EDGAR C. BRITTON and HAROLD R. SLAGH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 18, 1929. Serial No. 333,514. 9 Claims. (Cl. 260—128.)

1. The method of making conjointly a secondary arylamine having the general formula Aryl.NH.R and the corresponding primary arylamine having the general formula R.Aryl.NH_2, wherein R represents an aryl or alkyl group, which comprises reacting a metallic anilide of a metal from the group consisting of Na, K, Ca, Mg and Al, with a halogenated hydrocarbon having the general formula R.Hal, wherein R is aryl or alkyl, at a temperature between 100° and 250° C.

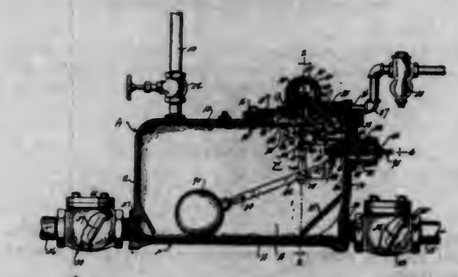
1,882,760. METHOD AND APPARATUS FOR PILING MATERIAL. ROBERT B. BROWN, Great Neck, Long Island, N. Y., assignor to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 385,014. 4 Claims. (Cl. 19—159.)



1. In a piling mechanism, a rotary table, means for causing oscillatory movement thereof, a chute for directing a sliver on said table, and means for oscillating said chute about a substantially vertical axis whereby the sliver is automatically oscillated in a direction of its greatest width as it is fed to the oscillating table and is caused to be

piled in a series of eccentric chords of substantially uniform length, the relative movement of the chute and table being such that successive chords are angularly displaced and disposed on the same side of the axis of the table in a substantially toroidal formation made up of a plurality of alternately superposed helices.

1,882,761. AUTOMATIC LIQUID EXTRACTOR. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa, a Corporation. Filed Nov. 25, 1929. Serial No. 409,709. 7 Claims. (Cl. 137—103.)



1. In a liquid extractor of the class described a casing having a chamber therein, check valve controlled inlet and outlet means for regulating admission and extraction of liquids with respect to the chamber, a variably regulatable low pressure equalizing connection with the casing chamber, a high pressure inlet control valve for the casing placed so that the pressure is exerted thereon to normally maintain the valve closed, float means in the casing having an operative connection with the pressure inlet valve for opening the latter at a predetermined high level of liquid in the casing to admit air or gas for driving the liquid from the chamber, said float means having a pivotal mounting in said casing spaced from the operative connection of the float means with said valve, and means for moving the effective pivot axis of said float means towards or away from the operative connection of the float means with said valve to increase or decrease the leverage action of the float means upon said valve.

1,882,762. ACIDS FROM PETROLEUM HYDROCARBONS AND METHOD OF PRODUCING SAME. HERMAN A. BRUSON, Philadelphia, Pa., assignor to The Resinous Products & Chemical Company, a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 898,823. 12 Claims. (Cl. 260—108.)

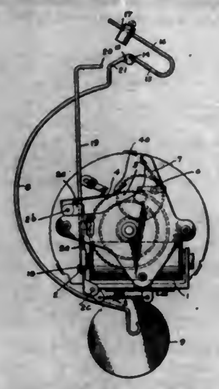
7. A method for preparing acids from an essentially non-aromatic petroleum hydrocarbon which comprises heating it with the anhydride of a polycarboxylic acid in the presence of a Friedel-Crafts catalyst and thereafter hydrolysing the reaction product.

9. A composition of matter comprising the acid mixture obtained by condensing an essentially non-aromatic petroleum hydrocarbon with the anhydride of a polycarboxylic acid in the presence of anhydrous aluminum chloride and hydrolyzing the reaction product.

12. A composition of matter comprising the unhydrolyzed reaction product obtained by heating a petroleum hydrocarbon of essentially non-aromatic nature with the anhydride of a polycarboxylic acid in the presence of a Friedel–Crafts catalyst.

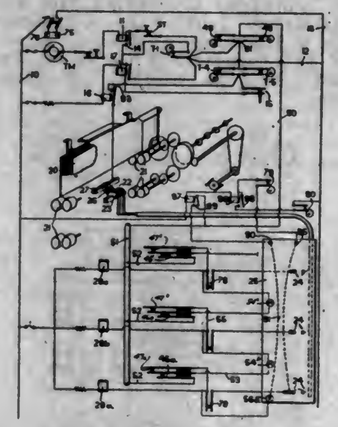
1,882,768. INDICATING DEVICE. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Jan. 15, 1927. Serial No. 161,334. 5 Claims. (Cl. 58—26.)

1. In a clock having a dial, indicating hands cooperating therewith, and magnetic means for moving the hands; means for indicating that the clock is running, said indicating means comprising an element substantially free of



effect on the indicating hands, and means operated by said magnetic means for regularly periodically actuating said element.

1,882,764. ELECTRIC TRANSFER FOR TABULATING MACHINES. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Aug. 5, 1927. Serial No. 210,769. 12 Claims. (Cl. 235—92.)

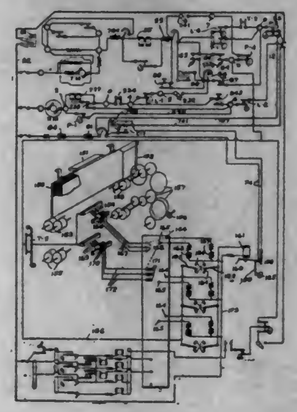


1. In an accumulator mechanism, a series of denominational order accumulating elements, means for making differential entries in a plurality of denominational orders concurrently means for thereafter transferring data from one element to another, and means for entering an arbitrary number in the lowest denominational order element of the series simultaneously with the transferring operation.

1,882,765. AUTOMATIC CONTROL SYSTEM. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 22, 1927. Serial No. 241,785. 7 Claims. (Cl. 235—92.)

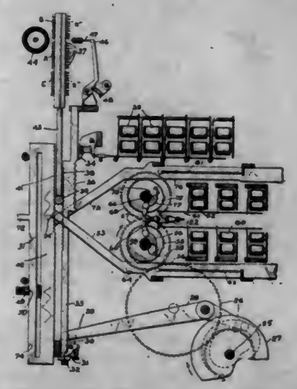
1. In an automatic control system for a record controlled machine, a plurality of similar machine elements, a corresponding number of members operated thereby, record controlled controlling means whereby a plurality of said machine elements and said members for a single

controlling column of successive records are operated jointly or any one singly, a machine controlling means operated by the operation of any machine element alone and related member, and means controlled by said ma-



chine controlling means for effecting one type of machine operation in accordance with the operation of a plurality of said members and a different type of machine operation by any member alone.

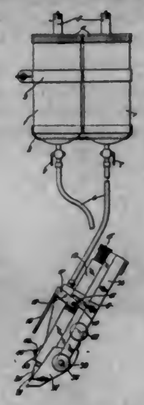
1,882,766. PRINTING MECHANISM FOR TABULATING MACHINES. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 20, 1928. Serial No. 286,840½. 25 Claims. (Cl. 101—93.)



1. In an accounting machine comprising in combination with a movable printing bar carrying a plurality of groups of type common to a card column, means whereby index points in a certain field of a controlling card controls the selection of a particular type in a group and means whereby other index points in another card field preliminarily controls the selection of the groups of type.

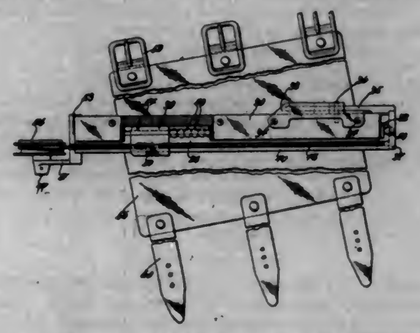
1,882,767. STRIPING DEVICE. KENLY C. BUGG, St. Louis, Mo. Filed July 5, 1927. Serial No. 203,392. 4 Claims. (Cl. 91—62.6.)

1. A striping device comprising a frame, a tubular paint applicator, means for removably holding said applicator, in connection with said frame, means for delivering paint to said applicator, a guide for said frame having pivotal connection therewith, a spring yieldingly holding said guide away from said frame and permitting



said guide to be moved toward said frame, and an abutment limiting extent of movement of said guide toward said frame.

1,882,768. DISPENSER FOR NAILS, TACKS, ETC. KENLY C. BUGG, St. Louis, Mo. Filed June 20, 1929. Serial No. 372,326. 10 Claims. (Cl. 1—49.7.)

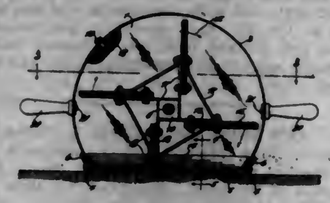


1. A device of the character described comprising a slotted tube, means for supporting headed fasteners in connection with said tube in a relationship in which the stems of the fasteners are enclosed in the tube and the heads are on the outside of the tube, an element preventing the fasteners from dropping out of the tube and terminating short of the end of the tube to leave the heads of the fasteners exposed at the end of the tube, an actuator for moving the fasteners along the tube, a wall across the end of said slot in position to be engaged by and support the heads of said fasteners, a guide for said actuator, a connection for moving said actuator, and a device for operating said connection.

1,882,769. POLISHING MACHINE. KENLY C. BUGG, St. Louis, Mo. Filed Aug. 10, 1929. Serial No. 385,009. 3 Claims. (Cl. 51—170.)

1. A device of the character described comprising two spaced end walls having alined supporting edges, a curved wall attached to said end walls and cooperating therewith to form an enclosure which is open at the side along which said supporting edges of said end walls extend, non-abrasive elements in connection with said supporting edges of said end walls, a rotary shaft supported by said end walls, a motor supported by one of said end walls

for rotating said shaft, a frame attached to said shaft within said enclosure, and a series of wipers attached to and having wiping portions projecting beyond said



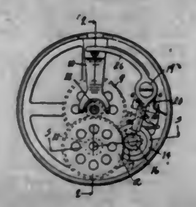
frame and arranged to wipe against a surface along which the device is moved and on which the device is supported by said non-abrasive material.

1,882,770. STRIPING DEVICE. KENLY C. BUGG, St. Louis, Mo. Filed Nov. 6, 1929. Serial No. 405,087. 6 Claims. (Cl. 91—62.6.)



1. A striping device comprising a resilient applicator having a discharge opening at one end, a tubular stem in connection with said applicator and communicating with said opening, a body in connection with the opposite end of said applicator and having a paint receiving passage therethrough, a flexible tube for conducting paint from said passage to said stem, and a handle in connection with said body.

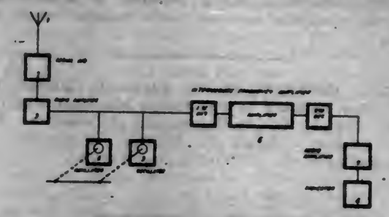
1,882,771. FISHING REEL. FRANK BURDICK, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed June 14, 1930. Serial No. 461,228. 19 Claims. (Cl. 242—84.5.)



17. The combination in a spring winding fishing reel, of a driving spring, a spool, a driving connection for said spring to said spool comprising a train of gears, a brake wheel provided with a pinion meshing with one of the gears of said train of gears, a brake coacting with said brake wheel, and manually operated means for releasing said brake.

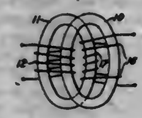
1,882,772. WIRELESS RECEIVING APPARATUS. JOHN L. CALLAHAN, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 1, 1928. Serial No. 258,168. 2 Claims. (Cl. 250—8.)

1. The method of receiving radio signals which consist in setting up oscillations at the signal frequency in a circuit, generating in said circuit a first local oscillation of an amplitude similar to the amplitude of the oscillations at signal frequency, generating in said circuit additional local oscillations of an amplitude greater than



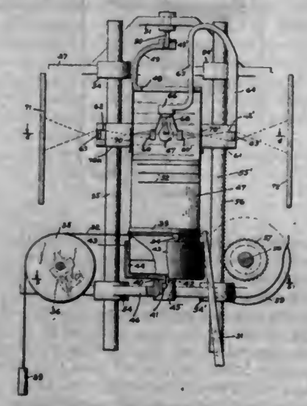
the amplitude of said first named oscillations, and utilizing the components of said oscillations to operate an indicating device.

1,882,773. CURRENT TRANSFORMER. ALBERT CALLSEN, Stuttgart, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 12, 1930, Serial No. 501,853, and in Germany Dec. 19, 1929. 2 Claims. (Cl. 175—358.)



1. A current transformer comprising, in combination, a primary winding, a secondary winding, and two separate iron cores similarly coupled with the secondary winding, said cores having similar magnetic lengths of iron, one core being enclosed by all of the primary winding turns and the other by only a portion of the total primary turns to thereby produce such relative degrees of magnetic saturation within the cores that, at normal load, the magnetic reluctance is in the range below the point of minimum value for one and in the range above the point of minimum value for the other.

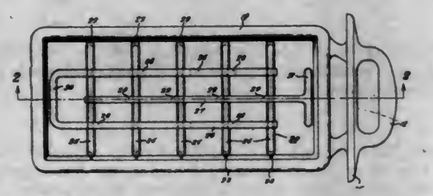
1,882,774. COMPUTING SCALE. FRED M. CARROLL, Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Oct. 22, 1927. Serial No. 227,904. 20 Claims. (Cl. 88—24.)



1. In combination, in a weighing and computing scale, a weighing mechanism, a transparent drum chart having a plurality of series of identical indications, a projector positioned within said drum, and having a plurality of

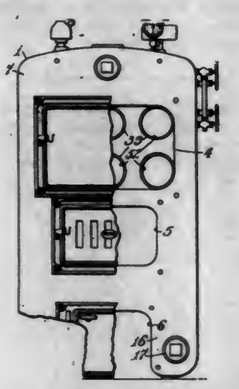
projection members, each adapted to coact with a different series of indications, said projector and drum being relatively movable, said latter element being connected to said weighing mechanism, and a plurality of screens upon which the projector members casts identical chart indications.

1,882,775. FREEZING TRAY. RALPH H. CHILTON, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 2, 1931. Serial No. 512,890. 4 Claims. (Cl. 62—108.5.)



1. A freezing tray for refrigerators comprising: a container adapted to hold water and a removable partition grid unit adapted to be set within said container to divide the frozen contents into a plurality of blocks, said grid having a plurality of parallel arranged hollow metal partitions open at the top edges thereof to permit easy circulation of cold air within said hollow partitions, and means extending across the tops of said hollow partitions to hold them in place but permit the opposite walls of a partition to flex inwardly.

1,882,776. STEEL BOILER. WILLIAM HARRY CLIFF, Terre Haute, Ind., assignor to Terre Haute Boiler Works Company, Terre Haute, Ind., a Corporation of Indiana. Filed Oct. 26, 1928. Serial No. 315,219. 11 Claims. (Cl. 122—225.)



1. A sheet metal sectional boiler comprising a plurality of sections including an intermediate section comprising front and back sheets, each sheet having its lower portion cut out to form a fire arch opening and having openings in its upper portion to form flue openings, the edges of the sheets being inturned to form peripheral flanges facing one another, the edges of the material surrounding said fire arch opening being inturned to form peripheral flanges, tubular flues interposed between the front and back sections connected thereto and surrounding said flue openings, a connecting member extending between the edge flanges and second connecting member connecting the edge flanges of the fire arch opening whereby a hollow section is formed provided with suitable flue openings extending therethrough and having a fire arch opening enclosed on each side by water legs.

8. A hollow boiler section having a steam dome and firepot arch and water legs extending downwardly on each side of said arch, and baffle members in said legs opposite the sides of the fire arch extending longitudinally of the section and inclined from the horizontal, said baffle members being spaced apart from the front and rear of the section.

1,882,777. NEW MORDANT. MOSES L. CROSSLEY and MAURICE L. DOLT, Plainfield, N. J., assignors to The Calco Chemical Company, Inc., Bound Brook, N. J., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,354. 10 Claims. (Cl. 260—20.)

1. The hereindescribed alkali-metal salts of phenol-sulphur condensation products which are pearl gray powders soluble in water at room temperature and have a mordanting power on cotton from three to five times "type."

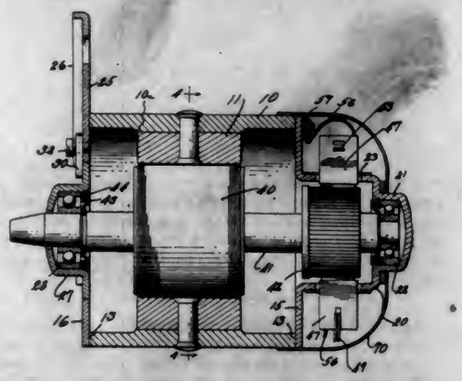
3. The process of making an alkali-metal salt of a phenol-sulphur condensation product, which comprises fusing together the condensation product and an alkali-metal caustic.

1,882,778. NEW MORDANT. MOSES L. CROSSLEY and MAURICE L. DOLT, Plainfield, N. J., assignors to The Calco Chemical Company, Inc., Bound Brook, N. J., a Corporation of Delaware. Filed Dec. 19, 1920. Serial No. 415,355. 3 Claims. (Cl. 260—20.)

1. The hereindescribed alkali-metal salts of phenol-sulphur condensation products, which are light-tan-colored powders, soluble in water at room temperature, have a mordanting power on cotton about one and one-half times "type", and which are capable when used in weak solutions of rendering basic dyes on paper non-bleeding.

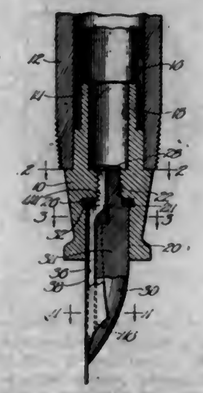
2. A process for making a mordant for fixing dyes on paper, comprising mixing solid phenol and sulphur substantially in the proportion of two molecules of phenol to 3½ atoms of sulphur with less than one per cent of caustic, fusing the mixture and heating it to 180° C., maintaining it at 180° C. to form a sulphur-phenol condensation product, separating the excess phenol from the condensation product by vacuum distillation at 180° C., and fusing together the condensation product and a substantial proportion of caustic.

1,882,779. ELECTRICAL APPARATUS. JASPER F. CULLIN, Detroit, Mich., assignor, by mesne assignments, to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,338. 2 Claims. (Cl. 171—252.)



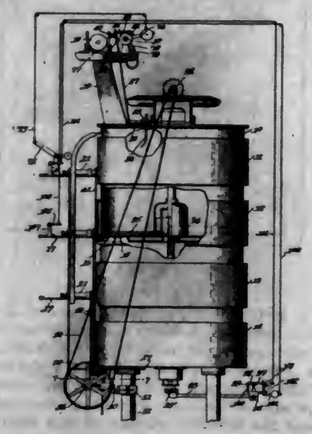
1. The method of forming electrical apparatus which includes the steps of permanently mounting pole pieces on the inside of a cylindrical housing, machining the pole pieces so mounted so as to provide curved surfaces all of which are in the same cylindrical imaginary surface, machining and surfacing the ends of the cylindrical housing to proper dimensions using the curved surfaces of the pole pieces as datum surfaces the steps being performed in the order above enumerated.

1,882,780. FOUNTAIN PEN. ARTHUR O. DAHLBERG, Madison, Wis. Filed Jan. 2, 1930. Serial No. 417,882. 11 Claims. (Cl. 120—50.)



1. In a fountain pen having a barrel, a section secured to the barrel, said section having a pen point and feed bar receiving bore at its lower end, and a threaded bore of smaller diameter at its upper end, a rigid feed bar having air and ink ducts extending longitudinally along its surface, said bar having a threaded reduced diameter end portion screwed into said threaded bore in said section, and having a pen point receiving recess, cooperating means on said pen point and said feed bar for preventing downward longitudinal movement of the former relative to the latter, and a compressible washer secured in said section and arranged to seal the connections between said pen point and section, said feed bar and section and said pen point and feed bar.

1,882,781. COOKER. JOSEPH DAVIDSON, Atlanta, Ga., assignor to Davidson-Kennedy Company, Atlanta, Ga., a Corporation of Georgia. Filed May 19, 1931. Serial No. 538,577. 12 Claims. (Cl. 87—6.)



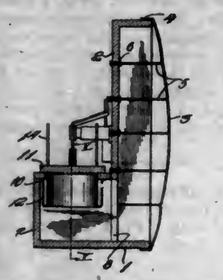
7. In combination with a cooker having a series of superimposed kettles having openings in the bottom thereof for communicating the adjacent kettles with one another, a gate controlling the flow of supply through each opening, a fluid pressure actuating piston connected to each of the gates, means supplying pressure to opposite sides of the piston, a valve for controlling the supply of pressure to one side of the piston, a slidable reciprocating block arranged to actuate sequentially the valves controlling the flow of pressure to each of the pistons, means for moving the slidable block past each of the valves and means for returning the slidable block to its initial position.

1,882,782. CARD HOLDING TRAY. GEORGE H. DAWSON, Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 14, 1929. Serial No. 332,454. 4 Claims. (Cl. 129—16.)



2. In a card index system, a tray having card holder compartments and a floor having lateral lower portions spaced below said compartments, in combination with card holders having resilient ends mounted in said compartments and adapted to be deflected below said compartments for shifting purposes.

1,882,783. GOLF DRIVING INDICATOR. THEODORE H. DECKER, Highland Park, Ill. Filed Jan. 29, 1927. Serial No. 164,525. 8 Claims. (Cl. 265—20.)



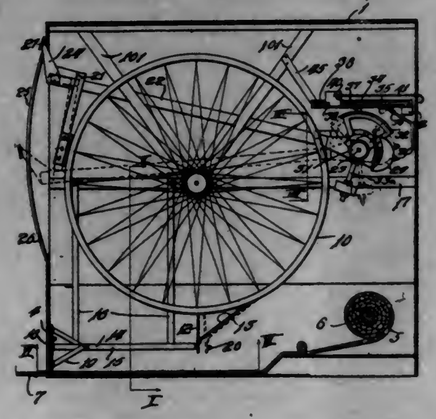
1. In a golf drive indicating device, a hollow member having a flexible wall and an opening in said member, a closure for said opening, bellows connecting said closure to said member, means for maintaining air under pressure within said member to hold said wall in distended condition, a gauge having indicia thereon representing distances, and a lever operatively connecting said closure and said gauge, whereby a displacement of a portion of said flexible wall by the impact of a golf ball driven thereagainst effects a registration on said gauge proportional to the force of the impact.

3. A golf drive indicating device comprising a hollow box having a rigid back wall and a flexible front wall, said front wall being attached to said box in a loosely distended condition, means for supplying air under pressure to said box for distending said front wall, a chamber extending rearwardly of said back wall having an open upper end and communicating with the interior of said box, a cover for said open end, an airtight flexible member connecting said cover to said chamber, a lever pivoted to said back wall and connected to said cover, a gauge on said box, and connections between said lever and said gauge for actuating the latter as said lever is rocked.

1,882,784. GOLF PUTTING DEVICE. THEODORE H. DECKER, Highland Park, Ill. Filed Feb. 25, 1927. Serial No. 170,767. 3 Claims. (Cl. 265—20.)

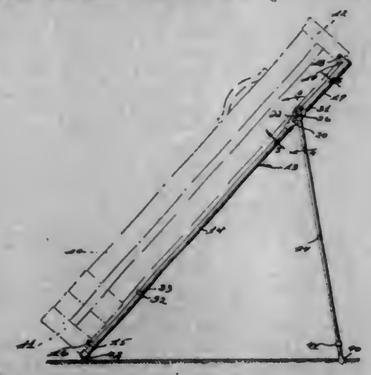
1. In a golf putting device, a pivotally mounted lever having an arcuate surface concentric with the lever pivot

and arranged above the same, means set in motion by the impact of a golf ball for actuating said lever, and weighted means for applying adjustable braking pressure against said arcuate surface.



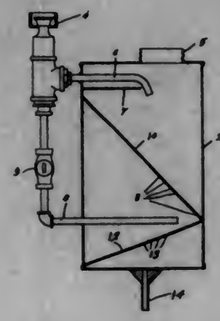
3. A golf putting apparatus comprising a casing, an oscillatable wheel having a plate depending therefrom, an impeller adapted to be displaced by the impact of a golf ball, a bar attached to said impeller and arranged to strike said plate, a lever pivoted near one end, an arm on said wheel arranged to rock said lever, a pointer on the outer end of said lever arranged to move over a scale, and adjustable counterweight on the other end of said lever, a sector on said lever at the pivot thereof, an adjustable weight acting on said sector to retard movement of the same and its connected lever, and a rolled fabric in the casing arranged to be extended to provide a surface for the golf ball as the same is driven towards said impeller.

1,882,785. ATTACHMENT FOR GOLF BAGS. WILLIAM J. DOUGHTY, Detroit, Mich., assignor to Addie A. Doughty, Detroit, Mich. Filed July 13, 1931. Serial No. 550,590. 8 Claims. (Cl. 150—1.5.)



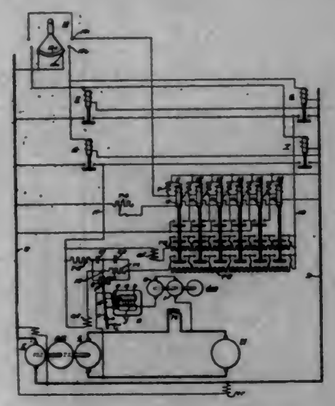
1. An attachment for golf bags comprising telescopically engaging parts, one of the parts adapted to be fixed to a bag and the other part mounted for movement longitudinally of the bag, a pair of legs pivotally connected adjacent the upper ends thereof to one of said parts, and cam means associated with the other of said parts and operable upon relative movement of the parts for simultaneously swinging said legs from a position adjacent the bag to a position wherein they cooperate with the plunger to form a tripod for supporting the bag.

1,882,786. APPARATUS FOR MAKING SOAPSUDS. PHILIP C. DOYLE, Cleveland, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 14, 1931. Serial No. 515,754. 3 Claims. (Cl. 299—84.)



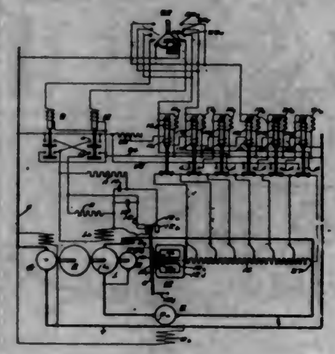
1. Apparatus of the character described, comprising a container having a charging opening and a liquid-inlet in its upper portion, a partition in said container beneath said liquid-inlet having perforations, a valve-controlled liquid-inlet beneath said partition, a perforated partition beneath said last-named inlet, and a discharge outlet independent of said last-named inlet in the lower portion of the container.

1,882,787. MOTOR-CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 18, 1930, Serial No. 445,303. Renewed Feb. 11, 1932. 15 Claims. (Cl. 172—239.)



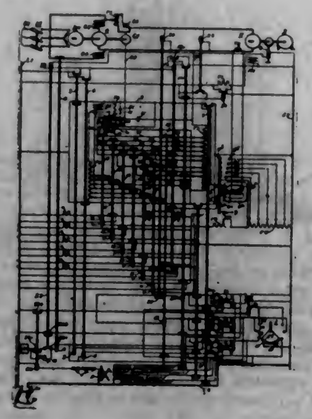
1. In a motor-control system, a motor, a generator, electrical connections between the armatures of said motor and said generator, means for generating a voltage having a component corresponding to a desired value of speed of said motor and a component proportional to the current in said connections, and means responsive to said voltage and the terminal voltage of said motor for controlling the excitation of said generator to maintain the actual speed of said motor at said desired value, regardless of variations of load.

1,882,788. MOTOR-CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 18, 1930. Serial No. 445,304. 18 Claims. (Cl. 172—239.)



1. In a motor-control system, a motor, a generator, electrical connections between the armatures of said motor and said generator, means for generating a control voltage which varies in accordance with the current in said connections, and means responsive to said control voltage and the voltage between said connections for maintaining the speed of said motor constant, regardless of variations of load.

1,882,789. ELEVATOR CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,684. 17 Claims. (Cl. 172—152.)

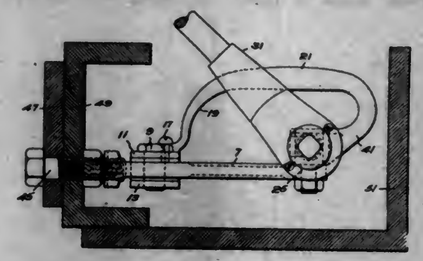


1. In an elevator-control system, an elevator car, a motor for driving said car, means for varying the speed of said motor, means for approximately correcting the speed regulation of said motor, means operating upon said first mentioned means to control the rate of deceleration of said motor, and means responsive to the load on said motor for modifying the operation of said last mentioned means to cause the deceleration of said motor to be substantially the same with all car loads.

5. In an elevator-control system, an elevator car, a motor for driving said car, a generator, electrical connections between the armatures of said motor and said generator, controlling means for adjusting the excitation of said generator in accordance with successive desired values of motor speed, means responsive to the current in said connections for changing the excitation of said generator to correct the variations of actual speed of said motor from values fixed by said controlling means within a predetermined range of loads, and means responsive to the load on said motor for modifying the operation of said controlling means to cause the actual speed of said motor to be maintained at said desired values regardless of motor load.

10. In an elevator-control system, an elevator car, a motor for driving said car, means for impressing a variable voltage on the armature of said motor, controlling means operating upon said first mentioned means to vary said voltage in a manner to control the rate of change of the counter-electromotive force of said motor, and means for modifying the operation of said controlling means to correct for variations in the ratio between the counter-electromotive force and speed of said motor due to load, whereby the rate of change of speed of said motor in response to operation of said controlling means is independent of the load on said elevator car.

1,882,790. PORTABLE CUTTING TOOL. JOHN J. EYRE, Saugus, and HENRY W. PORTER, Brookline, Mass., assignors to H. K. Porter, Inc., Everett, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1931. Serial No. 567,902. 4 Claims. (Cl. 81—196.)



1. A portable cutting tool comprising a base, a pair of cutter levers pivotally mounted thereon, a handle extending upwardly and rearwardly from said base, and a right and left screw cooperating with the tails of said levers for moving the same and having means adjacent both ends thereof for engagement of a turning tool therewith, said handle having a depending end provided with a bearing receiving said screw between the ends of the latter.

1,882,791. PORTABLE OUTLET RECEPTACLE. WILLARD J. FERRIS, Jackson, Mich., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Aug. 21, 1928. Serial No. 301,081. 3 Claims. (Cl. 173—334.)

1. A portable outlet receptacle divided longitudinally into two sections and comprising a handle provided at its outer end with a lamp socket recess and having lateral current taps, and a lamp socket and current tap contacts assembly inserted in the receptacle as a unit and including a head member having a shank and interlocked with the sections, a metallic screw shell mounted on the head

member, a center contact arranged within the shell, conductor bars located at opposite sides of the shank of the head member and connected with the shell and the center



contact respectively, and spring contacts mounted on the conductor bars and associated with the lateral current taps.

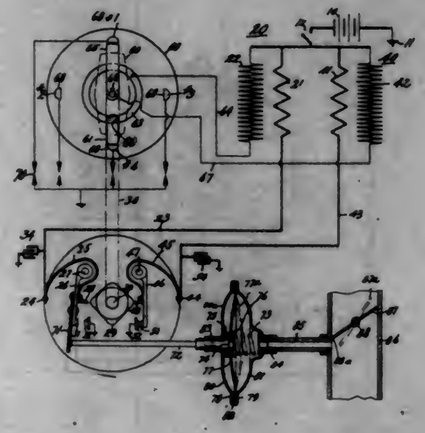
1,882,792. PREFORMED COMPOSITION STRIP AND METHOD OF MAKING SAME. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Dec. 7, 1925. Serial No. 73,931. 13 Claims. (Cl. 154—2.)



1. The method of producing sheet material comprising a commingled mass of granular material and rubber binding material consisting in spreading granular material upon a surface, coating the exposed surface of the granular material with rubber, the application of the rubber being supplied to the granular material in sufficient quantity to leave a surplus of the rubber between the confronting surfaces of the granules in the form of connecting webs, and then forming the rubber coated granular material into a sheet.

1,882,793. IGNITION APPARATUS. JOHN T. FITZSIMMONS, Anderson, Ind., assignor to Delco Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 31, 1931. Serial No. 584,104. 6 Claims. (Cl. 123—148.)

1. Ignition apparatus for a multi-cylinder internal combustion engine comprising in combination, means for providing ignition impulses for all of the cylinders of the engines, and means responsive to engine operating conditions for controlling the ignition means so that only a part of the engine cylinders are provided with ignition impulses during idling.

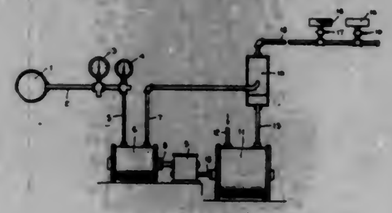


1,882,794. LOCK. GEORGE D. FULL, Winnetka, Ill., assignor to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1925, Serial No. 56,273. Renewed Apr. 30, 1931. 4 Claims. (Cl. 70—113.)



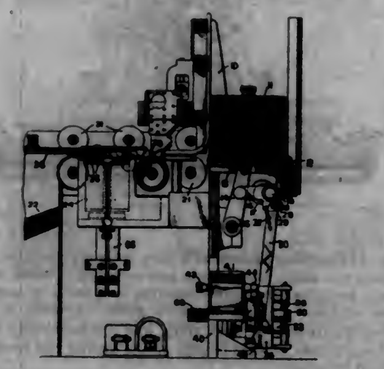
1. In a permutation lock, a casing, locking means including a part movably mounted in the casing, tumbler mechanism for controlling the movement of said means including a series of superimposed tumbler disks each having a peripheral notch adapted to be registered with said movable part to permit movement thereof in approximately radial direction, and an exteriorly accessible member adapted for adjusting said tumbler disks in registered relation; one of said tumbler disks being larger in diameter than the others, and having its periphery formed with a plurality of circumferentially spaced radially extending shoulders of less depth than the shoulders forming said peripheral notch, and having its entire periphery except a portion of said notch lying outwardly beyond the peripheries of said other tumblers, whereby said shouldered tumbler disk prevents contact of said movable part with the other disks unless its peripheral notch is registered with said part and said disk itself is held against rotation by encounter of said movable part with any one of its said shoulders.

1,882,795. METHOD OF PREPARING A GAS MIXTURE SUITABLE FOR SUBSTANTIALLY COMPLETE COMBUSTION. HANS FOERSTERLING, Jamesburg, N. J.; Robert J. McNitt administrator ad litem of said Hans Foersterling, deceased. Filed Nov. 11, 1927. Serial No. 232,504. 4 Claims. (Cl. 48—180.)



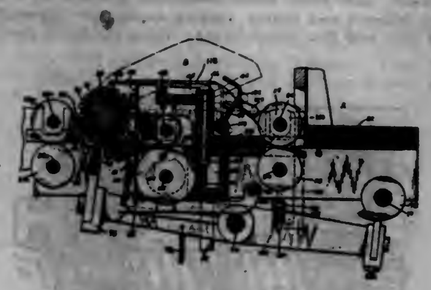
1. A process of mixing combustible air and gas preparatory to burning which comprises passing gas under regulated pressure and volume through a suitable device driven by said gas, driving an air blower by said gas driven device at a rate correlated to the rate of said gas driven device, passing the air compressed by said air blower into a receptacle, leading the gas after delivery from said gas driven device separately from the compressed air into such receptacle to therein form an airgas mixture of predetermined relative proportion, leading such airgas mixture to a location of consumption and consuming the airgas mixture.

1,882,796. CARD COUNTER. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed Nov. 19, 1927, Serial No. 234,329. Divided and this application filed Apr. 6, 1928. Serial No. 267,940. 14 Claims. (Cl. 235—98.)



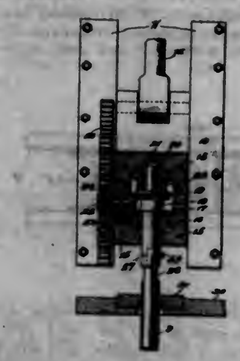
1. A counting attachment for a machine wherein semi-flexible cards are fed one at a time by a feeding mechanism, comprising a counter, a member connected to said mechanism, and a magnet for controlling said member to render it effective to operate said counter.

1,882,797. PERFORATED CARD INTERPRETER. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 6, 1930. Serial No. 426,341. 20 Claims. (Cl. 101—96.)



1. In a machine of the class described, record feeding means, a pneumatic device for analyzing records provided with index points while the records are in motion and printing means controlled by said device for effecting printing on the records.

1,882,798. MANUFACTURE OF TUBULAR CORRUGATED METAL WALLS. WESTON M. FULTON, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Original application filed Jan. 14, 1922, Serial No. 529,282. Divided and this application filed Jan. 14, 1924. Serial No. 686,187. 4 Claims. (Cl. 205—4.)

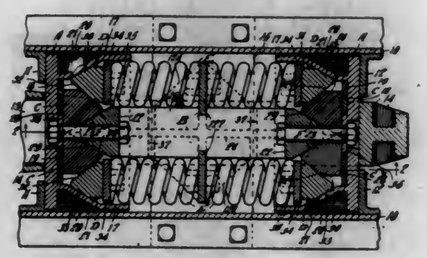


3. Apparatus for displacing the grain in a relatively thin tubular wall including a stationary die, a mandrel, means for pushing said mandrel through said die to operate upon said wall, a gear on said mandrel, and means cooperating with said gear on said mandrel and including means on a stationary part of said apparatus for rotating said mandrel is displaced axially to push said tube through said die.

1,882,799. FRICTION SHOCK ABSORBING MECHANISM. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,585. 3 Claims. (Cl. 213—26.)

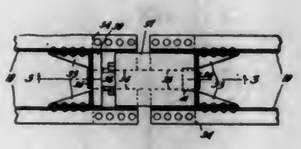
1. In a friction shock absorbing mechanism, the combination with a central post having wedge means at opposite ends thereof; of front and rear followers having trans-

verse friction surfaces and interior, inwardly diverging wedge faces; a pair of wedge blocks at each end of the mechanism at opposite sides of the post, each block having wedging engagement with the post and frictional engagement with the transverse face of the corresponding follower; additional wedge blocks at opposite sides of each follower and having wedging engagement therewith and with said first named blocks; spring resistance means



opposing relative movement of the second named wedge blocks of said front and rear followers; and separate retainer bolts at opposite ends of the mechanism anchored to said post and followers, each of said bolts extending between the members of one of said pairs of first named blocks, the post having a pocket inwardly of the opposite ends thereof accommodating the inner ends of the bolts for inward movement, said pocket opening through the side of the post to render the pocket accessible.

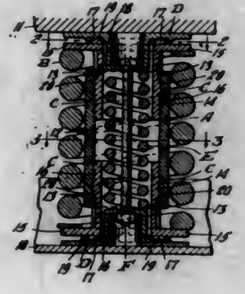
1,882,800. CAR CONSTRUCTION. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,796. 3 Claims. (Cl. 213—8.)



1. In car construction, the combination with coupler means at opposite ends of the car; of a pair of spaced draft sills connected to each coupler, said sills being movable lengthwise of the car body; means yieldingly opposing relative movement of the sill members and car body; a U-shaped yoke member connected to each pair of sills, the arms at the open end of said yoke member being fixed to said sills and the closed end portion of said yoke extending beyond said pair of sills and between the other pair of sills; and a shock absorbing means enclosed by said yoke members and adapted to be compressed between the closed ends thereof.

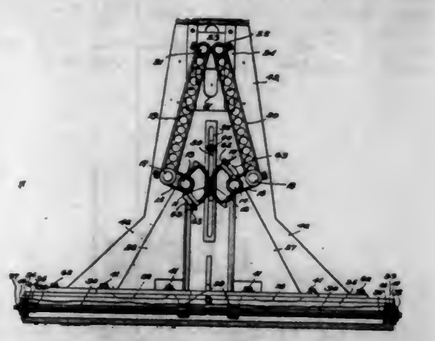
1,882,801. SHOCK ABSORBER. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 5, 1931. Serial No. 542,210. 4 Claims. (Cl. 267—9.)

1. In a friction shock absorbing mechanism, the combination with a friction shell having interior friction surfaces at the opposite ends thereof; of end followers movable toward and away from the shell; friction shoes at opposite ends of the shell having sections extending into the latter, said shoes having rocking engagement with the end followers, each shoe having an arm rigid therewith extending laterally outwardly from the point of rocking engagement of the shoe with the corresponding follower;



a spring resistance surrounding said shell and bearing at opposite ends on the arms of the shoes; and additional spring resistance means within the shell opposing movement of said end followers toward each other.

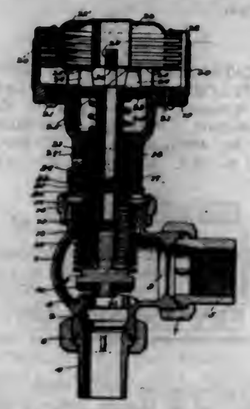
1,882,802. METHOD AND MACHINE FOR TESTING THIN STRIPS. JEAN V. GIESLER, Knoxville, Tenn., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Dec. 27, 1926. Serial No. 157,250. 50 Claims. (Cl. 73—51.)



1. The method of testing a thin strip of material by subjecting the same to repeated and reversed bending stresses which includes alternately bending said strip progressively upon opposed curved surfaces while exerting a tensile stress lengthwise of said strip, and automatically varying the magnitude of said tensile stress during the progression of said bending.

1,882,803. VALVE. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Nov. 25, 1929. Serial No. 409,701. 20 Claims. (Cl. 236—42.)

11. In a device of the class described, a valve casing having a seat therein, a valve movable toward and away from said seat, a support rotatably mounted on said casing, a thermostat carried by said support, a valve stem extending through said support and rotating therewith, said stem operatively connecting said thermostat and

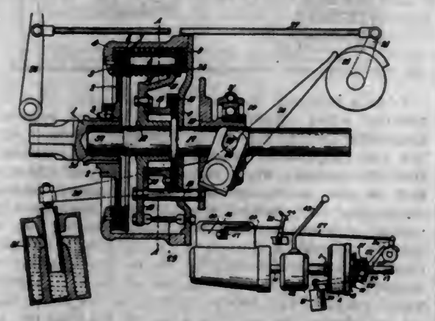


valve, a flexible wall connecting said valve and said casing, and means operable on rotation of said support to vary the effective length of said valve stem.

1,882,804. STABILIZER FOR LEAD CHROMATE PIGMENTS. JOHN WATSON GILBERT, Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 23, 1929. Serial No. 388,037. 8 Claims. (Cl. 134—79.)

1. A coating composition comprising a cellulose derivative, a lead chromate pigment, an inert white pigment, and from 5–30%, by weight of said inert white pigment, of a pigment from the group consisting of zinc oxide and leaded zinc oxide.

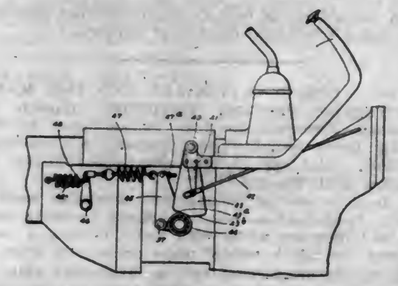
1,882,805. TRANSMISSION SYSTEM. EDWARD HENRY JAMES CECIL GILLETT, Maida Vale, London, England. Filed July 22, 1929, Serial No. 380,105, and in Great Britain Aug. 3, 1928. 22 Claims. (Cl. 192—.01.)



1. In a motor vehicle having an engine accelerator, the combination with a self-energizing clutch of means operated by the accelerator and adapted to effect light engagement only of the clutch on first accelerating the engine, the said clutch comprising a movable idle member, two sets of co-acting inclined members, one set fast on the driven shaft and the counterpart set fast on the idle member, clutch disengaging springs and frictional elements between the driving shaft and the idle member and the said operating means comprising a mechanical connection between the accelerator and the idle member including a lost motion device, the operation being such that on lightly engaging the friction members a wedging action is set

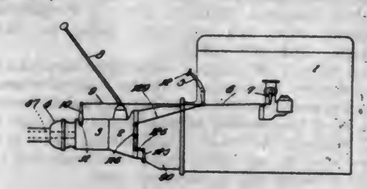
up between the said co-acting inclined members which effects tight engagement of the clutch, disengagement being effected on decelerating the engine, while the said lost motion device permits of further engine acceleration after the clutch is engaged without further effect on the clutch.

1,882,806. FRICTION CLUTCH FOR THE TRANSMISSION OF POWER. EDWARD HENRY JAMES CECIL GILLETT, West Hampstead, London, England. Filed Nov. 1, 1929, Serial No. 404,126, and in Great Britain Nov. 6, 1928. 8 Claims. (Cl. 192—.01.)



1. In an automobile having a motor and an accelerator therefor, the combination with a main friction clutch and means normally holding said main clutch out of engagement, of a pilot clutch, main-clutch-engaging servo-means actuated by said pilot clutch and including a motion rectifying device so operating as to bring about engagement of the main clutch irrespectively of the direction of rotation of the pilot clutch and means operatively connected to the accelerator for engaging the pilot clutch on accelerating the motor.

1,882,807. TRANSMISSION SYSTEM. EDWARD HEATH JAMES CECIL GILLETT, West Hampstead, London, England. Filed Dec. 6, 1929, Serial No. 412,126, and in Great Britain June 10, 1929. 18 Claims. (Cl. 192—01.)



1. In an automobile, a driving motor and a control and transmission system comprising in combination an accelerator for regulating the speed of the driving motor, a servo-operated main clutch including progressively engaging means, an additional clutch including quick engaging means, a variable speed gear interposed between the clutches, and control means for both clutches operatively connected to the accelerator whereby movement of the accelerator to accelerate the motor engages both clutches and maintains the clutches in engagement over the greater part of the accelerator range of movement, and movement of the accelerator to decelerate the motor disengages both clutches.

1,882,808. ESTER INTERCHANGE WITH ORGANIC ACIDS. GEORGE D. GRAVES, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 12, 1928. Serial No. 312,218. 10 Claims. (Cl. 260—106.)

1. The method of shifting the reaction between an aliphatic monocarboxylic acid ester and an aliphatic

monocarboxylic acid in the direction of the opposite ester and the opposite acid when one of the newly formed products has a lower boiling point than either of the original reactants, which comprises distilling off one of the reaction products in the presence of a catalyst.

1,882,809. COMPOSITION OF MATTER. JOHN J. GREBE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 21, 1929. Serial No. 341,700. 7 Claims. (Cl. 252—5.)

1. A composition of matter, which comprises diphenyl-oxide and a substantial amount of diphenyl.

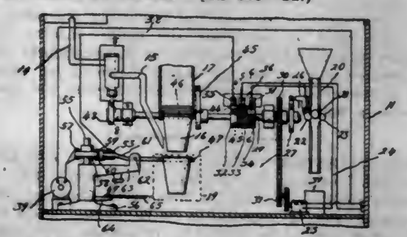
1,882,810. POROUS MATERIALS AND THE MANUFACTURING PROCESS THEREOF. HAROLD W. GREIDER, Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 18, 1928. Serial No. 271,108. 19 Claims. (Cl. 25—155.)

14. In a process of making heat insulation material wherein finely-divided solid ingredients including magnesia and fiber are mixed with water to form a semi-fluid mix, the mix is molded under pressure of about 25 to 50 pounds per square inch in filter-molds with expulsion of water, and the molded forms are thereafter dried, the step comprising generating acetylene gas in said mix in the presence of a gas emulsifying agent by chemical reaction between water of the mix and calcium carbide coated with a protective coating so as to form a stable gaseous emulsion of minute pressure-resisting bubbles of acetylene gas in said mix prior to molding, a multiplicity of said bubbles of emulsified gas being substantially retained during said molding under pressure in filter-molds and a multiplicity of thickly interspersed minute voids being created in the dried product by said retained bubbles of said gaseous emulsion.

1,882,811. PREPARATION OF ORTHO-CHLOR-PARA-NITRANILINE. ERNEST F. GRETHER and JOSEPH L. KEENER, Jr., Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 25, 1929. Serial No. 342,663. 3 Claims. (Cl. 260—130.5.)

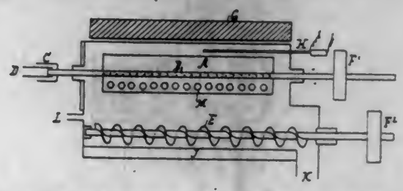
1. The method of making ortho-chlor-para-nitraniline which comprises heating 1, 2 dichlor-4 nitrobenzene under super-atmospheric pressure with aqueous ammonia solution at a temperature between about 140° and about 180° C. whereby the chloro group in position 1 is selectively replaced by an amino group, the remaining chloro group being substantially unreacted upon.

1,882,812. DISPENSING APPARATUS. JAMES B. GUNN, Windsor, Ontario, Canada, assignor to Edward N. Sturdevant and George M. Jenkins, Detroit, Mich. Filed Dec. 16, 1929, Serial No. 414,539. Renewed Feb. 11, 1932. 11 Claims. (Cl. 225—21.)



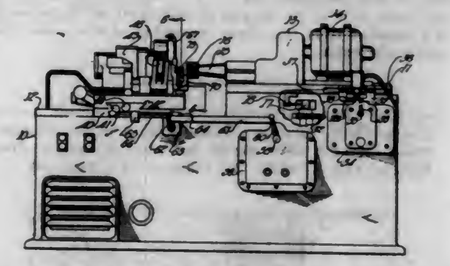
1. Liquid dispensing apparatus having in combination, a casing having an opening in one wall thereof, coin controlled means arranged within the casing for discharging a quantity of liquid into a container also located within the casing, and means actuated by the liquid dispensed to move the container out of the casing through the opening therein.

1,882,813. CATALYSTS FOR THE PRODUCTION OF CARBON BLACK. WALTHER HAAG, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 31, 1930, Serial No. 457,889, and in Germany June 3, 1929. 6 Claims. (Cl. 134—60.)



2. In the production of carbon black by thermal catalytic decomposition of gaseous combustible carbon compounds, the step of contacting said carbon compounds with a solid catalyst comprising a finely divided metal of the iron group, prepared by decomposition of a carbonyl compound, and an alkali metal compound.

1,882,814. GRINDING MACHINE. FREDERICK S. HAAS, Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,205. 23 Claims. (Cl. 51—50.)



1. In a grinding machine the combination of a bed, a grinding wheel support carried thereby and reciprocable longitudinally thereof, a work support carried by the bed and reciprocable longitudinally thereof toward and from the grinding wheel support, a grinding wheel rotatably carried by the grinding wheel support, means reciprocating the grinding wheel support through a short normal grinding stroke, means reciprocating the work support through a normal work receiving and ejecting stroke, means for interrupting the movement of the work support, means for extending the stroke of the grinding wheel support, and means carried by the work support for resurfacing the grinding wheel at the time the movement of the work head is stopped and the movement of the grinding wheel support is extended.

1,882,815. APPARATUS FOR TESTING ELECTRICAL COILS. OTTO PAUL HAEGELE, Berwyn, and CHRISTIAN PAULSON, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1929. Serial No. 345,646. 5 Claims. (Cl. 175—183.)

1. In an apparatus for testing electrical coils, an electrical test circuit, means for clamping a coil at one end in a predetermined testing position and connecting the test circuit with the winding of the coil, an oscillatory member having its free end disposed laterally of the

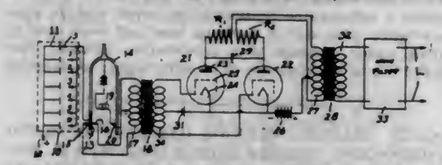


opposite end of the coil, and means for oscillating the member to and from engagement with the coil for subjecting the clamped coil to vibration.

1,882,816. PROCESS OF ENHANCING THE VISCOSITY OF TECHNICAL OILS. MAX HAGEDORN, Dessau in Anhalt, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 30, 1929, Serial No. 403,673, and in Germany Nov. 29, 1928. 7 Claims. (Cl. 87—9.)

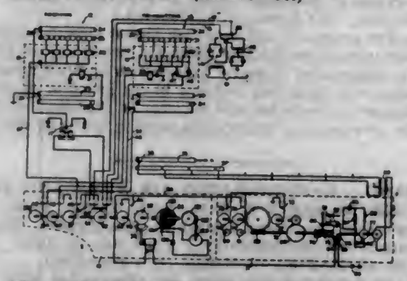
1. A non-resinifying technical oil comprising an oil selected from the group consisting of non-volatile vegetable, animal and mineral oils, and dissolved therein a small quantity of a derivative of a polysaccharide.

1,882,817. TELEGRAPH CARRIER SYSTEM. HAKON H. HAGLUND, Flushing, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,638. 15 Claims. (Cl. 178—51.)



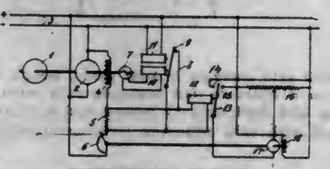
1. A carrier current telegraph system comprising a source of oscillations, a keying device therefor, and means responsive to said oscillations for applying oscillations of the same frequency and increased amplitude to a line circuit, comprising an electrostatically controlled arc discharge tube for each polarity of current.

1,882,818. DIRECTION CONTROL SWITCH FOR TRANSMISSION OVER SUBMARINE CABLES. HAKON H. HAGLUND, Flushing, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1930. Serial No. 492,331. 5 Claims. (Cl. 178—63.)



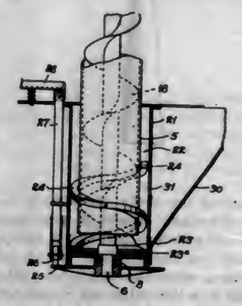
1. The combination with a transmission line, of transmitting apparatus and receiving apparatus, means for periodically changing the electrical connections of said apparatus whereby transmission takes place first in one direction and then in the other, said means comprising a plurality of switches, individual cams for operating said switches, a spring motor having a positive driving connection with said cams for rotating the same, an escapement for permitting said motor to drive said cams and means for periodically actuating said escapement.

1,882,819. DEVICE FOR THE QUICK CONTROL OF VOLTAGE IN DYNAMO-ELECTRIC MACHINES. WALTER HAHNEMANN, Berlin-Marienfelde, and ROBERT HERZOG, Berlin, Germany, assignors to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Aug. 5, 1929, Serial No. 383,438, and in Germany Aug. 11, 1928. 9 Claims. (Cl. 171—229.)



1. A voltage regulating system for a dynamo-electric machine having a field winding comprising an electromagnetic device having a contact normally opened and closed periodically thereby and under the influence of the voltage of said machine, means controlled by the opening and closing of said contact for varying the exciting current through the field winding in timed relation thereto, a variable resistance in series with the field winding, and a motor controlled by said contact and controlling said resistance, the current through the armature of said motor being reversed periodically in timed relation to the opening and closing of said contact.

1,882,820. CONVEYER APPARATUS. GEORGE H. HAINES, Caledonia, Ohio, assignor to The Grain Machinery Company, Marion, Ohio, a Corporation of Ohio. Filed Oct. 29, 1930. Serial No. 491,952. 13 Claims. (Cl. 198—64.)

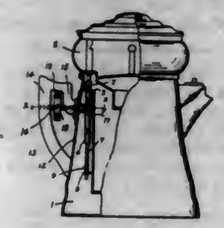


1. Conveyer apparatus comprising a rotatable screw conveyer, a feeder device operatively connected to the screw conveyer for rotation on the same axis, spaced circumferentially of the said conveyer and extending longitudinally of a portion thereof, and a stationary tubular conduit for said screw conveyer positioned between the said conveyer and the said feeder device.

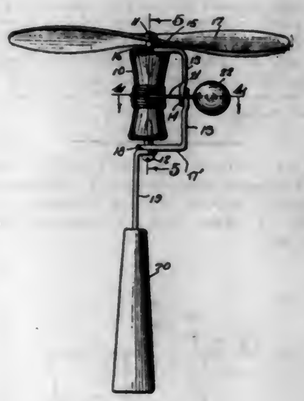
1,882,821. FLUID FLOW CONTROL MEANS FOR COOKING UTENSILS. STACEY A. HAINES, Chicago, Ill., assignor of one-half to Harold F. Spencer, Kansas City, Mo. Filed Apr. 14, 1930, Serial No. 444,155. Renewed May 23, 1932. 6 Claims. (Cl. 53—3.)

1. In a utensil, the combination with a plurality of chambers, fixed guide means associated with the wall of

one of said chambers, an aperture in the wall of said guide means, means movably supported by said guide means for transferring fluid from one of said chambers to the other, said transferring means having serrations coinciding with said aperture in said guide, means extending through said aperture and engaging said serrations for adjusting said fluid delivery means, and a control wheel associated with said adjusting means exteriorly of said utensil.



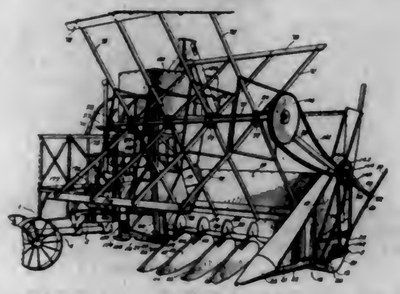
1,882,822. TOY. ALEX HAJDU, Hooversville, Pa. Filed Dec. 31, 1930. Serial No. 505,850. 1 Claim. (Cl. 46—14.)



A spinner toy of the character described, comprising a frame formed of a single strand of wire having a straight shank, a handle in which said shank is embedded, the wire strand outwardly of the straight shank being bent into U-shape to form a spool holder with a coiled eye at each end of the holder in line with the shank and a coiled eye in the closed side of the U-shaped holder, a spool arranged in axial alignment with the end eyes, a spinner element, and screw pegs passing through the end eyes and fastened in the ends of the spool and forming pivots for the same, one of said screw pegs being connected to the spinner element.

1,882,823. APPARATUS FOR HARVESTING CORN. STEPHEN H. HALE, Kansas City, and WAYNE H. WORTHINGTON and TORVALD N. PIERSON, Independence, Mo., assignors to The Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 421,944. 14 Claims. (Cl. 56—65.)

1. In a machine of the character described, a frame, a pan supported on the frame for receiving corn stalks, a sickle supported in front of the pan for cutting the corn stalks, a conveyor in the pan for removing the corn cut by the sickle, a reel supported above the pan for directing corn stalks into contact with the sickle, means pivotally



related to the pan and supported in front of the sickle for raising fallen stalks into position to be engaged by the reel, and a back board on the pan cooperating with the reel to support cut stalks in feeding relation with the conveyor.

1,882,824. PROCESS FOR THE MANUFACTURE OF PHENOLS. WILLIAM J. HALE and JOSEPH W. BRITTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 30, 1926. Serial No. 145,364. 7 Claims. (Cl. 260—154.)

1. The method of making a free phenol directly without acidification of the reaction product which comprises reacting a halogenated benzene hydrocarbon and an aqueous solution of a salt of a strong base and weak acid by heating under pressure at a temperature between 250° and 375° C. in the presence of metallic copper as catalyst.

1,882,825. MANUFACTURE OF HYDROXY AROMATIC COMPOUNDS. WILLIAM J. HALE and JOSEPH W. BRITTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 30, 1926. Serial No. 145,365. 10 Claims. (Cl. 260—154.)

1. A method of making free beta-naphthol which comprises heating to 250°–375° C. under pressure beta-chloronaphthalene with water and a salt of a strong base and weak acid, while in contact with metallic copper.

1,882,826. MANUFACTURE OF PHENOLS. WILLIAM J. HALE and EDGAR C. BRITTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 3, 1929. Serial No. 375,873. 12 Claims. (Cl. 260—154.)

1. The process of making a free phenol directly without acidification of the reaction product which comprises heating a halogenated aromatic hydrocarbon with an aqueous solution of a basic salt included in the group of borates, carbonates, phosphates and silicates of the alkali metals under pressure at a temperature between 320° and 400° C.

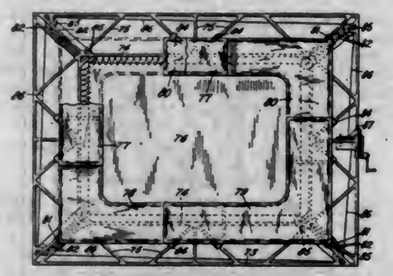
1,882,827. HAND-OPERATED AIR PUMP AND THE LIKE. FREDERICK E. HALL, North Easton, Mass., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Apr. 8, 1931. Serial No. 528,619. 10 Claims. (Cl. 230—206.)

1. In a reciprocating pump, the combination with the cylinder-unit and plunger-unit thereof; of an absorbent oil-storage pad carried by one of the said units; and a tapered oil-deflector carried by the other of the said units; the said pad and the said tapered oil-deflector being located within the pump structure in position to interengage as



the said plunger-unit approaches the limit of its reciprocating movement to displace oil from the said pad toward the inner surface of the said cylinder-unit.

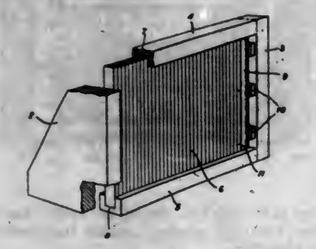
1,882,828. MASKING FOR CINEMATOGRAPH AND LIKE SCREENS. GEORGE SAMUEL HALL and ROBERT GEORGE HALL, London, England. Filed Dec. 15, 1930, Serial No. 502,562, and in Great Britain Jan. 9, 1930. 14 Claims. (Cl. 88—24.)



1. A masking for a projection screen comprising a plurality of parts forming the sides, top and bottom of a complete border around the screen, common operating means for moving all of said parts simultaneously to vary the size of opening in the masking, the centre of said opening remaining unaltered, and operating means for moving a part of said border forming one side thereof independently of the remainder of the masking.

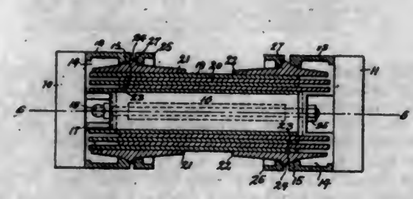
1,882,829. RELIEF PICTURE VIEWING SCREEN. HOWARD HALL, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,832. 12 Claims. (Cl. 88—24.)

1. A relief picture viewing screen, comprising a plurality of separate elongated infrangible transparent elements arranged side by side, one exposed surface of each element being of a certain curvature, the opposite surface



being of a different curvature, and a layer of light diffusing material formed on said opposite surface.

1,882,830. SHOCK ABSORBER. JOSEPH M. HALL, Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Aug. 26, 1925. Serial No. 52,627. 8 Claims. (Cl. 213—36.)

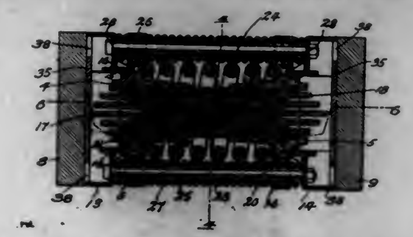


3. A shock absorber comprising opposed thrust heads adapted to engage with the inner sides of followers which are movable toward and from one another, an abutment member, means for securing said abutment member to one of said heads, a plurality of groups of intercalated friction plates, one group adapted to be engaged by one follower and the other group by the other follower and to be moved lengthwise thereby, certain of said plates being on opposite sides of said abutment member and in contact therewith, wedge shoes engaging with the sides of said groups of plates and having wedging engagement with said thrust heads, cross heads engaging with said wedge shoes, a releasing spring interposed between said thrust heads, and a thrust spring between said cross heads.

1,882,831. SHOCK ABSORBER. JOSEPH M. HALL, Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Apr. 12, 1926. Serial No. 101,866. 3 Claims. (Cl. 213—36.)

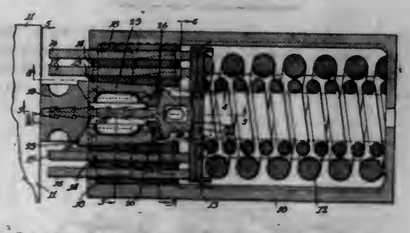
2. A shock absorber comprising a pair of casings spaced apart, a plurality of sets of intercalated friction plates having their outer ends in said casings, follower plates at the outer ends of said casings and movable relative thereto, comparatively thin bearing plates between said follower plates and the ends of said friction plates and adapt-

ed to contact therewith during the compression of said shock absorber, means for securing said bearing plates to said casings, and means comprising wedging mechanism



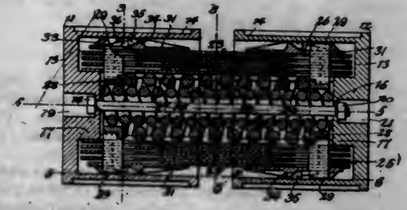
for forcing said friction plates laterally into frictional engagement with one another during the compression of the shock absorber.

1,882,832. DRAFT GEAR. JOSEPH M. HALL, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Feb. 19, 1930. Serial No. 429,498. 7 Claims. (Cl. 213—33.)



1. In a draft gear in combination, a chambered follower, an opposed follower, a follower within the chamber, a spring reacting between the last named follower and the end of the chambered follower, a pair of thrust elements, seated against the opposed follower, their inner faces being forwardly and outwardly inclined, a thrust element associated with the outer face of the spring advanced follower and having a stem located between the pair of thrust elements, such stem having faces complementary to the inclined faces thereof, wedge means for advancing the second named thrust element in opposition to the spring upon movement of said first named thrust elements and for forcing the pair of first named thrust elements against the stem, said wedge means also causing relative movement of the stem and the first named thrust elements.

1,882,833. SHOCK ABSORBER. JOSEPH M. HALL, Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Apr. 9, 1923. Serial No. 630,730. 19 Claims. (Cl. 213—36.)

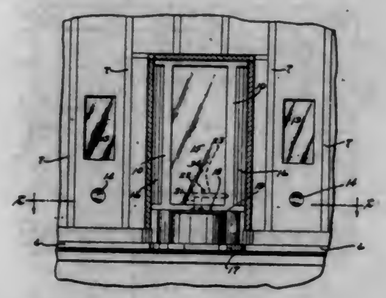


14. In a draft gear, opposite followers, a set of intercalated friction plates located lengthwise between said followers for engagement thereby upon compression of the gear to move the plates longitudinally inward in opposite directions, means for pressing the friction plates together inwardly transversely of said gear to offer frictional resistance to the inward movement of the followers, said means including shoe members in cooperative relation with the set of friction plates and provided with inclined wedge surfaces, and wedge members cooperating with said wedge surfaces of said shoes and actuated by the inward movement of the followers for forcing said plates together laterally into frictional contact upon compression of said gear, resilient means for resisting the inward longitudinal movement of certain of said members for causing the wedging action between said members, and means for returning the parts to normal position after release of said gear.

1,882,834. ASPHALT EMULSION AND MANUFACTURE THEREOF. LLOYD A. HALL, Chicago, and EDWIN E. MORTELL, Kankakee, Ill., assignors, by mesne assignments, to J. W. Mortell Company, a Corporation of Illinois. Filed Aug. 15, 1929. Serial No. 386,000½. 1 Claim. (Cl. 134—1.)

A method of forming a stable asphalt emulsion which comprises forming an emulsion from relatively small quantities of a heated colloidal clay suspension and an asphaltic substance heated considerably above its melting point, adding relatively large quantities of the same ingredients at substantially the same temperatures while agitating to emulsify the ingredients, then continuing the agitation until the emulsion cools to a temperature approximately as low as the melting point of the asphaltic substance, and then chilling the emulsion by simultaneously adding cold water thereto and continuing the agitation until the temperature of the emulsion is at least not higher than the melting point of the asphaltic substance.

1,882,835. DEAL TRAY. EDWARD C. HANSON and SYLVAN R. POPP, Minneapolis, Minn., assignors to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 16, 1931. Serial No. 537,770. 14 Claims. (Cl. 20—1.01.)

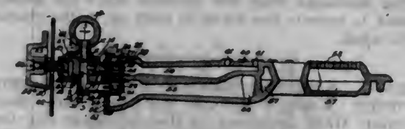


1. A deal tray adapted to be mounted in a closure and through which an article may be passed from one side of the closure to the other and comprising inner and outer casings, one of which is fixed and the other of which is rotatable, the fixed casing having a passage on each side of the closure and the rotatable casing having a passage arranged to be alternately brought into registration with the passages in the fixed casing by a movement of the rotatable casing, said rotatable casing also having an open bottom.

1,882,836. GAS RANGE COCK. PHILIP S. HARPER, Chicago, Ill. Filed Oct. 3, 1929. Serial No. 396,952. 1 Claim. (Cl. 158—120.)

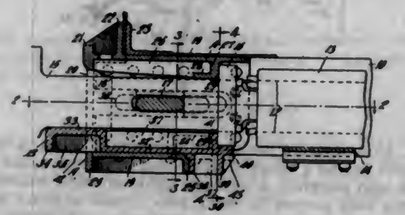
A gas burner, comprising a valve having a casing with a valve closing member seating therein, said casing having two discharge nozzles thereon, said burner having two

sections, one larger than the other, and having two mixing tubes, one connecting with each section, each of said nozzles projecting into one of said mixing tubes, said valve closing member having an inlet passage and two outlet passages, each of said outlet passages leading to one of said nozzles, said passages being arranged whereby in



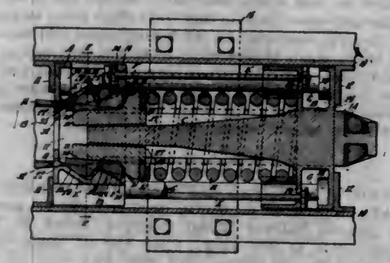
at least one rotary position of said closing member said inlet passage is closed while both outlet passages are open to said nozzles, the one of said nozzles projecting into the mixing tube leading to the smaller of said sections having a central orifice projecting into said mixing tube, a needle designed to close said central orifice, and having a single side orifice projecting into said mixing tube.

1,882,837. RAILWAY DRAFT RIGGING. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 6, 1928. Serial No. 283,204. 5 Claims. (Cl. 213—60.)



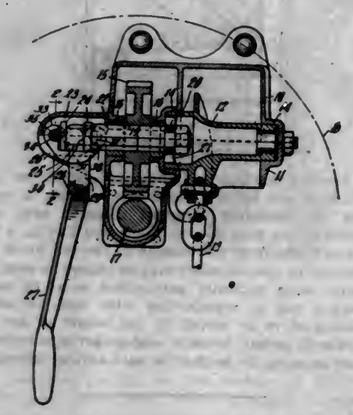
1. In a draft rigging for railway cars, the combination with a coupler having a shank member; of a yoke having a keyed connection with the shank of the coupler; a fixed support on the car; a main front follower within the yoke; a slide movably guided on said support and engaging and supporting the coupler shank outwardly of the keyed connection thereof with the yoke, said slide being movable lengthwise of the mechanism with respect to the yoke; and means on the inner end of the slide for supporting said front follower.

1,882,838. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Sept. 26, 1923, Serial No. 664,867. Divided and this application filed July 7, 1928. Serial No. 291,066. 6 Claims. (Cl. 213—36.)



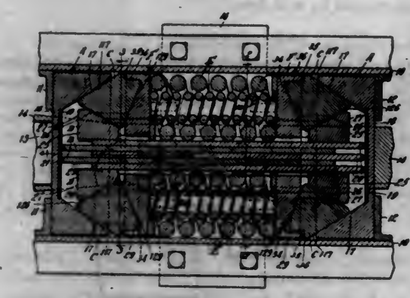
3. In a friction shock absorbing mechanism, the combination with a tapered friction post; of a wedge casing, said post and casing being relatively movable toward and away from each other, said casing having a plurality of sets of interior wedge faces; a plurality of friction shoes having frictional engagement with the post; a main spring resistance opposing relative movement of the shoes and post; and a set of wedge blocks engaging each shoe, the wedge blocks of said set having wedging engagement respectively with one of said sets of wedge faces of the casing.

1,882,839. CLUTCH ACTUATING MEANS. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 6, 1931. Serial No. 573,861. 11 Claims. (Cl. 192—82.)



1. In a clutch operating mechanism, the combination with a rotary clutch member; of a cooperating rotary clutch element, said element being axially shiftable toward the clutch member to engage the same therewith; and a swiveled lever for shifting said clutch element, said lever having trunnion means swiveled to said clutch element, the axis of said trunnion means being brought into alignment with the center of swiveling movement of the lever in a plane parallel to the axis of said shiftable element when said clutch element is in operative engagement with the clutch member.

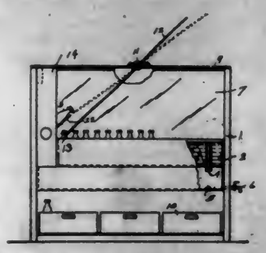
1,882,840. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Feb. 14, 1924. Serial No. 692,684. 12 Claims. (Cl. 213—36.)



2. In a friction shock absorbing mechanism, the combination with relatively movable end followers; of a plurality of relatively movable friction plates interposed be-

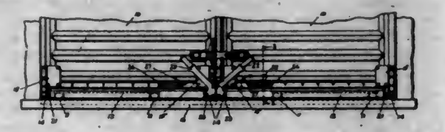
tween said end followers; a spring resistance; and wedging means having wedging engagement with said followers for placing said plates under pressure, said wedging means including a yoke interposed between said followers.

1,882,841. VENDING MACHINE. WELLINGTON C. HATHAWAY, Houston, Tex. Filed Mar. 17, 1930. Serial No. 436,310. 4 Claims. (Cl. 312—36.)



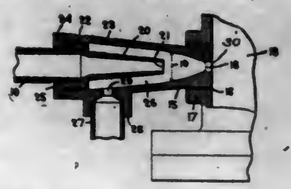
1. A vending machine including a container for articles to be vended and having a delivery opening, a rotatable drum in the container arranged adjacent said opening to prevent access into the container and having a pocket, means accessible from the outside of the container whereby an article in the container may be placed in said pocket, said drum being normally unbalanced so as to maintain said pocket out of registration with said opening and being mounted to be moved by the weight of an article, placed in said pocket, to carry said pocket into registration with said opening to render the said article accessible.

1,882,842. DOOR ELEVATING MEANS. FREDERICK C. HEINEN, Chicago, Ill. Filed June 14, 1930. Serial No. 461,116. 15 Claims. (Cl. 16—99.)



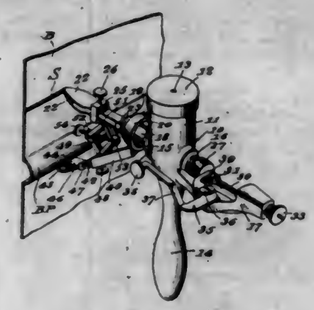
1. In combination, a door, a runway eccentrically connected to said door, said door and said runway being capable of relative vertical movement, a track, rolling elements seated within said runway and supported upon said track, said door normally resting upon said track and means adapted to rotate said runway to raise said door about its connection with the runway, whereby said door is supported for movement upon the rolling elements, said means comprising a lug depending from said runway and a lever carried by said door.

1,882,843. RETARDING CHAMBER. WILLIS K. HODGMAN, Jr., Taunton, Mass. Filed Feb. 2, 1929. Serial No. 337,102. 8 Claims. (Cl. 169—23.)



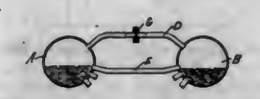
5. A retarding chamber for a liquid supplying system under pressure in which the said chamber is closed except for an alarm-operating connection and for a single orifice acting both to admit liquid to, and discharge liquid from, the chamber, and a nozzle connected to the supply system located opposite said orifice and constructed and arranged to produce, when the flow through the nozzle is continuous for a predetermined period under full head, a jet filling the orifice, flowing into the chamber and preventing discharge from the chamber until the pressure required to operate the alarm is built up in the chamber by the liquid.

1,882,844. STRIPING DEVICE FOR AUTOMOBILE BODIES. RALPH Z. HOPKINS and EARL FENTON SEGER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 23, 1928. Serial No. 272,072. 14 Claims. (Cl. 91—62.6.)



1. In a striping device for automobile bodies, a body portion having a reservoir, a striping applicator connected with said reservoir, a yieldable guide pivotally connected to the body portion to swing into various adjusted positions with respect to said applicator, and means for maintaining the guide in adjusted position.

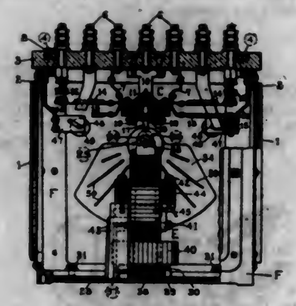
1,882,845. WATER TUBE BOILER. HENRY SHILLETO HORSMAN, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 13, 1928, Serial No. 319,029, and in Great Britain Jan. 25, 1928. 3 Claims. (Cl. 122—302.)



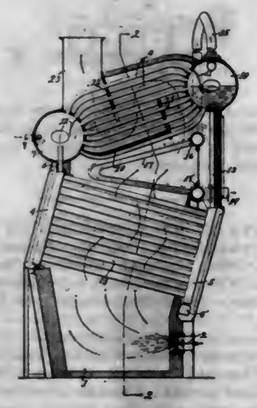
1. In a boiler having a front steam and water drum and a rear steam and water drum, a lower drum connected by tubes to said steam and water drums, the tubes connecting said lower drum to said front drum being located so that they are contacted by the hottest gases and have the most of the steam generated in them and delivered to said front drum, steam connections between said front and rear drums, and a restriction in said connections to cause greater pressure in said front drum and tend to equalize the water levels in said steam and water drums.

1,882,846. UNIVERSAL ALTERNATING CURRENT RELAY. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Apr. 27, 1922. Serial No. 556,990. 16 Claims. (Cl. 200—91.)

1. A relay comprising, a casing including a top and a bottom plate, a carrier bar supported on a horizontal axis in said casing and carried from the top plate and provided with contact fingers, a forked hanger extending from said bar, and an electro-responsive device carried by the bottom plate and having a spindle mounted substantially parallel with said carrier bar and provided with an eccentrically disposed roller continuously in engagement with the fork of said hanger.

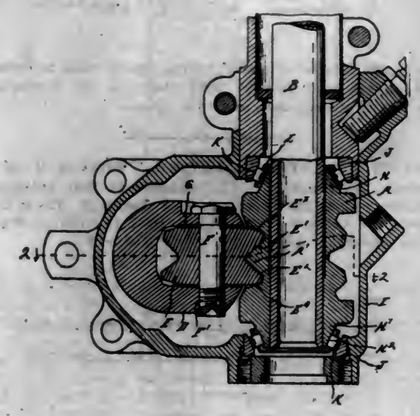


1,882,847. BOILER. VIVIAN W. HOXIE, San Francisco, Calif., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,309. 7 Claims. (Cl. 122—303.)



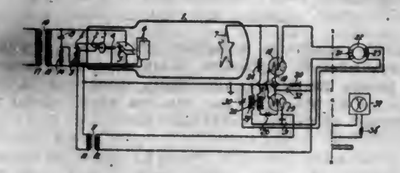
1. In a steam boiler, a bank of inclined tubes connected to headers, a bank of tubes inclined in the opposite direction and located above the first bank, drums at opposite ends of said last named bank of tubes, connections between said tubes, and means to cause hot gases to pass across the upper ends of the tubes of the second bank and then across the lower ends thereof.

1,882,848. STEERING GEAR. HENRY MARLES, Detroit, Mich., assignor, by mesne assignments, to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1929. Serial No. 330,834. 3 Claims. (Cl. 74—79.)



1. In a steering gear, a worm, integral conical extensions on opposite ends of said worm, race members having surfaces parallel to the surface of said conical extension and cylindrical rollers arranged between said surfaces.

1,882,849. FREQUENCY CONTROL SYSTEM. WARREN A. MARRISON, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1929. Serial No. 382,535. 12 Claims. (Cl. 250—36.)



1. The method of determining relative changes between a plurality of wave trains utilizing means for rotating an electron beam conically in accordance with the frequency of one wave train, and means for varying the velocity of the electrons cyclically in accordance with the frequency of another wave train whereby a definite trace is obtained which comprises absorbing energy from the beam only when said trace is varied and utilizing the absorbed electrons to vary the current in an external circuit.

1,882,850. FREQUENCY PRODUCER. WARREN A. MARRISON, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 5, 1929. Serial No. 383,622. 12 Claims. (Cl. 250—36.)

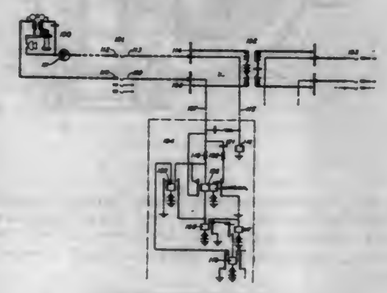
5. In combination with means for producing a cathode ray and means for varying the direction of said ray

cyclically, additional means comprising conductive elements connected to each other through a path of substantially zero impedance and arranged to intercept and



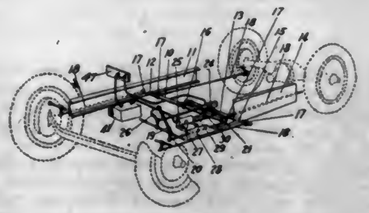
avoid said ray alternately during equal time intervals, and means controlled by said elements for regulating the flow of energy in a separate circuit.

1,882,851. TELEPHONE SYSTEM. WILLIAM H. MATTHIES, Hackensack, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1931. Serial No. 568,927. 14 Claims. (Cl. 179—16.)



1. In a signaling system, a responsive device, means for establishing operating circuits of different resistance to said responsive device, means operative over said circuits for determining whether a particular established circuit is of relatively high or low resistance, and means controlled by said means for rendering said responsive device less responsive if said circuit is found to be of low resistance.

1,882,852. MANUAL ELECTRIC BRAKING SYSTEM. MONTGOMERY W. MCCONKEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 29, 1928. Serial No. 289,120. 17 Claims. (Cl. 188—156.)

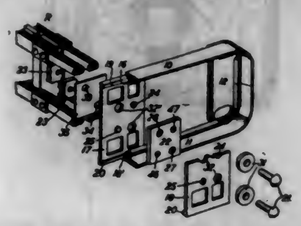


1. A manual electric braking system comprising, brakes, manual means to apply said brakes, magnetic means to operate in conjunction with said manual means, and yieldable means coupling said manual applying means with the brakes including a member associated with the magnetic means whereby the magnetic strength is increased by certain successive steps after the manual braking effort reaches a certain value determined by the strength of the yieldable means.

1,882,853. BLACK POWDER COMPOSITION. WILLIAM A. MCINTYRE, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,390. 6 Claims. (Cl. 52—17.)

1. A black powder composition characterized by its slow rate of combustion, and containing as an ingredient an oil emulsifiable with water without the use of an additional emulsifying agent.

1,882,854. MOUNTING FRAME FOR ELECTRICAL APPARATUS. EDWARD D. MEAD, Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1931. Serial No. 580,104. 5 Claims. (Cl. 179—91.)



1. A pair of spaced parallelly disposed bars, apparatus to be mounted thereon, a pair of plates for each piece of apparatus, and a common securing device for clamping the bars between each pair of plates and the piece of apparatus to the plates.

1,882,855. SHEET CONVEYING APPARATUS. HANS MELIN, Youngstown, Ohio, assignor to The Aetna Standard Engineering Company, Youngstown, Ohio, a Corporation of Ohio. Filed Oct. 13, 1931. Serial No. 568,576. 1 Claim. (Cl. 198—189.)



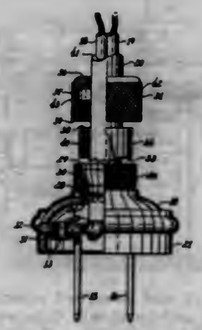
A supporting and conveying mechanism for sheets comprising a chain having side bars and cross pins, and auxiliary side bars of low thermal conductivity extending above said first named side bars.

1,882,856. STRAIN RELIEVING DEVICE FOR ELECTRICAL CONDUCTOR CORDS. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,837. 6 Claims. (Cl. 173—322.)

3. In a device of the character described, in combination, an externally threaded metal bushing having a downwardly tapering bore, a substantially cylindrical gripping element formed of wound paper tubing adapted to seat within said bore, said element having notches extending upwardly from the lower edge thereof, a nipple having an internal thread at its lower end adapted for cooperative engagement with said bushing and a flange at its upper end adapted to overlie said gripping element, and a rubber covered cord conductor freely insertable lengthwise through said gripping element, the latter being forced into tight frictional engagement with the rubber covering of said cord upon movement of said nipple into telescopic engagement with said bushing.

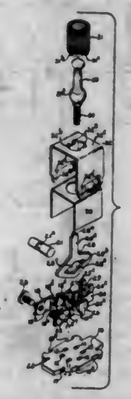
6. In a strain relieving device for electrical conductor cords, a separately formed gripping element consisting of

a cylindrical section or length of wound or laminated paper tubing, said element having a plurality of notches extending from the lower edge throughout the major



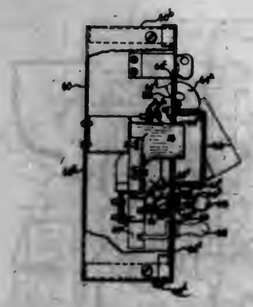
portion of the length thereof, the open ends of said notches being flared to provide for deformation of said element into subatantially frusto-conical shape without buckling of the material.

1,882,857. ELECTRIC SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 10, 1931. Serial No. 528,998. 14 Claims. (Cl. 200—76.)



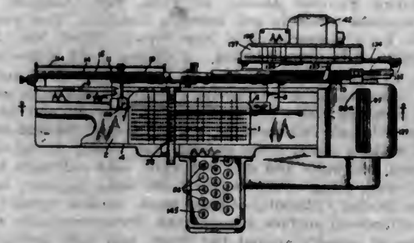
1. In an electric snap switch, in combination, an insulating base, a plurality of contacts positioned edgewise upon the upper surface of said base and rigidly attached thereto, a substantially cylindrical roller contactor movable into and out of bridging engagement with pairs of said contacts selectively, certain of said contacts having concave upper edge portions to resist movement of said contactor from engagement therewith, a housing for said contacts, a bushing attached to said housing, a lever pivoted within said bushing, said lever having a recess in the lower end thereof, a flat punched insulating member having an upper end portion slidable within said recess, a coiled compression spring within said recess and tending to eject said end portion of said insulating member therefrom, said insulating member having a lower enlarged portion providing arms adapted to straddle said contactor, said arms being arranged to provide for movement thereof relatively to said contactor and the engaging surfaces of said arms converging upwardly toward each other to provide a camming action thereof upon said contactor to accelerate the movements of the latter.

1,882,858. ELECTRIC SWITCH MECHANISM. RALPH A. MILLERMASTER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 5, 1931. Serial No. 542,236. 13 Claims. (Cl. 200—50.)



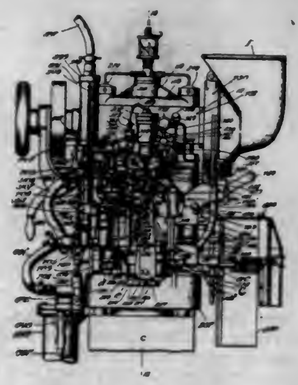
1. In a fused switch device, in combination, a box-like sheet metal casing, a main cover member hinged to said casing, a molded insulating base supported within said casing in spaced relation to the rear wall of the latter, a fuse receptacle carried by said base, said cover member having an opening to provide access to said fuse receptacle, a switch mechanism comprising a pair of stationary contacts arranged in parallelism in a plane below and to one side of said fuse receptacle, one of said switch contacts being electrically connected to the center contact of the fuse receptacle and the other switch contact being provided with a line terminal, an insulating element slidably engaging the inner surfaces of said contacts and bearing on opposite edges against said insulating base for support thereof by the latter, said insulating element and said base having cooperating shoulders to limit movements of the former with respect to the latter, a bridging contactor comprising a pair of resilient arms rigidly attached to said insulating element on opposite sides of the latter and electrically connected with each other, said arms having flared end portions spaced from said insulating member and adapted to slidably engage the outer surfaces of said contacts, an operating handle slidably mounted on said cover member and accessible from the exterior of the latter, an element carried by and movable with said handle, and said last mentioned element having a loose interlocking connection with said insulating element to provide for corresponding movements of the latter.

1,882,859. PERFORATING MACHINE. ALBERT W. MILLS, East Orange, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 1, 1930. Serial No. 432,461. 6 Claims. (Cl. 164—112.)



1. In a card perforating machine, a punch, manually actuated means for operating the punch, means controlled by the operation of the machine for also actuating the punch and means including a holding latch for preventing a repeat operation under control of said machine controlling means.

1,882,860. BOTTLE FILLING AND CROWNING MACHINE. VALENTINE J. MOHLER, Wheaton, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 16, 1928. Serial No. 262,105. 50 Claims. (Cl. 226—77.)



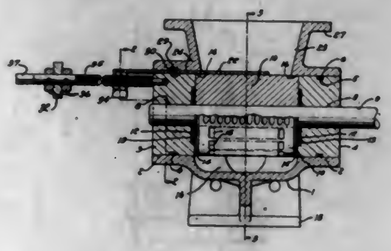
2. In a machine of the class described, a bottle support, a vertically movable filling head, means for lowering the filling head into engagement with the bottle and raising it therefrom means operated by the engagement of the filling head with a bottle for arresting the movement of the lowering and raising means while the bottle is being filled.

39. In a machine of the class described, a filling head, a die in said filling head adapted to receive the lip of a bottle with a crown thereon and force the crown into fixed engagement with the lip, a filling tube, a dial below the die having a filling passage therethrough and a passage adapted to receive the head of a bottle, there being a crown seat above the latter passage, means for placing a bottle crown on said seat and means for operating the dial to bring the two openings therein alternately in registry with the bottle head receiving opening of the filling head.

48. In a machine of the class described, a bottle support, a filling head, an auxiliary slide carrying said filling head, a main slide in which said auxiliary slide is mounted, a sealing cup mounted to slide on the lower end of the filling head, there being bottle head receiving openings in said head and cup, an annular compressible seal between the cup and filling head surrounding the openings therein, and means on the slides for moving said cup toward and from the filling head when the main slide moves relatively to the auxiliary slide.

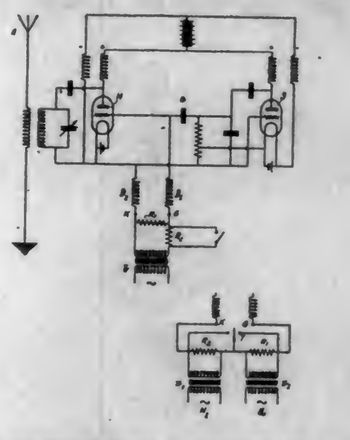
1,882,861. FEEDER FOR PULVERIZED MATERIALS. RALPH SWITZER MOORE, El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 25, 1927. Serial No. 235,564. 2 Claims. (Cl. 302—49.)

1. In a non-clogging feeder for feeding pulverized material to a furnace, a body having cylindrical side walls with end openings and a top feed opening, separate end walls secured in said end openings, a shaft passing through said end walls, a rotary drum on said shaft closely fitting said curved side walls and said end walls, said end walls and said drum being of substantially the same diameter, said drum having a plurality of fixed, small, shallow recesses in its cylindrical surface disconnected circumferentially and arranged serially around the drum, said body having a lower chamber in which the entire lower part of the drum is disposed, aligned inlet and outlet conduits communicating with said chamber and disposed at right angles to said shaft, said conduits covering from both ends toward said drum, an arcuate stationary gate disposed closely over one disk wall and said drum, and means for axially sliding said gate to cover any desired fraction of said drum from zero to maximum, whereby a tight seal is provided between said top opening and lower chamber and



no free passage of said pulverized material is permitted and whereby the pockets of said drum are kept clean by the blast of air passing through said aligned conduits.

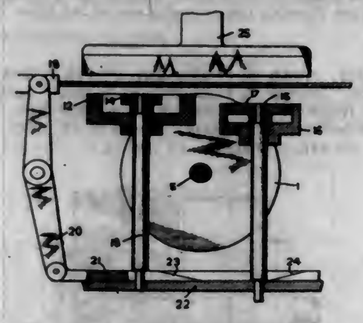
1,882,862. SYSTEM FOR KEYING TRANSMITTERS. WILHELM MOSER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 13, 1926, Serial No. 80,926, and in Germany Mar. 7, 1925. 2 Claims. (Cl. 250—19.)



1. In a transmitting system, a source of high frequency oscillations having its output electrodes connected with a load circuit, a thermionic modulator tube, means for impressing oscillations from said high frequency source on to the input electrodes of said modulator tube, a source of oscillations having a frequency characteristic of the signal units, a source of oscillations having a frequency characteristic of the marking units, and means for conductively connecting said sources in series across the input electrodes of said modulator and for separately connecting either of said sources across the input electrodes of said modulator.

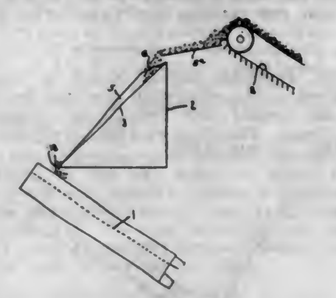
1,882,863. TIME RECORDER. HUGO MUTSCHLER, Lindelfingen, Germany, assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed June 13, 1928, Serial No. 285,004, and in Germany Nov. 25, 1927. 15 Claims. (Cl. 234—54.)

1. A device for recording elapsed time between successive registrations, comprising a die for making an imprint upon the first registering operation, a die for making an imprint upon the second registering operation, record



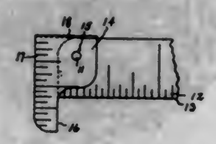
card positioning means and means controlled by the latter for selecting one of the dies for operation.

1,882,864. METHOD OF AND APPARATUS FOR DISTRIBUTING MATERIALS. FRANKLIN P. NICKERSON, Cleveland, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 18, 1926. Serial No. 129,977. 6 Claims. (Cl. 193—2.)



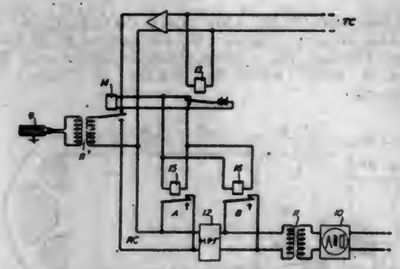
5. In apparatus for distributing a relatively narrow stream of material into a uniform relatively wider stream, the combination of an inclined base plate for discharging the wider stream, and a pair of plates overlying said base plate, angularly related thereto and adapted to receive a portion of said localized stream and distribute the same evenly over a portion of said base plate.

1,882,865. HOOK RULE. CARL M. NICHOLSON, Ossining, and EMIL ANDERSON, Briarcliffe, N. Y., assignors to Master Rule Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1931. Serial No. 534,262. 4 Claims. (Cl. 33—107.)



1. In a hook rule, a rule member having a corner rounded on an arc struck from a pivot point as a center, and a hook member pivotally mounted on said pivot point, said hook member having a flange which engages a side of the rule when open and protects the end thereof when closed.

1,882,866. SIGNALING SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 18, 1931. Serial No. 581,890. 6 Claims. (Cl. 178—44.)



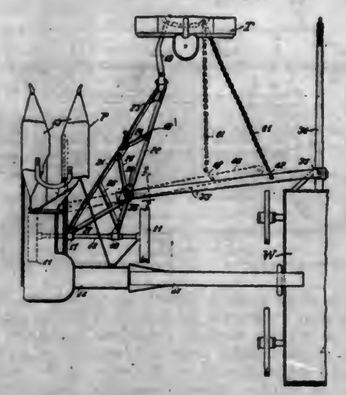
1. In a signaling system, a transmission line, a receiving path connectible thereto, means for connecting the receiving path to the line, short-circuiting contacts bridging said receiving path at a plurality of points, means for successively removing said short circuits from said path, and means for suppressing the transmission between said points of currents of substantially all frequencies below the lowest signal frequency to be received by said receiving path.

1,882,867. TISSUE FILLER FOR CORPSES. HENRY R. OCHS, Westport, Conn., assignor to The Embalmers Supply Company, Westport, Conn., a Corporation of Connecticut. Filed Oct. 12, 1931. Serial No. 568,527. 1 Claim. (Cl. 27—22.)

A liquid for use as a tissue filler for a corpse, consisting of celluloid chips 1 lb. avd.

Methanol	1 gal. (96 ozs.)
Castor oil	7½ ozs.
Oil of cloves	2 ozs.
Eosine red	6 grains
Tri acetine	1 gal.
Ethyl methyl ketone	1 gal.

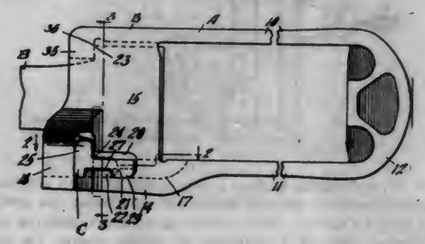
1,882,868. WAGON HITCH. JOHN B. O'DONNELL, Sheldon, Iowa, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 14, 1930. Serial No. 475,181. 11 Claims. (Cl. 280—33.94.)



1. In a draft connection between a tractor and an agricultural implement and a wagon disposed to one side thereof, draft structure disposed between said implement and

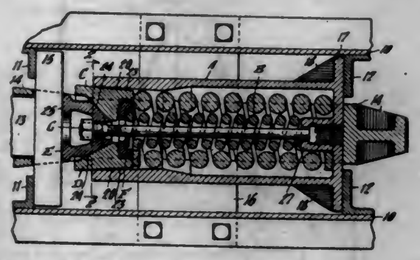
wagon and attached to the tractor, said draft structure being capable of endwise movement away from said wagon while being connected to the tractor and supported entirely on the implement.

1,882,869. COUPLER AND YOKE CONNECTION. ROLAND J. OLANDER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,458. 3 Claims. (Cl. 213—70.)



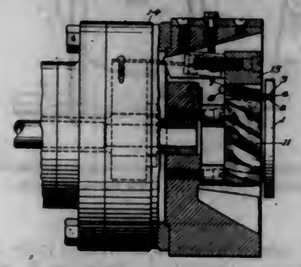
1. A yoke for draft riggings including a hooded portion defined by spaced side and spaced top and bottom walls, said hood portion having a transverse shoulder adapted to cooperate with a corresponding shoulder of a coupler butt, the wall opposite said shouldered portion being offset, said side walls being provided with transverse, alined openings adjacent said offset wall adapted to receive a locking block, one of said openings being of greater vertical dimensions than the other, said yoke having a locking lug adjacent said opening of greater vertical dimensions; and a locking block of lesser height than said last named opening, said locking block having shouldered engagement at one end with said lug and at the other end with the corresponding side wall of the hood, to lock said block against lateral displacement said block having a transverse shoulder cooperating with the corresponding shoulder of the coupler butt, said block being vertically displaceable in said larger opening of the hood of the yoke to free the same from said lug and permit lateral withdrawal from the yoke.

1,882,870. FRICTION SHOCK ABSORBING MECHANISM. ROLAND J. OLANDER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,459. 2 Claims. (Cl. 213—32.)



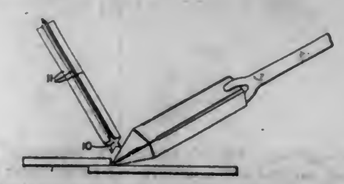
1. In a friction shock absorbing mechanism, the combination with a one-piece friction shell having a plurality of interior friction surfaces extending lengthwise thereof arranged symmetrically about the longitudinal axis of the shell and formed directly on the walls of the shell; of a plurality of friction shoes cooperating respectively with said friction surfaces, adjacent shoes having the opposed longitudinal side edges thereof spaced apart, and said shell having longitudinal interior grooves between adjacent friction surfaces thereof, which the side edges of the shoes overhang, said grooves providing clearance for the longitudinal side edges of said shoes; a wedge block having wedging engagement with the shoes; and a main spring resistance opposing inward movement of the shoes.

1,882,871. GEAR HOLDING AND CENTRALIZING DEVICE. DWIGHT C. PAGE, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1932. Serial No. 595,441. 7 Claims. (Cl. 279—1.)



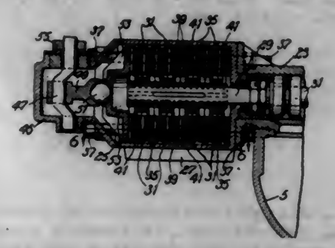
1. A device for centering a helical gear, comprising a base member, a plurality of flexible arms extending from said base, and resilient members on each of said arms for engagement with the teeth of said gear on the pitch line.

1,882,872. FUSIBLE METAL. SIDNEY L. PALMER, San Francisco, Calif., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1928. Serial No. 318,439. 1 Claim. (Cl. 113—110.)



As an article of manufacture, a strip of metal which is readily fusible for purposes of soldering, welding and brazing having a starshaped cross section.

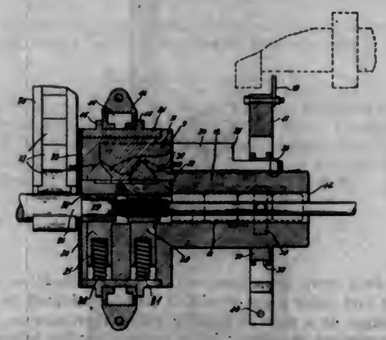
1,882,873. BRAKE. HARVEY S. PARDEE, Ravinia, Ill., assignor to John Robert Blackhall, Highwood, Ill. Filed May 8, 1929. Serial No. 361,277. 5 Claims. (Cl. 188—72.)



1. A vehicle brake comprising at least one disc slidably but non-rotatably held, at least one other disc slidably and rotatably held to a portion associated with the driving

mechanism of said vehicle, a movable pressure plate for pressing said discs into frictional engagement, a crank, means pivoted to the crank and reaching to said pressure plate and a ball-and-socket universal arrangement interposed between said pivoting means and the pressure plate for equalizing purposes.

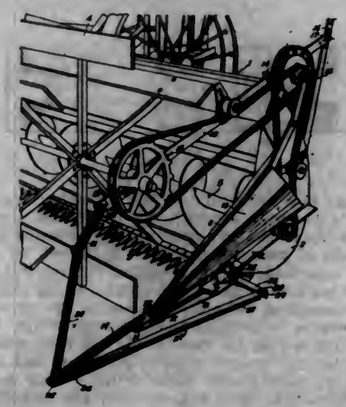
1,882,874. METHOD OF AND MECHANISM FOR TAPPING ARTICLES. JAMES F. PATTON, Cleveland, Ohio. Filed June 27, 1927. Serial No. 201,648. 39 Claims. (Cl. 10—134.)



1. In a method of threading hollow articles, the steps which consist in intermittently feeding such articles to the first of two sets of aligned gripping jaws, axially moving a tap into the gripped article to cut threads on the interior thereof, and moving said tap and threaded article to a position for engagement by the second set of gripping jaws, said last step being performed simultaneously with the feeding operation.

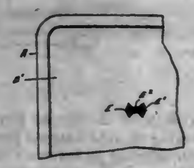
37. Threading mechanism comprising a work-carrying head, two sets of gripping jaws mounted therein, a tap movable axially of said jaws, means for feeding blanks to one set of said jaws, means for causing a relative rotation between said head and tap to thread the tap into such engaged blank, and means for retracting said tap together with the blank threaded thereon in position for engagement with the other set of said jaws.

1,882,875. GRAIN DIVIDER EXTENSION. TORVALD N. PIERSON, Independence, Mo., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed July 8, 1929. Serial No. 376,709. 14 Claims. (Cl. 56—220.)



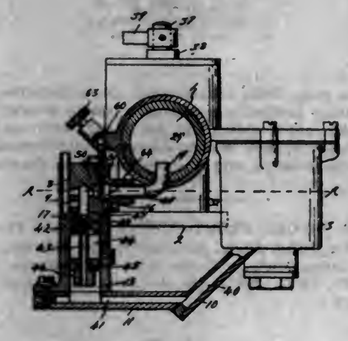
1. In combination with a grain divider, an extension member projecting forwardly of the divider, means for supporting the extension member, and lateral bracing means connected with the forward end of the extension member and cooperating therewith to divide grain in advance of the divider.

1,882,876. MATTRESS. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., Rome, N. Y., a Corporation of New York. Filed Aug. 25, 1930. Serial No. 477,497. 5 Claims. (Cl. 5—356.)



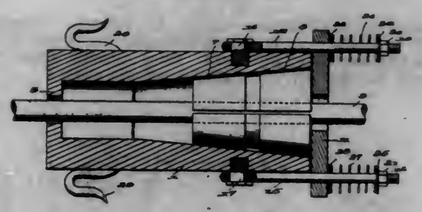
1. A mattress having upper and lower cover members, a filling material arranged therebetween, and tufting means for holding said filling material in position and comprising a strand of material arranged to form a group of adjacent reinforcing stitches at a predetermined point on the outer side of one of said cover members, and a tufting cord extending through said filling material and cover members and looped about said stitches.

1,882,877. CARBURETOR. ANTOINE P. PLAUT, Flint, Mich., assignor to Marvel Carburetor Company, Flint, Mich., a Corporation of Michigan. Filed Oct. 21, 1929. Serial No. 401,240. 5 Claims. (Cl. 261—121.)



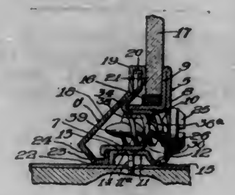
1. In a carburetor, the combination of an air inlet, a mixture outlet, a throttle at the mixture outlet end, a mixing chamber between said air inlet and mixture outlet, an emulsion passage leading into said mixing chamber, nozzle means for supplying substantially all of the fuel utilized by said carburetor to said emulsion passage, means for admitting air to said emulsion passage, said emulsion passage being provided with an enlargement between the discharge end thereof on the one hand and the nozzle means and the air admitting means on the other hand, said enlargement being at a higher level than said nozzle means, said emulsion passage having a horizontal portion extending from said enlargement toward said mixing chamber and a transfer passageway having one end thereof connected to the mixture outlet above the throttle and the other end extending into said enlargement.

1,882,878. PORTABLE SHACKLE LINE PICK-UP DEVICE. RUSH VANN PLYLER, Saratoga, Tex. Filed May 21, 1930. Serial No. 454,500. 14 Claims. (Cl. 74—17.)



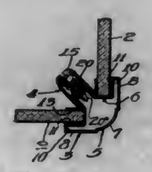
1. The combination with a central power unit and a bumper post, of a casing on said bumper post having a central aperture therein adapted to receive a shackle line and means confined within and freely slidable in said casing to permit movement of the shackle line therethrough in one direction only.

1,882,879. STORE FRONT CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 447,859. 24 Claims. (Cl. 20—56.4.)



1. In a store front construction, the combination of a pane seating section, a moulding, a clamp member associated with said moulding and positioned within said pane seating section, and means engaging said section and member for drawing said member toward said section.

1,882,880. STORE FRONT CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 447,860. 22 Claims. (Cl. 189—78.)



1. In a store front construction, the combination of an inner and outer glass retaining member adapted to hold the edges of a pair of window panes therebetween, a clamping member engaging one of said retaining members and provided with an aperture, the edges of said aperture being offset, and a screw in one of said members adapted to engage said offset edges for drawing said retaining members into engagement with said panes.

1,882,881. STORE FRONT CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed May 12, 1930. Serial No. 451,531. 14 Claims. (Cl. 189—78.)

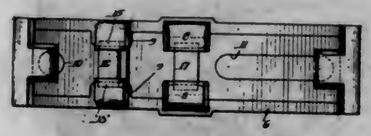


1. In a store front construction, the combination of an inner and outer glass retaining member adapted to hold the edges of a pair of window panes therebetween, said outer member provided with a recessed portion intermediate its glass retaining portions, and an intermediate member engaging in said recessed portion and extending into said member, and a screw in said inner member adapted to engage with said intermediate member for drawing said members into engagement with said panes.

1,882,882. MOLD FACING. FRED M. POE, Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,511. 8 Claims. (Cl. 22—189.)

1. A facing for molds to be used in casting ferrous metals comprising a mixture of mineral wool as the principal ingredient and a binding material.

1,882,883. BRAKE SHOE. ROBERT B. POGUE, Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 13, 1929. Serial No. 406,817. 1 Claim. (Cl. 188—250.)



A brake shoe comprising a body, a reenforce plate embedded in the body at the back thereof and having its side edges recessed at the middle of the plate and between the middle of the plate and one end thereof, an attaching lug comprising a strap engaging the recesses in the plate at the middle thereof, an additional lug comprising a strap engaging the other recesses in the plate, body metal forming projections alongside said straps, the attaching lug having its opening clear of body metal and said projections extending above the strap, and the additional lug having body metal in its opening upon the reenforce back to form a bearing for the fastening key and the projections at the sides of its strap terminating substantially flush with the top of the strap.

1,882,884. BRAKE SHOE. ROBERT B. POGUE, Chicago, Ill., assignor to The American Brake Shoe & Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 14, 1931. Serial No. 515,654. 9 Claims. (Cl. 188—254.)



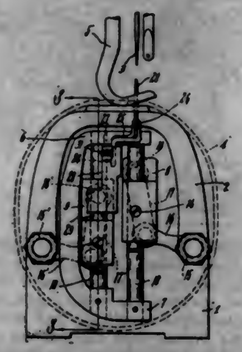
1. A brake shoe comprising a shell and transverse braces secured within the shell and spaced from the back thereof.

1,882,885. HOLDER FOR CRYSTAL RESONATORS. FRANK A. POLKINGHORN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1928. Serial No. 270,873. 2 Claims. (Cl. 171—327.)



2. A crystal holder for a plate crystal comprising a base with a plurality of pins projecting therefrom, a reversible electrode mounted on said base, having a plurality of holes therein through which said pins project, a second electrode likewise provided with a plurality of holes through which said pins project, a stud projecting from said second electrode, a unitary cover enclosing said electrodes and carrying a conductive spring member bearing on said stud to maintain said second electrode in its proper position and to constitute an electrical connection from the electrode to an external circuit.

1,882,886. SEWING MACHINE. JESSE V. POOLE, Abington, Mass., assignor to Puritan Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 11, 1930. Serial No. 434,849. 12 Claims. (Cl. 112—49.)

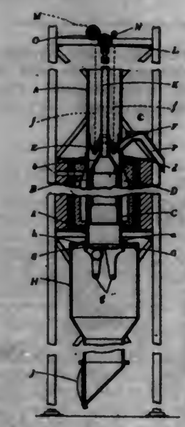


1. In a stitch forming mechanism, a feed rocker, guide means within the outline of the rocker, two slides slidable on the guide means, needle carrying means on one slide, cast-off carrying means on the other slide, and means for reciprocating the slides.

1,882,887. SLUDGE RESISTING HYDROCARBON OILS AND METHOD OF MAKING THE SAME. JOHN C. POPE, Yonkers, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 23, 1928. Serial No. 264,277. 11 Claims. (Cl. 87—9.)

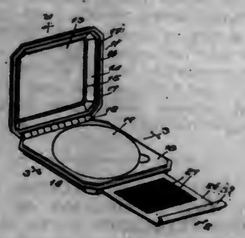
1. An improved process for manufacturing sludge-resistant hydrocarbon products, comprising adding a small quantity of a lead-organic compound to a suitable hydrocarbon heavier than butane, subjecting the mixture to prolonged heating, and removing the precipitate formed during heating.

1,882,888. APPARATUS FOR LOW TEMPERATURE CARBONIZATION. PHILIP CROSBY POPE, Beckenham, England. Filed Dec. 7, 1928, Serial No. 324,540, and in Great Britain Dec. 9, 1927. Renewed June 21, 1932. 4 Claims. (Cl. 202—225.)



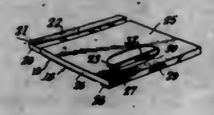
4. In a low-temperature carbonization apparatus, the combination of a tubular chamber to contain the coal under treatment, an internal stem mounted substantially centrally within the chamber, a conical upper end to said stem, a charging hopper above said chamber, and a conical valve normally closing said hopper, said valve when lowered for charging resting upon the conical upper end of the said stem.

1,882,889. VANITY CASE. WALTER POHANSKI, Chicago, Ill. Filed Sept. 19, 1931. Serial No. 563,609. 6 Claims. (Cl. 132—83.)



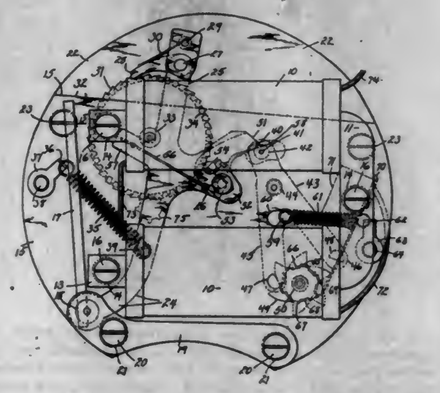
1. In a device of the kind described, a container consisting of a cover and a closed powder receptacle, a reciprocally movable distributing plate normally in contact with the contents of the container, and latch means operable by the reciprocation of the plate to fasten and unfasten the cover.

1,882,890. STORAGE MAGAZINE. GEORGE M. PORTER, New York, N. Y. Filed July 16, 1930. Serial No. 468,291. 2 Claims. (Cl. 220—41.)



1. A container for electrotypes comprising a shallow rectangular sheet metal body having a cover engageable over its side walls, interengaging elements on said body and cover located only at their opposed respective ends whereby the cover is prevented from rising when in operative closed position, said cover having an opening in its front wall, and a handle fixed on the front wall of said body to protrude through the mentioned cover opening.

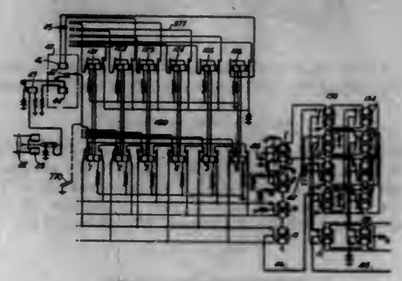
1,882,891. ELECTRIC CLOCK. WILSON E. PORTER, New Haven, Conn., assignor to The New Haven Clock Co., New Haven, Conn., a Corporation. Filed May 18, 1927. Serial No. 192,274. 3 Claims. (Cl. 185—40.)



1. In a contact-operating mechanism for electric clocks of the type in which an armature is moved in one direction by a driving-spring and in the opposite direction by an electro-magnet, the combination with a switch-mechanism, of an operating-member actuated by the armature of the clock and having a cam-surface for moving the said switch-mechanism into its circuit-breaking position, a spring normally tending to move the said switch-mechanism into its circuit-closing position, and a retireable locking-dog also carried by the said operating-member for bodily movement therewith in position to normally overlap the said cam-surface for positively holding the said switch-mechanism in its circuit-breaking position against the counter-urge of the said spring during the time-interval between the periodic energization of the driving-spring of the clock.

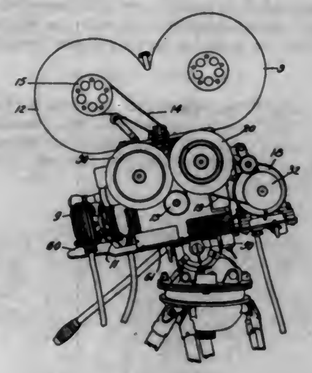
1,882,892. SYSTEM FOR CAUSING IMPULSES TO CONTROL THE PRODUCTION OF IMPULSES OF DIFFERENT FREQUENCY. LOUIS M. POTTS, Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Sept. 17, 1925, Serial No. 56,855, Patent No. 1,708,954, dated Apr. 16, 1929. Divided and this application filed Feb. 8, 1929. Serial No. 338,403. 3 Claims. (Cl. 175—373.)

1. In an electrical system, means for producing a series of impulses of current of one periodicity, a relay connected thereto having two pair of contacts, a source of current and a condenser for receiving and storing a charge from said source of current and a device actuated by the discharge of said condenser all connected to said contacts whereby the charging of said condenser is effected by the closure of one of said pair of contacts and the discharge



of said condenser is effected by the closure of the other of said pair of contacts, said device having switching means associated therewith which is connected to said condenser circuits, whereby the frequency of actuation of said device is one-half of the periodicity of said impulses.

1,882,893. SOUND PICTURE CAMERA. LOUIS M. POTTS, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 425,932. 2 Claims. (Cl. 88—16.2.)



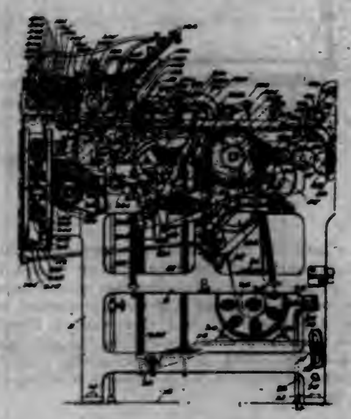
1. In a sound picture camera, a casing, a pivotal mounting for said casing, means within said casing for intermittently feeding a film adjacent a picture lens and a sprocket for continuously feeding said film adjacent a sound controlled light modulator, and means external to said casing for driving said film feeding means comprising a motor, a flywheel driven therefrom, and a second flywheel driven by said first flywheel, said motor being substantially balanced by the light modulator and said flywheels being on opposite sides of said pivotal mounting and of such mass as to afford a balance of the camera equilateral of the pivotal point.

1,882,894. COLLAPSIBLE JOINT FOR DRILL STEMS. GEORGE V. POWERS, Oklahoma City, Okla. Filed Sept. 18, 1930. Serial No. 482,096. 12 Claims. (Cl. 285—146.)



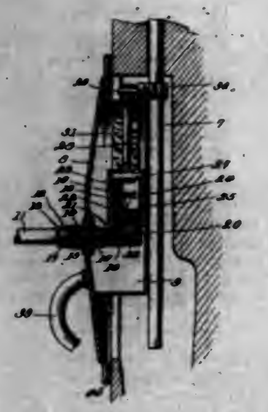
1. A drill stem joint comprising a pipe section adapted to be connected between sections of a drilling column, a weakened portion of said pipe section, and removable means for normally reinforcing said weakened portion.

1,882,895. MACHINE FOR AUTOMATICALLY PRODUCING AND ASSEMBLING SIGNATURES. EARL D. RADER, Bedford, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1928. Serial No. 313,864. 92 Claims. (Cl. 270—54.)



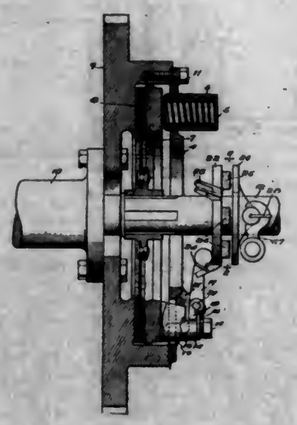
1. In apparatus of the character described, the combination of means for feeding, folding and separating a sheet into a plurality of signatures, and means for assembling said signatures on their folded edges with similarly disposed signatures of sheets successively fed, folded, and separated by said first named means.

1,882,896. FUEL FEEDING SYSTEM FOR INTERNAL COMBUSTION ENGINES. ALBERT G. REDMOND, Flint, Mich., assignor to Jacob Richard Francis, Flint, Mich. Filed Dec. 16, 1926. Serial No. 155,201. 3 Claims. (Cl. 123—139.)



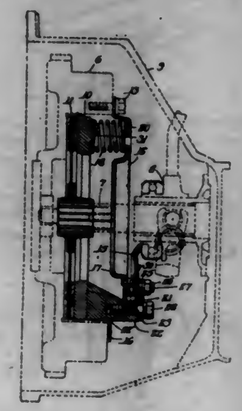
1. In fuel feeding means for internal combustion engines, a push-rod, a cover plate arranged adjacent to the push-rod, a fuel reservoir arranged on the inner side of the plate, a fuel feeding pump for forcing fuel into the reservoir having a reciprocating piston rod, and means for connecting said piston rod to the push-rod.

1,882,897. FRICTION CLUTCH. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 3, 1927, Serial No. 158,502. Divided and this application filed Feb. 27, 1931. Serial No. 518,818. 2 Claims. (Cl. 192—110.)



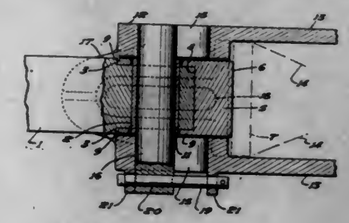
1. In a friction clutch, the combination of a cover plate, a plurality of clutch levers mounted on the cover plate, a driven shaft, a plate movable on the shaft for cooperation with clutch release devices, and arms on the plate having bifurcations to receive the free ends of the levers to hold the levers in operative relation to the plate.

1,882,898. FRICTION CLUTCH. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed May 22, 1929. Serial No. 365,030. 6 Claims. (Cl. 192—68.)



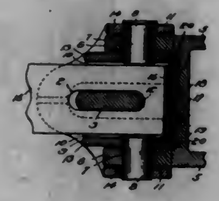
1. A friction clutch comprising a cover adapted to be secured to a flywheel and having openings therein, a pressure plate having bosses projecting through said openings, wear plates secured on the outer ends of the bosses, levers pivotally mounted on the outer side of the cover and engaging said wear plates, and springs engaged with the cover and overlying the levers.

1,882,899. CAR COUPLER. WILLIAM J. REGAN, Wilkinsburg, and ENOCH GEORGE, Jr., Pittsburgh, Pa., assignors to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,070. 2 Claims. (Cl. 213—71.)



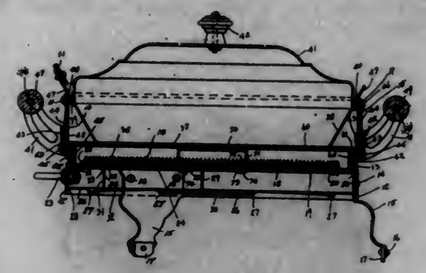
1. The combination with a draft yoke having vertically alined longitudinally extending slots adapted to receive a tail pin, of a car coupler involving a shank member of reduced height adjacent its rear end and having a convexly curved rear end, a bearing block having a concavely curved face cooperating with said convexly curved rear end, said bearing block being adapted to engage the forward follower of a draft gear associated with said yoke and having forwardly extending arms embracing a portion of said coupler shank member, said arms of the bearing block and said shank member being provided with concentric openings, and a tail pin extending through said openings and through the slots of said yoke, said shank being of substantially uniform height throughout in advance of its said portion of reduced height, and the upper and lower surfaces of said block being substantially in alinement with the corresponding faces of said shank.

1,882,900. RAILWAY DRAFT APPLIANCE. WILLIAM J. REGAN, Wilkinsburg, and ENOCH GEORGE, Jr., Pittsburgh, Pa., assignors to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,321. 2 Claims. (Cl. 213—69.)



2. In a railway draft appliance, the combination with a yoke having a plurality of spaced arms, of a car coupler having a stem extending between said arms, a member operatively associated with the yoke and coupler for permitting pivotal movement of the latter with respect to the yoke, said member having a plurality of slots for receiving the arms of the yoke, means for pivotally connecting the yoke to said member, a key for connecting the latter to the coupler, and means at the rear of the coupler stem adapted to engage the forward follower of a draft rigging, said last named means and the end of the coupler stem having cooperating curved bearing faces.

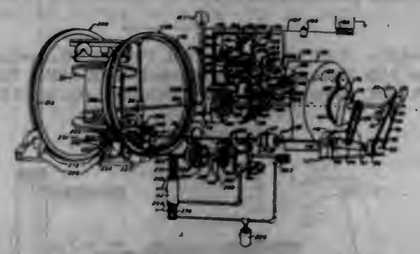
1,882,901. PORTABLE ELECTRIC GRILL. JAMES H. REICHART, Muncie, Ind. Filed Feb. 15, 1930. Serial No. 428,556. 5 Claims. (Cl. 53—3.)



1. In a grill, the combination of a peripheral side wall, an electric heating element construction nested therein, a cooking pan having a base portion positionable adjacent the construction and a peripheral portion overlapping the upper edge of said side wall, a plurality of handle constructions each secured to the side wall, and an upwardly extending pan anchoring clip supported by each handle construction for detachably securing said pan to said side wall.

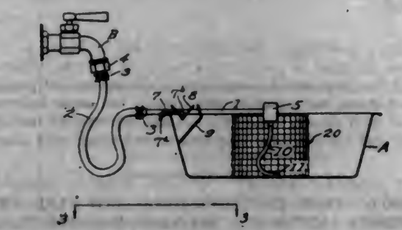
1,882,902. CABLE FORMING APPARATUS. LESTER O. REICHELT, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 10, 1932. Serial No. 597,947. 20 Claims. (Cl. 117—49.)

2. In a cable forming apparatus, a plurality of cable unit supply means, means for assembling a plurality of said units into a group, a rotatable cylindrical member for twisting the cable as it is formed, endless means mounted within said member for engaging the cable to



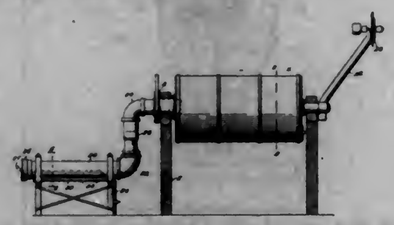
advance it through said rotatable cylindrical member, and a planetary gearing arrangement for actuating said endless means.

1,882,903. APPARATUS FOR WASHING PHOTOGRAPHIC PRINTS. JAMES C. REID, Jr., Shaker Heights, Ohio. Filed Aug. 8, 1930. Serial No. 473,805. 16 Claims. (Cl. 95—97.)



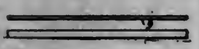
1. In a photographic print washer, in combination, a vessel adapted to contain liquid, a flexible tube suspended in said vessel and provided with a liquid discharging outlet, the discharge of liquid from said outlet being adapted to impart motion to said outlet in a direction transversely of the axis of said tube adjacent said outlet.

1,882,904. APPARATUS FOR PREPARING PRESERVATIVES. JOHN REID, Lyons, Kans., assignor to Diamond Crystal Salt Company, St. Clair, Mich., a Corporation of Michigan. Filed Oct. 11, 1929. Serial No. 399,076. 8 Claims. (Cl. 99—2.)



1. In a device of the class described, a rotatable drum in which salt may be placed for treatment, said drum being mounted on trunnion sleeves through which smoke may be passed into and out of the drum, said drum having lifting devices projecting inwardly from the inner face thereof and shaped so as to convey the salt to the upper portion of the drum and gradually discharge said salt diametrically across the drum so that it falls through the smoke to the bottom of the drum, a pipe connected with the trunnion sleeves through which the smoke passes from the drum, and an exhaust fan associated with said pipe for forcing the smoke through the drum, said pipe with which the exhaust fan is associated having means for controlling the draft through the drum.

1,882,905. TINSEL GARLAND. MARTIN J. REINER, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Apr. 13, 1931. Serial No. 529,630. 9 Claims. (Cl. 41—10.)



8. A garland having numerous knurled tinsel bristles extending outwardly from its core to provide a multiplicity of minute reflecting facets, and a number of plain tinsel bristles interspersed amongst the knurled bristles, the reflecting surfaces of which are substantially larger than said facets, whereby the rays of said plain bristles are distinguishable from the rays of said knurled bristles.

1,882,906. TOOL FOR FLUID ACTUATED MACHINES. JOHN E. RENFER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 7, 1929. Serial No. 405,515. 1 Claim. (Cl. 125—23.)

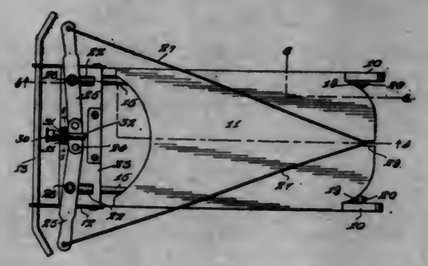


A cutting tool for bituminous material for use with fluid actuated machines comprising a hollow member having an open end surrounded by a cutting edge, the interior and exterior walls of said member tapering inwardly and downwardly to facilitate the withdrawal of said member from the material being cut and to retain therein a block cut from the material, said member having a discharge opening in the side thereof communicating with the interior of the same, the width of said opening being as great as the inner width of said member, the height of said opening being greater than the distance from said cutting edge to the lower edge of said opening, there being an aperture in said member oppositely disposed to said opening and adapted to receive therein an ejecting mandrel, and means for attaching said member to an operating shank of a fluid actuating machine.

1,882,907. SLED. BENJAMIN A. REXFORD, Alton, Ill. Filed Jan. 31, 1931. Serial No. 512,711. 1 Claim. (Cl. 188—8.)

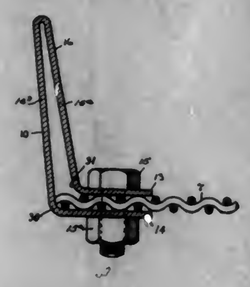
In a sled, a top, runners, rods mounted for sliding movement longitudinally of the runners, angle arms pivotally mounted upon the runners and having one of their ends pivotally secured to the rear ends of the rods, ground

engaging elements at the rear ends of the angle arms, upwardly disposed angular extremities extending through the top of the sled at the front end thereof, oppositely extend-



ing hand levers pivotally mounted upon the top of the sled, and means to pivotally secure the angular extremities of the rods to the hand levers.

1,882,908. SCREENING APPARATUS. MORLEY PUNSHON REYNOLDS, Cleveland Heights, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 13, 1930. Serial No. 481,715. 2 Claims. (Cl. 209—346.)



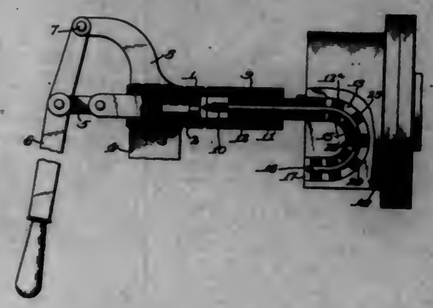
1. In a vibratory screening mechanism, a woven wire screen supported along opposite edges, and a vibration distributing element secured to and extending throughout one free edge thereof, said element consisting of a formed metallic plate having its two edges secured above and below the free edge of said screen and having its body portion extending upwardly from said screen at an angle to the plane thereof.

1,882,909. EYEGLASS LENS. GEORGE A. RHUE, San Diego, Calif. Filed Jan. 8, 1929. Serial No. 331,147. 1 Claim. (Cl. 88—41.)



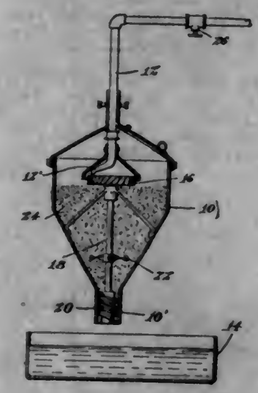
In eye glasses, a pair of lenses, opaque covering oppositely disposed on the outer side edges of said lenses, each covering gradually increasing in width in one direction only from end to end, so positioned relatively that one is wide at the upper side of the lens, and the other is wide at the lower side of the lens.

1,882,910. TAP. RALPH E. RICH, Chicago, Ill., assignor to Rich Trust, a Trust of Massachusetts. Filed Sept. 6, 1928. Serial No. 304,201. 12 Claims. (Cl. 10—129.)



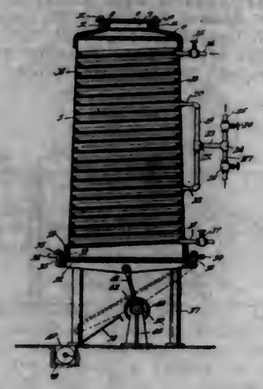
1. A tapping device comprising a shank, an end portion of said shank having threading means, the other end portion of said shank being reflexed and serving as the discharge end for threaded elements moved along said shank.

1,882,911. FIRE EXTINGUISHING AND FIRE PROTECTIVE METHOD. BENJAMIN RICHARDS, Kenilworth, Ill., assignor to Everett E. Kent, Newton, Mass. Filed Dec. 27, 1926. Serial No. 157,020. 4 Claims. (Cl. 169—4.)
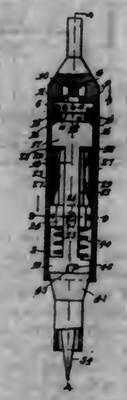


2. The art of blanketing liquid comprising the applying thereto of a liquid carrying in suspension an earthy substance and filled with bubbles interspersed in said earthy substance adapted to solidify to rigid solid form, and the said bubbles of gas being present in sufficient amount to make the whole buoyant on the liquid which is to be covered to be buoyant on the liquid which is to be protected.

1,882,912. APPARATUS FOR THE TREATMENT OF SOIL PRODUCTS. JAMES R. RICHARDSON, Houston, Tex., assignor to Abilene Cotton Oil Company, Houston, Tex., a Corporation of Texas. Filed Nov. 6, 1928. Serial No. 317,675. 4 Claims. (Cl. 257—229.)



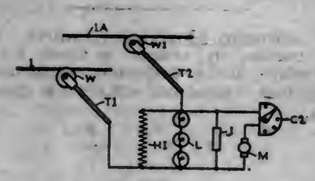
1. A device of the class described, comprising a treating chamber having an inlet and outlet, a heating coil arranged around the inner walls of said chamber, and means extended from the inner walls of said chamber and overlapping said heating coil.

1,882,913. SCREW DRIVER. THOMAS J. RICHEY, Louisville, Ky.; Nell Shader, administratrix of said Thomas J. Richey, deceased. Filed Mar. 29, 1930. Serial No. 440,046. 9 Claims. (Cl. 144—82.)



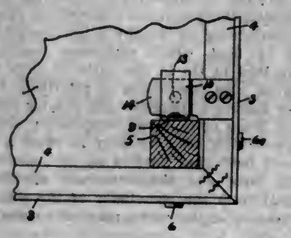
1. A screw driver including a drive housing, a bit shank within the housing, a sleeve slidable in the housing and relative to the shank, a core between the shank and sleeve and rotatably driven by the housing, co-operating means on the core and shank for holding them against relative rotation, a latch carried by the sleeve for holding said means in engagement, and means movable relative to the bit shank and positioned adjacent to the active end thereof for engagement with the work to shift the sleeve and disengage said co-operating means to release the housing and core for rotation independently of the bit shank.

1,882,914. ELECTRIC SWITCH OPERATING DEVICE. FRANK H. RICHTERKESSING, Louisville, Ky. Filed Aug. 14, 1930. Serial No. 475,221. 9 Claims. (Cl. 246—226.)



7. In a trolley frog tongue operating device, the combination of a movable frog tongue, means for moving the said frog tongue element, said means including a plurality of coils, a power line, a contactor, a current collector for coperating with the said contactor for selectively supplying a temporary energization current to one of the said coils for electro-magnetically operating the said tongue element to one position and means for supplying a holding current in another one of the said coils for retaining the selected position of the said tongue element.

1,882,915. CARD TABLE. GUSTAF C. RICKSON, Grand Rapids, Mich., assignor to Gunn Furniture Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 17, 1930. Serial No. 482,409. 3 Claims. (Cl. 45—11.)



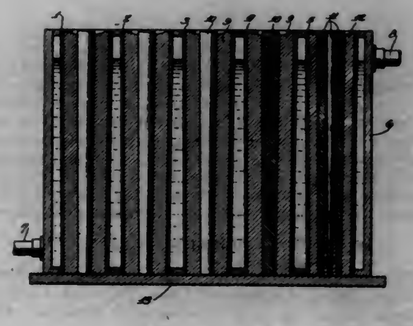
1. A table top of rectangular form having frame members secured to and depending therefrom at its edges, a leg at each corner of the table pivotally mounted on a frame member and movable to a position underneath the top within the frame members or to another position at right angles to the plane of the top, a metal member secured to each leg having a ledge portion disposed at right angles to said leg, a stud extending from said ledge portion and a spring plate secured at one end to a frame member adjacent each corner of the table and having a yieldable free end portion in which an opening is made over which the stud carried by the adjacent leg rides until received in said opening, thereby latching the leg against pivotal movement.

1,882,916. MANUFACTURING OF DECOLORIZING CARBON AND THE LIKE. ROBERT N. RIDDLE, Philadelphia, Pa., assignor to Riddle Process Company, Philadelphia, Pa., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 431,051. 5 Claims. (Cl. 252—3.)

1. A process of preparing finely divided clarifying and decolorising carbon, which process comprises forming a mixture of pulverized coal with a solution of an alkali metal salt and water soluble soap; boiling off the water and thereby investing the coal particles with a deposit of material from the solution; heating the thus prepared coal to a temperature of redness, with exclusion of air and

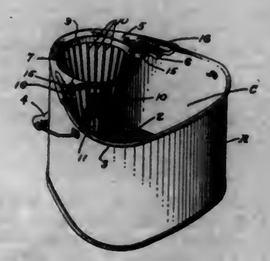
avoidance of fusion and sintering together of the carbonaceous particles; and then treating the latter at a glowing heat with a limited supply of oxidizing agent until ammonia has ceased to come off.

1,882,917. METHOD OF MAKING INGOTS. PERRY C. RIPLEY, Chicago, Ill., assignor to Kester Solder Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1930. Serial No. 423,898. 3 Claims. (Cl. 22—203.)



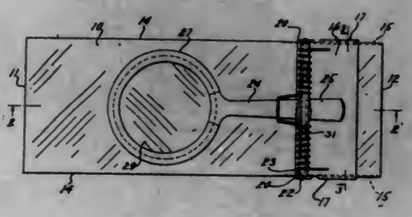
1. The process of preparing a relatively large diameter ingot of substantially uniform composition throughout from an alloy containing by weight approximately 60% of tin and 40% of lead, which comprises casting a solution containing lead in tin in the ratio of 60% tin and 40% lead about a core comprising a relatively small tin-lead alloy ingot having a diameter not greater than about two inches and being of uniform composition containing 60% of tin and 40% of lead whereby to effect a rapid extraction of heat from that portion of the solution contacting said small ingot and simultaneously effecting a conduction of heat from the remainder of the solution whereby a rapid freezing of the entire mass of solution is obtained.

1,882,918. MOP WRINGER. RALPH H. ROBB, Oakland, Calif. Filed Dec. 23, 1931. Serial No. 582,705. 4 Claims. (Cl. 15—263.)



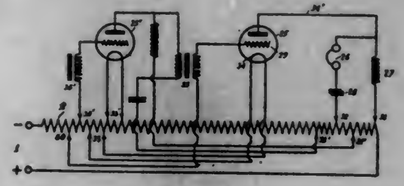
1. A mop wringer comprising a plurality of wire rods having upper and lower ends, said rods being spaced apart and arranged to form an inverted truncated cone-shaped body member, a top plate secured to the upper edge of a pail and to which the upper ends of the rods are secured, said top plate having an opening formed therein to permit insertion of a mop centrally between the wire rods, and a perforated bottom member to which the lower ends of the rods are secured.

1,882,919. APPARATUS FOR LOCATING OBJECTS. CHARLES W. ROBBINS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 12, 1929. Serial No. 399,184. 7 Claims. (Cl. 88—40.)



1. In combination with an object slide, a bracket longitudinally slidable with respect to the slide, a cover glass mounted on the bracket and spring actuated means for constantly urging the cover glass toward the object slide.

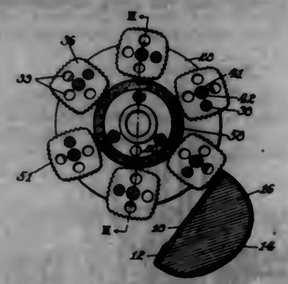
1,882,920. MEANS FOR ENERGIZING THERMIONIC TUBES. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 11, 1928. Serial No. 253,545. 14 Claims. (Cl. 179—171.)



1. In apparatus of the character described, a resistance adapted to be connected to a source of direct current, an electron discharge device having its cathode connected to an intermediate point on said resistance, and having its grid and anode connected to points on said resistance negative and positive respectively with respect to the cathode connection, said anode connection having a high impedance to direct current the ratio of the potential differences between the grid and cathode and the anode and cathode being substantially equal to the reciprocal of the amplification factor of said tube and a direct current connection from the anode to a point on said network having a positive potential.

1,882,921. ROUGHING TOOL FOR SHOE PARTS. CHARLES ARTHUR ROBINSON, Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 3, 1930. Serial No. 486,182. 6 Claims. (Cl. 69—1.)

4. In a roughing tool for shoe parts, the combination of a rotary carrier and a blade having a plurality of groups of abrading teeth any one of which groups of teeth may be presented in operative position, said blade being



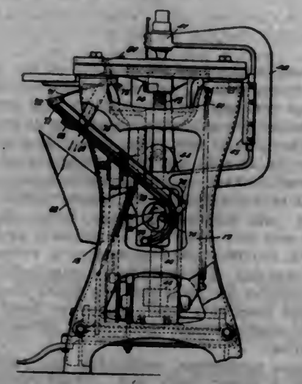
loosely mounted to permit it to be thrown outward centrifugally by rotation of the carrier regardless of which group of teeth is in operative position.

1,882,922. SPRINKLER HEAD. WARD M. ROBINSON, DAVID E. LINDQUIST, HAROLD K. RADER and LEON M. YOUNG, Port Huron, Mich., assignors to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed Aug. 27, 1930. Serial No. 478,046. 2 Claims. (Cl. 299—18.)



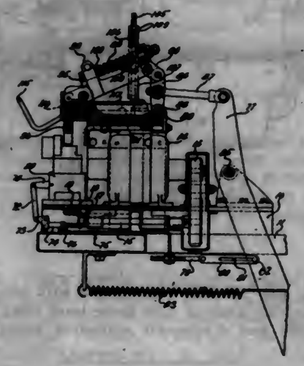
1. In a sprinkler head, a water-ejecting nozzle, a stem threaded interiorly into and spaced from said nozzle, and adapted to be drawn down therein, a conical head on said stem, a groove in said head for seating a circumferential portion of said head on the edge of said nozzle, thereby to prevent water discharge in the region of said seating and means in said head providing a recess for ejecting water in the circumferential region of said head and not seating on said edge.

1,882,923. FOLDING MACHINE. EDWARD B. ROBY, New York, N. Y., assignor to S. and R. Folding Machine Company, Inc., Green Island, N. Y., a Corporation of New York. Filed Aug. 19, 1926. Serial No. 130,133. 22 Claims. (Cl. 223—15.)



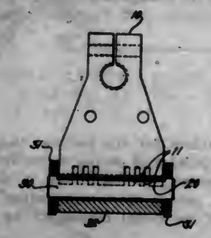
1. In a machine of the class described, a bed plate, means for clamping the central part of a blank to the bed plate, a shelf, means for clamping the edges of the blank to the shelf to hold said edges, means for turning up the corners of the blank, a die, and means for actuating the bed plate and die to clamp the blank therebetween, the corners of the blank being folded by the clamping of the blank by the die and bed plate.

1,882,924. SCREW DRIVING MECHANISM. DARRELL D. ROCK, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1931. Serial No. 508,482. 15 Claims. (Cl. 144—32.)



1. In a screw driving mechanism, a screw driving member, a stationary housing surrounding said screw driving member, means for actuating said screw driving member, means for moving an object into engagement with and holding the object in engagement with said screw driving member, and means disposed laterally of said screw driving member and externally of said housing for visually indicating an operative engagement between said screw driving member and said object.

1,882,925. METHOD OF SEALING MATERIALS. GEORGE LYNDEN ROCK, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 3, 1927. Serial No. 223,573. 6 Claims. (Cl. 154—42.)

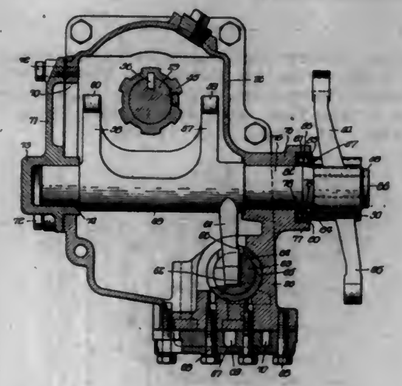


1. The method of sealing a layer of fabric combined with a fusible adhesive material to an article, which consists in applying heat to the fabric at spaced intervals to render certain portions of the fusible adhesive material therein liquid and other adjacent portions adhesive.

1,882,926. POWER BRAKE APPARATUS. EDWARD A. ROCKWELL, Chicago, Ill. Filed June 15, 1929. Serial No. 371,109. 6 Claims. (Cl. 188—140.)

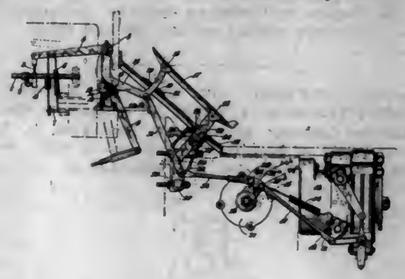
3. In combination, a vehicle power shaft, a power brake casing enclosing a portion of said power shaft, an output rock shaft pivotally supported by the walls of

said casing below said power shaft and transverse thereto, said rock shaft including an end protruding from said casing and a double arm brake lever mounted on the



protruding end of said rock shaft with provision for lost motion, the arms of said brake lever being connected to forwardly and rearwardly extending brake rods.

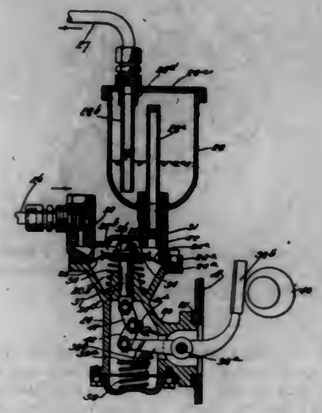
1,882,927. BRAKE MECHANISM. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed Oct. 8, 1927, Serial No. 224,847. Renewed Feb. 25, 1929. 29 Claims. (Cl. 192—3.)



1. In a mechanism for the purpose indicated, in combination with a pedal and means connected therewith for operating alternatively a brake and a motor speed-controlling element, means for accumulating and increasing the resistance of toe pedal movement as said movement proceeds.

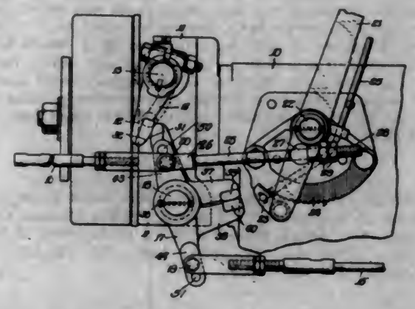
1,882,928. FUEL PUMPING DEVICE. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed July 2, 1928. Serial No. 289,693. 1 Claim. (Cl. 103—224.)

In a fuel feed system for internal combustion engines, a fuel pump having check-valve controlled inlet and outlet passages, a plug secured to the pump body in an opening through which the outlet valve is adapted to be assembled, said plug forming a stop for said check valve and having a vertical bore forming a continuation of the outlet passage from the pump, an outlet trap chamber carried by said plug, an outlet feed line leading to the carbureter connected to the top of said chamber and tubular fuel-conducting members within said trap chamber, one of said members being secured to said plug and delivering the fuel from the pump directly into the top



of said chamber and the other of said members being connected to the outlet feed line and having its intake at the bottom of said chamber.

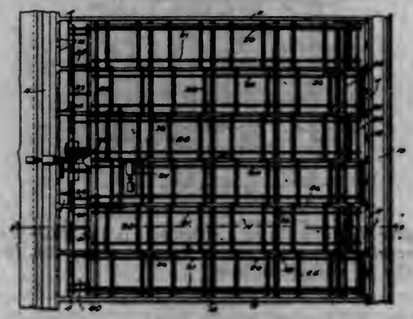
1,882,929. BRAKE LINKAGE. EDWARD A. ROCKWELL and EDWIN R. EVANS, Chicago, Ill. Filed May 29, 1929. Serial No. 366,844. 19 Claims. (Cl. 188—10.)



16. Brake mechanism for vehicles of the type having front and rear brakes, a double arm pivoted brake lever, a pull rod connected to one arm of said lever and extending to actuate said rear brakes, a pull rod connected to the other arm of said brake lever below the pivot and extending to actuate the front brakes, a pivoted emergency lever, linkage extending between said emergency lever and said brake lever in line with said rearwardly extending pull rod, said linkage being pivotally connected to said brake lever and connected to said emergency lever with provision for lost motion, a rockable member directly engaging said brake lever intermediate said pull rod connections for actuating said brake lever independent of said emergency lever and power brake mechanism under the control of the operator for actuating the rockable member.

17. Brake mechanism comprising front and rear sets of brakes, a power brake unit, a fixed fulcrum, a lever pivoted on said fixed fulcrum operative by said power brake unit, a double arm brake lever pivotally mounted on said fixed fulcrum, oppositely extending brake pull rods connected to said brake lever at points above and below said fulcrum, said levers including cooperating portions in thrust engagement for transmitting movement of said first lever to said brake lever.

1,882,930. SEWAGE DISPOSAL SYSTEM. GUSTAV R. RODDY, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 16, 1929. Serial No. 386,359. 6 Claims. (Cl. 210—3.)



1. In a sewage disposal plant, a settling tank of relatively great width, devoid of intermediate walls or supports and having an unobstructed floor surface; and a plurality of sludge removing conveyors in said tank, the ends of the flights of adjacent conveyors overlapping whereby they may remove sludge from the entire area of said floor surface.

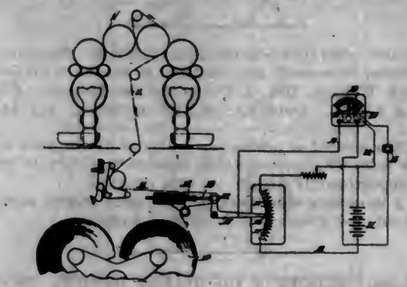
1,882,931. APPARATUS FOR HOLDING THE SACK OPEN WHILE PICKING POTATOES OR ONIONS. JOHN A. RODRIGUES, Portland, Oreg. Filed May 8, 1930. Serial No. 450,719½. 1 Claim. (Cl. 88—26.)



In a bag holding device to be used with a vehicle of the class described, a U-shaped support disposed at the front portion of the vehicle and inclined rearwardly therefrom, braces for maintaining said support in fixed position relative to the vehicle, said support having at its free ends hooks adapted for holding the open end of a sack in fixed position, a canvas flooring secured to the vehicle and to the U-shaped support, said flooring adapted to form an inclined surface rearwardly from the U-shaped support, and means disposed upon the lowermost portion of the U-shaped support for holding the lower portion of the open end of a sack in fixed position.

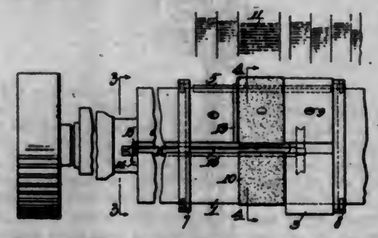
1,882,932. TENSION METER. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 25, 1929. Serial No. 365,995. 4 Claims. (Cl. 265—1.)

1. The combination with a spring-pressed web roll, of an arm connected with the web roll to move therewith, a rheostat, means connected with the arm for moving over the contacts of the rheostat in accordance with the position of the roll due to its tension, a circuit connected to the rheostat and an indicator in said circuit having a pointer adapted to move over the scale of the indicator in accordance with the amount of current passing through the circuit whereby the position of said means



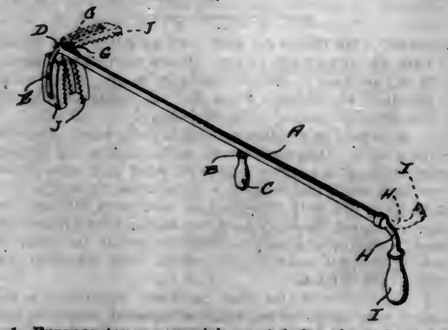
on the rheostat will control the position of the pointer on the indicator, a second electric circuit having a pair of contacts adapted to be closed by the pointer when it reaches an extreme position and a signal in the second circuit adapted to be energized on the closing of said contact.

1,882,933. LATE NEWS PRINTING DEVICE. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 22, 1930, Serial No. 476,996. Renewed Mar. 31, 1932. 7 Claims. (Cl. 101—407.)



1. In a printing device, the combination with an impression cylinder having a portion of its surface of complete annular shape and another portion of less than cylindrical shape and an impression blanket adapted to be placed on either portion of said cylinder.

1,882,934. FURNACE TONG. JULIUS ROGACZEWICZ, Detroit, Mich. Filed Aug. 11, 1930. Serial No. 474,475. 8 Claims. (Cl. 294—11.)



1. Furnace tongs comprising a tubular shank having a jaw secured to its inner end and a depending handle in-

termediate its ends, a rod extending through said tubular shank having at its inner end a complementary jaw and at its outer end a depending handle, said handles being spaced a considerable distance apart together forming a means for holding the tongs and also for opening and closing the jaws.

1,882,935. COLORED WAX AND CANDLE. THOMAS H. ROGERS, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Aug. 9, 1928. Serial No. 298,626. 6 Claims. (Cl. 87—21.)

1. The method of preventing fading of dye in dyed wax which fades on standing which consists in adding to said wax approximately 0.025% of beta naphthol.

2. A dyed wax comprising paraffin wax, stearic acid, a dye stuff and about 0.025% of beta naphthol.

1,882,936. ELECTRON DISCHARGE DEVICE. VICTOR L. RONCI, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 21, 1930. Serial No. 454,210. 11 Claims. (Cl. 250—27.5.)

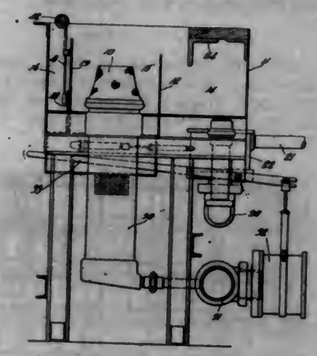


1. An electron discharge device comprising an enclosing vessel having a stem, a filamentary cathode, a grid and an anode mounted concentrically about said cathode, a member extending from said stem and coincident with the axis of said grid and anode, and cathode supporting elements slidably mounted in spaced relation on said member.

1,882,937. METHOD OF AND APPARATUS FOR FORMING ARTICLES OF PULP. BERTWELL C. ROOT, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 5, 1931. Serial No. 513,600. 4 Claims. (Cl. 92—56.)

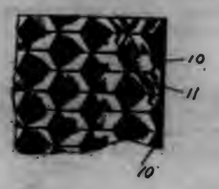
1. A method of molding articles of pulp, which comprises setting up a stationary screen mold, flowing an aqueous suspension of long fiber unbeaten wood pulp around and over said mold, maintaining a substantial vacuum in said mold until the pulp deposited on said mold attains a desired thickness, draining said suspension from around said mold, restoring atmospheric pressure within the mold, removing the wet molded pulp article from the mold, and drying the article.

3. Apparatus of the class described comprising a flow box, a pair of partition walls of unequal height in said flow box defining three compartments, a screen mold mounted in the compartment between the two partitions, a supply pipe entering the other compartment adjacent to the lower partition, a discharge pipe leading from the other compartment adjacent to the higher partition, said



higher partition having a sluice gate in the lower portion thereof, and suction means communicating with the interior of said screen mold.

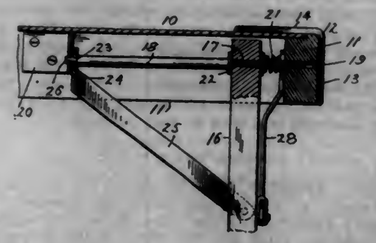
1,882,938. COMB FOUNDATION. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed Aug. 13, 1927. Serial No. 212,735. 2 Claims. (Cl. 6—11.)



1. Comb foundation comprising layers of beeswax and regenerated cellulose in the form of a thin sheet.

2. Comb foundation comprising layers of beeswax and regenerated cellulose in the form of a thin sheet between the beeswax layers.

1,882,939. FOLDING TABLE. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed Oct. 8, 1927. Serial No. 224,954. 7 Claims. (Cl. 45—11.)

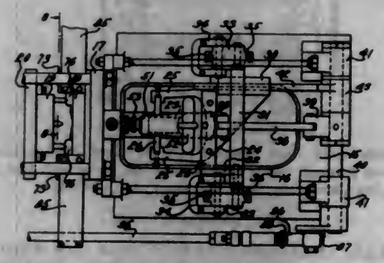


1. A table comprising a top that includes frame bars, independent leg pivoting means comprising a rod passing through a hole in each leg and supported at opposite ends

CARNEGIE LIBRARY OF ATLANTA
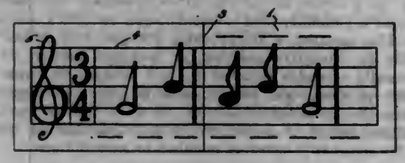
by the frame bars so as to be endwise movable, and an elastic member interposed between the leg and an adjacent frame bar tending to press the leg away from such frame bar.

1,882,940. DIE CASTING MACHINE. ALBERT PERCY ROSANDER, Forest Park, and FRANCIS PETER TIKALSKY, La Grange, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1930. Serial No. 446,824. 1 Claim. (Cl. 22—69.)



In a die casting machine, a furnace having a melting pot, a unitary inverted U-shaped supporting member having spaced arms hinged at their lower ends upon the furnace on opposite sides of the melting pot, a carrier pivotally supported at opposite sides upon said arms and having a U-shaped portion, a charging pot supported at three points upon said U-shaped portion of the carrier, means for swinging the carrier and thereby the supporting member to move the charging pot into and out of the melting pot, and guiding means for causing a predetermined relative movement between the carrier and the supporting member during the movement of the carrier.

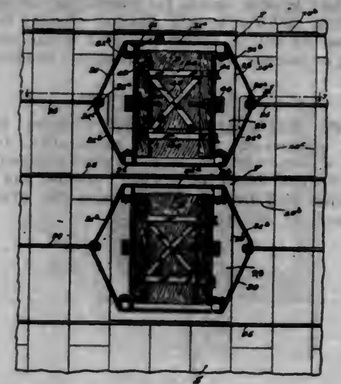
1,882,941. MUSIC BUILDER. HELENE ROSECRANTS, St. Joseph, Mich. Filed Mar. 3, 1931. Serial No. 519,889. 1 Claim. (Cl. 84—471.)



Apparatus for use in teaching and composing music comprising charts having staffs with clefs displayed thereon, and plates composed of separable sections, each section having a note or musical symbol displayed thereon whereby the notes and symbols may be separated for placement upon a staff, the sections displaying stemmed notes being each scored to form a brace connecting the stem and head of the note thereon and the sections bearing some symbols having lines across the same spaced according to the lines of a staff upon which they are to be placed.

1,882,942. SILO. CHARLES B. ROSS, Marietta, Ohio, assignor to Marietta Concrete Corporation, Marietta Ohio, a Corporation of Ohio. Filed June 15, 1931. Serial No. 544,596. 12 Claims. (Cl. 72—6.)

1. In a silo having a circular wall, a series of vertically alined door frames built into the wall, a series of exterior hoops around the wall disposed between the openings in said door frames, a series of hoops around the wall spaced between said first mentioned hoops, and spreaders extended across the door frames above and below the openings therein and connected at their opposite ends to the ends of said last mentioned hoops, respectively, said door frames provided with seats on which said spreaders engage to maintain the spreaders against displacement across



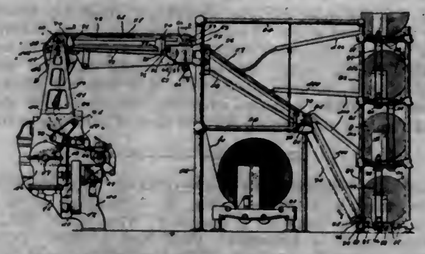
or over the frames, and the last mentioned hoops and spreaders completely independent of the first mentioned hoops.

1,882,943. FLEXIBLE SHAFT END. FRANK A. ROSS, Wilmette, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 11, 1930. Serial No. 420,234. 5 Claims. (Cl. 285—72.)



1. In combination with a flexible shaft casing formed comprising a resilient helical coil, a terminal fitting having a cavity dimensioned to admit the end of the casing by direct thrust of the casing thereinto, and having at a point toward the inner end of the cavity an interior circumferential groove, constituting a recess in the wall of the cavity increasing by the amount of the depth of the recess the radius of the cavity at that point beyond the dimension necessary to admit the coil by direct thrust, the casing having near the end a coil distorted outwardly to form a protrusion projecting radially outward with respect to the helical coil adapted to resiliently engage said groove when the end of the shaft casing is forced into the mouth of the cavity of the fitting.

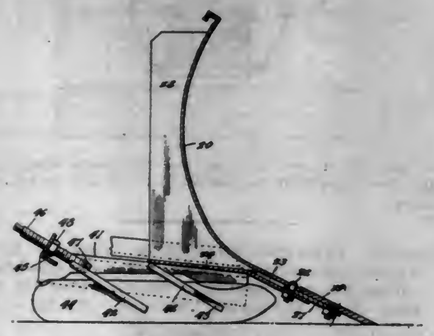
1,882,944. COTTON BAT FEEDING MACHINE. FREDERICK N. ROSS, Detroit, Mich., assignor, by mesne assignments, to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1930. Serial No. 486,807. 7 Claims. (Cl. 154—29.)



1. Cotton bat feeding means for use in combination with upholstery forming machines and the like comprising a plurality of sets of rollers forming cradles to peripherally

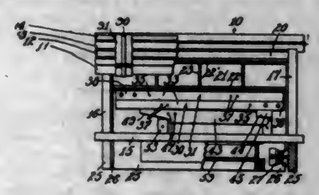
support rolls of cotton bat, means for rotating said rollers to rotate said cotton bat rolls in a direction to unreel the same, a conveyor driven in timed relation with said rollers and guiding chutes for conducting the unwound strips from each roll to said conveyor whereby the strips of cotton bat will be bodily presented to the upholstery forming mechanism without longitudinally tensioning said strips.

1,882,945. SNOWPLOW. LESTER T. ROSS, Crestline, Ohio, assignor to The Burch Corporation, Crestline, Ohio, a Corporation of Ohio. Original application filed Mar. 2, 1931, Serial No. 519,579. Divided and this application filed Dec. 4, 1931. Serial No. 579,017. 2 Claims. (Cl. 37—42.)



1. The combination with a snow plow, of runner frames connected thereto adjacent the ends of the same, each runner frame comprising spaced elements provided on their opposed inner faces with downwardly and forwardly inclined lugs, shoes disposed between said lugs and provided in their sides with grooves receiving the lugs, and means mounted on the shoes and the runner frames for adjusting the shoes downwardly and forwardly.

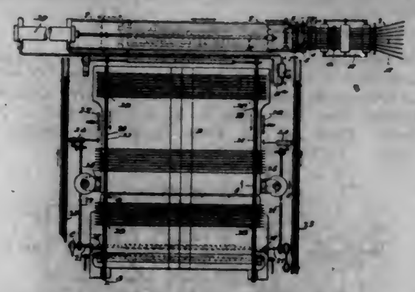
1,882,946. COMMERCIAL PACKAGE. TAYLOR W. ROSS, Madison, Ind., assignor to Thomas Graham & Company, Madison, Ind., a Corporation of Indiana. Filed Jan. 14, 1931. Serial No. 508,607. 13 Claims. (Cl. 45—22.)



1. A commercial package comprising a desk top including a floor and a pair of substantially parallel upstanding side walls, a collapsible chair including a plurality of separate sections nested between said side walls on said floor, and a plurality of legs for said desk top stacked upon each other, said legs extending transversely of said desk top and abutting an edge of each of said side walls.

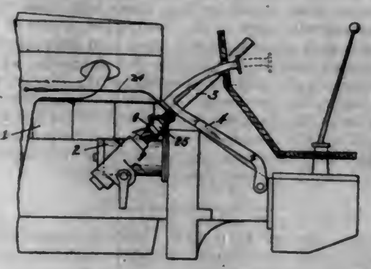
1,882,947. WIRE STRIPPING MACHINE. WALTER SCOTT ROTHERHAM, Pompton Lakes, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,799. 9 Claims. (Cl. 81—9.51.)

1. In the process of removing combustible insulation from conductor wires, the steps which comprise clamping a multiplicity of the wires in spaced relation, passing the wires transversely of their length through a heated zone



of sufficiently high temperature to burn circumferential grooves through the insulation around the wires, and stripping the insulation from the ends of the wires.

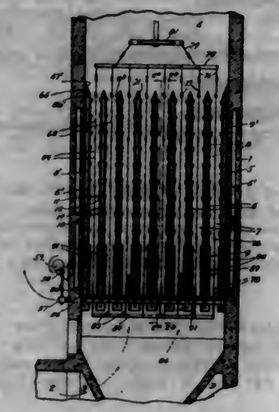
1,882,948. STARTER CONTROL FOR GAS ENGINES. FREDERICK J. ROUTLEDGE, Monroe, Mich. Filed June 4, 1931. Serial No. 542,003. 4 Claims. (Cl. 200—59.)



1. In a device of the character described, the combination of a yieldably held normally open switch, a manually operable member, a reciprocable plunger, and means normally in operative position to transmit motion of the manually operable member to said plunger to cause the latter to close said switch, said plunger being operable under the influence of suction to move said means to a position where it is inoperable for transmitting motion of the manually operable member to said plunger.

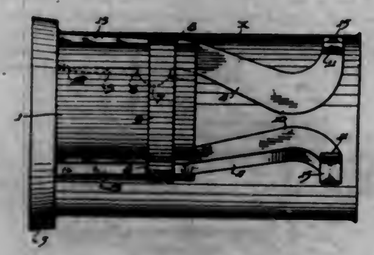
1,882,949. ELECTRICAL PRECIPITATION APPARATUS. HEINRICH BERNHARD RÜDER, Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 15, 1930. Serial No. 495,967. 4 Claims. (Cl. 183—7.)

1. An electrical precipitation apparatus, comprising a housing, a plurality of spaced vertically disposed collecting electrodes extending across said housing and each consisting of two sets of horizontally extending strips, the strips of each set having their major portions disposed substantially in a common vertical plane and the upper edge portion of each strip being offset outwardly with respect to and overlapping the lower edge portion of the next higher strip of that set so as to define upwardly and outwardly opening slots between the respective strips of said set, and the planes of the two sets of strips of each electrode being parallel to one another and spaced apart so as to provide an internal material receiving space within said electrode, said space and the space between the lower edges of the sets of strips of each electrode being open and substantially free from horizontal obstructions so as to permit material entering said space within such electrode to fall freely by gravity to and through the bottom thereof, means positioned within said housing and below the lower edges of all of said electrodes to receive material falling therefrom, said material receiving means comprising a hopper extending substantially across the width of the entire group of collecting electrodes in a direction transverse to said collecting electrodes but having a width in the direction of said collecting electrodes some-



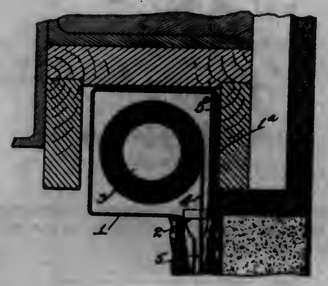
what less than the width of said electrodes and individual spaced channel members extending upwardly and outwardly from the sides of said hopper beneath the portions of the respective collecting electrodes which project beyond said hopper, and a plurality of discharge electrode units extending parallel to and between the respective collecting electrodes and spaced from the outer surfaces of said strips, said housing being provided with inlet means below said channel members and outlet means above the upper ends of said collecting electrodes.

1,882,950. HOLDER FOR BOBBINS OR SPOOLS. WATSON B. RUTON, Jr., Philadelphia, Pa. Filed Sept. 12, 1930. Serial No. 481,569. 3 Claims. (Cl. 242—46.2.)



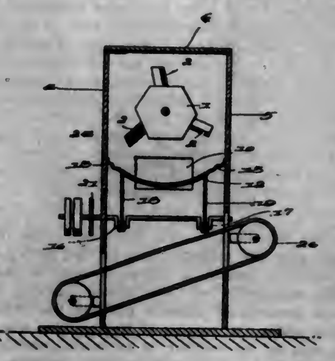
1. A holder for hollow bobbins or spools comprising a body having radial slots therein spaced circumferentially thereof, flat gripping fingers inserted edgewise in said slots and having fulcrum portions thereon located at their inner sides and between their ends and seated in the bottom of said slots in the body, and a band encircling said fingers for retaining the fingers removably in said slots.

1,882,951. ROLLING SCREEN. EDGAR P. RUPPRECHT, Chicago, Ill., assignor to American Rolling Screen Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,042. 5 Claims. (Cl. 156—39.)



1. In a roller screen device including a housing having a throat adjacent one wall, a roller in said housing, and a screen on said roller passing thru said throat; a sound deadening medium on said wall adjacent said throat.

1,882,952. VINER. FRANK PITTIS RYDER, Niagara Falls, N. Y. Filed Mar. 8, 1930. Serial No. 434,351. 6 Claims. (Cl. 130—30.)

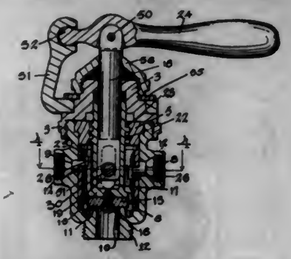


4. In a viner, the combination with a beater cylinder having beater arms extending outwardly therefrom and so arranged as to cause vines to move longitudinally thereof of a vertically movable element to support vines arranged below and extending longitudinally of the beater cylinder and means for vertically reciprocating said movable element to impel vines carried by it upward into the path of movement of the beater arms.

1,882,953. MIXTURE VALVE. ROLLA SAELZLER, Toledo, Ohio. Filed May 25, 1931. Serial No. 539,697. 3 Claims. (Cl. 277—35.)

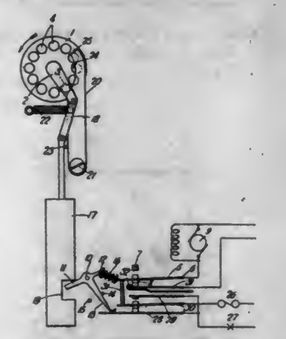
1. In a mixing valve a casing, the casing having a chamber, a plurality of ports formed in the walls of the chamber, a member rotatably supported on the casing, a handle pivotally supported in the member, a valve stem connected to the handle, a sleeve slidably supported in

the chamber and having slotted openings, the openings being adapted to register with some of the ports, means for closing other of the ports, and a pin for interconnecting



the handle to the sleeve for allowing reciprocatory movement of the sleeve to vary the areas of the openings of the sleeve relative to the ports.

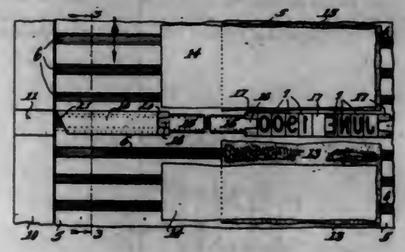
1,882,954. MOTOR CONTROL DEVICE FOR TELEGRAPH AND LIKE SIGNALING APPARATUS. REGINALD DENNIS SALMON and STANLEY ELLIS KIRK, Croydon, England, assignors to Creed and Company, Limited, Croydon, England. Filed July 28, 1931, Serial No. 553,576, and in Great Britain June 11, 1931. 7 Claims. (Cl. 178—4.1.)



1. Motor control device for telegraphic and like signalling apparatus and comprising, a driving motor, a member slowly movable thereby, a driven member having appreciable mass engageable with said slowly movable member to be moved towards an extreme position but disengageable therefrom under the control of line signals, means for restoring said driven member to an initial position on disengagement from said slowly movable member, a switch actuating member operable from one to the other of two positions and actuated thereto by said driven member at each of the two extreme positions respectively, a switch contact lever controlling said motor and likewise operable from one to the other of two positions, and spring means connecting said switch contact lever and said actuating member and strained thereby to maintain both lever and member in either of their two positions respectively.

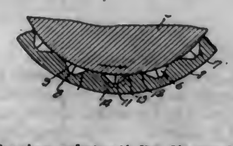
1,882,955. LINE IMPRESSION EQUALIZER. EDGAR LOUIS SANDERS, Chicago, Ill., assignor of one-half to Walter J. Sanders, Chicago, Ill. Filed Nov. 7, 1931. Serial No. 573,701. 4 Claims. (Cl. 101—244.)

1. In a printing machine of the character described and comprising a rotary printing element carrier having longitudinally disposed circumferential grooves for the reception of the respective lines of printing elements, an abutment member adjacent the end of said rotary carrier in opposed relation to the ends of the respective circumferential grooves of the carrier, a cooperating roller platen for effecting an impression of the printing elements upon a sheet passed therebetween, and a line impression equalizing device comprising an element insertable in a printing element receiving groove of said carrier in correlation



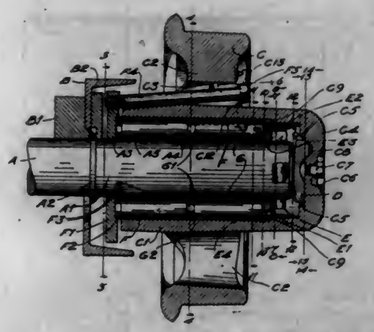
to the line of printing elements therein, the circumferential face of said equalizing element being higher than the printing face of the correlated line of printing elements and the outer end of said equalizing element being beveled to slidably engage said abutment member with cam effect.

1,882,956. BEARING. LOUIS SANDLER, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1929, Serial No. 387,671. 1 Claim. (Cl. 308—240.)



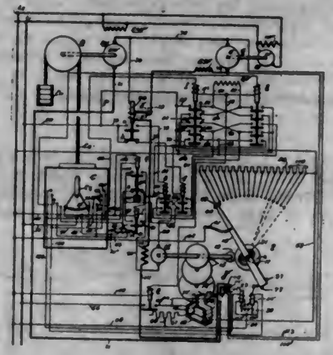
A bearing having substantially diamond shaped pockets therein adapted to contain lubricant for a shaft, the walls between the bottoms and tops of the pockets sloping upwardly and outwardly at a sharp angle to the bearing surface in order to wedge a thin film of lubricant between the shaft and walls of the pockets and cause it to be carried by the shaft when rotated.

1,882,957. WHEEL AND AXLE. HUGH W. SANFORD, Knoxville, Tenn. Filed Jan. 20, 1930. Serial No. 422,152. 41 Claims. (Cl. 295—44.)



1. In a structure of the kind described, the combination with an axle journal, of a removable hub lining, a collar surrounding the journal at the outer end of the lining and forming an abutment for the lining, means removably supported on the journal at the outer side of said collar and forming an abutment for said collar, a wheel hub surrounding said lining and having an outer end wall in operative relation with the end of the journal to oppose movement of the hub inward toward the car body and the hub having near its outer end an interior transverse annular shoulder directed toward the inner end of the hub and serving as an abutment for said collar, binding means including an inner end wall between the wheel hub and said lining for drawing the lining toward said collar, a sleeve around the journal, and a washer surrounding the journal between said sleeve and the inner end wall.

1,882,958. MOTOR RHEOSTAT FOR ACCELERATION. DANILO SANTINI, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 24, 1929. Serial No. 380,538. 13 Claims. (Cl. 172—152.)



1. In a motor-control system, a motor, a source of power, means for supplying voltage from said source to said motor, voltage-modifying means for varying the value of voltage so supplied comprising a switch arm movable over a fixed path between two extreme positions, means biasing said lever to a position representing lowest voltage and means for exerting a force proportional to the load on said motor to move said lever against the force of said bias and means for exerting a force inversely proportional to the degree of movement of said arm, to retard movements of said arm.

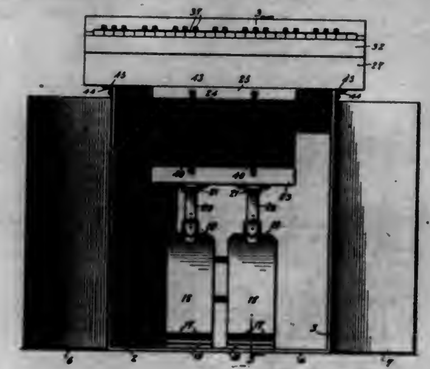
9. In a motor-control system, a motor to be controlled, a motor controlling member, means actuable by an operator to control said member for varying the speed of operation of said motor, and means comprising a load responsive device for automatically controlling said member to regulate the rate of speed variation to be according to a predetermined rate for all loads.

1,882,959. BRAKE SHOE. FITZ WILLIAM SARGENT, Mahwah, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,793. 1 Claim. (Cl. 188—258.)



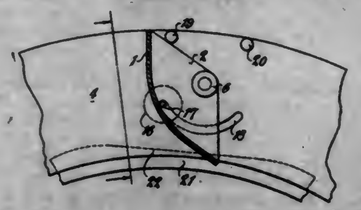
A brake shoe comprising a body, a central attaching lug, and a reenforce back embedded in the body at the back thereof, said back comprising a strip of less width than the body and having elongated depressions at both side edges between the middle portion and the end portions of the back, there being openings in the bottom of said depressions to permit the body metal to run therethrough and into the depressions during the casting operation for filling the depressions and uniting with the body metal at the edges of the back to anchor the back to the body.

1,882,960. FOOT PEDAL PIANO ACCORDION. SAMUEL SATER, New York, N. Y. Filed Aug. 1, 1931. Serial No. 554,532. 3 Claims. (Cl. 84—354.)



2. A foot pedal piano accordion including a body acting as a container when the parts are folded and as a stand when the parts are unfolded, a housing rigidly secured to said body, a bellows connected with said housing and positioned to be in free communication therewith, resilient members acting to normally hold the bellows collapsed, a foot pedal acting to distend the bellows, a casing mounted on said housing, said casing being provided with a plurality of passageways, a plurality of reed housings carrying reeds connected with said casing and covering said passageways, some of said reeds facing in one direction while the others face in the opposite direction so that some of the reeds will function as the bellows move the air in one direction and the other reeds will function as the bellows move the air in the opposite direction, a plurality of valves, said valves normally covering said respective passageways and acting to normally shut off the air when the air is moving in either direction and a keyboard carried by said casing, said keyboard having the respective keys connected with the respective valves.

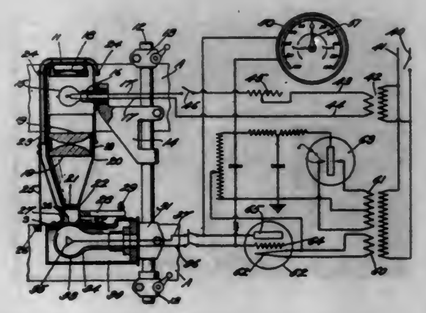
1,882,961. FAN OR BLOWER. NORMAN FRANK TILBURY SAUNDERS, Newport Pagnell, England, assignor to Associated Electrical Industries Limited, a Company of Great Britain. Filed Nov. 1, 1929, Serial No. 403,972, and in Great Britain Nov. 2, 1928. 1 Claim. (Cl. 230—133.)



A fan for delivering air radially thereof comprising a plurality of shroud rings, a plurality of curved blower elements pivotally mounted between the shroud rings with the axis of the elements parallel to the axis of the fan,

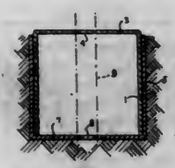
said elements being curved symmetrically with respect to the axis thereof, stops on the shroud for maintaining the blower elements in either of two positions, a weight member attached to each of said blower elements and a cam member cooperating with said weight members for reversing the blower elements upon reversal of the direction of rotation of the fan.

1,882,962. APPARATUS FOR MEASURING THE THICKNESS OF PAPER. FRANK SAWFORD, Vancouver, British Columbia, Canada, assignor of one-half to Frank Sawford, jr., Vancouver, British Columbia, Canada. Filed Nov. 19, 1928. Serial No. 320,886. 2 Claims. (Cl. 88—14.)



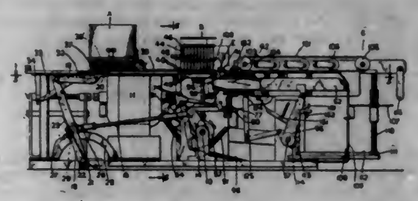
1. Apparatus for measuring variations in the thickness of a sheet of paper, which consists in a lamp, means for concentrating a beam of light therefrom, and for throwing it against a sheet of paper, a photo-electric cell on the opposite side of the sheet of paper, an electric circuit for the photo-electric cell, means for measuring variations in the current in said circuit, and a shutter interposed between the lamp and the photo-electric cell normally intercepting the light from the lamp, and means operated by the paper for holding the shutter out of the path of the lamp.

1,882,963. FILLER COVER. JOHN J. SCANLAN, Tyler, Minn. Filed Feb. 7, 1931. Serial No. 514,266. 2 Claims. (Cl. 273—34.)



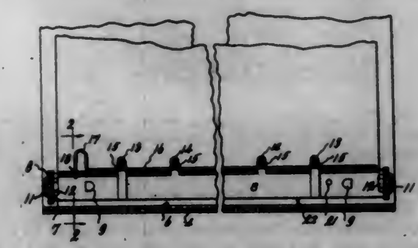
1. A construction of the class described comprising, in combination, an upright golf-hole cup, open at the top thereof and having a small perforation in the bottom thereof, and a filler cover for said golf-hole cup, said filler cover comprising an inverted cup, open at the bottom thereof and having a small perforation in the top thereof, said filler cover being telescopingly received in said golf-hole cup, the tops of said filler cover and golf-hole cup lying in substantially the same plane, and said circular perforations being in substantial alignment, whereby they are adapted to cooperate in the support of a hole flag, marker or the like.

1,882,964. MACHINE FOR ANALYZING AND PRINTING UPON RECORD CARDS. JOHN T. SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed July 6, 1927. Serial No. 203,765. 21 Claims. (Cl. 101—93.)



1. In a machine for printing on records, type carriers, means for analyzing the records including stops to engage and arrest the type carriers in printing positions corresponding to the analyzed record, and means for causing said type after the carriers have moved to printing positions to print on a record while the latter is still in analyzing relation to said analyzing means.

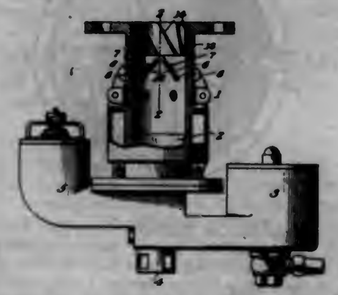
1,882,965. LOOSE SHEET BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Oct. 3, 1931. Serial No. 566,697. 1 Claim. (Cl. 129—1.)



A loose sheet binder comprising side covers and a back, a plurality of prongs, some secured to one side and some to the other side of said back, a plurality of sets of sheets, the sheets of each set folded together and notched along the fold, said prongs engaging the respective notches, in combination with spring metal retaining wires one for each set of sheets and each extending under said prongs and along the folded line of its set to close the notches, each retaining wire being straight except at one end and at such end having a downwardly extending right angle bend for that end of the wire to enter a small hole in the fold of its sheets, said right angle bend being formed from the body of its wire with a reverse bend to form a finger grip adjacent the said hole and by which the flexible wire can be manipulated to readily position it in and remove it from the binder, each of said wires being positioned in the fold against longitudinal movement relative thereto solely by its end fitting in said hole and removable from the fold solely by lifting one end out of its hole by its finger grip and pulling the wire longitudinally.

1,882,966. CARBURETOR THROTTLE. FREDERICK W. SCHAFFNER, Brooklyn, N. Y. Filed Mar. 2, 1932. Serial No. 596,354. 2 Claims. (Cl. 48—180.)

1. A carburetor throttle comprising semi-circular valve plates mounted for pivotal movement in opposite directions within the throat of a carburetor for controlling the passage of fuel through the throat, one of said plates having its straight edge concave and the other plate having its straight edge convex, said concave and convex edges adapted to fit one within the other during the positioning of the plates to close the throat and each of said edges having notches to align for forming ports of a given size to permit passage of a regulated amount of fuel by said



plates when in throat closing position proper for running an engine at idling speed, fuel deflecting means on said plates to swirl the fuel passing between said plates when the latter are positioned to open the throat, and means located above the plates within the throat to swirl the fuel passing between the plates and the walls of the throat.

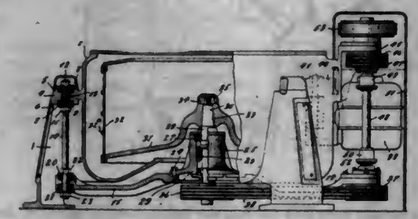
1,882,967. PROTECTING DEVICE FOR CASHIERS WINDOWS AND THE LIKE. CHARLES A. SCHEELER, Buffalo, N. Y., assignor to Buffalo Wire Works Co., Inc., Buffalo, N. Y., a Corporation of New York. Filed July 24, 1931. Serial No. 552,823. 5 Claims. (Cl. 89—36.)



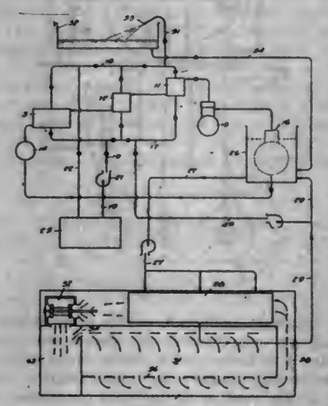
1. A bank fixture of the character described, comprising a body adapted to be fitted in a partition or the like and having a gun port therein, an outwardly opening trap door carried by said body, means yieldingly holding said trap door in a closed position over said opening, the outer surface of said trap door being roughened to prevent the effective application thereto of a suction cup for the purpose of drawing said trap door open.

1,882,968. CLEAR TOP EXTRACTOR. LE ROY C. SCHENCK, Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,346. 13 Claims. (Cl. 210—71.)

1. In an extractor of the clear top type an outer casing or curb, a basket adapted to rotate within said curb, a relatively light frame swingably suspended from said curb, a basket carried by said frame, a driving motor attached to the curb, a first pulley attached to the basket shaft, a second pulley on a fixed center with respect to the first pulley, and a shaft universally connected at opposite ends to the motor and to said second pulley respectively.



1,882,969. REFRIGERATING SYSTEM AND METHOD. PAUL A. SCHERER, Medford, Oreg., and GRAHAME B. RIDLEY, San Francisco, Calif., assignors to Southern Oregon Sales Inc., Medford, Oreg., a Corporation of Oregon. Filed June 24, 1930. Serial No. 463,543. 3 Claims. (Cl. 62—104.)

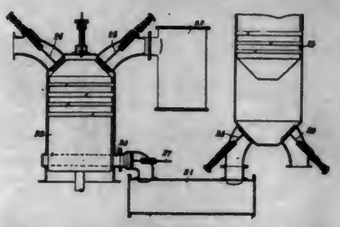


2. In a system of the character described, a refrigeration space containing a medium to be cooled, brine recirculating means adapted to bring cool brine into heat absorbing contact with said medium, means for diverting a portion of said brine from said recirculating means and for returning the same to said means, means for heating said diverted brine portion out of contact with the atmosphere and means for subjecting the diverted portion to the atmosphere to evaporate undesired moisture prior to its return to said recirculating means.

1,882,970. INTERNAL COMBUSTION ENGINE. EMIL SCHIMANEK, Budapest, Hungary. Filed Sept. 17, 1928, Serial No. 306,800, and in Austria Oct. 4, 1927. 4 Claims. (Cl. 123—1.)

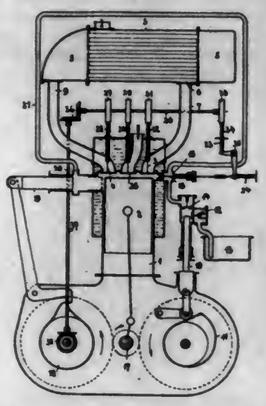
1. A method of operating internal combustion engines of the Diesel type working on a cycle comprising four or more strokes, characterized in that the power cylinder, at the turning of the stroke at the end of the combustion stroke, is (by means of a compressor or the like operated

independently of the power cylinder piston) scavenged and charged with air to a degree already sufficient for a power stroke, and that this air charge together with additional



charging air supplied during the subsequent strokes of the cycle is compressed in the power cylinder during its inward stroke immediately preceding the combustion.

1,882,971. ENGINE FOR MOTOR VEHICLES. EMIL SCHIMANEK, Budapest, Hungary. Filed May 28, 1927, Serial No. 194,920, and in Austria Oct. 19, 1926. 4 Claims. (Cl. 123—64.)

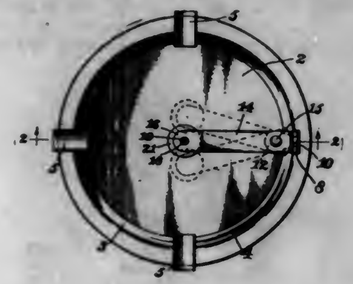


1. An internal combustion engine operating on a cycle comprising an even number of strokes more than four and having a cylinder and a piston reciprocable therein, a fuel receiving chamber in communication with said cylinder, an air receiver having fluid connection with said cylinder and said fuel receiving chamber, air being delivered to said air receiver by said piston and compressed to a pressure higher than the combustion pressure of the engine, valve means in operable connection with said air receiver and said fuel receiving chamber to selectively control flow of air from said receiver and injection of fuel into the cylinder by compressed air, and means operable in timed relation to movement of said piston to move said valve means.

1,882,972. PRODUCTION OF SHAPED METALLIC ARTICLES. LEO SCHLECHT, Ludwigshafen-on-the-Rhine, WALTER SCHUBARDT, Mannheim, and FRANZ DUFTSCHMID, Heidelberg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 28, 1931, Serial No. 519,246, and in Germany Mar. 5, 1930. 3 Claims. (Cl. 29—160.5.)

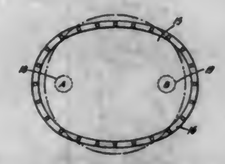
1. In the production of shaped metallic articles by sintering a metallic powder by the action of heat, the step which comprises arranging the uncompressed metal powder to be sintered in such a spatial position that the direction of the shaped article in which the shrinkage during the sintering is greatest, is about vertical.

1,882,973. ASH TRAY AND EXTINGUISHER. ROBERT A. SCHLEGEL, Williamsport, Pa. Filed July 18, 1930. Serial No. 468,947. 2 Claims. (Cl. 131—51.)



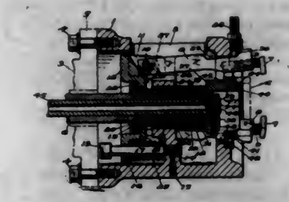
1. In a device of the character described, an ash tray, an anvil located within the tray and surrounded thereby and having an imperforate upper face elevated above the bottom of the tray, a plunger having an imperforate lower face, means mounting the plunger for movement toward and from the anvil to permit a cigarette end to be crushed between the said faces, said plunger being rotatable relatively to the anvil, both of said faces being provided with roughened milling surfaces whereby the cigarette end while being crushed will be shredded and the shreds as created forced from between the said faces and into the surrounding tray by centrifugal action when the plunger is rotated relatively to the anvil.

1,882,974. ACOUSTIC DEVICE. VESPER A. SCHLENKER, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1928. Serial No. 279,792. 22 Claims. (Cl. 181—31.)



1. An acoustic device comprising a plane diaphragm stretched symmetrically and non-uniformly and means at all portions of the periphery of said diaphragm to maintain it so stretched.

1,882,975. CHUCK. WILLIAM D. SCHMIDT, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1929. Serial No. 413,099. 9 Claims. (Cl. 279—106.)



1. In a chuck, an internal centering device arranged to engage a workpiece on the surface to be gauged, and an internal gauge mounted inside said centering device.

1,882,976. PRODUCTION OF CONVERSION PRODUCTS OF SYNTHETIC RUBBER. OTTO SCHMIDT and GEORG NIEMANN, Ludwigshafen-on-the-Rhine, and EGON MEYER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 3, 1929, Serial No. 368,181, and in Germany June 15, 1928. 31 Claims. (Cl. 18—54.)

1. The process for the production of artificial masses which comprises heating a non-distillable polymerization product of a butadiene to a temperature between about 100° and 500° C. in the presence of a sulphurizing agent in a quantity below that required for the production of hard rubber from india rubber until the product has lost the tensile elasticity of rubber.

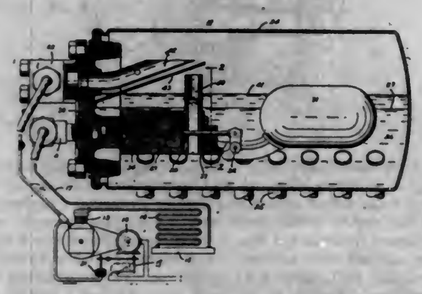
1,882,977. PRODUCTION OF HYDROGEN. OTTO SCHMIDT and GEORG NIEMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 7, 1927, Serial No. 204,138, and in Germany July 31, 1926. 4 Claims. (Cl. 23—212.)

1. The process of substantially quantiatively converting gaseous aliphatic hydrocarbons into hydrogen, which comprises decomposing the said initial hydrocarbons with steam at about 400° to 600° C. and subsequently contacting the reaction gases with a carbon-dioxide absorbent at such high temperatures that no simultaneous condensation of water vapor takes place and then repeating the said operations with the gases resulting from the absorption step until practically all of the hydrocarbons are converted.

1,882,978. RECOVERY OF UNSATURATED ALIPHATIC HYDROCARBONS. OTTO SCHMIDT and OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 15, 1928, Serial No. 262,035, and in Germany Mar. 21, 1927. 11 Claims. (Cl. 260—171.)

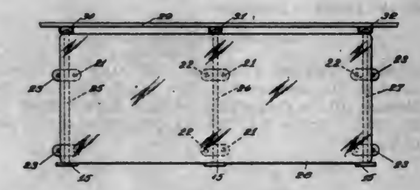
1. The process of recovering and separating butadiene which comprises treating a mixture containing the same with an organic solvent containing at least one element selected from the group consisting of oxygen, nitrogen and halogen and which when shaken with a liquid mixture of diolefines and mono-olefines causes the formation of two separate layers.

1,882,979. REFRIGERATING APPARATUS. WARREN H. F. SCHMIEDING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 30, 1931. Serial No. 533,995. 9 Claims. (Cl. 62—126.)



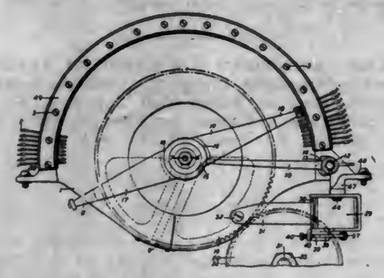
2. In a refrigerating system of the type in which a body of liquid refrigerant is maintained in an evaporator and in which a layer of lubricant floats on the liquid refrigerant in the evaporator, the combination of an evaporator having a liquid refrigerant inlet opening, said inlet opening including a confined passage communicating with the body of liquid refrigerant within said evaporator and with the space above the lubricant floating on the liquid refrigerant.

1,882,980. BRACKET. THOMAS O. SCHRADER, Allentown, Pa., assignor to The Dent Hardware Company, Fullerton, Pa., a Corporation of Pennsylvania. Filed July 9, 1931. Serial No. 549,771. 2 Claims. (Cl. 248—18.)



1. A shelf supporting bracket adapted for use as a right-hand, left-hand or center bracket comprising a bracket arm provided with means to facilitate its attachment to a support, and a pair of stops removably secured to lateral extensions of said arm in substantially spaced relation in a direction transverse to the length of said arm, whereby said bracket may be used as a center bracket by removal of both stops, as a right-hand bracket by removal of the left-hand stop so that the right-hand end of a shelf may be firmly supported by said extensions and abut against the remaining stop, and as a left-hand bracket by removal of the right-hand stop so that the left-hand end of a shelf may be firmly supported by said extension and abut against the remaining stop.

1,882,981. SWITCHING MECHANISM. LOUIS J. J. SCHREIBER, GEORGES P. CHEVIGNY, and GEORGES X. LENS, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 6, 1931, Serial No. 567,146, and in France Dec. 3, 1930. 6 Claims. (Cl. 179—27.51.)



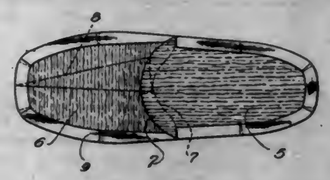
2. A switching mechanism comprising a brush carriage, wiper brushes cooperatively arranged in pairs thereon, each of said brushes being formed with an embossed portion between the point of attachment to said carriage and the contacting end thereof, the embossed portions of each pair of brushes abutting against each other when mounted on said rotor.

1,882,982. ROLLING SCREEN RETAINING MEANS. AUGUST J. SCHMIEDESKAMP, Berkeley, Calif. Filed Nov. 25, 1930. Serial No. 498,032. 8 Claims. (Cl. 156—39.)



8. In means of the character described, a roller screen mounted in a window frame, guides at the sides of the frame for the side edges of the screen, and resilient tapes secured to and extending along said edges and engaging in said guides whereby the withdrawal of said edges from the guides is prevented.

1,882,983. PAPER SLIPPER. WILLIAM M. SCHOLL, Chicago, Ill., assignor to The Scholl Mfg. Co., Inc., Chicago, Ill., a Corporation of New York. Filed Apr. 27, 1931. Serial No. 533,191. 2 Claims. (Cl. 36—11.5.)

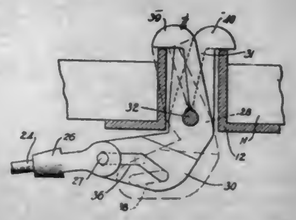


1. As an article of manufacture, a crepe paper slipper including a sole piece, an upper portion creped transversely of the length of said sole piece, and non-skid tape securing said sole piece and upper portion together, said tape overlapping the sole surface of said slipper.

1,882,984. RECTAL ANÆSTHETIC. KARL SCHRANZ and SIEGFRIED JÄGER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928, Serial No. 324,577, and in Germany Dec. 16, 1927. 6 Claims. (Cl. 167—52.)

1. A composition of matter comprising tribromoethyl-alcohol and such a quantity of a liquid non-primary aliphatic alcohol, that the mixture is liquid at normal temperature, said composition of matter being stable to light and heating and exerting valuable pharmacological properties in the use as rectal anæsthetic or narcotic.

1,882,985. APPARATUS FOR HANDLING MATERIAL. WILLIAM SCHROEDER, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,063. 5 Claims. (Cl. 214—94.)



1. In a reel handling apparatus, a reel center plug including slotted levers oppositely rotatable about a common fulcrum, hooked ends on the levers, and means engaging the slots of the levers for rotating the levers about the fulcrum to cause the hooked end to expand and to coincide so as to engage or release an inner surface of a reel face after insertion through the central aperture thereof.

1,882,986. COVERING FOR GRAVES. PAUL EDMUND SCHROEDER, Fort Wayne, Ind. Filed July 13, 1931. Serial No. 550,510. 2 Claims. (Cl. 27—30.)

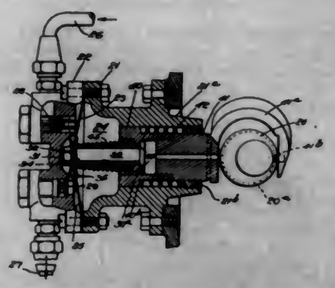


2. A grave covering consisting of a base-sheet having a superimposed decoration simulating grass and constituting a mat, said mat having flaps to provide an opening therein for the reception of a vase, which flaps normally close said opening, and means for securing said flaps in closed position or about the vase when positioned in said opening.

1,882,987. PROCESS OF MAKING METAL ARTICLES. WALTER SCHUBARDT, Mannheim, and LEO SCHLECHT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 26, 1929, Serial No. 388,615, and in Germany Sept. 13, 1928. 1 Claim. (Cl. 29—160.5.)

The process of producing iron articles which comprises subjecting a mixture of scrap iron and iron powder prepared by thermal decomposition of iron carbonyl to a heat treatment at a temperature of about 600° C. and then rolling the sintered material.

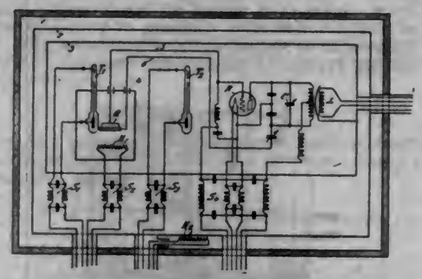
1,882,988. FUEL PUMPING DEVICE. WILLIAM H. SCHULZE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Apr. 14, 1928. Serial No. 269,947. 5 Claims. (Cl. 103—38.)



1. A fuel feeding device comprising a housing containing a pumping chamber and passages connected for inflow from a fuel source and outflow toward the carbureter of the engine served, with one-way seating valves in said passages opening for flow toward the carbureter and seating against reverse flow, the pumping chamber having a movable wall member by whose opposite movements the chamber capacity is enlarged and reduced; means for moving said pumping chamber wall in said opposite directions consisting of a two-membered stem of which one member is secured to the movable wall member and the other is exposed to positive actuation in the direction of

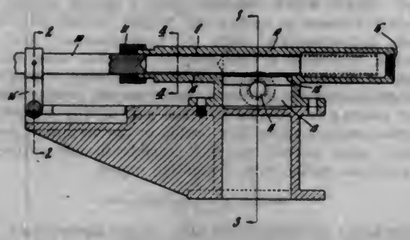
the chamber-enlarging movement of the movable wall member by means exterior to the casing; a spring reacting between the casing and the last mentioned stem member to retract the latter in the direction of the chamber-reducing movement of said wall member; the two stem members being longitudinally movable relative to each other for extending and reducing the stem, and having co-operating stops limiting such extension and at said limit engaged with each other by said stops for longitudinal movement of the first mentioned stem member in the chamber-enlarging direction, and a second spring weaker than the first reacting on the first mentioned stem member and said movable wall member for transmitting movement of said second mentioned stem member to said wall member in chamber-reducing direction.

1,882,989. THERMOSTATICALLY CONTROLLED PIEZO-CRYSTAL. HANS SCHUMACHER, Berlin-Lichterfelde-West, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin, Germany. Filed Dec. 11, 1930, Serial No. 501,537, and in Germany Dec. 18, 1929. 3 Claims. (Cl. 250—36.)



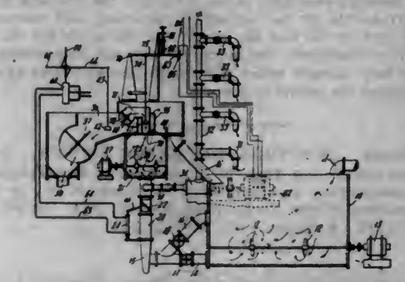
1. In a temperature control system, the combination of a plurality of chambers one within the other, a source of oscillations, a piezo-electric crystal disposed in the innermost chamber for controlling said source of oscillations, said oscillator and its associated circuits being disposed in the next outer chamber, and means in each of said chambers for approximately maintaining a predetermined temperature therein, the actual temperature in each of said chambers differing from said predetermined temperature by a smaller amount until the innermost chamber is reached at which point the temperature becomes substantially constant.

1,882,990. SELF-ADJUSTING VALVE. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 12, 1930. Serial No. 443,675. 7 Claims. (Cl. 251—4.)



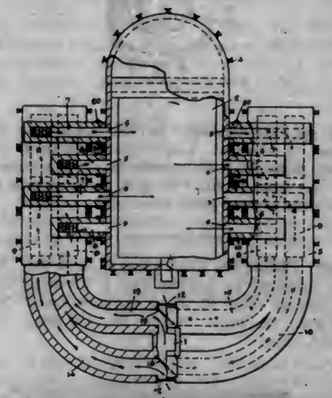
1. A self-adjusting valve comprising a casing having a port therein for the flow of fluid through the valve, a valve member movable to close said port, said valve member having a cut-away portion movable in two directions into and out of registry with said port to open and close a passage through the valve, one of said directions of motion being for operating movement and the other direction of motion for adjustment of valve capacity, and means actuable by approach of said valve member to either end of its operating stroke to impart movement to said valve member in its adjusting direction to augment the effect of the motion in said operating direction.

1,882,991. METHOD OF AND APPARATUS FOR DELIVERING PULP STOCK AT CONSTANT TONNAGE RATE. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 14, 1930. Serial No. 495,599. 24 Claims. (Cl. 92—46.)



1. Apparatus of the class described comprising a vat for pulp stock having an outlet port and an inlet port, means for controlling the outflow of stock through said outlet port, and means for automatically maintaining a substantially constant consistency and volume rate of inflow of stock through said inlet port.

1,882,992. METHOD OF HEATING GLASS AND APPARATUS THEREFOR. FRANZ G. SCHWALBE, Toledo, Ohio. Filed Feb. 11, 1931. Serial No. 514,972. 5 Claims. (Cl. 49—54.)

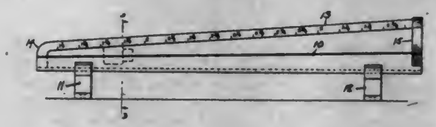


1. The method of heating a furnace which consists in forming flames in stratified currents moving in opposite directions across the furnace at the same time, alternate flames moving in the same direction, and intermediate flames moving in directions opposite the movement of the adjoining flames.

1,882,993. PLUG CALIPERING DEVICE. MAX SCHWARZE, Milwaukee, Wis. Filed May 17, 1928. Serial No. 278,464. 1 Claim. (Cl. 33—178.)

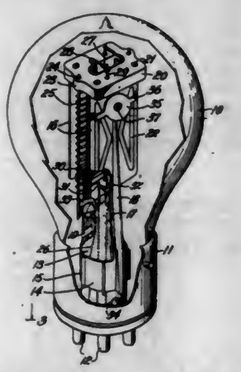
A calipering device comprising an elongated bed provided with a longitudinally extending V-channel the side

walls of which constitute a 2-point contact and support for a cylindrical article while the diameter of the latter is being determined or its taper is being checked, and a scale bar positioned above the channel in a plane co-incident with the bisecting plane of the angle of the channel



and forming the third point of contact for the said cylindrical article in the calipering operation, and means at each end of the bed for supporting the scale bar in the position described, the means at one end comprising an open loop through which the article may be passed axially to engage the points of contact.

1,882,994. ELECTRON DISCHARGE DEVICE. PAUL SCHWERIN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1926. Serial No. 112,472. 8 Claims. (Cl. 250—27.5.)



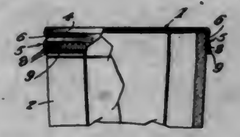
1. An electron discharge device, comprising an enclosing vessel, a filament, and a plate electrode having at least two triangular embossments on the outer surface thereof, the base portions of said embossments extending longitudinally of said plate electrode.

1,882,995. CLOSURE CAP. EDGAR SCOFIELD, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,669. 12 Claims. (Cl. 215—38.)



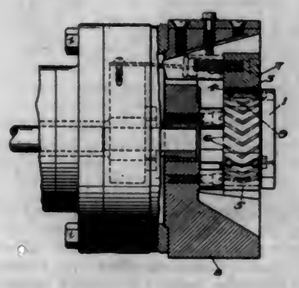
1. As an article of manufacture, a closure cap comprising a cover portion and a depending skirt, said skirt being provided with a pair of rows of inwardly extending corrugations about the circumference thereof to permit the expansion of the skirt, a row of corrugations extending downwardly and flaring inwardly and a row of corrugations extending upwardly and flaring inwardly to provide a zone of minimum diameter substantially above the middle of the skirt.

1,882,996. FRICTION CLOSURE CAP. EDGAR SCOFIELD, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Oct. 10, 1928. Serial No. 311,440. 6 Claims. (Cl. 215—38.)



1. A friction closure cap comprising a cover portion, a depending skirt, a bead in the upper part of the skirt for forming a continuous sealing zone on the side wall of a container, and corrugations in the lower portion of the skirt adapted to engage the container and form a less tight and more expansive gripping zone.

1,882,997. GEAR HOLDING AND CENTRALIZING DEVICE. GERALD D. SCOTT, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1931. Serial No. 514,565. 7 Claims. (Cl. 279—1.)



1. A device for centering a gear comprising a base member, a plurality of flexible arms extending from said base, and spaced enlarged portions on said arms substantially circular in cross section and adapted to engage with teeth on a gear substantially at the pitch line.

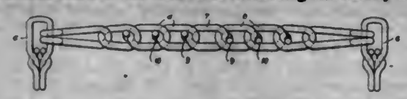
1,882,998. PROCESS OF REFINING COPPER. JAMES W. SCOTT, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1930. Serial No. 480,821. 2 Claims. (Cl. 75—62.)

1. A method of producing copper substantially free from oxygen which comprises poling molten copper in a mother furnace to reduce the oxygen content thereof to from approximately .03% to approximately .08% by weight, providing a clay graphite crucible lined with a layer of aluminum oxide, sprinkling the lining with calcium boride, ladling the molten copper from the mother furnace and pouring it into the crucible, and adding copper containers containing calcium boride to the stream of molten metal being poured into the crucible to mix intimately the calcium boride with the molten copper.

1,882,999. ANTISKID CHAIN. JOHN SENFT, York, Pa., assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,271. 3 Claims. (Cl. 152—14.)
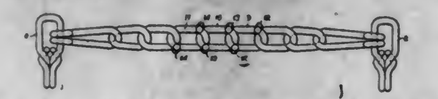
1. An anti-skid chain containing interconnected links each twisted at its ends to permit the said links to lie

in approximately a common plane, and calks secured to the extremities of the links and extending outwardly from



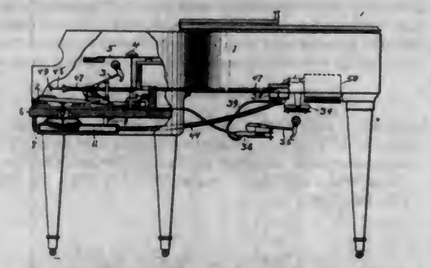
the median planes thereof, a distance sufficient that they cooperate with the protuberant bends of the links to form traction surfaces.

1,883,000. ANTISKID CHAIN. JOHN SENFT, York, Pa., assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,270. 6 Claims. (Cl. 152—14.)



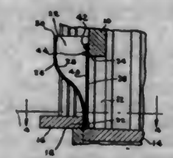
2. A chain link having bar-like calks secured to opposite sides thereof at points removed from the face of the link, the calks extending in directions generally perpendicular to the normal plane of the link, but being inclined in opposite directions.

1,883,001. MUSICAL INSTRUMENTS. BROR K. SETTERGREN, Bluffton, Ind. Filed Apr. 15, 1929. Serial No. 355,136. 3 Claims. (Cl. 84—170.)



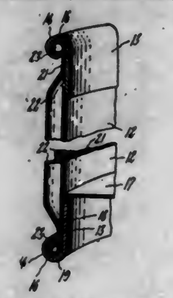
2. In a musical appliance, a set of keys, a piano member operated thereby, chimes including an action therefor, an organ member adjustably mounted relative to said keys and being operable thereby, means controlled by said set of keys operatively associated with the action for said chimes, a valve controlling said means, and mechanism associated with said piano and organ members and said set of keys for adjusting said piano and organ members to selectively establish operative relation between said keys and either one of said members and rendering the other of said members inoperative.

1,883,002. WINDOW VENTILATOR. SARAH H. SEWARD, Minneapolis, Minn. Filed Sept. 8, 1930. Serial No. 480,338. 2 Claims. (Cl. 98—99.)



1. A window ventilator comprising two end members, a front wall secured between said end members with the upper portion of said wall deflected inwardly toward the room, means for holding the device fixedly in place to maintain a constant path for the inflow of air underneath a partially open window sash, a telescoping imperforate slide adapted to be inserted between said end members, and means for holding said slide with its upper edge in engagement with the lower portion of the window sash whereby the inflow of air may be minutely controlled according to the extent to which said slide is telescoped.

1,883,003. SHEET METAL RECEPTACLE. GEORGE A. SEXTON, Winchester, Mass. Filed Nov. 10, 1930. Serial No. 494,515. 2 Claims. (Cl. 220—69.)



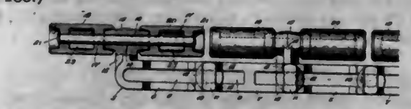
1. A composite receptacle having laminated chimes and comprising relatively stiff end hoops having pre-formed outwardly curled portions constituting formers and external chime layers, and a reinforced body composed of an inner member and reinforcing means superimposed thereon, said member and reinforcing means having end portions telescoped into said formers and thereby rolled within the formers to constitute a plurality of internal chime layers and interlock said inner member and reinforcing means with the formers, the end hoops being within, and reinforcing the ends of the body and confined therein wholly by the interlocking of the body ends with the formers.

1,883,004. CHAIN. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 24, 1928. Serial No. 314,713. 2 Claims. (Cl. 198—189.)



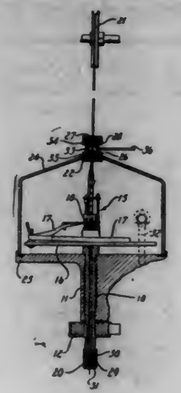
2. An element for compound articulating sprocket chain links comprising an elongated bar having a depressed portion intermediate its ends and bent upon itself at said depressed portion to provide a pair of spaced arms; and a tubular bushing embraced by and secured to said depressed portion.

1,883,005. CONVEYER CHAIN. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 6, 1931. Serial No. 573,489. 17 Claims. (Cl. 198—183.)



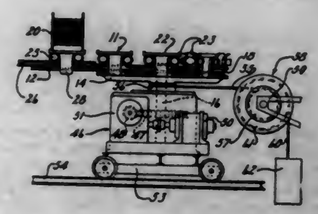
1. A conveyer chain, certain of the links of which are provided with a single projecting support; and a load receiving roller rotatably carried by said support at each end thereof with their axes substantially longitudinal of the link.

1,883,006. APPARATUS FOR WORKING MATERIAL. JOHN R. SHEA, Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1931. Serial No. 514,718. 6 Claims. (Cl. 117—42.)



1. In an apparatus for covering a core, a main chamber through which said core is adapted to pass, points of entrance and exit for said core in said main chamber, means located within said main chamber for applying a covering material to said core, and an auxiliary chamber at at least one of said points in said main chamber through which said core passes for preventing the passage of air into said main chamber and thereby maintaining controlled atmospheric conditions within said main chamber.

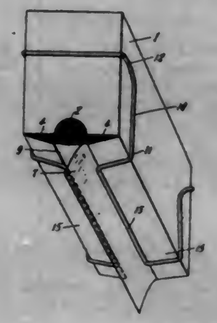
1,883,007. CONVEYER. HAROLD SHEEL, Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,286. 7 Claims. (Cl. 198—181.)



1. In a conveyer, a plurality of spaced discs, an endless wire cable arranged to travel around the discs comprising a plurality of connected lengths of cable, metallic gripping members cold flowed upon the cable at spaced positions therealong, and a carrier attached to and enclosing each of the gripping members and having a portion for cooperating with one of the discs to advance the cable and thereby the carriers.

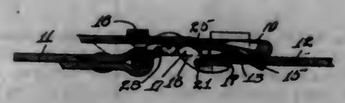
1,883,008. PAPER TOWEL PACKAGE. JOHN C. SHERMAN, Gorham, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 18, 1928. Serial No. 306,728. 5 Claims. (Cl. 206—57.)

1. A carton for containing sheet material consisting of a container having a portion defined by a pair of weakened lines extending along one face from end to end thereof and for a short distance across adjacent faces and the juncture between said one face and said adjacent faces being also weakened to permit separation of said faces whereby when said portion has been removed said one face comprises spaced flaps which may be bent outwardly to hopper formation presenting an open end through which said material may be withdrawn.



4. In combination with a skeleton frame having a pair of bottom members with parallel portions defining an elongated slot, a carton supported by said frame, said carton having portions resting on said members and spaced apart to form a slot registering with the slot between the parallel portions of said frame members and of sufficient width to present said parallel portions for contact with material being removed from said carton through said slots.

1,883,009. BUCKLE. OZRO G. SHERMAN, Chicago, Ill.; Maybel F. Sherman, administratrix of said Ozro G. Sherman, deceased, assignor to Frank Mashek, Chicago, Ill. Filed Sept. 15, 1930. Serial No. 481,988. 15 Claims. (Cl. 24—194.)



6. As an article of manufacture, a buckle comprising a frame, means connected to the frame for securing the free end of a strip thereto and a floating keeper connected to said frame formed to hold said free end of strip in cooperation with the frame, said keeper cooperating with said means in such a way as to be capable of being snapped past a predetermined dead center line into engaged and disengaged position with respect to the free end of the strip.

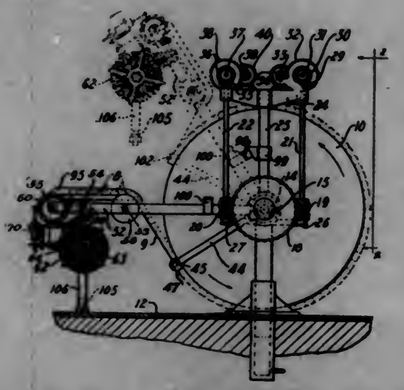
1,883,010. METHOD AND APPARATUS FOR FORMING PILES. GLENN L. SHERWOOD, Oak Park, Ill., assignor to Western Foundation Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1927. Serial No. 231,651. 10 Claims. (Cl. 61—57.)

1. An apparatus for driving composite piles, comprising a supporting frame, a driving means, a core adapted for use between the driving means and the pile, means for supporting the core from the driving means, and means for temporarily supporting the core at one side of the path of travel of the driving means whereby the driving means may engage directly with the pile, these two supporting means comprising projections on the core and swinging links on the driving means and the supporting frame adapted to engage the projections whereby the



core may be transferred from one supporting means to the other by raising and lowering the driving means and adjusting the swinging links.

1,883,011. METHOD OF AND APPARATUS FOR SECURING INCLOSURE ELEMENTS ON CONTAINERS. DAN D. SHEWMON, Dunellen, N. J., and WILLIAM SCHROEDER, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1930. Serial No. 479,065. 12 Claims. (Cl. 144—25.)



1. A method of securing inclosure elements to a container, which consists in positioning the inclosure elements on the container, applying a retaining element to the inclosure elements under tension, sealing the retaining element under a tension equivalent to the tension existing therein in the completed container, and simultaneously indicating the tension.

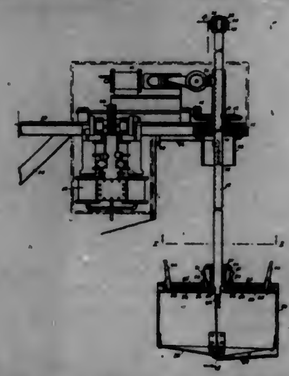
1,883,012. BOX FOR HOLDING AND DISPLAYING PENS OR PENCILS OR OTHER ARTICLES. JOHN M. SHIELDS, Chicago, Ill., assignor to F. H. Noble & Co., Chicago, Ill., a Corporation of Illinois. Filed July 20, 1929. Serial No. 379,670. 5 Claims. (Cl. 206—44.)

1. In a container of the class described and having a box body including vertical side walls formed with horizontal inwardly extending flanges, a false bottom constituting a tray supported in said flanges and having vertical marginal flanges terminating below the plane of the top of said side walls, and a cover member having



depending marginal walls arranged to rest upon the marginal walls of said tray and frictionally engage the inner face of said vertical side walls of the box body.

1,883,013. VERTICAL FOUNDATION BORING MACHINE. EDWARD SHINN, Harrison, N. J. Filed July 30, 1928. Serial No. 296,355. 12 Claims. (Cl. 255—19.)



1. A device of the character described including a vertically rotatable shaft, means to rotate the shaft, a collar carried by said shaft, said collar including a bucket having boring elements associated therewith, means for preventing downward vertical movement of said shaft with respect to said collar, means for releasing said first named means to allow downward vertical movement of said shaft with respect to said collar, and means simultaneously operable to retain said collar in elevated position upon released position of said first named means.

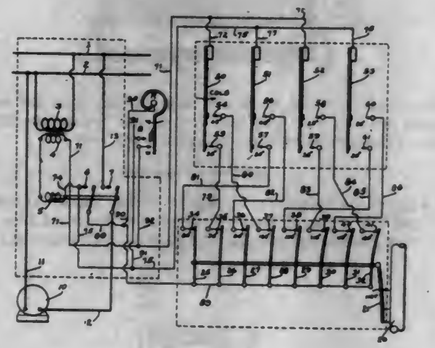
1,883,014. METHOD OF MANUFACTURING STORAGE BATTERY PLATES. TSUTOMU SHIOMI, Yebara-Cho, Yebara-Gun, and SHOKICHI HIGUCHI, Omorimachi, Yebara-Gun, Tokyo, Prefecture, Japan, assignors to Furukawa Denki Kogyo Kabushiki Kaisha, Tokyo, Japan. Filed Jan. 2, 1929, Serial No. 329,945, and in Japan Jan. 17, 1928. 1 Claim. (Cl. 136—27.)

A method of manufacturing storage battery plates, consisting in a step of preparing lead ash which is a mixture of coarse lead particles and lead oxides, by stirring molten lead added with lead oxides, a step of finely pulverizing said lead ash mechanically to prepare a powdery mixture of lead and lead oxides, a step of kneading said powdery mixture with a solution to prepare a paste, and a step of filling grids with said paste, substantially as described.

1,883,015. STEP-BY-STEP PROPORTIONAL CONTROL. SYLVANUS C. SHIPLEY, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 24, 1931. Serial No. 564,956. 7 Claims. (Cl. 236—91.)

1. A device of the class described including heat generating means, a series of contacts adapted to be sequentially

closed as the outside temperature falls, a series of contacts adapted to be sequentially opened as the generating means temperature rises, and electrical connections by which holding and starting circuits for the heat-generating means are alternately made through at least one contact each of said outdoor and generating means responsive devices.

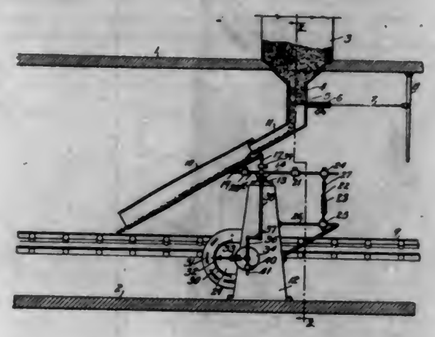


1,883,016. GRINDING APPARATUS. LEO C. SHIPPY, Anderson, and LOUIS C. GOAD, Muncie, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 388,394. 39 Claims. (Cl. 51—56.)

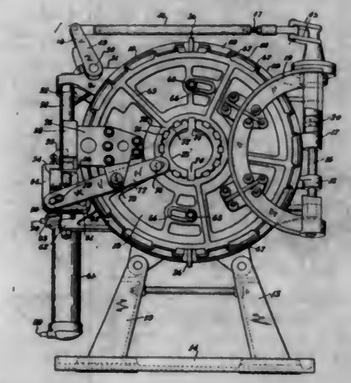
1. Grinding apparatus for shaping the contour of flat plates comprising, in combination, a work-holder supporting a flat plate for rotation on an axis at right angles to its plane; a grinding wheel having a plane surface for grinding the contour of the plate, said wheel rotating on an axis parallel to the plane of the plate; and means for concurrently rotating the work-holder and bodily moving the wheel.

1,883,017. MATERIAL WEIGHING AND CONTROL APPARATUS. RICHARD J. SHOLTZ, Kansas City, Mo., assignor of one-third to Clarence M. Hardenbergh and one-third to Emanuel M. Racs, Kansas City, Mo. Filed July 8, 1929. Serial No. 376,761. 8 Claims. (Cl. 265—27.)

1. In grain delivering apparatus of the character described including a hopper having a discharge conduit provided with an inclined throat, a valve in the conduit for regulating the rate of flow of grain therethrough, an inclined spout sleeved loosely over said throat, means pivotally supporting the spout, yielding means resisting pivotal movement of the spout, and means responsive to grain moving through the spout for indicating the rate of movement of said grain.



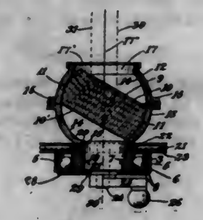
1,883,018. TIRE VULCANIZER. FLORAIN J. SHOOK, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 21, 1929. Serial No. 387,400. 10 Claims. (Cl. 18—17.)



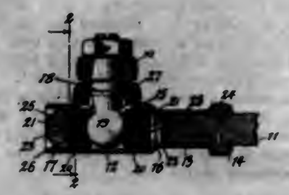
8. The combination of a casing having a door, a fluid-actuated slide movable in a rectilinear path, said door and slide being provided, one with a channeled cam member and the other with a roller adapted to pass into and through said cam member for initiating the opening and completing the closing movement of said door, and door-locking means also operated by said slide.

1,883,019. VIEW ANALYZER. ALBERT F. SHORE, New York, N. Y. Filed May 24, 1926. Serial No. 111,150. 8 Claims. (Cl. 88—1.)

1. In an optical instrument, a rotatably mounted globular casing having an axial opening therethrough, a refractive element having opposite plane surfaces and an arcuate peripheral portion to conform to the casing walls and releasably carried by the casing to permit adjustment thereof on an axis transversely of the axis of rotation of the casing and adapted to deflect the light rays traveling in an oblique direction relative to the axis of rotation toward the lateral portions of the refractive element, and means to continuously rotate the casing and thereby disperse the light rays at the lateral portions of the refractive element.



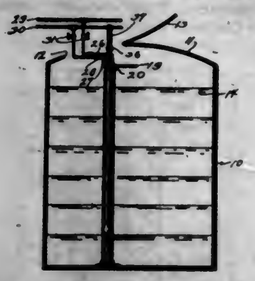
1,883,020. BALL AND SOCKET JOINT. ALBERT B. SHULTZ, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed May 4, 1929. Serial No. 360,502. 1 Claim. (Cl. 287—90.)



A ball and socket joint to couple two members which are substantially normal to each other and to prevent noise being transmitted from one member to the other, said joint comprising a tubular head having an enlarged front part and a reduced rear part forming an internal shoulder, the enlarged part having an opening in a side thereof, a ball member entered in said enlarged front part with a neck extending through the side opening, means to support said ball member for pivotal movement and to prevent noise being transmitted along said tubular head when said ball member is vibrated, said means comprising a pair of sheet metal cups within the enlarged part of the head having concaved surfaces to engage opposed surfaces of said ball member, a rubber plug entered in each of said cups with a portion extending from said cups, means to position said rubber plugs and said cups, said means comprising an abutment member engaging the internal shoulder and one of said plugs, an abutment member screwed in the forward end of the enlarged part to engage the other rubber plug, said rubber plug having concaved ends complemental to the convexed inner surfaces of said cups.

1,883,021. SAMPLING DEVICE. GEORGE F. SILKNITTER, Sioux City, Iowa. Filed Apr. 14, 1930. Serial No. 444,322. 4 Claims. (Cl. 137—18.)

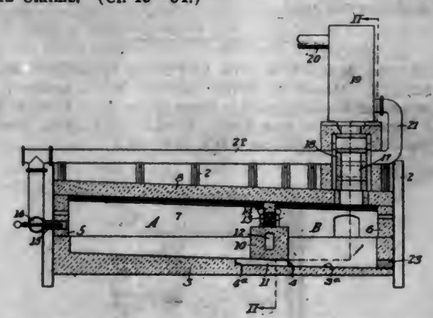
1. In combination with a grease storage tank having an opening in its upper wall normally closed by a cover, a sampling device comprising a tubular casing secured within the tank in an upstanding position with its upper end nearer the said opening, a plurality of openings in the wall of the casing in vertically spaced succession, means for opening and closing said openings, a pipe communicating with the space within the casing at the lower extremity thereof for pumping off the contents of the casing and a steam coil arranged in conjunction with the casing, the upper ends of the coil and pipe being positioned near said opening and adapted to be attached to steam pipes and a pumping tube, respectively, extended through said tank opening.



1,883,022. PAPER MAKING PROCESS. JAMES R. SIMPSON, Wisconsin Rapids, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed June 18, 1930. Serial No. 462,144. 2 Claims. (Cl. 92—45.)

1. The method of forming a paper web which comprises flowing paper stock onto a traveling perforated surface, draining a predetermined quantity of water from the stock without substantially shaking the fibers therein to form an initial deposit of loosely matted fibers on the perforated surface under relatively quiescent conditions, and subsequently subjecting said deposited fibers to a shaking action to form an interlaced fiber web.

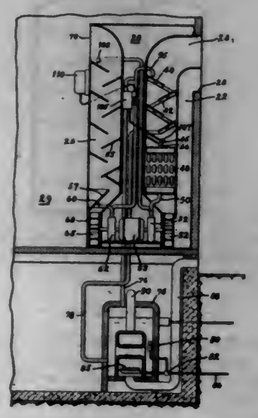
1,883,023. GLASS FURNACE. EDWIN E. SLICK, Pittsburgh, Pa. Filed May 11, 1926. Serial No. 108,299. 12 Claims. (Cl. 49—54.)



1. A glass furnace having an interior chamber divided by a transversely extending bridge wall into a melting chamber and a gathering chamber, a throat in the floor of the furnace under the bridge wall for establishing communication between the two chambers, the floor of the furnace being continuously inclined from one end to the other and having a vertical step therein adjacent the bridge wall.

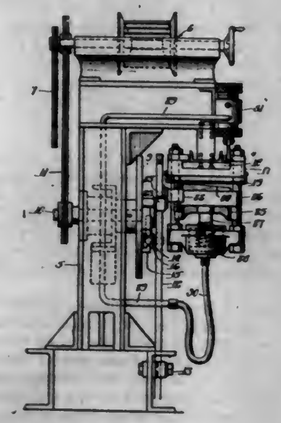
3. In a glass furnace, a furnace chamber having a bridge wall transversely thereof, a restricted passage over the bridge wall through which the products of combustion pass from the chamber at one side of the bridge wall to the chamber at the other side of the bridge wall, a throat under the bridge wall, a burner at one end of the furnace chamber on one side of the bridge wall, a flue leading out of the other end of the chamber at the other side of the bridge wall, a recuperator associated with the flue, and an air passage leading from the recuperator to the burner for providing heated air to the burner.

1,883,024. REFRIGERATING OR AIR CONDITIONING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 29, 1930. Serial No. 499,026. 8 Claims. (Cl. 261—8.)



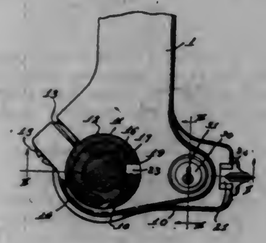
1. An apparatus for conditioning air in a room comprising an intake flue, a discharge flue communicating with said intake flue, said flues communicating with the atmosphere outside said room, means for circulating a hygroscopic liquid through said discharge flue, means in said discharge flue for imparting to said liquid a predetermined degree of concentration at substantially atmospheric temperature, said latter means comprising a steam conduit and means for cooling the liquid, an air treating zone for the air in the room, means for circulating the air in said room through said zone and means for contacting the concentrated liquid with said circulating air in said treating zone.

1,883,025. MACHINE FOR CUTTING FRICTION ELEMENTS. HARRY N. SMITH, Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 14, 1929. Serial No. 399,530. 5 Claims. (Cl. 164—49.)



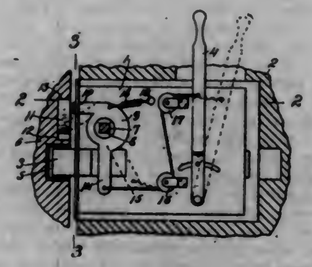
1. A machine for cutting into predetermined lengths strip material under constant feed to the machine and comprising a carriage to receive and carry the material, means for reciprocating the carriage, cutter devices movable with the carriage, pneumatic means for operating the cutter devices, means actuated by the carriage for controlling operation of the pneumatic means, and means for timing the movement of the carriage with relation to the movement of the strip to arrange the strip on the carriage in position for cutting a predetermined length from the strip at each operation of the carriage.

1,883,026. AUTOMOBILE LOCK. FREDERICK A. SMITH, North Chicago, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Nov. 27, 1931. Serial No. 577,664. 6 Claims. (Cl. 70—127.)



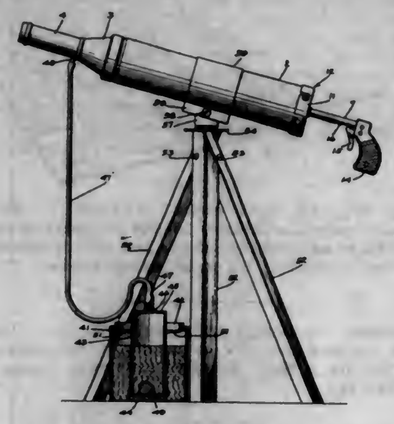
1. A switch structure comprising a body having a bore therethrough, a locking bolt adapted for shifting movement and for rotational movement in said bore, means for shifting said bolt into locking or unlocking position, means preventing rotational movement of said bolt when it is in locking position, a switch lever having a forked end, an actuating member on said bolt receiving said forked end of the switch lever and adapted to swing said lever when said bolt is rotated, and switch means controlled by the swing of said switch lever.

1,883,027. DOORLOCK MECHANISM. ROBERT N. SMITH, Kansas City, Mo., assignor to James L. Hogin, Kansas City, Kans. Filed Feb. 17, 1930. Serial No. 428,981. 2 Claims. (Cl. 292—171.)



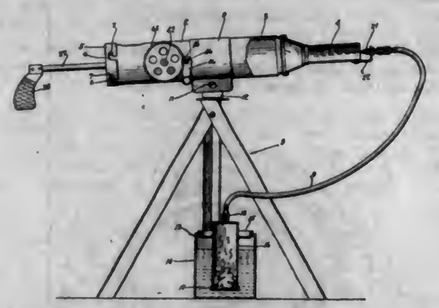
1. In a door lock, the combination with a lock casing, a bolt therein and a handle movable on said casing in opposite directions from an inactive initial position, of a door opening push member movable on said casing to and from a position in which it is adapted to push against a jamb for opening the door, and a flexible pull line connecting said handle and said push member which forces the latter to said pushing position when said handle is moved in one of said directions from said initial position, and which yields and does not operate said push member when said handle is moved in the other of said directions from said initial position.

1,883,028. GUN. ELMER H. SMITH, Minneapolis, Minn., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Aug. 1, 1931. Serial No. 554,489. 13 Claims. (Cl. 42—55.)



12. A gun comprising a casing having a chamber therein, means for introducing a suitable gas into said chamber, means movably mounted in said chamber and by which air may be drawn into said chamber to intermix with the gas therein and thus provide an explosive charge, said movable means having an operating handle situated exteriorly of the chamber, and an igniter comprising a pivoted trigger mounted adjacent to said operating handle and whereby said igniter may be actuated to ignite the charge in said chamber.

1,883,029. TOY MACHINE-GUN. ELMER H. SMITH, Minneapolis, Minn., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 5, 1931. Serial No. 561,420. 12 Claims. (Cl. 42—55.)



1. A toy gun comprising a body portion having a chamber therein, a barrel at one end of said body portion communicating with said chamber, a nozzle connected with a source of gas under pressure and positioned to project gas and air through said barrel and into said chamber whereby an explosive mixture is provided within the chamber, and means at the breech of the gun for successively igniting the explosive gas delivered to said chamber.

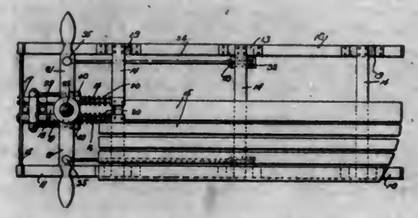
1,883,030. RACKET PRESS. JOHN HUNTER SMITH, Chicago, Ill. Filed Sept. 4, 1929, Serial No. 390,267. Renewed June 5, 1931. 5 Claims. (Cl. 273—74.)

1. In combination, a racket press, of the character described, comprising a pair of similar spider frames, each of said pair of spider frames consisting of a hub provided with a plurality of radially disposed arms, a connecting bar being rigidly and permanently fixed in the hub of one of said spider frames and having a notch formed adjacent to the free end thereof, the hub of the other of said pair of spider frames being formed with an aperture for



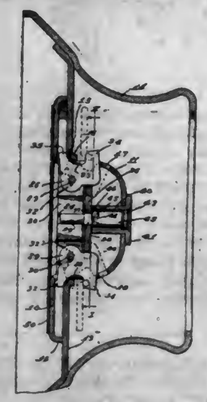
the passage of said connecting bar, a cam member pivotally connecting with the forward side of said apertured hub and engaging in the notch of said connecting bar for drawing said pair of spider frames toward each other, said connecting bar and said aperture being oblong in transverse cross section for establishing and maintaining the parallel relation of said pair of spider frames.

1,883,031. COMBINED STEERING AND BRAKING DEVICE FOR SLEIGHS. WILBERT P. SMITH, Thomaston, Conn., assignor of one-fourth to Jan P. Clary, Hartford, Conn. Filed May 25, 1931. Serial No. 539,931. 2 Claims. (Cl. 188—8.)



1. In a combined steering and braking attachment for sleighs, a sleigh body, a block slidable thereon, a steering bar pivoted on the block, a lever supported shoe adjacent each runner, link connections between the shoe lever and steering bar, and a freely disengageable interfitting connection between the block and steering bar for normally holding the steering bar transversely positioned.

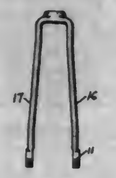
1,883,032. SPARE WHEEL CARRIER AND LOCK. FREDERICK A. SMITH, North Chicago, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed July 2, 1931. Serial No. 548,398. 10 Claims. (Cl. 70—90.)



8. In a spare wheel lock structure, the combination of a supporting member for receiving the hub of a wheel to be locked, a latch member on said supporting member,

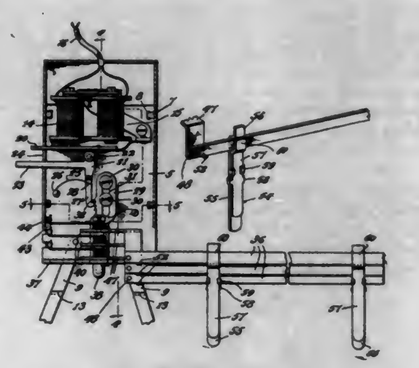
means normally holding said latch member in unlocking position, means controlled by the application of a wheel hub to said supporting member for positively moving said latch member to locking position, and lock means for locking said latch member in locking position.

1,883,033. FRONT FORK ASSEMBLY FOR JUVENILE VEHICLES AND METHOD THEREFOR. SAMUEL A. SNELL, Toledo, Ohio, assignor to The American-National Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 17, 1931. Serial No. 557,430. 5 Claims. (Cl. 208—96.)



1. A device of the class described comprising a one piete sheet metal fork having substantially parallel arms, bearing elements on the ends of said arms, a reinforcing plate disposed in the crotch of said fork and having substantially parallel side portions to reinforce the inner ends of said arms, and a bearing member on said plate to receive a steering post.

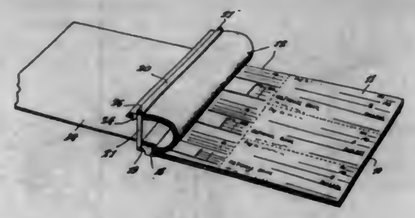
1,883,034. MUSIC LEAF TURNER. CHESTER B. SNIVELY and JOE H. WOLF, Waynesboro, Pa. Filed Apr. 3, 1931. Serial No. 527,562. 4 Claims. (Cl. 84—497.)



1. A music leaf turner comprising an electro-magnet, a spring-pressed pawl pivoted to the armature of the electro-magnet, a slidably mounted latch having teeth engaged by the pawl and having a plurality of integral wards corresponding to the teeth, a pivot post below the magnet, a plurality of spring-controlled arms for holding the music sheets, and superposed disks integral with the arms and mounted to pivot on the post and engageable with the wards, said wards being proportioned to release a corresponding disk during each step actuation of the latch to free a corresponding arm to be turned by its spring.

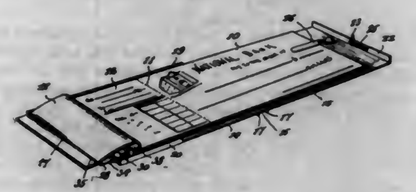
1,883,035. CHECK-BOOK STUB HOLDER. CHESTER B. SNIVELY and HOWARD M. WOLF, Waynesboro, Pa. Filed Apr. 3, 1931. Serial No. 527,561. 8 Claims. (Cl. 281—42.)

1. A device for pressing back the used stubs of check books comprising a support adapted to be applied to the bound edge of the check book, a pivoted frame on said support adapted to be engaged underneath the used stubs and separate the same from the checks, and a spring-



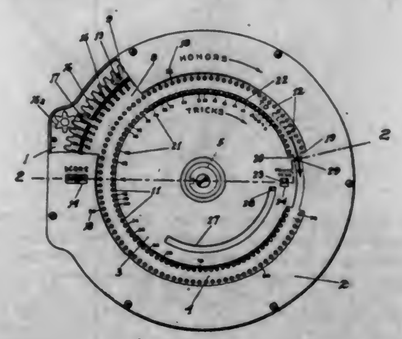
pressed clutch for yieldably holding the frame in upright position to maintain the stubs pressed back or in collapsed position to separate the stubs and the checks.

1,883,036. FOLDING CHECK-BOOK HOLDER. CHESTER B. SNIVELY and HOWARD M. WOLF, Waynesboro, Pa. Filed Apr. 3, 1931. Serial No. 527,560. 5 Claims. (Cl. 281—19.)



1. The combination with hinged cover sections, of a flipper pivoted to one of said sections remote from the hinge, and a spring controlling the flipper and tensioned by pivotal movement of the flipper to position between the sections to move the flipper in the opposite direction to extend in prolongation of the section to which the flipper is pivoted.

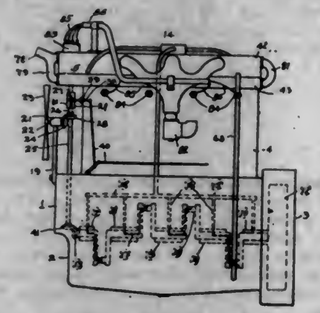
1,883,037. BRIDGE-SCORE TABULATOR. EDWARD A. SNOOK, Los Angeles, Calif. Filed Oct. 19, 1929. Serial No. 400,802. 1 Claim. (Cl. 235—78.)



A tabulator including a casing having a cover provided with a circular opening, a dial turnably mounted in the casing under the cover concentric with the opening, said dial having radially spaced rows of stylus-receiving opening visible through a large arc of said circular opening, another smaller dial superimposed on said first dial but turnable independently thereof, said other dial having a

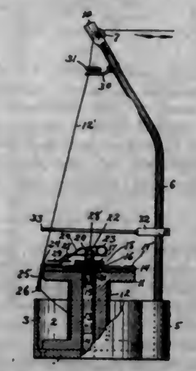
series of peripheral indentations to register with a corresponding number of the holes of the inner row, a stylus for simultaneous engagement with any indentation and hole to rotate the dials together, stylus-stops arranged transversely of the opening at a certain point in the extent thereof, numbers printed on the cover about both sides of the opening in increasing sequence from the stops as a zero mark, numbers printed about the outer portion of the lower dial in sequence from zero up, a window on the cover through which one such number at a time is visible, and another window over the outer portion of the upper dial through which one at a time of the numbers on said upper dial is visible.

1,883,038. INTERNAL COMBUSTION ENGINE AND VALVE CONSTRUCTION. AULDEN D. SNYDER, Cleveland, Ohio. Filed Feb. 5, 1925. Serial No. 6,955. 7 Claims. (Cl. 123—59.)



1. An apparatus of the character described, having in combination a cylinder block, a head provided on the upper side thereof, inlet and exhaust passageways formed through said head, cooling chambers surrounding said passageways, and a plurality of intermeshing gear disc rotatable valves flat on each face and mounted on pins within said head, serving as an oil distributing pump, and adapted to control the admission and exhaust of gases to and from said cylinder block, each of said valves being enclosed and rotatable on a vertical axis coincident with the axis of the cylinder.

1,883,039. UNREELING APPLIANCE FOR WIRE, THREAD, ETC. EDWARD SNYDER, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed June 8, 1928. Serial No. 283,915. 10 Claims. (Cl. 242—128.)



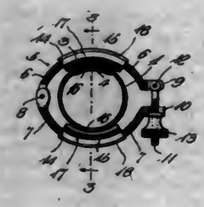
9. In apparatus of the class described, the parts comprising the brake plate applicable to the end of a spool of wire; a longitudinally adjustable post revolubly mounted in axial alinement with said brake-plate; and a fly member fixed on said post having a drag arm that bears upon said brake plate, said drag arm having a guide for wire as it is withdrawn from said spool.

1,883,040. WARNING SIGNAL FOR DEFLATED TIRES. ALFRED B. SOLVE, Oakland, Calif. Filed Aug. 6, 1930. Serial No. 473,472. 5 Claims. (Cl. 200—58.)



1. In a warning signal for a deflated vehicle tire, a circuit closer arranged to control an electric circuit for a signal device, and comprised of normally spaced contact members one of which is movable into contact with the other solely by engagement thereof with a tire when the latter becomes deflated, and means for fixing the circuit closer to a stationary part of the vehicle and independently of a wheel thereof with said movable contact in position to be engaged and moved as aforementioned by the tire on said wheel, said movable contact comprising a coiled spring surrounding the other contact.

1,883,041. CLAMP. EVERETT X. SOMERS, West Barnet, Vt. Filed May 13, 1931. Serial No. 537,133. 3 Claims. (Cl. 24—1.)

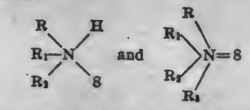


8. In means for the purpose set forth, the combination of two semi-circular hinged portions each of which are provided with elongated slots, a toggle-bolt arranged on one end of one of the portions and a throat formed in the free end of the other of the portions whereby the toggle-bolt of one portion may enter the throat of the other portion and a knurled nut threaded on the toggle-bolt and adapted to bear on a surface of one of the portions whereby the two semi-circular portions are removably secured to each other and rubber pads having ledges formed on one face thereof; said ledges being adapted to seat in the slots of the semi-circular portions and corrugations formed in the free faces of the pads.

1,883,042. PROCESS OF FATLIQUORING. IAN C. SOMERVILLE, Fox Chase, Pa., assignor to Röhm & Haas Company, a Corporation of Delaware. Filed June 20, 1930. Serial No. 462,709. 14 Claims. (Cl. 149—6.)

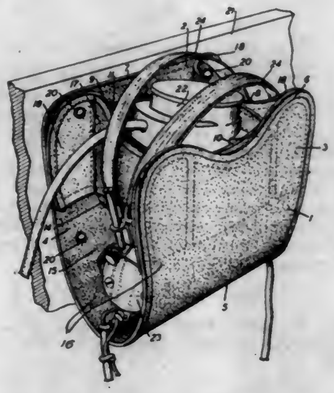
2. The process of fatliquoring leather which consists in the application of a water-insoluble oil in the form of an

emulsion stabilized by a compound selected from the class consisting of tertiary and quaternary amine salts of the general formulæ



where R represents a long chain radical of at least 8 carbon atoms, R_1 and R_2 represent radicals of not more than 4 carbon atoms of the nature of alkyl or substituted alkyl groups, R_3 represents an alkyl, aryl, or aralkyl radical, S represents one equivalent of an acid radical, and H represents the hydrogen radical.

1,883,043. POUCH. ERNEST SOBENY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 5, 1931. Serial No. 555,248. 2 Claims. (Cl. 224—29.)



1. A pouch for a telephone transmitter and a headset including receivers and a headband, said pouch comprising front and back wall portions, spaced wall members attached to and extending laterally between said front and back wall portions, a pocket for the transmitter supported by and between the spaced wall members, said pocket dividing the pouch into an upper section for the transmitter and a lower section for the receivers, and said spaced wall members serving as a rest for the headband of the headset to suspend the receivers on the headband in the lower section of the pouch.

1,883,044. EXPLOSIVE COMPOSITION. CHARLES P. SPAETH, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 20, 1931. Serial No. 576,434. 9 Claims. (Cl. 52—5.)

1. As a new compound trimethylol ethyl methane trinitrate.

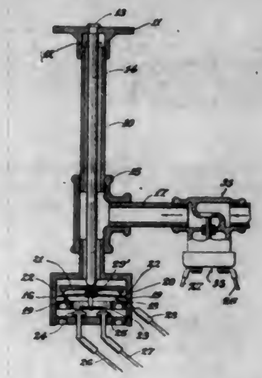
2. An explosive composition containing as an ingredient trimethylol ethyl methane trinitrate.

1,883,045. EXPLOSIVE COMPOSITION. CHARLES P. SPAETH, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 20, 1931. Serial No. 576,436. 6 Claims. (Cl. 52—5.)

1. As a new compound dimethylol dimethyl methane dinitrate.

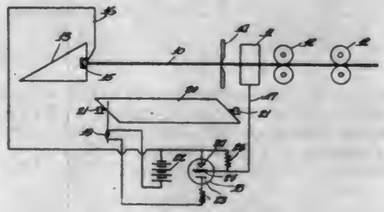
3. A propellent explosive containing as an ingredient dimethylol dimethyl methane dinitrate.

1,883,046. THERMOSTATIC SWITCH. JOHN A. SPENCER, Newton, Mass., assignor to The Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 17, 1930. Serial No. 461,802. 6 Claims. (Cl. 158—117.1.)



1. A burner comprising a tube, a distributing head at one end of said tube and a housing at the other end thereof, a rod in said tube, means in said housing operable to control a circuit, a valve operable to control the supply of fluid to said burner, said valve being controlled by said circuit and said means being actuated by the differences in the linear expansions of said rod and tube.

1,883,047. MATERIAL SORTING MACHINE. WILLIAM H. SPIER, Cleveland, Ohio, assignor to Thompson Products Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 14, 1931. Serial No. 562,633. 5 Claims. (Cl. 164—47.)

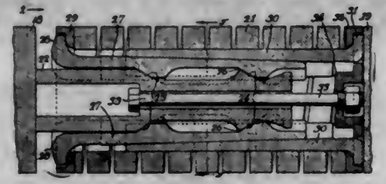


2. In combination, power shears, an abutment member, means to feed material to be cut by said shears against said abutment member, said abutment member being a terminal of an electric circuit, means to selectively direct material cut by the shears, and electrical means responsive to engagement of said material against said abutment to selectively actuate said material-directing means.

1,883,048. CUSHIONING DEVICE. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,423. 2 Claims. (Cl. 213—22.)

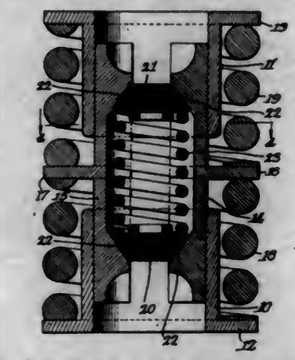
2. In a cushioning device, in combination, a follower, a thrust element opposed to the follower and having spreading wedge surfaces, segmental friction shoes cooperating with the wedge surfaces of the thrust element and having radially projecting flanges at their rearward

ends, a helical spring reacting between the shoe flanges and the follower, and friction shoes interposed between the first-named shoes and the spring, the follower being



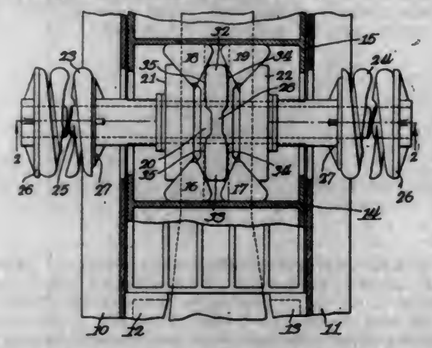
apertured for the insertion of the second-named shoes and such shoes having radially extending flanges at their outer ends engageable with the outer face of the follower.

1,883,049. CUSHIONING DEVICE. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,220. 4 Claims. (Cl. 267—9.)



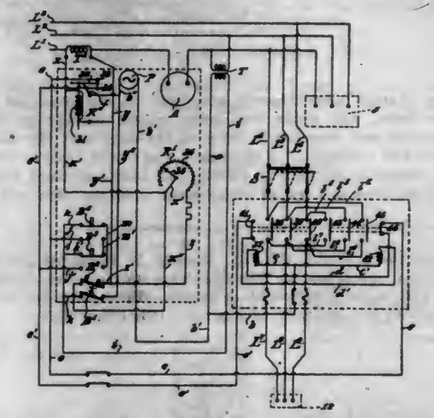
4. In a cushioning device, in combination, a pair of alined cylinders having outstanding flanges, spring means reacting between the flanges, friction plates each engaging the inner faces of the cylinders and being interlocked with the spring means, and means for holding the shoes in engagement with the cylinder walls with constant pressure.

1,883,050. DRAFT GEAR. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,418. 2 Claims. (Cl. 213—38.)



1. A draft gear comprising, in combination, a pair of opposed chambered followers each having longitudinal guide grooves in its top and bottom walls, a set of friction elements, a central member thereof extending into both followers and having top and bottom ribs slidable within the guide grooves, the sides of the end portions of the several ribs cooperating with the grooves of both followers being bowed.

1,883,051. CONTROL FOR MOTOR-DRIVEN APPARATUS. OSCAR STAMETS, Milford, and LEON A. DUCKWORTH, Finesville, N. J., assignors to Riegel Paper Corporation, Riegelsville, N. J., a Corporation of New Jersey. Filed May 31, 1930. Serial No. 458,576. 2 Claims. (Cl. 172—239.)

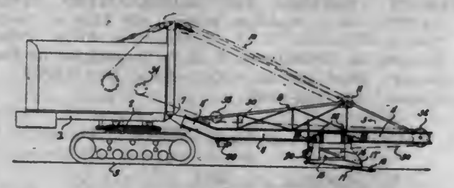


1. A control for motor-driven apparatus comprising, in combination with the drive-motor and a machine element adapted by adjustment to control the working load on the motor, of an auxiliary motor operatively connected with the machine element and adapted to control the adjustment thereof, automatic means for controlling the operation of the auxiliary motor comprising a reversing switch with normally open contacts actuated by two electromagnets to oppositely connect the auxiliary motor with a source of electrical energy, a potential transformer with primary winding connected across the drive-motor circuit, a current transformer in a lead of the drive-motor circuit, a double-throw relay with coil connected across the current transformer circuit, a rheostat set in and controlling a by-pass around the coil of the relay, and circuit connections controlled by the relay connecting the magnet coils of the reversing switch in circuit with the secondary winding of the potential transformer whereby the auxiliary motor will be operated to shift the adjustment of the machine element to effect an increase of load on the drive-motor whenever the current through the coil of the relay falls below the value determined by the setting of the rheostat and to effect a decrease in such load whenever the current through the coil of the relay rises above the value so determined by the rheostat, and manually actuated means for controlling the operation of the auxiliary motor including an interlock hand switch with a set of contacts adapted to close a short circuit around the rheostat in the by-pass around the coil of the relay and a second set of contacts adapted to break the connection between the contacts of the relay and the magnet coils of the reversing switch, and circuit connections with the circuits of the two magnet coils of the reversing switch controlled respectively by two hand switches.

1,883,052. SKIMMER SCOOP. ERNEST R. STANDFUSS, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 9, 1929. Serial No. 412,650. 1 Claim. (Cl. 214—102.)

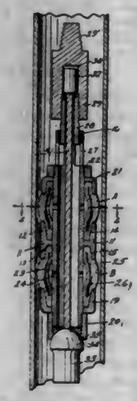
A shovel of the skimmer type comprising a boom including side channels and cross bracing between the chan-

nels for holding them in spaced relation, said channels having outwardly directed flanges having their confronting portions adapted to provide upper and lower tracks, a skimmer bucket having a top for deflecting excavating material in the body of the bucket, brackets connected to the top of the bucket and projecting upwardly from the



top thereof and disposed alongside of the channels of the boom, and upper and lower rollers carried by said brackets and disposed in between the flanges of the channels and engaged with the upper and lower tracks thereof respectively, the rollers engaged with one track being spaced from and out of engagement with the other track.

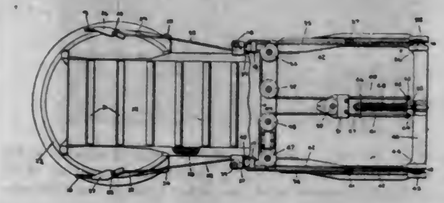
1,883,053. WELL SWAB. HARVEY R. STANDLEE, Tulsa, Okla., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,883. 2 Claims. (Cl. 103—225.)



1. A swab including a tubular support provided with a fluid-admitting aperture in its side wall near its upper end and a valve seat at its lower end, a collar carried by the support and expansible under the influence of fluid pressure in the support, a sub adapted to be connected to a sucker rod and having a tubular extension axially slidable in the upper end of the tubular support, a stem secured in the sub and extending axially through the extension and the tubular support, the flexibility and tensile strength of the stem being at least approximately the same as a stem of the same cross sectional area composed of a plurality of steel wires, and a valve secured to the lower end of the stem and adapted to seat against the valve seat.

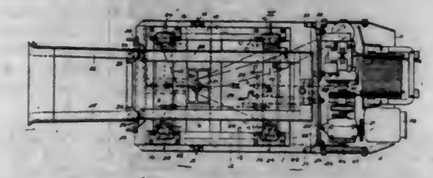
1,883,054. CONVEYER STRUCTURE. ARBA P. STANLEY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 8, 1930. Serial No. 450,755. 10 Claims. (Cl. 198—100.)

1. The combination of a pair of troughs each including side and bottom walls, one of the troughs being disposed relative to the other to deliver to an adjacent receiving end of said other, one of said troughs being mounted for pivotal movement about an axis at its end adjacent the other trough and substantially perpendicular to its bottom wall, there being a gap between the adjacent ends of the side walls of the two troughs to permit swinging movement of the pivoted trough relative to the other, extensible and contractible wall elements extending between the respective side walls of said



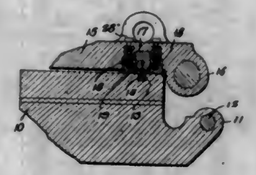
troughs to guide material from one to the other in all of their relative angular positions, means for anchoring said wall elements at one end at the side wall ends of one of the troughs, and tensioning means in connection with the other ends of said wall elements.

1,883,055. COAL MINING APPARATUS. ARBA P. STANLEY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 23, 1922, Serial No. 596,483, and in Great Britain July 22, 1922. Renewed June 4, 1926. 67 Claims. (Cl. 262—28.)



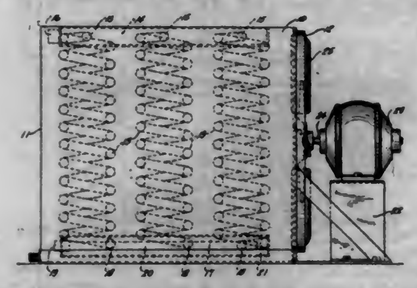
1. In mining apparatus, the combination of a wheeled carriage, a motor mounted thereon and adapted to drive said carriage along suitable trackways, a turn table mounted on said carriage, a supporting frame mounted on said turn table and having longitudinal guideways projecting outside of the area of said turn table and adapted to receive a mining machine, and means actuated by said carriage motor to adjust vertically said supporting frame relative to said turn table.

1,883,056. ENVELOPE PERFORATOR. WALTER J. STANLEY, Salem, Ohio, assignor to The Church-Budget Envelope Company, Salem, Ohio. Filed June 29, 1931. Serial No. 547,764. 3 Claims. (Cl. 93—67.)



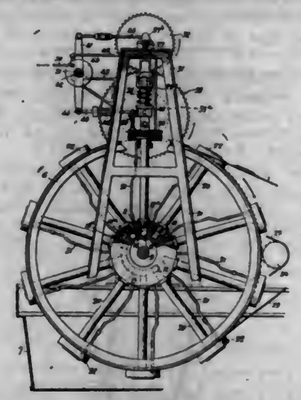
1. A perforating device comprising a stationary bed having a series of depressions, a folding member movably connected to the bed and swingable into and out of engagement with the depressed face of the bed, a perforating member in the operating face of the swingable member for passage through an article to be folded and into said recesses, and spring projected strips at opposite sides of said perforating member adapted to be forced into said movable member upon contact with the bed and passage of said perforating member through said article, and lips on said spring projected strips arranged to be engaged by said perforating member, whereby to press said strips into positive engagement with the article, said spring pressed strips being adapted to strip the said article from the perforator upon movement of said member from the bed.

1,883,057. REFRIGERATION UNIT. DESIDER STANYO, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1928. Serial No. 313,488. 5 Claims. (Cl. 62—135.)



5. A refrigerating unit comprising a casing having air inlet and outlet openings in opposite end portions thereof, a pair of headers spaced apart in said casing, refrigerant receiving means extending between and having end portions connected to said headers and means for causing a circulation of air from said inlet around the refrigerant receiving means and through said opposed outlet.

1,883,058. MACHINE FOR MAKING PULP ARTICLES. FRED W. STAPLES, Waterville, Me. Filed Jan. 23, 1930, Serial No. 422,882. Renewed July 13, 1932. 14 Claims. (Cl. 42—56.)



1. A machine forming pulp-fibre articles from liquid stock comprising in combination, a vat for the stock; a shell mounted for rotation partially submerged in the vat having a plurality of molds with perforate wire-covered forming surfaces spaced circumferentially therearound and a core-like hub formed with a double annular series of longitudinal channels in concentric relation; head-members applied at opposite ends of said hub having separate suction and air ports open relatively to the series of channels in the hub; means connecting said channels of the hub each with one of the aforesaid molds; means rotating the shell; means connecting said suction and air ports of the heads respectively with related pumps; an endless conveyor trained over and driven by the shell with the molds on the latter projecting through openings therein; a press-die supported at the top of the shell in co-operative relation to the molds successively moved thereunder; means swinging and simultaneously lowering the die into pressure contact with the molds moving thereunder and actuating the same to travel with the molds through an arc of shell rotation beginning at a point before and ending at a point after its top center; means driving the die-actuating means in timed regulation with the shell; means applying suction through the die during its period of pressure contact with the molds and during withdrawal therefrom; and means releasing a blast of air through said die upon its withdrawal from the molds.

1,883,059. WAVE APPARATUS. BRENTON L. STEELE, Pullman, Wash. Filed Aug. 25, 1930. Serial No. 477,537. 17 Claims. (Cl. 35—12.)



1. In a wave apparatus, a transmitting mechanism including a constant speed motor, a variable speed device, and a crosshead, a cord secured at one end to the crosshead and receiving wave impulses therefrom, and adjustable means at the other end of the cord for receiving the waves and absorbing their energy at exactly the rate at which the energy was imparted to the cord by the transmitting mechanism.

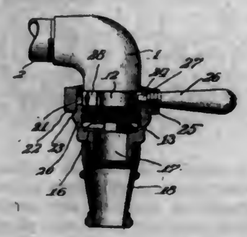
1,883,060. LACQUER FOR APPLICATION BY BRUSHING. GERHARD STEIMMIG, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 3, 1928, Serial No. 290,264, and in Germany Apr. 24, 1925. 5 Claims. (Cl. 134—26.)

1. A lacquer for application by brushing, comprising collodion cotton of low viscosity, and of which at least 15 per cent are soluble in 96 per cent ethyl alcohol, an artificial cyclic ketone resin, and a mixture of at least one low aliphatic alcohol containing from one to three carbon atoms in the molecule with an ester of the general formula

$$R.CO—O—C_nH_{2n}—OR'$$

(in which R.CO— indicates the radical of an aliphatic monocarboxylic acid with from 2 to 4 carbon atoms, R' means an alkyl group with from 1 to 3 carbon atoms, and n is 2, 3 or 4).

1,883,061. FAUCET. EDWARD P. STEIN, Chicago, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1929. Serial No. 389,381. 5 Claims. (Cl. 251—8.)



2. In a faucet the combination of a body member having an interior valve seat, a valve member within the body cooperating with said valve seat, a rotary spout member for operating said valve mounted on said body and having an annular flange surrounding the outside of said body, said

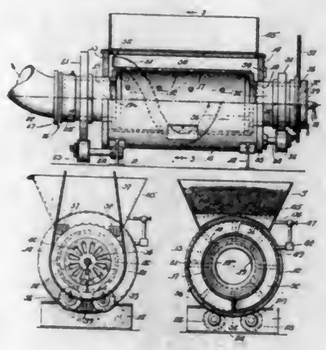
flange having an annular series of openings, a stop lug on said body within the flange, and a handle member mounted on said flange and extending through one of said openings for engagement with the stop lug.

1,883,062. GLOVE. IRWIN STEINBERGER, New York, N. Y., assignor to Steinberger Bros. Glove Corp., New York, N. Y., a Corporation of California. Filed Mar. 12, 1931. Serial No. 522,061. 17 Claims. (Cl. 2—159.)



1. A glove having an arm portion with a longitudinally extending gathered fold extending the length of the said arm portion, and a plurality of transversely extending members spaced apart at the gathered fold and secured throughout their length to the gathered fold of the glove and between the sides of the fold.

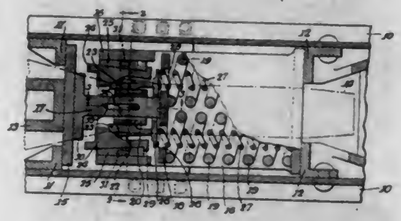
1,883,063. SULPHUR BURNER. JERRY W. STEVENS, Cloquet, Minn. Filed Mar. 24, 1930. Serial No. 438,296. 13 Claims. (Cl. 23—278.)



1. A sulphur burner comprising in combination a closed housing, a hollow rotor in said housing having its ends extending through the housing, and means outside the housing to support said rotor, the ends of said rotor being open to provide communication to the interior of the rotor, means to feed sulphur into the housing, said rotor being perforated within the housing, means to admit air to the housing, and means to carry sulphur gases away from the housing.

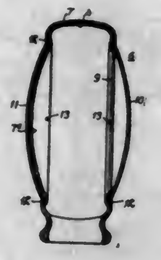
9. In a sulphur burner, in combination, a housing adapted to hold a pool of sulphur, a rotor adapted to rotate on a substantially horizontal axis in said housing and positioned above the pool of sulphur, and a helical fin on the rotor adapted in the rotation of the rotor to move the sulphur in the housing in the direction of the length of the rotor whereby to increase the depth of the pool in one end of the housing.

1,883,064. FRICTION DRAFT GEAR. ROY R. STEVENS, Forest Hills, Pa., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Original application filed Jan. 29, 1930, Serial No. 424,202. Divided and this application filed Oct. 8, 1931. Serial No. 567,578. 2 Claims. (Cl. 213—32.)



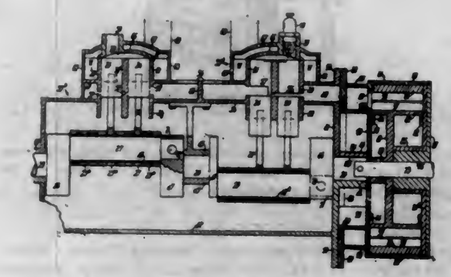
2. In a draft gear, a chambered follower having the front portions of its side walls inwardly and rearwardly inclined, a pair of permanently spaced parallel walls flanking the longitudinal axis of the follower and anchored against longitudinal movement, a thrust element projecting into the open end of the follower and being freely movable between the named parallel walls, spring means resisting the inward movement of the thrust element, cooperating wedge elements located between each of the parallel walls and a side wall of the follower and having frictional engagement with each, a plate follower for applying compressive forces successively to the thrust element and to certain of the wedging elements, and spring means independently resisting the inward movement of the wedge elements.

1,883,065. GLASSWARE AND METHOD OF MAKING SAME. ANDREW H. STEWART, Shields, Pa., assignor to The Phoenix Glass Company, Monaca, Pa., a Corporation of West Virginia. Filed Jan. 24, 1930. Serial No. 423,035. 2 Claims. (Cl. 40—131.)



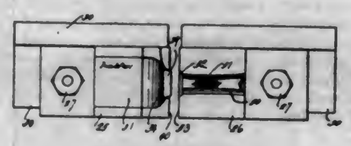
1. A sign globe comprising an all-glass body having a rim portion and side portions, the rim being of circular form and the said body having an annular shoulder formed in each side, at the point of juncture between said rim and said side, one of the said sides being cut away adjacent to the said shoulder to form an opening permitting access to the inner surface of said rim portion, visible decorating material on said surface adjacent to said shoulder, and a face plate covering the said opening and cemented at its edges to the adjacent shoulder.

1,883,066. INTERNAL COMBUSTION ENGINE. BURNHAM C. STICKNEY, Hillside, N. J. Filed May 16, 1928. Serial No. 278,088. 3 Claims. (Cl. 123—55.)



1. An internal combustion engine having a crank-shaft provided with only two wrists, said wrists being diametrically opposite, sixteen cylinders, said cylinders arranged in rows which extend longitudinally of the crank-shaft, there being four cylinders in each row, sixteen pistons in said cylinders connected to said wrists, half of the pistons in each row for one crank-wrist and half for the other, the cylinders in each row being divided into two pairs, the cylinders in each pair being side by side and inosculated and having a spark-plug, pitmen connecting four pairs of said pistons to one crank-wrist, and pitmen connecting the other four pairs of pistons to the other crank-wrist, all of the rows of cylinders radiating at angles of 45 degrees from one another to procure a mutual balancing of the pistons and to secure eight evenly-spaced explosions at each revolution of the crank-shaft, each pair of cylinders forming an engine-head and there being two engine-heads in each row, the engine-heads in the different rows being in echelon or the like arrangement, and the pitmen having corresponding arrangements upon the crank-wrists, there being space between the pitmen in each pair for a plurality of other pitmen, and each of said other pitmen belonging to a different engine-head, the engine-heads being all cast integral with a semi-cylindrical shell or body-part forming an engine-block.

1,883,067. MEANS FOR ELECTRICALLY WELDING TABLEWARE PARTS. WILLIAM R. STOCKING, Glastonbury, Conn. Original application filed Oct. 17, 1928, Serial No. 313,161. Divided and this application filed Mar. 19, 1930. Serial No. 437,116. 8 Claims. (Cl. 219—4.)



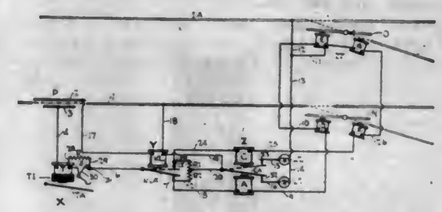
1. In a die for holding the blades of knives to be provided with handles, the combination of a lower die portion of copper having an insulation blade resting surface thereon against which the blade may abut, and a second die portion cooperating in a clamping relation upon the blade portion at the opposite side thereof with respect to the first mentioned die portion.

1,883,068. COUPLED NUT AND WASHER ASSEMBLY. ALBERT STOLL, Detroit, Mich., assignor to National Machine Products Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 13, 1930. Serial No. 481,769. 4 Claims. (Cl. 151—37.)



2. In a structure of the class described, a screw-threaded body having a bearing surface and an annular concentric washer coupling portion contiguous to the bearing surface, and a resilient lock washer embracing said coupling portion and having the outer edge thereof free, said washer and said coupling portion having means consisting of complemental faces on the coupling portion and the washer to permanently couple the washer to said threaded body to allow the washer and the threaded body to be handled as a unit, said coupling portion being reduced in external diameter from a point between the ends thereof toward the end of the coupling portion removed from said bearing surface to extend between and spread said washer during the coupling operation.

1,883,069. SWITCH AND SIGNAL SYSTEM. SAMUEL S. STOLP, Louisville, Ky. Filed Aug. 18, 1930. Serial No. 476,090. 16 Claims. (Cl. 246—226.)

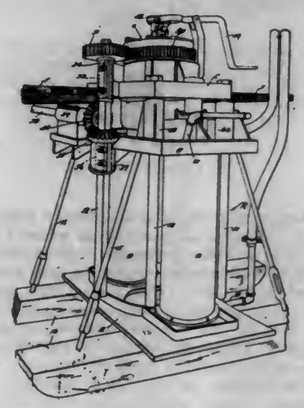


1. In a trolley frog operating device, the combination of a plurality of operating coils, a movable tongue element for the said frog, a branched circuit including a circuit changer for selectively connecting the coils to a source of power for selective energization of the different coils of the frog operating device in accordance with predetermined conditions, electrically operated means cooperating therewith for holding the tongue element against movement after operation thereof, and signal indications for indicating the selected energization of the said operating coils, circuits for connecting the said signals to a source of power, switch means for alternately opening and closing the said circuits and means for shifting the said switch means in accordance with the temporary selective energization of the said operating coils.

1,883,070. WELL DRILLING APPARATUS. FREDERICK STONE, Glendale, Calif., assignor to Doheny-Stone Drill Co., Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 4, 1928. Serial No. 244,422. 11 Claims. (Cl. 255—22.)

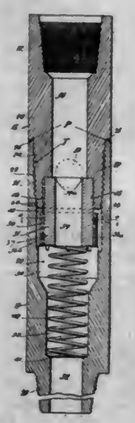
2. In a device of the character described, a plurality of horizontally arranged, vertically spaced members having vertically alined bores therethrough, independently operable mechanism on each of the members and having portions adapted to extend into the bores of their associated

members, said mechanisms being adapted selectively to be operated to engage releasably work extending vertically through said bores, means for rotating one of the mech-



anisms and hence the work taken thereby, and means for vertically reciprocating said one mechanism and hence the work taken thereby.

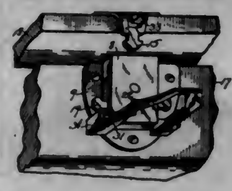
1,883,071. LOCKABLE SAFETY JOINT. FREDERICK STONE, Los Angeles, Calif., assignor to Doheny-Stone Drill Co., Los Angeles, Calif., a Corporation of Delaware. Filed Dec. 14, 1928. Serial No. 326,106. 24 Claims. (Cl. 255—28.)



1. In combination with a tubular drill stem or the like through which fluid is adapted to pass and made up of a plurality of stem sections coupled end to end, a safety joint in the stem, a releasable lock holding said joint from breaking, and lock-releasing means actuable by fluid pressure in the stem bore.

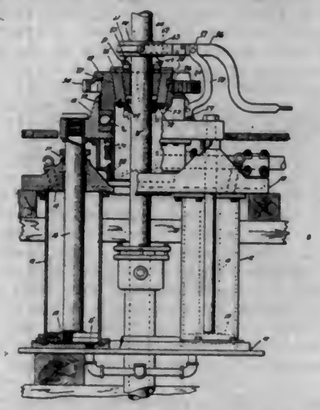
1,883,072. LOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 18, 1930. Serial No. 445,287. 5 Claims. (Cl. 70—27.)

4. A lock including a case, a pair of latches movably mounted in the case and formed to releasably engage a catch, finger pieces projecting from the latches through opposite edges of the case for manual operation of said



latches, and a member pivotally mounted upon the case and having wings to overlie and house said finger pieces in one position of said member.

1,883,073. WORK-GRIPPING MEANS FOR WELL DRILLING APPARATUS. FREDERICK STONE, Glendale, Calif., assignor to Doheny-Stone Drill Co., Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 4, 1928. Serial No. 244,423. 14 Claims. (Cl. 24—263.)



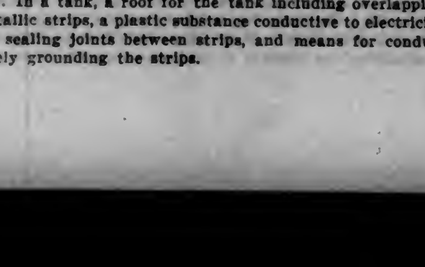
1. In a device of the character described, a body member having a vertically extending bore adapted to take vertically extending work, one of the wall-defining faces of the bore being inclined inwardly and downwardly, a bushing movable vertically into and out of said bore and having a bore therein and having an outer face inclining inwardly and downwardly and adapted to seat on said inclined face of the body member bore, said body member and bushing having coacting means holding them from relative rotation, one of the defining faces of the bore in said bushing being inclined inwardly and downwardly, an inclined guide shoulder on a wall face of the bore in said bushing adjacent to said last mentioned inclined face, said last mentioned inclined shoulder being opposed and substantially parallel to said last mentioned inclined face, and a work clamping member adapted to move vertically in said bore of the bushing with a portion thereof confined between said last mentioned inclined face and opposed inclined shoulder.

1,883,074. CHEMICAL PICTURE-TELEGRAPH EQUIPMENT. PAUL STOACH, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 30, 1930, Serial No. 492,192, and in Germany Sept. 20, 1929. 1 Claim. (Cl. 178—62.)

In an apparatus for receiving pictures on moistened chemical records, a container roll having a filling of chemical moistening material therein, a porous absorptive material on the periphery of said container, means for moistening said material with the liquid contained within said container, and means for passing a record strip over approxi-

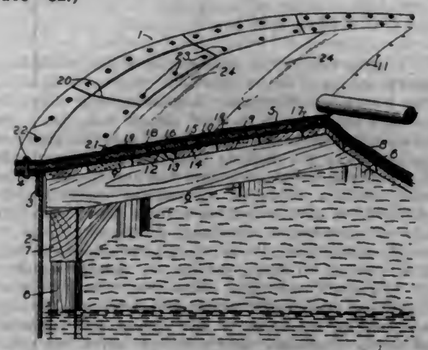
mately half of the periphery of said container roll in contact with said material, whereby the record strip is moistened by the chemical solution.

1,883,075. LIVE CENTER FOR LATHES, GRINDERS AND THE LIKE. ADOLPH STORM and THOR THORSEN, Minneapolis, Minn., assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 18, 1931. Serial No. 516,650. 5 Claims. (Cl. 82—40.)



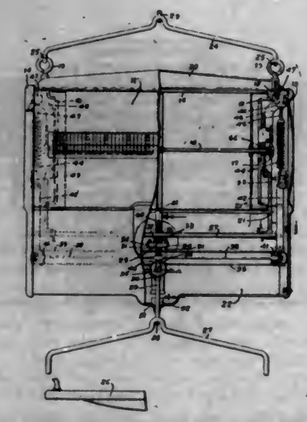
1. In a device of the class described, a body having on its face a conical bearing surface, a recess in said face at the axis thereof, said body having in said recess a pair of diametrically opposite driving lugs, and a U-shaped driving dog, the transverse portion of which is mounted in said recess between the driving lugs with its outer face between the prongs substantially in the same plane with the outer edge of said surface, and a wobbled joint connecting the driving dog to the body with freedom to turn about the axis thereof between the driving lugs.

1,883,076. TANK ROOF. JAY A. STOUGH, Tulsa, Okla., assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 21, 1928. Serial No. 279,389. 4 Claims. (Cl. 108—32.)



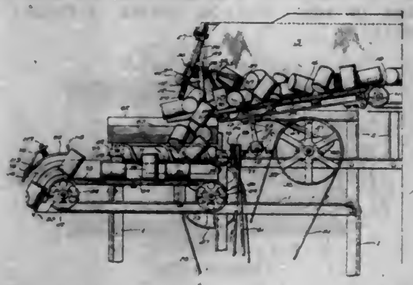
1. In a tank, a roof for the tank including overlapping metallic strips, a plastic substance conductive to electricity for sealing joints between strips, and means for conductively grounding the strips.

1,883,077. SCALE. THOMAS H. STRACHAN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Dec. 2, 1930. Serial No. 499,448. 17 Claims. (Cl. 265—69.)



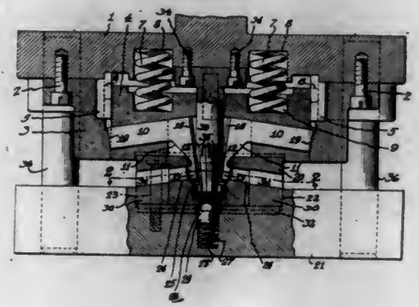
1. In a hanging drum scale the combination of a frame, a cylinder chart carried thereby, an actuating member for said chart extending axially of the chart, a dash pot carried by said frame, and means rigid with said actuating member and extending transversely of the member for operating the dash pot.

1,883,078. MACHINE FOR HANDLING CANNED GOODS. CARL B. STRETCH, Bridgeton, N. J. Filed Mar. 6, 1931. Serial No. 520,697. 6 Claims. (Cl. 198—30.)



1. In a machine for handling canned goods, a frame having a receiving compartment and provided with means for delivering the canned goods chaotically thereinto, said compartment having a discharge end an agitating cradle constituting the bottom of the compartment for agitating the canned goods toward the discharge end, means for regulating passage of the canned goods through the discharge end, said frame having guide channels or troughs just beyond the discharge end, the end portion of the agitating cradle adjacent the discharge end having means for regulating the canned goods into the channels or troughs in substantial equal quantities, conveying chutes beyond and communicating with the guide channels or troughs for receiving the canned goods, and means in said channels just prior to reaching the chutes for arranging the canned goods in sequential order lying on their sides, whereby they may enter the chutes end for end, said means at the end edge of the cradle comprising varying lengths of fingers.

1,883,079. PUNCH AND DIE FOR ROLLER BEARING CAGES. SILAS A. STRICKLAND, Detroit, Mich., assignor to Bower Roller Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed Oct. 11, 1930. Serial No. 487,997. 10 Claims. (Cl. 164—90.)



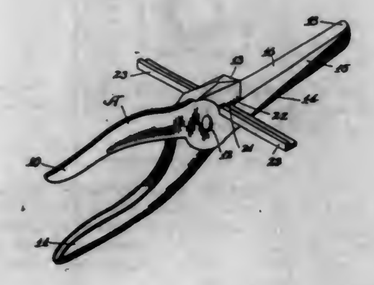
1. In a device of the character described, the combination of a base, a die block on said base, a series of non-pivotal punches, means for supporting and guiding said punches for bodily rectilinear movement, and means for engaging all of said punches and moving the same bodily into engagement with work held in the die block and punch a plurality of openings in the work, said punch-supporting means being movable vertically into and out of the plane wherein the punches are rendered active.

1,883,080. APPARATUS FOR FORMING ARTICLES. JOHN S. STULL, Chicago, and JOHN W. KING, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,282. 8 Claims. (Cl. 80—5.1.)



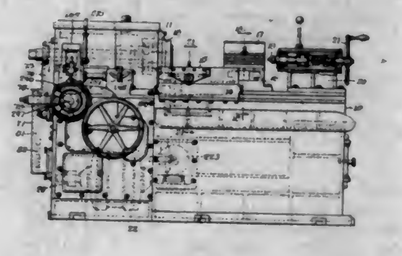
7. In a forming apparatus, means for rotating work, a reciprocable slide mounted opposite a free end of the work for movement longitudinally of the axis of rotation of the work, a carriage reciprocably mounted on the slide for movement in a corresponding direction, oppositely disposed movable elements mounted on the carriage, forming rolls carried on the elements for engaging the periphery of the work, means for advancing the slide toward the work through a predetermined distance, cooperating extensions on the carriage and the slide, resilient means carried on the carriage extension and between the carriage and the slide for effecting the advance of the carriage with the slide, adjustable means on the carriage extension cooperating with a fixed portion of the apparatus for preventing further advance of the slide after the forming rolls have been predeterminedly positioned longitudinally of the work, and means movable with the slide for operatively engaging the elements after the rolls are longitudinally positioned for actuating the elements to move the rolls into forming engagement with the work.

1,883,081. NONSLIPPING PLATE HOLDER. RUDOLPH STURM, St. Paul, Minn. Filed Oct. 26, 1928. Serial No. 315,319. 2 Claims. (Cl. 81—51.)



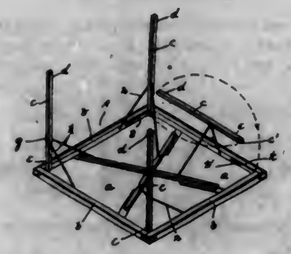
1. A plier-like plate holder including an upper jaw, a lower jaw extending outwardly beyond the end of the upper jaw and an angle member extending transversely of said lower jaw.

1,883,082. LATHE. GUSTAF DAVID SUNDSTRAND, deceased, Rockford, Ill., by Pearl Sundstrand, executrix, Rockford, Ill., and JOHN F. BENNER, Rockford, Ill., assignors to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Sept. 13, 1930. Serial No. 481,684. 39 Claims. (Cl. 82—2.)



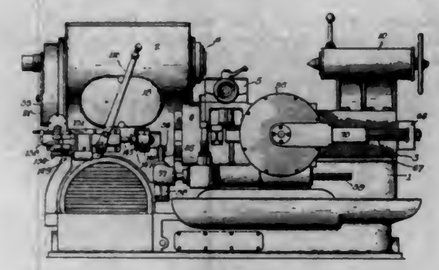
1. A lathe having, in combination, a bed, movable tool supports on said bed, a rotatable headstock spindle, a prime mover, two differently speeded driving connections from said prime mover to said spindle including a common clutch element, a pressure fluid actuated piston and cylinder device for shifting said clutch element, a feed shaft rotatably mounted in said bed and operatively connected to said supports, a constant speed reversible traverse drive directly from said prime mover to said feed shaft and including a reversing clutch, a pressure fluid actuated piston and cylinder device for selectively engaging said clutch to obtain forward or reverse rotation of said feed shaft, a driving connection from said spindle to said feed shaft for rotating said shaft at a feed speed determined by the speed of said spindle and including a feed clutch, a pressure fluid actuated piston and cylinder device for controlling said feed clutch, valve means for controlling the operation of said piston and cylinder devices, and means driven in unison with said feed shaft for controlling the position of said valve means.

1,883,083. LEGGED STRUCTURE. CHARLES J. SYMMONDS, U. S. Army, Kenosha, Wis. Filed June 28, 1928. Serial No. 288,995. 17 Claims. (Cl. 45—11.)



1. In a device of the class described an element to be supported, V-shaped braces pivotally mounted on the element, legs pivoted intermediate their ends to the bight portion of the braces and means rigid with said element for engaging the legs when in supporting position.

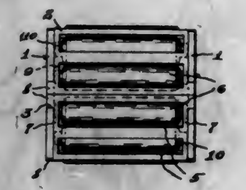
1,883,084. MACHINE TOOL. ERNEST J. SVENSON, Rockford, Ill., assignor to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Jan. 7, 1928. Serial No. 245,168. 54 Claims. (Cl. 82—2.)



1. In a machine tool, the combination of a spindle, a main drive shaft, a pulley thereon, a main clutch for connecting said pulley to said drive shaft, a feed shaft, means for actuating said feed shaft in opposite directions at traverse rates driven from said main pulley and including a reversing traverse clutch, means for actuating said feed shaft at feed rates driven from said spindle and including a feed clutch, means for engaging said main drive clutch arranged simultaneously to engage said traverse clutch, and means moving continuously in accordance with said feed shaft arranged to disengage said traverse clutch and engage said feed clutch.

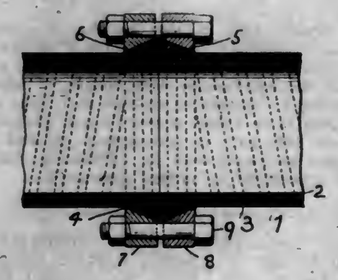
25. In a lathe, in combination, a bed, a carriage movably mounted thereon, and means for moving said carriage comprising a drive shaft rotatably mounted on the bed, a worm journalled on the carriage driven by said shaft, a worm wheel journalled on the carriage meshing with said worm and having cam slots on the opposite sides thereof, one of said cam slots having a dwell portion adjacent the center of the wheel and an accelerating portion extending through approximately 180° from said dwell portion to the periphery, the other slot having a dwell portion adjacent its periphery and an approximately 180° accelerating portion extending towards the center of the cam and means mounted on said bed arranged to engage said cam slots successively.

1,883,085. ROLLER BEARING CONSTRUCTION. CLARENCE A. SWART and JOHN H. EVANS, Syracuse, N. Y., assignors to Rollway Bearing Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,860. 2 Claims. (Cl. 308—217.)



1. A roller bearing comprising a cage consisting of opposing annular heads, each having spaced apart notches in its peripheral edge and an inturned annular flange at its inner edge and a cylindrical wall between the heads, said wall having transverse spaced apart slots terminating short of the side edges of said wall, the side margins of said wall having spaced apart tongues seating and secured in the notches, the tongues projecting from the end of the cylindrical wall and flush therewith and the periphery of the cylindrical wall being flush with the edges of the heads in which the notches are formed, the portions of the side margins between the notches abutting against the heads between the notches and together with said flanges and the portions of the heads between the flanges and the tongues forming raceways and rollers projecting through and extending into said slots and having axles at their ends in the raceways.

1,883,086. FLEXIBLE PIPE AND COUPLING. ALFRED W. SWARTZ, Haverford, Pa., assignor to Linear Packing & Rubber Co. Inc., Tacony, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 10, 1931. Serial No. 549,911. 4 Claims. (Cl. 285—71.)

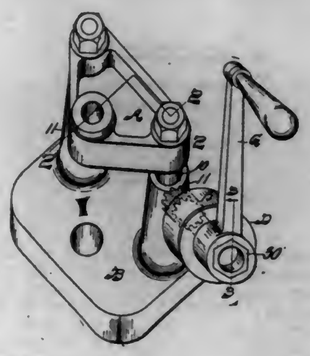


4. A flexible pipe of duck and rubber having in combination an outer ply and a lining, a ring of wedge shape in cross section arranged at the end of the pipe and in a fold of the outer ply with its inclined face disposed to flare outwards towards the end of the pipe, a collar element provided with a beveled face, and means spaced outside and clear of the pipe for connecting the collar element.

1,883,087. CLAMP OPERATING AND LOCKING MEANS. GUY E. SWARTZ, Detroit, Mich. Filed June 26, 1930. Serial No. 464,096. 27 Claims. (Cl. 192—8.)

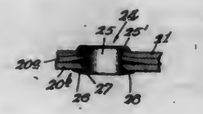
1. An operating and locking means for movable clamps including an operating mechanism for moving a clamp into various positions including a driven member and a

driving member free moving to operate said driven member, wedge members adapted to automatically move into positions to lock said operating mechanism and the clamp against movement thereof when the same are not acted



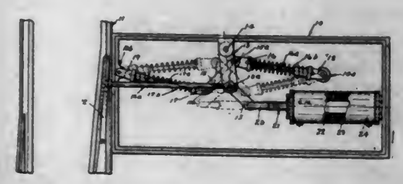
upon by said driving member, driving parts on said driving and driven members and adapted for driving contact thereof, and a spring between adjacent ones of said parts.

1,883,088. FASTENER. ARTHUR H. SWETT, Chicago, Ill. Original application filed July 2, 1930, Serial No. 465,294. Divided and this application filed Apr. 11, 1931. Serial No. 529,347. 4 Claims. (Cl. 24—141.)



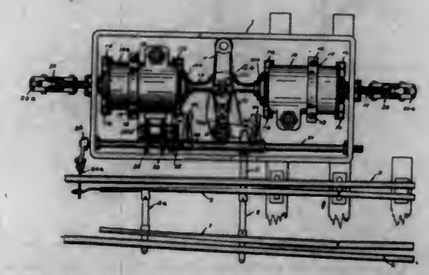
1. A tubular rivet of the character described which comprises an annular base part with a tubular part extending therefrom at substantially right angles, and strips cut from the longitudinal wall surface of said tubular part leaving an upstanding tubular part, said strips being adapted to be forced outwardly and downwardly toward said base part to permanently fix said rivet in place upon an object with its upstanding tubular part free for attachment by further deformation.

1,883,089. ELECTRIC SWITCH OPERATING AND HOLDING DEVICE. ROBERT E. TAFEL, Louisville, Ky. Filed Feb. 3, 1930. Serial No. 425,632. 19 Claims. (Cl. 246—231.)



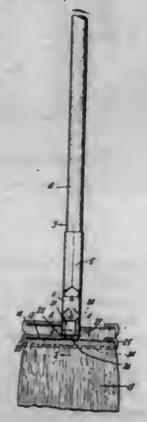
1. In an electrically operated switch throwing device comprising a switch point connected to a spring controlled compound toggle joint provided with a pair of articulated levers, and a pair of spring-pressed bolts pivoted at their outer ends to a stationary member and pivoted at their outer ends to one of said levers whereby the levers and bolts are connected through articulations to said switch point.

1,883,090. ELECTRIC SWITCHING MACHINE. ROBERT E. TAFEL, Louisville, Ky. Filed Feb. 18, 1930. Serial No. 429,327. 8 Claims. (Cl. 246—220.)



1. In an apparatus of the character described, comprising a pair of independent opposed solenoids encased in independent magnetic housings, having an integral magnetic plunger, a casing, a two position lock mechanism composed of an arm and an escapement crank mounted transversely of said casing in slidable relation to each other, means responsive to said solenoids for operating said lock linearly and means for preventing movement except through said operating means.

1,883,091. FITTING FOR MOPS. EDWARD H. TATE, Malden, Mass. Filed Dec. 17, 1930. Serial No. 502,970. 3 Claims. (Cl. 15—120.)

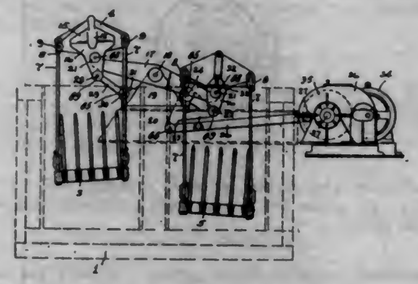


1. A fitting for a mop handle, which comprises a ferrule adapted to be attached to the end of said handle, said ferrule having a portion projecting beyond the end of the handle, and a loop member supported by said projecting portion, said loop member consisting of a piece of stiff wire, one end portion of which is bent into the shape of a closed rectangle, said projecting portion of the ferrule enclosing and gripping three sides of said rectangle.

1,883,092. MACHINE FOR PICKLING SHEETS AND THE LIKE. CLARENCE L. TAYLOR, Youngstown, Ohio. Filed Sept. 23, 1929. Serial No. 394,405. 6 Claims. (Cl. 266—7.)

2. The combination with a pickling tank, of supporting heads on opposite sides of such tank, a bell crank for

actuating said heads, arms pivotally attached to said heads and adapted to restrain the lateral motion thereof and to impart thereto a rocking motion a cross head



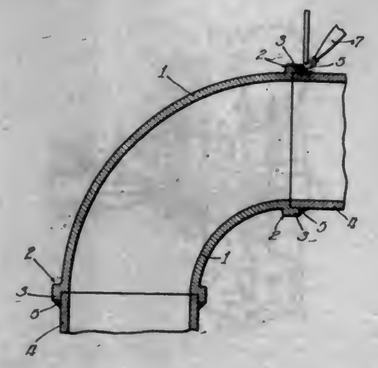
spanning such tank and supported by said supporting heads, and a carrier supported by said cross head and adapted to be actuated in said tank.

1,883,093. MACHINE FOR CUTTING OFF PIPE AND THE LIKE. CLARENCE L. TAYLOR, Youngstown, Ohio, assignor to The Aetna-Standard Engineering Company, Youngstown, Ohio, a Corporation of Ohio. Filed Dec. 7, 1929. Serial No. 412,347. 3 Claims. (Cl. 82—25.)

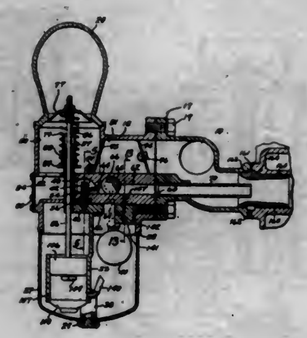
1. In a machine for cutting off cylindrical articles and the like, the combination with means for rigidly and revolubly supporting said article to be cut, slideheads positioned adjacent said article adapted to move toward and away therefrom, cutting means for said article carried by said slideheads, separate fluid actuated means for respectively actuating said slideheads, means for adjusting said cutting means transversely of said article without varying their relative positions, and means for equalizing the rate of relative movement between each of said cutting means and said article.

1,883,094. PIPE FITTING FOR WELDING. EDWARD HALL TAYLOR, Oak Park, Ill. Filed Feb. 15, 1932. Serial No. 593,043. 1 Claim. (Cl. 285—115.)

As a new article of manufacture, a weldable pipe fitting having its wall offset outwardly near its end to form a shallow socket directly open to the interior of the fitting and providing a shoulder, said socket being adapted to receive the straight end portion of a weldable pipe so that the end of said pipe directly abuts said shoulder throughout a substantial area and the interior surface of said pipe forms from its end a direct continuation of the interior surface of said fitting, the depth of said socket being so proportioned to the thickness of the engaging fitting and pipe walls that the heat of fusion welding applied to the end of the fitting and the adjacent outer surface of the pipe is conducted therefrom at substantially equal rates in either direction to provide for substantially equal heating of such weld-receiving end and surface.



1,883,095. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,424. 14 Claims. (Cl. 261—47.)

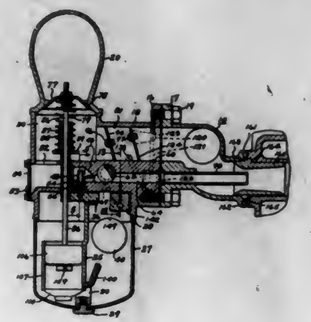


1. In a charge forming device for a multi-cylinder engine having a plurality of intake ports the combination of a main air manifold having branches leading to said intake ports and forming secondary mixing chambers, a plurality of primary carburetors for supplying fuel mixture to said secondary mixing chambers, a single air intake passage admitting auxiliary air to all of said secondary carburetors, a throttle for controlling the flow through said passage and an automatically operated flow controlling means for modifying the effect of said throttle.

1,883,096. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,423. 21 Claims. (Cl. 261—54.)

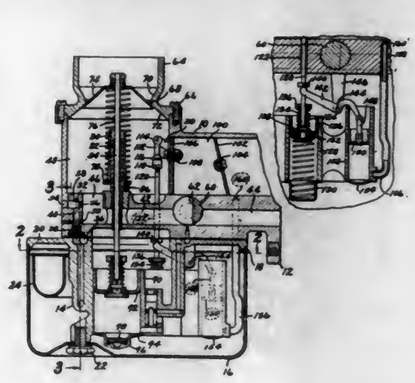
1. A charge forming device for internal combustion engines having in combination, a mixing chamber, a fuel inlet therefor, a throttle controlling the flow of mixture from said mixing chamber, a secondary air passage admitting air to said mixing chamber, a main air port ad-

mitting air to said mixing chamber and secondary air passage, means in said secondary air passage operated by the engine suction for retarding the flow of air



through said passage, and means operated by the suction anterior to said last mentioned means for controlling its operation.

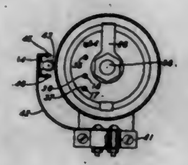
1,883,097. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 19, 1929. Serial No. 387,009. 16 Claims. (Cl. 261—54.)



1. A charge forming device for internal combustion engines comprising a secondary mixing chamber, a primary mixing chamber for supplying a fuel and air mixture to said secondary mixing chamber, means for supplying fuel and air to said primary mixing chamber, a secondary air supply passage for supplying additional air to the secondary mixing chamber, a valve regulating the admission of air through said secondary air passage, and means operated by the suction in said secondary air passage for closing said valve.

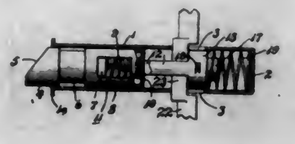
1,883,098. ELECTRICAL RESISTANCE DEVICE. BRYCE O. TEMPLETON, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 1, 1930. Serial No. 465,101. 4 Claims. (Cl. 201—56.)

1. In an electrical resistance device, a pair of plates each having a plurality of shoulder portions, a spacer ring mounted on a number of said portions and cooperating with the other portions to form grooves, resistance coils mounted in said grooves, means for securing said ring to said plates and said coils on said portions, a



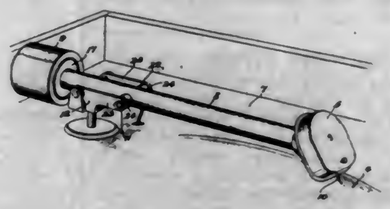
stationary arm having a roller engaging each of said coils and means for moving said coils with respect to said roller.

1,883,099. SPRING BOLT LATCH. HERMAN TER MEER, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 10, 1931. Serial No. 556,082. 2 Claims. (Cl. 292—169.)



1. In a latch construction, a cylindrical housing open at one end and closed at the other, a coiled spring in the housing having one end bearing against the closed end of said housing, an inner latch bolt member formed of a single blank of sheet metal having spaced apart cylindrical parts connected by integral spaced links, integral means closing the inner end of the outer cylindrical portion of said bolt member, a second latch bolt member telescopically received in the outer cylindrical part of the first bolt member, spring means of less strength than the first spring housed within said outer cylindrical portion of the first bolt member tending to force the second bolt member outwardly, and interengaging means on said second bolt member and the outer cylindrical portion of the first bolt member limiting the outward extension of the second bolt member and permitting a predetermined inward movement thereof with respect to the second bolt member.

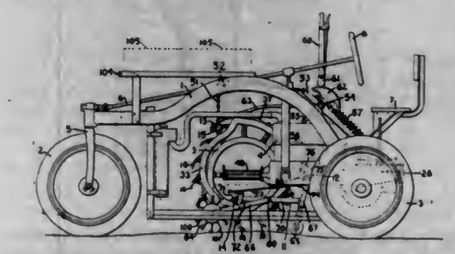
1,883,100. SUSPENSION MEANS FOR SOUND TRANSLATING DEVICES. JOHN A. TERRELL, Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,833. 7 Claims. (Cl. 179—100.4.)



1. In a sound translating apparatus, the combination with a sound translating device, of a suspension arm therefor rigidly secured thereto, a supporting means for

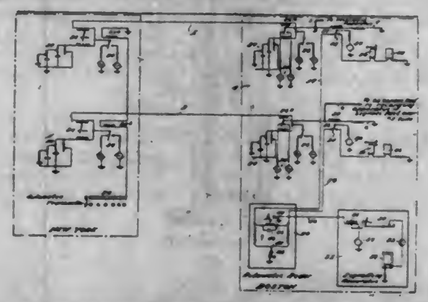
said arm providing a pivot axis about which said arm may move, a body of vibration absorbing material surrounding said pivot axis and being interposed between said supporting means and said arm, a counterweight for said arm, and means providing a second body of vibration absorbing material interposed between said arm and said counterweight.

1,883,101. CRANBERRY PICKER. OSCAR TERVO, Norway, Me., assignor to Wilfred B. Mathewson, North Weymouth, Mass. Filed Feb. 18, 1929. Serial No. 340,773. 16 Claims. (Cl. 56—19.)



1. In a cranberry-picking machine, the combination with a main frame having front and rear wheels on which it is supported, of a supplemental frame located between said front and rear wheels, rolling supports therefor which are independent from said wheels, means connecting the main frame and the supplemental frame and by which the forward movement of the main frame is imparted to the supplemental frame, and a plurality of connected but independently operating cranberry-picking elements mounted on the supplemental frame, and means to bring said elements successively into position to pick cranberries from the vines as the machine is moved forward.

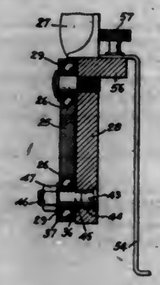
1,883,102. AUTOMATIC RIDER CIRCUITS. PAUL E. TETEA, Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 20, 1930. Serial No. 476,679. 12 Claims. (Cl. 178—69.)



1. In combination, a pair of telegraph circuits, means to transmit the same signals simultaneously over both circuits, a signal device and means responsive to the differential action of signals received over said circuits for controlling the operation of said signal device.

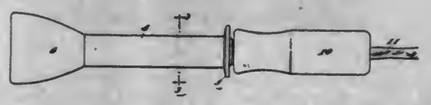
1,883,103. SLICING MACHINE. HENRY J. THEIS, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 29, 1930. Serial No. 439,939. 1 Claim. (Cl. 146—102.)

In a slicing machine, a knife, a carriage for traversing the knife, an article feeder, upper and lower coacting guiding means provided on the carriage and the feeder for guiding the feeder transversely of the knife plane, and means for adjusting the upper and lower guiding



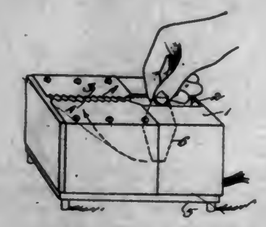
means relatively towards and away from each other to provide the proper riding fit between the carriage and the feeder.

1,883,104. TOOL FOR LAYING SHOE FILLER. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1931. Serial No. 526,599. 8 Claims. (Cl. 12—103.)



1. A tool for laying shoe filler in shoe bottom cavities, comprising a handle at one end, a scoop at the opposite end, an intermediate member connecting the handle and the scoop, and a rotatable molding member on the intermediate member.

1,883,105. METHOD OF FILLING SHOES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 25, 1927. Serial No. 228,588. 28 Claims. (Cl. 12—142.)

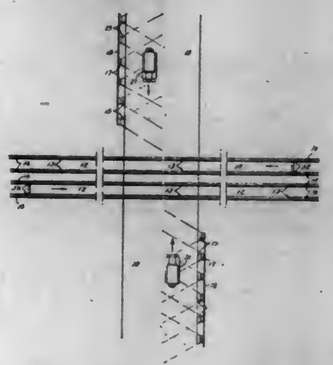


1. The method of filling shoes which comprises first providing as a nucleus a self-supporting piece having a shoe filler shape, then, at some time prior to the step of bottom-forming in the manufacture of the shoe, providing said piece with an external layer of spreadable shoe filler material, rendering at least one side of the aforesaid multi-layer actively sticky, and then placing said sticky product in the shoe-bottom and securing the same in place and spreading the external spreadable layer beyond the nucleus by pressure.

1,883,106. SHOE BOTTOM FILLER. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed July 25, 1928. Serial No. 295,342. 10 Claims. (Cl. 91—3.)

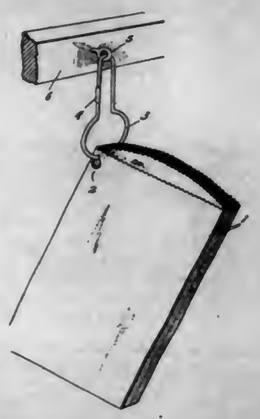
1. A shoe filler mixture in the form of a plastic mass, as an article of manufacture, composed of a comminuted body material intermixed with a binder containing a liquid dispersed coagulable material in uncoagulated, vulcanized condition which becomes coagulated throughout the mass upon parting with its dispersing liquid after being laid in the shoe-bottom.

1,883,107. AUTOMATIC SAFETY SYSTEM FOR SELF-PROPELLED VEHICLES. ADOLPH A. THOMAS, New York, N. Y. Filed July 2, 1930. Serial No. 465,252. 28 Claims. (Cl. 246—29.)



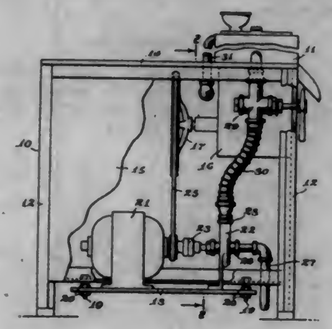
1. A trackless vehicle operated by an internal combustion engine and provided with photo-electric means for stopping its engine when said means is optically energized, the engine being automatically restored to operative condition by the de-energizing of said means.

1,883,108. PAPER BAG. ELLIS J. THOMPSON, Lynbrook, N. Y. Filed July 22, 1930. Serial No. 469,869. 1 Claim. (Cl. 206—57.)



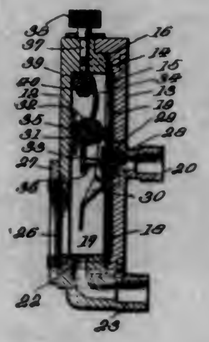
A stack of paper bags each having a portion bodily removed therefrom to form the bags with registering openings, the said openings tapering toward their upper ends whereby the bags may be readily torn from a support extending through the openings.

1,883,109. MOTOR AND PUMP ASSEMBLY FOR ICE CREAM FREEZERS. EMERY THOMPSON, New Rochelle, N. Y. Filed June 3, 1931. Serial No. 541,935. 6 Claims. (Cl. 62—101.)



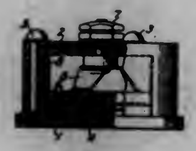
1. The combination with an ice cream freezer and stand therefor, of a base member adjustably mounted within the stand at the bottom thereof to change the elevation of said member, means to adjust said base member and to rigidly maintain it in its adjusted position, a motor and a pump operatively connected with said motor mounted on said base member, and a flexible refrigerant conduit connected with said pump and freezer.

1,883,110. LUBRICATING SYSTEM FOR INTERNAL COMBUSTION ENGINES. VERNON W. THOMPSON and BURT N. PIERCE, New York, N. Y., assignors to Emerol Manufacturing Co., New York, N. Y., a Corporation of Illinois. Filed Dec. 8, 1930, Serial No. 500,928. Renewed June 3, 1932. 20 Claims. (Cl. 123—196.)



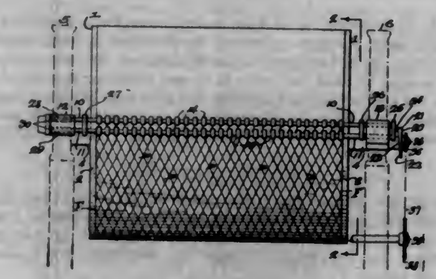
1. In a lubricating system of the kind described, the combination with an internal combustion engine having an intake manifold and a charge forming device connected thereto, a throttle valve controlling the passage of explosive charge of said charge forming device to said engine, a source of lubricant supply, a conduit extending from said source of lubricant supply to said intake manifold above said throttle valve, a casing disposed in said conduit, said casing having chambers formed by a movable wall, said movable wall being apertured and a needle valve cooperating with said aperture for regulating the passage of lubricant therethrough.

1,883,111. PIEZO-ELECTRIC CRYSTAL MOUNTING. GEORGE M. THURSTON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,904. 5 Claims. (Cl. 171—327.)



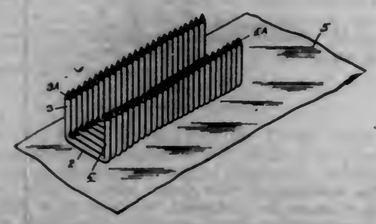
2. A piezo-electric crystal body having opposite faces, electrodes therefor and means including said electrodes for clamping said body to said electrodes along the entire margin of said faces and only at the marginal portions of said faces.

1,883,112. SCORING DEVICE FOR SOAP ROLLS. LOUIS P. TIBBS, Evanston, Ill., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 22, 1930. Serial No. 504,135. 14 Claims. (Cl. 83—93.)



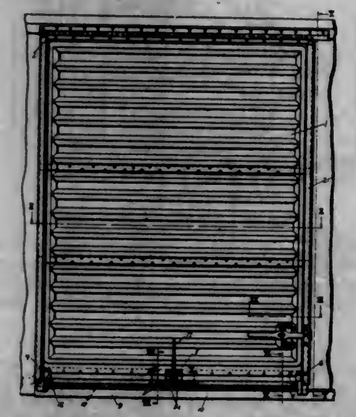
1. The combination with a solidifying roll, for plastic materials, of a plurality of scoring elements disposed in spaced relation to each other across the material carrying face of the roll, means for rotating the roll, and means for laterally reciprocating said elements to produce undulated scorings in a layer of material on the said face of the roll.

1,883,113. METHOD OF MAKING STAPLE BLOCKS. PAUL F. TITCHENER, Binghamton, N. Y., assignor to Oscar D. Gibbs and Eric Ischinger, Rochester, N. Y. Filed Apr. 30, 1930. Serial No. 448,715. 4 Claims. (Cl. 1—56.)



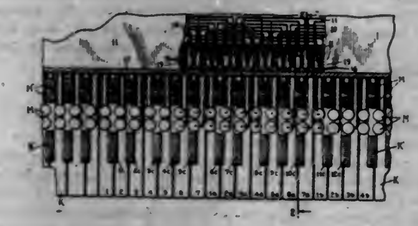
1. The method of fastening a plurality of staples into a block which consists in coating a portion of a series of the staples with a liquid binding material placing the coated portion of the series of staples onto a sheet material while the liquid binding material is still in the liquid state in order to hold the binding material between the sides of the individual staples during the drying period.

1,883,114. SUPPORTING MEANS FOR CAR DOORS. KENNETH J. TOBIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Original application filed July 26, 1929, Serial No. 381,145. Divided and this application filed Aug. 13, 1930. Serial No. 474,929. 8 Claims. (Cl. 16—99.)



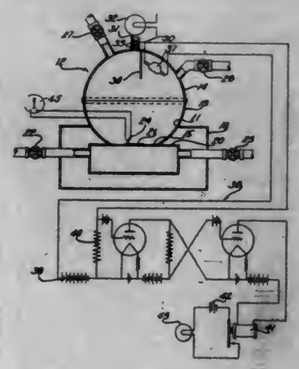
1. The combination with a door, of a track therefor, ball retainer sections eccentrically pivoted to said door, a ball in each retainer section, a lever connected between said sections for simultaneously operating the same in a direction transverse of the door to elevate the door and support the same upon said balls.

1,883,115. AUXILIARY KEYBOARD. SATURNINO TOFÉ Y BONILLA, Gimileo, Spain. Filed Dec. 16, 1929. Serial No. 414,253. 5 Claims. (Cl. 84—425.)



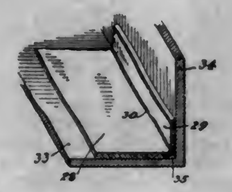
3. A keyboard instrument having a front panel and comprising a plurality of keys corresponding to the notes of a chromatic scale, hammer levers associated with said main keys so that the movement of said hammer levers causes the movement of a corresponding main key, said hammer levers having upward extensions by means of which said hammer levers may be operated, and auxiliary keys having hammers adapted to directly contact with said hammer levers and with said extensions, each said auxiliary key being associated with a main key, each said auxiliary key having a plurality of hammers adapted to cause the operation of a plurality of said hammer levers, to produce a chord which includes the main key with which said auxiliary key is associated, said hammer levers and hammers being located behind said front panel and said keys being located in front of said panel.

1,883,116. DEVICE FOR DETERMINING THE CONDITION OF A GAS. MALCOLM CLAIRE WEYANT TOMLINSON, Loch Arbour, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,640. 2 Claims. (Cl. 73—51.)



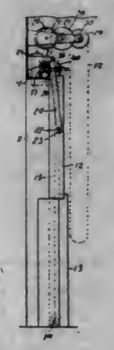
2. In a device for determining the condition of a gas, an indicating means, a chamber, means for introducing the gas to be tested into the chamber, a metallic non-light reflecting element within said chamber, a light sensitive means positioned within said chamber, means for altering the temperature of said metallic non-light reflecting element to effect the precipitation of a condensation from the gas upon said element to reflect a beam of light into said light sensitive means, means responsive to the energization of the light sensitive means by said reflected beam of light for operating said indicating means, and means for indicating the temperature of said element.

1,883,117. COMBINED FLOOR AND COVE COVERING. WILLIAM J. TOMPKINS, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,085. 1 Claim. (Cl. 20—74.)



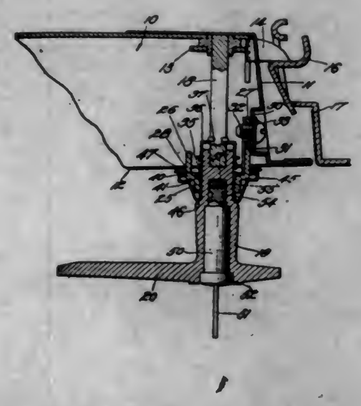
A telephone booth floor covering constructed of a single layer of rubber comprising a floor section and border sections, kerfs limiting the boundaries of said sections and arranged to permit the covering to fit the intersections formed by the floor section and the border sections, and reenforcing strips embedded in the covering adjacent the kerfs.

1,883,118. DOOR MECHANISM. CHARLES C. TOMKINSON, Plainfield, N. J., assignor to J. Edward Ogden Company, Inc., East Orange, N. J., a Corporation of New Jersey. Filed June 7, 1930. Serial No. 459,672. 16 Claims. (Cl. 20—19.)



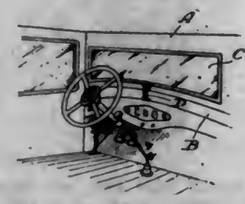
12. In combination, a door movable vertically and laterally to open position, a keeper on the door, a snap latch mounted on a fixed support and adapted to coact with the keeper to hold the door in closed position, link structure for supporting and guiding the door and having a lost motion connection so dimensioned as to allow sufficient movement of the door to free the keeper from the latch.

1,883,119. DOOR HANDLE MOUNTING. MILLARD H. TONCRAY, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 4, 1930. Serial No. 493,323. 9 Claims. (Cl. 70—91.)



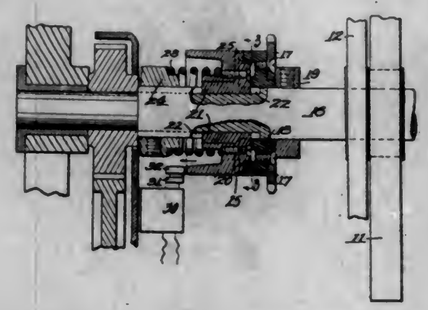
1. The combination with a door post, of a door having a pillar with its face adjacent said post when said door is in closed position, a latch spindle, a handle hub secured to said spindle, a locking plate surrounding said hub and means cooperating with said plate and hub to prevent withdrawal of said hub including a screw accessible from the face of said pillar.

1,883,120. WINDSHIELD SECURING DEVICE. MILLARD H. TONCRAY, Detroit, and JAMES W. GREIG, Grosse Pointe Park, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 27, 1930. Serial No. 423,597. 8 Claims. (Cl. 296—84.)



1. In a vehicle body, the combination with a windshield, of a toggle acting upon an unsupported edge of said windshield intermediate its ends to clamp said windshield in closed position, and a resilient bracket connecting said windshield and toggle.

1,883,121. DISPATCH CONVEYER SAFETY DEVICE. ISIDOR TORNBERG, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Mar. 27, 1928, Serial No. 265,121. Renewed May 4, 1932. 4 Claims. (Cl. 192—125.)

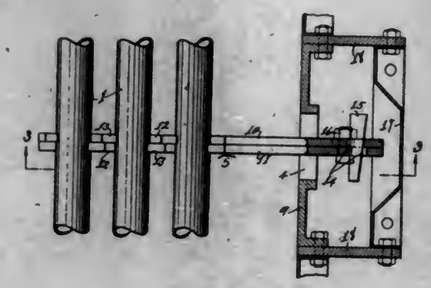


1. In a folding machine, the combination with a fan and its shaft and means for driving the shaft, of a driving wheel rotatably mounted on the shaft, a collar slidably keyed to the shaft and having means for driving the said wheel, said collar being yieldingly mounted to move longitudinally on the shaft, means whereby, when the wheel encounters undue resistance, the collar will be moved back along the shaft, and means in the path of the collar for disconnecting the shaft from its driving means when the collar is moved back.

1,883,122. BENZYL CELLULOSE. DAVID TRAILL, Saltcoats, Scotland, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 15, 1930, Serial No. 428,856, and in Great Britain Feb. 20, 1929. 3 Claims. (Cl. 260—152.)

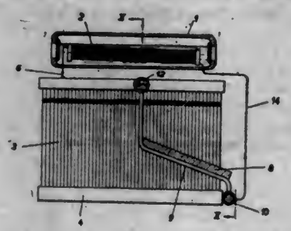
1. Method of treating benzyl cellulose containing a benzyl halide which comprises digesting same with steam to reduce the viscosity characteristics and increase the solubility of the benzyl cellulose in the usual solvents therefor.

1,883,123. ECONOMIZER TUBE SUPPORT. JAMES B. TRAIMER and IVAR L. LANGVAND, Barberton, Ohio, assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Jan. 11, 1928, Serial No. 245,970. Divided and this application filed June 20, 1929. Serial No. 372,332. 9 Claims. (Cl. 257—240.)



1. In an economizer, a row of tubes, a support for intermediate portions of said tubes, said support extending loosely through the sides of said economizer, and means to prevent leakage beyond the ends of said support.

1,883,124. INDIRECTLY HEATED STEAM GENERATOR. HANS TREDE and OTTO H. HARTMANN, Kassel-Wilhelmshohe, Germany, assignors to Schmidt'sche Heissdampf-Gesellschaft mit beschrankter Haftung, Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Dec. 15, 1931, Serial No. 581,252, and in Germany Jan. 10, 1931. 5 Claims. (Cl. 122—33.)

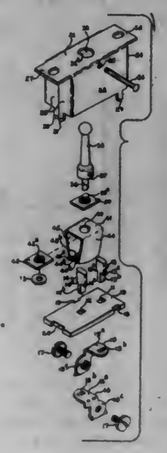


3. In a steam generator in which steam is generated by the indirect system by means of a heating medium flowing in a closed circuit, said circuit including heat receiving tubes some of which are more highly heated than others and heating elements, lower and intermediate headers to which said highly heated tubes are connected, other lower and intermediate headers to which said less highly heated tubes are connected, means connecting said first intermediate header to said second intermediate header, means to conduct the condensate from said heating elements first to said first lower header and through the highly heated tubes to said first intermediate header.

1,883,125. ELECTRIC SWITCH. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 31, 1931. Serial No. 512,608. 11 Claims. (Cl. 200—15.)

1. In an electric switch, in combination, an insulating base, a plurality of stud contacts secured to said base and projecting upwardly from the latter, a bridging contactor pivotally supported independently of said base, said

contactor having resilient arms the inwardly extending curved edge portions of which are adapted to straddle said stud contacts, and said contactor being movable with



a snap action to opposite sides of one of said stud contacts for bridging engagement with or disengagement from other of said stud contacts selectively.

1,883,126. ELECTRIC SWITCH. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 12, 1931. Serial No. 508,037. 14 Claims. (Cl. 200—154.)



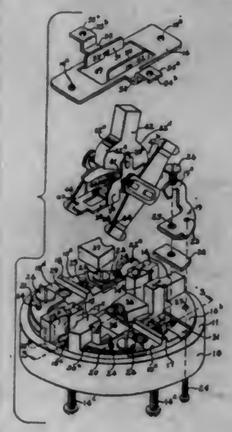
1. In an electric switch, in combination, a flat punched insulating base having an opening, a plurality of combined contact and terminal members, each of said members comprising a reflexed metal strip having parallel portions thereof arranged on opposite faces of said base, the upper and lower portions of each of said members and said base having registering openings, and the opening in each of said upper portions being tapped to receive the shank of a binding screw.

1,883,127. PUSH BUTTON SNAP SWITCH. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 11, 1930. Serial No. 460,362. 6 Claims. (Cl. 173—355.)

6. In a push button snap switch lamp socket, in combination, a pair of complementally recessed molded insulating members to loosely receive and retain therebetween the movable parts of the switch mechanism, the actuating button of said switch mechanism being located between and guided by the adjacent recessed faces of said insulating members, a flanged screw-shell lamp socket contact located on one of said members, a wiring terminal member formed integrally with the flange of said screw-shell, and bent outwardly from the latter, and a pair of headed elements penetrating aligned openings in each of said members and the flange of said screw-shell contact, said elements having the ends thereof upset over said flange to thereby rigidly and permanently secure all of said parts in assembled relation to each other.



1,883,128. ELECTRIC SNAP SWITCH. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 495,387. 6 Claims. (Cl. 200—67.)

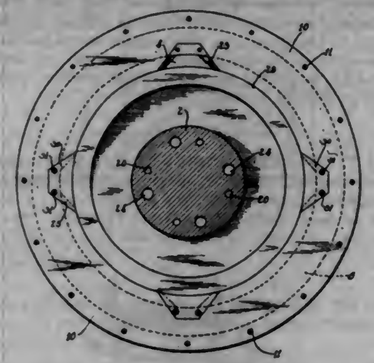


6. A retaining yoke member for rubber mounted toggle snap switches adapted for surface mounting, said member comprising a punched and stamped sheet metal plate adapted to be secured at opposite ends thereof to a suitable insulating base, said plate having an intermediate substantially rectangular opening, parallel lugs formed integrally with said plate at said opening and extending upwardly at right angles thereto to provide a guide for a switch actuating lever, said lugs having openings providing notches for engagement with a switch frame to retain the latter in a given operative position, and a pair of arms formed integrally with said plate and extending laterally therefrom, said arms having end portions offset upwardly in a plane parallel to the main body of said plate and adapted for cooperation with suitable cover attaching means.

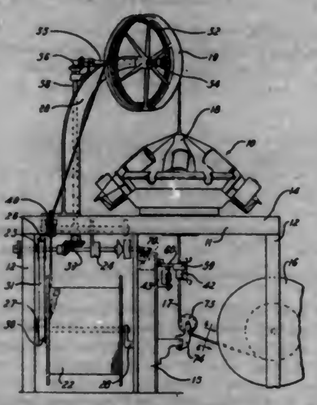
1,883,129. TURBINE. ALBERT O. TRIMMER, Cerro Gordo, Ill. Filed Feb. 14, 1929. Serial No. 339,973. 1 Claim. (Cl. 121—55.)

A device of the type described comprising a stator having a disc portion provided with a plurality of abutments, a rotor mounted for movement upon said disc portion, said rotor being provided with a circular recess substantially

equal in diameter to the diameter of said disc portion and arranged for receiving the same, said rotor being provided with a groove communicating with said recess for receiving said abutments, said rotor being provided with cutaway portions for receiving said abutments, and plate means for closing said cutaway portions.



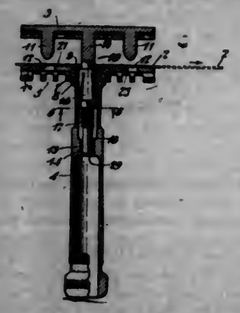
1,883,130. STRAND HANDLING DEVICE. ERNEST R. TROCHE, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1930. Serial No. 474,255. 9 Claims. (Cl. 164—34.)



1. In a strand splitting device, a support, and freely rotatable rollers carried by said support adapted to separate individual strands, together with their coverings, from a common covering of a character which can be split by said rollers upon a plurality of strands.

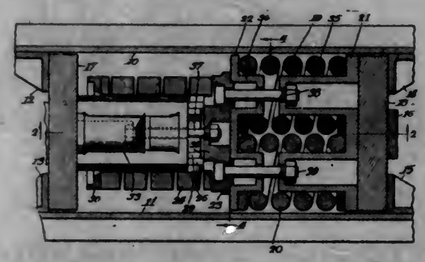
1,883,131. SAFETY RAZOR. MARIUS TUA, Union City, N. J. Filed July 2, 1930. Serial No. 465,300. 5 Claims. (Cl. 30—12.)

5. A safety razor comprising a blade-supporting head; a tubular handle; a swivel connection between said head and handle constantly holding them together; a shiftable blade-clamping member opposed to said blade-supporting head for holding a blade to the head; a shank carried by said blade-clamping member extending longitudinally into the handle and longitudinally shiftable therein; blade-retaining means to hold the blade against removal during a limited range of separation of the clamping member and head and adapted to release the blade for removal upon further separation; a threaded connection between said shank and handle to hold the clamping member in clamping position and adapted, by unscrewing rotation of the handle, to force the shank outward and shift the clamping member away from the blade-supporting head and release the shank materially before the retaining limit of



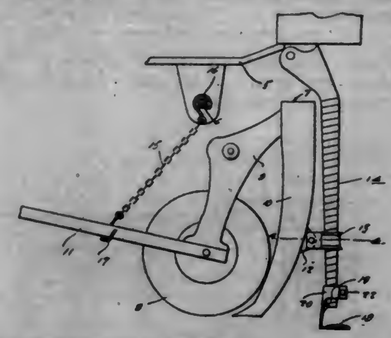
said blade-retaining means has been reached; and means to yieldably resist further outward shifting of the clamping member to free the blade from the retaining means.

1,883,132. DRAFT GEAR. HERBERT E. TUCKER, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed May 9, 1930. Serial No. 450,908. 2 Claims. (Cl. 213—24.)



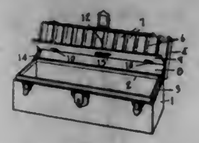
2. In a draft gear, in combination, a pair of successively acting shock absorbing devices arranged in tandem one thereof being of higher resistance than the other, means for initially tensioning the stronger device and holding its elements in assembly, and independent means for holding the two devices in assembly and adjusting the tension of the weaker device.

1,883,133. SEED DRILL. HERMAN F. TURNER, Yukon, Okla. Filed May 2, 1930. Serial No. 449,253. 1 Claim. (Cl. 111—12.)



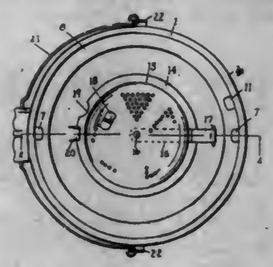
Means for converting a row drill provided with disks, boots, and drill tubes into a broadcasting drill comprising means for holding the disks and boots in elevated position, means for holding each drill tube in rear of the boot and a spreader attached to the lower end of each tube.

1,883,134. TACKLE BOX. GLEN H. WALKER, Kalamazoo, Mich., and IRA L. COLE, Madison, Wis., assignors to Shakespeare Company, Kalamazoo, Mich. Filed Feb. 28, 1930. Serial No. 432,005. 2 Claims. (Cl. 43—32.)



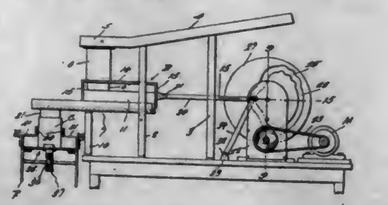
2. In a tackle box, the combination with a box body, of a chambered cover hinged to said body, a series of spaced partitions disposed transversely within the cover chamber, a fixed compartment front wall disposed longitudinally within the cover chamber and extending across the rear portions of said transverse partitions providing a plurality of compartments open above said front wall, and a closure coacting with said front wall to close the several compartments.

1,883,135. MINNOW BUCKET. GLEN H. WALKER and EDGAR R. THORNE, Kalamazoo, Mich., assignors to Shakespeare Company, Kalamazoo, Mich. Filed May 29, 1931. Serial No. 540,834. 16 Claims. (Cl. 43—56.)



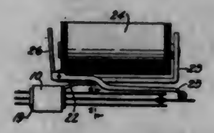
1. A minnow bucket comprising a container having openings to permit circulation of air therein and having inwardly projecting lugs adjacent the rim thereof, an air-porous water receptacle disposed within said container with its walls in spaced relation to the walls of the container, the top of the receptacle being in a plane below the top of the container, and a cover for said receptacle and container having a depending portion telescopingly engaging with the top of the receptacle and rotatable relative thereto and to said container, said cover having a slot to receive one of said lugs when brought into registering relation therewith, said cover having a hand hole affording access to said receptacle and said hand hole being provided with a closure.

1,883,136. CANNING MACHINE. MILTON E. WALKER, Chicago, Ill. Filed Dec. 31, 1930. Serial No. 505,938. 7 Claims. (Cl. 226—72.)



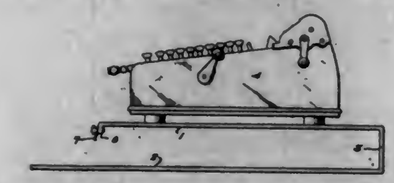
1. A filling machine including an inclined tray terminating in a trough having a longitudinally extensible discharge spout, a platform mounted below the tray, a member slidable on the platform adapted to receive the commodity dispensed from said spout, said platform remote from the terminus of said spout being provided with a discharge opening, a conveyor movable beneath said platform and adapted to support the receptacles thereon for successively alining the receptacles with said discharge opening, and means for actuating said slidable member and conveyor in timed relation with respect to one another, said last mentioned means including means for imparting reciprocatory movement to said slidable member, and intermittent movement to said conveyor.

1,883,137. SWITCHING DEVICE. LEE R. WALLER, Montreal, Quebec, Canada, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,724. 1 Claim. (Cl. 200—166.)



In a contact spring mounting for a relay, a metal bracket having an arm secured to the relay frame, the free end of said bracket having heavy integral lugs, a spring assembly comprising flat springs and resilient insulating strips therebetween, said assembly being held rigidly in place on the bracket solely through the clamping action of said lugs, said lugs being of such rigidity as to permit of no deformation thereof after being bent over the assembly.

1,883,138. DESK STAND. EDWARD C. WALTER, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,639. 6 Claims. (Cl. 45—90.)



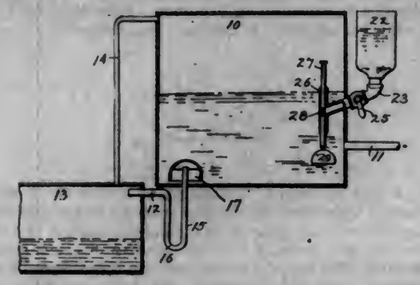
1. In a desk stand for calculating machines and the like, the combination with a lower support, of an elevated platform, said stand having a space between said platform and said support free of all obstructions on three sides thereof and wherein a work sheet may be freely inserted and moved in any direction, said platform having a downturned front straight edge to indicate the line on which the work is being done and provided with a longitudinal slot and a pointer working in said slot and slidable along said edge to indicate the column.

2. In a desk stand for calculating machines and the like, the combination with a lower support, of an overlying elevated horizontal platform, said stand having a space between said platform and said support free of all obstructions on three sides thereof and wherein a work sheet may be freely inserted and moved in any direction, said platform having at the front end thereof a straight line defining edge and at the rear thereof adjustable means of engagement with said support including a stop device adapted to adjustably limit a downward tilting movement of the platform to bring the forward edge thereof closer to the work sheet.

1,883,139. LIQUID MIXING APPARATUS. HENRY L. WALTER, Twin Falls, Idaho. Filed Mar. 8, 1930. Serial No. 434,428. 4 Claims. (Cl. 210—21.)

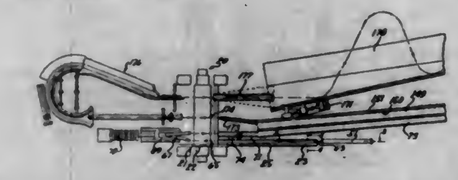
4. Apparatus for mixing liquids having two liquid holders, an outlet from one to the other, a measuring device

that comprises a rod vertically movable across said outlet, means to guide the rod vertically, and a float connected



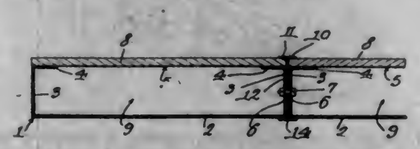
with the rod that contacts with the liquid in the receiving tank and which by the liquid level determines the vertical position of said rod.

1,883,140. ROLLING MILL. RALPH COLLINS WALTER, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1929. Serial No. 331,310. 20 Claims. (Cl. 80—37.)



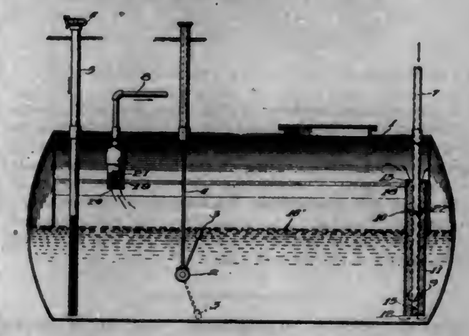
12. In a rolling mill for forming rods, a roughing mill having a plurality of passes, a tapered shelf adjacent the roughing mill for supporting a rod being discharged from the one pass until the rod is released by the rolls, a pneumatically actuated plunger for automatically engaging one end of the rod dropped from the tapered shelf to direct it to a second pass, a vertical repeater for receiving the rod from the second pass and directing it to a third pass, a pneumatically actuated tiltable table for receiving the rod from the third pass, means controlled by the rod for automatically tilting the table to discharge the rod therefrom, a trough for receiving the rod discharged from the tiltable table, a constantly driven roller positioned in the trough, a pneumatically controlled idler roller for automatically pinching a rod between itself and the driven roller to advance the rod to a fourth pass in the roughing mill, and a horizontal repeater for receiving the rod from the fourth pass and guiding it to a fifth pass in the roughing mill.

1,883,141. BUILDING CONSTRUCTION. LAWRENCE WALTHERS, Madison, Wis. Filed Sept. 4, 1931. Serial No. 561,281. 2 Claims. (Cl. 189—34.)



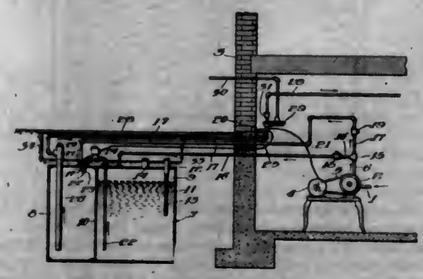
1. In a structure of the class described, wall-forming members each comprising a back, forwardly extended end plates at the longitudinal edges of the back, and inwardly extended wings at the forward longitudinal edges of the end plates and overhanging the back, there being a space between the inner longitudinal edges of the wings, facings supported on the outer surface of the wings of adjoining wall-forming members and extending across said spaces, a T-shaped batten comprising a body and a flange projecting from the body, the body overlapping the outer surface of adjoining facings at one side of the structure, the flange being frictionally held between the end plates of adjoining wall-forming members, a tightening device connecting said end plates to cause them to have the aforesaid frictional hold on the flange, and a spacer frictionally held between said end plates, at the opposite side of the structure, and preventing the wall-forming members from tilting on the tightening device and causing the end plates to lose their frictional hold on the flange.

1,883,142. METHOD OF GENERATING A COMBUSTIBLE GAS. CARL OTTO WANNACK, Chicago, Ill., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill., a Corporation of Delaware. Original application filed Aug. 15, 1928, Serial No. 299,787. Divided and this application filed Nov. 7, 1929. Serial No. 405,340. 1 Claim. (Cl. 48—219.)



A method of generating combustible gas, which comprises maintaining a bulk supply of volatile hydrocarbon liquid under pressure within a closed zone, isolating a portion of said liquid, introducing air under pressure through a single inlet and intimately contacting a portion of the air with the liquid in said isolated portion to form a combustible gas, and diverting another portion of said air within said closed zone out of contact with the isolated portion of liquid to dilute the combustible gas.

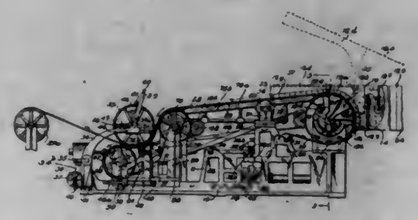
1,883,143. APPARATUS FOR GENERATING COMBUSTIBLE GAS. CARL OTTO WANNACK, Chicago, Ill., assignor, by mesne assignments, to S. H. G. Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 409,715. 7 Claims. (Cl. 261—26.)



1. In combination, an enclosed vessel divided into separate compartments for combustible liquid and combustible gas respectively, a pipe connected to each compartment

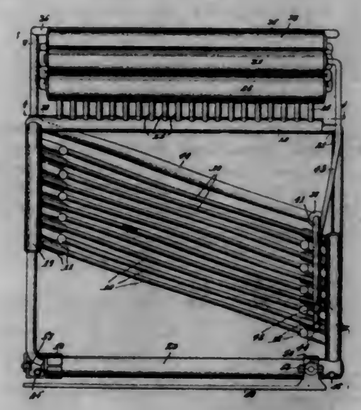
from a common source, a pipe connecting the liquid compartment and the gas storage compartment, an automatically operated valve interposed in said pipe, and means for simultaneously passing air under pressure through said former pipes to the compartments whereby liquid is caused to pass from the liquid compartment to the gas compartment.

1,883,144. ART OF MAKING PAPER AND FELTED SHEET MATERIALS. MELVIN R. WARE, Baltimore, Md., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 14, 1929. Serial No. 399,656. 12 Claims. (Cl. 92—38.)



1. In a paper machine of the class described, characterized by an endless belt running over a web-forming suction cylinder, the combination with said belt and cylinder of a couch roll operating on the formed web at a point in the belt path of movement remote from the cylinder, said couch roll constituting the first factor of mechanical pressure-application to be encountered by the paper web, and means, operating between the cylinder and couch roll, for draining water from the web.

1,883,145. STEAM GENERATOR. ROY M. WARFIELD, Chicago, Ill., assignor, by mesne assignments, of one-third to Stanley Steam Motors Corporation, a Corporation of Delaware. Filed June 24, 1927. Serial No. 201,081. 12 Claims. (Cl. 122—291.)



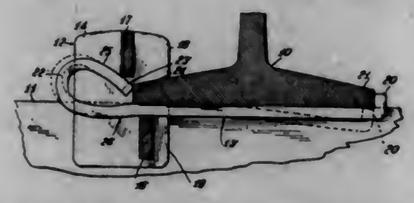
1. A vapor generator comprising a plurality of banks of inclined tubes for containing liquid to be heated; upright headers; means for removably connecting said banks to said headers, said banks being substantially rectangular in form; some of said banks being arranged diagonally in one direction, and the other banks arranged diagonally in the opposite direction for forming a crisscross grid, for increasing efficiency of the generator.

1,883,146. MERCURY SWITCH. CARL J. WARNKE, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,497. 5 Claims. (Cl. 200—152.)



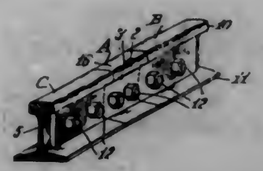
1. A mercury switch comprising an hermetically sealed container, electrodes therein, the surfaces of the electrodes being substantially free of any material amount of oxide, scale, and impurities, a body of mercury in the container cooperable with the electrodes, and an atmosphere of substantially pure and extremely dry hydrogen filling the container and having the property of absorbing and holding the impurities of the electrodes and precluding such impurities from contaminating the mercury over a long period of time.

1,883,147. RAIL ANCHOR. HAROLD G. WARR, Park Ridge, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1931. Serial No. 539,857. 18 Claims. (Cl. 238—329.)



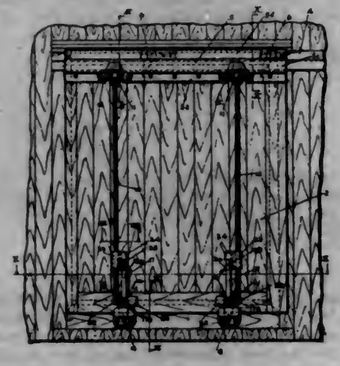
1. A rail anchor comprising in combination a gripping member adapted to engage one base flange of a rail and a holding member extending across beneath the rail for maintaining the gripping member in its applied position comprising a bar provided at one end with a shoulder for locking engagement with the opposite edge of the rail base, the other end of the holding member being provided with a resilient loop portion for bearing against said gripping member and the vertical edge portion of the adjacent flange of the rail base and adapted to yield transversely of the rail to increase the effective length of the under-rail portion of said bar.

1,883,148. WHEEL FLANGE OILER. HAROLD G. WARR, Park Ridge, Ill., assignor to Maintenance Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1928. Serial No. 311,873. 10 Claims. (Cl. 184—3.)



1. In a wheel flange oiling system, a relatively short rail section formed with an internal oil conduit having an outlet in one side of the rail head adjacent the crown of the rail, and means for supporting said rail section from the end portions of the adjacent rails, comprising a pair of fish plates overlapping the short section and the end portions of the adjacent rails.

1,883,149. SLIDING REFRIGERATOR CAR DOOR. AXEL WASSBERG and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1928. Serial No. 308,693. 9 Claims. (Cl. 20—24.)

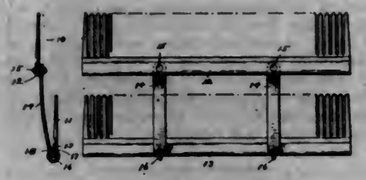


1. In a car having a door opening, a track adjacent one margin of said opening, a door mounted upon said track, upper and lower guides upon said car, upper and lower door actuators upon the door straddling said guides, and means for simultaneously operating said actuators.

1,883,150. POWDERED CITROUS FRUIT JUICES AND PROCESS OF MAKING THE SAME. ROBERT M. WASHBURN, Evanston, Ill., assignor to Liquid Dehydration Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 10, 1929. Serial No. 369,927. 4 Claims. (Cl. 99—5.)

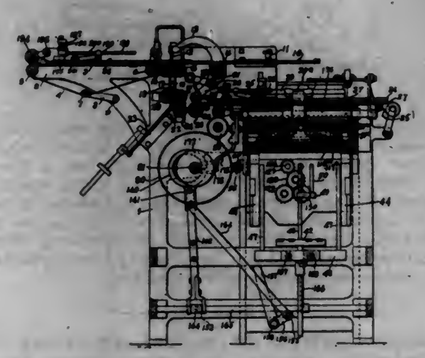
2. The process of preparing a dried fruit juice powder, which comprises spray drying a mixture of the juice of a citrous fruit and the finely ground, cooked rinds of a citrous fruit from which objectionable oils have been removed.

1,883,151. HAIR WAVING COMB. GERTRUDE F. WATERS and GILBERT A. WATERS, Sharon, Conn. Filed Sept. 22, 1931. Serial No. 564,808. 2 Claims. (Cl. 132—38.)



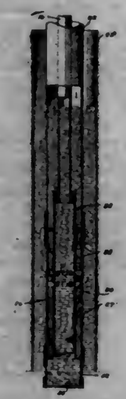
1. A hair waving device comprising a plurality of combs, and link means inter-connecting said combs, the connection between one end of said link means and one of said combs consisting of a frictionally retarded pivot and the connection between the other end of said link means and the other of said combs comprising a freely movable pivot.

1,883,152. FOLDING MACHINE. ROBERT J. WATERWORTH, Sidney, Ohio, assignor, by mesne assignments, to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed July 29, 1926. Serial No. 125,777. 28 Claims. (Cl. 270—62.)



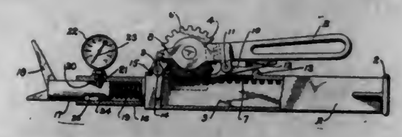
1. In a folding machine, a plurality of knife folders successively arranged at right angles to each other, a plurality of loop folders each parallel with one of said knife folders, and means for selectively guiding sheets from a knife folder to one side of its associated loop folder or through the latter for delivery to a following knife folder.

1,883,153. WELL PUMPING APPARATUS. HAROLD F. WATKINS, Oakland, Calif. Filed Aug. 7, 1928. Serial No. 298,104. 6 Claims. (Cl. 103—234.)



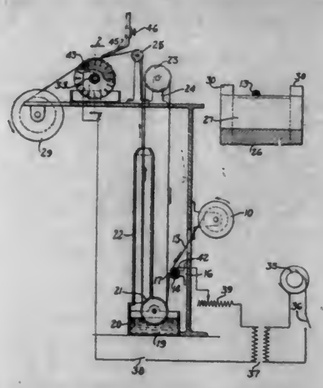
1. In an oil well pump, concentric gas and oil flow pipe strings adapted to extend into a well, a working barrel connected to the lower end of one of said pipes, a valve sleeve slidably disposed in said barrel, means for cyclically reciprocating said sleeve, ports formed in said barrel, ports formed in said sleeve, said latter ports being carried beyond one end of the working barrel in one position of the sleeve and registering with the first ports in another position of the sleeve, and a source of gas under pressure connected to said gas pipe string, said barrel and valve sleeve being so associated with said pipe that in one position of said sleeve oil may flow into the oil pipe string but flow of gas is arrested and in said other position gas flows into the oil pipe string and flow of oil from the well into the oil string is arrested.

1,883,154. COMBINATION JACK AND PRESSURE GAUGE. WILLIS H. WATROUS, Oakland, Calif. Filed Apr. 18, 1928. Serial No. 271,076. 2 Claims. (Cl. 254—95.)



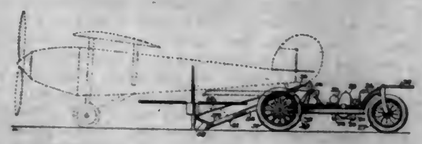
1. A device of the character described comprising an elongated housing, a toothed rack bar slidably mounted therein, means for extending the rack bar, a plunger mounted in one end of the rack bar, a spring interposed between one end of the plunger and the rack bar to yieldingly support the plunger, said plunger having an elongated slot formed therein, and a pin extending through the rack bar and the slot and limiting the movement of the plunger with relation to the rack bar.

1,883,155. METHOD OF COATING ELECTRICAL CONDUCTORS. KENNETH M. WATSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Dec. 16, 1926, Serial No. 155,303. Divided and this application filed Aug. 30, 1930. Serial No. 479,066. 7 Claims. (Cl. 91—70.)



1. The method of insulating an electrical conductor, which consists in coating the conductor, and then making a direct contact with the conductor through the coating thereof to connect the conductor with a source of electrical current supply, thereby heating the conductor to bake the coating.

1,883,156. AIRPLANE SERVICE DOLLY. IRA A. WEAVER and WILLIAM A. ROSS, Springfield, Ill., assignors, by mesne assignments, to Ira A. Weaver, Springfield, Ill. Filed Oct. 2, 1929. Serial No. 396,618. 5 Claims. (Cl. 214—94.)



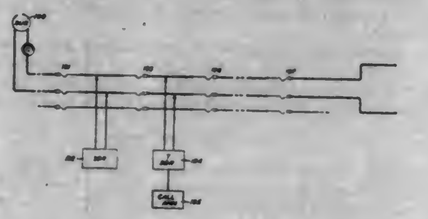
1. In an airplane service dolly, the combination of a wheeled carriage, means permitting steering of said carriage, an internal-combustion engine on said carriage, an inclined support hinged on said carriage and having an abutment near its upper end, and means operated by said engine designed to engage and to advance the tail skid of an airplane up such support and to rock the latter on its hinge by the engagement of said skid with said abutment.

1,883,157. JACK. GAILARD E. WEAVER and ALBERT VETTEL, Springfield, Ill., assignors to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Mar. 26, 1928. Serial No. 264,910. 8 Claims. (Cl. 254—6.)



1. In a jack, the combination of a frame, carrying-wheels for said frame near one end only thereof, said frame extending beyond said wheels to constitute an end support for the jack when standing on end, means on said frame to raise and lower the load, a handle to operate said load raising and lowering means hinged on, and projecting beyond the opposite end of said frame, and an abutment on said frame against which said handle is adapted to bear to raise the frame from the ground, whereby the jack may be rolled on said carrying-wheels or to turn the jack up on end on said frame extension.

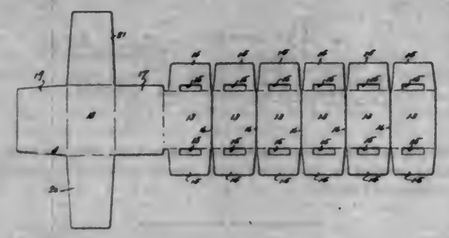
1,883,158. TRUNK CIRCUIT. HORACE W. ULRICH, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1932. Serial No. 588,283. 10 Claims. (Cl. 179—27.)



1. In a telephone system, a dial office, a manual office, an operator's position at said manual office, trunks interconnecting said dial office and said manual office, an operator's control circuit common to said trunks, a key individual to each trunk for connecting said control circuit to said trunk, a call announcer mechanism at said dial office, means in said control circuit to initiate the operation of said call announcer mechanism, and means responsive to the seizure of one of said trunks to disable said initiating means until after the key of said trunk has been operated and released.

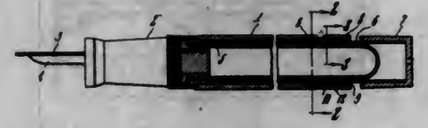
1,883,159. PACKAGE FOR SAFETY RAZOR BLADES. PHILIP H. UNSINGER, Maplewood, N. J. Filed Apr. 28, 1931. Serial No. 533,393. 2 Claims. (Cl. 206—46.)

1. A foldable means for holding and individually segregating a plurality of safety razor blades of the tongue-end type, comprising a strip of material foldable transversely to provide a plurality of inter-connected blade holding sections upon which blades may be superimposed, said holding sections having widths in excess of the width of the blades to be received thereby, and each section having oppositely projecting end flaps having openings adjacent the line of fold thereof through which tongue-ends



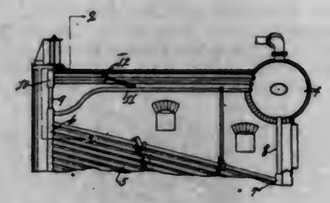
of said blades may project whereby said blades are secured against lateral displacement relative to holding sections to which they are applied.

1,883,160. FRICTIONAL PACKING. HENRY J. UPTON, Medford, Mass., assignor, by mesne assignments, to The Chilton Pen Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,754. 7 Claims. (Cl. 120—47.)



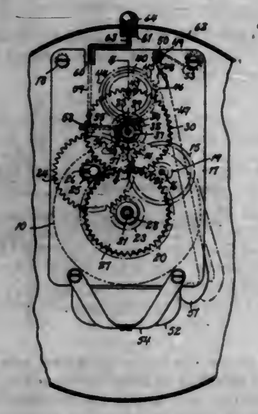
1. A joint between a pair of relatively slidable members, one of which is subject to size variations due to shrinkage, which comprises a pair of spaced sizing elements of material not subject substantially to such size variations carried by said one member in position to maintain a free sliding fit with the other of said members, and a packing positioned between said elements and spaced from said one member and making a fluid tight joint with said other member and said elements.

1,883,161. CIRCULATOR FOR CROSSDRUM BOILERS. FRANK VALLADARES, Bayonne, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 16, 1928. Serial No. 319,861. 2 Claims. (Cl. 122—297.)



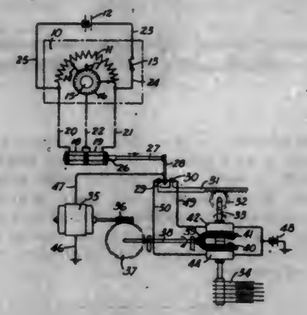
1. In a water tube boiler, a steam and water drum, downtake and uptake header constructions connected by inclined steam generating tubes, horizontal main circulators connecting the top of the uptake header construction with the steam and water drum, means affording an uptake passage contraction just beneath said circulators, an auxiliary circulator leading from the uptake header construction at a position beneath the contraction to the steam and water drum, the auxiliary circulator being horizontal throughout the major portion of its length.

1,883,162. SYNCHRONOUS-MOTOR ELECTRIC AUDIBLE-SIGNAL CLOCK. ANTON VAN VEEN, West Hartford, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed June 14, 1930. Serial No. 461,070. 2 Claims. (Cl. 58—38.)



1. In an electric audible-signal clock, the combination with a continuously-rotating electric synchronous motor; of time-indicating means driven thereby; a normally-idle audible-signal mechanism; means for coupling the said audible-signal mechanism to and uncoupling the same from the said motor, including a pair of complementary rotary gears, one of which is constantly driven by the said motor and the other of which is operatively connected to the said audible-signal mechanism for driving the same; and an automatic control-mechanism including an arbor, a coupling-gear axially movable upon the said arbor into and out of position to interconnect the aforesaid complementary gears, a spring normally tending to move the said coupling-gear into position to interconnect the said complementary gears, and a cam and cam-finger, one of which is rigidly carried by the said arbor and the other being mounted for movement coaxially with respect thereto for forcibly moving the said coupling-gear into its retired position.

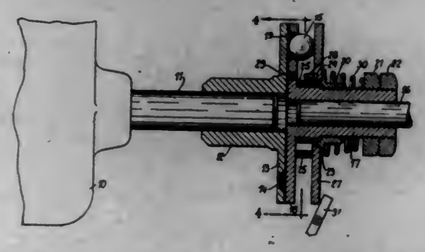
1,883,163. REMOTE CONTROL DEVICE. FRANK VAN VOORHIS, Jr., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,927. 2 Claims. (Cl. 250—40.)



2. In a radio remote control mechanism, a magnet, a plunger actuated by said magnet, a contact arm carried by said plunger, a resistance for variably energizing said magnet for positioning said plunger, a motor, a differential mechanism actuated by said motor, a driven shaft, a tuning element operatively connected to said shaft, magnetic

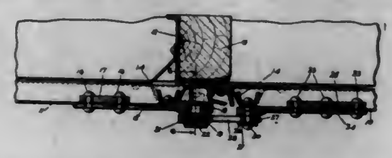
means operable upon the starting of said motor for variably connecting said shaft to said mechanism, and means actuated by said shaft and cooperating with the contact arm for controlling the operation of said motor and adjustably positioning said tuning element.

1,883,164. COUPLING. LEONIDAS A. VASSAKOS, New York, N. Y. Filed Feb. 24, 1931. Serial No. 517,891. 5 Claims. (Cl. 192—150.)



1. A device of the character described, comprising driving and driven members in axial alignment with but physically separated from one another, a plurality of individual and independently operable elements normally in engagement with and forming interconnections between said members, pressure induced means operatively connected with and forming a part of said driven element and adapted to normally bear with yieldable pressure against the said elements for retaining them in their interconnecting relation to said members under normal load, a resilient spacing member forming a part of said driven member and adapted to be normally held inoperative by said means (in normal position) said elements adapted to be disengaged from said driving member on overload, thereby forcing said means in the direction from the driving element, said spacing member adapted to be released by said means when the latter is forced out by said elements into interconnecting position between driving and driven members, said means provided with spacing members to release said pressure induced means, so that the latter may again bear against said individual elements, while at the same time rendering said spacer member inactive.

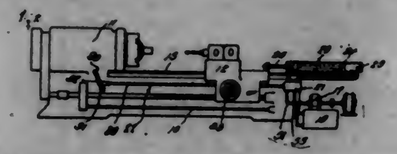
1,883,165. CAR DOOR LOCK. CONRAD R. VEGREN, Chicago, Ill. Filed Apr. 16, 1931. Serial No. 530,508. 6 Claims. (Cl. 292—283.)



2. In combination, a lock plate secured to a relatively fixed member, a hasp fastener secured to a relatively movable member, a hasp supported by said hasp fastener and adapted to engage said lock plate, said hasp being provided with a recessed portion including an inclined wall and a vertical wall and a locking pin having a similarly inclined wall and a vertical wall adapted to extend into said recessed portion.

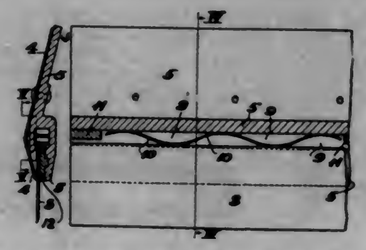
1,883,166. MACHINE TOOL. HARRY F. VICKERS, Detroit, Mich. Filed May 19, 1930. Serial No. 453,846. 6 Claims. (Cl. 121—45.)

1. In a machine tool, a stationary frame, a movable carriage on the frame, fluid pressure actuated means for operating said carriage relative to the frame, and a control for said means including, a valve connected with a fluid supply and an outlet and with said means for operation in either direction, a rack slidably supported on the frame



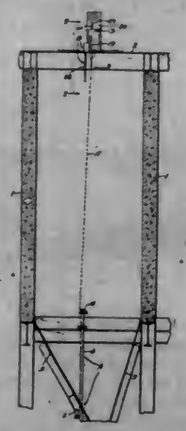
and operatively connected with the valve, and an actuating pinion carried by the carriage on a fixed axis and operatively engaging the rack.

1,883,167. DOCTOR FOR PAPER-MAKING MACHINERY. FREDERICK WILLIAM VICKERY, London, England, assignor to Vickery Incorporated, a Corporation of Massachusetts. Filed May 3, 1930, Serial No. 449,442, and in Great Britain May 14, 1929. 8 Claims. (Cl. 92—74.)



1. In a doctor the combination of a rigid support, a resilient blade having its rear edge resting on said support, spring means bearing upon the outer face of said blade to press it upon a roll and towards surface contact with said support, and upon the rear edge of said blade to press it in its own plane towards the roll.

1,883,168. APPARATUS FOR VISUAL MEASUREMENT OF CONCENTRATION OF SUSPENDED MATERIAL IN GASES. FLOYD H. VIETS, Glendale, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 17, 1930. Serial No. 436,596. 3 Claims. (Cl. 88—14.)



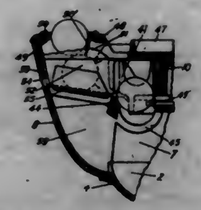
1. In combination with a flue adapted for passage of gas therethrough, a source of light located adjacent a wall of said flue, a light diffusive reflecting means mounted in position to be illuminated by said source of light, said source of light and said reflecting means being located outside of said flue, a light directing tube in position to receive light from said reflecting means and to direct such light through the gas in said flue, sight means adjacent another wall of said flue opposite said first-named wall and aligned with said light directing tube but spaced therefrom, another source of light and another diffusive reflecting means mounted in position to be illuminated thereby, said last named source of light and diffusive reflecting means being mounted outside the flue and adjacent the wall of the flue opposite said light directing tube, sight means in position to receive light directly from said last named diffusive reflecting means, said two sight means being so positioned as to permit simultaneous observation therethrough of light received thereby from the respective reflecting means, and means for varying and measuring the intensity of illumination of one of said sources of light.

1,883,169. VENDING MACHINE STRUCTURE. FRANK H. VOGEL, Columbus, Ohio, assignor to The Columbus Vending Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 6, 1931. Serial No. 528,050. 4 Claims. (Cl. 312—35.)



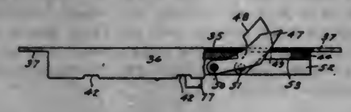
1. Vending machine structure comprising a base portion embodying the usual dispensing mechanism, a receptacle adapted to contain the articles to be dispensed mounted upon said base portion, a retaining ring provided with open-ended slots mounted upon the top of said receptacle, a plurality of bolt members disposed within the space defined by said receptacle and mounted upon the top of said base portion movable into said open-ended slots to hold said retaining ring in secured position and movable out of said open-ended slots to release said retaining ring from secured position, and means for holding said bolt members in place within the slots.

1,883,170. COIN CONTROLLED VENDING MACHINE. FRANK H. VOGEL and RALPH A. VOGEL, Columbus, Ohio, assignors to The Columbus Vending Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 2, 1930. Serial No. 441,070. 3 Claims. (Cl. 194—102.)
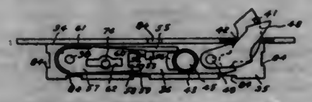


2. Coin controlled mechanism comprising a body portion, a hood projecting from said body portion, a plate, a slotted structure extending from said plate and adapted to fit in said hood, and a removable member for covering the base of said slotted structure.

1,883,171. LOCK. ALBERT VOIGT, New York, N. Y. Filed May 30, 1930. Serial No. 457,586. 13 Claims. (Cl. 70—31.)



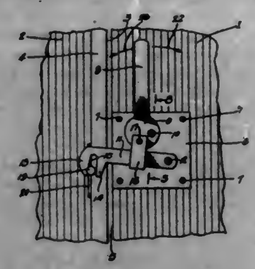
1. In a lock, a casing arranged with an opening, a plate longitudinally slidable in the casing, a pair of bolts arranged in sidewise juxtaposed relation pivotally mounted on the plate with the free ends of the bolts in register with the casing opening and substantially flush with the outer face of the casing in the unlocking position of the bolts, and the bolts having cam edges to engage opposite wall portions of the casing opening to transmit the movement of the plate to movement of the bolts laterally of the plane of movement of the plate and laterally of each other and the casing opening in a direction longitudinal of the plate and hold the bolts against movement when in projected position.

1,883,172. LOCK. ALBERT VOIGT, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,244. 8 Claims. (Cl. 70—31.)



1. In a lock, a casing arranged with an opening in one edge portion thereof, bolt mechanism slidably mounted in the casing to have movement on the longitudinal axis of the casing and through the casing opening, a pivoted latch member yieldingly urged into engagement with the bolt mechanism to retain the said mechanism in predetermined positions, means rotatably carried by the bolt mechanism to actuate the latch member to release the latch member from engagement with the bolt mechanism and move the bolt mechanism relative to the casing opening, and a second pivoted latch member yieldingly urged into engagement with the bolt mechanism to retain the same in one of the predetermined positions thereof, and said second latch member arranged to be actuated by a removable key to release the same from and permit the bolt mechanism to be actuated from the said predetermined position.

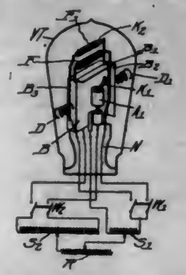
1,883,173. DOOR CLOSING DEVICE. JOSEPH HENRY VON GARTZEN, Creston, Iowa, assignor of forty-nine one-hundredths to Leonard W. Eagan, Creston, Iowa. Filed May 12, 1930. Serial No. 451,764. 6 Claims. (Cl. 292—134.)



1. A door latch comprising a supporting base, latch means movably carried by the base for operative engagement with an engagement member, and means operatively

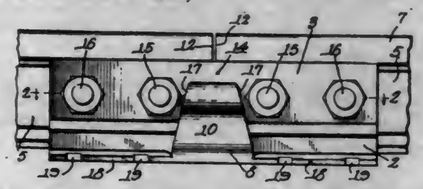
connected with said latch means whereby the same may be moved into engagement with the engagement member, said means operatively connected to said latch means having an extending handle portion and being pivotally secured to said base in a manner whereby the handle portion acts as a weighted lever arm to hold the latch means up and out of engagement with the engagement member when the latch means has been lifted out of engagement with the engagement member.

1,883,174. DISCHARGE TUBE FABRICATION. CARL J. R. H. VON WEDEL, Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Filed Dec. 12, 1927. Serial No. 239,417. 11 Claims. (Cl. 250—27.5.)



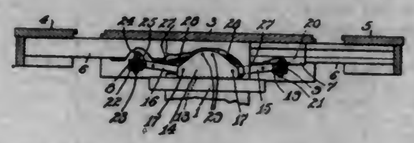
1. A discharge tube comprising an anode and an electron emissive cathode, terminals for said anode and cathode including terminals for supplying heating current for the cathode, and a getter substance extending between said anode and cathode substantially shortening the initial discharge path therebetween, whereby the initial discharge potential between said anode and cathode is reduced and maintained at a low value during degasification of said tube.

1,883,175. RAIL JOINT. GEORGE W. WAGNER, Marlinton, W. Va. Filed July 16, 1931. Serial No. 551,217. 1 Claim. (Cl. 238—205.)



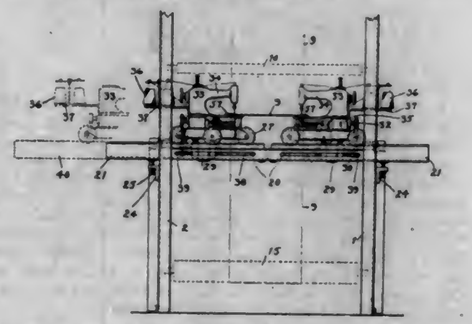
In a rail joint, a chair comprising a base plate having oppositely-disposed overhanging wings provided on their inner edges with upwardly-extended walls having inner and outer bolt holes, the chair being provided, on each side, with a single outwardly-projecting integral buttress located midway between the inner bolt holes, at equal distances from the outer bolt holes, and at equal distances from the ends of the base plate, the buttresses extending inwardly from the extreme outer edges of the base plate, upwardly and inwardly across the wings, and upwardly along said walls, the upper ends of the buttresses being approximately flush with the upper edges of the inner bolt holes and being spaced from the upper edges of said walls, enough to leave room for wheel flanges, the buttresses tapering in width as they extend upwardly, so that the inner bolt holes can be located close together and at the same time have the buttresses afford a maximum amount of reinforcement at their lower, outer ends, and having upper ends of considerable width, compared with the distance between the inner bolt holes, those parts of the outer edge portions of the base plate which lie on opposite sides of the buttresses constituting spike flanges having spike notches, all of which are disposed beyond the ends of the buttresses, the outer edges of the buttresses and the outer edge of each spike flange being disposed in the same straight line with the outer edge of one buttress.

1,883,176. TABLE SLIDE SUPPORT. FREDERICK B. WALTER, Wabash, Ind., assignor to B. Walter & Company, Inc., Wabash, Ind., a Corporation of Indiana. Filed May 8, 1929. Serial No. 361,313. 5 Claims. (Cl. 45—118.)



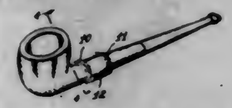
1. The combination with a table base, of a table top mounted on said base, a table leaf, a slide unit support for said leaf to permit the same to slide in planes parallel with said top, a lever for supporting said slide unit pivoted on said base and having one end connected to said slide unit to permit said unit to move vertically, and a spring anchored at one end and connected at its other end to said lever, the tension of said spring and the weight of the leaf and slide unit being so related as to sustain said leaf in either of the two extreme vertical positions to which it may be moved.

1,883,177. MACHINE FOR STITCHING WIRE FABRICS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,539. 39 Claims. (Cl. 112—2.)



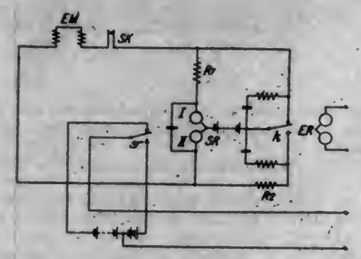
1. In a machine for stitching a continuously fed tensioned fabric, the combination of a support, two pairs of pivotally supported tracks carried thereby, means for vertically adjusting the tracks, a carriage shiftably supported by each pair of tracks at the opposed edges of the fabric for gravitational movement toward the edge of the fabric, and a sewing machine carried by each carriage and spaced apart by the fabric.

1,883,178. PIPE SUPPORTER. VICTOR W. WILLS, Philadelphia, Pa. Filed Mar. 29, 1930. Serial No. 439,918. 6 Claims. (Cl. 131—12.)



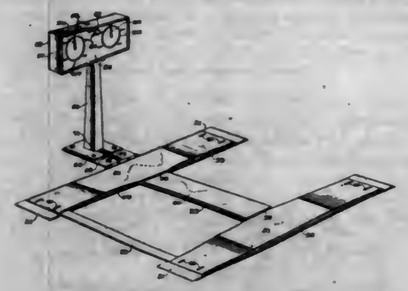
4. A pipe supporter comprising spaced bars lying substantially in the same plane, and spaced loops connecting corresponding ends of the bars, said loops being of such individual dimensions as to fit and clasp different parts of a pipe stem.

1,883,179. SIGNALING SYSTEM. CHRISTIAN WIBS-PEINTNER, Berlin-Charlottenburg, and GEORG CHODZIESNER, Berlin-Zehlendorf, Germany, assignors to International Communications Laboratories, Incorporated, New York, N. Y. Filed Sept. 24, 1930, Serial No. 484,045, and in Germany Sept. 26, 1929. 12 Claims. (Cl. 178—2.)



1. In a telegraph system, the combination including a normally closed loop circuit extending between two stations, an electromagnetic receiving device and a transmitting key at one station connected in the loop, a sending relay at the other station having a winding connected in the loop and controlled by the transmitting key, a source of current at the other of said stations connected in the loop, a receiving relay at the said other station having its marking contact in the loop, a second winding for the sending relay included in a normally closed circuit containing said source of current and said marking contact, and means including said source of current for maintaining the sending relay in its normal position upon closure of the spacing contact of the receiving relay to operate the receiving device.

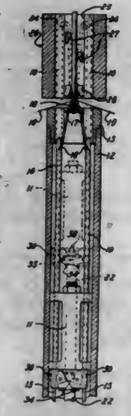
1,883,180. VEHICLE WHEEL TESTING APPLIANCE. IRA A. WEAVER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield Ill., a Corporation of Illinois. Filed July 13, 1929. Serial No. 378,007. 14 Claims. (Cl. 73—51.)



8. In a vehicle-wheel testing appliance, the combination of a member movable by the rolling contact of a vehicle-wheel thereon when the brake is applied to such wheel, means to resist such movement of said member, means controlled by said member to move a record card, and means controlled by said member to trace the movement of said member on said card during the travel of the latter.

10. In a vehicle-wheel testing appliance, the combination of a member movable by the toe in or toe out of a vehicle-wheel in rolling contact therewith, means controlled by said member to move a record card, and means controlled by said member to trace such movement of said member on said card during the travel of the latter.

1,883,181. MATERIAL ADVANCING APPARATUS. LEO L. WEAVER, Roselle, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,887. 8 Claims. (Cl. 96—3.)

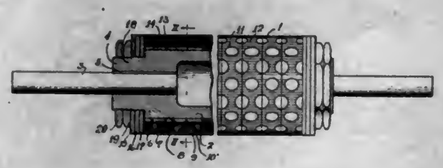


1. In an appaaratus for advancing strand material, a reciprocable carrier for intermittently advancing the material, and inertia operated means carried thereby for engaging the material and thereby controlling the amount of material advanced by the carrier.

1,883,182. ESTERIFICATION PRODUCT OF DICARBOXYLIC ACIDS AND THEIR PRODUCTION. FRANZ WEBEL, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 1, 1928, Serial No. 251,234, and in Germany Feb. 2, 1927. 13 Claims. (Cl. 260—103.)

1. A process for producing water-soluble derivatives of dicarboxylic acids which comprises acting on 1 molecular proportion of a dicarboxylic acid with at least 2 molecular proportions of an alkylene oxid.

1,883,183. MARKING ROLL COMPOSITION. HERMAN G. WEBER, Sheboygan, Wis. Filed July 28, 1930. Serial No. 471,201. 11 Claims. (Cl. 92—48.)

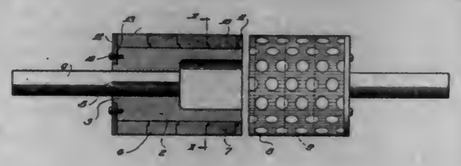


1. A marking roll comprising a supporting core having thereon an engraved marking surface of a hard heat and pressure resistant compressed fiber composition.

1,883,184. MARKING ROLL WITH HARD RUBBER SURFACE. HERMAN G. WEBER, Sheboygan, Wis. Filed July 28, 1930. Serial No. 471,203. 9 Claims. (Cl. 92—48.)

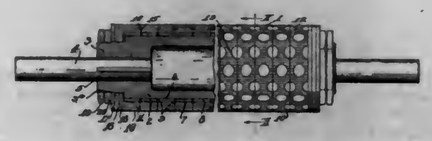
1. A device for impressing a watermark in a fibrous web during the course of its formation, comprising a supporting shaft, a plurality of engraved rubber sleeves snugly fitting about said shaft, the density of the rubber of said sleeves being such as to render the sleeves hard

enough to watermark the fibrous web, yet sufficiently resilient to cushion the impact of the sleeves against the web to thereby prevent cutting of the web, the abutting



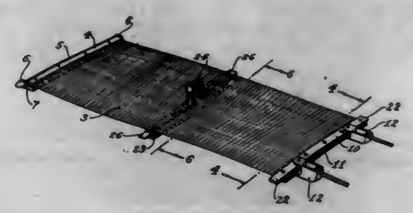
ends of adjacent sleeves having cooperating male and female members for preventing relative rotation between said sleeves.

1,883,185. MARKING ROLL. HERMAN G. WEBER, Sheboygan, Wis. Filed July 28, 1930. Serial No. 471,197. 19 Claims. (Cl. 92—48.)



1. A marking roll comprising a cylindrical support, a layer of resilient material secured to the periphery of said support and a sectional marking sleeve detachably mounted on the periphery of said resilient layer and of such diameter as to snugly fit about said layer.

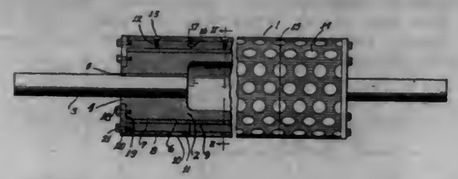
1,883,186. APPARATUS FOR SCREENING MATERIALS. DON A. WEBER, Fort Wayne, Ind., assignor to The Deister Concentrator Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Oct. 20, 1928. Serial No. 313,752. 12 Claims. (Cl. 209—403.)



1. In a screening apparatus of the character described, a supporting frame, a screen cloth adapted for suspension on said frame, means for suspending said cloth on said frame including a bracket having a bearing socket provided with a side entrance way, and a tension element having a sharp edged bearing member formed to hook into said socket.

1,883,187. MARKING ROLL WITH METAL PLATES AND CUSHION. HERMAN G. WEBER, Philadelphia, Pa. Filed July 28, 1930. Serial No. 471,202. 6 Claims. (Cl. 92—48.)

1. A marking roll comprising a supporting shaft, a layer of resilient material secured to the periphery of said shaft, detachable metallic sleeves about said layer of resilient material and of such diameter as to snugly



fit about said layer, stereotypes secured to said sleeves, and means for detachably maintaining said sleeves on said shaft.

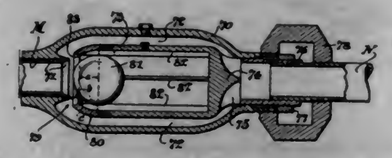
1,883,188. LIGHT-DENSITY COMPOSITION OF PARIS GREEN AND CALCIUM ARSENATE AND METHOD OF MAKING THE SAME. BYRON PAYNE WEBSTER, Plainfield, N. J., assignor to Chipman Chemical Company, Inc., Bound Brook, N. J., a Corporation of New York. Filed Aug. 30, 1930. Serial No. 479,108. 11 Claims. (Cl. 167—15.)

10. An improved composite insecticide containing Paris green and calcium arsenate the particles of which are so bonded together as to be practically inseparable by mechanical means, said composite insecticide having a very light density approximating that of calcium arsenate having such a density that about 80 to 90 cubic inches thereof weighs about one pound.

1,883,189. METHOD OF MAKING DIARYLGUANIDINES. MORRIS L. WEISS, Newark, and CARLETON P. BARDSLEY, South Orange, N. J., assignors, by mesne assignments, to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 23, 1928. Serial No. 294,934. 3 Claims. (Cl. 260—125.)

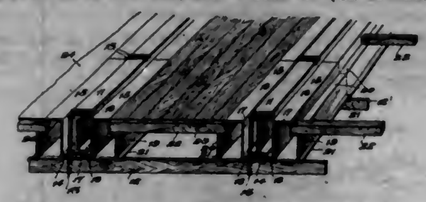
1. In a method of making diarylguanidine, the steps which consist in passing chlorine into a brine at a temperature of about 0° C. so that a precipitate of chlorine hydrate crystals is produced therein, thereupon adding a solution of an alkali metal cyanide in amount not exceeding that theoretically required to react with all such chlorine present, whereby a solution of cyanogen chloride is formed, and then adding a primary aromatic amine of the benzene series to such solution.

1,883,190. FLOW GOVERNOR. RUDOLPH WELCKER, Springfield, Mass., assignor of one-fourth to Franklin G. Neal, Springfield, Mass. Filed May 25, 1928. Serial No. 280,577. 27 Claims. (Cl. 137—78.)



25. A flow governor comprising a casing with a flow passage therethrough, rolling means in said passage automatically responsive to a predetermined excess velocity flow or tendency to such flow through the casing, stationary means in the casing to cooperate with said rolling means according to the position of the latter, in throttling the flow to approximately its predetermined amount, said flow passage being arranged so as to prevent said cooperating means from completely shutting off the flow.

1,883,191. CONCRETE FLOOR CONSTRUCTION. HEWITT L. WELLS, Washington, D. C. Filed Mar. 14, 1930. Serial No. 435,846. 4 Claims. (Cl. 25—131.5.)



1. A sheet metal form for concrete construction, comprising a metal plate bent to form a top and sides, the sides extending downwardly from the top and being of like depth to produce a self supporting unit, one of the sides forming the wall of a mold, and the other side bent outwardly to form a seat for supporting a system of slab formwork.

1,883,192. CONCRETE FLOOR CONSTRUCTION. HEWITT L. WELLS, Washington, D. C. Filed Nov. 19, 1929. Serial No. 408,342. 2 Claims. (Cl. 25—131.5.)

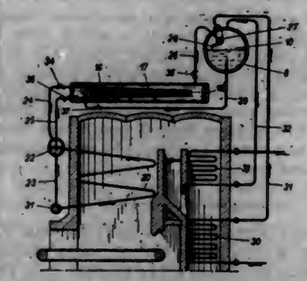


1. Means for forming a concrete floor, comprising a metal form constructed from a metal plate by bending to form a top and sides bent downwardly from the top, the sides being of different depths, one side forming the wall of a mold, and the side of lesser depth being bent at its lower edge to form a seat to support a system of slab forms, a supporting means interposed between the sides of the metal form and engaging the top thereof for maintaining the metal form in position.

1,883,193. BLEACHING OF PAPER PULP. SIDNEY D. WELLS, Quincy, Ill., assignor to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Filed Jan. 13, 1930. Serial No. 420,622. 3 Claims. (Cl. 8—2.)

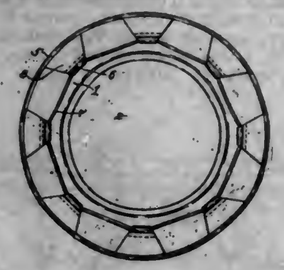
1. In the bleaching of pulp, the steps which comprise subjecting the pulp to aqueous suspension to hypochlorous acid to partially bleach the pulp, washing the pulp and subsequently subjecting the partially bleached pulp under a continuously maintained distinctly alkaline condition to an alkaline hypochlorite bleaching agent.

1,883,194. INDIRECTLY HEATED STEAM GENERATOR. FRIEDRICH WEMPE, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft m. b. H., Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Mar. 5, 1932, Serial No. 597,075, and in Germany Apr. 4, 1931. 7 Claims. (Cl. 122—33.)



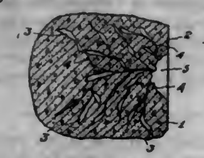
1. In a steam generator in which steam is generated by the indirect method, an upper drum, a plurality of lower drums connected to said upper drum, said upper and lower drums forming a working steam system, a heating steam system including a fire box, a header, a plurality of heat receiving tubes in said fire box connected to said header, and a heating element in each of said lower drums, each of said heating elements being connected to said header.

1,883,195. ADVERTISING ATTACHMENT FOR SPARE TIRES. BEN WENGARD, Waterloo, Iowa. Filed Oct. 31, 1931. Serial No. 572,335. 3 Claims. (Cl. 40—129.)



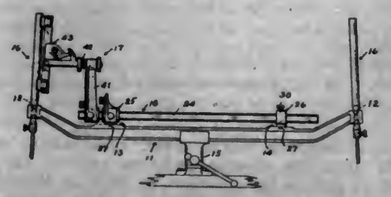
1. In combination, a flat display member positioned upon one side face of a pneumatic tire, means engaged with said member peripherally to keep it tensionally extended in a single plane, flexible flaps connected to the circumferential part of said member to cross the tire tread and extend centrally upon the opposite face of the tire, said flaps having elastic connecting means therebetween to retain them and the said display member centrally upon the tire adjustably and under tension.

1,883,196. PROCESS OF REPAIRING MASONRY STRUCTURES. LOUIS S. WERTZ, Shaker Heights, Ohio. Filed Jan. 20, 1930. Serial No. 422,023. 5 Claims. (Cl. 72—128.)



1. The process of repairing masonry structures which consists, in removing the disintegrated masonry adjacent the surface of the structure to form a repair cavity; forcing filling material into the masonry structure through any channels draining into said repair cavity to fill said channels and any communicating pockets; and then plugging the repair cavity.

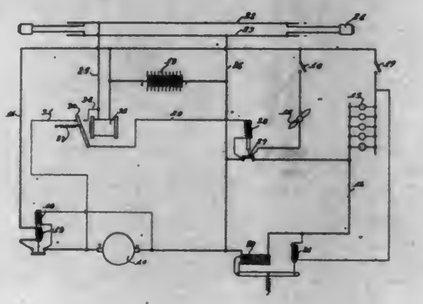
1,883,197. AXLE GAUGE. JOHN WALTER WEST, deceased, Albany, Calif., by Katherine Hennings West, executrix, Albany, Calif. Filed Feb. 5, 1930. Serial No. 426,035. 4 Claims. (Cl. 33—193.)



1. In a gauge for an axle having a king-pin hole and a pair of spaced and planar spring perches, a test pin adapted to be fixedly mounted on said axle to extend axially of said hole, a base bar adapted to be mounted on said spring perches, a testing head providing a member arranged for

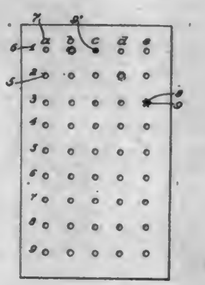
adjusted positioning to have an axis thereof parallel to the axis of said test pin, said head also including an arm pivoted to said bar for angular adjustment about the axis thereof and supporting said head for the aforesaid adjusted positioning of said head member with respect to said test pin, and means associated with said head to determine the angularity of said arm with respect to the plane of a said perch.

1,883,198. ELECTRICAL DISTRIBUTION REGULATING SYSTEM FOR RAILWAY CARS. PHILIP S. WESTCOTT, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 18, 1930. Serial No. 503,144. 6 Claims. (Cl. 171—313.)



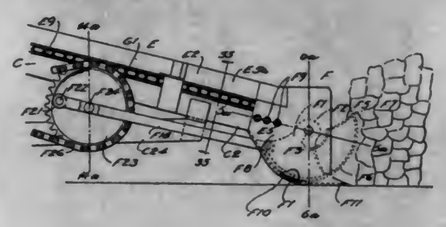
1. In a system containing a variable speed generator, a storage battery and an auxiliary power supply circuit connected to a translating circuit, and a regulator for said latter circuit; a relay having contacts normally short-circuiting the regulator, a voltage coil for operating said relay, said coil being connected across the generator, and means for automatically connecting said operating coil to the auxiliary supply circuit, when current flows from the auxiliary supply circuit to the battery.

1,883,199. SELECTIVE MARK INDICATOR FOR TESTS. JAMES A. WILEY, Cedar Falls, Iowa. Filed Sept. 16, 1931. Serial No. 563,030. 9 Claims. (Cl. 35—12.)



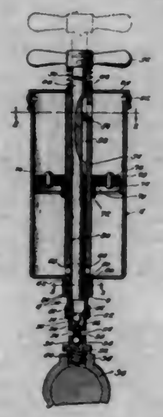
1. In a device for use in giving examinations of the kind in which the examinee indicates answers which he desired to give to the questions by marking through an apertured sheet upon a sheet below, a cover having apertures of relatively small size, and a removable sheet positioned closely beneath the cover having a desired number of larger circular location marks thereon to be positioned below said apertures and wholly concealed by the cover, whereby an examinee's markings made through such apertures may be discriminated as to their correctness or incorrectness.

1,883,200. SHOVELING MACHINE. WILLIAM WHALEY, Knoxville, Tenn. Filed Feb. 28, 1930. Serial No. 432,209. 21 Claims. (Cl. 214—90.)



1. In a shoveling machine, the combination with a supporting structure, of a shovel hung to the forward part of said structure on a line which is horizontal and transverse to said structure and extends through the upper part of the shovel and is at a height to allow the shovel to be below and oscillate on and below said line, and means engaging the shovel below the level of said line to oscillate said shovel.

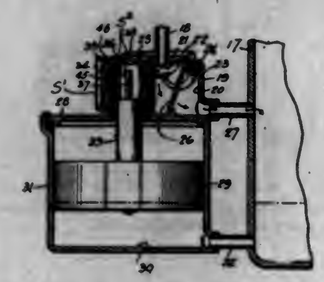
1,883,201. LUBRICANT COMPRESSOR. LEONARD H. WHEELER, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 31, 1929. Serial No. 336,408. 8 Claims. (Cl. 221—47.4.)



2. A high pressure lubricant compressor comprising a barrel, a piston in said barrel, a piston stem threaded through said piston and rotatably mounted in said barrel, said stem having a cylindrical bore extending longitudinally thereof, a plunger longitudinally slidable in said bore, cooperating means on said plunger and stem for preventing relative rotation thereof, and a high pressure cylinder at the end of said barrel and in axial alignment with the bore of said stem.

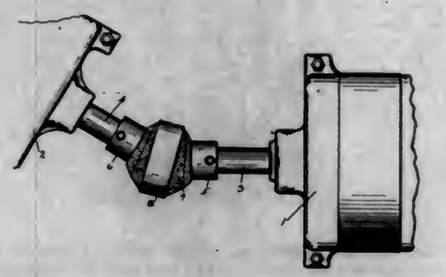
1,883,202. OIL-FEEDING APPARATUS FOR ENGINES. SANFORD E. WHITE, Santa Monica, Calif. Filed Jan. 22, 1931. Serial No. 510,574. 14 Claims. (Cl. 184—103.)

1. An apparatus of the character described comprising a source of oil supply, a line by which said oil source is adapted to be connected to a crank case of an engine, a valve in said line for controlling the passage of oil from said source to the crank case, means tending to open said valve, a member having a chamber adapted for communication with the crank case so that oil will flow from the crank case into said chamber and to a level corresponding to the oil level in the crank case, a float in the chamber, coacting means correlated to the valve and the float for



closing the valve against the action of said valve opening means when the float is elevated to an uppermost position by oil rising to a predetermined level in the chamber, and means independent of the oil in said chamber for lifting the float to its uppermost position to maintain said valve closed, said float lifting means having an element adapted for correlation to the engine so as to be operative only when the engine is operating.

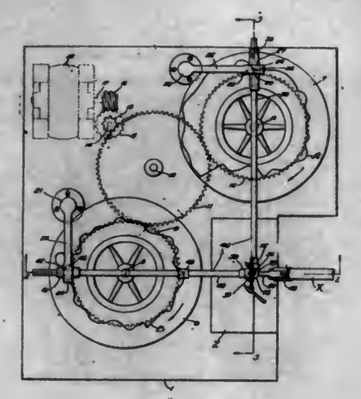
1,883,203. JOINT. IRVING P. WHITEHOUSE, Erie, Pa., assignor to H. C. Lord, Erie, Pa. Filed Oct. 25, 1930. Serial No. 491,180. 9 Claims. (Cl. 64—96.)



1. In a joint, the combination of two members to be joined end to end; and a rubber connection having a wall surrounding the ends of the members, the inner surface of the wall being bonded thereto.

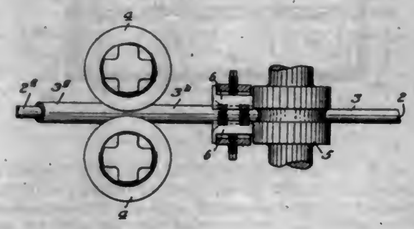
1,883,204. SIGNATURE MACHINE. JOHN WHITAKER, North Wales, Pa., assignor to Safe Guard Corporation, Lansdale, Pa., a Corporation of Delaware. Filed Jan. 23, 1928. Serial No. 248,868. 20 Claims. (Cl. 33—18.)

1. In a writing device, the combination of a writing implement, a support for said writing implement, a tracer element carried by said support, a relatively movable element having an undulated groove adapted to receive said tracer element for moving said support in one general direction, means for moving said support in a general direction substantially at right angles to the first said general direction, said groove having additional undulations adapted to move said support substantially perpendicular to the said general directions.



17. In a writing device, a scriber controlling element having a stylus guideway provided with undulations effective in different planes throughout a writing portion of the groove for forming and simultaneously shading characters being written by the scriber.

1,883,205. METHOD OF ROLLING BIMETALLIC ARTICLES. FREDERICK A. WHITEHEAD, Glassport, Pa., assignor to Copperweld Steel Company, Glassport, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1929. Serial No. 348,289. 10 Claims. (Cl. 80—60.)

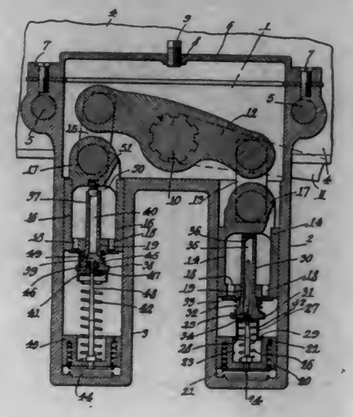


10. In the method of rolling bimetallic articles having a steel core and an envelope of softer metal, the steps consisting in rolling the metal while the core and the envelope are both hot and plastic, so shaping the bimetallic body that the steel core assumes substantially the desired final shape, and then rerolling the body so as to re-shape the envelope while leaving the shape of the core substantially unaffected.

1,883,206. HYDRAULIC SHOCK ABSORBER. JOHN B. WHITTED, Hagerstown, Md., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Aug. 2, 1928. Serial No. 297,040. 6 Claims. (Cl. 188—88.)

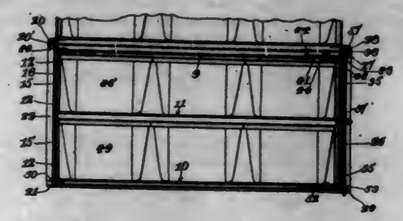
1. A hydraulic shock absorber including a cylinder, a valved piston therein having a high pressure side and a no pressure side, there being an opening through the

piston for the flow of fluid displaced from the high pressure side by the piston, means for controlling flow through said piston opening and means carried by the piston and



opening into the no pressure side for building up an intermediate pressure of displaced fluid while flowing to the no pressure side.

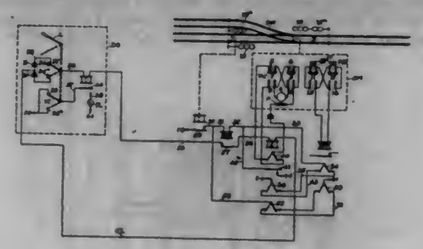
1,883,207. COLLAPSIBLE CONTAINER. EARNEST ALBERT WHITTLE, Jacksonville, Fla. Filed July 9, 1929. Serial No. 377,047. 6 Claims. (Cl. 220—4.)



1. In a collapsible container of that type including a pair of end walls, one of said walls including a wall forming member provided at its top with an outwardly directed right angularly disposed bend merging into an angle shaped flange forming in connection with the bend an inwardly opening channel, and the other of said walls including a wall forming member provided at its top with an outwardly directed right angularly disposed flange merging into a vertical extension opposing said channel, and each of said members having its bottom formed with an outwardly directed right angularly disposed bottom flange, one aligning with the bend and the other with said top flange, said extension and angle shaped flange providing for nesting and connecting a superimposed container on the top of and to a lower container.

1,883,208. RAILWAY TRAFFIC CONTROLLING SYSTEM. SEDGWICK N. WIGHT, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Nov. 1, 1929. Serial No. 404,021. 2 Claims. (Cl. 246—3.)

1. In combination, a power operated switch machine for operating a track switch, a polar relay for governing the operation of the switch machine, a polar relay repeating the position of the switch points, indicating means, a circuit for the indicating means including contacts of said

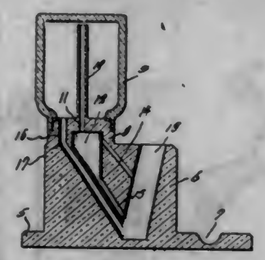


polar relays, and automatic means for intermittently opening and closing said circuit when the contacts of the polar relays are out of correspondence.

1,883,209. ADHESIVE. WILLIAM R. WILLAUER, Philadelphia, Pa., assignor to Marathon Paper Mills Company, Chicago, Ill., a Corporation of Wisconsin. Filed May 5, 1930. Serial No. 450,062. 3 Claims. (Cl. 87—17.)

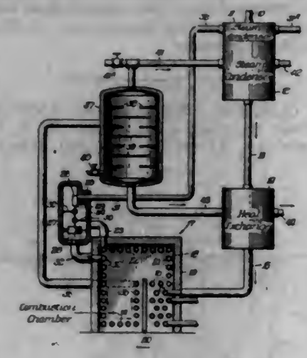
1. The process of preparing an adhesive which comprises mixing 200 parts by weight of casein with 10 to 60 parts by weight of sulphur in a dry way and adding a solution of water and alcohol to such mixture to form a liquid suspension thereof.

1,883,210. INKWELL. DANIEL WILLEY, Sulphur, Okla. Filed Dec. 22, 1930. Serial No. 504,108. 1 Claim. (Cl. 120—59.)



An inkstand comprising a body having a well in its front part sloping upwardly and forwardly with its upper end opening out through the top of the body, a reservoir detachably connected to the top of the body and located rearwardly of the well, said body having a passage therein connecting the reservoir with the lower end of the well, a chamber in the body located forwardly of the passage and in rear of the well and in the upper part of the body, a tube connecting the top of the chamber with the upper part of the reservoir, a passage connecting the bottom of the chamber with the lower part of the well, the latter passage being located above the first passage, said body having another passage therein for connecting the upper portion of the well with an intermediate part of the chamber, the last-mentioned passage being located above the second-mentioned passage, whereby when the ink in the well is partly exhausted, air will flow through the upper or last-mentioned passage into the chamber and then into the reservoir when the ink in the well is practically all exhausted air will enter the chamber through both of the passages leading into the chamber and thus increase the flow of ink to the well.

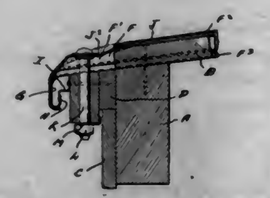
1,883,211. CONCENTRATION OF CAUSTIC SODA. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Oct. 20, 1930. Serial No. 489,969. 6 Claims. (Cl. 23—184.)



1. Method of concentrating a caustic solution which comprises heating the solution to a temperature of about 750° F. in a closed conduit, introducing the hot fluid into a separator chamber and sweeping hot caustic with an inert gas for removing further amounts of water therefrom.

4. The method of preparing substantially anhydrous caustic soda which comprises heating an aqueous solution of caustic soda in resistant pipe still tubes to liberate steam, trapping out said steam, raising the temperature of the solution in the tubes to about 750° F., separating the substantially anhydrous caustic leaving the pipe stills from the steam which is mixed therewith, and stripping said substantially anhydrous caustic with a hot inert gas to sweep out further amounts of water.

1,883,212. CAR ROOF. ALFRED R. WILSON, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 429,126. 5 Claims. (Cl. 108—5.4.)



1. In a car roof of the flexible type, the combination with a roof frame and a plurality of roofing sheets laid thereon having downturned flanges overlapping and spaced from the eaves, of a transverse cap or weatherproofing between adjacent sheets having downturned flanges outside the flanges of said sheets and means external of the car body but inside said downturned flanges for drawing down said transverse cap upon said sheets whereby said caps and sheets are held down with freedom for relative lateral movement.

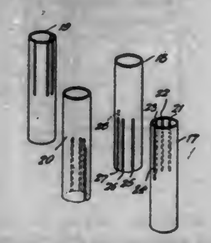
1,883,218. CAR ROOF. ALFRED R. WILSON, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed Feb. 3, 1930. Serial No. 425,577. 5 Claims. (Cl. 108—5.4.)

1. In a car roof of the flexible type including relatively movable roofing sheets, a roof frame comprising a series of carlines and a beam extending uninterruptedly longitudinally of the car at the ridge above said series of car-



lines and secured thereto, said beam constituting the support for the upper ends of said relatively movable sheets and a hoist anchorage.

1,883,214. ORNAMENTAL OBJECTS. EDWIN BIRD WILSON, Forest Hills, and NICHOLAS JOHN RESSETAR, Flushing, N. Y., assignors to Design Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1931. Serial No. 562,100. 3 Claims. (Cl. 41—10.)

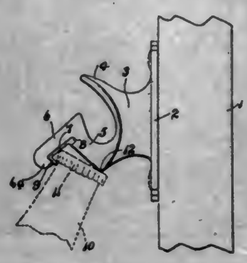


3. An ornamental body comprising a plurality of tubular members joined together in intersecting relationship by means of slots therein.

1,883,215. LOW VISCOSITY NITROCELLULOSE AND PROCESS OF MAKING THE SAME. WILLIAM COURTNEY WILSON, Chicago, Ill., assignor, by direct and mesne assignments, to Cellovis, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 1, 1926. Serial No. 119,995. 19 Claims. (Cl. 260—145.)

14. A nitrocellulose compound comprising the nitration product of a nitrating acid and a chemically altered cellulose, said product having initially the property of forming with 19 parts of butyl acetate a solution having a viscosity not greater than 150 centipoises at 25° C. when one part thereof is dissolved.

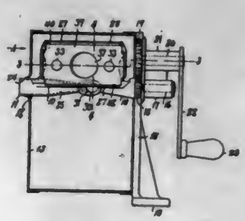
1,883,216. BOTTLE OPENER. ALEXANDER F. WINTERS, Grand Rapids, Mich., assignor to Winters & Crampton Manufacturing Company, Grandville, Mich., a Corporation of Michigan. Filed Oct. 12, 1931. Serial No. 568,288. 2 Claims. (Cl. 65—46.)



1. A bottle opener including two arms formed as an integral casting and adapted to be positioned with one arm extending in an upward and forward direction, and the other arm extending from the front end of the first

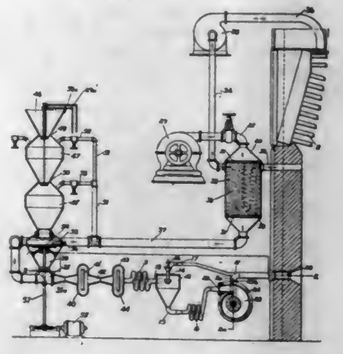
arm in a downward and forward direction, the second arm terminating at its lower end in a downwardly and rearwardly extending hook, and a plate of metal formed at its lower end with a downwardly and rearwardly extending lip located at the inner side of the second arm with said lip bearing against the hook, and the opposite end of the plate seated at the inner corner formed by the junction of the two arms.

1,883,217. PENCIL SHARPENER. HERMAN L. WITTSTEIN, New Haven, Conn., assignor to The Atlas-Ansonia Company, New Haven, Conn., a Corporation. Filed July 3, 1931. Serial No. 548,586. 3 Claims. (Cl. 120—96.)



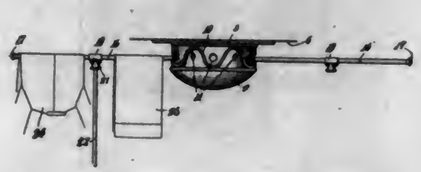
1. A pencil sharpener having a rotary blade-carrier provided with an axial pencil-receiving socket and formed with a transverse passage extending therethrough from side to side adjacent the inner end of the said pencil-receiving socket which it intersects to permit the forcible lateral expulsion of broken leads, shavings and dust; a blade positioned to engage and sharpen a pencil as the same is moved axially into the said socket; and a seat extending part way into the said transverse passage in position to support the sharpened end of a pencil therein against the thrust of the said blade.

1,883,218. METHOD OF AND APPARATUS FOR PULVERIZING AND TREATING MATERIAL. WALTER J. WOHLENBERG, New Haven, Conn., assignor to Erie City Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 285,833. 25 Claims. (Cl. 83—46.)



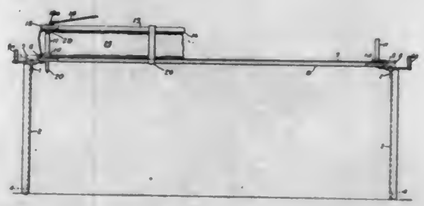
1. In a pulverizer, the combination of a plurality of units comprising an initial unit and secondary units, the secondary units being in series with the initial unit and in parallel with each other, each unit comprising a member having a passage having a wall deflected from the approaching path formed by the passage; means moving gaseous fluid at high velocity through the passage; and devices feeding material to the passage, the material being driven through the passage with a continuous movement by the driving force of the gaseous fluid and the deflection inducing an abrasive impingement of the material on the wall of the passage.

1,883,219. CLOTHES DRIER FOR INDOOR USE. AARON WOLF, Hartford, Conn. Filed Dec. 2, 1930. Serial No. 499,444. 11 Claims. (Cl. 211—113.)



1. A clothes drier for indoor use, comprising a casing having an annular inner wall and an annular outer wall disposed concentrically, the outer wall being provided with a plurality of openings, and a plurality of socket tubes equal to the number of said openings and connected with said inner wall and extending radially outward therefrom to said openings, the hollow of each socket tube communicating with one of said openings in said outer ring, and a plurality of clothes arms to be detachably thrust through said openings and into said socket tubes, and thus supported.

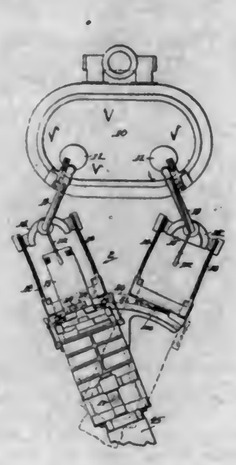
1,883,220. TUFTING TABLE APPARATUS. HARRY E. WOLF, Pittsburgh, Pa. Filed May 31, 1930. Serial No. 458,744. 8 Claims. (Cl. 112—3.)



1. A tufting table comprising an upright frame, a perforated bottom member adapted to support a mattress, means for pivotally securing said member to said frame, means for locking said member in position, a removable perforated top member for laying on the mattress, means for positioning said top member with its perforations registering with the perforations in the bottom member, and a needle device for carrying a length of tape and adapted to be successively guided by the top member perforations through the corresponding bottom perforations, said locking means being also adapted to lock said bottom member in an inverted position when the top and bottom members and the mattress are rotated on said pivotal means to permit access to the threaded-through ends of tape.

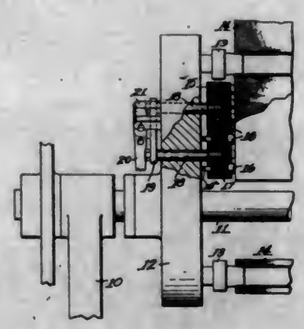
CARNEGIE LIBRARY OF ATLANTA

1,883,221. MULTIPLE CASTING AND FINISHING MACHINE FOR STEREOTYPE PRINTING PRESS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 9, 1926, Serial No. 121,403. Renewed June 11, 1932. 3 Claims. (Cl. 22—3.)



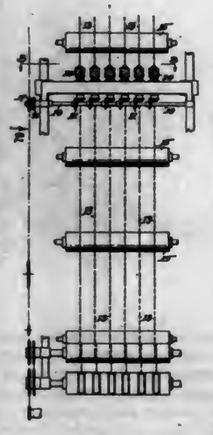
1. The combination with a finishing machine mounted to turn on a pivot, of a plurality of casting machines, each one arranged in stationary position with its axis in alignment with said pivot to deliver its casting to a finishing machine located in line with the pivot.

1,883,222. PAPER ROLL BRAKING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 12, 1931. Serial No. 508,046. 4 Claims. (Cl. 242—75.)



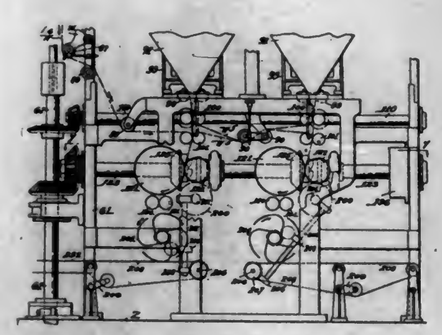
1. In a braking device for a paper roll, the combination of means for applying pressure for braking purposes to various points unconnected with and isolated from each other at different distances from the center of the paper roll and on the end surface thereof, whereby the amount of braking action will be dependent upon the diameter of the roll.

1,883,223. MEANS FOR CLEANING CONVEYER CHAINS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 23, 1930. Serial No. 504,229. 8 Claims. (Cl. 101—423.)



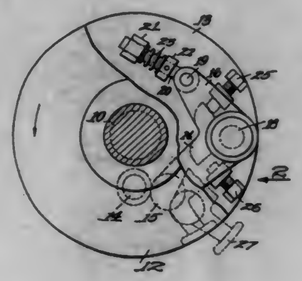
1. The combination with a traveling conveyer for delivering newspapers from the press delivery, of movable means located in position to operate on the inner side of the return strand of the conveyer for removing particles of foreign matter adhering thereto.

1,883,224. FOLDING AND DELIVERY MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 26, 1926, Serial No. 111,787. Divided and this application filed Apr. 6, 1929. Serial No. 353,196. Renewed Apr. 7, 1932. 23 Claims. (Cl. 270—65.)



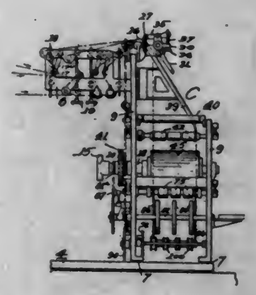
1. In a folder, the combination with a drag roll for introducing one or more webs into the folder, of a former located in a position for receiving the webs from the drag roll, means for supporting the former comprising a pair of brackets, a shaft extending across under the former, between but not in contact with, the brackets, a support at each end of the shaft, means carried by said supports for supporting the former, and means for adjusting the position of the shaft and the former.

1,883,225. AUTOMATIC DISCONNECTING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 22, 1928. Serial No. 321,262. 8 Claims. (Cl. 192—56.)



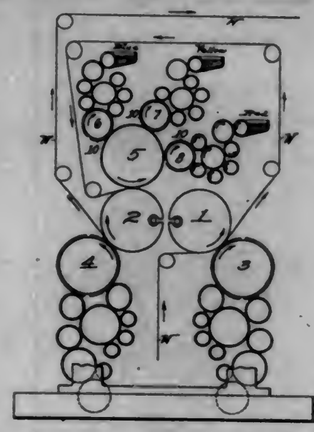
1, In a device of the character described, the combination with a driving member having a fixed projection eccentrically arranged and a driven member, of a lever pivotally mounted on the driven member and having a part on one side of this pivot normally in the path of said fixed projection to transmit motion therefrom to the driven member, a rod pivotally connected with said lever on the other side of said pivot, a spring on the rod for holding the lever in driving position, said spring being capable of yielding to allow the lever to be forced out of driving position when undue resistance is encountered and means for holding the lever in inactive position until reset.

1,883,226. FOLDING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Oct. 28, 1926, Serial No. 144,877. Divided and this application filed Nov. 18, 1929. Serial No. 407,963. Renewed May 11, 1932. 13 Claims. (Cl. 270—5.)



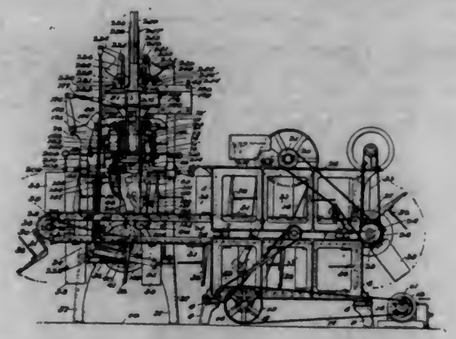
1. In a folding machine, the combination with a former and a drag roll mounted to deliver thereto, of a series of propellers, levers on which said propellers are mounted, springs for individually operating said levers to force the propellers against the drag roll, a shaft having projections on which said levers are pivoted and provided with a handle, whereby said shaft can be turned to move all the propellers into or out of contact with the drag roll, and means for holding the handle in either extreme position, said springs being adjustable independently so that the operation of the handle will not affect their adjustments.

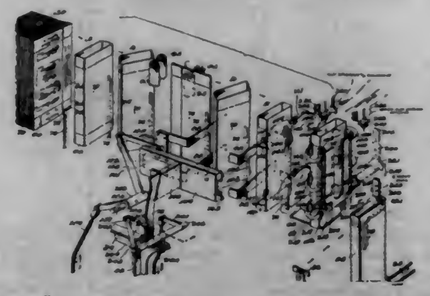
1,883,227. COLOR PRINTING PRESS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 2, 1930. Serial No. 479,249. 5 Claims. (Cl. 101—176.)



1. In a multi-color printing press, the combination with a hard surfaced printing cylinder, a plurality of soft surfaced color printing cylinders directly in contact therewith and separate inking means for each color printing cylinder, of an impression cylinder located in direct contact with said pringting cylinder.

1,883,228. CARTON FEEDING MACHINE. GEORGE H. BENT, Battle Creek, Mich. Filed June 28, 1927. Serial No. 202,134. 59 Claims. (Cl. 93—44.)

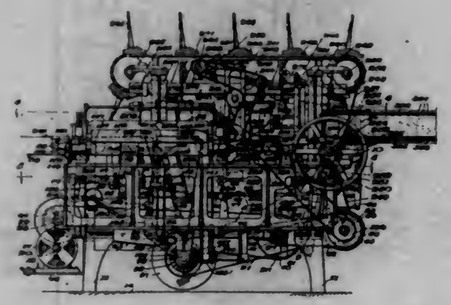




1. In apparatus of the character described, a carton holder continuously moving in one plane only, a carton receiver arranged to move into cooperative relation with said carton holder, and means for positively moving the carton out of the receiver onto said continuously moving carton holder.

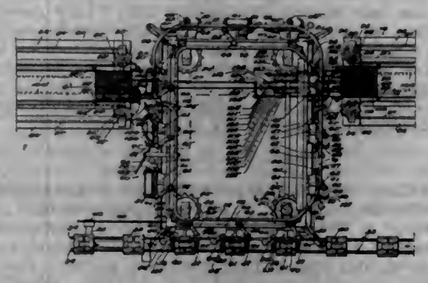
56. Blank separating and forwarding means comprising a knife arranged to reciprocate rectilinearly in a plurality of angularly related directions and rotate first in one direction and then in the opposite direction.

1,883,229. WRAPPING MACHINE. GEORGE H. BENT, Battle Creek, Mich. Filed Apr. 1, 1929. Serial No. 351,731. 38 Claims. (Cl. 93—7.)



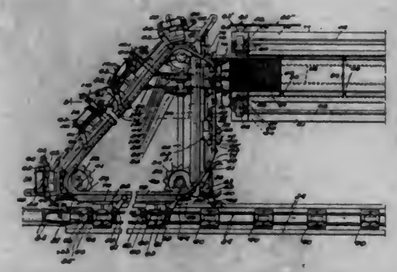
1. In a machine of the character described, the combination with continuously movable means for advancing an article having a wrapper overlapped on the bottom thereof to provide a seam, of a heated element movable toward and away from the bottom of the article and adapted to engage and seal said seam, and means for operating said element timed to move the same so that it engages the seam of the wrapper only.

1,883,230. CARTON FEEDING MACHINE. CHARLES F. RICHARD, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association limited of Michigan. Filed Apr. 2, 1929. Serial No. 351,929. 27 Claims. (Cl. 93—44.)



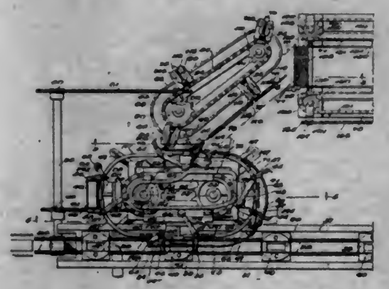
1. In a carton feeding machine, a plurality of mechanisms each adapted to open and advance cartons, and a plurality of pockets all movable past each of said mechanisms and adapted to selectively receive the open cartons advanced thereby.

1,883,231. CARTON FEEDING MACHINE. CHARLES F. RICHARD, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association limited of Michigan. Filed Apr. 2, 1929. Serial No. 351,930. 36 Claims. (Cl. 93—44.)



1. In an apparatus of the character described, the combination of means for supporting a supply of cartons, a plurality of continuously travelling pockets successively adapted to receive cartons from said supply, and a movable knife adapted to enter successive cartons of the supply and deliver them successively therefrom into said pockets.

1,883,232. CARTON FEEDING MACHINE. CHARLES F. RICHARD, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association Limited of Michigan. Filed Apr. 2, 1929. Serial No. 351,931. 40 Claims. (Cl. 93—44.)

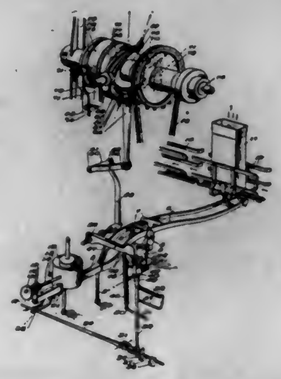


1. The combination with means for supporting a supply of cartons, of means for separating and advancing cartons successively from said supply and comprising a plurality of knives each movable in opposite directions independently of the other or others and all traveling together in another direction along a path extending in proximity to said supporting means.

1,883,233. FILLING AND WEIGHING MACHINE. CHARLES F. RICHARD, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association Limited of Michigan. Filed Apr. 5, 1929. Serial No. 352,854. 15 Claims. (Cl. 249—2.)

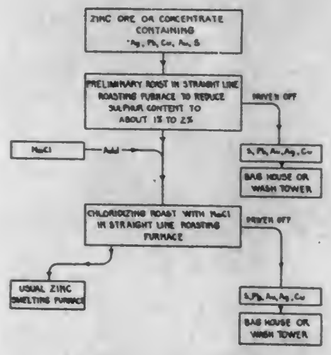
1. The combination with a scale, dispensing apparatus control devices, and a plurality of operatively related elements for controlling the operation of said control

devices, of a scale operated member for controlling the operation of said elements, and an adjustable counterbalancing device operatively associated with said member



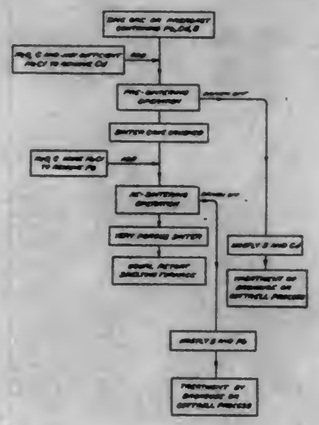
and mounted for movement therewith in one direction and for movement relative thereto in the opposite direction.

1,883,234. METHOD OF TREATING ZINC ORES. LUTHER WILLIS LENNOX, Palo Alto, Calif., and HORATIO SEYMOUR WILDMAN, Villa Escobedo, Chihuahua, Mexico, assignors to American Smelting & Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1929, Serial No. 338,082. Renewed Apr. 25, 1932. 3 Claims. (Cl. 75—28.)



1. The process of treating zinc-bearing materials of a sulphide character containing metallic impurities including lead, which comprises subjecting the zinc-bearing material to an oxidizing roasting treatment to remove sulphur from said material, discontinuing said roasting treatment when the content of sulphur has been reduced to less than about 3%, mixing sodium chloride with said roasted ore having a sulphur content of less than about 3% without lowering the temperature of said roasted ore to any substantial extent, subjecting the mixture of roasted ore and sodium chloride to heat sufficiently intense to fume off metallic impurities including lead but insufficient in intensity to cause the volatilization and loss of zinc, and thereafter smelting said zinc-bearing materials freed from lead to effect a recovery of zinc therefrom.

1,883,235. METHOD OF TREATING ZINC ORES. BRUCE W. GONSER, Amarillo, Tex., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 12, 1929, Serial No. 399,137. Renewed Oct. 21, 1931. 7 Claims. (Cl. 75—28.)

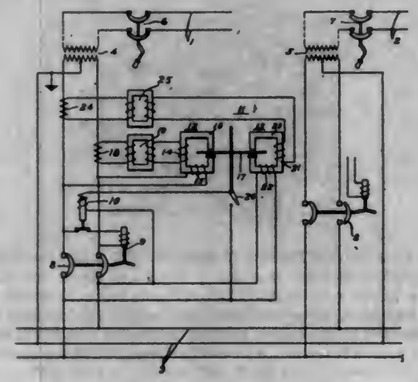


1. The process of purifying a zinc-bearing material of sulphide character contaminated with impurities including lead and cadmium which comprises mixing said zinc-bearing material with water, sodium chloride and carbon in restricted amounts just sufficient to effect removal of cadmium as a volatile chloride, forming said mixture into a relatively thin, quiescent bed, moving said bed while subjecting the same to a blast roasting temperature just high enough for a limited period of time sufficient to cause the volatilization of the bulk of cadmium without removing any material amounts of lead, immediately thereafter quickly cooling the thus heated mixture to reduce the temperature of said bed so as to prevent practically wholly the volatilization of lead, crushing the solid residue resulting from the aforesaid treatment, mixing with said crushed material water, carbon and sodium chloride in amounts just sufficient to effect removal of substantially all of said lead, forming said mixture into a relatively thin, quiescent bed, moving said bed while subjecting the same to a blast roasting temperature having a sufficiently high local temperature for a restricted period of time to effect volatilization of practically all of the lead without causing the loss of any material amount of zinc, immediately thereafter quickly cooling the heated mixture to reduce the temperature of said bed so as to further minimize the loss of zinc by volatilization and then subjecting the double heat treated and chloridized residue substantially freed from lead, cadmium and sulphur for the recovery of zinc.

1,883,236. ALTERNATING CURRENT DISTRIBUTION SYSTEM. ARTHUR H. KEHOE, Rutherford, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Feb. 1, 1924, Serial No. 690,014. Divided and this application filed Aug. 8, 1929. Serial No. 384,347. 15 Claims. (Cl. 175—294.)

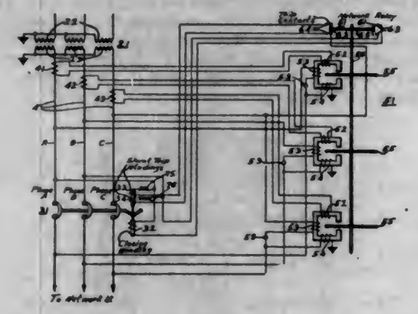
1. The combination with a circuit-interrupter connected to a load circuit, of interrupter control means including relay apparatus having a plurality of windings and flux-shifting means associated therewith, one of the windings being energized according to the voltage on the supply side only of the interrupter and cooperating with one of the flux-shifting means in such manner to tend

to close the interrupter and another winding being energized according to the voltage on the load side only of the interrupter and cooperating with another of the flux-shifting means in such manner to tend to maintain the



interrupter open, said relay apparatus including interrupter-opening means responsive to magnitude and phase position of the current through the interrupter when closed.

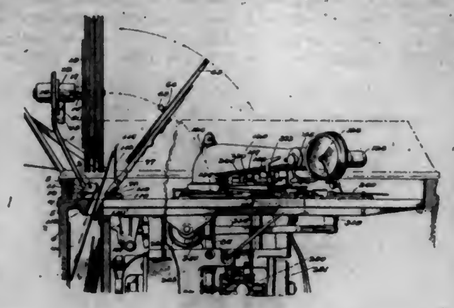
1,883,237. SYSTEM OF ALTERNATING-CURRENT DISTRIBUTION. JOHN S. PARSONS, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,445. 9 Claims. (Cl. 175—294.)



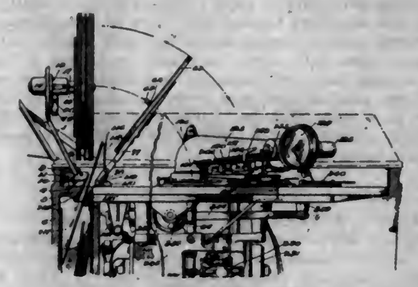
1. A polyphase alternating-current system of distribution comprising a transformer bank connected to supply a distribution network through a secondary feeder, a circuit interrupter disposed in said feeder, and means for tripping said interrupter, including normally deenergized tripping coil means responsive to the resultant effect of the voltages across a plurality of the phases of said feeder.

1,883,238. SOUND REPRODUCING MACHINE. WILLIAM D. LA RUE, Philadelphia, Pa., and SAMUEL H. WISMER, Palmyra, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1924. Serial No. 706,494. 137 Claims. (Cl. 274—10.)

2. In a sound reproducing machine, the combination of means for supporting a plurality of record tablets, means for supporting a record tablet in cooperative relation with sound reproducing instrumentalities, and means for moving said last-named means to discharge a tablet by gravity therefrom and remove a tablet from said first-named means.



1,883,239. SOUND REPRODUCING MACHINE. SAMUEL H. WISMER, Palmyra, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1924, Serial No. 706,530. Renewed Jan. 29, 1932. 73 Claims. (Cl. 274—10.)

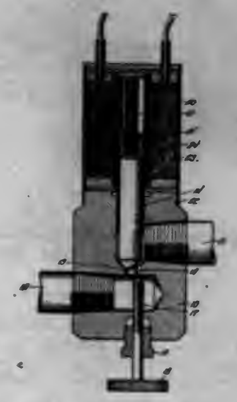


1. In a sound reproducing machine, the combination of sound reproducing instrumentalities, a support for a record tablet in cooperative relation with said instrumentalities, means for disengaging said instrumentalities from the tablet and returning the same to starting position, and means controlled by the movement of said instrumentalities at an angle to the direction of said returning movement for automatically effecting the engagement of said instrumentalities with the beginning of records on tablets of different diameters.

1,883,240. MAGNETICALLY OPERATED VALVE. LOUIS A. M. PHELAN, Beloit, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 27, 1925. Serial No. 71,860. 2 Claims. (Cl. 137—139.)

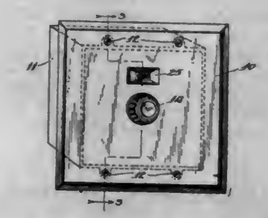
1. A valve device of the class described comprising a valve body provided with inlet and outlet ports, a valve seat therebetween, a vertical bore extending above said seat, and a vertical by-pass communicating with the inlet and outlet ports, a vertically movable magnetizable plunger disposed in said vertical bore for engaging said valve seat, a tube surrounding said plunger and extend-

ing into said vertical bore and secured to the valve body, said tube having its upper end closed and extending above the valve body and said plunger, a coiled spring having its ends abutting the plunger and the closed end of the tube for biasing the plunger to engage said valve seat and thereby interrupt communication between the inlet and outlet ports, an adjustable screw extending upwardly through the bottom of the valve body and co-



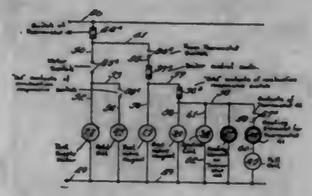
operating with said by-pass to regulate the quantity of fluid that may pass through the valve when said plunger is seated, and actuating means for said plunger superimposed upon said valve body and comprising a cylinder housing an electromagnetic coil that embraces said tube and said plunger, said actuating means being separable as a unit from said valve body and said cylinder slidingly engaging at its lower end with the upper portion of said valve body.

1,883,241. ELECTRICAL SWITCH. LOUIS A. M. PHELAN, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,504. 12 Claims. (Cl. 200—153.)



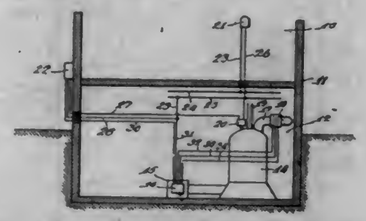
1. In a device of the character described, a support, a manually operable member rotatably mounted thereon, an actuating member operated by said manually operable member, and a switch member mounted on said actuating member, said actuating member holding said manually operable member in a secure relation with said support and holding said switch member against rotation unless manually forced.

1,883,242. OIL BURNER CONTROL SYSTEM. JOHN C. BOGLE, River Forest, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,951. 8 Claims. (Cl. 158—28.)



1. In a heating system, in combination, a fuel burner, a combustion chamber therefor, a source of liquid fuel supply, a pump for supplying liquid fuel from said source to said burner, a blower for supplying air to said burner for combustion purposes, an electric motor for operating said pump and said blower, a normally closed valve for controlling the flow of fuel from said pump to said burner, an electromagnet for opening said normally closed valve, a switch responsive to the temperature of the space to be heated, means responsive to combustion conditions in said combustion chamber, a switch for controlling the energization of said electric motor, means for actuating said motor switch to closed position, and means for maintaining said motor switch in closed position, said space-temperature-responsive switch controlling said means for actuating said motor switch to closed position and also controlling the period of energization of said valve-opening electromagnet, and said combustion-condition-responsive means controlling said means for maintaining said motor switch in closed position.

1,883,243. BURNER CONTROL APPARATUS AND SYSTEM. JOHN C. BOGLE, River Forest, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 11, 1929. Serial No. 354,323. 30 Claims. (Cl. 236—91.)

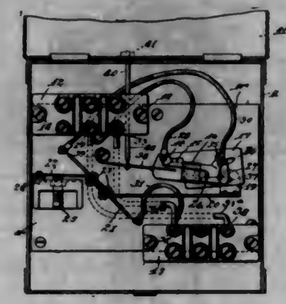


1. In a system for heating an enclosed space, automatic means for effecting intermittent operation of said system, and means responsive to a temperature prevailing outside said space for determining the length of such intermittent periods of operation.

1,883,244. ELECTRICAL SWITCH. LOUIS A. M. PHELAN, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 27, 1927, Serial No. 186,883. Renewed June 9, 1931. 19 Claims. (Cl. 200—122.)

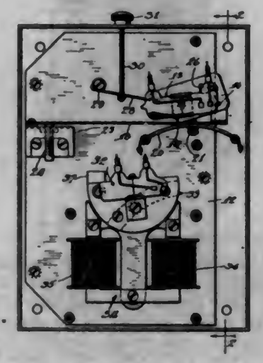
3. In an electrical switch, a heat responsive element fixed at one end thereof, said element comprising a plural-

ity of parts placed end to end, a tiltable switch mounted adjacent the other end of said element and actuated there-



by, and heating means connected intermediate two of said parts of said element, said heating means controlling the actuation of said element.

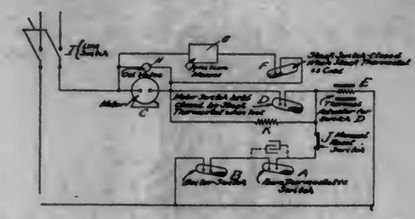
1,883,245. ELECTRICAL SWITCH. JOHN C. BOGLE, River Forest, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed Nov. 23, 1927, Serial No. 235,147. Divided and this application filed Jan. 7, 1929. Serial No. 330,807. 13 Claims. (Cl. 200—122.)



1. In a device of the character described, an actuating element, a plate pivotally mounted on said actuating element, a tiltable liquid switch mounted on said plate and operated thereby to obtain a change of circuit through said switch, said plate having a slot therein, and a pin engaging said slot for holding said plate in a fixed position after obtaining a change of circuit connection through said switch whereby said plate is restorable by manual means only.

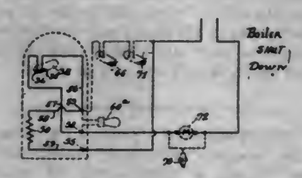
1,883,246. ELECTRICAL SWITCH AND CONTROL CIRCUIT THEREFOR. LAWRENCE E. KOCH, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 5, 1928. Serial No. 267,523. 6 Claims. (Cl. 158—28.)

1. An electrical control system for an oil burner comprising a temperature control thermostat, a thermostatically controlled actuator, an electric heating element for said actuator the circuit of which is controlled by a circuit comprising said thermostat, a combustion chamber, electrically controlled means for supplying fuel thereto, an electric switch controlling said fuel supplying means, said switch being adapted to be held in a closed circuit position by said actuator when heated, safety control means for controlling said electric switch, said electric switch being



maintained by said safety control means in a closed circuit position as long as combustion obtains but permitted to move automatically into an open circuit position upon failure of combustion, and a reset switch connected in circuit-controlling relation to said electric heating element and manually operable to reenergize said element after opening of said controlling switch due to failure of combustion.

1,883,247. ELECTRICAL SWITCH AND CONTROL CIRCUIT THEREFOR. EDWIN W. SLADKEY, Joliet, Ill., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Sept. 17, 1927, Serial No. 220,071. Renewed Aug. 15, 1931. 13 Claims. (Cl. 158—28.)

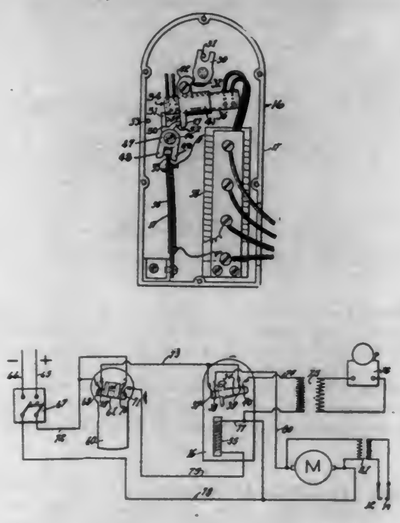


12. An electrical control circuit comprising single-circuit switching means for the normal control of an automatic heating system, a safety switch normally held in closed circuit position and in circuit with said single-circuit switching means, a member for actuating said safety switch into closed position, means responsive to the current flow in said control circuit and controlled by said single-circuit switching means for controlling the operation of said actuating member, and thermal responsive means for maintaining said safety switch in a normally closed position.

1,883,248. SAFETY DEVICE. HERBERT S. WILSON and ADOLF E. FOHN, Joliet, Ill., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed May 15, 1926. Serial No. 109,447. 10 Claims. (Cl. 158—28.)

1. An electrical control circuit including switching means for the normal control of an automatic heating system, a safety switch normally held in a closed circuit position and in series with said switching means, a bimetallic element for controlling said safety switch, means energized by electrical energy in said control circuit through the open circuiting of said switching means for actuating said bimetallic element to obtain a normally closed position through said safety switch, means re-

sponsive to heat conditions in said system for maintaining said safety switch in a normally closed position, and a resistance element connected in shunt across said safety switch.



7. An electrical safety device comprising a mercury-electric switch biased to one position, a holder for said switch, two separate thermostatic actuators for said switch disposed to be separately heated, and separate, uni-directional connecting means between said actuators and said holder, each engageable with said holder to prevent said switch from moving to its biased position but free to move out of engagement with said holder when the latter is engaged by the other of said connecting means.

1,883,249. THERMOSTAT. JOHN A. SPENCER, Newtonville, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 31, 1928, Serial No. 316,214. Renewed Oct. 9, 1930. 7 Claims. (Cl. 297—15.)



1. A thermostat comprising a bimetallic member lying in a cupped plane, said member having a central portion and voluted spoke elements radiating therefrom.

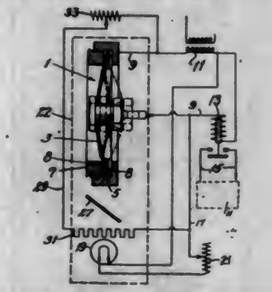
1,883,250. VALVE. JOHN A. SPENCER, Newtonville, Mass., assignor to The Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 19, 1930, Serial No. 462,370. Renewed June 27, 1932. 3 Claims. (Cl. 236—101.)

1. A valve structure comprising the combination with a casing having a passage therethrough, of a valve member adapted to control the flow of fluid therethrough, a rod for operating the valve member, a substantially rigid sheet engaging the said rod, temperature responsive means for movably supporting the sheet to lift it against the stem,



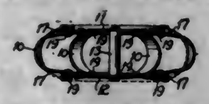
and a flexible sheet secured to the temperature responsive means and forming, with the said rigid sheet, means for securing the temperature responsive means in position.

1,883,251. THERMOSTAT. JOHN A. SPENCER, Newtonville, and VANNEVAR BUSH, Belmont, Mass., assignors to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1931. Serial No. 529,426. 14 Claims. (Cl. 236—68.)



1. In a thermostatic control, a thermostatic element, a circuit, means for energizing said circuit, a main heater controlled by said circuit and adapted to heat a region through temperatures adapted to be controlled by said element, contacts in said circuit operable by said element, an auxiliary heater juxtaposed with respect to said element adapted to heat the same by convection, said contacts being operable by said element to deenergize said circuit and to vary the degree of heating of said auxiliary heater over a maximum and minimum, said auxiliary heater comprising a lamp which is never completely deenergized and a third heater juxtaposed with respect to said lamp and the element.

1,883,252. THERMOSTAT. JOHN A. SPENCER, Newtonville, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1931. Serial No. 557,233. 8 Claims. (Cl. 297—12.)



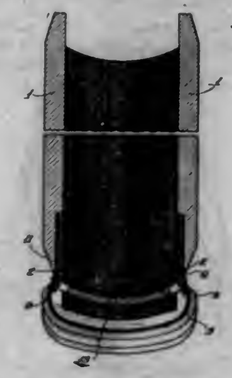
1. A thermostat comprising a snap acting flexible sheet, a second sheet, said first sheet being rigidly separated at a portion thereof from said second sheet, and thermostatic strips joining said sheets at non-rigidly separated portions.

1,883,253. EXTENSION POST FOR CHAIN POST BINDERS. PAUL O. UNGER, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Sept. 25, 1930. Serial No. 484,339. 8 Claims. (Cl. 129—41.)



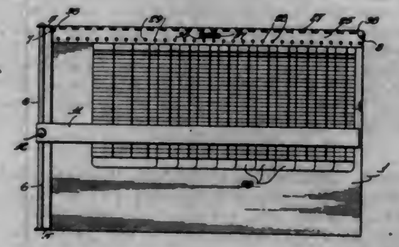
2. In a chain post binder, a lower clamping member, take-up mechanism in said clamping member, flexible posts connected to said take-up mechanism an upper member having vertically spaced bearings, heads upon said posts extending into said spaced bearings for preventing tilting thereof and means for latching said heads in said upper member.

1,883,254. RECORD BINDER. PAUL O. UNGER, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Dec. 11, 1930. Serial No. 501,553. 6 Claims. (Cl. 129—24.)



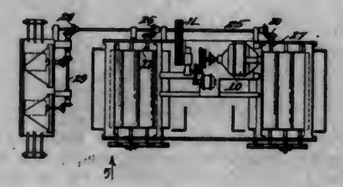
4. In a record binder of the class described comprising a back member and a pair of cover members hinged to said back member, a plurality of impaling posts secured to one cover member, means for removably attaching said posts to the other cover member and means for aligning said posts with respect to said other cover member comprising aligning members engageable with said posts.

1,883,255. INDEX STAND. PAUL O. UNGER, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed May 25, 1931. Serial No. 539,661. 4 Claims. (Cl. 129—23.)



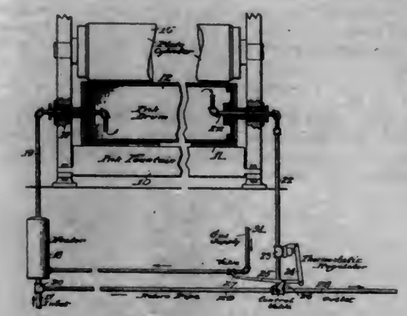
1. In a device of the character described, a supporting plate having a tongue at one edge, a slidable tongue upon the other edge, a sheet-holding device having a notch for receiving the first-mentioned tongue and a notch for receiving the other tongue through a sliding movement.

1,883,256. PRESS UNIT DRIVE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 18, 1926, Serial No. 89,070. Renewed June 2, 1932. 1 Claim. (Cl. 270—5.)



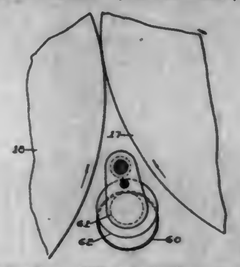
In a printing system, the combination with a plurality of press units arranged parallel to each other and registering with each other and a folding mechanism located at the end of the series so that the whole series is in alignment but the driving shafts of the press units and folder are all parallel, said driving shafts for the press units each being the shaft of one of the cylinders of the printing couple, and the folder having shafts perpendicular to the folder driving shaft for operating it but in the same horizontal plane, of a longitudinal main shaft extending along the system perpendicular to all of said driving shafts and in the same horizontal plane, and means connected with said main shaft for driving all the parallel shafts directly.

1,883,257. INK SUPPLYING REGULATOR. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 28, 1926, Serial No. 144,878. Renewed May 9, 1932. 9 Claims. (Cl. 101—350.)



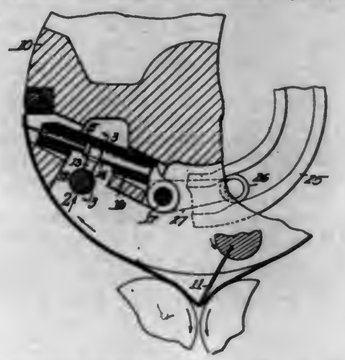
1. In an inking mechanism, the combination of the ink forwarding cylinders thereof, with means for supplying heat to one of said cylinders to soften the ink film thereon and means for automatically regulating the degree of such heat.

1,883,258. FINGER GUARD. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 26, 1926, Serial No. 111,787, and Apr. 6, 1929, Serial No. 353,200. Divided and this application filed May 14, 1931. Serial No. 537,279. 4 Claims. (Cl. 101—216.)



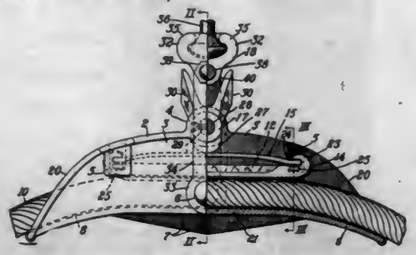
1. The combination with a printing couple, of a finger guard located adjacent to the bite between the cylinders, comprising a thin metal tube supported in place from the side frames.

1,883,259. IMPALING PIN. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Sept. 27, 1928, Serial No. 308,687. Divided and this application filed July 3, 1931. Serial No. 548,648. 2 Claims. (Cl. 270—47.)



1. The combination with a folding cylinder, of pivoted bars carrier thereby, impaling pins mounted to reciprocate in said bars, and means in fixed position for swinging the bars backwardly when the paper on the cylinder is being folded.

1,883,260. SUSPENSION CLAMP. WILLIAM W. WOODRUFF, 3d, Swarthmore, and RALPH L. JENNER, Germantown, Pa. Filed Aug. 29, 1927. Serial No. 216,146. 21 Claims. (Cl. 248—31.)



1. A clamp comprising a conductor-receiving portion, a relatively movable supporting portion therefor and means for clamping the conductor relative to said receiving portion including a cam movable relative to said supporting portion for actuation thereby to release the conductor.

1,883,261. PROCESS OF RECOVERING GLASERITE. HENRY TEYNHAM WOODWARD, Berkeley, Calif., assignor to Burnham Chemical Company, Reno, Nev., a Corporation of Nevada. Filed Jan. 14, 1929. Serial No. 332,463. 15 Claims. (Cl. 23—39.)

6. The method of separating a desired salt from other salts considered to be impurities comprising substantially converting said other salts to more soluble salts by the addition of the acid of the more soluble salt, and recovering said desired salt.

1,883 262. PROCESS OF RECOVERING ALKALI METAL SALTS FROM BRINES. HENRY TEYNHAM WOODWARD, Berkeley, Calif., assignor to Burnham Chemical Company, Reno, Nev., a Corporation of Nevada. Filed June 3, 1929. Serial No. 368,202. 3 Claims. (Cl. 23—41.)

1. That step in the process of separating a mixture of crystallized salts including glaserite and borax which comprises contacting the mixture with hot water to dissolve the borax substantially out of the crystal mixture to leave substantially pure glaserite.

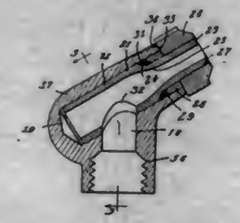
1,883,263. UNDERGARMENT. CLAIR G. WRIGHT, Kansas City, Mo., assignor to Ely Walker Dry Goods Company, St. Louis, Mo., a Corporation of Missouri. Filed July 18, 1929. Serial No. 379,179. 2 Claims. (Cl. 2—237.)



1. In a garment of the character described including front and back portions having the lower ends of the side edges seamed together and the upper ends of each of the side edges diverging away from said seam portions to form substantially triangular shaped recesses at the sides of the garment, complementary shaped inserts received in the recesses and sewed to the diverging side edges, elastic strips of shorter length than the width of said inserts spaced from the upper edges of the inserts and having their ends attached to the side edges of the front and back portions, an inwardly extending fold formed at the upper edges of the inserts and the front and back portions of the garment, a line of stitching extending through the fold and the elastic strips, a binding strip overlying the fold and the elastic strips and spaced from the line of stitching, and parallel lines of stitching extending through the elastic strips for securing the binding strip, said lines of stitching being inserted when the elastic strips are in stretched condition to form hip-receiving pockets in the sides of the garment when the elastic strips are in normal condition.

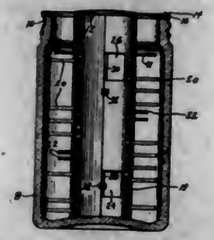
1,883,264. ADJUSTABLE NOZZLE. HORACE C. WRIGHT, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1931. Serial No. 543,437. 4 Claims. (Cl. 299—117.)

3. An adjustable spray nozzle comprising a valve chamber, a tubular valve member rotatably positioned in said chamber having a cylindrical inner surface of two different diameters, that of smaller diameter terminating in a discharge opening, and a sloping surface connecting the surfaces of different diameters, means for conducting liquid into said valve member at an obtuse angle with re-



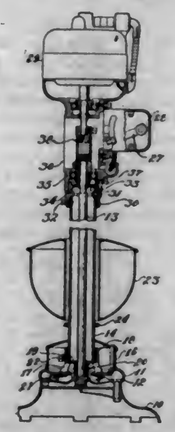
spect to the longitudinal axis of the discharge end of said valve member in a position to impinge against the inner surface of larger diameter at a point closely adjacent to said sloping surface, whereby to impart particular flow characteristics to said liquid, and means for regulating the fluid entering said valve member.

1,883,265. TOY. BENJAMIN F. WUPPER, Chicago, Ill. Filed Aug. 24, 1928. Serial No. 301,811. 5 Claims. (Cl. 273—153.)



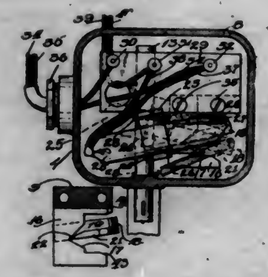
1. In combination, a sealed container, a liquid therein, a one piece three dimensional maze within said container, and a cartesian diver adapted to be moved through said maze.

1,883,266. PORTABLE SUMP PUMP. HOWARD D. YODER, Detroit, Mich., assignor to Penberthy Injector Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,519. 5 Claims. (Cl. 103—87.)



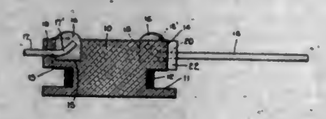
1. A portable electric sump pump comprising a base, a centrifugal pump casing on said base, an impeller in said pump casing, a spider on said pump casing terminating in a cup, a shaft tube extending upwardly from the cup, a motor on the upper end of said tube, and a shaft within said tube carrying said impeller, said shaft being mainly supported by bearings adjacent the upper end of said tube, a float guided on said tube, and a motor switch arranged to be actuated by said float.

1,883,267. AUTOMATIC SWITCH. HOWARD D. YODER, Detroit, Mich., assignor to Penberthy Injector Company, Detroit, Mich., a Corporation of Delaware. Filed Mar. 3, 1928. Serial No. 258,779. 1 Claim. (Cl. 200—67.)



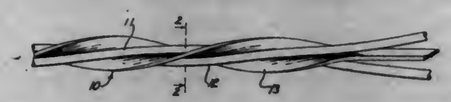
In a switch mechanism including a switch operating plunger, a housing in which said plunger terminates, a supporting member in said housing, an outwardly extending portion of said member having an aperture through which said plunger extends, a pair of integral parallel depending arms on said supporting member, each having a V-shaped notch, the notches being in alignment with each other on vertical edges of said arms, a yoke-like member pivotally associated with the pair of arms, a pair of arms on said yoke-like member adapted to embrace the outer side of the depending arms, a flange like portion on the inner side of each of said yoke arms, each of said portions terminating in a knife edge, a spring connected at one end of said plunger and at the other end to the middle of said yoke, said spring serving to hold said knife edges in engagement with the notches and to move said yoke when said plunger passes the dead center position of said yoke, an integral annular portion on one of said yoke arms, a clamp carried by said annular portion, and a mercury switch in said clamp and movable with said yoke into and out of circuit closing position.

1,883,268. APPARATUS FOR CONNECTING ELECTRICAL DEVICES. JACOB YOLLES, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1927. Serial No. 222,225. 5 Claims. (Cl. 173—259.)



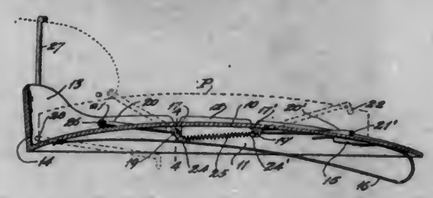
1. Apparatus for connecting an electrical device in circuit comprising a support made of insulating material, an electrical device associated therewith, a connector for connecting said device to other apparatus, said support having a wall provided with a part defining a small receptacle, a gob of solder held in said receptacle and protruding therefrom, a terminal of said electrical device and a terminal of said connector being embedded in said gob of solder, one of said terminals being embedded in the protruding portion of the gob of solder.

1,883,269. ELECTRICAL CONDUCTOR. EDWARD HENRY YONKERS, Wilmette, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1928. Serial No. 305,339. 7 Claims. (Cl. 173—265.)



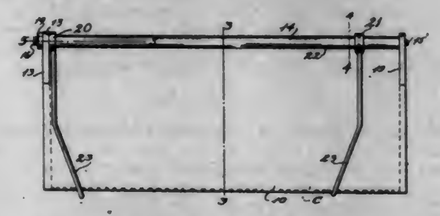
2. An electrical conducting unit comprising a pair of conducting elements, a strip of thin, flat, rigid insulating material positioned therebetween, and a thin adherent coating of waterproofing substance on the conductors and strip securing the conductors on the strip.

1,883,270. SLIP HOLDING DEVICE. ROBERT S. YOUNG, New Brighton, N. Y. Filed Mar. 28, 1930. Serial No. 439,831. 8 Claims. (Cl. 129—35.)



1. A slip holder including an elongated base bowed upwardly from end to end and provided at one end with an upstanding wall, spring actuated clips at respective ends of said base, one of said clips being urged toward the base with greater force than the second clip, and means on the first clip resisting slipping of paper slips from beneath said first clip.

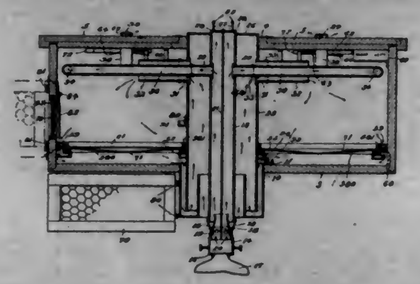
1,883,271. CHECK HOLDER. ROBERT S. YOUNG and PAUL DEVLIN, New Brighton, N. Y. Filed May 9, 1930. Serial No. 451,148. 8 Claims. (Cl. 129—35.)



1. In a check holder, a platform, brackets at the rear corners of the platform, a shaft revolubly mounted in one of said brackets, arms extending forwardly from the shaft and having down-turned ends overlapping the front edge of said platform to engage the front of a package of checks on the platform, and a spring having its ends connected respectively to said shaft and the other of said brackets and urging the forward ends of said arms downwardly toward the platform.

1,883,272. INCUBATOR AND BROODER. HARRY W. ZELLNER, Salt Lake City, Utah. Filed Apr. 6, 1929. Serial No. 353,014. 6 Claims. (Cl. 119—30.)

1. An incubator comprising a casing containing a chamber, a flue extending vertically through the casing at one side of the chamber, a heater in communication with the lower end of the flue, means at the upper end of the flue for venting the same, an upwardly swinging lid for the chamber, and circulating pipes having portions leading laterally from the flue below the upper end thereof into the chamber and other portions suspended from the lid



and telescopically engaging the first-mentioned portions, said suspended portions branching toward the sides of the chamber and having terminal portions extending through the lid and discharging above the lid.

1,883,273. LUBRICATING SYSTEM. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 31, 1926. Serial No. 158,155. 13 Claims. (Cl. 184—7.)

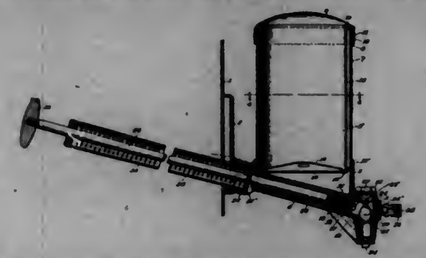


1. A resistance unit comprising a sleeve having a tapered bore therein, a resistance element having its outer wall tapered to make tight contact with the bore of said sleeve, the outer wall of said resistance element having a spiral groove formed therein and extending from its outer end to a point adjacent to, but not at, its inner end, said resistance element having a longitudinal bore opening through its inner end and an opening through the wall of said resistance element for connecting said longitudinal bore with said spiral groove, a check valve seating in the open end of said longitudinal bore, and a spring for holding said check valve on its seat.

1,883,274. LUBRICANT RESERVOIR AND DASH PUMP. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 15, 1927. Serial No. 161,281. 5 Claims. (Cl. 184—14.)

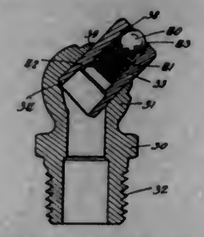
1. Apparatus of the class described, comprising a lubricant reservoir, a pump integral therewith, a tube in said reservoir and having a strainer at its lower end, means located at the lower end of said tube for spacing it from the walls of said reservoir and other means at the top of said reservoir for spacing the upper end of said tube

from the walls of said reservoir, said second spacing means preventing lubricant poured into said reservoir from passing downwardly between said tube and the walls



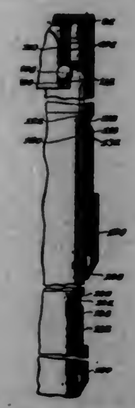
of said reservoir, both of said spacing means permitting air trapped beneath said strainer to pass upwardly between said tube and the walls of said reservoir.

1,883,275. LUBRICATING NIPPLE. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,353. 4 Claims. (Cl. 184—105.)



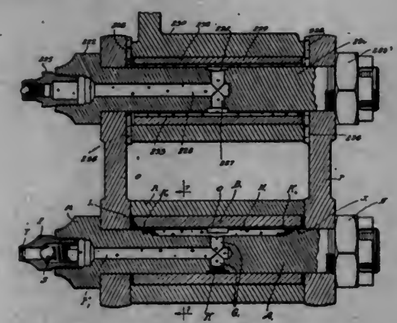
1. A lubricating nipple of the contact type comprising a pair of interfitted tubular supporting and lubricant receiving elements, extending angularly from their interfitted portions, the supporting portion having an annular flange presented toward the projecting end of the receiving element, said flange provided with a nozzle engaging lubricant sealing contact surface disposed in a manner to be protected by portions of said receiving and supporting elements for a nozzle engaging therewith for dispensing lubricant into the receiving element.

1,883,276. TRIPOD. OSCAR U. ZERK, Chicago, Ill. Filed Aug. 17, 1929. Serial No. 386,593. 7 Claims. (Cl. 248—43.)



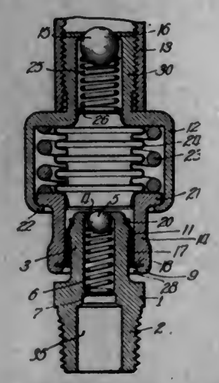
1. In a tripod, the combination of a plurality of telescoping tubular leg sections, annular V-shaped ridges formed on said sections for limiting outward movement thereof relative to one another, a plurality of resilient clamping elements having wedge-shaped ends, one of said elements being interposed between each pair of adjacent sections, a clamping nut threaded on the outer of each pair of adjacent sections, and a tapering surface on each of said nuts for contracting and forcing its associated clamping element into tight frictional contact with its adjacent sections at a plurality of points near said ridges and near the tapering surface of said nut, said elements being normally at a slight angle relative to the axes of said leg section and movable more nearly into parallelism with said axes thereby to increase the clamping action.

1,883,277. LUBRICATION METHOD AND MEANS. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 398,065. 17 Claims. (Cl. 184—7.)



1. In combination two bearing members having cooperating bearing surfaces with a duct leading to the bearing surfaces and a substantially free escape passageway communicating with the duct to receive lubricant therefrom and communicating laterally with the bearing surfaces to deliver lubricant thereto and substantially freely opening longitudinally outside of the bearing surfaces for the ejection of impurities away from the bearing surfaces.

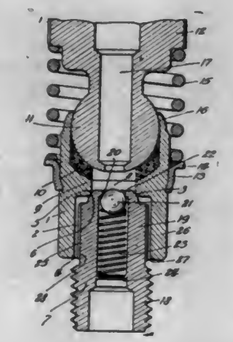
1,883,278. LUBRICATING COUPLER. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,277. 13 Claims. (Cl. 221—47.4.)



1. In lubricating apparatus, in combination with a nozzle, a nipple, said nozzle comprising a thin walled inherently resilient tube, said nipple comprising a lubricant receiving tubular shaft, said shaft having an annular projection disposed intermediate its ends, said tube being

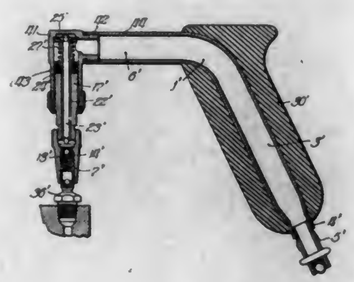
telescopically engageable with said shaft to effect circumferential distension of an intermediate portion of the tube by the intermediately disposed annular shaft projection.

1,883,279. LUBRICATING COUPLER. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,279. 5 Claims. (Cl. 285—161.)



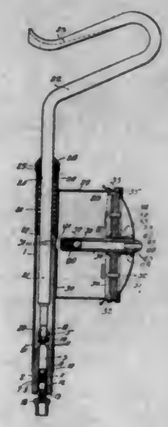
1. In lubricating apparatus, a lubricant coupler comprising a nozzle and a nipple, a lubricant communicating oscillatable joint mechanism joining the nozzle to a compressor, said nozzle having a terminal recess with lateral walls enveloping the nipple, and an end wall annular surface, said nipple having an annular surface at its inlet end engageable with said first annular surface throughout a plurality of relatively different angular positions of nozzle and nipple, and another lateral surface spaced from its inlet end making arresting engagement with the projecting lateral walls of the recessed nozzle, to limit said relative angular positions.

1,883,280. LUBRICATING APPARATUS. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 26, 1930. Serial No. 438,918. 7 Claims. (Cl. 221—47.4.)



1. Lubricant dispensing means of the class described, comprising a tube, a valve therefor, a spring overpowering the effect of fluid pressure tending to open the valve, and manual means comprising a nozzle at one end of the tube, movable relatively thereto, for overpowering said spring.

1,883,281. LUBRICATING MEANS AND METHOD. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 443,091. 3 Claims. (Cl. 221—47.4.)



1. A lubricant gun comprising a high pressure dispensing barrel, a reservoir cup secured laterally thereto by an end wall thereof, a cap for the cup, and a tubular feeder for the cup carried by the cap.

1,883,282. LUBRICATING APPARATUS. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,527. 16 Claims. (Cl. 221—47.4.)

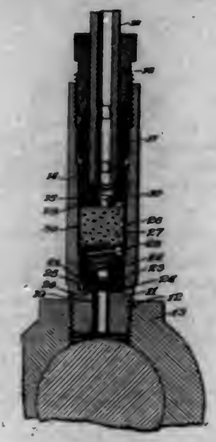


1. A lubricant dispensing apparatus, comprising a tubular dispensing barrel, a posteriorly disposed handle therefor, a tubular dispensing nozzle rigidly mounted on the forward end of the barrel, a valve in the barrel, a spring closing the valve against pressure of lubricant in the barrel, a thurst rod in the barrel for unseating the valve, and means forming a part of the handle, adapted to move the rod to unseat the valve, solely by a manual thrust effort exerted upon the handle towards the free end of the barrel communicated to the valve by said rod.

1,883,283. LUBRICATING APPARATUS. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,498. 6 Claims. (Cl. 184—7.)

1. In lubricating apparatus of the class described, the combination of a body member having one end threaded for attachment to a bearing, a tubular socket supported in said body member, a strainer carried by said socket, a

resistance member mounted in said body and providing a restricted passageway offering high resistance to the flow of lubricant therethrough, a chamber formed between said

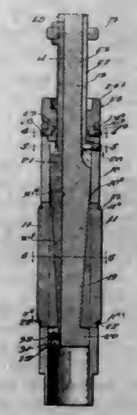


socket and said resistance member, a large block of cork movably supported in said chamber, and a spring for pressing said block against said socket.

1,883,284. PURIFICATION OF QUINONE. ADOLPH ZIMMERLI and ROBERT C. LYON, New Brunswick, N. J., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,607. 6 Claims. (Cl. 202—46.)

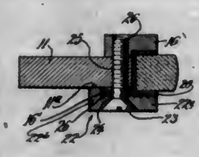
1. The process of purifying crude quinone which comprises subjecting the quinone to steam distillation under a vacuum and at a temperature not substantially exceeding 60° C.

1,883,285. REAMING AND BURNISHING TOOL. HERMAN W. ZIMMERMAN, Chicago, Ill., assignor to Automotive Maintenance Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1929. Serial No. 339,756. 3 Claims. (Cl. 77—76.)



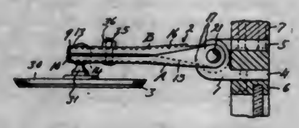
1. In a device of the class described, a body, a cutting blade and guide elements supported by said body for expansion or contraction movement, a cone-shaped expander member engaging complementally-shaped portions of said guide elements, means mounting said expander member in said body for longitudinal slide movement only, said expander member having a threaded extension projecting through and beyond one end of said body where it is constantly accessible, an adjusting device rotatably fixed in the later-mentioned end of said body and engaging said threaded extension for longitudinally adjusting said expander member relative to said guide element, said expander member having a longitudinal groove along one side the base of which is substantially parallel with the axis of said expander member, an adjusting element of substantially the outline shape of said groove seated in said groove and adjustable to a position wherein its outer edge coincides with the cone-surface of said expander member, the outer edge of said element being engageable with a complementally-shaped portion of said blade, and means carried by said expander for sliding said element longitudinally in said groove to protect its outer edge outwardly beyond the cone-surface of said expander member to independently project said blade relative to said guide elements.

1,883,286. ABRASIVE CARRIER FOR CYLINDER GRINDING TOOLS. HERMAN W. ZIMMERMAN, Chicago, Ill., assignor to Automotive Maintenance Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1929. Serial No. 349,613. 10 Claims. (Cl. 51—184.8.)



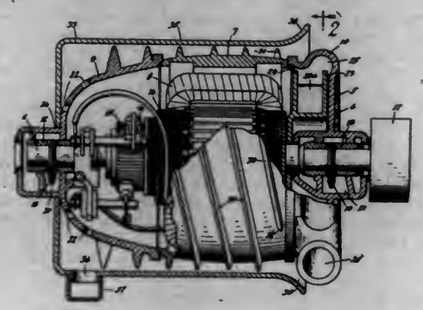
1. In a tool of the character described, a carrier having a body with a receiving-channel formed therein, an abrading stone unit mounted in said channel, and means for rigidly securing said abrading stone unit in said channel which includes a clamp block adjustably mounted on said body and being so arranged as to extend into one of the sides of said channel to engage said unit, and separate fastening means for tightening said block in place to wedge said abrading stone unit downwardly seated in said channel.

1,883,287. REAR VIEW MIRROR ASSEMBLY. FRED W. ZINK, Detroit, Mich., assignor to Kales Stamping Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 11, 1929. Serial No. 406,411. 6 Claims. (Cl. 45—97.)



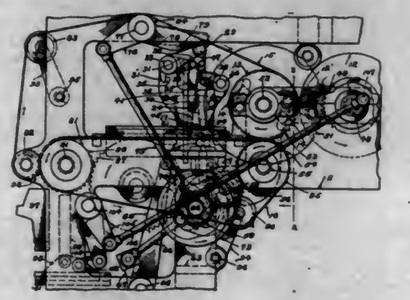
4. A mirror mounting including two clamping members connected together and having substantially parallel clamping portions provided at one end thereof with substantially flat portions that project beyond the ends of said clamping members, said flat portions being in planes at substantially right angles to the parallel planes of said members, and the extensions of one member overlapping the extensions of the other member, and the extensions of both members having aligned openings therein for receiving a hinge pintle and the like.

1,883,288. VENTILATING APPARATUS FOR DYNAMO-ELECTRIC MACHINES. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 26, 1927. Serial No. 222,099. 8 Claims. (Cl. 171—252.)



1. In a device of the class described, a rotatable shaft, a casing surrounding the shaft and spaced therefrom between its ends, a housing surrounding and circumferentially spaced from the casing, the space within the casing being in communication with the space between the casing and the housing and also in communication with the atmosphere, and means associated with said shaft to cause air to pass from the atmosphere into and through the space between the casing and the housing, into and through the space within the casing, and from the space within the casing back into the atmosphere.

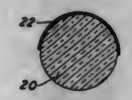
1,883,289. PERFORATING MECHANISM FOR USE IN PRINTING MACHINES. ADOLPH M. ZUCKERMAN, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1929. Serial No. 415,818. 16 Claims. (Cl. 270—41.)



1. In combination with a printing machine folder, a perforating mechanism on a movable support, a delivery, and means to convey a printed product to the perforating mechanism and to the delivery; said perforating mechanism being arranged to move with the product while perforating it.

1,883,290. PROJECTION OF STEREOSCOPIC PICTURES. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,637. 18 Claims. (Cl. 88—16.6.)

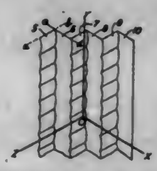
1. In apparatus for producing images in relief, a diffusing screen comprising a transparent element having a plurality of parallel cylindrical ridges on one surface and a like number of cylindrical ridges on the other surface, the ridges of said one surface being paired with those of the other respectively and the ridges of each pair being coaxial, means on said other surface for causing diffusion of light rays incident thereon, and means to project on said one surface of said screen from a corresponding position of a corresponding plurality of posi-



tions around said screen transverse to said ridges each image of a plurality of images representative of an object as viewed respectively from a large number of closely adjacent points of view

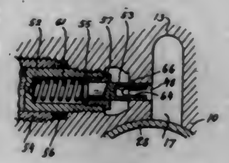
---

1,883,291. PROJECTION OF STEREOSCOPIC PICTURES. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,831. 16 Claims. (Cl. 88—16.6.)



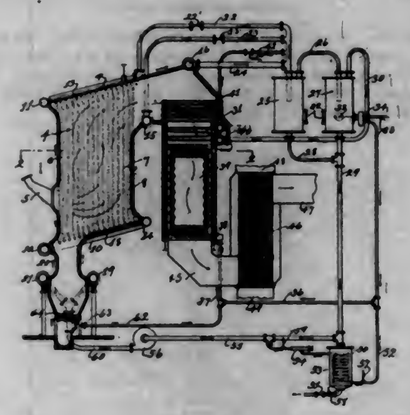
15. In apparatus for producing images in relief, a first set of mirror-like surfaces, each surface thereof coinciding with one generated by the movement of a straight line which at all times is parallel to the OX coordinate axis, a second set of mirror-like surfaces, each surface of said second set coinciding with one generated by the movement of a straight line which at all times is parallel to the OZ coordinate axis, said mirror-like surfaces being arranged adjacent each other and surfaces of one set alternating with surfaces of the other to form a viewing screen consisting of a plurality of elements, each element comprising two facing mirror-like surfaces, at least one of said surfaces of each element being corrugated so that an elemental beam of light reflected therefrom is diffused in planes parallel to the OY axis, and means to project elemental beams of nearly parallel rays of light upon said screen whereby each projected ray is reflected in a plane parallel to a plane including the projected ray and parallel to the OY axis.

1,883,292. SHOCK ABSORBER. HAROLD E. JACKSON, Detroit, Mich. Filed Jan. 13, 1931. Serial No. 508,512. 4 Claims. (Cl. 267—8.)



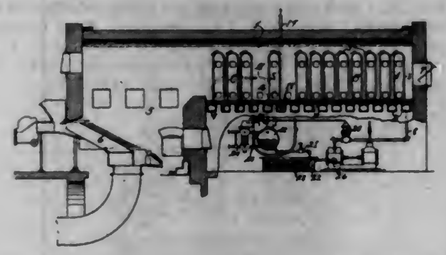
1. A hydraulic shock absorber having a high compression chamber and a low compression chamber communicating through a liquid passageway controlled by valve mechanism, a slotted tubular valve member slidably receivable within the liquid passageway, rotatable screw means adjustable exteriorly of the casing to adjustably position said valve member, spring means holding said valve member at each adjusted position yieldable only under extraordinary liquid pressure to open said valve further.

1,883,293. BOILER WITH FORCED RETURN CIRCULATION THROUGH FURNACE WALLS. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 31, 1927, Serial No. 229,893. Renewed June 23, 1932. 6 Claims. (Cl. 122—1.)



1. The process which comprises positively circulating water only through the steam generating tubes of a boiler during normal operation and through said steam generating tubes and the economizer of the boiler during the starting up period.

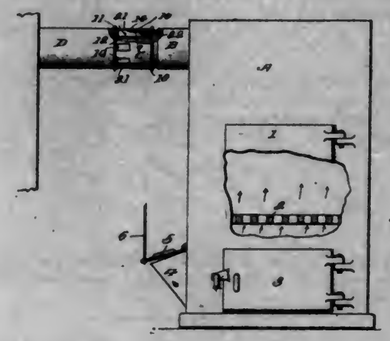
1,883,294. SERIES BOILER WITH SUPERHEATER BETWEEN BOILER TUBES. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Apr. 16, 1918, Serial No. 228,827. Divided and this application filed Sept. 19, 1928. Serial No. 306,837. 3 Claims. (Cl. 122—460.)



1. A drumless boiler including a source of heat, a gas passage, water tubes in said passage connected for progressive flow from the cooler to the hotter end of said passage, a superheater in said passage nearer the hotter end thereof, some of said tubes forming a screen for the protection of the superheater, said superheater receiving steam from the tubes in the hotter end of said passage, and means between the superheater and the tubes delineating the location at which saturated steam generation ceases.

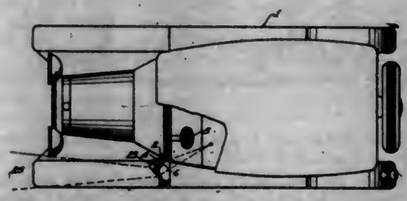
1,883,295. FUEL SAVING AND COMBUSTION REGULATING DEVICE. RAYMOND J. JENKINS, Baltimore, Md. Filed Jan. 5, 1932. Serial No. 584,871. 12 Claims. (Cl. 110—58.)

1. A smoke flue formed intermediate of its ends with longitudinal air flues on its inner wall and spaced from each other to provide unobstructed passageways for the products of combustion passing in opposite direction from the passage of air in said air flues, said air flues being



closed at one end and open at the other end adjacent to the smoke inlet of the flue means adapted to discharge the air towards the axis of the flue, said air flues having air inlet openings adjacent their closed ends.

1,883,296. TRAFFIC OBSERVING INSTRUMENT. ROY W. JOHNSON, Columbus, Ohio, assignor, by mesne assignments, to The Corcoran-Brown Lamp Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 22, 1931. Serial No. 510,498. 1 Claim. (Cl. 88—1.)

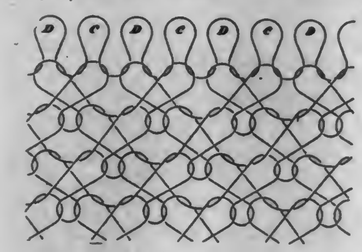


In a traffic observing instrument for motor vehicles, a bracket adapted to be secured to the side and exterior of the body of said vehicles, a horizontally extending arm adjustably secured at one end to said bracket, a vertically arranged open sided frame carried by the other end of said arm and capable of adjustment about its vertical axis, a prism within said frame, said prism having straight sides and being substantially triangular in horizontal cross section, the base of said triangle being arranged towards the vehicle and at such position relative thereto that the rear face of the prism is substantially at right angles to the vehicle operator's line of vision.

1,883,297. TUBULAR KNITTED FABRIC. THOMAS HENRY JONES, Woodthorpe, England. Filed June 17, 1929, Serial No. 371,560, and in Great Britain July 21, 1928. 6 Claims. (Cl. 66—198.)

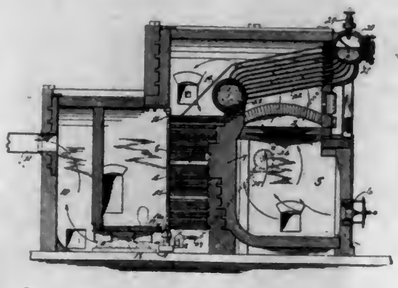
1. A tubular knitted fabric comprising two series of mutual or intermeshing loops or stitches, the stitches of one of said series being drawn in an opposite direction to the stitches of the other series, said two series being produced from common thread or threads and forming spaced needle wales on both faces of the fabric, and a

third series of stitches occupying the sinker wales on one face of the fabric and the series of stitches on one face of the fabric extending at an angle to the series of stitches



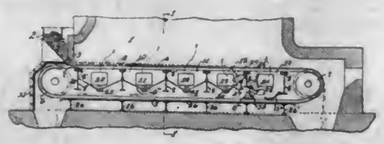
on the opposite face of the fabric, each of the series of stitches being of uniform structure throughout without break or gap.

1,883,298. STEAM GENERATOR. HOWARD J. KERR, Westfield, N. J., and JAMES FLETCHER, West New Brighton, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 22, 1927, Serial No. 177,256. Renewed June 3, 1932. 5 Claims. (Cl. 122—265.)



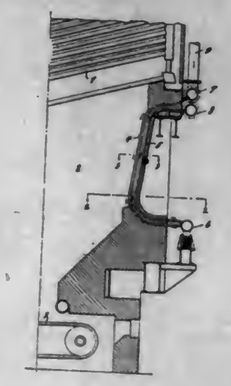
1. In a steam boiler, a plurality of tubes connected in series, a steam and water drum connected to the tubes at one end of said series, means for feeding water into the tubes at the other end of said series, means including a pump that will permit passage of water therethrough by gravity for returning water from said drum to the feed water end of said series, a second drum, and tubes connecting said drums.

1,883,299. CHAIN GRATE STOKER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 4, 1928. Serial No. 275,009. 8 Claims. (Cl. 110—40.)



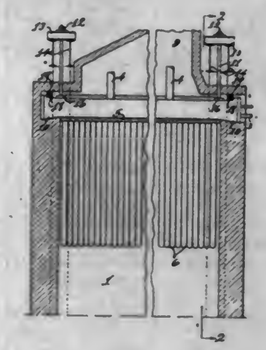
8. In a furnace, a chain grate stoker having side-by-side compartments formed between the upper and lower runs thereof and opening through the upper run thereof, means forming an air-tight chamber in front of said compartments, a drag plate below said lower run and spaced from the bottoms of said compartments, means for supplying air under different pressure to different compartments, and means for conducting air leaking into said front chamber through the space between the bottoms of said compartments and said drag plate to a compartment under a lower pressure adjacent the rear end of said stoker.

1,883,300. RADIANT HEAT SUPERHEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 323,892. 8 Claims. (Cl. 122—481.)



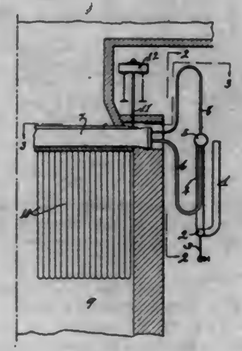
1. In a radiant heat superheater, two rows of tubes, one disposed inwardly from the other, the tubes of the outward row having their inner faces substantially flat and forming a substantially continuous surface across the row, and the tubes of the inner row being spaced apart to permit passage of radiant heat to said flt faces of the outer row, and means causing steam to flow through first one row and then the other.

1,883,301. MERCURY BOILER HAVING HORIZONTAL HEADERS. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 23, 1929. Serial No. 357,441. 11 Claims. (Cl. 122—318.)



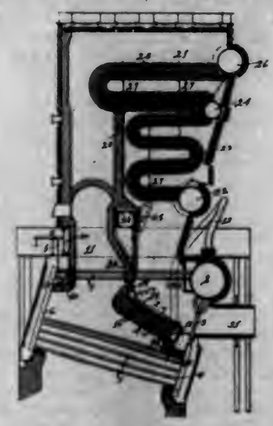
1. In a mercury boiler, a plurality of horizontally disposed interconnected headers having smooth spots on the upper sides thereof, fixed stops, and means for holding said headers with said spots in contact with said stops by means of which each header is held level and at the same height.

1,883,302. MERCURY BOILER FEEDER SYSTEM. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 4, 1929. Serial No. 360,891. 1 Claim. (Cl. 122—318.)



In a feed system for a mercury boiler having a plurality of horizontally disposed headers to which vaporizing tubes are connected, a series of feed headers at right angles to said first named headers at the same level, connections from said feed headers to said boiler headers, a lower cross feed pipe connected to said feed headers, and a drain pipe connected to said cross pipe.

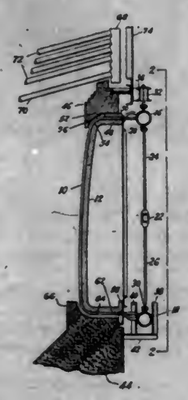
1,883,303. STEAM BOILER WITH SUPERHEATER AND REHEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 21, 1929. Serial No. 408,702. 4 Claims. (Cl. 122—478.)



3. In a boiler, a bank of inclined steam generating tubes, and a superheater located out of the main path of the gases beyond said bank of tubes, the superheater tubes adjacent the gas path being spaced apart farther than those remote from said path.

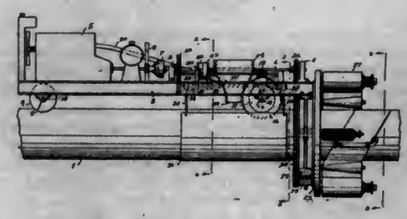
4. In a boiler, a furnace, a gas pass leading from the furnace, a bank of inclined steam generating tubes of relatively low heat absorptive capacity extending across the gas pass above the furnace, the tubes of said bank being arranged to permit the transmission of radiant heat from the furnace to a portion of said gas pass above said bank, a bank of fluid heating tubes in said gas pass subsequent to said steam generating tube bank with respect to gas flow, said gas pass having a wall section above said steam generating bank and in position to absorb heat radiantly transmitted from the furnace, and a superheater having tubes extending along and cooling said wall section and absorbing heat both by radiation and convection.

1,883,304. SUPERHEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,839. 10 Claims. (Cl. 122—481.)



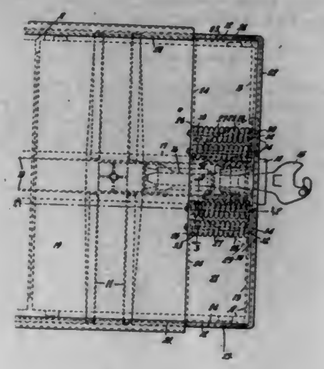
10. In a fluid heat exchange device, a combustion chamber, a bank of fluid conducting tubes exposed to the radiant heat of burning fuel in the combustion chamber, an upper header for the tubes, a lower header for the tubes, means for suspending the structure, connectors for tying together the upper and lower headers, and parallel guides for maintaining the lower header in its normal position as varying temperatures in the structure cause expansion and contraction of the device.

1,883,305. COATING MACHINE. FRANK KINZBACH, Houston, Tex. Original application filed Nov. 25, 1927, Serial No. 235,698. Divided and this application filed Jan. 28, 1930. Serial No. 423,916. 9 Claims. (Cl. 91—18.)



1. A pipe coating machine including a carriage, means supporting the carriage on the pipe, means for driving the supporting means to effect the movement of the machine along the pipe, means for supplying a coating substance to the pipe, a flexible retainer disposed around the underside of the pipe opposite said supplying means, means for imparting an oscillatory movement to said retainer.

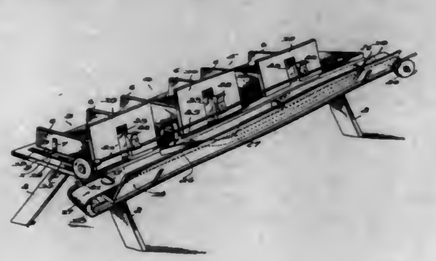
1,883,306. CAR CONSTRUCTION. GOODRICH Q. LEWIS, Wheaton, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 14, 1931. Serial No. 562,690. 11 Claims. (Cl. 105—454.)



1. In a railway car, the combination with a sliding abutment member at each end of the car; of means for yieldingly opposing outward movement of said abutment members.

2. In a railway car, the combination with a sliding end member at each end of the car, each end member having an abutment wall for the lading of the car; of means yieldingly opposing sliding movement of said members.

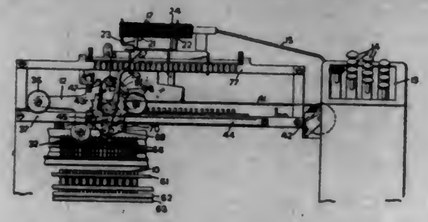
1,883,307. ASSEMBLING MACHINE. ELIZABETH LIVINGSTON and LOUIS LIVINGSTON, Washington, D. C. Filed Dec. 18, 1929. Serial No. 415,054. 19 Claims. (Cl. 270—55.)



1. In a machine of the character described, the combination of a support, a plurality of compartments arranged thereon, a conveyor arranged in front of and extending along said compartments, means for feeding a folded letter from one of said compartments onto said conveyor, an approximately V-shaped opener arranged in position to open the flap of the letter, and means for applying an insert to the opened letter.

1,883,308. STRAIGHT AND COMPLEMENT PUNCH. RUDOLF LORANT, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed July 5, 1929, Serial No. 376,150, and in Germany Aug. 20, 1928. 20 Claims. (Cl. 164—113.)

1. A punching machine for perforating tabulating cards comprising punching mechanism, a plurality of control members equal in number to the perforation receiving positions in a single card column and selecting devices controlled thereby for determining punch operation in all the columns to be perforated column by column, said selecting devices including mechanism settable upon a



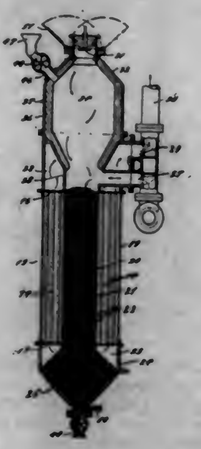
single operation of the control members for simultaneously determining punching of related data in a plurality of spaced card fields.

1,883,309. FLOW EQUALIZING MEANS. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 20, 1928. Serial No. 300,684. 8 Claims. (Cl. 122—476.)



6. In combination, a header having a plurality of tubes extending transversely therefrom, a supplementary feed header, and a plurality of connections between said headers and spaced apart lengthwise thereof substantially throughout the length of the first-named header.

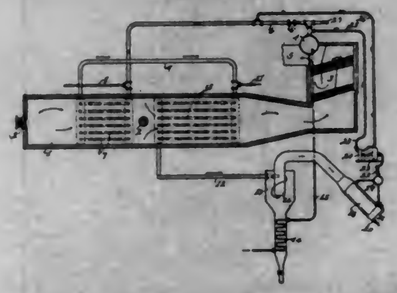
1,883,310. WASTE HEAT BOILER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 10, 1928. Serial No. 311,428. 12 Claims. (Cl. 122—7.)



1. In combination, a source of heated gases having a pulsating flow and carrying impurities, a steam boiler of the fire tube type comprising outer and inner shells and end tube sheets connecting the same, fire tubes connecting said tube sheets, a mass of finely divided

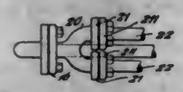
pieces of material located within said inner shell, a conduit comprising an inlet to the boiler for conducting the gases from said source through said material and then through the fire tubes, and an outlet through which the gases flow from said fire tubes, the steam boiler being offset from said inlet and said outlet.

1,883,311. PROCESS FOR HEAT TREATING COAL. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 19, 1928. Serial No. 320,364. 5 Claims. (Cl. 202—17.)



1. The processing of coal including the production of combustible fluids therefrom, which comprises combining superheated steam and pulverized coal in a fuel fire-heated conduit, generating low pressure steam by the heat in the hot products from said conduit, then compressing said low pressure steam for use in said conduit, and collecting said combustible fluids.

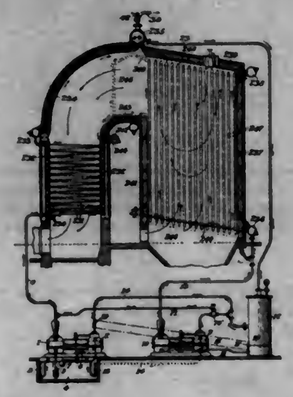
1,883,312. STEAM BOILER AND ECONOMIZER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 14, 1930. Serial No. 435,753. 1 Claim. (Cl. 257—230.)



In a fluid heat exchange device, a flue for the passage of heating gases, a first fluid flow section consisting of return bend tubes for conducting a fluid in separated streams through the heating gases from the beginning to the end of the first section, a second fluid flow section in front of the first section with reference to gas travel and comprising twice as many return bend tubes as are in the first section, the return bend tubes in separate rows in the second section being consecutively connected to provide separated conduits conducting separated streams of fluid through the heating gases from the beginning to the end of the second section, and means connecting each of the last tubes of the first section to at least two tubes of the second section so that a single stream of fluid flowing through the first section is divided into two streams of fluid which are maintained as separate streams throughout their flow in the second section.

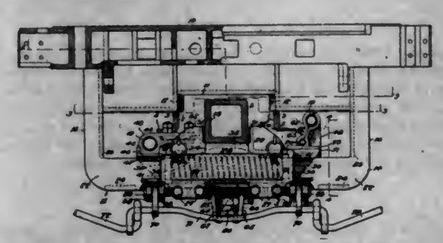
1,883,313. BOILER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Jan. 3, 1927, Serial No. 158,470. Divided and this application filed Aug. 11, 1930. Serial No. 474,676. 3 Claims. (Cl. 122—235.)

1. A steam generator comprising groups of water tubes located in a gas passage and including a series group disposed in the cooler end thereof, and a radiantly heated group of parallel tubes in the hotter end thereof, parallel flow tubes intermediate the aforesaid groups and each receiving water from one of said previously named groups, a steam and water drum receiving the discharge from all of said tubes, a steam and water separator receiving steam and water from said drum, a pump receiving steam and



water from said separator and discharging only to the radiantly heated group of parallel tubes, a second pump delivering water to the series group of tubes, the first named pump being controlled by the discharge from the last named pump, and the water level in the separators controlling the operation of the last named pump, both pumps always operating to deliver more water to all of said tubes than can be converted into steam thereby.

1,883,314. RADIAL COUPLER MECHANISM. WILLIAM J. REGAN, Wilkinsburg, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1928. Serial No. 328,599. 12 Claims. (Cl. 213—21.)

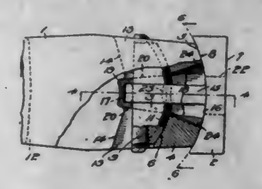


2. The combination with a laterally swinging car coupler, a coupler carrier having sides integrally connected by a portion extending under the coupler, a downwardly removable coupler saddle mounted on the coupler carrier so as to slide laterally with respect thereto and movable with respect to said carrier vertically downward from assembled position, yielding means for centering the saddle, and a laterally movable pipe carrier adapted to be actuated by said saddle, said pipe carrier and said saddle being relatively movable transversely of the car.

1,883,315. CAR COUPLER. WILLIAM J. REGAN, Wilkinsburg, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 24, 1920. Serial No. 373,242. 6 Claims. (Cl. 213—69.)

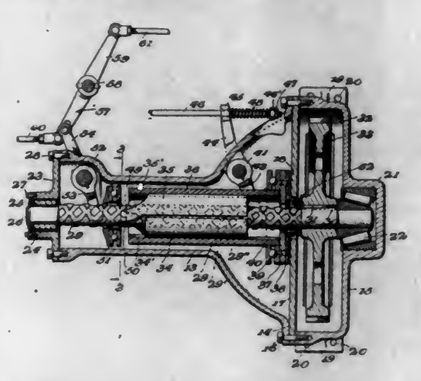
6. A car coupler involving shank member having a rear end wall and a transversely extending slot in ad-

vance thereof, said rear wall having curved rear and forward surfaces, a bearing block having a curved forward face cooperating with said curved rear surface, and a key seat member positioned in said slot and having a curved



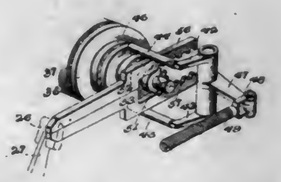
rear face cooperating with said curved forward surface of said rear wall, the bearing block being provided with forwardly extending arms embracing said key seat member and serving to connect said block to said key seat member.

1,883,316. BRAKE MECHANISM. FREDERICK HATHAWAY RAGAN, Cleveland, Ohio. Filed June 16, 1928. Serial No. 285,962. 9 Claims. (Cl. 188—140.)



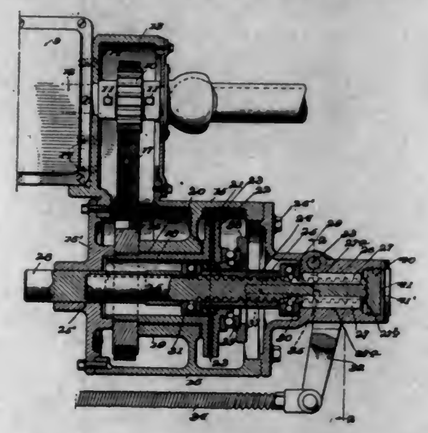
1. A brake operating mechanism including a screw member and a pair of nut members threaded thereon, means for rotating the screw member, means for restraining the rotation of the nut members to thereby cause translation thereof, and connections between the nut members and the brakes whereby translation of the nut members in one direction will operate the brakes.

1,883,317. BRAKE OPERATING MECHANISM. FREDERICK HATHAWAY RAGAN, Cleveland, Ohio. Filed June 25, 1928. Serial No. 288,149. 4 Claims. (Cl. 188—140.)



3. In a power brake operating mechanism for motor vehicles, a casing, a driving member journaled therein and adapted to be rotated from a rotating part of the vehicle, a pair of driven members mounted in said casing for longitudinal movement in one direction from a normal position, means for defining said normal position, one or the other of said members being adapted to be engaged and moved selectively by the driving member in accordance with the direction of rotation thereof, means continuously under the control of the operator for regulating the rotation of the driving member and connections whereby longitudinal movement of the moved member in said one direction is caused to apply the brakes.

1,883,318. BRAKE OPERATING MECHANISM. FREDERICK H. RAGAN, Cleveland, Ohio. Filed Dec. 27, 1928. Serial No. 328,703. 13 Claims. (Cl. 188—140.)



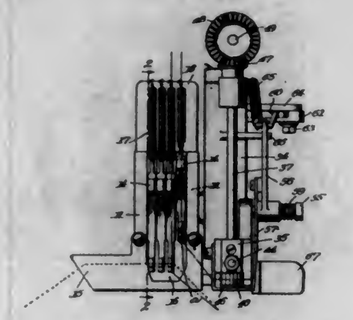
1. In a power brake operating mechanism for motor vehicles, a force multiplying unit including a driven member, a pair of driving members cooperating to actuate the driven member in one direction by relative motion between the driving members in either direction, means continuously under the control of the operator for moving one driving member from a rotating part, and means independent of the driven member for restraining similar movement of the other driving member.

1,883,319. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 23, 1926. Serial No. 143,701. 7 Claims. (Cl. 280—33.12.)



1. A truck comprising a sectional articulatable frame having a driving and steering portion and a load carrying portion, a pair of wheels entirely below said load carrying portion, supporting and traction wheels for said driving and steering portion operable to drive said portion in either direction, means for driving certain of the last mentioned wheels, means for steering certain of the last mentioned wheels, means for connecting said portions together to form said sectional frame, said means comprising a connector pivotally connected at one end on a vertical axis to said driving and steering portion and a universal joint between the opposite end of said connector and the other frame portion, separate devices at one end of said driving and steering frame portion for operating the driving means and the steering means, and means for swinging said connector laterally about said axis to affect steering of said load carrying portion.

1,883,320. YARN CUTTING AND CLAMPING DEVICE. HARRY B. AARONSON, Camden, N. J., assignor to H. Brinton Company, Philadelphia, Pa., a Corporation. Filed Dec. 12, 1931. Serial No. 580,680. 8 Claims. (Cl. 66—140.)



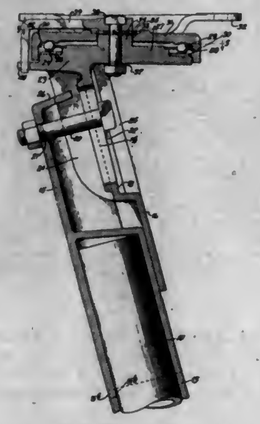
1. In a yarn changer for knitting machines, a series of yarn fingers, a common pivot for said fingers, a series of parallel horizontally slidable actuators for moving the respective fingers to idle position, individual springs for returning the fingers to feeding position, yarn-cutting means in advance of said fingers comprising a fixed cutting blade and a movable cutting blade; yarn-clamping means including a pair of intermeshing pinions between the fingers and the cutting blades; and pattern controlled means acting selectively on the yarn fingers for operating said cutting and clamping means.

1,883,321. CORE DRILL. MORRIS C. ALLEN, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 30, 1928. Serial No. 296,215. 2 Claims. (Cl. 255—72.)



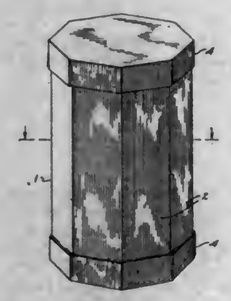
1. In a core drill, an annular core cutting bit having a central core passage, said bit having guiding means comprising projections having relatively wide guiding surfaces and extending radially from said bit and spaced at intervals around the periphery thereof, said guiding means adapted to substantially fit and slidably engage the walls of the drill hole to guide the bit during drilling, and the bottom faces of said projections being stepped to provide plane diamond receiving cutting surfaces in different planes and conjointly extending from the edge of the core passage to the outer periphery of the bit on the bottom faces of the projections for cutting out completely an annular kerf to admit said bit and to thereby form a core.

1,883,322. COMBINED DESK AND SEAT. GEORGE H. ABBOTT, Elgin, Ill., assignor to Woodruff & Edwards Inc., Elgin, Ill., a Corporation of Illinois. Filed Apr. 30, 1930. Serial No. 448,482. 4 Claims. (Cl. 155—95.)



1. In an article of furniture, a pair of plates in superposed swiveling relation, one plate being provided with an aperture, a projection on the other plate extending substantially through the aperture, a resilient washer located over the opening and projection, means on the plate having the aperture for preventing relative rotation between the washer and plate, a bolt passing through said washer and projection and securing the plates together under adjustable tension, said bolt being provided with means having bearing upon the upper surface of said resilient washer.

1,883,323. FOLDING BOX. CHAMPE S. ANDREWS, Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1929. Serial No. 388,667. 5 Claims. (Cl. 225—23.)



1. A polygonal shaped sectional container comprising a tubular body open at both ends, and a separable cover member for each of said ends, said cover member having a plurality of side walls extensions, one of said extensions having a tab portion at one end thereof and the adjacent extension having tab portions at both ends thereof, said body being collapsible so as to close into a flat position.

1,883,324. SAFETY RAZOR. LOUIS V. ARONSON, Newark, N. J. Filed Dec. 27, 1930. Serial No. 505,123. 15 Claims. (Cl. 30—12.)

1. A safety razor comprising, in combination, a support, a blade mounted thereon, a hone plate having a plane hon-

ing surface and movably mounted on said support, guard teeth carried by an edge of said plate, means to move said



plate from shaving to honing position and drive means carried by said support to cause relative movement between said blade and hone with the latter in honing position.

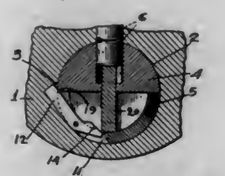
1,883,325. SECONDARY DISAZO DYESTUFFS. JAMES BADDILEY and JAMES HILL, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Nov. 2, 1926, Serial No. 145,910, and in Great Britain Feb. 12, 1926. Renewed Oct. 29, 1931. 6 Claims. (Cl. 260—81.)

1. As new secondary disazo dyestuffs, suitable for dyeing acetyl cellulose, the dyestuffs having the general formula

$$(NO_2)_x-R-N=N-R-N=N-R-NH_2$$

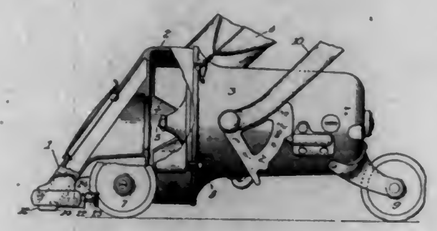
where x is 1 or 2 and R represents a benzene or naphthalene residue free from sulphonic acid or sulphonate groups and which dye acetyl cellulose in even level brown shades.

1,883,326. CYLINDER LOCK. WAINO A. THOR, Berkeley, Calif. Filed Oct. 7, 1931. Serial No. 567,395. 7 Claims. (Cl. 70—46.)



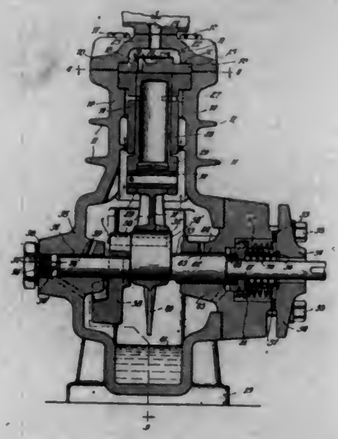
2. The combination with a cylinder lock and the barrel and tumblers thereof, of a segmental sleeve mounted upon said barrel to limit rotation thereof; and means mounted upon said segmental sleeve and normally engaging said cylinder to prevent movement of said sleeve and barrel, said means being positioned to be engaged and released by the key of said lock only after said key has released said tumblers, whereby full unlocking movement of said barrel may be obtained.

1,883,327. SUCTION CLEANER. BERNARD C. BECKER, York, Pa., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 514,011. 5 Claims. (Cl. 15—155.)



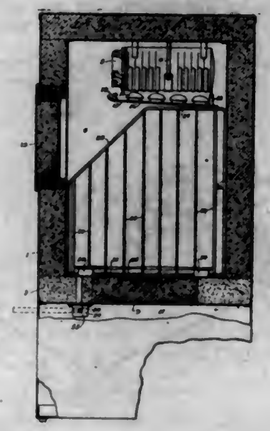
1. In a suction cleaner nozzle, a lip defining one side of the nozzle mouth, means movably supporting said lip and manually operable means to adjust said lip relative to said nozzle to vary the area of said mouth.

1,883,328. COMPRESSOR. WILLIAM E. BIHL and AXEL RAMCLAW, Chicago, Ill., assignors, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Nov. 8, 1927. Serial No. 231,874. 4 Claims. (Cl. 230—172.)



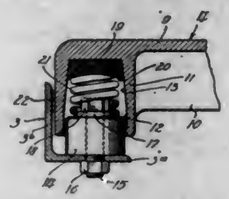
1. In a compressor, a crank case, a base and a cylinder block all formed as integral parts of a unitary structure, the block having an inner annular shoulder adjacent its upper end, a cylinder having an outer annular flange at its upper end seating on said shoulder, a cylinder head seating on the upper end of the cylinder, a cylinder block head seating on the cylinder head and secured to the block, a piston operating in the cylinder, a crank shaft mounted in the crank case, and operating connections between said shaft and the piston.

1,883,329. REFRIGERATOR. WILLIAM E. BIHL, Chicago, Ill., assignor, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,730. 9 Claims. (Cl. 62—116.)



1. In a refrigerator, a cooling unit, a removable drip pan disposed below said unit and inclined with respect to it, means on one end of said pan and engaging said unit to hang the pan therefrom, means for supporting the other end of the pan, and means in said pan for permitting a free flow of chilled air downward from said unit.

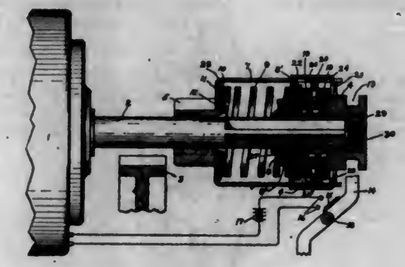
1,883,330. COMPRESSOR MOUNTING. WILLIAM E. BIHL and AXEL RAMCLAW, Chicago, Ill., assignors, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,917. 8 Claims. (Cl. 248—16.)



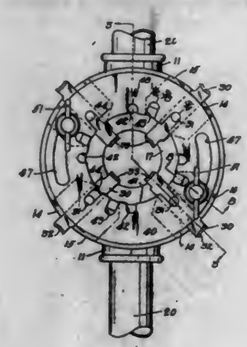
1. In combination, a supporting member, a base disposed above the supporting member and provided with a downwardly opening socket, a cushion member secured to the supporting member and projecting into said socket to limit the lateral motion of the base on the supporting member, a cushion member disposed within the socket, and a cushion spring confined between the two cushion members for supporting the base upon the support, said spring being spaced away from the surrounding wall of the socket.

1,883,331. STARTING APPARATUS. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Eclipse Machine Company, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1922, Serial No. 582,221. Renewed Feb. 28, 1925. 58 Claims. (Cl. 74—7.)

1. In combination, an engine driven member, a motor, a shaft driven thereby, a control member mounted on said shaft for longitudinal motion thereon but connected so as to rotate in unison therewith, a driving member mounted on said shaft adapted to cooperate with said engine driven member, torque transmitting means between the control member and said driving member including a clutch, a barrel cooperating with said driving member and said clutch, and a nut threaded on said control member and arranged to move thereon to tighten said clutch when said motor drives said shaft.



1,883,332. DIESTOCK. BRADFORD T. BORDEN, Lakewood, Ohio, assignor of one-half to William A. Neracher, Warren, Ohio, and one-half to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930. Serial No. 447,212. 7 Claims. (Cl. 10—121.)

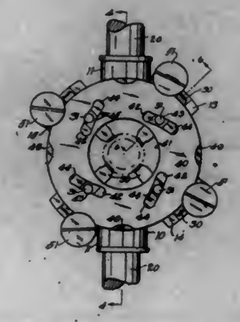


1. In a die stock, the combination of a hollow frame having chaser guides with arcuate flanges at their outer ends, a circular stopping plate mounted within and guided by said flanges, said stopping plate having a central opening with groups of radial notches leading therefrom for various distances, chasers having shoulders adapted to abut against the ends of the notches, arcuate slots through the stopping plate, and screws passing through the stopping plate into the frame for holding said plate in various angular positions.

1,883,333. DIESTOCK. BRADFORD T. BORDEN, Lakewood, Ohio, assignor of one-half to William A. Neracher, Warren, Ohio, and one-half to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Aug. 16, 1930. Serial No. 475,781. 3 Claims. (Cl. 10—122.)

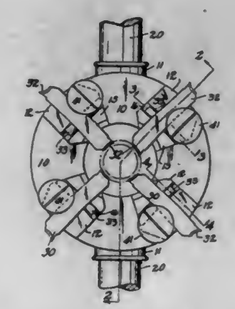
1. In a die stock, the combination of a hollow frame, chaser guides carried thereby, chasers occupying said guides and having shoulders, and an annular clamping plate having slots, one for each chaser, positioned obliquely to the chaser guides and each adapted to coact with

the chaser shoulder in various positions of the plate, each slot having an intermediately located recess at that side of the slot which is farther from the plate axis



to define an intermediate position of the chaser and hinder the outward thrust on the chase from rotating the plate.

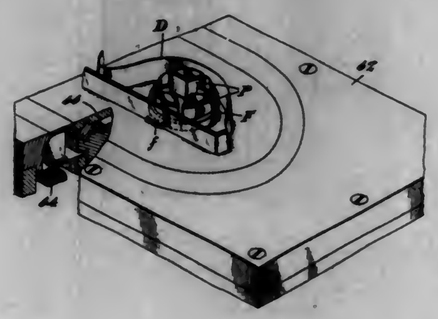
1,883,334. DIESTOCK. BRADFORD T. BORDEN, Lakewood, Ohio, assignor of one-half to William A. Neracher, Warren, Ohio, and one-half to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Aug. 16, 1930. Serial No. 475,782. 4 Claims. (Cl. 10—120.)



2. In a die stock, the combination of an annular frame having radial chaser guideways open at both ends, outwardly facing notches in the frame on opposite sides of the chaser guiding space and perpendicular thereto, and chasers adapted to occupy the guides and having rigid pins projecting from their opposite sides, said pins occupying the notches, and means bearing on the outer edge of the chasers to hold against the bottom of guiding space, the outer walls of the notches receiving the radial thrust on the chasers.

1,883,335. METHOD OF MAKING DIES. ALBERT R. BRADEN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 17, 1929. Serial No. 355,923. 9 Claims. (Cl. 76—107.)

1. The method of making cutting dies from patterns made up of separate design-units, which consists in forming a cutting element corresponding to each design-unit, sharpening each element to furnish a cutting edge having the contour of a unit of the design, arranging the cutting elements upon a support under the guidance of the pattern in accordance with the design to be cut, applying to each cutting element a force acting to retain it as arranged upon the support, and securing the cutting elements together in the relation established by the pattern to form the die.



9. The method of making dies, which consists in heating a tube, swaging the tube over a form to produce the transverse contour of the punch-element of a die, forcing a form through the punch to perfect its contour, placing the punch and a surrounding frame upon a support, heating the support, and pouring molten metal upon the support within the frame about the punch.

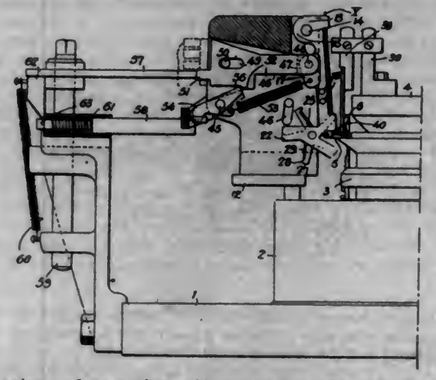
1,883,336. SCREW PROPELLER FOR AIRCRAFT. RUDOLPH CHILLINGWORTH, Leytonstone, England. Filed Apr. 6, 1926, Serial No. 100,100, and in Great Britain Feb. 12, 1925. Renewed Dec. 18, 1931. 8 Claims. (Cl. 170—159.)



1. A propeller device having a shaft, a blade on the shaft, disposed obliquely with respect thereto, the inner portion of the blade being parallel with the longitudinal line of the shaft and being applied on an oblique line in the direction of the transverse plane of the blade, the blade in the direction of its longitudinal axis being curved, the curving of the blade being away from its longitudinal axis from the inner end portion towards the middle portion and reversely from the middle portion towards the tip portion, and the blade also being curved spirally about its longitudinal axis from the inner end portion to the tip portion.

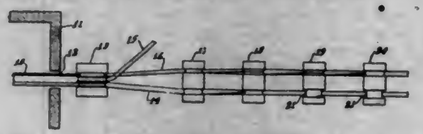
1,883,337. YARN CHANGER. GEORGE D. COLLAR, Glenside, Pa., assignor to H. Brinton Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1930. Serial No. 479,983. 9 Claims. (Cl. 66—140.)

3. In a rib knitting machine, a plurality of yarn fingers at a feed, means for moving said fingers in parallel planes toward and from feeding position, yarn-cutting and clamping means on each finger, and means stationary with respect to the backward swing of the yarn fingers for



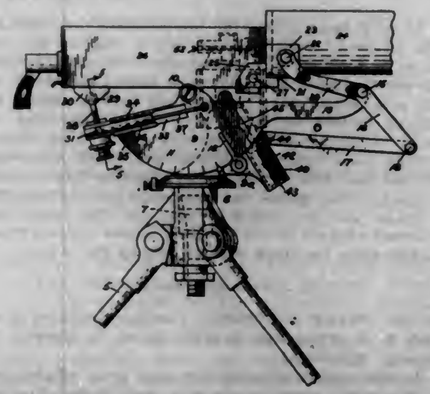
engaging and operating said cutting and clamping means as the respective yarn fingers move away from feeding position.

1,883,338. CONTINUOUS PROCESS AND APPARATUS FOR ROLLING SCRAP RAIL AND THE LIKE. GEORGE W. CONNORS, Birmingham, Ala. Filed Aug. 15, 1930. Serial No. 475,606. 10 Claims. (Cl. 80—65.)



5. The herein described process for continuously rolling rods, bars, stripe and/or shapes from scrap rail and similar raw stock, which consists in slitting the stock, in the first pass, delivering the stock sections simultaneously to a continuous rolling mill having multipass rolls designed to convert same continuously into the desired finished stock, and finishing stock of different sizes on different rolls of said mill.

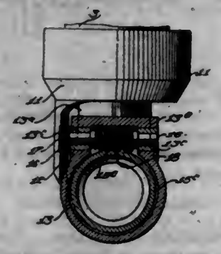
1,883,339. MOUNT FOR MACHINE GUNS. RICHARD C. COUPLAND, Norfolk, Va. Filed July 16, 1930. Serial No. 468,361. 17 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



16. In a gun mount, a cradle, a gun supporting member carried by the cradle and having its relation thereto changed on elevation of the cradle and an ammunition box holder carried by the gun supporting member.

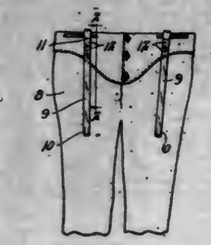
17. In a gun mount, a cradle, a gun supporting member carried by the cradle and having its relation thereto changed on elevation of the cradle, a gun, means for attaching the gun to the gun supporting member, and an ammunition box holder carried by said attaching means and by an element of the gun.

1,883,340. VARIABLE PITCH PROPELLER. JOHN F. DAUGHERTY, San Diego, Calif., assignor of one-half to John W. Daugherty, San Diego, Calif. Filed Oct. 3, 1928. Serial No. 310,025. 4 Claims. (Cl. 170—163.)



1. In a variable pitch propeller, a plurality of propeller blades, a hub rotatably supporting said blades, means for preventing radial movement of said propeller blades, a propeller shaft secured to said hub, a worm gear and rack traveler means rotatable with said propeller shaft and axially shiftable relative thereto for co-operating with said hub member for rotating said propeller blades, and screw and chain means for shifting said traveler means axially relative to said propeller shaft.

1,883,341. UNDERWEAR SUPPORTING DEVICE. HENRY C. DAUPHINAIS, Jamestown, N. Dak. Filed Jan. 17, 1930, Serial No. 421,447. Renewed Mar. 14, 1932. 5 Claims. (Cl. 2—224.)

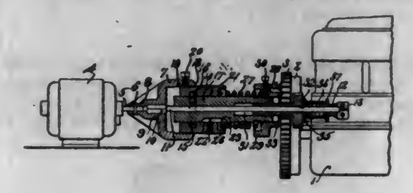


1. In a pair of underwear drawers, a device to support the leg portions of the drawers to prevent pulling and binding of the drawers about the crotch, comprising a pair of fabric straps secured at their lower ends to the front leg portions of the drawers intermediate a vertical line taken through the crotch and the outer side edges of the drawers and adjustable securing means carried by said straps adjacent their upper ends to permit attachment of the upper ends of the straps to a garment worn about the waist of the wearer.

1,883,342. POWER TRANSMISSION MECHANISM. ALBERT A. DENSMORE, Boston, Mass., assignor to Eclipse Machine Company, Elmira Heights, N. J., a Corporation of New York. Filed June 10, 1922. Serial No. 567,311. 25 Claims. (Cl. 74—7.)

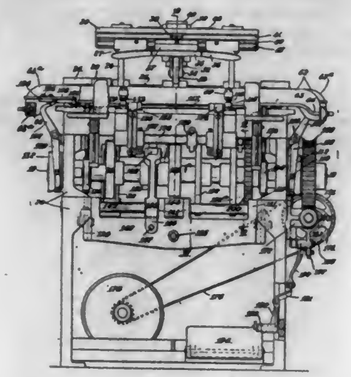
1. A power transmission mechanism for engine starting comprising a power shaft, a sleeve co-axial therewith, cooperating cam elements carried by the shaft and sleeve respectively for transmitting motion of rotation from the former to the latter and arranged to slip by each other

in the event of an abnormal amount of torque being transmitted to thereby operatively disconnect the shaft and sleeve, a spring means normally operative to determine the driving pressure between said elements, a screw



shaft concentric with the sleeve and having screw threaded engagement therewith, said screw shaft having a driving member movable therewith to engage a member of the engine to be started.

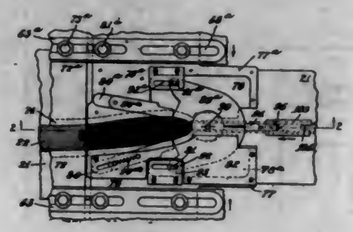
1,883,343. INFOLDING MACHINE. WALTER L. DIXON, Boston, Mass., assignor to Reece Folding Machine Company, Boston, Mass., a Corporation of Maine. Filed May 27, 1930. Serial No. 456,053. 25 Claims. (Cl. 223—55.)



1. An infolding machine having a contractible templet, means for lifting and lowering it about a rear axis, a cam secured by a mounting at the axis of templet swing, a follower on the templet cooperating with said cam to contract the templet during lifting, and means for relatively adjusting the cam and follower to change the timing of the contraction of the templet, consisting of a clamping device holding the cam at a point removed from the axis and releasable to permit rotary shift of the cam.

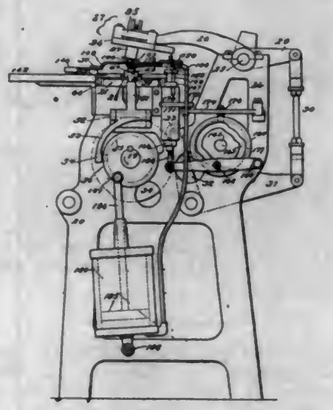
1,883,344. INFOLDING MACHINE. WALTER L. DIXON, Boston, Mass., assignor to Reece Folding Machine Company, Boston, Mass., a Corporation of Maine. Filed May 27, 1930. Serial No. 456,054. 3 Claims. (Cl. 223—55.)

1. In a machine for infolding the opposite side edges and both rounded ends of collar band or similar blanks, in combination with a blank supporting bed and a defining templet, of infolders for the opposite side edges of the blank movable inwardly and outwardly, and at the end a complementary pair of infolders swingably connected together, means for moving the pair of end infolders inwardly endwise, means for moving the opposite side edge



infolders inwardly sidewise, and means carried by the opposite side edge infolders respectively for swinging the adjacent end infolders toward each other.

1,883,345. INFOLDING MACHINE. WALTER L. DIXON, Boston, Mass., assignor to Reece Folding Machine Company, Boston, Mass., a Corporation of Maine. Filed Feb. 27, 1931. Serial No. 518,702. 16 Claims. (Cl. 223—55.)



1. In an automatic machine for infolding the edges of blanks of cloth, leather or the like, a support for the blank to be infolded, a definer arranged to move into defining position upon the blank and retract therefrom, a holder arranged to move into position upon a portion of the blank to hold the blank upon the support, and to retract therefrom, infolding means arranged to infold the blank edge upon the definer, and timed actuating means for said definer, holder and infolding means, such that the infolding means twice advances and retracts for each blank, and the definer between the first retraction and second advance of the infolding means retracts from the blank while the blank remains held by the holder.

1,883,346. WARP PRINTING. CAMILLE DREYFUS, New York, N. Y. Filed Sept. 8, 1928. Serial No. 304,803. 3 Claims. (Cl. 8—5.)

1. In the method of producing warp print effects, the step of printing a warp containing organic derivative of cellulose yarns and having a size thereon, with a paste containing an insoluble anthraquinone dye.

1,883,347. PROCESS OF MAKING ARTIFICIAL FILAMENTS AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 8, 1928. Serial No. 304,804. 3 Claims. (Cl. 18—54.)

1. Process of forming hollow filaments, bristles and the like comprising extruding a solution of an organic derivative of cellulose in a volatile solvent through orifices of a spinnerette into and evaporating atmosphere heated to a temperature below the boiling point of the solvent employed in the solution whereby solid cellulosic filaments are formed and drawing off the filament at such slow rate that the solvent evaporates at the surface of the filaments first sufficiently to form a solid skin prior to the substantial evaporation of the solvent in the interior of the filaments, whereby upon the evaporation of the solvent in the interior of the filament hollow filaments are formed.

1,883,348. TREATMENT OF FABRIC AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,228. 8 Claims. (Cl. 8—20.)

1. Process for reducing the tendency of a knitted fabric to develop faults comprising subjecting a knitting fabric consisting wholly of yarns of organic derivatives of cellulose to the action of a solution of nitric acid of such concentration as to cause shrinkage of the fabric.

7. The process of reducing the tendency of knit hose to develop faults comprising subjecting knit hose consisting of yarns of organic derivatives of cellulose to the action of a solution of nitric acid of such concentration as to cause shrinkage of the fabric.

1,883,349. TEXTILE PROCESS AND PRODUCT. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 10, 1930. Serial No. 427,418. 3 Claims. (Cl. 28—59.)

1. Method of forming knit fabrics comprising applying a finely divided solid to a yarn containing artificial filaments of organic derivatives of cellulose and then knitting the same whereby a knit fabric of substantially uniform loops is obtained.

1,883,350. TREATMENT OF MATERIALS MADE OF OR CONTAINING CELLULOSE DERIVATIVES. HENRY DREYFUS, London, England. Filed Mar. 12, 1927, Serial No. 175,014, and in Great Britain Dec. 14, 1926. 14 Claims. (Cl. 8—5.)

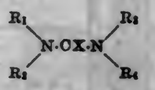
1. Process for dyeing material comprising an organic substitution derivative of cellulose, comprising dyeing the material with a coloring compound which comprises at least one basic amino group linked directly to carbon in a side chain.

1,883,351. TREATMENT OF CELLULOSE DERIVATIVES. HENRY DREYFUS, London, England. Filed Aug. 15, 1927, Serial No. 213,199, and in Great Britain Oct. 8, 1926. 2 Claims. (Cl. 8—5.)

1. Process for dyeing material comprising a cellulose ether, comprising dyeing the material with an aqueous dispersion of a relatively water-insoluble coloring compound, said dispersion being prepared by pretreating the compound with a solubilizing agent comprising a sodium salt of sulpho-ricinoleic acid and with xylene.

1,883,352. DYEING, PRINTING, OR STENCILING OF MATERIALS MADE OF OR CONTAINING CELLULOSE DERIVATIVES. HENRY DREYFUS, London, GEORGE HOLLAND ELLIS, TOBIAS OCKMAN, and HENRY CHARLES OLPIN, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 19, 1929, Serial No. 356,600, and in Great Britain Apr. 26, 1928. 19 Claims. (Cl. 8—5.)

1. Process for dyeing materials comprising organic substitution derivatives of cellulose which comprises applying thereto unsulphonated colouring matters of the general formula

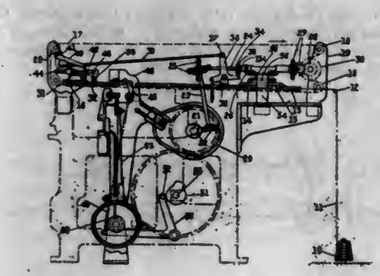


where X represents oxygen or sulphur and R_1, R_2, R_3, and R_4 represent hydrogen, or aryl residues but at least one is a nitroaryl residue.

1,883,353. MANUFACTURE OF ALIPHATIC ANHYDRIDES. HENRY DREYFUS, London, England. Filed May 10, 1929, Serial No. 362,133, and in Great Britain May 26, 1928. 19 Claims. (Cl. 260—123.)

1. Process for the manufacture of an aliphatic anhydride which comprises subjecting the vapor of an aliphatic acid to thermal decomposition in presence of at least one nitrogenous basic substance.

1,883,354. SHUTTLELESS LOOM. HENRY DREYFUS, London, and FRANK COREYN HALE, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 15, 1930, Serial No. 488,828, and in Great Britain Oct. 23, 1929. 4 Claims. (Cl. 139—127.)

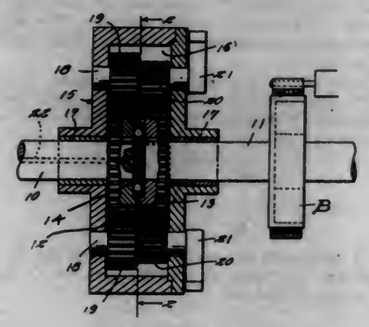


1. A shuttleless loom comprising in combination means for measuring weft from a stationary supply at a side of the loom in the form of a loop whose length is sufficient for two picks, weft-inserting means adapted to engage each limb of the loop in turn and carry it part-way througm the shed, and means for transferring the weft thus inserted to withdrawing means adapted to carry it through the remainder of the shed.

1,883,355. TRANSMISSION. SILAS M. EDBERG, Bismarck, N. Dak., assignor of twenty per cent to Joseph P. Spies and forty-five per cent to Melvin O. Steen, Bismarck, N. Dak. Filed Mar. 30, 1929. Serial No. 351,395. 5 Claims. (Cl. 74—34.)

1. In an automatic transmission and in combination with aligned driving and driven shafts having gears upon their adjacent ends, a housing freely rotatable upon said shafts about said gears, a plurality of shafts rotatably mounted in said housing one end of shafts extending

outwardly of said housing, gears mounted in the housing and upon said latter shafts, said latter gears engaging with said first gears and a weight eccentrically carried



by said latter shafts outwardly of the housing said housing coacting with said weights to automatically control the rotation of said driven shaft.

1,883,356. MANUFACTURE OF AZO DYESTUFFS. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 2, 1928, Serial No. 297,099, and in Great Britain Aug. 17, 1927. 8 Claims. (Cl. 260—86.)

1. As new products, azo dyestuffs of the probable formula $R_1(-N=N-R_2)_n$, where n is 1 or 2, R_1 an anthraquinone nucleus and at least one R_2 is an amino naphthoic acid.

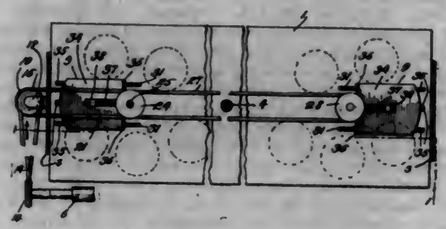
1,883,357. RAIL CAR. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,477. 19 Claims. (Cl. 105—35.)



1. A rail car comprising a body, an axle adjacent each end of said body; a pair of independently mounted leaf springs yieldably connecting each of said axles to said body; a housing carried by each end of each of said axles; a wheel rotatably supported by each of said housings; and means supported by said body for imparting rotation to said wheels for propelling said car, the wheels on one side of said body being driven independently of those on the other side thereof.

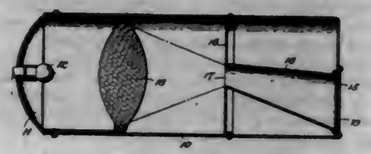
1,883,358. SPINNING FRAME CLEANER. JOHN C. FERGUSON, Elmira, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,831. 13 Claims. (Cl. 118—19.)

1. The combination with the creel of a spinning frame having superposed creel boards, of a vertical shaft extending between two of the creel boards, pulleys fixed on said shaft just above each of said creel boards, idler pulleys on said creel boards, belts adjacent to the upper surfaces of said creel boards passing around said shaft pulleys and said idler pulleys, wipers attached to said belts and resting on the upper surfaces of said creel boards, and a



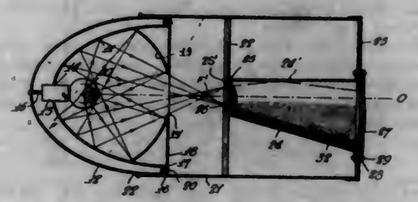
direct driving connection between a continuously rotating power-driven part of the spinning frame and said shaft.

1,883,359. HEADLIGHT. BEAUDDUS BROCK FORTNEY, Louisville, Ky., assignor, by direct and mesne assignments, to American Safety Headlight Corporation, a Corporation of Delaware. Filed Mar. 12, 1928. Serial No. 261,004. 4 Claims. (Cl. 240—41.3.)



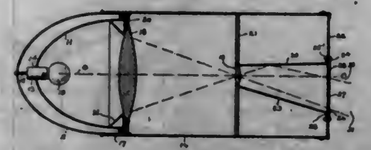
4. In a headlight, the combination which includes a source of light and a condensing system arranged to converge the light from said source to a focal area within the headlight, a conically formed reflector conduit having its small end concentric with the optical axis of said condensing system adjacent the focal area of said light, and having its forward end eccentrically disposed with the optical axis to extend below the same, said conduit having a reflecting surface at its upper interior portion.

1,883,360. HEADLIGHT. BEAUDDUS BROCK FORTNEY, Louisville, Ky., assignor, by direct and mesne assignments, to American Safety Headlight Corporation, a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 335,876. Renewed June 20, 1931. 6 Claims. (Cl. 240—41.3.)



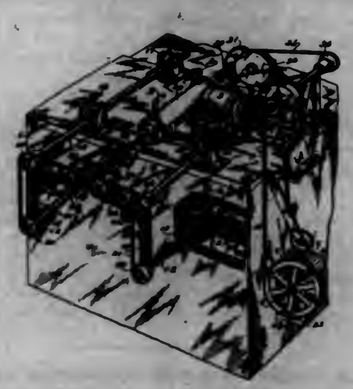
1. In a headlight, the combination which includes a primary compound condensing reflective system, including an ellipsoidal segment and a spheroidal segment, a source of light positioned at the inner focus of the ellipsoidal segment, said spheroidal segment having an emitting aperture, and a conically formed secondary reflector conduit having its small end concentric with the outer focus of the ellipsoidal segment and its forward end eccentrically disposed with said outer focus, said conduit having a reflector at its upper interior portion, and lenses placed near the inner and outer ends of said conduit reflector.

1,883,361. HEADLIGHT. BEAUDDUS BROCK FORTNEY, Louisville, Ky., assignor to American Safety Headlight Corporation, a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 335,875. Renewed June 16, 1932. 3 Claims. (Cl. 240—41.3.)



1. In a headlight having the combination which includes a condensing and refracting system arranged to converge the light from a source to a focal area within the headlight, of a conically formed secondary opaque reflector conduit having its small end concentric with the optical axis of said system adjacent the focal area of said light and its forward end eccentrically disposed with the optical axis to extend below the same, said conduit having the portion of the conical conduit disposed above the optical axis interiorly provided with a mirrored reflective surface, a lens placed at the inner end of the conduit, a transparency at the outer end of said conduit, said transparency comprising a translucent material for a portion of its upper section.

1,883,362. AUTOMATIC ROTARY LEER FEEDER. IRA H. FREEZE, Clarksburg, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Original application filed Nov. 29, 1927, Serial No. 236,524. Divided and this application filed Nov. 29, 1927. Serial No. 236,523. 11 Claims. (Cl. 198—31.)



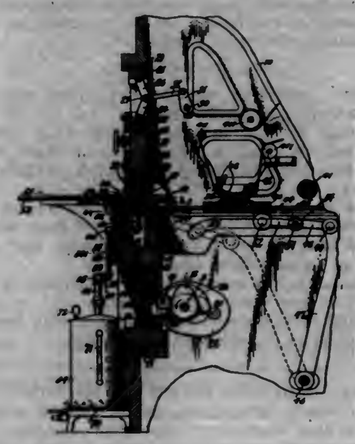
1. A leer feeder including a cylinder and piston rod, a stripper bar, operative connections between the piston rod and stripper bar, and means for rotating said piston rod to impart continuous orbital movement to said stripper bar, said cylinder intermittently reciprocating the piston rod to move the stripper bar back and forth.

1,883,363. SYSTEM AND STRUCTURE FOR HIGH SPEED TRAFFIC. JUSTUS W. FRY, Renton, Wash. Filed Sept. 9, 1930. Serial No. 480,705. 7 Claims. (Cl. 104—124.)



1. In a device of the character described, a plurality of flat slabs having raised portions at the ends, a suitable steel structure for supporting the slabs to form a plurality of continuous roadways, a complete flat surface above the said roadway forming a continuous covering therefor and also a landing and guideway for airplanes, and suitable approaches to the said roadways.

1,883,364. APPARATUS FOR TREATING PAPER WITH VAPOR PREPARATORY TO PRINTING THEREON. EDWARD R. GASKIN, Buffalo, N. Y., assignor of one-third to Alexander H. Jackson and Peter T. Hoehn, Buffalo, N. Y. Filed Oct. 29, 1930. Serial No. 491,890. 11 Claims. (Cl. 101—164.)

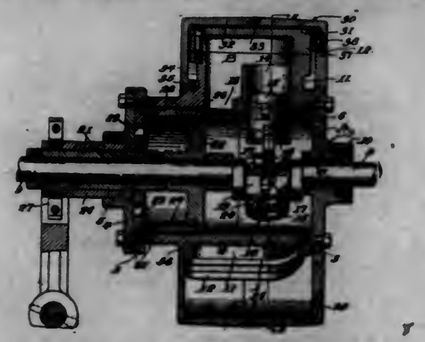


1. An apparatus of the character described, comprising two relatively movable platens adapted respectively to carry a die and counter between which a sheet of paper is to be printed, means for supporting the sheet at the printing position and means for applying vapor to the sheet at the printing position before printing an impression thereon between the die and counter.

1,883,365. HYDRAULIC CLUTCH. ANTHONY GELLERT, Brooklyn, N. Y. Filed May 27, 1931. Serial No. 540,415. 1 Claim. (Cl. 192—60.)

A hydraulic clutch comprising a drive member adapted for connection to a power medium and having a main fluid chamber, a crank shaft journalled in said drive member and adapted to be connected to a device to be driven, radially extending members on the drive member and forming auxiliary chambers, said drive member having ports between the chambers, cylinders carried by the radially extending members and the drive member and in

communication with the chamber, pistons slidable in the cylinders and connected to the crank shaft, a non-slidable head in the main chamber, a sleeve valve between the head



and the walls of the main chamber for controlling the ports, and means for varying the position of the valve relative to the ports.

1,883,366. PACKING AND PRESERVING NUTS IN GLASS CONTAINERS. DANIEL M. GRAY, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Nov. 6, 1928. Serial No. 317,692. 4 Claims. (Cl. 99—8.)

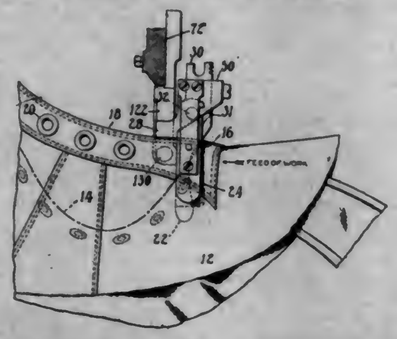
1. A package of shelled nuts, comprising a transparent glass container and transparent insulating lacquer applied as a coating to the interior of the container, to prevent the formation of a white deposit.

1,883,367. METHOD OF STABILIZING THE CONSISTENCY OF MAYONNAISE. DANIEL M. GRAY, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Dec. 21, 1929. Serial No. 415,792. 4 Claims. (Cl. 99—11.)

1. The method of stabilizing the consistency of mayonnaise, which consists in mixing mustard flour with vinegar, and then processing the mixture with heat prior to its use as an ingredient in mayonnaise.

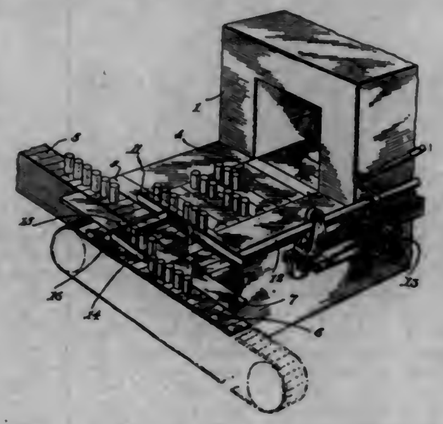
8. The method of stabilizing the consistency of mayonnaise, which consists in mixing mustard with an aqueous liquid, and then processing the mixture with heat prior to its use as an ingredient in mayonnaise.

1,883,368. FASTENER-INSERTING MACHINE. THOMAS E. GRIMES, Westmount, Quebec, Canada, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 13, 1931. Serial No. 556,799. 10 Claims. (Cl. 218—15.)



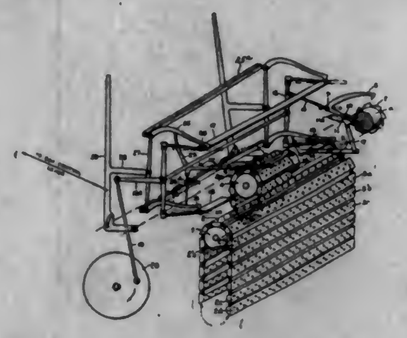
1. A fastener-inserting machine comprising mechanism arranged to insert fasteners, mechanism arranged to feed the work step by step to space successive fasteners one from another, and a work-supporting member arranged at the feeding-in side of the fastener-inserting mechanism, said member being normally stationary but movable by the work in the direction of the feeding movement thereof.

1,883,369. LEER LOADER. COY H. HARDMAN, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 29, 1929. Serial No. 359,017. 6 Claims. (Cl. 198—31.)
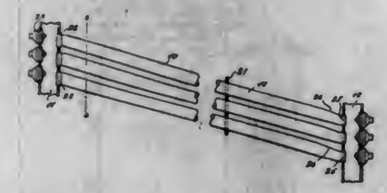


1. In a device of the class described, a leer, conveyers traversing the front of said leer, a dead plate between said conveyers, a shadow pan between one of said conveyers and the main leer conveyer, and means for simultaneously projecting ware from one of said conveyers across the dead plate onto the shadow pan and from the other conveyer into the leer.

1,883,370. LOOM ATTACHMENT. CLIFFORD HARGREAVES, Drummondville, Quebec, Canada, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 22, 1929. Serial No. 334,184. 3 Claims. (Cl. 139—326.)



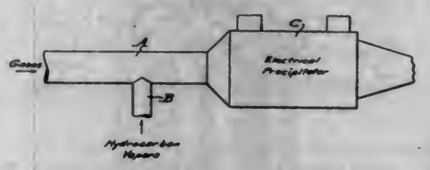
1. In a loom having a dobby with pattern bars, pegs for actuating the mechanism for controlling the movement of the shafts of the harness, a griffe bar, and shuttle holder changing mechanism, the combination of an auxiliary cylinder having pegs thereon, a hooked arm connected with the shuttle holder changing mechanism, a lever actuated by said pegs for causing said hooked arm to engage the griffe bar, and means, including such griffe bar, actuated by said pattern bars to cause the auxiliary cylinder to rotate.

1,883,371. STEAM BOILER. ISAAC HARTER, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 31, 1928. Serial No. 316,283. 9 Claims. (Cl. 122—303.)



1. In a water tube steam boiler, oppositely-disposed water chambers having their adjacent faces flat and substantially parallel to each other and a plurality of water tubes extending between and having their ends entered into openings in said parallel faces, the ends of each tube having bends in two planes with respect to the main portion of the tube, whereby each end is brought into position to enter said openings at right angles to said faces and the main portion of each tube is out of alinement in each plane with said openings.

1,883,372. CONDITIONING GASES FOR ELECTRICAL PRECIPITATION. CARL W. J. HEDBERG, Middlesex, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 7, 1928. Serial No. 245,173. 7 Claims. (Cl. 183—114.)



1. The process of separating suspended particles from gases which consists in supplying hydrocarbons in a fluid state to such gases in an amount sufficient to substantially alter the electrical characteristics of the gases, and by means of a corona discharge, precipitating the particles suspended in the gases in a friable state.

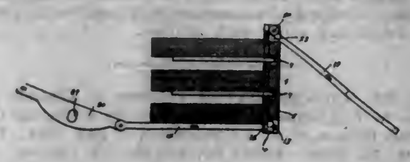
1,883,373. PURIFICATION OF BLAST FURNACE GASES. CARL W. J. HEDBERG, Middlesex, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,718. 5 Claims. (Cl. 183—114.)

1. A method of purifying blast furnace gases which comprises conditioning the gases by generating hydrocarbons in a fluid state in an amount sufficient to alter the electrical characteristics of the gases in the blast furnace and then passing the gases thus conditioned between electrodes maintained at a high potential difference.

1,883,374. TREATMENT OF OILS. JOSEPH BENNETT HILL, Wynnewood, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 21, 1931. Serial No. 539,136. 18 Claims. (Cl. 196—13.)

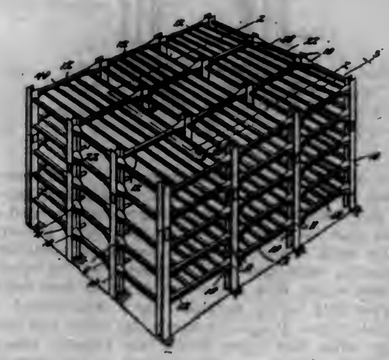
10. In the art of refining mineral lubricating oil containing paraffinic and naphthenic hydrocarbons, the step of fractionally extracting the oil with furfuralcohol, to effect a separation of fractions respectively richer in paraffinic and naphthenic compounds.

1,883,375. COMBINED SUPPORT AND PICKLING RACK. GRANT U. HILLIARD, Youngstown, Ohio. Filed Oct. 10, 1929. Serial No. 398,640. 8 Claims. (Cl. 266—7.)



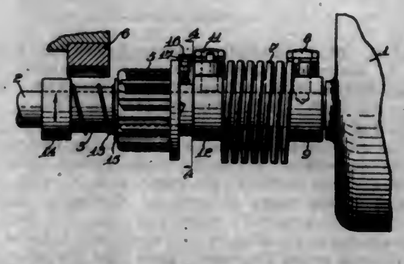
1. An apparatus of the character described having in combination a frame comprising a base, a side member rigidly secured to one side of said base, a side member hingedly secured to the other side of said base opposite said rigid side member, and means adapted to be connected to the free end of said side members for handling the same.

1,883,376. BUILDING CONSTRUCTION. MEIER GEORGE HILPERT and CAMILLO WEISS, Bethlehem, Pa. Filed Oct. 20, 1927. Serial No. 227,544. 25 Claims. (Cl. 189—36.)



1. A shop fabricated member for erection in a structure, comprising a column section and a laterally extending beam member secured thereto, the flange and web of said beam member being secured to the column.

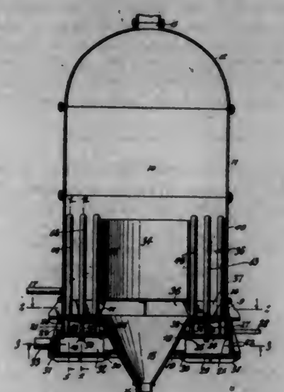
1,883,377. REBOUND CHECK FOR STARTER DRIVES. DANIEL P. KEARNEY, Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Sept. 1, 1931. Serial No. 560,584. 8 Claims. (Cl. 74—7.)



1. In starting mechanism for internal combustion engines, a power member, a driving member mounted thereon for rotation thereof and therewith, and connected to be

moved thereby into and out of engagement with a member of an engine to be started, a detent on said power member, and a speed responsive element on said driving member normally positioned out of cooperative relation with said detent but arranged to be moved upon rapid rotation of said driving member into position to engage said detent and arrest such rotation.

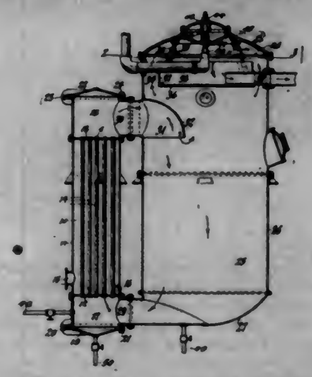
1,883,378. CONCENTRATOR. MARTIN J. KEMMER, Snyder, N. Y., assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 20, 1930. Serial No. 476,533. 2 Claims. (Cl. 159—23.)



1. A liquor concentrator comprising a concentrating chamber having at its lower end an annular upper tube sheet and a downwardly projecting spout arranged on the central part of said upper tube sheet and provided externally with upper and lower flanges, a manifold wall surrounding said spout and connected at its upper edge with said upper tube sheet and provided internally with a downwardly facing shoulder which is arranged in line with said upper flange and having its lower end arranged in line with said lower flange, an annular lower tube sheet having its inner edge secured to the underside of said upper flange and its outer edge secured to the under side of said shoulder and forming with said spout, wall and upper tube sheet an upper manifold chamber, an annular cover secured at its inner edge to the underside of said lower flange and at its outer edge to the lower edge of said wall and forming with said spout, wall and lower tube sheet a lower manifold chamber, and heating tube units each having an inlet communicating with one of said chambers and an outlet communicating with the other chamber, the opening closed by said cover being larger than the opening closed by said lower tube sheet so that the latter can be removed through said opening which is closed by said cover.

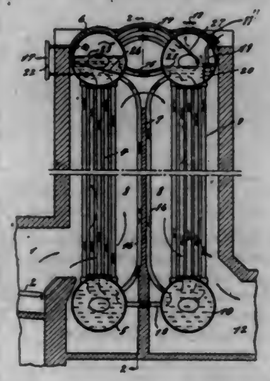
1,883,379. EVAPORATOR. MARTIN J. KEMMER, Snyder, N. Y., assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 30, 1930. Serial No. 479,048. 5 Claims. (Cl. 261—115.)

1. An evaporator comprising a separating and storing chamber adapted to receive the concentratable liquid and having a vapor outlet at its upper part, a catch basin arranged in the upper part of the separating chamber and connected with said outlet and separated from the side wall of the chamber by an intervening annular passage through which the vapors pass from the lower part of said chamber and toward the top of said basin; means for delivering an annular shower of condensing liquid so that the same passes from the top of said chamber into the top of said basin between said annular passage and said outlet; and including a downwardly projecting spreader for condensing liquid arranged centrally over the basin,



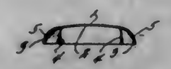
and an upwardly projecting nozzle for directing a stream of condensing liquid against said spreader and causing an annular shower of said liquid to fall into said basin.

1,883,380. BOILER. HOWARD J. KERR, Westfield, and CHARLES U. SAVOYE, Hackensack, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 13, 1928. Serial No. 319,045. 8 Claims. (Cl. 122—336.)



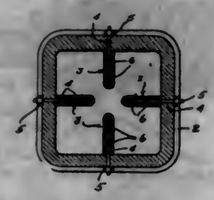
1. In a boiler having at least two steam and water drums, steam circulators and water circulators connecting said drums, a bank of tubes connected to one of said drums below the normal water level therein and below said water circulators, means to apply heat to said tubes to generate steam therein, and a baffle disposed in the drum above and extending across the ends of said tubes and adapted to interrupt the rise of the fluid discharged from the tubes into the drum, said baffle being inclined upwardly, with its lower edge beneath said water circulators and above said tubes.

1,883,381. MULCH. FRANKLIN H. KERR, Toledo, Ohio. Filed June 24, 1929. Serial No. 373,100. 4 Claims. (Cl. 47—9.)



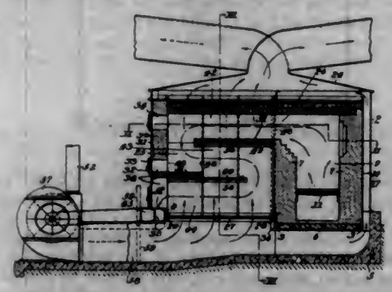
1. A mulch shield having an intermediate deck and opposite depending sinuous edges.

1,883,382. INGOT MOLD. AUGUSTUS B. KINZEL, Beechhurst, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Oct. 27, 1930. Serial No. 491,489. 4 Claims. (Cl. 22—139.)



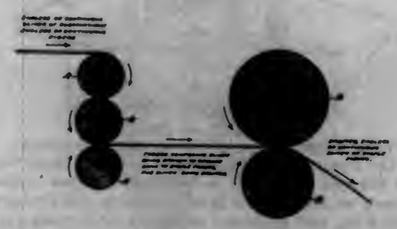
1. A mold for casting ingots comprising an outer wall and a plurality of vertical dividing walls of low heat conducting material extending inward from said outer walls toward the center of the mold.

1,883,383. FURNACE. LEIF LEE, Youngstown, Ohio. Filed Feb. 23, 1929. Serial No. 341,919. 3 Claims. (Cl. 126—108.)



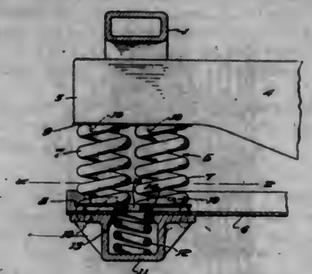
1. In a furnace, an air heating system comprising a plurality of vertical parallel spaced metal plates alternately separated by spaced vertical and spaced horizontal metal plates secured thereto, said horizontal plates being staggered and providing a tortuous passage for combustion gas, means whereby a stream of air is introduced to the bottom of the vertical passages formed by the spaced vertical metal plates, and means whereby a stream of hot combustion gas is introduced to the top passages formed by the spaced horizontal plates.

1,883,384. PROCESS OF PRODUCING YARN. JAMES LOUIS LOHRKE, Moylan-Rose Valley, and HENRY H. PERRY, Bryn Mawr, Pa. Filed Feb. 18, 1930. Serial No. 429,238. 14 Claims. (Cl. 19—1.)



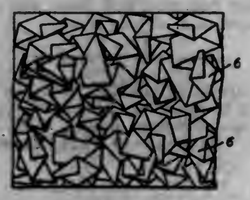
1. In the process of producing yarn from a continuous sliver composed of a multiplicity of substantially continuous fibers grouped in substantial parallelism, reducing the fibers to staple fibers while maintaining their substantial parallelism and the continuity of the sliver.

1,883,385. AUXILIARY SPRING MECHANISM FOR TRUCKS. MARK H. MARTIN, Reading, Pa., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Original application filed May 11, 1928, Serial No. 277,081. Divided and this application filed May 27, 1929. Serial No. 366,876. 4 Claims. (Cl. 105—197.)



1. In a railway car truck, a side frame having a seat for truck springs and formed beneath said seat with a hollow portion containing auxiliary helical spring means adapted to cooperate with the truck springs and in series therewith, said auxiliary spring means serving to center the truck springs.

1,883,386. SOUND ABSORBING UNIT AND METHOD OF MAKING SAME. JACOB MAZER, Stonehurst, Upper Darby Township, Delaware County, Pa. Filed Oct. 25, 1930. Serial No. 491,152. 10 Claims. (Cl. 20—4.)



1. A sound-absorbing unit consisting of a plurality of strips crushed in a direction lengthwise thereof to form folds and held in assembled relation.

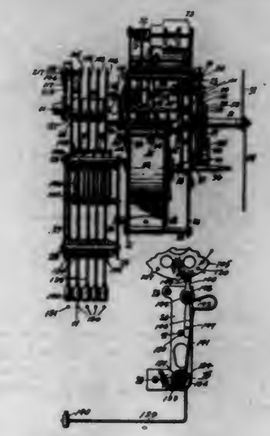
1,883,387. CHIME CLOCK. SAMUEL MAZUR, Bristol, Conn., assignor to The Sessions Clock Company, Forestville, Conn., a Corporation of Connecticut. Filed Apr. 18, 1930. Serial No. 445,281. 11 Claims. (Cl. 58—13.)

2. A clock comprising a chiming and striking mechanism having a support, a rotary chime player drum provided with a stop opening, a stop pin adapted to be engaged with and disengaged from said stop opening by longitudinal movement of said drum relative to said pin; and an arm carrying said pin and pivoted on said support so as to be capable of swinging toward and from the axis of said drum.

5. A clock comprising a chiming and striking mechanism including a driving shaft, and a player drum having a bushing mounted on said shaft, a central collar mounted on said bushing and provided at opposite ends with reduced necks, end collars mounted on said bushing at opposite ends of said central collar and having reduced necks at their outer ends, and player wheels mounted on said necks and having player teeth or tappets.

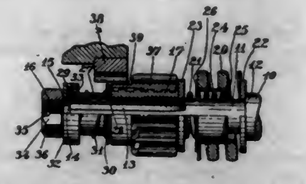
7. A clock comprising a chiming and striking mechanism having a rotary player wheel provided with an annular row of tappets, an intermediate lever provided on its upper arm with a laterally projecting pin adapted to be engaged by said tappets and provided on its lower arm

with a laterally projecting shifting pin, and a bell lever having an upper arm adapted to be engaged by the lower pin of said intermediate lever and provided on its lower arm with a bell hammer said intermediate lever being provided with a hub and the upper arm of said bell lever being provided with a brake shoe adapted to engage said hub.



9. A clock comprising a chiming and striking mechanism including a hammer lever consisting of a hub provided with a circumferential groove on its periphery, and a rod provided with a loop arranged in a part of said groove and secured therein by turning the adjacent edge portions of said hub over said loop, and arms projecting from opposite ends of said loop.

1,883,388. ENGINE STARTER. WILLIAM L. MCGRATH and MAURICE P. WHITNEY, Elmira, N. Y., assignors to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,901. 12 Claims. (Cl. 74—7.)



1. In an engine starter drive, a member adapted to engage and drive a member of the engine to be started, an actuating member having connections with said driving member whereby relative rotation causes relative translation thereof, yielding means for lightly opposing initial longitudinal movement of the actuating member away from said engine member, yielding means for strongly resisting further such longitudinal movement of the actuating member, a stop for limiting longitudinal movement of the actuating member toward the engine member, and yielding means mounted on said stop for normally maintaining the driving member out of engagement with the engine member.

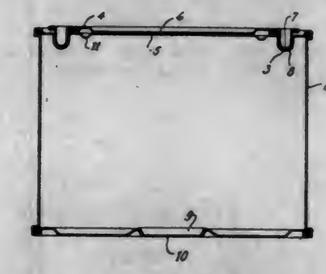
1,883,389. ENGINE STARTER. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 24, 1931. Serial No. 532,478. 6 Claims. (Cl. 74—7.)

1. In an automatic shift for starter gearing, a driving member having a circumferential flange provided with an arcuate recess in its periphery, a spiral spring for actuating said driving member having an annular terminal por-



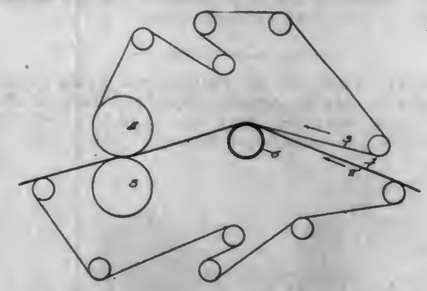
tion adapted to engage in said recess, and means surrounding said flange and recess to retain the end of said spring therein.

1,883,390. CONTAINER. FREDERIC MEIER, Chicago, Ill. Filed May 11, 1931. Serial No. 536,468. 1 Claim. (Cl. 220—27.)



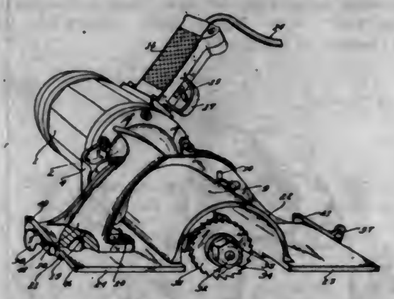
A container comprising a body having an upper and a lower end, the upper end having a rim with a large opening in its central portion, a closure with its edge hermetically sealed to the edge of the opening, and an imperforate top over said closure, the periphery of the top having a friction connection with said rim, said closure having an annular yieldable loop therein immediately inside of its sealed edge.

1,883,391. BLOWING PREVENTATIVE FOR PAPER-MACHINE FELTS. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio, a Corporation of Ohio. Filed Jan. 31, 1930. Serial No. 424,795. 2 Claims. (Cl. 92—49.)



1. In a paper-making machine having co-acting press rolls and a pair of felts co-acting to carry the paper between them through the press, a perforated hollow guide roll interiorly at atmospheric pressure and in contact with one of said felts, said guide roll being located to bring the felts into co-action and deflecting at least one of said felts, whereby only the pressure action imposed by said guide roll against the felts and paper will cause air trapped or carried between the paper and the felt in contact with said guide roll to be pressed out through such felt into the roll perforations and escape to the atmosphere.

1,883,392. POWER DRIVEN MECHANIC'S HAND TOOL. EDWIN MOLL, Portland, Oreg. Filed Apr. 15, 1931. Serial No. 530,288. 3 Claims. (Cl. 144—136.)

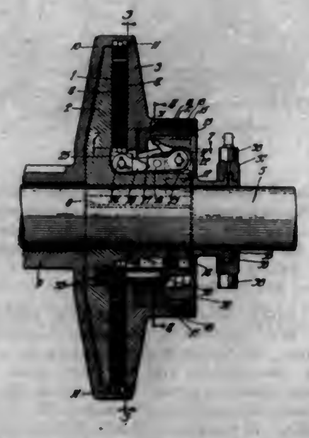


1. In a device of the class described, in combination with a prime mover, a bifurcated bracket removably attached to the frame of the prime mover, the ends of the bracket being adapted for straddling the driven shaft of the prime mover, a housing adjustably attachable to the bracket, the base of the housing lying in a plurality of planes, an aligning bar adjustably adapted to the base of the housing and secured to the ends thereof, a spacer bar adapted for being secured to the base of the housing and for being held thereupon by frictional engagement at its ends, and a cutter head assembly adapted to the driven shaft of the prime mover.

1,883,393. NITRATION OF ARYLSULPHONYL DERIVATIVES OF AROMATIC AMINES. DENIS HOUGHTON MOSBY, HENRY CHARLES OLPIN, and GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed May 16, 1929, Serial No. 363,708, and in Great Britain June 18, 1928. 10 Claims. (Cl. 260—130.5.)

1. A process which consists in nitrating arylsulphonyl derivatives of aromatic amines by means of 60 to 75 per cent aqueous nitric acid.

1,883,394. CLUTCH. JAMES F. MOSHER, Mishawaka, and GEORGE N. VAN DERHOEF, South Bend, Ind., assignors to Dodge Manufacturing Corporation, Mishawaka, Ind., a Corporation of Delaware. Filed May 24, 1930. Serial No. 455,213. 7 Claims. (Cl. 192—68.)



1. A friction-disc clutch comprising disc-clamping elements, mechanism enclosed thereby operable to force said elements into disc-clamping action, said mechanism comprising centrally arranged differential toggles, and an actuator therefor comprising an axially movable member mounted in one of said elements and having a cam means to operate the toggle knuckles.

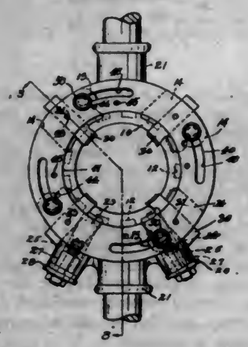
1,883,395. COATING COMPOSITION AND VEHICLE FOR THE SAME. WILLIAM H. MOSS, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1927. Serial No. 230,187. 5 Claims. (Cl. 134—79.)

2. A lacquer containing esters of cellulose and a low boiling solvent containing alcohol 30%, benzene 40% and ethylene dichloride 30%.

1,883,396. METHOD OF COATING. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,593. 4 Claims. (Cl. 91—68.)

1. Method of coating porous surfaces comprising applying to said surfaces a filler coat of a composition that has a consistency ranging from pasty to powdery condition and that contains a major proportion of relatively non volatile organic materials consisting of a derivative of cellulose and a plastifier and then applying a lacquer containing a derivative of cellulose.

1,883,397. DIESTOCK. ROBERT B. PEALER, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Aug. 16, 1930. Serial No. 475,813. 1 Claim. (Cl. 10—121.)

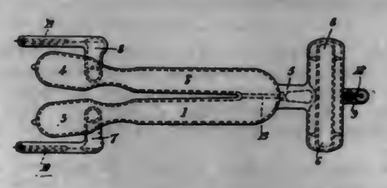


In a die stock, the combination of a frame having spaced chaser guides with clearance openings between them, a clamping ring overlying said guides and having an arcuate slot through it, means passing through the slot for locking the ring to the frame in various positions, said ring having groups of holes through it all located back from the inner periphery of the ring and individually at varying distances therefrom, and chasers rectangular in cross section standing on one of their narrow edges in guides and having pins projecting from their other narrow edges, each pin being adapted to occupy any of the holes of the group corresponding to that guide.

1,883,398. ALTERNATING CURRENT MERCURY VAPOR APPARATUS. FREDERICK REYNOLDS and ARTHUR LEONARD LEES, Walkerville, Newcastle-upon-Tyne, England, assignors to The Thermal Syndicate Ltd., Wallsend-upon-Tyne, England, a Corporation of England. Filed Jan. 12, 1928, Serial No. 246,128, and in Great Britain Mar. 18, 1927. 8 Claims. (Cl. 176—42.)

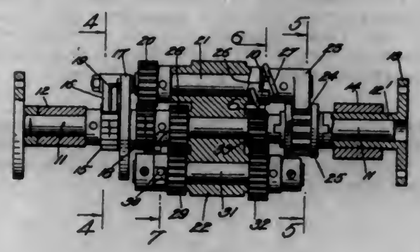
6. Alternating current mercury vapor apparatus comprising an arc tube having a cathode and a pair of anodes

located therein, said arc tube being divided so as to divide between the anodes a stream of mercury flowing toward the anode end of the tube, and having a narrow



channel extending toward the cathode from the point in the tube where the mercury divides when it flows back to the anodes.

1,883,399. CHANGE SPEED MECHANISM. CARROLL H. RICHARDS, Newton, Mass. Filed Nov. 18, 1929. Serial No. 407,820. 19 Claims. (Cl. 74—34.)



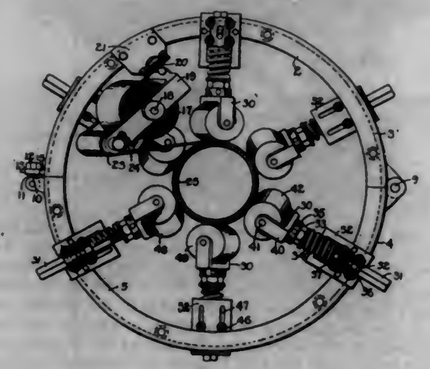
2. The combination of a driving element, a driven element, and a change-speed mechanism connecting said elements including an equalizing element, a shaft journalled in said last named element, a one-way driving connection between said driving element and said shaft, a releasable driving connection, automatically controlled by the resistance of said driven element, between said shaft and driven element whereby the latter may be driven when its resistance is not greater than the force of said driving element, and a second shaft journalled in said equalizing element and having operative connections with said driving element and said driven element whereby the latter may be driven when said releasable driving connection is released.

1,883,400. KILN. HARRY M. ROBERTSON, Cleveland, Ohio. Filed Sept. 22, 1930. Serial No. 483,530. 17 Claims. (Cl. 25—142.)



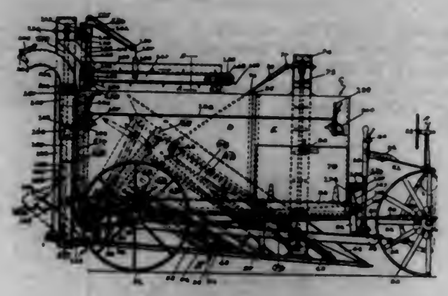
1. In a tunnel kiln having side walls and an arch forming contiguous heating and cooling zones through which ware moves, carriers for moving the ware through said zones, benches extending throughout said heating zone at either side thereof, a sectional baffle extending from each bench to the arch throughout said heating zone and forming with said bench, arch and adjacent side wall a combustion chamber, and a fire box incorporated in each side wall and forming a primary combustion chamber communicating with the inner end portion of one of the first mentioned combustion chambers.

1,883,401. PIPE WRAPPING APPARATUS. EUGENE L. ROLFS, Dallas, and CHARLES W. FULLER, Houston, Tex., assignors, by direct and mesne assignments, to Johns-Manville Corporation of New York, a Corporation of New York. Filed Feb. 8, 1930. Serial No. 426,820. 10 Claims. (Cl. 242—11.)



1. In a pipe wrapping machine, a tubular frame surrounding the pipe, angularly disposed means on said frame bearing on said pipe to support said frame rotatably on said pipe and cause it to advance thereon upon rotation of said frame, and a roll of wrapping material on said frame, said means acting also to smooth out said wrapping material after it is wrapped upon said pipe.

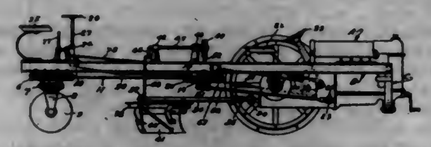
1,883,402. HARVESTING MACHINE. ANDREAN G. RONNING and ADOLPH RONNING, Minneapolis, Minn.; Jacob A. Ronning and Adolph Ronning executors of said Andrean G. Ronning, deceased. Filed Aug. 8, 1927. Serial No. 211,386. 35 Claims. (Cl. 56—16.)



1. In a corn harvester, the combination of means for removing the ears from the stalks, means for severing the stalks from the field after the ears have been removed, and means for reducing the stalks into small particles.

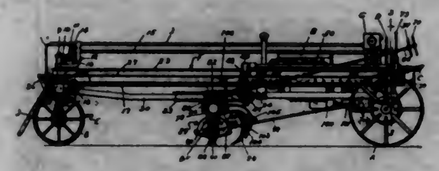
1,883,403. ROAD MACHINE. ADOLPH RONNING, Minneapolis, and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning and Jacob A. Ronning, executors, Minneapolis and St. Paul, Minn. Original application filed July 18, 1924, Serial No. 726,662. Divided and this application filed Jan. 31, 1928. Serial No. 250,884. 19 Claims. (Cl. 37—156.)

19. A tool adjusting mechanism for a road machine having a motor, comprising devices at the sides of the machine for raising and lowering the respective ends of the tool, said devices each including a worm and worm gear power transmitter, and means for selectively trans-



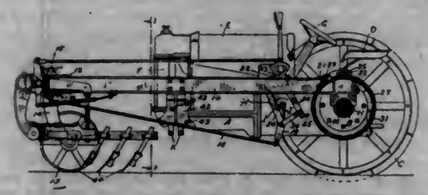
mitting power, from the motor to either of said transmitters, including a pair of manually controlled power transmitting devices.

1,883,404. ROAD MAINTAINER. ADOLPH RONNING, Minneapolis, Minn. Filed Aug. 11, 1928. Serial No. 298,926. 15 Claims. (Cl. 37—145.)



9. The combination with a vehicle frame having a motor mounted thereon, a secondary frame adjustably mounted under the vehicle frame, a rotary toothed scarifier carried by the secondary frame and mounted for angular adjustment with respect thereto, and a power connection for driving the scarifier from the motor.

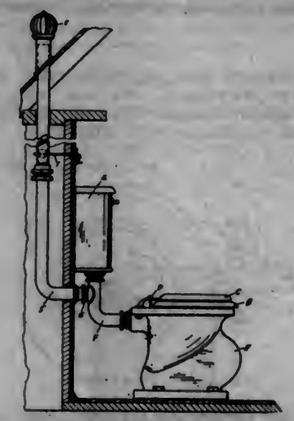
1,883,405. TRACTOR STRUCTURE. ADOLPH RONNING, Minneapolis, Minn., and ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning, Minneapolis, Minn., and Jacob A. Ronning, Minneapolis, Minn., executors, assignors, by mesne assignments, to Adolph Ronning, and Adolph Ronning and Jacob A. Ronning trustees of the estate of Andrean G. Ronning, deceased, Minneapolis, Minn. Original application filed Oct. 29, 1925, Serial No. 65 700. Divided and this application filed Dec. 19, 1928. Serial No. 327,139. 8 Claims. (Cl. 180—1.)



1. An attachment for a tractor comprising a wheel supported frame adapted to be substituted for the normal steering wheel axle of the tractor so as to support the front end of the tractor with said axle removed, and said frame having support devices with means for attaching such devices to the front end of the tractor at points spaced from the point of attachment of said axle, before being removed, so that said devices may be secured to the tractor before said steering wheel axle has been removed.

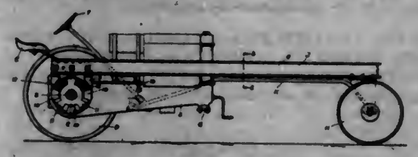
1,883,406. VENTILATOR. ADOLPH RONNING, Minneapolis, Minn. Filed Mar. 30, 1929. Serial No. 351,284. 4 Claims. (Cl. 4—213.)

1. The combination with a closet bowl having a seat ring and a cover therefor, of a depressible bearing member hingedly supporting the ring and cover, a ventilator for the bowl, means rendered operative by depression of the bearing member when pressure is applied to the seat ring



to actuate the ventilator, and means carried by the cover to lock the bearing member in its normally raised or inactive position when the cover is closed.

1,883,407. EXTENSION FRAME FOR TRACTORS. ADOLPH RONNING, Minneapolis, Minn. Filed Mar. 30, 1929. Serial No. 351,285. 11 Claims. Cl. 180—1.)



1. The combination with a tractor power plant having a rear axle, axle housing and traction devices, of a frame extending longitudinally of the power plant and in advance thereof with its rear end pivotally supported upon said axle housing, a steering device supporting the front end of the frame, and resilient devices carried by the frame, at the rear end thereof, and connected to the power plant to yieldably support the front end thereof with respect to the frame.

1,883,408. WRINKLE FINISH COATING. FRANK BRIAN ROOT, East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 1, 1929. Serial No. 343,727. 22 Claims. (Cl. 91—70.)



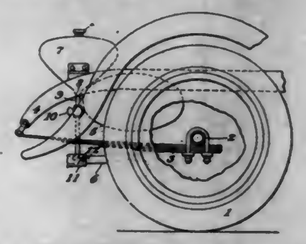
1. A coating composition comprising a wrinkling oil selected from the group consisting of perilla and linseed oils, a wrinkle finish resin, a drier and thinner in proportions to yield a wrinkle finish when dried.

12. An article of manufacture carrying a wrinkle finish coating produced from a composition containing a wrinkling oil selected from the group consisting of perilla and linseed oils.

16. The process of producing wrinkling finishes on articles of manufacture which comprises applying thereto, a

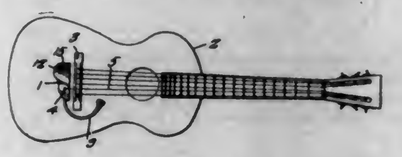
wrinkling finish composition containing a wrinkling oil selected from the group consisting of perilla and linseed oils, a wrinkle finish resin, a drier and thinner, and drying the coating at a temperature which produces a wrinkle finish.

1,883,409. MEANS FOR DISTRIBUTING MOISTURE ABSORBING MATERIAL. WILLIAM ORMISTON ROY, Montreal, Quebec, Canada. Filed Mar. 14, 1931. Serial No. 522,724. 2 Claims. (Cl. 275—2.)



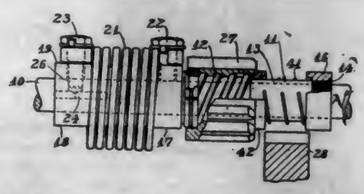
1. Means for distributing moisture absorbing material consisting in the combination with an automotive vehicle embodying an internal combustion engine and an exhaust duct, of a material container, a material duct extending from the container to the exhaust duct, positively acting means actuated by the exhaust blast for moving material through the material duct to and into the exhaust duct and into the path of the blast through said exhaust duct.

1,883,410. DEVICE FOR CHANGING THE TONE OF THE STRING OF A MUSICAL INSTRUMENT. JOHN A. RYAN, Pittsburgh, Pa. Filed June 19, 1931. Serial No. 545,547. 6 Claims. (Cl. 84—312.)



1. A device for changing the tone of the string of a musical instrument comprising a tone changing element adapted to be applied to the body of the instrument and adapted to be connected with the string, a lever member adapted to operate the tone changing element and adapted to be operated by the string playing hand of the performer while in playing position.

1,883,411. ENGINE STARTER. THEO C. SAYLES, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 27, 1931. Serial No. 533,065. 8 Claims. (Cl. 74—7.)

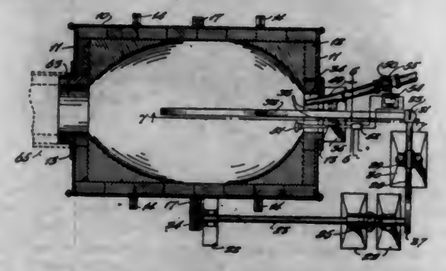


1. In an engine starter, a power member, a driving member mounted thereon for movement into and out of engagement with a member of the engine to be started, means for moving the driving member into idle position when the engine starts, normally inoperative means for arresting the movement of the driving member in its idle position and means cooperating therewith for actuating said arresting means responsive to longitudinal movement of the driving member.

1,883,412. APPLICATION OF CELLULOSE ESTERS AND ETHERS. GEORGE SCHNEIDER, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 23, 1926. Serial No. 124,544. 1 Claim. (Cl. 91—68.)

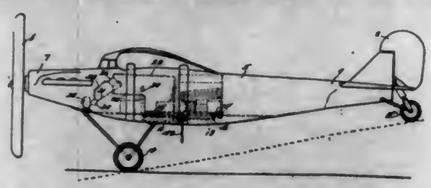
An article of manufacture comprising a base containing acetone soluble cellulose acetate with crystals of bismuth oxychloride thereon to give it a metallic effect, over which a transparent protective layer of chloroform soluble cellulose acetate is superimposed.

1,883,413. PUDDLING FURNACE. HENRY W. SCHOENFELDT, Youngstown, Ohio, assignor of sixty and eight-tenths per cent to George J. Burns, Girard, Ohio. Filed Jan. 3, 1928. Serial No. 244,253. 4 Claims. (Cl. 263—22.)



1. In combination, a cylindrical puddling furnace having the axis of the cylinder substantially horizontal, means for supporting the furnace for rotative movement on said axis, a rabble extending into said furnace and movable relative thereto, supporting means for said rabble, and means for simultaneously causing rotative movement of the furnace and oscillatory movement of the rabble.

1,883,414. AIR VEHICLE. RICHARD W. SEARS, 2d., and JAMES F. KOCA, Woodstock, Ill.; said Koca assignor to said Sears, 2d. Filed May 31, 1928. Serial No. 281,656. 22 Claims. (Cl. 244—2.)



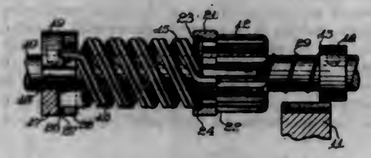
10. In an air vehicle, a load supporting device, landing gear, means common to said device and landing gear for selectively shifting the positions thereof relative of the vehicle, and means for selectively and collectively locking said device and landing gear against movement.

1,883,415. PROCESS OF HARDENING PHENOL-ALDEHYDE CONDENSATION PRODUCTS. FRITZ SEEBACH, Erkner, near Berlin, Germany, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin, Germany. Filed Apr. 23, 1930, Serial No. 446,795, and in Germany June 21, 1929. 6 Claims. (Cl. 260—4.)

1. Process of hardening phenol-aldehyde condensation products characterized by the addition of a hardening agent including a substance of the quinone type.

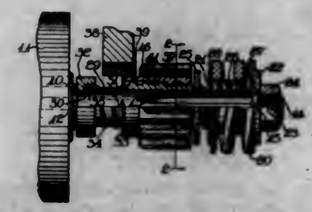
6. The reaction product of a phenol-aldehyde condensation product and a substance of the quinone type.

1,883,416. STARTING MECHANISM FOR INTERNAL COMBUSTION ENGINES. YOUSTON SEKELLA, Elmira, Heights, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 29, 1931. Serial No. 533,633. 5 Claims. (Cl. 74—7.)



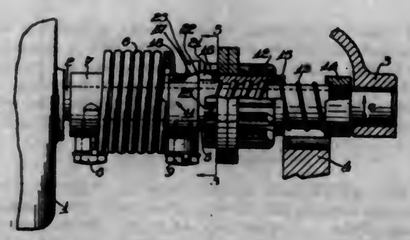
1. In an automatic starter shift, a rotatable driving member having a substantially axial slot therein, a spiral power transmitting spring having an outturned end adapted to seat in said slot, and a shoulder thereon adapted to project from said slot; and means on said driving member adapted to close said slot and engage said shoulder to prevent axial withdrawal of the spring.

1,883,417. ENGINE STARTER. YOUSTON SEKELLA, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 2, 1931. Serial No. 534,544. 4 Claims. (Cl. 74—7.)



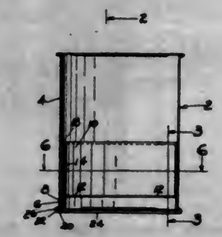
1. In an engine starter, a member adapted to engage and drive a member of an engine to be started, an actuating member therefor, said driving and actuating members having connections whereby relative rotation causes relative longitudinal motion thereof, means for limiting longitudinal motion of said members toward said engine member, yielding means for restricting longitudinal motion of said members away from said engine member, said means serving to restrict relative longitudinal movement between said actuating and driving members in either direction, said connections being adapted to disengage after a predetermined relative longitudinal movement of said members.

1,883,418. REBOUND CHECK FOR STARTER DRIVES. YOUSTON SEKELLA, Elmira Heights, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 30, 1931. Serial No. 553,943. 6 Claims. (Cl. 74—7.)



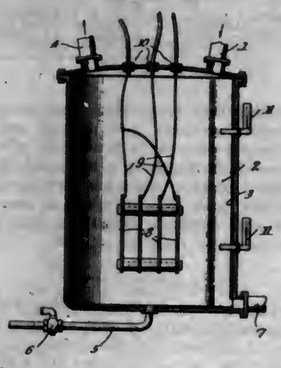
1. In an engine starter, a power member, a driving member mounted thereon for rotary movement thereof and therewith and for longitudinal movement into and out of engagement with a member of an engine to be started, and means on said power member adapted to be moved by centrifugal force into position to engage and lock said driving member against rotary movement with respect to said power member.

1,883,419. SECTIONAL DISPLAY CONTAINER. ADOLPH F. SOBEN, Los Angeles, Calif., assignor to Henry H. Davis, Los Angeles, Calif. Filed May 10, 1929, Serial No. 361,909. Renewed Jan. 4, 1932. 9 Claims. (Cl. 220—54.)



1. A container comprising an outer sectional closure, a diametrically smaller compartment within said closure, and provided with top and bottom outwardly directed flares, a bottom plate uniting the lower section of said outer closure and the bottom flare of said smaller compartment, and a removable seal conjoining the sections of said outer closure.

1,883,420. METHOD OF PRESERVING FRUIT JUICES. HENRY C. STEPHENS, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 3, 1929. Serial No. 329,981. 5 Claims. (Cl. 99—8.)

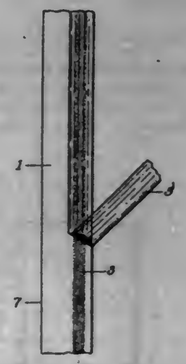


1. The method of preserving fruit juices and other food substances, which comprises violently agitating the juices by bubbling inert gases therethrough under high vacuum, and at the same time subjecting the material to the electrical action of an alternating current.

1,883,421. BINDING STRIP FOR PARTS OF BOOTS AND SHOES. PERCY E. STEVENS, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 31, 1930, Serial No. 472,117, and in France Sept. 10, 1929. 1 Claim. (Cl. 154—50.)

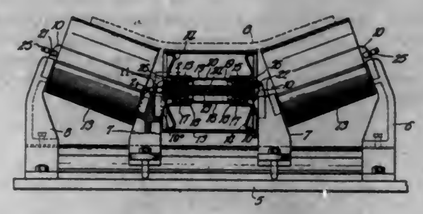
A binding strip adapted to be stitched along one edge thereof to a shoe part and to have its unattached portion folded about the edge of the shoe part, a coating of ad-

hesive substance spaced from the edge which is to be stitched to the shoe part, and a transparent protective strip having a glassy surface overlying the coating



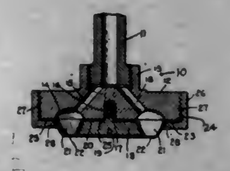
whereby the adhesive substance may be inspected at any time, and remains on the binding strip when the protective strip is torn off preparatory to the folding operation.

1,883,422. CONVEYER ROLL. ARTHUR P. STRONG, Mishawaka, Ind., assignor to Dodge Manufacturing Corporation, a Corporation of Delaware. Filed Dec. 29, 1924. Serial No. 758,497. 25 Claims. (Cl. 308—20.)



21. In conveyer belt supporting apparatus, conveyer rolls having axles arranged end to end and relatively inclined, axle supporting arms connected with the axle ends, rigid stationary supports constructed to be interlockingly engaged by said arms for holding the rolls in operative position, each roll, its axle and arms being removable as a unit without disturbing the other rolls by sliding motion away from its support.

1,883,423. APPARATUS FOR FORMING FILAMENTS. HOWARD TAYLOR, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 2, 1929. Serial No. 329,870. 6 Claims. (Cl. 18—8.)

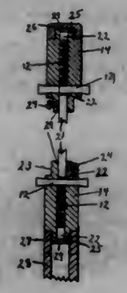


1. In a device for forming filaments the combination of a candle fitting, a spinneret formed with an annular depression, a member for coupling said spinneret and candle fitting and means for reinforcing said spinneret within the annular depression.

1,883,424. PRODUCTION OF TEXTILE PRODUCTS. WILLIAM IVAN TAYLOR, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 4, 1929, Serial No. 390,433, and in Great Britain Sept. 19, 1928. 5 Claims. (Cl. 19—144.)

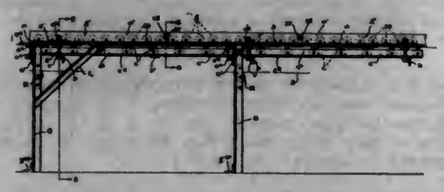
1. Process for the production of yarns containing artificial staple fibres, said process comprising forming into staple lengths a mass of substantially continuous artificial filaments, which filaments are irregularly disposed throughout the mass so that adjacent filaments are unalined with each other, and submitting the staple lengths to a spinning operation to form said yarns.

1,883,425. METHOD OF MAKING A BRUSH FOR CLEANING BOILER AND CONDENSER TUBES. GUYSBERT B. VROOM, New York, N. Y. Filed Nov. 30, 1929. Serial No. 410,840. 10 Claims. (Cl. 300—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. Steps in the method of making cleaners for boiler, condenser and other tubes, comprising securing the strands of a cable at a plurality of points to prevent the cable strands from unlaying and severing from the cable a length whose strands are secured.

1,883,426. CONVEYER. JOHN C. WALTER and RUDOLPH VOGT, Oakley, Ohio, assignors to The Alvey-Ferguson Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,765. 19 Claims. (Cl. 198—127.)

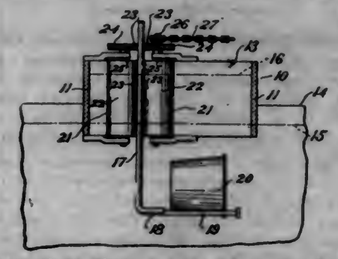


1. A conveyer including a main frame, a traveling belt, load supporting means driven by said belt, a secondary frame having a group of rollers supporting the working run of the belt, and means for raising and lowering said secondary frame and belt supporting rollers, unitarily, relatively to said main frame and load supporting means.

1,883,427. FLUX BOX GATE. VIRGIL P. WENDLE, Dover, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed June 23, 1931. Serial No. 546,260. 8 Claims. (Cl. 91—12.6.)

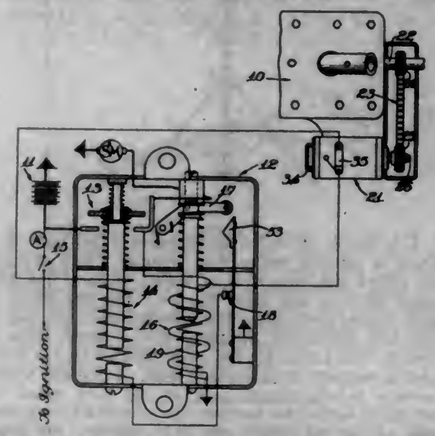
1. Apparatus for coating articles including a tank of molten metal, a flux box at the top of the molten metal and provided with an opening through one side, a moving

carrier for supporting an article to be coated and for moving the article down through the flux box and through the molten metal in the tank, and a roll located within



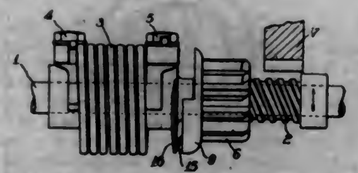
and substantially filling the opening in the flux box and having a longitudinal groove arranged to receive said carrier.

1,883,428. GENERATOR CONTROL. DANIEL L. WERTZ, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Aug. 11, 1931. Serial No. 556,366. 5 Claims. (Cl. 290—36.)



1. In an electrical system for internal combustion engines, a starting circuit including a motor and a starting switch, means for closing the starting switch, a generator driven by the engine to be started, means controlled by the generator for preventing the operation of the closing means, and means for rendering the generator substantially independent of fluctuations in engine rotation.

1,883,429. REBOUND CHECK FOR STARTER PINIONS. DANIEL L. WERTZ, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 27, 1932. Serial No. 607,836. 4 Claims. (Cl. 74—7.)



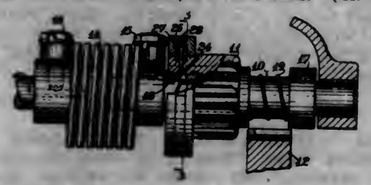
1. In an engine starter drive, an operating shaft, a driving member mounted on said shaft for longitudinal movement thereof into and out of engagement with a member of the engine to be started, and for rotation therewith to crank said engine, means for yieldingly opposing longitudinal movement of the driving member away from idle position and means for arresting longitudinal movement of the driving member into its idle position, said arresting means being arranged when operative to increase the effectiveness of the yielding opposing means.

1,883,430. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 5, 1924. Serial No. 710,979. 16 Claims. (Cl. 74—7.)



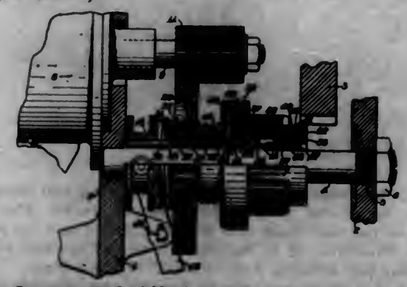
1. An engine starter drive including a rotatable shaft, a driving member adapted to engage and drive a member of the engine to be started, a pair of clutches disposed in axial alignment, a spring interposed between them, a barrel enclosing the clutches and the spring, one member of each clutch being rotatively connected with the shaft and movable longitudinally with respect thereto, the other member of each clutch being rotatively connected with the barrel, and one of the latter members being operatively connected with the driving member.

1,883,431. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Jan. 31, 1931. Serial No. 512,575. 9 Claims. (Cl. 74—7.)



1. In an engine starter, a power member, a driving member, means actuated by the power member for moving the driving member into and out of engagement with a member of the engine to be started, means on said driving member for opposing movement of the driving member toward driving position, and centrifugal means mounted on said driving member for actuating said opposing means.

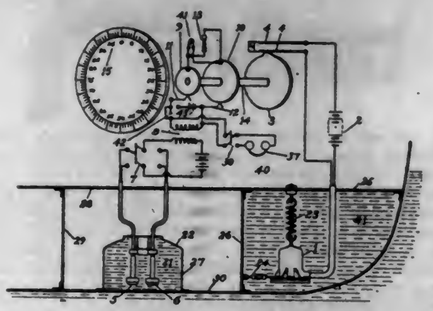
1,883,432. STARTING MECHANISM. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 31, 1931. Serial No. 554,245. 15 Claims. (Cl. 74—7.)



1. In a manual shift for starter gearing, a longitudinally shiftable sleeve, a pinion rotatably mounted thereon

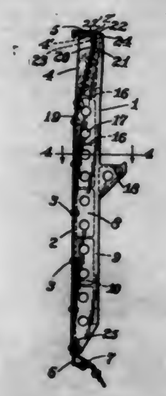
and normally movable longitudinally therewith into engagement with a member of the engine to be started, means for rotating said pinion relatively to the sleeve by longitudinal movement of the sleeve when the longitudinal motion of the pinion is arrested, and means independent of said sleeve to rotate the pinion to start the engine.

1,883,433. SYSTEM AND APPARATUS FOR SUBMARINE SIGNALING. ROBERT LONGFELLOW WILLIAMS, Newton, Mass., assignor to Submarine Signal Corporation, Boston, Mass., a Corporation of Delaware. Filed Sept. 12, 1927. Serial No. 219,002. 4 Claims. (Cl. 177—386.)



1. In a signaling system in a vessel for both sending and receiving signals substantially at the same time, a sound producer of the impact type having a diaphragm adapted to produce a sound impulse by action of a force in a direction substantially perpendicular thereto, a water filled tank located in said vessel and means within said tank for supporting said sound producer in the direction of the action of said force at the diaphragm, said means being yielding in said direction.

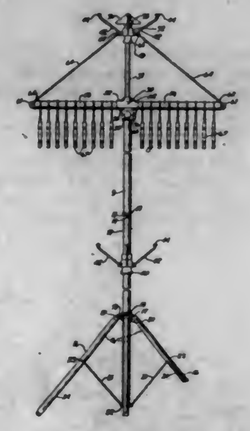
1,883,434. INTERMEDIATE SIDE STAKE FOR FREIGHT CARS. WILLIAM E. WINE, Toledo, Ohio. Filed Mar. 21, 1929, Serial No. 348,859. Renewed Nov. 19, 1931. 18 Claims. (Cl. 105—380.)



1. In combination with a side stake, a top rail secured to the upper end of said side stake, a bracket also secured to the said stake and fitting up under said top rail, a side sheet riveted to the top rail and to the side stake and clamped between said bracket and the stake.

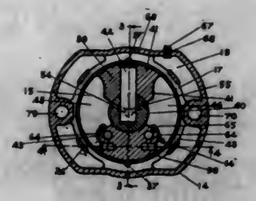
2. A side stake for railway freight cars comprising a web and a plurality of marginal flanges, one of which is adapted to be secured to a side sheet of the car, said flanges being integrally connected by a plurality of transverse ribs.

1,883,435. COSTUMER. LOTHAR R. ZIFFERER, Columbia, Pa.; Mabel C. Zifferer, Harry E. Champion, and H. Nelson Albright, executors of said Lothar R. Zifferer, deceased, assignors to Utilatree Products Inc., New York, N. Y., a Corporation of Pennsylvania. Filed Oct. 6, 1930. Serial No. 486,612. 9 Claims. (Cl. 211—165.)



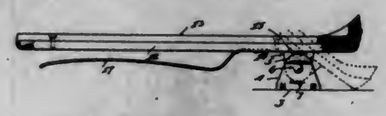
1. A costumer in which is combined a vertical stand whereon is slidably mounted a collar to which are pivotally joined the inner ends of a pair of bars, link connections between the outer bar ends and the stand at a point remote from the collar whereby the bars may be swung into horizontal position upon opposite sides of the stand, and a stop for the collar carried by the stand extending laterally from opposite sides thereof and arched to overlie the proximate ends of the bars when the latter are in horizontal position, the stop being conformed closely to the associated bar ends whereby the upper surfaces thereof may serve as hanger extensions therefor.

1,883,436. SHOCK ABSORBER. ALLAN A. THAYER, Jamestown, N. Y., assignor to Auto Spring Control Company, Inc., Jamestown, N. Y., a Corporation of New York. Filed July 19, 1926. Serial No. 123,434. 19 Claims. (Cl. 188—89.)



1. A shock absorber comprising a cup-shaped shell, having on its inner bottom a plurality of separated projections, a base plate adapted to bear against said projections, an annular wall in said shell resting on said plate and a cap, said plate, wall and cap being finished independently and when assembled in said shell forming a chamber.

1,883,437. AUTOMOBILE ACCELERATOR PEDAL. HALE D. ADAMS, Galesburg, Ill. Filed Dec. 11, 1930. Serial No. 501,523. 7 Claims. (Cl. 74—81.)



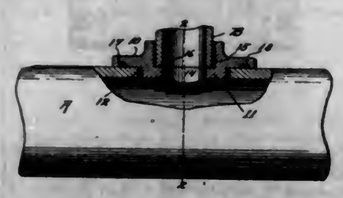
1. In an automobile accelerator pedal, the combination of a bracket having a pair of ears extending therefrom, a pedal having a pair of ears, the ears of both the named parts having portions adapted to frictionally engage each other acting to pivotally connect the said parts but adapted for separation in a lateral direction, an abutment carried by one of the ears of each pair, one being disposed in the path of movement of the other, the same being disposed eccentrically to the place of pivotal connection of the ears adapted where brought together under strain to separate the ears of the pair and terminate such pivotal connection.

1,883,438. STRAND FOR MAKING BRAIDED RUGS AND THE LIKE AND THE METHOD OF MAKING. WILLIAM H. ADAMS, Kenyon, R. I. Filed Sept. 30, 1931. Serial No. 565,988. 2 Claims. (Cl. 117—52.)



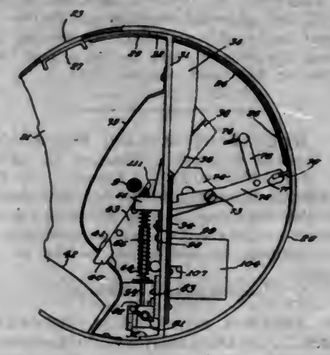
2. A strand for use in braiding rugs and the like, said strand comprising four plies of coarsely-woven lightweight fabric which are integrally connected together in a direction transversely of the strand, one edge of the strand presenting a single fold and the other edge a double fold, both sides of the strand presenting a napped surface, and all the folds being creased thereby to retain the strand in its folded condition.

1,883,439. SEWER PIPE TAP. DAVID G. ADAMS, Spartanburg, S. C. Filed Mar. 6, 1930. Serial No. 433,675. 4 Claims. (Cl. 285—105.)



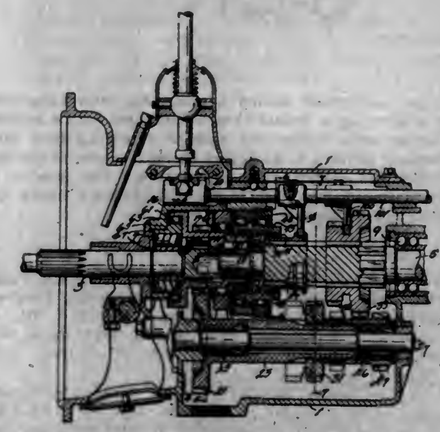
1. Means for connecting a waste pipe with a sewer pipe, comprising a preformed saddle member formed as a one piece casting of concrete and shaped as a section of a cylinder adapted to engage conformingly against a sewer pipe and provided at its concave side with a projection, the sewer pipe having an opening to receive the projection, a mass of cement surrounding the projection within the opening, and the saddle member being formed with a hole extending through the projection and further formed with a cylindrical counterbore concentric therewith defining a ledge and adapted to receive an end of a waste pipe abuttingly supported upon the ledge, and a mass of cement surrounding the waste pipe within the counterbore.

1,883,440. VENDING MACHINE. SCOTT M. ABBOTT, Chicago, Ill., assignor to Louis J. Loenneke and Herman Bock, Chicago, Ill. Filed Mar. 19, 1930. Serial No. 437,120. 8 Claims. (Cl. 194—57.)



1. In a package vending machine, a casing, a stationary drum therewithin formed with a package delivery perforation, a gate normally closing said perforations, a rotary multiple package carrier encircling said drum and adapted to deliver its packages singly through said drum perforation in the open position of the same, a partition in said drum provided with openings, a detent fulcrumed thereto and having projections extending through said openings, means yieldingly engaging said detent, a riser plate carried by said partition, a plunger plate carried by said partition, one of the projections on said detent being in the path of said plunger plate, said plunger plate being spaced from said riser plate to admit a coin between said plates whereby motion of said riser plate will cause the coin to engage the other of its projections on said detent to release the plunger plate, a lever operatively engaging said riser plate, a lever connecting said plunger plate and gate, and connection between said plunger plate and riser plate whereby movement of the latter is but partially transmitted to said plunger plate normally.

1,883,441. TRANSMISSION MECHANISM. CHARLES E. F. AHLM, Cleveland Heights, Ohio, assignor to The Automotive Research Corporation, Warren, Ohio, a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,113. 4 Claims. (Cl. 74—57.)



1. In a power transmission gearing, a driving shaft, a driven shaft, a counter shaft, reduction gears capable of being shifted from operating to idle positions inter-

mediate said shafts to interconnect said shafts in various speed ratios as each of said intermediate gears are shifted selectively into operating position, said intermediate gears including a ring gear eccentric to one of said shafts, rotatably supported on internal bearings at one portion thereof, and external bearings at another portion, the ring gear having external teeth for driving the counter-shaft and the counter-shaft having a gear thereon in meshing relation with said external teeth.

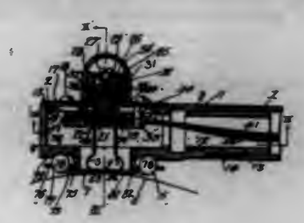
1,883,442. METHOD OF MAKING BRICK AND THE LIKE. HERMAN O. ANNELL, Chicago, Ill. Filed Sept. 6, 1930. Serial No. 480,187. 2 Claims. (Cl. 25—156.)

1. The method of making bricks and analogous articles containing clay requiring burning which is characterized by the step of subjecting the brick, substantially immediately after burning, to cold water, as and for the purpose set forth.

1,883,443. PROCESS FOR THE MANUFACTURE OF ACETONE. JAN AL, Amsterdam, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Dec. 3, 1930, Serial No. 499,855, and in Great Britain Dec. 6, 1929. 8 Claims. (Cl. 260—134.)

1. A process for the manufacture of acetone from isopropyl alcohol, wherein isopropyl alcohol in vapour form is caused to pass through a liquid medium heated to a temperature between about 300 and 700° C., which liquid medium at said temperatures does not react to any appreciable extent with the vapours with which it comes into contact.

1,883,444. TEMPERATURE INDICATING MEANS. EDWARD J. ALBERT, Philadelphia, Pa., assignor to Thwing Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1926. Serial No. 150,872. 8 Claims. (Cl. 136—4.)



1. An instrument having a removable interchangeable unit comprising a closure element provided with a recess, a thermocouple supporting member extending into said recess and adapted to be guided thereby, means extending between said element and said member for causing a relative movement therebetween, and resilient means operative on said member.

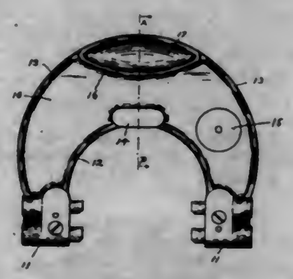
1,883,445. HOLDER FOR GLASS CUTTER CARTRIDGES. GEDOR W. ALDEEN, Rockford, Ill., assignor to Fyrac Manufacturing Company, Rockford, Ill., a Corporation of Illinois. Filed Mar. 5, 1928, Serial No. 259,335. Renewed Feb. 23, 1932. 7 Claims. (Cl. 125—20.)

1. A glass cutting device comprising, a pair of members adapted to be disposed on opposite sides of a piece of glass and to extend substantially parallel with one another in cutting positions, means for connecting said members adjacent one end of each and for drawing them together, means between said connecting means and said member ends for limiting relative movements of said ends toward one another, one of said members adjacent its opposite end having an aperture therethrough adapted



to receive a glass cutter cartridge, and means secured to the opposite end of the other member for abutting against the glass opposite the said cartridge.

1,883,446. SNAP GAUGE. ERIK H. ALDERBORGH, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y., a Corporation of New York. Filed June 4, 1929. Serial No. 368,291. 1 Claim. (Cl. 33—143.)

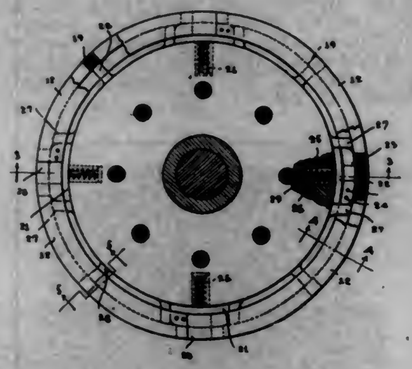


A snap gauge comprising a C-shaped type frame having a marginal beading and formed with an elliptical shaped depression on each side thereof and in registry with each other, a raised edge surrounding said depression and forming a part of the beading of said frame.

1,883,447. PROCESS OF TREATING TRISODIUM PHOSPHATE CRYSTALS. IRVIN G. AMMEN, Yonkers, N. Y., assignor to International Agricultural Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 4, 1929. Serial No. 337,524. 2 Claims. (Cl. 23—243.)

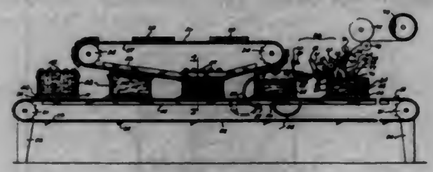
1. The process which comprises crystallizing trisodium phosphate from a solution, removing excess mother liquor, washing the crystals with a sodium silicate solution, and transferring the liquid from the washing step to the trisodium phosphate solution.

1,883,448. PISTON RING. WALTER R. G. ANDREASEN and CLIFFORD A. TOLEMAN, East Boston, Mass., assignors of one-third to Peter Kane, Boston, Mass. Filed Nov. 10, 1930. Serial No. 494,684. 1 Claim. (Cl. 74—109.)



The combination of a piston having a packing ring groove, a packing ring disposed in said groove and comprising a plurality of arcuate segments, each segment having a channel formed on its inner face and also having cut-out portions on its wearing face in communication with said channel, a sealing block carried by one end of each segment, said sealing block interlocking with said channels of adjacent segments, a spring carried by said piston and exerting a pressure upon said sealing block.

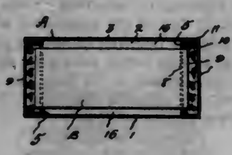
1,883,449. PACKING PROCESS FOR SILK YARN AND THE LIKE. CHAMPE S. ANDREWS, Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 10, 1929. Serial No. 384,966. 6 Claims. (Cl. 93—7.)



1. A method of packing compressible thread-like material which comprises placing the desired amount of loose, thread-like material into and protruding from the open top of a container whose cover is in open position, reinforcing the sides of the container, holding the cover in open position, holding the protruding material over the container, applying pressure to the top of the thread-like material to compress it to substantially the size of the closed container, closing the cover of the container over the compressed material and sealing said cover in closed position.

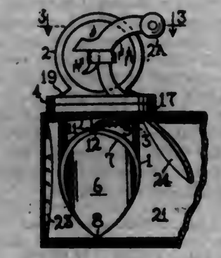
1,883,450. REFRIGERATING CONTAINER. CHAMPE S. ANDREWS, North Chattanooga, Tenn., assignor to Carton Development Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1930. Serial No. 460,864. 6 Claims. (Cl. 229—14.)

1. A refrigerating container of the class described composed of inner and outer receptacles, fold in flaps at each end of said outer receptacle, said inner receptacle extending through an opening in each of said fold in flaps where-



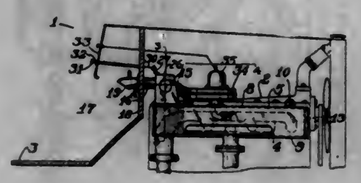
by the outer walls of said inner receptacle are maintained out of contact with the inner walls of said outer receptacle.

1,883,451. CONTAINER-PERFORATING AND THREADING DEVICE FOR STOPPERS, FAUCETS, AND THE LIKE. JOSEPH M. ANGELETTI, New York, N. Y. Filed June 9, 1931. Serial No. 543,123. 12 Claims. (Cl. 221—23.)



1. In combination with a device of the class described, having a tubular body with a bevel or diagonal cutting edge with a pointed end to pierce sheet material or metal and having an exteriorly projecting screw-threaded portion, of a downwardly bent thread portion at the inlet turn of the thread perpendicular with the surface of the body to guide said thread thru perforated sheet material or metal.

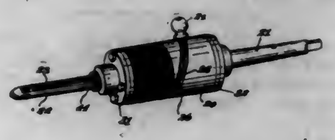
1,883,452. MANIFOLD HEATER. EDWARD R. ARMSTRONG, Columbus, Ohio, assignor to F. O. Schoedinger, Columbus, Ohio. Filed Sept. 4, 1930. Serial No. 479,715. 1 Claim. (Cl. 237—12.3.)



Heating apparatus for motor vehicles including an air heater of the exhaust manifold type having an air outlet opening at the rear portion thereof, said outlet opening being located in the top wall of said heater, an outlet box over said opening in communication with the interior of said heater, a conduit leading from the rear wall of

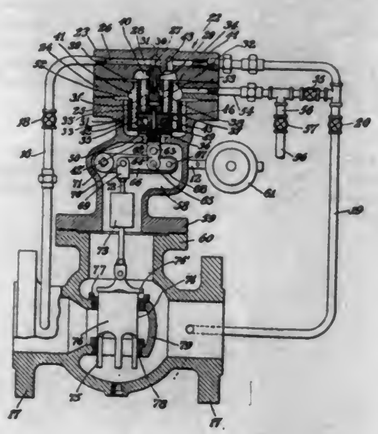
said box to the interior of the vehicle, the front wall of said box being provided with an opening in substantial alignment with the opening in the rear wall of said box, a conduit leading from said heater at a point in advance of said box to the opening in said front wall, a motor driven fan in said conduit, one of the remaining walls of said box being provided with an opening in communication with the atmosphere, and a gate valve normally closing the latter opening when the heater is in use but which may be swung to uncover the opening and close the conduit leading to the interior of the vehicle.

1,883,453. TUBE CUTTING DEVICE. ROBERT ARMSTRONG, Ridgefield, N. J. Filed May 27, 1931. Serial No. 540,372. 13 Claims. (Cl. 81—195.)



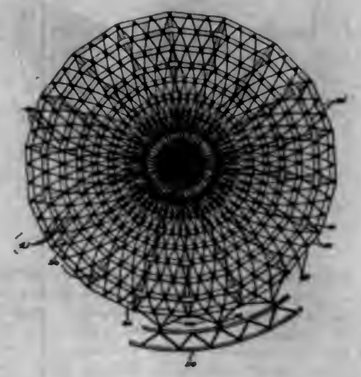
1. In a tube cutter, a threaded housing, a spindle journaled therein and provided with a projecting end adapted to be inserted into the tube to be cut, said projecting end being provided with a longitudinal slot, a cutter normally within the confines of said slot and movably mounted therein for radial emergence therefrom, means within said housing and operatively connected with said cutter for controlling the radial position thereof, a threaded member cooperating with the housing for actuating said controlling means, and means on the exterior of said housing for moving said threaded member.

1,883,454. BOILER FEED WATER REGULATING APPARATUS. CHARLES B. ARNOLD, Brooklyn, N. Y. Filed Aug. 8, 1930. Serial No. 473,886. 15 Claims. (Cl. 122—451.2.)



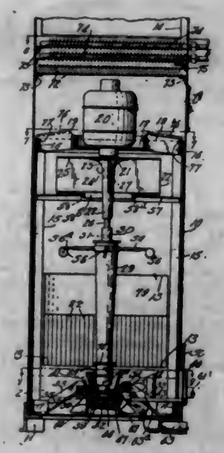
13. In combination, a boiler, a steam conduit and a water conduit connected therewith, a regulating valve in said water conduit, means for by-passing liquid from the inlet to the outlet side of said regulating valve, a by-pass valve in said by-pass means, a restricted orifice on the discharge side of said by-pass valve in said by-pass means, means responsive to the differential pressure across said orifice adapted to actuate said by-pass valve, means adapted to actuate the regulating valve in response to changes in position of said by-pass valve, and means responsive to changes of water level in the boiler and co-operating with said last named means for actuating the regulating valve.

1,883,455. METHOD AND APPARATUS FOR BUILDING AIRSHIP BULKHEADS. KARL ARNSTEIN and PAUL HELMA, Akron, Ohio, assignors to Goodyear-Zeppelin Corporation, Akron, Ohio, a Corporation of Delaware. Filed Feb. 19, 1932. Serial No. 594,032. 22 Claims. (Cl. 244—3.)



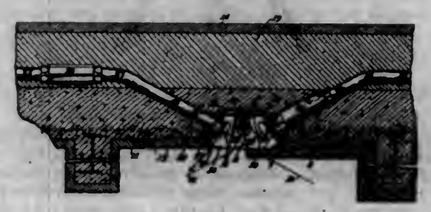
3. The method of providing an airship with a netting which consists in constructing a netting upon a suitable apparatus, securing the netting in substantially the position it will have in the completed airship, and then releasing the netting from the apparatus.

1,883,456. GAS TREATING DEVICE. CARLYLE M. ASHLEY, Orange, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Apr. 9, 1928. Serial No. 268,467. 20 Claims. (Cl. 261—88.)



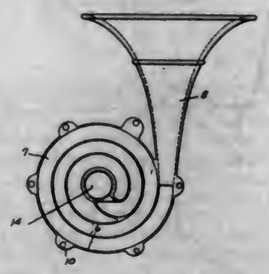
1. A gas treating device comprising a driving element rotatable about a vertical axis, a spray member arranged in alinement with the lower end of said element and at its upper end secured to said element for rotation therewith, said member below its connection to said element having a portion of relatively small diameter to permit flexing thereof, said element having a guard encircling said member at a point adjacent to or below said flexible portion and having some clearance therewith to permit a limited lateral movement of said member while flexing, said member having therein a passage, a floating bearing for the lower end of said member, means for supplying a liquid to the passage in said member, and a spray device carried by said member and communicating with the passage thereof for discharging a liquid from said member while the latter is rotating.

1,883,457. OUTLET BOX. HARRY S. ARNOLD, Brooklyn, N. Y. Filed June 22, 1928. Serial No. 287,380. 9 Claims. (Cl. 247—15.)



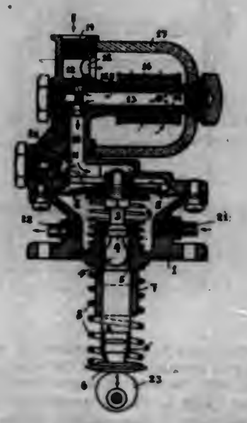
7. As a new article of manufacture, an outlet box for concrete floor slabs comprising a shallow one piece box structure open at one end and having convergent sides inclined directly from said open end of the box and said convergent sides having removable knockouts for enabling wiring to be drawn into the box through said convergent sides.

1,883,458. HORN. JOHN M. AUFIERO, Brooklyn, N. Y., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 13, 1932. Serial No. 611,059. 5 Claims. (Cl. 116—142.)



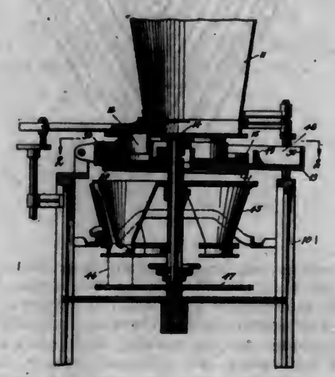
1. As an article of manufacture, a sound projector comprising a cast base, an integral fin extending therefrom in the form of a spiral with the convolutions thereof spaced from each other to provide a passage, a cover disposed adjacent the outer edges of said fin and a trumpet portion forming a part of said base, and having its bore in line with the outer end of the passage as defined by the outermost convolution of said fin.

1,883,459. DELIVERY-PUMP FOR LIQUIDS. RIFAT AVIGDOR, Berlin-Charlottenburg, Germany. Filed Oct. 24, 1930, Serial No. 490,993, and in Germany May 26, 1930. 8 Claims. (Cl. 103—4.)



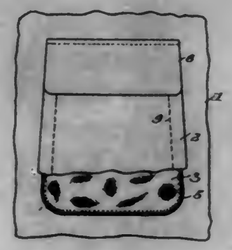
1. In a fuel pump including a flexible diaphragm, a bolt secured to the diaphragm having a shoulder and a rounded head comprising a guide, a cam plate having a projecting portion carrying a shoulder, a driving eccentric cam in contact with said cam plate, a tubular shaft engaging said shoulders and establishing a loose driving connection therewith, and resilient means cooperating with said cam plate and said diaphragm for effecting a resilient drive.

1,883,460. CAN FILLING MACHINE. CHARLES H. AYARS, Salem, N. J., assignor to Ayars Machine Company, Salem, N. J., a Corporation of New Jersey. Filed Mar. 5, 1929. Serial No. 344,330. 15 Claims. (Cl. 226—100.)



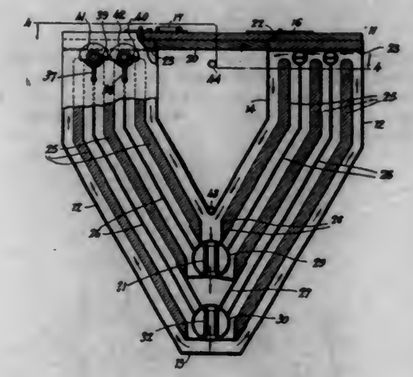
1. In a can filling machine, a receptacle having spaced openings therein and means moving along a path for positioning confined quantities of liquid in communication with said openings and means for determining the number of openings discharging for each movement of the means along said path.

1,883,461. GARMENT POCKET. JOHN P. BACCARO, Rochester, N. Y., assignor of one-half to Rosario Camuglia, Rochester, N. Y. Filed June 10, 1931. Serial No. 543,410. 2 Claims. (Cl. 2—247.)



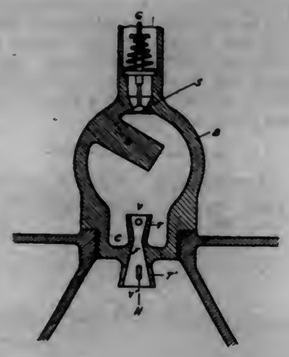
1. In a patch pocket, the combination with a garment body, of a pair of linings stitched together and to the body on the outer side thereof in superposed relationship to form a pocket, and a patch overlying the linings and stitched to the body independently thereof at the sides and bottom and to the upper edge of the outer lining at its top.

1,883,462. COOLING UNIT. ALVIN H. BAER, Waynesboro, Pa. Filed July 28, 1931. Serial No. 553,633. 8 Claims. (Cl. 62—91.5.)



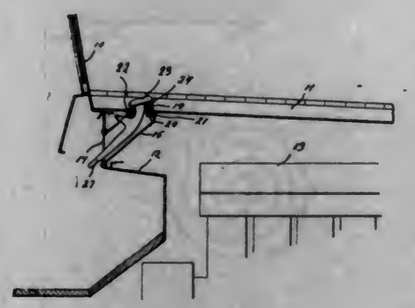
1. A cooling unit comprising an outer heat-conducting casing, an inner heat-conducting compartment for ice or the like, intermediate partitions respectively of heat-conducting and heat-insulating character providing a labyrinthine passage for non-freezing fluid between adjacent walls of said casing and said compartment, and means whereby circulation may be established either independently in different circuits of the labyrinth including one circuit having branch along a wall of the compartment and another having a branch along a wall of the casing, the totality of circuits being in heat-exchanging relation, or else a circulation may be established only in the innermost and the outermost branches of the labyrinth and passages leading directly from one to the other, substantially as set forth.

1,883,463. LIQUID FUEL ENGINE. ALBERTO BAGNULO, Paris, France. Filed July 16, 1930, Serial No. 468,416, and in France July 27, 1929. 3 Claims. (Cl. 123—32.)



3. In an internal combustion engine, a gasification chamber mounted upon the cylinder of the engine, injection means for injecting combustible fluid into said chamber, said cylinder and chamber being interconnected by a passage in the form of two Venturi tubes united by their small bases and having the frusto conical portions thereof disposed on an axis coincident with the axis of said injection means, one of said frusto conical portions extending a substantial distance into said chamber and forming with the walls thereof an annular trough for receiving combustible fluid, and canals forming intercommunicating passages between said trough and the interior of said Venturi tubes.

1,883,464. VENTILATOR CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1932. Serial No. 585,606. 5 Claims. (Cl. 98—2.)



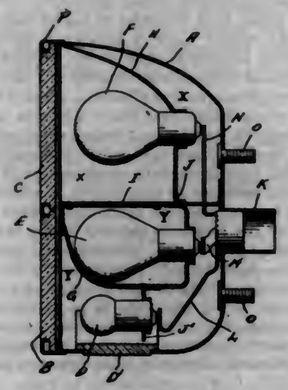
1. In a vehicle body in which the hood extends rearwardly to a point adjacent the windshield, the combination of a movable hood section having an opening therein, a dash, and a ventilator conduit secured to said dash and extending under said hood section and into registration with said opening when the hood section is closed.

1,883,465. RIFLE SUPPORT. HARRY T. BALMER, Collingdale, Pa., assignor of one-half to Richard S. Hamric, Philadelphia, Pa. Filed Oct. 15, 1931. Serial No. 568,897. 8 Claims. (Cl. 42—72.)



1. A gun support comprising a grip, a bracket, and a pair of parallel members each pivotally connected with said grip and bracket and adjustable to vary the spacing and angular relation thereof.

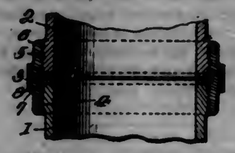
1,883,466. COMBINED TAIL-LIGHT, STOP LIGHT, AND BACKING LIGHT FOR MOTOR VEHICLES. FRANK L. BAMFORD, Detroit, Mich., assignor to C. M. Hall Lamp Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 24, 1928. Serial No. 307,965. 3 Claims. (Cl. 177—827.)



1. A lamp comprising a casing provided with adjacent light openings, lamp bulbs arranged opposite the respective openings for delivering the light therethrough, a third lamp bulb arranged in rear of one of said openings, means for preventing the light from the third bulb from shining through the opening in front thereof, including a reflector for directing a portion of the light from the third bulb transversely into the space opposite the other of said openings, a reflector for redirecting said light through the latter opening and a filter arranged between said third light and said last mentioned reflector for changing the character of light delivered therefrom.

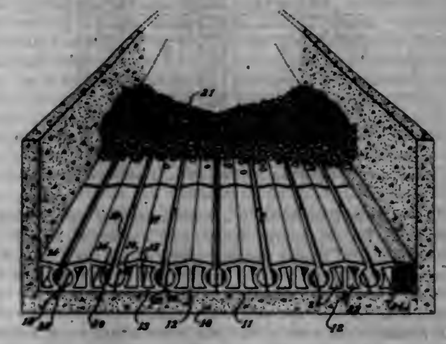
1,883,467. BREAKABLE RING FOR HYDRANTS, STREET LAMP COLUMNS, METAL OR CONCRETE POSTS, ETC. FREDERICK R. BANKS, Elmira, N. Y., assignor to The Kennedy Valve Mfg. Co., Elmira, N. Y., a Corporation of New York. Filed Nov. 8, 1930. Serial No. 494,418. 4 Claims. (Cl. 137—13.)

2. A column comprising a pair of sections disposed end to end in abutting relation, a coupling member for normally holding said sections together and in aligned position, said member comprising a ring for embracing circumferential engagement with both of said section ends,



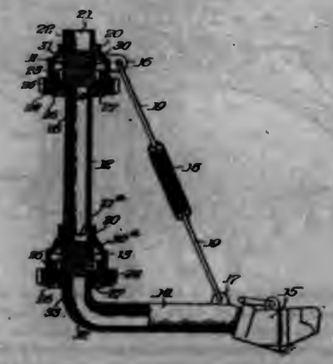
and said ring being provided with a restricted frangible section at substantially the point of engagement of said adjacent ends.

1,883,468. TRICKLING FILTER FLOOR CONSTRUCTION. JAMES G. BARBOUR, Canton, Ohio, assignor to The Metropolitan Paving Brick Company, Canton, Ohio, a Corporation of Ohio. Filed July 12, 1930. Serial No. 467,517. 5 Claims. (Cl. 210—148.)



4. A trickling filter floor made of hollow tiles each having a wide base wall and substantially semicircular concave side walls, the tiles being laid end to end and side by side and laterally spaced at their top edges to form longitudinally extending substantially tubular drainage troughs with longitudinal slots at their upper portions, the widths of the slots being controlled by the lateral spacing of the blocks from each other.

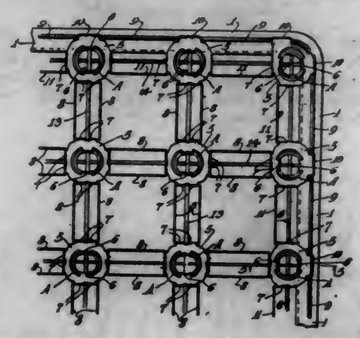
1,883,469. STEAM PIPE COUPLING. FRANCIS N. BARD, Highland Park, Ill. Filed Nov. 21, 1924. Serial No. 751,890. 8 Claims. (Cl. 285—7.)



1. In a structure for forming a connection between relatively movable pipe members, a coupling device including a depending pipe supported by one of said pipe mem-

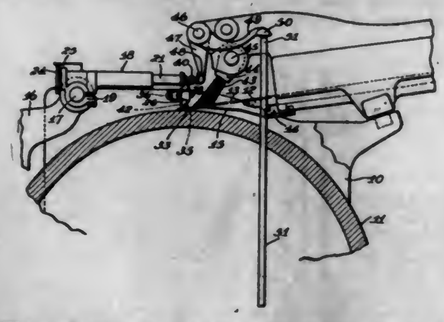
bers, a plurality of universally movable joints in said depending pipe including annular seat members, and ball portions engaging said seat members, one of the sections of said depending pipe having an integral curved portion for bringing a part thereof into approximate parallelism with said first mentioned pipe members, and means in each of said joints for holding said ball portions against said seat members for tending to maintain said depending pipe in a predetermined position.

1,883,470. COILED SPRING CUSHION. DEAN S. BARNARD, Hinsdale, Ill., assignor to The Rome Company, Inc., a Corporation of New York. Filed June 15, 1931. Serial No. 544,489. 5 Claims. (Cl. 5—252.)



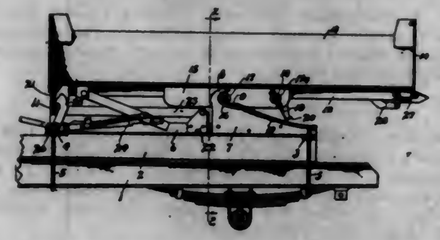
1. The combination with a spring cushion comprising a bottom spring-supporting frame and a superstructure including vertical coiled springs mounted on the frame and arranged in transverse and longitudinal rows, of ties extending from an intermediate coil of each spring to the corresponding coils of the adjacent springs in each transverse and longitudinal row, a ring-like metal plate lying outside of and surrounding and secured to each of said intermediate coils, each plate having at the periphery hinge ears each registering with the corresponding tie and extending transversely thereto, and the end portions of the ties extending laterally into said hinge ears.

1,883,471. SHEET DETECTOR. ALFRED WILLIAM BARRETT, Pittsburgh, Pa., assignor to Miller Printing Machinery Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 10, 1930. Serial No. 427,151. 1 Claim. (Cl. 271—56.)



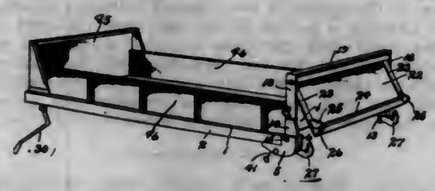
The combination with a feed table having a sheet supporting member formed with a slot therein, and a front guide movable into and out of operative position and having a gauge cooperating with said member, of a rock shaft mounted on said table, tripping mechanism associated with said rock shaft to be operated when said shaft is not rocked, an abutment member on said rock shaft, a plunger reciprocably mounted on said front guide for bodily movement therewith, said plunger being disposed for engagement by said abutment member, whereby when said plunger is locked against movement, said rock shaft is prevented from being rocked, said plunger having a groove in the end thereof and a detecting member carried by said front guide and having a portion adapted to enter said slot, whereby said detecting member is moved from one position to another when a sheet is fed against said gauge, said detecting member having a portion adapted to enter said groove, thereby to lock said plunger against movement, when said detecting member is in one of its positions.

1,883,472. GRAVITY DUMP BODY HOIST. EDWARD R. BARRETT, Detroit, Mich., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 15, 1927, Serial No. 212,992. Renewed Apr. 24, 1931. 13 Claims. (Cl. 298—12.)



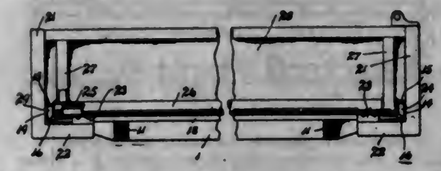
1. In a construction of the class described, a truck frame having spaced apart side frame members, a track member carried one above each of said side frame members toward the rear ends thereof, each of said track members having an upper track surface horizontal for a short distance at its front end and inclined downwardly and to the rear back of said front horizontal track portion, a truck body located above said truck frame and track members, a horizontal shaft attached to and located transversely of and below the body a short distance forward of the center of gravity of said body, rollers on said shaft normally bearing on the horizontal portions of said tracks, a second shaft parallel to and back of the first shaft and located a short distance back of the center of gravity of the body, said second shaft being attached to and disposed below the body, rollers on the second shaft located above the rear downwardly inclined portions of said tracks and out of engagement therewith when the body is in horizontal position, said rollers engaging with the downwardly inclined rear portions of said tracks after the body has been tilted about the axis of the first shaft to a predetermined position.

1,883,473. ADJUSTABLE TAIL GATE. EDWARD R. BARRETT, Detroit, Mich., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 21, 1928. Serial No. 327,700. 13 Claims. (Cl. 296—51.)



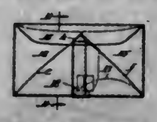
1. A vehicle body including, a bottom, and an end gate construction pivotally mounted thereon to move from a position in which it constitutes a closure for the end of the body to another position in which it forms an extension to said bottom, latching means automatically engageable with said construction to hold the same in either of said positions, and manually operable means connected with said latching means for releasing the same by moving said means in one direction when the tail gate construction is in the first position and in an opposite direction when the tail gate construction is in the other position.

1,883,474. THREE-WAY DUMPING BODY CONSTRUCTION. EDWARD R. BARRETT, Detroit, Mich., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 5, 1929. Serial No. 404,896. 5 Claims. (Cl. 296—10.)



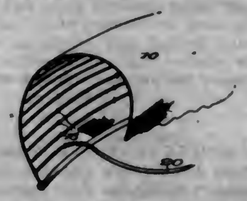
1. In an underframe structure having longitudinal beams and transverse beams the combination with side frame members of angle iron form located one at each side of said frame and at the ends of the transverse beams, transverse channel members located at the ends of and welded to said longitudinal beams, said side frame members being welded at their ends to said transverse channel members, and said channel members having end portions projecting beyond said side members of the frame, and a bracket member secured at each corner of the frame comprising a vertical post and a horizontal arm extending from said vertical post at its lower end, the vertical posts having a welded connection to the adjacent end portions of the said transverse channel members, and means connecting said horizontal arms to the adjacent side members of the frame.

1,883,475. RETURN ENVELOPE AND BLANK THEREFOR. BEATRICE F. BARTSCH, Chicago, Ill. Filed Jan. 2, 1931. Serial No. 506,008. 5 Claims. (Cl. 229—73.)



1. An envelope of the type described, comprising front and back body walls, side wings formed as end extensions of said front wall, end flaps on said back wall, and sealing flaps on the respective upper edges of said walls; said back wall, with its end flaps and sealing flap folded inwardly thereon, being folded on itself obliquely to form a triangular wall of double thickness, and said wings being folded inwardly over said triangular wall and at their lower edges adhered to said end flaps.

1,883,476. RADIO ANTENNA. HENRY G. BARTSCH, Washington, D. C. Filed July 22, 1931. Serial No. 552,479. 6 Claims. (Cl. 250—33.)



1. An antenna unit for use with automobile radio equipment comprising an annular member of substantially tire size and shape formed of flexible, electrically non-conductive material and having means associated therewith for snugly and concentrically detachably securing said member against the spare tire casing of an automobile, a pick-up element for radio energy substantially coextensive with said annular member, means securing said pick-up element to said annular member, and means whereby said pick-up element may be electrically connected to radio equipment carried by said automobile.

1,883,477. GUY ANCHOR. THOMAS B. BASH, Kansas City, Mo. Filed Dec. 24, 1927. Serial No. 242,865. 1 Claim. (Cl. 189—91.)



A guy anchor formed of a single casting of malleable material, including a body having a pilot or tip at its lower end, of substantially pyramidal form, the faces of the pyramidal portion being recessed to provide cutting portions at the corners, the faces of the tip being continued upwardly of the body beyond the tip portion; a helical blade of substantially a single continuous convolution, having its lower or entering edge projecting substantially centrally from one of the faces of the body, and its trailing or upper edge substantially overlying said leading edge; a wrench socket of polygonal section formed in the upper portion of the body and adapted internally to receive an anchor-driving wrench, the socket extending to a substantial depth within the blade-carrying portion of the body, whereby the tubular part of the body constitutes a combined hub for the blade and a wrench-receiving seat; and a threaded socket extending below said wrench socket for detachably engaging a threaded end of an anchor rod.

1,883,478. PROCESS OF PURIFYING CELLULOSE MATERIAL. HARRY P. BASSETT, Cynthiana, Ky. Filed June 4, 1929. Serial No. 368,444. 4 Claims. (Cl. 92—13.)

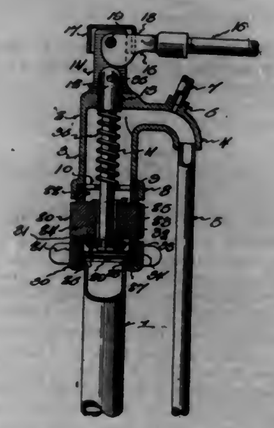
1. The herein described process of purifying cellulose material selected from the group comprising wood pulp, cotton linters, and rag stock, without material disintegration thereof, which comprises digesting such material with a solution of a cellulose purifying agent to remove impurities therefrom, and washing the digested material, said material being maintained out of substantial contact with air until after the washing operation.

1,883,479. POWER SPRAYER. FRED H. BATEMAN, Grenloch, N. J., and ISAAC TROLLEY, York, Pa., assignors to Fred H. Bateman Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 27, 1929. Serial No. 358,559. 4 Claims. (Cl. 299—41.)



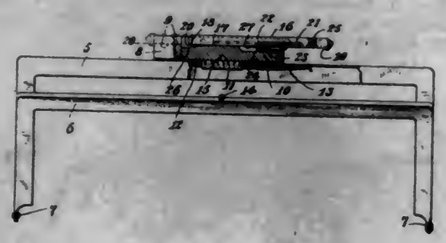
2. In a sprayer, a spray boom pivoted to swing between operative and inoperative positions, means automatically latching the boom in its operative position when moved thereto and means for moving the boom from its operative to its inoperative position, initial operation of which releases said latching means.

1,883,480. FLOAT VALVE. JACOB L. BAUER, Wauwatosa, Wis., assignor of fifteen per cent to Arnold Raasch, Milwaukee, Wis., and twenty-five per cent to Louis Reunzel, Wauwatosa, Wis. Filed Apr. 18, 1931. Serial No. 531,510. 1 Claim. (Cl. 137—104.)



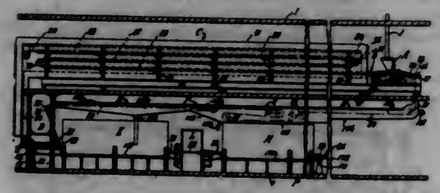
In a float valve, the combination, a supply pipe, a casing, a valve body having a stem, a guide for the stem, and a reversible coupling arranged between the pipe and casing for uniting the same together, the coupling comprising an intermediate body having an axial bore therethrough, opposed valve seats formed on the opposite ends of the body surrounding the bore and forming a continuation thereof, and externally threaded flanges formed on the opposite ends of the body in spaced annular relation to the valve seats forming means for enclosing and protecting said seats, the coupling flanges extending beyond the valve seats for entirely receiving the valve body, said flanges having a greater diameter than the valve body and having the outer ends thereof provided with annular internal supporting shoulders for the guide.

1,883,481. BAG LOCK. CHARLES BAUM, Irvington, N. J., assignor to E. Pceter & Co., Irvington, N. J., a Corporation of New Jersey. Filed July 18, 1931. Serial No. 551,637. 8 Claims. (Cl. 292—207.)



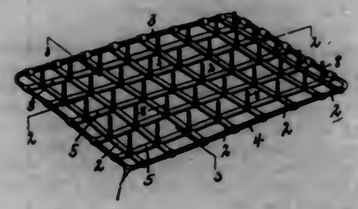
1. In a lock of the kind described, complementary members relatively movable into and out of aligned relation, latch means releasably holding the said members in aligned relation, and supplementary locking means including a manually operable part on one of said members engageable with the other member to lock said members against relative movement and prevent release of said latch means.

1,883,482. CONFECTION MAKING APPARATUS. ALONZO LINTON BAUSMAN, Springfield, Mass., and HOWARD C. BAUM, Mount Vernon, N. Y., assignors to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 28, 1930. Serial No. 424,122. 15 Claims. (Cl. 107—8.)



1. A confection making machine, comprising, a continuously movable conveying means carrying a series of molds, a receptacle for confection to be cast in said molds, means for intermittently ejecting through the outlet of said receptacle measured charges of confection, means for coordinating the movement of said conveying and ejecting means so that an intermittent ejection of confection occurs during each interval of movement of the conveying means wherein the mold moves in receiving relation to said outlet, a temperature conditioning apparatus through which the filled molds are carried by said conveying means and by which the molded confection is caused to set, means for emptying the molds after they leave said apparatus and while moving continuously with said conveying means, said emptying means comprising means moving with the molds during the emptying operation for positively removing the confections out of their molds and means for coordinating the operation of said emptying means with the movement of said conveying means.

1,883,483. PIN BOARD. LESTER A. BEARDSLEY, Norwich, N. Y., assignor to Norwich Wire Works, Inc., Norwich, N. Y., a Corporation of New York. Filed May 29, 1931. Serial No. 540,920. 2 Claims. (Cl. 242—131.)

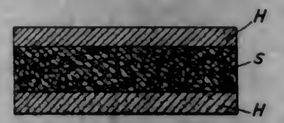


1. A pin board comprising a frame, primary and secondary sets of cross strips secured to the frame and intersecting each other, said strips having registering openings at their intersections, and the openings in the secondary strips having a tapered wall, and pins having shoulders resting upon the primary strips and their lower portions extending through said registering openings and their lower ends enlarged to fit tightly within said tapered wall to firmly unite the pin and the sets of cross strips together.

1,883,484. EDIBLE COATING FOR FROZEN PRODUCTS. HOWARD BEATTY and CHARLES MONOHER, Chicago, Ill., assignors to Glidden Food Products Company, Chicago, Ill. Filed Aug. 14, 1929. Serial No. 385,963. 5 Claims. (Cl. 99—11.)

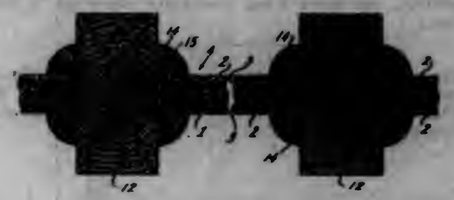
1. As an article of manufacture, a composition of matter suitable for coating ice cream and frozen products comprising nut fibre, powdered skim milk, powdered sugar material, and fatty materials above a melting point of 76 degrees Fahrenheit in sufficient proportion to produce a product, in which the fatty material is substantially from two to three times that of the nut fibre and in which the melting point of the total fat in the finished product is less than 100 degrees Fahrenheit, the coating product being relatively soft at room temperature whereby when it is employed as a coating for a frozen product, said coating will melt substantially readily at the mouth temperature.

1,883,485. LAMINATED SHEET BUILDING MATERIAL. CHARLES J. BECKWITH, New York, N. Y., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1928. Serial No. 257,275. 4 Claims. (Cl. 154—2.)



4. A process of making a laminated building material, comprising a backing layer of relatively light, soft and porous insulating material and a face layer of mineral fiber bonded in a hard dense mass with Portland cement, the process being characterized by separate formation of the layers and pressing the several layers together while the mineral cement layer is still wet, with the inter-position between the separately formed layers of an additional binding material of the character of Portland cement.

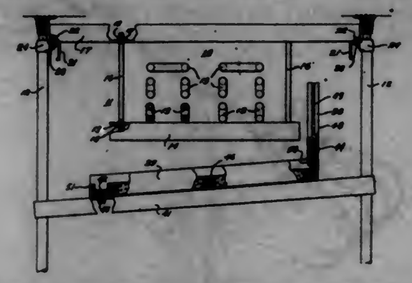
1,883,486. LAMINATED SHEET MATERIAL. CHARLES J. BECKWITH, Brooklyn, N. Y., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed July 29, 1930. Serial No. 471,465. 4 Claims. (Cl. 154—45.9.)



1. Composite board comprising face laminæ of densely compacted Portland cement and asbestos fibers providing material of high compressive and tensile strength, the face laminæ being capable of limited flexing to oppose major stresses, an intermediate cushioning lamina of felted fibrous insulating material adhesively bonded to the face laminæ so that the board acts as a unit in resisting stresses, the cushioning lamina having a yieldability sufficient to permit to conform to the flexing of the face laminæ, whereby breaking down of the bonding connection between the laminæ is avoided even under high bending stresses.

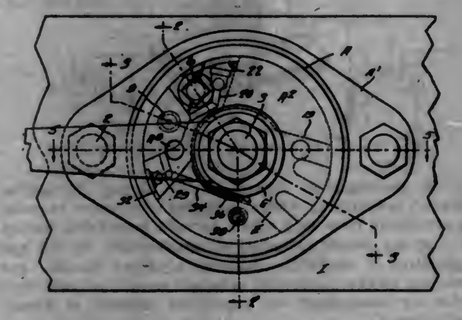
1,883,487. REFRIGERATING INSTALLATION. LOUIS I. BECKWITH, Dorchester, Mass. Filed Aug. 27, 1929. Serial No. 388,763. 8 Claims. (Cl. 62—103.)

5. In a refrigerating installation, the combination of a drip pan comprising insulating material between metal sheathing, this sheathing being substantially continuous over the upper and lower surfaces of the pan and being separated along the edges thereof to avoid transfer of heat by conduction through the metal sheathing from the upper to the lower side of the pan, an upright baffle comprising insulating material between metal sheathing, this sheathing being substantially continuous over the sides of the baffle and being separated along the upper and substantially vertical edges thereof to form a substantially continuous gas along these edges for avoiding transfer of heat by conduction from one side of the baffle to the other, the metal sheathing being folded substantially



upon itself along the lower edge of the baffle to form a depending lip substantially in alignment with one side of the baffle, and dowels on the lower edge of the baffle, the pan having recesses registering with and receiving these dowels, the recesses being located to support the baffle with the depending lip projecting within the pan so that drippings from the baffle may fall within the pan.

1,883,488. SHOCK ABSORBER. EUGENE L. BEECHER, East Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 22, 1930. Serial No. 422,519. 28 Claims. (Cl. 188—89.)

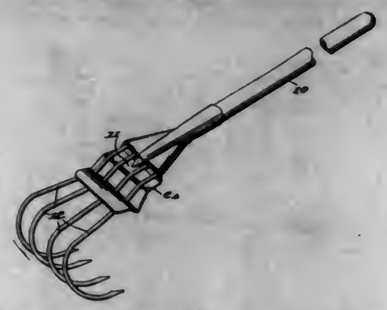


1. A shock absorber comprising in combiuation a cylindrical casing having an open bottom and provided with an integral cover having a central opening therethrough, a shaft mounted in said casing and extending through the said opening, a closure for the bottom of the said casing, a cover block spaced from the cover of the said casing and providing a working chamber between its rear face and the said closure, the said cover block having a central neck formed therewith and constituting a bearing for the shaft and extending into the central opening in the casing cover, a movable vane or partition mounted on said shaft in the working chamber, packing material for the end of the cover-block neck, and means secured to the cover of said casing for holding the said packing material under compression.

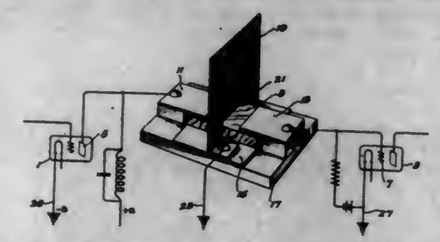
1,883,489. CULTIVATOR. FRED P. BEEDLE and HARRY T. KINGSBURY, Keene, N. H. Filed July 9, 1931. Serial No. 549,778. 5 Claims. (Cl. 97—63.)

1. A cultivator implement including tines and a holder therefor, a handle on said holder, the body portion of said holder including a relatively flat member having laterally extending flange portions each having a row of

openings therein aligned with the openings in the other flange portion, a plurality of U-shaped tines having their legs extended through said openings with the bight end of each tine engaging one of said perforated flange portions; the portion of said holder between said flange portions together with the opposing portions of said tines being bent transversely of the tines and out of a straight line, whereby the tines are held in position.

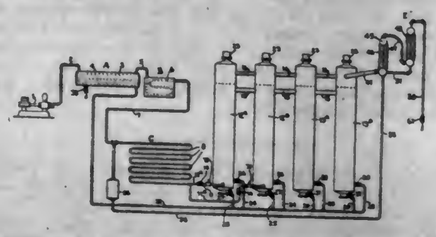


1,883,490. AMPLIFYING SYSTEM. GEORGE LISLE BEERS, Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1931. Serial No. 532,753. 10 Claims. (Cl. 179—171.)



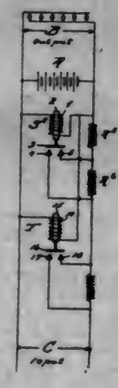
1. In combination, means for producing fluctuating potential, amplifying means, coupling means for impressing potentials from said source on said amplifying means, the coupling means including a piezo-electric crystal and a plurality of electrodes disposed adjacent thereto, and screening means interposed between certain of said electrodes for minimizing the capacitive transfer of energy therebetween.

1,883,491. CONVERTING HYDROCARBON OILS. OTTO BEHIMER, Oak Park, Ill., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 6, 1920, Serial No. 401,623, and in Canada Dec. 3, 1921. Divided and this application filed Nov. 26, 1927. Serial No. 235,804. 2 Claims. (Cl. 196—58.)



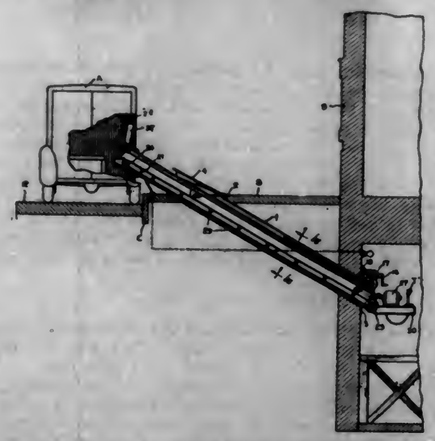
1. A process of cracking oil, consisting in passing the oil through a heating coil wherein it is subjected to cracking conditions of heat and pressure, in transferring a portion of the oil from said coil into a primary expansion chamber, in directing all of the oil constituents from said primary expansion chamber to a secondary chamber, and in introducing the remaining portion of the heated oil from said coil directly into the liquid oil in said secondary expansion chamber to increase the conversion therein.

1,883,492. BATTERY CHARGING SYSTEM. CHARLES W. BELL, Buffalo, N. Y., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 353,585. 5 Claims. (Cl. 171—314.)



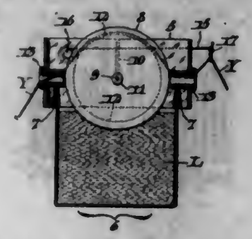
2. In a storage battery charging system, resistances in the input circuit, a circuit closer connected across the battery and operable to cut in additional resistance for reducing the charging rate when the battery approaches a fully charged condition, and a circuit closer connected across the battery for increasing the charging rate when the battery approaches the minimum desirable charged condition, the input being constantly connected to the battery.

1,883,498. TRANSFERRING AND TRANSPORTING APPARATUS. ALBERT W. BEZO, New York, N. Y. Filed Aug. 3, 1929. Serial No. 383,267. 4 Claims. (Cl. 214—44.)



1. In an apparatus for transferring valuable articles between a building and an armored traveling vehicle, a communicating closed and armored casing adapted to be projected from said building into operating contact with said vehicle, and a plurality of endless belt conveyor means within said casing adapted to transfer articles between the building and vehicle simultaneously in opposite directions.

1,883,494. YARN MOISTENING DEVICE. EMIL J. BERGES, Hatfield, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 394,183. 3 Claims. (Cl. 91—51.)



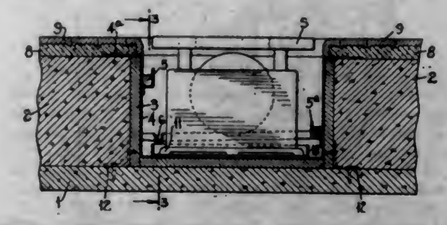
1. A yarn moistening device comprising a receptacle for the moistening liquid, a hollow bridge-piece removably supported by opposed notches in its lower edges on the receptacle, a freely rotatable disk detachably journaled in the bridge-piece with hub extensions to prevent lateral play, said disk being adapted to be propelled by the yarn incident to being overtravelled by the latter and having a circumferential V-groove to carry up moisture from the receptacle by capillary action for absorption by the yarn, and a springy element projecting from the bridge-piece with means for imposing tension upon the yarn.

1,883,495. GARTER TOP STOCKING. EMIL J. BERGER, Hatfield, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Aug. 18, 1931. Serial No. 557,807. 9 Claims. (Cl. 66—173.)



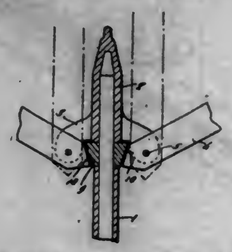
1. As a new article of manufacture, a knit stocking with a welt top, and an elastic garter with the edge thereof attached at the fold of the welt.

1,883,496. COMBINATION FLOOR AND SCALE CONSTRUCTION. SAM BERSON, New York, N. Y. Filed Feb. 16, 1931. Serial No. 516,123. 4 Claims. (Cl. 265—68.)



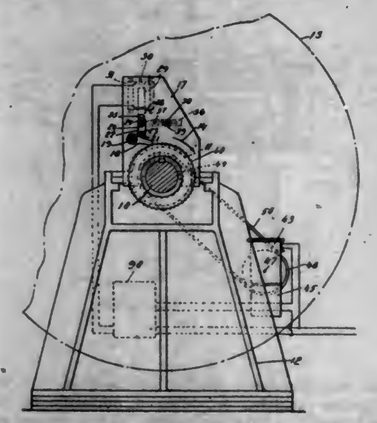
1. In combination, a floor having a vertical recess, the vertical wall of said recess having collecting means adapted to collect water which enters said recess, a pan located at the bottom of said recess and communicating with said collecting means, and a scale having its base located within said pan.

1,883,497. LOCKING DEVICE FOR CLOTHES DRIERS. ROSCOE G. BICKNELL, Worcester, Mass. Filed Jan. 27, 1932. Serial No. 589,264. 2 Claims. (Cl. 211—167.)



1. In combination with an upright having an inverted substantially conical part adjacent its upper end, a hub fitting over the upper end of the upright and having arms pivotally connected thereto, each arm having a beveled inner end for engaging the substantially conical member, when the arms are in lowered position for locking the hub to the upright.

1,883,498. BRAKE. JOHN P. BILLINGSLEY, Wilmington, and THOMAS A. KELLUM, Claymont, Del., assignors to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Nov. 11, 1930. Serial No. 494,875. 17 Claims. (Cl. 188—182.)

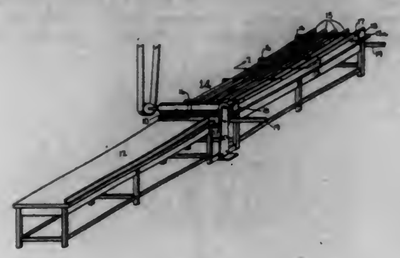


1. The combination with a shaft normally rotatable in one direction of means for preventing rotation of the shaft in the opposite direction comprising a brake, electrically controlled means for maintaining the brake inoperative during normal rotation of the shaft, and means for rendering the brake operative on rotation of the shaft below a predetermined rate.

1,883,499. METHOD AND APPARATUS FOR PRODUCING PLYWOOD. ARTHUR B. BIRTLES, Louisville, Ky. Filed July 11, 1931. Serial No. 550,059. 7 Claims. (Cl. 144—280.)

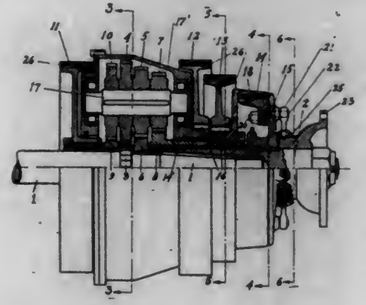
1. The method of assembling layers of wood or the like for producing a built up structure of plywood which comprises simultaneously coating the opposite faces of a succession of core stock pieces to constitute the central members with an adhesive and delivering same onto a

pivotally reversible rack, then applying a surface product member to the exposed surface and securing the product thus far processed to said rack, then reversing the whole



and releasing said product and applying another surface member entering into the product to the last exposed surface.

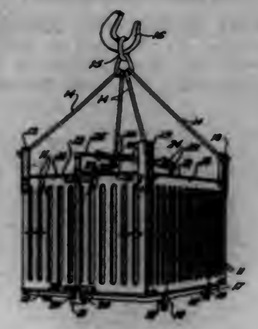
1,883,500. VARIABLE SPEED GEARING. MAGNUS BJÖRNDAL, Jersey City, N. J., and EMIL AGER WICK, Brooklyn, N. Y. Filed Nov. 24, 1930. Serial No. 497,812. 7 Claims. (Cl. 74—34.)



1. In variable speed gearing of the planetary type for motor-driven vehicles providing a plurality of different speeds between a driving element and a driven element, the combination of a centrifugal clutch comprising a member associated with one of the elements, a plurality of eccentric taps mounted in the member and each having a lever, a flyweight mounted on each of the taps, a member associated with the other of the elements and which the flyweights are adapted to engage by the effect of centrifugal force, adjustable counter-springs for the flyweights, and means for actuating the levers and the taps in accordance with the torque of the driving element.

1,883,501. PICKLING BASKET. THEODORE J. BLACK and GEORGE EARL YOUNG, Canton, Ohio. Filed Mar. 17, 1932. Serial No. 599,520. 3 Claims. (Cl. 266—7.)

1. A pickling basket including side walls forming a substantially rectangular frame, a pair of bottom sections hinged at their outer edges to the lower edge portions of opposite side walls, lugs at opposite ends of the swinging edge portions of said bottom sections, vertical shafts journaled upon the outside of opposite side walls and extending above and below said side walls, latch members



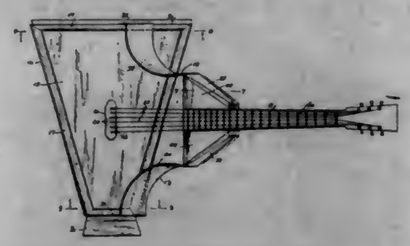
upon the lower ends of said shafts for engagement with said lugs, levers upon the upper ends of said shafts and a link connecting said levers.

1,883,502. TOY HANDCUFFS. JOSEPH E. BLAKE, Gardner, Mass. Filed Mar. 21, 1932. Serial No. 600,094. 5 Claims. (Cl. 70—24.)



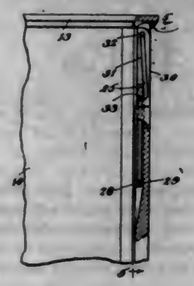
1. A toy formed of a pair of connected hand-cuffs each of which comprises a frame having side walls and a connecting portion along one edge thereof with an opening through said connecting portion, and a substantially U-shaped holding member pivoted at one end to said frame and having its free end portion provided with notches on its outer surface, and said notched end portion selectively and yieldingly engaging a shoulder on said frame when said free end portion is inserted through said opening.

1,883,503. STRINGED MUSICAL INSTRUMENT. PETER E. BLONDIN, North Tonawanda, N. Y. Filed Aug. 19, 1931. Serial No. 558,003. 21 Claims. (Cl. 84—267.)



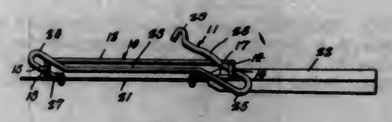
1. A stringed musical instrument comprising a sound box having a sounding board, a string carrying member in interspaced relation with the sound box, strings carried by the member and having their inner ends attached to the sounding board, said string carrying member having its axis arranged perpendicularly to the longitudinal axis of the sound box and at an angle to the lateral axis of the sound box, and resonator members connecting the string carrying member with the sound box.

1,883,504. COMBINED CLOSET AND TABLE. EDGAR S. BOLLES, Monument Beach, Mass., assignor to Dorothy J. Bolles and Edgar S. Bolles, jr., Monument Beach, Mass. Filed May 29, 1931. Serial No. 541,068. 6 Claims. (Cl. 45—51.)



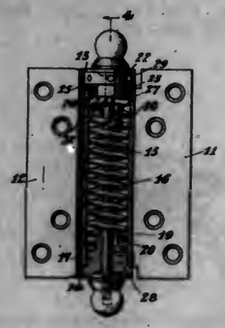
1. A cabinet having a front hinged at the bottom to open to a horizontal position for use as a table, a stop on the top of the cabinet legs for supporting the front in horizontal position, means pivotally and slidably attaching said legs to the upper end of the front and adapted to dispose said legs in rear of said stop to hold the front upright to form a closure for the cabinet, and props hinged to the front and to the legs for preventing collapse of the legs.

1,883,505. KNIFE GAUGE. ANDREW C. BOLTON, Miami, Fla. Filed June 29, 1931. Serial No. 547,712. 4 Claims. (Cl. 30—20.)



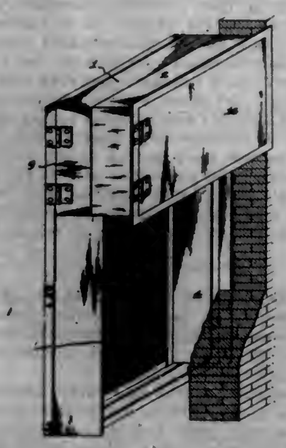
1. A gauge for a knife comprising a stationary bar having means at its ends for attachment to the blade of a knife, and a gauge bar arranged in spaced parallel relation to said blade attaching bar and movable toward and away therefrom, obliquely extending parallel flexible means on the ends of said bar frictionally and slidably engaged with the end portions of the blade attached bar, one of said obliquely extending means being flexible out of engagement with an end of the blade attached bar to permit movement of the gauge bar toward and away from and in constant parallelism with the stationary bar.

1,883,506. SPRING HINGE. GUSTAV BOMMER, Brooklyn, N. Y., assignor to Emil Bommer, Brooklyn, N. Y. Filed June 11, 1931. Serial No. 543,580. 7 Claims. (Cl. 16—189.)



1. A spring hinge having a spiral spring, one hook portion of which is anchored, a tensioning collar with which the second hook portion of the spring has pulling engagement whereby to tension the spring on movement of the collar in the direction of the spiral winding of the spring, and means for forcing the second hook portion out of pulling engagement with the collar on movement of the collar in a direction counter to the direction of the spiral winding of the spring.

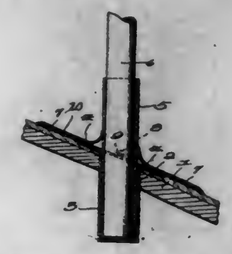
1,883,507. METER CONTAINER. PERCY C. BOND, ALFRED F. BOND, and ERNEST ORLANDO, Detroit, Mich., assignors to Percy C. Bond, trustee for Percy C. Bond, Edwin F. Rauss, and Alfred F. Bond. Filed Feb. 25, 1920. Serial No. 342,634. 12 Claims. (Cl. 73—167.)



1. The combination with a wall of a building having an opening therein and meters positioned in the said building and adjacent to the said opening for inspection and

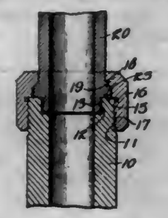
reading from without the building and connected to intake conduits within the building, of a casing surrounding said opening and having closures to the interior and to the exterior of the building spaced from each other.

1,883,508. AERIAL SUPPORT. FREDERICK W. BONDAY, Baltimore, Md. Filed Feb. 6, 1930. Serial No. 426,362. 12 Claims. (Cl. 248—37.)



11. A mast support comprising a socket for receiving a mast or the like, plates extending on opposite sides of the socket and embracing the same, and means connected with the plates providing hinged joints therebetween.

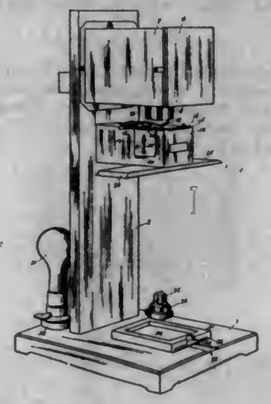
1,883,509. PIPE UNION. CHARLES G. BOONE, Tulsa, Okla., assignor to Magic City Specialty Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Apr. 20, 1931. Serial No. 531,570. 1 Claim. (Cl. 285—122.)



A pipe coupling union comprising a stationary part provided with an inner shoulder, a movable part having a projection at one end adapted to be enclosed by said shoulder, a flange formed adjacent said projection perpendicular thereto adapted to seat on the end of said stationary part and of a diameter less than that of the said stationary part, the upper portion of said flange being beveled and a securing part mounted around said movable part having a corresponding bevel therein conforming and seated on said bevel on the flange, and a shoulder adjacent to said bevel adapted to seat on the end of said pipe over said flange, said securing part being screw-threaded on said stationary part, all contacting surfaces being ground finished, substantially as set forth.

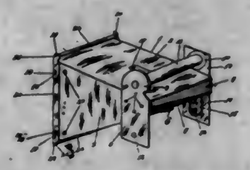
1,883,510. ENLARGING APPARATUS. CARL BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Dec. 17, 1930. Serial No. 503,003. 2 Claims. (Cl. 88—24.)

1. An apparatus for printing enlarged positives directly from negatives comprising in combination, a photographic negative film strip, supporting means therefor comprising a pair of guide plates having grooves in the ends thereof slightly wider than said film, said plates being disposed substantially perpendicular to that portion of the film which is in position to be printed, means for supporting a sensitized surface at a predetermined distance from said negative, a lamp, a pair of laterally extending members for keeping the remaining portions of said negative film out of the path of light of said lamp to the sensitized surface, means for supporting said lamp at a predetermined distance from said negative on the side thereof opposite said sensitized surface, means for projecting light from said



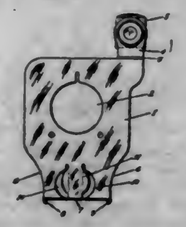
lamp through said negative to said sensitized surface, a second lamp adjacent said sensitized surface, a source of electrical energy, and means whereby the first mentioned lamp may be connected to said source or both of said lamps may be connected in series to said source, as desired.

1,883,511. FILM HOLDER FOR CAMERAS. CARL BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 4, 1932. Serial No. 584,726. 5 Claims. (Cl. 95—31.)



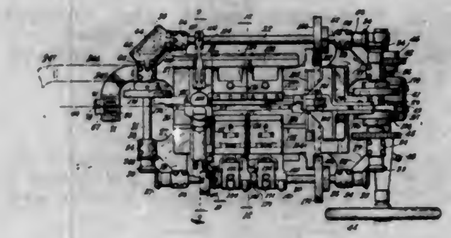
1. A film holder for box cameras comprising a flat sided substantially cone shaped member of one piece of material, the free ends of said material being folded together along one side of said material.

1,883,512. CAMERA FRONT. CARL A. BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 4, 1932. Serial No. 584,728. 3 Claims. (Cl. 95—40.)



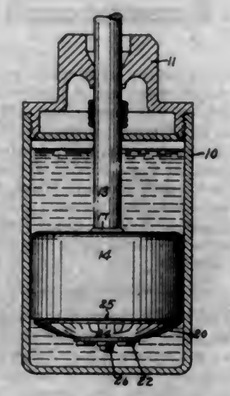
1. A camera front comprising a one-piece stamping having a bent portion provided with integral channel guiding means thereon.

1,883,513. CUTTING AND FORMING MACHINE. ALWYN E. BOSTON, South Orange, N. J., assignor to Associated Manufacturers, Inc., Ampere, N. J., a Corporation of New Jersey. Filed Sept. 10, 1931. Serial No. 562,101. 21 Claims. (Cl. 153—2.)



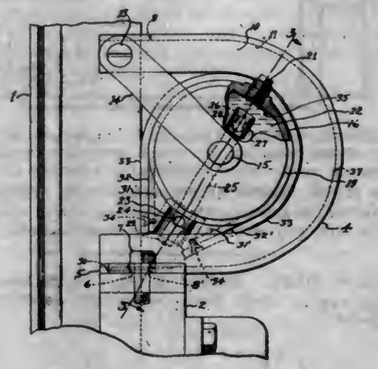
1. A combination machine of the character disclosed, comprising a base having bearing supporting portions, shafts arranged in quadrangular relation, bearings supporting said shafts on said base, said bearings being split substantially horizontally and substantially on the centers of the shafts with the upper halves of the bearings in the form of vertically removable bearing caps and the lower halves of the bearings rotatably shiftable in said bearing supporting portions of the base whereby they may be rocked to enable shifting of the shafts away from each other, miter gears on the ends of all said shafts and engaged to couple said shafts in a continuous end-to-end driving loop, means for applying power to one of the shafts and machine devices operated by the several shafts through the continuous power of the loop described.

1,883,514. THERMOSTATIC DASHPOT. JOSEPH BOYER, deceased, Detroit, Mich., by Detroit Trust Company, Detroit, Mich., Henry E. Candler, Detroit, Mich., and Standish Backus, Detroit, Mich., executors, assignors to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed June 29, 1931. Serial No. 547,728. 2 Claims. (Cl. 188—100.)



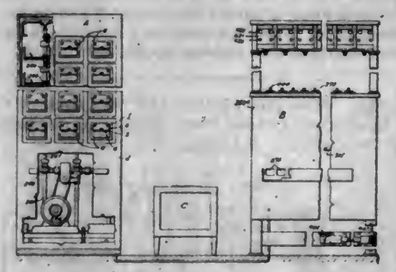
1. A dash pot for calculating machines comprising a fluid cylinder, a cup-shaped piston in said cylinder having an open lower end, and a pair of metal disks supported by said piston with their edges adjacent the lower edges of said cup, said metal disks having different coefficients of expansion whereby the edges of said disks are spaced from the bottom of said piston in accordance with the temperature of the fluid in said dash pot.

1,883,515. GUIDE RAIL LUBRICATOR. THOMAS BRADY, Caldwell, N. J. Filed Nov. 27, 1931. Serial No. 577,526. 11 Claims. (Cl. 184—21.)



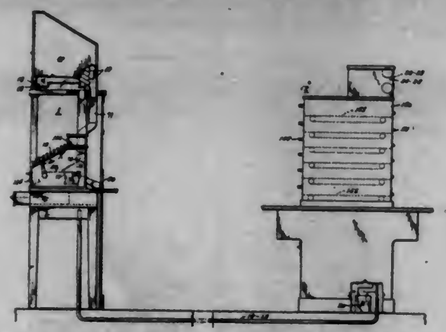
1. A guide rail lubricator comprising, a member arranged to engage a guide rail and to roll a limited amount in either direction therealong, said member being provided with stop surfaces for limiting the rolling thereof to a part of a revolution, and means cooperating with said member for supplying lubricant for use on the guide rail.

1,883,516. AUTOMATIC SALES SYSTEM. HARRY RUSSELL BRAND, New York, N. Y. Filed May 21, 1928. Serial No. 279,551. 9 Claims. (Cl. 234—1.5.)



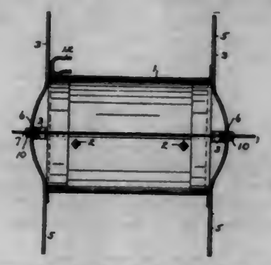
1. The process of dispensing which comprises performing a mechanical act initiatory of the delivery of an article from a distant point and thereby recording the order at the distant point, automatically identifying a recipient with the order and surrendering the article to the recipient in exchange for the identification and deleting the record by surrender of the identification.

1,883,517. AUTOMATIC SALES SYSTEM. HARRY RUSSELL BRAND, New York, N. Y. Filed May 7, 1928. Serial No. 275,722. 41 Claims. (Cl. 235—92.)



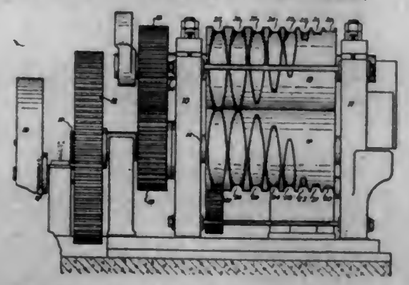
1. The process of dispensing a single article from a group of dissimilar articles which comprises mechanically performing an act characteristically initiatory of the delivery of the desired article and thereby automatically identifying the patron with the article ordered and releasing the article by surrender of the identification.

1,883,518. REEL. ERNEST H. BRANNING, Akron, Ohio. Filed Aug. 22, 1930. Serial No. 476,961. 1 Claim. (Cl. 242—87.)



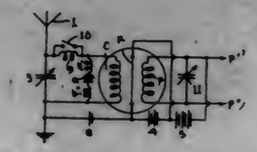
1. A reel comprising a sheet of metal adapted to be rolled into the form of a cylinder with the ends of the sheet overlapped, means extended through the overlapped ends to secure them together, two L-shaped collars insertible in the opposite ends of the cylinder, cross arms welded to the collars having portions projecting beyond the collars and having their central portions curved outwardly and apertured, a shaft adapted to be received by the apertures in the cross arms, a handle supporting the shaft and nuts on the shaft to clamp the cross bars together and located between the cross bars and the handle.

1,883,519. FORGING PROPELLER BLADES. CHARLES A. BRAUCHLER, Canton, Ohio. Filed Aug. 22, 1929. Serial No. 387,607. 9 Claims. (Cl. 29—156.8.)



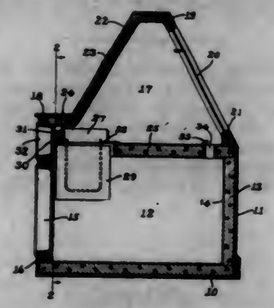
1. The method of forging propeller blades which includes heating a bar blank, elongated and tapering one end portion of the bar blank by successive passes between a series of roll dies, further elongating and tapering the elongated portion of the bar blank by successive passes between a series of roll dies, the elongated portion being confined laterally and longitudinally to a predetermined size and shape during each successive pass, and then hammer forging the partly completed product to a finished forging.

1,883,520. THERMIONIC RELAY AND CIRCUITS THEREFOR. HARRY F. BRECKEL, Cincinnati, Ohio. Filed Mar. 31, 1928. Serial No. 266,838. 20 Claims. (Cl. 179—171.)



1. In a short wave signalling system, a three electrode vacuum tube comprising a cathode, an anode, and a control element comprising an inductance coil interposed in the discharge path between the anode and cathode and arranged to magnetically control the electron emission from said cathode, an input circuit including said coil connected directly in series therewith, and means for tuning the input circuit to establish current resonance in the control coil, said coil consisting substantially the entire inductance in the tuned input circuit.

1,883,521. REFRIGERATING APPARATUS. JOHN B. BREEN, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 27, 1929. Serial No. 395,587. 5 Claims. (Cl. 62—89.5.)

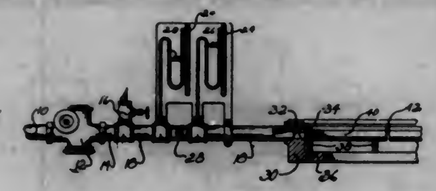


1. A mechanically cooled refrigerator cabinet having an upper display compartment and a lower storage compartment, and a partition wall separating said compartments, said wall having an opening provided therein, a compact, block-like cooling unit removably supported and disposed in said opening and having a portion extending above said partition wall into said display compartment and another portion extending below said partition wall into said storage compartment, said opening being larger than the cooling unit, said cooling unit being adapted for installation as a unit.

1,883,522. PISTON RING TESTING MACHINE. CARL BREER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 11, 1928. Serial No. 253,566. 5 Claims. (Cl. 73—51.)

4. In a device for testing the pressure sealing capacity of a piston ring, a conduit having one end communicating with a source of fluid under substantially constant pressure, an annular casing having an inner cylindrical wall adapted to retain a piston ring under compression, said wall having a port therein communicating with said conduit and normally with the atmosphere, and adapted

to be closed by said piston ring, a pair of pressure indicating devices, one for indicating the pressure at said source and the other for indicating the pressure in said conduit,



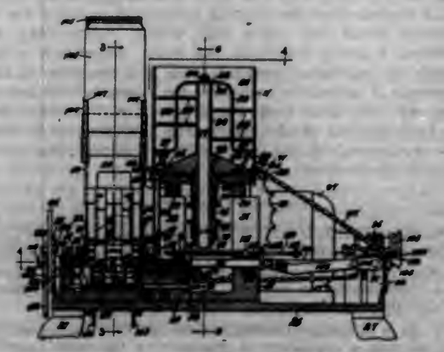
and a restriction in said conduit between said gauges, a variance in pressure on said gauges normally indicating a leakage of fluid from said passage past said ring.

1,883,523. MACHINE FOR HEAT TREATING GLASS TUBES AND THE LIKE. CLIFFORD E. BEE MILLER, Chicago, Ill., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1927. Serial No. 219,888. 6 Claims. (Cl. 49—58.)



1. A machine for treating glass cartridge tubes and the like, comprising, in combination, a conveyor; and a counterbalanced tube receiving receptacle at the discharge end of the conveyor; said receptacle being movable responsive to the increase in total weight of the tubes as they collect in the receptacle, so as to permit the entry of additional tubes.

1,883,524. STOPPER INSERTING MACHINE. CLIFFORD E. BEE MILLER, Chicago, Ill., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 24, 1927. Serial No. 221,824. 53 Claims. (Cl. 226—92.)

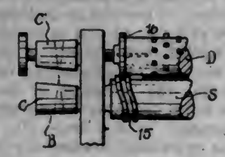


2. A machine for inserting plugs into glass tubes and the like comprising, in combination, a holder for tubes; a container for a supply of plugs; a feeding chute for the plugs; mechanically operated means for discharging the plugs from the container into the chute; means for forcing the plugs through the chute; coordinated feeding mechanism for both the tubes and the plugs; and means synchronized with said feeding mechanism for forcibly inserting one of the plugs in one end of each tube.

1,883,525. CHLORO-ANTHRAQUINONE-ACRIDONES AND PROCESS OF MAKING SAME. WALTER BRUCK, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 13, 1930, Serial No. 475,120, and in Germany Aug. 17, 1929. 9 Claims. (Cl. 260—37.)

1. A process of producing chloro-anthraquinone-2.1 (N)-benzacridones, which comprises treating an 1-anilinoanthraquinone containing a methyl group in ortho position to the nitrogen atom in an inert organic solvent in the absence of acid-binding agents with a chlorinating agent until products are produced which contain more than five atoms of chlorine when saponified.

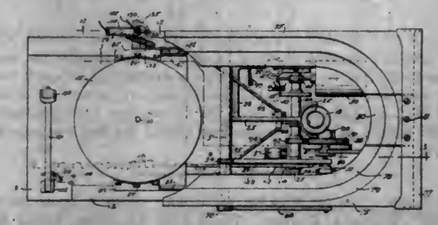
1,883,526. METHOD OF AND APPARATUS FOR APPLYING DESIGNS TO PAPERS AND THE LIKE. CASSIUS M. BRYAN, West Springfield, Mass., assignor to Strathmore Paper Company, Mitteneague, Mass., a Corporation of Massachusetts. Filed June 18, 1928, Serial No. 286,439. Renewed May 9, 1932. 11 Claims. (Cl. 92—42.)



2. The method of decorating a web of paper which consists in, impinging a wet web of paper wherein the fibers thereof are relatively shiftable with a decorating device and then in moving said device and web relative to one another at different speeds to shift fibers of the web relative to others.

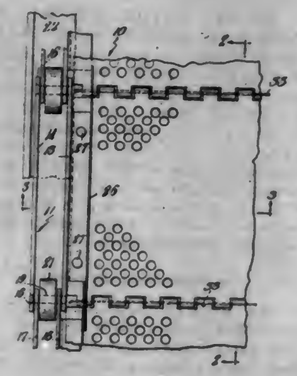
7. Paper making apparatus comprising in combination, an element for receiving fibrous paper making material which is movable in a certain direction at a certain surface speed, a movable design device for impinging material on said element and means for moving said device at a surface speed different from that of said element whereby certain fibers of material thereon may be displaced with respect to others.

1,883,527. AUTOMATIC SOUND REPRODUCING APPARATUS. ROY B. BRYANT, Dallas, Tex. Filed Jan. 19, 1931. Serial No. 509,852. 16 Claims. (Cl. 274—10.)



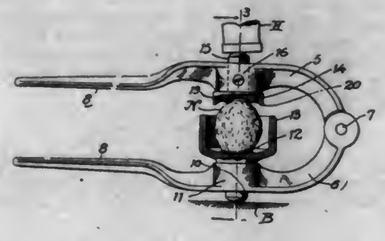
1. In an automatic sound reproducing apparatus, a rotatable turntable, means for rotating said turntable, a plurality of super-imposed sound reproducing records mounted on the turntable, sound reproducing means engaging the uppermost record for reproducing the same, and means for removing the uppermost record and inverting the same and returning it to the turntable for reproduction of its opposite side.

1,883,528. CONVEYER. LUCIEN A. BUCK, Mount Vernon, N. Y., assignor of one-half to Buck Dryer Corporation, Manchester, Conn., a Corporation of New York. Filed Jan. 17, 1931. Serial No. 509,341. 5 Claims. (Cl. 198—190.)



2. An apron plate for a conveyer comprising a sheet of material having a series of similar substantially rectangular openings spaced substantially uniformly in a transverse row across at least one end of the sheet, the row of openings being spaced from the end of the sheet to provide a strip of material for reinforcing the openings, the material separating the openings of the row forming hinge straps, the latter being curved downwardly and backwardly for engagement with a hinge pin, the reinforcing strip of material extending downwardly below the sheet, and means reinforcing the downwardly extending portion of this strip.

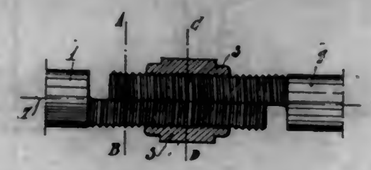
1,883,529. NUTCRACKER. JACOB S. BUCKWALTER, Philadelphia, Pa., assignor to Jacob R. Hershey, Kinzers, Pa. Filed Nov. 28, 1928. Serial No. 322,506. 2 Claims. (Cl. 146—13.)



1. A nut cracker comprising a fixed anvil provided with an annular beaded portion, a shield and receptacle associated therewith, and an overlying and slidable anvil having concentric beaded portions disposed in relatively different planes, said second anvil being exterior to but adapted to fit within said receptacle and shield for the purpose set forth.

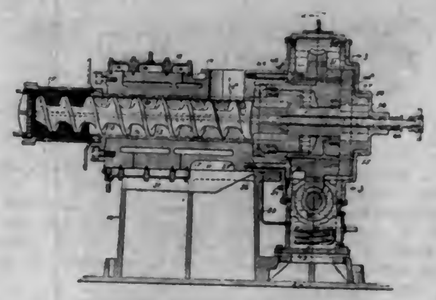
1,883,530. TIGHTENING DEVICE. ANDRÉ PAUL BUISSET, Mezieres, France. Filed July 12, 1930, Serial No. 467,570, and in France Oct. 17, 1929. 2 Claims. (Cl. 24—124.)

2. A device of the character described comprising a pair of juxtaposed cooperating parts each having their outer surfaces correspondingly rounded and formed respectively with left and right threads, the normal cross section of one thread being a sector of a circle and the normal cross section of the other thread being the other sector of the same circle, the inner adjacent surfaces of said parts each having a recess formed longitudinally thereof and extended in an inverse inclined relation with respect to the body of said parts, the recess in one part cooperating with the recess in the other part to constitute a bore



adapted to receive a foreign member therein, and a nut in engagement with the threads on said parts and adapted to move the same in relatively opposed directions, whereby through the inclined cooperating recess in each part, to bind the foreign member received therebetween.

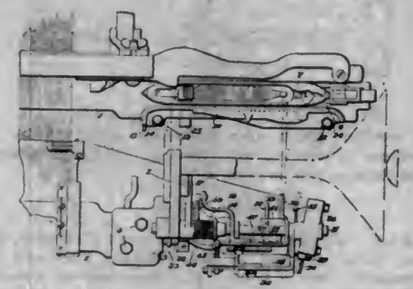
1,883,531. EXTRUSION APPARATUS. CLIFFORD C. BUNKER, Tallmadge, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed June 23, 1928. Serial No. 287,711. 11 Claims. (Cl. 146—174.)



1. In an extruding machine, a screw, a driven quill holder keyed loosely thereto, a sleeve member in which the screw and the quill are journaled, said member supporting therein bearings for the quill at each end thereof and also an intermediate thrust bearing between shoulders on the sleeve and quill, a worm gear journaled about said member and connected to the quill at the end thereof, a driving worm meshed with the worm gear at the bottom thereof, a casing about the gearing defining a reservoir for lubricant about the gears and worms where they are meshed, a pump driven by the worm, connection to the pump for supplying lubricant from the reservoir to said bearings, a separator acting on the screw beyond the inner end bearing to keep the lubricant in the casing and to keep dirt out of the casing, and a connection between the separator and the inner bearing for returning lubricant to the reservoir.

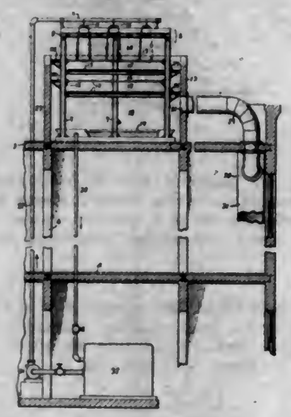
1,883,532. FILLING END CONTROLLER FOR REPLENISHING LOOMS. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed July 15, 1930. Serial No. 468,012. 7 Claims. (Cl. 139—263.)

1. In a filling replenishing loom, the combination of the lay having a replenishing shuttle box the front wall of which is provided with a longitudinal slot open at its inner end, a thread parter and clamp for parting and clamping the outgoing filling adjacent the shuttle eye of a boxed shuttle and adapted to hold the filling extending between the selvage and clamp, a slide on which the parter and clamp are mounted, a guide for the slide having its guiding portion extending between the ends of the shuttle box in a direction inclined to the longitudinal axis of the shuttle, and an actuator for moving the slide in the guide towards and from the front of the loom in a path inclined outwardly towards the end of the shuttle box to present the



parter and clamp to a position adjacent the shuttle eye and then remove the clamped end of the filling frontwardly in a direction inclined inwardly towards the cloth selvage to reduce the tension of the filling end and facilitate its withdrawal through said slot.

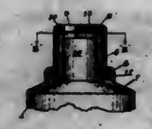
1,883,533. COOLING APPARATUS. EDWIN BURHORN, Hoboken, N. J. Filed May 18, 1930. Serial No. 451,940. 4 Claims. (Cl. 261—113.)



1. In combination, a water cooling tower, having superposed cooling decks, a water distributor at the top of the tower, walls laterally enclosing the lower part of the tower, the upper part of the tower being extended above the enclosing walls for cooling by natural air currents of the descending water, a vessel at the bottom of the tower receiving the cooled water, an air pipe conducting exhaust air into the bottom of the tower within its enclosing walls, and means compelling the exhaust air to traverse the between-deck spaces, back and forth, trending upwardly, with final discharge to atmosphere.

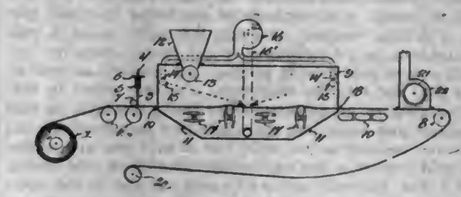
1,883,534. CLOSURE FOR CONTAINERS. JAMES P. BURKE, Wayne, N. J., assignor to Mack Molding Co., Wayne, N. J., a Corporation of New Jersey. Filed Feb. 17, 1931. Serial No. 516,443. 3 Claims. (Cl. 221—60.)

1. In combination with a container having a cylindrical neck with a wall perforated eccentrically at the outer end thereof and a circular flange surrounding the inner end of said neck and spaced therefrom, a cap having a flat outer wall with a discharge orifice therein eccentrically disposed for cooperation with the opening in the container wall and a circular side wall projecting from said top wall and sur-



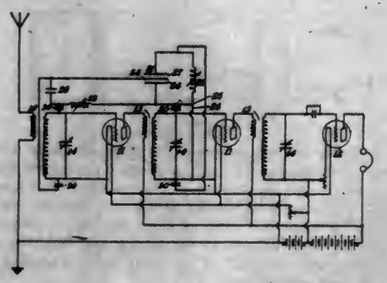
rounding said neck, said circular side wall having an outwardly projecting flange at its free edge engaging beneath the circular flange on the container.

1,883,535. PROCESS FOR PRODUCING ON PAPER OR FABRIC A SUÈDE-LIKE FINISH OF WATERPROOF PROPERTY. ANDRE BURNETT, Wausau, Wis. Filed Oct. 7, 1929. Serial No. 398,015. 3 Claims. (Cl. 91—68.)



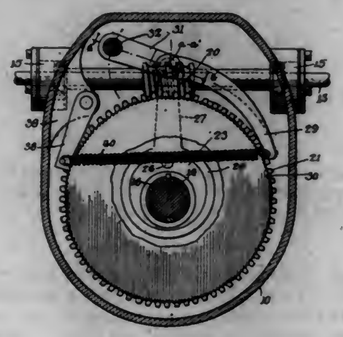
1. A process of the class described consisting of applying an adhesive coating to a sheet of paper or fabric, distributing comminuted material upon the coated surface of the sheet, subjecting the sheet to converging blasts of air and subjecting the sheet to agitation.

1,883,536. SYSTEM FOR COUNTERACTING UNDESIRED OSCILLATIONS IN ALTERNATING CURRENT CIRCUITS. THOMAS H. BURNS, Maplewood, N. J. Filed Nov. 7, 1931. Serial No. 573,667. 3 Claims. (Cl. 179—171.)



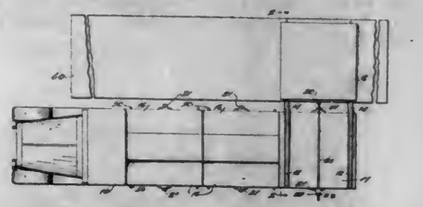
1. In a system for counteracting undesired oscillations in a radio frequency circuit including a tuning portion: a stabilizing circuit capacitatively coupled thereto and through a junction point, said circuit including two closed circuit portions each containing a condenser, the one condenser being connected to the other substantially at its mid-point to form therewith the one closed circuit portion; an inductance in said closed circuit portion; and an inductance in the other closed circuit portion which includes the divided condenser and the junction point.

1,883,537. TRANSMISSION MECHANISM. WARREN DEAN BURTON, Oak Park, Ill., assignor to Combustioneer Inc., Cicero, Ill., a Corporation of Illinois. Filed May 2, 1929. Serial No. 359,728. 7 Claims. (Cl. 74—54.)



3. A transmission mechanism comprising, in combination, a casing, a driven member extending into said casing, a driving member extending into said casing, a gear rotatable on said driven member and having operative connection with said driving member, an eccentric secured to said gear for rotation therewith, a ratchet keyed to said driven member, an eccentric strap freely rotatable on said eccentric and having an arm extending therefrom, a pawl pivotally secured to the outer end of said arm and engaging said ratchet, a pin adjustably mounted in said casing, and a link pivotally secured to said pin and to the outer end of said arm, said link being adapted to describe an arcuate movement about said pin, said pin being adjustable toward and from the line of reciprocation of said pawl so as to vary the component of said arcuate movement along said pawl.

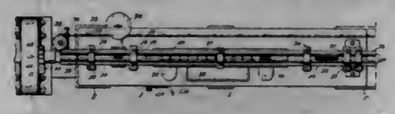
1,883,538. STORE DOOR PICK UP AND DELIVERY SYSTEM. NORBERT W. BYWATER, Louisville, Ky. Filed Apr. 27, 1931. Serial No. 533,329. 11 Claims. (Cl. 214—65.)



1. A truck having a series of pairs of guide rails extending transversely thereof, a freight container for each pair of rails and having wheels supporting the container on said rails, sockets spaced along the side of the truck centrally between the rails of each pair, and a horizontal jack having a shank selectively engageable with said sockets and having a jack bar adapted for connection selectively to said containers.

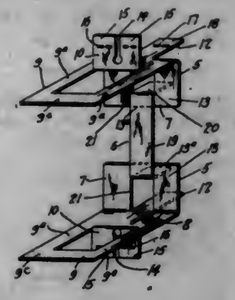
1,883,539. SOLDERING DEVICE FOR CAN MACHINES. WILLIAM CAMERON, Chicago, Ill., assignor to Cameron Can Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1930. Serial No. 484,061. 53 Claims. (Cl. 113—61.)

1. In a can making machine, a body forming section, a soldering section arranged to receive can bodies from the forming section, feeding devices for conveying the can bodies over the soldering roll of said soldering section, a motor for actuating said feeding devices in timed relation to the forming section, an independent motor for actuating said feeding devices upon cessation of said



first mention motor and means for automatically and selectively connecting said feeding devices in predetermined order to said motors.

1,883,540. EXTENSION CLIP. CALVIN CAMPBELL, Denver, Colo., assignor to The Colorado Fuel and Iron Company, Denver, Colo., a Corporation of Colorado. Filed Dec. 10, 1928. Serial No. 324,961. 8 Claims. (Cl. 72—118.)



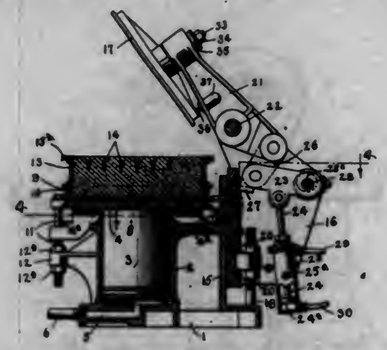
1. A clip for fastening wall- or ceiling-boards, comprising end-members having integral means for securing wall- or ceiling-boards to a support against which they are placed, and a link-member connecting the end-members.

1,883,541. GAS BURNER. CARLETON W. CAMPBELL and SIDNEY J. COOK, Denver, Colo., assignors to Burnair, Inc., Denver, Colo. Filed July 29, 1930. Serial No. 471,460. 5 Claims. (Cl. 158—116.)



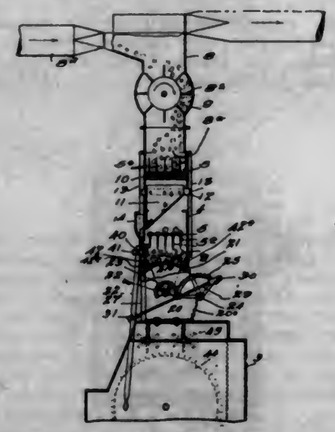
1. A gas burner comprising a housing partitioned to provide an upper mixing chamber and a lower air chamber having an upwardly ejecting air outlet, the mixing chamber having a gas outlet discharging across the path of the upwardly ascending air, whereby to effect a mixing of the air and gas after issuance from the burner housing, a gas injector set in the partition separating the mixing and air chambers, and means for supplying gas to the injector.

1,883,542. MOLDING MACHINE. DONALD J. CAMPBELL, Muskegon Heights, Mich. Filed Sept. 29, 1930. Serial No. 484,989. 10 Claims. (Cl. 22—40.)



1. A molding machine comprising, a base, means for supporting a flask having open upper and lower sides on said base and a pattern associated with said flask, said flask being adapted to receive loose sand surrounding said pattern, a slide vertically adjustable on said base, and means movably mounted on said slide and located adjacent the flask for compressing the sand therein.

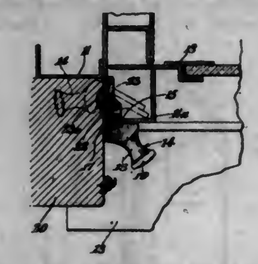
1,883,543. MATERIAL HANDLING APPARATUS. ERNEST F. CAMPBELL, Columbus, Ga., assignor to Lummus Cotton Gin Company, Columbus, Ga., a Corporation of Georgia. Filed Sept. 30, 1930. Serial No. 485,451. 7 Claims. (Cl. 19—74.)



1. In combination with a supply means for a cotton feeder or the like, a communicating supply reservoir disposed between said supply means and feeder, and a single valve means within said reservoir and operable to shut off the supply of material from the supply means to the reservoir when in one position and movable to another position for shutting off the supply of material from said reservoir to the feeder while permitting said reservoir to receive cotton from said supply means.

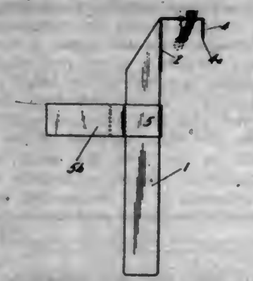
1,883,544. ATTACHMENT HOOK FOR SAFETY BELTS. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed May 8, 1930. Serial No. 450,664. 12 Claims. (Cl. 20—72.)

1. A window frame including an attachment device having a portion adapted normally to occupy a position within the outline of said frame, means for movably supporting said device upon said frame and to permit of the adjustment of said portion of the device to a



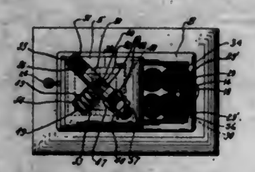
position projecting outwardly beyond the outline of the frame, and means for securing said device to its projected position, substantially as specified.

1,883,545. CURTAIN SUPPORT. WILLIAM C. CAMPBELL, Davenport, Iowa. Filed May 4, 1931. Serial No. 534,755. 2 Claims. (Cl. 156—22.)



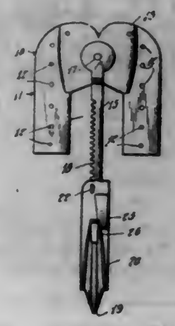
1. A curtain support comprising a body having a head united thereto at right angles, a reversible bracket slidably mounted upon the body and having forwardly extending ends, and means for securing the head to a window casing.

1,883,546. SMOKER'S NOVELTY. ADOLFO CAMPOS and ANGEL RAMIREZ, Newark, N. J. Filed Feb. 11, 1930. Serial No. 427,507. 2 Claims. (Cl. 67—4.1.)



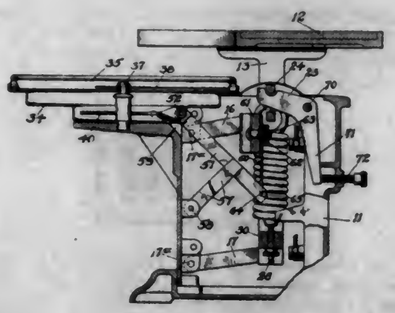
1. In a smoker's novelty, a cigarette lighter comprising, a wick element, a friction wheel, a guide cylinder having an open end adjacent said friction wheel, a flint stick slidably mounted within said guide cylinder and adapted to engage said friction wheel, spring means contained within said guide cylinder for urging said flint stick into engagement with said friction wheel, means for revolving said friction wheel so as to cause the latter to rub said flint stick and effect the lighting of said wick element, said guide cylinder having an aperture in the side wall thereof and a flint stick cartridge pivotally connected to said guide cylinder and adapted to contain additional flint sticks, said flint cartridge being turnable upwardly about its pivotal connection with said guide cylinder to cause a flint stick to drop downwardly through the aperture in said guide cylinder to thereby replenish used up flint sticks.

1,883,547. SPOUTING OR GUTTER HANGER. CONRAD A. CARBAUGH, Dickeys Mountain, Pa. Filed Mar. 28, 1929. Serial No. 350,784. 1 Claim. (Cl. 108—29.)



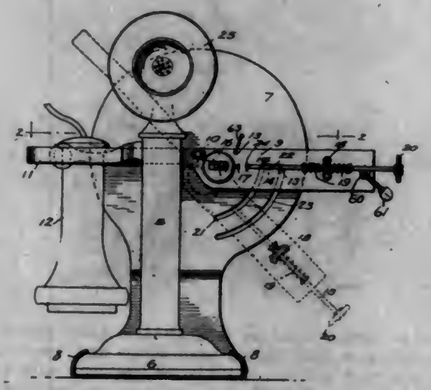
A device of the class described comprising an attaching bracket of U-shape having its bight uppermost, an offset portion integral with the bight, a bar having an attaching member forwardly of its rear edge, means securing the attaching member to the offset portion, said offset portion having a notch entered by the bar at its junction with the attaching portion, said bar thereby being offset from the outer surfaces of the legs of the attaching bracket in line with the space between said legs, and a supporting bracket adjustably mounted on the bar, the movement of the supporting bracket being facilitated by the positioning of said bar.

1,883,548. WEIGHING SCALE. FREDERICK E. CARLSON, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed May 23, 1930. Serial No. 454,952. 8 Claims. (Cl. 265—68.)



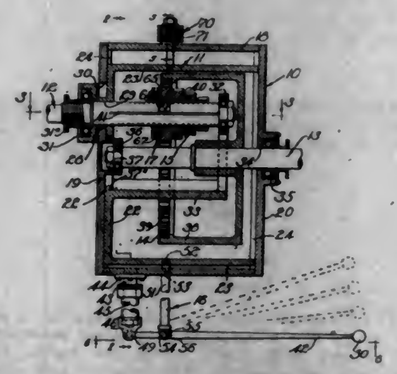
1. In a scale, and in combination, a stationary frame, a vertically movable platform frame, a weighing-spring connection between the movable frame and the stationary frame, a dial having a horizontal face, a pointer movable over said dial, and an operating connection for causing rotation of said pointer upon movements of said movable frame, said connection including a lever provided with a notch, and a thrust-exerting spring element in engagement with said notch and urged by its spring tension into said notch in a direction at an angle to its direction of thrust.

1,883,549. TELEPHONE REGISTER. DAVID M. CARR, Brooklyn, N. Y. Filed May 31, 1930. Serial No. 458,277. 20 Claims. (Cl. 179—7.)



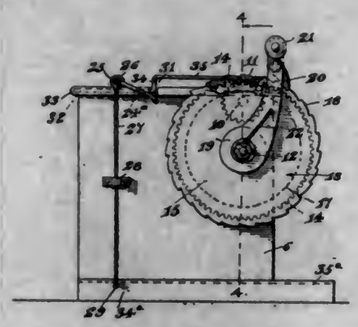
1. A movable guard to prevent easy manual movement of the telephone switch when said receiver or combination transmitter and receiver is off its hook or cradle of any suitable material normally secured in a position which will prevent the removal from its switch hook or cradle, of the receiver or combination transmitter and receiver of a telephone instrument without first moving the guard.

1,883,550. POWER TRANSMISSION. SAMUEL C. CARTER, Los Angeles, Calif., assignor of one-half to Robert F. Belcher, Los Angeles, Calif. Filed Jan. 26, 1931. Serial No. 511,192. 11 Claims. (Cl. 74—58.)



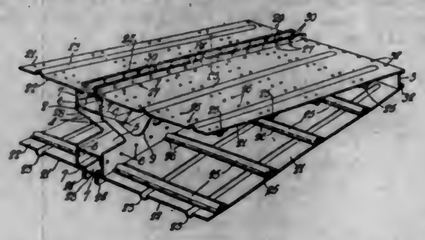
1. A power transmission including, a housing, a mounting shiftable in the housing, a high speed shaft rotatably carried by the mounting, a low speed shaft extending into the housing and having a relatively stationary axis of rotation, a gear on the low speed shaft within the housing, a group of pinions of different effective diameters slidable on and rotatable with the high speed shaft, means supporting the high speed shaft on the mounting at points spaced from the opposite ends of the group of pinions, means for shifting the mounting to positions where the pinions are in alignment with the gear, and means for sliding the pinions along the high speed shaft into engagement with the gear.

1,883,551. MOP WRINGING APPARATUS. SPEROS CARVOUR, Jersey City, N. J. Filed Aug. 11, 1930. Serial No. 474,531. 4 Claims. (Cl. 15—262.)



1. A wringer including wringer rolls, a gear on one roll, a rotatable driving member having internal gear teeth operating the roll gear and having peripheral ratchet teeth, and an oscillatory treadle having a pawl operating on the ratchet teeth.

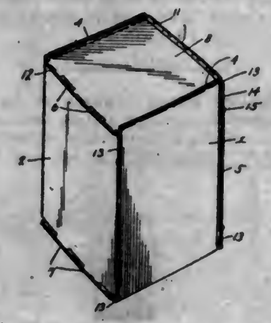
1,883,552. AIRPLANE WING STRUCTURE AND METHOD OF MAKING THE SAME. EDMOND CHAGNIARD and ALEXANDER KARTVELICHVILI, New York, N. Y., assignors to Chagnkart International Aviation Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1929, Serial No. 397,562, and in France Nov. 30, 1928. 20 Claims. (Cl. 244—31.)



1. In an aircraft wing structure an internal metal frame structure including tubular form defining rib members extending transversely of the wing an outer sectional sheet metal shell structure covering said frame structure and comprising a plurality of reinforced sheet metal panels of the one piece type bridging the space between adjacent ribs and individually and independently secured to the upper and lower edges of said transverse ribs of the frame structure by rivets applied and fastened at the exterior of the structure.

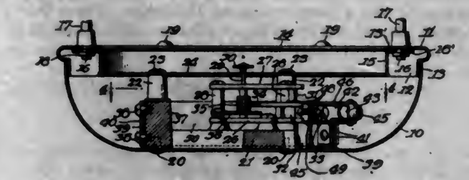
1,883,553. KNOCKDOWN BOX. LEONARD CHAIN, Owensdale, Pa. Filed June 9, 1931. Serial No. 543,219. 2 Claims. (Cl. 220—4.)

1. A knockdown box comprising a pair of duplicate, opposed vertical walls, T-heads on the vertical edges of said duplicate vertical walls terminating in spaced relation to the upper and lower ends thereof, pairs of angular, complementary flanges on the inner sides of the upper and lower end portions of said duplicate walls defining channels, another pair of opposed, vertical walls, pairs of angular, complementary flanges on the inner sides of the vertical marginal portions of the second named walls for slidably receiving the T-heads for detachably connecting the walls together in assembled relation, the upper and lower ends of one of the second named walls being disposed above the horizontal plane of the corresponding ends of the other second named wall, a top, T-heads on certain of the edges of the top slidably engageable in the uppermost of the first named channels, said top being engageable in its respective channels over the upper ends of said other of the second named walls, a bottom, T-heads on certain of the edges of the bottom



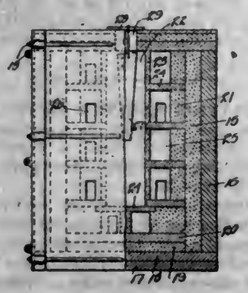
slidably engageable in the lowermost of the first named channels, said bottom being engageable in its respective channels under the lower end of said one second named wall and means for detachably securing the top and bottom in position.

1,883,554. THERMOMETER. CHARLES F. CHAPMAN, Chicago, Ill., assignor to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 24, 1931. Serial No. 564,880. 10 Claims. (Cl. 73—118.)



7. In a thermometer of the type described, the combination with a case of heat conducting material adapted to float on a liquid, of mechanical temperature indicating means mounted in said case, said means including a flexible bi-metallic actuator strip, and a fixed heat transmitting rib lying in contact with a wall of said case and disposed along side of and narrowly spaced from said actuator strip.

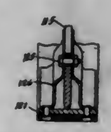
1,883,555. FURNACE FOR HEAT TREATING METALS. WILLIAM R. CHAPIN, Indianapolis, Ind. Filed Nov. 18, 1929. Serial No. 406,942. 2 Claims. (Cl. 263—9.)



2. A heat treating furnace comprising a plurality of combustion chambers arranged one above the other and having fuel inlets thereto and flue outlets therefrom, a

work chamber completely surrounded by the combustion chambers and separated from the combustion chambers by imperforate walls, a cover plate for the work chamber having a relatively long narrow slot therein, means positioned in the slot for supporting work, said pieces of work being supported so as to be out of contact one with the other whereby the work may be evenly heated throughout, substantially as set forth.

1,883,556. BRAKE SHOE. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 1, 1927. Serial No. 209,843. 1 Claim. (Cl. 188—250.)



In a brake, a shoe comprising a swinging beam and a flange, plates of good heat conductivity connecting said flange to said beam at positions on beam remote from said flange, and said beam having a reduced area of contact at its point of engagement with said flange.

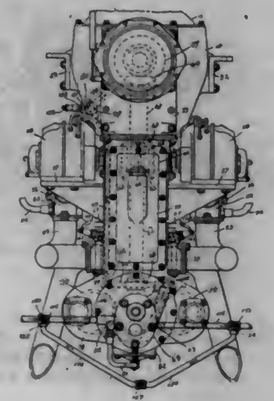
1,883,557. TIRE TESTER. MOSES E. CHENEY, La Crosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Oct. 2, 1928. Serial No. 309,725. 4 Claims. (Cl. 73—109.)



2. The combination of an expansible and contractile member with a pointer pivoted at one end, an actuator pivoted at one end and having its free end engaging the edge of the pointer adjacent its pivot and capable of sliding along said edge, the engaging surface of said pointer when the said pointer is at its midway position being in line with the pivots of said pointer and actuator and means connecting the expansible member with said actuator.

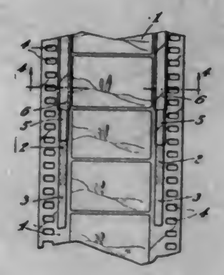
1,883,558. AVIATION ENGINE. ARTHUR E. CHEVROLET, Indianapolis, Ind., assignor to Chevolair Motors, Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed June 3, 1929. Serial No. 367,966. 11 Claims. (Cl. 123—59.)

1. In a multi-cylinder in-line air cooled valve-in-head internal combustion engine suitable for aviation purposes, the combination of a pair of exhaust valve seats for each cylinder, a pair of intake valve seats for each cylinder, an intake and exhaust valve being provided at each side of the cylinder and in line with others upon the same side of the engine, an independent passage associated with each seat, the exhaust and intake valves being diametrically arranged on opposite sides of the engine the passages upon the same side of the engine having a common intermediate wall and the exhaust valves on opposite sides of each cylinder having substantial valve spac-



ing therebetween whereby cooling of the common wall by the incoming fuel and the spaced portion cools the exhaust passage portion thereof.

1,883,559. SOUND FILM AND METHOD OF MAKING SAME. HARRY E. CHIPMAN, Springfield, Mass., assignor, by direct and mesne assignments, to Andrew Le Roy Chipman, New York, N. Y. Filed Nov. 5, 1928. Serial No. 317,289. 1 Claim. (Cl. 274—43.)

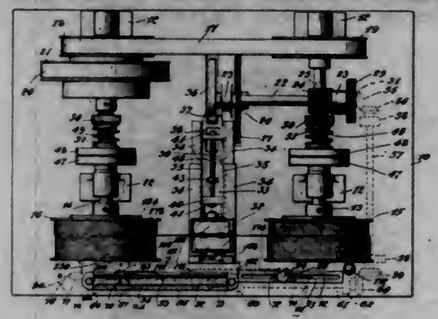


A sound film of the character described, including a film body, a plurality of strips of cementitious material coated on said film body, magnetic particles comprising the sound record embedded in said cementitious material, and a plurality of layers of cementitious material extending over said magnetic particles and each overlapping on to the film body to permanently secure the particles to the film and to protect the same against disturbance and injury.

1,883,560. ELECTROMAGNETIC SOUND RECORDING AND REPRODUCING MACHINE. HARRY E. CHIPMAN, Springfield, Mass., assignor to Andrew Le Roy Chipman, New York, N. Y. Filed Oct. 10, 1929. Serial No. 398,585. 11 Claims. (Cl. 179—100.2.)

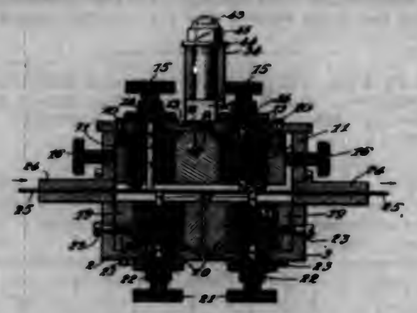
1. In an apparatus having a reel and driving means therefor, of control means for said driving means, including, in combination, a drive screw driven by said driving means in synchronism with the reel and having a traveler, a member adjustable axially relatively to said drive screw, means associated with said member, traveler and driving means adapted to shut off the driving means

when the traveler reaches a place on its drive screw determined by the adjusted position of said member relative to the drive screw, and means, including a fixed dial



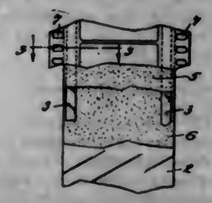
and a coacting pointer movable with said member, for indicating the adjustment of said member relative to the drive screw.

1,883,561. MAGNETIC SOUND RECORDING AND REPRODUCING HEAD. HARRY E. CHIPMAN, Springfield, Mass., assignor to Electric Magnetic Sound Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 25, 1930. Serial No. 438,705. 14 Claims. (Cl. 179—100.2.)



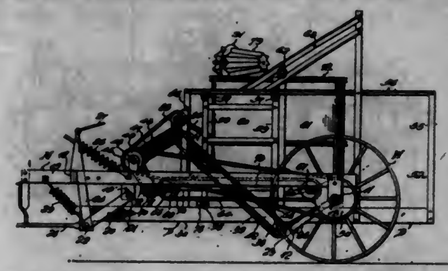
1. In a device of the character described, in combination, a casing having a slotted wall, a slide plate, slidably disposed in the slot and against the casing, a slide block within the casing opposite said slot, means securing the slide block and slide plate together, an electromagnet mounted in the slide block, and means for anchoring the slide plate and block in slidably adjusted position on the casing.

1,883,562. SOUND FILM AND METHOD OF MAKING SAME. HARRY E. CHIPMAN, Springfield, Mass., and HOWARD H. CHIPMAN, New York, N. Y., assignors, by direct and mesne assignments, to Andrew Le Roy Chipman, New York, N. Y. Filed Nov. 5, 1928. Serial No. 317,290. 2 Claims. (Cl. 274—43.)



2. A sound film of the character described, including in combination, a film body comprising a pair of photo transparent layers, one of said layers carrying a photographic emulsion, and a pair of sound strips of magnetic material extending lengthwise of the film body, said strips being pocketed between and cemented to each of said layers.

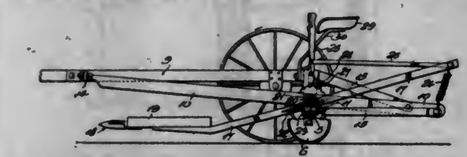
1,883,563. SHOCK-FORMING MACHINE. CHRISTIAN CHRISTIANSEN, Fargo, N. Dak. Filed Aug. 14, 1931. Serial No. 557,175. 13 Claims. (Cl. 56—402.)



1. In a grain shocker of the type embodying a shock-supporting table, a rearwardly shiftable shock-forming receiver over said table, and means for rearwardly shifting said receiver to push a shock from the table; a drop frame carrying said table, a main frame having ground wheels, means mounting said drop frame on said main frame for vertical movement with respect to the latter, and means for holding said drop frame raised until a shock is to be pushed from said table.

13. A structure as specified in claim 12; said roller being tapered toward its inner end and having corrugations, said knife being formed of arcuate overlapped sections having lugs at their ends fitting between the roller corrugations, anchoring bolts passing through said lugs and lying between said corrugations, and means connecting said bolts with said roller.

1,883,564. HARVESTER FRAME. CHRISTIAN CHRISTIANSEN, Fargo, N. Dak. Filed Aug. 14, 1931. Serial No. 557,176. 4 Claims. (Cl. 56—123.)

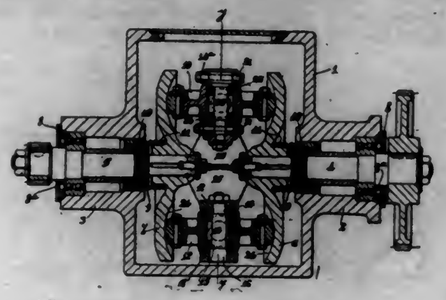


1. In a harvester, a main frame, a cutter-carrying frame whose front end carries harvesting equipment, means between the front and rear ends of said cutter-carrying frame mounting the latter on said main frame on axes transverse to the line of travel of the machine, spring means connecting the rear end of said cutter-carrying frame with said main frame and substantially balancing the weight of the equipment carried by the front end of said cutter-carrying frame, allowing the latter to be readily tilted, and means for holding said cutter-carrying frame in any position to which tilted.

1,883,565. VARIABLE SPEED FRICTION GEAR. EJNAR CHRISTIANSEN, Birmingham, England. Filed Nov. 13, 1930, Serial No. 495,528, and in Great Britain July 17, 1930. 2 Claims. (Cl. 74—26.)

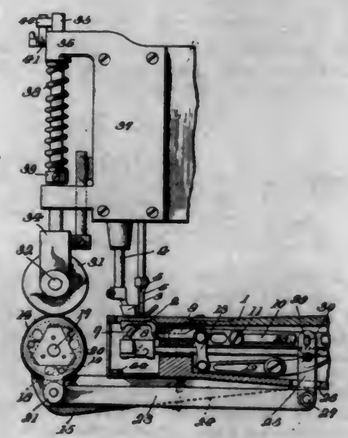
1. A variable speed friction gear comprising two face friction discs, a plurality of intermediate discs for transmitting the drive from one face disc to the other and each mounted on a spindle, a bracket associated with each spindle in which both ends of the respective spindle are mounted having trunnion pins rotatably mounted in a stationary frame so that the position of each of said in-

termediate discs can be rotatably adjusted about an axis at right angles to the axis of the face discs, and means for mounting both ends of a spindle on which an intermediate disc is rotatably mounted so that such spindle is capable of a sliding movement in its said bracket in



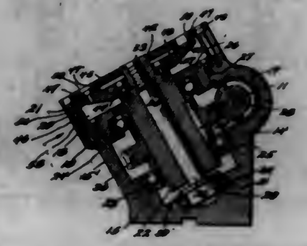
a direction at right angles to the axis of such spindle and in the direction of the line passing between the points of contact of the intermediate disc with the face discs in order that the spindle will be automatically adjusted centrally between the two face discs.

1,883,566. FEEDING MECHANISM FOR SEWING MACHINES. NORMAN V. CHRISTENSEN, Chicago, and HAROLD J. LE VESCONTE, Western Springs, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1930. Serial No. 466,264. 6 Claims. (Cl. 112—214.)



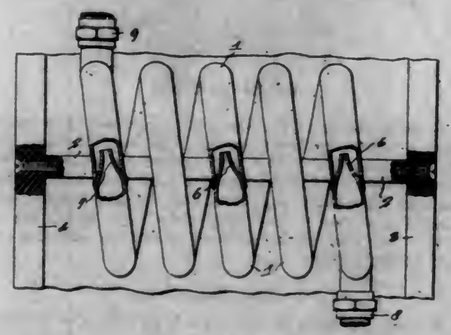
2. The combination of a work supporting arm having a feeding mechanism for feeding the articles as stitched off the end of the arm including a feed bar, a puller feeding mechanism including a lower puller roller, a bracket carried by the arm on which said roller is mounted whereby a tubular article stitched on said work supporting arm will pass over the bracket and said puller roller, an upper puller roller located above and cooperating with the lower puller roller, a link extending lengthwise of said work supporting arm and connected to said lower puller roller for intermittently rotating the same and means operated by and in timing with the feed bar within the work supporting arm for moving said link endwise.

1,883,567. FINISHING MACHINE FOR SMALL ARTICLES. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 18, 1930. Serial No. 429,436. 12 Claims. (Cl. 164—40.)



1. In a device of the type described, in combination, a face plate, a cutter member rotatable beneath said face plate, means to drive said cutter continuously, openings in said face plate to receive articles to be trimmed and to hold them stationary in respect to the cutter, said cutting member having cutting openings to periodically register with the face plate openings, each cutting opening being of less extent radially than any face plate opening.

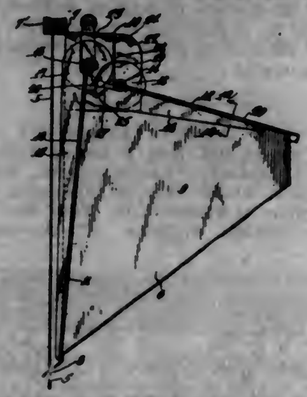
1,883,568. INDUCTANCE UNIT AND METHOD OF COOLING. BEN J. CHROMY, Hopkins, Minn. Filed Nov. 6, 1929. Serial No. 405,263. 9 Claims. (Cl. 62—1.)



1. In inductance units the combination of an electrically conducting member, a nozzle supported by said member, means for passing gas through said nozzle, said gas being caused to expand at said nozzle and cool surfaces of said conducting member.

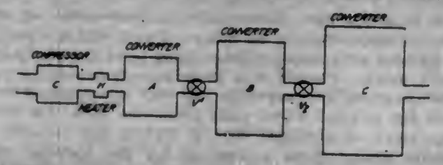
1,883,569. CHUTE DOOR CONTROL. CLARENCE H. CHUBBUCK, Bala-Cynwyd, Pa., assignor to Haslett Chute and Conveyor Company, Oaks, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,218. 7 Claims. (Cl. 193—34.)

1. In a chute inlet, an inlet casing, a pair of chute doors therefor pivoted to swing upon adjacent axes, and controlling stop devices swinging coaxially with the doors and each with opening movement swinging into the path of



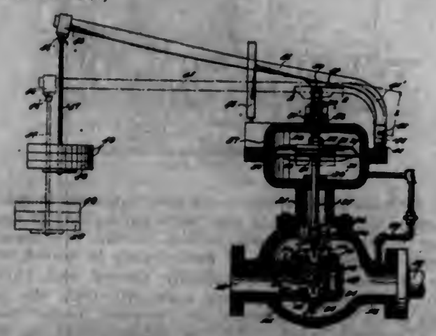
movement of the other whereby when one has begun to open the other cannot be opened.

1,883,570. METHOD OF CONDUCTING EXOTHERMIC GASEOUS REACTIONS. CYRIL B. CLARK, Scarsdale, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1926. Serial No. 146,301. 5 Claims. (Cl. 23—176.)



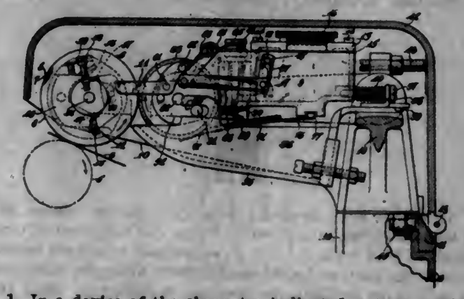
3. The method of conducting exothermic reactions between gases which comprises causing a partial reaction in a mixture of the gases, expanding said partially reacted mixture to bring the temperature thereof within predetermined limits, and repeating the alternate partial reaction and expansion steps until the reaction is substantially complete.

1,883,571. COMPENSATING GAS REGULATOR ATTACHMENT. EARLE A. CLARK, Tulsa, Okla., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Nov. 23, 1927. Serial No. 235 347. 5 Claims. (Cl. 50—27.)



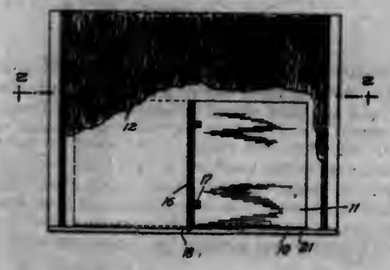
1. In a regulator of gas pressure, a diaphragm casing, an actuating diaphragm supported in said casing, a guiding member extending outwardly from said diaphragm, a lever arm provided with a curved portion whose end is offset and pivotally secured to said casing at a point adjacent the plane of the diaphragm, a weight fixed to the opposite end of said lever arm, said lever arm being adapted to movably engage said guiding member intermediate the ends thereof, and designed to move over a considerable distance with respect to said guiding member, thereby permitting a relatively wide pressure regulating range.

1,883,572. INKING DEVICE FOR PRINTING MACHINES. PAUL J. CLARK, Longport, N. J. Filed May 9, 1930. Serial No. 450,921. 12 Claims. (Cl. 101—350.)



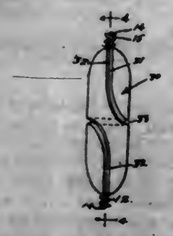
1. In a device of the character indicated, a type carrier roll, a reservoir for ink, a pump adapted to discharge ink from the reservoir, a stirrer adapted to stir the ink within the reservoir, operative connections between the roll and stirrer and pump, and means for transferring the ink discharged by the pump to the type on the roll.

1,883,573. STAGE SETTING. PETER CLARK and GEORGE VAIL, New York, N. Y. Filed Oct. 13, 1930. Serial No. 488,330. 3 Claims. (Cl. 272—22.)



1. A stage setting as characterized, comprising a plurality of page-like members adapted to be swung to open position and thereby furnish a plurality of scenes, an end piece hinged to and bracing one of said members, and means for guiding said end piece.

1,883,574. SINKER. JOHN S. CLEELAND, Glendale, Calif. Filed Dec. 10, 1930. Serial No. 501,250. 5 Claims. (Cl. 43—52.)



1. In a fishing line sinker, the combination of: a substantially streamline body; and coils provided on said

body and extending axially from opposite ends thereof, there being a friction groove provided in said body terminating at the bases of said coils so as to communicate directly with the central channels of said coils.

1,883,575. SHOT SHELL AND METHOD OF LOADING THE SAME. ROBERT G. CLYNE, St. Louis, Mo., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,129. 7 Claims. (Cl. 102—15.)



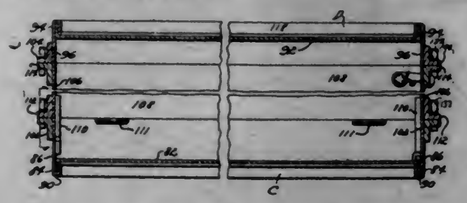
7. A shot shell having a propellant powder charge and a wad overlying said powder charge and composed of comminuted wad material and a congealable substance assembled in the shell and condensed therein while the substance is soft so as to limit the pressure necessary to unify the wad material over the powder charge.

1,883,576. FINGER SUPPORTED BLOTTER. RICHARD H. COBB, Cleveland, Ohio. Filed June 26, 1930. Serial No. 463,898. 1 Claim. (Cl. 120—25.)



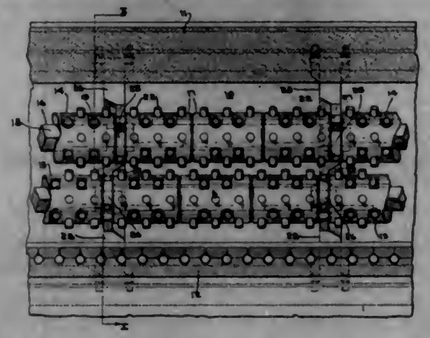
A blotter consisting of a sheet of blotting paper, the sheet of blotting paper having forward and rear edges and right and left-hand edges, extensions at the forward and rear edges, the extensions beginning at a point approximately the transverse center of the sheet of blotting paper and terminating short of its right-hand edge, the sheet of blotting paper being recessed in alignment with the right-hand edges of said extensions, and said extensions being bent upwardly and inwardly on an angle to form a socket for receiving a finger for supporting said blotter.

1,883,577. COLLAPSIBLE CONTAINER. ROY L. COBB, Spencer, Iowa. Filed Mar. 16, 1931. Serial No. 522,985. 6 Claims. (Cl. 220—6.)



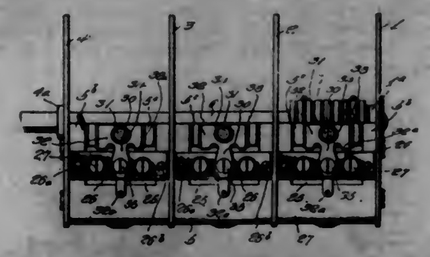
1. A collapsible container comprising a bottom member including a bottom wall and low walls rigidly secured thereto, said low walls being provided with outwardly projecting flanges at their upper margins, other walls movably arranged relative to said low walls and adapted to form continuations thereof, said other walls being provided with outwardly projecting flanges at their lower margins adapted to engage and rest on the flanges of said low walls and also being provided with outwardly projecting flanges at their upper margins, a cover member provided with an outwardly projecting flange adapted to engage and rest selectively on the flanges of said low walls when the device is in collapsed condition or on the flanges at the top of said other side walls when the device is extended, and latching means for securing said engaging flanges to each other.

1,883,578. ASH DISPOSAL APPARATUS. CLIFFORD S. CODY, Sharon Hill, BURL A. DAVIS, Pittsburgh, and DONALD J. MOASHART, Lansdowne, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1931. Serial No. 577,358. 3 Claims. (Cl. 110—165.)



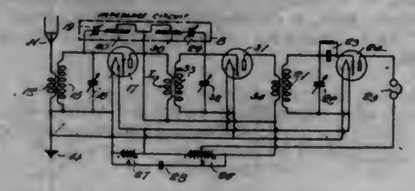
1. In combustion apparatus, the combination of side and end walls defining an ash or clinker pit; a plurality of grinder rolls disposed longitudinally of the pit in the lower portion thereof with their axes substantially parallel; bearings for supporting the rolls intermediate their ends for rotation about their respective axes; the bearings being so arranged that a bearing for one roll is axially spaced from a bearing for the opposite roll, whereby each bearing is disposed opposite a grinding portion of the other roll.

1,883,579. VARIABLE CONDENSER. SAMUEL COHEN, Brooklyn, N. Y., assignor to General Instrument Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1931. Serial No. 556,887. 2 Claims. (Cl. 175—41.5.)



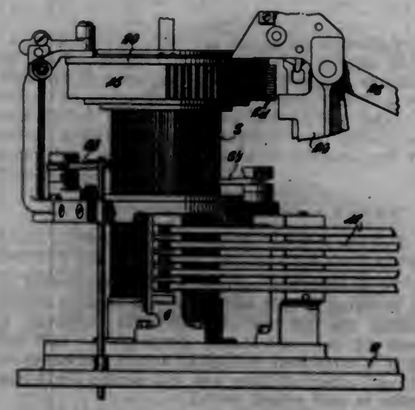
1. In a multiple variable condenser, a chassis including a bottom and upstanding side walls having sets of oppositely positioned apertures formed therein, electrostatic shields disposed laterally of said chassis in spaced relation to each other longitudinally thereof and having their end portions projecting outwardly from the side walls of the chassis between the apertures formed therein, a rotatable shaft extending longitudinally of said chassis and passing through said shields, individual insulated panels extending horizontally along said side walls in bridging relation to said apertures with their ends secured against the outer faces of the side walls and between the side edges of the apertures and the extended end portions of said shields, sets of stator plates suspended from said insulated panels between said shields, rotor plates carried by said shaft for variably interleaving with the stator plates, and compensating condensers between the extended end portions of said shields at one side of said chassis disposed above the panels and supported thereby.

1,883,580. RADIO RECEIVING SYSTEM. SAMUEL COHEN, Brooklyn, N. Y., assignor to General Instrument Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 17, 1925. Serial No. 9,753. 10 Claims. (Cl. 179—171.)



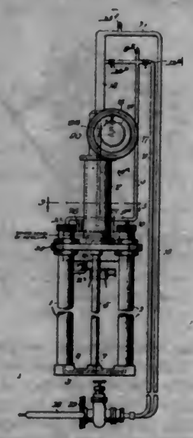
1. An amplification system comprising in combination a plurality of electron tubes, each having grid, cathode and plate electrodes, a tuned input and an output circuit interconnecting said electrodes, means inter-linking the output circuit of one of said electron tubes with the input circuit of a succeeding electron tube, and an impedance circuit connected between points on the grid sides of said tuned input circuits of succeeding electron tubes and a point in the output circuit of each of said electron tubes for stabilizing the operation of said amplification system.

1,883,581. KNITTING MACHINE. BERNARD THORNTON COLE, Leicester, England. Filed Nov. 9, 1929, Serial No. 405,989, and in Great Britain Nov. 12, 1928. 13 Claims. (Cl. 66—51.)



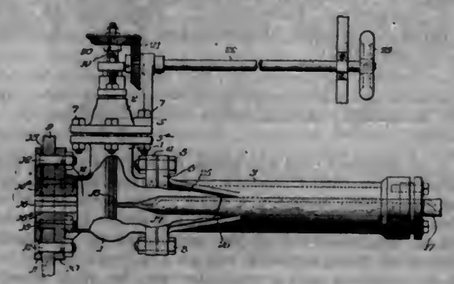
1. In a circular knitting machine, the combination of knitting needles, sinkers disposed between the needles, means for operating these to knit a tubular fabric,—certain of the needles and sinkers being displaceable so as to remain inoperative,—means for introducing needles and sinkers that have been displaced between other needles already in operation for the purpose of varying the effective width of the fabric produced.

1,883,582. SHIP'S LOG OR LIKE DEVICE. EDWARD S. COLE, New York, N. Y. Filed May 3, 1926. Serial No. 106,565. 38 Claims. (Cl. 73—122.)



1. A ship log having indicating means having different speed ranges and adapted to be operated selectively through one amplitude for one range of speed and through another amplitude for another range of speed.

1,883,583. MOUNTING FOR PITOT TUBE CONNECTIONS OR RODMETERS. EDWARD S. COLE, New York, N. Y. Filed June 7, 1926. Serial No. 114,355. 10 Claims. (Cl. 73—167.)



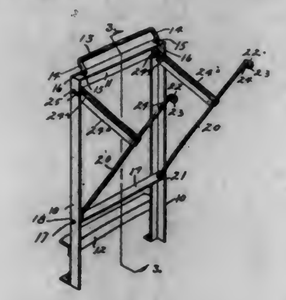
1. In a device of the class specified, a rod-meter provided with holding members, a mounting therefor; said holding members and mounting being provided with cooperating inclined or tapering surfaces to prevent the outward movement of the holding members.

1,883,584. INTERPROXIMAL COMPACT. FRANK H. CONNOR, Duluth, Minn. Filed Feb. 16, 1931. Serial No. 516,031. 1 Claim. (Cl. 32—5.)



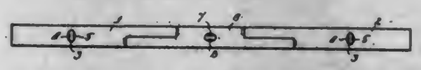
A tooth separating compact consisting of rubber, surrounded by gutta-percha.

1,883,585. BAG HOLDER. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 6, 1929. Serial No. 383,826. 2 Claims. (Cl. 83—26.)



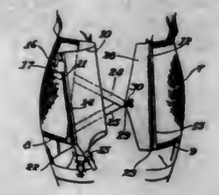
1. A bag holder comprising a support having upright members and a horizontal top member, said top member being provided with spaced openings, a gripping bar supported horizontally above said top member, each end of said gripping bar being bent downwardly and inwardly and thence downwardly, screw threaded and extended through said openings, nuts for said screw threaded ends above and below said frame member, said vertical members being provided with openings, a bar pivotally mounted in said openings, each end of said bar having upwardly and outwardly inclined rods, the free ends of said rods being adapted to swing toward and from said gripping bar, and means for guiding the free ends of said rods against inward movement toward each other and for limiting the outward swinging movement of said rods.

1,883,586. COMBINED LEVEL AND PLUMB. ANDREW F. CORRINGTON, Enfield, N. C. Filed Aug. 21, 1928, Serial No. 301,028. Renewed Feb. 1, 1932. 5 Claims. (Cl. 287—103.)



1. A combined level and plumb made up of several elongated sections fitted together by a slidable lap joint having overlapping members, a dowel at the outer end of the member of one section engaging in a socket in the shoulder at the inner end of the member of the companion section, a spring-actuated bolt on the inner side of one of the members and a projection on the other member engaged by the bolt for securing the sections together by spring pressure.

1,883,587. GARMENT. WILLIAM D. CRAIG, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Mar. 4, 1930. Serial No. 433,053. 2 Claims. (Cl. 2—38.)



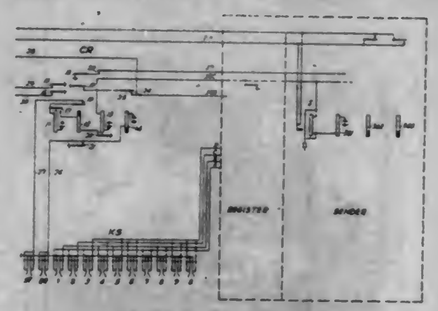
1. A garment comprising a body encircling member having separable edges, a slider operated fastener having cooperating series of fastener elements along said separable edges, and a slider movable along said elements for engaging or disengaging the same, a flap underlying said fastener elements on one side and projecting beyond said elements, a strap attached to the under side of the garment on the opposite side and independent fastening means on said flap and strap adapted to be initially fastened to place the garment under tension and to position said edges adjacent each other to facilitate closing movement of said slider and prevent catching of the slider on the fastener elements during closing, said slider operated fastener, when closed, being adapted to remove the stress from said independent fastening means.

1,883,588. FLUID BRAKE. HENRY M. CRANE, New York, N. Y., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 27, 1927. Serial No. 194,657. 4 Claims. (Cl. 188—152.)



1. In brake mechanism, a plurality of brakes, a lever, one arm of said lever connected to one of said brakes, a fluid pump, means associated with said pump to operate the other brake, a second lever pivoted to said first lever, means associated with said second lever to render the pump operative upon its brake and resilient means between said levers, said resilient means holding said levers in spaced relation and for simultaneous movement until a predetermined resistance is offered by the first one of said brakes.

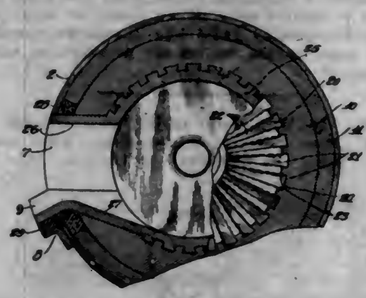
1,883,589. TELEPHONE SYSTEM. THOMAS F. CROCKER, Chicago, and VICTOR S. THARP, Elmhurst, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,164. 32 Claims. (Cl. 179—27.)



1. In a telephone system, a toll switchboard, a toll line incoming to said switchboard, a hunting switch terminating the toll line and controlled thereover, a link circuit at the switchboard accessible to said hunting switch, a directively controlled switch individual to said link, and other toll lines and toll service trunk lines accessible to said second switch.

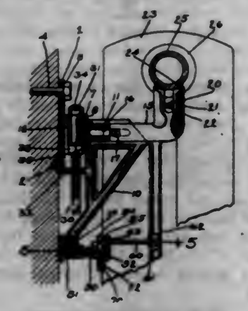
1,883,590. FURNACE LINING. EDWIN L. CROSBY and ALBERT E. RHOADS, Detroit, Mich., assignors to Detroit Electric Furnace Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 23, 1930. Serial No. 483,894. 10 Claims. (Cl. 266—43.)

9. A refractory lining comprising a cylindrical body portion having an apertured end wall at one end and a full diameter opening at the other end, a closure for said full diameter opening, said closure and abutting body end having interfitting annular portions, said closed end and cover having radially extending grooves and said



body portion having longitudinally extending grooves, all of said grooves being adapted to receive and interlock therewith a moldable mixture.

1,883,591. RADIATOR HANGER. RALPH H. CROSBY, Minneapolis, Minn., assignor to Little Giant Manufacturing Co., Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 8, 1928. Serial No 244,238. 8 Claims. (Cl. 248—17.)



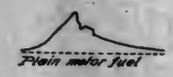
1. A radiator bracket having means for connecting it to a wall and for supporting a radiator by its top portion, and having a stop mounted upon the bracket and adapted to bridge two adjacent radiator sections, said stop being slidably guided in the bracket and having means for accurately adjusting it in its guide, said means being accessible from between the radiator sections and from the front of the radiator.

1,883,592. PROCESS FOR THE MANUFACTURE OF BISCUITS OR THE LIKE ARTICLES AND MACHINE THEREFOR. EDWARD MILNER CROSLAND, Newton-Le-Willows, England. Filed Apr. 8, 1932, Serial No. 604,098, and in Great Britain Jan. 25, 1932. 3 Claims. (Cl. 107—6.)



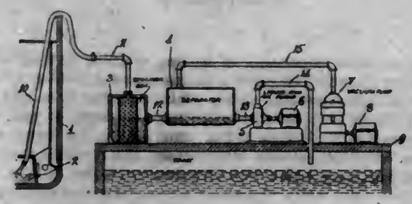
1. A method of manufacturing articles from plastic material consisting in forming a sheet cutting the separate articles from said sheet conveying away the reticulate sheet of scrap plastic material forming a second sheet from said scrap material, and applying said second sheet to the first sheet as an additional layer prior to its treatment on the cutting machine.

1,883,593. ANTIKNOCK COMPOUNDS FOR INTERNAL COMBUSTION ENGINES AND PROCESS OF MAKING SAME. ROY CROSS, Kansas City, Mo. Filed Dec. 1, 1924, Serial No. 753,069. Renewed Jan. 25, 1932. 1 Claim. (Cl. 44—9.)



A hydrocarbon motor fuel for internal combustion engines containing dissolved cyanoform.

1,883,594. METHOD AND APPARATUS FOR TRANSPORTING VISCOUS LIQUIDS. WALTER M. CROSS, Kansas City, Mo., assignor to Salvage Process Corporation, New York, N. Y., a Corporation of New York. Filed June 25, 1928. Serial No. 288,078. 5 Claims. (Cl. 103—5.)



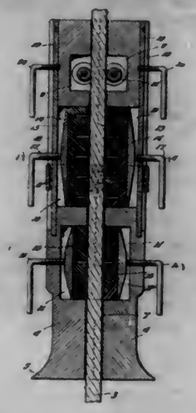
1. A method of transporting viscous liquids, comprising creating a relatively high vacuum in a restricted passageway in which a strainer chamber and a separator chamber are serially arranged, drawing the viscous liquid and air into the passageway whereby the air velocity breaks up the liquid in its passage therethrough, straining the mixture in the strainer chamber and thus separating solids from the viscous liquid and air, then passing the viscous liquid and air into the separating chamber under said high vacuum, continuously withdrawing air therefrom, and continuously removing liquid therefrom and maintaining a progressively increasing vacuum pressure from the restricted passageway through the strainer chambers and to the air and liquid discharge ports of the separating stage.

1,883,595. UNDERFEED STOKER. WALTER M. CROSS, Kansas City, Mo., assignor to Cross Coal-O-Matic Company, Kansas City, Mo., a Corporation of Missouri. Filed June 23, 1930. Serial No. 463,212. 8 Claims. (Cl. 110—45.)



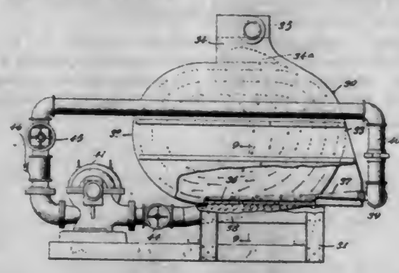
1. In an underfeed stoker, a combustion pot, an air supply means surrounding the combustion pot, a plurality of vertically spaced lugs on said air supply means, an air chamber having walls surrounding said air supply means, a plurality of vertically spaced lugs on said walls, the lugs on said air supply means and the lugs on said walls providing means for adjustably positioning said grates vertically below the combustion pot rim.

1,883,596. OIL SAVER. GEORGE W. CUNNINGHAM, Seminole, Okla. Filed Apr. 29, 1930. Serial No. 448,339. 1 Claim. (Cl. 286—16.)



An oil saver consisting of mating sections having openings therethrough to receive packing and provided marginally on their meeting faces with engaging lugs and recesses to prevent relative endwise movement of the sections and each section being provided in its outer side with a vertical channel intersecting the opening through the section and being provided with grooves in the bottom and side walls of said channel, plates engaging in said grooves and co-extensive with the channels to cover the outer ends of the openings through the mating sections and extend to the upper ends of the respective mating sections, packing in the openings through the mating sections, securing screws mounted in said plates and bearing upon the packing, and other screws mounted in the upper end portions of the plates to engage the respective mating sections and lock the plates in position.

1,883,597. METHOD AND APPARATUS FOR DISSEMINATING SOLIDS IN LIQUIDS. EDWIN COWLES, Short Hills, N. J., assignor to Cowles Engineering Corporation, Sewaren, N. J., a Corporation of New Jersey. Filed Dec. 27, 1930. Serial No. 505,054. 29 Claims. (Cl. 92—20.)



1. The method of disseminating solid material in a liquid which comprises placing the material in a liquid medium in a container provided with a perforated bottom, directing one or more jets of liquid at close range across said bottom to keep the material from clogging therein and to create a circulation in vertical planes, withdrawing liquid and partly disseminated solid material through said bottom, and withdrawing liquid and disseminated material from a relatively quiet zone maintained in the container.

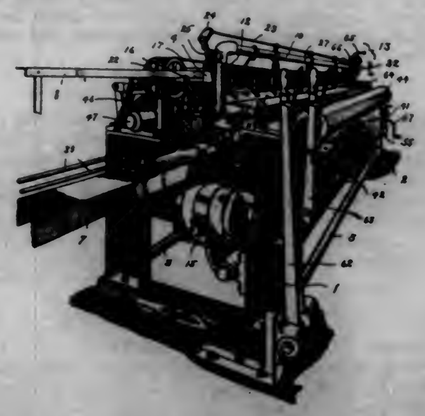
17. Apparatus for disseminating solids in liquid comprising in combination, an oblong vessel for containing a mass of liquid and undisseminated solid material, perforated plates in the sides thereof aligned with the major axis of the vessel, nozzles directed along said plates in opposite directions on opposite sides of the vessel to create a circulation in horizontal planes, solid side walls spaced from the perforated sides of the vessel, an outlet in the side for withdrawing liquid and disseminated material, and an outlet in the bottom for withdrawing material therefrom.

1,883,598. HOLDER FOR HOGS AND OTHER ANIMALS. EARL A. DAHL, Hooper, Nebr. Filed Aug. 21, 1931. Serial No. 558,611. 2 Claims. (Cl. 119—153.)



1. An animal holder of the class described comprising a hollow handle, a ring member attached to one end thereof and having a pair of holes therein, oppositely arranged, a flexible band having its ends passing through said holes, a rod passing through the handle and slidably arranged therein, a link connecting the inner end of the rod to one end of the band, the other end of tue band passing diagonally across the ring member and being fastened to that side of the ring member which contains the hole through which that end of the band passes which is connected to the link, and a handle connected to the outer end of the rod.

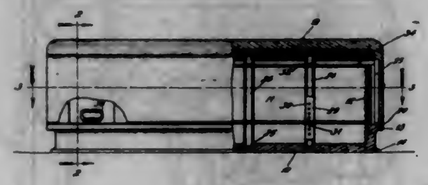
1,883,599. RUG MAKING MACHINE. CHARLES A. DAHLEN, Duluth, Minn. Filed Dec. 4, 1929. Serial No. 411,628. 5 Claims. (Cl. 112—79.)



1. A rug making machine of the character described comprising an upright elongated structure, spaced feeding rollers mounted longitudinally therein, spaced tracks longitudinally of the upper portion of the structure, a carriage cooperating reciprocably with said tracks and carrying a needle head upon one track and a loop cutting head upon the other track.

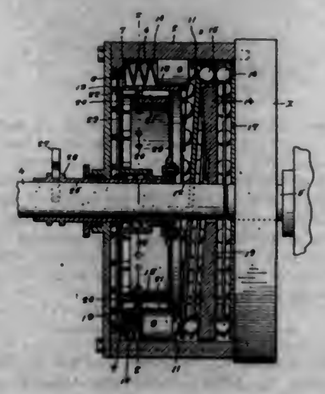
CARNEGIE LIBRARY OF ATLANTA

1,883,600. COMBINED CASKET AND BURIAL VAULT. EVAN G. DANIELS, Lucas, Iowa. Filed Sept. 21, 1931. Serial No. 564,022. 7 Claims. (Cl. 27—3.)



1. A burial vault comprising a water and air tight body portion having side and end members, a cover having its edges provided with a downwardly extending flange overlapping the upper end of the side and end members, the adjacent surface of said overlapping portions being fluted to form vertical air pockets having their lower ends communicating with the exterior surface of said vault, and their upper ends with the interior thereof, whereby water submerging the vault will cause a displacement of air within said pockets and a pressure created in said vault to exclude water therefrom.

1,883,601. HYDRAULIC CLUTCH. JOHN DAUSTER, Wilkinsburg, Pa. Filed Nov. 19, 1930. Serial No. 496,735. 5 Claims. (Cl. 192—59.)



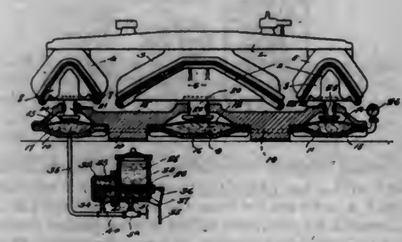
1. A device of the kind described comprising driving and driven members, a casing containing fluid fixed to the driving member, a wedging member on the driven member, inner and outer cylinders in the casing, spring tensioned pistons in the outer cylinders and operated upon by the wedging member, valves in the inner cylinders and controlling the flow of liquid to and from the outer cylinders, means engaging opposite ends of the valves for moving the same, and means for moving the first named means.

1,883,602. MANTLE HEAD. CORTLAND W. DAVIS, Oak Park, Ill., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Original application filed July 25, 1927, Serial No. 208,286. Divided and this application filed Nov. 12, 1928. Serial No. 318,874. 5 Claims. (Cl. 67—101.)



2. A head for an incandescent mantle comprising a perforated circular strip of metal having continuous edges and external means for the reception of the top of the mantle and a supporting element extending across said head.

1,883,603. PRESSURE EQUALIZING MEANS FOR MULTIPLE BUCK PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 5, 1928, Serial No. 267,554. Renewed Nov. 13, 1930. 5 Claims. (Cl. 68—9.)

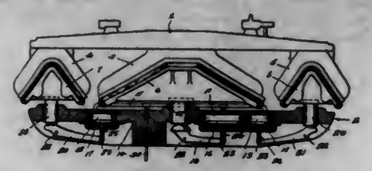


1. A pressing machine including cooperating pressing elements, one of which is movable toward and from the other, one of said elements including a plurality of members mounted to move relatively to each other under the pressure of the other element, and fluid pressure equalizing means between said members.

1,883,604. EQUALIZING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed May 12, 1928. Serial No. 277,110. 2 Claims. (Cl. 68—9.)

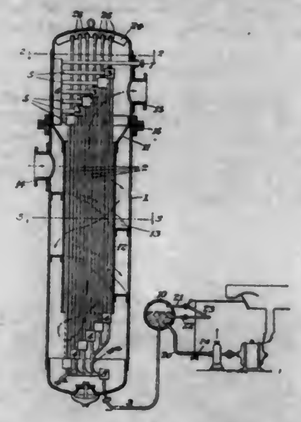
1. In a pressing machine, the combination of cooperating pressing elements, one of which is movable toward and from the other and each including a plurality of members paired with the members of the other element, the members of one element being movable relatively to each other under the pressing action of the members of the other element, means for equalising the pressure between the relatively movable members of one of said elements including pressure chambers, one for each of the relatively movable members of said element, an equalizing

conduit connecting said chambers, a pressure operated part movable in each chamber, and motion transmitting means including levers between each of said parts and



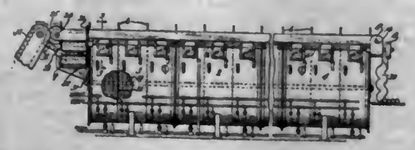
its associated relatively movable member, and a feed pipe for a fluid under pressure connected to the equalizing conduit.

1,883,605. STEAM REHEATER. CHRISTOPHER HUMPHREY DAVY, Blackheath, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 6, 1931, Serial No. 513,954, and in Great Britain May 14, 1930. 16 Claims. (Cl. 257—227.)



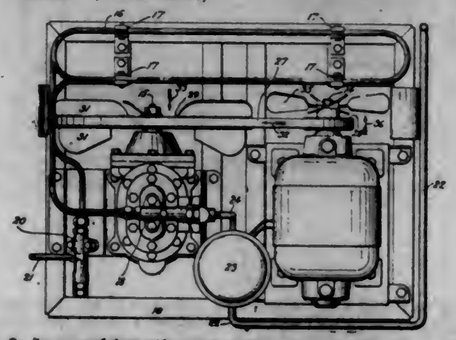
1. A steam reheater comprising, in combination, a casing provided with a low pressure steam inlet and a corresponding outlet, a shell spaced from the casing and open at both ends, closures for the ends of the casing spaced from the ends of the shell, a plurality of tubes extending through the shell and substantially uniformly spaced therein, means for guiding low pressure steam from the inlet around the shell in one direction to one end of the shell, and means forming a gas tight closure between the other end of the shell and the casing, the outlet communicating with said other end of the shell.

1,883,606. APPARATUS FOR TREATING FOOD PRODUCTS. WILLIAM DE BACK, Hayward, Calif., and ODDEN S. SELLS, Hoopeston, Ill., assignors to Sprague-Sells Corporation, Hoopeston, Ill. Filed July 10, 1928. Serial No. 291,625. 33 Claims. (Cl. 126—272.)
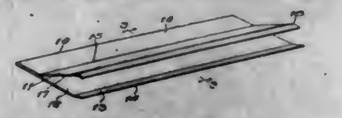


1. An apparatus for processing canned goods comprising a processing unit made up of a plurality of axially arranged separated chambers, an independently movable member in each chamber separate means for imparting step by step movement to each member, endless conveyor serving all of the chambers whereby cans are moved by said conveyor from chamber to chamber to complete a processing cycle.

1,883,607. REFRIGERATION. JAMES H. DENNEDY, Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 144,117. 3 Claims. (Cl. 62—115.)



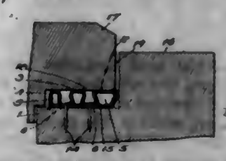
2. In a refrigerating apparatus the combination of a base, an elongated condenser disposed longitudinally of the base, a compressor and motor mounted in spaced relation on said base with substantially parallel shafts disposed transversely of the base and substantially at right angles to the condenser, a fan driven from the motor, said fan being located between the motor and condenser, a fan driven by the compressor, said fan being located between the compressor and condenser, said fans being arranged to produce two currents of air moving in opposite directions through the condenser and a single current of air over each the motor and the compressor.

1,883,608. WEATHER STRIP. WILLIAM J. DENNIS, Chicago, Ill. Filed Jan. 20, 1930. Serial No. 422,059. 2 Claims. (Cl. 20—69.)



1. A weather strip comprising a strip of material having some resiliency, said strip being folded upon itself to form coextending members of unequal width, said coextending members forming an edge section of double thickness adjacent the line of fold, the wider of said sections having its free edge forming an inturned flange, the other of said sections being folded longitudinally to form a portion inclined at an acute angle to said wider section, the free edge of said inclined portion being curved towards the wider section to form a flange.

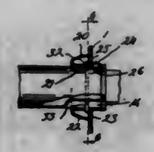
1,883,609. GASKET. WILLIAM J. DENNIS, Chicago, Ill. Filed May 31, 1930. Serial No. 458,157. 3 Claims. (Cl. 20—69.)



1. A weather seal made solely from an integral strip of resilient material, and consisting of a base portion with a plurality of spaced tubular longitudinal portions of

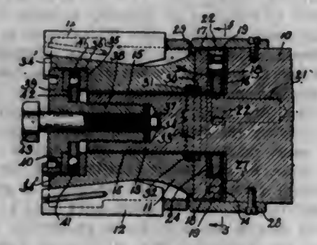
graduated sizes extending from one side thereof, the material forming the side walls of said longitudinal portions being substantially perpendicular to said base portion.

1,883,610. DOORLATCH MECHANISM. WILLIAM C. DEVEREAUX, Detroit, Mich. Original application filed July 28, 1930, Serial No. 471,368. Divided and this application filed Apr. 20, 1931. Serial No. 531,565. 15 Claims. (Cl. 292—357.)



1. An escutcheon attachable to a sheet metal panel having a tubular body portion for insertion in an opening in the panel, an open return-bent marginal portion for engagement with one side of the panel, and struck-out portions at substantially diametrically opposite sides thereof engaging the opposite side of said panel.

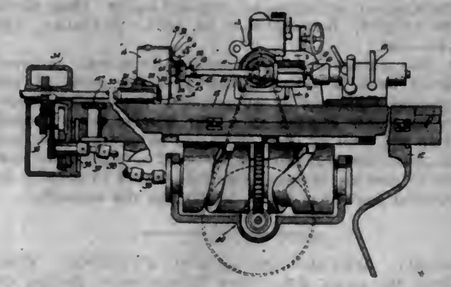
1,883,611. TOOL HOLDER. GERARD A. DE VLIEG, Rockford, Ill. Filed Apr. 7, 1930. Serial No. 442,085. 6 Claims. (Cl. 279—16.)



1. A tool holder comprising, in combination, a spindle having an axial extension and a transverse annular shoulder, a pair of diametrically opposed pins extending from said shoulder, an annular disk loosely disposed about said extension and having two diametrically opposed notches receiving said pins, the sides of said notches coacting with said pins being radial, a second annular disk loosely disposed about said extension and having two diametrically opposed abutments, said first mentioned disk having two diametrically opposed notches receiving said abutments, the sides of said last mentioned notches coacting with said abutments being radial and disposed at right angles to said first mentioned sides, means on said spindle for retaining said spindle and said disks in assembled relation, a tool, and means for securing said tool to said second disk.

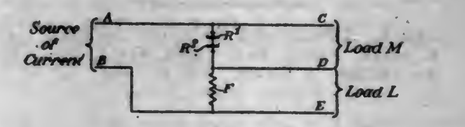
1,883,612. GRINDING MACHINE. GERARD A. DE VLIEG, Rockford, Ill. Filed Nov. 3, 1930. Serial No. 492,897. 17 Claims. (Cl. 51—95.)

1. A machine tool comprising, in combination, a cutting element, a work support for a work piece, means for effecting a relative reciprocation between said cutting element and said support, means tending to rotate said work piece continuously in one direction, and means for



modifying the effect of said rotating means to cause an intermittent rotation of said work piece of variable extent.

1,883,613. VOLTAGE REGULATING APPARATUS. LEE DEVOL, Forest Hills, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1931. Serial No. 561,412. 7 Claims. (Cl. 171—119.)

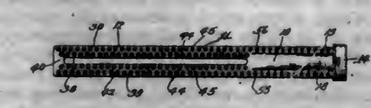


1. In combination, a source of alternating current of variable voltage, a resistor having one terminal connected with a terminal of said source, two oppositely poled copper oxide rectifiers connected in series from the other terminal of said resistor to the remaining terminal of said source, and a load connected across said resistor.

1,883,614. METHOD OF COATING PARTICLES. CLYDE C. DE WITT, Houghton, Mich. Filed June 27, 1929. Serial No. 374,283. 11 Claims. (Cl. 91—68.)

1. The method of coating particles of material with hydrated iron oxide comprising in first subjecting said particles to the action of a water mixture of ferrous carbonate and carbon dioxide, and then subjecting said particles to the action of oxygen.

1,883,615. GAS BURNER. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Aug. 4, 1928. Serial No. 297,459. 10 Claims. (Cl. 158—104.)



9. A gaseous fuel burner, comprising an elongated, generally rectangular, body partitioned internally to provide a central inlet passage for the combustible mixture, and side distributing passageways separated from said inlet passage by partitions extending from an end of said burner part way toward the opposite end.

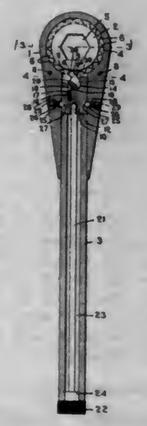
1,883,616. METHOD OF MAKING PLYWOOD. THEODORE WILLIAMS DIKE, New Westminster, British Columbia, Canada, assignor, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash., a Corporation of Delaware. Filed Jan. 29, 1929, Serial No. 335,998. Renewed Mar. 10, 1931. 25 Claims. (Cl. 144—309.)

1. The method of making plywood from wet, unshrunk plies of wood in a single stage in a hot press without tangential shrinkage by employing a dispersible adhesive base substance applied as a dry powder to said plies, setting the limit of the penetration of said adhesive into said plies, and applying pressure of a magnitude sufficient to prevent tangential shrinkage and to densify the wood and heat of a degree to dry out the assembly.

1,883,617. METHOD OF MAKING PLYWOOD. THEODORE WILLIAMS DIKE, New Westminster, British Columbia, Canada, and IRVING F. LAUCKS and CHARLES N. CONN, Seattle, Wash., assignors, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,822. 10 Claims. (Cl. 144—309.)

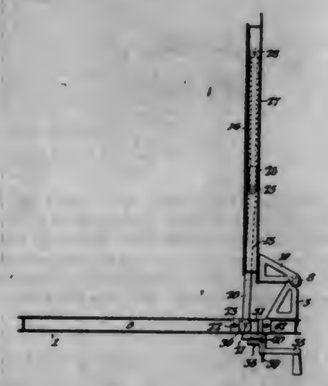
1. The method of making plywood comprising applying to the plies an adhesive base substance in the powder form dry at the time of spreading and controlling the degree of penetration of the adhesive material, an element of such control being by providing the particles of said powder of a predetermined size with respect to the magnitude of the pores of the plies.

1,883,618. REVERSIBLE RATCHET WRENCH. JOHN S. DODGE, Paxton, Mass. Filed May 8, 1931. Serial No. 535,951. 2 Claims. (Cl. 81—63.)



1. A ratchet tool having a head portion provided with a socket-receiving recess, a handle portion rigid with the head portion, a toothed socket in said recess, said head portion having a cylindrical pawl-receiving recess communicating at one end with the socket-receiving recess and extending in the direction of the length of the handle, the opposite end of said pawl-receiving recess forming a supporting abutment, a cylindrical pawl-carrying member mounted in said recess for turning movement and seated on said abutment, said pawl-carrying member being provided at its exposed end with a transversely-extending cylindrical seat, a pawl adapted to engage the teeth of the socket member and having a cylindrical bearing portion at its outer end which rests in said seat, said pawl having a tooth-engaging face situated substantially at right angles to the lengthwise direction of the pawl, whereby the strain to which the pawl is subjected in the operation of the tool is a thrust strain as distinguished from a shearing strain and is transmitted to the pawl-carrying member and resisted by said supporting abutment, and means to turn the pawl-supporting member to reverse the pawl.

1,883,619. METALLIC WINDOW STRUCTURE. ALBERT LINDSAY DOERING, Germantown, Pa., assignor to J. S. Thorn Company, Germantown, Pa., a Corporation of Pennsylvania. Filed June 4, 1931. Serial No. 542,092. 6 Claims. (Cl. 268—119.)



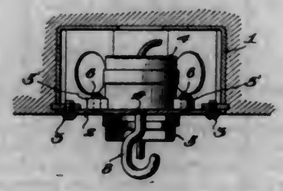
1. In a metallic window structure, the combination with a stationary window frame; of a sash frame hinged to said window frame; the bars of said frames being channels and so disposed in opposite relation that when the sash is closed in the window frame there is a tubular recess between said frames extending entirely around the sash frame and closed by the flanges on the channels when overlapped in weathering relation; a lever fulcrumed at one end in the recess of said stationary window frame and having its opposite end operatively connected with said sash frame; a worm gear rigidly connected with said lever, in concentric relation with its fulcrum, in said recess; a worm mounted to rotate in said recess, between said frames, and in mesh with said worm gear; and a crank handle on said worm projecting from said recess into the building, from the inner face of said window frame; whereby said sash may be opened and shut by turning said handle.

1,883,620. FIXTURE HANGER. HENRY D'OLIER, Jr., Bridgeport, Conn. Filed Jan. 12, 1927. Serial No. 160,689. 2 Claims. (Cl. 248—30.)



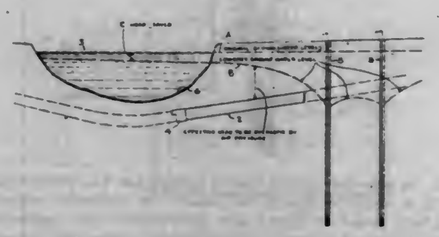
1. A hanger for electrical fixtures of the class described, said hanger being formed of wire bent to form a hanger loop, and having also a portion bent at right angles to said loop to form a coil having an exterior auxiliary thread to adapt said coil to be screwed into an article with which attachment of said hanger is to be effected, said coil having a central opening adapted to receive insulated conductors and serving as a protective bushing therefor, the interior of said coil presenting smooth surfaces to surround said conductors.

1,883,621. OUTLET BOX. HENRY D'OLIER, Jr., Bridgeport, Conn. Filed May 17, 1929, Serial No. 363,895. Renewed Nov. 14, 1931. 6 Claims. (Cl. 247—20.)



5. An outlet box cover carrying on its upper side one part of a two part electrical connector and having a fixture supporting hook depending from its lower side and provided with openings to permit passage of electrical contacts, the other part of the two part connector having an opening for receiving the hook and plugging contacts for engaging through the cover with the first of said connector members when the two members are brought into operative relation.

1,883,622. METHOD IN CONSTRUCTION OF SUBAQUEOUS TUNNELS. FRANCIS DONALDSON, Yonkers, N. Y., assignor to Mason & Hanger Company, Inc., New York, N. Y., a Corporation of West Virginia. Filed Oct. 3, 1931. Serial No. 566,687. 3 Claims. (Cl. 61—42.)



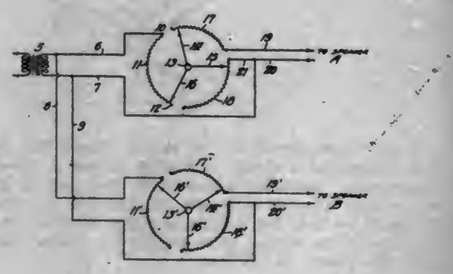
1. In the construction of a subaqueous tunnel driven under compressed air, the method which comprises continually pumping water from the ground in the vicinity of the operation at a rate sufficient to create a downdraft through the river bottom, and eventually establishing a substantially water-tight matte, the material for which may be supplied as herein stated, and thereafter continuing the pumping while the tunnel is driven beneath the body of water, thereby reducing the hydrostatic pressure on the tunnel and the amount of air pressure required within the shield to enable the tunneling operation to be carried on while the tunnel is being driven beneath the body of water.

1,883,623. TENSIONING MEANS FOR FEED ROLLS AND THE LIKE. CHARLES DONLEY, Lebanon, Pa., assignor to Wrought Iron Company of America, Lebanon, Pa., a Corporation of Pennsylvania. Filed July 24, 1931. Serial No. 553,018. 5 Claims. (Cl. 80—56.)



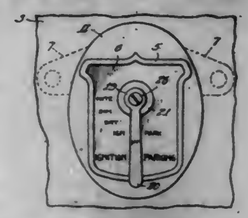
2. Tensioning apparatus for movable feed rolls comprising a tappet operatively engaging the roll, a housing having a bore through which the tappet passes, a spring within the bore and operatively engaging the housing at one end, a nut adjustable longitudinally to the bore by rotation of the tappet mounted on said tappet and with which the opposite end of said spring engages, and means exterior to the housing locking said tappet and nut against relative rotation.

1,883,624. CONSTANT LINE AND SPEAKER IMPEDANCE VOLUME CONTROL. LEROY O. DOMAN, Chicago, Ill., assignor to Carter Radio Company, Chicago, Ill., a Corporation of Illinois. Filed May 24, 1929. Serial No. 365,640. 1 Claim. (Cl. 179—1.)



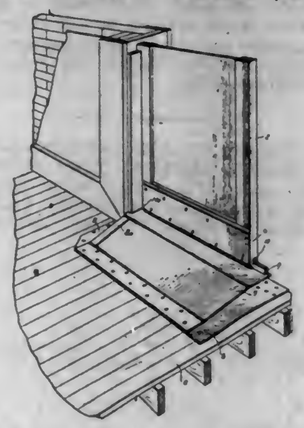
In a system of the character described including a reproducing device connected across the output circuit of radio receiving apparatus, means for varying the volume of said reproducing device without varying the impedance across the output circuit or reproducing device comprising resistance units, and means for varying the amount of said units in series with said reproducing device while maintaining a substantially constant amount thereof across the terminals of said device and a substantially constant amount thereof across the output circuit, said last named means comprising an adjustable contactor element having three contact making arms electrically connected to each other and each engaging one resistance unit only.

1,883,625. SWITCHING MECHANISM. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 18, 1932. Serial No. 593,802. 9 Claims. (Cl. 200—8.)



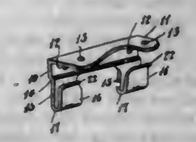
1. In a switching mechanism the combination of a casing, an insulating contact carrier rotatable in said casing, a metallic clip gripping said carrier, said clip being journaled at one end in the casing and keyed at the other end to an actuator, said actuator being journaled in the casing and having an operating lever extending outside of the casing, and means for securing the actuator to the clip.

1,883,626. RELEASE DEVICE FOR FIRE ESCAPE DOORS. RALPH W. DOWNES, Kansas City, Mo., assignor to Potter Manufacturing Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 16, 1931. Serial No. 515,973. 5 Claims. (Cl. 292—94.)



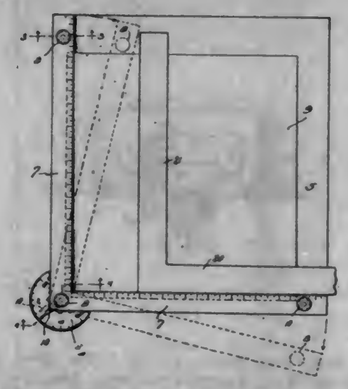
1. A release device for a spring hinged fire escape door comprising a spring floor plate having a raised bar transversely positioned adjacent its free end, a groove in the door adapted to engage the bar and to cooperate therewith to hold the door in a closed position, the depression of the spring plate adapted to release the bar from the groove in the door.

1,883,627. SUPPORTING BRACKET FOR SHADE PULLEYS. LUTHER O. DRAPER, Spiceland, Ind. Filed Mar. 17, 1932. Serial No. 599,511. 1 Claim. (Cl. 248—20.)



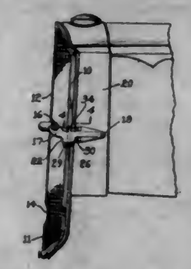
A shade pulley bracket, comprising a body portion having downwardly and rearwardly inclined hook portions adapted to receive and support attaching portions of a shade pulley holder, the hook portions being spaced laterally from one another to receive a pulley and its supporting ears therebetween and prevent displacement thereof laterally of the hook portions.

1,883,628. DRAWING BOARD. WALTER DREIFUSS, Niles Center, Ill. Filed June 16, 1930. Serial No. 460,001. 7 Claims. (Cl. 33—76.)



1. The combination with a drawing board proper, of a right-angled strip pivoted at the juncture of its arms on said board at one corner of the latter to swing in a plane parallel with the surface of said board, and means to secure said right-angled strip in any position of pivotal adjustment thereof.

1,883,629. RADIATOR GUARD MOUNTING. LEWIS W. DRESSER, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 10, 1931. Serial No. 568,165. 7 Claims. (Cl. 293—54.)

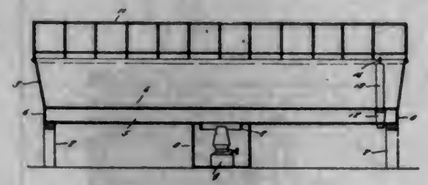


1. In a motor vehicle having a radiator, the combination with a radiator guard, of means for pivotally supporting said guard on either side intermediate the upper and lower portions thereof, and abutments interposed between the upper and lower portions of the guard and the radiator, one of said abutments being adjustable for swinging the radiator about the pivotal support therefor to ensure firm engagement of both abutments with the radiator and guard.

1,883,630. CHEMICAL APPARATUS AND METHOD OF LINING THE SAME. RALPH L. DUFF, Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Dec. 27, 1926. Serial No. 157,425. 1 Claim. (Cl. 196—133.)

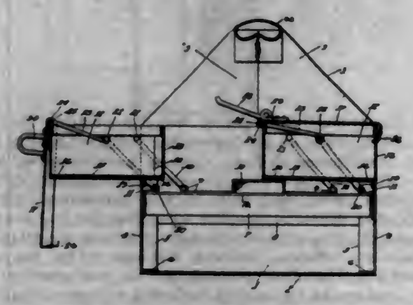
In the manufacture of steel distillation and cracking equipment, the improvement which comprises fusing a chromium-iron alloy and depositing it upon the inner surface of said equipment at a temperature sufficient to cause the alloy to bond with the steel.

1,883,631. POULTRY WATERER. CHARLES A. DUNLEVY, Monongahela, Pa. Filed Jan. 10, 1931. Serial No. 507,914. 2 Claims. (Cl. 119—73.)



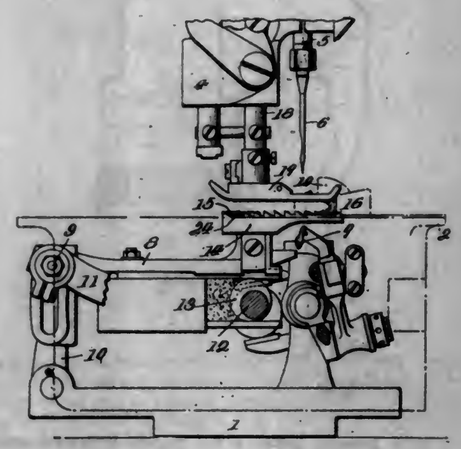
1. A poultry waterer comprising a horizontally disposed casing, said casing being open at its top, a trough, for the reception of the water, mounted on top of the casing, the bottom of the trough constituting a closure for the top of the casing and, in conjunction with said casing, providing a hot air chamber beneath the trough, means for supplying heated air to the chamber for warming the water in the trough, a tapered tube communicating with the trough and depending from the bottom thereof through he hot air chamber and projecting through the bottom of the casing, and an overflow pipe removably mounted vertically in the tube and extending upwardly therefrom in the trough, the tube constituting a drain spout when the overflow pipe is removed therefrom, said overflow pipe having a tapered lower end portion conforming substantially to the shape of the tube.

1,883,632. MULTIPLE COMPARTMENT BOX. GEORGE M. DUVALL and JOHN L. ISRAELSON, Worcester, Mass., assignors, by mesne assignments, to Stevens Walden Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 2, 1928. Serial No. 258,617. 4 Claims. (Cl. 206—16.)



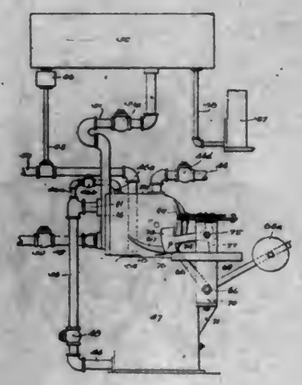
1. In a box of the class described, the combination with a box body, a pair of trays, a parallel linkage mechanism connecting said trays to said body, allowing said trays to come together to close the main compartment of said box or to be swung outwardly to open said compartment, and covers for said trays, of links connecting the inner edge portions of each of said covers to said trays along a medial vertical line thereof, hook means integral with the outer portion of the covers adapted to hook the outside portions of said covers to said trays, and means to lock said covers together, whereby, with the hooked portions in engagement, and the covers locked together, no access can be obtained to any part of the box, and whereby said covers, when unlocked, can be readily swung outward by a sliding movement.

1,883,633. FEEDING MECHANISM FOR SEWING MACHINES. HARRY E. DYKEMAN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1930. Serial No. 418,127. 8 Claims. (Cl. 112—216.)



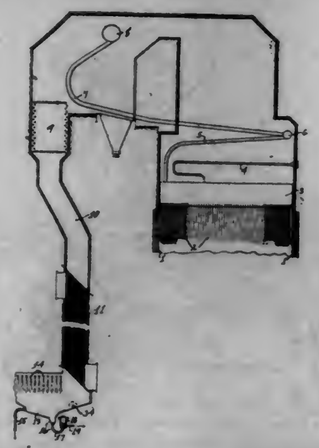
1. The combination of a stitch forming mechanism including a needle, a work support, and a feeding mechanism including a feed dog having a feeding section extending alongside of said needle, said feeding section having the teeth thereof in the region of the needle shaped so as to cause the stitching threads to readily slide onto and over the teeth of the feeding section when stitching about corners.

1,883,634. DUAL PURPOSE PUMPING APPARATUS. LUCIAN F. EASTON, La Crosse, Wis. Filed Feb. 7, 1930. Serial No. 426,695. 18 Claims. (Cl. 103—6.)



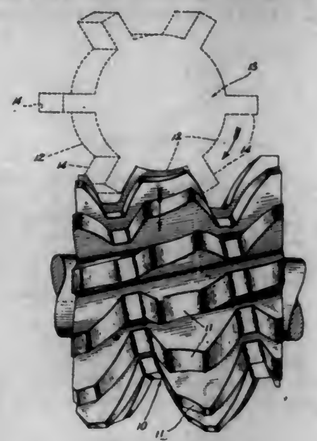
1. In apparatus of the class described, the combination of a rotary pump designed to operate as an air pump when rotating in one direction and as a water pump when rotating in the opposite direction, means for admitting air and water to the pump, and means responsive to variations in the quantity of water supplied for effecting rotation of the pump in the desired direction.

1,883,635. MERCURY BOILER. GEORGE D. EBBETS, Kenilworth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 17, 1929. Serial No. 363,872. 3 Claims. (Cl. 122—4.)



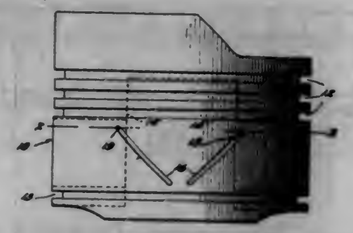
1. In a mercury boiler, a flue for spent gases leaving said boiler and means in said flue for recovering mercury from said gases that may escape from said boiler into said gases, said means comprising a cold water spray, and overflow means actuated by a predetermined bulk of mercury within said recovering means.

1,883,636. METHOD OF MAKING TOOTHED POWER TRANSMITTING DEVICES. JOHN EDGAR, Rockford, Ill. Original application filed Sept. 21, 1929, Serial No. 394,161. Divided and this application filed Dec. 24, 1930. Serial No. 504,500. 6 Claims. (Cl. 90—4.)



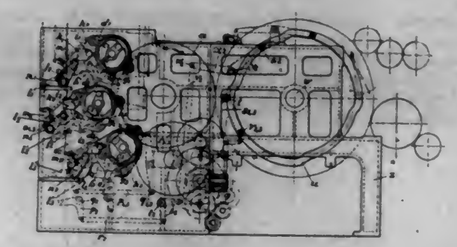
6. The method of making a spline shaft having abraded keys which comprises providing a hob having elongated teeth with projecting portions adjacent the top thereof to undercut the keys at the root and with a peripheral groove cut therein to cut root section between the keys, rotatably mounting said hob, rotatably mounting a blank shaft with its axis parallel to the helix of the hob, rotating said hob and shaft in timed relation to each other, and abrading the sides of the keys.

1,883,637. PISTON FOR INTERNAL COMBUSTION ENGINES. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1930. Serial No. 495,957. 2 Claims. (Cl. 74—108.)



1. A piston having circumferentially spaced apertures extending through the piston wall and having grooves in the outer piston surface, each such groove communicating with one of said apertures only, the adjacent grooves being inclined with respect to the longitudinal axis of the piston and extending from the associated apertures toward the lower end of the piston and toward each other and being spaced apart throughout their length.

1,883,638. MULTICOLOR INTAGLIO PRINTING MACHINE. ARNOLD AUGUST EGLI, Hamburg, Germany. Filed Sept. 22, 1928, Serial No. 307,730, and in Germany Sept. 26, 1927. 5 Claims. (Cl. 101—152.)

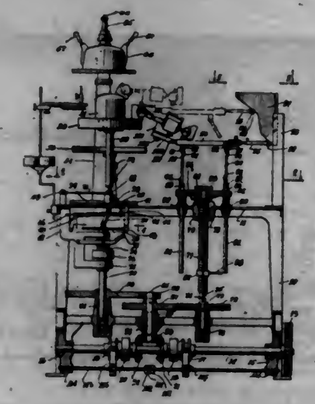


1. In a multi-color sheet intaglio printing machine, the combination of an impression cylinder having more than two printing surfaces thereon, more than two printing cylinders whose axes lie upon an imaginary cylinder concentric with the axis of the impression cylinder, mechanism operative upon at least two, but less than all, of said printing cylinders to move the same simultaneously against different printing surfaces while the other printing cylinder or cylinders are in non-printing position, and means for moving the other printing cylinder or cylinders into printing position while the first-mentioned printing cylinders are in non-printing position, so that no printing is being performed as a simultaneously controlled group of cylinders or a single cylinder is moved into printing position against the impression cylinder.

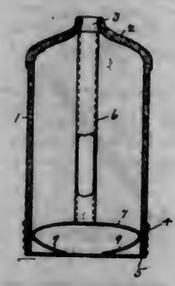
1,883,639. HAT MAKING MACHINE. IRVING A. EICHENBAUM, New York, N. Y. Filed Aug. 11, 1930. Serial No. 474,435. 4 Claims. (Cl. 223—27.)

1. A hat blocking and finishing machine, comprising in combination a clockwise and anti-clockwise rotatable and reciprocating hat block support, a hat block mounted thereon, a tool support raising and lowering mechanism, a reciprocatingly mounted tool support carried thereby, a rotatable turret adapted to receive a plurality of tools and disposed in operative relation to said hat block, a

profile following member extending from said support, an exchangeable profile element in engagement with said member, operating means for actuating said block support and said tool mechanism, and means in operative relation with the latter for controlling said operating means.



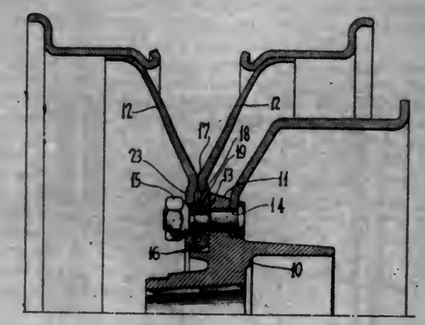
1,883,640. SUGAR DISPENSER. WILLIAM T. EISENHARDT, Baltimore, Md., assignor to William J. Eisenhardt, Baltimore, Md. Filed Sept. 25, 1931. Serial No. 565,123. 3 Claims. (Cl. 221—98.)



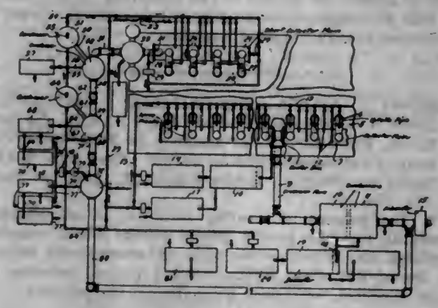
2. A dispenser comprising a receptacle having a central aperture in one end and its opposite end open, a closure for the open end of said receptacle, a dispensing tube within said receptacle having one end in alignment with said central aperture and its opposite end held a predetermined distance from the bottom of said receptacle and having a flange thereon, a spring secured to the flanged end of said tube and extending outwardly from opposite sides thereof and impinging against the inner surface of said receptacle to hold the tube in vertical alignment with said central aperture and its extremities bent inwardly and downwardly and impinging against the bottom of said receptacle to hold the tube in proper relation to the bottom.

1,883,641. DUAL DISK WHEEL WITH SPACER RINGS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1931. Serial No. 521,621. 4 Claims. (Cl. 301—36.)

4. A vehicle wheel including, in combination, a hub having a radially extending face, a pair of disk wheel bodies mounted against said face, each of said disk wheel bodies including a radially extending portion in its zone of attachment to the hub, an axially turned flange at the inner extremity of said radially extending portion and an axially turned rib at the outer extremity of said radially turned portion, said axially turned flanges extending into abutment with each other and said axially turned ribs extending into abutment with each other, and securing means passing through said radially extending portions of said disks to hold them in assembled position upon said hub.



1,883,642. DISTILLATION OF TAR. EDWARD H. ELLMS, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 17, 1928. Serial No. 306,330. 5 Claims. (Cl. 202—66.)

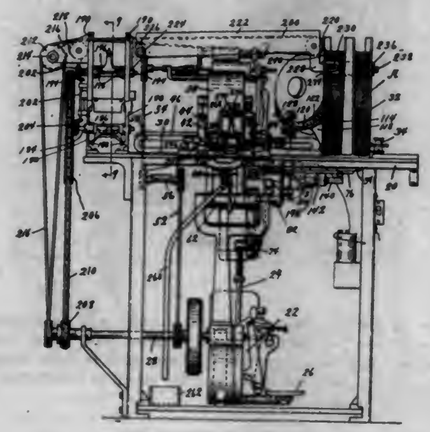


1. The process for obtaining clean oil from tar which comprises distilling the tar by direct contact with hot coal distillation gases, removing entrained impurities from the gases at a temperature above the dew point of condensable oil constituents contained in the gases, cooling the resulting cleaned hot gases and vapors by indirect heat interchange with a body of liquid cooling medium having a relatively constant boiling point within the range of from about 110° C. to about 185° C., whereby the cooling medium is kept boiling and the gases and vapors are cooled below the dew point of the condensible oil constituents, and separately collecting the clean oil thus condensed.

1,883,643. STENCIL PRINTING MACHINE. HARMON P. ELLIOTT, Watertown, Mass. Filed Dec. 31, 1928. Serial No. 329,470. 25 Claims. (Cl. 101—48.)

1. A stencil printing machine having the combination of a stencil holder, printing mechanism, means to move

successive stencils from said holder to said printing mechanism and thence therebeyond, a conveyor device elevated above said printing mechanism and operable to return used stencils to said holder, and an elevating device arranged to raise used stencils to said conveying device, said elevating device consisting of two elevating



mechanisms one of which is arranged to deliver a used stencil into the second mechanism and to reverse the stencil during its action and the second mechanism having means to again reverse the stencil presented to it and to deliver the stencil to the conveying device whereby it will be returned to the stencil holder in the same position as it was moved therefrom.

1,883,644. ALCOHOL-SOLUBILIZED NITROCELLULOSE AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Mar. 3, 1924, Serial No. 696,686. Renewed Apr. 23, 1930. 6 Claims. (Cl. 134—79.)

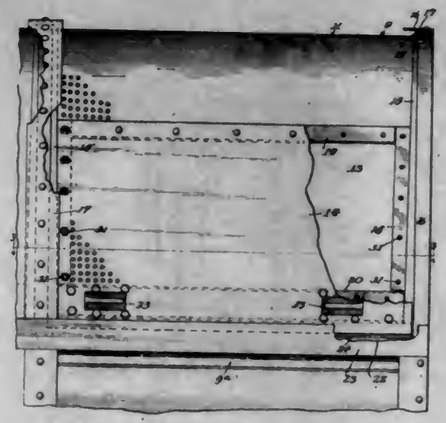
6. The process of treating solutions of nitrocellulose normally insoluble in the chosen solvent which comprises reacting on nitrocellulose with an ammoniacal solution of benzol and ethyl alcohol until a desired solution has been obtained, and then neutralizing the solution.

1,883,645. PORDUCT MADE FROM MICA SPLITTINGS AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Nov. 5, 1924. Serial No. 747,994. 12 Claims. (Cl. 154—2.6.)

1. The process of making laminated mica products which comprises coating mica splittings with a mixture of rubber latex and a vulcanizing agent, assembling a quantity of the splittings and hot pressing to vulcanize the rubber coating and to cause the splittings to adhere to yield a coherent molded article.

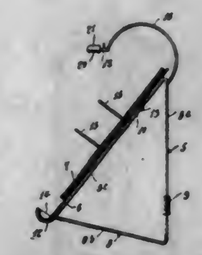
1,883,646. DOOR FOR CYLINDRICAL RECEPTACLES. HUBERT C. ELLIS, Evanston, Ill. Filed June 17, 1929. Serial No. 371,461. 7 Claims. (Cl. 220—41.)

1. In a tumbler, the combination of a rotatable body provided with a rectangular opening, a door for closing said opening, guides at the sides of the opening for engaging the side margins of the door and retaining said door so that it is slidable into and out of its closed position, a pair of coacting wedge elements fixed on one of



the side margins of the door and one of the guides respectively for holding the door in its closed position, and a lock for securing the door in its closed position.

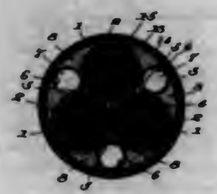
1,883,647. ROUTE FILE. LUTHER A. ELLISON, Topeka, Kans. Filed July 25, 1931. Serial No. 553,229. 2 Claims. (Cl. 129—1.)



1. A route file comprising members arranged in laterally spaced relation and having upright front bars and downwardly and rearwardly inclined rear bars, the rear bars having their lower ends curved to provide upwardly directed hooks, an attaching plate located between and secured to the front bars, a cross bar secured to and between the rear bars, the attaching plate and the cross bar serving to secure said members in assembled relation, a tablet resting upon the rear bars with its lower end positioned in the hooks, and an element carried by the tablet and removably engaged with the cross bar, said element and the hooks holding the tablet on said members against accidental displacement therefrom.

1,883,648. MULTICORE OIL-FILLED HIGH TENSION ELECTRIC CABLE. LUIGI EMANUELI, Milan, Italy, assignor to Societa Italiana Pirelli, Milan, Italy. Filed July 12, 1929, Serial No. 377,851, and in Italy July 9, 1928. 11 Claims. (Cl. 178—266.)

1. In a multicore high tension cable, the combination of conductors, a covering of permeable insulation for each conductor, an outer covering therefor, channels for conveying fluid which are located in the spaces between the insulation on the conductors and said covering, some of said channels being permeable to fluid and feeding it directly to the insulation on the conductors, the remainder being impermeable to fluid for conveying it from one point to a distant part of the cable, and fillers which



are permeable to the fluid and which are held in a compressed state between the walls of the channels, the insulation on the conductors and the outer covering.

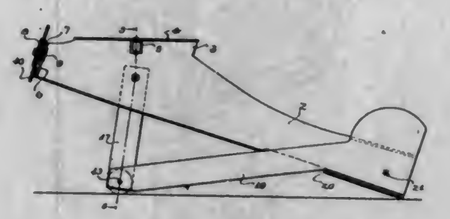
1,883,649. METHOD OF PREPARING BLEACHING SOLUTION. MARTIN J. ENGBERG, Chicago, Ill., assignor, by direct and mesne assignments, to Maurice Preston Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 14, 1927, Serial No. 205,853. Renewed Apr. 11, 1932. 5 Claims. (Cl. 23—86.)

2. The method of forming a bleaching solution which comprises forming a solution of sodium hydroxide of predetermined strength, continuously passing chlorine through said solution, adding successive amounts of an indicator to the said solution during the addition of the chlorine, the characteristic color of the sodium salt of which indicator is displayed only so long as the solution has not been neutralized, and discontinuing the addition of chlorine to the solution whenever the characteristic color fades quickly upon the addition of the said indicator.

1,883,650. CONTACT MATERIAL. EDGAR W. ENGLE, Lake Forest, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed June 22, 1931. Serial No. 546,164. 1 Claim. (Cl. 75—1.)

An electrical substitute for silver composed of silver, nickel and copper in approximately the proportions: Silver 65%, copper 30%, nickel 5%.

1,883,651. COMBINED TOY AND GAME. MAJOR A. ENSLEY, Rochester, N. Y., assignor to All Fair Incorporated, Churchville, N. Y. Filed July 14, 1931. Serial No. 550,798. 1 Claim. (Cl. 273—134.)



A toy air-plane comprising a fuselage formed from a single piece of sheet material bent to provide two upwardly diverging sides, a slot being provided in the material at the bend near the rear ends of the sides, a plane resting upon the upper edges of the sides adjacent their forward ends, a running gear connected to the forward portion of the fuselage, and a brace extending rearwardly from the running gear, passed through the slot at the bend and secured to the sides above the bend.

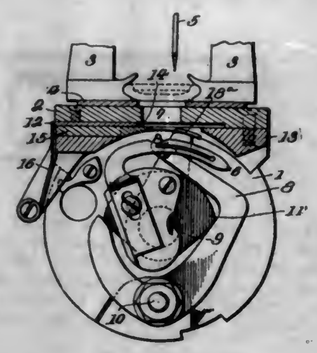
1,883,652. PROCESS OF PRODUCING EGG PRODUCT. ALBERT K. EPSTEIN, Chicago, Ill. Filed Apr. 10, 1930. Serial No. 443,255. 4 Claims. (Cl. 99—14.)

1. The method of manufacturing an egg product adapted for use as an emulsifying agent in the making of mayonnaise, which includes treating yolk material consisting essentially of egg yolk with a substantial quantity of an edible water soluble organic material containing at least one hydroxyl group and capable of lowering the freezing point of water, and a substantial quantity of an edible neutral salt system insufficient to saturate the moisture content of the yolk, and then subjecting the resulting mixture to a temperature below the freezing temperature of untreated yolks, but above the freezing temperature of the mixture, and maintaining the mixture at such temperature until desired for use.

1,883,653. METHOD OF MANUFACTURING EGG NOODLES. ALBERT K. EPSTEIN and BENJAMIN R. HARRIS, Chicago, Ill. Filed Sept. 5, 1929. Serial No. 390,658. 2 Claims. (Cl. 99—10.)

1. The method of manufacturing egg noodles which comprises rendering egg material more fluid than normal egg yolk by means of a peptizing agent, mixing together said fluid egg material with flour material and a relatively small amount of water to produce a plastic paste, forming the paste into proper shape, and finally drying the shaped paste, the step of rendering the egg material more fluid having the effect of decreasing the amount of water required in the paste, whereby the drying time is reduced.

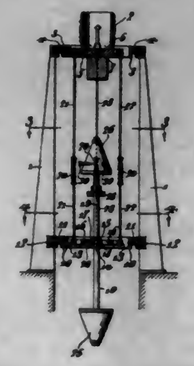
1,883,654. THREAD CUTTER FOR SEWING MACHINES. ARVID ERICSSON, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation. Original application filed May 18, 1927, Serial No. 192,249. Divided and this application filed July 29, 1929. Serial No. 381,878. 7 Claims. (Cl. 112—252.)



1. A thread cutter for sewing machines comprising a stationary cutting member disposed in a fixed position at one side of the needle path, a yielding, clamping member associated with the stationary cutting member and disposed at the same side of the needle path, a positively operated clamping member normally disposed at the other side of the needle path and adapted to move across said needle path to engage the stitching threads, clamp the

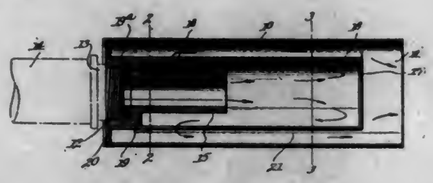
same against the yielding clamping member and move said clamped threads and yielding clamping member so as to cause said stitching threads to engage and be severed by the stationary cutting member.

1,883,655. PENDULUM CONTROLLED LENS APPARATUS. SVEN AUGUST ESKILSON, Stockholm, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 4, 1930, Serial No. 433,027, and in Sweden Mar. 6, 1929. 11 Claims. (Cl. 9—8.3.)



1. Pendulum controlled lens apparatus for lightships, luminous buoys and the like, and in which a stabilizing pendulum is suspended at or in proximity to the center of oscillation of the ship or the like, transmission means connecting said pendulum to said lens apparatus, said pendulum having a large moment of inertia as compared with the moment of inertia of the lens apparatus, and means having connection with the pendulum bar to render the moment of stabilization of said pendulum small so that the frequency of oscillation of the pendulum lens apparatus will be less than that of the ship, buoy or the like.

1,883,656. IRRIGATION NOZZLE. MICHAEL ESTOCK, Orange, Calif. Filed Aug. 13, 1930. Serial No. 475,062. 8 Claims. (Cl. 299—107.)

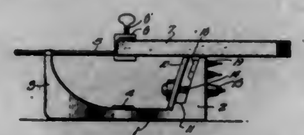


5. A device for breaking down the velocity of a jet of liquid from a source under pressure and including an outer shell, an unobstructed inlet fitting for attachment to said source, and a jet obstruction means fixed in the shell and in the path of the jet to wholly break the velocity of the jet; said shell having an outlet.

1,883,657. SAUSAGE CASING AND PROCESS OF MAKING SAME. RALPH ETTLINGER, Kansas City, Mo., assignor to Ettlinger Casaks Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 26, 1928. Serial No. 264,947. 8 Claims. (Cl. 17—45.)

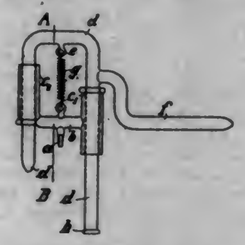
1. A coating for fabric meat casings comprising a viscous water solution of a gelatinous substance containing glycerine and salt petre.

1,883,658. SHEARS SHARPENER. JOHN R. EVERHART, Westminster, Md. Filed Apr. 18, 1931. Serial No. 531,214. 2 Claims. (Cl. 51—69.)



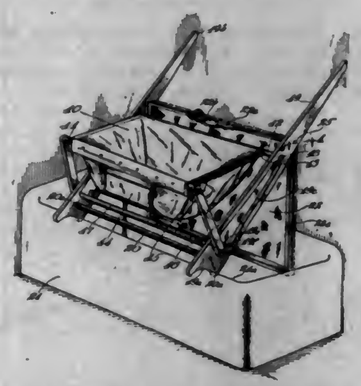
1. In a sharpening device of the type adapted for the sharpening of heavy duty metal cutting shears, the improvement which consists of a U shaped support having an elongated base and upstanding ends offset with respect to each other, of clamping means associated with one of said ends and comprising a clamping plate and securing means therefor, and a curved blade support, positioned laterally intermediate the said end and associated clamping plate and adjustably secured by means of two separate securing members extending through two elongated curved slots in the said support.

1,883,659. SPINNING ARTIFICIAL SILK. OTTO FAUST, Mannheim-Neuostheim, Germany. Filed Mar. 1, 1928, Serial No. 258,433, and in Germany Mar. 4, 1927. 2 Claims. (Cl. 18—8.)



1. In an apparatus for spinning viscose silk in operative combination, a thread guide arranged between the spinning nozzle and the receiving device, said thread guide being suspended by elastic means and giving way only in one plane.

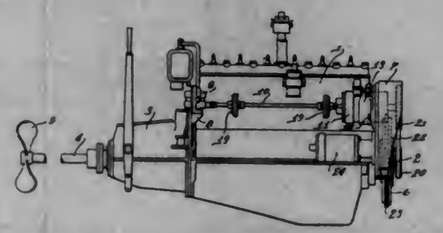
1,883,660. INFANT'S COLLAPSIBLE BATHTUB. ABRAHAM G. FELDMAN, Chicago, Ill. Filed June 18, 1931. Serial No. 545,347. 7 Claims. (Cl. 4—177.)



1. A portable bathtub comprising a vessel, front and rear rails supporting the same, side members inclined from the rear and pivotally receiving at high points the end portions of the rear rail, and arms pivoted from the end portions of the front rail and dropped to connect with

the side members at low points of the latter, the side members being longitudinally slotted from the points of connection, and the arms being foldable along the clearance provided by the slots to procure the folding of the vessel into the space between the side members.

1,883,661. MARINE MOTOR. FRANK O. FERNSTRUM, Detroit, Mich., assignor to Gray Marine Motors Co., Detroit, Mich., a Corporation of Michigan. Filed Jan. 23, 1932. Serial No. 588,314. 10 Claims. (Cl. 290—47.)



1. In a marine motor, a block, a crank shaft journalled in said block, transmission mechanism at the stern end of said block, a fly-wheel on said crankshaft at the forward end of said block and external thereof, an accessory shaft journalled adjacent said block, and a V-belt connecting said crank shaft to said accessory shaft at said flywheel.

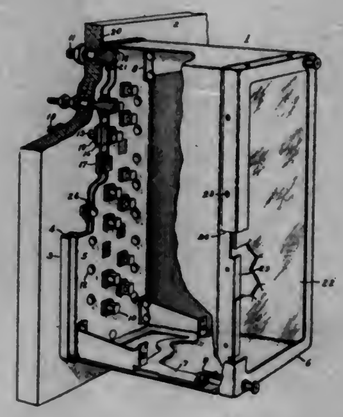
10. In a marine motor, a block, a crank shaft journalled in said block, transmission mechanism at the stern end of said block, a flywheel on said crank shaft at the forward end of said block, and external thereof, an accessory shaft journalled adjacent said block, a V-belt connecting said crank shaft to said accessory shaft at the forward face of said flywheel,, a hood covering said flywheel and belt and open at its forward face to permit access to said belt, a universal joint in said accessory shaft, a generator mounted on said shaft and adjustably attached to said hood for tightening said belt, gear teeth on the periphery of said flywheel, and an electric starter geared to said teeth.

1,883,662. METHOD OF REMOVING LINERS FROM PRESSURE VESSELS. HAROLD W. FISHER, Elizabeth, N. J., assignor to Standard-I. G. Company. Filed May 22, 1930. Serial No. 454,819. 2 Claims. (Cl. 29—88.2.)



1. An improved method for removing a non-resilient inner liner from high pressure vessels which comprises, first, distorting the inner liner so that its cross-sectional shape is different from that of the outer shell, and then removing the distorted liner by mechanical means.

1,883,663. CASING. ALAN S. FITZ GERALD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 14, 1928. Serial No. 306,062. 5 Claims. (Cl. 247—9.)



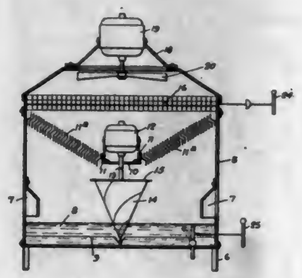
1. The casing for electrical devices including a base and cover, said base including two telescoping members provided with registering openings, terminals provided with insulating collars and arranged to project through said openings and means for securing said members together whereby rigidly to support said terminals within said openings.

1,883,664. WINDOW CLEANING DEVICE. SAMUEL FLEISCHMAN, Chicago, Ill., assignor to U. S. Tool and Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 412,716. 1 Claim. (Cl. 15—120.)



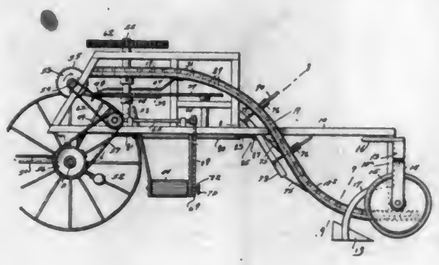
A window cleaning device comprising a hollow handle serving as a reservoir for a cleaning fluid, a head mounted on the handle and consisting of an upper and lower plate, an absorbent cleaning strip clamped between the plates and extending from one side thereof, the upper plate having an offset portion to accommodate the cleaning strip, a plurality of beads in said offset portion forming fluid cavities adjacent the edge of the cleaning strip, the lower plate having an aperture extending into the reservoir and forming a fluid passage between the reservoir and the absorbent cleaning strip to keep the strip moist with the cleaning fluid.

1,883,665. AIR CONDITIONING UNIT. WALTER L. FLEISHER, New York, N. Y., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 22, 1929. Serial No. 349,143. 6 Claims. (Cl. 261—91.)



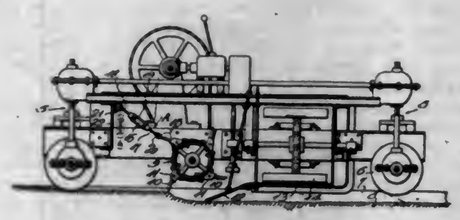
1. An air conditioning unit having an inlet and an outlet, means for drawing air through the inlet and discharging it through the outlet, an atomizer, a bracing member within said unit, a truss formed by eliminators on opposite sides of said member, said bracing member supporting a motor for driving the atomizer.

1,883,666. BEET HARVESTER. WALTER J. FLINTJER, Cheyenne, Wyo. Filed Apr. 9, 1931. Serial No. 528,909. 11 Claims. (Cl. 55—108.)



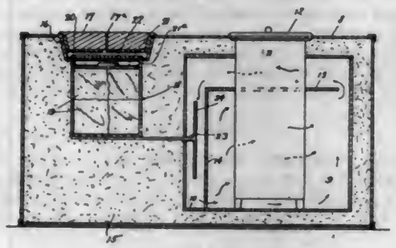
1. A beet loader including a wheeled supporting frame, a beet digging means carried at the forward end of the frame, opposed endless elements extending horizontally and rearward, then upward and then rearward and then again horizontally and rearward, and carrying beet top gripping members, forward and rear sprocket wheels for supporting and driving said endless elements, opposed rotatable cutting knives disposed below the rear sprocket wheels and opposed endless chains movable in a horizontal plane just above the cutting knives and extending forward to a point adjacent the upward and rearward flights of said endless elements, the chains being formed with beet top gripping fingers whereby to support the beet top just above the body of the beet as the beet top is engaged by said knives.

1,883,667. GRADING MACHINE. BENJAMIN H. FLYNN, Alexandria, La. Filed Jan. 2, 1932. Serial No. 584,494. 12 Claims. (Cl. 37—108.)



1. In a grading machine having a rotatable grader provided with adjustable cutters for changing its shape according to the transverse shape desired for the grade; a templet carried by the machine to assist in accurately adjusting said cutters.

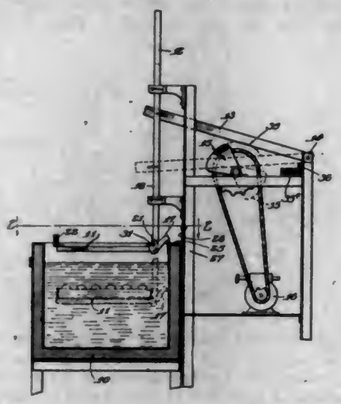
1,883,668. REFRIGERATOR. CHARLES N. FOREMAN, Chambersburg, Pa. Filed Oct. 23, 1931. Serial No. 570,709. 2 Claims. (Cl. 62—91.5.)



1. In a refrigerator construction of the class described, an enclosure embodying a refrigerating and storage compartment, insulation packing in said enclosure surrounding said compartment, a refrigerant container imbedded in said insulation and isolated from said compartment, and heat absorbing and conducting means connected with said container and projecting into said compartment, said refrigerant container being designed to accommodate frozen carbon dioxide blocks, and including a weighted follower plate arranged in the container above the blocks and adapted to recede as the blocks evaporate.

1,883,669. EGG TREATING MACHINE. BURDETTE E. FORD, Chicago, Ill., assignor to The Sterolene Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1931. Serial No. 512,571. 7 Claims. (Cl. 99—2.)

1. In an egg-treating machine of the character described, the combination of an egg carrier mounted for vertically-reciprocating movements and adapted to hold a tray of eggs, with means for moving the carrier with constantly reciprocating movements, and means under the control of the weight of a tray of eggs on said carrier for rendering the carrier-reciprocating means operative to reciprocate the carrier.

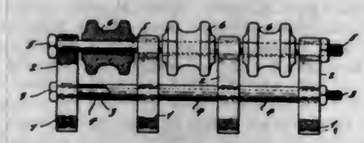


1,883,670. KNOCKDOWN HOGSHEAD. WILLIAM BLADES FOREMAN, Elizabeth City, N. C. Filed Sept. 8, 1931. Serial No. 561,795. 2 Claims. (Cl. 217—72.)



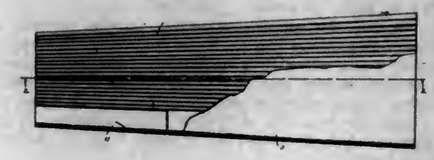
1. A knock-down hogshead comprising a pair of normally thin, flexible panels and solid disk heads, said panels being bent to encircle said heads with their adjacent edges overlapping, clips secured along one inner edge of each panel adapted to receive the edge of the other panel, and bands for retaining said panels and heads in position, substantially as set forth.

1,883,671. INSULATOR BRACKET AND SUPPORT. LOUIS FORT, Jersey City, N. J. Filed Aug. 29, 1929. Serial No. 389,172. 8 Claims. (Cl. 173—321.)



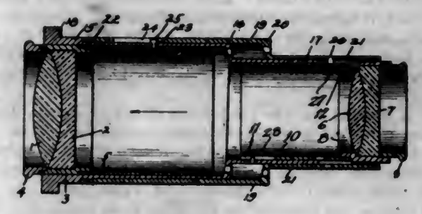
3. An insulator rack for insulating electric wires from their supports comprising a plurality of separate independent brackets detachably assembled on a common member extending through the brackets, an insulator pin extending through the brackets, and an insulator on the pin between the brackets.

1,883,672. AEROPLANE CONSTRUCTION. JACK E. FOSTER, Kansas City, Mo., assignor of one-half to Walter M. Cross, Kansas City, Mo. Filed Jan. 19, 1931. Serial No. 509,560. 5 Claims. (Cl. 244—31.)



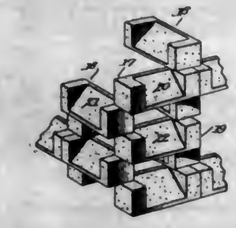
1. An all metal wing construction comprising a stress sheet made up of a plurality of overlapping corrugated sheets of varying thickness or gauges of metal, the thinnest sheet extending from the base to the tips of the wing and the remaining sheets of varying thickness extending only so far as to give adequate strength and rigidity to the wing structure.

1,883,673. ADJUSTABLE MOUNT FOR PROJECTING LENSES. WILLIAM F. FOUQUET, Rochester, N. Y., assignor to Projection Optics Co., Rochester, N. Y. Filed Nov. 9, 1929. Serial No. 406,141. 4 Claims. (Cl. 88—24.)



4. A lens mount, a lens at each end of said mount, means by which said lenses are moved longitudinally and by which one of said lenses is simultaneously moved transversely to the other lens, said means coordinating the movements of the lenses, said lenses being adapted to project a picture and change the size thereof and hold one edge of the picture substantially stationary during the change in the size of the picture.

1,883,674. CHECKER-BRICK AND CHECKERWORK CONSTRUCTION. JAMES H. FRANCE, Phillipsburg, Pa., assignor to J. H. France Refractories Company, Snow Shoe, Pa., a Corporation of Pennsylvania. Filed July 10, 1930. Serial No. 467,094. 5 Claims. (Cl. 263—51.)



1. A checker-brick of rectangular cross-section in portions of its length, two of whose adjacent faces are flat throughout its length, the other two faces being cut away for another portion of the length so as to form a sloping surface which with the first two adjacent faces forms substantially a right angle triangle.

1,883,675. CEMENT POWDER AND MORTAR POWDER. KARL FRANK and KARL DIETZ, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 30, 1929, Serial No. 396,079½, and in Germany Oct. 2, 1928. 5 Claims. (Cl. 106—8.)

1. As new compositions of matter, cement powders and mortar powders containing hydrous, readily soluble silicates in a mixture with a substance of the group consisting of free silicon and silicon fluorides, said substances showing, when boiled in powdered form for 2 hours with 25 times the quantity of caustic oda solution of 15% strength, a loss of weight of at least 40% of the starting material.

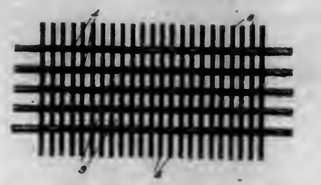
1,883,676. DEGRADATION OF WOOD AND OTHER POLYSACCHARIDS. KARL FREDENHAGEN and BURCKHARDT HELFERICH, Greifswald, Germany. Filed Mar. 14, 1928, Serial No. 261,701, and in Germany Mar. 14, 1927. 8 Claims. (Cl. 260—10.)

1. A process for the production of water-soluble degradation products of polysaccharids, which comprises acting upon a dry material containing polysaccharids at a temperature below 90° C. with hydrogen fluoride and removing the hydrofluoric acid after the reaction.

1,883,677. DEGRADATION OF WOOD AND OTHER POLYSACCHARIDES. KARL FREDENHAGEN and BURCKHARDT HELFERICH, Greifswald, Germany. Original application filed Mar. 14, 1928, Serial No. 261,701, and in Germany Mar. 14, 1927. Divided and this application filed Sept. 10, 1930. Serial No. 481,076. 5 Claims. (Cl. 260—10.)

1. A process for the production of water-soluble degradation products of polysaccharides, which comprises acting upon a material containing polysaccharides with a concentrated solution of hydrofluoric acid at a temperature below 100° C., the quantity of water present in the acid and in the material to be acted upon being less than 20 per cent of water by weight of the initial material when in the dry state, and removing the hydrofluoric acid after the reaction.

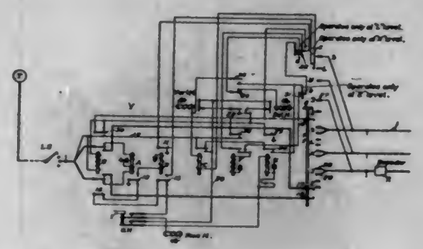
1,883,678. TEXTILE FABRIC. EPHRAIM FREEDMAN, Brooklyn, N. Y., ADOLF JAEKLI, North Bergen, N. J., and ERNEST J. GNAEGI, New York, N. Y., assignors to R. H. Macy & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 24, 1930. Serial No. 497,742. 3 Claims. (Cl. 139—428.)



1. A water-proof fabric constructed of grege silk warp yarn, and spun silk filling yarn, said filling yarn being uniform and having not less than twelve twists to the inch to decrease fuzziness, the interstitial area of the fabric being appreciably reduced and closed in the process of weaving, substantially as set forth.

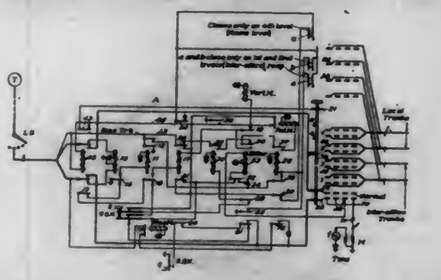
1,883,679. AUTOMATIC TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Chicago, Ill.; Milton S. Friendly and Central Republic Bank and Trust Company, executors of said Herbert M. Friendly, deceased. Filed May 14, 1930. Serial No. 452,282. 26 Claims. (Cl. 179—18.)

1. In a telephone system, means including a plurality of serially related directively controlled automatic switches for connecting a calling and a called subscriber's line, a different and lesser plurality of similar switches for connecting the said calling line with another called line, a uniform numbering system in which all the said subscribers have the same number of digits in their tele-



phone numbers, and means for automatically operating one of the switches used in calling the said second called line in a cumulative vertical movement after such switch is first operated in order to cancel one of the digits of the number.

1,883,680. AUTOMATIC TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Chicago, Ill.; Milton S. Friendly and Central Republic Bank and Trust Company, executors of said Herbert M. Friendly, deceased. Filed May 14, 1930. Serial No. 452,283. 25 Claims. (Cl. 179—18.)

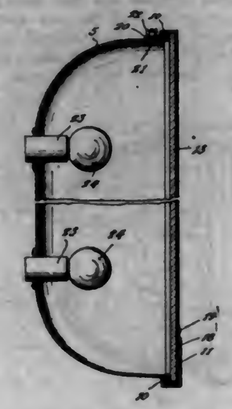


1. In a telephone system, means including a plurality of serially related directively controlled automatic switches for connecting a calling and a called subscriber's line, a different and lesser plurality of similar switches for connecting the said calling line with another called line, a uniform numbering system in which all the said subscribers have the same number of digits in their telephone numbers, and means included in one of the switches used in calling said second called line and dependent upon the extent of selective movement of the switch effective to cancel any two of the digits of the number including dissimilar digits.

1,883,681. HEADLIGHT FOR MOTOR VEHICLES. NELLIE M. GAGE, Dayton, Ohio. Filed Nov. 18, 1930. Serial No. 496,465. 3 Claims. (Cl. 240—7.1.)

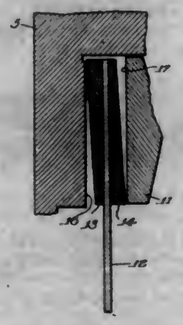
1. A headlight for motor vehicles comprising a casing open at its front and of sufficient length to extend across the front of a radiator with its ends projecting from opposite sides thereof, lamps in said casing spaced longitudinally thereof, flanges extending along margins of the open front of said casing, a closure for the open front of said casing consisting of a frame and a transparent sheet carried thereby, said frame being open at one end and formed with a channel to receive marginal portions of the sheet and with a second channel receiving said flanges and mount the closure for sliding movement longitudinally of the frame into and out of a closed position,

a shield at the open end of said frame carried by the frame and movable into and out of position to engage about the adjacent end of said sheet, means carried by



the casing to engage the shield and retain said shield in an operative position when the closure is closed, and means to releasably secure the closure closed.

1,883,682. FRICTION CLUTCH. DAVID E. GAMBLE, Detroit, Mich., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1926. Serial No. 109,239. 10 Claims. (Cl. 192—52.)



1. A driven plate for a friction clutch having oppositely disposed friction rings thereon, one of said rings being thicker at its outer edge than at its inner edge.

1,883,683. PLASTIC COMPOSITION. EARL W. GARDNER and DUDLEY H. FELDER, Jefferson County, Tex., assignors to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,867. 3 Claims. (Cl. 106—31.)

1. A plastic composition consisting of petroleum asphalt, kerosene distillate and asbestos in the approximate proportions of 34% of the asphalt, 26% of the distillate and 40% of the asbestos.

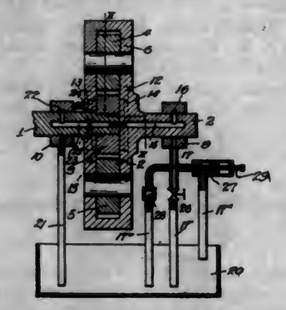
1,883,684. STRAIGHTENING TOOL FOR SHEET METAL. WILLIAM GARRETT, Beckley, W. Va. Filed Feb. 10, 1931. Serial No. 514,824. 2 Claims. (Cl. 81—15.)

1. A sheet metal straightening tool comprising a metal bar having one end portion forming a shank, the outer end portion of the shank being bent to form a head for prying dents out of sheet metal, the said head being substantially U-shaped and disposed transversely of the shank with its inner arm carried by the shank and its outer arm being of greater length than its inner arm



and bent to form a bill extending transversely of the head and having flat side faces and a sloping end face to form an entering point at the outer end of the bill.

1,883,685. HYDRAULIC CLUTCH. JOHANNES GASTERSTÄDT, Dessau, Germany, assignor to Hugo Junkers, Dessau, Germany. Filed June 18, 1928, Serial No. 286,205, and in Germany June 20, 1927. 6 Claims. (Cl. 192—61.)

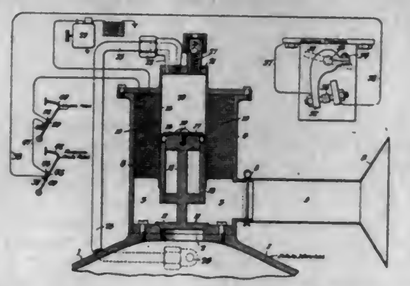


1. A hydraulic clutch comprising a driving and a driven part, a pump having two cooperating rotary parts, one of said parts being operatively connected to one, and the other being operatively connected to the other part of said clutch, one of said clutch parts defining two liquid passages connected, respectively, to the suction and delivery ends of said pump, a fixed liquid reservoir which is open to the atmosphere, fixed pipe lines extending from said reservoir to said passages, and packing means connecting said fixed pipe lines to said passages in said rotary parts, and an overload valve and a nonreturn valve arranged in parallel intermediate said reservoir and said clutch in the conduit formed by said pipe lines and said passages.

1,883,686. INTERNAL COMBUSTION ENGINE. JOHN C. GEIGER, Bryn Mawr, Pa. Filed Nov. 12, 1930. Serial No. 495,245. 8 Claims. (Cl. 123—97.)

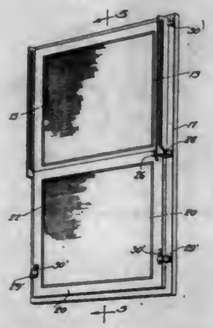
1. In an internal combustion engine, the combination with a combustible mixture intake manifold, having an air inlet port; of a valve controlling said port; means adapted to move said valve to close said port during the normal operation of the engine and to open said port

when the engine throttle valve is closed, including a solenoid coil in registry with said port, and a core adapted to reciprocate in said coil and rigidly connected with said valve; an electric circuit adapted to energize said coil and including a switch; and an engine controlling device, movable in changing said engine, from normal to throttled condition, operatively connected with said switch; whereby said circuit is closed when the engine is throttled and opened when it is not throttled and suc-



tion upon the carburetor is minimized during each throttled operation, by then establishing communication between said intake manifold and the outer atmosphere; wherein said core is mounted to reciprocate in a fluid pressure chamber within said coil, and including a conduit continually establishing communication between said intake manifold and said chamber; whereby the fluid pressure is balanced upon opposite ends of said valve and core and the magnetic stress necessary to open said valve thereby minimized.

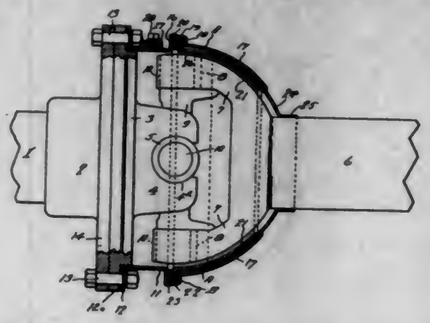
1,883,687. REMOVABLE SCREEN. HYMAN GELFAND, Brooklyn, N. Y. Filed Apr. 12, 1932. Serial No. 604,791. 6 Claims. (Cl. 156—14.)



1. In combination with a window frame, an upper screen section hingedly mounted to one side of said frame, a lower screen section slidably supported by said upper screen section for vertical movement, releasable fastening means for securing said lower screen section in a raised position, and releasable means for securing the upper screen section closed.

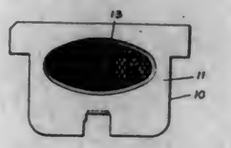
1,883,688. HOUSING FOR UNIVERSAL JOINTS. CATLIN GEROLD, Los Angeles, Calif. Filed June 4, 1930. Serial No. 459,139. 8 Claims. (Cl. 64—89.)

1. The combination, with a pair of shaft sections and means for connecting the same, the said means comprising a universal joint, of a lubricant-containing housing for the said joint, the said housing comprising a member connected at one end to one of said sections, an inner and an outer spherical housing section, the outer section having its enlarged end connected to the other end of the said housing member, the said spherical sections being concentric and there being a space provided therebetween, an intermediate spherical housing section also concentric with the first mentioned spherical sections and having its enlarged end inserted between the first mentioned spherical sections, the enlarged end of the last mentioned section being of less diameter than the enlarged ends of the other two spherical sections, the third spherical section having a reduced portion connected to the other shaft section,



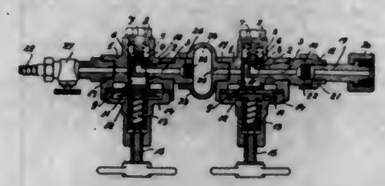
means for supplying lubricant by centrifugal action from the interior of the housing to the chamber provided between the enlarged portions of the inner and outer spherical sections and beyond the enlarged end of the intermediate section, and means yieldingly forcing the inner spherical section toward the outer spherical section thereby to maintain a capillary seal between the said sections.

1,883,689. TYPE CASTING MATRIX. LOUIS H. GILBERT, Hartford, Conn. Filed Sept. 22, 1930. Serial No. 483,487. 1 Claim. (Cl. 199—63.)



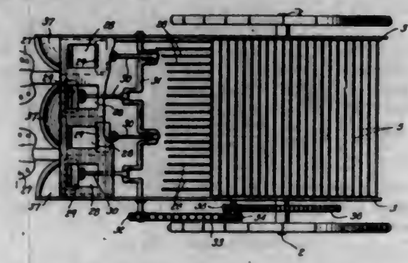
In a matrix for hand assembly, a matrix body with laterally extending positioning lugs adjacent the top only of said body, the central portion of the front face of said body being recessed to form a finger grip.

1,883,690. DEVICE FOR WITHDRAWING LOW PRESSURE GASES FROM HIGH PRESSURE VESSELS. PAUL GILGENBERG, Cologne-on-the-Rhine, Germany. Filed Oct. 27, 1930, Serial No. 491,626, and in Germany Feb. 25, 1930. 2 Claims. (Cl. 50—23.)



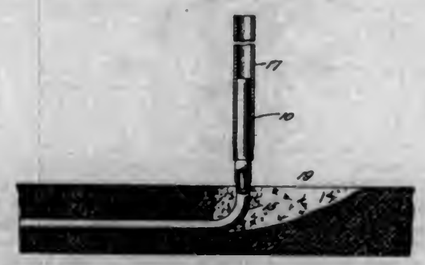
1. The combination with a pair of identical pressure regulating valves each having a central chamber and relatively small inlet and outlet openings, of a connection between the outlet of one valve and the inlet of the other, said connection including a large expansion chamber provided with inlet and outlet passages, and a throttling device located in the outlet passage from the expansion chamber.

1,883,691. BEET HARVESTER AND POTATO DIGGER. GEORGE D. GILLESPIE, Kansas City, Mo. Filed June 13, 1930. Serial No. 460,913. 5 Claims. (Cl. 55—9.)



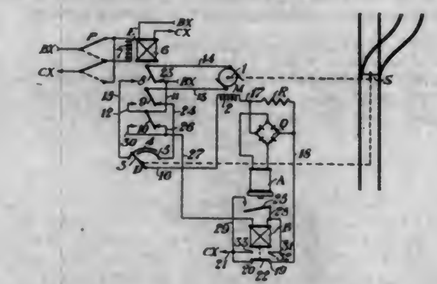
2. A combined beet harvester and potato digger, comprising a frame mounted on ground wheels, a plow share and a stationary beet-receiving platform having a traveling conveyer therebetween mounted on a frame, reciprocating cutters adjacent the platform for severing the beet tops from the beets.

1,883,692. PIPE HICKEY. THEOBALD M. GILLIN, Aldan, Pa., assignor of one-third to William W. Patton and one-third to Arthur Wine, Philadelphia, Pa. Filed Jan. 9, 1931. Serial No. 507,669. 5 Claims. (Cl. 81—15.)



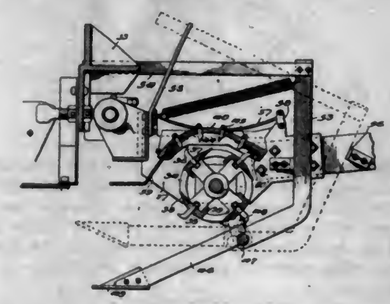
1. A pipe hickey comprising a shank having an interiorly threaded socket at one end adapted to receive a piece of pipe to be bent and a stud projecting from the base of the socket and of greater length than the depth of the socket, said stud being of a size to interiorly fit the pipe to be bent.

1,883,693. RAILWAY TRAFFIC CONTROLLING APPARATUS. ROBERT M. GILSON, Pittsburgh, and BERNARD E. O'HAGAN, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 9, 1932. Serial No. 616,184. 5 Claims. (Cl. 246—242.)



1. In combination, an electric motor, a circuit for operating said motor, a manually controlled device for supplying current to said circuit, a resistor having a positive temperature coefficient included in said motor circuit, a first relay responsive to the potential across said resistor in such manner that said first relay becomes energized when the current carried by said resistor exceeds a predetermined value, a second relay, means controlled by said first relay for energizing said second relay when said first relay is energized, means controlled by said second relay for interrupting said motor circuit when said second relay is energized, a holding circuit for said second relay, and means controlled by said device for at times rendering said holding circuit ineffective.

1,883,694. BRUSH PICKING AND MACERATING MACHINE. WILLIAM E. GOBLE, Orosi, Calif., assignor to S. P. Keithly, Fresno, Calif. Filed May 26, 1931. Serial No. 540,127. 9 Claims. (Cl. 55—118.)



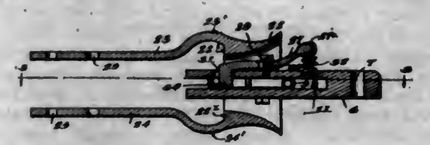
1. In a brush picking and macerating machine, a drum and juxtaposed housing equipped with cutting and shredding means, said housing being held in a yielding relation with the drum.

1,883,695. FISH LURE. SIMON GOERKE, Milwaukee, Wis. Filed Sept. 3, 1931. Serial No. 561,063. 2 Claims. (Cl. 43—45.)



1. A fish lure comprising a thin plate of elongated elliptical shape and having its two end portions relatively offset, providing an abrupt elongated shoulder whose length extends throughout the width of said plate at right angles to the length of the latter, said shoulder being disposed in a plane oblique to said length of the plate, one of said end portions of the plate being of concavo-convex form with its concave side disposed toward said shoulder, the other of said end portions being flat, means for connecting a hook to one end of said plate, and means for connecting a line to the other end of said plate.

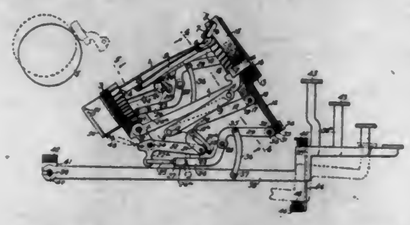
1,883,696. COUPLER. ABRAHAM S. GOERTZ, Reedley, Calif. Filed May 13, 1931. Serial No. 537,109. 3 Claims. (Cl. 280—33.15.)



1. In a coupling, a draw bar having a slot, a pair of pivoted hooks disposed in said slot, a spring disposed between the portions of said hooks for forcing the hooks

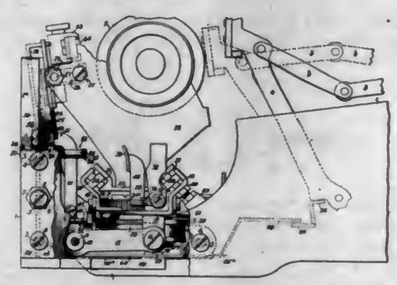
together, a socket having a portion arranged to engage a portion of said hooks for forcing said hooks apart, said socket being provided with a bearing portion behind which the hooks are adapted to enter, and spring-pressed means adapted to enter between the hooks for locking them in their engaging positions.

1,883,697. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Feb. 24, 1928. Serial No. 256,613. 13 Claims. (Cl. 197—27.)



1. The combination of a type bar, a key lever, and operative connections between said key lever and said type bar for effecting substantially a noiseless pressure imprint, said connections comprising three pairs of toggle arms, two of the pairs being normally broken and the remaining pair being normally substantially straight.

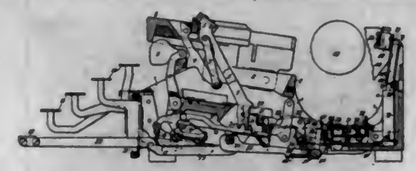
1,883,698. TYPEWRITING MACHINE. GEORGE G. GOING, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed June 1, 1929. Serial No. 367,733. 5 Claims. (Cl. 197—149.)



4. The combination of a carriage; a platen carried thereby; a support for the carriage; a machine frame comprising side plates and a member which unites said side plates and constitutes the back of the frame and supports said carriage support; and means for effecting an adjustment of said member fore and aft of the machine relatively to said side plates and for holding the member in its adjusted position, whereby the platen may be adjusted to vary the effectiveness of the imprint from the types without disturbing the correlation between various parts carried by and adjustable with said adjustable member.

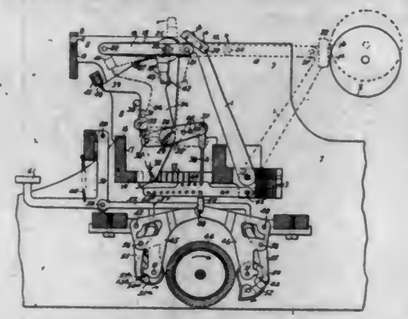
1,883,699. TYPEWRITING MACHINE. GEORGE G. GOING, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,539. 19 Claims. (Cl. 197—112.)

1. In a typewriting machine, the combination of a carriage, escapement mechanism therefor, a universal bar for actuating said escapement mechanism, type actions operative on said universal bar, a space key, and independent train of operative connections between said space key and said universal bar, and means operating automatically when the carriage reaches the end of a line for effecting a



relative displacement between parts of said connections and thus rendering said space key ineffective to actuate the escapement.

1,883,700. TYPEWRITING MACHINE. GEORGE G. GOING, Glenbrook, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,400. 31 Claims. (Cl. 197—25.)



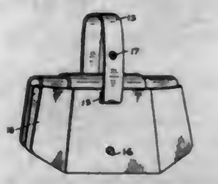
1. The combination of a printing instrumentality, and means for actuating the same comprising a rotative actuating arm, means for transmitting a forward and back printing movement to the printing instrumentality from and at each complete rotative movement of said actuating arm, a key, and means brought into operation by an actuation of said key for rotating said actuating arm through substantially 360°.

1,883,701. SMOKER'S DEVICE. EDWARD GOLDBERG, Shaker Heights, Ohio. Filed Aug. 11, 1931. Serial No. 556,398. 3 Claims. (Cl. 131—10.)



1. A smoker's device, comprising a mouthpiece and an impaling member extending therefrom having notches.

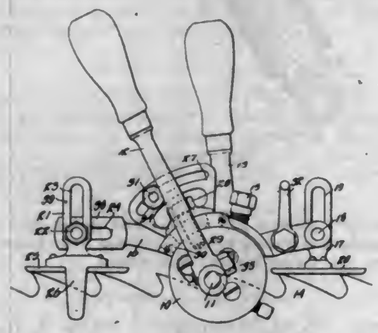
1,883,702. HAND BAG. TADASHI D. GOMI, New York, N. Y. Filed Mar. 11, 1931. Serial No. 521,786. 5 Claims. (Cl. 150—33.)



1. In hand bags and the like, an adjustable supporting member retained at its ends to the bag, detachable fasten-

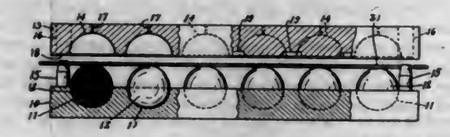
ing means intermediate the ends for connecting said member and bag whereby the supporting member may be positioned in a plurality of manners to facilitate the carrying of the bag.

1,883,703. SAW SWAGE. DEWEY E. GOMMEL, Indianapolis, Ind., assignor to E. C. Atkins & Company, Indianapolis, Ind., a Corporation of Indiana. Filed Apr. 17, 1930. Serial No. 445,144. 2 Claims. (Cl. 76—54.)



1. A saw swaging device comprising a frame having a block mounted therein, a swaging die mounted in the block, a lever for operating the die, arms on said frame for holding it on a saw, one of the arms having a depending leg engageable with the saw, said depending leg having means for adjustably attaching it to the said arm, said leg gradually increasing in thickness from its upper end toward the center, providing a wedging action between it and the attaching means whereby any slippage of the arm on the leg will tend to tighten the engagement between the leg and the arm to prevent further slippage, substantially as set forth.

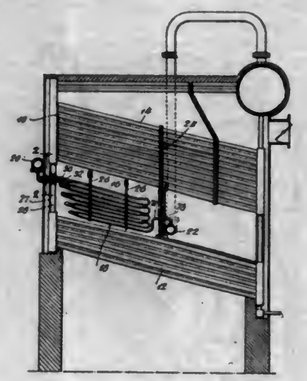
1,883,704. BALL COVERING PROCESS. JOHN O. GOODWIN, Akron, Ohio, assignor to Seiberling Latex Products Company, Barberton, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,549. 1 Claim. (Cl. 154—17.)



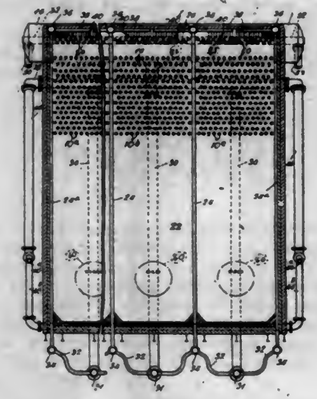
The method of covering ball bodies which comprises building up successive layers of rubber composition on the ball body, one side at a time, while holding the ball by its opposite side, semi-vulcanizing the components of the inner layer or layers before applying the outer layer or layers, and finally vulcanizing all the layers.

1,883,705. SUPERHEATER ARRANGEMENT. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Feb. 27, 1930. Serial No. 431,783. 5 Claims. (Cl. 122—478.)

3. The combination with a boiler having a plurality of tube banks, circulator nipples and a vertical wall fixed to said nipples of a superheater intermediate two of said banks, said superheater having headers relative to which said wall moves when changing temperature and having tube ends passing through said wall, and means for sealing the points at which said ends pass through said wall comprising plates each fixed to a pair of nipples and having openings for said tube ends, and plates fixed closely around said tube ends and closing said openings both when the boiler is hot and when it is cold.



1,883,706. BOILER. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Filed May 10, 1930. Serial No. 451,353. 12 Claims. (Cl. 122—235.)

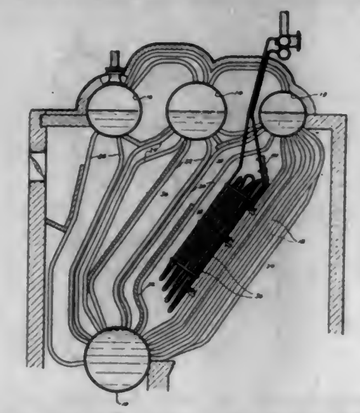


1. The combination in a boiler of a plurality of groups of generator tubes, said groups having vertical lanes therebetween, a steam and water drum transverse to said tubes and connected to both ends thereof, rows of vertical water tubes in said lanes between and extending well below said groups, and means connecting the tops and bottoms of said vertical tubes to said drum, said means for connecting the generator tubes to the transverse drum including substantially horizontal nipples above the generator tubes, said vertical tubes extending through said horizontal nipples to points above said nipples, and said means connecting the vertical tubes to the drum including manifolds transversely to the steam and water drum.

1,883,707. BAFFLE ARRANGEMENT. CHARLES W. GORDON, Hammond, Ind., assignor to The Superheater Company, New York, N. Y. Filed Dec. 6, 1930. Serial No. 500,522. 2 Claims. (Cl. 122—478.)

1. A boiler having generating water tubes inclined to the vertical and means forming connected first and second

passes in which the gases flow respectively up and down, certain of said tubes forming a front bank in said first pass, a superheater immediately back of said bank and also in said first pass, and a baffle entirely and immediate-



ly in front of the upper portion of the said superheater and opposite the connection between said passes and having its lower edge not substantially below the lowest point in said connection.

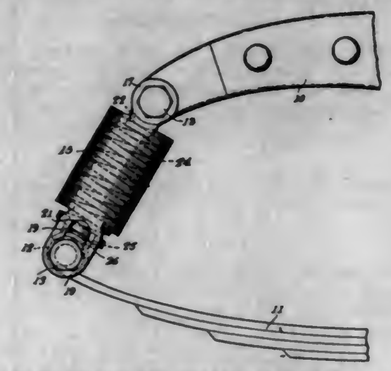
1,883,708. SUPERHEATER. CHARLES W. GORDON, Munster, Ind., assignor to The Superheater Company, New York, N. Y. Filed Nov. 17, 1931. Serial No. 575,498. 7 Claims. (Cl. 122—481.)



1. The combination with a water wall tube of a furnace of a superheater element having a pipe length in the furnace close to the furnace side of said tube and connected to receive saturated steam, and a length connected to receive steam directly from said first length and to discharge steam from the element, said second length having its greater portion farther from the furnace than said wall tube and screened from radiation thereby to some extent, but arranged to receive heat by convection.

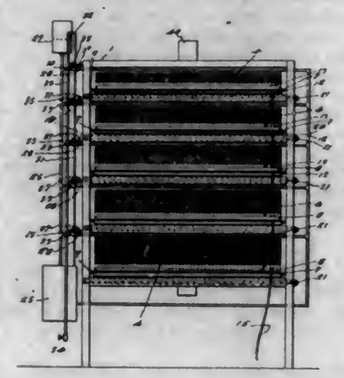
1,883,709. SHOCK ABSORBING SPRING SHACKLE. JOHN HECTOR GRAHAM, New York, N. Y. Filed Feb. 1, 1928. Serial No. 250,965. Renewed Feb. 6, 1932. 8 Claims. (Cl. 267—29.)

1. A link connecting a vehicle frame member and a semi-elliptical spring to support said member, said link comprising a tubular body pivoted to the extreme end of the frame member, slotted connections at the opposite end of said body to engage the spring end, said body dis-



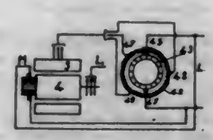
posed wholly between the member and spring, and a helical compression spring enclosed in said body respectively abutting the frame member and spring.

1,883,710. STORAGE BROODER. VOLNEY L. GRAHAM, Nevada, Ohio. Filed May 25, 1929. Serial No. 365,884. 8 Claims. (Cl. 119—34.)



1. The combination with a chick receiving tray having a front wall and end walls of reticulated material, and a trough arranged in front of the lower portion of said tray and accessible to chicks in the tray and having end lugs with notches therein to engage horizontal bars of the front wall and also having terminal bendable tongues adapted to be disposed under horizontal bars of the end walls of the tray.

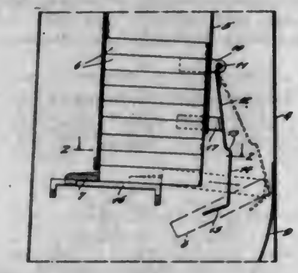
1,883,711. VARIABLE SPEED TRANSMITTER FOR DISTANT CONTROL DEVICES. ELIE GRANAT, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France, a Company of France. Filed Aug. 26, 1927, Serial No. 215,704, and in France Mar. 19, 1927. 1 Claim. (Cl. 172—293.)



A transmitter-repeater system comprising a transmitter constituted by a rotor and a stator, a stationary commutator electrically connected with one of the transmitter

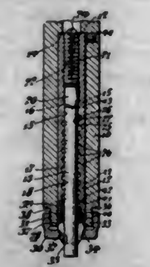
elements, polyphase slip-rings connected with equidistant tappings of the transmitter rotor, receivers constituted by a rotor and a stator, polyphase slip-rings connected with equidistant tappings of the corresponding receiver rotor, polyphase wires connecting the sliprings of the transmitter with the corresponding sliprings of the different receivers, alternating current mains feeding the transmitter rotor and the receiver stators, a winding inductively connected with the stationary commutator and feeding the transmitter stator, brushes rubbing on the stationary commutator and connected with the mains and means for angularly shifting the brushes and therewith modifying the relative angular setting of the stator and rotor fields of the transmitter.

1,883,712. ROCKABLE DELIVERY DEVICE FOR VENDING MACHINES. GARNET P. GRANT, Long Island City, N. Y., assignor to Auto-Sales Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 20, 1928. Serial No. 327,253. 1 Claim. (Cl. 312—67.)



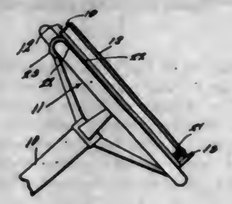
In a vending machine, the combination comprising a vertical delivery chute containing a stack of articles to be vended, means for ejecting the lowermost article of the stack laterally from the chute, a rockable member pivoted so as to swing toward and from the chute, a lip carried on the lower end of the member at a position below the chute and an abutment for maintaining the rockable member with its lip out of vertical alignment with the chute, the arrangement being such that one end of the article during its ejection from the stack is carried by the lip of the rockable member.

1,883,713. TOOL HOLDER. CHARLES B. GRAY, Millbourne, Pa. Filed Nov. 25, 1930. Serial No. 497,988. 12 Claims. (Cl. 279—56.)



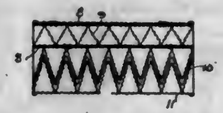
1. In a cutting machine of the reciprocatory punch type, a ram construction having an axial bore, a punch tool in the bore, abutment means in the bore and abutting the thrust end of the tool and operatively connected to the ram construction for transmitting working thrust from the latter to the thrust end of the tool, means providing for axial adjustment of said abutment means suitably to the tool length, means providing a connection between the ram construction and the tool for stripping the latter from work, collet mechanism carried by the lower end of the ram construction for gripping and centering the tool, said mechanism including a collet disposed about the tool and having an external conical surface and means for contracting the collet including an annular member having a surface engaging the conical surface of the collet and coaxial with an annular member cylindrical surface engaging a cylindrical surface formed on the ram construction and coaxial with the latter, and spacing means encompassing the tool between the stripping connection and the collet and fitting the bore to resist buckling of the tool in the bore.

1,883,714. PORTABLE DESK. FRED G. GRAY, Clintwood, Va. Filed July 30, 1931. Serial No. 554,089. 2 Claims. (Cl. 45—58.)



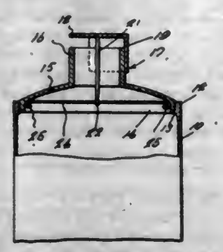
1. A portable writing desk of the class described comprising a box-like receptacle having forward, rear, and side walls and including a multiplicity of compartments to accommodate various articles, and a hingedly mounted cover for said receptacle defining a writing board, the rear wall of said receptacle being at such height as to project above the writing surface of the board to function as a ledge.

1,883,715. ARMORED FILTER ELEMENT. OSCAR V. GREENE, Cleveland, Ohio. Filed Sept. 20, 1928. Serial No. 307,130. 4 Claims. (Cl. 183—69.)



1. In a filter, the combination of a holding frame having an open end, a series of alternating layers of filtering and non-filtering material mounted in said frame, said filtering layers comprising sheets of non-metallic filtering material enclosed in envelopes of folded metallic reticulated material, said non-filtering layers comprising sheets of coarse mesh reticulated metallic material, one of said layers being provided with bent portions adapted to space the layers from each other.

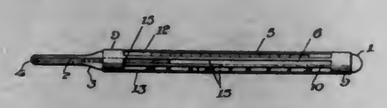
1,883,716. CLOSURE FOR COLLAPSIBLE TUBES. RUSSELL C. GREENLEES, Gladstone, Mich. Filed Dec. 11, 1931. Serial No. 580,424. 2 Claims. (Cl. 221—60.)



2. In a structure of the class described, a collapsible tube provided with a discharge neck, a closing cap for said neck, said cap including a closure disc and a seg-

mental ring fitting telescopically around the neck, a rod attached to the disc and extending into the tube through the neck, and spring retaining and automatic closing means attached to the inner end of the rod and confined within the tube.

1,883,717. CLINICAL THERMOMETER. LEOPOLD E. GREINER, Jr., New York, N. Y. Original application filed July 30, 1928, Serial No. 296,152. Divided and this application filed Oct. 5, 1929. Serial No. 397,477. 11 Claims. (Cl. 73—52.)

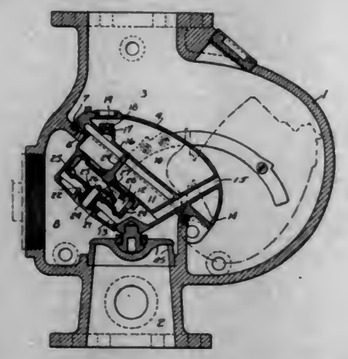


5. A thermometer of the class described having a shield covering and protecting the thermometer and having a longitudinal slot aligned with the prismatic or magnifying portion of the thermometer and also having a longitudinal slot along its side for the observation of the degree markings, said shield having edges of said first longitudinal slot colored in contrast with the remainder of the shield.

1,883,718. FERTILIZER COMPOSITION. ERNEST F. GEETHER, Midland, Mich. Filed Jan. 28, 1929. Serial No. 335,742. 4 Claims. (Cl. 71—9.)

1. A fertilizer composition including magnesium ammonium phosphate and methylene urea.

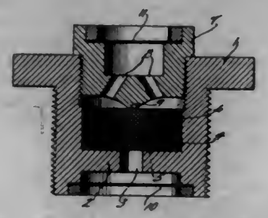
1,883,719. VALVE ACCELERATING DEVICE. LESTER A. GRIMES, Montclair, N. J., assignor to Grimes Sprinkler Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed May 9, 1930. Serial No. 450,945. 9 Claims. (Cl. 169—22.)



1. In combination with a casing having a clapper seat therein and a clapper normally maintained upon said seat by fluid pressure acting thereupon, means carried by said clapper and responsive to a rate of reduction of said fluid pressure tending when the rate of pressure reduction exceeds of predetermined value to equalize the pressures acting upon said clapper.

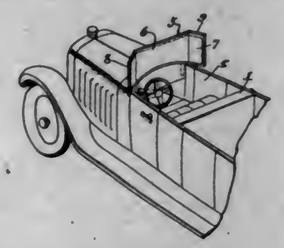
1,883,720. SLOW LEAK DEVICE. LESTER A. GRIMES, Montclair, N. J., assignor to Grimes Sprinkler Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed Aug. 14, 1930. Serial No. 475,319. 3 Claims. (Cl. 169—17.)

1. A slow leak device comprising in combination a member having a passage therethrough, a pair of elements located in said passage, one of said elements having an aperture therethrough and being so disposed in said passage as to prevent leakage of fluid there passed except through said aperture and the other of said elements being non-apertured and having dimen-



sions substantially less than that of the cross-section of the passage through said member, and means for holding said elements in contact; the surfaces of said elements being roughened where in contact whereby fluid passing through said aperture may leak between the contacting roughened surfaces of said elements.

1,883,721. WINDSHIELD CONSTRUCTION. WALTER E. GRIMM, Long Beach, Calif. Filed May 28, 1929. Serial No. 366,614. 2 Claims. (Cl. 296—84.)



1. A vehicle windshield construction comprising a main section, wings on the sides of said main section, said main section and wings being integrally formed, a frame extending around said main section and wing sections, means whereby said frame is secured to the vehicle, a second frame surrounding the main and wing sections, said second frame being adapted to fit into the first named frame, a hinge connecting said first and last named frames whereby the windshield construction may be swung outwardly from the bottom.

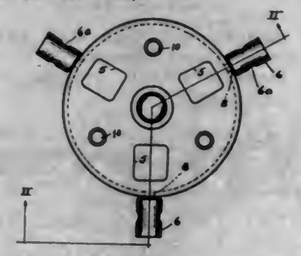
1,883,722. DRYING CYLINDER. ELIJAH C. GREISEN, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,411. 2 Claims. (Cl. 34—6.)



1. A drying cylinder comprising a rotary continuous annular shell, box section members forming longitudinally extending internal draft chambers associated with said shell and having gas discharge openings in their trailing walls, and means associated with each of said discharge openings to prevent the material within the

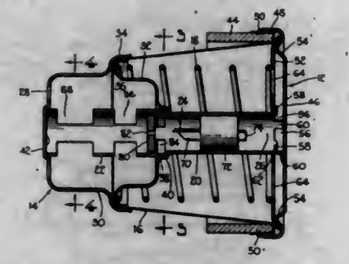
cylinder from working out therethrough, said means comprising a shield member fastened to said trailing wall and extending from an inward portion thereof towards said shell, and guard elements extending rearwardly from said trailing wall and disposed to direct the flow of gas from the respective discharge opening underneath said shield member.

1,883,723. ASH RECEPTACLE. JOHN H. GROTH, Beaver Falls, Pa. Filed Oct. 19, 1931. Serial No. 569,621. 4 Claims. (Cl. 131—51.)



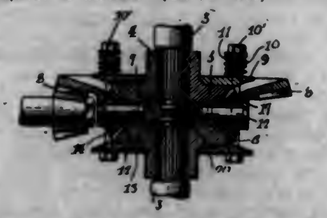
1. In an ash receptacle, the combination of an urn-shaped vessel provided with a side handle and a removable cover closing its mouth, a cigarette holder on the top of said handle, and an orifice in said removable cover adapted to lie in alignment with said holder.

1,883,724. SOUND PRODUCING DEVICE. LEO J. GRUBMAN, Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J., a Corporation of Delaware. Filed Mar. 5, 1932. Serial No. 597,005. 14 Claims. (Cl. 46—46.)



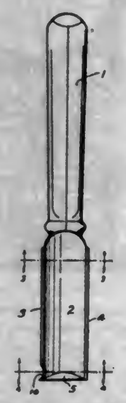
1. A manually operable articulative sound producing device comprising relatively movable heads, resilient means for keeping the same normally in separated position, and a pair of telescopically related tubes secured to the heads for relative movement therewith, said tubes including valve means for modulating the sound produced by the device.

1,883,725. DIFFERENTIAL. JOSEPH GUILMETTE, St. Felicien, Quebec, Canada. Filed July 17, 1931. Serial No. 551,409. 6 Claims. (Cl. 74—99.)



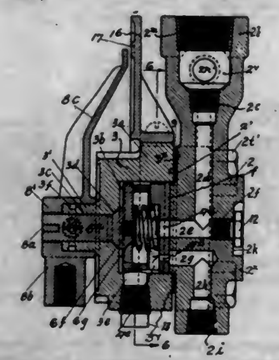
1. A differential comprising a pair of friction disks having peripheral gear teeth, an intermediate friction disk between the first named disks, pinions journalled to said intermediate disk and meshing with said gear teeth, axles keyed to the first named disks and journalled in said intermediate disk, means for driving said intermediate disk, and clamping means holding said disks in mutual surface contact.

1,883,726. KNIFE. JOHN R. WARREN, Grand Rapids, Mich., assignor to Catherine McGough and Frank Raymond McGough, doing business as F. H. McGough & Son, Grand Rapids, Mich. Filed Dec. 20, 1930. Serial No. 503,706. 2 Claims. (Cl. 15—236.)



1. In a device of the class described, an elongated blade of concavo-convex form provided with cutting edges adjacent both its longitudinal sides, and a pick on one side of said cutting edges near its lower end.

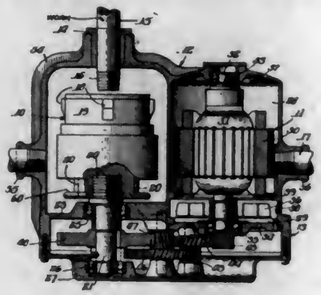
1,883,727. CONTINUOUS BLOW-OFF VALVE. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed June 28, 1930. Serial No. 464,602. 3 Claims. (Cl. 251—90.)



1. A continuous blow-off valve of variable capacity, comprising a valve body containing a valve cavity and presenting a circular valve seat which forms one end of said cavity, a circular valve disk positioned within said cavity and faced against said seat, said body and disk together containing a central passage which forms the fluid inlet of said cavity, said body also containing a discharge port which is spaced from the inlet passage, said disk containing a correspondingly positioned discharge port which is of less width than said discharge port in the body, a disk-rotating stem rotatably mounted in said body at the other end of said cavity, a telescopically assembled flexible coupling positioned in said cavity and

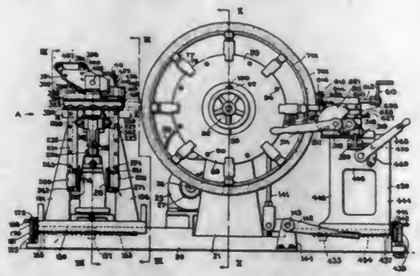
operatively uniting said disk and stem, an expansion spring confined between said disk and stem, and, self-indexing means provided upon the face of the body and coupled to the outer end of said stem.

1,883,728. PORTABLE POWER DRIVEN THREADING MACHINE. JOSEPH F. HAAS, Forest Park, Ill., assignor to Wodack Electric Tool Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 26, 1930. Serial No. 447,486. 4 Claims. (Cl. 10—95.)



1. A portable threading machine comprising a supporting structure having an elongated flat gear box, a motor housing carried by said gear box at one end thereof and projecting perpendicularly from the box, an angular frame extending from the projecting end of said housing and connected to the other end of said gear box, a threading tool rotatably supported in the space between said frame and said gear box and said motor housing, a guide supported by said frame in coaxial relation to said tool, a motor in said housing, speed reduction gearing in said gear box connecting said motor to said threading tool, and a pair of alined handles, one mounted on said angular frame and the other mounted on said motor housing.

1,883,729. TIRE TRIMMING MACHINE. JORGEN I. HAASE, Akron, Ohio. Filed Sept. 21, 1928. Serial No. 307,363. 15 Claims. (Cl. 29—27.)

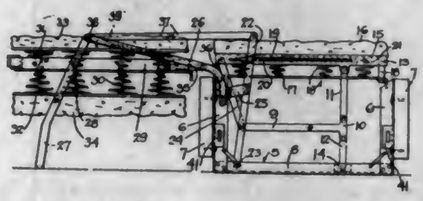


1. A machine for trimming a tire comprising a rotatable support for the tire, means for rotating the support, a mechanism for trimming an outer peripheral portion of the tire and movable to and from operative positions relative to the tire, means for moving said mechanism, and motor control means in the path of movement of the mechanism for controlling the rotating means for the support.

5. A machine for trimming a tire comprising a rotatable support for the tire, selective motors for rotating the support, mechanism for trimming the tread portion of the tire and including a motor, said mechanism being movable to and from operative positions relative to the tire and adapted to be operated while one of said selective motors is in operation, means for trimming the sides of the tire and adapted to be operated, while the other selective motor is in operation, means for moving the tread trimming mechanism, and motor control means in the path of movement of said mechanism.

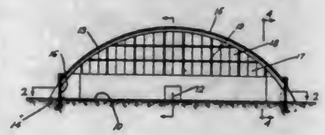
15. In a machine for trimming tires, a base comprising a stationary portion and a laterally movable portion, means for adjustably moving the movable portion of the base relative to the stationary portion, a plurality of pulleys rotatably mounted on the movable portion, an endless tire trimming member trained about the pulleys and means for operating the pulleys and trimming member.

1,883,730. COMBINATION DAY BED AND DAVENPORT. PHILIP HACKER, Brooklyn, N. Y. Filed Mar. 6, 1930. Serial No. 433,641. 4 Claims. (Cl. 5—31.)



4. In a day bed, a stationary frame, a movable frame including means by which the frame is mounted for sliding vertically in the stationary frame, means for raising the frame, a frame hinged to the stationary frame, pivotal supports carried by said hinged frame, arms connecting pivotally the supports to the stationary frame on an axis different from that of the hinged frame, and folding means connecting the means for raising the sliding frame to the arms.

1,883,731. INDOOR TENNIS COURT. GAVIN HADDEN, New York, and CHARLES A. HOLDEN, New Rochelle, N. Y.; said Holden assignor to said Hadden. Filed Feb. 21, 1930. Serial No. 430,198. 1 Claim. (Cl. 20—1.)

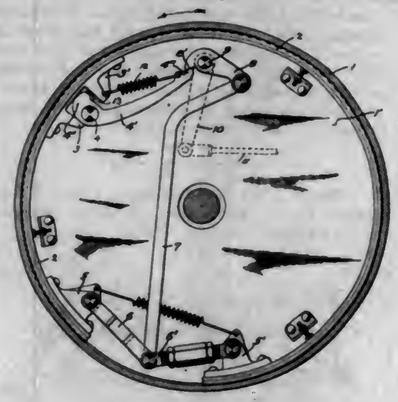


An indoor tennis court structure, comprising an oblong horizontal floor having a shape and dimensions corresponding to the playing surface for a standard tennis court, an opaque roof arching longitudinally over said floor from one end thereof to the other and having its greatest height along the transverse middle line of said floor, and translucent vertical side walls connecting the side edges of the floor and roof so as to enclose the space necessary for the flight of tennic balls with a minimum wall and roof surface, and to provide for lighting of the enclosed tennis court without glare.

1,883,732. COMPENSATING VEHICLE BRAKE. OTTO W. HAHN, San Francisco, Calif. Filed May 28, 1928. Serial No. 281,259. 6 Claims. (Cl. 188—2.)

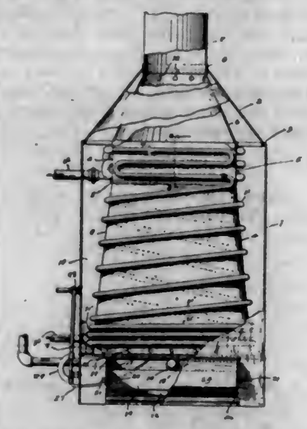
1. In a wheel brake, a brake drum and a fixed side plate, a braking element, means pivoted to the side plate for applying or forcing the element against said drum for arresting the same, means permitting bodily rotative movement of said element in direction of rotation of the drum upon application of the brake, and means for transferring a portion of the rotative energy thereby produced in the element back into the brake applying means, said means for transferring a portion of the rotative

energy comprising a lever pivotally anchored to a fixed member, means on the element anchored against a short end of said lever against rotation in both directions



whereby the lever must carry the torque developed by the element, and a long end to said lever fulcrumed against a portion of the means for applying the brake.

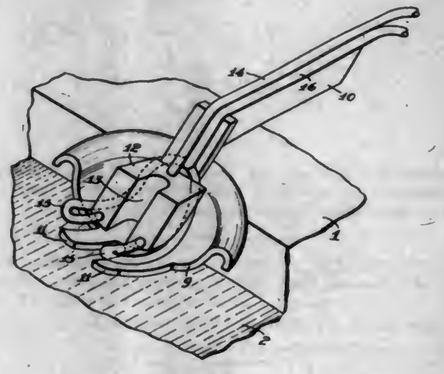
1,883,733. GAS WATER HEATER. OTTO W. HAHN, San Francisco, Calif. Filed July 11, 1928. Serial No. 291,840. 7 Claims. (Cl. 122—250.)



1. A water heater comprising a casing, a sheet metal vertically disposed tubular inner shell spacedly mounted in said casing and open top and bottom, water pipe coils mounted on the outside of the inner shell, a gas burner at the bottom of the inner shell arranged for its hot gases to pass upward through the shell, and means provided for causing a relatively small amount of the hot gases to pass upward from the burner through the space between the shell and casing.

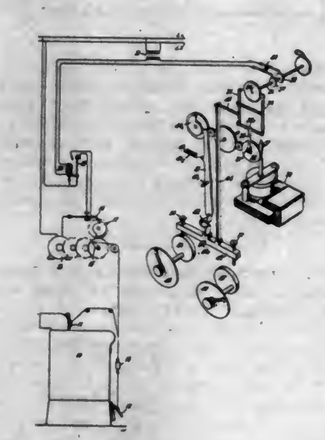
1,883,734. PROCESS AND APPARATUS FOR MAKING SHEET GLASS. HOWARD L. HALBACH, Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 27, 1931. Serial No. 511,477. 5 Claims. (Cl. 49—17.)

5. A process of holding the edge of a sheet of glass which is drawn upwardly from a molten bath which consists in passing the edge through a slot in a metal shielding member located above the glass but so close thereto that the meniscus of the sheet at the edge touches both sides of the slot, and chilling said edge by radiation from a cooling body just above the shielding member so as to



form a bead on such edge, said chill being applied uniformly around said bead for a substantial distance therealong.

1,883,735. MECHANICAL RELAY. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,844. 15 Claims. (Cl. 236—75.)

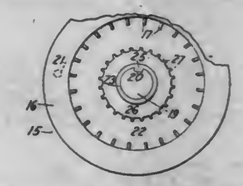


1. In a heat control device, a circuit controlling device having a member movable through a cycle to open and close a circuit, continuously oscillated means adapted to intermittently act upon said member to move said member through its cycle, and heat responsive means connected to said oscillated means to control the intermittent operation.

1,883,736. METHOD OF MAKING COMMUTATORS. FREDERICK W. COTTERMAN, Dayton, Ohio, assignor to Vincent G. Apple Laboratories, Dayton, Ohio. Filed May 23, 1929. Serial No. 365,490. 4 Claims. (Cl. 18—59.)

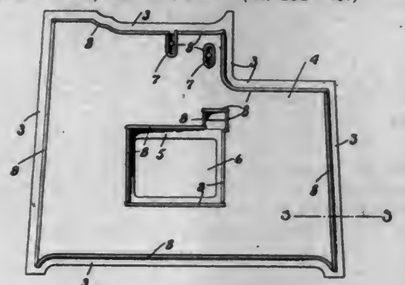
3. The method of making a commutator comprising a plurality of metal segments held in circumferentially spaced apart relation in a core of insulation, which consists of arranging the segments in the form of a cylindrical ring within a mold, keeping them circumferentially

spaced apart by holding them at both their outer and their inner edges, leaving the greater part of the space between them vacant, pressure molding the core of insulation with-



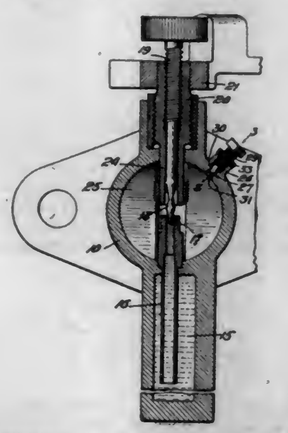
in the said ring and into the said vacant spaces while the segments are still held spaced apart at both their outer and inner edges, and hardening said core.

1,883,737. MAT. JAMES FRANCIS DUFFY, Holland, Mich., assignor to Duffy Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed July 31, 1930. Serial No. 471,924. 1 Claim. (Cl. 154—49.)



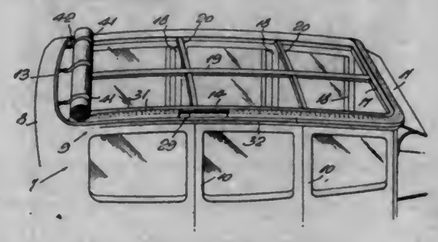
A mat comprising a relatively thick filler and a rubber covering secured thereto having an upper portion co-extensive with the upper side of said filler, said covering also having a relatively thin flexible marginal web, a substantially vertical border portion between said web and upper portion and narrow strip means fastened along the inner edge of the web and the outer edge of the filler member whereby the border portion is prevented from bulging outwardly.

1,883,738. CARBURETOR. THADDEUS B. EIKER, Jefferson Barracks, Mo. Filed July 19, 1932. Serial No. 623,404. 1 Claim. (Cl. 261—44.)



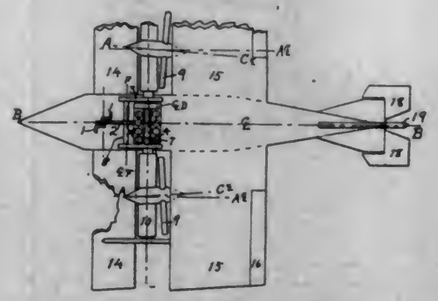
1. In a carburetor, an air-intake tube, a butterfly valve adjustably mounted therein, a stationary fuel nozzle extending into said air-intake tube in definite juxtaposition to the butterfly valve, the nozzle being within the area of movement of the valve, and means for actuating the butterfly valve, said valve being adapted to snugly fit the interior of the air-intake tube when positioned transversely therein, the wall of the tube being apertured and fitted with a closure plug, the inner end of said plug being slightly spaced from the inner surface of the tube whereby to provide a blind recess for the by-pass of a fuel mixture when the valve is positioned across the tube to bisect the recess, said by-pass being ineffective when the valve is opened beyond the limits of the recess.

1,883,739. ROOF FOR VEHICLES. JOHN H. FORD, Washington, D. C. Filed Mar. 28, 1930. Serial No. 439,808. 4 Claims. (Cl. 296—137.)



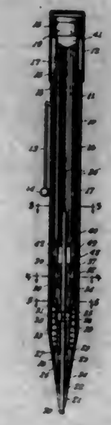
1. In a vehicle having an open top, frame members across the top, a flexible covering attached to one end of said top, fastener elements carried inwardly of and parallel to the free edges of the covering, cooperating fastener elements mounted on the top in uniform interlocking relation with said first named fastener elements throughout the sides and front of the top, means for interlocking said fastener elements and a channeled molding around the sides and front of said top receiving and concealing the second edges of the covering free from the tension of the said interlocked fastener elements.

1,883,740. AIRPLANE. HERBERT ELLWOOD IRWIN, Barons, Alberta, Canada. Filed May 31, 1930. Serial No. 458,813. 12 Claims. (Cl. 244—14.)



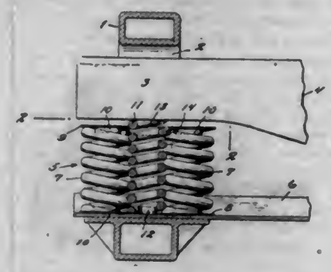
1. An airplane of the biplane type having wings rigidly secured to the fuselage, the front edge of the upper wing being to the rear and over the back edge of the lower wing, frame members on each side joining the upper wing with the lower wing, said frame members supporting bearing midway between the upper and lower wings, the bearing position being in front of the upper wing and to the rear of the lower wing, sleeve members on either side of the fuselage are supported by said bearings, motor driven propellers are secured to said sleeve members and are located in front of the upper wing and to the rear of the lower wing and means to oscillate the sleeve members together with the propellers.

1,883,741. PENCIL. ISRAEL KRUTT, New York, N. Y., assignor, by direct and mesne assignments, of five per cent to William A. Rappeport, New York, N. Y., forty-seven and one-half per cent to James J. Deegan and forty-seven and one-half per cent to Jean U. Koree. Filed June 25, 1927, Serial No. 201,295. Renewed Mar. 25, 1931. 3 Claims. (Cl. 120—17.)



2. In a mechanical lead pencil the combination with a reciprocating tube of a pair of floating jaws, means to move the jaws parallelly towards each other for clamping the jaws against the lead to restrain it against retraction and also to propel it, and means serving to parallelly separate the jaws and to carry them back free of the lead.

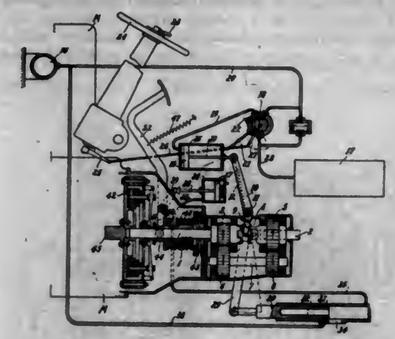
1,883,742. AUXILIARY SPRING MECHANISM FOR TRUCKS. MARK H. MARTIN, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed May 11, 1928. Serial No. 277,081. 7 Claims. (Cl. 267—4.)



1. In a railway car truck embodying side frames, a truck bolster, a spring nest located within the side frame for supporting the truck bolster, the spring nest having caps, and auxiliary spring means engaging one of the caps and operating constantly in parallel with the springs in the nest, the other cap being apertured for the passage of the auxiliary spring means.

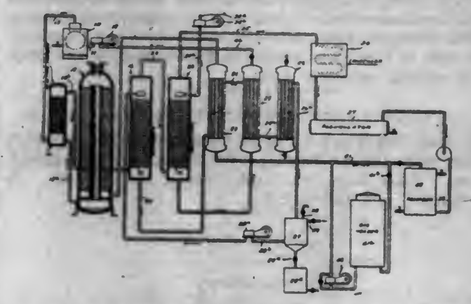
1,883,743. CHANGE SPEED GEAR. KARL MAYBACH, Friedrichshafen, Germany, assignor to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. Filed Aug. 29, 1931, Serial No. 560,174, and in Germany Sept. 6, 1930. 4 Claims. (Cl. 192—4.)

1. A change speed gear comprising a driving shaft and a driven shaft; means for driving said driven shaft at speeds of rotation different from the speed of rotation of said driving shaft, said means comprising at least two pairs of constantly meshing gear wheels; means for braking said driving shaft; means for causing a change in the speed of rotation of said driven shaft; and means in operative con-



nection with said changing means adapted to cause braking of said driving shaft whenever a speed change from a slower to a faster speed of said driven shaft is perfected.

1,883,744. CONVERSION OF HYDROCARBON OILS. EDWIN W. BEARDSLEY, Texas City, Tex., assignor to Petroleum Conversion Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,535. 10 Claims. (Cl. 196—61.)

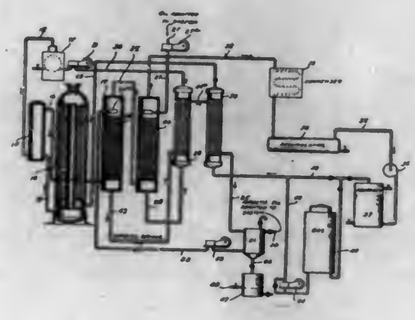


1. In the process of converting oil in the vapor phase in which the vapor to be converted is mingled with a heat-carrier gas having sufficient heat units to accomplish the conversion of the vapor so mingled therewith, the steps which consist in introducing the oil vapor into a reaction zone wherein conversion takes place and carbon is formed, passing the vapor products from said zone directly into a second zone, there introducing a scrubbing oil having light and heavy fractions under conditions of gas and liquid contact as to deprive said vapor products of substantially all of their entrained carbon and a portion of the heat in said products, passing said thus heated scrubbing oil as then constituted in the indirect heat exchange relation with the heat carrier gas and the hydrocarbon material to be converted continuously removing the carbon from said scrubbing oil as then constituted and re-using the carbon-deprived oil in said second zone as the scrubbing oil.

1,883,745. PROCESS FOR CONVERTING OILS AND SIMULTANEOUSLY RECOVERING ASPHALT. EDWIN W. BEARDSLEY, Los Angeles, Calif., and ALBERT P. SACHS, Brooklyn, N. Y., assignors to Petroleum Conversion Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1929, Serial No. 334,396. Renewed Jan. 14, 1932. 6 Claims. (Cl. 196—74.)

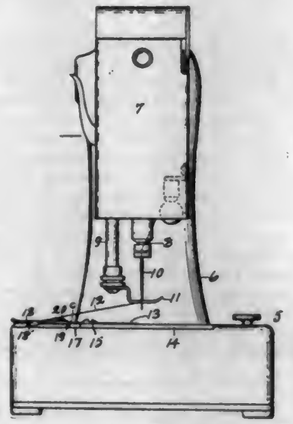
1. In the process of converting hydrocarbon oils into products suitable as motor fuels, and simultaneously obtaining asphalt from oils containing same, in admixture

with compounds of lighter molecular weight than asphalt the steps which consist in first subjecting said hydrocarbon oils first mentioned to conversion conditions by contacting same with a heated heat carrier gas physically mingled therewith in a closed chamber, leading the gas and vapor products produced in said chamber therefrom, adding to said stream of products in a second chamber,



said asphalt-bearing oil also containing fractions lighter than asphalt, so controlling the temperature in said second chamber as to vaporize the fractions lighter than asphalt without dropping out of said stream of products those substances lighter than asphalt, passing the gas and vapor products from said second chamber, and subjecting them to conditions producing liquefaction of said products suitable as motor fuels.

1,883,746. THREAD CUTTER FOR SEWING MACHINES OR THE LIKE. CHARLES W. H'DOUBLER, Springfield, Mo. Filed Sept. 17, 1930. Serial No. 482,552. 10 Claims. (Cl. 112—252.)



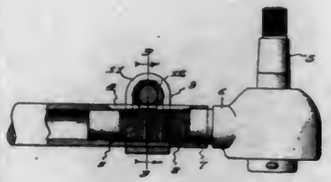
1. In combination with a thread utilizing machine having a presser foot, a thread cutter comprising a flat resilient member secured to the frame of said machine entirely to the rear of the presser foot and having a cutting edge disposed on the outer side edge of said member closely adjacent to said frame.

1,883,747. ABRADING ROLL. WILLIAM J. MADDOX, Jamestown, N. Y. Filed Aug. 19, 1926. Serial No. 130,245. 2 Claims. (Cl. 51—194.)



1. An abrading roll comprising a pair of end pieces adapted for reception upon the roll mounts of a rotary abrading machine, and an abrasive coated unitary tubular member of stiff paper composition supported only adjacent its ends by said end pieces.

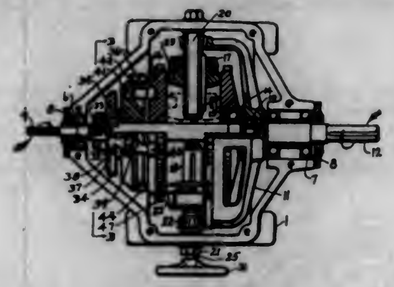
1,883,748. TIE ROD END CONNECTION. ERLE K. BAKER, Chicago, Ill. Filed June 26, 1930. Serial No. 463,921. 2 Claims. (Cl. 287—90.)



1. In a tie rod end connection, the combination of a housing containing a stud adapted for a limited universal movement therein, said housing having an externally threaded shank integral therewith, a tie rod internally threaded and longitudinally split at the end and adapted to be adjustably connected to said shank, and a split clamping ring surrounding said end of the tie rod for clamping it upon said housing shank.

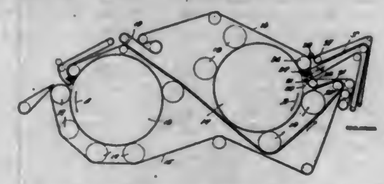
1,883,749. VARIABLE SPEED TRANSMISSION. EDWARD K. STANDISH, Stoughton, Mass. Filed Jan. 14, 1931. Serial No. 508,609. 11 Claims. (Cl. 74—26.)

3. A variable speed transmission comprising an input shaft, an output shaft, two plates mounted on the input shaft and connected by cog wheels, a plurality of rolls connected by cog wheels to the output shaft and driven by said plates, means for varying the speed of said rolls



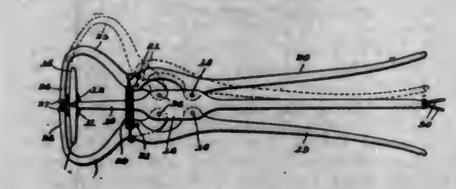
and means for automatically varying the pressure between said rolls and plates, as the load on the output shaft varies.

1,883,750. IRONING MACHINE. WILLIAM J. ASHER, Colorado Springs, Colo. Filed Mar. 7, 1930. Serial No. 434,113. 1 Claim. (Cl. 68—9.)



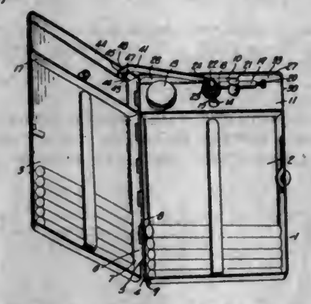
In an ironing machine, in combination, a rotatable drum and an endless apron associated therewith, a second rotatable drum and a second endless apron associated therewith, guide means for said aprons, including a plurality of rollers, whereby each is caused to bear against its associated drum and over a substantial area of its cylindrical surface, said means also bringing the two aprons together at a point adjacent the first drum, guiding them in closely adjacent parallel paths to a point adjacent the second drum and effecting the separation of the aprons at such point, the first apron returning to the first drum and the second apron passing on to the second drum, the first apron overlying the second after being separated therefrom and passing upwardly around a roller of said guide means positioned above the second apron prior to returning to said first drum, and means positioned adjacent said roller for directing streams of air downwardly and tangentially against the apron moving upwardly around the same for dislodging any article of work tending to adhere to the first apron after said aprons are separated, and forcing the same onto the second apron.

1,883,751. ANIMAL MOUTH TONGS. WARD ASHTON, Ottawa, Ontario, Canada, assignor to John Ormond Ker, Ottawa, Ontario, Canada. Filed Jan. 13, 1930. Serial No. 420,460. 8 Claims. (Cl. 128—14.)



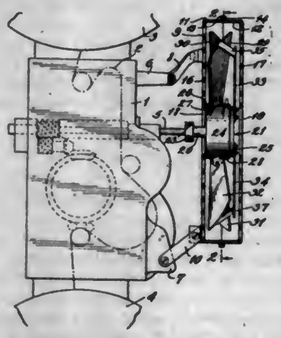
1. An animal mouth tongs comprising a fixed gag having a bore therethrough, a pair of pivotally mounted spring-held clamping jaws co-operating with said gag and formed with openings therethrough, a locking bar normally carried in the bore of the gag, and designed for detachable engagement with the openings in either of the clamping jaws to lock the jaw of an animal gripping the gag.

1,883,752. LIGHTER. JOSEPH E. BARNES, Chicago, Ill. Filed Mar. 8, 1929. Serial No. 345,377. 3 Claims. (Cl. 67—7.1.)



2. A device of the character described including a pair of hingedly connected hollow members, lighting mechanism in one of said members including a wheel, wheel-rotating means including a rack and a spring for moving the rack, a rod pivotally mounted in the other member and engageable with said rack and adapted to move the same to tension the spring upon opening movement of the members, and adapted upon continued opening movement of the members to release the rack to permit the spring to operate on the same, and yielding means for normally urging said rod into engagement with the rack.

1,883,753. COMBINED SHUTTER AND VENTILATOR. JOSEPH D. BASSON, Brooklyn, N. Y. Filed June 24, 1930. Serial No. 463,467. 8 Claims. (Cl. 88—19.3.)



1. A combined projecting machine shutter and ventilator having a hub, a plurality of inclined blades fixed on said hub and inclined in the same direction to a plane extending vertically to the axis of the hub, and a plurality of deflecting blades fixed on said hub to extend perpendicularly to the axis of the hub, in aggregate area corresponding substantially to the aggregate area of said inclined blades, and in registration with said inclined blades, said inclined blades drawing the air from the film of the projecting machine and said deflecting blades directing it outwardly away from the lamp of the projecting machine.

1,883,754. FILE. JAKOB BECK, Berlin, Germany. Filed Apr. 29, 1929, Serial No. 359,138, and in Germany Nov. 12, 1928. 6 Claims. (Cl. 129—5.)

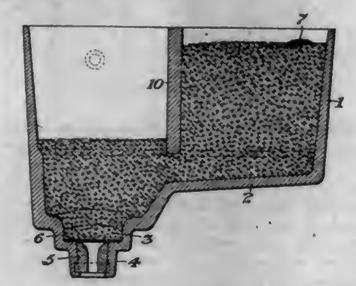
1. A file for holding the papers, books and the like to be filed, the pile of filed papers being compressed at the

filing points, comprising in combination with the file back, the filing pins and clamping springs inserted in the file back at the leaf-impaling points so that their ends project



over the edges of the file back, said ends of said clamping springs constructed to form holding means for said filing pins.

1,883,755. CRUCIBLE FOR ALUMINO-THERMIC REACTIONS. EDWARD F. BEGTRUP, Jersey City, N. J. Filed Mar. 23, 1932. Serial No. 600,815. 5 Claims. (Cl. 263—48.)



1. A crucible for alumino-thermic and similar reactions having a basin of general trough shape with a tap hole near one end of the bottom thereof.

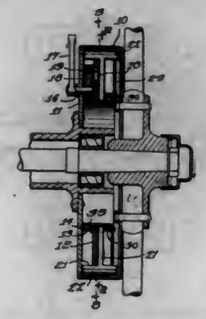
1,883,756. HEADGEAR. SIMON BLOOM, New York, N. Y. Filed Jan. 12, 1929. Serial No. 332,200. 1 Claim. (Cl. 2—172.)



In a headgear of the class described, a portion adapted to fit about the skull, the said portion at its bottom being circumferentially superimposed with an internal sweatband and with an external showband, the latter band having a stub thereof secured along its circumferential length, except at two intervals, to a position between the contiguous faces of said sweatband and said skull portion, the excepted stub portions at said intervals comprising oppositely positioned elongated sections adapted for earlaps, reciprocal slits through which said earlaps may be laterally deflected when in nonuse to a concealed position between the contiguous faces of said skull portion and said showband, the said earlaps at the same time being unfoldable to a downward position substantially as shown when required for use.

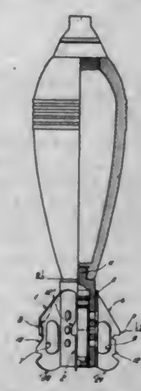
1,883,757. AUTOMOBILE BRAKE. BENJAMIN F. BOONE, Daytona Beach, Fla. Filed Oct. 15, 1929. Serial No. 399,778. 2 Claims. (Cl. 188—78.)

1. In a brake, a wheel carrying a brake-drum, a stationary disk carried by the axle-housing, a rotatable ring within the brake-drum, means exterior to the brake-drum for actuating said ring, a plurality of studs carried by said disk for supporting said ring, said studs extending through circumferential slots in the ring to permit the ring to rotate back and forth, and a plurality of brake-shoe-segments mounted on said disk in such manner as to be free to move radially inwardly and outwardly



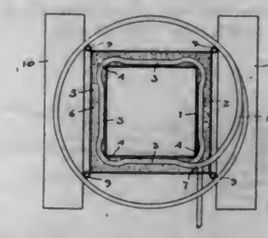
with respect to said ring, the means for causing this movement of the segments consisting of a pair of tangential slots in each segment and studs working in said slots and carried by said ring.

1,883,758. BLADED PROJECTILE. EDGAR WILLIAM BRANDT, Paris, France. Filed Oct. 24, 1930, Serial No. 491,045, and in France Nov. 9, 1929. 4 Claims. (Cl. 102—2.)



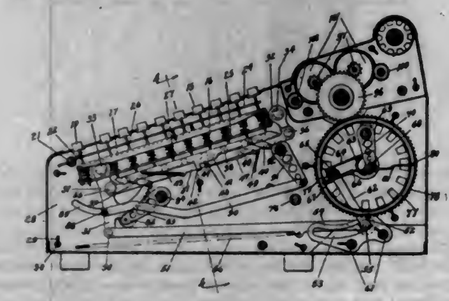
1. A projectile for smooth bore guns, comprising a body, a plurality of stabilizing blades mounted at the rear of the body, each blade comprising at least one perforation, and propulsion charges each extending through the perforation of at least one blade and held in position by the walls of said perforations.

1,883,759. REFRIGERATOR UNIT. ARTHUR E. BROWN, Burlington, Ontario, Canada. Filed Sept. 18, 1929. Serial No. 393,437. 6 Claims. (Cl. 62—99.)



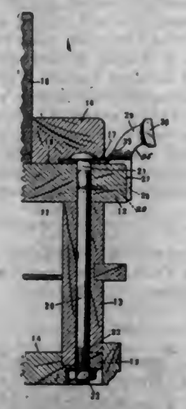
1. A refrigerating unit, comprising a casing, a coil of tubing encircling said casing, a coil of tubing spaced from and encircling the former coil, said first-mentioned coil being embedded in a solid filler of predetermined heat exchange value disposed mainly on the outward side thereof whereby a greater heat exchange will be effected between the embedded coil and the interior of the casing than between the embedded coil and the exterior of the casing.

1,883,760. CALCULATING MACHINE. JOHN BRICKEN (now by judicial change of name John George Beaver), East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Apr. 22, 1931. Serial No. 531,862. 2 Claims. (Cl. 235—82.)



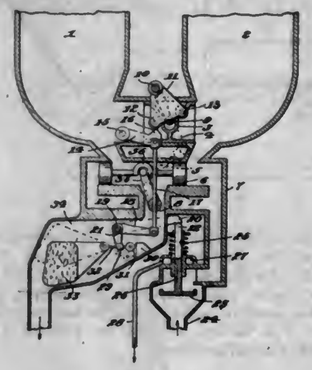
1. In a calculating machine having numeral wheels; actuators therefor comprising each a driven gear, two interconnected pawls, means for moving said pawls alternately into contact with said gear, and means for advancing one of said pawls varying distances to advance said gear differentially.

1,883,761. SAFETY ANCHOR. AINSWORTH BUCK, East Orange, N. J. Filed Jan. 9, 1930. Serial No. 419,726. 8 Claims. (Cl. 20—72.)



1. In a device of the class described, the combination of a building construction comprising a plurality of structural parts and provided with angularly disposed faces coacting to form an exposed angle, a one-piece window-cleaner's safety anchor fashioned to fit said angle, said anchor comprising a main plate fitted to one of said faces, provided with a non-circular bolt hole extending therethrough and with a face flange integral with an edge of said main plate and fitted to the other face, a post integral with said main plate and projecting therefrom at the edge provided with the face flange, said flange provided with a screw hole, a screw extending therethrough and into said other face, and a relatively long bolt having a non-circular head portion fitted in said bolt hole and held thereby from rotary movement when the bolt nut is turned on the opposite end, said bolt being offset from said screw, passed through said structural parts and acting as the primary means for securely fastening the anchor to the construction and said bolt also providing means for assisting in securing the structural parts in place and to defeat any tendency of abnormal strain on the post from separating the structural parts from each other.

1,883,762. APPARATUS FOR MEASURING AND FEEDING LIQUIDS. MARIO CARBONARO, Paris, France, assignor to Société Hardoll, Etablissements Hariveau et Dolimier et René Porte et Cie. Réunis, Seine, France. Filed June 6, 1929, Serial No. 368,877, and in France June 15, 1928. 15 Claims. (Cl. 221—100.)



1. A liquid measuring device comprising at least two measuring tanks, a filling conduit, a discharge conduit, a valve for closing said filling conduit, an element responsive to the liquid pressure in the tank being filled, a reversing element for alternately establishing communication of the tanks with the filling and discharge conduits, said reversing element being actuated by said pressure responsive element, and means for connecting said pressure responsive element and said valve for preventing the closure of said valve when said pressure responsive element is in position for the filling of a tank, and released by said pressure responsive element upon a partial displacement thereof when the tank is filled for permitting the closure of said valve.

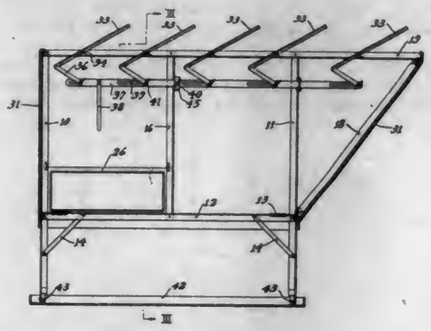
1,883,763. WALKING BEAM CONVEYER. RALF S. COCHRAN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Sept. 6, 1930. Serial No. 480,068. 2 Claims. (Cl. 198—219.)



2. In apparatus for conveying work in a series of steps or hops along a longitudinally extending bed within a furnace chamber, the combination of a carriage adjacent the outer end of said chamber, means for reciprocating said carriage toward and from said chamber, a second carriage mounted on the first-mentioned carriage, means for reciprocating the second carriage toward and from said chamber, a longitudinally extending member supported within said chamber and coupled at one end to the second carriage for reciprocation therewith, a second

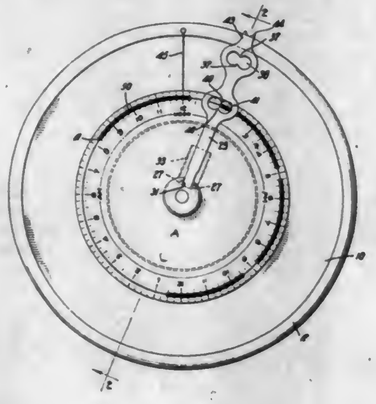
longitudinally extending member disposed within said chamber and secured at one end to the first-mentioned carriage, and rocker links between said members for maintaining them in parallelism.

1,883,764. SUN BATH APPARATUS. BERRY COLLINS, Birmingham, Ala., assignor, by mesne assignments, to Sun Bath Company, Birmingham, Ala., a Corporation. Filed Nov. 4, 1929. Serial No. 404,745. 5 Claims. (Cl. 174—177.)



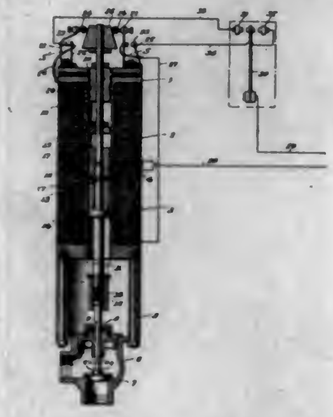
1. In a sun bath, a portable bed, upstanding side frame members around the bed, fabric enclosure means supported on the frames, a window frame pivoted at its top to the side frame, and covered by the fabric, a plurality of adjustable shading means over the bed to intercept the sun's rays, and means adapted to actuate all of said shading means simultaneously.

1,883,765. TOTALING DEVICE. HENRY R. COOL, Cleveland, Ohio, assignor to The Service Recorder Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 28, 1930. Serial No. 464,501. 4 Claims. (Cl. 235—83.)



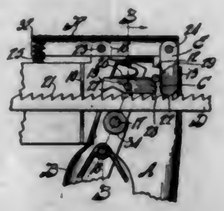
4. In a chart holding and totaling device, a plate member having a depressed concentric portion and a radial reference mark on its surface outside of said depressed portion, a rotatable inset in said depressed portion and substantially flush therewith and having means for securing a chart in place comprising a hub carried by said insert and a pointer adapted to overlie the chart and means for hingedly securing the pointer to said hub, said securing means permitting said pointer to have a vertical position at rest and a horizontal securing position at rest.

1,883,766. HEAT CONTROL DEVICE. BRYCE H. COX and HOMER I. SNOW, Winston-Salem, N. C.; said Snow assignor to said Cox. Filed Nov. 25, 1930. Serial No. 498,187. 1 Claim. (Cl. 236—75.)



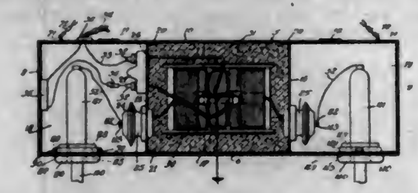
A heat control device including a thermostatic switch having a pair of circuit closing positions and electrically connected to an electrical source and a control valve provided with stops on the stem thereof, a support on the valve with the stem of said valve extending therein, a spool shaped element mounted on said support, electromagnets on the element between the ends thereof and electrically connected to the electrical source, a hollow core slidable in said magnets to strike the stops for opening the valve, a rod extending through the magnets and core and extending into the support, a sleeve secured to the rod and slidably receiving the stem of the valve, a spring between the stem of the valve and the rod and confined in said sleeve, a self closing switch on the spool element and electrically connected to one of the magnets and to the thermostatic switch, a self opening switch on said element adjacent the self closing switch and the electrically connected to the other magnets and to the thermostatic switch, a conical shaped head secured to the rod and operable between the self closing and self opening switches to open the self closing switch and to close the self opening switch according to the positions occupied by the rod under the influence of the core, and means for holding the core and rod when moved into their several positions by the energization of the magnets under the control of the thermostatic switch.

1,883,767. RATCHET MECHANISM. SAMUEL CREWE, East Cleveland, Ohio. Filed Aug. 26, 1927. Serial No. 215,598. 6 Claims. (Cl. 74—54.)



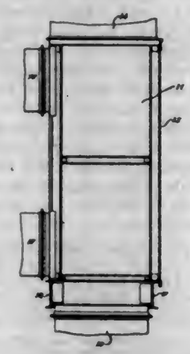
5. In a ratchet mechanism, a frame member, a pivot pin extending transversely through said frame member, an operating member extending into said frame member and pivotally supported by said pivot pin, a roller on said pin between the walls of said operating member, a longitudinally movable bar extending longitudinally through said frame and operating members and riding on said roller and permanently supported on said pivot pin, and a bar engaging pawl normally out of engagement with said bar and engaging the same opposite said roller for longitudinal movement of said bar upon manual movement of the operating member.

1,883,768. SIGN CABINET. JAMES C. DALEY, Chicago, Ill., assignor to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 21, 1930. Serial No. 446,039. 18 Claims. (Cl. 40—130.)



9. In a cabinet for gaseous tubes the combination of a pair of end compartments, an intermediate compartment disposed between said end compartments, a transformer in said intermediate compartment, an insulating compound enclosing said transformer and filling said intermediate compartment only, and a gaseous tube having electrodes entering said end compartments and connected with said transformer in said end compartments.

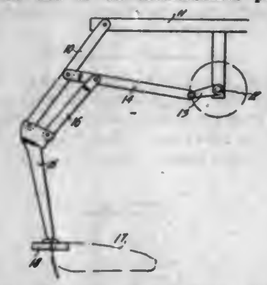
1,883,769. HEAT TRANSFER APPARATUS. GARDNER C. DERRY, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Original application filed Aug. 10, 1928, Serial No. 298,804. Divided and this application filed Feb. 15, 1930. Serial No. 428,620. 12 Claims. (Cl. 257—245.)



1. A heat transfer apparatus having, in combination, a casing having provision for conducting hot gases thereto and therefrom, inlet and outlet openings in the casing for the gases to be heated, a series of chambers in the casing spaced apart from one another and having inlet and outlet openings adapted to register with the inlet and outlet openings in the casing, and being provided with flanges adjacent their inlet and outlet openings, certain of the flanges having a groove, the flange of one chamber engaging the groove on the flange on the adjacent chamber to close the space between said chambers.

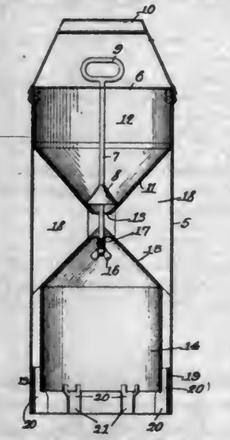
1,883,770. LINK MECHANISM. WILLIAM DOWLING, East Malvern, Victoria, Australia. Filed Sept. 10, 1929, Serial No. 391,628, and in Australia Sept. 13, 1928. 2 Claims. (Cl. 74—14.)

1. Link mechanism including a main arm pivotally mounted on a suitable frame, a crank rotatably mounted on this frame, an operating arm pivotally connected to the free end of the main arm and provided at its free end with operating means, a connecting rod pivotally connected at one end to an intermediate portion of the



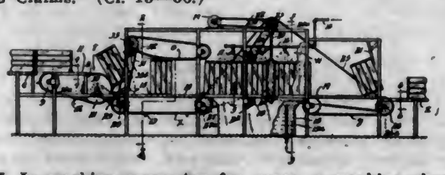
main arm and at its opposite end to the crank and a link connection between the connecting rod and the operating arm.

1,883,771. COMBINED PLANT DUSTER AND FERTILIZER. EARL C. DUNCAN, St. Anne, Ill. Filed Sept. 16, 1931. Serial No. 563,187. 2 Claims. (Cl. 111—1.)



1. A device of the class described comprising a body portion, said body portion having a compartment for containing fertilizer, means for controlling the passage of fertilizer from the compartment, a distributing member positioned within the body portion and onto which the fertilizer passes upon leaving the compartment, means for preventing rotary movement of the distributing member with respect to the body portion, said distributing member being spaced from the body portion to provide an annular passageway, and fingers extending from the distributing member for stirring the ground on which the fertilizer has been deposited.

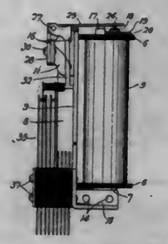
1,883,772. WASHING AND SCRUBBING APPARATUS FOR CASES AND BOXES. JOHN W. ENGHOLM, Minneapolis, Minn. Filed Apr. 12, 1930. Serial No. 443,868. 8 Claims. (Cl. 15—56.)



7. In washing apparatus for cases, a washing chamber, means for moving cases through said washing chamber in end-up position, scrubbing brushes in said cham-

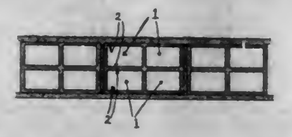
ber for operating upon the walls of said cases, a conveyor receiving from said washing chamber and a striker member disposed above said conveyor for engaging the upper ends of said cases in their travel and tipping the same into open-side-up position.

1,883,773. ELECTROMAGNETIC RELAY. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 18, 1931. Serial No. 538,058. 10 Claims. (Cl. 175—336.)



1. In an alternating current relay, a magnetic structure comprising a U-shaped member having a winding on one of the legs, a non-magnetic supporting member on each side of the other of said legs, means on one end of said supporting members for supporting the armature of the relay in operative relation to the end of said first leg, means on the other end of said supporting members for mounting the relay as a unit, means on each of said supporting members for mounting a set of contact springs controlled by the armature, and means on said supporting members for adjusting the movement of the armature against the first leg of the relay.

1,883,774. MEANS FOR INSULATING BUILDINGS AND LIKE STRUCTURES. JOSEPH LOUIS FINCK, Washington, D. C. Filed Feb. 1, 1928. Serial No. 251,112. 16 Claims. (Cl. 72—16.)



3. A wall structure including elements containing one or more air spaces, the pressure within said air spaces being approximately equal to that of atmospheric pressure, and the heat transmitting surfaces defining said air spaces being coated with a thin film of metal.

1,883,775. AUTOMATIC TEST-SCORER. ERWIN O. FINKENBINDER, Cedar Falls, Iowa. Filed Apr. 21, 1930. Serial No. 446,071. 1 Claim. (Cl. 35—12.)
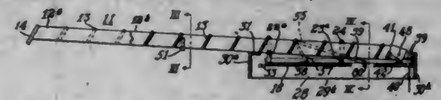


A device for marking tests automatically, comprising superposed pages, the uppermost page having defined areas for receiving answers to questions, one or more carbon areas on the under face of said uppermost page of less size than the page and one or more carbon areas on the top face of the next page of less size than said page with appropriate spaces left uncarboned in the respective areas, the uncarboned spaces and the carbon areas being adapted for registering relation to each other when the pages are superposed one upon the other, whereby only those markings indicative of correct answers will be manifolded and at the same time segregated upon the one page while incorrect markings will be manifolded segregated on another page.

1,883,776. CABINET. BENJAMIN FRANKLIN FORSYTH, Chicago, Ill., assignor of one-third to Essea E. Gordan and one-third to Edmund J. Forsyth, Chicago, Ill. Filed Sept. 9, 1931. Serial No. 561,893. 7 Claims. (Cl. 312—155.)



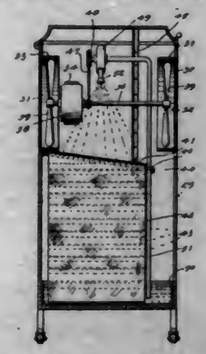
5. In a cabinet of the character described, a semi-cylindrical container mounted rotatably about a horizontal axis in said cabinet and a self-leveling independently movable supplemental article holder comprising a tray suspended in said container from an axis coinciding with the axis of the container.

1,883,777. CONCEALED STAIRWAY. BERT FRAZIER, Pittsburgh, Pa. Filed June 17, 1929. Serial No. 371,313. 6 Claims. (Cl. 228—50.)



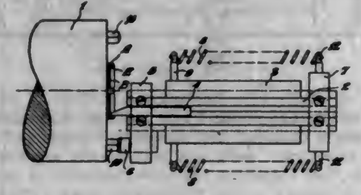
2. In combination, a hinged trap door, a stair slidably supported thereon in such manner that it may be moved up into the space above the trap door or slid down to a floor below, characterized by having a handle-rung extending across the stair near the bottom end thereof, a stop member on the upper surface of the trap door near the bottom end of the latter, and a gravity-actuated hinged latch having a limited swinging movement in a vertical plane about a pivot secured to the inner face of one of the stringers of the stair and having an inclined latch-end engageable with said stop member, and means operable from said handle-rung for releasing said latch from said stop-member.

1,883,778. AIR CLEANSING AND COOLING DEVICE. CLAUD W. FREEMAN, Fort Worth, Tex. Filed Oct. 4, 1930. Serial No. 486,436. 6 Claims. (Cl. 261—104.)



1. An air cleansing and cooling device, comprising a cabinet having an inlet opening in one wall and an outlet opening in an opposite wall, a fan disposed before one of said openings, a motor for operating said fan, a chamber enclosing the fan and covering the adjacent opening and further having an inlet through the lower part thereof, a plurality of absorbent bodies suspended to hang vertically in the cabinet between the inlet and the outlet openings, a liquid receiving receptacle in the bottom of the cabinet, and means for removing the liquid from the receptacle and discharging it over the absorbent elements.

1,883,779. METHOD AND MEANS FOR FINISHING TIMEPIECE BALANCE WHEELS. GEORGES GALLAY, Le Sentier, Switzerland. Filed May 25, 1931, Serial No. 539,890, and in Switzerland Aug. 12, 1930. 4 Claims. (Cl. 82—1.)

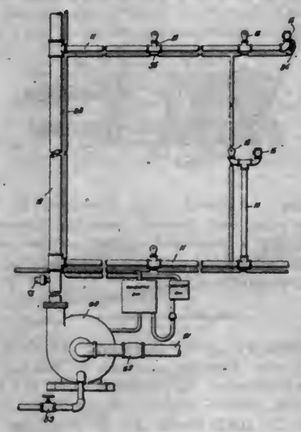


1. The method of finishing the inner surface of the rims of wheels having arms or spokes, which consists in centering the wheel on a rotatable work carrier, rotating the work carrier with the wheel thereon, feeding a tool radially against the inner surface of the rim of the wheel, and axially shifting the tool away from and towards the work carrier in timed relation to the rotation thereof to provide for the passage of the spokes of the wheel in front of the tool.

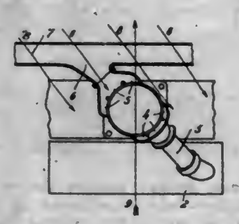
4. A lathe for finishing the inner surface of the rim of wheels having arms or spokes, comprising a rotatable work carrier adapted to have the wheel centered on a face thereof, fingers projecting from said face and corresponding in number to the number of spokes of the wheel to be finished, said fingers being situated exteriorly of the wheel rim when centered on this face and on the longitudinal axis of each spoke thereof, a tool disposed to work on the inner face of the wheel rim, a tool carrier, spring means acting to approach the tool carrier to the work carrier, and abutting means on the tool carrier situated in a predetermined position relative to the tool and coacting with said fingers on the work carrier for effecting relative axial movement between the tool carrier each time a spoke of the wheel approaches the tool.

1,883,780. AUTOMATIC SPRINKLER. WILLIAM GERLACH, WILL E. GERLACH, and BUDDY GERLACH, Memphis, Tex. Filed Apr. 23, 1930. Serial No. 446,644. 1 Claim. (Cl. 169—17.)

A sprinkler system comprising a motor driven pump, a normally empty pipe connected with the pump and having an open end, thermostatically controlled sprinkler heads mounted upon said pipe, said thermostatically controlled heads including elements fusible at a temperature corresponding to fire conditions, thermostatically controlled operating mechanism including elements fusible at a lower melting point than the elements of the sprinkler heads, and located in the zones protected by said sprinkler heads, a normally open valve located at the open end of the pipe constructed and arranged to close the pipe when subjected to pressure from within the pipe, a normally open electrical supply circuit connected with the motor, means for closing said circuit when one or more of the fusible elements of the operating mechanism melt, a valve controlled water supply pipe connected with the pump and means operable by the operation of the pump for controlling the valve of said supply pipe.



1,883,781. MULTICYLINDER TWO-STROKE INTERNAL-COMBUSTION ENGINE. FRITZ GOSSLAU, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Aug. 28, 1930, Serial No. 477,220, and in Germany Sept. 20, 1929. 3 Claims. (Cl. 123—55.)

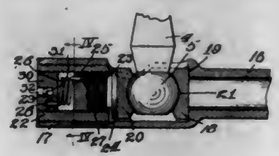


1. A multi-cylinder air cooled two stroke internal combustion engine for air craft having radiating ribs on its cylinders cooled by the air draft passing along the craft and having a common manifold respectively for the intake and exhaust ports of said cylinders and pipe connections between the two ports of each cylinder and their pertaining manifold, said manifolds being arranged on either side of the central plane through all cylinders, the two pipe connections of each cylinder being disposed in a common plane extending at an acute angle to said central plane, and following substantially the direction of the cooling air currents to which the cylinders are exposed.

1,883,782. SELF-ADJUSTING BALL JOINT. MATTHEW P. GRAHAM, Detroit, Mich., assignor to Thompson Products, Inc., Detroit, Mich., a Corporation of Michigan. Filed Dec. 24, 1928. Serial No. 328,209. 4 Claims. (Cl. 287—90.)

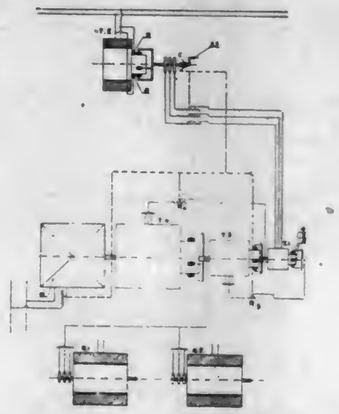
1. A ball joint comprising a housing member having a cylindrical bore extending through one end thereof,

said bore terminating in a shoulder at the other end of the housing, ball seat members in said housing, one of which rests against said shoulder, a ball stud, having a ball end positioned between said seat members, a screw plug threaded in said bore and bearing against one of said



seat members, a second plug threaded in said bore through the open end thereof, securing means for said second plug and a torsional spring secured at its ends to said plugs for urging said first plug against the other of said seat members.

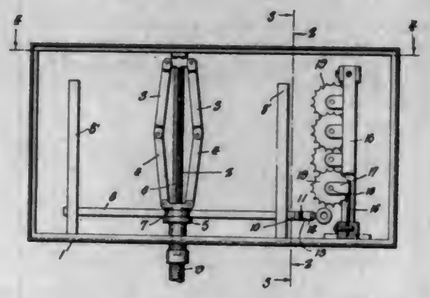
1,883,783. RELAY FOR DISTANT CONTROL. ELIE GRANAT, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France, a Company of France. Filed Feb. 17, 1932, Serial No. 593,671, and in France June 26, 1928. 4 Claims. (Cl. 172—239.)



1. A polyphase distant control device comprising a series of generators each constituted by two windings, common adjustable means for making one winding of each generator rotate with reference to the other with the desired angular velocity, an auxiliary transmitter feeding one winding of the first generator, means whereby the excited winding of each generator feeds the exciting winding of the next generator, receivers each constituted by two windings adapted to rotate one with reference to the other, wires connecting one winding of each receiver with the excited winding of the last generator, a rotary part at the auxiliary transmitter adapted to modify the frequency of the current fed to the first generator, means for controlling the generator exciting current and making its intensity follow a predetermined law and means for feeding the second windings of the receivers with current adapted to restore the angular concordance between the fields of the receivers when the rotary part is stationary.

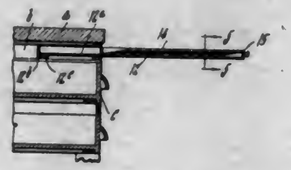
1,883,784. CENTRIFUGAL SWITCH. OLIVER D. GRIFFIN, Salt Lake City, Utah. Filed Apr. 14, 1930. Serial No. 444,233. 1 Claim. (Cl. 200—80.)

In a circuit closer, a vertically directed revoluble spindle carrying a governor, said governor having a lower peripherally grooved sleeve which is both slidably and revolubly arranged on the spindle, a bar having a central ring portion received in the groove of the sleeve, slotted plates providing guides for the bar, said bar having one of its ends formed with a lateral head, a substantially U-shaped metal member secured to but insulated from the head, a roller journaled in the arms of the U-shaped member, a vertical frame of insulating material adjacent the roller, spaced series of metal arms secured respectively to



the top and bottom of the frame, and the upper and lower arms being of different lengths and having pairs of spaced ears on their outer ends, and peripherally grooved metal wheels having trunnions that are journaled in said ears and the periphery of the said wheels being arranged for respective contact by the roller upon the upward and downward movement of the slide when the latter is influenced vertically by the governor.

1,883,785. DESK ADJUNCT. BERTRAM C. HAMM, Cambridge, Mass. Filed June 24, 1929. Serial No. 373,099. 1 Claim. (Cl. 45—90.)

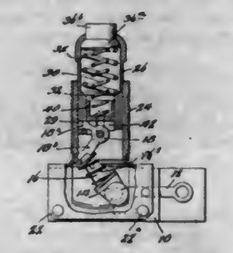


An office desk of the type used by a person in a seated position having superposed drawers beside the position occupied by the seated user of the desk, and a slide arranged between the desk top and the uppermost one of such drawers adapted to be either pulled out and serve as a support or to be pushed in under the desk top out of the way, distinguished by the fact that in place of such slide is substituted a shallow drawer of substantially the same dimensions as the slide adapted to occupy the recess provided for the slide and to be pulled out and pushed in, combined with cards or the like occupying the drawer in overlapping relationship, adapted to be raised for inspection of matter noted on the cards, but when lying in normal position being wholly contained within the interior space of the drawer.

1,883,786. PUSH SWITCH. HANS CHRISTIAN HANSEN, West Hartford, and ALFRED JOHN BENNETT, Hartford, Conn., assignors to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed May 5, 1931. Serial No. 535,224. 3 Claims. (Cl. 200—67.)

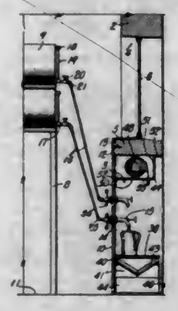
3. An electric switch comprising a casing, a sleeve mounted on said casing, a plunger slidably engaged with said sleeve, a spindle journalled in said sleeve and passing through a slot in said plunger to limit the movement

thereof, a button in said plunger and movable relatively thereto, main and auxiliary springs in said plunger pressing against said button and constantly urging said plunger



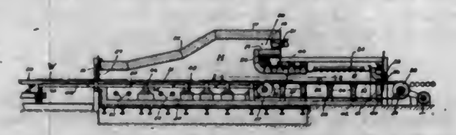
and button in one direction, a switch lever mounted on said spindle, and switch mechanism actuated by said lever, as said plunger is moved.

1,883,787. LIQUID DISPENSING APPARATUS. JAMES E. HEAD and CHARLES F. LUKINS, Tulsa, Okla. Filed Oct. 6, 1930. Serial No. 486,707. 1 Claim. (Cl. 221—68.)



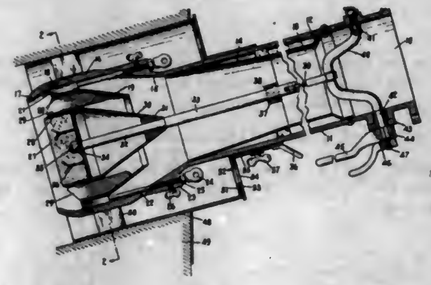
In combination with a housing having a side wall, series of horizontal containers in the housing, sight glasses on the front end of said containers, a window in the side wall for exposing the containers and sight glasses, a faucet panel in said wall below the window, series of faucets mounted in the panel and having outlet openings outside the housing, said faucets including body portions extending into the housing having valve means operable from the panel front for controlling flow of liquid from the faucets, and conduits for conveying liquid from the containers to respective faucets on the panel.

1,883,788. CONVEYING MECHANISM FOR FURNACES. WILLIAM M. HEPBURN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Sept. 6, 1930. Serial No. 480,082. 19 Claims. (Cl. 263—6.)



8. In combination, a furnace having a heating chamber wherein the work is brought up to temperature, a vertically and horizontally reciprocable conveyer for moving the work in a series of hops or steps through the heating chamber, a cooling chamber forming a continuation of said heating chamber, and an endless conveyer the upper flight of which extends longitudinally within the cooling chamber to form a bed on which work discharged from the reciprocable conveyer is received for passage through the cooling chamber.

1,883,789. BURNER. DAVID J. IRISH, Richmond, Staten Island, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1928. Serial No. 310,481. 2 Claims. (Cl. 110—104.)



2. A pulverized burner which comprises a tubular nozzle wall expanded towards its outlet end and having an inturned outlet edge, an inner wall within said expanded portion of said nozzle wall, said inner wall having a larger diameter part and a contracting portion and forming an inner passage, supporting vanes between said inner wall and said enlarged portion of said nozzle, inner deflecting vanes within said inner passage, means for moving said inner wall longitudinally of said nozzle, and a valve movable longitudinally in said inner passage to or from the contracting portion thereof.

1,883,790. FUSE CLIP. JOHN G. JACKSON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 28, 1929. Serial No. 403,071. 11 Claims. (Cl. 200—134.)

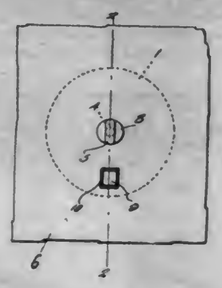


1. In a mounting for fuses having terminal contact portions, a clip having a substantially U-shaped base and converging arms extending at substantially right angles from the arms of the U base and having open return bent portions substantially parallel to each other and adapted to grip and hold a terminal contact portion of a fuse.

1,883,791. SIGN. HAROLD D. JEWELL, Detroit, Mich. Filed June 13, 1932. Serial No. 616,088. 1 Claim. (Cl. 40—125.)

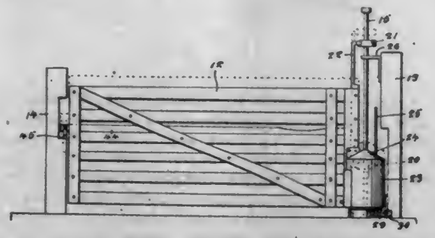
A sign comprising a vacuum cup engageable with a support, an integral shank projecting centrally from the outer side of the vacuum cup, an integral, a reduced neck projecting from the free end of the shank, a card mounted on the neck, a T-head on the free end of the neck, a washer mounted on the neck between the card and the T-head,

said card having an opening therein in spaced relation to the neck, and a finger projecting from a marginal portion of the vacuum cup through the opening and providing



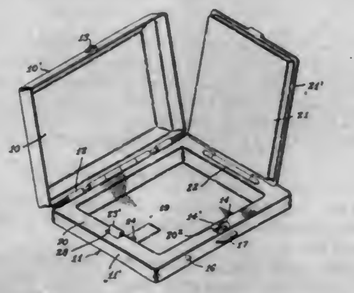
means for detaching the vacuum cup from the support, said finger extending substantially in spaced parallelism with the shank and the neck.

1,883,792. GATE. LAWRENCE U. JOBES, Greenville, Ohio. Filed Dec. 8, 1930. Serial No. 500,889. 1 Claim. (Cl. 16—154.)



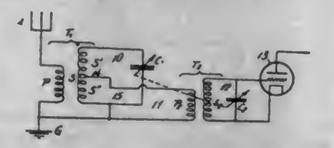
A hinge structure comprising a vertically supported shaft, a cylindrical member having a cam edge surrounding the shaft a closure member slidable over said cylindrical member and journaled upon the axis of the shaft and adapted to be raised and lowered when turned, brackets adapted to be mounted upon a post to support the shaft in vertical position, a bearing housed within the closure member and slidable upon the lower portion of the shaft and a vertical arm attached to the closure member and having at its upper end an angularly disposed hinge portion slidable upon the upper portion of the shaft.

1,883,793. VANITY CASE. FRITZ RUDOLPH JOHNSON, Providence, R. I. Filed Oct. 14, 1931. Serial No. 568,698. 10 Claims. (Cl. 132—83.)



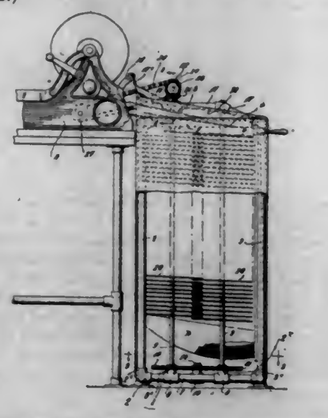
1. A vanity case comprising a pair of complementally flanged casing forming members hinged together to define when closed a box-like receptacle, coacting locking means for said members including a pressure-actuated catch, a blade spring carrying said catch and fastened at one end to the inner face of the flange of one of said members and formed at its free end as a bowed friction element, and a powder holding unit lodged in one of said casing members and retained by the bowed end of said spring against accidental displacement from said casing member.

1,883,794. RADIO RECEIVING APPARATUS. JOHN KELLY JOHNSON, Rye, N. Y., assignor to Hazeltine Corporation. Filed July 7, 1931. Serial No. 549,164. 16 Claims. (Cl. 250—20.)



1. Signal selecting circuits for a radio receiver comprising a circuit tunable to the frequency of the current it is desired to receive, a second circuit tunable to the same frequency, and a link circuit connecting portions of the impedances of each of said circuits, the portion of the impedance of the first of said circuits being shunted by a circuit resonant to the current of a frequency it is not desired to receive and said link circuit being made resonant to current of a frequency lower than the band of frequencies to which said circuits are tunable.

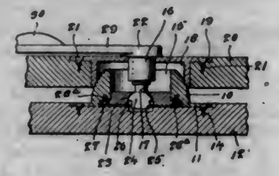
1,883,795. AUTOMATIC DRYING DEVICE FOR INKED SHEETS. HENRY M. KANNEE, New York, N. Y. Filed June 5, 1930. Serial No. 459,316. 7 Claims. (Cl. 198—213.)



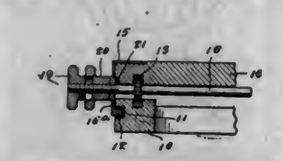
7. In drying devices for inked paper sheets, means for feeding sheets of paper edgewise and in succession, a plurality of opposed sets of vertically disposed, helically spiral plate-like supports for gravitational feed of said sheets and means for rotating the supports in synchronism with the edgewise sheet feeding mechanism so that the sheets will successively fall into position upon the sets of helically spiral supports when the topmost area of each support lies under a margin of a sheet said means rotating the supports of each set in opposite directions.

1,883,796. MOUNTING FOR CAMERA FRAME YOKES. MELBERT KING, Altoona, Pa. Filed Dec. 7, 1931. Serial No. 579,599. 2 Claims. (Cl. 248—30.)

1. A mounting of the kind indicated comprising a base member of any spherical contour, a cap member having an annular flange for bearing engagement with the base member, and clamping means carried respectively by the base member and cap member for binding the annular flange of the latter on the spherical surface of the former, the clamping means consisting of a screw having a universal mounting in the base member and a nut engaging the screw and rotatably mounted in the cap member, the nut having a head forming a shoulder with the body of the screw, said shoulder bearing on top of the cap portion.

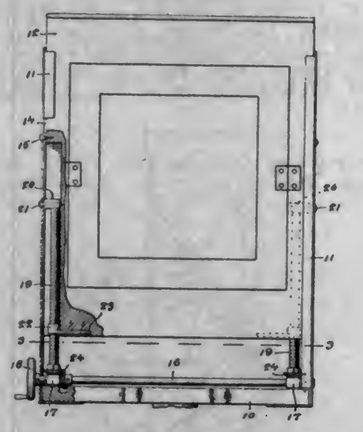


1,883,797. CARRIAGE ADJUSTMENT FOR CAMERA FRAMES. MELBERT KING, Altoona, Pa. Filed Dec. 7, 1931. Serial No. 579,598. 2 Claims. (Cl. 95—46.)



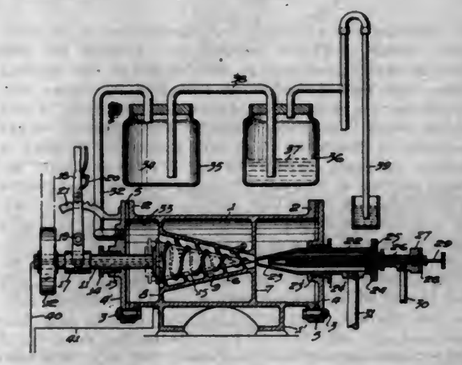
1. A device for the purpose indicated comprising a base, a carriage slidably mounted on the base and provided with guides entering guide grooves on the latter, operative connections between the carriage and the base for effecting movement of the former along the latter in small increments, and a clamping member carried by said means, one of the guides having a movable element engageable by said clamping member to lock the carriage in any adjusted position.

1,883,798. CAMERA FRAME ELEVATOR. MELBERT KING, Altoona, Pa. Filed Dec. 7, 1931. Serial No. 579,600. 1 Claim. (Cl. 95—51.)



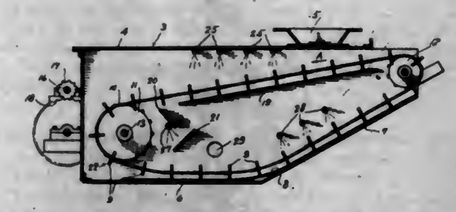
In combination with a camera frame and yoke, the latter being provided with upright guides in which the former is slidably mounted, vertical elevating screws disposed adjacent the legs of the yoke and journalled in blocks mounted on the bottom of the yoke and other blocks secured to the legs of the yoke, the frame being slotted on opposite sides and the screws being disposed in said slots, nuts threadingly engaging the screws and formed with extensions having fasteners securing them to the under edge of the frame in slots formed in said under edge, a transverse shaft spanning the yoke and journalled in the lower of the blocks in which the screws are journalled at their lower ends, miter gear connections between said shaft and said screws, and an actuating handle for imparting rotary or turning movement to said shaft.

1,883,799. PRODUCTION OF ACETYLENE FROM PETROLEUM OIL. HERMAN B. KIPPER, New York, N. Y., assignor to R. Baylor Knox, Bronxville, N. Y. Filed Sept. 11, 1930. Serial No. 481,253. 3 Claims. (Cl. 204—31.)



1. An apparatus for destruction of petroleum at a high temperature in a hydrogen atmosphere which comprises a casing defining a chamber, electrodes concentrically disposed in said chamber, a feeding tube horizontally disposed at one end of the chamber and adapted to direct a spray of oil and gas between said electrodes, means for rotating one of the electrodes with respect to the other and means for moving one of the electrodes longitudinally with respect to the other for varying the distance between the electrodes.

1,883,800. MATERIAL WASHING MACHINE. GEORGE E. KRIDER, Duncansville, Pa., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1932. Serial No. 598,284. 3 Claims. (Cl. 209—463.)



1. In a structure of the class described, in combination, a housing, upper and lower driven shafts mounted for rotation in opposite end portions of said housing, sprocket wheels carried by said shaft, an endless drag equipped conveyor trained over the sprocket, a material feeding hopper attached to the top of the housing adjacent one end thereof, a downwardly and rearwardly inclined partitioning plate between the side walls of the housing underlying the hopper and a portion of the upper flight of the conveyor, the bottom of the housing having its rear end portion substantially level and its forward end portion inclined upwardly toward the material discharge end of

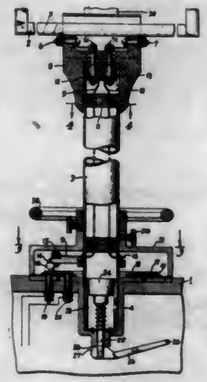
the housing, means for introducing water into said housing, an elevated side drain carried by one wall of the housing to regulate the water level and to carry off portions of the dirt washed from the material treated.

1,883,801. SIGNAL DEVICE. OSCAR KRUEGER, Chicago, Ill. Filed Dec. 26, 1928. Serial No. 328,607. 1 Claim. (Cl. 200—59.)



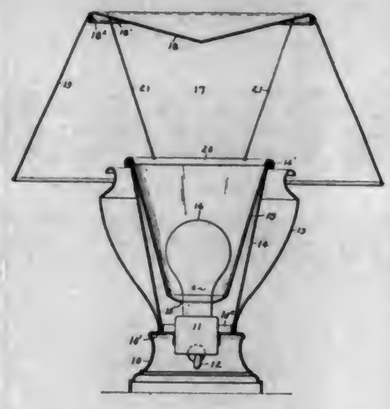
In combination with the steering column of an automotive vehicle, a switch mechanism, a housing for said switch mechanism adapted to be mounted on the steering column, said switch mechanism including stationary contacts, means for mounting said stationary contacts in said housing, movable contacts providing arm members, means for pivotally mounting said arm members including a manually operated member having a right-angularly extending portion at one end providing a handle and having a right-angularly extending portion at the opposite end, said last-mentioned portion extending between said arm members whereby when said handle is operated in one direction one of said arms will be moved into contacting engagement with one of said stationary contacts and the other of said stationary contacts will be in disengaged position and whereby when said handle is operated said last-mentioned arm will be moved into contacting engagement with one of said stationary contacts and said first-mentioned arm will be released from contacting engagement, and means for mounting said manually operated member on the steering column of an automotive vehicle.

1,883,802. RADIOCOMPASS. HORATIO W. LAMSON, Arlington, Mass., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1928. Serial No. 249,095. 4 Claims. (Cl. 250—11.)



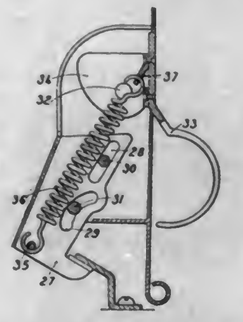
1. In a device of the class described a radio receiving set, a loop, an elongated connector between said set and said loop for supporting the latter, said connector being separable from both said set and loop, means carried by said connector for establishing electrical connection between said loop and set, relatively movable means carried by said set and said connector whereby the relative position of the set and loop may be indicated, a portion of said movable means being adjustable relative to its carrier, a resilient sleeve mounted concentrically of said connector, and a tapered member adapted to cooperate with said sleeve and said connector to hold said connector in fixed relation to said set, while said portion of said movable means is being adjusted.

1,883,803. ELECTRIC LAMP. HORACE G. MARTIN, Jr., New York, N. Y. Filed Oct. 3, 1929. Serial No. 396,984. 2 Claims. (Cl. 240—81.)



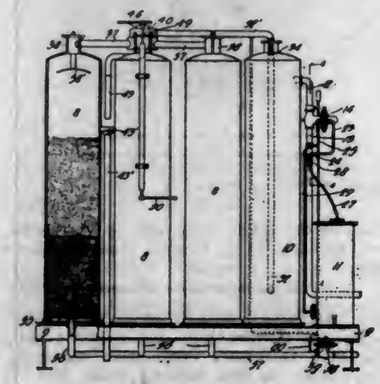
1. A lamp comprising a base, an electric light socket mounted on said base, a shaped shell mounted on said base about said socket and extending upwardly from the base, a tapered tubular shell mounted inside of said shaped shell and having a beaded top edge, the diameter of said tapered shell being smaller than the corresponding diameters of said shaped shell, a tubular tapered reflector suspended from said beaded top edge and projecting downwardly inside said tubular shell above said socket, and reflecting shade means adapted to be supported above said shells from said beaded top edge, said shade including a conical cylinder of revolution the apex of which projects downwardly and a flared shade mounted about the circumferential edge of said cylinder of revolution.

1,883,804. FASTENING DEVICE, MORE ESPECIALLY FOR HOODS. LÉON MARQUÉ, La Garenne, France, assignor of one-half to Louis Massuger, Le Vesinet, Seine-et-Oise, France. Filed Mar. 31, 1932, Serial No. 602,281, and in France Apr. 3, 1931. 4 Claims. (Cl. 292—111.)



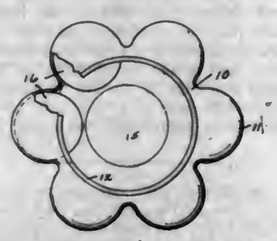
1. A fastening device, comprising an attaching lug, a support secured to the part to be fastened, a hook-shaped member adapted to engage the said attaching lug, elastic means for maintaining the hook in contact with the said attaching lug, a controlling device adapted to act upon said hook-shaped member, means for straight guiding including a ramp secured to the support and upon which the upper end of the hooked shaped member is slidable, and means for curvilinear guiding provided at the lower part of said member.

1,883,805. FILTRATION OF WATER. MICHAEL JAMES MARTIN, Armadale, Victoria, and WALTER REGINALD TERRY, Kooyong, Victoria, Australia, assignors to Filtration and Water Softening Proprietary Limited, Melbourne, Australia, a Company of Victoria, Australia. Filed Oct. 15, 1929, Serial No. 399,844, and in Australia Oct. 29, 1928. 4 Claims. (Cl. 210—132.)



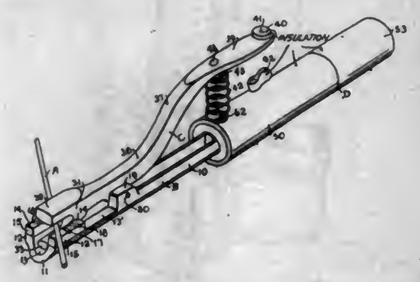
1. In a pressure filter, a plurality of chambers provided with filter beds, a distribution chamber associated with a crude water main and provided with a valve seat, a plurality of radially disposed ports in the valve seat, a central port open to waste, supply passages connecting the inlet ends of the filter chambers with the radially disposed ports, a rotary valve engaging the valve seat in the distribution chamber adapted to be actuated to place any of the ports in communication with the waste port and simultaneously cut off the crude water supply thereto, connected discharge passages at the lower ends of the chambers, and automatic valve mechanism in the discharge passage controlled by the pressure drop across the filter beds whereby when the pressure drop between the common inlet and discharge pipes of the filter chambers reaches a predetermined magnitude, the valve mechanism commences to close to prevent a further increase in the pressure difference.

1,883,806. COOKY DISPLAY JAR. VERNON V. MARTIN, Indianapolis, Ind. Filed Nov. 16, 1931. Serial No. 575,269. 5 Claims. (Cl. 215—1.)



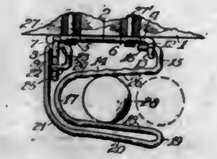
1. A container having a plurality of column-like compartments spaced around and opening into a common central well the width of said opening being not less than the major width of the compartment whereby cookies and the like may be lowered through the central well and positioned selectively within the compartments by an edgewise movement of the cookies in a plane substantially at right angles with the longitudinal axis of its compartment.

1,883,807. ELECTRODE HOLDER. ERASTUS W. MCINTIRE, Ontario, Calif. Filed Mar. 9, 1931. Serial No. 521,301. 16 Claims. (Cl. 219—8.)



1. In an electrode holder and ejector, the combination of an arm, a jaw member rigid therewith and a second jaw member pivotally carried by the arm and movable toward and from the first member, and an ejector carried by the movable member dislodging and ejecting an electrode carried by said holder.

1,883,808. ADJUSTABLE HANGER FOR BROOMS OR MOPS. CHARLES W. MEGGENHOFEN and JAMES L. ZINK, Indianapolis, Ind. Filed Nov. 16, 1931. Serial No. 575,882. 2 Claims. (Cl. 24—249.)

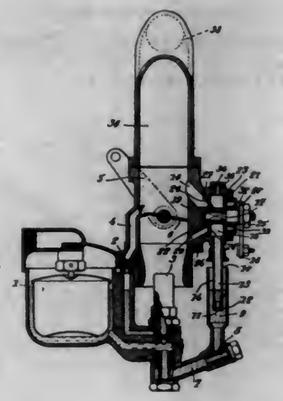


1. A hanger appliance comprising a main part having a horizontal bar and securing eyes thereon, opposite end portions of the bar having each a hinge ear on the front thereof, one of the ears having a forward extending arm on its under portion and a stop member supported by the arm in spaced relation thereto, and a clutch part hingedly connected to said hinge ears and having a finger alternately to engage said arm and said stop member.

1,883,809. CARBURETOR. MARCEL MENNESSON, Neuilly-on-the-Seine, France, assignor to "Societe Anonyme Solex", Neuilly-on-the-Seine, Seine, France, a Society. Filed Sept. 8, 1931, Serial No. 561,749, and in Belgium June 12, 1931. 8 Claims. (Cl. 261—41.)

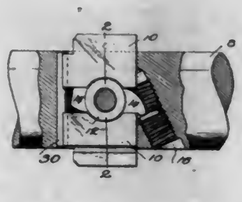
1. In combination with a carburetor provided with a main nozzle, a main mixing chamber and a throttle valve controlling said mixing chamber, an auxiliary carburetor assembly comprising a chamber, passages communicating at opposite extremities with said chamber and with said main mixing chamber at points positioned on opposite sides of said throttle valve when the latter is in closed position, said chamber communicating with the atmosphere, means operative by the depression in said main mixing chamber to aspirate fuel into said chamber of said auxiliary carburetor assembly, and a valve assem-

bly operative to control communication between said passages and said chamber, said chamber having additional communication to the atmosphere comprising a



passage positioned to communicate at one extremity with the atmosphere and at its other extremity with said chamber via said valve assembly.

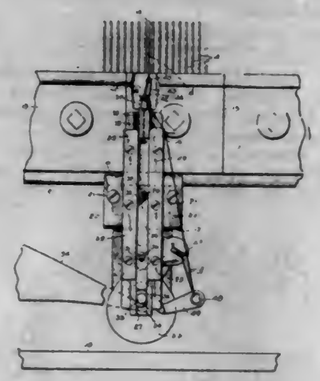
1,883,810. ROTARY CUTTER. FRANK P. MILLER, Meadville, Pa. Filed June 10, 1929. Serial No. 369,881. 7 Claims. (Cl. 77—58.)



1. In a rotary cutter, a carrier having a slot, blades in the slot, a rotatable cam wholly between the inner portions of the blades having oppositely arranged lobes engaged with the inner portions of said blades, a supporting pin for said cam and having an eccentric portion adjustable with respect to said cam to effect lateral bodily movement of the cam, and means independent of the said lateral bodily movement of the cam for turning said cam to vary the cutting diameter of the blades.

1,883,811. APPARATUS FOR THE PRODUCTION OF VERTICAL STRIPES ON THE CIRCULAR TYPE KNITTING FRAME. EMIL MILNER and FRANK WALTER, Germantown, Pa., assignors to Continental Mills, Inc., Philadelphia, Pa. Filed Jan. 24, 1930. Serial No. 423,083. 11 Claims. (Cl. 66—135.)

1. In a circular spring needle knitting machine having a revolving needle cylinder and upright bearded needles therefor, the combination of an attachment to work a yarn into vertical stripe in the fabric being knitted, comprising a yarn guide and means for moving the guide in a rotary direction to carry the yarn across a needle, then upwardly to bring the yarn under the beard of the needle and then around the back of the needle and down the other side to form a loop above the



last stitch of the fabric being still on the needle, so as to enable the loop to be stripped from the needle with the stitch.

1,883,812. SHUTTLE FOR SEWING MACHINES. WILFRID THOMAS MINETT, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 7, 1930, Serial No. 434,132, and in Great Britain Apr. 2, 1929. 12 Claims. (Cl. 112—233.)

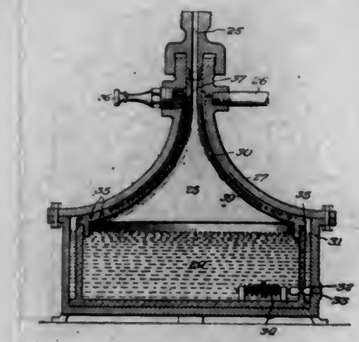


1. In a sewing machine shuttle of the discoidal type, the combination of a shuttle body having a bobbin housing, a removable bobbin cover, a thread guide formed integrally with the cover and adapted to guide the thread from the thread mass to a point adjacent the inner surface of said cover, a lip formed in the cover by the intersection of two converging slots, the apex of the lip being bent slightly outward to permit the insertion of the thread under the lip, a spring adapted to receive the thread which is passed under the lip between the spring and the cover, and means for guiding the thread through the cover past one edge of the lip at a point which will cause the thread to pass in a line from the thread guide between the tension spring and the cover to said means.

1,883,813. MANOMETER. MONTFORD MORRISON, Montclair, N. J. Original application filed Oct. 8, 1923, Serial No. 667,397. Divided and this application filed Oct. 22, 1928. Serial No. 314,168. 2 Claims. (Cl. 177—351.)

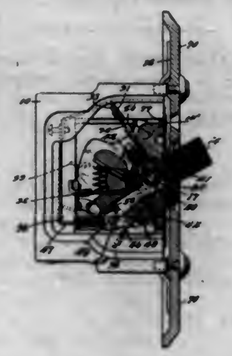
1. In a flow-meter, a differential pressure manometer comprising an integral electric circuit element, having

continuous conductance values directly proportional to the flow to be measured, flow-being-measured-actuated



means for causing infinitesimal variations in the electric current of said element, and a measurement translating device connected to said manometer.

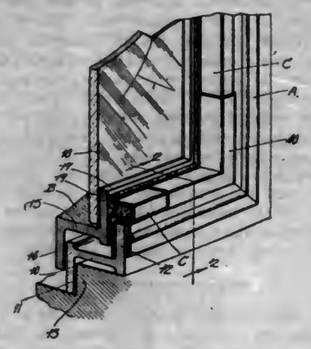
1,883,814. COMBINED SWITCH AND CIRCUIT BREAKER. ARVID H. NERO, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 6, 1929. Serial No. 353,166. 15 Claims. (Cl. 200—116.)



1. A switch device having fixed and movable contacts, a lever reciprocable to actuate said movable contacts, snap switch mechanism interposed between said movable contacts and said lever to move said movable contacts with a snap action both to circuit making and circuit breaking positions, in combination with an automatic circuit breaker normally stressed to open circuit position, latch means adapted to trip said circuit breaker and break circuit through the device upon overload, said circuit breaker being resettable by said lever.

1,883,815. WEATHER STRIP FOR WINDOWS OR DOORS. STEPHEN JOHN NOLAN, Mount Vernon, N. Y. Filed June 11, 1931. Serial No. 543,696. 2 Claims. (Cl. 20—69.)

1. A weather strip for window and door openings comprising a resilient channel shaped clip member adapted to removably engage a portion of a door or window construction, a resilient portion formed integral with one of the side walls of said clip member, said resilient portion being arranged exteriorly of the clip member and



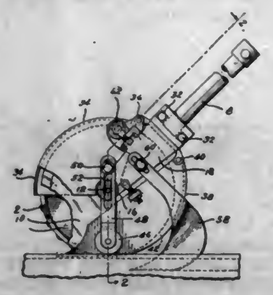
normally spaced therefrom to permit movement of the resilient portion relative to the clip member, and a sealing member carried by said resilient portion.

1,883,816. COLLAPSIBLE STRUCTURAL UNIT. CHESTER J. O'BRIEN, Chicago, Ill., assignor, by mesne assignments, to Calumet Steel Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 4, 1931. Serial No. 520,086. 15 Claims. (Cl. 72—110.)



7. A collapsible structural unit comprising a plurality of upright stirrups, longitudinal bars having integral tabs cut out of the body thereof and bendable around the vertical limbs of said stirrups to substantially swivelly engage therewith and maintain the same in a definite spaced relation, and means for holding said bars in definite positions endwise of said stirrups.

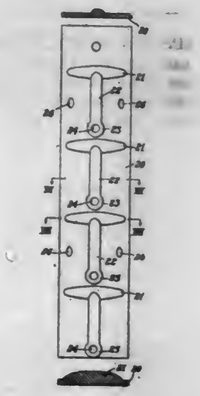
1,883,817. LAWN EDGE TRIMMER. LUDWIG A. OLSEN and STEPHEN J. ROACH, Brooklyn, N. Y. Filed May 27, 1929. Serial No. 366,176. 1 Claim. (Cl. 56—256.)



A grass cutting device comprising a frame having a handle extending therefrom, a ground wheel rotatably secured to said frame and having an internal gear thereon,

a pinion driven by said ground wheel through the internal gear and rotatably secured to said frame, a second pinion fixed to an axle rotatably secured to said frame and journaled within the pivot of said ground wheel, the second pinion being driven from the ground wheel through the first pinion at a speed greater than that of the ground wheel, a circular cutting disk of diameter slightly less than that of the ground wheel fixed to said axle so as to be rotated by the ground wheel acting through said pinions, a guard covering the cutting edge of said disk except adjacent its cutting position integral extensions on the guard adjacent said cutting position adapted to be pushed under horizontally disposed plants and when so pushed to lift them into engagement with the cutting edge of said blade, and an adjustable guide member secured to said frame on the opposite side of the cutting disk from the ground wheel and adapted to control the distance above the ground of the cutting edge of said disk.

1,883,818. SECONDARY RACK. CHARLES L. PEIRCE, JR., Pittsburgh, Pa., assignor of one-half to Hubbard and Company, a Corporation of Pennsylvania. Filed July 25, 1930. Serial No. 470,603. 9 Claims. (Cl. 178—321.)



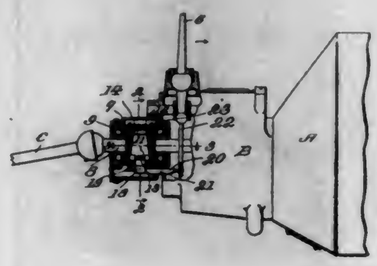
7. A secondary insulator rack comprising a base, a series of T-shaped members having the tops thereof formed integrally with said base and an apertured boss on the end of each of said T-shaped members.

1,883,819. SMOKER'S ARTICLE. HENRY C. PFINGST, Louisville, Ky. Filed Mar. 7, 1932. Serial No. 597,309. 1 Claim. (Cl. 131—51.)



A smoker's device comprising a tray, a tube secured to and rising from said tray and being reduced intermediate its ends to provide a restricted throat, an outwardly flared mouth portion for said tube, and an outwardly flared bottom portion for said tube and being provided with diametrically arranged recessed extending through the lower edge thereof.

1,883,820. STOP DEVICE FOR AUTOMOBILES. JOHN W. PLUNKETT and EDWARD H. ROBERTS, Orange, Mass. Filed June 22, 1929. Serial No. 372,890. Renewed Aug. 23, 1932. 3 Claims. (Cl. 192—4.)



1. A back stop brake for motor vehicles having a drive shaft, comprising an oil tight housing surrounding said shaft, a gear in said housing rotatable with said shaft, a pivotally mounted dog normally engaging said gear and locking it against rotation in one direction, flanges at the opposite edges of said gear to prevent lateral displacement of said dog, a sliding rod extending into said housing and provided with an enlarged portion, the dog provided with an extending end supporting one end of said rod, and means to reciprocate said rod and cause the enlarged portion thereof to engage the extending end of the dog and rock it upon its pivotal support to disengage the dog from the gear, for the purpose described.

1,883,821. DRIVING BELT. PAUL B. REEVES, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed July 30, 1928. Serial No. 296,139. 2 Claims. (Cl. 74—62.)

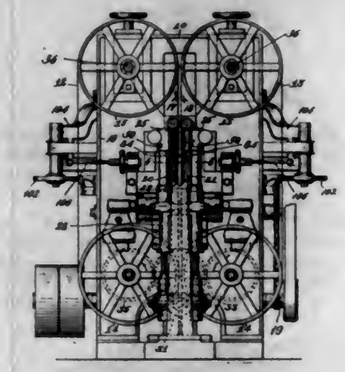


1. A power transmission belt comprising a plurality of attached layers of leather cooperating to provide at their opposite edges oppositely equally beveled driving surfaces, a plurality of spaced stiffener plates applied to the wider face of the belt, fastening members passing through said plates into the body of the belt, the narrowest layer of the belt presenting an inner peripheral driving surface transversely grooved to a depth less than the thickness of said layer.

1,883,822. APPARATUS FOR FILLETING FISH. ROBERT REID and ANDREW S. REID, Beverly, Mass. Filed May 29, 1928. Serial No. 281,883. 9 Claims. (Cl. 17—4.)

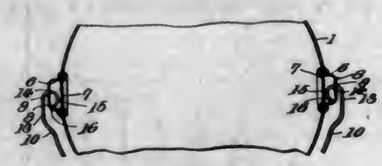
1. A fish filleting machine having, in combination, a pair of band knives having portions thereof running in adjacent planes spaced a short distance apart, guiding means for said portions of the knives including fixed upper and lower guide members, and movable guide members between said stationary guide members adapted to permit

the knives to be flexed upon the passage therethrough of fish bones of varying size, means for yieldingly urging the



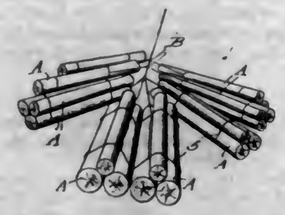
movable guide members toward each other, and feeding means for engaging the fish and moving it transversely against said portions of the knives.

1,883,823. METAL CONTAINER. JOSEPH HOWARD RENSHAW, Cincinnati, Ohio, assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 8, 1930. Serial No. 426,917. 2 Claims. (Cl. 220—91.)



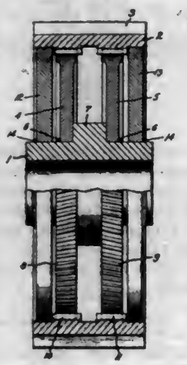
1. A container comprising a body portion having ears attached thereto, said ears being dome-shaped and having a central perforation, a wire bail attached to said ears, each end of the bail from a point outside of the opening in the ear to the inner end of the bail being curved about a common center and in a direction backwardly on the bail and outwardly so that the extreme inner end of the bail is substantially above the portion of the bail passing through the opening in the ear.

1,883,824. LOG RAFT. BILL E. ROBERSON, Hoquiam, Wash. Filed June 1, 1931. Serial No. 541,478. 1 Claim. (Cl. 9—15.)



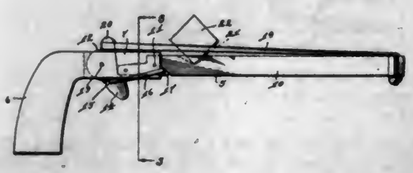
In a log raft, a towing cable, raft units at opposite sides of said cable having flexible elements extending from their front ends and attached to the towing cable, each raft unit consisting of logs secured together in a series of tiers, one upon another, and other similarly constructed raft units connected with the rear of the towing cable in side-by-side relation to each other and extending longitudinally of the cable between the rearmost of the first mentioned raft units to retain the same in forwardly converging relation to each other.

1,883,825. YIELDABLE CONNECTION. AUBREY A. ROSS, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566,355. 5 Claims. (Cl. 74—29.)



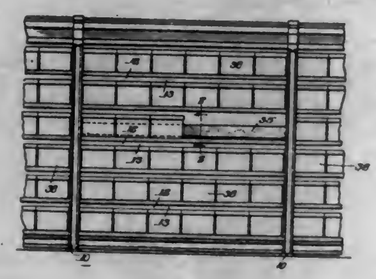
1. In combination, concentric driving and driven elements and means connecting them comprising axially flexible members which are rigidly connected to one of said elements and connected through the intermediary of helical teeth to the other of said elements.

1,883,826. TOY GUN. HARRY H. SCHMIDT, Detroit, Mich. Filed Nov. 10, 1931. Serial No. 574,130. 2 Claims. (Cl. 124—14.)



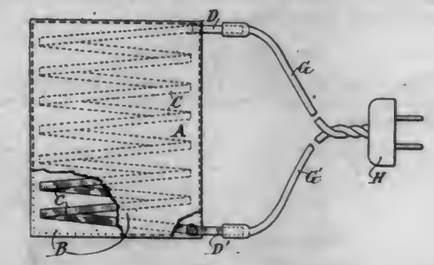
1. A toy gun of the character described comprising a handle having an extension provided with a slot, a barrel having a reduced end secured in the slot of said extension, a trigger pivotally mounted in said slot, having its upper and lower ends projecting beyond said slot, an elastic band having one end connected with the lower end of said trigger and its opposite end connected to said barrel, and an elastic shooting band having one end connected to the outer end of said barrel and its opposite end engageable over the upper end of said trigger, said barrel having a recess in its upper edge in the path of the elastic shooting band, adapted to receive an object to be catapulted by said shooting band.

1,883,827. RACK. JAMES E. HALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed May 8, 1930. Serial No. 450,643. 7 Claims. (Cl. 211—135.)



1. In combination a plurality of front uprights, rear uprights spaced from said front uprights, shelves supported by the uprights and adapted to support boxes, clips engageable with front and rear uprights, guides engaging the clips and having alined slots therein, and a stop removably engaging alined slots in a pair of guides for limiting the sliding movement of said boxes to bring their fronts in alinement.

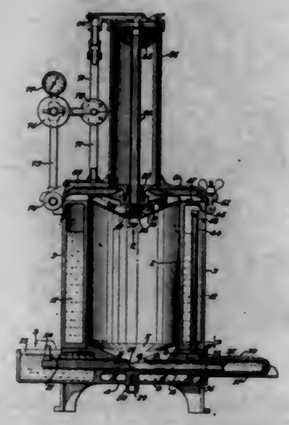
1,883,828. HEATER FOR PERMANENT WAVE MACHINES. WILLIAM GENTRY SHELTON, St. Louis, Mo., assignor to Shelton-Jancke Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,291. 8 Claims. (Cl. 219—24.)



5. The combination with a hair-waving steaming pad including a moisture holder, of a flexible, but non-resilient, electric heater comprising a thin sheet-like member of non-inflammable, non-conductive material of dimensions approximating those of the pad and having an electric resistance element extended along the same, said heater being readily applicable for use as a layer of the pad and readily detachable therefrom so as to be adapted for application to another pad.

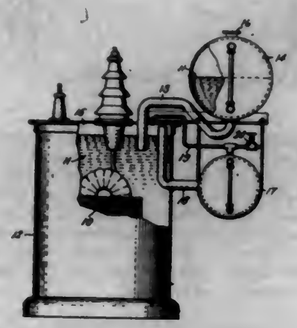
1,883,829. DISPENSING DEVICE. JOHN R. SKOVERSKI, Berkeley, Calif., assignor of one-half to George H. Roberts and one-half to Joseph Schor, San Francisco, Calif. Filed Aug. 2, 1930. Serial No. 472,525. 5 Claims. (Cl. 107—1.)

1. A dispensing device comprising a container, a water jacket for the container, means for heating the water in said jacket, a discharge means for the container, means for closing the orifice of the discharge means, and means for



utilizing the steam liberated within the water jacket to clean the closing means.

1,883,830. ELECTRICAL INDUCTION APPARATUS. ZOLTAN O. ST. PALLEY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1931. Serial No. 519,235. 3 Claims. (Cl. 220—85.)

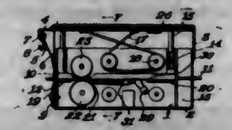


1. The combination with electrical apparatus immersed in a liquid within a casing, and a gas cushion above the liquid in said casing, of a conservator partially filled with liquid and communicating with the liquid in said casing below said gas cushion, and a sealed overflow compartment communicating with said gas cushion above the level of said liquid.

1,883,831. STRING CUTTER. EMIL H. STRATTON, Boise, Idaho. Filed Oct. 12, 1931. Serial No. 568,458. 5 Claims. (Cl. 30—14.)

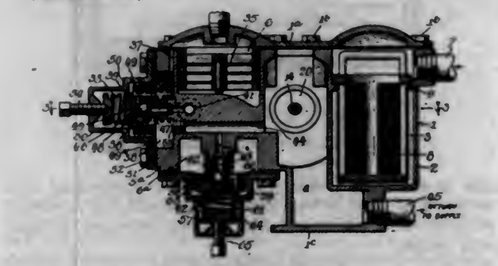
1. A string cutter comprising a portable holder including telescopic sections, a frame in one of said sections, means slidably connecting the other section to said frame, tension means between the last named section and the frame, knives carried by said sections, guide tubes in the frame to have a string from a supply threaded therethrough and having their inner ends relatively spaced,

feed rollers engaging the string between the inner ends of the tubes, and a pawl and ratchet mechanism between one of the feed rollers and one of the sections to impart



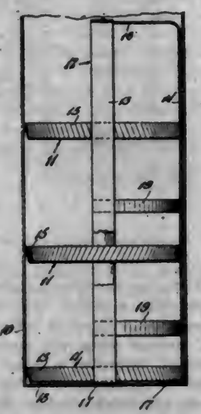
rotation to the last named feed roller to cause the string to be fed outwardly of the holder after each severance of the string by the blades.

1,883,832. OIL BURNING EQUIPMENT. GUSTAF DAVID SUNDSTRAND, Rockford, Ill., assignor to The Sundstrand Engineering Co., Rockford, Ill., a Corporation of Illinois. Filed May 9, 1929. Serial No. 361,596. 8 Claims. (Cl. 103—42.)



1. A device of the character described comprising, in combination, a casing having an inlet passage and an outlet passage, a pumping device mounting member forming a portion of one wall of the casing and having a flat surface joint with the remainder of the casing, a pumping device carried on said member, inelt and outlet ports in said member for the pumping device and means securing said plate to the remainder of the casing comprising screws having passages therethrough communicating with said inlet and outlet ports in said member and with the said inlet and outlet passages.

1,883,833. SHELF DEVICE FOR REFRIGERATOR CABINETS. GEORGE J. TILTON, Modesto, Calif. Filed Sept. 4, 1931. Serial No. 561,261. 5 Claims. (Cl. 312—172.)



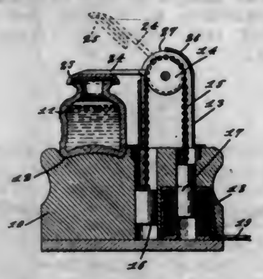
3. A shelf device comprising, in combination, an upright frame; a plurality of sheet metal shelves secured in the frame; said shelves having outwardly and upwardly flared flanges; and cutting teeth formed on the flanges at the upper edges thereof.

1,883,834. MIRROR-SUPPORT. LEWIS L. TURNER, South Meriden, Conn., assignor to The Charles Parker Company, Meriden, Conn., a Corporation. Filed Jan. 30, 1932. Serial No. 589,861. 2 Claims. (Cl. 45—97.)



1. A mirror-support comprising a hook adapted to be secured to the surface on which the mirror is to be mounted, a bar secured to said surface, a strap mounted on the back of the mirror and adapted to engage said hook, a locking-block also secured to the back of the mirror and formed with a slot to receive the bar on the supporting-surface, said block formed with vertically-arranged threaded-openings, and a screw adapted to extend through said openings and bar to interlock them.

1,883,835. ELECTROMECHANICAL BOTTLE OPENER. ERNEST VELASQUEZ, New Orleans, La. Filed Aug. 28, 1931. Serial No. 560,045. 2 Claims. (Cl. 221—68.)

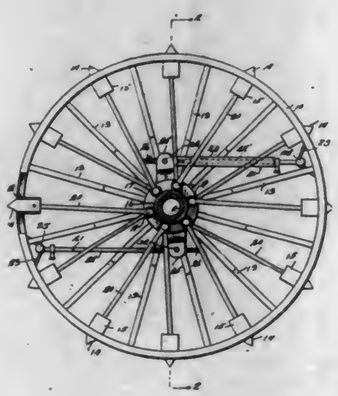


1. In a device of the kind described, a base, a plurality of bottles on said base, a pulley for each bottle supported by said base, a chain trained over the pulley, a weight on one end of the chain, electromagnets arranged in the base and having movable cores connected with said chains, normally open electric circuits having arranged therein the magnets and normally open electric switches, a box for inclosing the switches and having push buttons controlling said switches, and covers connected with the pulleys and normally closing the bottles and automatically raised when the switches close the circuits for energizing the electromagnets to draw their cores therein.

1,883,836. TRACTOR WHEEL LUG. KIERAN WALLACE, Clay Township, Jones County, Iowa. Filed May 26, 1931. Serial No. 540,114. 1 Claim. (Cl. 301—46.)

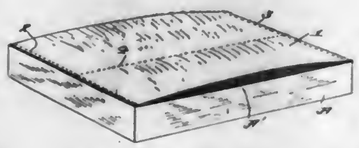
In a tractor wheel, a plurality of lug members, guide means carried by the wheel rim for said lug members, a rotatable member mounted on the wheel hub, links connecting the rotatable member with the lug members, and

lug operating means engaging the wheel and the rotatable member, said operating means including a screw, a nut on the screw, means for rotating the screw, a rock member engaging the rotatable member, and a guide



member carried by the rock member and engaging the nut to hold the nut against rotation while permitting sliding thereof relative to the rock member in one direction.

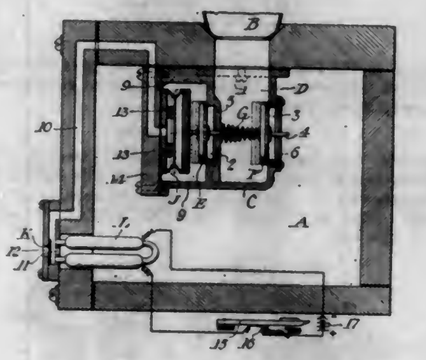
1,883,837. COMBINATION OF BOX SPRING AND MATTRESS HAVING POCKETS FOR SELECTIVELY RECEIVING THE EDGES OF THE SEVERAL BED COVERINGS. MAYBELLE K. WALLACE, New York, N. Y. Filed Jan. 23, 1931. Serial No. 510,824. 5 Claims. (Cl. 5—345.)



1. In combination, a mattress, a flexible sheet secured on one face of the mattress along its ends and center of the mattress said sheet forming with the mattress pockets opening at the sides of the mattress.

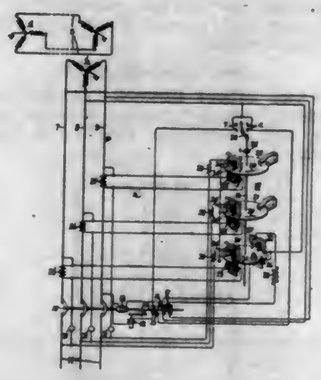
1,883,838. PNEUMATICALLY BALANCED VALVE. SAMUEL RUSSELL WARREN, Brattleboro, Vt., assignor to Estey Organ Company, Brattleboro, Vt., a Corporation of Vermont. Filed Dec. 24, 1931. Serial No. 583,093. 6 Claims. (Cl. 84—339.)

1. A pipe organ having, in combination, a wind chamber; a pipe; a valve casing within the wind chamber having its interior in communication with said pipe, and having two apertures in its walls which permit air to flow between the wind chamber and the pipe; a pneumatically balanced double valve having two connected pallets for said apertures respectively one of said pallets being within and the other without the valve casing whereby the air pressure tends to open one pallet and close the other; a light spring serving to close and main-



tain closed both pallets; an armature operatively connected with said valve; and an electromagnet mounted on said valve casing and acting when energized to open both pallets.

1,883,839. PROTECTIVE ARRANGEMENT. ROY L. WEBB, Brooklyn, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 30, 1930. Serial No. 424,695. 9 Claims. (Cl. 175—294.)

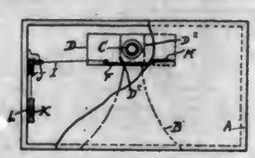


1. In combination, a polyphase circuit, controlling means therefor including a circuit interrupter and means for controlling said interrupter to effect a circuit controlling operation thereof when the power of the circuit is in a given direction including a relay having windings connected to be energized from the circuit to produce an effect dependent on the power of the circuit, and means independent of said windings for restraining the operation of said relay until the circuit power in said direction exceeds a predetermined value connected to be energized from the circuit to exert an effect dependent on two different voltages of the circuit and the phase relation between said two voltages.

1,883,840. MANUFACTURING OXIDE CATHODES. ERICH WIEGAND, Berlin-Waidmannslust, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 30, 1931, Serial No. 548,036, and in Germany July 16, 1930. 4 Claims. (Cl. 250—27.5.)

1. A process of manufacturing cathodes for electric discharge devices, said process including the steps of applying an oxygenous compound to a cathode foundation member and heating the oxidized member in the vapor of an electronically active material to a temperature so high that the said material is precluded from forming on the foundation member in a solid or liquid state.

1,883,841. GRAMOPHONE. ALFRED CHARLES WILLIAMS, Deal, England. Filed Apr. 20, 1929. Serial No. 356,762, and in Great Britain Jan. 21, 1929. 2 Claims. (Cl. 181—27.)



1. In a gramophone in combination, a cabinet, a rectilinear sound box mounted therein, said box communicating with the tone arm of the gramophone, said sound box having a circular aperture in one wall thereof, a shutter adapted to slide over said circular aperture, means for guiding said shutter, said shutter having a pear-shaped opening for controlling the volume of sound issuing from said circular aperture, and means for moving said shutter in either direction.

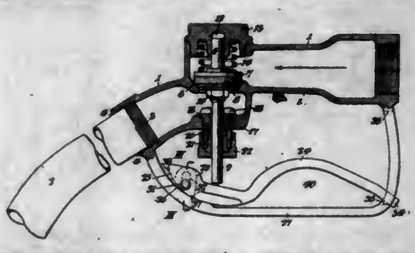
1,883,842. SHEARS. HENRY B. WOMACK, Birmingham, Ala. Filed June 2, 1930. Serial No. 458,936. 2 Claims. (Cl. 30—13.)



1. As a new article of manufacture, a pair of shears especially constructed to facilitate the repeated sharpening and setting of the cutting blades thereof, comprising a pair of similarly constructed one-piece cutting blades, each blade being of a comparatively thin structure throughout its entire length and of a comparatively thin structure and of substantially uniform thickness across its transverse area, a reinforcing rib of substantially twice the thickness of each blade formed along the back edge of each blade and extending the full length of the blade whereby the setting of the blade will be facilitated when the face of the bead or rib is struck with an instrument.

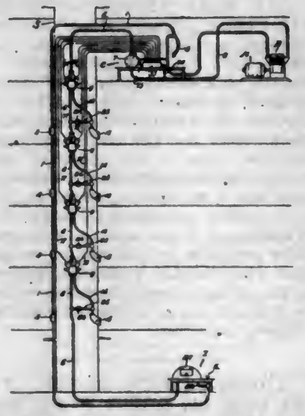
1,883,843. LIQUID DISPENSING NOZZLE. JOSEPH C. WOODFORD, Ardmore, Pa., assignor to Service Station Equipment Company, Conshohocken, Pa., a Corporation of Delaware. Filed Jan. 21, 1932. Serial No. 587,899. 4 Claims. (Cl. 251—184.)

2. In a liquid dispensing nozzle; the combination with a valve for controlling the passage of liquid through said nozzle; of a stem on said valve mounted to reciprocate transversely to the axis of said nozzle through an opening in the latter; a guard frame on said nozzle in opposition to said stem; and a lever for operating said valve interposed between said stem and said frame, having at one end a cam surface adapted to bear on said frame as a fulcrum support; the point of fulcrum contact of said cam surface and said guard being progressively shifted during the movement of said lever to vary the effective leverage of said lever with respect to said stem; whereby



the maximum leverage is afforded to initially displace the valve from its seat and diminishes as the valve is shifted away from its seat to the limit of its opening movement.

1,883,844. PNEUMATIC DISPATCH TUBE APPARATUS. JOHN T. NEEDHAM, North Plainfield, N. J., assignor, by mesne assignments, to Pneumatic Tube Supply Co. of Delaware. Filed Sept. 24, 1929. Serial No. 394,787. 51 Claims. (Cl. 243—5.)

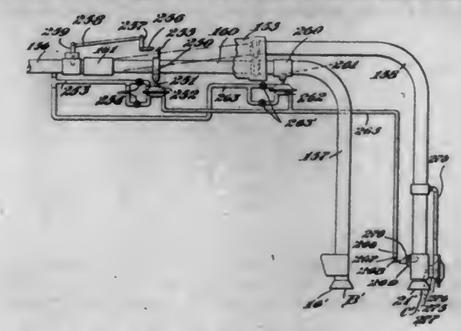


1. In a pneumatic dispatch tube apparatus, a carrier dispatch tube; switch means located at a point in the length of said tube, operable to one position to direct air and a carrier propelled thereby along the tube and operable to another position to discharge the carrier and air from the dispatch tube; a branch pipe disposed to receive the discharged carrier and air from the switch and leading to a terminal for the delivery of the carrier thereto; and a by-pass leading from said branch pipe to the carrier dispatch tube for the return of the air to the latter.

1,883,845. PNEUMATIC DISPATCH SYSTEM. JOHN A. BAUER, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 7, 1930. Serial No. 493,964. 29 Claims. (Cl. 243—31.)

1. In a pneumatic dispatch system having at least three stations, a switch housing containing a movably mounted transit tube section, a transit tube connecting one of said stations to said switch housing and being in alignment at all times with one end of the tube section therein, transit tubes connecting two other of said stations to said switch housing, the free end of the tube section therein being normally in alignment with one of said last named tubes, whereby a carrier can be transported between the station connected to the housing by said tube and the first named station, means for shifting the tube section to bring its free end into alignment with the other of said tubes, whereby a carrier can be transported between the

station connected to the housing by said tube and the first named station, means actuated by the carrier in transit for restoring the tube section to its normal posi-

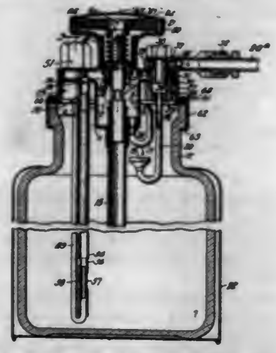


tion, and means for preventing the entry of another carrier into the switch housing until the tube section has been restored to its normal position.

1,883,846. PROCESS OF BLEACHING BAST FIBERS, ESPECIALLY BAST FIBERS OF LINEN, HEMP, AND THE LIKE. HELMUT KORTE, Frankfort-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 20, 1930, Serial No. 437,568, and in Germany Mar. 16, 1929. 4 Claims. (Cl. 8—2.)

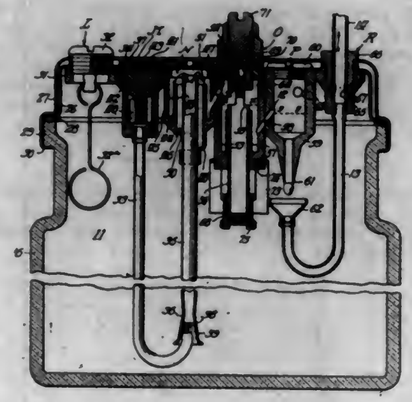
1. The process of bleaching bast fibers, especially bast fibers of linen, hemp and the like, which comprises subjecting the raw fibers to the following succession of treatments: first a treatment with a hydrogen peroxide solution, then with a solution containing available chlorine and having an acidity corresponding to $p_H<5$, then an intermediate soaking in a hot solution of alkaline reaction, then a second treatment with a solution containing available chlorine and showing a reaction corresponding to $p_H>7$, and finally again with a solution of hydrogen peroxide, the different stages of the treatment being terminated by rinsing operations.

1,883,847. LIQUID FEEDING DEVICE. THOMAS VAN TUYL, Oak Park, Ill., assignor to Jay Manufacturing Company, a Corporation of Illinois. Filed Nov. 10, 1928. Serial No. 318,418. 32 Claims. (Cl. 123—196.)



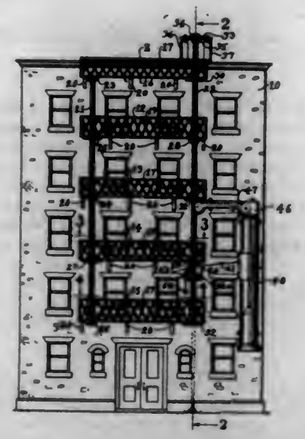
1. A device for supplying lubricant to the intake of an internal combustion engine comprising in combination an oil reservoir, a conduit leading from said reservoir to the intake manifold of the engine whereby lubricant may be introduced into the combustion space, feeding means having a free lubricant passage for delivering lubricant from the reservoir to said conduit, and mechanism for controlling said feeding means for varying the supply of lubricant to said conduit responsive to engine demands.

1,883,848. LIQUID FEEDING DEVICE. THOMAS VAN TUYL, Oak Park, Ill., assignor to Jay Manufacturing Company, a Corporation of Illinois. Filed Jan. 28, 1929, Serial No. 335,509. Renewed Nov. 30, 1931. 16 Claims. (Cl. 123—196.)



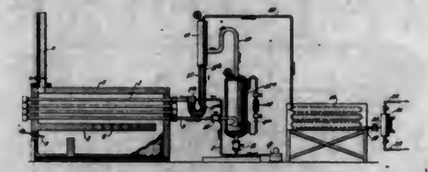
1. In a liquid feeding device of the character described, the combination comprising a feeding reservoir having a discharge orifice and means providing a low hydraulic head to effect a low rate of feed from said orifice, an auxiliary supply reservoir, liquid delivery means which operates to deliver liquid to said supply reservoir at varying rates, said supply reservoirs being provided with means for delivering a uniform supply of liquid to said feeding reservoir independently of the varying rate of delivery to said supply reservoir.

1,883,849. FIRE ESCAPE. ARCHIE L. VANASSE, Waterbury, Conn. Filed Jan. 14, 1931. Serial No. 508,617. 11 Claims. (Cl. 227—5.)



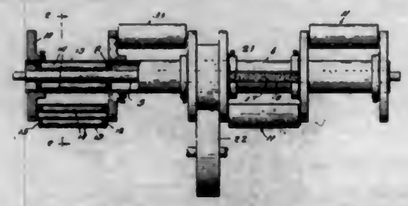
5. In a fire escape for buildings, a balcony, a hollow pole supported in vertical position alongside the building and passing through said balcony, a slidable rod telescoping into the bottom of said pole, a foot-plate secured to said rod, a counterweight for raising said foot plate to the balcony when released, means for locking said counterweight in its upper position, a pulley-supported cord for connecting said rod to said counterweight, and a weather-proof housing for said cord and counterweight.

1,883,850. PROCESS FOR MAKING GASOLINE. OTTO BEHIMER, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 21, 1918, Serial No. 263,562, and in Canada Dec. 8, 1921. Divided and this application filed Apr. 6, 1923. Serial No. 630,242. 44 Claims. (Cl. 196—48.)



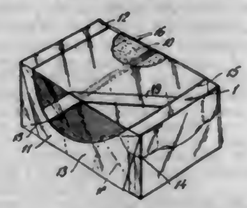
2. The process of converting hydrocarbon oil which comprises continuously forcing oil through a heating coil at a rapid rate of flow, continuously removing said oil from the coil before material cracking takes place and introducing it into a body of oil while in its heated condition to maintain said body of oil at a temperature sufficiently for decomposition without depending upon the application of other external heat thereto, removing residuum and vapors formed, separating out the heavier vapors as a condensate and continuously forcing it under maintained mechanical pressure into the heating coil, while maintaining a pressure of substantially 100 to 500 pounds throughout the system.

1,883,851. BEATER FOR CLEANING RUGS. FRANKLIN L. FELTY, Chicago, Ill.; Maude M. Felty, administratrix of said Franklin L. Felty, deceased, assignor, by mesne assignments, to Mae F. Grover, Harvey, Ill. Filed July 2, 1928. Serial No. 289,712. 4 Claims. (Cl. 15—5.)



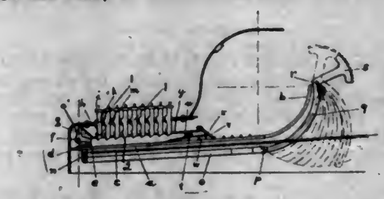
1. A beater for cleaning rugs and the like comprising a supporting spindle, pairs of spaced disks rotatably and coaxially mounted on said spindle, means for rotating said disks, a beater spindle extending between each pair of disks with its ends fixed thereto, and a beater roller rotatably mounted on each beater spindle, said roller being of continuous material.

1,883,852. CLEANSING TISSUE COMPACT. WILLIAM MEDOFF, New York, N. Y. Filed Aug. 20, 1932. Serial No. 629,583. 7 Claims. (Cl. 206—47.)



3. As a new article of manufacture, a special package comprising a stack of folded tissue sheets, a dispensing container of a capacity to receive a small number of said folded tissue sheets and means carried by said special package for retaining said dispensing container in place on said special package.

1,883,853. CALCULATING MACHINE. JEAN BERGMANN, Berlin, Germany. Filed Sept. 21, 1928, Serial No. 807,499, and in Germany Aug. 30, 1927. 2 Claims. (Cl. 235—60.)

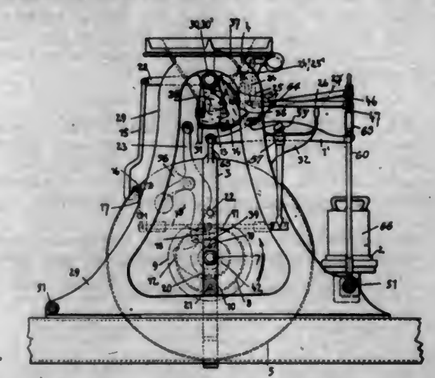


1. Setting mechanism for calculating machines, including a flexible setting rack provided with setting teeth, a spring for moving said rack towards setting position, means retaining said rack in zero position, and movable keys acting as stops for limiting the movement of the flexible rack and connected with the retaining means whereby to release the latter, means for retaining the flexible rack in setting position, and a manually operable member adapted to engage and return the keys to initial position and coacting with the second mentioned retaining means to effect release of the latter and permit the return of the flexible setting rack to zero position.

1,883,854. ORNAMENTATION OF CELLULOID. ADOLF MICHAEL, Heideck, near Ellenburg, Germany, assignor to Dermatoid-Werke Paul Meissner, Aktien-Gesellschaft, Leipzig, Germany. Filed Mar. 26, 1930, Serial No. 439,258, and in Germany Feb. 9, 1926. 3 Claims. (Cl. 41—33.)

1. A method of ornamenting celluloid and similar material which comprises, applying to a carrier of paper a soluble layer, applying to said soluble layer a pattern, applying the paper with the ornamented surface upon the material to be ornamented which material is in the moist stage of manufacture, subjecting the whole to pressure in the presence of heat and removing the soluble layer by means of water.

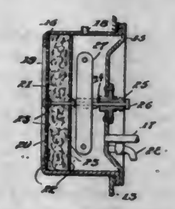
1,883,855. AUTOMATIC WEIGHING MACHINE. CARL NAGEL, Gliesmarode, Germany, assignor to Librawerk m. b. H., Gliesmarode, Germany. Filed Feb. 14, 1930, Serial No. 428,527, and in Germany June 15, 1928. 7 Claims. (Cl. 249—20.)



4. In an automatic weighing machine, weighing mechanism including a revoluble receptacle for receiving the material to be weighed, and mechanical means for causing the discharge of the weighted material by rotary movement of said receptacle, said mechanical means comprising coupling mechanism including means operative at the end of the prescribed rotary movement for auto-

matically throwing the coupling means out of coupling engagement, a disk formed with a slot, and a pin engaging said slot, said disk and pin being connected respectively with said mechanical means and said receptacle.

1,883,856. WATER PURIFICATION FOR LOCOMOTIVES. JULIUS OSTERTAG, Stuttgart, Germany. Original application filed July 10, 1922, Serial No. 573,825, and in Polonia Feb. 8, 1922. Patent No. 1,700,716, Jan. 29, 1929. Divided and this application filed Aug. 29, 1928. Serial No. 302,879. 6 Claims. (Cl. 122—898.)



1. A continuous purification system for portable boilers, comprising a feed water supply tank, a sludge separator therein, a boiler blow-off connection for conducting sludge-containing blow-off water to said separator, a steam outlet in the separator, a filter within the separator, and a water outlet in the separator for permitting exit of the filtered water into the supply tank.

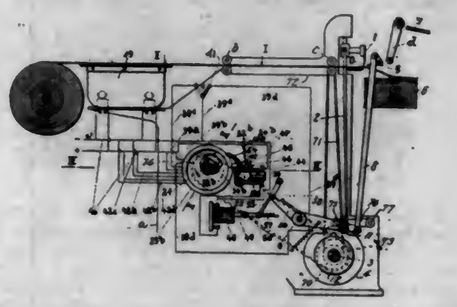
1,883,857. AMUSEMENT DEVICE. HAROLD PICKARD, HARRY PICKARD and NORMAN PICKARD, Blackpool, England. Filed Feb. 16, 1931, Serial No. 516,228, and in Great Britain Sept. 27, 1929. 11 Claims. (Cl. 104—172.)



1. In an amusement device, a conveyor, cars, and ⊥-bars connected to said conveyor and means connecting said cars to said ⊥-bars, whereby the cars can swing in a plane at right angles to the direction of movement of the conveyor.

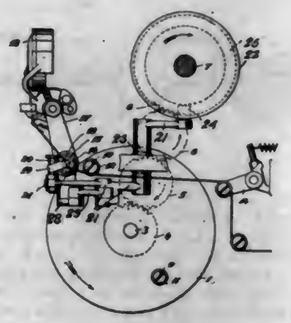
1,883,858. SHEET CUTTING MACHINE. GEORG SPIESS, Leipzig-Plagwitz, Germany. Original application filed Apr. 14, 1927, Serial No. 183,746, and in Germany Apr. 24, 1926. Divided and this application filed Feb. 24, 1928. Serial No. 256,629. 5 Claims. (Cl. 164—49.)

1. Sorting device for sheet cutting machines comprising a cutter, means for feeding sheets past said cutter, a switch for conducting the sheets to separate piles according to their quality, mechanism for operating said switch, means for locking said switch against operation, a rotary member, a pawl on said member adapted to control said locking means, a circuit connected with said



member, means on said member and in said circuit for operating said pawl, manually operated means for making and breaking said circuit, and means for operating said member from said mechanism in such manner that the operation of said switch lags with respect to that of said cutter.

1,883,859. SHOE SEWING MACHINE. JAKOB SÜNDER, Oberursel, Germany, assignor to the Firm Adrian & Busch, Oberursel, Germany. Filed Jan. 28, 1930, Serial No. 423,982, and in Germany Jan. 28, 1928. 10 Claims. (Cl. 112—57.)



1. In a shoe sewing machine operating with a lock stitch, a curved hook-needle, a uniformly rotating disc having two take-up rolls arranged approximately at opposite sides of the axis and at different distances from the axis of rotation of the disc, an auxiliary take-up spaced laterally from the plane of the take-up rolls, and means for presenting the thread from the said auxiliary take-up to the take-up rolls at an angle to the plane of the said rolls.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office

Vol. 423—No. 4 TUESDAY, OCTOBER 25, 1932 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscription, $16.00 per annum; including annual index, $18.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
ISSUE OF OCTOBER 25, 1932	929
DISCLAIMERS	929
APPLICATIONS UNDER EXAMINATION	930
DECISIONS OF THE U. S. COURTS—	
In re Fischer	931
Farmer and Thomas v. Schweyer	932
Jardine and Jehle v. Long	933
PATENT SUITS	935
TRADE-MARKS PUBLISHED (167 APPLICATIONS)	937
TRADE-MARK REGISTRATIONS GRANTED	960
TRADE-MARK REGISTRATIONS RENEWED	968
LABELS	969
PRINTS	970
REISSUES	971
PLANT PATENTS	972
DESIGNS	972
PATENTS GRANTED	980

Issue of October 25, 1932

Trade-Marks	209—No.	298,313 to No.	298,521, inclusive.
T. M. Renewals	33		
Labels	31—No.	41,313 to No.	41,343, inclusive.
Prints	4—No.	13,948 to No.	13,951, inclusive.
Reissues	4—No.	18,635 to No.	18,638, inclusive.
Plant Patents	3—No.	37 to No.	39, inclusive.
Designs	75—No.	88,064 to No.	88,138, inclusive.
Patents	1241—No.	1,883,860 to No.	1,885,100, inclusive.
Total	1,600		

Disclaimers

1,544,373.—*Georges Claude*, Paris, France. METHOD FOR THE DIRECT SYNTHESIS OF AMMONIA. Patent dated June 30, 1925. Disclaimer filed September 30, 1932, by the assignee, *E. I. Du Pont De Nemours & Company*.

Hereby enters the following disclaimer:

It disclaims claims 12 and 14, reading:

"12. A process of producing ammonia by synthesis of its elements under pressure in the presence of a catalytic body, which comprises passing incoming gases in heat-exchange contiguity to the hot gases of the reaction, and then heating the gases to substantially the temperature necessary for reaction by passing the preheated gases through and in unrestricted thermal contact with the catalytic body and thence into direct contact with the said catalytic body."

"14. A process of producing ammonia by synthesis of its elements under pressure in the presence of a catalytic body, which comprises preheating incoming gases by the heat evolved from the reaction and finally heating the gases to substantially the temperature necessary for reaction by passing them through and in unrestricted thermal contact with the interior of the catalytic body before actual contact with the catalytic body."

1,683,180.—*Louis A. Gebhard*, Washington, D. C. PIEZO-ELECTRIC CRYSTAL-CONTROLLED OSCILLATOR. Patent dated September 4, 1928. Disclaimer filed October 1, 1932, by the assignee, *Wired Radio, Inc.*

Hereby enters a disclaimer to claim 1 of said patent, which is in the following words, to wit:

"1. A piezo electric crystal control system comprising an electron tube having grid, filament and plate electrodes, an input circuit interconnecting said grid and filament electrodes, an output circuit interconnecting said plate and filament electrodes, an oscillatory circuit connected with said output circuit, a piezo electric crystal element connected in said input circuit and a variable condenser coupling said input and output circuits for maintaining the current through said piezo electric crystal element below a predetermined value for relieving the strain upon said piezo electric crystal element while sustaining oscillations at maximum amplitude and at the frequency of said piezo electric crystal element in said oscillatory circuit."

1,735,844.—*Edwin L. White*, Honolulu, Territory of Hawaii. DUPLEX RADIO COMMUNICATION SYSTEM. Patent dated November 12, 1929. Disclaimer filed October 1, 1932, by the assignee, *Wired Radio, Inc.*

Hereby enters a disclaimer to claims 1, 2, and 3 of said patent, which are in the following words, to wit:

"1. A transmission and receiving system comprising an antenna ground system, an electron tube oscillator, a radio receiving circuit including an electron tube detector and a responsive device, switching mechanism for alternately establishing connection between said antenna ground circuit and said oscillator or with said radio receiving circuit, and means rendered effective simultaneously with the actuation of said switching mechanism for changing the amplitude of the oscillations developed by said oscillator when said oscillator is connected in circuit with said antenna ground system or when said antenna ground system is connected with said receiving circuit.

"2. A transmission and receiving system comprising a radio frequency energy transmitting and collecting circuit, a transmitter including an electron tube oscillator having an input circuit and an output circuit, means for limiting the amplitude of the oscillations developed by said electron tube oscillator, a radio receiving system, and means for alternately establishing connection between said radio frequency energy collecting or radiating circuit and said oscillator and said receiving circuit, said means operating to simultaneously control said aforementioned means for reducing the amplitude of oscillations developed by said oscillator when said radio frequency energy collecting or radiating circuit is connected with said receiving circuit.

"3. A signal transmission and reception system comprising a radio frequency energy collecting or radiating circuit, an electron tube system having input and output circuits arranged for the production of high frequency oscillations, a resistor arranged in the output circuit of said electron tube system, a signal receiving circuit,

(*Continued on page 936*)

Condition of Applications Under Examination at Close of Business October 8, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 68,072; Trade-Mark Division, 950. Oldest new case, Apr. 6, 1932; oldest amended, Feb. 8, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	July 15	July 25	323
6708	2. HERMAN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	June 13	June 13	842
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	June 13	July 9	720
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	July 1	Aug. 5	352
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	June 8	June 9	324
4898C	6. LEWERS, A. M., Carbon Chemistry	Apr. 11	Apr. 13	2,030
5725	7. JARBOE, C. G., Optics; Photography	May 18	May 18	1,377
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	June 13	June 2	934
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	July 9	July 26	652
6812	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	May 10	May 10	805
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	June 8	June 10	628
7701	12. HENRY, C. C., Machine Elements	June 22	July 1	482
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	May 31	June 1	1,042
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	June 17	July 2	748
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	May 9	May 9	1,731
5612	16. SPENCER, C. J., Telegraphy; Telephony	June 20	June 20	709
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Apr. 21	Apr. 21	1,357
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	June 13	June 9	612
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Apr. 13	Apr. 9	1,793
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	June 21	June 18	531
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	May 23	June 1	834
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	July 5	July 26	483
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Apr. 25	Apr. 18	845
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	July 8	July 9	570
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Apr. 22	Apr. 28	1,333
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Apr. 13	Apr. 14	965
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	June 13	June 13	852
4628	28. BENSON, A. R., Internal-Combustion Engines	Apr. 15	Apr. 15	1,334
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Apr. 8	Apr. 9	835
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	June 3	June 6	805
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Apr. 28	Apr. 27	1,525
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	June 20	June 23	692
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Apr. 8	Apr. 11	2,255
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	May 9	May 11	833
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 10	Aug. 10	327
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Apr. 12	Apr. 16	1,542
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	May 11	May 11	1,030
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 12	Aug. 29	135
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Apr. 13	Apr. 13	1,380
7880	40. OBERLIN, J. J., Receptacles	May 11	May 14	2,203
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	July 11	Aug. 5	465
5882	42. CUTTING, H. O., Electric Signaling	Apr. 11	Apr. 8	1,282
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	May 14	May 14	1,501
4807B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Apr. 8	Apr. 8	1,740
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	June 20	June 20	915
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	June 14	June 16	535
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	May 12	May 12	1,956
5731	48. ROEPKE, O. B., Electricity, General Applications	May 16	May 17	686
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Apr. 15	Apr. 18	1,430
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Apr. 12	Apr. 12	2,123
5828	51. BACKUS, C. D., Radiant Energy	May 26	May 26	1,128
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	July 12	July 14	684
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	July 20	Aug. 1	444
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Apr. 20	Apr. 20	1,090
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	July 19	July 21	351
	Designs	Sept. 19	Sept. 21	165
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Apr. 25	Apr. 26	1,387
3623	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	June 9	June 8	644
5605	58. DOWELL, E. F., Abrading; Typewriting	Apr. 6	Apr. 10	1,280
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Apr. 8	Apr. 8	1,717
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Apr. 20	Apr. 20	1,402
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Apr. 30	May 2	1,261
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	May 10	May 10	1,580
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Apr. 21	Apr. 21	1,387
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	June 11	July 6	472
3624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Apr. 16	Apr. 16	1,559
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Sept. 7	Sept. 24	909
	Labels and Prints	Sept. 23	Sept. 23	50

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Fischer

No. 2,714. Decided May 31, 1932

1. Application—Prosecution—Rule 75.

An affidavit under rule 75 is not sufficient to establish a date of invention prior to the effective date of a patent where the patent contains claims for the same invention as that covered by applicant's claims.

2. Same—Same—Date of Invention.

Where claims were rejected on a prior patent, *Held* that the fact that the applicant had another application of earlier date than the patent is immaterial where that application as filed did not disclose the invention and it was only after the effective date of the patent that the application was amended to disclose the invention in question.

3. Same—Same—Rule 94.

An affidavit as to an earlier date of invention is insufficient to justify the declaration of an interference with a patent where the applicant does not present claims copied from the patent.

Appeal from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.:*

The appellant filed his application in the United States Patent Office on November 8, 1919, for a patent on an alleged improvement in "air, moisture, and sound-proof structure and method of and adhesive material for producing the same." Included in the application were an unnecessary and troublesome multiplicity of claims. The Examiner allowed certain of the claims and disallowed others. The Board of Appeals allowed certain other claims and modified the decision of the Examiner to some extent. The appellant has appealed to this court upon the rejection of claims 3, 5, 12, 13, 14, 20, 24, 25, 26, 30, and 31.

The rejection was made by the Board of Appeals on the following references: New, 251,921, January 3, 1882; Kerbaugh, 427,174, May 6, 1890; Cavey, 1,361,517, December 7, 1920; Abraham's Work on Asphalts and Allied Substances, page 439.

Appellant's invention consists of a material to be used upon roofs and similar structures, consisting of a thin sheet of paper, felt, or like substance, with a normally tacky adhesive surfacing, preferably of bituminous or asphaltic origin, which adhesive has the inherent characteristic of maintaining fluidity and adhesiveness, so that it will be self-adhering, when opened up and applied to the surface which is to receive it. The appellant proposes to use any ordinary and suitable asphaltic or bituminous compound for his adhesive.

Rejected claims 30 and 31 were copied from the reference patent to Lowe, and were inserted in the application for the reason, as it is averred, of procuring an interference with that patent. The remaining rejected claims were rejected by the Board upon the reference Cavey.

[1] Appellant filed certain affidavits of himself and his attorney, under rule 75 of the Patent Office, in and by which affidavits he proposed to swear back of the Cavey patent and thus obviate its use as a reference against his application. Counsel argues quite earnestly in this court that these affidavits fully complied with the rule, and that, accordingly, the Cavey patent should not have been used as a reference.

The difficulty with this position is found in the language of said rule 75, which is as follows:

> 75. When an original or reissue application is rejected on reference to an expired or unexpired domestic patent which substantially shows or describes but does not claim the rejected invention, or on reference to a foreign patent or to a printed publication, and the applicant shall make oath to facts showing a completion of the invention in this country before the filing of the application on which the domestic patent issued, or before the date of the foreign patent, or before the date of the printed publication, and shall also make oath that he does not know and does not believe that the invention has been in public use or on sale in this country, or patented or described in a printed publication in this or any foreign country for more than two years prior to his application, and that he has never abandoned the invention, then the patent or publication cited shall not bar the grant of a patent to the applicant, unless the date of such patent or printed publication be more than two years prior to the date on which application was filed in this country.

It will be observed that this rule applies only to references where the invention is shown or described, but not claimed. On reference to the Cavey patent we find, as did the Board, that the patentee expressly made claim for a similar product to that claimed by appellant here, with this feature expressly claimed:

> • • • said sheets being superposed and adherent with the cementing surfaces in juxtaposition, and capable of being subsequently stripped apart and laid with the cement securing overlapping portions of the roofing.

Therefore, rule 75 has no application to the case at bar, and the affidavits were insufficient for the purpose of overcoming the Cavey reference.

In support of his present application, the appellant offered his application, Serial No. 273,868, filed January 29, 1919, which he states was abandoned, but of which he avers the present application is a continuation. He argues that the said application discloses the feature heretofore referred to, of two sheets with their adhesive surfaces in contact, and that he is, under the rule of *Chapman* v. *Wintroath*, 252 U. S. 126, 272 O. G. 913, entitled to rely upon the earlier application for common subject matter. He also argues that because the date of the said Serial No. 273,868 is prior to the date of application in the Cavey patent, the latter date being June 18, 1919, the Cavey patent is not properly used as a reference against him as to that feature. In support of this contention he cites *Ex parte Allport*, 1915 C. D. 32, in which the office announced the rule, based upon *Field* v. *Coleman*, 40 App. D. C. 598, 193 O. G. 221, that a patent having a filing date subsequent to the filing date of the original application is not properly used as a reference.

[2] As we view it, the contention of the appellant cannot be sustained in this respect, in view of the fact, as stated by the Board of Appeals, and not con-

troverted by appellant, that the application, Serial No. 273,868, as originally filed, had no reference to the feature of arranging the sheets of material with their adhesive surfaces in contact. This feature was added to the application by amendment dated September 24, 1920, which date was subsequent to the filing of the application of the Cavey patent. Hence, no good reason can be seen why the Cavey patent is not a good reference in respect to such claims as rest upon this feature without further limitations.

It is apparent, from an examination, that the Cavey patent fully discloses and claims the subject matter in appellant's rejected claims 3, 5, 20, 24, 25, and 26.

The Board of Appeals has properly held that rejected claims 12 and 13 are not patentable over allowed claim 15, and that rejected claim 14 is not patentable over allowed claim 16. These rejected claims are, for all practical purposes, identical with said allowed claims.

Claims 30 and 31 are substantially the same. Claim 30 is as follows:

> 30. A pavement comprising a supporting substructure, and an overlying fibrous sheet adhesively united to the substructure, the fibrous sheet being saturated with a semi-solid material to render the sheet slightly and slowly yieldable under impact, and being coated on its exposed surface with a bituminous compound solid at normal temperatures but capable of coalescing after scarring.

It is stated that these claims are incorporated by appellant for the purpose of obtaining an interference, if said claims are allowed, with the Lowe reference patent. We are unable to find anything in appellant's present disclosure upon which claims 30 and 31 will read. Appellant's application does not suggest or intimate that his material may be used for a pavement, and entirely fails to show the feature of a coating on the exposed surface of the material with a bituminous compound "solid at normal temperatures."

We, therefore, conclude that the Board of Appeals was not in error in rejecting these claims. The appellant certainly cannot, even for the purposes of interference, have claims allowed to him which do not read upon his disclosure.

It is contended that the affidavit of the appellant filed April 2, 1928, was sufficient under rule 94 of the office, and that, even if the Cavey reference could not be overcome by said affidavit under said rule 75, the claims rejected under said Cavey reference should have been allowed for the purposes of interference.

The Board of Appeals made its first decision herein on October 28, 1930. Thereupon the appellant filed his motion for reconsideration, and attached thereto his own affidavit and that of his attorney, attempting to bring the facts within the purview of said rule 94, which rule appears herein in a marginal note.[1] It is stated by the Board in its decision on said motion, and not denied here, that the application of said rule 94 was for the first time raised on said motion, the issue up to that time being as to the patentability of appellant's claims over said Cavey reference. The board reiterated its former holdings on the merits and denied the motion. Thereupon, the appellant filed his reasons for appeal, alleging error, among other things, in the Board's failure to find said affidavits sufficient under said rule 94.

[3] As we view the matter, the appellant is not in position to raise the point complained of, if, in fact, it is a question which we may consider upon this appeal. If appellant had desired the benefit of rule 94, he should have copied some or all of the claims of the Cavey patent. Having then identical claims which might be made the counts of an interference, and making oath to prior invention, he might have obtained a consideration of the allowability of his claims, without reference to the Cavey patent. This he did not do and he cannot complain when the Board failed to concur in what was, to him, plainly an afterthought.

It is also alledged as error that the Board of Appeals denied to appellant a reconsideration upon his motion to reopen his case. While the Board formally denied the "petition for rehearing," we are of opinion a reconsideration was given to the matter, as appears by the decision of the Board, where it is said, in part:

> No sufficient reasons have been advanced that would make us arrive at any different conclusion.

We have held that an oral hearing is not required upon such reconsiderations and that—

> the Board may exercise its sound discretion as to the procedure it will follow in the reconsideration.

In re Greenfield, 17 C. C. P. A. (Patents) 1217, 40 F(2d) 775, 400 O. G. 226.

The decision of the Board of Appeals is affirmed.

Affirmed.

[1] 94. Interferences will be declared between applications by different parties for patent or for reissue when such applications contain claims for substantially the same invention which are allowable in the application of each party, and interferences will also be declared between applications for patent, or for reissue, and unexpired original or reissued patents, of different parties, when such applications and patents contain claims for substantially the same invention which are allowable in all of the applications involved; *Provided*, That where the filing date of any applicant is subsequent to the filing date of any patentee, the applicant shall file an affidavit that he made the invention before the filing date of the patentee.

Where claims are copied from a patent and the Examiner is of the opinion that the applicant can make only some of the claims so copied, he shall notify the applicant to that effect, state why he is of the opinion he can not make the other claims and state further that the interference will be promptly declared and that the applicant can proceed under rule 109, if he further desires to contest his right to make the claims not included in the declaration of the interference.

Parties owning applications or patents which contain conflicting claims will be required before an interference is declared to show cause why these claims shall not be eliminated from all but one of the applications or patents of common ownership.

U. S. Court of Customs and Patent Appeals

FARMER AND THOMAS *v.* SCHWEYER

No. 3,178. Decided June 6, 1932

INTERFERENCE—PATENT AND APPLICATION—APPEAL.

Where, in an interference involving an application and a patent, priority is awarded by the Board of Appeals to the applicant, *Held* that the patentee had no right to file a suit under section 4915 Revised Statutes, and that an appeal by the patentee to the Court of Customs and Patent Appeals will not be dismissed upon motion of the appellee.

MOTION to dismiss appeal. Denied.

Mr. Paul Synnestvedt and *Mr. Edward H. Davis* for Farmer and Thomas.

Mr. Melville Church and *Mr. C. V. Des Jardines* for Schweyer.

GRAHAM, *P. J.*:

Farmer and Thomas, patentees, were involved in an interference with Schweyer, who was an applicant. Schweyer was given priority by the Board of Appeals. Thereupon Farmer and Thomas appealed to this court. Schweyer, within 20 days, filed a cross motion under section 4911, Revised Statutes, electing to proceed under section 4915, Revised Statutes. Farmer and Thomas did not file a bill in equity, as provided in said section 4911, and, thereupon, Schweyer moves to dismiss the appeal.

The Commissioner of Patents refused to dismiss the appeal, giving as a reason therefor, that Farmer and Thomas, being patentees, had no cause of action under said section 4915, Revised Statutes; that to do so would leave them without a statutory remedy; and that they were entitled to proceed with their appeal.

In support of this the Commissioner cited *MacGregor v. Chesterfield*, 31 F.(2d) 791, and *Heidbrink v. McKesson*, 53 F.(2d) 321, 412 O. G. 839.

In the first of these cases, District Judge Tuttle of the Eastern District of Michigan, had before him a bill in equity, filed by a patentee who had been defeated in an interference matter in the Patent Office. The cause was heard on March 28, 1929. The district court held that a patentee could not proceed under said section 4915, and that the evident intent of Congress was that no party except an applicant might file a bill in the district court to review the action of the Patent Office under either section 4911 or section 4915.

In the second case cited, a patent having issued to a party, certain claims therein were placed in interference with the claims of the other party's pending application. Priority was awarded the applicant. No appeal was prayed to the Court of Customs and Patent Appeals by the defeated party and the patentee instituted an action in the district court, claiming to do so under section 4915, Revised Statutes. The circuit court of appeals was of the opinion that sections 4911 and 4915 were not intended to open the door to review in the district court, of every decision in the Patent Office, but said,

> a litigant can avail himself of the remedies there provided only if he brings his case within the conditions so expressly imposed.

The argument was made in that case that either party to an interference might appeal under section 4911, if defeated in the Patent Office. The court said:

> The district court may impliedly be given jurisdiction under the circumstances of the hypothetical case just stated, but this is a question we need not here or now decide.

The court said it was constrained to the opinion that the only review open to a patentee interferent, after an adverse decision in the Patent Office, is by appeal to the Court of Customs and Patent Appeals, or by seeking relief under section 4918, Revised Statutes.

Section 4911 provides that a patent shall not be issued to the person awarded priority pending the final determination of the appeal under section 4915. This would seem to indicate that insofar as proceedings in equity are concerned, the section was intended to apply only to cases of applicants, and not to a patentee.

An examination of section 4915 discloses that this section was intended to give to an unsuccessful applicant in the Patent Office an opportunity to have his application heard in a court of equity, optional with a right of appeal to the United States Court of Customs and Patent Appeals. The section, obviously, is intended to apply to an *applicant* and not to a *patentee*. The judgment of the court of equity is to be that the applicant may "receive a patent for his invention," which adjudication "shall authorize the Commissioner to issue such patent."

This section also provides for service of notice upon "adverse parties," which would indicate that the section was not intended to apply, alone, to ex parte applications for patent.

Section 4918, Revised Statutes provides a remedy in equity between interfering patents. In the proceedings authorized by this section, the court—

> may adjudge and declare either or both of the patents void in whole or in part upon any ground, or inoperative, or invalid * * *.

Obviously this section has no application to cases such as the one at bar.

Viewing these various provisions of the statute together, we are of opinion that it was not intended by the language of section 4911, to authorize the filing of a bill in equity under said section 4915, by a patentee. If a patentee is involved in an interference and is unsuccessful in the Patent Office, and appeals to this court, he may not be forced to go into equity by notice of the appellee, but has a right to pursue his appeal and seek his remedy in this court. The compelling reason leading to this conclusion is that the court of equity could afford him no relief under said section 4915, even were he authorized by the law to file his bill in such court.

For the reasons assigned, the motion of the appellee to dismiss the appeal is denied.

Motion denied.

U. S. Court of Customs and Patent Appeals

JARDINE AND JEHLE *v.* LONG

No. 2,996. Decided May 31, 1932

1. INTERFERENCE — PRIORITY — EVIDENCE — ORAL TESTIMONY.

When oral testimony alone is produced to prove the facts necessary to establish priority such testimony will be most carefully scrutinized, in the light of human experience, and under such knowledge of human nature as the courts possess, and all circumstances surrounding the transaction will be most carefully looked to in bringing the mind to a conclusion as to what the truth really is.

2. SAME—SAME.

Evidence reviewed and *Held* sufficient to establish that L. was the first inventor even though the testimony presented on his behalf was all oral and no contemporaneous drawings were produced or any articles fulfilling the requirements of the counts.

APPEAL from the Patent Office. Affirmed.

Messrs. Richey & Watts, Mr. F. O. Richey, Mr. F. M. Bosworth, Mr. Donald A. Gardiner, and *Mr. H. F. Schneider* for Jardine and Jehle.

Mr. George Rex Frye for Long.

GARRETT, *J.*:

The insistence of appellants in this controversy is that there should be a reversal by this court of the decision of the Board of Appeals of the United States Patent Office, which affirmed the decision of the Examiner of Interferences awarding priority to Long, solely upon the facts.

In the reasons of appeal there are 20 assignments of error, but the substance of all these is that the evidence in behalf of Long, being entirely oral and supported by no corroborating documents or proper physical exhibits, should be held insufficient, under the law of evidence, to sustain his contentions.

It is well understood that this court follows the practice common to all appellate tribunals in cases such as this, and refuses to disturb decisions of the tribunals below, upon findings of fact unless fully convinced that such findings are not in accord with the weight of the evidence when such evidence is fairly weighed and construed.

It is also realized, we are sure, that where it appears that the tribunals originally hearing the case made a careful and painstaking scrutiny of the evidence, and that the intermediate appellate tribunal examined and independently weighed the same testimony, with the result that both reached the same conclusion, for the same reasons, then the burden of one appealing to convince us of error in their decisions is very great.

Having these two general and well known principles in mind we proceed to consider the issues raised.

The interference was declared upon two counts, reading as follows:

1. A piston for an internal combustion engine comprising an integral head and skirt, cylinder engaging bearing walls in the skirt, and a yieldable portion in one of the said bearing walls varying in wall thickness in the direction of its circumferential length from a maximum at its point of support to a minimum at its free end.

2. A piston for an internal combustion engine comprising a head and a skirt, the skirt having a plurality of flexible circumferentially extending portions varying uniformly in wall thickness in the direction of their free ends.

These counts were claims 1 and 4 of a patent, No. 1,580,491, issued to Jardine and Jehle April 13, 1926, upon an application filed May 2, 1921. An application of Long, filed January 17, 1921, was copending with that of Jardine and Jehle, which was held to cover the subject matter of said claims. So, the issue of patent to Jardine and Jehle was inadvertent. Long copied the claims which became the counts when the interference was declared.

In their preliminary statement Jardine and Jehle claimed conception on or about November 11, 1919, with reduction to practice on or about March 11, 1920. Long claimed conception on or about September 1, 1918, with reduction to practice on or about October 5, 1918. It is thus to be observed that Long's claimed date for reduction to practice antedated the claimed date of Jardine and Jehle even for conception.

The tribunals of the Patent Office did not assign specific dates to either party in their findings, same not being necessary because of their finding that Long did reduce to practice before his adversaries claimed conception.

Appellants, as has been stated, attack the sufficiency of the evidence to justify this finding.

The testimony in behalf of Long was all oral. No contemporaneous drawings by him were produced, nor were any pistons fulfilling the requirements of the counts, claimed to have been made by or for Long and used in reducing to practice, placed in evidence.

It seems to be true that, as stated in the brief for appellants:

> • • • the party Long produces no device or piston or drawing which can be proven to have been in existence prior to his filing date.

But, while the foregoing is the virtually admitted condition of the record as to Long's proofs, we have not been cited to any authority in which the courts have held that oral testimony alone may not be relied upon to establish such facts as Long here sought to establish. Indeed, it is so well known that the rule is to the contrary, as in reason it should be, that no citations are deemed necessary upon the point. Learned counsel for appellants does not claim it to be otherwise, but he does insist:

> The rule in this court and the Federal Courts, from the Supreme Court down, • • • is that he who seeks to prove priority carries a heavy burden and must do so by at least a preponderance of evidence. The rule regarding oral evidence is particularly severe because witnesses are prone, as the Supreme Court has said, to torture or to actually fabricate testimony to establish the earlier use of a later device and, since the evidence is all within the compass of the party undertaking to prove priority, the opponent has little or no opportunity to correct either tortured or fabricated testimony.

Numerous authorities beginning with the *Barbed Wire Case*, 143 U. S. 275, 58 O. G. 1555; and running through *Union* v. *White*, 22 F.(2d) 816, with their included citations, are brought to our attention in support of the argument last above quoted from appellant's brief.

[1.] We think they amply support said argument and that the doctrine is not only well established, but sound. However, this doctrine, in the final analysis, means only that when oral testimony alone is produced to prove the facts necessary to establish priority such testimony will be most carefully scrutinized, in the light of human experience and under such knowledge of human nature as the courts possess, and that all circumstances surrounding the transaction will be most carefully looked to in bringing the mind to a conclusion as to what the truth really is.

[2.] A careful study of the concurring decisions of the tribunals of the Patent Office convinces us that both tribunals were, in considering the testimony in the instant case, fully conscious of the rule, and that they did, with great particularity and care, scrutinize, consider and analyze the testimony. Practically every weakness which the brief of appellants comments upon was clearly pointed out in the decision of the Examiner of Interferences, and, in the main, repeated in the decision of the Board of Appeals.

Notwithstanding these weaknesses and defects, however, the tribunals of the Patent Office, each acting for himself or itself, concurred in holding the oral testimony sufficient to establish Long's contentions, and we are unable to bring ourselves to a satisfactory conclusion that such holding was manifestly wrong.

One circumstance which merits comment on our part is very earnestly stressed by counsel for appellants. That is the fact that Long, between September, 1918 (his claimed date of conception of the invention at issue), and January 17, 1921 (the filing date of the involved application), filed numerous applications for inventions relating to pistons, in several of which he might properly have disclosed, but did not disclose or claim, the invention. Also it is pointed out that he waited long to file the independent application for it.

It is argued that his failure to file an application for this, while he was filing so many others relating to the very same art, is a circumstance weighing against the claim that he was, in fact, in possession of the invention.

The circumstance, particularly as a matter of first impression, does tend somewhat to prejudice Long's case, and in cases such as *Halbleib et al.* v. *Bendix et al.*, 50 App. D. C. 247, 285 O. G. 191; 270 Fed. 683, as well as in other cases cited by appellants, the courts have made comment upon somewhat, but not wholly, analogous facts.

Notwithstanding this, however, there is no claim here that what Long did was an abandoned experiment, nor is any question of diligence involved. The effort is, broadly, to cast such doubt upon his having ever invented this particular piston, or, at least, having invented it at any time which would bring him in legal conflict with appellants, that his claim to priority will fail.

Noting the contentions of appellants upon this point the Board of Appeals said:

> • • • Where reduction to practice has been accomplished, we do not consider that the filing of several applications in the meantime constitutes any possible ground of estoppel or under the circumstances found here, of indicating that Long's first piston was an abandoned experiment.

It is argued by appellants that the quoted expression indicates that the board failed to consider the *negative* force and effect of Long's failure, and we are urged to consider it. We have considered it, and we apprehend the board did likewise and that it concluded that the negative force of his failure to file an application was not sufficient to outweigh the positive, even though only oral, testimony as to his reduction to practice.

We are not able to find in the record any evidence deemed sufficient to justify a conclusion that Long derived knowledge of the Jardine and Jehle device through the Franklin Company, or otherwise.

As has been stated, the case has been presented to this court as involving issues of fact solely. We have dealt with it wholly upon that basis, giving careful attention to appellants' criticisms, and to the authorities cited.

To repeat the very full review made by the tribunals of the Patent Office in which all the salient testimony was either paraphrased or directly quoted, would present nothing of public interest or importance and would merely unduly lengthen this opinion.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,151,501, J. Tomlinson, Printing plate, appeal filed Sept. 15, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9611, *L. O. Kellogg* v. *Speedaumat Mfg. Co.*

1,226,135, R. V. Stambaugh, Process of making moving picture films, filed Sept. 14, 1932, D. C., S. D. N. Y., Doc. E 71/83, *Artfilm Studios* v. *Paramount Public Corp.*

1,248,558, L. A. Scribner, Coupling, filed Aug. 17, 1932, D. C., S. D. Calif. (Los Angeles), Doc. X–84–C, *E. T. Wallace* v. *Safety Sales Co.*

1,280,596, 1,639,202, B. Valjean, Process of combustion, 1,512,869, same, Combustion apparatus, filed Sept. 16, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4403, *B. Valjean et al.* v. *Perfection Stove Co.*

1,329,755. (See 1,370,097.)

1,370,097, S. J. Dunkley, Pitter knife; 1,370,099, same, Pitting knife for pitting peaches, etc.; 1,329,755, same, Machine for halving or splitting peaches, filed Aug. 26, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E 31–D, *Sprague Sells Corp.* v. *Pacific Pitting Machine Co. et al.*

1,370,099. (See 1,370,097.)

1,379,855, J. Donner, Cream depilatory, appeal filed Sept. 15, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9613, *J. Donner* v. *Sheer Pharmacal Corp.*

1,419,301, E. J. Palmer, Card holder; 1,583,740, same, Placard holder, filed Sept. 15, 1932, D. C. Kans., 2d Div., Doc. 717–N, *E. J. Palmer* v. *Barnsdall Refining Co.*

1,472,484, H. Mayer et al., Dumping wagon; Re. 17,130, G. W. Berry, Tilting mechanism for dumping bodies, filed Sept. 15, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1293, *The Commercial Shearing & Stamping Co.* v. *The Differential Steel Car Co. et al.*

1,512,869. (See 1,280,596.)

1,523,928, Berney & McMahan, Liner setting tool and safety joint, filed Aug. 26, 1932, D. C., S. D. Calif. (Los Angeles), Doc. X–90–C, *E. P. Berney et al.* v. *S. R. Bowen Co. et al.*

1,534,478, W. J. Wiswall, Manifolding book, D. C., S. D. N. Y., Doc. E 51/201, *American Sales Book Co., Ltd.* v. *Autographic Register Co.* Decree for plaintiff (notice Sept. 10, 1932).

1,583,740. (See 1,419,301.) 1,639,202. (See 1,280,596.)

1,658,323, L. Blackmore, Refrigerator control, filed Aug. 31, 1932, D. C., S. D. Iowa (Davenport), Doc. E 4120, *Frigidaire Corp. et al.* v. *J. J. McNamara et al.* (*McNamara Furniture Co.*).

1,670,056. (See Re. 16,611.)

1,686,243, E. B. Meyer, Snow plow, filed Sept. 14, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4401, *E. B. Meyer* v. *J. Q. Shunk et al.*

1,701,093, J. S. Zook, Battery hand lamp, D. C., S. D. N. Y., Doc. E 52/169, *Burgess Battery Co.* v. *U. S. Electric Mfg. Co.* Decree for plaintiff (notice Sept. 15, 1932).

1,759,639, M. Belloch, Buckle, filed Sept. 16, 1932, D. C., S. D. N. Y., Doc. E 71/104, *M. Belloch* v. *M. Cohen* (*Red Star Casting Co.*).

1,803,281, 1,803,309, E. J. Budlong, Piston ring, D. C., S. D. Calif. (Los Angeles), Doc. D–23–C, *E. J. Budlong et al.* v. *Automotive Sales, Inc.* Dismissed without prejudice Sept. 9, 1932.

1,803,309. (See 1,803,281.)

1,813,791, 1,813,792. W. Wuerfel, Piston ring, D. C., S. D. N. Y., Doc. E 63/389, *Wilkening Mfg. Co.* v. *C. A. Gilbert.* Consent order of discontinuance Sept. 14, 1932.

1,818,792. (See 1,813,791.) 1,849,384. (See Re. 18,586.)

1,862,710, Silverman & Constantine, Jewelry construction, filed Sept. 14, 1932, D. C., S. D. N. Y., Doc. E 70/82, *W. Silverman et al.* v. *Simson Bros., Inc.*

Re. 16,611, L. L. Lewis, Method of and apparatus for cooling and ventilating; 1,670,656, W. L. Fleisher, Ventilating system, filed Sept. 13, 1932, D. C., S. D. N. Y., Doc. E 71/71, *Auditorium Conditioning Corp.* v. *Maurice & Philip Gertner, Inc., et al.*

Re. 17,130. (See 1,472,484.)

Re. 18,586, R. Ruemelin, Sand blast curtain; 1,849,384, same, Adjustable sand blast nozzle holder, filed Sept. 15, 1932, D. C., W. D. Wis. (Madison), Doc. E 2135, *Reumelin Mfg. Co.* v. *Luchsinger Monument Works.*

Des. 70,508, E. Pappert, Eye glass frame; Des. 73,578, same, Spectacle frame, D. C., S. D. N. Y., Doc. E 58/303, *E. Pappert* v. *Shell-Craft Mfg. Corp.* Dismissed Sept. 15, 1932.

Des. 73,578. (See Des. 70,508.)

Des. 86,877, A. S. Katz, Latch, filed Sept. 16, 1932, D. C., E. D. N. Y., Doc. E 6570, *A. S. Katz* v. *Star Refrigerator Hardware Works et al.*

Disclaimers

(*Continued from page 929*)

means for alternately establishing connections between said radio frequency energy collecting or radiating circuit, said oscillator and said receiving circuit, said means operating to shunt said resistor when said radio frequency energy collecting or radiating circuit is connected with said receiving circuit."

1,769,117.—*Ransom W. Davenport*, Detroit, Mich. REFRIGERATING AND ICE-MAKING APPARATUS. Patent dated July 1, 1930. Disclaimer filed October 1, 1932, by the assignee, *Chicago Pneumatic Tool Company*, the patentee, said *Davenport*, assenting.

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"1. A mechanically operated refrigerating outfit having a chamber from which heat is to be extracted, a thin flat horizontally disposed heat absorbing unit in said chamber, and a container for liquid in thermal proximity to said unit.

"2. A mechanically operated refrigerating outfit having a chamber from which heat is to be extracted, a thin flat horizontally disposed heat absorbing unit at one extremity of said chamber, and a container for liquids in thermal proximity to said unit."

"4. A mechanically operated refrigerator having a chamber with walls insulated against heat, a horizontally disposed freeze plate in said chamber adjacent one extremity thereof, and a container for liquid to be frozen in contact with said plate."

1,831,764.—*Harold A. Evans*, Lynn, Mass. ORNAMENTAL PIPING, METHOD OF MAKING AND APPLYING, AND ARTICLE OF MANUFACTURE CONTAINING THE SAME. Patent dated November 10, 1931. Disclaimer filed October 1, 1932, by the patentee, said *Evans*, the assignee, *Parco Specialty Company*, and the *United Stay Company, Inc.*, exclusive licensee.

Hereby enter this disclaimer.

Disclaim the respective subjects matter of claims 10, 18, and 19, except when the film is capable for a substantially indefinite period of adhesive attachment to a sheet to be ornamented, whereby the strip is adapted to be merchandised for subsequent adhesive application.

Disclaim entirely claims 12, 13, 14, 15, 16, 17, 20, 21, 22, and 23.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, OCTOBER 25, 1932

[VOL. 423. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 323,457. ANDREW R. KENNEDY, INC., New York, N. Y. Filed Jan. 26, 1932.

BENTURF

For Lawn Grass Seed Mixture.
Claims use since August, 1931.

Ser. No. 325,088. COTTENTEX PRODUCTS CO., Milwaukee, Wis. Filed Mar. 14, 1932.

Cottentex

For Cellulose Fiber.
Claims use since July 1, 1931.

Ser. No. 327,262. "SNIA-VISCOSA" SOCIETÁ NAZIONALE INDUSTRIA APPLICAZIONI VISCOSA, Milan, Italy. Filed May 19, 1932.



For Tufts of Artificial Staple Fibers from Which the Thread is Spun.
Claims use since Jan. 15, 1930.

Ser. No. 328,687. FARM SERVICE STORES, INC., Minneapolis, Minn. Filed July 11, 1932.

FARM-A-SERV

For Field, Garden, and Vegetable Seeds.
Claims use since Oct. 20, 1931.

Ser. No. 328,934. ESTATE OF CHARLES SAUNDERS, NELLIE L. SAUNDERS and CHARLES MORTIMER SAUNDERS, administrators, doing business as Charles Saunders, Key West, Fla. Filed July 21, 1932.

MARATHON ISLAND

For Sponges.
Claims use since May 21, 1932.

Ser. No. 329,463. READING POULTRY FOOD COMPANY, Reading, Pa. Filed Aug. 10, 1932.

REPCO Brand

No claim being made to the word "Brand" apart from the mark shown.

For Peat Moss for Poultry Bedding and Mulching for Trees and Plants.
Claims use since Jan. 1, 1931.

Ser. No. 329,568. C. E. WILSON & COMPANY, INC., Manchester, Conn. Filed Aug. 15, 1932.



The words "Its Coated" and the words "The Rose That Sleeps Safely" together with the representation of the shrub and the rose which appear on the drawing are disclaimed apart from the mark shown.

For Nursery Stock.

Claims use since July 31, 1931.

Ser. No. 330,175. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn. Filed Sept. 8, 1932.



The trade-mark consists of double stripes extending obliquely across the face of the bag or label parallel to each other, said stripes being red in color, as indicated in the drawing.

For Garden and Field Seeds, Bulbs, and Plants.

Claims use since Aug. 4, 1932.

CLASS 2

Receptacles

Ser. No. 330,132. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Sept. 6, 1932.

ARTIKS

For Containers or Bags of Transparent Paper or Cellulose Film, Used Particularly for Food Preservation.

Claims use since July 1, 1931.

Ser. No. 330,222. CAPITAL PAPER COMPANY, Indianapolis, Ind. Filed Sept. 10, 1932.

GREEN

BACK

For Paper Bags.

Claims use since Aug. 1, 1931.

Ser. No. 330,485. MICHIGAN CASKET CO., Detroit, Mich. Filed Sept. 19, 1932.

Eternity Bed

For Caskets.

Claims use since March, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 328,480. DETERGENT PRODUCTS CORPORATION, Atlanta, Ga. Filed July 1, 1932.

LABORSAVER

For Cleaning Compound in Powdered Form, Particularly for Laundry Use and All Kinds of Domestic Cleaning.

Claims use since August, 1931.

Ser. No. 329,092. THE PHOENIX OIL COMPANY, Cleveland, Ohio. Filed July 26, 1932.



The word "Cleaner" is disclaimed apart from the other features of the mark shown in the drawing.

For a Highly Concentrated Liquid Cleaning Preparation Especially Adapted for Cleaning and Restoring the Sheen to Carpets and Rugs, for Cleaning High Quality of Fabrics and for General Household Laundry Work.

Claims use since Apr. 28, 1932.

Ser. No. 329,499. CHARLES MILLS BUNKER, doing business as Grip-A-Club Company, Greensboro, N. C. Filed Aug. 12, 1932.



Applicant hereby disclaims the right to the exclusive use of the words "Perfect Aid to a Perfect Grip" apart from other features of the mark shown.

For Preparation to be Applied Either to the Hands, Golf Club Grip, Tennis Racket, Base-Ball Bat, Oar, Ball, or Other Device Used in Sports to Aid a Person to Maintain Control of the Instrument Used.

Claims use since Apr. 1, 1932.

Ser. No. 329,589. ABBOTT LABORATORIES, North Chicago, Ill. Filed Aug. 17, 1932.

FLEABAR

For Insecticidal Soaps.

Claims use since Mar. 19, 1932.

Ser. No. 329,818. MAJOR PETROLEUM COMPANY, Wilmington, Del., and Philadelphia, Pa. Filed Aug. 23, 1932.

MAJOR
DRY CLEANER

Applicant disclaims the descriptive words "Dry Cleaner" apart from the mark as shown on the drawing.

For Dry Cleaner.

Claims use since Jan. 1, 1932.

Ser. No. 330,020. POTTER-WRIGHTINGTON, INC., Charlestown, Mass. Filed Aug. 31, 1932.

KILZUM

For Flea Soap.

Claims use since Sept. 1, 1930.

Ser. No. 330,179. HYO PRODUCTS COMPANY, Binghamton, N. Y. Filed Sept. 8, 1932.

HYO

For Cleaning Compound for Domestic Use.

Claims use since July 14, 1932.

Ser. No. 330,278. ALBERT V. SHOTWELL, Los Angeles, Calif. Filed Sept. 12, 1932.

VANS

For Shoe Dressings.

Claims use since July 28, 1932.

Ser. No. 330,346. HOPKINS CHEMICAL CO., Washington, D. C., and Newark, N. J. Filed Sept. 14, 1932.

La Rue's
FRENCH PASTE
La Pâte Francaise



The portrait and signature appearing on the drawing are those of L. L. La Rue, one of the members of the firm of Hopkins Chemical Co., the applicant in this case. The words "French Paste" and "La Pate Francaise" are hereby disclaimed apart from the mark shown on the drawing.

For Soap Paste for Cleaning Purposes.

Claims use since January, 1929.

CLASS 5

Adhesives

Ser. No. 328,018. CARL W. RENSTROM, doing business as Tip-Top Products Co., Omaha, Nebr. Filed June 15, 1932.

TIP-TOP

For Liquid Solder (a Fluid, Metallized, Adhesive Cement.)
Claims use since July, 1931.

Ser. No. 329,802. MARTIN DENNIS COMPANY, Newark, N. J. Filed Aug. 24, 1932.

GRIPTOL

For Mild Adhesive Preparation for Application to the Hands to Assure Secure Gripping of Tools, Golf-Clubs, Tennis Racquets, and Other Hand Manipulated Implements.
Claims use since October, 1929.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 323,509. SOCIETY OF THE COLONAIDE, INCORPORATED, New York, N. Y. Filed Jan. 26, 1932.

COLONAIDE

For Tablets, a Medicinal Preparation for Clearing the Clogged Colon.
Claims use since Apr. 20, 1931.

Ser. No. 325,190. CARROLL DUNHAM SMITH PHARMACAL CO., doing business as Smith Pharmacal Co., New York, N. Y. Filed Mar. 16, 1932.



Registration rights in the words "Marrow Malt Compound Products" are disclaimed apart from the mark shown in the drawing.
For Reconstructive Tonic and Appetite Stimulator.
Claims use since Mar. 24, 1931.

Ser. No. 325,489. TERMINAL BARBER SHOPS, INC., New York, N. Y. Filed Mar. 25, 1932.



The drawing is lined to indicate green.
For Cosmetics—Namely, Powders, Rouges, Lip Sticks, and Mascara.
Claims use since Oct. 31, 1931.

Ser. No. 325,490. TERMINAL BARBER SHOPS, INC., New York, N. Y. Filed Mar. 25, 1932.



The drawing is lined to indicate green.
For Toilet Lotions—Namely, Astringents, Youth Tones, Skin Velvets, and Muscle Oils.
Claims use since Oct. 31, 1931.

Ser. No. 326,068. BURTON S. BOSS, New York, N. Y. Filed Apr. 11, 1932.



The word "Cream" is disclaimed apart from the mark as shown.
For Face Cream.
Claims use since Aug. 1, 1931.

Ser. No. 327,204. TAMPA DRUG COMPANY, Tampa, Fla. Filed May 17, 1932.

Poinsettia

For Saltpetre, Salicylic Acid, Cod Liver Oil, Mineral Oil for Medicinal Purposes, Russian Mineral Oil for Medicinal Purposes, Powdered Alum, Alum Crystals, Boric Acid Crystals, Boric Acid, Sugar of Lead, Ammonia, Rochelle Salts, Permanganate of Potash, Powdered Saltpetre, Sodium Bicarbonate, Oxalic Acid; Beef, Iron, and Wine Tonic; Cream of Tartar, Epsom Salts, Copperas, Pink Prepared Chalk, White Prepared Chalk; Antiseptic for Sore Throat, Bad Breath, Irritated Gums, and as a Cleanser and Wound Dressing; Calamine Lotion; Alkaline Antiseptic Solution Used as a Gargle, Throat Spray, and Mouth Wash; Citrate of Magnesia, Foot Powder, Willow Charcoal, Naphthalene Balls, Sodium Fluoride Used as an Insecticide, Flaxseed, Tartaric Acid, Citric Acid, Fuller's Earth, Senna Leaves, Flaxseed Meal, Senna and Manna, Powdered Borax, Blue Stone, Barium Carbonate, Sulphur, Psyllium Seed, Sunflower Seed, and Impregnated Red Cedar Chips, and Lavender Scented Moth Flakes and Cedar, Spirit Camphor, Phosphate of Soda, Aromatic Castor Oil, Solution Argyrol, Tincture Iodine, General Antiseptic, Preparation for Treating Earache, Cocoanut Oil for Medicinal Purposes, White Pine and Tar Cough Syrup, Improved Syrup of White Pine Compound Cough Syrup, Tincture Benzoin Compound, Tincture Asafetida, Tincture Arnica, Elixir Lactated Pepsin, Distilled Extract Witch Hazel, Cotton Seed Oil for Medicinal Purposes, Spirit Turpentine for Medicinal Purposes, Spirit Lavender Compound, Essence Peppermint, Chloroform Liniment, Aromatic Spirit of Ammonia, Camphorated Oil, Calomel, Rhubarb and Colocynth Compound Capsules, Cathartic Pills, Balsam Copaiba, Extract Cascara Aromatic, Oil of Citronella, Olive Oil for Medicinal Use, Glycerin, Sweet Spirits of Nitre, and Paregoric.
Claims use since 1922.

Ser. No. 327,433. MATTHEW GINSBURG, doing business as Universal Insecticide & Disinfectant Co., Philadelphia, Pa., assignor to Universal Insecticide & Disinfectant Co., of Philadelphia, Pa. Filed May 25, 1932.



For Insecticide.
Claims use since Jan. 2, 1932.

Ser. No. 327,597. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed May 31, 1932.

Soluga

For a Medicinal Dietetic Food Preparation for Use in the Treatment of Exhaustion, Disorders Attending Over-Fatigue and Advancing Age, Arrested Growth and Development; Rickets, Dental Caries, and Paradentosis; Disturbances During Pregnancy and Lactation, Conditions Attending and Following upon Wasting Diseases and as a Tonic During Convalescence, for Chlorosis and Anæmia, as an Invigorator for Physical and Mental Work, and for Strenuous Exercise.
Claims use since July 29, 1927.

Ser. No. 327,699. MONROE PRODUCTS CO., Los Angeles, Calif. Filed June 3, 1932.

FLAMINGO

For Facial and Hand Creams—Namely, Vanishing Cream, Cold Cream, and Cleansing Cream; Hair Tonics, Toilet Water, Perfumes, Nail Polish; Lotions—Namely, Such as Hand and Face Lotions for Soothing and Softening the Skin; Depilatories; Rouges; Powders—Namely, Face Powders and Dusting Powder; Shampoos, Facial Beauty Pack, Clay and Astringents, Finger Nail Polish, Liquid for Removing Finger Nail Polish, Finger Nail Polish Whitener, Cuticle Oil, Liquid for Removing Nail Cuticle, Eye Shadow Compound, Sachet Powder, Eyelash Mascara, Bath Salts, Shampoo Oil, and Finger Nail Coloring Liquid.
Claims use since Feb. 10, 1932.

Ser. No. 327,825. JOSEPH LUNTZ, Brooklyn, N. Y. Filed June 8, 1932.

VITOLYN

For Laxative Tonic.
Claims use since June 1, 1932.

Ser. No. 327,937. ECK-O-LIN MFG. CO., Minneapolis, Minn. Filed June 13, 1932.

ECK-O-LIN

For an Antiseptic Skin Perfector and for a Hair Tonic.
Claims use since Sept. 20, 1910.

Ser. No. 328,352. THE GRANGER MEDICINE CO. INC., doing business as Coal Roller Pill Company, New Iberia, La. Filed June 28, 1932.

COAL-ROLLER



For Pills for Headache, Dizziness, Billiousness, Torpid Liver, Constipation and Dyspepsia.
Claims use since January, 1898.

Ser. No. 328,370. THOMAS H. PETERSON, doing business as The Mae-O Company, Cody, Wyo. Filed June 28, 1932.

MAE-O

For Stomach Tablets.
Claims use since June 1, 1932.

Ser. No. 329,060. PIM CHEMICAL COMPANY, West Palm Beach, Fla. Filed July 25, 1932.

PIM

For Asthma Preparation.
Claims use since May 12, 1932.

Ser. No. 329,178. OTIS CLAPP & SON, INC., Boston, Mass. Filed July 29, 1932.

ICOMANGAN

For Blood Food or Blood Tonic.
Claims use since July 13, 1932.

Ser. No. 329,228. FIREX CHEMICAL CO., Baltimore, Md. Filed July 30, 1932.

FIREX

For Powdered Chemicals Used as Fire Extinguishers.
Claims use since Apr. 15, 1932.

Ser. No. 329,232. GODISSART & PYLES, Hollywood, Calif. Filed July 30, 1932.



VITA-CELL
A SUPERIOR ANTISEPTIC & DEODORANT

The words "A Superior Antiseptic & Deodorant" are disclaimed apart from the other features of the mark shown in the drawing. The drawing is lined for green.
For Antiseptic, Anti-Toxic, and Deodorant.
Claims use since June 16, 1932.

Ser. No. 329,259. EXCELSIOR SPRINGS MINERAL WATER CRYSTALS COMPANY, Excelsior Springs, Mo. Filed Aug. 1, 1932.



The words "Excelsior Springs Mineral Water Crystals" are disclaimed apart from the other features of the mark shown in the drawing.
For Mineral Water Crystals Having Laxative and Diuretic Properties.
Claims use since June 1, 1932.

Ser. No. 329,267. SAM TESORO, doing business as Chicago Spice & Flavor Co. and Tesoro Brand Products and Chicago Spice & Flavoring Ext. Co., Chicago, Ill. Filed Aug. 1, 1932.



No claim is made to the word "Brand" or to the outline of the label. The figures shown on the label are fanciful.
For an Effervescent Citrate Preparation for Treating Sour or Acid Stomach.
Claims use since 1926.

Ser. No. 329,299. ISAAC N. BOYD, York, Pa. Filed Aug. 3, 1932.

BOYD'S
MOUNTAIN OIL
DROPS

The words "Oil" and "Drops" are disclaimed apart from the other features of the mark shown in the drawing.
For An Especially Prepared Medicinal Preparation Recommended for Relief of Summer Complaints, Cramps, Diarrhea, Cholera Morbus, Cholic, Indigestion, Dyspepsia, and Constipation.
Claims use since January, 1892.

Ser. No. 329,331. ALEXANDER T. FERRIS, doing business as Sans Souci Products Co., Los Angeles, Calif. Filed Aug. 4, 1932.

SANS
SOUCI

For Prophylactic Compound to be Used by Women as an Antiseptic.
Claims use since Oct. 6, 1931.

Ser. No. 329,365. MARTHA WIORA, Almond, Wis. Filed Aug. 5, 1932.



Martha Wiora's

The portrait and signature are those of the applicant.
For A Preparation for Removing Wrinkles.
Claims use since Dec. 23, 1931.

Ser. No. 329,566. EDWARD M. WILLIAMS, Norway, Iowa. Filed Aug. 15, 1932.

LEA CLARE
WILLIAMS

MOON-O-C

For Medicine Used in the Treatment of Periodic Ophthalmia.
Claims use since Apr. 28, 1932.

Ser. No. 329,655. FERNANDO A. RUBIÓ, Barcelona, Spain. Filed Aug. 18, 1932.

LASA

For General Tonics, Cod Liver Oil, Laxative Medicines; Medicines Indicated for Diseases of the Respiratory Organs, Rheumatism, and the Nervous System; Opotherapic Medicines and Serums.
Claims use since Oct. 30, 1929.

Ser. No. 329,671. HY-G-DENT COMPANY, New York, N. Y. Filed Aug. 19, 1932.

HY-G-DENT
IS BETTER TASTES BETTER

No claim is made to the words "Is Better" and "Tastes Better" apart from the mark shown on the drawing.
For Toothpaste.
Claims use since Aug. 10, 1932.

Ser. No. 329,700. BECK, KOLLER & COMPANY, INC., Detroit, Mich. Filed Aug. 20, 1932.

Reckacite

For Synthetic Resins.
Claims use since Nov. 5, 1930.

Ser. No. 329,718. EDNA M. MCKAY, Akron, Ohio. Filed Aug. 20, 1932.

ACNEKIL

For Skin Lotion.
Claims use since June 1, 1932.

Ser. No. 329,778. ANNA RUDOLPH, Cincinnati, Ohio. Filed Aug. 22, 1932.

RUAH
RUDOLPH·HAIR·PROMOTER

The words "Hair" and "Promoter" are hereby disclaimed apart from the mark as shown on the drawing.
For Preparations for Promoting the Growth of Hair.
Claims use since Aug. 1, 1932.

Ser. No. 329,796. HERCULES POWDER COMPANY, Wilmington, Del. Filed Aug. 24, 1932.

BRISGO

For Depilating Compound.
Claims use since Aug. 5, 1932.

Ser. No. 329,850. BRAZILIAN INSECTICIDE COMPANY, Brooklyn, N. Y. Filed Aug. 26, 1932.

JEFF

For Insecticide.
Claims use since May 1, 1932.

Ser. No. 329,863. MERCK & CO., INC., Rahway, N. J. Filed Aug. 26, 1932.

ACETYLARSAN

For Medicinal Preparation Used as an Antisyphilitic.
Claims use since July 26, 1932.

Ser. No. 329,890. THE DURALS CO., INC., St. Louis, Mo Filed Aug. 27, 1932.

PARIS CHARM

For Deep Wave Hair Lotion, Nail Enamel for Finger Nails, Nail Enamel Remover for Finger Nails, Cuticle Oil, Cuticle Remover Preparation, Hand Cream, Finger Nail Whitener, Face Powder, Perfumery, Vanishing Cream, and Cold Cream.
Claims use since Sept. 11, 1931.

Ser. No. 330,005. ALEX MO COMPOUND CO., Redondo, Calif. Filed Aug. 31, 1932.

KWI ETT
SHIP OF PEACE

The expression "Kwiett" constituting the salient audible feature of the mark as depicted on the drawing is a phonetically spelled word derived from the word "Quiet."
For Hypnotic, Anti-Spasmodic Sedative and Anodyne for Treatment of Epilepsy.
Claims use since July 15, 1932.

Ser. No. 330,306. THOMAS J. MCBRIDE, doing business as The Entromul Company, Los Angeles, Calif. Filed Sept. 13, 1932.

ENTROMUL

For Preparation for the Treatment of Intestinal Disorders.
Claims use since July 15, 1932.

Ser. No. 330,336. CHAMPION CHEMICAL WORKS, Chicago, Ill. Filed Sept. 14, 1932.

SPEAR

For Lye.
Claims use since Aug. 15, 1932.

Ser. No. 330,408. MEYER BROTHERS DRUG COMPANY, St. Louis, Mo. Filed Sept. 16, 1932.



In the drawing the words "Diff" and "Inhalant" are lined for green on a background of blue, and the bush or small tree is lined for green on a background of white. Exclusive right to use of the word "Inhalant" apart from the mark as shown as hereby disclaimed.
For Medicinal Preparation in Liquid Form to be Used as an Inhalant.
Claims use since Nov. 1, 1931.

CLASS 10

Fertilizers

Ser. No. 320,014. SWANN CHEMICAL COMPANY, Birmingham, Ala. Filed Oct. 12, 1931.



No claim is made to the words "Muscle Shoals Concentrated Plant Food" apart from the distinctive display of the mark as shown.
For Concentrated Fertilizer.
Claims use since July 28, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 330,065. INKS INC., New York, N. Y. Filed Sept. 2, 1932.

CELLOKWIK

For Printing Ink.
Claims use since Aug. 15, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 329,089. ROBERT V. MORSE, New York, N. Y. Filed July 26, 1932.

PROTECTOVALVE

For Check Valves for Vacuum Control Devices.
Claims use since Mar. 18, 1932.

Ser. No. 330,012. CHESTER O. GOSEREUD, St. Paul, Minn. Filed Aug. 31, 1932.

SILENT – NITE

For Storm Window Fasteners and Storm Window Fasteners and Operators.
Claims use since Mar. 5, 1932.

Ser. No. 330,154. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Sept. 7, 1932.

GIDE-RITE

For Metal Fence Posts.
Claims use since July 12, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 318,230. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Precious Metals, Such as Gold, Silver, Platinum, and Non-Precious Metals, Such as Copper, Nickel, Brass,

German Silver, and the Like, Anchors, and Sheet Metals Made of Copper, Nickel, Brass, Iron, Steel, and Alloys.
Claims use since Sept. 24, 1930.

Ser. No. 328,463. THE TOLEDO PORCELAIN ENAMEL PRODUCTS COMPANY, Toledo, Ohio. Filed June 29, 1932.

TOLEDOT

For Porcelain Enameled Sheet Metal.
Claims use since April, 1929.

Ser. No. 329,397. DETROIT STOKER COMPANY, Monroe and Detroit, Mich. Filed Aug. 8, 1932.



For Stoker Castings and Forgings in the Rough.
Claims use since Mar. 1, 1932.

Ser. No. 330,228. IMPERIAL TYPE METAL COMPANY, Philadelphia, Pa. Filed Sept. 10, 1932.

VITALLOY

For Type Metal Alloys.
Claims use since Aug. 20, 1932.

CLASS 15

Oils and Greases

Ser. No. 318,961. VIKING OIL CORPORATION, Clarendon, Pa. Filed Sept. 11, 1931.



For Lubricants in Oil and Grease Form.
Claims use since Feb. 1, 1923.

Ser. No. 323,934. CALUMET REFINING CO., Chicago, Ill. Filed Feb. 8, 1932.

Octanoyl

For Penetrating Oils for Lubricating, Light Lubricating Oils, and Top Cylinder Lubricating Oils.
Claims use since Jan. 19, 1932.

Ser. No. 328,142. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y. Filed June 20, 1932.



For Penetrating and Lubricating Oils for Automobile Leaf Springs.
Claims use since May 9, 1932.

Ser. No. 330,209. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Sept. 9, 1932.

HYDROFINED

For Lubricating Oils.
Claims use since July 28, 1932.

Ser. No. 330,213. THE TEXAS COMPANY, New York, N. Y. Filed Sept. 9, 1932.

FIRE CHIEF

For Gasoline.
Claims use since Aug. 3, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 329,978. ANDREW BROWN COMPANY, Los Angeles, Calif. Filed Aug. 30, 1932.



The drawing is lined for red.
For Paint Enamels, Ready-Mixed Cold Water and Paste Paints, Varnishes, Lacquers.
Claims use since May 16, 1932.

CARNEGIE LIBRARY OF ATLANTA

CLASS 17

Tobacco Products

Ser. No. 329,639. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va. Filed Aug. 18, 1932. Under 10-year proviso.

LARUS

For Smoking Tobacco, Chewing Tobacco, and Cigarettes.
Claims use since 1877.

Ser. No. 329,761. BAYUK CIGARS INCORPORATED, Philadelphia, Pa. Filed Aug. 23, 1932.



Applicant makes no claim herein to exclusive right to the phrase "It's Ripe Tobacco" apart from the mark shown in the drawing.
For Cigars.
Claims use since Aug. 11, 1932.

Ser. No. 330,297. INTERNATIONAL TOBACCO COMPANY, LIMITED, London, England. Filed Sept. 13, 1932.



The lining does not stand for color. No claim is made to the word "Cigarettes."
For Cigarettes.
Claims use since Aug. 14, 1929.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 327,784. FEDERAL MOTOR TRUCK COMPANY, Detroit, Mich. Filed June 6, 1932.

FLOATING LOAD

For Six Wheel Vehicles Equipped with Bodies for Transport Purposes.
Claims use since Apr. 27, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 329,129. EDWARD G. BUDD MANUFACTURING COMPANY, Philadelphia, Pa. Filed July 28, 1932.

SHOTWELD

For Electric Welding Machines.
Claims use since July 8, 1932.

Ser. No. 329,731. WALTER A. ADAMS, doing business as Adams Machine Company, Rochester, N. Y. Filed Aug. 22, 1932.

SMADA

For Electric Floor, Table, Wall, and Ceiling Lamps and Electric Fixtures, Standards, Bases, Bodies, and Arms Therefor.
Claims use since July 18, 1932.

Ser. No. 329,776. FESS AND FISCHER, Chicago, Ill. Filed Aug. 22, 1932.



For Electric Reading Lamps Adapted to be Combined with Alarm Clocks.
Claims use since Jan. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 329,567. THE WILLIAMS GOLD REFINING CO., INC., Buffalo, N. Y. Filed Aug. 15, 1932.

Nipigon Coaster

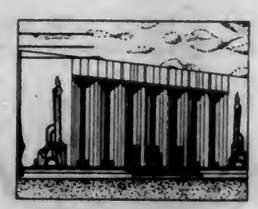
For Artificial Fishing Baits—Namely, Wobblers and Spinners.
Claims use since July 15, 1932.

Ser. No. 329,750. NATIONAL GAMES CORPORATION, Buffalo, N. Y. Filed Aug. 22, 1932.

SILVER-ARROW

For Shuttlecocks.
Claims use since Jan. 1, 1932.

Ser. No. 330,109. MAX TATAR, Chicago, Ill. Filed Sept. 3, 1932.





The words "Chicago Worlds Fair Card Pack" are hereby disclaimed apart from the association shown on the drawing.
For Playing Cards.
Claims use since Aug. 1, 1932.

Ser. No. 330,366. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Sept. 15, 1932.

PARD

For Fishing Reels.
Claims use since Aug. 5, 1932.

Ser. No. 330,435. TALKING GOLF BALL COMPANY, Chicago, Ill. Filed Sept. 17, 1932.

Talking

For Golf Balls.
Claims use since Sept. 14, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 312,768. OIL CENTER TOOL COMPANY, Houston, Tex. Filed Mar. 31, 1931.



For Slush Pump Liners, Slush Pump Rods, Slush Pump Pistons, Casing Shoes, Rotary Shoes, Pipe Pullers Including Taper Taps, Box Taps and Overshots.
Claims use since Mar. 1, 1929.

Ser. No. 313,469. DUPLEX PRINTING PRESS CO., Battle Creek, Mich. Filed Apr. 17, 1931.

TUBULAR

For Rotary Folders, Matrix Rollers, Mat Rollers, Plate Finishers, Plate Trimmers, Plate Shavers, Plate Borers, Scorchers, Melting Pots, Metal Pumps, Chases, Form Tables, Chipping Blocks and Routers, and Parts Thereof.
Claims use since Aug. 16, 1906.

Ser. No. 316,137. SNAP-ON TOOLS, INC., Kenosha, Wis. Filed June 22, 1931.

PAR-V

For Wrenches, Wrench Handles, Screw Drivers, Valve Spring Compressing Tools, Chisels, Wrench Sockets, and Socket Wrenches.
Claims use since Feb. 2, 1931.

Ser. No. 326,600. ROTOTILLER, INC., Wilmington, Del., and Long Island City, N. Y. Filed Apr. 27, 1932.

ROTOTILLER

For Farm Machine for Soil Cultivation.
Claims use since Feb. 9, 1929.

Ser. No. 327,580. CHICAGO MAIL ORDER COMPANY, Chicago, Ill. Filed May 31, 1932.

R.F.D.

For Cutlery of Base Metal—Namely, Razors, Knives.
Claims use since November, 1930.

Ser. No. 329,113. GOULDS PUMPS, INCORPORATED, Seneca Falls, N. Y. Filed July 27, 1932.

GOULDS FLEXI-UNIT

No claim is made herein to the name "Unit" apart from the mark shown in the drawing. Applicant claims ownership of registered Trade-Mark No. 138,008 issued Dec. 14, 1920.
For Centrifugal Pumps.
Claims use since Mar. 1, 1932.

Ser. No. 329,191. BYRON JACKSON CO., Los Angeles, Calif. Filed July 29, 1932. Under 10-year proviso.

BYRON JACKSON

For Pumps Comprising Centrifugal, Turbine, and Rotary or Impeller Pumps and Parts Therefor.
Claims use since 1890.

Ser. No. 329,192. BYRON JACKSON CO., Los Angeles, Calif. Filed July 29, 1932. Under 10-year proviso.

JACKSON PUMPS

For Pumps, Comprising Centrifugal, Turbine, and Rotary or Impeller Pumps and Parts Therefor.
Claims use since 1890.

Ser. No. 329,674. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis. Filed Aug. 19, 1932.

Double Duty

For Lathes and Drill Presses.
Claims use since July 7, 1931.

Ser. No. 329,705. EMERSON & STEVENS MFG. CO., INC., Oakland, Me. Filed Aug. 20, 1932.



The drawing being lined to indicate the colors blue, green, and yellow, the word "Scythe" being disclaimed apart from the mark shown.
For Scythes.
Claims use since Dec. 9, 1931.

Ser. No. 330,113. WORLD'S PRODUCTS CO., doing business as Home Run Razor Blade Co., Spencer, Ind. Filed Sept. 3, 1932.

HOME RUN

For Razor Blades.
Claims use since May 1, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 318,322. PITTSBURGH EQUITABLE METER COMPANY, Pittsburgh, Pa. Filed Aug. 22, 1931.

EMCORECTOR

For Pressure Correcting Gas Meters.
Claims use since Oct. 18, 1930.

Ser. No. 330,077. DU PONT FILM MANUFACTURING CORPORATION, New York, N. Y. Filed Aug. 31, 1932.

SUPERPAN

For Photographic Film.
Claims use since Aug. 26, 1932.

CLASS 27

Horological Instruments

Ser. No. 329,709. GOTHAM SHOCK-BILT, INC., New York, N. Y. Filed Aug. 20, 1932.

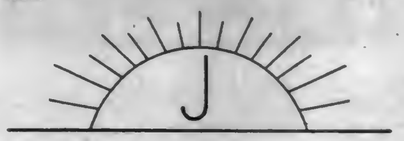
GOTHAM
SHOCK-BILT

No claim is made to the words "Shock-Bilt" apart from the mark shown in the drawing.
For Watches, Clocks, and Parts Thereof, Watch Cases, Watch Movements, and Watch and Clock Dials.
Claims use since June 4, 1929.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 322,471. HENRY PAULSON, doing business as Henry Paulson & Company, Chicago, Ill. Filed Dec. 26, 1931.



For Finger Rings, Bracelets.
Claims use since September, 1931, on rings and bracelets.

Ser. No. 330,085. GAMMA PHI BETA, Chicago, Ill. Filed Sept. 8, 1932.

ΓΦB

For Jewelry for Personal Wear, Not Including Watches, all Made or Plated with Precious Metal.
Claims use since Nov. 11, 1874.

Ser. No. 330,129. ALBERT S. SAMUELS CO., San Francisco, Calif. Filed Sept. 6, 1932.

BRIDAL CREST

For Finger Rings.
Claims use since May 28, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 330,390. FORT PITT BEDDING COMPANY, Pittsburgh, Pa. Filed Sept. 15, 1932.

NU-REX

For Bed Springs.
Claims use since July 28, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 329,512. JOHN E. TATE, Boston, Mass. Filed Aug. 12, 1932.

Fil-I-Ment

For Glare Eliminators for Automobile Head Lamps.
Claims use since July 30, 1932.

Ser. No. 329,756. STACEY-CURTIS MANUFACTURING CO., INC., Hampton, Va. Filed Aug. 22, 1932.

Governaire

For Air Conditioning Apparatus for Filtering, Humidifying, Heating, and Cooling Air.
Claims use since Aug. 1, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 329,952. KEASBEY & MATTISON COMPANY, Ambler, Pa. Filed Aug. 29, 1932

TEXMO

For Brake Linings.
Claims use since Aug. 3, 1932.

Ser. No. 330,111. WESTERN AUTO SUPPLY COMPANY, Kansas City, Mo. Filed Sept. 3, 1932.



For Tires Constructed Wholly or Partially of Rubber.
Claims use since July 7, 1932.

CLASS 37

Paper and Stationery

Ser. No. 315,960. ASSOCIATED STATIONERS SUPPLY COMPANY, Chicago, Ill. Filed June 17, 1931.

WORLD WIDE

For Books of Notes, Drafts, Receipts, and Checks; Printed Forms, Both Loose Leaf and Otherwise; Factory Inspection Books, Loose Leaf Covers, Inventory Covers, Ring Books, Index Cards, Folder Labels, Telephone Record Books (Blank), Shannon Arches, Typewriter and Mimeograph Papers, Mailing and Filing Envelopes, Cash Sales Books, Scratch Tablets and Ruled Tablets, Paper Clips and Paper Fasteners, Filing Folders, Rubber Stamp Racks, Hektographs and Composition, Duplicators (Gelatine Duplicating Devices), Rubber Type Outfits, Sign Markers, Telephone Indexes (Blank), Art Gum, Card Holders, Envelope Openers, Loose Leaf Book Rings, Erasing Shields, Pen Racks, Hand Blotters, Desk Pads.
Claims use since August, 1916.

Ser. No. 318,629. FIBREBOARD PRODUCTS INC., San Francisco, Calif. Filed Sept. 8, 1931.



For Paper—Namely, Rag Paper and Straw Paper; and Boards—Namely, Boxboard, Chipboard, Strawboard, Pulpboard, Newsboard, Fibreboard, Kraftboard, Sulphiteboard, Manilaboard, Bindersboard, Bristolboard, Tagboard, Air Dried Chipboard, Tarboard, and Trunkboard.
Claims use since Nov. 1, 1927.

Ser. No. 328,182. THE PEERLESS PAPER MILLS, INC., Oaks, Pa. Filed June 21, 1932.

HYGIENE



TISSUE

No claim is made to the word "Hygiene" or to the word "Tissue" apart from the mark of the applicant.
For Toilet Paper.
Claims use since 1913.

Ser. No. 328,736. LIBRARY EFFICIENCY CORPORATION, New York, N. Y. Filed July 12, 1932.

Lefco

Product

No claim is made to the word "Products" apart from the mark shown in the drawing.
For Filing Cards, Reference Cards, Indexes, Bill Files, Filing Books, File Signals, Paper Fasteners, Card Racks, Covers for Magazines, Blank Books and Forms, Bill Files, Account Books, Card Index Trays, Gummed Library Paper, Alphabetical Folders, Alphabetical Guides, Application Cards, Binders, Binding Slips, Book Cards, Book Marks, Book Pockets, Catalog Cards, Date Cards, Flexible Folders, File Folders, Gummed Folder Labels, Gummed Labels, Poster Holders, Identification Cards, Identification Card Containers, Index Slips, Loose Leaf Binders, Manila Folders, Overdue Post Cards, Posters, Printed Labels, Registration Cards, Reserve Cards, Vertical File Guides, Vertical File Folders.
Claims use since Sept. 1, 1928.

Ser. No. 329,803. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Filed Aug. 24, 1932.



No claim is made to the word "Cambray" apart from the mark as shown in the drawing.
For Toilet Tissue.
Claims use since July 10, 1932.

Ser. No. 329,910. VELDOWN COMPANY, INC., New York, N. Y. Filed Aug. 27, 1932.

SILVER SWAN

For Cleansing Tissues.
Claims use since June 4, 1932.

Ser. No. 330,125. THE HARDING-JONES PAPER COMPANY, Excello, Ohio. Filed Sept. 6, 1932.



HORNET

For Writing and Printing Paper.
Claims use since 1886.

Ser. No. 330,295. FOX RIVER PAPER COMPANY, Appleton, Wis. Filed Sept. 13, 1932.

Anniversary

For Bond Paper.
Claims use since Sept. 7, 1932.

CLASS 38

Prints and Publications

Ser. No. 318,719. POPULAR PUBLICATIONS, INC., New York, N. Y. Filed Sept. 8, 1931.

DARE-DEVIL STORIES

For Magazine Published Monthly and at Other Intervals.
Claims use since Aug. 5, 1931.

Ser. No. 330,158. BROWN AND FINDEISEN, INC., Miami, Fla. Filed Sept. 7, 1932.

THE GUEST BOOK

For Periodical.
Claims use since Jan. 1, 1932.

CLASS 39

Clothing

Ser. No. 316,877. CHIC MANUFACTURING CO., Peoria, Ill. Filed July 13, 1931.



The drawing is lined for the colors orange and green. The words "Another If Yours Fades" are disclaimed apart from the mark as shown on the drawing.
For Ladies' and Children's Dresses and Pajamas.
Claims use since Nov. 1, 1929.

Ser. No. 322,531. A. H. GEUTING COMPANY, Philadelphia, Pa. Filed Dec. 26, 1931.



For Men's, Women's, and Children's Boots and Shoes Made of Leather, Fabric, Rubber, or Any Combination of One or More of Said Materials; and Children's Wash Suits, Sweaters, Sweater Dresses, Berets, Hosiery, Blouses, Leather Coats, Rain Coats, Bathing Suits, Sun Suits, and Neckties.
Claims use since May 21, 1930.

Ser. No. 327,644. ARDEN BOX TOE COMPANY, Watertown, Mass. Filed June 2, 1932.

AllProoF

For Shoe Stiffener Parts—Namely, Box Toes Suitable for Use in Stiffening the Fore Parts of Shoes.
Claims use since Apr. 27, 1931.

Ser. No. 328,082. N & W OVERALL CO., INC., doing business as W. W. Couch Company, Lynchburg, Va. Filed June 16, 1932.

W.W. COUCH CO.
The REVOLUTION
"A NEW STANDARD IN WEAR"

The descriptive words, "A New Standard in Wear" are disclaimed apart from the other features of the mark shown in the drawing.
For Men's and Boys' Overalls, Work Shirts and Work Pants.
Claims use since May 24, 1932.

Ser. No. 328,343. WILLIAMS HAT STORES INC., St. Louis, Mo. Filed June 27, 1932.

Hat Land

No claim is made to the exclusive use of the word "Hat" except in the association shown in the drawing.
For Ladies and Children's Hats.
Claims use since 1927.

Ser. No. 328,973. BERKSHIRE KNITTING MILLS, Wyomissing: P. O. Address, Reading, Pa. Filed July 22, 1932.



No claim is made to the words "Kantrun" and "Stockings" or to the particular form of non-run stitch apart from the mark as shown.
For Hosiery.
Claims use since July 11, 1932.

Ser. No. 329,330. EARNSHAW KNITTING COMPANY, Newton, Mass. Filed Aug. 4, 1932.

Vanta
DOUBLE DUTY

The trade-mark consists of a red heart and the words "Vanta" and "Double Duty" in blue.
For Infants' and Children's Underwear—Namely, Knitted Training Panties.
Claims use since July 8, 1932.

Ser. No. 329,851. BRONSTON HAT CO., Plainfield, N. J. Filed Aug. 26, 1932.

BREEZ-WAY

For Men's, Women's, and Children's Straw Hats.
Claims use since June 1, 1932.

Ser. No. 329,956. THE MENIHAN COMPANY, Rochester, N. Y. Filed Aug. 29, 1932.

Lauray

For Leather and Fabric Shoes.
Claims use since Aug. 16, 1932.

Ser. No. 329,986. GORDON BRASSIERE CO. INC., New York, N. Y. Filed Aug. 30, 1932.

Gordonette

For Brassieres.
Claims use since July 1, 1931.

Ser. No. 329,994. KENGLO COATS, INC., New York, N. Y. Filed Aug. 30, 1932.



No claim is made to the words "Llama Fleece" apart from the mark shown on the drawing.
For Misses' and Ladies' Coats.
Claims use since July, 1932.

Ser. No. 330,063. HAT CORPORATION OF AMERICA, Norwalk, Conn. Filed Sept. 2, 1932.

LEISURE LIGHT

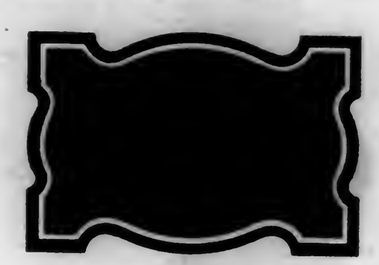
For Hats for Men and Women.
Claims use since Mar. 1, 1925.

Ser. No. 330,128. JOHNSON-STEPHENS & SHINKLE SHOE COMPANY, St. Louis, Mo. Filed Sept. 6, 1932.



For Shoes Constructed of Combination Leather, Rubber, and Fabric.
Claims use since Aug. 1, 1932.

Ser. No. 330,200. P. H. HANES KNITTING COMPANY, Winston-Salem, N. C. Filed Sept. 9, 1932.



For Wearing Apparel—Namely, Combination Suits, Shirts, Drawers, Sweaters, Bathing Suits of Knitted or Woven Material.
Claims use since 1914.

Ser. No. 330,203. MEARICK-AMES, INC., Dayton, Ohio. Filed Sept. 9, 1932.

Meramé

For Ladies' Hosiery.
Claims use since Aug. 30, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 329,902. PORTAGE DRAPERIES CO., INC., New York, N. Y. Filed Aug. 27, 1932.

PORTAGINE

For Curtains of Rayon, Silk, Cotton, Cellanese, and Tubize; Draperies of Rayon, Silk, Cotton, Cellanese, and Tubize; and Fabrics of Rayon, Silk, Cotton, Cellanese, and Tubize.
Claims use since July 14, 1928.

Ser. No. 329,908. SUSSBERG & FEINBERG, INC., New York, N. Y. Filed Aug. 27, 1932.

Satin Songette

No claim being made to the exclusive use of the word "Satin", apart from the mark as shown in the drawing.
For Silk and Rayon Piece Goods.
Claims use since Aug. 12, 1932.

Ser. No. 330,078. ADTOWL CORPORATION, New York, N. Y. Filed Sept. 3, 1932.

Adtowl

For Cloth Towels.
Claims use since Aug. 18, 1932.

Ser. No. 330,102. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y. Filed Sept. 3, 1932.

RUBICON

For Silk Goods in the Piece.
Claims use since May 3, 1932.

Ser. No. 330,560. WOLLNER & SMITH, New York, N. Y. Filed Sept. 21, 1932.

Wall Street

For Goods in the Piece of Wool, Cotton, Rayon, Silk, and Any Combinations Thereof.
Claims use since July, 1931.

CLASS 43

Thread and Yarn

Ser. No. 330,377. THE NATIONAL SILK COMPANY, INC., South Coventry, Conn. Filed Sept. 15, 1932.

FINSCIVIOUS

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon or a Combination of Such Textures.
Claims use since August, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 329,242. THE PYRAMID RUBBER COMPANY, Ravenna, Ohio. Filed July 30, 1932.

IDEAL

For Rubber Nursing Bottle Nipples.
Claims use since July 6, 1932.

Ser. No. 329,914. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed Aug. 26, 1932.

TRUE DENTALLOY

For Dental Alloys.
Claims use since 1900.

Ser. No. 330,293. THE DEANE PLASTER CO., Yonkers, N. Y. Filed Sept. 13, 1932.

NAPCO

For Sanitary Napkins, and Catamenial Bandages Made of Cotton and/or Cellulose and Sanitary Belts.
Claims use since Jan. 6, 1932.

Ser. No. 330,347. KNIGHTS CO., Cambridge, Mass. Filed Sept. 14, 1932.



For Prophylactic Rubber Articles for Prevention of Contagious Diseases.
Claims use since Sept. 2, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 329,218. SYLVIA O. BARNES, Salem, Mass. Filed July 30, 1932. Under 10-year proviso.

BARNES'
Birch Beer

For Non-Alcoholic, Maltless, Birch Beer Sold as a Soft Drink.
Claims use since 1885.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 300,778. BILLY BOY NUT KITCHEN, Oak Park, Ill. Filed May 19, 1930.

BILLY BOY

For Edible Nuts, Such as Peanuts, Almonds, Pecans, Cashews, Pistachios, Filberts, Pignolias, Brazilian Nuts, American and English Walnuts, Etc., in Raw, Salted, Coated, and Cooked Form.
Claims use since May, 1914.

Ser. No. 305,025. A. ARENA & CO., LTD., Los Angeles, Calif. Filed Aug. 26, 1930.

CARNATION

For Fresh Oranges, Fresh Melons, Fresh Vegetables.
Claims use since 1905 on oranges and melons, 1917 on vegetables.

Ser. No. 312,651. JABURG BROTHERS, INC., New York, N. Y. Filed Mar. 28, 1931.

JAY J BEE

For Alimentary Paste, Butter, Candies, Maraschino Cherries, Candied Orange and Citron Peel, Glacé Fruits, Canned Fruits, Canned Vegetables, Canned Soups, Canned Milk, Canned Eggs, Canned Fish, Catsup, Chili Sauce, Marmalade, Salad and Fruit Dressings, Peanut and Fruit Butters, Cereal Breakfast Foods, Cheese, Chocolate and Cocoa for Beverages, Chocolate and Cocoa for Making Candy and Bakery Products, Coffee, Corn Starch, Dehydrated Vegetables, Fruits, Eggs, Milk, and Fish; Extracts and Extract Powders for Food Flavoring, Edible Fats and Oils for Shortening in Frying and Baking, Pancake, Buckwheat, Rye, and Wheat Flour; Tapioca, Potatoes, Wheat, Corn, Rye, Gelatine, Glucose, Honey, Honey Jellies, Pickles, Lard, Lard Substitute, Macaroni, Noodles, Spaghetti, Vermicelli, and Alphabets; Malt Compound Powder, Hop Extract and Malt Extract for Food Purposes, Mayonnaise, Marshmallow Whip, Malted Milk and Milk Powder, Mince Meat, Molasses, Sandwich Spreads, Mustard, Nuts and Nut Pastes and Nut Butter, Oleomargarine, Pepper, Paprika, Pepper Sauce, Celery Salt, Spices, Pie Crust Preparation, Pie Fillings, Dry, Buttered, and Sweetened Pop Corn; Potato Chips, Rice, Cane Syrup, Corn Syrup, Maple and Corn Syrup or Syrup Made from Combinations Thereof, Malt Syrup for Food Purposes, Sugars, Tea and Tea Balls, Vinegar, Yeast, Cake Fillers, Bird Food.
Claims use since Apr. 8, 1915.

Ser. No. 314,158. INDEPENDENT MACARONI CO., INC., Mount Vernon, N. Y. Filed May 4, 1931.



The drawing is lined for light blue and dark blue. No claim is made to the word "Macaroni" or to the word "Brand".
For Macaroni.
Claims use since Apr. 1, 1931.

Ser. No. 319,518. JOSÉ SOLA ACERO, Malaga, Spain. Filed Sept. 29, 1931.



No claim is made to the conventional lining for color shown on the drawing. Exclusive use of the words "Selected Olive Oil, Aceites Vitamina, Purisimo de Oliva, Produced and Packed by, Malaga, Spain" are disclaimed apart from the mark shown on the drawing. Exclusive use of the words "Vitamin Oil" are disclaimed apart from the other features of the mark.
For Olive Oil.
Claims use since 1929.

Ser. No. 324,008. ROMANOFF CAVIAR COMPANY, New York, N. Y. Filed Feb. 9, 1932.

ROMA



The geographical word "Roma" is disclaimed apart from the mark shown.
For Anchovies and Antipasto.
Claims use since October, 1931.

Ser. No. 324,226. ROBERT A. KERR & JAMES F. HOPKINS, Detroit, Mich. Filed Feb. 16, 1932.

Zilch's
SALTED
Nertz

"Fresher than you are, Mister Winchell"

The words "Salted" "Zilch's" and "Winchell" are disclaimed apart from the mark shown.
For Edible Salted Nuts.
Claims use since Feb. 8, 1932.

Ser. No. 324,811. WAGSTAFFE LIMITED, Hamilton, Ontario, Canada. Filed Mar. 4, 1932.

WAGSTAFFE'S



No claim is made to the representation of the pail except in the association shown in the drawing.
For Jams, Jellies, Marmalade, and Other Fruit Preserves, Candied Citrus Fruit Peels, Plum Puddings, and Mince Meat.
Claims use since 1905.

Ser. No. 328,105. LOUIS POSSENHEIM, doing business as Nu-Ray Health Products Co., New York, N. Y. Filed June 18, 1932.



No claim is made to the exclusive use of the words "Health Products" and "Health Bar" apart from the mark as shown on the drawing.
For Candy.
Claims use since June 1, 1932.

Ser. No. 328,282. STOKELY BROTHERS & COMPANY, doing business as Fame Canning Company, Louisville, Ky. Filed June 24, 1932.

FAME

For Canned Vegetables, Tomato Puree, Sauer Kraut, Chili Sauce, Tomato Catsup, Pork and Beans, Hominy, and Cranberry Sauce, Tomato Juice.
Claims use since Feb. 6, 1902.

Ser. No. 328,614. DAVID LOMBARDY, Cleveland, Ohio. Filed July 7, 1932.

Ross-Marie

For Olive Oil, Canned Tunny Fish, Tomato Sauce, Macaroni, Canned Fruits, Canned Vegetables, Evaporated Milk, Mustard, Salad Oil.
Claims use since May, 1926.

Ser. No. 328,645. ALEX W. PORTER, Atlantic City, N. J. Filed July 8, 1932.



For Prepared Sandwiches and Box Lunches Packed to Include Such Articles as Sandwiches, a Drink or Beverage, Pie, Cake, Candy, Potato Chips, and the Like.
Claims use since June 15, 1932.

Ser. No. 328,781. DUNCAN COFFEE CO., Houston, Tex. Filed July 14, 1932.

DRIPKUT

For Coffee.
Claims use since Jan. 18, 1932.

Ser. No. 329,343. BLISH MILLING COMPANY, Seymour, Ind. Filed Aug. 5, 1932.



BAKER'S BUDDY

The drawing is lined for shading only. The pictures of a child and a man are fanciful.
For Wheat Flour.
Claims use since May 1, 1932.

Ser. No. 329,540. TENNESSEE CEREAL COMPANY, Nashville, Tenn. Filed Aug. 13, 1932.

Ernst WHEAT FLAKES "TOASTED and HONEY FLAVORED"

All wording except the notation "Ernst" is disclaimed apart from the features of the mark shown in the drawing.
For Cereal Breakfast Food—Namely, Wheat Flakes.
Claims use since Apr. 14, 1932.

Ser. No. 329,797. CARL R. HIRZEL, doing business as Hirzel Canning Company, Toledo, Ohio. Filed Aug. 24, 1932.

DEERLODGE

For Canned Sauer Kraut and Canned Tomatoes.
Claims use since Oct. 12, 1931.

Ser. No. 329,898. JOHN F. JELKE COMPANY, Chicago, Ill. Filed Aug. 27, 1932.

GOOD LUCK

For Mayonnaise, Salad Dressing, Sandwich Spread, French Dressing, and Thousand Island Dressing.
Claims use since Mar. 24, 1932.

Ser. No. 329,905. E. R. SQUIBB & SONS, New York, N. Y. Filed Aug. 27, 1932.

NEOLACTOSE

For Powdered Whey to be Used as a Dietary Supplement.
Claims use since Aug. 22, 1932.

Ser. No. 330,167. HERMANN RUDOLFF, doing business as Novato French Cheese Factory, Novato, Calif. Filed Sept. 7, 1932.



For Cheese.
Claims use since October, 1901.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 329,348. JUAN MOLLFULLEDA CONGOST, doing business as Hijo de Magín Molifulleda, Arenys de Mar, Barcelona, Spain. Filed Aug. 5, 1932.

GONG

For Ethyl Alcohol, Brandies, Whiskeys, Rum Liqueurs, and Cordials.
Claims use since Sept. 15, 1931.

Ser. No. 329,852. JUAN MOLLFULLEDA CONGOST, Arenys de Mar, Barcelona, Spain. Filed Aug. 5, 1932.

Calisay

For Ethyl Alcohol, Brandies, Whiskeys, Rum, Liqueurs, and Cordials.
Claims use since July 9, 1910.

Ser. No. 330,201. INTERNATIONAL TRADE, FINANCE, & EXPORT CO., LTD., Glasgow, Scotland. Filed Sept. 9, 1932.

"Old King Cole"

For Whiskey.
Claims use since Jan. 23, 1923.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 330,343. FIRE PROOF FABRICS SALES CORPORATION, Philadelphia, Pa. Filed Sept. 14, 1932.

SAFETY CLOTH

No claim being made to the words "Safety Cloth" apart from the mark as shown.
For Fire Resistant Fabrics.
Claims use since Aug. 30, 1932.

Ser. No. 330,351. THE PANTASOTE LEATHER COMPANY, Passaic, N. J. Filed Sept. 14, 1932.

Wyndasote

For Coated Textile Fabrics in the Piece Useful for Window Shades and All Other Purposes for Which Fabrics Having Waterproof, Water Resisting, or Water Shedding Qualities May be Used.
Claims use since 1925.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

OCTOBER 25, 1932

298,313. NON-ELECTRIC SIGNS. HENRY LEDERER & CO., Chicago, Ill.
Filed May 12, 1932. Serial No. 327,021. PUBLISHED AUGUST 16, 1932. Class 50.

298,314. FLOOR-COVERINGS COMPRISING A FELT-LIKE BASE HAVING A COLORED FIBROUS SURFACE. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio.
Filed May 5, 1932. Serial No. 326,780. PUBLISHED AUGUST 9, 1932. Class 20.

298,315. EMERGENCY DEVICES FOR FIRST AID TREATMENT. WALLACE W. ROBINSON, Portland, Me.
Filed June 2, 1932. Serial No. 327,664. PUBLISHED AUGUST 9, 1932. Class 44.

298,316. PHONOGRAPH RECORDS. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y.
Filed June 2, 1932. Serial No. 327,650. PUBLISHED AUGUST 9, 1932. Class 36.

298,317. CLEANERS FOR FABRICS SUCH AS RUGS, UPHOLSTERY, ETC. FOAMO KLEANZIT COMPANY, Waseca, Minn.
Filed May 31, 1932. Serial No. 327,585. PUBLISHED AUGUST 9, 1932. Class 4.

298,318. PESSARIES FOR REMEDYING DISPLACEMENTS. L. E. SHUNK LATEX PRODUCTS, INC., Akron, Ohio.
Filed May 28, 1932. Serial No. 327,569. PUBLISHED AUGUST 16, 1932. Class 44.

298,319. FLOOR-COVERINGS COMPRISING A FELT-LIKE BASE HAVING A COLORED FIBROUS SURFACE. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio.
Filed May 5, 1932. Serial No. 326,778. PUBLISHED AUGUST 9, 1932. Class 20.

298,320. FLOOR-COVERINGS COMPRISING A FELT-LIKE BASE HAVING A COLORED FIBROUS SURFACE. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio.
Filed May 5, 1932. Serial No. 326,779. PUBLISHED AUGUST 9, 1932. Class 20.

298,321. REFRIGERATORS. BARKER BROS. INCORPORATED, Los Angeles, Calif.
Filed May 9, 1932. Serial No. 326,924. PUBLISHED AUGUST 9, 1932. Class 31.

298,322. SCOTCH WHISKY. D. & J. MCCALLUM, LTD., Edinburgh, Scotland.
Filed May 10, 1932. Serial No. 326,948. PUBLISHED AUGUST 9, 1932. Class 49.

298,323. FLAVORING FOR NONALCOHOLIC, MALTLESS BEVERAGES FOR THE MAKING OF SOFT DRINKS. AMERICO B. FRISCIA, doing business as Consolidated Products Co., New York, N. Y.
Filed May 21, 1932. Serial No. 327,311. PUBLISHED AUGUST 16, 1932. Class 45.

298,324. REFRIGERATING APPARATUS. STEWART-WARNER CORPORATION, Chicago, Ill.
Filed April 23, 1932. Serial No. 326,434. PUBLISHED AUGUST 9, 1932. Class 31.

298,325. TENNIS RACKETS. HORACE W. HALL, Newton, Mass.
Filed March 14, 1932. Serial No. 325,097. PUBLISHED AUGUST 9, 1932. Class 22.

298,326. LINOLEUM AND OIL CLOTH. CORTICINE FLOOR COVERING COMPANY LIMITED, London, England.
Filed May 23, 1932. Serial No. 327,843. PUBLISHED AUGUST 9, 1932. Class 20.

298,327. CUE BALLS FOR POCKET-BILLIARDS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed June 11, 1932. Serial No. 327,900. PUBLISHED AUGUST 9, 1932. Class 22.

298,328. PARLOR GAME, IN THE NATURE OF A PUZZLE, PLAYED WITH BLOCKS. JULIUS F. SCHARNER, Jersey City, N. J.
Filed June 14, 1932. Serial No. 327,987. PUBLISHED AUGUST 16, 1932. Class 22.

298,329. GOLF BALLS. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed June 10, 1932. Serial No. 327,895. PUBLISHED AUGUST 16, 1932. Class 22.

298,330. THE FOLLOWING DESCRIBED GAME.—THE GAME IS PLAYED BY TWO OR MORE PERSONS WITH PLAYING CARDS, CHIPS AND A TABLE LAY-OUT UNDER RULES SIMILAR TO A COMBINATION OF THE RULES OF THE CARD GAMES OF POKER AND MICHIGAN. FIRESIDE GAMES, Chicago, Ill.
Filed June 17, 1932. Serial No. 328,060. PUBLISHED AUGUST 16, 1932. Class 22.

298,331. SMOKELESS SHOTGUN POWDER. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed July 1, 1932. Serial No. 328,482. PUBLISHED AUGUST 16, 1932. Class 9.

298,332. GRAPE JUICE. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y.
Filed July 1, 1932. Serial No. 328,512. PUBLISHED AUGUST 16, 1932. Class 45.

298,333. NONALCOHOLIC, NON-CEREAL, CARBONATED AND UNCARBONATED MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS FOR MAKING SAME, AND CARBONATED AND UNCARBONATED WATERS, DISTILLED WATER AND MINERAL WATER SOLD AS BOTTLED WATER BEVERAGES. LIBERTY BOTTLING CO., INC., Chicago, Ill.
Filed July 1, 1932. Serial No. 328,494. PUBLISHED AUGUST 9, 1932. Class 45.

298,334. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SIRUPS THEREFOR. SOUTHERN DAIRIES, INC., Washington, D. C., and Savannah, Ga.
Filed July 5, 1932. Serial No. 328,567. PUBLISHED AUGUST 9, 1932. Class 45.

298,335. BRIDGE GAME PACKAGE. SNYDER & BLACK, INC., New York, N. Y.
Filed June 25, 1932. Serial No. 328,412. PUBLISHED AUGUST 9, 1932. Class 22.

298,336. ARTIFICIAL BAIT. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed July 7, 1932. Serial No. 328,596. PUBLISHED AUGUST 9, 1932. Class 22.

298,337. REFRIGERATORS. MICHAELS BROS., Brooklyn, N. Y.
Filed July 11, 1932. Serial No. 328,694. PUBLISHED AUGUST 16, 1932. Class 31.

298,338. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES, SOLD AS SOFT DRINKS, AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. ELSIE ROHR GENTRY, Newark, N. J.
Filed July 8, 1932. Serial No. 328,638. PUBLISHED AUGUST 16, 1932. Class 45.

298,339. SHOE POLISH AND DRESSINGS, ETC. TOLEDO SHOE FINDING COMPANY, doing business as Sunbeam Products Company, Toledo, Ohio.
Filed May 26, 1932. Serial No. 327,545. PUBLISHED AUGUST 16, 1932. Class 4.

298,340. WHEAT FLOUR. LAWRENCEBURG ROLLER MILLS CO., Lawrenceburg, Ind.
Filed July 2, 1932. Serial No. 328,582. PUBLISHED AUGUST 9, 1932. Class 46.

298,341. FRESH GRAPES, FRESH DECIDUOUS FRUITS, FRESH VEGETABLES. LAMBERT MARKETING COMPANY, Sacramento, Calif.
Filed July 2, 1932. Serial No. 328,531. PUBLISHED AUGUST 9, 1932. Class 46.

298,342. CANNED FISH, CANNED VEGETABLES, CANNED FRUITS, CANNED COFFEE. P. A. FORD, San Francisco, Calif.
Filed July 6, 1932. Serial No. 328,578. PUBLISHED AUGUST 16, 1932. Class 46.

298,343. CANDY. BARD & MARGOLIES, INC., Brooklyn, N. Y.
Filed July 8, 1932. Serial No. 328,654. PUBLISHED AUGUST 16, 1932. Class 46.

298,344. HOSIERY. S. ROTHKOFF & SONS, New York, N. Y.
Filed July 12, 1932. Serial No. 328,740. PUBLISHED AUGUST 16, 1932. Class 39.

298,345. WOMEN'S HOSIERY. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa.
Filed July 14, 1932. Serial No. 328,773. PUBLISHED AUGUST 16, 1932. Class 39.

298,346. FINGER RINGS. JOSEPH GRANAT, doing business as Granat Bros., San Francisco, Calif.
Filed March 15, 1932. Serial No. 325,142. PUBLISHED AUGUST 9, 1932. Class 28.

298,347. CIGARS. CHARLES ODENCE COMPANY, Boston, Mass.
Filed May 3, 1932. Serial No. 326,720. PUBLISHED AUGUST 16, 1932. Class 17.

298,348. AGRICULTURAL LIME. WHITEROCK QUARRIES, INC., Bellefonte, Pa.
Filed April 12, 1932. Serial No. 326,036. PUBLISHED AUGUST 16, 1932. Class 10.

298,349. ELECTRIC LIGHTING FIXTURES, CONSISTING OF WALL BRACKETS, CHANDELIERS, AND THE LIKE; COMPLETE ELECTRIC FLOOR AND TABLE LAMPS. CASSIDY COMPANY, INCORPORATED, Long Island City, N. Y.
Filed March 17, 1932. Serial No. 325,208. PUBLISHED AUGUST 9, 1932. Class 21.

298,350. STORAGE BATTERIES, STORAGE BATTERY CHARGERS, ELECTRIC FUSES, FLASH LIGHTS, FLASH LIGHT BATTERIES, BATTERY CABLES, MINIATURE ELECTRIC LIGHT BULBS, AND INSULATING TAPE. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed May 27, 1932. Serial No. 327,494. PUBLISHED AUGUST 9, 1932. Class 21.

298,351. SURGICAL SYRINGES OF THE BULB TYPE AND OF THE PISTON TYPE. BECTON, DICKINSON & Co., Rutherford, N. J.
Filed May 21, 1932. Serial No. 327,301. PUBLISHED AUGUST 9, 1932. Class 44.

298,352. PETROLEUM PRODUCTS—NAMELY, LUBRICATING OILS AND MOTOR LUBRICATING OILS. RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y.
Filed May 13, 1932. Serial No. 327,068. PUBLISHED AUGUST 9, 1932. Class 15.

298,353. MILK, BUTTER, EGGS, AND COTTAGE CHEESE. LEVI G. MOORE, Lancaster, Pa.
Filed May 7, 1932. Serial No. 326,958. PUBLISHED AUGUST 16, 1932. Class 46.

298,354. COATS AND LEATHER COATS, LEATHER VESTS, LEATHER BREECHES, WOOL BLAZERS, NECKTIES; LEATHER GLOVES FOR MEN, WOMEN, AND CHILDREN. H. & L. BLOCK, LTD., San Francisco, Calif.
Filed May 18, 1932. Serial No. 327,212. PUBLISHED AUGUST 9, 1932. Class 39.

298,355. COATS AND LEATHER COATS, LEATHER VESTS, LEATHER BREECHES, WOOL BLAZERS, NECKTIES; LEATHER GLOVES FOR MEN, WOMEN, AND CHILDREN. H. & L. BLOCK, LTD., San Francisco, Calif.
Filed May 18, 1932. Serial No. 327,213. PUBLISHED AUGUST 9, 1932. Class 39.

298,356. INFANTS' AND CHILDREN'S DRESSES. LOUIS TUTTMAN, New York, N. Y.
Filed May 27, 1932. Serial No. 327,533. PUBLISHED AUGUST 16, 1932. Class 39.

298,357. LEGGINGS AND OVERALL PROTECTORS FOR NETHER GARMENTS. THE BRIA-SHAPE COMPANY, Whitinsville, Mass.
Filed June 10, 1932. Serial No. 327,863. PUBLISHED AUGUST 9, 1932. Class 39.

298,358. LADIES' SPORT COATS. IRVING FRIEDRICKS, doing business as Irving Friedricks Co., New York, N. Y.
Filed June 18, 1932. Serial No. 328,095. PUBLISHED AUGUST 9, 1932. Class 39.

298,359. COOKIES AND CRACKERS. DR. LARRY'S FOOD PRODUCTS LABORATORIES, New York, N. Y.
Filed June 14, 1932. Serial No. 327,980. PUBLISHED AUGUST 9, 1932. Class 46.

298,360. NECKTIES AND CRAVATS. HUT NECKWEAR CO. INC., New York, N. Y.
Filed June 20, 1932. Serial No. 328,126. PUBLISHED AUGUST 9, 1932. Class 39.

298,361. POP CORN IN ITS NATURAL STATE. AMERICAN POP CORN COMPANY, Sioux City, Iowa.
Filed June 21, 1932. Serial No. 328,151. PUBLISHED AUGUST 9, 1932. Class 46.

298,362. CANDY. D. GOLDENBERG, INC., Philadelphia, Pa.
Filed June 21, 1932. Serial No. 328,165. PUBLISHED AUGUST 9, 1932. Class 46.

298,363. BREAD. SPINELLA BROTHERS BAKERY, Waterbury, Conn.
Filed June 21, 1932. Serial No. 328,189. PUBLISHED AUGUST 16, 1932. Class 46.

298,364. COFFEE. NEWARK WHOLESALE GROCERY CO., Newark, N. J.
Filed June 23, 1932. Serial No. 328,248. PUBLISHED AUGUST 9, 1932. Class 46.

298,365. PICKLES. KINGSBURY PACKING CO., Chicago, Ill.
Filed June 24, 1932. Serial No. 328,274. PUBLISHED AUGUST 9 1932. Class 46.

298,366. COOKING-FATS. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio.
Filed June 24, 1932. Serial No. 328,279. PUBLISHED AUGUST 9, 1932. Class 46.

298,367. INFANTS' GARMENTS WHICH ARE BAG-LIKE IN SHAPE, WITH A NECK OPENING AT THE TOP AND AN OPENING IN THE FRONT THROUGH WHICH A BABY MAY BE INSERTED, SO THAT THE NECK-BAND OF THE GARMENT FITS AROUND THE BABY'S NECK. SNUGGLE RUG CO., Goshen, Ind.
Filed June 25, 1932. Serial No. 328,312. PUBLISHED AUGUST 16, 1932. Class 39.

298,368. CONFECTIONERY—NAMELY, MOLASSES CANDY AND SALT WATER TAFFY. H. L. HILDRETH CO., Boston, Mass.
Filed June 25, 1932. Serial No. 328,411. PUBLISHED AUGUST 16, 1932. Class 46.

298,369. COATS, VESTS, TROUSERS, KNICKERBOCKERS, TOP COATS, AND OVERCOATS FOR MEN, YOUTHS, AND BOYS. RODES-RAPIER CO., INC., Louisville, Ky.
Filed June 30, 1932. Serial No. 328,449. PUBLISHED AUGUST 9, 1932. Class 39.

298,370. SWEET CHOCOLATE. MASSACHUSETTS CHOCOLATE COMPANY, Boston, Mass.
Filed July 1, 1932. Serial No. 328,496. PUBLISHED AUGUST 9, 1932. Class 46.

298,371. CONFECTIONERY—NAMELY, SALT WATER TAFFY. H. L. HILDRETH CO., Boston, Mass.
Filed July 2, 1932. Serial No. 328,528. PUBLISHED AUGUST 16, 1932. Class 46.

298,372. LADIES' KNITTED AND SILK UNDERWEAR. THE PATRICIA PETTICOAT CO. INC., New York, N. Y.
Filed July 1, 1932. Serial No. 328,504. PUBLISHED AUGUST 16, 1932. Class 39.

298,373. AUTOMOBILE TOP DRESSING. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed July 7, 1932. Serial No. 328,605. PUBLISHED AUGUST 16, 1932. Class 4.

298,374. VEGETABLE AND FLOWER SEEDS. AMERICAN SEED COMPANY, Detroit, Mich.
Filed July 11, 1932. Serial No. 328,679. PUBLISHED AUGUST 16, 1932. Class 1.

298,375. THERAPY APPARATUS UTILIZING COLOR AND/OR THE APPLICATION OF ELECTRIC CURRENT TO THE BODY. LEE M. BROKAW, doing business as Metab-O-Lizor Co., Glendale, Calif.
Filed June 27, 1932. Serial No. 328,320. PUBLISHED AUGUST 23, 1932. Class 44.

298,376. TOILET SOAP. YARDLEY & CO., LIMITED, London, England.
Filed June 28, 1932. Serial No. 328,380. PUBLISHED AUGUST 16, 1932. Class 4.

298,377. DRY CLEANING FLUID. H. S. BENEDIKT COMPANY, INC., New York, N. Y.
Filed July 2, 1932. Serial No. 328,518. PUBLISHED AUGUST 9, 1932. Class 4.

298,378. PLASTIC RESIN USED IN THE DENTAL PROFESSION. PROSTHETIC PRODUCTS, INC., New York, N. Y.
Filed July 2, 1932. Serial No. 328,537. PUBLISHED AUGUST 9, 1932. Class 44.

298,379. SWEEPING COMPOUND. CHEMICAL CORPORATION OF AMERICA, Minneapolis, Minn.
Filed July 5, 1932. Serial No. 328,548. PUBLISHED AUGUST 16, 1932. Class 4.

298,380. ABRASIVE POT CLEANERS MADE OF METALLIC WIRE. NEW YORK MERCHANDISE CO. INC., New York, N. Y.
Filed June 17, 1932. Serial No. 328,070. PUBLISHED AUGUST 9, 1932. Class 4.

298,381. STORAGE BATTERIES. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed June 21, 1932. Serial No. 328,152. PUBLISHED AUGUST 9, 1932. Class 21.

298,382. STORAGE BATTERIES. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed June 21, 1932. Serial No. 328,153. PUBLISHED AUGUST 9, 1932. Class 21.

298,383. SOAP FLAKES. THE KROGER GROCERY & BAKING COMPANY, doing business as Wesco Foods Company, Cincinnati, Ohio.
Filed June 22, 1932. Serial No. 328,220. PUBLISHED AUGUST 16, 1932. Class 4.

298,384. NON-METALLIC FLEXIBLE ELECTRIC CONDUIT. HATHEWAY & COMPANY, INC., New York, N. Y.
Filed June 24, 1932. Serial No. 328,298. PUBLISHED AUGUST 9, 1932. Class 21.

298,385. METAL POLISH, SOAPS, ETC. ALYMP-OL SOAP WORKS, Taunton, Mass.
Filed June 27, 1932. Serial No. 328,318. PUBLISHED AUGUST 16, 1932. Class 4.

298,386. FURNITURE AND AUTOMOBILE POLISH. GERTRUDE A. KREYMER, Spokane, Wash.
Filed June 7, 1932. Serial No. 327,797. PUBLISHED AUGUST 9, 1932. Class 16.

298,387. PRINTING PLATES. AMERICAN WRINGER COMPANY, INC., Woonsocket, R. I.
Filed June 8, 1932. Serial No. 327,815. PUBLISHED AUGUST 16, 1932. Class 50.

298,388. RADIO RECEIVING SETS. FREDERICK LOESER & CO., INC., Brooklyn, N. Y.
Filed June 9, 1932. Serial No. 327,851. PUBLISHED AUGUST 9, 1932. Class 21.

298,389. MECHANICAL ADVERTISING SIGNS AND THE LIKE, AND FOR REFLECTORS MADE OF GLASS AND METAL FOR ADVERTISING SIGNS. BENJAMIN I. STAMM, St. Paul, Minn.
Filed June 9, 1932. Serial No. 327,857. PUBLISHED AUGUST 16, 1932. Class 50.

298,390. CHEMICALLY TREATED POLISHING CLOTH. F. N. KISTNER CO., Chicago, Ill.
Filed June 15, 1932. Serial No. 328,007. PUBLISHED AUGUST 16, 1932. Class 4.

298,391. CHEMICALLY TREATED POLISHING CLOTHS. F. N. KISTNER CO., Chicago, Ill.
Filed June 15, 1932. Serial No. 328,008. PUBLISHED AUGUST 9, 1932. Class 4.

298,392. SURGICAL APPLIANCES. WALLACE T. ABELL, doing business as Abell Laboratories, Alhambra, Calif.
Filed June 17, 1932. Serial No. 328,052. PUBLISHED AUGUST 16, 1932. Class 44.

298,393. RAZOR BLADES. CHUM RAZOR BLADE CORPORATION, Detroit, Mich.
Filed August 17, 1931. Serial No. 318,047. PUBLISHED AUGUST 9, 1932. Class 28.

298,394. KITCHEN TOOLS AND UTENSILS, NAMELY, BASTING SPOONS, BATTER SPOONS, ETC. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 25, 1931. Serial No. 317,293. PUBLISHED AUGUST 9, 1932. Class 23.

298,395. KITCHEN TOOLS AND UTENSILS. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 25, 1931. Serial No. 317,292. PUBLISHED AUGUST 9, 1932. Class 23.

298,396. [WITHDRAWN.]

298,397. COFFEE AND TEA. THE FISHER BROTHERS COMPANY, Cleveland Ohio.
Filed September 11, 1931. Serial No. 318,944. PUBLISHED AUGUST 9, 1932. Class 46.

298,398. STORAGE BATTERIES. CAMPBELL-HARRIS BATTERY CORPORATION, Kansas City, Mo., assignor to Kansas City Smelting Company, Kansas City, Mo., a Corporation of Missouri.
Filed October 12, 1931. Serial No. 319,973. PUBLISHED AUGUST 9, 1932. Class 21.

298,399. NONALCOHOLIC, MALTLESS SYRUP USED IN THE PREPARATION OF SOFT DRINKS. KOTARO TAKAHASHI, Tokyo-Fu, Japan.
Filed October 23, 1931. Serial No. 320,379. PUBLISHED AUGUST 16, 1932. Class 45.

298,400. STOCK AND POULTRY FEEDS. THE GERMANTOWN RENDERING COMPANY, Cincinnati, Germantown, and Dayton, Ohio.
Filed December 23, 1931. Serial No. 322,385. PUBLISHED AUGUST 9, 1932. Class 46.

298,401. RADIO RECEIVING SETS AND PARTS THEREOF. COLONIAL RADIO CORPORATION, Buffalo, N. Y.
Filed November 21, 1931. Serial No. 321,378. PUBLISHED AUGUST 9, 1932. Class 21.

298,402. MATTRESSES. THE STEARNS & FOSTER CO., Cincinnati and Lockland, Ohio.
Filed December 30, 1931. Serial No. 322,564. PUBLISHED AUGUST 9, 1932. Class 32.

298,403. PENCILS, FOUNTAIN PENS, DESK SETS, AND THE COMPONENT PARTS THEREOF. THE PARKER PEN COMPANY, Janesville, Wis.
Filed December 23, 1931. Serial No. 322,399. PUBLISHED AUGUST 9, 1932. Class 37.

298,404. SPRING CUSHION CONSTRUCTION. THE STEARNS & FOSTER CO., Cincinnati and Lockland, Ohio.
Filed December 30, 1931. Serial No. 322,565. PUBLISHED AUGUST 9, 1932. Class 32.

298,405. PAPER SLITTING AND STACKING MACHINES. THE NATIONAL CASH REGISTER COMPANY, Dayton, Ohio.
Filed January 13, 1932. Serial No. 323,109. PUBLISHED AUGUST 9, 1932. Class 23.

298,406. REFRIGERATING APPARATUS. GIBSON ELECTRIC REFRIGERATOR CORPORATION, Greenville, Mich.
Filed January 15, 1932. Serial No. 323,046. PUBLISHED AUGUST 16, 1932. Class 31.

298,407. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS, EXTRACTS, AND CONCENTRATES USED IN PREPARING THE SAME. MISSION DRY CORPORATION, LTD., Los Angeles, Calif.
Filed January 18, 1932. Serial No. 323,142. PUBLISHED AUGUST 16, 1932. Class 45.

298,408. ROCK DRILLS, ROCK HAMMERS, SINKERS, ETC. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y.
Filed January 30, 1932. Serial No. 323,645. PUBLISHED AUGUST 9, 1932. Class 23.

298,409. COIN-CONTROLLED AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed January 25, 1932. Serial No. 323,416. PUBLISHED AUGUST 16, 1932. Class 22.

298,410. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 29, 1932. Serial No. 324,615. PUBLISHED AUGUST 9, 1932. Class 46.

298,411. NOODLES. MRS. L. O. REAVIS, Kansas City, Kans.
Filed February 23, 1932. Serial No. 324,399. PUBLISHED AUGUST 9, 1932. Class 46.

298,412. FRESH FRUITS—NAMELY, PEARS. EWENS BROS., doing business as Diamond "E" Orchards, Sutherlin, Oreg.
Filed February 1, 1932. Serial No. 323,653. PUBLISHED AUGUST 2, 1932. Class 46.

298,413. GAS STOVES AND RANGES. ODIN STOVE MANUFACTURING COMPANY, Erie, Pa.
Filed February 17, 1932. Serial No. 324,264. PUBLISHED AUGUST 9, 1932. Class 34.

298,414. WOMEN'S AND CHILDREN'S HATS AND CAPS. B. SIMS CORPORATION, New York, N. Y.
Filed March 4, 1932. Serial No. 324,803. PUBLISHED AUGUST 2, 1932. Class 39.

298,415. AUTO AND FURNITURE POLISH. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed December 11, 1931. Serial No. 322,024. PUBLISHED AUGUST 9, 1932. Class 16.

298,416. MEN'S AND BOYS' HATS OF FELT, CLOTH, AND STRAW. YOUNG BROTHERS, New York, N. Y.
Filed February 9, 1932. Serial No. 324,024. PUBLISHED APRIL 12, 1932. Class 39.

298,417. SUGAR. GODCHAUX SUGARS, INC., New Orleans, La.
Filed February 12, 1932. Serial No. 324,103. PUBLISHED AUGUST 9, 1932. Class 46.

298,418. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINK'S. MILLBROOK PRODUCTS CO., Somerville, Mass.
Filed December 18, 1931. Serial No. 322,262. PUBLISHED FEBRUARY 23, 1932. Class 45.

298,419. BREAD AND CAKE, NOODLES, AND FORFEL, (WHICH IS DRY DOUGH IN THE SHAPE OF SMALL ROUND BALLS OF ABOUT 3/16" IN DIAMETER). ISIDORE KEIL, Newark, N. J.
Filed December 26, 1931. Serial No. 322,464. PUBLISHED JULY 12, 1932. Class 46.

298,420. LADIES' HATS. LILLY DACHÉ, New York, N. Y.
Filed January 20, 1932. Serial No. 323,191. PUBLISHED AUGUST 2, 1932. Class 39.

298,421. PLAY BALLS. C. B. WEBB COMPANY, New York, N. Y.
Filed February 29, 1932. Serial No. 324,689. PUBLISHED AUGUST 16, 1932. Class 22.

298,422. CANNED FISH, CANNED FRUITS, CANNED VEGETABLES, ALIMENTARY PASTES, OLIVES, EDIBLE OILS, CANDY, CHOCOLATE, TOMATO PASTE. F. & M. IMPORTING CO. INC., Los Angeles, Calif.
Filed July 17, 1931. Serial No. 317,032. PUBLISHED AUGUST 2, 1932. Class 46.

298,423. OINTMENTS USED IN THE TREATMENT OF BURNS, BRUISES, CUTS, CHAPPED AND CHAFED SKIN, CRACKED LIPS, CORNS AND BUNIONS, FROST BITES AND CHILBLAINS, INSECT BITES, SUNBURN, SCRATCHES, SKIN IRRITATION, POISON IVY AND SIMILAR SKIN TROUBLES. TOWNS & JAMES, assignor to Towns & James., Inc., Brooklyn, N. Y.
Filed August 8, 1931. Serial No. 317,820. PUBLISHED NOVEMBER 24, 1931. Class 6.

298,424. ADHESIVE COATED PAPER, ADHESIVE TAPE, AND ADHESIVE CELLULOSE FOR GENERAL UTILITY PURPOSES INCLUDING ADHESIVE TAPE FOR LACQUER AND PAINT SPRAY MASKING, DECORATING, INSULATING, WATERPROOFING, WRAPPING, SEALING, BINDING, PROTECTING POLISHED SURFACES, PHOTOGRAPHIC, DRAFTING, AND ELECTRICAL WORK. DUREX ABRASIVES CORPORATION, Jersey City, N. J.
Filed August 11, 1931. Serial No. 317,883. PUBLISHED NOVEMBER 10, 1931. Class 5.

298,425. LINIMENT. EDWARD E. RICE, doing business as Nu-Know-U-Well Medicine Company, Elmira, N. Y.
Filed August 18, 1931. Serial No. 318,115. PUBLISHED AUGUST 2, 1932. Class 6.

298,426. WEARING APPAREL FOR WOMEN, MISSES, AND CHILDREN, COMPRISING DRESSES, COATS, CLOAKS, CAPES, BOLEROS, CAPS, TIPPETS, SCARFS, AND MUFFS OF FABRIC OR OF FUR, AND UNDERWEAR FOR WOMEN, MISSES, AND CHILDREN. SOCIÉTÉ ANONYME: LOUISEBOULANGER, Paris, France.
Filed October 27, 1931. Serial No. 320,516. PUBLISHED AUGUST 16, 1932. Class 39.

298,427. FOUNTAIN PENS AND PENCILS. THE WAHL COMPANY, Chicago, Ill.
Filed November 6, 1931. Serial No. 320,882. PUBLISHED AUGUST 9, 1932. Class 37.

298,428. UNDERWEAR, BLOOMERS, PANTIES, STEPINS (UNDERDRAWERS), ONE PIECE COMBINATIONS CONSISTING OF A SHIRT AND PANTIES, DANCE SETS (COMBINING BANDEAUX WITH STEP-INS OR PANTIES), PETTY SKIRTS, BRASSIÈRES, COSTUME SLIPS, NIGHT GOWNS, PAJAMAS, VESTS, SHORTS (FOR UNDERWEAR) AND ATHLETIC SHIRTS FOR MEN, WOMEN, AND CHILDREN. AMERICAN TEXTILES, INC., Bay City, Mich.
Filed November 11, 1931. Serial No. 321,088. PUBLISHED AUGUST 16, 1932. Class 39.

298,429. SHOES MADE WHOLLY OR IN PART OF LEATHER. JAMES A. BANISTER COMPANY, INC., Newark, N. J.
Filed December 4, 1931. Serial No. 321,742. PUBLISHED AUGUST 2, 1932. Class 39.

298,430. MATTRESSES. THE PALMER BROTHERS CO., New London, Conn.
Filed May 7, 1932. Serial No. 326,869. PUBLISHED AUGUST 9, 1932. Class 32.

298,431. CAKES AND PIES. VAUGHN-GILLETTE, Bay City, Mich.
Filed April 21, 1932. Serial No. 326,347. PUBLISHED AUGUST 9, 1932. Class 46.

298,432. HOSIERY AND LINGERIE. SULTANA HOSIERY MILLS, INC., New York, N. Y.
Filed March 30, 1932. Serial No. 325,665. PUBLISHED AUGUST 9, 1932. Class 39.

298,433. FURNITURE. BARKER BROS. INCORPORATED, Los Angeles, Calif.
Filed March 25, 1932. Serial No. 325,455. PUBLISHED AUGUST 9, 1932. Class 32.

298,434. WOMEN'S AND MISSES' SILK FROCKS. LORCH MANUFACTURING COMPANY, Dallas, Tex.
Filed March 21, 1932. Serial No. 325,334. PUBLISHED AUGUST 9, 1932. Class 39.

298,435. CARD CONTROLLED TABULATING MACHINES, CARD PUNCHING MACHINES, CARD SORTING MACHINES, CARD DUPLICATING MACHINES, CARD CONTROLLED LISTING MACHINES, CARD INTERPRETING MACHINES, AND PUNCHED CARD VERIFYING MACHINES. THE TABULATING MACHINE COMPANY, New York, N. Y.
Filed July 6, 1931. Serial No. 316,672. PUBLISHED AUGUST 9, 1932. Class 26.

298,436. WRAPPING PAPER, TISSUE PAPER, AND CREPE PAPER FOR WINDOW DECORATION, PAPER COSTUMES, AND PARTY FAVORS. THE PAPYRUS COMPANY, Kenilworth, N. J.
Filed July 2, 1931. Serial No. 316,566. PUBLISHED AUGUST 16, 1932. Class 37.

298,437. MINERAL COATED PAPER FOR HALF-TONE PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed June 24, 1931. Serial No. 316,192. PUBLISHED AUGUST 16, 1932. Class 37.

298,438. LIQUID FERTILIZER AND ESPECIALLY PREPARED SOIL WHICH IS ALSO SIMILAR TO FERTILIZER. WIL-GRO PRODUCTS CO., Willow Grove, Pa., assignor to Wil-Gro Company, Bridgeboro, N. J., a Firm composed of Louis Kauderer.
Filed June 16, 1931. Serial No. 315,957. PUBLISHED AUGUST 18, 1931. Class 10.

298,439. BRASSIÈRES, BANDEAUX, AND GIRDLES; CORSETS, WOMEN'S UNDERWEAR, PAJAMAS, NEGLIGEES, WOMEN'S PETTICOATS, AND SLIPS. MODISHFORM BRASSIERE CO. INC., New York, N. Y.
Filed June 15, 1931. Serial No. 315,863. PUBLISHED AUGUST 9, 1932. Class 39.

298,440. APPLIANCE FOR CHARGING WATER AND/OR OTHER FLUIDS WITH RADIUM EMANATION. NORTH AMERICAN RADIUM CORPORATION, New York N. Y.
Filed April 21, 1931. Serial No. 313,623. PUBLISHED AUGUST 9, 1932. Class 44.

298,441. OLIVE OIL. SOCIETÀ ANONIMA FRANCESCO BERTOLLI, Lucca, Italy.
Filed April 13, 1931. Serial No. 313,311. PUBLISHED FEBRUARY 16, 1932. Class 46.

298,442. DRIED LACTEAL BABY FOOD. GRANTLAND B. VOORHIES, doing business as Alpha Milk Laboratories, Sacramento, Calif.
Filed March 30, 1931. Serial No. 312,725. PUBLISHED AUGUST 9, 1932. Class 46.

298,443. CARVED WOOD PLAQUES AND SILHOUETTES. CARDER-MARTIN, New Orleans, La.
Filed March 6, 1931. Serial No. 311,820. PUBLISHED AUGUST 16, 1932. Class 50.

298,444. ELECTRIC CLOCKS. WALGREEN CO., Chicago, Ill.
Filed February 24, 1931. Serial No. 311,403. PUBLISHED APRIL 19, 1932. Class 27.

298,445. FRESH CITRUS FRUITS. RIALTO CO-OPERATIVE CITRUS ASSOCIATION, Rialto, Calif.
Filed February 11, 1931. Serial No. 310,947. PUBLISHED AUGUST 9, 1932. Class 46.

298,446. MALT EXTRACT USED AS A TONIC. PABST CORPORATION, Milwaukee, Wis.
Filed January 26, 1931. Serial No. 310,407. PUBLISHED JUNE 9, 1931. Class 6.

298,447. CANNED SALMON. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash.
Filed January 24, 1931. Serial No. 310,333. PUBLISHED AUGUST 9, 1932. Class 46.

298,448. PROPHYLACTIC RUBBER OR TISSUE ARTICLES. WILLIS W. WYANT, doing business as Akron Rubber Supply Company, Akron, Ohio.
Filed April 23, 1930. Serial No. 299,359. PUBLISHED AUGUST 9, 1932. Class 44.

298,449. ANTISEPTIC FOR PERSONAL USE. OLIVER V. REIS, doing business as Halitosine Company, St. Louis, Mo.
Filed March 24, 1930. Serial No. 297,819. PUBLISHED JUNE 24, 1930. Class 6.

298,450. BOOTS, SHOES, AND OXFORDS MADE WHOLLY OR IN PART OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. WALTER BOOTH SHOE CO., Milwaukee, Wis.
Filed May 31, 1932. Serial No. 327,576. PUBLISHED AUGUST 16, 1932. Class 39.

298,451. BANDEAUS, BANDETTES, AND CORSETS. THE H & W COMPANY, INC., Newark, N. J.
Filed June 1, 1932. Serial No. 327,631. PUBLISHED AUGUST 2, 1932. Class 39.

298,452. MEN'S, WOMEN'S, AND CHILDREN'S SHOES MADE OF LEATHER, RUBBER, OR FABRIC, AND COMBINATIONS OF THESE MATERIALS. MAURICE J. MARKELL, Brooklyn, N. Y.
Filed June 4, 1932. Serial No. 327,732. PUBLISHED AUGUST 16, 1932. Class 39.

298,453. AIR CIRCULATING OIL BURNING FURNACES FOR HEATING AND OTHERWISE CONDITIONING AIR SUPPLIED TO LIVING ROOMS. MOTOR WHEEL CORPORATION, Lansing, Mich.
Filed June 4, 1932. Serial No. 327,734. PUBLISHED AUGUST 9, 1932. Class 34.

298,454. BANDEAUX AND GIRDLES. VAN-SEN, INC., New York, N. Y.
Filed June 7, 1932. Serial No. 327,811. PUBLISHED AUGUST 2, 1932. Class 39.

298,455. KNITTED AND TEXTILE UNDERWEAR AND HOSIERY FOR WOMEN AND CHILDREN—NAMELY, VESTS, BLOOMERS, DRAWERS, KNICKERBOCKERS, UNION SUITS, STEP-INS, CHEMISES, CORSET COVERS, NIGHTGOWNS, PAJAMAS, PETTICOATS, PRINCESS SLIPS, BANDEAUX, BANDEAUX CHEMISES; AND KNITTED AND TEXTILE UNDERWEAR FOR MEN—NAMELY, UNION SUITS, SHIRTS AND DRAWERS; AND CORSETS. VANITY FAIR SILK MILLS, Reading, Pa.
Filed June 9, 1932. Serial No. 327,859. PUBLISHED AUGUST 16, 1932. Class 39.

298,456. LAWN SPRINKLERS. MIDWEST HARDWARE COMPANY, Chicago, Ill.
Filed June 11, 1932. Serial No. 327,914. PUBLISHED AUGUST 9, 1932. Class 13.

298,457. SHOES OF LEATHER, OR A COMBINATION OF LEATHER, RUBBER, OR FABRIC. JOHANSEN BROS. SHOE COMPANY, St. Louis, Mo.
Filed June 10, 1932. Serial No. 327,876. PUBLISHED AUGUST 16, 1932. Class 39.

298,458. AIR CONDITIONING EQUIPMENT—NAMELY, BLOWER TYPE FANS AND AIR WASHERS FOR COOLING AND VENTILATING. SCOTT-BALLANTYNE COMPANY, Omaha, Nebr.
Filed June 15, 1932. Serial No. 328,019. PUBLISHED AUGUST 9, 1932. Class 34.

298,459. SHOES OF LEATHER AND FABRIC. CRADDOCK-TERRY CO., Lynchburg, Va.
Filed June 21, 1932. Serial No. 328,161. PUBLISHED AUGUST 16, 1932. Class 39.

298,460. SHOES OF LEATHER AND FABRIC AND COMBINATIONS THEREOF. B. F. SCHLESINGER & SONS, INC., Baltimore, Md.; San Francisco and Oakland, Calif.; Portland, Oreg., and Tacoma, Wash.
Filed June 21, 1932. Serial No. 328,166. PUBLISHED AUGUST 16, 1932. Class 39.

298,461. GLAZIERS SCRAPERS FOR SURFACES OF GLASS, WOOD, METAL, OR OTHER SUBSTANCES, COATED OR UNCOATED, IN WHOLE OR IN PART. LANDON P. SMITH, INC., Irvington, N. J.
Filed April 2, 1932. Serial No. 325,759. PUBLISHED AUGUST 9, 1932. Class 23.

298,462. BEVERAGE DISPENSERS—NAMELY, FRUIT JUICE DISPENSERS AND COMBINATION SODA-FOUNTAIN AND FRUIT JUICE DISPENSERS. MISSION DRY CORPORATION, LTD., Los Angeles, Calif.
Filed May 16, 1932. Serial No. 327,164. PUBLISHED AUGUST 9, 1932. Class 23.

298,463. COLOR DISPLAY CARD USED AS A DEVICE FOR MATCHING AND HARMONIZING COLORS. JOSEPH P. GAUGLER, doing business as The Flatelle Company, New York, N. Y.
Filed April 12, 1932. Serial No. 326,014. PUBLISHED AUGUST 9, 1932. Class 26.

298,464. OIL FIELD EQUIPMENT—NAMELY, CROWN BLOCKS, ROTARY TABLES, LINE SPOOLERS, CEMENT HEADS, COUNTERBALANCES, PITMEN, ROD SPIDERS, TUBING SPIDERS, DRILL PIPE SPIDERS, CHAIN TIGHTENERS, PUMP VALVES, PUMP PISTONS. CALMEC MFG. CO. LTD., Los Angeles, Calif.
Filed May 31, 1932. Serial No. 327,578. PUBLISHED AUGUST 9, 1932. Class 23.

298,465. SENSITIZED PHOTOGRAPHIC FILM. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y.
Filed June 2, 1932. Serial No. 327,648. PUBLISHED AUGUST 9, 1932. Class 26.

298,466. SENSITIZED PHOTOGRAPHIC FILM. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y.
Filed June 2, 1932. Serial No. 327,649. PUBLISHED AUGUST 9, 1932. Class 26.

298,467. PAPER AND STATIONERY, PARTICULARLY RECORD FORMS. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y.
Filed June 24, 1932. Serial No. 328,258. PUBLISHED AUGUST 9, 1932. Class 37.

298,468. ICE CREAM. SOUTHERN DAIRIES, INC., Washington, D. C.
Filed June 27, 1932. Serial No. 328,339. PUBLISHED AUGUST 9, 1932. Class 46.

298,469. WRITING PAPER AND ENVELOPES. Z. & W. M. CRANE, INC., Dalton, Mass.
Filed June 28, 1932. Serial No. 328,414. PUBLISHED AUGUST 9, 1932. Class 37.

298,470. MARINE GLUES IN SOLID AND LIQUID FORM. LORRIN W. FERDINAND, Waltham, Mass.
Filed July 5, 1932. Serial No. 328,553. PUBLISHED AUGUST 16, 1932. Class 5.

298,471. LEAD PENCILS. EAGLE PENCIL COMPANY, New York, N. Y.
Filed July 5, 1932. Serial No. 328,552. PUBLISHED AUGUST 16, 1932. Class 37.

298,472. PAPER HANDKERCHIEFS. POND'S EXTRACT COMPANY, New York, N. Y.
Filed July 6, 1932. Serial No. 328,583. PUBLISHED AUGUST 16, 1932. Class 37.

298,473. TISSUE, CREPED, AND ABSORBENT PAPERS. SCOTT PAPER COMPANY, Chester, Pa.
Filed June 25, 1932. Serial No. 328,592. PUBLISHED AUGUST 9, 1932. Class 37.

298,474. WRAPPING PAPER. HOLLINGSWORTH & WHITNEY COMPANY, Boston, Mass.
Filed July 7, 1932. Serial No. 328,610. PUBLISHED AUGUST 16, 1932. Class 37.

298,475. COAL, GREEN RIVER FUEL COMPANY, INCORPORATED, Mogg, Ky., assignor to Green River Fuel Company, Inc., Mogg, Ky., a Corporation of Indiana.
Filed December 29, 1928. Serial No. 277,366. PUBLISHED MARCH 26, 1929. Class 1.

298,476. ILLUSTRATED YEARLY CATALOGS. WARREN W. MAYTROTT, doing business as Dahliadel Nurseries, Vineland, N. J.
Filed May 22, 1929. Serial No. 284,477. PUBLISHED AUGUST 9, 1932. Class 38.

298,477. ILLUSTRATED YEARLY CATALOGS. WARREN W. MAYTROTT, doing business as Dahliadel Nurseries, Vineland, N. J.
Filed May 22, 1929. Serial No. 284,478. PUBLISHED AUGUST 9, 1932. Class 38.

298,478. VENDING MACHINE FOR PAPER ARTICLES. CHARLES D. MORTON, Chicago, Ill.
Filed June 30, 1932. Serial No. 328,445. PUBLISHED AUGUST 9, 1932. Class 23.

298,479. CONFECTIONS—NAMELY, CANDIES AND CRYSTALLIZED FRUITS. CHEZ FRANCOIS, INC., Miami, Fla.
Filed June 7, 1932. Serial No. 327,788. PUBLISHED JULY 26, 1932. Class 46.

298,480. LADIES' SHOES MADE OF LEATHER. CHARLES MILBURN FOSTER, Dayton, Ohio.
Filed March 15, 1932. Serial No. 325,202. PUBLISHED AUGUST 2, 1932. Class 39.

298,481. RUBBER COVERED WIRE FOR ELECTRICAL USE. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed March 19, 1932. Serial No. 325,303. PUBLISHED JUNE 14, 1932. Class 21.

298,482. LEATHER SHOES. GALE SHOE MANUFACTURING CO., Boston, Mass., and Manchester, N. H.
Filed April 23, 1932. Serial No. 326,421. PUBLISHED AUGUST 16, 1932. Class 39.

298,483. CERTAIN NAMED WEARING APPAREL. THE HECHT CO., doing business as The Hub, Washington, D. C., and Baltimore, Md.
Filed May 21, 1932. Serial No. 327,313. PUBLISHED AUGUST 2, 1932. Class 39.

298,484. WOMEN'S AND MISSES' SHOES, BOOTS, OVERSHOES, AND HOUSE SLIPPERS MADE OF PLAIN AND FANCY LEATHERS, SATINS, VELVETS, STRAWS, RUBBER, FELT, AND METAL CLOTH FOR STREET AND DRESS WEAR. WOHL SHOE COMPANY, St. Louis, Mo.
Filed May 13, 1932. Serial No. 327,079. PUBLISHED AUGUST 16, 1932. Class 39.

298,485. SWEATERS, LEATHER COATS, WINDBREAKERS, WOOLEN CAPS, KNICKERS, AND BATHING SUITS FOR MEN, WOMEN, AND CHILDREN. JOHN J. SULLIVAN, Norfolk, Va.
Filed May 23, 1932. Serial No. 327,376. PUBLISHED AUGUST 2, 1932. Class 39.

298,486. SPUR GEARS, WORM GEARS, MITER GEARS, ETC. BOSTON GEAR WORKS, INC., North Quincy, Mass.
Filed June 4, 1932. Serial No. 327,723. PUBLISHED AUGUST 9, 1932. Class 23.

298,487. SPECTACLE FRAMES. E. B. MEYROWITZ, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,913. PUBLISHED AUGUST 9, 1932. Class 26.

298,488. PICTURE PROJECTING APPARATUS AND SLIDES THEREFOR. SOLESCOPE INCORPORATED, Boston, Mass.
Filed June 16, 1932. Serial No. 328,042. PUBLISHED AUGUST 9, 1932. Class 26.

298,489. TIRE REPAIR VULCANIZING APPARATUS—NAMELY, INNER TUBE VULCANIZING PLATES, INSIDE CURING ARMS, TIRE TREAD REPAIR MOLDS, AND SPOT PATCHERS. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed June 18, 1932. Serial No. 328,092. PUBLISHED AUGUST 9, 1932. Class 23.

298,490. CENTRIFUGAL AND TURBINE PUMPS AND PARTS THEREFOR. BYRON JACKSON CO., Los Angeles, Calif.
Filed June 27, 1932. Serial No. 328,321. PUBLISHED AUGUST 9, 1932. Class 23.

298,491. BATTERY WATER LEVEL INDICATOR. A. LANDIS RILEY, doing business as Landis Manufacturing Company, Atlantic City, N. J.
Filed June 28, 1932. Serial No. 328,371. PUBLISHED AUGUST 9, 1932. Class 26.

298,492. BREAD SLICING MACHINERY. MAC-ROH SALES & MANUFACTURING CO., Bettendorf, Iowa.
Filed June 29, 1932. Serial No. 328,402. PUBLISHED AUGUST 9, 1932. Class 23.

298,493. BREAD SLICING MACHINERY. MAC-ROH SALES & MANUFACTURING CO., Bettendorf, Iowa.
Filed June 29, 1932. Serial No. 328,403. PUBLISHED AUGUST 9, 1932. Class 23.

298,494. CANNED CORN. GIBSON CANNING COMPANY, Gibson City, Ill.
Filed March 14, 1932. Serial No. 325,095. PUBLISHED AUGUST 9, 1932. Class 46.

298,495. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed March 26, 1932. Serial No. 325,540. PUBLISHED AUGUST 2, 1932. Class 46.

298,496. MALT SYRUP. ROYAL CANADIAN DISTRIBUTING COMPANY, Columbus, Ohio.
Filed April 4, 1932. Serial No. 325,806. PUBLISHED AUGUST 2, 1932. Class 46.

298,497. SAFETY PAPER. GILBERT PAPER CO., Menasha, Wis.
Filed April 14, 1932. Serial No. 326,086. PUBLISHED AUGUST 16, 1932. Class 37.

298,498. STENCILS (CONSISTING OF COATED OR IMPREGNATED SHEETS STENCILLIZED WITH THE AID OF LIGHT) AND STENCIL SHEETS (CONSISTING OF SHEETS, COATED OR IMPREGNATED WITH LIGHT SENSITIVE MATERIAL AND ADAPTED TO BE STENCILLIZED WITH THE AID OF LIGHT). A. B. DICK COMPANY, Chicago, Ill.
Filed April 15, 1932. Serial No. 326,130. PUBLISHED AUGUST 16, 1932. Class 37.

298,499. PERIODICAL. AMERICAN HEBREW PUBLISHING COMPANY, New York, N. Y.
Filed May 6, 1932. Serial No. 326,802. PUBLISHED AUGUST 9, 1932. Class 38.

298,500. HECTOGRAPH MACHINES. THE REYNOLDS-SCHIER CO., INC., Chicago, Ill.
Filed May 18, 1932. Serial No. 327,233. PUBLISHED AUGUST 16, 1932. Class 37.

298,501. WRITING-PAPER, PAPER USED FOR PRINTING, DRAWING-PAPER, BRISTOL-BOARD, COVER-PAPER, BLOTTING-PAPER, TYPEWRITING-PAPER, TISSUE-PAPER, WRAPPING-PAPER, TOILET-PAPER, WAXED PAPER, CORRESPONDENCE AND MAILING ENVELOPES; PENS, AND COPYING PRESSES. JOHN A. MONAGAS, doing business as Monagas Trading Company, New York, N. Y.
Filed May 24, 1932. Serial No. 327,403. PUBLISHED AUGUST 16, 1932. Class 37.

298,502. CRUSHED PEANUT CONFECTION. PLANTERS NUT & CHOCOLATE CO., Wilkes-Barre, Pa.
Filed May 24, 1932. Serial No. 327,414. PUBLISHED AUGUST 2, 1932. Class 46.

298,503. INDEX CARDS, MEMORANDUM CARDS, RECORD SHEETS, BLANK FORMS, AND NOTE PAPER. MERRIMAC PAPER COMPANY, Lawrence, Mass.
Filed May 28, 1932. Serial No. 327,559. PUBLISHED AUGUST 16, 1932. Class 37.

298,504. GELATIN DESSERT AND GELATIN ASPIC. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed June 3, 1932. Serial No. 327,709. PUBLISHED AUGUST 9, 1932. Class 46.

298,505. NUMERICAL PUZZLES RUN AS A COLUMN IN NEWSPAPERS AND MAGAZINES. HENRY YOUNG, Clarion, Pa.
Filed June 3, 1932. Serial No. 327,721. PUBLISHED AUGUST 9, 1932. Class 38.

298,506. VEGETABLE OIL SHORTENING COMPOUND. PLANTERS EDIBLE OIL COMPANY, Suffolk, Va., and Wilkes-Barre, Pa.
Filed June 6, 1932. Serial No. 327,767. PUBLISHED AUGUST 2, 1932. Class 46.

298,507. PUBLICATIONS ISSUED PERIODICALLY. THE STANDARD STATISTICS COMPANY, INC., New York, N. Y.
Filed June 16, 1932. Serial No. 328,051. PUBLISHED AUGUST 9, 1932. Class 38.

298,508. COLUMN OR SECTION OF DAILY NEWSPAPER. HARRY T. MADDEN, doing business as Kennedy Kane, Brooklyn, N. Y.
Filed June 20, 1932. Serial No. 328,132. PUBLISHED AUGUST 9, 1932. Class 38.

298,509. BLANK FORMS. CHARLES A. LAW, Los Angeles, Calif.
Filed June 21, 1932. Serial No. 328,177. PUBLISHED AUGUST 16, 1932. Class 37.

298,510. LEATHER SHOES AND BOOTS. S. BEARMAN SHOE COMPANY, St. Louis, Mo.
Filed May 31, 1932. Serial No. 327,574. PUBLISHED AUGUST 2, 1932. Class 39.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

298,511. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G L E CANDY CORPORATION OF AMERICA, Chicago, Ill. Filed June 6, 1931. Serial No. 315,485.

JEL-E-SWEETS

For Candy.
Claims use since Feb. 24, 1931.

298,512. (CLASS 39. CLOTHING.) PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed July 6, 1931. Serial No. 316,660.

"Tracery Top"

For Hosiery.
Claims use since June 25, 1931.

298,513. (CLASS 39. CLOTHING.) THE GUARANTEE SHOE COMPANY, San Antonio, Tex. Filed Aug. 20, 1931. Serial No. 318,241.

Comp-o-lite DISTINCTIVE FOOTWEAR

For Shoes of Leather, Fabrics, Rubber, and Combinations Thereof.
Claims use since July 30, 1931.

298,514. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CORTLAND LINE COMPANY, INCORPORATED, Cortland, N. Y. Filed Sept. 14, 1931. Serial No. 319,015.

KILREA

For Fish Lines.
Claims use since Sept. 1, 1931.

298,515. (CLASS 37. PAPER AND STATIONERY.) NASHUA GUMMED & COATED PAPER COMPANY, Nashua, N. H. Filed Sept. 15, 1931. Serial No. 319,073.

Lithochrome

For Wax-Coated Paper.
Claims use since Sept. 1, 1931.

298,516. (CLASS 39. CLOTHING.) PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed May 18, 1931. Serial No. 314,716.

Cool-Tones

For Apparel Belts, Suspenders, and Braces.
Claims use since Apr. 25, 1931.

298,517. (CLASS 39. CLOTHING.) GALE SHOE MANUFACTURING CO., Boston, Mass. Filed Oct. 3, 1931. Serial No. 319,692.

MOCSIN

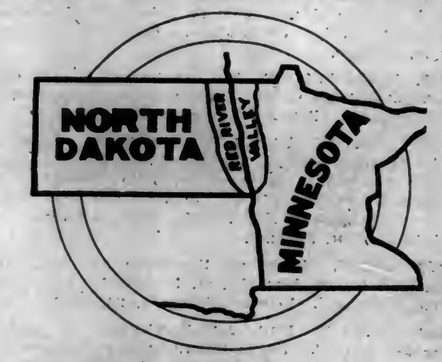
For Leather Shoes.
Claims use since June 10, 1931.

298,518. (CLASS 39. CLOTHING.) SOCIETE CLAIRE PALISSEAU ET JULIETTE LEVY, doing business as J. Suzanne Talbot, Paris, France. Filed Oct. 27, 1931. Serial No. 320,518.

J. SUZANNE TALBOT modes
14 rue. royale., paris

For Hats for Women, Misses, and Children and Also for Men; Fur Garments for Women, Misses, and Children—Namely, Cloaks, Capes, Boleros, Bonnets, Tippets, Scarfs, and Muffs, Slippers and Gloves of Fabric and of Fur, and Sandals of Fabric.
Claims use since Oct. 15, 1917.

298,519. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RED RIVER VALLEY POTATO SHIPPERS ASSOCIATION, Moorhead, Minn. Filed Oct. 29, 1931. Serial No. 320,605.



For Potatoes in Their Natural State.
Claims use since Sept. 10, 1931.

298,520. (CLASS 32. FURNITURE AND UPHOLSTERY.) BERKELEY CHESTERFIELD CO., Portland, Oreg. Filed Mar. 7, 1932. Serial No. 324,837.

BERKELEY

For Davenport Beds and Chairs.
Claims use since Jan. 2, 1926.

298,521. (CLASS 39. CLOTHING.) SEARS ROEBUCK AND CO., Chicago, Ill. Filed May 14, 1932. Serial No. 327,110.

Biltwel

For Misses' and Children's Shoes Made of Leather, Fabric and Combinations of the Same.
Claims use since Nov. 1, 1930.

TRADE-MARK REGISTRATIONS RENEWED

38,960. FLOUR. Registered September 30, 1902. NELSON STOREY & CO., Bozeman, Mont. Renewed September 30, 1932, to Montana Flour Mills Company, Great Falls, Mont., a Corporation of Montana, successor.

38,961. FLOUR. Registered September 30, 1902. NELSON STOREY & CO., Bozeman, Mont. Renewed September 30, 1932, to Montana Flour Mills Company, Great Falls, Mont., a Corporation of Montana, successor.

39,350. TIN PLATES AND TERNE PLATES. Registered November 25, 1902. AMERICAN TIN PLATE CO., New York, N. Y. Renewed November 25, 1932, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

39,368. SOFT AND STIFF FELT HATS AND CAPS. Registered November 25, 1902. JOHN B. STETSON COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed November 25, 1932.

39,505. TIN PLATES AND TERNE PLATES. Registered December 16, 1902. AMERICAN TIN PLATE CO., New York, N. Y. Renewed December 16, 1932, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

39,703. SHEET STEEL. Registered January 27, 1903. AMERICAN SHEET STEEL COMPANY, New York, N. Y. Renewed January 27, 1933 to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

39,796. METALLIC PLATES. Registered February 10, 1903. AMERICAN PRESSED STEEL CO., Philadelphia, Pa., a Corporation of New Jersey. Renewed February 10, 1933.

39,872. CERTAIN NAMED CONFECTIONERY. Registered March 3, 1903. GEORGE W. LOFT, New York, N. Y. Renewed March 3, 1933, to Loft, Inc., Long Island City, N. Y., a Corporation of Delaware, assignee by mesne assignments.

86,458. MOTOR-CARS AND CHASSIS. Registered May 7, 1912. ROLLS-ROYCE LIMITED, Osmaston, Derby, England. Renewed May 7, 1932, to Rolls-Royce of America, Incorporated, Springfield, Mass., a Corporation of Delaware, assignee.

88,439. WHEAT-FLOUR. Registered September 17, 1912. YARDLEY MILLS CO., INC., Yardley, Pa., a Corporation of Pennsylvania. Renewed September 17, 1932.

88,465. CERTAIN PARTS OF HARNESS AND SADDLERY HARDWARE. Registered September 24, 1912. AUGUST BUERMANN MANUFACTURING CO., Newark, N. J. Renewed September 24, 1932, to North and Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut, assignee.

88,473. GLUE. Registered September 24, 1912. H. EHRLICH & SONS MFG. CO., St. Joseph, Mo., a Corporation of Missouri. Renewed September 24, 1932.

88,559. SIEVES FOR ASH-BARRELS. Registered October 1, 1912. DOVER STAMPING AND MANUFACTURING COMPANY. Renewed October 1, 1932, to Dover Stamping and Manufacturing Company, Cambridge, Mass., a Corporation of Massachusetts, assignee.

88,601. A GRAIN-FINISH LEATHER IN THE PIECE, EITHER VEGETABLE, MINERAL OR OIL TANNED. Registered October 1, 1912. ALBERT TROSTEL & SONS COMPANY, Milwaukee, Wis., a Corporation of Wisconsin. Renewed October 1, 1932.

88,683. CERTAIN NAMED TOOLS AND PARTS OF MACHINERY. Registered October 15, 1912. THE LUNKENHEIMER COMPANY, of Cincinnati, Ohio, a Corporation of Ohio. Renewed October 15, 1932.

88,872. A RHEUMATIC AND KIDNEY REMEDY. Registered October 29, 1912. ALLEN E. HANEY. Renewed October 29, 1932, to Bertha S. Haney, Albion, Ind., successor.

89,109. LAUNDRY SOAP. Registered November 12, 1912. HASKINS BROS. & CO., Sioux City, Iowa, a Corporation of Iowa. Renewed November 12, 1932.

89,163. A REMEDY FOR CERTAIN AILMENTS AND DISEASES. Registered November 12, 1912. DAVID S. VAN HORNE, Monroe, Ga. Renewed November 12, 1932.

89,242. WRAPPING-PAPER. Registered December 3, 1912. FISHER BROS. PAPER COMPANY, Fort Wayne, Ind., a Corporation of Indiana. Renewed December 3, 1932.

89,279. PRESSURE-REGULATORS, WATER-COLUMNS, COCKS, NOZZLES, VALVES, AND UNIONS. Registered December 3, 1912. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed December 3, 1932.

89,337. RUPTURE APPLIANCES. Registered December 10, 1912. BROOKS RUPTURE APPLIANCE CO. Renewed December 10, 1932, to Brooks Appliance Company, Inc., Marshall, Mich., a Corporation of Michigan, assignee.

89,384. CERTAIN NAMED SPORTING GOODS. Registered December 10, 1912. SOUTH BEND BAIT COMPANY, South Bend, Ind., a Corporation of Indiana. Renewed December 10, 1932.

89,450. LEAD-PENCILS. Registered December 17, 1912. EAGLE PENCIL COMPANY. Renewed December 17, 1932, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware, assignee.

89,503. POCKET-KNIVES. Registered December 17, 1912. JOHN RUSSELL CUTLERY COMPANY, Turners Falls, Mass., a Corporation of Massachusetts. Renewed December 17, 1932.

89,544. WHEAT-FLOUR. Registered December 24, 1912. EMPIRE STATE FLOUR MILLS, Syracuse, N. Y. Renewed December 24, 1932, to Empire State Flour Mills, New York, N. Y., a Corporation of New York.

89,759. WATER-GAGES, OIL-GAGES, STEAM-GAGES, PRESSURE AND VACUUM GAGES. Registered January 7, 1913. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed January 7, 1933.

89,769. BLUING AND STARCH FOR LAUNDRY PURPOSES. Registered January 7, 1913. RECKITT & SONS LD., Hull, England. Renewed January 7, 1933, to Becketts (U. S. A.), Ltd., New Brunswick, N. J., a Corporation of Great Britain, assignee.

89,949. NECKTIES, NECKSCARFS, SHIELD-BOWS, SHIELD-TECKS, BAND-BOWS, BAND-TECKS, AND CRAVATS. Registered January 21, 1913. ABRAHAM L. RICE. Renewed January 21, 1933, to Lion Neckwear Co., Boston, Mass., a firm, assignee.

89,984. PAPER AND FIBER BOXES. Registered January 28, 1913. JUSTIN D. BOWERSOCK. Renewed January 28, 1933, to The Lawrence Paper Company, Lawrence, Kans., a Corporation of Kansas, assignee, by mesne assignments.

90,007. BLENDED COFFEE. Registered January 28, 1913. THE FORT SMITH COFFEE COMPANY, Fort Smith, Ark., a Corporation of Arkansas. Renewed January 28, 1933.

90,177. A BINDER USED AS AN INGREDIENT OF PORK SAUSAGE. Registered February 11, 1913. H. EHRLICH & SONS MFG. CO., St. Joseph, Mo., a Corporation of Missouri. Renewed February 11, 1933.

90,341. TOILET SOAPS. Registered February 18, 1913. THE ANDREW JERGENS CO., Cincinnati, Ohio, and New York, N. Y. Renewed February 18, 1933, to The Andrew Jergens Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

90,632. CUSHIONS FOR BILLIARD AND POOL TABLES. Registered March 11, 1913. H. EHRLICH & SONS MFG. CO., St. Joseph, Mo., a Corporation of Missouri. Renewed March 11, 1933.

LABELS

REGISTERED OCTOBER 25, 1932

41,313.—*Title:* SQUARE HOLE. For Tool Handles. THE AMERICAN FORK & HOE COMPANY, Cleveland, Ohio. Published May 27, 1932.

41,314.—*Title:* PEPPERMINT AROMINTS. For Mints. AROMINT CORPORATION, Chicago, Ill. Published March 15, 1932.

41,315.—*Title:* PEPPERMINT AROMINTS. For Mints. AROMINT CORPORATION, Chicago, Ill. Published March 15, 1932.

41,316.—*Title:* TERRITORIAL DESIGN NO. 223. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published August 19, 1930.

41,317.—*Title:* TERRITORIAL DESIGN NO. 226. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published April 15, 1930.

41,318.—*Title:* TERRITORIAL DESIGN NO. 227. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published April 15, 1930.

41,319.—*Title:* TERRITORIAL DESIGN NO. 228. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published April 15, 1930.

41,320.—*Title:* TERRITORIAL DESIGN NO. 329. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published July 30, 1931.

41,321.—*Title:* TERRITORIAL DESIGN NO. 333. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published May 12, 1931.

41,322.—*Title:* TERRITORIAL DESIGN NO. 334. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published July 6, 1931.

41,323.—*Title:* TERRITORIAL DESIGN NO. 335. For Butter. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published November 3, 1931.

41,324.—*Title:* TERRITORIAL NO. 500. For Ice Cream. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published January 26, 1931.

41,325.—*Title:* DESIGN NO. 501. For Ice Cream. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published March 13, 1931.

41,326.—*Title:* DESIGN NO 502. For Ice Cream. THE BUTLER PAPER PRODUCTS COMPANY, Toledo, Ohio. Published March 10, 1931.

41,327.—*Title:* "SPAIN MAID". For Spanish Paprika. ARTHUR C. CHASE, Los Angeles, Calif. Published August 17, 1932.

41,328.—*Title:* DERRIS FLEA AND LICE POWDER. For Flea and Lice Powder. DERRIS, INC., New York, N. Y. Published July 12, 1932.

41,329.—*Title:* FRIGIE ICE MILK BAR. For Frozen Confections. FRIGIE CORPORATION OF AMERICA, Chicago, Ill. Published July 30, 1932.

41,330.—*Title:* ZIL. For Candy. D. GOLDENBERG, INC., Philadelphia, Pa. Published September 21, 1932.

41,331.—*Title:* TING CHAH OLONGO BLEND—GENUINE CHINA TEA. For China Tea. GOON DIP & CO., Seattle, Wash. Published September 27, 1932.

41,332.—*Title:* FLAVOTINT. For Preparation Which Flavors and Tints Food Products. CHR. HANSEN'S LABORATORY, INC., doing business as The Junket Folks, Little Falls, N. Y. Published August 20, 1932.

41,333.—*Title:* SQUAW LOTION. For Lotion. EMILY CONSTANT HANSON, Bloomfield, N. J. Published August 1, 1932.

41,334.—*Title:* THE RED EAGLE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 9, 1932.

41,335.—*Title:* SMART SHOES FOR MEN. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published August 12, 1932.

41,336.—*Title:* VI-VA VARNISH. For Varnish. THE R. F. JOHNSTON PAINT COMPANY, Cincinnati, Ohio. Published August 16, 1932.

41,337.—*Title:* SQUARE DEEL CLEANER AND WATER SOFTENER. For Cleaner and Water Softener. KEYSTONE CHEMICAL CORPORATION, Detroit, Mich. Published August 18, 1932.

41,338.—*Title:* 8½ POUNDS ROLLED OATS. For Rolled Oats. NORTHERN ILLINOIS CEREAL COMPANY, Lockport, Ill. Published September 18, 1932.

41,339.—*Title:* PROTECTOL FOR SUNTAN. For a Protective Oil to be Applied to the Face and Body Before Exposure to the Sun. OGILVIE SISTERS, New York, N. Y. Published July 18, 1932.

41,340.—*Title:* PRESHRUNK FABRICS. For Fabrics. THE PROSPERITY COMPANY, INC., Syracuse, N. Y. Published July 19, 1932.

41,341.—*Title:* PINE-O-SOTE. For Wood Preservative. THE RETORT CHEMICAL COMPANY, Gainesville, Fla. Published June 1, 1932.

41,342.—*Title:* WELL-AGAIN ATHLETE'S FOOT REMEDY. For Salve for Athlete's Foot and Trench Foot. KRSTA TCHOSSITCH AND JULIANNA TCHOSSITCH, doing business as Well-Again Medicine Company, East St. Louis, Ill. Published July 1, 1932.

41,343.—*Title:* NORTH BAY BRAND PINK SALMON. For Canned Salmon. WESCO FOODS COMPANY, Cincinnati, Ohio. Published August 15, 1932.

PRINTS

REGISTERED OCTOBER 25, 1932

13,948.—*Title:* BIGELOW'S BIG EIGHT FOR HOTEL CARPETING. For Carpets and Carpeting. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published September 1, 1932.

13,949.—*Title:* SCIENCE'S MOST THRILLING FOOD INVENTION. For Biscuit Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published August 12, 1932.

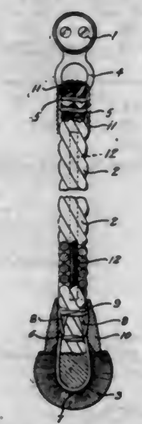
13,950.—*Title:* SAN-NAP-PAK, A BETTER NAPKIN AND LOWER IN PRICE. For Sanitary Napkins. SAN-NAP-PAK MFG. CO. INC., New York, N. Y. Published March, 1932.

13,951.—*Title:* TWO GOOD MICK-SIRS. For Ginger Ale and Spring Water. WAUKESHA PURE SPRING WATER COMPANY, INC., Chicago, Ill. Published August 8, 1932.

REISSUES

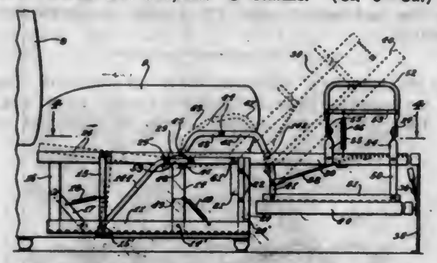
OCTOBER 25, 1932

18,635. ASSIST GRIP. HERMAN H. RUBIN, New York, N. Y. Original No. 1,703,821, dated Feb. 26, 1929, Serial No. 321,410, filed Nov. 23, 1928. Application for reissue filed Apr. 9, 1930. Serial No. 442,906. 2 Claims. (Cl. 105—354.)



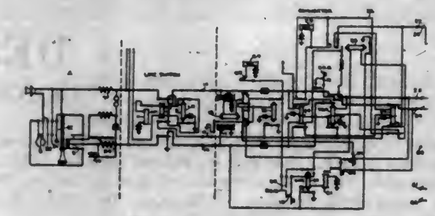
1. An assist grip comprising a body portion, an attaching device at one end thereof, a pompon at the other end thereof and means for securing the pompon in operative position including a clamp encircling said body portion, a metallic connecting member embracing said pompon and having its ends interlocking with said clamp, and a second separate clamp spaced from the first mentioned clamp and positioned in the path of said connecting member ends as a stop to limit disengaging movement of the pompon due to slipping of the first mentioned clamp.

18,636. DAVENPORT. JOSEPH GOMBAR, Lenox, Mich., assignor to Smith and Davis Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Original No. 1,741,153, dated Dec. 31, 1929, Serial No. 102,923, filed Apr. 19, 1926. Application for reissue filed Feb. 24, 1931. Serial No. 517,973. 3 Claims. (Cl. 5—31.)



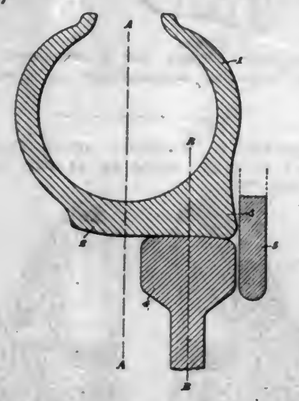
3. A folding davenport of the character described, comprising, a supporting frame, a folding bed frame having inner and outer sections and an intermediate section jointed therebetween to provide for movement thereof to extended and collapsed positions, means for pivoting said intermediate and outer sections on said supporting frame, means to connect said rear section to said supporting frame for movement forwardly and downwardly to collapsed position; a lever pivoted between its ends to said outer section and having one end projecting toward and overhanging said intermediate section when said outer section is in nearly extended position, a link connecting the outer end of said lever to the folding frame close to the joint between said inner and intermediate sections, adapted to apply a lifting force directly to said joint in order to raise said sections when said outer section is moved to extended position, and a seat frame connected to the other end of said lever so as to apply its weight to the lifting force at said joint to assist in raising said inner section.

18,637. RADIO RECEIVING SYSTEM. WINFRED T. POWELL, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Original No. 1,655,160, dated Jan. 3, 1928, Serial No. 589,792, filed Sept. 22, 1922. Application for reissue filed Feb. 6, 1931. Serial No. 514,303. 24 Claims. (Cl. 179—2.)



1. In a system of the class described, a telephone line, a radio receiving set including a thermionic device provided with a grid, a plate and a filament, a grid circuit including said grid and filament, a plate circuit connecting said plate and filament, said grid and plate circuits being coupled together, means including an automatic switch for extending said telephone line to said radio receiving set, and means controlled over said telephone line for directively varying the coupling between said grid and plate circuits.

18,638. TIRE FOR RAILWAY VEHICLES. ANDRÉ JULES MICHELIN, deceased, Paris, France, by Marcel Joseph Jules Michelin, executor, Clermont-Ferrand, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Original No. 1,833,718, dated Nov. 24, 1931, Serial No. 494,768, filed Nov. 10, 1930, and in France Nov. 21, 1929. Application for reissue filed May 12, 1932. Serial No. 610,968. 9 Claims. (Cl. 295—34.)



1. In covers of pneumatic tires adapted to be fitted on railway vehicles, a cylindrical lateral extension of the tread on one side only, giving the cover a dissymmetric shape, whereby an increased tread surface of the tire is obtained.

PLANT PATENTS

GRANTED OCTOBER 25, 1932

37. CARNATION. WILLIAM SIM, Saugus, Mass. Filed July 29, 1932. Serial No. 626,002. 1 Claim. (Cl. 47—1.)

The variety of carnation herein shown and described, characterized particularly by the intense deep pink color of its blossoms, their full and almost perfect formation, delicate fragrance and extraordinary keeping qualities; and by the vigorous growing habits of the plant and its ease of reproduction due to the unusual growth of side shoots.

38. ROSE. MATTHIAS LEENDERS, Teyl, Netherlands, assignor to Jackson & Perkins Company, Newark, N. Y., a Corporation of New York. Filed Nov. 3, 1931. Serial No. 572,853. 1 Claim. (Cl. 47—1.)

A new and distinct variety of rose characterized by the bronze color of the flower, the length of the bud, and its prolific habit of growth as shown and described.

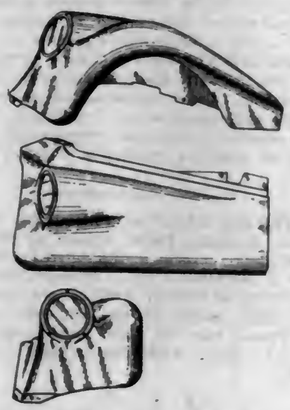
39. BRAMBLEBERRY. PERCY W. MEREDITH, Oregon City, Oreg. Filed Nov. 30, 1931. Serial No. 578,178. 1 Claim. (Cl. 47—1.)

A new variety of brambleberry substantially as shown and herein described.

DESIGNS

OCTOBER 25, 1932

88,064. COMBINED AUTOMOBILE FENDER AND HEAD LAMP. ARTHUR J. BAKER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 10, 1932. Serial No. 44,806. Term of patent 14 years.



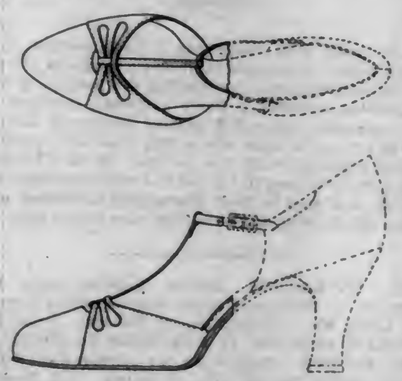
The ornamental design for a combined automobile fender and headlamp substantially as shown and described.

88,065. GARMENT. FLORENCE AYERS, Topeka, Kans. Filed June 22, 1932. Serial No. 44,167. Term of patent 3½ years.



The ornamental design for a garment as shown.

88,066. SHOE. ALBERT F. BANCROFT, West Newton, Mass. Filed Aug. 25, 1932. Serial No. 44,694. Term of patent 3½ years.



The ornamental design for a shoe, as shown and described.

88,067. FANCY BOTTLE. FÉLICIE EUGÉNIE AMÉLIE WANPOUILLE BERGAUD, Paris, France. Filed Aug. 13, 1932. Serial No. 44,593. Term of patent 14 years.



The ornamental design for a fancy bottle, as shown.

CARNEGIE LIBRARY OF ATLANTA

88,068. BOX. FÉLICIE EUGÉNIE AMÉLIE WANPOUILLE BERGAUD, Paris, France. Filed Aug. 13, 1932. Serial No. 44,594. Term of patent 14 years.



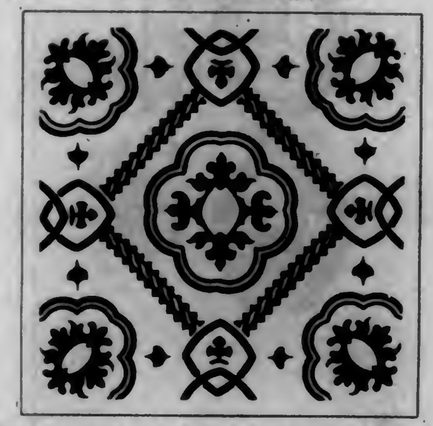
The ornamental design for a box, as shown.

88,069. MEDALLION FOR CONTAINERS, STOPPERS, OR THE LIKE. FÉLICIE EUGÉNIE AMÉLIE WANPOUILLE BERGAUD, Paris, France. Filed Aug. 13, 1932. Serial No. 44,595. Term of patent 14 years.



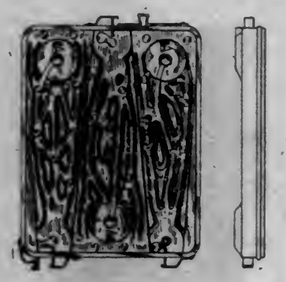
The ornamental design for a medallion for containers, stoppers or the like, as shown.

88,070. PILLOW COVER OR THE LIKE. MILTON W. BERLFEIN, New York, N. Y. Filed Sept. 8, 1932. Serial No. 44,770. Term of patent 3½ years.



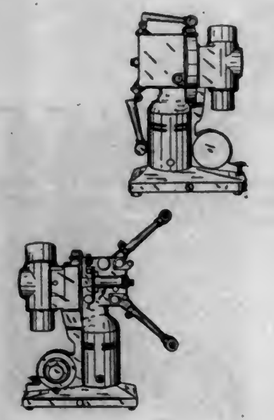
The ornamental design for a pillow cover or the like substantially as shown.

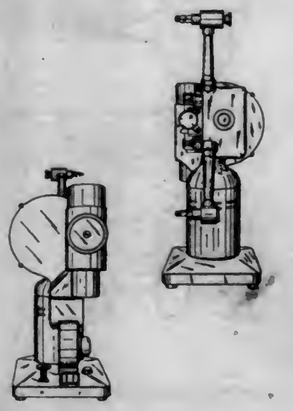
88,071. NOVELTY GOLF GAME TOY. NATHAN BURGELEISEN, Norwood, Ohio. Filed Aug. 1, 1932. Serial No. 44,597. Term of patent 3½ years.



The ornamental design for a novelty golf game toy as shown.

88,072. MOTION PICTURE PROJECTOR. ERNEST S. CARPENTER, Cleveland Heights, Ohio, assignor to Augustus Carpenter Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 26, 1932. Serial No. 43,611. Term of patent 14 years.





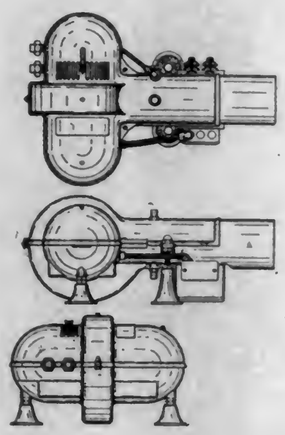
The ornamental design for a motion picture projector, substantially as shown and described.

88,073. DRESS. BETTINA CASABONA, New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 13, 1932. Serial No. 44,821. Term of patent 3½ years.



The ornamental design for a dress substantially as shown.

88,074. OIL BURNER. CHARLES H. CHALMERS, Minneapolis, Minn. Filed Feb. 1, 1932. Serial No. 42,698. Term of patent 14 years.



The ornamental design for an oil burner substantially as shown.

88,075. DRESS. PAULINE E. FIELDS, New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 13, 1932. Serial No. 44,823. Term of patent 3½ years.



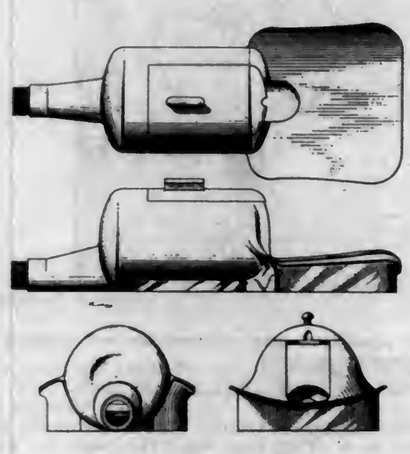
The ornamental design for a dress substantially as shown.

88,076. BOTTLE. EDWIN W. FUESST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 26, 1932. Serial No. 44,447. Term of patent 14 years.



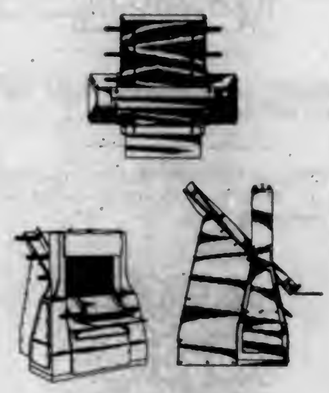
The ornamental design for a bottle substantially as shown.

88,077. COLONIC EXCRETA RECEPTACLE. FREDERICK H. GAUTSCHI, Van Nuys, Calif. Filed Jan. 25, 1932. Serial No. 42,614. Term of patent 14 years.



The ornamental design for a colonic excreta receptacle as shown.

88,078. BREAD SLICING MACHINE. ISRAEL C. GELLMAN, Rock Island, Ill. Filed Apr. 4, 1932. Serial No. 43,391. Term of patent 7 years.



The ornamental design for a bread slicing machine as shown.

88,079. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,858. Term of patent 3½ years.



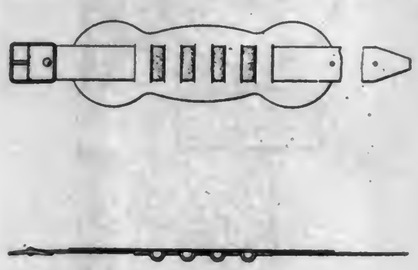
The ornamental design for a textile fabric, substantially as shown and described.

88,080. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,863. Term of patent 3½ years.



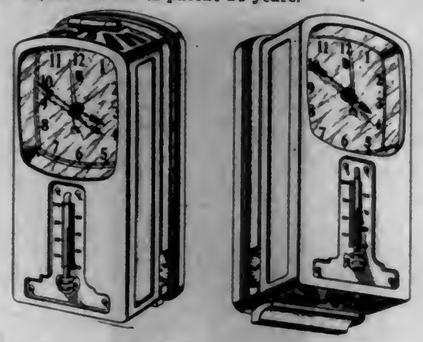
The ornamental design for a textile fabric, substantially as shown and described.

88,081. GOLF TEE HOLDING WRISTLET. CHARLES ANTON GLOCK, Chatham, Ontario, Canada. Filed Aug. 18, 1932. Serial No. 44,626. Term of patent 7 years.



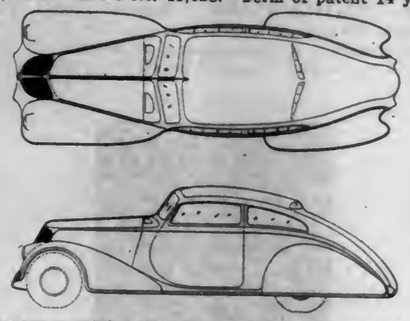
The ornamental design for a golf tee holding wristlet, substantially as shown.

88,082. COMBINED CLOCK, THERMOMETER AND THERMOSTAT. JOSEPH W. GOSLING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1932. Serial No. 44,619. Term of patent 14 years.



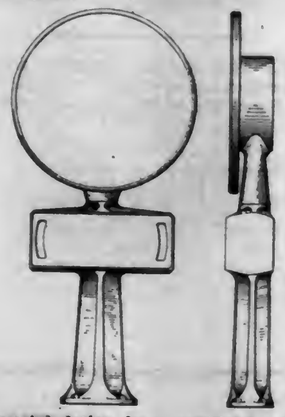
The ornamental design for a combined clock, thermometer, and thermostat, substantially as shown.

88,083. AUTOMOBILE. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 27, 1932. Serial No. 43,628. Term of patent 14 years.



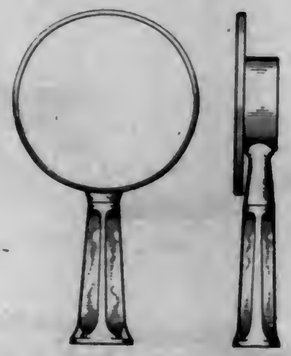
The ornamental design for an automobile substantially as shown.

88,084. COMBINED WEIGHING SCALE COLUMN AND TARE BEAM BOX. CARL HUGO JACOBSON, Bridgeport, Conn. Filed Sept. 2, 1932. Serial No. 44,738. Term of patent 14 years.



The ornamental design for a combined weighing scale column and tare beam box, substantially as shown.

88,085. COLUMN FOR A WEIGHING SCALE. CARL HUGO JACOBSON, Bridgeport, Conn. Filed Sept. 2, 1932. Serial No. 44,739. Term of patent 14 years.



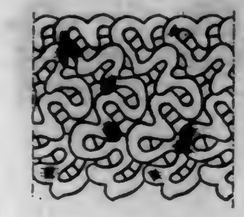
The ornamental design for a column for a weighing scale substantially as shown.

88,086. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,845. Term of patent 3½ years.



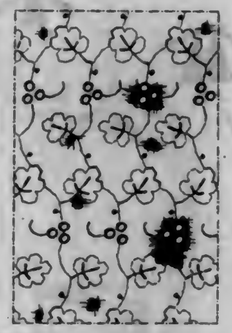
The ornamental design for textile fabric, substantially as shown and described.

88,087. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,846. Term of patent 3½ years.



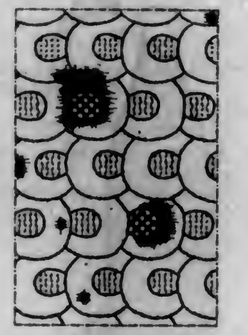
The ornamental design for textile fabric substantially as shown and described.

88,088. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,847. Term of patent 3½ years.



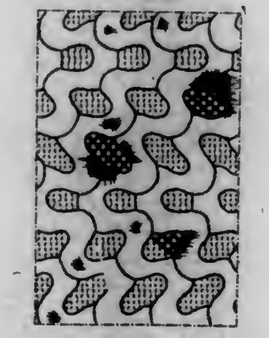
The ornamental design for textile fabric, substantially as shown and described.

88,089. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,849. Term of patent 3½ years.



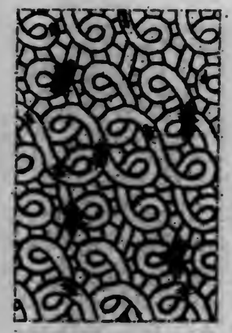
The ornamental design for textile fabric, substantially as shown and described.

88,090. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,850. Term of patent 3½ years.



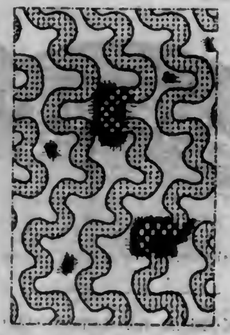
The ornamental design for textile fabric, substantially as shown and described.

88,091. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,851. Term of patent 3½ years.



The ornamental design for textile fabric, substantially as shown and described.

88,092. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,852. Term of patent 3½ years.



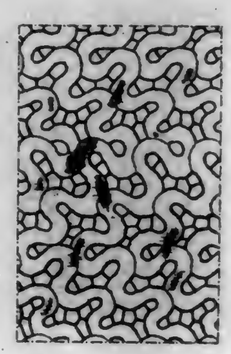
The ornamental design for textile fabric, substantially as shown and described.

88,093. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,854. Term of patent 3½ years.



The ornamental design for textile fabric substantially as shown and described.

88,094. TEXTILE FABRIC. MAX U. JUESTRICH, Ridgefield, N. J. Filed Sept. 15, 1932. Serial No. 44,855. Term of patent 3½ years.



The ornamental design for textile fabric substantially as shown and described.

88,095. SIGN BOARD. GEORGE P. KIMBALL, Stoneham, Mass. Filed Aug. 15, 1932. Serial No. 44,609. Term of patent 7 years.



The ornamental design for a sign board, as shown.

88,096. AUTOMOBILE RADIATOR CAP ORNAMENT. JOHN V. KOHLHEPP, Jersey City, N. J. Filed Sept. 1, 1932. Serial No. 44,733. Term of patent 7 years.





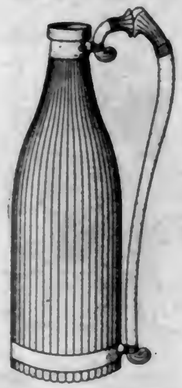
The ornamental design for an automobile radiator cap ornament, as shown.

88,097. DRESS. JOSEPH KOHN, St. Louis, Mo. Filed Sept. 10, 1932. Serial No. 44,803. Term of patent 3½ years.



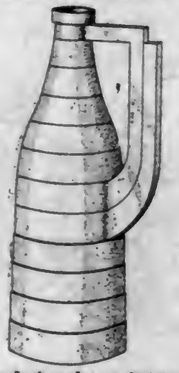
The ornamental design for a dress, as shown.

88,098. BOTTLE OR SIMILAR ARTICLE. PAUL E. LEHMAN, Woodmere, N. Y. Filed Aug. 11, 1932. Serial No. 44,579. Term of patent 7 years.



The ornamental design for a bottle or similar article substantially as shown.

88,099. BOTTLE OR SIMILAR ARTICLE. PAUL E. LEHMAN, Woodmere, N. Y. Filed Aug. 11, 1932. Serial No. 44,580. Term of patent 7 years.



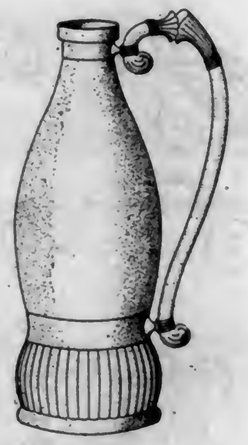
The ornamental design for a bottle or similar article substantially as shown.

88,100. BOTTLE HOLDER OR SIMILAR ARTICLE. PAUL E. LEHMAN, Woodmere, N. Y. Filed Aug. 11, 1932. Serial No. 44,581. Term of patent 7 years.



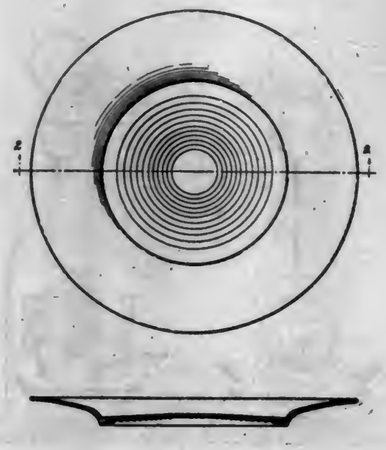
The ornamental design for a bottle holder or similar article substantially as shown.

88,101. BOTTLE OR SIMILAR ARTICLE. PAUL E. LEHMAN, Woodmere, N. Y. Filed Aug. 24, 1932. Serial No. 44,682. Term of patent 7 years.



The ornamental design for a bottle or similar article substantially as shown.

88,102. PLATE OR SIMILAR ARTICLE. WILL CAMERON MCCARTNEY, Cambridge, Ohio. Filed Aug. 12, 1932. Serial No. 44,590. Term of patent 8½ years.



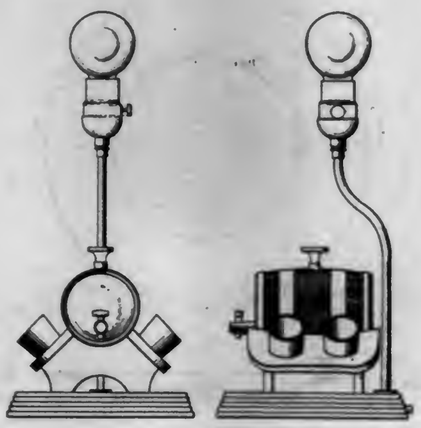
The ornamental design for a plate or similar article, substantially as shown.

88,103. TEAKETTLE OR SIMILAR ARTICLE. WALTER B. MOORE, West Lafayette, Ohio, assignor to Moore Enameling & Manufacturing Company, West Lafayette, Ohio, a Corporation of Ohio. Filed Aug. 1, 1932. Serial No. 44,505. Term of patent 14 years.



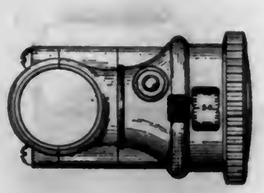
The ornamental design for a teakettle or similar article, substantially as shown.

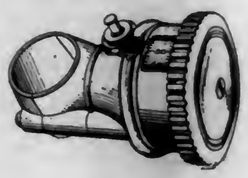
88,104. COMBINATION LAMP STAND AND BEVERAGE SET. BENSON ORENSTINE, JOEL L. SCHLESINGER, and HENRY REINSCHREIBER, Philadelphia, Pa. Filed June 17, 1932. Serial No. 44,121. Term of patent 3½ years.



The ornamental design for a combination lamp stand and beverage set as shown and above described.

88,105. RADIO CONTROL DEVICE. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1932. Serial No. 44,868. Term of patent 3½ years.





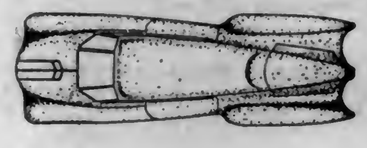
The ornamental design for a radio control device substantially as shown.

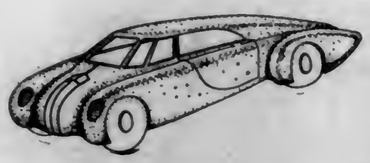
88,106. TUMBLER OR SIMILAR ARTICLE. THEODORE J. PIAZZOLI, Connellsville, Pa., assignor to Capstan Glass Company, Connellsville, Pa., a Corporation of Delaware. Filed Mar. 18, 1932. Serial No. 43,235. Term of patent 14 years.

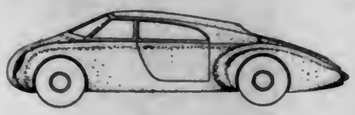


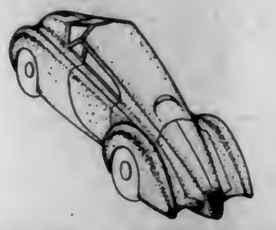
The ornamental design for a tumbler or similar article, substantially as shown and described.

88,107. AUTOMOBILE. FREDERICK J. PIKE, Buffalo, N. Y. Filed June 2, 1932. Serial No. 43,963. Term of patent 14 years.



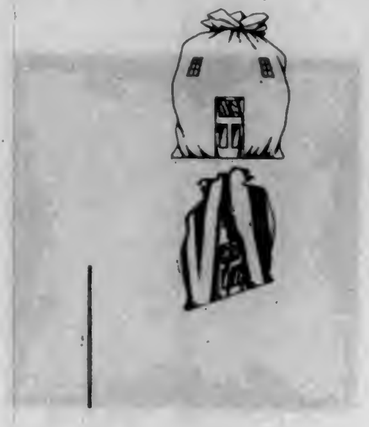






The ornamental design for an automobile, as shown.

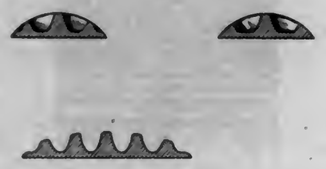
88,108. BUILDING FRONT. SAMUEL SPECTER, Chicago, Ill. Filed June 28, 1932. Serial No. 44,207. Term of patent 14 years.



The ornamental design for a building front as shown.

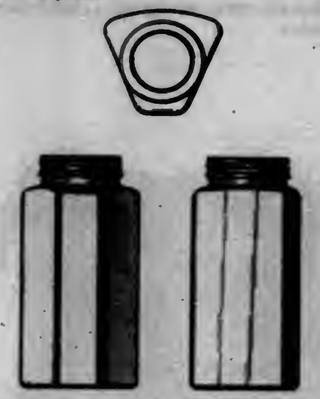
88,109. CANDY BAR. ANTON REICHE, Dresden, Germany, assignor to Bunte Brothers, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1932. Serial No. 44,640. Term of patent 14 years.





The ornamental design for a candy bar as shown.

88,110. GROUP CONTAINER. LEWIS H. SCURLOCK, Chicago, Ill. Filed Nov. 14, 1931. Serial No. 41,725. Term of patent 14 years.



The ornamental design for a group container, as shown and described.

88,111. GROUP CONTAINER. LEWIS H. SCURLOCK, Chicago, Ill. Filed Mar. 21, 1932. Serial No. 43,253. Term of patent 14 years.





The ornamental design for a group container, as shown and described.

88,112. GROUP CONTAINER. LEWIS H. SCURLOCK, Chicago, Ill. Filed Mar. 21, 1932. Serial No. 43,254. Term of patent 14 years.





The ornamental design for a group container, as shown and described.

88,113. ENSEMBLE DRESS. HARRY SHACTER, New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 13, 1932. Serial No. 44,825. Term of patent 3½ years.



The ornamental design for an ensemble dress substantially as shown.

88,114. DRESS. ADELE SMITHLINE SIMPSON, New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 13, 1932. Serial No. 44,824. Term of patent 3½ years.



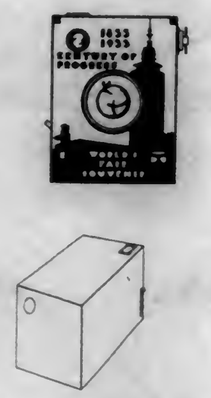
The ornamental design for a dress, substantially as shown.

88,115. TEXTILE FABRIC. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres Inc., New York, N. Y., a Corporation of New York. Filed Sept. 16, 1932. Serial No. 44,865. Term of patent 3½ years.



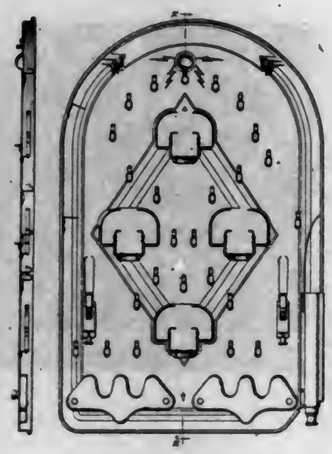
The ornamental design for a textile fabric substantially as shown.

88,116. CAMERA CASING. WALTER D. TEAGUE, New York, N. Y. Filed Aug. 20, 1932. Serial No. 44,644. Term of patent 3½ years.



The ornamental design for a camera casing, substantially as shown and described.

88,117. GAME BOARD. HARRY P. TROENDLY, Chicago, Ill., and FRED PEREIRA, New York, N. Y., assignors to Health Developing Apparatus Co., Inc., New York, N. Y., a Corporation of Delaware, and William D. Gibson Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 22, 1932. Serial No. 44,666. Term of patent 3½ years.



The ornamental design for a game board substantially as shown.

88,118. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,022. Term of patent 3½ years.



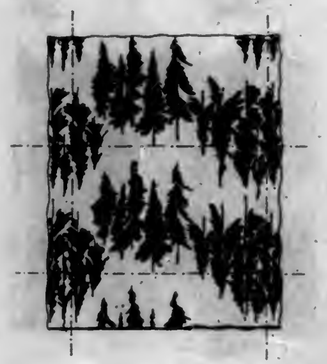
The ornamental design for a textile fabric or similar article as shown and described.

88,119. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,023. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,120. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,029. Term of patent 3½ years.



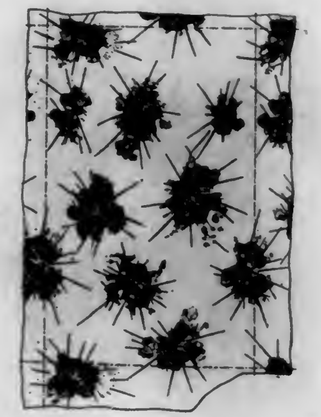
The ornamental design for a textile fabric or similar article as shown and described.

88,121. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,031. Term of patent 3½ years.



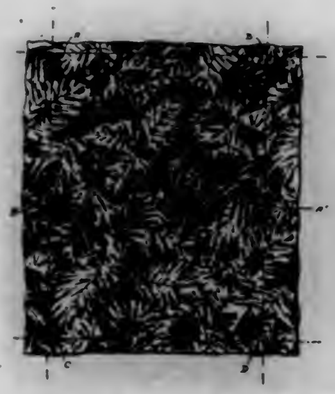
The ornamental design for a textile fabric or similar article as shown and described.

88,122. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,032. Term of patent 3½ years.



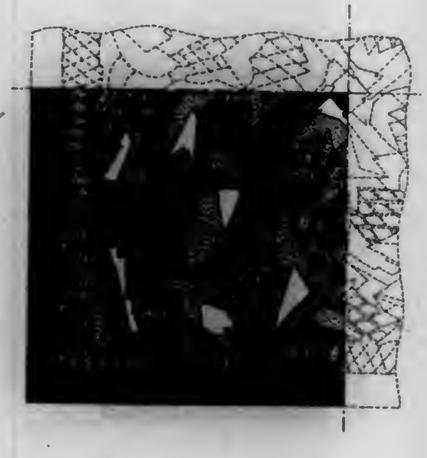
The ornamental design for a textile fabric or similar article as shown and described.

88,123. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,033. Term of patent 3½ years.



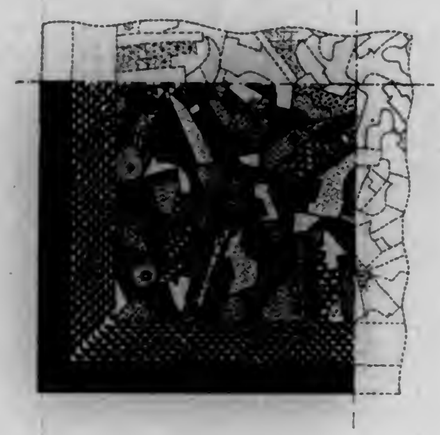
The ornamental design for a textile fabric or similar article as shown and described.

88,124. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,034. Term of patent 3½ years.



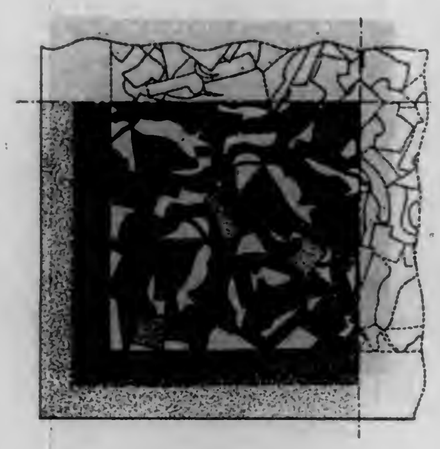
The ornamental design for a textile fabric or similar article as shown and described.

88,125. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,035. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,126. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,036. Term of patent 3½ years.



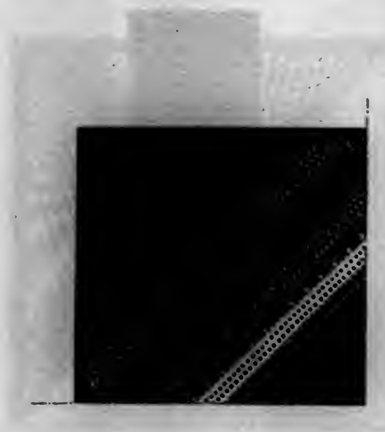
The ornamental design for a textile fabric or similar article as shown and described.

88,127. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,037. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,128. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,039. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,129. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,877. Term of patent 3½ years.



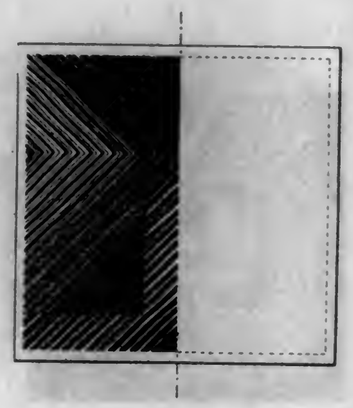
The ornamental design for a textile fabric or similar article as shown and described.

88,130. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,894. Term of patent 3½ years.



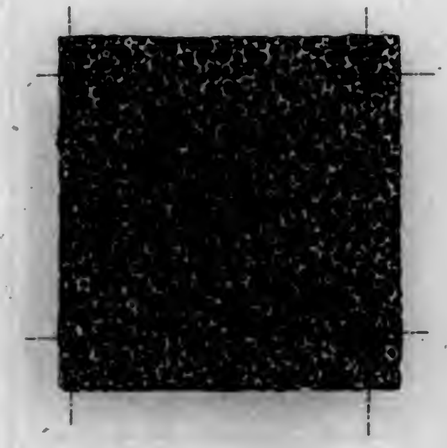
The ornamental design for a textile fabric or similar article as shown and described.

88,131. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,902. Term of patent 3½ years.



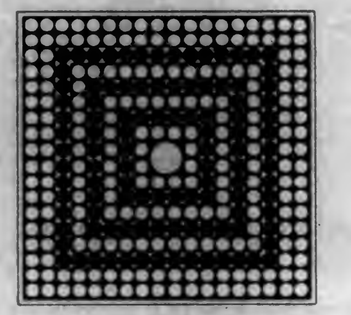
The ornamental design for a textile fabric or similar article as shown and described.

88,132. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,938. Term of patent 3½ years.



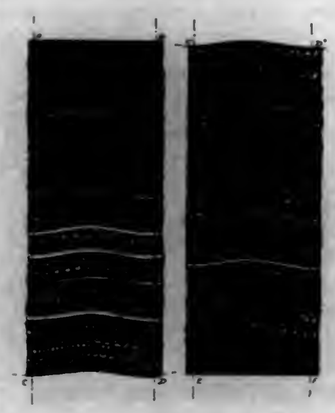
The ornamental design for a textile fabric or similar article as shown and described.

88,133. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,947. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

88,134. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,021. Term of patent 3½ years.



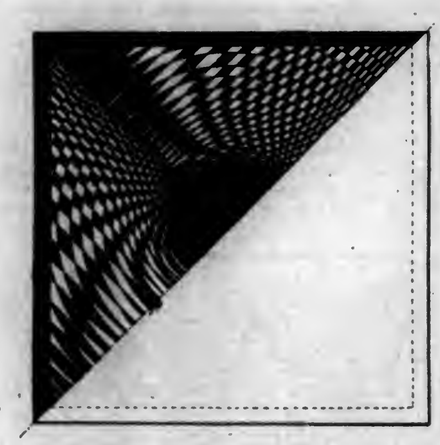
The ornamental design for a textile fabric or similar article as shown and described.

88,135. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,040. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,136. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,041. Term of patent 3½ years.



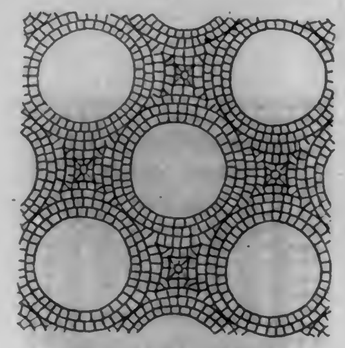
The ornamental design for a textile fabric or similar article as shown and described.

88,137. LAMP. WILLIAM R. YOUNG, Fairfield, Conn. Filed Aug. 25, 1932. Serial No. 44,691. Term of patent 8½ years.



The ornamental design for a lamp as shown and described.

88,138. LACE. JEAN DOGNIN, Paris, France, assignor to The Lace Net Importing Co. Inc., New York, N. Y. Filed July 15, 1932. Serial No. 44,349. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

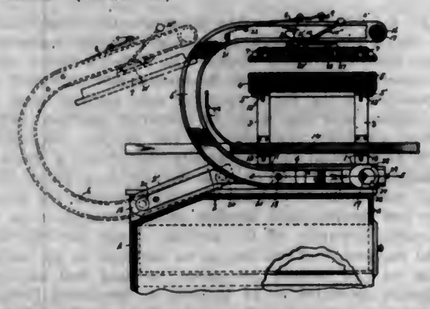
PATENTS

GRANTED OCTOBER 25, 1932

1,883,860. WETTING AGENT. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Böhme A. G., Chemnitz, Germany, a Corporation of Germany. Filed Oct. 2, 1928, Serial No. 309,895, and in Germany Oct. 11, 1927. 12 Claims. (Cl. 252—1.)

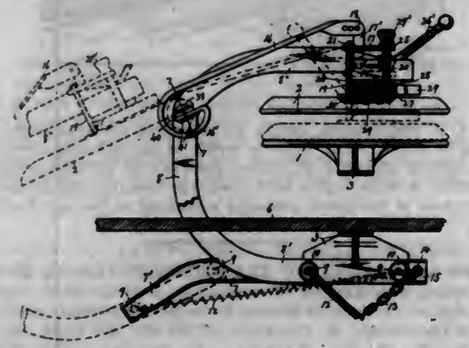
3. A preparation for use as a basis for washing, wetting, emulsifying, solvent and like media and especially suitable for the treatment of textiles, comprising a sulpho-acid of a multi-nuclear aromatic compound with aliphatic side chain having at least three carbon atoms, in admixture with a sulphoacid obtained by treatment of an unsaturated higher molecular aliphatic acid with sulphuric acid in the presence of an anhydride or chloride of an aromatic acid.

1,883,861. IRONING PRESS. FRANK E. BAKER, Syracuse, N. Y., assignor of one-half to Louis Will, Syracuse, N. Y. Filed May 31, 1929. Serial No. 367,380. 28 Claims. (Cl. 68—9.)



26. In an ironing press, a buck member, a U-shaped carriage having its opposite arms operatively extended respectively across the underside and top of the buck member, said carriage being movable in a horizontal plane toward and away from the buck member, a press head member carried by the carriage, and means for moving one of said members vertically relatively to the other member for performing the pressing operation.

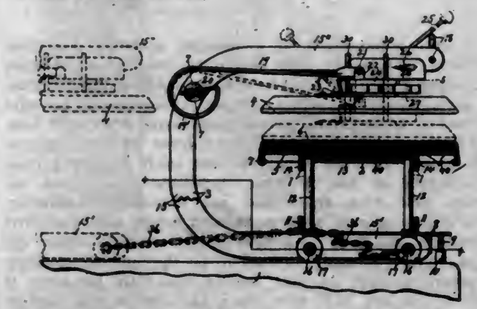
1,883,862. GARMENT PRESSING MACHINE. FRANK E. BAKER, Syracuse, N. Y., assignor of one-half to Louis Will, Syracuse, N. Y. Filed Mar. 17, 1930, Serial No. 436,534. Renewed May 27, 1932. 8 Claims. (Cl. 68—9.)



1. In an ironing press, a buck, a press-head, a sliding carriage, spring-means on the carriage supporting the press-head, means for forcing the press-head toward the buck including a pressure-applying element movable relatively to the head and carriage, and a pressure-transfer element having parts of different thicknesses movable to and from a position between the pressure-applying element and press-head for varying the pressing position of the head relatively to the buck.

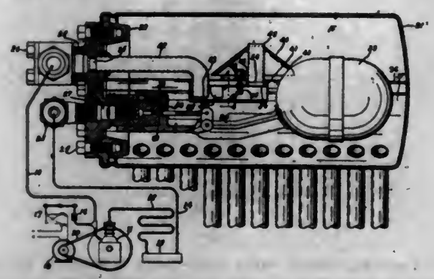
8. In an ironing press of the character described, a buck, a supporting element extending over the top of the buck, springs mounted on said supporting element, a press head mounted on the springs, a cam plate between said elements for moving the head toward the buck against the action of the springs, and slidable bearings between the cam plate and one of said elements.

1,883,863. IRONING PRESS. FRANK E. BAKER, Syracuse, N. Y., assignor of one-half to Louis Will, Syracuse, N. Y. Filed Sept. 9, 1930. Serial No. 480,629. 4 Claims. (Cl. 68—9.)



1. In an ironing press, the combination with a substantially flat horizontal supporting surface, separate frames each movable horizontally to different positions upon said surface and provided with separate pressing elements in different horizontal planes adapted to be moved into and out of vertical alignment by the relative movement of said frames, means operable at will for moving one of the registering elements into pressing coaction with the other element, and co-operative means on said frames for preventing relative vertical movement of the frames during the pressing operation.

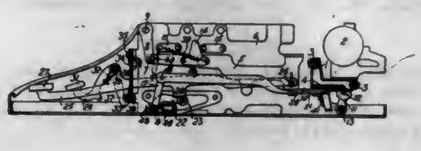
1,883,864. REFRIGERATING APPARATUS. MARSHALL W. BAKER, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,760. 17 Claims. (Cl. 62—8.)



17. A refrigerating system employing a refrigerant and a lubricant in which the lubricant and refrigerant

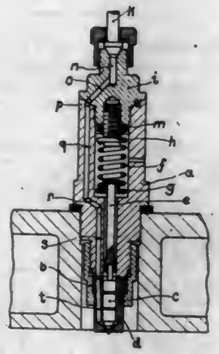
separate by gravity, of an evaporator; means for supplying liquid refrigerant to and for withdrawing gaseous refrigerant from the evaporator, a portion of the lubricant being delivered from the means to the evaporator with the refrigerant; a single path of flow for conducting gaseous refrigerant and lubricant from the evaporator to said first named means, a trap in said single path of flow from the evaporator, and a valve in said single path of flow actuated in response to pressure in the evaporator for delivering excess lubricant from the evaporator to said trap.

1,883,865. TYPEWRITING MACHINE. EDWIN E. BARNEY, New Rochelle, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 27, 1928. Serial No. 322,199. 5 Claims. (Cl. 197—80.)



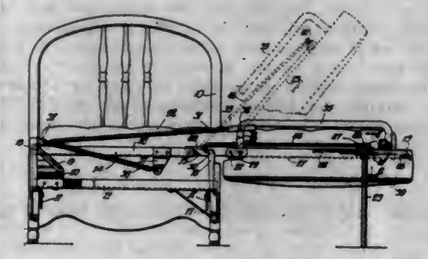
1. The combination of a member mounted for case-shifting movement; and case-shift mechanism therefor including a case-shift key-lever at one side of the machine, a key-actuated case-shift locking lever carried by said key-lever, an engaging device cooperative with said locking-lever, a second case-shift key-lever at the opposite side of the machine, a flexible rock shaft extending from side-to-side of the machine, inflexible connections between said rock shaft and the case-shiftable-member, and means on said rock shaft with which said case-shift key-levers coact to rock said shaft, whereby when the case-shiftable-member is locked in the shifted position pressure exerted on said second case-shift key-lever is effective to flex said rock shaft and relieve the reactive force exerted on said case-shift locking-lever enabling it to be released from its coacting engaging device and the case-shiftable-member to be returned to normal position.

1,883,866. SPRING LOADED VALVE. OTTMAR BAUR, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 19, 1929, Serial No. 379,479, and in Germany Oct. 19, 1928. 7 Claims. (Cl. 137—153.)



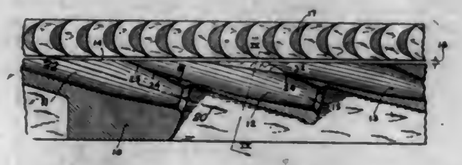
1. A spring loaded valve comprising a housing having a valve seat formed at one end and a duct in the wall thereof communicating with said valve seat, a valve, a valve spring enclosed by said housing, and a nipple closing the other end of the housing and forming an abutment for the spring and having a duct passing therethrough communicating with the duct in the housing.

1,883,867. FOLDING BED OR LIKE STRUCTURE. MATTHEW F. BAYER, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed June 25, 1927. Serial No. 201,463. 10 Claims. (Cl. 5—313.)



1. In a folding bed or like structure, the combination of a supporting frame, a folding bed section supported by said frame, normally disposed in folded position relative thereto and adapted to be moved into extended or bed position, a leg for supporting said section when in bed position, said leg, when in operative position, being disposed adjacent one edge of the section outwardly thereof and extending downwardly therefrom, a bracket for mounting said leg on said section and permitting pivotal movement of the leg into substantially the plane of the bed section, said bracket being mounted so as to be movable inwardly of the section, means for effecting pivotal movement of the leg as an incident to an initial portion of the folding movement of said bed section, and means operative as an incident to continued folding movement of said bed section and subsequent to said initial portion, for effecting inward movement as a whole, of said bracket and the leg carried thereby.

1,883,868. TURBINE NOZZLE BLOCK. ERIC W. BECKEMAN, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 21, 1930. Serial No. 437,766. 13 Claims. (Cl. 253—78.)

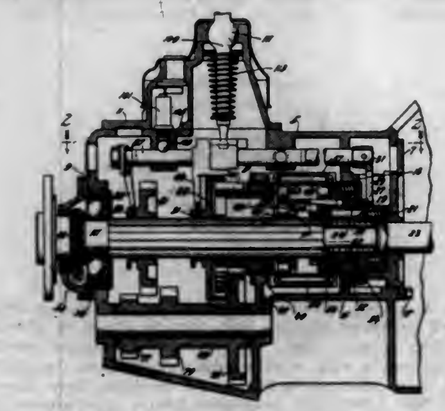


1. A nozzle block having an elongated discharge opening of substantially uniform width in the exit face thereof and a plurality of nozzle passages of circular cross section terminating in said discharge opening, the curved surfaces of the nozzle passages extending to the exit face.

1,883,869. OVERGEAR TRANSMISSION. ROSCOE BERINGER and ERNEST W. SEAHOLM, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 27, 1926. Serial No. 157,193. 7 Claims. (Cl. 74—58.)

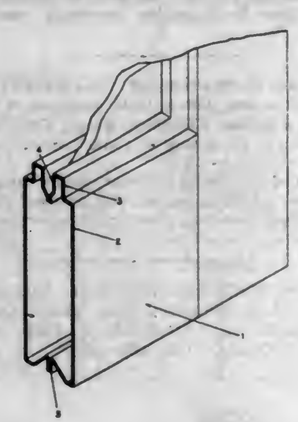
2. In a transmission for vehicles, telescopically arranged shafts, means to directly clutch said shafts, means

to additionally drive said driven shaft from said driving shaft at a plurality of speeds and in the same direction,



the gearing for each speed ratio comprising two external-internal gear trains each including a common gear member eccentrically surrounding said shafts.

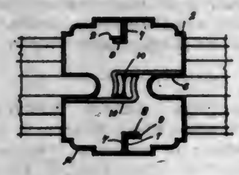
1,883,870. METALLIC BUILDING ELEMENT. JOHN A. BOHNSACK, Cleveland Heights, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 17, 1927. Serial No. 213,523. 1 Claim. (Cl. 189—46.)



A framing member for a metallic building unit, comprising two symmetrical sheet metal shells assembled with one margin inturned as a stretcher-receiving groove with parallel walls converging at their base to a V-shaped seam, and the other margin having an inwardly directed recess with outwardly-directed flanges weld-seamed together and lying within the contour outlined by the outside dimension.

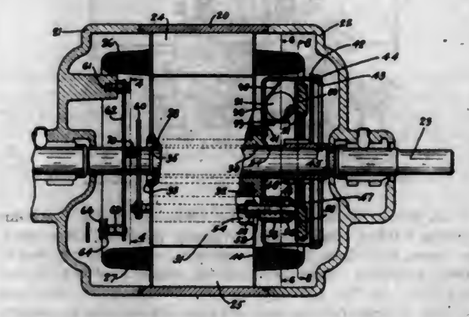
1,883,871. INTERLOCKING CONSTRUCTION FOR METAL PARTITIONS. JOHN A. BOHNSACK, Cleveland Heights, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1929. Serial No. 378,065. 9 Claims. (Cl. 189—34.)

3. In metallic partition construction, panel units having framing elements of generally channel cross-section, and means for connecting adjacent framing elements, said means comprising inwardly-extending clips secured in



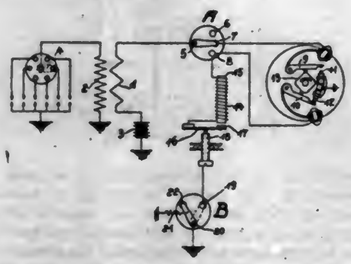
the respective channel framing elements at spaced intervals and mating with clips on the adjacent channel framing element.

1,883,872. CLUTCH. ZERBE C. BRADFORD, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,888. 4 Claims. (Cl. 192—105.)



1. A device of the character described, comprising in combination, a driving member; a driven member; a housing attached to the driving member; shiftable means within said housing operatively connectible with the driven member; centrifugal means adapted to move the shiftable means into gripping engagement with said housing; and a wedge-shaped cage rigidly secured to a wall of the housing which is substantially at right angles to the axis of the driving member, said cage cooperating with the shiftable means to provide a pocket for supporting the centrifugal means.

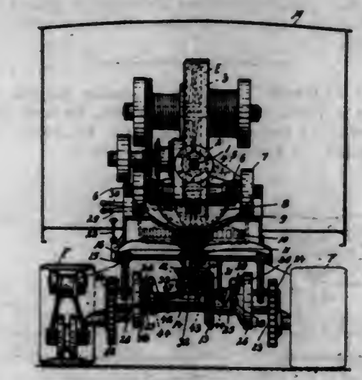
1,883,873. IGNITION APPARATUS. HANS BREITBART, ERWIN KURZ, and WILHELM WALTHER, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Sept. 23, 1929, Serial No. 394,688, and in Germany Aug. 19, 1929. 7 Claims. (Cl. 123—148.)



1. Ignition apparatus for internal combustion engines comprising a primary coil, a source of current in series with said coil, a mechanically operated contact breaker

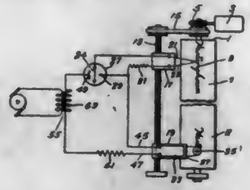
permanently set at advanced ignition adapted to be connected in circuit with said primary coil, a mechanically operated contact breaker permanently set at retarded ignition also adapted to be connected in circuit with said primary coil and rapid sparking means connected in parallel with said retarded contact breaker.

1,883,874. TRACTION DRIVE MECHANISM FOR WORM DRIVE SHOVELS. HAROLD E. BREY, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Oct. 10, 1928. Serial No. 311,619. 10 Claims. (Cl. 180—9.2.)



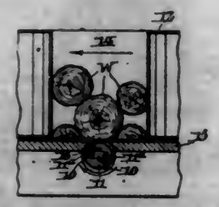
1. In crane mechanism of the class described, the combination with a crane body pivotally mounted on a traction base including traction devices, and driving mechanism including swing gearing for causing either swinging action of the crane body with respect to the base or effective operation of the traction devices for traveling, of brake instrumentalities and clutch devices associated with the traction devices and operable to cause steering operation on the part of the latter, the braking instrumentalities constituting a means for locking the traction devices during swinging action on the part of the crane body by operation of the swing gearing, and control levers, one for controlling steering action of the clutch devices and braking instrumentalities, and another for controlling simultaneous application of the braking instrumentalities to hold the traction means stationary and enable the swing gearing to effect swinging of the body on the base.

1,883,875. TRANSLATING APPARATUS. MYRON J. BROWN, Wilkinsburg, Pa., assignor to Westingbouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,617. 4 Claims. (Cl. 178—5.)



1. Reproducing apparatus comprising a surface that is partly conducting and partly insulating, a plurality of fingers coacting with said surface and capable of moving relative thereto, a source of alternating voltage, a grid-glow tube having principal electrodes connected to said source and a control means adapted to control current flow between said principal electrodes responsive to the condition of the surface between said fingers, and image-reproducing means responsive to said current flow.

1,883,876. PREPARATION OF FIBER AND FIBER PULP. ROGER B. BROWN, Trenton, N. J., assignor to Daniel Manson Sutherland, Jr., Morrisville, Pa. Filed Sept. 2, 1930. Serial No. 479,251. 2 Claims. (Cl. 92—20.)



1. A method of converting wood into long-fibered stock which comprises shaving long, narrow slivers or ribbons laterally from a billet, by successive tangential lateral impingements with a knife edge extending in the direction of the grain of the billet; and shredding these slivers into finer strands by tangential lateral impingement of hammer edges extending in the direction of the grain of the slivers, so as to tear their component fibers apart laterally, with minimum breakage of the ultimate fibers.

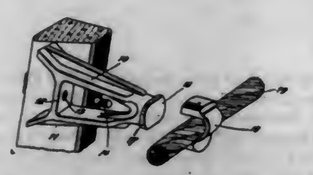
1,883,877. AGE REGISTER FOR RUBBER COMPOUNDS. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 8, 1930. Serial No. 442,713. 4 Claims. (Cl. 18—50.)

1. A method of preserving rubber, transformer oils, soaps, and similar readily decomposable organic materials which comprises incorporating therein a cumidyl naphthylamine.

1,883,878. ACCELERATOR OF VULCANIZATION. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 4, 1931. Serial No. 535,073. 5 Claims. (Cl. 18—53.)

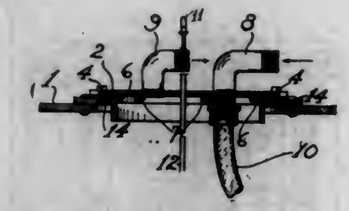
1. A method of treating rubber which comprises subjecting it to vulcanization in the presence of a carbo diphenyl di-imid reaction product of mercaptobenzothiazole.

1,883,879. OFFSET BRACKET FOR GUARD RAILS. ELMER K. COLE, Winterset, Iowa, and FRANK E. SHUMANN, Easton, Pa. Filed Jan. 6, 1932. Serial No. 584,958. 2 Claims. (Cl. 248—31.)



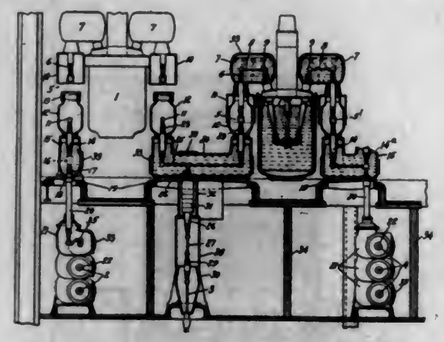
2. A bracket for cable guard rails comprising a bracket member having its inner end shaped to engage a post, means for securing it to a post, the outer end of the bracket member being shaped to engage a cable and being provided with lugs, and a cable supporting member substantially U-shaped to receive a cable and being provided with lugs capable of entering between said lugs of the bracket member and of forming a locking engagement therewith when one of the members is rotated relative to the other.

1,883,880. DOME COVER FOR TANK CARS. JACOB LEE COLE, Brave, Pa., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 15, 1930. Serial No. 444,886. 1 Claim. (Cl. 220—86.)



A portable temporary dome cover for tank cars, comprising a cover plate formed of aluminum alloy, a centering flange depending from the cover to form a ring, inlet and outlet pipes secured to and opening through the cover plate, a portion of the inlet pipe depending from the plate, a hose connected to the depending portion, a pipe tap through the cover plate to admit a gage rod, a tube depending from the plate, and an alarm device associated with the tube above the plate adapted to be actuated by gas escaping through the tube and silenced when liquid rises within the tube whereby the desired level of liquid within the car is indicated.

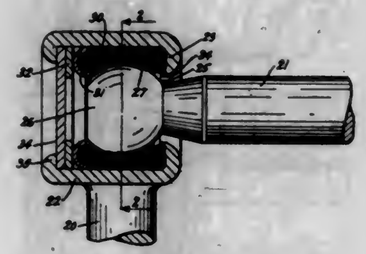
1,883,881. ELECTRICAL BUS AND SWITCH STATION. DAVID REGINALD DAVIES, Didsbury, England, assignor to General Electric Company, a Corporation of New York. Filed Dec. 10, 1930, Serial No. 501,339, and in Great Britain Dec. 20, 1929. 5 Claims. (Cl. 175—298.)



1. A bus and switch station of the metal clad type comprising a substantially horizontal floor structure, oil circuit breakers mounted above said floor, disconnecting switches for said oil circuit breakers including stationary contacts mounted on said floor structure, busbar and feeder cables in metallic enclosing casings mounted substantially vertically beneath said oil circuit breakers and spaced therefrom by said floor structure, and conductors extending from the stationary contacts of said disconnecting switches through said floor structure to connect with the corresponding phase busbars and feeders.

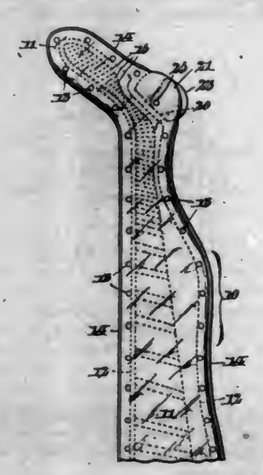
1,883,882. UNIVERSAL JOINT. LEWIS H. DAVIS, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 14, 1931. Serial No. 575,008. 4 Claims. (Cl. 287—90.)

1. A swivel joint between two power transmitting shafts comprising, in combination, a ball end on the one shaft; a tubular head on the other shaft, adapted to receive the said ball end; a metal lining about the ball end; a fibrous bearing in the tubular head supporting the ball end so that it is movable only rotatably about its center; a spring washer substantially coaxial of the shaft having the ball



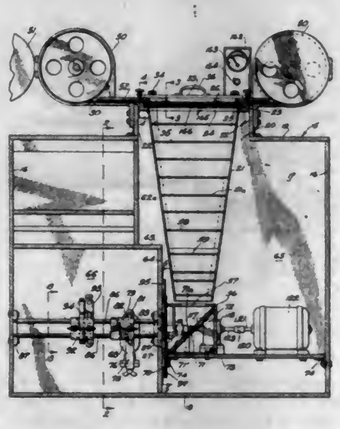
end; and means retained in the tubular head, engaging and completely compressing said spring washer which engages an edge of the fibrous bearing to urge it in a direction substantially parallel to the axis of the ball end shaft thus to wedge said bearing into constant contact with the tubular head and metal lining about the ball end.

1,883,883. FORM FOR SHAPING AND DRYING HOSIERY AND THE LIKE. JOHN W. DENNIS, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1929. Serial No. 334,086. 5 Claims. (Cl. 223—17.)



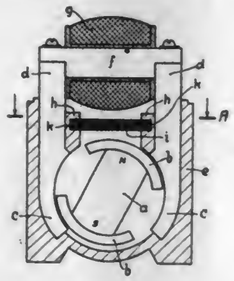
1. A form for shaping hosiery comprising a profile body; and a sectoral piece eccentrically-pivoted within an edge slot in the heel region of said body with capacity for movement from a normal substantially enclosed position within said edge slot to partially projected position to lengthen the foot and thereby adapt the form for stockings of different foot lengths.

1,883,884. PHOTOGRAPHIC SENSITOMETER. ALBERT B. DORAN, Los Angeles, Calif., assignor to Hughes Development Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed Feb. 9, 1931. Serial No. 514,677. 14 Claims. (Cl. 95—10.)



1. A sensitometric device of the character described, including: light means for projecting a beam of light to a sensitized photographic member; a sensitometric tablet interposed in the path of said light; and control means for said light means for controlling the intensity and duration of said beam of light.

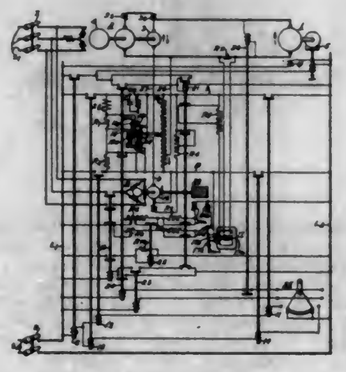
1,883,885. MAGNETO-ELECTRIC IGNITION APPARATUS. ERNST DURST, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Nov. 30, 1931, Serial No. 578,143, and in Germany Dec. 9, 1930. 6 Claims. (Cl. 171—209.)



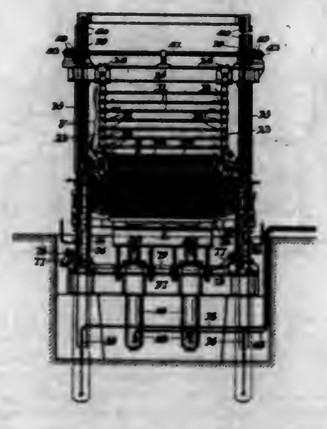
1. A magneto including in combination a rotating permanent magnet, stationary pole shoes forming an armature, an armature winding thereon, and a magnetic shunt between said pole shoes.

1,883,886. MOTOR-CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1931. Serial No. 547,389. 9 Claims. (Cl. 172—239.)

1. In a motor-control system, a motor; a main generator; electrical conductors completing a circuit including the armatures of said motor and said main generator; a control generator; means for accelerating and decelerating said control generator to thereby vary its voltage, and means, responsive to the voltage of said control generator and a voltage substantially equal to the counter-electromotive force of said motor, for controlling the excitation of said main generator to maintain the speed of said motor at values determined by the voltage of said control generator, regardless of the load on said motor.

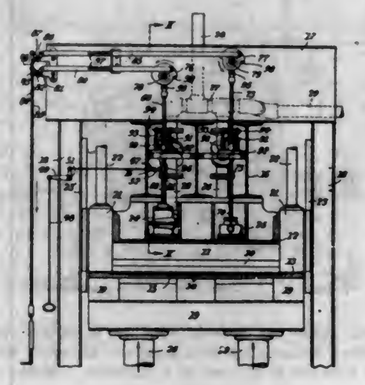


1,883,887. DRIER FOR FIBER BOARD. FRANCIS S. FARLEY, Trenton, N. J., assignor to Daniel Manson Sutherland, jr., Morrisville, Pa. Filed Aug. 29, 1929. Serial No. 389,175. 11 Claims. (Cl. 92—39.)



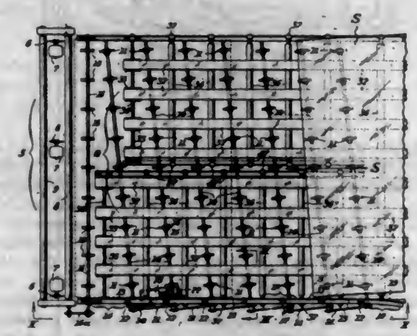
8. An apparatus of the character described comprising a stack or multiplicity of plates alternately interconnected and thereby suspended at an interval one above another in independent series, means for advancing raw sheets to the stack at substantially a constant loading level, means for supporting the plates below the loading level piled on one another, and for raising and lowering the pile, means for raising and lowering the suspended plates above the pile, and means for lifting the plate above the pile toward that above it, so as to increase the plate interval at the loading level.

1,883,888. MOLD FOR FIBER PULP. FRANCIS S. FARLEY, Trenton, N. J., assignor to Daniel Manson Sutherland, jr., Morrisville, Pa. Filed Dec. 12, 1930. Serial No. 501,765. 11 Claims. (Cl. 92—61.)



1. The combination with the mold of a hydraulic wet machine, of means for venting the mold cavity of air through the top of the mold while the mold is being filled with pulp, and means for subsequently pushing the pulp sheet thus formed away from the mold top and admitting air between them.

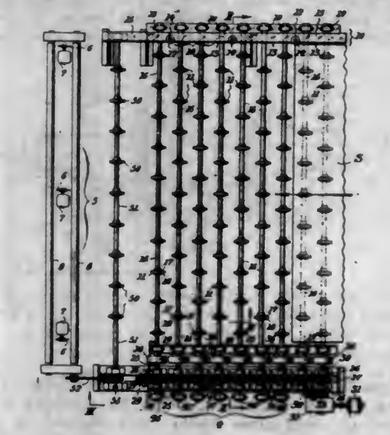
1,883,889. APPARATUS FOR FEEDING AND ALIGNING SHEET MATERIAL. FRANCIS S. FARLEY, Trenton, N. J., assignor to Daniel Manson Sutherland, jr., Morrisville, Pa. Filed Jan. 28, 1931. Serial No. 510,689. 10 Claims. (Cl. 198—30.)



1. Apparatus of the character described for feeding and aligning sheet material, comprising an aligning stop for the edge of the material, and a series of axially yielding rotary feed rolls extending oblique to said stop and revolving toward it, so as to press the material against the stop as they carry it along, but yielding in the axial direction after the material comes against the stop.

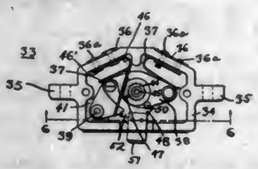
1,883,890. APPARATUS FOR FEEDING AND ALIGNING SHEET MATERIAL. FRANCIS S. FARLEY, Trenton, N. J., assignor to Daniel Manson Sutherland, Jr., Morrisville, Pa. Filed Jan. 28, 1931. Serial No. 510,690. 17 Claims. (Cl. 198—30.)

10. In apparatus of the character described for feeding and aligning sheet material, the combination with an aligning stop for the edge of the material, of revolving feed shafts with eccentric discs thereon resiliently yielding in any axial direction, for feeding the material along and pushing it toward said stop.



15. Apparatus of the character described for feeding and aligning sheet material, comprising an aligning stop for the edge of the material, groups of revolving rolls for feeding the material along said stops, said rolls being mounted for concurrent vibration both longitudinally toward and from said stop and also up and down, drive shafts with connections to said rolls permitting vibration of said rolls as aforesaid while revolving with the drive shafts, and means actuated by the drive shafts for vibrating said groups of rolls as aforesaid, both longitudinally and up and down, in alternation.

1,883,891. REFRIGERATING APPARATUS. MORTIMER W. FISH and HARRY F. CLARK, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 29, 1930. Serial No. 424,333. 2 Claims. (Cl. 200—124.)

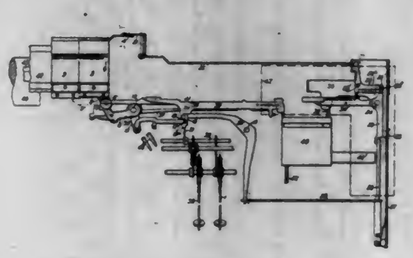


1. A circuit breaking device comprising a contact, a movable member, a second contact carried by said movable member, means for locking said movable member in position so that said second contact engages said first contact, means for moving said member in locking position, thermally actuated means for releasing said locking means upon excessive flow of current through said contacts, one of said contacts comprising spring means for snapping open said contacts upon the release of said locking means, said moving means also comprising means for manually releasing said locking means substantially as described.

1,883,892. COMBINED TYPEWRITING AND COMPUTING MACHINE. WALTHER FLACH, Frankfort-on-the-Main, Germany, assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed July 7, 1926, Serial No. 121,021, and in Germany July 20, 1925. 9 Claims. (Cl. 235—57.)

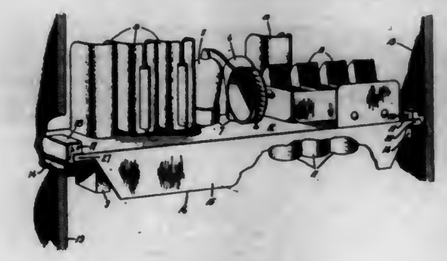
1. In a typewriting and computing machine, the combination with a paper carriage traveling through a series of computing zones, a series of vertical totalizers fixed

to the said carriage and carried by it through said zones, a cross-footing totalizer, a plurality of number keys actuating the said totalizers, a clearance key, a key lock tripped to locking position when the last number key actuating the last of the said series of vertical totalizers has been pressed, and means for disconnecting



the cross-footer from the said last vertical totalizer when leaving the computing zone, means for releasing the said lock by the said cross footer when cleared, of means for preventing the return of the released cross footer to the position of rest during the next feed step of the carriage.

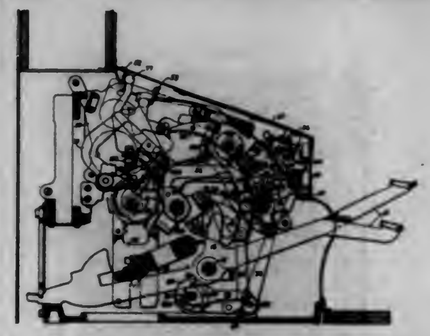
1,883,893. CHASSIS FOR ELECTRICAL APPARATUS. MARK FLAHERTY, Haddon Heights, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 30, 1930. Serial No. 457,590. 7 Claims. (Cl. 248—30.)



1. A chassis structure for radio apparatus and the like including a flat mounting plate adapted to be mounted in a horizontal position and provided with depending supporting flanges which are adapted to act as supporting feet therefor, supporting frames for the plate mounted on the ends of the same, spaced resilient mounting blocks secured in the frames and provided with slots for receiving the ends of the plate whereby said blocks provide a resilient connection between said frames and the ends of said plate, said frames having confining walls for holding the mounting blocks in a compressed preloaded condition tending to firmly close the slots and to stiffen the resilient connection provided by the blocks.

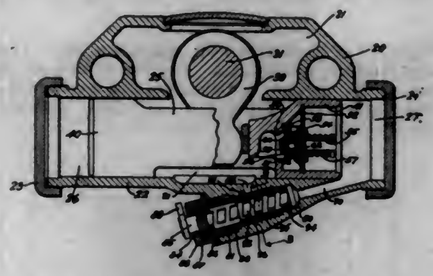
1,883,894. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 3, 1926. Serial No. 152,386. 31 Claims. (Cl. 235—130.)

1. In a machine of the class described, a totalizer, comprising a series of denominational elements, a series of spring urged detents, one for each element, for normally holding the latter in any position of adjustment, a control member, movable to a plurality of positions of adjustment, means controlled by said member for positively holding said detents and thereby positively locking said



elements when the control member is in one position, and means for moving said totalizer elements while the control member is at rest in a different position.
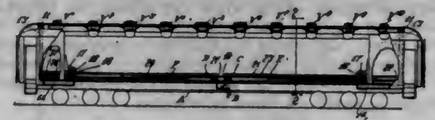
1,883,895. SHOCK ABSORBER. FREDERICK D. FUNSTON, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 19, 1931. Serial No. 569,704. 7 Claims. (Cl. 188—88.)



1. A shock absorber comprising, in combination, a casing providing a fluid reservoir and a cylinder; a piston in said cylinder forming a compression chamber therein; a piston operating member; a duct in the casing connecting the compression chamber with the fluid reservoir; a valve in said duct comprising two telescopically engaging tubular members, one of which is stationary the other rotatable relatively to said stationary member, both members having openings adapted to align; an actuator in said duct, extending outside the casing; and a thermostatic element connected to the actuator and the rotary valve member, said element being adapted automatically to rotate the valve in response to temperature changes to disalign the holes in the valve members and thus vary the flow of fluid through the duct in accordance with said temperature changes, said thermostatic element being adapted also to adjust the valve in response to adjustments of the actuator.

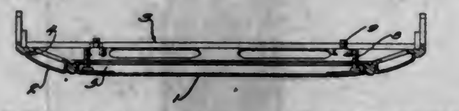
1,883,896. CAR HEATING SYSTEM. WILLIAM L. GARLAND, Llanerch, Pa., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,165. 7 Claims. (Cl. 237—4.)

1. In combination with a railway car, a pair of air intakes, one adjacent each end of the car, means in each intake for preheating the air before it enters the car, means for heating the air in the car throughout the length of the car, and a series of ventilators positioned at spaced intervals throughout the length of the upper portion of the car for exhausting the air from the car body, the



ventilators situated adjacent the center of the car being of greater capacity than the ventilators situated adjacent the ends of the car.

1,883,897. ENAMELED ARTICLE AND METHOD OF ASSEMBLING SAME. OSCAR H. GILES, Windsor, Ontario, Canada, assignor to Detroit Vapor Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1930. Serial No. 426,431. 5 Claims. (Cl. 29—84.)

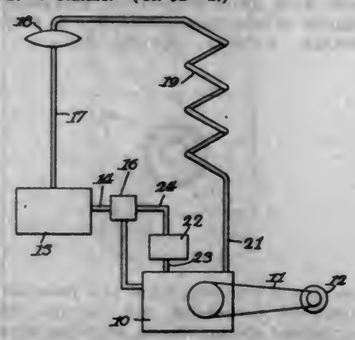


1. The method of securing articles having enameled surfaces to a supporting unit, which consists in securing a flat fastening strap to the back of the enameled article in such a manner as to provide relatively great bodily movement of a portion of the fastening strap relative to the article, and then securing the fastening strap in place without placing strain directly upon the article.

1,883,898. THERMIONIC CATHODE. GEORGE P. HALLIWELL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,155. 3 Claims. (Cl. 250—27.5.)

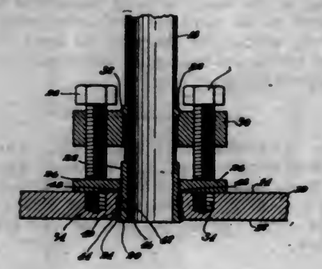
1. Electron emitting material of substantially homogeneous character capable of being forged into wire consisting of a base metal selected from a group consisting of nickel and cobalt, said base metal containing about 0.5 per cent titanium and about 10 per cent metal selected from a group consisting of titanium and iron, with about 2 to 10 per cent alkali-earth metal oxide uniformly distributed therethrough.

1,883,899. REFRIGERATING SYSTEM. BENJAMIN R. HARRIS, Chicago, Ill. Filed Sept. 11, 1929. Serial No. 391,712. 8 Claims. (Cl. 62—1.)



1. The method of introducing an odorous substance into a refrigerating system, which comprises placing the substance in relatively high concentration in the path of the refrigerant, and allowing the refrigerant to pass in contact with such substances to pick up such substance in sufficient amounts as to render the circulating fluid odoriferous, whereby leakage of such fluid will be readily detected.

1,883,900. HEADER JOINT. REGINALD M. HARRIS, Fanwood, N. J., assignor to The Superheater Company, New York, N. Y. Filed May 7, 1930. Serial No. 450,572. 7 Claims. (Cl. 285—25.)



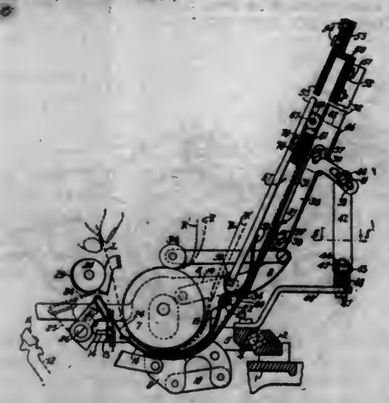
1. The combination of a header having an aperture therein, a tube extending into said aperture and having its inner end of larger diameter than the portion normally adjacent the surface of the header, means forming a fluid tight joint between said tube and header which is so arranged that fluid pressure within the header tends to tighten the joint, and means whereby said tube may be removed from said header in the direction parallel to the position of the tube when in use.

1,883,901. COMPUTING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Jan. 21, 1927. Serial No. 162,473. 5 Claims. (Cl. 74—1.)



4. In the differential mechanism of an adding machine, a cam-operated device including a bifurcated arm having holes through the branches of the arm, a tubular follower loose in said holes, and means for preventing the follower from coming out of the holes endwise.

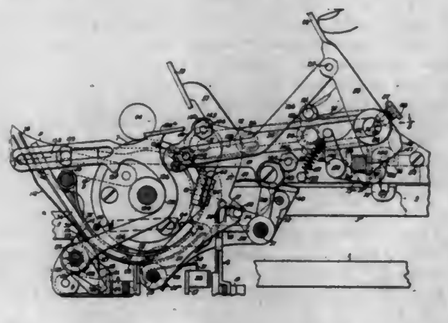
1,883,902. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,685. 14 Claims. (Cl. 197—127.)



1. In a typewriting machine, the combination of a platen, a work sheet guide having top and bottom fixed guide walls in the rear of the platen and between which

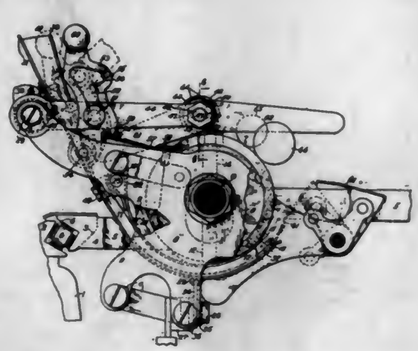
a rearwardly introduced work sheet is guided, and a fixed leaf spring adapted to bear lightly against a work sheet thus introduced and press it against said bottom fixed guide wall without preventing the sheet from passing said leaf spring as the sheet is being introduced as specified into position in the machine, said spring being curved to form a guide surface for directing the sheet between said spring and the bottom fixed guide wall with which it coacts in pressing the sheet.

1,883,903. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., and SIGURD L. WALSOE, Lyndhurst, N. J., assignors to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Sept. 23, 1927. Serial No. 221,543. 44 Claims. (Cl. 197—128.)



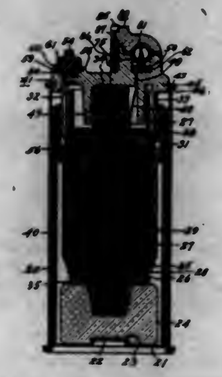
1. The combination of a platen, a pair of margin feed rollers, means for simultaneously moving said margin feed rollers together in their movements to and from the platen, a plurality of intermediate feed rollers, and means for individually shifting each of said intermediate feed rollers to the platen, said last mentioned means comprising a pair of toggles for each of said intermediate feed rollers, and means for straightening the pair of toggles for each intermediate feed roller independently of the toggles for the other intermediate feed roller or rollers and thus separately apply said intermediate rollers.

1,883,904. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Original application filed Oct. 22, 1926, Serial No. 143,382, now Patent No. 1,825,148. Divided and this application filed Dec. 1, 1927. Serial No. 236,984. 19 Claims. (Cl. 197—127.)



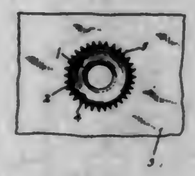
1. In a typewriting or like machine, the combination of a platen, a set of paper feed rollers coacting therewith, a spindle on which said feed rollers are mounted, arms mounted for independent pivotal movement and by which said spindle is supported, bearings on said arms in which the spindle is loosely seated to afford such independent pivotal movement of the arms and enable the spindle to assume different angular relations relatively to the axis of the platen, and means for limiting or preventing a turning movement of said spindle relatively to said arms without however affecting the ability of the spindle to assume different angular relations as specified.

1,883,905. IGNITION COIL. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 2, 1932. Serial No. 584,525. 4 Claims. (Cl. 175—357.)



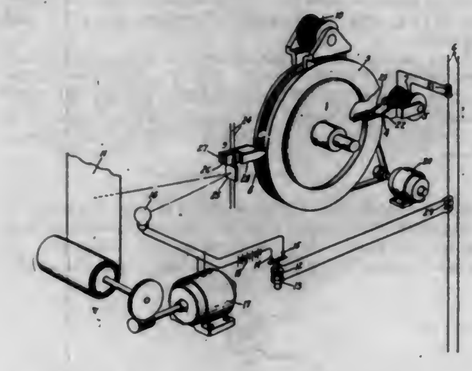
1. An ignition coil comprising, in combination, a tubular coil case, a non-conducting cover for the case, two primary terminals and two secondary terminals carried by the cover, a skirt provided by the cover within the case, a central magnetizable core extending within the skirt, a secondary surrounding the core and having leads separated by a wall of the skirt, a primary surrounding the secondary and having its leads connected with the primary terminals, and an apron depending from the cover to insulate from the case that secondary lead which is on the outside of said skirt.

1,883,906. METHOD OF ATTACHING NUTS TO METAL PLATES. HUGO S. HASSELQUIST, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 5, 1930. Serial No. 449,828. 4 Claims. (Cl. 29—148.)



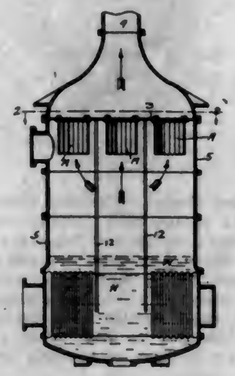
1. A method of attaching a nut to a plate-like member which comprises perforating said plate-like member to provide a circular opening therein, providing serrations on one side of said member in the edge portion thereof surrounding the perforation, applying a nut to the opposite side of the member with a circular projection complementary to the opening in said member extending through said opening, and deforming the end of the projection of said nut to engage the serrations of the plate-like member to thereby interlock the nut with the member and prevent relative rotation thereof.

1,883,907. AUTOMATIC OSCILLOGRAPH. CLAUDE M. HATHAWAY, Colorado Springs, Colo., assignor to General Electric Company, a Corporation of New York. Filed June 5, 1931. Serial No. 542,335. 18 Claims. (Cl. 234—5.5.)



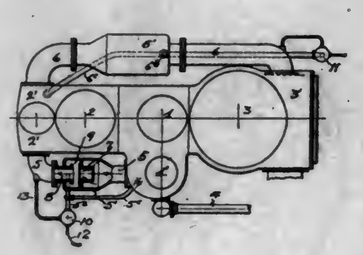
1. The method of recording both conditions leading up to a circuit disturbance and the disturbance itself which consists in temporarily magnetically storing the effect of said conditions and causing the recording of a predetermined portion of the circuit conditions preceding said disturbance in response to said disturbance and also recording the disturbance.

1,883,908. EVAPORATOR TOP. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 6, 1927. Serial No. 238,155. 2 Claims. (Cl. 183—85.)



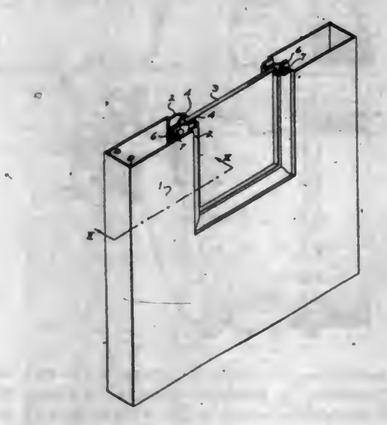
2. An evaporator top having a vapor outlet, in combination with a substantially horizontal floor forming a partition in said top and in advance of said outlet, means for draining said floor, and a plurality of entrainment separators supported by said floor, containing substantially cylindrical separating chambers and having respectively smaller and coaxial outlets through said floor.

1,883,909. MARINE ENGINE. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,182. 4 Claims. (Cl. 60—48.)



1. A multiple expansion steam engine including the receiver which extends from the exhaust cavity of the higher pressure engine to the admission cavity of the lower pressure engine, in combination with a condensate separator interposed in said receiver, means measuring the condensate discharged by said separator, and, interrelated means controlled thereby and measuring a replenishing supply of live steam to said admission cavity.

1,883,910. METAL BUILDING FRAMING ELEMENT CONSTRUCTION. EDWARD HELLER, Cleveland, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 20, 1930. Serial No. 453,952. 4 Claims. (Cl. 189—53.)

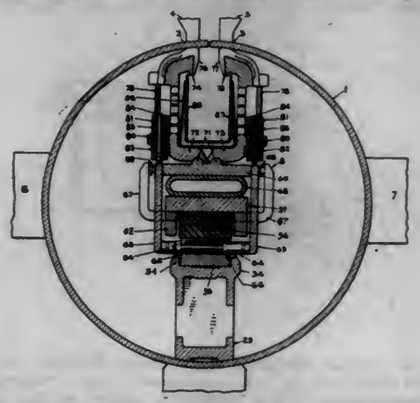


4. A sheet metal stile having an integral moulding finish and having a single longitudinal seam, the edges being inturned to form a groove for receiving a filler element and being joined by a series of welds made beyond such groove through holes provided at intervals in the inturned edge-metal forming the groove.

1,883,911. WELDING APPARATUS. WARREN F. HEINEMAN, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 15, 1931. Serial No. 508,855. 17 Claims. (Cl. 219—6.)

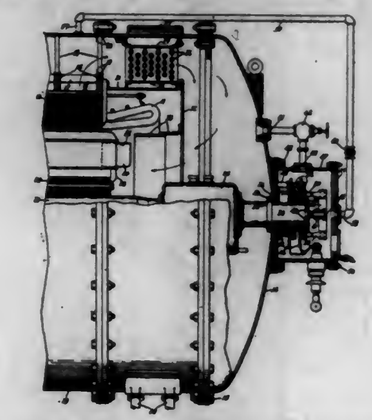
2. In an apparatus for flash welding a longitudinal seam in a tubular blank, an arbor adapted to be dis-

posed within the blank to be welded, said arbor comprising a base, an expansible hose supported on said base, a pipe connected to a fluid pressure supply, elliptically



shaped clamps connecting said hose with said pipe, and clamping arms operated by said hose to support the edges of the blank beneath the welding electrodes.

1,883,912. DYNAMO-ELECTRIC MACHINE. EARLE S. HENNINGSEN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1930, Serial No. 456,608. Renewed Feb. 18, 1931. 15 Claims. (Cl. 171—252.)



1. A dynamo-electric machine having stationary and rotatable members, a gas-filled housing enclosing said members, a current-collecting device associated with said rotatable member, a gas-tight casing enclosing said current collecting device and communicating with said housing, and means for closing off communication between said housing and said casing to provide access to said current-collecting device without removing the gas from said housing.

1,883,913. PROCESS OF LUBRICATING PHOTOGRAPHIC FILM. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,651. 5 Claims. (Cl. 91—69.)

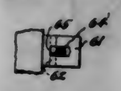
1. In the process of lubricating photographic film having a water-permeable colloid picture layer, treating said layer with a lubricant carried by an aqueous liquid vehicle in which it is homogeneously distributed, and drying said layer while it retains some of said lubricant.

1,883,914. PROCESS OF TREATING PHOTOGRAPHIC FILM AND PRODUCT THEREOF. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,652. 9 Claims. (Cl. 91—69.)

1. In the process of treating photographic film having a water-permeable colloid picture layer, applying to said layer an aqueous solution of a lubricant of low volatility, and drying said layer while it retains some of said lubricant.

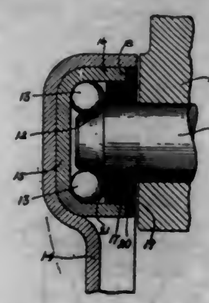
7. As an article of manufacture a photographic film comprising a flexible support and a gelatinous picture layer having permeated therethrough a transparent lubricating compound which renders said layer supple, even in dry atmospheres, without deliquescing in moist atmospheres.

1,883,915. DIPPER STICK FOOT PIECE. ALPHEUS E. HOLCOMB, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Feb. 12, 1931. Serial No. 515,874. 18 Claims. (Cl. 214—145.)



1. The combination with a dipper stick, of a foot piece therefor having instrumentalities thereon for attachment to an excavating element, a socket for the end of said dipper stick, an engaging surface on said socket, and means for clamping a side of said dipper stick against said surface.

1,883,916. CLOSURE RING FOR BEARINGS. LEVI CARTER HOUSTON, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed May 17, 1928. Serial No. 278,484. 2 Claims. (Cl. 288—1.)

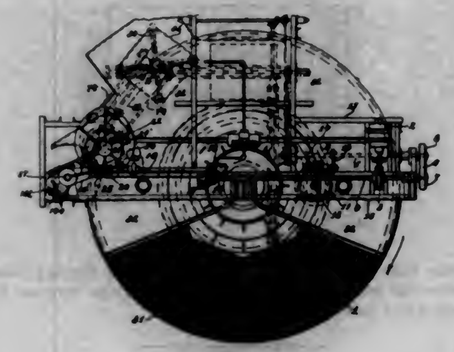


1. In a bearing closure, a tubular sheet metal sleeve member having a substantially radially extending flange thereon comprising a return bent flange portion extending radially of said sleeve in one direction and a continuation of a part of said return bent flange portion extending radially of said sleeve in the opposite direction, parts of said return bent flange portion being substantially parallel to and in proximity to each other, a seal member within said sleeve member, and means for holding said seal member in place.

1,883,917. SAND BLAST NOZZLE WIGGLER. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Aug. 18, 1928. Serial No. 300,417. 10 Claims. (Cl. 51—15.)

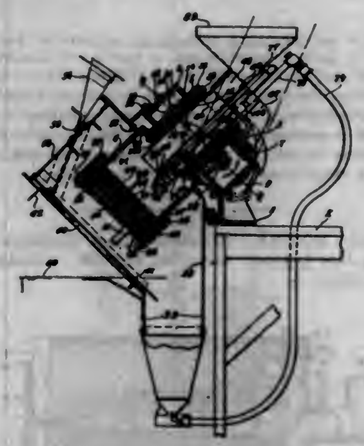
2. The combination with a sand blast table of a nozzle arm, means for oscillating the arm laterally of the table, a nozzle, and means carrying the same and mounted to

oscillate relatively to the arm about an axis substantially at right angles to the plane of oscillation of the arm, a prime mover oscillating with the arm and means including



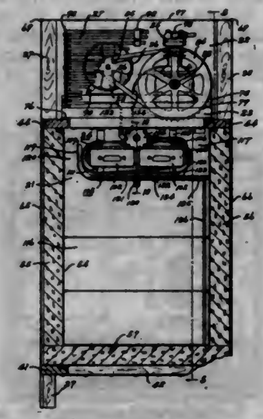
an adjustable lever connecting the same to the nozzle carrying means to oscillate the same imparting a secondary motion to the nozzle.

1,883,918. SAND BLAST BARREL. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Mar. 5, 1930. Serial No. 438,221. 8 Claims. (Cl. 51—13.)



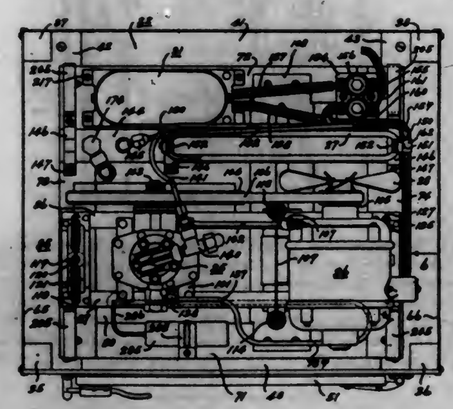
6. A sand blast barrel for treating small articles, the barrel having a portion formed of narrow flat strips overlapping at their ends and secured at the overlapping portions to the remainder of the barrel, substantially half the strips thus overlapped at any point extending oppositely to the other half so that the ends of one half of said strips serve to space the ends of the other half of said strips, and vice versa, forming slots alternating with the strips of a width equal to the thickness of the strips, whereby the used abrasive is released and the work is retained.

1,883,919. MECHANICAL REFRIGERATOR. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 147,862. 12 Claims. (Cl. 62—116.)



1. In combination, a cabinet, one wall of which being open for the ingress and egress of air, a refrigerator condenser disposed within the cabinet adjacent said open wall, and means within the cabinet for moving the entering air in a horizontal stream about a portion of said condenser and in one direction and for moving the outgoing air in a horizontal stream about another portion of said condenser in the opposite direction, said streams lying in substantially the same horizontal plane.

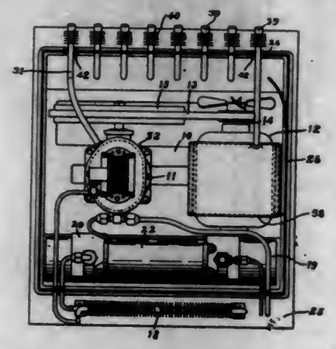
1,883,920. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,480. 34 Claims. (Cl. 62—116.)



1. A household cabinet, comprising in combination with a cabinet having a door opening in one side thereof and an opening in the top wall; of a removable cover for said latter opening; a cooling unit within the cabinet; and a partition wall separating said cabinet into a food compartment and a compartment containing said unit,

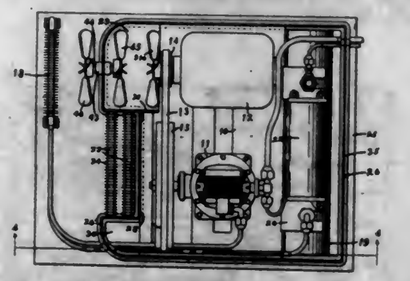
said wall being spaced from the cooling unit and providing for the flow of air about the cooling unit for cooling the air passing through said compartment, said partition wall being removable bodily through said latter opening.

1,883,921. HEAT DISSIPATING DEVICE FOR REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928, Serial No. 316,253. Renewed June 4, 1932. 8 Claims. (Cl. 62—116.)



1. Refrigerating apparatus comprising in combination a compressor, means for driving the compressor, a housing completely inclosing the compressor and driving means, and heat conducting members extending through the housing for transmitting to the outside atmosphere heat generated within the housing, and means for circulating the air confined within the housing over said heat conducting members.

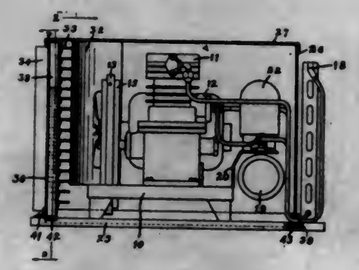
1,883,922. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,254. 8 Claims. (Cl. 62—115.)



1. Refrigerating apparatus comprising in combination a compressor, means for driving the compressor, a housing completely inclosing the compressor and driving means, said housing including at least one passage in heat exchange relation with the outside atmosphere and means for circulating the air confined in the housing through said passage and over the compressor and driving means.

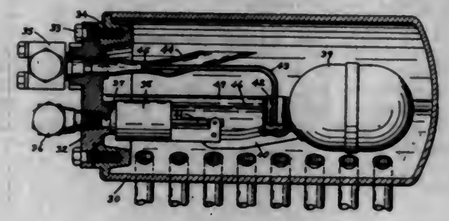
1,883,923. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928, Serial No. 316,255. Renewed June 4, 1932. 8 Claims. (Cl. 62—116.)

1. Refrigerating apparatus comprising a compressor, means for driving the compressor, a housing completely inclosing the compressor and driving means, a condenser outside the housing connected to the compressor, and heat exchange means associated with the housing for conducting through the housing and dissipating in the outside atmos-



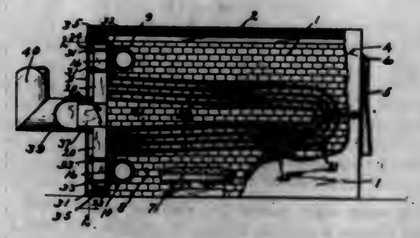
phere heat generated in the housing, said housing being removable without disturbing the connections between the compressor and condenser.

1,883,924. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1930. Serial No. 457,579. 16 Claims. (Cl. 62—8.)



1. In a refrigerating system, an evaporator adapted to contain a gaseous refrigerant, a liquid refrigerant, and a layer of lubricating fluid, a float member for regulating the level of the liquid refrigerant, a duct for removing the gaseous refrigerant, and means communicating with said duct for removing lubricating fluid from said evaporator, said means including a portion separate from and attached to move simultaneously with said float member.

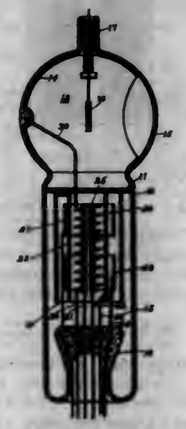
1,883,925. BOILER. GEORGE H. HYDE, Watertown, N. Y. Filed July 7, 1930. Serial No. 465,954. 7 Claims. (Cl. 122—279.)



1. In a boiler furnace, a pair of parallel spaced headers adapted to be connected in a heating system and a plurality of boiler tube sections removably secured to said headers in a fluid-tight manner, each of said sections comprising a pair of header boxes arranged in vertical spaced relation one above the other to form an opening therebetween extending transversely of said sections and in communication with an exhaust flue, and a plurality of U-

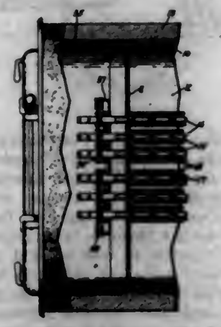
shaped boiler tubes having the limbs thereof extending outwardly from the transverse portions in diverging planes and connected with said boxes to form a fluid passage therebetween.

1,883,926. COMBINATION OF A PHOTOTUBE AND AN AMPLIFIER. HARLEY IAMS, San Diego, Calif., and VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 1, 1930. Serial No. 448,866. 4 Claims. (Cl. 250—27.5.)



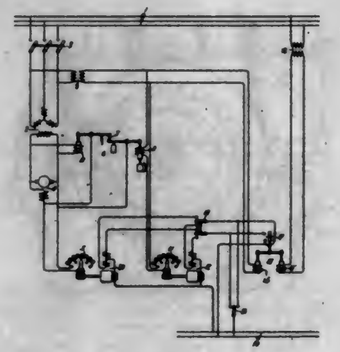
4. A container having a partition dividing said container into two portions, a photosensitive cathode and an anode therefor in one of said portions, a thermionic cathode, a grid and a plurality of shielded anodes in said other portion, said grid being connected to said photosensitive cathode.

1,883,927. ELECTRIC HEATER. CARL L. IPSEN and ALBERT N. OTIS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed June 6, 1929. Serial No. 368,898. 14 Claims. (Cl. 219—38.)



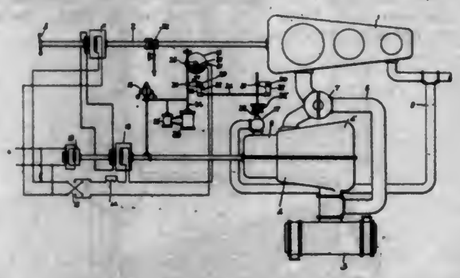
1. An electric heater comprising a resistor, a plurality of electrically insulating supports for said resistor spaced at intervals longitudinally thereof, each of said supports comprising a plurality of cooperating detachable sections arranged when assembled to provide an inclosed passageway for receiving said resistor, a spacing member for said supports, and interlocking means between said supports and said spacing member preventing relative longitudinal and rotative movement between said spaced insulators, said interlocking means providing for removal of each support independently of the remainder.

1,883,928. ELECTRICAL REGULATING SYSTEM. MAXIMILIAN JACKWIRTH, Berlin-Pankow, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 17, 1931, Serial No. 557,673, and in Germany Sept. 4, 1930. 7 Claims. (Cl. 171—312.)



1. In combination, a main circuit, a generator adapted to be connected in energy transmitting relation to said circuit, an automatic regulator of an operating condition of said generator, and means responsive to a function of an electrical condition of both said circuit and said generator for modifying the action of said regulator.

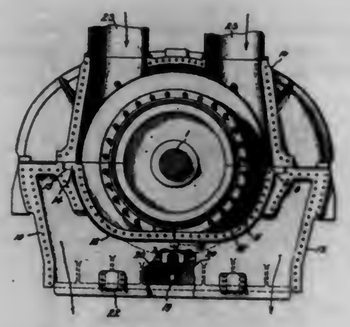
1,883,929. POWER SYSTEM. ERIC MAURICE JOHNSON, Brooklands, and HENRY CAJETAN PIERSON, Hale, England, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 13, 1929, Serial No. 406,871, and in Great Britain Nov. 15, 1928. 7 Claims. (Cl. 172—8.)



1. In a power system, the combination of a first prime mover coupled to a main drive, a second prime mover coupled to the main drive by variable power transmission means and also supplying power for an auxiliary load, and governing means for maintaining the speed of the second prime mover substantially constant comprising means responsive to the speed of the second prime mover for varying the power transmitted by said power transmission means so as to vary the load thereon due to the main drive.

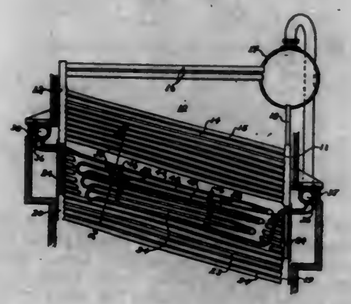
7. In a power system, the combination of a prime mover receiving a variable quantity of motive fluid, said prime mover being coupled to a main drive by variable power transmission means and also supplying power for an auxiliary load, and governing means for maintaining the speed of the prime mover substantially constant comprising means responsive to the speed of the prime mover for varying the power transmitted by said power transmission means so as to vary the load thereon due to the main drive.

1,883,930. ELASTIC FLUID TURBINE. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1930. Serial No. 478,424. 2 Claims. (Cl. 253—69.)



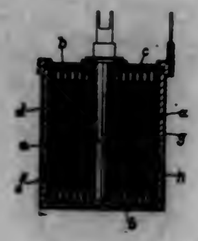
1. In an elastic fluid turbine, a rotor comprising a shaft and bucket wheels fastened to the shaft, diaphragms interposed between the bucket wheels, a lower inner half shell for supporting the diaphragms, flanges provided on the lower inner half shell, a lower outer half shell supporting the lower inner half shell, and means provided between the lower shells to allow relative movement between them, a single upper shell fastened to the lower outer half shell and having flanges which engage those of the inner lower half shell, said upper half shell including inwardly projecting webs having end portions provided with recesses into which outer portions of the diaphragms project.

1,883,931. SUPERHEATER BOILER. JAMES F. KAVANAGH, Calumet City, Ill., assignor to The Superheater Company, New York, N. Y. Filed Oct. 3, 1931. Serial No. 566,627. 12 Claims. (Cl. 122—478.)



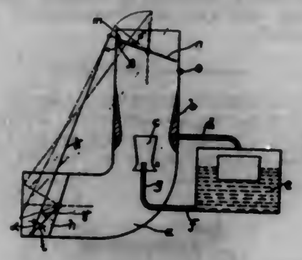
1. In a boiler, the combination of a plurality of spaced banks of steam generating tubes each comprising rows of tubes, headers connected to corresponding ends of the several rows in a bank, alternate headers at each end of the boiler and associated with one of the banks being extended towards another bank of said plurality, steam generating tubes connecting the extended portions of corresponding headers, and a superheater arrangement disposed between the tubes connecting the extended portions of the alternate headers.

1,883,932. ELECTRIC CONDENSER. AUGUST KAZENMAIER and WALTER DORN, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 28, 1927, Serial No. 209,175, and in Germany Aug. 28, 1926. 6 Claims. (Cl. 175—41.)



1. A condenser provided with a protective coating on its metal surfaces comprising a thin coating of a non-brittle resinous electrically insulating material and a thin outer coating of a phenolic condensation product on the protective coating.

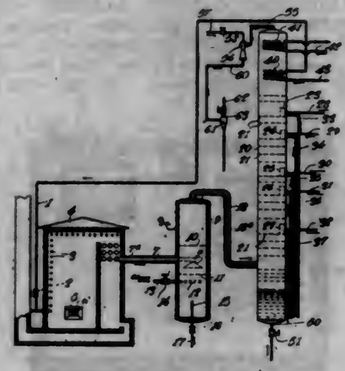
1,883,933. CARBURETOR. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Aug. 11, 1930, Serial No. 474,477, and in Germany Sept. 11, 1929. 5 Claims. (Cl. 261—52.)



1. A self feeding carburetor comprising a mixing tube, at least two choke tubes adapted to produce different degrees of vacuum for any given engine suction, a float chamber the air space of which is connected to the choke tube of lower vacuum and the fuel space to the choke tube of higher vacuum, an air throttle in advance of said choke tubes, a second throttle in rear of said choke tubes and means for operating said second throttle in dependence on said air throttle such that the rate of increase of effective cross sectional area past the air throttle is greater on commencement of opening of the same than that past the second throttle.

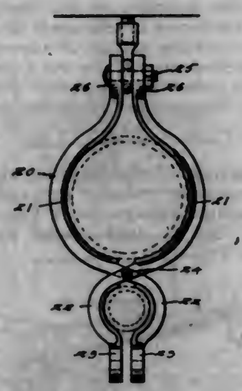
1,883,934. METHOD OF RECTIFYING PETROLEUM OILS. PERCY C. KEITH, Jr., Bernardsville, N. J., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,607. 5 Claims. (Cl. 196—77.)

1. The method of rectifying petroleum oils which comprises providing a column of rectifying zones under vacuum, admitting a mixture of petroleum oil vapors and steam near the bottom of said column, condensing substantially all of the petroleum vapors at the top of said column by means of indirect heat exchange with a cool-



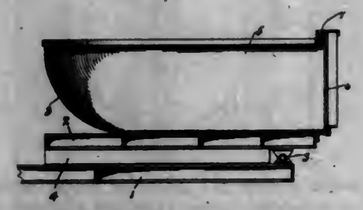
ing medium, withdrawing substantially solely fixed gases and steam from the top of said column, and subsequently condensing said steam.

1,883,935. PIPE HANGER. JOHN J. KELLEY, New Haven, Conn. Filed May 31, 1930. Serial No. 458,282. 3 Claims. (Cl. 248—81.)



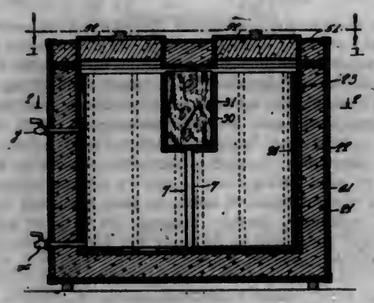
1. A pipe support, comprising a body formed in two parts, each of said parts being formed to provide two substantially semi-circular portions, one being oppositely curved with respect to the other, a pivot connection between said parts at the point of joinder between the portions thereof, the portions of one of said parts coacting with the portions of the other part to form two pipe encircling rings, means for connecting the ends of one pair of coacting parts with a supporting element, and an apertured ear extending from the end of each of the other coacting parts, said ears being brought into side by side relation when the parts are in pipe encircling position, to receive a portion of a second pipe supporting element therebetween.

1,883,936. AGITATING AND DUMPING VEHICLE BODY. ARTHUR G. KERR, Detroit, Mich., assignor to Wood Hydraulic Hoist & Body Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1929. Serial No. 385,359. 1 Claim. (Cl. 296—1.)



In a construction of the class described, a semi-cylindrical horizontal elongated body member, said body including a front end portion curved upwardly into the shape of a quadrant of a sphere and a gate adapted to close the rear end portion of the said body member.

1,883,937. REFRIGERATIVE APPARATUS. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 343,859. 4 Claims. (Cl. 62—91.5.)

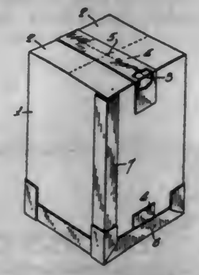


1. A refrigerative container comprising a casing of material substantially impermeable to carbon dioxide gas, formed to permit escape of gas only by outflow from a high level, a second container arranged within the casing and located at a high level holding solid carbon dioxide evolving gas to fill said casing, said second container being substantially impermeable to carbon dioxide gas so that gas evolved from the solid carbon dioxide can escape only by overflow, and penetrable cellular insulating material protecting the inner surfaces of said casing below the high overflow level and disposed so that it must be penetrated by said gas before the gas can reach said casing.

1,883,938. PACKAGE AND CONTAINER. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1929. Serial No. 394,814. 10 Claims. (Cl. 229—49.)

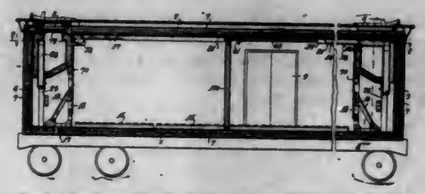
1. A sealing strip for the seams of a refrigerated container, with solid carbon dioxide used as the refrigerant,

said container being comprised of walls of corrugated paper made gasproof, a restricted vent for the release



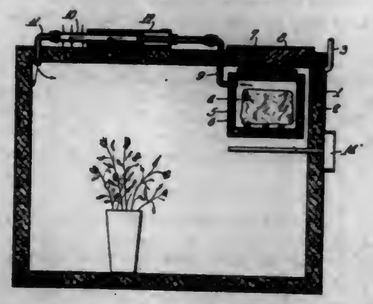
of the carbon dioxide gas generated by the solid carbon dioxide, said sealing strips comprising strips of paper fabric or the like and a layer of rubber latex.

1,883,939. REFRIGERATING APPARATUS AND METHOD. DAVID H. KILLEFFER, Yonkers, and CHARLES L. JONES, Pelham, N. Y., assignors to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1930. Serial No. 504,248. 14 Claims. (Cl. 62—91.5.)



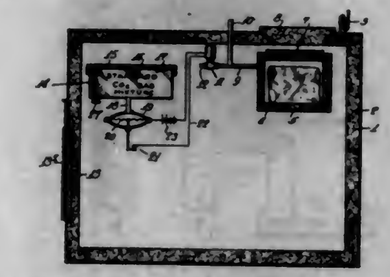
11. A method of controlling distribution of refrigerating effects of solid carbon dioxide, which includes highly insulating solid carbon dioxide from direct heat absorption from the refrigerated space; and conducting all of the gas from said solid into heat exchange relation with the refrigerated space and discharging all of it outside of said space; and applying heat to said solid carbon dioxide through a metallic conductor which is located outside of said refrigerated space by thermo circulation of air of the refrigerated space in heat exchange relation to said conductor, thereby making the rate of sublimation of gas dependent mainly on the temperature of the air of said refrigerated space.

1,883,940. METHOD OF AND APPARATUS FOR CONTROLLING CARBON DIOXIDE GASEOUS MIXTURES. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,707. 13 Claims. (Cl. 62—91.5.)



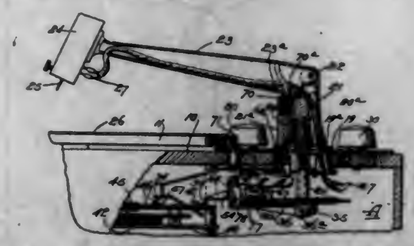
11. A refrigerator having means for cooling it by evaporation of carbon dioxide and discharge of the resulting gas into the atmosphere of the refrigerator, and in combination therewith, adjustable means for diluting the gas in said atmosphere.

1,883,941. METHOD OF AND APPARATUS FOR STANDARDIZING CARBON DIOXIDE GASEOUS MIXTURES. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,708. 10 Clams. (Cl. 62—91.5.)



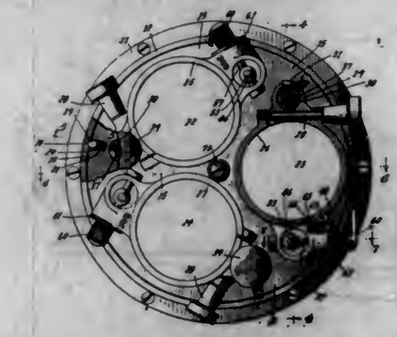
1. A method of refrigerating and controlling the composition of an enclosed atmosphere of carbon dioxide gas mixed with air by means of solid carbon dioxide, which includes causing the composition and resulting density of the mixture to vary from the standard in the direction of over-dilution; utilizing the over-diluted atmosphere to control inflow of carbon dioxide gas by exposing in said atmosphere a surface of thin rubber septum, causing the solvent activity of said material to vary in accordance with a predetermined standard by maintaining a fixed quantity of standard carbon dioxide gas-air mixture in solvent relation to the other surface of said septum, thereby causing the carbon dioxide gas to be transferred through the solvent septum in one direction or the other according as the exterior or interior percentage of the carbon dioxide gas is the greater, thereby producing corelative changes of amount and pressure of said standardized gas mixture and utilizing such pressure changes to cause supply of carbon dioxide gas to the atmosphere of the container to correct the overdilution.

1,883,942. RECORD REPEATER FOR PHONOGRAPHS. LEO T. KINCANNON, Chicago, Ill., assignor to Louis Hanson Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1930. Serial No. 460,354. 15 Claims. (Cl. 274—15.)



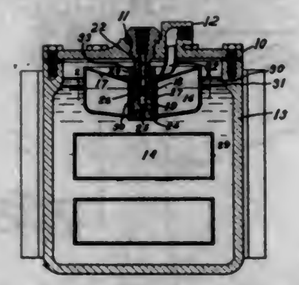
1. In a repeating device for phonographs, in combination, a record supporting turn table, reproducing means including a supporting arm mounted to swing about an upright axis, with a reproducing element carried thereby, and an actuating member movable radially with respect to the axis of the swinging arm connected for raising said arm and reproducing element out of operative engagement with the record, said member also being movable transversely about said axis and positively connected with the tone arm for actuating said arm and element toward the outer edge of the record.

1,883,943. LENS ADJUSTING, SHIFTING, AND INDICATING MECHANISM. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1931. Serial No. 507,832. 9 Claims. (Cl. 88—57.)



1. In a motion picture machine, a frame, a support thereon, a lens holding turret disposed on said support, a plurality of lens mounts on the turret, means projecting from the turret to support each mount, said means being turnable and longitudinally slidable on the turret, means for longitudinally moving the mount to focus the lenses, means for shifting the mounts on the supports to align the lenses with several projection axes, means for indicating the shifted positions, means for turning the turret within the support, means for latching the turret in several positions, and means for indicating the position to which the turret is turned.

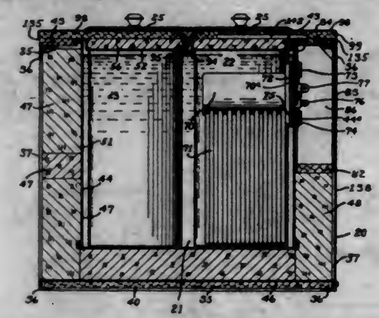
1,883,944. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,736. 8 Claims. (Cl. 62—8.)



1. An evaporator adapted to contain liquid refrigerant, a valve regulating the admission of said liquid refrigerant to said evaporator, a non-sinkable float in said evaporator for controlling said valve, means forming a part of said float for collecting liquid floating on said liquid refrigerant, and means associated with said last mentioned means for providing egress of said floating liquid from said evaporator.

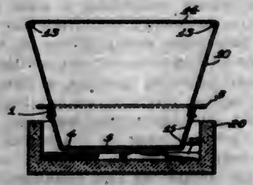
1,883,945. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Mar. 27, 1924, Serial No. 702,456. Divided and this application filed Jan. 11, 1930. Serial No. 420,042. 6 Claims. (Cl. 217—7.)

1. A commercial refrigerator cabinet comprising a frame structure including top, bottom and upright metal members joined to form a rigid structure; top, bottom and side walls of insulating material secured in the corresponding sides of said frame structure and supported thereby; an inner tank member secured at its top to said top insulating wall, said tank member being provided



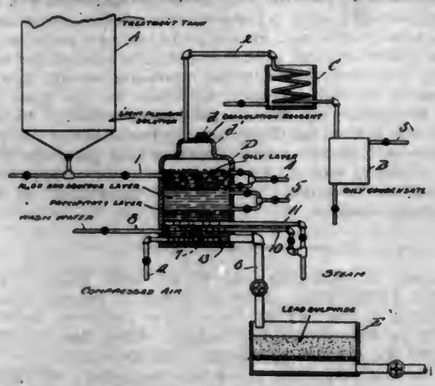
with a plurality of open top sleeves for the reception of food containers, said top insulating wall being provided with a plurality of openings registering with the openings in said sleeves and closure members for the openings in the top wall.

1,883,946. CHARCOAL BROILER. CLYDE L. KINGSBAKER, Pittsburgh, Pa. Filed Dec. 21, 1931. Serial No. 582,212. 6 Claims. (Cl. 126—14.)



1. A broiler comprising a fuel receptacle having a grate-like base, two opposite sides of said receptacle being provided with a plurality of spaced apertures, a grill disposed above said receptacle, and downward extending legs secured to said grill with their lower ends projecting into said apertures for supporting said grill above said receptacle.

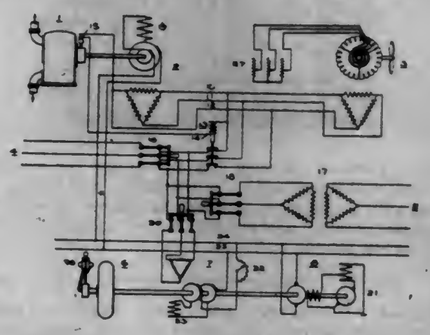
1,883,947. PROCESS FOR SEPARATING METALLIC-BASE REACTION PRODUCTS FROM OTHER DERIVATIVES IN THE TREATMENT OF HYDROCARBON OILS. ANTHONY KINSEL, Everett, Mass., assignor to The Litharge Recovery Corporation, Everett, Mass., a Corporation of Massachusetts. Filed Dec. 26, 1925. Serial No. 77,789. 16 Claims. (Cl. 23—134.)



1. Process for separating metallic—base reaction products from other derivatives of the treatment of hydro-

carbon oils comprising subjecting the reaction liquor from the treatment of oily material with a metallic-base reagent to heat and agitation, settling and recovering the metallic-base precipitate from the settled mixture.

1,883,948. CONTROL SYSTEM. THOMAS P. KIRKPATRICK, Decatur, Ga., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 19, 1927. Serial No. 162,042. 5 Claims. (Cl. 172—8.)

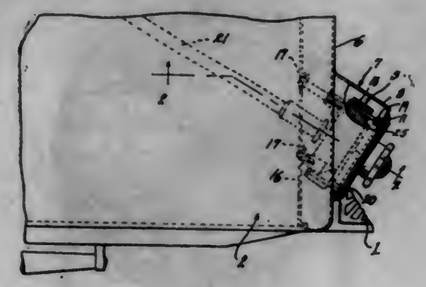


1. A control system comprising a main generator constituting a source of energy, a driving unit for said generator and a propulsion motor driven by said generator, direct-current and alternating-current auxiliary distribution circuits, a dynamo-electric machine, a direct-current generator and an exciter therefor, an auxiliary driving unit for driving said dynamo-electric machine, direct-current generator and exciter, means for connecting said auxiliary alternating-current distribution circuit to said main generator, means for connecting said dynamo-electric machine to said main generator to drive said direct-current generator and exciter, means responsive to predetermined variations in the load conditions on the main generator for disconnecting the auxiliary alternating-current circuit therefrom and automatically controlling said auxiliary driving unit to drive said dynamo-electric machine as a generator for maintaining a predetermined characteristic of said auxiliary circuits substantially uniform and also drive said direct-current generator and exciter.

2. A control system for ship propulsion comprising a turbo-alternator, a propulsion motor, a resistor adapted to be connected in the motor circuit, the speed of said propulsion motor being governed by the speed of the main turbine in conjunction with said resistor, an auxiliary distribution circuit, an auxiliary turbine, a dynamo-electric machine coupled thereto, a direct-current generator and an exciter therefor, said dynamo-electric machine being normally connected to said alternator to run as a motor driving said direct-current generator and being adapted for correcting the power-factor in the alternator circuit, means responsive to predetermined variations in the speed of said alternator for disconnecting the auxiliary circuit therefrom and automatically causing the auxiliary turbine to drive said dynamo-electric machine as a generator and also to drive said direct-current generator and exciter whereby said auxiliary circuits are maintained in an energized condition.

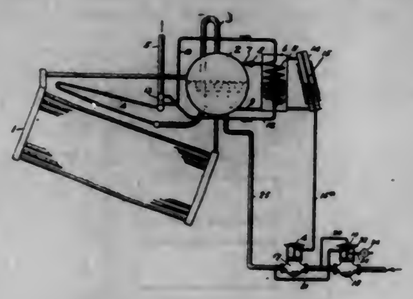
1,883,949. COMBINED GAS OVEN AND HEAT CONTROL THEREFOR. JOHN M. KISSELLE, Detroit, Mich., assignor to The Detroit Vapor Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 3, 1930. Serial No. 432,714. 7 Claims. (Cl. 236—15.)

1. Oven structure for gas stoves, comprising an extension formed in a vertical side wall of the oven, a heat control unit mounted within said extension, gas supply conduits leading to and from said unit whereby to control the supply of gas to the oven burner, heat responsive means carried by the control unit and extending within the oven, said extension being so formed and said heat



control unit being so positioned that the front of the control unit angularly faces the front of the stove and the heat responsive means extends inwardly at an angle to the door of the oven and to said vertical side wall.

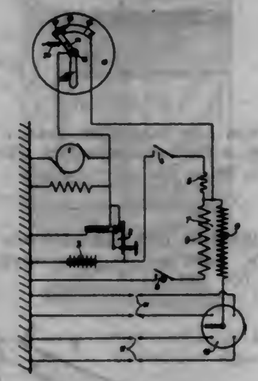
1,883,950. METHOD OF AND APPARATUS FOR FEEDING WATER TO BOILERS. JOSEPH KISSICK, White Plains, N. Y., assignor to Kissick-Fenno Co. Inc., a Corporation of New York. Filed Apr. 27, 1927. Serial No. 186,887. 10 Claims. (Cl. 122—451.2.)



2. The method of feeding water to a steam boiler which consists in establishing a steam generating body of water in communication with the boiler, generating steam in said body of water proportionate to increased heat due to increasing boiler load, applying the pressure of such steam on the body of water to depress its level and cause it to balance a higher level in the boiler, and regulating the feed water inflow in response to said body of water.

1,883,951. BATTERY IGNITION DEVICE. ERICH KLAIBER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 17, 1932, Serial No. 593,669, and in Germany Feb. 25, 1931. 3 Claims. (Cl. 123—148.)

1. An ignition system for motor vehicles comprising a battery, an automatic switch, a dynamo feeding said battery through said automatic switch, an ignition coil, a resistance in series between said battery and said coil, a make and break device, at least one spark gap, a broken

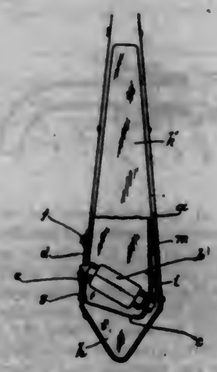


connection between said dynamo and said ignition coil, and a time lag switch adapted to complete said broken connection for a definite time after operation of said switch.

1,883,952. HYDROQUINONE DERIVATIVE. EMIL KLARMANN, Jersey City, and LOUIS W. GATTAS, Bloomfield, N. J., assignors to Lehn & Fink, Inc., Bloomfield, N. J., a Corporation of New York. Filed Aug. 17, 1931. Serial No. 557,730. 6 Claims. (Cl. 260—150.)

1. As a composition of matter, a hydroquinone monoether having the formula $p\text{-OH-C}_6\text{H}_4\text{.O.C}_2\text{H}_4\text{.R}$, wherein R is an alkyl or aryl radical, said ether having a high bactericidal efficiency.

1,883,953. SIGNALING APPARATUS. KARL KLEINERT, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Jan. 7, 1930, Serial No. 419,118, and in Germany Aug. 7, 1929. 10 Claims. (Cl. 40—182.)



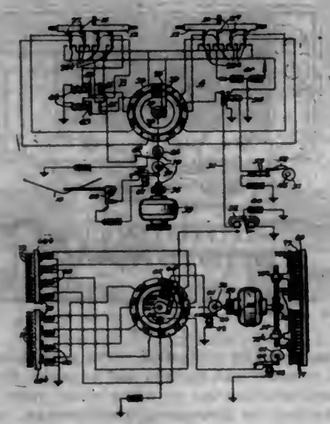
1. Signaling apparatus comprising a hollow arm provided with a transparent wall and having an opening in one wall thereof for the insertion of a lamp, and a yoke-shaped lamp holder, a tubular lamp supported between the arms of said holder, one arm of said holder being supported within the hollow arm whilst the other arm covers said opening.

1,883,954. SIGNALING DEVICE. KARL KLEINERT, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 23, 1930, Serial No. 470,205, and in Germany Aug. 7, 1929. 3 Claims. (Cl. 116—54.)



1. A signaling device suitable for use on road vehicles comprising a semaphore arm having front and rear faces formed of transparent plates, a perforated frame for holding said plates in spaced relationship, a lamp within said frame, and a covering for said frame consisting of a thin sheet of metal such as aluminium.

1,883,955. SELECTING TELEGRAPH. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor, by mesne assignments, to Teletypesetter Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,883. 34 Claims. (Cl. 178—4.)

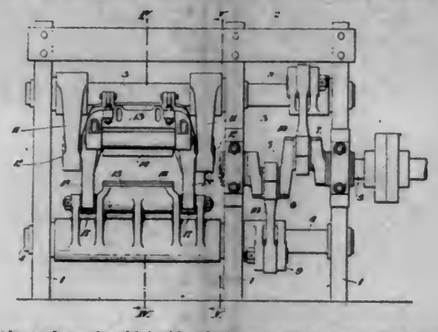


1. In a telegraph system, the method of sending and recording signals each consisting of one of each of a plurality of groups of components, which comprises successively transmitting, during each signal period, a plurality of definite interval permutations of two different electric conditions, one permutation for each component of the corresponding signal and separately selecting and recording the individual components of each signal in response to said permutations.

1,883,956. SHEARS. FRED E. KLING, Youngstown, Ohio. Filed Jan. 12, 1931. Serial No. 508,348. 4 Claims. (Cl. 164—41.)

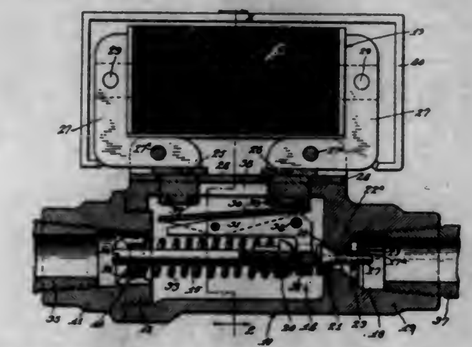
1. Metal cutting shears comprising, in combination, a supporting framework, a pair of operating shafts journaled

in said frame, a crankshaft disposed between said first named shafts, cranks and connecting-rods joining said shafts, a pair of arms movable with one of said pair of shafts, a knife holder having a knife blade secured to its lower edge, said knife holder being pivotally joined to said arms on an axis substantially in alinement with the



cutting edge of said knife blade, a knife supporting frame mounted for movement with the other of said pair of shafts, yokes on each end of said knife holder and rollers on each end of said knife supporting frame, said yokes being eugaged over said rollers to maintain said knife holder and said knife supporting frame in cooperative alinement during their complete operating cycle.

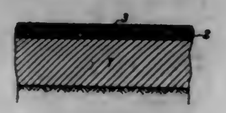
1,883,957. MAGNETICALLY OPERATED VALVE. LAWRENCE E. KOCH and HARRIS C. ROTH, Elkhart, Ind., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 17, 1927. Serial No. 226,730. 1 Claim. (Cl. 137—139.)



In a magnetically controlled valve, a main body portion having a chamber and an inlet and an outlet formed therein in communication one with the other, valve mechanism for controlling the passageway therethrough, an armature for controlling the operation of said valve mechanism, a solenoid, a plurality of iron plugs in said body portion in engagement with the core portion of said solenoid for actuating said armature, said body portion being apertured between said plugs to provide a high magnetic reluctance therebetween, and sealing means for said apertured portion comprising a channel-shaped member secured to said body portion by said plugs, said solenoid being secured to said channel-shaped member.

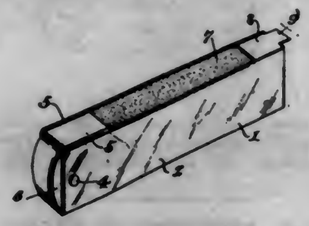
1,883,958. ICE SKATING RINK. WALTHER KOENIGER, Berlin-Wilmersdorf, Germany. Filed Nov. 21, 1930, Serial No. 497,287, and in Germany Apr. 25, 1929. 10 Claims. (Cl. 62—12.)

1. In an artificial ice rink, the combination of a water-permeable porous and heat insulating material formed into a bed, a cooling pipe system laid on such bed and a surface layer disposed above the cooling pipes which is formed from a granular material whose porosity, water-



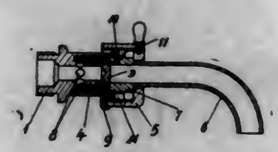
permeability and heat insulating capacity is essentially less than that of the bed but through which water may slowly pass to drain the upper surface.

1,883,959. LIPSTICK HOLDER. LESSING L. KOLE, Milwaukee, Wis. Filed Dec. 10, 1930. Serial No. 501,405. 3 Claims. (Cl. 206—56.)



1. A holder for lipsticks and the like, comprising an outer casing, an inner casing adapted to receive the lipstick, and projections formed on one end portion of one of the casings and received in depressions in the adjacent end portion of the other casing to readily detachably and hingedly connect the casings, and inturned flanges on the outer casing for releasably retaining the inner casing in closed position within the outer casing.

1,883,960. STOP VALVE FOR LIQUID OR GASEOUS SUBSTANCES. ARTHUR FRITZ KOPPEL, Berlin-Tempelhof, and MAX ALBRECHT, Neuenhagen, near Berlin, Germany; said Albrecht assignor to said Koppel. Filed Sept. 30, 1929, Serial No. 396,307, and in Germany Apr. 12, 1929. 10 Claims. (Cl. 251—24.)

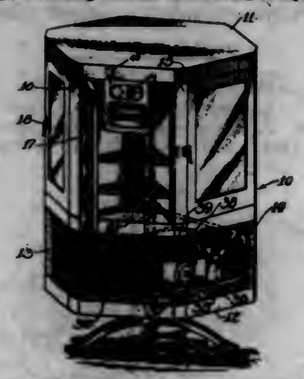


9. Stop valve of the kind referred to comprising in combination a tubular elastic medium to be compressed, and orificed member within said elastic medium, a chamber concentrically surrounding said member and elastic medium and a tubular element bearing against the elastic medium and coacting therewith to force the elastic medium against the orificed member to close the orifices therein, all of said parts being arranged perpendicularly to the direction of flow of the medium, and a partition by which the medium is conducted into the said chamber and out of said chamber.

1,883,961. PORTABLE REFRIGERATOR. JOSIPH KOSMERL, Lyons, Ill. Filed Nov. 16, 1931. Serial No. 575,249. 5 Claims. (Cl. 62—116.)

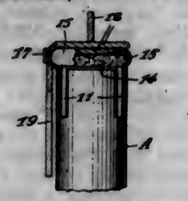
1. A refrigerator comprising a casing having a plurality of hinged doors; a base; means whereby said casing is

rotatably mounted on said base; a refrigerating unit in said casing; a cooling unit in said casing comprising means



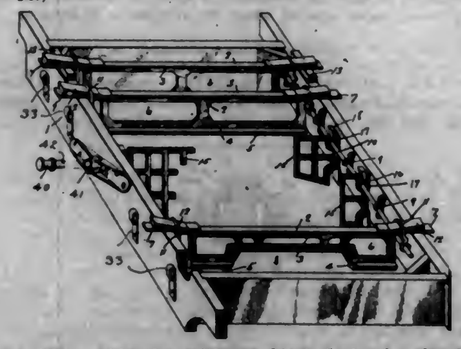
for circulating an evaporating refrigerant, and a compressor for compressing the refrigerant vapor and for circulating the same.

1,883,962. CIGARETTE LIGHTER. HANS KOTTHOFF, Newark, N. J. Filed Oct. 6, 1930. Serial No. 486,626. 7 Claims. (Cl. 131—52.)



1. A cigarette lighter of the character described comprising a body member with depending integral members, for affixing the device to the end of a cigarette, a glow member carried by the body member adapted to assume a position in close proximity to the tip of a cigarette when the device is assembled thereon, and frictional means for bringing the glow member into a glowing condition, said frictional means including a rip cord and a guide extending from the periphery of the member for the rip cord whereby frictional contact between the rip cord and the glow member upon pulling said cord effects lighting of said cigarette.

1,883,963. MOLDER'S FLASK. GEORGE HENRY KRAMER, Dayton, Ohio, assignor to Kramer Brothers Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 1, 1929. Serial No. 396,575. 21 Claims. (Cl. 22—96.)



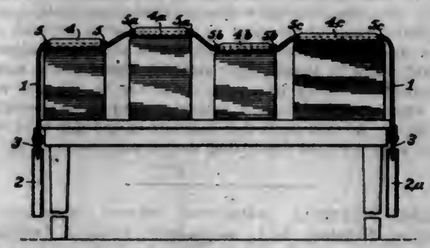
1. The combination with a molder's flask, of a plurality of sand anchor bars detachably engageable therewith, including an open frame-like portion extending within the flask, lateral arms upon the frame overhanging the side walls of the flask, clevises engaged with the flask through which the arms extend, and clamp wedges insertable beneath the clevises for clamping the arms in engagement with the flask walls.

1,883,964. DOLLY AND RETURN TRACKWAY. HERMANN KRAMER, Tulsa, Okla., assignor to General Paint Corporation, San Francisco, Calif., a Corporation of Nevada. Filed Sept. 3, 1929. Serial No. 390,197. 6 Claims. (Cl. 104—131.)



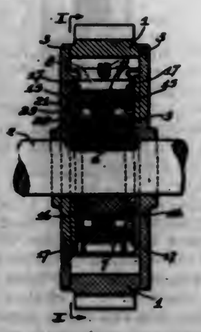
1. In combination with a pair of horizontally disposed trackways located one above the other, a pivotally mounted section of trackway at one end of said trackways adapted to move into alignment with either of said trackways, and latching means adjacent the ends of said horizontally disposed trackways adapted to retain said pivotally mounted section of trackway so as to form a continuation of either of said trackways, whereby a dolly may be transferred from one of said trackways to the other.

1,883,965. PAPER WEIGHT. LOUIS C. KRATZ, Brooklyn, N. Y. Filed May 4, 1932. Serial No. 609,249. 14 Claims. (Cl. 120—82.)



1. A paperweight for retaining stacks of magazines and the like in substantially stacked position comprising a length of flexible cable extended across said stacks, weights at each end thereof for maintaining it in an extended condition, and followers rotatably mounted upon said cable and adapted to rest upon said stacks.

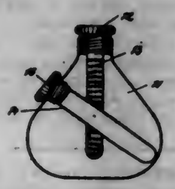
1,883,966. OVERRUNNING CLUTCH. FRANK R. KRAUSE, Youngstown, Ohio. Filed Sept. 20, 1930. Serial No. 483,287. 1 Claim. (Cl. 74—60.)



An over-running clutch mechanism comprising a shaft, a ratchet wheel having spaced ratchet notches secured on

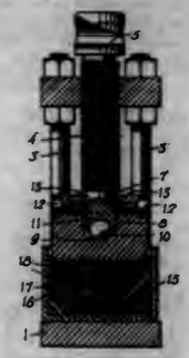
the shaft, hub plates journalled on the shaft at each side of the ratchet wheel, a rim member disposed between the outer edges of the hub plates and joined to them to constitute a housing, detents pivotally mounted within the housing for engaging the notches in the ratchet wheel, a pair of annular plates disposed at the sides of the ratchet wheel and having notches corresponding to the notches in the wheel, resilient means for holding the plates in frictional engagement with the hub plates, and means for limiting the movement of the plates relative to the ratchet wheel whereby the notches in the plates will match the notches in the ratchet wheel when the housing is turned relative thereto in the driving direction and the notches in the wheel will be guarded by cylindrical portions of the plates when the housing is turned in the over-running direction.

1,883,967. STERILIZING CONTAINER FOR LIQUIDS. GEORG A. KRAUSE, Munich, Germany, assignor to Katadyn, Inc., Dover, Del., a Corporation of Delaware. Filed May 9, 1929, Serial No. 361,705, and in Germany May 12, 1928. 2 Claims. (Cl. 99—15.)



1. In a sterilizing apparatus of the class described a closed container having walls, an oligodynamically active sterilizing element adapted to be projected through the walls, means to detachably secure said sterilizing element to said walls in liquid tight relation thereto, and means to introduce liquid into said container to contact with said sterilizing device, and means to support said sterilizing device, in said container and out of contact with said liquid whereby said sterilizing device may be revived.

1,883,968. DENTAL SWAGING PRESS. STEPHEN J. KAIVIO, Hillside, N. J., assignor to Baker & Company, Inc., a Corporation of New Jersey. Filed June 28, 1930. Serial No. 464,486. 1 Claim. (Cl. 113—39.)



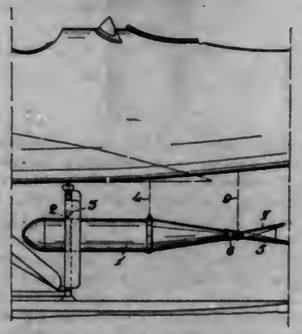
A press of the character described, comprising a frame having a base and a top-piece in spaced relation, a screw mounted in said top-piece to move upon rotation toward and from said base, said screw having a circumferential groove adjacent one end, a head-block having a socket to rotatably receive said end of the screw, a ball arranged between the extremity of said screw and the base of said socket, and diametrically opposite axially alined set screws in said head-block each with one end loosely arranged in said groove to connect the head-block to the screw, so that said head-block has a limited relative longitudinal and tilting movement and free relative rotation upon said screw.

1,883,969. CASTING BACKING. STEPHEN J. KRIVIC, Hillside, N. J., assignor to Baker & Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed June 30, 1931. Serial No. 547,911. 1 Claim. (Cl. 32—9.)



A casting backing for artificial teeth, comprising a plate having undercut recesses on one side extending entirely across the plate and opening through the edges thereof to receive and interlock with casting metal or solder, said plate being provided on the opposite side with means for holding a tooth.

1,883,970. AIRCRAFT. BRANDT JAKOB ERASMUS KROOK, Stockholm, and JOHANNES HÄRDÉN, Lidingo, Sweden. Filed May 5, 1931, Serial No. 535,130, and in Sweden May 6, 1930. 5 Claims. (Cl. 244—1.)



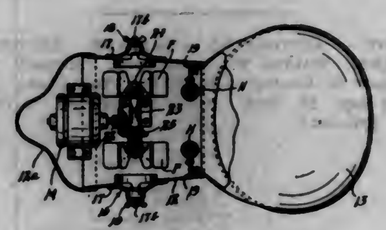
1. In an aircraft, a device for producing fog and spreading gases, comprising a receptacle for the taking up of the material producing the fog or the gas, said receptacle having an opening normally shut and being located outside the body of the aircraft and being pivotable in such a way that the contents can be ejected through the opening of the receptacle, and in which the normally shut opening of the receptacle is shut by means of a shutting member, which is automatically opened when the receptacle is turned.

1,883,971. SIGNALING DEVICE. CONSTANT J. KRYZANOWSKY, Baltimore, Md. Filed Aug. 10, 1929. Serial No. 385,055. 8 Claims. (Cl. 73—54.)



7. A liquid limit level gauge comprising an elongated upright light-transmitting body terminating at its lower end in an integral colored tip, said tip having faces arranged to totally reflect light, transmitted downwardly through said body, laterally and then upwardly.

1,883,972. HAIR DRIER. PAUL KUNIAN and JULIUS GOLDBERG, Minneapolis, Minn; said Goldberg assignor to said Kunian. Filed Jan. 29, 1931. Serial No. 512,014. 2 Claims. (Cl. 34—26.)



2. In a hair drier, a casing of substantially cylindrical cross section, a motor mounted within said casing and having its armature shaft disposed substantially diametrically of said casing, the armature shaft of said motor projecting from both ends of the motor case, a pair of centrifugal type fans fixed to the projecting ends of said armature shaft, a scalp encircling hood connected with the forward and open end of said casing and supported thereby and having a series of air distribution apertures, heating elements mounted in said casing forwardly of said fans, said casing having a pair of oppositely disposed air intake passages axially aligned with said fans, spiders secured to said casing over said air intake passages, said spiders having central bosses, a U-shaped bracket pivotally connected to said bosses, a standard supporting said bracket and means for frictionally connecting the outer ends of said bracket with the bosses of said spiders.

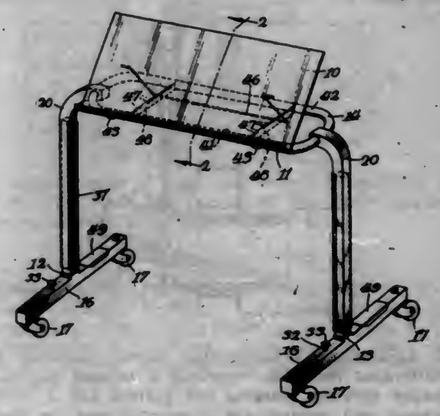
1,883,973. UNION OF RUBBER TO METAL. STEWART S. KURTZ, Jr., Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 2, 1928. Serial No. 258,665. 18 Claims. (Cl. 18—59.)



1. A method of securing rubber surfaces to metallic surfaces which comprises coating one of the surfaces with a material containing an organic salt of copper or cobalt, bringing the surfaces together and applying heat and pressure thereto.

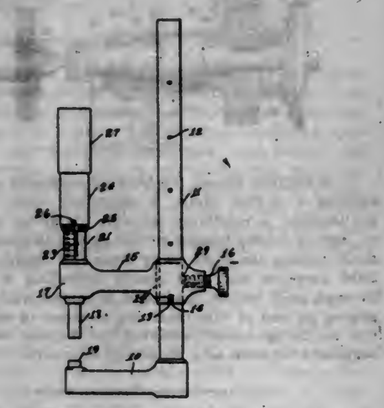
1,883,974. HOSPITAL TABLE. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1929, Serial No. 385,264. 6 Claims. (Cl. 45—110.)

1. In a hospital table, the combination of a table top, and a main supporting frame adapted to straddle the width of the bed for supporting said table top over the bed, said supporting means including a pair of pedestals respectively disposed on opposite sides of the bed, spaced members respectively disposed forwardly and rearwardly of said pedestals and rigidly connected to the upper ends thereof, a rack bar rigidly connected to and extending between said spaced connecting means, said table top being pivotally mounted on said front connecting means and



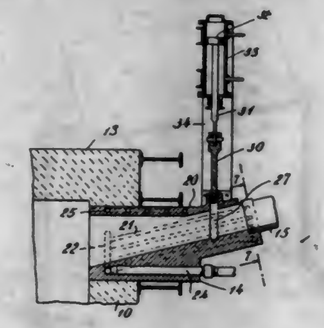
provided with means pivotally connected thereto for adjustably engaging the teeth of said rack bar to maintain the table top in the desired position of adjustment.

1,883,975. COMBINED HEIGHT-GAUGE MICROMETER. ANTON KUTYNIAK, Plainfield, N. J. Filed Mar. 3, 1930. Serial No. 432,701. 1 Claim. (Cl. 33—165.)



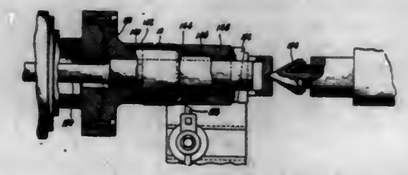
In a height-gauge of the character described, a base, an upright post carried by said base, pins projecting at intervals from said post, a socket adapted for reciprocatory motion along said post and having a recess formed in its lower edge adapted to selectively engage any of said pins during its reciprocation along said post, said socket having an inner groove spaced 90° around the socket from said recess to permit the sliding of said socket over said pins upon rotation of said socket for an angle of 90° about said post, an arm formed with said socket, a graduated sleeve formed with said arm, a spindle passing through this sleeve, a thimble integral with said spindle and having a beveled and graduated end and a milled head, the graduations on said thimble being at an angle of 90° to the graduations of said sleeve, and a set screw to lock the first named socket in any of its adjusted positions relative to said post.

1,883,976. FURNACE CHARGING DEVICE. CHARLES RAPHAEL KUZELL, Clarkdale, Ariz., assignor to United Verde Copper Company, a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,926. 6 Claims. (Cl. 263—1.)



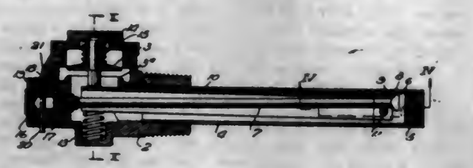
2. Apparatus for introducing molten materials into metallurgical furnaces comprising a launder having an enlarged open-top charging end portion and a covered discharge end portion, and a movable gate for closing the passage in the covered end portion.

1,883,977. WORK HOLDING MEANS FOR TURNING MACHINES. CHARLES H. LANDERS, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Jan. 23, 1928, Serial No. 248,842. Divided and this application filed Nov. 20, 1929. Serial No. 408,496. 4 Claims. (Cl. 82—43.)



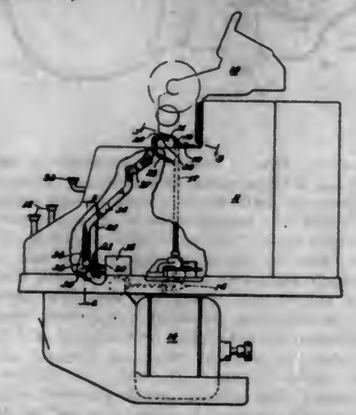
1. A holding means for bearing segments or the like including a hollow shaft, a relatively fixed clamping collar thereon, a relatively movable clamping member thereon, spring means housed within said clamping member normally urging the same away from the clamping collar, and fluid pressure operated means including a ram passing through said hollow shaft and provided with elements engaging an end of said clamping member to move it toward the clamping collar, adapted to thereby retain bearing segments between said clamping elements.

1,883,978. THERMOSTAT. FREDERICK K. LANDGRAF, Crafton, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 21, 1929. Serial No. 408,811. 13 Claims. (Cl. 236—102.)



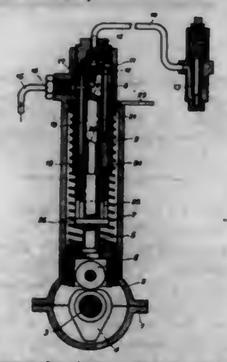
1. In a thermostat, a body, an element in the body adapted to be moved back and forth, a tubular casing secured to the body at one end thereof, a rod supported by the body extending longitudinally of the casing and within the casing, said casing having a relatively high coefficient of thermal expansion and said rod having a relatively negligible coefficient of thermal expansion, a lever within the casing extending longitudinally thereof, means carried by the casing adjacent the outer end of said lever providing a pivotal support therefor, means at the end of said rod adapted to abut against the end of said lever, the inner end of said lever extending into said body, the element in the body adapted to be operated by the thermostat engaging the inner end of said lever, and a compression spring for yieldably resisting the movement of the lever in one direction.

1,883,979. AUTOMATIC CARRIAGE RETURNING MEANS. WALTER W. LANDSIEDEL, Cincinnati, Ohio, assignor to Remington Rand Inc., Tonawanda, N. Y. Filed Sept. 19, 1927. Serial No. 220,389. 4 Claims. (Cl. 197—66.)



1. In a machine of the class described, the combination with a laterally shiftable carriage, motor driven means for returning it to its home position, a carriage return key and a device operated by said key for closing a clutch to cause the motor to return the carriage, of a cam plate 30 mounted on said carriage, a lever 27 in the nature of a follower operated by said cam at a given point in the carriage travel and a link 32 operated by said lever and acting directly on said key operated device to close the clutch.

1,883,980. FUEL PUMP. FRANZ LANG, Munich-Nymphenburg, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Dec. 24, 1926, Serial No. 156,959, and in Germany Jan. 2, 1926. 7 Claims. (Cl. 123—139.)



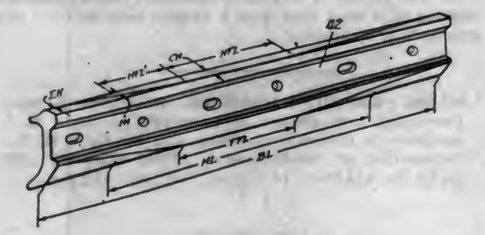
1. In a fuel pump having a piston and an intake passage and a discharge passage, a discharge valve controlling said discharge passage, and means providing a communication between the discharge side of the discharge valve and said intake passage, said piston formed to provide valve means controlling said intake passage and such communication.

1,883,981. CLUTCH OR BRAKE MECHANISM. GEORGE S. LANE, San Anselmo, Calif., assignor to Raybestos-Manhattan, Inc., Bridgeport, Conn., a Corporation of New Jersey. Filed Apr. 4, 1930. Serial No. 441,508. 18 Claims. (Cl. 192—107.)



1. In a device of the character described, two opposed plane pressure surfaces, a friction disc between said surfaces adapted to be engaged by both pressure surfaces; and means to generate friction between each pressure surface and the adjacent face of the said disc, so that the friction generated on one face of said disc is less than the friction generated on the other side of the said disc.

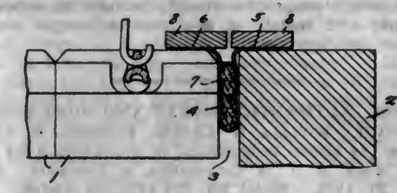
1,883,982. RAIL JOINT AND BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Nov. 7, 1930. Serial No. 494,071. 16 Claims. (Cl. 238—243.)



1. In a rail joint including the rail ends, a bar initially having top and bottom fishing contact with the rail ends at the center portion and intermediate portions of the bar for lengths at top and bottom respectively sufficient for bending movements when the joint is subjected to positive and negative train loads, one of the top and bottom members of the bar being of substantially uniform width throughout its length and having a fishing surface in greater width of rail fishing contact at its center portion than at its intermediate portions, with no rail fishing contact at its extreme end portions, and said member having no outward lateral deflection at its end portions.

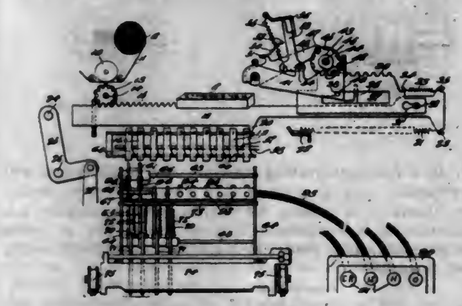
1,883,983. EXPANSION JOINT FOR FURNACES. SAMUEL HERBERT LANYON, San Francisco, Calif. Filed July 17, 1930. Serial No. 468,644. 5 Claims. (Cl. 110—99.)

1. In a furnace structure the combination with elements adapted to expand and contract relative to each other and having walls forming a space therebetween, of a fire-resisting flexible sheet of fabric folded to provide a channel seated in said space and contacting with the walls of said space, a fibrous filling within the channel



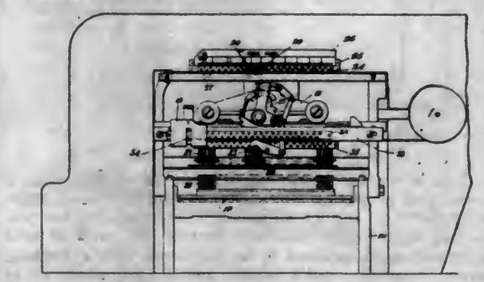
and confined solely thereby, and means independent of the contacted walls for suspending the fabric against displacement relative to said walls.

1,883,984. PUNCH FOR STATISTICAL CARDS. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1925, Serial No. 52,767. Renewed Feb. 26, 1932. 5 Claims. (Cl. 164—112.)



1. In a mechanism of the character stated, the combination of a punch set-up mechanism, a plurality of selecting pins arranged to co-operate with said set-up mechanism, a plurality of control bars, visible vertifying indicators respectively carried by said bars, stop devices for locating the respective bars in predetermined positions, a plurality of control keys, and common means controlled by said keys for selecting certain of said pins and setting certain of said stop devices whereby each bar operated sets its indicator to correspond to the associated pin selected.

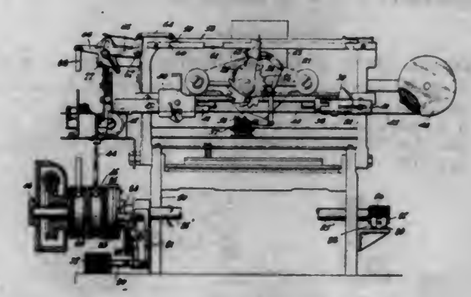
1,883,985. INDICATING MEANS FOR CARD PUNCHING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed June 17, 1927. Serial No. 199,566. 3 Claims. (Cl. 164—112.)



1. In a card punching machine, the combination with a movable carriage thereof, of an indicia bearing strip mounted in operative relation thereto, a pair of L-shaped

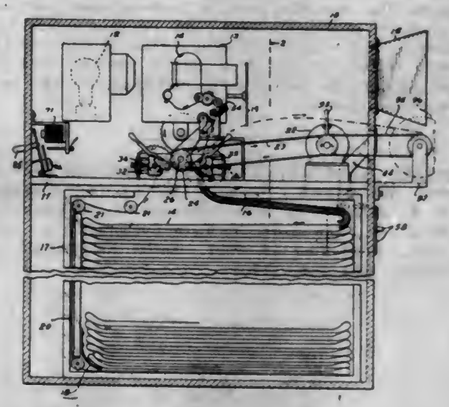
spacing members co-operative with said strip for forming a card pocket, an indicia bearing card in said pocket, and a traversing member mounted on said carriage and formed with elements for visually correlating indicia on said strip with indicia on said card to indicate the position of said carriage.

1,883,986. AUTOMATIC REPEAT AND NORMALIZING SWITCH. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1927. Serial No. 227,487. 11 Claims. (Cl. 164—113.)



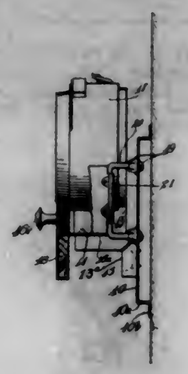
1. In a card perforating machine, the combination with a perforator and a carriage and carriage-return mechanism therefor, of means for setting said perforator into operation for a continuous run of a plurality of cycles and concomitantly rendering said carriage-return mechanism inoperable.

1,883,987. MOVING PICTURE CAMERA. LOUIS LASOWSKY, New York, N. Y. Filed May 11, 1929. Serial No. 362,291. 3 Claims. (Cl. 194—6.)



1. In a moving picture apparatus, in combination, a motor and projecting apparatus, a coin-controlled apparatus therefor, and an automatic stop apparatus for controlling said motor, separate circuits for each of said individual parts adapted to be connected with a common source of current, and a master switch thru which all of said independent circuits pass, said automatic stop apparatus including means adapted to close one of said circuits on breaking of the film to actuate said master switch.

1,883,988. ARTICLE SHELF. ALEXANDER E. LATCHIM, Chicago, Ill. Filed Apr. 9, 1929. Serial No. 353,775. Renewed June 6, 1932. 6 Claims. (Cl. 248—1.)



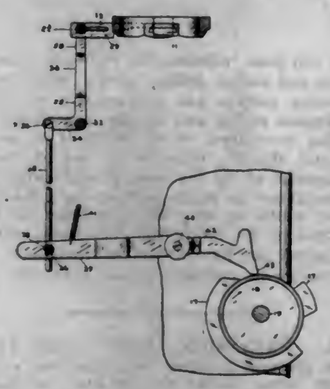
1. An article shelf comprising a wall plate, a support in front of the same, and hinge means applicable selectively between the sides of the support and the plate for the swinging of the support relative to the wall from the corresponding side of the support.

1,883,989. ADHESIVE AND METHOD OF MAKING. IRVING F. LAUCKS and GLENN DAVIDSON, Seattle, Wash., assignors to I. F. Laucks, Incorporated, Seattle, Wash., a Corporation of Washington. Original application filed Oct. 29, 1923, Serial No. 671,381, now Patent No. 1,689,782. Divided and this application filed Sept. 10, 1928. Serial No. 305,133. 20 Claims. (Cl. 87—17.)

1. An adhesive composition, which comprises the reaction products of a vegetable protein-containing material, an alkaline medium and a water-soluble chromium compound.
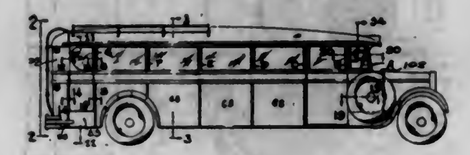
20. The process of making an adhesive, which comprises treating soya bean flour with a caustic soda solution and with sodium dichromate.

1,883,990. KNITTING MACHINE. ROBERT H. LAWSON, Pawtucket, and ARTHUR N. CLOUTIER, Lonsdale, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Mar. 10, 1930. Serial No. 434,604. 16 Claims. (Cl. 66—112.)



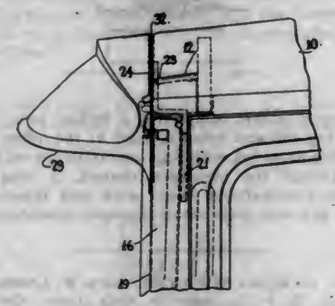
1. A latch ring, yarn guides mounted therein, an opening for the yarn guides being provided in the latch ring, a bar slidable transversely across said opening, and adapted to be yieldingly maintained in such position, said latch ring and bar being pivoted substantially coaxially, whereby when the latch ring swings away from the needle cylinder to any position desired, the bar may swing with it without being retracted from its position across the said opening in the latch ring.

1,883,991. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1927. Serial No. 175,851. 26 Claims. (Cl. 296—28.)



1. In a vehicle body, a body post of inwardly presenting channel from constituting substantially the entire strength-giving portion of the post structure, the sides of said channel being formed as separate stampings having lateral flanges which are secured in overlapping relation to form the base of the channel and lateral projections presenting in a direction opposite to said flanges and forming parts of glass run channels.

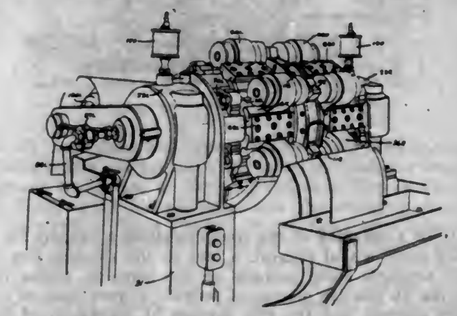
1,883,992. VEHICLE BODY CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 456,835. 8 Claims. (Cl. 296—28.)



1. In a vehicle body structure, front post structures extending inwardly at the top and formed with a substantially flat forward face, a cross member connecting said post structures having its top below the level of said inwardly extended portions and its front face in substantially the plane of the flat forward face of the post structures, and a roof section connecting the inwardly extended portions of the posts and having its front face substantially flat and in the plane of the front post structures and cross member, whereby an extended substantially flat face is formed for the attachment of the visor.

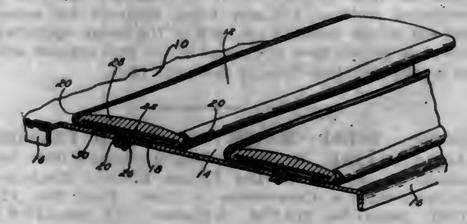
1,883,993. DRILLING MACHINE. JOHN W. LEE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,471. 2 Claims. (Cl. 77—23.)

1. A machine for drilling a hole through a piece of work and chamfering each end of the hole comprising, in combination, two spaced, stationary end frames; a bearing sleeve attached to and extending from each end frame, said bearing sleeves being coaxially aligned; a ring about each bearing sleeve lamped upon the respective frame by said sleeve, each ring having an internal gear at its end more remote from the frame and an annular cam slot in its outer peripheral surface; a carriage rotatably supported upon each ring; a driving member journalled in each bearing sleeve and attached to the carriage on the ring of the respective frame; a plurality of drill heads on each carriage, equally spaced and movable longitudinally thereto, each drill head having a rotating drill extending toward the drill head on the opposite carriage, corresponding drill head on the respective carriages being in coaxial alignment; a hub member supported between the two carriages; means attaching the hub member to said carriages so that they all rotate in unison; bearing rings about said hub member; annular members upon said bearing rings, the edges thereof engaging the respective carriages tending to rotate said annular members; internal camming surfaces in said members; an internal gear in each one of said



members, similar to the internal gear of the rings attached to the end frames; shafts rotatably carried by the carriages; similar pinions at the ends of the shafts, meshing respectively with the internal gears of the stationary ring and an annular member adjacent thereto thus maintaining said annular members non-rotative; a collar rotatably supported upon the annular members; work holders on said collar, one between each two corresponding drill heads; means operatively connecting the collar with the hub member so that the two rotate together; said means having provisions engaging the caming surfaces of the two annular members which operate the work holders; cam followers in the annular cam slot of each ring carried by a bearing sleeve; means connecting each drill head with a cam follower whereby aligned drill head on the respective carriages are moved toward each other substantially concurrently the caming slot of the one, however, moving it so that its drill cuts its hole and begins to retract before the drill of the opposite head cuts its hole to communicate with the said first drilled portion thereof.

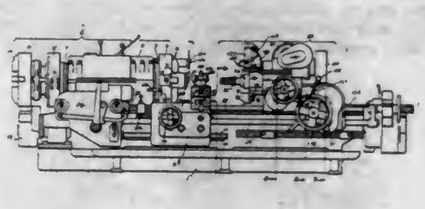
1,883,994. STEP PLATE. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,549. 2 Claims. (Cl. 280—160.)



1. A step plate having a metallic body portion, a metallic channel having upwardly and inwardly extending side flanges, means for detachably securing said channel to

said body portion, a rubber strip having a width greater than the distance between the outer edges of the side flanges adapted to be pressed into the channel between the side flanges, and over said securing means, and a metallic reinforcing strip for the rubber strip on the under surface of said rubber strip.

1,883,995. THREAD MILLING MACHINE. ERNEST J. LEES, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 20, 1929. Serial No. 387,222. 26 Claims. (Cl. 29—27.)

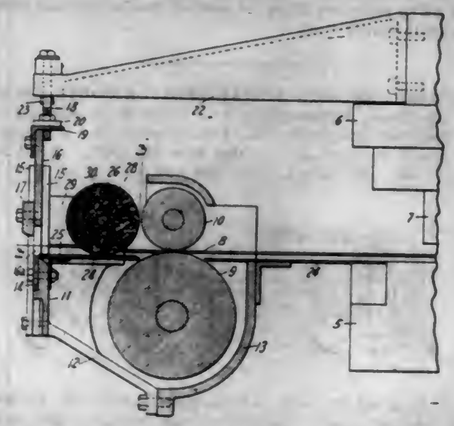


1. In a machine of the class described, a support for a work piece, a tool support, a tool on the support, one of said supports being movable on the machine, means for setting up relative movement between a work piece on the work support and the tool support by movement of the movable support on the machine, means for accurately positioning the tool in working position relative to a work piece on the work support, said means including a stop associated with one of the supports, and a gauge device associated with the other of the supports, an indicator on the gauge device, an indicator operating element of the gauge device adapted to be brought into engagement with the stop upon movement of the movable support, and upon continued movement of the movable support adapted to remain in engagement with the stop and to thereupon indicate upon the gauge the position of the tool.

10. In a machine of the class described, a rotary work spindle, a tool support, a tool on the support, means for rotating the work spindle and concurrently setting up a lead movement of the tool support to effect a thread cutting operation by the tool upon a work piece mounted on the work spindle, means for adjustably positioning the tool longitudinally with respect to the work piece at the beginning of the lead movement, said means comprising a gauge stop provided with a planular surface in a transverse plane on the machine, an indicating gauge device on the tool support movable therewith, a gauge operating element on the device adapted to be moved by longitudinal movement of the tool support into engagement with the said surface, and adapted by subsequent longitudinal movement of the tool support toward and from the work to indicate positions of the tool at, beyond and short of a preselected position, the stop being mounted for movement out of the longitudinal path of the gauge operating element to permit lead movement of the tool support and tool in the direction toward the work piece.

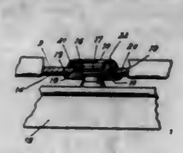
1,883,996. SCRAP CUTTER FOR PUNCH PRESSES AND THE LIKE. GEORGE H. LELAND, Dayton, Ohio, assignor of one-half to The Leland Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 12, 1931. Serial No. 574,550. 5 Claims. (Cl. 164—10.6.)

1. The combination with a machine having means for operating on a strip of material to sever portions thereof, means to eject the strip after it has been so operated upon, and a cutting device arranged beyond said ejecting means to act on the ejected strip, of another device arranged to engage a portion of a strip which is located



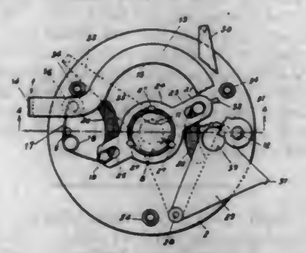
between said ejecting means and said cutting device and adapted to be actuated by a succeeding strip to move said portion of the preceding strip to said cutting device.

1,883,997. TRIPOD SOCKET FOR CAMERAS AND THE LIKE. LEW W. LESSLER, Johnson City, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 522,005. 2 Claims. (Cl. 248—46.)



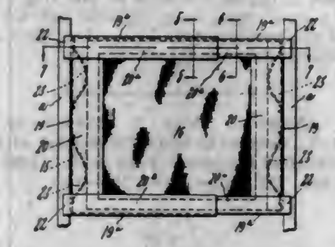
1. A tripod socket comprising a hollow stem having a flange at one end and being tapered at the other end, said flange being provided with an annular recess on the inner surface around the periphery thereof, a ring member adapted to cooperatively co-act with said tapered end of said stem and said stem being threaded interiorly thereof.

1,883,998. CAMERA SHUTTER. LEW W. LESSLER, Johnson City, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 522,006. 6 Claims. (Cl. 95—62.)



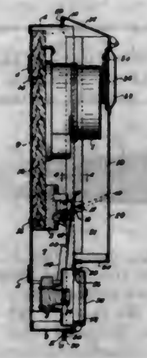
1. A shutter for cameras comprising a pair of pivoted leaves provided with slots, a supporting plate having an exposure aperture, and means on said plate and swingable around said aperture for simultaneously moving said leaves in opposite directions, said slots being so disposed that upon such movement of said leaves past each other the slots register with said aperture.

1,883,999. WINDOW SCREEN. LOUIS LEVI, Winthrop, Mass. Filed Jan. 27, 1932. Serial No. 589,077. 5 Claims. (Cl. 156—38.)



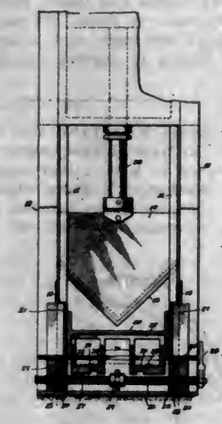
1. A window screen of the character stated comprising an invariable inner frame having a filling of screen fabric, and a horizontally variable sheet metal housing frame surrounding the inner frame and composed of two angular end sections telescopically interengaged to vary the length of the housing frame, said sections including vertical and horizontal members, each having a neck and substantially parallel flanges connected thereby, end portions of the flanges of the vertical members being inserted between and fixed to end portions of the flanges of the horizontal members, the necks of the vertical members constituting elongated runners adapted to contact with and slide freely on the inner edges of vertical screen guides, and the flanges of the horizontal members being extended from the necks thereof to form short spaced apart ears constituting lateral runners adapted to contact with and slide freely on opposite sides of said guides, so that the areas of contact between the housing frame and the screen guides are reduced to a minimum, with a corresponding reduction of friction.

1,884,000. SERVICE BOX. MORGAN J. LEWIS, Massillon, Ohio, assignor to M. J. Lewis Products Company, Canton, Ohio, a Corporation of Ohio. Filed May 3, 1928. Serial No. 274,809. 3 Claims. (Cl. 200—50.)



1. An entrance box arranged to house a switch and fuse block, a cover for the box provided with an offset portion having an opening to afford access to the fuse block, an auxiliary door for normally covering the opening, a reciprocating bar operatively associated with the switch and means operated by the bar for locking the door in closed position and simultaneously preventing removal of the cover when the switch is in closed position.

1,884,001. SHEARING AND CUTTING MACHINE. WALTER V. LEWIS, Scotia, N. Y. Filed May 22, 1930. Serial No. 454,779. 8 Claims. (Cl. 164—58.)

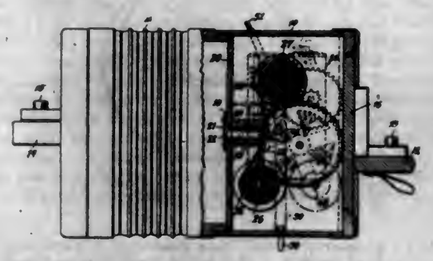


1. In a shearing and cutting machine, supports having cutting blades spaced apart, two pairs of clamping heads disposed for moving on the supports, each pair of clamping heads being spaced apart and the clamping heads having cutting blades disposed substantially in alignment with the first mentioned cutting blades, a movable cutting blade positioned for movement between the first mentioned cutting blades and also between the second mentioned cutting blades, two screws journaled in bearings, each screw having a right hand thread at one end and a left hand thread at its other end, the clamping heads having threaded openings, the threads at one set of ends of the screws meshing in the threaded openings in one set of clamping heads, and the threads at the other ends of the screws meshing in the threaded openings in the other pair of clamping heads.

1,884,002. METHOD OF PRODUCING 1,3 BUTADIENE. CHARLES J. LEYES, Jersey City, N. J. Filed Dec. 28, 1926. Serial No. 157,628. 6 Claims. (Cl. 260—171.)

1. The method of producing 1,3-butadiene which comprises passing, at a temperature not above 400° C., a vinyl compound selected from the group consisting of the vinyl halides, oxide and sulfide, in contact with a heavy metal.

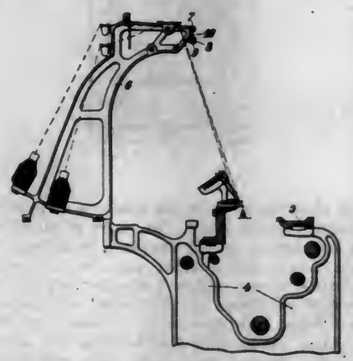
1,884,003. MECHANICAL MUSICAL INSTRUMENT. HARRY LICHTMAN, New York, N. Y. Filed May 21, 1930. Serial No. 454,426. 3 Claims. (Cl. 84—92.)



1. A musical instrument in the form of an accordion having the combination of a casing, a hand wind bellows connected with the casing, a series of reeds within said

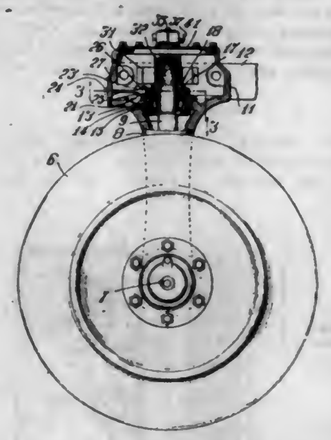
casing which may be vibrated by operating the bellows, said casing having wind passages in registry with said reeds respectively, a perforated music record sheet to control said passages to cause the vibration of said reeds to obtain the desired chords and tunes, power means within the casing operable to cause the movement of said sheet in relation to the reeds, and means projecting exteriorly of said casing to control the operation of the power means.

1,884,004. STRAIGHT KNITTING MACHINE ATTACHMENT. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany, a Corporation of Germany. Filed Apr. 14, 1931, Serial No. 530,093, and in Germany Aug. 22, 1930. 1 Claim. (Cl. 66—82.)



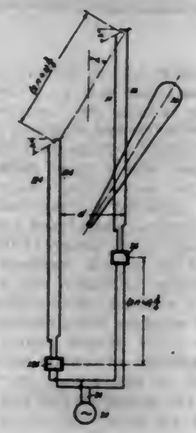
In a straight knitting machine the combination of a gallows, hanger attached thereto and a welt hook bar detachably supported in idle position by said hangers with its welt boks facing toward and close to the bar for protection of the hooks.

1,884,005. TRACTOR. JOHN T. LIGGETT, Waterloo, Iowa, assignor to John Deere Tractor Company, Waterloo, Iowa, a Corporation of Iowa. Filed May 29, 1929. Serial No. 366,913. 3 Claims. (Cl. 280—92.)



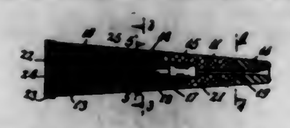
1. In a tractor of the class described, a vertically disposed hollow spindle, a gear box formed integral with and disposed at the top of said spindle and having an opening in one of its side walls, a collar formed in the inside face of said spindle at the junction of said box and spindle, a bearing supporting ring in said collar, a bearing eccentrically mounted in said ring, a shaft disposed in said spindle and projecting through said bearing into said gear box, means including teeth on said ring for rotating it to cause said eccentric mounting of the bearing to move the end of the shaft disposed in the gear box laterally in that box, a locking plate having two bolt holes and a pawl projecting from the plate and offset from the half way point between said bolt holes a distance equal to one half the distance between adjacent teeth on said ring, said pawl being projected through the opening in said gear box side wall to engage the teeth on said ring to lock it, and said locking plate being turnable end for end to adjust said ring within a distance equal to one half of the distance between its teeth.

1,884,006. ANTENNA. NILS E. LINDENBLAD, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,445. 29 Claims. (Cl. 250—11.)



17. A directional antenna comprising a collaterally spaced pair of simple linear conductors which are long, relative to the working wave length, and which are so staggered, longitudinally that wave action in one pair of opposite critical directions is strengthened, while wave action in the conjugate pair of opposite critical directions is weakened, and means for energizing said wires in phase opposition.

1,884,007. COMBINED CIGARETTE RECEPTACLE AND PIPE. BÉLA A. LOBLO, New York, N. Y. Filed May 25, 1931. Serial No. 539,702. 6 Claims. (Cl. 131—22.)



1. A smoking tube, comprising a tubular member having a coaxial passage and an end adapted to engage in one's mouth, the other end being formed with a tobacco chamber diverging from the inner to the outer end and a wire mesh cap removably mounted upon the tubular member so as to close the tobacco chamber.

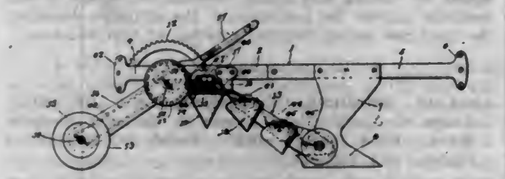
1,884,008. PUMP. HOBART M. LOCKHART, North Wilkesboro, N. C. Filed Dec. 5, 1930. Serial No. 500,388. 1 Claim. (Cl. 74—14.)

In combination with a pump and transmission mechanism including a casing, a vertically arranged rod having its upper end connected with the casing and its lower end with the pump, a brace connected with the casing at that side which is opposite to the side to which the rod is connected, said brace extending diagonally and having its lower end connected with the lower end of the rod, a cross



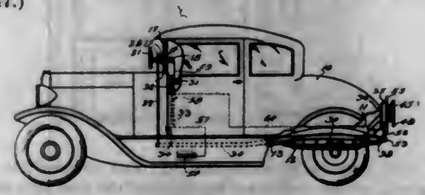
head slidably arranged on the rod and having a projection at its upper end and a projection at its lower end, means for connecting the piston rod of the pump to the lower projection, a pitman connected to the upper projection and to the transmission means.

1,884,009. PLOW. ALBIN PAULUS LOFSTRAND, Chicago, Ill. Filed Feb. 9, 1932. Serial No. 591,898. 6 Claims. (Cl. 97—119.)
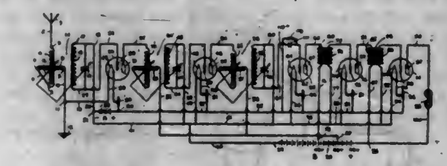


1. In a plow, a rollaway mold board including a set of rotatable, conoidal shaped soil abutting elements, arranged one above the other, angularly disposed with respect to each other and each including a rotating shaft therefor arranged axially thereof and extending rearwardly therefrom, means for simultaneously driving said shafts, and a combined suspension and bearing device for and carrying each element.

1,884,010. DIRECTION INDICATOR FOR VEHICLES. EVERETT E. LOOTENS, Council Bluffs, Iowa. Filed June 24, 1930. Serial No. 463,524. 1 Claim. (Cl. 116—47.)



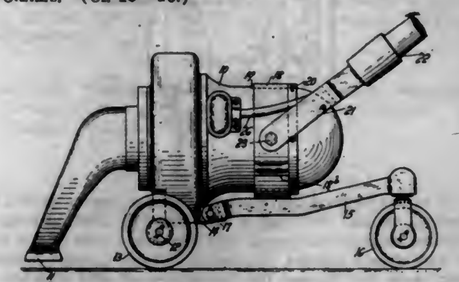
An indicator for vehicles comprising a front signal element, a rear signal element, a lever adapted for pivotal mounting upon the vehicle between the elements, a connection between the opposite ends of said lever and the respective front and rear elements, and manual means connected to the lever for operating the lever and simultaneously adjusting the front and rear elements.

1,884,011. RADIO OSCILLATION SYSTEM. FRANCIS L. LORD, Newark, N. J. Filed Feb. 1, 1926, Serial No. 85,294. Renewed July 9, 1932. 7 Claims. (Cl. 179—171.)



1. In a multi-stage transformer coupled radio frequency system, each transformer comprising a relatively fixed primary coil, a relatively fixed secondary coil, and a relatively movable coil connected electrically in series with one of said relatively fixed coils, means for mounting said relatively movable coil to rotate said coil at one position of its movement substantially coaxially with said relatively fixed primary coil, said relatively movable coil being throughout its range of movement in inductive relation with said relatively fixed coils, a tuning condenser for each radio frequency stage, and means for mounting and mechanically connecting the shafts of said tuning condensers respectively with said relatively movable coils to attain an effective gearing ratio of two to one for effecting movement of said relatively movable coil to vary the total inductance between each relatively movable coil and its associated relatively fixed coils progressively increasingly in the same sense throughout the full range of such movement and progressively decreasingly in the same sense throughout the range of the reversed movement.

1,884,012. VACUUM CLEANER. NORTH H. LOSEY, Akron, Ohio. Filed Oct. 30, 1926. Serial No. 145,216. 4 Claims. (Cl. 15—16.)

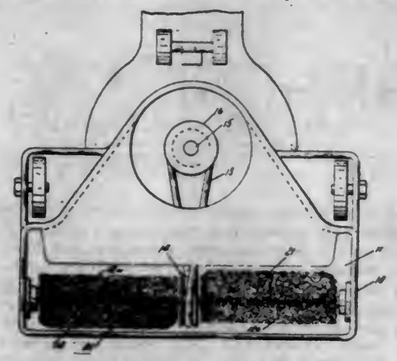


1. A vacuum cleaner comprising a casing having a nozzle projecting forwardly of the casing, and means for supporting the casing including a spindle on which the forward portion of the casing is pivoted, rollers on the spindle, an arm pivoted at one end on the casing and extending rearwardly thereof, means yieldingly urging said arm toward the casing, a caster supporting the free end of said arm, and a cam member journaled on the rear portion of the casing and rotatable thereabout transversely of said arm, and having a cam portion engaging said arm and adapted to move the latter relatively of the casing, said cam portion being provided with end abutments adapted to limit the movement of the cam transversely of said arm, said vacuum cleaner having an operating handle connected thereto through the cam and adapted to rotate the cam on the casing by rotation of the handle on its own longitudinal axis to raise or lower the nozzle.

1,884,013. SUCTION CLEANER. NORTH H. LOSEY, Akron, Ohio. Filed Apr. 20, 1927. Serial No. 185,254. 5 Claims. (Cl. 15—8.)

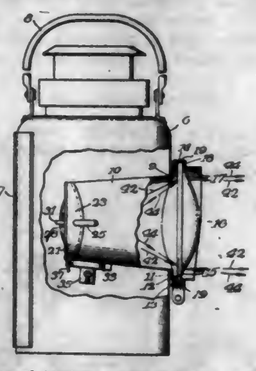
1. A suction cleaner having a suction nozzle provided with an inlet, a rotor above the inlet, a brush rotatably

mounted on the rotor so as to be operable in the inlet, the only axis of rotation of the brush being coincident with the axis of the rotor, said brush having a pair of equal



sections, the peripheries of said sections being oppositely eccentric to the axis of the rotor, and means for driving said rotor.

1,884,014. SIGNAL LAMP. FRANK J. LOSS, Detroit, Mich. Filed Aug. 10, 1927. Serial No. 211,872. 1 Claim. (Cl. 177—329.)



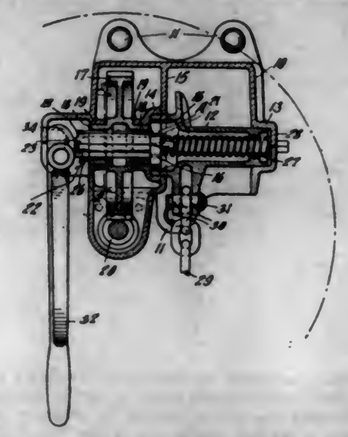
A railway signal lantern comprising a casing having an opening in one side and a door opposite said opening, a tubular member secured in said opening, a lens in the outer end of said tubular member, a movable closure opposite said door for closing the inner end of said member, a reflector, means adjustably mounting said reflector on said closure whereby the same may be adjusted to a position having a common focus with said lens, an electric lamp, means for mounting said lamp on said tubular member and means for adjusting said lamp longitudinally and transversely of the axis of said reflector for positioning said lamp on the common focus of said lens and reflector.

1,884,015. RIGIDIFYING COMPOSITION. BORIS N. LOUGOVOY, Montclair, N. J., assignor to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed Jan. 18, 1928. Serial No. 247,759. 4 Claims. (Cl. 167—87.)

4. As a hair dressing composition, a solution comprising a proteid of the gliadin-zein group, alcohol and water.

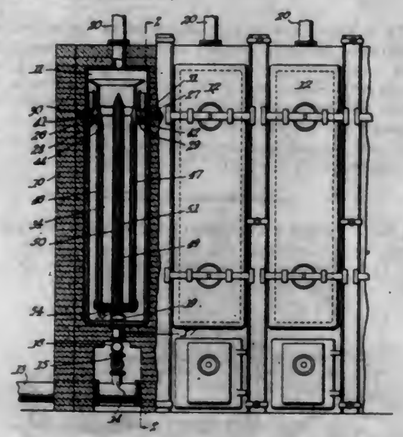
1,884,016. CLUTCH MEANS FOR HAND BRAKES. HARVEY J. LOUNSBURY, Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 25, 1931. Serial No. 539,771. 4 Claims. (Cl. 192—67.)

1. In clutch means for hand brake mechanisms including a rotary driving member and a rotary chain-tightening member which are coaxial, the combination with a clutch element slidable axially within one of said members, said element having clutch projections extending lengthwise of the same engaging longitudinally extending interior grooves formed in the member in which said element is slidable, said clutch projections having shouldered engagement with the walls of said grooves along surfaces extending lengthwise thereof and radial to the



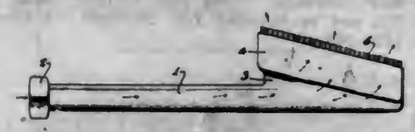
longitudinal axis of said clutch element, whereby said element and member are rotatable in unison; of a clutch head rigid with said element, said clutch head and the other member having cooperating clutch formations thereon; a spring yieldingly holding said clutch head engaged with said last named member; and manually operated lever means for sliding said clutch element lengthwise of said members against the resistance of the spring to disengage the head and permit relative rotation of said members.

1,884,017. PROCESS OF DISTILLATION OF COAL. JAMES E. LOUTTIT and ELMER H. RECORDS, Spokane, Wash. Filed Jan. 14, 1929. Serial No. 332,327. 2 Claims. (Cl. 202—15.)



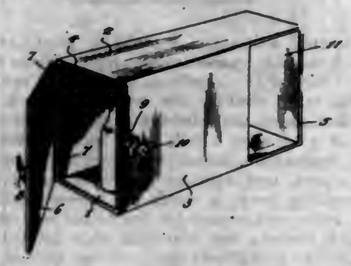
1. The process of producing coke and combustible gas from coal, which comprises subdividing the coal into small masses in the form of stationary layers or slabs, confining said slabs in a retort in a mutually isolated arrangement, passing steam as the sole reducing agent directly and rapidly through each of said masses by separate conduit means, and said steam being at a temperature of not less than 700 degrees F. and at a pressure of from 1 to 5 pounds per square inch.

1,884,018. BRUSH FOR WASHING AUTOMOBILES. IRA J. LOWDER, Charlotte, N. C. Filed Mar. 4, 1932. Serial No. 596,866. 1 Claim. (Cl. 15—127.)



An automobile cleaning device of the type described, having in combination a hollow handle, means for attaching the handle to a hose, an open channeled holder for a wicking element, said holder consisting of spaced rims, the inner rim having reversely bent end flanges, and a wicking constituting the cleaning element and adapted to be stretched to place it over the reversely bent end flanges and between the aforesaid rims, an offset aperture member carrying the aforesaid channeled holder and in open communication with the hollow handle to permit water to flow to the wicking.

1,884,019. BOTTLE BOX. JESSE L. LOWMAN, Chillicothe, Ohio. Filed June 15, 1931. Serial No. 544,531. 2 Claims. (Cl. 232—41.)



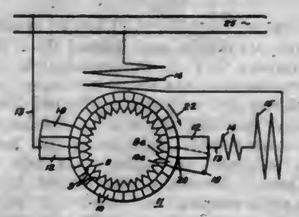
1. A bottle receptacle comprising a hollow body open at one end, a barrier extending transversely of the body and dividing the body into front and rear compartments there being an entrance opening communicating with the rear compartment, said barrier being formed of resilient material and having one edge thereof secured to one wall of the body and its other edge spaced from another wall of the body whereby a bottle introduced through the entrance opening into the rear compartment may be forced past the barrier into the front compartment, and a closure for the open end of the body.

1,884,020. COMBINED REFLECTOR AND LIGHT FOR AUTOMOBILES AND THE LIKE. RICHARD W. LUCE, Mountainside, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 30, 1929. Serial No. 389,332. 4 Claims. (Cl. 240—41.36.)



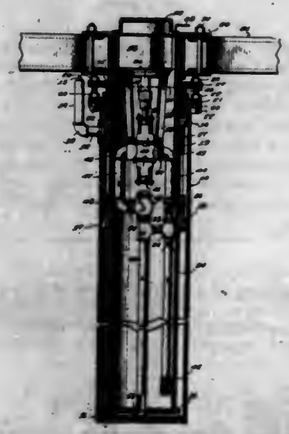
1. In a device of the character described, the combination of a triple reflector having sides which are arranged in approximately right angular relation to each other, the inner surfaces of which are light reflecting, said reflector having an opening in the rear portion thereof and an electric light supported in the rear of said reflector, the filament of which is located laterally of said opening, whereby a portion of the rays of light which radiate from the said filament are intercepted by one of the sides of said reflector and prevented from escaping from the front of said device to thereby subdue the glare of the light therefrom and other portions of the rays of light which radiate from the said filament impinging upon other portions of the reflector and being thereby reflected from the said device.

1,884,021. COMMUTATING DEVICE FOR DYNAMO-ELECTRIC MACHINES. LEON R. LUDWIG and JOSEPH SLEPIAN, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,423. 21 Claims. (Cl. 171—228.)



1. In a commutator-type dynamo-electric machine having a plurality of commutator-brush terminals, the combination, with each terminal, of one or more main brushes disposed in an axial plane and connected to said terminal, and a composite auxiliary brush having two portions on opposite sides of the trailing brush-tip of the main brush or brushes, said two portions being joined by a critical-voltage, imperfect-contact device having the property of carrying all but the smallest currents at a nearly constant voltage-drop.

1,884,022. VEHICLE LIFT. PETER J. LUNATI, Memphis, Tenn. Filed Oct. 6, 1927. Serial No. 224,476. 12 Claims. (Cl. 188—9.)



1. A hydraulic lift comprising a hollow structure including a pair of members each adapted to contain a liquid, vehicle supporting means arranged on one of said members, said last named member being vertically movable, and motor driven pump means arranged wholly within said structure and fixed to said movable member to move therewith, said pump means being adapted to transfer liquid under pressure from the movable member to the other member to effect elevation of the former, the motor of

said pump means being arranged above the level of the liquid, the pump of said last mentioned means being arranged below the level of the liquid when said vertically movable member is in lower position.

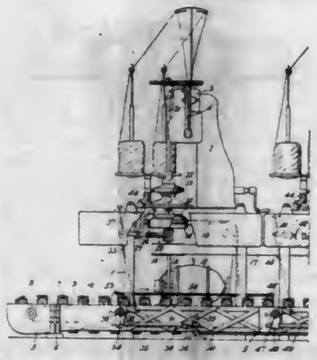
1,884,023. PRODUCTION OF PLASTIC MASSES. MARTIN LUTHER, Mannheim, and ROBERT HELD, Oppau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 3, 1929, Serial No. 368,185, and in Germany June 16, 1928. 15 Claims. (Cl. 260—8.)

1. The process for the production of plastic masses which comprises heating the liquid acid portion, insoluble in petroleum ether, of a product of the destructive oxidation of paraffin hydrocarbons, with an aliphatic compound containing at least two hydroxyl groups in its molecule to a temperature above about 150° C.

1,884,024. PRODUCTION OF PLASTIC MASSES. MARTIN LUTHER, Mannheim, and ROBERT HELD, Oppau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed June 3, 1929, Serial No. 368,185, and in Germany June 16, 1928. Divided and this application filed July 19, 1930. Serial No. 469,250. 14 Claims. (Cl. 260—8.)

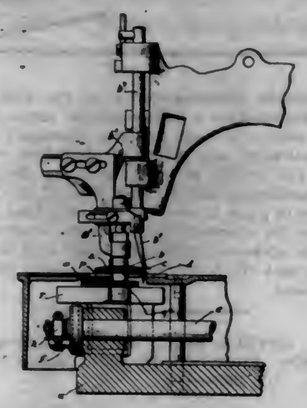
1. The process for the production of plastic masses which comprises heating the liquid acid portion, insoluble in petroleum ether, of a product of the destructive oxidation of paraffin hydrocarbons, with a polyhydric alcohol to a temperature above about 150° centigrade in the presence of a sulphur-bearing vulcanizing agent.

1,884,025. FILLED BAG CLOSING MACHINE. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Oct. 24, 1928, Serial No. 314,697, and in Germany Dec. 12, 1927. 7 Claims. (Cl. 112—11.)



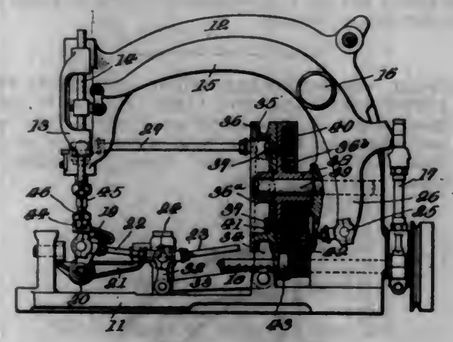
1. A filled bag closing apparatus including two independent sewing units, a single conveyor for conveying filled bags to and past said sewing units, a driving mechanism, a clutch for connecting said driving mechanism to said conveyor, and independent clutches for connecting said driving mechanism to the sewing units, a control mechanism at each sewing unit station for connecting the conveyor to and disconnecting the conveyor from the actuating mechanism and for connecting the sewing unit only at said station to said actuating mechanism.

1,884,026. FEEDING MECHANISM FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed July 1, 1929, Serial No. 375,038, and in Germany Dec. 29, 1928. 6 Claims. (Cl. 112—203.)



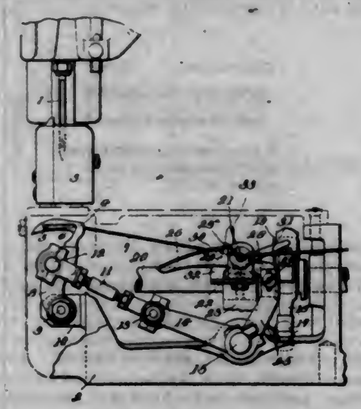
1. A feeding mechanism for sewing machines including a work support, cooperating clamping plates for feeding and directing the article to be stitched, said clamping plates being mounted for rotation about a vertical axis at one side of the stitching point whereby the edge portion of a circular article may be presented to the stitching mechanism, means for positively rotating one of said plates, said rotating means including a series of intermeshing gears, a clutch for intermittently rotating said gears, and means for supporting said gears and said clutch whereby said clamping plate rotated thereby may be shifted to different set positions without disturbing the connection between said gears and clutch.

1,884,027. ORNAMENTAL STITCH SEWING MACHINE. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Apr. 1, 1930, Serial No. 440,782, and in Germany May 4, 1929. 2 Claims. (Cl. 112—159.)



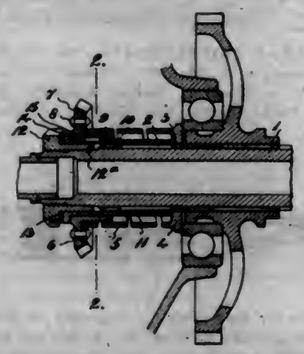
1. The combination of a needle, means for supporting said needle whereby the same may be shifted laterally, a looper cooperating with the needle, means for oscillating said looper and for permitting the oscillating position of said looper to be shifted, a feed dog, and mechanism for shifting the needle reciprocating position and the looper oscillating position laterally of the line of feed, including a sectional pattern drum, one of said sections being detachably connected to the other and having a pattern cam formed therein, means actuated by said pattern cam for controlling the stitch forming position of the needle and looper, the other section of said drum having an internal driving gear, an actuating shaft, and interchangeable gears between the actuating shaft and the internal gear of the drum.

1,884,028. THREAD CONTROLLER FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed July 22, 1930, Serial No. 469,766, and in Germany July 31, 1929. 5 Claims. (Cl. 112—241.)



1. The combination of a thread carrying looper, a cross shaft, a main shaft, means operated by the main shaft for oscillating said cross shaft, means operated by the cross shaft for oscillating said looper, a thread controlling member oscillated by said cross shaft and having a shoulder for engaging and taking up the looper thread and a retaining surface associated therewith, spaced thread guides for directing the thread into the path of said shoulder, and a stripper finger for stripping the thread from said shoulder onto said retaining surface.

1,884,029. SPRING DRIVE OR COUPLING FOR THE TRANSMISSION OF POWER. EDWARD STEPHEN LUKES, Birmingham, England, assignor to Wolseley Motors 1927 Limited, Birmingham, England. Filed Apr. 2, 1931, Serial No. 527,152, and in Great Britain July 18, 1930. 6 Claims. (Cl. 64—100.)



1. A spring coupling for the transmission of power, comprising a driving shaft, a driven member, a spring element, initally under torsional stress, one end of which is connected with the driving shaft while the other end is connected to the driven member, an inner sleeve on the driving shaft, a lost-motion connection between the sleeve and the driven member, and means for coupling the inner sleeve to the driving shaft so that the angular relationship between the sleeve and the driving end of the spring element may be varied.

1,884,030. CIGARETTE CONTAINER. JOHN W. MADDOX, Marion, Md. Filed May 15, 1930. Serial No. 452,765. 3 Claims. (Cl. 229—11.)



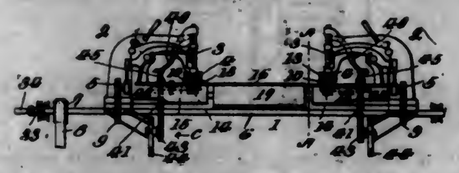
1. A receptacle comprising a jacket open at its top, a container slidably mounted within the jacket, said jacket having its lower portion formed with an opening at one side of the container, and means to elevate the container and project said container through the open top of the jacket, said means consisting of a shaft extending between front and rear walls of the jacket, and a strip carried by the shaft and having one end portion projecting through the opening to form a handle and its other end portion extending from the shaft transversely of the jacket and constituting an arm adapted to bear against the bottom of the container and project said container upwardly when the handle is pressed downwardly.

1,884,031. LINGERIE HOLDER. OTTO MAHLE, Elmhurst, N. Y. Filed Dec. 11, 1931. Serial No. 580,297. 3 Claims. (Cl. 24—81.)



2. A lingerie holder comprising an integral base of sheet material having spaced pairs of pintle ears, said base being twisted intermediate the pairs of ears to lie permanently in substantially perpendicular planes, and spring urged clamping members pivoted each to one of the pairs of ears, one end of the base and the corresponding clamping member having complementary garment engaging lateral extensions, said extensions having their edges bent toward each other into substantial engagement.

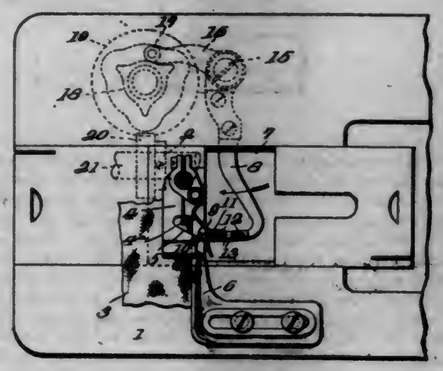
1,884,032. APPARATUS FOR STITCHING BAG MATERIAL. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filed July 2, 1928, Serial No. 289,787, and in Germany Oct. 11, 1927. 8 Claims. (Cl. 112—10.)



1. An apparatus for sewing bag blanks comprising sewing machines for simultaneously stitching the opposite edge portions of the blanks, an intermittently oper-

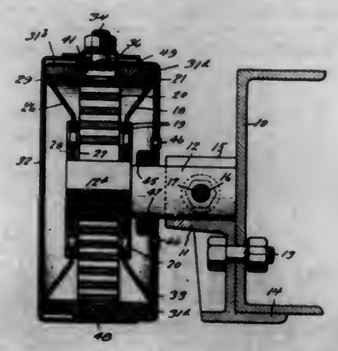
ated puller unit associated with each sewing machine and operating to insure an even feed of both edge portions of the blank and a uniform placing of the stitches relative to the edges thereof, and an intermittently operated conveyor located between said machines for feeding the blanks to the sewing machines and away from the puller units, said conveyor having means thereon to aid in the positioning of the blanks thereon so as to be properly presented to the sewing machines.

1,884,033. MACHINE FOR EDGING FABRIC SECTIONS. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filed Nov. 14, 1930, Serial No. 495,708, and in Germany Dec. 3, 1929. 5 Claims. (Cl. 112—160.)



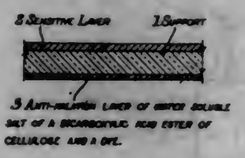
3. In a sewing machine the combination of a needle, a cord laying device having a guiding eye for a cord, a fabric pusher attached to the cord laying device and having a fabric engaging face adjacent said eye, means for moving said cord laying device and pusher gradually toward and from the line of stitching during the stitching of the fabric section for shaping the edge of the fabric section into scallops and for laying cord along said scallops.

1,884,034. SHOCK ABSORBER. BONNIE L. MALLORY, Cleveland Heights, Ohio, assignor to The Cleveland Shock Absorber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 18, 1930. Serial No. 496,408. 9 Claims. (Cl. 267—10.)



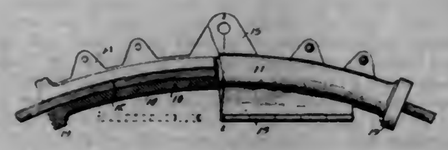
1. In a shock absorber a post non-rotatably mounted with respect to a vehicle member, said post having a polygonal portion and a circular portion, drum means non-rotatably supported on said polygonal portion, a housing radially and rotatably movable with respect to said post, a brake band between the drum means and housing, spring means causing gripping of said band between said housing and drum means, and a strap adapted to be connected to another vehicle member and to rotate the housing with respect to the drum, said housing enclosing said spring and drum means and having a part in sealing relation around said circular portion of the post at all times.

1,884,035. PHOTOGRAPHIC FILM WITH ANTIHALATION COATING. CARL J. MALM, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 20, 1932. Serial No. 594,261. 4 Claims. (Cl. 95—9.)



1. A colored sheet comprising a support and a colored layer thereon, the colored layer comprising as a carrier material a water soluble salt of a dicarboxylic acid ester of cellulose.

1,884,036. CUSHIONED CABLE SUPPORT. ADOLPH W. MALONE, Fillmore, Utah, assignor of one-half to Albert H. Vestal, Anderson, Ind. Filed Nov. 14, 1931. Serial No. 575,127. 5 Claims. (Cl. 248—31.)



1. A support for a cable comprising bracket having flared ends, a resilient arcuate cushion having flared ends carried by said bracket, said cushion being split along its upper surface and adapted to support an electric cable, and integral means for suspending the bracket from a fixed support, said means permitting rocking of the bracket in a vertical plane, substantially as set forth.

1,884,037. DEAD END SUPPORTS FOR ELECTRIC CABLES. ADOLPH W. MALONE, Fillmore, Utah, assignor of one-half to Albert H. Vestal, Anderson, Ind. Filed Nov. 14, 1931. Serial No. 575,130. 5 Claims. (Cl. 24—135.)



5. A device for dead ending a long span of wire comprising a bracket having a spool secured at one end and adapted to be pivotally attached at the other to an insulating member, the free end of said wire being wound about said spool and means positioned intermediate said pivotal point and said spool for securing said end in fixed position, said spool being covered with a resilient material for cushioning the effect due to movement of said span of wire and to prevent injury thereto, substantially as set forth.

1,884,038. WATERPROOFED FIBROUS PRODUCT. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Mansons Chemical Company, Montclair, N. J., a Corporation of New Jersey. Original application filed July 8, 1926, Serial No. 121,260. Divided and this application filed Apr. 25, 1927. Serial No. 186,602. 4 Claims. (Cl. 92—21.)

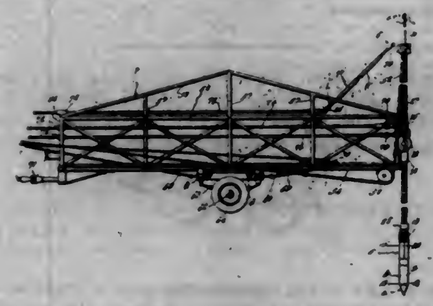
1. A fibrous product made from a pulp carrying a dispersion of encysted water-repellant substance.

1,884,039. PIPE. JOHN B. MARIN, Douglas, Territory of Alaska. Filed June 27, 1931. Serial No. 547,414. 1 Claim. (Cl. 131—12.)



A smoking pipe comprising a bowl, a stem on said bowl and having a collecting chamber, a mouth piece connected to the stem, a tube in communication with the bore of the mouth piece and extending well into the chamber and spaced from the walls thereof, said stem having an arcuate-shaped passage communicative at one end with the bowl and the other end communicative with the chamber adjacent the mouthpiece and spaced a considerable distance from the free end of the tube.

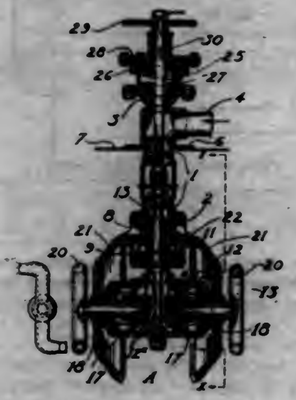
1,884,040. OIL WELL CONTROL. EVA MARLER, Oklahoma City, Okla., assignor to Oscar John Grace and Estella F. Grace, Oklahoma City, Okla. Filed Jan. 5, 1932. Serial No. 584,843. 6 Claims. (Cl. 166—15.)



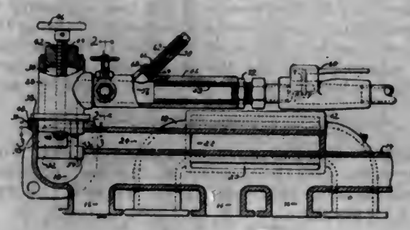
1. A machine of the character described comprising a frame, a truck, means whereby the truck can be adjusted longitudinally beneath the frame, a well closing device, and means on one end of the frame whereby the well closing device can be driven into a well.

1,884,041. TANK WASHING MACHINE. EDWARD MARLEY, New York, N. Y., assignor to Standard Shipping Company. Filed Oct. 16, 1929. Serial No. 399,895. 1 Claim. (Cl. 299—69.)

A cleaner comprising a tube for conveying fluid, a distributing assembly for the fluid mounted for rotation axially of the tube and having fluid communication therewith, the assembly including discharge nipples rotatable about an axis at an angle to the axis of the tube, means operated by the nipples for rotating the assembly at a faster speed than the nipples, a member non-rotatably associated with the assembly and extending through the tube, and a friction brake including friction discs associated with the member and tube for controlling the speed of rotation of the assembly.



1,884,042. INDICATOR. ELMER E. MARLIN, Detroit, Mich. Filed Dec. 20, 1926. Serial No. 156,030. 7 Claims. (Cl. 73—51.)

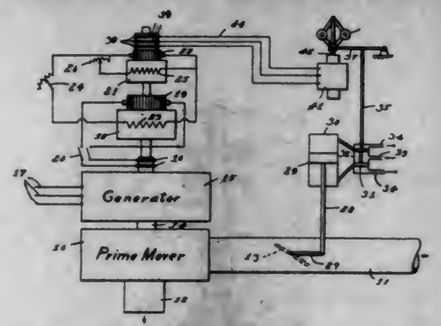


1. In a device of the class described comprising, a conduit adapted for communication with an open passage, means for supplying a current of air through said conduit and passage, means for indicating a back pressure caused by restricting the flow of said air current, and means for varying the amount of pressure adjacent said indicating means.

1,884,043. DRIVE FOR THE SPEED GOVERNOR OF A PRIME MOVER. IRL C. MARTIN, Rockford, Ill., assignor to Woodward Governor Company, Rockford, Ill., a Corporation of Illinois. Filed May 22, 1930. Serial No. 454,538. 13 Claims. (Cl. 290—40.)

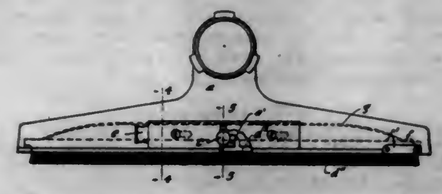
12. The combination with a prime mover and a generator driven thereby, of an exciter for the generator comprising an armature driven in timed relation with the prime mover, means on said armature for A. C. and D. C. gen-

eration, the direct current serving to excite the generator, the alternating current being of a frequency bearing a predetermined relation to the speed of the prime mover, a cen-



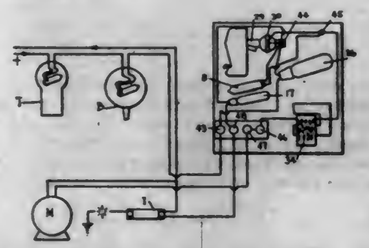
trifugal type speed governor for controlling the operation of the prime mover, and a motor operated by the alternating current and serving to drive the governor.

1,884,044. BRUSH ATTACHMENT FOR SUCTION CLEANER NOZZLES. EUGENE F. MARTINET, Cleveland, Ohio, assignor to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 1, 1927. Serial No. 216,849. 6 Claims. (Cl. 15—158.)



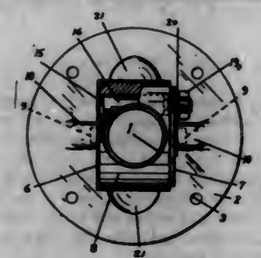
1. The combination with a suction cleaning tool having walls forming an elongated mouth, of a brush-housing positioned therein against one mouth wall completely to narrow the effective mouth of the tool, a floating brush disposed within said housing and mouth, a spring therein tensioned against the brush to press it against the surface being cleaned, and the brush being loosely mounted in the housing for rocking movement within the housing.

1,884,045. ELECTRICALLY OPERATED FLUID FUEL BURNER CONTROL. IRA E. MCCABE, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,684. 16 Claims. (Cl. 158—28.)



1. An electrically operated fluid fuel burner control included in the electric circuit operating the fuel feeding motor, said control including a motor switch, a holding magnet, both connected in series in the circuit between the motor and source of electricity, and an ignition device having a switch connected in parallel with the motor, a reset latch for closing the motor switch, thermally actuated means responsive to the presence or absence of the burner flame, which when cold allows the ignition switch to close and cooperates with the reset latch to allow a manual closing of the motor switch, means actuated by the energization of the holding magnet to hold the motor switch in closed position, said thermally actuated means when heated by the burner flame opens the ignition switch, and locking means actuated by the energization of the holding magnet for holding the ignition switch open, said holding and locking means actuated by the holding magnet acting when the magnet is deenergized to unlock the ignition switch and release the motor switch to open independently of the latch, and means carried by said thermally actuated means in moving from hot to cold position normally to engage and return the motor switch to closed position independently of the latch.

1,884,046. ADJUSTABLE MEANS FOR MOUNTING ELECTRICAL CONTROLS. IRA E. MCCABE, Chicago, Ill. Filed Dec. 22, 1930. Serial No. 503,976. 5 Claims. (Cl. 285—30.)



1. An adjustable mounting for thermostatic controls upon furnaces, said control having a cylindrical member passing through the wall thereof, including an attaching plate, a cylindrical receiving member having a diametrical passage way, adapted to receive the cylindrical member of the control, rotatably mounted upon said plate, and means in adjustable engagement with said plate and carried by the receiving member for positioning the cylindrical member therein and securing the receiving member against rotation.

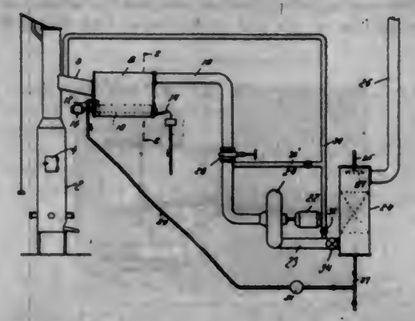
1,884,047. VISOR. ROBERT K. MCCLELLAN, Los Angeles, Calif. Filed May 20, 1931. Serial No. 538,819. 1 Claim. (Cl. 2—12.)



In a visor of the character described, a blank having openings adjacent its ends a resilient wire extending through said openings, said wire having its end portions bent so as to form temple portions, an offset formed in said wire at the junction of each of the temple portions and the wire, and means for securing the medial portion of said blank to said wire, said means comprising spaced openings adjacent the medial portion, and a slot extending tangentially between said openings.

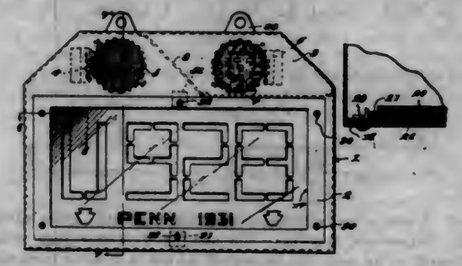
1,884,048. FUME ARRESTER FOR CUPOLA FURNACES. GREGORY EDWARD MCCLOSKEY, South Orange, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1930. Serial No. 505,281. 19 Claims. (Cl. 266—17.)

1. The combination comprising a cupola furnace having a charging opening through which fuel and metal to be melted are introduced into the furnace, a conduit through which fumes produced in the furnace pass therefrom and



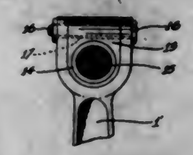
means in said conduit for controlling the passage of fumes therethrough to substantially obviate the admission of air into the furnace through the charging opening.

1,884,049. ILLUMINATED LICENSE TAG AND HOLDER. FRANK J. MCCORMACK, Lansdale, Pa. Filed July 14, 1931. Serial No. 550,768. 3 Claims. (Cl. 40—133.)



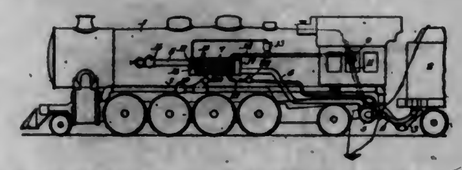
1. An illuminated license tag and holder comprising a casing, a tag holding frame provided with tag supporting runners extending longitudinally thereof, an opal plate, a stenciled tag and a clear transparent cover plate mounted upon said tag supporting runners, means carried by said casing for supporting said tag supporting frame flush with the outer face of said casing, and abutment means engaging the ends of said plates for holding said frame against longitudinal movement within said casing.

1,884,050. CONNECTING ROD CONSTRUCTION. JAMES A. MCCORMICK, Morris, Ill. Filed Oct. 10, 1930. Serial No. 487,860. 1 Claim. (Cl. 74—108.)



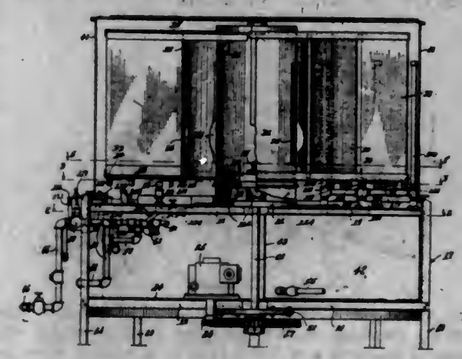
A connecting rod provided with a bifurcated head, a block pivotally connected with the head having a transverse opening and having a bearing relation with the head, and a piston pin provided with a concentrically and rotatably mounted sleeve, said pin projecting through the transverse opening in the block, the block and said bifurcated head being provided with aligned openings, a bolt extending through said openings and being provided with a rotatably mounted sleeve disposed in the opening in said block, said bolt passing through the aligned openings for holding the block in assembled relation with the bifurcated head, said second-mentioned sleeve passing through the opening of the block and forming a bearing for the block, said block being provided with a convex bearing surface, said connecting rod being provided with a concave bearing surface in sliding engagement with the convex bearing surface of said block.

1,884,051. BOILER FEED APPARATUS. VARL E. MCCOY, Milwaukee, Wis., assignor to Lyndon F. Wilson, Chicago, Ill. Filed Feb. 13, 1930. Serial No. 428,011. 6 Claims. (Cl. 122—441.)



4. In combination with a locomotive boiler and a tender tank for storing feed water, a pump and pipe line constructed for delivering water from said tank into the boiler, means for utilizing the cylinder exhaust steam for preheating the water in said tank, an auxiliary preheating chamber disposed in said pipe line adjacent the inlet thereof into the boiler and a pipe for supplying steam to said chamber for preheating of the water therein, and means including a thermostatic element disposed in said chamber constructed for thermostatically controlling starting of the pump to prevent delivery from the chamber into the boiler of water having less than a predetermined temperature.

1,884,052. CAN WASHING MACHINE. CHARLES F. MCEWAN, Chicago, Ill., assignor to Harry D. Lathrop, Chicago, Ill. Filed Jan. 30, 1930. Serial No. 424,514. 13 Claims. (Cl. 141—7.)



3. A rotary can washing machine comprising, in combination, a drive shaft provided with a drive disc, a rotary can carriage having a driven disc adapted to frictionally engage said drive disc whereby the rotary travel of said carriage may be arrested independently of said drive disc, an arresting member adapted to periodically engage said carriage, a rest period control member adapted to periodically engage and release said arresting member, means for selectively controlling the frequency of the operation of said control member comprising means upon said drive mechanism adapted to engage said control member upon one revolution of said drive disc in one selected position and adapted to engage said control member twice upon each revolution of said drive disc in a second selected position and adapted to engage said control member three times upon each revolution of said drive disc in a third selected position, cleansing devices disposed circumferentially upon said machine, a plu-

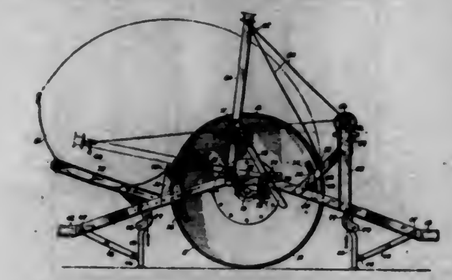
rality of fluid supply valves for controlling the supply of fluid to said cleansing devices, a pivotally mounted plate member constructed and arranged to operate said valves, and means upon said carriage for actuating said plate member to open said valves during each rest period of said carriage.

1,884,053. FISH LURE. ROBERT MCGARRAUGH, San Antonio, Tex. Filed Mar. 20, 1931. Serial No. 524,132. 10 Claims. (Cl. 43—42.)



1. In a fish lure, a body having a front head-simulating portion and a peripheral groove at the rear end of said head-simulating portion, said groove extending at least partially around said body and having front and rear walls both inclined to the length of the body, a multiplicity of U-shaped hairs having their free ends spaced substantially equidistantly from their bight portions, said bight portions being disposed in said groove, and a tight binding around said body and extending through said bight portions, the opposite end portions of said hairs projecting laterally from said body, giving the appearance of a collar at the rear end of said head-simulating portion and obscuring the portion of said binding which extends through said bight portions of the hairs.

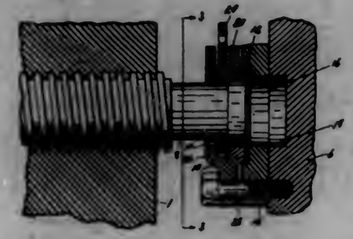
1,884,054. CONVEYER. NEIL CHARLES MCGINNIS, Memphis, Tenn., assignor to Neil C. McGinnis, jr., Memphis, Tenn. Filed Jan. 2, 1929. Serial No. 329,827. 11 Claims. (Cl. 94—44.)



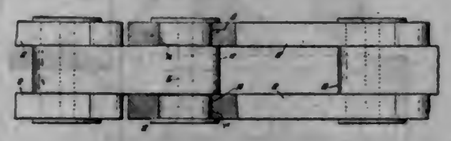
1. A conveyer having the combination of a draft frame, a freely rotatable material-carrying shell on which said frame is mounted and which travels in contact with the ground, said shell having an opening therein for the purpose of loading material into said shell and for discharging the material therefrom, a separate door, coacting means on said frame and door to hinge the door on the frame for swinging movement to opened and closed positions with respect to said opening, and means to latch the door in the closed position on said shell to be carried thereby when said coacting means is disengaged.

1,884,055. MILL CONSTRUCTION. EDWIN J. MCILVRIED, Cleveland, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed Mar. 27, 1929. Serial No. 350,385. 9 Claims. (Cl. 18—2.)

5. A mill having a roll, a movable bearing for said roll, a screw for limiting the outward movement of said bearing, a breaking disk assembly attached to said bearing, said assembly comprising a housing having a seat, a breaking disk in the seat, said screw bearing against the disk and a plate to secure the disk in its seat, an enlarged portion on the end of the screw, said enlarged portion and said housing cooperating with said disk whereby a breaking stress applied to the disk will be confined to shearing, and a removable shoe fitting over the screw forwardly of the enlarged portion thereof for actuating the bearing outwardly whether the disk is broken or not.

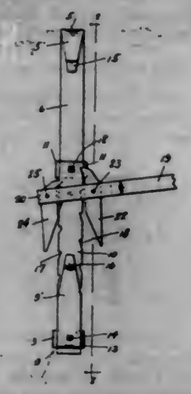


1,884,056. CHAIN. EDWIN J. MCILVRIED, Cleveland, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed Apr. 24, 1929. Serial No. 357,755. 4 Claims. (Cl. 74—32.)



1. A chain comprising center links and side links pivotally connected together, the end of a center link being formed on an arc, the center of which is located inwardly of the pivotal center between the links.

1,884,057. CHAIN TIGHTENER. ALFRED P. MCLEAN, Myers, Ky. Filed May 23, 1930. Serial No. 455,018. 2 Claims. (Cl. 254—72.)



1. A device of the character described comprising a pair of cooperating hooks each of which includes an elongated flat shank, means on one of said shanks engaging the shank of the other of said hooks for retaining the shanks in parallel sliding engagement, the shank of one of said books being also provided on relatively opposite edges thereof with teeth, a lever pivotally connected to the shank of the other of said hooks, and dogs pivotally mounted on said lever and engaging said teeth for shifting the shank of said one hook longitudinally relative to the shank of said other hook.

1,884,058. COVERED DISH AND SIMILAR ARTICLE. HARRY J. MCMASTER, Sebring, Ohio, assignor to The Sebring Pottery Company, Sebring, Ohio, a Corporation of Ohio. Filed May 12, 1930. Serial No. 451,743. 2 Claims. (Cl. 65—15.)



1. A covered dish and the like having a bottom and upwardly disposed side walls of substantially rectangular form, an inwardly disposed, substantially horizontal verge at the upper edge of and extending entirely around each side wall, the upper surface of the verge being substantially horizontal, and a cover having a flange around its outer periphery, the under surface of the flange being substantially horizontal and adapted to rest upon and entirely cover said upper surface of the verge.

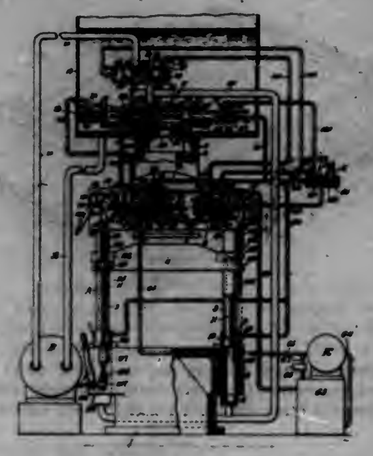
1,884,059. LEAF FLIPPER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 602,077. 6 Claims. (Cl. 129—4.)



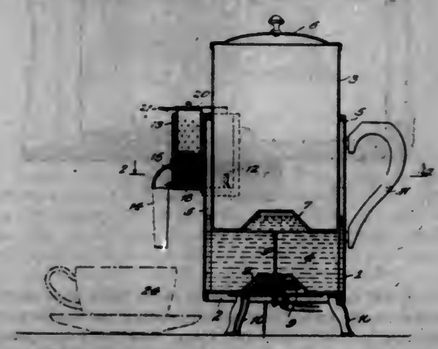
1. In a device of the class described, a body member having a plurality of apertures in spaced relation adjacent one edge, said edge having shoulders extending from one face thereof in spaced relation with said apertures adapted to abut against similar shoulders on another flipper for preventing overlapping of adjacent portions of co-operating flippers.

1,884,060. HYDRAULIC PRESS. HOWARD F. MACMILLIN, Mount Gilead, Ohio, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Aug. 31, 1929. Serial No. 389,761. 11 Claims. (Cl. 138—10.)

1. The combination with a hydraulic press including a reciprocatory platen, a pressing cylinder, and a platen returning cylinder; of a surge tank; a pump; means forming with said pressing cylinder, said platen returning cylinder, said surge tank, and said pump a hydraulic circuit; and a valve operatively connected in said circuit for controlling the movements of said platen, said valve being movable to three positions, in the first of which positions said valve affords communication between said surge tank, said pressing cylinder, said platen returning cylinder, and said pump for permitting a gravitational descent of the platen, in the second of which positions said valve affords communication between said pump and said pressing cylinder and also between said platen returning cylinder and said surge tank for completing a pressing stroke of the platen, and in the third of which positions said valve affords communication between said pump and said platen returning cylinder and also between said tank and said pressing cylinder for effecting a return stroke of the platen.



1,884,061. PERCOLATOR. GEORGE H. S. MCNAIR, Hastings-on-Hudson, N. Y. Filed Nov. 8, 1930. Serial No. 494,217. 7 Claims. (Cl. 53—3.)

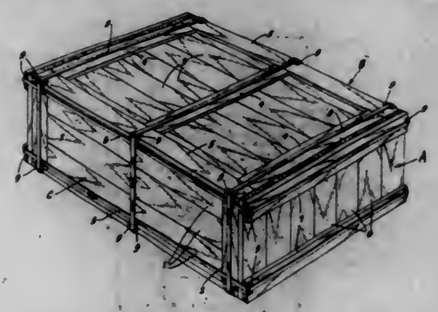


1. In a percolator, the combination of a container adapted to hold a liquid, a float chamber within said container and substantially equal thereto in capacity, adapted to displace said liquid when depressed and to force it from the container, a housing upon a wall of said container adapted to contain material to be infused, an inlet in a wall of said housing near the bottom thereof and in communication with said container, and an outlet in another wall of said housing at a higher level than the inlet and remote therefrom.

1,884,062. SHIPPING DEVICE. LEWIS J. MCSWEENEY, Detroit, Mich. Filed Aug. 6, 1931. Serial No. 555,450. 8 Claims. (Cl. 217—12.)

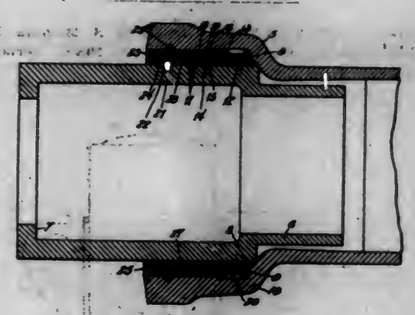
1. A collapsible returning shipping case comprising a series of separable wall units, locating means on certain

wall units for engagement with adjacent units to prevent inward collapse of the assembly, and tension hoops encircling the assembled units in different directions and being



the sole means for holding the respective units against outward separation from one another whereby removal of said elements frees the units for immediate separation.

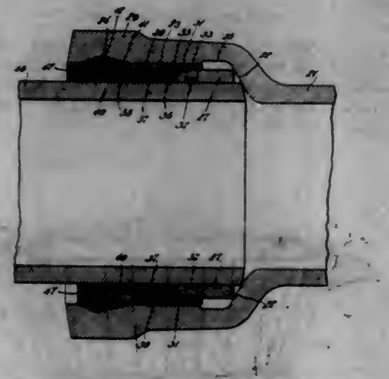
1,884,063. PIPE JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 20, 1929. Serial No. 341,406. 17 Claims. (Cl. 285—115.)



17. A bell and spigot pipe joint comprising joint packing material; and parting means surrounding the spigot and in direct contact with both the spigot and the joint packing material; said parting means being of such physical characteristics as to permit longitudinal movement of the spigot relative to the bell without injury to the packing material.

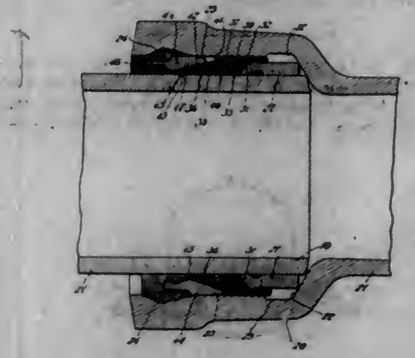
1,884,064. PIPE JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 27, 1930. Serial No. 431,860. 19 Claims. (Cl. 285—115.)

1. A bell and spigot pipe joint comprising, in combination, a ring of blocks flexibly connected together by a ring of lead and abutting the bottom of the bell at their free ends; another ring of lead tightly compressed against the first ring, the two rings together being in sealing contact with the bell and spigot and forming a primary seal; a rubber ring in contact with said mass of lead and with the bell and spigot, said second lead ring having a shape to expand the rubber ring against the bell when said rubber ring is compressed against said second ring; and lead calked into the mouth of the bell and engaging said rubber



ring to compress the same both inwardly against the primary sealing lead and laterally against the bell and spigot.

1,884,065. PIPE JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Sept. 9, 1930. Serial No. 480,781. 16 Claims. (Cl. 285—115.)

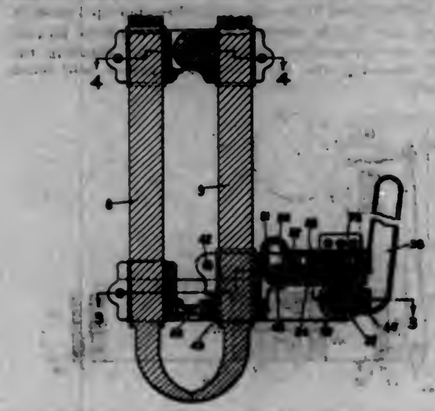


1. A bell and spigot pipe joint comprising, in combination, a ring of spacer blocks at the bottom of the bell; a mass of lead holding the blocks and in contact with both the bell and spigot; a solid rubber ring adjacent to the mass of lead and in contact with both the bell and the spigot; a ring of wedges adjacent to the solid rubber ring and in contact interiorly with a face of said ring which is presented outwardly toward the bell, said ring of wedges also contacting with the bell but being out of contact with the spigot; and a mass of calking lead at the top of the bell, holding the joint materials in position, surrounding the outer end of the ring of wedges and being in contact with both the bell and spigot.

1,884,066. WELDING MACHINE. JOSEPH W. MEADOWCROFT, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1927. Serial No. 176,318. 16 Claims. (Cl. 219—4.)

1. A spot welding machine comprising portable electrodes, clamp members arranged upon said electrodes and pivotally connected together, whereby said electrodes

are swingable with respect to each other, a second set of clamp members arranged upon said electrodes and operatively associated with each other whereby said electrodes



may be moved, the relative positions of said sets of clamps upon said electrodes being interchangeable so that said machine may operate upon different forms of work.

1,884,067. FAN FOR PNEUMATIC BLOWERS AND THE LIKE. SAMUEL O. MELOE, Des Moines, Iowa. Filed June 8, 1931. Serial No. 542,889. 5 Claims. (Cl. 302—37.)



1. The combination of a cylindrical casing having central opening at one end and a tangentially arranged discharge opening in its periphery, a shaft extending into said casing, a fan blade on the inner end of the said shaft, said blade comprising a hub having oppositely projecting blades, the front face of each blade being tangent to said hub, the back edge of each blade tapering inwardly toward its outer end, the front edge of each blade being comparatively thin and parallel with said face, the central portion of each of said blades having openings connecting its front and back faces.

1,884,068. PRODUCTS OF CELLULOID AND THE LIKE. WILLIAM MENDEL, Beverly, N. J., assignor to Samuel A. Neidich, Edgewater Park, N. J. Filed Jan. 2, 1929. Serial No. 329,686. 3 Claims. (Cl. 41—29.)



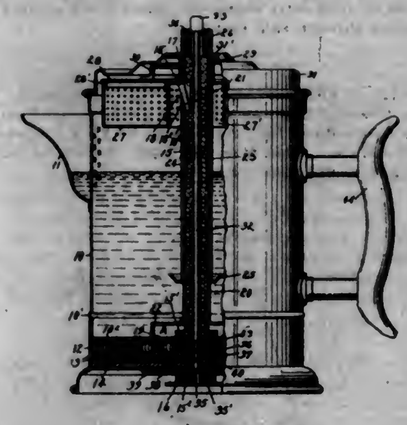
1. The method of forming an ornamental design upon the circumference of a tube of cellulosic material, which includes protecting a region of its outer surface with a dye resisting substance; rotating said tube while removing a portion of said dye resisting substance in accordance with said design; and dyeing said outer surface in the regions from which said dye resisting substance has been removed.

1,884,069. METHOD OF FORMING COMPOSITE CORDS AND BRAIDS. WILLIAM MENDEL, Beverly, N. J., assignor to Neidich Viscose Corporation, Burlington, N. J., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,827. 10 Claims. (Cl. 18—59.)



1. The method of forming a stringlike structure, which consists in assembling natural and artificial filaments in a dry state, and thereafter subjecting the structure to the action of a solvent of the artificial filament material until it coalesces and adheres to the natural filament material, and compressing said structure.

1,884,070. COFFEE PERCOLATOR. EMIL MAX MENNICKE, New York, N. Y., assignor of one-half to Herman Oswald Lorenz, New York, N. Y. Filed Dec. 9, 1930. Serial No. 500,995. 5 Claims. (Cl. 53—8.)

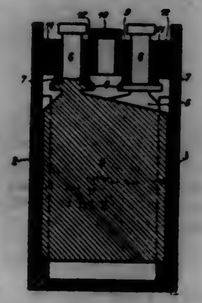


1. A coffee percolator or the like, comprising a container for liquid having a tubular shaft extending upwardly therein, a holder for coffee slidably mounted on said shaft, a catch member for supporting said holder on said shaft near the top of said container, a slidable tube mounted about said shaft, means at the bottom of said tube adapted to form with cooperating means in said container a separate enclosure for liquid, a slidable rod in said shaft having an electric switch adapted to be opened or closed by longitudinal movement of said rod, said rod being adapted to be moved by movement of said slidable tube and electrical heating means connected to and controlled by said switch whereby when said liquid in said separate enclosure boils said tube will be displaced, releasing said catch member and permitting said holder to be lowered into said liquid and simultaneously opening said electric switch.

1,884,071. ELECTRIC STORAGE BATTERY. FRIEDRICH MENZEL, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Aug. 9, 1927, Serial No. 211,741, and in Germany Jan. 11, 1927. 5 Claims. (Cl. 136—81.)

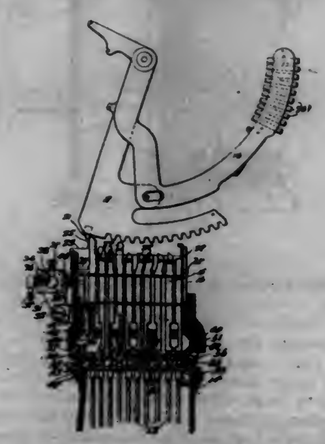
1. A storage battery comprising in combination, a casing, a plurality of positive and negative plates vertically arranged in said casing, spaced abutments within the casing and arranged to limit the lateral and downward movement of said plates, connecting bars and terminal

lugs for said positive plates and said negative plates, conical resilient stoppers mounted on said terminal lugs with their bases abutting said connecting bars, closure means for said casing having apertures arranged to receive said terminal lugs and stoppers and each of a diameter intermediate the diameters of the top and base of said stoppers,



said closure means being arranged to fit within the casing and rest upon said stoppers independently of the walls of the casing, and means acting between the casing and said closure means to force the closure means down upon said stoppers to resiliently clamp the plates down against said abutments through said stoppers.

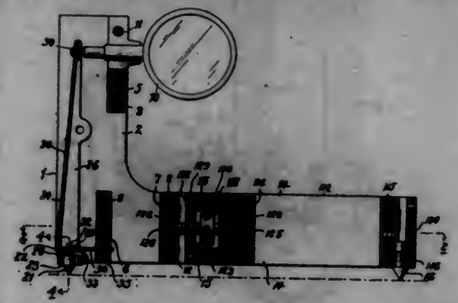
1,884,072. TABULATING MACHINE. JOSEPH R. MERKLE, Newark, N. J., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1926. Serial No. 97,915. 42 Claims. (Cl. 235—58.)



18. In a perforated card-controlled machine, a plurality of accounting units connected to operate from the same field of a perforated record card, a stop mechanism for controlling each unit, an analyzing unit, and settable means interposed between said analyzing unit and said stop mechanisms for automatically locking certain accounting units released by the actuation of said analyzing unit through an unset designation control position.

1,884,073. EXTENSOMETER. FERDINAND F. METZGER, Philadelphia, Pa.; Albert F. Metzger, administrator of said Ferdinand F. Metzger, deceased, assignor to Ferdinand F. Metzger and Son, Philadelphia, Pa., a Firm. Filed Mar. 7, 1930. Serial No. 433,913. 7 Claims. (Cl. 33—148.)

3. An extensometer comprising a frame, a bearing block in said frame, a lever pivotally mounted in said frame, a pin upon said lever for engaging a specimen, said block having means for detachably securing a pin therein, an extension bar having one end thereof provided with a threaded aperture, said block having a threaded aperture formed therein, a shaft having screw threads formed thereon and adapted to occupy said threaded apertures in said block and in the extension bar, and means located upon the central portion of said shaft for rotating the same for clamping the extension bar against said block of the frame.



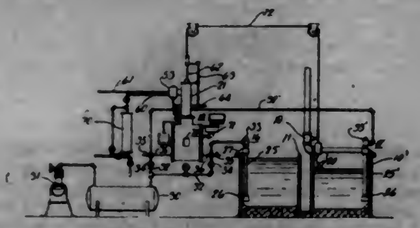
6. A device of the character described comprising a frame, a bearing in said frame, a lever pivotally mounted in said bearing, a bar upon said lever extending parallel with the pivotal axis of the lever, said bar having one element of the contact thereof coincident with the pivotal axis of the lever, a spring having a portion in engagement with said contact surface of the bar, and means for securing said spring in the frame.

1,884,074. HONEY UNCAPPING MACHINE. OLIVER MEYER, Preston, Iowa. Filed May 21, 1931. Serial No. 539,078. 8 Claims. (Cl. 6—12.)



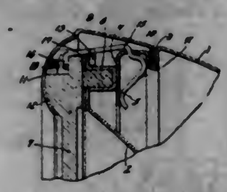
1. A honey uncapping machine, comprising a base; a transverse shaft at one end of the base; a pulley on one end of the shaft; an eccentric on the other end of the shaft; a reciprocable blade mounted on the base lying in the path of swing of the eccentric whereby as the shaft is rotated the blade will be reciprocated, and means for yieldably maintaining the blade in engagement with the eccentric.

1,884,075. CONSISTENCY RESPONSIVE DEVICE. SIDNEY E. MEYERS, Lockport, N. Y., assignor of one-half to Ericsson H. Merritt, Lockport, N. Y. Filed June 15, 1931. Serial No. 544,359. 12 Claims. (Cl. 92—46.)



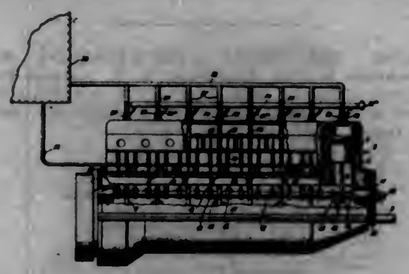
1. In a consistency responsive device, the combination with a passage through which a fluid suspension continually moves, of hydrostatic means located at two successive points in said passage for ascertaining the relative levels thereat, a differential mechanism associated with said hydrostatic means and adapted to be actuated by differences in the relative levels at said hydrostatic means, means for admitting a consistency modifying fluid to the suspension in said passage, and a relay actuated by said differential mechanism for moving said fluid-admitting means.

1,884,076. LAMP DOOR CLAMP ARRANGEMENT. CLARENCE A. MICHEL, Lakewood, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 28, 1929. Serial No. 416,057. 5 Claims. (Cl. 240—41.5.)



5. In a lamp the combination of a lamp body, a lens and a clamping ring to secure the lens to the body, said lens having an annular enlarged rim portion provided with a transversely curved cam surface, said ring being provided at its rear with means to fixedly engage the lamp body and at its front with a surface of substantially the same transverse curvature as the cam surface of the lens rim portion and clampingly engaging the major portion of said cam surface to secure the same to the body and seal the joint therebetween.

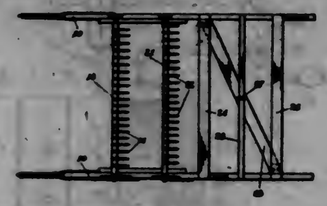
1,884,077. COMBINED AIR COMPRESSOR AND GAS ENGINE. ANDREW F. MICHLUN, North Andover, Mass. Filed Jan. 24, 1929. Serial No. 334,823. 23 Claims. (Cl. 123—64.)



1. A power plant including a multi-cylinder unit, a piston for each cylinder, means for operatively interconnecting said pistons, means for employing four strokes of each piston for developing power, means for employing four additional strokes of each piston for compressing air and pressure controlled means for rendering said last mentioned means operative and inoperative.

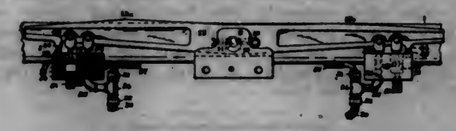
1,884,078. LAND LEVELING MACHINE. HERBERT C. MIGNERY, Elgin, Nebr. Filed June 29, 1931. Serial No. 547,634. 3 Claims. (Cl. 97—144.1.)

1. An implement for leveling fields having mounds or hummocks thereon, said implement including a frame, a knife support positioned transversely of said frame and adjustably secured thereto, a plurality of knives on said support for cutting the mounds or hummocks into vertical slices, and a diagonally disposed knife secured to said frame in substantially horizontal position in the rear of said knife support for severing the mounds or hummocks at their bases, said horizontally disposed knife being in strap form and having both of its end portions inturned into substantial parallelism with the blade portion thereof, each of said end portions being provided with front and rear upwardly projecting means for ad-



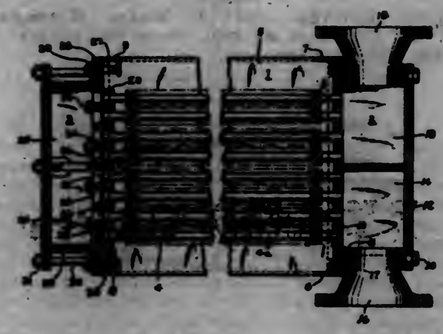
justable connection with said frame for adjustably raising or lowering said diagonally disposed knife or for adjustably raising or lowering the cutting edge thereof for altering its suck.

1,884,079. APPARATUS FOR LUBRICATING RAILWAY RAILS. CHARLES R. MILLER and JOHN E. MOUNTFORD, Jr., Pittsburgh, Pa. Filed Jan. 24, 1930. Serial No. 423,032. 9 Claims. (Cl. 184—3.)



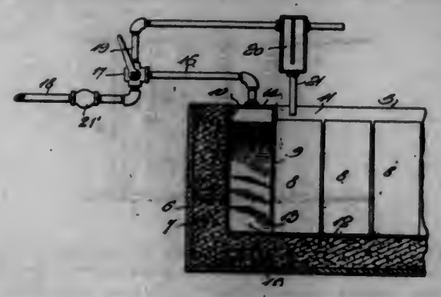
1. In rail-lubricating apparatus, the combination of a lubricant-discharge device positioned at the inside of the rail, an oscillating lever arranged to be moved by a wheel travelling along the rail, a lubricant pump arranged to charge the discharge device, an air-pump arranged to eject the charge against the rail, and operative connection between the lever and the pumps.

1,884,080. HEAT TRANSFER APPARATUS. ERNEST F. MILLER, Moore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 28, 1931. Serial No. 583,521. 8 Claims. (Cl. 257—239.)



1. In a tubular heat exchanger, a tube plate element, a group of tubes connected to the element, a plate member having openings therein affording communication therethrough with the tubes, means for connecting the tube plate element to the plate member and effective to draw the plate element toward the plate member, and sealing means between the tube plate element and the plate member and effective to prevent leakage between the internal space of the tubes and the space communicating therewith and the space external to the tubes.

1,884,081. ICE PLANT. GEORGE W. MILLER, Washington, D. C. Filed Aug. 19, 1931. Serial No. 558,111. 4 Claims. (Cl. 62—160.)



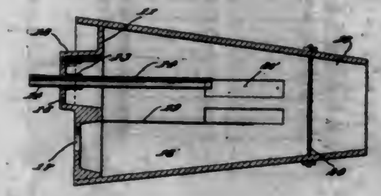
1. An improvement in an ice plant having conventional provision for freezing cans of water, said freezing provision embodying a main ice-can-receiving brine tank whose entire brine level is changed by insertion and removal of any of the cans; said improvement comprising an auxiliary brine tank into which the surplus of brine flows from the main tank when inserting any number of the cans, and normally idle flow-creating means extraneous to said freezing provision and adapted for operation when removing any of the cans for then returning a level-restoring quantity of brine from the auxiliary tank to the main tank.

1,884,082. COATED ELECTRON EMITTING SURFACE. HENRY JOHANNES MILLER, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 4, 1930. Serial No. 472,889. 5 Claims. (Cl. 250—27.5.)

1. A method of preparing an electron emissive surface which consists of forming an aqueous suspension of colloidal barium carbonate, coating a surface therewith, applying a coating of non-colloidal barium carbonate to said surface, and converting said carbonates to oxides.

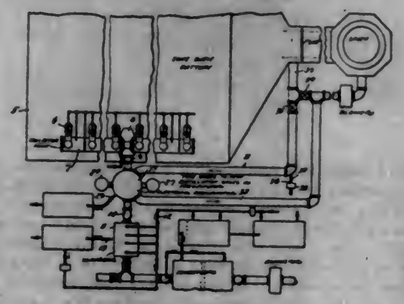
5. An electron emitter comprising a cathode surface, an undercoating of colloidal barium oxide, and an overcoating of non-colloidal barium oxide thereon.

1,884,083. BURNER. JOHN E. MILLER, Huntington, W. Va. Filed June 20, 1930. Serial No. 462,576. 1 Claim. (Cl. 158—99.)



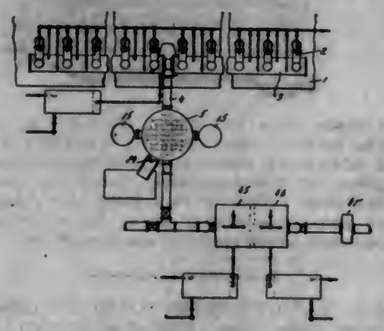
A burner comprising a housing having an open inner discharge end, a wall of said housing being inclined inwardly from the outer end of the housing, a head for closing the outer end of the housing, a fuel pipe extending through the head and terminating in the housing a material distance inwardly of the inner end, said fuel pipe being disposed in parallel relation to the longitudinal axis of the housing, a partition disposed in the housing intermediate said fuel pipe and said inclined wall and terminating inwardly of the inner end of said pipe, said head having openings therethrough communicating with the space between the partition and the wall whereby to permit air to enter the housing at an angle to the line of the fuel discharged from said fuel pipe for deflecting the ignited fuel in a plane substantially coplanar with the plane of said inclined wall, opposed walls of the housing having elongated slots at the same side of the partition as the fuel pipe and terminating closely adjacent to the inner end of said fuel pipe, said slots also extending beyond the inner end of the partition, and means for closing said slots.

1,884,084. BY-PRODUCT COKE OVEN RECOVERY SYSTEM. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 3, 1927. Serial No. 196,270. 2 Claims. (Cl. 202—105.)



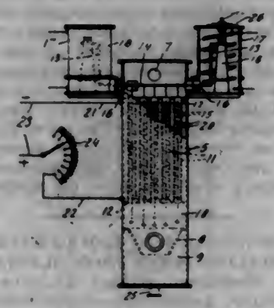
1. In a loal distillation plant having an oven or retort, means for heating the same by combustion, a discharge flue communicating with said means, a by-pass around a portion of said flue, a precipitator for separating from gas non-gaseous matter entrained therein, means for passing gases from the oven or retort to the precipitator, and a jacket for said precipitator adapted for heat exchange therewith, said jacket being in said by-pass.

1,884,085. ELECTRICAL PRECIPITATION. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 6, 1928. Serial No. 290,852. 11 Claims. (Cl. 183—7.)



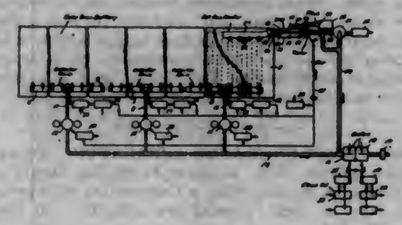
1. The method of operating electrical precipitators which comprises passing a gas thru precipitator tubes containing a discharge electrode, burning combustible material in a chamber connected with a jacket around the precipitator tubes, circulating the hot combustion gases through the jacket around the precipitator tubes, and recirculating a portion of the combustion gases leaving the jacket of the precipitator thru the said jacket together with fresh hot combustion gases.

1,884,086. ELECTRICAL PRECIPITATION. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1928. Serial No. 326,774. 3 Claims. (Cl. 183—7.)



1. An electrical precipitator comprising means for conveying a gas containing particles to be precipitated thru a field of silent electrical discharge, electric heating means in heat interchange relation with the gases passing therethru and automatic heat control means in operative connection with the circuit of said heating means and located in the gas outlet from the precipitator.

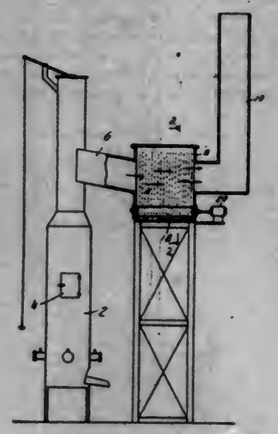
1,884,087. PRODUCTION OF CLEAN OILS AT COAL DISTILLATION PLANTS. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 3, 1929. Serial No. 360,020. 8 Claims. (Cl. 202—30.)



1. The method of treating the distillation gases resulting from the distillation of coal at a coal distillation plant which comprises cleaning a portion of the coal distillation gases at a high temperature to remove entrained impurities, distilling tar by bringing it in the form of a fine intense spray into direct contact with another portion of the coal distillation gases while still at a high temperature whereby these gases are cleaned and then combining the resulting clean enriched gases with the first mentioned clean gases and condensing them to produce clean oils.

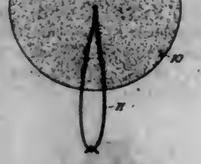
1,884,088. FUME ARRESTER FOR CUPOLA FURNACES. STUART P. MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1930. Serial No. 505,305. 7 Claims. 266—17.)

7. The process of preventing the discharge of fumes into the atmosphere produced in the melting and refining of metals in a cupola furnace, which comprises passing products of combustion and fumes produced in the melting of the metals to a stack through a path which is substantially unobstructed except for a finely divided spray



of liquid disposed at a localized point across the path of movement of the products of combustion and fumes from the cupola to the stack, thereby precipitating the fumes.

1,884,089. SANITARY PACK. JAMES A. MILLNER, Chicago, Ill., assignor to Lanair Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 412,723. 1 Claim. (Cl. 128—285.)

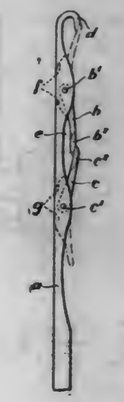


An appliance of the sort described comprising a relatively thin disk-like pad of coherent flexible compressible absorbent material, said pad being of approximately uniform thickness throughout, and having a traction string secured through its central portion, said string being of such length as to extend a substantial distance from the pad, and the pad being of such dimensions, flexibility and compressibility that it may be convoluted and compressed by retraction of its central portion from a protuberant position relative to the marginal portions thereof by traction on the string when the pad is constricted.

1,884,090. KNITTING NEEDLE. ROBERT KIRKLAND MILLS, Sherwood, England. Original application filed Jan. 8, 1930, Serial No. 419,229, and in Great Britain Mar. 28, 1929. Divided and this application filed Dec. 22, 1930. Serial No. 503,933. 9 Claims. (Cl. 66—119.)

1. A knitting needle comprising a shank, a hook on said shank, a plurality of pivoted latches spaced one below the

other on the same side of said shank, adjacent latches being adapted to engage or overlap at their tips when extending in opposite directions, and a parallel or substan-

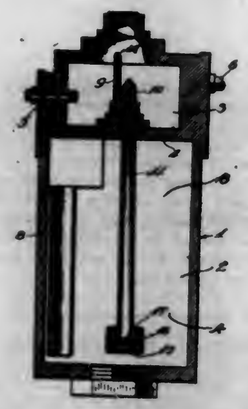


tially parallel space being provided between the back of a fully opened or lowered latch and the needle shank for freely accommodating a thread laid on said shank.

1,884,091. PROCESS OF TREATING JUTE FIBERS. JOHN R. MILSON, Mansfield, Mass., assignor to Mylon Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,165. 5 Claims. (Cl. 8—2.)

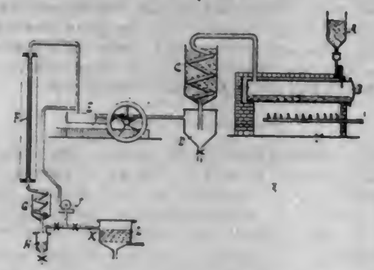
1. The process of treating jute fibers including subjecting the fibers to a warm chemical bath containing soap, alternately lifting and submerging the fibers therein and raising the temperature of the bath to a relatively hot temperature, and withdrawing the bath from the fibers and subjecting them immediately while hot to a cold water bath.

1,884,092. LIQUID SUPPLY FOR COMPRESSED AIR SYSTEMS. FREDERICK S. MINIER, Kansas City, Mo., assignor to Edward W. Anger, Chicago, Ill. Filed Feb. 25, 1929, Serial No. 342,523. Renewed Feb. 8, 1932. 2 Claims. (Cl. 137—72.)



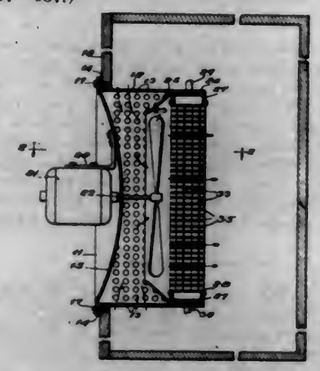
1. A device for supplying liquid to a changeable pressure compressed air system comprising a variable level reservoir for a liquid, and two passages leading from said reservoir to said system, one leading from above the liquid level whereby air is caused to flow from said reservoir into said system upon a reduction of pressure in the system, and one leading from below the liquid level whereby liquid is caused to flow into the system upon a reduction of pressure in the system, said device having provisions whereby substantially the same amount of liquid will be supplied to the system upon any definite reduction of the pressure regardless of the liquid level in the reservoir, said provisions comprising a chamber in said liquid passage, the air capacity of which materially increases as the liquid level lowers whereby at the lower levels a greater amount of air must flow into the system through the liquid passage before the liquid itself begins to flow into the system, thus compensating for the greater length of time it takes to equalize the air pressure at the lower levels, said chamber tapering upwardly whereby the compensation may be exactly graduated to correspond to the liquid level.

1,884,093. PRODUCTION OF LIQUID HYDROCARBONS OF LOW BOILING POINT FROM OLEFINES. ALWIN MITTASCH, Mannheim, WALTER FRANKENBURGER, and FRITZ WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 17, 1927, Serial No. 169,128, and in Germany Feb. 20, 1926. 7 Claims. (Cl. 196—10.)



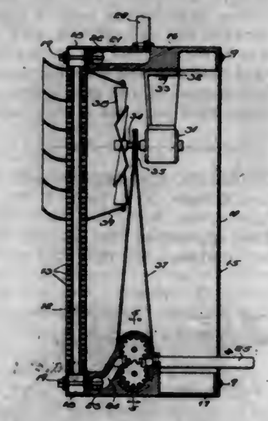
1. The process of producing liquid hydrocarbons of low boiling point, which comprises heating gases comprising olefines at between about 200° and 900° C. and while excluding substantial amounts of free oxygen with a catalyst comprising at least one of the constituents from the group consisting of noble metals and copper, said metals being employed in a form exhibiting coherent surfaces.

1,884,094. HEAT EXCHANGE APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 5, 1928. Serial No. 317,248. 10 Claims. (Cl. 257—137.)



4. In a device of the class described, a casing having a plurality of apertures therein, a heat exchange unit forming a wall of said casing, a wall opposite said heat exchange unit having a concavity therein, a motor supported by said last-mentioned wall and having a shaft passing therethrough, said wall having an opening larger than said shaft, and a fan carried by said shaft for forcing air through the opening in said wall and through said apertures and past said heat exchange unit.

1,884,095. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 21, 1928. Serial No. 320,797. 12 Claims. (Cl. 257—137.)



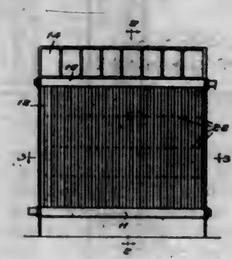
1. In a device of the kind described, a fan housing having an open side, a radiator unit located in said opening in said side and forming one wall of the housing, a fan in the housing, said fan being located at one end of the radiator unit and having means operable to rotate the fan, and partition members positioned in the housing whereby operation of the fan draws air into the housing through the lower portion of the radiator unit and forces the air out of the housing through the upper portion of the radiator unit.

1,884,096. HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed June 10, 1929. Serial No. 369,897. 12 Claims. (Cl. 257—136.)
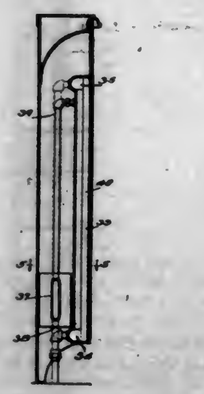


4. In a device of the kind described, a housing having two sections, a radiator unit mounted in the housing, one section of the housing comprising a vertically extending plate adjacent the radiator unit, the other section of the housing comprising a removable hood having a back wall cooperating with said plate, said hood having front and side walls extending downwardly to substantially enclose said radiator unit, the front wall of the hood having its upper end portion curved rearwardly to form the upper end of the hood, said upper curved portion of the plate having a plurality of apertures therein forming an outlet grille, the lower portion of said front plate being curved rearwardly and having a plurality of apertures therein to form an inlet grille adjacent to and underlying said radiator unit.

1,884,097. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 14, 1929. Serial No. 399,507. 7 Claims. (Cl. 257—136.)



1. A heat exchange device comprised of apertured tubular members providing a fluid inlet and outlet, a member connected with said fluid inlet and outlet and providing means for conveying fluid from said fluid inlet to said outlet, said member being comprised of a pair of corrugated elements formed of relatively light gauged sheet material connected together to provide open ended tubular fluid passages, said apertured tubular members being arranged at and connected with the ends of said corrugated elements to thus provide said heat exchange device.

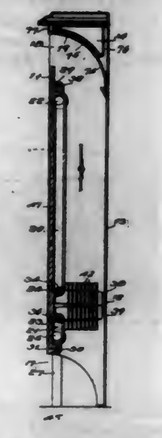
1,884,098. CAST HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 22, 1929. Serial No. 409,016. 16 Claims. (Cl. 257—136.)



5. A heat exchange device comprised of a member having a plurality of parallel vertical ribs and an element providing a transversely arranged integral web connecting

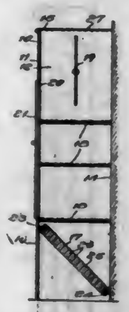
said ribs, the material at the juncture of said element and ribs providing tubular passages which communicate with fluid passages respectively located at the opposite ends of said tubular passages, a tubular member located at one end of said heat exchange device which communicates with said tubular passages and having heat radiating fins associated therewith.

1,884,099. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1930. Serial No. 425,157. 15 Claims. (Cl. 257—136.)



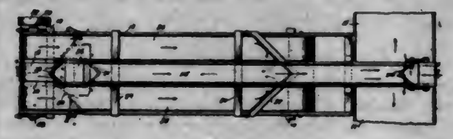
4. A heat exchange device comprised of an element having a fluid inlet and a fluid outlet, and having oppositely extending separate fluid passages respectively extending from said inlet and said outlet and a member located adjacent one end of said element providing a connection between adjacent ends of said fluid passages, said element and member respectively providing means for heating air by radiation and convection.

1,884,100. HEATING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Apr. 25, 1923, Serial No. 634,492. Divided and this application filed Dec. 26, 1930. Serial No. 504,718. 7 Claims. (Cl. 257—136.)



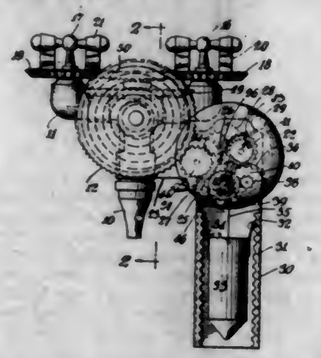
4. In a device of the kind described, an enclosure comprising a stack having an opening in the upper portion and an opening in the lower portion thereof, a radiator located adjacent the lower opening and extending from the front to the rear of the stack, said radiator having passageways providing means for directing air passing therethrough in an upwardly and rearwardly direction with respect to the interior of the stack.

1,884,101. SORTING AND PACKING BELT. ANDREW O. MOE, Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif. Filed Aug. 22, 1928. Serial No. 301,246. 6 Claims. (Cl. 209—124.)



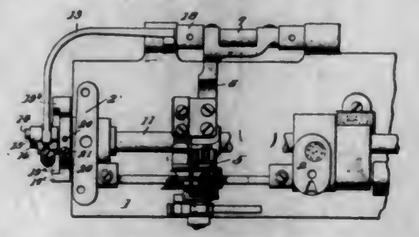
1. In a device of the class described, a pair of parallel endless sorting belts, an endless feed belt extending parallel to and between said sorting belts, a means disposed adjacent the forward end of travel of said belts for deflecting articles to be sorted from the sorting belts onto the return run of said feed belt, and a second means overlying the opposite end portion of the said return run for deflecting the articles back onto the sorting belts.

1,884,102. AUTOMATIC FAUCET CLOSER FOR BATHTUBS. HUGO MOSER, New York, N. Y. Refiled for abandoned application Serial No. 373,082, filed June 24, 1929. This application filed Apr. 20, 1932. Serial No. 606,507. 5 Claims. (Cl. 137—68.)



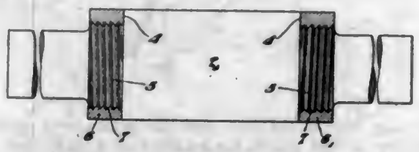
1. A device for automatically closing the faucets of both spigots of bath tubs when the water therein reaches a certain predetermined level, a float operated acoustic signal, a lever for normally keeping the signal silent, means to sound the signal upon the sinking of the float, a faucet closing means and means for normally holding said faucet closing means inoperative, adapted to be released upon the sounding of the signal to close the faucets against further discharge of water.

1,884,103. FEEDING MECHANISM FOR SEWING MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 17, 1928. Serial No. 278,489. 6 Claims. (Cl. 112—215.)



1. A feeding mechanism for sewing machines including in combination a feed dog, a feed bar carrying said feed dog, a main actuating shaft, devices connected to the feed bar and operated by said shaft for moving the feed dog back and forth, devices connected to the feed bar for raising and lowering the feed dog and a weighted member mounted eccentrically on said shaft and with the center of the weight thereof disposed relative to the axis of said shaft so as to counterbalance the power effort imposed on said shaft by the raising of the feed dog and by the moving of the feed dog to feed the fabric.

1,884,104. METHOD OF RESURFACING ROLLS. EDWIN EARL MOORE, CHARLES L. MCGRANAHAN and CECIL WARRENDER, Gary, Ind., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Nov. 8, 1928. Serial No. 318,094. 2 Claims. (Cl. 29—148.4.)



1. The method of resurfacing one-piece solid rolling mill metal working rolls which have had their end portions destroyed by chipping and spalling, which consists in turning down the roll body from the end inwardly to a point beyond the portion destroyed and sufficiently deep to entirely remove the defect, leaving the undamaged portion of said roll intact, then machining a ring to a size so that its internal diameter will fit said turned down portion of said roll and its outer diameter will be slightly greater than the diameter of the undamaged portion of said roll, threading said turned down portion of said roll and the internal surface of said ring, screwing said ring home on said threaded portions of said roll, and finally cutting down and polishing the surface of said original roll body and said ring to form an even polished surface.

1,884,105. MANUFACTURE OF AMMONIUM SALTS. HARRY C. MOORE, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 17, 1929. Serial No. 400,457. 4 Claims. (Cl. 23—119.)

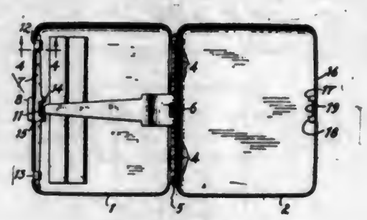
1. The process of making an ammonium salt, consisting in bringing the required acid in liquid form spread over an initial body of like salt acting as a contact medium, which does not participate in the chemical reaction, into contact with liquid anhydrous ammonia, the acid and ammonia being in such proportions that the salt formed contains practically no free acid or free ammonia.

1,884,106. PROCESS FOR PRODUCING GASSED SHEET RUBBER HAVING A SHAGGY OR HIRSUTE TEXTURE. EDWARD J. MORAN, Chicago, Ill., assignor, by mesne assignments, to W. Scott Robinson, Evanston, Ill., and Edward J. Moran, Chicago, Ill., as trustees. Filed Oct. 29, 1930. Serial No. 491,987. 1 Claim. (Cl. 18—53.)



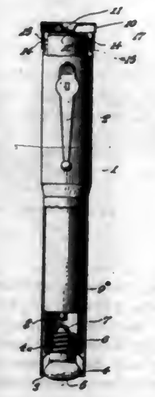
The process for producing gassed sheet rubber having a shaggy or hirsute texture consisting of mixing gassed rubber stock with commercial hair; the formation of said mixture in sheets; the subjecting of said sheets to sufficient heat to secure the curing thereof; and the splitting of said sheets while they are still warm, whereby the hairs intersecting said split are drawn from the side in which they are least embedded.

1,884,107. METAL BOX. JOSEPH F. MORAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 18, 1930. Serial No. 436,677. 2 Claims. (Cl 206—41.)



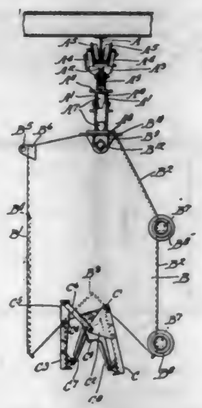
1. In a box, a body and a cover, a hinge pivotally uniting these parts, a spring catch on one of these parts and a cooperating latch on the other, said catch comprising a flat strip of spring metal positioned in the box with its flat sides disposed horizontally and substantially parallel with the plane of the box, bearings on each side of the box in which the ends of the strip are freely secured, lugs formed on the strip adjacent the catch to space it from the bottom of the box, and a finger piece for manipulating the catch.

1,884,108. FLASH LIGHT. JOSEPH F. MORAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 12, 1930. Serial No. 474,736. 1 Claim. Cl 240—10.68.)



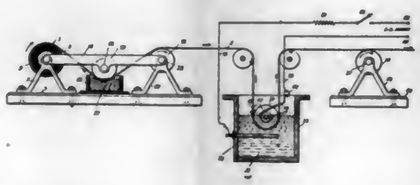
A pencil type vest pocket flash light having in combination a lamp, a battery, a metallic casing forming part of the electric circuit between said lamp and battery, said battery being longitudinally movable relatively to said casing for closing said circuit, means for yieldingly pressing said battery to open said circuit, an end cap movably mounted on said casing and electrically connected with one terminal of said battery, a projection on said cap slidably positioned in a slot formed in said casing, said slot having a longitudinally extending portion and an angularly extending portion, to permit selective longitudinal movement of said cap for flashing, or rotation of said cap for constant lighting.

1,884,109. TROLLEY BUCKET. GEORGE L. MOREHEAD and CHARLES M. YOUNG, Jr., Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 27, 1931. Serial No. 533,046. 19 Claims. (Cl. 294—71.)



1. In combination in a bucket, having an opening in its bottom, a plurality of movable doors mounted to close said opening, said doors adapted, when free to move and when the bucket is in a vertical position, to swing open and adapted when the bucket is in an inclined position automatically to swing closed.

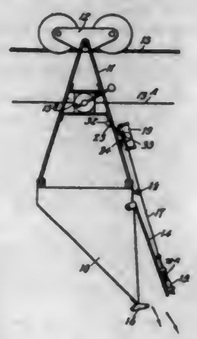
1,884,110. ELECTROPLATING OF WAX. FRANCIS G. MOREHOUSE, Greenwich, Conn., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 15, 1929. Serial No. 355,048. 5 Claims. (Cl. 204—1.)



1. The method of coating a surface with a waxy substance which includes passing a paper stock through a colloidal suspension of wax, applying electric current potentials to said paper through said substance and thereby electrically wax coating the surface of said paper by the separation of the wax from said colloidal suspension.

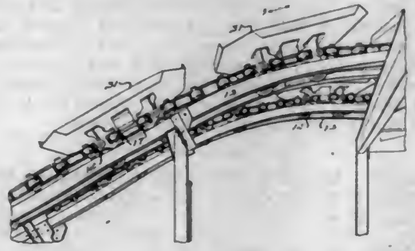
1,884,111. CAR TRIPPER. EARLE G. MORGAN, Elizabeth, N. J., assignor to Interstate Equipment Corporation, New York, N. Y., a Corporation of New York. Filed May 27, 1930. Serial No. 456,092. 12 Claims. (Cl. 214—59.)

1. In a tramway car, the combination with a door and latch member therefor, of means for operating said latch member comprising a delay mechanism, said mechanism including an actuating arm, an actuating disk and interconnecting means between said arm and disk for rotating said disk in response to rotation of said arm after a predetermined lapse of time after movement of said arm, said interconnecting means including a spring fluid check mechanism, a ratcheted sleeve slowly rotatable in opposite direction to the actuated rotation of said arm,



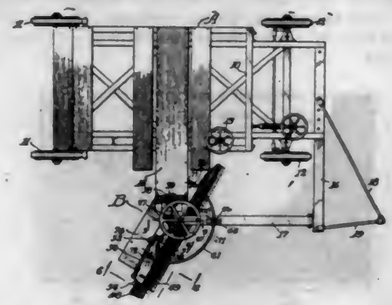
and dogs carried by said disk for engagement with the ratchets of said sleeve for rotating said disk upon slow rotation of said sleeve.

1,884,112. CONVEYER. HORACE H. MORGAN, Detroit, Mich., assignor to Palmer Bee Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 17, 1930. Serial No. 436,615. 15 Claims. (Cl. 198—181.)



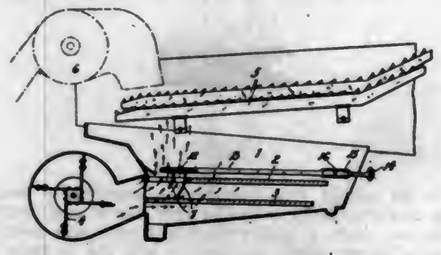
1. A conveyer having in combination, a driving member, supporting means for the driving member secured thereto at spaced points, and load carrying means having a driving connection with the portion of the driving member intermediate the supporting means and having portions slidably supported upon said last mentioned means.

1,884,113. ROAD GRADER. CHARLES J. MORITZ, Effingham, Ill. Filed June 18, 1930. Serial No. 461,860. 7 Claims. (Cl. 37—155.)



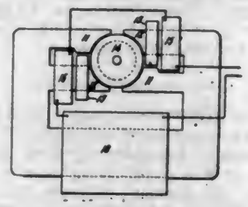
6. In a road shoulder machine, a wheeled carriage adapted to travel on a finished road surface, a mold board projecting at the side of the carriage for operating on the road shoulder, a platform supported by the mold board immediately behind the mold board and means for adjusting the vertical position of the mold board with respect to the carriage, and separate means for adjusting the angular position of the mold board, both of said adjusting means being operable from said platform.

1,884,114. GRAIN HARVESTING MACHINE. LAWRENCE FRANCIS MORONEY, Lara, Victoria, Australia. Filed Apr. 22, 1930, Serial No. 446,345, and in Australia Dec. 31, 1929. 6 Claims. (Cl. 130—24.)



1. In a grain separator, the combination of a housing formed at its front end with an opening, a series of vibratory riddles in the housing in substantial alignment with the opening therein, the upper riddle being open at its front end adjacent the opening in the housing, deflectors pivoted in the open end of the upper riddle, means for operating the deflectors to cause said deflectors to substantially span the space between the riddles, means for adjusting the position of the deflectors relative to each other, a series of straw walkers above and spaced from the riddles, and a blower, the casing of which communicates with the opening in front of the housing, whereby when the deflectors are adjusted in the space between the upper riddle and the next adjacent riddle, the air from the blower will be divided, part passing through the riddles and part being deflected to the forward portion of the straw walkers.

1,884,115. SHADED POLE MOTOR. WAYNE J. MORRILL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Feb. 25, 1931. Serial No. 518,150. 9 Claims. (Cl. 172—278.)



1. In an alternating current motor, a field element provided with one or more salient poles, such pole or poles being divided into sections with a shading coil on one section and exciting windings for said field element arranged to produce substantially the same amount of flux through the different sections of a pole.

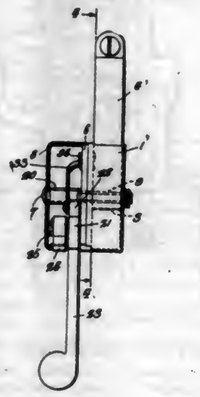
9. An alternating current motor having a field element provided with salient poles divided into two portions, shading coils on one portion of each pole, exciting windings on both portions of each pole proportioned to equalize the fluxes in said portions, a condenser in series with the exciting windings on the unshaded pole portions, and switching means for connecting the shaded and unshaded pole windings in parallel circuits to a common source of supply and for reversing the relative direction of current flow in said parallel connected circuits.

1,884,116. ASPARAGUS KNIFE. E LUSTER A MORROW, Sunnyside, Wash. Filed Apr. 24, 1931. Serial No. 532,608. 2 Claims. (Cl. 55—65.)



1. An asparagus knife comprising an elongated blade, a handle carried by said blade, a cutting edge extending across one end of said blade at an angle other than a right angle to the longitudinal axis of the blade, the rear end of said edge terminating in a hooked cutting edge.

1,884,117. CONTROL SWITCH. LA VAUGHN L. MORTENSEN, Los Angeles, Calif. Filed May 9, 1930. Serial No. 451,122. 1 Claim. (Cl. 200—59.)

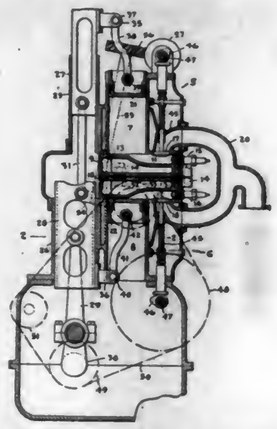


A circuit breaker for the purpose set forth, including a cylindrical casing having a clamp for fastening the same on the steering post column of an automobile or the like, and said casing comprising a cylindrical member, and having its outer side provided with an elongated slot, a block of insulating material in the casing and provided with contacts for wires in the electric circuit of an automobile and to bulbs in such circuit, a metal segmental plate having an inner reduced extension provided on its outer end with a central sleeve for a pivot that connects the plate to the block and to the casing, outwardly extending parallel metal spring arms secured to the reduced end of the segmental plate at the opposite sides of the sleeve and having a downwardly rounded portion terminating in straight ends which are engageable with the contacts, a handle fixed centrally to the segmental plate and extending through the opening in the casing and having a headed portion in a line with the periphery of the segmental plate, dogs pivoted to the inner corners of the segmental plate, and carrying pins, an arched spring centrally fixed to the segmental plate and exerting a pressure against the dogs to force the ends thereof through the opening in the casing, said segmental plate having arcuate slots therein for the reception of the pins on the dogs, and the dogs being so positioned that when the handle is turned to bring the spring contact fingers on the segmental plate into engagement with the fixed contacts that one of the dogs will have its end projected through the opening in the casing and the other will have its outer end guided into the casing, in combination with means for contacting the projecting dog for swinging the segmental plate to return the spring switch arms thereon to initial position.

1,884,118. PROCESS OF RECONDITIONING OLD RUBBER. ALEXANDER WILLIAM MORTON, Balaclava, Victoria, Australia, assignor to Charles Columbine Jackson, Melbourne, Australia. Filed Oct. 19, 1928, Serial No. 313,651, and in Australia May 31, 1928. 8 Claims. (Cl. 18—52.)

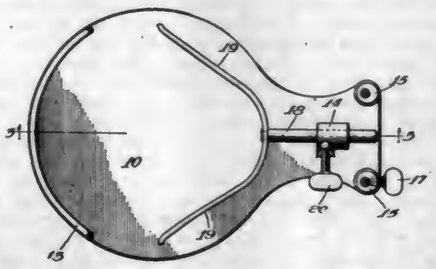
1. An improved process of reconditioning old vulcanized rubber which comprises reducing the old rubber to a finely divided state, treating the divided rubber with added sulfur and with a small amount of a liquid mixture comprising benzine, carbon bisulphide and carbon tetrachloride, and subsequently vulcanizing the mass so produced.

1,884,119. INTERNAL COMBUSTION ENGINE. IRA S. MOSHER, Detroit, Mich. Filed May 13, 1930. Serial No. 451,907. 4 Claims. (Cl. 123—57.)



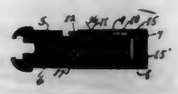
3. An internal combustion engine having in combination, pairs of opposed cylinders, each pair comprising an upper and lower cylinder, pistons in said cylinders, upper crossheads, lateral extensions on said upper crossheads, links connecting said lateral extensions to the pistons in said upper cylinders, lower cross-heads, lateral extensions on said lower cross-heads, links connecting said lateral extensions to the pistons in said lower cylinders, links connecting said upper and lower cross-heads, guides adjacent to and in close proximity with said cylinders for said cross-heads, and connections between said lower cross-heads and the crank shaft of said engine.

1,884,120. BASE FOR FOOD MIXER SUPPORTS. EDWARD R. MROSS, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, a Corporation. Filed Nov. 3, 1930. Serial No. 492,884. 2 Claims. (Cl. 248—41.)



1. A support for a food mixer comprising a base, spaced motor supporting means on said base, a receptacle clamping yoke carried by said base to secure a receptacle upon said base relative to said motor supporting means, and adjustable means for said yoke carried by said base between said yoke and motor supporting means and movable relative to said base between said motor supporting means.

1,884,121. ELECTRIC PLUG. BERNARD F. MULDOON, Mountain View, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed Mar. 16, 1927. Serial No. 175,648. 5 Claims. (Cl. 173—332.)



2. An electric plug comprising a plurality of insulating members, a pin extending from one of said members into the other, a band extending around said members, and a spring detent attached to said pin to keep said band in place, said detent having a projection extending into an opening in said band.

1,884,122. PYRANTHRONE VAT DYE AND METHOD OF MAKING SAME. WILFRED M. MURCH, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1927. Serial No. 228,698. 18 Claims. (Cl. 260—61.)

9. A dyestuff of the character described, obtainable by the action of a dehalogenating metal on the nitrobenzene-soluble halogenated product which is obtainable in the halogenation of a crude pyranthrone produced by the condensation of a 2.2'-dimethyl-1.1'-dianthraquinonyl compound, said dyestuff in the dry state being a brown powder substantially insoluble in water, in dilute acid, in dilute alkali, and in benzene, slightly soluble in boiling glacial acetic acid giving a yellow-colored solution having a green fluorescence, slightly soluble in boiling nitrobenzene giving an orange-colored solution having a green fluorescence, soluble in concentrated sulfuric acid giving a greenish-brown solution which upon dilution with water gives a brown precipitate, and soluble in an alkaline sodium hydrosulfite solution giving a violet colored vat which dyes cotton violet shades which, upon exposure to air, change to reddish-brown shades.

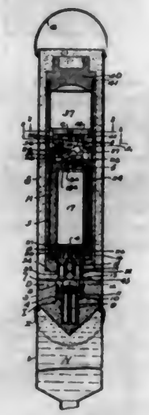
1,884,123. ART OF VULCANIZING RUBBER. PAUL I. MURRILL, East Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,858. 21 Claims. (Cl. 18—53.)

1. The method of vulcanizing rubber which comprises subjecting the rubber to vulcanization with the addition thereto of an organic tellurium compound containing the following group: —CSS—.

1,884,124. ART OF VULCANIZING RUBBER. PAUL I. MURRILL, East Norwalk, Conn., assignor to R. T. Vanderbilt Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,859. 14 Claims. (Cl. 18—53.)

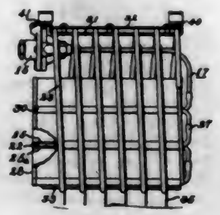
1. The method of vulcanizing rubber, which comprises subjecting rubber to vulcanization with the addition thereto of a member of the sulfur family as a vulcanizing agent and an organic tellurium compound containing the following group: —CSS— as an accelerator.

1,884,125. OIL WELL TORPEDO. WILLIAM R. MURROW, Independence, Kans., assignor to Mitchell & Murrow, Independence, Kans., a Partnership composed of Mark D. Mitchell and William R. Murrow. Filed June 4, 1930. Serial No. 459,166. 10 Claims. (Cl. 102—4.)



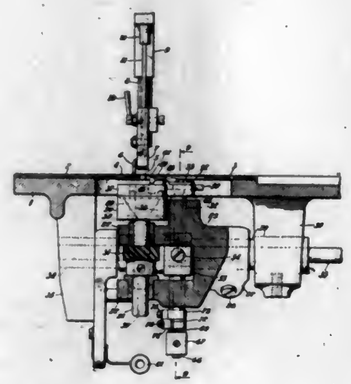
10. In a device of the class described, an initial explosive charge, and a unit for assembly therewith prior to use of the device, said unit comprising a housing containing the following, an electric battery, circuit wiring for connecting said battery and said charge, a switch part for opening and closing said circuit, a timing mechanism for moving said switch part to circuit closing position, and an element on said battery normally positioned to prevent insertion of said battery in said housing but movable by said switch part to a position permitting insertion of said battery in said housing when said part opens said circuit.

1,884,126. REFRIGERATING APPARATUS. CHARLES B. MYERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,957. 7 Claims. (Cl. 62—99.)



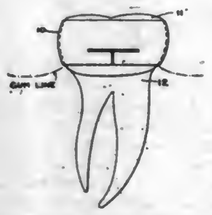
1. Refrigerating apparatus including in combination a casing for enclosing an ice-making container, a hollow shelf within the casing for supporting a container, said hollow shelf having its rear end open, a single continuous conduit for circulating refrigerant including a portion formed into a planar serpentine freezing coil extending within said hollow shelf from the rear and a portion formed into a cooling coil surrounding the casing.

1,884,127. THREAD-CONTROLLING DEVICE FOR SEWING MACHINES. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,881. 11 Claims. (Cl. 112—79.)



1. A sewing machine having a reciprocatory hook-needle, a looper actuated to present a thread for seizure by said needle, a thread-detaining member adapted to engage and form a slack-creating bight in the thread delivered by said looper, a reciprocatory carrier for said member, means for reciprocating said carrier to impart thread-engaging and -releasing movements to said member, and means including a manually operable finger-lever connected with the thread-detaining member for predetermining the effective thread-slack creating action of said member.

1,884,128. DENTAL ANCHORAGE. SIMON MYERSON, Brookline, Mass. Filed May 5, 1928. Serial No. 275,354. 6 Claims. (Cl. 32—12.)

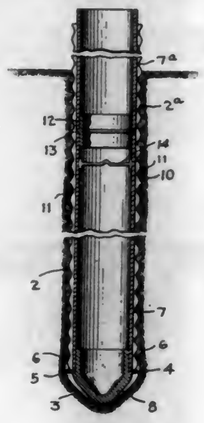


1. A dental anchorage in the form of a closed annulus arranged to encompass the crown of a tooth and provided with inherently resilient means adapted to be contracted about the external surface of the tooth crown.

1,884,129. METHOD AND APPARATUS FOR FORMING PILES. LOUIS NADEL, New York, N. Y., assignor to Pierce Steel Pile Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,688. 6 Claims. (Cl. 61—57.)

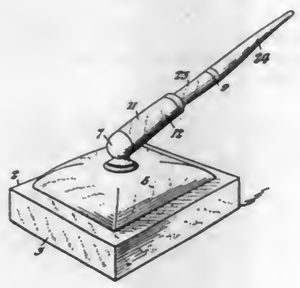
1. In apparatus for the construction of concrete piles in the ground, the combination of a sheet metal pile

shell to constitute a permanent form to be sunk in contact with the soil, said shell having a penetrating point firmly connected with the lower end thereof, and a re-



movable driving mandrel within said shell in driving contact with said point only, to pull the shell into the soil.

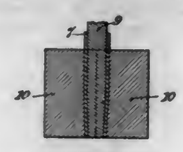
1,884,130. DESK SET. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed June 6, 1929. Serial No. 368,892. 3 Claims. (Cl. 120—108.)



1. In a desk set, the combination with a base, including two distinct blocks, one above the other, respectively covered with films of artificial cellulose material concealing said blocks; of a writing implement holder, including a recess for the point of the writing implement and mounted on said base; means rigidly connecting said base and holder, including a screw extending through both of said blocks and engaging a screw threaded socket in said holder, as a nut; and means distinct from said screw connection, extending between said upper block and holder and preventing rotation of the latter.

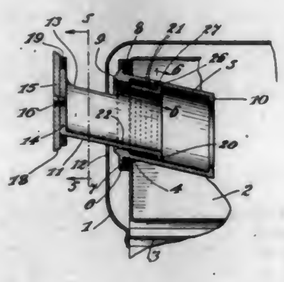
1,884,131. MANUFACTURE OF TAPERED TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J., assignor to Sanite Corporation, Burlington, N. J., a Corporation of New Jersey. Original application filed Jan. 18, 1929, Serial No. 333,353. Divided and this application filed Apr. 17, 1930. Serial No. 444,952. 3 Claims. (Cl. 18—51.)

1. A method of making a tapered tube of celluloid and the like which includes primarily forming a cylindrical tube of uniform diameter thruout its length; softening said tube, and deforming said tube to tapered



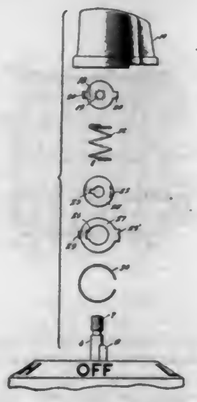
form while in the softened state, by expanding it, in a conical tubular space confined between inner and outer inelastic conical walls.

1,884,132. RADIATOR CAP. WILLIAM NELSON, Minneapolis, Minn., assignor to Burnett Walker, New York, N. Y. Filed June 1, 1928. Serial No. 282,225. 10 Claims. (Cl. 220—24 R. C.)



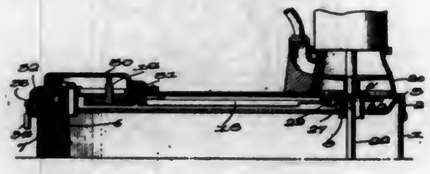
1. In combination with a tank and shell structure substantially as shown, a filling fitting located in front wall portions of the shell and tank and below the shell top, the fitting being arranged to slope inward and downward into the tank top, and including a withdrawable trough portion having a top opening.

1,884,133. SWITCH HANDLE. ARVID H. NERO, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 14, 1931. Serial No. 515,872. 5 Claims. (Cl. 200—172.)



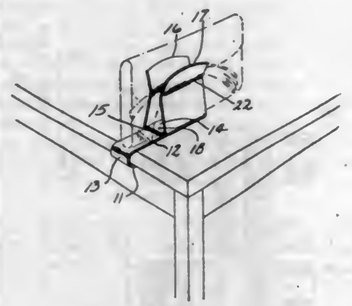
1. In combination a switch spindle, a hollow switch handle having within it a plurality of members engaged with the handle to be rotated thereby, one of said members also engaging with said spindle, a ratchet disc engageable with one of said members and movable with said spindle, a compression spring between said disc and one of said members, and means to hold all the handle parts in said handle.

1,884,134. DISPENSING APPARATUS FOR LUBRICATING OILS. RICHARD E. NEST, Takoma Park, Md. Filed June 23, 1931. Serial No. 546,384. 6 Claims. (Cl. 221—80.)



1. An oil drum or barrel having a cover extending over the head thereof, a pump positioned on said cover and having tongues projecting therethrough, parallel locking bolts slidable in tracks on the bottom of said cover, and means for differentially moving said bolts into operative or inoperative position, said means comprising a front rail pivotally secured to the rear end of each bolt, and an eccentric adapted for operation to move said rail forwardly or rearwardly.

1,884,135. PURSE HOLDER FOR TABLES. CLEMENS NETT, Malone, and PETER PAULY, Milwaukee, Wis. Filed Nov. 11, 1931. Serial No. 574,252. 2 Claims. (Cl. 24—81.)



2. An article of the class described, comprising a sheet metal hooked clamp, adapted to engage with its hooked portion an outer marginal edge of a table top, a strip shank portion of said hooked clamp, a backwardly directed fold of said shank strip, vertically upstanding integrally formed clip leaves fixedly secured at the basal portion thereof within said fold of said shank strip, and securing means extending through the folded portion of said shank strip adjacent its termination, the basal portion of said clip leaves and the portion of said shank strip underlying said basal portion of said clip leaves.

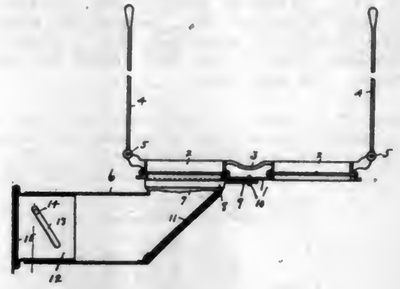
1,884,136. DISPENSING HOLDER FOR PASTE TUBES. LESTER H. NEWELL, Sharon, Pa. Filed Aug. 15, 1931. Serial No. 557,839. 9 Claims. (Cl. 221—60.)

1. A dispensing holder for paste tubes comprising a supporting member, a drum journaled in the supporting member, said drum having a longitudinal peripheral slot to receive the sealed end of a paste tube, and a pressure applying member formed of a single piece of resilient sheet metal of a width substantially corresponding to the length of the drum, said pressure applying member



having one end attached to the supporting member and its opposite end free and bent to provide a rounded bead of less diameter than the drum disposed parallel with the drum and bearing against the periphery thereof.

1,884,137. OPTICAL INSTRUMENT. EPHRAIM ARTHUR NEWMAN, Baltimore, Md. Filed Nov. 25, 1929. Serial No. 409,498. 2 Claims. (Cl. 88—20.)

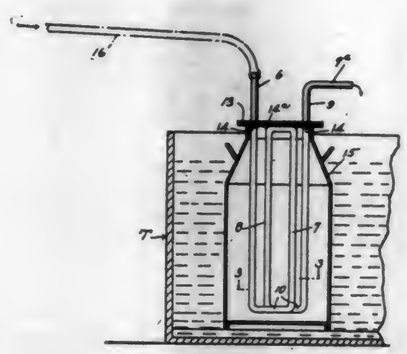


1. An optical instrument comprising a frame adapted to be fittted upon the face, a tube mounted upon said frame and adapted to be swung from one side thereof to the other, the inner end of said tube being provided with an inclined surface directly in line with the opening thereof, a reflector mounted in said tube against said inclined surface, a focusing lens in the inner end of said tube, a transparent disk in the outer end of said tube and provided with a target thereon, a pin projecting from the inner surface of said tube, and a small tube fitted within the outer end of the first named tube and having an inclined slot into which the said pin projects.

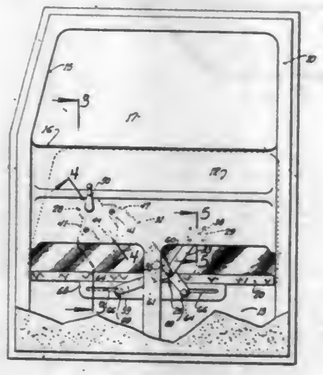
1,884,138. COOLER. JOSEPH NEWMIER, Stratford, Wis. Filed June 23, 1931. Serial No. 546,382. 1 Claim. (Cl. 257—199.)

A device for cooling liquids comprising in combination a circulating coil consisting of a single length of tubing including a plurality of relatively spaced end and intermediate parallel portions, a port of said tubing connecting corresponding ends of the intermediate portions with one another, said end portions projecting beyond the connected ends of the intermediate portions, and at said

projecting ends being open, a plate connecting the projecting ends of said end portions and secured to the part connecting said intermediate portion, one of said projecting ends being adapted for coupling to a source of supply, and the other of said projecting ends extending laterally to provide a discharge end for the coil.

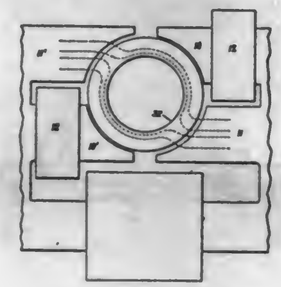


1,884,139. WINDOW REGULATOR. STANLEY W. NICHOLSON, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 28, 1931. Serial No. 571,516. 6 Claims. (Cl. 268—126.)



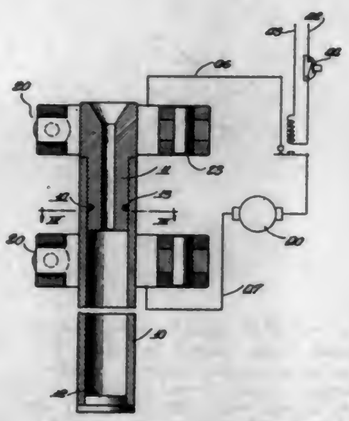
1. In a window regulator of the character described adapted to raise and lower a window, a base, a first arm pivotally supported from said base, a second arm pivotally supported from said base, a link pivotally connected to said arms to transmit motion from one said arm to the other said arm, and means on said arms cooperating with means on the window to transmit motion from said arms to said window.

1,884,140. SHADED POLE MOTOR. CLIFFORD A. NICKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 25, 1931. Serial No. 518,151. 10 Claims. (Cl. 172—278.)



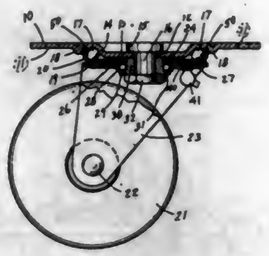
1. An alternating current motor having relatively rotatable field and armature members, the field member having salient poles split into halves, shading coils on one-half of each pole, means for producing alternating fluxes through said poles, and means for maintaining the flux in the halves of the poles substantially equal.

1,884,141. METHOD OF BRAZING. WARREN NOBLE, Detroit, Mich., assignor to Electromaster, Inc., Detroit, Mich., a Corporation of Michigan. Filed June 28, 1930. Serial No. 464,693. 2 Claims. (Cl. 219—12.)



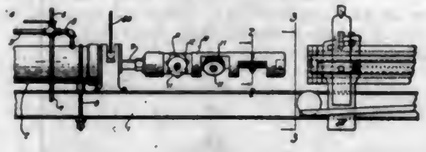
1. The process of preparing an article for brazing, said article comprising a plurality of parts one of which is hollow, which consists in assembling the parts together with a brazing metal therebetween at the place where the brazing of the parts is to be effected and with a space contiguous the brazing metal in communication with the interior of the hollow part, and confining a reducing gas within the hollow part, said parts, brazing metal and the confined gas forming a unitary assembly adapted to be thereafter presented as a unit for the brazing operation.

1,884,142. HEAVY DUTY CASTER. WILLIAM H. NOELTING, Evansville, Ind., assignor to Faultless Caster Company, Evansville, Ind., a Corporation. Filed July 28, 1931. Serial No. 552,687. 3 Claims. (Cl. 16—21.)



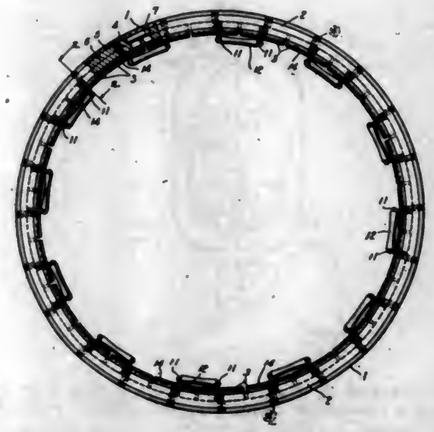
1. In a plate caster, the combination of a top having a retaining pin receiving hole, a depressed portion adjacent thereto for nesting an enlargement of the retaining pin head and a concentric depressed portion in spaced relation thereto for forming an included raceway and for race retainer retention, a caster yoke including a retaining pin receivable hole axially registering with the plate hole, and having an annular groove concentric therewith and in the upper face of the yoke for race retainer seating, a curved, sectioned annular ball race forming member and retainer located in said groove and extended upwardly for telescopic reception within the retainer portion of the plate for retainer location, an upper series of balls retained by the retainer and the lower wall of the first mentioned depressed plate portion and protected by said retainer, a spacing sleeve construction extending through the yoke hole and bearing on the plate and including a lower outwardly extending portion for ball retention and operative ball contact, a similar but inverted ball race forming retainer member, a lower series of balls interposed between the outwardly directed portion and the inverted retainer and constituting the lock for securing the yoke to the plate, said yoke including a concentric upwardly directed portion for nestingly receiving the inverted retainer, and a retaining-pin construction mounted in the sleeve and plate and including spaced enlarged portions.

1,884,143. TUBE PUNCHING APPARATUS. VICTOR C. NORQUIST, Kansas City, Mo., assignor to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed July 27, 1929. Serial No. 381,496. 11 Claims. (Cl. 164—108.)



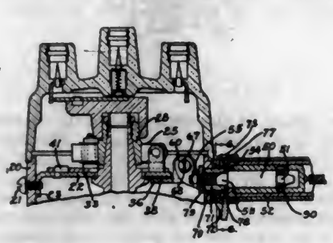
1. Machine for making grain ventilators comprising a separable mold for holding the ventilator and having longitudinal troughs cut in the interior surface thereof, a plunger insertable in the mold, circular perforation cutters mounted and rotated axially of the plunger and positioned in different planes so that the perforated edges of the cutters coincide with the troughs in the mold.

1,884,144. WELDING CLAMP FOR USE IN MANUFACTURING WELDED TANKS. VICTOR C. NORQUIST, Kansas City, Mo., assignor to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed May 20, 1931. Serial No. 538,769. 4 Claims. (Cl. 113—99.)



1. A clamp for welding tank rings in the manufacture of welded tanks comprising a circular element somewhat larger in diameter than the tank rings to be welded, a plurality of shoes or segments within the circular element, an expansible means between the circular element and shoes adapted to cause the shoes to firmly grip the abutting edges of the tank to be welded during the welding operation.

1,884,145. IGNITION DEVICE. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 9, 1928. Serial No. 311,338. 11 Claims. (Cl. 200—19.)



1. A theft preventing device for automotive vehicles comprising, in combination, an ignition timer, an armored conductor, means non-demountably securing the conductor to the timer, and means completing a circuit through the conductor and timer, including a locking clip secured to the terminal plate of the timer and electrically connected to the end of the conductor.

1,884,146. LIGHTING SWITCH. HARRY E. NORVIEL and WILLIAM E. WIKLE, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,273. 7 Claims. (Cl. 180—90.)

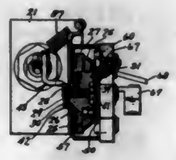
1. In a mounting, the combination comprising, a mounting bracket, a pair of cases secured thereto, said mount-

ing bracket being apertured substantially central of each case, a dial plate over said mounting bracket and a bezel ring secured thereto, said dial plate being apertured coextensive with said mounting bracket, and said bezel ring



enclosing both of said apertures, one of said cases providing a transparent closure for said aperture, said other case housing a switch mechanism operable through the aperture leading into said case.

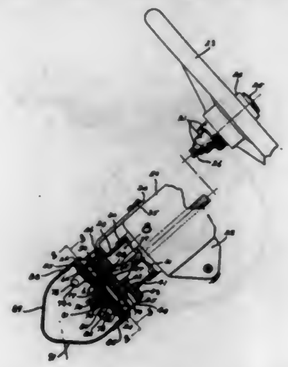
1,884,147. ELECTRIC SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,463. 8 Claims. (Cl. 200—153.)



8. In a switch of the class described, the combination comprising a cup shaped housing, a dielectric driving member providing a hub portion journalled within an aperture in the bottom of said cup and being accessible from without the same, said driving member providing a second hub portion coaxial with the first and peripherally notched, a movable contact member providing extensions loosely received by the peripheral notches of said second hub so as to be axially movable relative thereto, a switch back closing said casing and providing a plurality of contacts cooperatively associated with said movable contact member, and means engaging said contact member maintaining it in engagement with the switch back and permitting movement of the said contact member over irregularities of said switch back and means without the casing for actuating said driving member.

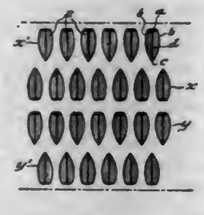
1,884,148. SWITCH. HARRY E. NORVIEL and VANCE ECOFF, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,948. 14 Claims. (Cl. 200—4.)

1. A lighting switch adapted to be mounted at the lower end of a steering column, comprising in combination, a housing, a bracket secured to said housing and providing a tubular extension, a tubular extension on the end



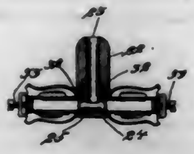
of said column telescopically receiving said bracket extension, and means securing said bracket to the end of said column.

1,884,149. WELDING ROD. FRANK H. NULLMEYER, Youngstown, Ohio, assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 2, 1928. Serial No. 258,470. 2 Claims. (Cl. 219—8.)



1. A welding rod comprising a metal body having a plurality of substantially spear-shaped indentations in its surface arranged in longitudinal spaced relation in four longitudinally extending rows disposed symmetrically about the body, the indentations in adjacent pairs of rows being disposed in opposite directions transversely of the rod and in longitudinally staggered relation with respect to the corresponding indentations in the other pair of rows.

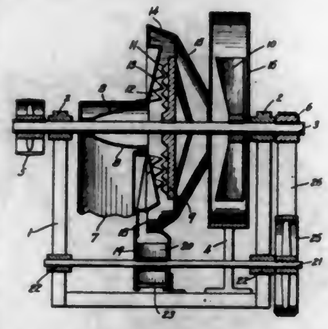
1,884,150. HARMONICA DEVICE FOR PLAYING TWO OR MORE HARMONICAS. JOHN N. NUMBERG, Lakewood, R. I. Filed Mar. 5, 1931. Serial No. 520,184. 10 Claims. (Cl. 84—379.)



4. A holder for a plurality of complete harmonicas, comprising a mouth piece with a series of main inlet openings therein, a series of branch openings therein extending

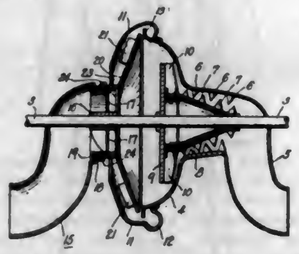
in a plurality of diverging paths, each series arranged to cooperate with the openings in the harmonica for directing the air thereinto, a member for engaging the bottom of each harmonica, and means for adjusting the position of said member to clamp the harmonica against one branch of said series of openings to receive air therefrom.

1,884,151. THRESHING MACHINE. GEORGE FRANCIS NYE, Kearney, Nebr. Filed June 9, 1930. Serial No. 459,857. 1 Claim. (Cl. 130—27.)



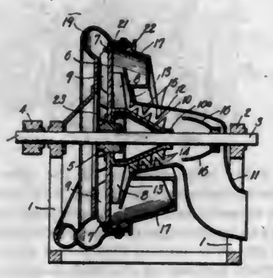
A centrifugal threshing machine comprising in combination a housing, a shaft rotatably mounted in said housing, a member mounted for rotation with said shaft provided with threshing elements, said member adapted to throw the threshed material in a plane substantially perpendicular to the axis of said shaft, a duct at one end of said housing adapted to lead the crop to said member, a suction fan mounted within said housing at the other end thereof adapted to create an air stream through said housing of sufficient velocity to overcome the momentum of the chaff, while insufficient to effect that of the grain, said housing being formed with an inclined surface extending from said plane of centrifugal force forwardly toward said crop inlet to said housing in a direction opposite to the air travel through the housing and a grain outlet duct communicating with said inclined surface.

1,884,152. CENTRIFUGAL THRESHING AND SEPARATING DEVICE. GEORGE FRANCIS NYE, Kearney, Nebr. Filed Jan. 22, 1931. Serial No. 510,469. 6 Claims. (Cl. 130—27.)



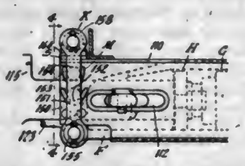
1. A threshing machine comprising in combination a casing, a shaft rotatably mounted in said casing, coacting threshing elements mounted on said shaft and said casing respectively, an inlet duct at one end of said casing for leading the material to be threshed to said threshing elements, a disk mounted on said shaft inwardly of said threshing elements, said disk adapted to throw the threshed material by centrifugal force in a plane substantially perpendicular to the axis of said shaft, a chaff discharge outlet at the other end of said casing, a fan mounted on said shaft, a baffle plate forming part of said fan, said fan adapted to create an air blast to overcome the momentum imparted to the light chaff and discharge it through said chaff outlet, a grain collecting channel formed in said casing adapted to receive the grain thrown through the air blast by centrifugal force, and a grain discharge outlet for said channel.

1,884,153. CENTRIFUGAL THRESHING AND SEPARATING DEVICE. GEORGE FRANCIS NYE, Kearney, Nebr. Filed Jan. 22, 1931. Serial No. 510,470. 7 Claims. (Cl. 130—27.)



1. A threshing machine comprising in combination a housing, a shaft rotatably mounted therein, a threshing means mounted on said shaft for rotation therewith, coacting threshing means mounted on said casing, a centrifugal impeller disk mounted on said shaft for rotation therewith adapted to throw the threshed mass outwardly by centrifugal force, blower fan blades mounted on one side of said disk for rotation therewith adapted to set up an air blast over the periphery of said disk of sufficient force to overcome the centrifugal momentum imparted to the chaff while insufficient to affect the grain, a chaff collecting channel formed in said housing and a grain collecting channel formed in said housing, said channels being provided with respective outlets for the chaff and the grain.

1,884,154. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,137. 5 Claims. (Cl. 213—61.)

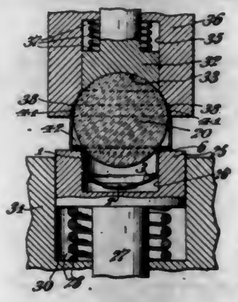


1. In a railway draft rigging, the combination with the underframe structure of the car; of a yoke member; shock absorbing means within the yoke; a coupler; means connecting the shank of the coupler to said yoke; and means supporting and guiding the yoke lengthwise of the car, including link means pivotally connected to the yoke and swingingly supported on the underframe structure of the car to guide said pivotal connection in a true horizontal path.

1,884,155. METHOD OF INSERTING AND SECURING OBJECTS IN THE OPEN ENDS OF HOLDERS. VICTOR L. OESTNAES, Westfield, RICHARD W. LUCE, Mountainside, and LESLIE M. MERRILL, Madison, N. J., assignors to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Sept. 5, 1929. Serial No. 390,442. 5 Claims. (Cl. 29—84.)

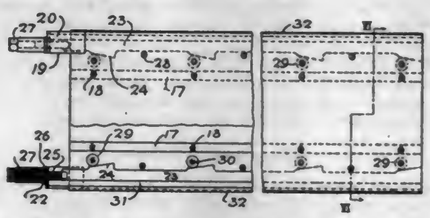
1. The method of inserting a member into the open end of a holder therefor and securing the same therein which comprises the bending inwardly of the outer edge

portion of the said open end to reduce the same so that its diameter is less than the diameter of the portion of the member which extends into the said open end, placing the said member in the said opening, yieldingly supporting said holder, applying pressure to said member to cause expan-



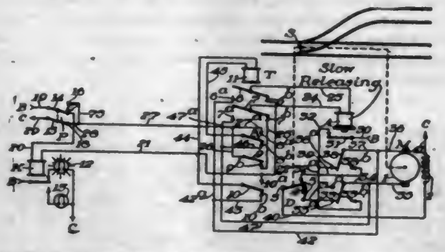
sion of the outer edge portion of the open end of said holder to permit the passage of the said member through the open end of said holder, and applying pressure to the outer side of the outer edge portion of the open end of said holder to set the said portion firmly and snugly against the adjoining surface portion of the said member.

1,884,156. HEAT EXCHANGER BAFFLE. WALTER S. OGILVY, Elmhurst, N. Y., assignor to Alco Products, Incorporated, New York, N. Y., a Corporation of Delaware. Filed June 4, 1931. Serial No. 541,996. 14 Claims. (Cl. 257—239.)



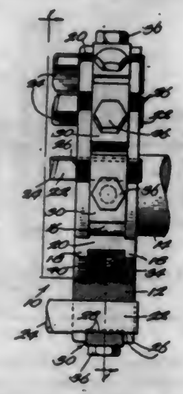
1. A baffle for a heat exchanger shell comprising a pair of spaced parallel plates; an adjustable member disposed between said plates at one side thereof; means for effecting transverse outward movement of said member with relation to said plates when said member is moved in a longitudinal direction to effect an expansion of the width of the baffle; and means for longitudinally moving said member with relation to said plates.

1,884,157. MOTOR CONTROL APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1930. Serial No. 420,690. 18 Claims. (Cl. 246—3.)



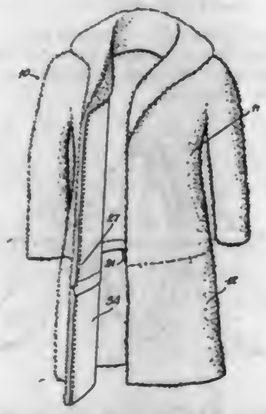
1. In combination, a movable device, an electric motor for controlling said device, a first relay having a contact arranged to be operated at the expiration of a measured time interval after said first relay becomes energized, a second relay, means including said contact for energizing said second relay, means controlled by said second relay for energizing said motor, and means for energizing said first relay when said motor is energized.

1,884,158. MILLING CUTTER. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1929. Serial No. 369,602. 2 Claims. (Cl. 29—105.)



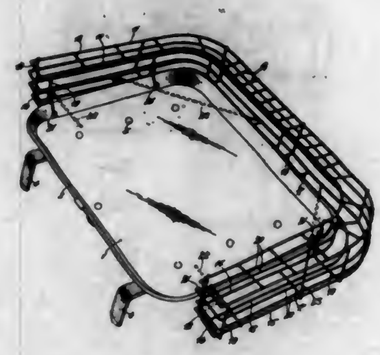
1. In a milling cutter of the class described, a cylindrical cutter body having a plurality of transverse blade receiving slots, a substantially radial cutting blade in each of said slots, said blades being provided with circumferentially extending serrations, a clamping member associated with each blade having corresponding circumferential serrations, whereby said blade may be adjusted axially of the cutter body, and means for tightening said clamping members against the blades.

1,884,159. GARMENT. JACOB L. ORENT, Brooklyn, N. Y. Filed Mar. 25, 1931. Serial No. 525,095. 5 Claims. (Cl. 2—93.)



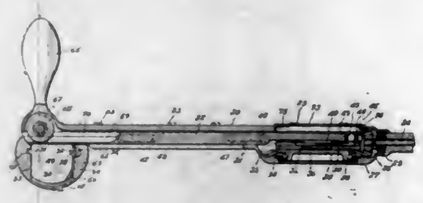
1. In combination with a garment portion having a pair of elongated flaps stitched together inwardly of the outer edges thereof to form an elongated pocket, a strip interposed between said flaps and stitched thereto, the edge of said strip being disposed within said pocket, a second garment portion having an elongated strip attached to one edge thereof and adapted to be inserted within said elongated pocket and between said flaps and complementary slider actuated fasteners at the outer edges of said strips for attaching said garment portions together, a slider for actuating said fasteners, non-removable from one garment portion and removable from said other garment portion to permit entire separation of said garment portions, and means adjacent the outer edge portions of said flaps for detachably attaching said flaps to opposite sides of said strip for forming a housing for said slider actuated fasteners.

1,884,160. SALES SERVICE RACK. JOHN J. ORLICK, St. Louis, Mo. Filed Jan. 14, 1932. Serial No. 586,487. 5 Claims. (Cl. 45—51.)



1. In a device of the class described, the combination with a support including a bottom wall and an outwardly inclined rim, of a rack comprising an open frame adapted to surround the ends and one side of said support, said rack having a plurality of partition members dividing the same into a series of open compartments, and means for removably connecting the rack with the support.

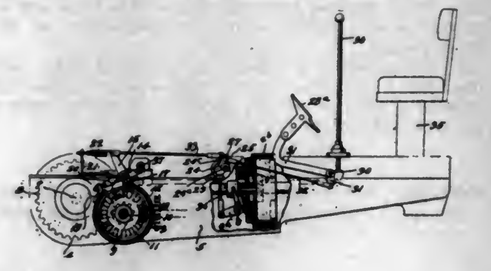
1,884,161. MASSAGE APPLIANCE. WILLIAM V. ORR, Cleveland Heights, Ohio; The Cleveland Trust Company and Adele Mary Orr executors of the estate of said William V. Orr, deceased. Filed May 16, 1930. Serial No. 453,018. 8 Claims. (Cl. 128—48.)



5. A massage appliance including a casing, an applicator mounting bar mounted within the casing for reciprocating movement therein, a crank pin rotatably mounted within the casing and engaging the bar, means for rotating the crank pin, means for adjusting the throw of the crank pin, an applicator mounted on the bar, and roller means mounted in the casing and engaging the bar opposite the applicator for taking thrust imposed upon the applicator.

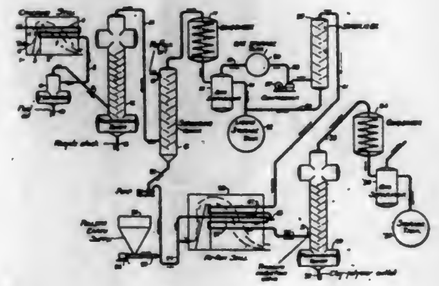
1,884,162. TRACTOR TRANSMISSION BRAKE AND CLUTCH CONTROL MECHANISM. RALPH T. OSMAN, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed June 23, 1930. Serial No. 463,122. 6 Claims. (Cl. 192—13.)

1. In a transmission clutch and brake device of the class described, a control device for causing actuation of the clutch device and subsequent application of the brake device, said control device including a shaft and actuator for the clutch and brake devices, a connection between the clutch actuating device and the actuator adapted to



move over the shaft whereby the tension of the clutch spring is carried by the shaft, and a connection between the brake device and the actuator for actuating the brake device.

1,884,163. PROCESS OF TREATING HYDROCARBONS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1929. Serial No. 355,693. 6 Claims. (Cl. 196—79.)



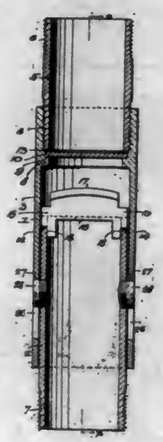
1. The method of treating cracked low-boiling unsaturated hydrocarbons, which consists in passing such hydrocarbons from a cracking zone through a fractionating stage to separate as vapors a fraction composed of the more-volatile hydrocarbons from a less-volatile liquid fraction, condensing and collecting the volatile fraction and removing therefrom the uncondensed gaseous hydrocarbons, passing the higher boiling less volatile liquid fraction through a heating stage and therein subjecting such liquid fraction to controlled conditions of temperature and pressure to produce without material molecular decomposition thereof polymerization of undesired gum-forming and color-imparting bodies present in said liquid fraction, simultaneously passing through said heating stage a portion, at least, of said gaseous hydrocarbons and subjecting them without material cracking to the controlled conditions of temperature and pressure obtaining in said heating stage to polymerize said gases in part into compounds having molecular weights of gasoline hydrocarbons, removing the products from said polymerizing stage and again fractionating the same to separate the high-boiling polymer-containing fractions from the desired low-boiling polymer-free fraction.

1,884,164. COMPOSITION FOR REMOVING SURFACE FINISHES. DONALD F. OTHMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 10, 1930. Serial No. 460,289. 3 Claims. (Cl. 87—5.)

1. A composition of matter, for removing finish coatings, which contains beta-beta' dichlorethyl ether and an organic solvent having strong solvating action on the finish coating.

3. A composition of matter, for removing finish coatings, which contains 2 parts of beta-beta' dichlorethyl ether, 2½ parts of acetone, 2½ parts of methyl alcohol and 1 part of benzol.

1,884,165. TEMPORARY SEAL FOR WELL TUBING. HERBERT C. OTIS, Shreveport, La. Filed Sept. 26, 1929. Serial No. 395,313. 15 Claims. (Cl. 166—4.)

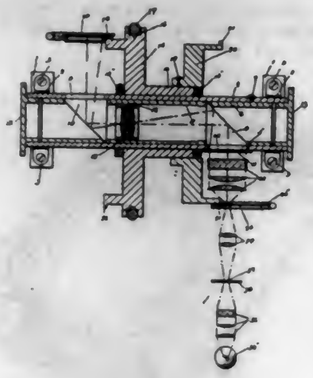


6. A device for temporarily sealing a string of well tubing, comprising a pair of telescoping sleeves adapted to be applied to separate sections of said string of tubing respectively, and a blade permanently and rigidly secured at its opposite ends in and extending across one of said sleeves and adapted to engage and break the disc carried by the other of said sleeves when relative axial movement between said sleeves is effected.

1,884,166. METHOD OF MANUFACTURING POSITIVE ACTIVE MATERIAL FOR THE ALKALINE STORAGE BATTERIES. EIKICHI OTSUKA and EIKICHI SAEOUSA, Tokyo, Japan. Filed Dec. 6, 1929, Serial No. 412,281, and in Japan Jan. 21, 1929. 5 Claims. (Cl. 136—29.)

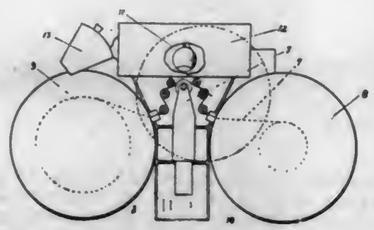
1. That method of making active material for the positive electrodes of storage batteries which is characterized by producing a deposit of nickel hydroxide in the form of mud; washing the deposit with water; adding finely powdered graphite to the deposit and intimately mixing the mass; forming the plastic mass into a cake; extruding the caked mass under pressure to produce a wire to cause it to break into short sticks; applying a coating of powdered graphite to the sticks; and slowly drying the coated sticks.

1,884,167. OPTICAL PRINTER. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed June 10, 1929. Serial No. 369,891. 10 Claims. (Cl. 88—24.)



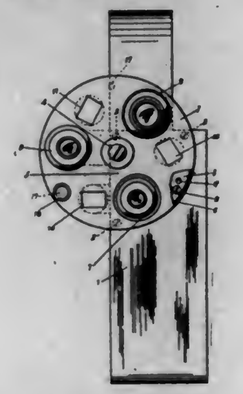
1. An optical printer comprising a single moving member having toothed ends adapted to engage and move films in definite laterally spaced relation, one of said ends being adjustable with respect to the other, means for illuminating one film, and means to pass light from the illuminated film to the other film.

1,884,168. FILM GUIDING MECHANISM FOR SOUND RECORDING AND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed July 31, 1929. Serial No. 382,564. 2 Claims. (Cl. 179—100.3.)



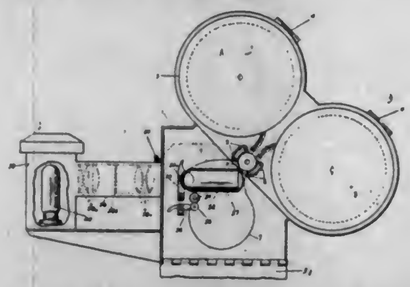
1. In photographic sound recording and reproducing apparatus, the combination of a light station comprising a pair of spaced axially aligned rollers, means for causing a film to travel past said station in contact with said rollers, and a plurality of guide rollers disposed closely about said station on each side thereof, the peripheries of two of said rollers overlapping a plane passing in contact with said film supporting surface thereby to impart to the film an undulatory form during its passage past said light station.

1,884,169. PHOTOGRAPHIC CAMERA. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed July 31, 1929. Serial No. 382,565. 3 Claims. (Cl. 95—44.)



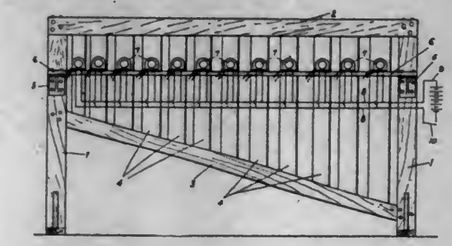
1. The combination with a camera having a focusing tube and a finder tube, of a turret mounted for rotation on said camera, a plurality of lenses of different focal lengths and a separate cooperating finder lens for each of said lenses mounted in said turret, said lenses being adapted upon rotation of the turret to be selectively brought into alignment with said focusing tube and then into picture-taking position, the relative disposition of the lenses and cooperating finder lenses being such that when a selected lens is in picture taking position its cooperating finder lens will be in alignment with the finder tube, and means for retaining the turret stationary while the selected lens and its finder are in the picture-taking position.

1,884,170. PHOTOGRAPHIC SOUND RECORDING AND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 18, 1930. Serial No. 429,822. 2 Claims. (Cl. 179—100.3.)



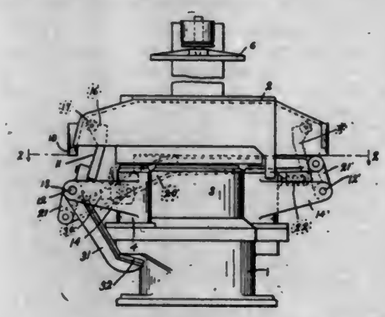
1. A sound recording and reproducing apparatus, comprising in combination, a housing, a film magazine forming an integral part of said housing and having a supply reel and a takeup reel mounted for rotation, a hollow member disposed within said housing and having a curved and slit end wall, means for conducting a film from said supply reel, over said curved end wall and to the takeup reel, movable means for maintaining the film in contact with said wall, means for projecting light rays on said film as it passes over said wall, a photoelectric cell disposed in said hollow member in position to receive the projected light rays after their passage through the film, and means for varying the intensity of the light rays before their passage through the film.

1,884,171. SOUND REPRODUCING DEVICE. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed May 22, 1930. Serial No. 454,766. 3 Claims. (Cl. 181—31.)



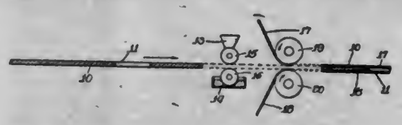
1. A sound reproducing device, comprising in combination, a frame having a horizontally disposed member and a member inclined to said horizontal member, a plurality of diaphragms of different lengths supported between said members in spaced relation to each other, and a plurality of loud speakers supported on said frame and each operatively connected with one of said diaphragms.

1,884,172. JOLT SQUEEZE STRIPPER LATCH. EARL F. OYSTER, Cleveland Heights, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 14, 1931. Serial No. 562,659. 5 Claims. (Cl. 22—9.)



1. A jolt squeeze stripper latch comprising an arm adapted when in vertical position to support a jolt table, automatic means constraining said arm to said vertical position, non-automatic means adapted to move said arm out of said position, and automatic locking means adapted to hold said arm out of supporting position when the table is in jolting position, said locking means comprising a lug attached to the squeeze cylinder, an arm positively connected to said supporting arm, and an extension carried by said last-named arm, said extension being engageable beneath said lug when the squeeze cylinder is down.

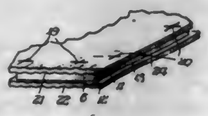
1,884,173. METHOD OF DISPLAY MOUNTING. KENNETH L. OZMUN, Chicago, Ill., assignor to Chicago Cardboard Company, Chicago, Ill. Filed Oct. 26, 1931. Serial No. 571,153. 11 Claims. (Cl. 41—21.)



11. The method of mounting a cardboard display sheet which consists in thoroughly drying the cardboard, in die-cutting an opening of the desired shape therein, in simul-

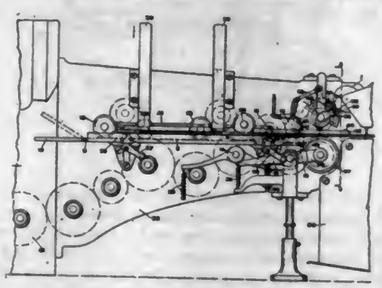
taneously applying paste to the opposite faces of the perforated cardboard, in simultaneously applying cover sheets to the paste covered sides of the board, in drying the cover sheets on the board, in die-cutting the cover sheet at one side of the opening from the cardboard with a larger or the same die with which the cardboard was cut and in removing the cut-out portion of the cover sheet over the opening leaving the other cover sheet stretched tightly over the opening.

1,884,174. MOUNTED BOARD AND METHOD OF MAKING THE SAME. KENNETH L. OZMUN, Chicago, Ill., assignor to Chicago Cardboard Company, Chicago, Ill. Filed Feb. 18, 1932. Serial No. 593,887. 18 Claims. (Cl. 154—2.)



1. The method of mounting two sheets of paper on opposing sides of a cardboard sheet to which paste has been applied, one sheet having an outer printed surface, and in overlapping the side and end edges of the printed sheet beyond the edges of the other sheets so that the extending edges which constitute the guide and gripper edges used in printing may also be used for feeding the combined sheets to the same guide edges to obtain accurate registration with the printing for die cutting.

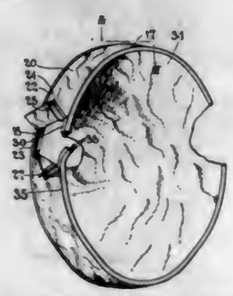
1,884,175. COMBINED MAIL-SEALING, POST-MARKING, METERING AND ADDRESSING MACHINE. JOSEF V. PACHER, Brooklyn, and LAWRENCE J. ZAHN, Long Island City, N. Y., assignors to International Postal Supply Company, Brooklyn, N. Y. Filed Oct. 12, 1928. Serial No. 312,071. 10 Claims. (Cl. 101—49.)



1. In a machine having mechanism for sealing, postmarking, and metering mail matter, further mechanism including; means for receiving the pieces of mail from the first mechanism and moving them forward, a stencil track with means for feeding stencils thereto, means brought into action by the moving piece of mail for moving the stencils forward on the track in the direction being taken by the mail matter, means for bringing a stencil and a piece of mail matter into juxtaposition, means for causing successive stencils to make an impression on successive pieces of mail matter, and means for receiving the mail matter and stencils after the stencil impression operation has been performed.

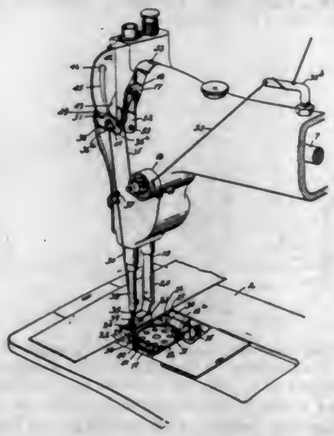
1,884,176. ANTENNA. CLARENCE J. PAGEL and BENJAMIN L. KULICK, Buffalo, N. Y., assignors to Henry G. Bartsch, Washington, D. C. Filed July 21, 1931. Serial No. 552,235. 1 Claim. (Cl. 250—33.)

An antenna unit for use with automobile radio equipment comprising a band-like member of flexible material of substantially the same diameter as that of the spare tire casing of an automobile, and adapted to be snugly and concentrically detachably mounted upon the tread portion of said tire casing, a circular member of flexible material disposed within the confines of said band-like member having its peripheral edge secured to the outboard edge of said band-like member and adapted to overlie and cover the outboard side wall of the tire casing, a tubular member of ring form having substantially the same diameter as said circular member and externally



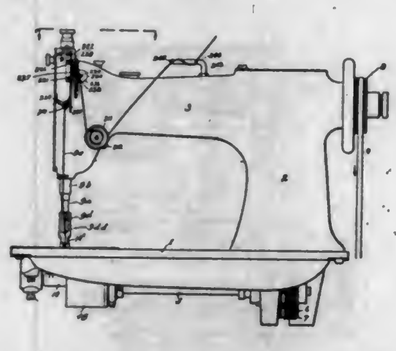
secured to said band-like member and said circular member at their common edge, a loop antenna element disposed within and completely encased by said tubular member, and a lead-in connection transversely disposed within, protected and concealed by said band-like member, one end of which lead-in connection passes through said tubular member and is electrically connected to said loop-antenna element, the other end of which is adapted for connection to radio equipment carried by said automobile.

1,884,177. SEWING MACHINE. WILLIAM N. PARKES, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,213. 9 Claims. (Cl. 112—249.)



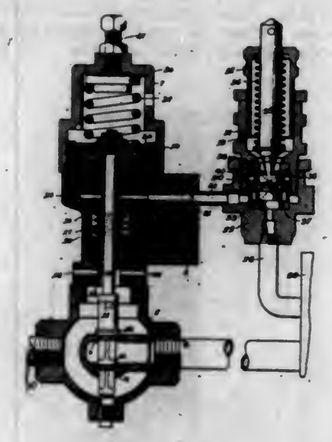
1. In a lock stitch sewing machine, a thread carrying needle, means for moving a section of the needle thread leading to the needle around a field, a fixed stitch setting and slack thread control part which has a body portion that terminates into an end portion, the body portion of the part located within the said field, and the end of the end portion located outside of the field.

1,884,178. SEWING MACHINE. WILLIAM N. PARKES, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, New York, N. Y., a Corporation of New Jersey. Filed June 13, 1930. Serial No. 460,938. 8 Claims. (Cl. 112—249.)



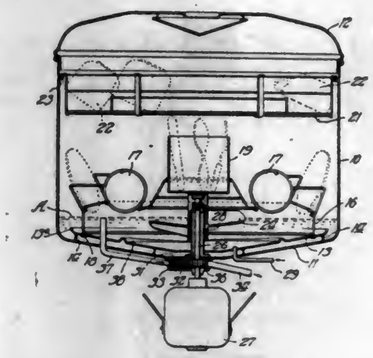
1. In a lock stitch sewing machine, a needle thread tension, an operating thread carrying needle, an operating take-up lever, a fixed auxiliary stitch setting part into engagement with which the take-up lever draws the needle thread previous to the setting of a stitch, and a separate fixed auxiliary needle thread control part into engagement with which the take-up lever draws the needle thread after the setting of a stitch.

1,884,179. FLUID COMPRESSOR REGULATING VALVE. ALBERT FRANKLIN PARKS, South Norwalk, Conn., assignor to Norwalk Company, Inc., South Norwalk, Conn., a Corporation of Connecticut. Filed May 24, 1930. Serial No. 455,183. 4 Claims. (Cl. 137—153.)



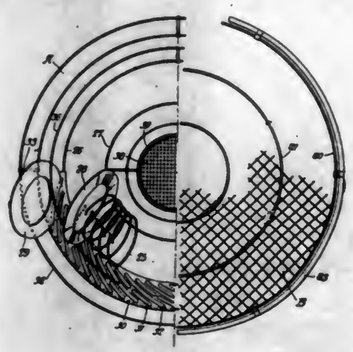
1. In a valve of the class described, the combination of a casing including an intake, an outlet, and valve seats, a central bore therein and vents connected with the bore, said casing also having cylinders opening into each other and having a common intake, normally spaced apart pistons, one in each cylinder, springs seated upon said pistons, one of the pistons being secured upon the valve stem and the other being slidable thereon, whereby said pistons and the valves are simultaneously operated in opposite directions against the actions of their respective springs to open one valve and close the other.

1,884,180. DISH WASHING MACHINE. REMIGIUS PAULY, Chicago, Ill., assignor of one-half to Eric Osterberg, Chicago, Ill. Filed Oct. 7, 1929. Serial No. 397,779. 4 Claims. (Cl. 141—9.)



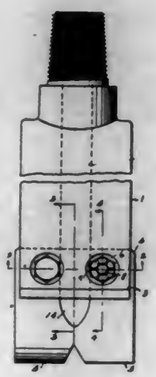
2. In a dish washing machine, a tub for holding dish washing water, having top, sides and bottom, a false bottom spaced from the tub bottom and disposed above the same and open at its periphery, a rack in the tub for supporting a supply of dishes to be washed, an impeller positioned above the false bottom for driving washing water against the dishes in the rack, a supply pipe for clear water extending through the tub bottom and false bottom for supplying clear water directly to the impeller, and a drain in the tube bottom and disposed underneath the false bottom for withdrawing soapy washing water from the tube during the admission of clear water to the impeller, whereby the soapy washing water may be removed and clear rinsing water supplied to the tub during the washing operation.

1,884,181. DISH WASHING MACHINE. REMIGIUS PAULY, Chicago, Ill., assignor of one-half to Eric Osterberg, Chicago, Ill. Filed July 18, 1924. Serial No. 726,770. 3 Claims. (Cl. 141—9.)



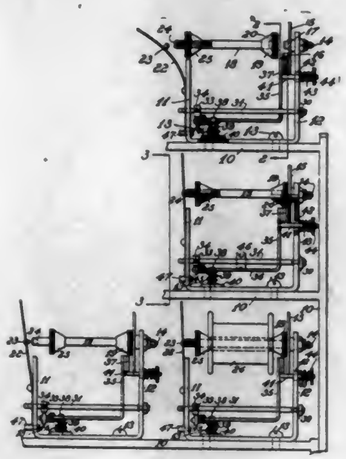
1. In a dish washing machine, a tub, an impeller located centrally near the bottom of the tub, said impeller having a spiral blade of increasing pitch toward its upper end, a rack portion surrounding said impeller for supporting plates at angles between tangents and radii of a circle concentric to the impeller, and slightly inclined vertically, and a second rack portion surrounding the first rack portion for supporting plates at larger angles with respect to the radii of a circle concentric to the impeller.

1,884,182. DRILL. LOUIS M. PEARCE and WALTER L. CHURCH, Houston, Tex. Filed Apr. 14, 1931. Serial No. 529,930. 6 Claims. (Cl. 255—61.)



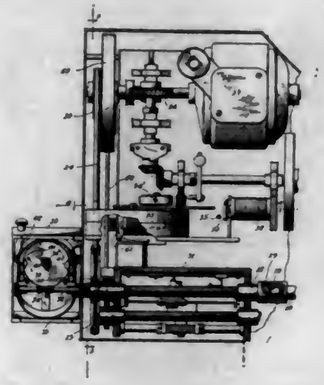
1. A drill comprising a head having prongs spaced apart forming a mortise between them, a boring member in said mortise, a bushing through each of the prongs on opposite sides of the axis of the head whose inner ends abut said member and bolts through said prongs and boring member from opposite sides of the drill and having threaded connections with said bushings.

1,884,183. TENSION DEVICE FOR COIL WINDING MACHINES AND THE LIKE. OSCAR A. PEARSON, Oak Park, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1928. Serial No. 292,300. 7 Claims. (Cl. 242—156.)



4. A device of the class described comprising in combination a supporting frame; a spool rotatably mounted in said frame; a yieldable brake for said spool; a rocker shaft mounted in said frame; means, operable by tension in a strand unwinding from said spool, for operating said shaft; an eccentric secured to said shaft; and a lever connection between said eccentric and said brake.

1,884,184. MACHINE FOR WINDING COILS. OSCAR A. PEARSON, Oak Park, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 20, 1928. Serial No. 307,177. 23 Claims. (Cl. 192—142.)



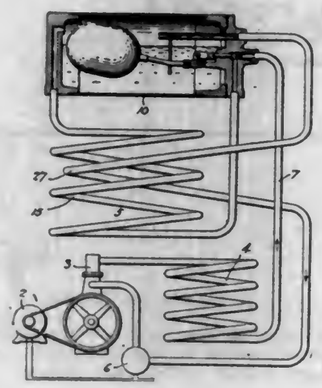
9. A machine of the class described comprising an operating shaft; a brake for checking the motion of said shaft; an electric motor for driving the shaft; a circuit for said motor; a switch for said circuit; a controlling circuit for said switch; a worm on said shaft; a worm wheel driven by said worm; a gear connected with said wheel to be driven thereby at reduced speed; two switches in said controlling circuit; means on said wheel and gear for simultaneously operating said switches; means permitting manual disengagement of said worm wheel from said worm for resetting said worm and gear; and an indicator showing proper setting of said wheel and gear.

1,884,185. FILE. ALFRED PEISELER, Remscheid-Haddenbach, Germany. Filed Mar. 19, 1930, Serial No. 437,139, and in Germany Mar. 23, 1929. 5 Claims. (Cl. 29—78.)



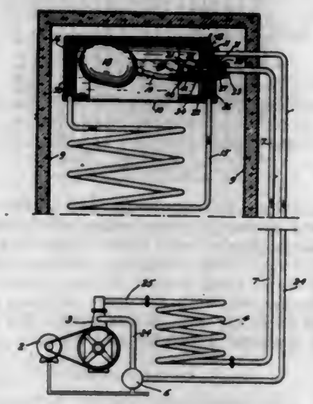
1. A file of the character described, the body proper of which is provided with milled teeth at one end, which teeth extend undivided over the whole width of the file, the remaining teeth being subdivided by filings breaker grooves of gradually increasing width, there being a gradual increase in the direction of depth, with the next succeeding grooves reduced in width progressively.

1,884,186. REFRIGERATION. FRANK DESNOYERS PELTIER and CLYDE EDWARD PLOEGER, Evansville, Ind., assignors, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1926. Serial No. 152,902. 10 Claims. (Cl. 62—115.)



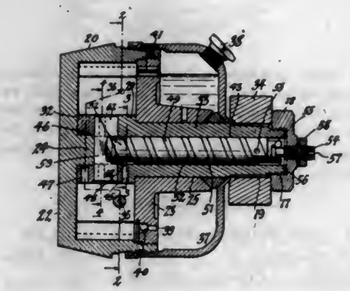
1. Refrigerating apparatus comprising, in combination, a chamber, a float in said chamber and means co-operating with said float to define a liquid space and a vapor space in said chamber, a discharge connection in the vapor space of said chamber, said connection having a restricted portion and a communication between said restricted portion and the liquid space of said chamber.

1,884,187. REFRIGERATION. FRANK DESNOYERS PELTIER and CLYDE EDWARD PLOEGER, Evansville, Ind., assignors to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed July 6, 1928. Serial No. 290,871. 5 Claims. (Cl. 62—115.)



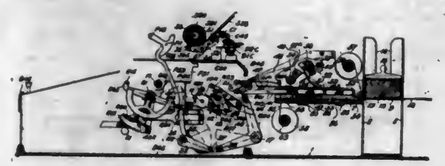
1. Refrigerating apparatus comprising, in combination, a first evaporator conduit, means to supply liquid refrigerant to said first evaporator conduit, a manifold connected to said first evaporator conduit to receive liquid and vapor therefrom, means to regulate the supply of liquid refrigerant to said first evaporator conduit to define a liquid space and a vapor space in said manifold, a second evaporator conduit connected to receive vapor from said manifold, means interposed in the path of flow of vapor from said manifold to said second evaporator conduit for producing a drop in pressure and a connection between said liquid space and said means.

1,884,188. SHOCK ABSORBER. RALPH F. PEO, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Apr. 8, 1931. Serial No. 527,405. 15 Claims. (Cl. 188—89.)



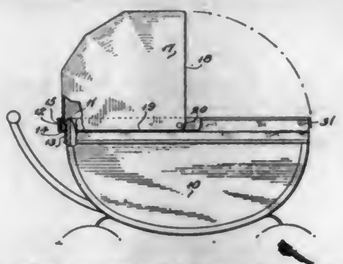
1. A hydraulic shock absorber having a body member provided with a working chamber adapted to contain a resistance liquid, a piston member movable back and forth in said chamber, one of said members having a passage communicating with said chamber on opposite sides of said piston, a relatively stationary core, and a helical thermostatic member surrounding said core and having one end secured thereto while its opposite end is slidable on said core and relative to said passage and thereby adapted to close the passage more or less under varying temperatures which expand and contract said thermostatic member.

1,884,189. COMBINED CALCULATING AND CARD PRINTING AND PERFORATING MACHINE. NATHAN W. PERKINS, East Orange, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 16, 1926. Serial No. 135,880. 30 Claims. (Cl. 101—93.)



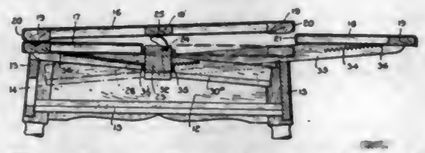
1. The combination with a calculating machine provided with a keyboard and having a travelling carriage carrying a platen, and means for printing on paper carried by the platen the amounts which are set up or result from calculations, of card feeding mechanism mechanically operated by said machine adapted to successively feed cards to a position where they may be subject to control by said carriage, means for controlling the subsequent movements of the card by the carriage, and means mechanically operated by the machine for successively indicating on a card thus fed and controlled amounts which correspond with the amounts printed on the paper on the platen by the calculating machine to thereby provide on the card a duplicate or equivalent of the record made by printing means.

1,884,190. BABY CARRIAGE STRUCTURE. HARRY PERLMUTTER, Brooklyn, N. Y. Filed Jan. 28, 1932. Serial No. 589,506. 4 Claims. (Cl. 296—110.)



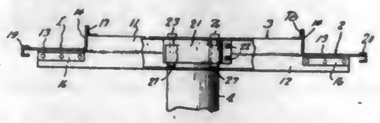
1. In a baby carriage, a body having continuous sides and rear end edges and a channelled upper edge extending continuously along the sides and end, a top pivoted in the channel at the sides of the body, and having a bottom edge conforming to the channel so as to lie in the bottom thereof throughout, and being tiltable therefrom.

1,884,191. ADJUSTABLE TOP FOR TABLES. JOSEPH PERLOFF, Brooklyn, N. Y. Filed Apr. 30, 1930. Serial No. 448,683. 7 Claims. (Cl. 45—113.)



1. The combination of a main top portion for a table or the like, mounting means for movably supporting said main top portion and to permit tilting of said main top portion when in elevated position, movable means cooperating with said mounting means for vertically elevating said main top portion, a supplemental top portion, means secured to said supplemental top portion for supporting the same when in exposed position by engagement with said main top portion, and retractile means for moving said supplemental top portion from its exposed position to concealed position, effective upon the elevation and tilting of said main top portion.

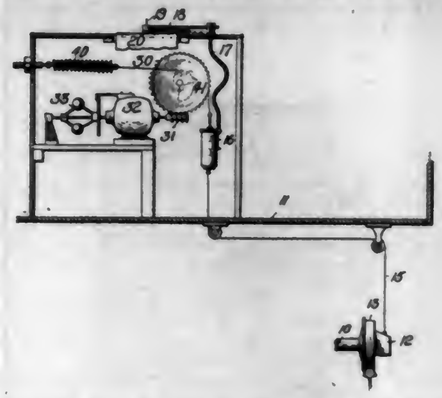
1,884,192. LIFT FOR AUTOMOTIVE VEHICLES. FRANCIS W. PERRY, Pittsburgh, Pa., assignor, by mesne assignments, to Edwin L. Wiegand, Pittsburgh, Pa. Filed Nov. 1, 1929. Serial No. 404,006. 16 Claims. (Cl. 254—89.)



8. In a lift of the character described, the combination of a pair of runways and a supporting column, a cross head connecting said pair of runways and comprising a pair of channels disposed one over the other, a head piece rigidly secured to said upper channel and to said supporting column.

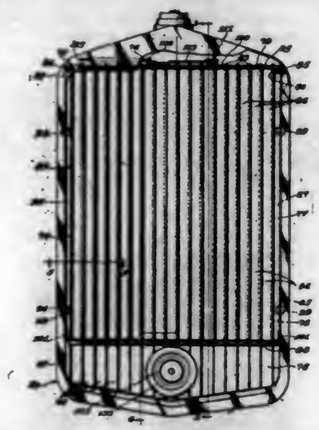
1,884,193. LOW RAIL JOINT RECORDER. WALTER M. PERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,980. 8 Claims. (Cl. 234—1.)

1. In a rail joint testing apparatus mounted on a rail car, a member carried by said car and movable in response to variations in the rail surface and to movements of the car body with respect to the rail, a rail joint recorder, a connection between said member and said recorder, said



connection including velocity responsive means whereby only those movements of said member in excess of a predetermined velocity actuate said recorder.

1,884,194. RADIATOR SHUTTER. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 6, 1929, Serial No. 412,195, and in Germany June 18, 1928. 5 Claims. (Cl. 180—68.)

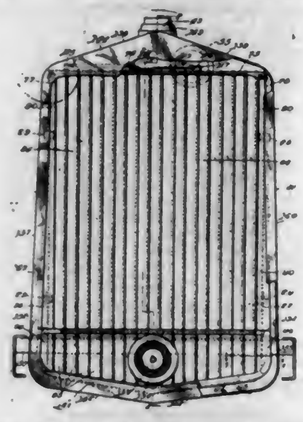


1. In a radiator shutter device, the combination of a radiator core having an outer casing with a pair of projecting flanges forming an extension of the air passage through said core, with a radiator shutter, comprising a frame, said frame being carried by said projecting flanges and said flanges enclosing the space between said frame and core to direct air through said device, and a plurality of movable shutters carried by said frame.

1,884,195. SHUTTER UNIT. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 9, 1928, Serial No. 268,491. Divided and this application filed Mar. 19, 1930. Serial No. 436,939. 8 Claims. (Cl. 180—62.)

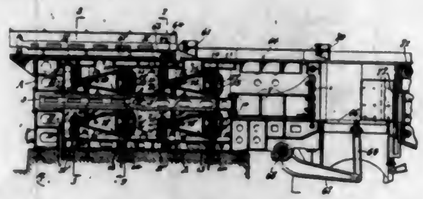
5. A shutter unit comprising an end frame member formed with inwardly extending flanges, side frame members formed with inwardly extending flanges, secured to the inwardly extending flanges on said end frame member,

attaching flanges carried by said frame members for securing said end frame member to said frame members, a second end frame member having attaching flanges secured to said side frame members, a plurality of shutters having trunnions pivotally mounted in said end frame members,



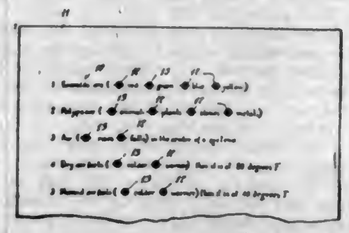
said shutters having inwardly extending actuating arms, resilient means carried by one of said end frame members for engaging the ends of said shutters and resilient means carried by one of said frame members engaging the ends of said trunnions.

1,884,196. PRESS. EDWARD T. PETERSON, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 456,901. 18 Claims. (Cl. 74—27.)



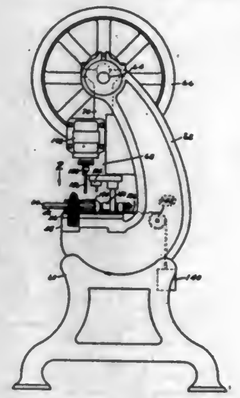
1. In a press of the character described the combination with a ram of a plurality of units arranged lengthwise of said ram for actuating the same, each of said units including independently functioning yielding means.

1,884,197. SELF-INSTRUCTOR AND TESTER. HANS J. PETERSON, Hattiesburg, Miss., and JOHN C. PETERSON, Manhattan, Kans. Filed Nov. 13, 1930. Serial No. 495,430. 17 Claims. (Cl. 35—12.)



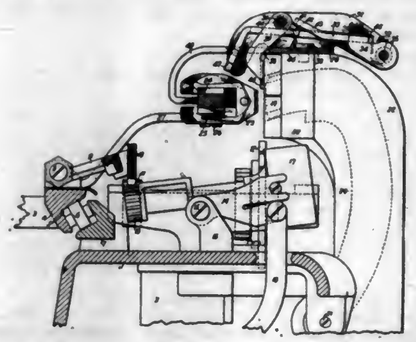
7. A tester device comprising means having segregated areas one or more of the same being provided with a chemical capable of development and one or more thereof being not so provided.

1,884,198. PRESS. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed June 1, 1929. Serial No. 367,818. 24 Claims. (Cl. 29—88.2.)



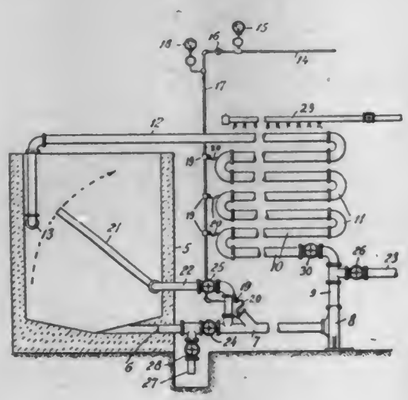
1. A device for pressing the bushing into a circuit breaker lever, said circuit breaker lever having an aperture for receiving and holding the bushing, comprising in combination, a floating support for the circuit breaker lever; a pair of clamping members mounted on said floating support for holding the lever in position; a support for the bushing so arranged as to hold the bushing in alignment with the circuit breaker lever; and means for causing the lever to be advanced towards the bushing so as to cause the lever to be pressed upon the bushing.

1,884,199. TYPEWRITING MACHINE. JOSEPH PHELPS, Stamford, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,244. 3 Claims. (Cl. 197—176.)



1. The combination of a carriage, a series of denominational stops separated at letter-space intervals, a series of column stops separated at letter-space intervals and mounted for movement into and out of operative position, a locking member for locking the carriage against rebound when it is arrested by the cooperation of an effective column stop with a projected denominational stop, said locking member having ratchet teeth spaced at letter-space intervals, and automatically operating means for bringing about a movement of said locking member into cooperative relation only with the next advancing effective column stop when a denominational stop is actuated, thereby engaging said next advancing effective column stop and preventing a rebound of the carriage when such advancing column stop coacts with the projected denominational stop to arrest the carriage.

1,884,200. METHOD OF CHLORINATING LIQUIDS. HERBERT PHILIPP, Syracuse, N. Y., assignor to Solvay Process Company, Syracuse, N. Y., a Corporation. Filed Mar. 25, 1929. Serial No. 349,691. 4 Claims. (Cl. 23—86.)



1. The method of chlorinating liquids which comprises causing the liquid to traverse an extended path of relatively slight cross-sectional area and introducing chlorine to the liquid at a plurality of points spaced with reference to the path of travel so that the chlorine introduced at each point is consumed substantially before the liquid which was in reactive contact therewith arrives at the succeeding point of introduction of the chlorine.

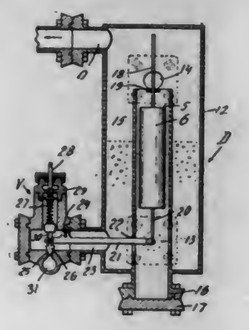
1,884,201. BURIAL VAULT LATCH. ELMER W. PHILLIPPE, Ottumwa, Iowa, assignor to The Royal Vault Manufacturing Company, Ottumwa, Iowa, a Corporation of Iowa. Filed Aug. 31, 1931. Serial No. 560,329. 3 Claims. (Cl. 292—41.)



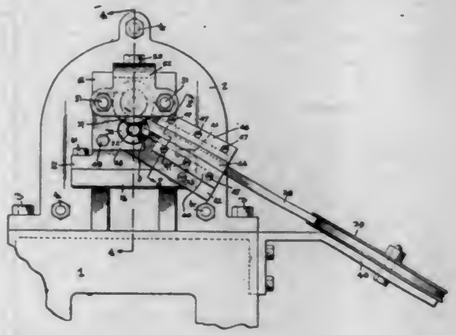
1. A latch device comprising a base having a slot formed therein, two slide bolts mounted in the base, and means for operating the slide bolts comprising a spring wire rod connected at its ends to the slide bolts, a handle at its central portion projected through said slot, the parts of the rod adjacent to the handle being inclined at angles converging toward the handle and designed to engage the sides of the slots in such manner that as the handle is moved through the slot in an outward direction the slide bolts will be withdrawn and when the handle is moved inwardly through the slot the slide bolts will be moved outwardly to locking position.

1,884,202. REFRIGERATION APPARATUS. HARRY A. PHILLIPS, Evanston, Ill. Filed Nov. 12, 1929. Serial No. 406,563. 8 Claims. (Cl. 62—126.)

1. Means for controlling the admission of liquid refrigerant to a refrigeration unit comprising a float chamber, a float within said float chamber, a liquid refrigerant chamber surrounding said float chamber for protecting the liquid refrigerant in said float chamber against heat absorption and a valve controlled by said float for admitting liquid refrigerant to said refrigerant chamber at a point outside of and remote from said float chamber.



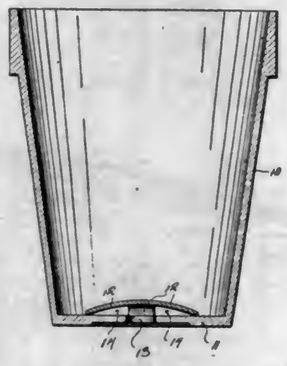
1,884,203. METHOD OF AND MACHINE FOR MAKING SPIRAL FIN TUBING. GEORGE H. PICKHARD, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Apr. 2, 1928. Serial No. 266,488. 15 Claims. (Cl. 29—33.)



1. In a machine for making spiral fin tubing comprising in combination, means for supporting a tube, means for presenting a flat sheet metal fin strip edgewise to the tube, and rotary means for reducing the thickness of the strip along its outer edge portion as the strip is presented to the tube to compensate for the larger circumference around the outer edge of the strip as it is spirally wound on the tube, said last named means while shaping the strip also forcing it about the tube.

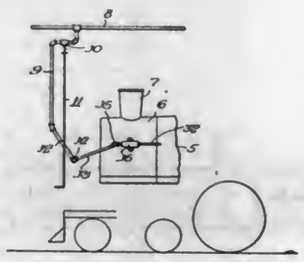
12. In a machine for making spiral fin tubing comprising in combination means for presenting a flat sheet metal fin strip edgewise to a tube to wind the fin strip spirally thereon as the tube is rotated and fed endwise through the machine, and means for rotating a tube and feeding it through the machine comprising a rotary drum to receive the tube, a single set of rolls carried by the drum and engaging the tube for rotating the tube in the turning of the drum, a stationary sun gear at one end of the drum and having a bore for the passage of the tube therethrough, planet gears in mesh with said sun gear and carried about the same in the rotation of the drum, and means connecting the rolls with said planet gears for turning the rolls to feed the tube through the drum in the rotation of the latter.

1,884,204. FLOWERPOT DRAINER. EDWARD PILKINGTON, Altoona, Pa. Filed Dec. 8, 1931. Serial No. 579,742. 2 Claims. (Cl. 47—34.)



1. A device as set forth, comprising a plurality of connected arms, each arm being curved longitudinally whereby to raise the central portion thereof above the bottom of a flower pot, said central portion being constructed to overlie the drain opening of the flower pot, the space between each pair of arms constituting drain openings.

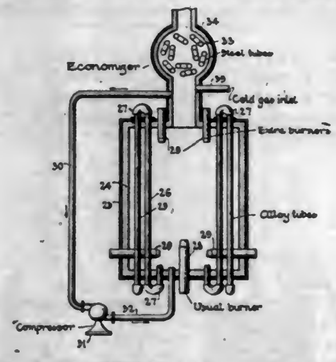
1,884,205. AUTOMATIC MEANS FOR BLOWING UP ENGINES. CURTIS W. PLOEN, Chicago, Ill., assignor to The Okadee Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1928. Serial No. 290,484. 13 Claims. (Cl. 110—150.)



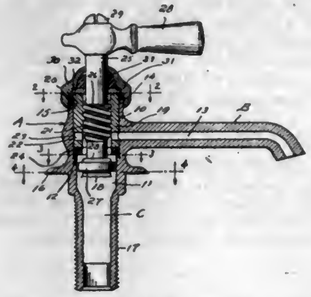
1. The combination with a boiler, and artificial draft means therefor, of an auxiliary supply of fluid under pressure for operating said draft means, and a differential pressure operated means for rendering said auxiliary supply of fluid inoperative upon a predetermined pressure less than that of said auxiliary supply being developed in the boiler and means for preventing at all times any communication between said auxiliary supply of fluid under pressure and said boiler.

1,884,206. RECONDITIONING ALLOY STEEL. WILLIAM B. PLUMMER, Chicago, Ill., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed July 18, 1930. Serial No. 469,001. 4 Claims. (Cl. 148—1.)

1. In the refining of petroleum oils, the method of reconditioning deteriorated alloy steel-oil-heating tubes which comprises cleaning the surface of the tubes to remove deposited carbon, heating the tubes in situ to a temperature of over 1500° F. and maintaining the tubes at the elevated temperature for a sufficient period of time to restore the non-brittle condition of the tubes.

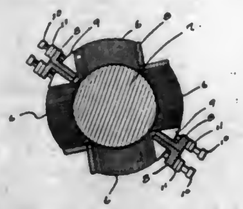


1,884,207. FAUCET. JULIUS POLLOCK, Cleveland Heights, Ohio, assignor to The Republic Brass Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 4, 1931. Serial No. 579,016. 3 Claims. (Cl. 251—156.)



1. A faucet including a body having an opening therethrough, a shoulder formed on said body and extending around said opening, an annular gasket resting on said shoulder, an insert axially slidable but non-rotatably received within said opening and confining said gasket between itself and said shoulder, removable means for securing said insert against axial movement in said opening, a valve stem threaded through said insert and carrying a head adapted to engage said gasket, and a projection on said body adapted to be engaged by said head upon excessive opening movement of said valve stem for assisting in the removal of said insert.

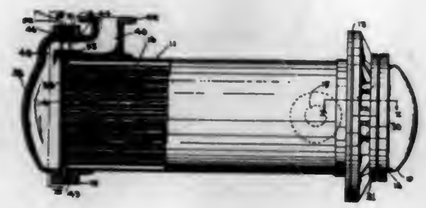
1,884,208. BEARING SURFACE. EUGENE P. POLUSHKIN, New York, N. Y. Filed Feb. 8, 1930. Serial No. 427,027. 8 Claims. (Cl. 308—237.)



1. A bearing surface for a shaft composed of a plurality of straight parallel elongated metallic elements hav-

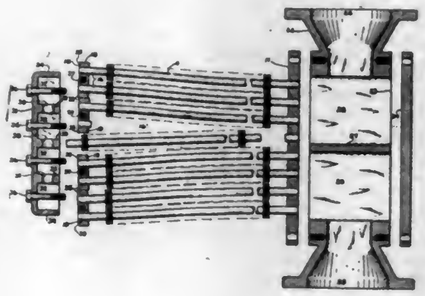
ing axes perpendicular to the axis of said shaft and having interstices therebetween for the introduction of lubricant.

1,884,209. HEAT EXCHANGE APPARATUS. JOHN A. POTTER, Prospect Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1930, Serial No. 482,834. Renewed Feb. 17, 1932. 12 Claims. (Cl. 257—239.)



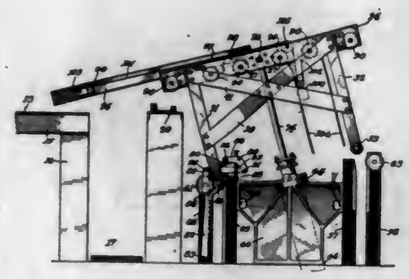
1. In a heat exchanger, the combination of a shell, a tube bundle aggregate for the shell including a tube plate, an expansion joint for connecting the shell to the plate including a flexible member connected to the shell and a ring consisting of lateral sections and connected to the flexible member and to the tube plate.

1,884,210. HEAT EXCHANGER. JOHN A. POTTER, Moore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1931, Serial No. 507,017. Renewed June 3, 1932. 13 Claims. (Cl. 257—240.)



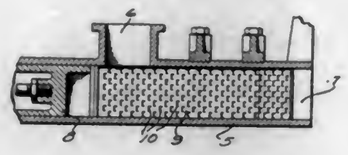
1. A heat transfer unit for a heat exchanger comprising, in combination, a plurality of tube bundle units, each embodying a tube plate section and a series of tubes secured at one end in the said tube plate section, a common box structure cooperating with all of said sections to form a fluid conveying chamber for the tubes, and means for separately securing each of the tube plate sections to said box structure.

1,884,211. MATERIAL TRANSFERRING MECHANISM. GOMBERT POWELL, Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 522,041. 15 Claims. (Cl. 214—1.)



1. In a material transferring unit, base members, a material transferring element slidably mounted on said base members, means for elevating said unit and for tilting the same to cause said element to slide by gravity along said base members.

1,884,212. PRESS. MICHAEL J. POWER, Nekoosa, Wis. Filed Dec. 29, 1930. Serial No. 505,258. 3 Claims. (Cl. 100—50.)

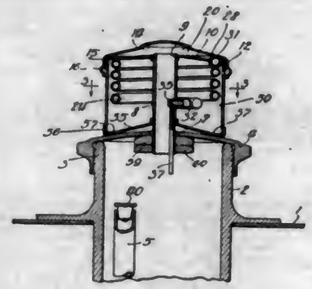


1. In a press the combination with a reciprocable piston, of a cylinder member provided with escape ports having front and rear walls outwardly diverging and both rearwardly inclined with reference to the direction of piston advance, the rear wall being rectilinear and the front wall being so curved that the path of the piston is substantially tangent thereto.

1,884,213. AUTOMOBILE CONDENSER. RAYMOND C. PRATT, Chicago, Ill. Filed Mar. 10, 1930. Serial No. 434,517. 7 Claims. (Cl. 257—25.)

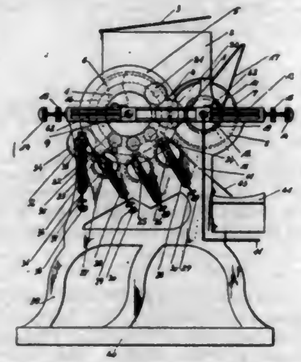
1. A condenser for radiators comprising means leading into the vapor space of the radiator and adapted to convey vapor therefrom, and means including relatively

small tubing in communication with the top of said first named means and leading back into communication with



the radiator, said last named means also including a conduit means in communication with the tubing and passing through said first named means.

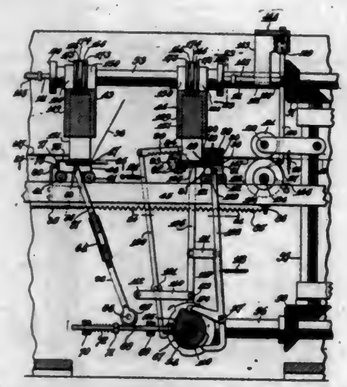
1,884,214. PRINTING ROLLER AND MEANS FOR MAKING THE SAME. FRITZ PRIEMER, Zschachwitz, near Dresden, Germany. Filed Dec. 12, 1928, Serial No. 325,635, and in Germany June 11, 1928. 4 Claims. (Cl. 91—67.8.)



1. A process of covering a printing roller with a coating of leather dust, copal and hardened oil, consisting in mixing the ingredients of the coating in powdered form, feeding the powder in a thin stream on to the rotating printing roller, heating the powder on the roller, and pressing the stream of powder continuously on to the roller surface.

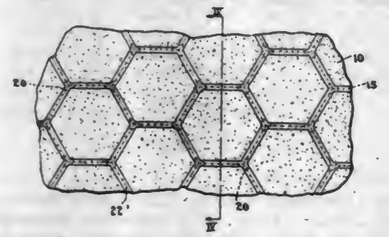
1,884,215. MATCH PACKAGE AND STAPLING INSERT. RODNEY S. PULLEN, Philadelphia, and WILLIAM J. CROWELL, Jr., Wyncote, Pa., assignors to Pullenlite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,217. 10 Claims. (Cl. 1—2.)

1. In match packeting mechanism, a multiple stapler including an inside plunger, downwardly extending blades thereon spaced along the bottom thereof, an outside plunger encasing the sides of the inside plunger, downwardly extending blades on the outside plunger one on each side of each inside blade and in the plane thereof, supporting structure encasing the outer sides of the outside plunger and presenting a bridge portion downwardly spaced from both plungers and perforated to downwardly pass the blades, springs between the bridge and plungers resiliently pressing the plungers upwardly, and a die plunger in the supporting structure having a range of movement across that of the blades and cam means for positioning the blades, the die plunger being adapted to cooperate at an early portion of the stroke with the sets of outside blades to form the staples and for movement after the forming operation is completed to



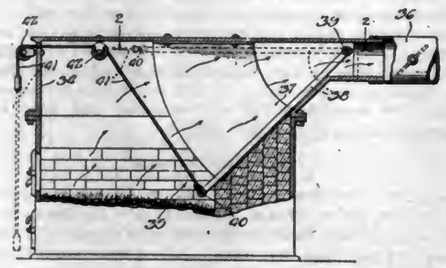
permit passage of the blades, the plungers moving down after the staples have been formed to complete the stapling stroke.

1,884,216. PAVING BLOCK. JOHN F. PURDY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 7, 1929. Serial No. 344,970. 4 Claims. (Cl. 94—12.)



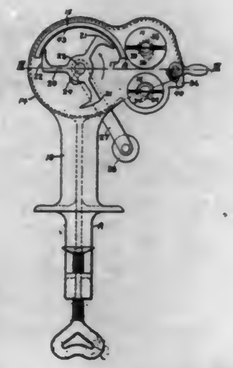
1. A paving block composed of a body of resilient material and a metal band encircling the body, said band intermediate its upper and lower edges having spaced slots for facilitating interlocking one block with another.

1,884,217. SMOKE CONSUMER. JOHN PYKOSZ, Chicago, Ill. Filed Dec. 11, 1929. Serial No. 413,324. 4 Claims. (Cl. 110—97.)



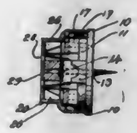
1. The combination with means of combustion, of combustion promoting means arranged to be heated thereby and provided with a plurality of elongated heated passageways for the products of combustion; and means for cleaning said passageways.

1,884,218. SPAGHETTI MACHINE. GUISEPPE QUATTROCCHI, Cleveland, Ohio. Filed July 13, 1931. Serial No. 550,614. 5 Claims. (Cl. 107—9.)



1. In a device of the class described, adjustable feed rollers having oppositely disposed arcuate central portions, a cutting member, a shield enclosing said cutting member and having a cutting edge upon one end thereof cooperating with said cutting member and stripping means upon said shield cooperating with said rollers.

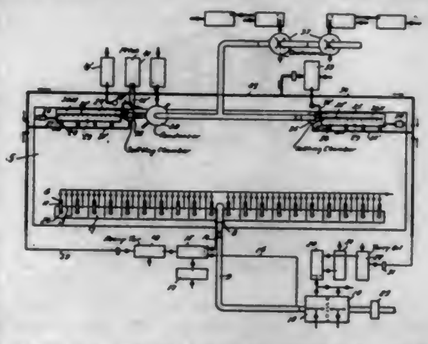
1,884,219. CONVENIENCE OUTLET. HARRY E. RADACK, New York, N. Y. Filed May 14, 1931. Serial No. 537,383. 2 Claims. (Cl. 173—338.)



1. In a convenience outlet, the combination with an attachable base member, of a removable cover member associated therewith, said base member provided with supporting means for spring contact members and means for providing a snap engagement with said cover member, an aperture provided in said base member accommodating an attaching screw or the like, a pair of spring contact members associated with said supporting means of the base member and attached to the former, said cover member comprising a substantially closed cap having two apertures for accommodating prongs of an electric plug or connector adapted to engage said spring contact members, a central recess provided in the body of said cover member for accommodating a screw for holding the base member permanently together with the cover member, when the latter is not attached to any object, a pair of recesses provided symmetrically within the cover member for accommodating and permitting, yet limiting the movement of said contact members, and means for accommodating and engaging said snap engagement means of said base member.

1,884,220. DISTILLATION OF TAR. ARTHUR H. RADASCH, South Orange, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 31, 1929. Serial No. 367,366. 5 Claims. (Cl. 202—30.)

1. The improved method of producing distillate oils and pitches from coal tar which comprises fractionally condensing the tar from hot coal distillation gases and thereby producing a plurality of tar fractions, including a heavy tar and a light tar fraction, subjecting the light tar to distillation to separate lower boiling constituents therefrom and to produce a heavy tar or pitch, combining such heavy tar or pitch with the heavy tar fraction



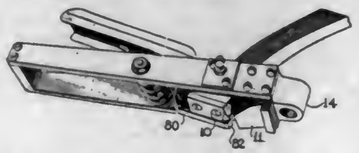
and distillating the mixture, and combining the gases and the vapors resulting from the distillations and cooling them to separate distillate oils therefrom.

1,884,221. LIGHT METALLIC TRUSS STRUCTURE. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 456,993. 3 Claims. (Cl. 189—37.)



1. In a light metallic truss member, opposed channel section chords joined together by generally Z-section web members having their opposite arms secured respectively to the opposite side walls of the channels.

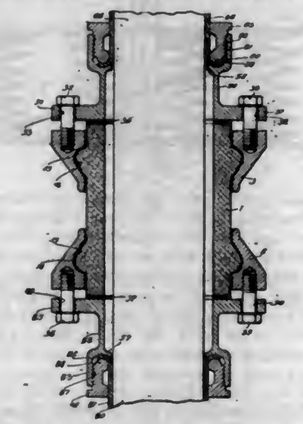
1,884,222. PORTABLE WELDING APPARATUS. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,476. 10 Claims. (Cl. 219—4.)



1. In a portable apparatus for welding sheet material together, a stationery electrode and a movable electrode normally spaced from said stationary electrode, a lever resiliently engaging said movable electrode and adapted upon depression to urge the same against a sheet of material disposed between said electrodes, and a clamping member rigidly secured to said lever and adapted upon depression of said lever to compress the sheet material adjacent the area of engagement of the sheet material between said electrodes.

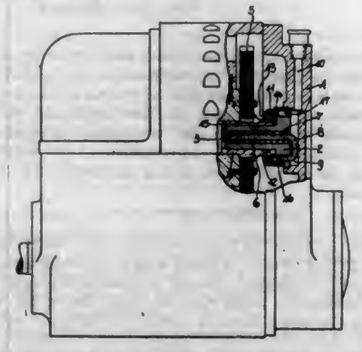
1,884,223. INSULATING JOINT. JOSEPH RAH, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1930. Serial No. 426,813. 7 Claims. (Cl. 173—268.)

1. A device for interrupting the conductive continuity of the exterior sheath of an underground cable while maintaining the continuity of the cable insulator and of the cable conductors, comprising a unitary tubular insulating casing for receiving said cable, an enlargement near each end of said casing and integral therewith, sectional clamping means, internal grooves in said clamping means for embracing said enlargements on said casing, packing means in said grooves for cushioning said clamping means on said enlargements, a gasket positioned at each end of said casing, tubular sleeve means engaging each of said gaskets at each end of said casing, the inner diameter of said sleeve means corresponding substantially to the inner diameter of said casing, means for removably attaching said sleeve means to said clamp-



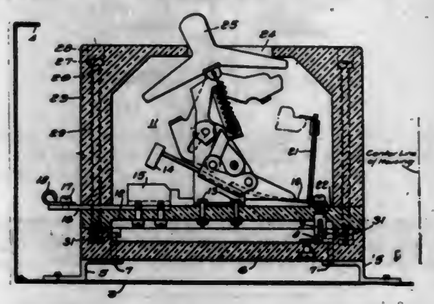
ing means, a laterally extending enlargement on each of said sleeve means, an annular groove in said laterally extending enlargement for receiving the sheath of said cable at the end of each sleeve means, an internal thread in said radially extending enlargement on each sleeve, and a tubular screw for fastening the sheath of said cable to the enlargement on each sleeve and in oil-tight relation therewith, said tubular screw having a rounded head portion for clamping said sheath in the annular groove in said enlargement on the sleeve and a cylindrical portion at the end thereof for engaging the outer diameter of said sheath, said cylindrical portion and said rounded head portion of said tubular screw being separated by an internal annular notch in said screw.

1,884,224. LUBRICATION OF BEARINGS. MAX RALL, Stuttgart, and HEINRICH BISCHOFF, Stuttgart-Botnang, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Jan. 6, 1931, Serial No. 506,992, and in Germany Jan. 16, 1930. 6 Claims. (Cl. 308—114.)



1. A pinion bearing comprising in combination a cap-like bush connected to the pinion, a perforated spindle supporting said bush, a wick within the perforation of said spindle, and a spring maintaining said wick in engagement with the cap-end of said bush.

1,884,225. DISTRIBUTING PANEL. KARL C. RANDALL, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,308. 4 Claims. (Cl. 175—371.)



1. A mounting for a current-controlling device comprising an insulating base having a threaded screw receiving socket therein and a feed conductor mounted on the outer side thereof, a secondary insulating base for supporting the current controlling device on the outer side thereof and having a contact member on the other side thereof and connected to the said device for conductively engaging the said feed conductor with a slip connection when the secondary base is in operative position on the first base, a cover for enclosing the current controlling device mounted upon the secondary base and a fastening screw extending through the cover and the secondary base and engaging the said socket for retaining the bases and cover in assembled position.

1,884,226. GASKET. CHARLES P. RANDOLPH, Oak Park, Ill., assignor to Edison Electric Appliance Company, Chicago, Ill., a Corporation of New York. Original application filed June 21, 1927, Serial No. 200,478. Divided and this application filed Jan. 20, 1931. Serial No. 509,989. 2 Claims. (Cl. 20—35.)

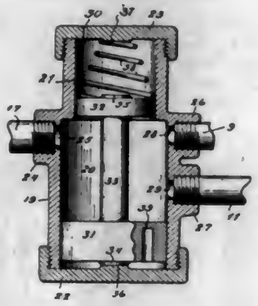


1. A door having outer and inner metallic shells, at least one of said shells projecting around the edge of the door and being folded upon itself, a spring clip secured in the fold of said projecting shell, and a gasket for said door removably secured by said clip.

1,884,227. VALVE FOR LOCOMOTIVE SANDERS. WILLIAM L. RANSOM, Takoma Park, Md., assignor to Graham-White Sander Corporation, Roanoke, Va., a Corporation of Virginia. Filed July 2, 1930. Serial No. 465,407. 12 Claims. (Cl. 291—16.)

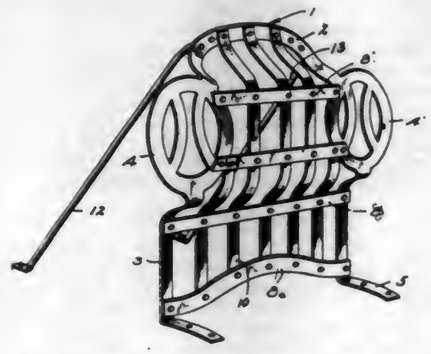
1. In a locomotive sanding apparatus including a sand dome, sand traps receiving sand from the dome and having delivery pipes connected therewith, each sand trap having a cleaning pipe leading thereinto and having a sand discharge pipe leading thereinto, a compressed air supply pipe, and an automatic valve interposed between the supply pipe and the cleaning pipe and discharge pipe, said automatic valve being normally open whereby upon

the admission thereto of compressed air from the air supply pipe the air will initially pass into the cleaning pipe and discharge pipe, and said valve being adapted



to close partially under the influence of air pressure for entirely cutting off flow of compressed air to the cleaning pipe while permitting flow to the discharge pipe.

1,884,228. GUARD FOR VEHICLES. HARRY RASKIN, New York, N. Y. Filed June 18, 1930. Serial No. 462,080. 9 Claims. (Cl. 293—54.)



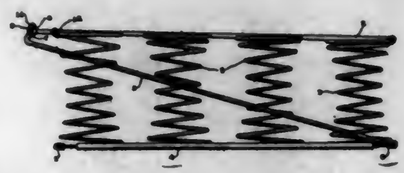
1. In a vehicle protecting device, an inverted U-shaped frame adapted to rest on the chassis, and spaced vertical elements secured to said frame, the whole having a portion extending in front of the normal plane of said device to constitute a resilient frame.

1,884,229. ELECTRIC CONDENSER. PAUL C. RAWLS, Des Moines, Iowa, assignor to Technical Equipment Company, Des Moines, Iowa, a Corporation of Iowa. Filed Feb. 24, 1930. Serial No. 431,009. 1 Claim. (Cl. 175—41.5.)



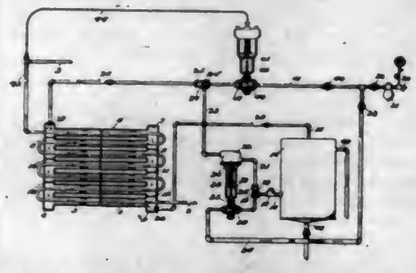
An electric condenser comprising a base, a pair of similar circular conductors of substantially the same diameter concentrically arranged, an insulator between said plates, one of said plates being adjacent to said base and the other bent to form a concavo-convex surface with the concave surface adjacent to said insulator, said plates having circular openings, a screw threaded pin mounted in the curved plate and projected through the opening of the first plate and through said base, a knob on the screw threaded portion of said pin, the first plate having radial arms, and means for fastening the free ends of said arms to said base to center the opening of said plate concentrically with said pin.

1,884,230. SPRING STRUCTURE. CLAIR S. REED, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Jan. 11, 1930. Serial No. 420,232. 3 Claims. (Cl. 5—262.)



1. A diagonal stay wire for spring structures adapted to extend downwardly from the upper frame at one side of the lower frame at the opposite side and provided at the upper forward end with an upwardly projecting substantially S-shaped hook portion arranged to partially embrace the upper frame at the inner side of the latter, said hook shaped portion having a relatively short laterally directed portion to lie upon the upper frame and bent inwardly to partially embrace said frame at its free extremity, a clip adapted to embrace the said laterally directed portion and the upper frame between said hook shaped portion and the bent end of the laterally directed portion so as to secure said upper end of the stay to the upper frame, and means for securing the opposite lower end of the stay to the lower frame.

1,884,231. APPARATUS FOR PASTEURIZATION. FRANK C. REEDER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed May 28, 1928. Serial No. 281,244. 17 Claims. (Cl. 257—Sub. 2.)

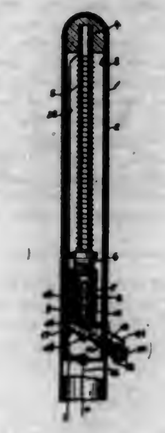


1. In a pasteurizing apparatus, the combination with a heater for the liquid to be sterilized, of a circulating system for maintaining a supply of heating liquid for said heater, means for warming the heating liquid to a fixed temperature, and means for supplying additional heat thereto controlled by the temperature of the liquid to be sterilized, said means also acting to propel the liquid in said system.

1,884,232. ELECTRICAL HEATING DEVICE FOR CURLING TONGS. ALFRED REHM, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Nov. 18, 1929, Serial No. 408,065, and in Germany Nov. 24, 1928. 5 Claims. (Cl. 219—24.)

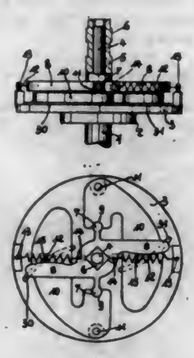
1. An electrical heater for curling tongs comprising a hollow casing, a heating resistance within said casing,

two longitudinal members of different heat coefficient of expansion connected together at one end, a pair of switch contact elements in series with said resistance each con-



tact element being connected to the free end of one of said longitudinal members and an adjustable bridging member between said switch contact elements.

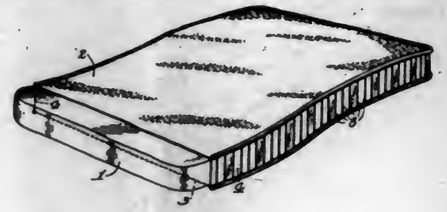
1,884,233. CENTRIFUGAL GOVERNOR. ALFRED REHM, Stuttgart, THEODOR WOLFF, Esslingen, and WILHELM WALTHER, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 26, 1931, Serial No. 518,514, and in Germany Mar. 7, 1930. 3 Claims. (Cl. 64—90.5.)



1. A centrifugal governor comprising a driving member, a driven member, centrifugal weights pivotally mounted on said driving member, spring secured at one end to one member and at the other end to the other of said members and means to distort said springs normal to their longitudinal axis on rotation of said driving member and displacement of said weights.

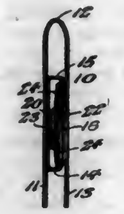
1,884,234. BOXING FOR MATTRESSES, CUSHIONS, AND THE LIKE. RAYMOND E. REICHELT, Maywood, Ill., assignor, by mesne assignments, to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 1, 1928. Serial No. 316,443. 2 Claims. (Cl. 5—360.)

1. A casing for mattresses, cushions and the like comprising a fabric having formed edge portions at the upper and lower faces of the casing defining vertical side walls, spaced vertical reinforcing ribs formed in the side walls of the casing, each rib including a cord extending from one formed edge to the other and secured therein, and lines of



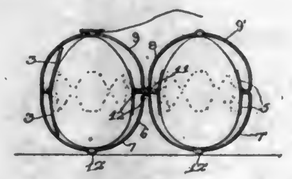
stitching passing through the fabric and firmly securing said cord to said fabric throughout the entire length of the cord.

1,884,235. COIN HOLDER. JOHN J. REINHOLD, Marietta, Pa. Filed July 10, 1931. Serial No. 549,919. 9 Claims. (Cl. 229—92.9.)



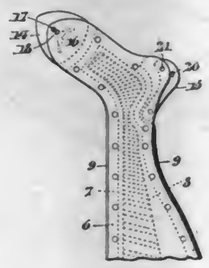
9. The combination of a card having a sight opening therein and a mounting for a coin arranged to hold said coin in register with said opening, said mounting consisting of an envelope having an aperture in the face thereof, means for holding said coin in register with said aperture, and means for supporting said envelope with its aperture in register with said opening.

1,884,236. EGG CARTON. ALBERT RETZER, Milwaukee, Wis. Filed Apr. 2, 1931. Serial No. 527,111. 3 Claims. (Cl. 229—29.)



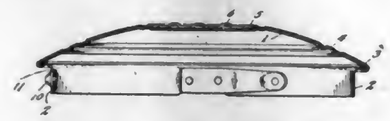
1. An egg carton formed from a single blank of cardboard folded upon itself to form complementary top and bottom sections, each section having a pair of longitudinal troughs alined with the troughs of the adjacent section, inwardly folded partitions carried by each section and adapted to abut each other, said partitions being provided with spaced openings alined with said troughs and registering with each other, and struck-up tabs surrounding each of said openings for snugly engaging an egg, one of each set of tabs adjacent the openings at the marginal edges of the partitions being elongated for engagement with the wall of the adjacent trough to brace said wall and the marginal end of said partition.

1,884,237. SHAPING AND DRYING FORM. CHRISTIAN H. REUMANN and HARRY H. WIGGLESWORTH, Philadelphia, Pa., assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 1, 1929. Serial No. 336,714. 15 Claims. (Cl. 223—17.)



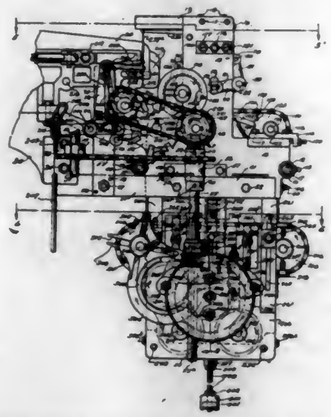
1. A stocking shaping form with independent pivotal toe and heel pieces having capacity for angular displacement whereby the form may be adapted to stockings of different sizes and shapes.

1,884,238. HUB CAP. FREDERICK R. REUTTER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 11, 1930. Serial No. 467,249. 3 Claims. (Cl. 301—108.)



1. In a hub cap, a body member, means on said body member for engaging a hub, an ornamental plate for said body member, said ornamental plate having a hole therein, and a design plate behind said hole and supported by said body member and said ornamental plate.

1,884,239. CONTROL MECHANISM FOR LOOMS AND THE LIKE. JAMES L. REYNOLDS, Stanley, and JOHN M. MCKELVEY, Charlotte, N. C. Filed Apr. 14, 1930. Serial No. 444,285. 9 Claims. (Cl. 139—68.)



1. Control means for both the harness mechanism of a loom having a dobby head and the shuttle box mechanism of the loom, said control means comprising a perforated pattern means, said pattern means comprising a plurality of separated cards having holes punched therein to control both the design of the fabric and the filling imparted thereto, means for progressing said pattern means through said control means, index members, means for intermittently moving the index members into engagement with the pattern means to cause the index members to penetrate certain holes in said pattern means, means associated with said pattern means and with the harness mechanism of the loom for operating the harness mechanism of the loom from said holes in said pattern means, a plurality of other index members adapted to penetrate selectively punched holes in said pattern means, means associated with said second index members and with the box motion of the loom for controlling the box motion of said loom by said second set of index members.

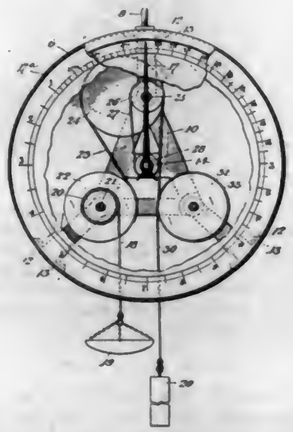
1,884,240. COMPOSITION OF MATTER AND PROCESS OF PREPARING THE SAME. EDMUND O. RHODES and FLOYD D. HAGER, Pittsburgh, Pa., assignors to American Tar Products Company, a Corporation of Delaware. Filed July 20, 1929. Serial No. 379,878. 1 Claim. (Cl. 106—23.)

A process comprising dissolving a rubber ingredient in water gas tar, mixing coke oven tar with the resulting solution, heating the mixture to about 130° C., adding sulphur to the said mixture with stirring, raising the temperature to and keeping it at about 150° C. until the mixture when cooled, remains homogeneous.

1,884,241. PROCESS OF EXTRACTING ACETIC ACID FROM PYROLIGNEOUS SUBSTANCES. ELOI RICARD and HENRI MARTIN GUINOT, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed July 19, 1929, Serial No. 379,575, and in Belgium July 28, 1928. 12 Claims. (Cl. 260—122.)

6. The step of removing tars from pyroligneous material which comprises treating the pyroligneous material with a nuclearalkylated cresol.

1,884,242. WEIGHING SCALE. MERRIT H. RICE, Pasadena, Calif. Filed Jan. 12, 1932. Serial No. 586,195. 7 Claims. (Cl. 265—70.)



1. In weighing scales, the combination of an eccentrically mounted pulley providing variable leverage, a load operated pulley, a load counter-balancing pulley, bands connecting the eccentric pulley with said load operated and counter-balancing pulleys, and a weight indicating device, substantially as set forth.

1,884,243. DEVICE OR APPLIANCE FOR WOMEN'S WEAR OR USE. ZOE MORGAN RICHARDS, London, England. Filed July 30, 1931, Serial No. 554,098, and in Great Britain Sept. 30, 1930. 2 Claims. (Cl. 2—267.)



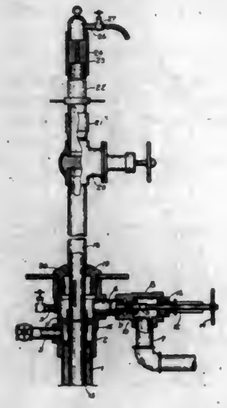
1. A device for women's wear in conjunction with a breast supporter consisting of a cushion made approximately in the shape and configuration of the breast of a woman, means provided on said pad to secure same in and to said breast supporter, a removable outer cover for said pad of the same general shape and contour as—but slightly larger in general dimensions than—that of the pad on which it is to be used, said covers having apertures surrounding the edge thereof which the attaching means carried on the pad may be passed thereby to enable the latter to be attached and secured together with its cover in position on the breast supporter.

1,884,244. AUTOMATIC ROD OPERATING MECHANISM. MAX RICHTER, West Reading, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 3, 1930. Serial No. 459,098. 12 Claims. (Cl. 66—126.)

1. In combination with a straight knitting machine, automatic thread-traversing mechanical control mechanism comprising a plurality of movable thread-carrier rods having a common operative mechanism, separate rotary clutch devices connecting each rod to said common operative mechanism, and pattern mechanism controlling the automatic selective operation of said clutch devices.

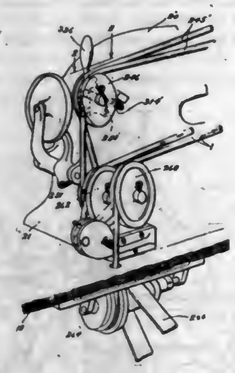
1,884,245. CASING HEAD EQUIPMENT FOR PNEUMATIC SWABS. NORMAN H. RICKER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Aug. 31, 1931. Serial No. 560,271. 9 Claims. (Cl. 103—52.)

1. A well head equipment for pneumatic swabs including a casing head, a lateral outlet therefrom, means to control the rate of flow of liquid from the said outlet, an eduction tube extending through said casing and having a



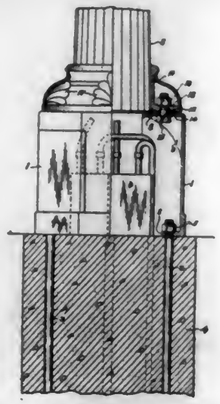
fluid tight fit with the upper end thereof, discharge outlets from said tube to said casing head, and means to provide a vent from said eduction tube above said casing head.

1,884,246. BELT TIGHTENER. ANDREW R. RIDDERSTROM, Nahant, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed May 31, 1922, Serial No. 564,718, now Patent No. 1,721,046. Divided and this application filed Nov. 28, 1923. Serial No. 676,646. 2 Claims. (Cl. 64—5.)



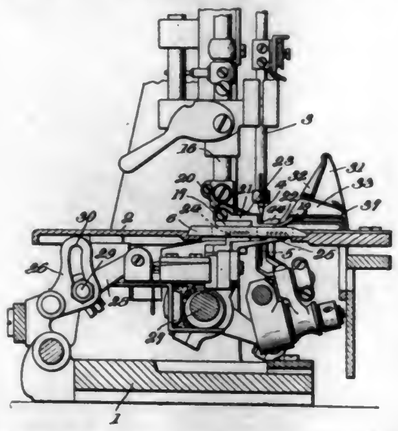
1. A machine of the class described having, in combination, a pulley, a bracket having an idler pulley and a handle, a belt mounted over the pulleys, the handle being adapted to adjust the bracket in order that the idler pulley may serve as a tightener for the belt, a ratchet rigidly connected with the idler pulley, a pawl adapted to be engaged by the teeth of the ratchet to lock the bracket in adjusted position, and a spring for releasably maintaining the pawl engaged with the ratchet.

1,884,247. POLE BASE. EDMUND W. RIEMENSCHNEIDER, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed June 2, 1928. Serial No. 282,320. 1 Claim. (Cl. 189—28.)



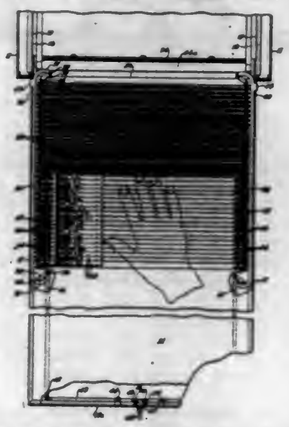
In pole construction, a foundation disposed entirely below the level of the ground, anchor bolts embedded in the foundation and extending upwardly therefrom, a hollow base provided at its lower end with internal horizontally disposed perforate ears registering with said anchor bolts, nuts threaded on said anchor bolts to draw the ears down tightly against the foundation, an inwardly presented integral horizontally disposed flange at the upper end of said hollow base, a tubular pole subjected to transverse loading provided with a base having an outwardly presented horizontally disposed flange, and bolt means for attaching said horizontally disposed flanges together, whereby the transverse loads imposed upon the pole will be transmitted through said pole base, bolt means, hollow base, and anchor bolts to the foundation.

1,884,248. SEWING MACHINE FOR BINDING KNITTED FABRICS. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 12, 1928. Serial No. 325,460. 8 Claims. (Cl. 112—138.)



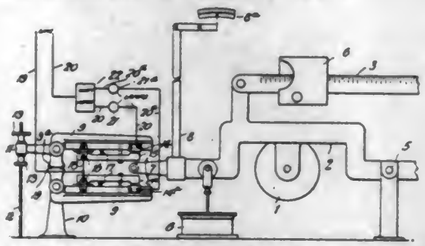
1. A sewing machine comprising in combination a stitching mechanism, including a needle, a feeding mechanism, a work support, a throat plate carried thereby, a presser foot, means for infolding the edges of a binding strip and folding said binding strip about the edge portion of a body fabric as it passes beneath the presser foot, the adjacent faces of the presser foot and the throat plate being shaped so as to form a space therebetween extending from the front end of the presser foot to a point in rear of the needle whereby said binding strip is substantially free from pressure until stitched to the body fabric.

1,884,249. CONTINUOUS LEDGER ACCOUNT AND STATEMENT FILE. ROBERT C. ROATH, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Feb. 24, 1931. Serial No. 517,911. 13 Claims. (Cl. 129—16.)



1. A filing device including a cabinet, a drawer frame slidably mounted in the cabinet, means for suspending a plurality of ledger leaves and the like in the drawer frame so that the leaves will hang in vertical position when the drawer is in open position, and means within the cabinet for moving the leaves into horizontal position when the drawer frame is closed.

1,884,250. GRAPHIC INDICATOR FOR CONTINUOUS FELT WEIGHING SCALES. JOHN ROBERT, Chicago, Ill., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1928. Serial No. 302,993. 8 Claims. (Cl. 265—27.)



1. In apparatus for continuously recording variations in weight of a sheet of material of indeterminate length, a weighing member over which the sheet of material to be weighed may pass, a balance beam operatively connected thereto, a plurality of electrical contacts controlled by said beam, a circuit connecting said contacts to a source of current and means for recording the current flowing through said circuit as the sheet material to be weighed passes over said member.

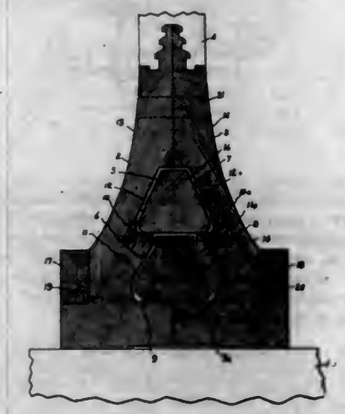
1,884,251. LINKAGE CONNECTION. WALTER C. ROBBINS, Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1930. Serial No. 493,575. 5 Claims. (Cl. 287—93.)

1. In a link assembly, the combination, with an arm having an eye portion and a rod having a trunnion adapted to be inserted in said eye portion of means for connecting said trunnion and eye portion, said means comprising a pair of opposed bushing members each having a bore therethrough by which it may be mounted on said trunnion and each having a concave surface extending radially outwardly from such bore, the concave surfaces of the said bushing members being presented toward each other and each of said bushing members also having surfaces adapted to engage a side and a portion of the inner sur-



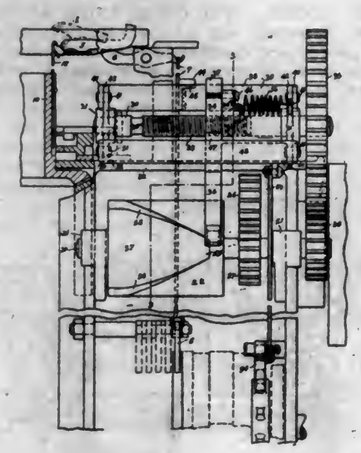
face of such eye portion, a reinforcing insert on said trunnion interposed between the bushing members, the said insert having sides shaped to cooperate with the adjacent concave faces of the bushing members, and means for securing the bushing members upon the trunnion under compression exerted in the direction of the axes of said bushing members whereby the said members are pressed against the eye portion and into engagement with the exterior of the insert.

1,884,252. ROTARY DISK, TURBINE BUCKET WHEEL, OR THE LIKE. ERNEST L. ROBINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1931. Serial No. 538,595. 5 Claims. (Cl. 253—39.)



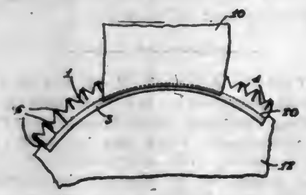
1. Rotary member comprising two halves each having a plane side with concentric grooves therein and another side inclined to said first side, said halves being arranged such that said plane sides engage each other whereby said grooves register with each other and definite concentric channels, and shrink rings provided within said channels and seated on the inner walls thereof for holding the two halves together and being adapted to cause uniform distribution of forces exerted on the rotary member and to prevent undesirable stresses within the rotary member.

1,884,253. HIGH SPLICE ATTACHMENT FOR CIRCULAR KNITTING MACHINES. FRANK W. ROBINSON, Reading, Pa., assignor, by mesne assignments, to Scott and Williams, Inc., New York, N. Y., a Corporation of Massachusetts. Filed May 16, 1921. Serial No. 469,788. 15 Claims. (Cl. 66—188.)



14. A circular hosiery knitting machine having needles and yarn supplying fingers including a high splice yarn finger in combination with means for bringing the high splice yarn finger and needles into and out of yarn engaging position, during round and round knitting, and means for gradually varying in different courses the number of needles supplied with high splice yarn, up to approximately a half circle of the needles, to thereby make the high splice tapering in configuration, with unknitted portions of the high splice yarn floated across the circle of needles at successive courses.

1,884,254. PIPING, WELTING, OR THE LIKE AND PROCESS OF MAKING SAME. A. WALDO ROCKWOOD, Winchester, Mass., assignor to Haley-Cate-Rockwood Company, Everett, Mass., a Corporation of Massachusetts. Filed Oct. 31, 1930. Serial No. 492,519. 1 Claim. (Cl. 36—37.)

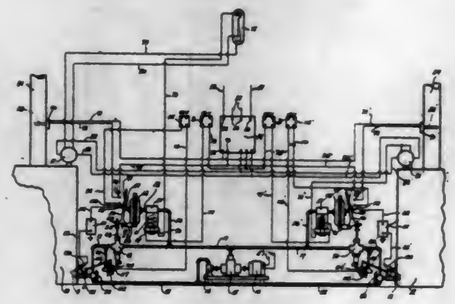


As an improved article of manufacture, piping, welting or the like, having a finished edge and having the opposite edge with a series of combined notches and slits, the slit cuts being of greater depth than that of the notches, said slits being intermediate the notches.

1,884,255. NITROCELLULOSE LACQUER. ALLEN ROGERS, Brooklyn, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 27, 1930. Serial No. 423,897. 5 Claims. (Cl. 134—26.)

2. A nitrocellulose lacquer containing a coumarone-indene resin having a melting point above 110° C. and a resinous product of the group consisting of ester gum and glycerol-phthalic anhydride, the amounts of said resinous constituents contained in said lacquer being such that the lacquer is non-blushing, and the total resinous content being not more than 18 per cent by weight of the lacquer of which approximately from 25 to 40 per cent is coumarone-indene resin.

1,884,256. CONTROL FOR OIL BURNING APPARATUS. HOMER S. ROGERS and RICHARD RADDATZ, Milwaukee, Wis., assignors to Combustion Fuel Oil Burner Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 3, 1926. Serial No. 145,934. 8 Claims. (Cl. 158—28.)

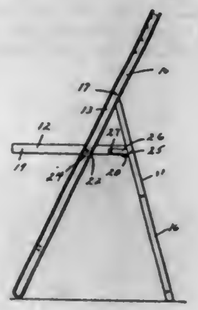


1. In oil burning apparatus of the character described, a burner nozzle, valve means for controlling the flow of air to said nozzle and for controlling means which controls the oil supply to the nozzle, means disposed at said nozzle for igniting the mixture issuing therefrom, a fluid-pressure motor common to said valve means and said igniting means for controlling the same, and valve means for controlling said motor.

3. In apparatus of the character described, a plurality of oil-burning installations and means common thereto for supplying the same with oil and atomizing air, each of said installations including a heating unit, a burner nozzle therefor, valve means for controlling the supply of oil to said nozzle, a fluid-pressure motor connected to the air supply and operable upon admission of compressed air thereto to impart controlling movement to said valve means, a second valve means interposed between the air supply and said motor for permitting the flow of air under pressure thereto or for allowing the air to escape to the atmosphere, and temperature responsive means for actuating said last-named valve means.

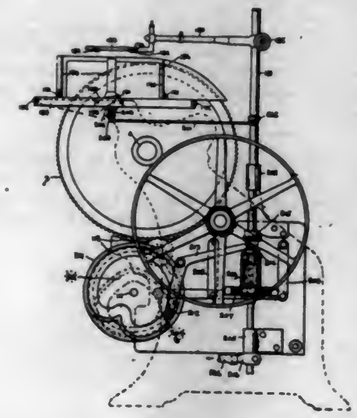
1,884,257. CHAIR. ALBERT T. RONK and ALVIN J. OVERHOLT, North Manchester, Ind., assignors to The Peabody Seating Company, North Manchester, Ind., a Corporation of Indiana. Filed May 19, 1930. Serial No. 453,580. 2 Claims. (Cl. 155—142.)

1. A chair comprising an upwardly and rearwardly inclined frame member having a back portion at its upper end, an upwardly and forwardly inclined frame member having its upper end pivoted to the first frame member at a point below its back portion, a horizontal seat, means pivotally connecting points intermediate the ends of the side edges of said seat to the frame member, a link pivoted to each side of said second frame projecting forwardly adjacent to the side edges of the rear end of said seat, means for pivotally connecting the free end of said links thereto, and laterally projecting lugs carried by the



rear end of the seat engaging the under edges of said links for preventing upward movement of the rear end of said seat.

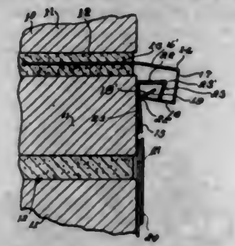
1,884,258. SHEET TRANSFERRING MECHANISM FOR PRINTING PRESSES. CHARLES F. ROOT, Cleveland, Ohio, assignor to The Chandler & Price Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Oct. 13, 1923, Serial No. 668,287. Divided and this application filed Dec. 9, 1930. Serial No. 501,130. 9 Claims. (Cl. 101—287.)



1. In mechanism of the character described, a sheet transferring device including a vertical support both reciprocable longitudinally of and oscillatory about its axis; a radially projecting arm carried by said support; a second arm mounted on said first arm and angularly adjustable with respect thereto about an axis approximately parallel with that of said support; and a suction tip carried by said second arm.

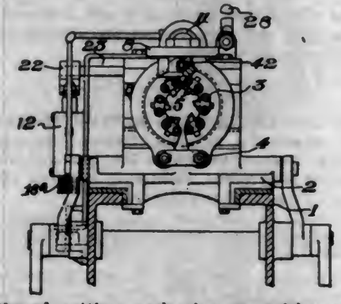
1,884,259. FLASHING FOR ROOFS. WILLIAM R. ROSE, Arlington Ridge, Va. Filed June 14, 1930. Serial No. 461,182. 5 Claims. (Cl. 108—26.)

2. A flashing of the character described comprising an anchor member having a flange portion adapted to be set in a wall or the like, its outer part being bent downwardly, then inwardly, and its terminal edge being arranged as a presser heel; and a swinging member having an upper edge portion pressed upon by said heel and



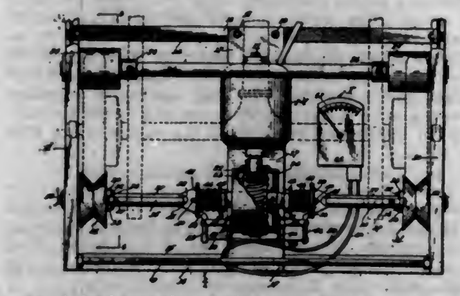
extended above and bent outward at a sharp angle above the heel, its terminal edge being shaped for retaining engagement with the heel.

1,884,260. PIPE THREADING MACHINE. MAX ROSENKRANZ, Library, and SAMUEL WEBB, Pittsburgh, Pa., assignors to National Tube Company, a Corporation of New Jersey. Filed Sept. 11, 1930. Serial No. 481,260. 2 Claims. (Cl. 10—94.)



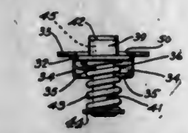
2. A thread cutting mechanism comprising a movable carriage, a die shoe mounted on said carriage, a pair of die holders pivotally mounted on said die shoe, means for moving said die holders about their pivots to open and closed positions, a wedge retainer carried by said die shoe, a stop wedge mounted in said retainer and movable back and forth between the free ends of said die holders to limit the movement of said die holders towards each other, a threaded stem on said wedge, a nut threaded on said stem and carried by said wedge retainer for adjusting said wedge, and means for locking said wedge in its adjusted position.

1,884,261. BRAKE TESTING DEVICE FOR MOTOR VEHICLES. CHARLES F. ROSSETTER, Los Angeles, Calif., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester Inc., a Corporation of Delaware. Filed Sept. 20, 1924. Serial No. 738,922. 26 Claims. (Cl. 265—25.)



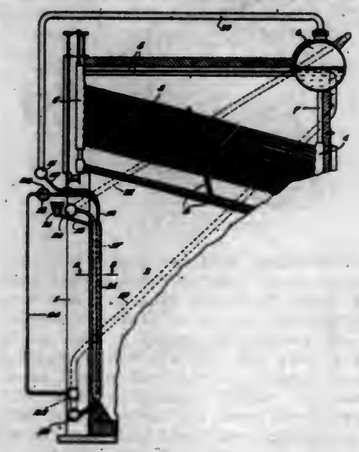
11. A brake testing device comprising means engageable upon each of two wheels of a vehicle for simultaneously rotating them at the same speed of rotation, and means for simultaneously and independently indicating the torque necessary to rotate each wheel.

1,884,262. VALVE FOR SHOCK ABSORBERS. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,621. 4 Claims. (Cl. 277—45.)



1. A fluid flow control device for a shock absorber comprising, in combination, a disc valve; a tubular valve supported by the disc valve; and a valve cage supporting said disc valve, said cage comprising a ring-shaped body portion, the inner peripheral edge having lugs, alternate ones extending radially in the plane of the body portion, the others being bent at angles to said body portion to form depending hook members; and a spring interposed between the hook members and the disc valve to urge the disc valve toward and against the radial lugs.

1,884,263. SUPERHEATER. DAGOBERT W. RUDORFF, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,205. 10 Claims. (Cl. 122—479.)

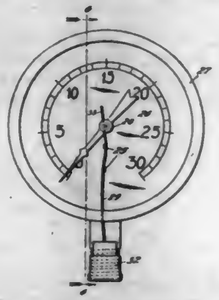


1. In apparatus of the class described, the combination of a structure comprising a receptacle, liquid metal in said receptacle, and two conduits in heat transferring relation to said liquid metal, means to heat the structure; means to circulate through one of said conduits a fluid to be heated, and means to circulate a cooling fluid through the other of said conduits.

1,884,264. PROTECTING DEVICE FOR GAUGES. GEORGE FREDERICK RUOPP, Marshalltown, Iowa, assignor to Marshalltown Manufacturing Company, Marshalltown, Iowa, a Corporation of Iowa. Filed June 23, 1931. Serial No. 546,279. 5 Claims. (Cl. 116—129.)

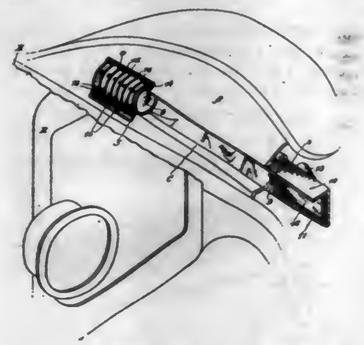
1. The combination of a pressure gauge casing having a connection member, a dial, an index rotatively mounted in front of said dial, said index having a hub, one face of which is flattened, said casing having an opening adjacent to said connection member, a cap covering said connection member, a wire supported through said open-

ing having one end connected to said cap and its opposite end adjacent to the flattened portion of said hub, and means carried by said dial for detachably supporting



said wire in position in such a manner that the wire may be removed only by being withdrawn outwardly and longitudinally.

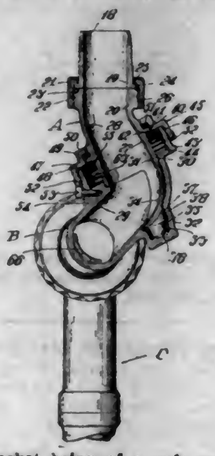
1,884,265. AUTOMOBILE PASSING LIGHT. WEAVER A. RUSH, Beatrice, Nebr. Filed Mar. 26, 1930, Serial No. 439,070. Renewed Jan. 26, 1932. 7 Claims. (Cl. 240—8.1.)



1. In combination with an automobile having a hood and radiator at its front end, and a front fender apron laterally spaced from said hood and radiator; a light projector mounted on the automobile in position to forwardly and downwardly project a beam of light onto the road, a shield extending forwardly from said projector, said shield extending to the front of said apron, having a substantially vertical longitudinal wall portion disposed toward said apron, and having a longitudinal flange portion projecting toward said hood from the upper part of said wall portion, said wall portion having an opening at its front end, and a second light projector mounted at the outer side of said wall portion and disposed to project its rays through said opening in front of the radiator and downwardly onto one side of the road.

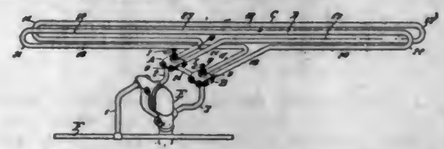
1,884,266. FLEXIBLE PIPE STRUCTURE. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed June 8, 1929. Serial No. 369,440. 11 Claims. (Cl. 285—9.)

4. In a flexible metallic conduit structure, a pair of telescopically engaged conduit sections relatively rotatable about the central longitudinal axis of the conduit, an outwardly projecting annular shoulder on one section, an inwardly projecting annular shoulder on the other section, said shoulders having substantially aligned sealing surfaces in the same radial plane, a gasket positioned to simultaneously bear laterally against said relatively movable sealing surfaces, the sealing face of the gasket being of hard composition and being split to provide independently movable annular portions engaging the two sealing surfaces on the shoulders and the integral rear



portion of the gasket being of a soft composition, and means engaging the rear portion for holding the gasket yieldingly in sealing position.

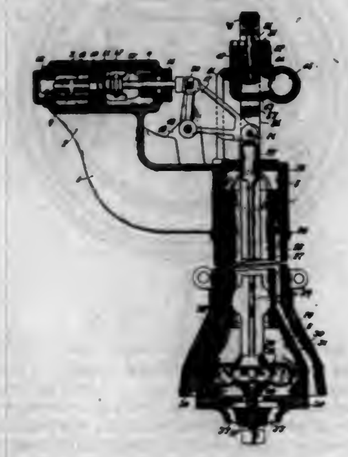
1,884,267. STEAM HEATING SYSTEM FOR RAILWAY CARS. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,281. 4 Claims. (Cl. 237—40.)



1. In a vapor heating system, a vapor regulator, a pair of similar control valves each comprising a casing formed with inlet, outlet, supply and return chambers, a valve movable from open position in which the inlet chamber is placed in communication with the supply chamber and the outlet chamber in communication with the return chamber, to closed position in which the inlet chamber communicates with the outlet chamber and the supply chamber with the return chamber, the valve being formed with a drain port for the supply and return chambers which is open when the valve is closed and is closed when the valve is open, a supply conduit leading from the vapor regulator to the inlet chamber of the first valve, a conduit connecting the outlet chamber of the first valve with the inlet chamber of the second valve and a return conduit connecting the outlet chamber of the second valve with the vapor regulator, a pair of radiators one of which has its supply and return pipes connected with the supply and return chambers respectively of the first valve, and the other radiator of which is similarly connected with the second valve, the casing of one of the valves being provided with a drain port connecting the inlet and outlet chambers thereof, a valve controlling this port and means for automatically closing the valve when the chambers are filled with vapor.

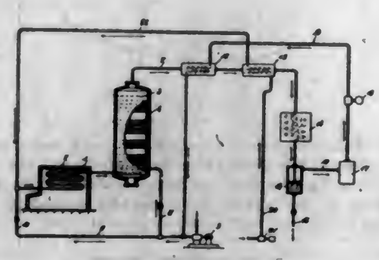
1,884,268. VAPOR REGULATOR. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Oct. 9, 1931. Serial No. 567,891. 9 Claims. (Cl. 236—40.)

1. A vapor regulator for railway car heating systems comprising a casing having a relatively high pressure inlet chamber, a relatively low pressure outlet chamber and a return chamber, an expansible thermostatic element located in the return chamber, there being a passage between the inlet and outlet chambers, a valve in the low pressure chamber adapted to be moved to close the passage, a valve stem in the low pressure chamber for moving the valve to or from closed position, a compensating



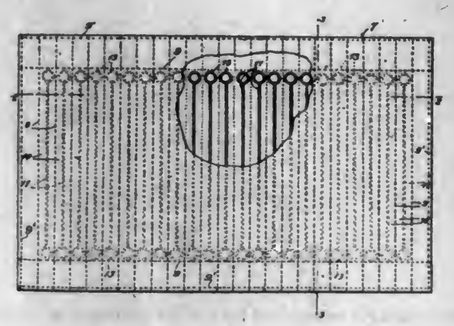
motor comprising a closed chamber, an expansible diaphragm forming one wall of the chamber, a conduit connecting the motor chamber with the high pressure chamber, a rockarm positioned outside the chambers and connected with the valve stem; operating means connecting the diaphragm of the motor with the rockarm, and operating means connecting the thermostatic element with the rockarm.

1,884,269. PROCESS FOR THE MANUFACTURE OF MOTOR FUEL. ROBERT P. RUSSELL, Baton Rouge, La., assignor to Standard-I. G. Company. Filed Aug. 31, 1929. Serial No. 389,717. 5 Claims. (Cl. 196—24.)



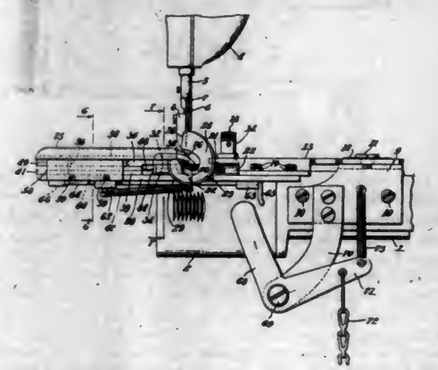
1. An improved process for purifying low-boiling petroleum distillates comprising naphthas and substantially increasing the anti-detonation value thereof, which comprises subjecting the oil to the action of a gas rich in free hydrogen under pressure of at least 20 atmospheres and at a temperature within the range from 850 to about 1000° F., for a time sufficient to convert at least 5% by weight of the original oil boiling below 400° F. to permanent gas, but less than about 10 minutes.

1,884,270. MATTRESS-SUPPORTING SPRING COVER. WILLIAM P. RYLANDER, San Marcos, Tex. Filed Dec. 29, 1930. Serial No. 505,390. 4 Claims. (Cl. 5—354.)



1. A mattress-supporting spring cover comprising a plurality of horizontal supporting members, and a flexible sheet having individual elongated pockets in which said members are disposed, said members being formed of wire and having laterally bent portions holding them properly positioned within said pockets.

1,884,271. FOLDER FOR SEWING MACHINES. RUDOLPH J. SAILER, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Feb. 8, 1929. Serial No. 338,393. 14 Claims. (Cl. 112—141.)

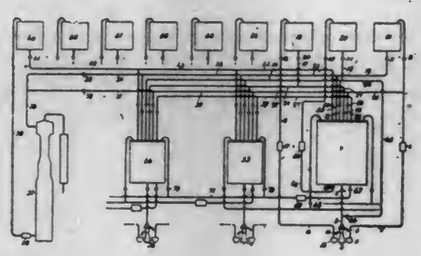


1. A sewing machine having stitch-forming mechanism, in combination with a fabric-folding device having separable sections together forming a scroll for folding a work-margin, supporting means for one of the folder-sections permitting it to yield laterally in a direction away from the other section during the passage of the work through the folding device, and a spring acting automatically during the stitching of endless seams for effecting separation of the folder-sections to provide for the completion of said seams.

1,884,272. METHOD OF CONTROLLING YEAST PROPAGATION. SØREN SØRENSEN, Charlottenlund, Denmark. Filed Aug. 29, 1927, Serial No. 216,248, and in Norway Jan. 8, 1927. 12 Claims. (Cl. 195—14.)

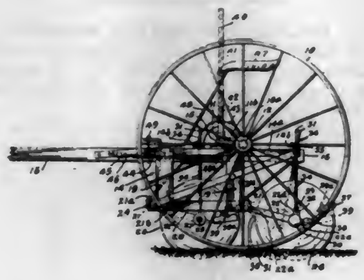
1. In a continuous-addition-continuous-withdrawal process of manufacturing yeast in which yeast is propagated

in a vat with propagating wort, the improvement comprising, besides the well known means, maintaining constant the weight of yeast per unit volume of propagating



wort during a substantial part of the propagation, for controlling the run of the process, by adding yeast in any form in sufficient amount to supply any deficiency.

1,884,273. DISK PULVERIZER. ERNEST C. SANDEEN, St. Paul, Minn. Filed Apr. 2, 1930. Serial No. 440,955. 4 Claims. (Cl. 55—73.)



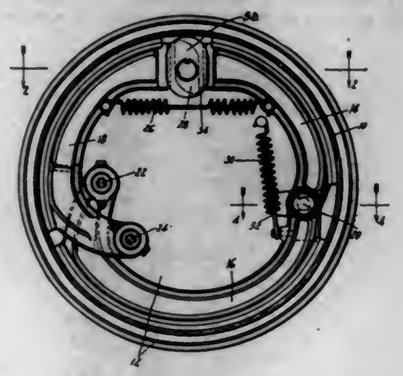
1. A farm implement, comprising a frame, a pair of crank axle members mounted thereon, wheels carried by said axle members, manual adjusting means controlling said axle members to vary the height of said wheels with respect to said frame, a plurality of aligned discoid soil working members mounted forwardly of said axle and resiliently connected to said frame for vertical movement with respect thereto, a second aligned row of discoid soil working members similarly connected to said frame rearwardly of said axle and oppositely disposed with respect to said forward row of aligned discoid soil working members.

1,884,274. PROCESS OF PREPARING LYO-PHILE PRODUCTS OF FATTY SUBSTANCES OF ANY ORIGIN. HÅKAN SANDQVIST and THORSTEN OLOF HJALMARSSON LINDSTRÖM, Stockholm, Sweden. Filed Feb. 27, 1929, Serial No. 343,238, and in Sweden Mar. 16, 1928. 9 Claims. (Cl. 87—12.)

1. Process of preparing lyophile products from oleaginous substances, consisting in adding a small quantity of an oxidized phytosterol to said oleaginous substances.

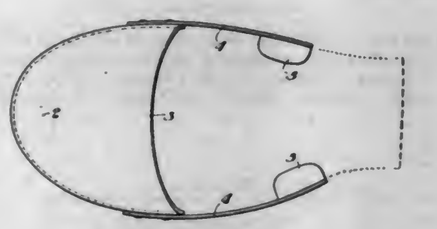
1,884,275. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 4, 1926. Serial No. 85,962. 30 Claims. (Cl. 188—79.5.)

20. A brake comprising, in combination, shoes, a pin pivotally connecting the shoes, a support, and a stop member carried by the support and having radially-extending arms straddling said pin and spaced apart slightly more than the diameter of the pin.



25. A brake comprising, in combination, friction means, supporting means, and positioning means for the friction means including two devices, one of which is formed with a slot and the other of which has a part received in said slot, and one of which moves with the friction means and the other of which is normally stationary, together with frictional means normally holding one of said devices gripped to said supporting means but permitting it to shift to correct its position automatically.

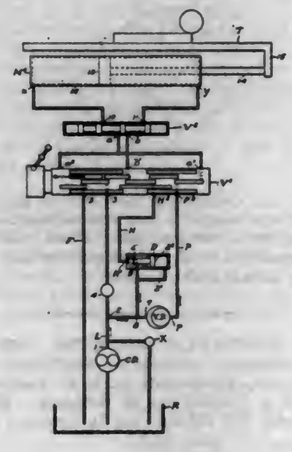
1,884,276. FOOT PROTECTOR. CLINTON E. SANKEY, Ellwood City, Pa. Filed Dec. 31, 1931. Serial No. 584,239. 2 Claims. (Cl. 36—72.)



1. A foot protector comprising a body constructed of rigid material for application to a shoe's toe portion, inwardly and backwardly extending resilient arms fixed to said body at its bottom and inwardly extending projections on the bottom end portions of said arms.

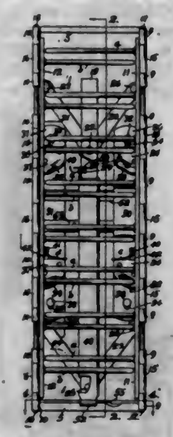
1,884,277. SELF-REGULATING HYDRAULIC SYSTEM. BERNARD SASSEN, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 8, 1930. Strial No. 442,565. 26 Claims. (Cl. 60—52.)

1. An hydraulic system combining a motor; a variable delivery pump arranged to receive its fluid at the intake side thereof at a relatively low pressure and to deliver same to said motor at a predetermined rate; and means maintaining the discharge from said motor under a relatively high pressure comprising a valve mechanism, having a variable orifice, adapted to respond to the combined influence of the motor discharge and pump intake pressures.



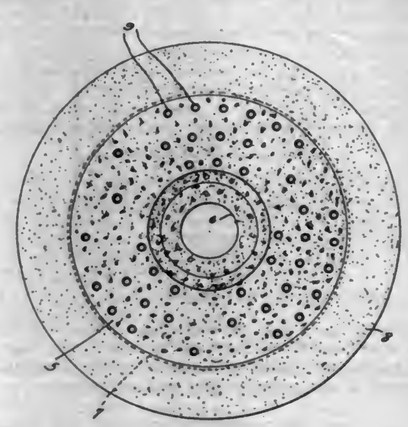
7. An hydraulic system combining a motor; an in-take line leading thereto; an out-take line leading therefrom; a source of fluid supply connected with the in-take line; and means in said out-take line for automatically diminishing the back-pressure therein in accordance with increases of the forward-pressure in the in-take line.

1,884,278. LOOSE LEAF BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1930. Serial No. 441,212. 9 Claims. (Cl. 129—13.)



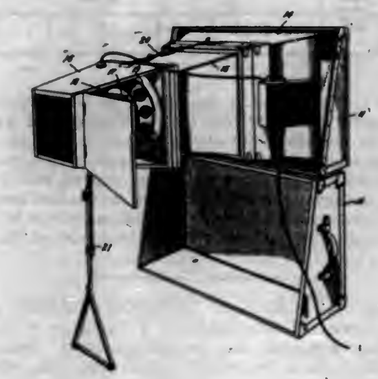
1. A loose leaf binder comprising telescoping sections, an elongated floating bar, toggle levers pivotally connected to said sections and to said bar at spaced locations, post-carrying bars hinged to the sides of said sections, interengaging latch members carried by said bars and sections, and unitary means for locking and unlocking the sections and for unlatching said post-carrying bars.

1,884,279. PULP GRINDING STONE. HANS P. SCHEEL and HANS P. SCHEEL, Jr., Tacoma, Wash. Filed Aug. 29, 1931. Serial No. 560,178. 1 Claim. (Cl. 51—206.)



A method of constructing grinding stones, consisting in providing a core of plastic material, embedding pipes in the core, the ends of the pipes terminating at the side faces of the core, and finally passing a medium through the pipes to change the temperature of the plastic material as the plastic material is setting.

1,884,280. PORTABLE LOUD SPEAKER. MARVEL W. SCHELDORF, Oaklyn, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1931. Serial No. 540,683. 6 Claims. (Cl. 274—2.)

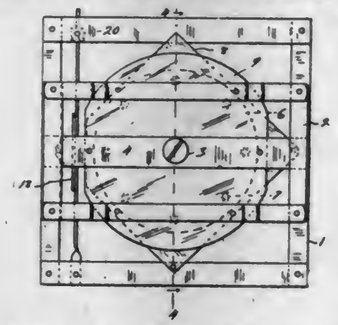


1. The combination of a carrying case and a loud speaker apparatus disposed therein comprising a diaphragm, a driving unit therefor and a horn adapted to be connected at one extremity to said diaphragm and connected at the other extremity to said carrying case, said carrying case forming a support for said speaker apparatus when said apparatus is in operative position.

1,884,281. BABY CARRIAGE FIFTH WHEEL ASSEMBLY. PAUL M. SCHIBROWSKI, Toledo, Ohio, assignor, by mesne assignments, to The American-National Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 3, 1930. Serial No. 432,869. 8 Claims. (Cl. 280—118.)

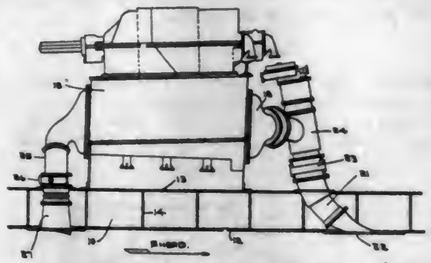
1. In combination, a baby carriage chassis frame, a king pin carried by said frame, a reversible baby carriage cab

frame mounted on the king pin so that either end thereof may be swung about the king pin to the rear of the chassis frame, and means for facilitating the swinging of the cab



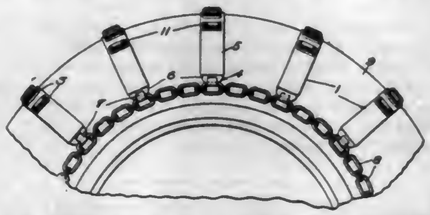
frame including a ball bearing cage on the king pin between said frames, ball bearings carried by the cage, and races for the ball bearings mounted on the king pin and connected to the opposed sides of the frames.

1,884,282. MARINE SEA CHEST. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 29, 1931. Serial No. 560,193. 7 Claims. (Cl. 114—198.)



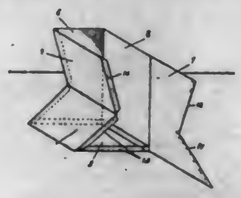
1. In a ship having an opening in its hull structure located below the water line for the discharge of water, a discharge sea chest embodying a conduit secured to the hull structure about the opening, and a lip projecting beyond the hull structure about the opening, said lip having its maximum projection disposed forward of the center of the opening and having its projecting portion terminating approximately athwartship of the center of the opening.

1,884,283. AUTOMOBILE NONSKID DEVICE. JOHN SCHNEIDER, Jr., Sloatsburg, N. Y., assignor of one-half to John Schneider, Sr., Sloatsburg, N. Y. Filed Apr. 29, 1932. Serial No. 608,292. 3 Claims. (Cl. 152—14.)



1. A non-skid element for anti-skid chains comprising a woven metallic strap, means for connecting said strap to side elements of an anti-skid device, hollow metallic calks secured to said strap, a yieldable covering for said strap, and cushion means carried by said calks and projecting outwardly therefrom.

1,884,284. PROTECTIVE GARMENT. MATTHEW G. SCHNEIDER, Binghamton, N. Y. Filed July 10, 1930. Serial No. 467,021. 1 Claim. (Cl. 36—1.)



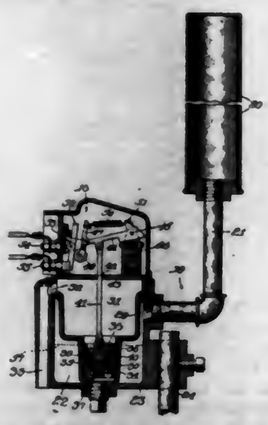
A paper bag comprising one piece of material creased and folded to provide a flat bottom portion and an inwardly extending front portion, and another piece creased and folded to provide a straight back portion and side portions conforming to said front portion.

1,884,285. PHOTO-ELECTRIC TUBE. OTTO SCHRIEVER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Sept. 3, 1926, Serial No. 133,390, and in Germany Oct. 7, 1925. 5 Claims. (Cl. 250—27.5.)



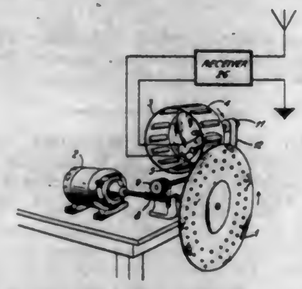
5. An annular photoelectric tube comprising an annular envelope, a light opaque substance coating one surface of said tube envelope, an anode member within the tube, and a light sensitive coating on one face of the tube.

1,884,286. FLUID-PRESSURE-CONTROLLED CONTROLLING MECHANISM. OSCAR C. SCHROEDER, Chicago, Ill. Original application filed Mar. 12, 1927, Serial No. 174,782, now Patent No. 1,689,803. Divided and this application filed Sept. 29, 1928. Serial No. 309,225. 14 Claims. (Cl. 60—23.)



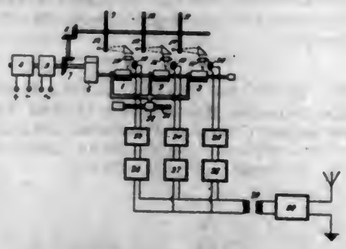
1. In a device of the character described, the combination of an air chamber for subjection to heat, means operating responsive to the expansion and contraction of the air in said chamber and comprising a movable element and an oil seal subjected to the variations of air pressure in said air chamber and movable responsive thereto and in such movements controlling the position of said movable element, the structure containing inlet and outlet ports through which pressure in the continuing of expansion of the air in the chamber is relieved and suction in the continuing contraction of the air in said air chamber is relieved, respectively, and valves for said ports, said oil seal comprising such an amount of oil and the ports of the apparatus being so proportioned and arranged that following the conclusion of the movement of said element in either direction the oil seal may become broken by the air pressure against it and permit of the escape of air past said oil seal.

1,884,287. APPARATUS FOR RECEIVING TELEVISION PICTURES. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Nov. 12, 1929, Serial No. 406,682, and in Germany Nov. 22, 1928. 11 Claims. (Cl. 178—6.)



1. In a television system, a rotary scanning disk for tracing point for point intensities of light and shadow in a line for line manner for rebuilding a picture, and a drum provided with elongated lens elements about an axis at right angles to the axis of rotation of said scanning system for causing light issuing from a source internally thereof to trace successive parallel paths across the said scanning element during the rotation thereof.

1,884,288. FACSIMILE TRANSMISSION. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 18, 1930, Serial No. 420,880, and in Germany Jan. 16, 1929. 1 Claim. (Cl. 178—7.)

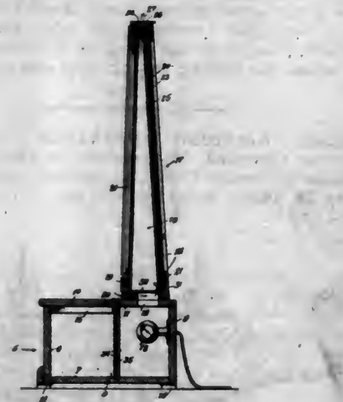


A system for simultaneously transmitting a plurality of picture record messages which comprises a plurality of supporting carriers for carrying said messages, a single driving element for rotating said carriers at identical speeds relative to predetermined points positioned in like relationship with respect to each record carrier, means for illuminating related elemental areas of each of said record carriers from a plurality of light sources, means for interrupting the light from each of said light sources directed toward said record carriers at different frequencies bearing preestablished relationship one with the other, light translating means associated with each of said record carriers for converting the varying intensities of light and shadow thereon as illuminated by said light sources into proportionately modulated electric current impulses of different frequencies, means for combining the output energies of all of said light translating elements, a transmitter for transmitting said signals, means for modulating said transmitter simultaneously by all of said signals, receiving means, and means at the point of reception for separating said received signals one from the other for reproducing a plurality of images corresponding to the records carried by each record carrier.

1,884,289. ARTIFICIAL SILK. HANS SCHUHMANN, Berlin-Charlottenburg, and FRIEDRICH STRUBER, Berlin-Tegel, Germany, assignors to General Electric Company, a Corporation of New York. Filed Dec. 7, 1928, Serial No. 324,574, and in Germany Jan. 11, 1928. 4 Claims. (Cl. 18—54.)

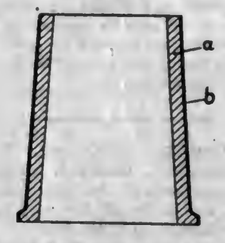
3. A textile fibre consisting of an alkyd resin in an insoluble, non-fusible condition.

1,884,290. PICTURE FRAME. WILLIAM C. SCHULTS and MAX HOLZER, Brooklyn, N. Y., assignors of one-third to Charles Newman, Brooklyn, N. Y. Filed Feb. 25, 1932. Serial No. 595,173. 10 Claims. (Cl. 40—130.)



8. In a picture frame, a base, a frame disposed on the base and having a transparent front member and a rear member spaced therefrom, a lamp in the base for directing light rays between the front and rear members, a horizontal translucent member at the bottom of the frame for partially closing the bottom of the frame, the frame having an outlet opening or openings at its top, and an inlet opening or openings below the translucent member.

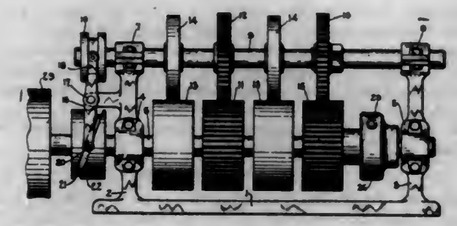
1,884,291. INGOT MOLD. EUGEN SCHÜRER, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Dec. 16, 1930, Serial No. 502,764, and in Germany Dec. 23, 1929. 2 Claims. (Cl. 22—144.)



1. An ingot mold for casting zinc and aluminium alloys which would solidify slowly so as to obtain a fine-grain

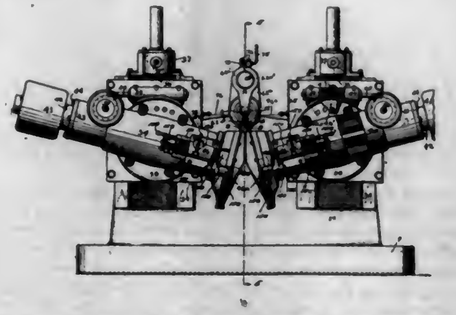
structure, comprising in combination an inner part consisting of an iron alloy containing about 35% of nickel and an outer sheath consisting of a material the surface of which has a lower heat radiation than the said inner part.

1,884,292. GEAR LAPPING MACHINE. CHARLES H. SCHURR, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 8, 1930. Serial No. 450,627. 4 Claims. (Cl. 51—26.)



1. Apparatus for lapping comprising two parallel shafts, means maintaining the shafts with their centers in fixed relation, a lap carried by one of said shafts to rotate therewith, a work gear carried by the other shaft to rotate therewith, positive driving connections between the shafts, and means for feeding one of said members about its shaft.

1,884,293. GRINDING APPARATUS. CHARLES H. SCHURR, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 28, 1923. Serial No. 641,880. 31 Claims. (Cl. 51—52.)



1. In apparatus of the class described, the combination with a main frame, of a supplemental frame movably mounted on said main frame, a slide mounted on said supplemental frame, a spindle rotatably mounted on said slide and adapted to carry a gear, a tool arranged to engage a gear carried on the spindle as its moves in one direction, means for reciprocating said slide and for oscillating said gear carrying spindle during the reciprocating of said slide, and means co-operating with said slide reciprocating and spindle oscillating means to move said supplemental frame relative to said main frame as the gear moves in the opposite direction to prevent engagement of said tool therewith.

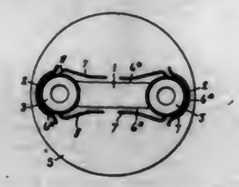
1,884,294. AUTOMATIC CONTROL DEVICE. KARL SCHWEIZER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Mar. 21, 1930, Serial No. 437,782, and in Germany June 29, 1929. 6 Claims. (Cl. 64—90.5.)

1. A centrifugal governor comprising in combination a driving part, a driven part, centrifugally movable weights on one of said parts, a connection between said weights and the other part, coil tension springs between the pivot journals of said weights and the part on which they are



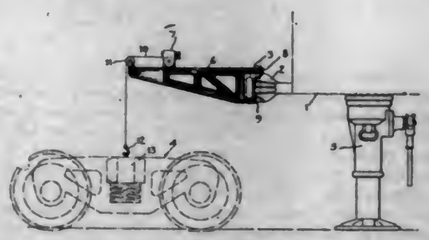
mounted, and means to deflect said springs substantially transversely to their longitudinal axes on the displacement of the weights.

1,884,295. PROCESS OF WELDING. CHARLES F. SCHWENNKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 21, 1929. Serial No. 372,769. 6 Claims. (Cl. 219—10.)



3. The method of welding a non-magnetic insert having apertures in spaced relation for receiving electrical conductors to a steel cover structure for alternating current electrical apparatus comprising forming an opening in said steel cover corresponding in size and shape to said insert, forming slots in said steel cover substantially around and parallel to the edge of said opening, welding said insert within the opening to said steel cover, and filling said slots with fused metal after the united structure has cooled for restoring the strength of the steel cover structure.

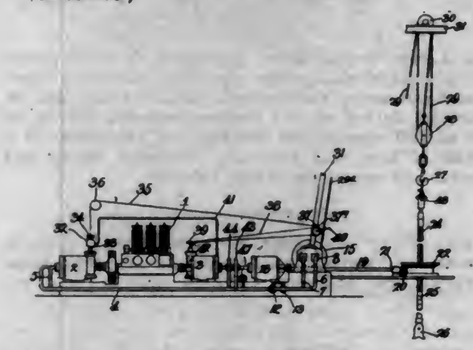
1,884,296. HOISTING DEVICE. FRANK H. SCHWERIN, Bellevue Borough, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 16, 1931. Serial No. 551,102. 8 Claims. (Cl. 212—65.)



2. An article of manufacture, comprising a beam for connecting with a railway car coupler, the upper portion

of one end of the beam extending horizontally and having a vertical hole for receiving the pin of the coupler, and a lower portion of the same end of the beam being shaped to engage a face of the coupler.

1,884,297. HYDRAULIC DRILLING METHOD AND AUTOMATIC CONTROL THEREFOR. KENNETH C. SCLATER and EDWIN O. BENNETT, Ponca City, Okla. Filed Apr. 23, 1928. Serial No. 272,286. 8 Claims. (Cl. 60—53.)



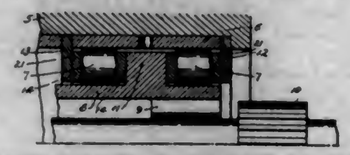
1. A rotary drill mechanism comprising in combination a prime mover, a first hydraulic pressure generator, a second hydraulic pressure generator, a hydraulic motor actuated by said first hydraulic pressure generator, a second hydraulic motor operated by said second pressure generator, and means responsive to variations of pressure in the first hydraulic system for controlling the pressure in said second pressure system.

1,884,298. BRUSH FOR ELECTRICAL MACHINES. RALPH L. SEABURY and LOUIS W. MURRAY, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,590. 15 Claims. (Cl. 171—325.)

1. The method of forming a brush for electric machines which consists in forming a solution of a binder material in an alkali, mixing such solution with graphite, adding acid to precipitate the binder material from solution on the graphite, filtering, washing and drying the mixture thus formed, pulverizing the dried material, briquetting such material in the desired form, and curing the forms under heat and pressure.

15. A brush for electric machines comprising, graphite and less than 5 per cent of a hydrocarbon binder, and in which the binder is uniformly distributed throughout the mass.

1,884,299. BEARING. RAYMOND R. SEARLES and FAYETTE LEISTER, New Britain, Conn., assignors to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 24, 1929. Serial No. 394,753. 2 Claims. (Cl. 308—212.)



1. A bearing assembly comprising an outer bearing race, an inner bearing race, anti-friction bearing members interposed between said races, a retainer member for the antifriction members comprising a pair of annular side plates provided with countersunk holes, shouldered spacer and mounting members positioned between the side plates, the side plates bearing against the shoulders of the spacer members and being held apart by said shoulders, the spacer members being provided with rivet extensions passing through the holes in the side plates, the rivet heads being upset in the countersunk holes and having their outer surfaces substantially flush with the outside surfaces of the annular plates, and abutment members associated with said inner and outer bearing races, respectively, and placed to bear against the outsides of the side plates of the retainer member.

1,884,300. METHOD OF PROCESSING CORN. OGDEN S. SELLS, San Francisco, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Dec. 4, 1924, Serial No. 753,986. Renewed Feb. 2, 1932. 2 Claims. (Cl. 99—8.)

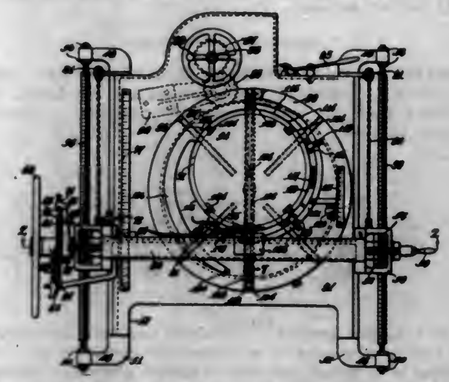
1. The method of processing corn in sealed containers consisting in subjecting the containers to a temperature of approximately 260° F. for a part of the processing time and then subjecting the containers to a receding temperature during the balance of the processing time.

1,884,301. CROSS STRAP SANDAL. WILLIS S. SHAFT, Faribault, Minn., assignor to Shaft-Pierce Shoe Company, Faribault, Minn., a Corporation of Minnesota. Filed Feb. 17, 1932. Serial No. 593,501. 13 Claims. (Cl. 36—11.5.)



1. That improvement in the manufacture of cross strap sandals and the like, which consists in notching the edge of an insole, placing the end portion of a strap against the inner portion of the peripheral edge of the insole forming said notch, outturning the end portion of the strap from the inner edge of the notch to fill the notch and lie substantially flush with the outer portion of the insole, stitching the end portion of the strap to the insole, and securing an outer sole to said insole.

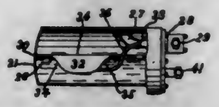
1,884,302. MACHINE FOR ENGRAVING CHARTS IN WAX. DAVID F. SHANKS, Winona, N. J., assignor to Royal Electrotype Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1927. Serial No. 243,099. 16 Claims. (Cl. 33—26.)



1. In a wax engraving machine, a turn-board adapted to angular movement in its own plane about a pivotal

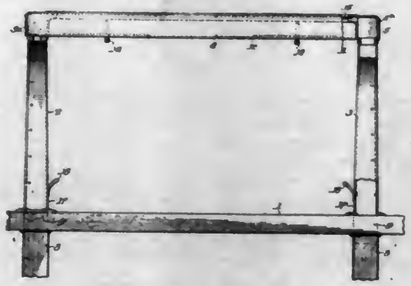
axis, a work-holder thereon, pivot connection between the holder and board having an axis parallel to and offset from the axis of the work-holder adapting the work-holder to angular movement about an axis offset from the axis of the turn-board and a tool support adapted to present a stationary tool to the work during angular movement of the board about its own axis.

1,884,303. REFRIGERATING APPARATUS. JOHN H. SHEATS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 27, 1929. Serial No. 395,568. 10 Claims. (Cl. 62—126.)



10. An evaporator adapted to contain a quantity of liquid refrigerant and oil, said evaporator having an outlet for gaseous refrigerant, means within the evaporator for removing oil from the liquid refrigerant and collecting same out of contact therewith, conduit means connecting said first named means with said outlet, said first named means having a portion thereof in intimate heat exchange relation with the medium to be cooled by the evaporator.

1,884,304. FUME HOOD FOR LABORATORY TABLES. EDGAR H. SHELDON, Muskegon, Mich. Filed Sept. 2, 1924. Serial No. 735,226. 11 Claims. (Cl. 98—115.)



1. A fume hood having a hollow member extending around its outer edge and provided with fume inlet openings, and uprights at the outer edges of said frame hood on which said hollow member is mounted, said uprights having fume ducts communicating with the interior of said hollow member.

1,884,305. HAIR CURLING APPARATUS AND METHOD. WILLIAM GENTRY SHELTON, St. Louis, Mo. Filed June 26, 1931. Serial No. 547,103. 6 Claims. (Cl. 132—33.)



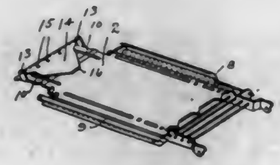
1. A supply member for applying moisture to a strand of hair in a waving or straightening operation and consisting of a cylindrical tube of pliable absorbent material adapted to receive and closely encase the strand of hair without opening irrespective of distortion thereof.

1,884,306. HAIR WAVING DEVICE. WILLIAM GENTRY SHELTON, St. Louis, Mo. Filed Oct. 9, 1931. Serial No. 567,828. 5 Claims. (Cl. 132—33.)



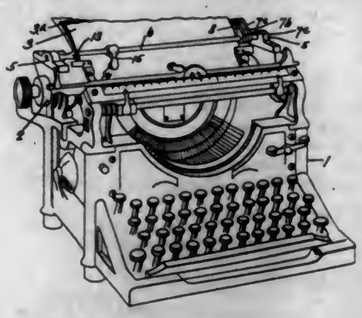
1. A hair curling device comprising an outer sleeve-like member having prongs projecting sidewardly therefrom for receiving and curling a strand of hair, and an inner rod having an end portion projecting beyond an end of said member and arranged for attachment of a strand of hair, said rod being revolvable within said member and serving as a hair tightener.

1,884,307. AUTOGRAPHIC REGISTER. JOHN Q. SHERMAN, Dayton, Ohio. Filed July 18, 1931. Serial No. 551,725. 12 Claims. (Cl. 282—16.)



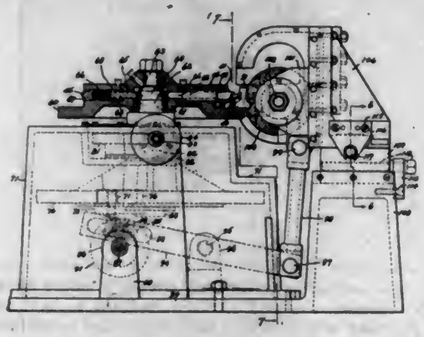
1. In an autographic register, the combination with a cabinet and record strip feeding means mounted therein, of a unitary strip supporting and guiding structure including a writing tablet, strip guiding means located at one end thereof, a pivotally mounted separator plate for the strips located at the opposite end of the writing tablet, a fixed pivot for supporting said plate and carbon mounting means located at opposite sides of the tablet.

1,884,308. SEPARATOR FOR MANIFOLDING MATERIAL. JOHN Q. SHERMAN, Dayton, Ohio. Filed Sept. 28, 1931. Serial No. 565,590. 10 Claims. (Cl. 197—133.)



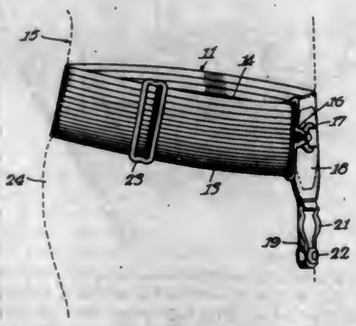
10. A device for separating superposed strips of manifolding material as they pass through a writing machine, including a plurality of relatively movable fingers extending between the superposed strips, and actuating means for alternately expanding and contracting the plurality of fingers and likewise the engaged strips at the will of the operator.

1,884,309. MACHINE FOR SURFACING THE RUBBING BLOCKS OF THE CIRCUIT BREAKER LEVERS OF IGNITION TIMERS. LEO C. SHIPPY and RUSSELL W. BAKER, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,644. 9 Claims. (Cl. 51—53.)



1. A machine for finishing the cam-engaging surfaces of the rubbing block of ignition timer circuit breaker levers comprising, in combination, a plurality of work-holders each provided with a pivot post and means for holding the lever in predetermined relation to its post, means for removing material from the rubbing block of a lever, means for successively conveying the work-holders to the material removing means, and means for automatically removing the levers from their pivot posts after their rubbing blocks have been surfaced.

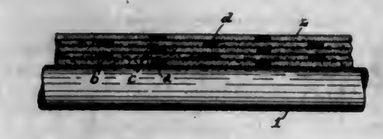
1,884,310. HOSE SUPPORTER. JAMES N. SIME, Chicago, Ill. Filed May 4, 1931. Serial No. 534,846. 2 Claims. (Cl. 241—6.)



1. A garter comprising an elastic band, a clasp for connecting the ends of said band together, a hose supporting member extending downwardly from said band, hose attaching members on the lower end of said supporting member, said band comprising a fabric having warp strands of rubber of progressively increasing cross-sectional area from its lower edge toward its upper portion, the edges of said garter being of substantially the same length when the same is not in use.

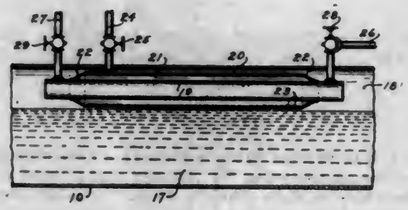
1,884,311. LAMINATE INSULATION. DONALD M. SIMMONS, Osborne, Pa., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,172. 6 Claims. (Cl. 173—264.)

5. In an electric cable structure a conductor, a body of insulation comprising overlying layers of spirally wrapped strip material, the edges of adjacent turns in said layers being separated by relatively narrow spaces, and strands



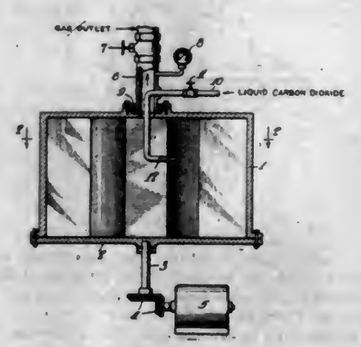
of fibrous material laid in the spaces between adjacent turns of a layer.

1,884,312. REFRIGERATING APPARATUS. HARRY SLOAN, Fox Point, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 30, 1931. Serial No. 553,978. 3 Claims. (Cl. 62—115.)



1. A purger comprising, an elongated horizontal inner casing, an outer tubular casing surrounding said inner casing to form a jacket embracing said inner casing intermediate the ends of the latter, said outer casing having an opening at one end for admitting mixed gases to the lower portion of one end of said jacket, means for admitting refrigerant to an end of said inner casing beyond the adjacent end of said outer casing to cool said jacket and thereby condense some of the admitted gases, and means for effecting removal of the non-condensible gases from an upper portion of the opposite end of said jacket.

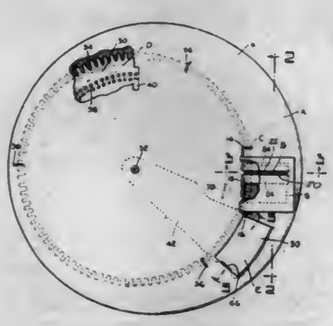
1,884,313. CENTRIFUGAL METHOD AND APPARATUS FOR MAKING SOLID CARBON DIOXIDE. JOHN D. SMALL, Douglaston, N. Y., assignor to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,146. 13 Claims. (Cl. 62—121.)



1. A method of compacting solid carbon dioxide, which includes forming a mixture of crystal and liquid carbon

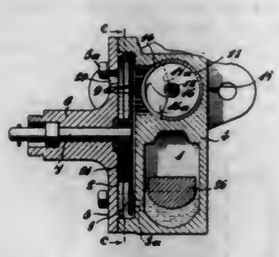
dioxide while maintaining pressure at or above the triple point; subjecting the wet mixture to centrifugal force; and drying the mixture.

1,884,314. SAVINGS BANK. ANTHONY N. SMITH, Girard, Pa., assignor to The Girard Model Works Inc., Girard, Pa., a Corporation of Pennsylvania. Filed Sept. 7, 1929. Serial No. 391,067. 8 Claims. (Cl. 235—100.)



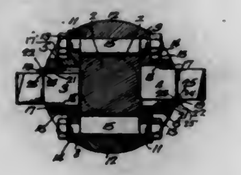
1. A coin savings bank comprising a coin container, a cover closing the same, an indexing disc pivoted directly to the cover, a sight window in the cover for observing the registration of the disc, said disc being provided with teeth around the outer periphery thereof, a housing mounted on top of the cover between the periphery of the disc and the periphery of the container and having a coin slot, said cover having an opening beneath the housing, an actuator reciprocable in said housing and including a coin chute, and a coin support subjacent the housing for holding a coin deposited in the slot and chute in engagement with the teeth of the disc, whereby movement of the actuator moves the coin and disc to change the registration thereof, until the coin rides off the end of the support and falls into the container.

1,884,315. CARBURETOR. FREDERICK HUGH SMITH Sherwood Rise, Nottingham, England. Filed Nov. 7, 1928, Serial No. 317,723, and in Great Britain May 1, 1928. 13 Claims. (Cl. 261—92.)



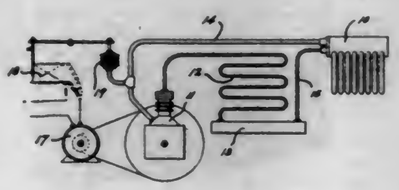
1. In a carburetor, a rotary disc, means for supplying liquid fuel to said disc to produce an attenuated film thereon, a chamber for accommodating said disc, an inlet to such chamber through which air may be drawn by engine suction to burst or penetrate said film, a mixing chamber, an elongated series of discrete apertures between said mixing and said disc chambers through which the atomized mixture is drawn and means for progressively opening and closing said apertures.

1,884,316. CRUSHER ROLL CONSTRUCTION. GEORGE E. SMITH, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 20, 1924. Serial No. 694,035. 4 Claims. (Cl. 83—12.)



1. In combination, a member having a socket provided with a recess, a second member mounted in said socket and provided with a locking portion inserted in said recess, said second member also having a recess, and a key securing said second member in its locked position, said key having a portion of substantially uniform cross section inserted in said socket, and a fracturable head portion projecting from the socket, and said head portion having a boss inserted in the recess of said second member.

1,884,317. REFRIGERATING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,229. 20 Claims. (Cl. 62—8.)



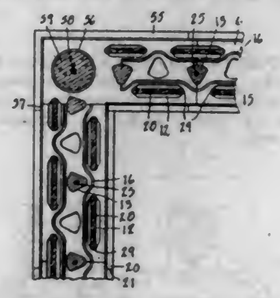
1. A refrigerating system containing a quantity of refrigerant and lubricant, circulating means for the refrigerant, revolving means actuated by the flow of refrigerant in a portion of the system for causing circulation of lubricant therein.

1,884,318. CELLULOSE ORGANIC DERIVATIVE COMPOSITION OF MATTER CONTAINING B-ETHOXY ETHYL LACTATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,328. 6 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic derivative of cellulose and a B-ethoxy ethyl lactate.

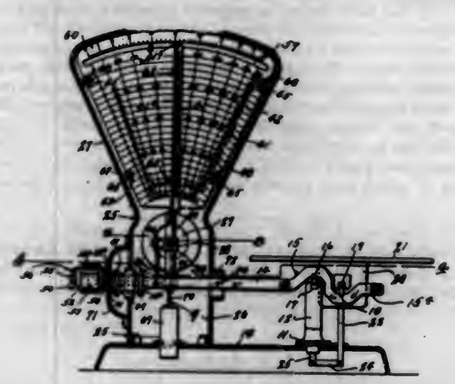
1,884,319. WALL STRUCTURE. KENNETH L. SMITH, Des Plaines, Ill. Filed Aug. 10, 1929. Serial No. 384,969. 4 Claims. (Cl. 72—30.)

4. A wall structure comprising a plurality of blocks having aligned vertical holes therein running normal to the horizontal course joints, the ends of said holes being vertically grooved, and continuous partition strips disposed



in said aligned holes with their edges in supporting engagement with said grooves.

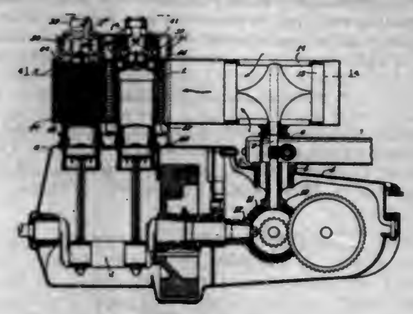
1,884,320. WEIGHING SCALE. WALTER STANDISH SMITH, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed June 30, 1930. Serial No. 464,900. 18 Claims. (Cl. 265—36.)



1. A weighing scale comprising in combination a base, a lever fulcrumed thereon, a load receiving platform pivotally mounted on said lever near said fulcrum, a torsion element disposed transversely above said lever, a mount for anchoring each end of said torsion element, an indicator fixed to said torsion element intermediate the ends thereof and extending radially therefrom, an arm extending from said indicator at an angle thereto and to said torsion element, a link pivotally connected at one end to said arm and at the other end to said lever, a chart stationarily arranged adjacent to the plane of movement of said indicator, said chart having arcuate slot near its upper end and being provided on one side with price indicia and provided on both sides with weight indicia, a hair line member carried by said indicator for reading said price indicia, and a pointer carried by the upper end of said indicator and arranged within said slot for simultaneously indicating the weight indicia on both sides of said chart.

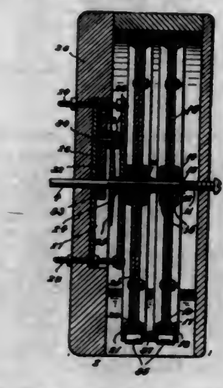
1,884,321. AIR COOLED INTERNAL COMBUSTION ENGINE. WILLIAM F. SMITH, Poughkeepsie, N. Y., assignor of one-half to Herman A. Schatz, Poughkeepsie, N. Y. Filed Feb. 9, 1929. Serial No. 338,767. 25 Claims. (Cl. 123—177.)

1. An engine cylinder comprising a wall and a head, said wall having cooling fins integral therewith, said head having positioned thereon a housing, an air passage in said housing opening downwardly towards said wall, a



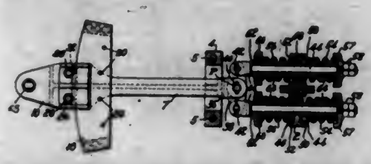
spark plug mounted in said head outside of said housing a hole in said housing opposite said spark plug, and means for blowing air through said passage into said housing.

1,884,322. PROGRAM CLOCK. DESKIN D. SNOW, Corpus Christi, Tex. Filed Sept. 9, 1929. Serial No. 391,414. 1 Claim. (Cl. 200—37.)



A program clock comprising a driving shaft, a hollow shaft mounted on the driving shaft, gearing operatively connecting the hollow shaft with the driving shaft, wheels secured on the respective shafts and electrically connected therewith, each of said wheels consisting of a pair of disks secured together and having diverging peripheral flanges and bands of insulation seated on said flanges, contact pins embedded in said bands and extending therethrough to the disks, and resilient brushes secured in the casing and bearing upon the bands of the respective wheels to be engaged by the contact pins.

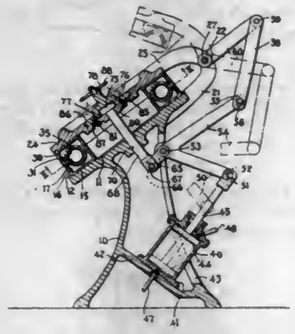
1,884,323. COUPLING BAR. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed June 25, 1928. Serial No. 287,951. 5 Claims. (Cl. 280—33.9.)



3. A coupling having, in combination, a coupling member, an equalizer, means operatively connecting said coupling member to said equalizer at an intermediate portion

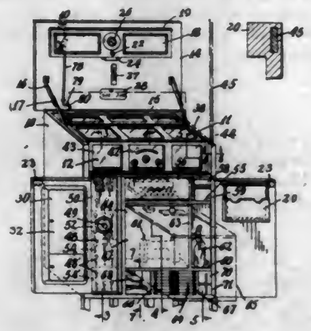
of the latter for bodily swinging movement of each relative to the other, springs operatively coacting with said equalizer at opposite sides of said intermediate portion thereof for resisting swinging movement of said equalizer in either of opposite directions and for resisting longitudinal movement of said coupling member in either of opposite directions.

1,884,324. VULCANIZING APPARATUS. ROBERT W. SNYDER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 1, 1929. Serial No. 382,608. 1 Claim. (Cl. 18—19.)



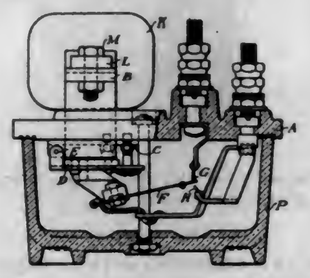
A mold for treating articles under pressure comprising a pair of relatively movable mold sections, one of which is provided with a central opening having alternating recesses and lugs in its sides, a rod slidably projecting through the other of the sections and having a head rotatable with respect to the section, said head being provided with recesses and lugs complementary with respect to the lugs and recesses respectively in the first section, thereby providing a lock between the sections when the lugs on the head have been projected through the recesses in the first section and the head turned relative thereto, and means for moving the rod, said means also being connected to the sections for moving them relatively.

1,884,325. COMBINATION RADIO AND CONVERTIBLE CABINET SYSTEM. LEON SOMMER, Brooklyn, N. Y. Filed Apr. 30, 1931. Serial No. 533,985. 5 Claims. (Cl. 213—189.)



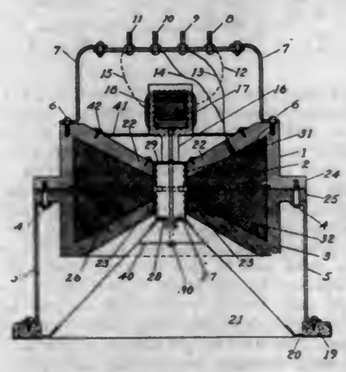
4. In a device of the class described a cabinet open at the top and at the front side, a cover hinged at the top of the cabinet for closing the top, a panel hingedly connected on the cover for closing a portion of the open front, a plurality of partitions within the cabinet dividing off compartments for the holding of various articles, and means for preventing closing movement of the cover when the panel is at an angle thereto of less than 90°.

1,884,326. ELECTRICAL RELAY. PAUL P. SOSINSKI, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 23, 1931. Serial No. 552,629. 6 Claims. (Cl. 175—336.)



1. In combination, a magnetic structure comprising two fixed magnetizable pole pieces terminating in spaced pole faces and a movable magnetizable core bridging the free ends of the pole pieces, a movable armature arranged to be attracted by said pole pieces, means for constantly urging said core away from said pole pieces, and adjustable clamping means including a member having a first magnetizable portion and a second non-magnetizable portion for drawing said core toward said pole pieces against the bias of said means whereby said first magnetizable portion is effective in providing a flux path from said core to one of said pole pieces during a part only of the total movement of which said adjustable clamping means is capable.

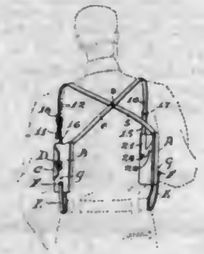
1,884,327. ELECTRICAL APPARATUS. PERCY LE BARON SPENCER, Medford, Mass. Filed Dec. 24, 1927. Serial No. 242,309. 10 Claims. (Cl. 179—115.5.)



9. In an electrodynamic loud speaker, a current conducting element forming a closed turn having two substantially parallel long sides, said long sides being formed in a substantially but not completely closed circle.

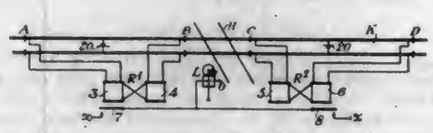
1,884,328. CARRIER FOR VALUABLES. EDWARD SPERLING, New York, N. Y. Filed Apr. 16, 1931. Serial No. 530,656. 6 Claims. (Cl. 224—5.)

1. In a carrier for valuables to be worn under and concealed by an outer garment, a supporting harness including a pair of straps crossing at the back of the wearer and forming a pair of loops for respectively receiving the arms



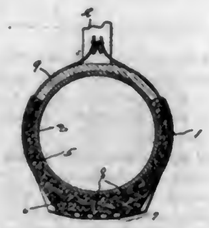
and pouches having means for threading the looped portion therethrough to optionally attach a pouch to either of the loops.

1,884,329. HIGHWAY CROSSING PROTECTION. LESTER E. SPRAY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 16, 1931. Serial No. 537,907. 11 Claims. (Cl. 246—130.)



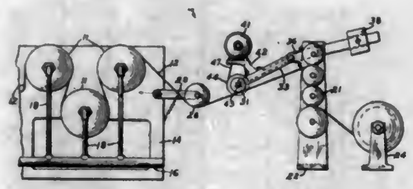
1. In combination, a railway track intersected by a highway, said track being divided to form two sections one on each side of the highway, an interlocking relay associated with each of said sections, and a highway crossing signal located at said intersection and controlled jointly by said two relays.

1,884,330. NONSKID DEVICE FOR PNEUMATIC TIRES. GIOACCHINO STABILI, Morrisville, Pa. Filed Feb. 19, 1931. Serial No. 517,017. 1 Claim. (Cl. 152—17.)



An anti-skid device for pneumatic tires, comprising an annular casing formed of compressed wood pulp material having metallic fibres distributed therethrough and having a relatively thick tread portion and relatively thin and flexible side wall portions capable of being flexed to facilitate the application of the device to a tire, said casing in cross section defining more than a semi-circle to form the side walls of a width to substantially cover the sides of a tire, the edge portions of the casing curving inwardly to engage and grip the tire above its center, reinforcing wires extending circumferentially of the device through the tread portion, and elongated flat attaching members extending transversely of and through the device from one side wall free edge to the other over the top of and in close proximity to the said wires for coaction therewith in reinforcing the casing, the said members having their ends extended beyond the said free edges and formed to facilitate their connection together, the said tread having recesses in its face forming suction cups.

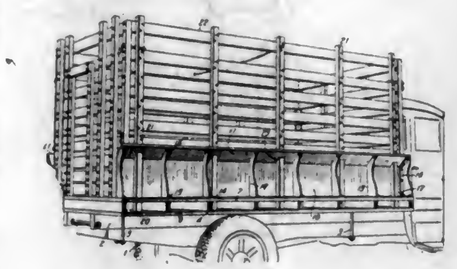
1,884,331. METHOD OF AND MEANS FOR INDICATING PAPER DRYNESS. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,781. 9 Claims. (Cl. 73—51.)



8. In a paper-dryness indicating system for indicating the moisture content of a moving web of paper, a roll, means for supporting said roll in frictional engagement with the web at a predetermined pressure therebetween indepedent of variations in the tension of said web, a dynamo-electric machine mechanically coupled to said roll, electric means associated with the dynamo-electric machine to cause said roll to rotate at a peripheral speed differing from the speed of the web and current responsive indicating means actuated by the armature current of the dynamo-electric machine for measuring the moisture content of the paper.

1,884,332. [WITHDRAWN.]

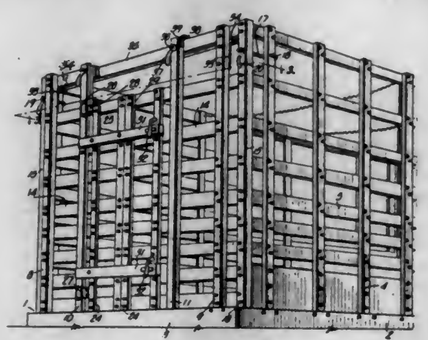
1,884,333. TRUCK BODY. MYLES STANDISH, Council Bluffs, Iowa. Filed Aug. 20, 1928. Serial No. 300,724. 1 Claim. (Cl. 296—43.)



In a body of the character described including a rack provided with stakes, stake-supporting means including transverse joists, a side board mounted on edge on the

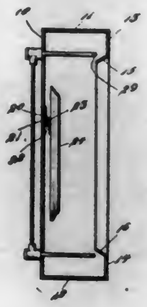
joist in juxtaposition to the outer edge of the floor, an upper ribbon board secured on the joists adjacent the outer face of the side board and having notches for receiving said stakes, a lower ribbon board secured to the joists in vertically aligned relation to the upper ribbon board to support the lower end of the stakes, a flare board in angular relation to the upper end of the side board and having stake-receiving notches vertically aligned with the notches in the upper ribbon board, and a brace having foot, side and flared portions adapted to be respectively secured to the upper ribbon board, side board and flare board.

1,884,334. REAR GATE STRUCTURE. MYLES STANDISH, Omaha, Nebr. Original application filed Aug. 20, 1928, Serial No. 300,725. Divided and this application filed Apr. 28, 1930. Serial No. 447,895. 2 Claims. (Cl. 296—51.)



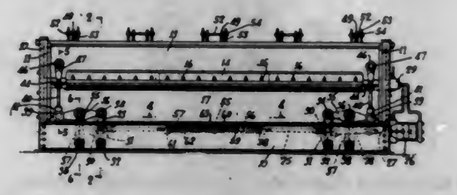
1. In a truck body having side boards, an end gate structure including stakes adjacent the side boards, gate-supporting stakes spaced from said first named stakes, means connecting the first named stakes and the side boards to the respective gate-supporting stakes, a gate supported by said gate stakes, bracket members secured to the upper ends of the first named stakes forming upwardly opening seats, a removable top bar seated in said seats and extending across said stakes to retain the stakes in alignment between the side boards, and means on said top bar engaging side faces of said gate-supporting stakes to prevent ontward movement of the side boards.

1,884,335. SIGN. MYLES STANDISH, Providence, R. I. Filed Nov. 10, 1930. Serial No. 494,508. 6 Claims. (Cl. 40—130.)



3. A sign comprising a base, characters mounted on said base, a light in the form of a tube extending lengthwise of the sign along the top and bottom thereof in a plane forward of the plane of the characters, means along the top and bottom of the sign for hiding the light tube from view, each of said characters being highly reflective and having a flat face with a generally concaved marginal edge, whereby light is reflected differently from said face and edge to give depth to said characters.

1,884,336. VENEER CLIPPING MACHINE. RICHARD W. STANLEY, Lockport, N. Y., assignor to Merritt Engineering & Sales Company, Inc., Lockport, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,100. 13 Claims. (Cl. 164—47.)



1. In a veneer-clipping machine, the combination of a clipper knife, a shear plate, a reciprocable member, a toggle joint on said reciprocable member, one arm of the toggle being fixedly mounted and the other arm of the toggle being connected with said shear plate, a pivotally mounted rocker arm, one end of said rocker arm being connected ot said shear plate and the other end being connected to said clipper knife, and means to reciprocate said reciprocable member.

1,884,337. CELLULOSIC COMPOSITION OF MATTER CONTAINING DIETHYL PHTHALATE AND ORTHO-CRESYL PARA-TOLUENE SULPHONATE. CYRIL J. STAUD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 14, 1930. Serial No. 495,793. 7 Claims. (Cl. 106—40.)

1. A composition of matter containing a cellulose derivative and a mixed plasticizer comprising ortho-cresyl para-toluene sulphonate and diethyl phthalate.

1,884,338. PRODUCTION OF CELLULOSE NITRO-ACYLATE. CYRIL J. STAUD, Rochester, N. Y., and CHARLES E. WARING, Dayton, Ohio, assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,960. 13 Claims. (Cl. 260—101.)

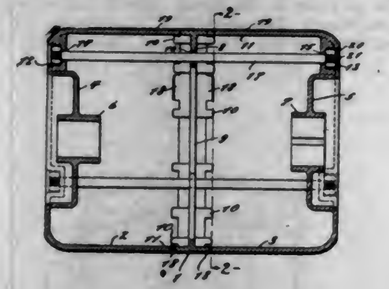
1. In the process of making cellulose nitroacylate the step which comprises nitrating an anhydrous partially de-esterified cellulose acylate.

1,884,339. METHOD OF PRODUCING COKE. FRANK WALTER STEERE, Scarsdale, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 1, 1928. Serial No. 251,283. 1 Claim. (Cl. 202—33.)

The method of producing coke which comprises admixing coke breeze and hot liquid pitch, cooling the mixture to solidify the pitch in admixture with the coke breeze, adding the resulting coke breese and pitch to coal charged to a coke oven, and coking the resulting charge.

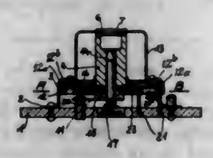
1,884,340. ROLL. HENRY J. STEGEMAN, Fairfield, Conn., assignor to Locke Steel Chain Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 4, 1930. Serial No. 479,641. 5 Claims. (Cl. 301—63.)

1. A cylindrical tractor roll comprising a ring and two end portions disposed one on each side of said ring on a common axis, said ring and end portions having cylindrical ground-engaging surfaces of equal diameters and said end portions having substantially closed ends, lugs on said ring engaging the inner surfaces of said end portions



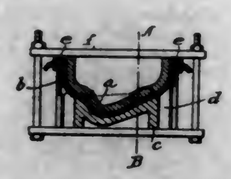
to register the ground-engaging surfaces of the ring and end portions, and means securing said ring and end portions together.

1,884,341. ELECTRIC SWITCH. HERMANN STEINHART, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 17, 1931, Serial No. 516,406, and in Germany Feb. 26, 1930. 9 Claims. (Cl. 200—44.)



1. An electric switch comprising a pair of relatively displaceable elements, contacts on said elements, a fixed member, contacts on said fixed member adapted to be engaged by the contacts on said relatively displaceable members, means including a pin carried by said fixed member for locking said relatively displaceable members in a fixed relative position, and means removable from the switch for displacing said locking means to permit relative displacement of said members on insertion of said removable means.

1,884,342. PRODUCTION OF MASKS OF RUBBER OR OTHER SUITABLE ARTIFICIAL SUBSTANCES. HERMANN STELZNER, Lubeck, Germany, assignor to Otto Heinrich Drager, Lubeck, Germany. Filed Jan. 15, 1931, Serial No. 508,889, and in Germany Jan. 28, 1930. 8 Claims. (Cl. 18—35.)



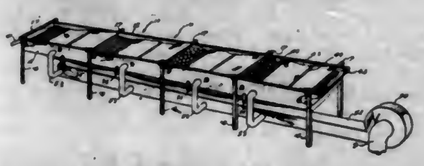
1. A method of producing masks in moulds out of rubber and similar artificial substances, comprising the steps of providing a partially vulcanized piece of rubber and textile material, subjecting parts of said piece to lateral drawing for the purpose of forming such portions of the mask which have an arched shape in operation, more particularly to the chin and the forehead portions, said parts being suspended during the drawing process and coming in contact with a superposed pressure element only, and simultaneously compressing from above and below the remaining parts of said piece.

1,884,343. HAIR WAVER. BERNARD A. STERLING, Chicago, Ill. Filed Oct. 24, 1930. Serial No. 490,909. 15 Claims. (Cl. 132—33.)



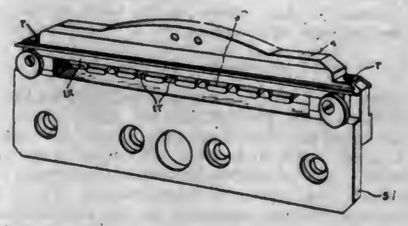
1. In a device of the class described, a spindle, a hair locking jaw rigid with one end of said spindle, a spindle sleeve surrounding said spindle, a cooperating hair locking jaw rigid with the end of said sleeve, adjacent said first jaw, said sleeve extending substantially to the opposite end of the spindle and said jaws being opened and closed by relative rotation between said spindle and said sleeve.

1,884,344. FRUIT DRYING APPARATUS. AUGUSTUS R. STEVENS and FRANCIS M. STEVENS, Lindsay, Calif., assignors to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Jan. 10, 1929. Serial No. 331,503. 5 Claims. (Cl. 34—12.)



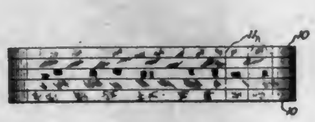
1. An apparatus for drying fruit or the like comprising an endless conveyor for supporting and moving fruit, an open top air distributing chamber over which said conveyor moves and forms a substantial closure therefor, openings in said conveyor for the passage of air, an air deflecting drag member located over said conveyor and lying horizontally therewith and supported by fruit on said conveyor, means for supplying air or other drying medium to said distributing chamber under sufficient pressure to force said air upwardly through said conveyor to surround and contact with fruit thereon, said drag member holding said air around said fruit and causing it to travel with said fruit to prolong the contact therewith to permit it to absorb the maximum of moisture from said fruit.

1,884,345. APPARATUS FOR CASTING TYPE FURNITURE. ASHTON G. STEVENSON, Chicago, Ill. Filed Apr. 23, 1931. Serial No. 532,335. 4 Claims. (Cl. 199—55.)



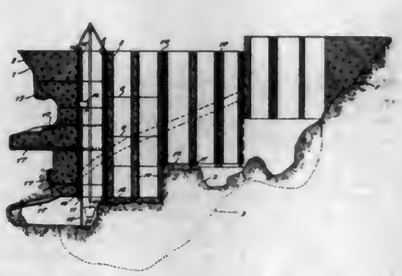
1. In a mold of the character described, a mold body having a passage therethrough, closure means for the front end of said passage, a core for partially closing the rear end of said passage, a reinforcing bar, and a support rigidly uniting the core to the reinforcing bar.

1,884,346. PROCESS OF PRODUCING MARBLE EFFECTS IN CERAMICS. ENOS A. STEWART, Canton, Ohio. Filed Jan. 24, 1930. Serial No. 423,127. 7 Claims. (Cl. 18—48.8.)



1. The method of making artificial geological formations which consists in forming layers of various colors of clay or pasty consistency, placing the layers one upon another, transversely cutting the superposed layers into laminated strips, churning the strips into a conglomerate mass, forming the mass into a desired shape and burning the finished product in a kiln.

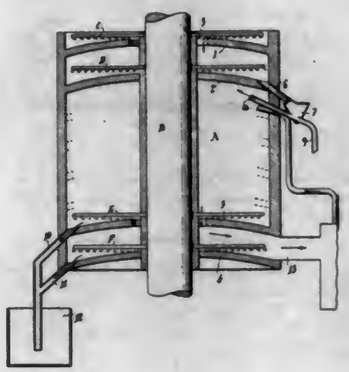
1,884,347. SUBTERRANEOUS MASONRY STRUCTURE AND METHOD OF MAKING THE SAME. SPENCER W. STEWART, White Plains, N. Y., assignor to Amberson Construction Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,458. 11 Claims. (Cl. 61—41.)



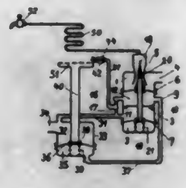
1. The method of excavating, which comprises removing material to form an excavation, placing in the bottom of the excavation easily removable material, building in the excavation a section of a shaft with its bottom disposed adjacent said easily removable material, supporting said section from the walls of the excavation, removing said easily removable material through said shaft, excavating further material beneath said section and placing another section of the shaft in the excavation beneath said first section.

1,884,348. METHOD OF ROASTING MINERALS CONTAINING THE SULPHIDES OF ZINC, IRON, LEAD, AND COPPER, FOR THE RECOVERY OF THE METAL AND THE SULPHUR DIOXIDE GAS THEREFROM. BYRON ANGUS STIMMEL, KENNETH DUNCAN MCBEAN, and GRAHAM CRUICKSHANK, Trail, British Columbia, Canada, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Quebec, Canada, a Company of Canada. Filed Feb. 10, 1930. Serial No. 427,414. 7 Claims. (Cl. 75—60.)

1. A method of roasting, in gaseous suspension, minerals or tailings containing the sulphides of zinc and iron, which comprises blowing the charge in a finely divided dry state into the upper part of an unobstructed roasting chamber of large cross sectional area and relatively great depth to descend therethrough, disseminating the particles of the charge therein and causing their free suspension for preserving a minimum of contact between them in the oxidizing gas; maintaining the temperature within the roasting chamber above the ignition point of the charge and conducting the roast exclusively by the combustion of its sulphur content supported only by the air of the blast for converting the sulphides into metallic oxides and sulphur dioxide gas in a high state of purity and concentration; and separately evacuating the roasted material and sulphur dioxide gas at the bottom of the roasting chamber.

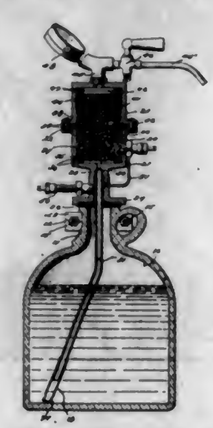


1,884,349. REGULATOR FOR THE GAS SUPPLY. FRIEDRICH WILHELM STOCKMEYER, Vaihingen, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Jan. 12, 1931, Serial No. 508,357, and in Germany Jan. 20, 1930. 14 Claims. (Cl. 236—25.)



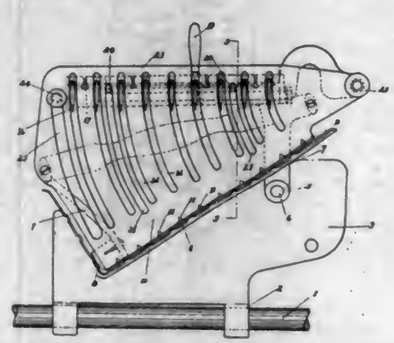
13. A regulator for the gas supply to a water heater comprising a gas supply, a water supply pipe, a main valve for said gas supply operable by differences of gas pressure on its faces, and means including a valve operable by flow of water in said water supply pipe and a thermostatic pilot valve, for controlling the gas pressure on one side of said main valve.

1,884,350. DISPENSING DEVICE. IRVIN E. STOOPS, Detroit, Mich. Filed Dec. 7, 1931. Serial No. 579,617. 11 Claims. (Cl. 225—17.)



1. In a dispensing device, a beverage container, a faucet, a tube communicating with the interior of said beverage container for conducting the beverage from the container to the faucet, a filter interposed between the tube and faucet, and means for carbonating the beverage during its passage through the filter.

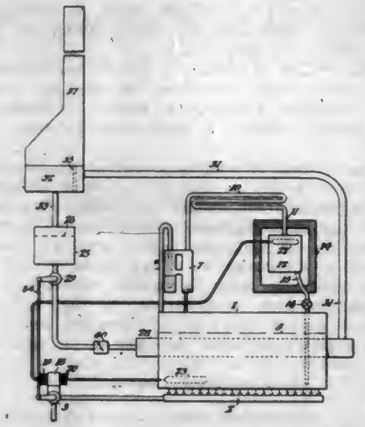
1,884,351. MEAT CLAMP. ELMER G. STRECKFUSS, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,843. 5 Claims. (Cl. 146—217.)



5. End slice gripping mechanism for a meat slicer comprising a backing plate having arcuate slots therein, a member pivoted for movement in the arc of said slots, and means for pivotally mounting curved tines on said member.

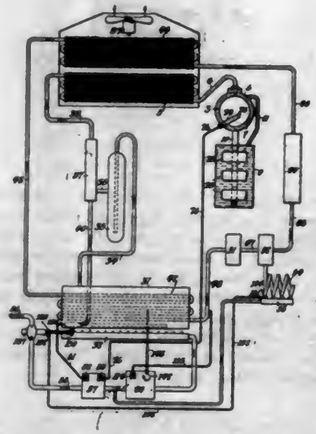
1,884,352. REFRIGERATING SYSTEM. ARCHIE HUGH STRONG, Norristown, Pa., assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa., a Corporation of New York. Filed June 6, 1929. Serial No. 368,791. 4 Claims. (Cl. 62—118.)

1. In a refrigerating system of the absorption type; the combination with a main refrigerating apparatus inclosing a primary refrigerant and including a generator, a condenser and an evaporator, connected in a closed conduit circuit, means adapted to intermittently heat said generator, and thermostatic means adapted to automatically control said heating means in accordance with the temperature of said primary refrigerant; of means adapted to intermittently cool said generator, including a secondary closed condnit circuit with a liquid trap, and a cellular radiator including air passageways and separate adjoining passageways containing a secondary refrigerant, capable of boiling at a lower temperature than said primary refrigerant; said secondary conduit circuit extending in and out of said generator; means adapted to induce air flow through said radiator,



including a stack open to the atmosphere; a valve in said secondary circuit, between said trap and said generator; whereby, when said valve is closed, the secondary refrigerant, in a liquid state, may be excluded from the portion of its circuit extending in said generator; and means operatively connecting said heater and valve, whereby they are rendered alternately operative by said thermostatic means.

1,884,353. REFRIGERATING SYSTEM. ARCHIE HUGH STRONG, Norristown, Pa., assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,922. 15 Claims. (Cl. 62—5.)



15. In a refrigerating system, the combination with a main refrigerant circuit including a generator and a condenser; of an auxiliary refrigerant circuit including a coil in cooperative relation with said generator, and a condenser; an air flue inclosing said two condensers;

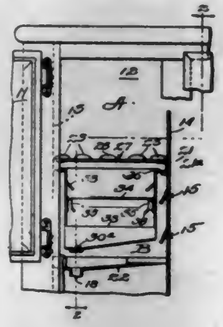
and a single fan at one end of said flue whereby both of said condensers are cooled by the operation of said fan and the air moved by said fan first encounters said main condenser and thereafter encounters said auxiliary condenser.

1,884,354. METHOD OF MAKING SALTS OF ALIPHATIC ACIDS. CHARLES J. STROSACKER and EARL L. PELTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 16, 1928. Serial No. 254,889. 7 Claims. (Cl. 260—112.)

1. The method of making a salt of an aliphatic carboxylic acid which comprises reacting an alpha-halogenated ethylene hydrocarbon with a hydroxide of an alkali-forming metal at a temperature between 100° and 500° C.

1. The method of making a salt of an aliphatic carboxylic acid which comprises heating a dihalogenated aliphatic hydrocarbon capable of being converted to an alpha-halogenated ethylene hydrocarbon by splitting off one molecule of hydrogen halide, with an alkali-metal hydroxide at a temperature of approximately 250° to 350° C., said hydroxide being in amount sufficient to convert said dihalogenated hydrocarbon to the corresponding alpha-halogenated ethylene hydrocarbon and to react with the latter to form the salt of an aliphatic carboxylic acid.

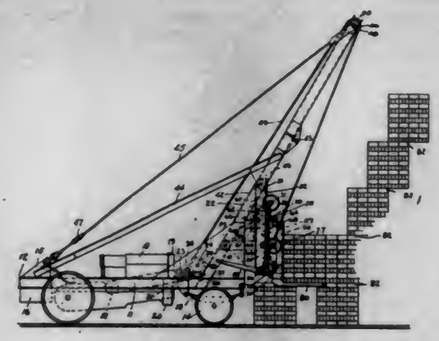
1,884,355. REFRIGERATOR. OTTO STAUFF, Dwight, Ill. Filed Sept. 7, 1929. Serial No. 390,909. 7 Claims. (Cl. 62—69.)



1. In a refrigerator the combination of walls forming two chambers, one thereof being an upper chamber for a substantially large cake of ice, the other being a lower chamber adapted to accommodate smaller pieces of ice, articles of food, etc., one of the defining walls being a substantially horizontally disposed platform having openings therethrough and positioned between the two chambers, an open-top receptacle adapted to hold small pieces of ice, and means for supporting the receptacle in the lower chamber below said platform.

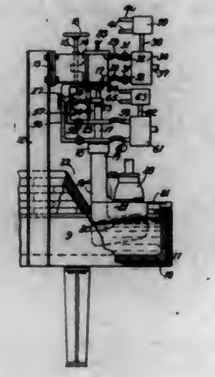
1,884,356. HANDLING MACHINE. ROBERT B. STUCKEY, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Aug. 8, 1929. Serial No. 384,367. 8 Claims. (Cl. 214—65.)

1. In a handling machine, an automotive vehicle, a fork associated with such vehicle, means for bodily shifting such fork from side to side, means for inclining such fork to either side, and means for raising and



lowering said fork, said means including power operated means supplemented by manually operable means.

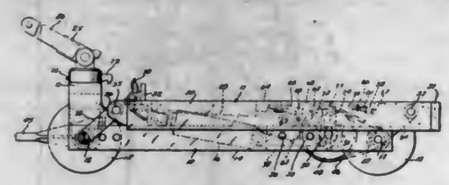
1,884,357. COMBINED GLASS PUDDLER AND FEEDER. SAMUEL G. STUCKEY, St. Louis, Mo., assignor to Obear-Nester Glass Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 31, 1929. Serial No. 403,676. 14 Claims. (Cl. 49—5.)



1. A combined glass puddler and feeder comprising a well adapted to contain a constant supply of molten glass, an imperforate spoon extending therein and in constant contact with said supply, and means for reciprocating said spoon vertically thereby puddling the glass in the well and bring the glass in the spoon into contact with a mold to be filled by suction.

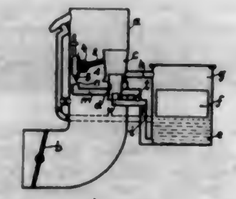
8. The method of feeding molten glass into molds, which consists in segregating and bodily elevating a predetermined body of molten glass from a pool of glass sufficiently to contact with the lower end of a parison mold, filling said elevated mold from said body by suction, lowering the remainder of said elevated body of glass to a predetermined distance below said parison mold, severing the glass in the mold from said body, and then submerging the remainder of the elevated body of glass in the glass in the pool, whereby fresh molten glass flows over the top of the elevated glass remaining.

1,884,358. LIFT TRUCK. WILLIAM STUEBING, Jr., Cincinnati, Ohio, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut. Filed Dec. 31, 1930. Serial No. 505,819. 7 Claims. (Cl. 254—10.)



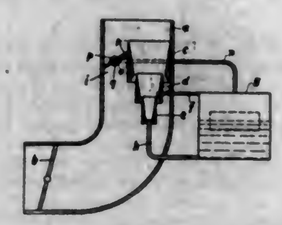
1. In a vehicle, in combination, a main frame, supporting wheels for said frame, a lifting frame, means operable by the rolling action of the wheels for raising the lifting frame relative to the main frame, and means for retaining the lifting frame in raised position upon the completion of the raising operation.

1,884,359. CARBURETOR. WILHELM STURM, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 18, 1929, Serial No. 371,832, and in Germany July 9, 1928. 4 Claims. (Cl. 261—41.)



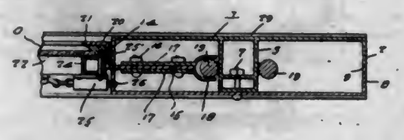
1. A carburetor comprising, in combination, a float chamber, a mixing pipe, a main choke tube located in said mixing pipe and connected to said float chamber, said mixing pipe having an air passage external to the main choke tube, an auxiliary choke tube within said main choke tube, an atomizing jet connected to the fuel space of said float chamber, an auxiliary air throttle controlling the air passage external to said main choke tube, and a pipe connected to the atomizing jet supply pipe, the opening to which is controlled directly from said air throttle.

1,884,360. CARBURETOR. WILHELM STURM, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 18, 1931, Serial No. 515,608, and in Germany Feb. 22, 1930. 6 Claims. (Cl. 261—72.)



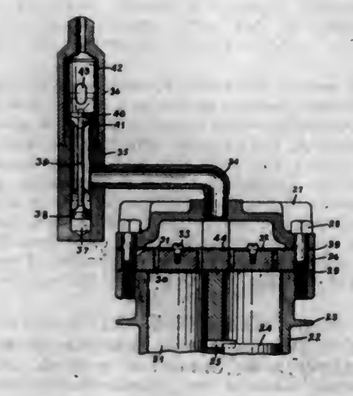
1. A carburetor comprising in combination a float chamber, a mixing pipe, choke tubes in said pipe, an atomizing jet in one of said choke tubes and connected to the fuel space of said float chamber, another conduit between the air space of said float chamber and one of said choke tubes, a main air throttle in said mixing pipe, an auxiliary throttle which is in parallel with said choke tubes and is automatically operated by the flow of air through said mixing pipe and means operable by the displacement of the auxiliary throttle to vary the vacuum in the air space of said float chamber.

1,884,361. WINDOW FRAME AND SASH THEREFOR. PAUL PETER SULLIVAN, Chicago, Ill. Filed Nov. 6, 1930. Serial No. 493,846. 9 Claims. (Cl. 189—72.)



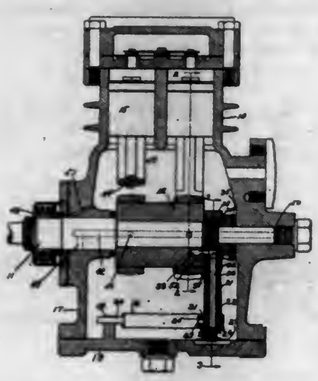
1. A window construction comprising in combination a frame including a pair of vertical side members respectively comprising a plate, a rib integral with the plate, a pair of upper and lower half plates secured to said rib in spaced parallel relation to said first mentioned plate, said first mentioned plate and said half plates, respectively provided adjacent their vertical edges with inwardly directed flanges, whereby to provide between the flange on the first mentioned plates, and the flanges of said half plates, guide channels, and a window sash operable between said side frame members, said sash provided with lateral oppositely extending plates operable within said guide channels.

1,884,362. PUMP FOR REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,345. 11 Claims. (Cl. 230—1.)



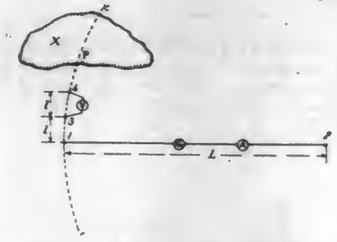
1. A part of a refrigerating system, having a low pressure portion and a high pressure portion, a pump for circulating refrigerant from said low pressure portion to said high pressure portion, a valve in said high pressure portion normally closed when the pump is idle, and a dash-pot for preventing closing of said valve while the pump is in operation.

1,884,363. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,827. 8 Claims. (Cl. 184—27.)



1. A compressor having a casing, moving parts in said casing, a cylinder in said casing having a lubricant inlet therein and pump means operating within said cylinder to force lubricant to said moving parts and a spring cradle supporting said cylinder.

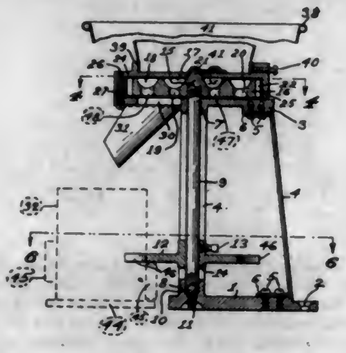
1,884,364. METHOD OF MAPPING SUBSURFACE STRUCTURES. KARL SUNDBERG, Houston, Tex., assignor to Aktiebolaget Elektrisk Malmletning, Stockholm, Sweden, a Corporation of Sweden. Filed May 11, 1928. Serial No. 276,849. 6 Claims. (Cl. 175—182.)



1. In a method of mapping subsurface earth structures, the steps which comprise producing a current flow between two fixed electrodes widely spaced in an area to be explored, and determining the potential difference per unit of current flow between at least two more closely spaced movable electrodes spotted at various points on the arc of a circle passing through or adjacent to one of said fixed electrodes, said arc having the other of said fixed electrodes as a center so that electrical conditions along the arc may become as independent as possible of conditions at the fixed electrode used as a center for said arc.

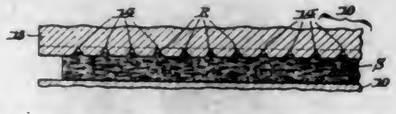
1,884,365. APPARATUS FOR DISPENSING FLAVORING MATERIALS. GERHART S. SUPPIGER and CLYDE ALEXANDER, Belleville, Ill., assignors to Scientific Tablet Company, East St. Louis, Ill., a Corporation of Illinois. Filed July 15, 1927. Serial No. 205,892. 3 Claims. (Cl. 226—2.)

1. A machine for dispensing pellets comprising a hopper having a bottom member provided with a discharge opening, a bottom wall supported in spaced relationship from the bottom member of said hopper, said bottom wall having a discharge opening, a rotatable plate mounted between the bottom member of the hopper and said wall provided with an annular groove in its upper surface overlying the opening in said wall and with an opening extending from the bottom of the groove to the undersurface of the



plate, and a projection extending into said annular groove and adapted to remove surplus charges of pellets therefrom.

1,884,366. PULP PRODUCT AND ITS MANUFACTURE. DANIEL MANSON SUTHERLAND, Jr., Morrisville, Pa. Filed Mar. 29, 1929. Serial No. 350,872. 5 Claims. (Cl. 92—68.)

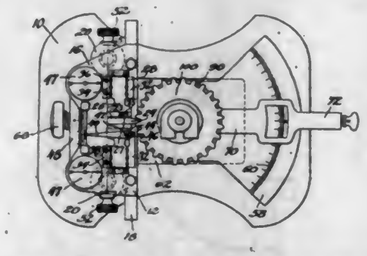


1. A drier for pulp sheets comprising opposed members between which the pulp sheets are hot-pressed, one of said members having a multiplicity of V-grooves in its active surface, affording vent channels therein in their angles for the escape of vapor beyond the depth to which the grooves are filled by the pulp.

1,884,367. ROT-PROOF FIBER PRODUCT. DANIEL MANSON SUTHERLAND, Jr., Morrisville, Pa. Filed Sept. 10, 1930. Serial No. 481,077. 3 Claims. (Cl. 92—21.)

1. A rot and water-proof and termite-proof fiber board, comprising interlaced fibers having their interstices charged with a waterproofing material and a toxic agent combined therewith.

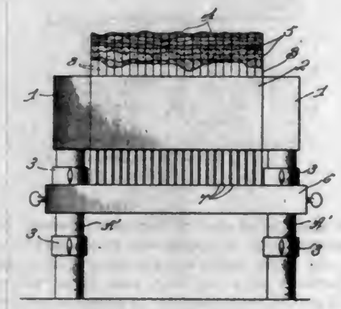
1,884,368. GEAR TESTING MACHINE. FRANCIS T. SWAIN, Newcastle, Ind. Filed Oct. 28, 1926. Serial No. 144,668. 7 Claims. (Cl. 73—51.)



1. In a gear checking mechanism having a base portion, rollers mounted thereon, a slidable unit laterally movable across said base and in contact with said rollers, said unit including a contactor having independent bodily move-

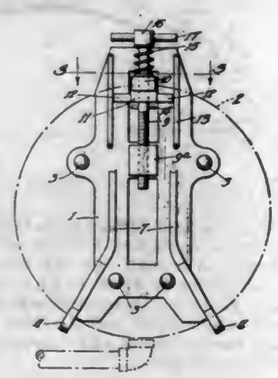
ment with respect to the remainder of said unit in a direction parallel to the direction of movement thereof, means for supporting a gear to be checked on one of said rollers with the face of one of its teeth in contact with said contactor, means for rotating said roller, and means carried by said slidable unit for indicating the amount of relative movement between said contactor and the remainder of said slidable unit.

1,884,369. VISUAL INFORMATION BOARD. MARTIN D. W. SWANSON, Omaha, Nebr. Filed July 17, 1931. Serial No. 551,520. 13 Claims. (Cl. 35—16.)



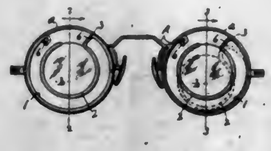
1. In apparatus of the character set forth, a frame, and a plurality of elongated polygonal blocks each slidably related, said blocks bearing information on their top end and side portions and said side portions being exposed when one or more of said blocks are projected above the others.

1,884,370. MOUNTING DEVICE. OLOF SWANSON, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 494,260. 5 Claims. (Cl. 248—30.)



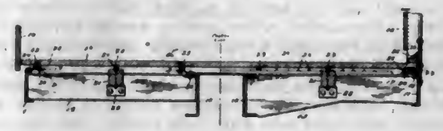
2. A mounting device comprising, in combination, a face; a plurality of rigid supporting arms extending a substantial distance from the face for receiving the periphery of an object to be mounted; a block slidable between the face and the object said block having sliding engagement with the face and having a portion for retaining engagement with the periphery of the object upon its side opposite the supporting arms; another block fixed on the face between the object and the face and between the sliding block and the supporting arms; a manually rotatable bolt passing through the sliding block, said bolt having a head on one end and having its other end in screw engagement with the fixed block; and a coil spring surrounding the bolt between the head of the bolt and the sliding block.

1,884,371. LENS-HOLDER FOR SPECTACLE AND EYE-GLASS FRAMES. CHARLES GEORGE SWART, Auburn, N. Y. Filed Oct. 20, 1930. Serial No. 489,981. 4 Claims. (Cl. 88—41.)



1. A trial frame for lenses and lens rims comprising an outer split ring adapted to be inserted into a lens rim, and an inner split ring adapted to receive a lens, said rings being united at one end and their opposite ends free to move toward and from the united ends.

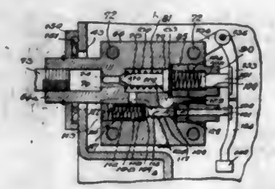
1,884,372. CAR FLOOR CUSHIONING MEANS. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Jan. 17, 1931. Serial No. 509,517. 14 Claims. (Cl. 105—422.)



1. In a railway car having an underframe and a floor, continuous cushioning means carried by the underframe extending throughout substantially the length thereof and supporting the floor.

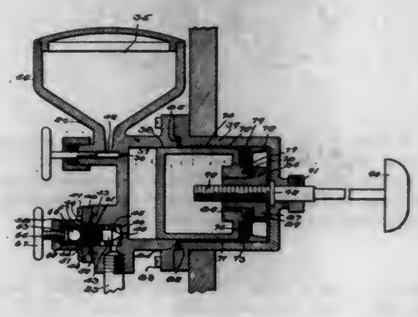
2. In a railway car having an underframe and a floor, cushioning means carried by the underframe and directly abuttingly engaging the floor for supporting the same, and means secured to the underframe for supporting said cushioning means.

1,884,373. BRAKE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 27, 1928. Serial No. 257,395. 2 Claims. (Cl. 188—152.)



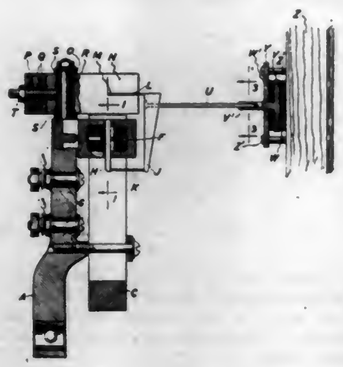
1. In a vehicle having front and rear wheels, the front wheels being carried by steering knuckles, fluid-operated brakes for the front wheels, and means associated with each brake for actuating it, each of said actuating means comprising a plunger, means for subjecting the plunger to fluid pressure, an expansible chamber adapted to receive fluid to relieve the pressure to which said plunger is subjected, valve means controlling the flow of fluid into said chamber, a lever operatively related to said valve means and means mounted on the axle of the vehicle and operatively related to said lever for opening said valve means when the front wheels are turned into predetermined positions.

1,884,374. LEAK PREVENTING DEVICE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1928. Serial No. 306,599. 8 Claims. (Cl. 286—29.)



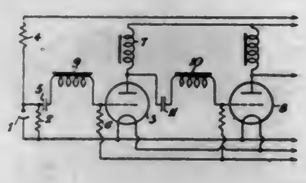
1. In a connection between a cylindrical chamber and a member operable therein, packing means therefor comprising a cup-shaped rubber packing member adapted to be clamped to the wall of the chamber and having a cylindrical side wall of relatively thin wall section whereby said cylindrical side wall may be readily stretched axially thereof, said cup shaped member having a bottom wall integral with said side wall, said bottom wall extending transversely of the axis of said cylindrical side wall, said bottom wall having a relatively thick wall section whereby to resist deflection outwardly thereof when subjected to relatively high fluid pressure within said cup-shaped packing member.

1,884,375. RADIOPHONE LOUD SPEAKER. ALVIN ALFRED WHEATLEY TAYLOR, Sydney, New South Wales, Australia, assignor, by mesne assignments, to Warren R. Cox, Cleveland, Ohio. Filed July 12, 1930, Serial No. 467,590, and in Australia July 26, 1929. 7 Claims. (Cl. 179—108.)



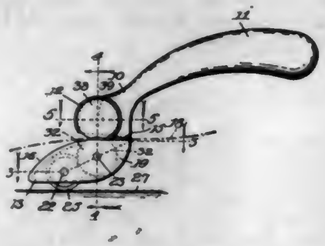
3. An electro-magnetic loud speaker unit, comprising an armature, a diaphragm, a fulcrumed lever connecting said armature with said diaphragm, and a fulcrum member of limited mass supporting said lever, said member being so supported that the fulcrum of said lever is restrained from movement responsively to stresses applied to said diaphragm through the lever by the inertia of said fulcrum member.

1,884,376. THERMIONIC AMPLIFIER FOR USE IN CONJUNCTION WITH PHOTO-ELECTRIC DEVICES. WILLIAM FRANCIS TEDHAM, London, England, assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed June 24, 1930, Serial No. 463,419, and in Great Britain July 3, 1929. 2 Claims. (Cl. 250—41.5.)



1. In an amplifying system for photo-electric currents, a light sensitive cell, a thermionic relay, means for coupling said cell to the input of said relay, and a choke coil in series between said cell and said input whereby the frequency response characteristic is accentuated for higher audio frequency.

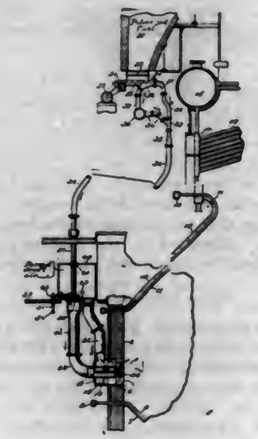
1,884,377. CUTTING DEVICE. FRED W. TEMPLE, Hinsdale, Ill., assignor to The Chicago Signal Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1930. Serial No. 459,814. 3 Claims. (Cl. 164—84.)



1. A device of the kind described comprising a frame, a roller journaled in said frame, a second roller formed of resilient material and driven by the first-mentioned roller, said second roller being provided with an outwardly projecting annular flange, a cutting disk constrained to rotate with said second roller, and a second cutting disk driven by said annular flange and cooperating with the first-mentioned cutting disk.

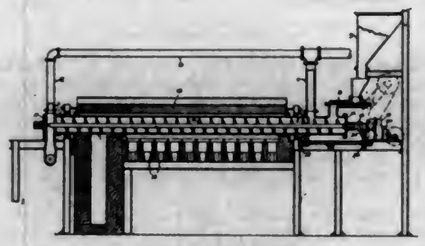
1,884,378. APPARATUS FOR FEEDING PULVERIZED COAL AND AIR TO A FURNACE. EDWARD H. TENNEY, Webster Groves, Mo. Filed Nov. 30, 1928. Serial No. 322,721. 7 Claims. (Cl. 110—104.)

1. Pulverized fuel burning apparatus comprising, in combination, an overhead storage container for pulverized fuel, a burner delivering into a combustion space, an air duct supplying forced-draft air, said air duct being provided with an opening in one wall, a fuel conduit connecting said opening with the burner, another fuel conduit leading from the overhead storage container and through the duct to discharge into the first mentioned fuel conduit, the discharge end of said second fuel conduit being smaller than said opening in the duct and smaller than the entrance end of the first mentioned fuel conduit, whereby an annular supply of air will be added to the fuel stream, and



a damper adjustably mounted on the end of the second-mentioned fuel conduit to regulate the passage of such air through the opening.

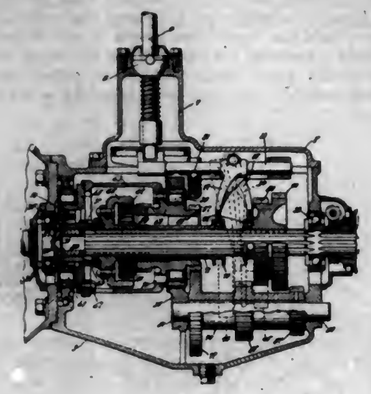
1,884,379. CARBONIZATION DEVICE. FRANK L. TENNEY, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,509. 3 Claims. (Cl. 202—118.)



1. In combination, a rotatable retort, a rotatable screw conveyer within said retort, and a driving mechanism comprising oppositely revolving mutilated gears cooperating intermittently with a gear driving the shaft of said conveyer, for reversibly rotating said screw conveyer.

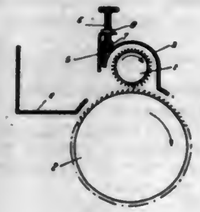
1,884,380. FOUR SPEED STEP-DOWN TRANSMISSION. PERRY L. TENNEY and HARRY E. FIDLER, Muncie, Ind., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,634. 4 Claims. (Cl. 74—58.)

2. In a gearing device, a cage having a gear, a second gear slidable into engagement with the cage gear and having a hub within the cage, a sleeve of equal diameter with said hub and coaxial with the said second gear, said sleeve



and second gear hub having parts integral therewith and interengaged by relative diametrical movement of said parts and means for sliding said sleeve and second gear.

1,884,381. CARD. ANTOINE THIBEAU, Tourcoing, France. Filed Aug. 21, 1930, Serial No. 476,920, and in France Dec. 30, 1929. 3 Claims. (Cl. 19—98.)

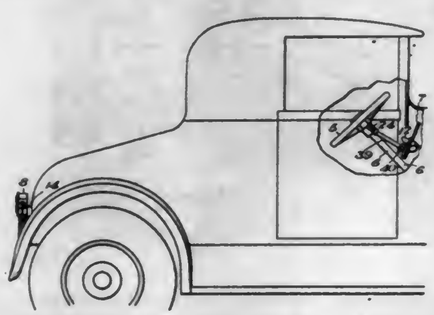


1. In a separating arrangement of the type having a card roller with a burr beating roller arranged thereabove and having a receiving trough located laterally of the card roller and rearwardly of the burr beating roller and also having a covering casing arranged above and circumferentially about the burr beating roller so as to leave an opening between said casing and trough, a shielding screen mounted on the covering casing adjacent the upper edge of the opening, and means for adjustably fastening the screen in various positions on the casing and with respect to the adjacent edge of the trough so as to vary the size of the opening.

1,884,382. SWITCH. GEORGE E. THIMMES, Mechanicsville, Iowa. Filed Feb. 9, 1928. Serial No. 253,017. 1 Claim. (Cl. 200—59.)

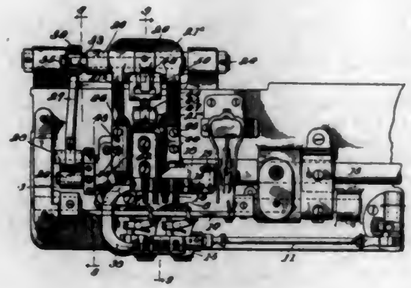
A controlling means for a vehicle signal including a switch with a pivoted operating lever, a long support for the switch having a base portion adapted for attachment to the instrument board of a motor vehicle to position the pivoted lever of the switch beneath the rim of the steering wheel of the vehicle and in proximity thereto for operation of said lever by a finger of the hand gripping the steering wheel, a spring pressed insulating plate in said support, a contact element mounted through the central portion of said plate, said operating lever having a head at its pivotal portion bearing against said insulating plate and having a flat inner end normally engaging the plate to hold the lever adjacent the rim of the

steering wheel, said head having a central opening at its inner flat end normally registering with the contact element to space the head therefrom and divide the head into opposed branches, one branch of said head having a flat side to engage the insulating plate and the contact element therein to hold the lever when swung in one direction and make contact between the element and the head, the other branch of the head being rounded to return the lever to normal position when the lever is swung in an opposite



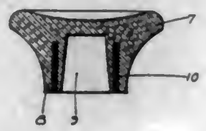
direction to make a temporary contact between the head and the element, said long support being disposed on its base portion to hold the operating lever of the switch for movement in opposite directions transversely of the vehicle and in a plane intersecting the plane of the axis of the steering wheel whereby said operating lever may be moved by the natural swinging of a finger of the hand on the steering wheel into one position to give a flashing signal and into an opposite position to give a continuous signal.

1,884,383. FEEDING MECHANISM FOR SEWING MACHINES. CHARLES S. THOMPSON, Park Ridge, and WILLIAM B. LONG, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1926. Serial No. 146,715. 4 Claims. (Cl. 112—209.)



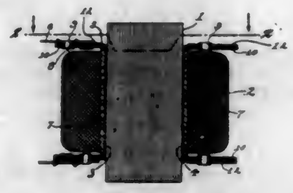
2. A feeding mechanism for sewing machines including a feed rocker, a main feed bar having spaced parallel forwardly projecting members and an integral connecting yoke at the rear end of the feed bar, said feed rocker having a member extending between the spaced members of the feed bar and pivotally connected thereto for moving said feed bar back and forth, a main feed dog carried by one of said members, an auxiliary feed bar mounted to slide freely on said parallel projecting members of said main feed bar, an auxiliary feed dog carried by said auxiliary feed bar, means connected to the member of the feed rocker to which the main feed bar is pivotally connected for imparting a differential feeding movement to said auxiliary feed bar, and means for raising and lowering said feed bars.

1,884,384. TYPEWRITING MACHINE. RUSSELL G. THOMPSON, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 5, 1931. Serial No. 520,222. 4 Claims. (Cl. 197—102.)



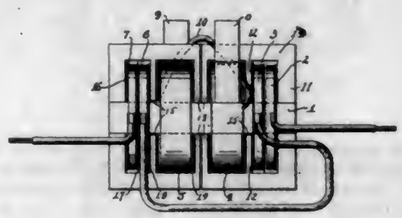
8. A key for typewriters or the like constructed of frangible material and comprising a body having a finger piece at its top and an opening in its bottom, and a reinforcing ring embedded in the material of said body and surrounding the lower end of said opening.

1,884,385. ELECTRICAL APPARATUS AND METHOD OF MAKING TERMINAL STRIPS THEREFOR. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 456,868. 12 Claims. (Cl. 175—356.



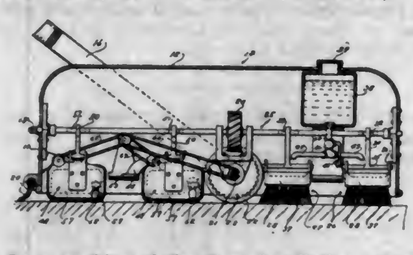
1. In apparatus of the class described the combination of a winding, a core for said winding, a terminal strip, and a clamping spacer member interposed between said winding and said terminal strip for preventing relative movement therebetween.

1,884,386. TRANSFORMER. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1931. Serial No. 515,014. 13 Claims. (Cl. 171—119.)



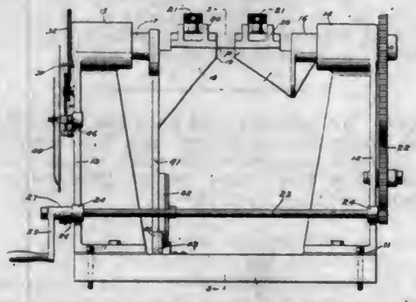
1. A constant-current transformer comprising a central core portion, a primary winding and a secondary winding surrounding said central core, an outer enclosing core portion in the form of E-shaped laminations, the intermediate leg of each E-shaped lamination being foreshortened with respect to the end legs, and providing a magnetic shunt between the primary and secondary windings.

1,884,387. SURFACE CLEANER. ALBERT ATHIEL THORNE, Laytown, Georgetown, Demerara, British Guiana. Filed Nov. 29, 1929, Serial No. 410,571. Renewed June 8, 1932. 3 Claims. (Cl. 15—50.)



1. In a machine of the class described, a support, a propeller shaft carried by said support, a crank shaft mounted on said support, an operating connection between said shafts, and wiping devices mounted in said housing and operatively connected with said crank shaft for simultaneous reciprocation in opposite direction, each of said devices including an endless mop which is mounted for continuous movement while reciprocating.

1,884,388. INITIAL TEAR-TESTING APPARATUS. CHARLES B. THWING, Philadelphia, Pa., assignor to Thwing Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 16, 1929. Serial No. 378,691. 7 Claims. (Cl. 265—17.)

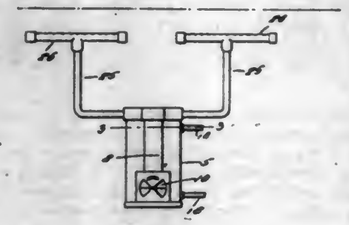


2. In a tear-testing machine, means engaging one end of an edge of a sheet for rotating the same about an axis paralleling said edge of the sheet, means engaging the opposite end of said edge of the sheet for resisting rotation thereof with a force increasing with the angular displacement of the sheet and means for registering the extent through which the sheet is rotated at the moment of initial tear.

6. In a tear-testing machine, opposed standards, shafts rotatable therein, clamping heads carried by adjacent ends of the shafts, means for positively rotating one of said shafts, a pendulum secured to the other of the shafts, an indicator, means positively connecting the pendulum shaft and the indicator during movement of the pendulum shaft from a normal position and disconnecting said shaft and indicator during return movement of the shaft and means for frictionally resisting rotation of the indicator.

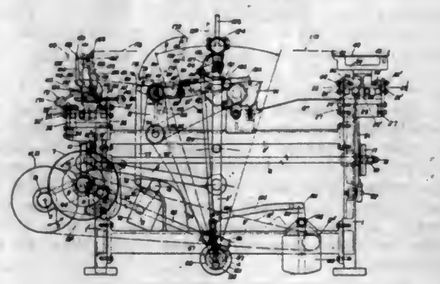
1,884,389. COMBINED AUTOMOBILE HEATER AND WINDSHIELD WARMER. WINNIE A. TIBBETTS, Rangeley, Me. Filed Apr. 28, 1931. Serial No. 533,555. 2 Claims. (Cl. 257—224.)

1. In a heater for automobiles, a vertical casing provided at a point below the upper end thereof, with a partition defining upper and lower chambers, a heating cylinder suspended from said partition and positioned within said lower chamber in spaced relation to the side and bottom walls thereof, said cylinder being provided with vertical air passages establishing communication between air chambers, the lower chamber having an air inlet and the upper chamber being formed with an air outlet, said casing being provided with an external longitudinal radial



extension forming a passageway communicating at the upper portion thereof with said upper chamber and being provided at the lower portion thereof with an outlet.

1,884,390. MACHINE FOR POLISHING THE EYES OF NEEDLES. WILLIAM TIVENDALE, Clydebank, and JAMES BAXTER, Glasgow, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 8, 1930, Serial No. 419,301, and in Great Britain Feb. 14, 1929. 22 Claims. (Cl. 51—152.)



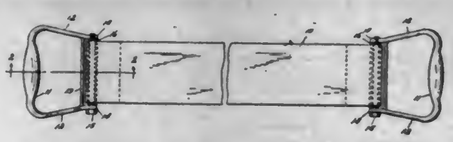
1. In a machine for the purpose specified, in combination, a frame, a set of threads extending in substantial parallelism between spaced points of said frame and each strung with a series of needles, means for reciprocating a row of needles along said threads, and means for carrying abrasive to said threads during the operation of the machine at a point traversed by said needles.

1,884,391. BRACKET FOR CURTAIN RODS. WALTER H. TOELLE, Wallingford, Conn., assignor to H. L. Judd Company, Inc., Wallingford, Conn., a Corporation of Delaware. Filed Jan. 15, 1931. Serial No. 508,917. 14 Claims. (Cl. 156—20.)



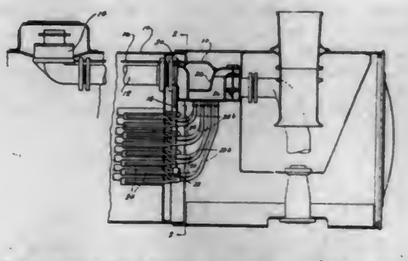
1. A bracket for curtain rods comprising, a bracket member adapted to be attached to a wall, and a rod holder adapted to be secured to a curtain rod, one of said members having a tongue thereon adapted to cooperate with a recess in the other of said members.

1,884,392. EXERCISER. FRED C. TREAT, Cuyahoga Falls, Ohio. Filed Nov. 17, 1930. Serial No. 496,047. 10 Claims. (Cl. 272—79.)



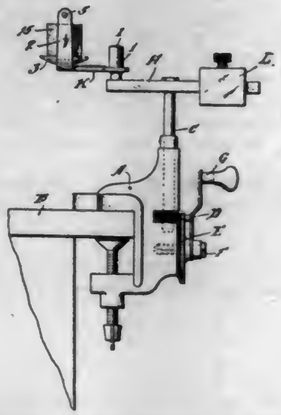
1. In an exerciser, the combination of an elastic strap, hand grip members secured to the respective ends thereof, and a frame member including means for gripping the strap intermediate its ends as to disable a part of said strap permitting the remainder thereof comprising an end portion and hand grip to be used as a hand exerciser.

1,884,393. STEAM DRIER ARRANGEMENT. CHARLES H. TRUE, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Filed July 9, 1931. Serial No. 549,625. 6 Claims. (Cl. 122—459.)



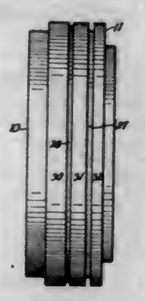
1. The combination with a boiler of a separator and a superheater connected to receive steam from the boiler one after the other, and a pipe connected to receive moisture from said separator and to discharge into the steam stream from said boiler at a point at which the steam pressure is enough lower than at the separator outlet to produce a free flow through the pipe and at which the steam temperature has been raised by said superheater.

1,884,394. CASTING MACHINE. JOSEPH V. TURNER, Wilson, N. C. Filed June 16, 1931. Serial No. 544,795. 6 Claims. (Cl. 22—65.)



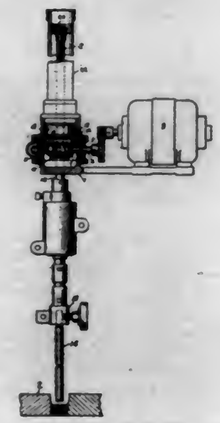
1. A centrifugal casting machine, comprising an arm mounted to rotate about a vertical axis, means for rotating said arm, a yoke, means to mount said yoke on said arm at one side of the axis of rotation of said arm to swing on a vertical axis, and a normally horizontal flangeless pan mounted on said yoke to swing on an axis which is offset from the axis of the yoke and lies in a plane perpendicular to said vertical axis of said yoke for holding an investment block without separate means for securing the block on the pan.

1,884,395. ROLLER BEARING. FRANK TYSON, Canton, Ohio. Filed Sept. 8, 1930. Serial No. 480,383. 6 Claims. (Cl. 308—214.)



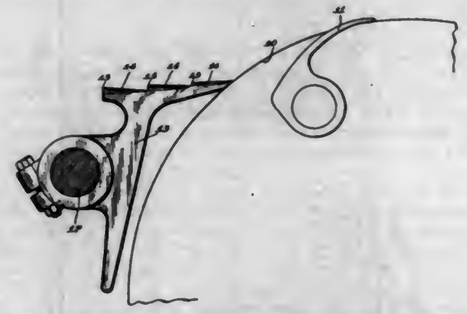
1. A taper roller bearing including a cone having an outer raceway surface, a cup having an outer cylindric surface and a conical inner raceway surface and a plurality of rollers rolling on and between the raceway surfaces, the cup being provided with spaced peripheral grooves of different depths with bottoms substantially equidistant from the conical raceway surface.

1,884,396. APPARATUS FOR ELECTRIC ARC WELDING. OTTO E. UECKER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 17, 1930. Serial No. 429,057. 6 Claims. (Cl. 219—8.)



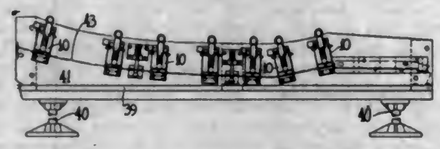
1. An apparatus for electric arc welding comprising a motor disposed for feeding a fusible electrode toward the work to be welded to maintain an electric arc between said electrode and the work, a screw feed rod for holding the electrode, a threaded feed nut engaging said screw feed rod and operatively connected to by said motor to feed the electrode downwardly toward the work, and means engaging said feed nut to effect periodic longitudinal movements thereof and thereby cause an intermittent forward feed of the electrode.

1,884,397. DELIVERY STRIPPER FINGER. BURT FROST UPHAM, Brookline, Mass., assignor to Miller Printing Machinery Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1929. Serial No. 332,473. 1 Claim. (Cl. 271—63.)



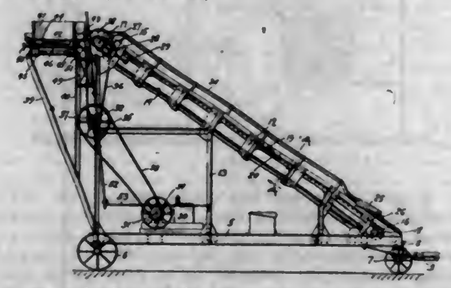
In a printing press, the combination with an impression cylinder of a stripper finger for stripping the printed sheets therefrom and directing said sheets to a delivery device, whereby the printed sheets slide over and past said finger, said finger having the edge thereof formed with a plurality of serrations inclined downwardly towards the cylinder and tapered away from the cylinder on a vertical plane.

1,884,398. PUNCHING FIXTURE. WARREN S. UXLEY, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 14, 1929. Serial No. 392,671. 4 Claims. (Cl. 164—86.)



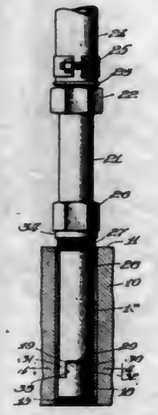
1. In combination, a work supporting fixture or jig, a plurality of identical self-contained punching units including punch and die and operating means therefor mounted thereon, said units being each provided with a work receiving slot across which the punching element is adapted to be projected, and means for independently securing each of said units in position on the work support at various angles to each other and to the support whereby to adapt said slots to commonly receive a piece of work to be pierced at substantially right angles to the direction of movement of the punches.

1,884,399. ICE LOADING MACHINE. GEORGE L. VAIL, Denver, Colo. Filed Oct. 1, 1929. Serial No. 396,442. 2 Claims. (Cl. 198—2.)



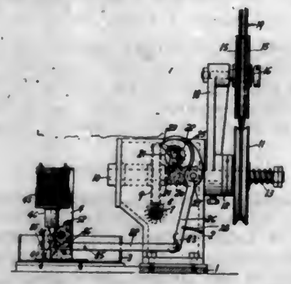
1. In a loader of the character described, including an elevated platform and a conveyor for moving ice-blocks onto the same, a chute slidable beneath the platform and capable of vertical deflection, and a roller on the chute, engaging the underside of the platform whereby to hold the chute in selective positions by the weight of its load.

1,884,400. SUBMARINE. PEMBROKE A. VAILE, Chicago, Ill., assignor of one-half to Sheldon Clark, Chicago, Ill. Filed Sept. 6, 1930. Serial No. 480,094. 2 Claims. (Cl. 114—16.4.)



1. In a submarine having an opening through its wall, a tubular wall fitted into the opening and extending from the inner to the outer surface of the submarine, the tubular wall being internally screw threaded adjacent each end and non-threaded between said ends, a screw threaded plug engaging the screw threads of the tubular wall adjacent the inner surface of the submarine, a hollow rotatable body adapted to be inserted within the tubular wall, means on the end of the hollow body for engaging the inner plug to unscrew the same and remove it from the tubular wall, screw threads located on the outside of the hollow rotatable body at a distance from its end for engaging the screw threads of the tubular wall near the outer surface of the submarine simultaneously with the removal of the plug, a nut integral with the rotatable body of greater diameter than the rotatable body, located outwardly of said screw threaded portion, and a swivel coupling on the outer end of the rotatable body, the length of the rotatable body including the plug engaging means and the screw threaded portion being slightly less than the length of the tubular wall.

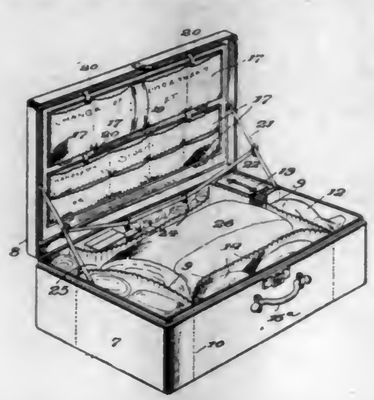
1,884,401. REMOTE CONTROL MECHANISM. EARL J. VALLEN, Akron, Ohio. Filed May 22, 1928. Serial No. 279,781. 7 Claims. (Cl. 172—239.)



1. A mechanism for controlling a reversible motor, comprising a switch, and means for moving the switch to on or off position comprising a solenoid, a circuit breaking mechanism adapted to be operated at a predetermined

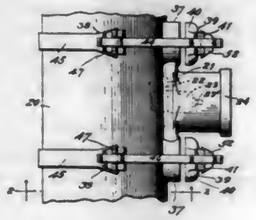
limit of the movement of a mechanism operated by the motor and means to prevent operation of the switch by the solenoid to actuate said mechanism in the direction in which it moves to said limit until the circuit breaking mechanism is restored to its normal position.

1,884,402. LUGGAGE CARRIER. ANNE W. VAN DEVANTER, Nashville, Tenn. Filed May 29, 1929. Serial No. 367,094. 2 Claims. (Cl. 190—51.)



1. In a suitcase, a body, a lid hinged to said body, a main panel in said lid hingedly mounted along its edge adjacent the hinge connection of the lid, sub-panels hinged to the main panel in spaced relation to the hinged edge thereof for movement into position adjacent the main panel, and pockets carried by the outer faces of the sub-panels.

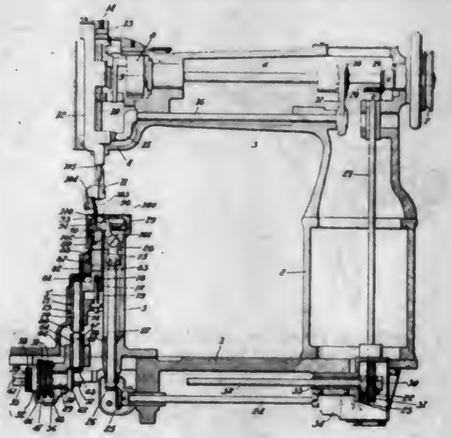
1,884,403. SADDLE CLAMPING METHOD AND MEANS. CHARLES E. VAN HECKE, Stevens Point, Wis. Original application filed Jan. 25, 1930, Serial No. 423,496. Divided and this application filed Apr. 6, 1931. Serial No. 528,209. 9 Claims. (Cl. 29—84.)



1. In a method of securing a saddle upon a main, the steps of positioning the saddle, embracing saddle and main with a yoke, tightening the yoke by forcibly moving a portion thereof outwardly from one of the embraced members, and placing a metal filler in the space thus formed.

1,884,404. FEEDING MECHANISMS FOR SEWING MACHINES. WILLIAM C. VAN NESS, Brooklyn, N. Y., and FREDERIC M. CARD, Bridgeport, Conn., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 21, 1931. Serial No. 538,918. 13 Claims. (Cl. 112—214.)

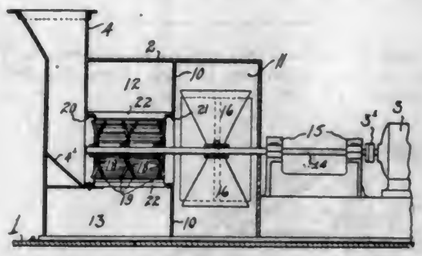
1. In a sewing machine, a work-support, stitch-forming mechanism including a reciprocatory needle, a feed-wheel projecting through said work support adjacent to the path of the needle and having a peripheral work-engaging flange, a stationary bracket upon which said feed-wheel is rotatably journaled and having a feed-wheel supporting ledge underlying the feed-wheel flange adjacent to the path of said needle, means for rotating said feed-wheel, and a presser opposed to said feed-wheel.



1,884,405. MANUFACTURE OF ALCOHOLS. ADRIANUS JOHANNES VAN PESKI, Amsterdam, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Nov. 1, 1930, Serial No. 492,868, and in Great Britain Nov. 6, 1929. 11 Claims. (Cl. 260—156.)

1. In a process for the manufacture of alcohols from the corresponding sulphuric acid esters obtained by absorbing olefines in sulfuric acid and distilling off the alcohols; the improvement which comprises diluting the acid with a quantity of the corresponding ammonium salt prior to absorbing the olefines.

1,884,406. PICKER MECHANISM. KILIAEN M. VAN RENSSELAER, Woodmere, and HUGO R. SWANSON, Brooklyn, N. Y., assignors to Triangle Kapok Machine Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,585. 2 Claims. (Cl. 19—90.)

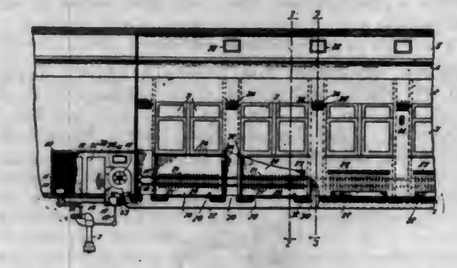


2. A machine as described comprising a casing having a feed hopper discharging thereinto, a picker comprising a stator in the form of an open ended cylinder, said stator having apertures in the wall thereof sufficiently large to let the fibres of the material being treated pass therethrough, a rotatable rotor within the stator for cooperation therewith, a fan mounted axially with the rotor and means for revolving the rotor and fan, said fan drawing the material to be treated axially through the picker and the apertures permitting escape of the material into the casing therethrough when the picker is overloaded and said fan acting to draw the material back through the apertures when the overload is removed.

1,884,407. PROCESS OF LIMING ROSIN. ELDON VAN ROMAINE, Cincinnati, Ohio, HENRY J. WEILAND, South Milwaukee, Wis., and PAUL O. POWERS and ROBERT C. PALMER, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 403,115. 10 Claims. (Cl. 134—21.)

1. In the process of liming a purified wood or gum rosin, the step of incorporating in the rosin small amounts of a catalyst selected from a group of substances characterized by their solubility in rosin at the temperature employed for liming, their acidic nature or their tendency to form acid reacting residues upon dissociation or hydrolysis, said acid reacting residues being capable of forming calcium compounds that are soluble in rosin.

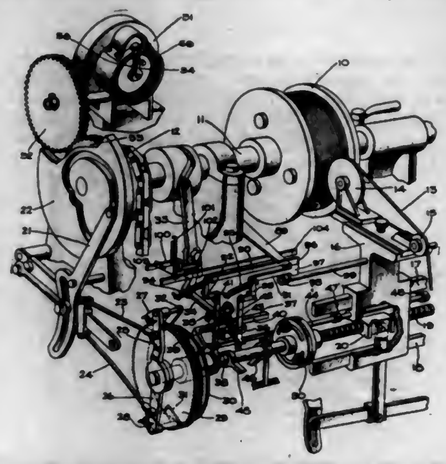
1,884,408. COMBINED HEATING AND COOLING SYSTEM FOR RAILWAY CARS. JOHN VAN VULPEN and EDWARD A. RUSSELL, Chicago, Ill., assignors to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,155. 14 Claims. (Cl. 257—7.)



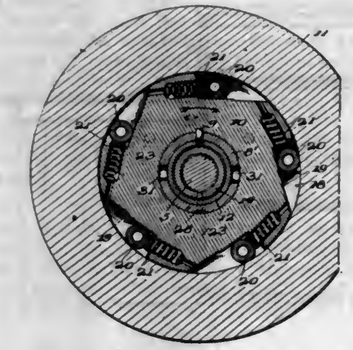
1. In a temperature controlling and ventilating system for railway cars, a heating means positioned in the lower portion of the car, a refrigerating means, an air circulating means, and a duct leading from said air circulating means and having outlets adjacent the floor of the car for discharging air beneath the heating means to be heated thereby, there being branch passages leading from this duct and having outlets in the upper portion of the car for delivering thereinto air cooled by the refrigerating means, and closures for the several outlets so that the lower outlets may be closed when the upper outlets are open and vice versa.

1,884,409. COIL WINDING MACHINE. JACOB J. VIENNEAU, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,703. 6 Claims. (Cl. 242—9.)

1. A coil winding machine for electrical conductors and the like comprising in combination with a spool, means for rotating said spool, means for feeding said conductor to said spool, means for reversing said feeding means at the end of each layer, electro-responsive means controlling said reversing means, a circuit for said electro-responsive means, a contact member connected in said circuit, an operable connection between said spool and said contact member whereby the latter is driven with said spool, contacts arranged to be connected in said energizing circuit and adjustable to predetermined positions in the path of movement of said contact member so that said contacts are successively engaged by said contact member as it is moved with said spool whereby said circuit is controlled to effect reversal of said feeding means at predetermined intervals after a predetermined number of full layers have been wound so as to wind on a predetermined number of layers of successively decreasing lengths.



1,884,410. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 4, 1924, Serial No. 730,107. Renewed May 27, 1930. 17 Claims. (Cl. 74—6.)

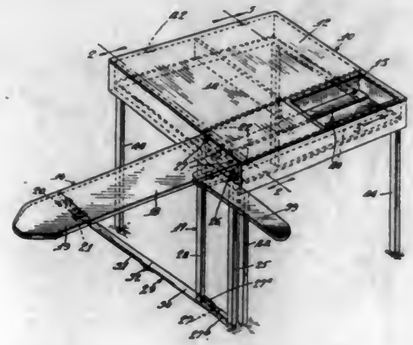


5. In combination, a power shaft subject to torsional vibration, an inertia member supported for rotation with respect to said shaft, means including rollers and co-operating clutch surfaces interposed between the shaft and interia member and preventing relative rotation therebetween in one direction, and means for pressing said rollers into frictional contact with the clutching surfaces to transmit the sole driving torque to the inertia member in the other direction.

1,884,411. FOLDING TABLE. LAURA R. VINDING, Chicago, Ill. Filed Nov. 24, 1930. Serial No. 497,753. 1 Claim. (Cl. 68—10.)

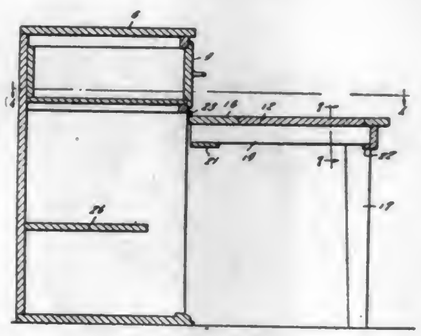
In a device of the character described, a portable table having a compartment beneath the top thereof, an ironing board coextensive with the length of said compartment and housed therein, said table top having a covered opening above said compartment and said ironing board

having slidable engagement with the walls of said compartment and movable to an operable position on the outside thereof whereby said compartment may receive therein a



portable sewing machine through said opening with the top of the table substantially flush with the top of the base of said sewing machine.

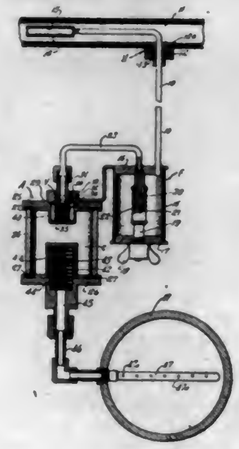
1,884,412. KITCHEN CABINET. FRANK VIRCHOW, Waterloo, Wis. Filed June 3, 1931. Serial No. 541,869. 1 Claim. (Cl. 312—161.)



A combined cabinet and table comprising in combination, a drawer, an extension table, a front wall section having an opening through which said drawer is slidable and said extension table including a section hinged to the front wall section, cleats secured at one end to said hinged section, a sliding section, cleats secured to the sliding section and having sliding engagement with the first named cleats, hinged legs connected with said sliding section, and a door arranged in said sliding section to afford access to the cabinet beneath said drawer.

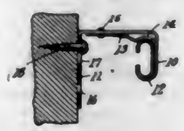
1,884,413. FUEL HUMIDIFYING DEVICE. CARLOS A. VON BLIX, Glendale, Calif., assignors to Irving A. Ford, Glendale, Calif. Filed Nov. 13, 1928. Serial No. 319,098. 7 Claims. (Cl. 123—25.)

1. In a humidifying device of the character described, a closed chamber having an outlet through which depression is transmitted to the chamber, an inlet communicating with a water supply source and an air inlet for supplying moisture and air to said chamber, a single valve means for both said inlets adapted to permit moisture and air to



be drawn into said chamber when the depression therein reaches a predetermined value, and valve means in said outlet.

1,884,414. BRACKET FOR CURTAIN RODS. ROBERT D. W. VROOM, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1931. Serial No. 510,199. 1 Claim. (Cl. 156—22.)

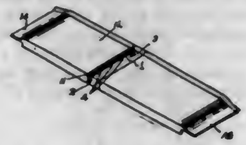


A bracket for a curtain rod comprising a member to be fixed to a main support, and having a forwardly extending arm, the outer end of said arm extending downwardly and terminating in a rearwardly extending hook shaped flange forming a rigid seat for the lower part of a curtain rod, the upper part of said rod being rigidly supported from escape outwardly from said seat by said downward extension, a spring member secured at its inner end to the underside of said forwardly extending arm, the outer part of said member forming a yielding abutment shoulder to hold said rod seated and against rearward escape from said bracket.

1,884,415. AUTOMOBILE FLOOR AND TOE BOARD AND THE LIKE. WILLIAM S. VROOMAN, Cleveland, Ohio, assignor to The Paine and Williams Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 8, 1930. Serial No. 494,803. 2 Claims. (Cl. 296—1.)

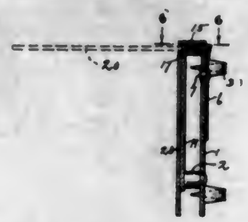
1. An article of the character described having in combination a supporting plate formed of thin sheet metal folded upon itself to provide a series of spaced parallel longitudinal ribs on the under side thereof and having marginal flanges, a top member of rubber composition having a thin body portion and depending lateral flanges and

end enlargements, an insulating and cushioning member between said supporting plate and said top member, and means for securing said flanges in firm engagement with



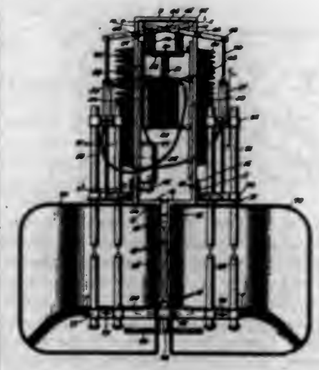
the flanges of said supporting plate, said end enlargements serving to space said top member from said plate adjacent the ends.

1,884,416. LOCK FOR HAND BAGS. BENJAMIN WACHS and DAVID H. COLIN, Brooklyn, N. Y. Filed Mar. 26, 1930. Serial No. 438,938. 1 Claim. (Cl. 292—204.)



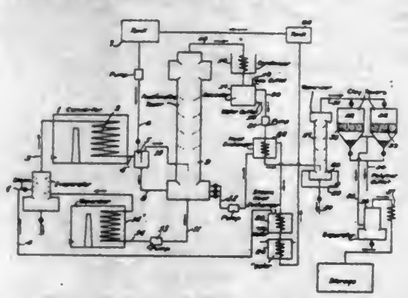
A locking device comprising a base portion having a head provided with inwardly projecting lips at the front and also at the bottom thereof, a slidable member located in said head and guided in its sliding movement by the inwardly bent lips located at the bottom of said head, said slidable member having a portion thereof adapted to project through an opening in said base member, a blade spring connected to the rear of said base member and abutting the projecting portion of said slidable member, and a locking member having angularly related faces and extensions positioned behind the front lips to swingably connect the locking member with the base whereby it is tensioned against swinging movement by said spring pressed slidable member.

1,884,417. ARC LAMP. JAMES H. WAGENHORST, Jackson, Mich. Filed Jan. 31, 1928. Serial No. 250,867. 12 Claims. (Cl. 176—59.)



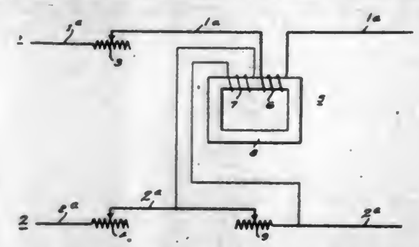
1. In an arc lamp, the combination of a pair of movable electrodes, means for clamping said electrodes in spaced and parallel arrangement, a stop member, a clutch adapted to engage said stop member and comprising a strap embracing one of said electrodes with the ends of said strap extending laterally on opposite sides of the other electrode, a clutch operating rod having its lower end bent laterally and extended through the ends of said strap, a core for said solenoid and connections between said core and the clutch operating rod.

1,884,418. METHOD OF SEPARATING AND FRACTIONATING OIL. CARY R. WAGNER, Chicago, Ill., assignor to The Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1928. Serial No. 261,410. 1 Claim. (Cl. 196—96.)



In the treatment of hydrocarbon oils, the process which consists in subjecting a confined stream of cracked oil vapor to fractionation to remove from such oil vapor compounds possessing an undesirably high boiling range, subsequently condensing said vapors to produce a condensate of low boiling range, passing such condensate to a treating zone to effect the removal therefrom of undesirable gum-forming and color-imparting bodies, removing the oils of undersidable high boiling range from the fractionating zone in two streams, passing one of said streams through a conversion zone to subject said latter oils to molecular decomposition, introducing into the oils discharged from the converter a body of fresh oil obtained from a source of supply, passing such fresh oil together with the cracked oils to the fractionating zone, passing the other stream of high boiling oil from the fractionating zone through a series of heat exchangers and thence back to the source of fresh oil supply, developing steam in one of said heat exchangers for introduction into the oils passing to the conversion zone, and utilizing the other heat exchanger for preheating the condensate passing to the treating zone.

1,884,419. MEANS FOR SIMULATING MUTUAL IMPEDANCES. CHARLES F. WAGNER, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,286. 11 Claims. (Cl. 171—97.)

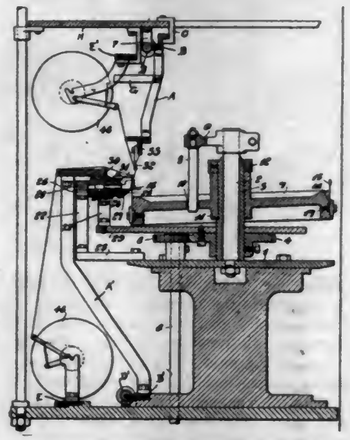


1. An alternating-current circuit including an impedance and a transformer having its primary winding in series relation therewith, and a second alternating-current circuit including two separate impedances in series relation thereto, the secondary winding of said transformer being connected across one of said impedances in said second circuit.

11. In a calculating device, means for simulating characteristics and conditions existing in an electrical trans-

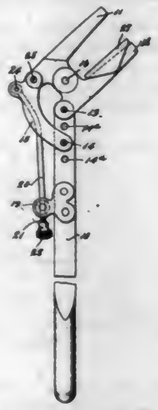
mission system, said means including a transforming means having a plurality of windings, a plurality of variable impedance means each connected in series-circuit relation with a different one of said windings and a varible impedance means connected in parallel-circuit relation with one of said windings.

1,884,420. CIRCULAR KNITTING MACHINE. GOTTLOB FRIEDRICH WAGNER, Limbach, Germany. Filed July 29, 1929. Serial No. 381,822, and in Germany Aug. 3, 1928. 6 Claims. (Cl. 66—81.)



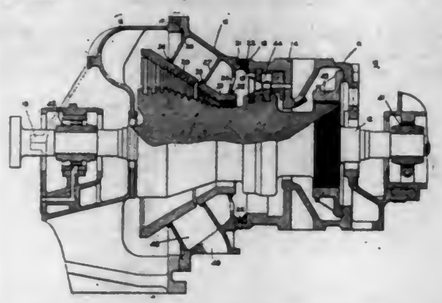
1. A circular knitting machine comprising a needle-carrying disc, needles secured in fixed relation to the periphery of the said disc and extending approximately parallel with its axis of said disc, means for imparting a rocking motion to said disc, said rocking means producing a tilting of said disc progressively round the needle circle, and means for restraining said rocking disc from rotary movement.

1,884,421. TOOL. JAMES WAGNER, Peninsula, and ANTON HUMR, Cleveland, Ohio. Filed Mar. 24, 1931. Serial No. 525,003. 4 Claims. (Cl. 81—91.)



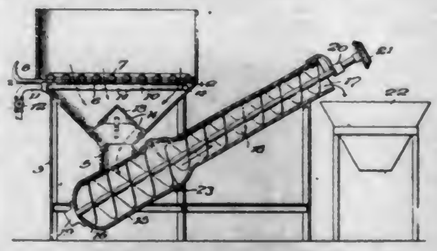
3. A tool of the character described, comprising a handle member, and a jaw unit detachably and adjustably secured to the handle member and comprising a pair of cooperating jaws pivotally interconnected to form an upper jaw and a lower jaw, means for pivotally securing the lower jaw to the handle member to allow angular adjustment of the jaw unit relatively to the handle member, co-operating links adjustably secured to the jaw unit and to the handle member for securing the unit in predetermined position of angular adjustment, an abutment member on the handle, a rod secured to the links and passing through the abutment member, and a cap threadedly mounted on the rod for engagement with the handle and abutment member respectively for causing the jaws to grip the work on clockwise movement of the handle and to release the work upon counter-clockwise movement of the handle.

1,884,422. TURBINE CASING. JOHN B. WALBRIDGE, Drexel Hill, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 7, 1930. Serial No. 459,802. 2 Claims. (Cl. 253—69.)



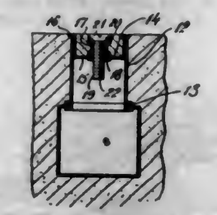
1. The method of assembling and constructing a turbine stator of desired capacity from standardized parts including a tubular portion made of cast metal having an integral approximately radial web portion and a separate tubular blade-carrying member, which comprises cutting the inner edge of the web portion to a diameter fitting the exterior of a tubular blade-carrying member of a size providing the desired capacity, positioning the blade-carrying member in the web portion in the desired axial position relative thereto, and welding the inner edge of the web portion to the main body of the blade-carrying member.

1,884,423. MIXER. ARTHUR WELLESLEY WALKER, Seminole, Okla. Filed Nov. 22, 1930. Serial No. 497,565. 4 Claims. (Cl. 83—73.)



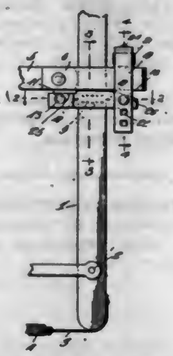
1. A mixer comprising a hopper having a conical lower portion terminating in an outlet at its bottom, sifting means adjacent the top of the conical portion of said hopper, a water inlet pipe, an annular delivery head for said pipe in the hopper below the sifting means and having discharge openings for delivering water upon walls of the conical portion diagonally thereof and forming a sheet of whirling water, a cylindrical mixing chamber below said hopper communicating with the outlet and extending at an upward incline, a tubular conveyor housing extending upwardly from said chamber in alinement therewith and a screw conveyor extending through the mixing chamber and housing with its spiral blade against walls thereof, said housing being detachable from the mixing chamber whereby said conveyor may be removed.

1,884,424. UNDER-FLOOR DUCT SYSTEM. HERVEY S. WALKER, Ardmore, Pa. Filed Jan. 12, 1928. Serial No. 246,108. 13 Claims. (Cl. 247—3.)



1. In an underfloor wiring system, the combination of a wiring duct disposed within the floor structure at a distance beneath the finished floor surface, an outlet communicating with the interior of the duct and providing means for leading wiring therefrom, a closure for the end of said outlet having a portion substantially flush with the floor surface and carrying a quantity of floor material forming the greater part of the exposed surface of said closure, and marking and removing means carried by said closure and visible at the floor surface.

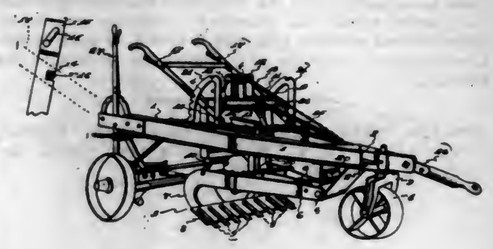
1,884,425. PICKER STICK CONNECTION FOR LOOMS. SHERMAN B. WALKER, Newton, N. J., assignor of two-fifths to Bessie Mabie, Monroe, N. J. Filed Nov. 3, 1931. Serial No. 572,842. 1 Claim. (Cl. 139—154.)



A picker stick clamping device comprising a pair of parallel arranged supporting pillows, said supporting pillows being provided with metal bands, said metal bands being serrated for a distance substantially corresponding to the width of the picker stick staff, a pair of adjusting bolts being carried by the wooden blocks and provided with adjusting thumb nuts, and a U-shaped element, adjustably carried by the pair of supporting pillows, the shanks of which extend in a vertical position to said pillows and their extreme upper ends being superimposed and slotted for lateral adjustment, a lug strap cushion carried by said superimposed members and rivets carried jointly by them, adapted to hold this aggregate in substantially parallel relation and permit slight lateral adjustment thereof.

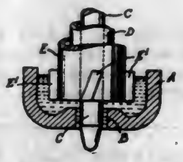
1,884,426. ROAD MAINTENANCE AND BUILDING MACHINE. RUFUS L. WARD, Irving, Tex. Filed July 28, 1931. Serial No. 553,505. 3 Claims. (Cl. 37—145.)

1. In a road building and maintenance machine, the combination comprising a rigid and substantially triangular frame having a pair of rear wheels and a single front wheel, a pair of beams having pivotal connection with said frame, a blade transversely supported by said beams and having a multiplicity of relatively parallel scarifying teeth secured thereto, a yoke suspended in said frame for vertical movement, an arch mounted in said yoke and arranged for lateral adjustment at its top and supporting said beams at its lower end, crank means for effecting lateral



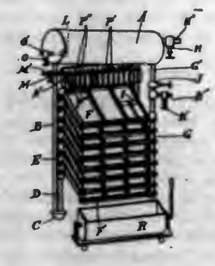
adjustment of said arch to change the angle of said blade relative to the road and independent means for raising and lowering said yoke.

1,884,427. GLASS FEEDING APPARATUS. THOMAS WARDLEY, Greenford, England, assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 21, 1927, Serial No. 193,110, and in Great Britain June 18, 1926. 17 Claims. (Cl. 49—55.)



8. In glass feeding apparatus, a glass container having a submerged outlet, a plunger movable in the glass toward and from the outlet, a regulating tube surrounding said plunger and extending into the glass for controlling flow of glass to the outlet, and a rotary or angularly movable tube surrounding said regulating tube and having a portion extending into the glass and provided with means to stir the glass in the container when said last named tube is rotated or moved angularly about its axis.

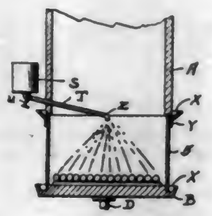
1,884,428. METHOD OF MAKING FROZEN BRINE. DOUGLAS K. WARNER, Bristol, Conn. Filed Nov. 9, 1927. Serial No. 232,083. 4 Claims. (Cl. 62—172.)



1. A method of quick freezing a solution of lesser concentration than that of its cryohydrate to produce a frozen mass of crystals of substantially uniform density through-

out consisting of supplying a shallow container with a body of the solution, and then absorbing the heat from such body while the latter is in a still condition within the container, into a refrigerant in contact with the container to cause in connection with the refrigerant the freezing of said body rapidly without the presence of convection currents or other motions whereby said body is frozen without noticeable separation of solids or concentration of part of the solution.

1,884,429. FOOD FREEZING. DOUGLAS K. WARNER, Watkins Glen, N. Y. Filed Apr. 4, 1931. Serial No. 527,723. 4 Claims. (Cl. 62—1.)



4. A method of freezing food by surface evaporation which consists in wetting the surface of the food with an aqueous fluid and evaporating the fluid while the food is exposed to a relatively high vacuum.

1,884,430. TOY COASTER. SAMUEL WARREN, New York, N. Y. Filed Mar. 7, 1930. Serial No. 433,849. 8 Claims. (Cl. 104—69.)



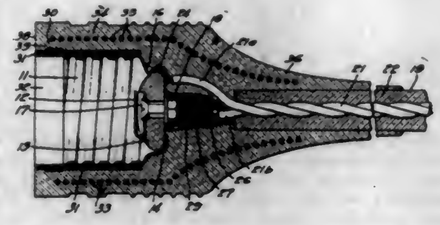
1. A toy coaster including a runway having a horizontal portion near its highest point and an incline leading therefrom to the floor level, and a platform on each side of the runway adjacent the horizontal portion thereof.

1,884,431. SOLUTION ACCELERATOR FOR OIL DYES. CORNELIUS B. WATSON and RUDOLPH C. OSTERSTROM, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 514,059. 8 Claims. (Cl. 44—9.)

1. The method of imparting artificial coloration to gasoline-like petroleum oils, which comprises producing a mechanical mixture composed of a finely divided oil soluble dye and a hydroxy-benzene compound, and adding this dry mechanical mixture to the petroleum oils to be colored for solution therein.

8. A compound for dying gasoline, comprising a dry mechanical mixture composed of finely divided catechol and an oil soluble dye.

1,884,432. ELECTRIC CORD TERMINAL. NOBLE H. WATTS, Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,689. 3 Claims. (Cl. 173—358.)

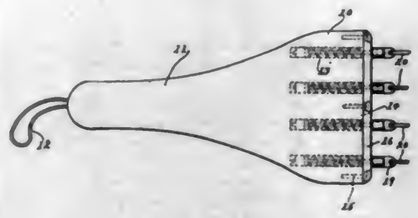


1. In an electrical terminal, a body of resilient rubber, a metallic sleeve positioned within said body, the interior of the sleeve being accessible for electrical contact thru one face of said body, and gum impregnated fibrous material imposed between said sleeve and the rubber of said body.

1,884,433. CELLULOSE ACETATE COMPOSITION. WILLIAM R. WEBB, Berlin, Germany, and HANS T. CLARKE, New York, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,805. 4 Claims. (Cl. 106—40.)

1. A composition of matter which has a high degree of practical non-inflammability comprising cellulose acetate and a trichlorophenyl phosphate.

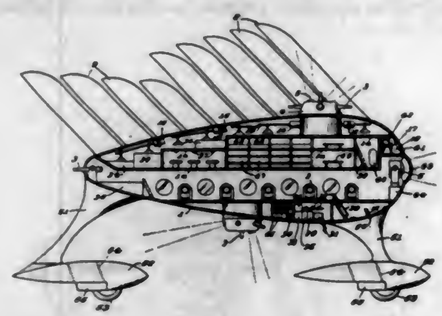
1,884,434. TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS. WALTER W. WEHMANN, Brooklyn, N. Y. Filed Feb. 27, 1931. Serial No. 518,853. 6 Claims. (Cl. 84—302.)



1. A tail piece for stringed musical instruments comprising a main body portion having a plurality of recesses, a plunger slidably mounted in each of said recesses, a coil spring surrounding each plunger, and resisting the reciprocating movement of its respective plunger, and means for attachment of a string to each plunger.

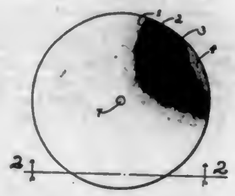
1,884,435. HYDROAEROPLANE. WILLIAM G. G. WEIDINGER, Chicago, Ill. Filed Sept. 15, 1930. Serial No. 481,918. 1 Claim. (Cl. 244—2.)

In hydro-aeroplanes, a body, great supports depending from said body, floats attached to said supports, wheels for said floats, spring arranged in said great supports substantially parallel with said wheels, forks for said



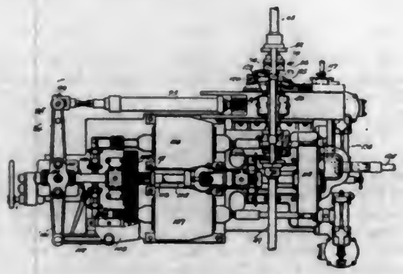
wheels, the shanks of said forks being arranged in said great supports, and springs in said forks upon opposite sides of said wheels.

1,884,436. ABRASIVE ELEMENT. EDWARD J. WEIL, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,327. 1 Claim. (Cl. 51—197.)



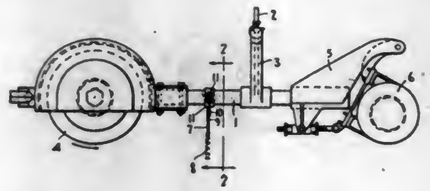
In an abrasive element comprising a wire screen base, an alloy covering the strands of said screen and firmly securing the same in place, a coating of an adhesive material on said screen, and an abrasive means secured thereto by said adhesive material.

1,884,437. STEERING GEAR SYSTEM. ANTHONY E. WEINGARTNER, Bethlehem, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1927. Serial No. 230,781. 23 Claims. (Cl. 103—11.)



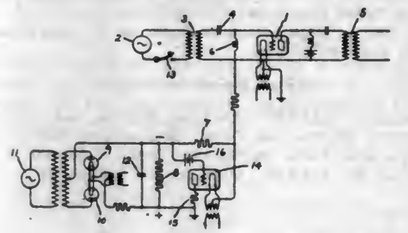
1. A pair of pumps having control elements, distributing-valve apparatus for said pumps variably adjustable for individual operation with the said pumps, operating means for said control elements, means for connecting said operating means to one or the other of said elements, and means connected to said last-mentioned means for adjusting said distributing valve apparatus.

1,884,438. SPARK ARRESTER. HERMON G. WEINLAND, Springfield, Ohio, assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed Aug. 12, 1929. Serial No. 385,848. 3 Claims. (Cl. 51—272.)



1. In a spark arrester, a head, a series of closely placed metallic chains depending from said head to form a curtain impervious to sparks, a clamping collar, and means for securing said head to said clamping collar.

1,884,439. CIRCUIT FOR ELECTRON DISCHARGE DEVICES. IRVIN R. WEIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,936. 15 Claims. (Cl. 250—27.)



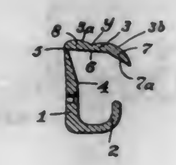
1. In combination, an electron discharge device having a grid circuit including a resistance, a source of direct current biasing potential connected in shunt to said resistance, and means responsive to flow of direct current in said source of biasing potential for changing the value of said resistance.

1,884,440. MOLDING STRIP. EDWARD J. WELCH, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,520. 5 Claims. (Cl. 296—135.)



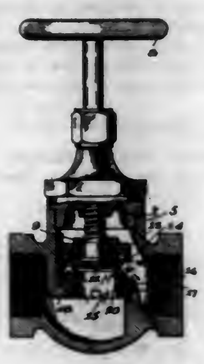
1. A one piece strip of extruded metal for automobiles comprising a base having at one edge a flange initially positioned at an angle thereto to allow fastening devices to be forced through the base, said base being thinned to a point in line with the inner face of said flange to provide a weakened line in the base about which the flange may turn bodily and without deformation, the flange being thicker than the said weakened line and having no bending contact with the base intermediate its free edge and its attached edge, the said attached edge portion reaching outwardly beyond the weakened line to maintain concealment of the same, substantially as described.

1,884,441. DRIP STRIP. EDWARD J. WELCH, New York, N. Y. Filed Oct. 23, 1929. Serial No. 401,808. 2 Claims. (Cl. 296—135.)



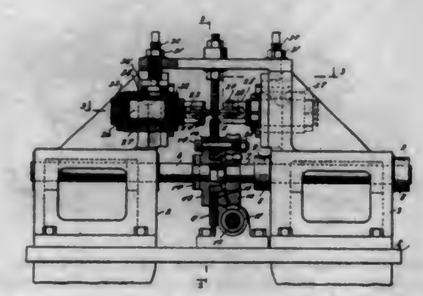
1. An extruded soft metal drip strip having a base with an upwardly extending gutter flange at its lower end and a fold down flange at its upper end, said base being relatively thick from its lower end to a point above the level of the upper end of the gutter flange, said flange being connected to the base by a weakened line of metal in the base itself and in line with the under face of the flange when in initial open position, about which weakened line the flange will turn bodily without deformation, said flange in folding being free from bending contact with the base intermediate the weakened line and the free edge, the root of the folded flange reaching above the plane of the weakened line to maintain concealment of the same, substantially as described.

1,884,442. VALVE. RICHARD WELLS and FRANK M. SMALL, Bartlesville, Okla., assignors to Wells Valve & Equipment Corp., Bartlesville, Okla. Filed Feb. 7, 1931. Serial No. 514,615. 4 Claims. (Cl. 251—28.)



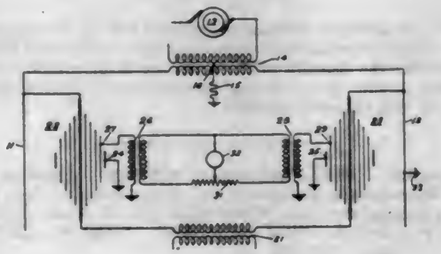
2. In a valve, a detachable annular valve seat having an external flared surface from which projects an annular wall, and a valve head cooperating with said seat and having a piston portion movable into the seat, and an overhanging flange with a flared surface which snugly engages the flared surface of the seat, said seat also having an annular projecting flange positioned at the widest portion of the flared surface of the seat and arranged substantially at right angles to said wall.

1,884,443. CHAIN RIVETING MACHINE. CHARLES E. WERTMAN, Hartford, Conn., assignor to The Whitney Mfg. Co., Hartford, Conn., a Corporation of Connecticut. Filed May 23, 1931. Serial No. 539,508. 15 Claims. (Cl. 59—7.)



1. In a device of the class described, means for continually moving through the device a chain having pins connecting adjacent links, and means for cutting the ends of said pins during said continuous movement.

1,884,444. TRANSMISSION LINE PROTECTIVE SYSTEM. CHARLES P. WEST, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 5, 1929. Serial No. 411,946. 5 Claims. (Cl. 175—294.)

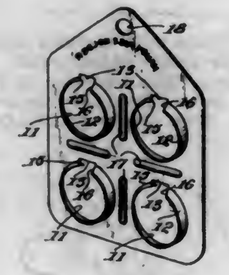


1. In a transmission system, a plurality of conductors comprising a transmission circuit, means for grounding a neutral point of said circuit, a plurality of capacitance devices connected between said conductors and ground, each of said capacitance devices comprising a series of alternatively disposed conducting elements and dielectric elements, protective relay means, and means responsive to the voltages across a part of each of a plurality of said capacitance devices for operating said protective means upon the occurrence of a ground fault upon said circuit, whereby said circuit may be protected against ground faults although conductively grounded at only one point.

1,884,445. FUSE HOLDER. JOHN A. WEVER, Baltimore, Md. Filed Jan. 30, 1931. Serial No. 512,437. 1 Claim. (Cl. 206—78.)

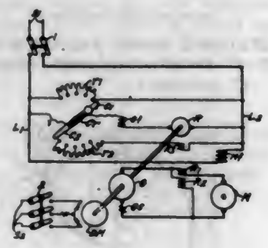
A fuse holder formed from a single sheet of material having spaced circular shaped openings therein, an offset

spirally arranged flange extending substantially around each of the openings and formed integrally with the sheet of material and defining a thread to engage the threaded portion of a fuse when the latter is inserted in the opening



from either side of the sheet of material and adapted to act as a centering medium when one or more sheets are placed in engagement with each other by extending into the opening of the adjacent sheet.

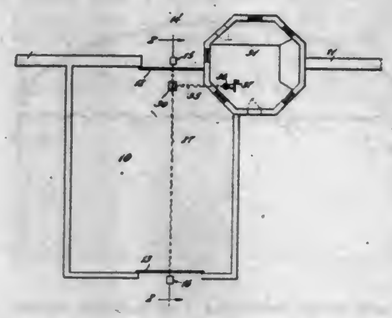
1,884,446. MOTOR-CONTROL SYSTEM. KENNETH M. WHITE and GROSOR K. HEARN, Chicago, Ill., assignors to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Oct. 20, 1930. Serial No. 489,766. 18 Claims. (Cl. 172—152.)



1. The method of controlling the speed of an electric motor which comprises so varying a component of voltage applied to the motor armature that the value of said component bears a predetermined ratio to a selected value of motor speed, and so varying a second component of voltage applied to the motor armature that the value of said second component bears a pre-determined higher ratio to the difference between the actual value of motor speed and the selected value and said second component acts in a direction to reduce said difference.

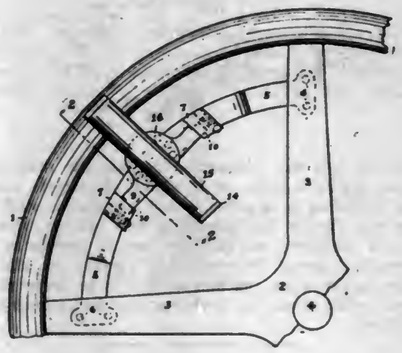
6. In a motor-control system, a motor, a generator, electrical connections completing a circuit including the armatures of said motor and said generator, means for so varying a component of the excitation of said generator that the value of said component bears a predetermined ratio to a selected value of motor speed, and means for so varying a second component of excitation of said generator that the value of said second component bears a predetermined higher ratio to the difference between the actual value of motor speed and the selected value and said second component acts in a direction to reduce said difference.

1,884,447. VEHICLE BARRIER. LLOYD J. WHITE, San Antonio, Tex., assignor to Southern Prison Company, San Antonio, Tex., a Corporation of Texas. Filed Apr. 25, 1932. Serial No. 607,460. 10 Claims. (Cl. 256—1.)



1. In combination with a roadway entrance having a gate, a vehicle stop protecting the gate comprising a plunger-like member mounted below the roadway to be projected upwardly into the path of a vehicle; and remote controlled means for operating the stop.

1,884,448. HAND WHEEL. JOSEPH E. WHITFIELD, Pittsburgh, Pa., assignor of one-half to Henning A. Johnson, Pittsburgh, Pa. Filed Jan. 24, 1931. Serial No. 511,021. 2 Claims. (Cl. 74—33.)

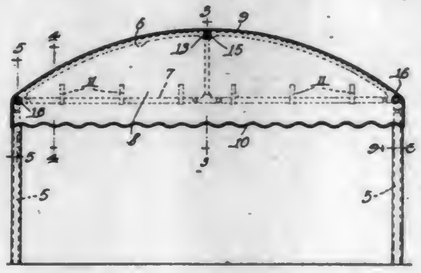


1. An attachment for hand wheels comprising in combination a support arranged to bridge the space between adjacent spokes of the wheel and to be secured thereto, opposed bearings carried by said support, a member having its ends journaled in said bearings, and a hand grip pivotally mounted on said member to turn on an axis which is angular to the axis of the movement of said member in said bearings.

1,884,449. TENT CONSTRUCTION. CECIL M. WICKSTRUM, Omaha, Nebr. Filed Dec. 29, 1930. Serial No. 505,408. 4 Claims. (Cl. 135—1.)

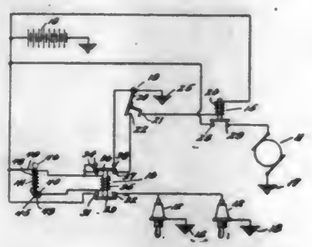
1. In a tent construction, a frame, said frame comprising a roof embodying a horizontal pipe section and a curved pipe section, the horizontal pipe section being connected to

the curved pipe section at the ends of the curved pipe section, pins extending forwardly from the frame at the ends of the curved pipe section, a pin extending forwardly from the curved pipe section and disposed at a point intermediate the ends of the curved pipe section, a cover for the



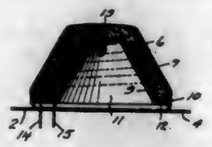
frame, said cover embodying end members formed with openings to receive the pins, and straps at the lower edge of the end section and adapted to be secured to the horizontal pipe section to draw the cover taut and prevent the cover and pins from becoming disconnected from each other.

1,884,450. INTERNAL COMBUSTION ENGINE. ADOLF A. WIDMANN, Detroit, Mich., assignor to Hermann I. A. Dorner, Detroit, Mich. Filed Oct. 10, 1931. Serial No. 568,170. 16 Claims. (Cl. 123—179.)



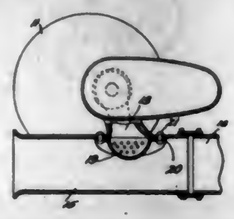
1. In an internal combustion engine, the combination with on engine starter, of a source of electric current, means including a starter switch associated with said source and starter for energizing said starter when the switch is operated, fuel ignition means associated with said engine, means for supplying current to said fuel ignition means when the starter switch is operated, and time-controlled means for rendering said last named means inoperative.

1,884,451. ELECTRIC HEATING ELEMENT. EDWIN L. WIEGAND, Pittsburgh, Pa. Original application filed June 7, 1928, Serial No. 283,505. Divided and this application filed Dec. 11, 1929. Serial No. 413,180. 2 Claims. (Cl. 219—19.)



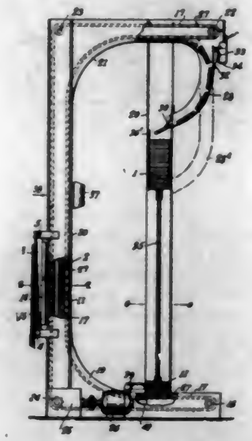
1. An electric resistance heating element of the character described comprising an outer metal shell frusto conical in form, an electric resistance heating element disposed within said shell, electrically insulating heat conducting material supported by said shell and embracing said heating element, an inner metal shell of frusto conical shape fitting within said outer shell and having its peripheral edge bent outwardly and secured to said outer shell, said outer shell having a peripheral flange thereon by means of which said heating element may be secured to a vessel.

1,884,452. MUFFLER FOR DIESEL ENGINES WITH SINGLE INLET AND OUTLET PORT. CLARENCE H. WIEGMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 23, 1930. Serial No. 504,360. 9 Claims. (Cl. 123—79.)



1. In a Diesel engine, in combination, a plurality of cylinders each having an elongated port for the introduction of air and the discharge of products of combustion, an exhaust manifold, a conduit associated with each cylinder and disposed transversely of the corresponding port, one end of the conduit being open for the inflow of air and the other end being connected to the exhaust manifold, the corresponding cylinder port opening into the conduit through an aperture formed in the conduit wall and intermediate the ends of the conduit, and a muffling device disposed across each such aperture.

1,884,453. ELECTRIC SIGN. FRANCIS E. J. WILDE, Forest Hills, N. Y. Filed Oct. 12, 1928. Serial No. 312,015. 6 Claims. (Cl. 200—46.)



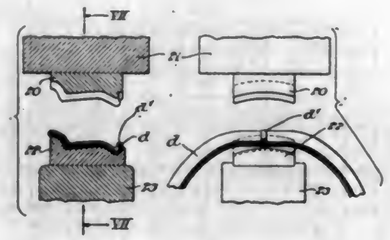
1. In talking sign apparatus, the combination of sign patterns, means for supporting said sign patterns in a stack, conveyor means associated with said stack supporting means for feeding the sign patterns in the stack, a contact bank and conveyor means for carrying the sign patterns from the stack to the contact bank independently of but in timed relation to the feeding of the sign patterns in the stack.

1,884,454. CONTROL APPARATUS FOR ELECTRIC SIGNS. FRANCIS E. J. WILDE, Forest Hills, N. Y. Filed Dec. 12, 1929. Serial No. 413,477. 9 Claims. (Cl. 200—46.)



1. Electric sign control apparatus of the class disclosed, which comprises sign plates, transporting means for engaging said plates to effect movement thereof, and means for effecting a change in the direction of movement of said plates which comprises a rotatable member adapted to engage said plates on the side thereof opposite the said transporting means, and means for causing the said transporting means to follow around the periphery of said rotatable member a distance sufficient to effect the desired change in direction, whereby the sign plates are positively held between the said transporting means and the said rotatable member and are thereby positively guided and supported throughout the desired change in their direction of movement.

1,884,455. METHOD OF WELDING. CHARLES L. WILES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1928. Serial No. 250,852. 2 Claims. (Cl. 219—10.)



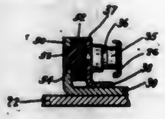
1. The method of making rings with side walls of an irregular contour in the plane of the axis which consists in flattening the ends of a split ring of the desired given contour between shaping dies whereby to bring the same into rectilinear abutting relation while preserving the given contour in the plane of the axis, welding said ends, and die pressing into circular form and the said given contour.

1,884,456. TROLLEY SLIDE WITH LOCKING MEANS. KENNETH M. WILKINS, Waukegan, Ill., assignor to Superior Trolley Slide & Equipment Company, Waukegan, Ill., a Corporation of Illinois. Filed Jan. 7, 1932. Serial No. 585,249. 13 Claims. (Cl. 191—59.1.)



1. In a device of the kind described, a carrier member, means provided for connecting said carrier member to a support, and an insert member associated with said carrier member and providing means for locking said connecting means against displacement.

1,884,457. IGNITION DEVICE. RAYMOND A. WILKINS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Aug. 8, 1930. Serial No. 473,888. 3 Claims. (Cl. 200—80.)

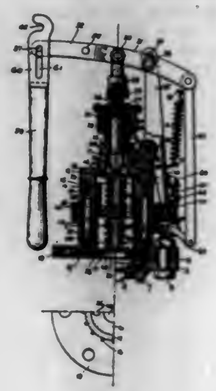


1. A circuit interrupter comprising, an oscillatable lever; a contact carried by said lever; a bracket having an angular ear; a flexible member secured to said bracket, said flexible member having an angular ear substantially parallel with the angular ear of the bracket; a contact supported upon the angular ear of the said flexible member, engageable by the contact on the lever; and a resilient element interposed between the angular ears of the said bracket and flexible member.

1,884,458. DRAW-OFF VALVE. CARL J. WILLENBORG, Jr., Hoboken, N. J., assignor to United States Fire Protection Corporation, Hoboken, N. J., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,756. 9 Claims. (Cl. 137—144.)

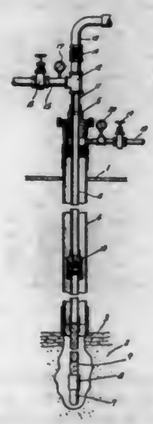
1. In a draw-off valve, a chamber, an inlet and an outlet port on said chamber, a poppet valve, on said outlet

port and opening into said chamber, a check valve on said inlet port adapted to open into said chamber, a gas cock



on said chamber, and means for subtantially complimentarily opening and closing said poppet valve and said cock.

1,884,459. METHOD AND APPARATUS FOR PRODUCING OIL. IRVING B. WILLIAMS, Tulsa, Okla. Filed Apr. 23, 1930. Serial No. 446,517. 4 Claims. (Cl. 103—232.)



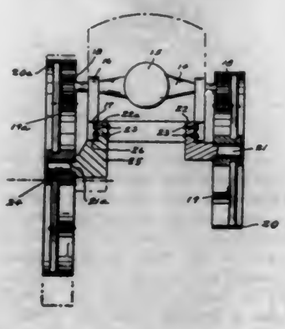
1. The method of controlling the flow of oil from an oil well in which natural gas and oil are present, which includes the steps of restricting the flow of the effluent oil-whereby the natural gas pressure is increased within the well, tending to lift the oil out of the well, introducing directly a predetermined increment of said pressure into the effluent column above the point of restriction whereby said pressure increment will oppose the pressure lifting the oil out of the well so that only the differential pressure thus created will be effective in lifting the effluent oil, resulting in a reduced flow velocity and a conservation of the natural gas pressure.

1,884,460. FACING TOOL. JOSEPH H. WILLIAMS, Saginaw, Mich. Filed Apr. 19, 1929. Serial No. 356,380. 1 Claim. (Cl. 29—95.)



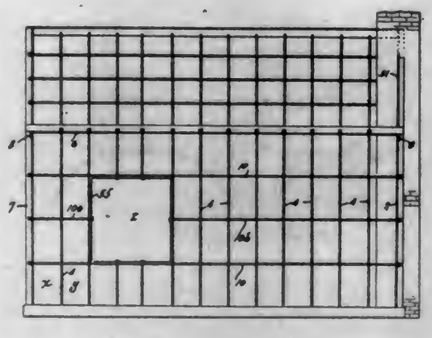
A cutter blade for a valve facing tool, comprising a rhomboil shaped bar having parallel grooves on two opposing side walls to cooperate with the facing tool, so that when the bar is placed in position in the tool, the acute angled edges present cutting edges to the work.

1,884,461. ADJUSTABLE TRACTOR. JOSEPH B. WILLINGS, Oil City, Pa. Filed Feb. 20, 1930, Serial No. 429,884. Renewed June 11, 1932. 7 Claims. (Cl. 180—1.)



1. In a tractor having a support frame, drive means including spaced and axially alined pinions of equal size, interchangeable tractor wheels of different diameters adapted to engage and be driven by said pinions, and removable axle assemblies for said tractor wheels adapted to be detachably connected with said tractor frame.

1,884,462. BUILDING CONSTRUCTION. CORWIN D. WILLSON, Lake Orion, Mich. Filed Dec. 13, 1928. Serial No. 325,840. 4 Claims. (Cl. 72—1.)

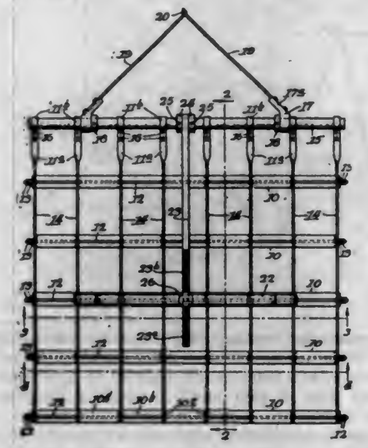


1. In building construction, a unitary structure for a wall, partition or a roof consisting of a metal framework including a series of rod like elements arranged to provide

CARNEGIE LIBRARY OF ATLANTA

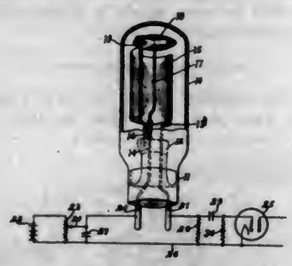
a plurality of spaces of substantially uniform size, filler members for the said spaces, means for placing the rod like elements under tension to thereby place the filler member under compression, a yieldable member for each rod like element placed under compression by the placing of the tension on the rods and providing a means automatically compensating for expansion and contraction in the structure.

1,884,463. HARROW. ALLEN B. WILSON, Chicago, Ill. Filed Aug. 16, 1929. Serial No. 386,466. 12 Claims. (Cl. 55—149.)



1. A harrow comprising a self-sustaining cultivator unit formed by bending a single metal bar into a plurality of spaced convolutions having their lower parts sharpened to enter the earth.

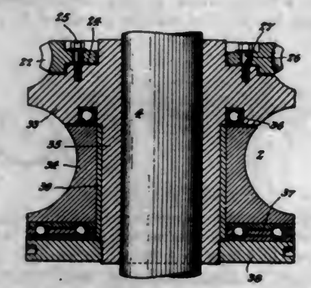
1,884,464. LIGHT-SENSITIVE DEVICE. EARL D. WILSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,515. 3 Claims. (Cl. 250—415.)



1. In combination, a light-sensitive device comprising a gas-tight container having a transparent portion, a plurality of electrodes in said container, a light-sensitive surface on one of said electrodes, a gas in said container, said gas being at a pressure of substantially 75 to 90 microns and an electerical potential applied across two of said electrodes at an ionizable potential of said gas.

1,884,465. WELDING APPARATUS. JOHN F. WINDSOR, Chicago, Ill., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,481. 10 Claims. (Cl. 219—4.)

1. A welding roll comprising means engageable with tube stock for supplying current thereto, means extending axially from the first mentioned means, and peripherally grooved means engageable with the tube stock and extending radially with respect to said axially extending portion, said first mentioned means and said peripherally grooved means being so constructed and arranged that one is rotatable with respect to the other.

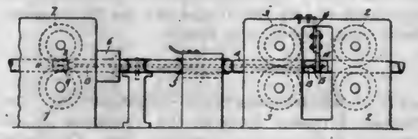


1,884,466. WELDING APPARATUS. JOHN F. WINDSOR, Chicago, Ill., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill., a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,942. 9 Claims. (Cl. 219—6.)



1. In an apparatus for butt welding metal tubing and comprising electrodes for passing current across the seam to be welded, means for preventing sagging of the tube portions adjacent the seam, said means comprising a plurality of rollers engaging portions of the interior of the tube stock, and pressure means within said stock and cooperating with said rollers for maintaining the latter in engagement with said stock.

1,884,467. MEANS TO REDUCE THE BURRS OF WELDED METAL TUBING. JOHN F. WINDSOR, Chicago, Ill., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 4, 1930. Serial No. 493,255. 3 Claims. (Cl. 80—11.)



3. In an apparatus for smoothing down burrs on butt-welded metal tubing, a pair of rollers, one positioned top of the other, within said tubing, one of said rollers having a circumferential groove in which the other of said rollers is received, a member having a chamber in which said rollers are floatably mounted, and a pair of rolls for applying pressure to the exterior of the tube stock above and below said rollers.

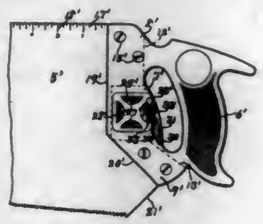
1,884,468. METHOD OF AND APPARATUS FOR THE MANUFACTURE OF FLAT BAGS AND ENVELOPES. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany, assignors to Baltimore Paper Company, Kansas City, Mo., a Corporation of Missouri. Filed July 12, 1929, Serial No. 377,779, and in Germany July 13, 1928. 22 Claims. (Cl. 93—61.)



1. A method for the manufacture of flat bags or other similar articles of the character described, which comprises moving the blank in a direction parallel to the bottom fold and to the closure-flap fold, then creasing the two side folds, then while conveying the blanks folding over, and re-opening the bottom flap and closure-flap, then applying the gum to the bottom flap and one side flap, then folding and gumming the side flaps, and finally refolding and gumming the bottom flap and re-folding the closure flap.

4. A cylinder folding-machine for the selective manufacture of envelopes or flat bags comprising elements which serve to form the side folds in the case of bags and to form the folds of the bottom and closure flaps in the case of envelopes, and means for the adjustment of said elements to change from one class of goods to the other.

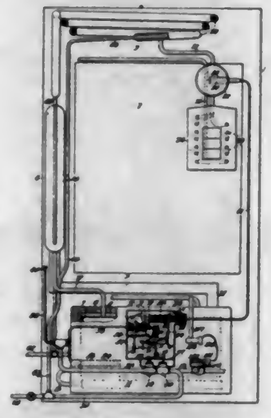
1,884,469. COMBINATION HANDSAW. FRED W. WINTER, Chicago, Ill. Filed June 19, 1930. Serial No. 462,274. 1 Claim. (Cl. 33—211.)



A device of the class described, comprising a blade having a pair of ears thereon, a handle having a main attaching portion provided with a pair of pockets for receiving said ears and also having a hole extending through the handle intermediate said pockets, a leveling device including a notched casing mounted in said hole and being provided with a plurality of level bulbs protected in the casing and constituting a four-way level, and a latching lever pivotally mounted in said handle and engaging in the notch in said casing for holding it in the hole in the handle, so that the casing may be readily inserted in the handle and readily removed therefrom, the handle forming protection for the leveling device and the device being visible from both sides of the handle.

1,884,470. REFRIGERATING APPARATUS. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa., a Corporation of New York. Filed Nov. 13, 1928. Serial No. 319,051. 2 Claims. (Cl. 62—5.)

1. In refrigerating apparatus, the combination with a generator wherein the refrigerant is periodically subjected to the action of heat from a gas burner, and to the action of a cooling medium; of conduits for fuel gas and for such cooling medium, disposed in parallel spaced relation; valves in the respective conduits spaced apart longitudinally with respect to said conduits, and having respective stems in parallel, spaced relation; a lever fulcrumed between said stems and having a main arm extending from said fulcrum, substantially parallel with said stems, and auxiliary arms extending oppositely from said fulcrum, transversely to said main arm and respectively in cooperative relation with said stems; springs for the respective

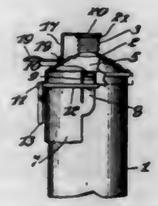


valves normally tending to close them in opposition to the auxiliary arms of said lever; and thermostatically operative means respectively adapted to alternately shift the main arm of said lever in opposite directions, and thereby alternately open said valves and permit them to be closed in accordance with the temperature in respectively different regions of the refrigerating apparatus.

1,884,471. PAVING AGGREGATE AND PROCESS OF PRODUCING SAME. LESTER WITTENBERG, New Rochelle, N. Y., assignor to The Barrett Company, a Corporation of New Jersey. Filed Apr. 17, 1926. Serial No. 102,670. 5 Claims. (Cl. 106—31.)

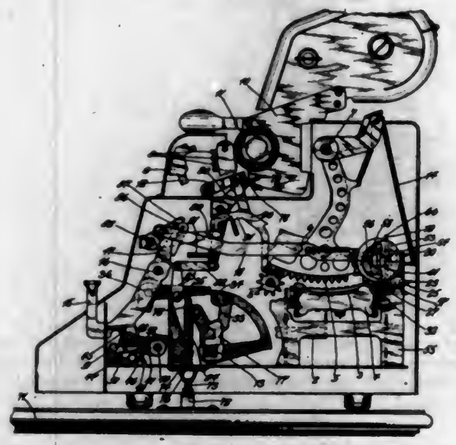
1. The method of preparing paving aggregate which comprises saturating the aggregate body with a solution of cementitious tarry bitumen residue, having a specific viscosity of between 8 and 35, and then coating the resulting product with bitumen which is substantially solid at atmospheric temperature.

1,884,472. ACCESSORY FOR CONTAINERS. FRANK WOLF, New York, N. Y. Filed Dec. 24, 1928. Serial No. 328,101. 5 Claims. (Cl. 221—60.)



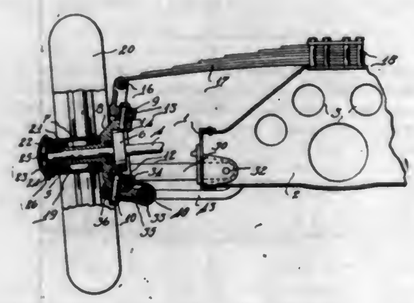
1. An accessory for a collapsible tube having a soft body and a comparatively rigid top, with a bead-flange around its periphery, the accessory comprising a member to fit upon the top, strengthening it and preserving its shape, the member having projections extending down past the bead-flange, a catch pivoted on said member and comprising a pair of arms curved to extend around the tube, and a handle on said catch to enable said arms to be forced under said projections against the side of the tube to hold the member in place.

1,884,473. ADDING AND REGISTERING MACHINE. CLARENCE H. WOLFE, Norwood, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Field Sept. 8, 1924. Serial No. 736,470. 38 Claims. (Cl. 235—60.)



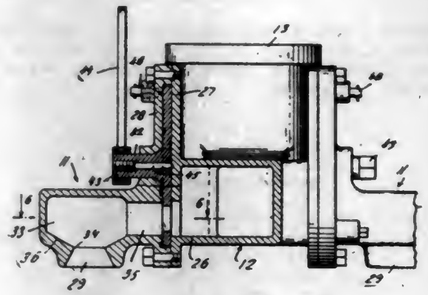
1. An adding and registering machine comprising a series of type carriers for printing numbers, an additional type carrier for printing a designating character, stops for limiting extent of movement of all of said type carriers, numeral keys operable first to set said stops to represent numbers to be printed by said first named type carriers and then operable to set the proper ones of said stops to limit extent of movement of said additional type carrier, and mechanism for preventing operation of any of said numbers printing type carriers until a stop has been set to limit movement of said additional type carrier after stops have been set to represent numbers.

1,884,474. FRONT WHEEL DRIVE. WILLIAM C. WOLFORTH, Highland Park, Mich. Filed Aug. 15, 1929. Serial No. 386,147. 1 Claim. (Cl. 180—43.)



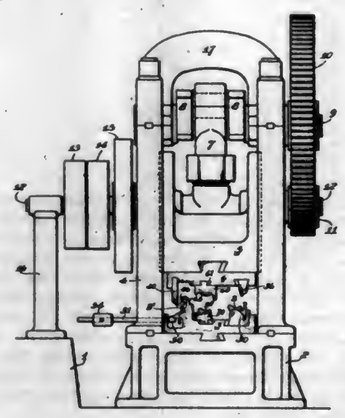
In a front wheel drive, a chassis frame having a front cross member, a propeller shaft mounted across said frame and having a universally jointed end, a front axle mounted on said end, a ring enclosing a portion of said axle and swivelled thereto, a pair of links diverging from opposite sides of said ring to said frame and pivoted to the ring and frame, and a wheel journalled to said axle.

1,884,475. LIQUID SPREADING APPARATUS. JOSEPH C. WOODCOCK, Cliffside, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 24, 1929. Serial No. 402,217. 4 Claims. (Cl. 299—34.)



1. In an apparatus for spreading liquid upon roads, a spray bar, two rows of centrifugal nozzles, one on each side of said bar, the nozzles of one row being staggered with respect to those of the other row and each nozzle being provided with an inlet opening eccentric to the axis of the nozzle and an outlet opening concentric to said axis to produce a conical discharge stream, a movable orifice plate, provided with a plurality of orifices differing in size for controlling the rate of flow of liquid admitted to each of said nozzles, mounted at the inlet of each of said nozzles and means to move said orifice plate to bring said orifices respectively opposite the inlet of said nozzles.

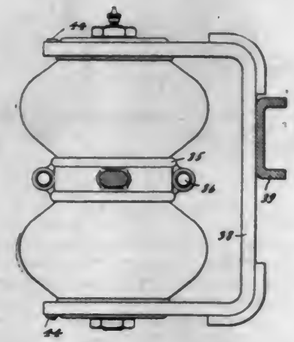
1,884,476. MACHINE FOR REFORMING SPLICE BARS. EMANUEL WOODINGS, Oakmont, Pa., assignor to Woodings-Verona Tool Works, Verona, Pa., a Corporation of Pennsylvania. Original application filed Aug. 28, 1928, Serial No. 302,461. Divided and this application filed Sept. 16, 1930. Serial No. 482,284. 3 Claims. (Cl. 29—34.)



1. In a machine for reforming splice bars of the continuous type, the combination of a fixed die block, a movable die block reciprocably mounted above the fixed die block, two dies and a shear knife mounted upon the movable block, cooperating dies on the fixed block, one pair of said dies located at one end of the die blocks being adapted first to open up the continuous bar by bending the base plate thereof into substantially parallel position relative to the web portion thereof, the shear knife located at the other end

of the die blocks being adapted thereafter at the same stroke to cut off the base plate of a previously opened up bar, and the other set of dies located at the middle of the die blocks being adapted thereafter at the same stroke to reform the head and seat portion of a sheared bar.

1,884,477. VIBRATION DAMPENER. JOSEPH KAYE WOOD, Mount Vernon, N. Y., assignor to Walter P. Albert, Madison, N. J. Filed Feb. 18, 1929. Serial No. 340,767. 14 Claims. (Cl. 267—35.)



1. In a vibration damper of the type described, an upper fluid-containing resilient-walled chamber, a lower fluid-containing resilient-walled chamber, each of said chambers having openings at their adjacent faces, a duct extending through each of said openings, means for providing an air-tight seal between each wall and the associate duct, and means for uniting said ducts to each other.

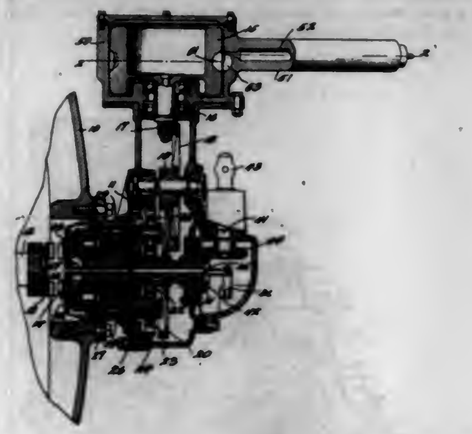
1,884,478. VENDING MACHINE. HAROLD B. WOODS, Ilion, N. Y., assignor, by mesne assignments, to Consolidated Automatic Merchandising Corporation, a Corporation of Delaware. Filed Jan. 11, 1928. Serial No. 245,952. 12 Claims. (Cl. 221—109.)



2. In a machine for vending unit quantities of a bulk commodity a receptacle for the commodity to be vended comprising an open bottom, a delivery device below said receptacle comprising a measuring pocket adapted to receive a unit quantity of the commodity in the receptacle, means for moving said pocket out of communication with said receptacle, and means for leveling off the content of the receptacle comprising a flexible wiper which is passed by the pocket, as the pocket passes out of communication with the receptacle, the contact edge of said wiper being at all times free from contact with moving parts of the mechanism.

1,884,479. INTERNAL COMBUSTION ENGINE STARTER. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 28, 1930. Serial No. 478,461. 8 Claims. (Cl. 123—Sub. Cl. 179.)

1. In an engine starter, in combination, a driving member adapted to engage and crank a member of the engine to be started, an inertia device connected to the driving member through reduction gearing, means to receive a



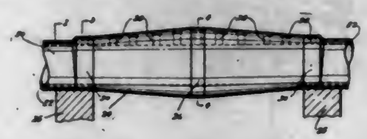
single charge of solid explosive, means to discharge said explosive, and means to rapidly bring the inertia device to high speed by expanding gases from said explosive.

1,884,480. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 25, 1930. Serial No. 491,254. 5 Claims. (Cl. 74—6.)



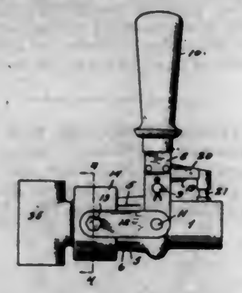
4. The combination with the crank shaft of a compression ignition engine having a high momentary torque during the period of ignition, and a load driven by said engine, of a flywheel for said crank shaft, a resilient shaft connected to said load, and seperate means connecting said crank shaft between the resilient shaft and the flywheel including clutches yieldable to said high momentary torque.

1,884,481. SUPERHEATER HEADER. BAZIL WOYNAROWSKI, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Filed Mar. 14, 1931. Serial No. 522,600. 6 Claims. (Cl. 122—360.)



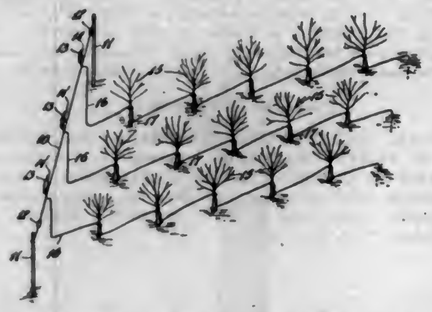
1. The combination with horizontally spaced supports, of a header thereon having the wall of the portion intermediate said supports thickest at the point midway between the supports and of progressively decreasing thickness toward the supports, said header having apertures therein for permitting flow between the header and pipes to be connected thereto and arranged along a line lying in the vertical plane determined by the central longitudinal axis of the header.

1,884,482. TERMINAL CLAMP. MALCOLM WRIGHT, Baltimore, Md. Filed Jan. 17, 1928. Serial No. 247,851. 1 Claim. (Cl. 173—273.)



In a device of the character described, a body having a socket for the reception of a conductor and having a resilient expansible jaw portion adapted for engagement upon a terminal element, a sleeve slidably mounted longitudinally upon the jaw portion and formed to effect contraction thereof when moved in one direction, a lever pivoted on the body and connected with the sleeve for moving the same, combined guide and brace means for the lever, comprising an arm on the lever having a socket therein containing a spring, and a guide element on the body slidably engaged within the second named socket in compressing relation to said spring therein.

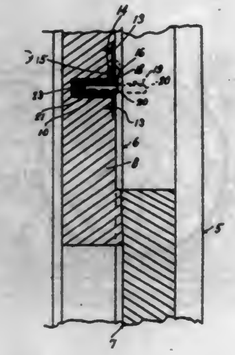
1,884,483. APPARATUS FOR TREATING VEGETATION. ROBERT H. WRIGHT, Nashville, Tenn. Filed Dec. 29, 1931. Serial No. 583,774. 3 Claims. (Cl. 47—1.)



1. Apparatus for treating growing vegetation, including trees, plants and the like with electricity collected from the atmosphere comprising, in combination, an elevated antenna insulated from its supports and having a series of electrically connected, metallic collectors; a multiplicity of electrical conductors extending from the antenna and electrically connected at vertically spaced points to the trees and deeply grounded at one end, being arranged in such a manner as to provide a metallic path for the collected electricity to promote growth and destroy certain insects and microbes.

1,884,484. WINDOW SASH RETAINER. JOHN YACOMIS, Albany, N. Y. Filed Sept. 16, 1931. Serial No. 563,173. 1 Claim. (Cl. 292—150.)

As a new product of manufacture, a window sash check comprising an attaching plate formed with a vertical slot and below said slot with a bolt hole and a marginal notch associated with the upper part of said bolt hole, said notch being in alinement with the slot, together with an integral open ended cylindrical barrel attached to the inner side of said plate and extending in alinement with said bolt hole, said barrel having an internal diameter greater than said hole, a bolt of a diameter corresponding to the bolt hole, said bolt being formed at its inner end with a disk like head slidable in the barrel, a spring in said barrel cooperable with said head, said bolt being provided with a longitudinal rib slidable through said notch, a



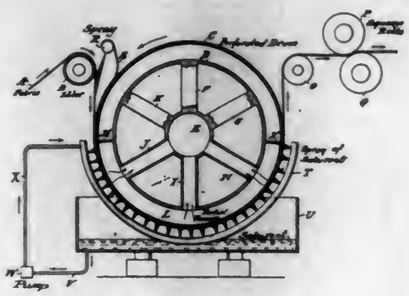
gravity actuated retaining latch comprising a plate having a finger part at its upper end and a stem slidable in said slot, the outer end of said rib terminating short of the adjacent end of the bolt to form a shoulder with which the cooperating end of said latch is engageable.

1,884,485. SPRAY GUN. OLIVER P. YOST, Grand Rapids, Mich., assignor to Food Machinery Corporation. Filed Dec. 31, 1929. Serial No. 417,733. 2 Claims. (Cl. 299—117.)



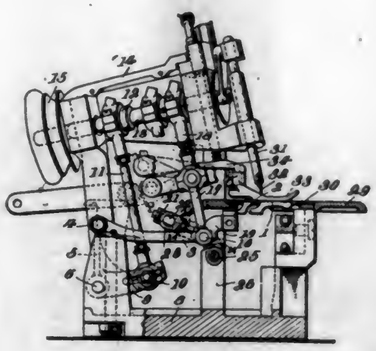
1. A spray device for spraying insecticides or fungicides on plants and trees comprising a spray head of one piece construction and having a plurality of limbs each provided with a plurality of conduits, and spray nozzles disposed on the ends of said limbs, a valve stem for controlling the admission of spray material into said plurality of conduits consisting of a seat member for cutting off admission of spray material to all of said conduits, another portion on said stem for cutting off admission of spray material to one of said conduits and reduced portions as a part of said stem for restricting the inlets to said conduits and thereby effect a more even distribution of spray material thereto, when both admission inlets are open for the flow of spray material.

1,884,486. IMPREGNATING PROCESS. JOSEPH ZAVERTNIK, Jr., Harrington Park, N. J., assignor to The Barrett Co., New York, N. Y., a Corporation of New York. Filed Dec. 19, 1928. Serial No. 327,090. 5 Claims. (Cl. 91—68.)



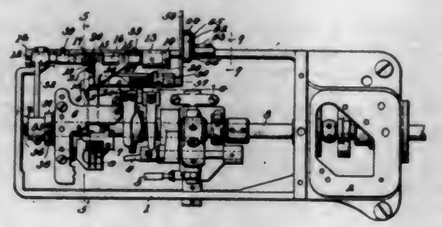
3. The process of saturating fabrics which comprises supporting the fabric to be saturated with one surface thereof in contact with a foraminous supporting member and the other surface exposed, spraying excess saturant onto the exposed surface of the fabric while subjecting the supported surface of the fabric to a reduced pressure as compared with that on the exposed surface, excess saturant being removed from the exposed surface throughout the area thereof subjected to differential pressure, and the penetration of the remaining saturant sprayed onto the fabric being aided by the differential pressure, whereby the degree of saturation of the fabric is controlled.

1,884,487. FEEDING MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIER, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1928. Serial No. 288,419. 10 Claims. (Cl. 112—209.)



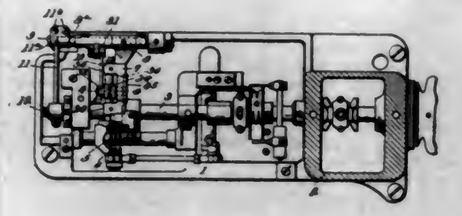
1. A feeding mechanism for sewing machines comprising a feed bar, a feed rocker to which said feed bar is pivoted, a main actuating shaft located above the feed bar and in a line at an acute angle to the line of feed, an eccentric, an eccentric strap cooperating therewith and connected to said feed rocker for oscillating the same, a second eccentric, an eccentric strap cooperating therewith and connected to said feed bar for raising and lowering the same, a feed dog fixed to said feed bar, a lever pivoted on said feed bar, a feed dog fixed to said lever, a guiding member having an operating slidable engagement with said lever and causing said lever to swing as the feed bar is raised and lowered for imparting a differential rising and falling movement to the feed dog carried by the feed lever.

1,884,488. FEEDING MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIER, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,331. 14 Claims. (Cl. 112—209.)



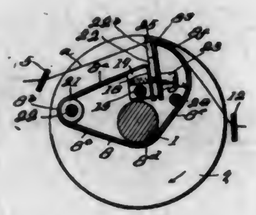
1. A feeding mechanism for sewing machines comprising a feed rocker, a main feed bar pivoted thereto, a main feed dog mounted on said feed bar, an auxiliary feed bar mounted to slide on said main feed bar, an auxiliary feed dog mounted on said auxiliary feed bar, means for raising and lowering the feed bars, and devices moving with the feed rocker and including a flexible member connected to the auxiliary feed bar for imparting a differential movement to the auxiliary feed dog.

1,884,489. DIFFERENTIAL FEEDING MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIER and CLARENCE C. SMITH, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1930. Serial No. 493,648. 12 Claims. (Cl. 112—209.)



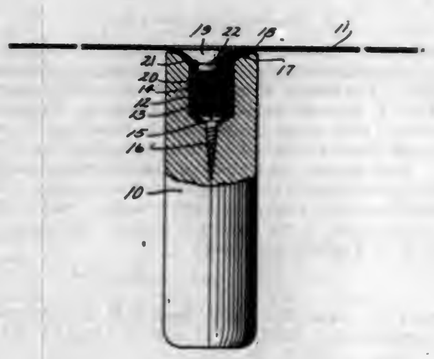
1. A feeding mechanism for sewing machines comprising a main feed bar, a main feed dog carried thereby, a feed rocker to which said main feed bar is connected, means for raising and lowering the feed bar, spaced bearing members carried by said main feed bar, a single auxiliary feed bar mounted in said bearings, an auxiliary feed dog carried thereby, means connected to said auxiliary feed bar between said supporting bearings for imparting a differential feeding movement to said auxiliary feed dog and means for holding said auxiliary feed bar to a right line movement on said main feed bar.

1,884,490. THREAD CONTROLLER FOR SEWING MACHINES. FREDERICK F. ZEIER and CLARENCE C. SMITH, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1930. Serial No. 499,335. 8 Claims. (Cl. 112—248.)



1. A thread controller for sewing machines including a thread engaging member formed of sheet metal bent so as to provide an irregular peripheral thread engaging surface and means for directing a thread across the thread engaging member in a direction at right angles to the axis of rotation thereof.

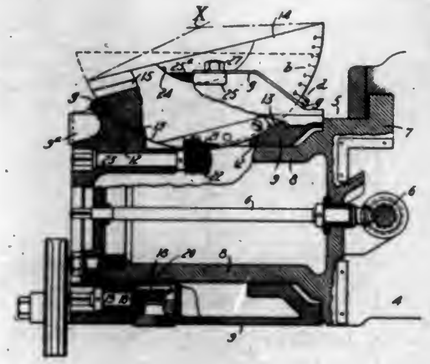
1,884,491. PLASTERER'S HAWK. HARRY J. ZIEMANN, Milwaukee, Wis., assignor to Empire Level Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 12, 1929, Serial No. 399,149. Renewed June 20, 1932. 3 Claims. (Cl. 306—44.)



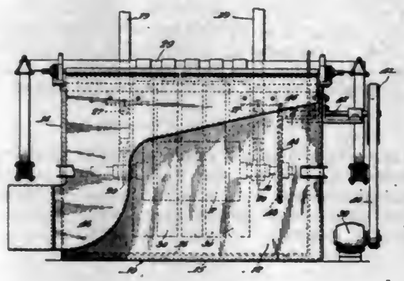
1. In a plasterer's hawk, the combination with an apertured plate of a handle having a socket in one end thereof, a nut anchored in said socket, a bolt having a head seated in a depression in said plate adjacent said aperture and having a threaded shank engaging the threads of said nut in said handle, whereby said plate and said handle are operatively secured together.

1,884,492. TIP-TOP TABLE FOR SHAPERS. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed June 19, 1931. Serial No. 545,471. 4 Claims. (Cl. 90—58.)

1. A work-support for shaping machines comprising a bed formed in its upper side with an arcuate seat; a table-top having a depending arcuate portion complemental to said seat and oscillatable thereon, said table-top also being provided with an arcuate clamp surface co-axial with said seat; a clamp-block having one portion seated upon said bed and another portion in contact with said clamp surface; and a screw device passing through said clamp-block and threaded into said bed to cause said block to be depressed into clamping contact with said clamp surface.



1,884,493. CHROMIUM PLATING APPARATUS. ANTHONY J. ZIMNIEWICZ and ARTHUR F. COX, Chicago, Ill., assignors to Manz Rotogravure Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 25, 1930, Serial No. 423,315. Divided and this application filed Dec. 24, 1930. Serial No. 504,614. 6 Claims. (Cl. 204—5.)

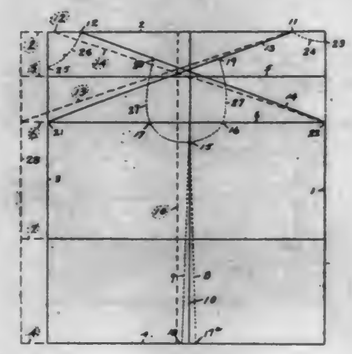


1. In an apparatus of the character described, a tank adapted to contain a plating solution, an electric conductor extending longitudinally of the top of said tank and having a plurality of anodes depending therefrom into said solution, and means for bodily shifting said conductor and anodes to various adjusted positions laterally of said tank consisting of a pair of carriages movably supporting said conductor on opposite ends of said tank and rack and pinion means for moving said carriages.

1,884,494. SYSTEM OF DRAFTING DRESS PATTERNS. CHARLES A. ZORN, St. Louis, Mo. Filed Mar. 5, 1928. Serial No. 259,034. 1 Claim. (Cl. 33—17.)

The method of drafting dress patterns, which consists in drawing a rectangle of predetermined length equal to the distance from the top of the shoulder to the hip and of a width equal to one-half the bust size, drawing across said rectangle a chest line at a predetermined distance below and parallel to the top line of said rectangle, measuring inwardly along said top line of the rectangle a predetermined distance from each side edge based upon the size

of the neck opening to locate the outermost points of the shoulders, and then connecting each of said points with diagonal lines extending from the same to the furthermost points of intersection, respectively, of the chest line with

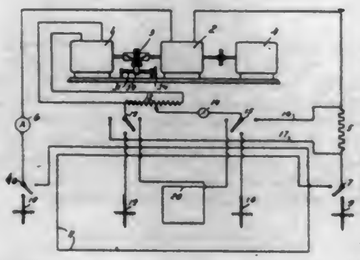


the side edge lines, said diagonal lines determining the slope of the shoulders, and the shoulder slopes thereby decreasing proportionately and automatically according to increasing width of the pattern.

1,884,495. REFINING HYDROCARBON. PAUL ZUBCHER, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Original application filed Aug. 13, 1928, Serial No. 299,443. Divided and this application filed Oct. 30, 1929. Serial No. 403,655. 4 Claims. (Cl. 196—24.)

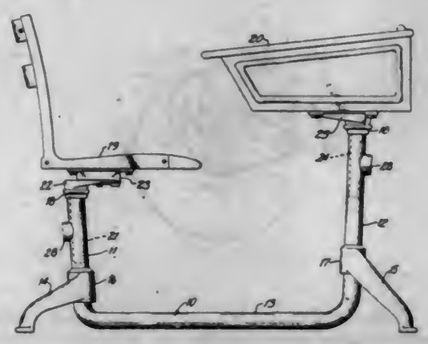
1. The method of purifying hydrocarbons which comprises rapidly passing vapors of the hydrocarbon through activated carbon at a temperature in the vicinity of 400° C. to 600° C. the velocity of the vapors through said activated carbon being such that treatment is effected without cracking the vapors, and condensing the vapors.

1,884,496. ELECTRICAL PROSPECTING APPARATUS. THEODOR ZUSCHLAG, New York, N. Y., assignor to Swedish American Prospecting Corporation, New York, N. Y., a Corporation of New York. Filed May 31, 1929. Serial No. 367,542. 5 Claims. (Cl. 175—182.)



1. Electrical prospecting apparatus comprising an exciter circuit for setting up an artificial ground field, a source of alternating E. M. F. connected to said exciter circuit, a search circuit, a second source of alternating E. M. F. of the same frequency connected to said search circuit, said second source of alternating current being coupled mechanically with said first source of alternating current in such a way that the phase of said second source may be varied in an arbitrary manner.

1,884,497. COMBINED DESK AND SEAT. GEORGE H. ABBOTT, Elgin, Ill., assignor to Woodruff & Edwards, Inc., Elgin, Ill., a Corporation of Illinois. Filed Apr. 23, 1931. Serial No. 532,157. 3 Claims. (Cl. 155—89.)

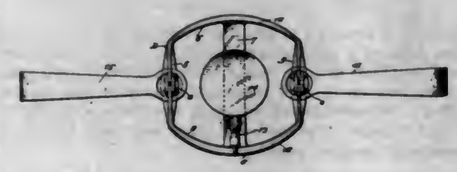


3. In an article of furniture, the combination of an upright tubular head formed with an aperture in one side, a longitudinally slotted tubular article supporting stem within said head, an outer clamping block having a curved face embracing the sides of the tubular head, an inner clamping block having a face normally engaging with the inner face of the tubular stem at places adjacent the slot thereof and formed with a tapered lug adapted to impinge against the side edges of the slot of the tubular stem, and a bolt having a head engaging the outer clamping block and a threaded stem threadedly engaging the inner clamping block.

1,884,498. PRODUCTION OF DIBENZOYL-ALPHA-ALPHA-DIANTHRIMIDES. WILLIAM A. ADAMSON and ALEXANDER J. WURTZ, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 9, 1929. Serial No. 377,072. 4 Claims. (Cl. 260—60.)

1. The process of producing dibenzoyl-diamino-alpha, alpha-dianthrimides which comprises condensing a benzoyl amino-amino-anthraquinone with a benzoyl amino-chloro-anthraquinone in the presence of an alkali-metal carbonate as a condensing agent.

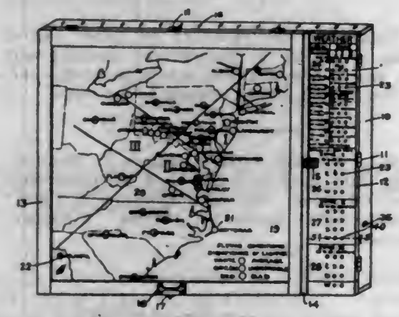
1,884,499. ANIMAL TRAP. THOMAS H. ALSTON, Pagaso Springs, Colo. Filed Oct. 15, 1930. Serial No. 488,928. 1 Claim. (Cl. 43—93.)



A trap comprising a horizontal base frame having end bars, side bars integral with said end bars, and a flat horizontal transverse bar extending between and integral with the central portions of said side bars, said transverse bar lying wholly within the zone surrounded by said end and side bars, upstanding posts secured to the central portions of said end bars, two U-shaped jaws pivoted to said posts and shaped to overlie said end and side bars of the base frame, two double-arm springs

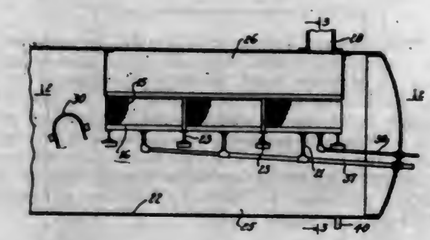
projecting outwardly in opposite directions from said end bars, the upper ends of said springs having openings to surround said posts when the trap is set and to surround the ends of the jaws when the trap is sprung, the lower ends of said springs having openings through which said posts pass, a trigger plate overlying said transverse bar and pivotally mounted on one end of the same, a horizontally slidable latch pin pivotally connected with said trigger plate to overlie one of said jaws to hold the latter set, and a guide projecting upwardly from said one end of said transverse bar and slidably receiving said latch pin.

1,884,500. MAP. JOSEPH B. ANDERSON, U. S. Navy. Filed Oct. 9, 1931. Serial No. 567,867. 6 Claims. (Cl. 40—130.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



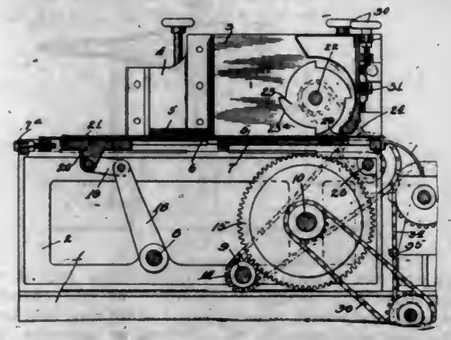
2. A weather map comprising a cabinet having a translucent member forming a portion thereof, a map associated with said member, groups of various colored lights, each light signifying a condition of the weather, positioned in said cabinet in under designated localities on the map for indicating by the different colors of the lights the general weather conditions, such as good, average or bad, of the localities, means for operating said lights whereby only one light of each group can be lit at one time, and a panel juxtaposed to said member, said panel having means to indicate for designated areas detailed weather conditions and flying information.

1,884,501. FLUID SEPARATOR. ROGER W. ANDREWS, Aspinwall, and GRANT D. BRADSHAW, Beaver, Pa., assignors to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed June 28, 1929. Serial No. 374,344. 3 Claims. (Cl. 183—109.)



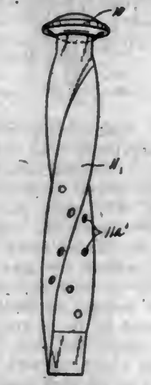
1. A fluid purifier system comprising a steam main, a drum connected in said main, said drum having an inlet, and an outlet, a plurality of fluid purifiers mounted in a row in said drum between said inlet and said outlet, said outlet being adjacent one end of the row, each of said purifiers having a fluid outlet in its upper wall, means mounted in said drum for guiding to said purifiers fluids passing into said drum through said drum inlet, said purifier outlets being of unlike sizes and decreasing in relative size as said drum outlet is approached, whereby the fluid is more evenly distributed through the purifiers, and means mounted in said drum forming a restricted passageway from said purifier outlets to the drum outlet.

1,884,502. MEANS FOR PASTING BATTERY PLATES. CHESTER M. ANGELL, Chicago, Ill., assignor to Vesta Battery Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 30, 1927. Serial No. 243,540. 3 Claims. (Cl. 226—39.)



2. In a battery grid pasting machine, means for applying paste to a grid, means to limit the quantity of paste in the grid to an amount just sufficient to fill the grid, and convex rollers having the surfaces thereof in contact for kneading said paste into the interstices of said grid whereby said paste will have concave surfaces between the ribs of said grid.

1,884,503. SPIKE, TWISTED OR THREADED. GEORG B. ANTHONISEN, Minneapolis, Minn. Filed Oct. 4, 1929. Serial No. 397,234. 4 Claims. (Cl. 85—20.)

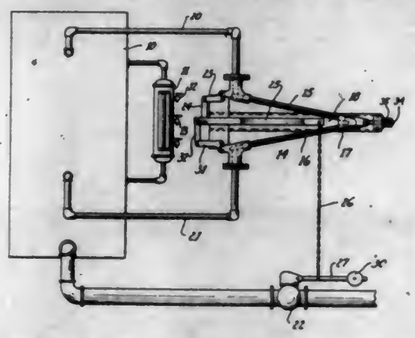


2. A spike comprising a head, a shank extending therefrom, said shank being of uniform cross section throughout substantially all of its length and substantially rectangular in cross section, said shank being twisted to form a helix of less than 360 degrees, the twist of said helix increasing from one point on said spike to a point closely adjacent the head of said spike.

1,884,504. FEED WATER REGULATOR. CLIFFORD HARRY ARMSTRONG, North Finchley, England. Filed Sept. 5, 1929. Serial No. 390,447. 5 Claims. (Cl. 122—451.1.)

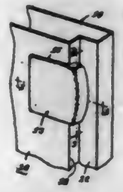
1. A boiler system comprising a boiler, a feed water valve and a feed water regulator for controlling the flow of water to the boiler through said valve in accordance

with the water level elevation in the boiler, said regulator comprising a V-shaped tube with its branches lying in the same vertical plane, communicating means connecting the outer ends of the branches with the boiler at two spaced points, and operative means connecting each of said ends with said valve, said means comprising a floating lever, each of said ends being operatively connected



with one end of said lever, and the other end of the lever projecting towards the junction of said branches and being operatively connected with said valve, said lever being positioned between the branches of said tube, the inner end of said lever being mounted substantially over said feed water valve and the outer end being positioned in substantially the same plane as the ends of said tubes.

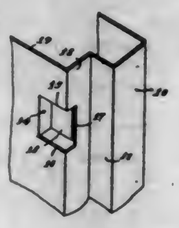
1,884,505. DOOR BUMPER. JAMES T. ATWOOD, Rockford, Ill. Filed Sept. 11, 1931. Serial No. 562,273. 12 Claims. (Cl. 16—86.)



1. In a door pillar, comprising a hollow metallic frame member formed to provide a door jamb having a front and a side wall, and a bumper socket provided in said frame member opening partly from the front and partly from the side wall of said jamb, said socket being open at its upper and lower ends for communication inside the frame member, the socket being defined by a back wall and a side wall within the frame member substantially parallel respectively with the front and side walls of the door jamb, a bumper of resilient material comprising a body arranged to fit in the socket and project forwardly therefrom from the door jamb, the body of said bumper being in abutment with the back and side walls of the socket to support the bumper for compression lengthwise and transversely thereof, and top and bottom projections on said body arranged to project through the open upper and lower ends of the socket on the inside of the frame member for abutment with the inside of the front and side walls of the door jamb, the outer side face of each of said projections being inclined in inwardly diverging relation to one another for the purpose described.

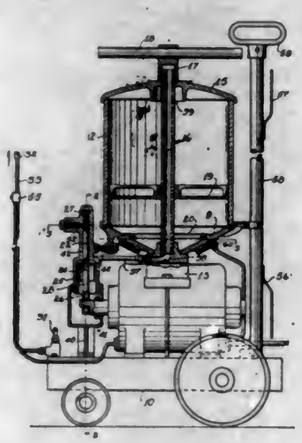
1,884,506. DOOR BUMPER. SETH B. ATWOOD, Rockford, Ill. Filed July 15, 1931. Serial No. 550,858. 4 Claims. (Cl. 296—28.)

1. In a device of the class described, a sheet metal door pillar suitably formed to provide an impact ledge and a flange extending inwardly therefrom, said pillar being provided with an opening in the ledge and extending a certain distance in said ledge laterally from said flange and a certain distance inwardly in said flange, the sheet metal of said pillar being bent laterally from



said flange into the pillar at the inner end of said opening to provide a bumper seat, integral with said flange, spaced inwardly from said impact ledge and wider than that portion of the opening in the ledge.

1,884,507. POWER PUMP. ROLLIN L. BACHER, Lakewood, Ohio, assignor to The U. S. Air Compressor Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 2, 1927. Serial No. 195,994. 4 Claims. (Cl. 221—47.1.)

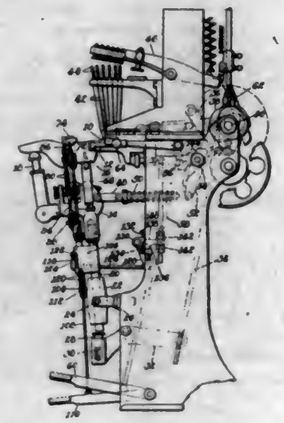


1. In a lubricant dispensing apparatus, the combination with a lubricant storage container, of an electric motor having an armature shaft, an air pump operated by the motor for forcing air under pressure into the top of the container, a lubricant discharge conduit, a booster pump in the conduit, said booster pump and air pump including reciprocating pistons, an eccentric mounted on the armature shaft for operating one of the pistons directly from the motor, and means for operating the other piston directly from the first named piston.

1,884,508. LASTING MACHINE. CHARLES MARTIN BAGSHAW, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 11, 1930, Serial No. 481,210, and in Great Britain Sept. 26, 1929. 49 Claims. (Cl. 12—4.)

1. In a lasting machine, the combination with heel-end-lasting mechanism including means for clamping an upper about the heel end of a last, of means constructed and

arranged to engage portions of the upper located forwardly of but near its heel-end portion at the opposite sides of the last and to lay them inwardly over and

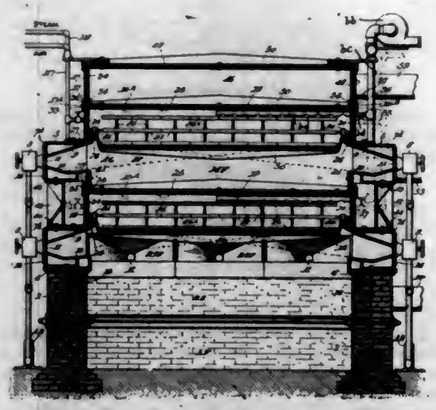


upon the outer face of a sole on the last prior to any substantial clamping action of said clamping means on the heel end of the upper.

1,884,509. PRODUCTION OF CYANOGEN CHLORIDE AND SUBSTITUTED GUANIDINES. GEORGE C. BAILEY, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 12, 1925. Serial No. 61,991. 31 Claims. (Cl. 260—125.)

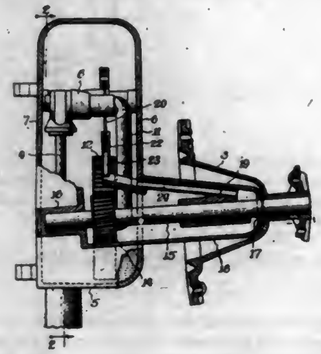
7. In the production of a substituted guanidine, a process which comprises forming cyanogen chloride continuously through the interaction of a cyanide solution and chlorine, removing any excess chlorine and entrained moisture from resulting gaseous products, and forthwith subjecting an arylamine having at least one hydrogen atom attached to the amino nitrogen to the action of the purified cyanogen chloride.

1,884,510. ORE OXIDIZING MUFFLED RETORT FURNACE. HOWARD S. BAILEY, Denver, Colo. Filed Dec. 26, 1928. Serial No. 328,524. 12 Claims. (Cl. 263—24.)



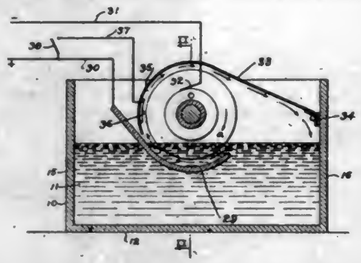
10. In a muffled-retort ore-oxidizing furnace the combination with supporting walls of retorts within said walls and flues for heating said walls and said retorts, said retorts being provided with opposite side members, and an ore-oxidizing floor member comprising a flat wide central floor portion and upwardly projecting opposite side members carrying horizontally disposed terminal members extending to the opposite side members of said retorts, and means including the horizontally disposed terminal members for supporting said floor member in operative relation to said retorts and its opposite side members.

1,884,511. WINDMILL CONSTRUCTION. JOHN SAYRES BAKER. Evansville, Wis. Filed July 31, 1930. Serial No. 471,942. 3 Claims. (Cl. 184—4.)



1. In a self-oiled windmill, the combination of a hollow casing, the lower portion of which constitutes a receptacle for oil, a spur gear mounted in the casing to turn on a horizontal axis, a wind-wheel outside of said casing, an inclined shaft carrying said wheel and projecting through and journaled in an extension of said casing, the outer end of the wheel shaft being higher than the inner end, a driving pinion gear on the inner end meshing with said spur gear, the teeth of one of said gears being spiraled to compensate for the angle between the axes thereof, means for supplying oil from said receptacle to said journal, and a drain for returning the surplus oil from said shaft journal to said oil receptacle.

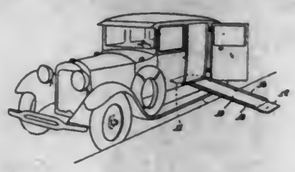
1,884,512. ELECTROPLATING METALLIC CYLINDERS. ERNEST S. BALLARD, San Francisco, Calif., assignor to Ballard Process Co., San Francisco, Calif., a Copartnership consisting of Russell B. Leech, San Francisco, Calif., and Colvin M. Reed, Burlingame, Calif. Filed Dec. 14, 1926, Serial No. 154,671. Renewed Jan. 18, 1932. 4 Claims. (Cl. 204—6.)



1. An apparatus of the class described, comprising a tank within which an electrolyte is adapted to be placed, bearings in the opposite end of the tank for receiving the trunnions of a rotogravure cylinder and supporting it with its lower portion submerged in the electrolyte, means attachable to the trunnions for rotating the same, an anode plate submerged in the electrolyte and conforming to the submerged surface of the cylinder, means for creating a

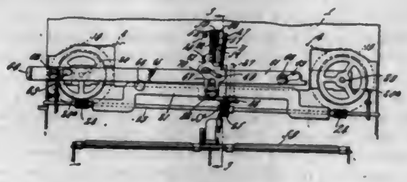
flow of electricity from the anode plate through the electrolyte and to the cylinder, and a shroud enclosing the unsubmerged portion of the cylinder whereby during rotation of the cylinder some of the electrolyte will be confined in close proximity to the cylinder and carried substantially all the way around it.

1,884,513. RAMP. WRIGHT BARCLAY, New York, N. Y. Filed June 9, 1931. Serial No. 543,182. 3 Claims. (Cl. 193—41.)



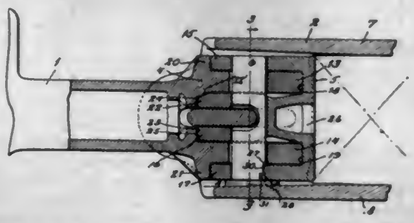
1. A ramp comprising a plurality of sections, interfitted hinged leaves carried by the respective sections, pintles connecting the interfitted leaves, a clutch head fast with one leaf, a clutch sleeve slidable on the pintle, held against rotation by the other leaf and engaging the clutch head, and a spring urging the sleeve toward the clutch head.

1,884,514. TYPEWRITER. JOHN H. BARR, Ithaca, N. Y., assignor to Barr-Morse Corporation, Ithaca, N. Y., a Corporation of New York. Filed Jan. 31, 1931. Serial No. 512,544. 19 Claims. (Cl. 197—154.)



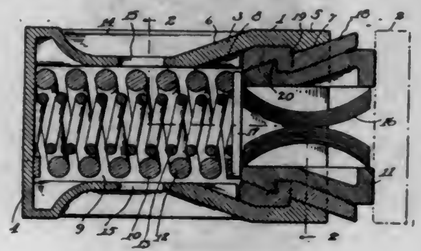
1. A typewriter comprising a ribbon, type keys, means for holding said ribbon normally out of printing position and operable by said keys to shift said ribbon into and then out of printing position at each operation of a key, ribbon reversing mechanism including a rocking feed shaft and ribbon driving gear wheels with which said shaft is alternately engaged, and means operable to shift said shaft into neutral position in which it is out of driving engagement with both of said wheels, and also operable to incapacitate the ribbon shifting means while in normal position, whereby said ribbon will remain stationary while said type keys are being operated to cut a stencil.

1,884,515. DRAFT RIGGING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Sept. 22, 1925. Serial No. 57,914. 13 Claims. (Cl. 213—69.)



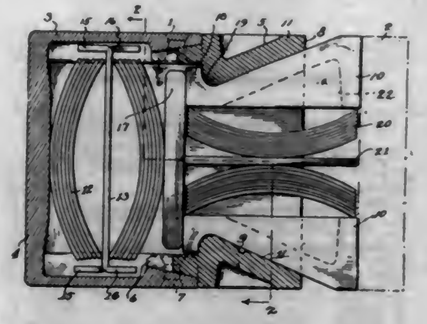
8. In a draft rigging, in combination with a yoke, an articulated coupler stem comprising members with intercalated flanges fitting between the arms of said yoke, means pivotally connecting the parts of said stem, and means formed on said pivotal means for interlocking the same directly to a single flange of one of the parts of said stem against turning and axial movement in either direction.

1,884,516. CUSHIONING MECHANISM. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Aug. 4, 1926. Serial No. 127,133. 13 Claims. (Cl. 213—30.)



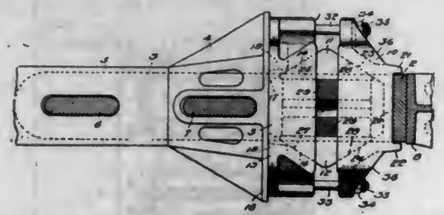
11. In a friction shock absorbing mechanism, the combination with a spring cage having a shell at the forward end thereof provided with opposed interior wedge faces; wedge shoes co-operating with the shell wedge faces; means on said shoes co-operating with the shell to limit outward movement of the shoes; a spring resistance; pressure transmitting elements between said shoes and co-operating with the spring resistance, said elements having notches providing shoulders normally in engagement with the adjacent shoes to limit outward movement thereof, said pressure transmitting elements normally extending beyond the outer ends of the shoes to initially receive the actuating pressure, said elements being movable relatively to the shoes longitudinally thereof until the shoes are engaged and moved inwardly of the shell; and means for forcing said pressure transmitting elements apart and maintaining the same in engagement with the wedge blocks.

1,884,517. CUSHIONING MECHANISM. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Sept. 27, 1926. Serial No. 138,068. 13 Claims. (Cl. 213—30.)



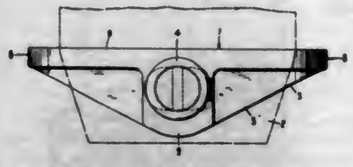
13. A cushioning device comprising a casing formed with walls and open at one end, cushioning mechanism including spring means disposed therein, said casing having means integral with, and extending inwardly from the inner surfaces of, said walls, to provide abutments engaged by said spring means, said casing being continued as an empty extension beyond said abutments to a desired length so that the device will fit in a draft gear pocket without the necessity of auxiliary filler means.

1,884,518. DRAFT RIGGING. DONALD S. BARROWS and GLENN F. COUCH, Rochester, N. Y., assignors to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Nov. 1, 1926. Serial No. 145,678. 8 Claims. (Cl. 213—30.)



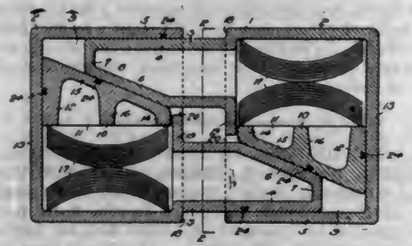
1. A cushioning mechanism comprising relatively short outer friction elements formed with end walls and portions of each extending close toward those of the other and formed with inclined friction surfaces, one of said outer friction elements being formed with indentations adapted to receive spring positioning lugs, whereby it is adapted to interchange with twin spring gear for use with railway draft rigging, intermediate friction elements positioned therebetween and formed with correspondingly inclined friction surfaces engaging the friction surfaces on the outer elements, and resilient means positioned between the intermediate friction elements to urge them apart and into engagement with the friction surfaces on the outer friction elements.

1,884,519. RETAINING DEVICE. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed May 19, 1928. Serial No. 279,085. 5 Claims. (Cl. 85—5.)



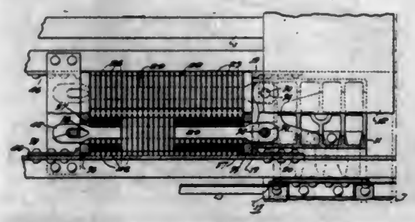
1. A retainer adapted for use with draft keys comprising a looped member fitting over the end of a key, the upper and lower portions of said loop being provided with apertures adapted to register with an aperture near the end of said key, and a pin extending in said apertures said pin being formed with a head limiting downward movement, and a bifurcated end spread in place for preventing undesired removal thereof, the aperture receiving said bifurcated end being elongated to prevent relative turning of the pin.

1,884,520. CUSHIONING MECHANISM. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Aug. 23, 1929. Serial No. 388,012. 8 Claims. (Cl. 213—30.)



1. Cushioning mechanism comprising a pair of housings, an intergral wedge portion projecting from each housing with the end normally received in the other housing, each wedge portion being laterally offset to provide a stop shoulder adapted to be engaged by a portion of the other housing to limit movement toward each other, a friction shoe in each housing cooperating with the wedge portion of the other housing, and springs in said housings acting transversely on said shoes.

1,884,521. DRAFT RIGGING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Nov. 25, 1929. Serial No. 409,662. 5 Claims. (Cl. 213—8.)

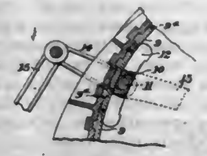


5. In railway draft rigging, draft sills slidably mounted with respect to the remainder of the underframe, a coupler, a key connecting said coupler and sills, tie rods connected to the underframe, rubber cushioning means mounted on said tie rods, followers engaging the opposite ends of said rubber cushioning means, one of said followers normally engaging a stop portion on the underframe and the other normally engaged by connecting portions on the tie rods, and lug means mounted on said sills and engaging said followers so that relative movement of said sills with respect to the underframe in either direction actuates said cushioning means.

1,884,522. CALCIUM-MAGNESIUM-CHLORIDE PRODUCT AND METHOD OF MAKING SAME. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 3, 1928. Serial No. 258,764. 4 Claims. (Cl. 23—90.)

1. The method of preparing a granular dehydrated form of a mixture of hygroscopic hydrated chlorides of calcium and magnesium which comprises intermixing a hydrous form of such chlorides with a body of a granular dehydrated form thereof in such proportion that the resultant mixture will not fuse at the subsequent drying temperature and then heating such mixture in a hot aeriform current to dehydrate the same, whereby a dry granular mixed product is made directly without material fusion thereof during the drying operation.

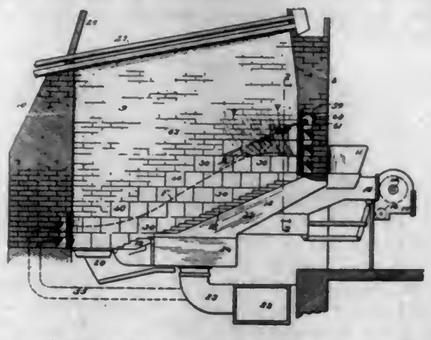
1,884,523. CRUSHING MACHINERY. WILLIAM A. BATTEY, Haverford, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1931. Serial No. 514,583. 2 Claims. (Cl. 83—11.)



1. The combination, in crushing machinery of the rotary beater type, of a casing or frame having a curved breaking surface, a scraping blade disposed within said casing and having end connecting portions; the walls of said casing having curved slots for the passage of said

end connecting portions, arms pivotally connected at one end to the casing and at the opposite end to said scraping blade, and means for moving said arms whereby said scraping blade may be swung across the curved breaking surface.

1,884,524. FURNACE. HENRY HOWELL BAUMGARTNER, Belleville, N. J., assignor to Drake Non-Clinkering Furnace Block Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 357,997. 2 Claims. (Cl. 72—101.)



2. A hollow furnace wall having an outer wall portion and an inner facing, both built of refractory bricks, the facing comprising a number of bricks having internal lugs, and means to space and anchor the facing with relation to the outer wall portion, comprising a number of bricks projecting from the outer wall across the space into abutting contact with the wall facing, the lugs and bricks being in mutual engagement and vertical alinement to afford vertical air passages in the wall interior, and metal ties resting on top of such bricks, each having an inner head in embedded engagement with the wall facing, and an outer head embedded engagement with the outer wall portion.

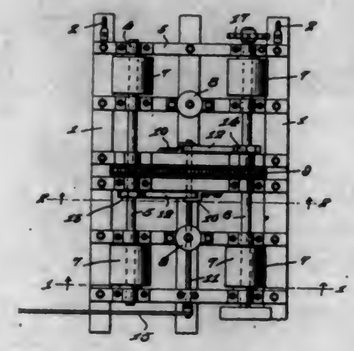
1,884,525. SAFETY PIN. LEOPOLDO L. BAUTISTA, Chicago, Ill. Filed Feb. 17, 1932. Serial No. 593,668. 5 Claims. (Cl. 24—156.)



1. A safety pin of the class described having a body, a pin member on the body having a point, spring means engaging the pin member and urging the pointed end thereof into the body, and retaining means engaging the pin and forming part of said spring means.

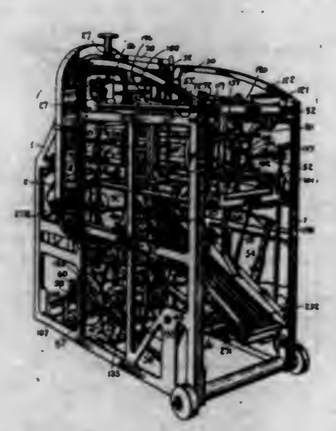
1,884,526. POWER TAKE OFF. ROBERT S. BEATTY, Toms River, N. J. Filed Aug. 18, 1931. Serial No. 557,887. 1 Claim. (Cl. 74—106.)

A power take off including skids, a frame comprising transversely arranged spaced beams which are fixed on the skids, spaced longitudinally arranged shafts journaled in bearings on the beams and having fixed rollers thereon adjacent the ends thereof, said rollers designed to receive thereon the driven wheels of a truck or like motor operated vehicle, means for preventing the turning of either of the rollers when the wheels of the vehicle are arranged thereon and said means being releasable when the wheels are positioned on the rolls, a belt or chain drive element on one or both of the shafts, and vertically disposed rollers journaled on the beams to contact with the inner sides of the driven wheels of the vehicle, said shaft stopping means comprising sprocket wheels fixed on the shafts and an endless chain trained therearound, ratchet wheels fixed on the shafts, brackets supported upon the inner beams, oppositely directed upwardly inclined dogs having their active ends disposed above and normally out of engagement with the ratchet wheels, a shaft journaled through the



brackets and to which the inclined dogs are fixedly secured, and a lever connected with the shaft operable for turning the said shaft to brings either one of the dogs to engage with its ratchet wheel and to bring the second dog further away from the ratchet wheel to be engaged thereby.

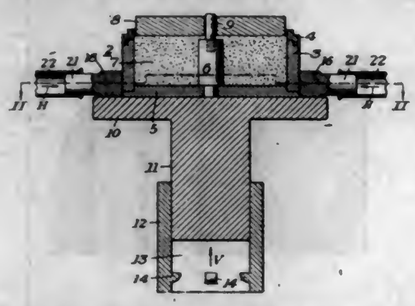
1,884,527. PITTING MACHINE. JOSEPH P. BEM, Fresno, Calif., assignor to Pacific Pitting Machine Company Inc., Fresno, Calif., a Corporation of California. Filed Feb. 4, 1929. Serial No. 337,343. 41 Claims. (Cl. 146—28.)



1. In a machine for operating on fruit, devices for holding a fruit from diametrically opposite points, means for advancing the fruit thus held in relation to an operating instrumentality, and means for moving one of said devices outwardly from the fruit and then sidewise out of the path of the fruit.

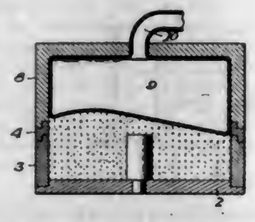
1,884,528. FORMING ARTICLES FROM GRANULAR MIXES. RAYMOND C. BENNER, PRESCOTT H. WALKER and WILLIAM G. SOLEY, Niagara Falls, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Jan. 28, 1929. Serial No. 335,519. 22 Claims. (Cl. 25—41.)

4. The method of forming articles from mixes of granular material and bond, which comprises placing the mix in a mold and jolting it in a plurality of directions so as to produce substantial uniformity of distribution of the mix



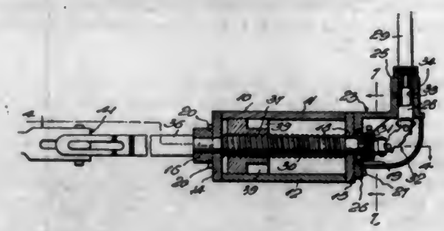
therein, and thereafter striking off the excess mix and applying a final forming pressure to compress the mix remaining in the mold.

1,884,529. CONSOLIDATING GRANULAR MATERIALS. RAYMOND C. BENNER, PRESCOTT H. WALKER and WILLIAM G. SOLEY, Niagara Falls, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Jan. 28, 1929. Serial No. 335,520. 12 Claims. (Cl. 25—56.)



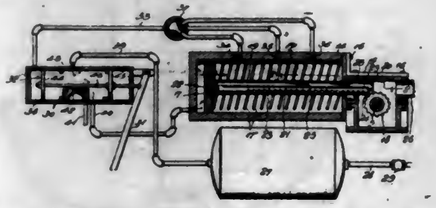
1. The method of consolidating a loose mix of granular material and bond preparatory to finally pressing the same to shape, which comprises applying to a surface of such mix a pressure distributed substantially uniformly over the entire area of such surface.

1,884,530. BRAKE ACTUATOR. HENRY MARION BENTLEY, Santa Rita, N. Mex., assignor, by direct and mesne assignments, to Bentley Brake Corporation, a Corporation of New Mexico. Filed Apr. 25, 1931. Serial No. 532,950. 2 Claims. (Cl. 74—89.)



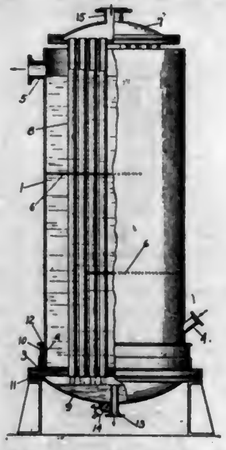
1. A brake actuator comprising a rectangular casing having parallel top and bottom walls, parallel side walls, and end walls provided with alined bearings, one of said end walls having openings at opposite sides of its bearing, a longitudinal screw in the casing having its ends rotatably mounted in said bearings, means whereby said screw may be rotated, a nut in the casing through which said screw is threaded, said nut having flat sides slidably contacting with said top, bottom and side walls and having peripheral notches alined with said openings, two pull links passing slidably through said openings and notches and having heads at their inner ends abutting one end of said nut, said heads having flat sides slidably contacting with said top, bottom and side walls, and means whereby said screw may be rotated.

1,884,531. PNEUMATIC BRAKE ACTUATOR. HENRY MARION BENTLEY, Santa Rita, N. Mex., assignor, by mesne assignments, to Bentley Brake Corporation, a Corporation of New Mexico. Filed Apr. 25, 1931. Serial No. 532,951. 8 Claims. (Cl. 188—151.)



6. In an actuating mechanism, a piston, a cylinder therefor, and pressure-admitting and exhaust means for said cylinder, embodying manually settable means for automatically cutting off pressure admission to and simultaneously effecting pressure exhaust from said cylinder when the piston has advanced to any of a plurality of predetermined positions in the cylinder.

1,884,532. HEAT EXCHANGER. CHARLES F. BERAN, Tuckahoe, N. Y., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 21, 1931. Serial No. 531,672. 3 Claims. (Cl. 257—203.)

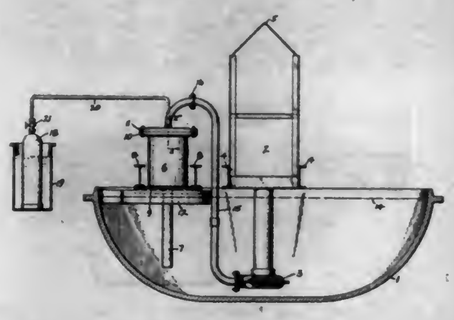


1. In a heat exchanger, the combination of a shell having an inlet and outlet for a cooling liquid, tubes within said shell for the passage of fluid to be cooled, a tube plate upon which said shell rests and to which the lower ends of the tubes are joined, another shell surrounding the first named shell and spaced therefrom to form an annular space, and a sealing medium in said annular space and covering the tube plate.

1,884,533. APPARATUS FOR DEZINCING LEAD. JESSE OATMAN BETTERTON, Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed May 7, 1926, Serial No. 107,325. Renewed Feb. 27, 1929. 1 Claim. (Cl. 266—34.)

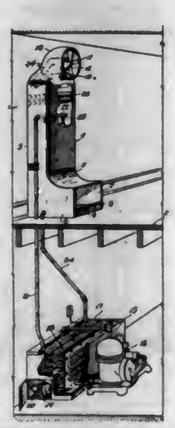
Apparatus for the purification of metals, comprising a framework adapted to be supported by the rim of a ket-

tie containing a bath of molten metal, a motor supported by said framework, a pump depending from said framework and driven by said motor, said pump being adapted to be immersed below the surface of the bath, a reaction cylinder supported by said framework, said reaction cylinder having a detachable head, a connecting pipe



having a flanged union connecting the discharge end of said pump with said detachable head, means connected to the detachable head for supplying a reactive gas to the reaction cylinder, a discharge pipe depending from the base of the reaction cylinder and adapted to be immersed in the bath to a substantial extent.

1,884,534. PORTABLE AIR-CONDITIONING DEVICE. HARRY D. BETZ, Kansas City, Mo. Filed Oct. 13, 1927. Serial No. 225,972. 4 Claims. (Cl. 62—129.)



1. An air conditioning device consisting of an elongated upright casing having laterally directed openings at the top and bottom of said casing, means in the upper part of the casing for directing a spray of liquid downwardly, said means being adapted to be connected to a source of water under pressure, a fan in the casing for drawing air therethrough, and means below the lower opening for collecting and leading off the water falling from said spray.

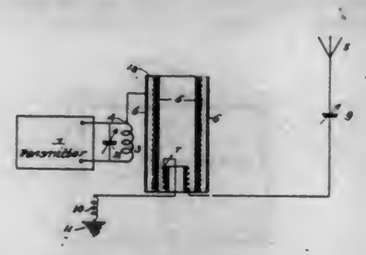
1,884,535. METHOD OF MAKING GRIDS. HENRY L. BEYER, Newark, N. J. Filed May 7, 1931. Serial No. 535,719. 5 Claims. (Cl. 140—107.)

1. The method of making grids for electronic tubes and the like, comprising simultaneously weaving two sheets of wire mesh, weaving the sheets together at predetermined intervals, cutting the sheets along the portions where they are woven together to provide a plurality of relatively long



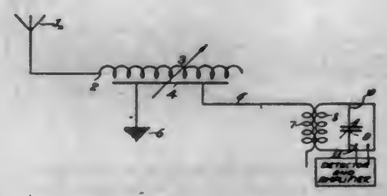
tubes, then cutting the tubes into lengths desired for grids, then spreading the tubes into substantially cylindrical shape.

1,884,536. RADIO SIGNALING. WILLIAM R. BLAIR and LOUIS COHEN, Washington, D. C. Filed Nov. 24, 1928. Serial No. 321,688. 4 Claims. (Cl. 250—17.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



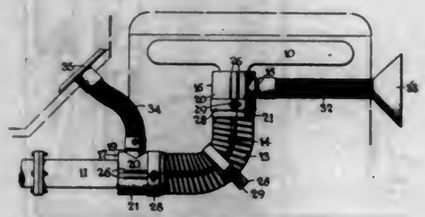
1. In a system for the transmission of radio signals comprising an oscillation energy source associated with an oscillating circuit, a wave conductor and an antenna, said wave conductor comprising a wave coil and a metal shield in proximity thereto, said oscillating circuit being connected at one point to said metal shield, said wave coil being open at both ends, a coupling coil which is coupled to said wave coil being connected in series in said antenna.

1,884,537. RADIO SIGNALING. WILLIAM R. BLAIR and LOUIS COHEN, Washington, D. C. Filed Jan. 15, 1929. Serial No. 332,624. 5 Claims. (Cl. 250—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



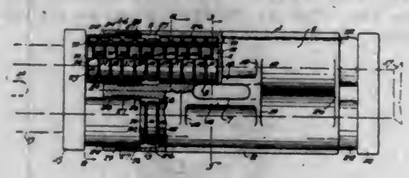
1. In a system for the reception of radio signals comprising an antenna, a wave conductor and a receiving circuit, said wave conductor consisting of a solenoidal coil placed in proximity to a grounded metal plate, the antenna being connected to one terminal of the coil of said wave conductor, and the grounded metal plate of said wave conductor being connected to one terminal of the primary of said receiving circuit system, the secondary of said receiving circuit being operatively associated with detecting and amplifying means.

1,884,538. AUTOMOBILE HEATER. GEORGE E. BLAKE, East Aurora, N. Y., assignor to Forsythe Metal Goods Company, Inc., East Aurora, N. Y., a Corporation of New York. Original application filed Mar. 21, 1929, Serial No. 348,798. Divided and this application filed Apr. 30, 1930. Serial No. 448,481. 5 Claims. (Cl. 257—241.)



1. In combination with means for creating a current of a medium to be heatel, a heater of the character described, comprising a flexible metal tubing body portion split longitudinally at at least one side to form two sections adapted to be joined together, said tubing being formed of a helically wound metal strip, the several convolutions thereof being interlocked at their edges, the break between said sections extending longitudinally from one end to the other, means for enclosing the ends of said joined sections and means for conducting said medium to be heated through said joined sections.

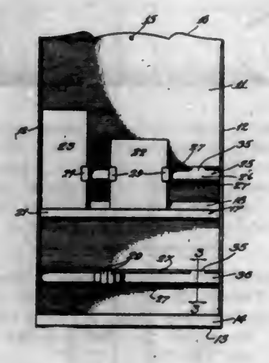
1,884,539. DRAFT GEAR. EMIL H. BLATTNER, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,746. 4 Claims. (Cl. 213—22.)



3. An integral housing adapted for cushioning mechanism and formed with pairs of twin-arranged pockets separated by a longitudinally extending partition wall, a pair of said pockets opening in one direction and another pair opening in the opposite direction, said partition wall being formed with a slot extending therethrough and disposed substantially midway between the ends of said housing, the inner ends of said pockets being defined by transverse walls extending from approximately the mid portions of the slotted part of said partition.

1,884,540. DISPLAY DEVICE. WILLIAM I. BLOCK, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 17, 1928. Serial No. 312,982. 4 Claims. (Cl. 211—50.)

1. The combination of a backing plate having its lower edge turned forward and upward to form a channel, a slide track having its top and bottom to form retaining channels, and spacers adjustable to any place on said



track and having rear walls engaged under said channels and side walls extending forward, and front walls extending sidewise at a distance from said backing plate.

1,884,541. CLINKER EXTRACTOR. CARL BLOHM, Jr., Silvis, Ill. Filed Oct. 15, 1931. Serial No. 569,078. 1 Claim. (Cl. 294—11.)



A clinker extractor comprising a tube having a circular bore, forward and rear caps threaded on the tube, the forward cap having a circular opening, and carrying a lateral jaw, the rear cap having a polygonal opening, a slide of polygonal cross section extended through the body and the caps and held against rotation in the opening of the rear cap, the slide having a lateral jaw cooperating with the jaw of the forward cap, the side being guided for longitudinal movement in the circular opening of the forward cap, as well as in the polygonal opening of the rear cap, the circular opening permitting the forward cap to be rotated on the slide and threaded on the body, independently of the slide and the rear cap.

1,884,542. MAKING ARSENICAL INSECTICIDES. JOHN F. BLYTH, Newark, and CARLETON ELLIS, Montclair, N. J., assignors to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Oct. 24, 1927. Serial No. 228,491. 10 Claims. (Cl. 167—15.)

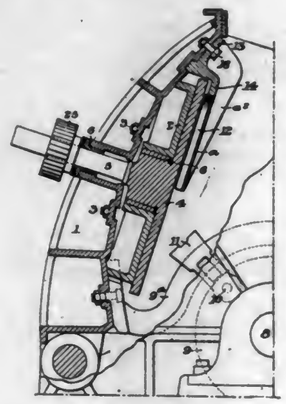
10. In the production of arsenicals, the herein described process which comprises reacting together, in the presence of aqueous liquid in amount sufficient to promote reaction, calcareous material and an aqueous liquid containing white arsenic, in a substantially colloidally fine state of division, such liquid containing an organic protective colloid, the calcareous material and aqueous liquid being in such proportion as to form a wet or pasty mass, allowing reaction to go on, and thereafter incorporating quick lime in such amount as to form a dry-appearing material of low water-soluble arsenic content, adapted for use as an insecticide.

1,884,543. COLLAPSIBLE TUBE DISPENSING MEANS. CHARLES BOLZ, Jersey City, N. J. Filed Mar. 27, 1931. Serial No. 525,807. 2 Claims. (Cl. 221—60.)



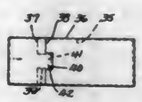
2. A collapsible tube having an open end, a bendable element carrying an ear arranged over, secured to and closing the said open end of the tube, and a key which includes a cross-sectionally round shank and a curved bit extending angularly from the shank to be passed through the ear.

1,884,544. CRUSHING MACHINERY. GEORGE W. BORTON, New Lisbon, N. J., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,398. 14 Claims. (Cl. 83—11.)



1. The combination, in crushing machinery, of a rotor structure having hammers, a rotatable breaking surface movable in a single plane at right angles to the plane of movement of said rotor structure and against which material undergoing crushing may be thrown by the action of said hammers, and a scraper blade mounted for cooperation with said rotatable breaking surface.

1,884,545. CIGARETTE PACKAGE AND OPENING DEVICE THEREFOR. RAOUL LOUIS BOUTIN, Newburyport, Mass. Filed July 6, 1931. Serial No. 548,922. 3 Claims. (Cl. 229—51.)

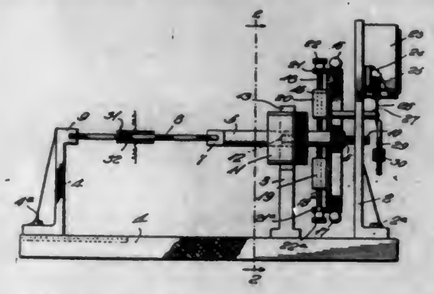


1. A cigarette package including an inner wrapper completely enveloping the contents of the package, and an outer wrapper closely enveloping the inner wrapper, the inner wrapper and outer wrapper having slits formed in adjacent end walls thereof, said slits being irregular to form superimposed alined tabs integral with the individual wrappers and extending in the same direction, the slits having portions adjacent to the tabs and transverse to the package, the tab of the outer wrapper having its end projecting beyond the end of the inner tab and the transverse portions of the slits being correspondingly spaced with respect to each other.

1,884,546. PAPER MAKING TECHNIQUE. PAUL F. BOVARD and THEODORE D. BECKWITH, Berkeley, Calif. Filed Nov. 14, 1931. Serial No. 575,148. 12 Claims. (Cl. 92—21.)

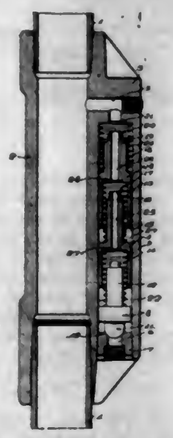
1. The improvement in the process of making paper stock which comprises introducing chloramine to the water used in making the paper stock.

1,884,547. ELECTRICAL GENERATING SYSTEM. WARD E. BOWER, Washington, D. C. Filed Mar. 9, 1929. Serial No. 345,873. 5 Claims. (Cl. 250—36.)



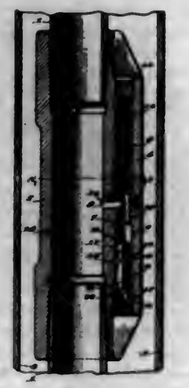
1. In a system for generating alternating current, a piezo electric crystal element, a fixed support holding one end of said piezo electric crystal element in fixed position, a rotatable element clamping the end of said crystal element opposite the end held in fixed position, a support for rotatably supporting said rotatable element, electromagnetic means for applying torsional moment to said rotatable member successively in opposite senses and causing said rotatable element to rotate with oscillations of small amplitude, and electrodes attached to said piezo electric crystal element for delivering electrical energy therefrom when torsion is applied to said crystal by said rotatable element, said electrodes being connected to said electromagnetic means, whereby said electromagnetic means sustains regular periodic vibrations of said crystal of frequency corresponding to the natural frequency of said crystal.

1,884,548. AUTOMATIC STAGE LIFT FLOWING APPARATUS FOR WELLS. ALEXANDER BOYNTON, San Antonio, Tex. Filed May 25, 1927. Serial No. 194,122. 11 Claims. (Cl. 137—111.)



1. A device of the character described comprising a valve body affording a passageway, and a plurality of telescoping valve elements of which one is solid and another hollow and open from end to end situated in the passageway being subject to relative shifting movement under the influence of fluid flowing through the passageway and through said hollow valve element thereby to perform a throttling action upon the fluid volume.

1,884,549. STAGE LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed Oct. 19, 1927. Serial No. 227,301. 5 Claims. (Cl. 137—111.)



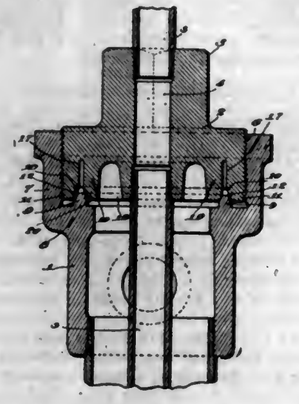
1. A valve for well flowing apparatus comprising a body having a passage with a seat adjoining each end, a constriction intermediate the seats, and a plunger operable in the passage having a neck extending through the constriction with a tapering body co-acting with one part of the constriction, and heads at the extremities of the plunger co-acting with the adjoining seats to close the passage at the extremities of high and low pressure differentials at one side of the valve body.

1,884,550. STAGE LIFT FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed Nov. 4, 1927. Serial No. 231,073. 11 Claims. (Cl. 137—111.)



1. A valve comprising a body having a chamber and an outlet port for the passage of fluid, a plane-ended plunger movable in the chamber by fluid flowing toward the port and a valve element adjacent to said end of the plunger, being capable of rolling upon that end into sealing-off engagement with the port when in proximity thereto.

1,884,551. CASING HEAD. ALEXANDER BOYNTON, San Antonio, Tex. Filed Dec. 6, 1927. Serial No. 238,132. 8 Claims. (Cl. 285—22.)



1. A casing head internally subject to pressure fluid exceeding the external pressure fluid exceeding the external pressure upon the exterior, said casing head comprising a main body carrying a tongue, a tubing carrier, and means by which the carrier is secured upon the main body, said carrier having a groove receiving the tongue and rendering that portion of the carrier flexible where it is secured upon the main body thus ensuring tight engagement as the carrier is actuated toward said tongue, said carrier having a second groove defining a second flexible portion upon which internal fluid pressure is exerted to effect a tight joint at the tongue and thus prevent the escape of pressure fluid.

1,884,552. CRIB. JOHN H. BRADLEY, Philadelphia, Pa. Filed May 29, 1930. Serial No. 456,873. 5 Claims. (Cl. 5—100.)



1. The combination, in a sliding side crib, of a crib frame including a mattress support having side rails and vertical rods at the ends of said frame, a vertically sliding side frame mounted on said rods, a pivotally mounted latch hung from the side rail of the mattress support adjacent said sliding side frame, an arm arranged below the mattress support at right angles with and connected to said sliding side frame and pivoted on the crib at a point remote from said side frame and serving to hold the latter in the upper position when said arm is supported by the

latch; said latch being laterally movable to release said arm whereby the side frame may drop, and a spring linked to said side frame and connected to a stationary part of said crib serving to arrest such lowering movement of said side frame whereby the same may halt gradually; said latch having a forward projection for engagement by the knee whereby such lowering of the side frame may take place without handling the latter.

1,884,553. COMPOSITION INTENDED FOR COATING, DECORATING, AND PRINTING WOOD, METAL, PAPER, CLOTH, AND OTHER SURFACES. THEODORE F. BRADLEY, Westfield, N. J. Filed Apr. 11, 1927. Serial No. 183,011. 15 Claims. (Cl. 134—79.)

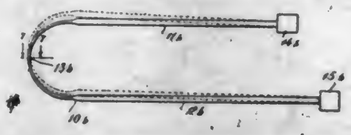
1. In compositions intended for coating, decorating and printing wood, metal, paper, cloth and other surfaces, a medium comprising nitrocellulose, a composite volatile solvent vehicle therefor, a resin, a plasticizer, a pigment, and a modicum of wax greatly reducing evaporation of the solvent vehicle at room temperature while permitting free escape thereof at slightly elevated temperatures; said proportion of wax being below a surface-defacing concentration whereby the composition dries to a smooth glossy surface.

1,884,554. PROCESS OF MAKING DEPOLARIZERS. ARTHUR J. BRIGGS, Syracuse, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Original application filed Mar. 31, 1922, Serial No. 548,420. Divided and this application filed June 15, 1927. Serial No. 199,079. 4 Claims. (Cl. 18—59.)



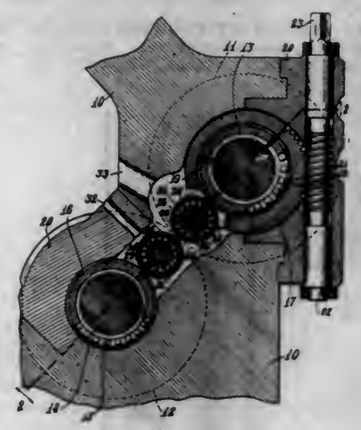
2. Process of making depolarizing bobbins which comprises shaping the depolarizing material into an elongated body having a central hole therethrough; applying a protective reinforcement around the lateral surface of said body; severing said body at intervals in its length so as to produce a plurality of laterally reinforced and centrally apertured sections; and then inserting electrodes into the apertures of such sections.

1,884,555. SCALE SHEDDING HEAT TRANSFER APPARATUS. STANLEY BROWN, Garden City, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed July 15, 1930. Serial No. 468,013. 10 Claims. (Cl. 257—2.)



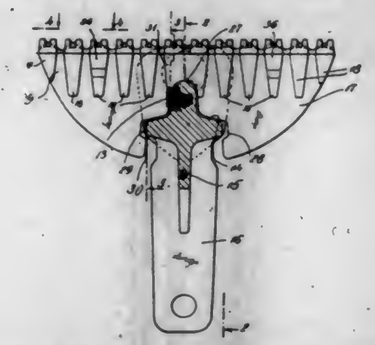
1. In a heat exchanger, a tube comprising a plurality of straight portions and at least one curved portion, each straight portion being serially joined through the medium of a curved portion of flattened cross section with at least one other straight portion of substantially different length, and means for fixedly mounting each end of said tube, whereby with changes in temperature and pressure a cooperative warping of the tube is brought about by the differences of elongation of the straight portions and the effort of the curved portion to increase its radius resulting in a general deformation of the tube.

1,884,556. PRINTING PRESS. MARTIN W. BRUESHABER, River Forest, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1929. Serial No. 395,794. 17 Claims. (Cl. 101—219.)



1. A printing press, comprising in combination a printing couple at least one member of which is in the form of a cylinder, a shaft on which said cylinder is mounted, anti-friction bearings for said shaft for supporting the cylinder pressed into operative impression relationship with the other member of the couple, and other anti-friction bearing means for applying pressure to said cylinder in the opposite direction from that in which pressure is applied by said first named bearings serving to hold the shaft against the working faces of said first named bearings.

1,884,557. FUEL GRATE. JOHN J. BUCKLEY, Boston, Mass., assignor, by mesne assignments, to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 8, 1929. Serial No. 338,852. 24 Claims. (Cl. 126—180.)



1. A grate bar comprising a supporting member provided with trunnions at its ends, and of substantially uniform overall width from end to end, a plurality of crossbars mounted on the supporting member and having a limited freedom of movement with reference thereto, and parts on each cross-bar lying on opposite sides of the axis thereof and normally free of said supporting member and spaced to permit said parts to clear said member when the cross-bar is removed therefrom, said parts having projections positioned to engage the member alternately to secure the cross-bar thereto as said member is rocked in opposite directions and said cross-bar moves relatively to said member in its rocking movement.

1,884,558. PULVERULENT PHOSPHORUS PENTOXIDE. WILLIAM S. CALCOTT, Penns Grove, N. J., and HARRY H. REYNOLDS, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 22, 1929. Serial No. 387,786. 3 Claims. (Cl. 252—25.)

1. A non-gumming dehydrating agent consisting of a pulverulent mixture of phosphorus pentoxide and charcoal.

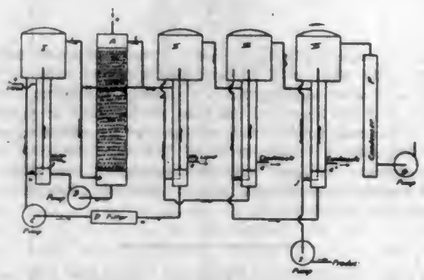
1,884,559. GUM INHIBITOR. WILLIAM S. CALCOTT, Penns Grove, N. J., and IRA E. LEE, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 25, 1930. Serial No. 438,896. 12 Claims. (Cl. 44—9.)

1. Gasoline otherwise capable of gumming and containing 0.001 to 0.1% of creosole.

1,884,560. HOSIERY. WILLIAM MCC. CAMERON, New York, N. Y., and FREDERICK J. WILLIAMS, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 1, 1927. Serial No. 237,119. 2 Claims. (Cl. 66—172.)

1. Knitted hose containing in at least part of its length simple highly twisted yarn of continuous textile filaments of organic derivatives of cellulose having 15 to 17 turns per inch.

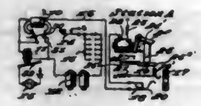
1,884,561. PROCESS FOR THE RECOVERY OF AMMONIA FROM FERMENTATION MASHES. LEONARD E. CARLSMITH, BENJAMIN C. BOECKELER, and IGNACE J. KRCHMA, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Sept. 25, 1930. Serial No. 484,370. 10 Claims. (Cl. 23—198.)



1. In the production of ammonia and other useful products from a dilute aqueous solution of ammonium salts, the steps which comprise adding to said solution a non-volatile base in sufficient quantity to liberate the ammonia and form the corresponding salts of the non-volatile base, passing the resulting solution through a scrubber in contact with the vapors resulting from the partial concentration of said solution after leaving said scrubber, condensing the vapors leaving said scrubber whereby the ammonia is obtained in aqueous solution, and further concentrating the partially concentrated solution whereby the salts of the non-volatile base are obtained in concentrated solution.

10. In a process for the recovery of ammonia and salts of aliphatic acids from ammonia-neutralized fermentation liquor, the steps which comprise adding to said liquor a non-volatile base in sufficient quantity to liberate the ammonia and form the aliphatic acid salts of the non-volatile base, passing said liquor through a scrubber in contact with the vapors from the first effect of a multiple effect evaporator, partially concentrating the liquor leaving the scrubber in the said first effect of the multiple effect evaporator, filtering the partially concentrated liquor to remove insoluble impurities, and further concentrating the partially concentrated liquor in one or more succeeding effects of the multiple effect evaporator whereby the ammonia is obtained in aqueous solution as the condensate from the second effect and the aliphatic acid salts of the non-volatile base are obtained in concentrated solution in the last effect.

1,884,562. SIGNALING SYSTEM. JOHN O. CARR and ABRAHAM S. BENJAMIN, Chicago, Ill., assignors to The Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1930. Serial No. 456,207. 14 Claims. (Cl. 178—71.)

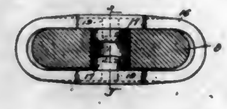


1. In a telegraph system, a first signaling line, a second signaling line, a repeater interposed therebetween comprising a pair of relays individual to each of said signaling lines, a pair of windings in each of said relays one of said windings of one of said relays being connected in series with its associated signaling line, means including circuit connections controlled by said one relay for operating said second relay and means including circuit connections controlled by said one relay for preventing operation of said other relay associated with said other signaling line.

1,884,563. MANUFACTURE OF PRESSED OR FILTERED WOOD PRODUCTS. FRANCIS L. CARSON, San Francisco, Calif., assignor to The Pacific Lumber Company, San Francisco, Calif., a Corporation of Maine. Filed Jan. 7, 1931. Serial No. 507,297. 16 Claims. (Cl. 92—54.)

1. The process of producing fibrous boards, sheets or shapes which comprises introducing shredded raw vegetable fibers into a solution containing soap and starch and forming a board, sheet or shape of any desired thickness.

1,884,564. RETAINING DEVICE. HOWARD T. CASEY and CHARLES P. NOSER, Rochester, N. Y., assignors to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Jan. 8, 1927. Serial No. 158,658. 9 Claims. (Cl. 85—5.)

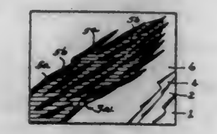


1. A retainer adapted for use with draft keys comprising an integral closed resilient loop relatively wide at its central portion and tapered toward the ends thereof, said loop conforming approximately in inner dimensions with the end portion of a draft key, provided with a lug disposed intermediate the ends thereof, adapted to engage in a corresponding pocket in said key, and adapted to be forced over the end portion thereof and held in place by its own resiliency.

1,884,565. GRAINING PROCESS. LLOYD V. CASTO, Detroit, Mich., assignor to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 17, 1929. Serial No. 333,048. 8 Claims. (Cl. 101—211.)

1. The process of simulating natural grain pattern effects on a base having a hard surface, comprising, apply-

ing a ground color coating to such surface, preparing a plate or roll, by hand copying a general design from the original pattern corresponding in general to the darker design portions of such pattern, using the copy in the photographic chain of steps necessary to etch the plate or



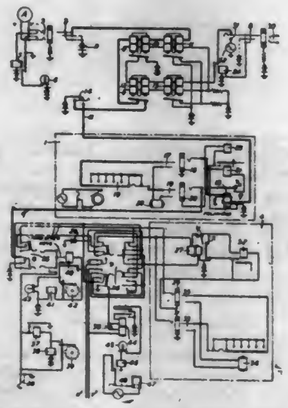
roll, preparing another plate or roll photographically and by etching, but using a photograph taken from the actual pattern design to be reproduced to distinctly copy the darker grain effects, and using said plate or rolls, one after the other, to effect successive imprints over the ground color.

1,884,566. GRAINING PROCESS. LLOYD V. CASTO, Detroit, Mich., assignor to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 16, 1930. Serial No. 444,882. 5 Claims. (Cl. 101—211.)



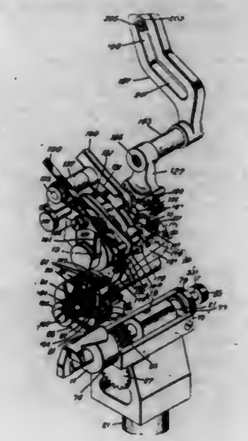
4. The method of reproducing wood grain effects on suitable bases, comprising, treating the base to cause it to represent substantially the ground color of the selected subject, preparing a plate or roll photographically and by etching, using a heavy gravity acid and etching slowly to subdue the grain contrast, preparing another plate or roll photographically and by etching, using a low gravity acid and etching rapidly to bring out the grain design in sharp contrast, applying pigment to the two plates or rolls and separately imprinting the design thereof onto the base over the ground color.

1,884,567. TELEGRAPH EXCHANGE SYSTEM. JOSEPH J. CATOGGE, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 18, 1931. Serial No. 545,213. 17 Claims. (Cl. 178—2.)



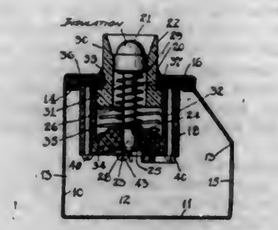
1. In a telegraph exchange system having operators' telegraph printer circuits, a supervisor's printer circuit comprising a telegraph printer set, a switching device for associating said supervisor's telegraph circuit with an operator's telegraph circuit for monitoring purposes, a trunk line, and an additional switching device in said supervisor's circuit for signaling an operator over said trunk line for making a call over the telegraph system.

1,884,568. MACHINE FOR APPLYING A STRIP OF TAPE TO A PIECE OF SHEET MATERIAL. HERBERT L. CHAPIN, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 14, 1928. Serial No. 299,511. 35 Claims. (Cl. 154—42.)



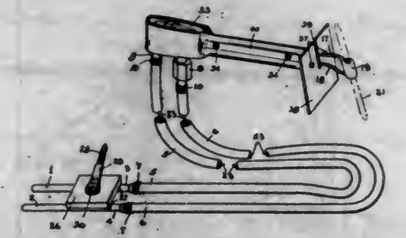
1. In a tape applying machine, a work support, means co-operating with said support for applying tape to the work, said work support having an edge extending in the direction of the length of the tape at the point of application of the tape to the work, and means for effecting relative adjustment transversely of the tape between said work support and said means co-operating therewith to effect register between said edge of said work support and one edge of said tape.

1,884,569. ELECTRIC SWITCH. EVERETT CHAPMAN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 6, 1928. Serial No. 317,624. 7 Claims. (Cl. 200—16.)



1. In an electric safety switching device having a plurality of movable contacts, the combination of a hollow member for actuating one of such contacts, and means terminating in a relatively inaccessible position within said hollow member for actuating another of said contacts.

1,884,570. PORTABLE ELECTRODE HOLDER. EVERETT CHAPMAN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 21, 1929. Serial No. 401,115. 4 Claims. (Cl. 219—8.)



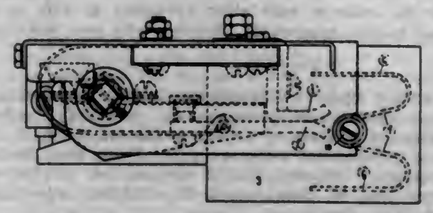
1. A welding electrode manipulating tool having electrode gripping means consisting of a thermal and electrical conductive cooling coil having its terminals leading therefrom, flexible conduits associated with the terminals in said coil, and flexible electric conductors in said flexible conduits and secured to the terminals of said coil.

1,884,571. STARTING SWITCH. EVERETT CHAPMAN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,505. 1 Claim. (Cl. 200—33.)



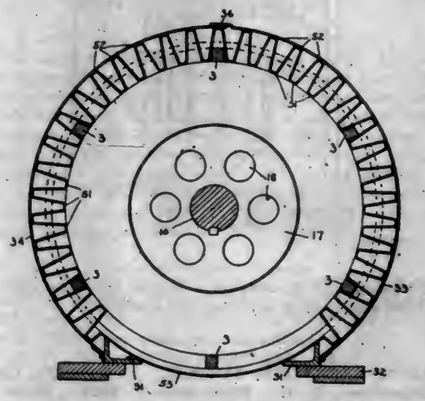
In a device of the character described, the combination of a pair of similarly shaped members in juxtaposition, said members forming an enclosed chamber; a conducting liquid in said chamber; a partition member disposed between said similarly shaped members and dividing said chamber; a relatively large aperture in said partition near one end of said chamber for readily transferring said conducting liquid from one portion of said chamber to the other; a relatively small aperture in said partition near the other end of said chamber to permit a restricted flow therethrough of said conducting liquid; and means for preventing return flow of said liquid through said large aperture as said device is rotated.

1,884,572. ARC SNUFFER. EVERETT CHAPMAN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 29, 1930. Serial No. 448,372. 3 Claims. (Cl. 200—144.)



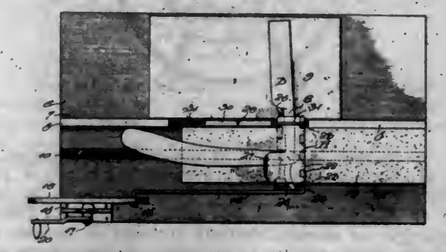
1. The combination with a pair of contacts between which an arc is formed when such contacts separate, of barriers of non-magnetic material disposed on opposite sides of said contacts and extending in planes contiguous to the plane of relative movement of said contacts, and rebent means of magnetic material interposed between said barriers and forming a transversely extending barrier with associated pockets.

1,884,573. DYNAMO ELECTRIC MACHINE AND METHOD OF COOLING SAME. EVERETT CHAPMAN, Coatesville, Pa., assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 8, 1930. Serial No. 466,464. 11 Claims. (Cl. 171—252.)



6. In a fully enclosed dynamo-electric machine, the combination of a supporting frame including end frame members supporting the rotor and circumferentially spaced axially extending bars supporting the stator, and thin corrugated metallic wall members closing the spaces between said bars welded to the periphery of said end frame members.

1,884,574. RAZOR HONING DEVICE. MAXIMILLIAN CINK, Naugatuck, Conn. Filed May 27, 1929. Serial No. 366,454. 5 Claims. (Cl. 51—159.)

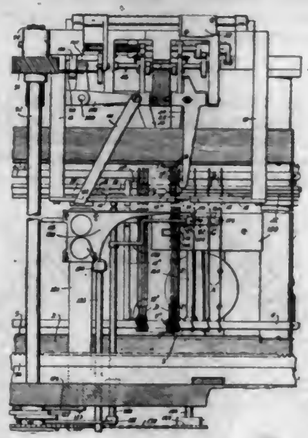


3. In a blade sharpener, edgetreating means, a carriage mounted near said edgetreating means, said carriage having spaced alined bearings, a blade holder for engaging a blade edge with said edgetreating means, said holder embodying two sections having hinge knuckles alined with said bearings, and a single rod passing through said knuckles and through said bearings to hingedly connect said holder sections and to pivotally mount the holder upon the carriage.

1,884,575. MACHINE FOR PRODUCING A CONNECTED SERIES OF HEDDLES. HOWARD D. COLMAN, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed July 16, 1928. Serial No. 293,059. 20 Claims. (Cl. 112—2.)

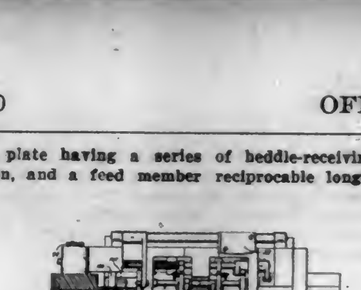
1. The combination of chain-stitch-forming means including a work plate, a sewing needle and a looper, said

work plate having a series of heddle-receiving spaces therein, and a feed member reciprocable longitudinally



and transversely to advance a heddle from one space to the next and thus to and past the needle.

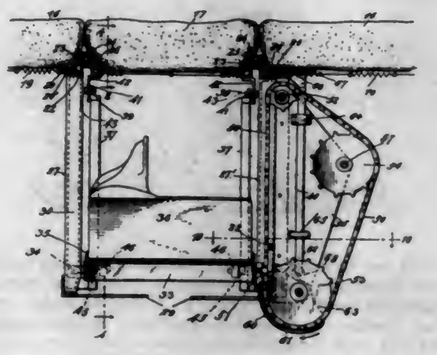
1,884,576. IGNITION SYSTEM. PATRICK B. COMER, Greensboro, N. C. Filed Nov. 1, 1929. Serial No. 404,147. 2 Claims. (Cl. 200—27.)



1. In an ignition system of the character described, a circuit controller comprising a movable member, a plurality of stationary contact points arranged at one side of said member and said stationary contact points, a plurality of movable contacts arranged in circular series about said member and movable to contact the latter, engaging means between said member and said movable contacts, and a tensioning means carried by each of said movable contacts and arranged for effective cooperation with an adjacent of such contacts to hold the same normally inoperative, said member being formed to successively actuate each of said movable contacts to engage its corresponding stationary contact, a plurality of times at each firing cycle.

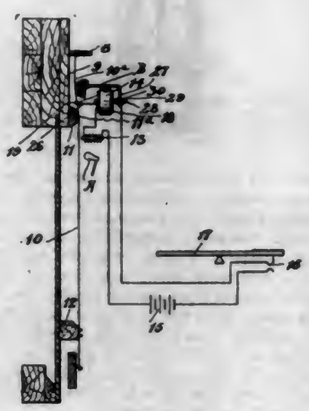
1,884,577. INVALID'S BED. ADRIAN COMPER, London, England, assignor to Hospital Appliances, Inc., Pittsfield, Mass., a Corporation of Massachusetts. Filed July 17, 1931. Serial No. 551,488. 19 Claims. (Cl. 5—90.)

1. In an invalid's bed, a mattress having a head section, a foot section and laterally shiftable hip sections; supports for said mattress sections embodying shiftable supporting means for said hip sections, and means for raising the portion of said head section toward said hip sections to free the patient's hips from said hip sections



while separating the latter, and for again lowering said portion of said head section while said hip sections are separated.

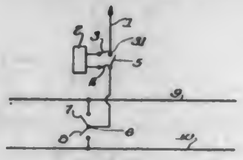
1,884,578. ELECTRICAL SOSTENUTO PIANO. SIMON COOPER, Brooklyn, N. Y. Filed Mar. 25, 1927. Serial No. 178,208. 29 Claims. (Cl. 84—261.)



1. In an electric sostenuto piano, the combination of a string, a pulsator, a magnet in circuit with and actuated by said pulsator to sustain the vibration of a string, means for imparting vibrations to the pulsator from vibrations of the string, and means for excluding from the pulsator such other vibrations as will, to an extent audibly appreciable, interfere with true sostenuto.

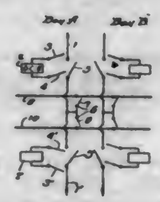
1,884,579. ELECTRIC STATION. ELIAS S. CORNELIUSSEN, called CORNELL, Chicago, Ill.; HENRY D. FREITAG, Lynbrook, and PHILIP SPORN, Manhattan Beach, N. Y.; said Corneliussen assignor to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1928. Serial No. 326,928. 15 Claims. (Cl. 175—298.)

1. In an electric power system, a main bus, a transfer bus, a rotatable bus between said main and transfer busses, and separate switching means carried by the rotatable bus and separately actuated for establishing



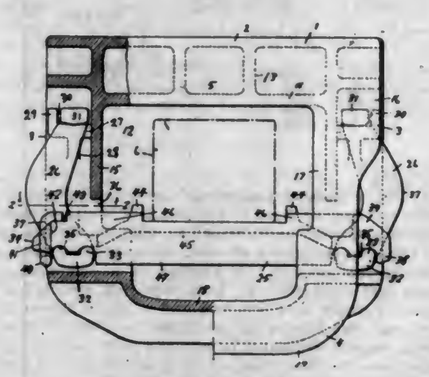
an electric connection between the rotatable bus and either of the other busses.

1,884,580. ELECTRICAL SWITCHING STATION. ELIAS S. CORNELIUSSEN, called CORNELL, Chicago, Ill., assignor to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1929. Serial No. 340,299. 45 Claims. (Cl. 175—298.)



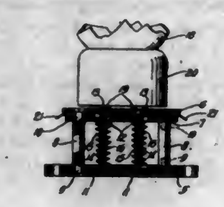
1. In an electric system, two power lines, a main bus, a transfer bus, and selector switches common to both lines for selectively establishing a connection between those lines and either bus.

1,884,581. CENTERING DEVICE. GLENN F. COUCH, Rochester, N. N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Feb. 12, 1927. Serial No. 167,698. 8 Claims. (Cl. 213—21.)



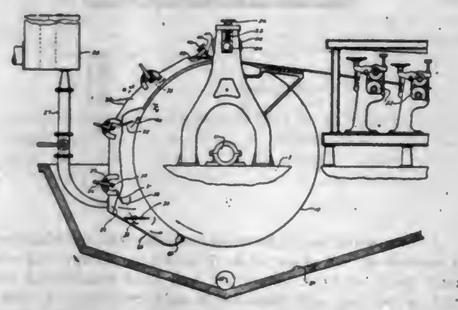
1. A centering device for couplers comprising a member formed with side walls and supporting ledges on either side of an associated coupler, a link disposed outside of the corresponding side wall on either side of said coupler and formed with extensions rockably engaging said ledges, the intermediate portions of said links being displaced from lines joining the ends away from each other to increase the clearance with respect to said side walls and corresponding permissible swinging movement thereof, and a carrier block movably supported from the lower portions of said links.

1,884,582. VACUUM TUBE SOCKET. ALLEN I. CRAWFORD, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 21, 1928. Serial No. 307,356. 2 Claims. (Cl. 173—328.)



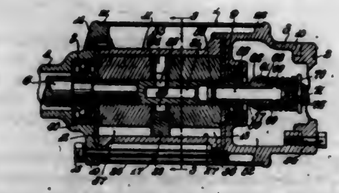
1. A socket for electrical devices comprising a top portion having a number of apertures therein and a recess concentric with each of said apertures, a base portion provided with an equal number of circular recesses, means for placing each of said apertures in alignment with a corresponding one of the last mentioned recesses, and contact members between said top and said base portions, said members comprising springs formed as helices, one pair for each aperture, said helices being substantially concentric with said apertures and seated at both ends in said recessed portions.

1,884,583. PAPER MACHINERY. CLIFF R. CRAWFORD, Middletown, Ohio, assignor to The Black-Clawson Company, Hamilton, Ohio, a Corporation of Ohio. Filed Aug. 20, 1930. Serial No. 476,564. 14 Claims. (Cl. 92—42.)



1. Web forming apparatus of the class described comprising a stock vat, a forming screen for said vat on which stock fibres are collected, and means spaced from the forming screen for directing the stock in the vat across the surface of the forming screen at the forming area thereof to control the thickness of the web produced.

1,884,584. PORTABLE TOOL. ROBERT E. CROSS, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 4, 1930. Serial No. 472,983. 7 Claims. (Cl. 121—34.)

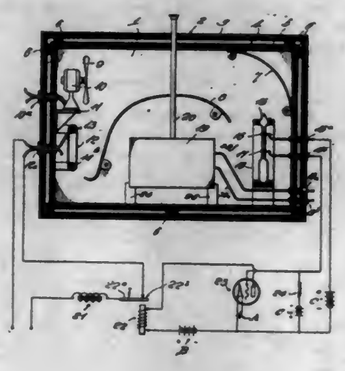


1. In a rotary pressure fluid operated motor, a cylinder member, heads therefor, a partition within said cylinder member dividing the interior of the latter into different

rotor chambers, rotors in said chambers, a spindle supporting said rotors, and fluid distribution means for said rotor chambers including a fluid supply passage extending through said spindle and said partition.

5. In a rotary pressure fluid operated motor, a cylinder member, members cooperating therewith to form a rotor chamber, a rotor in said chamber, a shaft upon which said rotor is mounted, said rotor shaft being hollow, passage means formed in the wall of said rotor chamber connecting the interior of said hollow shaft with said rotor chamber for admitting fluid to the latter, exhaust means for said rotor chamber, and means for admitting a governed supply of motive fluid to said hollow shaft including a governor supported coaxially with the latter and controlling the admission of fluid thereto.

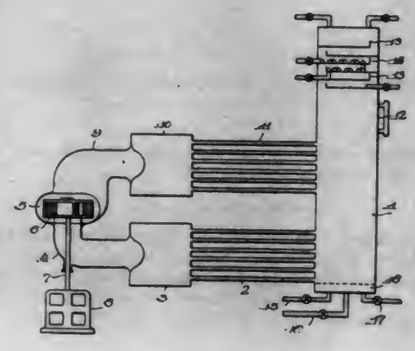
1,884,585. TEMPERATURE CONTROL SYSTEM. ALFRED CROSSLEY, Washington, D. C. Filed Feb. 11, 1929. Serial No. 339,248. 6 Claims. (Cl. 219—19.)



1. In apparatus of the class described the combination of a container, the sides of said container comprising alternate walls of heat insulating and heat conducting material, a heating unit disposed in said container, a thermostat positioned in said container, said thermostat being associated with said heating unit, a second container positioned within said first mentioned container, means for supporting said second container from the walls of said first mentioned container, means positioned within said first mentioned container for circulating the heat conducting medium therein past said heating unit, said thermostat and around said second container, a baffle positioned in the region immediately adjacent the geometrical central point of said first mentioned container for guiding the circulation of said heat conducting medium over a predetermined course, said second mentioned container being positioned beneath said baffle.

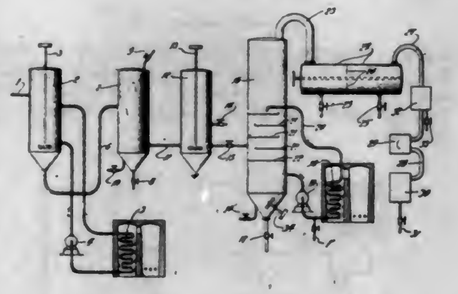
1,884,586. HYDROCARBON TREATMENT PROCESS AND APPARATUS. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Filed Apr. 25, 1927. Serial No. 186,462. 2 Claims. (Cl. 196—59.)

1. The process of producing low-boiling-point hydrocarbons from higher-boiling-point hydrocarbon which comprises controlled positive rapid circulation of the hydrocarbons by mechanical means by suction through a primary bank of tubes with a pump and simultaneously forcing through a secondary bank of tubes with the same pump under conditions of temperature conducive to cracking and under frequently varying super-atmospheric pressure, discharging the cracked products from said secondary bank



of tubes into a vaporizing zone, separating vapors from unvaporized oil and returning the unvaporized oil to said primary bank of heating tubes for retreatment.

1,884,587. PROCESS FOR THE PRODUCTION OF LUBRICATING OIL. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Filed May 26, 1927. Serial No. 194,282. 5 Claims. (Cl. 196—79.)

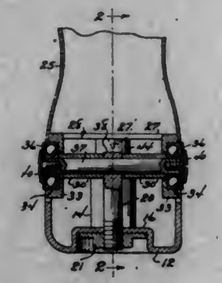


1. The process of producing lubricating oil which comprises treating oil stock in the presence of one or more colloidally dispersed solid adsorbent addition agents having the catalytic properties of colloidal bentonite under super-atmospheric pressure, by heating to a temperature between 500° and 850° F., both inclusive, circulating and agitating under such pressure and while so heated and at the same time forcing air or oxygen into the oil, removing lighter vapors, separated carbon and sedimentary deposits, vaporizing the remaining oil, and dephlegmating and separating the overhead under a vacuum.

1,884,588. SOLID ANKLE FOOT BASE. CHARLES H. DAVIES, Philadelphia, Pa. Filed July 3, 1931. Serial No. 548,643. 1 Claim. (Cl. 3—6.)

A device of the class described comprising ankle and foot portions, a flanged base fitting in the ankle portion and secured thereto, apertured bearing ears on the base and extending into the foot portion, a stem secured to the foot portion and having an apertured end, a bolt extending through the apertured end of the stem and the bearing

ears, sleeves on said bolt and abutting the stem and extending through the bearing ears, anti-friction bearings mounted in said ears and on the bolt, plates engaging the



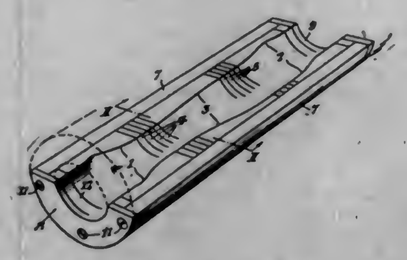
bearings and retaining the latter in the ears and engaging the ends of the bolt, and headed fasteners detachably secured to the ends of the bolt and bearing against the plate.

1,884,589. METHOD OF MAKING ARTIFICIAL LIMBS. CHARLES H. DAVIES, Philadelphia, Pa. Filed Aug. 15, 1931. Serial No. 557,274. 8 Claims. (Cl. 29—148.2.)



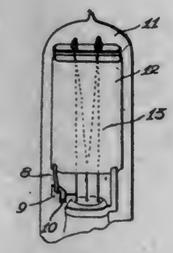
1. The method of forming an artificial limb, which includes forming a tubular metal spindle, open at each end, with coaxial zones of different diameters at different regions of its length, in relative proportion to the diameters of the limb desired; then bending said spindle, transversely to its axis, to render said zones relatively eccentric, according to the shape of the limb desired; and thereafter expanding said bent spindle to the shape of the limb desired.

1,884,590. MOLD. CHARLES H. DAVIES, Philadelphia, Pa. Filed Aug. 15, 1931. Serial No. 557,275. 5 Claims. (Cl. 113—44.)



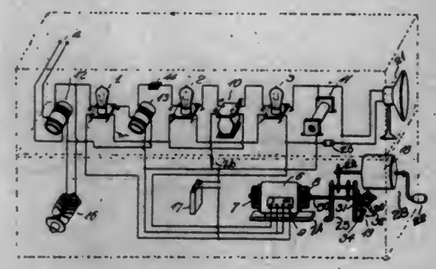
1. A mold for forming articles of different axial length, including a plurality of main mold sections adapted to be adjustably axially separated, and a series of auxiliary mold sections of the same configuration each adapted to be inserted between adjoining main mold sections, for spacing said main mold sections and affording a smoothly continuous surface between them.

1,884,591. ELECTRIC DISCHARGE TUBE. CHESTER L. DAVIS, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,796. 2 Claims. (Cl. 250—27.5.)



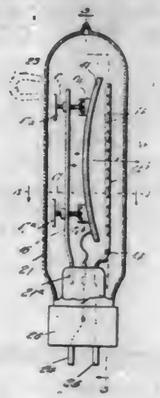
1. A thermionic tube comprising an evacuated vessel, a multiplicity of electrodes therein, a compensating condenser comprising a pair of plate members, one of said plate members being connected with one of said electrodes, and a thermoexpansive element supporting the other of said plate members with respect to said first mentioned plate member, said thermoexpansive element being connected with another of the electrodes within said tube for the conductive transfer of heat therefrom for controlling the spacial relation of said plate members according to the variation in temperatures within said tube.

1,884,592. SIGNALING SYSTEM. CHESTER L. DAVIS, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,588. 1 Claim. (Cl. 250—27.)



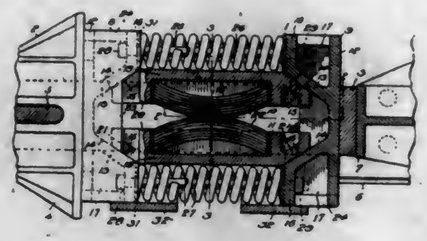
A portable radio receiving apparatus comprising an electron tube amplifier connected to a sound reproducer, means enclosing said amplifier, a tuning control for said amplifier projecting beyond said means and operative from the exterior thereof, a generator for energizing the anode and cathode circuits of said amplifier, a spring motor adapted to be periodically wound for the storage of tension energy therein, a speed multiplication gear connecting said spring motor with said generator, a governor connected with said speed multiplication gear, and a control extending outside of said enclosing means for modifying the effect of said spring motor upon said generator for simultaneously regulating the energization of the anode and cathode circuits of said amplifier by said generator for correspondingly controlling the volume of sound reproduced by said sound reproducer.

1,884,593. TELEVISION SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 23, 1930. Serial No. 470,157. 8 Claims. (Cl. 176—122.)



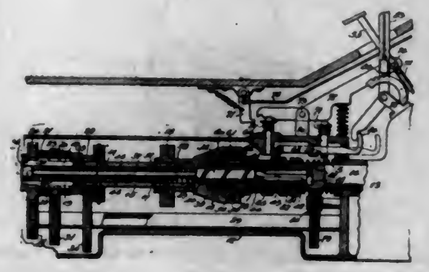
1. A television glow discharge screen comprising an inductance member having the turns thereof disposed parallel one to another and a reflective plate of conductive material variably adjustable adjacent said inductance member, said plate having a concave surface immediately adjacent said inductance member.

1,884,594. DRAFT RIGGING. DONALD C. DAVIS, Depew, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 12, 1926. Serial No. 141,092. 14 Claims. (Cl. 213—30.)



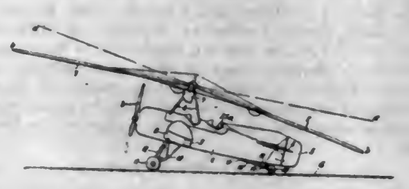
13. A cushioning mechanism adapted for use with railway draft rigging comprising outer friction elements formed with end walls and portions extending toward one another and provided with inclined friction surfaces, intermediate friction elements positioned between said outer friction elements and formed with correspondingly inclined friction surfaces engaging the friction surfaces on the outer elements, resilient means acting on said intermediate friction elements to urge them apart and into engagement with the friction surfaces on the outer friction elements, and resilient means acting on the outer friction elements longitudinally of the mechanism to facilitate release.

1,884,595. AUTOMATIC VARIABLE SPEED TRANSMISSION. NORMAN E. MOXLEY, Ellicott City, Md. Filed May 11, 1931. Serial No. 536,581. 29 Claims. (Cl. 74—59.)



1. In an automobile driving means, a variable speed transmission, automatic shifting means for said transmission, a driving motor for said transmision, a manually actuated accelerator for said motor, and means under the control of said accelerator for causing said automatic shifting mechanism to function.

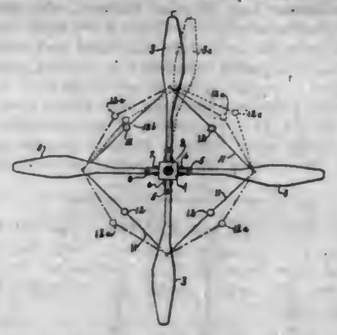
1,884,596. AIRCRAFT AND METHOD OF OPERATING THE SAME. JUAN DE LA CIERVA, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,387. 10 Claims. (Cl. 244—19.)



6. The method of operating an aircraft of the type having movable sustaining means actuable by relative airflow, which includes creating an air-flow and utilizing the ground to effect a deflection thereof against said means to move the same.

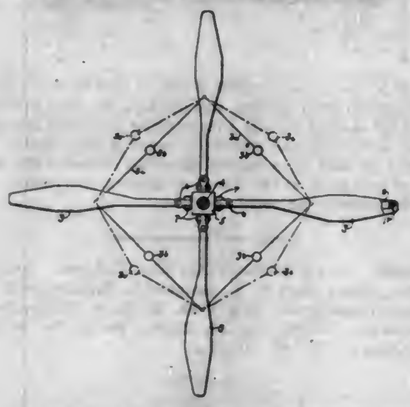
1,884,597. SUSTAINING ROTOR CONSTRUCTION FOR AIRCRAFT. JUAN DE LA CIERVA, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,655, and in Great Britain Nov. 19, 1925. Divided and this application filed Nov. 26, 1930. Serial No. 498,298. 17 Claims. (Cl. 244—19.)

1. An aircraft rotor construction including a set of sustaining blades, means providing for rotation of the set about a common axis, means providing for displacement of the blades fore and aft in the general path of move-



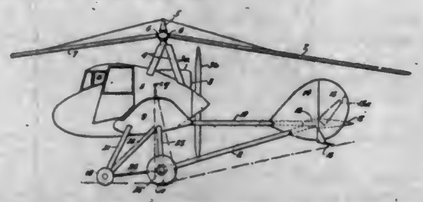
ment thereof, and means operable by the action of centrifugal force to yieldingly resist said displacement.

1,884,598. ROTATIVE SUSTAINING BLADES FOR AIRCRAFT. JUAN DE LA CIERVA, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,655, and in Great Britain Nov. 19, 1925. Divided and this application filed Nov. 26, 1930. Serial No. 498,301. 19 Claims. (Cl. 244—19.)



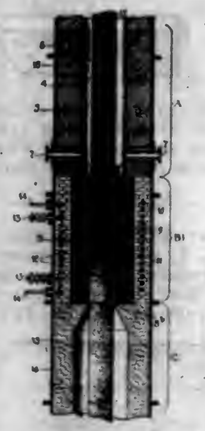
17. In an aircraft, a hinged and rotatively mounted sustaining wing or blade and means for adjusting the center of gravity of the blade including readily removable weight means associated therewith.

1,884,599. AIRCRAFT HAVING ROTATIVE WINGS. JUAN DE LA CIERVA, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 5, 1931. Serial No. 513,713. 31 Claims. (Cl. 244—19.)



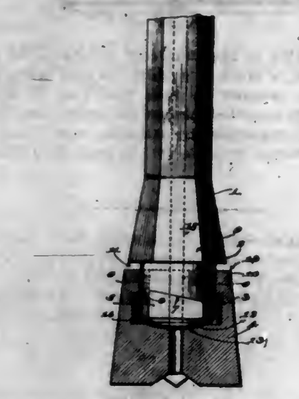
1. In an aircraft, the combination of a system of rotative blades adapted to be driven by the relative flight wind, and a body structure having propelling means mounted toward the rear thereof and a place for the occupant toward the front thereof, and a stabilizing element in the rear of the propelling means.

1,884,600. INDUCTION PROCESS OF GRAPHITIZING CARBON. IRA H. DERBY, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Apr. 23, 1931. Serial No. 532,379. 4 Claims. (Cl. 13—36.)



1. A process of graphitizing fabricated carbon bodies which consists in surrounding such bodies with electrothermal refractory insulating material, and then heating such bodies by heat radiated from the inner surface of the insulating material and by currents induced directly in the bodies by an alternating current source having a frequency not exceeding 2000 cycles per second.

1,884,601. DETACHABLE DRILL BIT. CHARLES W. DE WITT, Oakland, Calif. Filed July 31, 1930. Serial No. 472,105. 4 Claims. (Cl. 255—64.)



2. A percussion drill comprising a bit having a recess, the floor of said recess having a central shallow concavity, and a shank having a plug occupying the recess, the end of the plug being peened to fit the concavity, the diameter of the plug being greater than the diameter of the concavity thereby leaving an annular overhang of the plug with reference to the floor.

1,884,602. CONTAINER. HENRY M. DILLHOEFER, Jr., Cleveland Heights, Ohio, assignor to The Byrne Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 1, 1930. Serial No. 492,790. 2 Claims. (Cl. 285—49.)

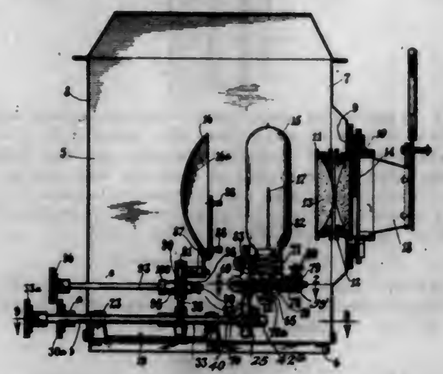
1. A container having a sheet metal wall formed with an opening, the wall surrounding said opening being distended to form a chamber having side and bottom walls and a neck depending from the inner circumferential edge of said bottom wall and said neck consisting of contigu-

ous flat side walls disposed at angles one to another, and a bung comprising a body portion having exterior flat side walls fitting into and having interlocking relation with said neck and a flange at its upper end fitting into said



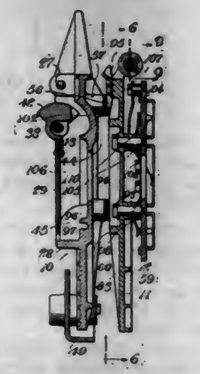
chamber, the lower end of said body portion terminating in a continuous wall which is riveted over the lower free edge of said neck and cooperates with said flange to position the bung in said neck and chamber.

1,884,603. LIGHT RAY PROJECTOR. AUGUSTO DINA, Jersey City, N. J., assignor, by mesne assignments, to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed May 19, 1925. Serial No. 31,419. 13 Claims. (Cl. 88—24.)



12. In a device of the character described, in combination, a reflector, a lamp, a support for said lamp, a base, a lamp-adjusting member on said base and on which said lamp support is mounted, means for supporting the reflector from the lamp-adjusting member, and means for adjusting the reflector relative to the lamp in a plurality of directions.

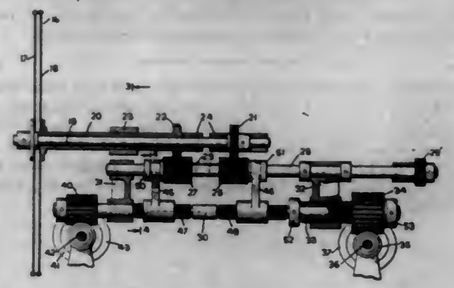
1,884,604. FILM GATE. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 20, 1927. Serial No. 220,689. 16 Claims. (Cl. 88—17.)



4. In a gate for projection machines and the like, the combination of an outer plate, a plurality of heat dissipating fins on said plate and extending throughout a substantial area thereof, and another plate mechanically supported apart from said first plate and being substantially insulated against heat transfer thereto, said spacing providing a passageway for cooling air between said plates.

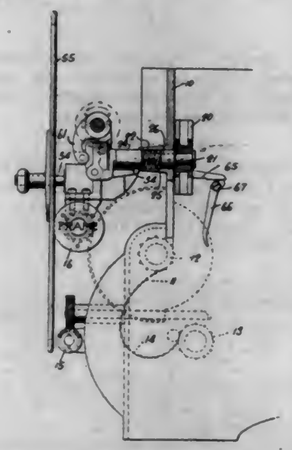
7. In a gate for projecting machines and the like, the combination of a guard of bakelite or the like, having apertures therein to permit access of air to the gate, a plurality of insulating washers separating said guard from adjacent portions of the gate to prevent the conduction of heat from one to the other, whereby the gate may be opened and closed by the operator without danger of being burned.

1,884,605. SHUTTER MECHANISM. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,406. 6 Claims. (Cl. 88—19.3.)



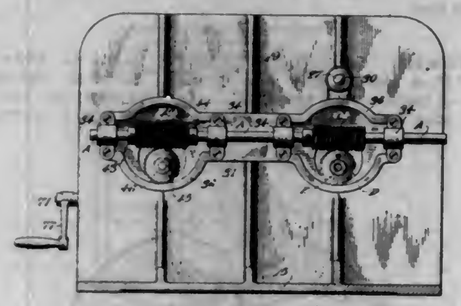
1. In a shutter mechanism, a pair of shutter discs, means for simultaneously driving said discs in the same direction, means for simultaneously advancing or retarding said discs during operation, and means for varying the relative relationship of said discs during operation whereby the duration of opening and the times of opening and closing may be independently adjusted.

1,884,606. GATE OPERATING MECHANISM. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,336. 10 Claims. (Cl. 88—17.)



2. In a projection head, a rod for supporting a film gate, means for slidably mounting said rod, a control shaft extending at right angles thereto, a swinging arm secured to said shaft and operatively associated with said rod, and means for causing said arm to produce longitudinal movement of said rod.

1,884,607. MECHANICAL MOVEMENT. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,834. 9 Claims. (Cl. 74—7.)



1. A power transmission system comprising a load shaft, a mechanism for driving said load shaft, and including a worm gear, a worm in mesh with said gear, a shaft on which said worm is mounted, means for moving said gear around the load shaft as a center, and means for causing pure rolling between said gear and said worm during said movement to prevent longitudinal and angular movement of said worm shaft.

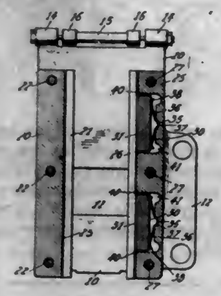
1,884,608. SCREENED AND VENTILATING FIRE SHUTTER. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,838. 8 Claims. (Cl. 88—19.3.)



1. A shutter for motion picture machines which comprises a first shutter with blades fixed to the shutter shaft, a second shutter having blades rotatable with the shaft but movable with respect to the blades of the first shutter, the blades of both shutters being bent at an angle to the axis of rotation, said sets of blades being spaced far enough apart to prevent the air wash of one from affecting the action of the other.

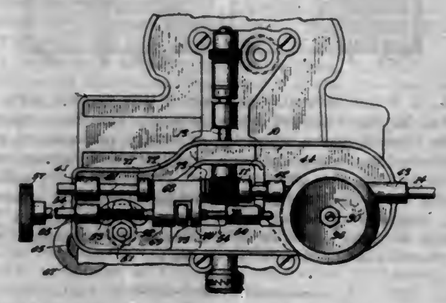
4. A shutter for motion picture machines which comprises a first shutter having a plurality of blades, a shaft on which said first shutter is fastened, a second shutter having a plurality of blades and movable on the shaft, said second shutter spaced sufficiently away from the first shutter to prevent the air wash of one from affecting the blades of the other, spring means connecting the shutters to maintain the blades of one in alignment with the openings between the blades of the other to form a fire shutter when the shutter shaft speed is below a definite value, the blades of at least one of said shutters being inclined as a whole to the plane of rotation to produce a fan action.

1,884,609. RESILIENT FILM GUIDE FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1930. Serial No. 422,711. 18 Claims. (Cl. 88—17.)



18. A film guide comprising a longitudinally extending member having a surface parallel to a film face, a guide bar mounted on said member and having a surface normal to said film supporting surface adapted to contact with the transverse edge of the film and means for mounting said guide bar for pivotal and transverse movement in the plane of said film face and resilient means acting in said plane for holding said guide bar against said transverse edge.

1,884,610. MECHANICAL MOVEMENT. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,850. 21 Claims. (Cl. 74—7.)

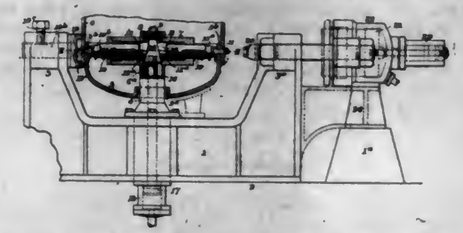


1. In a mechanical movement, a load shaft, a pin wheel shaft, gears on said shafts meshing with each other, a control gear, means connecting the control gear and the gear on the pin wheel shaft to cause joint movement thereof, a control shaft, a gear on said control shaft engaging said control gear, and means connecting the control shaft with the load shaft.

1,884,611. RIVETING MECHANISM. RICHARD W. DINZL, Margate City, N. J., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 23, 1928. Serial No. 294,881. 2 Claims. (Cl. 78—73.5.)

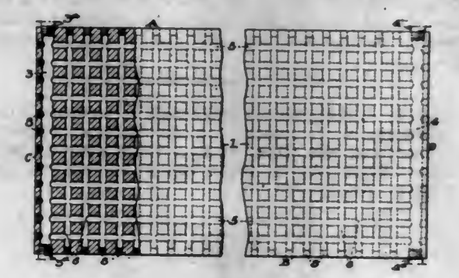
2. In a riveting device, the combination of a base, aligned abutments integral with said base, an adjustable block forming a backing support for a boiler shell carried by one of said abutments, a hold-back supported by the

base and arranged within said shell; said hold-back including oppositely disposed plunger members arranged in line for engagement with the inner wall of the boiler shell, a sleeve supporting said plunger members, a post supported by the base, a tubular shell carried by the post and supporting said sleeve, means for maintaining said plunger



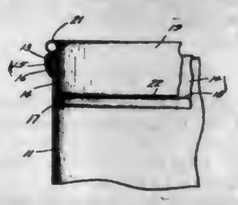
members against opposite walls of the boiler shell including a wedge-block operable between the same, a vertically movable stem disposed within said tubular shell, and connected to said wedge-block, fluid-pressure means for moving said stem and externally disposed riveting means operable in line with said plunger members and said adjustable backing block.

1,884,612. STEAM PLATEN. RICHARD W. DINZL, Philadelphia, Pa., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1930. Serial No. 435,766. 4 Claims. (Cl. 257—256.)



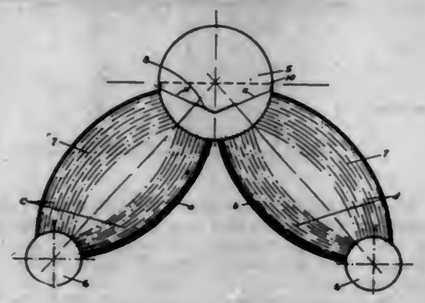
1. A steam platen comprising a thin walled plate of metal having enlarged cross passages adjacent opposite ends thereof and a plurality of drilled passages of less diameter connecting the same and inlet and exhaust connections for the circulation of temperature-controlling media connected to said enlarged passages, said connecting passages of lesser diameter extending through the platen at right angles to said enlarged cross passages and in direct communication therewith.

1,884,613. CONTAINER. JOSEPH DISTER, Hamilton, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 27, 1929. Serial No. 410,062. 1 Claim. (Cl. 220—27.)



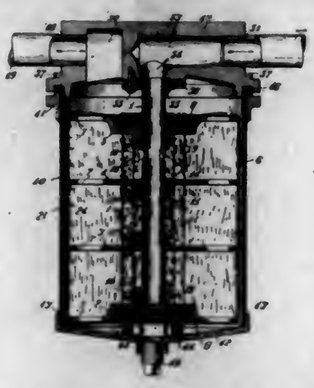
A container comprising a body, a bottom end seamed to said body, a ring double-seamed to the top margin of the body and depending thence in tight contact with the interior of the body to the lower end of the ring so that the can may be opened for its full width, and having a seal-holding seat located at the can body wall, a frangible seal within said ring and resting on said seat, and a cylindrical sheet metal plug removably fitted in said ring and having a bottom resting on the seal and holding the latter against its seat.

1,884,614. LIQUID VAPORIZER. HARRY G. DONALD, U. S. Navy. Filed Aug. 6, 1929. Serial No. 383,902. 4 Claims. (Cl. 122—327.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a liquid vaporizer, a vapor liberating drum having liquid therein, radiantly heated tubes and tubes heated by convection only entering said drum, a perforate baffle below the normal liquid level and overlying the inlets of the radiantly heated tubes only.

1,884,615. FILTER. DELMAR D. DOOLEY, Rock Island, Ill., assignor to Dooley Improvements Inc., Rock Island, Ill., a Corporation of Illinois. Filed Oct. 17, 1929. Serial No. 400,180. 13 Claims. (Cl. 210—165.)

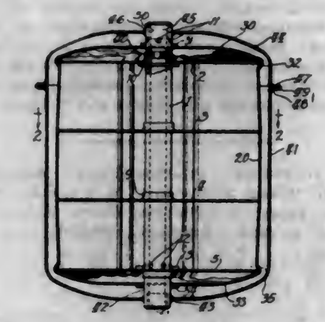


2. In a filter a framework comprising a central pipe, a plurality of slotted discs spaced along said pipe, end plates having a central circular portion with fingers radiating therefrom in a plane substantially parallel to the plane of the central portion, a fabric bag fitted over said framework and tied around said pipe, and a string laced over said bag to draw it down into said slots.

1,884,616. FILTER. DELMAR D. DOOLEY, Rock Island, Ill., assignor to Dooley Improvements, Inc., Rock Island, Ill., a Corporation of Illinois. Filed May 5, 1930. Serial No. 449,835. 7 Claims. (Cl. 210—178.)

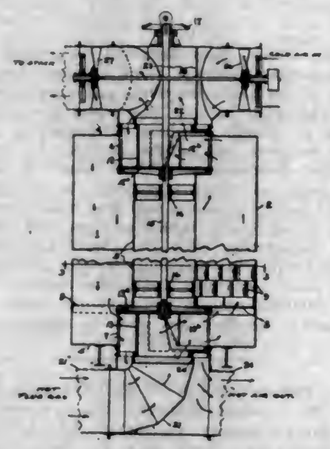
1. In a filter, the combination of an outer shell comprising a cylindrical wall having heads at each end, a tubular rod extending between said heads and extending

through at least one of them, radially slotted disks fixed at opposite ends of the rod, a sheet of filter fabric fluted into said radial slots and having the ends of the flutes folded over the outer sides of the plates to close off the



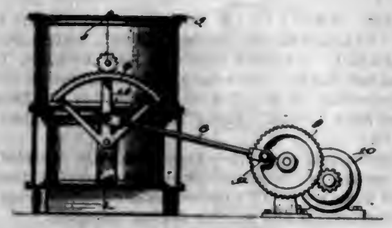
end of the flutes beyond the plates, and circular heads fastened to the central rod and lying axially beyond said plates and pressing against the folded ends of said flutes to keep the fabric in place.

1,884,617. AIR PREHEATER. HERBERT H. DOW, Midland, Mich., assignor, by mesne assignments, to Air Preheater Corporation, New York, N. Y., a Corporation of New York. Original application filed July 6, 1925, Serial No. 41,565. Divided and this application filed Nov. 16, 1926. Serial No. 148,707. 29 Claims. (Cl. 257—6.)



4. The combination with a plurality of stationary compartments, heat absorbing material disposed therein, means for supplying two fluid media of different temperatures to, and for discharging same from, opposite ends, respectively, of said compartments, and interconnected rotary valves continuously rotatable in the same direction and associated with such ends and operating in unison to control the flow of such media through said compartments, said valves being arranged and constructed to open each compartment in succession to the flow of one such medium and then the other without interrupting or bypassing such flow and the number of said compartments being sufficiently great to permit more than one thereof at a time to be open to the flow of such media, respectively.

1,884,618. APPARATUS FOR PREPARING ASPHALTIC COMPOSITION. JAMES S. DOWNARD, Fort Thomas, Ky. Original application filed Sept. 29, 1927, Serial No. 222,908. Divided and this application filed Sept. 18, 1929. Serial No. 393,531. 8 Claims. (Cl. 83—91.)



1. A device for dividing asphalt and the like into small particles, comprising a cylinder open at both ends, the said cylinder being oscillatably supported, means for oscillating the said cylinder, a screen within the said cylinder and rabble arm adjacent the screen and adapted to force the asphalt therethrough, a spider carrying said rabble arm, and means for maintaining the screen in a heated condition.

1,884,619. DERIVATIVES OF CELLULOSE COMPOSITIONS OF LOW INFLAMMABILITY CONTAINING CINNAMIC ACID DIBROMIDE. CAMILLE DREYFUS, New York, N. Y., and JACQUES SCHEIDEGGER, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,208. 13 Claims. (Cl. 106—40.)

3. A composition of matter containing a derivative of cellulose and a cinnamic acid dibromide.

1,884,620. TREATMENT OF FABRIC CONTAINING CELLULOSE ESTERS. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,804. 7 Claims. (Cl. 8—5.).

1. Method of treating textile materials containing organic esters of cellulose comprising treating the same with an alkaline solution under such conditions that intense surface saponification of the organic ester of cellulose material takes place and then dyeing the so treated textile material with dispersed relatively water insoluble dyestuffs.

1,884,621. TREATMENT OF FABRIC. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,805. 6 Claims. (Cl. 8—20.)

1. Method of treating fabric containing organic esters of cellulose comprising padding the fabric with an alkaline solution corresponding to a caustic soda solution of a concentration of from 5 to 20% at a temperature below 35° C., in the absence of retarding agents, batching the fabric containing the alkaline solution for 8 to 14 hours and then removing the alkaline solution.

1,884,622. TREATMENT OF FABRIC CONTAINING CELLULOSE ESTERS. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, East Orange, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,094. 6 Claims. (Cl. 8—20.)

1. Method of increasing the safe ironing point of fabric containing organic ester of cellulose filaments comprising applying to the whole surface thereof a paste containing

a thickening agent and an alkaline material in amounts to cause surface saponification of said organic ester of cellulose filaments to increase substantially the safe ironing point thereof.

1,884,623. PROCESS OF PARTIAL SAPONIFICATION OF CELLULOSE ESTER MATERIAL AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 1, 1928. Serial No. 303,600. 8 Claims. (Cl. 8—20.)

1. Method of treating textile materials containing organic esters of cellulose comprising applying thereto a limited quantity of an aqueous alkaline saponifying agent and immediately and quickly drying the same.

1,884,624. METHOD OF MAKING LAMINATED GLASS. CAMILLE DREYFUS, New York, N. Y. Filed Jan. 22, 1929. Serial No. 334,368. 2 Claims. (Cl. 49—81.)

1. The method of making laminated glass comprising separately heating sheets of glass coated with a thermoplastic solid adhesive and a plastic sheet containing organic derivatives of cellulose and then pressing at high pressure by means of heated solid surfaces, said heated sheet of plastic material between said heated sheets of glass, whereby a well stuck laminated glass is formed.

1,884,625. MANUFACTURE OF ALIPHATIC ACID ANHYDRIDES. HENRY DREYFUS, London, England. Filed Jan. 4, 1929, Serial No. 330,409, and in Great Britain Jan. 28, 1928. 4 Claims. (Cl. 260—123.)

1. In a process for the manufacture of an aliphatic anhydride by the thermal decomposition of an aliphatic acid, the step of avoiding violent decomposition of the aliphatic acid to carbon and gaseous products by effecting the thermal decomposition in the presence of carbon-dioxide.

1,884,626. MANUFACTURE OF ALIPHATIC ACID ANHYDRIDES. HENRY DREYFUS, London, England. Filed Jan. 4, 1929, Serial No. 330,410, and in Great Britain Jan. 28, 1928. 6 Claims. (Cl. 260—123.)

1. In a process for the manufacture of an aliphatic anhydride by thermal decomposition of an aliphatic acid, the step of avoiding oxidation, by oxygen present, of the aliphatic acid by effecting the thermal decomposition in the presence of carbon monoxide.

1,884,627. MANUFACTURE OF ALIPHATIC ANHYDRIDES. HENRY DREYFUS, London, England. Filed Jan. 5, 1929, Serial No. 330,452, and in Great Britain Jan. 28, 1928. 6 Claims. (Cl. 260—123.)

1. Process for the manufacture of an aliphatic anhydride which comprises subjecting the vapor of an aliphatic acid to thermal decomposition under pressures above atmospheric pressure.

1,884,628. MANUFACTURE OF ALIPHATIC ACIDS AND THEIR ESTERS. HENRY DREYFUS, London, England. Original application filed Mar. 8, 1929, Serial No. 345,441, and in Great Britain Mar. 16, 1928. Divided and this application filed June 24, 1930. Serial No. 463,579. 10 Claims. (Cl. 260—106.)

1. Process for the manufacture of an alkacyl compound which comprises subjecting an aliphatic ether of formula

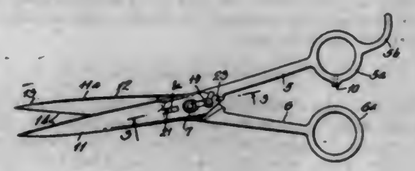
$$(C_nH_{2n+1})_2O$$

to the action of carbon monoxide in absence of catalysts.

1,884,629. TREATMENT OF CELLULOSE AND DERIVATIVES THEREOF. HENRY DREYFUS, London, England. Filed Oct. 29, 1930, Serial No. 492,085, and in Great Britain Nov. 20, 1929. 10 Claims. (Cl. 260—152.)

1. The manufacture of cellulose ethers of hydroxy carboxylic acids, which ethers are soluble in organic solvents, comprising effecting etherification of cellulose with sufficient halogenated aliphatic acid to introduce substantially more than one ether group into the cellulose molecule in presence of sufficient caustic alkali to form a concentrated solution with any water present.

1,884,630. SCISSORS. CHARLES DRIEST, Marlboro, and HARVEY D. MYERS, Jersey City, N. J.; said Driest assignor to Robert G. Wiencke, North Bergen, N. J. Filed Oct. 2, 1931. Serial No. 566,460. 11 Claims. (Cl. 30—13.)

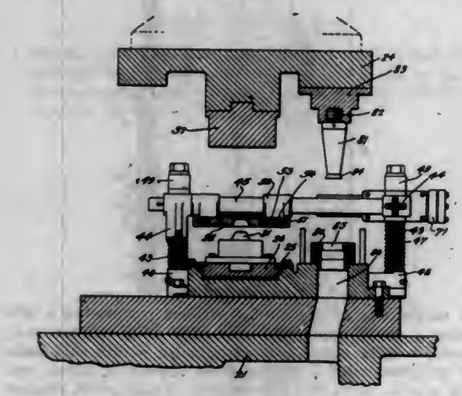


1. A tool of the class described comprising pivotally connected handle members, blade members formed independently of the handle members and attachable and detachable therewith without disturbing the pivotal connection of the handle members, interengaging means on the blade members and handle members for quickly attaching and detaching said blade members, said blade members being apertured to receive the pivotal connection of the handle members, said first named means comprising a spring tongue fashioned from said blade members and cooperating with the shank portions of the handle members, and securing devices rotatably supported in connection with the handle members and having cam portions cooperating with the blade members for adjustably securing the same in position.

1,884,631. PREPARATION OF BLOOMS FOR ROLLING. BYRON W. DUNHAM, Oakmont, Pa., assignor to Edgewater Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,290. 17 Claims. (Cl. 29—34.)

1. The process of producing blooms to be employed in the manufacture of annular objects, which comprises upsetting a metal block to slightly less than the diameter of a sizing ring, arranging said upset block in said sizing ring, inserting a punch in said block while in said sizing ring to pierce it and expand it into engagement with said ring, the while holding said ring loosely to permit lateral movement of said ring and block.

12. An apparatus for preparing blooms to be rolled into annular metal objects, comprising a press having parts adapted to upset a block of metal into general bloom form, a sizing and piercing mechanism mounted in said press and movable into position between its upsetting parts, said mechanism comprising a sizing ring and a piercing and expanding member adapted to preliminarily sustain the bloom within the die and on the piercing and expanding member, and means carried by and movable



with a moving press part for piercing said bloom and sizing the opening after said bloom has been moved from upsetting position in said press.

1,884,632. FINISH REMOVER COMPOSITION ADAPTED TO REMOVE NITROCELLULOSE COATINGS. CARLETON ELLIS, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Sept. 1, 1927. Serial No. 217,014. 8 Claims. (Cl. 87—5.)

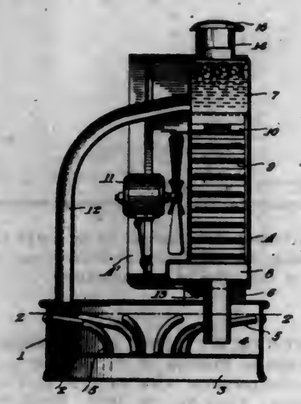
1. A critical-temperature lacquer remover comprising lacquer solvents constituting by far the largest part of the entire remover, wax and an alkali compound of higher fatty acids as a protective colloid, and a wax solvent constituting not substantially over 20% of the entire remover.

8. A low-wax lacquer remover containing not substantially over 1.5% of wax, in a vehicle containing a wax solvent and wax precipitants, which latter are at least largely nitrocellulose solvents and which are present in amount several times greater than said wax solvent.

1,884,633. PAINT, VARNISH, AND LACQUER REMOVER. CARLETON ELLIS, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Oct. 12, 1928. Serial No. 312,212. 7 Claims. (Cl. 87—5.)

7. A finish remover containing wax to the extent of not over two ounces per gallon, chlorbenzol as the essential wax solvent and an amount of wax precipitating loosening solvent substantially in excess of the amount of such wax solvent, such loosening solvent being composed at least in major part of substances selected from the group consisting of acetone, "lugosol," methyl acetone, methyl alcohol and methyl acetate; such remover containing nitrocellulose in amount substantially greater than the amount of the wax, by which the wax is rendered substantially colloidal, such remover remaining fluid at 0° C., such remover being substantially benzol-free, and having its wax in a colloidized non-settling condition, such remover being neutral and having a cutting speed not greatly below that of a standard benzolic remover containing 50 to 60% of benzol, with the balance methyl acetate and containing 3 ounces of paraffin wax per gallon.

1,884,634. PORTABLE HOT WATER HEATER. LOUIS EMANS, Willmar, Minn. Filed May 9, 1930. Serial No. 451,134. 3 Claims. (Cl. 126—101.)



1. A water heater of the kind described comprising a casing having a bottom inset from its lowermost edge to provide a heat receiving chamber below the same and also a water chamber above, a plurality of heat circulating tubes opening through the bottom, a water radiator carried by the casing and communicating with said water chamber therein at its bottom and top portions, and a fan carried by the radiator rearwardly thereof to confront the same.

1,884,635. GLASS CUTTER. CHARLES J. FANCHER, Windsor, Vt., assignor, by mesne assignments, to Woodward, Hubbard Company, Hill, N. H., a Corporation of New Hampshire. Filed July 6, 1928. Serial No. 290,746. 10 Claims. (Cl. 40—52.)



1. In a glass cutter, a recessed head, a resilient retainer for a rotatable cutter-wheel comprising resilient bearing sections that normally spring apart for journaling a rotatable cutter wheel between the sections and when pressed towards each other serve to yieldingly support the rotatable cutter wheel with its opposite faces parallel to and in rolling contact with the resilient bearing sections.

8. In a glass cutter, a recessed head having an abutment, a resilient retainer for a rotatable cutter-wheel comprising sections that normally spring apart for receiving the cutter-wheel and when closed are receivable in and adapted frictionally to engage said head and cutter-wheel for securing the cutter-wheel in rotatable position, said retainer having a part positioned to engage said abutment and thus limit the inward movement of the retainer and also having a part to be engaged by the thumb nail for the removal of said retainer, the cutter-wheel being rotatably mounted in the resilient retainer.

1,884,636. FREIGHT HANDLING APPARATUS. HERBERT W. FAUS, White Plains, N. Y. Filed June 20, 1928. Serial No. 287,019. 14 Claims. (Cl. 280—44.)

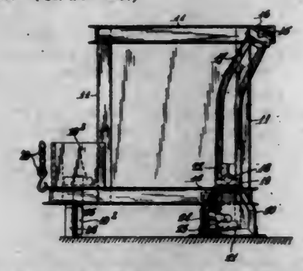
1. Freight handling apparatus comprising a container with a floor and several sides extending below the floor to

provide an immobile supporting portion, wheel supports therefor adapted to be extended vertically below the bot-



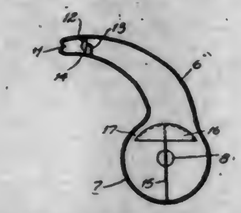
tom of the extended sides thereof or retracted at will, and actuating means for the latter operable from any one of a plurality of the sides of the container.

1,884,637. FURNACE TILTING MECHANISM. THOMAS ARTHUR FEEHAN, Trenton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Nov. 30, 1931. Serial No. 577,892. 3 Claims. (Cl. 13—26.)



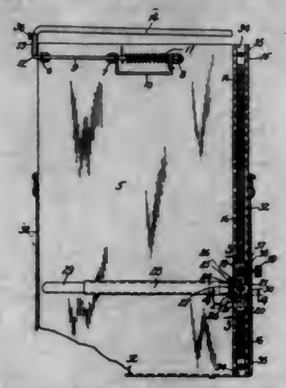
1. A furnace of the character indicated, in combination with means for progressively raising the rearward side of the furnace throughout a range of movement and subsequently progressively retracting the said side downwardly along the range, a rocker support for the forward side thereof having a pivotal connection with the furnace, a fixed pivot for the rocker downwardly and rearwardly from the connection with the furnace, means limiting the range of pivotal movement of the rocker, a lost motion connection between the furnace and rocker adapting the furnace when itself in normal upright position to hold the rocker in a retracted position and to move forwardly as a unit with the rocker about the fixed pivot during an initial portion of the range of movement of the rearward side of the furnace.

1,884,638. HEARING DEVICE. CHARLES FENSKY, St. Louis, Mo. Filed June 22, 1929. Serial No. 372,355. 6 Claims. (Cl. 181—23.)



1. A hearing device comprising a pair of communicating tubular members arranged at an angle to each other, one of said members having an opening formed in its wall, and a convex-concave deflector located across the interior of said member opposite said opening and spaced from said wall.

1,884,639. COPYHOLDER. CHARLES FENSKY and HARVEY J. READEY, St. Louis, Mo. Filed July 25, 1929. Serial No. 380,852. 1 Claim. (Cl. 120—33.)

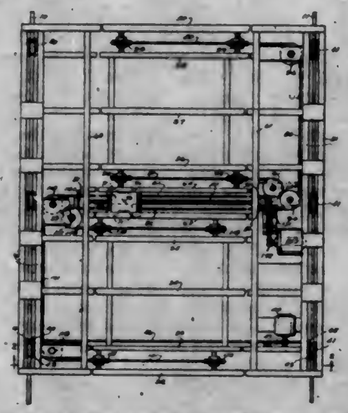


A copyholder of the kind described, comprising a base having a guide along one side edge with ratchet teeth therein, a slide movable longitudinally within said guide and provided with a spring pawl ratcheting along said teeth, a ruler extending transversely of said guide, manually operable screw means rotatably journalled in said slide and threadedly engageable with a portion of said ruler to adjustably connect one end of the latter to said slide and support the same spaced from said base any predetermined amount in either direction of movement, a plurality of pins in said slide engageable within recesses in the said portion of the ruler to assist in holding said ruler in its adjusted spaced position relatively of said slide while permitting spacing movement relatively therefrom.

1,884,640. METHOD OF INHIBITING THE OXIDATION AND HYDRATION OF LEAD ALLOYS. EDGAR W. FIELDING, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,142. 5 Claims. (Cl. 22—188.)

1. The process of inhibiting the oxidation and hydration of a hot lead sodium alloy which comprises maintaining an atmosphere of the vapors of a mineral oil having a flash point above 300° C. in contact with the alloy.

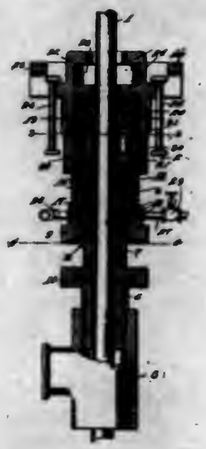
1,884,641. TRAVELING CRANE. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,958. 13 Claims. (Cl. 254—144.)



1. In a hoist of the character described, the combination of a screw and nut couple, one of which is rotatable and

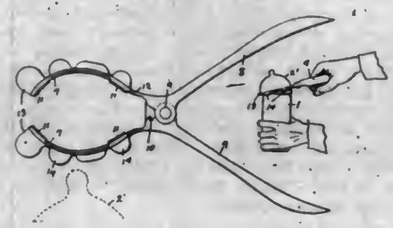
the other of which moves longitudinally consequent upon such rotation, cables attached to the longitudinally movable member and passing in opposite directions therefrom, sheaves about which such cables pass laterally, and other sheaves about which they pass downwardly, whereby depending cable-reaches are provided for acting on two independent loads to raise one while the other is lowered.

1,884,642. STUFFING BOX. THOMAS E. FLAKE, Breckenridge, Tex., assignor of one-half to Charles H. Brown, Breckenridge, Tex. Filed June 18, 1928. Serial No. 286,119. 6 Claims. (Cl. 286—16.)



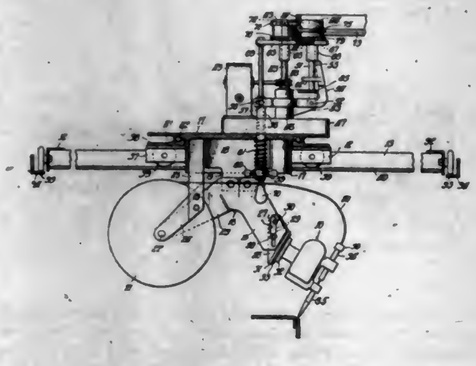
1. A stuffing box comprising a fixed element with a gland, a gland casing loosely connected with said element, said gland casing comprising a collar having a bore in one end of which the gland has a loose fit, a cap attached to the collar having an associated gland extending into the other end of the bore with a relatively tight fit, and a resilient packing situated between the glands permitting relative swaying of the gland projection to compensate for bending movements of a polished rod operating in the stuffing box.

1,884,643. NURSING BOTTLE DEVICE. WALTER D. FORBES, San Francisco, Calif. Filed Sept. 16, 1931. Serial No. 563,101. 8 Claims. (Cl. 29—88.2.)



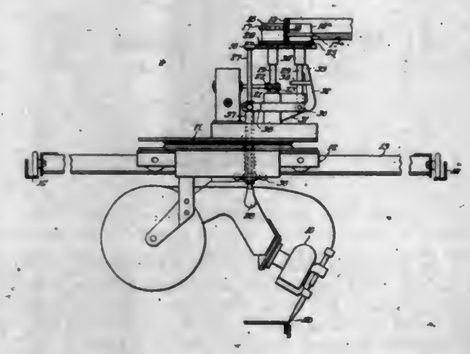
1. A nursing nipple applicator comprising a pair of plier-like handles hingedly connected together, arcuate confronting jaws projecting from said handles arranged to open when the handles are operated, means on said jaws adapted to engage the rim of a nursing nipple and for stretching it over the mouth of a nursing bottle, said arcuate jaws when open shaped to pass down over the mouth of the bottle.

1,884,644. WELDING APPARATUS. GEORGE G. FORD, Terre Haute, Ind. Filed Jan. 25, 1930. Serial No. 423,305. 22 Claims. (Cl. 219—8.)



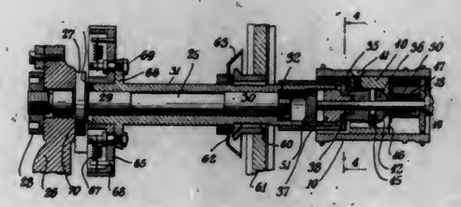
1. A welding apparatus comprising in combination a welding tool, means for mounting said tool adapting it for free bodily movement in any direction throughout a given plane, additional means providing for angular movement of said tool, a guide track, contact means fixedly connected with said tool and arranged to engage the guide track whereby the tool is maintained at all times in substantially the same relation with respect to a tangent to the guide track drawn through the working point of the tool.

1,884,645. WELDING APPARATUS. GEORGE G. FORD, Terre Haute, Ind. Filed Aug. 28, 1931. Serial No. 559,857. 10 Claims. (Cl. 219—8.)



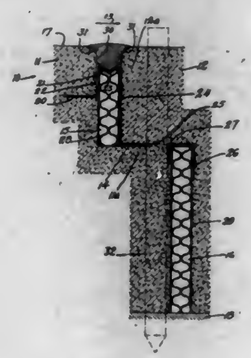
1. A welding apparatus comprising in combination a welding tool, a rotary support for said tool, supporting means for said rotary support on which the latter is adapted to move throughout a substantial area, a guide track, traction means connected in fixed relation to said tool and adapted to propel said tool along the guide track, guiding means for maintaining the working point of the tool in proper relation to the work, said means comprising a pair of contact members symmetrically disposed relative to said track and the working point of said tool, said contact members being independently movable toward and from said track, and tensioning means associated with said contact members whereby each member is normally held in snug engagement with said track.

1,884,646. SPROCKET. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projecter Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Oct. 27, 1928, Serial No. 315,331. Divided and this application filed Sept. 30, 1930. Serial No. 485,412. 7 Claims. (Cl. 64—98.)



1. In combination, a sprocket wheel and a driving shaft therefor, one of said elements having a ball and the other of said elements having a hemispherical socket in driving engagement therewith whereby limited relative angular variation between said elements is permitted and resilient means carried by one of said elements for securing said ball and socket in driving engagement.

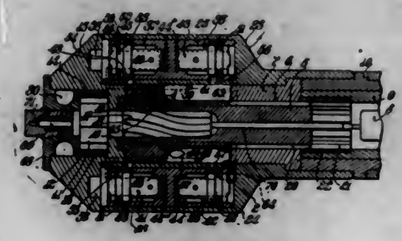
1,884,647. TRANSVERSE JOINT FOR CONCRETE PAVEMENTS. ROBERT B. GAGE, Trenton, N. J. Filed July 24, 1931. Serial No. 552,895. 5 Claims. (Cl. 94—18.)



1. An expansion joint for concrete pavements including means extending through the joint opening to the subgrade of the pavement, the concrete being set around said means, said means including upright hollow compressible portions at different elevations, said portions being parallel and offset from each other, said means including an incompressible horizontal portion interconnecting the upright portions, the upper portion of said means extending into proximity to the pavement surface, and a plastic filler in the joint opening resting on said upper portion.

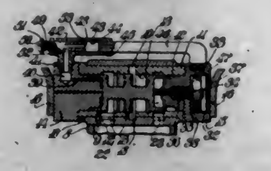
1,884,648. DRILLING MECHANISM. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 27, 1927. Serial No. 215,958. 11 Claims. (Cl. 121—24.)

1. In a pressure fluid motor, a cylinder, a piston reciprocable in said cylinder, and fluid distribution means for effecting reciprocation of said piston including a plurality of fluid actuated fluid distributing valve means for controlling fluid admission to only one end of said cylinder, means for operating said valve means in differently timed relation including passages controlled by said piston for controlling pressure fluid flow between said cylinder and



said valve means for controlling throwing of the latter, and independently operable fluid distribution means for only the opposite end of said cylinder.

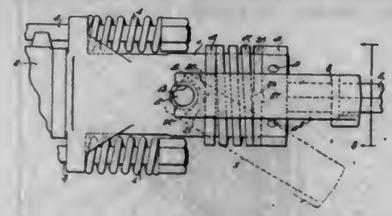
1,884,649. DRILLING MECHANISM. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Original application filed Oct. 27, 1924, Serial No. 746,242. Divided and this application filed Feb. 23, 1928. Serial No. 256,277. 5 Claims. (Cl. 121—6.)



1. In a fluid actuated rock drill, the combination with a tool actuating motor including a cylinder and a hammer piston reciprocable therein, fluid distribution means for effecting reciprocation of said piston including a valve chest, a fluid actuated fluid distributing valve therein controlling fluid distribution for opposite ends of said cylinder bore and means for conducting pressure fluid from said cylinder to said valve chest to effect throwing of said valve and including a valve throwing passage leading from one end of said valve chest to said cylinder adjacent its forward end, a hollow tool adapted to be actuated by said piston, and means for establishing communication between the forward end of said cylinder and the bore in said tool when the piston is held in its rearward position, of a hole blowing device comprising pressure fluid operated means relative to which said fluid distributing valve is movable during its normal operation for positively shifting said valve against the resisting throwing pressure and holding said valve in one position to effect a hole blowing operation by continuous supply of pressure fluid to the forward end of said cylinder, and means under manual control for admitting pressure fluid from said throwing passage to said pressure fluid operated means for effecting a hole blowing operation.

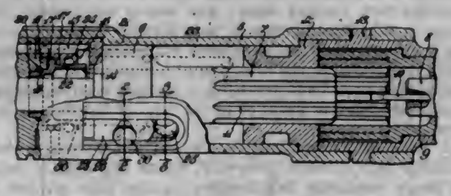
1,884,650. DRILLING APPARATUS. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 26, 1928. Serial No. 315,327. 11 Claims. (Cl. 121—32.)

1. In a rock drill, a chuck housing having cylindrical lugs projecting laterally therefrom, a retainer yoke pivotally mounted on said chuck housing and having arcuate bearing surfaces cooperating with said lugs, and means for resiliently maintaining said bearing surfaces in engagement with said lugs comprising an annular member surrounding said chuck housing and engaging said yoke



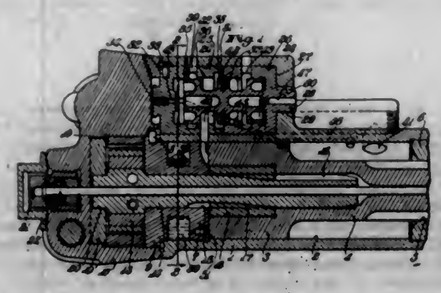
and yielding means for holding said member against said yoke and for holding said bearing surfaces in contact with said lugs.

1,884,651. ROCK DRILL. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 2, 1929. Serial No. 337,061. 10 Claims. (Cl. 121—6.)



1. In a rock drill, the combination of a cylinder having ports and passages for the admission and exhaust of motive fluid, a piston reciprocable therein, said cylinder having intermediate its length and controlled by the piston an exhaust port, a slide valve arranged alongside the cylinder and adapted in one position to close the exhaust port, said slide valve being maintained in its closed position by the pressure of the fluid in the cylinder, and a drill bit having a longitudinal passage for the motive fluid from the end of the cylinder to its cutting end.

1,884,652. ROCK DRILL. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 10, 1929. Serial No. 377,273. 7 Claims. (Cl. 121—13.)



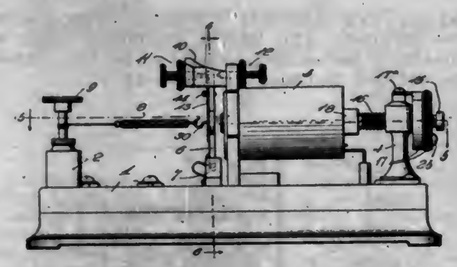
1. In a rock drilling motor, a cylinder, a piston reciprocable in said cylinder, and fluid distribution means for effecting reciprocation of said piston including a projection on said cylinder having a bore, alined valve sleeves arranged in end abutting relationship in and fitting said bore and cooperating to form a valve chamber, a valve in said chamber, said sleeves having ports therein controlled by said valve, and a head block closing the rear end of said cylinder and engaging the outer sleeve and retaining said sleeves in said bore.

1,884,653. DEMOLISHING PICK. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,213. 9 Claims. (Cl. 262—13.)



1. In combination, a tool, an actuating motor therefor, and supporting means therefor including a manual grasping handle extending at substantially right angles to the axis of the tool, and a second handle swingable relative to the first handle and to the tool, the weight of the tool being wholly supported by the operator by said handles.

1,884,654. RELAY AND CIRCUIT BREAKER. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,524. 6 Claims. (Cl. 200—95.)

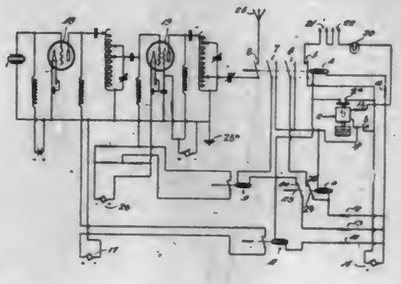


1. In a relay, an electromagnet, an armature pivotally mounted for actuation by said electromagnet, a contact member mounted on the side of said armature remote from said electromagnet, and a resilient member attached to said armature on the side thereof remote from said electromagnet and mounted to engage said contact member for permitting a marginal freedom of motion of said armature in its magnetically unactuated position without disengaging said contact member.

1,884,655. ANTENNA RELAY AND CONTROL SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1929. Serial No. 348,317. 9 Claims. (Cl. 250—8.)

2. In a high frequency transmitting system the combination of thermionic tubes having associated energizing circuits and space radio radiating circuits, interdependent relays connected with said circuits, auxiliary contact members of one of said relays connected for controlling an indicating device at a remote point, a key adapted to control the transmission of signaling energy according to

code combinations, one of said relays being retarded in opening and closing, said key connected with said relays whereby said relays are energized by the initial operation

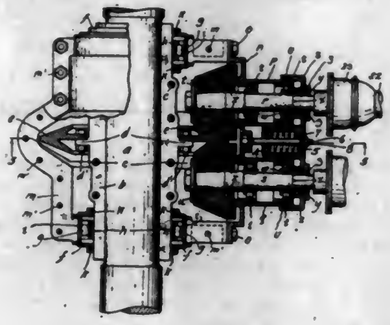


of said key and whereby further continuous and normal operation of said key controls the transmission of said code combinations as desired.

1,884,656. PROCESS FOR OBTAINING PHOSPHORUS-HALOGEN COMPOUNDS. HENRI CASPAR JOSEPH HUBERT GELISSEN, Roermond, Netherlands, assignor to Naamloose Vennootschap Electrochemische Industrie, Roermond, Netherlands, a Dutch Company. Filed Dec. 11, 1928, Serial No. 325,391, and in the Netherlands Dec. 22, 1927. 7 Claims. (Cl. 23—87.)

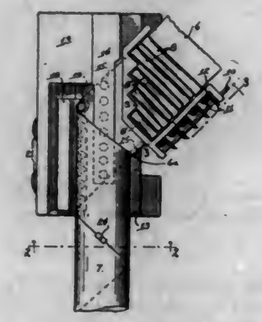
1. A process for obtaining phosphorus-halogen compounds from phosphates which comprises treating the phosphate with a free halogen in the presence of a reducing agent, while in the presence of a halide of a brass-forming metal as a catalyzer.

1,884,657. CAR AXLE DRIVE FOR ELECTRIC LIGHTING SYSTEMS AND OTHER PURPOSES. CARL F. GERLINGER, Dallas, Oreg. Filed Dec. 30, 1931. Serial No. 583,905. 14 Claims. (Cl. 105—117.)



1. In a car axle drive the combination of a driving friction gear carried by the car axle, a driven gear element comprising two friction pinions, one thereof adapted for operative connection to an operated device, one of said gear elements straddling the other, a housing inclosing the drive, and movable on the axis of the car axle, the driven gear element being journaled in the housing axially movable towards the driving gear, means suspending the housing from the car axle truck frame adapted to accommodate universal movement of the housing relatively to the truck frame and means including a spring for holding the driven gear element in operative relation with the driving gear.

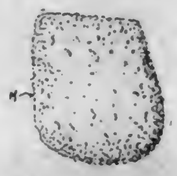
1,884,658. SPIRAL PIPE MACHINE. VLADIMIR GLADKOV and AUGUSTIN J. HAND, Berkeley, Calif., assignors to California Corrugated Culvert Co., Berkeley, Calif., a Corporation of California. Filed July 19, 1930. Serial No. 469,053. 10 Claims. (Cl. 113—35.)



1. In a spiral pipe machine, means for bending a sheet helically into tubular form; and means for feeding said sheet to said bending means, said feeding means comprising a plurality of rolls positioned with their axes substantially transverse to the direction of movement of the sheet, and having their ends arranged in stepped relation along a line approximately parallel to the line of bending of said sheet.

5. In a spiral pipe machine, means for bending a sheet helically into tubular form, said means including a series of freely rotatable ball bearing against one surface of the sheet, and a roller mounted in a plane different from that of said balls and adapted for contact with the edge portion of said sheet to bend it initially to a curvature different from that of its central portion; and means for feeding said sheet into said bending means.

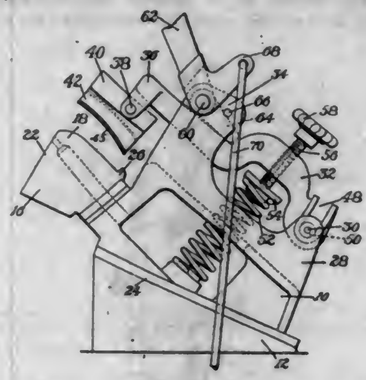
1,884,659. SPONGE MITT. WILLIAM J. GOULD, Johnstown, N. Y., assignor to Jesse D. Edick, Johnstown, N. Y. Filed Jan. 25, 1932. Serial No. 588,702. 4 Claims. (Cl. 15—227.)



1. As a new article of manufacture, a washing mitt having a face lamination of sheepskin with the wool outwardly disposed, said lamination having a plurality of openings therethrough, a backing lamination secured to the sheepskin lamination, said backing lamination being open at the inner or wrist portion of the mitt to allow the insertion of a hand therein, and a sponge element within and secured against displacement from the mitt, said element being provided with openings to receive the extremities of the digits of a hand inserted within the mitt.

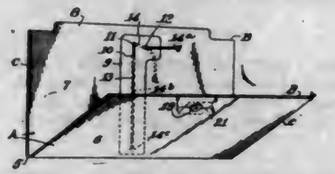
1,884,660. MACHINE FOR SHAPING SHOE UPPERS. JOSEPH GOULDBOURN, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 25, 1929, Serial No. 402,491, and in Great Britain Nov. 12, 1928. 22 Claims. (Cl. 12—51.)

1. A shoe upper shaping device having, in combination, an inverted V-shaped inner mold, an outer mold, means for moving said outer mold toward said inner mold to engage the back of the heel end of a shoe upper and for



applying pressure to said outer mold thereby to define the vertical middle line of the top of the rear end of the shoe upper.

1,884,661. FILE HOLDER. WILLIAM S. GRAHAM, Berkeley, Calif. Filed Mar. 17, 1930. Serial No. 436,311. 9 Claims. (Cl. 129—16.7.)



1. A file holder of the character described, comprising a plurality of hingedly connected leaves, a flexible member connected between its ends to one of said leaves so as to be adapted for adjustment relative to said connection, and an anchor means on another leaf adapted to releasably engage an end portion of said flexible member.

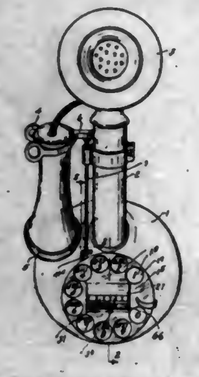
1,884,662. LIGHT REFLECTING TYPE. WILLIAM GRASS, Roslyn Heights, N. Y. Original application filed Jan. 13, 1927, Serial No. 160,949. Divided and this application filed July 15, 1931. Serial No. 550,926. 6 Claims. (Cl. 95—85.)



1. A type for photographic printing, in the form of a transparent triangular prism, having the outline of the letter set off on one of its sides by opaque substance.

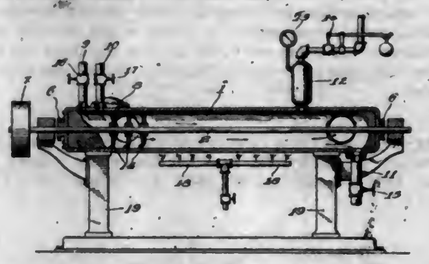
1,884,663. NUMBER INDICATOR AND REGISTER FOR AUTOMATIC TELEPHONES. WILLIAM GREENBERG, Portland, Oreg., assignor to Alta Greenberg, Portland, Oreg. Filed Feb. 17, 1930. Serial No. 429,134. 8 Claims. (Cl. 179—90.)

3. In a device of the class described, in combination with an automatic telephone, of a housing having an annular gear associated therewith attachable to the base of the telephone, a second housing attachable to the dial shaft of the automatic telephone, means associated with the respective housings and coacting with the annular gear for indicating and registering central of the telephone dial the number dialed as the dial occurs and means associated with



the hook of the receiver for clearing the dialed number when the telephone receiver is placed upon the receiving hook.

1,884,664. PROCESS OF MAKING EMULSIONS. MAXWELL G. GREGG, Ballston Spa, N. Y., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed June 19, 1922, Serial No. 569,467. Divided and this application filed July 19, 1930. Serial No. 469,087. 4 Claims. (Cl. 134—1.)



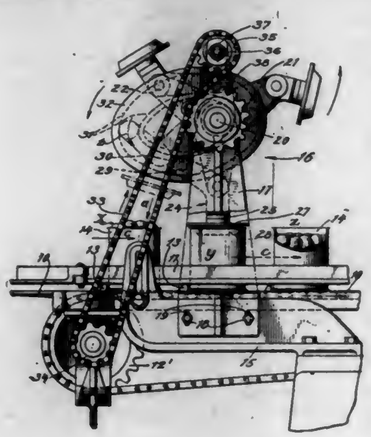
1. A process of making emulsions, which comprises subjecting a base material, water and an emulsifying agent to agitation to disperse the base material in the water, imparting a cyclic circulation in a horizontal direction to said dispersion, maintaining said cyclic circulation of said dispersion while introducing fresh quantities of base material, water and emulsifying agent to the circulating mass to be dispersed, and withdrawing predetermined amounts of dispersion from said circulating mass.

1,884,665. METALLIC TREATMENT OF VITREOUS MATERIALS. ALFRED GREINER, Boston, Mass., assignor of forty per cent to Rene E. Schirmer, Newton, Mass., and twenty per cent to Lawrie L. Witter, Jamaica Plain, Mass. Filed Oct. 5, 1929. Serial No. 397,637. 13 Claims. (Cl. 49—81.)



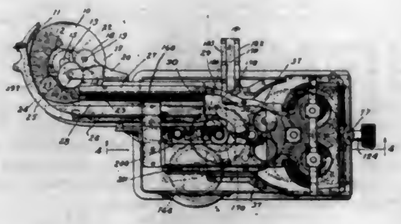
1. A process of metallizing a vitreous body, consisting of treating the surface of the body in its heated condition with a metallic compound to impregnate the body on and beneath the surface with the compound.

1,884,666. CAN PACKER. HENRY L. GUENTHER, Los Angeles, Calif. Filed Aug. 18, 1928. Serial No. 300,477. 10 Claims. (Cl. 226—71.)



1. A can packer adapted to press the contents of a can to a level below the mouth thereof as the can moves in a lineal horizontal path of travel, which consists of a plurality of packing members moving in a vertical plane around a common axis, and means whereby said members may be caused to register with the can and travel in unison therewith and in a plane substantially parallel to the path of travel thereof for a predetermined distance, said last named means including a rotary carrier having the packing members mounted on it and a non-circular guide operatively connected with the packing members for modifying the rotary movement imparted to the same by the carrier.

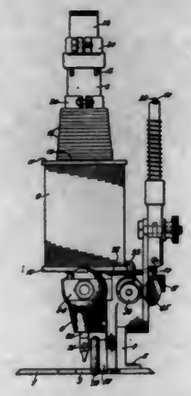
1,884,667. VACUUM DOUBLE SEAMING MACHINE. HENRY L. GUENTHER, Los Angeles, Calif. Filed Dec. 28, 1929. Serial No. 417,057. 15 Claims. (Cl. 113—24.)



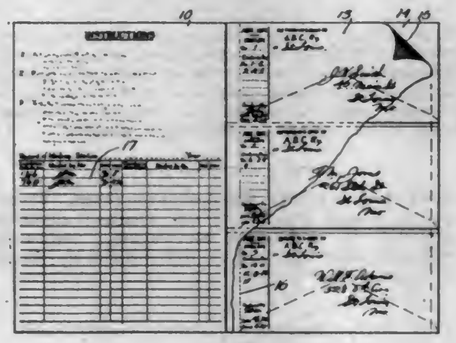
1. A machine for double seaming cans in vacuo, comprising a seaming head, a rotating carriage having a pocket into which a can may be lowered, and after which it may be moved with the carriage to an operative position relative to the seaming head, a bell surrounding the seaming head and acting with the rotatable carriage and the pocket therein when in register therewith to form an air tight compartment within which the can may be seamed, means exerting suction upon said compartment, and means for raising the can from its pocket to be disposed in seaming operation with the seaming head, and to be acted upon thereby.

1,884,668. PUNCHING MACHINE. JOHN B. GURY, Jr., St. Louis, Mo., assignor to J. B. Gury Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 21, 1931. Serial No. 510,087. 23 Claims. (Cl. 164—89.5.)

1. A punching machine comprising a plunger, a tube in which said plunger is mounted for operation, an electromagnet supported by said tube for operating said plunger in one direction, a spring enclosed in said tube for moving said plunger in the opposite direction when said magnet is de-energized, automatic mechanism for energizing said magnet as an incident to movement of the punching machine along the work, and means operated by said plunger during movement of said plunger by said magnet to de-energize said magnet.



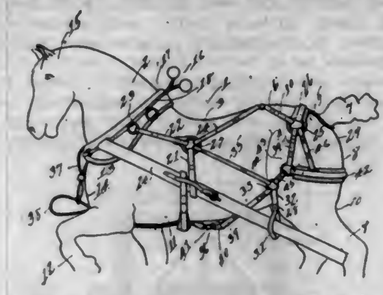
1,884,669. ARRIVAL NOTICE BOOK. JOHN B. HANNAN, deceased, Indianapolis, Ind., by Mary M. E. Hannan, executrix, Indianapolis, Ind. Filed May 17, 1929. Serial No. 363,861. 1 Claim. (Cl. 282—23.)



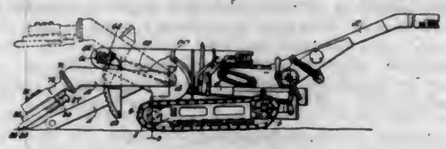
A freight arrival notice book comprising a front and a back cover and a plurality of appropriately aligned record sheets and envelopes secured in alternate relation along one edge in the book, the record sheets having a transfer medium on the under side by means of which records made on the sheet will be simultaneously made on the face of the envelope beneath it, one end of the envelope being secured in the book and having a line of perforations by means of which the envelope may be detached from the book, this end of the envelope being glued along a strip which extends in sufficiently past the line of perforations to insure that the end of the envelope will be closed when detached from the book, substantially as set forth.

1,884,670. TRACE SUPPORT. HOWARD V. HANSON, Walla Walla, Wash. Filed Apr. 11, 1931. Serial No. 529,357. 4 Claims. (Cl. 54—1.)

1. In a trace support, the combination with a plow harness, having a hip pad, of a lazy strap, provided with a single breeching ring, and unitary means attached to said single breeching ring to securely support said lazy strap, from said hip pad and rearward of the hip bone of a harnessed animal, and means to secure and maintain said single breeching ring in a fixed position longitudinally on said animal.

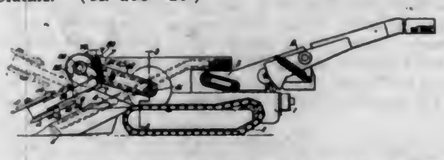


1,884,671. LOADING MACHINE. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 31, 1929. Serial No. 417,625. 2 Claims. (Cl. 198—10.)



1. In a loading machine, a portable base, conveying means thereon, and material gathering means associated with said conveying means for moving the material to be loaded thereon and including a swingable arm structure pivotally mounted on said base, material gathering elements carried beneath the outer extremity of said arm structure and overlying and movable laterally in substantially the plane of the conveying means, and means for swinging said arm structure to vary the elevation of said gathering elements relative to said conveying means.

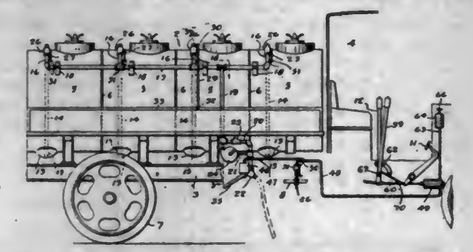
1,884,672. MATERIAL HANDLING MECHANISM. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 21, 1930. Serial No. 445,987. 5 Claims. (Cl. 198—10.)



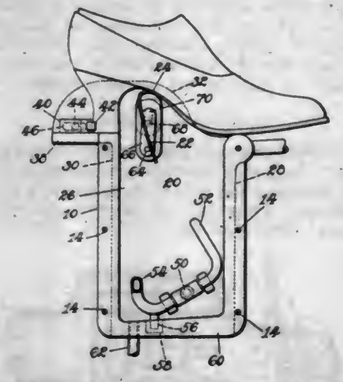
1. In a loading machine, conveying means, and material gathering means associated with said conveying means for moving the material onto the conveying means including a pair of relatively movable material engaging picks swingably mounted at each side of the conveying means, the picks of each pair mounted to move in superimposed planes.

1,884,673. TANK TRUCK. FRED LAWRENCE HAYES, Port Washington, N. Y., assignor, by mesne assignments, to Charles Henry Bickell, Passaic, N. J. Filed Mar. 12, 1925. Serial No. 14,952. 14 Claims. (Cl. 137—21.)

1. The combination with a tank, of a discharge mechanism comprising a siphon having an intake limb extending to a point near the bottom of said tank and an outlet limb, mechanical means for initiating flow through the siphon said means being connected to the outlet limb of the siphon, a by-pass around said means, said by-pass being formed by a pipe connection independent of said means and connected at its ends to the outlet limb at points spaced from said means, said by-pass permitting free outward siphonic flow from the tank, a self-closing valve normally arresting flow through the siphon, and means for operating the valve to permit such flow.

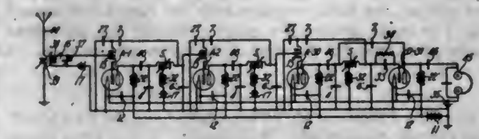


1,884,674. APPARATUS FOR CONDITIONING PARTS OF SHOES. GEORGE HAZELTON and THOMAS BAGGOTT CLARKE, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 11, 1930, Serial No. 494,941, and in Great Britain Jan. 3, 1930. 18 Claims. (Cl. 12—1.)



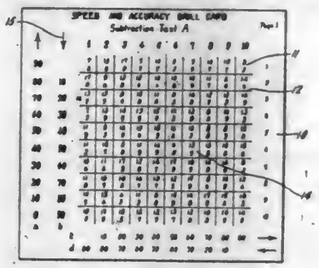
1. A conditioning apparatus comprising means constructed and arranged to support a Louis-heeled shoe, means arranged to maintain an unlayed breast-flap thereof away from the heel, and means arranged to spray a conditioning fluid on the breast of the heel.

1,884,675. ELECTRIC WAVE TRANSMISSION SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,610. 27 Claims. (Cl. 179—171.)



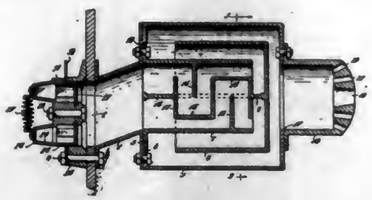
1. The method of operating a multistage vacuum tube circuit including inductive reactance connected between two of the vacuum tube stages which comprises varying that reactance and maintaining the width of the transmitted frequency band and the gain of the circuit for that band the same for different values of that reactance.

1,884,676. EDUCATIONAL DEVICE. WILLIAM E. HENDRIE, Greenlawn, N. Y. Filed Dec. 20, 1928. Serial No. 327,354. 2 Claims. (Cl. 35—12.)



1. A problem sheet having one hundred problems printed on one face thereof in square array of ten rows and ten columns, said sheet having the answers to said problems printed on the reverse face thereof, the arrangement and spacing of the answers being substantially identical with the arrangement and spacing of the problems whereby fresh portions of a blank paper strip with successive folds may be placed in juxtaposition successively with the several rows or columns, to receive the written solutions of the problems and may be subsequently placed in juxtaposition successively with the several rows or columns of printed answers for direct comparison, and marginal percentage data extending in parallel spaced rows vertically of one side of the sheet and longitudinally of one end of the sheet and in alignment with the rows and columns whereby the percentage of problems solved be determined upon inspection when the problems are worked upwardly or downwardly of the rows or from left to right or right to left of the columns.

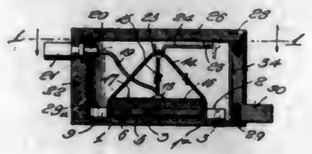
1,884,677. PREHEATED SECONDARY OXYGEN REGULATOR. NICHOLAS HENNESSY, Bristol, Pa., assignor to The International N S E Corporation, a Corporation of Delaware. Filed Aug. 20, 1927. Serial No. 214,415. 3 Claims. (Cl. 110—75.)



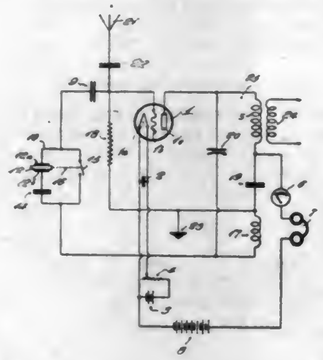
1. A combustion promoting device for a furnace comprising a casing arranged within the furnace, means for connecting the front end of the casing with the exterior of the furnace, a nozzle member connected with the other end of the casing having nozzles therein extending in different directions and said nozzles being of different cross sectional shapes, a pair of cylinders in the casing one cylinder being of cup shape and encircling the rear end of the first cylinder with its closed end spaced from the inner end of the other cylinder and partitions in the first cylinder forming a tortuous air passage.

1,884,678. PIEZO-ELECTRIC CRYSTAL APPARATUS. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1929. Serial No. 386,440. 1 Claim. (Cl. 171—327.)

Piezo electric crystal apparatus comprising a base member, a hermetically sealed insulated housing carried by said base member, a metallic supporting plate member secured to the interior of said base member within said housing, a piezo electric crystal element having one face thereof in contact with said supporting plate member, a metallic contact plate in contact with another face of said crystal, said supporting plate member having diametral grooves cut in the face thereof in contact with said base member and extending substantially normal to each other, said base member having correspondingly aligned grooves cut therein, the face of said supporting plate member in contact with said crystal being multiply apertured near each end of each of said diametral grooves symmetrically with reference to a central point of said supporting plate member, supporting means attached to said housing, and flexible cords supported by said supporting means and passing through said diametral grooves in said supporting plate and through apertures in the face thereof in contact with said crystal symmetrically disposed with reference to a central point of said plate member and disposed one near each end of each of said diametral grooves, whereby crystals of different sizes may be resiliently supported in said housing without contact with the medium outside said housing.

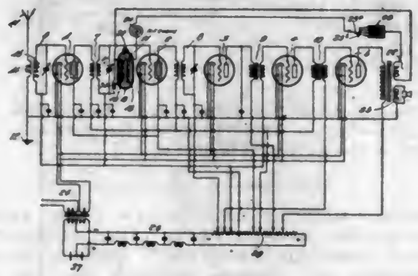


1,884,679. HIGH-FREQUENCY OSCILLATORY SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 16, 1929. Serial No. 400,033. 3 Claims. (Cl. 250—36.)



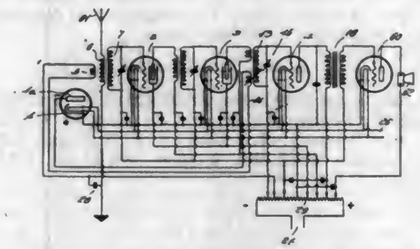
1. In a high frequency oscillatory system, an electron tube having cathode, grid and anode, a piezo electric crystal element, an input circuit connected between said grid and said cathode and comprising said piezo electric crystal element, an output circuit connected between said anode and said cathode, and means connected in series with said piezo electric crystal element for preventing self-oscillations when said crystal is not vibrating, said means comprising an impedance of admittance substantially less than is required to pass through the circuit containing said piezo electric crystal element and said impedance at frequencies approximating the frequency of said crystal element sufficient current to maintain self-oscillations when said crystal is not vibrating.

1,884,680. AUTOMATIC VOLUME CONTROL SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 17, 1930. Serial No. 461,822. 12 Claims. (Cl. 250—20.)



1. A volume control system for a signal receiving circuit comprising in combination a resonant circuit, an electroscopic device having a pair of capacity areas connected with said resonant circuit and means for controlling the effective capacity of said electroscopic device in accordance with the amplitude of the incoming signaling energy by variable displacement of said capacity areas with respect to each other.

1,884,681. VOLUME CONTROL SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,942. 7 Claims. (Cl. 250—20.)



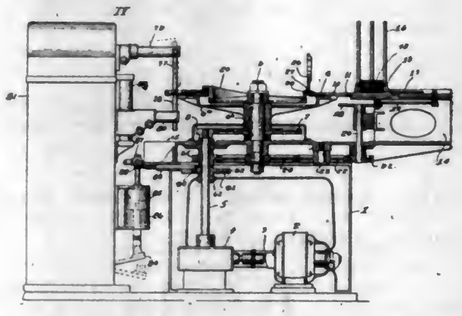
1. In a signal receiving system, a multiplicity of electron tube amplification stages, and means coupling one amplification stage with a preceding amplification stage for feeding back energy to said preceding amplification stage in phase opposition to the incoming signaling energy in proportion to the amplitude of the incoming signaling energy.

1,884,682. KEY OPENING CAN. HENRY HERMANI, Baltimore, Md., assignor, by mesne assignments, to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 9, 1927, Serial No. 211,693. Renewed Apr. 30, 1931. 2 Claims. (Cl. 220—52.)



1. A key opening can having a vent opening in its top normally closed by a drop of solder, and a key having an auxiliary opening at the end remote from the handle and beyond the rip strip engaging slot through which auxiliary opening the solder passes to hold the key to the can.

1,884,683. MACHINE FOR ATTACHING KEYS TO CAN TOPS. HENRY HERMANI, Baltimore, Md., assignor, by mesne assignments, to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1928. Serial No. 299,587. 22 Claims. (Cl. 113—1.)



1. In a machine of the class described, a rotating turret having a plurality of holders for holding can tops with both faces exposed, means to insert tops into the holders, means to deposit a key having an auxiliary opening for a rivet on each top, means to preform a rivet in the opening, means to spot weld the rivet to the top, and a common means to rotate the turret and to operate all of said means in sequence.

1,884,684. FLYER FOR SPINNING MACHINES AND THE LIKE. HARVEY E. HERR, Buffalo, N. Y., assignor to Herr Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Aug. 7, 1931. Serial No. 555,705. 9 Claims. (Cl. 117—23.)

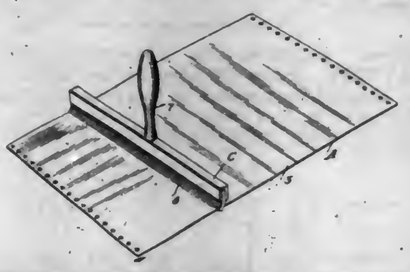


1. A flyer for spinning machines and the like, comprising a body adapted for attachment to a bobbin-spindle, a brake element hinged to said body for movement into and out of frictional contact with the bobbin, and yieldable means for urging said brake element into frictional contact with the bobbin.

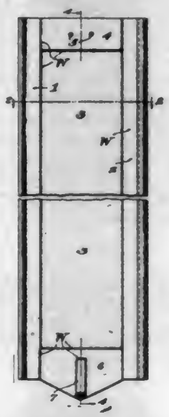
1,884,685. METHOD OF RECONDITIONING PRINTING PLATES. LANDON HILL and JOHN DOUGLAS HOBBY, Raleigh, N. C. Filed Sept. 6, 1929. Serial No. 390,842. 2 Claims. (Cl. 101—401.1.)

1. The herein described method of reconditioning metal plates used in printing apparatus, consisting in first treat-

ing the metal surface of the plate with a cleansing fluid to remove ink or other substances on the plate, then removing the cleansing fluid from the plate and permitting the plate to dry and finally drawing a strip of rubber containing an abrasive back and forth over the surface of the plate.

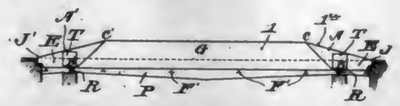


1,884,686. METAL PILING. MEIER GEORGE HILPERT, Bethlehem, Pa. Filed Oct. 10, 1927. Serial No. 225,269. 23 Claims. (Cl. 61—60.)



1. In a fabricated metal piling having side sections provided with interlocking means at the outer edges thereof for engaging with adjacent piling units, an intermediate web comprising plates of varying thickness connected edge to edge throughout the vertical height of the piling.

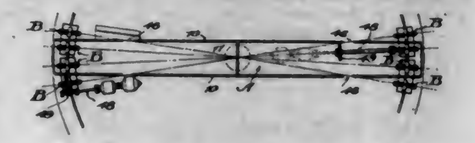
1,884,687. STRUCTURAL SPAN. MEIER G. HILPERT, Bethlehem, Pa. Filed Jan. 5, 1929. Serial No. 330,672. 14 Claims. (Cl. 104—35.)



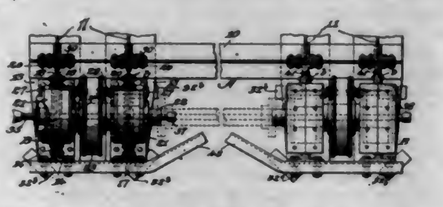
1. A movable structural span of the class described including, a main span comprising main girders extending the length of the span and including flexible cantilever sections, and wheeled trucks carried by the girders at the beginning of the said cantilever sections.

1,884,688. TRUCK SUPPORTED LOAD CARRYING STRUCTURE. MEIER G. HILPERT, Bethlehem, Pa. Filed Apr. 8, 1931. Serial No. 528,621. 14 Claims. (Cl. 104—35.)

1. A structure of the character described comprising a load carrying span, supporting trucks adjustably connected with said span, said trucks having axially bored axles through which a sight is to be taken to effect desired positioning of the axles relative to the span, and the span having sighting openings formed through such portions thereof as are disposed between the truck axles and a point to which the sight is to be taken.

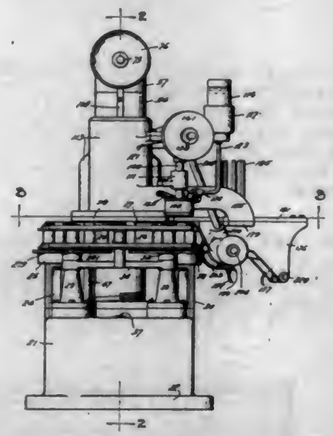


1,884,689. METHOD OF ALIGNING THE TRUCK AXLES AND OF ASSEMBLING TRUCK SUPPORTED LOAD CARRYING STRUCTURES. MEIER G. HILPERT, Bethlehem, Pa. Original application filed Sept. 21, 1927, Serial No. 221,120. Patent No. 1,831,112, dated Nov. 10, 1931. Divided and this application filed May 14, 1931. Serial No. 537,471. 15 Claims. (Cl. 29—84.)



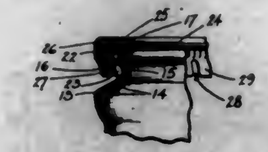
1. The method of aligning a pair of spaced axles which consists in forming axial bores through the axles, sighting through said bores by means of suitable instruments, and adjusting one or the other or both of said axles until they are brought into alignment as determined by the sight taken through their bores.

1,884,690. CAN HEADING AND SEALING MACHINE. HARRY S. HOGAN, New Orleans, La., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 3, 1930. Serial No. 432,887. 8 Claims. (Cl. 113—14.)



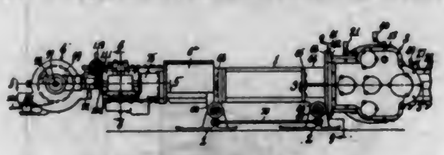
1. In a can heading and sealing machine, the combination of a can feeding device for feeding cans with a flanged end into the machine, means for lining the flanged end of said can with a sealing material, said means causing the sealing material to be applied to the upper surface of the cam flange, a can cover feeding device for bringing a cover to the flange-lined can, and mechanism for securing the cover on the can in a sealed joint.

1,884,691. CONTAINER. WILLIAM M. HOLLOWAY, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 21, 1929. Serial No. 387,514. 2 Claims. (Cl. 220—59.)



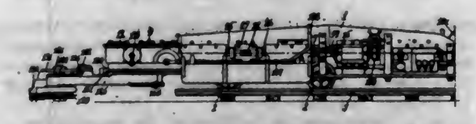
1. A container comprising a body having an annular recess in its outer wall extending around its periphery and located adjacent its top end and having an annular ledge formed in the body above said recess, the extreme edge of the body being bent inward and downward to oppose said ledge, a frangible cover having its margin secured between said ledge and said extreme edge of the body, and a removable cover having a depending flange and an annular knurled surface adjacent, said flange terminating in a plurality of inwardly turned edges adapted to be sprung outwardly by said ledge when said cover is applied to the container body and then to spring inwardly under said ledge and into said recess to hold the cover on the container body.

1,884,692. MINING APPARATUS. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 18, 1929. Serial No. 415,050. 21 Claims. (Cl. 262—28.)



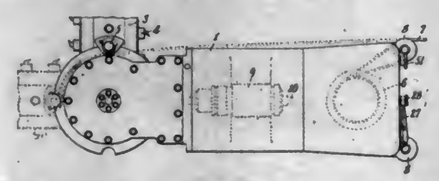
1. In a mining apparatus, a portable support, cutting mechanism carried thereby, a motor carried by said support, and feeding means driven by said motor including a feed operating member arranged on a horizontal transversely extending axis and adapted to cooperate directly with flexible feeding means, and driving means for said member including a fast and slow predetermined speed transmission means disposed generally on a horizontal axis, and a reversing mechanism disposed generally on a horizontal axis in the drive between said transmission means and said feed operating member whereby the latter may be driven in either of opposite directions at a relatively low cutting speed and at a relatively high moving speed.

1,884,693. MINING APPARATUS. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 18, 1929. Serial No. 415,051. 16 Claims. (Cl. 262—28.)



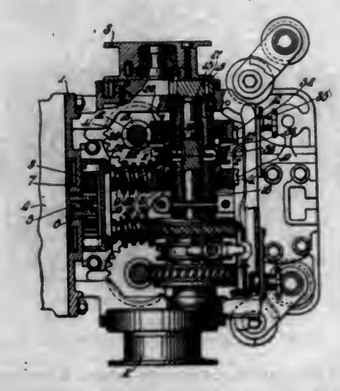
1. In a mining apparatus, a portable frame, kerf cutting mechanism mounted on said frame including a cutter head rotatable about a longitudinal axis, a supporting arm pivotally mounted on said cutter head for swinging movement relative thereto and adjustable therewith about the head axis, mechanism for adjusting said arm in a vertical direction, a cutter bar pivotally mounted on the outer end of said arm for independent swinging movement relative thereto about an axis parallel to the pivotal axis of said arm, and releasable locking means for holding said cutter bar in its different angular positions relative to said arm.

1,884,694. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 30, 1929. Serial No. 417,331. 45 Claims. (Cl. 262—30.)



1. A mining machine feeding mechanism including a feed operating member adapted to cooperate directly with flexible feeding means, and mechanism for driving said member in a direction to draw in its cooperating flexible feeding means including an oscillatory driving element, means driven thereby for transforming the oscillatory motion thereof into an intermittent rotary motion, means for transforming said intermittent rotary motion into an oscillatory motion, and means for transforming said last mentioned oscillatory motion into an intermittent rotary motion of said feed operating member.

1,884,695. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 26, 1930. Serial No. 439,187. 24 Claims. (Cl. 262—30.)

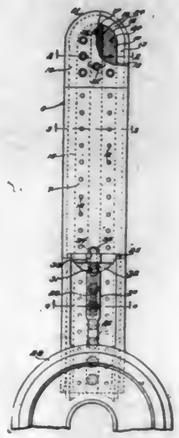


1. In a mining machine feeding mechanism, the combination of a feed member, driving mechanism for said feed member including a controlling clutch and operating means therefor, and separate clutch means controlled by said clutch operating means for insuring disconnection of said feed member from said driving mechanism whenever said clutch operating means is moved into its clutch releasing position.

1,884,696. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 25, 1930. Serial No. 463,776. 15 Claims. (Cl. 262—28.)

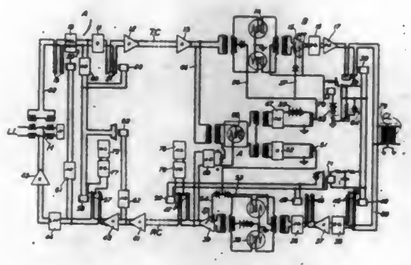
1. A mining machine cutter bar having a cutter chain channel extending along two opposed sides and in arcuate

form around one end of the cutter bar comprising top and bottom plates, cooperating end plates, mating metal strips



welded to said plates, and devices for securing said plates and strips in assembled relation.

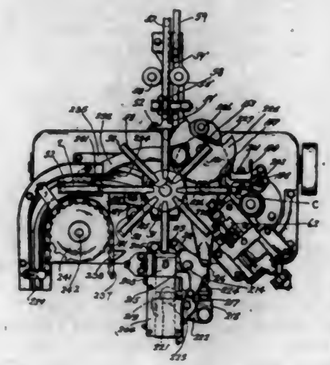
1,884,697. LONG DISTANCE TELEPHONE SYSTEM. ARTHUR W. HORTON, Jr., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1930. Serial No. 501,275. 7 Claims. (Cl. 179—170.)



1. In a transmission system comprising a two-way transmission path and a terminal circuit therefor including transmitting and receiving branches with directional switching apparatus for alternatively connecting said branches to said path, an artificial source of residual noise, said directional switching apparatus connecting said source to the receiving branch when the receiving branch is disconnected from the transmission path.

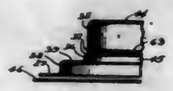
1,884,698. CONTAINER ASSEMBLING MACHINE. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 21, 1928. Serial No. 307,502. 25 Claims. (Cl. 29—11.)

1. In a machine for assembling hinge covers to containers, in combination, means to feed and partly pre-form a cover to form hinge members thereon and to position said cover upon a portion of a container body adapted to receive such hinge members in a partially assembled rela-



tionship, and a mandrel around which the body may slide, said mandrel having a die for curling hinge elements of the cover.

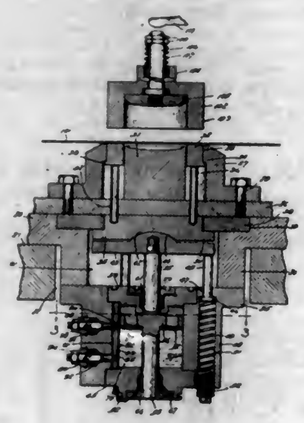
1,884,699. METHOD OF MAKING FRICTION CLOSURES. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 2, 1929. Serial No. 343,992. 7 Claims. (Cl. 113—121.)



1. The method of producing a friction closure for a container, which comprises shaping a blank of sheet material into a cup member having two adjacent concentric walls of said cup of different diameters connected by an offset 37 in the side of the cup member which offsets said concentric walls out of line with each other, dividing said member into an inner and an outer part by severing said offset by a cutting action in a direction parallel with said walls, forming said inner part into a friction plug having an exterior friction wall of given dimension, and forming said outer part into a friction ring having an interior friction wall of dimension adapting it to engage the friction wall of said friction plug.

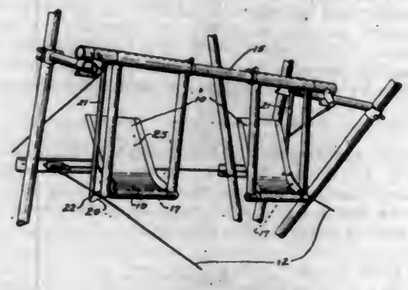
1,884,700. DRAWING PRESS HYDRAULIC CUSHION. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 19, 1930. Serial No. 445,780. 11 Claims. (Cl. 113—46.)

1. In a drawing press mechanism, the combination of a pair of opposed, substantially concentric instrumentalities for clamping material to be drawn in a slip grip, an hydraulic cushion connected to one of said instrumentalities and resisting movement thereof for supplying a clamping force in said slip grip, means for closely confining said



cushion so that it has no empty space, and means for adjusting the resistance of said cushion and controlling the clamping action of said slip grip.

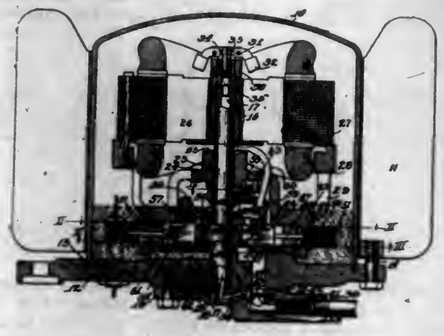
1,884,701. AIRCRAFT. CLINTON W. HOWARD, Dayton, Ohio. Filed June 4, 1930. Serial No. 459,231. 10 Claims. (Cl. 244—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



10. In a brake and rudder control mechanism for aircraft, a rudder control member having a rudder pedal provided with a tread, a brake pedal including a tread portion supported at its one end on said rudder pedal, the tread portion of said brake pedal being so disposed with respect to the tread portion of said rudder pedal such that said brake pedal may be operated independently of said rudder pedal.

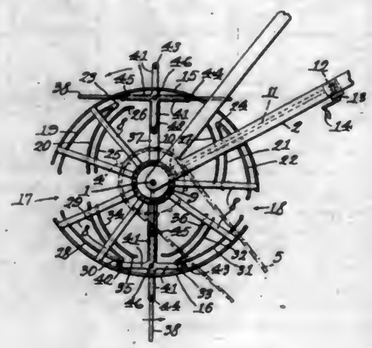
1,884,702. ROTARY COMPRESSOR UNIT. EARL F. HUBACKER, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 29, 1929. Serial No. 410,287. 17 Claims. (Cl. 230—29.)

1. A device of the class described comprising a closed casing, a rotary compressor, a driving shaft therefor and a driving motor mounted on said shaft, the compressor, shaft and motor being enclosed in said casing, a relief passage extending axially through said shaft, a centrifugal unloading valve controlling said relief passage, a suction supply passage to said compressor having a branch



in communication with the relief passage in said shaft, and a check valve in said suction supply passage and anteriorly located relative to said branch.

1,884,703. PROPELLER. LOUIS F. HUBER, Baltimore, Md. Filed Dec. 1, 1930. Serial No. 499,389. 4 Claims. (Cl. 170—149.)

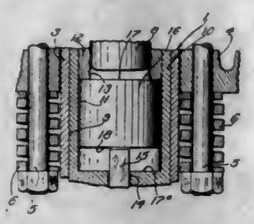


1. A propeller including a shaft, members rotatable therewith, a propeller blade supported by said members and rotatable about its individual axis, regularly spaced rail engaging elements rotatable with the blade, said elements being all movable in the same plane and disposed 90° apart, and a track held against rotation with the shaft and blade and having rails cooperating at all times with one or more of said elements to hold the blade against unrestrained rotation about its individual axis while rotating with the shaft and thus bring the blade successively to feathering and propelling positions, said track comprising diametrically opposed duplicate portions.

1,884,704. IMPACT TOOL. MERVIN C. HUFFMAN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 15, 1930. Serial No. 502,441. 5 Claims. (Cl. 121—32.)

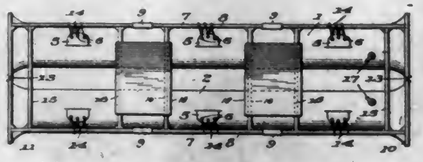
1. In an impact tool, the combination with a hammer motor having an impact element, a working implement actuated thereby and a chuck housing, of a chuck sleeve mounted in said chuck housing and having a longitudinal

opening for receiving the shank of the working implement and a bore opening through the rear end of said sleeve and into which the shank of the working implement projects, a cylindrical striking block reciprocably mounted in said sleeve bore for transmitting the impact blows of the impact element to the working implement, said striking block being removable from said sleeve bore through



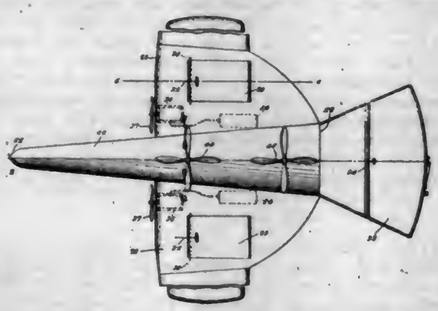
the rear end of said sleeve, said sleeve having a shoulder forming an abutment limiting forward movement of the striking block and a removable bushing projecting within the rear end of said sleeve and fitting said bore and having an opening through which the impact element projects, said bushing forming an abutment for limiting rearward movement of said striking block.

1,884,705. PNEUMATIC BOAT. WILLIAM E. HUFFMAN, Dayton, Ohio. Filed Apr. 11, 1931. Serial No. 529,497. 1 Claim. (Cl. 9—11.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



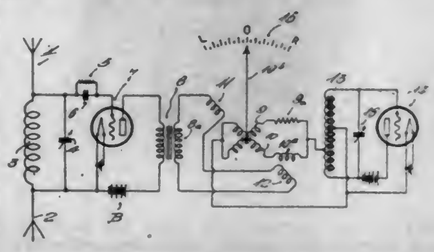
A device of the character described including a plurality of collapsible and inflatable pontoons of cylindrical formation, having their ends flattened to form a horizontally transverse seam, a plurality of lashing patches on said pontoons, a frame including ends and sides, the sides being made up of a plurality of sections, to which the said patches on the pontoons are lashed, a bottom secured to said pontoons and to the said ends, a plurality of thwart carlings connecting the sectional sides of the frame and seats carried by said carlings.

1,884,706. AIRCRAFT. JOSEPH FREAMON HUGHES and JOHN MURRY SMITH, Smackover, Ark. Filed Jan. 4, 1932. Serial No. 584,680. 6 Claims. (Cl. 244—7.)



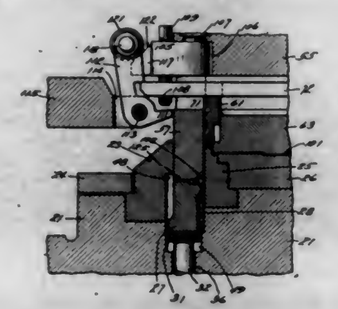
1. An aircraft of the kind described comprising a substantially bullet-shaped hollow body forming a gas bag, a plurality of buoyant cells removably hung within said body, side planes projected laterally from the body and having adjustable ailerons, an elevating plane rearwardly of said body, a tail rudder rearwardly of said body, a cabin beneath said body and side planes, a float beneath the cabin, a wheel landing gear associated with said cabin, vertically and horizontally arranged propellers, the vertically arranged propellers being arranged at opposite sides of the cabin and angularly adjustable vertically and horizontally, means for adjusting the vertically arranged propellers, and plural power units independently connected for driving said propellers.

1,884,707. BEACON SYSTEM. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,520. 10 Claims. (Cl. 250—11.)



1. In a beacon system for air craft navigation, a receiving circuit responsive to audio frequency modulations of selected frequencies, said receiving circuit including a pair of diametrically disposed energizing windings each subjected to the incoming signal modulations, an indicating scale, an indicator movable from a central position on said scale toward either end thereof, a pair of movable coils connected to said indicator and positioned between said energizing windings, and a local oscillator connected to said movable coils for establishing an electromagnetic field for normally maintaining said indicator in a central position on indicating scale and operating differentially with respect to the field established by said windings for correspondingly controlling the movement of said indicator toward either end of said indicating scale.

1,884,708. APPARATUS FOR FORMING SHEET METAL CAPS. GEORGE R. JENESON, Cincinnati, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 27, 1930. Serial No. 484,844. 8 Claims. (Cl. 113—42.)



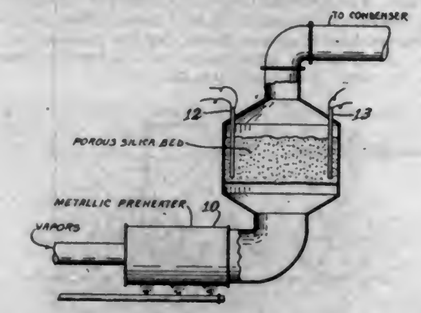
1. In a cap forming apparatus, the combination of a pair of opposed, substantially concentric instrumentalities having a forward and a return movement and clamping a disc positioned therebetween in a slip grip, an anvil coactive with said instrumentalities during their forward movement for drawing said disc from between the slip grip of said instrumentalities and into one of them thereby shaping the disc into a cap having its edges left projecting, a curling die located within one of said instrumentalities and in alignment with the said projecting cap edge, and means for actuating said curling die during the return movement of said instrumentalities and shaping said projecting edge into an annular curl thereby producing a finished cap.

1,884,709. POROUS SILICA CATALYST AND METHOD OF PREPARING THE SAME. RUSSELL L. JENKINS, Anniston, Ala., and JAMES F. NORRIS, Cambridge, Mass., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Oct. 22, 1928. Serial No. 314,319. 7 Claims. (Cl. 23—233.)

1. A porous silica skeleton catalyst formed of serpentine from which acid soluble substances have been largely but not entirely removed, and impregnated with a metallic catalyzing agent.

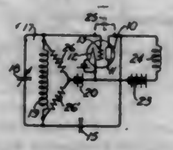
4. The method of preparing a porous silica skeleton catalyst which comprises leaching with acid a water insoluble metallic silicate until the acid soluble substances in the silica have been largely but not entirely removed, and soaking the skeleton so formed in a cupric chloride solution of such strength that, when dried, the skeleton retains approximately .00005 moles of cupric chloride per gram of skeleton.

1,884,710. CATALYTIC PROCESS FOR HYDROLYZING ORGANIC HALIDES. RUSSELL L. JENKINS, Anniston, Ala., and JAMES F. NORRIS, Cambridge, Mass., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Nov. 17, 1928. Serial No. 320,000. 10 Claims. (Cl. 260—154.)



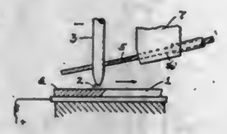
1. An improved method of producing a catalytic reaction which consists in passing a reaction mixture in the vapor phase over a metal having catalytic properties and being capable of forming a volatile salt under the conditions of use, and then passing said volatile metal salt commingled with the reaction mixture through a bed comprising a highly porous body.

1,884,711. ELECTRIC WAVE TRANSMISSION SYSTEM. AXEL G. JENSEN, Red Bank, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Dec. 4, 1924, Serial No. 753,813, now Patent No. 1,722 094, dated July 23, 1929. Divided and this application filed Apr. 24, 1929. Serial No. 357,846. 9 Claims. (Cl. 179—171.)



5. An audion amplifier the impedance network of which is arranged in the form of an alternating current Wheatstone bridge having four balancing arms one of which is the grid-plate capacity of the audion tube, one of which is a capacity connected between the plate of said tube and one terminal of the input circuit, one of which is a resistive impedance connected between the cathode of said tube and said terminal of the input circuit, and one of which is a resistive impedance connected between the grid and cathode of said tube.

1,884,712. ARTICLE FOR USE IN ARC WELDING. THEOPHIL E. JERABEK, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 14, 1928. Serial No. 285,425. 5 Claims. (Cl. 219—10.)

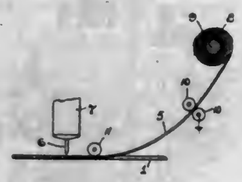


1. As an article of manufacture for use in arc welding, a cord of combustible material carrying fluxing and alloying ingredients and capable of being fed into the arc area independently of the electrode and the work.

1,884,713. METHOD OF AND APPARATUS FOR COATING WIRE. THEOPHIL E. JERABEK, Cleveland, Ohio, assignor to The Lincoln Electric Co., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930. Serial No. 447,279. 9 Claims. (Cl. 91—68.)

1. The method of coating welding electrode which comprises applying a coating of flux to such electrode, working such flux into the residual drawing lubricant present on the electrode, and then distrbutng an even layer of the resultant flux over the surface of the work electrode.

1,884,714. ARC WELDING. THEOPHIL E. JERABEK, Cleveland, Ohio, assignor to The Lincoln Electric Co., Cleveland, Ohio, a Corporation of Ohio. Filed May 3, 1930. Serial No. 449,411. 3 Claims. (Cl. 219—10.)

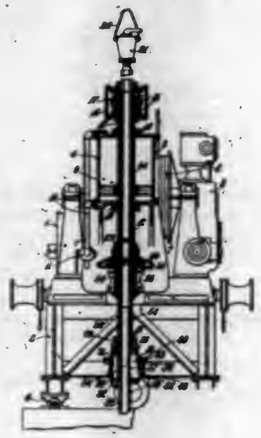


1. The method of electric arc welding which consists in presenting an electrode in arcing relation to the work, relatively moving such work and the electrode to cause the latter to follow the line to be welded, introducing a strip of material laterally into the arc area and connecting said electrode and strip of material to opposite poles of a source of electricity whereby at least a part of the welding current passes through said strip.

1,884,715. WELDING ELECTRODE. THEOPHIL E. JERABEK, East Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1930. Serial No. 503,612. 6 Claims. (Cl. 219—8.)

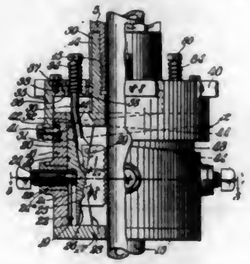
1. An electrode for arc welding having a coating containing a combustible material consisting principally of lignin.

1,884,716. DRILLING APPARATUS. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Nov. 17, 1926. Serial No. 148,856. 34 Claims. (Cl. 255—22.)



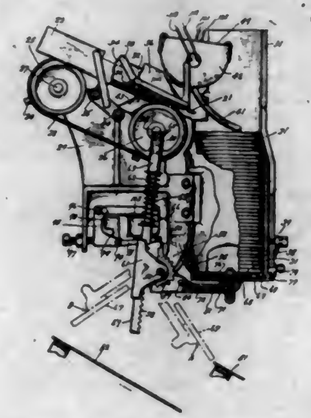
1. A grief stem chuck for a drill feeding mechanism of the character wherein a grief stem with teeth is employed comprising means for engaging a grief stem to rotate the latter, and means for connecting the chuck to a grief stem including chuck jaws having teeth engageable with teeth on a grief stem, said jaws having inclined surfaces, and means for actuating said jaws into interlocking engagement with a grief stem comprising a member having inclined surfaces engaging the inclined surfaces on said jaws.

1,884,717. CHUCK MECHANISM. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 8, 1930. Serial No. 442,644. 30 Claims. (Cl. 279—28.)



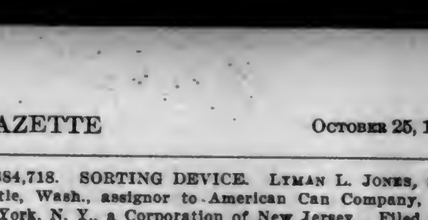
1. A drill rod chuck mechanism comprising a body, chuck jaws carried thereby and adapted to grip a drill rod, and means for oppositely positioning said jaws in said body to grip automatically a drill rod upon movement of the chuck mechanism selectively in either direction.

1,884,718. SORTING DEVICE. LYMAN L. JONES, Seattle, Wash., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 28, 1928. Serial No. 265,304. 17 Claims. (Cl. 73—51.)



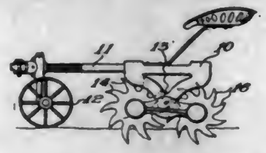
1. In a machine for testing and sorting can ends and in combination therein, means to test and sort said can ends, said means comprising a swinging vacuum disc, and means to feed can ends to said disc and position the ends thereon.

1,884,719. TRANSPORTING AND DEPTH REGULATING WHEEL. GEORGE E. KARL, Berea, Ohio, assignor to The Dunham Company, Berea, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930, Serial No. 434,227. Renewed Apr. 13, 1932. 7 Claims. (Cl. 55—11.)



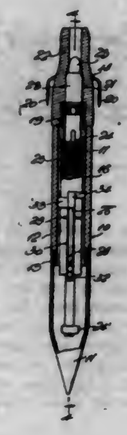
1. In an implement of the class described, a weight carrying frame having draft means, tool-carrying frames rockably connected below and to each end of the weight-carrying frame, shafts journaled in suitable boxes in said tool-carrying frames, soil-working tools on said shafts, and depth regulating wheels adjustably carried on said implement.

1,884,720. ROTARY HOE CULTIVATOR. GEORGE E. KARL, Berea, Ohio, assignor, by mesne assignments, to The Dunham Company, Berea, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,228. 14 Claims. (Cl. 55—77.)



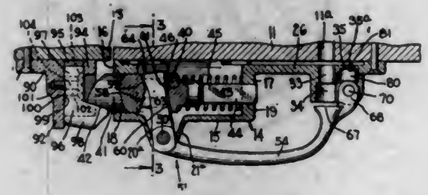
1. A one-piece rotary hoe wheel having a hub, a plurality of radially disposed prongs which are forwardly arcuately curved, said prongs having rearwardly extending central ribs.

1,884,721. TRAP GUN. GEORGE KARR, Silver City, N. Mex., assignor, by direct and mesne assignments, to Explosive Bait Corporation—No Stockholders' Liability, a Corporation of New Mexico. Filed Oct. 5, 1931. Serial No. 567,041. 5 Claims. (Cl. 43—84.)



1. In a trap gun, an outer tubular section adapted for anchorage, an inner section slidable in said outer section and having a projecting end adapted to carry bait, cartridge holding and firing means carried by said inner section and having a releasing trigger within said outer section, and means carried by said outer section for actuating said trigger when said inner section is outwardly pulled.

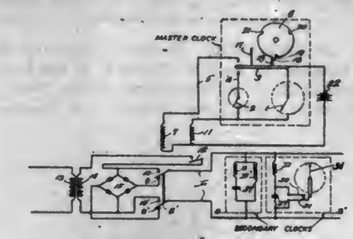
1,884,722. LOCK. ALEXANDER S. KATZ, Brooklyn, N. Y. Filed Nov. 28, 1931. Serial No. 577,757. 8 Claims. (Cl. 292—173.)



1. A lock comprising a casing, a spring projected bolt slidably mounted within said casing, said bolt having a transverse opening and spaced surfaces on said bolt at said opening inwardly thereof, and a bolt retracting lever pivotally mounted in said casing having a bolt retracting arm positioned within said opening, said arm having individual contact with each of said spaced surfaces in the projected position of said bolt, said arm and said surfaces being so related in said projected position of the bolt as to create a locking engagement relatively to each other whereby to prevent further movement of said handle and bolt in the direction of projection of the latter.

1,884,723. ELECTRIC CLOCK SYSTEM. SAUL KELLEN, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed Feb. 19, 1929. Serial No. 341,177. 8 Claims. (Cl. 58—24.)

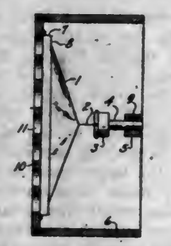
1. An electric clock system of the type having a control station for sending alternating current and direct current impulses and secondary clocks having electromagnetic means responsive to one kind of impulses for advancing the hands to predetermined positions and other magnetic means responsive only to the other kind of impulses for





further advancing the hands, characterized by a single circuit for tranmitting both classes of impulses from the control station to the secondary clocks.

1,884,724. SOUND BOX FOR PHONIC DIAPHRAGMS. ARTHUR C. KELLER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 19, 1923. Serial No. 646,351. 12 Claims. (Cl. 181—31.)



2. In combination, a large direct acting diaphragm, means acting in conjunction with the diaphragm to alter its frequency characteristics comprising a member positioned in close proximity to said diaphragm and containing a multiplicity of small openings whereby the area of the air column in front of the diaphragm is reduced and the air column is divided into a large number of small columns, and means connected to said diaphragm for driving it.

12. The combination of a large conical diaphragm, with a casing open at opposite ends disposed about the edge of said diaphragm and providing an open sound chamber at the rear of said diaphragm serving to enhance the operation thereof throughout its frequency range.

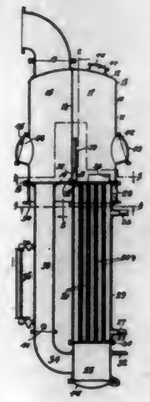
1,884,725. PNEUMATIC FOOTWEAR CONSTRUCTION. JOHN CHARLES KELLER, Chicago, Ill., assignor to Keller Pneumatic Footwear Company, Chicago, Ill. Filed Feb. 2, 1931. Serial No. 513,020. 3 Claims. (Cl. 36—35.)



1. As an article of manufacture, a pneumatic cushion heel for shoes including a resilient body portion having a

hermetically sealed cavity formed by outwardly extending integral and continuous concavo-convex top and bottom walls and upstanding side walls of said body.

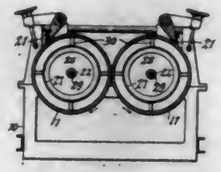
1,884,726. EVAPORATOR. MARTIN J. KERMER, Buffalo, N. Y., assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y., a Corporation of New York. Filed May 27, 1929. Serial No. 366,143. 2 Claims. (Cl. 159—27.)



1. An evaporator comprising a dome, a baffle extending downwardly from the top of the dome and terminating short of the bottom thereof, heating tubes opening into the lower part of said dome on one side of the baffle, a liquid return at the lower part of said dome on the opposite side of said baffle, a vapor outlet at the top of said dome on the same side of the baffle as the liquid discharge, an outer large ring supporting the bottom of said dome to which the upper ends of the heating tubes are connected, and a steam chest surrounding said tubes and including an inner small ring arranged eccentrically within the large outer ring and formed integrally therewith and serving as a support for said steam chest.

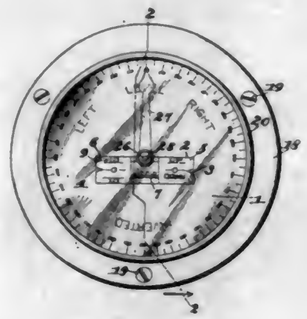
2. An evaporator comprising an upright dome, a vertical imperforate baffle arranged in said dome diametrically across the central part thereof and dividing the space within the dome into an inlet chamber and an outlet chamber and said baffle being connected at its upper end with the top of the dome and connected at its opposite vertical edges with opposite sides of the dome and having one part of its lower edge depressed and arranged close to the bottom of the dome so that liquid on the inlet chamber side of the baffle flows from the depressed edge of the same to the bottom of the dome, while another part of said lower edge is raised a considerable distance above the bottom of said dome and forms an enlarged passage through which the vapors pass from the inlet chamber to the outlet chamber of the dome; a plurality of upright heating tubes having their upper ends secured to the bottom of said dome and opening into said inlet chamber, a heating chest surrounding said heating tubes; a liquid supply chamber communicating with the lower ends of said tubes, and a return pipe connecting said outlet chamber with said liquid supply chamber, said heating tubes being longer than the height of said dome so that the liquid heated therein will be discharged from the upper ends of said tubes at a high velocity into the upper closed part of the inlet chamber and said inlet chamber being of such height that a vapor receiving space of considerable height and closed at its top is formed directly above the heating tubes, which vapor space is adapted to hold a vapor cushion of substantial volume into which the heated liquid is discharged upwardly from the tubes and a separation of the vapors and liquid is effected therein.

1,884,727. ROTARY DRUM DRIER. MARTIN J. KERMER, Snyder, N. Y., assignor to Buffalo Foundry & Machine Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 30, 1930. Serial No. 492,157. 3 Claims. (Cl. 34—4.)



1. A drier comprising a horizontal rotary hollow drum which is adapted to receive on its periphery the material which is to be dried, means for introducing steam into the interior of the drum at one end thereof, means for discharging the condensate from the drum at the opposite end thereof, and a horizontal conical baffle arranged lengthwise within the drum and spaced from the inner side thereof and forming an annular passage for the steam of comparatively large area adjacent to the inlet and of gradually reduced area toward the condensate discharging means.

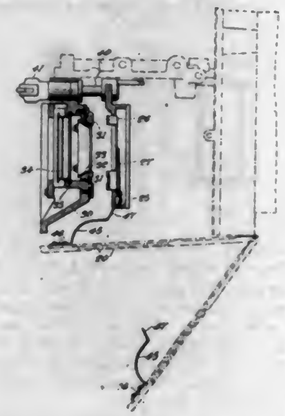
1,884,728. BALOMETER. CHARLES W. KIESEL, Honolulu, Territory of Hawaii. Filed Sept. 17, 1930. Serial No. 482,591. 1 Claim. (Cl. 33—215.)



An instrument of the character described comprising a casing, a dial comprising part of the casing, said dial having a sight opening with confronting pointers and there being peripheral graduations on one face of the dial, a pair of crossed shafts journaled in the casing, a hand carried by one of the shafts being situated in front of the dial and operative in respect to the graduations, a pair of calibrated indicators on the other shaft being visible through the opening and cooperating with the pointers, and means on each of the respective shafts tending to maintain them in a constant position and producing various readings of the graduations and calibrations in respect to the hand and said indicators upon movements of the casing in different directions.

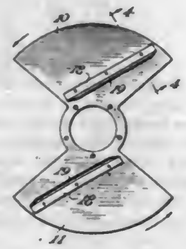
1,884,729. FILM GATE LOCK. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,439. 6 Claims. (Cl. 88—17.)

1. In a motion picture machine having a film gate and a closure member, means carried by said closure member and engaging said gate for locking said film gate in closed position when said member is closed and for preventing said member from being closed when said film gate is in open position.



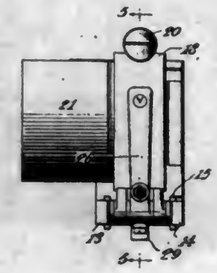
2. In a projection head of a motion picture projection machine, a film gate, a closure member for completely closing said projection head, and means carried by said member and engaging said gate for locking said film gate in closed position when said member is closed.

1,884,730. WING SHUTTER FOR MOTION PICTURE MACHINES. ALBERT KINDELMANN, Floral Park, N. Y., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,305. 9 Claims. (Cl. 88—19.3.)



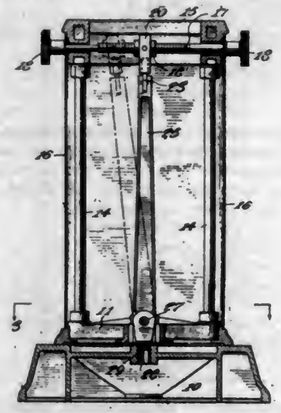
7. In a motion picture machine, a base, a support mounted and resting upon said base, a pivotal substantially central connection between the base and the support, a lever pivoted to the support and connected at one end to the base at a point removed from the pivot point between the base and the support, said lever adapted to adjust the support on the base, threaded adjusting means on the support and connected to the other end of the lever for adjusting the same, the distance between the lever pivot and the threaded means on the support being relatively great compared to the distance between the lever pivot and the base.

1,884,731. LENS SHIFTING DEVICE. ALBERT KINDELMANN, Floral Park, N. Y., assignor to International Projector Corporation of New York, N. Y., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 492,999. 9 Claims. (Cl. 88—24.)



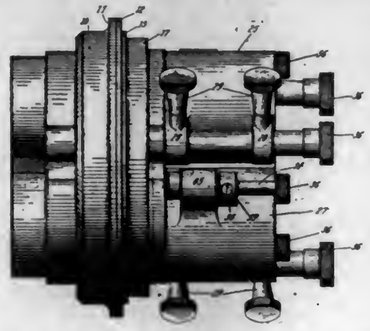
1. In a motion picture apparatus, a lens supporting member, a bracket for said support, means for moving the bracket longitudinally of the apparatus for focusing the lens, an operating lever on the support, and cam means between the lever and the bracket to shift the support on the bracket when the lever is operated.

1,884,732. ADJUSTABLE BASE AND SUPPORT FOR MOVING PICTURE MACHINES. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1930. Serial No. 493,292. 7 Claims. (Cl. 248—15.)



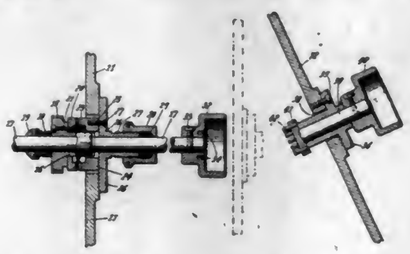
1. In a motion picture machine, a base, a support mounted and resting upon said base, a pivotal substantially central connection between the base and the support, a lever pivoted to the support and connected at one end to the base for adjusting the support on the base, and threaded adjusting means on the support and connected to the other end of the lever for adjusting the same.

1,884,733. LENS SHIFTING DEVICE. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1931. Serial No. 506,905. 11 Claims. (Cl. 88—57.)



4. In a motion picture apparatus a frame, a supporting ring therein, a rotatable turret disposed within said ring, a lens mount disposed in said turret, a longitudinally disposed element in said turret for supporting said lens mount and a longitudinally disposed element on the turret at the bottom of the lens mount to shift the same laterally.

1,884,734. INTERLOCKING SHAFT CONSTRUCTION. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1931. Serial No. 506,906. 6 Claims. (Cl. 88—17.)

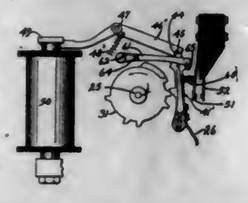


1. In combination a shaft within a casing, a pivoted door on said casing, an auxiliary shaft mounted on and extending through said door and means on said shafts adapted to interlock when the door is closed so that the shaft within the casing may be driven from outside the casing by turning the auxiliary shaft.

4. In combination a casing, a shaft disposed therewithin, a pivoted door on said casing, an auxiliary shaft mounted on and extending through said door, and a series of cooperating pins and recesses on adjacent ends of said shafts adapted to interlock when the door is closed to permit the one shaft to operate the other.

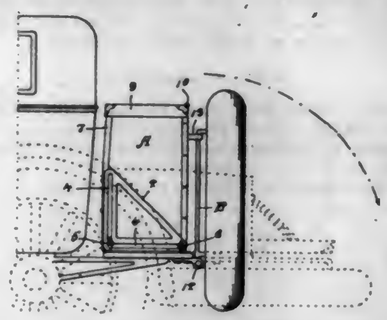
1,884,735. SIGNALING MECHANISM. GEORGE ERNEST KING, Newton, Mass., assignor to The Gamewell Company, Newton Upper Falls, Mass., a Corporation of Massachusetts. Filed May 29, 1929. Serial No. 367,017. 3 Claims. (Cl. 177—361.)

2. Code signal formulating mechanism comprising,—a toothed code signal wheel, a key break lever pivoted adjacent to said wheel for movement in one direction by the teeth thereof, electromagnetically controlled non-interference mechanism associated in interlocking relationship with said key break lever for release therefrom during and just prior to termination of movement of said lever by any tooth of said wheel, an arm pivoted adjacent to and so inter-related with said lever as to permit movement of said lever by teeth of said code wheel without corresponding movement of said arm and so as to limit movement of said arm relatively to said lever in direction corresponding to lever movement imparted by signal wheel teeth, resilient means urging movement of said arm corresponding to the wheel-tooth imparted movement of said



lever, a latch biased for movement to a position for engaging said arm to restrain movement thereof during signal wheel-tooth imparted movement of said lever, said latch inter-related with said lever to effect disengagement thereof from said arm during that portion of the movement imparted to said lever by any tooth of said wheel which immediately but appreciably precedes that at which such release of non-interference mechanism is effected, and signal contacts operable by said arm.

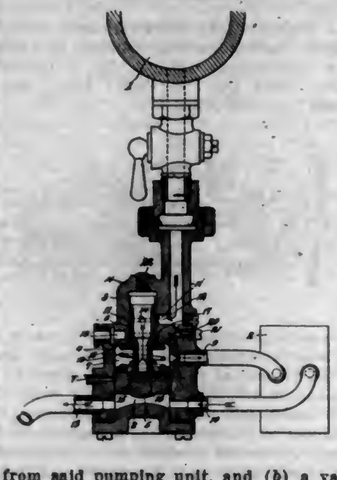
1,884,736. AUTOMOBILE TRUNK. MORGAN L. KING, Carthage, Mo., assignor to The Mid-West Steel Products Corporation, Carthage, Mo. Filed Aug. 8, 1930. Serial No. 473,944. 7 Claims. (Cl. 224—29.)



1. In combination with a vehicle, a horizontal base attached to a part of the vehicle, brackets connected with the base and each having a vertically arranged slot therein, a trunk located between the brackets, bolts in the trunk passing through the slots in the brackets, nuts on the bolts engaging the brackets when tightened to hold the trunk in adjusted position, said trunk having its forward side and its top open, a lid for closing the top and a member for closing the side when the trunk is in vertical position.

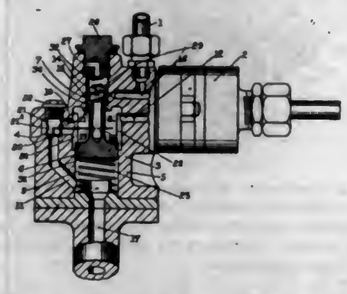
1,884,737. PUMPING APPARATUS. EDWARD KINSELLA, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 12, 1927, Serial No. 239,524, and in Great Britain Dec. 23, 1926. 10 Claims. (Cl. 103—11.)

2. Pumping apparatus for delivering artificial silk spinning solutions or other fluids, comprising a source of pressure, at least one pumping unit and a communication between the same and the source of pressure, the pumping unit itself comprising a pressure balance valve and a measuring pump, the inlet side of which measuring pump communicates with said source of pressure through one side of said pressure balance valve, the pressure balance valve comprising (a) a motor member subjected on the one side to the pressure of the inlet side of the measuring pump and on the other side to the pressure of the delivery side of the measuring pump and to the pressure of the



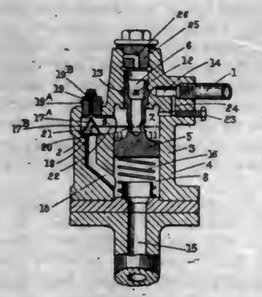
delivery from said pumping unit, and (b) a valve member operatively connected to said motor member, said valve member being adapted to control the supply of fluid to the pumping unit.

1,884,738. PUMPING APPARATUS. EDWARD KINSELLA, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed June 9, 1928, Serial No. 284,128, and in Great Britain Feb. 9, 1928. 13 Claims. (Cl. 103—11.)



1. Pumping apparatus for delivering artificial silk spinning solutions or other fluids, comprising at least one pumping unit itself comprising a pump, a measuring device having delivery means, the delivery from the pump being greater than the delivery from the measuring device and the delivery side of the pump communicating with the feed side of the measuring device, a pressure balance valve comprising (a) a motor member subjected on the one side to the pressure of the feed side of the measuring device and on the other side to the pressure of the delivery side of the measuring device and to the pressure of the delivery from the pumping unit, and (b) a valve member operatively connected to said motor member, a communication between the feed side of the measuring device and the feed side of the pump controlled by said valve member and serving to by-pass the excess fluid from the feed side of the measuring device back to the feed side of the pump, and means for establishing a given pressure difference across the measuring device and for compensating for the drop in pressure of the fluid in its passage through said device, thereby enabling a balance of pressures to be established on the respective sides of the motor member of the pressure balance valve.

1,884,739. PUMPING APPARATUS. EDWARD KINSELLA, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 1, 1928, Serial No. 323,148, and in Great Britain Dec. 17, 1927. 8 Claims. (Cl. 103—11.)

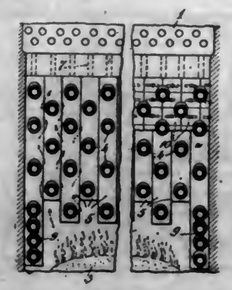


1. Apparatus for delivering artificial silk spinning solutions or other fluids, comprising a source of pressure, at least one flow controlling unit itself comprising a static measuring device being an orifice of determined dimensions and a communication between said static measuring device and the source of pressure, the flow controlling unit itself comprising besides said static measuring device a pressure balance valve, whereof the pressure balance valve comprises (a) a motor member subjected on the one side to the pressure of the inlet side of the static measuring device and on the other side to the pressure common to the delivery side of the static measuring device and to the delivery from the flow controlling unit and (b) a valve member operatively connected to said motor member and arranged to control the supply of fluid to the static measuring device of the flow controlling unit and means for establishing a given pressure difference across the static measuring device and for compensating for the drop in pressure of the fluid in its passage through said device, thereby enabling a balance of pressures to be established on the respective sides of the motor member of the pressure balance valve.

1,884,740. BUILDING CONSTRUCTION. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1927. Serial No. 171,072. 5 Claims. (Cl. 154—44.)

1. An insulating structure comprising a cork base and a substantially impervious coating on an outer face of the base comprising sand, and a binder of cement and a waterproofing material coalesced from an aqueous dispersion of said waterproofing material, said waterproofing material comprising 12% to 20% of said coating.

1,884,741. RADIANT HEAT BOILER. HARRISON E. KLEFFEL, New York, N. Y. Filed Mar. 27, 1930. Serial No. 439,349. 9 Claims. (Cl. 122—303.)

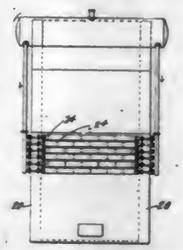


5. In a boiler installation, the combination of a furnace chamber, means for introducing fuel into the chamber for

ignition and combustion therein, heat-absorbing surface beyond the furnace chamber in the direction of flow of the gases of combustion, and a bank of water tubes within the furnace chamber with a substantial proportion of the tubes in said bank lying in that part of the chamber where combustion of the gases is taking place, the tubes in said bank extending substantially transverse to the direction of flow of the gases and providing a plurality of tortuous passages for the gases through said bank, whereby diffusion and turbulence in the burning gases are produced, said tubes being provided with a covering maintained relatively cool by the contents of said tubes and permitting abstraction of heat from said gases to a limited and controlled extent such as not to interfere with combustion of said gases.

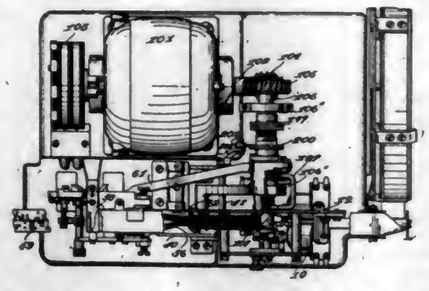
9. A tube for use in a furnace chamber installation, comprising a tubular shell of metal, an outer metallic sleeve thereon, said sleeve having projections on its outer surface, and heat-insulating material mounted on the outer surface of said sleeve and held in place by being interlocked with said projections.

1,884,742. BOILER CONSTRUCTION. HARRISON E. KLEFFEL, New York, N. Y. Filed Mar. 25, 1931. Serial No. 525,143. 7 Claims. (Cl. 122—297.)



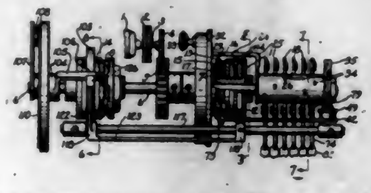
1. In a boiler installation, the combination of a furnace chamber, means for introducing fuel into the chamber for ignition and combustion therein, heat absorbing surface beyond the furnace chamber in the direction of flow of the gases of combustion, and a bank of tubes within the furnace chamber made up of a plurality of interchangeable units, each unit including a pair of headers extending substantially at right angles to the direction of gas flow and tubes connecting the headers and the units in the bank including at least two kinds differing in the locations of the tubes within the furnace chamber when the units are in place therein, whereby replacing a unit of one kind by a unit of the other kind produces a variation in the amount of heat absorbed by the bank and a variation in the resistance to gas flow offered by the bank.

1,884,743. SINGLE MAGNET REPERFORATOR. EDWARD E. KLEINSCHMIDT, Highland Park, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1929, Serial No. 411,122. Renewed Feb. 18, 1932. 33 Claims. (Cl. 178—92.)



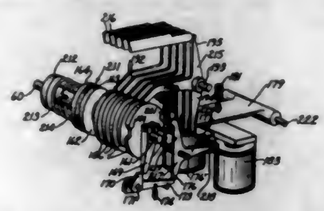
1. In a perforating device, a series of punches, a series of selectors, one directly associated with each punch and means comprising a single magnet responsive to electrical impulse conditions for controlling the setting of said selectors.

1,884,744. REPEATING SYSTEM AND APPARATUS. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,587. 14 Claims. (Cl. 178—70.)



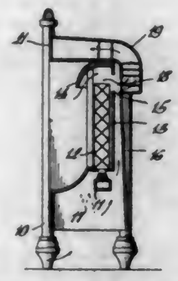
1. In a telegraph system, a first and a second telegraph circuit, means to transmit permutation code signals over said first circuit, means to receive and store the elements of said signals in sequence, embodying a single magnet, a series of contacts, and solely mechanical means controlled by said magnet to set said contacts sequentially in groups in accordance with the received code signals, and means controlled by said contacts to retransmit said permutation code signals over said second circuit.

1,884,745. SELECTIVE SYSTEM AND APPARATUS. EDWARD E. KLEINSCHMIDT, Park Ridge, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 510,797. 28 Claims. (Cl. 178—53.1.)



1. In a start-stop telegraphic selector responsive to received code combinations of selecting conditions, arresting means controlled by a stop condition, and other arresting means controlled by the last selecting condition of a code combination.

1,884,746. GAS BURNING HEATER. CHARLES L. KLINE and HENRY B. HARRINGTON, Buffalo, N. Y., assignors to Emilie F. Harrington, Buffalo, N. Y. Filed May 31, 1930. Serial No. 458,858. 5 Claims. (Cl. 126—92.)

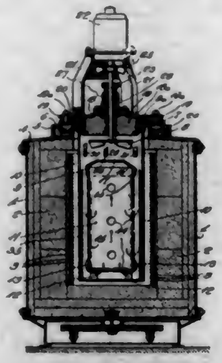


1. In a gas heater of the character described, the combination of a wall applied to the rear side of the heater in spaced relation thereto to provide an air intake passage extending upwardly alongside and behind the heater elements and provided adjacent its upper end with an outlet for the discharge of air admitted to said passage and the products of combustion emitted from the heater, and a conduit containing a catalyst applied to said wall and in communication with said passage outlet.

1,884,747. PLASTIC COMPOSITION. PAUL KNAPP, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 10, 1929. Serial No. 331,722. 4 Claims. (Cl. 106—8.)

1. The process of forming a self-hardening composition which comprises mixing 25 to 175 parts of formaldehyde and about 210 parts of a phenol under refluxing conditions, allowing the reaction mass to cool, separating the water formed, neutralizing, adding about 140 parts of furfural, adding 20–30% by weight of a filler and adding 1 to 30% of a product which is obtainable by mixing about 70 parts of concentrated sulphuric acid and about 30 parts of ethyl alcohol with cooling and stirring.

1,884,748. HEAT TREATMENT SYSTEM. HAROLD E. KOCH, Wauwatosa, and MELVILLE LOWE, Milwaukee, Wis., assignors to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 24, 1930. Serial No. 504,586. 4 Claims. (Cl. 266—5.)



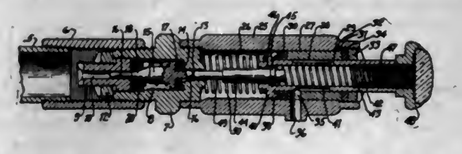
1. In a heat treatment system including a furnace having a sealed retort insertable therein with means extending through and rotatively sealed in a cover for the retort and into the retort for centrifugally distributing the atmosphere in said retort, the method of sealing the passage between the centrifugal drive means and the retort cover which consists in liberating carbon during a heat treatment process and forcing the carbon thus liberated into the seal between the centrifugal drive means and the retort cover.

1,884,749. DRAWING COMPOUND AND THE LIKE. CYRIL KOCOUR, Chicago, Ill. Filed Dec. 21, 1927. Serial No. 241,723. 11 Claims. (Cl. 205—19.)

1. A drawing compound and the like containing essentially lubricating grease and a small percentage of well dispersed soft metal capable of reaction to form gas in an alkaline cleaning bath.

1,884,750. DISPENSING VALVE. HAROLD I. KOPPELMAN and BRUNO W. SEIDEL, Chicago, Ill., assignors to U. S. Sanitary Specialties Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1931. Serial No. 538,970. 8 Claims. (Cl. 221—102.)

7. In a liquid dispenser, the combination with a supply pipe of a body connected therewith having a discharge port and provided with two port-connected chambers one in communication with the discharge port and the other equipped with an inlet port, a plunger movable within one chamber to open and close the discharge port, a valve

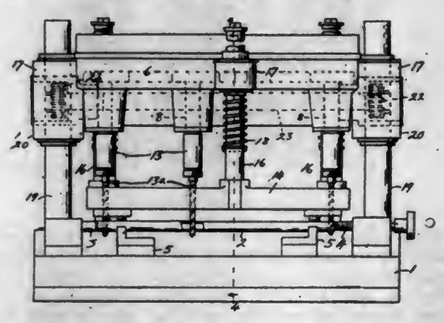


unit movable within the other chamber to close either the inlet port or the connecting port, and means associated with the plunger for moving the valve unit to close the inlet port before the plunger opens the discharge port.

1,884,751. PROCESS FOR THE PRODUCTION OF UREA AND AN AMMONIUM SALT OF A STRONG MINERAL ACID. HERBERT J. KRASE, Anniston, Ala., assignor, by mesne assignments, to Swann Research, Inc., Birmingham, Ala., a Corporation of Alabama. Filed Oct. 28, 1929. Serial No. 402,949. 4 Claims. (Cl. 260—125.)

1. The process of simultaneously producing urea and diammonium phosphate, comprising pumping into a urea converting system liquid ammonia and liquid carbon dioxide in the proportions of substantially two molecules of ammonia to one of carbon dioxide, subjecting this mixture to urea forming temperatures and pressures, separating at substantially atmospheric pressure the converted mixture into an aqueous solution of urea and a gaseous mixture of ammonia and carbon dioxide, combining the ammonia with phosphoric acid in substantially the proportions of two molecules of ammonia to one molecule of phosphoric acid, recovering the carbon dioxide and scrubbing it with the phosphoric acid used for combining with the ammonia, and separately recovering the urea and diammonium phosphate.

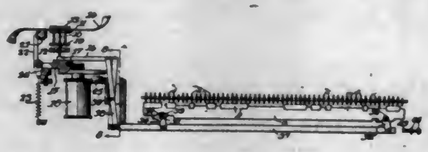
1,884,752. MULTIPLE DRILL HEAD. HENRY R. KRUEGER, Detroit, Mich., assignor, by mesne assignments, to Ex-Cello-O Aircraft and Tool Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 5, 1929. Serial No. 383,573. 1 Claim. (Cl. 77—22.)



In a multiple drilling apparatus, a work holder, a pair of spaced parallel posts rigidly carried by said work holder, a drill head between said posts, means mounting said drill head upon said posts for reciprocation to and from said work holder, a plurality of drill carriers journaled in said head parallel to said posts, a shaft freely rotative in said head transversely to said posts, a rack carried by each of said posts, a pair of pinions terminally rigidly carried by said shaft and meshing with said racks, a drill guide plate disposed between said work holder and head, a plurality of guide rods mounting said guide plate on said head independently of said posts, and means

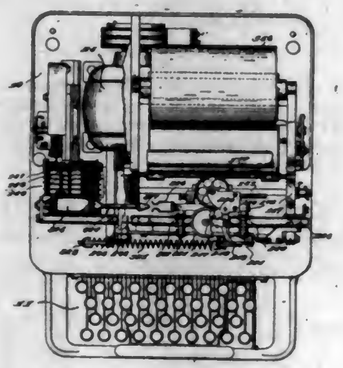
journaled in said head for driving said drill carriers and for feeding the drill head under pressure toward the work holder, independently of said pinion-mounting shaft, whereby said freely rotative shaft and pinions thereon function to maintain uniform movement of both ends of the head toward the work.

1,884,753. KEYBOARD MECHANISM FOR PRINTING TELEGRAPH APPARATUS. HOWARD L. KRUM, Kenilworth, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 394,067. 14 Claims. (Cl. 164—113.)



1. In a telegraph keyboard mechanism, a set of elements, corresponding pairs of code bars for conditioning said elements in different combinations, and a plurality of keys, each arranged to move the bars of every pair transversely of their lengths in opposite directions and selectively condition all of said elements.

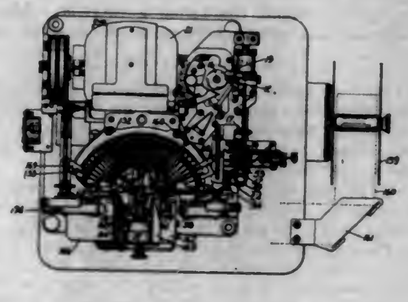
1,884,754. PRINTING TELEGRAPH. HOWARD L. KRUM, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1930. Serial No. 423,781. 42 Claims. (Cl. 178—28.)



1. In combination, a movable carriage, a typewheel supported on said carriage, a pivotally mounted platen, means responsive to code combinations of impulse conditions for rotating said typewheel to various positions, power driven mechanical means for rocking said platen into engagement with said typewheel, and means for moving said carriage step by step.

1,884,755. COUPON PRINTER. HOWARD L. KRUM, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 16, 1930. Serial No. 489,205. 31 Claims. (Cl. 178—42.)

1. In a printing telegraph machine, a printing mechanism, a paper strip, a main paper feed mechanism actuated at each printing operation to feed said strip forward in the direction of its length one letter space, an auxiliary paper feed mechanism, a single magnet, said magnet being the sole electro-responsive means for controlling the operations of said mechanisms, and means operable in



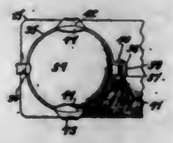
cycles for driving said auxiliary paper feed mechanism to insure feeding of a predetermined length of paper through the machine.

1,884,756. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY, Buffalo, N. Y., assignor to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Nov. 21, 1929. Serial No. 408,755. 2 Claims. (Cl. 45—97.)



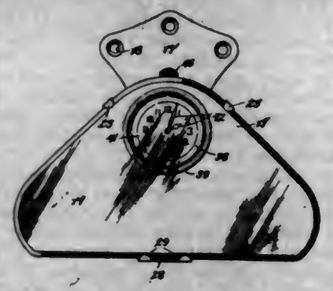
1. In combination with a panel and a support for said panel, an instrument case arranged in rear of said panel, whereby an instrument arranged in said instrument case is visible through said panel, and means for holding said instrument case against the corresponding face of said panel comprising an arm extending outwardly from said support and a screw having threaded engagement with and extending through said arm and bearing against a side of said instrument case to hold said instrument case with adjustable pressure against the corresponding face of said panel.

1,884,757. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY, Buffalo, N. Y. Filed Apr. 22, 1930. Serial No. 446,280. 9 Claims. (Cl. 45—97.)



1. Means for mounting an instrument case behind a transparent panel, comprising a band composed of at least one section and adapted to embrace said case, means for drawing the ends of said band together to clamp it to said case, and fingers provided at opposite sides of said band and adapted to engage opposite edges of said panel, said fingers being drawn together to clamp the panel therebetween upon said drawing together of the ends of said band.

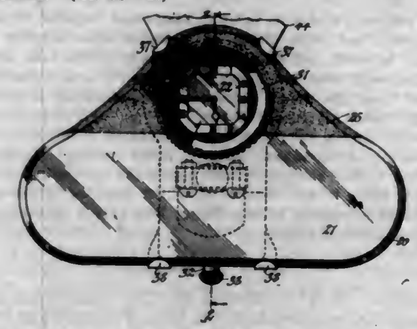
1,884,758. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY and PAUL BERTELL, Buffalo, N. Y., assignors to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 28, 1930. Serial No. 448,120. 13 Claims. (Cl. 45—97.)



1. Means for supporting an instrument case behind a transparent panel, comprising a metal backing plate supporting said panel and having a cut away portion, an instrument case having an open side arranged in said cut away portion, a pair of metal members connected to said plate and projecting rearwardly alongside of said instrument case, and each of said connecting members including a part extending over the rear of said instrument case and means operatively connecting said members and said case for exerting a forward pressure against said instrument case thereby to hold said instrument case against said panel, and to permit an instrument arranged in said instrument case to be visible through said panel.

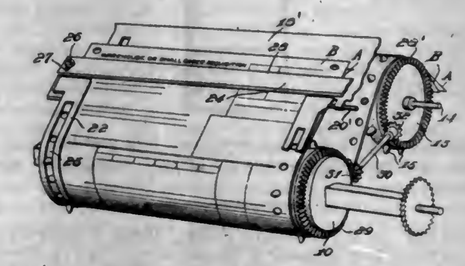
11. Means for supporting an instrument case behind a transparent panel, comprising a support for said panel, a time piece case carried by said support, whereby a time piece movement arranged in said case is visible through said panel, and a sleeve carried by said support whereby a winding stem arranged in said sleeve is connected to said time piece movement.

1,884,759. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY, Buffalo, N. Y., assignor to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Aug. 30, 1930. Serial No. 478,996. 6 Claims. (Cl. 88—1.)



1. A transparent panel having a portion through which the face of an instrument is adapted to be displayed and an image reflective coating provided on a substantial part of the surface of said panel and a substantial area of the surface of said panel around said portion and between said portion and said image reflective coating being provided with a dimmed image-reflective finish whereby the face of the instrument is more easily discerned through said portion.

1,884,760. MECHANISM FOR FEEDING AND ALIGNING MULTIPLE PRINTED FORM. ROSS A. LAKE, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 16, 1929. Serial No. 333,000. 8 Claims. (Cl. 197—127B.)

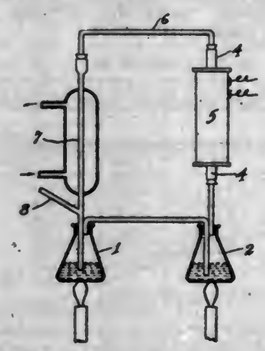


2. In combination with the platen of a printing machine, of a ring carrying a plurality of equally spaced pins, and means to operatively connect said ring and said platen, said means permitting the circumferential adjustment of said ring and the pins carried thereby with respect to said platen.

1,884,761. WATERPROOF FIBROUS PRODUCT. HAROLD L. LEVIN, Nutley, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 22, 1930. Serial No. 497,611. 6 Claims. (Cl. 92—21.)

1. The method of making waterproof fibrous objects which comprises admixing fibrous stock and an aqueous dispersion of thermoplastic waterproofing material, forming said mixture into a wet board on a paper making machine, forming said board to approximate shape while in its wet state, drying the board in said shape and subjecting the dried board to heat and pressure.

1,884,762. PROCESS OF PRODUCING SULPHUR DYES. STEWART J. LLOYD and GEORGE D. PALMER, Jr., University, Ala., assignors of one-third to Absalom M. Kennedy, University, Ala. Filed Mar. 8, 1929. Serial No. 345,840. 8 Claims. (Cl. 260—17.)

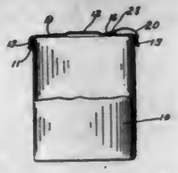


1. A process for producing dyestuffs comprising passing the vapors of a volatile organic compound containing hydrogen through molten sulphur.

1,884,763. CLOSURE. EDGAR O. LORBER, Cleveland Heights, Ohio, assignor to The Lome Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 31, 1929. Serial No. 403,691. 7 Claims. (Cl. 220—55.)

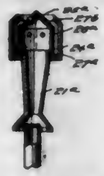
1. In combination with a receptacle having laterally projecting means at its open end, a closure having a de-

pending flange adapted to overlie and enclose said projecting means, a latch carried by said closure and extending through said flange, and a spring in direct engagement



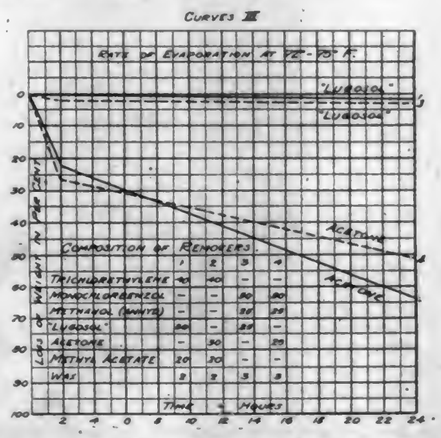
with said latch and urging said latch into position to engage said projecting means to prevent removal of said closure.

1,884,764. BURNER STRUCTURE. SIMON J. LONERGAN, La Porte, Ind., assignor to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed Dec. 28, 1927. Serial No. 248,145. 4 Claims. (Cl. 158—116.)



1. A burner structure comprising a supply pipe and a nozzle member having a diameter substantially equal to the diameter of said pipe and connected thereto and having a port in its end wall arranged to alone support combustion under minimum gas pressure supply and to also support combustion under variations in pressure up to the maximum and a series of ports in its side wall cooperative with said port to additionally support combustion under increased gas pressures above the minimum, and a deflecting wall surrounding said nozzle member.

1,884,765. PAINT AND VARNISH REMOVER CONTAINING KETONE CONDENSATION SOLVENTS. BORIS N. LOUGOVOY, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed May 26, 1928. Serial No. 280,955. 10 Claims. (Cl. 87—5.)



1. A paint and varnish remover comprising a mixture of liquid alkali condensation products of acetone boiling above the boiling point of acetone.

3. A finish remover containing an alkali-polymerized acetone containing a series of products of which the boiling points range from slightly above that of acetone up to 170° C., together with at least one substance selected from the herein described group consisting of benzol, chlorbenzol, methyl alcohol, ethyl alcohol, isopropyl alcohol, diacetone alcohol, acetone, methyl ethyl ketone, mesityl alcohol, furfural, ethyl acetate, methyl acetate and petroleum naphtha.

1,884,766. PAINT AND VARNISH REMOVER CONTAINING FURFURAL. BORIS N. LOUGOVOY, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed June 18, 1928. Serial No. 286,496. 10 Claims. (Cl. 87—5.)

1. A high speed paint and varnish remover possessing high initial surface wrinkling power capable of rapidly opening the surface to ingress of solvent, said remover containing furfural, methanol, chlorinated hydrocarbons miscible therewith, and a wax.

9. A high speed paint and varnish remover possessing high initial surface wrinkling power capable of rapidly opening the surface to ingress of solvent, said remover containing furfural, a benzolic solvent selected from the group consisting of benzol and chlorbenzol, a methyl solvent selected from the group consisting of methyl alcohol and methyl acetate, and a small percentage of a wax.

1,884,767. PAINT AND VARNISH REMOVER CONTAINING ACTIVATED ACETONE. BORIS N. LOUGOVOY, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed June 29, 1928. Serial No. 289,328. 4 Claims. (Cl. 87—5.)

1. A finish remover containing "activated-acetone" as a constituent thereof.

4. A finish remover containing wax, a wax solvent selected from the herein described group consisting of benzol, trichlorethylene and monochlorbenzol, and containing "activated-acetone" and other wax precipitants selected from the herein described group consisting of methanol and methyl acetate, such remover being faster than a similar remover having the same composition but with ordinary acetone instead of the "activated-acetone."

1,884,768. COMPOSITION FOR SELECTIVELY REMOVING TOP COATINGS. BORIS N. LOUGOVOY, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed July 21, 1928. Serial No. 294,590. 1 Claim. (Cl. 87—5.)

A remover which is mild in character, capable of readily removing dried coats of nitrocellulose lacquer but being without substantial removing action on baked enamel, such remover comprising wax, a wax solvent selected from the group consisting of petroleum distillates substantially all distilling below 85° C., and carbon tetrachloride, and a wax precipitant selected from the group consisting of acetone, methyl ethyl ketone, "lugosol", mesityl oxide, methanol and denatured alcohol, the wax solvent being in amount less than the wax precipitant, and the total loosening solvent being less active on oil paints than is acetone alone.

1,884,769. HEAVY-BODIED FINISH REMOVER CONTAINING A CORRECTIVE OF ANTIPENETRATION. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Nov. 30, 1928. Serial No. 322,968. 6 Claims. (Cl. 87—5.)

1. A finish remover containing petroleum hydrocarbons substantially all boiling at below 85° C., functioning as the essential wax solvent, and containing wax in amount sufficient to give a heavy bodied remover, and containing relatively volatile wax precipitants in such amount as to form a highly active finish remover, the wax precipitants including one at least of the substances of the group consisting of anhydrous methanol, anhydrous methyl acetate, acetone and "lugosol," such remover having a cutting speed of at least 240, the wax precipitants being in excess over the wax solvent.

6. A finish remover having the following composition:—

	Parts
Wax solvent, consisting of hydrocarbons substantially all boiling between about 60 and 85° C	30 to 40
Wax precipitants selected from the herein described group consisting of anhydrous methanol, methyl acetate, acetone and "lugosol"	55 to 65
Wax and nitrocellulose material together	About 5

1,884,770. FINISH REMOVER CONTAINING METHYL ACETATE. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Nov. 30, 1928. Serial No. 322,969. 8 Claims. (Cl. 87—5.)

1. A waxy-bodied finish solvent remover containing wax and a wax solvent and containing substantially anhydrous methyl acetate, the methyl acetate amounting to at least 20% of the entire bulk of solvents in said remover, the whole remover having an evaporation loss in 24 hours, exposed to the air at room temperature, not considerably over 5%.

8. A finish remover having the following formula—

Petroleum hydrocarbons boiling point range 60 to 85° C	About 30 parts
Anhydrous methanol	About 30 parts
Anhydrous methyl acetate	About 40 parts
Wax	About 2 parts

1,884,771. COMPOSITION ADAPTED TO REMOVE SHELLAC. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Nov. 30, 1928. Serial No. 322,970. 3 Claims. (Cl. 87—5.)

3. A shellac remover comprising below 30% of petroleum naphtha, as its essential wax solvent, the other solvents therein being mostly methanol with a small percentage of a higher and less readily volatile alcohol, said remover containing a wax and about 0.9% to 1.0% of a fixed caustic alkali.

1,884,772. LOW WAX NONHYDROCARBON FINISH REMOVER. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 12, 1928. Serial No. 325,652. 6 Claims. (Cl. 87—5.)

1. A non-hydrocarbon, substantially non-volatile finish remover having a wax content of not substantially over one per cent, and comprising a wax and a solvent composed of a mixture of ethyl acetate and methyl acetate and a solvent in which the wax is insoluble, which is less readily volatile than said acetate, such a remover containing not substantially less than 70% of said acetates.

5. A composite finish remover which is substantially free from hydrocarbon and halogenated hydrocarbon wax solvents, and containing ethyl acetate as its essential wax solvent, together with a small percentage of dissolved wax, such remover containing cooperating solvent material selected from the herein described group consisting of methyl acetate, "lugosol," methyl alcohol, acetone, such remover showing an evaporation loss, when exposed to the atmosphere as a thin layer, for two hours, at about 72–75° F., of below 10%.

1,884,773. NONBENZOLIC FINISH REMOVER CONTAINING CHLORINATED HYDROCARBONS. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 13, 1928. Serial No. 325,933. 6 Claims. (Cl. 87—5.)

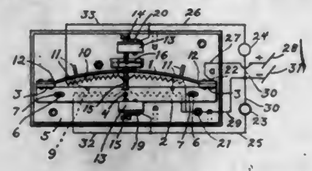
1. A non-benzolic, quick-acting finish remover containing as its essential wax solvent, chlorinated hydrocarbons of lower volatility than benzol, wax, and wax precipitants constituted in major part at least by a plurality of substances selected from the herein described group consisting of methanol, methyl acetate, acetone and "Lugosol", such remover having higher activity than the corresponding benzol-containing remover, and containing wax precipitant in excess over wax solvent.

6. A non-benzolic high speed finish remover containing a wax and having as its essential wax solvent, a chlorinated hydrocarbon selected from the herein described group consisting of monochlorobenzol and trichlorethylene, and having wax precipitants selected in major part at least from the herein described group consisting of acetone, "Lugosol", methyl ethyl ketone and methanol, the chlorinated hydrocarbon being about 40 to 50% of the total solvents present including wax solvents and wax precipitants, and said remover containing a minor proportion of a wax precipitant of lower volatility selected from the herein described group consisting of "methyl cellosolve" and furfural, the amount of the total wax precipitants being not substantially below 50% of the total solvents present.

1,884,774. FINISH REMOVER CONTAINING CHLORINATED HYDROCARBON WAX SOLVENT. BORIS N. LOUGOVOY, New York, N. Y., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 27, 1928. Serial No. 328,854. 1 Claim. (Cl. 87—5.)

A non-benzolic finish remover of activity at least as great as high grade commercial benzol remover, containing a mineral wax in amount equal to not over 2% of the entire remover, chlorinated hydrocarbons less volatile than benzol, as the wax solvent and containing wax precipitant loosening solvent including liquids of the group consisting of "lugosol", methyl acetate, methanol, "methyl cellosolve", acetone, methyl-ethyl ketone and in which the entire wax precipitant is at least as slowly volatile, at room temperature, as is the chlorinated hydrocarbon, the amount of the loosening solvent in said remover being at least as great as the amount of said wax solvent, and said remover being capable of retaining over 90% of its solvents over a period of twenty-four hours when exposed to the air at a temperature around 75° F., in a layer of about 7 mm. thick.

1,884,775. INTERMITTENT THERMAL SWITCH. HARRY F. LÖWENSTEIN, Washington, D. C. Original application filed Apr. 14, 1920, Serial No. 373,768, now Patent No. 1,684,709, issued Sept. 18, 1928. Divided and this application filed July 6, 1928. Serial No. 290,733. 5 Claims. (Cl. 200—122.)



1. An intermittent thermal switch having a thermomotor element comprising a bow-shaped expansible member mounted upon a compensating expansible base member, and heating and cooling means for one of said expansible members.

1,884,776. MANUFACTURE OF 6-CHLOR-O-TOLUIDINE. HERBERT AUGUST LUBS and ARTHUR LAWRENCE FOX, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 3, 1931. Serial No. 566,798. 4 Claims. (Cl. 260—130.5.)

1. The process of producing 6-chlor-o-toluidine, which comprises chlorinating o-nitrotoluene, thereafter reduc-

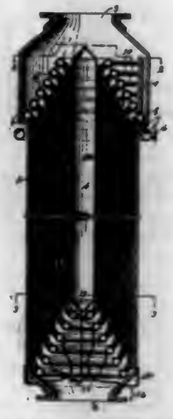
ing to toluidines the mixed chlor-nitro-toluenes thus formed, dissolving the said toluidines in hot aqueous hydrochloric acid, cooling the solution, and separating the 6-chlor-o-toluidine-hydrochloride which crystallises out of the cooled solution.

1,884,777. LONGITUDINAL FLOW ECONOMIZER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 21, 1928. Serial No. 271,682. 17 Claims. (Cl. 257—227.)



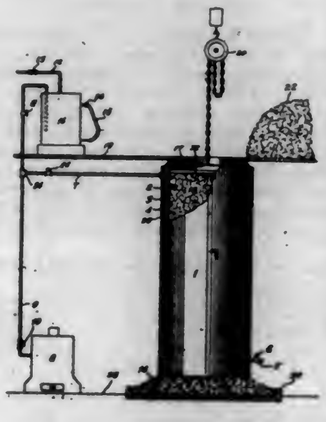
1. A fluid heat exchange device comprising, in combination, walls forming a main passage for hot gases, means constituting a gas inlet passage extending transversely relative to the main passage and directing hot gases to the main passage, a plurality of headers arranged in a single row extending transversely of each passage at the juncture of the two passages with all of the headers located in each passage, tubes extending longitudinally of the main passage and connected to the headers, and means providing for the movement through the headers and tubes of a fluid to be treated by the hot gases passing in counter-current relation to the flow of the fluid in the tubes.

1,884,778. STEAM REHEATER. CHARLES E. LUCKE, New York, N. Y., and JOHN E. BLACK, Rumson, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 16, 1928, Serial No. 278,193. Renewed June 15, 1932. 19 Claims. (Cl. 257—227.)



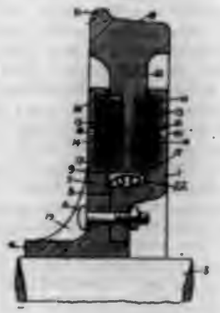
1. A reheater for steam comprising a casing, a plurality of headers near each end of said casing, vertical tubes connecting said headers, and means for admitting steam to the headers at the upper end and withdrawing condensate from the headers at the lower end, said headers having an outline similar to a cross-section of the casing.

1,884,779. MANUFACTURE OF LIVESTOCK FEEDS. CHARLES R. MABEE, Buffalo, N. Y., assignor, by mesne assignments, to Charles H. Donaldson, Buffalo, N. Y. Filed Aug. 10, 1925. Serial No. 49,236. 12 Claims. (Cl. 99—2.)



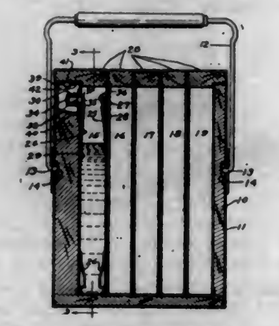
11. In apparatus for the processing of farm roughage, a container having an open lower end the cross-sectional area of which is at least as great as the cross-sectional area throughout the length of said container, and means to supply heat to said container.

1,884,780. RESILIENT CONNECTION. JAMES M. MACLEAN, Oakland, Calif., assignor to Cairew Incorporated, San Francisco, Calif., a Corporation of Nevada. Filed Nov. 11, 1930. Serial No. 494,870. 15 Claims. (Cl. 295—11.)



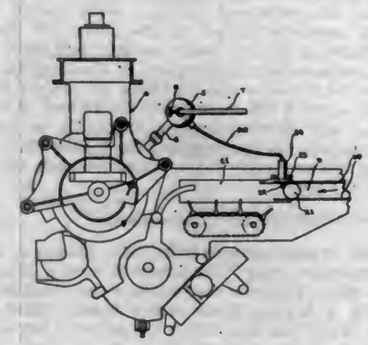
1. A resilient connection between two movable parts disposed in substantially parallel planes and each part having a circular recess, the recesses being in normal axial alinement, said connections comprising liners in said recesses and a resilient element housed within said liners, said elements fitting the liners and frictionally engaging the same to prevent relative rotation between it and the liners and the liners having free rotation within their respective recesses.

1,884,781. DAYLIGHT DEVELOPING APPARATUS. GEORGE A. MAGNUS, Dayton, Ohio. Filed Apr. 11, 1931. Serial No. 529,461. 8 Claims. (Cl. 95—90.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928: 370 O. G. 757.)



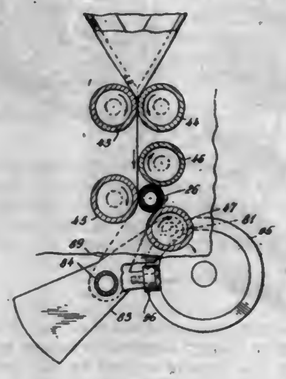
1. In a photographic film developing apparatus of the class described, a compartment for containing a fluid, a photographic film holder adapted to be received in said compartment whereby said fluid may chemically treat the sensitized portions of the film in said holder, and closure-forming means in said compartment cooperating with said film holder to form a light-tight joint therewith.

1,884,782. STOP MECHANISM FOR CAN SEALING MACHINES OR THE LIKE. ADOLPH K. MALMQUIST, South Bellingham, Wash. Filed Apr. 28, 1930. Serial No. 448,144. 10 Claims. (Cl. 192—125.)



1. In a machine of the character described, a runway along which articles are fed, a stop element for obstructing said runway, vacuum operated means for normally holding the stop element in retracted position, and means functioning when the vacuum is cut off for projecting the stop element into obstructing position.

1,884,783. MACHINE FOR AND METHOD OF WINDING FOLDED WEBS. NICHOLAS MARCALUS, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc., a Corporation of New Jersey. Filed Aug. 19, 1930. Serial No. 476,428. 27 Claims. (Cl. 270—86.)



1. The method of winding a multi-ply web which comprises making the outer plies longer than the inner to compensate for the greater length of travel of the outer plies in winding.

1,884,784. PAPER ROLL. NICHOLAS MARCALUS, Elizabeth, N. J., assignor to Automatic Paper Machinery Co. Inc., a Corporation of New Jersey. Original application filed Aug. 19, 1930, Serial No. 476,428. Divided and this application filed June 9, 1931. Serial No. 543,063. 4 Claims. (Cl. 206—59.)

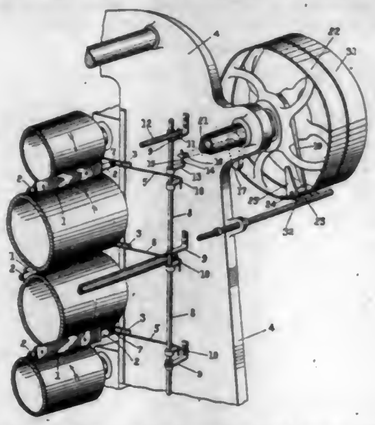


1. A tightly wound roll of paper, said roll consisting of convolutions, each convolution comprising two plies integrally joined by a longitudinally folded area or line, the web constituting the outer ply being constructed of greater length than the inner ply of the same convolution, and each convolution being in a substantially smooth and unwrinkled condition.

1,884,785. SAFETY DEVICE. ROBERT MARTIN, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 2, 1928, Serial No. 296,967, and in Great Britain Aug. 13, 1927. 12 Claims. (Cl. 192—130.)

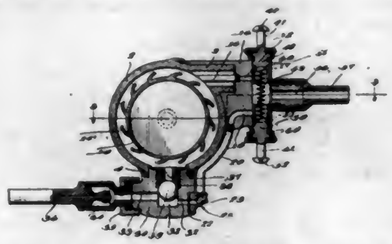
12. A calendering machine comprising at least one pair of rolls forming a nip, provided with a safety device comprising a guard bar disposed at the entrance to and parallel to said nip and adapted to maintain parallelism therewith when moved, a trigger device adapted to be released both by a movement of the guard bar towards and by a movement thereof away from the nip, and a declutching

mechanism directly operated by the release of the trigger device and comprising a member carried by a sleeve adapted to drive the first motion shaft of the machine and a



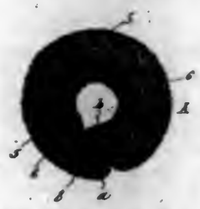
power driven pulley mounted loose on the sleeve and carrying a movable member adapted to engage and to be disengaged from the member carried by the sleeve.

1,884,786. IRRIGATOR. ABRAHAM H. MATLOWSKY, Pedro Miguel, Canal Zone. Filed Nov. 29, 1930. Serial No. 499,103. 5 Claims. (Cl. 128—229.)



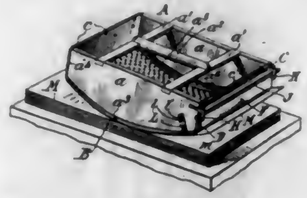
1. An irrigator comprising a chamber provided with inlets opening at right angles to each other and an outlet, a substance container communicating with one of said inlets, a cylinder communicating with the other inlet and with the container, plungers mounted in said cylinder to control the communication between the cylinder and said chamber and container, said cylinder having a fluid inlet and a valve arranged in said chamber to close either of said inlets according to the plunger which is actuated to control its corresponding cylinder outlet.

1,884,787. METALLIC ABRADANT. DANIEL J. MAYER, Belleville, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed Sept. 16, 1931. Serial No. 563,114. 2 Claims. (Cl. 15—208.)



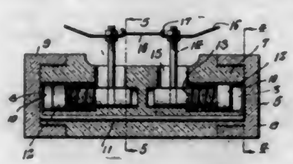
2. A scouring device, comprising a strand of metallic abrasive material consisting in a flexible carrier core and a gimping of flat ribbon-like wire sprally convolved about said core, said strand being looped back and forth upon itself and with the resultant mass twisted axially into a spirally formed body to disperse the convolutions of the gimping in a multiplicity of angles of projection, and means to retain the body against untwisting.

1,884,788. DUPLICATOR. EDWARD G. MCCALMONT, West Englewood, N. J. Filed Dec. 8, 1931. Serial No. 579,700. 7 Claims. (Cl. 101—125.)



1. A duplicator comprising a support having printing means mounted thereon adapted to engage over the sheet to be imprinted and a pick-up means for raising the imprinted sheet as the printing means is being removed therefrom.

1,884,789. NEON TUBE BY-PASS. ROBERT E. MCCOMBES, deceased, Buffalo, N. Y., by Esther W. McCombes, administratrix, Buffalo, N. Y. Filed June 24, 1931. Serial No. 546,608. 2 Claims. (Cl. 200—118.)



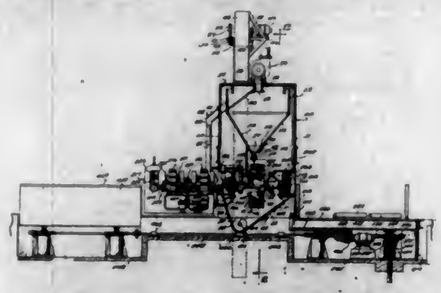
1. A by-pass element comprising an insulated body having opposed chambers, removable caps carried by the body for closing the chambers, electrically connected stationary contacts in said chambers, spring pressed movable plungers to engage the stationary contacts, posts carried by the plungers, terminals carried by the posts and connected in an electrical circuit, hooks on said terminals, and a fusible means connecting the hooks to disengage the plungers from the contacts and providing an air gap between the posts to break the circuit until the voltage of the electricity of said circuit increases sufficiently to jump the gap and destroy the fusible means for freeing the plungers to engage the stationary contacts and complete the circuit between the posts.

1,884,790. CORROSION INHIBITION. JAMES E. MCCONKIE, Portland, Oreg., and ROGER H. LUECK, San Francisco, Calif., assignors to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 2, 1929. Serial No. 383,170. 2 Claims. (Cl. 99—8.)

1. The method of inhibiting internal corrosion in hermetically sealed metallic containers containing solid food matter immersed in liquid, which comprises the addition of minute quantities of gelatine to the product sealed within the container.

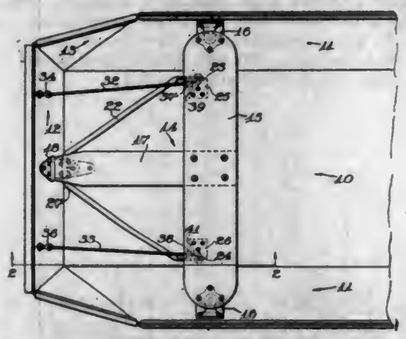
2. The method of inhibiting internal corrosion in hermetically sealed metallic containers containing solid food matter immersed in liquid, which comprises lining the interior of a metallic container with a coating containing gelatine, filling a product into the lined container and hermetically sealing.

1,884,791. SCALE REMOVING APPARATUS. HAROLD E. MCCREERY, Apollo, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 6, 1927. Serial No. 196,959. 11 Claims. (Cl. 51—8.)



1. Apparatus of the character described comprising a pair of abrasive impacting devices between which sheets are adapted to be conveyed, each of said impacting devices including a horizontal elongated trough adapted to receive abrasive and a plurality of closely arranged alined abrasive chambers directly communicating therewith, an abrasive impacting nozzle associated with each of said chambers to receive abrasive therefrom, the nozzles of each impacting device being arranged in alinement with each other and extending at a fixed angle to the path of travel of the sheets, the nozzles of each device extending entirely across the sheet and being arranged parallel to one of the surfaces of each successive sheet and adapted to impact abrasive in straight streams thereagainst, and means for moving said impacting devices across the sheets without changing the angular relationship between said nozzles and the surfaces of the sheets.

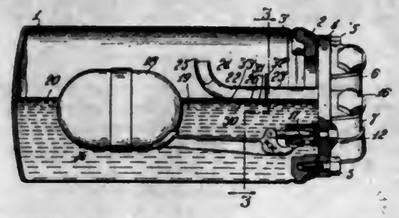
1,884,792. COLLAPSIBLE BOAT. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 30, 1931. Serial No. 547,908. 10 Claims. (Cl. 9—2.)



1. A collapsible boat including a bottom panel, side panels and a stern panel hinged thereto, stretching means for holding the side panels and stern panel in extended position and means connecting the edges of said stern panel to said stretching means to transmit thrusts from the stern panel to the stretching means and prevent angular movement of the stern panel.

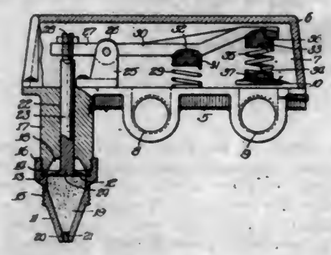
1,884,793. EVAPORATOR. JAMES MCKEAGUE, Chicago, Ill., assignor, by mesne assignments, to Zerozone, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,920. 4 Claims. (Cl. 62—126.)

3. In a mechanical refrigerating unit, the combination with a boiler drum in which a liquid refrigerant is maintained at a certain height by a float controlled valve, of a suction pipe in said drum which is partly submerged in said liquid and contains a skimming port in its submerged portion just below the surface of said liquid, a baffle attached to said pipe and including a horizontal portion



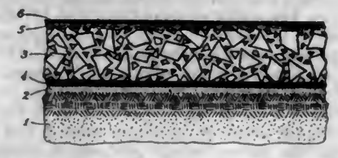
located beneath said port and vertical portions disposed on opposite sides of said port, said baffle forming a basin which is closed at the bottom and on two sides by said baffle and on one end by said pipe, said liquid filling said basin to permit its being skimmed through said port.

1,884,794. THERMOSTATIC CONTROL. GARNET W. MCKEE, Rockford, Ill. Filed Aug. 4, 1930. Serial No. 472,836. 8 Claims. (Cl. 236—99.)



1. A control device comprising, in combination, a passage, a valve controlling said passage, a closed tapered member having a flexible wall at its large end, paraffin completely filling said member and sealed therein, said wall being responsive to changes in volume of said paraffin, and means operatively connecting said wall to said valve.

1,884,795. EMULSIFIED ASPHALT PENETRATION PAVEMENT AND PROCESS OF CONSTRUCTING THE SAME. CLAUDE L. MCKESSON, Oakland, Calif., assignor to American Bitumuls Company, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,302. 10 Claims. (Cl. 94—23.)



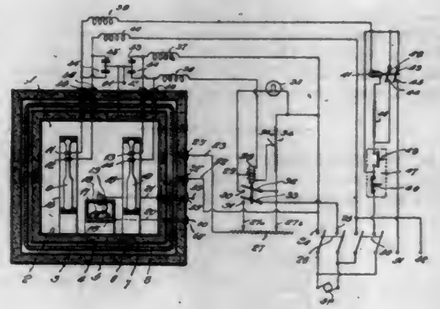
1. A pavement consisting of stone particles graded from maximum to a minimum size which excludes material passing a ten mesh sieve screen, a coating of emulsified asphalt on the stone particles and a seal coat of stone dust and asphalt emulsion on the under side of said pavement.

1,884,796. METHOD OF PRODUCING SOLUBLE BARYTIC MATERIAL FOR USE AS A SUGAR PRECIPITANT. GEORGE P. MEADE, Gramercy, La., and RALPH N. TRAXLER, Rahway, N. J. Filed Nov. 23, 1929. Serial No. 409,421. 8 Claims. (Cl. 23—134.)

1. A method of making soluble barytic material, which consists in calcining together insoluble barytic material

and silicious material in the proportion of more than three atoms of barium to one atom of silicon, at least a part of the barium being in the form of a barium-sulphur-oxygen compound, and decomposing the resulting clinker with water with the production of insoluble barium silicate and soluble barytic material containing more than two atoms of barium for each atom of silicon used and containing sulphur.

1,884,797. TEMPERATURE AND CIRCUIT CONTROL SYSTEM FOR HIGH FREQUENCY SIGNALING SYSTEMS. RAYMOND B. MEYER, Washington, D. C. Filed Mar. 12, 1929. Serial No. 346,482. 15 Claims. (Cl. 250—36.)



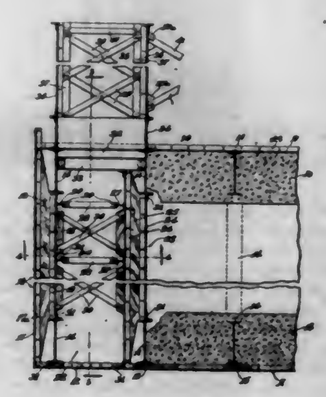
9. In a system of the class described the combination of a container, means for heating said container, an electromechanical vibrator whose natural frequency varies with temperature positioned in said container, a high frequency oscillation generator, said electromechanical vibrator being in electrical relation with circuits of said high frequency oscillation generator for controlling the frequency of the oscillations generated, and means in thermal relation with said container to render the circuits of said high frequency generator inoperative until a predetermined temperature is obtained within said container.

1,884,798. EXTRACTION OF SUGAR FROM CANE MOLASSES AND THE LIKE. GEORGE P. MEADE, Gramercy, La., and RALPH N. TRAXLER, Rahway, N. J., assignors to Cuban-American Sugar Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 23, 1929. Serial No. 409,420. 11 Claims. (Cl. 127—47.)

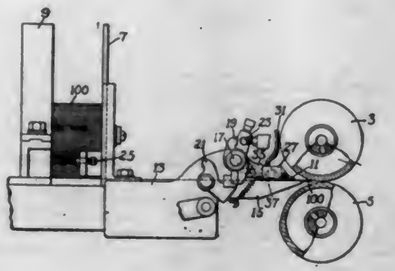
1. A method for extracting sugar from a sugar solution containing glucose which comprises mixing with said solution a barium hydroxide solution free from barium silicate and containing sufficient barium to combine quantitatively with the glucose and with the sugar and, in addition, an excess of barium hydroxide equal, when figured in non-hydrolized form, BaO, to not less than five per cent of the water in the mixed solutions, so as to destroy the glucose, to precipitate the sugar as barium saccharate and to maintain the glucose decomposition products in solution, and separating the sugar-containing precipitate from the mother liquor containing the glucose decomposition products by filtration.

1,884,799. TUNNEL CONSTRUCTION. JAMES C. MEEM, Brooklyn, N. Y. Filed July 21, 1930. Serial No. 469,386. 13 Claims. (Cl. 61—42.)

1. A submersible tunnel section comprising a body portion and end closures having substantially flat outer faces constituted by metal channels, plates interposed between the channel flanges with their outer edges substantially flush with the flat outer faces of the channels, said plates extending inward, and parallel stiffening elements secured at spaced intervals to the inwardly extending portions of said plates, cross closures of substantially like construction to the end closures but oppositely arranged and spaced inward therefrom, and bracing devices connecting the end closures with the associate inwardly spaced cross closures, said bracing devices comprising angularly arranged bracing bars connected at their end portions to portions of said plates projecting beyond the spaced parallel stiffening elements and further comprising parallel cross bracing elements, said parallel cross bracing elements being constituted by I-beams secured to said spaced stiffening members and connected cross bars which alternate with the aforesaid angularly arranged bracing bars.

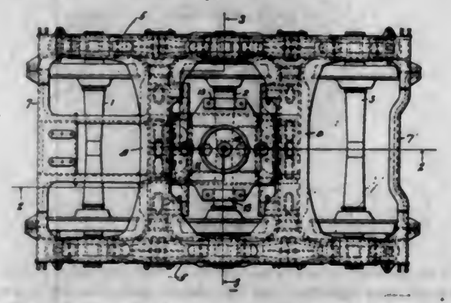


1,884,800. MACHINES FOR TREATING SHOE STIFFENERS. LUCIEN PAUL MELLERIO, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 29, 1931, Serial No. 512,081, and in Great Britain Feb. 11, 1930. 18 Claims. (Cl. 12—61.)



1. A machine of the class described having, in combination, mechanism for expressing stiffening material from a selected locality in a stiffener blank, mechanism for feeding the blank to the expressing mechanism, and means independent of the expressing mechanism for softening the stiffening material of the blank to facilitate its expression before the blank reaches the expressing mechanism.

1,884,801. RAILWAY CAR TRUCK. WILLIAM H. MEYER, St. Louis, Mo., JAMES C. TRAVILLA, Jr., Philadelphia, Pa., and EDWIN C. JACKSON, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,146. 8 Claims. (Cl. 105—188.)

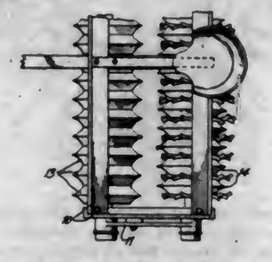


1. In a railway truck, a transverse member, a rocker mounted thereon, a bolster having a pivotal bearing on said rocker, said bearing comprising a renewable plate.

1,884,802. INORGANIC CELLULOSE ESTERS AND MANUFACTURE THEREOF. GEORGE W. MILES, Boston, Mass., and CAMILLE DREYFUS, New York, N. Y., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 14, 1926. Serial No. 102,085. 18 Claims. (Cl. 260—145.)

14. Inorganic esters of cellulose manufactured by treating a material consisting essentially of cellulose with an esterifying mixture in the presence of phosphoric acid and small amounts of sulphuric acid, said esters being free of sulphates.

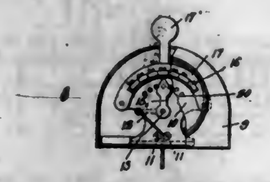
1,884,803. SOIL PULVERIZER. MYRON D. MILLER, Berea, Ohio, assignor, by mesne assignments, to The Dunham Company (1931), Berea, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,218. 10 Claims. (Cl. 55—77.)



1. In a soil pulverizer, a frame, a shaft journaled in the frame, a series of pulverizer disks rotatably mounted on the shaft, and a toothed wheel loosely mounted between each two adjacent disks, said wheel having a series of staggered teeth.

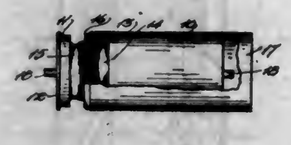
1,884,804. SPEED CONTROL FOR AUTOMOBILES. FELIX BERESFORD MILLINGTON, Maracaibo, Venezuela, Filed Sept. 5, 1930. Serial No. 480,018. 1 Claim. (Cl. 74—39.)

A control for a valve which is normally spring influenced to closed position, comprising a casing located a distance from the valve and having a rounded top which is slotted, and having a transparent face, a pair of spaced upright plates in the casing disposed respectively at the sides of the opening, the plate, adjacent to the transparent face of the casing, having its outer portion widened and its upper end arched, a graduated dial plate fixed on the said upper portion of the plate and said plate, below the dial plate having an arcuate series of spaced apertures therethrough, a shaft journaled through both of the plates and having a dial hand on one end thereof for travel over the dial plate, a lever fixed on the shaft and extending through the opening in the casing, a handle



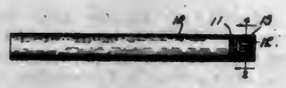
pivotally secured to the lever, spring influenced away from the outer end thereof and having an offset end to be received in any one of the series of apertures, an arm having one end fixed on the shaft, a pair of closely related rollers journaled between the plates and a flexible element fixed to the arm, guided between the rollers and connected to the operating handle for the valve.

1,884,805. SPOOL HOLDER. ADRIAN J. L. MORITZ, Enka, N. C., assignor to American Enka Corporation, Enka, N. C., a Corporation of Delaware. Filed Sept. 23, 1931. Serial No. 564,692. 6 Claims. (Cl. 242—46.2.)



1. A core or holder for spools including a cylindrical body, a cylindrical head, a neck connecting said body and head and having a cylindrical central portion of less diameter than the central portion and grooved portions at each side of the central portion connecting the latter with the body and head respectively, and an elastic ring normally seated in the groove adjacent the body and projecting peripherally beyond the body.

1,884,806. SELF-LIGHTING CIGARETTE. DANIEL MORRIS, St. Petersburg, Fla., assignor of one-half to Allan W. Fisher, St. Petersburg, Fla. Filed Nov. 15, 1930. Serial No. 495,971. 4 Claims. (Cl. 131—52.)

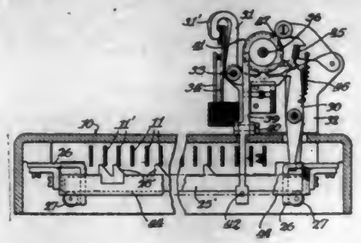


4. In a cigarette having its body completely filled with tobacco, means for igniting the end thereof comprising a band of inflammable material attached to one end and a plurality of spaced portions of friction ignitable material secured upon said inflammable material, substantially as set forth.

1,884,807. KEYBOARD MECHANISM FOR TELEGRAPH APPARATUS. STERLING MORTON, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 4, 1930. Serial No. 441,465. 22 Claims. (Cl. 178—17.)

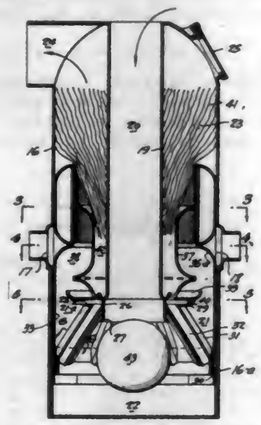
1. In transmitting apparatus for telegraphs employing a definite interval code, a set of selectors, one for each

interval of the code, transmitting mechanism controlled thereby, a plurality of finger keys including a shift key for operating said selectors in different combinations,



and means operated by all the keys with the exception of the shift key for initiating the operation of said mechanism.

1,884,808. AIR CLEANER. JOHN A. MOSHER, Pomona, Calif. Filed Mar. 30, 1931. Serial No. 526,185. 10 Claims. (Cl. 183—10.)



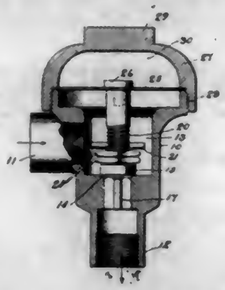
1. The method of producing a liquid mist, which comprises partially submerging in a liquid mass a solid medium having a marginal edge extending upward above the liquid mass, passing a stream of air over said edge and thereby creating a stria of low pressure on a surface of said medium and ranging along said edge to said liquid mass and along which liquid is caused to flow from said mass, and inducing by said air stream the spilling of liquid from the medium over said edge into said air stream.

1,884,809. LAMINATED GLASS AND METHOD OF MAKING SAME. WILLIAM HENRY MOSS and KENNETH H. CRUTCHFIELD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 12, 1929. Serial No. 339,398. 7 Claims. (Cl. 49—81.)

1. In the method of preparing laminated glass, the step of interposing between sheets of glass that are not coated with an adhesive at least one continuous sheet or film made of plastic material containing derivatives of cellulose, the sheet or film having only on the surfaces thereof a suitable adhesive containing a synthetic resin compatible with the derivative of cellulose.

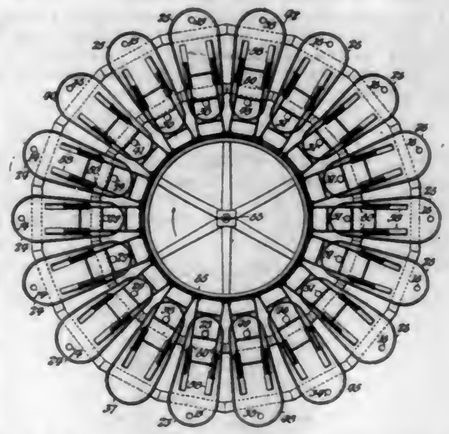
1,884,810. RELIEF VALVE. HERMAN MÜLLER, Philadelphia, Pa. Filed Oct. 7, 1930. Serial No. 486,924. 1 Claim. (Cl. 137—53.)

A relief valve organization comprising a housing, a diaphragm forming a chamber within the housing, said housing having inlet and outlet ports communicating with said chamber, a threaded sleeve carried by the diaphragm with a diametrical transecting opening, a valve adapted to close one port and having a shank loosely inserted with-



in the sleeve, a pin smaller than the opening inserted through said opening and the shank and forming a loose connection, and nuts upon the sleeve adapted to electively engage the valve and pin and limit the relative movement of the valve and sleeve in two directions.

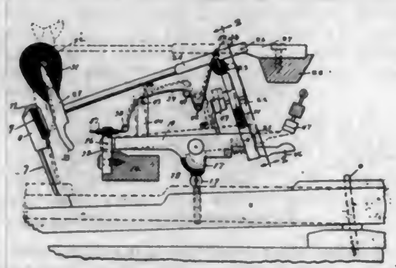
1,884,811. VISCOSE TREATING APPARATUS. SAMUEL A. NEIDICH, Edgewater Park, N. J., assignor to Sylvania Industrial Corporation, Fredericksburg, Va., a Corporation of Virginia. Filed Feb. 12, 1929. Serial No. 339,470. 5 Claims. (Cl. 18—8.)



1. In viscose treating apparatus, the combination with a rotary carriage, having means arranged to support a circular series of trays, for rotation in coaxial relation with said series; of a circular series of stationary tubs disposed beneath said series of trays; means arranged to intermittently raise and lower said carriage; and means arranged to intermittently turn said carriage; whereby, said trays may be automatically dipped into and removed from said tubs, in succession; wherein the tray supporting means are radially extending frames respectively, independently, hingedly connected to the carriage, and free to be upturned by any subjacent obstruction encountered thereby, when the carriage is lowered; whereby, breakage of said frames, by such obstructions, is prevented.

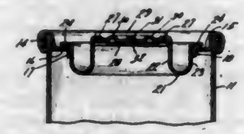
1,884,812. GRAND PIANO ACTION. BURTON J. NEILL, Oakland, Calif. Filed Mar. 9, 1928, Serial No. 260,424. Renewed May 4, 1932. 3 Claims. (Cl. 56—237.)

1. In a piano action, a key fulcrumed intermediate its ends, a wippen pivotally supported above said key, a hammer including a shank pivotally secured above said wippen, a spring interposed between said wippen and said shank, said spring having one end secured in a cavity in said shank and bearing against the latter, means receiving the opposite end of said spring and mounted above the



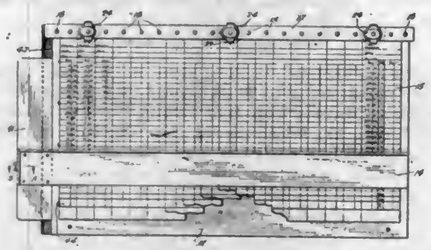
axis of the wippen, means rising from said wippen and carrying said spring and said means cooperating with each other to increase the upward angular movement of the portion of the spring which bears upon the shank upon upward movement of the wippen.

1,884,813. CONTAINER CLOSURE. HENRY M. NICHOLLS, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 26, 1931. Serial No. 511,120. 7 Claims. (Cl. 221—62.)



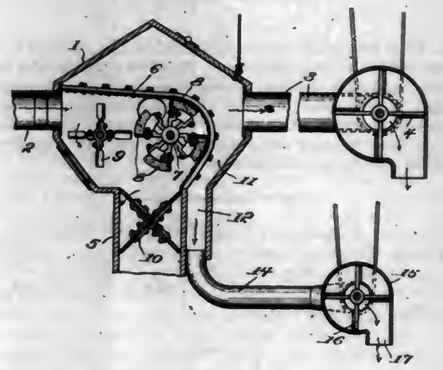
1. In a dredge top container, in combination, a container body having a top filling opening, a friction plug closure adapted to seal said opening and having a pouring opening and sifter openings and an imperforate slide movable upon said plug and adapted to close said pouring opening and sifter openings and to selectively expose them, said plug having an outer friction wall, a channel, an upwardly extending inner wall, and a top panel formed with said inner wall and carrying said slide.

1,884,814. DEVICE FOR DISTRIBUTION OF ACCOUNTS. FREDERICK A. NIEMANN and KURT F. ZIEHM, Chicago, Ill., assignors to Felt & Tarrant Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed May 13, 1931. Serial No. 537,192. 11 Claims. (Cl. 281—44.)



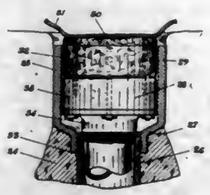
10. A record sheet holder, comprising a backing support adapted to receive a multiplicity of strips of paper having columns of numerical data, a row of projections carried by said backing support for receiving the ends of said strips to hold them in predetermined equally spaced shingled relationship across said backing support with columns exposed, a line guide arrangeable across said strips and movable lengthwise thereof to facilitate lateral reading of items across said plurality of strips, and a confining strip associated with said projections for holding the engaged ends of said strips in the predetermined shingled relation during use of the record sheet holder.

1,884,815. COTTON CLEANING MACHINE. FREDERICK EUGENE NOISWORTHY, Wyatt, Mo., assignor of one-half to Alvis Taylor Marshall, Wyatt, Mo. Filed Dec. 15, 1930. Serial No. 502,557. 1 Claim. (Cl. 19—72.)



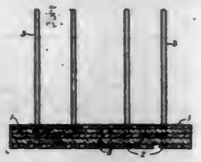
In a cleaning device, a casing, an inlet pipe in communication therewith, a suction pipe aligned with the inlet pipe, suction means associated with the suction pipe for drawing material through the inlet pipe into said casing to be cleaned, beating and screening means arranged in said casing, a passageway disposed in said casing for receiving dirt and foreign matter from the screening means, and a trough disposed below the passageway and including converging walls, a suction means, a conduit having one end curved and arranged in fitting engagement with the trough at the adjacent ends of the converging walls and the opposite end of said conduit being disposed in communication with the last mentioned suction means and the latter including a fan with its blades disposed for movement at right angles with respect to the longitudinal center of the conduit.

1,884,816. FOOTBALL BLOCKING DUMMY. BERNARD F. OAKES, Missoula, Mont. Filed Nov. 3, 1930. Serial No. 493,059. 3 Claims. (Cl. 273—55.)



1. A football field provided with a plurality of sockets for the interchangeable insertion of blocking dummies having elongated anchors of relatively small cross section whereby a plurality of the dummies may be arranged in any of several defensive positions, each of the sockets having a tubular lining which is wider in its upper portion than in its lower portion, and plugs for the sockets, said plugs each comprising an elongated anchor seating within the lower portion of said lining, a block secured to said anchor and adapted to seat in the upper portion of said lining, and a covering for said block, said covering simulating the turf of the field in texture and in appearance.

1,884,817. TEXTILE PACKAGE HOLDER. LESLIE JAMES O'DOWD, Drummondville, Quebec, Canada, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 13, 1928. Serial No. 292,373. 2 Claims. (Cl. 242—230.)



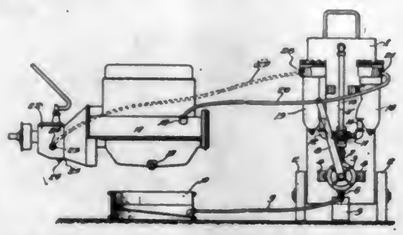
2. In a board for the reception of textile packages, the combination of two sections of plywood forming the base thereof and having longitudinal grooves on the underside, hinges joining said sections and substantially U shaped members mounted in said board and having the horizontal portions thereof embedded in said grooves, and firmly secured thereto by an adhesive.

1,884,818. HINGE AND METHOD OF MAKING IT. VICTOR ODQUIST, Yonkers, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 1, 1927. Serial No. 209,768. 1 Claim. (Cl. 220—31.)



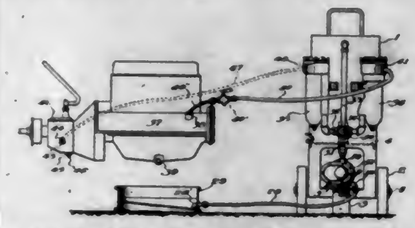
In a display cover, a lid having a flange and a margin wire, a frame for the lid having a flange with narrow slots in the edge parallel to and near said wire and a clip extending around the wire with its ends inserted through the slot, and curled away from each other inside of the flange on the frame and bearing against said flange by their end portions, thereby avoiding any angular bend of said ends of the clip.

1,884,819. APPARATUS FOR CLEANING LUBRICANT CASES OF ENGINES. WILLIAM L. OSBORNE, Los Angeles, Calif., assignor to Osborne Process, Inc., Los Angeles, Calif., a Corporation of California. Filed Mar. 30, 1928. Serial No. 265,931. 1 Claim. (Cl. 184—1.5.)



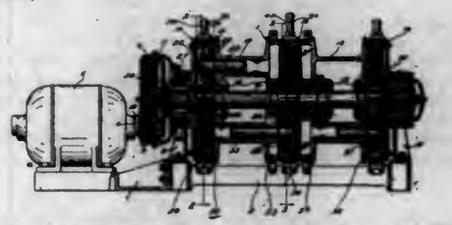
A portable cleaning accessory for lubricant containers of engines comprising in combination, a storage receptacle, a pump having inlet and outlet mounted thereon, separate independently operable filters also mounted on said storage receptacle, branches communicating respectively between the pump outlet and each of said filters and with the storage receptacle, and a single valve disposed in said pump outlet for regulating the passage of liquid from the pump to a selected filter or to the storage receptacle.

1,884,820. METHOD OF CLEANING LUBRICANT CONTAINERS. WILLIAM L. OSBORNE, Los Angeles, Calif., assignor to Osborne Process, Inc., Los Angeles, Calif., a Corporation of California. Filed Aug. 21, 1929. Serial No. 387,293. 7 Claims. (Cl. 184—1.5.)



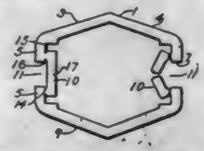
1. A process which comprises withdrawing used lubricant from a lubricant container, then introducing a limited quantity of cleaning fluid to the lubricant container, imparting to said cleaning fluid a cyclic circulation from said lubricant container to a point exterior thereof and back to said lubricant container, imparting to said cleaning fluid a suction flow for a limited distance immediately subsequent to removal from the lubricant container, then converting said suction flow to a positive pressure flow, filtering said cleaning fluid during its passage through the cycle, positively controlling the flow of cleaning fluid immediately adjacent its discharge back into said lubricant container, and dissipating any back pressure created because of adjustment of the flow at the point of discharge into said lubricant container by returning excess from the pressure portion to the suction portion of said cycle.

1,884,821. HOISTING MECHANISM. ROBERT C. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 12, 1930. Serial No. 467,541. 17 Claims. (Cl. 154—184.)



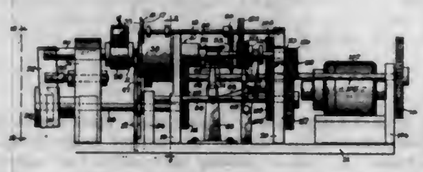
1. In a hoisting mechanism, a pair of coaxial relatively rotatable winding drums, a motor, and driving connections between said motor and drums including means for effecting rotation of one of said drums at either a relatively high or a relatively low winding speed, said driving connections comprising gear trains individual to each drum.

1,884,822. COPING TILE. FRED B. PARKER, Kansas City, Mo., assignor to W. S. Dickey Clay Manufacturing Company, Kansas City, Mo., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,055. 2 Claims. (Cl. 72—86.)



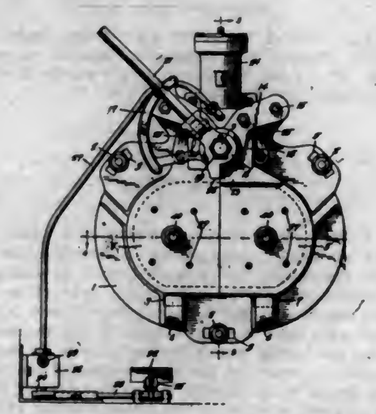
1. An extruded clay column adapted to form a plurality of coping tiles including tile-forming portions, each having side flanges arranged in the column so that the exposed edges of the resulting tiles are spaced from corresponding edges of adjacent tile-forming portions, web portions overlapping inner faces of flanges on adjacent tile-forming portions, and frangible tenon portions spaced from said exposed edges and connecting the inner faces of said flanges with said web portions to complete the column and form lines of fracture with said tile-forming portions whereby when the tile-forming portions are separated from the column the resultant tiles will have smooth unbroken exposed edges.

1,884,823. MACHINE FOR FORMING AND APPLYING PLASTIC GASKETS TO JAR CAPS. MERRITT G. PARKS, Gary, Ind. Filed Oct. 20, 1930. Serial No. 489,886. 26 Claims. (Cl. 113—80.)



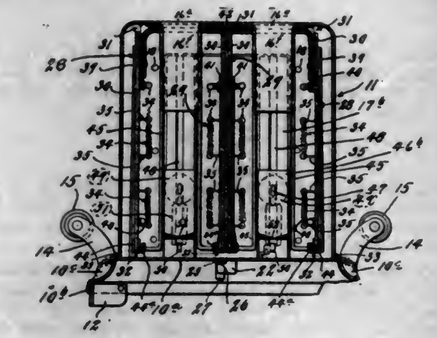
1. A machine for forming and applying plastic gaskets to jar caps comprising, in combination, means operable to form one end of a strand of gasket material into a circle, means operable to sever the circularly formed portion of the strand from the remainder of the strand, a clamp operable to hold said strand adjacent to said circular portion while said severing operation is performed, a cap presenting device, and means operable to press the circle of gasket material onto a cap presented by said device.

1,884,824. FIRE DOOR APPARATUS. CLARENCE D. PATTERSON, Jacksonville, Fla., and MORTON K. MOORE, Charleston, S. C.; said Patterson assignor to said Moore. Filed Jan. 20, 1930. Serial No. 422,163. 3 Claims. (Cl. 110—178.)



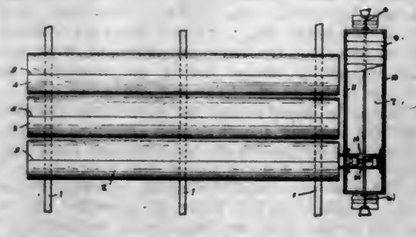
1. A device of the class described comprising a door frame, a pivot member at the top of the frame, a pair of doors through the upper portion of which the pivot member passes so that the doors are supported for swinging movement toward and away from each other, a stationary piston supported from a part of the frame, a movable cylinder fitting over the piston, links connecting the cylinder with the top parts of the doors, said cylinder constituting a crosshead-like connection between the links and doors, and means for introducing fluid into the cylinder to cause the same to move to a position to open the doors.

1,884,825. TOASTER. JOSEPH PAVELKA, St. Louis, Mo. Filed Oct. 19, 1928. Serial No. 313,604. 7 Claims. (Cl. 219—19.)



1. An electric toaster comprising a base, an inverted U-shaped support detachably arranged on said base and provided in the top with elongated spaced openings, heating elements, means on the parallel portions of said support for detachably receiving said heating elements in spaced relation with each other and with said elongated openings, bread carriers movably mounted within said support between said heating elements, and a casing secured to said support and enclosing the same and parts associated therewith, said casing being provided with elongated openings aligned with the openings of said support.

1,884,826. ELECTRIC WELDING MECHANISM. CECIL C. PECK, Lakewood, and MAURICE R. TAYLOR, East Cleveland, Ohio, assignors to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 26, 1929. Serial No. 409,849. 8 Claims. (Cl. 219—8.)



1. In combination, a bed upon which articles to be welded are supported; a self-propelled welding apparatus supported by and traveling directly upon the articles to be welded; and vertically and transversely movable means adjacent said bed for conveying said welding mechanism from one such article to another.

1,884,827. DOORSTOP AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Apr. 2, 1931. Serial No. 527,129. 9 Claims. (Cl. 16—86.)



1. A door buffer device comprising a pillar member having an impact ledge and a buffer block extending across the impact surface of said ledge, said pillar mem-

ber having means adjacent opposite sides of said ledge cooperating with said block and constituting the sole securing and anchoring means for said block on said ledge.

1,884,828. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed July 27, 1931. Serial No. 553,288. 15 Claims. (Cl. 16—86.)



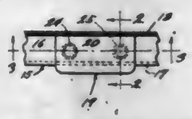
1. A door buffer device comprising a pillar member having an impact ledge formed to provide a depression at the position of the buffer block, and a buffer block extending across the impact surface of said ledge and having an enlarged portion engaged in said depression, said pillar member having means adjacent opposite sides of said ledge cooperating with said block to fasten the same in position on the ledge.

1,884,829. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Original application filed Apr. 2, 1931, Serial No. 527,129. Divided and this application filed Sept. 16, 1931. Serial No. 563,055. 11 Claims. (Cl. 16—86.)



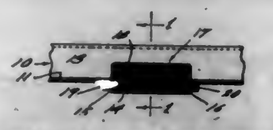
1. A door buffer device comprising a sheet metal pillar member formed to provide an impact ledge facing in the direction of door closing movement, and inwardly and outwardly extending side flanges connected with the edges of the ledge, and a bumper block of resilient material disposed on the ledge in abutment with the outwardly extending flange having an abutment portion above the plane of the ledge for engagement by a door and having a longitudinal lip projecting therefrom to overlie the side of the inwardly extending flange, said block seating on the ledge and having fastening lugs reaching endwise from opposite ends thereof, the sheet metal of the pillar member being suitably formed to provide openings in the ledge at opposite ends of the block for reception of said lugs so as to hold the block in place on the ledge, the said block by virtue of its resilience and the location and form of the lugs being arranged to have the lugs entered into the openings by suitably buckling the same endwise.

1,884,830. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Original application filed Apr. 2, 1931, Serial No. 527,129. Divided and this application filed Sept. 16, 1931. Serial No. 563,057. 6 Claims. (Cl. 16—86.)



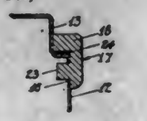
1. A door buffer device comprising a pillar member having an impact ledge facing in the direction of door closing movement, and inwardly and outwardly extending side flanges substantially parallel with the direction of door closing movement, a bumper block extending across said ledge in abutment with the outwardly extending flange, said block having an elongated lip on one of its longitudinal edges arranged to overlie the side of the inwardly extending flange, said impact ledge having a pair of openings provided therein adjacent the opposite ends of said block, and fastening lugs provided on the back of the bumper block and fitting in said openings so as to anchor the block in place on the ledge.

1,884,831. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Original application filed Apr. 2, 1931, Serial No. 527,129. Divided and this application filed Sept. 16, 1931. Serial No. 563,058. 8 Claims. (Cl. 16—86.)



1. A door buffer device comprising a sheet metal pillar member formed to provide an impact ledge facing in the direction of door closing movement, and oppositely extending side flanges disposed substantially parallel to the direction of door closing movement and connected to the edges of said ledge, the sheet metal being suitably formed to provide a socket alongside the outwardly extending flange and reaching along the ledge part way to the inwardly extending flange, said socket having a bottom wall and front and rear walls integral therewith, the front wall being an integral continuation of the ledge and the rear wall an integral continuation of the outwardly extending flange, the ends of the socket being open and communicating directly beneath the ledge, and a bumper block of resilient material fitting in and projecting from said socket and seated on the bottom thereof in engagement with the front and back walls, said bumper block having lugs reaching endwise through the open ends of the socket and engaging under the ledge to retain the block in the socket.

1,884,832. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Sept. 16, 1931. Serial No. 563,059. 8 Claims. (Cl. 16—86.)



1. A door buffer device comprising a pillar member having an impact ledge facing in the direction of door closing movement, and a buffer block extending across the impact surface of said ledge, said pillar member having means adjacent opposite sides of said ledge cooperating with said block and constituting the sole securing and anchoring means for said block on said ledge, the block by virtue of the construction of the last mentioned means being slidable in the direction of door closing movement relative to the pillar member and toward the door, without disturbing the anchorage of the block, whereby to dispose the block in a predetermined desired relation to the pillar member for efficient cushioning action.

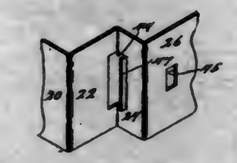
1,884,833. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Sept. 16, 1931. Serial No. 563,060. 5 Claims. (Cl. 16—86.)

1. A door buffer device comprising a pillar member having an impact ledge facing in the direction of door closing movement, and oppositely extending side flanges substantially parallel with the direction of door closing movement, the outwardly extending flange having an elongated opening provided therein lengthwise with respect to the ledge and adjacent the same, a bumper block extending across said ledge for abutment by the door in its closing movement, an elongated lip projecting inward-



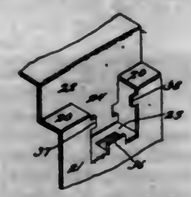
ly from one longitudinal edge of the bumper block to overlie the side of the inwardly extending flange, and an elongated fastening lug extending lengthwise of the opposite longitudinal edge of the bumper block and fitting in the aforesaid opening so as to hold the bumper block in place on the impact ledge.

1,884,834. DOOR PILLAR AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Sept. 16, 1931. Serial No. 563,061. 3 Claims. (Cl. 296—28.)



1. A pillar for an automobile body comprising a sheet metal member bent to provide a ledge portion facing in the direction of door closing movement, and an inwardly projecting flange portion substantially at right angles thereto, one of said portions having an opening provided therein, a lug being formed on said portion by bending sheet metal therefrom to form the opening, said pillar portion being adapted to receive a bumper block thereon with a portion thereof entered in the opening and engaging the lug, the other portion of said pillar having an opening provided therein in a predetermined relation to the aforesaid opening and lug to permit fastening the bumper block to the pillar by means engaging in said opening.

1,884,835. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Sept. 22, 1931. Serial No. 564,269. 2 Claims. (Cl. 16—86.)



1. A door buffer device comprising a metal door pillar member cut and bent to provide substantially parallel flanges spaced by integral impact ledge and bumper seat portions, said portions extending in parallel spaced planes connected by a bumper backing portion, said backing portion forming with said seat an angular continuation of each of said flanges, a resilient bumper block engaging said seat and backing portions, and a lug element projecting from a cut edge of said member and cooperating with said seat and backing portions to retain said bumper block in position adjacent said impact ledge.

1,884,836. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Oct. 28, 1931. Serial No. 571,573. 14 Claims. (Cl. 16—86.)



3. In a device of the class described, the combination of a sheet metal door pillar suitably formed to provide a ledge facing in the direction of door closing movement, and an inwardly extending flange substantially parallel to the direction of door closing movement and connected to the edge of said ledge, the sheet metal being suitably formed to provide a socket extending inwardly from the ledge and from the inwardly extending flange, said socket having a floor and a back wall integral with one another and with the sheet metal of the pillar, the floor and back wall being as wide as the socket, a bumper block of resilient material disposed in and projecting from the socket and seated directly upon the floor thereof and in abutment with the back wall, whereby the same is supported to absorb the loads incident to abutment of the door with the bumper block in closing, and means for securing the bumper block in place in the socket comprising a lug projecting from the bumper block and extending through an opening provided therefor in the door pillar.

1,884,837. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Oct. 28, 1931. Serial No. 571,574. 7 Claims. (Cl. 16—86.)



4. In a device of the class described, the combination of a sheet metal door pillar suitably formed to provide a ledge facing in the direction of door closing movement and an inwardly extending flange connected with the edge of said ledge and disposed substantially parallel with the direction of door closing movement, the sheet metal of said pillar being suitably formed to provide a socket reaching inwardly from the ledge portion and the flange portion, the sheet metal of the one portion being suitably formed to provide the floor of the socket, the rest of the socket being open for communication inside the pillar, and a bumper block of resilient material fitting in and projecting from the socket and seated upon the floor on the one portion of said pillar and being formed to provide a projection for engagement with the inside of the other portion of the pillar by extension from the socket within the pillar, whereby to retain the bumper block in place in the socket.

1,884,838. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Oct. 28, 1931. Serial No. 571,575. 3 Claims. (Cl. 16—86.)

1. In a device of the class described the combination of a door pillar comprising a sheet of metal suitably formed to provide a ledge facing in the direction of door closing movement and also an inwardly extending flange having its edge integral with the edge of said ledge, there being an opening in the ledge extending lengthwise

of the door pillar, a strap stirrup seated through said opening and having its ends provided with lugs engaging the ledge of the door pillar at the ends of the opening,



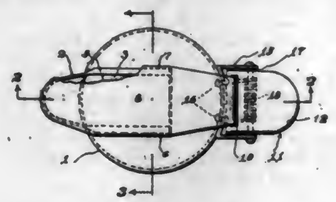
and a bumper block of resilient material seated within and supported by the stirrup and extending above the projected plane of the ledge, substantially as described.

1,884,839. DOOR BUMPER AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Original application filed July 27, 1931, Serial No. 553,288. Divided and this application filed June 6, 1932. Serial No. 615,582. 4 Claims. (Cl. 16—86.)



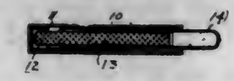
1. A door buffer device comprising a pillar member having a ledge portion facing in the direction of door closing movement and formed to provide a transverse depression at the position of the bumper block, a bumper block extending across said ledge portion, the said depression having sloping sides whereby the same is deepest at the middle, said block being enlarged in the direction of door closing movement, the enlarged portion being received in the aforesaid depression and formed with sloping surfaces to fit the sides of the depression, and means for securing the bumper block to the pillar member, said last mentioned means comprising lugs provided on the bumper block in a transverse plane coincident with the middle of the depression, said pillar member being provided with openings at opposite sides of said depression arranged to receive said lugs.

1,884,840. DISPENSER OF VARIOUS SUBSTANCES, SUCH AS LIQUIDS, POWDERS, GRANULATES. RALPH HUDSON PERSHALL, Bremerton, Wash., assignor to Sanicut Manufacturing Company, Bremerton, Wash., a Corporation of Washington. Filed Oct. 14, 1930. Serial No. 488,566. 2 Claims. (Cl. 215—100.)



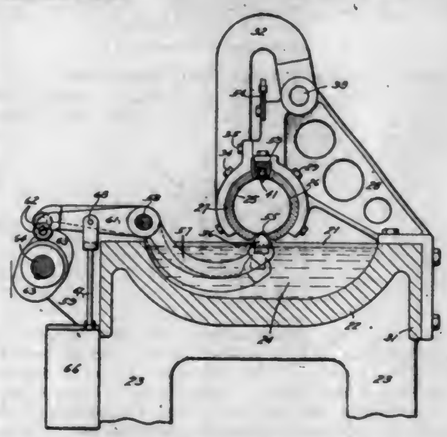
1. In a device of the class described, the combination of a body member having an opening at the top, of a spout at the front thereof, a slidable cover above said opening, said cover having downwardly bent rear end, an operating handle having a slot in the top face, said downwardly bent end fitting into said slot, a bracket attached to said body member and pivotally supporting said operating handle, a torsion spring for normally keeping the top of said operating handle on a substantially horizontal plane, and a stop at the lowermost edge of said handle for limiting the downward swing of said handle.

1,884,841. ERASER HOLDER. ARTHUR PESTEL, New York, N. Y. Filed June 25, 1931. Serial No. 546,810. 23 Claims. (Cl. 120—86.)



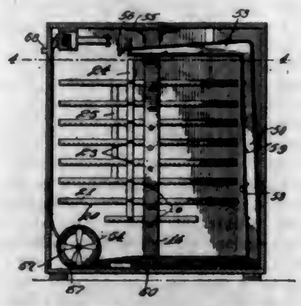
22. In an eraser holder, a casing, reversible means to retain an eraser in said casing and pinch the eraser near its working edge while in an operative position the eraser to be retained in said casing without a pinch in an inoperative position.

1,884,842. CAN BODY SOLDERING APPARATUS. JOHN F. PETERS, Leonia, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 6, 1929. Serial No. 360,651. 10 Claims. (Cl. 113—62.)



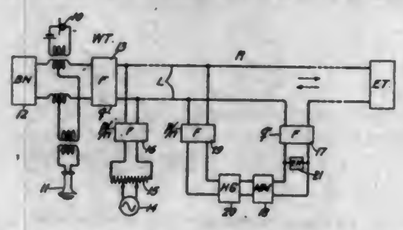
1. In a soldering apparatus, the combination of a solder bath, a solder horn positioned above said bath and adapted to support can bodies, a conveyor for moving the can bodies along said horn and over said solder bath, and a plurality of separate soldering irons positioned beneath said horn and having movement into engagement with a can body passing along said horn and into solder contained in the solder bath, and independent mechanisms for moving said irons separately to and from said can bodies.

1,884,843. INCUBATOR. RAY M. PETERSIME, Gettysburg, Ohio. Filed July 11, 1929. Serial No. 377,518. 8 Claims. (Cl. 119—37.)



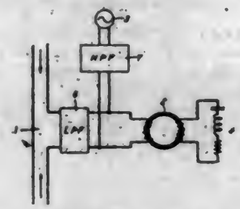
1. An incubator comprising a housing, a plurality of tray holders mounted in the housing, an air shaft in the housing arranged around the tray holders and provided with spaced discharge passages for directing air downwardly, upwardly, and laterally through the holders and means for causing circulation of air through the air shaft.

1,884,844. MAGNETIC WAVE-AMPLIFYING REPEATER. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,446. 9 Claims. (Cl. 179—170.)



1. The combination with a submarine cable having a surrounding sheath, of a repeater wholly included inside said sheath, said repeater comprising magnetic modulator means for introducing a negative resistance effect into the cable conductor within the frequency range of the signals transmitted over said conductor, and means to supply to said modulator means from a distance the energy of a sustained alternating current wave for enabling it to function.

1,884,845. MAGNETIC AMPLIFIER. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,800. 9 Claims. (Cl. 179—171.)



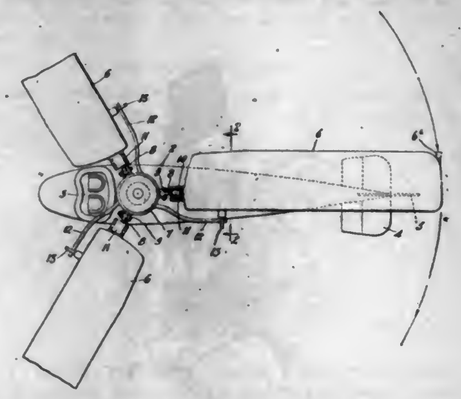
1. A magnetic amplifier comprising a magnetic core, a source of waves to be amplified, an auxiliary wave source, means responsive to the wave from each of said sources for producing flux variations in said core, a circuit including a coil wound on said core and therefore adapted to have electromotive force variations generated therein responsive to variations of the flux in said core, said circuit being coupled with said sources only through said core and comprising resonant tuning elements whereby the waves from said first mentioned source are directly regeneratively amplified.

1,884,846. RAILWAY CAR STRUCTURE. HARRY M. PFLAGER, St. Louis, Mo., and EINAR G. HALLQUIST, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Sept. 15, 1930. Serial No. 482,035. 25 Claims. (Cl. 105—249.)



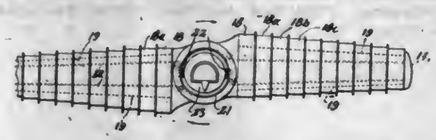
1. In a railway car underframe, a center sill having a single vertical web, and hopper side wall elements depending from the lower portions of said center sill proper and reinforcing the same.

1,884,847. AIRCRAFT. HAROLD F. PITCAIRN, Bryn Athyn, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 30, 1927, Serial No. 223,017. Renewed Feb. 28, 1931. 16 Claims. (Cl. 244—19.)



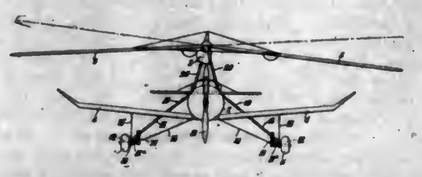
16. In an air screw, a hub, blades articulated thereto, a corresponding number of extensions from said hub for each blade, and means connecting each extension with its respective blade to cause the blade to attain a lower pitch when the blade rises above the normal plane of rotation and to attain a higher pitch when the blade falls below its normal plane of rotation.

1,884,848. AIRCRAFT DEVICE. HAROLD F. PITCAIRN, Bryn Athyn, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Original application filed Dec. 12, 1925, Serial No. 74,941. Divided and this application filed June 24, 1929. Serial No. 373,379. 19 Claims. (Cl. 244—19.)



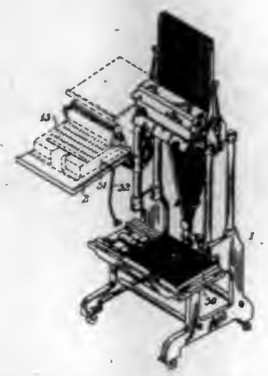
1. In an aircraft, a rotatively mounted hub member, a wing mounted thereon and formed of collapsible aerofoil sections flexibly joined together and adapted to be held in operative form by the centrifugal force of rotative movement.

1,884,849. AIRCRAFT. HAROLD F. PITCAIRN, Bryn Athyn, Pa., and JUAN DE LA CIERVA, Madrid, Spain, assignors to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,684. 19 Claims. (Cl. 244—10.)



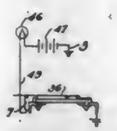
6. An aircraft having a fuselage, freely-rotative sustaining means thereabove, a pylon supporting the latter from the fuselage, alighting mechanism, and compression means extending from said mechanism to the fuselage adjacent said pylon.

1,884,850. TABULATOR FOR TYPOGRAPHIC MACHINES. FRANK H. POEPPELMEIER, Dayton, Ohio, assignor, by mesne assignments, to Set-O-Type Manufacturing Company, Cleveland, Ohio, a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,386. 14 Claims. (Cl. 276—28.)



1. A device of the type described, comprising a group of type-ejector keys, a scale associated therewith, a rotatable drum, a band on the periphery of said drum adapted to traverse the scale when the drum is rotated, and means for operation by any one of said keys to rotate the drum to advance the band from one graduation to the next succeeding graduation on the scale.

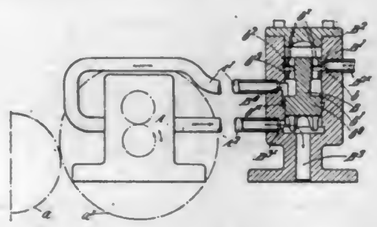
1,884,851. MARGINAL GAUGE FOR TYPESETTING MACHINES. FRANK H. POEPPELMEIER, Dayton, Ohio, assignor, by mesne assignments, to Set-O-Type Manufacturing Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 14, 1930. Serial No. 495,626. 6 Claims. (Cl. 276—12.)



1. In a typesetting machine, a chase, and dual means engaged by a type during its forward movement in the chase to apprise the operator, first that a predetermined marginal spacing is being approached and second, that the word being set up must end the line or be hyphenated.

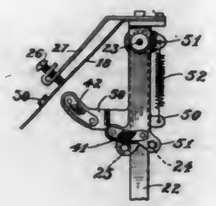
1,884,852. DEVICE FOR DELIVERING FLUIDS UNDER PRESSURE. WILLIAM POOL, Crayford, England, assignor, by mesne assignments, to British Celanese Limited, London, England, a Company of Great Britain. Filed Feb. 11, 1928, Serial No. 253,652, and in Great Britain May 16, 1927. 3 Claims. (Cl. 103—11.)

1. Pumping apparatus for delivering fluids under pressure, comprising a high pressure conduit, a pump, and a reducing valve interposed in series between said high pressure conduit and said pump, said reducing valve having an inlet port communicating with said high pressure conduit and a port communicating between the low pressure side of said reducing valve and the inlet side of said pump and a port communicating with the delivery side of the pump, a moving member subjected on its respective opposite sides to the pressure of the inlet side of the pump and to the pressure of the delivery side of the pump, and a valve member connected to said moving member and arranged to control the inlet port of said reducing valve; whereby the supply of fluid from the high pressure conduit to the pump is controlled and equal pressures are maintained as between the inlet and delivery sides of the pump as long as the pressure on the delivery side thereof does not exceed the pressure of the high pressure conduit, characterized by a communication between the inlet side of the



pump and its delivery side, the moving member of the reducing valve being adapted to keep said communication closed under normal conditions of operation, but to open said communication when the delivery pressure of the pump exceeds the pressure of the high pressure conduit, said moving member being further adapted to operate the valve member to close the inlet port communicating with the high pressure conduit when the pressure of the delivery side of the pump rises in excess of the pressure of the high pressure conduit.

1,884,853. CLOCK DRIVING MECHANISM. ARTHUR F. POOLE, Ithaca, N. Y., assignor to Poole Manufacturing Co., Inc., Ithaca, N. Y., a Corporation of New York. Original application filed Apr. 4, 1927, Serial No. 180,830, now Patent No. 1,831,260, dated Nov. 10, 1931. Divided and this application filed Oct. 12, 1928. Serial No. 312,069. 10 Claims. (Cl. 58—30.)

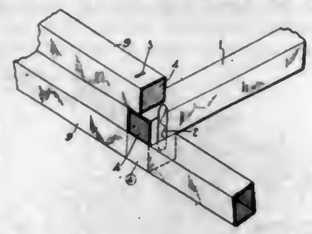


1. In a time keeping mechanism, the combination of a pendulum, a crutch operatively connected to said pendulum, a verge operated by said crutch and made in two portions held together by a spring, a pallet attached to each of said portions, and a toothed wheel adapted to be fed along by said pallets, the spring being sufficiently strong so that in normal operations the pallets do not yield, while in case of excessive movement of the pendulum the pallets will yield and prevent damage to the toothed wheel.

1,884,854. CRIBBING. GEORGE W. POWERS, Cleveland, Ohio. Filed Aug. 23, 1930. Serial No. 477,447. 3 Claims. (Cl. 61—47.)

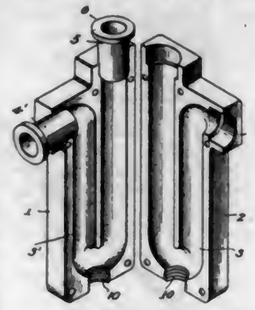
1. A cribbing structure comprising hollow tubular stretcher and header members, having metallic walls, said members having flat load-bearing walls extending in parallelism and vertical side walls in parallel spaced relation-

ship, tongues struck up from the metal of the flat load-bearing walls of the header members, slots in the load bearing walls of the stretcher members, registering with



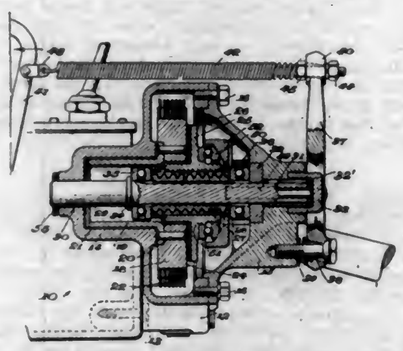
said tongues, the structure being assembled with the tongues passing through the slots and bent down upon the stretcher member to retain it in place.

1,884,855. TRANSPARENT TRAP. MATTHEW BYRNE PRICE, Rock Hill, S. C. Filed Sept. 21, 1931. Serial No. 564,244. 1 Claim. (Cl. 182—7.)



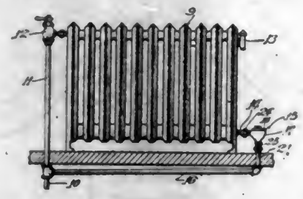
A trap consisting of a transparent rectangular body formed with parallel cross-sectionally circular ducts separated by a relatively thick wall and opening at one end of the body, the ducts being in communication with each other at their other ends, said body being tapped at the open ends of said ducts for connection wth inlet and discharge pipes and being split in a plane common to the diameters of both ducts to provide complemental sections for separation and removal without change in the normal positions of the connecting pipes, and removable fasteners securing said sections together.

1,884,856. BRAKE MECHANISM. FREDERICK HATHAWAY RAGAN, Cleveland, Ohio. Filed Nov. 10, 1928. Serial No. 318,544. 15 Claims. (Cl. 188—140.)



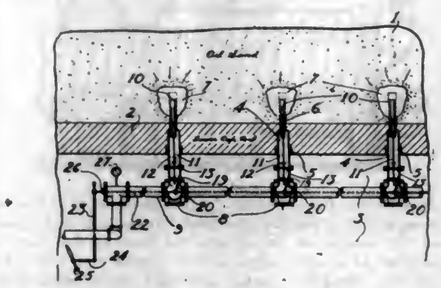
8. In a brake operating mechanism, a force multiplying unit including two driving members threaded one within the other, a driven member, means for preventing longitudinal movement of the driving members in one direction, means whereby longitudinal motion of either of the driving members in the opposite direction actuates the driven member, means preventing rotation of one driving member, means under the control of the operator for rotating the other driving member from a rotating part, and connections between the driven member and the brakes to operate the latter.

1,884,857. STEAM TRAP. WILLIAM H. RANDALL, Chicago, Ill. Filed Sept. 18, 1930. Serial No. 482,663. 4 Claims. (Cl. 237—9.)



1. In a single pipe steam heating system, the combination of a steam supply pipe, a branch pipe connected to said steam supply pipe, a radiator connected to said steam supply pipe, a trap connected between said radiator and said branch pipe, a connection between said trap and said radiator, a thermostat element mounted within said trap and expansible upon contact with steam, a main closure valve mounted upon said thermostat element and arranged to close communication between said trap and said branch pipe when steam is admitted to the trap, and a check valve mounted adjacent the connection between said trap and said radiator and arranged to close communication between said trap and said radiator when pressure within said trap exceeds that from within said radiator.

1,884,858. APPARATUS FOR SIMULTANEOUSLY CONTROLLING OIL MINE WELLS. LEO RANNEY, New York, N. Y., assignor to Standard Oil Development Company. Filed Mar. 22, 1929. Serial No. 349,091. 2 Claims. (Cl. 262—1.)

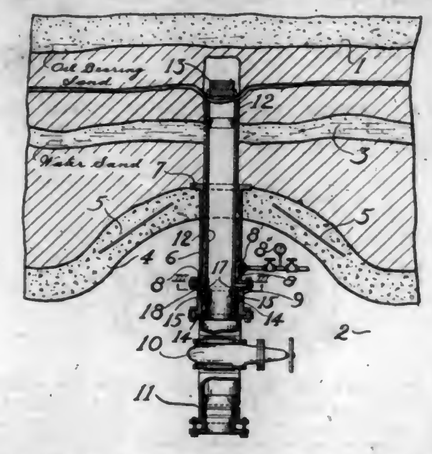


1. In equipment for recovering oil from the earth by a mining method, the improvement which comprises a plurality of conduits affording access to the oil sand, a common line into which said conduits discharge, a float operated valve in each conduit adapted to vent oil when the oil level in the conduit reaches a predetermined height, and means having a common connection to all of the valves for simultaneously unseating the valves in a single operation.

1,884,859. METHOD OF AND APPARATUS FOR INSTALLING MINE WELLS. LEO RANNEY, New York, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 12, 1030. Serial No. 427,743. 7 Claims. (Cl. 166—21.)

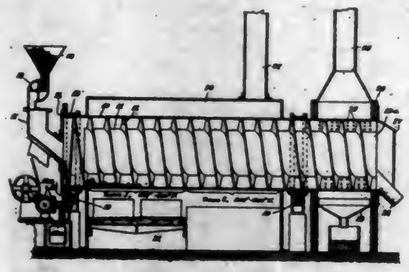
1. In recovering oil from an oil-bearing earth stratum to which access is gained through an offending stratum,

the steps which comprise securing a pipe into the earth, forming a hole from the pipe through the offending stratum while preventing substantial unconfined escape of material through the pipe, passing a closed conduit



into and beyond the offending stratum, sealing the space between the conduit and pipe, and inserting plastic composition to close the space around the conduit beyond the seal.

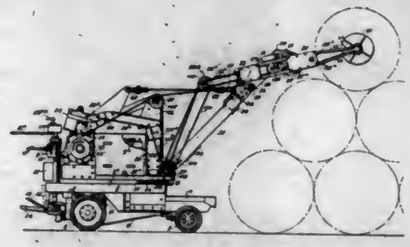
1,884,860. METHOD AND APPARATUS FOR EXTRACTING OIL FROM NUTS. THOMAS M. RECTOR, Rutherford, N. J., assignor, by mesne assignments, to Vitapack Corporation, New York, N. Y., a Corporation of New York. Filed May 17, 1930. Serial No. 453,248. 7 Claims. (Cl. 87—6.)



1. Apparatus for removing oils from the shells of nuts comprising a heating chamber having one end closed against the escape of gas, means for feeding the nuts to the chamber at a point adjacent the closed end, the other end of the chamber being provided with separating means for separating the nuts from fluids, means for heating the chamber in such a way as to provide a zone of high temperature adjacent the closed end of the chamber and a second zone of lower heat between the zone of high heat and the separating means, and means to move nuts through the heating zones to the separating means.

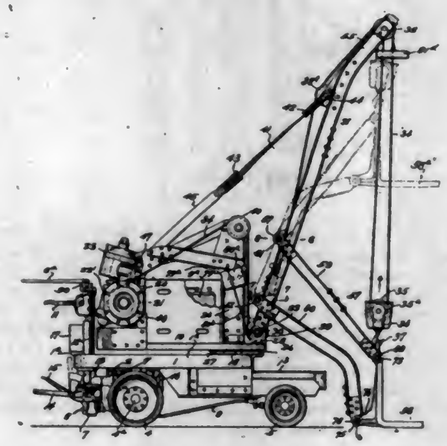
1,884,861. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio. Filed Oct. 14, 1929. Serial No. 399,472. 7 Claims. (Cl. 214—147.)

1. In a power driven truck, the combination of a wheel mounted frame, a member arranged to engage one wall of a load, a movable member for clamping another wall of the load, and means for operating the last mentioned member, said means comprising a motor, power means driven thereby and cut out devices between said power means and said movable member, said cut out devices including a device movably mounted on said movable member and connected to said power means and a spring between said device and said member arranged to yield



and operate the cut out when the clamping force of said movable member against the load exceeds the compression strength of said spring.

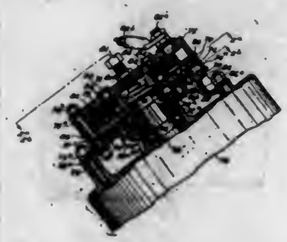
1,884,862. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 7, 1929. Serial No. 390,954. 9 Claims. (Cl. 214—65.)



1. In apparatus of the class described, the combination of a wheel mounted frame, a vertical shaft thereon, a frame rotatably mounted on said shaft, a support pivotally mounted on said last mentioned frame to swing in a vertical plane, spaced upper and lower horizontal shafts carried by said support, arms pivotally mounted at their inner ends on said horizontal shafts, a load carrying member comprising an L-shaped device having its vertical portion pivotally connected to the outer ends of said arms, means for swinging said arms about said shafts, and means for moving said support about its pivot.

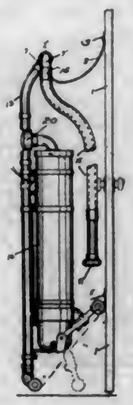
1,884,863. MAGNETIC BRAKE. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed July 4, 1924, Serial No. 724,175. Divided and this application filed Oct. 17, 1929. Serial No. 400,239. 2 Claims. (Cl. 188—171.)

1. In apparatus of the class described, the combination with an electric motor, of an annular member fixed to the motor casing in concentric relation to the shaft of said motor, a casing member supported in fixed relation to the motor casing, a disk connected to the motor shaft but mounted to move axially thereof into and out of engagement with said annular member, an armature supported non-rotatively between said disk and said casing member and movable toward said annular member to effect frictional engagement of said disk with said armature and said annular member, means normally acting on said armature to move it toward said annular



member to cause said disk to frictionally engage the armature and annular member, a winding connected in series with said motor and arranged to effect movement of the armature in the opposite direction when current is supplied to said motor, and means normally tending to move said disk away from said annular member.

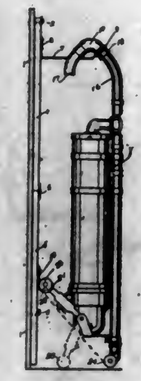
1,884,864. AIRWAY ELBOW ATTACHMENT FOR HOSE EXTENSIONS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed June 6, 1928. Serial No. 283,278. 26 Claims. (Cl. 15—1.)



13. A vacuum cleaner having an open-ended hollow handle, in combination with a support for said cleaner having resilient means for pressing an extension tube and the open end of said handle against each other.

1,884,865. SUPPORTING STANDARD FOR SUCTION CLEANERS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed June 7, 1928. Serial No. 283,587. 3 Claims. (Cl. 15—1.)

1. The combination with a suction cleaner having a handle with a passage therethrough and a suction inlet, a hose pipe, and a standard for supporting said suction cleaner and said hose pipe, said standard having a bracket arm, a loop on said bracket arm, rotatable ring members carried by said loop, an L member engageable with one of said ring members for adjustably supporting the hose pipe, the other ring member engaging the upper



end of the suction handle, said ring members and L providing an air passage between the suction handle and said hose pipe.

1,884,866. AIRWAY CLEANER SUPPORT. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed June 7, 1928. Serial No. 283,588. 3 Claims. (Cl. 15—1.)

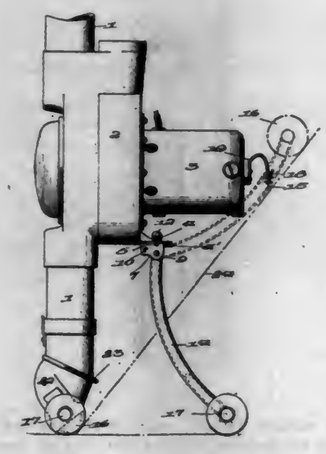


1. A standard provided with supports for the body and detachable suction hose-pipe of a suction cleaner, the said standard comprising an upper frame and a base frame, the upper frame carrying the hose-pipe support and the base frame carrying the body support for the cleaner, and the frames being adjustably connected to vary the distance between said supports.

1,884,867. SUPPORT FOR AIRWAY CLEANERS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed June 14, 1930. Serial No. 461,208. 8 Claims. (Cl. 15—16.)

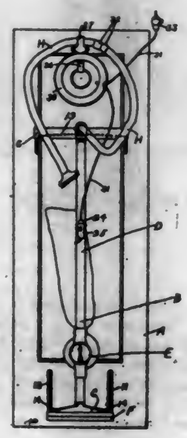
8. In combination with a suction cleaner having a rigid frame portion and a rotatably mounted floor tool,

means, hingedly and rotatably connected to the frame portion of said cleaner, cooperating with said rotatable



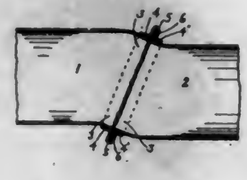
floor tool to adjustably support the cleaner in various positions.

1,884,868. AIRWAY CLEANER SUPPORTING LEDGE. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed May 27, 1931. Serial No. 540,467. 6 Claims. (Cl. 15—1.)



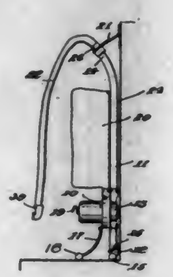
1. In a device of the character described, a flexible shelf supported at its opposite edges and a hollow connector carried thereby having its ends extending on opposite sides of the shelf and adapted respectively for connection to the suction handle and hose extension members of an air-way cleaning system.

1,884,869. METHOD OF MAKING PIPE SECTIONS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Original application filed Aug. 2, 1924, Serial No. 729,759. Divided and this application filed June 8, 1931. Serial No. 542,941. 1 Claim. (Cl. 29—157.)



The method of making a pipe section suitable for an angular joint which consists in cutting off a length of pipe angularly and then reducing the elliptical cut-off pipe end to cylindrical form of substantial length, the axis of the cylinder being rectilinear and substantially at right angles to the plane of the cut end, whereby the cylindrical end may be fitted to rotate within another straight cylinder the internal diameter of which is the same as the external diameter of the cylinder at the cut-off end of the pipe.

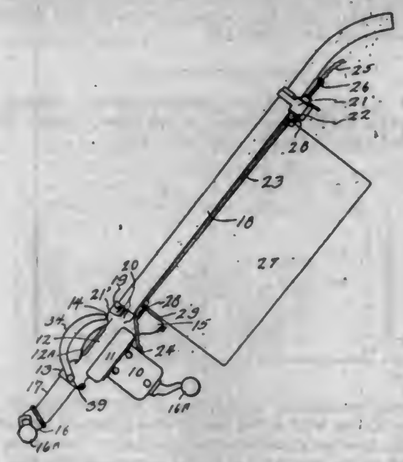
1,884,870. HOSE PIPE HANGER FOR AIRWAY CLEANERS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed July 20, 1931. Serial No. 552,049. 6 Claims. (Cl. 15—1.)



1. An extension device for suction cleaners of a type having a hollow handle, comprising a bracket carrying an expansible clasp, and a hose extension pipe for said cleaner having a hollow tip forming a permanent part of said hose, detachably grasped by said clasp, said clasp and hose being in engagement with each other when the extension device is in operative relation with the cleaner.

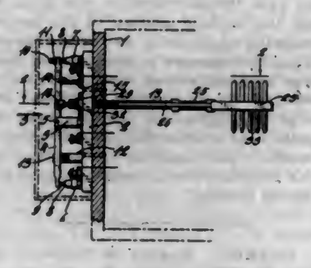
1,884,871. CONVERTIBLE SUCTION CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed July 9, 1931. Serial No. 549,627. 4 Claims. (Cl. 15—9.)

2. In a suction cleaner, a body unit comprising a motor and a fan casing having an outlet attachable to a filtering bag, a handle demountably attached to said body unit, one element of a separable electrical connector car-



ried by said handle, and a short motor cord attached at one end to the motor and provided at its other end with the mating element of said connector.

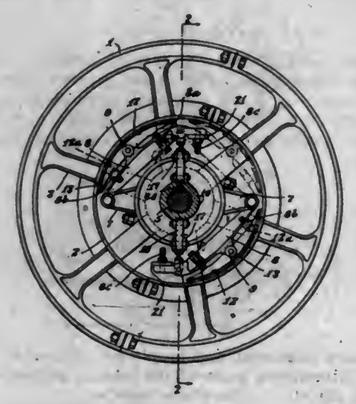
1,884,872. THERMOSTATIC SWITCHING DEVICE. JOHN L. ROBBINS, Denver, Colo. Filed July 29, 1931. Serial No. 553,831. 6 Claims. (Cl. 200—140.)



1. A thermo responsive switching device comprising in combination a base, two spaced switch contacts mounted thereon, a stationary terminal located between the contacts, a switch member pivotally connected with the stationary terminal and movable into engagement with either of the two contacts, resilient means for urging the switch member into engagement with one of the contacts, the base having an opening, a rod extending through the opening in the base, a support secured to the base and projecting therefrom, a thermo responsive element attached to the free end of the support for moving the rod and the switch member for opening the normally closed circuit whenever the temperature to which the thermo responsive element is exposed attains a predetermined value.

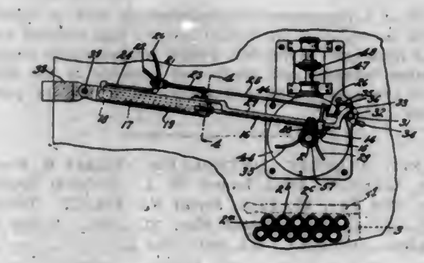
1,884,873. CLUTCH PULLEY. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed Dec. 9, 1930. Serial No. 501,001. 12 Claims. (Cl. 192—105.)

1. A friction clutch pulley embracing in its construction, a pulley adapted to be loosely mounted on a shaft and having a concentric clutch rim, a spider adapted to be secured to the shaft adjacent to said pulley, shoe-supporting arms fulcrumed at their forward ends to said spider, centrifugally actuated arcuate clutch shoes pivotally mounted on the respective arms intermediate the ends of the arms and actuated by their own centrifugal force



and the centrifugal force of their supporting arms to move into frictional clutching engagement with the interior face of said rim, and means under the control of the operator connected with said arms to retract the shoes from clutching engagement with said rim.

1,884,874. PIPE JOINT COUPLING DEVICE. WARREN A. ROSS, Long Beach, Calif., assignor of one-fourth to Truman O. Boyd, Long Beach, Calif., and one-fourth to Donald M. Carter, Chicago, Ill. Filed Apr. 13, 1927. Serial No. 183,571. 8 Claims. (Cl. 29—88.2.)

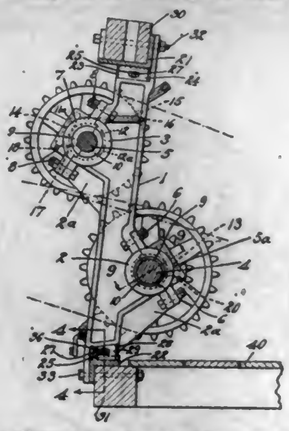


8. A coupling and uncoupling device for tool joints having separable sections comprising a series of teeth forming a part of one section of said joint, a movable toothed part separate from the parts to be coupled and having teeth to successively mesh with the teeth of said toothed section by means of which said toothed section may be rotated to connect and disconnect the sections.

1,884,875. DRAW WORKS. WARREN A. ROSS, Chicago, Ill., assignor of one-fourth to Donald M. Carter, Chicago, Ill. Filed Mar. 24, 1928. Serial No. 264,424. 4 Claims. (Cl. 308—22.)

1. A draw works comprising a plurality of metal bearing supports, bearings supported thereon, metal, aligning members at the top and bottom of said bearing supporting members, the aligning members and bearing supporting members having interlocking parts, aligning faces

on the interlocking parts of said bearing supporting members and aligning members which when in engagement, cause the bearings of the bearing members to be brought



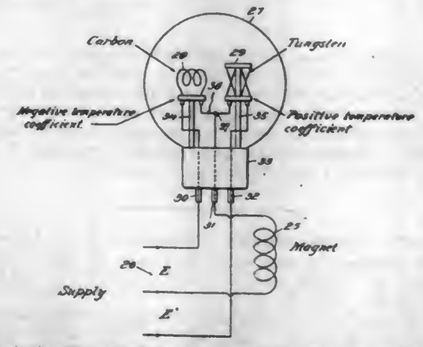
into proper alignment and means for removably connecting the interlocking parts of the bearing supporting members and the aligning members together.

1,884,876. COMPRESSOR. WILFRED J. ROULEAU, Quincy, Mass. Filed Feb. 27, 1931. Serial No. 518,646. 9 Claims. (Cl. 230—212.)



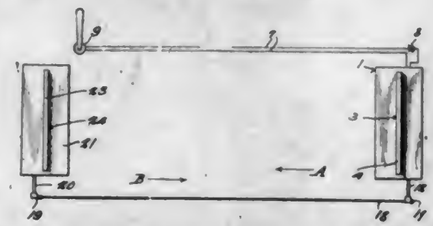
1. In a compressor, the combination with a cylinder member having co-axial conical exterior and interior walls spaced from each other, of a hollow conical piston member operating between said walls and movable in the direction of the axis thereof and means to operate the piston member.

1,884,877. CIRCUIT CONTROLLER. ALBERT B. RYPINSKI, Laurelton, Long Island, N. Y. Original application filed Dec. 27, 1929, Serial No. 416,877. Divided and this application filed Mar. 21, 1931. Serial No. 524,304. 2 Claims. (Cl. 201—63.)



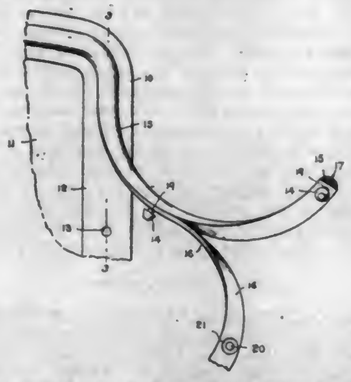
2. A circuit controller comprising an evacuated envelope, a base connected therewith, terminals carried by said base, independent filaments supported within said envelope in predetermined relation to said base, one of said filaments comprising a carbon filament and another of said filaments comprising a tungsten filament, a series circuit extending between two of the terminals and said filaments, and a connection extending from a point between said filaments and another of said terminals.

1,884,878. LOCKING MECHANISM. GEORGE B. SAMUELS, Burlington, Kans. Filed June 1, 1929. Serial No. 367,756. 1 Claim. (Cl. 200—169.)



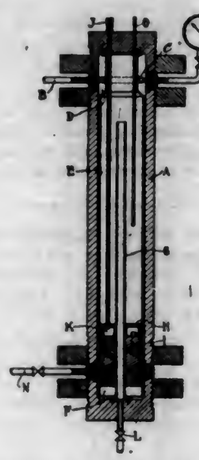
Locking mechanism comprising a box-like support provided in its top with a slot and having guides in its ends, a plate-like member slidable in the slot and in the guides and provided on its side with a keeper located within the support, a retractile spring within the support and connected to the plate-like member and to the support to raise said member, a shaft journaled in the ends of the support, a latch finger within the support and mounted on the shaft, the finger being engageable over the keeper to hold the plate-like member depressed, the keeper having an inclined surface against which the latch finger presses when the plate-like member is raised, an arm on the shaft, a retractile spring connected to the arm and to the support to hold the finger against the inclined surface of the keeper when the plate-like member is raised, and to hold the finger engaged over the keeper when the plate-like member is depressed, the inclined surface of the keeper acting to increase gradually the tension of the last-specified spring, when the plate-like member is depressed to enable the finger to engage over the keeper, mechanism for rocking the shaft to disengage the finger from the keeper, stop brackets on one end of the support, on opposite sides of the corresponding guide, and a cross piece on the lower edge of the plate-like member and engaging the brackets to limit the movement of the plate-like member when said member is depressed in the guides.

1,884,879. GASKET. MARION S. SANDERS, Bristol, Va. Filed Aug. 26, 1930. Serial No. 477,885. 7 Claims. (Cl. 20—69.)



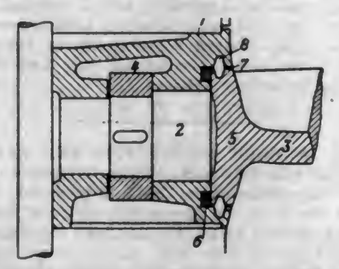
1. The combination with a gasket member having heads thereon at intervals for insertion through apertures in corresponding intervals in a carrying member to which the gasket is to be applied and shanks between said heads and gasket adapted to be extended, of an underlying strip having apertures therethrough at intervals corresponding with the heads on the gasket through which apertures the heads of the gasket are to be inserted to secure the underlying strip thereto before pressing the heads through the apertures in the carrying member as provided for by the extensible shanks.

1,884,880. APPARATUS FOR CARRYING OUT REACTIONS CONTINUOUSLY IN THE LIQUID PHASE UNDER INCREASED PRESSURE. KENNETH HERBERT SAUNDERS, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed May 18, 1929. Serial No. 364,153. 4 Claims. (Cl. 23—289.)



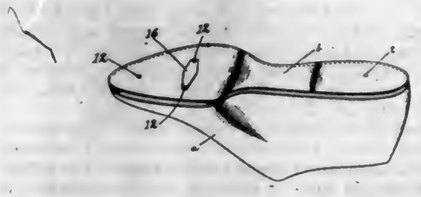
1. In an apparatus for carrying out reactions continuously under pressure, an outer pressure retaining cylinder closed at both ends, a shorter mantle within said cylinder closed and supported at its upper end and leaving an annular space between said outer cylinder and said mantle, fluid distributing means within said annular space, a still shorter inner cylinder supported from its lower end and leaving an annular chamber between said mantle and said inner cylinder, packing within said annular chamber at its lower end, fluid distributing means above said packing, and fluid draw-off means at the bottom of said inner cylinder.

1,884,881. SAFETY DEVICE FOR WING TYPE TURBINES, PUMPS AND SIMILAR PIECES OF APPARATUS WITH MOVABLE VANES. CARLOS SCHMITTHENNER, Heidenheim-on-the-Brenz, Germany. Filed Feb. 9, 1931, Serial No. 514,380, and in Germany Feb. 20, 1930. 3 Claims. (Cl. 253—148.)



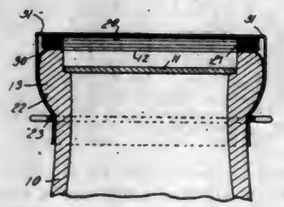
1. In a blade type turbine, a vertical axis runner head having a bearing and a seat, a blade having a pin and a flange fitting respectively in said bearing and seat for rotary adjustment of the blade, means for preventing outside water from entering the bearing, comprising an annular drain channel in the joint between the seat and flange, adapted to receive the water entering the joint at the high pressure side of the head and to conduct the received water to the low pressure side of the head, and a water outlet to the outside of the head, extending from said drain channel at the low pressure side of the head.

1,884,882. INSOLE-POSITIONING MEANS. AUGUST R. SCHOENKY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 1, 1929, Serial No. 336,697, and in Great Britain Dec. 31, 1928. 6 Claims. (Cl. 12—141.)



1. A device for positioning an insole on a last comprising a sheet metal member having a body portion adapted to overlie the bottom face of the insole and having opposite end portions forming projections in angular relation to its body portion and constructed and arranged to extend into holes previously provided in the insole and last, said projections being curved laterally to present convex faces toward each other and being rounded on their ends to facilitate their entrance into the holes in the insole and last.

1,884,883. MILK BOTTLE CLOSURE. WILLIAM ADAM SCHOLLMEYER, Yonkers, N. Y. Filed Jan. 10, 1930. Serial No. 419,786. 2 Claims. (Cl. 215—38.)

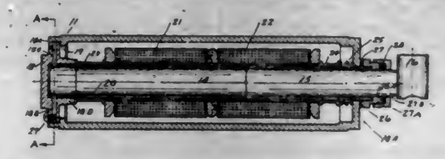


1. A milk receptacle comprising a bottle having an opening at the top thereof, an enlarged neck flange surrounding said opening, a paper closure having a flat portion adapted to extend over the opening of the bottle, a skirt adapted to extend downwardly around the neck of the bottle and to be secured thereto, and a plurality of folds forming an annular expansible intermediate portion combined with a cap having a flat portion extending over and in contact with the flat portion of said closure, a skirt extending over and in contact with the skirt of said closure and a cylindrical side of larger diameter than that of said folds lying against the neck of the bottle constructed with circularly arranged perforations surrounding the flat portion of said inner closure.

1,884,884. ELECTRIC TRACK SWITCH. CHESTER O. SEATON, Louisville, Ky. Filed Oct. 2, 1930. Serial No. 486,020. 9 Claims. (Cl. 175—341.)

1. In an electro-magnet, comprising a magnetic plunger, a magnetic shell included in the magnetic path of the flux of said magnet, a center non-magnetic tube mounted

therein and sealed to the ends of said shell with closures, windings associated with said tube which is provided with an open end through which passes the connection from the

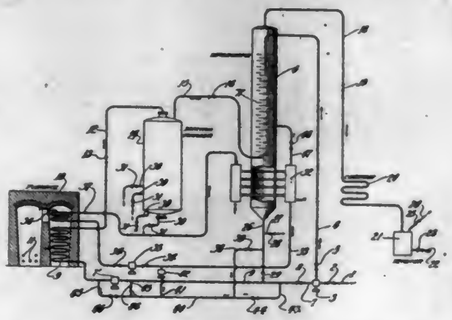


plunger to the device to be operated, said tube being provided with an auxiliary plunger bearing, said tube extending beyond the casing of one of the closures.

1,884,885. ANTIOXIDANT OR AGE RETARDER FOR RUBBER COMPOUNDS. LORIN B. SEBRELL and ALBERT M. CLIFFORD, Akron, Ohio, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 4, 1930. Serial No. 418,646. 26 Claims. (Cl. 18—50.)

1. A method of preserving rubber which comprises incorporating therein a mixture of a thio diaryl substituted amine and an organic compound which exhibits age retarding properties but which is excluded from the class of thio diaryl amines.

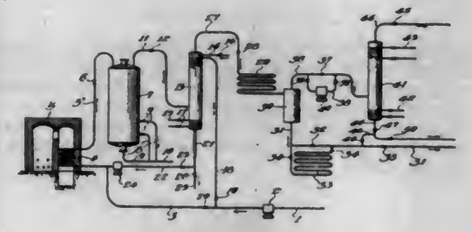
1,884,886. PROCESS FOR HYDROCARBON OIL CONVERSION. JEAN DELATTRE SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 27, 1927. Serial No. 163,880. 4 Claims. (Cl. 196—139.)



1. A process of hydrocarbon oil conversion, comprising subjecting oil to cracking conditions of temperature and superatmospheric pressure to cause substantial vaporization, separating said vapors and subjecting same to reflux condensation, collecting a pool of said reflux condensate, subjecting the pool of reflux condensate to a reboiling action to release lighter fractions thereof by passing a liquid heated to a higher temperature than the pool of reflux condensate through said pool but out of direct contact herewih in a closed cycle, utilizing a portion of said reflux condensate as the liquid medium circulating through said closed cycle, releasing vapors from said cycle and adding regulated portions of reflux condensate from the pool to the body circulating through the closed cycle in quantity sufficient to compensate for said vapors released from said closed cycle, whereby the amount of liquid in said closed cycle is maintained constant.

1,884,887. TREATMENT OF HYDROCARBON OILS. JEAN D. SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 10, 1929. Serial No. 331,436. 6 Claims. (Cl. 196—11.)

1. A method for treating the vaporous and gaseous mixture produced in the cracking of hydrocarbon oils which comprises dephlegmating the mixture of vapors and gases to condense and separate therefrom fractions heavier than gasoline, then subjecting the mixture to partial condensation at a temperature above atmospheric to condense therefrom a heavy gasoline cut while retaining a lighter



gasoline cut in vapor form, separating the condensed heavy gasoline cut from the vapor-gas mixture, and then rectifying the mixture in the absence of said condensed heavy gasoline cut to sharply separate and condense said lighter gasoline cut from the incondensable gases.

1,884,888. ROCKER SHAFT CARRIER FOR TIN GAS METERS. NELSON J. SEIBERT and EARL M. KREIDLER, Wilkinsburg, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Mar. 30, 1928. Serial No. 266,044. 5 Claims. (Cl. 73—1.)

1. A rocker shaft carrier for gas meters comprising a sheet metal base plate provided with a marginal reinforcing flange; projections formed by bending portions of said base plate outward substantially at right angles; and reinforcing metal cast around said projections and forming rocker shaft bearings.

1,884,889. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1929. Serial No. 340,338. 18 Claims. (Cl. 18—50.)

1. The method of preserving rubber which comprises reacting an aminophenol with a primary aromatic amine with the elimination of both water and ammonia, and treating rubber with the product.

1,884,890. HEATER FOR PERMANENT WAVING. JOHN SQUERSO, Brooklyn, N. Y. Filed Sept. 12, 1931. Serial No. 562,480. 8 Claims. (Cl. 132—36.)



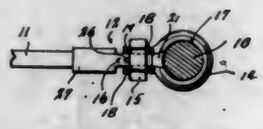
1. An electric heater for permanent waving comprising two bulging halves connectible to each other to form a barrel-shaped hollow structure having a diameter decreasing from its middle portion toward its ends, adapted to embrace a hair lock wound upon a hair waver, said halves being movable with respect to each other to expand said structure, when the same is inserted in or removed from, its operative position.

1,884,891. HAIR WAVER. JOHN SQUERSO, Brooklyn, N. Y. Filed Sept. 12, 1931. Serial No. 562,481. 16 Claims. (Cl. 132—38.)



1. As a new article of manufacture, a hair waver consisting of an elongated body having a barrel shaped central portion, said body comprising two parts axially movable one with respect to the other, so as to set under tension the windings of a hair lock wound thereupon.

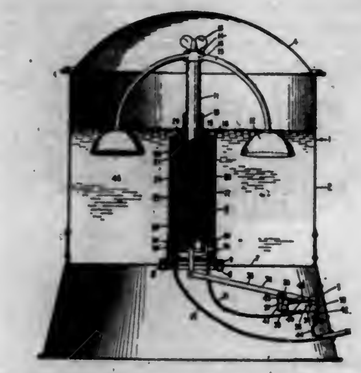
1,884,892. BATTERY TERMINAL. JACOB SHANKS, St. Louis, Mo. Filed July 6, 1931. Serial No. 458,903. 6 Claims. (Cl. 173—259.)



1. In a battery terminal, the combination of a split ferrule having radial extensions provided with external screw threads, a longitudinally movable member disposed between said extensions and provided with longitudinally spaced projections, and a nut screw-seated on said extensions and adapted when operable in one direction to engage one of said projections and produce inward movement of said movable member whereby the inner end thereof moves against the post, said nut being operable in another direction to engage the other projection and cause the inner end of said movable member to move outwardly between said extensions away from said post and cause expansion of said ferrule.

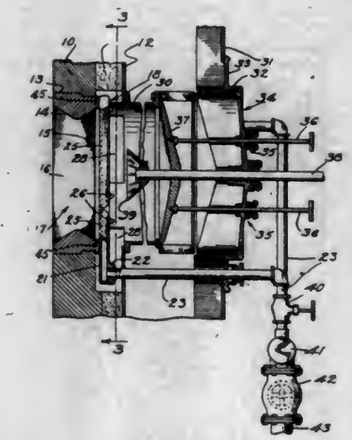
1,884,893. WASHING MACHINE. WILLIAM E. SHARP, Chicago, Ill. Filed Nov. 24, 1928. Serial No. 321,707. 6 Claims. (Cl. 259—113.)

1. A washing machine comprising a container, a plunger mounted for up and down movement therein, agitating means connected to the upper end of said plunger, an operating solenoid surrounding said plunger, a lever pivoted to said container, a link connecting the free end of said lever to said plunger, and a switch pivoted to said lever, whereby when said plunger falls by gravity, the switch is closed causing the solenoid to be energized to raise said plunger, and when said plunger is raised,



said switch is opened resulting in deenergization of said solenoid and release of said plunger to again fall by gravity.

1,884,894. FUEL BURNER. CARLYLE J. SHERWOOD, Los Angeles, Calif., assignor to Coen Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Dec. 11, 1929. Serial No. 413,822. 9 Claims. (Cl. 158—11.)

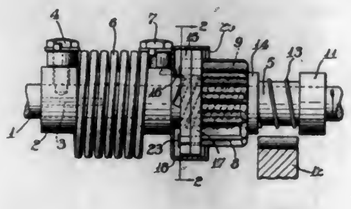


1. A burner structure comprising a central fuel burner adapted to project a flame through a firing opening, a housing adjacent said burner and the mouth of the firing opening, and an annular burner ring concentric with the axis of the mouth of the firing opening, and interposed between the wall of the furnace, through which the firing opening occurs, and the forward end of the housing, said annular burner being formed in arcuate segments disposed in interlocking relation with the end of said housing.

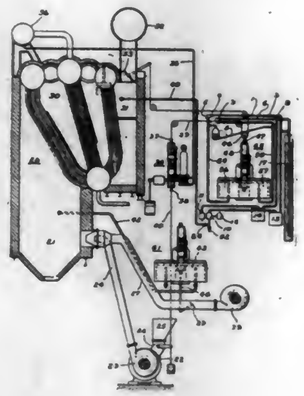
1,884,895. ENGINE STARTER. ROBERT E. SLAYTON, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 28, 1932. Serial No. 614,240. 5 Claims. (Cl. 74—7.)

1. In an engine starter, an operating member, a driving member mounted for rotation thereon and therewith and for movement into and out of engagement with a member

of the engine to be started, centrifugal elements mounted on said driving member and means mounted on said operating member cooperating therewith to oppose relative rotation between the operating member and driving member during the disengaging movement of said driving member.



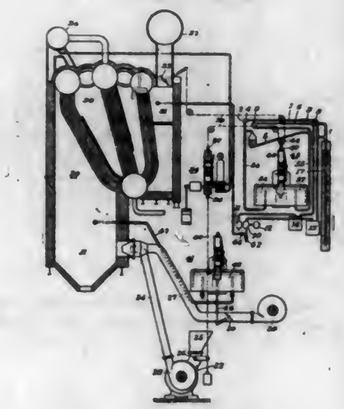
1,884,896. FLUID ANALYSIS. GEORGE W. SMITH, Pittsburgh, Pa., assignor to John M. Hopwood, Pittsburgh, Pa. Filed July 29, 1927. Serial No. 209,289. 20 Claims. (Cl. 73—51.)



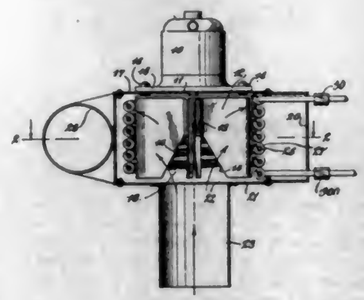
1. The method of analyzing a fluid mixture, which comprises passing the mixture through lamellar and turbulent flow restrictions in series at constant initial and final pressures, and measuring the pressure at a point intermediate the restrictions.

1,884,897. METHOD AND APPARATUS FOR REGULATING COMBUSTION. GEORGE W. SMITH, Pittsburgh, Pa., assignor to John M. Hopwood, Pittsburgh, Pa. Original application filed July 29, 1927, Serial No. 209,289. Divided and this application filed Apr. 8, 1929. Serial No. 353,515. 21 Claims. (Cl. 236—14.)

1. The method of regulating combustion of fuel in a furnace, which comprises continuously passing a sample of the combustion gas through turbulent and lamellar flow restrictions in series at constant initial and final pressures whereby the pressure intermediate the restrictions varies in accordance with the carbon dioxide content of the combustion gas, and regulating the relative supplies of fuel and air in accordance with such pressure variations.



1,884,898. AIR CIRCULATING AND TEMPERATURE CHANGING UNIT. HERMAN WILLIAM SMITH, Jr., Schenectady, N. Y., assignor to Joseph Porzel, Lockport, N. Y. Filed May 7, 1930. Serial No. 450,423. 2 Claims. (Cl. 257—244.)



1. An air circulating and temperature changing unit comprising a frame and a motor secured thereto; a fan driven by said motor; a vertical air inlet duct arranged at the lower part of said frame; a horizontal air discharge duct arranged upon the side of said frame; an annular thermal transfer member connected with a source of thermal power and secured to said frame; and conducting means for directing air from said inlet duct and radially against said thermal transfer member and through said fan and into said discharge duct.

1,884,899. NONGUMMING GASOLINE AND MODE OF PREPARING SAME. EVERETTE I. SOLLMANN, Washington, D. C., assignor to American Lecithin Corporation, Atlanta, Ga., a Corporation of Delaware. Filed Oct. 28, 1931. Serial No. 571,682. 10 Claims. (Cl. 44—9.)

1. As a new product, gasoline containing a few thousandths to a few hundredths of one per cent of added phosphatide, such product having not more than a slight tendency to formation of gum.

6. As a new product, gasoline containing a few thousandths to a few hundredths of one per cent of added lecithin, such product having not more than a slight tendency to formation of gum.

9. A process which comprises adding a small fraction of one per cent of lecithin to a gasoline which normally would have a tendency to gum-formation, whereby said tendency is reduced.

1,884,900. HAIRPIN. EDITH SPARKE, Oakland, Calif. Filed Oct. 14, 1931. Serial No. 568,652. 9 Claims. (Cl. 132—50.)

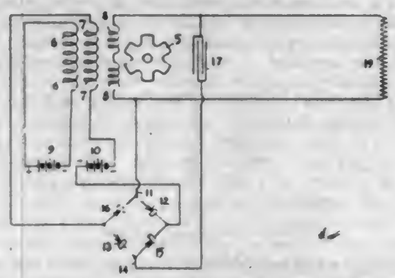


1. A hair pin, including a longitudinally extended leg having an opening therein adjacent one end thereof and extending to a point substantially midway between the ends thereof.

1,884,901. PROCESS FOR EXTRACTING SUGAR FROM CANE MOLASSES CONTAINING GLUCOSE. GUILFORD L. SPENCER, deceased, Brooksville, Me., by Emma F. Spencer, executrix, Brooksville, Me., assignor to Cuban-American Sugar Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 17, 1929. Serial No. 400,460. 1 Claim. (Cl. 127—47.)

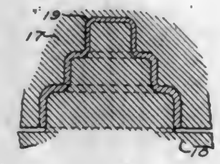
A method of extracting sugar from cane molasses containing glucose, which consists in adding to the molasses a solution of barium hydroxide sufficient in quantity to maintain the solution strongly alkaline after a part of the barium has precipitated the sugar as barium saccharate and another part of the barium has reacted with the glucose.

1,884,902. REGULATING SYSTEM FOR ALTERNATING CURRENT GENERATORS. MILLARD COLE SPENCER, East Orange, N. J., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed Mar. 6, 1930. Serial No. 433,566. 2 Claims. (Cl. 171—119.)



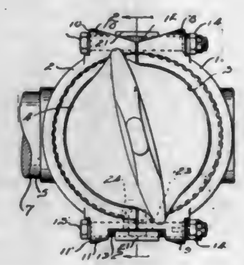
2. In a regulating system, an alternating-current generator having main direct-current field coils, differential direct-current field coils, and alternating-current coils, a constant-potential source of direct current for the main direct-current field coils, an opposing constant-potential source of direct current for the differential direct-current field coils, a rectifier, a condenser, connections from the alternating-current coils through the condenser, the rectifier and the opposing constant-potential source of direct current to the differential direct-current field coils to weaken the field excitation from the main direct-current field coils.

1,884,903. METHOD OF MAKING PROPELLER BLADES. JOHN SQUIRES, Hagerstown, Md. Filed Dec. 9, 1929. Serial No. 412,670. 7 Claims. (Cl. 29—156.8.)



1. The method of forming a hollow, seamless metal propeller blade which comprises the subjecting of a disc-shaped blank successively to the action of a plurality of pairs of drawing dies, each pair of which draws out a progressively smaller concentric portion of the blank to make it substantially step-shape in longitudinal section, then subjecting the blank to the action of a pair of tapered drawing dies, upsetting a bead around the open end of said blank, and then subjecting the blank to a pair of forming dies for pressing opposite sides of the tapered blank toward each other to secure the desired cross-sectional shape.

1,884,904. PROPELLER BLADE ADJUSTING MEANS. JOHN SQUIRES, Hagerstown, Md. Filed June 20, 1930. Serial No. 462,479. 19 Claims. (Cl. 170—160.)

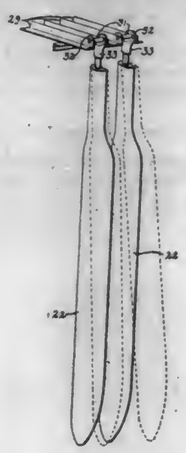


1. In combination, a propeller hub including hub sections, a propeller blade, adjustably mounted on said hub, rotatable members for clamping said sections together and means carried solely by said members and operable by rotation thereof for positively moving said blade relative to said hub.

1,884,905. AIRCRAFT SUSTAINING ROTOR AND METHOD OF MAKING THE SAME. PAUL H. STANLEY, Glenside, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 27, 1931, Serial No. 518,638. Renewed Jan. 26, 1932. 28 Claims. (Cl. 244—19.)

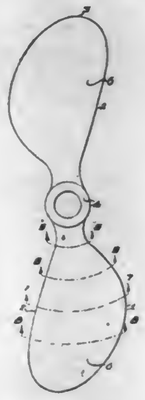
28. In the manufacture of a sustaining rotor construction of the articulated blade type, in which construction

the blades are irregularly swung on their articulations by flight forces, the steps which include balancing the



blades with respect to their weights first statically and then dynamically.

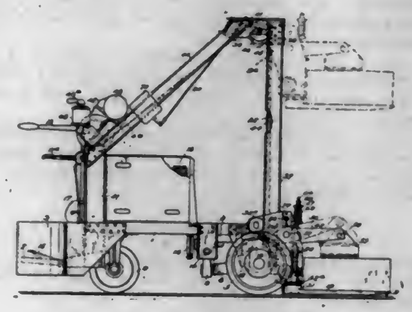
1,884,906. SCREW PROPELLER. WILLIAM STANNUS, Detroit, Mich., assignor to Stannus Propeller Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 20, 1930. Serial No. 429,909. 5 Claims. (Cl. 170—159.)



1. A watercraft propeller blade of unsymmetrical stream-line cross section, having its thickest portion disposed along an imaginary line directionally corresponding approximately to that of a line representing the leading-edge contour of the blade and located at about one third of the distance between the leading and following edges of blade, said edges being of arcuate contour.

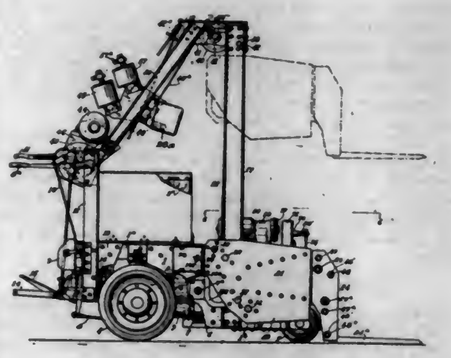
1,884,907. INDUSTRIAL TRUCK. FRANK STONER, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 6, 1928. Serial No. 259,535. 18 Claims. (Cl. 214—65.)

1. In apparatus of the class described, the combination of a wheel mounted frame, means for steering certain of the wheels for supporting said frame, a member mounted on said frame for vertical movement, and a plurality of load carrying devices projecting outwardly beyond the front end of said frame and arranged to be projected below a load whereby it may be lifted, and



means for independently pivoting said devices at their inner ends on said member, whereby the outer ends of said devices may independently swing laterally in either direction in a horizontal plane.

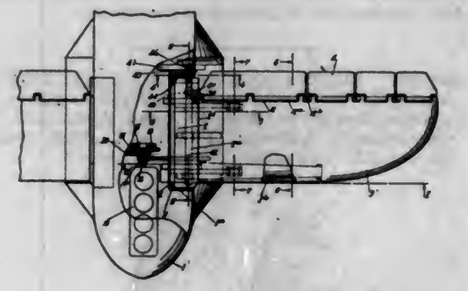
1,884,908. INDUSTRIAL TRUCK. FRANK STONER, Lakewood, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 9, 1929. Serial No. 398,388. 22 Claims. (Cl. 214—65.)



1. In apparatus of the class described, the combination of a wheel mounted frame having guides, a member slidable on said guides, means for raising and lowering said slidable member, a load engaging and carrying member slidably mounted on said first mentioned member to move laterally in either direction from the longitudinal axis of the frame, and means for moving said last mentioned member laterally, said means including a power operated element mounted on said frame and arranged to have operative relation to said load engaging and carrying member in a lowered position only of said first mentioned member.

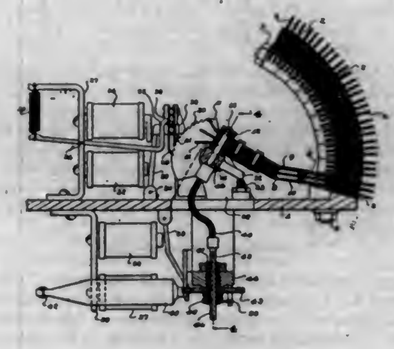
1,884,909. ORNITHOPTER. CHARLES WILLIAM STROBELL, San Diego, Calif. Filed Sept. 4, 1930. Serial No. 479,687. 15 Claims. (Cl. 244—20.)

1. In an ornithopter, a body having relatively large circular recesses at the opposite sides of and within the confines of the body, the axes of the circular recesses extending longitudinally with respect to the longitudinal axis of the body, and a pair of wings, one positioned



at each side of the body, each wing having at its inner end a large circular bearing portion mounted in the circular recess at the corresponding side of the body.

1,884,910. AUTOMATIC TELEPHONE SWITCH. WALTER S. STROWGER, Livonia, N. Y., assignor to Strowger Telephone Securities, Inc., Wilmington, Del., a Corporation of Delaware. Filed Nov. 20, 1931. Serial No. 576,401. 7 Claims. (Cl. 179—27.52.)

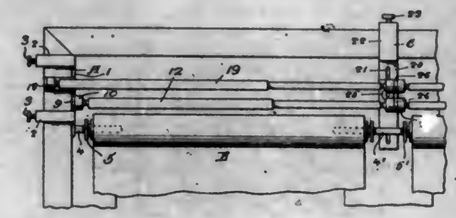


1. An automatic telephone switch comprising a switch member mounted to turn about a suitable axis, a member on which the switch member turns, mounted to turn about a suitable axis at right angles to the first mentioned axis and intersecting said axis, an advancing magnet for shifting the switch member about the first mentioned axis, supported independently of the member on which the switch member turns, means operated by said advance magnet, and a flexible shaft connecting said means with the switch member.

1,884,911. WINDOW SHADE AND CURTAIN BRACKET. CHARLES C. STUBBLEFIELD, Bradleyville, Mo. Filed Nov. 8, 1929. Serial No. 405,742. 1 Claim. (Cl. 156—24.)

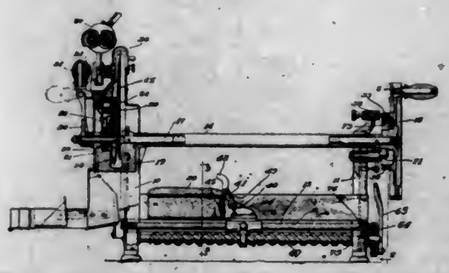
A window shade and curtain center bracket comprising an elongated flat member, a substantially U-shaped element formed integral with the member to engage over a window frame, securing means carried by said element for engagement with the frame, a plate adjustably secured to said member and extending parallel therewith and capable of adjustment vertically in opposite directions, a supporting element on the plate and extending

at right angles thereto, a horizontally disposed bar adjustably secured to the supporting element inwardly of the free end of the latter and adapted for adjustment



horizontally in opposite directions, and means on said bar and the free end of the supporting element adapted to support the ends of shade rollers.

1,884,912. BREAD-SLICING MACHINE. HENDRIK STUKART, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 30, 1925. Serial No. 5,681. 14 Claims. (Cl. 146—103.)



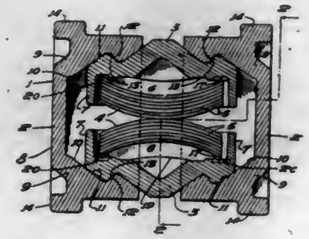
1. A bread slicing machine comprising a pair of spaced upright brackets, a slideway connecting said brackets, and slicing mechanism supported at one end of said slideway while the bracket at the opposite end of said slideway is open at one side of said slideway to permit free movement of the operator's hand in adjusting material on said slideway.

14. A slicing machine comprising a substance support, a work holder for moving a substance along said support, a feeding means for said work holder, a slicing knife, means for retracting said work holder to an extreme position away from said knife, said feeding means comprising a feed screw and a follower and being rendered totally inoperative by the movement of said work holder to said extreme position, and a stop movable into operative position at the will of the operator for preventing movement of said work holder to said extreme position.

1,884,913. CUSHIONING MECHANISM. FRED GEORGE SUCKOW, Depew, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Apr. 30. 1929. Serial No. 359,369. 8 Claims. (Cl. 213—30.)

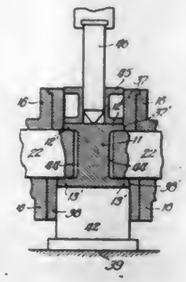
1. Cushioning mechanism comprising outer friction elements formed with end walls and inclined friction surfaces extending therefrom, intermediate friction elements positioned therebetween and formed with correspondingly inclined friction surfaces engaging the friction surfaces of the outer elements, interchangeable leaf springs positioned between the intermediate friction elements for urging them apart and into engagement with the friction surfaces of the outer friction elements, and means

for preventing lateral shifting of said leaf springs with respect to said friction elements comprising interlocking projections disposed at the ends of said springs extending



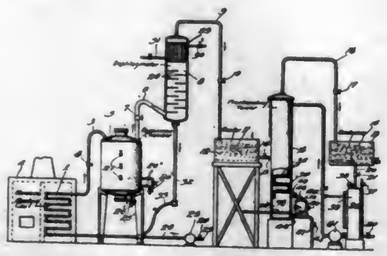
from said springs and between the outermost springs for slidable reception in grooves in the corresponding friction elements.

1,884,914. METHOD OF MAKING NOZZLES. JAMES HALL TAYLOR, Oak Park, Ill. Filed Oct. 4, 1928. Serial No. 310,414. 2 Claims. (Cl. 29—157.)



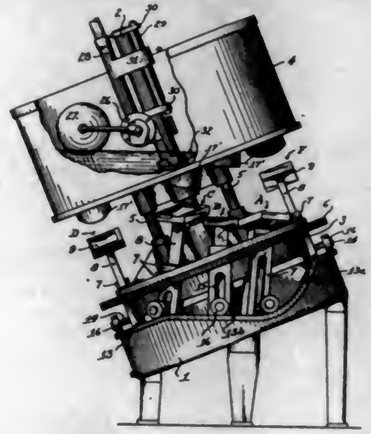
1. The method of making nozzles, which comprises forming a billet with a reduced mid-portion and end flanges, piercing the billet and thereby displacing and redistributing the metal of the mid-portion radially thereof, and confining the radial extension of said mid-portion to a diameter less than that of either of the flanges, thereby forming an intervening tubular neck between the flanges and of less exterior diameter than either flange.

1,884,915. PROCESS FOR TREATING PETROLEUM OIL. CLAUDE F. TEARS, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 18, 1923, Serial No. 646,057. Renewed Feb. 23, 1929. 8 Claims. (Cl. 196—48.)



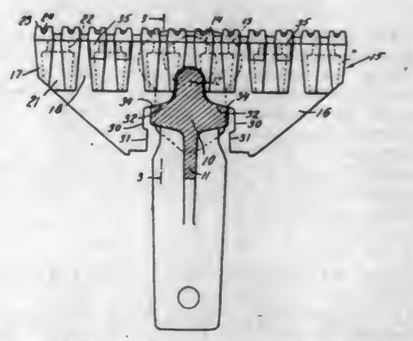
1. An oil conversion process, consisting in subjecting the oil to cracking conditions of temperature and pressure, in subjecting the evolved vapors to reflux condensation in a reflux condenser, in re-cracking the reflux condensate, in passing the vapors from the reflux condenser to a partial condenser, in fractionating the vapors and liquid passing from the partial condenser, in introducing steam to the vapors and liquid undergoing fractionation, and in condensing and collecting the uncondensed vapors after fractionation as gasoline-like products.

1,884,916. FILLING CONTAINERS WITH LIQUID. ALBERT R. THOMPSON, San Jose, Calif., assignor to Anderson-Barngrover Mfg. Co., San Jose, Calif., a Corporation of California. Filed Feb. 20, 1929. Serial No. 341,313. 20 Claims. (Cl. 226—22.)



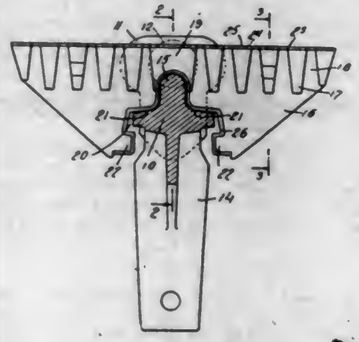
7. An apparatus for the described purpose comprising a liquid containing tank rotatable about an inclined axis, said tank having a discharge aperture positioned to travel in a path lying partly below and partly above the level of the liquid in said tank; and means for positioning a container to be filled in free filling relation with said aperture, and for maintaining the relative positions of said tank and said container unchanged during the rotation of said tank.

1,884,917. GRATE BAR. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 28, 1930. Serial No. 439,685. 12 Claims. (Cl. 126—180.)



1. A grate bar which comprises a carrier member, and fuel-supporting units extending beyond the side edges of said member, each unit comprising a plate, a plurality of spaced lugs projecting from the faces of said plate near the top thereof, each lug being hollow and having an open bottom, opposed lugs on opposite faces of said plate lying in registry and having their hollow interiors in communication.

1,884,918. GRATE. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Carporation, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 19, 1930. Serial No. 476,261. 7 Claims. (Cl. 126—180.)

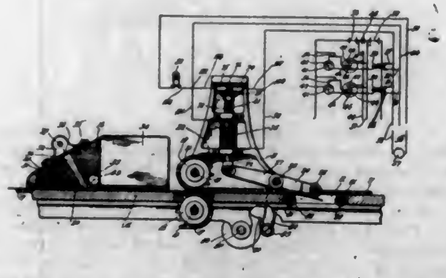


1. In a grate bar, a longitudinal member and crossbars supported thereby on their bottom surfaces and projecting beyond opposite lateral edges thereof, each crossbar having a reinforcing member forming at least a portion of the bottom surfaces thereof.

1,884,919. ASPHALTIC EMULSIONS AND METHOD OF MAKING THE SAME. LYNDON G. THOMPSON, Oakland, Calif., assignor, by mesne assignments, to American Bitumuls Company, San Francisco, Calif., a Corporation of Delaware. Filed July 11, 1928, Serial No. 292,036, and in Canada July 25, 1927. 11 Claims. (Cl. 134—1.)

1. A method of producing asphaltic emulsions, consisting in forming a hot weak solution of alkali, melting a mass of asphalt in weight approximately equal to the aqueous solution, stirring a part of the melted asphalt into the said solution, adding the former slowly to the latter until a scum begins to form on the surface, then adding a small quantity (approximately half of one percent of the final product) of oleic acid, then adding the rest of the asphaltic content while maintaining the high temperature and the agitation, a substantial quantity, less than 2 per cent of clay being added to impart the desired degree of stability and adhesiveness.

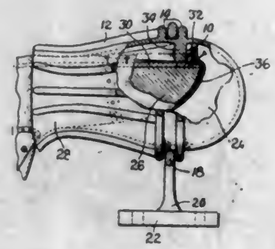
1,884,920. METHOD AND APPARATUS FOR SORTING SHEET STOCK. JOHN A. TOLEIK, West Orange, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1926. Serial No. 158,311. 27 Claims. (Cl. 209—111.)



1. An apparatus for sorting sheet stock, comprising, means directing a focused light beam to a predetermined point, an endless chain conveyer continuously moving sheets through the light beam and having means to engage the rear edge of and propel the sheet, and means operable by variations of the reflections of the light beam from the surface of the sheets for sorting the sheets in accordance with the condition of the surface thereof.

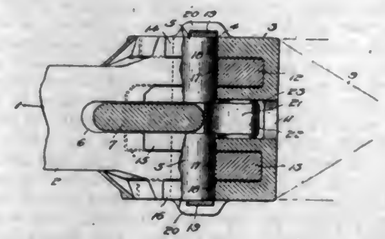
20. A method of sorting sheet stock, which consists in passing sheets in processional order through a transverse series of beams of light, reflecting said beams from the shiny parts of said sheets, controlling an electric flow by the amount of the reflected beams, and causing the deflection from said order of insufficiently reflecting sheets by the agency of said electric flow.

1,884,921. APPARATUS FOR CONDITIONING SHOE PARTS. FRED E. TOOTHAKER, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 22, 1929. Serial No. 349,205. 8 Claims. (Cl. 12—1.)



1. An apparatus for conditioning shoe parts comprising a container constructed entirely of rubber and provided with a chamber having an opening through which a portion of a shoe may be introduced but being otherwise substantially air-tight, said opening being surrounded by yielding, elastic material adapted to form with the shoe a substantially air-tight seal.

1,884,922. DRAFT RIGGING. DONALD L. TOWNSEND, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 3, 1928. Serial No. 310,121. 8 Claims. (Cl. 213—69.)

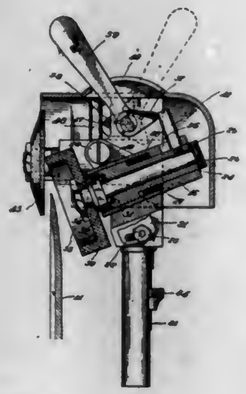


1. A coupler with a shank comprising a pair of members with intercalated flanges formed with registering apertures, a slot formed in said shank, a horizontal draft key received in said slot and extended between the apertured portions of the flanges, pivot means extending through the apertures in said flanges above and below said slot, and means received in said shank and disposed between said pivot means for keeping them out of said slot.

1,884,923. **FRUIT DUFF AND METHOD OF PREPARING SAME.** ANNA CRESSWELL TURNER, Riverdale, Md. Filed Jan. 2, 1931. Serial No. 506,310. 1 Claim. (Cl. 99—10.)

Prepared fruit duff composition comprising a homogeneous admixture of two mixtures, one of the two mixtures comprising flour with which the necessary fat for shortening has been incorporated to a state of dryness, the other of the two mixtures comprising flour mixed with comminuted fruit so that each particle of the latter is covered with a buffer coating of flour.

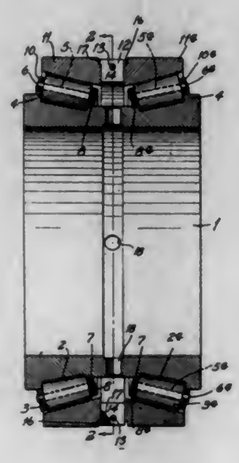
1,884,924. **SHARPENER FOR SLICING MACHINES.** WILHELMUS ADRIANUS VAN BERKEL, Clarens, Montreux, Switzerland, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Sept. 7, 1923, Serial No. 661,383. Renewed Sept. 21, 1931. 4 Claims. (Cl. 51—248.)



1. A sharpener for a slicing machine knife comprising a frame member having spaced bearings thereon, a sleeve slidably mounted in each of said bearings, a spindle journaled in each sleeve, a grinder disc secured to each spindle and arranged to engage opposite faces of said knife, springs for resiliently moving said sleeves to press said discs against said knife, an abutment member connected with each sleeve, a cam shaft extending transversely of said spindles, and positioned between said abutment members, cams on said shaft for engaging said abutment members to retract said grinders against the force of their springs, a spring for operating said cam shaft to retract said grinders, and a handle disposed at one side of the plane of the knife and movable away from said plane to turn said cam shaft against the force of the last-named spring to cause said grinders to engage said knife under the influence of the first-named springs, said second-named spring acting to cause the automatic disengagement of said grinders from said knife when said handle is released.

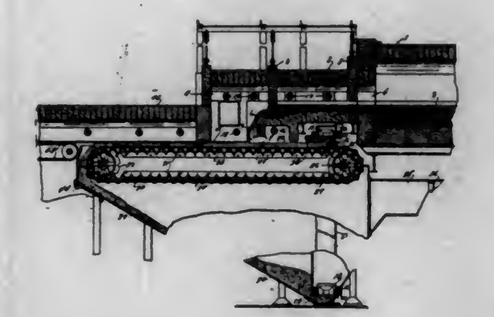
1,884,925. **ROLLER BEARING.** HERBERT VANDERBEEK, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 8, 1931. Serial No. 549,349. 3 Claims. (Cl. 308—207.)

1. A roller bearing comprising an integral bearing cone having two inwardly tapering raceway portions, axially bored conical rollers on each of said raceways, integral cage rings at the large ends of said rollers, cage pins secured thereto and extending through said roller bores,



half rings secured together at the small ends of said rollers and receiving said pins, separate cups for said rollers and a spacer member between said cups.

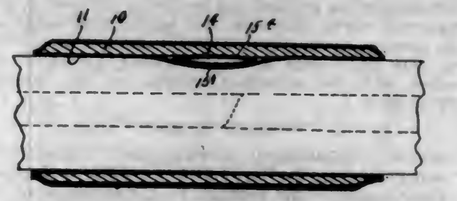
1,884,926. **GLASS MANUFACTURE.** WILLARD L. VAN NESS, Toledo, Ohio. Filed Feb. 6, 1929. Serial No. 337,775. 22 Claims. (Cl. 49—17.)



1. The method of producing sheet glass comprising defining a stream flow from a supply, providing a support, maintaining the stream fluid for taking form after delivery to said support, and progressing said support.

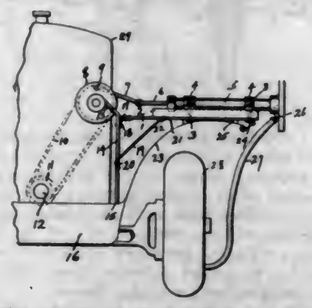
19. A glass forming installation embodying a glass supply having a flow-off, a movable support, a hopper over said support in advance of said flow-off, a first conveyor for delivering material to the hopper for deposit on the bed, and a second conveyor from the support on the other side of the flow-off from the hopper for receiving material from the support and delivering to the first conveyor.

1,884,927. **SURGICAL APPLIANCE.** MARTIN VAN RAALTE, St. Louis, Mo. Filed Apr. 23, 1930. Serial No. 446,426. 3 Claims. (Cl. 128—83.)



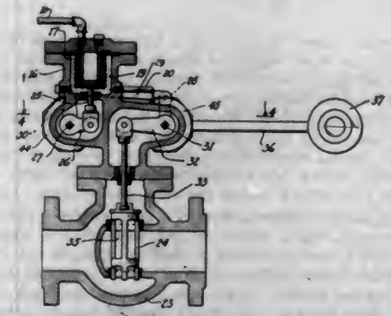
1. In an immobilization bandage for bone fractures, the combination of an inflatable pad placed against one side only of the fractured member, an immobile dressing completely enclosing said pad, and means for inflating said pad whereby pressure is applied against the displaced fractured part.

1,884,928. **AUTOMOBILE PUMP.** DOMONIC LALLI, Youngstown, Ohio. Filed June 16, 1930, Serial No. 461,275. Renewed Sept. 14, 1932. 1 Claim. (Cl. 230—38.)



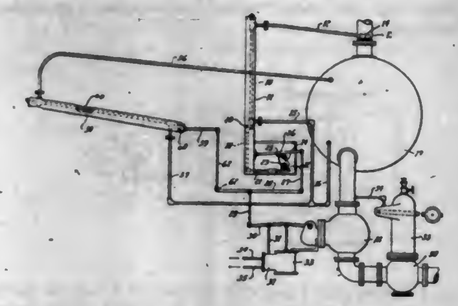
In a device of the class described, horizontal frame members, a support block, a pump secured to said support block, a pair of support legs hinged to said horizontal frame members, an arm held by one of said support legs, a brace rod functioning between one of said suppprt legs and the horizontal frame member, a hook functioning with an outer portion of the device and with an outer portion of a fender, attached to said arm a pulley wheel, a link secured to said pulley wheel and to a piston rod of said pump, means for actuating said pump, substantially as described for the purpose set forth.

1,884,929. **PUMP GOVERNOR.** VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 30, 1928. Serial No. 289,356. 2 Claims. (Cl. 137—153.)



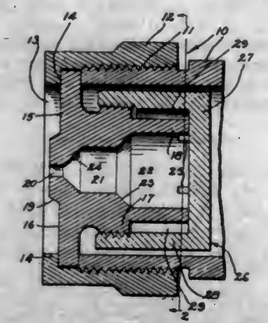
1. A pump governor comprising a valve casing, a valve mounted in said casing, a rotary shaft projecting into and out from said casing and being operatively connected with said valve, a second casing fixed to said valve casing, a rotary shaft projecting into and out from said second casing, means operatively connecting the outer ends of said shafts, means in said second casing for operating said second shaft, and ball bearings limiting outward movement of said shafts.

1,884,930. **FEED WATER REGULATOR.** VINCENT V. VEENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 6, 1929. Serial No. 368,974. 6 Claims. (Cl. 122—451.1.)



1. In a boiler system a boiler having a feed water valve and a steam main, said main having a restricted orifice therein, a feed water regulator comprising a thermostatic tube, one end of said tube being operatively connected with the water space of the boiler, the other end of the tube being operatively connected with said steam main with the orifice between the point of connection and the boiler, and means operatively connecting said thermostatic tube with said valve, said means comprising a cam arranged to vary the valve opening proportional to variations in load on the boiler.

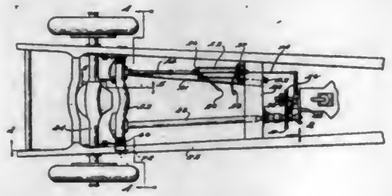
1,884,931. **LIQUID ATOMIZER.** JOSEPH T. VOORHEIS, Los Angeles, Calif., assignor to Coen Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Aug. 23, 1930. Serial No. 477,255. 3 Claims. (Cl. 299—114.)



3. A fuel atomizer comprising a liquid fuel supply tube, a fuel tip at the end thereof substantially closing the end of the tube and having an inwardly extending cylindrical portion the outer circumference of which is materially smaller than the inner circumference of the tube, a central passageway longitudinally of the tip which is of relatively large diameter at its outer end and continues in a portion of lesser diameter communicating with a relatively small outlet opening at the eduction end of the jet, said progressively reduced diameters being connected by intermediate tapered wall sections, a cap closing the induction end of said tip and forming an annular pas-

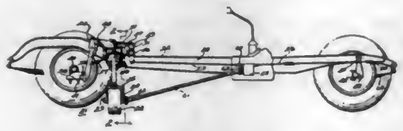
sageway therearound, induction openings through the cap to permit fluid to enter said annular passageway from the tube and tangential passageways formed in the large diameter wall of the tip and lying in a circle described by the diameter of the smaller sectioned opening of the tip whereby communication will be established from the annular passageway into the longitudinal passageway of the tip to introduce fluid under pressure and to step up a swirling motion producing a gyrating column of substantially the diameter of the intermediate passageway in the tip.

1,884,932. VEHICLE LIFTING AND TRAVERSING DEVICE. BROOKS WALKER, Piedmont, Oakland, Calif. Filed Apr. 30, 1931. Serial No. 533,944. 19 Claims. (Cl. 180—1.)



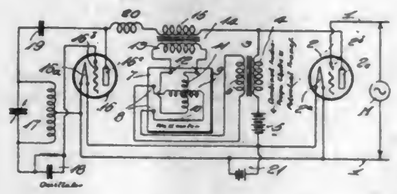
1. A lifting and traversing device for a vehicle having means for retaining it in retracted position on the frame, said device being movable relative to the vehicle frame in the vehicle raised position and including vehicle wheel lifting devices mounted on said device and means for lowering the said device for raising the vehicle partly through the vehicle spring.

1,884,933. VEHICLE LIFTING AND TRAVERSING DEVICE. BROOKS WALKER, Piedmont, Oakland, Calif. Filed May 6, 1931. Serial No. 535,380. 26 Claims. (Cl. 180—1.)



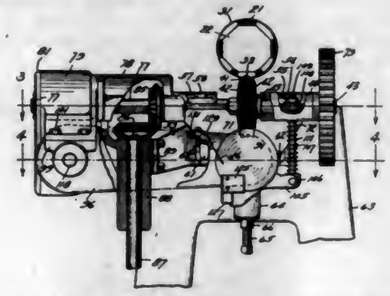
1. A device for lifting one end of a vehicle in combination with automatically actuated means for anchoring the unelevated end of the vehicle to the axle thereof, to effect a two way stability between said axle and said frame.

1,884,934. APPARATUS FOR MEASURING THE PERCENTAGE OF MODULATION. JAMES D. WALLACE, Washington, D. C. Filed Mar. 12, 1931. Serial No. 522,078. 6 Claims. (Cl. 179—171.)



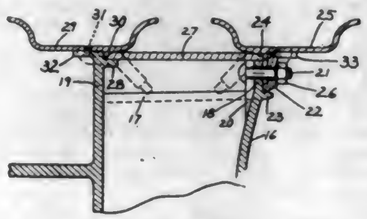
2. An apparatus for measuring percentage of modulation comprising an electron tube modulator including input and output circuits, an electron tube oscillator having coupled input and output circuits, connections between the output of said electron tube modulator and separated points in the circuits of said electron tube oscillator, a source of high potential, a potential transformer including primary and secondary windings, a series connected circuit including said source of potential and the primary winding of said potential transformer bridging said connections and a measuring instrument connected with the secondary winding of said potential transformer.

1,884,935. SOLDERING APPARATUS. GEORGE FREDERICK WALTER, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 27, 1930. Serial No. 478,086. 5 Claims. (Cl. 113—97.)



1. In a soldering apparatus, the combination of a solder horn, solder applying devices located adjacent said horn for applying solder to can bodies passing therealong, a solder wiper located adjacent said horn for removing excess solder from said can bodies, and a rotary scraping device rotating adjacent to and across the face of said wiper with its periphery tangent thereto for removing the excess solder collected from said wiper, and means for rotating said scraping device.

1,884,936. METAL WHEEL. GEORGE WALTHER, Montgomery County, near Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 5, 1929. Serial No. 383,646. 1 Claim. (Cl. 301—13.)



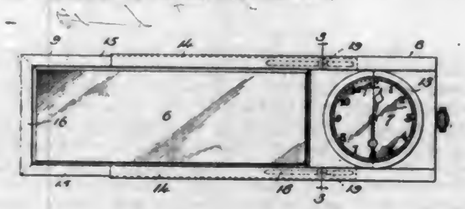
A metal wheel comprising a hub and a hub extension terminating in an outboard flange portion and an inboard flange portion, the inboard flange portion having a laterally outwardly facing plane surface disposed at right angles to the axis of the wheel; an inboard tire rim having a tapered rib at its outboard edge and on its radially inwardly facing surface, the said rib having a laterally inwardly facing plane surface disposed at right angles to the axis of the wheel for engagement with the plane surface of the inboard flange to thus position the rim in a plane at right angles to the axis of the wheel; an outboard tire rim having a tapered rim on its radially inwardly facing surface, a spacer band between said rims and having beveled edges for engagement with the tapered ribs on the tire rims; and clamping means carried by the said outboard flange portion for engagement with the said tapered rib of the outboard rim.

1,884,937. SHANK STIFFENER AND METHOD OF MAKING THE SAME. BRADFORD B. WATERMAN, East Bridgewater, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 11, 1929. Serial No. 354,409. 15 Claims. (Cl. 36—76.)



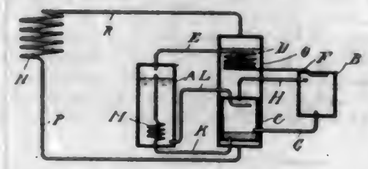
12. That improvement in methods of making shank stiffeners which consists in forming prongs extending beyond the ends of a stiffener blank, positioning the pronged blank between co-operative molding dies and operating said dies to mold the blank into the form of a shank stiffener, moving wiper members transversely of the stiffener in one direction to bend the prongs toward the ends of one of the dies, moving the wiper members in another direction to strip the stiffener from said die, and moving the wiper members toward each other to set the prongs at acute angles to the body portion of the stiffener.

1,884,938. CLOCK AND MIRROR HOLDER. JAMES B. WEIR, New Dorp, N. Y., assignor, by mesne assignments, to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed May 27, 1929. Serial No. 366,472. 2 Claims. (Cl. 45—97.)



1. A panel and instrument holder comprising a back plate formed in two sections each having interfitting channels at the edges, extensible to hold panels of different sizes, said channels engaging the edges of the panel, one of the sections being extended beyond the panel and having an opening to receive an instrument.

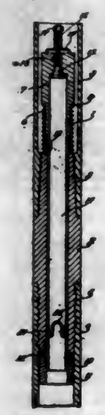
1,884,939. REFRIGERATING APPARATUS. KARL ALEXANDER WESSBLAD, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, a Corporation of Delaware. Filed Aug. 26, 1924, Serial No. 734,334, and in Sweden Sept. 22, 1923. 14 Claims. (Cl. 62—119.5.)



1. Refrigerating apparatus comprising a generator, an absorber, a refrigerant condenser, an evaporator, all connected by conduits to form a closed system and a second system consisting of a closed hermetically sealed vaporization-condensation cycle comprising a chamber and an air-cooled condenser situated above said chamber and connected thereto, said second system containing a volatile liquid and said refrigerant condenser of the first-mentioned system being contained within said chamber of the second system.

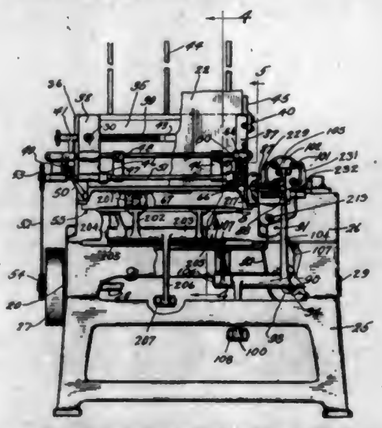
14. That improvement in the art of refrigeration by the aid of an absorption system which consists in utilizing heat produced due to change of state of fluid in the system to boil a liquid out of contact with the fluid giving off the heat, conducting vapor of the boiled liquid into heat exchange relation with atmospheric air and thereby condensing the vapor, and conducting the condensate by gravity back into heat exchange relation with the fluid giving off heat.

1,884,940. DRILL ROD VALVE MECHANISM. EUGENE WHINNEN, Okotoks, Alberta, Canada, assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 17, 1931. Serial No. 509,412. 16 Claims. (Cl. 255—28.)



13. A drill rod valve mechanism for controlling fluid flow through a drill rod and openable to permit fluid flow in either direction through the rod and closable at will irrespective of the position of the valve mechanism in the drill hole, and means for automatically locking said valve mechanism in its closed position.

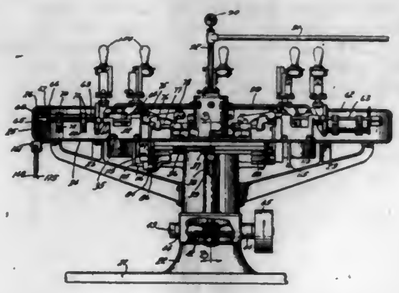
1,884,941. MACHINE FOR FORMING METAL BANDS. MAGNUS E. WIDELL, Cincinnati, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 23, 1929. Serial No. 334,536. 18 Claims. (Cl. 113—1.)



1. In a machine for forming metal bands, the combination of means for notching one edge only of a sheet,

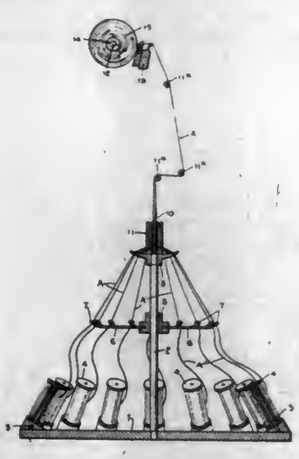
devices for cutting strips of desired size from said sheet, a forming mandrel, mechanism for arranging the severed strips upon said mandrel with their ends overlapped, and means for securing the lapped strip ends together with said notched edge arranged on the inside of the lap to form annular metal bands.

1,884,942. CAN TESTER. MAGNUS E. WIDELL, Cincinnati, Ohio, assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 400,123. 7 Claims. (Cl. 73—51.)



1. In a pneumatic can tester, the combination of a movable frame, a plurality of can testing units carried thereby, each unit comprising a can carrier, a can clamping member, a can leak detecting device and a can leak indicating lamp, and means supplying air under pressure both to the interior of the can when clamped in said carrier by said clamping member and to the interior of said detecting device, whereby said detecting device operates its associated leak indicator upon any diminution of the pressure in the can through leakage.

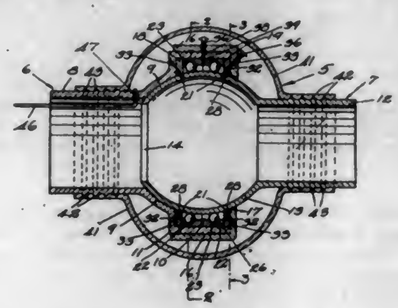
1,884,943. METHOD OF AND APPARATUS FOR WINDING YARN. FREDERICK J. WILLIAMS and RUSSELL ROBINSON, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,683. 11 Claims. (Cl. 242—42.)



4. In a method of winding a multiple end yarn package the step of applying uniform tension on the plurality of the ends of the yarn by causing the same to pass through precisely corresponding paths and in contact with precisely corresponding surfaces applying tension and a lubricant to a common winding device.

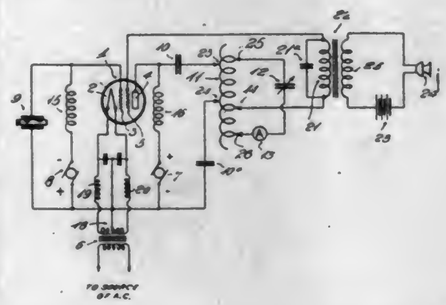
6. In means for winding multiple end yarn packages, the combination of a common winding device with a yarn rack having means for supporting a plurality of packages of yarn and means for applying a uniform tension to the yarns, said means being arranged and positioned to cause the plurality of yarns to pass through precisely corresponding paths in their passage from the packages to the common winding device.

1,884,944. FLEXIBLE JOINT. JOHN C. WILLIAMS, Oakland, Calif., assignor to Harold H. Meredith, Oakland, Calif. Filed Sept. 11, 1929. Serial No. 391,810. 11 Claims. (Cl. 285—91.)



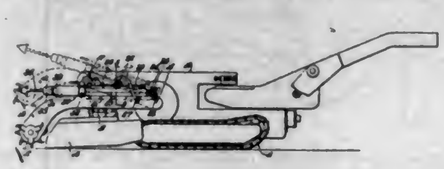
11. A flexible joint comprising a tube having an end provided with an inwardly opening annular chamber, a second tube formed with a ball shaped end adapted to be received in said first tube end, sealing rings fitted within said chamber and having inner peripheral faces for seating against said ball at opposite sides of a diametrical plane thereof, said rings being formed with annular grooves in said inner faces thereof, and means whereby a lubricant fluid may be forced into a said groove under pressure and for coaction with the ball to urge an unseating of the ring providing the groove.

1,884,945. COMBINED OSCILLATOR AND MODULATOR SYSTEM. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Dec. 18, 1928. Serial No. 326,881. 4 Claims. (Cl. 179—171.)



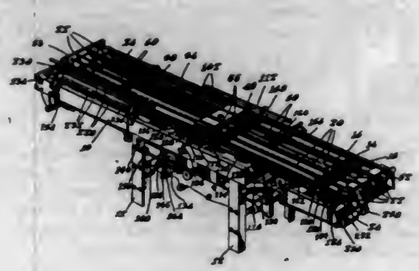
2. In an electron tube system, an electron tube having cathode, anode, control grid and auxiliary grid, an input circuit connected between said control grid and said cathode, a piezo electric crystal element connected to said input circuit, a source of anode potential connected between said anode and said cathode, a tapped output inductance connected between said anode and said cathode, a tuned circuit connected between taps disposed adjacent opposite ends of said inductance, a source of voltages of audio-frequencies, a transformer having a primary winding connected to said source of audio-frequencies and having its secondary winding connected between said auxiliary grid and a tap on said output inductance intermediate the connections of said tuned circuit with said inductance, whereby the output delivery from the anode of said tube is varied in accordance with said audio-frequencies.

1,884,946. DISLODGING DEVICE. WADE H. WINEMAN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Nov. 20, 1929. Serial No. 408,617. 9 Claims. (Cl. 262—12.)



1. The method of preparing coal for loading which comprises loosening the coal from the face, causing a vibrating penetrating tool by purely axial thrust to penetrate the standing coal, thereafter locking the tool in the coal when so penetrated, and moving the tool when so locked backward to dislodge the coal.

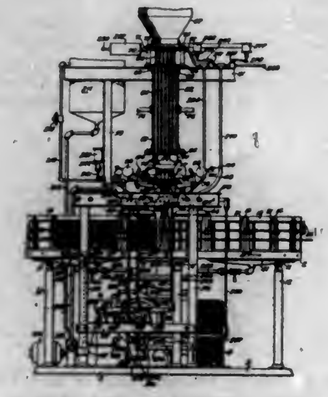
1,884,947. MACHINE FOR OPERATING UPON SHEET MATERIAL. ERASTUS E. WINKLEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 21, 1929. Serial No. 341,764. 47 Claims. (Cl. 271—54.)



1. In a machine for operating upon flexible sheet material, a conveyor adapted to feed sheet material, means for operating the conveyor uninterruptedly, a work support normally below and spaced from said conveyor, above and across which sheet material is fed by the conveyor, and means operative intermittently to elevate the work support into engagement with material fed by the conveyor and to cause the work support to lift said material from the conveyor, thereby interrupting the feeding of the material.

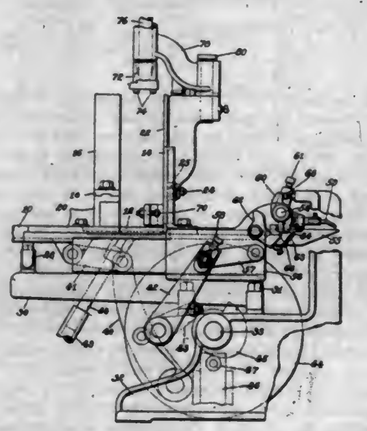
1,884,948. APPARATUS FOR MOLDING MATERIALS. WILLIAM O. WITHERSPOON, Burlingame, and JAMES HARROWER, San Francisco, Calif., assignors to J. D. & A. B. Spreckels Investment Company, a Corporation of California. Filed July 21, 1930. Serial No. 469,572. 8 Claims. (Cl. 107—8.)

1. A machine for producing an integral body from particles of material, comprising a mold having perforations therein and adapted to contain the material; means for intermittently moving the mold; means for introducing cementing fluid, and means for cleansing the mold



while it is stationary; and means communicating with said perforations for effecting passage of drying fluid through the perforations.

1,884,949. FEED MECHANISM. REGINALD BOYD WOODCOCK and THOMAS AUBREY KESTELL, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 24, 1929, Serial No. 402,266, and in Great Britain Nov. 21, 1928. 10 Claims. (Cl. 271—44.)

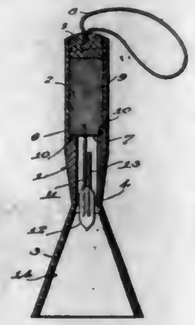


1. Mechanism for feeding blanks of sheet material one by one from a stack of blanks to a station having, in combination, a magazine for the stack of blanks, a member for engaging the under face of the lowermost blank of the stack and removing the blank from the stack, and a feed finger for engaging the upper face of the blank and advancing it to the station.

1,884,950. MEANS FOR THE DETECTION OF ELECTRICITY. HUBERT E. WOODRING, Denver, Colo. Filed June 27, 1930. Serial No. 464,387. 6 Claims. (Cl. 175—183.)

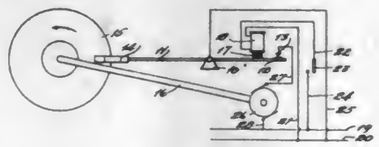
1. A means for determining the presence or absence of an electric current or potential in a conductor comprising a signal adapted for actuation by an electric current and

means for causing a flow of electric current through said signal for the actuation thereof upon the placing of said means in the magnetic field induced by a current or potential in said conductor, said means consisting of a pair



of conductors forming the terminals of said signal and positioned in close proximity to one another to act as a condenser upon the flow of an induced current therethrough.

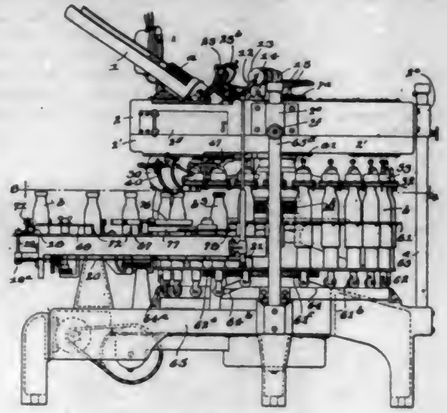
1,884,951. MOTOR SPEED REGULATOR. WILLIAM COWPER WOODSON, Jr., Brooklyn, N. Y. Filed Dec. 30, 1930. Serial No. 505,589. 3 Claims. (Cl. 175—355.)



1. In a device of the kind described, a contact, a circuit closing arm mounted for oscillation to and from the contact, an electro-magnet urging said arm into engagement with the contact, a magnetic torque device tending to rotate said arm away from said contact and including a rotative element, a motor driving said rotative element, a source of electro-motive energy, circuit connections connecting the arm and contact in series with the source of energy and controlling the operation of said motor, said torque device being arranged to move said arm and open said arm from the contact against the action of said magnet upon the motor exceeding a predetermined speed and circuit connections for said electromagnet including a manually operable switch adapted upon closing to energize the magnet and thereby effect closing of the motor circuit to start the motor by moving the circuit closing arm into engagement with said contact, said switch maintaining the magnet in energized condition when closed to thereby resist movement of the circuit closing arm by the torque device, the opening of said switch effecting breaking of the circuit through the motor by permitting free action of the torque device on the circuit closing arm.

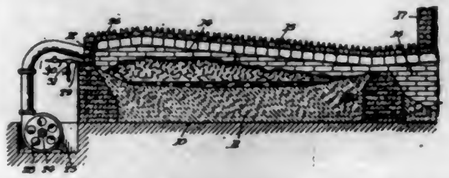
1,884,952. HOOD CAPPING CONTAINER. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed May 9, 1929. Serial No. 361,780. 29 Claims. (Cl. 226—83.)

4. In combination; a heating oven; a continuously rotating conveyer for constantly advancing a plurality of binder carrying paper material hood cap disks and simultaneously subjecting the same to the heat of said oven to render them temporarily moldable; means for successively dropping cold hood cap disks to a delivering station for successively picking up by said conveyer; and mechanism whereby temporarily moldable hood cap disks are succes-



sively dropped from said conveyer to a hood capping station in the order in which said disks were delivered to said conveyer.

1,884,953. APPARATUS FOR MELTING METALS. LOTHAR R. ZIFFERER, deceased, Columbia, Pa., by Mabel C. Zifferer and H. Nelson Albright, Columbia, Pa., and Harry E. Champion, Blue Point, Long Island, N. Y., executors, assignors to Columbia Malleable Castings Corp., Columbia, Pa., a Corporation of New York. Original application filed Apr. 17, 1930, Serial No. 444,996, now Patent No. 1,825,841, dated Oct. 6, 1931. Divided and this application filed Aug. 7, 1931. Serial No. 555,687. 4 Claims. (Cl. 263—43.)



1. In combination, a reverberatory furnace comprising a hearth, a nozzle adapted for the injection of material thereinto, means for supplying air to the nozzle, a conduit adapted to supply finely divided solid fuel to the same nozzle, and means adapted to inject fluid fuel into the furnace at a point adjacent the nozzle aforesaid.

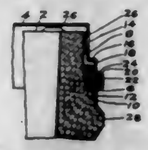
1,884,954. METHOD OF TREATING CLAY. CHARLES V. ZOUL, Los Angeles, Calif., assignor to Coen Companies, Inc., Los Angeles, Calif., a Corporation of California. Filed July 20, 1929. Serial No. 379,887. 2 Claims. (Cl. 252—2.)

1. A process of preparing clays for adsorption purposes, which consists in reducing the clay to a desired degree of fineness, thereafter treating the same with an acid to bring to a desired degree of neutrality and then adding aluminium chloride to the mass thus treated.

1,884,955. HERMETICALLY SEALED PACKAGE. HARRY E. TOWNSEND, Brooklyn, N. Y. Filed Jan. 21, 1928. Serial No. 248,292. 11 Claims. (Cl. 215—40.)

1. The combination of a receptacle having a cylindrical mouth portion and an annular shoulder below the cylindrical portion, an elastic gasket positioned on the annular shoulder, and a closure having a crown portion slightly

larger in diameter than the cylindrical mouth of the receptacle and a skirt adapted to compress the gasket on the annular shoulder, the crown of the closure being provided with a plurality of inwardly directed projections for en-



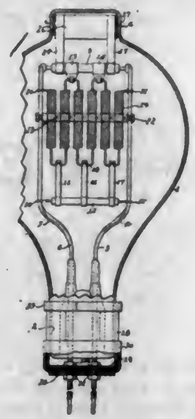
gaging said cylindrical mouth portion above the gasket, said projections insuring uniform engagement of the cup with the gasket throughout the circumferential length thereof.

1,884,956. METHOD OF PRODUCING TRAP JAWS. FRANCIS E. ADAMS and CHARLES EARL CHESEBRO, Oneida, N. Y., assignors to Triumph Trap Company, Inc., Oneida, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,778. 2 Claims. (Cl. 29—148.)



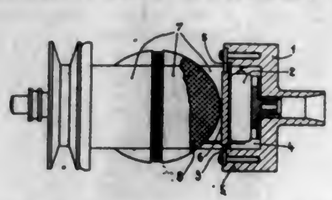
1. The method of producing a double jaw for traps comprising forming a substantially U-shaped primary jaw with non-circular apertures in its opposite legs, forming a bowed supplemental jaw with reduced non-circular end portions adapted to respectively fit tightly in said non-circular openings with shoulders at the base of the reduced end portions, assembling the two jaws with the reduced end portions in alignment with respective apertures and the supplemental jaw bowed away from the base of the primary jaw, and then applying pressure to the supplemental jaw to permanently deflect its central portion toward the base of the primary jaw and project the reduced end portions of the supplemental jaw into respective apertures of the primary jaw until the shoulders are in substantial contact with the primary jaw.

1,884,957. ILLUMINATING DEVICE. MAUDE ADAMS and RAYMOND F. HOWE, New York, N. Y., and PERLEY G. NUTTING, Washington, D. C. Filed Aug. 4, 1931. Serial No. 555,004. 7 Claims. (Cl. 176—39.)



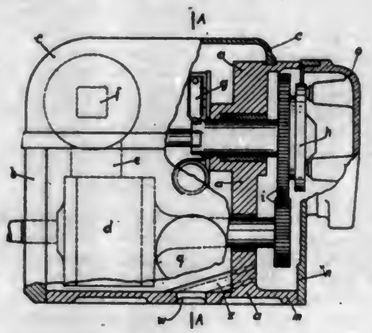
1. A high-powered lamp comprising an evacuated envelope, an incandescent member in the form of a coiled filament having a plurality of sections arranged in parallel rows, means for supporting all said sections from both ends of the envelope, and means for supporting each section intermediate its ends.

1,884,958. MAGNETO ELECTRIC IGNITION APPARATUS. FRITZ ALLENDORFF, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Dec. 5, 1931, Serial No. 579,336, and in Germany Dec. 10, 1930. 3 Claims. (Cl. 171—209.)



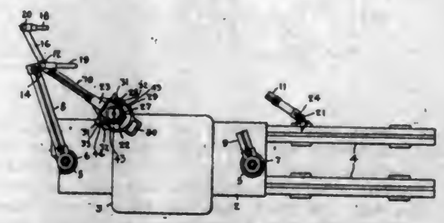
1. A magneto including a condenser, a high tension winding, a spring holding said condenser, and a metallic sleeve enclosing said spring.

1,884,959. MAGNETO IGNITION APPARATUS. FRITZ ALLENDORFF, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 12, 1932, Serial No. 592,645, and in Germany Feb. 23, 1931. 4 Claims. (Cl. 123—149.)



1. A magneto ignition apparatus comprising an armature, a magnet rotatable relatively to said armature, an interrupter, a chamber having ventilating openings therein enclosing said armature, magnet and interrupter, a distributor, a chamber enclosing said distributor and means to protect said ventilating openings.

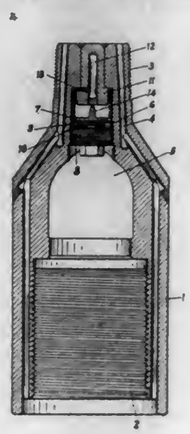
1,884,960. UNIVERSAL TORCH MACHINE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1932. Serial No. 592,348. 15 Claims. (Cl. 266—23.)



1. A machine of the character described, comprising a base, two pivot supports thereon, parallel primary arms carried on said pivot supports so as to swing in arcs back

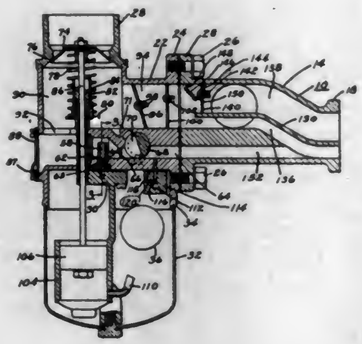
of the fixed center line between said supports, a parallelogram of pivoted members pivotally connected with said primary arms and a torch and a motor tracer on corresponding separated forward portions of said parallelogram.

1,884,961. DECLINOMETER BOTTLE MOUNTING. REXFORD O. ANDERSON, Houston, Tex. Filed Oct. 14, 1930. Serial No. 488,563. 8 Claims. (Cl. 234—1.)



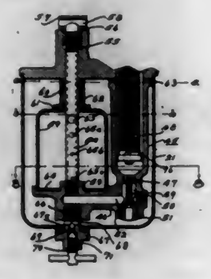
1. A declinometer for use in rotary well drilling including a bottle adapted to be etched by reactant liquids, a supporting structure for use with a well drill, a chamber in said structure, a stopper plug projecting into said chamber, and a support for said bottle adapted to close said chamber with said plug projecting into said bottle.

1,884,962. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 391,058. 19 Claims. (Cl. 123—52.)



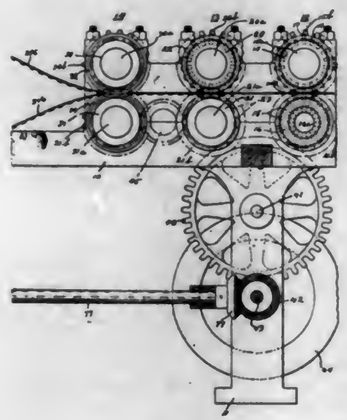
1. A charge forming device for internal combustion engines comprising an intake pipe communicating with the engine intake port, a primary mixture passage delivering a mixture of fuel and air to said pipe, means for supplying fuel and air to said mixture passage, means for accelerating the flow at the point of delivery of the primary mixture passage comprising means for dividing the intake pipe into two passages and means for controlling the flow through one of said passages.

1,884,963. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,546. 16 Claims. (Cl. 123—179.)



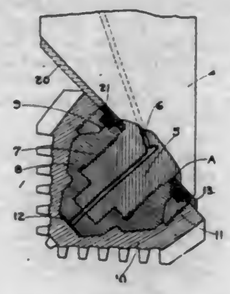
1. A charge forming device for internal combustion engines having in combination a mixture passage, fuel and air inlets for said mixture passage, main and secondary fuel chambers for supplying fuel to said mixture passage, said secondary fuel chamber being automatically supplied with fuel only after the engine is stopped, and of a capacity sufficient to supply fuel to the engine for a material period after the engine is started and means whereby said secondary chamber is rendered ineffective to supply fuel to the engine after the latter has operated for a predetermined time.

1,884,964. METHOD AND APPARATUS FOR MAKING HEAT INTERCHANGERS. GEORGE R. AULD, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 447,018. 10 Claims. (Cl. 153—2.)



1. The method of manufacturing strip fins for use in the manufacture of heat-exchange elements which comprises removing sections from a sheet of metal to form rows of openings therein, forming a plurality of continuous strips by cutting longitudinally through the rows of openings, cutting said strips into fins and stacking said fins with their sides in parallel relation.

1,884,965. SEAL RING FOR CONICAL CUTTERS. HENRY T. BAGGETT and LEWIS E. GARFIELD, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 19, 1931. Serial No. 569,709. 7 Claims. (Cl. 255—71.)

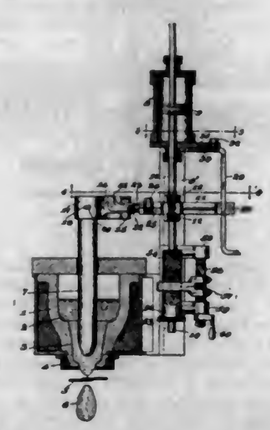


1. In combination, a head, a shaft integral therewith, a bushing on said shaft, a cutter surrounding the end of said shaft, a washer between said cutter and said head, a seal ring partly in said cutter and partly in said bushing and a compressible packing member positioned in said washer and adjacent said seal ring.

1,884,966. PROCESS FOR THE REMOVAL OF NATURAL OILS, WAX AND SPRAY RESIDUES FROM FRUITS. REGINALD H. ROBINSON, Corvallis, Oreg., dedicated, by mesne assignments, to the People of the United States of America. Filed Feb. 19, 1930. Serial No. 429,805. 1 Claim. (Cl. 146—219.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

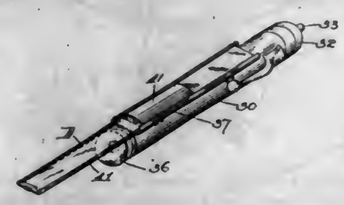
A process for the removal of natural oils, wax and spray residues from fresh fruits comprising the application to the fresh fruits of a solution of liquid petroleum hydrocarbons, hydrochloric acid and water, followed by washing with water to remove the cleaning solution and then drying the fruit.

1,884,967. CONTROL MECHANISM FOR GLASS FEEDERS. ALBERT M. ALGEO and JAMES W. ROSS, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Feb. 18, 1926, Serial No. 88,067. Renewed Mar. 3, 1932. 11 Claims. (Cl. 49—55.)



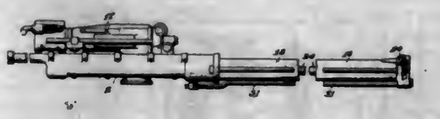
10. A glass feeder, including a flow spout having a flow orifice, a feeder plunger adapted to reciprocate in the flow spout in alignment with the flow orifice, a controller for adjusting the stroke of said plunger, stroke limiting members in said controller, and said controller being rotatable, the rotation of the controller moving the stroke limiting members in opposite directions and simultaneously moving the controller bodily in a direction opposite to and to the same extent as the movement of one of said members.

1,884,968. COMBINED FLASH LIGHT AND READING GLASS. ISABELLE H. M. BLOCH, Chicago, Ill. Filed Jan. 12, 1931. Serial No. 508,159. 2 Claims. (Cl. 88—39.)



1. In combination with an electric flashlight comprising a tubular casing for an energizing dry cell and a lamp bulb and beam-directing means mounted in one end of said casing, an oblong reading glass having its width approximately equal to the diameter of the tubular casing, the casing having at one side a guideway for the reading glass, the latter being arranged for sliding in said guideway from a position alongside the tubular casing to a position lateral with respect to the flashlight beam.

1,884,969. ROCK DRILL. IVAN S. CARPENTER, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Apr. 25, 1930. Serial No. 447,350. 6 Claims. (Cl. 255—45.)

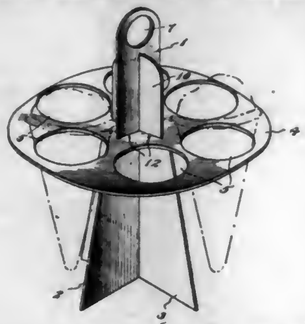


6. The combination with a support of a drill slidable thereon and having a rack, a rack on the support, a pinion engaging both racks and movable along the support, a fluid operated motor mounted on the support, a connecting member between the motor and pinion, and said member having a fluid passageway therein for directing fluid from the motor to a point in advance of the pinion to clear detritus from the racks.

1,884,970. ICE CREAM CONE CARRIER. STEPHEN J. DAVIS, Willimantic, Conn., assignor of one-half to Bert C. Hallock, Willimantic, Conn. Filed May 21, 1930. Serial No. 454,410. 1 Claim. (Cl. 224—48.)

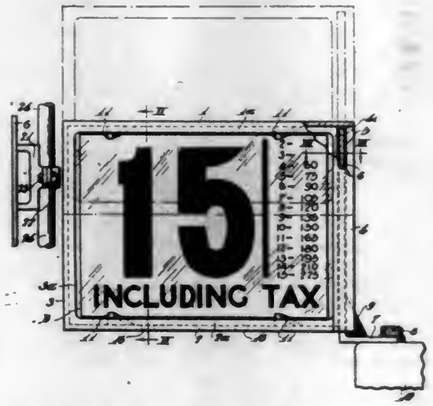
An ice cream cone carrier comprising interengaging and freely separable companion sections, one of which is provided with upwardly converging side edges terminating in inwardly extending horizontal stop shoulders defining a reduced neck, the free end of which is provided with a finger opening, there being a vertical slot formed in said section and extending from a point immediately below the finger opening to a point adjacent the bottom edge of the section, the other section being provided with upwardly converging side edges, inwardly extending horizontal stop shoulders and a reduced neck of less length than the first mentioned neck with the upper edge of the neck rounded, said other section being provided with a vertical upper slot extending from a point above the horizontal shoulders thereof and opening through the rounded edge of the neck and having a lower

vertical slot spaced from the upper slot and opening through the bottom edge of said section whereby when the sections are assembled the slots of one section will interengage with the slots of the other section and permit pivotal movement of said sections from an extended posi-



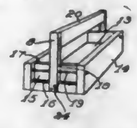
tion transversely of each other to a folded position in face to face contact, and an article receiving tray having intersecting slots adapted to receive the necks of both sections and rest on the horizontal shoulders thereof to brace the necks and hold said sections against pivotal movement.

1,884,971. DISPLAY CARD CONTAINER. ARCH H. GALBRAITH, Pittsburgh, Pa., assignor to Rutledge Equipment Company, a Corporation of Pennsylvania. Filed June 25, 1930. Serial No. 463,632. 6 Claims. (Cl. 40—64.)



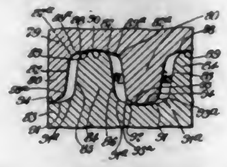
1. In a display device, a casing adapted to receive a plurality of display cards, said casing having transparent sides adjacent to the outer faces of said cards and an open end for inserting and withdrawing said cards, a recess within said open end, and a combined closure and support member adapted to be received into said recess.

1,884,972. FEEDING TROUGH. FRANK HACKER, Friend, Nebr. Filed Oct. 27, 1930. Serial No. 491,484. 2 Claims. (Cl. 119—61.)



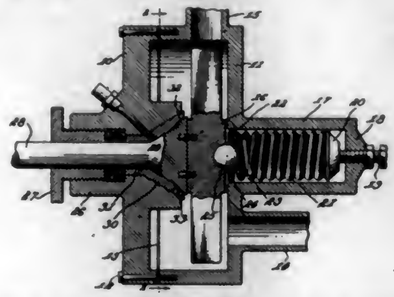
1. In combination, a wooden trough, metal end closures therefor secured thereto, channeled end standards mounted upon the ends of the trough, the trough ends and standard flanges apertured in alinement, a removable securing rod in said apertures, and a rigid longitudinal bar secured to and between the flanges of said standards.

1,884,973. SELF-LOCKING COUPLED SCREW ELEMENTS. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1927, Serial No. 230,300. Divided and this application filed Feb. 26, 1931. Serial No. 518,424. 2 Claims. (Cl. 151—14.)



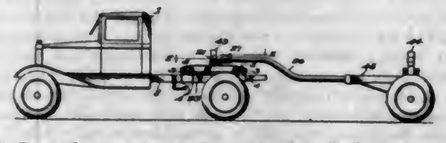
1. In combination, two members screw threaded for coupling and uncoupling, characterized in that said members are provided with a pair of coupling threads of equal and constant pitch having symmetrical profiles and sufficient space between the thread convolutions to permit substantial crosswise displacement between the coupling threads while they are screwed together, the symmetrical thread profiles being such that each thread has two steep sides extending from a transversely symmetrical and slightly concave thread root to a transversely symmetrical convex thread crest curved from one of said steep sides to the other and that the threads have a clearance which permits free screwing of the coupled threads when relatively centered one in the other and permits the curved convex crest of at least one of said threads to be wedged on the slightly concave root of the other thread when the threads are crosswisely displaced in either direction from central free screwing relation into side face engagement, whereby the members are screwable together either end first and their coupled threads are wedgable into side engagement and frictionally locked crest and root engagement by crosswise displacement in either direction.

1,884,974. WATER PUMP. GEORGE M. HURD, South Bend, Ind. Filed Jan. 12, 1931. Serial No. 508,277. 1 Claim. (Cl. 103—96.)



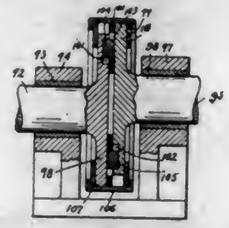
A rotary pump comprising a casing having inlet and outlet ports and provided at opposite sides with tubular extensions, a funnel-shaped bearing sleeve fitting snugly within the inner end of one of said extensions, said sleeve having a plurality of interiorly located conical bearing surfaces, a shaft journaled in said extension and having a head provided with a plurality of cone-shaped surfaces bearing against corresponding surfaces of the sleeve, an impeller housed in the casing and having at its hub portion a series of pins entering the end of said head, and a spring-pressed bearing member housed in the other extension and bearing against the side of the impeller in alinement with the axis of said shaft.

1,884,975. TRAILER DRAFT GEAR. WILLIAM JOHN, Pekin, Ill., assignor to Pekin Wagon Company, Pekin, Ill., a Corporation of Illinois. Filed May 14, 1931. Serial No. 537,256. 7 Claims. (Cl. 280—33.1.)



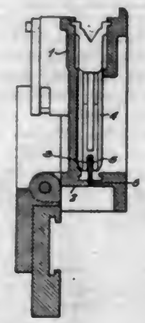
1. In a device of the character described, supporting means for attachment to a vehicle, a slidable carrier connected to the supporting means, a ring track secured on the carrier, a bolster mounted for pivotal movement on the track, a support for the bolster connected to the carrier, a king bolt pivotally connecting the bolster to said support, cushioning means carried by the supporting means and bolster support, and draft connections on said bolster.

1,884,976. COUPLING FOR TRANSMISSION GEARING. JAMES P. JOHNSON, Cleveland, Ohio. Filed May 19, 1930. Serial No. 453,464. 7 Claims. (Cl. 64—91.)



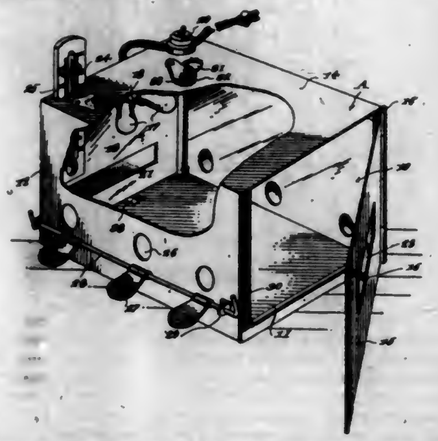
1. A coupling comprising a rotatable drive member, a driven member rotatable about an axis eccentric with respect to the axis of said drive member, a member rotatably disposed between said drive member and said driven member having transverse openings therethrough, and roller members disposed in said openings and engaging said drive member and said driven member, one of said roller members having a driving connection with said drive member and another of said roller members having a driving connection with said driven member.

1,884,977. SPACEBAND RAIL FOR TYPESETTING MACHINES. EDWARD C. JONES, Hoquiam, Wash. Filed Nov. 4, 1930. Serial No. 493,358. 1 Claim. (Cl. 199—36.)



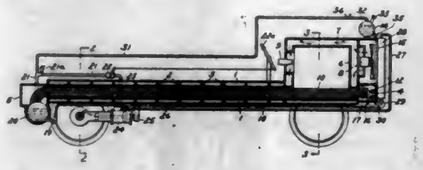
In a typesetting machine, a spaceband guide including a grooved bar, a rail having a lower portion fitted in the groove of the bar and an upper portion of a width greater than said lower portion, and a spaceband having a lower slotted end to slide on the upper edge of the bar, said upper portion of the bar of greater width having a straight transverse edge and of such width with respect to the slot of the space band as to prevent the spaceband from tilting laterally and binding on the rail, and a retarding pin on the rail to engage the lower end of each spaceband as it leaves the rail and limit the upward movement of the spaceband and hold said end of the spaceband back until the upper end thereof is pulled far enough into the spaceband box of the machine to permit the band to slide freely over said pin.

1,884,978. SHOE DYE DRIER. FRANK JONES, Williamsburg, Ky., assignor of one-half to Everet F. White, Williamsburg, Ky. Filed Oct. 11, 1930. Serial No. 488,127. 2 Claims. (Cl. 34—10.)



1. A device of the class described comprising a casing including a bottom, side, end and top walls, one of the side walls being provided with a plurality of openings, a door for closing one of the end walls, drying means mounted within said casing, a manipulating rod supported upon one of said side walls, valves carried by said manipulating rod and adapted to close said opening, said rod provided with angularly bent manipulating handles at the ends thereof for holding said rod against longitudinal movement, said manipulating handles overhanging the ends of said casing and being adapted to engage said door for holding said door in a closed position while said valves are swung to a closed position.

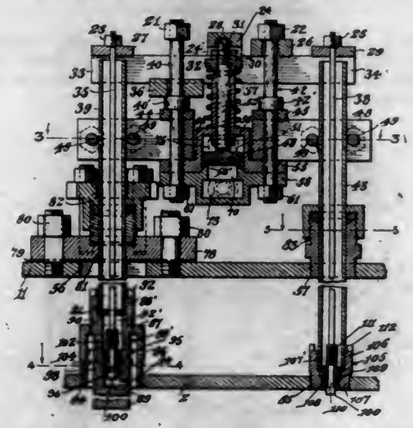
1,884,979. APPARATUS FOR GENERATING STEAM. WALTER DOUGLAS LA MONT, North Colebrook, Conn., assignor to La Mont Corporation, New York, N. Y., a Corporation of New York. Original application filed July 28, 1927, Serial No. 209,024. Divided and this application filed Apr. 15, 1931. Serial No. 530,227. 13 Claims. (Cl. 122—39.)



1. The process of generating steam in a tube so positioned that water flowing therein toward the discharge end thereof must flow through at least a part thereof without the aid of or against gravity, which consists in applying steam generating heat to said tube, feeding water into said tube at such a rate with respect to the rate of applying the heat to the tube as to exceed the rate of steam generation of the tube but at a rate less than sufficient to fill said tube, said rate of feeding being so adjusted with respect to the volume of steam generated that

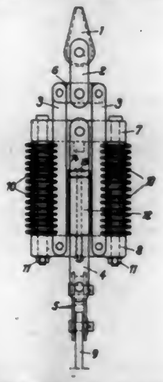
said steam will by its passage through said tube cause said water to be spread around and along the interior surface of said tube.

1,884,980. COMPOUND AUTOMATIC SAFETY APPARATUS. SALVADOR HERREJÓN LÓPEZ, Mexico, Mexico. Filed Oct. 14, 1930, Serial No. 488,672, and in Mexico Oct. 22, 1929. 12 Claims. (Cl. 122—504.3.)



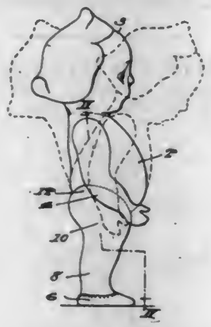
1. In an automatic safety system for steam boilers or generators for indicating low water therein and abnormal working thereof, a steam pressure conducting line leading from the steam space of the boiler to the point desired for utilization of the steam pressure conducted by such line, said line having interposed therein a normally closed, spring controlled controlling valve therefor for normally closing it to prevent the passage of steam pressure therethrough, means acting upon the stem of said valve for normally maintaining the latter closed against the action of its controlling spring, a low water limiter including a fusible body, said limiter positioned above the crown sheet of the fire box of the boiler, and a temperature limiter including a fusible body, said temperature limiter positioned in the crown sheet of the fire box of the boiler, said fusible bodies coupled with said means for normally maintaining it active and adapted when fused to permit of the controlling spring of said valve to shift the latter to a position to open said line.

1,884,981. FLEXIBLE SUSPENSION FOR ROPE HOISTING EQUIPMENT AND IN PARTICULAR FOR MINE CAGE WINDING. FRITZ OTTO, Dusseldorf, Germany. Filed Oct. 15, 1930, Serial No. 488,924, and in Germany Oct. 24, 1929. 1 Claim. (Cl. 267—70.)



Flexible suspension means for hoisting apparatus, comprising upper and lower cross bars, vertical rods connecting said cross bars and on which the lower cross bar is vertically movable, disc springs of minimum friction on said rods and extending from cross bar to cross bar, hoisting means connected to the lower cross bar, hoisting means connected to the upper cross bar, a bolt arranged between the rods, and movable vertically through the lower cross bar and a helicoidal friction spring column around said bolt and bearing between the head of said bolt and the said lower cross bar, said upper cross bar having a stop to bear on the head of the bolt and move the latter downwardly against the tension of the said helicoidal spring column when the upper cross bar is moved downwardly relatively to the lower cross bar by the load.

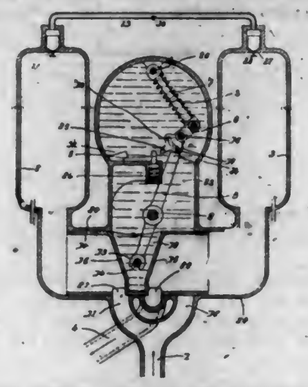
1,884,982. FIGURETTE. NUNZIO PAGANELLO, Brooklyn, N. Y. Filed Jan. 21, 1931. Serial No. 510,094. 1 Claim. (Cl. 46—40.)



In a figurette, a unitary support including feet, lower limbs, thighs and hips and provided with a concave recess extending over the upper surface thereof between the hips, a hollow trunk having its lower end convexed to oscillate in said concave recess, said convexed end of the trunk having an enlarged central opening and an elongated slot extending laterally and upwardly therefrom into the body of the trunk, a rigid link having one end fixed in the bottom of the concave recess of the support and arranged to extend upwardly therefrom through said opening or slot into the hollow trunk, said opening and elongated slot being disposed to accommodate the position of the link with respect to the support and trunk, and an elastic connection having its ends secured in the hollow trunk and disposed to engage the upper end of said link intermediate of said elastic connection for maintaining a uniform tension between the concave and convex surfaces of the support and trunk.

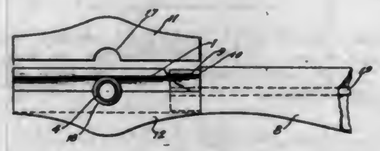
1,884,983. MECHANISM FOR FLUID DISTRIBUTION SYSTEMS. BERNARD L. P. PLANTIN, Brussels, Belgium, assignor to Societe Hardoll, Anciens Etablissements Harivesu & Dolimier et René Porte & Cie Réunis, a French Society, Levallois-Perret, Seine, France. Filed Sept. 28, 1926, Serial No. 138,241, and in Belgium Oct. 8, 1925. 11 Claims. (Cl. 73—28.)

1. In an apparatus of the class described, the combination of two measuring chambers of given capacity, means for supplying liquid to said chambers under pressure, means for venting said chambers during filling and for closing said vent when the chamber is filled with the measured quantity of liquid, a movable valve for controlling the supply to and the discharge from said chambers, means whereby the pressure developing on the liquid when the chamber is filled with the measured quantity directly and positively imparts a movement to the valve, means whereby said movement of the valve stores power for completing the movement of the valve and initiates the operation of the stored power, said last-named means including a pivoted lever connected to the valve and movable therewith, a lever arm pivoted to the lever and having a limited movement relative to the lever, a yielding abutment cooperating with said lever arm, and a spring associated with said lever arm in which power is stored by the first part of the movement of the valve, said parts being disposed so



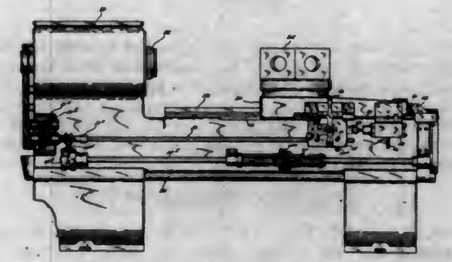
that said yielding abutment shifts the position of the lever arm relative to the lever whereby the stored power becomes operative to move the lever and complete the movement of the valve.

1,884,984. PROPELLER. MORRIS J. STONE, Wichita, Kans. Filed Jan. 12, 1929. Serial No. 332,058. 6 Claims. (Cl. 170—159.)



6. An all metal hollow propeller comprising a tubular connector, a hub passing through the center of the connector having a shoulder overlapped by a portion of the connector, hollow propeller blades having constricted ends telescoped into the ends of the connector and a two piece cover embracing the connector having openings surrounding the ends of the hub, the cover having its greatest diameter at its middle portion, the cover being welded at its ends to the blades, the hub being welded to the cover.

1,884,985. HYDRAULIC OPERATING SYSTEM FOR MACHINE TOOLS. JOHN J. N. VAN HAMERSVELD, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 8, 1930. Serial No. 494,319. 30 Claims. (Cl. 20—42.)



1. In a machine tool, two movable members, hydraulic means for moving one of said members, means for controlling the movement of the hydraulically moved member and a differential mechanism operatively connected to said second named means and having elements connected with both movable members.

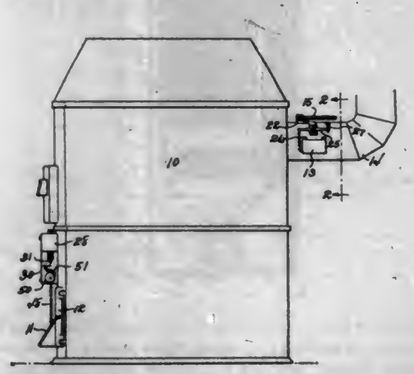
30. In a machine tool, two movable members, hydraulic means for moving one of said members relative to the other, a device for controlling said means, and a differential mechanism comprising an element having two gear faces, one of which is operatively connected with one of said members, a gear operatively connected with the other of said members, and a lever pivoted centrally of said element and said gear and having a gear operatively associated with the other gear face of said element and with said first named gear, said lever being connected to said device.

1,884,986. MINING MACHINE. LOUIS M. WELD, JOHN H. OHLER, and CLARENCE E. BERKLEY, Meyersdale, Pa. Filed Oct. 31, 1930. Serial No. 492,540. 4 Claims. (Cl. 262—3C.)



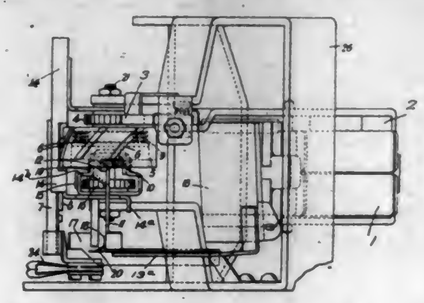
1. In a mining machine, the combination with a body having spaced upper and lower plates, of an arm projecting from the body and also comprising spaced upper and lower plates, the plates of the arm and of the body being lapped and secured together, a vertical shaft journaled in the lapped portions of the body and arm plates, a motor geared to the shaft, and a cutter chain mounted on the arm and actuated by the shaft.

1,884,987. DAMPER CONTROL. HERMAN WESSELS, Louisville, Ky. Filed Nov. 17, 1930. Serial No. 496,241. 1 Claim. (Cl. 236—96.)



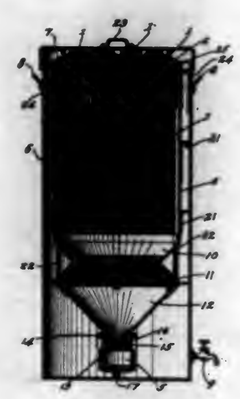
A damper control comprising a support, a thermostat detachably mounted in the support, a connecting rod adjustably attached to the thermostat and housed within the support, a lever pivoted to the support and connected at one end with said rod, a weight adjustable upon the lever and located exteriorly of the support, a guide member slidable in the support and connected with the connecting rod, a shaft journaled in the guide member, a chain arranged to wind upon said shaft and adapted to be connected with a damper, a disk fixed to the shaft and provided with peripheral notches, and a lever member pivoted upon the guide member and having an end adapted to enter the notches.

1,884,988. AUTOMATIC SWITCHING APPARATUS. EDUARD OTTO ZWIETUSCH, Vienna, Austria, assignor to International Standard Electric Corporation, New York, N. Y. Filed Dec. 12, 1930, Serial No. 501,897, and in Austria Dec. 24, 1929. 13 Claims. (Cl. 179—27.52.)



1. A two-motion selector switch comprising in combination an electro-magnet, a member which is driven in one direction by said electro-magnet, means whereby both longitudinal and rotary motion of the switch wipers are effected by said member and means whereby the change over from one direction to the other is effected between trains of impulses.

1,884,989. PROCESS FOR EXTRACTING ORGANISMS FROM ORGANIC OR INORGANIC SUBSTANCES. FOSTER H. BENJAMIN, Washington, D. C., dedicated to the free use of the Public. Filed Dec. 3, 1931. Serial No. 578,682. 1 Claim. (Cl. 43—124.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



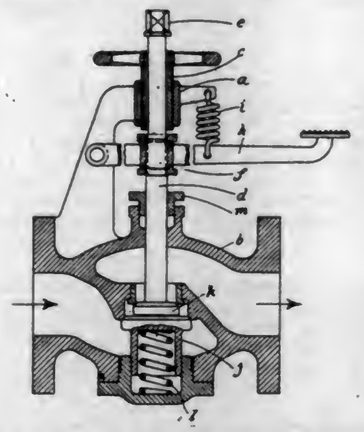
An apparatus for extracting organisms from their host or habitat, comprising a water-tight master container, a container slightly smaller but of the same general shape as the master container and suspended therein, composed of sheet metal and open mesh material, its lower portion tapering to an aperture, means to suspend said smaller container in the master container, a receptacle made of sheet metal and open mesh material removably attached to the lower end of said smaller container, means to removably attach the receptacle to said smaller container, a container screen of the same general shape of the master container, suspended within the said smaller container, means to so suspend the container screen, a hanger resting upon the top of said container screen and having a plurality of openings, host or habitat containers suspended through the openings in said hanger and means at the top of the host or habitat containers to hold them in a suspended position.

1,884,990. FIRE-FIGHTING TOOL. FRED W. FUNKE, Oakland, Calif., dedicated to the Government and the People of the United States of America. Filed May 19, 1931. Serial No. 538,490. 2 Claims. (Cl. 306—23.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. In a combined hoe and rake, a blade, provided with openings, a lock plate having wedge blocks and recessed sections loosely riveted to said blade, a ferrule plate, equipped with lugs so fashioned as to engage with said openings in said blade and to tightly connect the blade to the ferrule plate upon adjustment of the lock plate about its rivet, the wedge blocks engaging the undersides of the said lugs and a ferrule handle socket welded to and formed integral with said ferrule plate, which ferrule handle socket is fashioned to receive an additional suitable handle.

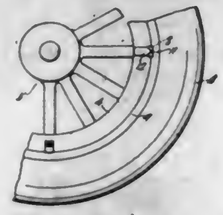
1,884,991. BLOW-OFF VALVE. GUSTAV FRIEDRICH GRADTS, Bremen, Germany. Filed Jan. 28, 1931, Serial No. 511,877, and in Germany Jan. 29, 1930. 5 Claims. (Cl. 251—134.)



2. In a blow-off valve a lever-operated spindle for normally opening the valve, in combination with a sleeve axially screwable in the casing, the spindle being adapted to axially reciprocate in the sleeve and being also provided with a projecting stop near each of the two ends of the sleeve, by means of which the valve may be screw-operated by the sleeve.

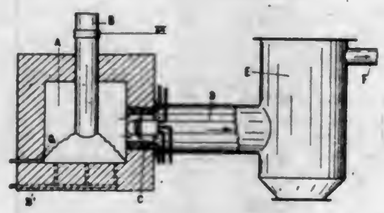
1,884,992. RIM LUG NUT LOCK. PAUL J. GRABBE, Lewistown, Pa. Filed Aug. 26, 1931. Serial No. 559,383. 1 Claim. (Cl. 70—90.)

In combination with a wheel, a removable rim mounted thereon and a rim bolt passed transversely thru the wheel felloe, the said bolt having a nut, a device of the kind described, comprising a lock lug for holding the rim in place on the wheel, the lug being additionally cut out at its outer face for engaging the bolt nut, and having a cover aperture in one end, a keeper aperture in the opposite end and a medial bolt aperture,



and a complemental cover having a nose adapted to engage the cover aperture of the lock lug and a lock bolt adapted to enter the keeper aperture of the lug, and means for releasably locking said lock bolt in said keeper aperture.

1,884,993. PRODUCTION OF METALLIC MAGNESIUM. FRITZ HANSGIRG, Radenthein, Karnten, Austria. Filed July 14, 1932, Serial No. 622,553, and in Austria July 8, 1931. 8 Claims. (Cl. 75—22.5.)



1. A process of producing magnesium which comprises admitting a mixture of magnesium containing material and carbonaceous reducing material to a heating zone to produce, besides carbon monoxide, magnesium vapors; while keeping the evolved vaporous and gaseous products of reaction out of contact with an extraneous reducing gas and at such a high temperature that the chemical equilibrium of the reversible reaction

$$MgO + C \rightleftarrows Mg + CO$$

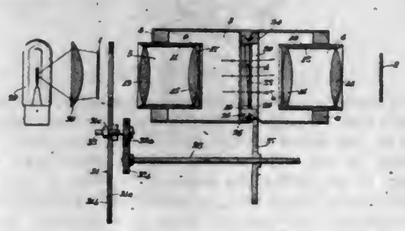
is practically disposed from left to right in the equation, and then suddenly diluting and chilling the magnesium vapors at the point of their discharge from the heating zone by direct contact with a cool non-oxidizing gas.

1,884,994. METHOD AND APPARATUS FOR CAUSING THE RETICULATION AND CLOUDY EFFECTS IN GOFFERED FILMS IN COLORS TO DISAPPEAR. ISAAC KITROSER, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed July 31, 1929, Serial No. 382,381, and in France Aug. 9, 1928. 6 Claims. (Cl. 88—24.)



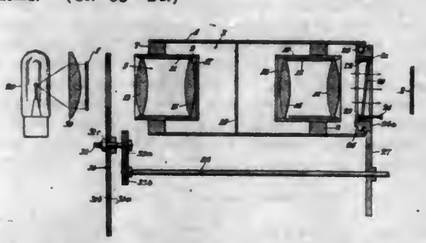
1. A method for eliminating undesirable effects appearing during reproduction of goffered films which comprises optically spreading the image of the film a distance substantially equal to the dimension of a goffered element of the film, and so transmitting the light as to necessitate the enlargement of a point into a curved outline whose dimension is substantially equal at least to that of the individual elements of the goffering while the objective is in focus.

1,884,995. ROTATING PRISM APPARATUS. ISAAC KITROSER, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1930. Serial No. 488,308. 17 Claims. (Cl. 88—24.)



1. An apparatus adapted for copying goffered cinematographic films comprising a symmetrical objective, a diaphragm located between the two parts of the objective, a shutter, a prism located between the two parts of the objective and means to rotate the prism in unison with the shutter.

1,884,996. ROTATING GLASS APPARATUS FOR COPYING GOFFERED FILMS. ISAAC KITROSER, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,625. 15 Claims. (Cl. 88—24.)

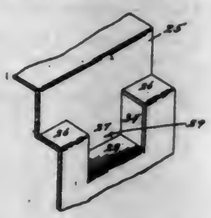


1. An apparatus adapted for reproducing a photographic image carried on a goffered support, comprising a source of light, means for supporting and feeding a film to be copied and a film on which the copy is to be made, an objective, a diaphragm associated therewith and a transparent plate having parallel faces inclined at an angle to the axis of the rays passing through the objective and rotatably mounted on substantially said axis.

1,884,997. DOORSTOP AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed June 24, 1931, Serial No. 546,552. Renewed June 25, 1932. 14 Claims. (Cl. 296—28.)

1. In a device of the class described, a sheet metal door pillar suitably formed to provide a ledge facing in the direction of door closing movement together with flanges extending inwardly and outwardly therefrom parallel to the direction of door closing movement, the sheet metal of said pillar being formed to provide a bumper block seat also facing in the direction of door closing movement and at a lower elevation than the ledge and having its front edge integral with and directly connected to the inwardly extending flange and the sheet metal of said pillar being formed to provide a back

wall at the back of said bumper block seat and having its lower edge integral with the rear edge of the bumper block seat and connected thereto and said back wall comprising an extension of the outwardly extending flange and integral therewith, whereby said bumper block seat is integral with the sheet metal of the door pillar and



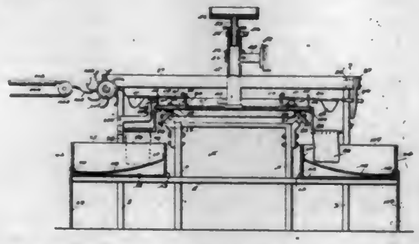
of substantially uniform thickness therewith, and whereby said seat is supported along both its front and rear edges by the metal of the door pillar, and there being openings at the ends of said bumper block seat facing endwise of the door pillar beneath the ledge at both ends of the bumper block seat, substantially as described.

1,884,998. DOOR PILLAR AND THE LIKE. IRA D. PERRY, Chicago, Ill., assignor to Edna L. Meyer, Rockford, Ill. Filed Oct. 28, 1931. Serial No. 571,571. 4 Claims. (Cl. 296—28.)



1. In metal door frame construction, a sheet metal door pillar suitably formed to provide a ledge facing in the direction of door closing movement and a flange connected with the edge of the ledge and disposed substantially parallel with the direction of door closing movement, the sheet metal of the ledge being suitably formed to provide a socket integral with the sheet metal of the ledge adapted to receive a resilient bumper block so as to cushion the closing of a door, one of whose portions is movable toward the ledge in the closing of the door.

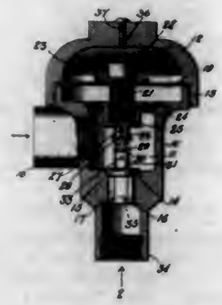
1,884,999. EDIBLE ENTITY SIZING MECHANISM AND METHOD. EDWARD A. WHITE and IRA W. KNIGHT, Lewiston, Idaho. Filed Feb. 18, 1930. Serial No. 429,254. Renewed July 27, 1932. 20 Claims. (Cl. 209—121.)



1. In a mechanism for segregating different sized fruit or vegetable entities according to the weight thereof, a series of weighing beams each having a receiver for an entity, and a fluid pressure rebound device common to all of said beams and yielding under weight of each thereof in accordance with the weight of the entity in the respective receiver.

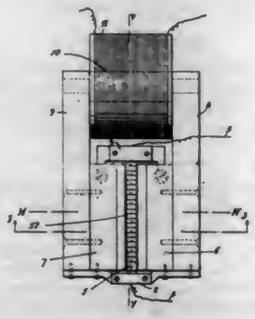
12. The herein-described method of segregating fruit or vegetable entities of different size by weight, which consists, in delivering entities, in automatically, individually and hydraulically weighing all the delivered entities by a common hydraulically weighing medium in supplying an adjustable head of the hydraulic weighing medium, and in depositing the weighed entities in separated points of deposition to segregate entities of one size from those of another size.

1,885,000. RELIEF VALVE. HERMAN MÜLLER, Philadelphia, Pa. Filed Mar. 4, 1931. Serial No. 519,983. 1 Claim. (Cl. 137—53.)



A relief valve organization comprising a housing, a perforated diaphragm forming one side of a chamber within the housing, said chamber having inlet and outlet ports, a valve within the chamber normally closing a port, a threaded bolt through the perforation of the diaphragm, an internally and externally threaded bushing upon and functioning as a nut for the bolt, a sleeve adjustably positioned upon the bushing, and means connecting the sleeve and valve.

1,885,001. APPARATUS FOR CONVERTING SOUND VIBRATIONS INTO ELECTRICAL VARIATIONS. HARRY F. OLSON, Bronx, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 31, 1931. Serial No. 526,598. 10 Claims. (Cl. 179—121.)



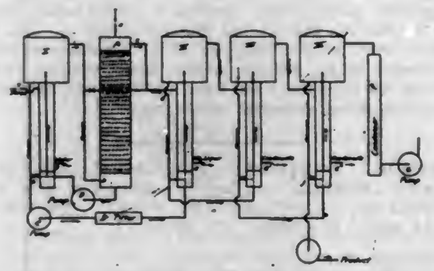
1. Apparatus for converting sound vibrations into electrical variations comprising a body subjected at opposite sides thereof to pressure variations due to a sound wave, said body being adapted to move in response to said pressure variations, means for supporting the body, means for converting the movement of said body into electrical variations, and means forming a baffle to provide a sound wave path between the opposite sides of said body equal substantially to half the wave length of the highest frequency sound wave to be converted into electrical variations.

1,885,002. KEY CUTTING MACHINE. HENRY W. DEVLIN, Denver, Colo. Filed Aug. 22, 1930. Serial No. 477,123. 3 Claims. (Cl. 90—13.2.)



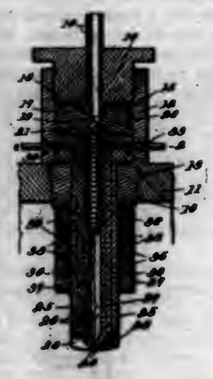
1. A key cutting machine comprising a supporting body, a shaft journaled therein, a cutter on one end of the shaft, a tubular part formed on the body and paralleling the shaft, a member slidably arranged in the tubular part and having a plurality of notches in one end thereof, a spring-pressed dog for engaging any one of the notches for holding the sliding member in adjusted position, a plate supporting member at the opposite end of the sliding member, a transversely arranged sliding plate on said supporting member, means for holding a key on the plate, a screw shaft rotatably supported on the plate supporting member and engaging a threaded part on the plate for moving the plate towards and away from the cutter to bring the key against the cutter when the plate is moved towards the same, and means for rotating the shaft.

1,885,003. APPARATUS FOR THE RECOVERY OF AMMONIA FROM FERMENTATION MASHES. LEONARD E. CARLSMITH, BENJAMIN C. BOECKELER, and IGNACE J. KRCHMA, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Sept. 25, 1930. Serial No. 484,371. 5 Claims. (Cl. 202—174.)



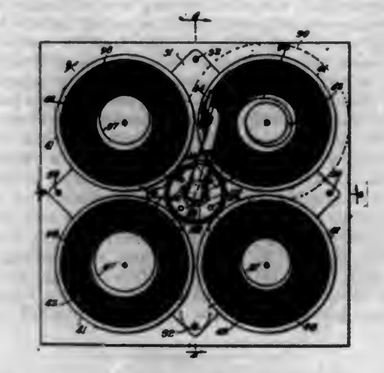
1. A distillation apparatus comprising a scrubbing column, a multiple effect evaporator, a filter connected between two of the effects of said evaporator, means for supplying heating medium to the first effect of said evaporator, means for utilizing the vapors from the said first effect of the evaporator as heating and scrubbing medium for the said scrubbing column and as heating medium for the second effect of the evaporator, means for recovering the condensate from the succeeding effect of the evaporator, means for utilizing the vapors of each effect as heating media for succeeding effects of the multiple effect evaporator, and means for conducting the liquid under treatment thru the said scrubbing column, multiple effect evaporator and filter.

1,885,004. INJECTION NOZZLE. ALLEN T. CRUMBAKER, Brooklyn, N. Y. Filed May 21, 1930. Serial No. 454,468. 16 Claims. (Cl. 299—107.3.)



1. A fuel injection nozzle for internal combustion engines comprising a tubular member formed with a resilient lip normally closing one end thereof, means to supply fuel under pressure to said nozzle thereby to open said normally closed end and spray the fuel, and means to adjustably restrict movements of said lip thereby to vary the opening resistance of said end to fuel pressures.

1,885,005. AUTOMATIC PHONOGRAPH. WILLIAM H. DAILY, Chicago, Ill. Filed Aug. 13, 1926. Serial No. 128,987. 22 Claims. (Cl. 274—10.)

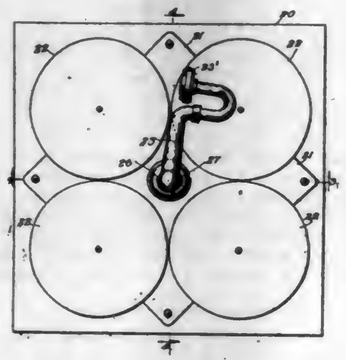


6. In a phonograph, a plurality of disk supports arranged in a circle, a driving wheel arranged concentric with the disks and adapted to be constantly driven by a power belt, each support being carried by a vertically movable spindle, a rotatable member concentric with said driving wheel and provided with a cam member for successively lifting said spindles, a secondary shaft parellel with the axis of said driving wheel and belt driven therefrom at a reduced speed, said secondary shaft being vertically movable and adapted to be rotatably engaged with said rotatable member and adapted to drive same at a relatively slow speed, a tone arm propeller member concentric with said driving wheel and rotatably independently thereof and a belt operatively connecting said secondary shaft and said arm propeller and arranged to drive same in a reverse direction to the direction of rotation of said rotatable member.

17. A phonograph adapted to play grooved disk records having run-over grooves of either the spiral-lead-in type or the eccentric type, a swinging arm, a groove following stylus carried by the arm and by which the arm is swung,

automatic means for returning the arm to the beginning of the record after the playing of same, and means for initiating the action of the automatic returning means arranged and adapted to be operated by the arm when it is swung inwardly to a predetermined inward position by a spiral-lead-in groove on a record being played, and also arranged and adapted to be operated by the arm when it is swung backward due to a run-over groove of the eccentric type on a record being played.

1,885,006. AUTOMATIC PHONOGRAPH. WILLIAM H. DAILY, Chicago, Ill. Filed July 16, 1927, Serial No. 206,211. Renewed Aug. 25, 1931. 9 Claims. (Cl. 274—10.)



7. In a phonograph, a turntable adapted to support a phonograph disk, a stylus carrying arm rotatably mounted to swing around a fixed point, a stylus carried by the free end of the arm, the arm mounted to position the stylus above the turntable for co-operation with a record disk carried thereby, means for raising the turntable from a lower inoperative position to an upper operative position, the arm being pivotally mounted for slight movement up and down and adapted to be lifted slightly by a disk on the turntable when the turntable is lifted, a cylindrical rotatable member mounted concentrically with the mounting of the arm for swinging the arm around its center of movement, a projection on the base of the arm adapted to frictionally engage upon the cylindrical surface of said concentric member to swing the arm when unsupported by a disk, said cylindrical surface having shoulders adapted to be engaged by said projection for enhancing the rotational action of the cylindrical member on the arm.

1,885,007. SURGICAL WRAPPING OR DRESSING. SAMUEL ROSENBLATT, Brighton, Mass., assignor to Surgical Dressings, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1932. Serial No. 593,969. 6 Claims. (Cl. 128—268.)

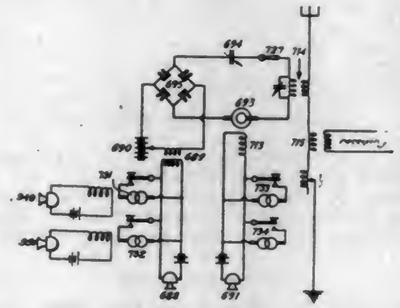


1. A wrapping or dressing described consisting of a partially depolymerized strip of unvulcanized crude rubber highly retentively possessing the characteristics of non-adherence to hair or skin, great elastic extensibility and sufficient porosity to permit the passage of air therethrough.

1,885,008. PROCESS OF PRODUCING A WRAPPING, DRESSING, OR SIMILAR ARTICLE. SAMUEL ROSENBLATT, Brighton, Mass., assignor to Surgical Dressings, Inc., Jamaica Plain, Mass., a Corporation of Massachusetts. Original application filed Feb. 19, 1932, Serial No. 593,969. Divided and this application filed June 13, 1932. Serial No. 617,049. 8 Claims. (Cl. 18—50.)

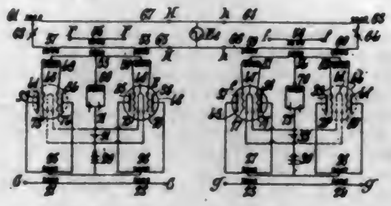
1. The method of producing a wrapping, dressing, or other article described which consists in heating a sheet or strip of pure crude rubber and in correlating the temperature of the heat applied, the time period of the heat application, and the thickness or penetrability to heat of said sheet or strip to develop in said sheet or strip the characteristics of great elastic extensibility and tenacious cohesion when pressed together and to insure the highly retentive possession by said sheet or strip of the characteristics of non-adherence to hair or skin, great elastic extensibility and tenacious cohesion when pressed together.

1,885,009. METHOD AND MEANS FOR ELECTRICAL SIGNALING AND CONTROL. ALBERT V. T. DAY, New Rochelle, N. Y. Filed Jan. 25, 1919. Serial No. 273,054. 88 Claims. (Cl. 250—6.)



43. The signaling method which consists in producing a voltage wave of constant unmodulated frequency, deriving therefrom a continuous carrier current wave, producing a signaling wave and employing it to modulate the frequency of said current wave, transmitting said frequency-modulated wave from a sending station as an elemental carrier wave through a transmission medium to a receiving station and thus conveying the signal between stations by modulation of the fundamental carrier frequency of the elemental wave in said medium, and deriving the signaling wave from said frequency-modulation of the received elemental carrier wave.

1,885,010. MULTIPLEX ELECTRICAL SIGNALING AND CONTROL. ALBERT VAN TUYL DAY, Rye, N. Y. Filed July 24, 1923, Serial No. 653,450. Renewed Mar. 24, 1931. 24 Claims. (Cl. 179—15.)



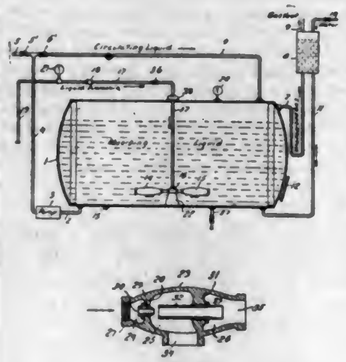
1. The method of multiplexing carrier-wave signals which consists in superposing in a common transmission medium, two phase-differentiated synchronous carrier-waves, independently modulating each carrier-wave in accordance with other waves which are to be transmitted, and separately translating each of said phase-differentiated carrier-waves.

1,885,011. FRUIT JUICE EXTRACTOR. CHARLES H. GOUDISS, Jr., New York, N. Y., assignor to Richcar Corporation, Wilmington, Del., a Corporation of Delaware. Filed July 30, 1932. Serial No. 626,925. 8 Claims. (Cl. 100—49.)



5. A fruit juice extractor, comprising a coring member having a tubular body part of approximately uniform interior diameter with a cutting edge at one end thereof and having a cup-shaped part at the other end, which part is of greater diameter than the tubular part, the cup-shaped part of said coring member having apertures which communicate with the side opposite the cup of the cup-shaped part.

1,885,012. PROCESS AND APPARATUS FOR THE TREATMENT OF LIQUIDS WITH AMMONIA. EDWARD W. HARVEY, Highland Park, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 17, 1929. Serial No. 355,802. 13 Claims. (Cl. 23—193.)



1. The improvement in the treatment of aqueous liquids with ammonia which comprises rapidly and intimately admixing liquid ammonia with said liquid.

13. The method of preparing aqua ammonia which comprises introducing liquid ammonia into a body of water and intimately admixing the liquid ammonia with the water at a point below the surface thereof.

1,885,013. SILO. PETER J. HRONES, Canton, S. Dak. Filed Mar. 25, 1931. Serial No. 525,265. 8 Claims. (Cl. 189—8.)

1. In a structure of the type set forth, a series of transversely curved units each composed of an open rectangular frame, metal sheathing extending over said frame and having the edge portions thereof turned at right angles and secured to the adjacent edges of the frame, and means to secure adjacent units together in superimposed and side to side engagement and with the sheathing forming a



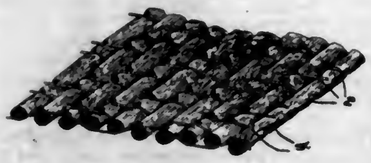
substantially continuous lining for the structure and with the frames exposed on the exterior of the structure, said securing means being disposed exteriorly of the frames.

1,885,014. OPHTHALMIC MOUNTING. BROR J. JACOBSON, Warwick, R. I., assignor to Martin-Copeland Company, Providence, R. I., a Trusteeship consisting of Edgar W. Martin, Laurence C. Martin, and George W. Bleecker. Filed Sept. 18, 1930. Serial No. 482,786. 4 Claims. (Cl. 88—47.)



1. An ophthalmic mounting for spectacles and eyeglasses comprising a member having means for fastening it to a lens and provided with an arcuate shoe having a curvature on its inside of less radius than the radius of the rim of the lens, and an arcuately-shaped spring of slightly greater length than the shoe adapted to be held under compression between the shoe and the edge of the lens, the shoe being of such length as to cause its ends to engage against the back of the spring at points adjacent the ends of the latter whereby to clamp the terminal portions of the spring against the edge of the lens to maintain the parts in rigid connection.

1,885,015. BLANKET. RONALD C. MCILROY, Lewiston, Me., assignor to Nashua Manufacturing Company, Nashua, N. H., a Corporation of New Hampshire. Filed Dec. 29, 1931. Serial No. 583,655. 7 Claims. (Cl. 139—426.)

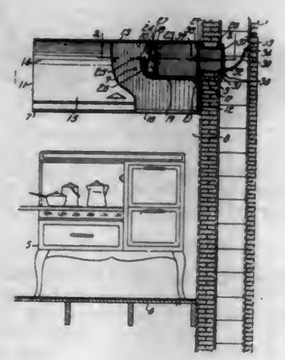


1. As a new article of manufacture, an all-animal-fibre blanket composed principally of napped, wool filling woven upon a spun silk warp, the said warp not exceeding 25% of the weight of said blanket.

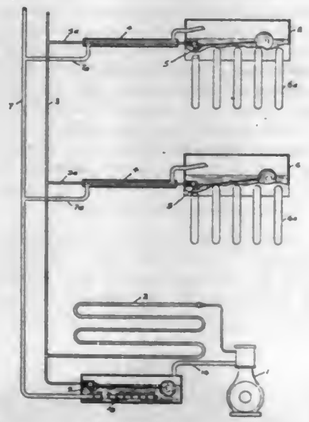
1,885,016. VENTILATING APPARATUS. FRANK G. RYAN, Tulsa, Okla. Filed May 23, 1930. Serial No. 454,972. 7 Claims. (Cl. 98—115.)

1. In combination with a stove and a chimney having a flue opening communicating with a room containing the stove, a canopy supported above the stove, an exhaust cabinet open at both ends in the canopy and communicating

with said flue opening, an exhaust fan in one of the open ends of the cabinet for drawing vapors from the room and delivering the same into the chimney, through the remaining open end of the cabinet, a deflector plate in the chimney, and common means for securing the cabinet and the deflector plate in their relative positions.



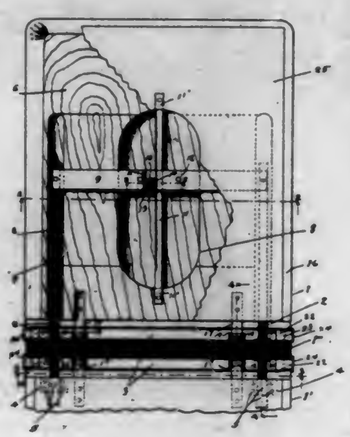
1,885,017. REFRIGERATING SYSTEM. BENNET CARROLL SHIPMAN, San Mateo, Calif. Filed July 22, 1927. Serial No. 207,745. 7 Claims. (Cl. 62—115.)



1. In a refrigerating system including a compressor, condenser, evaporator, liquid refrigerant supply and gas suction lines, the said supply and suction lines connected in mutual heat exchange relationship and a refrigerant gas saturator in the gas suction line adjacent to the compressor.

1,885,018. LOOSE LEAF BINDER. OSCAR S. SWALL, Ross, Calif., assignor to S & D Loose Leaf Co., Ltd., a Corporation of Nevada. Filed Oct. 28, 1929. Serial No. 403,085. 6 Claims. (Cl. 129—41.)

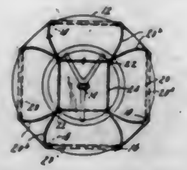
5. In a loose leaf binder, a pair of covers, flexible binding elements extending between the inner faces of the covers, leaf-clamping bars through which said elements extend made of sheet-metal of substantially L-section with the long arms in clamping relation for the leaves of the book, and hinge elements secured to the covers extending beyond the binding margin of the covers pivotally connected to said bars and a sheet of flexible covering material pasted to the outer face of each of the covers extending over the outer face of the adjacent bar and along the clamping face of the long arm thereof.



1,885,019. PROCESS FOR THE PRODUCTION OF SOFT FABRIC OR THE LIKE FROM VEGETABLE FIBROUS MATERIALS. FRITZ THIES, Berlin-Tempelhof, Germany. Filed May 5, 1930, Serial No. 450,052, and in Germany July 16, 1928. 1 Claim. (Cl. 28—1.)

A process to produce soft fabrics or the like, which comprises predetermining the final thread count for both warp and weft thread in a fabric, weaving a fabric of vegetable fibre with a more open warp and weft than represented by said count and applying a caustic soda mercerizing solution to said fabric and shrinking it, the strength of the shrinking agent and spacing of the warp and weft threads being proportioned with respect to one another so that said shrinking will cause the fabric to shrink to the predetermined thread count.

1,885,020. MOUNTING MEANS FOR A SIGN OR THE LIKE. WILLIAM F. VERNON, Newton, Iowa. Filed Sept. 6, 1932. Serial No. 631,780. 11 Claims. (Cl. 40—129.)



1. Mounting means for a sign or the like having a plurality of perimetrically spaced openings therein, said mounting means comprising a closed loop of cord shiftably laced through said openings successively and a closed loop of cord shiftably associated with the central parts of the portions of the first loop of cord which lie on one side of said sign.

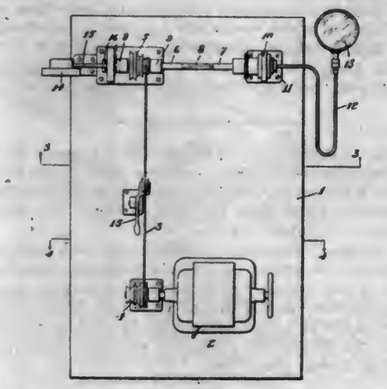
1,885,021. FASTENER TAPE. JINDRICH WALDES, New York, N. Y., assignor to Waldes Koh-I-Noor, Inc., Long Island City, N. Y., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,735. 2 Claims. (Cl. 2—265.)



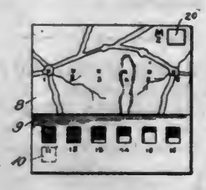
1. A fastening tape comprising a plurality of plies of fabric, fastening elements at spaced intervals along said tape, each fastening element comprising a fastener engaging portion, a shank and an enlargement at the end of the shank, one of the plies of fabric covering the enlargements and substantially the whole of the shanks of said fastening elements, a single, continuous line of stitching running first through both said plies of fabric and extending from one fastening element to an adjoining fastening element near the upper edge of said covering then continuing downwardly along the shank portion of a fastening element on one side thereof and up to abutment vicinity of the enlarged portion of the fastener, then doubling backwardly passing beyond the upper edge of the covering into the under ply only and, about the upper end of the fastening element through said under ply only, then downwardly through both plies along the opposite side of the fastening element and again up to abutment vicinity of the enlarged portion of the fastener, then upwardly through both plies to a point near the upper edge of the covering and then through both plies along the upper edge of the covering to the next fastening element, the portions of said stitching along the shanks lying in close proximity to the shank and substantially parallel thereto, the thread constituting the stitching being located wholly outside of the fastening element and no part of said stitching traversing any portion of the fastening element, the fabric covering and said stiching constituting the entire stitching for forming a pocket for the fastening element and for securing the fastening element against outward creeping movement from said pocket.

1,885,022. STROBOSCOPIC APPARATUS. PHILIP C. WENTWORTH, Providence, R. I., and JAMES H. AVERY, Franklin, Mass., assignors to National Ring Traveler Co., Providence, R. I., a Corporation of Rhode Island. Filed Mar. 12, 1928. Serial No. 261,150. 3 Claims. (Cl. 88—14.)

1. Stroboscopic apparatus for determining the necessary factors to establish the proper relationship between the spindle, ring and traveler used in ring spinning and twisting yarn comprising a base, a variable speed motor mounted on said base and having a shaft, an interrupter shaft mounted on said base, driving connections from the shaft of said motor to said interrupter shaft, for driving said interrupter shaft at speeds regulatable to the varying speed of the spindle and traveler relative to each other, said interrupter shaft formed as a pair of aligned sections flexibly connected together, an interrupter driven from one of said shaft sections for determining stroboscopically the speed of the spindle and the traveler relative to each other so that the relation of the traveler to the ring may be observed with the stroboscope at the speed obtained, a tachometer driven from the other shaft section, and a frictional retarding device for said interrupter shaft.



1,885,023. SYSTEM FOR LOCATING MOVING BODIES. MAX DIECKMANN, Graefelfing, near Munich, Germany, assignor of one-third to Otto Scheller, Berlin, Germany, and one-third to William H. Murphy, Oceanport, N. J. Filed Feb. 25, 1931, Serial No. 518,203, and in Germany Mar. 29, 1927. 2 Claims. (Cl. 250—11.)



1. In navigational systems, a plurality of signal transmitters located in predetermined arrangement over a geographical area, each adapted to selectively emit a particular modulation, a receiving apparatus carried by a mobile body for receiving the signals thus transmitted, and an apparatus connected with said receiving apparatus including vibratory reed devices arranged with respect to a geographical chart designating the transmitting stations in similitude over the geographical area in which the transmitting stations are located, said reed devices selectively responding to the modulation frequencies of the transmitting stations for indicating the movement of the mobile body over the geographical area defined by the transmitting stations.

1,885,024. COATING COMPOSITION. WILLIAM W. LEWERS, Flint, Mich., and GORDON D. PATTERSON, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 431,040. 4 Claims. (Cl. 134—51.)

1. A coating composition substantially free from cellulose derivatives which comprises a pigment containing titanium and a vehicle comprising a resin which has, in combined form, the radicals of a polyhydric alcohol, a polybasic acid and an oil having drying properties, the titanium component, including any extender present in the coating composition, constituting at least 65% of the total pigment and extender.

1,885,025. COATING COMPOSITION. GORDON D. PATTERSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 431,043. 9 Claims. (Cl. 134—51.)

1. A coating composition substantially free from cellulose derivatives which comprises a pigment containing antimony and a vehicle comprising a resin which has, in combined form, the radicals of a polyhydric alcohol, a polybasic acid, and an oil having drying properties.

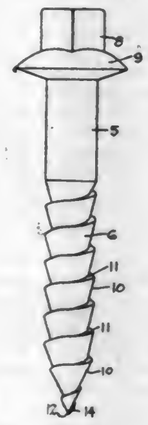
1,885,026. COATING COMPOSITION. GORDON D. PATTERSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 431,044. 3 Claims. (Cl. 134—39.)

1. A coating composition substantially free from cellulose derivatives which comprises a pigment containing a titanate of the group which consists of barium titanate, calcium titanate, zinc titanate and lead titanate and a vehicle comprising a resin which has, in combined form, the radicals of a polyhydric alcohol, a polybasic acid, and an oil having drying properties.

1,885,027. COATING COMPOSITION. GORDON D. PATTERSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 431,045. 4 Claims. (Cl. 134—39.)

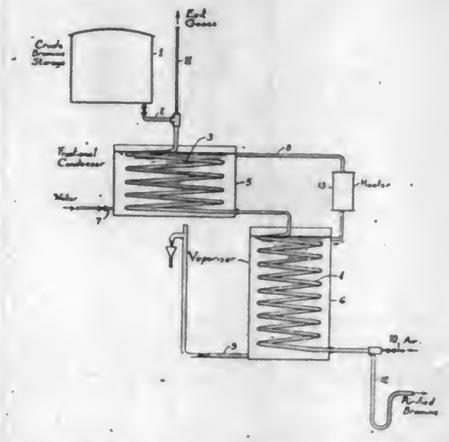
1. A coating composition substantially free from cellulose derivatives which comprises a zinc oxide pigment containing, as an impurity, more than 8% by weight of lead compounds, calculated as lead sulfate, and a vehicle comprising a resin which has, in combined form, the radicals of a polyhydric alcohol, a polybasic acid and an oil having drying properties.

1,885,028. SINGLE THREAD BARBED DRIVE SCREW. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to The International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,199. 1 Claim. (Cl. 85—44.)



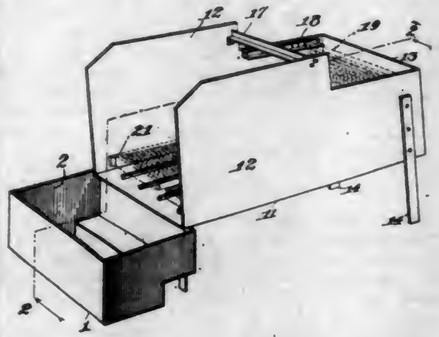
As a new article of manufacture, a screw element having a cylindrical body terminating at one end in a tapered point, a thread formed on the body extending to and throughout said tapered point, said thread providing a shouldered upper surface terminating at the tapered point of the body in an entering lip, one edge of said lip comprising a cutting side disposed at an angle downwardly from said tapered point, and the other edge of said lip being disposed at said tapered point and in the median line of said body.

1,885,029. PURIFICATION OF BROMINE. GRAYTON F. DRESSEL, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 25, 1930. Serial No. 463,676. 4 Claims. (Cl. 23—216.)



1. The method of purifying liquid bromine containing a relatively small amount of chlorine which comprises partially vaporizing such bromine at a temperature materially below the boiling point thereof, contacting the liquid with a slow current of air to remove the vapors evolved, cooling the vapor-laden air to condense at least a portion of the bromine therein, and separating the residual gases containing the chlorine.

1,885,030. AUTOMATIC BEE-COMB FILLER. DELBERT E. LHOMMEDIEU, Colo, Iowa. Filed Jan. 2, 1932. Serial No. 584,488. 12 Claims. (Cl. 6—12.)



1. In an apparatus of the class described, the combination of a casing provided with frame supporting means on its bottom, and said casing provided with frame suspending means on its side.

10. In an apparatus of the class described, the combination of a casing, and parallel irons fastened to said casing, whereby a syrup tank may be positioned between said parallel irons against accidental displacement.

1,885,031. LABEL. ELLIOTT I. PETERSEN, Enfield, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 12, 1932. Serial No. 598,330. 2 Claims. (Cl. 40—2.)



1. In combination with a floor covering having a pile surface, a plain woven terminal end, and a fringe secured to the latter, a looped label formed of flexible textile material and having an upper portion and a lower portion united together beyond the free end of the fringe, the end of the upper portion being turned outwardly beyond the pile surface to form an upward bend in the upper portion adjacent to the pile surface, means for securing the outwardly turned end of the upper portion to the floor covering with the upper portion of the label free of the securing means to cause the top surface of the upper portion of the label at the bend to extend upwardly substantially in the plane of the pile surface, a bendable stiffener having its securing end turned outwardly to form a bend within the bend of the upper portion of the label to support the bend of the label with its top surface substantially in the plane of the pile, and means for securing the lower portion of the label to the floor covering.

1,885,032. LABEL. ELLIOTT I. PETERSEN, Enfield, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 12, 1932. Serial No. 598,396. 2 Claims. (Cl. 40—2.)



1. In combination with a floor covering comprising a ground fabric having a pile surface and a plain woven end folded under to form a folded head at the termination of the pile surface, a flexible label formed of flexible textile material having an upper and a lower portion united beyond the folded head, and means for securing the ends of the upper and lower portions of the label to the folded head in non-interfering relation with the pile surface.

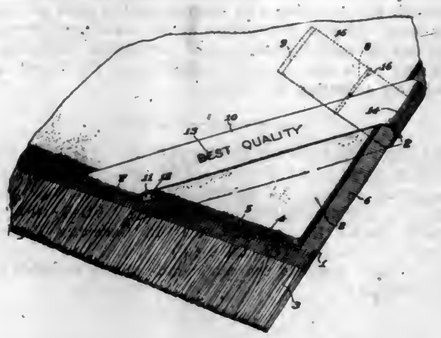
1,885,033. LABEL. ELLIOTT I. PETERSEN, Enfield, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 28, 1932. Serial No. 601,548. 6 Claims. (Cl. 40—2.)

1. The combination of a floor covering having a ground fabric and a pile surface, an edge fringe secured to the floor covering and extending outwardly from the floor covering, an identifying flexible label for the floor covering formed of flexible sheet material having a data bearing portion and projecting outwardly from the floor



covering wholly at one side of and in non-enclosing relation to the fringe so that the entire fringed edge may be exposed for ready inspection and examination, and means for securing an end portion of the label to the floor covering in noncrushing relation to the pile.

1,885,034. LABEL FOR FLOOR COVERINGS. ELLIOTT I. PETERSEN, Enfield, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Original application filed Mar. 28, 1932, Serial No. 601,548. Divided and this application filed June 8, 1932. Serial No. 616,052. 6 Claims. (Cl. 40—2.)



1. The combination of a floor covering comprising a woven backing fabric having pile forming yarns secured thereto to form a pile surface area, and a label formed of flexible material having one end secured to the floor covering at the end of the floor covering and the other end secured to the floor covering adjacent a side edge thereof, so that the part of the label between the secured ends thereof shall extend above and overlie a portion of the pile surface area.

1,885,035. TREATING THIOCYANATES. CHRISTIAN J. HANSEN, Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Aug. 9, 1928, Serial No. 298,617, and in Germany Apr. 14, 1928. Divided and this application filed Nov. 29, 1929. Serial No. 410,649. 9 Claims. (Cl. 23—119.)

1. The method of decomposing thiocyanates and of producing ammonium compounds therefrom comprising heating an aqueous solution of such thiocyanates in the presence of a thionate.

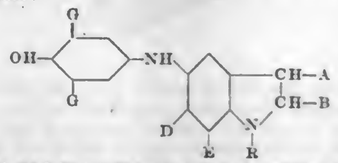
1,885,036. GAME APPARATUS. CHARLES MARSHALL GRAVATT, Asheville, N. C. Filed Sept. 14, 1932. Serial No. 633,146. 10 Claims. (Cl. 273—119.)



1. In a game apparatus including a playboard normally inclined to the horizontal, and having a number of openings through which a projectile may pass, mechanism arranged for directing and controlling the path of travel of a projectile over the surface of the board until dropped into one of said openings, said mechanism including a plurality of levers pivotally mounted on the board, and means for actuating said levers.

1,885,037. LEUCOINDOPHENOLS OF THE CARBAZOLE TYPE. FRIEDRICH MUTH, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 13, 1929, Serial No. 407,006, and in Germany Feb. 14, 1927. 4 Claims. (Cl. 260—46.)

1. As new products the compounds of the probable general formula:



wherein A and B jointly stand for one of the groupings

$$-CH_2-CH_2-CH_2-, \quad -CH_2-CH_2-CH_2-CH_2-$$

or

$$-CH_2-CH_2-CH_2-CH_2-CH_2-,$$

D and E stand for hydrogen or jointly for one of the groupings

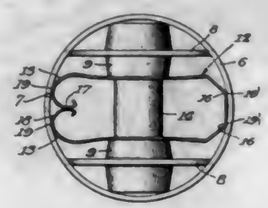
$$-CH=CH-CH=CH-$$

or

$$-CH_2-CH_2-CH_2-CH_2-,$$

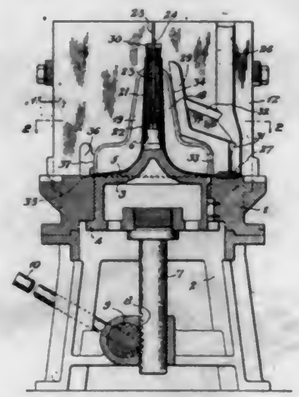
G stands for hydrogen or chlorine and R stands for hydrogen, ethyl, benzyl or phenyl, said compounds being generally light greyish crystalline powders, soluble in hot water, alcohol and mineral acids and sparingly soluble in salt solutions, forming colorless solutions with aqueous alkalies in which the leucoindophenols are easily oxidized to the corresponding dark colored indophenols, and producing in the polysulfide melt very valuable sulfur dyestuffs.

1,885,038. PISTON SKIRT EXPANDER. RALPH R. TENTOR, Hagerstown, Ind., assignor to The Perfect Circle Company, Hagerstown, Ind., a Corporation of Indiana. Filed June 9, 1932. Serial No. 616,203. 16 Claims. (Cl. 74—108.)



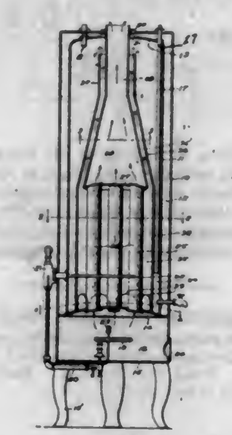
1. In combination with a piston having a skirt with a vertical slot, of a diametrically extending expander formed of spring metal and having free ends contacting each other and engaging the interior of the piston on either side of the slot and adjacent thereto.

1,885,039. CASTING APPARATUS AND METHOD. JOHN SCHMELLER, Sr., Lakewood, Ohio. Filed Jan. 27, 1932. Serial No. 589,068. 16 Claims. (Cl. 22—209.)



10. The process of casting thin-walled articles having a tapered body portion and wings integrally formed therewith from metal having a low melting point and high crystallization shrinkage, comprising introducing molten metal into the casting cavity by pouring the metal downward under the action of gravity toward the casting cavity, restricting its flow, and directing a portion of it to flow laterally and in opposite directions adjacent to and along the periphery of the bottom of the casting cavity and thence upward in spaced relation to the casting cavity opposite each respective wing and simultaneously directing the laterally flowing metal into the casting cavity in the form of a plurality of thin horizontal webs and simultaneously and progressively directing the upward flowing metal into the wing and adjacent base portion of the casting cavity in the form of a plurality of series of successive thin webs, the amount of metal in each one of the webs being so small that when the casting cavity has been filled to substantially the level of each respective web, and the metal flow through said respective web has stopped, the said webs will solidify in advance of the metal in the casting cavity and form a seal between it and the molten metal supply of said web adjacent the casting cavity.

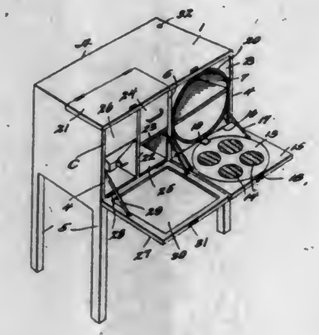
1,885,040. WATER HEATER. LEM ARNOLD, San Angelo, Tex. Filed June 23, 1931. Serial No. 546,340. 1 Claim. (Cl. 122—118.)



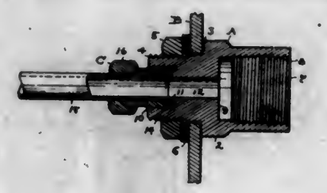
A domestic water heater comprising a vertical cylindrical casing, a vertical cylindrical water holding tank disposed within the casing in spaced relation for affording a space between the same, said tank having top and bottom heads, said casing extending downwardly beyond the tank for forming a combustion chamber, a plurality of spaced flues arranged within the water holding tank and attached to the bottom head and in communication with the combustion chamber, a heat chamber arranged within the tank above the flues and having a head attached to the flues, said flues discharging into the heat chamber, said heat chamber being vertically disposed and tapering upwardly, said heat chamber and said flues being generally of the same length, and the combined length of the heat chamber and flues extending throughout the major portion of the length of the water holding tank, discharge means for the heat chamber leading to the exterior of the water holding tank, a water circulating jacket extending longitudinally within the water holding tank and spaced from the tank and from the flues and heat chamber, said water circulating jacket including a lower cylindrical portion of substantially the same length as the flues and an upwardly tapering portion of substantially the same length as the heat chamber, the upper end of the jacket discharging into the water holding tank adjacent to its upper end, means for introducing water into the lower end of the tank, means for withdrawing water from the upper end of the tank, and a burner arranged within the combustion chamber.

1,885,041. STOVE-CABINET. FLOYD JENNINGS BAKER, Washington, D. C. Filed Mar. 12, 1930. Serial No. 435,258. 2 Claims. (Cl. 219—35.)

1. A cooking stove device comprising a supporting casing or oven housing, an oven member having an opening insertable in said casing, a heating unit hingedly connected to the oven member and movable to open and closed positions with respect thereto, whereby said unit when in closed position constitutes a closure and heating medium for said oven and when in open position a heating and supporting unit for cooking purposes independently of said oven.



1,885,042. HYDRAULIC COUPLING. JOHN D. BALDWIN, Jr., Cleveland, Ohio, assignor to Albert J. Weatherhead, jr., Cleveland, Ohio. Filed May 18, 1929. Serial No. 364,298. 5 Claims. (Cl. 285—30.)

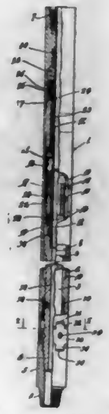


1. A tube coupling device for hydraulic brake systems in automobiles, comprising an attachment member having a straight, externally threaded shank adapted to be secured to a fixed part of an automobile, said shank being formed with an internally screw-threaded opening axially thereof and a sealing cone at the base of said opening, and the opposite end of said member having a second screw-threaded opening of larger diameter than the opening in the shank and a flat sealing seat at the base thereof, and the middle portion of said member having a fluid-passage connecting said openings.

1,885,043. ROTARY JAR. JULIUS S. BECK, Los Angeles, Calif. Filed Oct. 6, 1931. Serial No. 567,166. 11 Claims. (Cl. 255—27.)

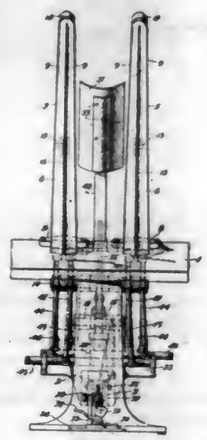
1. A jar for use in rotary drilling comprising two members telescopically assembled one within the other for relative longitudinal movement from a normal contracted position to an extended position, striking abutments formed on said members interengageable when said members are in extended position, a resilient sleeve carried by one of said members arranged to flex radially toward that

member, a shoulder formed on said sleeve directed toward said other member, a second sleeve carried by said other member and having means formed thereon for engaging



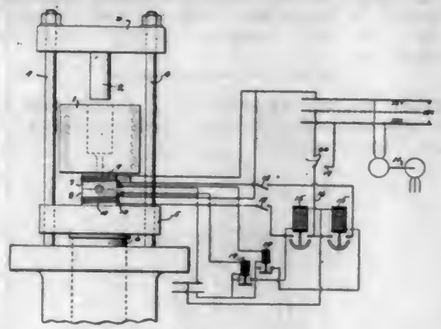
said shoulder to hold said members in contracted position but releasable by the exertion of such longitudinal strain as will cause flexing of said resilient sleeve.

1,885,044. IRONING MACHINE. LOUIS A. BELMONT, Merion, Pa. Filed June 19, 1930. Serial No. 462,220. 19 Claims. (Cl. 223—17.)



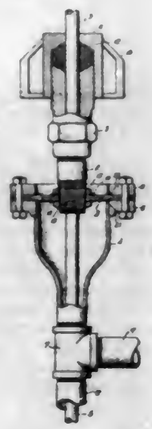
1. In an ironing machine, the combination of a supporting frame, an expansible and contractible ironing device adapted to receive and to be surrounded by a part to be ironed, a pneumatic cylinder, a piston within the cylinder, means controlled by the piston for effecting the expansion and contraction of the device and means operable to admit compressed air to and exhaust it from said cylinder.

1,885,045. LEAD PRESS. CHARLES E. BENNETT, Paterson, N. J., assignor to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed Dec. 8, 1931. Serial No. 579,600. 3 Claims. (Cl. 207—10.)



1. In the heating of lead press die blocks, the method which consists in subjecting the block to the action of an alternating magnetic field to raise the temperature of the block to the desired degree mainly by the hysteresis effect of said field, and then reducing the field flux to maintain the block substantially at said temperature.

1,885,046. FLEXIBLE STUFFING BOX ASSEMBLY. EDWIN O. BENNETT, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Nov. 5, 1931. Serial No. 573,087. 8 Claims. (Cl. 286—15.)



1. Means for mounting a stuffing box for a well pump rod comprising a nipple having an enlarged portion, said nipple being secured to the well casing, a relatively thin annular disk extending across said nipple and fixedly attached thereto, a stuffing box secured to said disk and supported solely thereby, the arrangement being such as to provide for a slight angular movement of said stuffing box to accommodate it to movements occasioned by pumping operations.

1,885,047. UNIFORM DRESS. OSCAR A. BERMAN, Baltimore, Md., assignor to Morris & Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Mar. 31, 1932. Serial No. 602,294. 2 Claims. (Cl. 2—74.)

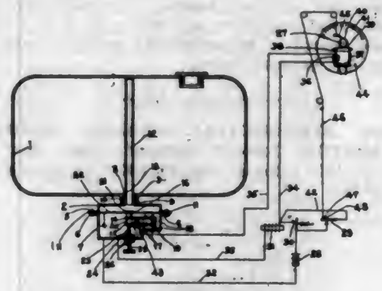
1. A garment open at its front and comprising a skirt and coat united thereto at the waist, belt sections extending from opposite sides of the garment at the waist, one side portion of said garment being disposed in overlapping

relation to the other side portion to close the garment at the front when worn and the belt section carried by the overlapped side section passed outwardly through a slit formed in the waist portion of the garment at the rear of the garment, the belt section carried by the overlapping



side portion of the garment being extended rearwardly about the waist and passed through a slit formed in the first mentioned belt section near the first slit when worn and both belt sections extended forwardly in opposite directions about the waist and releasably secured.

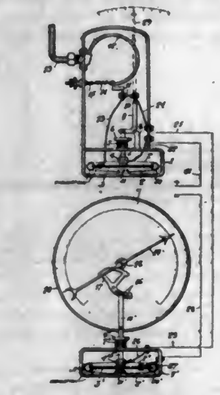
1,885,048. ELECTRICAL SYSTEM. FRANK M. SLOUGH, Elyria, Ohio, assignor to The Anderson Company. Filed Oct. 7, 1924. Serial No. 742,278. 131 Claims. (Cl. 177—351.)



24. In an electrical system for remotely indicating the value of a variable pressure, a controlling and a controlled electrical heating element, an electrical switch, a source of current, and electrical circuit conductors interconnecting said source, said heating element and said switch, said switch when operated, adapted to effect a flow of current from said source over said conductors through said elements, and means variably responsive to the pressure to be indicated according to the value of pressure, adapted to operate said switch, and thermally operable means, disposed so as to respond to heating by said controlling element, commensurably with the value of said pressure, adapted to restore said switch, and a thermally responsive indicator adapted to indicate the accrued temperature of said controlled element.

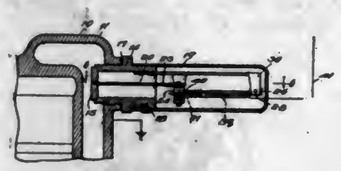
1,885,049. ELECTROTHERMIC INDICATOR. TORSTEN KÄLLE, Saffle, Sweden. Filed July 7, 1925, Serial No. 42,106, and in Sweden July 8, 1924. 15 Claims. (Cl. 177—351.)

4. In electrically operated apparatus, the combination with a contact point, of a resilient member for urging the contact point in one direction, a second contact point engageable with the first mentioned contact point, a second resilient member for urging the second contact point in the same direction as the first contact point is urged, a wire, means mechanically connecting the wire to said second resilient member whereby the wire controls the movements of said second contact point, means cooperating with said first and second contact points for forming an electrical circuit and subjecting the wire to heat gener-



ated by an electrical current, said first and second contact points being adapted to open and close the circuit, and means controlled by the electrical current and movable in response thereto into positions corresponding to the positions assumed by said first contact point.

1,885,050. INDICATING APPARATUS. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Dec. 20, 1926. Serial No. 156,054. 1 Claim. (Cl. 177—351.)

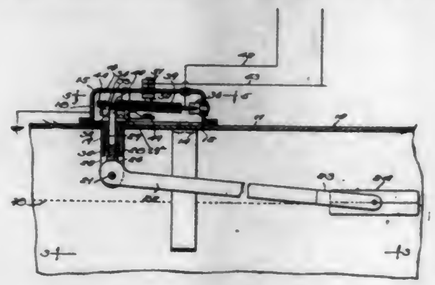


A unitary electric control device comprising a plug casing adapted to be removably mounted upon the wall of a container of thermally variable liquid with a portion projecting therethrough and into thermal contact with the therein contained liquid, a thermostatic element supported internally of the casing upon the said projecting portion thereof, a second thermostatic element supported internally of the casing, an electric heater for the second element, a pair of controlling contacts disposed in the plug adapted to be operated by movement of the first mentioned thermostatic element upon thermal response thereof to liquid temperature, and to be mutually disabled by movement of the second thermostatic element upon thermal response thereof to heat from the winding, an electric circuit comprising the pair of contacts and said heating winding in serial relation, and adapted to be included in serial circuit with a source of current and an electrical indicator device.

1,885,051. GAUGE. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Nov. 8, 1926. Serial No. 147,076. 1 Claim. (Cl. 177—351.)

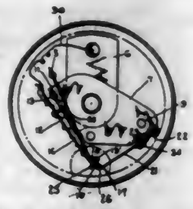
In an electrical indicating system for an automotive vehicle, a liquid container carried by the vehicle, a float therein, an electric control device comprising a walled housing supported on the container externally thereof, a

peripherally sealed passageway between the housing and the container interior, a thermostatic element supported in the housing, an electric heater therefor, a movable element, a motion reducing mechanism operable through the passageway, transmitting float movement to the movable element, a pair of controlling contacts disposed in the housing adapted to be engaged and disengaged by said movable element responsive to up and down movements of the float caused by movements of the vehicle, a source of



electrical current, a remotely disposed slowly operable indicator, an electrical circuit comprising said contacts, said heater, said source of current and said indicator, said contacts controlling the flow of current from the source to both said heater and said indicator, said thermostatic element being cumulatively operable responsive to cumulative heating of said heater, whereby said indicator is substantially non-responsive to the effects of vehicle movement upon said float and indicates the average position of said float in said container.

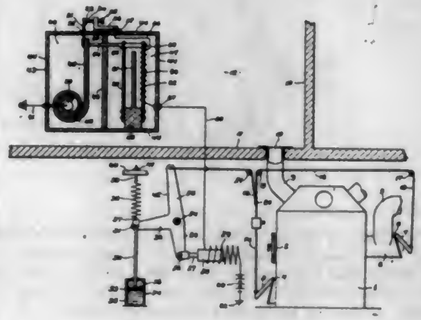
1,885,052. ELECTROTHERMAL APPARATUS. THEODORE J. SMULSKI, Gary, Ind., assignor to The Anderson Company, Gary, Ind., a Corporation of Indiana. Filed May 31, 1930, Serial No. 458,595. Renewed Apr. 28, 1932. 12 Claims. (Cl. 171—308.)



1. In an indicator mechanism the combination with an indicator hand, an apertured support therefor, said hand secured to said support and projecting therefrom, an actuating element for said hand comprising an actuating arm and a hook projected through said apertured support movable by said arm in a direction lateral to said support, a second hook projected through said apertured support and spring means tending to separate said hooks, said hooks engaging oppositely disposed edges of the support bordering the aperture.

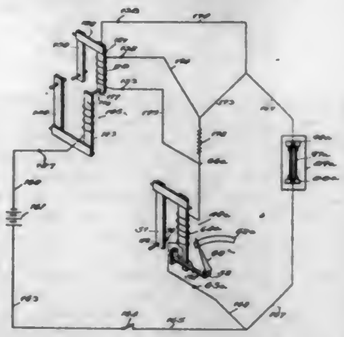
1,885,053. ELECTRIC CONTROL SYSTEM AND APPARATUS. FRANK M. SLOUGH, Lakewood, Ohio, assignor to The Anderson Company, Gary, Ind., a Corporation of Indiana. Filed Dec. 27, 1930. Serial No. 505,187. 12 Claims. (Cl. 236—68.)

1. In a heating system, the combination with a source of heat and regulator for regulating the amount of heat delivered from said source to a space to be heated, electro-responsive means for adjustably effecting the operation of said regulator, an electrical controller disposed in the space to be heated controlling said electro-responsive means, said controller comprising a pair of thermostats, one of said thermostats having a portion movable responsive to changes of temperature in the air surrounding it, an electrical current flow controller operable by said thermostat movable portion, the second of said thermostats having two oppositely movable thermally responsive portions, an electric heating element so disposed that when energized it will principally communicate heat to one only of said portions of said second thermostat means movable



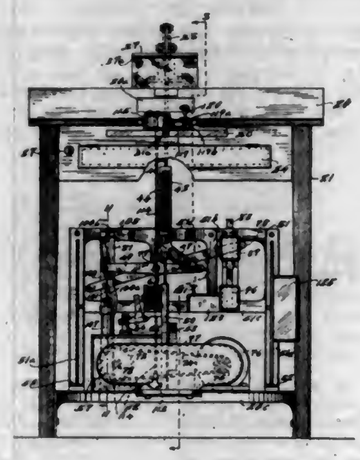
under the joint control of both of said portions of said second thermostat adapted to oppose the operative effect of said first thermostat on said electrical controller, a source of electric current for energizing said electrical heating element and said electro-responsive means, electric circuit conductors, interconnecting said source, said controller, said electrical heating element, electro-responsive means, said controller controlling the flow of current from said source to said electrical heating element and said electro-responsive means.

1,885,054. ELECTRICALLY OPERATED INDICATING APPARATUS. JOHN W. ANDERSON, Gary, Ind. Filed Nov. 5, 1927. Serial No. 231,302. 18 Claims. (Cl. 175—183.)



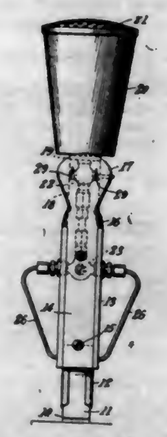
1. Apparatus arranged to form an electrical circuit for measuring electrical resistance, said apparatus comprising a source of current vibratory means for opening and closing said circuit to cause pulsations of electrical energy to flow therethrough and adapted to vary the duration of the pulsations upon the occurrence of variations of the voltage of the current source, indicating means in series with said vibratory means, said vibratory means and said indicating means being actuated by said pulsations of electrical energy, and means for connecting a resistance element to be measured in said circuit in series with said vibratory means and in parallel with said indicating means.

1,885,055. AUTOMATIC PHOTOGRAPHIC PRINTING MACHINE. JOSEPH L. BARBER, Greeley, Colo. Filed Nov. 14, 1930. Serial No. 495,656. 38 Claims. (Cl. 95—73.)



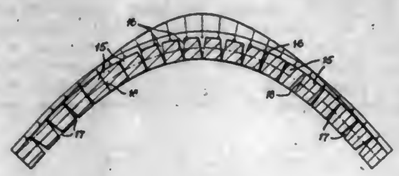
1. An attachment for a printing machine having a platen movable to and from print holding position, having in combination, a member connectable to said platen, means for reciprocating said member to move said platen to and from print holding position, starting a switch constructed and arranged to be closed by the operator and then allowed to open, and power actuated mechanism operated by the closing of said starting switch to operate said first mentioned means and move said platen to print holding position, said power actuated mechanism accomplishing its operation while said starting switch is in open position.

1,885,056. APPARATUS FOR FORMING AND FINISHING SCALLOPED EDGES OF GARMENTS. SAMUEL DOWINSKY, New York, N. Y. Filed May 12, 1931. Serial No. 536,771. 1 Claim. (Cl. 223—17.)



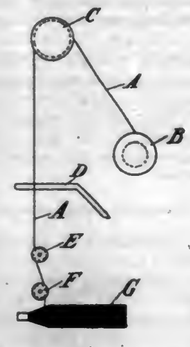
A finisher for woven textile fabric scallops comprising a fixed frame, a scallop former removably engaged thereon, an electric heating coil for said former, a pair of coiled tubes adjacent said coil, and means for supplying said tubes with water.

1,885,057. DAM. ALEXANDER V. KARPOV, Pittsburgh, Pa. Filed May 26, 1930. Serial No. 455,582. 4 Claims. (Cl. 61—30.)



1. Dam structure comprising a wall of curved form whose convex side faces toward the source of pressure, the convex surface of the wall between vertical sections adjacent to mid portions of the curve having clearance spaces flared toward said convex side, and the vertical sections at the concave surface of the wall, between the said mid portion of the curve and the ends of the curve, having clearance spaces that flare toward the concave side of the wall the clearance spaces being of diminished width toward the bottom of the wall.

1,885,058. WINDING OF THREADS AND AN APPARATUS THEREFOR. HUGH BIDDULPH, Coventry, England, assignor to Courtaulds Limited, London, England. Filed Apr. 7, 1931, Serial No. 528,439, and in Great Britain Apr. 14, 1930. 1 Claim. (Cl. 242—157.)

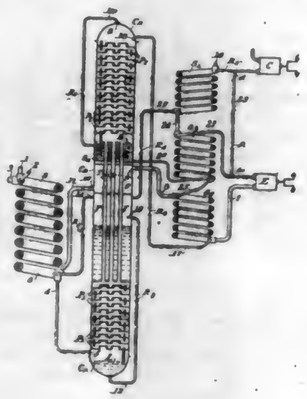


In an apparatus for the winding of threads, a reciprocating thread guide for leading the thread on to a pirn or tube, comprising two spaced grooved wheels over which the thread passes in succession, the axes of said wheels being parallel and their common plane being at right angles to the axis of the pirn or tube, said wheels being fixedly mounted in relation to one another upon a reciprocating member.

1,885,059. PROCESS FOR PRODUCING PRACTICALLY PURE HYDROGEN. GIOVANNI CICALI, Bologna, Italy. Filed May 15, 1928, Serial No. 277,984, and in Italy June 1, 1927. 3 Claims. (Cl. 183—115.)

1. The process of producing from an initial gaseous mixture containing hydrogen and undesirable gases such as carbon monoxide and methane, the element hydrogen in a relatively high state of purity free from said undesirable gases, which consists in the steps of highly compressing said initial gaseous mixture, partially liquefying another independent gaseous mixture containing predetermined amounts of hydrogen and nitrogen in order to produce an auxiliary cooling and rectifying mixture having a liquid portion and a gaseous portion in mutual contact and equilibrium, exposing the said initial gaseous

mixture at high pressure to conductive thermal contact with the expanded and cooled hydrogen of the final output stage of the process, whereby to partially liquefy said initial gaseous mixture, washing said initial gaseous mixture by directly exposing the same to physical contact with the hydrogen and nitrogen constituting the liquid portion of said auxiliary cooling and rectifying mixture, intermingling the hydrogen and nitrogen constituting the gaseous phase of the auxiliary cooling mixture with the gases arising from the treated mixture as a result of



the purifying process carried out in the last named step, whereby to obtain both purified hydrogen and a mixture of hydrogen and nitrogen for further use as auxiliary cooling and rectifying mixture, adding further amounts of hydrogen and nitrogen to said hydrogen-nitrogen mixture in order to augment the same and to control the temperature thereof and finally expanding said augmented hydrogen-nitrogen mixture for use in the initial cooling of the compressed mixture and collecting the end products of the process.

1,885,060. POLYMERIZATION OF OLEFINES. FRITZ HOFMANN, Breslau, MICHAEL OTTO, Ludwigshafen-on-the-Rhine, and WALTER STROEMANN, Monheim-on-the-Rhine, Germany. Filed Nov. 8, 1929, Serial No. 405,719½, and in Germany June 28, 1927. 8 Claims. (Cl. 260—170.)

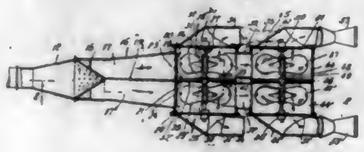
1. In the polymerization of olefines of the general formula (C_nH_{2n}) with the aid of boron fluoride, the step of operating in the presence of a vaporous hydrogen halide.

1,885,061. AUTOMATIC SAFETY APPLIANCE FOR RAILWAY VEHICLES AGAINST OVERRUNNING OF SIGNALS. GEORG KOFLER, Berlin, Germany. Filed Aug. 28, 1931, Serial No. 559,913, and in Germany Aug. 28, 1930. 6 Claims. (Cl. 246—200.)



1. The combination with a vehicle movable along a right of way, said vehicle comprising a portion substantially rigidly supported upon said right of way, a second portion of the vehicle and spring means supporting said second portion upon said first mentioned portion, of contact means adapted to engage a track signal arm supported on said right of way, said contacting means being supported by means of springs upon said second portion of the vehicle and means for connecting said contacting means to said first mentioned vehicle portion.

1,885,062. EXHAUST SILENCER FOR INTERNAL COMBUSTION ENGINES. GIUSEPPE NICOLICH, New York, N. Y., assignor of fifteen per cent to Florence Hamilton and five per cent to Berta Cutti, New York, N. Y. Filed Apr. 4, 1929, Serial No. 352,357, and in Italy Jan. 11, 1928. 16 Claims. (Cl. 137—160.)

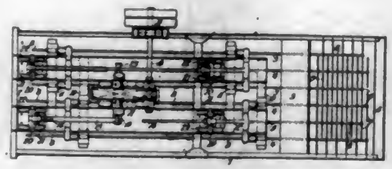


1. In an internal combustion engine exhaust silencer the combination of a casing having a circular chamber, a multi-bladed wheel rotatably mounted in said chamber, the blades of said wheel being turned outwardly, at least one stationary perforated member mounted on said chamber adjacent the blades of said wheel and substantially parallel to the plane of rotation thereof, a reducing discharge nozzle communicating with said member and a tube leading from the exhaust pipe of the engine tangentially of said wheel into said chamber.

1,885,063. METHOD OF TREATING PHOTO-SENSITIVE BODIES. CARL ROEHRICH, Berlin, Germany, assignor to the Firm Silfree Aktiengesellschaft, Silfree Limited, Vaduz, Germany. Filed Dec. 23, 1929, Serial No. 416,204, and in Germany Apr. 23, 1929. 8 Claims. (Cl. 95—5.)

1. Method of treating a photo-sensitive body having a colloid layer photo-sensitized with an agent adapted to harden the layer by reaction with light, consisting in exposing said body under a negative, thereby producing hardened and unhardened sections of said layer, in moistening said layer after exposure, in removing the moisture from the hardened sections of said layer, and in thereafter re-exposing said body to light for a short period.

1,885,064. CONVEYING MECHANISM. RUPERT OCTAVIUS STOKES, London, England. Filed May 23, 1932, Serial No. 613,087, and in Great Britain Feb. 5, 1932. 9 Claims. (Cl. 198—224.)

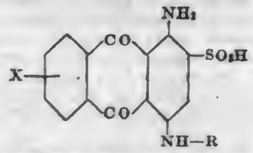


1. Conveying mechanism comprising a surface along which material is adapted to be conveyed in a given direction, a plurality of rakes located with blades interlapping in the said direction and means for imparting a cyclic movement to the rakes near the surface in the said direction and further from it in the reverse direction, said rakes being at any instant at different points of their cycle of movement.

CARNEGIE LIBRARY OF ATLANTA

1,885,065. EASILY SOLUBLE DYESTUFFS OF THE ANTHRAQUINONE SERIES. SAMUEL VON ALLMEN, Basel, Switzerland, assignor to the Firm: Chemical Works Formerly Sandoz, Basel, Switzerland. Filed Dec. 14, 1929, Serial No. 414,235, and in Germany Dec. 20, 1928. 3 Claims. (Cl. 260—60.)

1. The herein described new dyestuffs of the anthraquinone series corresponding to the general formula:

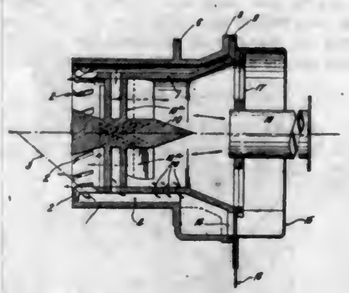


wherein R stands for an aromatic radical and X for a sulphonic group linked to the benzene ring, said dyestuffs constituting in dry pulverized state blue powders easily soluble in cold water with a blue color, soluble in sulphuric acid with a pale greenish color, forming with hydrochloric acid red-violet hydrochlorides, dyeing wool of fast blue tints and being usable for printing purposes.

1,885,066. METHOD OF MOLDING. HENRY W. H. WARREN, Coventry, and CHARLES G. GARTON and ALBERT E. SMITH, Rugby, England, assignors to General Electric Company, a Corporation of New York. Filed Jan. 9, 1930, Serial No. 419,735, and in Great Britain Feb. 11, 1929. 1 Claim. (Cl. 18—55.)

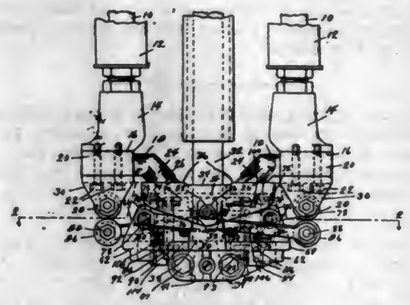
The method of making a molded thin walled article which consists in using a basic material wet felted fibrous pulp, replacing the water in said pulp by alcohol, replacing the alcohol by a synthetic resin which is convertible to the cured state by heat and pressure, and molding the impregnated mass under heat and pressure.

1,885,067. FUEL BURNER. WILLIAM ARMSTRONG WOODESON, Gateshead-on-Tyne, England, assignor to Clarke Chapman & Company, Limited, Gateshead-on-Tyne, England, and to said William Armstrong Woodeson. Filed Sept. 4, 1928, Serial No. 303,859, and in Great Britain Jan. 19, 1928. 6 Claims. (Cl. 110—104.)



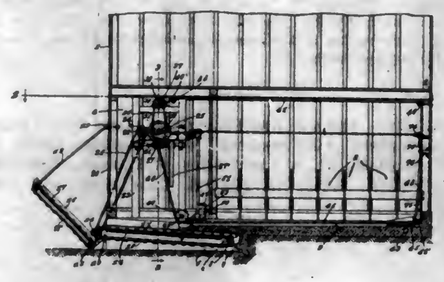
6. In a burner of the kind herein referred to, a mixing chamber, an air chamber to the rear of said mixing chamber, means for introducing fuel into the rear end of said mixing chamber so that it flows therealong, means for admitting air to said mixing chamber in the vicinity of the fuel inlet thereto and an auxiliary connection from said air chamber to said mixing chamber, said auxiliary connection comprising means for jetting air upwardly into the current through the mixing chamber so as to lift the fuel particles in such current.

1,885,068. HIGH CURRENT ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,876. 24 Claims. (Cl. 200—87.)



1. A movable switch member for an electric switch including a vertical lifting rod, a rigid conducting support secured to the lower end of said rod and extended on opposite sides thereof, and a generally horizontal movable contact arm having a pivotal support at one end on said conducting support at one side of said rod and having a contact member at its free end which is disposed on the opposite side of said rod, and means to connect said conducting support and contact arm electrically in series.

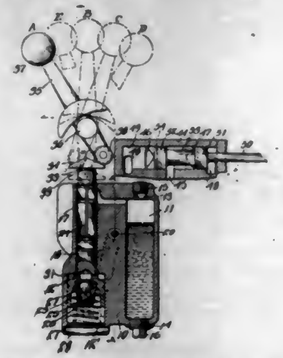
1,885,069. MANURE COLLECTING DEVICE FOR BARNS. CHARLES M. BAKER, Youngstown, Ohio. Filed Apr. 8, 1931. Serial No. 527,569. 2 Claims. (Cl. 37—115.)



1. A stable having a longitudinal gutter therein for the reception of refuse, and a scoop in the gutter, a motor, a train of gears operated by the motor, and having shafts, a drum freely mounted on one of the shafts, flexible elements connected to the drum and to the scoop, guide means for the flexible elements, said drum having a brake wheel and a clutch surface at its other end, a double faced clutch element splined for longitudinal movement on the shaft, a sprocket wheel freely mounted on the shaft, and having a clutch surface, a spool operated by the turning of the sprocket wheel, a flexible element wound around the spool and connected to the rear of the gutter, guide means for the flexible element, vertically disposed shafts arranged at the opposite sides of the gutter and having disc heads, a pivotally supported lever carrying a brake shoe to engage with the brake wheel, and having a flexible and spring influenced connection with one of the discs, a pivotally supported lever having a loose connection with a

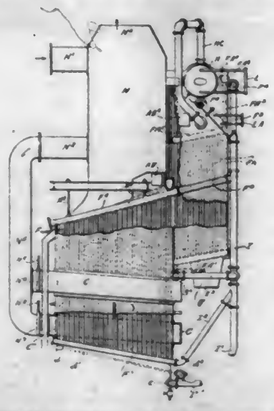
slidable clutch element and a rod connection with the disc of the second shaft, compensating springs between the end of the lever and the disc connecting element thereof, said shafts having angle fingers which depend into the gutter and which are in the path of contact with the scoop when the scoop is moved to dumping position, and whereby the brake is applied to the drum, the clutch element shifted from the drum to the clutch surface on the sprocket wheel, when the scoop is in dumping position and means projecting into the trough to contact with the scoop to assist the dumping of the scoop.

1,885,070. TARRY MECHANISM FOR GRINDING MACHINES. HAROLD E. BALSIGER, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa., a Corporation. Filed Apr. 15, 1927. Serial No. 184,161. 6 Claims. (Cl. 121—45.)



1. In a machine tool having a reciprocating carriage, and a reversible hydraulic carriage drive mechanism, a reversing valve for said mechanism, a lever for operating said valve, a plunger having a cam engageable with said lever for throwing said lever past central position, a spring urging said plunger toward said lever and means acting in opposition to said spring for retarding the action of said plunger whereby said lever will remain in central position for a predetermined length of time, substantially as set forth.

1,885,071. STEAM GENERATOR. HANS J. E. BANCK, Springfield, Ill., assignor to Springfield Boiler Co., Springfield, Ill., a Corporation of Illinois. Filed Mar. 10, 1927. Serial No. 174,108. 11 Claims. (Cl. 122—235.)



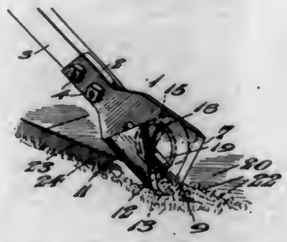
1. In a steam generator adapted for operation at ratings greatly in excess of its nominal rating, the combination with vertically disposed water tubes arranged to absorb radiant heat from the combustion chamber of the generator in amount sufficient to generate the major portion of the steam generated, steam and water separating means located at a level substantially above the heat absorbing portions of said tubes including a steam receiving means and conduit connections between the last mentioned means and said tubes arranged to restrict the escape of steam and water into said receiving means from said water tubes and to return to the upper ends of the latter much of the water entering said connections from said tubes, and separate water return connections extending from said receiving means to the lower ends of said tubes and located out of heat absorbing relation with said chamber whereby said heat absorbing tube portions are normally filled with water under an appreciable hydraulic head.

1,885,072. EGG COUNTER FOR HENS. JOSEF BECHTOLD, Coleman Station, N. Y. Filed Dec. 27, 1930. Serial No. 505,036. 1 Claim. (Cl. 235—116.)



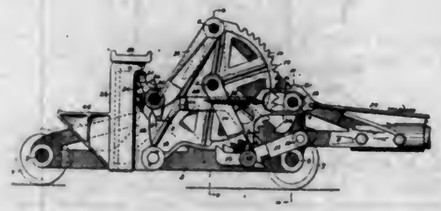
A device of the class described comprising a hollow cylindrical drum open at the rear and having a face member closing the same at the front, said face having a sight hole therein, a pin passing through the axis of said drum and having said drum rotatably mounted thereon, a disk rigid with said pin rotatable in said drum and having numerals thereon successively visible through said sight hole, a trigger rotatably mounted on said pin at the rear of said drum and extending radially beyond the periphery of said drum, said trigger being looped around the cylindrical edge of said drum from the rear to the face of said drum, the free end of said drum lying adjacent said face of the drum, a flexible tongue on said free end of the trigger normally lying adjacent said face, peripheral teeth on said disk at right angles to said disk, an arcuate channel in said face exposing one of said disk teeth therethrough, peripheral teeth on the rear edge of said drum, a flexible ear on the rear portion of said trigger engaging said drum teeth, said flexible tongue being adapted to enter said channel to engage said exposed tooth when passing said channel during rotation of said trigger with respect to said face, and a spring between the rear portion of said trigger and said disk normally urging said disk toward the rear of said face and also normally urging said flexible tongue against the front of said face.

1,885,073. GRASS CUTTING DEVICE. FRANK BROEMME, Palmyra, N. J. Filed Apr. 12, 1932. Serial No. 604,684. 1 Claim. (Cl. 97—227.)



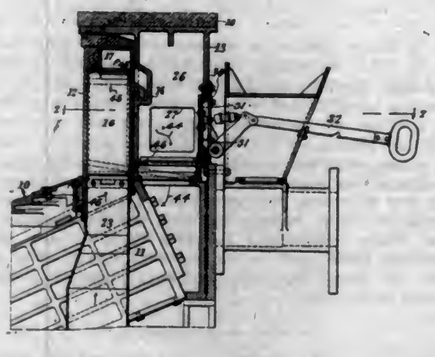
A reversible grass cutting device for trimming a wall or the like contiguous with an edge of an adjacent implanted area to cut a straight edge or a groove, comprising a substantially U-shaped body portion, one of the limbs of said U-shaped body portion having a rearwardly inclined front cutting edge, the other of said limbs being formed to present rearwardly diverging upper and lower front cutting edges, the lower of said last mentioned cutting edges merging with and coacting with said first mentioned cutting edge to cut a groove and the upper of said edges serving to cut a straight edge depending on the direction of travel of the cutting device, and a roller for supporting said cutting device, there being intersecting slots in said body portion for permitting vertical and horizontal adjustment of said roller with respect to said body portion.

1,885,074. VEHICLE JACK. JOHN H. BURKHOLDER, Ashland, Ohio, assignor, by mesne assignments, to Elite Manufacturing Company, a Corporation of Ohio. Filed Sept. 20, 1928. Serial No. 307,095. 13 Claims. (Cl. 254—6.)



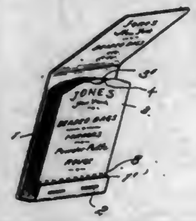
1. A vehicle jack, including a frame, a ratchet member rotatably supported upon said frame, a lift member operatively connected with said ratchet member, a holding pawl for said ratchet member, an active pawl suspended to swing in respect to said ratchet member, an oscillatory lever connected with said active pawl, a longitudinally movable bar slidably mounted upon said frame and positively engageable with each of said pawls, and a spring for controlling the longitudinal movement of said bar in one direction, said active pawl being engageable with said bar to move it in an opposite direction during the lowering movement of said lift member.

1,885,075. FURNACE FRONT WALL. WILLIAM BUSFIELD, Jr., Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 16, 1927. Serial No. 206,218. 14 Claims. (Cl. 110—75.)



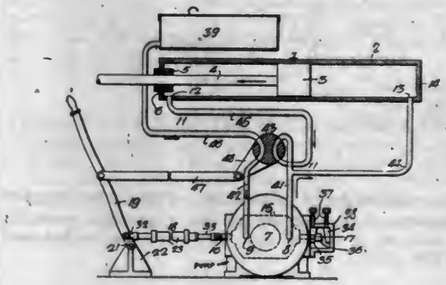
6. In a furnace, a wall comprising inner and outer hollow sections, the inner section being divided into a plurality of passages each of which is connected at one end to a source of air supply and at the other end to the outer hollow section, and means establishing communication between the said outer section and the interior of the furnace.

1,885,076. ADVERTISING NOVELTY. CESAR BUSTAMANTE, New York, N. Y. Filed May 20, 1929, Serial No. 364,400. Renewed Apr. 20, 1932. 9 Claims. (Cl. 132—78.5.)



1. As a new article of manufacture, a member having a portion configured to the human lip and bearing a cosmetic thereat, and having another portion below the first portion adapted for removing excess of said cosmetic from the lip.

1,885,077. SYSTEM OF CONTROL. EARL CANNON, Philadelphia, Pa., assignor to American Fluid Motors Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 15, 1924. Serial No. 743,696. 4 Claims. (Cl. 60—52.)

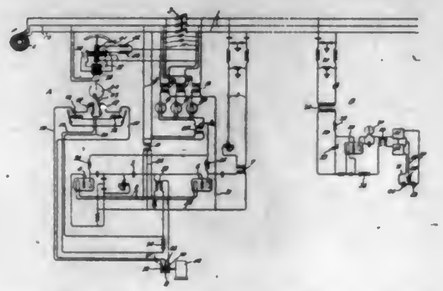


1. In a hydraulic power system, the combination with a fluid motor provided with a piston having different effective areas on the opposite sides thereof, of a reversible, variable-stroke positive displacement pump, an element for reversing said pump and for controlling the stroke thereof, a pair of pipes extending from said pump, means for operatively connecting one of said pipes to both sides of said piston and subsequently the other of said pipes to the side of said piston having the smaller pressure area, said means including a control valve, and common means for actuating the latter and said element, said last-mentioned means including a lost-motion device permitting a differential operation of said means in actuation of the control valve and said element.

1,885,078. SYNCHRONISM INDICATING MEANS. EMMETT F. CARTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 22, 1927. Serial No. 207,785. 22 Claims. (Cl. 177—351.)

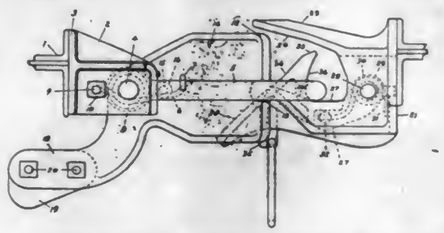
6. The combination, with a plurality of alternating current sources adapted to be synchronized with each other, of means for interconnecting said sources, a vacuum tube transmitter of high frequency currents, means for energizing the anode circuit of said transmitter in accordance with the voltage across said interconnecting

means, means for producing variations in said high frequency currents determined in character by the relative frequency of voltages on opposite sides of said inter-



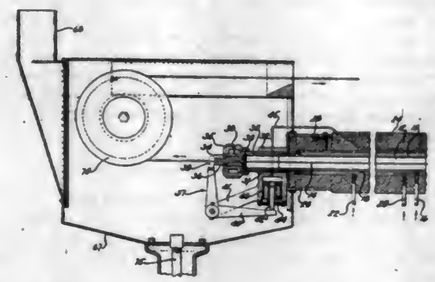
connecting means and means at a remote point responsive to the intensity of said high frequency currents and to said variations.

1,885,079. COUPLER. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry & Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 15, 1930. Serial No. 420,885. 15 Claims. (Cl. 280—33.15.)



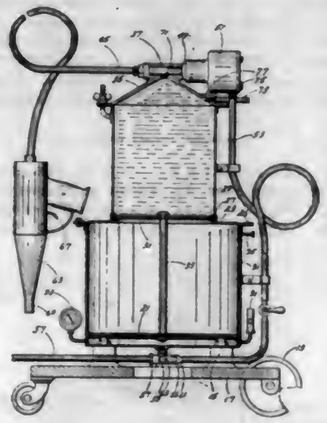
1. In combination, a pivoted ball, guide arms mounted independent of the ball but moving therewith, a coupler head adapted to receive said ball and to enter between said guide arms.

1,885,080. APPARATUS FOR HANDLING TREATED ARTICLES. GEORGE LAFAYETTE CHERRY, La Grange, and LESLIE FAWCETT LAMPLOUGH, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1929. Serial No. 362,108. 13 Claims. (Cl. 18—6.)



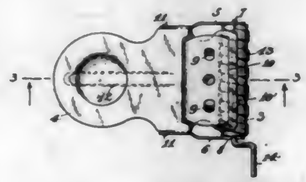
2. A fluid seal comprising a plurality of flexible sealing members having registering apertures adapted to permit the passage of a strand therethrough, and a non-flexible slidably mounted retaining member yieldingly engaging the flexible members against the action of fluid pressure.

1,885,081. LUBRICATOR. KENNETH S. CLAPP, Cleveland, Ohio. Filed July 13, 1931. Serial No. 550,350. 6 Claims. (Cl. 221—47.1.)



3. In a lubricator, a cylinder having lubricant therein, a piston in the cylinder for expressing the lubricant, a second cylinder, said cylinders being mounted together, a second piston in the second cylinder, a rigid connection between the pistons, fluid means acting within the second cylinder upon the second piston at the side distant from the first piston, vent means arranged between the pistons, said vent means being carried by the second cylinder and arranged to exhaust air from that cylinder at the end of the stroke of the pistons.

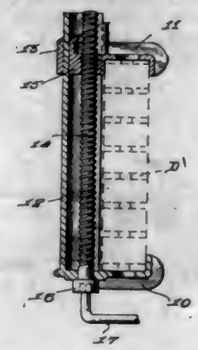
1,885,082. SAFETY-RAZOR BLADE-SHARPENER. ADOLPH COHN, North Bergen, N. J. Filed Nov. 5, 1927. Serial No. 231,206. 3 Claims. (Cl. 51—98.)



1. A blade sharpening device for safety razor blades or the like comprising two sections formed of metal stampings pivotally mounted at intermediate points, one stamping being formed with side arms formed with bearing portions for mounting a stropping and sharpening roller and bearing portions for the pivotal mounting means, the other stamping having sidewardly extended tongues forming pivots engaging the pivotal bearing portions of said first stamping, said second stamping being extended beyond the pivot cooperating with said first section to form finger compressing members whereby said roller and blade holder may be drawn towards each other and urge the blade edge into proper sharpening position against said roller.

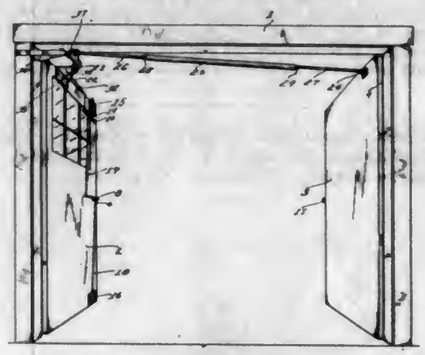
1,885,083. AUTOMOBILE SERVICE HAND TOOL. LAUREL T. COLE, Los Angeles, Calif. Filed June 6, 1931. Serial No. 542,647. 2 Claims. (Cl. 29—87.1.)

1. A hand tool of the character described comprising stationary and movable jaws, a channeled stem carrying the stationary jaw, means slidably connecting the movable jaw with said stem, a feed screw journaled in the stem and operative upon the movable jaw to adjust the same, a detachable hand crank fitted with the feed screw, each jaw being formed with an opening, a clamping



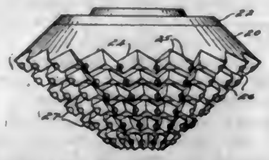
bracket adapted for detachable and adjustable connection in the opening of either jaw and a yoke engaging the other jaw.

1,885,084. DOUBLE DOOR HARDWARE. JESSE W. CROWELL, Portland, Oreg. Filed Feb. 5, 1931. Serial No. 513,605. 5 Claims. (Cl. 268—62.)



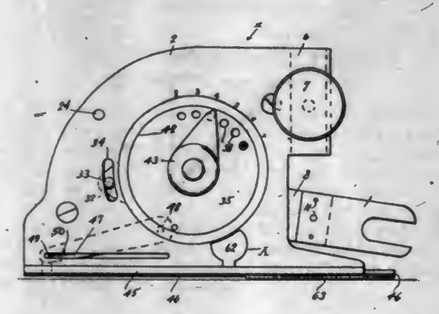
1. In a device of the class described, in combination with a pair of doors, locking bolts secured to the upper and lower portions of one of the doors, a latch disposed through the same door, a locking latch rockably secured to the same door and adapted for being manipulated by the first mentioned latch, means for connecting the locking bolts to the locking latch, brackets on the doors, a strut connecting the brackets, a bracket secured to the frame of the doors, and a latch bar carried by the bracket of the first mentioned door, said bar engaging and being in direct alignment with said frame bracket.

1,885,085. ROCK DRILL. WILLIAM F. DALZEN, Grosse Pointe Park, Mich. Filed Nov. 26, 1930. Serial No. 498,368. 4 Claims. (Cl. 255—71.)



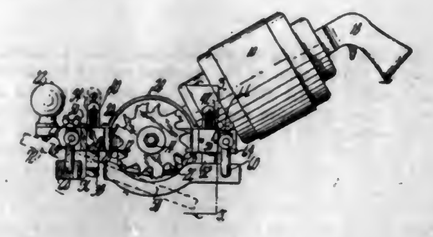
1. For a rock drill, a cone cutter having spirally curved rows of teeth formed thereon and inserts of relatively harder material embedded in the teeth along their cutting edges.

1,885,086. SEWING MACHINE ATTACHMENT FOR MAKING BUTTONHOLES. RAYMOND C. DAVID, Clinton, Mass. Filed Nov. 21, 1929. Serial No. 408,833. 7 Claims. (Cl. 112—77.)



1. A sewing machine attachment of the character described comprising a casing, a work engaging and shifting foot mounted for reciprocation on the casing and means for actuating said foot comprising an oscillating lever engaged with the machine for actuation, a rotatable disc having a series of laterally projected spaced pins mounted for rotation on the casing, a pawl mounted on the lever and adapted to successively engage the pins when the lever is oscillated in a manner to rotate the disc, in a step-by-step manner, a cam mounted for rotation on the casing and coupled to the disc, a pair of ratchet elements mounted for rotation in the casing, means actuated by the cam and engageable alternately with the ratchet elements for alternately rotating same in opposite directions and a coupling rod connected to the ratchet elements and to the foot.

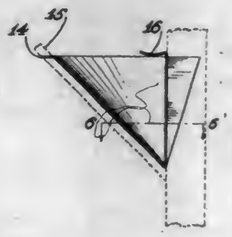
1,885,087. PLANK FITTER TOOL. ARTHUR R. DE WITT, Harbor Springs, Mich., assignor of one-half to Carl L. Wright, Harbor Springs, Mich. Original application filed Mar. 3, 1930, Serial No. 432,684, now Patent No. 1,828,103, dated Oct. 20, 1931. Divided and this application filed Sept. 21, 1931. Serial No. 563,976. 15 Claims. (Cl. 143—48.)



1. A plank fitter tool comprising a frame, a cutter carried thereby, a laterally adjustable guide in advance of said cutter of less thickness than the cutter, and a laterally adjustable guide behind said cutter of less thickness than the cutter.

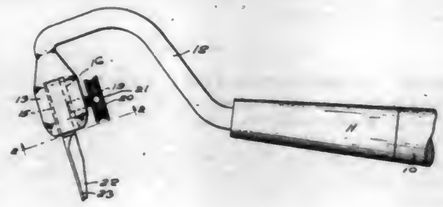
14. In a plank fitter tool of the kind described, a frame, a cutter mounted thereon, a portable power plant operatively connected with said cutter and supported on said frame, a guide of less thickness than the cutter carried by said frame in front of the cutter, a guide of less thickness than the cutter supported on said frame rearwardly of said cutter, means for adjusting said guides laterally with relation to the cutter, a depth guide carried by said frame, and a rabbet guide carried by said frame and mounted for up and down lateral adjustment with relation to the frame and the cutter.

1,885,088. CARD TABLE ASH RECEPTACLE. ANDREW LEROY DUHL, Dennison, Ohio. Filed July 25, 1930. Serial No. 470,718. 5 Claims. (Cl. 45—75.)



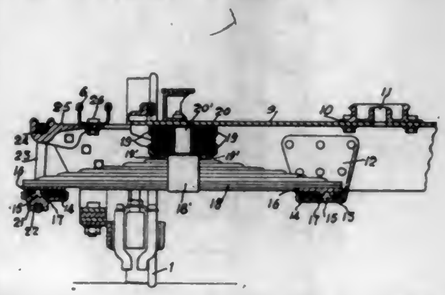
1. In combination, a table having an inclined brace connecting the legs and top, a receptacle having a vertically disposed recess in one side to receive one of the legs of the table, spaced lugs extending from the other side of the receptacle to detachably engage the leg brace, and a horizontally disposed supporting arm at the upper edge of the recess.

1,885,089. MANUALLY OPERATED GROUND WORKING IMPLEMENT. DAVID LUTHER DUKES, St. George, S. C. Filed Feb. 19, 1932. Serial No. 594,075. 2 Claims. (Cl. 306—42.)



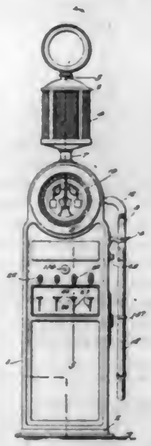
1. A ground working implement, comprising a handle, a connecting rod secured to the forward end of the handle, a metal socket rigidly attached to the connecting rod and having a bore, said bore having a uniform cross-sectional area throughout its length and parallel forward and rear walls and forwardly converging side walls, said socket having a screw-threaded opening in its rear portion passing through the rear wall, a clamping screw arranged within the screw-threaded opening and extending to the exterior of the rear side of the socket, and a ground-engaging element having a metal shank, said shank having a uniform cross-sectional area throughout its length and parallel forward and rear walls and forwardly converging side walls, the shank being adapted for insertion within the bore of the socket so that its forwardly converging side walls engage the forwardly converging side walls of the bore and the forward and rear walls of the shank are permanently spaced from the forward and rear walls of said bore, said screw engaging the rear wall of the shank and forcing the converging walls of the shank into wedging engagement with the converging walls of said bore, the arrangement being such that when the screw is manipulated to disengage the rear wall of the shank, the engagement between the side walls of the socket and shank may be readily broken by forcing or striking the ground engaging element in a forwardly direction upon the ground.

1,885,090. TRUCK FOR HIGH SPEED INTERURBAN CARS. JOSEPH H. ELLIOTT and RAGNAR A. NORBOM, Cincinnati, Ohio, assignors to The Cincinnati Car Corp., Cincinnati, Ohio, a Corporation of Ohio. Original application filed June 5, 1929, Serial No. 368,456. Divided and this application filed Apr. 12, 1930. Serial No. 443,641. 5 Claims. (Cl. 267—41.)



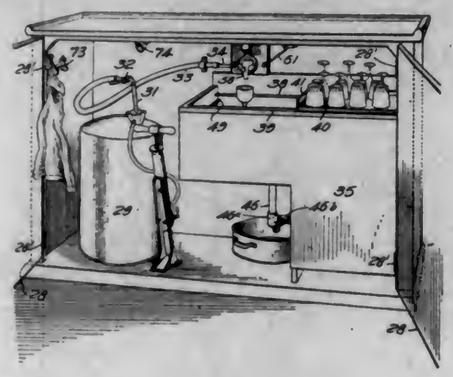
2. In a car truck, a transverse member, a spring extending longitudinally to said transverse member, means on said transverse member to yieldingly support one end of said spring, swinging means on said car truck to yieldingly support the other end of said spring, and resilient means on the end of said transverse member engaging said spring intermediate the ends thereof whereby one end of said transverse member is supported by said car truck.

1,885,091. GASOLINE VENDING MACHINE. MERTON W. FARNHAM, Batavia, N. Y. Filed Sept. 29, 1928. Serial No. 309,189. 16 Claims. (Cl. 249—2.)



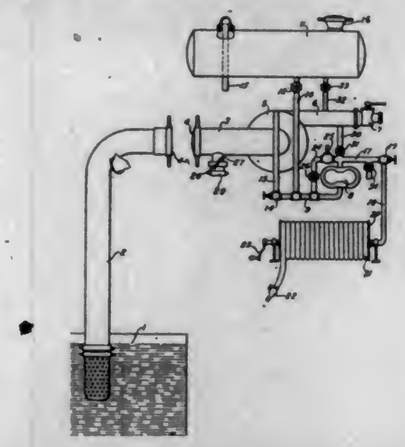
1. A liquid vending machine comprising in combination, a vertically movable tank, a motor operating pump for supplying a liquid to the tank, means for closing the circuit to the pump, mechanism controlled by the weight of the liquid in the tank for breaking the circuit to the motor, for cutting off the supply of the liquid to the tank after a predetermined amount has entered said tank, an additional means for effecting the return of the first mentioned means to its normal position subsequent to the breaking of the circuit to the motor.

1,885,092. PORTABLE BEVERAGE SERVICE AND DISPENSER. MORRIS FELLERMAN, Jersey City, N. J. Filed Aug. 28, 1930. Serial No. 478,341. 3 Claims. (Cl. 225—21.)



1. In a service device of the character described, a cabinet including a top forming therewith a counter or the like, a bottom for said cabinet, a self-contained interconnected beverage dispensing, storage and cooling assembly resting on said bottom and affixed to said interior of said cabinet, the cabinet being free from outside plumbing installation and including roller mounting for the same whereby the same may become readily portable.

1,885,093. COMBINED BOOSTER AND FIRE PUMP. CHARLES H. FOX, Cincinnati, Ohio, assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 17, 1932. Serial No. 599,421. 25 Claims. (Cl. 183—10.)

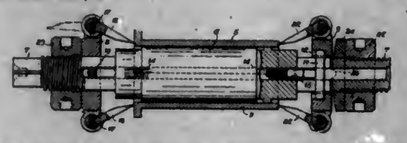


1. In a fire engine pump, in combination, a major pump having an outlet, and a booster pump having an inlet connected to the major pump and an outlet connected to the major pump outlet.

1,885,094. MOLD WASH. KARL W. GRANT, Youngstown, Ohio, assignor to The Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Feb. 4, 1930. Serial No. 425,906. 6 Claims. (Cl. 22—189.)

1. A mold wash for treating the surface of metallic molds comprising an alkali metal compound and graphite.

1,885,095. CHUCK. ALFRED E. HAMILTON, Pittsburgh, Pa. Filed Jan. 24, 1931. Serial No. 510,917. 6 Claims. (Cl. 82—43.)

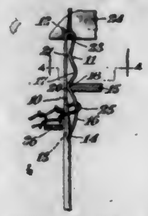


1. Work-holding structure comprising a mandrel for supporting an article thereon that is curved to approximately the contour of the mandrel, a chuck head disposed adjacent to one end of the mandrel, and fingers pivotally mounted on said head at points farther removed from the axis of the mandrel than the radial dimensions of the mandrel, the said fingers extending in angular directions from their pivotal points toward the axis of the mandrel and adapted to engage the end of an article to hold it against the mandrel.

1,885,096. PROCESS OF PRODUCING BUTYL ALCOHOL AND ACETONE, AND ETHYL ALCOHOL. CARL HANER, Moylan, and OSCAR GAMPER, Philadelphia, Pa., assignors to Publicker, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,367. 8 Claims. (Cl. 195—44.)

1. The process of producing butyl alcohol and acetone, and ethyl alcohol from the same mash which comprises preparing a mash containing saccharaiferous material and other nutriment suitable for butylic fermentation, inoculating said mash with butylic bacilli, allowing the butylic fermentation to become fully active, thereupon inoculating said mash with ethyl-alcohol-producing yeast ferment, allowing the fermentations to proceed to completion, and thereafter distilling the mash to recover the products of the fermentations.

1,885,097. SPRING KNITTING NEEDLE. BERNARD HERTAN, Brooklyn, N. Y., assignor to Fred E. Hertan, Kew Gardens, N. Y. Filed Aug. 1, 1931. Serial No. 554,442. 14 Claims. (Cl. 66—119.)



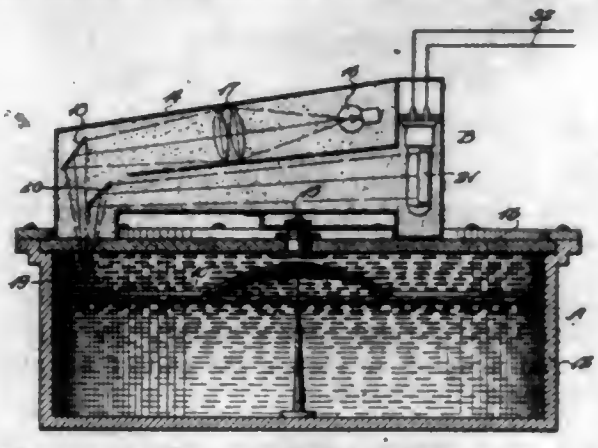
14. A spring knitting needle of the class described, comprising a stem and a beard coextensive therewith and substantially parallel thereto; said beard containing combined thread holding and presser engaging means; said means consisting of inwardly projecting portions adapted to hold a thread positioned between the stem and beard against downward movement, and a recessed portion adapted to receive the contacting portion of a suitably positioned presser and hold it against vertical movement.

1,885,098. COMPASS CONTROL SYSTEM. CURTISS L. HILL, Tacoma, Wash., assignor of one-half to R. Clayton McRae, Tacoma, Wash. Filed Mar. 11, 1931. Serial No. 521,771. 14 Claims. (Cl. 33—204.)

1. A compass card having a mirror surface substantially in the plane of its upper surface and occupying an area immediately to one side of and bounded on one side by a portion of one of its diameters.

10. A device of the character described comprising an element consisting of a single source of electric energy

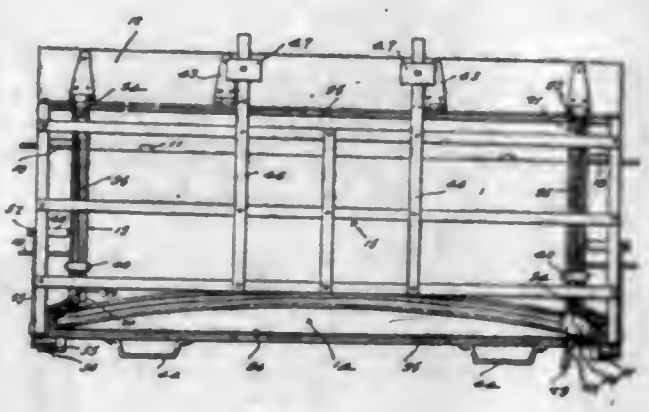
sensitive to radiant energy, a device controlled thereby, a compass casing, said element being stationary relative to said casing, means mounted upon said casing for projecting a beam of radiant energy, a compass card constructed and arranged to cut off said beam only when the compass deviates to one side of a predetermined direc-



tion, whereby parts controlled by the compass through said element will be immediately operated in one direction or the other without any dwell due to neutral position, and means for operating said controlled device in one direction when said element is energized and in the opposite direction when it is not energized.

1,885,099. GLASS CUTTING MACHINE. HOWARD D. HIVELY and OCTAVE C. NATLIS, Charleston, W. Va., assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 19, 1928, Serial No. 294,022. Renewed Mar. 2, 1932. 15 Claims. (Cl. 33—26.)

1. A windshield glass cutting machine of the class described comprising a base; a pattern board on the base, a frame hingedly mounted on the base and disposed over the pattern board, a series of tracks carried by the frame,



a plurality of cutting tools mounted for sliding movement along the tracks, and means for simultaneously sliding the cutting tools.

1,885,100. PROCESS FOR THE REMOVAL OF SPRAY RESIDUES FROM FRUITS AND VEGETABLES. REGINALD H. ROBINSON, Corvallis, Oreg., dedicated, by mesne assignments, to the Citizens of the United States. Filed July 11, 1929. Serial No. 377,588. 2 Claims. (Cl. 146—219.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A process for the removal of spray residue from fruit and vegetables comprising the application to the fruit or vegetables of a water solution of a mixture of hydrochloric acid and ferrous sulfate, (copperas) followed by washing with water to remove the cleaning solution and then drying the fruit or vegetables.

ROLL NO. BL

OFFICIAL GAZETTE

UNITED STATES PATENT OFFICE

SEPT & OCT 1932

VOLS. 422 & 423

MICRO — PHOTO INC

CLEVELAND 3, OHIO